U.S. Army Corps of Engineers

New England District
Concord, Massachusetts

Former LO-58 Nike Battery Launch Site
Formerly Used Defense Site (FUDS)
Caribou, Aroostook County, Maine

Contract No. W91236-05-D-0036
Task Order No. 0036
DCN: MEFUDS36-061710-AABU

FINAL
BOREHOLE HYDROPHYSICS AND GEOPHYSICS REPORT

JUNE 2010

WESTON SOLUTIONS

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LIST OF ACRONYMS

AMAC	Adult Multiple Alternative Center
amsl	above mean sea level
Analytics	Analytics Analytical Laboratories, LLC
bgs	below ground surface
BHG	Borehole Hydrophysics and Geophysics
BOH	Bureau of Health
C.G.	Certified Geologist
CENAE	United States Army Corps of Engineers, New England District
cis-1,2-DCE	cis-1,2-dichloroethylene
COLOG	COLOG, Division of Layne Christensen Company
COPC	contaminants of potential concern
CSM	Conceptual Site Model
DBCP	1,2-dibromo-3-chloropropane
DO	dissolved oxygen
DQO	data quality objectives
DRO	diesel-range organics
EDB	1,2-ethylene dibromide
EPA	U.S. Environmental Protection Agency
FEC	fluid electrical conductivity
ft	foot/feet
ft/day	feet per day
ft^2/day	square feet per day
FUDS	Formerly Used Defense Sites
gpm	gallons per minute
GRO	gasoline-range organics
HPL	hydrophysical logging
LO-58 Site	LO-58 Nike Battery Launch Site, Caribou, Maine
Maine HETL	Maine Health and Environmental Testing Laboratory
MCL	Maximum Contaminant Limits
MDEP	Maine Department of Environmental Protection
Maine MEG	Maine Maximum Exposure Guidelines
MGS	Maine Geologic Survey
µg/L	micrograms per liter
ORP	oxidation-reduction potential

LIST OF ACRONYMS
(Concluded)

OTV	Optical Televiewer
PDT	project delivery team
RL	reporting limit
SOW	*Statement of Work*
TCE	trichloroethylene
TCP	1,2,3-trichloropronane
TestAmerica	TestAmerica Laboratories, Inc.
U.S.	United States
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
VFW	Veterans of Foreign Wars
VOC	volatile organic compound
VSP	Vertical Seismic Profiling
WESTON®	Weston Solutions, Inc.
WSP	wire-line straddle packer

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

This Borehole Hydrophysics and Geophysics Report (BHG Report) was prepared by Weston Solutions, Inc. (WESTON®) to document field activities and interpretations for the former LO-58 Nike Battery Launch Site (LO-58 Site) in Caribou, Maine, which is one of several Formerly Used Defense Sites in *northern* Aroostook County, Maine. This BHG Report has been prepared for the United States (U.S.) Army Corps of Engineers, New England District (CENAE) in accordance with the *Statement of Work* (*SOW*) issued by CENAE to WESTON on 28 March 2007 (CENAE, 2007). In accordance with the *SOW*, the investigation included on-site geological observations, borehole geophysical and hydrogeophysical logging, well rehabilitation and maintenance, temporary water services, well repair, groundwater sampling and sample management. WESTON's geologic, geophysical, and hydrophysical investigations at the LO-58 Site were conducted in May 2008. The purpose of the investigation was to gather site-specific geologic information using geologic, geophysical, and hydrophysical methods to update and expand the bedrock groundwater dataset. The geophysical investigations were performed on five bedrock monitoring wells (MW-01 through MW-05) and two drinking water wells; DW-1, the Adult Multiple Alternative Center Well, and DW-2, the Veterans of Foreign Wars Well at the LO-58 Site, and hydrophysical investigations were performed on two drinking water wells; DW-1 and DW-2.

The following conclusions can be made from the geological, geophysical, and hydrophysical data collected and interpreted by WESTON during the latest investigation at the LO-58 Site.

Bedrock Geology

- The LO-58 Site is located on the northwest face of a rock-cored drumlin, which was subject to glacial action approximately 12,000 years ago. Vertical seismic profiling did not identify acoustically-incompetent bedrock at the LO-58 Site. Thus, no significant areas of weathered bedrock were identified.
- Despite conflicting references, bedrock beneath the LO-58 Site is the Silurian Sprague ville Formation which comprises interbedded pelite and limestone and/or dolostone rocks of Silurian age. The nearest contact with another geologic unit, the

Silurio-Ordivician Carys Mills Formation, is located approximately 900 feet (ft) northwest of the LO-58 Site.

- The Chapman Synclinorium was formed during the first deformational or compressional phase of the Acadian Orogeny which occurred during the lower to middle Devonian Period, and resulted in a major, single, and steeply dipping north-south cleavage in the bedrock.

- The bedrock bedding at the LO-58 Site strikes North 70º East and dips 12º East, as well as a foliation striking North 5º West and dipping 78º West, but varies significantly locally due to folding in two directions: the major folds are broad to tight with axes oriented North 30º East, parallel to the axis of the Chapman Synclinorium; the fold axes are also folded broadly on North 20º West axes.

- Three joint sets are present in the local bedrock: a near vertical set striking North 45º East and dipping 80º West which is associated with the Acadian Orogeny; another steeply-dipping set striking North 45º East and dipping 85º East, which is roughly perpendicular to the first; and a shallowly-dipping set of sheeting joints that is roughly parallel to the ground surface and bedding and decreases in frequency with depth. The near-vertical sets of joints, particularly the North 45º East and dipping 85º East set, are often filled with calcite. The upper 60 ft of bedrock have similar fracturing characteristics at drinking water well locations DW-1 and DW-2. However, the deeper bedrock (below approximately 70 ft) surrounding well DW-2 contains very few sheeting fractures and the aperture and water-bearing potential of the steeper fractures are not as significant, resulting in different fracturing characteristics which, by nature of its depth, do not appear in the bedrock surrounding well DW-1.

- Neither the available geologic literature nor the lack of local and regional observations of karst topography indicate that the limestone of the Spragueville Formation is subject to solution cavities.

Bedrock Hydrogeology

- The orientation, length, width, and interconnectedness of joints in the bedrock beneath the LO-58 Site exert significant control over both groundwater flow direction and contaminant distribution within groundwater.

- Bedrock groundwater elevations range from approximately 569 to 537 ft above mean sea level (amsl) on 30 April and 564 to 531 ft amsl on 21 May 2008.

- The hydrophysical logs for well DW-1 indicate that ambient horizontal flow occurs within the borehole. The volumetric flow rate observed in the DW-1 wellbore for the depth intervals 27.3 to 31.7, 34.6 to 35.0, 40.4 to 48.6, 49.0 to 50.2, and 52.7 to 53.6 ft below ground surface (bgs) are 0.085, 0.011, 0.14, 0.018, and 0.058 gallons

per minute (gpm), respectively. These flow rates equate to Darcy velocities or specific discharges of groundwater in the aquifer of 2.84, 3.91, 2.53, 2.28, and 9.56 ft per day, respectively.

- During production testing, seven inflow zones were identified from the well DW-1 hydrophysical logs at 27.3 to 31.7, 34.6 to 35.0, 37.4 to 38.4, 40.4 to 48.6, 49.0 to 50.2, 52.7 to 53.6, and 54.4 to 58.1 ft bgs with flow rates ranging of 0.207, 0.195, 0.745, 2.00, 0.416, 1.65, and 0.838 gpm, respectively. The logs indicate the interval 40.4 to 48.6 and 52.7 to 53.6 ft bgs dominated flow during pumping, producing 3.65 gpm or 60 percent of the total flow. The transmissivity calculations for well DW-1 indicate that the intervals 40.4 to 48.6 and 52.7 to 53.6 ft bgs exhibited the highest transmissivities of approximately 129 and 111 square feet per day (ft^2/day), respectively.

- The hydrophysical logs for well DW-2 indicate ambient vertical flow occurring within the borehole. Formation water migrates downward within the fluid column beginning near the base of casing and at 31 ft.

- Four inflow zones were identified from the well DW-2 hydrophysical logs at 19.5 to 19.6, 30.4 to 31.6, 38.2 to 41.8, and 44.9 to 51.4 ft bgs at rates of 0.026, 0.297, 0.016, and 0.074 gpm, respectively. The combined inflow of 0.413 gpm of these four intervals is observed to migrate vertically downward through the borehole based on the migration of the center of mass of the area under the curve. Groundwater exits the borehole at depths of 96.4 to 97.0 and 189.5 to 191.0 ft bgs at rates of 0.370 and 0.185 gpm, respectively.

- In well DW-2, a fluid electrical conductivity anomaly was observed at the base of the borehole at 280 ft. This early increase in mass is not the result of ambient flow, as over the course of the ambient flow characterization, no additional groundwater entered the borehole at this depth. As such, this water-bearing interval is not considered to produce groundwater to the borehole under ambient conditions.

- During production testing, 11 inflow zones were identified from the DW-2 hydropysical logs, ranging in flow from 0.005 to 5.69 gpm, with the dominant inflow zone at 30.4 to 31.6 ft, producing 5.69 gpm or 90 percent of the total formation production rate. The transmissivity calculations for well DW-2 indicate that the interval 30.4 to 31.6 ft bgs exhibited the highest transmissivity of approximately 216 ft^2/day.

- Based on the observations from the synoptic potentiometric head measurements, WESTON concludes that the dominant north-south fracturing present in bedrock creates strong north-south anisotropy in the groundwater flow. Further, at well DW-1, the shallower fractures do not appear to have any interconnectivity with fractures in other wells, while the deeper fracture intervals are interconnected with fractures that reach as far as monitoring wells MW-01, MW-03, and MW-05. Synoptic

potentiometric head measurements did not identify bedrock fracture interconnections beyond well DW-2.

- The fracture characteristics of the shallow bedrock surrounding the borehole at well DW-1, and the number of those water-bearing fractures that are high-angle fractures, results in an interconnected network of fractures around the well that have pressure-equilibrated outside the influence of the borehole. The weak differential potentiometric head that exists between the fractures results in primarily horizontal groundwater flow within the well.

- In well DW-2, the fracture characteristics of the shallow bedrock are similar to those surrounding the borehole at well DW-1. However, although there are high-angle fractures identified in the deeper bedrock surrounding well DW-2, their aperture and water-bearing potential are not as significant as those in the shallow bedrock, and the upper and lower portions of the well have substantially different potentiometric heads. The relatively strong differential potentiometric head that exists between the upper and middle fractures results in vertical groundwater flow from the middle fractures to the upper fractures within the well.

- In drinking water well DW-1, the peak toluene and gasoline-range organics (GRO) concentrations were in shallow bedrock fractures, the peak chlorinated solvent concentrations were in the middle bedrock fractures, and the peak diesel-range organics (DRO) concentrations were in the deepest bedrock fractures; this pattern of contamination indicates that the well may be impacted with hazardous substances from three separate sources at the LO-58 Site. Further, the gradual increase or decrease in contaminant concentrations at successive depth intervals demonstrates that the uppermost and deepest fractures may be interconnected, and that concentration gradients exist between them. However, the slight variations in contaminant concentrations and the relatively small number of measurement points were found to be inadequate to make statistically significant conclusions.

- The ratio of cis-1,2-dichloroethylene (cis-1,2-DCE) to trichloroethylene (TCE) was compared between shallower and deeper intervals of well DW-1 in order to assess possible greater TCE degradation and distance from the TCE source. The slight increase in cis-1,2-DCE to TCE ratios with depth were found to be statistically insignificant.

- A trace concentration of cis-1,2-DCE was detected in well DW-2. Based on the lack of concentration gradients between adjacent fractures, these results demonstrate the lack of interconnection between adjacent fractures in this well. Further, the trace detection of cis-1,2-DCE in the second deepest (187.9 to 192.2 ft bgs) depth interval, with no detectable TCE, supports two hypotheses:

1. There is a small, but nonetheless significant deep bedrock connection between wells DW-1 and DW-2, or a connection to a common source that is not detectable in the synoptic potentiometric head measurements.

2. The detection of cis-1,2-DCE but no TCE at substantial depth and distance from the presumed source area suggests that TCE degradation appears nearly complete.

- The overall bedrock groundwater horizontal potentiometric gradients at the LO-58 Site are north-northwesterly beneath the eastern portion of the Site, northerly beneath the northern portion of the Site, and northwesterly beneath the western portion of the Site, generally consistent with topography.

Bedrock Groundwater Quality

- The analytical results for drinking water well DW-1 were consistent with previous analytical results for this well. Laboratory analytical results from the wire-line straddle packer (WSP) sampling of drinking water well DW-1 indicate the presence of chloroform, cis-1,2-DCE, TCE, toluene, GRO, and DRO in one or more samples collected from DW-1, and generally have increasing or decreasing concentration trends with depth. None of the volatile organic compounds (VOC) were detected above their Maine Maximum Exposure Guidelines (Maine MEG) or the U.S. Environmental Protection Agency (EPA) Maximum Concentration Limits (MCL) for drinking water. However, GRO or DRO concentrations in five samples exceeded their 50 micrograms per liter (µg/L) Maine MEG.

- In well DW-1, the peak toluene and GRO concentrations are in shallow bedrock fractures, the peak chlorinated solvent concentrations are in the middle bedrock fractures, and the peak DRO concentrations are in deep bedrock fractures; this pattern of contamination indicates that the well may be impacted with hazardous substances from three separate and increasingly distant sources at the LO-58 Site.

- The analytical results for drinking water well DW-2 were generally consistent with previous analytical results, with one anomaly. Laboratory analytical results from the WSP sampling of drinking water well DW-2 indicate the presence of cis-1,2-DCE, toluene, and DRO in one or more samples collected. None of the VOCs were detected above their Maine MEGs or EPA MCLs for drinking water. However, GRO or DRO concentrations in five samples exceeded their applicable 50 µg/L Maine MEG. The one anomaly in the well DW-2 analytical results is the detection of a trace concentration of cis-1,2-DCE in the sample collected from the second deepest (187.9 to 192.2 ft bgs) depth interval. Chlorinated solvents have not previously been detected in samples collected from this well. However, the detection of cis-1,2-DCE is likely due to the focused nature of the sampling at the single fracture zone;

consistent with previous analytical results, subsequent sampling of the well did not detect cis-1,2-DCE, likely due to dilution by water from other fractures within the well borehole. Finally, the cis-1,2-DCE detection at the second deepest interval provides evidence of the extent of chlorinated solvent impacts to bedrock groundwater.

The geological, geophysical, and hydrophysical data collected as part of the LO-58 Site investigation has eliminated many of the data gaps regarding groundwater flow and the nature and extent of groundwater impacts from the LO-58 Site. As part of the next task required under the *SOW*, WESTON will update the Conceptual Site Model for the LO-58 Site.

SECTION 1

INTRODUCTION

1. INTRODUCTION

1.1 SCOPE OF WORK AND PURPOSE

This Borehole Hydrophysics and Geophysics Report (BHG Report) was prepared by Weston Solutions, Inc. (WESTON®) to document field activities and interpretations for the former LO-58 Nike Battery Launch Site (LO-58 Site) in Caribou, Maine, which is one of several Formerly Used Defense Sites (FUDS) in northern Aroostook County, Maine (Figure 1-1). This BHG Report has been prepared for the United States (U.S.) Army Corps of Engineers, New England District (CENAE) in accordance with the *Statement of Work* (*SOW*) issued by CENAE to WESTON on 28 March 2007 (CENAE, 2007). In accordance with the *SOW*, WESTON provided field logistical support to the borehole hydrogeophysics team, including providing all well rehabilitation and maintenance services, temporary water services, well repair, field sampling and sample management, and water to support hydrophysical logging (HPL). WESTON also procured a laboratory with a successful track record for providing staged electronic data deliverables required by the U.S. Army Corps of Engineers FUDS guidance (CENAE, 2007). Finally, as called for in the *SOW*, electronic files containing raw and processed data collected during the geologic, geophysical, and hydrophysical investigation are included on a compact disk in Appendix A. This compact disk also includes an electronic copy of the BHG Report.

1.2 LIMITING CONDITIONS AND METHODOLOGY USED

This BHG Report was prepared according to the specifications provided in the *SOW*. As such; the BHG Report is a description of the activities and findings of the 2008 investigation at the LO-58 Site, to be used to assist the project delivery team (PDT) in planning, interpreting data, and communicating. The BHG Report provides additional geological, hydrogeological, and geophysical data that will be used to update the Conceptual Site Model (CSM) for the LO-58 Site. The target audience is the PDT (CENAE, 2007).

The information within the BHG Report was gathered primarily during the May 2008 field activities, supplemented as necessary by available documents at the Maine Geologic Survey (MGS) offices, and interviews and previous investigations conducted at the LO-58 Site. The information included in the BHG Report is limited by the quality of the previous investigations and the material which was available for review. In addition, current site conditions are based on the date of site investigation, the date of file reviews performed, and the information which was available for review. Site conditions noted in this report cannot be guaranteed to cover future activities or uses of the LO-58 Site.

1.3 REPORT ORGANIZATION

This BHG Report describes the activities and findings of the 2008 investigation at the LO-58 Site. Section 2 of the BHG Report summarizes the activities and results of the geological, geophysical, and hydrophysical investigations conducted by WESTON in 2008 to fulfill the requirements of the *SOW*. Section 3 of the BHG Report presents the conclusions of the WESTON 2008 LO-58 Site investigation. Section 4 of the BHG Report presents recommendations for further work to address hydrogeological data gaps that remain for the LO-58 Site following the 2008 WESTON investigation. Section 5 of the BHG Report includes the references cited to support the BHG Report for the LO-58 Site.

SECTION 2

LO-58 SITE GEOLOGIC, GEOPHYSICAL, AND HYDROPHYSICAL INVESTIGATIONS AND RESULTS

2. LO-58 SITE GEOLOGIC, GEOPHYSICAL, AND HYDROPHYSICAL INVESTIGATIONS AND RESULTS

WESTON's geologic, geophysical, and hydrophysical investigations at the LO-58 Site were conducted in May 2008. The purpose of the investigation was to gather site-specific geologic information using geologic, geophysical, and hydrophysical methods to update and expand the bedrock groundwater dataset. The investigations were directed by Mr. Joseph Schmidl, a State of Maine Certified Geologist (C.G.) (Certificate Number GE436). The investigations relied heavily on the work of WESTON's subcontractor COLOG, a division of Layne Christensen Company (COLOG), which summarized the results of the geophysical and hydrophysical investigations in the *HydroPhysics™ and Geophysical Logging Results*, which is included in Appendix B (COLOG, 2009).

2.1 LO-58 SITE GEOLOGIC, GEOPHYSICAL, AND HYDROPHYSICAL INVESTIGATIONS

2.1.1 Site Description

The LO-58 Site is a 17-acre parcel of land located at 253 Van Buren Road (Route 1) in Caribou, Aroostook County, Maine (Figure 2-1). The LO-58 Site is owned by the Lister-Knowlton Post #9389 Veterans of Foreign Wars (VFW) and is identified by the City of Caribou Assessor's Office as Map 14, Lot 50 (WESTON, 2007a). The entrance to the LO-58 Site from Van Buren Road is located at latitude 46º 52′ 55″ North and longitude 68º 0′ 38″ West (U.S. Fish and Wildlife Service, 2008). The magnetic declination at Caribou, Maine is 18º 12′ West; however, for the purposes of this report, geophysical data based on compass readings were adjusted by 20º West (National Geophysical Data Center, 2009).

The property was acquired from the Town of Caribou in 1955 by the U.S. Government for the construction of a Nike missile launching facility. The LO-58 Site was deactivated by the Department of Defense in 1966 and following its decommissioning as a military facility in 1969, the LO-58 Site was conveyed to the City of Caribou and used for storage of municipal property. In 1970, the property was purchased by the current owner, the Lister-Knowlton VFW Post #9389 (WESTON 2007a). Several components of the former launch site have since been

deconstructed, including the subsurface portion of the Former Launcher Area, which was closed by filling with soil in 1994, and the aboveground portion of the Former Warhead Building was demolished in spring 2007, leaving only the concrete building pad in place.

The LO-58 Site is provided drinking water from two separate bedrock water supply wells. The VFW Building, which is the former barracks building, is provided potable drinking water from a 6-inch-diameter, 284-foot (ft) deep bedrock well, in which the pump is set at 62.5 ft below ground surface (bgs). The well is designated DW-2 and is located approximately 100 ft west of the building in the parking area. The well is situated in a 4-ft by 4-ft concrete vault beneath the parking area and access to the wellhead is acquired through a manhole (WESTON, 2007a). A chlorine-based water-softening and bacterial treatment system has been installed on the water supply to address hardness and elevated bacteria levels which have been reported in the water supply; no other treatment system has been part of this system. The treatment system is located in a utility room located in the eastern corner of the building (WESTON, 2009).

The Adult Multiple Alternative Center (AMAC) facility, which is located in the former Generator Building, is provided potable drinking water from a 6-inch-diameter, 58-ft deep bedrock water supply well designated DW-1, in which the pump is set at 50 ft bgs. Well DW-1 was installed in 1994 and is located approximately 25 ft east of the building. Prior to that date, potable water for the building came from well DW-2. The well was installed following a break in the water line which could not be repaired between the VFW and AMAC buildings. A point-of-entry activated carbon water filtration system was installed and is monitored by the Maine Department of Environmental Protection (MDEP) to remove any contaminants which are present in the well DW-1 water supply. Historically, concentrations of trichloroethylene (TCE) in drinking water from the well have exceeded the applicable MDEP action level of 2.5 micrograms per liter (µg/L) [Bureau of Health (BOH), 2000; WESTON, 2007a].

WESTON installed five bedrock groundwater monitoring wells (MW-01 through MW-05) in October 2000. The bedrock monitoring well installations were performed using air-hammer drilling techniques. The wells were installed at the site to evaluate the nature and extent of groundwater contamination at the site, as well as to determine the direction of groundwater flow in the local bedrock water-bearing zone (WESTON, 2007b). Table 2-1 summarizes the

construction details for the two drinking water wells and the five bedrock monitoring wells at the LO-58 Site.

2.1.2 Geologic Investigation

The geologic investigation included background research among available geologic references, observation, and characterization of exposed bedrock at the LO-58 Site; measurement of bedrock features, including bedding planes, fold axes, and fractures; and the measurement of water levels in five bedrock monitoring wells and two bedrock drinking water wells during geophysical and hydrophysical investigations. The geologic investigation was conducted by Mr. Joseph Schmidl, C.G. The results of the geological investigation are presented in Subsection 2.2 of this BHG Report.

2.1.3 Geophysical and Hydrophysical Investigations

The geophysical and hydrophysical investigations were performed on the five bedrock monitoring wells (MW-01 through MW-05) and the two drinking water wells (DW-1 the AMAC Well, and DW-2 the VFW Well) at the LO-58 Site. Table 2-1 summarizes the construction details for these wells. In advance of the geophysical and hydrophysical investigations, pressure transducers were installed in each of the seven on-site bedrock wells. The synoptic potentiometric head measurement data from the pressure transducers were used to identify potential hydraulic interconnections between wells. The results of this investigation are summarized in Subsection 2.2.4.3. In addition, WESTON measured synoptic water levels in the seven bedrock wells at the beginning and end of the geophysical and hydrophysical investigations. Table 2-2 summarizes the bedrock groundwater potentiometric elevation data obtained, which is further discussed in Subsection 2.2.4.1.

2.1.3.1 Geophysical Investigation

The geophysical investigation included downhole geophysical logging of five bedrock monitoring wells and two bedrock drinking water wells at the LO-58 Site. The geophysical logging included the ten techniques listed in Table 1 of the *SOW* (CENAE, 2007):

- Natural Gamma Logs.
- Three-Arm Caliper Logs.
- Fluid Electrical Conductivity (FEC) Logs (temperature, dissolved oxygen (DO), specific conductance, SHE-corrected oxidation-reduction potential (ORP), hydrogen ion concentration).
- 8-, 16-, 32-, and 64-inch Normal Resistivity Logs.
- Single Point Resistance/Spontaneous Potential/Current Logs.
- Induction Logs.
- Vertical Seismic Profiling (VSP).
- Acoustic Televiewer Logs.
- Optical Televiewer (OTV) Logs.
- Full Wave Form Sonic Logs.

The geophysical investigation was conducted by Mr. Greg Bauer of COLOG, with the assistance of COLOG's subcontractor Mr. Mark Blackey of Geophysical Applications, Inc., who performed the VSP task. The results of the geophysical investigation were presented in the *HydroPhysics™ and Geophysical Logging Results* (COLOG, 2009), which is included in Appendix B. The pertinent results have been incorporated into Subsection 2.2 of this BHG Report.

2.1.3.2 Hydrophysical Investigation

The hydrophysical investigation included HPL of two bedrock drinking water wells at the LO-58 Site. The HPL included ambient flow characterization, pumping flow characterization, and wire-line straddle packer (WSP) testing techniques listed in Table 1 of the *SOW*. The hydrophysical investigation was conducted by Mr. Greg Bauer of COLOG (COLOG, 2009). The results of the hydrophysical investigation were presented in the *HydroPhysics™ and*

Geophysical Logging Results (COLOG, 2009), which is included in Appendix B. The pertinent results have been incorporated into Subsection 2.2 of this BHG Report.

In order to conduct the geophysical and hydrophysical investigations in drinking water wells DW-1 and DW-2, the pumps and associated piping were removed from the wells, and the AMAC and VFW Buildings were supplied with temporary potable water supplies. WESTON collected drinking water samples before (8 May), during (15 May), and following (21 May) the use of each temporary water supply to ensure that the temporary supply for each building met MDEP drinking water standards. The water samples were submitted to TestAmerica Laboratories, Inc. (TestAmerica) and Analytics Analytical Laboratories, LLC (Analytics) for analysis for volatile organic compounds (VOC) by the U.S. Environmental Protection Agency (EPA) Method 524.2 (Analytics, 2008a; 2008b; TestAmerica, 2008a). Table 2-3 summarizes the results of these analyses, and shows that the trace VOCs detected in the temporary potable water supplies were within Maine Maximum Exposure Guidelines (Maine MEG) and EPA Maximum Contaminant Limit (MCL) standards (BOH, 2000; EPA, 2003).

However, as noted in an 11 June 2008 letter from CENAE to the VFW, samples collected on 8 May from the supplied water before it went through the VFW system contained bromodichloromethane, bromoform, dibromochloromethane, compounds which are formed as by-products of drinking water chlorination. The Caribou Utilities District treats its water with sodium hypochlorite for disinfection. The sample of supplied water collected after going through the VFW system contained TCE and dibromochloromethane. The difference in concentration of the compound dibromochloroemethane from 1.3 µg/L to 3.1 µg/L in the samples from the supplied water before and after the VFW system, respectively, indicated that the chlorination byproduct concentration was increasing.

Since the VFW system includes a chlorination system and the alternate water supply provided is also chlorinated, the result was over-chlorination of the drinking water. As a result of the above, the VFW chlorination system was taken off-line and the system flushed to reduce concentrations of compounds resulting from the over chlorination. The chlorination system remained off-line while the alternate water supply was being used. Samples were collected again on 15 May after the system was flushed and indicated the presence of the following chlorination byproduct

compounds: dibromochloromethane, bromodichloromethane, and bromoform. The concentrations were all below the more conservative of the MCL and Maine MEGs. Tetrachloroethene was not detected in the sample collected on 15 May.

A final sample was collected on 22 May once the VFW was taken off the alternate water supply and reconnected to its own well and before restarting the chlorination system. Toluene was the only compound detected at a concentration of 1.0 µg/L, below the EPA MCL of 1,000 µg/L. Toluene has not been detected in the well previously and may be a laboratory contaminant. The VOC concentrations will continue to be monitored as part of the existing drinking water monitoring program (CENAE, 2008).

In addition, the HPL of drinking water wells DW-1 and DW-2 required the well boreholes to be flushed with deionized water generated on-site from the potable water source; this water was similarly tested before its use to ensure that no contamination was introduced to the drinking water wells. The water samples were submitted to TestAmerica and Analytics for VOC analysis by EPA Method 524.2; the initial sample, collected on 5 May 2008, was also analyzed for 1,2-ethylene dibromide (EDB), 1,2-dibromo-3-chloropropane (DBCP), and 1,2,3-trichloropronane (TCP) by EPA Method 504.1; further analysis by EPA Method 504.1 was not performed because of the favorable initial results (Analytics, 2008a; 2008c; 2008d; 2008e; 2008f). During initial testing of the deionized water and before the water was introduced to either drinking water well, it was discovered that the deionization process was introducing tetrahydrofuran at concentrations greater than the Maine MEG of 70 µg/L (There is no EPA MCL for tetrahydrofuran.) (BOH, 2000; EPA, 2003). Through iterative sampling, the source of the contamination was traced to a newly-recharged deionized water filtration unit, and the problem was eliminated with the replacement of the filtration unit. The replacement filtration unit initially contained chloroform above the Maine MEG but below the EPA MCL, but this condition quickly passed following continued flushing, and did not recur, as documented by subsequent samples (BOH, 2000; EPA, 2003). Table 2-4 summarizes the water analytical results for the deionized water and associated samples of influent water, and shows that the trace VOCs detected in the deionized water were below Maine MEGs and EPA MCLs (BOH, 2000; EPA, 2003).

2.1.3.3 Wire-Line Straddle Packer Testing/Groundwater Sampling

WESTON performed WSP sampling at both of the drinking water wells in May 2008 as part of the geophysics program designed to expand site characterization. WESTON retained the services of COLOG to perform WSP sampling on the two drinking water wells DW-1 and DW-2. Based on the results of the HPL investigation described in Subsection 2.1.3.2, the highest-producing zones in each well were targeted for WSP testing, with the objective of distributing sampling points along the entire length of the borehole to the extent possible. The zones targeted for WSP testing were first isolated and sampled utilizing low-flow methodology for VOCs, gasoline-range organics (GRO), and diesel-range organics (DRO). The groundwater parameters measured to confirm equilibrium conditions were achieved during low-flow sampling are summarized in Table 2-5, and the Groundwater Sampling Logs and equipment calibration records for these sampling activities are included in Appendix C. After collecting the samples, each zone was tested for transmissivity and hydraulic conductivity.

The same WSP (including the integral pump) was used to sample drinking water well DW-2 and well DW-1. Drinking water well DW-2 was sampled first, from the shallowest to the deepest interval, as it was expected to be the least contaminated, having historically lower groundwater contaminant concentrations and being farther from the known sources of contamination. The WSP was not decontaminated between sample intervals, as the WSP was lowered through the shallower intervals to reach the deeper intervals, and thus, could not be protected from cross-contamination between intervals. Following sampling the six depth intervals of well DW-2, the WSP (including the integral pump) was decontaminated before use in drinking water well DW-1. Equipment rinsate blank sample RB-051808-01 was collected from the WSP following its decontamination. The detection of DRO in the equipment rinsate sample indicates that the equipment decontamination was not entirely successful. Following decontamination of the WSP, drinking water well DW-1 was sampled, this time from the deepest to the shallowest interval. The detection of DRO in the first depth interval of well DW-1 sampled at a concentration three times that detected in the equipment rinsate blank suggests that, although the decontamination of the WSP was not entire successful, it was not likely to result in false positive results of this concentration level in the samples collected from well DW-1.

The groundwater samples were submitted to TestAmerica and Analytics for analysis for VOCs by EPA Method 524.2, EDB, DBCP, and TCP by EPA Method 504.1, GRO by the Maine Health and Environmental Testing Laboratory (Maine HETL) Method 4.1.17 and DRO by Maine HETL Method 4.1.25 (Analytics, 2008g; TestAmerica, 2008b). The analytical results were validated according to EPA Region 1 functional guidelines and were found to be useable, as qualified. Table 2-6 lists the zones targeted in each well and the laboratory analytical results from the WSP sampling, and the data validation records are included in Appendix D.

The analytical results for drinking water well DW-1 were consistent with previous analytical results for this well, when the difference between previous point-of-entry sampling and 2008 WSP sampling methodologies are accounted for. Laboratory analytical results from the WSP sampling of drinking water well DW-1 indicate the presence of chloroform, cis-1,2-dichloroethylene (cis-1,2-DCE), TCE, toluene, GRO, and DRO in one or more samples collected from well DW-1, as shown in Table 2-6 and discussed further in subsequent sections. None of the VOCs were detected above their applicable or EPA MCLs for drinking water (BOH, 2000; EPA, 2003). However, GRO or DRO concentrations in three samples exceeded their 50 µg/L Maine MEG. The groundwater quality implications of these data are further discussed in Subsection 2.2.5.

The analytical results for drinking water well DW-2 were generally consistent with previous analytical results, when the difference between previous point-of-entry sampling and 2008 WSP sampling methodologies are accounted for. Laboratory analytical results from the WSP sampling of drinking water well DW-2 indicate the presence of cis-1,2-DCE, toluene, and DRO in one or more samples collected from DW-2; chlorinated solvents had not previously been detected in samples collected from this well. None of the VOCs were detected above their applicable Maine MEGs or EPA MCLs for drinking water (BOH, 2000; EPA, 2003). However, DRO concentrations in two samples, the shallowest and deepest intervals, exceeded their applicable 50 µg/L Maine MEG (There is no EPA MCL for DRO.) (BOH, 2000; EPA, 2003). The groundwater quality implications of these data are further discussed in Subsection 2.2.5.

2.1.3.4 Data Quality Objectives

The data quality objectives (DQO) for the investigation were described in Sections 3 and 5 of the June 2007 *Final Management Work Plan, Borehole Hydrogeophysics and Conceptual Site Model Development at the Former Nike Battery LO-58 and Well Investigation at the Former Loring Air Force Base Communications Annex, Formerly Used Defense Sites Caribou and Perham, Maine* (WESTON, 2007a). The DQOs for laboratory reporting limits (RL) were included in Table 5-1 of the *Final Management Work Plan*. In general, the laboratory RLs met the DQOs, with the notable exception of the vinyl chloride RLs for samples analyzed by EPA Method 524.2 in Report Numbers 61245 (RL equals 10 µg/L), 61287 (RL equals 2 µg/L), 61307 (RL equals 2 µg/L), 61408 (RL equals 0.5 µg/L), 125508 (RL equals 0.5 µg/L), and 125630 (RL equals 0.5 µg/L) (Analytics, 2008b; 2008c; 2008e; TestAmerica, 2008a, 2008b).

The analytical results were validated according to EPA *Region 1 Data Validation Functional Guidelines* and were found to be useable, as qualified (EPA, 1996). The validated analytical results, including the Data Review Checklist for each data report, are included on Appendix D. The data validator identified a relatively small number of issues among the analytical results, which led to the following data qualifications:

- The concentrations and detection limits for methylene chloride in samples analyzed by EPA Method 524.2 from Report Number 61245 were estimated, because calibration quality control criteria were not met.
- The result for tetrahydrofuran in sample COLOGDI-050808 analyzed by EPA Method 524.2 from Report Number 61276 was estimated, as the result was above the calibration range.
- The positive results below the action level for DRO in samples analyzed by Maine HETL Method 4.1.25 from Report Number 61399 were estimated, because of detection of DRO in rinsate blank sample RB-051808-01. Professional judgment was used in not qualifying the results as not detected.
- The result for toluene in samples LS58DW1-0508-051, LS58DW2-0508-189, and LS58DW2-0508-265 analyzed by EPA Method 524.2 from Report Number 125630 was qualified as not detected, because of the detection of toluene in rinsate blank sample RB-051808-01.

Of the identified issues, only the possible DRO and toluene cross-contamination potentially impact the interpretation of the groundwater analytical results. For the purposes of this BHG Report, WESTON has considered the qualified results as usable and has interpreted the results accordingly.

2.1.3.5 Well Repair Activities

During the reinstallation of the pumps in the drinking water wells following the geophysical and hydrophysical investigations, repairs were made to the pumps and ancillary equipment. For drinking water well DW-1, the repairs were limited to the replacement of a centralizer which was found to be broken when removed from the well. For drinking water well DW-2, the repairs included the replacement of a plastic fitting which was worn by use, the installation of a pitless adapter, and the extension of the well casing by approximately 4 ft in order to meet current installation standards. The repairs were performed by WESTON's subcontractor St. Pierre and Sons, a Maine-licensed plumber.

2.1.3.6 Investigation-Derived Waste

Investigation-derived waste generated during the geophysical and hydrophysical investigations included purge water from the two drinking water wells, detergent-water solutions and rinse water used for equipment decontamination, and non-hazardous solid waste, such as used personal protective equipment, plastic tubing, and cardboard boxes. In accordance with industry standards, purge water was discharged to the ground surface in the vicinity of the well from which it was purged (since its infiltration does not adversely impact the formation from which it came), decontamination fluids were discharged to the ground surface, and non-hazardous solid waste was double-bagged and disposed of with municipal solid waste.

2.2 LO-58 SITE GEOLOGIC, GEOPHYSICAL, AND HYDROPHYSICAL RESULTS

2.2.1 Topography

Consistent with the typical location of Nike missile batteries, the LO-58 Site is located on a topographic high, east of Van Buren Road (see Figures 1-1 and 2-1). The LO-58 Site is located

on the northwest face of a rock-cored drumlin. Elevations at the LO-58 Site vary by approximately 60 ft, from approximately 540 ft above mean sea level (amsl) at the former Barracks Building which is located at the bottom of the hill near Van Buren Road, to approximately 600 ft amsl at the former Launcher Area which is situated at the topographic high for the property (WESTON, 2007a).

2.2.2 Soil and Overburden Geology

2.2.2.1 Soil Description

Based on the *Aroostook County Soil Survey, Northeastern Part* [U.S. Department of Agriculture (USDA), 2008a], soils at the LO-58 Site are primarily mapped as Caribou gravelly loam, with slopes varying from 0 to 15 percent. Caribou soils are well drained soils formed on loamy till plains and ridges and have moderate permeability (USDA, 2008b).

2.2.2.2 Overburden Geology

Based on the *Surficial Geologic Map of Maine* (MGS, 1985a), overburden underlying the property is primarily glacial till consisting of a heterogeneous mix of sand, silt, clay, and stones, with local occurrences of boulders and was deposited directly by glacial ice. The till is generally massive, but may contain beds and lenses of variably washed and stratified sediments. Subsurface investigations performed at the LO-58 Site have generally confirmed these mapped subsurface conditions, although no inclusions of washed or stratified sediments have been noted. Site-specific observations document that overburden thickness at the LO-58 Site varies depending on location and ranges from 0 ft bgs at the former Launcher Area to approximately 16 ft bgs near the former Test Building. Bedrock outcrops are present along the southern edge of the former Launcher Area (WESTON, 2007a). Figure 2-2 presents an isopach map of overburden thickness at the LO-58 Site.

Based on the results of previous environmental investigations, the contaminants of potential concern (COPC) attributable to releases from the LO-58 Site are VOCs associated with fuel and chlorinated solvents associated with missile maintenance (WESTON, 2000). The VOCs associated with fuel include benzene, toluene, ethylbenzene, xylene, naphthalene, and

trimethylbenzenes. Based on historical information, the primary chlorinated solvent associated with missile maintenance is TCE, which has also been detected in on-site soils, although the concentrations of TCE detected were sufficiently low that a clear soil source of TCE has not been identified (WESTON, 2001). Tetrachloroethylene, commonly present in trace concentrations in solvent-grade TCE, as well as cis-1,2-DCE and chloromethane, breakdown products of TCE, are also COPCs for the LO-58 Site, due to their detection in on-site soils (WESTON, 2000).

The COPCs associated with fuel have been detected in soil and soil vapor samples associated with former underground storage tanks located near the Former Missile Assembly and Test Building, as well as soils in the vicinity of the Former Launcher Area and Former Fueling Platforms, and south-southeast of the AMAC Building at the LO-58 Site (WESTON, 2000). The COPCs associated with missile maintenance (specifically, TCE) have been detected at soil sample locations SB-13 which is northwest and downslope of the Former Launcher Area, and SB-34 which is immediately southwest of the AMAC Building. In addition, TCE was detected in soil vapor samples associated with soils in the vicinity of the Former Launcher Area and south-southeast of the AMAC Building at the LO-58 Site (WESTON, 2000).

The COPCs attributable to releases from the LO-58 Site are both volatile and susceptible to both aerobic and anaerobic degradation with the degradation rates of the chlorinated solvents substantially lower than those of the fuel-related VOCs. Further, the solubility of the COPCs in water is relatively low. Due to these characteristics, mobility of the COPCs is moderate, and the attenuation factors for the COPCs at the LO-58 Site are moderate to high. In the context of the BHG Report, the presence of dissolved VOCs in groundwater at the LO-58 Site comprises evidence of a release to the environment from the previously mentioned soil source(s), and the groundwater analytical data serve to quantify the extent of the release.

2.2.2.3 Overburden Hydrogeology

Subsurface investigations into overburden groundwater at the LO-58 Site have indicated that there is little or no saturated thickness in the overburden (WESTON, 2007b). WESTON concludes that surface water that infiltrates the overburden percolates downward until coming in contact with the bedrock surface. At the bedrock surface, groundwater flows along the surface of

the bedrock beneath the LO-58 Site until reaching a point of infiltration, such as a fracture or a weathered bedrock zone (WESTON, 2007b).

2.2.3 Bedrock Geology

As noted above, the depth to bedrock at the LO-58 Site varies depending on location ranging from 0 ft bgs at the former Launcher Area to approximately 16 ft bgs near the former Test Building (WESTON, 2007b). Figure 2-3 presents a contour map of bedrock elevations at the LO-58 Site. Observation of the bedrock surface can be made in the vicinity of the former Launcher Area, and previous soil boring records indicate that there is little or no weathered bedrock at the overburden-bedrock interface. This is consistent with the geologic history of the LO-58 Site which indicates that any weathered bedrock at the site would have been eroded during the final Wisconsin glacial advance, and that there has been insufficient time for appreciable bedrock weathering during the subsequent 12,000 years. This condition is to be expected on the northwest face of a rock-cored drumlin which was subject to glacial action approximately 12,000 years ago. Vertical seismic profiling did not identify acoustically-incompetent bedrock at the LO-58 Site (COLOG, 2009). No rock quality designation data are available for any of the bedrock wells at the LO-58 Site. Finally, a notable linear depression in the bedrock surface is present between locations SB-22 and SB-43 which may be indicative of a fracture zone.

2.2.3.1 Lithology

Based on the 1:500,000-scale *Bedrock Geologic Map of Maine,* bedrock underlying the property is mapped as the Siluro-Ordivician Carys Mills Formation, and the datalayer used to generate Figure 1 of the *SOW* used this reference (MGS, 1985b). However, based on the 1:62,500-scale *Geologic Map of the Caribou and Northern Presque Isle Quadrangles, Maine*, bedrock beneath the LO-58 Site is mapped as the Silurian Spragueville Formation (MGS, 1985c). To reconcile the conflicting references, WESTON relies on the smaller-scale map which not only provides greater control but used more recent data from outcrops at the LO-58 Site to determine the contact boundary between the Spragueville and Carys Mill Formations; thus, WESTON concludes the bedrock beneath the LO-58 Site is part of the Spragueville Formation, as depicted in Figure 2-4.

The Spragueville Formation comprises interbedded pelite and limestone and/or dolostone rocks of Silurian age (MGS, 1985b). This formation is weakly metamorphosed and contains local occurrences of prehnite and pumpellyite. The Spragueville Formation contains distinctive, rounded nodules resulting from bioturbation (Lopez, 2003). The Spragueville Formation is interpreted as submarine fan sediments that are closely related to the older Carys Mills Formation (Lopez, 2003).

Observations of bedrock in outcrops at the LO-58 Site confirm that the local bedrock is gray, "nubbly", interbedded, weakly metamorphosed mudstone and limestone. The bedding surfaces are clearly visible in the rock, both in outcrops and in OTV logs of boreholes, and contain the "nubbly" bioturbation features associated with the Spragueville Formation (Lopez, 2003). Consistent with the available information regarding the thickness and extent of the Spragueville Formation, no geologic contacts were encountered on or beneath the LO-58 Site. The nearest contact with another geologic unit, the Silurio-Ordivician Carys Mills Formation, is located approximately 900 ft northwest of the LO-58 Site (MGS, 1985c).

2.2.3.2 Bedrock Fabric

Based on the *Geologic Map of the Caribou and Northern Presque Isle Quadrangles, Maine* and other geologic references (MGS, 1985b; 1985c; Lopez, 2003), bedrock underlying the property is located on the east limb of the Chapman Synclinorium. The axis of the synclinorium trends north-northeast and dips to north. The Chapman Synclinorium was formed during the first deformational or compressional phase of the Acadian Orogeny, which occurred during the lower to middle Devonian Period, and resulted in a major, single, and steeply dipping north-south cleavage in the bedrock (Lopez, 2003).

The *Geologic Map of the Caribou and Northern Presque Isle Quadrangles, Maine* identifies the bedrock bedding at the LO-58 Site as striking North 70º East and dipping 12º East as well as a foliation striking North 5º West and dipping 78º West (MGS, 1985c). Site-specific observations, from both bedrock outcrops and OTV logs, indicate that the local bedrock is folded in two directions: the major folds are broad to tight with axes oriented North 30º East, parallel to the axis of the Chapman Synclinorium; the fold axes are also folded broadly on North 20º West axes. Three joint sets are present in the local bedrock: a near vertical set striking North 45º East and

dipping 80º West, which is associated with the Acadian Orogeny; another steeply-dipping set striking North 45º East and dipping 85º East, which is roughly perpendicular to the first; and a shallowly-dipping set of sheeting joints that is roughly parallel to the ground surface and bedding and decreases in frequency with depth (Billings, 1972; COLOG, 2009). The near-vertical sets of joints, particularly the North 45º East and dipping 85º East set, are often filled with calcite.

The planar features in bedrock that are intercepted by drinking water wells DW-1 and DW-2 were measured by COLOG and plotted as tadpoles on the geophysical logs as well as plotted onto Schmidt stereonets. Figure 2-5 presents a stereonet plot of bedding planes and measured joints. The stereonet plots for well DW-1 show two clusters of data; one for the low-angle features (near-horizontal joints and bedding) which has about 90º of variability from North 45º West to North 45º East, dipping West, and a second pair of steeply dipping features (near-vertical joints) which are further grouped in two clusters, one at North 25º West and a smaller cluster at North 65º West, both dipping East. The feature ranks (ranked from 0 for fractures with minimum flow capacity to 5 for fractures with maximum flow capacity) indicate that both the low angle and steeply-dipping features contain members where significant flow is present (COLOG, 2009). The stereonet plots for well DW-2 are appropriately more complicated, inasmuch as they represent a greater length of bedrock borehole data. The primary data cluster for well DW-2 is centered on steeply-dipping features (near-vertical joints) oriented North 45º East and dipping East which has approximately 45º of lateral spread. The feature rank plot reveals that there are a small number of features which do not appear on the contour plot due to low frequency. Within these data are a set of steeply-dipping features (North 45º West to North 45º East, with a slight concentration around North 45º East, dipping West); there are relatively few low-angle features in this dataset (COLOG, 2009).

The upper 60 ft of bedrock have similar fracturing characteristics at drinking water well locations DW-1 and DW-2. However, the deeper bedrock (below approximately 70 ft) surrounding well DW-2 contains very few sheeting fractures and the aperture and water-bearing potential of the steeper fractures are not as significant, resulting in different fracturing characteristics which, by nature of its depth, do not appear in the bedrock surrounding well DW-1.

Further, as noted in Subsection 2.2.3, Figure 2-3 indicates a linear depression in the bedrock surface is present between locations SB-22 and SB-43 which may be indicative of a fracture zone. The orientation of the linear depression is approximately North 70º West, which is nearly parallel with the North 65º West cluster of joints noted in the geophysical log of well DW-1, supports the hypothesis that the feature is a fracture zone.

2.2.4 Bedrock Hydrogeology

As noted in Subsection 2.2.3, there are no significant deposits of weathered bedrock at the LO-58 Site, and overburden groundwater is assumed to discharge directly from the glacial till overburden to competent bedrock. Groundwater flow through bedrock at the LO-58 Site is solely via fracture flow; the mudstone and limestone beneath the site are not reported to have any primary porosity. In addition, although solution cavities are common in certain limestone deposits, neither the available geologic literature nor the lack of local and regional observations of karst topography indicate that the limestone of the Spragueville Formation is subject to solution cavities (MGS, 1985b). Thus, it may be concluded that the orientation, length, width, and interconnectedness of joints in the bedrock beneath the LO-58 Site exert significant control over both groundwater flow direction and contaminant distribution within groundwater (Freeze & Cherry, 1979).

2.2.4.1 Depth to Bedrock Groundwater

Figure 2-6 depicts the bedrock groundwater elevation contours for May 2008. Bedrock groundwater depths were measured in each of the five monitoring wells at the LO-58 Site on 30 April 2008, upon installation of the pressure transducers, and on 21 May 2008, upon the retrieval of the same. Bedrock groundwater depths were measured in drinking water wells DW-02 and DW-01 at the LO-58 Site on 5 and 6 May 2008, respectively, upon installation of the pressure transducers, and on 21 May 2008, upon the retrieval of the same. The first groundwater depths for the drinking water wells were measured shortly following their shut down and the removal of their pumps and associated piping and are not considered to represent equilibrium conditions; thus, only the 21 May 2008 groundwater depth data are considered usable for the calculation of groundwater flow directions (see Subsections 2.2.4.4 and 2.2.4.5). Table 2-2

summarizes the groundwater depth data and groundwater elevation calculations; note that the elevation measurements for the drinking water wells are estimated from available maps and are not the result of a precise survey, and the groundwater elevations calculated for those wells are considered approximate. Rainfall was very limited between 30 April and 21 May 2008, which is reflected in the roughly 10 ft drop in water levels across the LO-58 Site during this period. Bedrock groundwater elevations range from approximately 569 to 537 ft amsl on 30 April and 564 to 531 ft amsl on 21 May 2008. Figure 2-6 depicts the groundwater elevations measured on 21 May 2008.

2.2.4.2 Bedrock Groundwater Flow Velocity and Transmissivity

The hydrophysical logs at ambient conditions for drinking water wells DW-1 and DW-2 provide the data required to calculate volumetric flow rates and specific discharge rates for the bedrock fractures examined. The hydrophysical logs under production conditions for drinking water wells DW-1 and DW-2 provide the data required to calculate interval-specific inflow rates. Finally, an estimation of transmissivity of the fractures at each well can be made using an equation after Hvorslev, assuming steady-state radial flow in an unconfined aquifer. By applying the HPL results under the two pressure conditions (ambient and production conditions), the interval specific transmissivity can be calculated for each identified water producing interval. The specific calculations, formulae, and references for the methodology are included in the *HydroPhysics™ and Geophysical Logging Results*, which is included as Appendix B to this BHG Report (COLOG, 2009).

Beyond the measurements and calculations performed within drinking water wells DW-1 and DW-2, WESTON has obtained precipitation records from the Caribou Airport for the period that the pressure transducers were in place, and notes that precipitation of greater than 0.5-inches occurred on 8 and 20 May 2009. WESTON has summarized the precipitation records in a table in Appendix E. Comparison of these records to the pressure transducer data summaries also included in Appendix E indicate that there appears to have been a fairly rapid (approximately 6 hours) response in wells DW-1 and DW-2 to the rainfall event on 8 May, where a slight increase in potentiometric elevation was noted. However, a similar response was not noted to the 20 May rainfall event, in part due to interference by pumping activities at well DW-1.

The relatively rapid response is consistent with the relatively thin overburden deposits at the LO-58 Site.

AMAC Well (DW-1)

The hydrophysical logs for well DW-1 illustrate significant change at several intervals throughout the length of the borehole. These dramatic changes in the FEC profiles with respect to time are associated with ambient horizontal flow occurring within the borehole. Numerical modeling of the reported field data suggests the volumetric flow rate observed in the wellbore for the depth intervals 27.3 to 31.7, 34.6 to 35.0, 40.4 to 48.6, 49.0 to 50.2, and 52.7 to 53.6 ft bgs are 0.085, 0.011, 0.14, 0.018, and 0.058 gallons per minute (gpm), respectively. Correcting for convergence of flow at the wellbore and factoring the length of the interval, these flow rates equate to Darcy velocities or specific discharges of groundwater in the aquifer of 2.84, 3.91, 2.53, 2.28, and 9.56 feet per day (ft/day), respectively (COLOG, 2009).

During production testing, seven inflow zones were identified from the well DW-1 hydrophysical logs, at 27.3 to 31.7, 34.6 to 35.0, 37.4 to 38.4, 40.4 to 48.6, 49.0 to 50.2, 52.7 to 53.6, and 54.4 to 58.1 ft bgs with flow rates ranging of 0.207, 0.195, 0.745, 2.00, 0.416, 1.65, and 0.838 gpm, respectively. The logs indicate the interval 40.4 to 48.6 and 52.7 to 53.6 ft bgs dominated flow during pumping, producing 3.65 gpm or 60 percent of the total flow. The transmissivity calculations for well DW-1 indicate that the intervals 40.4 to 48.6 and 52.7 to 53.6 ft bgs exhibited the highest transmissivities of approximately 129 and 111 square feet per day (ft^2/day), respectively (COLOG, 2009).

VFW Well (DW-2)

The hydrophysical logs for well DW-2 also illustrate significant change at several intervals throughout the length of the borehole. These dramatic changes in the FEC profiles with respect to time are associated with ambient vertical flow occurring within the borehole. Formation water migration as a result of downward vertical flow within the fluid column is indicated by the increase in FEC over time, beginning near the base of casing and at 31 ft. Numeric modeling of the reported field data suggests groundwater enters the wellbore at 19.5 to 19.6, 30.4 to 31.6,

38.2 to 41.8, and 44.9 to 51.4 ft bgs at rates of 0.026, 0.297, 0.016, and 0.074 gpm, respectively. The combined inflow of 0.413 gpm of these four intervals is observed to migrate vertically downward through the borehole based on the migration of the center of mass of the area under the curve. The modeling suggests groundwater exits the borehole at depths of 96.4 to 97.0 and 189.5 to 191.0 ft bgs, at rates of 0.370 and 0.185 gpm, respectively. Evidence for these outflow zones is observed in the logs for well DW-2, where the velocity of the water slows within the borehole ("downstream" of an outflow zone), and a change in slope, or truncation, of the FEC log is observed. The flow rates are based on the rate of increase of mass at their respective intervals. Of particular note is the FEC anomaly observed at the base of the borehole at 280 ft. This early increase in mass is not the result of ambient flow. Notice the mass at this depth, or area under the curve, does not increase with time but instead disperses. During removal of the plumbing at the conclusion of the emplacement, groundwater was momentarily allowed to enter the borehole at this depth near the bottom of the borehole. Over the course of the ambient flow characterization however, no additional groundwater entered the borehole at this depth. As such, this water-bearing interval is not considered to produce groundwater to the borehole under ambient conditions (COLOG, 2009).

During production testing, 11 inflow zones were identified from the DW-2 hydropysical logs, ranging in flow from 0.005 to 5.69 gpm, with the dominant inflow zone at 30.4 to 31.6 ft, producing 5.69 gpm, or 90 percent of the total formation production rate. The transmissivity calculations for well DW-2 indicate that the interval 30.4 to 31.6 ft bgs exhibited the highest transmissivity of approximately 216 ft^2/day (COLOG, 2009).

2.2.4.3 Bedrock Fracture Interconnectivity

Three sources of data collected during May 2008 provide information regarding the interconnectivity of bedrock fractures: synoptic potentiometric head measurements from the five bedrock monitoring wells and two drinking water wells, the results of ambient and pumping HPL flow characterization, and the results of WSP groundwater sampling.

Synoptic Potentiometric Head Observations

Potentiometric head measurements were collected via data water level transducers installed in the monitoring and drinking water wells and programmed to record measurements at 1-minute intervals. The transducers were installed prior to commencing any work activities at the LO-58 Site and remained in each well location until after the completion of work. WESTON recorded the times of the beginning and ends of significant events, such as pump removal and well purging, and compared these times to observed changes in potentiometric head elevation in nearby wells. Charts illustrating the water table elevations at the LO-58 Site during the May 2008 field program are included in Appendix E. WESTON also created a log which documents the major field activity start and stop times for each location which is also included in Appendix E, which was used as an interpretation aide by cross-referencing site activities with potentiometric head fluctuations.

The most notable change in water table elevation, not including the start/stop and removal of the transducers themselves, occurred on 14 May 2008, during the production testing of DW-1. Data measurements collected from MW-01, MW-03, and MW-05 indicate that when production testing began in DW-1, potentiometric head elevations decreased almost immediately in each of the three wells. As expected, after the completion of production testing in DW-1, the potentiometric head elevations rebounded to the static level. The same relationship was observed in these wells during the transmissivity and hydraulic conductivity testing performed in DW-1 with the WSP on 19 and 20 May 2008. The strongest relationship during the transmissivity and hydraulic conductivity evaluation was observed when the 41.2- to 51.9-ft and the 51-ft to 58.1-ft intervals were isolated with the WSP system. A slightly weaker correlation between the three monitoring wells and DW-1 was observed during the isolation of the 33.75- to 38.5-ft interval. However, the 33.75- to 38.5-ft interval also produced less than half the yield of the two deeper intervals. No other significant bedrock fracture interconnectivity was noted within the synoptic potentiometric head measurements.

As noted in Subsections 2.2.3 and 2.2.3.2, Figure 2-3 indicates a linear depression in the bedrock surface is present between locations SB-22 and SB-43 which has been interpreted as the expression of a fracture zone. The orientation of the linear depression is approximately North 70º

West, and includes wells DW-1 and MW-01. Based on the observations from the synoptic potentiometric head measurements, WESTON concludes that the North 65 to 70º West fracturing present in bedrock creates strong anisotropy in the groundwater flow in the vicinity of well DW-1. Further, at well DW-1, the shallower fractures do not appear to have any interconnectivity with fractures in other wells, while the deeper fracture intervals are interconnected with fractures that reach as far as monitoring wells MW-01, MW-03, and MW-05.

Flow Characterization Observations

Ambient HPL testing identified primarily horizontal flow across well DW-1 and downward vertical flow within the fluid column in well DW-2. The direction of groundwater flow across a well is an indicator of the interconnectedness of the individual fractures within the well.

A quantitative analysis of the fracture densities and relative apertures (ranks) was conducted which is documented in Tables A-1 and A-2 included in Appendix A. The overall fracture (ranks 1 to 5) density in well DW-1 is 0.67 fractures per foot (fractures/ft), and the overall fracture density in well DW-2 is 0.57 fractures/ft. These calculations indicate that the overall fracture density in well DW-1 is only 15 percent greater than the overall fracture density in well DW-2. Further, there are a total of six rank 3 and 4 fractures in well DW-2 (only two of which are located in the uppermost 58 ft) compared to a total of six rank 3 (but no rank 4) fractures in well DW-1, which also supports a conclusion that the bedrock at wells DW-1 and DW-2 are similarly fractured. Considering fractures with dips greater than or equal to 60º to be “high-angle”, and only considering open fractures (ranks 1 to 5), the high-angle fracture density in well DW-1 is 0.26 fractures/ft, and the high-angle fracture density in well DW-2 is 0.43 fractures/ft. These calculations demonstrate that the high-angle fracture density in well DW-1 is only 60 percent that of well DW-2 which may be due to well DW-2 extending into deeper bedrock than well DW-1. When high-angle fracture density in the top 58 ft of both wells is compared, the high-angle fracture density is identical, but the well DW-1 fractures tend to be larger.

The fractured bedrock surrounding the borehole in DW-1, and the number of those water-bearing fractures that are high-angle fractures, results in an interconnected network of fractures around

the well that have pressure-equilibrated outside the influence of the borehole. The weak differential potentiometric head that exists between the fractures results in primarily horizontal groundwater flow within the well. In well DW-2, the fracture characteristics of the shallow bedrock are similar to those surrounding the borehole at well DW-1. However, although there are some high-angle fractures identified in the deeper bedrock surrounding well DW-2, their aperture and water-bearing potential are not as significant, and the upper and lower portions of the well have substantially different potentiometric heads. The relatively strong differential potentiometric head that exists in well DW-2 between the upper and middle fractures results in vertical groundwater flow from the upper fractures to the middle fractures within the well (COLOG, 2009).

Wire-Line Straddle Packer Sampling Observations

The migration of groundwater is often much more complicated in fractured bedrock than in porous media, and the inconsistencies in trends observed in the discussion of the following groundwater analytical results may well be due to such complications. As described in Subsection 2.2.5.1, summarized in Table 2-6, and depicted in Figure 2-7, toluene and GRO were detected in drinking water well DW-1 in four of the five depth intervals tested, with concentrations decreasing with depth from the shallowest to deeper intervals, not detected in the second deepest interval, but appearing again in the deepest interval. This pattern of concentrations suggests that the primary source of these substances is proximal to the shallowest bedrock fractures, and that there is very limited communication between the uppermost fractures and the deepest fractures tested, but perhaps not in the vicinity of well DW-1. Thus, the shallow concentrations, in combination with the pressure transducer data, suggest that the primary source of the toluene and GRO contamination is proximal to the well, and that the deeper source of the toluene and GRO contamination may be from a more distant source.

Conversely, DRO was only detected in the middle interval (41.2 to 51.9 ft bgs) of drinking water well DW-1 and the deepest interval (56.6 to 58.0 ft bgs) where it was greatest. The deep concentrations suggest that the primary source of the DRO contamination is distal to this well; a separate source from the toluene and GRO detected in shallow bedrock.

The concentrations of cis-1,2-DCE and TCE detected in drinking water well DW-1 are relatively low, ranging from a few times the detection limit to just below the detection limit, which makes any conclusions regarding these data tentative. The concentrations of cis-1,2-DCE and TCE in drinking water well DW-1 increased from the shallowest interval to the middle interval (41.2 to 51.9 ft bgs) and decreased in the intervals below the middle interval. Of further interest is the ratio of cis-1,2-DCE to TCE between different intervals, as depicted in Figure 2-8. A higher cis-1,2-DCE to TCE ratio would indicate a relatively higher concentration of daughter to parent compound and imply greater degradation and distance from the TCE source. The slight increases in cis-1,2-DCE to TCE ratios with depth shown in Figure 2-8 were found to be statistically insignificant.

In drinking water well DW-1, the peak toluene and GRO concentrations were in shallow bedrock fractures, the peak chlorinated solvent concentrations were in the middle bedrock fractures, and the peak DRO concentrations were in deep bedrock fractures; this pattern of contamination indicates that the well may be impacted with hazardous substances from three separate sources at the LO-58 Site. Further, the gradual increase or decrease in contaminant concentrations at successive depth intervals demonstrates that the adjacent fractures are interconnected, and that concentration gradients exist between adjacent fractures. However, the slight variations in contaminant concentrations and the small number of measurement points were found to be inadequate to make statistically significant conclusions.

The laboratory analytical results (also summarized in Table 2-6) from the WSP sampling of drinking water well DW-2 indicate the presence of cis-1,2-DCE, toluene, and DRO in one or more samples collected. The detection of cis-1,2-DCE was anomalous for well DW-2 as chlorinated solvents had not previously been detected in samples collected from this well. Refer to Subsection 2.2.5.2 for a discussion of the likely reason for this anomalous result. None of the VOCs were detected above their Maine MEGs or EPA MCLs for drinking water (BOH, 2000; EPA, 2003). However, DRO concentrations in samples collected from the shallowest (16.0 to 20.0 ft bgs) and deepest (265.0 to 284.0 ft bgs) depth intervals exceeded the 50 µg/L Maine MEG (There is no EPA MCL for DRO.) (BOH, 2000; EPA, 2003).

In addition, groundwater parameters collected during sample collection, summarized in Table 2-5 and depicted in Figure 2-9, may provide further evidence of the nature of groundwater flow at the LO-58 Site. First, there appears to be a inverse relationship between pH and temperature. In both drinking water wells DW-1 and DW-2, temperatures were lowest and pHs were highest in the deepest intervals, although comparably low pH and the second lowest temperatures are noted in the shallowest interval of well DW-1 as well. However, the opposite relationship was not as clear in either well. In drinking water well DW-1, the highest temperatures are associated with the second lowest pHs (in the 33.8 to 38.5 ft interval), but equally low pH is associated with mid-range temperatures in the 51.0 to 58.1 ft interval. In drinking water well DW-2, second highest temperature and lowest pH was noted in the third deepest interval (37.0 to 41.7 ft bgs), while the highest temperatures occurred in the shallowest interval, associated with mid-range pH values. Refer to Subsection 2.2.5.2 for further discussion of these results. High temperature and low pH may indicate shallow, short flow paths from surface water infiltration, and low temperature and high pH are typically found in deeper, longer-flow paths from areas of groundwater recharge. The deepest intervals in both wells support the longest flow path conclusion, while the shallowest intervals do not, emphasizing the complexity of groundwater flow through fractured bedrock. However, the slight variations in groundwater parameters shown in Figure 2-9 were found to be statistically insignificant.

Second, DO and ORP results collected during sample collection were also assessed. In drinking water well DW-1, DO and ORP were lowest in the middle interval (41.2 to 51.9 ft bgs), which corresponded to the highest concentration of dissolved chlorinated solvents. In drinking water well DW-2, DO and ORP were lowest in the second deepest interval (187.5 to 192.2 ft bgs), which corresponded to the only detection of dissolved chlorinated solvents in this well. Refer to Subsection 2.2.5.2 for further discussion of these results. Typically, DO and ORP values decrease as a result of the consumption of oxygen (an electron receptor) during aerobic biodegradation of petroleum hydrocarbons, such as DRO and GRO (which are electron donors). As aerobic biodegradation processes consume available oxygen, bacteria are forced to shift toward reductive chlorination which allows the biodegradation of chlorinated solvents (which are less efficient electron receptors) (Wedemeier, et al., 1997). It is suspected that the general lack of DO and ORP reduction is due to the relatively low DRO and GRO concentrations detected in groundwater which provide insufficient carbon load to reduce the DO and ORP in the

groundwater. The lower DO and ORP values noted in the middle depth interval of well DW-1 and second deepest interval of well DW-2 may be indicative of higher contaminant concentrations in an upgradient area where substantial biodegradation has occurred. However, the slight variations in groundwater parameters shown in Figure 2-9 were found to be statistically insignificant. Refer to Subsection 2.2.5.2 for further discussion of these results.

2.2.4.4 Bedrock Groundwater Horizontal Gradients

In porous media aquifers, the vertical and horizontal vectors comprising the gradient, as determined by water table elevations, is fairly constant near and between wells. For this reason, overburden groundwater horizontal gradients can often be clearly defined and depicted graphically. However, in fractured bedrock aquifers, water-bearing fractures penetrated by wells can have similar to nearly opposite local flow vectors or directions depending on fracture orientation, recharge zone locations, ambient or pumping conditions, and fracture interconnectivity. Because of the complex, anisotropic flow systems in bedrock aquifers, it is difficult to make specific statements regarding groundwater horizontal gradients without comprehensive, site-specific data such as that collected using HPL methods.

Figure 2-6 depicts the overall bedrock groundwater horizontal potentiometric gradients for May 2008. The overall bedrock groundwater horizontal potentiometric gradients at the LO-58 Site are north-northwesterly beneath the eastern portion of the site, northerly beneath the northern portion of the site, and northwesterly beneath the western portion of the site, generally consistent with topography. Seasonal variations in groundwater elevations have not been noted at the LO-58 Site (WESTON, 2007a).

The complexity of the bedrock groundwater horizontal potentiometric gradients is illustrated by the results of synoptic potentiometric head measurements performed by WESTON in May 2008. The location of drinking water well near the center of the LO-58 Site monitoring network is nearly ideal for the characterization of bedrock groundwater horizontal potentiometric gradients and flow directions, as it is uniquely surrounded by other bedrock groundwater monitoring points. As described in Subsection 2.2.4.3, synoptic potentiometric head measurements during pumping of drinking water well DW-1 and three bedrock monitoring wells, MW-01, MW-03, and MW-05 showed strong responses indicating that these four locations are along the same

groundwater flow path. In contrast, during the same synoptic potentiometric head measurement period, there was no observable response at drinking water well DW-2, which is located to the west, and either hydraulically-downgradient or cross-gradient of well DW-1. Although the May 2008 overall bedrock groundwater horizontal potentiometric gradient suggest a potential connection between wells DW-1 and DW-2, the contemporaneous synoptic potentiometric head measurements (which represent actual, rather than theoretical conditions, and thus bear much greater weight) indicate the contrary.

As noted previously, ambient HPL testing identified primarily horizontal flow across well DW-1 at least in the proximity of the well. The moderately-fractured rock surrounding the borehole in DW-1, and the number of those water-bearing fractures that are high-angle fractures, results in an interconnected network of fractures around the well that have pressure-equilibrated outside the influence of the borehole. The weak differential potentiometric head that exists between the fractures results in primarily horizontal groundwater flow within the well (COLOG, 2009).

2.2.4.5 Bedrock Groundwater Vertical Gradients

Hydrophysical, pressure transducer, and groundwater parameter data collected from drinking water wells DW-1 and DW-2 provides information regarding the variations in hydraulic head between individual fracture zones at the LO-58 Site which can be used to document bedrock groundwater vertical potentiometric gradient.

Drinking Water Well DW-1 Results

The fractured rock surrounding the borehole in DW-1, and the number of those water-bearing fractures that are high-angle fractures, results in an interconnected network of fractures around the well that have pressure-equilibrated outside the influence of the borehole. This has resulted in weak differential potentiometric head between the fractures which results in primarily horizontal groundwater flow within the well (COLOG, 2009). The exception to this general statement is the shallowest depth interval of well DW-1 which has temperature/pH and pressure transducer data which indicate that it appears to be isolated from the fractures immediately below it.

Additional vertical groundwater flow information can be obtained from groundwater quality data. The concentrations of cis-1,2-DCE and TCE increased from the shallowest interval to the middle interval (41.2 to 51.9 ft bgs) and decreased in the intervals below the middle interval. However, the slight variations in contaminant concentrations were found to be inadequate to make statistically significant conclusions. These data indicate downward migration through bedrock.

Drinking Water Well DW-2 Results

In well DW-2, the fracture characteristics of the shallow bedrock are similar to those surrounding the borehole at well DW-1. However, although there are high-angle fractures identified in the deeper bedrock surrounding well DW-2, their aperture and water-bearing potential are not as significant as those in shallow bedrock, and the upper and lower portions of the well have substantially different potentiometric heads. Table DW-2:4 in the *HydroPhysics™ and Geophysical Logging Results* indicates that the differential head, the difference between ambient and production pressure (converted to ft), gradually increases with depth, with the deepest fracture interval (265.0 to 284.0 ft bgs) having a pressure head of approximately 130 ft. The relatively strong differential potentiometric head that exists between the upper and middle fractures results in vertical groundwater flow from the middle fractures to the upper fractures within the well (COLOG, 2009).

2.2.5 Bedrock Groundwater Quality

As described in Subsection 2.1.3.3 and summarized in Tables 2-5 and 2-6, WESTON performed WSP sampling at drinking water wells DW-1 and DW-2 in May 2008 in order to obtain detailed, and fracture zone-specific, data regarding groundwater quality and contaminant distribution. The following discussion of the vertically-segregated bedrock groundwater analytical results integrates bedrock hydrogeology conclusions from Subsection 2.2.4 to make additional conclusions regarding bedrock groundwater quality and its implications regarding the fate and transport of groundwater contaminants beneath the LO-58 Site. As noted in Subsection 2.2.4.3, typically DO and ORP values decrease as a result of the consumption of oxygen (an electron receptor) during aerobic biodegradation of petroleum hydrocarbons, such as DRO and GRO

(which are electron donors). As aerobic biodegradation processes consume available oxygen, bacteria are forced to shift toward reductive chlorination which allows the biodegradation of chlorinated solvents (which are less efficient electron receptors) (Wedemeier, et al., 1997).

2.2.5.1 Drinking Water Well DW-1 Results

Trace concentrations of chloroform (near the RL and two orders of magnitude below its Maine MEG) were detected in three of the five intervals tested and do not appear to result from the known releases of hazardous materials at the LO-58 Site (BOH, 2000). Toluene and GRO were detected in a pattern of concentrations that indicates that the primary sources of these substances are the shallowest bedrock fractures, and that there is some communication between these fractures and the second and third uppermost fractures tested. Thus, the shallow concentrations, in combination with the pressure transducer data, indicate that the primary source of the toluene and GRO contamination is proximal to the well, and that the source of the toluene and GRO contamination detected in the deepest testing interval may be from a more distant source. Conversely, the pattern of DRO concentrations indicate that the primary source of the DRO contamination is distal to the well; a separate source from the toluene and GRO detected in shallow bedrock.

The concentrations of cis-1,2-DCE and TCE detected in drinking water well DW-1 are relatively low, ranging from a few times the detection limit to just below the detection limit, making statistically significant conclusions impossible. However, the apparent pattern of concentrations of cis-1,2-DCE and TCE suggests that the source of chlorinated solvents in this well may be in the middle fracture zone, and that the dissolved chlorinated solvents may be degrading as they migrate downward through bedrock fractures.

The peak toluene and GRO concentrations are in shallow bedrock fractures, the peak chlorinated solvent concentrations are in the middle bedrock fractures, and the peak DRO concentrations are in deep bedrock fractures; this pattern of contamination suggests that the well is impacted with hazardous substances from three separate and increasingly distant sources at the LO-58 Site.

It is suspected that the general lack of DO and ORP reduction in groundwater at the LO-58 Site (see Table 2-5) is due to the relatively low DRO and GRO concentrations detected in

groundwater, which provide insufficient carbon load to reduce the DO and ORP in the groundwater. The lowest DO and ORP values noted in well DW-1 may be indicative of higher contaminant concentrations in an upgradient source area where substantial biodegradation has occurred.

Because the DO and ORP results do not appear to be reduced by aerobic DRO/GRO degradation, another source of organic material must be found to account for the reduced DO and ORP results. One potential source which is both proximal to drinking water well DW-1 and associated with chlorinated solvents is the septic system for the AMAC Building. WESTON hypothesizes that the organic loading (non-hazardous) in the septic system may be the source of the anaerobic conditions which could facilitate TCE biodegradation. However, the slight variations in contaminant concentrations were found to be inadequate to make statistically significant conclusions.

2.2.5.2 Drinking Water Well DW-2 Results

The concentration of DRO detected in the sample collected from the shallowest depth interval of well DW-2 was particularly high (1,050 µg/L) and is interpreted to represent a release from a proximal source; drinking water well DW-2 is located in a parking area, which could be the source of the DRO.

The one anomaly in the well DW-2 analytical results is the detection of a trace concentration of cis-1,2-DCE in the sample collected from the second deepest (187.9 to 192.2 ft bgs) depth interval. Chlorinated solvents have not previously been detected in samples collected from this well. However, the detection of cis-1,2-DCE is likely due to the focused nature of the sampling at the single fracture zone; consistent with previous analytical results, subsequent sampling of the well did not detect cis-1,2-DCE, likely due to dilution by water from other fractures within the well borehole. Finally, the cis-1,2-DCE detection at the second deepest interval provides evidence of the extent of chlorinated solvent impacts to bedrock groundwater.

As noted above, it is suspected that the general lack of DO and ORP reduction in groundwater at the LO-58 Site (see Table 2-5) is due to the relatively low DRO and GRO concentrations detected in groundwater which provide insufficient carbon load to reduce the DO and ORP in the

groundwater. In drinking water well DW-2, the relatively low DO and ORP results in the second deepest (187.9 to 192.2 ft bgs) depth interval correlate well with the 1,2-DCE detection in this depth interval (as shown in Tables 2-5 and 2-6, the depth interval with the highest ratio of cis-1,2-DCE/TCE shows the greatest degree of biodegradation and also has the lowest DO/ORP), and support the conclusion that biodegradation of TCE is occurring. Further, the relatively low DO and ORP results in this depth interval correlate well with the chlorinated solvent concentrations detected in this depth interval and provide a mechanism for the biodegradation of TCE to 1,2-DCE. Based on the apparent isolation of the shallow and deepest sampling intervals of drinking water well DW-2 by the second deepest interval, it appears that the DRO detected in the deepest interval of well DW-2 is from an even more distal source. However, the slight variations in contaminant concentrations were found to be inadequate to make statistically significant conclusions; therefore, WESTON hypothesizes that source of 1,2-DCE in well DW-2 may be the same as the source for well DW-1, possibly, the septic system for the AMAC Building.

SECTION 3

LO-58 SITE CONCLUSIONS

3. LO-58 SITE CONCLUSIONS

As discussed in greater detail in Section 2, the following conclusions can be made from the geological, geophysical, and hydrophysical data collected and interpreted by WESTON during the latest investigation at the LO-58 Site.

3.1 BEDROCK GEOLOGY

- The LO-58 Site is located on the northwest face of a rock-cored drumlin which was subject to glacial action approximately 12,000 years ago. Vertical seismic profiling did not identify acoustically-incompetent bedrock at the LO-58 Site. Thus, no significant areas of weathered bedrock were identified.

- Despite conflicting references, bedrock beneath the LO-58 Site is the Silurian Spragueville Formation which comprises interbedded pelite and limestone and/or dolostone rocks of Silurian age. The nearest contact with another geologic unit, the Silurio-Ordivician Carys Mills Formation, is located approximately 900 ft northwest of the LO-58 Site.

- The Chapman Synclinorium was formed during the first deformational or compressional phase of the Acadian Orogeny, which occurred during the lower to middle Devonian Period, and resulted in a major, single, and steeply dipping north-south cleavage in the bedrock.

- The bedrock bedding at the LO-58 Site strikes North 70º East and dips 12º East, as well as a foliation striking North 5º West and dipping 78º West, but varies significantly locally due to folding in two directions: the major folds are broad to tight with axes oriented North 30º East, parallel to the axis of the Chapman Synclinorium; the fold axes are also folded broadly on North 20º West axes.

  Three joint sets are present in the local bedrock: a near vertical set striking North 45º East and dipping 80º West which is associated with the Acadian Orogeny; another steeply-dipping set striking North 45º East and dipping 85º East which is roughly perpendicular to the first; and a shallowly-dipping set of sheeting joints that is roughly parallel to the ground surface and bedding and decreases in frequency with depth. The near-vertical sets of joints, particularly the North 45º East and dipping 85º East set, are often filled with calcite. The upper 60 ft of bedrock have similar fracturing characteristics at drinking water well locations DW-1 and DW-2. However, the deeper bedrock (below approximately 70 ft) surrounding well DW-2 contains very few sheeting fractures and the aperture and water-bearing potential of the steeper fractures are not as significant, resulting in different fracturing characteristics, which, by nature of its depth, do not appear in the bedrock surrounding well DW-1.

- Neither the available geologic literature nor the lack of local and regional observations of karst topography indicate that the limestone of the Spragueville Formation is subject to solution cavities.

3.2 BEDROCK HYDROGEOLOGY

- The orientation, length, width, and interconnectedness of joints in the bedrock beneath the LO-58 Site exert significant control over both groundwater flow direction and contaminant distribution within groundwater.

- Bedrock groundwater elevations range from approximately 569 to 537 ft above mean sea level (amsl) on 30 April and 564 to 531 ft amsl on 21 May 2008.

- The hydrophysical logs for well DW-1 indicate that ambient horizontal flow occurs within the borehole. The volumetric flow rate observed in the DW-1 wellbore for the depth intervals 27.3 to 31.7, 34.6 to 35.0, 40.4 to 48.6, 49.0 to 50.2, and 52.7 to 53.6 ft below ground surface (bgs) are 0.085, 0.011, 0.14, 0.018, and 0.058 gallons per minute (gpm), respectively. These flow rates equate to Darcy velocities or specific discharges of groundwater in the aquifer of 2.84, 3.91, 2.53, 2.28, and 9.56 ft per day, respectively.

- During production testing, seven inflow zones were identified from the well DW-1 hydrophysical logs at 27.3 to 31.7, 34.6 to 35.0, 37.4 to 38.4, 40.4 to 48.6, 49.0 to 50.2, 52.7 to 53.6, and 54.4 to 58.1 ft bgs with flow rates ranging of 0.207, 0.195, 0.745, 2.00, 0.416, 1.65, and 0.838 gpm, respectively. The logs indicate the interval 40.4 to 48.6 and 52.7 to 53.6 ft bgs dominated flow during pumping, producing 3.65 gpm or 60 percent of the total flow. The transmissivity calculations for well DW-1 indicate that the intervals 40.4 to 48.6 and 52.7 to 53.6 ft bgs exhibited the highest transmissivities of approximately 129 and 111 square feet per day (ft^2/day), respectively.

- The hydrophysical logs for well DW-2 indicate ambient vertical flow occurring within the borehole. Formation water migrates downward within the fluid column beginning near the base of casing and at 31 ft.

- Four inflow zones were identified from the well DW-2 hydrophysical logs at 19.5 to 19.6, 30.4 to 31.6, 38.2 to 41.8, and 44.9 to 51.4 ft bgs at rates of 0.026, 0.297, 0.016, and 0.074 gpm, respectively. The combined inflow of 0.413 gpm of these four intervals is observed to migrate vertically downward through the borehole based on the migration of the center of mass of the area under the curve. Groundwater exits the borehole at depths of 96.4 to 97.0 and 189.5 to 191.0 ft bgs, at rates of 0.370 and 0.185 gpm, respectively.

- In well DW-2, a fluid electrical conductivity anomaly was observed at the base of the borehole at 280 ft. This early increase in mass is not the result of ambient flow, as over the course of the ambient flow characterization, no additional groundwater

entered the borehole at this depth. As such, this water-bearing interval is not considered to produce groundwater to the borehole under ambient conditions.

- During production testing, 11 inflow zones were identified from the DW-2 hydropysical logs, ranging in flow from 0.005 to 5.69 gpm, with the dominant inflow zone at 30.4 to 31.6 ft, producing 5.69 gpm or 90 percent of the total formation production rate. The transmissivity calculations for well DW-2 indicate that the interval 30.4 to 31.6 ft bgs exhibited the highest transmissivity of approximately 216 ft^2/day.

- Based on the observations from the synoptic potentiometric head measurements, WESTON concludes that the dominant north-south fracturing present in bedrock creates strong north-south anisotropy in the groundwater flow. Further, at well DW-1, the shallower fractures do not appear to have any interconnectivity with fractures in other wells, while the deeper fracture intervals are interconnected with fractures that reach as far as monitoring wells MW-01, MW-03, and MW-05. Synoptic potentiometric head measurements did not identify bedrock fracture interconnections beyond well DW-2.

- The fracture characteristics of the shallow bedrock surrounding the borehole at well DW-1, and the number of those water-bearing fractures that are high-angle fractures, results in an interconnected network of fractures around the well that have pressure-equilibrated outside the influence of the borehole. The weak differential potentiometric head that exists between the fractures results in primarily horizontal groundwater flow within the well.

- In well DW-2, the fracture characteristics of the shallow bedrock are similar to those surrounding the borehole at well DW-1. However, although there are high-angle fractures identified in the deeper bedrock surrounding well DW-2, their aperture and water-bearing potential are not as significant as those in shallow bedrock, and the upper and lower portions of the well have substantially different potentiometric heads. The relatively strong differential potentiometric head that exists between the upper and middle fractures results in vertical groundwater flow from the middle fractures to the upper fractures within the well.

- In drinking water well DW-1, the peak toluene and GRO concentrations were in shallow bedrock fractures, the peak chlorinated solvent concentrations were in the middle bedrock fractures, and the peak DRO concentrations were in the deepest bedrock fractures; this pattern of contamination indicates that the well may be impacted with hazardous substances from three separate sources at the LO-58 Site. Further, the gradual increase or decrease in contaminant concentrations at successive depth intervals demonstrates that the uppermost and deepest fractures may be interconnected, and that concentration gradients exist between them. However, the slight variations in contaminant concentrations and the relatively small number of measurement points were found to be inadequate to make statistically significant conclusions.

- The ratio of cis-1,2-DCE to TCE was compared between shallower and deeper intervals of well DW-1 in order to assess possible greater TCE degradation and distance from the TCE source. The slight increase in cis-1,2-DCE to TCE ratios with depth were found to be statistically insignificant.

- A trace concentration of cis-1,2-DCE was detected in well DW-2. Based on the lack of concentration gradients between adjacent fractures, these results demonstrate the lack of interconnection between adjacent fractures in this well. Further, the trace detection of cis-1,2-DCE in the second deepest (187.9 to 192.2 ft bgs) depth interval, with no detectable TCE, supports two hypotheses:

    1. There is a small, but nonetheless significant deep bedrock connection between wells DW-1 and DW-2, or a connection to a common source, that is not detectable in the synoptic potentiometric head measurements.

    2. The detection of cis-1,2-DCE but no TCE at substantial depth and distance from the presumed source area suggests that TCE degradation appears nearly complete.

- The overall bedrock groundwater horizontal potentiometric gradients at the LO-58 Site are north-northwesterly beneath the eastern portion of the Site, northerly beneath the northern portion of the Site, and northwesterly beneath the western portion of the Site, generally consistent with topography.

3.3 BEDROCK GROUNDWATER QUALITY

- The analytical results for drinking water well DW-1 were consistent with previous analytical results for this well. Laboratory analytical results from the WSP sampling of drinking water well DW-1 indicate the presence of chloroform, cis-1,2-DCE, TCE, toluene, GRO, and DRO in one or more samples collected from DW-1,. None of the VOC were detected above their Maine MEG or the EPA MCL for drinking water. However, GRO or DRO concentrations in five samples exceeded their 50 µg/L Maine MEG.

- In well DW-1, the peak toluene and GRO concentrations are in shallow bedrock fractures, the peak chlorinated solvent concentrations are in the middle bedrock fractures, and the peak DRO concentrations are in deep bedrock fractures; this pattern of contamination indicates that the well may be impacted with hazardous substances from three separate and increasingly distant sources at the LO-58 Site.

The analytical results for drinking water well DW-2 were generally consistent with previous analytical results with one anomaly. Laboratory analytical results from the WSP sampling of drinking water well DW-2 indicate the presence of cis-1,2-DCE, toluene, and DRO in one or more samples collected. None of the VOCs were detected above their Maine MEGs or EPA

MCLs for drinking water. However, GRO or DRO concentrations in five samples exceeded their applicable 50 µg/L Maine MEG. The one anomaly in the well DW-2 analytical results is the detection of a trace concentration of cis-1,2-DCE in the sample collected from the second deepest (187.9 to 192.2 ft bgs) depth interval. Chlorinated solvents have not previously been detected in samples collected from this well. However, the detection of cis-1,2-DCE is likely due to the focused nature of the sampling at the single fracture zone; consistent with previous analytical results, subsequent sampling of the well did not detect cis-1,2-DCE, likely due to dilution by water from other fractures within the well borehole. Finally, the cis-1,2-DCE detection at the second deepest interval provides evidence of the extent of chlorinated solvent impacts to bedrock groundwater.

SECTION 4

LO-58 SITE RECOMMENDATIONS

4. LO-58 SITE RECOMMENDATIONS

The geological, geophysical, and hydrophysical data collected as part of the LO-58 Site investigation has eliminated many of the data gaps regarding groundwater flow and the nature and extent of groundwater impacts from the LO-58 Site. Based on the availability of data regarding groundwater flow and the nature and extent of groundwater impacts at most likely groundwater targets at the LO-58 Site, bedrock drinking water wells DW-1 and DW-2, CENAE recommends no additional environmental investigations to address the minor outstanding data gaps.

As part of the next task required under the *SOW* (CENAE, 2007), WESTON will update the CSM for the LO-58 Site. As the LO-58 Site CSM will assess all potential migration pathways, it may identify data gaps not strictly related to the hydrogeology of the site which may result in additional recommendations for further investigative activities.

SECTION 5

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5. REFERENCES

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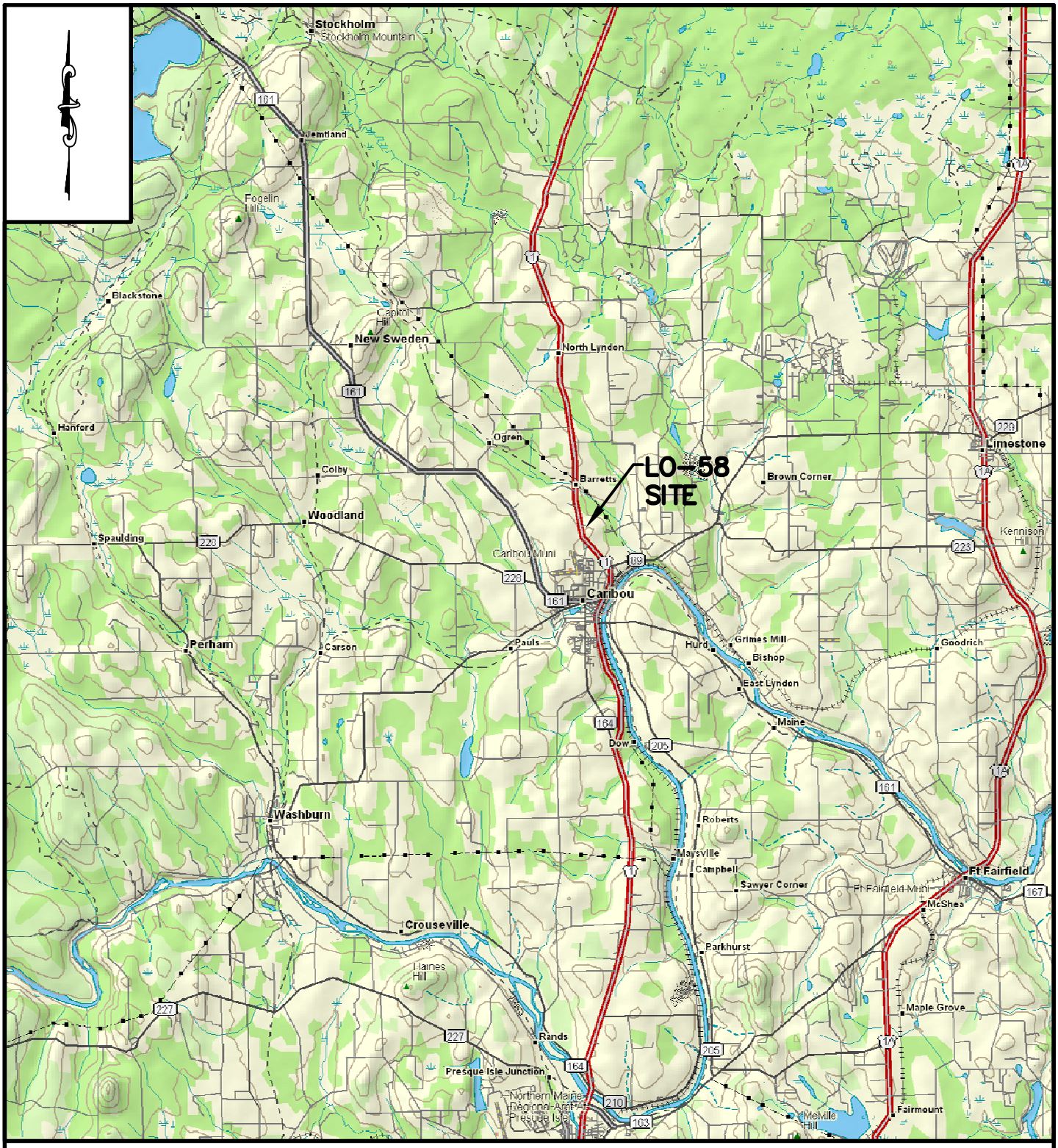
FIGURES



SOURCE
US DEPT. OF THE INTERIOR, GEOLOGICAL SURVEY
7.5x7.5 MINUTE SERIES (TOPOGRAPHIC)
1:24,000 CARIBOU, MAINE (1984)

GRAPHIC SCALE
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APPROXIMATE SCALE IN MILES

BOREHOLE HYDROPHYSICS AND GEOPHYSICS REPORT LO-58 SITE CARIBOU, MAINE

WESTON SOLUTIONS
MANCHESTER NEW HAMPSHIRE

DEPARTMENT OF THE ARMY
NEW ENGLAND DISTRICT
CORPS OF ENGINEERS
CONCORD, MASSACHUSETTS

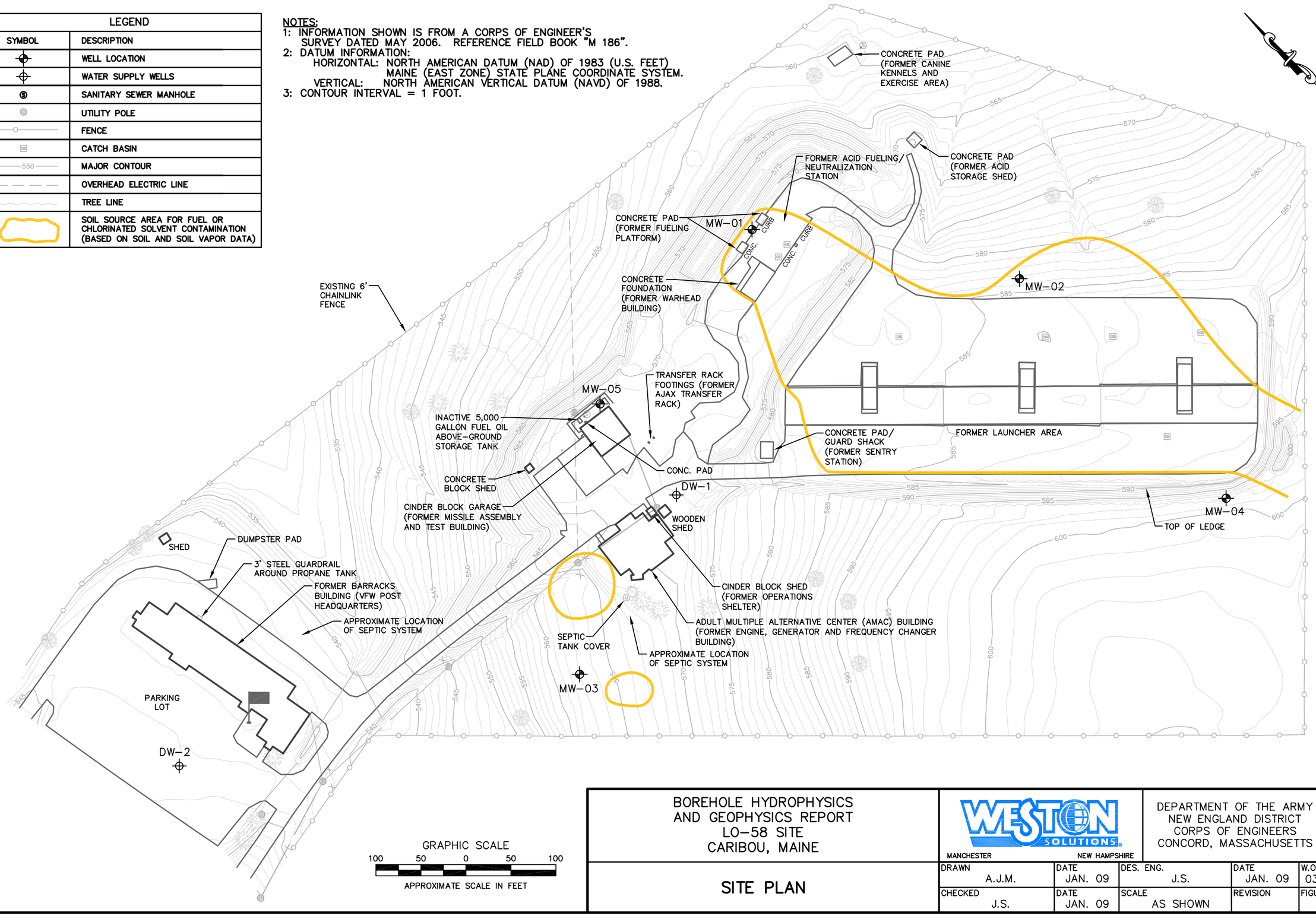
SITE LOCATION MAP

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
A.J.M.	JAN. 09			03886.184.001
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
J.S.	JAN. 09	AS SHOWN		1-1

M:\Design\DWG\ACOE\MEFUDS\5FUDS\LO-58 2009\BOREHOLE 2009\FIG 1-1.dwg, Layout1, 1/21/2009 8:49:22 AM, MURROT, 1:1

LEGEND	
SYMBOL	DESCRIPTION
⊕	WELL LOCATION
⊕	WATER SUPPLY WELLS
Ⓢ	SANITARY SEWER MANHOLE
	UTILITY POLE
	FENCE
CB	CATCH BASIN
550	MAJOR CONTOUR
	OVERHEAD ELECTRIC LINE
	TREE LINE
	SOIL SOURCE AREA FOR FUEL OR CHLORINATED SOLVENT CONTAMINATION (BASED ON SOIL AND SOIL VAPOR DATA)

NOTES:
1: INFORMATION SHOWN IS FROM A CORPS OF ENGINEER'S SURVEY DATED MAY 2006. REFERENCE FIELD BOOK "M 186".
2: DATUM INFORMATION:
HORIZONTAL: NORTH AMERICAN DATUM (NAD) OF 1983 (U.S. FEET) MAINE (EAST ZONE) STATE PLANE COORDINATE SYSTEM.
VERTICAL: NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988.
3: CONTOUR INTERVAL = 1 FOOT.



BOREHOLE HYDROPHYSICS AND GEOPHYSICS REPORT
LO-58 SITE
CARIBOU, MAINE

SITE PLAN

WESTON SOLUTIONS
MANCHESTER NEW HAMPSHIRE

DEPARTMENT OF THE ARMY
NEW ENGLAND DISTRICT
CORPS OF ENGINEERS
CONCORD, MASSACHUSETTS

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
A.J.M.	JAN. 09	J.S.	JAN. 09	03886.184.001
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
J.S.	JAN. 09	AS SHOWN		2-1

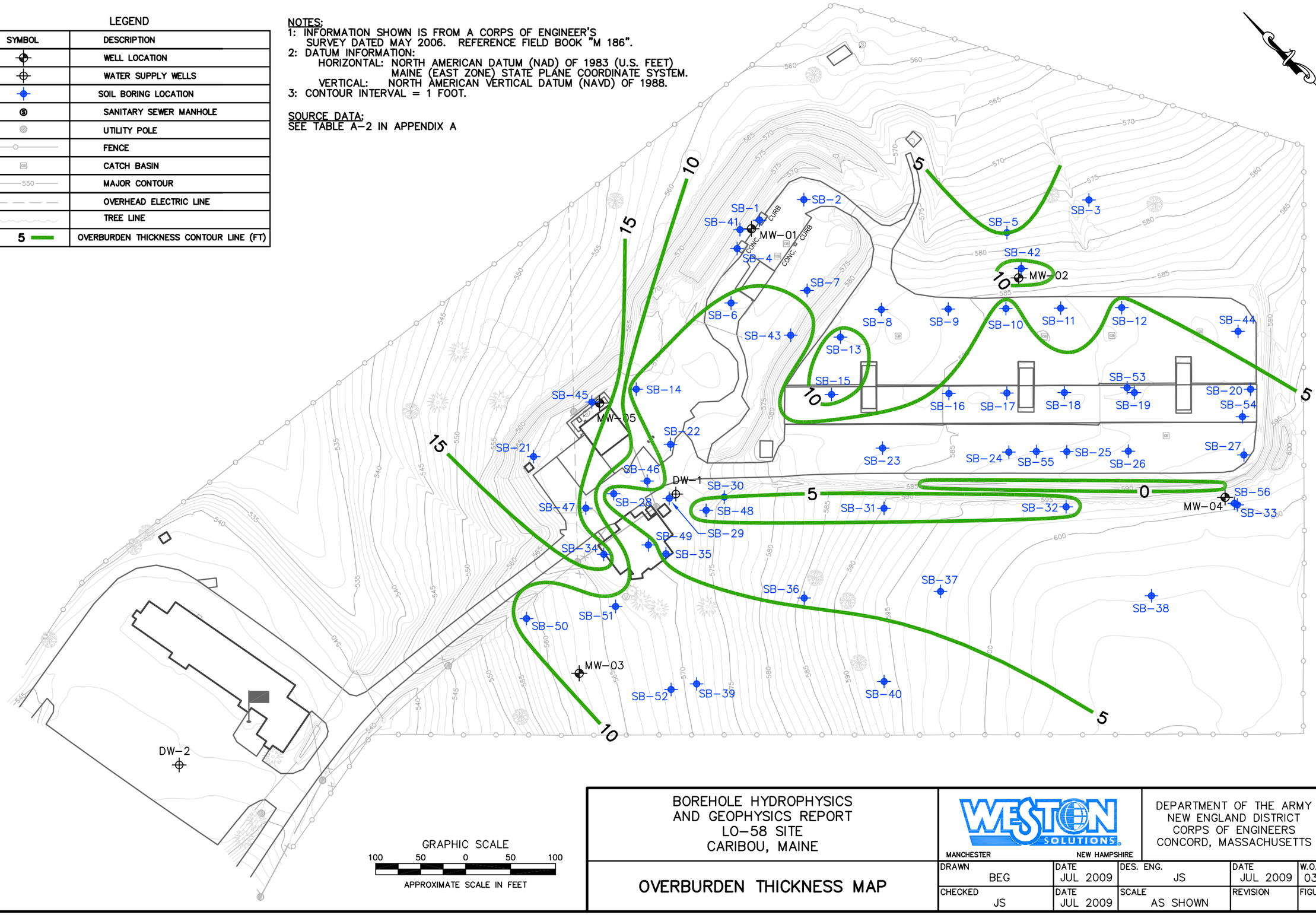
M:\Design\DWG\ACOE\MEFUDS\5FUDS\LO-58 2009\BOREHOLE 2009\FIG 2-1.dwg, Layout1, 4/9/2009 2:37:14 PM, GIRARDEB, 1:1

LEGEND

SYMBOL	DESCRIPTION
⊕	WELL LOCATION
⊕	WATER SUPPLY WELLS
⊕	SOIL BORING LOCATION
Ⓢ	SANITARY SEWER MANHOLE
○	UTILITY POLE
—○—	FENCE
CB	CATCH BASIN
550	MAJOR CONTOUR
— — — —	OVERHEAD ELECTRIC LINE
~~	TREE LINE
5	OVERBURDEN THICKNESS CONTOUR LINE (FT)

NOTES:
1: INFORMATION SHOWN IS FROM A CORPS OF ENGINEER'S SURVEY DATED MAY 2006. REFERENCE FIELD BOOK "M 186".
2: DATUM INFORMATION:
HORIZONTAL: NORTH AMERICAN DATUM (NAD) OF 1983 (U.S. FEET) MAINE (EAST ZONE) STATE PLANE COORDINATE SYSTEM.
VERTICAL: NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988.
3: CONTOUR INTERVAL = 1 FOOT.

SOURCE DATA:
SEE TABLE A-2 IN APPENDIX A



GRAPHIC SCALE
100 50 0 50 100
APPROXIMATE SCALE IN FEET

BOREHOLE HYDROPHYSICS AND GEOPHYSICS REPORT
LO-58 SITE
CARIBOU, MAINE

OVERBURDEN THICKNESS MAP

WESTON SOLUTIONS
MANCHESTER NEW HAMPSHIRE

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NEW ENGLAND DISTRICT
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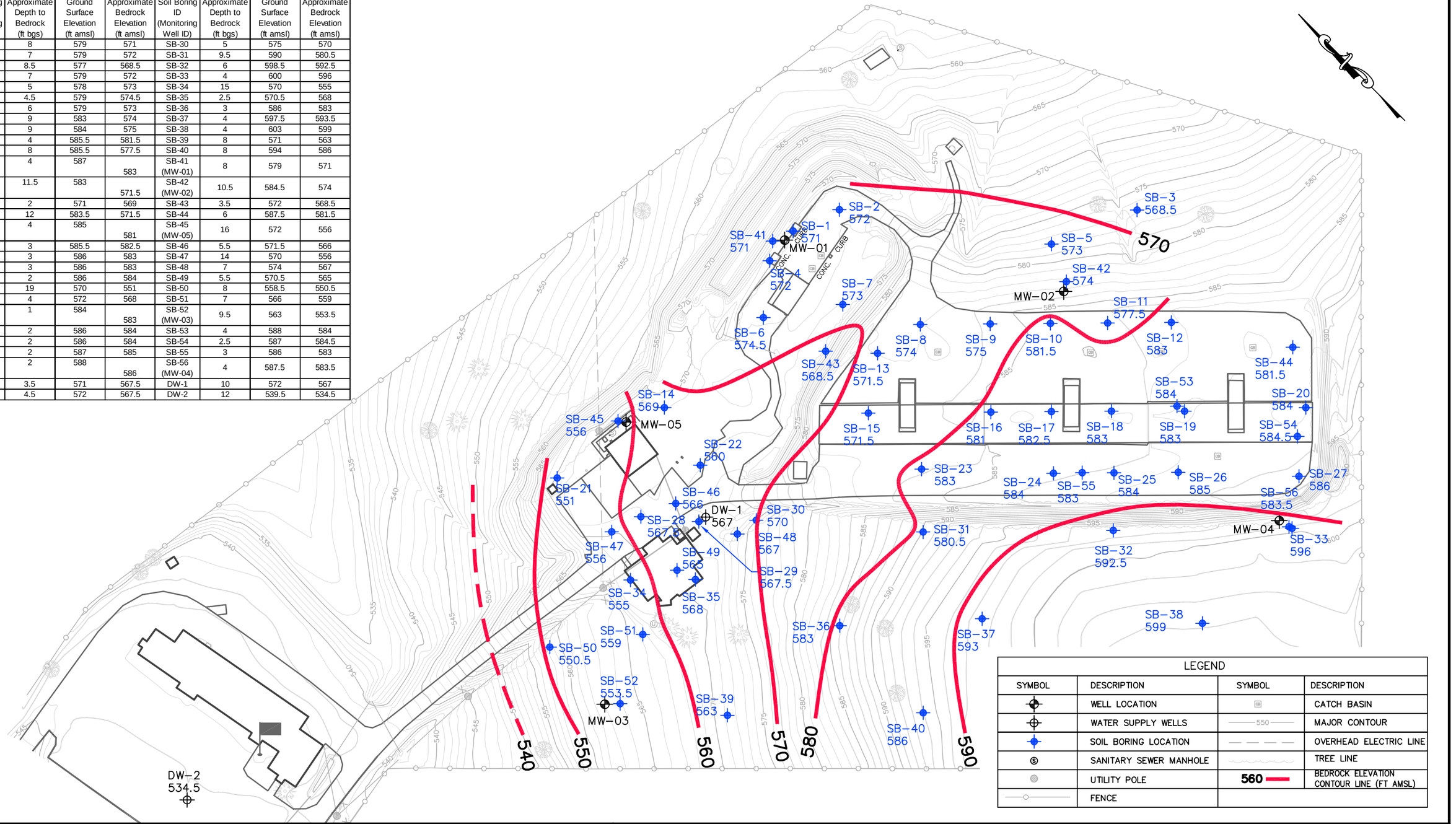
CONCORD, MASSACHUSETTS

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	JUL 2009	JS	JUL 2009	03886.184.001
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
JS	JUL 2009	AS SHOWN		2-2

M:\Design\DWG\ACOE\MEFUDS\SFUDS\2009\LO-58 2009\BOREHOLE 2009\FIG 2-2.dwg, Layout1, 8/3/2009 1:03:17 PM, GIRARDEB, 1:1

Soil Boring ID (Monitoring Well ID)	Approximate Depth to Bedrock (ft bgs)	Ground Surface Elevation (ft amsl)	Approximate Bedrock Elevation (ft amsl)	Soil Boring ID (Monitoring Well ID)	Approximate Depth to Bedrock (ft bgs)	Ground Surface Elevation (ft amsl)	Approximate Bedrock Elevation (ft amsl)
SB-01	8	579	571	SB-30	5	575	570
SB-02	7	579	572	SB-31	9.5	590	580.5
SB-03	8.5	577	568.5	SB-32	6	598.5	592.5
SB-04	7	579	572	SB-33	4	600	596
SB-05	5	578	573	SB-34	15	570	555
SB-06	4.5	579	574.5	SB-35	2.5	570.5	568
SB-07	6	579	573	SB-36	3	586	583
SB-08	9	583	574	SB-37	4	597.5	593.5
SB-09	9	584	575	SB-38	4	603	599
SB-10	4	585.5	581.5	SB-39	8	571	563
SB-11	8	585.5	577.5	SB-40	8	594	586
SB-12	4	587	583	SB-41 (MW-01)	8	579	571
SB-13	11.5	583	571.5	SB-42 (MW-02)	10.5	584.5	574
SB-14	2	571	569	SB-43	3.5	572	568.5
SB-15	12	583.5	571.5	SB-44	6	587.5	581.5
SB-16	4	585	581	SB-45 (MW-05)	16	572	556
SB-17	3	585.5	582.5	SB-46	5.5	571.5	566
SB-18	3	586	583	SB-47	14	570	556
SB-19	3	586	583	SB-48	7	574	567
SB-20	2	586	584	SB-49	5.5	570.5	565
SB-21	19	570	551	SB-50	8	558.5	550.5
SB-22	4	572	568	SB-51	7	566	559
SB-23	1	584	583	SB-52 (MW-03)	9.5	563	553.5
SB-24	2	586	584	SB-53	4	588	584
SB-25	2	586	584	SB-54	2.5	587	584.5
SB-26	2	587	585	SB-55	3	586	583
SB-27	2	588	586	SB-56 (MW-04)	4	587.5	583.5
SB-28	3.5	571	567.5	DW-1	10	572	567
SB-29	4.5	572	567.5	DW-2	12	539.5	534.5



LEGEND			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	WELL LOCATION		CATCH BASIN
	WATER SUPPLY WELLS	550	MAJOR CONTOUR
	SOIL BORING LOCATION		OVERHEAD ELECTRIC LINE
S	SANITARY SEWER MANHOLE		TREE LINE
	UTILITY POLE	560	BEDROCK ELEVATION CONTOUR LINE (FT AMSL)
	FENCE		

NOTES:
1: INFORMATION SHOWN IS FROM A CORPS OF ENGINEER'S SURVEY DATED MAY 2006. REFERENCE FIELD BOOK "M 186".
2: DATUM INFORMATION:
HORIZONTAL: NORTH AMERICAN DATUM (NAD) OF 1983 (U.S. FEET) MAINE (EAST ZONE) STATE PLANE COORDINATE SYSTEM.
VERTICAL: NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988.
3: CONTOUR INTERVAL = 1 FOOT.

SOURCE DATA:
SEE TABLE A-2 IN APPENDIX A

GRAPHIC SCALE
100 50 0 50 100
APPROXIMATE SCALE IN FEET

BOREHOLE HYDROPHYSICS AND GEOPHYSICS REPORT LO-58 SITE CARIBOU, MAINE

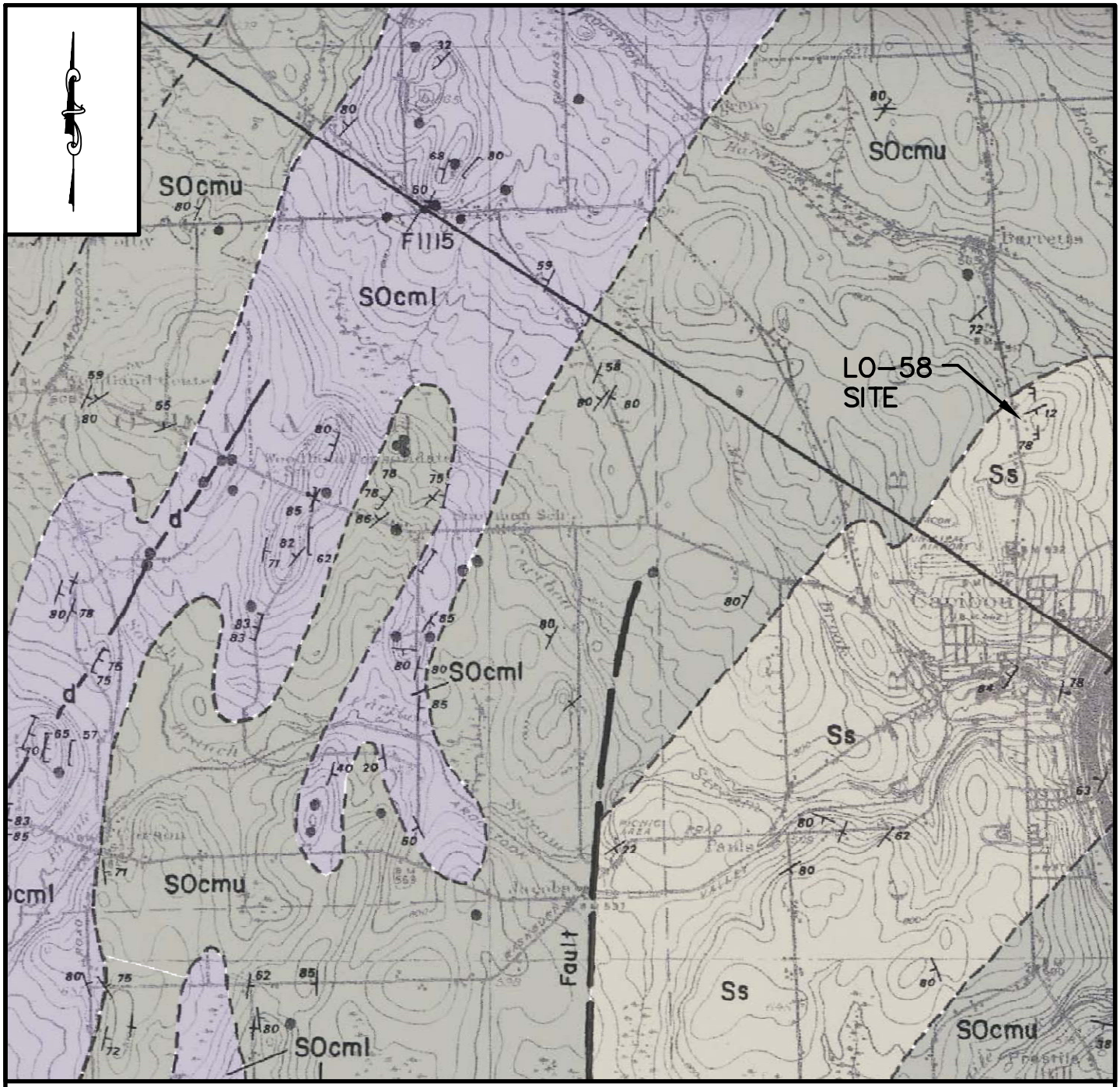
BEDROCK SURFACE ELEVATION MAP

WESTON SOLUTIONS
MANCHESTER NEW HAMPSHIRE

DEPARTMENT OF THE ARMY
NEW ENGLAND DISTRICT
CORPS OF ENGINEERS
CONCORD, MASSACHUSETTS

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	JUL 2009	JS	JUL 2009	03886.184.001
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
JS	JUL 2009	AS SHOWN		2-3

M:\Design\DWG\ACOE\MEFUDS\5FUDS\2009\LO-58 2009\BOREHOLE 2009\FIG 2-3.dwg, Layout1, 2/3/2010 1:40:43 PM, CHASET, 1:1



LEGEND

Ss	SPRAGUEVILLE FORMATION
SOcmu	CARYS MILLS FORMATION (UPPER MEMBER)
SOcml	CARYS MILLS FORMATION (LOWER MEMBER)

SOURCE
GEOLOGIC MAP OF THE CARIBOU AND NORTHERN PRESQUE ISLE QUADRANGLES, MAINE. MAINE GEOLOGIC SURVEY, DEPARTMENT OF CONSERVATION, OPEN-FILE NUMBER 87-2. 1985.

GRAPHIC SCALE
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APPROXIMATE SCALE IN FEET

BOREHOLE HYDROPHYSICS AND GEOPHYSICS REPORT LO-58 SITE CARIBOU, MAINE

WESTON SOLUTIONS
MANCHESTER NEW HAMPSHIRE

DEPARTMENT OF THE ARMY
NEW ENGLAND DISTRICT
CORPS OF ENGINEERS
CONCORD, MASSACHUSETTS

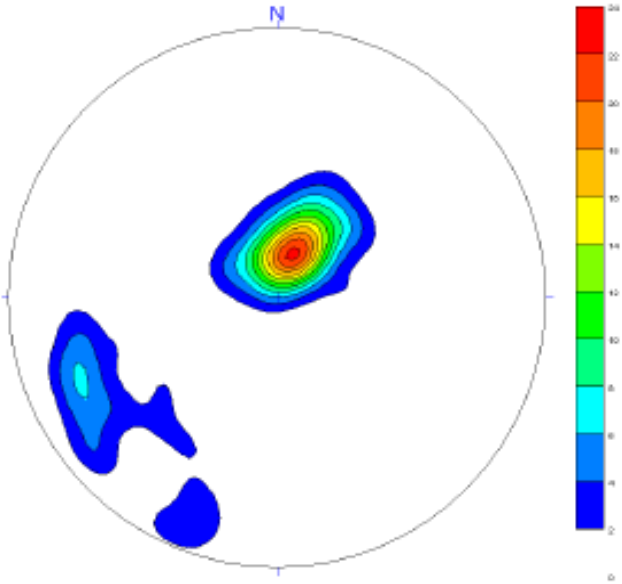
BEDROCK GEOLOGIC MAP

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
A.J.M.	JAN. 09			03886.184.001
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
J.S.	JAN. 09	AS SHOWN		2-4

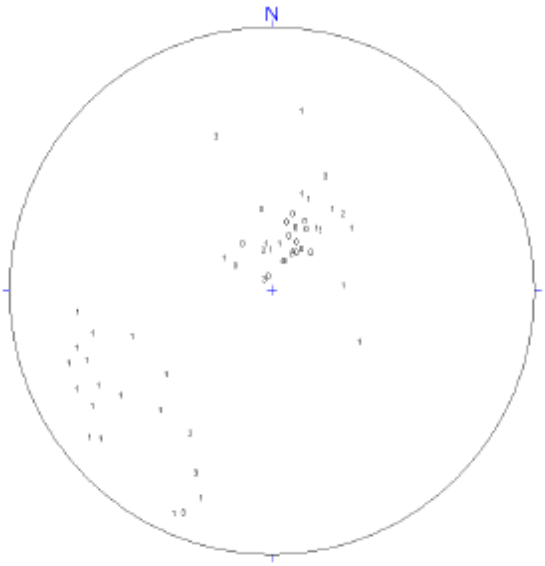
Figure 2-5
LO-58 Site Stereonets of Bedding and Joints/Faults
Borehole Hydrophysics and Geophysics Report

Drinking Water Well DW-1

Schmidt Projection with Contours

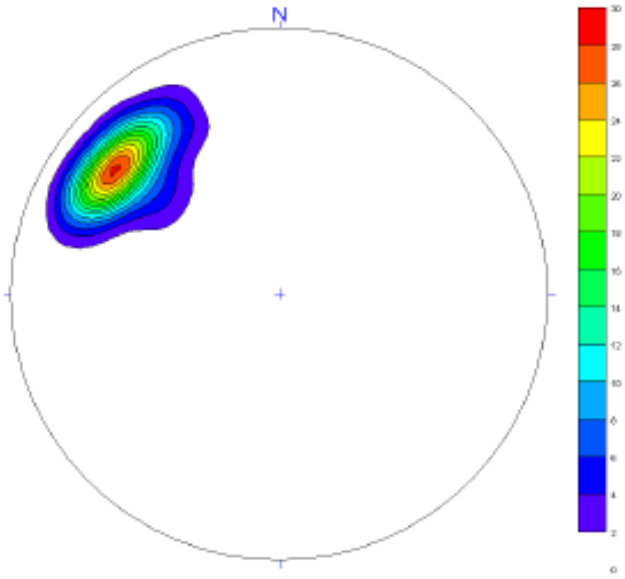


Schmidt Projection with Feature Ranks

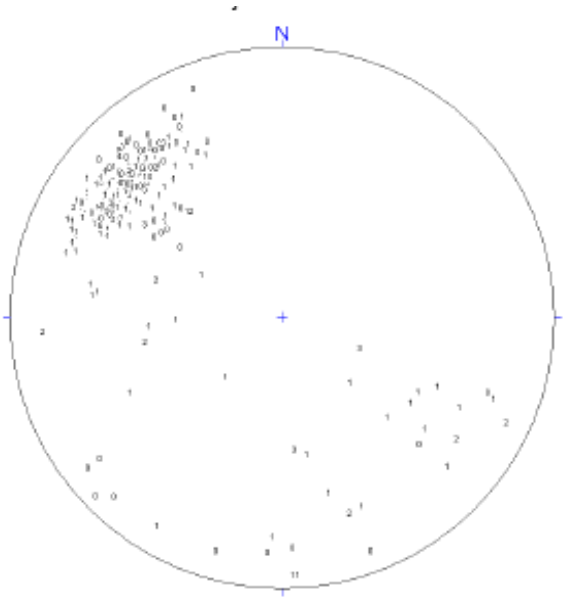


Drinking Water Well DW-2

Schmidt Projection with Contours



Schmidt Projection with Feature Ranks

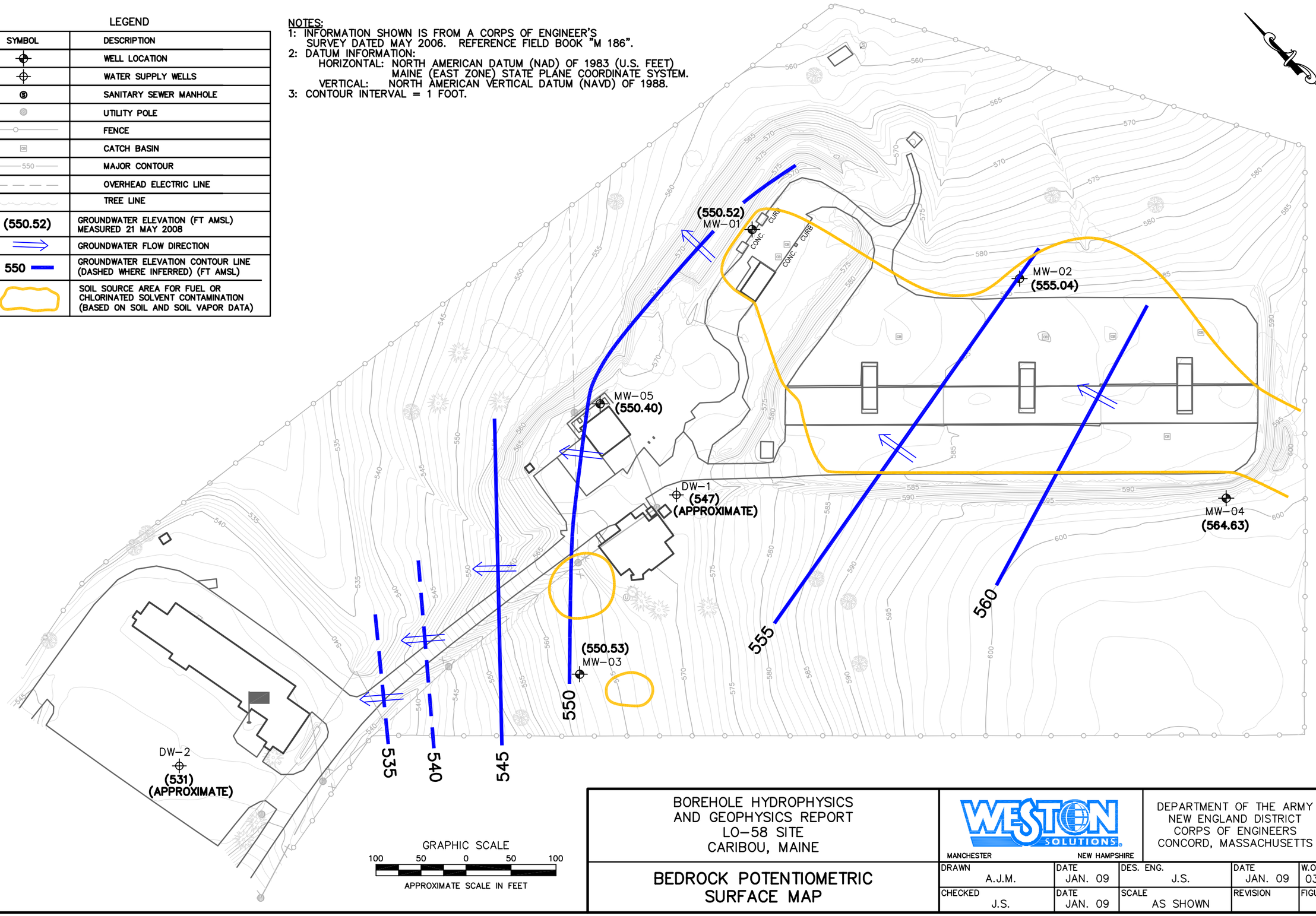


From *HydroPhysics™ and Geophysical Logging Results*, 2009.

LEGEND

SYMBOL	DESCRIPTION
⊕	WELL LOCATION
⊕	WATER SUPPLY WELLS
Ⓢ	SANITARY SEWER MANHOLE
	UTILITY POLE
	FENCE
CB	CATCH BASIN
550	MAJOR CONTOUR
	OVERHEAD ELECTRIC LINE
	TREE LINE
(550.52)	GROUNDWATER ELEVATION (FT AMSL) MEASURED 21 MAY 2008
	GROUNDWATER FLOW DIRECTION
550	GROUNDWATER ELEVATION CONTOUR LINE (DASHED WHERE INFERRED) (FT AMSL)
	SOIL SOURCE AREA FOR FUEL OR CHLORINATED SOLVENT CONTAMINATION (BASED ON SOIL AND SOIL VAPOR DATA)

NOTES:
1: INFORMATION SHOWN IS FROM A CORPS OF ENGINEER'S SURVEY DATED MAY 2006. REFERENCE FIELD BOOK "M 186".
2: DATUM INFORMATION:
HORIZONTAL: NORTH AMERICAN DATUM (NAD) OF 1983 (U.S. FEET) MAINE (EAST ZONE) STATE PLANE COORDINATE SYSTEM.
VERTICAL: NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988.
3: CONTOUR INTERVAL = 1 FOOT.



BOREHOLE HYDROPHYSICS AND GEOPHYSICS REPORT
LO-58 SITE
CARIBOU, MAINE

BEDROCK POTENTIOMETRIC SURFACE MAP

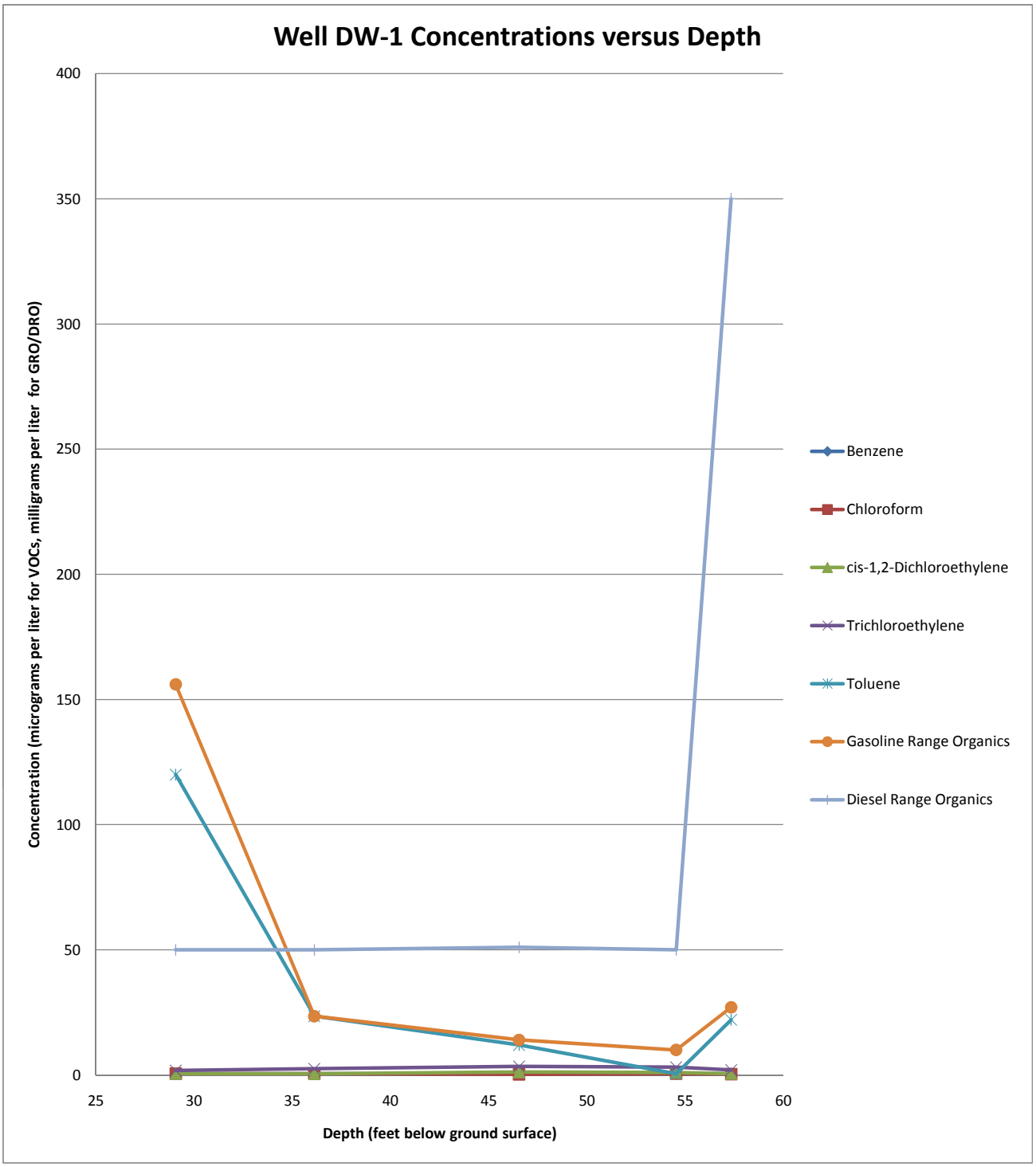
WESTON SOLUTIONS
MANCHESTER NEW HAMPSHIRE

DEPARTMENT OF THE ARMY
NEW ENGLAND DISTRICT
CORPS OF ENGINEERS
CONCORD, MASSACHUSETTS

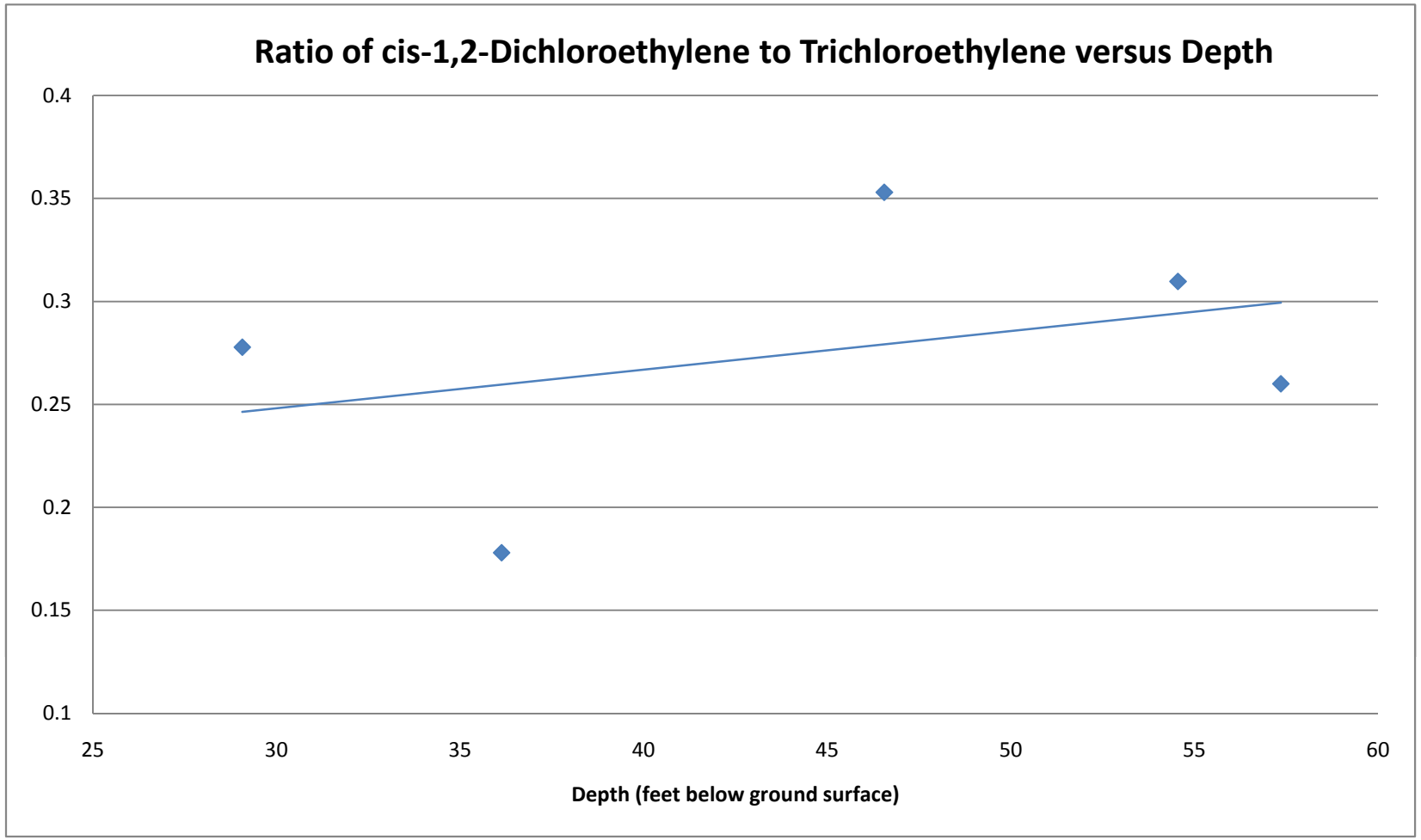
DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
A.J.M.	JAN. 09	J.S.	JAN. 09	03886.184.001
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
J.S.	JAN. 09	AS SHOWN		2-6

M:\Design\DWG\ACOE\MEFUDS\SFUDS\LO-58 2009\BOREHOLE 2009\FIG 2-6.dwg, Layout1, 4/14/2009 2:21:04 PM, girardeb, 1:1

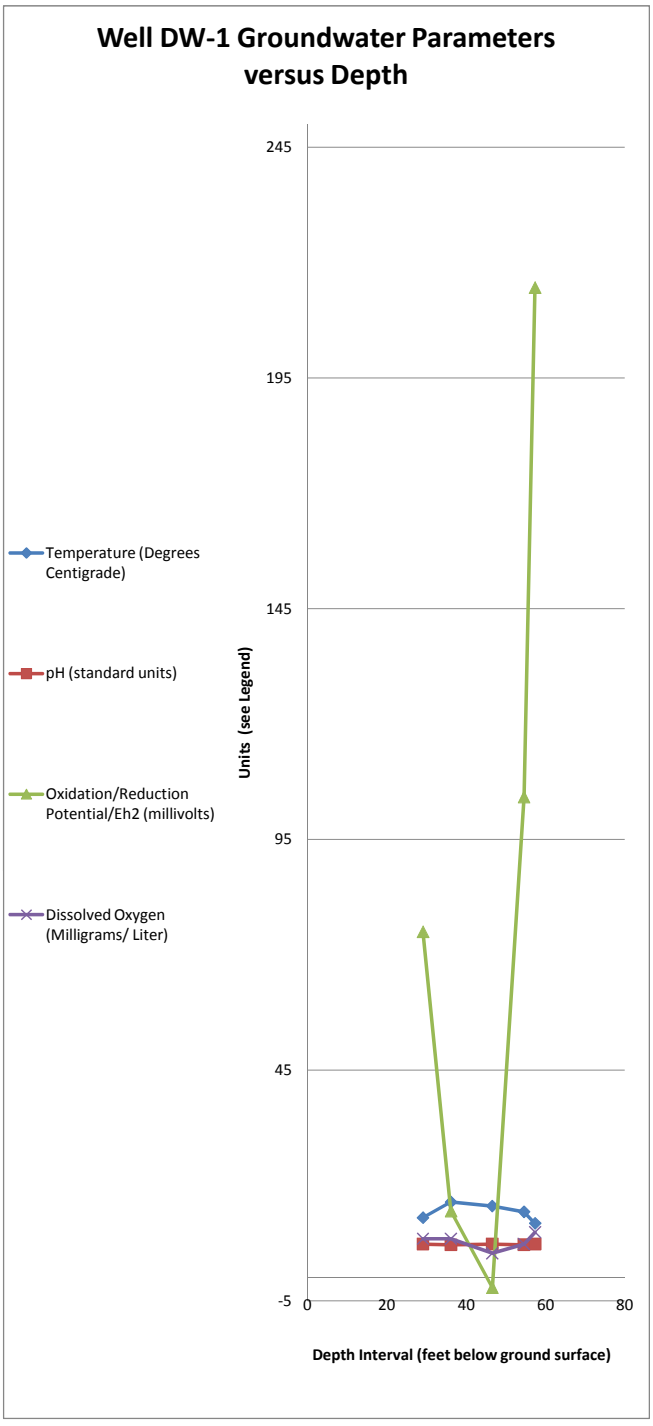
Concentration Trends in Analytical Results for Well DW-1
Maine Formerly Used Defense Site LO-58
Borehole Hydrophysics and Geophysics Report

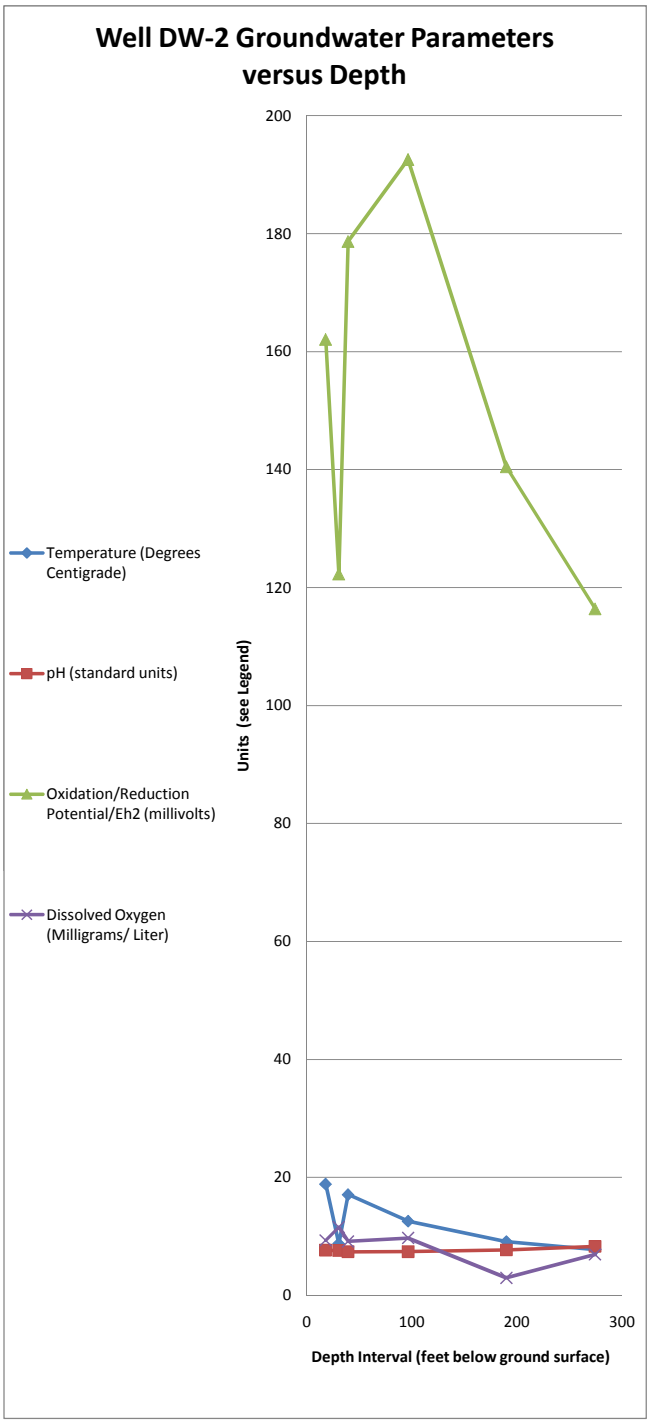


Degradation Rate for Chlorinated Solvents for Well DW-1
Maine Formerly Used Defense Site LO-58
Borehole Hydrophysics and Geophysics Report



Groundwater Parameter Trends for Wells DW-1 and DW-2
Maine Formerly Used Defense Site LO-58
Borehole Hydrophysics and Geophysics Report





TABLES

Table 2-1

Well Construction Summary
Maine Formerly Used Defense Site LO-58
Borehole Hydrophysics and Geophysics Report

Well ID	MW-01	MW-02	MW-03	MW-04	MW-05	DW-1	DW-2
Ground Elevation (ft amsl)	577.3	587.6	567.5	603.4	575.9	571	546.5
Protective/Steel Casing Elevation (ft amsl)	578.96	590.13	571.07	605.84	575.88	573	539.5
Top of Inner Casing Elevation (ft amsl)	578.79	589.36	570.63	605.45	575.72	na	na
Casing Stickup, construction log (ft)	1.66	2.53	3.57	2.44	-0.02	na	na
Casing Stickup, measured (ft)	1.66	2.53	3.57	2.44	-0.02	2.4	-6*
Well Total Depth, construction log (ft bmp)	142	62	47	82	82	na	na
Well Total Depth, measured (ft bmp)	143.1	61.6	47.85	82.7	77.8	58.1	284
Casing Diameter (inches)	2	2	2	2	2	6	6
Screened Interval Elevation (ft amsl)	435.69 to 445.69	527.76 to 537.76	521.78 to 531.78	522.75 to 532.75	497.92 to 507.92	514.9 to 563	524.5 to 255.5
Casing Bottom Elevation (ft amsl)	435.69	527.76	521.78	522.75	497.92	514.9	255.5
Depth to Water (ft bmp)	28.27	34.32	20.10	40.82	25.32	25.92	8.86
Groundwater Elevation (ft amsl)	550.52	555.04	550.53	564.63	550.4	547.08	530.64

Notes:

na = not available

Elevations for well DW-1 and DW-2 are approximate and not the result of a precise survey.

ft bmp = feet below measuring point

ft amsl = feet above mean sea level

Groundwater depth measurements were made on 21 May 2008.

* = Following fieldwork, well casing was raised 4 ft to meet current construction guidelines; current stickup is -2 ft.

Table 2-2

Summary of Bedrock Groundwater Elevations, April through May 2008
Maine Formerly Used Defense Site LO-58
Borehole Hydrophysics and Geophysics Report

Well ID	Ground Elevation (ft amsl)	Measuring Point Elevation (ft amsl)	Depth to Water (ft bmp)		Groundwater Elevation (ft amsl)	
			30-Apr-2008	21-May-2008	30-Apr-2008	21-May-2008
MW-01	577.3	578.79	16.95	28.27	561.84	550.52
MW-02	587.6	589.36	19.83	34.32	569.53	555.04
MW-03	567.5	570.63	9.95	20.10	560.68	550.53
MW-04	603.4	605.45	25.36	40.82	580.09	564.63
MW-05	575.9	575.72	14.93	25.32	560.79	550.40
DW-1	571	573	18.87	25.92	554.1	547.1
DW-2	546.5	539.5	2.54	8.86	537.0	530.7

Notes:

Elevations for well DW-01 and DW-02 are approximate, and not the result of a precise survey.
Groundwater depth for well DW-01 reported for 30 April 2008 was measured on 6 May 2008.
Groundwater depth for well DW-02 reported for 30 April 2008 was measured on 5 May 2008.
ft bmp = feet below measuring point.
ft amsl = feet above mean sea level.

Table 2-3

Summary of Drinking Water Analytical Results
Maine Formerly Used Defense Site LO-58
Borehole Hydrophysics and Geophysics Report

Station Name Field Sample ID Sample Date	Maine Maximum Exposure Guideline (µg/L)	EPA Maximum Contaminant Limit (µg/L)	Maine Action Level* (µg/L)	VFW Spigot VFW-SPIGOT 5/8/2008	VFW Tap VFW-TAP 5/8/2008	AMAC Tap AMAC-TAP 5/8/2008	VFW Tap VFW-TAP-051508 5/15/2008	VFW Tap VFW-TAP-052108 5/21/2008	AMAC Tap 052108 5/21/2008
Volatile Organic Compounds by EPA Method 524.2 (µg/L)									
Bromodichloromethane	6	NE	3	**0.4 J**	**2.2**	0.5 U	**1.1**	0.5 U	0.5 U
Bromoform	44	NE	22	**2.4**	**3.6**	0.5 U	**6**	0.5 U	0.5 U
Chloroform	70	80	35	0.5 U	**4.9**	0.5 U	0.69	0.5 U	0.5 U
Dibromochloromethane	4	NE	2	**1.3**	**3.1**	0.5 U	**3.5**	0.5 U	0.5 U
Toluene	1,400	1,000	500	0.5 U	0.5 U	0.5 U	0.5 U	**1.0**	0.5 U
Trichloroethene	5**	5	2.5	**0.4 J**	**3.4**	0.5 U	**0.26 J**	0.5 U	0.5 U

Notes:
NE = Standard not established.
Bold = Substance Detected
EPA = United States Environmental Protection Agency
VFW = Veterans of Foreign Wars
AMAC = Adult Multiple Alternative Center
* =The action level used by the State of Maine is one-half the Maine Maximum Exposure Guideline or EPA Maximum Contaminant Level, whichever is lower.
** = the 1992 Maine Maximum Exposure Guideline of 5 µg/L remains the "relevant and appropriate ", and supercedes the 2008 Maine Maximum Exposure Guideline of 32 µg/L.
Pink Highlight = Result exceeds the State of Maine action level.
µg/L = Micrograms per liter (parts per billion)
J = Quantitation approximate.
U = Not detected.

Table 2-4

Summary of Deionized Water Analytical Results
Maine Formerly Used Defense Site LO-58
Borehole Hydrophysics and Geophysics Report

Station Name Field Sample ID Sample Date	Maine Maximum Exposure Guideline (µg/L)	EPA Maximum Contaminant Limit (µg/L)	Maine Action Level* (µg/L)	VFW - Cologd DI CologDI-050508 5/5/2008	VFW - Spigot VFW-SPIGOT 5/8/2008	CFD - Cologd DI CologDI-050508 5/8/2008	Cologd DI - Old Tank COLOGDI-051108 5/11/2008	Cologd DI - Culligan Tank w/ Carbon Filter 01 DI & C 5/12/2008	Cologd DI - Culligan Tank 011360T DI only 5/12/2008
Volatile Organic Compounds by EPA Method 524.2 (µg/L)									
Acetone	6,300	NE	3,150	5 U	5 U	5 U	**26**	**105**	2 U
Bromodichloromethane	6	NE	3	0.5 U	**0.4 J**	0.5 U	2 U	2 U	2 U
Bromoform	44	NE	22	0.5 U	**2.4**	0.5 U	2 U	2 U	2 U
Chlorobenzene	47**	100	23.5	**0.5**	0.5 U	**0.6**	2 U	2 U	2 U
Chloroform	70	80	35	**0.3 J**	0.5 U	0.5 U	**86**	2 U	2 U
Dibromochloromethane	4	NE	2	0.5 U	**1.3**	0.5 U	--	--	--
Methyl ethyl ketone (MEK)	170**	NE	85	5 U	5 U	**14**	**14**	10 U	10 U
n-Propylbenzene	NE	NE	NE	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U
Tetrahydrofuran	70	NE	35	**85 D**	2.5 U	**96 J**	**40**	5 U	5 U
Trichloroethene	5**	5	2.5	0.5 U	**0.4 J**	0.5 U	2 U	2 U	2 U
1,2-Ethylene Dibromide, 1,2-Dibromo-3-Chloropropane, and 1,2,3-Trichloropronane by EPA Method 504.1 (µg/L)									
No analytes detected	NE	NE	NE		--	--	--	--	--

Notes:
EPA = United States Environmental Protection Agency
NE = Standard not established.
J = Quantitation approximate.
U = Not detected.
VFW = Veterans of Foreign Wars
* =The action level used by the State of Maine is one-half the Maine Maximum Exposure Guideline or EPA Maximum Contaminant Level, whichever is lower.
** = the 1992 Maine Maximum Exposure Guideline for this substance remains the "relevant and appropriate ", and supercedes the higher 2008 Maine Maximum Exposure Guideline.
µg/L = Micrograms per liter (parts per billion)
Bold = Substance detected.
Blue Highlight = Exceeds Maine Maximum Exposure Guideline.
D = Result from dilution analysis.
-- = Not analyzed

Table 2-5

Summary of Groundwater Parameters Measured During Wire-Line Straddle Packer Low-Flow Sampling
Maine Formerly Used Defense Site LO-58
Borehole Hydrophysics and Geophysics Report

Well	DW - 1 (AMAC Well)														
Depth Interval (feet below ground surface)	**24.98 to 33.15**			**33.75 to 38.5**			**41.2 to 51.9**			**51 to 58.1**			**56.6 to 58.1**		
Time	15:53	15:58	16:03	11:45	11:50	11:55	18:00	18:05	18:10	9:15	9:20	9:25	18:57	19:02	19:07
Purge Rate (Milliliters/minute)	100	100	100	120	120	120	720	720	720	1,000	1,000	1,000	90	90	90
Temperature (Degrees Centigrade) [3%]	13.16	13.06	13.04	16.44	16.44	16.44	15.42	15.37	15.58	14.26	14.26	14.33	11.87	11.85	11.84
Specific Conductivity (Microsiemens/ centimeter) [3%]	438	439	440	454	463	466	433	434	433	458	458	461	422	424	426
pH (standard units) [+/-0.1]	7.34	7.33	7.33	7.17	7.17	7.17	7.35	7.34	7.32	7.16	7.17	7.18	7.36	7.36	7.36
Oxidation/Reduction Potential/Eh^2 (millivolts) [+/-10]	70.1	72.9	75.0	15.9	15.3	14.5	1.8	-4.8	-2.1	106.2	106.1	104.2	215.0	214.8	214.6
Dissolved Oxygen (Milligrams/ Liter) [10%]	8.50	8.46	8.48	8.65	8.49	8.48	5.29	5.43	5.34	7.30	7.26	7.32	10.00	9.93	9.90
Turbidity (Nephelometric Turbidity Units) [10%]	10.27	9.79	9.86	3.80	3.50	3.90	6.48	6.37	6.31	12.00	11.00	10.00	16.00	14.00	15.00

Well	DW - 2 (VFW Well)																	
Depth Interval (feet below ground surface)	**16.0 to 20.0**			**28.5 to 32.5**			**37.0 to 41.7**			**94.5 to 98.5**			**187.9 to 192.2**			**265.0 to 284.0**		
Time	15:21	15:26	15:31	18:15	18:20	18:25	12:04	12:09	12:14	15:19	15:24	15:29	18:43	18:48	18:53	21:39	21:44	21:49
Purge Rate (Milliliters/minute)	44	45	44	5,909	5,909	5,909	800	800	800	750	750	750	700	700	700	600	600	600
Temperature (Degrees Centigrade) [3%]	18.48	19.11	18.87	8.78	8.72	8.76	17.29	17.08	17.09	12.66	12.42	12.58	9.16	9.15	9.14	7.84	7.79	7.77
Specific Conductivity (Microsiemens/ centimeter) [3%]	429	425	430	448	450	450	444	446	451	435	435	436	428	428	429	227	225	224
pH (standard units) [+/-0.1 unit]	7.68	7.68	7.67	7.62	7.61	7.61	7.39	7.39	7.39	7.43	7.42	7.42	7.71	7.70	7.70	8.26	8.28	8.30
Oxidation/Reduction Potential/Eh^2 (millivolts) [+/-10 units]	162.9	162.1	162.1	126.7	123.4	122.3	178.0	178.7	178.7	195.6	195.1	192.6	141.2	141.0	140.5	119.4	117.6	116.4
Dissolved Oxygen (Milligrams/ Liter) [10%]	9.45	9.28	9.33	11.60	11.59	11.58	9.15	9.17	9.16	9.82	9.84	9.72	3.37	3.16	2.97	7.16	7.03	6.95
Turbidity (Nephelometric Turbidity Units) [10%]	50.00	51.00	52.00	<1	<1	<1	5.50	5.80	5.30	79.00	66.50	47.20	47.00	45.00	44.00	103.60	102.40	101.30

Notes:
AMAC = Adult Multiple Alternative Center
VFW = Veterans of Foreign Wars

Table 2-6

Summary of Drinking Water Well Wire-Line Straddle Packer Sampling Analytical Results
Maine Formerly Used Defense Site LO-58
Borehole Hydrophysics and Geophysics Report

Well Field Sample ID Sample Date Depth Interval (ft bgs)	Maine Maximum Exposure Guideline (µg/L)	EPA Maximum Contaminant Limit (µg/L)	Maine Action Level* (µg/L)	DW-1					
				LS58DW1-0508-29 5/20/2008 (water) 24.98 to 33.15	LS58DW1-0508-34 5/20/2008 33.75 to 38.5	LS58DW1-0508-34E 5/20/2008	LS58DW1-0508-41 5/19/2008 41.2 to 51.9	LS58DW1-0508-51 5/19/2008 51.0 to 58.1 (bottom)	LS58DW1-0508-56 5/18/2008 56.6 to 58.1 (bottom)
Volatile Organic Compounds by EPA Method 524.2 (µg/L)									
Benzene	6	5	2.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	70	80	35	**0.52**	0.5 U	0.5 U	**0.24 J**	0.5 U	**0.34 J**
cis-1,2-Dichloroethylene	70	70	35	0.5 U	**0.44 J**	**0.45 J**	**1.2**	**0.96**	**0.52**
Toluene	1,400	1,000	500	**120 D**	**25**	**22**	**12**	0.5 U	**22**
Trichloroethylene	5**	5	2.5	**1.8**	**2.5**	**2.5**	**3.4**	**3.1**	**2**
1,2-Ethylene Dibromide, 1,2-Dibromo-3-Chloropropane, and 1,2,3-Trichloropronane by EPA Method 504.1 (µg/L)									
No analytes detected									
Gasoline Range Organics by the Maine Health and Environmental Testing Laboratory Method 4.1.17 (µg/L)									
Gasoline Range Organics	50	NE	NE	**156**	**24**	**23**	**14**	10 U	**27**
Diesel Range Organics by the Maine Health and Environmental Testing Laboratory Method 4.1.25 (µg/L)									
Diesel Range Organics	50	NE	NE	50 U	50 U	50 U	**51 J[1]**	50 U	**350 J[1]**

Well Field Sample ID Sample Date Depth Interval (ft bgs)	Maine Maximum Exposure Guideline (µg/L)	EPA Maximum Contaminant Limit (µg/L)	Maine Action Level* (µg/L)	DW-2					
				LS58DW2-0508-16 5/16/2008 16.0 to 20.0	LS58DW2-0508-28.5 5/16/2008 28.5 to 32.5	LS58DW2-0508-37 5/17/2008 37.0 to 41.7	LS58DW2-0508-94.5 5/17/2008 94.5 to 98.5	LS58DW2-0508-189 5/17/2008 187.9 to 192.2	LS58DW2-0508-265 5/17/2008 265 to 284.0 (bottom)
Volatile Organic Compounds by EPA Method 524.2 (µg/L)									
Benzene	6	5	2.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	70	80	35	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U U
cis-1,2-Dichloroethylene	70	70	35	0.5 U	0.5 U	0.5 U	0.5 U	**0.23 J**	0.5 U
Toluene	1,400	1,000	500	**2.4**	0.5 U	0.5 U	**5.5**	2.3 U[1]	0.79 U[1]
Trichloroethylene	5**	5	2.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Ethylene Dibromide, 1,2-Dibromo-3-Chloropropane, and 1,2,3-Trichloropronane by EPA Method 504.1 (µg/L)									
No analytes detected									
Gasoline Range Organics by the Maine Health and Environmental Testing Laboratory Method 4.1.17 (µg/L)									
Gasoline Range Organics	50	NE	25	10 U	10 U	10 U	10 U	10 U	10 U
Diesel Range Organics by the Maine Health and Environmental Testing Laboratory Method 4.1.25 (µg/L)									
Diesel Range Organics	50	NE	25	**1,050**	50 U	50 U	50 U	50 U	**80 J[1]**

Notes:

NE = standard not established
µg/L = micrograms per liter (parts per billion)
ft bgs = feet below ground surface
Bold = substance detected
Blue Highlight = Exceeds Maine Maximum Exposure Guideline
EPA = United States Environmental Protection Agency
D = Result from dilution analysis
J = Quantitation approximate
J^1 = Diesel range organics quantitation approximate due to detection in rinsate blank
U = substance not detected at the listed detection limit
U^1 = Toluene qualifiued as not detected due to detection in rinsate blank
* =The action level used by the State of Maine is one-half the Maine Maximum Exposure Guideline or EPA Maximum Contaminant Level, whichever is lower.
** = the 1992 Maine Maximum Exposure Guideline of 5 µg/L remains the "relevant and appropriate ", and supercedes the 2008 Maine Maximum Exposure Guideline of 32 µg/L.
Pink Highlight = Result exceeds the State of Maine action level.

APPENDIX A

ELECTRONIC FILES: RAW AND PROCESSED HYDROPHYSICAL AND GEOPHYSICAL DATA; LABORATORY ELECTRONIC DATA DELIVERABLE; ADR-REVIEWED FILES; PACKER TEST MONITORING DATA; AND PRESSURE TRANSDUCER DATA

APPENDIX B

HYDROPHYSICS™ AND GEOPHYSICAL LOGGING RESULTS INCLUDING HYDROPHYSICS™ AND GEOPHYSICAL LOG MONTAGE PLOTS

HydroPhysical™ and Geophysical Logging Results
Former LO-58 Nike Battery Launch Site,
Maine Formerly Used Defense Sites (FUDS)
Caribou, ME

Prepared for
Weston Solutions, Inc.
January 13, 2009

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Figures and Tables – DW-2

List of Acronyms

Weston Solutions – Weston Solutions, Inc.
gpm – gallons per minute
FEC – Fluid Electrical Conductivity
OBI – Optical Borehole Imager (optical televiewer)
ABI – Acoustic Borehole Imager (acoustic televiewer)
WSP – Wireline Straddle Packer
VSP – Vertical Seismic Profile
ft – feet
min. – minute
cm – centimeters
s – second
µS – micro Siemons
HpL™ - HydroPhysical™ Logging
DI – De-ionized, e.g., DI water
ftbtoc – feet below top of casing
GS – Ground Surface

HydroPhysical™ and Geophysical Logging Results
Former LO-58 Nike Battery Launch Site,
Maine Formerly Used Defense Sites (FUDS)
Caribou, ME

I. Executive Summary

The results of the HydroPhysical™ and geophysical logging performed in two open boreholes and five 2-inch PVC wells at the Former LO-58 Nike Battery Launch Site, Maine Formerly Used Defense Sites (FUDS) in Caribou, Maine identified water-bearing fractures ranging in flow rates from 0.005 to 5.69 gpm. High-angle fractures with aperture were identified in each of the two open boreholes and wireline straddle packer testing indicated the high-angle fractures are likely providing a vertical conduit for hydraulic communication outside the influence of the borehole. Fracture-specific transmissivities calculated using the hydrophysical data in the two open boreholes range from 0.20 to 220 $feet^2$/day. Fracture-specific FEC did not vary significantly between the boreholes, with FEC ranging from 321 to 597 μS/cm.

Ambient testing identified horizontal flow in DW-1 and downward vertical flow within the fluid column in DW-2. The difference is likely due to the highly fractured borehole in DW-1 with some of those water-bearing fractures high-angle, resulting in an interconnected network of fractures that have pressure-equilibrated outside the influence of the borehole. In DW-2, a significantly deeper borehole, though there are still high-angle fractures identified, their aperture and water-bearing potential are not as significant and likely lack the vertical hydraulic potential in the middle portion of DW-2.

Please refer to Table Summary:1 for a complete summary of the HydroPhysical™ logging results. All depths reported herein are referenced to the top of steel or PVC casings.

Table Summary 1: Summary of Hydrophysical Logging Results; Weston Solutions; LO-58; Caribou, ME.

Well ID	Water Bearing Interval #	Interval of Flow (feet)	Interval Specific Flow Rate During Ambient Testing (gpm)	Interval Specific Flow Rate During Pumping (gpm)	Transmissivity (ft2/day)	Interval-Specific Fluid Electrical Conductivity (uS/cm)
DW-1	1	27.3 - 31.7	0.085	0.207	8.51E+00	376
	2	34.6 - 35.0	0.011	0.195	1.28E+01	376
	3	37.4 - 38.4	0.000	0.745	5.18E+01	428
	4	40.4 - 48.6	0.140	2.00	1.29E+02	357
	5	49.0 - 50.2	0.018	0.416	2.76E+01	375
	6	52.7 - 53.6	0.058	1.65	1.11E+02	375
	7	54.4 - 58.1	0.000	0.838	5.82E+01	375
DW-2	1	19.5 - 19.6	0.026	0.01	2.95E+00	321
	2	30.4 - 31.6	0.297	5.69	2.20E+02	378
	3	38.2 - 41.8	0.016	0.374	1.43E+01	528
	4	44.9 - 51.4	0.074	0.081	2.82E-01	512
	5	96.4 - 97.0	-0.370	0.000	1.48E+01	432
	6	143.3 - 144.3	0.000	0.008	3.20E-01	432
	7	179.2 - 183.0	0.000	0.015	6.00E-01	431
	8	189.5 - 191.0	-0.185	0.051	9.45E+00	429
	9	191.4 - 218.3	0.000	0.008	3.20E-01	429
	10	227.4 - 228.2	0.000	0.005	2.00E-01	597
	11	243.7 - 279.2	0.000	0.024	9.61E-01	597

Wire-Line Straddle Packer (WSP) Summary

Former Nike Battery Launch Site LO-58, Maine Formerly Used Defense Site

Well	Maine	EPA	DW-1					
Field Sample ID	Exposure	Maximum	LS58DW1-0508-29	LS58DW1-0508-34	LS58DW1-0508-34E	LS58DW1-0508-41	LS58DW1-0508-51	LS58DW1-0508-56
Sample Date	Guideline	Contaminant	5/20/2008	5/20/2008	5/20/2008	5/19/2008	5/19/2008	5/18/2008
Depth Interval (ft bgs)	(µg/L)	Limit (µg/L)	(water) 24.98 to 33.15	33.75 to 38.5		41.2 to 51.9	51.0 to 58.1 (bottom)	56.6 to 58.1 (bottom)
Volatile Organic Compunds by U.S. Environmetal Protection Agency Method 524.2 (µg/L)								
Benzene	6	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	70	NE	**0.52**	0.5 U	0.5 U	**0.24 J**	0.5 U	**0.34 J**
cis-1,2-Dichloroethylene	70	70	0.5 U	**0.44 J**	**0.45 J**	**1.2**	**0.96**	**0.52**
Trichloroethylene	32	5	**1.8**	**2.5**	**2.5**	**3.4**	**3.1**	**2**
Toluene	1,400	1,000	**120 D**	**25**	**22**	**12**	0.5 U	**22**
1,2-Ethylene Dibromide, 1,2-Dibromo-3-Chloropropane, and 1,2,3-Trichloropronane by U.S. Environmetal Protection Agency Method 504.1 (µg/L)								
No analytes detected								
Gasoline Range Organics by Maine Health and Environmental Testing Laboratory Method 4.1.17 (µg/L)								
Gasoline Range Organics	50	NE	**156**	**24**	**23**	**14**	10 U	**27**
Diesel Range Organics by Maine Health and Environmental Testing Laboratory Method 4.1.25 (µg/L)								
Diesel Range Organics	50	NE	50 U	50 U	50 U	**51**	50 U	**350**

Well	Maine	EPA	DW-2					
Field Sample ID	Exposure	Maximum	LS58DW2-0508-16	LS58DW2-0508-28.5	LS58DW2-0508-37	LS58DW2-0508-94.5	LS58DW2-0508-189	LS58DW2-0508-265
Sample Date	Guideline	Contaminant	5/16/2008	5/16/2008	5/17/2008	5/17/2008	5/17/2008	5/17/2008
Depth Interval (ft bgs)	(µg/L)	Limit (µg/L)	16.0 to 20.0	28.5 to 32.5	37.0 to 41.7	94.5 to 98.5	187.9 to 192.2	265 to 284.0 (bottom)
Volatile Organic Compunds by U.S. Environmetal Protection Agency Method Method 524.2 (µg/L)								
Benzene	6	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	70	NE	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U U
cis-1,2-Dichloroethylene	70	70	0.5 U	0.5 U	0.5 U	0.5 U	**0.23 J**	0.5 U
Trichloroethylene	32	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	1,400	1,000	**2.4**	0.5 U	0.5 U	**5.5**	2.3 U1	0.79 U1
1,2-Ethylene Dibromide, 1,2-Dibromo-3-Chloropropane, and 1,2,3-Trichloropronane by U.S. Environmetal Protection Agency Method 504.1 (µg/L)								
No analytes detected								
Gasoline Range Organics by Maine Health and Environmental Testing Laboratory Method 4.1.17 (µg/L)								
Gasoline Range Organics	50	NE	10 U	10 U	10 U	10 U	10 U	10 U
Diesel Range Organics by Maine Health and Environmental Testing Laboratory Method 4.1.25 (µg/L)								
Diesel Range Organics	50	NE	**1,050**	50 U	50 U	50 U	50 U	**80**

Notes:

NE = Standard not established.
µg/L = Micrograms per liter (parts per billion).
ft bgs = Feet below ground surface.
Bold = Substance Detected.
Blue Highlight = Exceeds Maine Exposure Guideline.

D = Result from dilution analysis.
J = Quantitation approximate.
U = substance not detected at the listed detection limit.
U1 = Toluene qualifiued as not detected due to detection in rinsate blank.

II. Introduction

In accordance with COLOG's proposal dated February 23, 2007, COLOG has applied HydroPhysical™ (HpL™) and geophysical logging methods and wireline straddle packer methods to characterize the formation waters and orientation of identified fractures and features intersecting two open boreholes and five PVC wells at the Former LO-58 Nike Battery Launch Site, Maine Formerly Used Defense Sites (FUDS) in Caribou, Maine. The objectives of the investigation were to:

1) Evaluate temperature and fluid electrical conductivity under pre-testing conditions.
2) Identify fractures and features intersecting the borehole and evaluate their orientation.
3) Characterize and quantify flow in the borehole under both non-stressed (ambient) and stressed (pumping) conditions.
4) Evaluate the vertical distribution of flow and interval-specific permeability for all identified water-producing fractures or intervals.
5) Sample and stress test water-bearing intervals using the WSP to acquire depth-specific groundwater samples.
6) Apply surface geophysical methods and downhole methods to estimate subsurface velocities.

The two open boreholes logged with the hydrophysical and geophysical logging methods at the LO-58 site are: DW-1 (AMAC well) and DW-2 (VFW well). The five PVC wells tested are: MW-1, MW-2, MW-3, MW-4 and MW-5. The geophysical and hydrophysical logging methods used to achieve the objectives were HydroPhysical™ logging, optical televiewer, acoustic televiewer, 3-arm caliper, natural gamma, water quality (pH, ORP, DO), EM induction conductivity, electric resistivity, VSP, wireline straddle packer, downhole video and full waveform sonic. The two open boreholes were tested under both non-stressed, or ambient, conditions and stressed, or pumping, conditions to fully evaluate the water-bearing horizons intersecting the boreholes. The PVC wells were not hydrophysically tested. All depths reported herein are referenced to the top of steel casings in the case of the open boreholes and PVC casings in the case of the wells.

COLOG's logging of the three subject wellbores was performed over the period of May 5th through May 20th, 2008.

Well Construction Summary

Former Nike Battery Launch Site LO-58, Maine Formerly Used Defense Sites

Well ID	MW-01	MW-02	MW-03	MW-04	MW-05	DW-1	DW-2
Ground Elevation (ft amsl)	577.3	587.6	567.5	603.4	575.9	571	546.5
Protective Casing Elevation (ft amsl)	578.96	590.13	571.07	605.84	575.88	573	539.5
Top of Inner Casing Elevation (ft amsl)	578.79	589.36	570.63	605.45	575.72	na	na
Casing Stickup (ft)	1.66	2.53	3.57	2.44	-0.02	2.4	-6
Well Total Depth (ft bmp)	142	62	47	82	82	58.1	284
Casing Diameter (inches)	2	2	2	2	2	6	6
Screened Interval Elevation (ft amsl)	435.69 to 445.69	527.76 to 537.76	521.78 to 531.78	522.75 to 532.75	497.92 to 507.92	514.9 to 563	524.5 to 255.5
Casing Bottom Elevation (ft amsl)	435.69	527.76	521.78	522.75	497.92	514.9	255.5
Depth to Water (ft bmp)	28.27	34.32	20.10	40.82	25.32	25.92	8.86
Groundwater Elevation (ft amsl)	550.52	555.04	550.53	564.63	550.4	547.08	530.64

Notes:

Elevations for well DW-1 and DW-2 are approximate, and not the result of a precise survey.

ft bmp = feet below measuring point.

ft amsl = feet above mean sea level.

Groundwater depth measurements were made on 21 May 2008.

III. Methodology

A. HydroPhysical™ Logging (HpL™)

The HydroPhysical™ logging technique involves pumping the wellbore and then pumping while injecting into the Wellbore with deionized water (DI). During this process, profiles of the changes in fluid electrical conductivity of the fluid column are recorded. These changes occur when electrically contrasting formation water is drawn back into the borehole by pumping or by native formation pressures (for ambient flow characterization). A downhole wireline HydroPhysical™ tool, which simultaneously measures fluid electrical conductivity (FEC) and temperature is employed to log the physical/chemical changes of the emplaced fluid.

The computer programs FLOWCALC and/or BOREII (Hale and Tsang, 1988 and (Daughtery and Tsang, 2000) can be utilized to evaluate the inflow quantities of the formation water for each specific inflow location. FLOWCALC is used to estimate the interval-specific flow rates for the production test results based on "hand-picked" values of FEC and depth. The values are determined from the "Pumping" and "Pumping During DI Injection logs". Numerical modeling of the reported data is performed using code BORE/BOREII. These methods accurately reflect the flow quantities for the identified water bearing intervals.

In addition to conducting HydroPhysical™ logging for identification of the hydraulically conductive intervals and quantification of the interval specific flow rates, additional logging runs are also typically performed. Prior to emplacement of DI, ambient fluid electrical conductivity and temperature (FEC/T) logs are acquired to assess the ambient fluid conditions within the borehole. During these runs, no pumping or DI emplacement is performed, and precautions are taken to preserve the existing ambient geohydrological and geochemical regime. These ambient water quality logs are performed to provide baseline values for the undisturbed borehole fluid conditions prior to testing.

For interval-specific permeability estimations, COLOG utilizes Hvorslev's 1951 porosity equation in conjunction with the HpL™ results. Several assumptions are made for estimating the permeability of secondary porosity. First, the type of production test COLOG performs in the field may significantly affect the accuracy of the transmissivity estimation. The permeability equation is relatively sensitive to overall observed drawdown. For a high yield wellbore, drawdown will usually stabilize and an accurate observed drawdown can be estimated. However, for a low yield wellbore, drawdown usually does not stabilize but instead, water level continues to drop until it reaches the pump inlet and the test is complete. In this case COLOG utilizes the maximum observed drawdown. The inaccuracy arises in the fact that overall observed drawdown does not stabilize and therefore is more an arbitrary value dependent on the placement of the pump downhole. Secondly, in an environment where flow originates from secondary porosity the length of the interval is derived from the either the thickness of the fracture down to 0.1 feet or the thickness of the fracture network producing water. This assumption of a fracture network producing water versus a porous media is not how the permeability equation was designed to be used. In lieu of a more appropriate equation unknown to COLOG at this time, COLOG utilizes Hvorslev's 1951 porosity equation based on its sensitivity to interval-specific flow which can be measured accurately, drawdown which can be measured accurately in the case of a high yield wellbore and its insensitivity to effective radius. The insensitivity to effective radius is critical when an observation well is not available to measure drawdown at a known distance from the subject wellbore.

Appendix A includes COLOG's Standard Operating Procedure for Hydrophysical Logging.

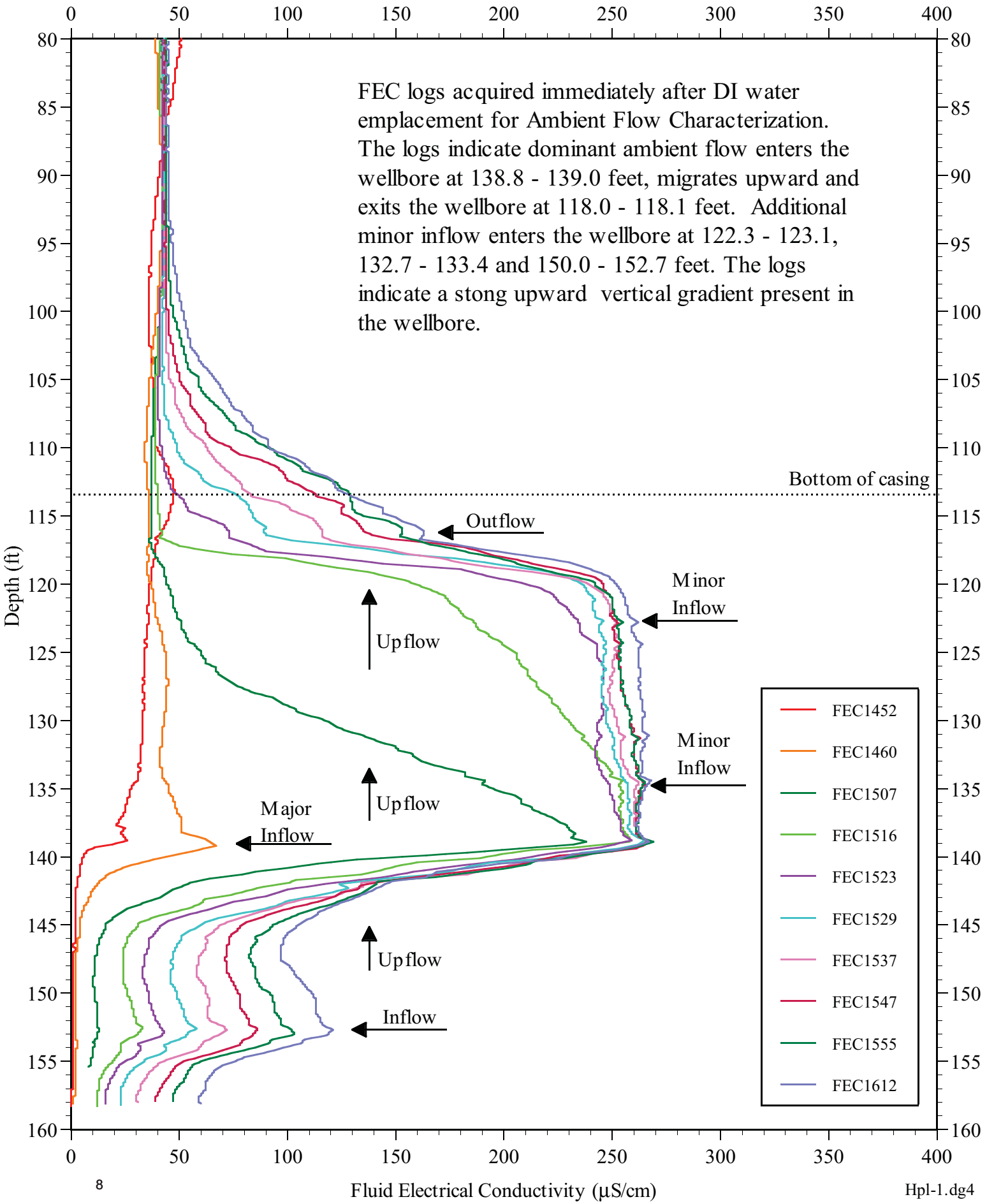
How to Interpret HydroPhysical™ Logs

Figure HpL:1 below is an example data set for an ambient flow evaluation. The data represents HpL™ logs acquired immediately after deionized (DI) water emplacement for ambient flow evaluation. For ambient flow evaluation the wellbore fluids are first replaced with DI water (termed "emplacement"), then a series of fluid electrical conductivity (FEC) logs are acquired over a period of a time to monitor ground water entering the wellbore under natural pressures and migrating either vertically or horizontally through the wellbore. The wellbore fluids are replaced with DI water without disturbing the ambient free-water level by injecting DI water at the bottom of the wellbore and extracting wellbore water at exactly the same rate at the free-water surface. However, at the beginning of the DI water emplacement, a slightly depressed free-water level (approximately one tenth of a foot below ambient free water-level) is achieved and maintained throughout the test. This procedure is implemented to ensure that little to no DI water is able to enter the surrounding formation during DI water emplacement. By acquiring FEC logs during the emplacement of DI water and by continuously measuring water level with a downhole pressure transducer the emplacement can be properly monitored and controlled to minimize the disturbance of the recorded ambient water. After the wellbore fluids are replaced with DI water, the injection and extraction pumps are turned off and in most cases the downhole plumbing is removed from the wellbore. A check valve is installed in the pump standpipe to ensure water in the standpipe does not drain back into the wellbore. While the plumbing is removed from the wellbore DI water is injected from the top of the wellbore to maintain ambient water level. Often a baseline FEC log is acquired during the final stages of the emplacement of DI water to provide baseline conditions just before the ceasing of pumping. Figure HpL:1 illustrates ambient flow entering the wellbore at depths of 150.0 to 152.7, 138.8 to 139.0, 132.7 to 133.4, 122.3 to 123.1 and 118.0 to 118.1 feet. The location of these intervals is illustrated by the sharp increases or "spikes" in FEC. The increase in FEC over time at these four intervals is characteristic of ambient inflow. The upward vertical trend in this inflow is also apparent from the FEC logs. For example, the dominant inflowing zone at 138.8 to 139.0 feet illustrates a major growth in FEC above the inflow "spike", and little growth below the "spike." The zone at 118.0 to 118.1 feet is the termination of all inflow into the well. The sum of the four inflow zones make up the outflow of this zone, and this value, along with the value of the four inflow zones is computed using code BOREII.

COLOG uses three types of tests to identify the water-bearing intervals in a wellbore under stressed conditions. In the lowest yield environment (less than 0.5-0.7 gpm) a slug test approach is utilized. In a relatively low-yield wellbore environment a pump after emplacement (PAE) test is conducted, and in a relatively medium to high-yield wellbore environment a pump and inject (PNI) test is conducted. The decision on the type of test to perform on a specific wellbore is made in the field based on the ability of the wellbore to recover to ambient free-water level when a disturbance in water level is introduced into the well, i.e. inserting tools and/or pluming into the well.

In a low-yield wellbore environment a slug or PAE test is utilized to identify the water-bearing intervals under stressed conditions. These tests are similar in protocol and involve first a replacement of wellbore fluids with DI water in a manner identical to that of the emplacement during an ambient flow evaluation. Often a baseline FEC log is acquired during the final stages of the emplacement of DI water to provide baseline conditions just before the ceasing of injection pumping. Following the cessation of injection pumping, the extraction pump is left used to either pull an instantaneous slug (slug test) or is used to pump at a relatively steady low rate of flow in the wellbore (approximately 1-2 gpm). During this time numerous FEC logs are acquired over time. The location of water-bearing intervals is apparent by the sharp increases or "spikes" in FEC over time. The rate at which these intervals inflow is calculated using BOREII and is based on the rate of increase of mass (area under the curve using the FEC log as the curve). Flow direction is easily determined by tracking the center of mass of the area under the curve. In

FIGURE HpL:1. EXAMPLE OF HYDROPHYSICAL LOGS DURING AMBIENT FLOW CHARACTERIZATION WITH EXAMPLE INTERPRETATION.

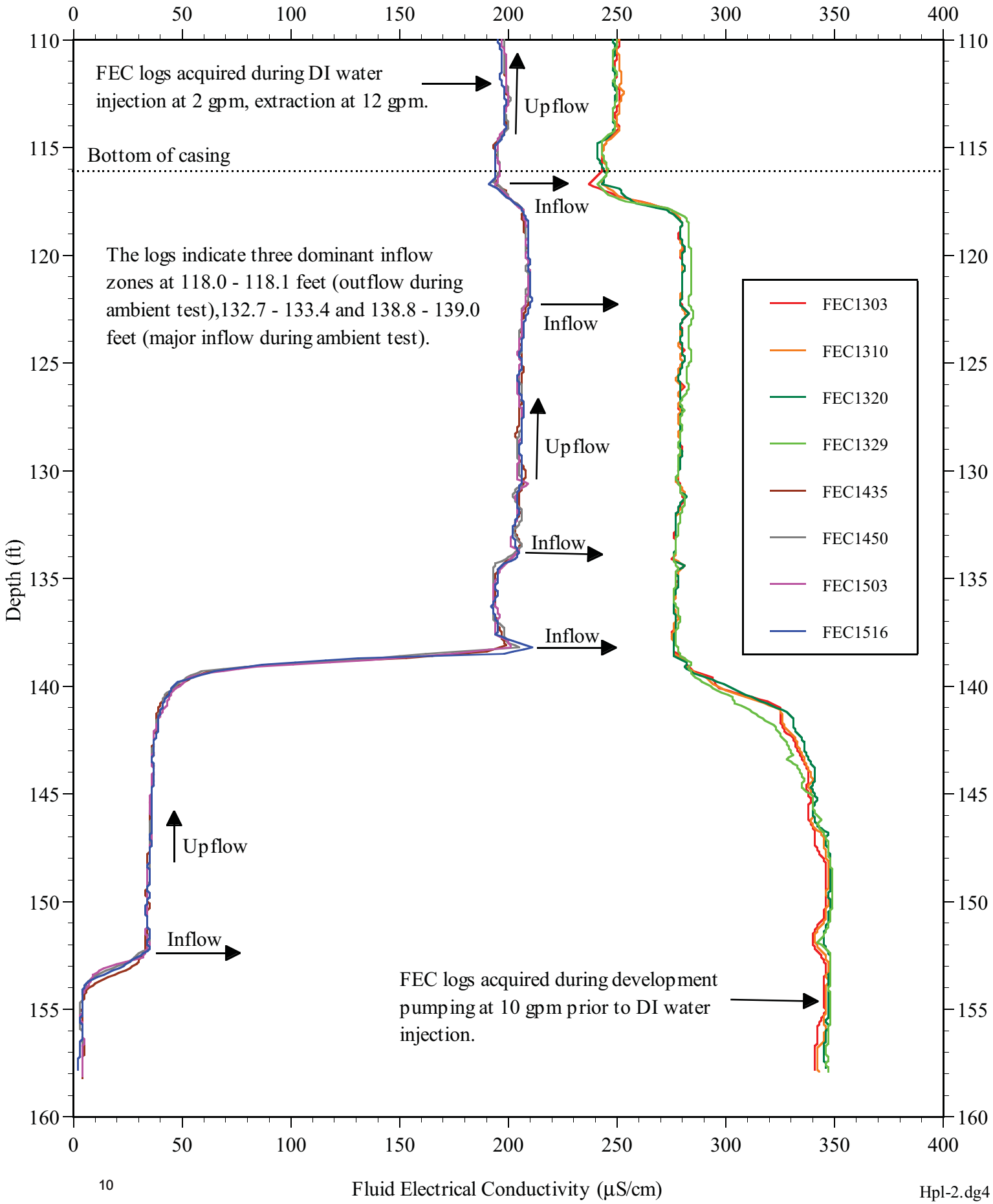


Hpl-1.dg4

most cases, if pumping is being conducted flow is traveling up the wellbore towards the pump which is situated inside casing.

Figure HpL:2 is an example data set from a production test (stress test) from the same wellbore as above. The data represents HpL™ logs acquired during a PNI test. The set of FEC logs on the right of this figure (FEC1303, FEC1310, FEC1320, and FEC1329) illustrate the condition of the wellbore during development pumping. In the case of this example, the wellbore was stressed at a rate of approximately 10 gpm until a relatively steady-state condition was achieved in the wellbore. A steady-state condition is apparent when the FEC logs begin to repeat as they do in figure HpL:2. Repeatable FEC logs indicate that the hydrochemistry of the water inflowing to the wellbore is not changing over time (steady-state) and that the flow rates of all inflow zones is also not changing over time. Additionally, the drawdown is monitored continuously to observe a "slowing down" in the rate of increase of drawdown. When drawdown (water level) is stable, the inflow rates of the various inflow zones are assumed to be steady. By contrast, if DI water injection is begun in the early stages of pumping when drawdown is still increasing, i.e. water level is dropping rapidly, the inflow rates of the various inflow zones would increase with time as less wellbore storage is used to maintain a particular pumping rate. The remaining FEC logs (FEC1435, FEC1450, FEC1503, and FEC1516) illustrate the conditions in the wellbore during pumping and injection procedures. Fluid was extracted from the wellbore at a rate of approximately twelve gpm while DI water was simultaneously injected at the bottom of the wellbore at a rate of approximately two gpm, until a relatively steady-state condition existed in the well. Water-bearing intervals in the wellbore are identified by changes or "steps" in FEC throughout the FEC logs. The flow rate of these intervals is computed using BOREII and/or Flowcalc software. Every location that the FEC increases in these logs is a zone of inflow. Similarly, where the logs decrease in FEC indicates a zone of inflow with water lower in FEC than the water in the wellbore. A zone exhibiting a decrease in FEC on the injection logs should also decrease at the same depth on the development (pre-DI water injection) logs. Please see Appendix B for a detailed discussion of code BOREII used to numerically model the reported field FEC logs.

FIGURE HpL:2. EXAMPLE OF HYDROPHYSICAL LOGS DURING A 10 GPM PRODUCTION TEST WITH EXAMPLE INTERPRETATION.



Hpl-2.dg4

Sensitivity of Transmissivity to Effective Radius

An estimation of transmissivity (T) has be made for all identified water-bearing intervals using an equation after Hvorslev (1951) assuming steady-state radial flow in an unconfined aquifer:

$$T = KL = \frac{q_i}{2\pi\Delta h_w} \ln\left(\frac{r_e}{r_w}\right)$$

where K is the hydraulic conductivity, q_i is the interval specific inflow rate calculated using HpL™ results (or "Delta Flow" from the table which equals "Interval-Specific Flow Rate During Pumping Conditions" minus "Ambient Flow Rate" if any), r_w is the borehole radius, r_e is the effective pumping radius, Δh_w is the observed maximum drawdown and L is the thickness of the zone through which flow occurs. The thickness, or length of the interval is calculated using a combination of both the HpL™ data and other geophysical data such as optical televiewer data. L can usually be estimated with a high degree of confidence based on both of those data sets. Q_i, or Delta Flow, can also be estimated accurately using code BOREII (see Appendix B) for the HpL™ data sets. Δh_w is estimated with a high degree of confidence using Cologs' downhole pressure transducer and a laptop to record water-level data every second. Additionally, the borehole radius is confirmed quite readily from caliper data or core data. For this example, r_w equals 0.20 feet, r_e has been assumed to be approximately 100 feet and the observed maximum drawdown was estimated at 9.98 feet (the drawdown plot). By applying L and q_i from the HpL™ results under the two pressure conditions, the interval specific transmissivity can be calculated for each identified water-producing interval.

Colog utilizes Hvorslevs' 1951 equation when an observation well a known distance away with measurable drawdown is not available. Essentially, Hvorslevs' 1951 equation is similar to the prevalent Theis equation minus the observation well drawdown information. In replace of the observation well drawdown data Hvorslevs' equation uses an assumed "effective radius" divided by the borehole radius. One benefit to using Hvorslevs' 1951 equation when observation well data is unavailable is the insensitivity of the equation to the assumed effective radius as this is the only "unknown" variable in the equation. All other variables are known or calculated with a high degree of confidence. Only the effective radius is unproven, or unsupported, but its value can be estimated with some degree of accuracy.

The following example will illustrate the insensitivity of Hvorslevs' 1951 equation to the assumed effective radius of an aquifer. The greatest magnitude of change in this example between r_e of 50 feet and r_e of 300 feet is 2.22 feet^2/day transmissivity.

Interval (feet)	Length of Interval (feet)	Q_i - Delta Flow (gpm)	Borehole Radius (feet)	Transmissivity Using r_e of 50 Feet	Transmissivity Using r_e of 100 Feet	Transmissivity Using r_e of 300 Feet
118.0 – 118.1	0.1	3.997	0.20	6.78 x E^{01}	7.63 x E^{01}	8.98 x E^{01}
122.3 – 123.1	0.8	0.335	0.20	5.68 x E^{00}	6.39 x E^{00}	7.53 x E^{00}
132.7 – 133.4	0.7	1.217	0.20	2.06 x E^{01}	2.32 x E^{01}	2.73 x E^{01}
138.8 – 139.0	0.2	3.961	0.20	6.72 x E^{01}	7.56 x E^{01}	8.90 x E^{01}
150.0 – 152.7	2.7	0.197	0.20	3.34 x E^{00}	3.76 x E^{00}	4.43 x E^{00}

B. Optical Televiewer (OBI)

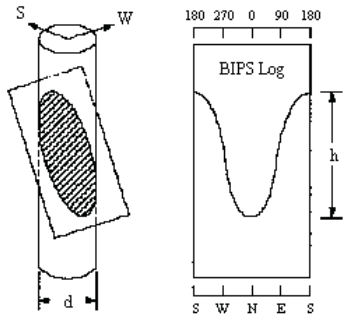
The optical televiewer provides the highest resolution available for fracture and feature analysis in boreholes. This technology is based on direct optical observation of the borehole wall face. Precise measurements of dip angle and direction of bedding and joint planes, along with other geological analyses, are possible in both air and clear fluid filled boreholes.

Theory of Operation

A small light ring illuminates the borehole wall allowing a camera to directly image the borehole wall face. A conical mirror housed in a clear cylindrical window focuses a 360° optical "slice" of the borehole wall into the camera's lens. As the optical televiewer tool is lowered down the hole, the video signal from this camera is transmitted uphole via the wireline to the optical televiewer surface instrumentation.

The signal is digitized in real time by capturing 360 pixels around a 0.5 mm ring from the conical image. The rings are stacked and unwrapped to a 2-D image of the borehole wall. A digital fluxgate magnetometer is used to determine the orientation of the digital image. A secondary mechanical compass is imaged along with the analog signal to insure proper orientation of the digital image.

The optical televiewer image is an oriented, 2-D picture of the borehole wall unwrapped from south to south or north to north depending on the software used (Figure 1). Planar features that intersect the borehole appear to be sinusoids on the unwrapped image. To calculate the dip angle of a fracture or bedding feature the amplitude of the sinusoid (h) and the borehole diameter (d) are required. The angle of dip is equal to the arc tangent of h/d, and the dip direction is picked at the trough of the sinusoid (Figure 1).



Dip Direction = Orientation of Sinusoid Minimum
Dip Angle = ArcTan h/d
where: h = height of sinusoid
d = borehole diameter

Figure 1: Geometric representation of a north dipping fracture plane and corresponding log.

Sinusoidal features were picked throughout wells by visual inspection of the digital optical televiewer images using interactive software. The software performed the orientation calculations and assigned depths to the fractures or bedding features at the inflection points (middles) of the sinusoids. Features were subjectively ranked for flow potential using COLOG's Ranking System for optical televiewer features included in this report. The features picked along with their assigned ranks, orientations and depths are presented in tables for each well. Orientations are based on magnetic north and are corrected for declination. The Stereonet plots and Rose Diagrams provide useful information concerning the

statistical distribution and possible patterns or trends that may exist from the optical televiewer feature orientations.

Interpreting Optical Televiewer Data

Data acquired from the optical televiewer is typically in the form of dip direction/dip angle, i.e. 230/45. When plotted in 2-D color, the fractures and features intersecting the borehole appear as sinusoids as discussed above. Using the software program WellCAD version 3.2, the user identifies the features/fractures and has the software assign and record a dip angle and direction based on the above algorithm as described in the "Theory" section. The data can easily be converted into table format for display in Excel or any tabular editing program. From the data table, rose diagrams and/or stereonets can be generated if requested.

Rose Diagrams

A rose diagram is a polar diagram in which radial length of the petals indicates the relative frequency (percentage) of observation of a particular angle or fracture dip direction or range of angles or dip directions. Rose diagrams are used to identify patterns (if any) in the frequency of dip angles or directions for a particular data set. Figures 3 and 4 are example rose diagrams from an optical televiewer data set of fractures and features.

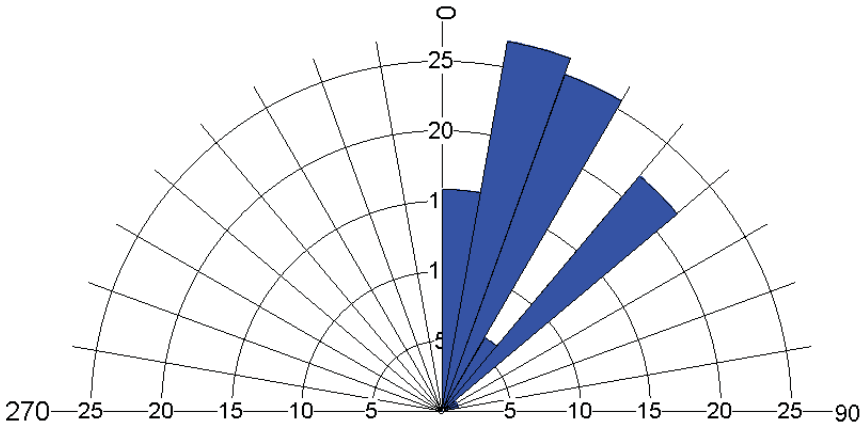


Figure 3: Example rose diagram from an optical televiewer data set illustrating the frequency (%) of dip angles.

Figure 3 above indicates, from an example data set, that approximately 16 percent of the fractures/features have a dip angle between 0 and 10 degrees, approximately 27 percent of the fractures/features have a dip angle between 11 and 20 degrees, approximately 25.5 percent between 21 and 30 degrees, approximately 6 percent between 31 and 40 degrees and 22 percent between 41 and 50 degrees. A quick glance at Figure 3 identifies a pattern of dip angle where greater than 50 percent of the fracture/features identified have a dip angle between 11 and 30 degrees. Additionally, no high-angle (greater than 50 degrees) fractures/features were identified from this data set.

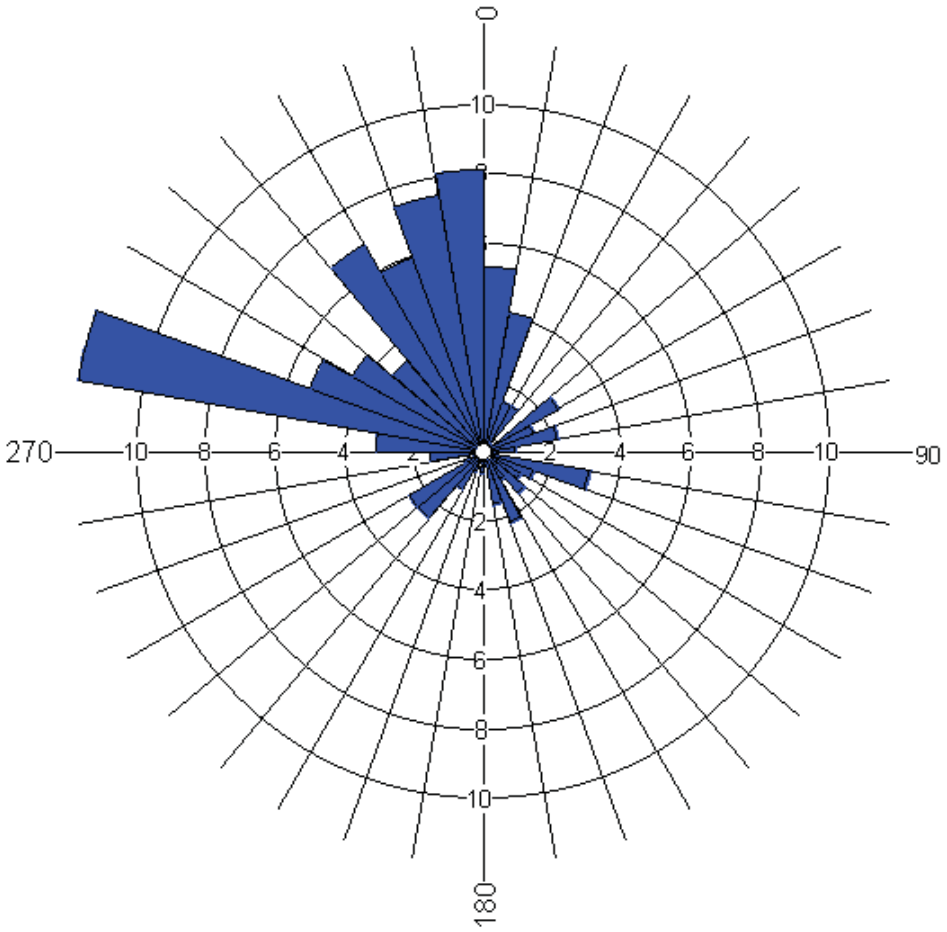


Figure 4: Example rose diagram from an optical televiewer data set illustrating the frequency (%) of dip direction.

Figure 4 (example data set) above indicates, with a quick glance, that the majority of the fractures/features dip in the direction of northwest. Specifically, approximately 62 percent of the identified fractures/features have a dip direction of 280 degrees (west) to 20 degrees (north).

Stereonets

For stereonets, COLOG utilizes a Schmidt net, an equal-area plot of longitude and latitude used in plotting geologic data such as the direction of structural features. Here, the angle indicates dip direction and the distance from the center indicates the dip magnitude. The further from the center the shallower the dip angle. Figure 5 below is an example stereonet diagram from an acoustic televiewer data set of fractures and features.

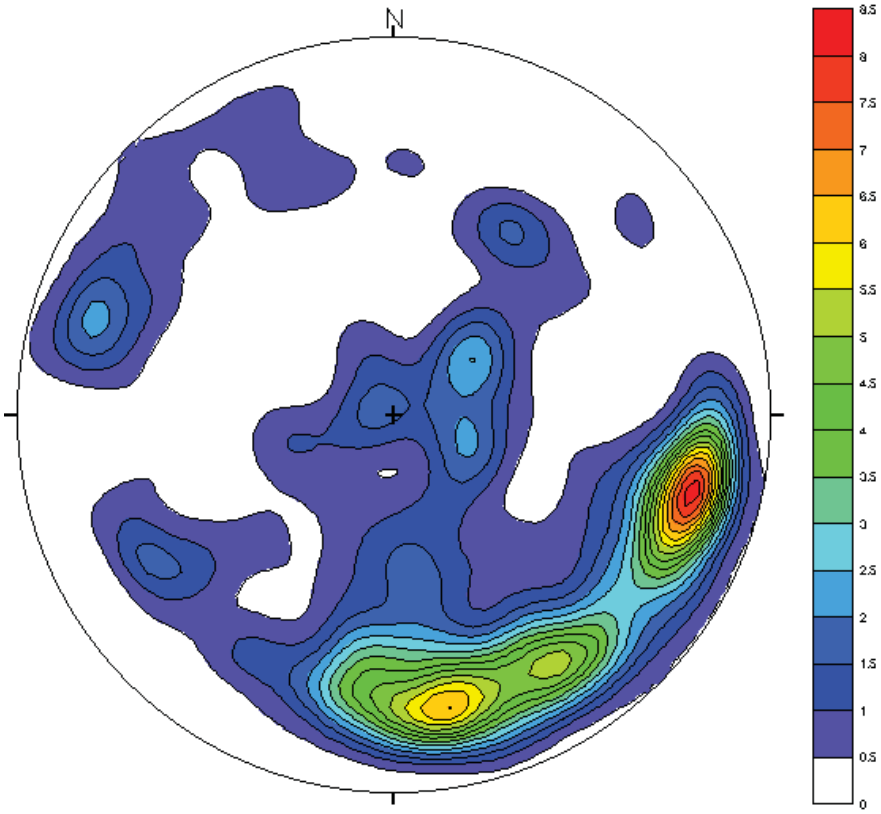


Figure 5: Example stereonet from an optical televiewer data set illustrating the frequency (%) of dip direction and dip angle in 2-D space.

Figure 5 above indicates, with a quick glance, that two distinct patterns exist in the example data set. A cluster of fractures/features with similar dip direction of approximately 110 degrees and similar steep dip angles is apparent. A second cluster, slightly less dense, is apparent with similar dip directions of approximately 170 degrees (almost due south) and similarly steep dip angles.

Please refer to the following Ranking System for Optical Televiewer Features for an explanation of the qualitative ranks assigned each optical televiewer feature identified.

Ranking System for Optical Televiewer Features

	Rank	Color Code	Observation	Flow Rating System
	0	Gray	Non-flow feature (bedding, healed fracture, staining, foliation, vein, etc.)	Sealed, no flow
	1	Cyan	Weak feature (not continuous around the borehole)	Partial open crack
	2	Blue	Clean, distinct feature	Continuous Open crack
	3	Red	Distinct feature with apparent aperture	Wide open crack Or cracks
	4	Magenta	Very distinct, wide possible interconnected fracture	Very wide crack or multiple interconnected fractures
	5	Green	Major fracture zone with large openings.	Major fracture with large openings or breakouts

This ranking system is based on a system developed and applied by Paillet (USGS, WRD, Borehole Research Project) as a subjective evaluation of permeability potential. In general, the higher the rank, the greater the likelihood of fracture interconnection and subsequent increased permeability. Tadpoles represent individual features, where the tail points in the direction of dip (clockwise from the top, 0-359). The head is positioned vertically according to the median depth of the feature and positioned horizontally according to the feature dip angle (0-90 from horizontal).

C. Facsimile 40 - Acoustic Televiewer (FAC-40 ATV or ABI-40)

The FAC-40 ATV, from Advanced Logic Technologies (ALT), provides a detailed, oriented image of acoustic reflections from the borehole wall. A unique focusing system resolves bedding features as small as 2 mm and is capable of detecting fractures with apertures as small as 0.1 mm. The acoustic image is precisely oriented using a 3-axis magnetometer with dual accelerometers, which also combine to measure deviation (or drift) of the borehole trajectory.

Theory

The FAC-40 transmits ultrasonic pulses from a rotating sensor and records the signals reflected from the interface between the borehole fluid and the borehole wall (Figure 1). The amplitude of these reflections is representative of the hardness of the formation surrounding the borehole, while the travel time represents the borehole shape and diameter. As many as 288 reflections may be recorded per revolution at up to 12 revolutions per second. The digital amplitude or travel time data are presented using a variety of color schemes that represent the borehole wall.

This ATV image is an oriented, 2-D picture of the borehole wall unwrapped from north to north (Figure 2). Planar features that intersect the borehole appear to be sinusoids on the unwrapped image· To calculate the dip angle of a fracture or bedding feature the amplitude of the sinusoid (h) and the borehole diameter (d) are required. The angle of dip is equal to the arc tangent of h/d, and the dip direction is picked at the trough of the sinusoid (Figure 2).

Sinusoidal features are picked by visual inspection of the amplitude and travel time images using interactive software called WellCAD, version 4.1. The software performs the orientation calculations and assigns a depth to the fracture or bedding feature at the inflection point (middle) of the sinusoid. Features may be subjectively ranked for flow potential using the ranking system developed by the USGS presented in Table 1. Statistical analysis of the fracture/feature data such as stereonet plots and rose diagrams provide useful information concerning the statistical distribution and possible patterns or trends that may exist in the set of fracture/feature orientations.

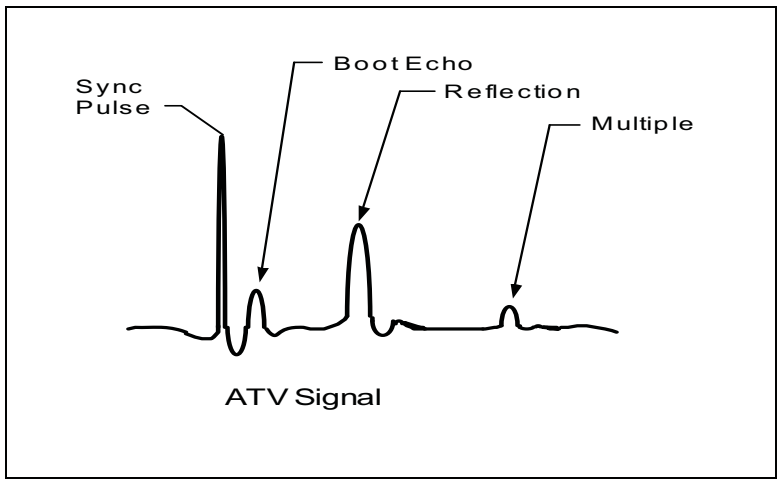


Figure 1: Returned signal.

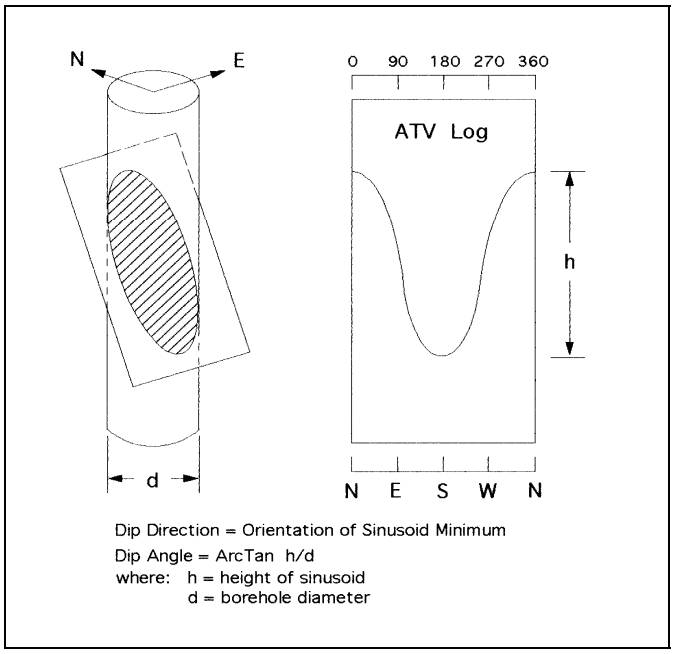


Figure 2: Geometric representation of a fracture plane and corresponding ATV log.

Acoustic Televiewer Caliper Log

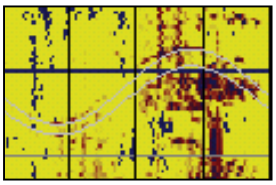
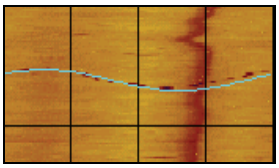
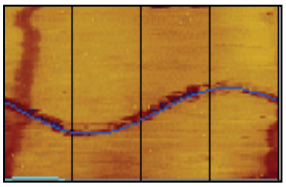
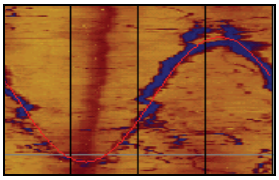
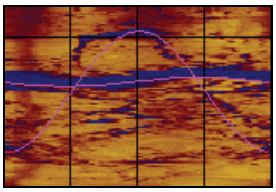
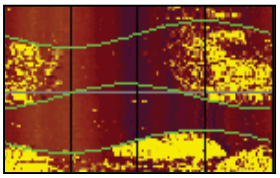
An unconventional caliper log may be generated from the travel time data acquired by the Fac-40 acoustic televiewer. Using WellCAD version 3.2, an estimation of the distance from the probe to the borehole wall can be made by incorporating the travel time of the acoustic signal with an estimation of the velocity of the wellbore fluid. The time it takes the acoustic signal to travel through a known viscous medium and back to the probe is directly related to the distance between the signal generator and the borehole wall provided the borehole fluid viscosity remains constant and the probe is properly centralized. The distance from the probe to the borehole wall is then corrected for the radius of the probe producing a borehole diameter in inches.

Applications

The high resolution reflection images and the precise travel time measurements make the FAC-40 ATV a versatile tool. Possible applications include:

- Fracture detection and evaluation
- Detection of thin beds
- Determination of bedding dip
- Lithological characterization
- Casing inspection
- High resolution caliper measurements

Ranking System for Acoustic Televiewer Features

	Rank	Color Code	Observation	Flow Rating System
	0	Gray	Non-flow feature (bedding, healed fracture, vein, etc.)	Sealed, no flow
	1	Cyan	Weak feature (not continuous around the borehole)	Partial open crack
	2	Blue	Clean, distinct feature	Continuous Open crack
	3	Red	Distinct feature with apparent aperture (visible on travel-time image)	Wide open crack Or cracks
	4	Magenta	Very distinct, wide possible interconnected fracture	Very wide crack or multiple interconnected fractures
	5	Green	Major fracture zone, visible on both the amplitude and travel time images	Major fracture with large openings or breakouts

This ranking system is based on a system developed and applied by Paillet (USGS, WRD, Borehole Research Project) as a subjective evaluation of permeability potential. In general, the higher the rank, the greater the likelihood of fracture interconnection and subsequent increased permeability.

D. 3-Arm Caliper

The caliper log represents the average borehole diameter determined by the extension of 1 or 3 spring-loaded arms. The measurement of the borehole diameter is determined by the change in the variable pot resistors in the probe, which are internally connected to the caliper arms.

Caliper logs may show diameter increases in cavities and, depending on drilling techniques used, in weathered zones. An apparent decrease in borehole diameter may result from mud or drill-cutting accumulation along the sides of the borehole (mudcake), a swelled clay horizon or a planned change in drill bit size. The bottom of the boring can also induce a small diameter reading from the caliper due to the caliper leaning up against on side of the borehole. The caliper log is often a useful indicator of fracturing. The log anomalies do not directly represent the true in-situ fracture size or geometry. Rather, they represent areas of borehole wall breakage associated with the mechanical weakening at the borehole-fracture intersection. Caliper anomalies may represent fractures, bedding planes, lithologic changes or solution openings. Generally, in solid bedrock caliper log anomalies indicate the intervals where fractures intersect boreholes.

COLOG records the caliper log with either a single-arm caliper measurement using the decentralization arm of the density probe or a separate stand-alone three-arm caliper. Calibrations of the probe are done routinely on the bench and in the field directly before the tool is placed into the borehole. Calibration standards consist of rings of known diameters that are placed over the extended arms as the tool response at these diameters is recorded. Additionally, as with other geophysical measurements, a repeat section may be collected and compared with original logs for consistency and accuracy.

Fundamental assumptions and limitations inherent in these procedures are as follows:

- Excessive borehole diameters (greater than 36 inches) may limit the range of borehole caliper measurements. Holes greater than 12 inches must be logged with extended arms for hole diameters up to 36 inches.

- Since the caliper probe is an electro-mechanical device, a certain amount of error is inherent in the measurement. These errors are due to: 1) averaging hole diameter using three arms, 2) non-linearity of the measurement resistor, 3) tolerance in the mechanical movement of the caliper arms (mechanical hysteresis).

E. Natural Gamma

The natural gamma log (also known as gamma or gamma ray log) provides a measurement recorded in counts per second (CPS), that is proportional to the natural radioactivity of the formation. Actual counts depend upon the detector size and efficiency but are often normalized in API units. 200 API units equal the detector response in a specially constructed physical model designed to simulate the typical shale. For most of COLOG's gamma probes, 1 API unit is approximately equal to 1.25 CPS. The depth of investigation for the gamma log is typically 10 to 12 inches. Gamma logs provide formation clay and shale content and general stratigraphic correlation in sedimentary formations. In general, the natural gamma ray activity of clay-bearing sediments is much higher than that of quartz sands and carbonates. Gamma logs are also used in hard rock environments to differentiate between different rock types and in mining applications for assessment of radioactive mineralization such as uranium, potash, etc.

Gamma radiation is measured with scintillation NaI detectors. The gamma-emitting radioisotopes that naturally occur in geologic materials are Potassium40 and nuclides in the Uranium238 and Thorium232 decay series. Potassium40 occurs with all potassium minerals, including potassium feldspars. Uranium238 is typically associated with dark shales and uranium mineralization. Thorium232 is typically associated with biotite, sphene, zircon and other heavy minerals.

The usual interpretation of the gamma log, for hydrogeology applications, is that measured counts are proportional to the quantity of clay minerals present. This assumes that the natural radioisotopes of potassium, uranium, and thorium occur in exchange ions, which are attached to the clay particles. Thus, the correlation is between gamma counts and the cation exchange capacity (CEC). Usually gamma logs show an inverse linear correlation between gamma counts and the average grain size (higher counts indicate smaller grain size, lower counts indicate larger grain size). This relation can become invalid if there are radioisotopes in the mineral grains themselves (immature sandstones or arkose), and if there are differences in the CEC of clay minerals in the different parts of the formation. Both of these situations are possible in many environments. The former situation would most likely occur in basal conglomerates composed of granitic debris, and the latter where clay occurs as a primary sediment in shale and another as an authigenic mineral deposited in pore spaces during diagenesis.

The assumption of a linear relationship between clay mineral fraction in measured gamma activity can be used to produce a shale fraction calibration for a gamma log in the form:

$$Csh = (G-Gss) / (Gsh - Gss)$$

Where Csh is the shale volume fraction, G is the measured gamma activity; Gss is the gamma activity in clean sandstone or limestone; Gsh is the gamma activity measured in shale.

Calibration of the gamma logging tool is usually performed in large physical models such as the API test pits in Houston, or the DOE uranium calibration test pits. In hydrogeology, the gamma measurement is usually a relative log and quantitative calibrations are not routinely performed. However, the stability and repeatability of the natural gamma measurement is routinely checked with a sleeve of known radioactivity. It is also common to routinely check the gamma log by repeat logging a section of a well. Natural radioactive decay follows a Gaussian distribution; that is, approximately 67% of the radioactive response occurs within ± the square root of the count rate. For instance, if a background radiation of 100 CPS is being measured, there is approximately ± 10 CPS variability.

Fundamental assumptions and limitations inherent in these procedures are as follows:

- The natural gamma ray log, as with all nuclear or radiation logs, have a fundamental advantage over most other logs in that they may be recorded in either cased or open holes that are fluid or air filled. Borehole fluid and casing may attenuate the gamma values.

- Excessive borehole rugosity, often caused by air drilling, may degrade natural gamma ray log results.

F. Electrical Measurements

All electrical logs require the presence of the borehole fluid to carry the current from the probe to the formation, and therefore these devices do not work above fluid level. Quantitative formation electrical resistivity, spontaneous potential and qualitative single point resistance can be measured with a combination tool. The operational features of each measurement is discussed under the measurement heading.

16-inch and 64-inch Normal Resistivities

Formation resistivity is dependent on the fluid salinity, permeability, and connected fracture paths within the depth of investigation of the measurement. Measured resistivity is also controlled by particle surface conduction in clastic environments. The resistivity measurement decreases in larger diameter boreholes and areas in which the borehole has been broken out, and/or highly fractured. The above responses allow interpretation of lithologic types, correlation of beds, estimation of fluid quality and possible fractured zones.

A constant current is supplied to the downhole current electrode and the resulting voltage drop is measured on the return electrodes 16" and 64" away from the current electrode. The resistivity of the surrounding media (which includes the borehole fluid) is derived from Ohm's Law and the geometry of the electrode arrangement. The static electric field which results from the geometric arrangement of electrodes is ideally a sphere 16" or 64" in radius (for the short and long normal functions respectively). The presence of the borehole diameter and mudcake affects the measurement sphere by decreasing the lateral extent, and increasing the vertical extent. Borehole corrections based on the borehole fluid resistivity can be made, but these corrections do not address the effects of vertical averaging. Accurate interpretation of the logs minimizes this averaging effect. The influence of the borehole size becomes less with smaller diameter boreholes. Calibration of the 16" and 64" normals is performed in the field with a resistance box which tests a range of known resistivities from 0.0 ohm-m to 10,000 ohm-m.

Single Point Resistance (SPR)

The SPR measurement is controlled by rock and fluid parameters in much the same way as resistivity logs. SPR is a simple system of two electrodes (the resistivity current electrode) and a surface electrode. Current is passed through the formation and voltage differences are measured between the two electrodes. The measured resistance includes the resistance of the cable, borehole fluid, and the formation around the borehole. The current density is higher near the borehole electrode and surface electrode. Since the current density at the surface electrode is constant, formation variations close to the probe produce the resistance changes visible on the logs. Since there is a single downhole electrode, not an array, the log effectively shows a point measurement. This gives a very "responsive", high vertical resolution measurement. Though the single point resistance cannot be calibrated quantitatively, its instantaneous response is a good boundary indicator, and does show a more well defined response than the 16" or 64" normals.

Spontaneous Potential (SP)

The SP is a measurement of the naturally occurring potential in the borehole. This naturally occurring potential is most often caused by a concentration gradient between the borehole fluid and formation fluid (electro-chemical), and requires the presence of a clay rich/porous media interface to occur. Reduction/oxidation (redox) interfaces and streaming potentials (electro-kenetic) caused by the flow of fluid in or out of the borehole are also causes for the occurrence of spontaneous potential. In fresh water environments where the drilling fluid is natural or the salinity is near the formation pore fluid salinity the electro-chemical potential is minimized. The absence of sulfide mineralization or fluid movement into or out of the formation may minimize the redox and streaming potentials.

Fundamental assumptions and limitations inherent in these procedures are as follows:

- The range within which a given device is accurate is different for the different measurement techniques. This range shall be specified for each device, and the appropriate device shall be selected for the borehole under investigation.

- The properties of the borehole and borehole fluid influence the response of normal resistivity logs in what is commonly known as “Borehole Effects”. As the hole diameter increases, these effects become more pronounced. These effects have been quantified, and log data may be corrected based on standard techniques.

- The geometry of the logging probe such as the positions of the source and measurement electrodes of resistivity type probes affects the measurement values.

- The ability of a given measurement to accurately measure resistivity across a thin bed is a function of the geometry and of the resistivity contrast and bed thickness.

- The distance away from the borehole which influences a given measurement is a function of the geometry and the radial distribution of electrical properties.

- The log should be recorded with the tool moving **up** the borehole, but measurements can be made while logging downward also. In fact, in deep wells, it is suggested that data be recorded while running in the well, just in case hole conditions or tool problems prevent getting a good log in the up direction.

- The electric resistivity measurement is adversely affected by metalic or ferrous material in the vicinity of the probe.

- Electric resistivity measurements can not be performed through PVC, fiberglass or steel casing.

G. Fluid Temperature/Resistivity (Conductivity)

Geothermal gradients in the near surface earth are usually dominated by conduction, and are generally linear increasing with depth due to the relative constancy of the thermal conductivity of earth materials. Convective heat flow within the borehole fluid is caused by formation fluid entering or leaving the borehole at some permeable interval. Therefore, deviations from the linear thermal gradient can be attributed to fluid movement. Both the thermal gradient and fluid resistivity profile of the borehole fluid can be obtained with the same probe. The temperature is measured with a thermistor and the fluid resistivity is measured with a closely spaced Wenner electrical array.

Slope changes in both the temperature and fluid resistivity logs may be indicative of fluid flow between the formation and the borehole. Both responses are affected by drilling method, time since circulation, mud type or additives and well development procedures.

A differential temperature log is a calculated curve that amplifies slight slope changes in the temperature gradient and can assistance in the interpretation of the fluid temperature log. As the probe is lowered downhole, small changes in the slope of the temperature curve are identified by a differential curve that is plotted from a center zero line. The differential temperature is constructed by using a temperature point at one depth and subtracting a point at a lower depth throughout the entire logged interval.

(temperature value Depth 1) - (temperature value Depth 2) = differential value

In real time the differential values are calculated across the acquisition digitizing interval (e.g. 0.1 to 0.5 ft). Because of the small digitizing interval the calculated real time differential curve may only identify larger temperature gradient deviations. Another differential temperature can be constructed in post processing over a larger sample interval (sometimes up to 2 ft). This log commonly provides a more diagnostic differential curve and is used frequently in the temperature profile interpretation.

The fluid resistivity in the borehole is controlled primarily by the salinity. Therefore, salinity stratification, or the introduction of a fluid of different water quality into the borehole, can be observed by changes in the fluid resistivity log. Often, the exchange of fluid between the formation and the borehole, influences both the temperature and the fluid resistivity so that the response is evident in both logs.

Temperature corrected resistivity can be converted to equivalent NaCl salinity in parts per million (Bateman and Konen, 1977). A salinity profile can then be plotted which indicates the general water quality trend of the borehole fluid. If the assumption is made that the borehole fluid is in equilibrium with the formation fluid, then the borehole salinity profile can be interpreted as a formation fluid salinity profile. Differences between these profiles from well to well, may contain information concerning the extent of hydraulic connectivity in the area.

Fundamental assumptions and limitations inherent in these procedures are as follows:

- The borehole temperature log is usually the first log run in a borehole and, unlike virtually all other logs, is run while the probe is moving down the hole. The exception to running this probe first, however, would be if any optical measurement is to be acquired. The idea is that the logging of the temperature/resistivity probe may stir up the wellbore fluids inhibiting the optical device.

- The recorded borehole temperature is only that of the fluid surrounding the probe, which may or may not be representative of the temperature in the surrounding rocks.

- In most wells the geothermal gradient is considerably modified by fluid movement in the borehole and adjacent rocks.

- Temperature logs are generally recommended for uncased fluid-filled boreholes, but may be used in fluid-filled cased wells for some applications.

H. Full Waveform Sonic

Full Waveform Sonic Methodology

Digital full-waveform sonic (FWS) data is acquired with a Mount Sopris Instruments 2SAF probe, that can be configured with two or three receivers at fixed separations from the sonic transmitter. The acquisition software allows the real-time viewing of the waveforms as they are written directly to hard disk. The waveforms can also subsequently be viewed and processed for amplitude, frequency, and velocity information. Functionality and repeatability of the probe is monitored by logging in an ungrouted, fluid-filled, steel pipe, and by repeat logging of boreholes at each project.

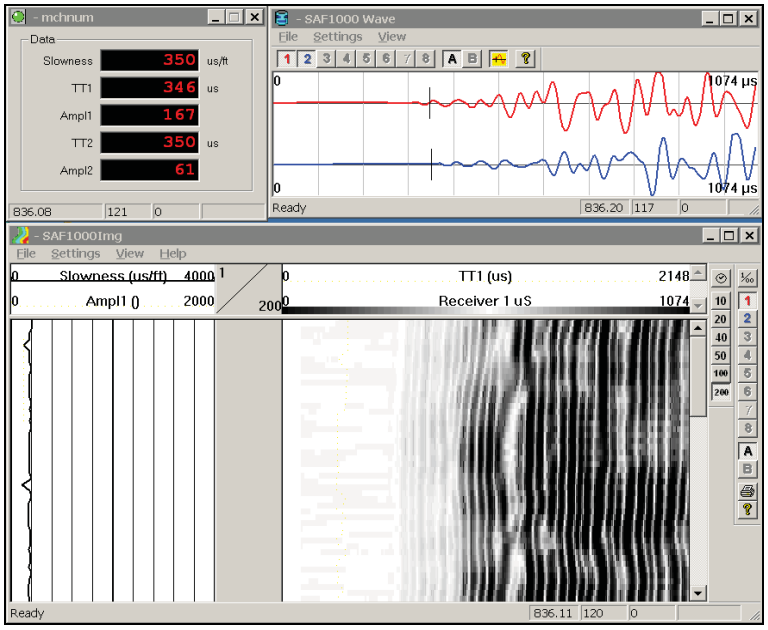


Figure: Real-time presentation from the sonic acquisition software, illustrating the output of a 2SAF configured with two receivers.

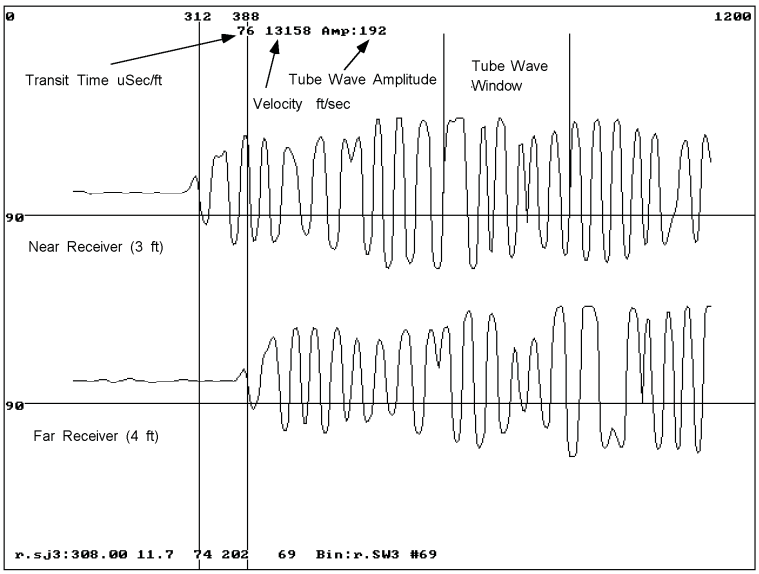


Figure: Example of a typical waveform pair with the tube wave annotated.

The FWS log, recorded in the time domain at two or three downhole receivers, consists of interacting sonic waves generated by a 30 kHz acoustic energy pulse from the downhole transmitter. Sonic logs can only be obtained in the fluid filled portion of the borehole, and the propagation of these waves is controlled by the borehole wall/fluid interface, at which head waves are critically refracted and complicated reflections occur.

Sonic transit time is the compression-wave travel time, per foot of rock, and represents the inverse of velocity (i.e., greater transit time equals slower velocity). Often referred to as "delta-T" because it is the difference in arrival times between two receivers spaced one foot apart, transit time can be used to characterize rock lithology, consolidation, and presence of discontinuities. These characterizations, however, usually require calibration from core data unless regional relationships are available. Transit times are also used to help in the processing of seismic reflection and refraction data.

The tube wave is a guided fluid wave that travels along the borehole wall/fluid boundary at a velocity slightly slower than the speed of sound in water.

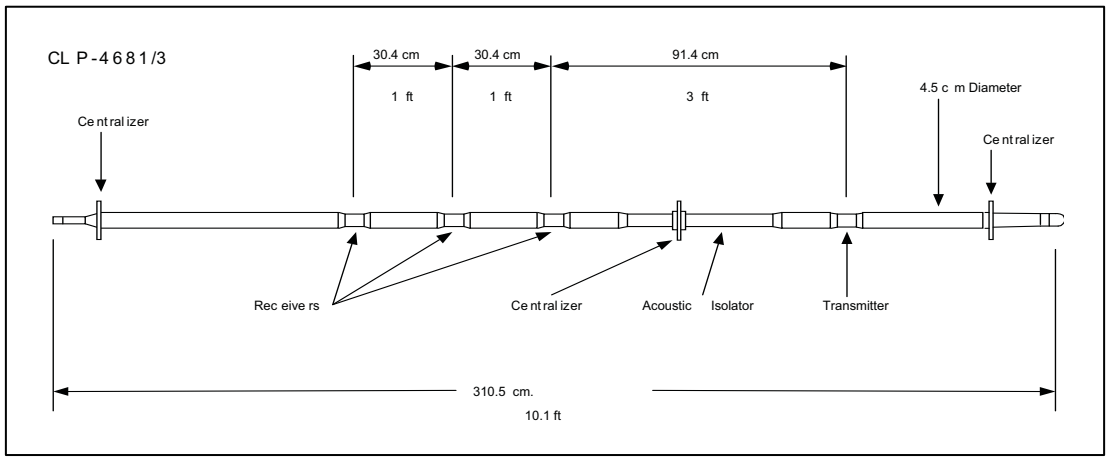


Figure: Probe schematic for the 2SAF sonic probe.

Vertical stacking of the individual waveforms creates the full waveform display, which uses a banded presentation to represent the sinusoidal nature of sonic waves. By convention, black bands represent high amplitude waves above the centerline, dark gray is the low amplitude portion of the positive wave, while light grey is the low amplitude portion of the negative wave below the centerline, and white is the high amplitude portion of the negative wave. The degree of discontinuity of the rock is reflected by the deviation from parallel banding in the FWS VDL display. The velocities and other information obtained from sonic logs are used to determine the lithology, formation porosity, cement bonding, formation weathering, rock strength, and to identify fractures.

I. Formation Conductivity (Induction)

The induction measurement is made by using a magnetic field to induce electric currents in the material being surveyed. Because the magnitude of these electric currents is proportional to the conductivity of the media being measured, the magnetic field generated by the induced electric current is measured.

The tool is designed to measure formation conductivity in millisiemens per meter (mS/m) which is converted to resistivity in software. This probe also measures the rate of change of the magnetic susceptibility as a percent of primary magnetic field, however the tool has been optimized for conductivity readings and the magnetic susceptibility measurements are qualitative. For the purposes of this investigation, the magnetic susceptibility measurements provided no additional information and were not plotted.

Fundamental assumptions and limitations inherent in these procedures are as follows:

- The EM induction measurement is adversely affected by metallic or ferrous material in the vicinity of the probe.
- The EM induction measurement can be effected, though not adversely, but the conductivity of the wellbore fluid present and the fluid in the formation.
- Because the EM induction measurement is spherical, major borehole washouts may effect the measurement of formation conductivity at that depth.
- The EM induction measurement can be performed through PVC casing if need be.

MW-1 Geophysical Report

1.0 Geophysical Logging

On May 5th and May 8th, 2008, downhole geophysical investigations were performed in boring MW-1. The geophysical logs performed were: ambient fluid temperature and fluid conductivity, natural gamma, EM conductivity and vertical seismic profiling (VSP). The data for these logs are presented in the MW-1 Geophysical Summary Plot at the end of this well report.

1.1 Ambient Fluid Temperature/Fluid Conductivity

On May 5th, 2008, an ambient fluid temperature and electrical fluid conductivity (FEC) profile was acquired in MW-1 to a depth of 142.5 feet. The ambient temperature log is relatively featureless with the exception of an anomaly at approximately 48.9 feet. As this anomaly is at a depth corresponding to blank PVC casing, this anomaly is likely not the result of flow. At the screened interval of interest of 133.0 to 143.0 feet the ambient fluid temperature and FEC profiles are relatively featureless. The ambient FEC profile registers a nominal 294 to 296 µS/cm at the screened interval. The ambient temperature profile registers a nominal 6.70 degrees C at the top of the fluid column and 5.11 degrees C at the interval of interest.

1.2 Natural Gamma

On May 5th, 2008, a natural gamma profile was acquired in MW-1 to a depth of 141.7 feet. The natural gamma profile is relatively featureless ranging in gamma counts of 22 to 91 counts per second (CPS).

1.3 EM Induction Conductivity

On May 5th, 2008, an EM conductivity profile was acquired in MW-1 to a depth of 140.5 feet. The EM conductivity profile registers an anomaly at 133 feet indicating the top of the screened interval and at 21.7 feet indicating water level. The EM conductivity log registers a nominal 175 mSeimans/meter above 133 feet and 183.6 mSeimans/meter below 133 feet.

1.4 Vertical Seismic Profile (VSP)

On May 8th, 2008, a vertical seismic profile (VSP) investigation was conducted in MW-1 to a depth of 140 feet. Four distinct intervals of specific velocity were observed in MW-1 at 15 to 47.5, 47.5 to 77.5, 77.5 to 130 and 130 to 140 feet, registering 5,706, 8,200, 12,400 and 3,338 feet per second (fps). The deepest calculated velocity is derived from low P-wave energy data. As such, the calculated value of 3,338 fps is suspect. The higher velocity value is consistent with limestone bedrock.

Project: LO-58	**Well ID:** MW-1	**Date Logged:** 5 May 2008
Location: Aroostook County, Caribou, ME	**Log Ref.:** Top PVC Casing	**Hole Diameter:** 8" nom. to TD
Depth Logger: 143.1 ft	**Log Ref. Elev.:** 578.79 ft above MSL	**Csg Size/Type:** 2" PVC
Depth Driller: 142 ft bgs	**Recorded by:** G. Bauer	**Witnessed by:** A. Fuller

LOGS & TOOLS

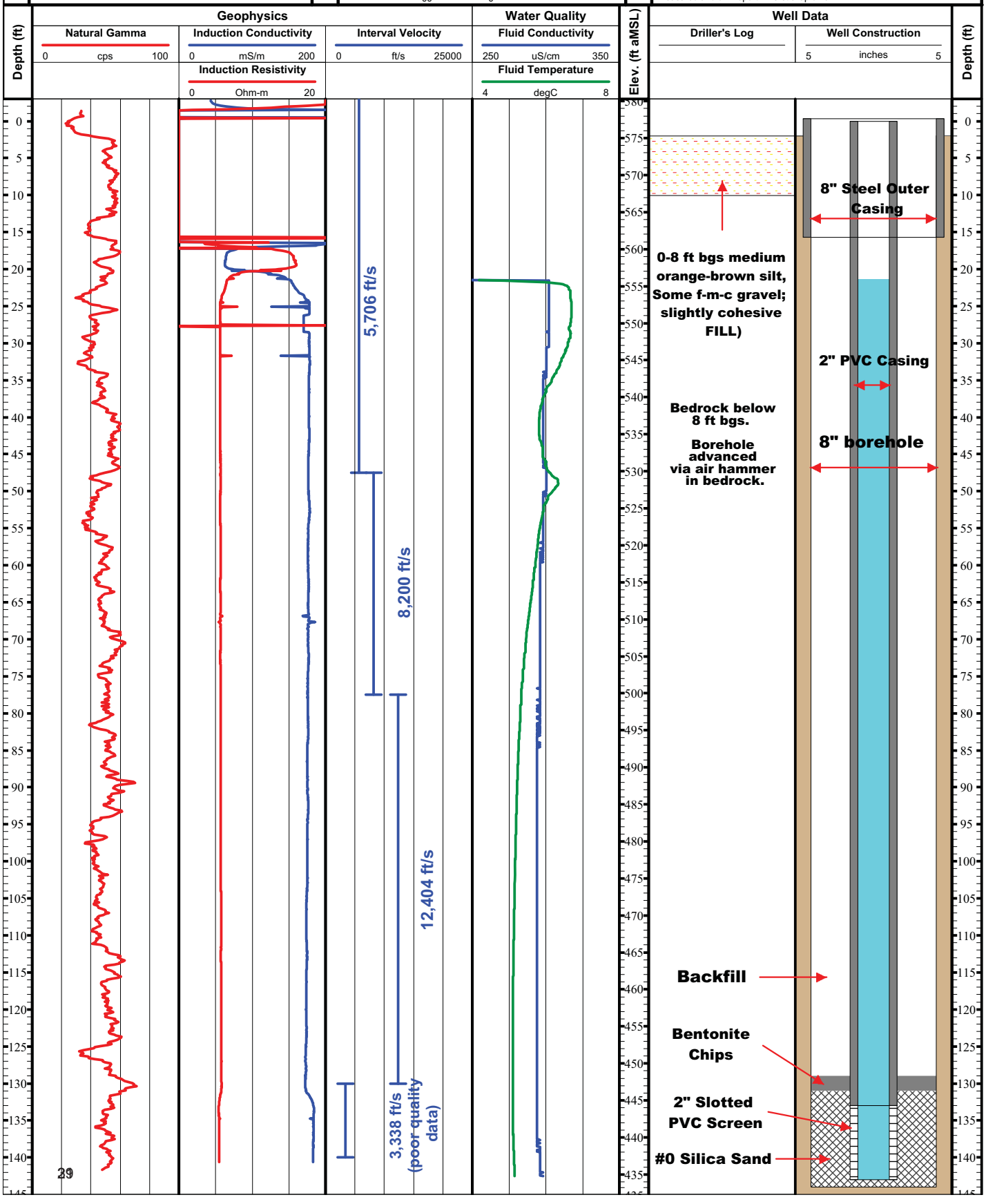
Gamma: Gamma SN# 311, depth err. -0.04 ft, speed 10 ft/min
Ind. Cond./Res.: 2PIA SN# 2041, depth err. -0.18 ft, speed 10 ft/min
Fluid Temp./Cond.: HpL SN# A, depth err. 0.1 ft, speed 5 ft/min

COMMENTS

Ground Elevation: 577.3 ft. aMSL.
Natural Gamma log includes K, U, and Th.
Water Quality logs performed under ambient conditions.
Ambient Water Level about 21.4 ft (19.7 ft bgs).
Borehole was not logged while drilling.

COMMENTS

All depths here referenced to top PVC casing unless noted otherwise.
Measured casing stick up above ground surface: PVC 1.75 ft, Steel 2.0 ft.
Steel outer casing total depth 15.7 ft, estimated from induced cond. log.
Other well Consturction info taken directly from drilling report.
Measured and drill report PVC stickup differ.



MW-2 Geophysical Report

1.0 Geophysical Logging

On May 7th and May 8th, 2008, downhole geophysical investigations were performed in boring MW-2. The geophysical logs performed were: ambient fluid temperature and fluid conductivity, natural gamma, EM conductivity, vertical seismic profiling (VSP) and water chemistry (pH, ORP, DO). The data for these logs are presented in the MW-2 Geophysical Summary Plot at the end of this well report.

1.1 Ambient Fluid Temperature/Fluid Conductivity

On May 7th, 2008, an ambient fluid temperature and electrical fluid conductivity (FEC) profile was acquired in MW-2 to a depth of 61.7 feet. The ambient temperature log indicates an anomaly at the top of the screened interval at 52 feet. Above 52 the temperature log registers a nominal 6.01 degrees C. Below 52 feet the temperature log registers a nominal 5.15 degrees C. The temperature profile is featureless within the screened interval. The ambient FEC profile registers a nominal 368 µS/cm at the top of the screened interval at 52 feet and is observed to increase with depth to 377 µS/cm at 61.7 feet (TD).

1.2 Natural Gamma

On May 7th, 2008, a natural gamma profile was acquired in MW-2 to a depth of 57.6 feet. The natural gamma profile indicates a high-gamma count anomaly at 46 to 50 feet. The natural gamma profile ranges from 16 to 92 CPS.

1.3 EM Induction Conductivity

On May 7th, 2008, an EM conductivity profile was acquired in MW-2 to a depth of 59.4 feet. The EM conductivity profile does not register usable data, for unknown reasons, though the anomalies have the character of registering metal nearby. It is possible there is rebar or other metal under the asphalt in the immediate vicinity of the well. Two different EM conductivity probes were utilized on MW-2 and both registered the same result, along with repeat logs.

1.4 Vertical Seismic Profile (VSP)

On May 8th, 2008, a vertical seismic profile (VSP) investigation was conducted in MW-2 to a depth of 57.5 feet. Three distinct intervals of specific velocity were observed in MW-2 at 5 to 15, 15 to 30 and 30 to 57.5 feet, registering 5,936, 1,921 and 7,178 fps.

1.5 Water Chemistry (pH, ORP, DO)

On May 7th, 2008, an ambient pH, oxidation-reduction potential (ORP) and dissolved oxygen (DO) profile was acquired in MW-2 to a depth of 61.8 feet. The pH profile registers a high-pH anomaly at water level, which is typical of this type of log. Below water level the pH measurement decreases with depth until the top of screened interval at 52 feet. Below 52 feet the pH registers a nominal 7.45 through the screened interval. The DO measurement registers regular low-DO anomalies every 4 feet approximately, perhaps the result of casing joints. Within the screened interval the DO measurement increases with depth, registering 2.36 to 2.47 percent.

Project: LO-58	**Well ID:** MW-2	**Date Logged:** 7 May 2008
Location: Aroostook County, Caribou, ME	**Log Ref.:** Top PVC Casing	**Hole Diameter:** 8" Nom. to TD
Depth Logger: 61.6 ft	**Log Ref. Elev.:** 589.36 ft above MSL	**Csg Size/Type:** 2" PVC
Depth Driller: 62 ft bgs	**Recorded by:** G. Bauer	**Witnessed by:** A. Fuller

LOGS & TOOLS

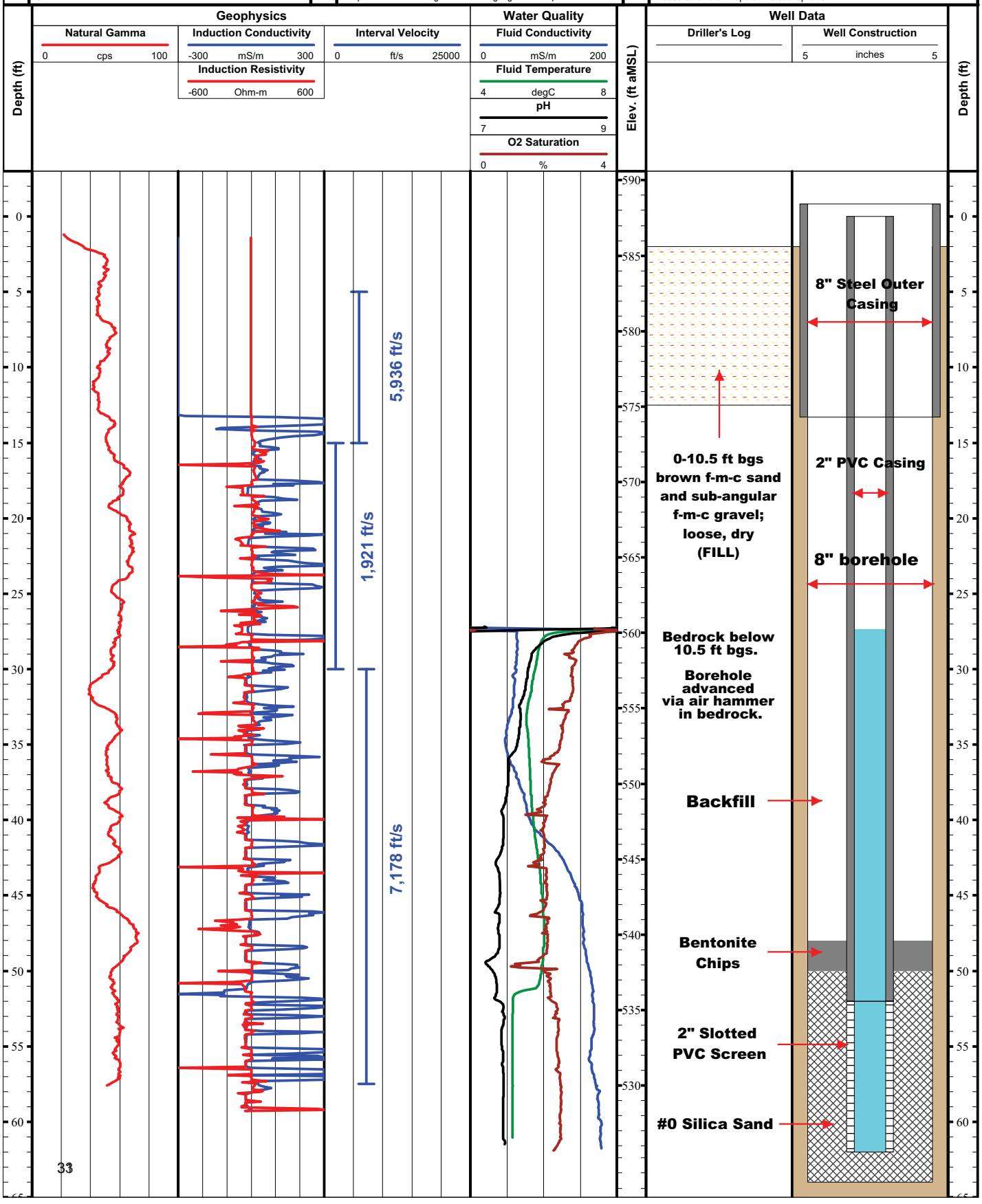
Gamma: Gamma SN# 311, depth err. 0.10 ft, speed 10 ft/min
Cond./Res.: 2PIA SN# 2041, depth err. 0.10 ft, speed 10 ft/min
Fluid Temp: HpL SN# A, depth err. 0.08 ft, speed 5 ft/min
Fluid Cond/pH/O2: WQ SN# 3048, depth err. 0.08 ft, speed 4.5 ft/min

COMMENTS

Ground Elevation: 587.6 ft aMSL.
Natural Gamma log includes K, U, and Th.
Water Quality logs performed under ambient conditions.
Ambient Water Level about 27.4 ft (25.7 ft bgs).
Suspected metel underground affecting logs. Missile pad area.

COMMENTS

All depths here referenced to top PVC casing unless noted otherwise.
Measured casing stick up above ground surface: PVC 1.75 ft, Steel 2.54 ft.
Steel outer casing total depth 13.3 ft bgs, estimated from induced cond. log.
Other well consturction info taken directly from drilling report.
Measured and drill report PVC stickup differ.



MW-3 Geophysical Report

1.0 Geophysical Logging

On May 6th and May 8th, 2008, downhole geophysical investigations were performed in boring MW-3. The geophysical logs performed were: ambient fluid temperature and fluid conductivity, natural gamma, EM conductivity, vertical seismic profiling (VSP) and water chemistry (pH, DO). The data for these logs are presented in the MW-3 Geophysical Summary Plot at the end of this well report.

1.1 Ambient Fluid Temperature/Fluid Conductivity

On May 6th, 2008, an ambient fluid temperature and electrical fluid conductivity (FEC) profile was acquired in MW-3 to a depth of 48.4 feet. The ambient temperature log indicates an anomaly at the top of the screened interval at 39 feet. Below 39 feet the temperature log registers a nominal 6.38 to 6.63 degrees C. The temperature profile is featureless within the screened interval. The ambient FEC profile registers approximately 663 µS/cm at the top of the screened interval at 39 feet and 643 µS/cm at near TD. The FEC observed in MW-3 is notably higher than other wells on site.

1.2 Natural Gamma

On May 6th, 2008, a natural gamma profile was acquired in MW-3 to a depth of 47.5 feet. The natural gamma profile is relatively featureless with gamma counts ranging from 50 to 69 CPS, with the exception of the low gamma counts that are likely the result of near-surface effect.

1.3 EM Induction Conductivity

On May 6th, 2008, an EM conductivity profile was acquired in MW-3 to a depth of 46.5 feet. The EM conductivity profile is rather erratic below 31.5 feet registering approximately 100 to 150 mSeimans/meter. Below 43.1 feet the conductivity log registers -1,400 mSeimans/meter – possibly the effect of metal near the well.

1.4 Vertical Seismic Profile (VSP)

On May 8th, 2008, a vertical seismic profile (VSP) investigation was conducted in MW-3 to a depth of 45 feet. Three distinct intervals of specific velocity were observed in MW-3 at 5 to 20, 20 to 30 and 30 to 45 feet, registering 2,031, 3,435 and 11,492 fps. The deepest interval was calculated using a two-point calculation between 30 and 45 feet due to high scatter in the data set.

1.5 Water Chemistry (pH, DO)

On May 6th, 2008, an ambient pH, oxidation-reduction potential (ORP) and dissolved oxygen (DO) profile was acquired in MW-3 to a depth of 48.4 feet. The pH profile registers a low-pH anomaly at 39 feet. Below 39 feet the pH registers a nominal 7.57 with a minor high-pH anomaly at 42.3 feet. The DO measurement registers a low-DO anomaly at 39 feet, the top of the screened interval. Below 39 feet the DO registers 10.67 to 10.8 percent.

Project: LO-58	**Well ID:** MW-3	**Date Logged:** 6 May 2008
Location: Aroostook County, Caribou, ME	**Log Ref.:** Top PVC Casing	**Hole Diameter:** 8" Nom. to TD
Depth Logger: 48.85 ft	**Log Ref. Elev.:** 570.63 ft above MSL	**Csg Size/Type:** 2" PVC
Depth Driller: 47 ft bgs	**Recorded by:** G. Bauer	**Witnessed by:** A. Fuller

LOGS & TOOLS

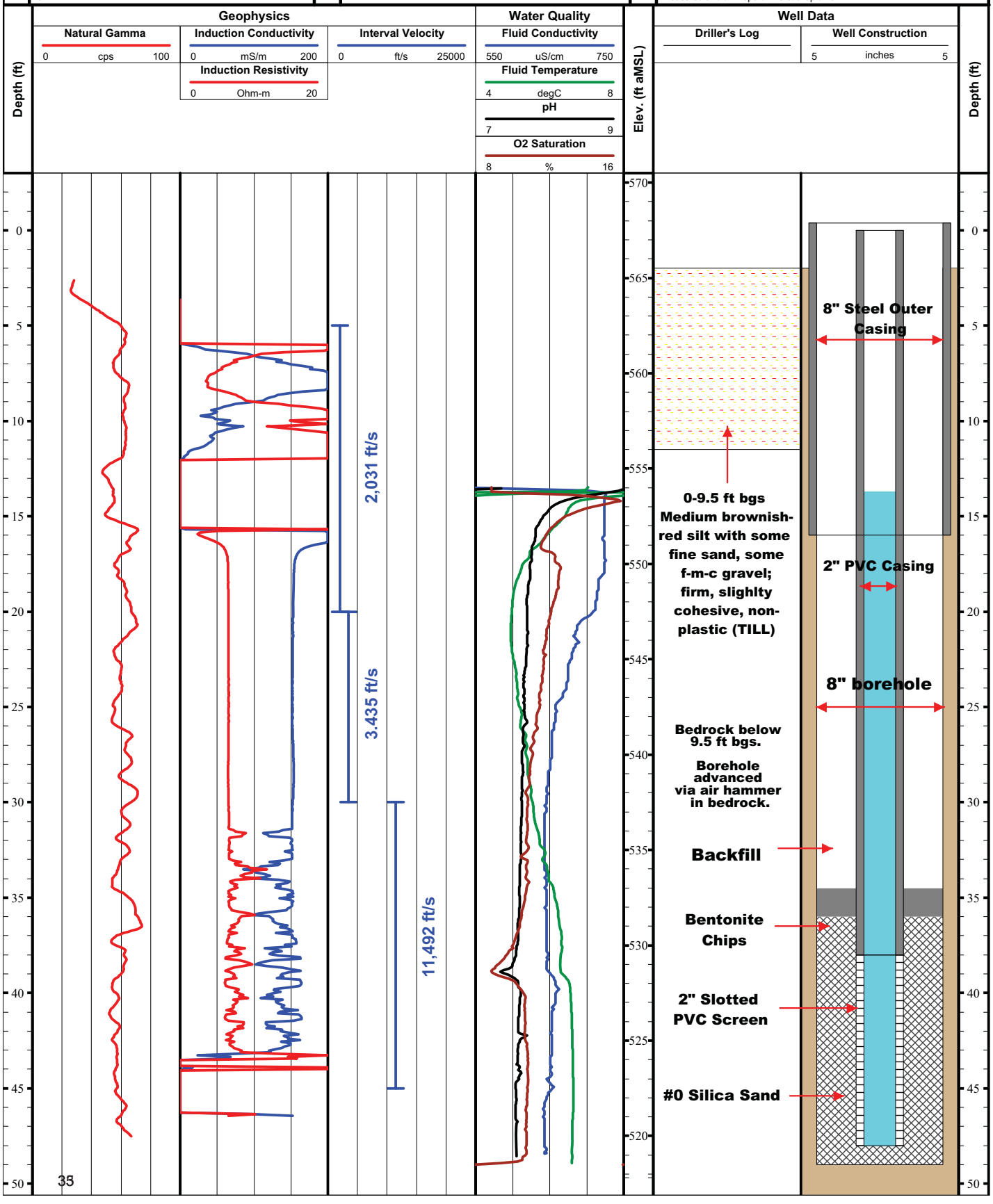
Gamma: Gamma SN# 311, depth err. 0.10 ft, speed 10 ft/min
Cond./Res.: 2PIA SN# 2041, depth err. 0.10 ft, speed 10 ft/min
Fluid Cond: HpL SN# A, depth err. 0.10 ft, speed 5 ft/min
Fluid Temp/pH/O2: WQ SN# 3048, depth err. 0.08 ft, speed 4.0 ft/min

COMMENTS

Ground Elevation: 567.5 ft aMSL.
Natural Gamma log includes K, U, and Th.
Water Quality logs performed under ambient conditions.
Ambient Water Level about 13.7 ft (10.32 ft bgs).

COMMENTS

All depths here referenced to top PVC casing unless noted otherwise.
Measured casing stick up above ground surface: PVC 3.38 ft, Steel 3.79 ft.
Steel outer casing total depth 16.0 ft bgs, estimated from induced cond. log.
Other well construction info taken directly from drilling report.
Measured and drill report PVC stickup differ.



MW-4 Geophysical Report

1.0 Geophysical Logging

On May 6th and May 8th, 2008, downhole geophysical investigations were performed in boring MW-4. The geophysical logs performed were: ambient fluid temperature and fluid conductivity, natural gamma, EM conductivity and vertical seismic profiling (VSP). The data for these logs are presented in the MW-4 Geophysical Summary Plot at the end of this well report.

1.1 Ambient Fluid Temperature/Fluid Conductivity

On May 6th, 2008, an ambient fluid temperature and electrical fluid conductivity (FEC) profile was acquired in MW-4 to a depth of 82.3 feet. The ambient temperature log is relatively featureless in the interval of interest, ranging in temperature from 4.16 to 4.13 degrees C. The ambient FEC profile indicates some stratification of wellbore fluids inside the blank casing at 58 feet. Below 58 feet the ambient FEC profile registers a nominal 416 to 421 µS/cm within the screened interval. A minor high-FEC anomaly is observed at 79 feet within the screened interval.

1.2 Natural Gamma

On May 6th, 2008, a natural gamma profile was acquired in MW-4 to a depth of 81.2 feet. The natural gamma profile is relatively featureless ranging in gamma counts of 29 to 75 counts per second (CPS).

1.3 EM Induction Conductivity

On May 6th, 2008, an EM conductivity profile was acquired in MW-4 to a depth of 80.1 feet. The EM conductivity profile registers an anomaly at 72 feet indicating the top of the screened interval and 31.2 feet indicating water level. The EM conductivity log registers a nominal 176 mSeimans/meter above 72 feet and 186 mSeimans/meter below 72 feet.

1.4 Vertical Seismic Profile (VSP)

On May 8th, 2008, a vertical seismic profile (VSP) investigation was conducted in MW-4 to a depth of 80 feet. Three distinct intervals of specific velocity were observed in MW-3 at 5 to 30, 30 to 47.5 and 47.5 to 80 feet, registering 4,529, 6,548 and 6,678 fps. The deepest interval was calculated using a two-point calculation between 47.5 and 80 feet due to high scatter in the data set.

Project: LO-58	**Well ID:** MW-4	**Date Logged:** 6 May 2008
Location: Aroostook County, Caribou, ME	**Log Ref.:** Top PVC Casing	**Hole Diameter:** 8" Nom. to TD
Depth Logger: 82.7 ft	**Log Ref. Elev.:** 605.45 ft above MSL	**Csg Size/Type:** 2" PVC
Depth Driller: 82 ft bgs	**Recorded by:** G. Bauer	**Witnessed by:** A. Fuller

LOGS & TOOLS

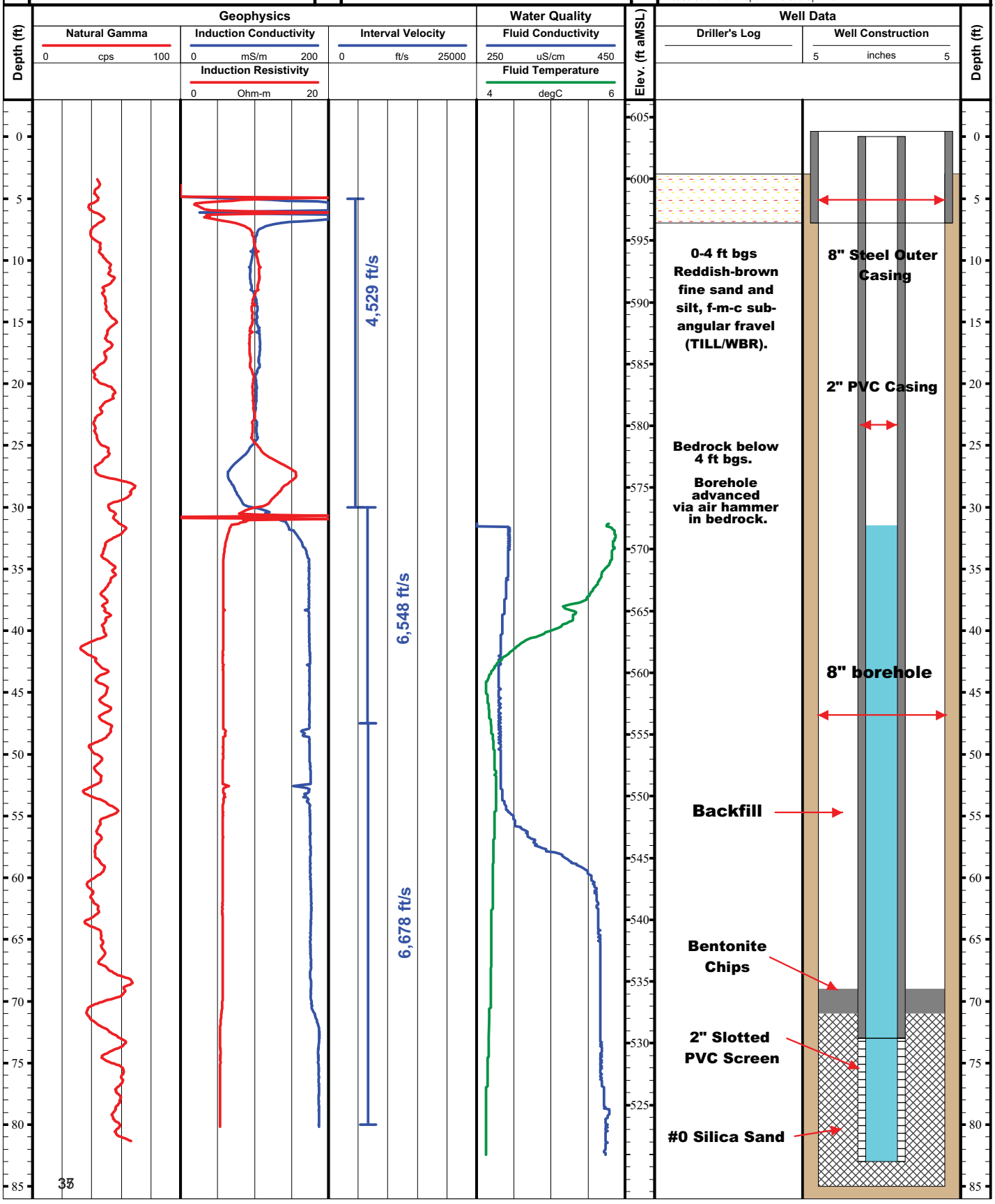
Gamma: Gamma SN# 311, depth err. -0.08 ft, speed 10 ft/min
Cond./Res.: 2PIA SN# 2041, depth err. 0.16 ft, speed 10 ft/min
Fluid Temp./Cond.: HLP SN# A, depth err. 0.1 ft, speed 5 ft/min

COMMENTS

Ground Elevation: 603.4 ft. aMSL.
Natural Gamma log includes K, U, and Th.
Water Quality logs performed under ambient conditions.
Ambient Water Level about 31.5 ft (29.5 ft bgs).

COMMENTS

All depths here referenced to top PVC casing unless noted otherwise.
Measured casing stick up above ground surface: PVC 2.0 ft, Steel 2.42 ft.
Steel outer casing total depth 7.0 ft, est from induced conductivity log.
Other well construction data taken directly from drilling report.
Measured and drill report PVC stickup differ.



MW-5 Geophysical Report

1.0 Geophysical Logging

On May 8th and May 9th, 2008, downhole geophysical investigations were performed in boring MW-5. The geophysical logs performed were: ambient fluid temperature and fluid conductivity, natural gamma, EM conductivity, vertical seismic profiling (VSP) and water chemistry (pH, DO). The data for these logs are presented in the MW-5 Geophysical Summary Plot at the end of this well report.

1.1 Ambient Fluid Temperature/Fluid Conductivity

On May 8th, 2008, an ambient fluid temperature and electrical fluid conductivity (FEC) profile was acquired in MW-5 to a depth of 77.7 feet. The ambient temperature log decreases with depth below 42 feet. In the screened interval the temperature log is relatively featureless decreasing from 4.6 to 4.55 degrees C. The ambient FEC profile registers approximately 454 μS/cm at the top of the screened interval at 70 feet and 461 μS/cm at TD.

1.2 Natural Gamma

On May 8th, 2008, a natural gamma profile was acquired in MW-5 to a depth of 73.8 feet. The natural gamma profile is relatively featureless with the exception of a high-gamma anomaly at 62 to 67 feet. The natural gamma profile ranges in gamma counts from 50 to 90 CPS.

1.3 EM Induction Conductivity

On May 8th, 2008, an EM conductivity profile was acquired in MW-5 to a depth of 75.7 feet. The EM conductivity profile is somewhat erratic below water level at 20 feet, registering approximately 142 mSeimens/meter and increasing with depth. The conductivity profile registers approximately 158 mSeimens/meter near TD with a high-induction conductivity anomaly at 70.6 feet, within the screened interval.

1.4 Vertical Seismic Profile (VSP)

On May 9th, 2008, a vertical seismic profile (VSP) investigation was conducted in MW-5 to a depth of 75 feet. Five distinct intervals of specific velocity were observed in MW-5 at 2.5 to 5, 5 to 17.5, 17.5 to 27.5, 32.5 to 57.5 and 60 to 70 feet, registering 984, 3,385, 5,244, 15,936 and 20,307 fps. A low-velocity anomaly is observed at 57.5 to 60 feet with poor P-wave energy returned.

1.5 Water Chemistry (pH, DO)

On May 8th, 2008, an ambient pH and dissolved oxygen (DO) profile was acquired in MW-5 to a depth of 77.6 feet. The pH profile registers low-pH anomalies at 61.7, 64.8 and 67.9 feet. The pH profile registers a nominal 7.09 pH above the screened interval and 7.27 near TD. The DO measurement indicates an erratic profile with regular anomalies that may be related to casing joints. The DO registers approximately 0.16 percent within the screened interval.

Project: LO-58	**Well ID:** MW-5	**Date Logged:** 7-8 May 08
Location: Aroostook County, Caribou, ME	**Log Ref.:** Top PVC Casing	**Hole Diameter:** 8" nom. to TD
Depth Logger: 77.8 ft	**Log Ref. Elev.:** 575.72 ft above MSL	**Csg Size/Type:** 2" PVC
Depth Driller: 82 ft bgs	**Recorded by:** G. Bauer	**Witnessed by:** A. Fuller

LOGS & TOOLS

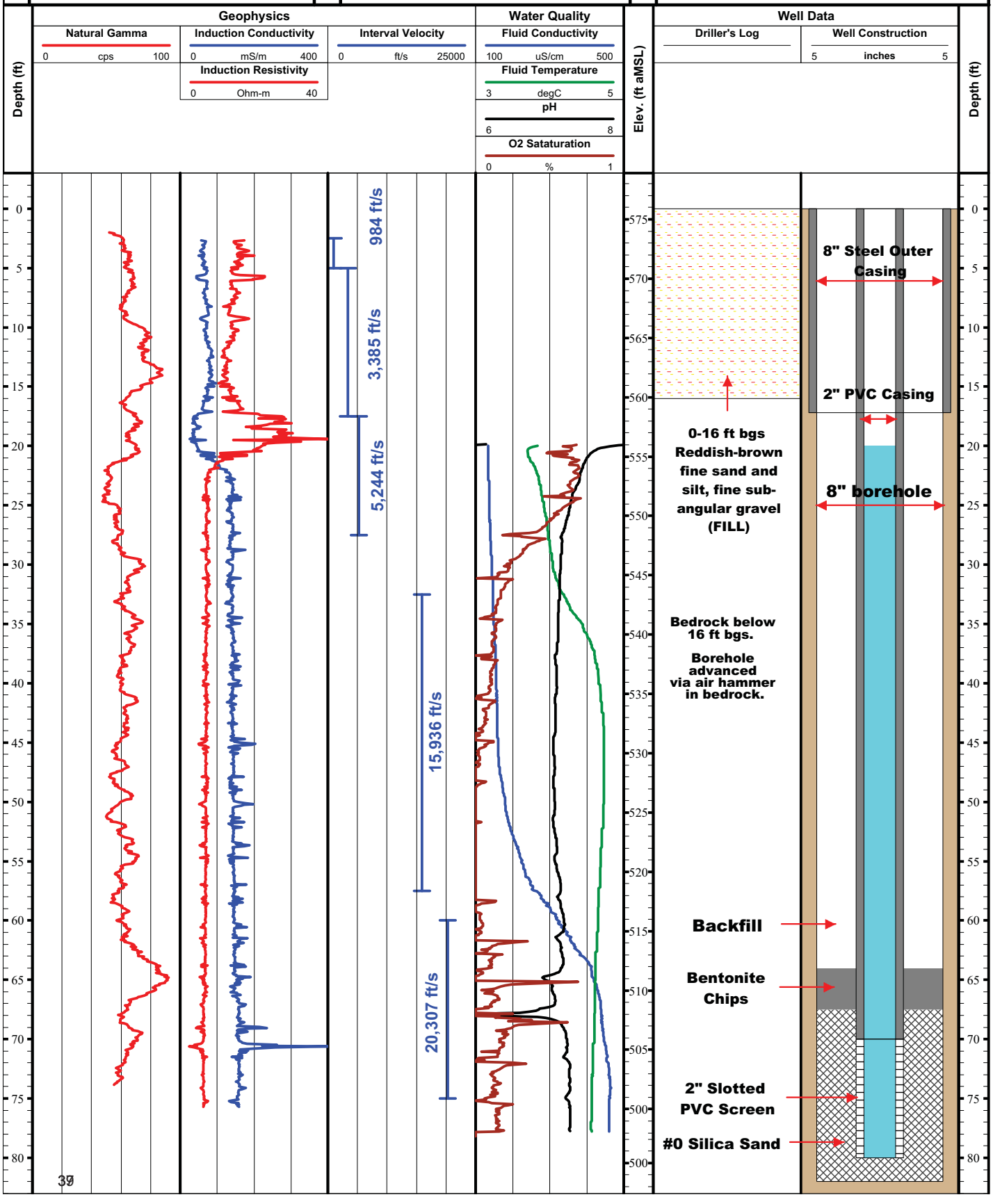
Gamma: 2PEA SN# 2955, depth err. 0.10 ft, speed 10 ft/min
Cond./Res.: 2PIA SN# 2041, depth err. 0.10 ft, speed 10 ft/min
Fluid Cond/Temp: HLP SN# A, depth err. 0.10 ft, speed 5 ft/min
Fluid pH/O2: WQ SN# 3048, depth err. 0.10 ft, speed 4 ft/min

COMMENTS

Ground Elevation: 575.9 ft aMSL.
Natural Gamma log includes K, U, and Th.
Water Quality logs performed under ambient conditions.
Ambient Water Level about 20 ft (20 ft bgs).

COMMENTS

All depths here referenced to top PVC casing unless noted otherwise.
Measured casing stick up above ground surface: PVC 0.0 ft, Steel 0.0 ft.
Steel outer casing total depth is undetermined from data. Guess is shown.



DW-1 Logging Results

1.0 HydroPhysical™ Logging

1.1 Ambient Fluid Electrical Conductivity and Temperature Log: DW-1

At 1202 hours on May 13th, 2008, after a calibration check of the fluid electrical conductivity (FEC) and temperature logging tool, the fluid column was logged for FEC and temperature profiles with COLOG's 1.5-inch diameter HpL™ probe. These logs were performed prior to the installation of any pumping equipment. Please refer to Figure DW-1:1. The ambient FEC profile indicates a relatively featureless profile with a notable increase at approximately 38.7 feet. The ambient FEC profile registers a nominal FEC of approximately 303 µS/cm above 38.7 feet and approximately 343 µS/cm below 42 feet. The anomaly observed in the ambient FEC profile correlates well with a water-bearing interval identified during hydrophysical testing. The ambient temperature profile is relatively rugose exhibiting a temperature range of 4.73 to 5.21 degrees C. Anomalies observed in the ambient temperature profile at approximately 27.3, 35.0, 37.2, 53.2 and 55.2 feet correlate well with identified water-bearing intervals. In vertically flowing conditions, where water enters the borehole, termed inflow, a change in either FEC is typically seen

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1.2 Ambient Flow Characterization: DW-1

On May 13th, 2008, an ambient flow characterization was conducted in the boring DW-1. For ambient flow assessment, the formation water in the borehole was diluted with deionized water (DI) and the boring left in an undisturbed state to allow any natural flow to occur. After DI water emplacement the pump was removed from the boring to insure that water in the pump standpipe would not drain back into the boring. Prior to this period and throughout all HpL™ testing, water levels were monitored and recorded. Ambient flow evaluation is reported for the period after the water surface returned to near pre-emplacement levels. A series of FEC and temperature logs were then conducted to identify changes in the fluid column associated with ambient flow. Ambient flow characterization is conducted to evaluate the presence of both vertical and horizontal ambient flow.

On May 13th, 2008, at 1318 hours (t = 0 minutes, elapsed time of test), dilution of the fluid column was complete. Minimal to no DI water was lost to the formation due to the slightly depressed head maintained during emplacement procedures. During the 18.5 hours following the emplacement of DI water, multiple logs were conducted. Of these logs, 9 are presented in Figure DW-1:2. The designation of each logging with the FEC tool is indicated in the figure legend by the time of logging (e.g., FEC1318 versus a subsequent logging at FEC1334), thus the progressing of curves to the right in this figure represents changes in FEC over the total logging period. The last four digits of each log ID correspond to the time at which that particular log was started. Only logs acquired during logging in the downward direction are presented as the design of the FEC/Temperature probe allows the most accurate data to be collected in the downward direction. The logs acquired in the upward logging direction are not representative of downhole conditions and are therefore omitted. These logs illustrate significant change at several intervals throughout the length of the borehole. These dramatic changes in the FEC profiles with respect to time are associated with ambient horizontal flow occurring within the borehole.

Formation water migration by horizontal flow through the fluid column is indicated by the increase in FEC over time in the data presented in Figure DW-1:2 for the intervals 27.3 to 31.7, 34.6 to 35.0, 40.4 to 48.6, 49.0 to 50.2, and 52.7 to 53.6 feet. Numerical modeling of the reported field data using code BOREII of the horizontal flow intervals suggests the volumetric flow rate observed in the wellbore for these intervals are 0.085, 0.011, 0.14, 0.018, and 0.058 gpm, respectively. Correcting for convergence of flow at the wellbore and factoring the length of the interval, this flow rate equates to a Darcy velocity, or specific discharge of groundwater in the aquifer of 2.84, 3.91, 2.53, 2.28, and 9.56 feet/day, respectively. Please refer to Figure DW-1:2 and Table DW-1:1 for a complete summary of the HydroPhysical™ logging results. Please refer to Appendix B for a discussion of the methodology and code used to calculate these values. The ambient depth to water at the time of testing was 22.39 ftbtoc.

1.3 Flow Characterization During 6 GPM Production Test: DW-1

Pumping of borehole fluids and simultaneous DI injection was conducted at one pumping rate to establish the inflow locations and evaluate the interval specific inflow rates. Pumping at a given rate was conducted until reasonably constant drawdown was observed. When constant drawdown was observed, DI injection was initiated at about 20-30% of the pumping rate and the extraction pumping rate was increased to maintain a constant total formation production rate (i.e. pumping rate prior to DI injection). These procedures were conducted at a differential rate of 6.04 gpm.

On May 14th, 2008, at 1000 hours (t = 0 minutes elapsed time of testing), development pumping was initiated at approximately 6.6 gpm. Prior to initiating pumping, the ambient depth to water was recorded at 22.79 ftbtoc. All drawdown values are referenced to this ambient water level. Time dependent depth to water, totals and flow rate information were recorded digitally every second and are presented in Figure DW-1:3. Pumping was maintained at a time-averaged rate of 6.64 gpm until 1215 hours (t = 135 minutes, elapsed time of testing). During development pumping numerous FEC logs were acquired to monitor the development process and assist in identifying the depths of flow zones. Of these FEC logs, six (FEC1041 through FEC1150) are presented in Figure DW-1:4. The FEC logs acquired during development pumping illustrate a reasonably stable, repeatable condition of the fluid column with local inflow locations identified by spikes or incremental step increases or decreases in FEC. DI water injection from the bottom of the wellbore was initiated at 1215 hours at a time-averaged rate of 1.39 gpm while the total extraction rate was increased to a time-averaged rate of 7.43 gpm, resulting in a total borehole formation time-averaged production rate of 6.04 gpm. These flow conditions were maintained until 1323 hours (t = 203 minutes) during which time a reasonably constant drawdown of approximately 3.02 feet was observed. COLOG defines reasonably constant drawdown as drawdown that fluctuates less than 10 percent of the total drawdown. The FEC logs acquired during dilution procedures illustrate a reasonably stable condition of the fluid column with local inflow locations identified by spikes or incremental step increases in FEC. Seven inflow zones were identified from these logs at 27.3 to 31.7, 34.6 to 35.0, 37.4 to 38.4, 40.4 to 48.6, 49.0 to 50.2, 52.7 to 53.6, and 54.4 to 58.1 feet with flow rates ranging of 0.207, 0.195, 0.745, 2.00, 0.416, 1.65, and 0.838 gpm, respectively. The logs indicate the interval 40.4 to 48.6 and 52.7 to 53.6 feet dominated flow during pumping, producing 3.65 gpm or 60 percent of the total flow. Please refer to Table DW-1:1 for a summary of HydroPhysical™ flow results and the depths of individual inflow zones.

1.4 Estimation of Interval Specific Transmissivity: DW-1

An estimation of transmissivity (T) can be made using an equation after Hvorslev (1951) assuming steady-state radial flow in an unconfined aquifer:

$$T = KL = \frac{q_i}{2\pi\Delta h_w} \ln\left(\frac{r_e}{r_w}\right)$$

where K is the hydraulic conductivity, q_i is the interval specific inflow rate calculated using HpL™ results, r_w is the borehole radius (0.26 ft), r_e is the effective pumping radius, Δh_w is the observed maximum drawdown (22.79 feet) and L is the thickness of the zone through which flow occurs. For our calculations, COLOG used r_e of 300 feet (assumed). By applying L and q_i from the HpL™ results under the two pressure conditions, the interval specific transmissivity can be calculated for each identified water producing interval. These calculations were made at each identified interval and are presented in Table DW-1:1. In summary, the intervals 40.4 to 48.6 and 52.7 to 53.6 feet exhibited the highest transmissivities of approximately 129 and 111 ft^2/day, respectively.

2.0 Geophysical Logging

On May 11th, 2008 through May 20th, 2008, downhole geophysical and hydrogeologic investigations were performed in boring DW-1. The geophysical and hydrogeologic logs performed were: optical televiewer (OBI), acoustic televiewer (ATV), 3-arm caliper, natural gamma, electric resistivity, EM induction conductivity, water chemistry (pH, ORP, DO), full waveform sonic, vertical seismic profile (VSP), wireline straddle packer (WSP) and downhole video. The data for these logs are presented in the DW-1 Geophysical/HydroPhysical™ Summary Plot and Figures DW-1:5, 6, 7 and 8 and Table DW-1:2 for the statistical analysis of all fractures/features, Table DW-1:3 for a summary of the VSP velocities and Figures DW-1:9A through E and Table DW-1:4 for the WSP pressure data and results at the end of this well report. The downhole video was provided to the client in the field at the time of logging.

2.1 Optical Televiewer (OBI)/Acoustic Televiewer (ABI)

On May 11th, 2008 optical and acoustic televiewer logging was performed in DW-1 to a depth of 58.1 feet. The televiewers identified features at depths correlating well with the HpL™ and caliper data. The features observed by the OBI at water-bearing intervals identified from the HpL™ data had apparent aperture and in some cases evidence of staining. Twenty high-angle fractures or features (dip angles greater than 45 degrees) were identified in DW-1. Four of these high-angle features are qualitatively ranked 2 or greater suggesting the potential for vertical hydraulic communication outside the influence of the borehole. However, none of these high-angle fracture or features are found deeper than 55 feet – all are shallow features. Data acquired during WSP testing confirms the presence of vertical hydraulic communication between several water-bearing zones in the immediate vicinity of the borehole.

2.2 Three-Arm Caliper

On May 11th, 2008 three-arm caliper logging was performed in DW-1 to a depth of 57.7 feet. The caliper log indicates a relatively rugose borehole with nine major inflections observed at approximately 10.4 to 12.6, 18.5, 23.0, 26.9, 34.7, 37.9, 40.4 to 45.1, 46.8 to 48.2 and 52.4 to 53.5 feet. The inflections, or borehole enlargements, observed in the caliper log correlate well with water-bearing zones and fractures identified by the hydrophysical and optical televiewer data. The caliper log registers an approximately nominal 6.25-inch diameter borehole below casing at 10.4 feet.

2.3 Natural Gamma

On May 11th, 2008 natural gamma logging was performed, in conjunction with the electric resistivity logging, in DW-1. The natural gamma measurement reached to a depth of 54.1 feet. The natural gamma is relatively featureless with minor fluctuations in gamma counts, expected in limestone. The natural gamma log registers an approximately nominal 44 to 70 counts per second.

2.4 Electric Resistivities (8, 16, 32, 64-inch Normal Resistivities, SP, SPR)

On May 11th, 2008 electric resistivity logging was performed, in conjunction with the natural gamma log, in DW-1 to a depth of 57.8 feet. The electric measurements consist of 8, 16, 32 and 64-inch "normal" resistivities, spontaneous potential (SP) and single-point resistance (SPR). The normal resistivities registered approximately 850 Ohm-meters (8-inch resistivity) to 3,690 Ohm-meters (64-inch resistivity). A notable anomaly in the electric resistivity is observed at approximately 47 to 48 feet. The higher spaced resistivities (32 and 64-inch) register lower resistivities below this depth. Above 47 to 48 feet, the higher spaced resistivities register a marked increase in resistivity, typical of more massive limestone. However, the limestone above this depth is marked with large, occasionally high-angle, fractures. The SP is also relatively featureless registering a nominal 125 to 246 milivolts below water level. The SPR measurement registers low-resistivity anomalies at 37.8, 40.4 to 48.2 and 52.8 feet, correlating well with identified major fractures. The SPR registers 432 to 791 Ohms.

2.5 EM Induction Conductivity

On May 11th, 2008 EM induction conductivity logging was performed in DW-1 to a depth of 55.8 feet. The induction conductivity log is featureless with the exception of anomalies at the bottom of casing at 10.5 feet and water level at approximately 21.4 feet. The induction conductivity registers a nominal 43 miliS/meter above water level and 154 miliS/meter below water level.

2.6 Water Chemistry (pH, ORP, DO)

On May 11th, 2008, pH, oxidation-reduction potential (ORP) and dissolved oxygen (DO) measurements were acquired under ambient conditions in DW-1 to a depth of 57.6 feet. The pH measurement is relatively featureless with the exception of a high-pH anomaly at waters surface. The pH measurement registers a nominal pH ranging from 7.41 to 7.50. The ORP measurement indicates a gradual increase in oxidation potential with depth. The ORP measurement registers approximately 137 mV at waters surface and 195 mV near total depth. The dissolved oxygen

measurement is relatively variable with significant fluctuations in DO. The DO measurement registers an increase in dissolved oxygen with depth, registering zero from waters surface to approximately 37.6 feet where the data indicates an increase in DO. Near total depth the DO is observed to be approximately 1.57 percent.

2.7 Full Waveform Sonic

On May 11th, 2008 full waveform sonic logging was performed in DW-1 to a depth of 58.1 feet. The sonic registered slower velocity anomalies at 37.4 to 46.4, 48.4 and 53.1 feet, correlating well with identified fractures and water-bearing zones observed in the optical televiewer, caliper and hydrophysical data. The sonic registered p-wave velocities ranging from 9,340 to 19,550 feet/second. The lower value of p-wave velocity correlates well with velocities identified using vertical seismic profiling (VSP).

2.8 Vertical Seismic Profile (VSP)

On May 8th, 2008 a vertical seismic profile (VSP) was conducted in DW-1 to a depth of 55 feet. The VSP investigation in DW-1 identified 3 specific intervals of specific velocity at 5 to 10, 10 to 25 and 25 to 55 feet, registering 1,670, 7,135 and 8,493 feet/second (fps), respectively. All of the DW-1 velocity calculations are effectively two-point calculations, using arrival times at the beginning & end of the indicated depth ranges. Late arrivals indicate possible low-velocity zones near 20 & 50 feet deep. The 1,670 fps value is consistent with dry overburden. The higher values are relatively low for bedrock velocities, but consistent with highly fractured bedrock.

2.9 Wireline Straddle Packer (WSP)

On May 18th through 20th, 2008 wireline straddle packer (WSP) testing was conducted in DW-1 at five intervals:

33.15 to 24.98 feet (the top of water table)
33.75 to 38.5 feet
41.2 to 51.9 feet
51.0 to 58.1 feet (total depth)
54.0 to 58.1 feet (total depth)

WSP testing was conducted to acquire a fracture-specific groundwater sample from each major water-bearing fracture identified during hydrophysical production testing. In addition to collecting a representative groundwater sample from each interval, development pumping was conducted at each interval and pressures above, below and in the interval of interest recorded to estimate fracture-specific permeability for each interval tested. Please see Tables WSP Summary and DW-1:4 for a complete summary of wireline straddle packer testing results.

Several different configurations of the WSP were utilized to properly characterize the numerous fracture zones in this borehole. Due to either a long length of fracture zone that is intended to be tested, or the fracture of interest being close to water level of the bottom of the borehole, the WSP was configured several different ways:

Interval 33.15 to 24.98 feet (water level) – the top of the upper packer was situated at 33.15 feet and only the upper packer was inflated. The middle zone of the packer assembly was sealed from

the upper interval and pumping was conducted from a 2-inch pump lowered to the interval of interest, 33.15 feet up to water level (24.98 ftbtoc). In this configuration, both the middle and lower pressure transducers are recording the same interval of interest – the entire interval below the upper packer to TD. Notice there is no evidence of vertical hydraulic communication outside the influence of the borehole between water-bearing fractures in the test interval of 33.15 feet up to water level and water-bearing fractures below the upper packer (bottom of the upper packer seal approximately 35 feet) based on the non-response to pumping registered by the middle and lower pressure transducers. However, the pumping rate of 0.25 gpm is very low with respect to the yields of the identified water-bearing fractures below this interval of interest. As such, any vertical hydraulic communication at this testing flow rate would likely not be measured in the pressure transducers below this interval of interest. Please see Figure DW-1:9A and Table DW-1:4 for a complete summary of the data acquired and results for this interval.

Interval 33.75 to 38.5 feet – The WSP was utilized in its standard configuration, with a 4.8-foot interval, both packers inflated, and all pressure transducers measuring pressure in their respective zones of interest. The data clearly indicates vertical hydraulic communication outside the influence of the borehole between water-bearing fractures in the interval of interest at 33.75 to 38.5 feet and the lower interval below the lower packer based on the correlating responses observed in the middle and lower pressure transducers. The data indicates a small correlating response in the upper pressure transducer, likely observed during this test due to the higher pumping rate of 2.73 gpm during stress testing compared to the pumping rate of 0.25 gpm during stress testing of the upper interval 33.15 feet to water level. Please see Figure DW-1:9B and Table DW-1:4 for a complete summary of the data acquired and results for this interval.

Interval 41.2 to 51.9 feet – For this interval of interest, the WSP was reconfigured for a longer length between packers. For this test the interval was lengthened to 10.7 feet due to the highly fractured interval and lack of pertinent, solid borehole to place a packer for a good seal. The data clearly indicates vertical hydraulic communication outside the influence of the borehole between water-bearing fractures in the interval of interest at 41.2 to 51.9 feet and the upper and lower intervals surrounding the interval of interest based on the correlating responses observed in the upper and lower pressure transducers. This is not unexpected based on the high-angle fractures with aperture identified in the optical and acoustic televiewer data in this interval. Please see Figure DW-1:9C and Table DW-1:4 for a complete summary of the data acquired and results for this interval.

Interval 51.0 feet to TD – For this interval of interest, the WSP was reconfigured by removing the lower packer in order to enable the sample port of the WSP to reach this interval of interest near the bottom of the borehole. For this test the middle and lower pressure transducers are both in the interval of interest and register the same changes in pressure. The interval of interest is considered to be from the base of the upper packer to total depth of the borehole – 58.2 feet. The data clearly indicates vertical hydraulic communication outside the influence of the borehole between water-bearing fractures in the interval of interest at 51.0 to TD and the upper interval above this interval of interest based on the correlating response observed in the upper pressure transducers. This is not unexpected based on the high-angle fractures with aperture identified in the optical and acoustic televiewer data. Please see Figure DW-1:9D and Table DW-1:4 for a complete summary of the data acquired and results for this interval.

Interval 54.0 feet to TD – For this interval of interest, the WSP was reconfigured by removing the lower packer in order to enable the sample port of the WSP to reach this interval of interest near the bottom of the borehole. For this test the middle and lower pressure transducers are both in the

interval of interest and register the same changes in pressure. The interval of interest is considered to be from the base of the upper packer to total depth of the borehole – 58.2 feet. The data clearly indicates vertical hydraulic communication outside the influence of the borehole between water-bearing fractures in the interval of interest at 54.0 to TD and the upper interval above this interval of interest based on the correlating response observed in the upper pressure transducers. Please see Figure DW-1:9E and Table DW-1:4 for a complete summary of the data acquired and results for this interval.

3.0 Data Summary

Processing and interpretation of the geophysical and HydroPhysical™ logs in DW-1 suggest the presence of seven producing intervals for this borehole. Numerical modeling of the reported HydroPhysical™ field data was performed using computer programs FLOWCALC and/or BOREII. These analyses were performed to estimate the rate of inflow for each identified hydraulically conductive borehole interval during DI injection procedures. The results of these analyses are presented in Table DW-1:1. For code comparisons to field data please see Appendix D. In summary, the intervals at 40.4 to 48.6 and 52.7 to 53.6 feet dominated flow during pumping, producing 3.65 gpm or 60 percent of the total flow. Five of the seven identified producing intervals correlate well with water-bearing zones identified during ambient testing. The remaining two intervals were not actively flowing water during ambient testing.

During ambient testing, boring DW-1 exhibited a complex network of horizontal flow zones. Five ambient inflow intervals are identified at 27.3 to 31.7, 34.6 to 35.0, 40.4 to 48.6, 49.0 to 50.2, and 52.7 to 53.6 feet, with observed flow rates of 0.085, 0.011, 0.14, 0.018, and 0.058 gpm respectively. Ambient flow from these inflow intervals is observed to migrate horizontally across the borehole. Correcting for convergence to the wellbore and factoring the length of the interval, this flow rate equates to Darcy velocities of 2.84, 3.91, 2.53, 2.28, and 9.56 ft/day, respectively.

The optical and acoustic televiewers identified features at depths correlating well with the HpL™ and caliper data. The features observed by the OBI at water-bearing intervals identified from the HpL™ data had apparent aperture and in some cases evidence of staining. Two hundred twenty high-angle fractures or features (dip angles greater than 45 degrees) were identified in DW-1. Seventeen of these high-angle features are qualitatively ranked 2 or greater suggesting the potential for vertical hydraulic communication outside the influence of the borehole. Data acquired during WSP testing confirms the presence of vertical hydraulic communication between several water-bearing zones in the immediate vicinity of the borehole.

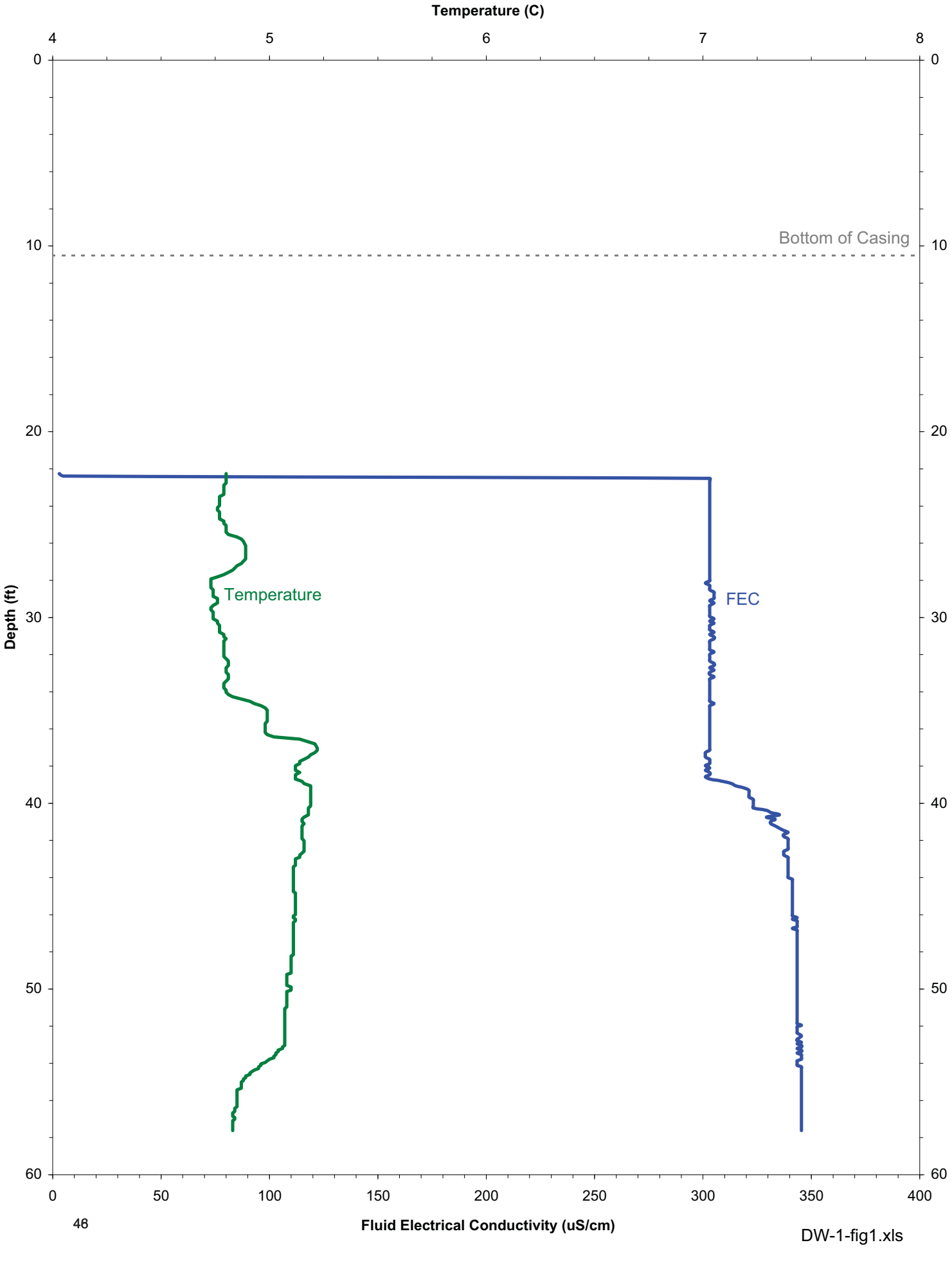
The seven interval-specific transmissivity estimates calculated using the hydrophysical data in DW-1 ranged from 8.51 to 129 ft^2/day, with the interval at 40.4 to 48.6 feet registering the highest transmissivity. The ranges of transmissivities suggest that flow originates from secondary porosity consisting of large discrete fractures at the major inflow zones and minor fractures or features with less inter-connectiveness at the minor inflow zones. Interval-specific FEC ranged from 357 to 428 µS/cm.

The WSP sampling results identified contaminant concentrations in each of the five sampled intervals. Of particular note is a high toluene anomaly of 120 µg/L in the uppermost sample interval of 33.2 to water level (24.86 ftbtoc). Each of the five sampled intervals at 33.2 to water level, 33.8 to 38.5, 41.2 to 51.9, 51.0 to 58.2 (TD) and 54.0 to 58.2 feet registered concentrations of TCE of 1.8, 2.5, 3.4, 3.1 and 2 µg/L, respectively. Please see Table WSP Summary in the Executive Summary for a complete summary of the sample results.

Fracture inter-connectiveness in the immediate vicinity of a wellbore can be inferred by the similarity, or lack there of, of parameters such as interval-specific transmissivity estimates and interval-specific FEC, along with the presence of high-angle fractures and pressure differentials within the borehole. Similar transmissivity and FEC estimates would suggest an inter-connected network of fractures or aquifers in the immediate vicinity of the wellbore. High-angle fractures with aperture may provide a conduit for vertical communication. Moreover, although a pressure differential would seem to suggest the driving force for vertical communication is present, typically substantially vertically interconnected fractures or aquifers tend to pressure-equilibrate in the immediate vicinity of the wellbore. Thus, the presence of a pressure differential in a wellbore may suggest a lack of vertical communication between fractures or aquifers in the immediate vicinity of the borehole.

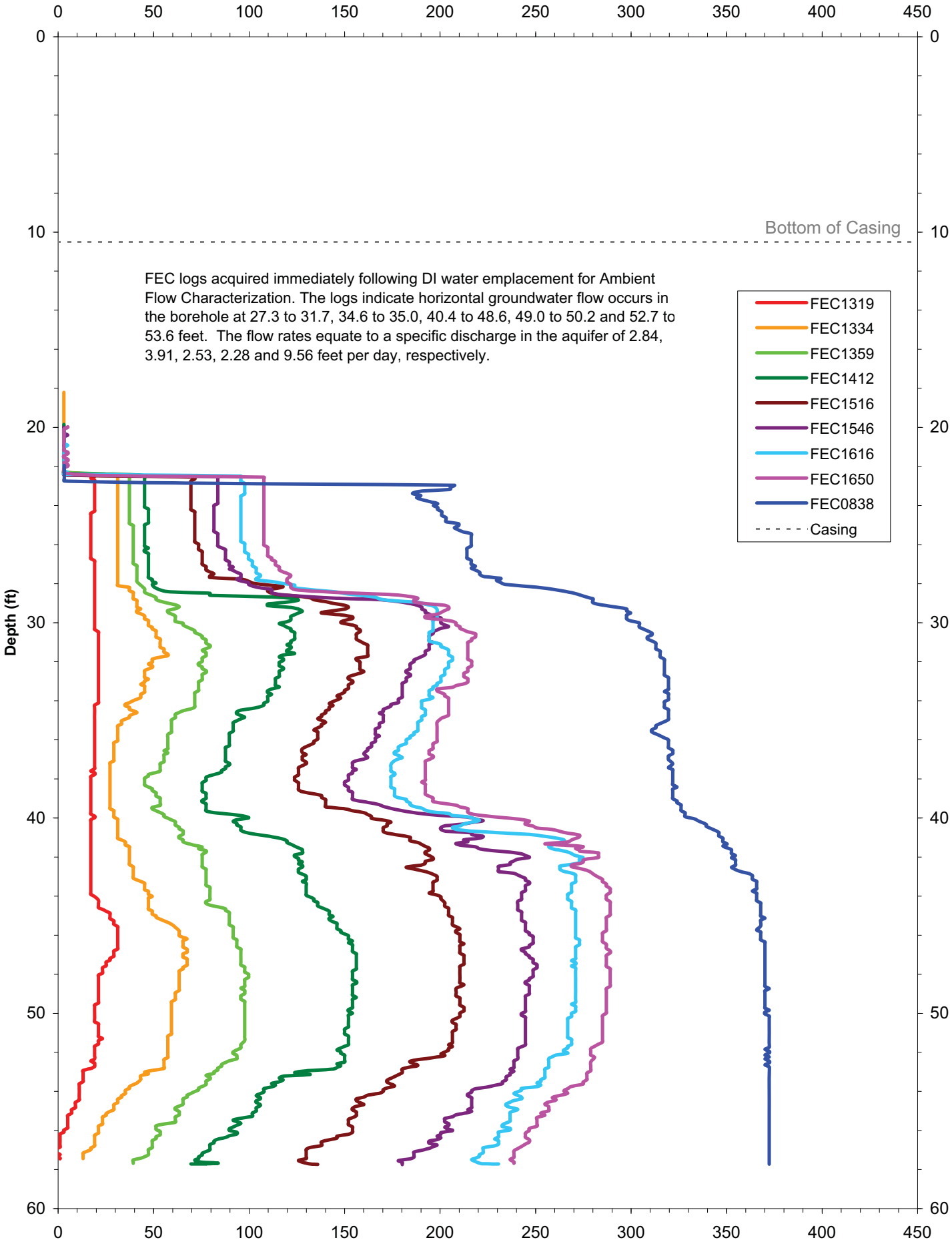
The data acquired in DW-1 exhibited dissimilar interval-specific transmissivity but similar FEC estimates. The televiewers identified high-angle fractures with aperture and the WSP registered pressure correlations above and below several tested intervals. The data strongly suggest the fractures are vertically inter-connected in the immediate vicinity of the wellbore. Please see Table DW-1:1 for a summary of the HydroPhysical™ and geophysical logging results which includes the locations, flow rates and transmissivity and hydraulic conductivity estimates assessed by COLOG.

FIGURE DW-1:1. Ambient Temperature And Fluid Electrical Conductivity; Weston Solutions; MEFUDS; LO-58; Caribou, ME; Wellbore: DW-1



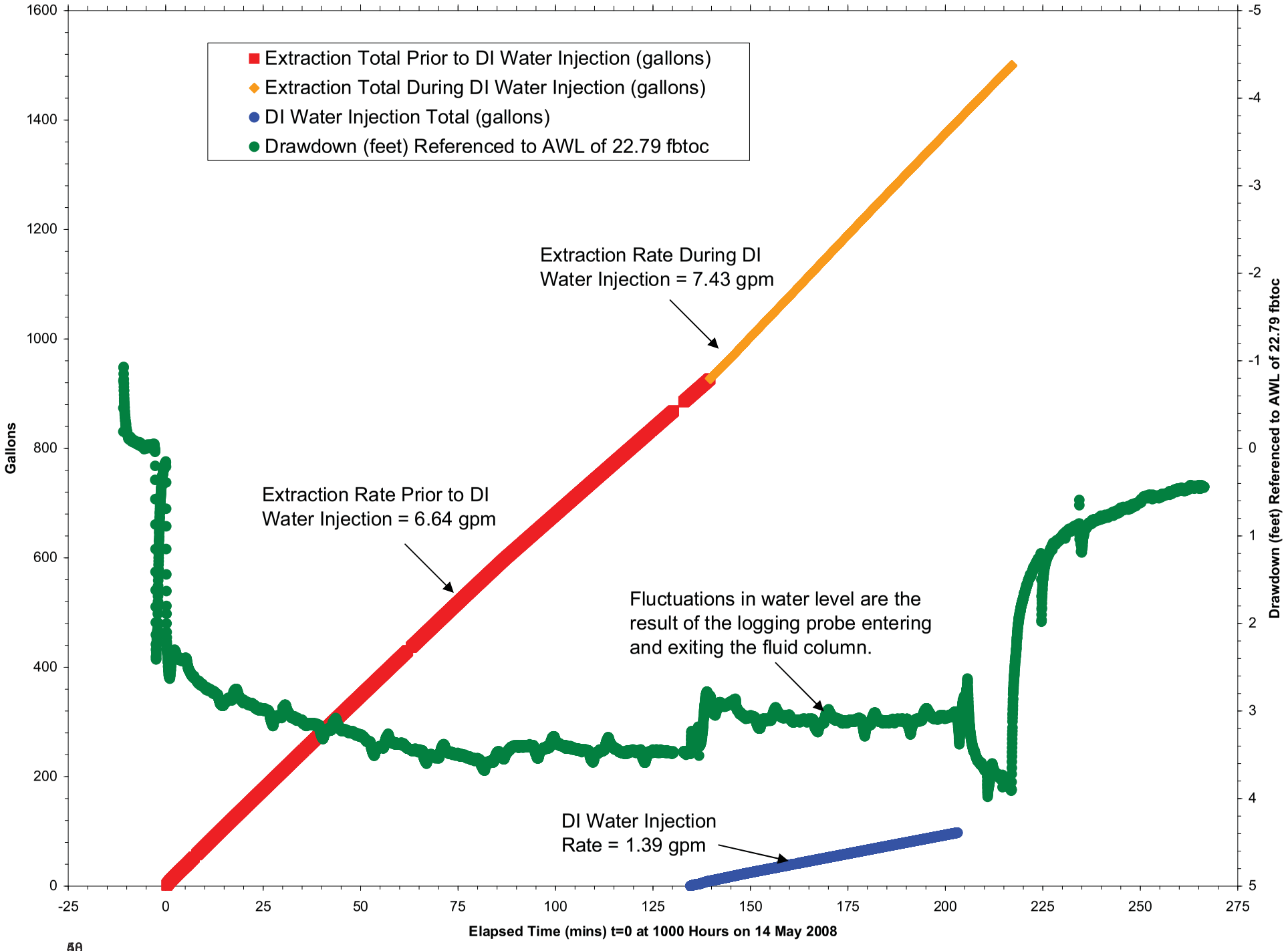
DW-1-fig1.xls

FIGURE DW-1:2. Summary of Hydrophysical Logs During Ambient Flow Characterization; Weston Solutions; MEFUDS; LO-58; Caribou, ME; Wellbore: DW-1



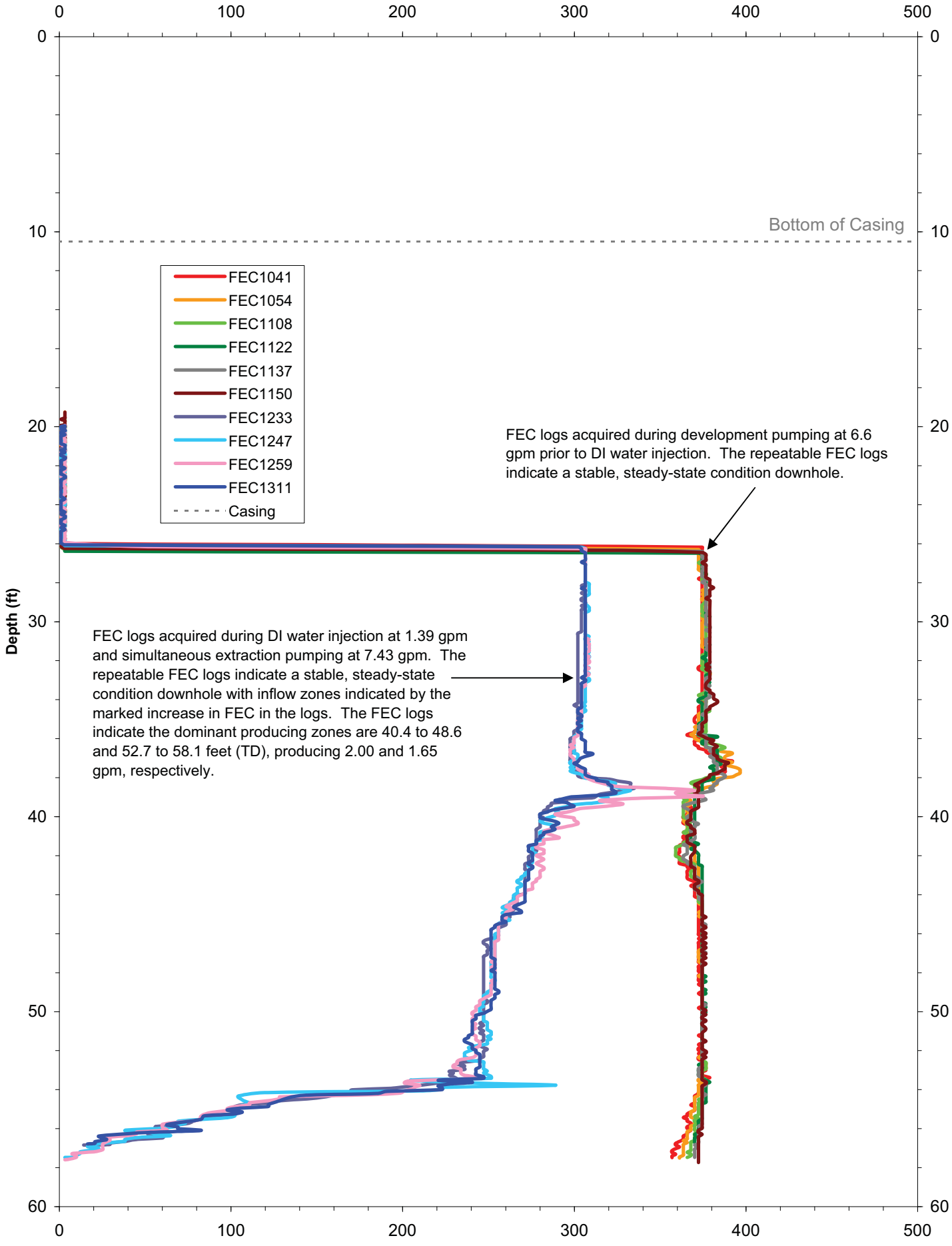
DW-1-fig2.xls

FIGURE DW-1:3. Pumping And Drawdown Data During 6 GPM Production Test; Weston Solutions; MEFUDS; LO-58; Caribou, ME; Wellbore: DW-1



DW-1-fig3.xls

FIGURE DW-1:4. Summary of Hydrophysical Logs 6 GPM Hydrophysical Production Test; Weston Solutions; MEFUDS; LO-58; Caribou, ME; Wellbore: DW-1



DW-1-fig4.xls

Table DW-1:1. Summary Of HydroPhysical™ Logging Results With Hydraulic Conductivity And Transmissivity Estimations; Weston Solutions; MEFUDS; LO-58; Caribou, ME; Wellbore: DW-1

Well Name	DW-1
Ambient Depth to Water (ftbtoc)	22.79
Diameter of Borehole (ft)	0.52
Maximum Drawdown (ft)	3.11
Effective Radius (ft)	300

Interval No.	Top of Interval (ft)	Bottom of Interval (ft)	Length of Interval (ft)	Ambient Flow[1] (gpm)	Darcy Velocity in Aquifer[2] (Specific Discharge) (ft/day)	Interval Specific Flow Rate During Pumping (gpm)	Delta Flow[3] (gpm)	Delta Flow (ft^3/min.)	Interval Specific Hydraulic Conductivity[4] (ft/day)	Transmissivity (ft2/day)	Interval Specific Fluid Electrical Conductivity (microS/cm)
1	27.3	31.7	4.4	0.085	2.84	0.207	0.123	0.016	1.93E+00	8.51E+00	376
2	34.6	35.0	0.4	0.011	3.91	0.195	0.184	0.025	3.20E+01	1.28E+01	376
3	37.4	38.4	1.0	0.000	0.00	0.745	0.745	0.100	5.18E+01	5.18E+01	428
4	40.4	48.6	8.2	0.140	2.53	2.00	1.860	0.249	1.58E+01	1.29E+02	357
5	49.0	50.2	1.2	0.018	2.28	0.416	0.398	0.053	2.30E+01	2.76E+01	375
6	52.7	53.6	0.9	0.058	9.56	1.65	1.592	0.213	1.23E+02	1.11E+02	375
7	54.4	58.1	3.7	0.000	0.00	0.838	0.838	0.112	1.57E+01	5.82E+01	375

[1] Horizontal flow is identified in this borehole under ambient conditions.

[2] Darcy Velocity is calculated using the observed volumetric flow rate, the cross-sectional area of the flow interval in the wellbore and a wellbore convergence factor of 2.5 (Drost, 1968). The Darcy Velocity is only applicable to ambient horizontal flow

[3] Delta Flow is the difference between Interval-Specific Flow Rate (during pumping) and Ambient Flow Rate.

[4] Hydraulic conductivity and transmissivity estimates are based on single well drawdown data, a porus-medium equivilent model and Hvorslev's 1951 porosity equatior

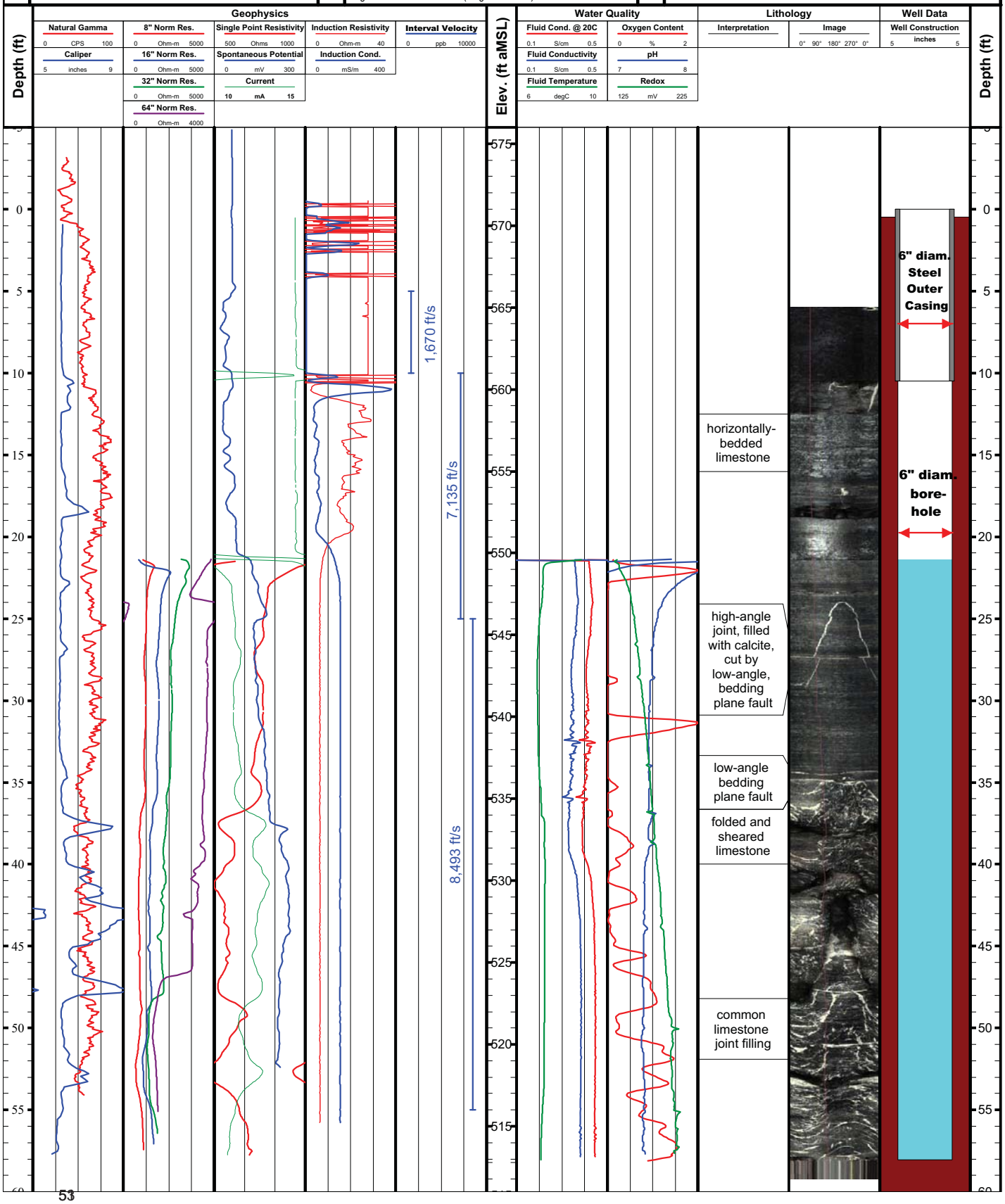
NA - Not Applicable

Project: LO-58	**Well ID:** DW-01 (AMAC Well)	**Date Logged:** 11-20 May 08
Location: Aroostook County, Caribou, ME	**Log Ref.:** Top Steel Casing	**Hole Diameter:** 6" nom. to TD
Depth Logger: 58.1 ft	**Log Ref. Elev.:** ~573 ft above MSL	**Csg Size/Type:** 6" Steel
Depth Driller: No Data	**Recorded by:** G. Bauer	**Witnessed by:** J. Schmidl

LOGS & TOOLS: See Individual Logs

COMMENTS: Ground Elevation: ~571ft. aMSL.
Natural Gamma log includes K, U, and Th.
Water Quality logs performed under ambient conditions.
Ambient Water Level about 21.4 ft (20.9 ft bgs).
Logs relative to Truth North (mag dec = 20W)

COMMENTS: All depths here referenced to top steel casing unless noted otherwise.
Measured casing stick up above ground surface: 0.5 ft.
Steel outer casing total depth 10.5 ft, estimated from image log.



Project: LO-58	**Well ID:** DW-01 (AMAC Well)	**Date Logged:** 11-20 May 08
Location: Aroostook County, Caribou, ME	**Log Ref.:** Top Steel Casing	**Hole Diameter:** 6" nom. to TD
Depth Logger: 58.1 ft	**Log Ref. Elev.:** ~573 ft above MSL	**Csg Size/Type:** 6" Steel
Depth Driller: No Data	**Recorded by:** G. Bauer	**Witnessed by:** J. Schmidl

LEGEND

Tadpoles at depth of planar structure, pointing towards strike, and centered on dip. Projections corresponding to each tadpole shown in adjacent column.

Structure Tadpoles

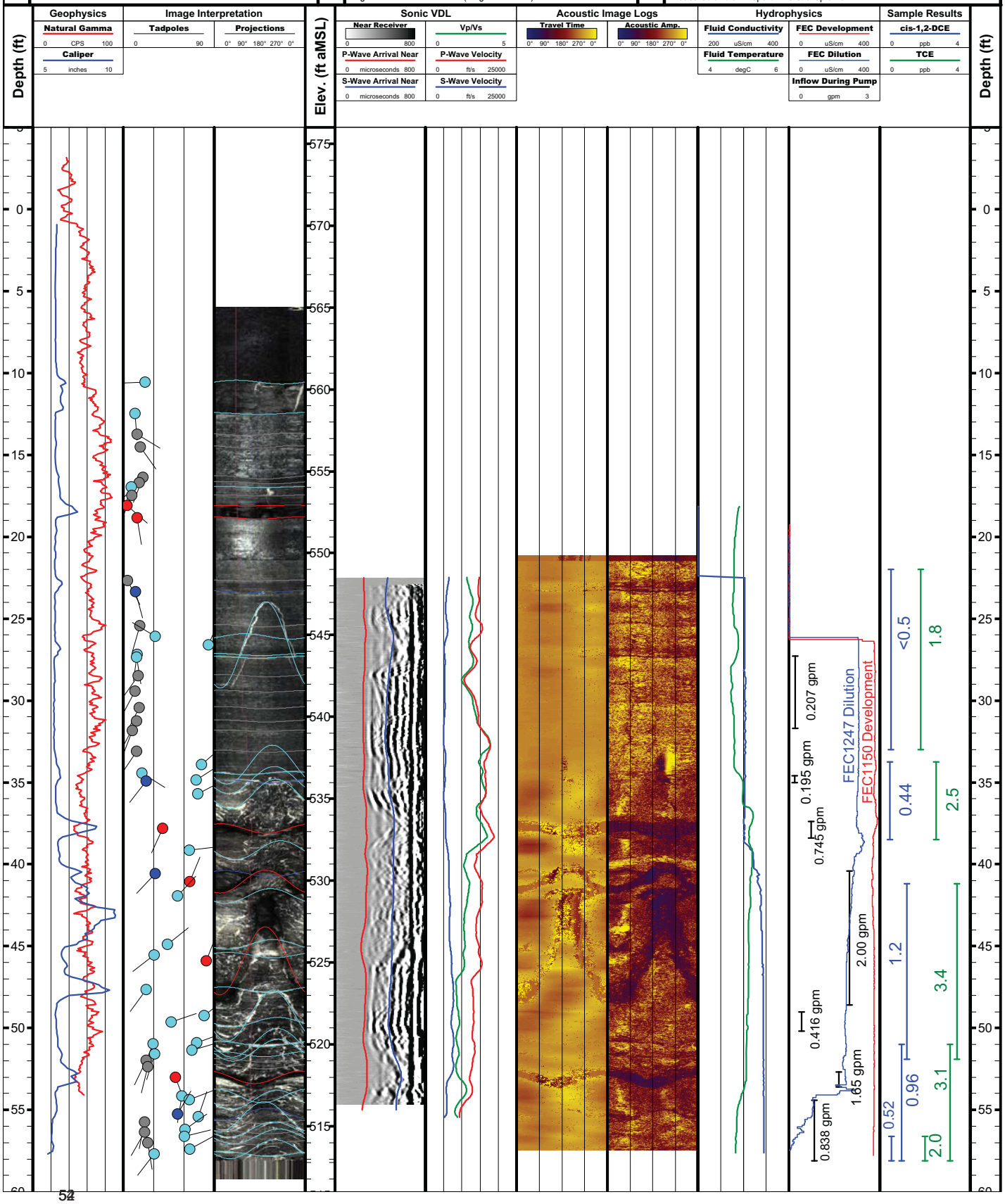
- Partial Fracture
- Healed Fracture/Bedding Plane
- Complete Fracture
- Open Fracture
- Wide Fracture/Multiple Fractures
- Washout/Wide Fracture Zone

COMMENTS

Ground Elevation: ~571 ft. aMSL.
Natural Gamma log includes K, U, and Th.
Water Quality logs performed under ambient conditions.
Ambient Water Level about 21.4 ft (20.9 ft bgs).
Logs relative to Truth North (mag dec = 20W)

COMMENTS

All depths here referenced to top steel casing unless noted otherwise.
Measured casing stick up above ground surface: 0.5 ft.
Steel outer casing total depth 10.5 ft, estimated from image log.
Other well Consturction info taken directly from drilling report.
Measured and drill report PVC stickup differ.



Optical Televiewer Image Plot - True North

COLOG Main Office
810 Quail Street, Suite E, Lakewood, CO 80215
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www.colog.com

COMPANY: Weston Solutions | PROJECT: LO-58

DATE LOGGED: 12 May 2008 | WELL: DW-01 (AMAC Well)

3-Arm Caliper

5 inches 13

Projections

0° 90° 180° 270° 0°

Tadpoles

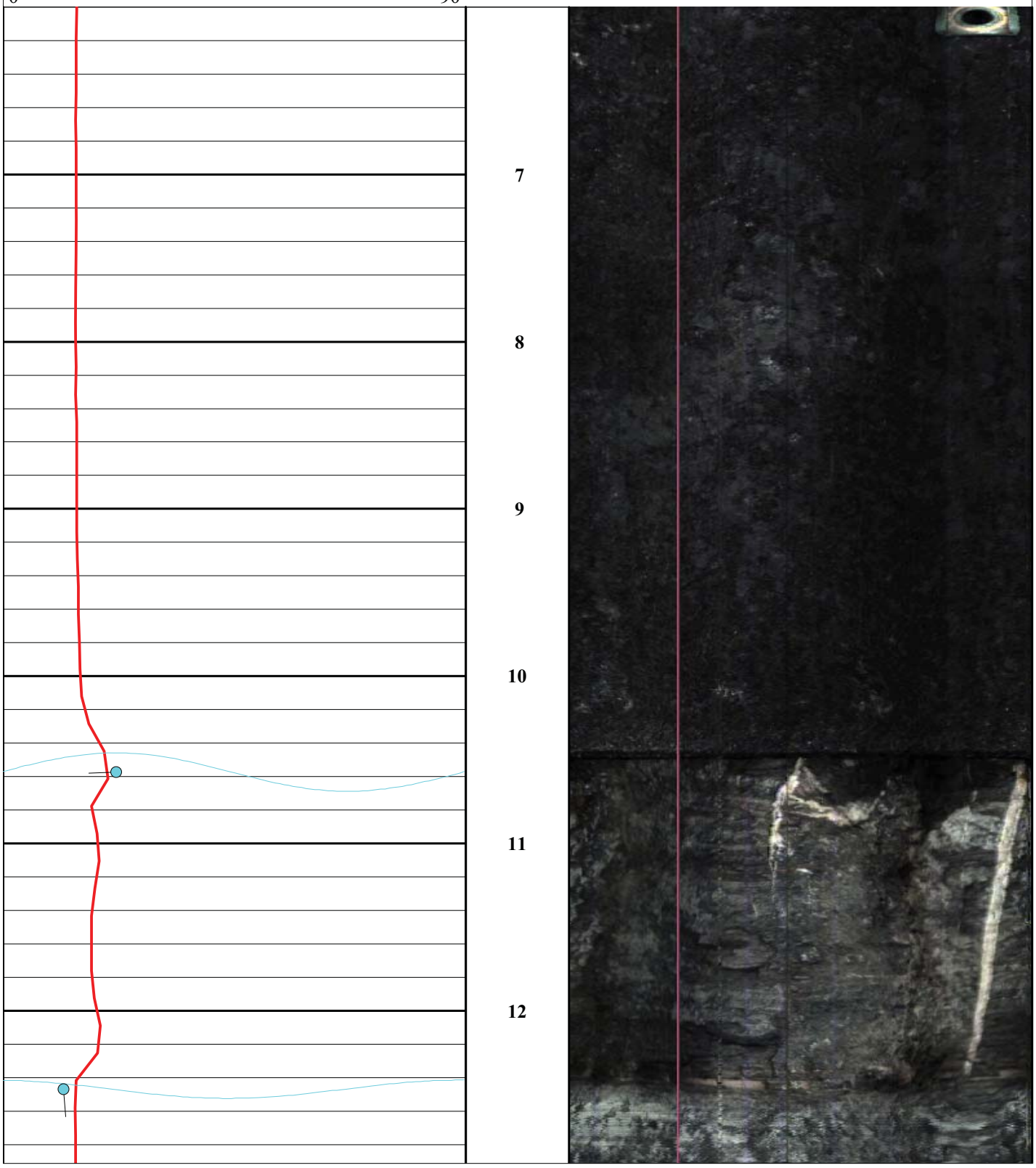
0 90

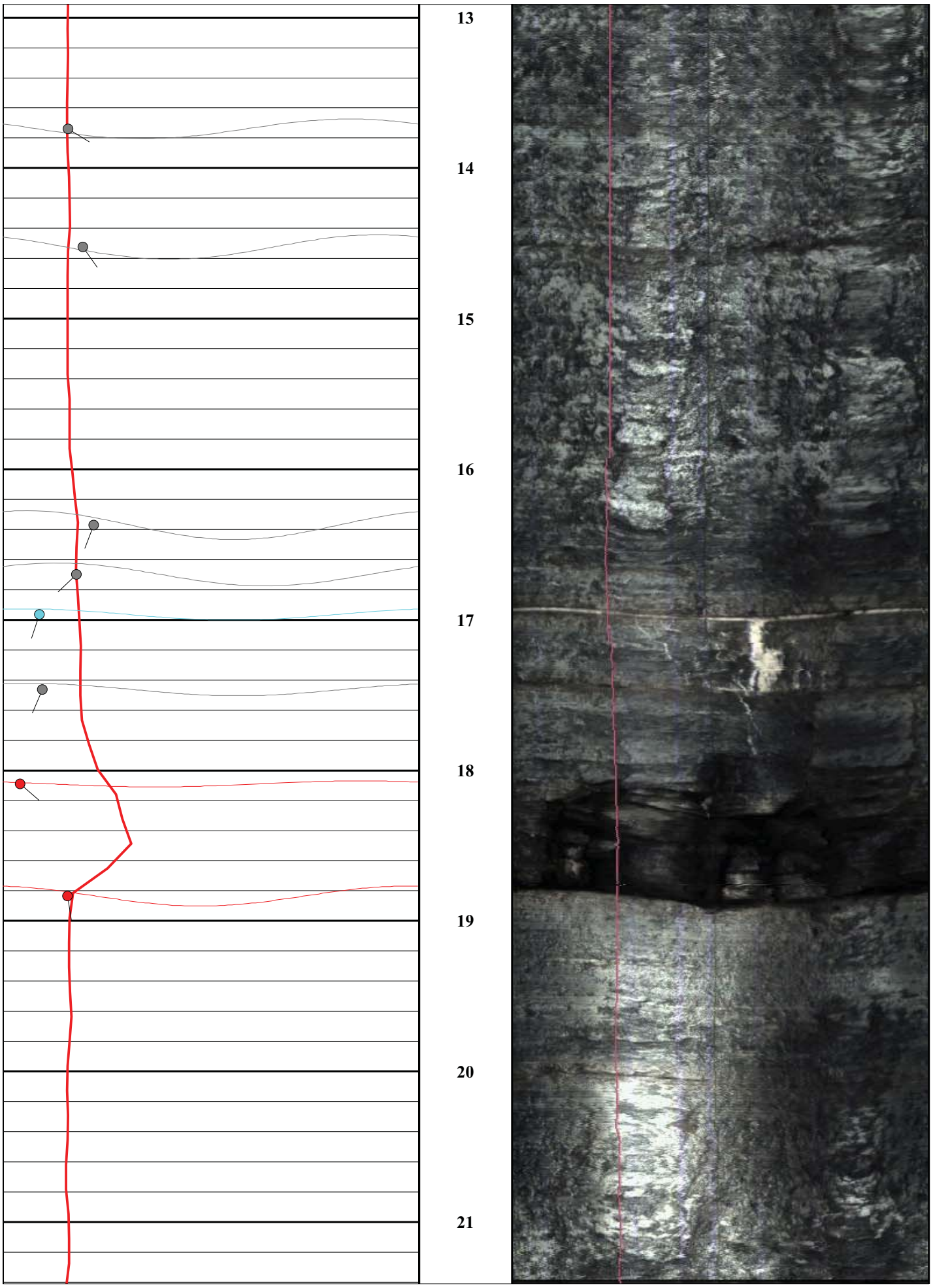
Depth

1ft:10ft

Optical Televiewer Image

0° 90° 180° 270° 0°

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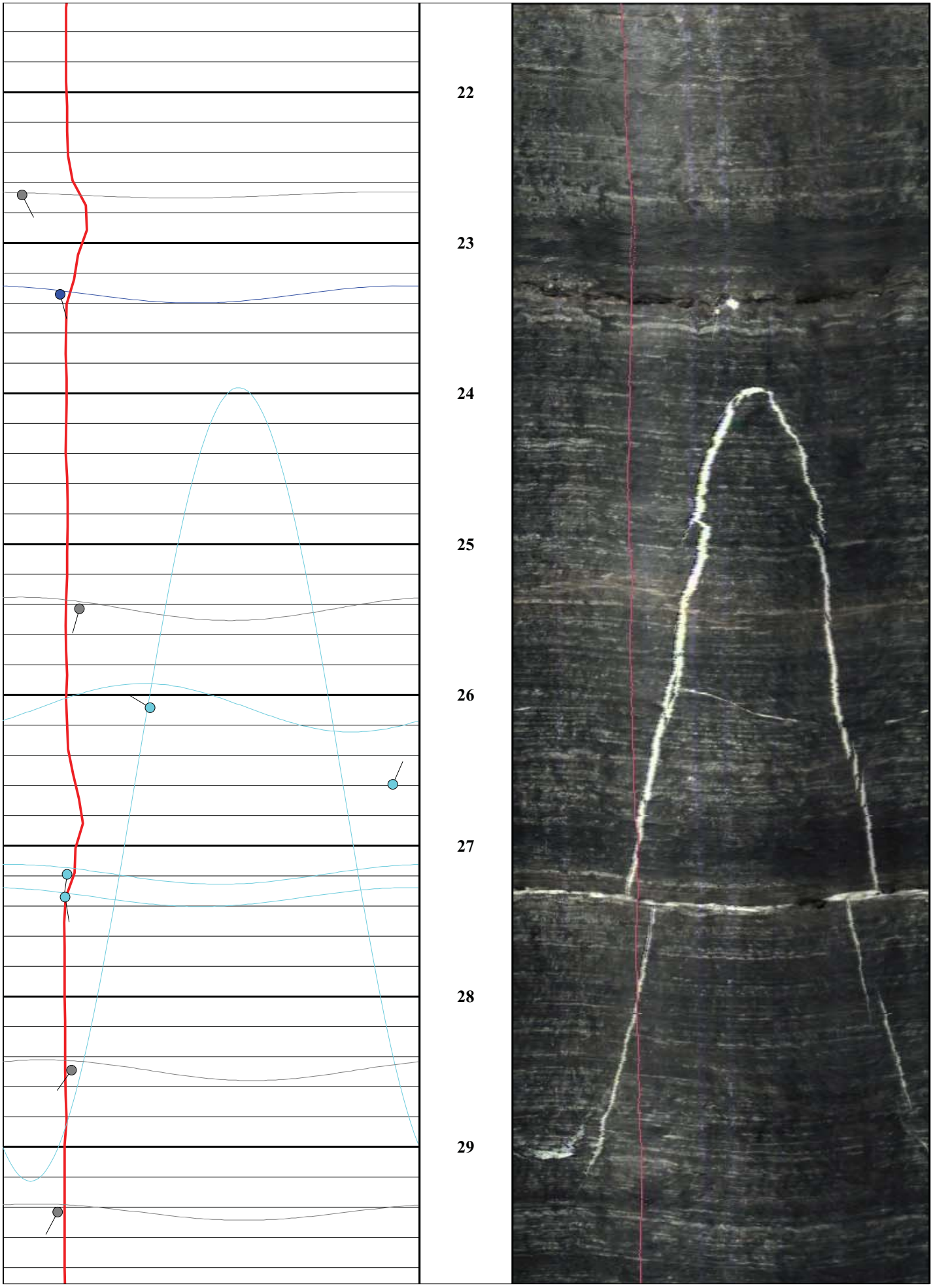
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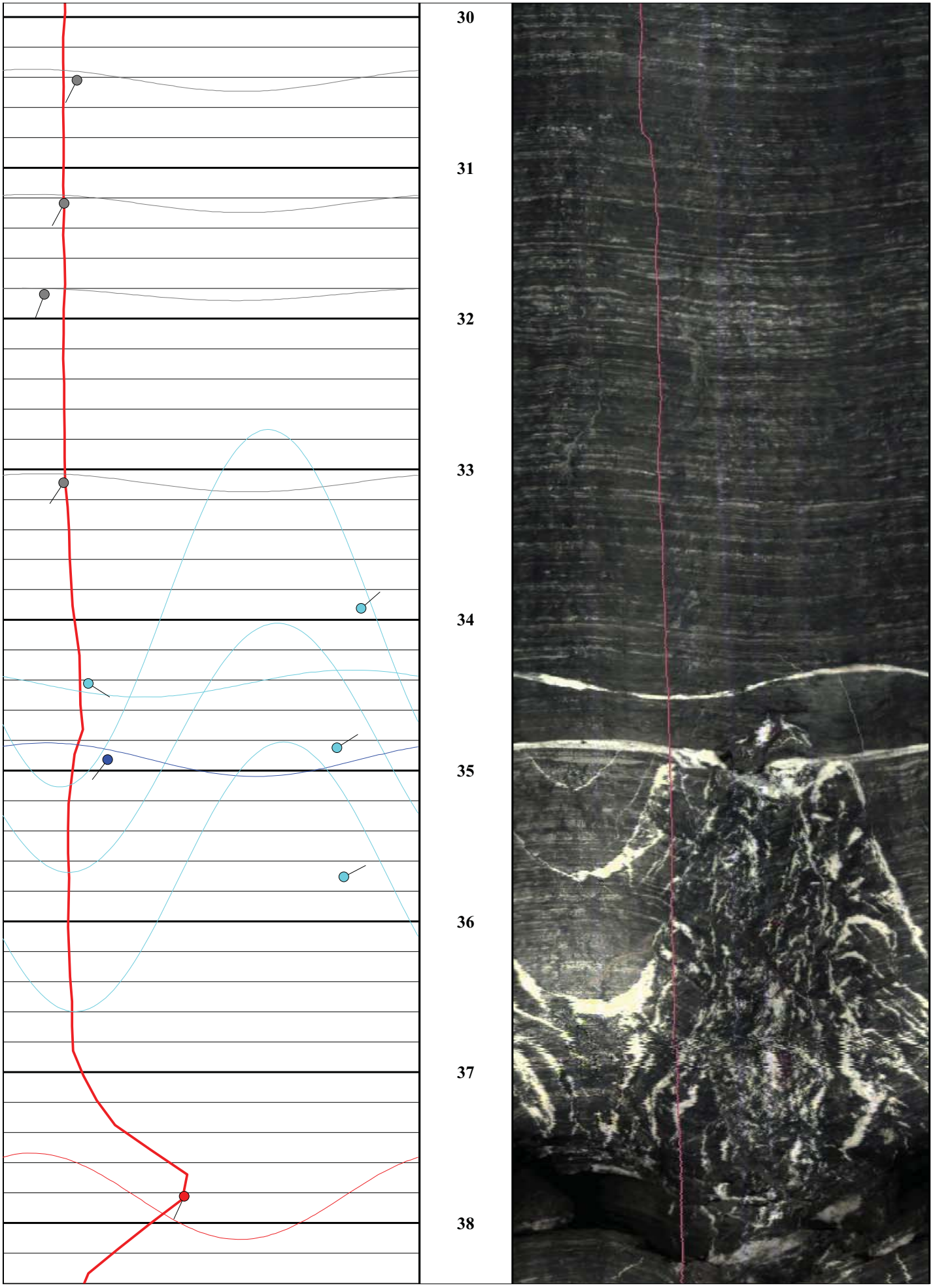
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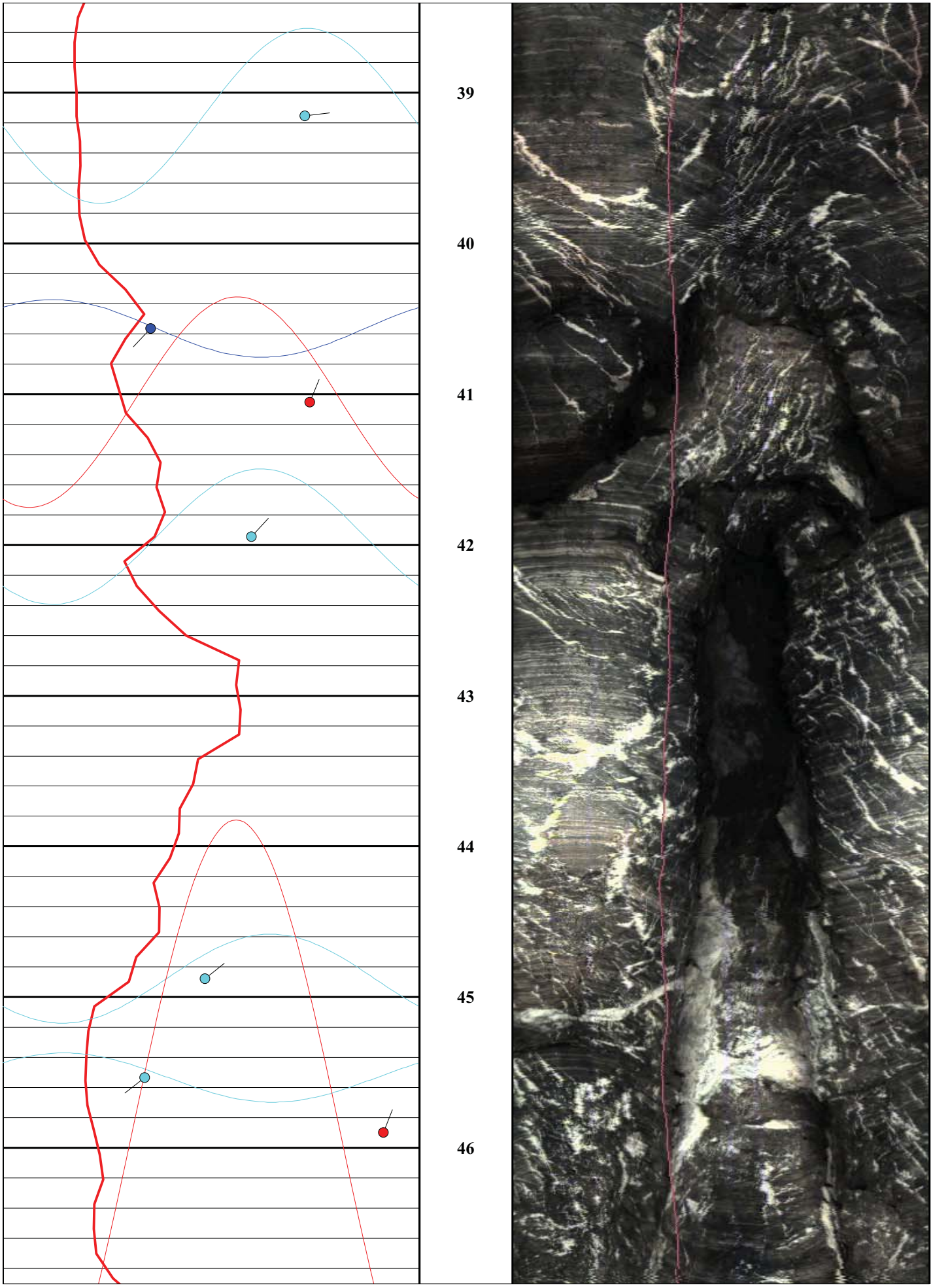
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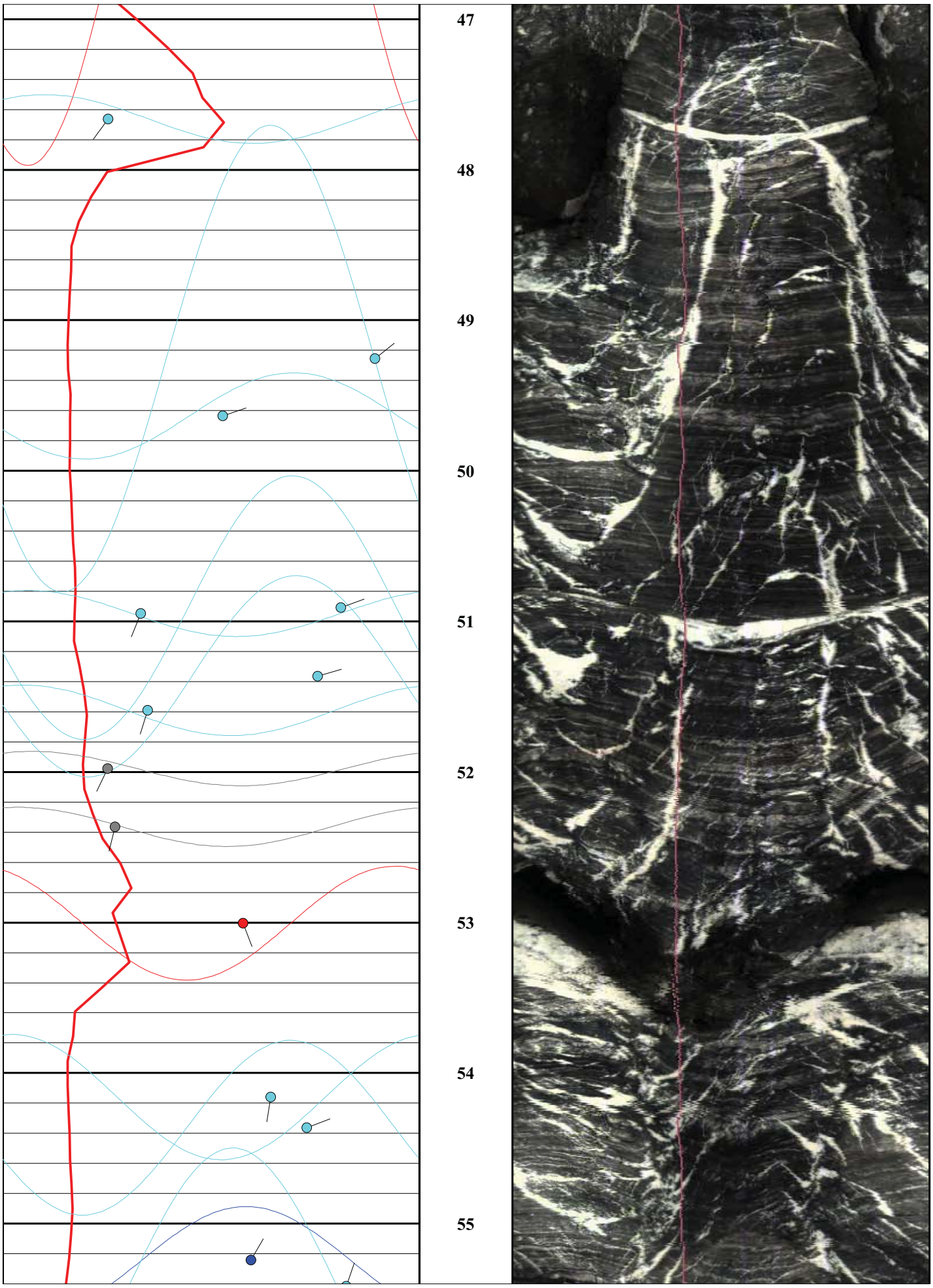
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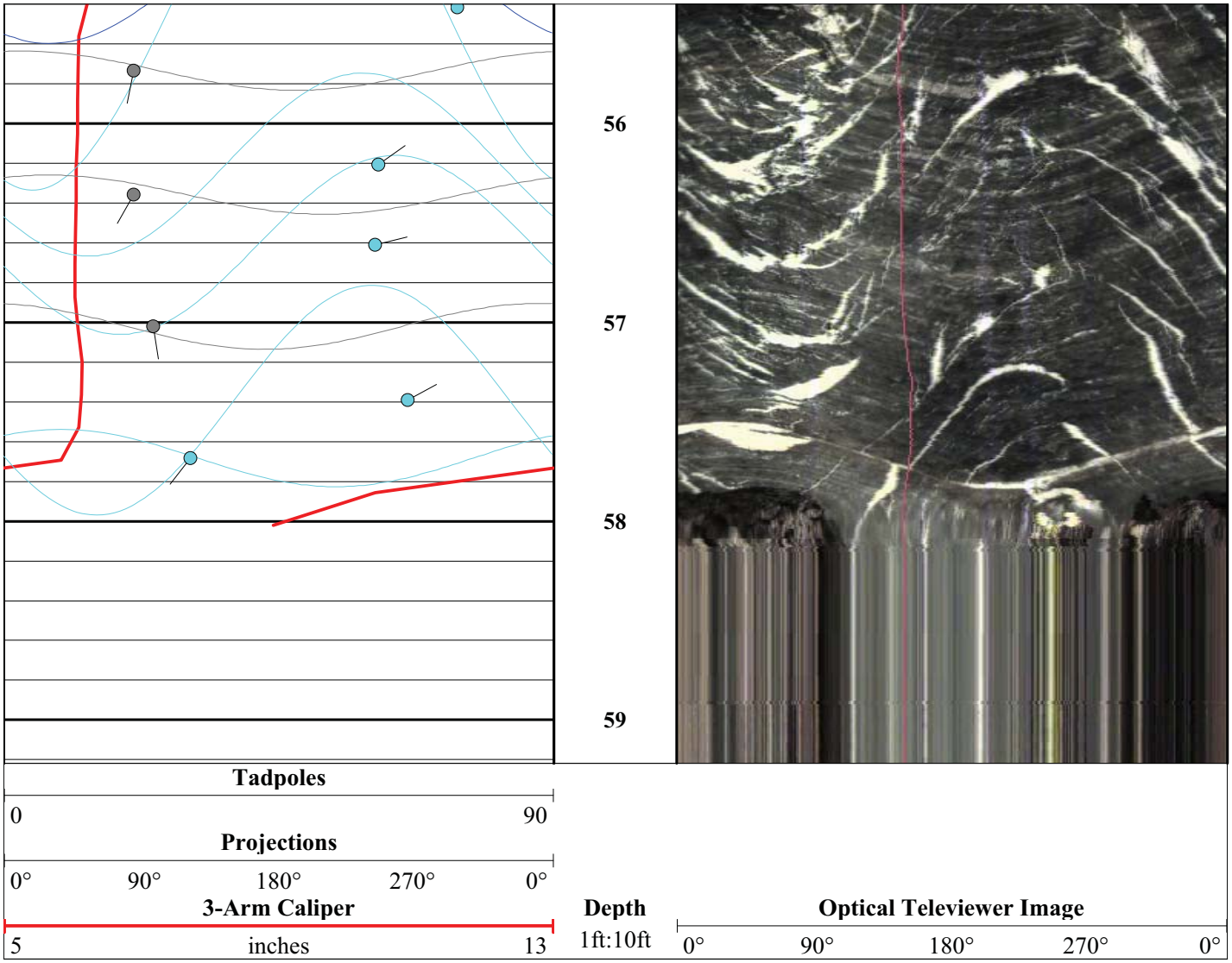
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3-Arm Caliper
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inches
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Depth
1ft:10ft
Optical Televiewer Image
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90°
180°
270°
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Acoustic Televiewer Image Plot

COLOG Main Office
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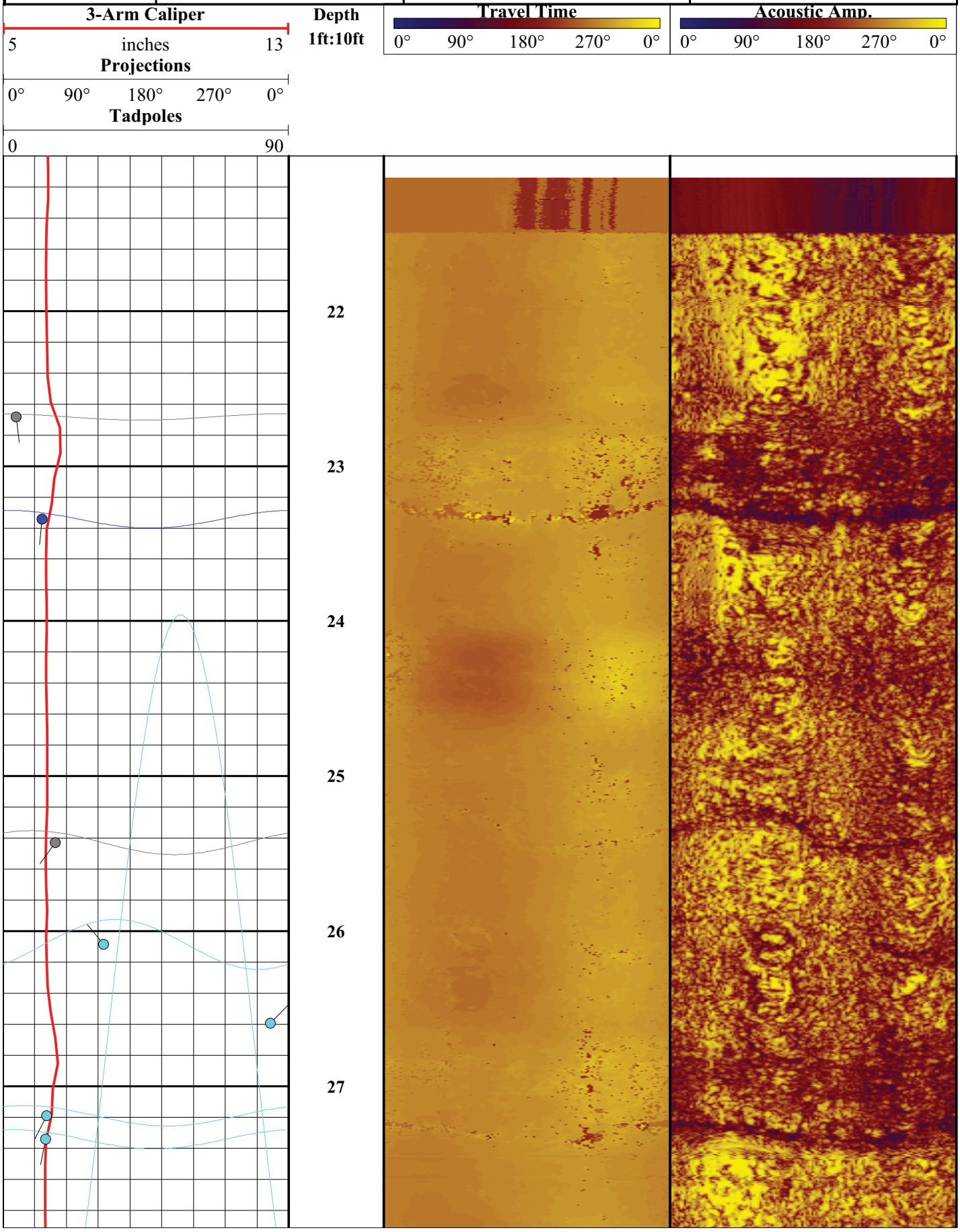
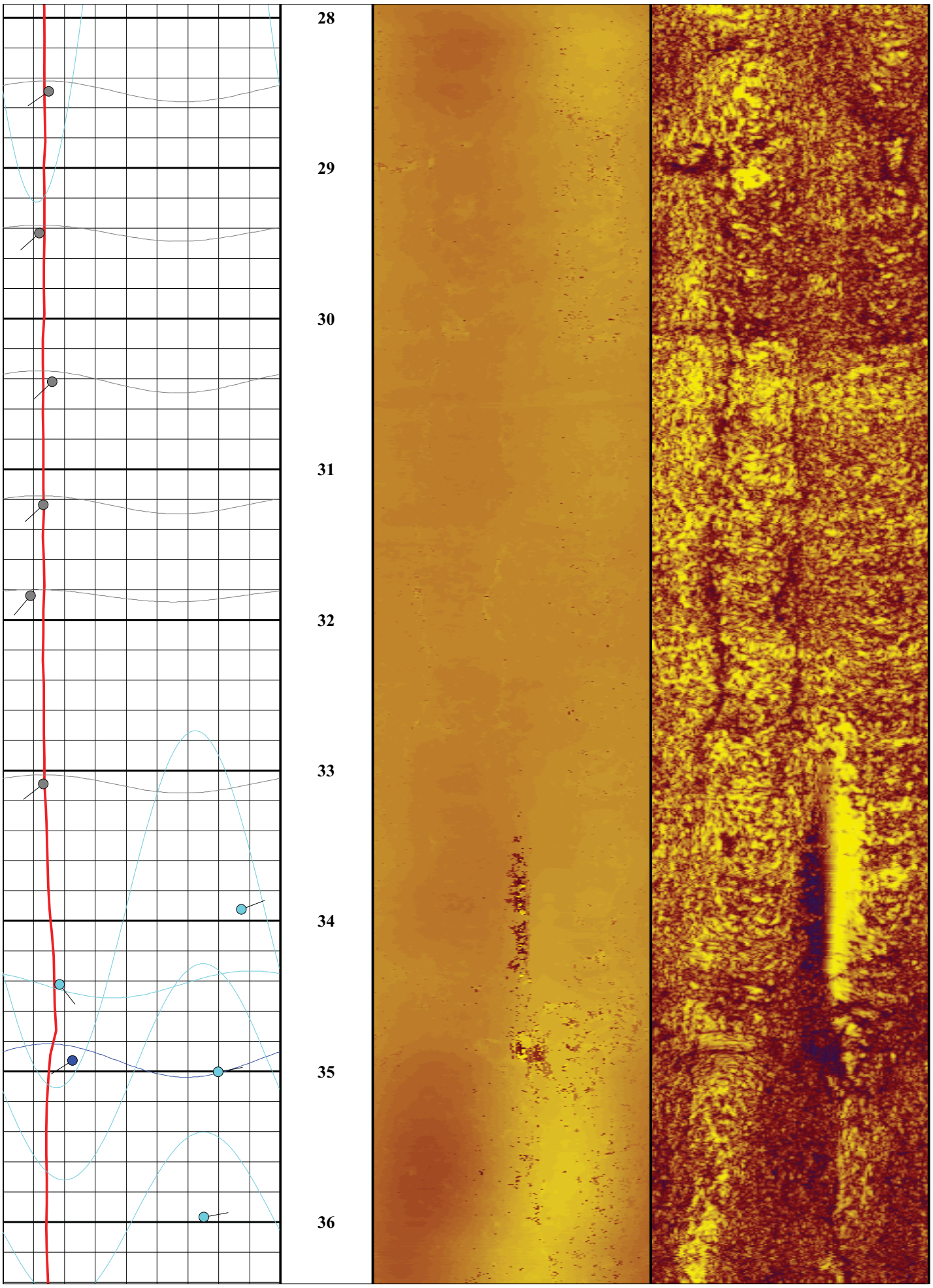
COMPANY: Weston Solutions
PROJECT: LO-58
DATE LOGGED: 11 May 2008
WELL: DW-1

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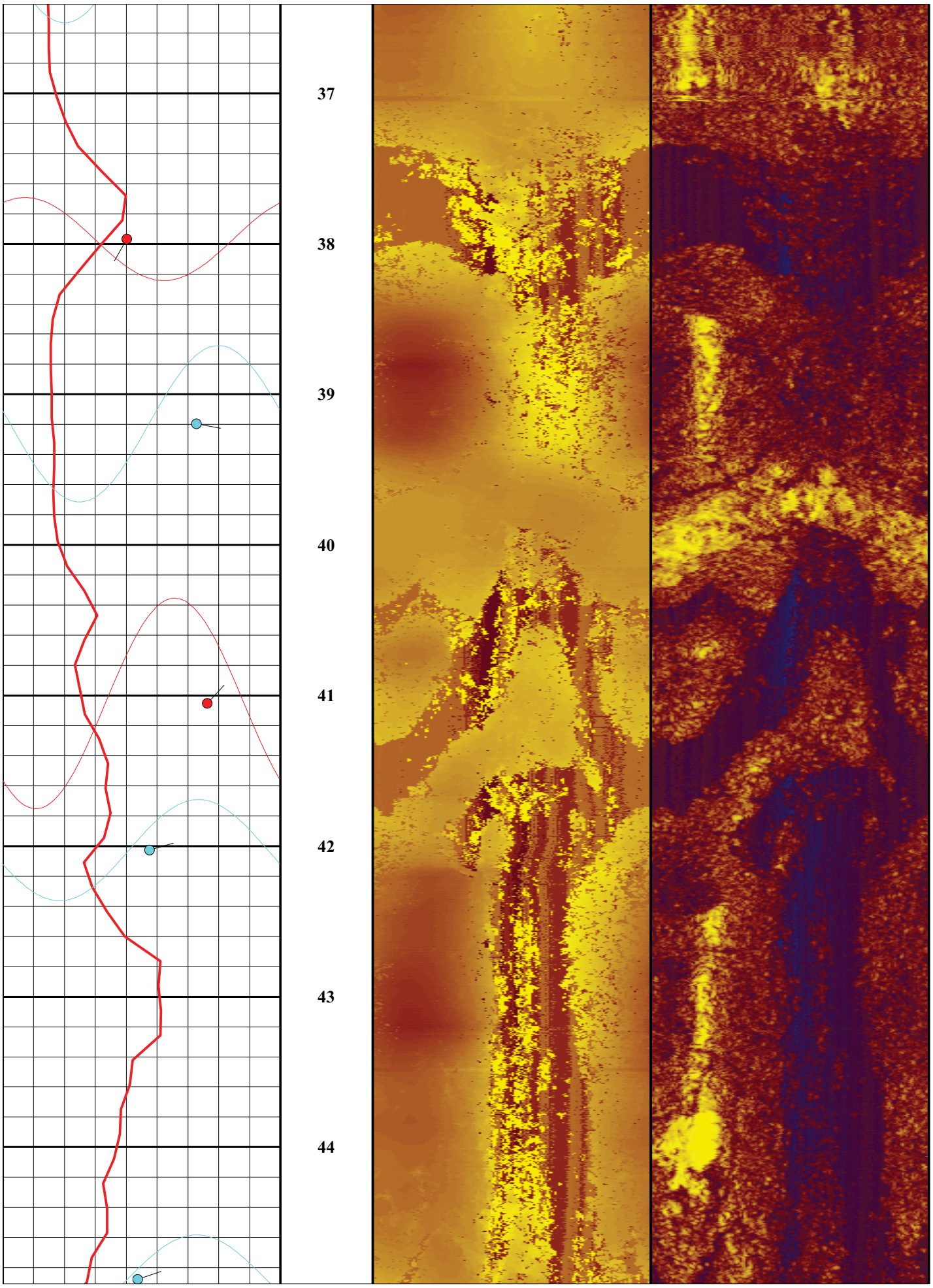
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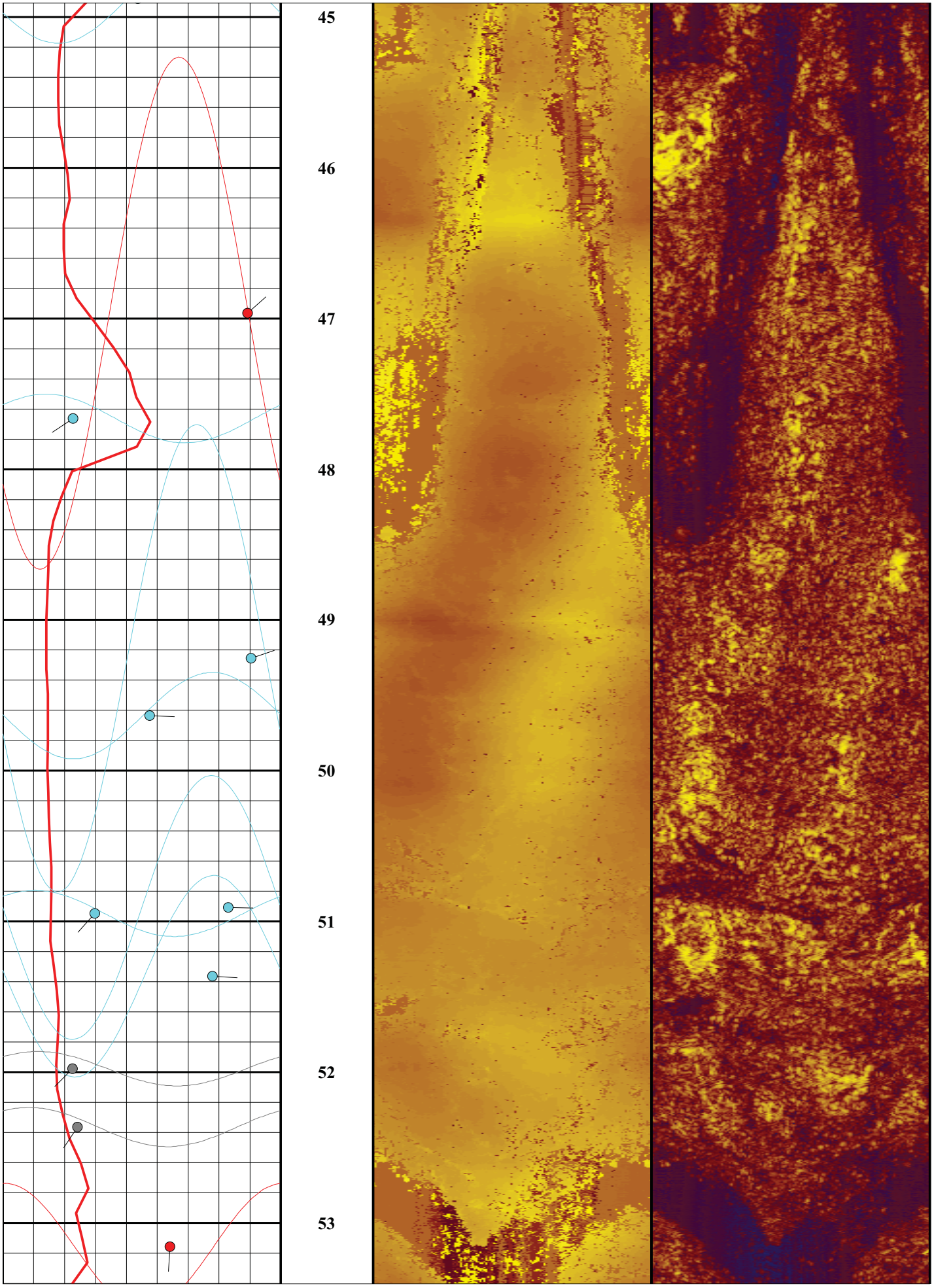
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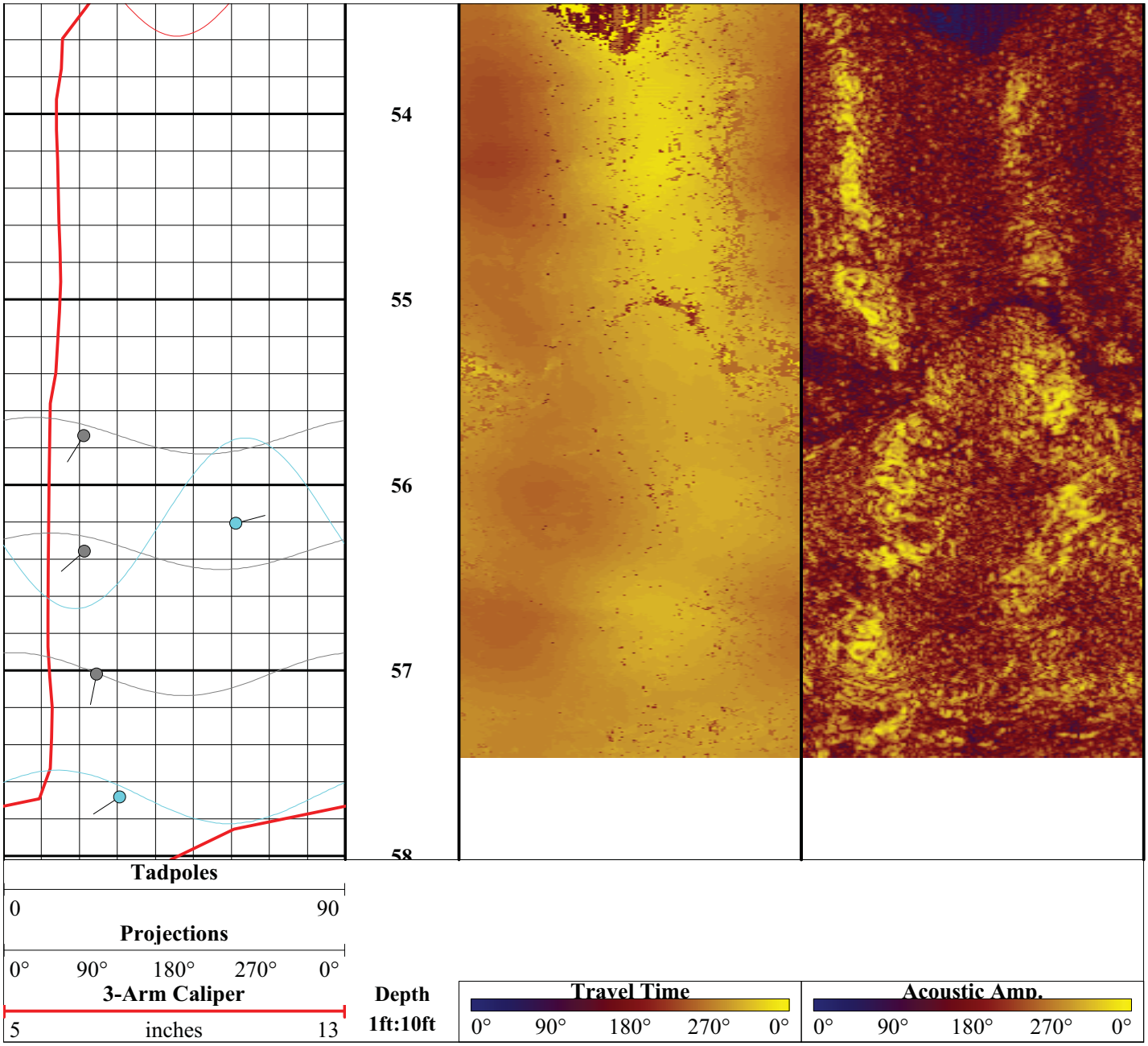
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Tadpoles
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Projections
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inches
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Depth
1ft:10ft
Travel Time
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Acoustic Amp.
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Figure DW-1:5. Rose Diagram of Optical Televiewer Features
Weston Solutions
MEFUDS; LO-58
Wellbore: DW-1
May 11, 2008

Dip Direction

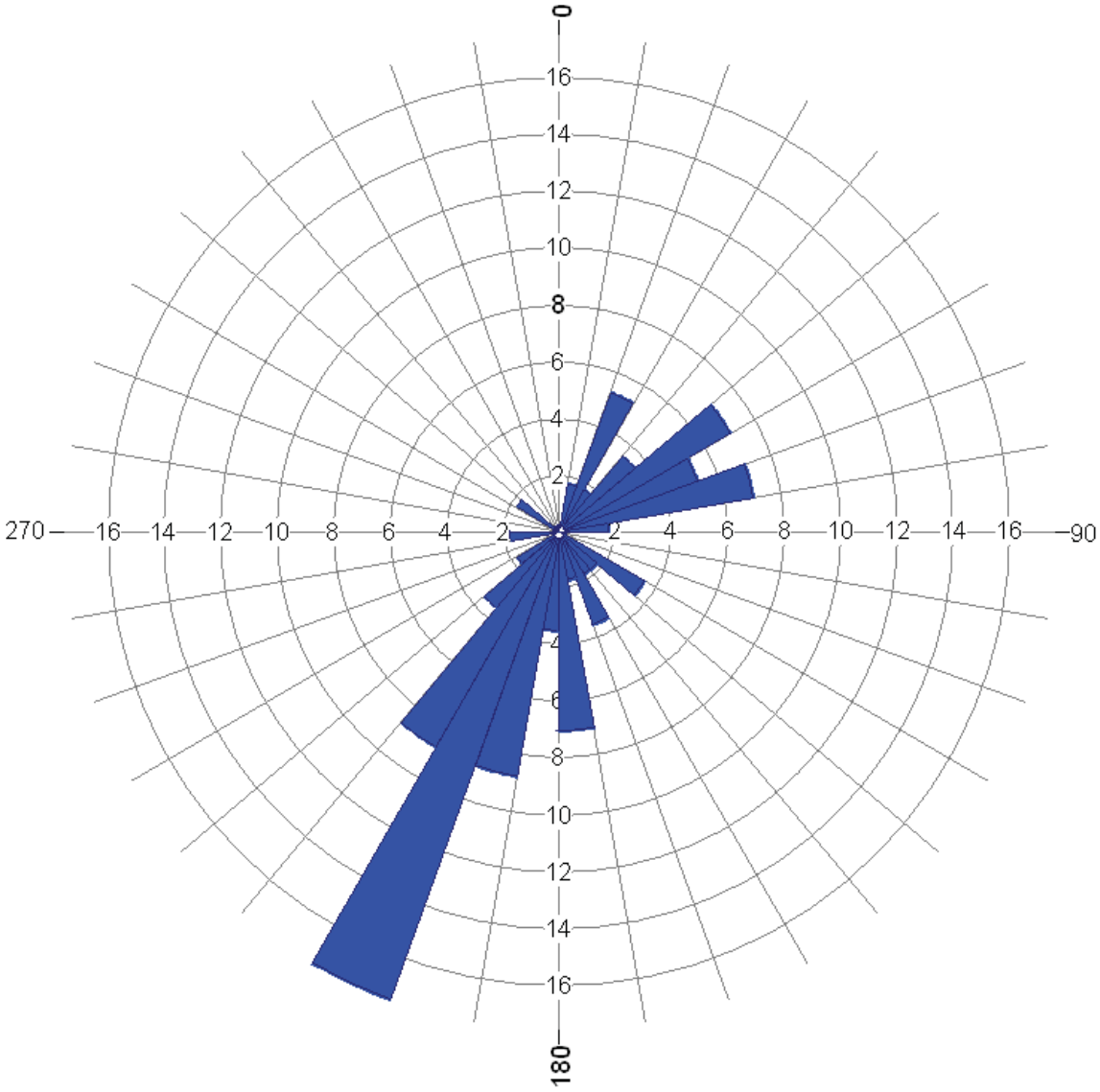


Figure DW-1:6. Rose Diagram of Optical Televiewer Features
Weston Solutions
MEFUDS; LO-58
Wellbore: DW-1
May 11, 2008

Dip Angles

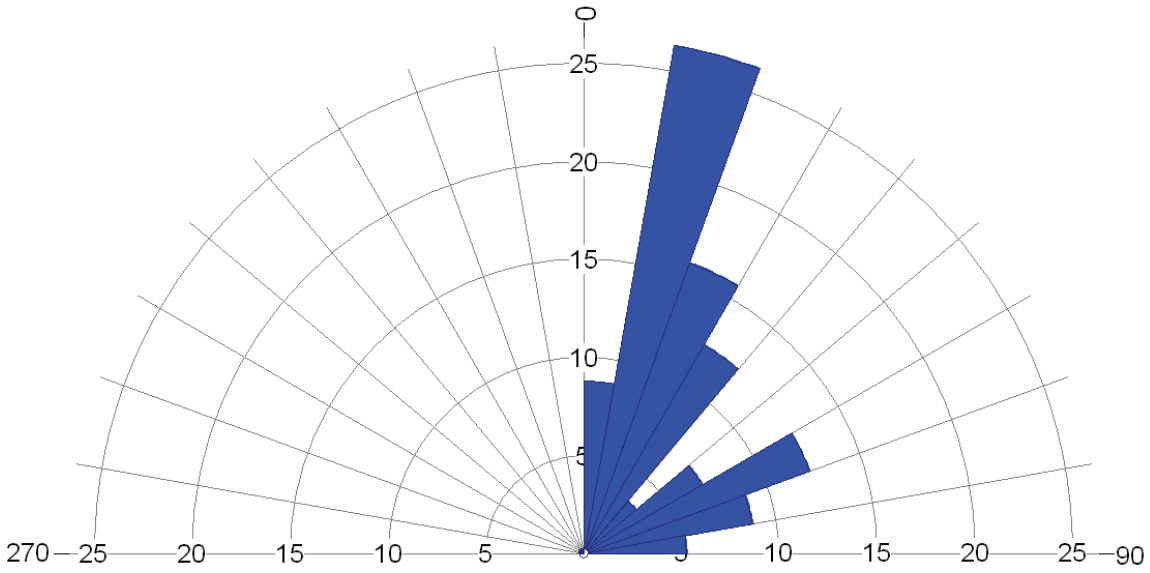


Figure DW-1:7. Stereonet of Optical Televiewer Features
Weston Solutions
MEFUDS; LO-58
Wellbore: DW-1
May 11, 2008

Schmidt Projection with Contours

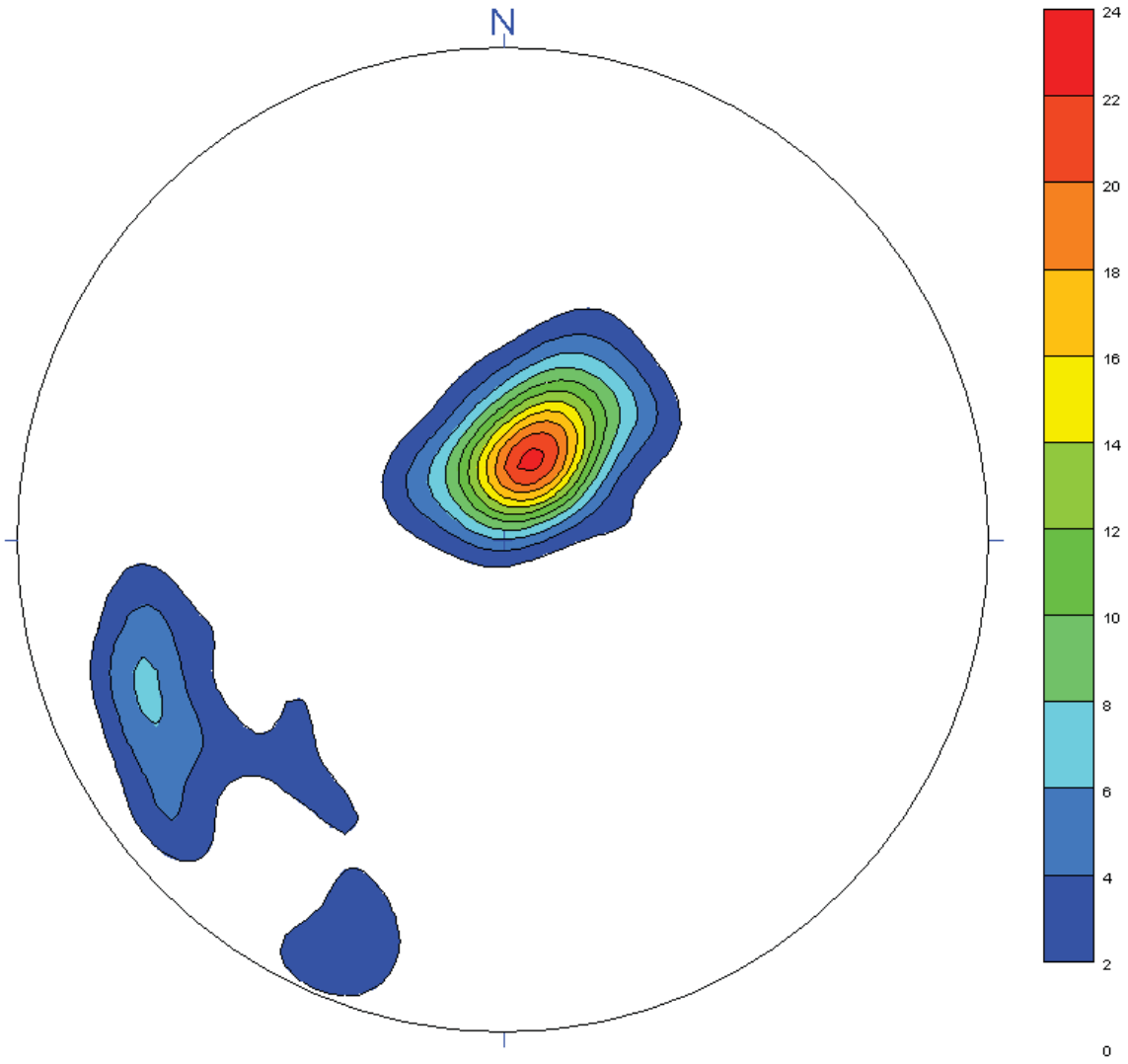


Figure DW-1:8. Stereonet of Optical Televiewer Features
Weston Solutions
MEFUDS; LO-58
Wellbore: DW-1
May 11, 2008

Schmidt Projection with Feature Ranks

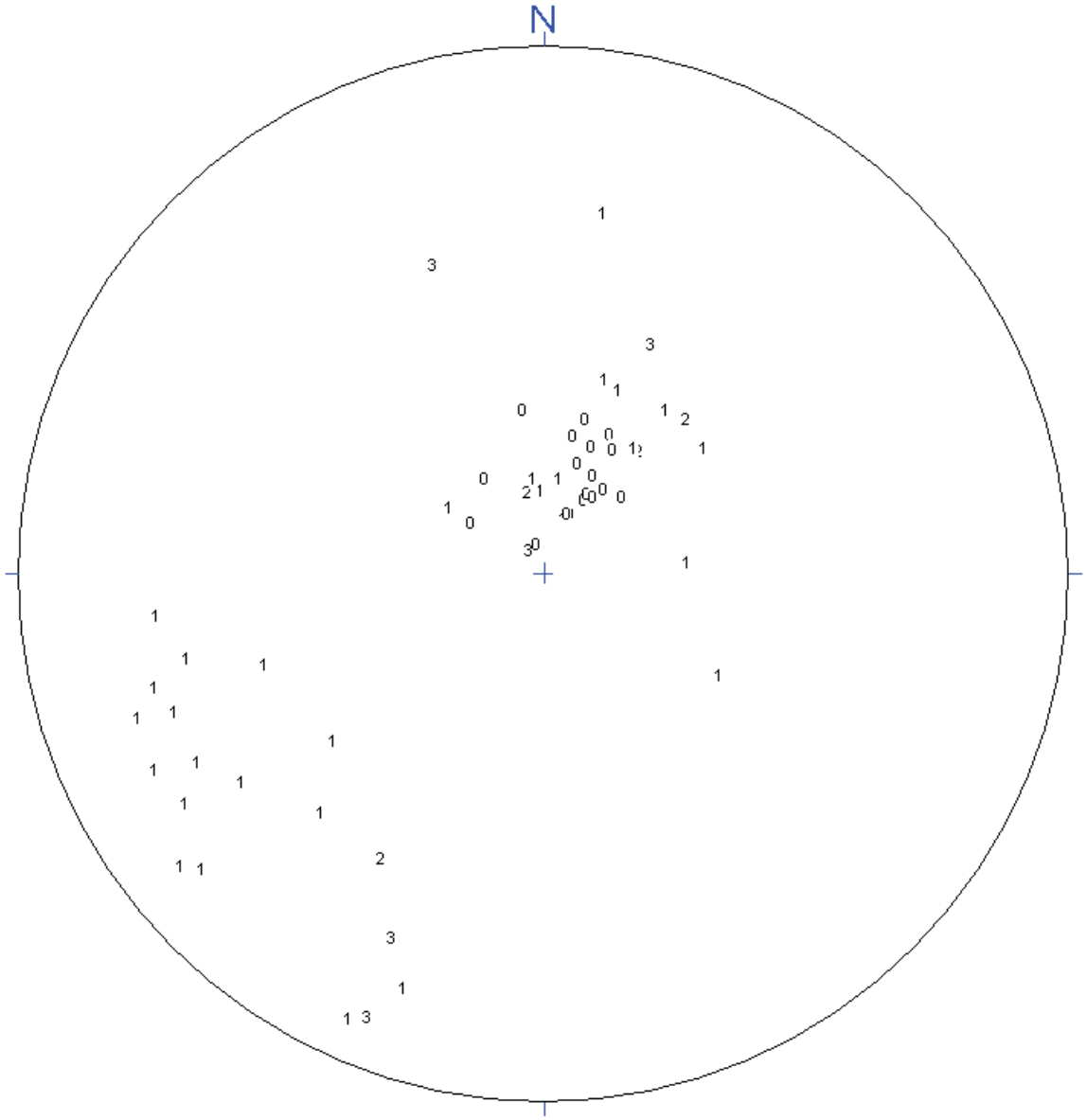


Table DW-1:2. Orientation Summary Table
Image Features
Weston Solutions
LO-58;
Wellbore: DW-1
May 11, 2008

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
1	3.22	10.6	268	22	1
2	3.80	12.5	175	12	1
3	4.19	13.7	120	14	0
4	4.43	14.5	144	17	0
5	4.99	16.4	200	20	0
6	5.09	16.7	227	16	0
7	5.17	17.0	199	8	1
8	5.32	17.5	203	9	0
9	5.51	18.1	130	4	3
10	5.74	18.8	171	14	3
11	6.91	22.7	153	4	0
12	7.11	23.3	165	12	2
13	7.75	25.4	196	17	0
14	7.95	26.1	302	32	1
15	8.11	26.6	24	84	1
16	8.29	27.2	187	14	1
17	8.33	27.3	171	14	1
18	8.68	28.5	215	15	0
19	8.97	29.4	208	12	0
20	9.27	30.4	206	16	0
21	9.52	31.2	208	13	0
22	9.70	31.8	200	9	0
23	10.09	33.1	213	13	0
24	10.34	33.9	49	77	1
25	10.49	34.4	121	18	1
26	10.62	34.9	57	72	1
27	10.65	34.9	218	23	2
28	10.88	35.7	63	74	1
29	11.53	37.8	205	39	3
30	11.93	39.2	83	65	1
31	12.36	40.6	223	32	2
32	12.51	41.1	23	66	3
33	12.79	42.0	43	54	1
34	13.68	44.9	51	44	1
35	13.88	45.5	233	31	1
36	13.99	45.9	22	82	3
37	14.53	47.7	216	23	1
38	15.01	49.3	51	80	1
39	15.13	49.6	71	48	1
40	15.52	50.9	70	73	1
41	15.53	51.0	202	30	1
42	15.65	51.4	73	68	1
43	15.72	51.6	197	31	1
44	15.84	52.0	205	23	0

All directions are with respect to true north (magnatic declination 20W).

Table DW-1:2. Orientation Summary Table
Image Features
Weston Solutions
LO-58;
Wellbore: DW-1
May 11, 2008

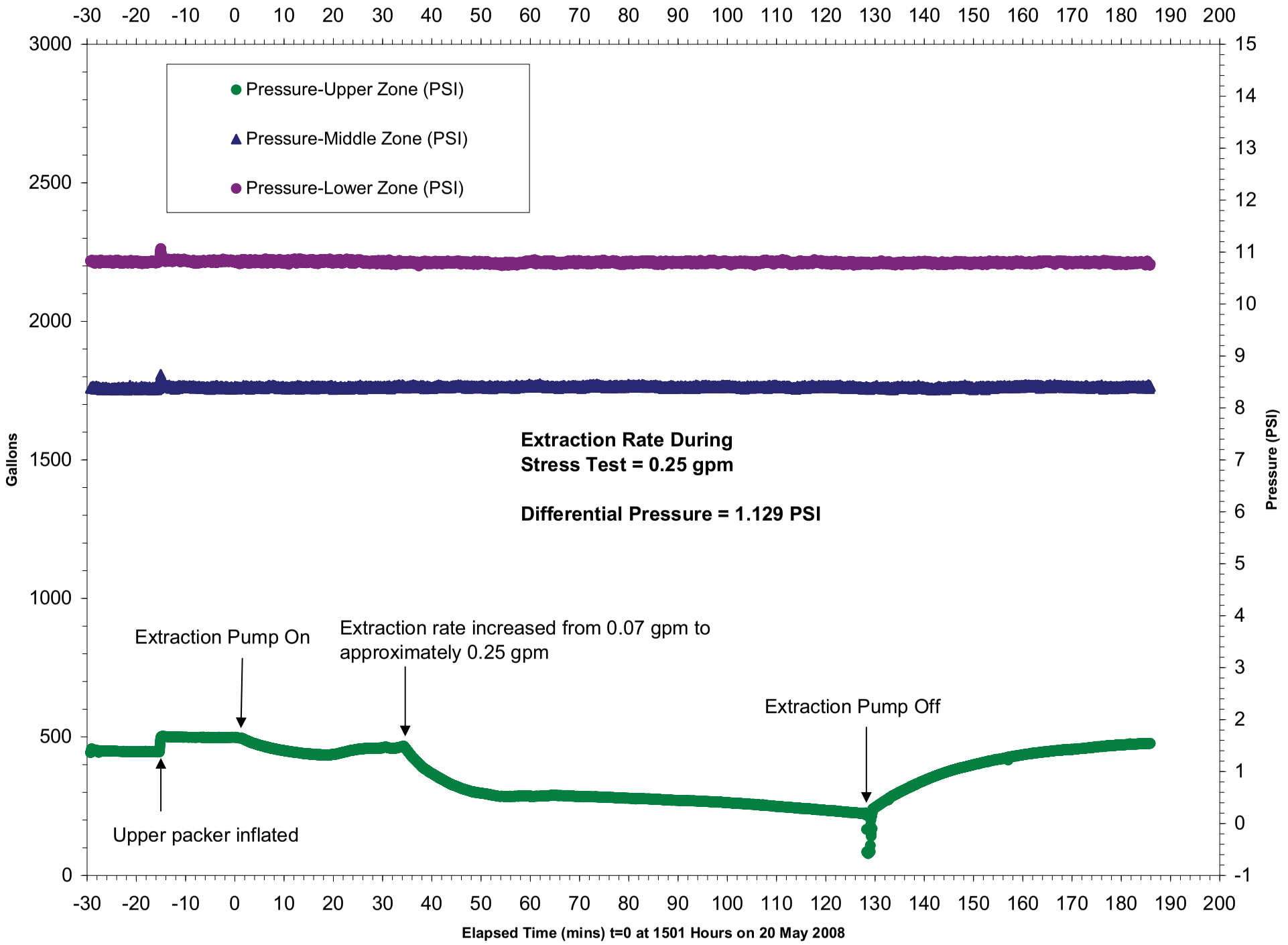
Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
45	15.96	52.4	194	24	0
46	16.16	53.0	159	52	3
47	16.51	54.2	189	58	1
48	16.57	54.4	69	66	1
49	16.84	55.2	30	54	2
50	16.89	55.4	19	74	1
51	16.99	55.7	191	21	0
52	17.13	56.2	55	61	1
53	17.18	56.4	209	21	0
54	17.25	56.6	76	61	1
55	17.38	57.0	171	25	0
56	17.49	57.4	61	66	1
57	17.58	57.7	217	31	1

All directions are with respect to true north (magnatic declination 20W).

Table DW-1:3. Summary of Vertical Seismic Profile Results; Weston Solutions; LO-58, Caribou, ME; Wellbore: DW-1

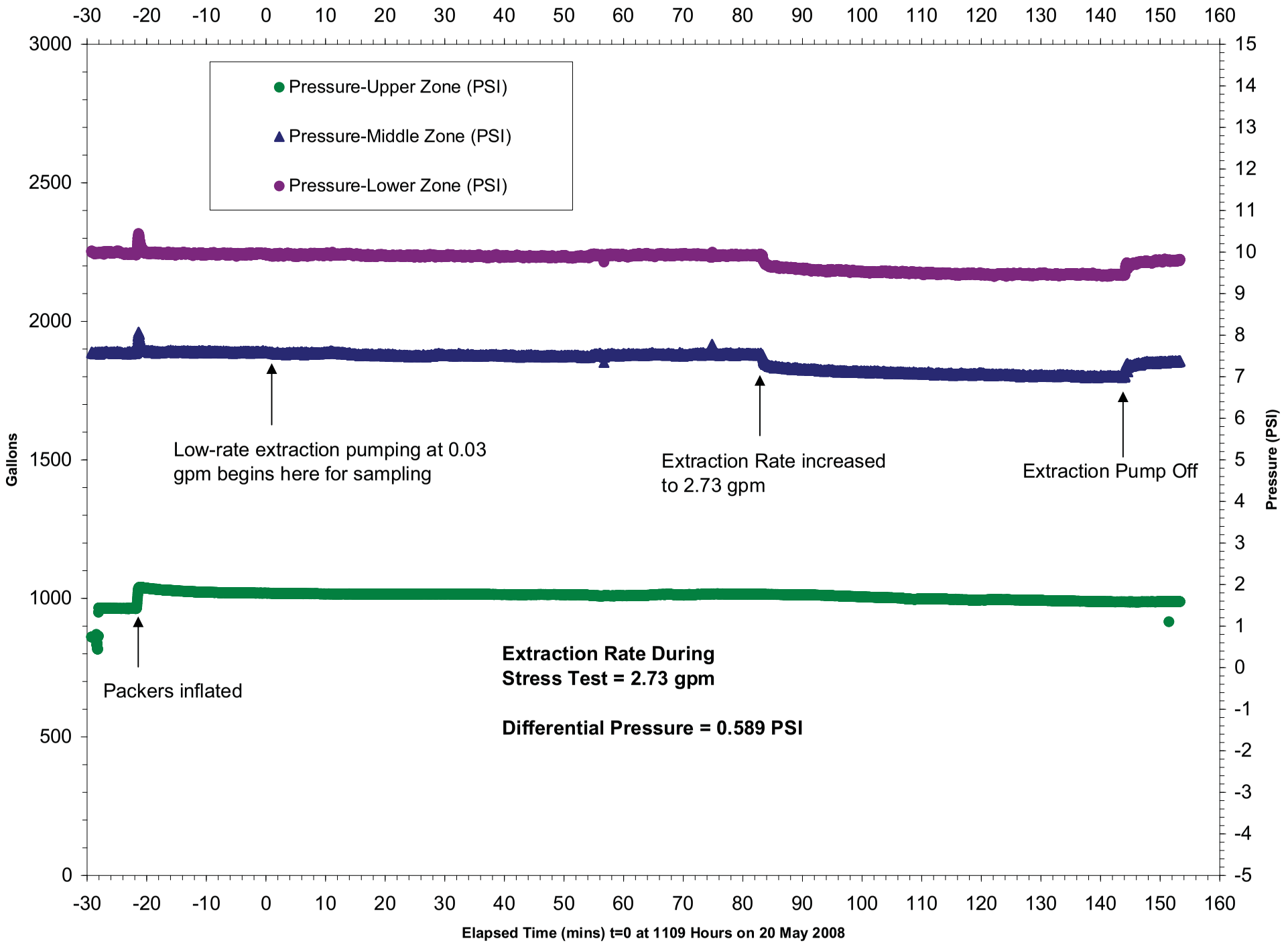
Well	Depth Interval (ftbtoc)	Interval-Specific Velocity (feet/second)	Comments
DW-01	5 - 10	1,670	Consistent with overburden
	10 - 25	7,135	Consistent with highly fractured bedrock
	25 - 55	8,493	Consistent with highly fractured bedrock

FIGURE DW-1:9A. Pressure and Extraction Rate Data During Wireline Straddle Packer Sampling at 33.15 feet and Up; Weston Solutions; LO-58; Aroostook County; Caribou, ME; Wellbore: DW-1



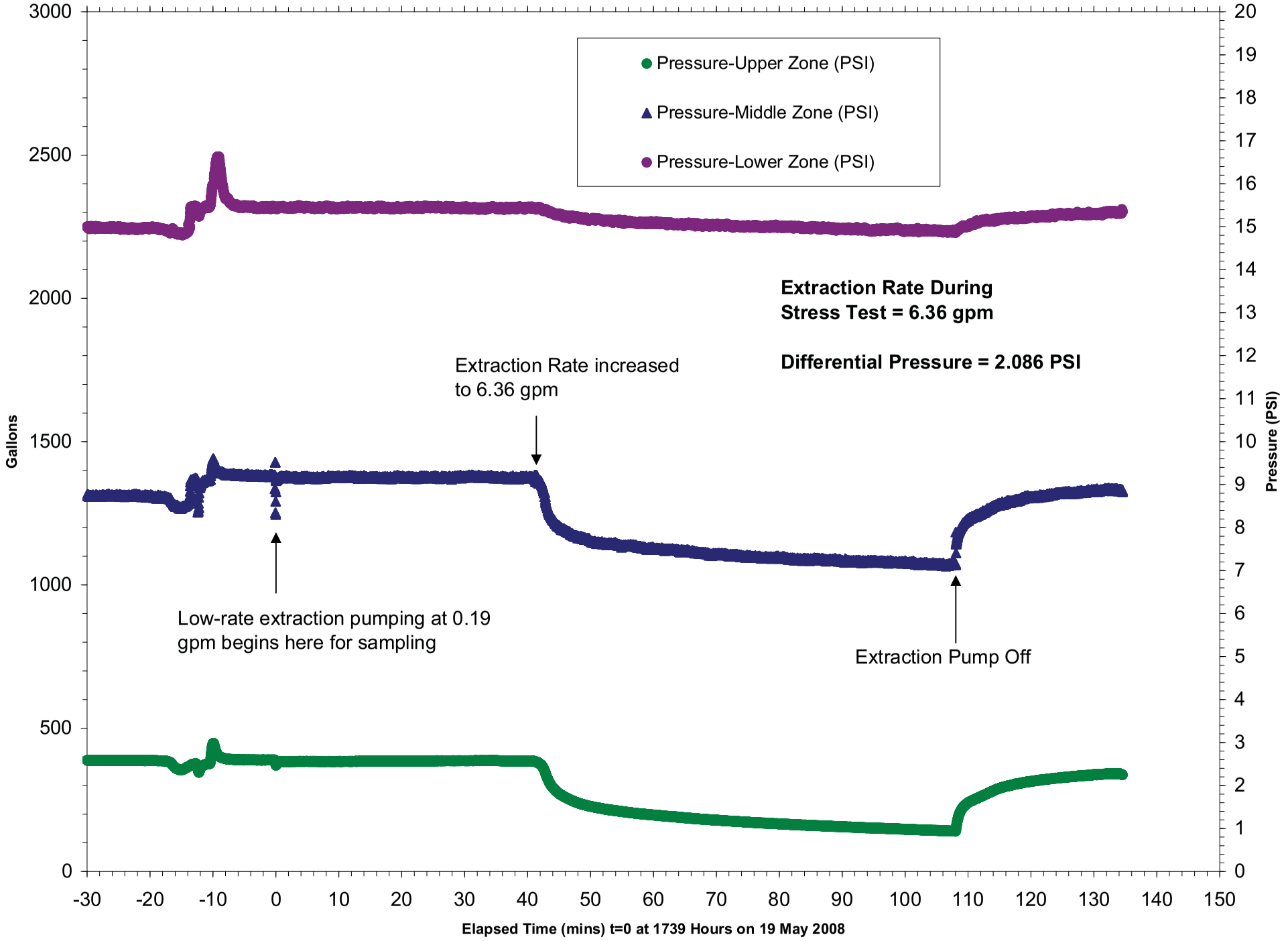
RS-1522-fig3.xls

FIGURE DW-1:9B. Pressure and Extraction Rate Data During Wireline Straddle Packer Sampling at 33.75 to 38.5 Feet; Weston Solutions; LO-58; Aroostook County; Caribou, ME; Wellbore: DW-1



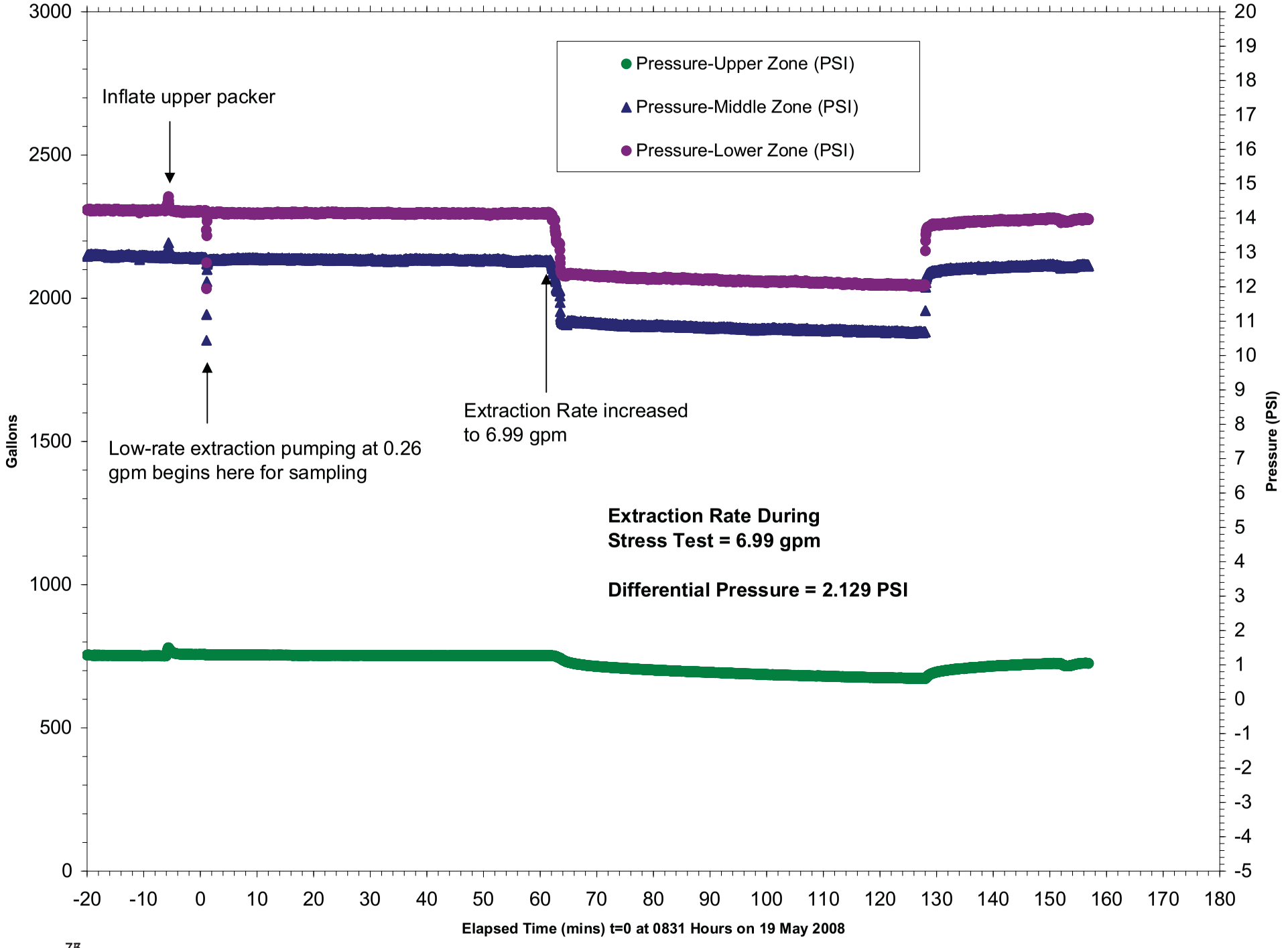
RS-1522-fig3.xls

FIGURE DW-1:9C. Pressure and Extraction Rate Data During Wireline Straddle Packer Sampling at 41.2 to 51.9 Feet; Weston Solutions; LO-58; Aroostook County; Caribou, ME; Wellbore: DW-1



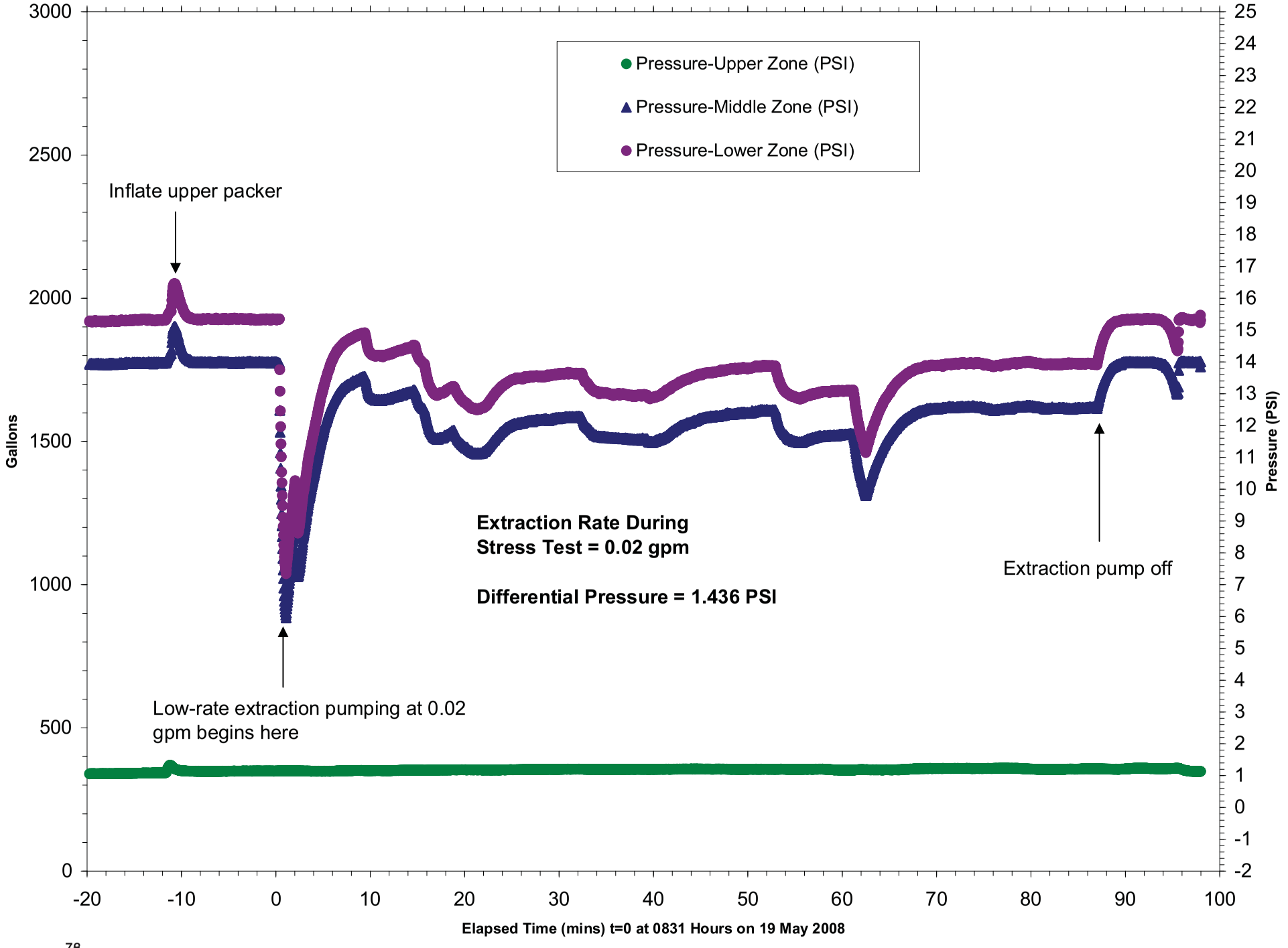
RS-1522-fig3.xls

FIGURE DW-1:9D. Pressure and Extraction Rate Data During Wireline Straddle Packer Sampling at 51.0 to 58.2 Feet (TD); Weston Solutions; LO-58; Aroostook County; Caribou, ME; Wellbore: DW-1



RS-1522-fig3.xls

FIGURE DW-1:9E. Pressure and Extraction Rate Data During Wireline Straddle Packer Sampling at 54.0 to 58.2 Feet (TD); Weston Solutions; LO-58; Aroostook County; Caribou, ME; Wellbore: DW-1



RS-1522-fig3.xls

Table DW-1:4. Summary Of Wireline Straddle Packer Testing With With Hydraulic Conductivity And Transmissivity Estimations; Weston Solutions; MEFUDS; LO-58; Caribou, ME; Wellbore: DW-1

Well Name	DW-01
Ambient Depth to Water (ftbtoc)	24.86
Diameter of Borehole (ft)	0.52
Effective Radius (ft)	300

Interval No.	Top of Interval (ft)	Bottom of Interval (ft)	Length of Interval (ft)	Differential Pressure (PSI)	Differential Head (feet)[1]	Interval Specific Flow Rate: WSP Stress Test (gpm)	Interval Specific Hydraulic Conductivity[4] (ft/day)	Transmissivity (ft2/day)	Interval Specific Fluid Electrical Conductivity (microS/cm)
1*	24.9	33.2	8.3	1.129	2.607	0.25	1.86E+01	1.55E+02	439
2	33.8	38.5	4.7	0.589	1.360	2.73	6.90E+02	3.24E+03	461
3	41.2	51.9	10.7	2.086	4.818	6.36	1.99E+02	2.13E+03	433
4**	51.0	58.2	7.2	2.129	4.917	6.99	3.19E+02	2.30E+03	459
5**	54.0	58.2	4.2	1.436	3.316	0.02	2.32E+00	9.75E+00	424

* The reported top depth is ambient water level.

** The reported bottom depth of these intervals is the total depth (TD) of the borehole.

[1] Differential Head is the difference between ambient pressure and pumping pressure, converted to feet.

DW-2 Logging Results

1.0 HydroPhysical™ Logging

1.1 Ambient Fluid Electrical Conductivity and Temperature Log: DW-2

At 0933 hours on May 9th, 2008, after a calibration check of the fluid electrical conductivity (FEC) and temperature logging tool, the fluid column was logged for FEC and temperature profiles with COLOG's 1.5-inch diameter HpL™ probe. These logs were performed prior to the installation of any pumping equipment. Please refer to Figure DW-2:1. The ambient FEC profile indicates a relatively featureless profile with the exception of FEC anomalies at 32, 52 and a notable increase at approximately 191.1 feet. The nominal FEC above 191.1 feet is approximately 392 µS/cm while the nominal FEC below 191.1 feet is approximately 596 µS/cm. The ambient temperature profile indicates a gradual increase in temperature with depth with an inflection at approximately 191.1 feet. The anomaly observed in the ambient FEC profile at 191.1 feet indicates a strong correlation with the identified water-bearing feature observed during hydrophysical ambient and stressed testing. In vertically flowing conditions, where water enters the borehole, termed inflow, a change in either FEC is typically seen.

1.2 Ambient Flow Characterization: DW-2

On May 14th, 2008, ambient flow characterization was conducted in the boring DW-2. For ambient flow assessment, the formation water in the borehole was diluted with deionized water (DI) and the boring left in an undisturbed state to allow any natural flow to occur. After DI water emplacement the pump was removed from the boring to insure that water in the pump standpipe would not drain back into the boring. Prior to this period and throughout all HpL™ testing, water levels were monitored and recorded digitally every second. Ambient flow evaluation is reported for the period after the water surface returned to near pre-emplacement levels. A series of FEC and temperature logs were then conducted to identify changes in the fluid column associated with ambient flow. Ambient flow characterization is conducted to evaluate the presence of both vertical and horizontal ambient flow.

On May 14th, 2008, at 1818 hours (t = 0 minutes, elapsed time of test), dilution of the fluid column was complete. Minimal to no DI water was lost to the formation due to the slightly depressed head maintained during emplacement procedures. During the 15.5 hours following the emplacement of DI water, multiple logs were conducted. Of these logs, 8 are presented in Figure DW-2:2. The designation of each logging with the FEC tool is indicated in the figure legend by the time of logging (e.g., FEC1818 versus a subsequent logging at FEC1840), thus the progressing of curves to the right in this figure represents changes in FEC over the total logging period. The last four digits of each log ID correspond to the time at which that particular log was started. Only logs acquired during logging in the downward direction are presented as the design of the FEC/Temperature probe allows the most accurate data to be collected in the downward direction. The logs acquired in the upward logging direction are not representative of downhole conditions and are therefore omitted. These logs illustrate significant change at several intervals throughout the length of the borehole. These dramatic changes in the FEC profiles with respect to time are associated with ambient vertical flow occurring within the borehole.

Formation water migration as a result of downward vertical flow within the fluid column is indicated by the increase in FEC over time in Figure DW-2:2 beginning near the base of casing and at 31 feet. Numeric modeling of the reported field data suggests groundwater enters the wellbore at 19.5 to 19.6, 30.4 to 31.6, 38.2 to 41.8, and 44.9 to 51.4 feet at rates of 0.026, 0.297, 0.016 and 0.074 gpm, respectively. The combined inflow of 0.413 gpm of these four intervals is observed to migrate vertically downward through the borehole based on the migration of the center of mass of the area under the curve. The modeling suggests groundwater exits the borehole at depths of 96.4 to 97.0 and 189.5 to 191.0 feet, at rates of 0.370 and 0.185 gpm, respectively. Evidence for these outflow zones is observed in the logs presented in Figure DW-2:2. Where the velocity of the water slows within the borehole ("downstream" of an outflow zone) a change in slope, or truncation, of the FEC logs is observed. All flow rates are based on the rate of increase of mass at their respective intervals. Of particular note is the FEC anomaly observed at the base of the borehole at 280 feet. This early increase in mass is not the result of ambient flow. Notice the mass at this depth, or area under the curve, does not increase with time, but instead disperses. During removal of the plumbing at the conclusion of the emplacement groundwater was momentarily allowed to enter the borehole at this depth near the bottom of the borehole. Over the course of the Ambient Flow Characterization however, no additional groundwater entered the borehole at this depth. As such, this water-bearing interval is not considered to produce groundwater to the borehole under ambient conditions. Please refer to Table DW-2:1 and Summary:1 for a complete summary of the HydroPhysical™ logging results. Please refer to Appendix B for a discussion of the methodology and code used to calculate these values. The ambient depth to water at the time of testing was 4.31 ftbtoc.

1.3 Flow Characterization During 6 GPM Production Test: DW-2

Pumping of borehole fluids and simultaneous DI injection was conducted at one pumping rate to establish the inflow locations and evaluate the interval specific inflow rates. Pumping at a given rate was conducted until reasonably constant drawdown was observed. When constant drawdown was observed, DI injection was initiated at about 20% of the pumping rate and the extraction pumping rate was increased to maintain a constant total formation production rate (i.e. pumping rate prior to DI injection). These procedures were conducted at a differential rate of 6.35 gpm.

On May 15th, 2008, at 1148 hours (t = 0 minutes elapsed time of testing), development pumping was initiated at approximately 6 gpm. Prior to initiating pumping, the ambient depth to water was recorded at 4.54 ftbgs. All drawdown values are referenced to this ambient water level. Time dependent depth to water, totals and flow rate information were recorded digitally every second and are presented in Figure DW-2:3. Pumping was maintained at a time-averaged rate of 6.25 gpm until 1740 hours (t = 352 minutes, elapsed time of testing). During development pumping numerous FEC logs were acquired to monitor the development process and assist in identifying the depths of flow zones. Of these FEC logs, nine are presented in Figure DW-2:4A. The FEC logs acquired during development pumping illustrate the development process of the borehole fluids, with local inflow locations indicated by the depths at which FEC is observed to increase over time. DI water injection from the bottom of the wellbore was initiated at 1740 hours at a time-averaged rate of 1.3 gpm while the total extraction rate was increased to a time-averaged rate of 7.65 gpm, resulting in a total borehole formation time-averaged production rate of 6.35 gpm. These flow conditions were maintained until 2332 hours (t = 704 minutes) during which time a reasonably constant drawdown of approximately 5.40 feet was observed. The FEC logs acquired during dilution procedures are presented in Figure DW-2:4B, along with the last four development logs for comparison, and illustrate a reasonably stable condition of the fluid column with local inflow locations identified by spikes or incremental step increases in FEC. Eleven

inflow zones were identified from these logs ranging in flow from 0.005 to 5.69 gpm with the dominant inflow zone at 30.4 to 31.6 feet, producing 5.69 gpm, or 90 percent of the total formation production rate. Please refer to Table DW-2:1 for a summary of HydroPhysical™ flow results and the depths of individual inflow zones.

1.4 Estimation of Interval Specific Transmissivity: DW-2

An estimation of transmissivity (T) can be made using an equation after Hvorslev (1951) assuming steady-state radial flow in an unconfined aquifer:

$$T = KL = \frac{q_i}{2\pi\Delta h_w} \ln\left(\frac{r_e}{r_w}\right)$$

where K is the hydraulic conductivity, q_i is the interval specific inflow rate calculated using HpL™ results, r_w is the borehole radius (0.26 ft), r_e is the effective pumping radius, Δh_w is the observed maximum drawdown (5.40 feet) and L is the thickness of the zone through which flow occurs. For our calculations, COLOG used r_e of 300 feet (assumed). By applying L and q_i from the HpL™ results under the two pressure conditions, the interval specific transmissivity can be calculated for each identified water producing interval. These calculations were made at each identified interval and are presented in Table DW-2:1. In summary, the interval 30.4 to 31.6 feet exhibited the highest transmissivity of approximately 216 ft^2/day.

2.0 Geophysical Logging

On May 8th through May 17th, 2008, downhole geophysical and hydrogeologic investigations were performed in boring DW-1. The geophysical and hydrogeologic logs performed were: optical televiewer (OBI), acoustic televiewer (ATV), 3-arm caliper, natural gamma, electric resistivity, EM induction conductivity, water chemistry (pH, ORP, DO), full waveform sonic, vertical seismic profile (VSP) and wireline straddle packer (WSP). The data for these logs are presented in the DW-2 Geophysical/HydroPhysical™ Summary Plots and Figures DW-2:5, 6, 7 and 8 and Table DW-2:2 for the statistical analysis of all fractures/features, Table DW-2:3 for a summary of the VSP velocities and Figures DW-2:9A through E and Table DW-2:4 for the WSP pressure data and permeability results at the end of this well report.

2.1 Optical Televiewer (OBI)/Acoustic Televiewer (ABI)

On May 8th, 2008 optical and acoustic televiewer logging was performed in DW-2 to a depth of 280.6 feet. The televiewers identified features at depths correlating well with the HpL™ and caliper data. The features observed by the OBI at water-bearing intervals identified from the HpL™ data had apparent aperture and in some cases evidence of staining. Two hundred twenty high-angle fractures or features (dip angles greater than 45 degrees) were identified in DW-2. Seventeen of these high-angle features are qualitatively ranked 2 or greater suggesting the potential for vertical hydraulic communication outside the influence of the borehole. Data acquired during WSP testing confirms the presence of vertical hydraulic communication between several water-bearing zones in the immediate vicinity of the borehole.

2.2 Three-Arm Caliper

On May 9th, 2008 three-arm caliper logging was performed in DW-2 to a depth of 284.2 feet. The caliper log indicates a relatively rugose borehole with eight notable inflections observed at approximately 31.3, 45.4, 96.5, 158.6, 170.7, 179.7, 190.9 and 244.0 feet. All but two of the inflections, or borehole enlargements, at 158.6 and 170.7 feet, observed in the caliper log correlate well with water-bearing zones and fractures identified by the hydrophysical and optical televiewer data. The caliper log registers an approximately nominal 6.4-inch diameter borehole below casing at 14.6 feet.

2.3 Natural Gamma

On May 10th, 2008 natural gamma logging was performed, in conjunction with the electric resistivity logging, in DW-1. The natural gamma measurement reached to a depth of 279.1 feet. The natural gamma is relatively featureless with minor fluctuations in gamma counts, expected in limestone. The natural gamma log registers an approximately nominal 27 to 62 counts per second.

2.4 Electric Resistivities (8, 16, 32, 64-inch Normal Resistivities, SP, SPR)

On May 11th, 2008 electric resistivity logging was performed, in conjunction with the natural gamma log, in DW-1 to a depth of 280.2 feet. The electric measurements consist of 8, 16, 32 and 64-inch "normal" resistivities, spontaneous potential (SP) and single-point resistance (SPR). The normal resistivities registered approximately 923 Ohm-meters (8-inch resistivity) to 2,480 Ohm-meters (64-inch resistivity). A notable anomaly in the electric resistivity is observed at approximately 31.6 to 161.3 feet where the electric resistivities uniformly register higher resistivities, indicative of pertinent limestone. Low resistivity anomalies are observed at 30 to 33 and 161 to 191 feet, indicative of a fractured environment under these conditions. The SP is relatively featureless registering a gradual increase in potential with depth, registering 44 to 358 milivolts below water level. The SPR measurement correlates well with the normal resistivities and also registers low-resistivity anomalies at 30 to 33 and 161 to 191 feet. The SPR registers 427 to 2,119 Ohms.

2.5 EM Induction Conductivity

On May 10th, 2008 EM induction conductivity logging was performed in DW-2 to a depth of 279.5 feet. The induction conductivity log is featureless with the exception of a minor anomaly at 255 feet. The induction conductivity registers a nominal 196 mS/meter above 255 feet and 149 mS/meter below 255 feet.

2.6 Water Chemistry (pH, ORP, DO)

On May 9th, 2008, pH, oxidation-reduction potential (ORP) and dissolved oxygen (DO) measurements were acquired under ambient conditions in DW-2 to a depth of 280.4 feet. The pH measurement is relatively featureless with the exception of an anomaly at 191 feet where the pH registers approximately 7.53 above 191 feet. Below 191 feet the pH log registers an approximately uniform 7.69. The ORP measurement indicates a gradual increase in oxidation potential with depth until 191 feet. The ORP measurement indicates approximately 135 mV near water surface and 247 mV at 191 feet. Below 191 feet the ORP log gradually decreases to TD,

registering 185 mV at TD. The dissolved oxygen measurement registers a nominal 0.35 percent from water surface to 191 feet. Below 191 feet the DO measurement registers zero. It should be noted that no ambient flow is identified below 191 feet – a stagnant zone.

2.7 Full Waveform Sonic

On May 9th, 2008 full waveform sonic logging was performed in DW-2 to a depth of 277.2 feet. The sonic registered slower velocity anomalies at 29, 45, 67, 188 and 274 feet, correlating well with identified fractures and water-bearing zones observed in the optical televiewer, caliper and hydrophysical data. The sonic registered P-wave velocities ranged from 12,060 to 24,900 feet/second, correlating well with the velocities identified using vertical seismic profiling (VSP).

2.8 Vertical Seismic Profile (VSP)

On May 7th, 2008 a vertical seismic profile (VSP) was conducted in DW-2 to a depth of 200 feet. The VSP investigation in DW-2 identified three specific intervals of specific velocity at 25 to 30, 35 to 115 and 115 to 185 feet, registering 1,789, 10,255 and 17,274 feet/second (fps), respectively. However, due to the cement vault and backfill encasing the well casing and the presence of asphalt at the surface, the velocity reported here at 25 to 30 feet is suspect. Below 185 feet the P-wave energy was too little to report usable data.

2.9 Wireline Straddle Packer (WSP)

On May 16th and 17th, 2008 wireline straddle packer (WSP) testing was conducted in DW-2 at six intervals:

16.0 to 20.0 feet
28.5 to 32.5 feet
37.0 to 41.7 feet
94.5 to 98.5 feet
187.9 to 192.2 feet
265.4 to 284.0 feet (bottom of the borehole)

WSP testing was conducted to acquire a fracture-specific groundwater sample from each major water-bearing fracture identified during hydrophysical production testing. In addition to collecting a representative groundwater sample from each interval, development pumping was conducted at each interval and pressures above, below and in the interval of interest recorded to estimate fracture-specific permeability for each interval tested. Please see Tables WSP Summary and DW-1:4 for a complete summary of wireline straddle packer testing results.

Interval 16.0 to 20.0 feet – The WSP was utilized in its standard configuration, both packers inflated, and all pressure transducers measuring pressure in their respective zones of interest. During low-rate pumping for sampling the pump cavitated several times indicating the lack of significant yield from this interval. It is apparent from the WSP pumping that this interval cannot yield more than approximately 0.01 gpm. During pumping on this interval, no correlating response from either the upper or lower pressure transducer was observed, suggesting no vertical hydraulic communication exits outside the influence of the borehole between this interval and fracture/features in close proximity above and below this interval. The pumping rate of approximately 0.01 gpm during sampling was also used as the "stress test" pumping rate. Please

see Figure DW-2:9A and Table DW-1:4 for a complete summary of the data acquired and results for this interval.

Interval 28.5 to 32.5 feet – The WSP was utilized in its standard configuration, both packers inflated, and all pressure transducers measuring pressure in their respective zones of interest. The data clearly indicates vertical hydraulic communication outside the influence of the borehole between water-bearing fractures in the interval of interest at 28.5 to 32.5 feet and the upper and lower intervals surrounding the interval of interest based on the correlating responses observed in the upper and lower pressure transducers. This is not unexpected based on the numerous fractures of approximately 30 to 50 degrees dip in and in the immediate vicinity of the interval of interest. Please see Figure DW-2:9B and Table DW-2:4 for a complete summary of the data acquired and results for this interval.

Interval 37.0 to 41.7 feet – The WSP was utilized in its standard configuration, both packers inflated, and all pressure transducers measuring pressure in their respective zones of interest. The data clearly indicates vertical hydraulic communication outside the influence of the borehole between water-bearing fractures in the interval of interest at 37.0 to 41.7 feet and the upper and lower intervals surrounding the interval of interest based on the correlating responses observed in the upper and lower pressure transducers. This is not unexpected based on the numerous fractures of approximately 30 to 50 degrees dip in and in the immediate vicinity of the interval of interest. Please see Figure DW-2:9C and Table DW-2:4 for a complete summary of the data acquired and results for this interval.

Interval 94.5 to 98.5 – The WSP was utilized in its standard configuration, both packers inflated, and all pressure transducers measuring pressure in their respective zones of interest. The data clearly indicates vertical hydraulic communication outside the influence of the borehole between water-bearing fractures in the interval of interest at 94.5 to 98.5 feet and the lower interval below this interval of interest based on the correlating response observed in the lower pressure transducers. No response is observed in the upper interval pressure transducer. This is not unexpected based on the identification of a downward pressure gradient and the fact this interval was identified as a thief zone (water exited the borehole at approximately 97 feet) during ambient testing. The presence of a pressure differential between this interval and the upper interval suggests little to no significant vertical hydraulic communication outside the influence of the borehole. The data does indicate a vertical hydraulic connection between the interval of interest and the lower zone however. During ambient testing the lower flow interval of 189.5 to 191.0 feet was also identified as an outflow zone (less significant pressure differential between 189.5 to 191.0 and this flow interval of 96.4 to 97.0 feet) and is likely the flow interval hydraulically interconnected with this WSP sample interval. Please see Figure DW-2:9D and Table DW-2:4 for a complete summary of the data acquired and results for this interval.

Interval 187.9 to 192.2 feet – The WSP was utilized in its standard configuration, both packers inflated, and all pressure transducers measuring pressure in their respective zones of interest. The data clearly indicates vertical hydraulic communication outside the influence of the borehole between water-bearing fractures in the interval of interest at 187.9 to 192.2 feet and the lower interval below this interval of interest based on the correlating response observed in the lower pressure transducers. No response is observed in the upper interval pressure transducer. This is not unexpected based on the identification of a downward pressure gradient and the fact this interval was identified as a thief zone (water was observed to exit the borehole at approximately 189.5 to 191.0 feet) during ambient testing. The presence of a pressure differential between this interval and the upper interval suggests little to no significant vertical hydraulic communication

outside the influence of the borehole. The data does indicate a vertical hydraulic connection between the interval of interest and the lower zone however. Please see Figure DW-2:9E and Table DW-2:4 for a complete summary of the data acquired and results for this interval.

3.0 Data Summary

Processing and interpretation of the geophysical and HydroPhysical™ logs in DW-2 suggest the presence of eleven producing intervals for this borehole. Numerical modeling of the reported HydroPhysical™ field data was performed using computer programs FLOWCALC and/or BOREII. These analyses were performed to estimate the rate of inflow for each identified hydraulically conductive borehole interval during DI injection procedures. The results of these analyses are presented in Table DW-2:1. For code comparisons to field data please see Appendix D. In summary, the interval at 30.4 to 31.6 feet dominated flow during pumping, producing 5.69 gpm or 90 percent of the total flow. Six of the eleven identified producing intervals correlate well with water-bearing zones identified during ambient testing. The remaining five intervals were not actively flowing water during ambient testing.

During ambient testing, boring DW-2 exhibited a straight-forward downward flow regime. Four water-bearing intervals were identified to contribute groundwater to the wellbore during ambient testing, the dominant interval being 30.4 to 31.6 feet, contributing 0.297 gpm, or 72 percent of the aggregate 0.413 ambient inflow. Two water-bearing intervals are identified under ambient conditions to thieve water from the wellbore at 96.4 to 97.0 and 189.5 to 191.0 feet, taking 0.370 and 0.185 gpm, respectively, from the wellbore.

The optical and acoustic televiewers identified features at depths correlating well with the HpL™ and caliper data. The features observed by the OBI at water-bearing intervals identified from the HpL™ data had apparent aperture and in some cases evidence of staining. Two hundred twenty high-angle fractures or features (dip angles greater than 45 degrees) were identified in DW-2. Seventeen of these high-angle features are qualitatively ranked 2 or greater suggesting the potential for vertical hydraulic communication outside the influence of the borehole. Data acquired during WSP testing confirms the presence of vertical hydraulic communication between several water-bearing zones in the immediate vicinity of the borehole.

The eleven interval-specific transmissivity estimates calculated using the hydrophysical data in DW-2 ranged from 0.20 to 216 ft^2/day, with the interval at 30.4 to 31.6 feet registering the highest transmissivity. The ranges of transmissivities suggest that flow originates from secondary porosity consisting of large discrete fractures at the major inflow zones and minor fractures or features with less inter-connectiveness at the minor inflow zones.

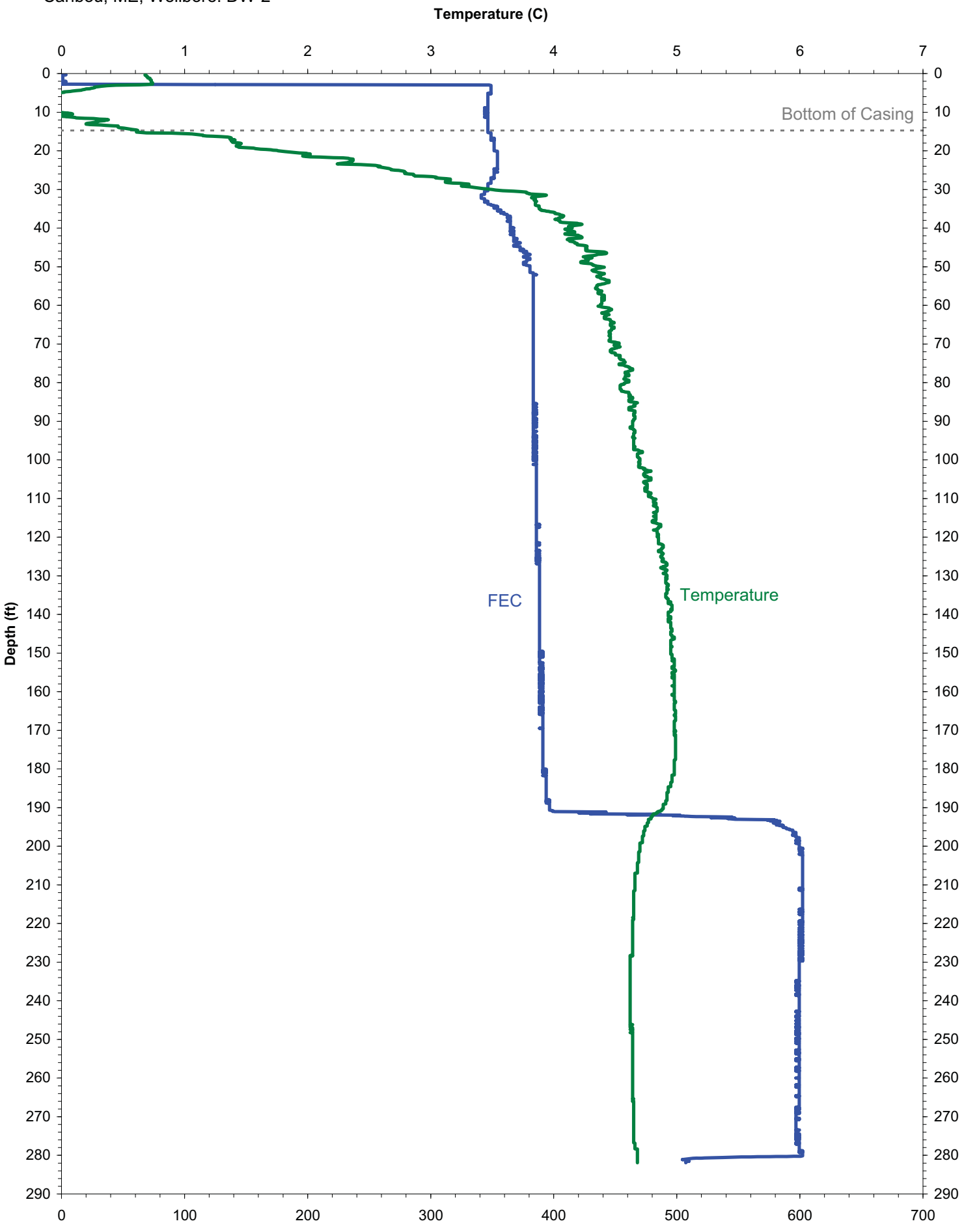
The WSP sampling results identified contaminant concentrations in four of the six sampled intervals. The two contaminants that registered identifiable concentrations are cis-1,2-DCE and toluene. The sample interval 187.9 to 192.2 feet registered only cis-1,2-DCE at 0.23 µg/L. The sample intervals 16.0 to 20.0, 37.0 to 41.7 and 94.5 to 98.5 feet registered only toluene at 2.4, 4 and 5.5 µg/L, respectively. Please see Table WSP Summary in the Executive Summary for a complete summary of the sample results.

Fracture inter-connectiveness in the immediate vicinity of a wellbore can be inferred by the similarity, or lack there of, of parameters such as interval-specific transmissivity estimates and interval-specific FEC, along with the presence of high-angle fractures and pressure differentials within the borehole. Similar transmissivity and FEC estimates would suggest an inter-connected

network of fractures or aquifers in the immediate vicinity of the wellbore. High-angle fractures with aperture may provide a conduit for vertical communication. Moreover, although a pressure differential would seem to suggest the driving force for vertical communication is present, typically substantially vertically interconnected fractures or aquifers tend to pressure-equilibrate in the immediate vicinity of the wellbore. Thus, the presence of a pressure differential in a wellbore may suggest a lack of vertical communication between fractures or aquifers in the immediate vicinity of the borehole.

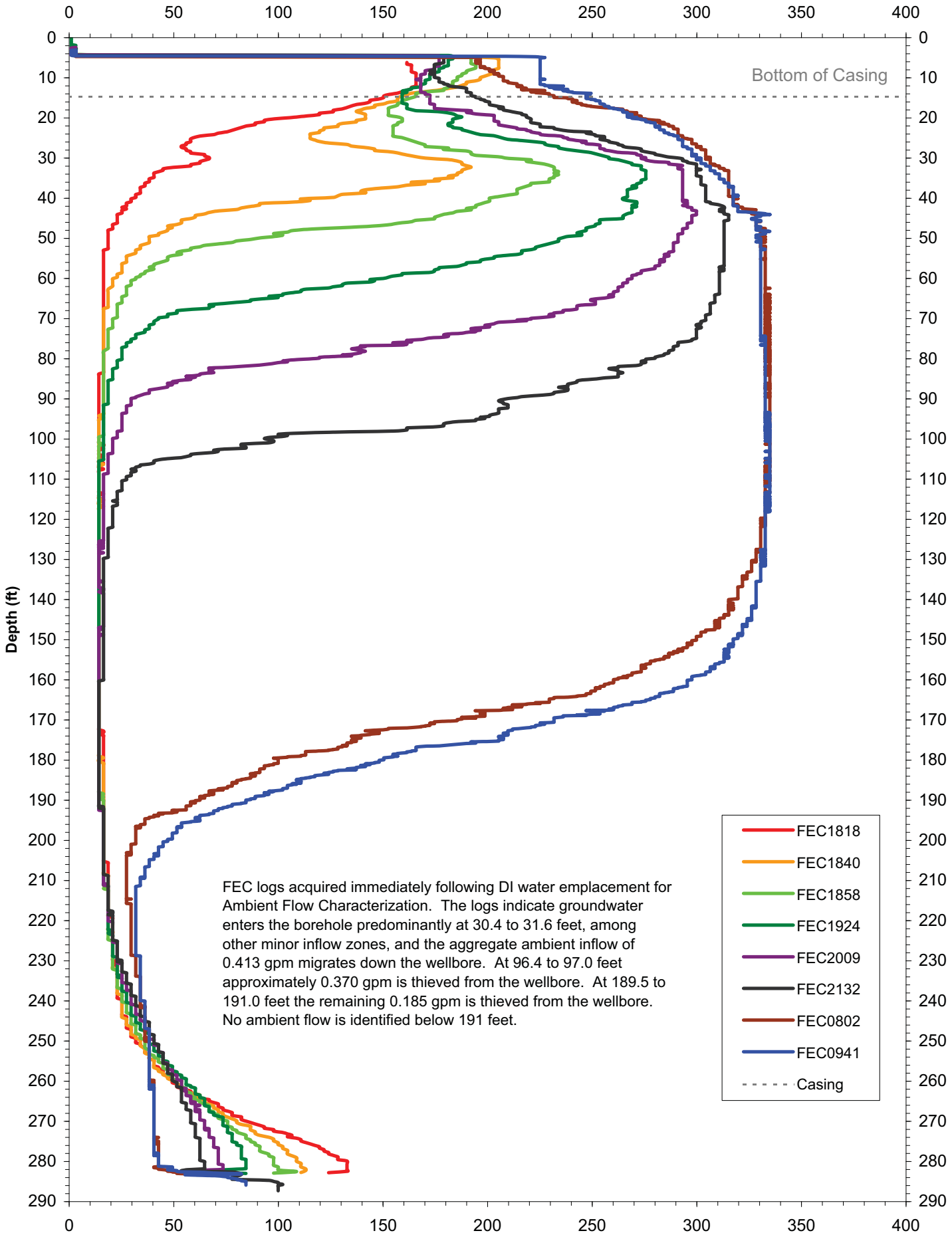
The data acquired in DW-2 exhibited dissimilar interval-specific transmissivity but similar FEC estimates. The televiewers identified high-angle fractures with aperture and the WSP registered pressure correlations above and below several tested intervals. Though a pressure differential was identified under ambient conditions, the WSP data support the suggestion that certain intervals are not hydraulically connected over the intervals in which the pressure differential under ambient conditions was observed in the borehole. The data suggest the fractures are moderately vertically inter-connected in the immediate vicinity of the wellbore, primarily in the upper intervals. Please see Table DW-2:1 for a summary of the HydroPhysical™ and geophysical logging results which includes the locations, flow rates and transmissivity and hydraulic conductivity estimates assessed by COLOG.

FIGURE DW-2:1. Ambient Temperature and Fluid Electrical Conductivity;Weston Solutions; MEFUDS; LO-58; Caribou, ME; Wellbore: DW-2



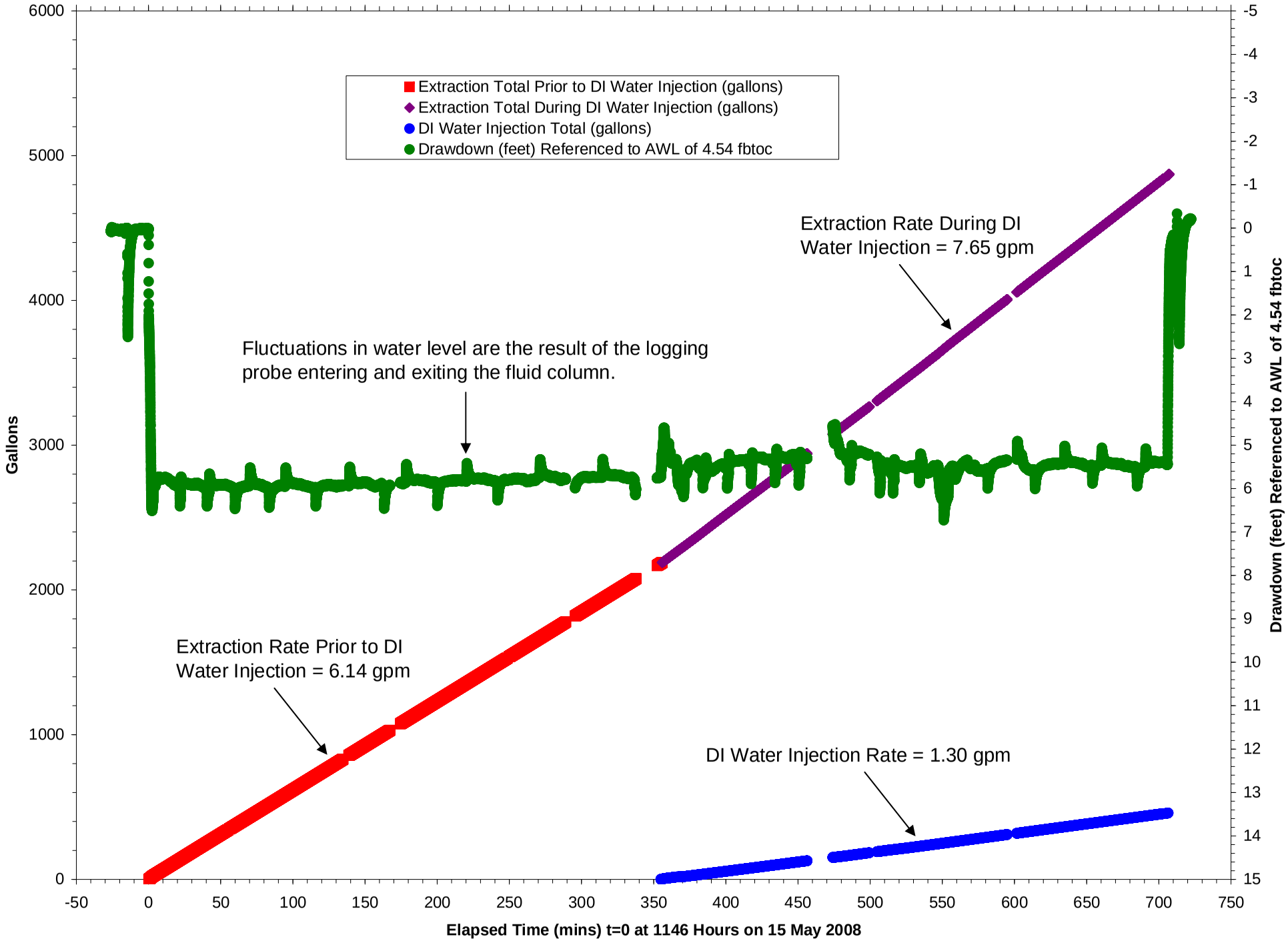
DW-2-fig1.xls

FIGURE DW-2:2. Summary of Hydrophysical Logs During Ambient Flow Characterization; Weston Solutions; MEFUDS; LO-58; Caribou, ME; Wellbore: DW-2



DW-2-fig2.xls

FIGURE DW-2:3. Pumping And Drawdown Data During 6 GPM Production Test; Weston Solutions; MEFUDS; LO-58; Caribou, ME; Wellbore: DW-2



DW-2-fig3.xls

FIGURE DW-2:4A. Summary of Hydrophysical Logs During Development Pumping at 6 GPM; Weston Solutions; MEFUDS; LO-58; Caribou, ME; Wellbore: DW-2

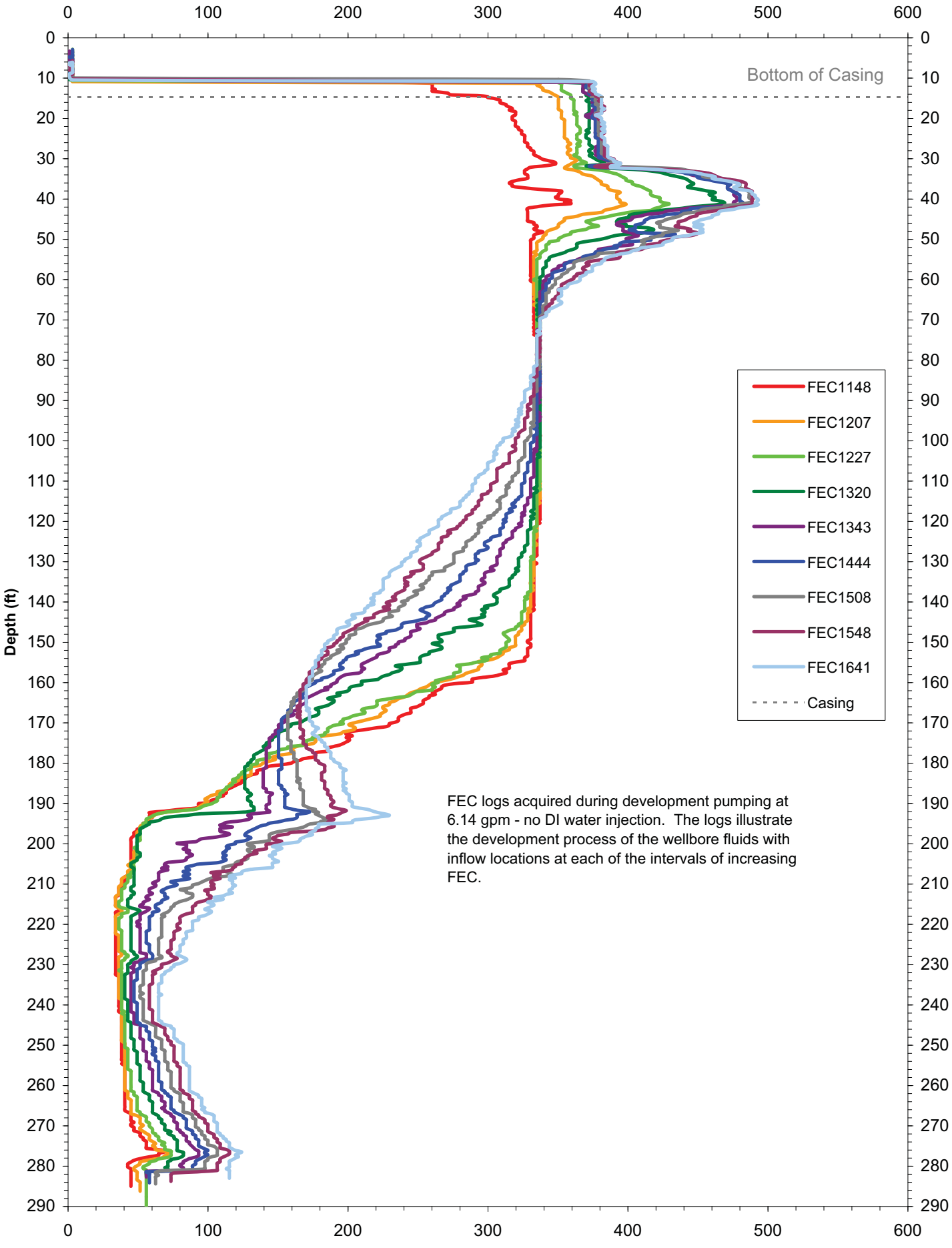


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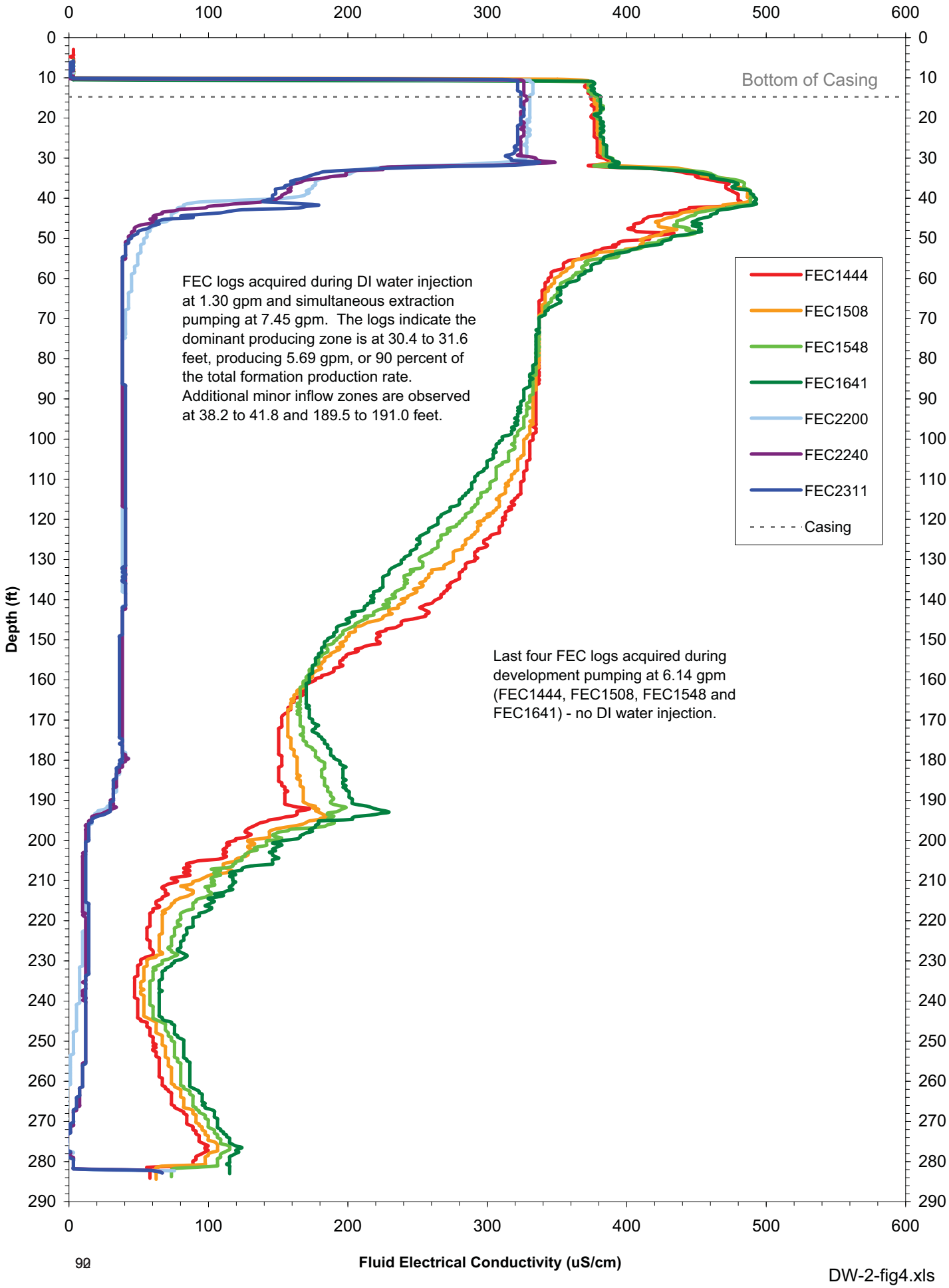
FIGURE DW-2:4B. Summary of Hydrophysical Logs During 6 GPM Hydrophysical Production Test; Weston Solution; MEFUDS; LO-58; Caribou, ME; Wellbore: DW-2



DW-2-fig4.xls

Table DW-2:1. Summary Of HydroPhysical™ Logging Results With Hydraulic Conductivity And Transmissivity Estimations; Weston Solutions; MEFUDS; LO-58; Caribou, ME; Wellbore: DW-2

Well Name	DW-2
Ambient Depth to Water (ftbtoc)	4.54
Diameter of Borehole (ft)	0.52
Maximum Drawdown (ft)	5.40
Effective Radius (ft)	300

Interval No.	Top of Interval (ft)	Bottom of Interval (ft)	Length of Interval (ft)	Ambient Flow[1] (gpm)	Darcy Velocity in Aquifer[2] (Specific Discharge) (ft/day)	Interval Specific Flow Rate During Pumping (gpm)	Delta Flow[3] (gpm)	Delta Flow (ft^3/min.)	Interval Specific Hydraulic Conductivity[4] (ft/day)	Transmissivity (ft2/day)	Interval Specific Fluid Electrical Conductivity (microS/cm)
1	19.5	19.6	0.1	0.026	NA	0.10	0.074	0.010	3.68E+01	2.95E+00	321
2	30.4	31.6	1.2	0.297	NA	5.69	5.393	0.721	1.80E+02	2.16E+02	378
3	38.2	41.8	3.6	0.016	NA	0.374	0.358	0.048	3.98E+00	1.43E+01	528
4	44.9	51.4	6.5	0.074	NA	0.081	0.007	0.001	4.33E-02	2.82E-01	512
5	96.4	97.0	0.6	-0.370	NA	0.000	0.370	0.049	2.47E+01	1.48E+01	NA
6	143.3	144.3	1.0	0.000	NA	0.008	0.008	0.001	3.20E-01	3.20E-01	432
7	179.2	183.0	3.8	0.000	NA	0.015	0.015	0.002	1.58E-01	6.00E-01	431
8	189.5	191.0	1.5	-0.185	NA	0.051	0.236	0.032	6.30E+00	9.45E+00	429
9	191.4	218.3	26.9	0.000	NA	0.008	0.008	0.001	1.19E-02	3.20E-01	429
10	227.4	228.2	0.8	0.000	NA	0.005	0.005	0.001	2.50E-01	2.00E-01	597
11	243.7	279.2	35.5	0.000	NA	0.024	0.024	0.003	2.71E-02	9.61E-01	597

[1] Downward vertical flow is identified in this borehole under ambient conditions.

[2] Darcy Velocity is calculated using the observed volumetric flow rate, the cross-sectional area of the flow interval in the wellbore and a wellbore convergence factor of 2.5 (Drost, 1968). The Darcy Velocity is only applicable to ambient horizontal flow

[3] Delta Flow is the difference between Interval-Specific Flow Rate (during pumping) and Ambient Flow Rate.

[4] Hydraulic conductivity and transmissivity estimates are based on single well drawdown data, a porus-medium equivilent model and Hvorslev's 1951 porosity equatior

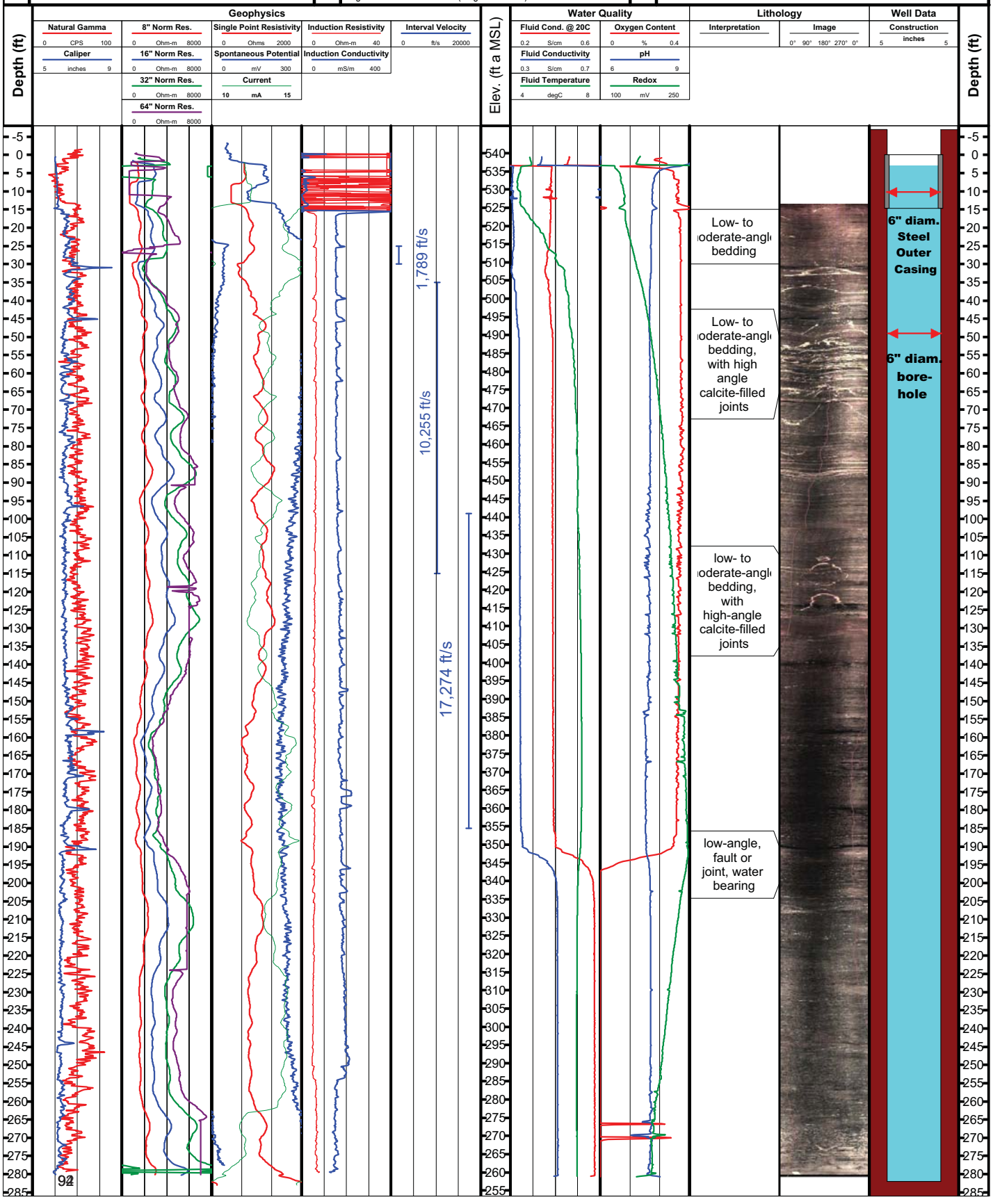
NA - Not Applicable

Project: LO-58	**Well ID:** DW-02 (VFW Well)	**Date Logged:** 8-15 May 08
Location: Aroostook County, Caribou, ME	**Log Ref.:** Top Steel Casing	**Hole Diameter:** 6" nom. to TD
Depth Logger: 283 ft	**Log Ref. Elev.:** ~539.5 ft above MSL	**Csg Size/Type:** 6" Steel
Depth Driller: No Data	**Recorded by:** G. Bauer	**Witnessed by:** J. Schmidl

LOGS & TOOLS: See Individual Logs

COMMENTS: Ground Elevation: ~546.5 ft. aMSL.
Natural Gamma log includes K, U, and Th.
Water Quality logs performed under ambient conditions.
Ambient Water Level about 2.9 ft (9.9 ft bgs).
Logs relative to Truth North (mag dec = 20W)

COMMENTS: All depths here referenced to top steel casing unless noted otherwise.
Measured casing stick down below ground surface: 7.0 ft.
Steel outer casing total depth 14.6 ft, estimated from image log.



Project: LO-58	**Well ID:** DW-02 (VFW Well)	**Date Logged:** 8-15 May 08
Location: Aroostook County, Caribou, ME	**Log Ref.:** Top Steel Casing	**Hole Diameter:** 6" nom. to TD
Depth Logger: 283 ft	**Log Ref. Elev.:** ~539.5 ft above MSL	**Csg Size/Type:** 6" Steel
Depth Driller: No Data	**Recorded by:** G. Bauer	**Witnessed by:** J. Schmidl

LEGEND

Tadpoles at depth of planar structure, pointing towards strike, and centered on dip. Projections corresponding to each tadpole shown in adjacent column.

Structure Tadpoles

- Washout/Wide Fracture Zone
- Wide Fracture/Multiple Fractures
- Open Fracture
- Complete Fracture
- Healed Fracture/Bedding Plane
- Partial Fracture

COMMENTS

Ground Elevation: ~546.5 ft. aMSL.
Natural Gamma log includes K, U, and Th.
Water Quality logs performed under ambient conditions.
Ambient Water Level about 2.9 ft (9.9 ft bgs).
Logs relative to Truth North (mag dec = 20W)

COMMENTS

All depths here referenced to top steel casing unless noted otherwise.
Measured casing stick down below ground surface: 7.0 ft.
Steel outer casing total depth 14.6 ft, estimated from image log.

Depth (ft) | **Elev. (ft aMSL)**

Geophysics
- Natural Gamma: 0 CPS 100
- Caliper: 5 inches 10

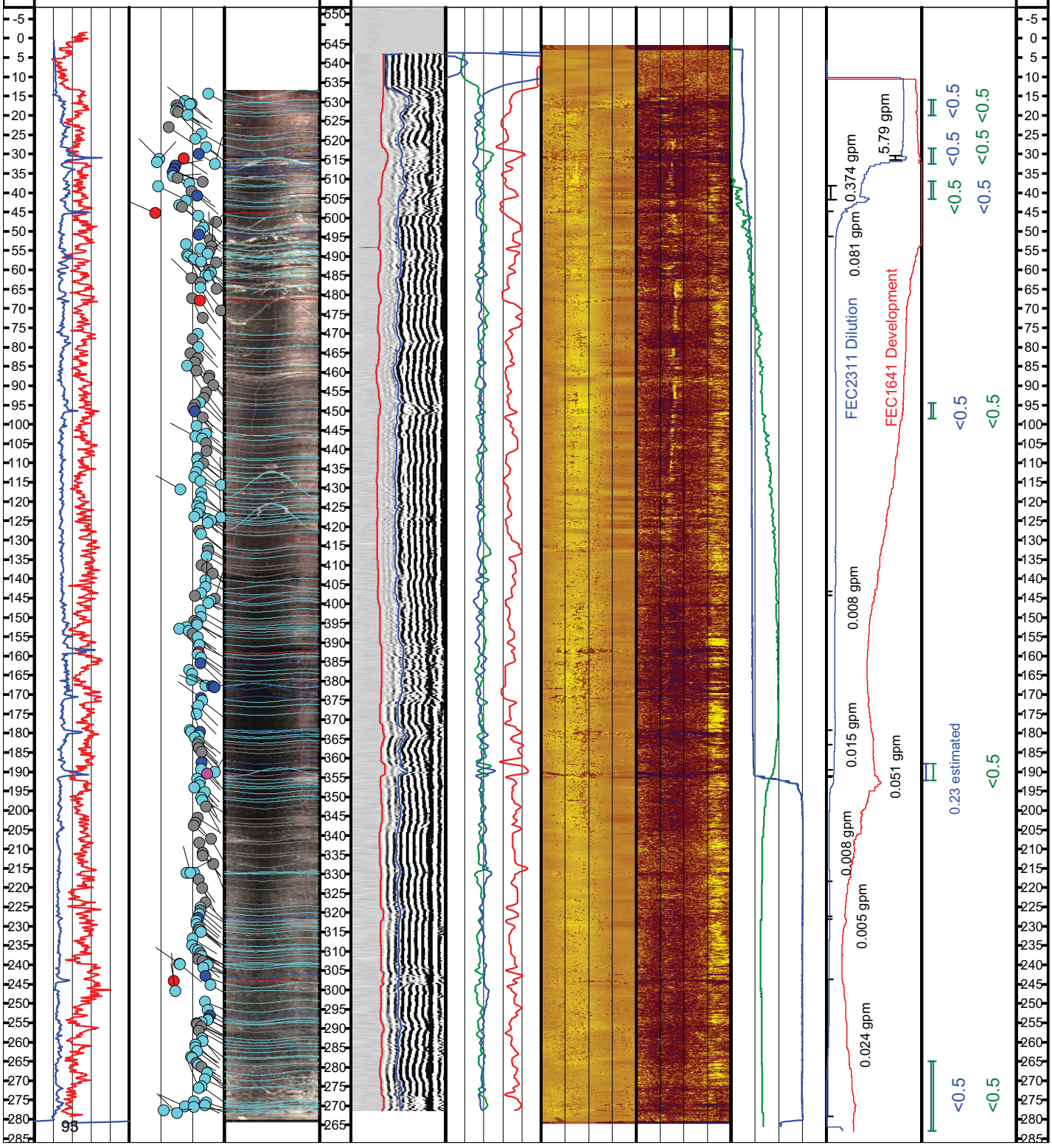
Image Interpretation
- Tadpoles: 0 90
- Projections: 0° 90° 180° 270° 0°

Sonic VDL
- Near Receiver: 0 800
- Vp/Vs: 0 5
- P-Wave Arrival Near: 0 mircoseconds 800
- P-Wave Velocity: 0 ft/s 25000
- S-Wave Arrival Near: 0 microseconds 800
- S-Wave Velocity: 0 ft/s 25000

Image Logs
- Travel Time: 0° 90° 180° 270° 0°
- Acoustic Amp.: 0° 90° 180° 270° 0°

Hydrophysics
- Fluid Conductivity: 300 mS/cm 700
- FEC Development: 0 uS/cm 400
- Fluid Temperature: 4 degC 6
- FEC Dilution: 0 uS/cm 400
- Inflow During Pump: 0 gpm 8

Sample Results
- cis-1,2-DCE: 0 ppb 5
- TCE: 0 ppb 4



Optical Televiewer Image Plot - True North

COMPANY: Weston Solutions	PROJECT: LO-58
DATE LOGGED: 8 May 2008	WELL: DW-2

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810 Quail Street, Suite E, Lakewood, CO 80215
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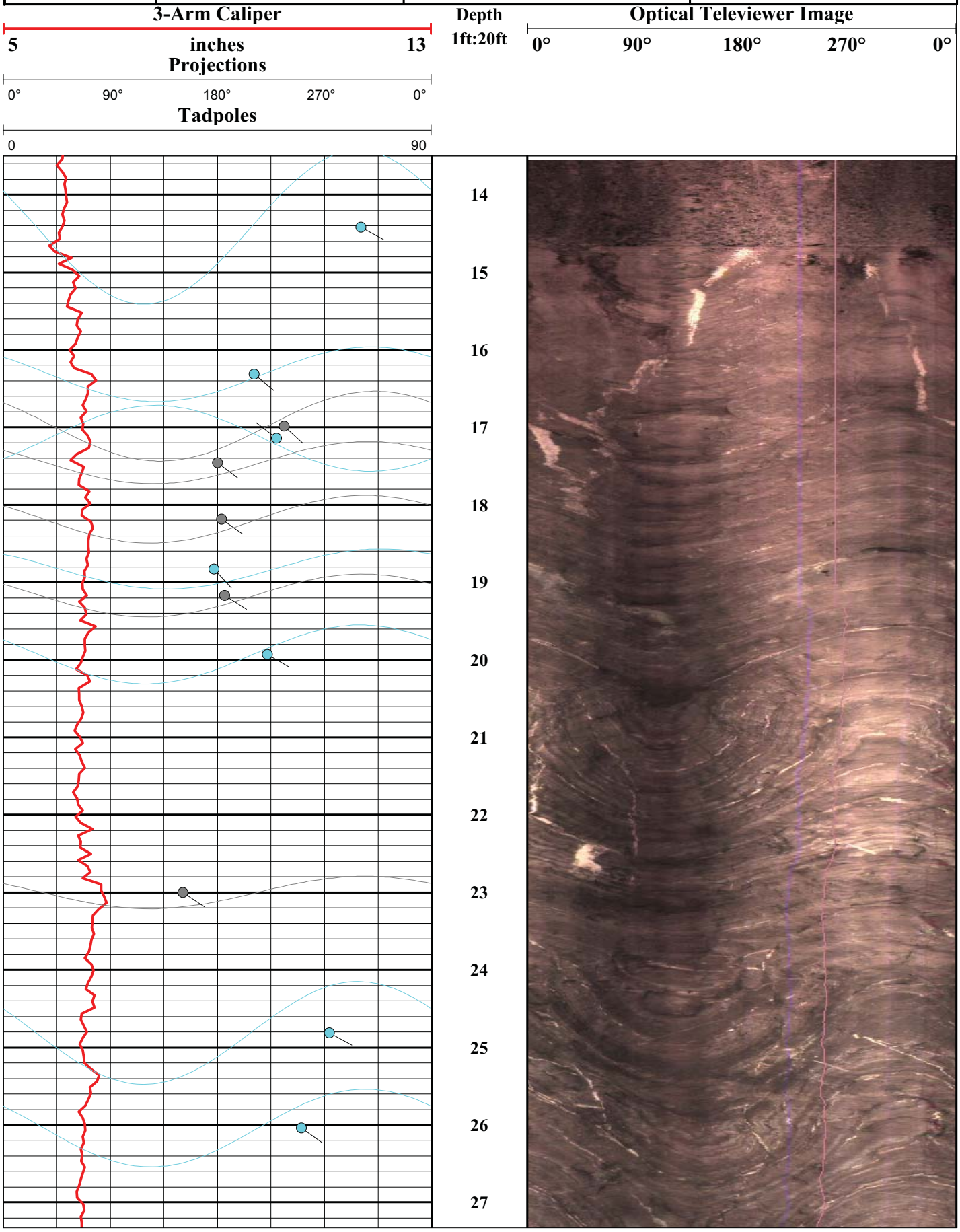

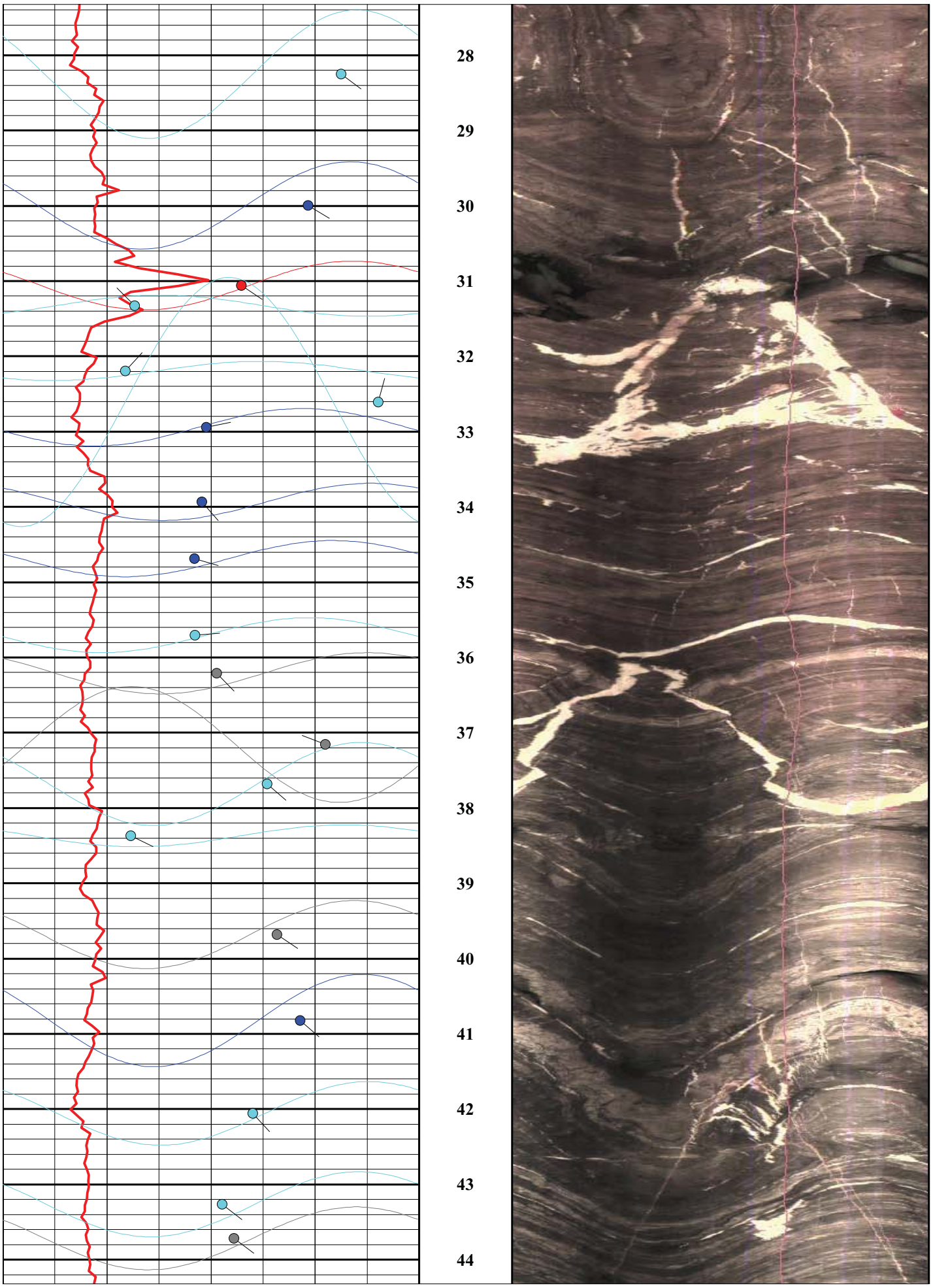
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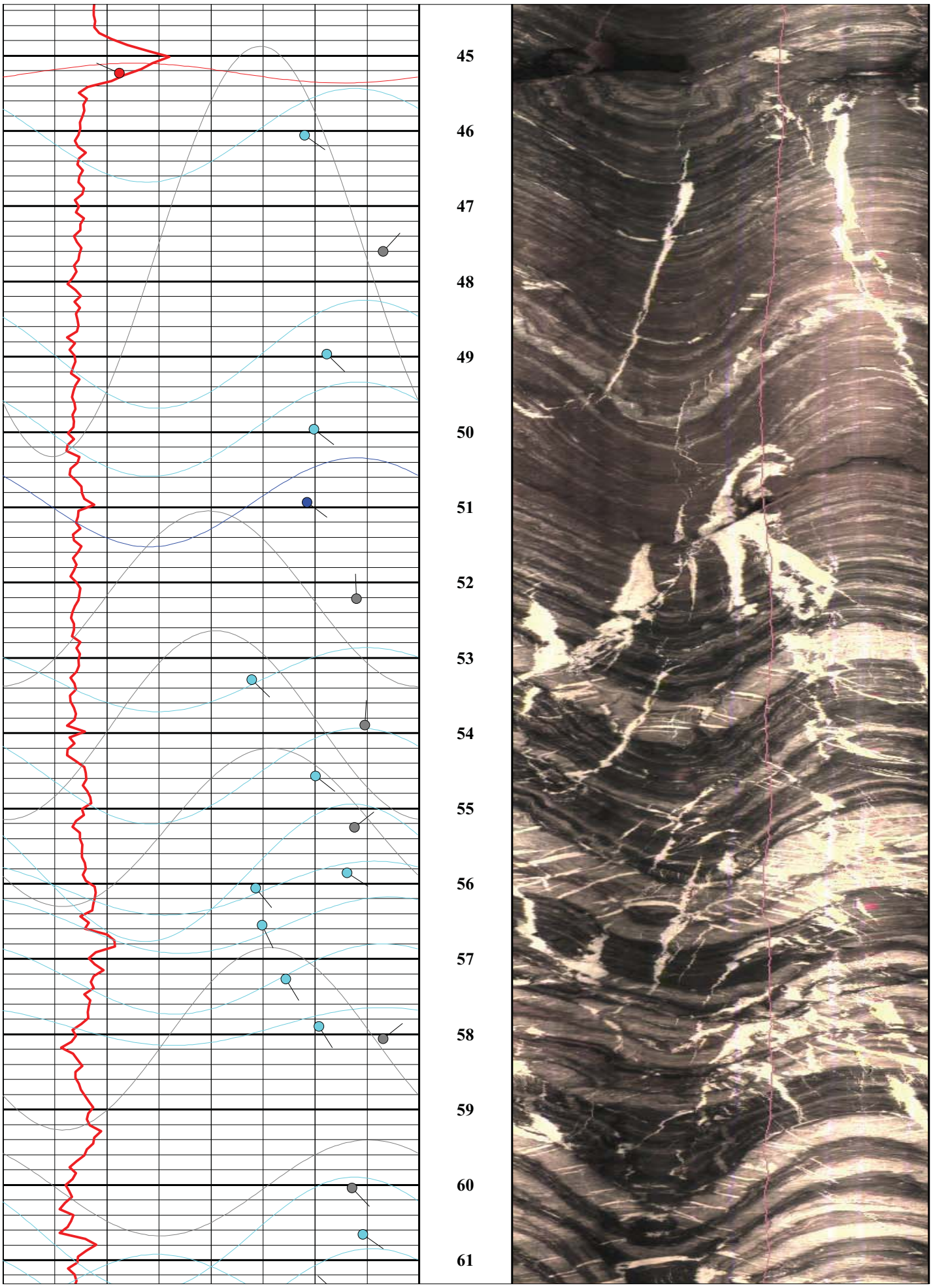
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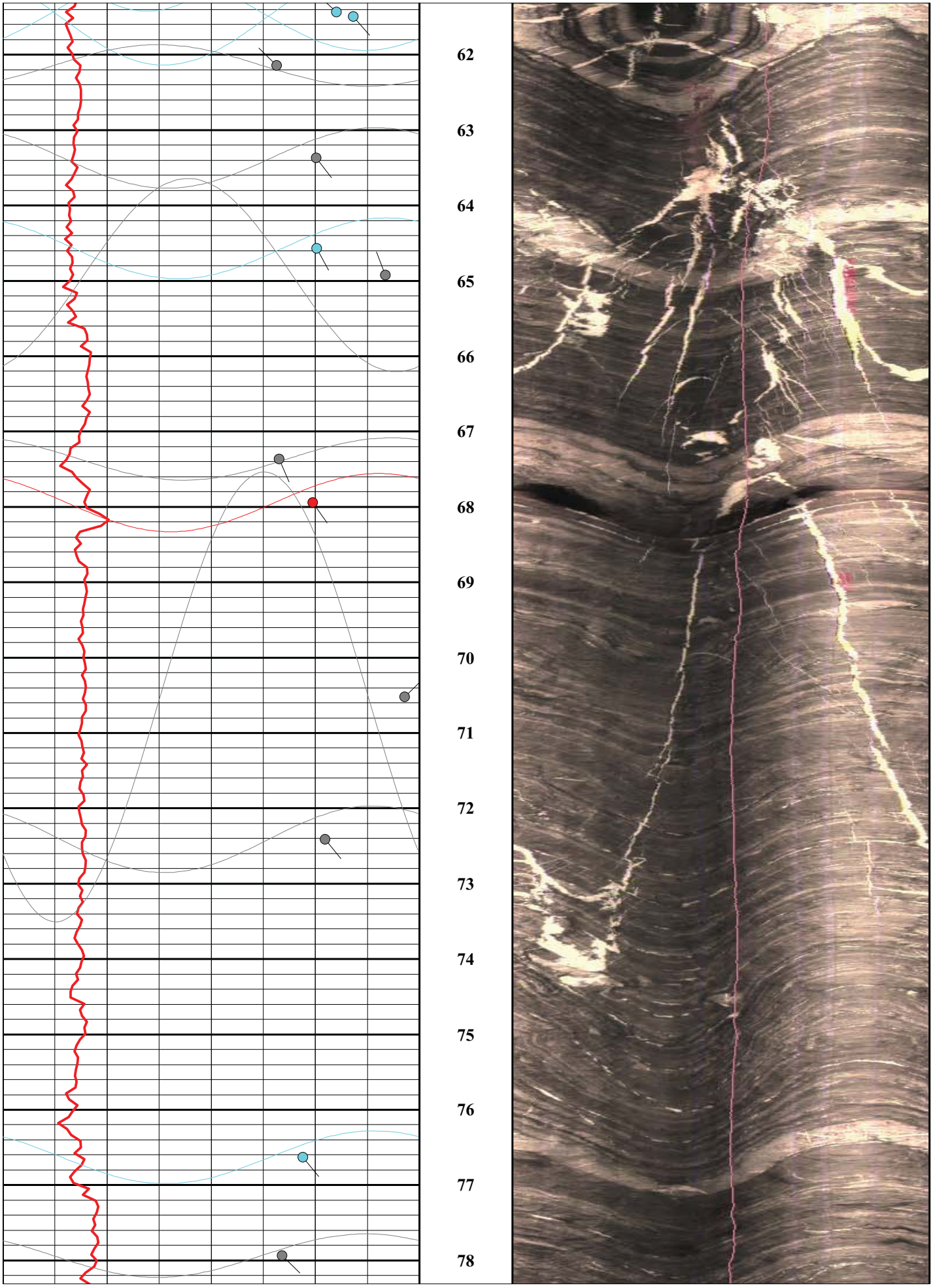
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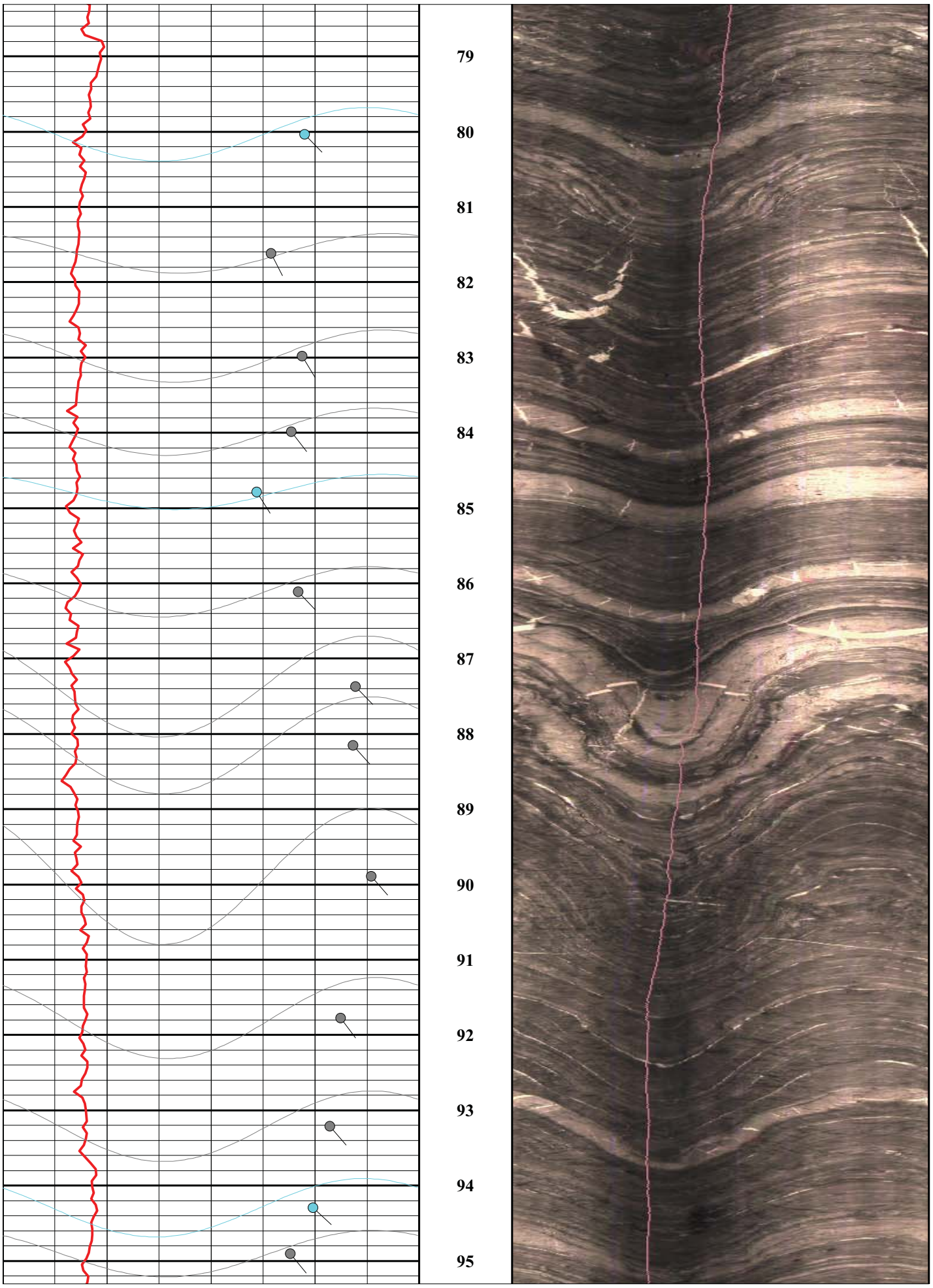
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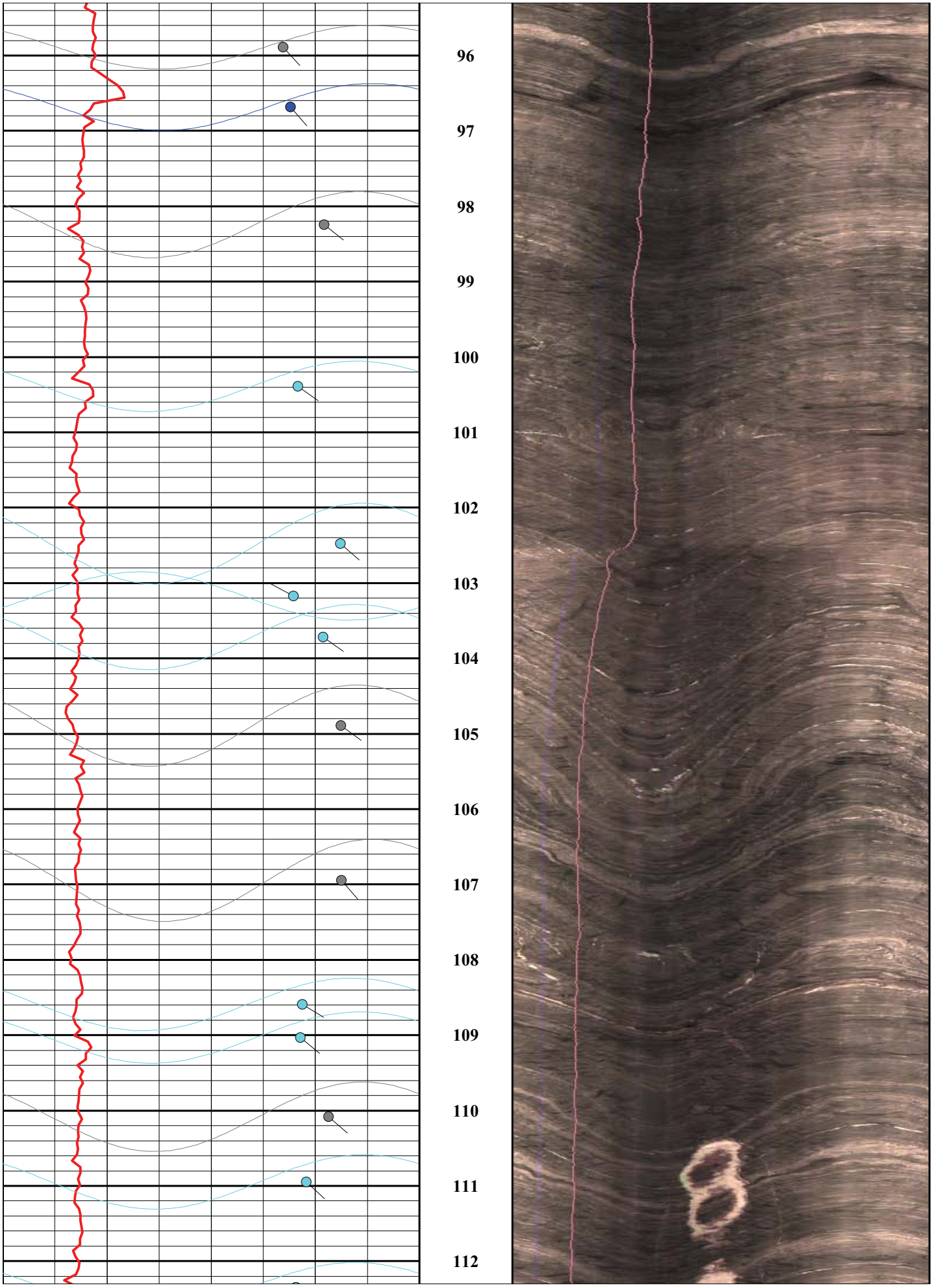
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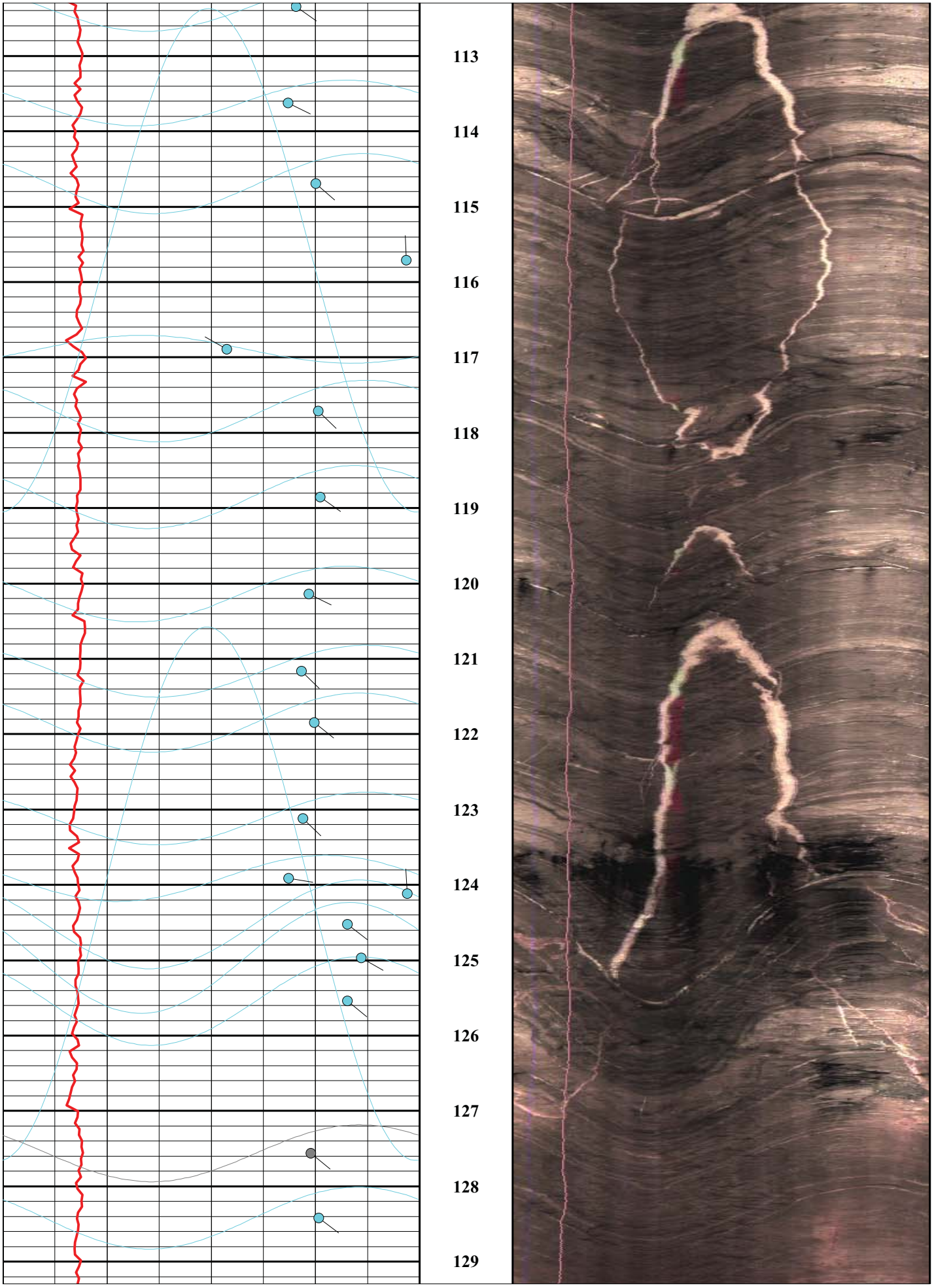
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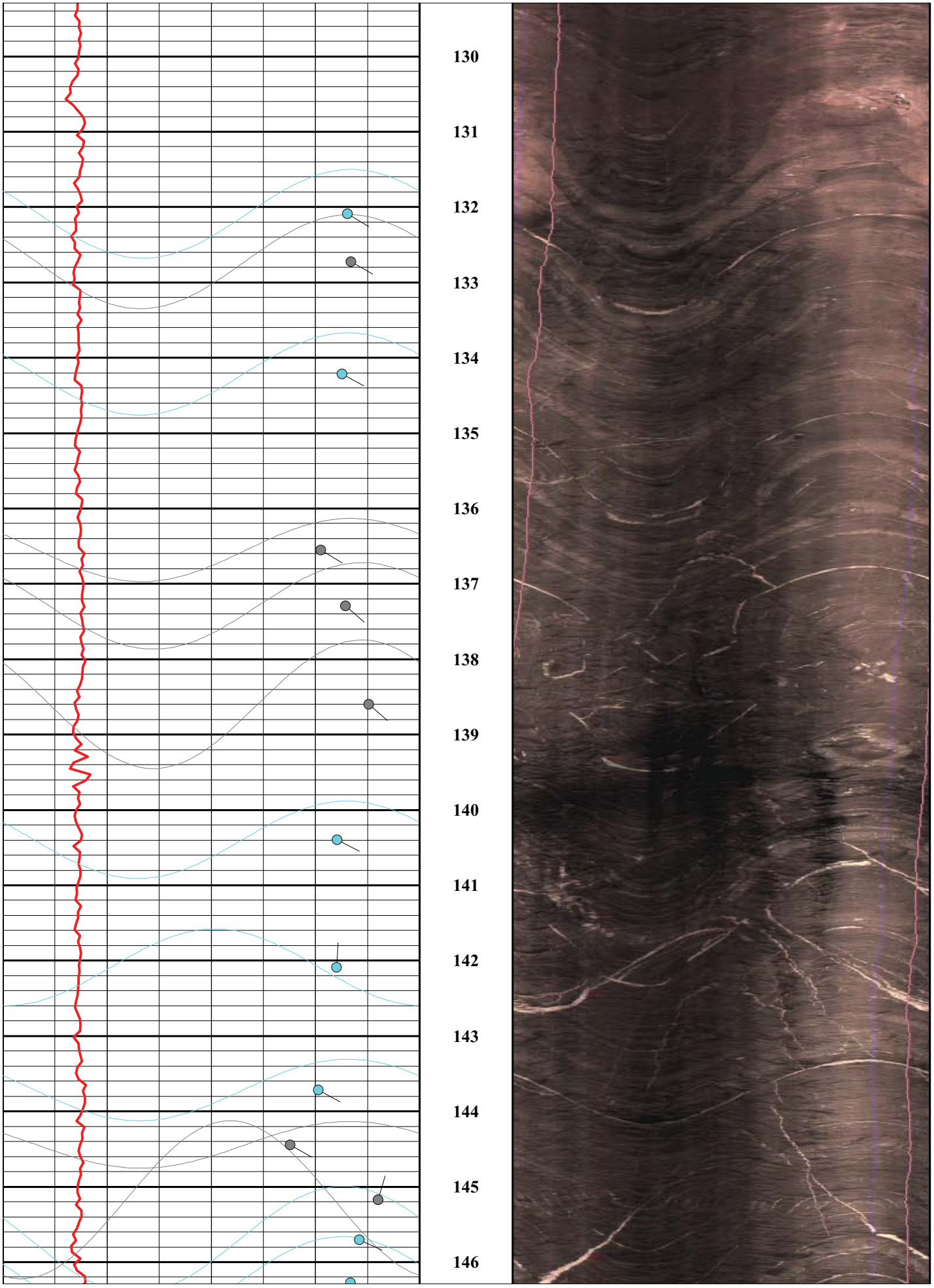
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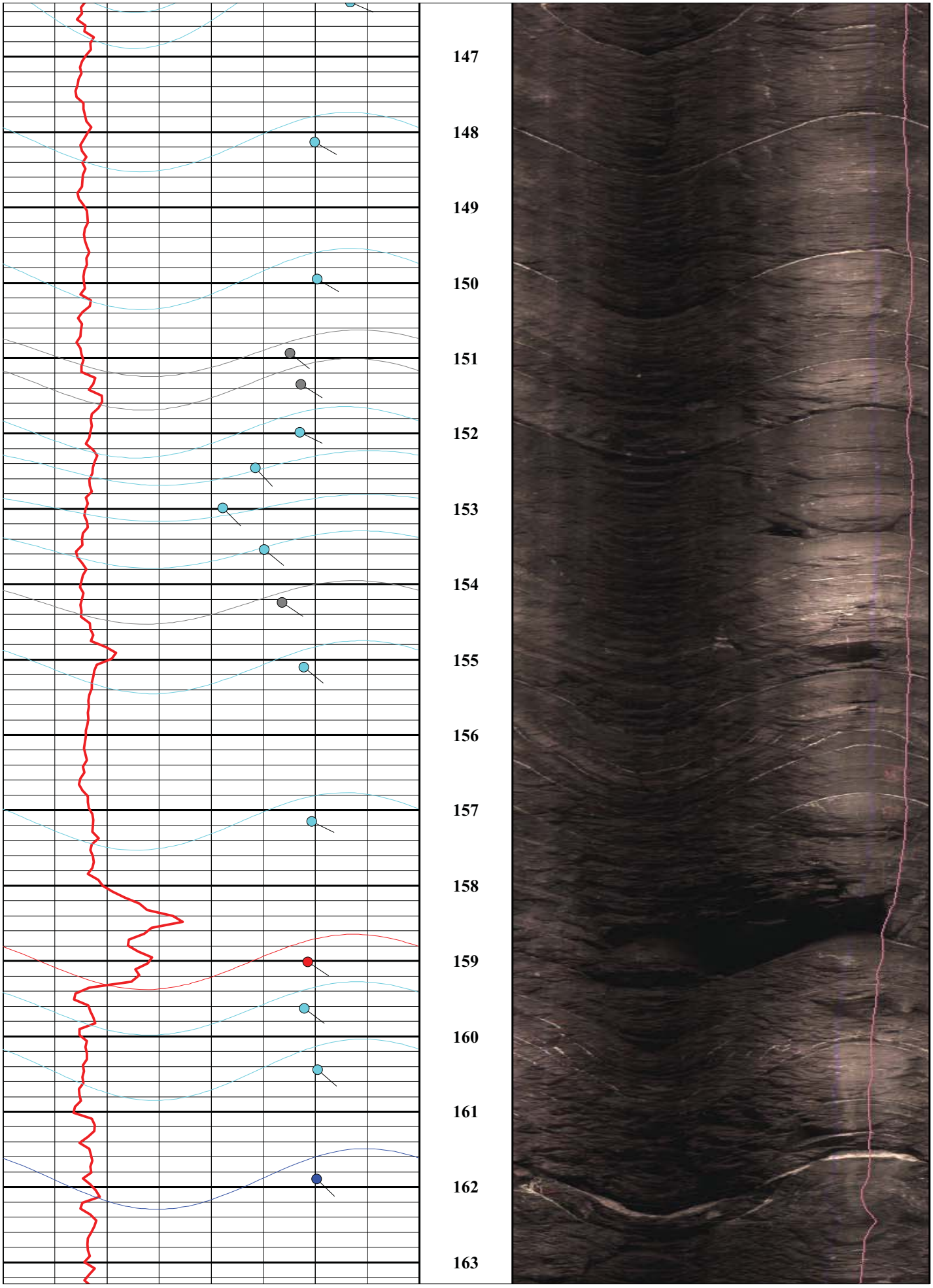
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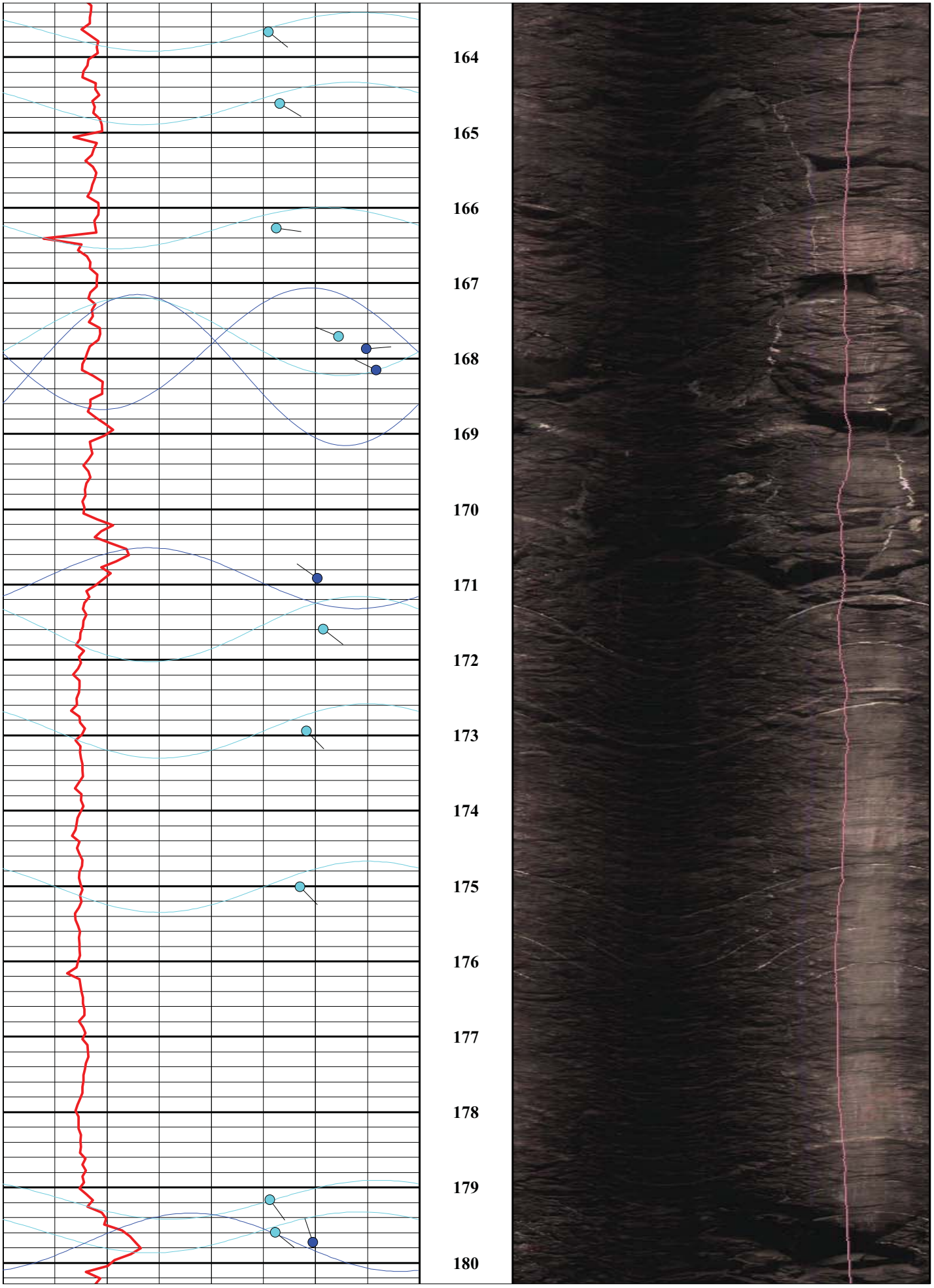
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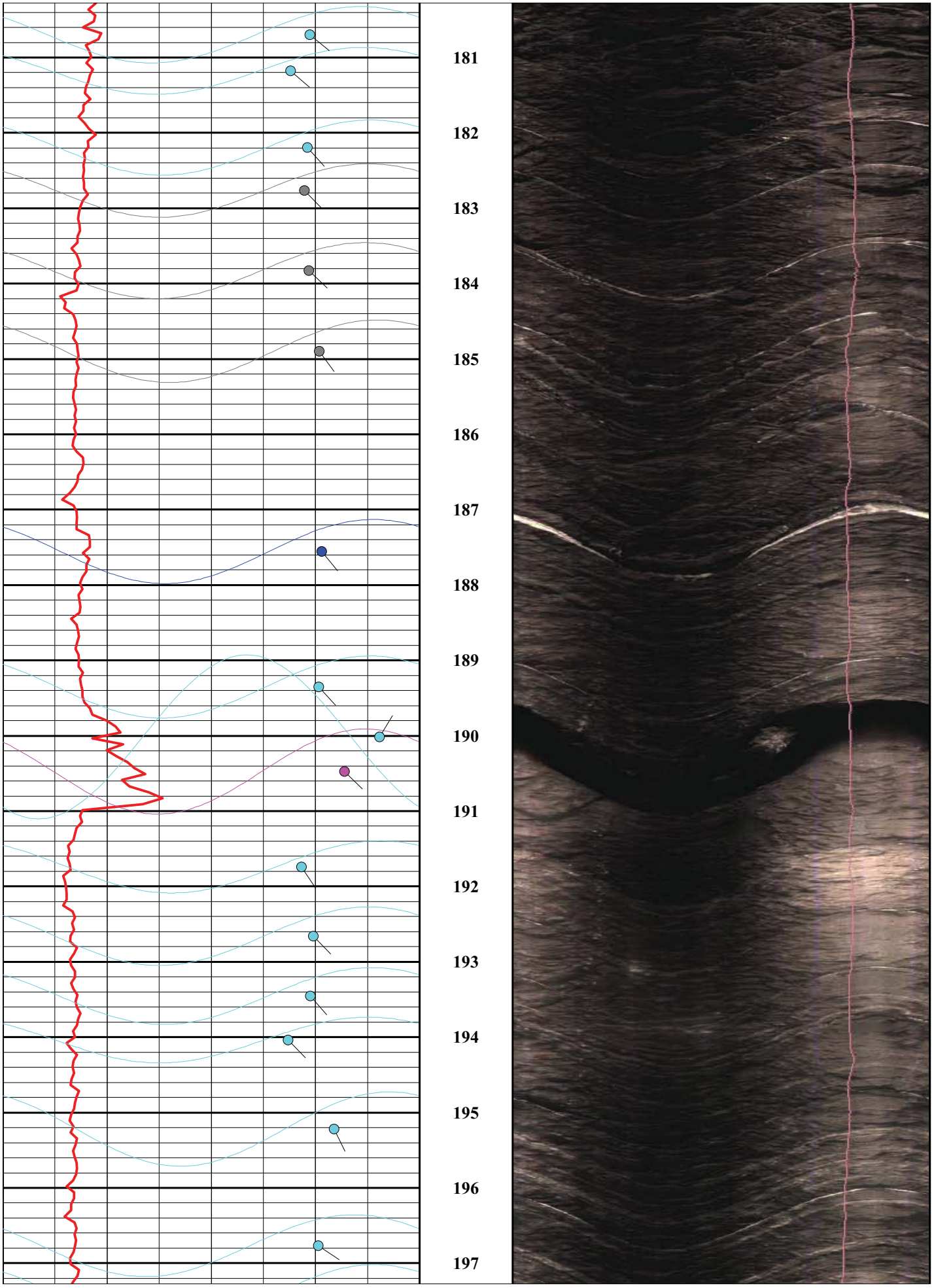
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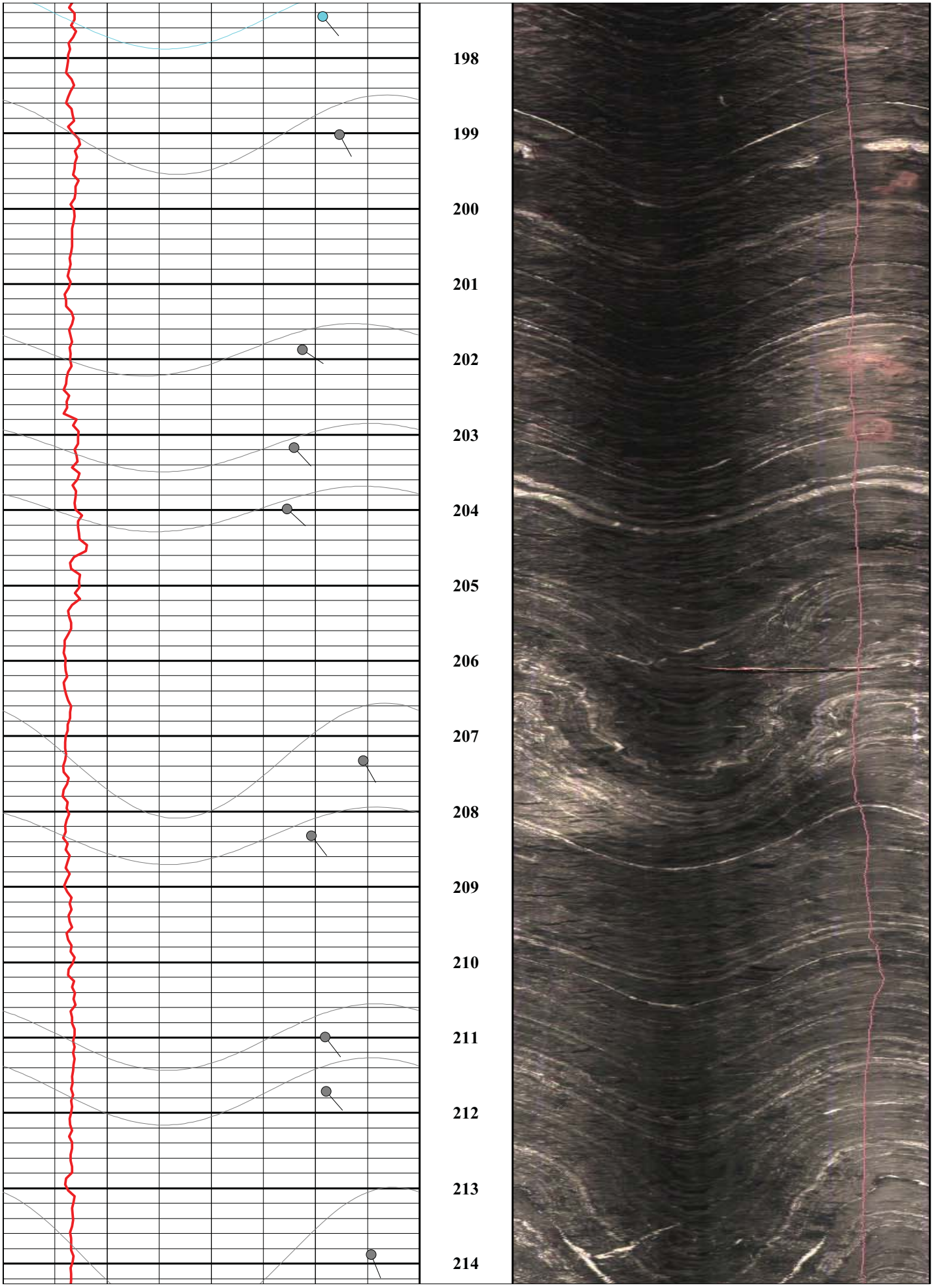
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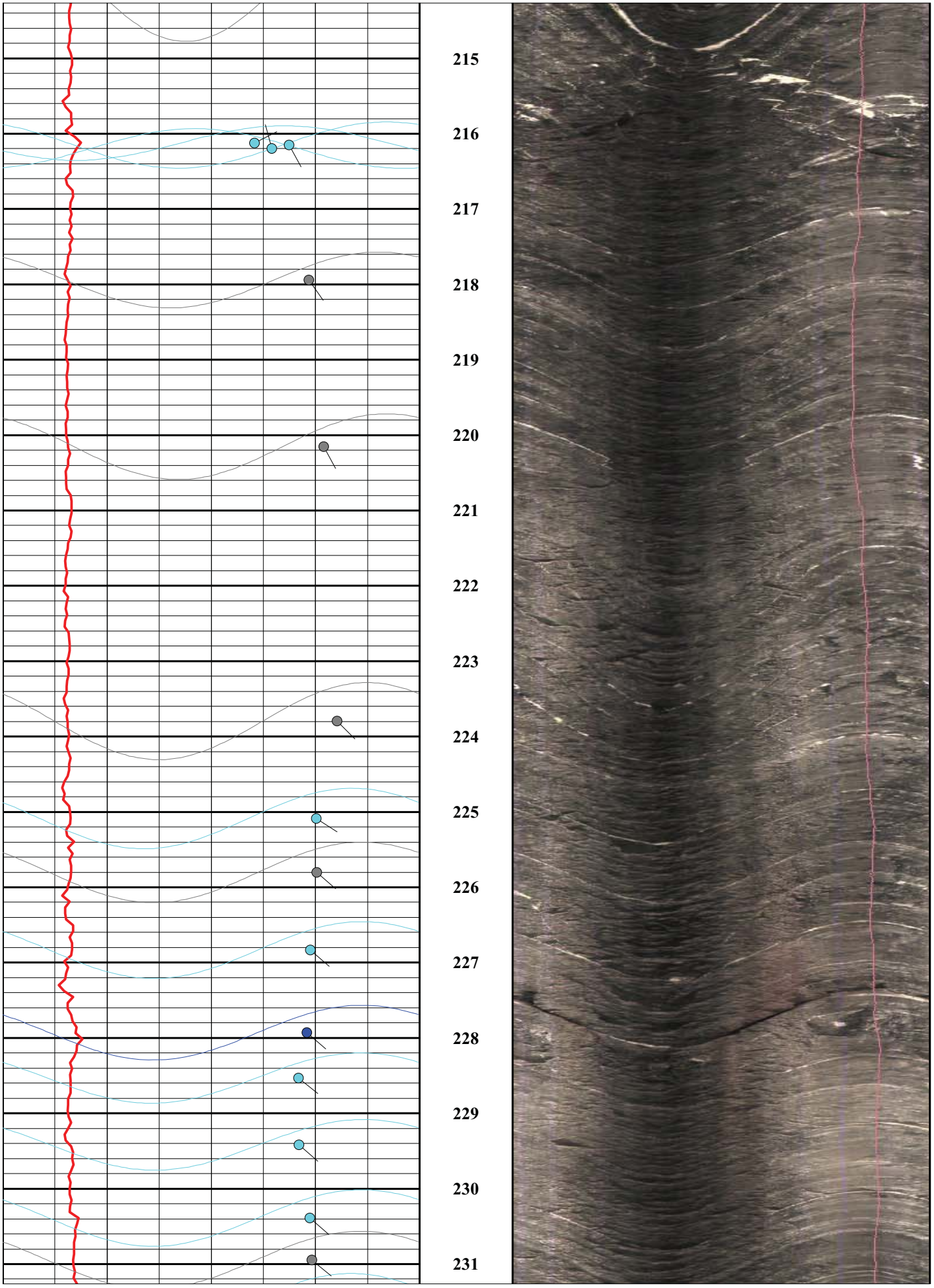
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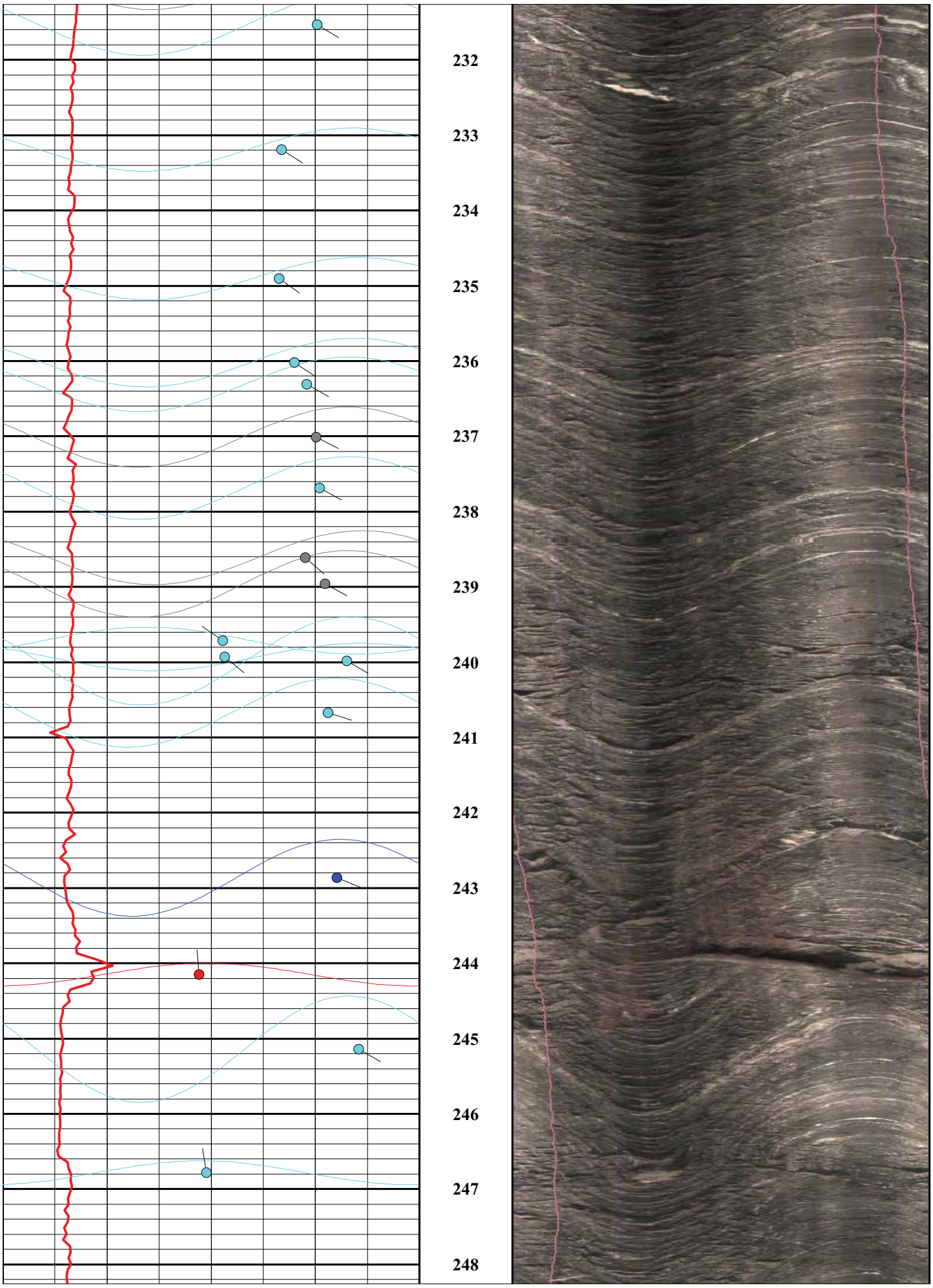
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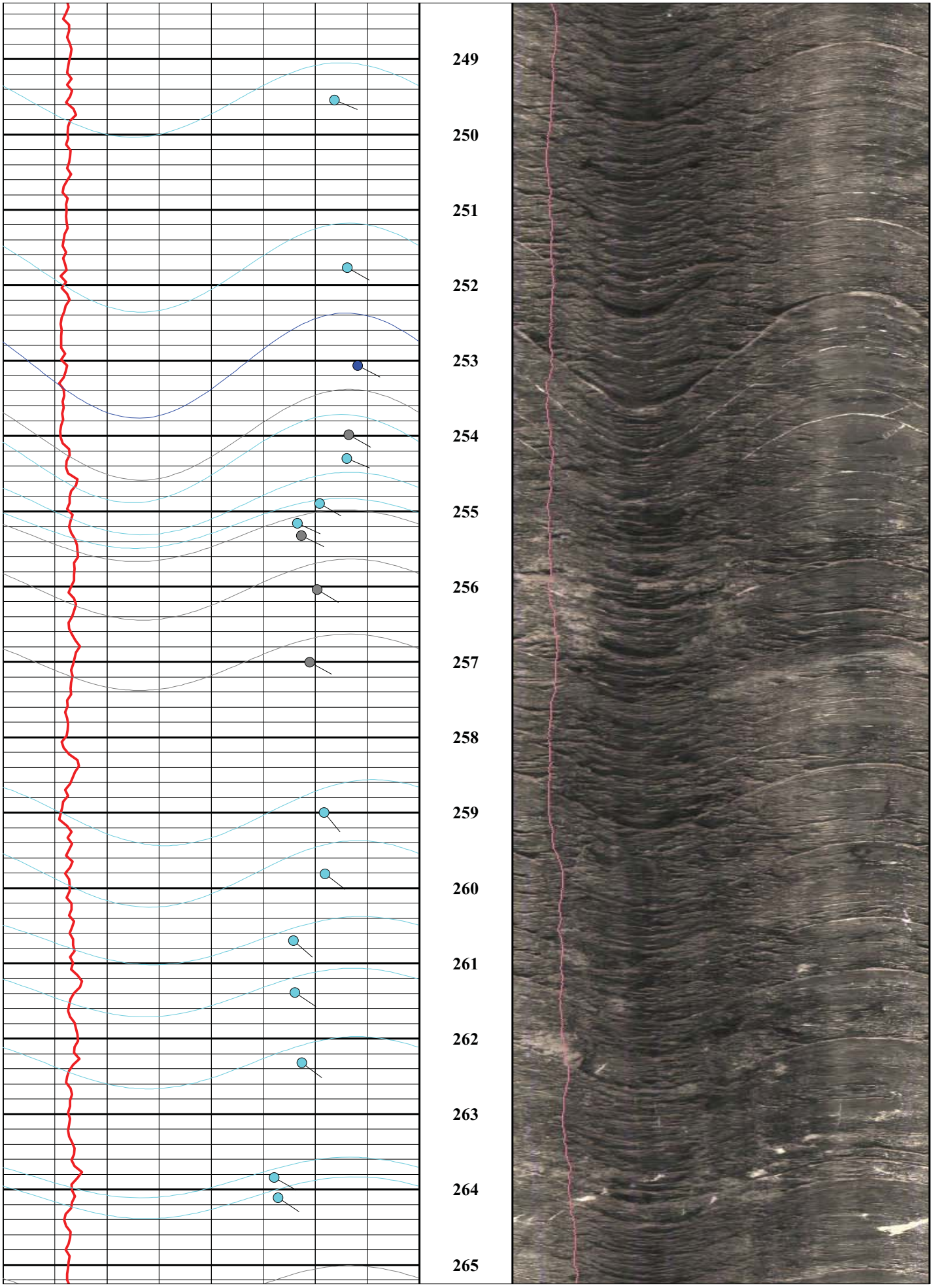
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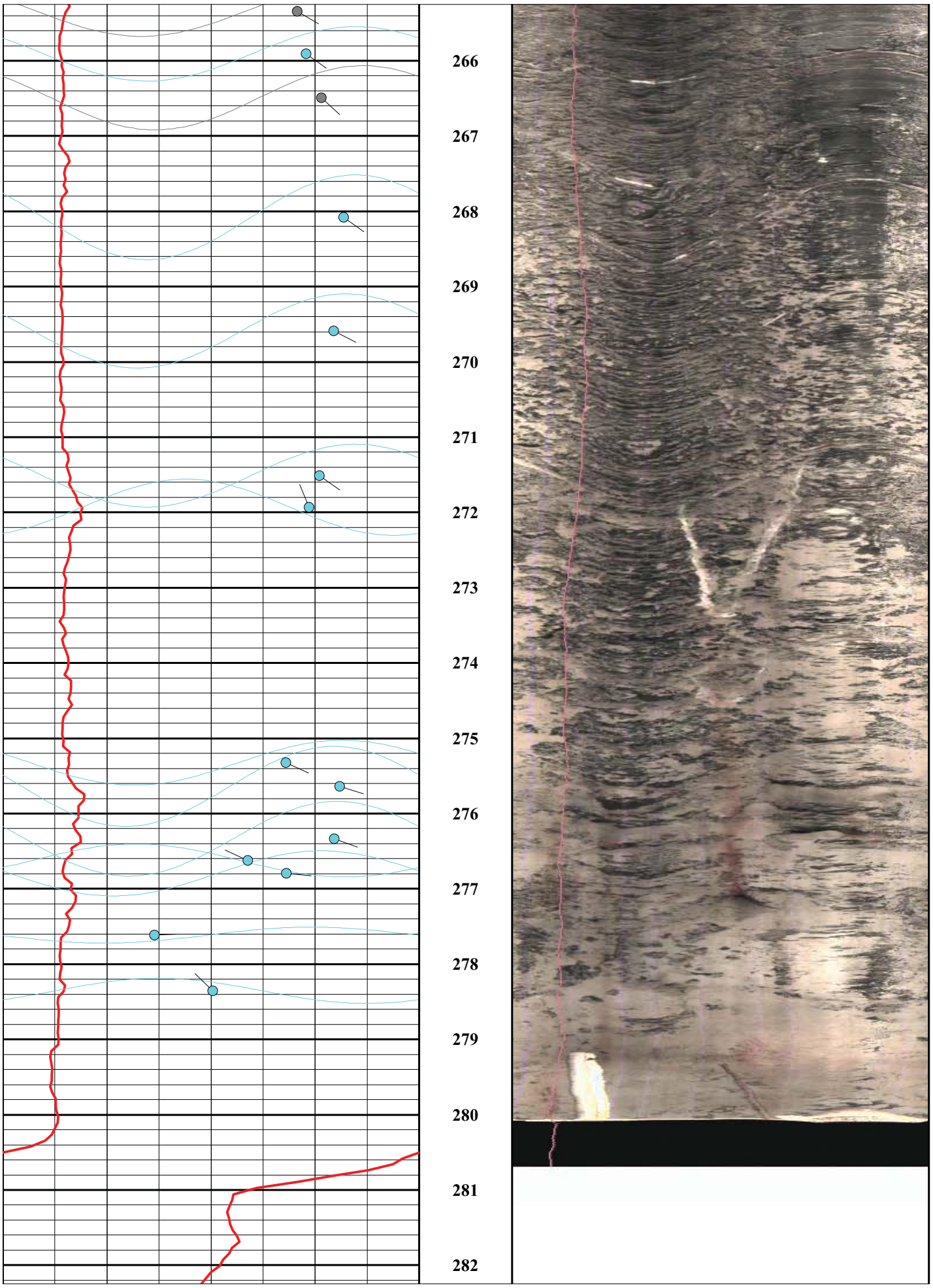
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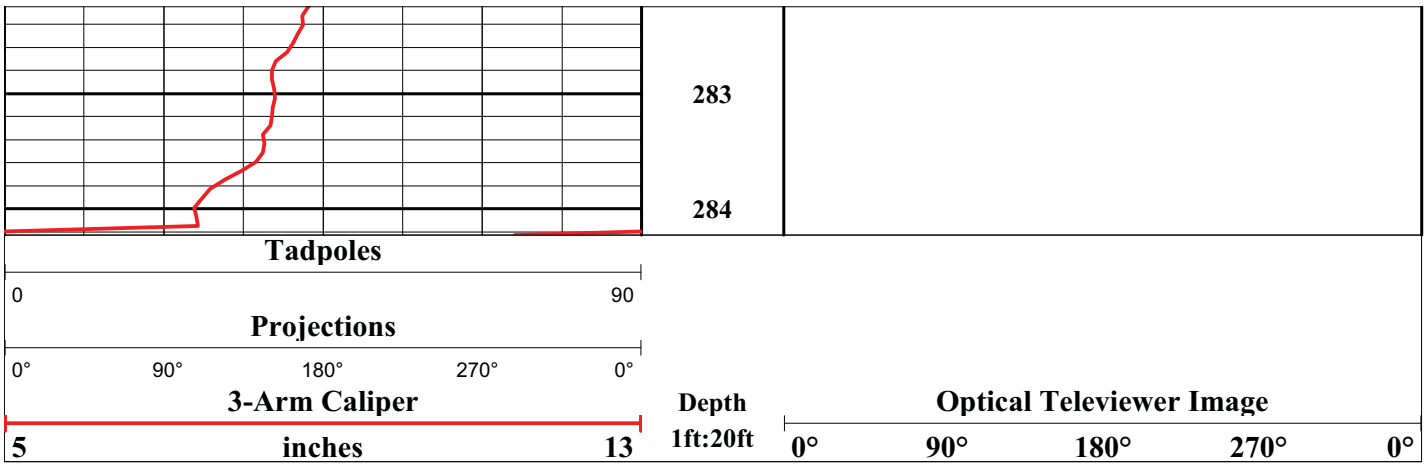
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Optical Televiewer Image
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90°
180°
270°
0°

Acoustic Televiewer Image Plot-True North

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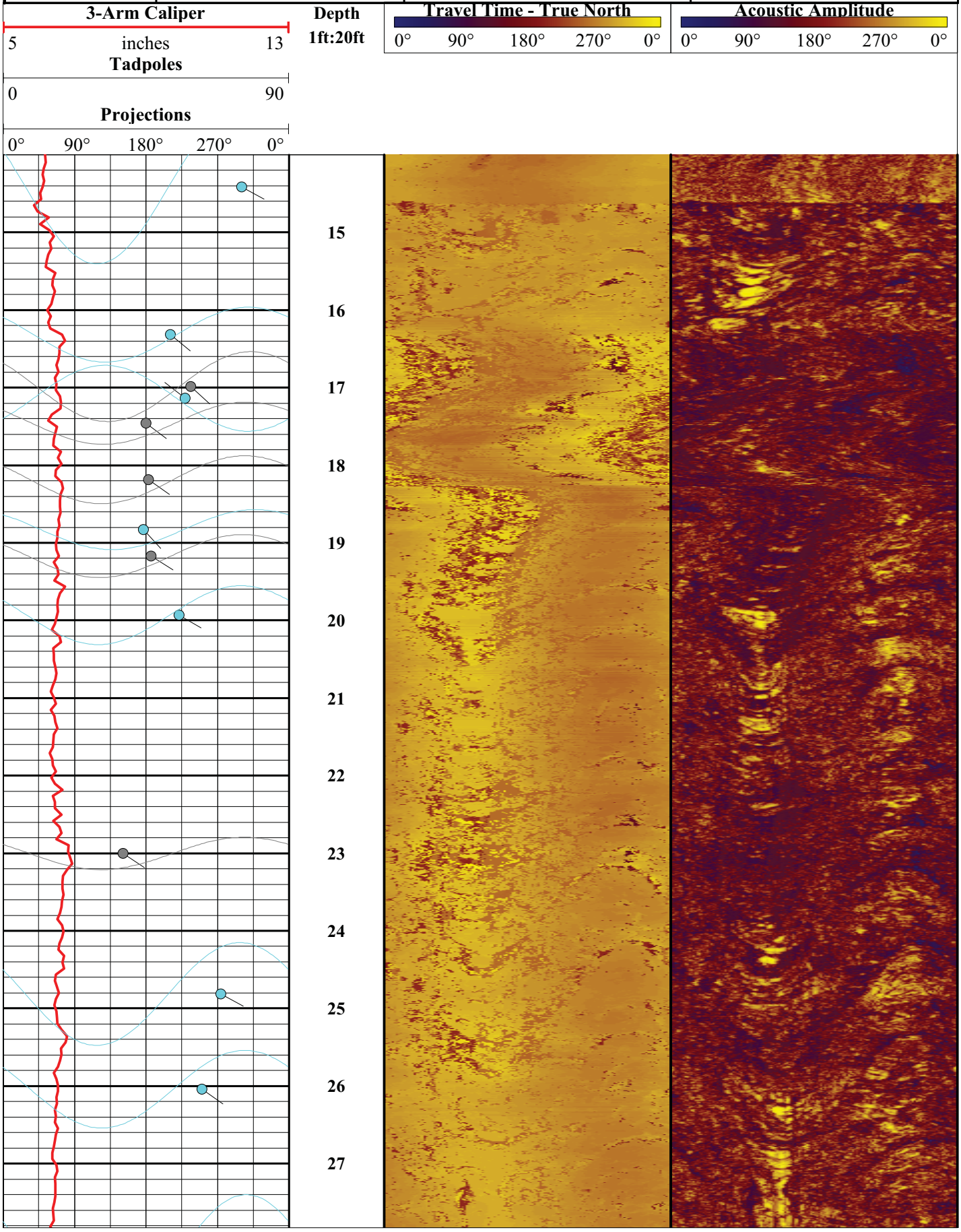
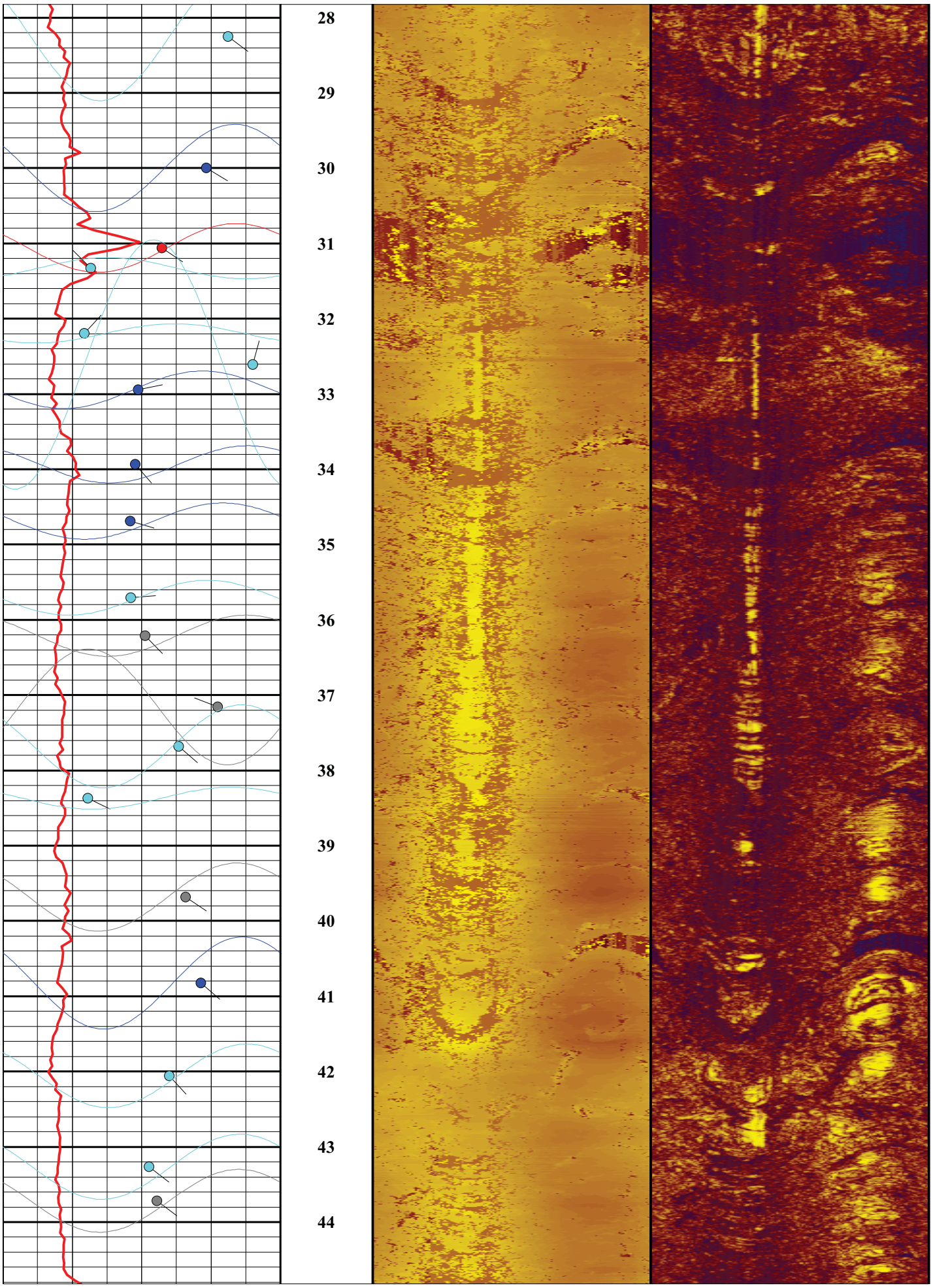
COMPANY: Weston Solutions | PROJECT: LO-58

DATE LOGGED: 10 May 2008 | WELL: DW-2 (Adj. to True North)

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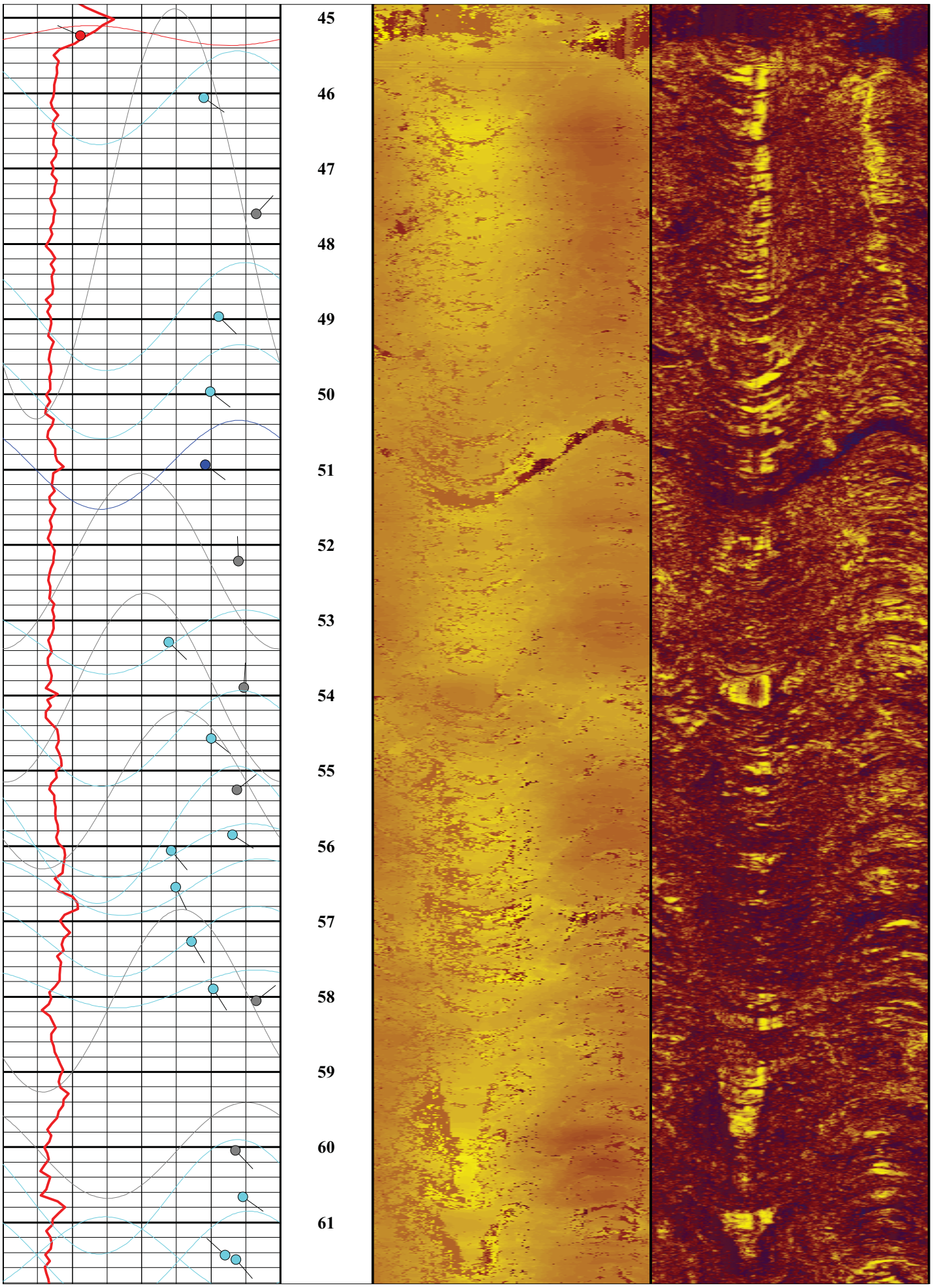
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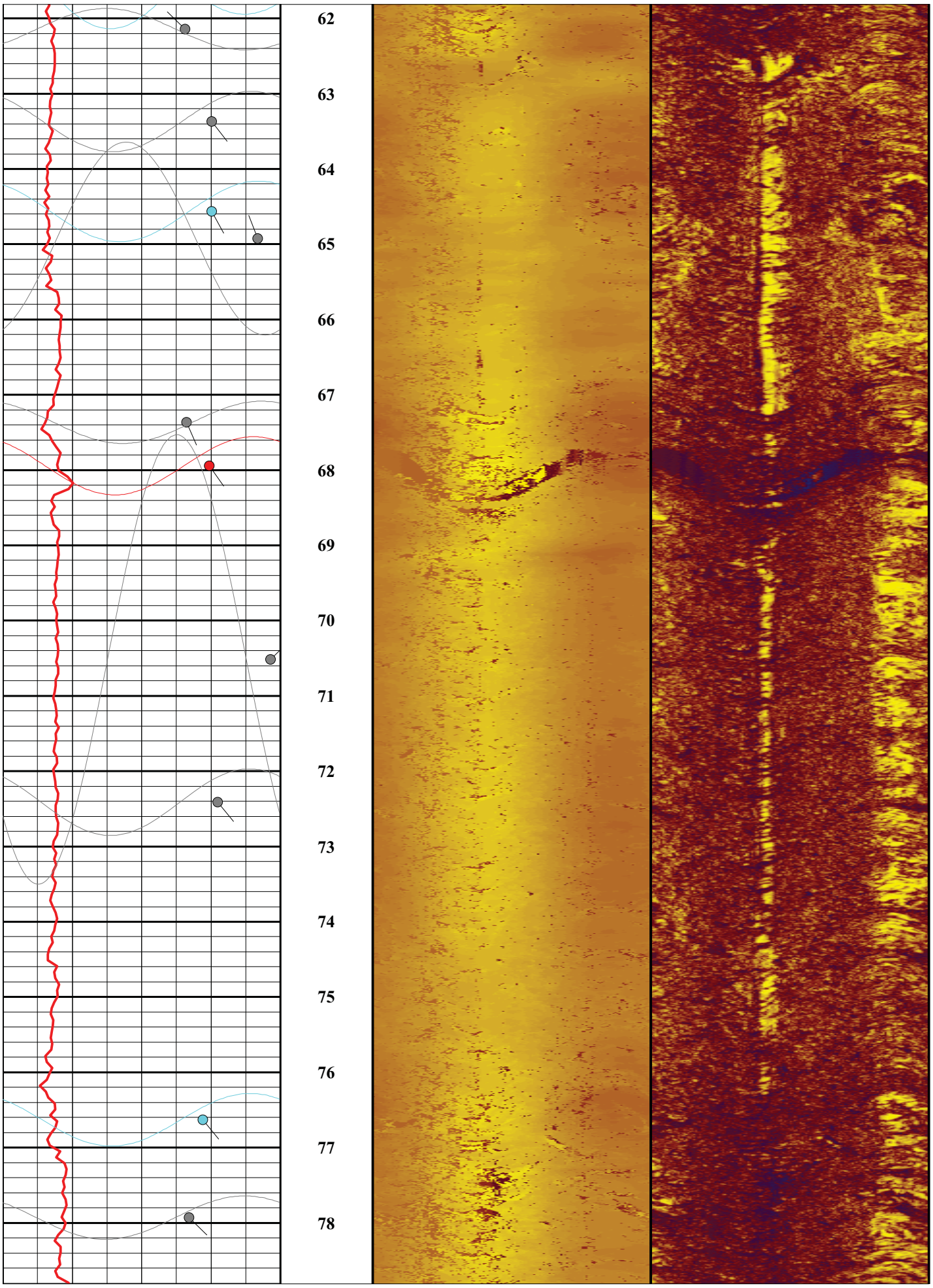
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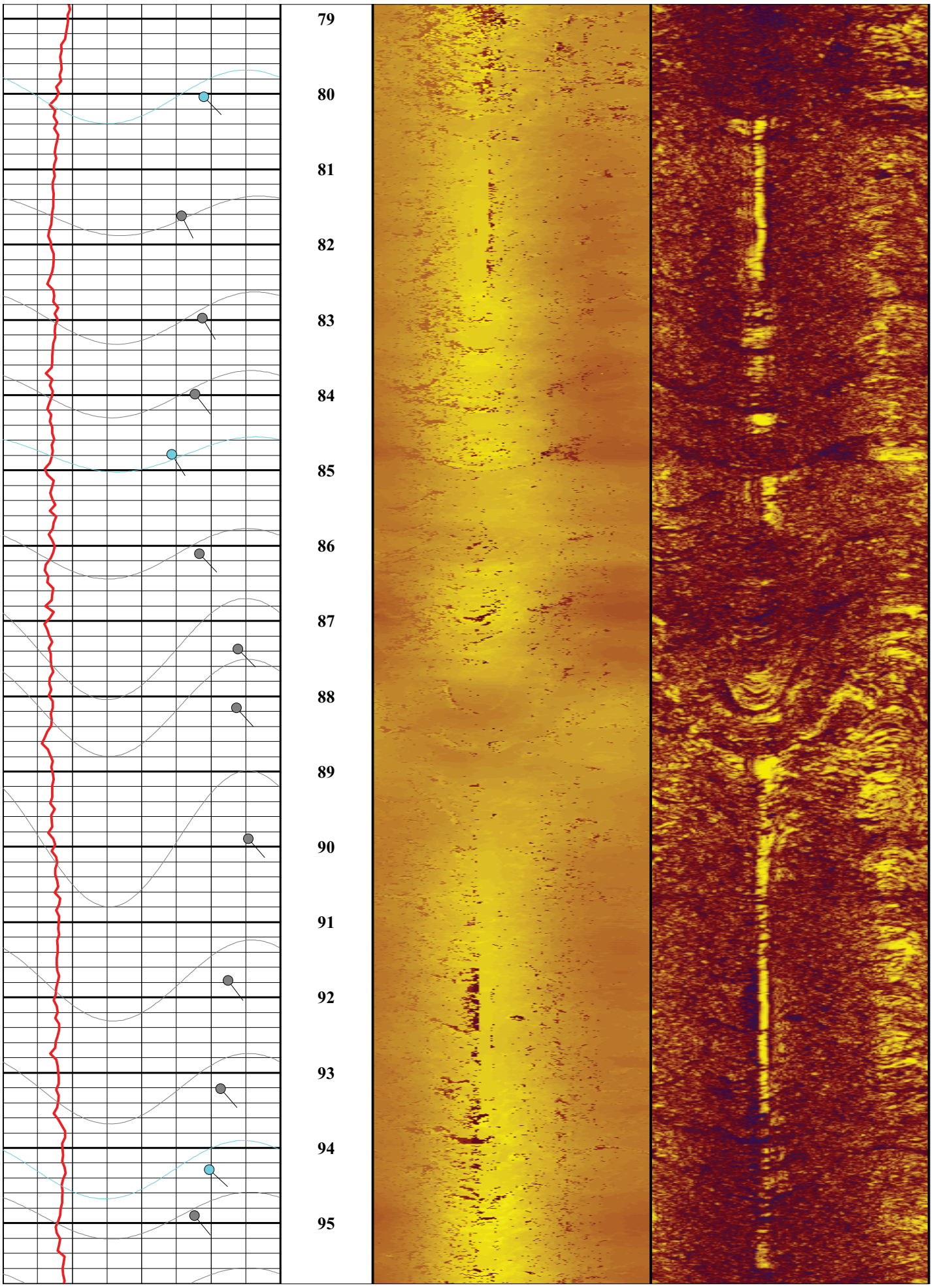
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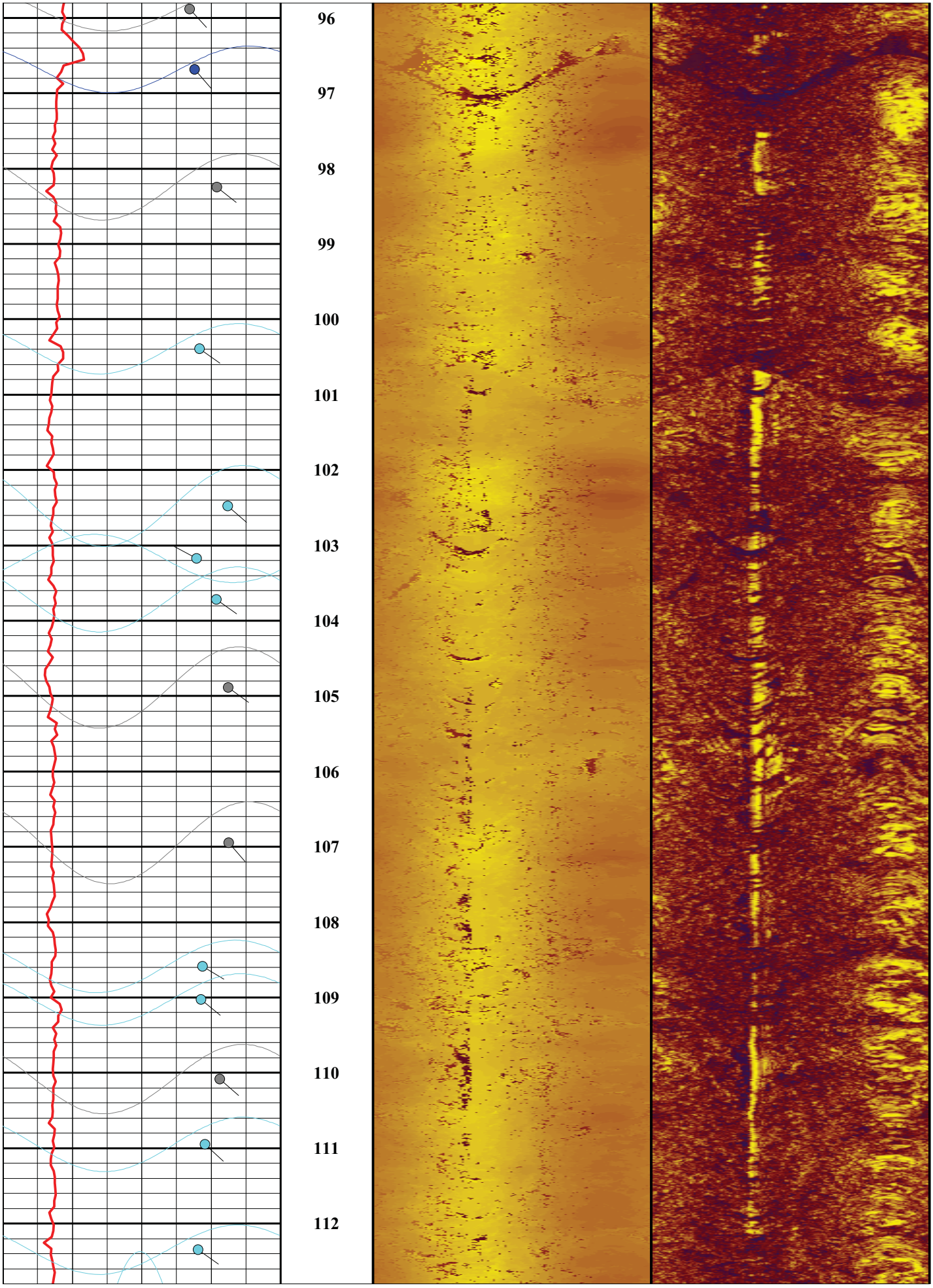
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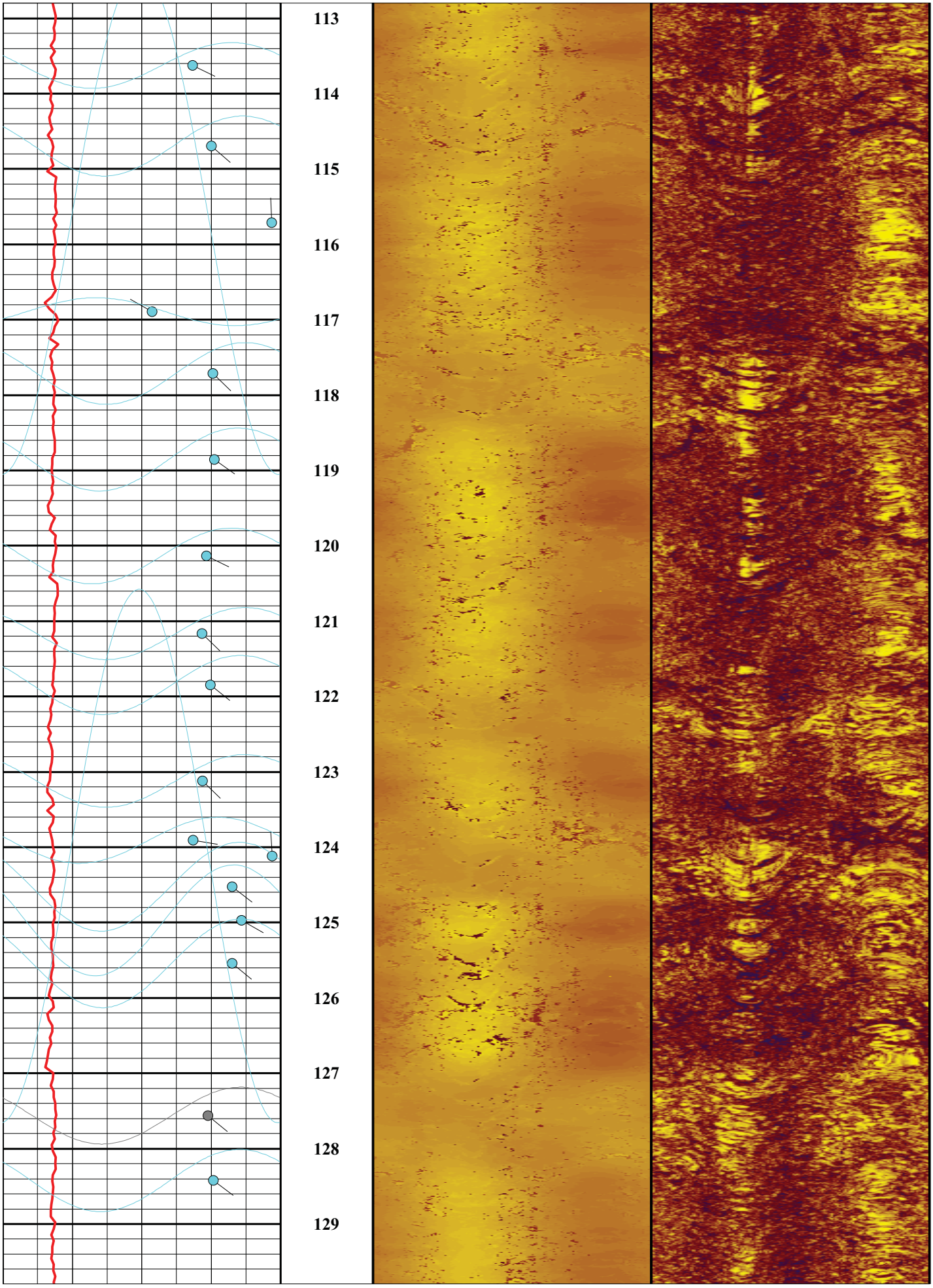
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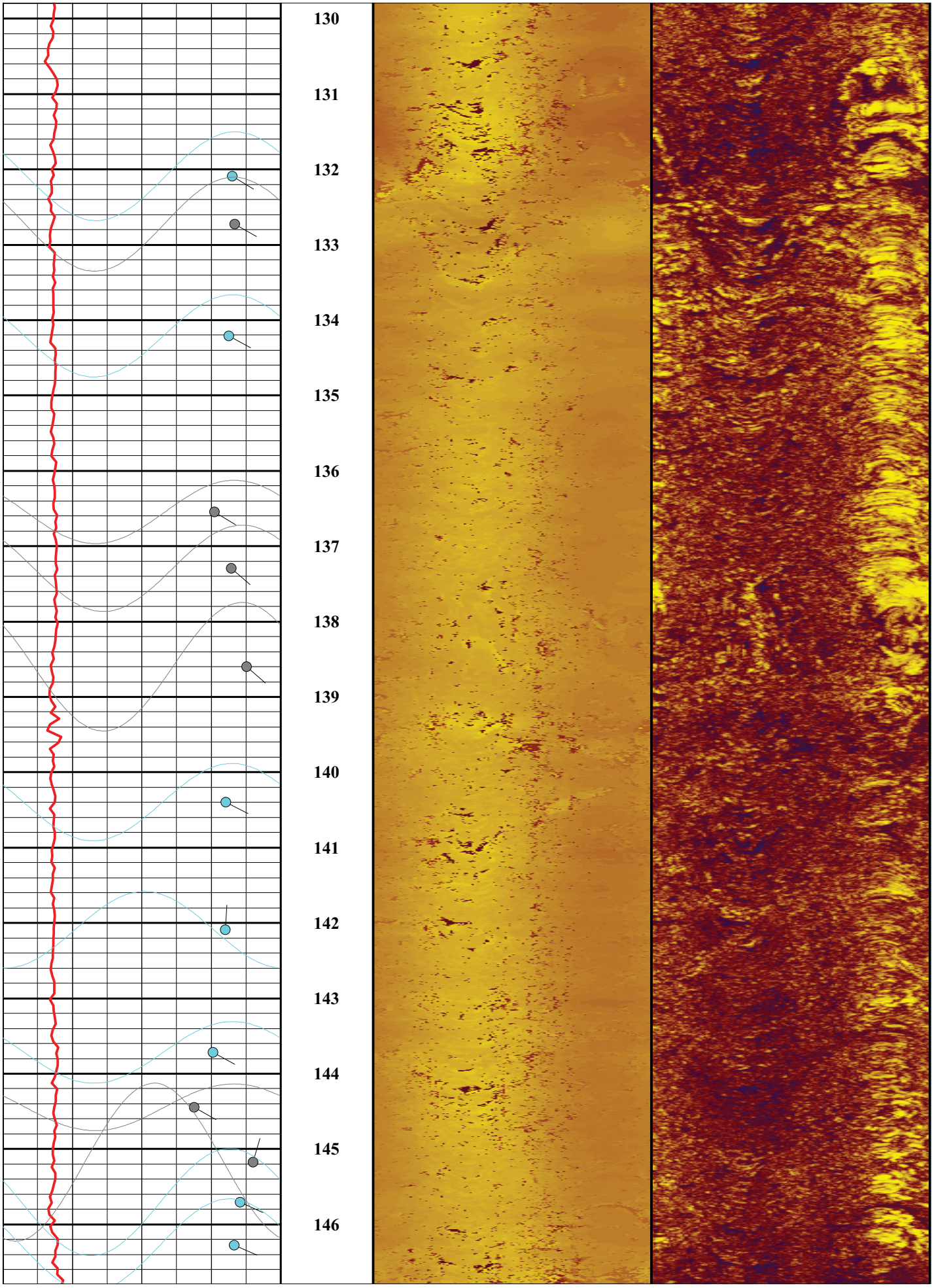
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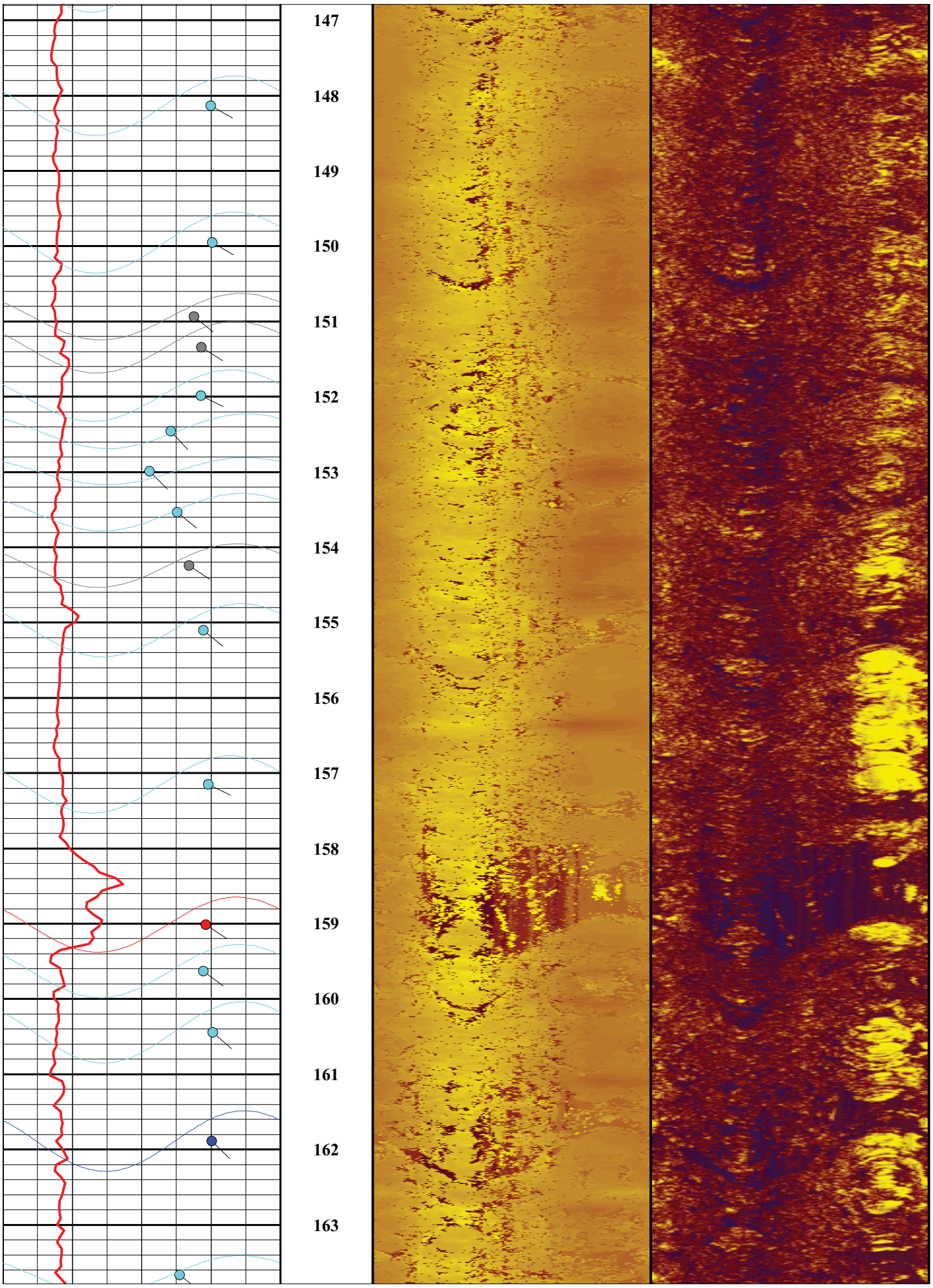
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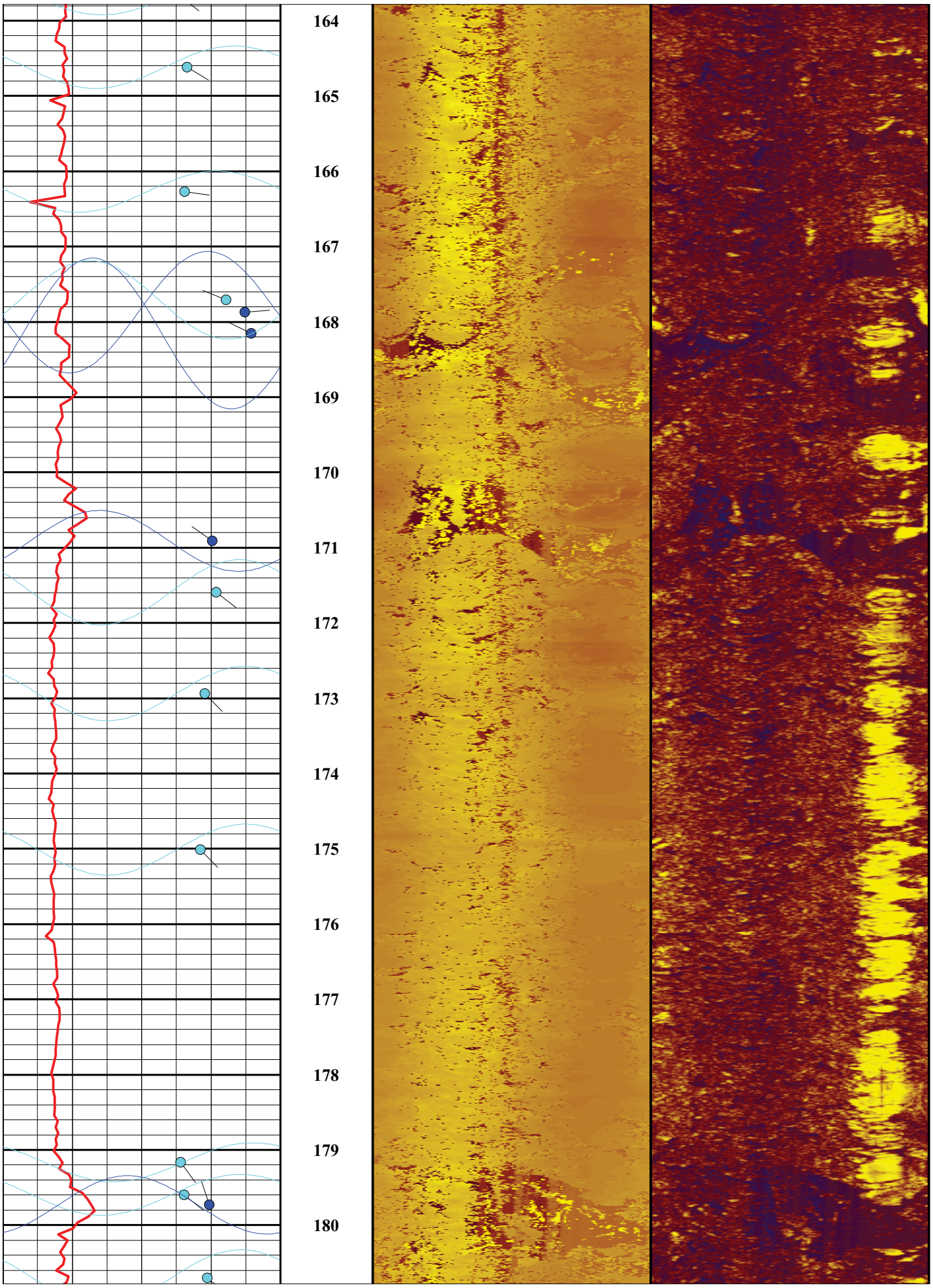
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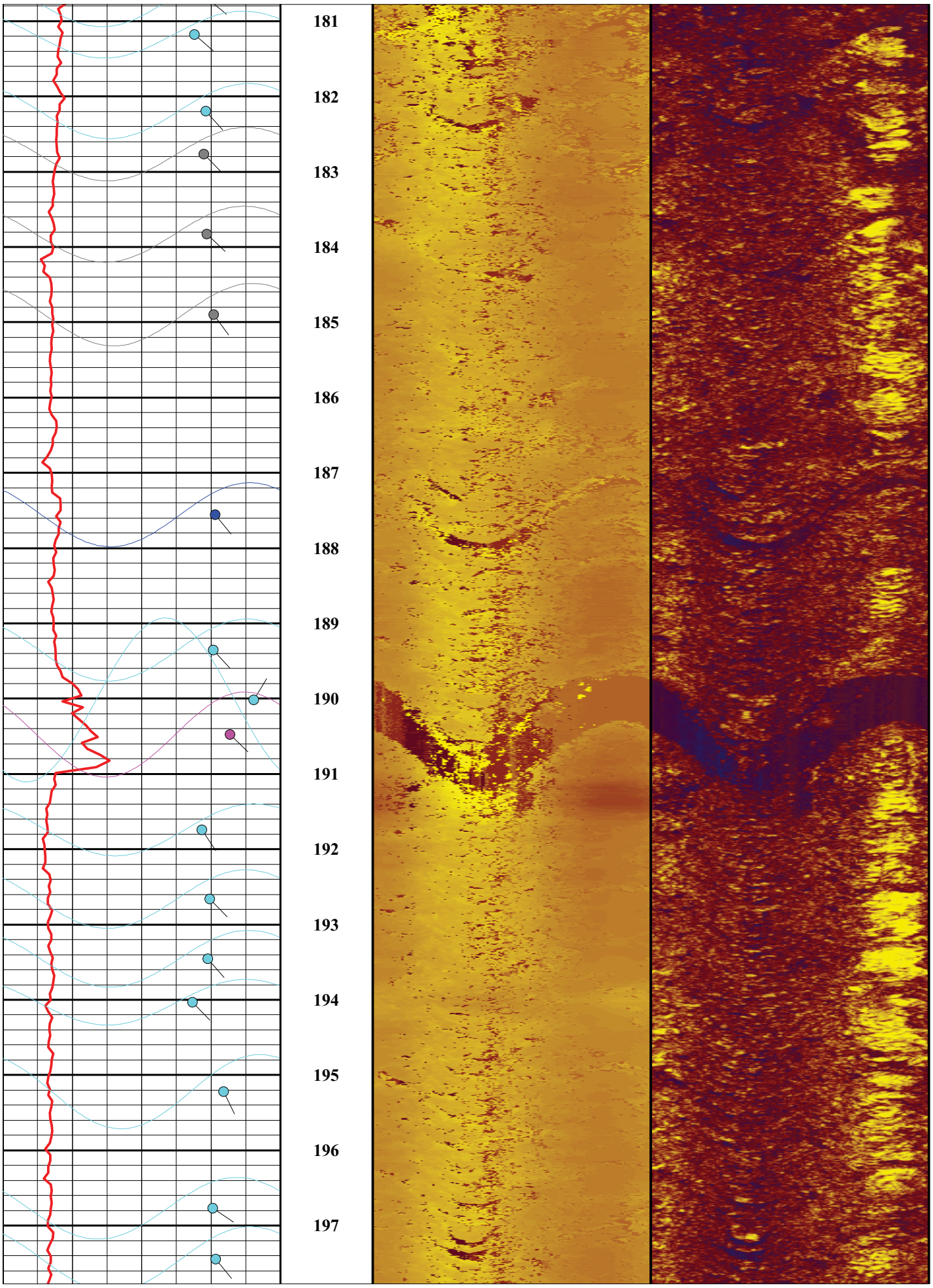
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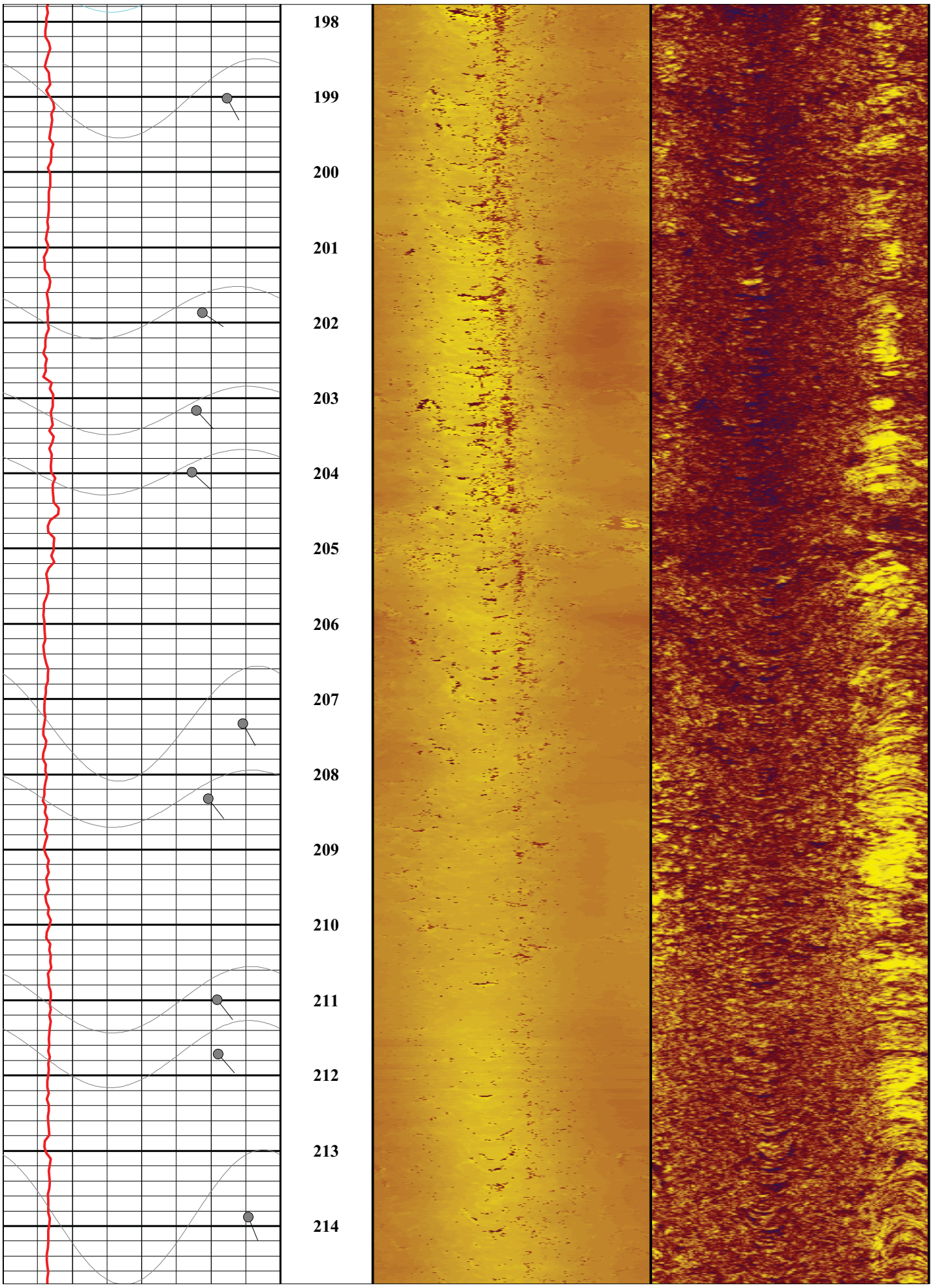
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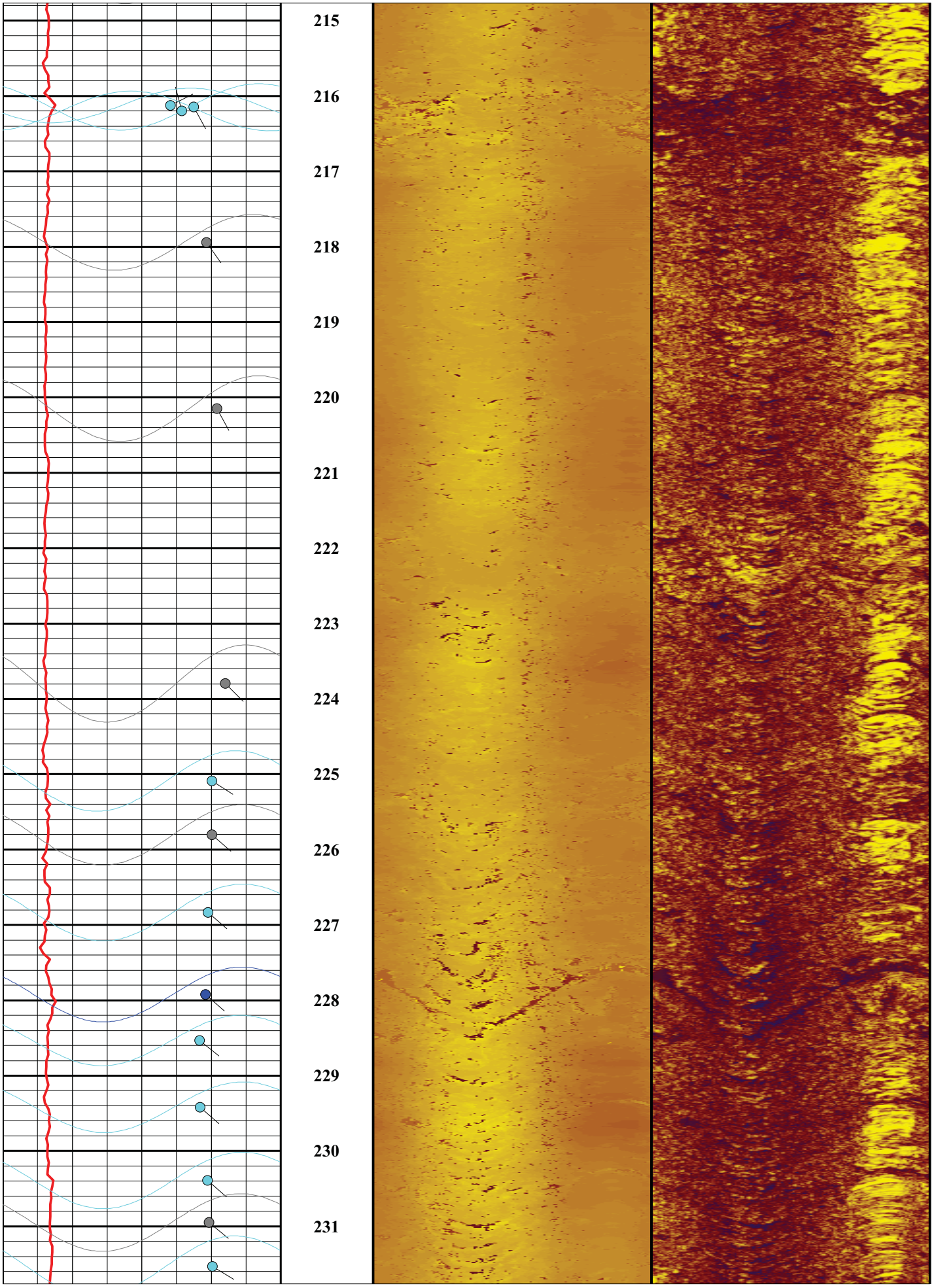
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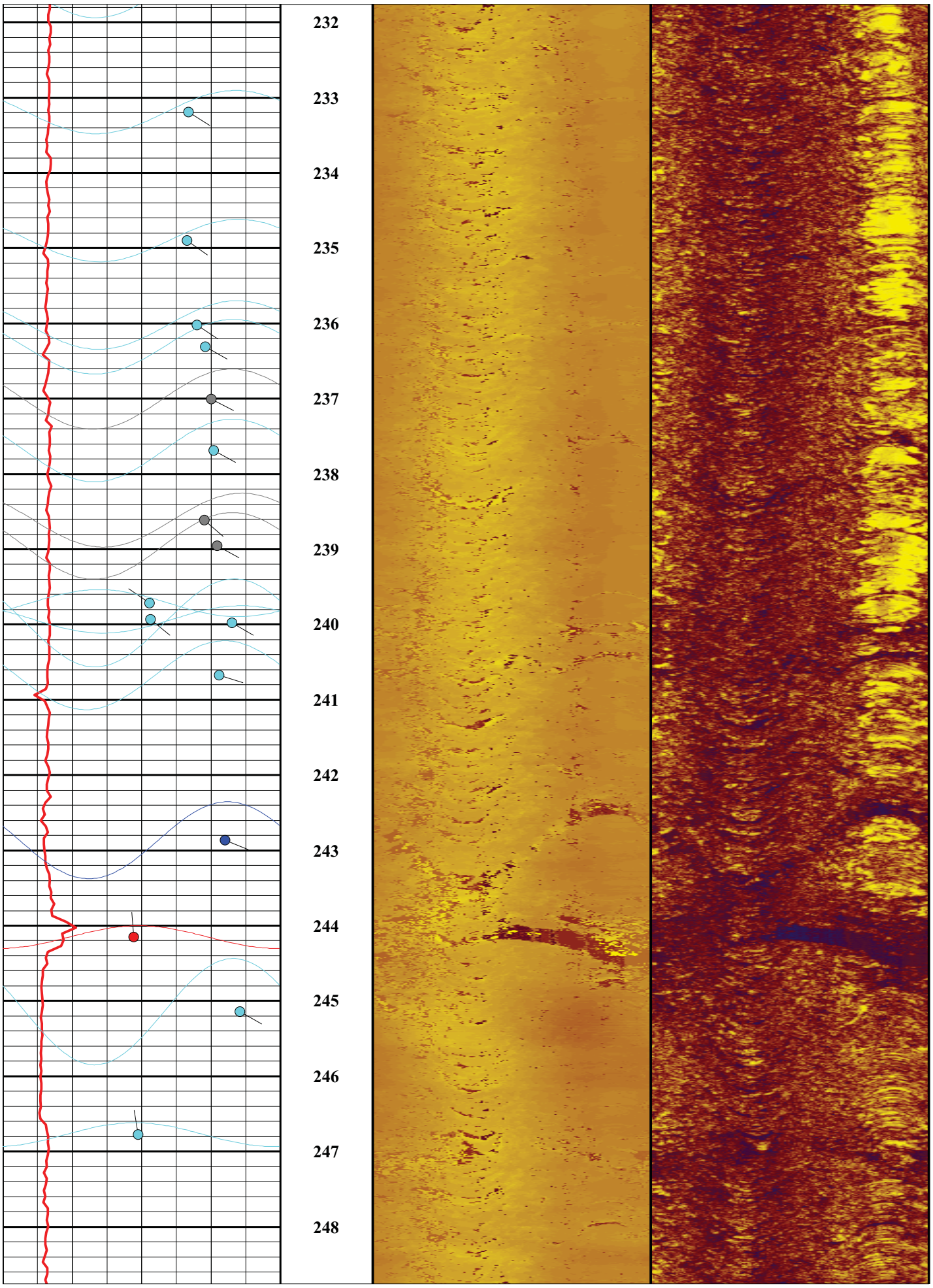
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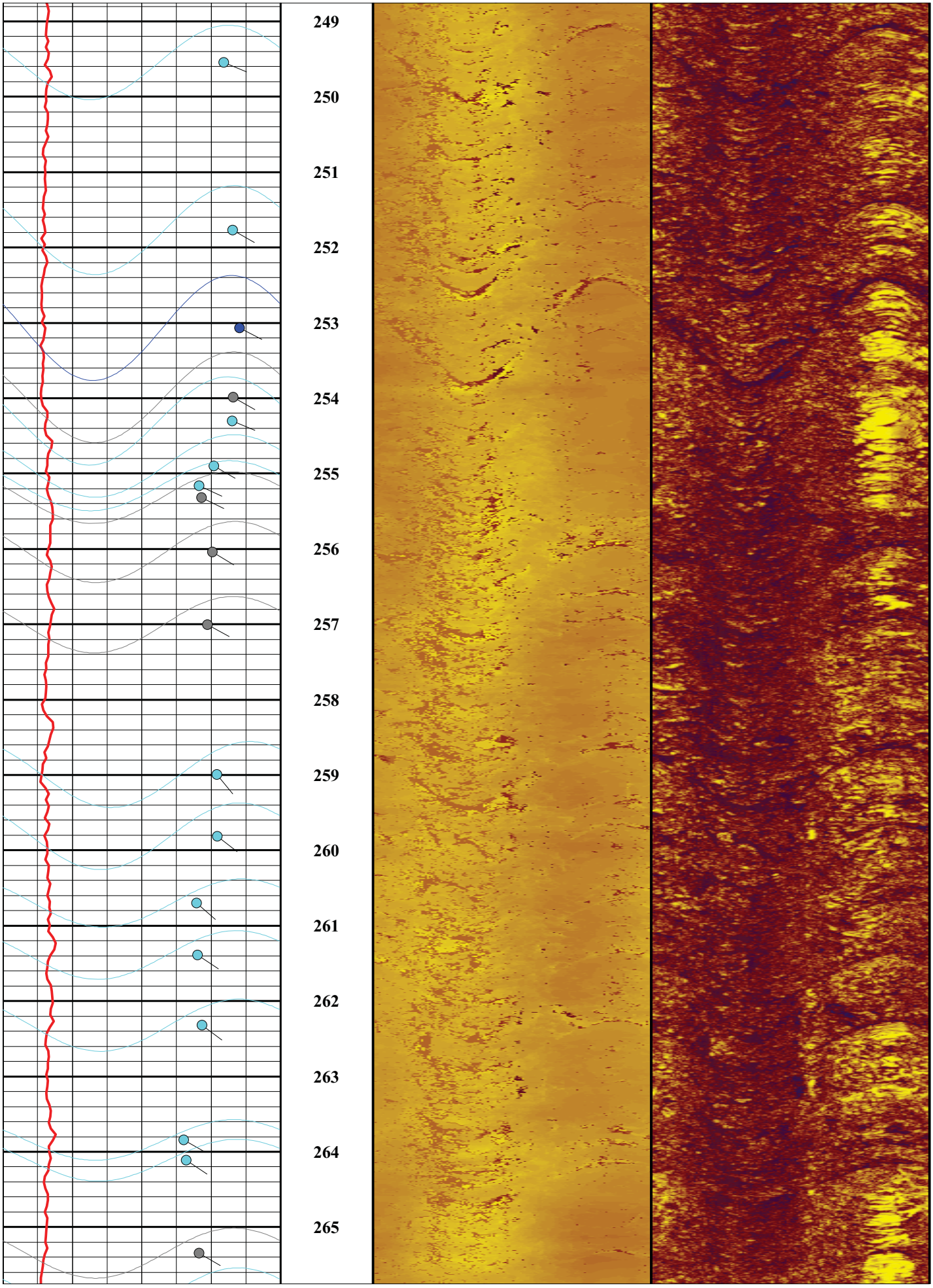
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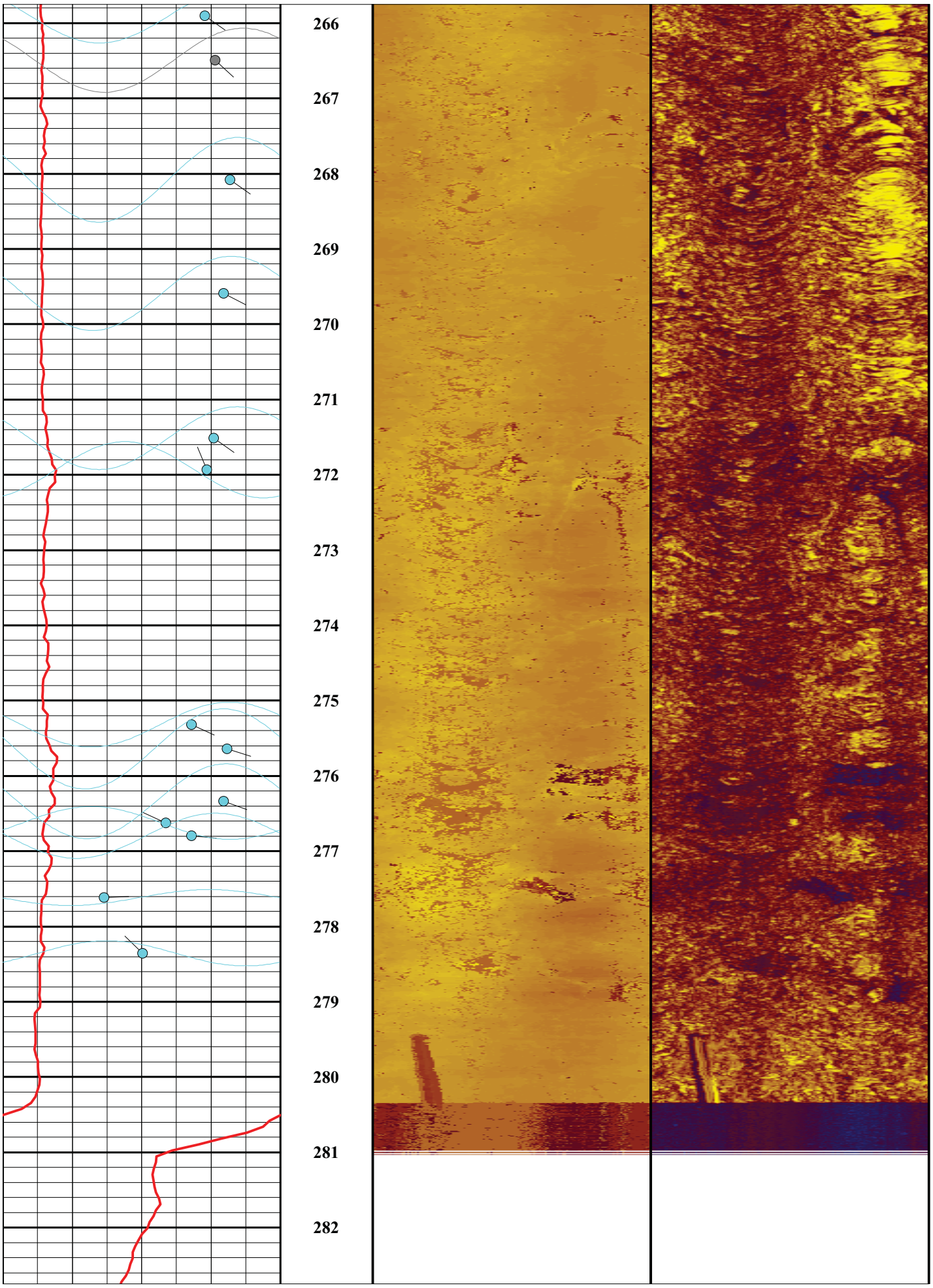
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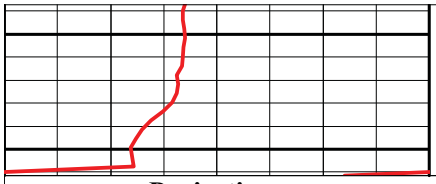

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Projections

0° 90° 180° 270° 0°

Tadpoles

0 90

3-Arm Caliper

5 inches 13

Depth

1ft:20ft

Travel Time - True North

0° 90° 180° 270° 0°

Acoustic Amplitude

0° 90° 180° 270° 0°

Figure DW-2:5. Rose Diagram of Optical Televiewer Features
Weston Solutions
MEFUDS; LO-58
Wellbore: DW-2
May 8, 2008

Dip Direction

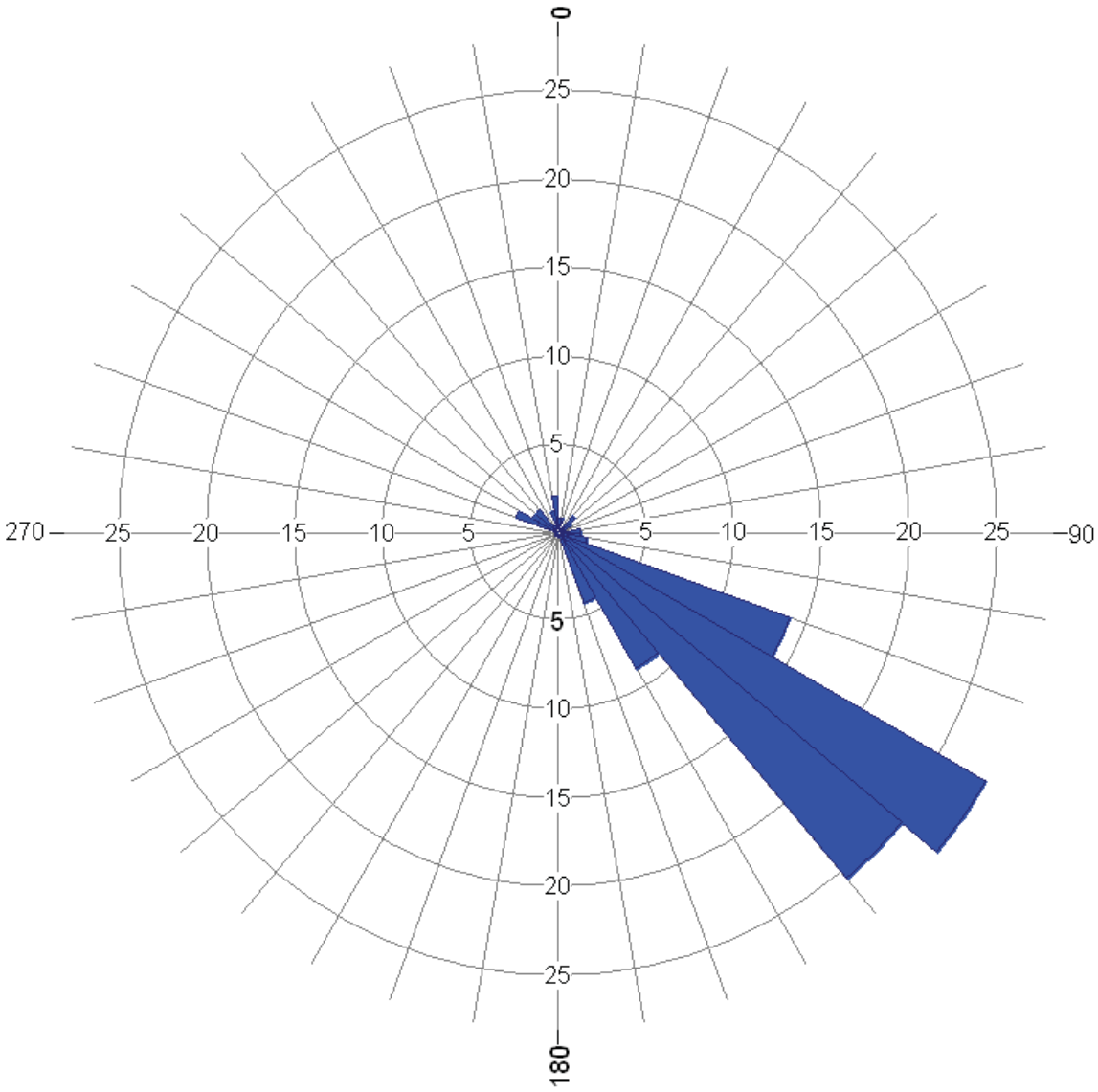

Figure DW-2:6. Rose Diagram of Optical Televiewer Features
Weston Solutions
MEFUDS; LO-58
Wellbore: DW-2
May 8, 2008

Dip Angles

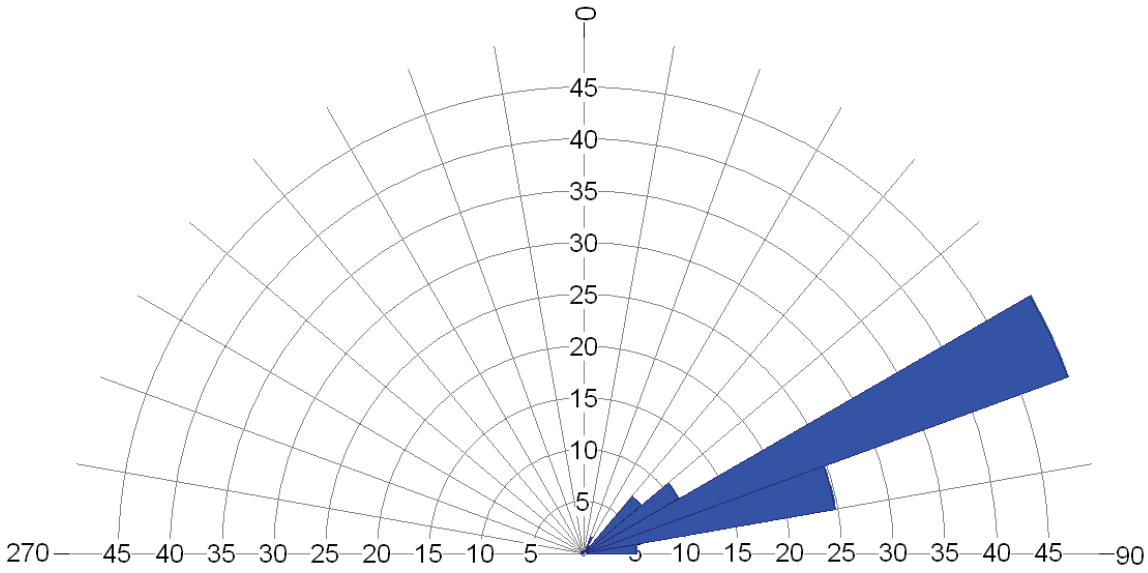

Figure DW-2:7. Stereonet of Optical Televiewer Features
Weston Solutions
MEFUDS; LO-58
Wellbore: DW-2
May 8, 2008

Schmidt Projection with Contours

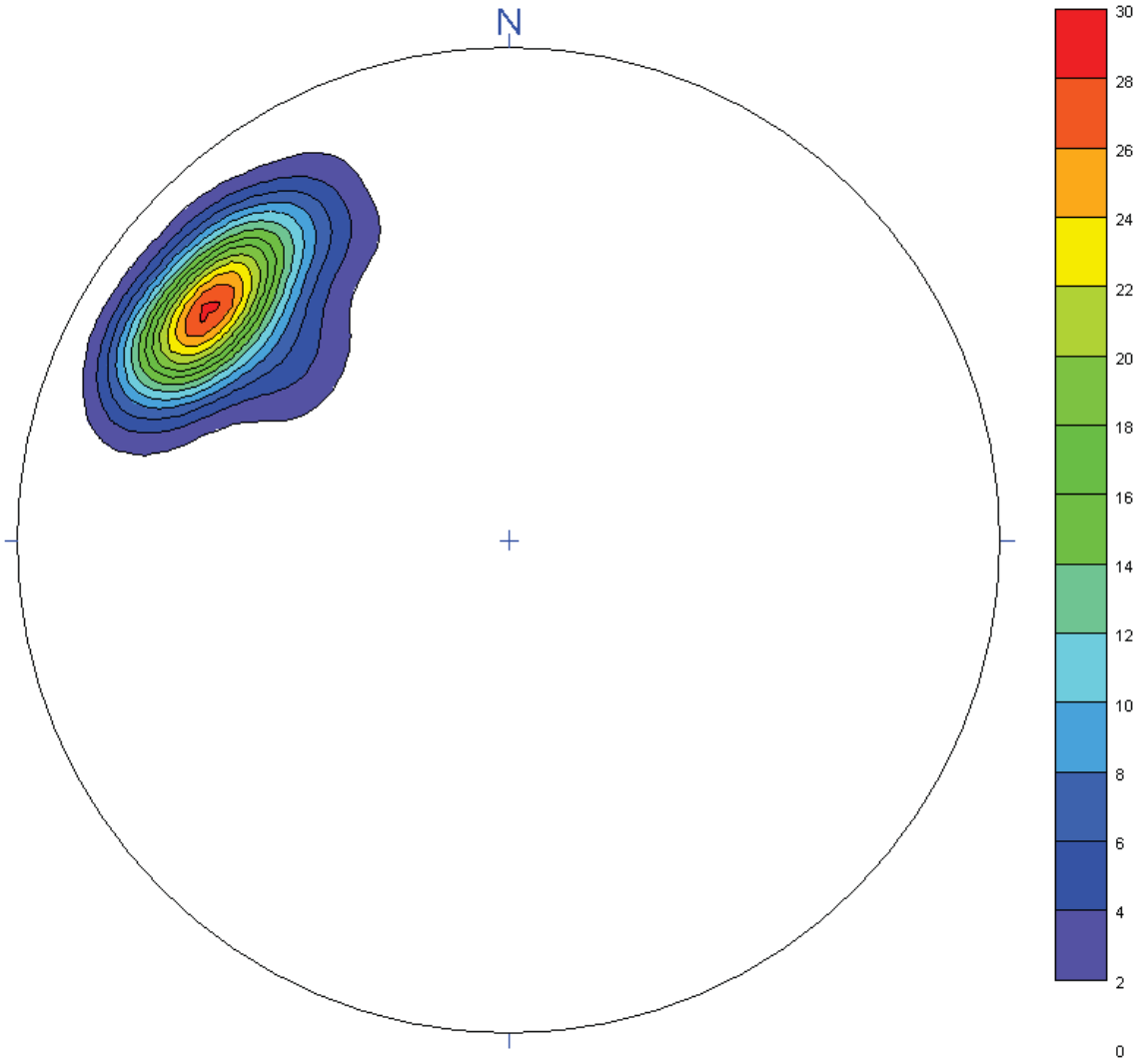

Figure DW-2:8. Stereonet of Optical Televiewer Features
Weston Solutions
MEFUDS; LO-58
Wellbore: DW-2
May 8, 2008

Schmidt Projection with Feature Ranks

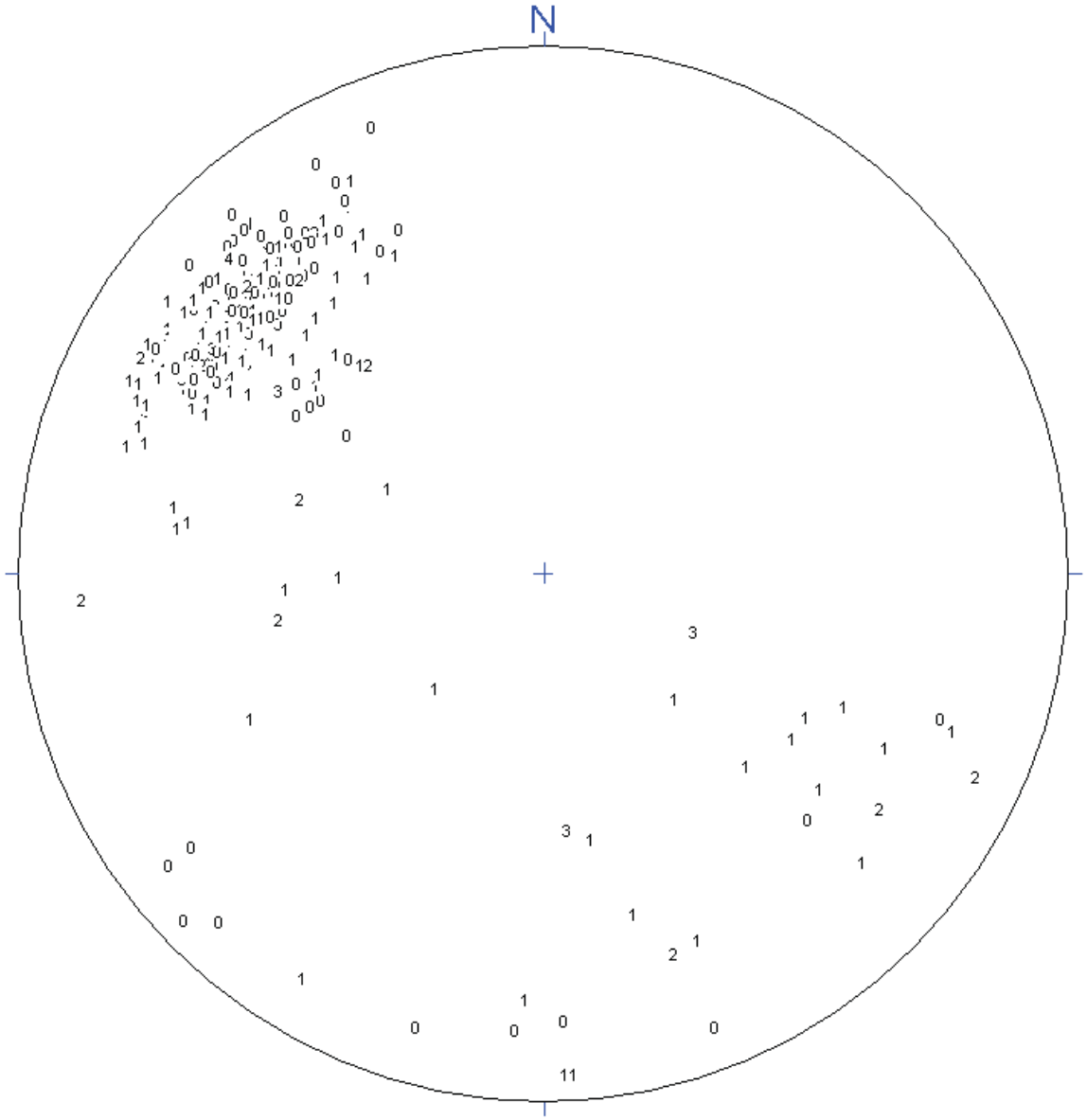

Table DW-2:2. Orientation Summary Table
Image Features
Weston Solutions
LO-58;
Wellbore: DW-2
May 8, 2008

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
1	4.40	14.4	118	75	1
2	4.97	16.3	129	53	1
3	5.18	17.0	132	59	0
4	5.22	17.1	309	57	1
5	5.32	17.5	126	45	0
6	5.54	18.2	124	46	0
7	5.74	18.8	137	44	1
8	5.84	19.2	121	47	0
9	6.07	19.9	120	56	1
10	7.01	23.0	123	38	0
11	7.56	24.8	118	69	1
12	7.94	26.0	124	63	1
13	8.61	28.3	126	73	1
14	9.14	30.0	120	66	2
15	9.47	31.1	123	52	3
16	9.55	31.3	316	29	1
17	9.81	32.2	43	26	1
18	9.94	32.6	16	81	1
19	10.04	33.0	79	44	2
20	10.34	33.9	138	43	2
21	10.57	34.7	105	41	2
22	10.88	35.7	85	42	1
23	11.04	36.2	136	46	0
24	11.32	37.2	291	70	0
25	11.48	37.7	130	57	1
26	11.70	38.4	116	28	1
27	12.09	39.7	124	59	0
28	12.44	40.8	131	64	2
29	12.82	42.1	137	54	1
30	13.19	43.3	128	47	1
31	13.33	43.7	126	50	0
32	13.79	45.2	294	25	3
33	14.04	46.1	124	65	1
34	14.51	47.6	43	82	0
35	14.93	49.0	134	70	1
36	15.23	50.0	127	67	1
37	15.53	50.9	127	66	2
38	15.91	52.2	358	76	0
39	16.24	53.3	134	54	1
40	16.43	53.9	4	78	0
41	16.63	54.6	128	68	1
42	16.84	55.3	52	76	0
43	17.02	55.9	122	75	1
44	17.09	56.1	141	55	1

All directions are with respect to true north (magnatic declination 20W).

Table DW-2:2. Orientation Summary Table
Image Features
Weston Solutions
LO-58;
Wellbore: DW-2
May 8, 2008

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
45	17.24	56.6	154	56	1
46	17.46	57.3	149	61	1
47	17.65	57.9	147	68	1
48	17.70	58.1	52	82	0
49	18.30	60.1	136	76	0
50	18.49	60.7	125	78	1
51	18.72	61.4	313	72	1
52	18.74	61.5	139	76	1
53	18.94	62.1	314	59	0
54	19.32	63.4	142	68	0
55	19.68	64.6	151	68	1
56	19.79	64.9	340	83	0
57	20.53	67.4	156	60	0
58	20.71	67.9	145	67	3
59	21.49	70.5	46	87	0
60	22.07	72.4	140	70	0
61	23.36	76.6	141	65	1
62	23.75	77.9	134	60	0
63	24.40	80.0	135	65	1
64	24.88	81.6	152	58	0
65	25.29	83.0	148	65	0
66	25.60	84.0	142	62	0
67	25.84	84.8	148	55	1
68	26.25	86.1	136	64	0
69	26.63	87.4	135	76	0
70	26.87	88.2	138	76	0
71	27.40	89.9	138	80	0
72	27.97	91.8	143	73	0
73	28.41	93.2	139	71	0
74	28.74	94.3	132	67	1
75	28.93	94.9	140	62	0
76	29.23	95.9	136	61	0
77	29.47	96.7	139	62	2
78	29.94	98.2	128	70	0
79	30.60	100.4	125	64	1
80	31.24	102.5	131	73	1
81	31.45	103.2	298	63	1
82	31.61	103.7	125	69	1
83	31.97	104.9	126	73	0
84	32.60	107.0	139	73	0
85	33.10	108.6	121	65	1
86	33.23	109.0	129	64	1
87	33.55	110.1	131	70	0
88	33.82	111.0	132	66	1

All directions are with respect to true north (magnatic declination 20W).

Table DW-2:2. Orientation Summary Table
Image Features
Weston Solutions
LO-58;
Wellbore: DW-2
May 8, 2008

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
89	34.24	112.3	124	63	1
90	34.63	113.6	116	62	1
91	34.96	114.7	131	68	1
92	35.27	115.7	358	87	1
93	35.63	116.9	300	48	1
94	35.88	117.7	134	68	1
95	36.23	118.9	125	69	1
96	36.62	120.1	116	66	1
97	36.93	121.2	134	65	1
98	37.14	121.9	128	67	1
99	37.53	123.1	134	65	1
100	37.77	123.9	99	62	1
101	37.83	124.1	357	87	1
102	37.95	124.5	127	74	1
103	38.09	125.0	119	77	1
104	38.26	125.5	129	74	1
105	38.88	127.6	128	67	0
106	39.14	128.4	127	68	1
107	40.26	132.1	121	74	1
108	40.46	132.7	119	75	0
109	40.91	134.2	118	73	1
110	41.62	136.6	120	69	0
111	41.85	137.3	130	74	0
112	42.25	138.6	130	79	0
113	42.79	140.4	117	72	1
114	43.31	142.1	3	72	1
115	43.81	143.7	118	68	1
116	44.03	144.4	119	62	0
117	44.25	145.2	16	81	0
118	44.41	145.7	114	77	1
119	44.59	146.3	114	75	1
120	45.15	148.1	119	67	1
121	45.70	150.0	120	68	1
122	46.01	150.9	128	62	0
123	46.13	151.4	121	64	0
124	46.32	152.0	116	64	1
125	46.47	152.5	137	55	1
126	46.63	153.0	135	48	1
127	46.80	153.5	129	57	1
128	47.01	154.2	124	60	0
129	47.27	155.1	130	65	1
130	47.90	157.2	116	67	1
131	48.47	159.0	123	66	3
132	48.66	159.6	127	65	1

All directions are with respect to true north (magnatic declination 20W).

Table DW-2:2. Orientation Summary Table
Image Features
Weston Solutions
LO-58;
Wellbore: DW-2
May 8, 2008

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
133	48.90	160.4	131	68	1
134	49.34	161.9	133	68	2
135	49.89	163.7	128	57	1
136	50.18	164.6	120	60	1
137	50.68	166.3	97	59	1
138	51.12	167.7	292	73	1
139	51.17	167.9	86	79	2
140	51.25	168.2	296	81	2
141	52.09	170.9	306	68	2
142	52.30	171.6	127	69	1
143	52.71	172.9	135	66	1
144	53.34	175.0	135	64	1
145	54.61	179.2	144	58	1
146	54.74	179.6	128	59	1
147	54.78	179.7	342	67	2
148	55.08	180.7	129	66	1
149	55.22	181.2	131	62	1
150	55.53	182.2	138	66	1
151	55.71	182.8	136	65	0
152	56.03	183.8	133	66	0
153	56.36	184.9	144	68	0
154	57.17	187.6	140	69	2
155	57.71	189.4	137	68	1
156	57.92	190.0	31	81	1
157	58.06	190.5	134	74	4
158	58.44	191.7	146	65	1
159	58.72	192.7	135	67	1
160	58.96	193.5	139	67	1
161	59.14	194.0	135	62	1
162	59.50	195.2	153	72	1
163	59.98	196.8	123	68	1
164	60.18	197.5	141	69	1
165	60.66	199.0	151	73	0
166	61.53	201.9	123	65	0
167	61.93	203.2	138	63	0
168	62.18	204.0	132	61	0
169	63.19	207.3	150	78	0
170	63.50	208.3	142	67	0
171	64.31	211.0	142	70	0
172	64.53	211.7	139	70	0
173	65.19	213.9	158	80	0
174	65.87	216.1	63	54	1
175	65.88	216.2	151	62	1
176	65.90	216.2	346	58	1

All directions are with respect to true north (magnatic declination 20W).

Table DW-2:2. Orientation Summary Table
Image Features
Weston Solutions
LO-58;
Wellbore: DW-2
May 8, 2008

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
177	66.43	217.9	144	66	0
178	67.10	220.2	151	69	0
179	68.21	223.8	135	72	0
180	68.61	225.1	122	68	1
181	68.83	225.8	130	68	0
182	69.14	226.8	130	67	1
183	69.47	227.9	130	66	2
184	69.66	228.5	128	64	1
185	69.93	229.4	131	64	1
186	70.22	230.4	130	66	1
187	70.39	231.0	129	67	0
188	70.57	231.5	121	68	1
189	71.08	233.2	121	60	1
190	71.60	234.9	125	60	1
191	71.94	236.0	124	63	1
192	72.03	236.3	119	66	1
193	72.24	237.0	117	68	0
194	72.45	237.7	118	69	1
195	72.73	238.6	130	65	0
196	72.84	239.0	118	70	0
197	73.07	239.7	305	48	1
198	73.13	239.9	130	48	1
199	73.15	240.0	120	74	1
200	73.36	240.7	107	70	1
201	74.02	242.9	111	72	2
202	74.42	244.2	356	42	3
203	74.72	245.1	119	77	1
204	75.22	246.8	351	44	1
205	76.06	249.5	112	72	1
206	76.74	251.8	119	74	1
207	77.14	253.1	117	77	2
208	77.42	254.0	119	75	0
209	77.51	254.3	112	74	1
210	77.69	254.9	120	68	1
211	77.77	255.2	114	64	1
212	77.82	255.3	116	65	0
213	78.04	256.0	121	68	0
214	78.34	257.0	118	66	0
215	78.94	259.0	140	69	1
216	79.19	259.8	127	70	1
217	79.46	260.7	130	63	1
218	79.67	261.4	123	63	1
219	79.96	262.3	126	65	1
220	80.42	263.8	119	59	1

All directions are with respect to true north (magnatic declination 20W).

Table DW-2:2. Orientation Summary Table
Image Features
Weston Solutions
LO-58;
Wellbore: DW-2
May 8, 2008

Feature No.	Depth (meters)	Depth (feet)	Dip Direction (degrees)	Dip Angle (degrees)	Feature Rank (0 to 5)
221	80.50	264.1	124	60	1
222	80.88	265.3	120	64	0
223	81.05	265.9	125	66	1
224	81.23	266.5	131	69	0
225	81.71	268.1	125	74	1
226	82.17	269.6	116	72	1
227	82.76	271.5	124	69	1
228	82.88	271.9	338	66	1
229	83.92	275.3	114	61	1
230	84.02	275.6	106	73	1
231	84.23	276.3	109	72	1
232	84.32	276.6	295	53	1
233	84.37	276.8	96	61	1
234	84.62	277.6	87	33	1
235	84.84	278.4	315	45	1

All directions are with respect to true north (magnatic declination 20W).

Table DW-2:3. Summary of Vertical Seismic Profile Results; Weston Solutions; LO-58, Caribou, ME; Wellbore: DW-2

Well	Depth Interval (ftbtoc)	Interval-Specific Velocity (feet/second)	Comments
DW-02	20 - 30	1,789	Signal degraded due to cement vault, asphalt
	35 - 115	10,255	Consistent with highly fractured bedrock
	115 - 185	17,274	Consistent with highly fractured bedrock

Note: P-wave signal degradation is observed in all test stations likely due to the cement vault and backfill arround the steel casing and the asphalt surface. Moreover, seismograms at 195 and 200 feet had too little P-wave seismic energy to estimate velocities.

FIGURE DW-2:9A. Pressure and Extraction Rate Data During Wireline Straddle Packer Sampling at 16.0 to 20.0 Feet; Weston Solutions; MEFUDS; LO-58; Caribou, ME; Wellbore: DW-2

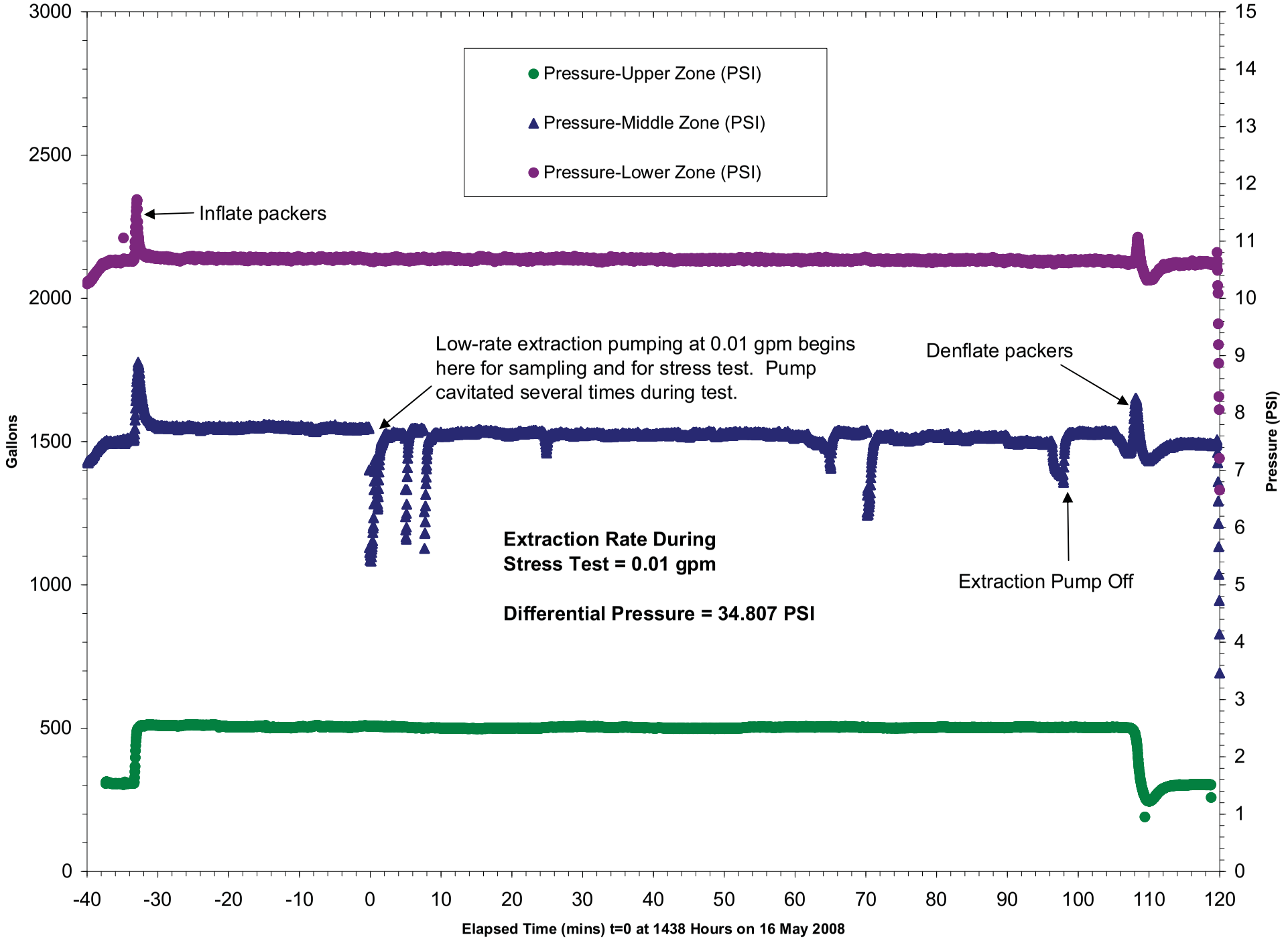

FIGURE DW-2:9B. Pressure and Extraction Rate Data During Wireline Straddle Packer Sampling at 28.5 to 32.5 Feet; Weston Solutions; MEFUDS; LO-58; Caribou, ME; Wellbore: DW-2

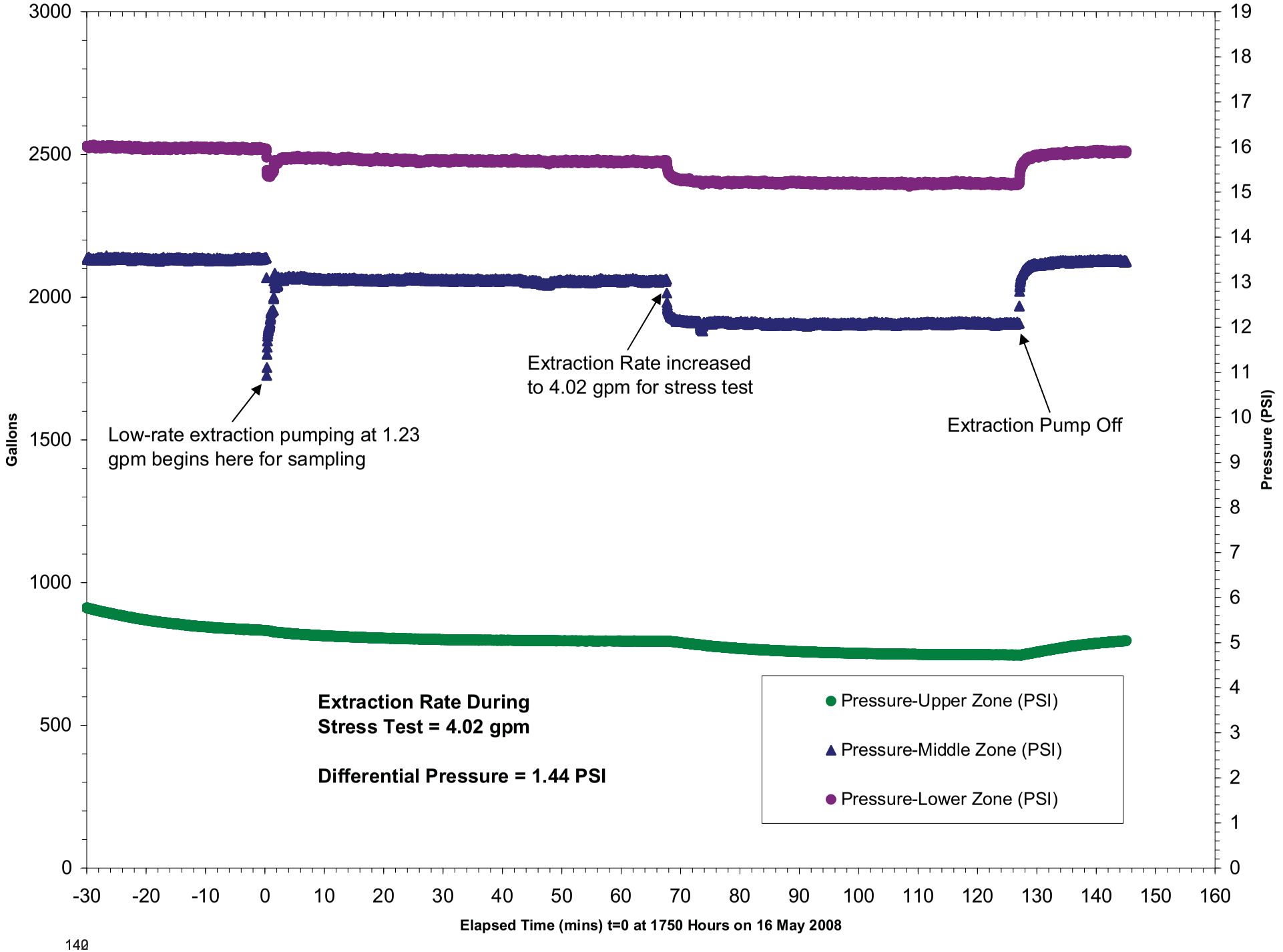

FIGURE DW-2:9C. Pressure and Extraction Rate Data During Wireline Straddle Packer Sampling at 37.0 to 41.7 Feet; Weston Solutions; MEFUDS; LO-58; Caribou, ME; Wellbore: DW-2

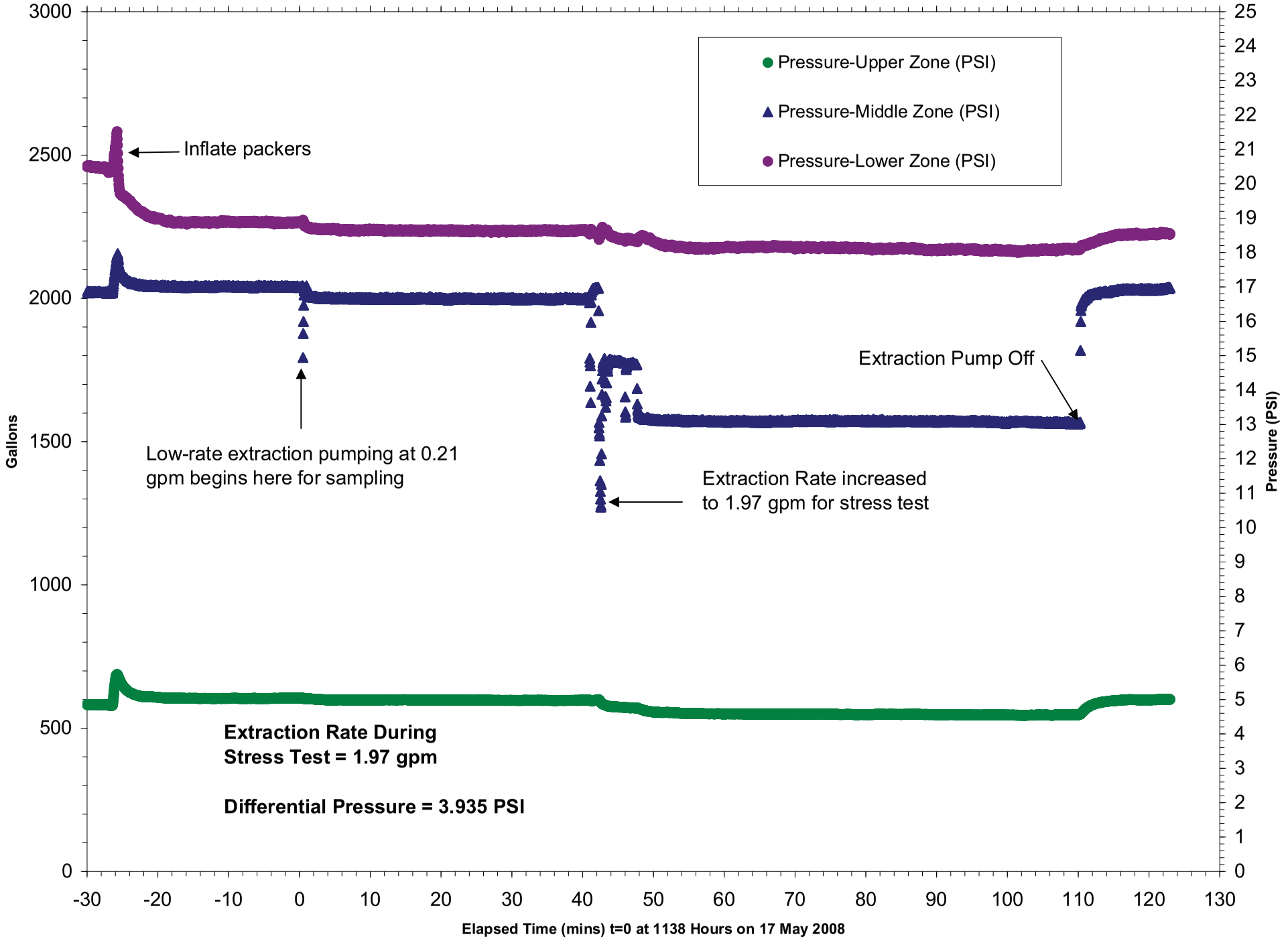

FIGURE DW-2:9D. Pressure and Extraction Rate Data During Wireline Straddle Packer Sampling at 94.5 to 98.5 Feet; Weston Solutions; MEFUDS; LO-58; Caribou, ME; Wellbore: DW-2

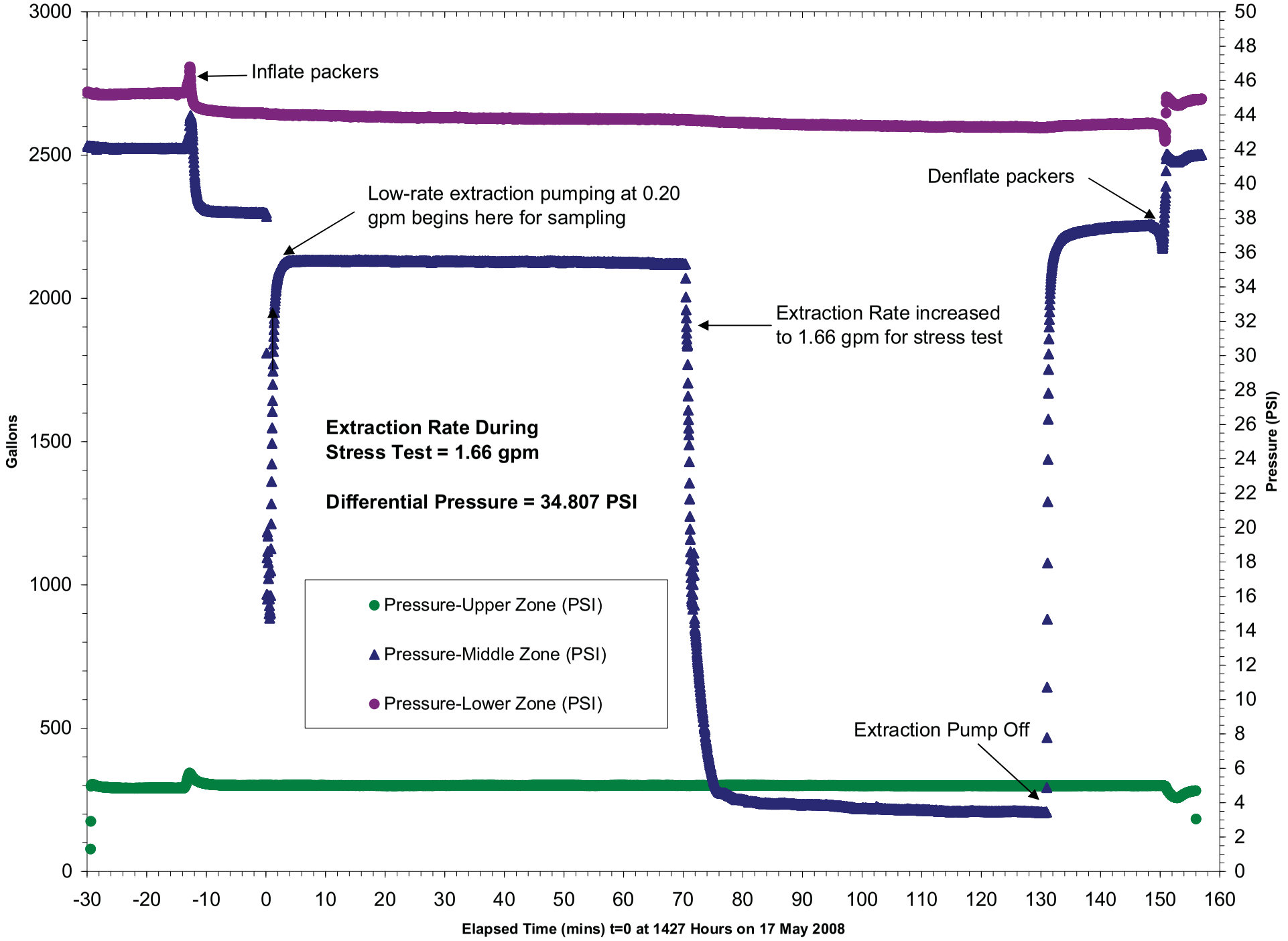

FIGURE DW-2:9E. Pressure and Extraction Rate Data During Wireline Straddle Packer Sampling at 187.9 to 192.2 Feet; Weston Solutions; MEFUDS; LO-58; Caribou, ME; Wellbore: DW-2

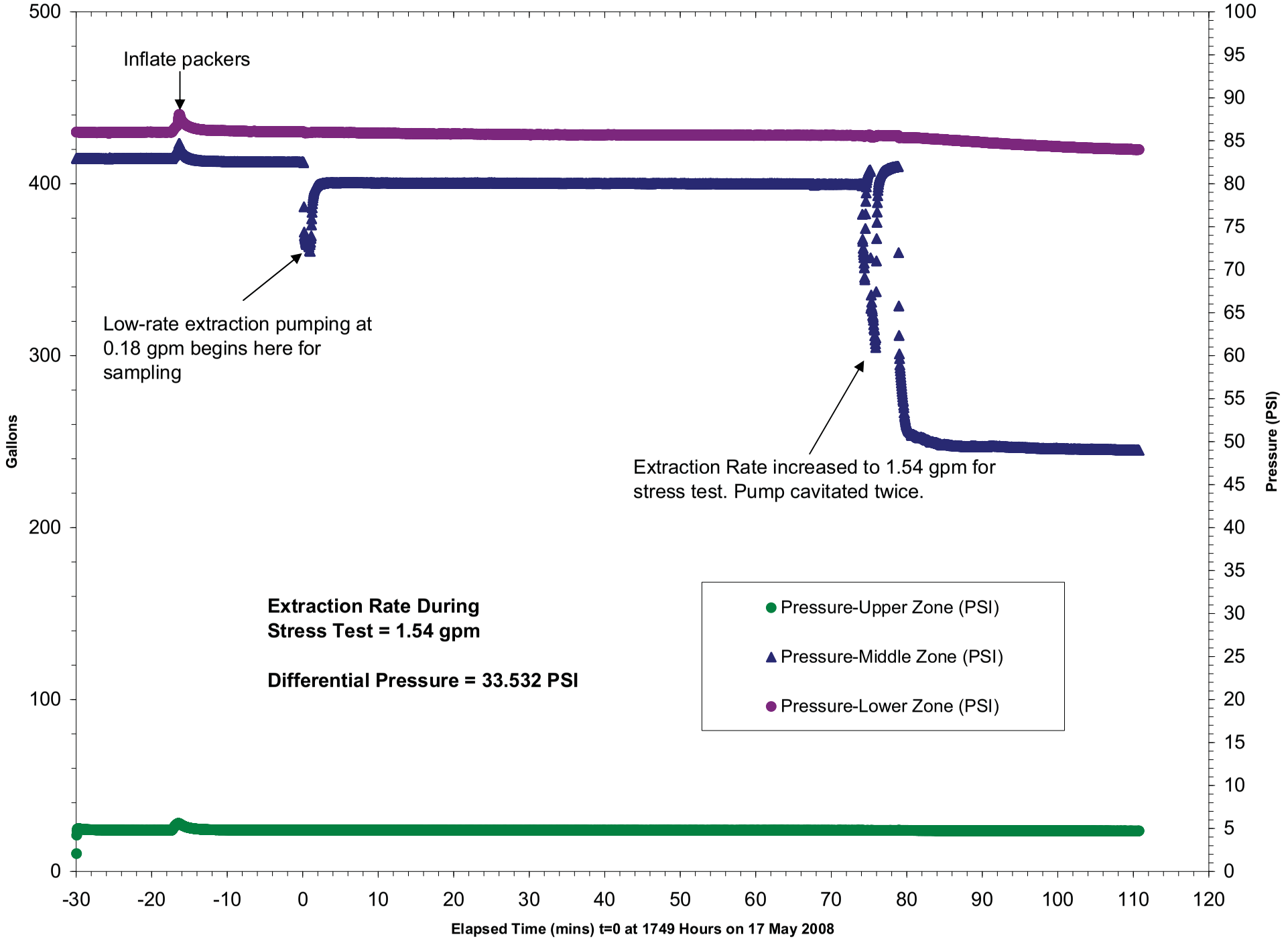

Table DW-2:4. Summary Of Wireline Straddle Packer Testing With Hydraulic Conductivity And Transmissivity Estimations; Weston Solutions; MEFUDS; LO-58; Caribou, ME; Wellbore: DW-2

Well Name	DW-02
Ambient Depth to Water (ftbtoc)	4.94
Diameter of Borehole (ft)	0.52
Effective Radius (ft)	300

Interval No.	Top of Interval (ft)	Bottom of Interval (ft)	Length of Interval (ft)	Differential Pressure (PSI)	Differential Head (feet)[1]	Interval Specific Flow Rate: WSP Stress Test (gpm)	Interval Specific Hydraulic Conductivity[4] (ft/day)	Transmissivity (ft2/day)	Interval Specific Fluid Electrical Conductivity (microS/cm)
1	16.0	20.0	4.0	0.120	0.277	0.01	1.46E+01	5.83E+01	430
2	28.5	32.5	4.0	1.440	3.326	4.02	4.89E+02	1.95E+03	450
3	37.0	41.7	4.7	3.935	9.088	1.97	7.46E+01	3.50E+02	451
4	94.5	98.5	4.0	34.807	80.386	1.66	8.35E+00	3.34E+01	435
5	187.9	192.2	4.3	33.532	77.441	1.54	7.48E+00	3.22E+01	438
6*	265.0	284.0	19.0	56.592	130.697	0.41	2.67E-01	5.07E+00	225

* The reported bottom depth of this interval is the total depth (TD) of the borehole.

[1] Differential Head is the difference between ambient pressure and pumping pressure, converted to feet.

APPENDIX A

STANDARD OPERATING PROCEDURES FOR HYDROPHYSICAL™ LOGGING

Standard Operating Procedures
HydroPhysical™ Logging for Aquifer Characterization

1. Purpose

Application of the HydroPhysical™ (HpL™) logging method to analyze and determine:

- The location of hydraulically conductive intervals within a wellbore
- The interval specific rate of inflow during well production, in conjunction with the drawdown data, can be used to estimate interval specific hydraulic conductivity or transmissivity
- Ambient (non-pumping) flow conditions (inflow and outflow rates, and locations)
- The hydrochemistry (fluid electrical conductivity (FEC) and temperature) of the associated formation waters

In addition, when downhole, discrete point fluid sampling is coupled with the HydroPhysical™ Logging technique, analysis of the actual contaminant concentrations associated with each identified conductive interval is accomplished for any aqueous phase contaminant.

2. Equipment and Materials

This SOP specifically applies to application of the technique using COLOG's HydroPhysical™ Logging Truck 16, which has been specially configured to handle those field conditions associated with small diameter, low-moderate yield wells The maximum capability of the van is to a total depth of 700 ft and 350 ft total drawdown (maximum depth to water) . In the event of high yield wells, the wireline capability of any COLOG truck can be used to accompany fluid management equipment.

- HydroPhysical™ logging truck field equipment includes:

- Fluid management system
  - Back Pressure Regulator or orifices
  - Rubber hose (0.75-inch i.d.) for injection
  - Submersible Pump
  - Evacuation Line
  - Storage tanks (as required) with inlet/outlet valves
  - Surface Pump
  - Fluid management manifold/Monitoring Panel
  - Data Acquisition System (for recording volumes, flow rates, time)
  - Wireline System
  - Wireline winch unit
  - Depth encoder
  - Water level indicator
  - Computer System

    - HydroPhysical™ Logging tool
    - Downhole Fluid Sampler
- Deionizing Units
- Deionized water (prepared with wellbore fluids or transported on-site)
- Standard Reference Solutions - Electrical conductivity reference solutions (set of 3 solutions).

3. Procedures

1.) Review well construction details and complete general well information sheet. The HydroPhysical™ logging technique involves dilution of the wellbore fluids with DI water and profiling of the wellbore dynamics using a HydroPhysical™ logging tool. Significant aberrations or reductions in the borehole diameter should be identified as the downhole equipment can become lodged in the borehole. Additionally, application of the technique requires certain wellbore conditions:

- In open bedrock boreholes, casing must be installed through the overburden and grouted at the rock/alluvium interface to inhibit water leakage into the borehole from the saturated alluvium. For cased boreholes, the well should be fully cased and gravel packed with single or multiple screened intervals;
- The diameter of the borehole must be approximately 4 inches or greater for application with the slim-tool (1.5-inch o.d.). Two inch i.d. boreholes may be tested using the slug test approach described in Section 5.
- For newly drilled wells, cuttings and drill fluids must be removed from the affected fractures by standard well development procedures.

2.) Review and record additional wellbore construction/site details and fill out the general well information form which includes the following information:

- Ambient depth-to-water
- Depth of casing
- Total depth of well
- Lithology (if available)
- Estimated well yield and any available drawdown data
- Type and concentration of contamination

3.) Prepare the deionized (DI) water. Consult with DI water tank firm for assistance if necessary. If DI water has not been transported to the site, surface or groundwater may be used if it is of suitable quality Generally source water containing less than 1000 micro Siemens per centimeter (µS/cm) and less then 200 ppb VOCs will not significantly affect the deionizing units, but this should be confirmed with DI water firm. If the groundwater from the well under construction cannot be used for DI water generation, then DI water must be transported to the site and containerized at the wellhead.

Depending on the amount of HydroPhysical™ testing to be performed (ambient and/or during production) the typical volume of DI water required for each borehole is approximately three times the volume of the standing column of formation water in the wellbore per type of HydroPhysical™ characterization.

If preparation takes place on site, pump the source water through a pre-filter, to the deionizing units, and into the storage tanks.

Monitor the FEC of the DI water in-line to verify homogeneity; the target value is 5 to 25 µS/cm.

4.) Calibrate the HydroPhysical™ logging tool using standard solutions prepared and certified by a qualified chemical supply manufacturer. Fill out tool calibration form following the steps defined in the software program, "tools" under the directory, calibration. Also use a separate field temperature / FEC / pH meter to support calibration data. Record the results of the tool calibrations, specifically noting any problems on the tool calibration form. Also record the certification number of the standard solutions.

5.) Set datum on the depth encoder with the FEC sensor on the tool as 0 depth at the top of casing. If inadequate space is available at the wellhead, measure 10 feet from the FEC sensor up the cable (using measuring tape) and reference with a wrap of electrical tape. Lower the tool down the hole to the point where the tape equals the elevation at the top of the casing and reference that as 10 feet depth on the depth encoder.

6.) Place the top of the tool approximately 3 feet below the free-water surface to allow it to achieve thermal equilibrium. Monitor the temperature output until thermal stabilization is observed at approximately $\pm$ .02 °C.

7.) After thermal stabilization of the logging tool is observed, log the ambient conditions of the wellbore (temperature and FEC). Fill out the water quality log form. During the logging run, the data are plotted in real time in log format on the computer screen and, the data string is simultaneously recorded on the hard drive.

Log the ambient fluid conditions in both directions (i.e. record down and up). The ideal logging speed is 5 feet per minute (fpm). For deeper wells the logging speed can be adjusted higher, but the fpm should not exceed 20.

At completion of the ambient log, place the tool approximately 10 feet below the free water surface. The tool will remain there during equipment set up as long as borehole conditions permit. Establish and record ambient depth to water using top of protective casing as datum.

8.) Attach back pressure regulator or orifice, if used, and weighted boot, to end of emplacement line and secure. Insure that the injection line is of adequate length to reach the bottom of the wellbore.

9.) Lower the flexible emplacement line to the bottom of the well allowing one foot of clearance from the well bottom to the outlet of the injection line.

10.) Lower tool about 10 feet below the water surface. The tool will be stationed beneath the submersible pump during non-logging times.

11.) Lower submersible pump in the well to a depth just above the logging tool. Record approximate depth of the pump location.

12.) Record all initial readings of gauges at elapsed time 0.0 minutes. Fill out well testing data form.

13.) Mark hoses with a round of electrical tape for reference. In addition, establish datum for tool depth to the nearest foot and mark on wire with wrap of tape. Reset datum on optical encoder for this depth.

14.) When ambient flow characterization is to be conducted, it should be done now, before disturbing the aquifer (i.e. by pumping). Fill out ambient flow characterization (AFC) form. Skip to Section 17 for procedures.

15.) After AFC, if performed, conduct a controlled, short term well production test (pump test) to characterize the overall hydraulics of the wellbore (drawdown at given pumping rate provides total well transmissivity or yield) and to make an initial assessment of formation water hydrochemistry. Begin pumping at a total extraction flow rate appropriate for wellbore under investigation (see Section 4 Special Notes). During this period, record elapsed time of pumping, depth to water, total gallons extracted, and extraction flow rate at approximately one minute intervals.

During extraction, log the fluid column continuously until at least three wellbore volumes have been extracted from the wellbore, or a stabilized water level elevation is obtained.

Review fluid logging results to verify that true formation water is present within the affected borehole interval and that the vertical distribution of water quality parameters within this interval is stable.

16.) Review data obtained during the pumping test to determine DI water emplacement and pumping/logging procedures. Extraction procedures for detection and characterization of hydraulically conductive intervals and the formation water hydrochemistry are determined based on the pumping test information. The emplacement, testing and pumping procedures will differ depending upon well yield and determined lengths of intervals of interest. In wellbore situations where intervals of interest are small (less than 30 feet) and hydraulic characteristics observed during borehole advancement and preliminary hydraulic testing indicate hydraulically conductive intervals with extremely low flow rates (i.e. <0.10 gpm/foot of drawdown), a slug testing procedure can be employed. In wellbore cases where the preliminary hydraulic testing indicates low to moderate total yield (i.e. $0.10 < Q < 4$ gpm/foot of drawdown), constant low flow rate pumping after DI water emplacement procedures can be employed. In wellbore situations where intervals of interest are large, and high total yield (i.e. > 4 gpm/foot of

drawdown) is observed, constant pumping during DI water injection procedures will be employed.

17.) When the fluid column is to be replaced with DI water, (vertical flow characterization, slug testing, logging during pumping after DI water emplacement) the following emplacement procedures apply:

Pump the DI water to the bottom of the wellbore using the surface pump and the injection riser. Simultaneously use the submersible pump to maintain a stable, elevated total head by extracting groundwater from near the free-water surface. When groundwater from the subject well is used for DI water generation, generate DI water from the extracted formation water and re-circulated to the well bottom via the solid riser.

Use the water level meter to observe the elevated total head during emplacement. If borehole conditions permit (i.e. the absence of constricted borehole intervals), the logging tool is used to monitor the advancement of the fluid up the borehole as it displaces the standing formation water. Draw the logging tool up the wellbore in successive increments as the DI water is emplaced. Monitor the electrical conductivity of the fluid expelled from the evacuation pump during emplacement procedures. When FEC values are representative of the DI water, or sufficiently diluted formation water, terminate emplacement procedures.

Emplacement is complete when DI water, or sufficiently diluted formation water, is observed from the evacuation pump or when logging tool stationed near the pump indicates DI water or sufficiently diluted formation water.

Upon completion, turn off the evacuation pump. Then turn off the injection line.

18.) Record volumes of extracted and injected fluids on the well testing data form. Calculate the volume of DI water lost to the formation.

19.) Take initial background HydroPhysical™ log, or begin continuous logging depending upon extraction method (i.e. slug vs. continuous).

20.) Pumping and testing procedures vary depending upon wellbore hydraulics and construction detail.

21.) Continuous logging is conducted until stabilized and consistent diluted FEC logs are observed. If inflow characterization at a second pumping rate is desired, increase extraction rate and assure the proper DI water injection rate. Perform continuous logging until stabilized and consistent FEC logs are observed and all diluted formation water is re-saturated with formation water.

22.) After stabilized and consistent FEC traces are observed, terminate DI water injection. Reduce the total extraction flow rate to the net formation rate and conduct continuous logging. Conduct logging until stable and consistent FEC values are observed.

23.) Conduct depth specific sampling at this time.

24.) At the conclusion of the above procedures, assess the wellbore fluid conditions and compare them with those observed during the original pumping (Step 14).

25.) Turn all pumps off. First remove the extraction pump from the borehole. During removal, thoroughly clean the evacuation line (2-inch o.d.) with a brush and alconox and rinse DI water. Also clean the outside of the pump. Place the pump in a drum of DI water and flush DI water through the system.

Remove the tool. Clean the wireline for the tool in a similar manner during its withdrawal from the borehole.

Remove the injection line from the well. Follow the same procedures when cleaning the injection line as for the evacuation line.

Store the pumps and logging tools properly for transport.

Place cover on well and lock (if available).

4. Special Notes

On-site pre-treatment of groundwater using activated carbon, can be conducted prior to DI water generation, if there is a contaminated groundwater source. In addition, on-site treatment can also be considered to handle extracted fluids that would require containerization and treatment prior to disposal.

The rate(s) of pumping are determined by drawdown information previously obtained or at rate(s) appropriate for the wellbore diameter and saturated interval thickness. The appropriate extraction rate is a function of length of saturated interval, borehole diameter, and previous well yield knowledge. The appropriate pumping procedures to be employed are also dictated by the length of the exposed rock interval. In general, the extraction flow rate should be sufficient to induce adequate inflow from the producing intervals. The concern is that the extraction flow rate does not cause extreme drawdown within the well i.e. lowering the free water surface to within the interval of investigation.

5. Discussion

LOW YIELD: Extraction Slug Test After DI water Emplacement

In wells with very low total flow capability (i.e. < 0.10 gpm/foot of drawdown), perform a slug test in accordance with procedures developed by Hvorslev (1951). Rapidly extract a small volume of water from near the free water surface using the extraction riser and pump. A drop in piezometric head of about 2 feet should be adequate for the initial test. Record the rise in the free water surface with time and develop a conventional time-lag plot.

When the free water surface has recovered to a satisfactory elevation, log the wellbore fluid conditions. Repeat the procedures described above with successive increases in the drop of piezometric head (or volume extracted). Let the wellbore recover and record the rise in the free water surface. Repeat logging of the wellbore fluid after the free water surface has recovered to a satisfactory elevation. The number of slug tests performed is determined in the field after review of previous logging results.

MODERATE YIELD: Time Series HydroPhysical™ Logging During Continuous Pumping After DI water Emplacement

In the case of moderate yield wells (i.e. $0.10 < Y < 4$ gpm/foot of drawdown), maintain a constant flow rate from the evacuation pump and record the total volume of groundwater evacuated from the wellbore. Employ a continuous reading pressure transducer (or equivalent device) to monitor the depressed total head during pumping, along with the associated pumping rate.

Hold the flow rate from the evacuation pump constant at a rate determined for the specific borehole. Drawdown of the free water surface produced during pumping should not overlap any identified water producing interval. Conduct hydrophysical logging continuously. The time interval is a function of flow rate and is specific to each well. The number of logging runs and the length of time required to conduct all loggings is a function of the particular hydraulic conditions. Logging and pumping is continued until the fluid column is re-saturated with formation water (i.e. all DI water is removed from the borehole).

HIGH YIELD: Time Series Wellbore Fluid Logging During Continuous Pumping and Simultaneous DI Water Injection

When wells exhibit high yield (> 4 gpm/foot of drawdown), as determined by a review of the interval of interest, the borehole diameter and the results obtained from previous information and preliminary hydraulic testing, the appropriateness of time series fluid logging during continuous pumping and simultaneous DI water injection is determined.

In this case, maintain a constant flow rate from the evacuation pump and record this rate and the associated drawdown. During this period, conduct hydrophysical logging until reasonably similar HydroPhysical™ logs are observed and stabilized drawdown is achieved. After reasonably similar downhole fluid conditions are observed and simultaneous with extraction pumping, inject DI water at the bottom of the well at a constant rate of 10 to 20% of that employed for extraction. Increase the total rate of extraction to maintain total formation production reasonably similar to that prior to DI water injection (i.e. increase the total extraction by amount equal to the DI water injection rate).

Periodically record the total volume and flow rate of well fluids evacuated and the total volume and flow rate of DI water injected. Use a continuous reading pressure transducer or similar device to monitor the depressed total head during pumping. Record the depressed total head (piezometric surface) periodically, with the associated pumping and injection data.

The evacuation and DI water injection flow rates are held constant at a rate determined for the specific wellbore. Drawdown of the free water surface during pumping must not overlap any identified water producing intervals. HydroPhysical™ Logging is conducted continuously. The number of logging runs and the length of time required to conduct all loggings is a function of the particular hydraulic conditions exhibited by the well under investigation.

APPENDIX B

BORE II MODELING SOFTWARE

LBNL-46833

BORE II – A Code to Compute Dynamic Wellbore Electrical Conductivity Logs with Multiple Inflow/Outflow Points Including the Effects of Horizontal Flow across the Well

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Abstract

Dynamic wellbore electrical conductivity logs provide a valuable means to determine the flow characteristics of fractures intersecting a wellbore, in order to study the hydrologic behavior of fractured rocks. To expedite the analysis of log data, a computer program called BORE II has been developed that considers multiple inflow or outflow points along the wellbore, including the case of horizontal flow across the wellbore. BORE II calculates the evolution of fluid electrical conductivity (FEC) profiles in a wellbore or wellbore section, which may be pumped at a low rate, and compares model results to log data in a variety of ways. FEC variations may arise from inflow under natural-state conditions or due to tracer injected in a neighboring well (interference tests). BORE II has an interactive, graphical user interface and runs on a personal computer under the Windows operating system. BORE II is a modification and extension of an older code called BORE, which considered inflow points only and did not provide an interactive comparison to field data. In this report, we describe BORE II capabilities, provide a detailed user's guide, and show a series of example applications.

1. Introduction

The variation of formation permeability surrounding a wellbore is useful information not only for identifying hydraulically conducting fractures or other high-conductivity features intercepted by the well, but also for quantifying the heterogeneity of the medium. These are essential data in the evaluation of in-situ flow and transport characteristics at a given site.

Methods to evaluate permeability values along the depth of a well include the packer method, in which constant pressure, constant flow, or pulse tests are conducted in packed-off intervals in a wellbore, and various downhole flow meters. The packer method has the disadvantage that it is very time consuming and costly, and the vertical resolution is limited by the interval between the two packers that can be set in the well. Flow meter methods such as spinners and heat pulse flow meters generally allow better vertical resolution than the packer method, but they are not as accurate in determining permeability, because they mostly measure the wellbore fluid velocity, which is very sensitive to variations in the wellbore radius.

In 1990, Tsang et al. (1990) proposed a method using logs of fluid electric conductivity (FEC) at successive times under constant-pumping conditions to obtain inflow from the formation into the well as a function of depth in the well. In this method, the wellbore is first filled by de-ionized water or water of a constant salinity (i.e., ion concentration) distinct from that of the formation water. This is usually done by passing the de-ionized water down a tube to the bottom of the wellbore at a given rate while simultaneously pumping at the top of the well at the same rate. After this is done, the well is pumped at a constant flow rate, which can be adjusted to optimize wellbore flow conditions. An electric resistivity probe is lowered into the wellbore to scan FEC as a function of depth along the wellbore. This is what is called fluid conductivity logging. A series of five or six such logs are obtained at time intervals over a one- or two-day period. At the depth levels where water enters the wellbore, the conductivity log displays peaks, which grow with time and become skewed in the direction of water flow. By analyzing these logs, it is possible to obtain the permeability and salinity of each hydrologic layer transmitting water. The method has been very successful, being much more accurate than flow meters and much more efficient (much cheaper) than packer tests (Tsang et al. 1990), particularly in low permeability formations. A typical 1000-m section in a deep hole can be tested in two or three days at a spatial resolution of ~0.10 m all along the length of the wellbore section. The method is now being widely used in Europe and the U.S. (Marschall and Vomvoris, 1995; Pedler et al., 1992; Bauer and LoCoco, 1996), both under natural-state flow conditions and while tracer is injected in a neighboring well (i.e., interference tests).

Along with the method, a code was developed called BORE (Hale and Tsang, 1988), which performed the forward calculation to produce wellbore FEC profiles given different inflow positions, rates, and concentrations. The code has been well used over the last decade. However, it appears now that there is a need to revise the code to make it more suitable for current computer environments and to add new capabilities. Thus, the code has been updated to run under current operating systems, provide interactive

modification of model parameters, and produce graphical comparisons between model and field data. More importantly, the revised code allows the possible inclusion of both flows into and out of the well at various depths, a feature that has been observed in real field conditions when different layers penetrated by the well have different hydraulic heads. Furthermore, the new code allows the calculation of the case with equal inflow and outflow at the same depth level, which is effectively the special case of horizontal flow across the wellbore. Drost (1968) proposed a measurement of solute dilution in the wellbore to evaluate ambient horizontal flow velocity in the formation and it has become a well-accepted method. The new code provides the opportunity to analyze such cases and to identify the depth interval of horizontal flow to within ~0.1 m as well as to estimate the flow rate. Moreover, one can analyze the combination of horizontal flow across the wellbore and vertical diffusion or dispersion along the length of the wellbore, which is not possible with Drost's solution.

The report is organized as follows. In Section 2, the basic capabilities of the revised code, called BORE II, are described, and the key parameters associated with BORE II are defined. Details of the mathematical background and numerical approach are described in Appendix 1, which is adapted from Hale and Tsang (1988). A user's guide is presented in Section 3, which includes a description of BORE II's interactive user interface, required input items, and options available when running BORE II. Four example applications are given in Section 4 to conclude the report.

We are still open to further improvements of BORE II; any suggestions and comments are invited and should be addressed to the authors.

2. BORE II Capabilities

BORE II calculates FEC as a function of space and time in a wellbore containing multiple feed points given the pumping rate of the well, the inflow or outflow rate of each feed point, its location and starting time, and, for inflow points, its ion concentration. A simple polynomial correlation between ion concentration, C, and FEC is assumed. Ion transport occurs by advection and diffusion along the wellbore, with instantaneous mixing of feed-point fluid throughout the wellbore cross-section. These assumptions allow use of a one-dimensional model. BORE II divides the wellbore section under study into equal height cells and solves the advection/diffusion equation using the finite difference method. Further details of the mathematical and numerical approach are given in Appendix 1.

Inflow and Outflow Feed Points

The original BORE code (Hale and Tsang, 1988) considered inflow points only, so flow through the wellbore was upward at all depths. BORE II allows both inflow and outflow points, so flow in the wellbore can be upward, downward, or horizontal at different depths and flow at either end of the wellbore section being studied can be into or out of the wellbore section or be zero. By convention, upward flow in the wellbore is positive and flow into the wellbore is positive.

Steady and Varying Fluid Flow

The original BORE code considered steady fluid flow, so feed points had constant flow rates. They also had constant concentrations, but delayed starting times for feed-point concentration to enter the wellbore were allowed. BORE II permits both steady and varying fluid flow. For the steady-flow case, the user specifies flow rate, concentration, and concentration start time for each feed point, but for outflow points (those with negative flow rates) the concentration and concentration start time are not used. Variable flow rate or concentration can be specified for feed points by interpolating from a table of time, flow rate, and concentration. If a table includes both positive and negative flow rates (i.e., a feed point alternates between inflow and outflow), the concentration for the positive flow rate is used when interpolating between positive and negative flow rates.

Concentration Boundary Conditions

If the flow at the top of the wellbore section under study is into the wellbore, the initial concentration for the uppermost cell in the wellbore is used as the inflow concentration. Analogously, if flow at the bottom of the wellbore section is a flow up from greater depths, the initial concentration for the lowermost cell in the wellbore is used as the inflow concentration. Furthermore, for inflow points with a concentration start time greater than zero, the initial concentration of the wellbore is used as the inflow concentration for times less than concentration start time.

Horizontal Flow

The special case of horizontal flow through the wellbore, as described by Drost (1968), can also be considered, by locating an inflow point and an outflow point with equal magnitude flow rates at the same depth. The flow rates may be specified as either (1) the Darcy velocity through the aquifer or (2) the volumetric flow rate into/out of the wellbore. BORE II multiplies Darcy velocity by the cross-sectional area of the feed point (wellbore diameter times cell height) and Drost's α_h convergence factor to convert it to a volumetric flow rate. The value of α_h can range from 1 (no convergence) to 4 (maximum possible convergence, which occurs for the case of a thick, highly-permeable well screen). Drost suggested that for a uniform aquifer with no well screen, $\alpha_h = 2$, and that for typical applications, a good choice for α_h is 2.5. Horizontal flow feed points may have time-varying flow rates, but for Darcy-velocity calculations to make sense, the inflow and outflow rates must be equal and opposite at any time. Thus, if a feed point location changes from a horizontal flow point to a non-horizontal flow point with time, volumetric flow rates must be specified rather than Darcy velocities.

BORE II Parameters

The key parameters associated with BORE II are defined below.

Parameter	I/O units*	Description
C	g/L	Ion concentration in the wellbore; converted to FEC using FEC $= \gamma + \beta C + \alpha C^2$, where α, β, and γ are user-specified constants (default values are provided in the code, see Section 3)
C_i	g/L	Ion concentration of ith feed point
C_0	g/L	Initial ion concentration in wellbore
D_0	m^2/s	Diffusion coefficient (may include dispersive effects as well molecular diffusion)
d_w	cm	Wellbore diameter (assumed constant)
FEC	μS/cm	Fluid electrical conductivity
q	L/min	Fluid flow rate in wellbore (upward flow is positive)
q_i	L/min	Fluid flow rate of ith feed point; positive for inflow and negative for outflow
q_w	L/min	Fluid flow rate in wellbore at x_{max}, specified by the user
q_0	L/min	Fluid flow rate in wellbore at x_{min} (or any depth of interest), calculated internally
T or TEMP	°C	Temperature (assumed constant)
t	hr	Time
t_{max}	hr	Maximum simulation time
t_{0i}	hr	Concentration start time of ith feed point
v_d	m/day	Darcy velocity through aquifer for horizontal flow ($q_i = v_d \alpha_h \Delta x \, d_w$)
x	m	Depth (positive, increases down the wellbore)
x_{min}, x_{max}	m	Top and bottom, respectively, of wellbore interval being studied
Δx	m	Cell height for wellbore discretization
α_h	–	Drost (1968) convergence factor for horizontal flow

*I/O units are chosen for convenience; all quantities are converted to SI units before BORE II calculations.

3. BORE II User's Guide

Operating System

BORE II may be run under Windows 95, 98, or 2000 by double-clicking the executable icon (BOREII.EXE) in Windows Explorer, by double-clicking on a desktop shortcut key to BOREII.EXE, or by typing BOREII in the Run command in the Start Menu or in a DOS-prompt window. BORE II will not run in stand-alone DOS or in the DOS-mode of Windows. BORE II was compiled using Microsoft Fortran PowerStation™ Version 4.0, but this software is not necessary to run the program.

BORE II Graphical Output

The primary user interface with BORE II is interactive, with the user responding to on-screen prompts to modify model parameters and choose options (described below) for the real-time graphical display of model results and data. The basic BORE II output screen consists of three windows.

- The borehole profile window shows FEC profiles as a function of depth and time. Simulation time t is shown in the upper left corner. Fluid flow rate at a user-specified depth in the wellbore, q_0, is shown in the middle of the top line (the depth at which q_0 is calculated is set by option P). The depth of a C-t plot is also shown.

- The inflow parameters window shows the feed-point characteristics for the model that can be modified with option M (location, flow rate, and concentration). Often there are more feed points than can be displayed at once on the screen. BORE II starts out showing the first few (deepest) feed points, then shows the feed points in the neighborhood of any point that is being modified.

- The dialog window allows the user to select options (described below) when running BORE II.

On computers with small screens, it may be desirable to run BORE II in full-screen mode, so that the entire BORE II screen can be seen at once without scrolling. Full-screen mode is entered by pressing Alt-VF (or on some computers by pressing Alt-Enter). Pressing Esc (or Alt-Enter) terminates full-screen mode. There are three potential problems associated with the use of full-screen mode.

(1) The status line describing what BORE II is doing (e.g., running, waiting for input) is not visible.

(2) Drawing an x-t plot (options X, S, D, F, and I), which creates a new window, may be very slow and the graphics quality poor.

(3) On some computers, text is difficult to read after closing the x-t plot window.

To address the latter two problems, one may terminate full-screen mode before using options X, S, D, F, and I. The new window will be small, but after drawing is complete it may be expanded by pressing Alt-VF to enter full-screen mode. Full-screen mode should be terminated before the new window is closed to avoid the final problem.

To print an image of the screen, press Alt-PrintScreen to copy the screen image into the clipboard. Then open a program such as Microsoft Paint and paste in the image. It can be manipulated, saved in a variety of graphics formats, or printed from Paint. The image can also be pasted directly into another Windows application such as MS Word.

Input/Output File Overview

Running BORE II requires one or two external files: a file with an initial set of model input parameters (mandatory, known as the input file) and a file with observed data (optional, known as the data file). These files are plain ASCII text, and must reside in the same folder as the BORE II executable. The input file contains model parameters such as the depth interval being studied, feed point characteristics, problem simulation time, and *C*-to-FEC conversion factors. The data file contains observed values of FEC and temperature, and optionally contains other fluid properties such as pH. Detailed instructions for preparing an input file and a data file are given below.

BORE II always creates a temporary file, called BOREII.TMP (see options C and R), and optionally creates a new input file (see option V), which is useful if model parameters have been changed during the BORE II run.

Line-by-line Instructions for Input File

After starting BORE II, the user is prompted to choose the input file from the list of files residing in the folder where the BORE II executable is. Input file names with more than 8 characters before a period or blanks will appear in the list of files in an abbreviated form. File names can be at most 20 characters long.

A sample input file is provided that can be modified as needed using a text editor such as Notepad or a word processor such as MS Word. If a word processor is used to create or modify an input file, be sure that the file is saved as plain ASCII text.

The input file is designed to be self-documenting, with header lines preceding data lines. These header lines must be present, but BORE II does not use the text on them. Data entries are read in free format, with individual entries on a given line separated by blanks, tabs, or commas. This means that entries cannot be left blank, even if they are not being used (e.g., concentration for an outflow point). Unused entries may be set to zero or any convenient value. Comments may be added on data lines, after the requisite number of entries. In the sample input file, comments begin with an exclamation point.

Item	**Computer Variables**	**Unit**	**Description**
1.	TITLE	–	A description of the problem, 80 characters maximum
2 header for wellbore geometry			

2.	RXMIN	m	Top of study area, x_{min}
	RXMAX	m	Bottom of study area, x_{max}
	RDIAM	cm	Wellbore diameter, d_w
3 header for flow parameters			
3.	RQW	L/min	Flow into (positive) or out of (negative) the bottom of the study area, q_w
	HALPHA	–	Factor to account for convergence of horizontal flow lines toward the wellbore, α_h (Drost, 1968) Range: 1.0 – 4.0; default value: 2.5 Only used for horizontal flow

4 header for feed points			
4.	IINFN	–	Number of feed points (maximum 180)
	IQFLAG	–	Variable flow-rate flag – a 3 digit integer used to identify feed points with variable flow (suggested value 999)
5 header for constant- flow-rate feed points			
5. Repeat IINFN times	RINFX	m	Location of feed point, x_i * For horizontal flow put two feed points at the same location, with equal magnitude, opposite sign flow rates
	RINFQ	L/min (m/day if IINFV=1)	Constant inflow rate (positive) or outflow rate (negative) of feed point, q_i For a variable flow rate, set RINFQ = IIIJJ, where III = IQFLAG, and JJ is a two digit integer giving the number of times in the variable-flow-rate table, which follows in 5a For horizontal flow, v_d replaces q_i if IINFV = 1
	RINFC	g/L	Constant feed point concentration, C_i - only used for inflow points For a variable concentration, set RINFQ = IIIJJ, where III = IQFLAG, and JJ is a two digit integer giving the number of times in the variable-flow-rate table, which follows in 5a
	RINFT	hr	Start time for constant feed point concentration, t_{0i} - only used for inflow points Feed point concentration is C_0 of cell containing feed point for t < t_{0i}
	IINFV	–	Horizontal flow Darcy-velocity flag (must be zero for non-horizontal flow case): = 0: RINFQ is flow rate q_i into/out of the wellbore in L/min = 1: RINFQ is +/–Darcy velocity v_d through the aquifer in m/day

5a header for variable-flow-rate table (only when RINFQ = IQFLAGJJ)			
5a. Repeat JJ times when RINFQ = IQFLAGJJ	RINFQT	hr	Time t_j (set $t_1 = 0$, set $t_{JJ} > t_{max}$)
	RINFQQ	L/min (m/day if IINFV=1)	Volumetric flow rate q_j at time t_j For horizontal flow, v_d replaces q_j if IINFV = 1
	RINFCC	g/L	Concentration C_j at t_j
6 header for misc. parameters			
6.	TMAX	hr	Maximum simulation time, t_{max}
	DPYMAX	µS/cm	Maximum FEC for plots
	RK	m^2/s	Diffusion coefficient, D_0
7 header for C-to-FEC conversion			
7.	RGAMMA	µS/cm	Conversion from C in g/L to FEC in µS/cm: FEC = $\gamma + \beta C + \alpha C^2$ Default values (for 20°C): $\gamma = 0$, $\beta = 1870$, $\alpha = -40$ Set $\gamma = 0$, $\beta = 1$, $\alpha \approx$ 1.e-8 for FEC $\approx C$
	RBETA	[µS/cm]/[g/L]	
	RALPHA	[µS/cm]/$[g/L]^2$	
8 header for initial conditions			
8.	IC0FLAG	–	Initial concentration flag: = 0: $C_0 = 0$, no further input for item 8 < 0: read uniform non-zero C_0 in 8a > 0: read IC0FLAG (x,$C_0(x)$) pairs in 8b to describe variable initial concentration
8a header for uniform initial conditions (only when IC0FLAG < 0)			
8a. when IC0FLAG<0	RC0	g/L	Uniform non-zero C_0
8b header for non-uniform initial conditions (only when IC0FLAG > 0)			
8b. repeat IC0FLAG times when IC0FLAG>0	RX	m	x value*
	RC0	g/L	$C_0(x)$
9 header for data file name			
9.	CFDATA	–	Name of data file, 20 characters maximum; 'NONE' if there is no data file

*see Appendix 1, Section A1.5, for additional information on locating feed points and specifying non-uniform initial conditions

Sample Input File

An input file illustrating many of these options is shown below. Text or numbers following an exclamation point (!) are comments, and are not used by BORE II.

```
TITLE: Sample Input File with flow from below, horizontal flow, variable
flow
XMIN(m)      XMAX(m)      DIAM(cm)
.0000        60.00        7.600
QW(L/min)    HALPHA       !QW=flow from below; HALPHA=hor. flow
constriction
 0.50        0.           !default value of HALPHA will be used
#FEED_PTS    VARIABLE_FLOWRATE_IDENTIFIER
   4               999
DEPTH(m)     Q (L/min)     C(g/L)       T0(hr)       Q/V_FLAG
 25.         +1.           6.0          .0000        1 !1st 2 feed pts-hor.
flow
 25.         -1.           6.0          .0000        1 !C & T0 not used
(outflow)
 30.         99905.        6.0          .0000        0 !C & T0 not used
(table)
     T(hr)        Q(L/min)     C(g/L)       !#entries is two digits after
999
      .0000        .0000         6.         !first time in table is zero
      .3000        .2800E-01     5.
      .5000        .3200         4.
      1.000        .4600         3.
      1.500        .4600         2.         !last time in table is > tmax
 35.         .5            4.0          .2000        0 !final feed pt
TMAX(hr)     FECMAX       DIFFUSION_COEF.(m2/s)
 1.000       5000.        .7500E-09
RGAMMA       RBETA        RALPHA       !FEC = RGAMMA + C*RBETA + C*C*RALPHA
0.           0.           0.           !default values will be used
IC0FLAG      !If 0, C0=0; If <0, read one C0; If >0,read IC0FLAG (X,C0)
pairs
    1
X(m)         C0(g/L)            !#entries is IC0FLAG
60.          2.                 !Concentration associated with Qw
DATA_FILE    !'NONE' if there is no data file
NONE
```

The first two feed points represent constant horizontal flow, and since the Q/V flag (IINFV) is one, flow rate is given as Darcy velocity through the aquifer in m/day. The third feed point has variable flow rate and concentration, with a five-entry table specifying the variation with time. The fourth feed point is an inflow point with constant flow rate and concentration and a non-zero concentration start time.

Note that the flow from below, q_w, is positive (into the wellbore section), so the corresponding concentration is specified as the initial condition of the lowermost cell in the wellbore (at $x = x_{min}$) by using IC0FLAG = 1. If IC0FLAG = 0, the concentration associated with q_w would be zero, and if IC0FLAG = -1, the concentration associated with q_w would be the uniform non-zero initial concentration in the wellbore.

When BORE II writes an input file (option V), it changes several things to the file form shown above. Comments found in the original input file are not reproduced, but two comments are added. First, the cell height and the equation used to calculate it are shown on the line with x_{min}, x_{max}, and d_w. Second, if feed points represent horizontal flow, then the flag IINVF is set to 0, flow rate is given in L/min, and the corresponding Darcy velocity through the aquifer in m/day is added as a comment. Finally, if IC0FLAG > 0, BORE II sets IC0FLAG to the number of wellbore cells, and explicitly shows every (x, $C_0(x)$) pair. This

option is useful for identifying the *x* values of various cells, which may expedite assignment of feed point locations or initial conditions. Part of the input file created by BORE II for the above sample is shown below.

```
TITLE: Sample Input File with flow from below, horizontal flow, variable
flow
XMIN(m)      XMAX(m)      DIAM(cm)     !DX(m) = MAX(|XMIN - XMAX|/180,
DIAM/100)
 .0000        60.00        7.600       ! .3333
QW(L/min)    HALPHA       !QW=flow from below; HALPHA=hor. flow
constriction
 .5000        2.500
#FEED_PTS    VARIABLE_FLOWRATE_IDENTIFIER
    4                999
DEPTH(m)     Q(L/min)     C(g/L)       T0(hr)       Q/V_FLAG     !Vd(m/day)
 35.00        .5000        4.000        .2000          0
 30.00       99905.        6.000        .0000          0
     T(hr)        Q(L/min)     C(g/L)       !#entries is two digits after
999
      .0000        .0000        6.000
      .3000        .2800E-01    5.000
      .5000        .3200        4.000
      1.000        .4600        3.000
      1.500        .4600        2.000
 25.00        .4398E-01    6.000        .0000          0          ! 1.000
 25.00       -.4398E-01    6.000        .0000          0          !-1.000
TMAX(hr)     FECMAX       DIFFUSION_COEF.(m2/s)
 1.000        5000.        .7500E-09
RGAMMA       RBETA        RALPHA       !FEC = RGAMMA + C*RBETA + C*C*RALPHA
 .0000        1870.       -40.00
IC0FLAG      !If 0, C0=0; If <0, read one C0; If >0,read IC0FLAG (X,C0)
pairs
  179
X(m)         C0(g/L)            !#entries is IC0FLAG
 59.83        2.000
 59.50        .0000
 59.17        .0000
 58.83        .0000
…(169 entries with C0=0 not shown)…
 2.167        .0000
 1.833        .0000
 1.500        .0000
 1.167        .0000
 .8333        .0000
 .5000        .0000
DATA_FILE    !'NONE' if there is no data file
NONE
```

Line by Line Instructions for Data File

The data file is read in the fixed format shown below. If data are available in a different format, an auxiliary program should be used to convert it to this form (a simple preprocessor called PREBORE, described in Appendix 2, converts the data file format used by BORE to the new format shown below). Note that because a fixed format is used, blank entries are allowed; they are interpreted as zero.

Lines 1-8 are header lines, not used by BORE II.

Each line of the remainder of the file contains:

Variable	*x*	FEC	TEMP	DAT3	DAT4	DAT5	HR	MIN	SEC
Units	m	μS/cm	^{o}C				–	–	–
Format	F10.3	F10.3	F10.3	E10.3	E10.3	E10.3	I3	I2	I2
Columns	1-10	11-20	21-30	31-40	41-50	51-60	62-64	66-67	69-70

The entries DAT3, DAT4, and DAT5 represent optional data types that may be collected with certain logging tools, such as pH and dissolved oxygen (see options A and Y for ways to display this data). Note that there is one blank column before each of the HR, MIN, and SEC entries, to make the data file more readable. The first time entry corresponds to $t = 0$ for the model.

BORE II Options

The following options are available on the BORE II main menu. Either uppercase or lowercase letters may be used, and should be followed by pressing ENTER.

C – (C)-x plot – Displays FEC versus depth for data and/or model continuously in time (an animation); stores [*x* (m), *t* (sec), data FEC (μS/cm), model FEC (μS/cm)] in file BOREII.TMP for later use by option R or post-processing.

T – c-(T) plot – Displays FEC versus time for data and model for a chosen depth.

R – d/m cu(R)ve – Displays FEC versus depth plots for data and model at a series of times (snapshots of the option C display); uses results of most recent option C, read from BOREII.TMP. Does not work if there is no data file or if there are only data at one depth in data file.

N – i(N)flow-c – Displays inflow FEC for a chosen feed point as a function of time.

A – p(A)ram display – Displays all data profiles (FEC, TEMP, DAT3, DAT4, DAT5) simultaneously, using user-specified plot limits (selections 3-6). For selection 1, all points are connected on one continuous curve; for selection 2, points that are beyond depth or time limits start new curve segments.

X – (X)-t plot – Displays a color-coded plot of model FEC versus depth and time in a new window, then repeats the plot in the borehole profile window.

S – tool (S)tudy x-t plot – Same as X, but limits display to what would be obtained with a tool whose parameters (number of probes, gap between probes, and tool velocity) are specified by the user.

D – (D)ata x-t – Displays a color-coded plot of data traces versus depth and time in a new window, then repeats the plot in the borehole profile window (data type specified by option Y, default is FEC).

F – (F)ill data x-t – Same as D, except that data traces are interpolated to fill the *x*-*t* plane.

I – d/m d(I)ff x-t – Displays a color-coded plot of the difference between model and data FEC versus depth and time in a new window, then repeats the plot in the borehole profile window. User selects whether to show data traces (mode 1) or filled data (mode 2).

M – (M)odify inp– Opens interactive session for modifying location, flow rate, and concentration of feed points, or adding new feed points. User is prompted to enter feed point number and given the chance to modify or maintain current parameters. To add a new feed point, specify a feed point number greater than that for any existing feed point. If horizontal flow is implemented using option M, flow rate must be specified as volumetric flow rate through the wellbore in L/min.

P – (P)lot adjust – Sets new values of parameter minimum and maximum; t_{max}; difference range for option I; and depth for which wellbore flow rate q_0 is displayed in borehole profile window (default depth is x_{min}).

G – (G)rid – Sets grid spacing for new window showing *x-t* plots.

Y – data t(Y)pe – Chooses data type (FEC, TEMP, DAT3, DAT4, DAT5) to display in options C, T, D, and F. Model results always show FEC, so option C and T plots, which show both model and data, must be read carefully. Note that options R and I are not affected by the choice of data type, but always compare model and data FEC.

Z – print – Displays instructions for printing a screen image.

V – sa(V)e – Creates a new input file with current model parameters. User is prompted for new file name.

Q – (Q)uit – Terminates BORE II program.

4. Example Applications

Five example applications are presented to illustrate the capabilities of BORE II. Although BORE II simulates the forward problem (it produces wellbore FEC profiles given different inflow positions, rates, and concentrations), it is most commonly used in an inverse mode, in which inflow positions, rates and concentrations are varied by trial and error until the model matches observed values of wellbore FEC profiles. Initial guesses for the trial and error process may be obtained using direct integral methods (Tsang and Hale, 1989; Tsang et al., 1990) or other means (see example 2 below). Example applications 3, 4, and 5 demonstrate such comparisons to real data provided to us as typical field data sets by G. Bauer (private communication, 2000). The results of these example applications do not necessarily provide physically realistic flow rates and inflow concentrations, because they employ the artificial equality FEC = *C*. Furthermore, rough matches to real data, as are obtained here, can often be obtained equally well with a variety of different parameters (i.e., the solution of the inverse problem is non-unique). The input files for the example applications are shown in Appendix 3.

	Problem	Data File	Input File	Features
1	Up flow	up_num.dbt (numerically simulated)	up_num.inp	Advection and dilution, diffusion/dispersion minor
2	Horizontal flow	hor_an.dbt (analytical solution)	hor_an.inp	Dilution only, no advection or diffusion/dispersion One pair inflow/outflow points
3	Horizontal flow	hor_real.dbt (real data)	hor_real.inp	Dilution and diffusion/dispersion Multiple pairs inflow/outflow points Initial time added to data

4	Down flow	down_c.dbt (real data)	down_c.inp	Advection, dilution, and diffusion/dispersion Variable inflow concentration
5	Combination flow	comb_ic.dbt (real data)	comb_ic.inp	Advection, dilution, and diffusion/dispersion Non-uniform initial conditions

1. Up Flow – Numerically Simulated Data

Perhaps the most common application of BORE II is to the case of up flow - when one pumps from the top of the wellbore section, and fluid enters the wellbore at one or more feed points. Figure 1 shows C versus x for several times for a typical up flow case (obtained with BORE II option R). Each feed point has the same inflow rate and the same concentration, and there is also up flow from below. At early times, the feed points show up as individual FEC peaks, but as time passes, the deeper peaks merge with those above them, creating a step-like structure. The data set for this example is not real, but the results of a numerical simulation using the flow and transport simulator TOUGH2 (Pruess, 1987; 1991; 1995; 1998). TOUGH2 has been verified and validated against analytical solutions, other numerical models, and laboratory and field data. The TOUGH2 simulation uses a one-dimensional model with the same cell spacing as BORE II and constant mass sources located at the BORE II feed points. Thus, BORE II and TOUGH2 are solving the same problems, and comparing the results for wellbore FEC profiles verifies that the BORE II calculations are done correctly.

2. Horizontal Flow – Analytical Solution and Numerically Simulated Data

For horizontal flow in the absence of diffusion/dispersion along the wellbore, an analytical solution for the concentration observed in the wellbore as a function of time, $C(t)$, is given by (Drost, 1968):

$$C(t) = C_i - [C_i - C(0)] \exp\left(\frac{-2tv_d\alpha_h}{\pi r_w} \right), \qquad (1)$$

where C_i is the formation (inflow) concentration, t is time (s), v_d is the Darcy velocity through the aquifer (m/s), α_h is the aquifer-to-wellbore convergence factor, and r_w is the wellbore radius (m). Figure 2 shows the analytical solution and the BORE II results for this problem, obtained using option T. The agreement is excellent. Note that for small values of v_d, if C(0) = 0, the analytical solution becomes approximately

$$C(t) = C_i \left[1 - \exp\left(\frac{-2tv_d\alpha_h}{\pi r_w} \right) \right] \approx C_i \left[1 - \left(1 - \frac{2tv_d\alpha_h}{\pi r_w} \right) \right] = \frac{C_i 2tv_d\alpha_h}{\pi r_w}. \qquad (2)$$

Thus, any combination of C_i and v_d whose product is a constant gives the same value of C. This condition corresponds to the early-time straight-line portion of Figure 2. The analytical solution may be implemented in a spreadsheet to expedite the choice of BORE II parameters, by examining the solution for various values of v_d and C_i. Note that care must be taken to use a consistent set of units for t, v_d, and r_w in Equations (1) and (2). For example, when time is in seconds, BORE II input parameters v_d in m/day and r_w in cm must be converted to m/s and m, respectively.

Figure 2 also shows the evolution of concentration at and near a horizontal flow layer when diffusion/dispersion along the wellbore is significant ($D_0 = 10^{-5}$ m^2/s). For this case, the analytical solution is not applicable, but BORE II results compare very well to numerically simulated data obtained using TOUGH2. When dispersion is significant, use of the Drost solution generally results in an underestimation of C_i and an overestimation of v_d. These errors do not arise when using BORE II, since diffusion/dispersion can be explicitly included.

3. Horizontal Flow – Real Data

As indicated in Figure 2, the addition of diffusion or dispersion modifies the depth-FEC profile arising from a thin layer of horizontal flow, by widening the base of the FEC peak. A thick layer of horizontal flow produces a distinct signature, with an FEC response that has a wide peak as well as a wide base. To model a thick layer of horizontal flow, one may use several adjacent inflow/outflow point pairs in the model. Figure 3 compares model and data profiles (G. Bauer, private communication, 2000) of C versus x for several times, using option R. Seven pairs of inflow/outflow points are used, assigned to seven adjacent cells. By multiplying the number of inflow/outflow pairs by cell thickness, one may estimate the thickness of the layer of horizontal flow, in this case 2.3 m. See Appendix 1, Section A1.5, for additional information about assigning feed points to specific cells.

For this particular data set, the earliest observations show a variable FEC profile. One possible way to address this is to specify a non-uniform initial concentration distribution in the wellbore. An alternative approach (used here) is to add a dummy entry to the data file, specifying a time prior to the first real data time, at which the FCE distribution in the wellbore is assumed to be uniform. In general, it is not possible to determine when, if ever, the FEC distribution in the wellbore is uniform, but the approach can work quite well, as shown in Figure 4, which shows C versus t at the center of the horizontal flow zone (option T). The data zero time taken from the header of the data file, where the date and time of the logging run are specified.

4. Down Flow – Real Data

Figure 5 compares model and data profiles (G. Bauer, private communication, 2000) of C versus x for several times (option R) for a case with primarily down flow. A uniform non-zero initial concentration is used (IC0FLAG < 0) to approximate the low, slightly variable initial concentration. Two shallow inflow

points have variable concentrations that increase in time, which suggests that de-ionized water penetrated into the fractures when it was introduced into the wellbore to establish low-concentration initial conditions for logging. A low-concentration feed point at x = 158.5 m creates up flow above it, but the remainder of the wellbore section shows down flow.

5. Combination Flow – Real Data

Figure 6 compares model and data profiles (G. Bauer, private communication, 2000) of C versus x for several times (option R) for a case with combination flow. A non-uniform initial condition has been used, which is extracted from the data file using the preprocessor PREBORE (see Appendix 2). Note that there are more entries in the initial condition specification (232) than there are cells in the model (179). Thus, some cells are assigned more than one initial condition. For cells where this occurs, only the final initial condition assigned is used. See Appendix 1, Section A1.5, for additional information on specifying non-uniform conditions. Figure 7 shows the same information as Figure 6, but plotted in a different way, with the difference between data and model FEC plotted as an x-t plot (option I). The blue and orange diagonal features indicate that the largest discrepancy between model and data gradually deepens with time.

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Appendix 1: Mathematical Background and Numerical Approach

The principal equation governing wellbore FEC variation is the equation for the transport of mass (or ion concentration) in the wellbore. However, additional consideration must be given to the determination of FEC as a function of ion concentration and the temperature dependence of FEC.

A1.1 FEC as a Function of Concentration

The relationship between ion concentration and FEC is reviewed, for example, by Shedlovsky and Shedlovsky (1971), who give graphs and tables relating these two quantities. Hale and Tsang (1988) made a sample fit for the case of NaCl solution at low concentrations and obtained

$$\mathrm{FEC} = 1{,}870\, C - 40\, C^2, \qquad \text{(A.1)}$$

where C is ion concentration in kg/m^3 (≈ g/L) and FEC is in μS/cm at 20°C. The expression is accurate for a range of C up to ≈ 6 kg/m^3 and FEC up to 11,000 μS/cm. The quadratic term can be dropped if one is interested only in values of C up to ≈ 4 kg/m^3 and FEC up to 7,000 μS/cm, in which case the error will be less than 10%.

Fracture fluids typically contain a variety of ions, the most common being Na^+, Ca^{2+}, Mg^{2+}, Cl^-, SO_4^{2-}, and HCO_3^-. If a hydrochemical analysis has been completed, various methods are available for computing an equivalent NaCl concentration for other ions. Schlumberger (1984) presents charts of multiplicative factors that convert various solutes to equivalent NaCl concentrations with respect to their effect on electric conductivity.

A1.2 Temperature Dependence of FEC

BORE II calculations are made assuming a uniform temperature throughout the wellbore. Actual wellbore temperatures generally vary with depth, so temperature corrections must be applied to field FEC data to permit direct comparison with model output.

The effect of temperature T on FEC can be estimated using the following equation (Schlumberger, 1984)

$$\mathrm{FEC}(20^\circ\mathrm{C}) = \frac{\mathrm{FEC(T)}}{1 + \mathrm{S}(\mathrm{T} - 20^\circ\mathrm{C})}, \qquad \text{(A.2)}$$

where $S = 0.024$.

Generally, temperature increases with depth below the land surface. If full temperature logs are available, these data can be used to correct the corresponding FEC values. However, if no complete logs are available, a simplifying assumption may be made that the temperature variation in the wellbore is linear and can be modeled by:

$$T = Ax + B, \qquad \text{(A.3)}$$

where A and B are parameters determined by fitting any available temperature versus depth data. If the fit is unsatisfactory, other relationships with higher order terms must be used.

A1.3 Governing Equation

The differential equation for mass or solute transport in a wellbore is:

$$\frac{\partial}{\partial x}\left(D_o \frac{\partial C}{\partial x}\right) - \frac{\partial}{\partial x}(Cv) + S = \frac{\partial C}{\partial t}, \tag{A.4}$$

where x is depth, t is time, and C is ion concentration. The first term is the diffusion term, with D_0 the diffusion/dispersion coefficient in m^2/s, the second term is the advective term, with v the fluid velocity in m/s, and S is the source term in kg/m^3s. This one-dimensional partial differential equation is solved numerically using the finite difference method, with upstream weighting used in the advective term. The following initial and boundary conditions are specified:

$C(x,0) = C_0(x)$, (A.5)

$C(x_{min},t) = C_0(x_{min})$ for flow into the wellbore from above,

$C(x_{max},t) = C_0(x_{max})$ for flow into the wellbore from below,

$D_0 = 0$ for $x < x_{min}$ and $x > x_{max}$.

The first condition allows for the specification of initial ion concentrations in the wellbore. The second and third conditions allow for advective flow of ions into the wellbore interval from above and below. The final condition indicates that diffusion and dispersion do not take place across the boundaries of the wellbore interval. In general, advection will be the dominant process at the boundaries. If diffusion or dispersion is dominant for a particular problem, the boundaries should be extended in order to prevent improper trapping of electrolyte.

A1.4 Discretization in Time

Time stepping is explicit, with the time step Δt determined by stability constraints for advection

$$\Delta t \le \frac{\pi d_w{}^2 \Delta x}{8 q_{max}}, \tag{A.6}$$

and diffusion

$$\Delta t \le \frac{\Delta x^2}{4 D_0}, \tag{A.7}$$

where q_{max} (m^3/s) is the maximum fluid flow rate anywhere in the wellbore. BORE II starts its calculation at $t = 0$. The first time in the data file is also identified with $t = 0$. If it is apparent that model and data times are not synchronized, then one may insert an additional line into the data file after the header lines, with an earlier time than the first real data time, in order to reset the data zero time. On the inserted line, FEC, x, and other data entries may be left blank or copied from the first real data line.

A1.5 Discretization in Space

The wellbore interval between x_{min} and x_{max} is uniformly divided into N cells and it is assumed that the wellbore has uniform diameter, d_w. Cell height Δx is determined as the larger of $(x_{max} - x_{min})/180$ and d_w. Position values indicate depth in the wellbore and thus x is zero at the surface and increases downward. The cell index increases upward, with cells 1 and N located at the bottom and top, respectively, of the wellbore interval. In general, the ith node (the center of the ith cell) is located at

$$x_i = x_{max} - (i\text{-}1/2)\Delta x, \tag{A.8}$$

with the ith cell extending from $x_{max} - (i - 1)\Delta x$ to $x_{max} - i\Delta x$.

BORE II assigns feed points and initial concentrations to cell i if the location of the feed point or $C_0(x)$ value lies within the boundaries of the ith cell. If multiple feed points are assigned to the same cell, they will all be accounted for, but if multiple initial conditions are assigned to the same cell, only the final one assigned will be used. By definition, the lower boundary of cell 1 is at x_{max}, but due to round-off errors, the upper boundary of cell N may not be at x_{min}. Hence, it is often useful to know the x coordinates of each node. These are displayed in the input file written by BORE II (option V) when IC0FLAG > 0. Thus, if the user sets IC0FLAG = 1, inputs one $(x, C_0(x))$ pair, and uses option V, then a new input file will be created with IC0FLAG = N and a complete list of the x coordinates for all nodes, with $C_0 = 0$ for all cells except the one identified in the original input file. Alternatively, if the initial conditions are taken from the data file with PREBORE (or taken from any source that is independent of the nodal coordinates), then using option V will create an input file that shows the actual initial conditions assigned to each cell.

The list of nodal x coordinates may be useful when modeling a thick fracture zone or aquifer, in order to place one feed point in each cell over a given depth range. Similarly, when using IC0FLAG > 0 to specify non-uniform initial concentrations, one must assign a C_0 value to each cell in the interval of interest in order to obtain a continuous C profile, because no interpolation is done between scattered initial concentrations. Finally, knowing the coordinate of the top cell in the model is useful for assigning the initial concentration that serves as the boundary condition for inflow into the wellbore interval from above. For inflow from below, either $x = x_1$ or $x = x_{max}$ may be used.

A1.6 Calculation of Flow Rates

Feed point flow rates may be constant in time, in which case a steady-state flow field is assumed in the wellbore, or variable, with feed point flow rates determined by linear interpolation between tabulated values. Although feed point flow rate may vary, true transient wellbore flow including fluid compressibility effects is not considered. Rather, the wellbore fluid flow field is assumed to change instantly from one steady-state flow field to another. In other words, the flow rate out of cell i is always the sum of the flow rates from all feed point locations within the boundaries of cell i plus the flow rate out of cell i-1.

Appendix 2: The Preprocessor PREBORE

PREBORE is a simple Fortran program that does preprocessing for BORE II. It runs under either Windows or DOS. PREBORE converts the old BORE data file format into the new BORE II data file format. Depth is converted from feet to meters, and other data columns are realigned. PREBORE can also create a file with (x,C_0) pairs to be added to the BORE II input file as initial conditions (this option requires that x values steadily increase or steadily decrease in each profile).

If data file conversion is being done, the user is prompted to enter the old and new data file names.

If a file with initial conditions is being created, the user is prompted for the following information: the name of the BORE II data file; a name for the initial condition file; which profile in the data file to use; the direction of logging (downward assumes x values increase in the data file, upward assumes they decrease, and both assumes the profiles alternately increase and decrease in x); and the conversion factors (γ, β, α) between FEC and C (default values 0, 1870, -40). In addition to creating an ASCII text file with (x,C_0) pairs, which may be added to the BORE II input file using a text editor or word processor, PREBORE prints out the number of pairs on the screen, which should be used for IC0FLAG. Note that IC0FLAG may be greater than the number of cells in the model (usually about 180), but that in this case not all the C_0 values will be used (see Appendix 1, Section A1.5).

Data file conversion and initial condition creation can be done in the same PREBORE run. In this case the user must specify both old and new data file names in addition to the parameters describing the creation of initial conditions.

Appendix 3: Input Files for Example Applications

A2.1 Example Application 1 – Up Flow – up_num.inp

```
TITLE: up flow with flow from below, compare to synthetic data
XMIN(m)     XMAX(m)     DIAM(cm)    !DX(m) = MAX(|XMIN - XMAX|/180,
DIAM/100)
 .0000       180.0       14.00      ! 1.000
QW(L/min)   HALPHA      !QW=flow from below; HALPHA=hor. flow
constriction
 .7500       2.500
#FEED_PTS   VARIABLE_FLOWRATE_IDENTIFIER
    3              999
DEPTH(m)    Q(L/min)    C(g/L)      T0(hr)      Q/V_FLAG    !Vd(m/day)
 160.5       .7500       100.0       .0000        0
 130.5       .7500       100.0       .0000        0
 50.50       .7500       100.0       .0000        0
TMAX(hr)    FECMAX      DIFFUSION_COEF.(m2/s)
 24.00       100.0       .7500E-09
RGAMMA      RBETA       RALPHA      !FEC = RGAMMA + C*RBETA + C*C*RALPHA
 .0000       1.000       .1000E-07
IC0FLAG     !If 0, C0=0; If <0, read one C0; If >0,read IC0FLAG (X,C0)
pairs
    0
DATA_FILE   !'NONE' if there is no data file
up_num.dbt
```

A2.2 Example Application 2 – Horizontal Flow Analytical Solution – hor_an.inp

```
TITLE: Horizontal Flow - Compare to Analytical Solution
XMIN(m)     XMAX(m)     DIAM(cm)
0.000       50.000      7.600
QW(L/min)   HALPHA
0.          2.850000
#FEED_PTS   VARIABLE_FLOWRATE_IDENTIFIER
       2    999
DEPTH(m)    Vd(m/d)     C(g/L)      T0(hr)      Q/V_FLAG
  25.0000     1.        1000.     .0000          1
  25.0000    -1.        1000.     .0000          1
TMAX(hr)    FECMAX      DIFFUSION_COEF.(m2/s)
3.0000      1000.       1.e-10
RGAMMA      RBETA       RALPHA
0.000000    1.000000    1.e-08
IC0FLAG
0
DATA_FILE
hor_an.dbt
```

The input file for the case with significant dispersion is identical, except that the diffusion coefficient is increased from 10^{-10} m^2/s to 10^{-5} m^2/s.

A2.3 Example Application 3 – Horizontal Flow - hor_real.inp

```
TITLE: Horizontal Flow Example
XMIN(m)     XMAX(m)     DIAM(cm)    !DX(m) = MAX(|XMIN - XMAX|/180,
DIAM/100)
 .0000       60.00       7.600      ! .3333
QW(L/min)   HALPHA      !QW=flow from below; HALPHA=hor. flow
constriction
 .0000       2.500
#FEED_PTS   VARIABLE_FLOWRATE_IDENTIFIER
   14               999
DEPTH(m)    Q(L/min)    C(g/L)      T0(hr)      Q/V_FLAG    !Vd(m/d)
 26.73       .5295E-02   730.0       .0000        0          ! .1204
 26.73      -.5295E-02    .0000      .0000        0          !-.1204
 26.39       .5295E-02   730.0       .0000        0          ! .1204
 26.39      -.5295E-02    .0000      .0000        0          !-.1204
 26.06       .5295E-02   730.0       .0000        0          ! .1204
 26.06      -.5295E-02    .0000      .0000        0          !-.1204
 25.73       .5295E-02   730.0       .0000        0          ! .1204
 25.73      -.5295E-02    .0000      .0000        0          !-.1204
 25.39       .5295E-02   730.0       .0000        0          ! .1204
 25.39      -.5295E-02    .0000      .0000        0          !-.1204
 25.06       .5295E-02   730.0       .0000        0          ! .1204
 25.06      -.5295E-02    .0000      .0000        0          !-.1204
 24.73       .5295E-02   730.0       .0000        0          ! .1204
 24.73      -.5295E-02    .0000      .0000        0          !-.1204
TMAX(hr)    FECMAX      DIFFUSION_COEF.(m2/s)
 4.000       400.0       .7500E-04
RGAMMA      RBETA       RALPHA      !FEC = RGAMMA + C*RBETA + C*C*RALPHA
 .0000       1.000       .1000E-07
IC0FLAG     !If 0, C0=0; If <0, read one C0; If >0,read IC0FLAG (X,C0)
pairs
    0
DATA_FILE   !'NONE' if there is no data file
hor_real.dbt
```

A2.4 Example Application 4 – Down Flow – down_c.inp

```
TITLE: downflow, variable source conc., uniform non-zero initial conc.
XMIN(m)     XMAX(m)     DIAM(cm)    !DX(m) = MAX(|XMIN - XMAX|/180,
DIAM/100)
 140.0       240.0       7.600      ! .5556
QW(L/min)   HALPHA      !QW=flow from below; HALPHA=hor. flow
constriction
 .0000       2.850
#FEED_PTS   VARIABLE_FLOWRATE_IDENTIFIER
   12               999
DEPTH(m)    Q(L/min)    C(g/L)      T0(hr)      Q/V_FLAG    !Vd(m/day)
 239.0      -.7000       .0000       .4000        0
 212.0      -1.000       .0000       .4000        0
 187.0       .7500       1800.       .4000        0
 183.0       .1900       1900.       .4000        0
 181.0       .1200       1900.       .4000        0
 178.0       .5000E-01   1900.       .4000        0
 176.0       .4000E-01   1900.       .4000        0
 174.0       .3000E-01   1900.       .4000        0
 171.0       .1000E-01   1900.       .4000        0
 164.4      99905.       1900.       .4000        0
     T(hr)       Q(L/min)    C(g/L)      !#entries is two digits after
999
      .0000       .4400       80.00
      .4000       .4400       100.0
      1.200       .4400       1100.
      1.900       .4400       1650.
      4.500       .4400       1950.
 162.0      99904.       1800.       .0000        0
     T(hr)       Q(L/min)    C(g/L)      !#entries is two digits after
999
      .0000       .6000E-01   80.00
      .4000       .6000E-01   200.0
      1.900       .6000E-01   1650.
      4.500       .6000E-01   1950.
 158.5       .1000       80.00       .0000        0
TMAX(hr)    FECMAX      DIFFUSION_COEF.(m2/s)
 4.400       1700.       .1000E-02
RGAMMA      RBETA       RALPHA      !FEC = RGAMMA + C*RBETA + C*C*RALPHA
 .0000       1.000       .1000E-07
IC0FLAG     !If 0, C0=0; If <0, read one C0; If >0,read IC0FLAG (X,C0)
pairs
   -1
C0 (g/L)    !Uniform, non-zero C0
 80.00
DATA_FILE   !'NONE' if there is no data file
down_c.dbt
```

A2.5 Example Application 5 – Combination Flow – comb_ic.inp

```
TITLE: Combination flow example, non-uniform initial concentration
XMIN(m)     XMAX(m)     DIAM(cm)    !DX(m) = MAX(|XMIN - XMAX|/180,
DIAM/100)
 .00000      50.000      7.6000     ! .2778
QW(L/min)   HALPHA      !QW=flow from below; HALPHA=hor. flow
constriction
 .00000      2.8500
#FEED_PTS   VARIABLE_FLOWRATE_IDENTIFIER
   12              999
DEPTH(m)    Q(L/min)    C(g/L)      T0(hr)      Q/V_FLAG    !Vd(m/day)
 45.000     -.13000      .00000      .00000       0
 33.300      .11000      800.00      .15000       0
 33.300     -.31000      .00000      .00000       0
 27.500     -1.0500      .00000      .00000       0
 25.700      .30000      810.00      .15000       0
 25.400      .30000      810.00      .15000       0
 25.140      .30000      810.00      .15000       0
 24.900      .30000      810.00      .15000       0
 23.500      .12000      800.00      .15000       0
 21.500      .40000E-01  800.00      .15000       0
 14.000      .15000E-01  750.00      .15000       0
 12.200      .10000E-01  750.00      .15000       0
TMAX(hr)    FECMAX      DIFFUSION_COEF.(m2/s)
 1.0000      1000.0      .50000E-03
RGAMMA      RBETA       RALPHA      !FEC = RGAMMA + C*RBETA + C*C*RALPHA
 .00000      1.0000      .10000E-07
IC0FLAG     !If 0, C0=0; If <0, read one C0; If >0,read IC0FLAG (X,C0)
pairs
  232
X(m)        C0(g/L)           !#entries is IC0FLAG
1.524       2
1.615       2
1.707       3
1.829       3
1.951       3
2.073       3
2.225       3
2.377       3
2.53        3
2.713       3
2.865       3
3.018       3
3.353       589
3.536       597
3.719       588
3.871       583
4.054       584
…(208 entries not shown)…
43.282      2
43.8        2
43.983      2
44.166      1
44.318      1
44.501      1
44.684      1
DATA_FILE   !'NONE' if there is no data file
comb_ic.dbt
```

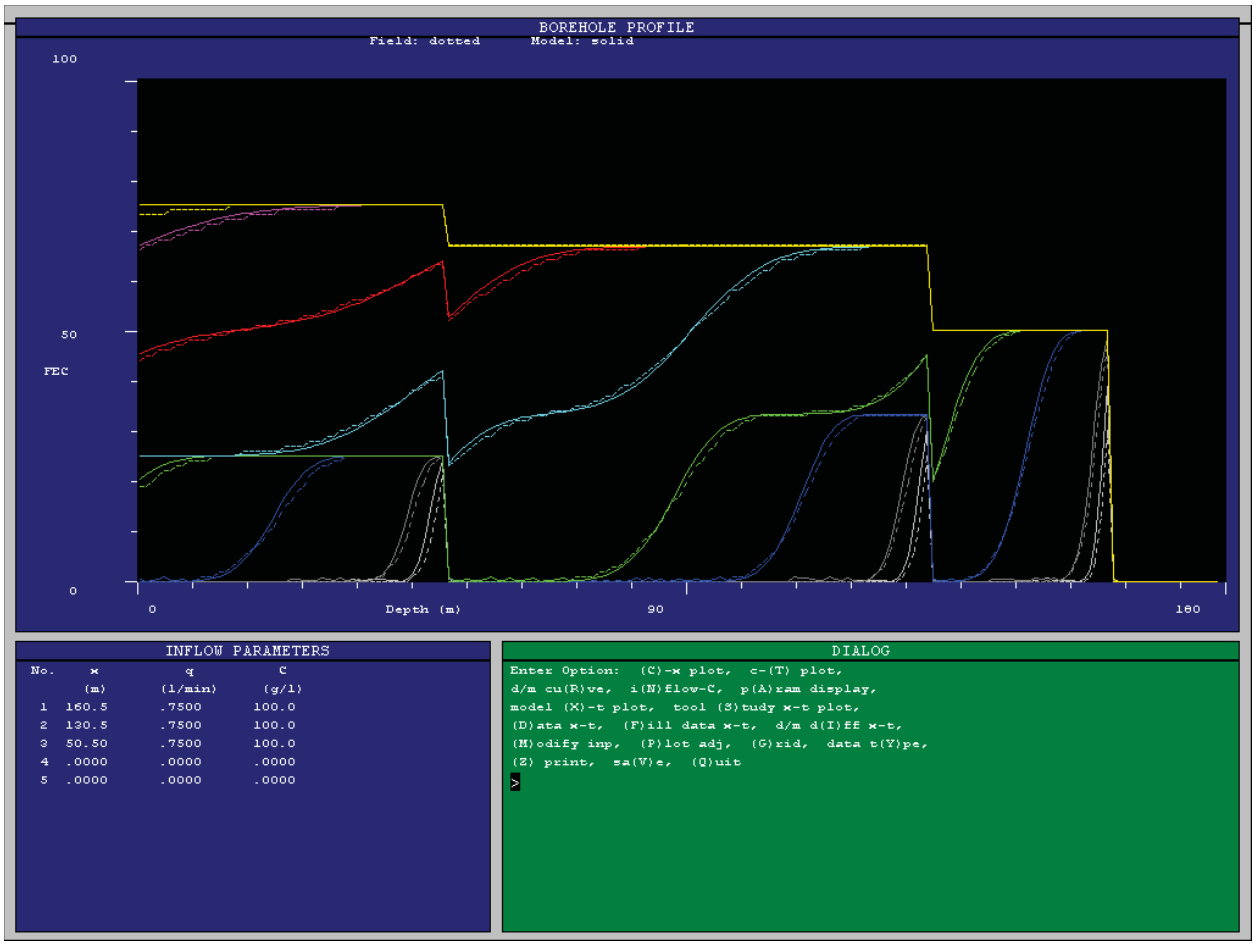

Figure 1. Concentration (=FEC) versus depth at a series of times for example application 1 - up flow. Data are numerically simulated using the TOUGH2 code. Figure is a BORE II screen-print after running option R.

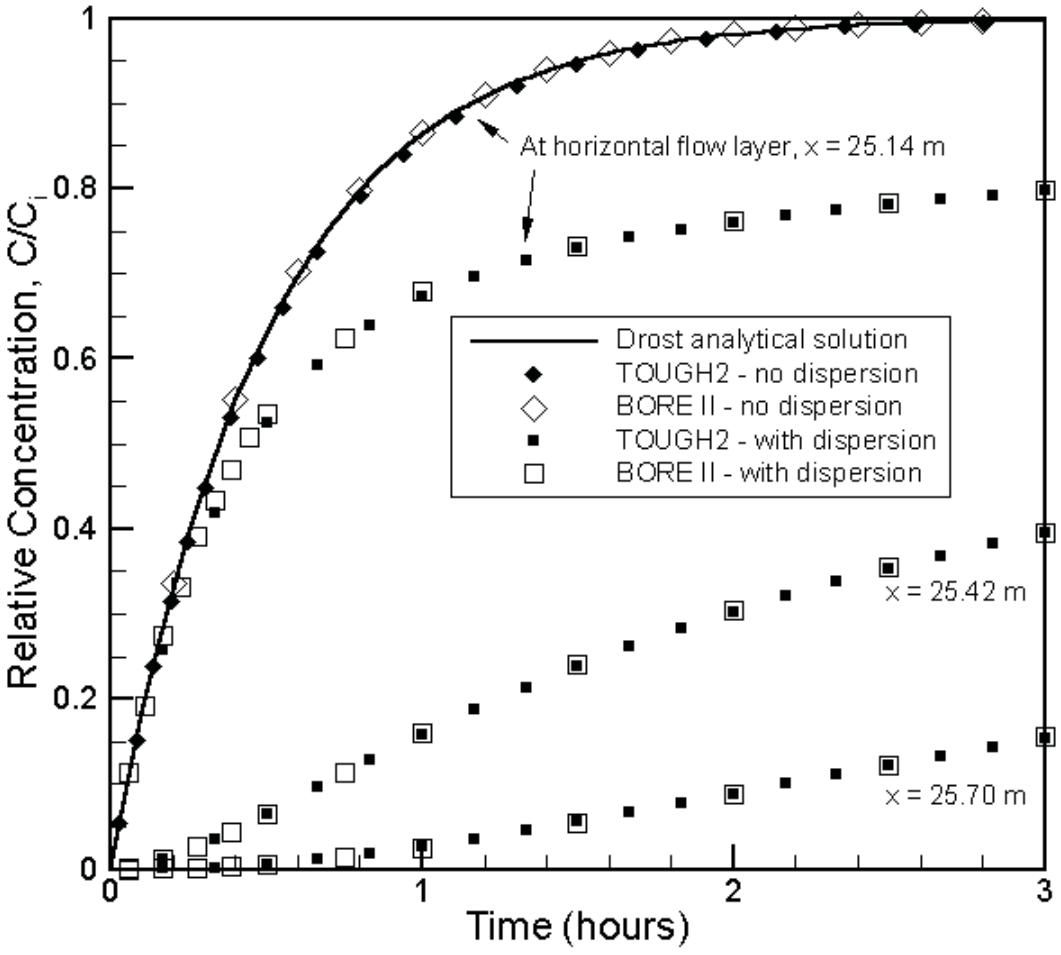

Figure 2. Relative concentration versus time for example application 2 – horizontal flow. When diffusion/dispersion is negligible, the concentration increase only occurs at the depth of the horizontal flow layer. The solid line shows the analytical solution as given by Drost (1968), Equation (1).

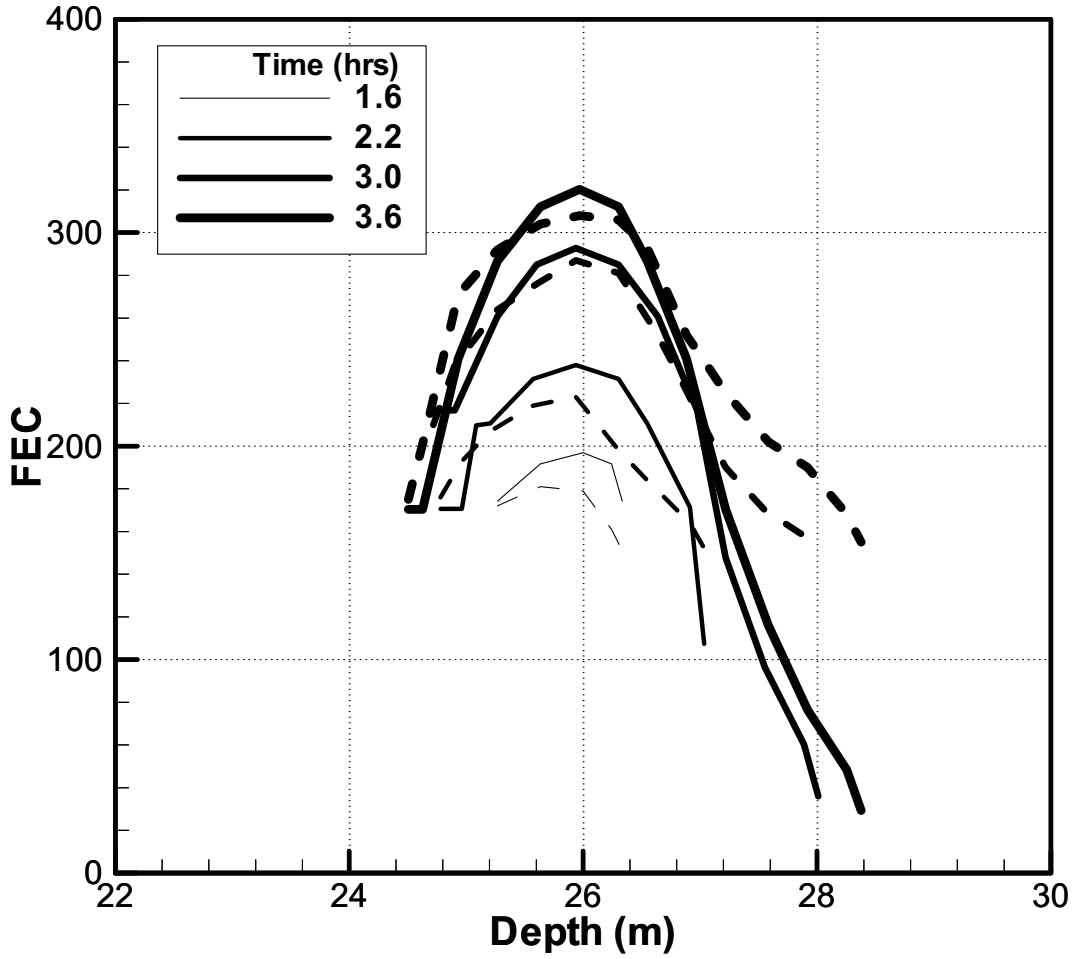

Figure 3. Concentration (= FEC) versus depth at a series of times for example application 3 – a thick layer of horizontal flow. Dashed lines represent field data, solid lines represent BORE II results. Diffusion/dispersion is significant.

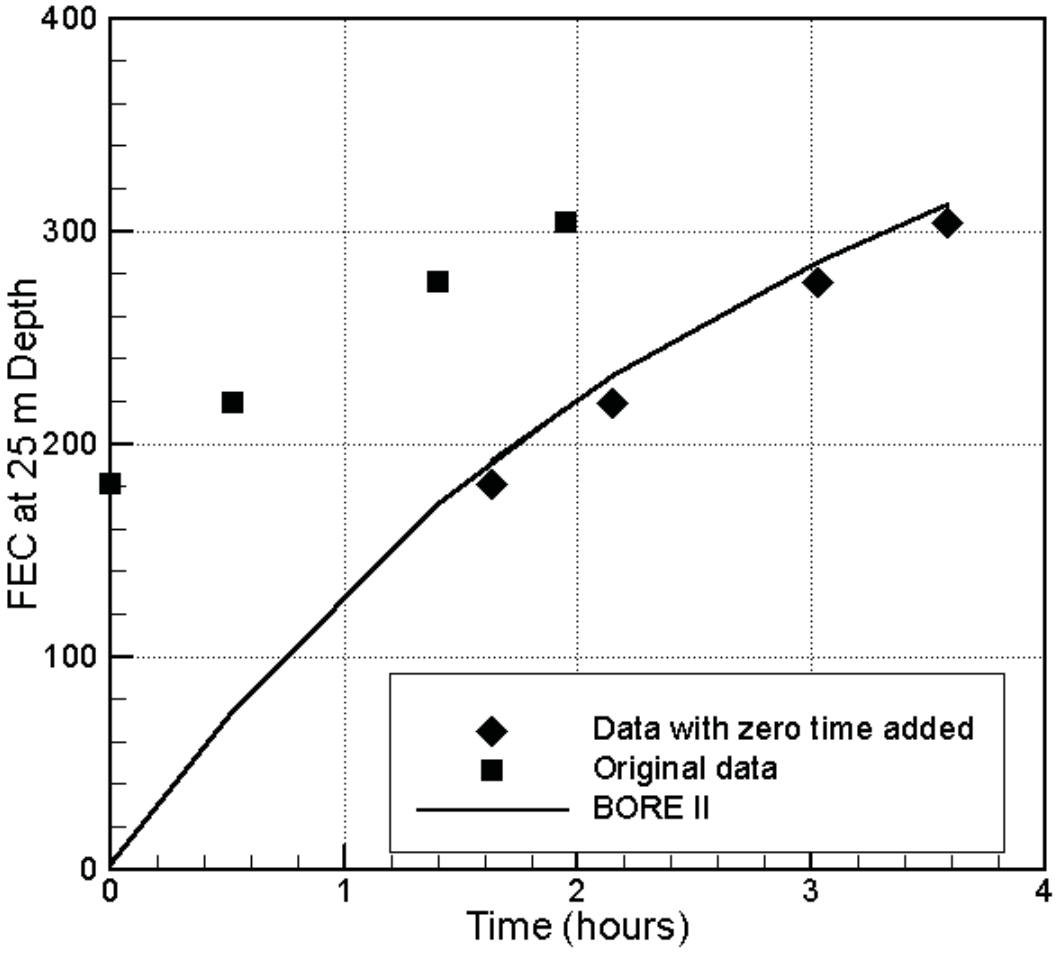

Figure 4. Concentration (= FEC) versus time at the center of the horizontal flow zone of example application 3, illustrating the addition of a data zero time.

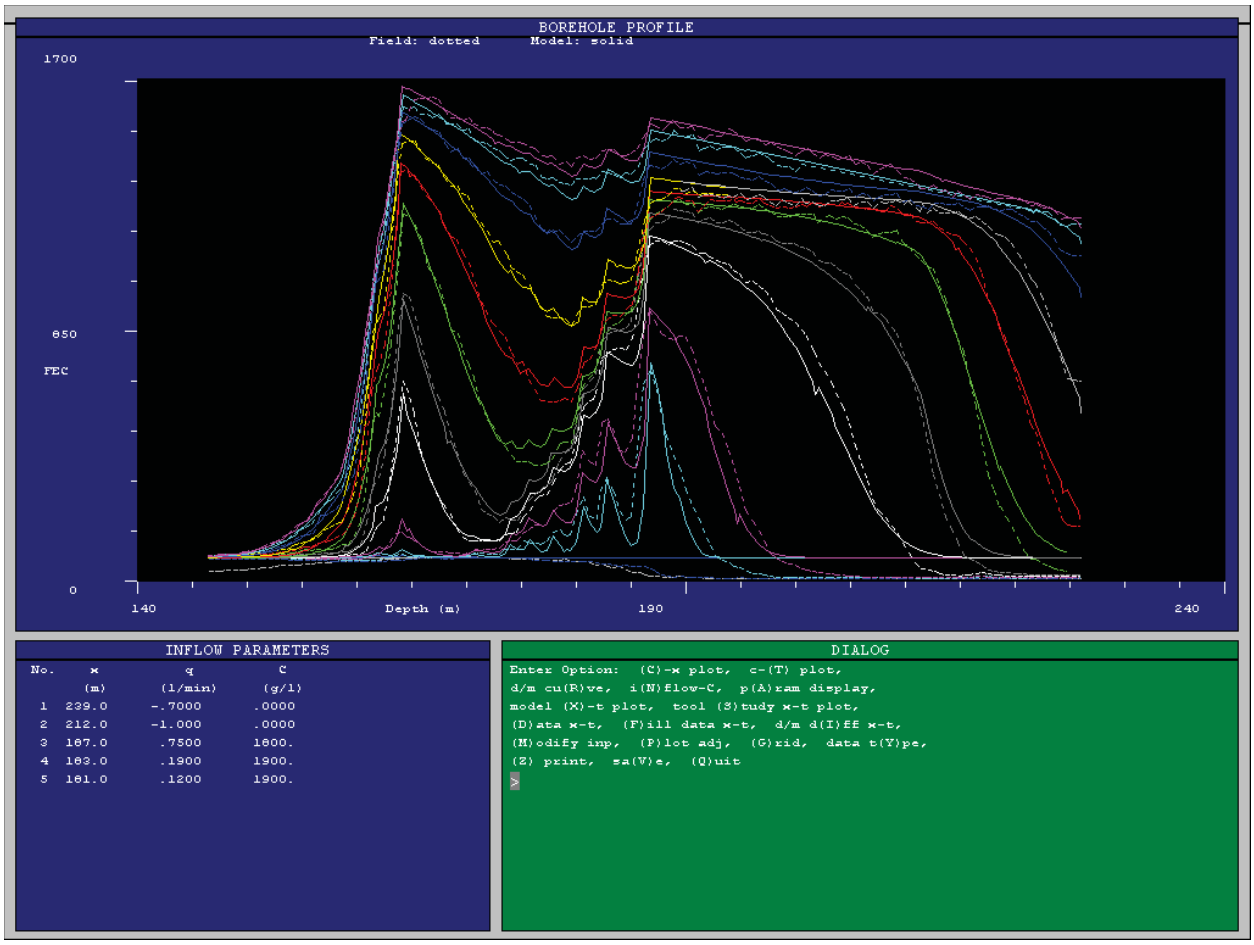

Figure 5. Concentration (= FEC) versus depth at a series of times for example application 4 – down flow. Figure is a BORE II screen-print after running option R.

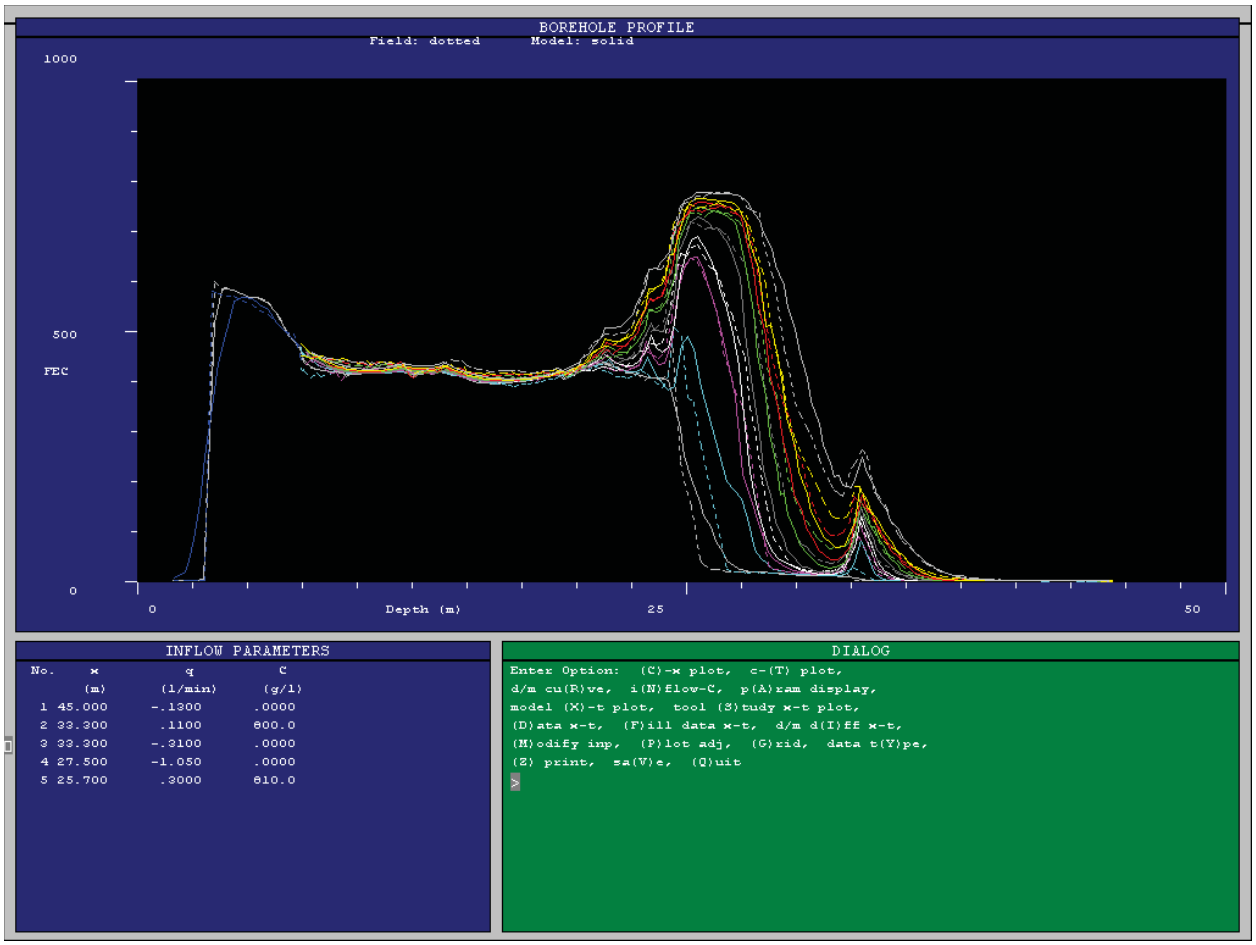

Figure 6. Concentration (= FEC) versus depth at a series of times for example application 5 – combination flow. Figure is a BORE II screen-print after option R.

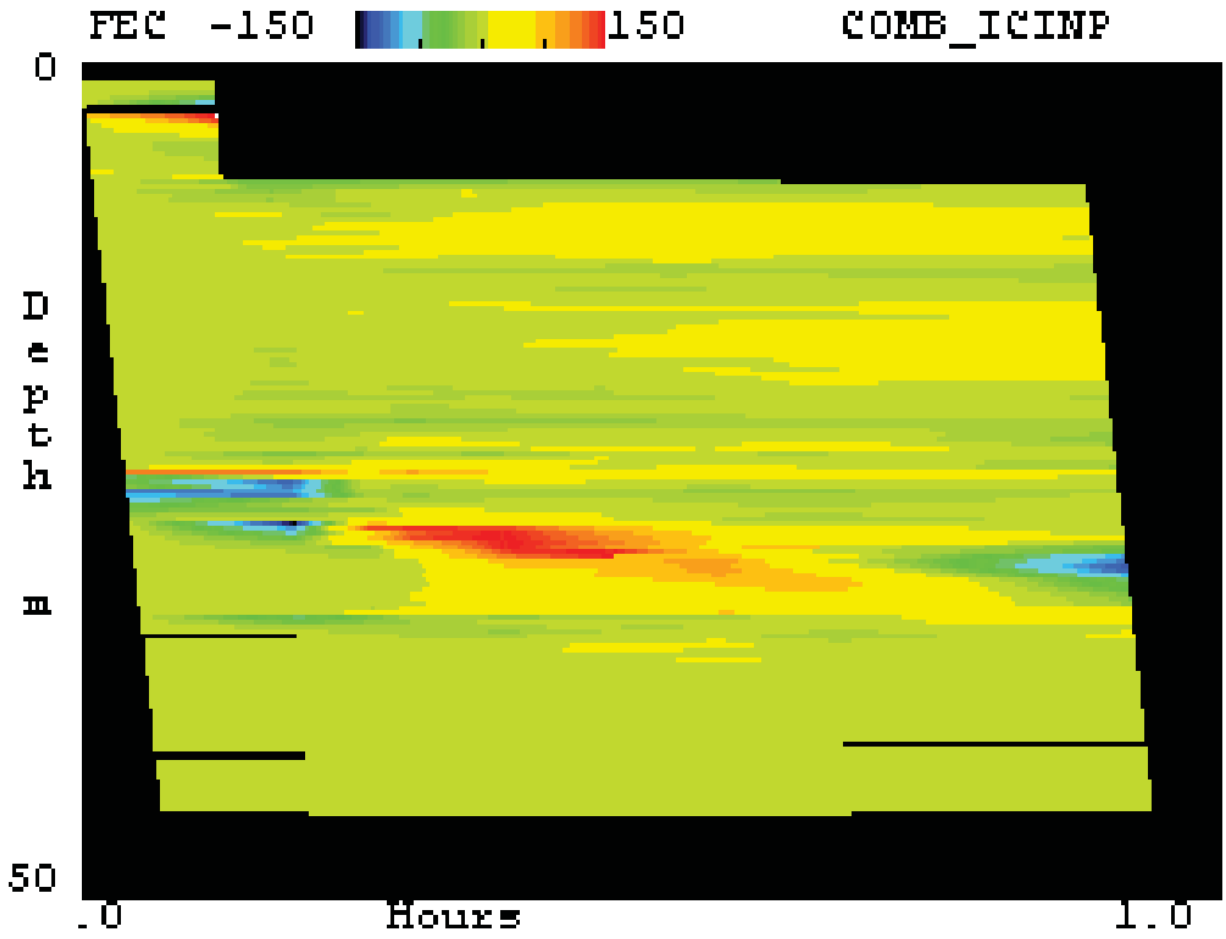

Figure 7. FEC difference between model and data as a function of depth and time (an *x-t* plot) for example application 5 – combination flow. Figure is a BORE II screen-print after option I, mode 2.

APPENDIX C

BORE II MODELING CODE COMPARISONS

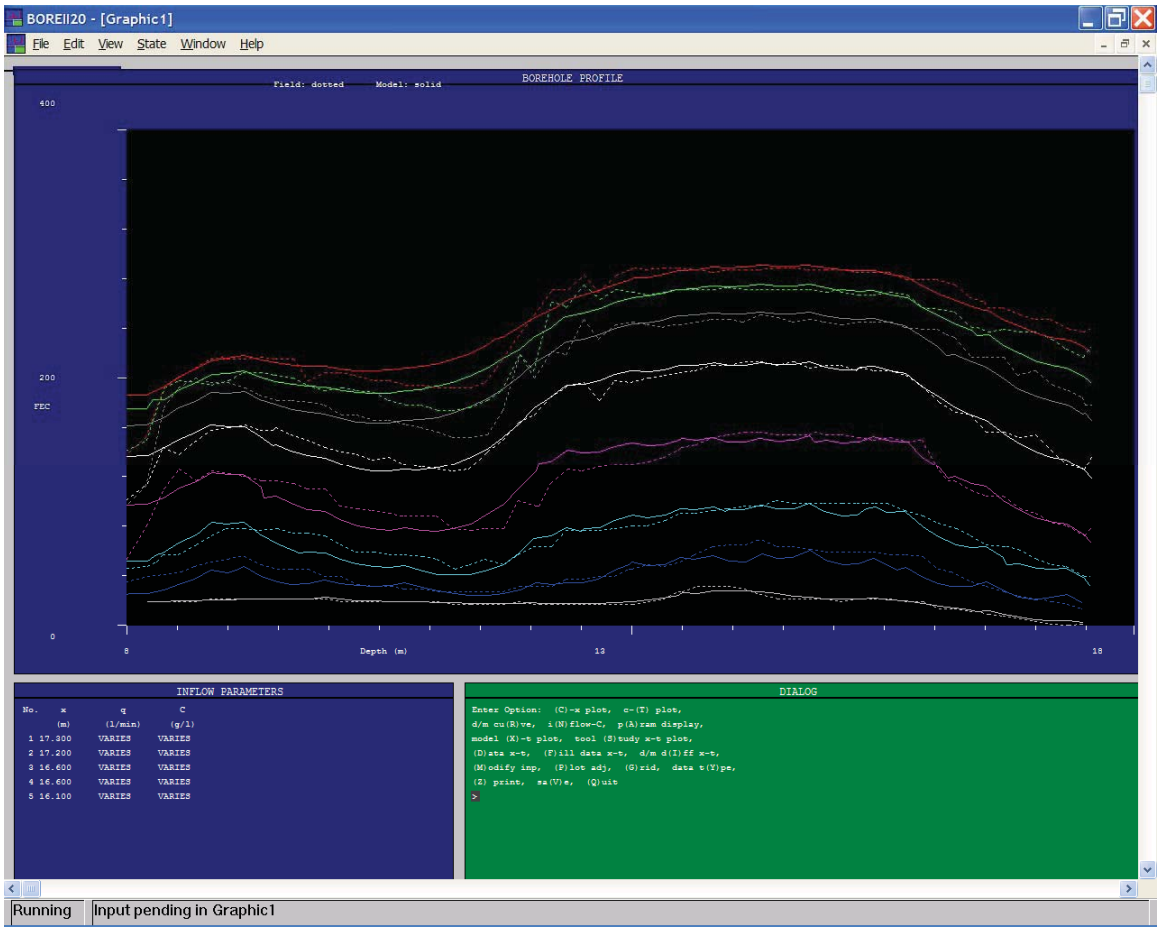

Figure Appendix C:1. BORE II Code Comparison of Field FEC Profiles Acquired During Ambient Flow Characterization and Model. Wellbore DW-1.

- Field FEC Profiles = Dotted
- Model = Solid

Note: Significant borehole diameter changes in this borehole made modeling of this data set more difficult to match precisely. As such, effort was concentrated on the areas of known water-bearing fractures and proper gauge borehole. Areas where dispersion was the only factor on the mass and areas of large borehole diameter changes were not intensely modeled. Depths of the water-bearing fractures are cross-referenced with the optical televiewer and caliper data.

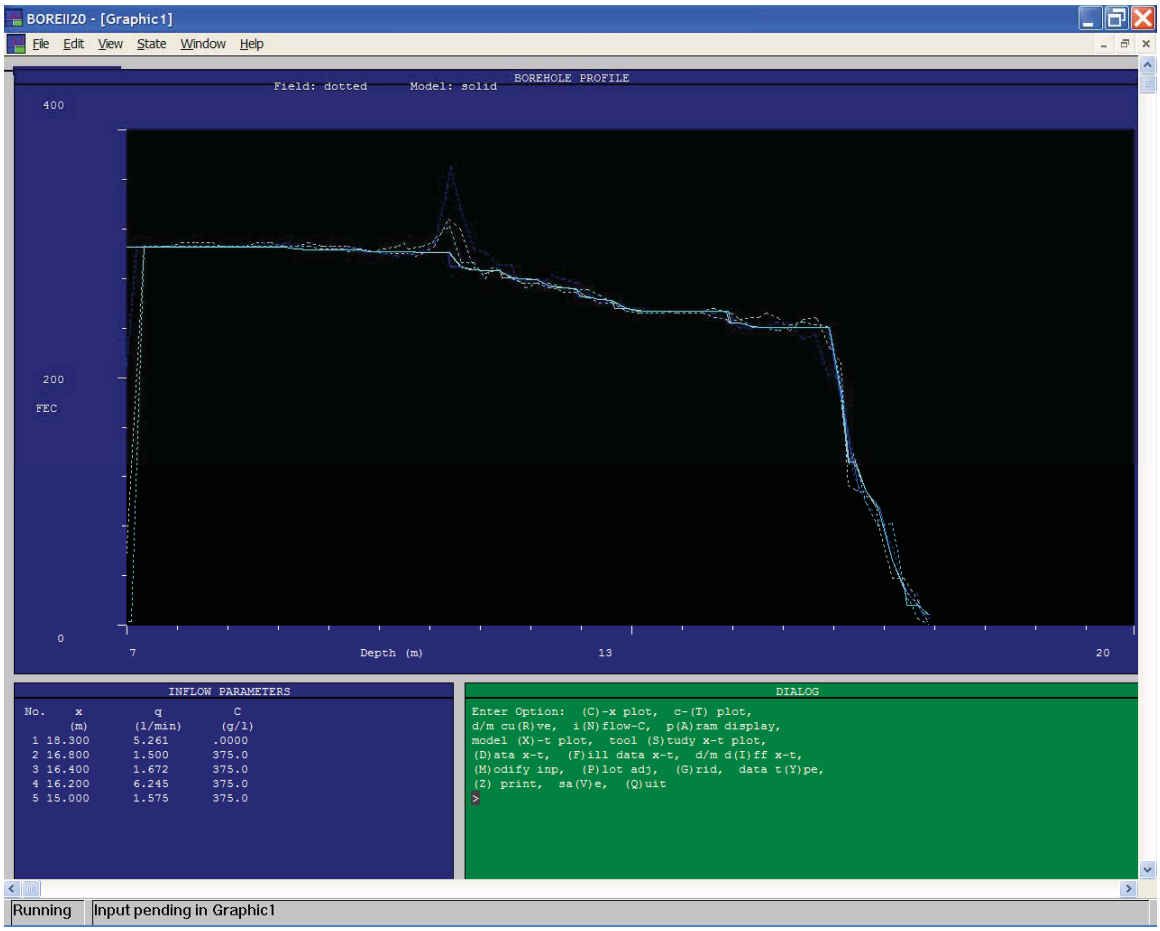

Figure Appendix C:2. BORE II Code Comparison of Field FEC Profiles Acquired During Hydrophysical Production Test at 6 GPM and Model. Wellbore DW-1.

- Field FEC Profiles = Dotted
- Model = Solid

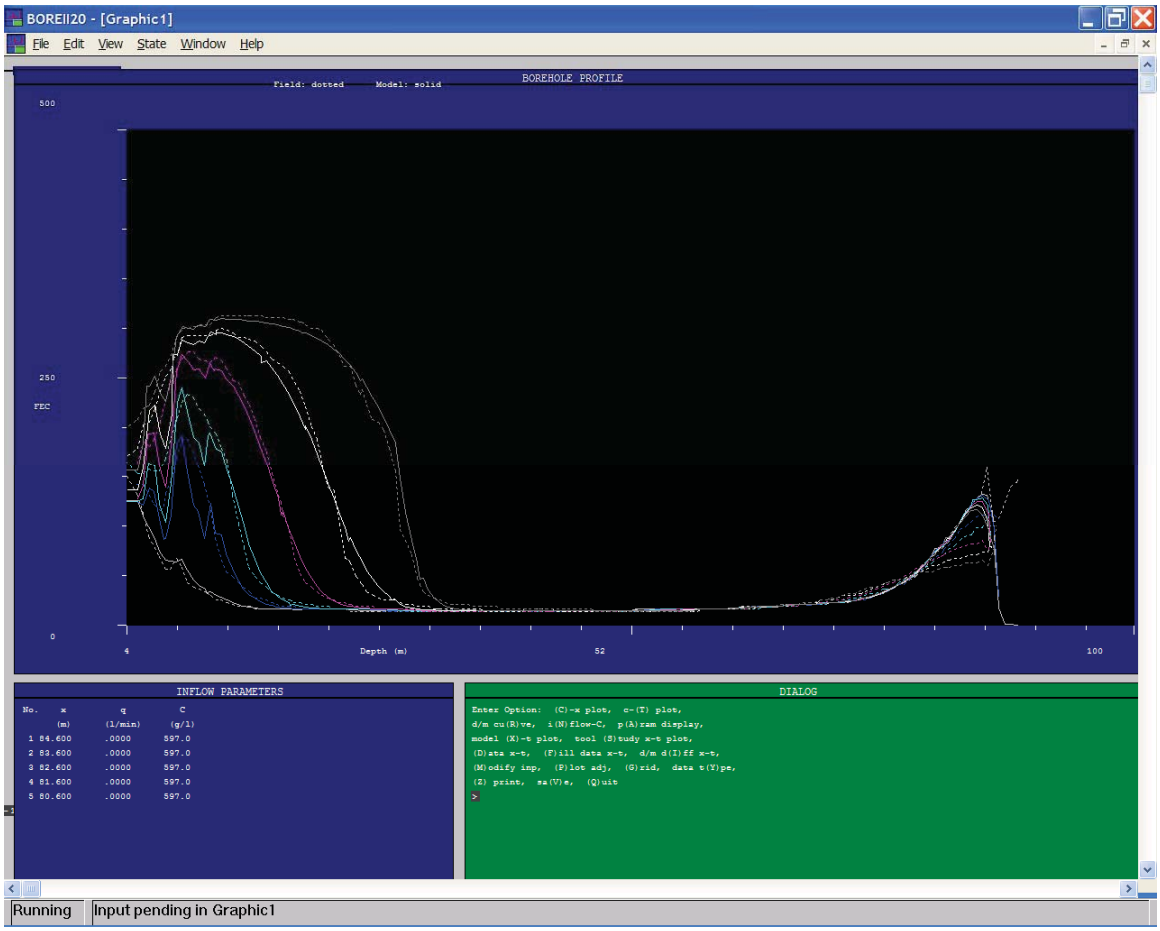

Figure Appendix C:3. BORE II Code Comparison of Field FEC Profiles Acquired During Ambient Flow Characterization and Model. Wellbore DW-2.

- Field FEC Profiles = Dotted
- Model = Solid

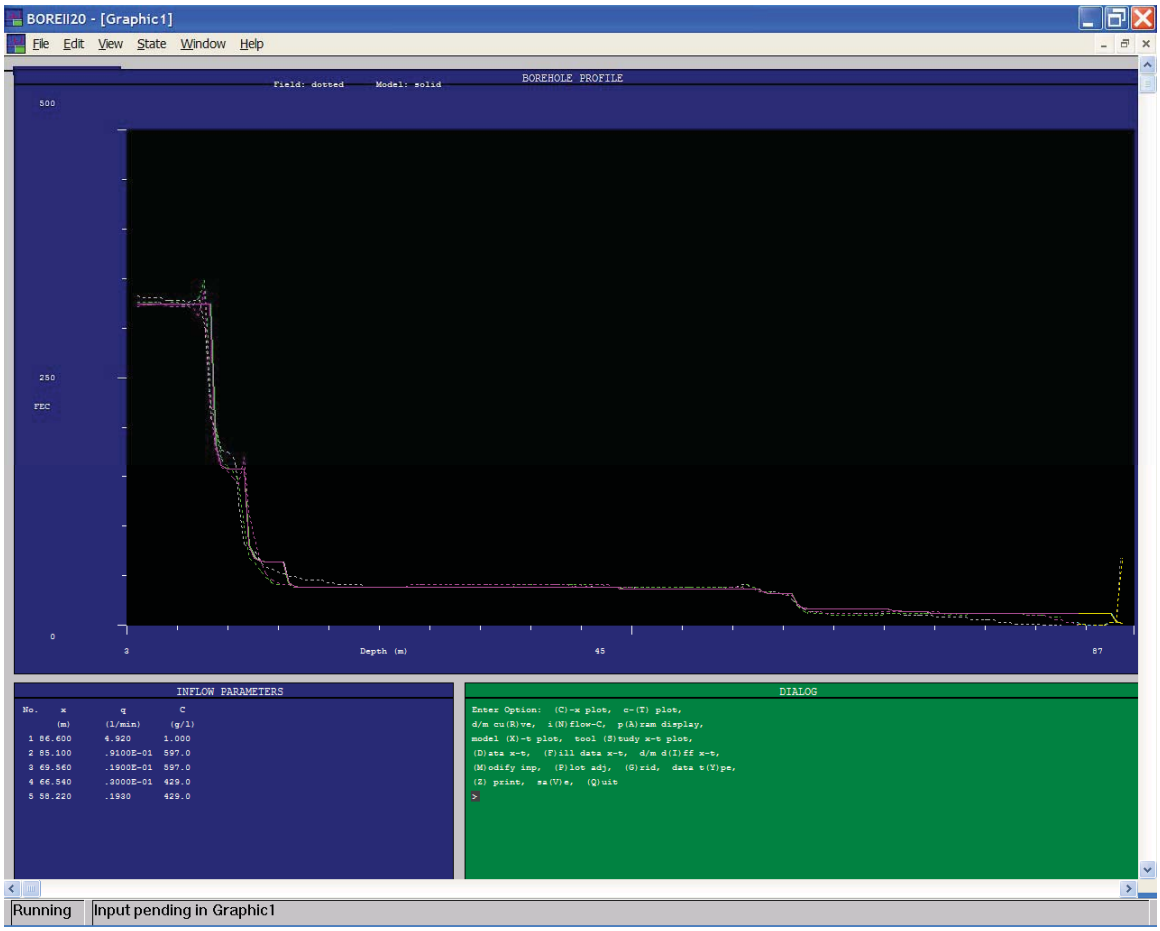

Figure Appendix C:4. BORE II Code Comparison of Field FEC Profiles Acquired During Hydrophysical Production Test at 6 GPM and Model. Wellbore DW-2.

- Field FEC Profiles = Dotted
- Model = Solid

APPENDIX D

LIMITATIONS

LIMITATIONS

COLOG's logging was performed in accordance with generally accepted industry practices. COLOG has observed that degree of care and skill generally exercised by others under similar circumstances and conditions. Interpretations of logs or interpretations of test or other data, and any recommendation or hydrogeologic description based upon such interpretations, are opinions based upon inferences from measurements, empirical relationships and assumptions. These inferences and assumptions require engineering judgment, and therefore, are not scientific certainties. As such, other professional engineers or analysts may differ as to their interpretation. Accordingly, COLOG cannot and does not warrant the accuracy, correctness or completeness of any such interpretation, recommendation or hydrogeologic description.

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APPENDIX C

WESTON FIELD RECORDS, INCLUDING: EQUIPMENT CALIBRATION RECORDS; AND GROUNDWATER LOW-FLOW SAMPLING RECORDS

INSTRUMENT CALIBRATION/MAINTENANCE LOG

Date: 5/20/08 Time: 0645 Field Personnel: AF

Function	Temp. of Standard	Value of Standard	Initial Reading	Calibrated To	Comments
YSI Meter: Model 600XL or Model 6820 (circle one)			**Sonde Type and Serial No.** 04J16000 AA		
Specific Conductance (1 ms/cm)	11.35	1.413	1.408	1.413	~~2nd Solution check~~ =
Conductivity Cell Constant (see *)			4.86		Range: 4.6 to 5.45
Oxidation-Reduction Potential (mV)	12.18	240	243.4	240	Type - ~~Zobell~~ or Other Pine
pH calibrated (at pH 7)	12.39	7	6.97	7	2nd Solution check =
pH mV for pH 7 solution			-23.9		Range: -40 to 40 mV
pH calibrated (at pH 10)	11.87	10	10.05	10	
pH mV for pH 10 solution			-196.6		Range: -140 to -220 mV
pH calibrated (at pH 4)	11.89	4	4.13	4.02	
pH mV for pH 4 solution			141.7		Range: 140 to 220 mV
Dissolved Oxygen (% sat)	19.44	100	96.7	100	**Allow 10 minutes for stabilization**
Dissolved Oxygen Charge			41		Range: 25 to 75
Dissolved Oxygen Gain (see *)			0.99		Range: 0.8 to 1.7
Dissolved Oxygen (Zero DO check)	12.06	0	<0.1		Less than 0.5 mg/L

Additional Information for Dissolved Oxygen Calibration/Probe Check

Barometric Pressure: 719.4 mm Hg ** [BP inches _____ x 25.4 + BP _____ mm Hg]

Inspected DO membrane for nicks or bubbles Date: 5/20 Personnel: AF

Function	Temp. of Standard	Value of Standard	Initial Reading	~~Within 5%~~ (yes/no)	Comments
HACH 2100 Turbidimeter		**Serial Number:**		Cal kit	
0 NTU standard		1	1.14	1	
5 - 20 NTUs standard		10	8.67	10	
20 - 100 NTUs standard					

End of Day Calibration Check	Value of Standard	Initial Reading	Comments
Date: **Time:**			
pH 7 solution			
Specific conductivity solution			
Turbidimeter			

* To display Conductivity Cell Constant and Dissolved Oxygen Charge (DO ch) on 650 MDS: go to "Sonde Menu", "Advanced", "Cal Constants"

INSTRUMENT CALIBRATION/MAINTENANCE LOG

Date: 5/19 Time: 0745 Field Personnel: AF

Function	Temp. of Standard	Value of Standard	Initial Reading	Calibrated To	Comments
YSI Meter: Model 600XL or Model 6820 (circle one)			**Sonde Type and Serial No.** 04J16000 AA		
Specific Conductance (1 ms/cm)	16.95	1.413	1.432	1.413	~~2nd Solution check~~ =
Conductivity Cell Constant (see *)			4.84		Range: 4.6 to 5.45
Oxidation-Reduction Potential (mV)	17.23	240	245.4	240	Type - Zobell or Other _____
pH calibrated (at pH 7)	16.45	7	6.96	7	~~2nd Solution check~~ =
pH mV for pH 7 solution			-23.9		Range: -40 to 40 mV
pH calibrated (at pH 10)	15.43	10	10.15	10	
pH mV for pH 10 solution			-192.3		Range: -140 to -220 mV
pH calibrated (at pH 4)	15.24	4	4.10	4	
pH mV for pH 4 solution			144.7		Range: 140 to 220 mV
Dissolved Oxygen (% sat)	16.53	100	96.1	100	**Allow 10 minutes for stabilization**
Dissolved Oxygen Charge			43.1		Range: 25 to 75
Dissolved Oxygen Gain (see *)			1.01		Range: 0.8 to 1.7
Dissolved Oxygen (Zero DO check)	16.25	0	<0.1		Less than 0.5 mg/L

Additional Information for Dissolved Oxygen Calibration/Probe Check

Barometric Pressure: 716.6 mm Hg ** [BP inches _____ x 25.4 + BP _____ mm Hg]

Inspected DO membrane for nicks or bubbles Date: 5/19/08 Personnel: AF

Function	Temp. of Standard	Value of Standard	Initial Reading	Within 5% (yes/no)	Comments
HACH 2100 Turbidimeter		**Serial Number:**			
~~0~~ 1 NTU standard		1	1	Yes	
~~5 – 20~~ 10 NTUs standard		10	10	Yes	
~~20 – 100 NTUs standard~~					

End of Day Calibration Check	Value of Standard	Initial Reading	Comments
Date: **Time:**			
pH 7 solution	7	7.00	
Specific conductivity solution	1.413	1.420	
Turbidimeter			

* To display Conductivity Cell Constant and Dissolved Oxygen Charge (DO ch) on 650 MDS: go to "Sonde Menu", "Advanced", "Cal Constants"

INSTRUMENT CALIBRATION/MAINTENANCE LOG

Date: 5/18/05 Time: 1100 Field Personnel: [illegible]

Function	Temp. of Standard	Value of Standard	Initial Reading	Calibrated To	Comments
YSI Meter: Model 600XL or Model 6820 (circle one) **Sonde Type and Serial No.** 04J16000 AA					
Specific Conductance (1 ms/cm)	17.87	1.413	1.359	1.413	~~2nd Solution check =~~
Conductivity Cell Constant (see *)			4.909		Range: 4.6 to 5.45
Oxidation-Reduction Potential (mV)	17:33	240	232.5	240	Type - Zobell or Other
pH calibrated (at pH 7)	18:25	7	7	7	~~2nd Solution check =~~
pH mV for pH 7 solution			-25.7		Range: -40 to 40 mV
pH calibrated (at pH 10)	18.57	10	9.94	10	
pH mV for pH 10 solution			-192.7		Range: -140 to -220 mV
pH calibrated (at pH 4)	18.74	4	4.03	4	
pH mV for pH 4 solution			140.5		Range: 140 to 220 mV
Dissolved Oxygen (% sat)	19.98	100	92.9	100	**Allow 10 minutes for stabilization**
Dissolved Oxygen Charge			41		Range: 25 to 75
Dissolved Oxygen Gain (see *)			1.03		Range: 0.8 to 1.7
Dissolved Oxygen (Zero DO check)	18:61	0	0.10		Less than 0.5 mg/L

Additional Information for Dissolved Oxygen Calibration/Probe Check

Barometric Pressure: 717.9 mm Hg ** [BP inches _____ x 25.4 + BP _____ mm Hg]

Inspected DO membrane for nicks or bubbles Date: 5/18 Personnel: [illegible]

Function	Temp. of Standard	Value of Standard	Initial Reading	Within 5% (yes/no)	Comments
~~HACH~~ Lamotte 2100 Turbidimeter **Serial Number:** 02407 Cal to					
~~0~~ 1 NTU standard		1	1.09	1	
5 - 20 NTUs standard		10	9.95	10	
~~20 - 100 NTUs standard~~					

End of Day Calibration Check	Value of Standard	Initial Reading	Comments
Date: 5/18 **Time:** 1950			
pH 7 solution	7	7.01	
Specific conductivity solution	1.413	1.409	
Turbidimeter			

* To display Conductivity Cell Constant and Dissolved Oxygen Charge (DO ch) on 650 MDS: go to "Sonde Menu", "Advanced", "Cal Constants"

INSTRUMENT CALIBRATION/MAINTENANCE LOG

Date: 5/16/08 Time: 0940 Field Personnel: AF

Function	Temp. of Standard	Value of Standard	Initial Reading	Calibrated To	Comments
YSI Meter: Model 600XL or Model 6820 (circle one)			Sonde Type and Serial No.	Sn 04516000AA	650 MDS
Specific Conductance ~~(1 ms/cm)~~ 1.413	20.79	1.413	1.434	1.413	2nd Solution check =
Conductivity Cell Constant (see *)					Range: 4.6 to 5.45
Oxidation-Reduction Potential (mV)	21.34	240	237.1	24	Type - Zobell or Other
pH calibrated (at pH 7)	21.18	7	6.97	7	2nd Solution check =
pH mV for pH 7 solution					Range: -40 to 40 mV
pH calibrated (at pH 10)	21.06	10	10.09	10.01	
pH mV for pH 10 solution					Range: -140 to -220 mV
pH calibrated (at pH 4)	21.65	4	4	4	
pH mV for pH 4 solution					Range: 140 to 220 mV
Dissolved Oxygen (% sat)	23.7	100	101.7	100	**Allow 10 minutes for stabilization**
Dissolved Oxygen Charge					Range: 25 to 75
Dissolved Oxygen Gain (see *)					Range: 0.8 to 1.7
Dissolved Oxygen (Zero DO check)					Less than 0.5 mg/L

Additional Information for Dissolved Oxygen Calibration/Probe Check

Barometric Pressure: 734.2 mm Hg ** [BP inches _____ x 25.4 + BP _____ mm Hg]

Inspected DO membrane for nicks or bubbles Date: 5/16/08 Personnel: AF

Function	Temp. of Standard	Value of Standard	Initial Reading	~~Within 5%~~ (yes/no)	Comments
~~HACH 2100 Turbidimeter~~ Lamotte 20/20		Serial Number:	02407		
~~0~~ 1 NTU standard		1	1.3		Cal to 1.0
~~5 - 20~~ 10 NTUs standard		10	9.92		Cal to 10.
~~20 - 100 NTUs standard~~					

End of Day Calibration Check		Value of Standard	Initial Reading	Comments
Date: Time:				
pH 7 solution				
Specific conductivity solution				
Turbidimeter				

* To display Conductivity Cell Constant and Dissolved Oxygen Charge (DO ch) on 650 MDS: go to "Sonde Menu", "Advanced", "Cal Constants"

INSTRUMENT CALIBRATION/MAINTENANCE LOG

Date: 5/17/08 Time: 0736 Field Personnel: AF

Function	Temp. of Standard	Value of Standard	Initial Reading	Calibrated To	Comments
YSI Meter: Model 600XL or Model 6820 (circle one)			Sonde Type and Serial No.	SN 04J16000 AA	650 MDS
Specific Conductance (1 ms/cm)	14.98	1.413	1.486	1.413	2nd Solution check =
Conductivity Cell Constant (see *)			✓		Range: 4.6 to 5.45
Oxidation-Reduction Potential (mV)	15.38	240	248.3	240	Type - Zobell or Other
pH calibrated (at pH 7)	15.10	7	7.07	7	2nd Solution check =
pH mV for pH 7 solution			✓		Range: -40 to 40 mV
pH calibrated (at pH 10)	15.14	10	9.97	10	
pH mV for pH 10 solution			✓		Range: -140 to -220 mV
pH calibrated (at pH 4)	14.40	4	3.99	4	
pH mV for pH 4 solution			✓		Range: 140 to 220 mV
Dissolved Oxygen (% sat)	17.89	100	94%	100%	Allow 10 minutes for stabilization
Dissolved Oxygen Charge			✓		Range: 25 to 75
Dissolved Oxygen Gain (see *)			✓		Range: 0.8 to 1.7
Dissolved Oxygen (Zero DO check)	✓	✓	✓		Less than 0.5 mg/L

Additional Information for Dissolved Oxygen Calibration/Probe Check

Barometric Pressure: 725.8 mm Hg ** [BP inches _____ x 25.4 + BP _____ mm Hg]

Inspected DO membrane for nicks or bubbles Date: 5/17/08 Personnel: AF

Function	Temp. of Standard	Value of Standard	Initial Reading	~~Within 5%~~ (yes/no)	Comments
HACH 2100 Turbidimeter		Serial Number:	02407		
0 NTU standard		1	0.71	→	Cal to 1.0
5 - 20 NTUs standard		10	10.25	→	Cal to 10.0
20 - 100 NTUs standard		✓	✓	✓	✓

End of Day Calibration Check	Value of Standard	Initial Reading	Comments
Date: Time:			
pH 7 solution	✓	✓	✓
Specific conductivity solution	✓	✓	✓
Turbidimeter	✓	✓	✓

* To display Conductivity Cell Constant and Dissolved Oxygen Charge (DO ch) on 650 MDS: go to "Sonde Menu", "Advanced", "Cal Constants"

INSTRUMENT CALIBRATION/MAINTENANCE LOG

Date: 5/18/08 Time: 1100 Field Personnel: AE

Function	Temp. of Standard	Value of Standard	Initial Reading	Calibrated To	Comments
YSI Meter: (Model 600XL) or Model 6820 (circle one)			Sonde Type and Serial No. 04J16000 AA		
Specific Conductance (1 ms/cm)	17.87	1.413	1.359	1.413	~~2nd Solution check~~ =
Conductivity Cell Constant (see *)			4.909		Range: 4.6 to 5.45
Oxidation-Reduction Potential (mV)	17:33	240	232.5	240	Type - Zobell or (Other)
pH calibrated (at pH 7)	18.25	7	7	7	~~2nd Solution check~~ =
pH mV for pH 7 solution			-25.7		Range: -40 to 40 mV
pH calibrated (at pH 10)	18.57	10	9.94	10	
pH mV for pH 10 solution			-192.7		Range: -140 to -220 mV
pH calibrated (at pH 4)	18.74	4	4.03	4	
pH mV for pH 4 solution			140.5		Range: 140 to 220 mV
Dissolved Oxygen (% sat)	19.98	100	92.9	100	**Allow 10 minutes for stabilization**
Dissolved Oxygen Charge			41		Range: 25 to 75
Dissolved Oxygen Gain (see *)			1.03		Range: 0.8 to 1.7
Dissolved Oxygen (Zero DO check)	18:61	0	0.10		Less than 0.5 mg/L

Additional Information for Dissolved Oxygen Calibration/Probe Check

Barometric Pressure: 717.9 mm Hg ** [BP inches _____ x 25.4 + BP _____ mm Hg]

Inspected DO membrane for nicks or bubbles Date: 5/16 Personnel: AE

Function	Temp. of Standard	Value of Standard	Initial Reading	Within 5% (yes/no)	Comments
~~HACH~~ Lamotte 2100 Turbidimeter		Serial Number: 02407 Cal to			
~~0~~ 1 NTU standard		1	1.09	1	
5 - 20 NTUs standard		10	9.95	10	
~~20 - 100 NTUs standard~~					

End of Day Calibration Check		Value of Standard	Initial Reading	Comments
Date: 5/18 Time: 1950				
pH 7 solution		7	7.01	
Specific conductivity solution		1.413	1.409	
Turbidimeter				

* To display Conductivity Cell Constant and Dissolved Oxygen Charge (DO ch) on 650 MDS: go to "Sonde Menu", "Advanced", "Cal Constants"

INSTRUMENT CALIBRATION/MAINTENANCE LOG

Date: 5/19 Time: 0745 Field Personnel: AF

Function	Temp. of Standard	Value of Standard	Initial Reading	Calibrated To	Comments
YSI Meter: Model 600XL or Model 6820 (circle one)			Sonde Type and Serial No.	04J16000 1A	
Specific Conductance (1 ms/cm)	16.95	1.413	1.432	1.413	~~2nd Solution check~~ =
Conductivity Cell Constant (see *)			4.84		Range: 4.6 to 5.45
Oxidation-Reduction Potential (mV)	17.23	240	245.4	240	Type - Zobell or Other
pH calibrated (at pH 7)	16.45	7	6.96	7	~~2nd Solution check~~ =
pH mV for pH 7 solution			-23.9		Range: -40 to 40 mV
pH calibrated (at pH 10)	15.43	10	10.15	10	
pH mV for pH 10 solution			-192.3		Range: -140 to -220 mV
pH calibrated (at pH 4)	15.24	4	4.10	4	
pH mV for pH 4 solution			144.7		Range: 140 to 220 mV
Dissolved Oxygen (% sat)	16.53	100	96.1	100	**Allow 10 minutes for stabilization**
Dissolved Oxygen Charge			43.1		Range: 25 to 75
Dissolved Oxygen Gain (see *)			1.01		Range: 0.8 to 1.7
Dissolved Oxygen (Zero DO check)	16.25	0	<0.1		Less than 0.5 mg/L

Additional Information for Dissolved Oxygen Calibration/Probe Check

Barometric Pressure: 716.6 mm Hg ** [BP inches _____ x 25.4 + BP _____ mm Hg]

Inspected DO membrane for nicks or bubbles Date: 5/19/08 Personnel: AF

Function	Temp. of Standard	Value of Standard	Initial Reading	Within 5% (yes/no)	Comments
HACH 2100 Turbidimeter		**Serial Number:**			
~~0~~ 1 NTU standard		1	1	Yes	
~~5 – 20~~ 10 NTUs standard		10	10	Yes	
~~20 – 100 NTUs standard~~					

End of Day Calibration Check	Value of Standard	Initial Reading	Comments
Date: Time:			
pH 7 solution	7	7.00	
Specific conductivity solution	1.413	1.420	
Turbidimeter			

* To display Conductivity Cell Constant and Dissolved Oxygen Charge (DO ch) on 650 MDS: go to "Sonde Menu", "Advanced", "Cal Constants"

INSTRUMENT CALIBRATION/MAINTENANCE LOG

Date: 5/20/08 Time: 0645 Field Personnel: AF

Function	Temp. of Standard	Value of Standard	Initial Reading	Calibrated To	Comments
YSI Meter: Model 600XL or Model 6820 (circle one)			Sonde Type and Serial No.	04J16006	AA
Specific Conductance (1 ms/cm)	11.35	1.413	1.408	1.413	~~2nd Solution check~~ =
Conductivity Cell Constant (see *)			4.86		Range: 4.6 to 5.45
Oxidation-Reduction Potential (mV)	12.18	240	243.4	240	Type - ~~Zobell~~ or Other Pinp
pH calibrated (at pH 7)	12.39	7	6.97	7	2nd Solution check =
pH mV for pH 7 solution			-23.9		Range: -40 to 40 mV
pH calibrated (at pH 10)	11.87	10	10.05	10	
pH mV for pH 10 solution			-196.6		Range: -140 to -220 mV
pH calibrated (at pH 4)	11.89	4	4.13	4.02	
pH mV for pH 4 solution			141.7		Range: 140 to 220 mV
Dissolved Oxygen (% sat)	19.44	100	96.7	100	**Allow 10 minutes for stabilization**
Dissolved Oxygen Charge			41		Range: 25 to 75
Dissolved Oxygen Gain (see *)			0.99		Range: 0.8 to 1.7
Dissolved Oxygen (Zero DO check)	12.06	0	<0.1		Less than 0.5 mg/L

Additional Information for Dissolved Oxygen Calibration/Probe Check

Barometric Pressure: 719.4 mm Hg ** [BP inches _____ x 25.4 + BP _____ mm Hg]

Inspected DO membrane for nicks or bubbles Date: 5/20 Personnel: AF

Function	Temp. of Standard	Value of Standard	Initial Reading	~~Within 5%~~ (yes/no)	Comments
HACH 2100 Turbidimeter		Serial Number:		Cal to	
0 NTU standard		1	1.14	1	
5 - 20 NTUs standard		10	8.67	10	
20 - 100 NTUs standard					

End of Day Calibration Check		Value of Standard	Initial Reading	Comments
Date: Time:				
pH 7 solution				
Specific conductivity solution				
Turbidimeter				

* To display Conductivity Cell Constant and Dissolved Oxygen Charge (DO ch) on 650 MDS: go to "Sonde Menu", "Advanced", "Cal Constants"

WESTON LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: MEFUDS LO 58 — PROJECT #: 03886.184 — WELL ID: DW-1
LOCATION: Cushing, ME
SAMPLING CREW: AF + Coby — DATE: 5/18/08 — SAMPLE TIME: 1910

PURGING DATA

REFERENCE POINT (CIRCLE): PVC (Steel Casing) — PURGING DEVICE: WSP
INITIAL DTW: 24.66 (FT) — WELL DEPTH: ~58 Ft (FT) — Well Diameter: 6"

CLOCK TIME (24 HR)	Water Depth Below MP (ft)	PURGE RATE (mL/min)	Drawdown/Total Drawdown (ft)	TEMP (°C) (3%)	SP COND (uS/cm)[1] (3%)	pH (s.u) (+/-0.1)	ORP/Eh[2] (MV) (+/-10)	DO (mg/L) (10%)	Turb (NTU) (10%)	COMMENTS
1822		100	/	11.97	471	8.48	216.7	9.66	55	Very small tiny fractures. Not a good producer
1827		~~100~~ 90	/	11.84	462	7.62	219.4	10.05	50	
1832		~~90~~ 80	/	12.27	425	7.50	215.6	10.33	32	
1837		~~80~~ 70	/	12.46	422	7.47	215.6	10.38	26	
1842			/	12.05	419	7.46	215.5	10.15	25	
1847		90	/	12.04	421	7.39	215.2	10.06	19	
1852			/	12.04	421	7.38	214.6	10.00	16	
1857			/	11.87	422	7.36	215.0	10.00	16	
1902			/	11.85	424	7.36	214.8	9.93	14	
1907			/	11.84	426	7.36	214.6	9.90	15	
1910 – Sample			/							
			/			56.6 – Bottom				

~~56.6 => Bot~~ ~~32 => 35~~

1. uSiemens per cm (same as umhos/cm) at 25C
2. Oxidation reduction potential (stand in for Eh)

FINAL FIELD DATA

TEMPERATURE: 11.84 (°C) — ORP: 214.6 (MV) — COMMENTS: LS58DW1-0508-05
SPECIFIC CONDUCTANCE: 426 (uS/cm) — DO: 9.90 (mg/L)
pH: 7.36 (S.U.) — TURBIDITIY: 15 (NTU)

ODOR AND PHYSICAL APPEARANCE OF SAMPLE: None — TOTAL DEPTH OF WELL: 58
WEATHER CONDITIONS: See log book

WESTON LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: MEFLOS. LO-58 | PROJECT #: 03866.184 | WELL ID: DW-1
LOCATION: Caribou, ME
SAMPLING CREW: AF + Colog | DATE: 5/19/08 | SAMPLE TIME: 0930

PURGING DATA

REFERENCE POINT (CIRCLE): PVC (Steel Casing) | PURGING DEVICE: WSP
INITIAL DTW: 25.30 (FT) | WELL DEPTH: 58.2 (FT) | Well Diameter: 6"

CLOCK TIME (24 HR)	Water Depth Below MP (ft)	PURGE RATE (mL/min)	Drawdown/Total Drawdown (ft)	TEMP (°C) (3%)	SP COND (uS/cm)[1] (3%)	pH (s.u) (+/-0.1)	ORP/Eh[2] (MV) (+/-10)	DO (mg/L) (10%)	Turb (NTU) (10%)	COMMENTS
0830		880	/	9.67	456	6.27	216.2	10.78	10.45	
0835		1000	/	12.76	434	6.86	160.3	7.62	26	
0840		1000	/	13.25	443	6.92	141.6	7.37	45	
0845			/	13.76	452	7.00	124.3	7.17	45	
0850			/	13.86	454	7.06	116.1	7.13	33	
0855			/	14.03	455	7.10	109.3	7.10	23	
0900			/	14.13	455	7.12	108.3	7.06	20	
0905			/	14.28	456	7.14	108.4	7.11	19	
0910			/	14.32	457	7.16	108.2	7.21	17	
0915			/	14.26	458	7.16	106.2	7.30	12	
0920			/	14.26	458	7.17	106.1	7.36	11	
0925			/	14.33	461	7.18	104.2	7.32	10	
			/							0930 Sample
			/							5ft - bottom

5' to bottom

1. uSiemens per cm (same as umhos/cm) at 25C
2. Oxidation reduction potential (stand in for Eh)

FINAL FIELD DATA

TEMPERATURE: 14.33 (°C) | ORP: 104.2 (MV) | COMMENTS: LS58DW1-0508-051
SPECIFIC CONDUCTANCE: 461 (uS/cm) | DO: 7.32 (mg/L)
pH: 7.18 (S.U.) | TURBIDITIY: 10 (NTU)
ODOR AND PHYSICAL APPEARANCE OF SAMPLE: No odor | TOTAL DEPTH OF WELL: 56
WEATHER CONDITIONS: Overcast. 50° Breezy

WESTON LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: MEPWDS LOSS — PROJECT #: 03886.184 — WELL ID: DW-1

LOCATION: Caribou, ME

SAMPLING CREW: AF - Cabay — DATE: 5/19/08 — SAMPLE TIME: 1815

PURGING DATA

REFERENCE POINT (CIRCLE): PVC (Steel) Casing — PURGING DEVICE: WSP

INITIAL DTW: 4 (FT) — WELL DEPTH: 58.2 (FT) — Well Diameter: 6"

CLOCK TIME (24 HR)	Water Depth Below MP (ft)	PURGE RATE (mL/min)	Drawdown/Total Drawdown (ft)	TEMP (°C) (3%)	SP COND (uS/cm)[1] (3%)	pH (s.u) (+/-0.1)	ORP/Eh[2] (MV) (+/-10)	DO (mg/L) (10%)	Turb (NTU) (10%)	COMMENTS
1740		720	/	8.85	440	8.05	24.8	6.72	16.9	1655 DxRS Stables
1745			/	13.35	433	7.60	5.0	5.42	9.15	1706 Start Pump
1750			/	14.72	432	7.44	12.5	5.35	7.59	40.0-50.7 ft
1755			/	14.91	433	7.39	2.2	5.35	6.56	41.2-51.9 ft
1800			/	15.42	433	7.35	1.8	5.29	6.48	
1805			/	15.37	434	7.34	-4.8	5.43	6.37	
1810			/	15.58	433	7.32	-2.1	5.34	6.31	
			/							
			/							
			/							
			/							
			/			41.2-51.9 ft				
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Sample @ 1815

1. uSiemens per cm (same as umhos/cm) at 25C
2. Oxidation reduction potential (stand in for Eh)

FINAL FIELD DATA

TEMPERATURE: 15.58 (°C) — ORP: -2.1 (MV) — COMMENTS: LSSDW1-0508-041

SPECIFIC CONDUCTANCE: 433 (uS/cm) — DO: 5.34 (mg/L)

pH: 7.32 (S.U.) — TURBIDITIY: 6.31 (NTU)

ODOR AND PHYSICAL APPEARANCE OF SAMPLE: No odors — TOTAL DEPTH OF WELL: 58

WEATHER CONDITIONS: see log book

WESTON LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: MEFUDS. CO-58 | PROJECT #: 03686.184 | WELL ID: DW-1

LOCATION: Caribou, ME

SAMPLING CREW: AF + Colog | DATE: 5/20 | SAMPLE TIME: 1200

PURGING DATA

REFERENCE POINT (CIRCLE): PVC (Steel Casing)

PURGING DEVICE: WSP / 2" Grundfos.

INITIAL DTW: 24.98 (FT)

WELL ~~DEPTH~~ interval: 33.75-38.5 (FT) | Well Diameter: 6"

CLOCK TIME (24 HR)	Water Depth Below MP (ft)	PURGE RATE (mL/min)	Drawdown/Total Drawdown (ft)	TEMP (°C) (3%)	SP COND (uS/cm)[1] (3%)	pH (s.u) (+/-0.1)	ORP/Eh[2] (MV) (+/-10)	DO (mg/L) (10%)	Turb (NTU) (10%)	COMMENTS
1110		232	/	10.06	430	6.87	-20.5	9.32	14	
1115			/	12.78	413	6.95	2.4	8.66	12	
1120		1.2 L/min	/	13.24	424	7.06	6.5	8.30	20.6	
1125			/	17.93	430	7.12	5.2	8.45	9.85	
1130			/	17.00	423	7.15	7.1	8.43	6.30	
1135			/	16.66	424	7.17	10.3	8.63	5.19	
1140		1.2	/	16.73	432	7.17	13.2	8.71	4.05	
1145			/	16.49	454	7.17	15.9	8.46	3.8	
1150			/	16.44	463	7.17	15.3	8.99	3.5	
1155			/	16.44	466	7.17	14.5	8.48	3.9	
1200 – Sample well interval.			/							
			/				33.75-38.5 ft			

1. uSiemens per cm (same as umhos/cm) at 25C
2. Oxidation reduction potential (stand in for Eh)

FINAL FIELD DATA

TEMPERATURE: 16.44 (°C) | ORP: 14.5 (MV) | COMMENTS: LS58DW1-0506-034 + E

SPECIFIC CONDUCTANCE: 466 (uS/cm) | DO: 8.48 (mg/L)

pH: 7.17 (S.U.) | TURBIDITY: 3.9 (NTU)

ODOR AND PHYSICAL APPEARANCE OF SAMPLE: Clear no odor. | TOTAL DEPTH OF WELL:

WEATHER CONDITIONS: Cloudy - Windy 48°

WESTON LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: MEFUDS LO-58
LOCATION: Caribou, ME
SAMPLING CREW: AF + Colog
PROJECT #: 03886.184
DATE: 5/20/08
WELL ID: DW-1 -33 and up intake @ ~29 ft btoc
SAMPLE TIME: 1609

PURGING DATA

REFERENCE POINT (CIRCLE): PVC **(Steel Casing)**
PURGING DEVICE: WSP/2" Grundfos
INITIAL DTW: 25.20 (FT)
WELL DEPTH: ~58.2 (FT)
Well Diameter: 6"

CLOCK TIME (24 HR)	Water Depth Below MP (ft)	PURGE RATE (mL/min)	Drawdown/Total Drawdown (ft)	TEMP (°C) (3%)	SP COND (uS/cm)[1] (3%)	pH (s.u) (+/-0.1)	ORP/Eh[2] (MV) (+/-10)	DO (mg/L) (10%)	Turb (NTU) (10%)	COMMENTS
1503		560	/	9.74	452	7.79	115.2	9.59	22	
1508			/	10.28	435	7.45	82.3	8.99	20	
1513			/	10.80	433	7.41	69.2	8.91	19	
1518		280	/	10.98	435	7.39	67.2	8.83	18	
1523			/	11.32	433	7.39	79.4	8.66	17	
1528		176	/	12.28	426	7.38	89.8	8.21	16.4	
1533			/	14.36	423	7.37	89.9	8.35	16.0	
1538		1.5	/	14.80	428	7.37	70.8	8.64	15.7	Can't pump any slower or pump cuts out. Tubing on Grundfos is 1/4 OD. Pump works too hard and cuts out.
1543		↓	/	14.18	429	7.36	65.0	8.62	14.1	
1548			/	13.68	437	7.35	66.8	8.54	11.4	
1553		1.0	/	13.16	438	7.34	70.1	8.50	10.27	
1558		↓	/	13.06	439	7.33	72.9	8.46	9.79	
1603			/	13.04	440	7.33	75.0	8.48	9.86	

33 ft and up

Sample @ 1605

1. uSiemens per cm (same as umhos/cm) at 25C
2. Oxidation reduction potential (stand in for Eh)

FINAL FIELD DATA

TEMPERATURE: 1304 (°C)
SPECIFIC CONDUCTANCE: 440 (uS/cm)
pH: 7.33 (S.U.)
ORP: 75 (MV)
DO: 8.48 (mg/L)
TURBIDITIY: 9.86 (NTU)
COMMENTS: LS58DW1-0508-029

ODOR AND PHYSICAL APPEARANCE OF SAMPLE: No odors
TOTAL DEPTH OF WELL: 58.2
WEATHER CONDITIONS: See log book

WESTON LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: MEFUDS CO-58 | PROJECT #: 03886.154 | WELL ID: DW-2
LOCATION: Cowhan, MB
SAMPLING CREW: NE + Colog | DATE: 5/14/08 | SAMPLE TIME: 1538

PURGING DATA

REFERENCE POINT (CIRCLE): PVC ~~Steel Casing~~ Interval | PURGING DEVICE: WSP
INITIAL DTW: 16-20 ft bgs (FT) | WELL DEPTH: 284 (FT) | Well Diameter: 6"

CLOCK TIME (24 HR)	Water Depth Below MP (ft)	PURGE RATE (mL/min)	Drawdown/Total Drawdown (ft)	TEMP (°C) (3%)	SP COND (uS/cm)[1] (3%)	pH (s.u) (+/-0.1)	ORP/Eh[2] (MV) (+/-10)	DO (mg/L) (10%)	Turb (NTU) (10%)	COMMENTS
~~1337~~		164	/	~~4.48~~	~~10.1855~~	~~5.84~~	78.9	13.76		~~Pump Contacts - Restart~~
1440		64	/	13.53	433	7.92	184.9	11.24	50	See Field notes
1443		64	/	11.97	440	7.84	169.9	11.69	60	
1446		64	/	13.15	430	7.76	176.2	10.85	60	
1451		54	/	14.41	427	7.75	176.6	10.50	60	
1456		44	/	15.54	426	7.74	174.3	10.21	60	
1501			/	16.98	431	7.71	172.8	9.97	58	
1506			/	16.78	432	7.70	173.1	10.02	55	
1511			/	17.29	430	7.70	171.2	9.82	50	
1516			/	17.86	430	7.70	166.3	9.59	52	
1521			/	18.84	429	7.68	162.9	9.45	50	
1526		45	/	19.11	425	7.68	162.1	9.28	51	
1531		40	/	18.87	430	7.67	162.1	9.33	52	
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1. uSiemens per cm (same as umhos/cm) at 25C
2. Oxidation reduction potential (stand in for Eh)

FINAL FIELD DATA

TEMPERATURE: 18.87 (°C) | ORP: 162.1 (MV) | COMMENTS: 16-20 ft bgs
SPECIFIC CONDUCTANCE: 430 (uS/cm) | DO: 9.33 (mg/L)
pH: 7.67 (S.U.) | TURBIDITY: 52 (NTU) | CS58DW2-0508-4
ODOR AND PHYSICAL APPEARANCE OF SAMPLE: Clear, No odor | TOTAL DEPTH OF WELL: 284
WEATHER CONDITIONS: See log Book

WESTON LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: MEFUDS LO-58 | PROJECT #: 03886.184 | WELL ID: DW-2
LOCATION: Caribou, ME
SAMPLING CREW: AF - Colog | DATE: 5/16/06 | SAMPLE TIME: 1830

PURGING DATA

REFERENCE POINT (CIRCLE): PVC (Steel Casing)
~~INITIAL DTW~~ Intesival: 28.5-32.5 (FT) | PURGING DEVICE: WSP
WELL DEPTH: 284 (FT) | Well Diameter: 6"

CLOCK TIME (24 HR)	Water Depth Below MP (ft)	PURGE RATE (~~mL/min~~)	Drawdown/Total Drawdown (ft)	TEMP (°C) (3%)	SP COND (uS/cm)[1] (3%)	pH (s.u) (+/-0.1)	ORP/Eh[2] (MV) (+/-10)	DO (mg/L) (10%)	Turb (NTU) (10%)	COMMENTS
1755		1.34 gpm	/	9.09	441	7.70	125.9	11.43	26	
1800		1.35 gpm	/	8.84	443	7.67	128.7	11.50	8.6	
1805			/	8.58	445	7.65	130.1	11.55	5.0	
1810			/	8.83	446	7.64	130.2	11.56	1.26	
1815			/	8.78	448	7.62	126.7	11.60	<1	
1820			/	8.72	450	7.61	123.4	11.59	<1	
1825			/	8.76	450	7.61	122.3	11.58	<1	
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1. uSiemens per cm (same as umhos/cm) at 25C
2. Oxidation reduction potential (stand in for Eh)

FINAL FIELD DATA

TEMPERATURE: 8.76 (°C) | ORP: 122.3 (MV) | COMMENTS: 28.5-32.5 ft bgs.
SPECIFIC CONDUCTANCE: 450 (uS/cm) | DO: 11.58 (mg/L)
pH: 7.61 (S.U.) | TURBIDITIY: <1 (NTU) | LS58DW2-0508-28.5
ODOR AND PHYSICAL APPEARANCE OF SAMPLE: Clear. No odor | TOTAL DEPTH OF WELL: 284
WEATHER CONDITIONS: See log book

WESTON LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: MEPDS LO-58 | PROJECT #: 03558.184 | WELL ID: DW-2
LOCATION: Carbon, ME
SAMPLING CREW: AR + Colog | DATE: 5/17/08 | SAMPLE TIME: 1214

PURGING DATA

REFERENCE POINT (CIRCLE): PVC ~~Steel Casing~~ | PURGING DEVICE: WSP
~~INITIAL DTW~~ Depth Interval: 37-41.7 (FT) | WELL DEPTH: 284 (FT) | Well Diameter: 6"

CLOCK TIME (24 HR)	Water Depth Below MP (ft)	PURGE RATE (mL/min)	Drawdown/Total Drawdown (ft)	TEMP (°C) (3%)	SP COND (uS/cm)[1] (3%)	pH (s.u) (+/-0.1)	ORP/Eh[2] (MV) (+/-10)	DO (mg/L) (10%)	Turb (NTU) (10%)	COMMENTS
1139		500	/	14.13	413	7.49	192.9	10.43	25.8	
1144			/	16.36	423	7.45	184.0	9.71	16	
1149			/	16.75	418	7.42	180.8	9.49	14	
1154			/	16.83	425	7.43	179.0	9.44	12	
1159			/	17.08	437	7.41	178.7	9.31	7.2	
1204			/	17.29	444	7.39	176.0	9.15	5.5	
1209			/	17.06	446	7.39	175.2	9.17	5.8	
1214			/	17.09	451	7.39	178.7	9.16	5.3	
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1. uSiemens per cm (same as umhos/cm) at 25C
2. Oxidation reduction potential (stand in for Eh)

FINAL FIELD DATA

TEMPERATURE: 17.09 (°C) | ORP: 178.7 (MV) | COMMENTS: LS58DW2-0508-37
SPECIFIC CONDUCTANCE: 451 (uS/cm) | DO: 9.16 (mg/L)
pH: 7.39 (S.U.) | TURBIDITY: 5.3 (NTU)

ODOR AND PHYSICAL APPEARANCE OF SAMPLE: Clear. No odor | TOTAL DEPTH OF WELL: 284

WEATHER CONDITIONS: See logbook

WESTON LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: MEPUDS LO-58 | PROJECT #: 05585-184 | WELL ID: DW-2

LOCATION: Caribou, ME

SAMPLING CREW: AR + Colog | DATE: 5/17/08 | SAMPLE TIME: 1535

PURGING DATA

REFERENCE POINT (CIRCLE): PVC ~~Steel Casing~~ | PURGING DEVICE: WSP

~~INITIAL DTW~~ Depth Interval: 94.5-98.5 (FT) | WELL DEPTH: 284 (FT) | Well Diameter: 6"

CLOCK TIME (24 HR)	Water Depth Below MP (ft)	PURGE RATE (mL/min)	Drawdown/Total Drawdown (ft)	TEMP (°C) (3%)	SP COND (uS/cm)[1] (3%)	pH (s.u) (+/-0.1)	ORP/Eh[2] (MV) (+/-10)	DO (mg/L) (10%)	Turb (NTU) (10%)	COMMENTS
1429		750	/	11.58	450	7.61	216.9	10.25	75	
1434			/	12.24	446	7.52	213.0	9.82	900	
1439			/	12.59	436	7.47	206.2	9.71	OR	
1444			/	12.74	432	7.46	206.4	9.70	OR	
1449			/	12.44	429	7.44	207.9	9.73	OR	
1454			/	12.72	440	7.44	202.6	10.74	OR	
1459			/	12.54	439	7.40	200.3	10.37	OR	
1504			/	12.70	436	7.41	197.5	10.00	650	
1509			/	12.75	437	7.42	197.0	9.91	310	
1514			/	12.67	437	7.42	197.1	9.86	160	
1519			/	12.66	435	7.43	195.6	9.80	79	
1524			/	12.42	435	7.42	195.1	9.84	66.5	
1529			/	12.58	436	7.42	192.6	9.70	47.2	
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1. uSiemens per cm (same as umhos/cm) at 25C
2. Oxidation reduction potential (stand in for Eh)

FINAL FIELD DATA

TEMPERATURE: 12.58 (°C) | ORP: 192.6 (MV) | COMMENTS: LS58DW2-0508-945

SPECIFIC CONDUCTANCE: 436 (uS/cm) | DO: 9.72 (mg/L)

pH: 7.42 (S.U.) | TURBIDITIY: 47.2 (NTU)

ODOR AND PHYSICAL APPEARANCE OF SAMPLE: Nothing notable | TOTAL DEPTH OF WELL: 284

WEATHER CONDITIONS: See log book

WESTON LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: MEFUDS LO 58 — PROJECT #: 03666.184 — WELL ID: DW2

LOCATION: Caribou, ME

SAMPLING CREW: AF + Colby — DATE: 5/17/08 — SAMPLE TIME: 1855

PURGING DATA

REFERENCE POINT (CIRCLE): PVC ~~Steel Casing~~ — PURGING DEVICE: WSP

~~INITIAL DTW~~ Depth Interval: 187.9 - 192.2 (FT) — WELL DEPTH: 284 (FT) — Well Diameter: 6"

CLOCK TIME (24 HR)	Water Depth Below MP (ft)	PURGE RATE (mL/min)	Drawdown/Total Drawdown (ft)	TEMP (°C) (3%)	SP COND (uS/cm)[1] (3%)	pH (s.u) (+/-0.1)	ORP/Eh[2] (MV) (+/-10)	DO (mg/L) (10%)	Turb (NTU) (10%)	COMMENTS
1746		700	/	12.41	447	8.22	126.3	10.65	255	
1753			/	9.58	360	8.00	134.2	10.90	232	
1758			/	9.02	308	7.89	135.7	9.78	230	
1803			/	9.16	332	7.87	136.8	9.17	140	
1808			/	9.22	366	7.83	139.1	8.26	130	
1813			/	9.15	381	7.80	140.0	7.73	110	
1818			/	9.21	402	7.75	142.0	6.83	75	
1823			/	9.22	409	7.75	142.9	6.03	65	
1828			/	9.20	413	7.74	143.5	5.53	65	
1833			/	9.20	416	7.74	143.8	5.01	60	
1838			/	9.20	421	7.72	142.5	4.67	50	
1843			/	9.16	428	7.71	141.2	3.37	47	
1848			/	9.15	428	7.70	141.0	3.16	45	
1853			/	9.14	429	7.70	140.5	2.97	44	
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1. uSiemens per cm (same as umhos/cm) at 25C
2. Oxidation reduction potential (stand in for Eh)

FINAL FIELD DATA

TEMPERATURE: 9.14 (°C) — ORP: 140.5 (MV) — COMMENTS: 1558DW2-0508-189

SPECIFIC CONDUCTANCE: 429 (uS/cm) — DO: 2.97 (mg/L)

pH: 7.70 (S.U.) — TURBIDITIY: ~~cut~~ (NTU)

ODOR AND PHYSICAL APPEARANCE OF SAMPLE: No odors — TOTAL DEPTH OF WELL: 284

WEATHER CONDITIONS: See log book

WESTON LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: MEFUDS LO-58 | PROJECT #: 03886.184 | WELL ID: DW-2
LOCATION: Gorham, ME
SAMPLING CREW: AF + Coby | DATE: 5/17/06 | SAMPLE TIME: 2150

PURGING DATA

REFERENCE POINT (CIRCLE): PVC (Steel Casing) | PURGING DEVICE: WSP
INITIAL DTW: Interval 265-bottom (FT) | WELL DEPTH: 282 (FT) | Well Diameter: 6"

CLOCK TIME (24 HR)	Water Depth Below MP (ft)	PURGE RATE (mL/min)	Drawdown/Total Drawdown (ft)	TEMP (°C) (3%)	SP COND (uS/cm)[1] (3%)	pH (s.u) (+/-0.1)	ORP/Eh[2] (MV) (+/-10)	DO (mg/L) (10%)	Turb (NTU) (10%)	COMMENTS
2119		600	/	7.68	419	8.01	134.1	12.84	150	
2124			/	7.71	300	8.04	131.5	9.34	150	
2129			/	7.84	258	8.11	126.8	8.36	130	
2134			/	7.85	235	8.21	122.1	7.63	111	
2139			/	7.84	227	8.26	119.4	7.16	103.6	
2144			/	7.79	225	8.28	117.6	7.03	102.4	
2149			/	7.77	224	8.30	116.4	6.95	101.3	
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1. uSiemens per cm (same as umhos/cm) at 25C
2. Oxidation reduction potential (stand in for Eh)

FINAL FIELD DATA

TEMPERATURE: 7.77 (°C) | ORP: 116.4 (MV) | COMMENTS: LS58 DW2-0506-265
SPECIFIC CONDUCTANCE: 224 (uS/cm) | DO: 6.95 (mg/L)
pH: 8.30 (S.U.) | TURBIDITIY: 101.3 (NTU)

ODOR AND PHYSICAL APPEARANCE OF SAMPLE: None | TOTAL DEPTH OF WELL: 284

WEATHER CONDITIONS: See log book

APPENDIX D

WESTON VALIDATED ANALYTICAL RESULTS
MAY 2008

DATA REVIEW CHECKLIST

SITE: Maine FUDS
LAB NUMBER: Analytics 61245
WESTON SAMPLE IDs: 0010GDI-050508 → MISSING 624 / 8260 24.2
TB-050508-01

Data Reviewed	Fraction						Comments
	524.2	~~8260~~ GRO		DRO			
Chain of Custody	✓						
Percent Solids/RLs		✓					
Preservation/Log Sheet							
Holding Time							
Field Blanks (Trip/Equip.)	✓	✓					
Instrument/Method Blanks (Soils/Solids)							
Instrument/Method Blanks (Aqueous)		✓		✓			
MS/MSD (Soil/Solids)							
MS/MSD (Aqueous)							
LCS/LCSD		✓		✓			
Blank Spikes (BS/BSD)							
Lab Duplicates							
Field Duplicates							
Surrogate Recoveries	✓	✓		✓			

Note:
Data reviewed but not commented on is considered acceptable.
√ = Data Reviewed
NA = Not Applicable

Qualifiers Used:
UJ/J – Estimate MeCl2 since calib QC criteria did not meet
J – Estimate due to over calib. range of instrument (E)

Data Reviewer Initials: DPG
Date: 9/4/08

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analytics environmental laboratory LLC

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Portsmouth, New Hampshire 03801
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800-929-9906
www.analyticslab.com

Mr. Ron Penttkowski
Test America Burlington
30 Community Drive Suite 11
South Burlington VT 05403

Report Number: 61245

Revision: Rev. 0

Re: MEFUDS **03886.184**

Enclosed are the results of the analyses on your sample(s). Samples were received on 07 May 2008 and analyzed for the tests listed below. Samples were received in acceptable condition, with the exceptions noted below or on the chain of custody. These results pertain to samples as received by the laboratory and for the analytical tests requested on the chain of custody. The results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. Please see individual reports for specific methodologies and references.

Lab Number	Sample Date	Station Location	Analysis	Comments
61245-1	05/05/08	COLOGDI-050508	EPA 524.2 Volatile Organics	
	05/05/08	COLOGDI-050508	Maine HETL Method 4.1.25	
	05/05/08	COLOGDI-050508	Maine HETL Method 4.2.17	
61245-2	05/05/08	TB-050508-01	Electronic Data Deliverable	
	05/05/08	TB-050508-01	Maine HETL Method 4.2.17	

Sample Receipt Exceptions: None

Analytics Environmental Laboratory is certified by the states of New Hampshire, Maine, Massachusetts, Connecticut, Rhode Island, New York, Virginia, Pennsylvania, and is validated by the U.S. Navy (NFESC). A list of actual certified parameters is available upon request.

If you have any further question on the analytical methods or these results, do not hesitate to call.

Authorized signature _____

Stephen L. Knollmeyer Laboratory Director

Date 5/8/2008

analytics environmental laboratory LLC

195 Commerce Way
Portsmouth, New Hampshire 03801
603-436-5111 Fax 603-430-2151
800-929-9906

Mr. Ron Penttkowski
Test America Burlington
30 Community Drive Suite 11
South Burlington VT 05403

May 8, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS

Project Number: 03886.184

Field Sample ID: COLOGD1-050508

SAMPLE DATA

Lab Sample ID: 61245-1
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 05/05/08
Lab Receipt Date: 05/07/08
Analysis Date: 05/07/08

ANALYTICAL RESULTS VOLATILE ORGANICS

COMPOUND	Quantitation Limit µg/L	Result µg/L	COMPOUND	Quantitation Limit µg/L	Result µg/L
Benzene	0.5	U	1,3-Dichloropropane	0.5	U
Bromobenzene	0.5	U	cis-1,3-Dichloropropene	0.5	U
Bromochloromethane	0.5	U	trans-1,3-Dichloropropene	0.5	U
Bromodichloromethane	0.5	U	2,2-Dichloropropane	0.5	U
Bromoform	0.5	U	1,1-Dichloropropene	0.5	U
Bromomethane	0.5	U	Ethylbenzene	0.5	U
n-butylbenzene	0.5	U	Hexachlorobutadiene	0.5	U
sec-butylbenzene	0.5	U	Isopropylbenzene	0.5	U
tert-butylbenzene	0.5	U	p-isopropyltoluene	0.5	U
Carbon Tetrachloride	0.5	U	Methylene Chloride	0.5	**0.9 ***
Chlorobenzene	0.5	**0.5**	Methyl-tert-butyl ether (MTBE)	0.5	U
Chloroethane	0.5	U	Naphthalene	0.5	U
Chloroform	0.5	**0.3 J**	n-Propylbenzene	0.5	U
Chloromethane	0.5	U	Styrene	0.5	U
2-Chlorotoluene	0.5	U	1,1,1,2-Tetrachloroethane	0.5	U
4-Chlorotoluene	0.5	U	1,1,2,2-Tetrachloroethane	0.5	U
Dibromochloromethane	0.5	**0.3 J**	Tetrachloroethene	0.5	U
1,2-Dibromo-3-chloropropane	0.5	U	Toluene	0.5	U
1,2-Dibromoethane	0.5	U	1,2,3-Trichlorobenzene	0.5	U
Dibromomethane	0.5	U	1,2,4-Trichlorobenzene	0.5	U
1,2-Dichlorobenzene	0.5	U	1,1,1-Trichloroethane	0.5	U
1,3-Dichlorobenzene	0.5	U	1,1,2-Trichloroethane	0.5	U
1,4-Dichlorobenzene	0.5	U	Trichloroethene	0.5	U
Dichlorodifluoromethane	0.5	U	Trichlorofluoromethane	0.5	U
1,1-Dichloroethane	0.5	U	1,2,3-Trichloropropane	0.5	U
1,2-Dichloroethane	0.5	U	1,2,4-Trimethylbenzene	0.5	U
1,1-Dichloroethene	0.5	U	1,3,5-Trimethylbenzene	0.5	U
cis-1,2-Dichloroethene	0.5	U	Vinyl Chloride	0.5	U
trans-1,2-Dichloroethene	0.5	U	o-Xylene	0.5	U
1,2-Dichloropropane	0.5	U	m,p-Xylene	0.5	U
Acetone	5	U	Diethyl ether	0.5	U
Carbon Disulfide	0.5	U	2-Hexanone	5	U
Tetrahydrofuran	2.5	**112 E**	Methyl isobutyl ketone	5	U
Methyl ethyl ketone	5	**7.0**	Di-isopropyl ether (DIPE)	0.5	U
t-Butyl alcohol (TBA)	10	U	Ethyl t-butyl ether (ETBE)	0.5	U
t-Amyl methyl ether (TAME)	0.5	U			

Surrogate Standard Recovery

1,4-Difluorobenzene	93 %	Bromofluorobenzene	74 %	1,2-Dichlorobenzene-d4	80 %

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analysis was conducted according to EPA 600, Method 524.2

COMMENTS: * Methylene Chloride had low recovery in the continuing calibration standard / laboratory control sample. Sample is being reanalyzed.

Authorized signature

analytics environmental laboratory LLC

195 Commerce Way
Portsmouth, New Hampshire 03801
603-436-5111 Fax 603-430-2151
800-929-9906

Mr. Ron Penttkowski
Test America Burlington
30 Community Drive Suite 11
South Burlington VT 05403

May 8, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS

Project Number: 03886.184

Field Sample ID: COLOGDI-050508

SAMPLE DATA

Lab Sample ID: 61245-1 DL
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 20
Collection Date: 05/05/08
Lab Receipt Date: 05/07/08
Analysis Date: 05/07/08

ANALYTICAL RESULTS VOLATILE ORGANICS

COMPOUND	Quantitation Limit µg/L	Result µg/L	COMPOUND	Quantitation Limit µg/L	Result µg/L
Benzene	10	U	1,3-Dichloropropane	10	U
Bromobenzene	10	U	cis-1,3-Dichloropropene	10	U
Bromochloromethane	10	U	trans-1,3-Dichloropropene	10	U
Bromodichloromethane	10	U	2,2-Dichloropropane	10	U
Bromoform	10	U	1,1-Dichloropropene	10	U
Bromomethane	10	U	Ethylbenzene	10	U
n-butylbenzene	10	U	Hexachlorobutadiene	10	U
sec-butylbenzene	10	U	Isopropylbenzene	10	U
tert-butylbenzene	10	U	p-isopropyltoluene	10	U
Carbon Tetrachloride	10	U	Methylene Chloride	10	U*
Chlorobenzene	10	U	Methyl-tert-butyl ether (MTBE)	10	U
Chloroethane	10	U	Naphthalene	10	U
Chloroform	10	U	n-Propylbenzene	10	U
Chloromethane	10	U	Styrene	10	U
2-Chlorotoluene	10	U	1,1,1,2-Tetrachloroethane	10	U
4-Chlorotoluene	10	U	1,1,2,2-Tetrachloroethane	10	U
Dibromochloromethane	10	U	Tetrachloroethene	10	U
1,2-Dibromo-3-chloropropane	10	U	Toluene	10	U
1,2-Dibromoethane	10	U	1,2,3-Trichlorobenzene	10	U
Dibromomethane	10	U	1,2,4-Trichlorobenzene	10	U
1,2-Dichlorobenzene	10	U	1,1,1-Trichloroethane	10	U
1,3-Dichlorobenzene	10	U	1,1,2-Trichloroethane	10	U
1,4-Dichlorobenzene	10	U	Trichloroethene	10	U
Dichlorodifluoromethane	10	U	Trichlorofluoromethane	10	U
1,1-Dichloroethane	10	U	1,2,3-Trichloropropane	10	U
1,2-Dichloroethane	10	U	1,2,4-Trimethylbenzene	10	U
1,1-Dichloroethene	10	U	1,3,5-Trimethylbenzene	10	U
cis-1,2-Dichloroethene	10	U	Vinyl Chloride	10	U
trans-1,2-Dichloroethene	10	U	o-Xylene	10	U
1,2-Dichloropropane	10	U	m,p-Xylene	10	U
Acetone	100	U	Diethyl ether	10	U
Carbon Disulfide	10	U	2-Hexanone	100	U
Tetrahydrofuran	50	85	Methyl isobutyl ketone	100	U
Methyl ethyl ketone	100	U	Di-isopropyl ether (DIPE)	10	U
t-Butyl alcohol (TBA)	200	U	Ethyl t-butyl ether (ETBE)	10	U
t-Amyl methyl ether (TAME)	10	U			

Surrogate Standard Recovery

1,4-Difluorobenzene	92 %	Bromofluorobenzene	72 %	1,2-Dichlorobenzene-d4	77 %

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analysis was conducted according to EPA 600, Method 524.2

COMMENTS: *Methylene Chloride had low recovery in the continuing calibration standard / laboratory control sample. Sample is being reanalyzed.

NH 524 Lab(74)

Authorized signature

analytics environmental laboratory LLC

195 Commerce Way
Portsmouth, New Hampshire 03801
603-436-5111 Fax 603-430-2151
800-929-9905

Mr. Ron Penttkowski
Test America Burlington
30 Community Drive Suite 11
South Burlington VT 05403

May 8, 2008

SAMPLE DATA

CLIENT SAMPLE ID

Project Name:	MEFUDS
Project Number:	03886.184
Client Sample ID:	COLOGDI-050508

Lab Sample ID:	61245-1
Matrix:	Aqueous
Percent Solid:	N/A
Dilution Factor:	1
Collection Date:	05/05/08
Lab Receipt Date:	05/07/08
Analysis Date:	05/07/08

ANALYTICAL RESULTS GASOLINE RANGE ORGANICS

Compound	Result	Units	Quantitation Limit
GRO	24	µg/L	10

ESTIMATED TARGET CONCENTRATIONS

Compound	Result	Units	Quantitation Limit
MTBE	U	µg/L	2
Benzene	U	µg/L	1

Surrogate Standard Recovery

Trifluorotoluene	105 %
Bromofluorobenzene	108 %

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to: "Maine HETL Method 4.2.17, September 6, 1995."

COMMENTS:

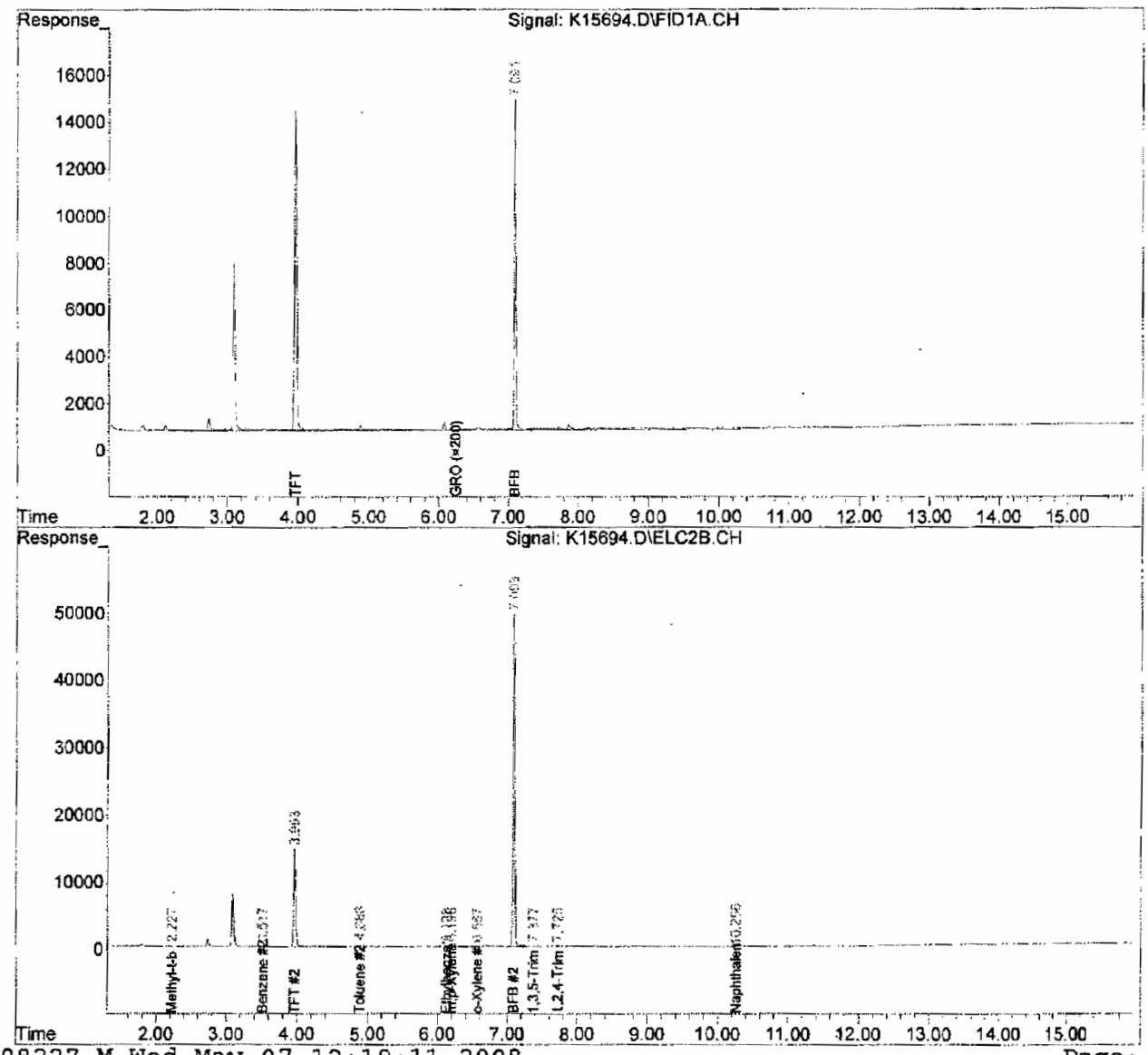
Authorized signature M Lenhall

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\050608-K\
Data File : K15694.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 07 May 2008 12:02 pm
Operator :
Sample : 61245-1
Misc : 5000
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 07 12:19:10 2008
Quant Method : C:\msdchem\1\METHODS\GRO08227.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Wed Aug 22 18:37:56 2007
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



analytics environmental laboratory LLC

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Mr. Ron Penttkowski
Test America Burlington
30 Community Drive Suite 11
South Burlington VT 05403

May 8, 2008

SAMPLE DATA

CLIENT SAMPLE ID

Project Name:	MEFUDS
Project Number:	03886.184
Field Sample ID:	COLOGDI-050508

Lab Sample ID:	61245-1
Matrix:	Aqueous
Percent Solid:	N/A
Dilution Factor:	1.0
Collection Date:	05/05/08
Lab Receipt Date:	05/07/08
Extraction Date:	05/07/08
Analysis Date:	05/07/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	88	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

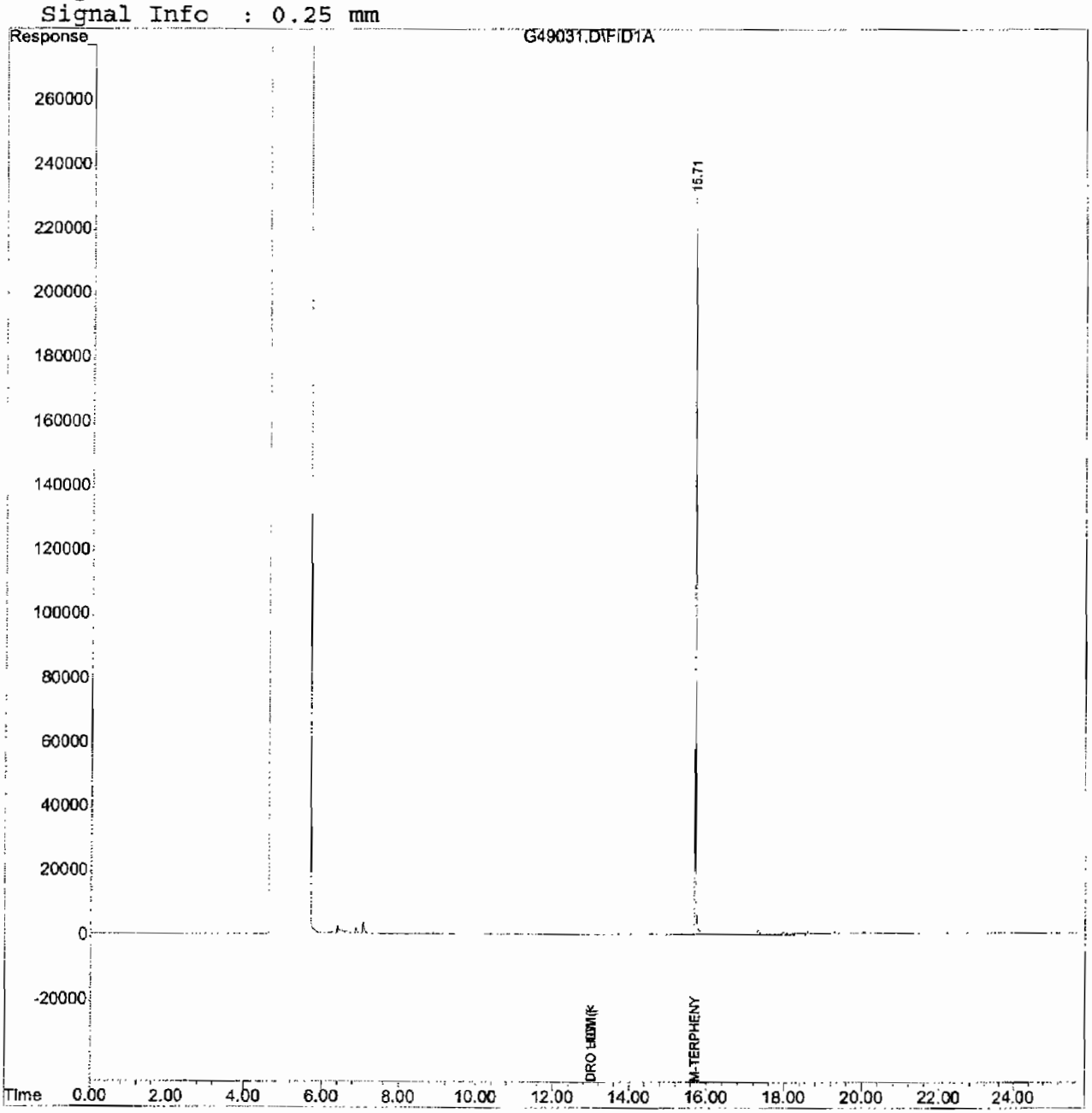
Authorized signature

Quantitation Report (QT Reviewed)

Data File : D:\TPH\050708-G\G49031.D Vial: 24
Acq On : 7 May 2008 19:39 Operator:
Sample : 61245-1 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: May 8 7:40 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm



analytics environmental laboratory LLC

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Portsmouth, New Hampshire 03801
603-436-5111 Fax 603-430-2151
800-929-9906

Mr. Ron Penttkowski
Test America Burlington
30 Community Drive Suite 11
South Burlington VT 05403

May 8, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS
Project Number: 03886.184
Client Sample ID: TB-050508-01

SAMPLE DATA

Lab Sample ID: 61245-2
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 05/05/08
Lab Receipt Date: 05/07/08
Analysis Date: 05/07/08

ANALYTICAL RESULTS GASOLINE RANGE ORGANICS

Compound	Result	Units	Quantitation Limit
GRO	U	µg/L	10

ESTIMATED TARGET CONCENTRATIONS

Compound	Result	Units	Quantitation Limit
MTBE	U	µg/L	2
Benzene	U	µg/L	1

Surrogate Standard Recovery

Trifluorotoluene	110 %
Bromofluorobenzene	110 %

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to: "Maine HETL Method 4.2.17, September 6, 1995."

COMMENTS:

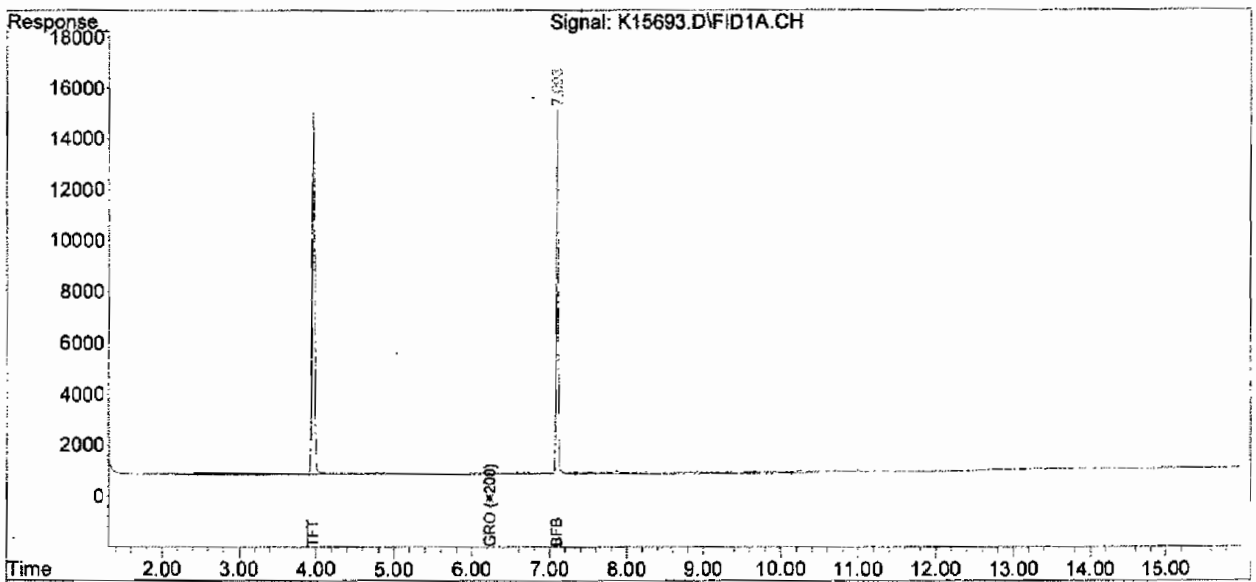
Authorized signature

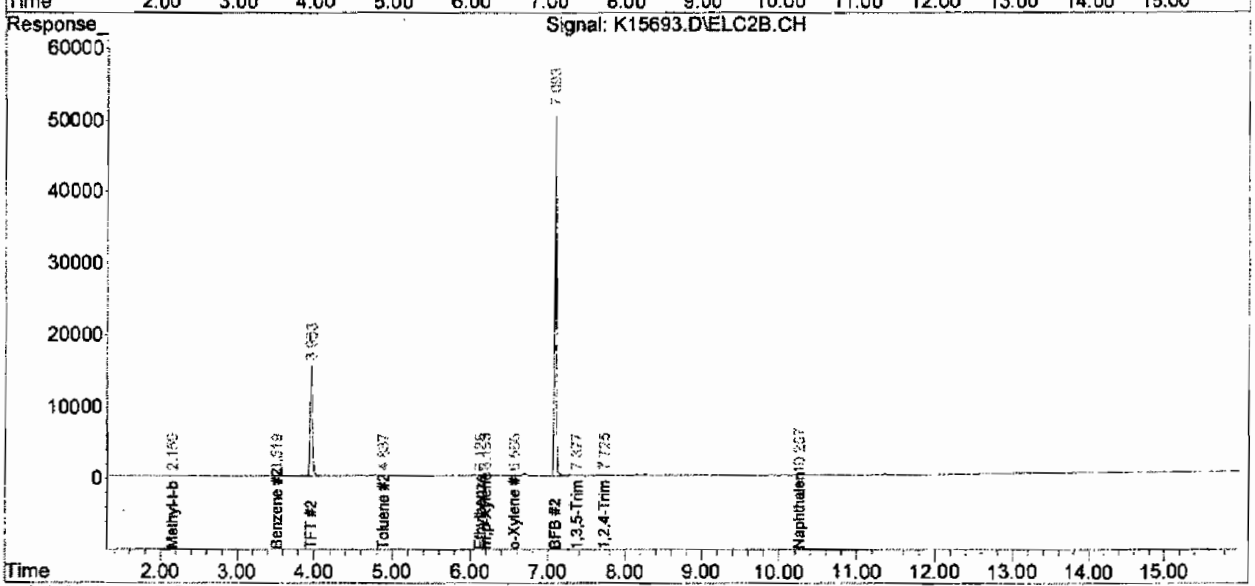
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\050608-K\
Data File : K15693.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 07 May 2008 11:39 am
Operator :
Sample : 61245-2
Misc : 5000
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 07 12:12:07 2008
Quant Method : C:\msdchem\1\METHODS\GRO08227.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Wed Aug 22 18:37:56 2007
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





SEVERN TRENT

~~STL~~ TestAmerica

~~STL~~ Burlington
30 Community Drive, Suite 11
South Burlington, VT 05403 Tel: 802 660 1990

~~SEVERN TRENT LABORATORIES, INC.~~

CHAIN OF CUSTODY RECORD

Report to:
Company: Weston Solutions
Address: 1 Wall St
Manchester, NH 03101
Contact: Joe Schmid
Phone: 603 656 5400
Fax: 603 656 5401
Contract/Quote:

Invoice to:
Company: Test America
Address: ~~[illegible]~~
Contact: ~~Cathy Tremblay~~
Phone:
Fax: As Per Contract

Sampler's Name: Andrew Fuller
Sampler's Signature: [signature]

Proj. No.: 23896.184
Project Name: MEFUDS

Analysis Requested: TPH-GRO; TPH-DRO; 24 hr TAT; pH on both Ambers for DRO; pH Tested pH 5/7/08

Lab Use Only
Due Date:
Temp. of coolers when received (C): 3.2°
1 | 2 | 3 | 4 | 5
Custody Seal: (N) Y
Intact: N / (Y)
Screened For Radioactivity: ☐

Matrix[1]	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	VOA	A/G 1 Lt.	250 ml	P/O	TPH-GRO	TPH-DRO	24 hr TAT	pH	pH	Lab/Sample ID (Lab Use Only)
W	5/5	1720		X	COLOGDI-050508	4	2			X	X	X			W245 • 1
					TB-050508-01	2				X			1.5	1.5	• 2

No/Type of Containers[2]: 4 Voa / 2 Lit

Labels checked by CP 5/7/08

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	5/5/08	1800	UPS FedEx		
FedEx	5/7/08	0	Pam Mudock	5/7/08	9:40

Remarks: 24 hr Turn around Time! TestAmerica Job Report and Invoice to them
Client's delivery of samples constitutes acceptance of Severn Trent Laboratories terms and conditions contained in the Price Schedule.

[1]Matrix: WW - Wastewater; W - Water; S - Soil; L - Liquid; A - Air bag; C - Charcoal Tube; SL - Sludge; O - Oil
[2]Container: VOA - 40 ml vial; A/G - Amber / Or Glass 1 Liter; 250 ml - Glass wide mouth; P/O - Plastic or other

STL Cannot accept verbal changes. Please Fax written changes to (802) 660-1919

STL8234-200 (02/07)

analytics environmental laboratory LLC

ANALYTICS SAMPLE RECEIPT CHECKLIST

AEL LAB#: 61245 COOLER NUMBER: _____

CLIENT: Test America NUMBER OF COOLERS: 1

PROJECT: _____ DATE RECEIVED: 5/7/08

A: PRELIMINARY EXAMINATION: PM DATE COOLER OPENED: 5/7/08

1. Cooler received by(initials) PM Date Received: 5/7/08

2. Circle one: Hand delivered (If so, skip 3) (Shipped)

3. Did cooler come with a shipping slip? (Y) N

3a. Enter carrier name and airbill number here: Fed Ex 8612666873250

4. Were custody seals on the outside of cooler? Y (N)
How many & where: _____ Seal Date: _____ Seal Name: _____

5. Did the custody seals arrive unbroken and intact upon arrival? Y (N/A)

6. COC#: _____

7. Were Custody papers filled out properly (ink,signed, etc)? (Y) N

8. Were custody papers sealed in a plastic bag? (Y) N

9. Did you sign the COC in the appropriate place? (Y) N

10. Was the project identifiable from the COC papers? (Y) N

11. Was enough ice used to chill the cooler? (Y) N Temp. of cooler: 3.2°

B. Log-In: Date samples were logged in: 5/7/08 By: PM

12. Type of packing in cooler(bubble wrap, popcorn) (Y) N

13. Were all bottles sealed in separate plastic bags? (Y) N

14. Did all bottles arrive unbroken and were labels in good condition? (Y) N

15. Were all bottle labels complete(ID,Date,time,etc.) (Y) N

16. Did all bottle labels agree with custody papers? (Y) N

17. Were the correct containers used for the tests indicated: (Y) N

18. Were samples received at the correct pH? (Y) N

19. Was sufficient amount of sample sent for the tests indicated? (Y) N

20. Were bubbles absent in VOA samples? (Y) N

If NO, List sample #'s: _____

21. Laboratory labeling verified by (initials): CR Date: 5/7/08

FedEx. US Airbill
Express

8612 6687 3250

0200 Form ID No.

FedEx Retrieval Copy

1 From

Date 5/6/08 Sender's FedEx Account Number 101589404

Sender's Name W Andrew Fuller Phone 603 969 2639

Company Weston Solutions, Inc

Address 1 Wall St Suite 201 Dept./Floor/Suite/Room

City Manchester State NH ZIP 03101

2 Your Internal Billing Reference MEFUDS 03886.184.001

3 To

Recipient's Name Receiving Phone 603 436 5111

Company Analytics Environmental Lab LLC

Recipient's Address 195 Commerce Way Suite E

We cannot deliver to P.O. boxes or P.O. ZIP codes. Dept./Floor/Suite/Room

Address

To request a package be held at a specific FedEx location, print FedEx address here.

City Portsmouth State NH ZIP 03801

8612 6687 3250

4a Express Package Service *Packages up to 150 lbs.*

- [X] 1 FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] 5 FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.
- [ ] 6 FedEx First Overnight — Earliest next business morning delivery to select locations.* Saturday Delivery NOT available.
- [ ] 3 FedEx 2Day — Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] 20 FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

FedEx Envelope rate not available. Minimum charge: One-pound rate. * To select locations.

4b Express Freight Service *Packages over 150 lbs.*

- [ ] 7 FedEx 1Day Freight* — Next business day.** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] 8 FedEx 2Day Freight — Second business day.** Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] 83 FedEx 3Day Freight — Third business day.** Saturday Delivery NOT available.

* Call for Confirmation. ** To select locations.

5 Packaging

- [ ] 6 FedEx Envelope*
- [ ] 2 FedEx Pak* — Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak
- [ ] 3 FedEx Box
- [ ] 4 FedEx Tube
- [X] Other

* Declared value limit $500.

6 Special Handling Include a FedEx address in Section 3.

- [ ] 3 SATURDAY Delivery — Not available for FedEx International Overnight, FedEx 1Day Freight, FedEx Express Saver, or FedEx 3Day Freight.
- [ ] 1 HOLD Weekday at FedEx Location — Not available for FedEx First Overnight.
- [ ] 31 HOLD Saturday at FedEx Location — Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Does this shipment contain dangerous goods? One box must be checked.

- [X] No
- [ ] 4 Yes — As per attached Shipper's Declaration
- [ ] Yes — Shipper's Declaration not required
- [ ] 6 Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg
- [ ] Cargo Aircraft Only

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.

7 Payment Bill to: Enter FedEx Acct. No. or Credit Card No. below. Obtain Recip. Acct. No. [ ]

- [X] 1 Sender
- [ ] 2 Recipient
- [ ] 3 Third Party
- [ ] 4 Credit Card
- [ ] 5 Cash/Check

[redacted]

Total Packages 1 Total Weight 31 [redacted]

Our liability is limited to $100 unless you declare a higher value. See the current FedEx Service Guide for details. Credit Card Auth.

8 Residential Delivery Signature Options If you require a signature, check Direct or Indirect.

- [ ] No Signature Required — Package may be left without obtaining a signature for delivery.
- [ ] 19 Direct Signature — Someone at recipient's address may sign for delivery. Not available for FedEx First Overnight.
- [ ] 34 Indirect Signature — If no one is available at recipient's address, someone at a nearby address may sign for delivery. Not available for FedEx First Overnight.

520

Rev. Date 10/08 Part #158261 ©1994–2008 FedEx PRINTED IN U.S.A. SRY

fedex.com 1.800.GoFedEx 1.800.463.3339

fedex.com 1.800.GoFedEx 1.800.463.3339

DATA REVIEW CHECKLIST

SITE: Maine Fuds
LAB NUMBER: Analytics 61274
WESTON SAMPLE IDs: COLOGDI-050508
TB-050508-01, ~~TB-050508-01~~

Data Reviewed	Fraction: 504.2						Comments
Chain of Custody	✓						
Percent Solids/RLs							
Preservation/Log Sheet							
Holding Time							
Field Blanks (Trip/Equip.)	✓						
Instrument/Method Blanks (Soils/Solids)							
Instrument/Method Blanks (Aqueous)	✓						
MS/MSD (Soil/Solids)							
MS/MSD (Aqueous)							
LCS/LCSD							
Blank Spikes (BS/BSD)							
Lab Duplicates							
Field Duplicates							
Surrogate Recoveries	✓						

Note:
Data reviewed but not commented on is considered acceptable.
√ = Data Reviewed
NA = Not Applicable

Qualifiers Used: No qualifications were made.

Data Reviewer Initials: AFG
Date: 9/18/08

analytics environmental laboratory LLC

195 Commerce Way Suite E
Portsmouth, New Hampshire 03801
603-436-5111 Fax 603-430-2151
800-929-9906
www.analyticslab.com

May 27, 2008

Mr. Ron Pentkowski
Test America Burlington
30 Community Drive Suite 11
South Burlington VT 05403

RE: Analytical Results Case Narrative
ME FUDS Project # 125361
Analytics # 61274

Dear Mr. Pentkowski:

Enclosed please find the analytical results for samples collected from the above-mentioned project. The attached Cover Page lists the sample IDs, Lab tracking numbers and collection dates for the samples included in this deliverable.

Samples were analyzed for the target volatile organic compounds by EPA Method 524.2.

Unless otherwise noted in the Non-conformance Summary listed below, all of the quality control (QC) criteria including initial calibration, calibration verification, surrogate recovery, holding time and method accuracy/precision for these analyses were within acceptable limits.

This Level IV package has been assembled in the following order with raw data:

Case Narrative/Non-Conformance Summary
Sample Log Sheet - Cover Page
VOA Form 1 Sample Data Results
Chromatograms
VOA Form 2 Surrogate Recoveries
VOA Form 3 MS/MSD and LCS Recoveries
VOA Form 4 Method Blank Summary (equiv.) GC/MS Logbook Sheets
VOA Form 5 BFB Tune Summaries
VOA Form 6 Initial Calibration Data (equiv..) Response Factor Report
VOA Form 7 Continuing Calibration Check (equiv.)
VOA Form 8 Int. Standard and RT Summary
Chain of Custody (COC) Forms
Sample Receipt Checklist

QC NON CONFORMANCE SUMMARY

Sample Receipt:
No QC deviations.

EPA Method 524.2 Volatile Organics:
This narrative is specific to target analytes reported on the Form 1 data pages. Non-target (NT) analyte deviations were not addressed. The following analytes were not 'J" flagged in this report: Vinyl Chloride, Methylene choride, Diethyl ether, Acetone, Hexachlorobutadiene, and Naphthalene.

Chloromethane, Vinyl Chloride, Acetone, and Tetrahydrofuran used quadratic fit for quantitation.

If you have any questions on this data submittal, please do not hesitate to contact me.

Sincerely,
ANALYTICS Environmental Laboratory, LLC

Stephen Knollmeyer
Laboratory Director

analytics environmental laboratory LLC

195 Commerce Way Suite E
Portsmouth, New Hampshire 03801
603-436-5111 Fax 603-430-2151
800-929-9906
www.analyticslab.com

Mr. Ron Pentkowski
Test America Burlington
30 Community Drive Suite 11
South Burlington VT 05403

Report Number: 61274

Revision: Rev. 0

Re: Maine FUDS **125361**

Enclosed are the results of the analyses on your sample(s). Samples were received on 09 May 2008 and analyzed for the tests listed below. Samples were received in acceptable condition, with the exceptions noted below or on the chain of custody. These results pertain to samples as received by the laboratory and for the analytical tests requested on the chain of custody. The results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. Please see individual reports for specific methodologies and references.

Lab Number	Sample Date	Station Location	Analysis	Comments
61274-1	05/05/08	COLOGDI-050508	EPA 524.2 Volatile Organics	
61274-2	05/05/08	TB-050508-01	Electronic Data Deliverable	
	05/05/08	TB-050508-01	EPA 524.2 Volatile Organics	

Sample Receipt Exceptions: None

Analytics Environmental Laboratory is certified by the states of New Hampshire, Maine, Massachusetts, Connecticut, Rhode Island, New York, Virginia, Pennsylvania, and is validated by the U.S. Navy (NFESC). A list of actual certified parameters is available upon request.

If you have any further question on the analytical methods or these results, do not hesitate to call.

Authorized signature _____
Stephen L. Knollmeyer Laboratory Director

Date 5/9/2008

analytics environmental laboratory LLC

Summary Report

analytics environmental laboratory LLC

195 Commerce Way
Portsmouth, New Hampshire 03801
603-436-5111 Fax 603-430-2151
800-929-9906

Mr. Ron Pentkowski
Test America Burlington
30 Community Drive Suite 11
South Burlington VT 05403

May 9, 2008

CLIENT SAMPLE ID

Project Name: Maine FUDS

Project Number: 125361

Field Sample ID: LAB QC

SAMPLE DATA

Lab Sample ID: B505098I
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: N/A
Lab Receipt Date: N/A
Analysis Date: 05/09/08

ANALYTICAL RESULTS VOLATILE ORGANICS

COMPOUND	Quantitation Limit µg/L	Result µg/L	COMPOUND	Quantitation Limit µg/L	Result µg/L
Benzene	0.5	U	1,3-Dichloropropane	0.5	U
Bromobenzene	0.5	U	cis-1,3-Dichloropropene	0.5	U
Bromochloromethane	0.5	U	trans-1,3-Dichloropropene	0.5	U
Bromodichloromethane	0.5	U	2,2-Dichloropropane	0.5	U
Bromoform	0.5	U	1,1-Dichloropropene	0.5	U
Bromomethane	0.5	U	Ethylbenzene	0.5	U
n-butylbenzene	0.5	U	Hexachlorobutadiene	0.5	U
sec-butylbenzene	0.5	U	Isopropylbenzene	0.5	U
tert-butylbenzene	0.5	U	p-isopropyltoluene	0.5	U
Carbon Tetrachloride	0.5	U	Methylene Chloride	0.5	U
Chlorobenzene	0.5	U	Methyl-tert-butyl ether (MTBE)	0.5	U
Chloroethane	0.5	U	Naphthalene	0.5	U
Chloroform	0.5	U	n-Propylbenzene	0.5	U
Chloromethane	0.5	U	Styrene	0.5	U
2-Chlorotoluene	0.5	U	1,1,1,2-Tetrachloroethane	0.5	U
4-Chlorotoluene	0.5	U	1,1,2,2-Tetrachloroethane	0.5	U
Dibromochloromethane	0.5	U	Tetrachloroethene	0.5	U
1,2-Dibromo-3-chloropropane	0.5	U	Toluene	0.5	U
1,2-Dibromoethane	0.5	U	1,2,3-Trichlorobenzene	0.5	U
Dibromomethane	0.5	U	1,2,4-Trichlorobenzene	0.5	U
1,2-Dichlorobenzene	0.5	U	1,1,1-Trichloroethane	0.5	U
1,3-Dichlorobenzene	0.5	U	1,1,2-Trichloroethane	0.5	U
1,4-Dichlorobenzene	0.5	U	Trichloroethene	0.5	U
Dichlorodifluoromethane	0.5	U	Trichlorofluoromethane	0.5	U
1,1-Dichloroethane	0.5	U	1,2,3-Trichloropropane	0.5	U
1,2-Dichloroethane	0.5	U	1,2,4-Trimethylbenzene	0.5	U
1,1-Dichloroethene	0.5	U	1,3,5-Trimethylbenzene	0.5	U
cis-1,2-Dichloroethene	0.5	U	Vinyl Chloride	0.1	U
trans-1,2-Dichloroethene	0.5	U	o-Xylene	0.5	U
1,2-Dichloropropane	0.5	U	m,p-Xylene	0.5	U
Acetone	5	U	Diethyl ether	0.5	U
Carbon Disulfide	0.5	U	2-Hexanone	5	U
Tetrahydrofuran	2.5	U	Methyl isobutyl ketone	5	U
Methyl ethyl ketone	5	U	Di-isopropyl ether (DIPE)	0.5	U
t-Butyl alcohol (TBA)	10	U	Ethyl t-butyl ether (ETBE)	0.5	U
t-Amyl methyl ether (TAME)	0.5	U			

Surrogate Standard Recovery

1,4-Difluorobenzene	92 %	Bromofluorobenzene	73 %	1,2-Dichlorobenzene-d4	81 %

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analysis was conducted according to EPA 600, Method 524.2

COMMENTS:

NH 524 fuf(74)

Authorized signature

analytics environmental laboratory LLC

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Mr. Ron Pentkowski
Test America Burlington
30 Community Drive Suite 11
South Burlington VT 05403

May 9, 2008

CLIENT SAMPLE ID

Project Name: Maine FUDS

Project Number: 125361

Field Sample ID: cologd1-050508

SAMPLE DATA

Lab Sample ID: 61274-1
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 05/05/08
Lab Receipt Date: 05/09/08
Analysis Date: 05/09/08

ANALYTICAL RESULTS VOLATILE ORGANICS

COMPOUND	Quantitation Limit µg/L	Result µg/L	COMPOUND	Quantitation Limit µg/L	Result µg/L
Benzene	0.5	U	1,3-Dichloropropane	0.5	U
Bromobenzene	0.5	U	cis-1,3-Dichloropropene	0.5	U
Bromochloromethane	0.5	U	trans-1,3-Dichloropropene	0.5	U
Bromodichloromethane	0.5	U	2,2-Dichloropropane	0.5	U
Bromoform	0.5	U	1,1-Dichloropropene	0.5	U
Bromomethane	0.5	U	Ethylbenzene	0.5	U
n-butylbenzene	0.5	U	Hexachlorobutadiene	0.5	U
sec-butylbenzene	0.5	U	Isopropylbenzene	0.5	U
tert-butylbenzene	0.5	U	p-isopropyltoluene	0.5	U
Carbon Tetrachloride	0.5	U	Methylene Chloride	0.5	**0.8**
Chlorobenzene	0.5	**0.5**	Methyl-tert-butyl ether (MTBE)	0.5	U
Chloroethane	0.5	U	Naphthalene	0.5	U
Chloroform	0.5	**0.3 J**	n-Propylbenzene	0.5	U
Chloromethane	0.5	U	Styrene	0.5	U
2-Chlorotoluene	0.5	U	1,1,1,2-Tetrachloroethane	0.5	U
4-Chlorotoluene	0.5	U	1,1,2,2-Tetrachloroethane	0.5	U
Dibromochloromethane	0.5	**0.3 J**	Tetrachloroethene	0.5	U
1,2-Dibromo-3-chloropropane	0.5	U	Toluene	0.5	U
1,2-Dibromoethane	0.5	U	1,2,3-Trichlorobenzene	0.5	U
Dibromomethane	0.5	U	1,2,4-Trichlorobenzene	0.5	U
1,2-Dichlorobenzene	0.5	U	1,1,1-Trichloroethane	0.5	U
1,3-Dichlorobenzene	0.5	U	1,1,2-Trichloroethane	0.5	U
1,4-Dichlorobenzene	0.5	U	Trichloroethene	0.5	U
Dichlorodifluoromethane	0.5	U	Trichlorofluoromethane	0.5	U
1,1-Dichloroethane	0.5	U	1,2,3-Trichloropropane	0.5	U
1,2-Dichloroethane	0.5	U	1,2,4-Trimethylbenzene	0.5	U
1,1-Dichloroethene	0.5	U	1,3,5-Trimethylbenzene	0.5	U
cis-1,2-Dichloroethene	0.5	U	Vinyl Chloride	0.1	U
trans-1,2-Dichloroethene	0.5	U	o-Xylene	0.5	U
1,2-Dichloropropane	0.5	U	m,p-Xylene	0.5	U
Acetone	5	U	Diethyl ether	0.5	U
Carbon Disulfide	0.5	U	2-Hexanone	5	U
Tetrahydrofuran	2.5	**111 E**	Methyl isobutyl ketone	5	U
Methyl ethyl ketone	5	**6.7**	Di-isopropyl ether (DIPE)	0.5	U
t-Butyl alcohol (TBA)	10	U	Ethyl t-butyl ether (ETBE)	0.5	U
t-Amyl methyl ether (TAME)	0.5	U			

Surrogate Standard Recovery

1,4-Difluorobenzene	95 %	Bromofluorobenzene	71 %	1,2-Dichlorobenzene-d4	77 %

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analysis was conducted according to EPA 600, Method 524.2

COMMENTS:

NH 524 full(74)

Authorized signature

analytics environmental laboratory LLC

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Mr. Ron Pentkowski
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South Burlington VT 05403

May 9, 2008

SAMPLE DATA

CLIENT SAMPLE ID

Project Name: Maine FUDS

Project Number: 125361

Field Sample ID: COLOGDI-050508

Lab Sample ID: 61274-1 DL
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 20
Collection Date: 05/05/08
Lab Receipt Date: 05/09/08
Analysis Date: 05/09/08

ANALYTICAL RESULTS VOLATILE ORGANICS

COMPOUND	Quantitation Limit µg/L	Result µg/L	COMPOUND	Quantitation Limit µg/L	Result µg/L
Benzene	10	U	1,3-Dichloropropane	10	U
Bromobenzene	10	U	cis-1,3-Dichloropropene	10	U
Bromochloromethane	10	U	trans-1,3-Dichloropropene	10	U
Bromodichloromethane	10	U	2,2-Dichloropropane	10	U
Bromoform	10	U	1,1-Dichloropropene	10	U
Bromomethane	10	U	Ethylbenzene	10	U
n-butylbenzene	10	U	Hexachlorobutadiene	10	U
sec-butylbenzene	10	U	Isopropylbenzene	10	U
tert-butylbenzene	10	U	p-isopropyltoluene	10	U
Carbon Tetrachloride	10	U	Methylene Chloride	10	U
Chlorobenzene	10	U	Methyl-tert-butyl ether (MTBE)	10	U
Chloroethane	10	U	Naphthalene	10	U
Chloroform	10	U	n-Propylbenzene	10	U
Chloromethane	10	U	Styrene	10	U
2-Chlorotoluene	10	U	1,1,1,2-Tetrachloroethane	10	U
4-Chlorotoluene	10	U	1,1,2,2-Tetrachloroethane	10	U
Dibromochloromethane	10	U	Tetrachloroethene	10	U
1,2-Dibromo-3-chloropropane	10	U	Toluene	10	U
1,2-Dibromoethane	10	U	1,2,3-Trichlorobenzene	10	U
Dibromomethane	10	U	1,2,4-Trichlorobenzene	10	U
1,2-Dichlorobenzene	10	U	1,1,1-Trichloroethane	10	U
1,3-Dichlorobenzene	10	U	1,1,2-Trichloroethane	10	U
1,4-Dichlorobenzene	10	U	Trichloroethene	10	U
Dichlorodifluoromethane	10	U	Trichlorofluoromethane	10	U
1,1-Dichloroethane	10	U	1,2,3-Trichloropropane	10	U
1,2-Dichloroethane	10	U	1,2,4-Trimethylbenzene	10	U
1,1-Dichloroethene	10	U	1,3,5-Trimethylbenzene	10	U
cis-1,2-Dichloroethene	10	U	Vinyl Chloride	2	U
trans-1,2-Dichloroethene	10	U	o-Xylene	10	U
1,2-Dichloropropane	10	U	m,p-Xylene	10	U
Acetone	100	U	Diethyl ether	10	U
Carbon Disulfide	10	U	2-Hexanone	100	U
Tetrahydrofuran	50	97	Methyl isobutyl ketone	100	U
Methyl ethyl ketone	100	U	Di-isopropyl ether (DIPE)	10	U
t-Butyl alcohol (TBA)	200	U	Ethyl t-butyl ether (ETBE)	10	U
t-Amyl methyl ether (TAME)	10	U			

Surrogate Standard Recovery

1,4-Difluorobenzene	95 %	Bromofluorobenzene	76 %	1,2-Dichlorobenzene-d4	82 %

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analysis was conducted according to EPA 600, Method 524.2

COMMENTS:

NH 524 full(74)

Authorized signature

analytics environmental laboratory LLC

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Mr. Ron Pentkowski
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30 Community Drive Suite 11
South Burlington VT 05403

May 9, 2008

CLIENT SAMPLE ID

Project Name: Maine FUDS

Project Number: 125361

Field Sample ID: Trip Blank

SAMPLE DATA

Lab Sample ID: 61274-2
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 05/05/08
Lab Receipt Date: 05/09/08
Analysis Date: 05/09/08

ANALYTICAL RESULTS VOLATILE ORGANICS

COMPOUND	Quantitation Limit µg/L	Result µg/L	COMPOUND	Quantitation Limit µg/L	Result µg/L
Benzene	0.5	U	1,3-Dichloropropane	0.5	U
Bromobenzene	0.5	U	cis-1,3-Dichloropropene	0.5	U
Bromochloromethane	0.5	U	trans-1,3-Dichloropropene	0.5	U
Bromodichloromethane	0.5	U	2,2-Dichloropropane	0.5	U
Bromoform	0.5	U	1,1-Dichloropropene	0.5	U
Bromomethane	0.5	U	Ethylbenzene	0.5	U
n-butylbenzene	0.5	U	Hexachlorobutadiene	0.5	U
sec-butylbenzene	0.5	U	Isopropylbenzene	0.5	U
tert-butylbenzene	0.5	U	p-isopropyltoluene	0.5	U
Carbon Tetrachloride	0.5	U	Methylene Chloride	0.5	U
Chlorobenzene	0.5	U	Methyl-tert-butyl ether (MTBE)	0.5	U
Chloroethane	0.5	U	Naphthalene	0.5	U
Chloroform	0.5	U	n-Propylbenzene	0.5	U
Chloromethane	0.5	U	Styrene	0.5	U
2-Chlorotoluene	0.5	U	1,1,1,2-Tetrachloroethane	0.5	U
4-Chlorotoluene	0.5	U	1,1,2,2-Tetrachloroethane	0.5	U
Dibromochloromethane	0.5	U	Tetrachloroethene	0.5	U
1,2-Dibromo-3-chloropropane	0.5	U	Toluene	0.5	U
1,2-Dibromoethane	0.5	U	1,2,3-Trichlorobenzene	0.5	U
Dibromomethane	0.5	U	1,2,4-Trichlorobenzene	0.5	U
1,2-Dichlorobenzene	0.5	U	1,1,1-Trichloroethane	0.5	U
1,3-Dichlorobenzene	0.5	U	1,1,2-Trichloroethane	0.5	U
1,4-Dichlorobenzene	0.5	U	Trichloroethene	0.5	U
Dichlorodifluoromethane	0.5	U	Trichlorofluoromethane	0.5	U
1,1-Dichloroethane	0.5	U	1,2,3-Trichloropropane	0.5	U
1,2-Dichloroethane	0.5	U	1,2,4-Trimethylbenzene	0.5	U
1,1-Dichloroethene	0.5	U	1,3,5-Trimethylbenzene	0.5	U
cis-1,2-Dichloroethene	0.5	U	Vinyl Chloride	0.1	U
trans-1,2-Dichloroethene	0.5	U	o-Xylene	0.5	U
1,2-Dichloropropane	0.5	U	m,p-Xylene	0.5	U
Acetone	5	U	Diethyl ether	0.5	U
Carbon Disulfide	0.5	U	2-Hexanone	5	U
Tetrahydrofuran	2.5	U	Methyl isobutyl ketone	5	U
Methyl ethyl ketone	5	U	Di-isopropyl ether (DIPE)	0.5	U
t-Butyl alcohol (TBA)	10	U	Ethyl t-butyl ether (ETBE)	0.5	U
t-Amyl methyl ether (TAME)	0.5	U			

Surrogate Standard Recovery

1,4-Difluorobenzene	93 %	Bromofluorobenzene	71 %	1,2-Dichlorobenzene-d4	73 %

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analysis was conducted according to EPA 600, Method 524.2

COMMENTS:

NH 524 full(74)

Authorized signature

analytics environmental laboratory LLC

VOLATILE
DATA SUMMARIES

analytics environmental laboratory LLC

195 Commerce Way
Portsmouth, New Hampshire 03801
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800-929-9906

Mr. Ron Pentkowski
Test America Burlington
30 Community Drive Suite 11
South Burlington VT 05403

May 9, 2008

CLIENT SAMPLE ID

Project Name: Maine FUDS

Project Number: 125361

Field Sample ID: LAB QC

SAMPLE DATA

Lab Sample ID: B505098I
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: N/A
Lab Receipt Date: N/A
Analysis Date: 05/09/08

ANALYTICAL RESULTS VOLATILE ORGANICS

COMPOUND	Quantitation Limit µg/L	Result µg/L	COMPOUND	Quantitation Limit µg/L	Result µg/L
Benzene	0.5	U	1,3-Dichloropropane	0.5	U
Bromobenzene	0.5	U	cis-1,3-Dichloropropene	0.5	U
Bromochloromethane	0.5	U	trans-1,3-Dichloropropene	0.5	U
Bromodichloromethane	0.5	U	2,2-Dichloropropane	0.5	U
Bromoform	0.5	U	1,1-Dichloropropene	0.5	U
Bromomethane	0.5	U	Ethylbenzene	0.5	U
n-butylbenzene	0.5	U	Hexachlorobutadiene	0.5	U
sec-butylbenzene	0.5	U	Isopropylbenzene	0.5	U
tert-butylbenzene	0.5	U	p-isopropyltoluene	0.5	U
Carbon Tetrachloride	0.5	U	Methylene Chloride	0.5	U
Chlorobenzene	0.5	U	Methyl-tert-butyl ether (MTBE)	0.5	U
Chloroethane	0.5	U	Naphthalene	0.5	U
Chloroform	0.5	U	n-Propylbenzene	0.5	U
Chloromethane	0.5	U	Styrene	0.5	U
2-Chlorotoluene	0.5	U	1,1,1,2-Tetrachloroethane	0.5	U
4-Chlorotoluene	0.5	U	1,1,2,2-Tetrachloroethane	0.5	U
Dibromochloromethane	0.5	U	Tetrachloroethene	0.5	U
1,2-Dibromo-3-chloropropane	0.5	U	Toluene	0.5	U
1,2-Dibromoethane	0.5	U	1,2,3-Trichlorobenzene	0.5	U
Dibromomethane	0.5	U	1,2,4-Trichlorobenzene	0.5	U
1,2-Dichlorobenzene	0.5	U	1,1,1-Trichloroethane	0.5	U
1,3-Dichlorobenzene	0.5	U	1,1,2-Trichloroethane	0.5	U
1,4-Dichlorobenzene	0.5	U	Trichloroethene	0.5	U
Dichlorodifluoromethane	0.5	U	Trichlorofluoromethane	0.5	U
1,1-Dichloroethane	0.5	U	1,2,3-Trichloropropane	0.5	U
1,2-Dichloroethane	0.5	U	1,2,4-Trimethylbenzene	0.5	U
1,1-Dichloroethene	0.5	U	1,3,5-Trimethylbenzene	0.5	U
cis-1,2-Dichloroethene	0.5	U	Vinyl Chloride	0.1	U
trans-1,2-Dichloroethene	0.5	U	o-Xylene	0.5	U
1,2-Dichloropropane	0.5	U	m,p-Xylene	0.5	U
Acetone	5	U	Diethyl ether	0.5	U
Carbon Disulfide	0.5	U	2-Hexanone	5	U
Tetrahydrofuran	2.5	U	Methyl isobutyl ketone	5	U
Methyl ethyl ketone	5	U	Di-isopropyl ether (DIPE)	0.5	U
t-Butyl alcohol (TBA)	10	U	Ethyl t-butyl ether (ETBE)	0.5	U
t-Amyl methyl ether (TAME)	0.5	U			

Surrogate Standard Recovery

1,4-Difluorobenzene	92 %	Bromofluorobenzene	73 %	1,2-Dichlorobenzene-d4	81 %

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analysis was conducted according to EPA 600, Method 524.2

COMMENTS:

NH 524 full(74)

Authorized signature

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\DATA\050908-I\I29423B.D Vial: 5
Acq On : 9 May 2008 11:23 am Operator:
Sample : B505098I Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 9 11:26 2008 Quant Results File: V505048I.RES

Quant Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration
DataAcq Meth : V504258I

5.9.08

DF = 1.0
dL = 0.5

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.49	168	232452	4.00	ug/L	0.01
39) Fluorobenzene	8.89	96	609607	4.00	ug/L	0.00
63) d5-Chlorobenzene	13.70	117	349668	4.00	ug/L	0.01
87) 1,4-Dichlorobenzene-d4	17.54	152	125267	4.00	ug/L	0.01
System Monitoring Compounds						
28) DB Holder #28	9.01	114	461302	3.68	ug/L	0.00
Spiked Amount 4.000	Range 70 - 130		Recovery = 92.00%			
36) 1,4-Difluorobenzene	9.01	114	461302	3.68	ug/L	0.00
Spiked Amount 4.000	Range 70 - 130		Recovery = 92.00%			
54) Bromofluorobenzene	15.63	95	152886	2.92	ug/L	0.01
Spiked Amount 4.000	Range 70 - 130		Recovery = 73.00%			
73) 1,2-Dichlorobenzene-d4	18.14	152	102207	3.24	ug/L	0.00
Spiked Amount 4.000	Range 70 - 130		Recovery = 81.00%			
Target Compounds						Qvalue
4) Vinyl Chloride	2.22	62	1515	Below Cal		70
12) Acetone	3.89	43	3578	Below Cal		99
16) Methylene Chloride	4.86	84	24334	Below Cal		96
31) Tetrahydrofuran	7.65	42	879	Below Cal	#	44

ND

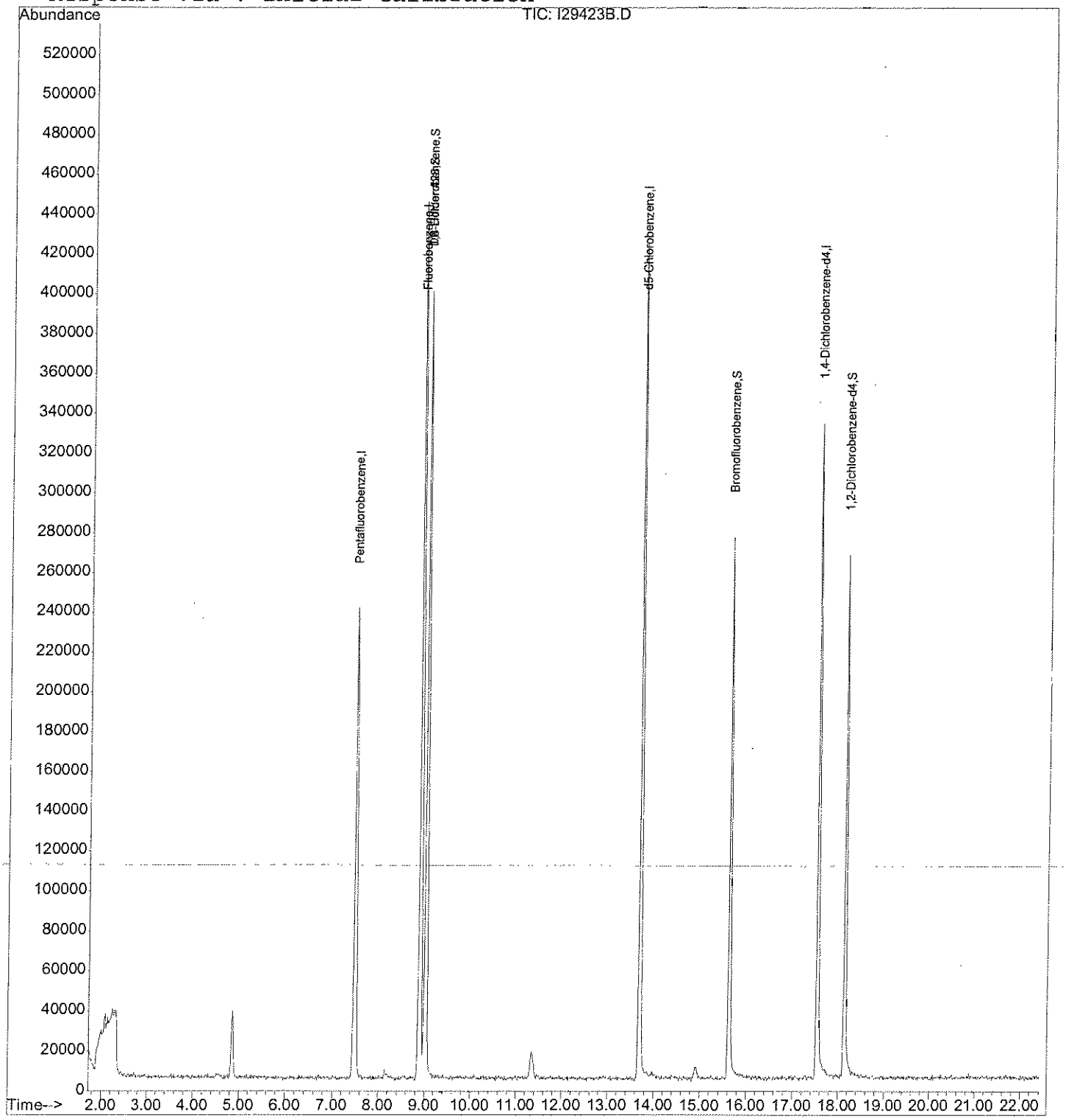
35-90

(#) = qualifier out of range (m) = manual integration
I29423B.D V505048I.M Fri May 09 11:26:26 2008 Page 1

Quantitation Report

Data File : D:\HPCHEM\DATA\050908-I\I29423B.D Vial: 5
Acq On : 9 May 2008 11:23 am Operator:
Sample : B505098I Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 9 11:26 2008 Quant Results File: V505048I.RES

Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration



analytics environmental laboratory LLC

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800-929-9906

Mr. Ron Pentkowski
Test America Burlington
30 Community Drive Suite 11
South Burlington VT 05403

May 9, 2008

CLIENT SAMPLE ID

Project Name: Maine FUDS

Project Number: 125361

Field Sample ID: cologd1-050508

SAMPLE DATA

Lab Sample ID: 61274-1
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 05/05/08
Lab Receipt Date: 05/09/08
Analysis Date: 05/09/08

ANALYTICAL RESULTS VOLATILE ORGANICS

COMPOUND	Quantitation Limit µg/L	Result µg/L	COMPOUND	Quantitation Limit µg/L	Result µg/L
Benzene	0.5	U	1,3-Dichloropropane	0.5	U
Bromobenzene	0.5	U	cis-1,3-Dichloropropene	0.5	U
Bromochloromethane	0.5	U	trans-1,3-Dichloropropene	0.5	U
Bromodichloromethane	0.5	U	2,2-Dichloropropane	0.5	U
Bromoform	0.5	U	1,1-Dichloropropene	0.5	U
Bromomethane	0.5	U	Ethylbenzene	0.5	U
n-butylbenzene	0.5	U	Hexachlorobutadiene	0.5	U
sec-butylbenzene	0.5	U	Isopropylbenzene	0.5	U
tert-butylbenzene	0.5	U	p-isopropyltoluene	0.5	U
Carbon Tetrachloride	0.5	U	Methylene Chloride	0.5	**0.8**
Chlorobenzene	0.5	**0.5**	Methyl-tert-butyl ether (MTBE)	0.5	U
Chloroethane	0.5	U	Naphthalene	0.5	U
Chloroform	0.5	**0.3 J**	n-Propylbenzene	0.5	U
Chloromethane	0.5	U	Styrene	0.5	U
2-Chlorotoluene	0.5	U	1,1,1,2-Tetrachloroethane	0.5	U
4-Chlorotoluene	0.5	U	1,1,2,2-Tetrachloroethane	0.5	U
Dibromochloromethane	0.5	**0.3 J**	Tetrachloroethene	0.5	U
1,2-Dibromo-3-chloropropane	0.5	U	Toluene	0.5	U
1,2-Dibromoethane	0.5	U	1,2,3-Trichlorobenzene	0.5	U
Dibromomethane	0.5	U	1,2,4-Trichlorobenzene	0.5	U
1,2-Dichlorobenzene	0.5	U	1,1,1-Trichloroethane	0.5	U
1,3-Dichlorobenzene	0.5	U	1,1,2-Trichloroethane	0.5	U
1,4-Dichlorobenzene	0.5	U	Trichloroethene	0.5	U
Dichlorodifluoromethane	0.5	U	Trichlorofluoromethane	0.5	U
1,1-Dichloroethane	0.5	U	1,2,3-Trichloropropane	0.5	U
1,2-Dichloroethane	0.5	U	1,2,4-Trimethylbenzene	0.5	U
1,1-Dichloroethene	0.5	U	1,3,5-Trimethylbenzene	0.5	U
cis-1,2-Dichloroethene	0.5	U	Vinyl Chloride	0.1	U
trans-1,2-Dichloroethene	0.5	U	o-Xylene	0.5	U
1,2-Dichloropropane	0.5	U	m,p-Xylene	0.5	U
Acetone	5	U	Diethyl ether	0.5	U
Carbon Disulfide	0.5	U	2-Hexanone	5	U
Tetrahydrofuran	2.5	**111 E**	Methyl isobutyl ketone	5	U
Methyl ethyl ketone	5	**6.7**	Di-isopropyl ether (DIPE)	0.5	U
t-Butyl alcohol (TBA)	10	U	Ethyl t-butyl ether (ETBE)	0.5	U
t-Amyl methyl ether (TAME)	0.5	U			

Surrogate Standard Recovery

1,4-Difluorobenzene	95 %	Bromofluorobenzene	71 %	1,2-Dichlorobenzene-d4	77 %

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analysis was conducted according to EPA 600, Method 524.2

COMMENTS:

NH 524 full(74)

Authorized signature

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\DATA\050908-I\I29430.D Vial: 12
Acq On : 9 May 2008 3:15 pm Operator:
Sample : 61274-1 Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 9 15:39 2008 Quant Results File: V505048I.RES

Quant Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 09 15:39:25 2008
Response via : Initial Calibration
DataAcq Meth : V505048I

5.9.08

df=1
dl=0.5

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.49	168	208367	4.00	ug/L	0.02
39) Fluorobenzene	8.89	96	554910	4.00	ug/L	0.00
63) d5-Chlorobenzene	13.70	117	320229	4.00	ug/L	0.02
87) 1,4-Dichlorobenzene-d4	17.54	152	111010	4.00	ug/L	0.02
System Monitoring Compounds						
28) DB Holder #28	9.02	114	427836	3.81	ug/L	0.00
Spiked Amount 4.000	Range 70 - 130		Recovery = 95.25%			
36) 1,4-Difluorobenzene	9.02	114	427836	3.81	ug/L	0.00
Spiked Amount 4.000	Range 70 - 130		Recovery = 95.25%			
54) Bromofluorobenzene	15.63	95	134772	2.83	ug/L	0.02
Spiked Amount 4.000	Range 70 - 130		Recovery = 70.75%			
73) 1,2-Dichlorobenzene-d4	18.14	152	89254	3.09	ug/L	0.00
Spiked Amount 4.000	Range 70 - 130		Recovery = 77.25%			
Target Compounds						Qvalue
3) Chloromethane	2.08	50	1907	~~Below Cal~~		90
4) Vinyl Chloride	2.20	62	1976	~~Below Cal~~		94
16) Methylene Chloride	4.86	84	63615	0.83	ug/L	94
23) Methyl ethyl ketone	6.77	72	10768	6.74	ug/L	91
29) Chloroform	7.27	83	23413	J 0.27	ug/L	92
31) Tetrahydrofuran	7.60	42	413453	E 111.00	ug/L	96
61) Dibromochloromethane	12.78	129	7503	J 0.30	ug/L	96
64) Chlorobenzene	13.76	112	45394	0.53	ug/L	97

MR
1mL
2.5mL
5.9.08

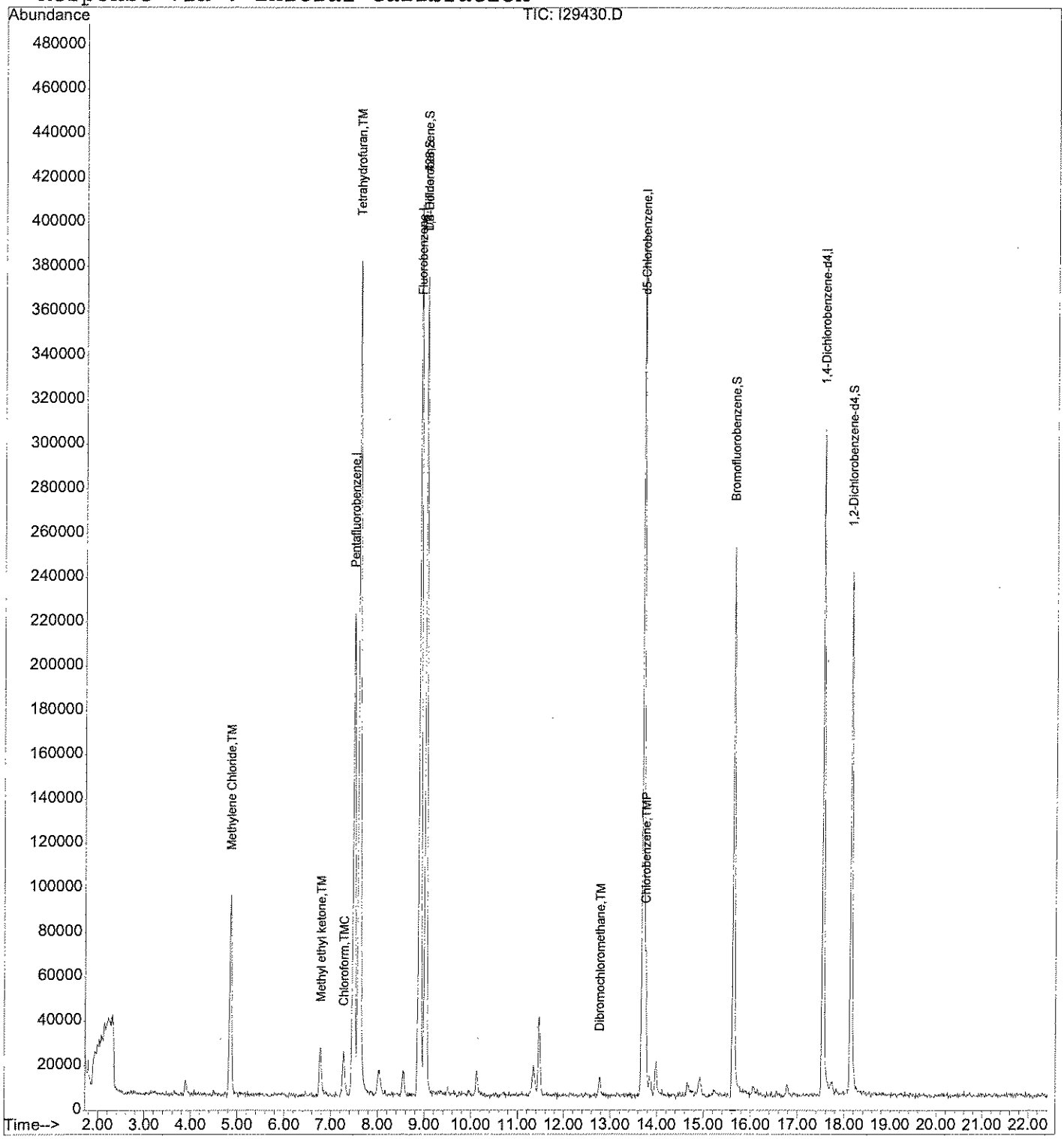
05-908

(#) = qualifier out of range (m) = manual integration
I29430.D V505048I.M Fri May 09 15:39:36 2008 Page 1

Quantitation Report

Data File : D:\HPCHEM\DATA\050908-I\I29430.D Vial: 12
Acq On : 9 May 2008 3:15 pm Operator:
Sample : 61274-1 Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 9 15:39 2008 Quant Results File: V505048I.RES

Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 09 15:39:25 2008
Response via : Initial Calibration



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Mr. Ron Pentkowski
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South Burlington VT 05403

May 9, 2008

CLIENT SAMPLE ID

Project Name: Maine FUDS

Project Number: 125361

Field Sample ID: COLOGD1-050508

SAMPLE DATA

Lab Sample ID: 61274-1 DL
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 20
Collection Date: 05/05/08
Lab Receipt Date: 05/09/08
Analysis Date: 05/09/08

ANALYTICAL RESULTS VOLATILE ORGANICS

COMPOUND	Quantitation Limit µg/L	Result µg/L	COMPOUND	Quantitation Limit µg/L	Result µg/L
Benzene	10	U	1,3-Dichloropropane	10	U
Bromobenzene	10	U	cis-1,3-Dichloropropene	10	U
Bromochloromethane	10	U	trans-1,3-Dichloropropene	10	U
Bromodichloromethane	10	U	2,2-Dichloropropane	10	U
Bromoform	10	U	1,1-Dichloropropene	10	U
Bromomethane	10	U	Ethylbenzene	10	U
n-butylbenzene	10	U	Hexachlorobutadiene	10	U
sec-butylbenzene	10	U	Isopropylbenzene	10	U
tert-butylbenzene	10	U	p-isopropyltoluene	10	U
Carbon Tetrachloride	10	U	Methylene Chloride	10	U
Chlorobenzene	10	U	Methyl-tert-butyl ether (MTBE)	10	U
Chloroethane	10	U	Naphthalene	10	U
Chloroform	10	U	n-Propylbenzene	10	U
Chloromethane	10	U	Styrene	10	U
2-Chlorotoluene	10	U	1,1,1,2-Tetrachloroethane	10	U
4-Chlorotoluene	10	U	1,1,2,2-Tetrachloroethane	10	U
Dibromochloromethane	10	U	Tetrachloroethene	10	U
1,2-Dibromo-3-chloropropane	10	U	Toluene	10	U
1,2-Dibromoethane	10	U	1,2,3-Trichlorobenzene	10	U
Dibromomethane	10	U	1,2,4-Trichlorobenzene	10	U
1,2-Dichlorobenzene	10	U	1,1,1-Trichloroethane	10	U
1,3-Dichlorobenzene	10	U	1,1,2-Trichloroethane	10	U
1,4-Dichlorobenzene	10	U	Trichloroethene	10	U
Dichlorodifluoromethane	10	U	Trichlorofluoromethane	10	U
1,1-Dichloroethane	10	U	1,2,3-Trichloropropane	10	U
1,2-Dichloroethane	10	U	1,2,4-Trimethylbenzene	10	U
1,1-Dichloroethene	10	U	1,3,5-Trimethylbenzene	10	U
cis-1,2-Dichloroethene	10	U	Vinyl Chloride	2	U
trans-1,2-Dichloroethene	10	U	o-Xylene	10	U
1,2-Dichloropropane	10	U	m,p-Xylene	10	U
Acetone	100	U	Diethyl ether	10	U
Carbon Disulfide	10	U	2-Hexanone	100	U
Tetrahydrofuran	50	**97**	Methyl isobutyl ketone	100	U
Methyl ethyl ketone	100	U	Di-isopropyl ether (DIPE)	10	U
t-Butyl alcohol (TBA)	200	U	Ethyl t-butyl ether (ETBE)	10	U
t-Amyl methyl ether (TAME)	10	U			

Surrogate Standard Recovery

1,4-Difluorobenzene	95 %	Bromofluorobenzene	76 %	1,2-Dichlorobenzene-d4	82 %

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analysis was conducted according to EPA 600, Method 524.2

COMMENTS:

NH 524 full(74)

Authorized signature

Quantitation Report (Not Reviewed)

Q

Data File : D:\HPCHEM\DATA\050908-I\I29432.D Vial: 14
Acq On : 9 May 2008 4:27 pm Operator:
Sample : 61274-1 Inst : GC/MS Ins
Misc : 1250 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 9 16:40 2008 Quant Results File: V505048I.RES

Quant Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration
DataAcq Meth : V505048I

AK 5.09.08
DF=20
DL=10

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.49	168	208480	4.00	ug/L	0.01
39) Fluorobenzene	8.90	96	558710	4.00	ug/L	0.01
63) d5-Chlorobenzene	13.70	117	335034	4.00	ug/L	0.01
87) 1,4-Dichlorobenzene-d4	17.54	152	118568	4.00	ug/L	0.01
System Monitoring Compounds						
28) DB Holder #28	9.01	114	426833	3.79	ug/L	0.00
Spiked Amount 4.000	Range 70 - 130		Recovery = 94.75%			
36) 1,4-Difluorobenzene	9.01	114	426833	3.79	ug/L	0.00
Spiked Amount 4.000	Range 70 - 130		Recovery = 94.75%			
54) Bromofluorobenzene	15.63	95	145866	3.04	ug/L	0.01
Spiked Amount 4.000	Range 70 - 130		Recovery = 76.00%			
73) 1,2-Dichlorobenzene-d4	18.15	152	98996	3.27	ug/L	0.01
Spiked Amount 4.000	Range 70 - 130		Recovery = 81.75%			
Target Compounds						Qvalue
~~4) Vinyl Chloride~~	2.21	62	662	~~Below Cal~~	#	48
~~12) Acetone~~	3.90	43	2415	~~Below Cal~~	#	76
~~16) Methylene Chloride~~	4.85	84	15804	~~Below Cal~~		93
31) Tetrahydrofuran	7.63	42	21580	4.83	ug/L	93

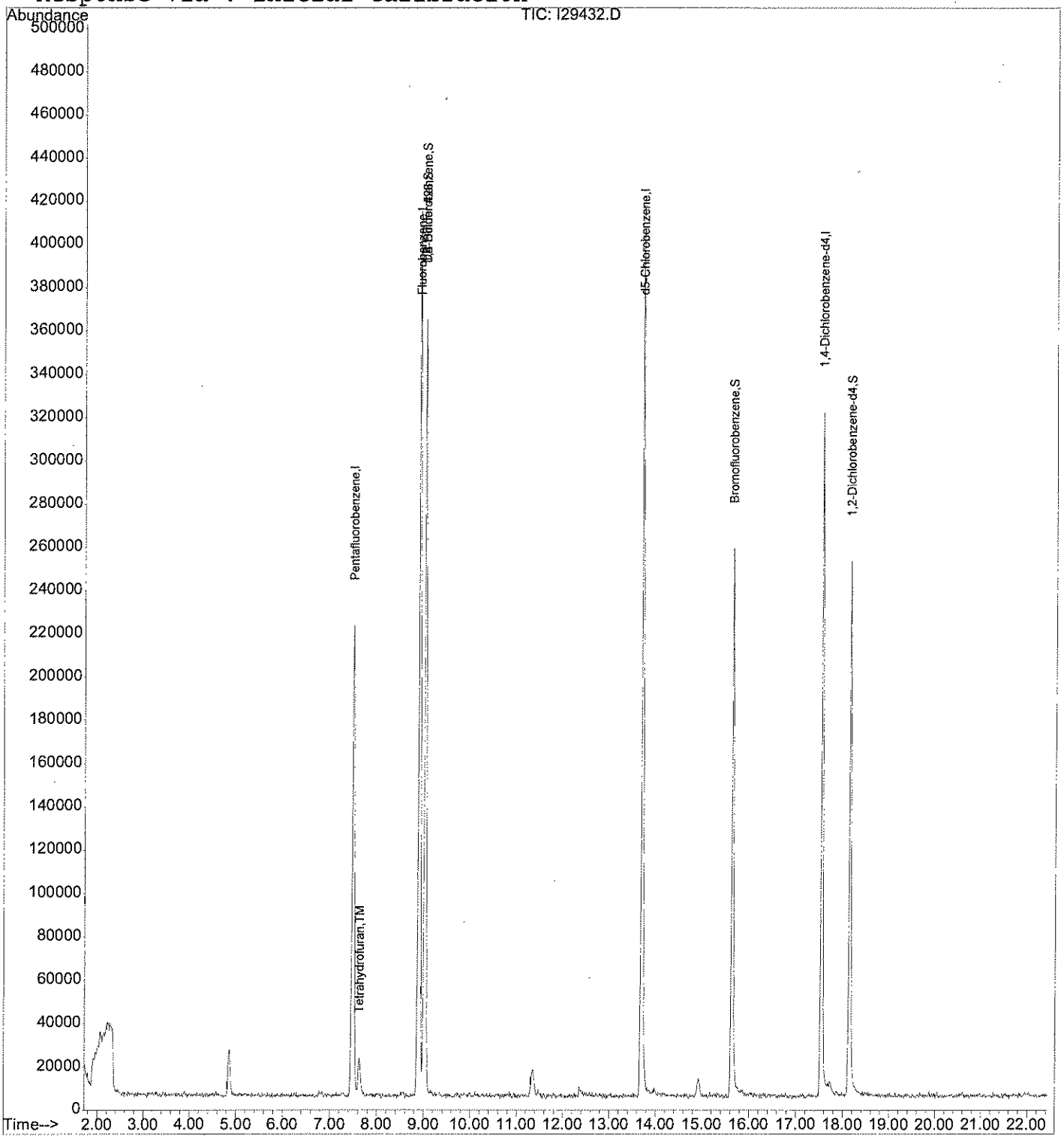
JJ. 1308

(#) = qualifier out of range (m) = manual integration
I29432.D V505048I.M Fri May 09 16:40:44 2008 Page 1

Quantitation Report

Data File : D:\HPCHEM\DATA\050908-I\I29432.D Vial: 14
Acq On : 9 May 2008 4:27 pm Operator:
Sample : 61274-1 Inst : GC/MS Ins
Misc : 1250 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 9 16:40 2008 Quant Results File: V505048I.RES

Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration



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Mr. Ron Pentkowski
Test America Burlington
30 Community Drive Suite 11
South Burlington VT 05403

May 9, 2008

SAMPLE DATA

CLIENT SAMPLE ID

Project Name: Maine FUDS

Project Number: 125361

Field Sample ID: Trip Blank

Lab Sample ID: 61274-2
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 05/05/08
Lab Receipt Date: 05/09/08
Analysis Date: 05/09/08

ANALYTICAL RESULTS VOLATILE ORGANICS

COMPOUND	Quantitation Limit µg/L	Result µg/L	COMPOUND	Quantitation Limit µg/L	Result µg/L
Benzene	0.5	U	1,3-Dichloropropane	0.5	U
Bromobenzene	0.5	U	cis-1,3-Dichloropropene	0.5	U
Bromochloromethane	0.5	U	trans-1,3-Dichloropropene	0.5	U
Bromodichloromethane	0.5	U	2,2-Dichloropropane	0.5	U
Bromoform	0.5	U	1,1-Dichloropropene	0.5	U
Bromomethane	0.5	U	Ethylbenzene	0.5	U
n-butylbenzene	0.5	U	Hexachlorobutadiene	0.5	U
sec-butylbenzene	0.5	U	Isopropylbenzene	0.5	U
tert-butylbenzene	0.5	U	p-isopropyltoluene	0.5	U
Carbon Tetrachloride	0.5	U	Methylene Chloride	0.5	U
Chlorobenzene	0.5	U	Methyl-tert-butyl ether (MTBE)	0.5	U
Chloroethane	0.5	U	Naphthalene	0.5	U
Chloroform	0.5	U	n-Propylbenzene	0.5	U
Chloromethane	0.5	U	Styrene	0.5	U
2-Chlorotoluene	0.5	U	1,1,1,2-Tetrachloroethane	0.5	U
4-Chlorotoluene	0.5	U	1,1,2,2-Tetrachloroethane	0.5	U
Dibromochloromethane	0.5	U	Tetrachloroethene	0.5	U
1,2-Dibromo-3-chloropropane	0.5	U	Toluene	0.5	U
1,2-Dibromoethane	0.5	U	1,2,3-Trichlorobenzene	0.5	U
Dibromomethane	0.5	U	1,2,4-Trichlorobenzene	0.5	U
1,2-Dichlorobenzene	0.5	U	1,1,1-Trichloroethane	0.5	U
1,3-Dichlorobenzene	0.5	U	1,1,2-Trichloroethane	0.5	U
1,4-Dichlorobenzene	0.5	U	Trichloroethene	0.5	U
Dichlorodifluoromethane	0.5	U	Trichlorofluoromethane	0.5	U
1,1-Dichloroethane	0.5	U	1,2,3-Trichloropropane	0.5	U
1,2-Dichloroethane	0.5	U	1,2,4-Trimethylbenzene	0.5	U
1,1-Dichloroethene	0.5	U	1,3,5-Trimethylbenzene	0.5	U
cis-1,2-Dichloroethene	0.5	U	Vinyl Chloride	0.1	U
trans-1,2-Dichloroethene	0.5	U	o-Xylene	0.5	U
1,2-Dichloropropane	0.5	U	m,p-Xylene	0.5	U
Acetone	5	U	Diethyl ether	0.5	U
Carbon Disulfide	0.5	U	2-Hexanone	5	U
Tetrahydrofuran	2.5	U	Methyl isobutyl ketone	5	U
Methyl ethyl ketone	5	U	Di-isopropyl ether (DIPE)	0.5	U
t-Butyl alcohol (TBA)	10	U	Ethyl t-butyl ether (ETBE)	0.5	U
t-Amyl methyl ether (TAME)	0.5	U			

Surrogate Standard Recovery

1,4-Difluorobenzene	93 %	Bromofluorobenzene	71 %	1,2-Dichlorobenzene-d4	73 %

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analysis was conducted according to EPA 600, Method 524.2

COMMENTS:

NH 524 full(74)

Authorized signature

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\DATA\050908-I\I29424.D Vial: 6
Acq On : 9 May 2008 11:56 am Operator:
Sample : 61274-2 Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 9 12:10 2008 Quant Results File: V505048I.RES

Quant Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration
DataAcq Meth : V505048I

5.9.08

df=1
dc=0.5

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.49	168	222878	4.00	ug/L	0.01
39) Fluorobenzene	8.89	96	585152	4.00	ug/L	0.00
63) d5-Chlorobenzene	13.70	117	338942	4.00	ug/L	0.01
87) 1,4-Dichlorobenzene-d4	17.54	152	111391	4.00	ug/L	0.01
System Monitoring Compounds						
28) DB Holder #28	9.01	114	449043	3.73	ug/L	0.00
Spiked Amount 4.000	Range 70 - 130		Recovery = 93.25%			
36) 1,4-Difluorobenzene	9.01	114	449043	3.73	ug/L	0.00
Spiked Amount 4.000	Range 70 - 130		Recovery = 93.25%			
54) Bromofluorobenzene	15.63	95	142920	2.85	ug/L	0.01
Spiked Amount 4.000	Range 70 - 130		Recovery = 71.25%			
73) 1,2-Dichlorobenzene-d4	18.14	152	89264	2.92	ug/L	0.00
Spiked Amount 4.000	Range 70 - 130		Recovery = 73.00%			
Target Compounds						Qvalue
3) Chloromethane	2.08	50	1761	Below Cal	#	59
4) Vinyl Chloride	2.23	62	724	Below Cal		69
12) Acetone	3.90	43	3145	Below Cal	#	12
18) Methylene Chloride	4.85	84	5132	Below Cal		95
31) Tetrahydrofuran	7.61	42	442	Below Cal	#	43

(ND)

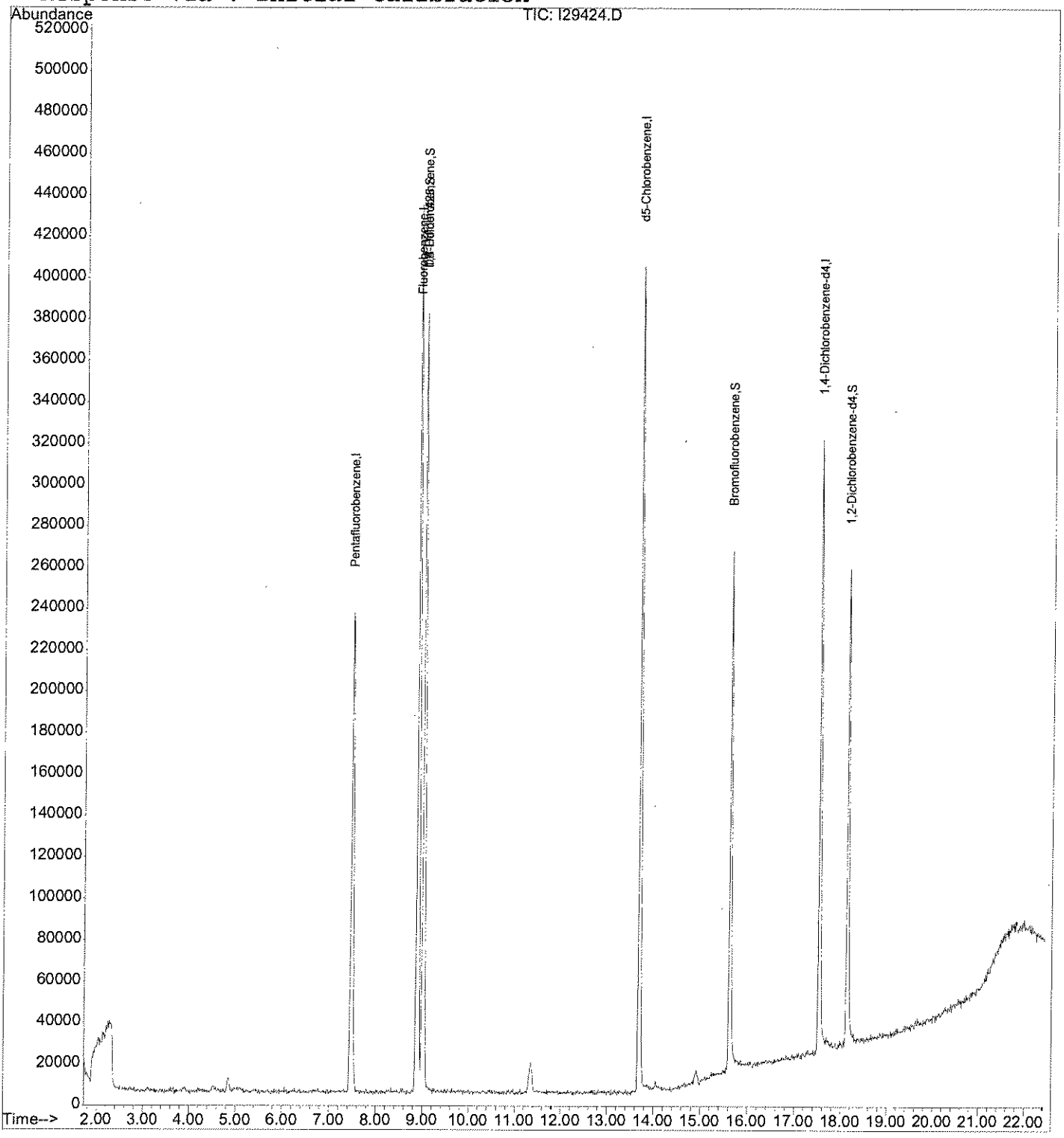
35900

(#) = qualifier out of range (m) = manual integration
I29424.D V505048I.M Fri May 09 12:10:04 2008 Page 1

Quantitation Report

Data File : D:\HPCHEM\DATA\050908-I\I29424.D Vial: 6
Acq On : 9 May 2008 11:56 am Operator:
Sample : 61274-2 Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 9 12:10 2008 Quant Results File: V505048I.RES

Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration



analytics environmental laboratory LLC

VOLATILE
QC FORMS

AnalyticsLLC: AEL Documents LLC: Pkg Dividers: VOCQC.doc

VOLATILE ORGANIC AQUEOUS
SYSTEM MONITORING COMPOUNDS
SUMMARY

Instrument ID: I
GC Column: RTX-502.2
Column ID: 0.25 mm

SDG: 61274

SAMPLE ID	SMC 1 (%)	#	SMC 2 (%)	#	SMC 3 (%)	#
L505098I	94		78		87	
L505098I2	92		77		87	
B505098I	92		73		81	
61274-2	93		71		73	
61274-1	95		71		77	
61274-1, DL	95		76		82	

		Lower Limit	Upper Limit
SMC #1 =	1,4-Difluorobenzene	70	130
SMC #2 =	Bromofluorobenzene	70	130
SMC #3 =	1,2-Dichlorobenzene-d4	70	130

\# Column to be used to flag recovery values outside of QC limits
* Values outside QC limits
D System Monitoring Compound diluted out

VOA FORM 2

VOLATILE ORGANIC AQUEOUS
LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
PERCENT RECOVERY

Instrument ID: 1
GC Column: RTX-502.2
Column ID: 0.25 mm

SDG: 61274
Non-spiked sample: B5050981
Spike: L5050981
Spike Duplicate L5050981 2

COMPOUND	SPIKE ADDED	LOWER LIMIT	UPPER LIMIT	RPD LIMIT	NON-SPIKE RESULT (ug/L)	SPIKE RESULT (ug/L)	SPIKE % REC	#	SPIKE DUP RESULT (ug/L)	SPIKE DUP % REC	#	RPD	#
Dichlorodifluoromethane	1	70	130	15	0.00	0.80	80		0.76	76		4	
Chloromethane	1	70	130	15	0.00	0.79	79		0.74	74		6	
Vinyl Chloride	1	70	130	15	0.00	0.94	94		0.85	85		11	
Bromomethane	1	70	130	15	0.00	0.88	88		0.84	84		4	
Chloroethane	1	70	130	15	0.00	0.85	85		0.81	81		5	
t-Butyl alcohol (TBA)	5	70	130	15	0.00	4.23	85		4.09	82		3	
Trichlorofluoromethane	1	70	130	15	0.00	0.86	86		0.82	82		4	
Diethyl ether	1	70	130	15	0.00	0.88	88		0.83	83		6	
1,1,2-Trichlorotrifluoroethane	1	70	130	15	0.00	0.94	94		0.90	90		5	
Acetone	5	70	130	15	0.00	3.55	71		3.53	71		1	
1,1-Dichloroethene	1	70	130	15	0.00	0.93	93		0.90	90		4	
Di-isopropyl ether (DIPE)	1	70	130	15	0.00	0.90	90		0.86	86		5	
Methylene Chloride	1	70	130	15	0.00	0.72	72		0.74	74		3	
Carbon Disulfide	1	70	130	15	0.00	0.92	92		0.89	89		4	
Acrylonitrile	1	70	130	15	0.00	0.74	74		0.84	84		12	
Methyl-tert-butyl ether (MTBE)	2	70	130	15	0.00	1.75	87		1.67	84		4	
trans-1,2-Dichloroethene	1	70	130	15	0.00	0.88	88		0.84	84		4	
1,1-Dichloroethane	1	70	130	15	0.00	0.90	90		0.86	86		5	
Methyl ethyl ketone	5	70	130	15	0.00	4.12	82		3.90	78		6	
Ethyl t-butyl ether (ETBE)	1	70	130	15	0.00	0.88	88		0.84	84		4	
2,2-Dichloropropane	1	70	130	15	0.00	0.92	92		0.90	90		2	
cis-1,2-Dichloroethene	1	70	130	15	0.00	0.90	90		0.88	88		2	
t-Amyl methyl ether (TAME)	1	70	130	15	0.00	0.88	88		0.84	84		5	
Chloroform	1	70	130	15	0.00	0.88	88		0.89	89		0	
Bromochloromethane	1	70	130	15	0.00	0.85	85		0.83	83		3	
Tetrahydrofuran	1	70	130	15	0.00	0.83	83		0.81	81		2	
1,1,1-Trichloroethane	1	70	130	15	0.00	0.89	89		0.86	86		3	
1,1-Dichloropropene	1	70	130	15	0.00	0.86	86		0.85	85		2	
Carbon Tetrachloride	1	70	130	15	0.00	0.90	90		0.88	88		1	
1,2-Dichloroethane	1	70	130	15	0.00	0.91	91		0.87	87		4	
Benzene	1	70	130	15	0.00	0.85	85		0.83	83		3	
Trichloroethene	1	70	130	15	0.00	0.93	93		0.92	92		1	
1,2-Dichloropropane	1	70	130	15	0.00	0.92	92		0.90	90		2	
Bromodichloromethane	1	70	130	15	0.00	0.95	95		0.96	96		1	
Dibromomethane	1	70	130	15	0.00	0.94	94		0.91	91		4	
2-Hexanone	5	70	130	15	0.00	3.61	72		3.54	71		2	
Methyl isobutyl ketone	5	70	130	15	0.00	4.06	81		4.07	81		0	
cis-1,3-Dichloropropene	1	70	130	15	0.00	0.94	94		0.90	90		4	
Toluene	1	70	130	15	0.00	0.90	90		0.89	89		1	
trans-1,3-Dichloropropene	1	70	130	15	0.00	0.83	83		0.78	78		5	
1,1,2-Trichloroethane	1	70	130	15	0.00	0.91	91		0.94	94		4	
1,3-Dichloropropane	1	70	130	15	0.00	0.88	88		0.87	87		1	
Tetrachloroethene	1	70	130	15	0.00	1.01	101		0.99	99		2	
Dibromochloromethane	1	70	130	15	0.00	0.89	89		0.86	86		4	
1,2-Dibromoethane	1	70	130	15	0.00	0.89	89		0.88	88		2	
Chlorobenzene	1	70	130	15	0.00	1.04	104		1.05	105		1	

VOA FORM 3

VOLATILE ORGANIC AQUEOUS
LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
PERCENT RECOVERY

Instrument ID: 1
GC Column: RTX-502.2
Column ID: 0.25 mm

SDG: 61274
Non-spiked sample: B5050981
Spike: L5050981
Spike Duplicate L50509812

COMPOUND	SPIKE ADDED	LOWER LIMIT	UPPER LIMIT	RPD LIMIT	NON-SPIKE RESULT (ug/L)	SPIKE RESULT (ug/L)	SPIKE % REC	#	SPIKE DUP RESULT (ug/L)	SPIKE DUP % REC	#	RPD	#
1,1,1,2-Tetrachloroethane	1	70	130	15	0.00	1.02	102		1.02	102		0	
Ethylbenzene	1	70	130	15	0.00	1.04	104		1.04	104		0	
m,p-Xylene	2	70	130	15	0.00	2.07	103		2.09	105		1	
o-Xylene	1	70	130	15	0.00	1.00	100		1.00	100		0	
Styrene	1	70	130	15	0.00	1.01	101		1.00	100		1	
Bromoform	1	70	130	15	0.00	1.02	102		0.99	99		2	
Isopropylbenzene	1	70	130	15	0.00	0.91	91		0.91	91		0	
1,1,2,2-Tetrachloroethane	1	70	130	15	0.00	0.99	99		0.97	97		1	
1,2,3-Trichloropropane	1	70	130	15	0.00	0.90	90		0.91	91		1	
trans-1,4-Dichloro-2-butene	1	70	130	15	0.00	0.93	93		0.73	73		25	*
n-Propylbenzene	1	70	130	15	0.00	1.00	100		1.01	101		1	
Bromobenzene	1	70	130	15	0.00	0.98	98		0.99	99		1	
1,3,5-Trimethylbenzene	1	70	130	15	0.00	1.03	103		1.01	101		2	
2-Chlorotoluene	1	70	130	15	0.00	1.05	105		1.04	104		1	
4-Chlorotoluene	1	70	130	15	0.00	1.01	101		1.01	101		0	
tert-butylbenzene	1	70	130	15	0.00	1.01	101		0.99	99		1	
1,2,4-Trimethylbenzene	1	70	130	15	0.00	1.04	104		1.02	102		2	
sec-butylbenzene	1	70	130	15	0.00	1.01	101		1.02	102		0	
p-isopropyltoluene	1	70	130	15	0.00	0.97	97		0.99	99		2	
1,3-Dichlorobenzene	1	70	130	15	0.00	1.00	100		0.98	98		2	
1,4-Dichlorobenzene	1	70	130	15	0.00	1.08	108		1.05	105		3	
n-butylbenzene	1	70	130	15	0.00	1.08	108		1.11	111		2	
1,2-Dichlorobenzene	1	70	130	15	0.00	1.10	110		1.10	110		0	
1,2-Dibromo-3-chloropropane	1	70	130	15	0.00	0.99	99		0.94	94		4	
1,2,4-Trichlorobenzene	1	70	130	15	0.00	1.02	102		0.98	98		4	
Hexachlorobutadiene	1	70	130	15	0.00	1.06	106		1.05	105		1	
Naphthalene	1	70	130	15	0.00	0.97	97		0.97	97		0	
1,2,3-Trichlorobenzene	1	70	130	15	0.00	1.04	104		1.03	103		1	
1,3,5-Trichlorobenzene	1	70	130	15	0.00	1.08	108		1.08	108		0	

Column to be used to flag recovery and RPD values outside of QC limits
* Values outside QC limits

Non-spike result of "0" used in place of "U" to allow calculation of spike recovery

Comments: _____

VOA FORM 3

Data File : D:\HPCHEM\DATA\050908-I\I29421Q.D Vial: 3
Acq On : 9 May 2008 10:09 am Operator:
Sample : L505098I Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p

Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 09 15:39:25 2008
Response via : Multiple Level Calibration

5.9.08 AK 5.12

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	112	0.00
2	TM	Dichlorodifluoromethane	1.196	0.953	20.3	84	0.00
3	TMP	Chloromethane	1.706	1.419	16.8	90	0.00
4	TMC	Vinyl Chloride	1.349	1.242	7.9	99	0.00
5	TM	Bromomethane	0.968	0.848	12.4	97	0.00
6	TM	Chloroethane	0.849	0.724	14.7	88	0.00
7	TM	t-Butyl alcohol (TBA)	0.031	0.026	16.1	89	0.02
8	TM	Trichlorofluoromethane	1.506	1.289	14.4	88	0.00
9	TM	Diethyl ether	0.317	0.280	11.7	97	0.02
10	TM	1,1,2-Trichlorotrifluoroeth	0.896	0.847	5.5	100	0.02
11	T	Acrolein	0.252	0.011	95.6#	5#	-0.01
12	TM	Acetone	0.100	0.082	18.0	82	0.00
13	TMC	1,1-Dichloroethene	1.507	1.406	6.7	98	0.00
14	T	Methyl iodide	0.000	0.000	0.0	0#	0.00
15	TM	Di-isopropyl ether (DIPE)	2.958	2.661	10.0	98	0.02
16	TM	Methylene Chloride	1.410	1.133	19.6	96	0.02
17	TM	Carbon Disulfide	3.360	3.089	8.1	98	0.00
18	TM	Acrylonitrile	0.120	0.089	25.8	80	0.00
19	TM	Methyl-tert-butyl ether (MT	1.299	2.272	-74.9#	196	0.00
20	TM	trans-1,2-Dichloroethene	0.998	0.874	12.4	93	0.00
21	TMP	1,1-Dichloroethane	1.823	1.641	10.0	94	0.00
22	T	Vinyl acetate	0.000	0.000	0.0	0#	0.02
23	TM	Methyl ethyl ketone	0.031	0.025	19.4	92	0.02
24	TM	Ethyl t-butyl ether (ETBE)	2.082	1.833	12.0	95	0.00
25	TM	2,2-Dichloropropane	1.445	1.323	8.4	94	0.02
26	TM	cis-1,2-Dichloroethene	0.958	0.866	9.6	98	0.00
27	TM	t-Amyl methyl ether (TAME)	1.508	1.321	12.4	98	0.02
28	S	DB Holder #28	2.158	2.019	6.4	104	0.00
29	TMC	Chloroform	1.643	1.454	11.5	93	0.00
30	TM	Bromochloromethane	0.305	0.261	14.4	99	0.00
31	TM	Tetrahydrofuran	0.094	0.087	7.4	82	0.03
32	TM	1,1,1-Trichloroethane	1.416	1.264	10.7	93	0.02
33	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
34	TM	1,1-Dichloropropene	1.447	1.252	13.5	90	0.00
35	TM	Carbon Tetrachloride	1.099	0.983	10.6	94	0.02
36	S	1,4-Difluorobenzene	2.158	2.019	6.4	104	0.00
37	TM	1,2-Dichloroethane	0.787	0.716	9.0	95	0.00
38	TM	Benzene	3.790	3.236	14.6	90	0.00
39	I	Fluorobenzene	1.000	1.000	0.0	103	0.00
40	TM	Trichloroethene	0.341	0.316	7.3	91	0.00

(#) = Out of Range

Data File : D:\HPCHEM\DATA\050908-I\I29421Q.D Vial: 3
Acq On : 9 May 2008 10:09 am Operator:
Sample : L505098I Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p

Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 09 15:39:25 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	TMC	1,2-Dichloropropane	0.301	0.277	8.0	90	0.00
42	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
43	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
44	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
45	TM	Bromodichloromethane	0.355	0.339	4.5	94	0.00
46	TM	Dibromomethane	0.118	0.111	5.9	98	0.00
47	T	1,4-Dioxane	0.001	0.001	0.0	93	0.02
48	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
49	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
50	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.48
51	TM	2-Hexanone	0.036	0.026	27.8	87	0.02
52	TM	Methyl isobutyl ketone	0.042	0.034	19.0	88	0.02
53	TM	cis-1,3-Dichloropropene	0.401	0.376	6.2	97	0.02
54	S	Bromofluorobenzene	0.343	0.268	21.9	85	0.02
55	TMC	Toluene	0.781	0.706	9.6	91	0.00
56	TM	trans-1,3-Dichloropropene	0.293	0.242	17.4	87	0.00
57	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
58	TM	1,1,2-Trichloroethane	0.127	0.115	9.4	95	0.02
59	TM	1,3-Dichloropropane	0.276	0.244	11.6	91	0.00
60	TM	Tetrachloroethene	0.277	0.279	-0.7	102	0.00
61	TM	Dibromochloromethane	0.181	0.161	11.0	92	0.00
62	TM	1,2-Dibromoethane	0.133	0.119	10.5	90	0.00
63	I	d5-Chlorobenzene	1.000	1.000	0.0	94	0.00
64	TMP	Chlorobenzene	1.060	1.101	-3.9	96	0.00
65	TM	1,1,1,2-Tetrachloroethane	0.335	0.340	-1.5	94	0.00
66	TMC	Ethylbenzene	2.150	2.242	-4.3	95	0.00
67	TM	m,p-Xylene	0.766	0.792	-3.4	93	0.00
68	TM	o-Xylene	0.700	0.699	0.1	91	0.00
69	TM	Styrene	1.074	1.083	-0.8	94	0.00
70	TMP	Bromoform	0.116	0.119	-2.6	97	0.00
71	TM	Isopropylbenzene	1.922	1.748	9.1	83	0.00
72	TMP	1,1,2,2-Tetrachloroethane	0.220	0.217	1.4	91	0.00
73	S	1,2-Dichlorobenzene-d4	0.361	0.314	13.0	87	0.00
74	TM	1,2,3-Trichloropropane	0.160	0.145	9.4	92	0.00
75	TM	trans-1,4-Dichloro-2-butene	0.031	0.028	9.7	95	0.02
76	TM	n-Propylbenzene	2.555	2.555	0.0	90	0.00
77	TM	Bromobenzene	0.330	0.323	2.1	91	0.00
78	TM	1,3,5-Trimethylbenzene	1.478	1.518	-2.7	95	0.00
79	TM	2-Chlorotoluene	1.534	1.611	-5.0	96	0.00
80	TM	4-Chlorotoluene	1.349	1.364	-1.1	92	0.00

(#) = Out of Range

Data File : D:\HPCHEM\DATA\050908-I\I29421Q.D Vial: 3
Acq On : 9 May 2008 10:09 am Operator:
Sample : L505098I Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p

Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 09 15:39:25 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
81	TM	tert-butylbenzene	1.257	1.266	-0.7	92	0.00
82	TM	1,2,4-Trimethylbenzene	1.450	1.509	-4.1	96	0.00
83	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.48
84	TM	sec-butylbenzene	2.052	2.080	-1.4	92	0.00
85	TM	p-isopropyltoluene	1.559	1.516	2.8	90	0.00
86	TM	1,3-Dichlorobenzene	0.670	0.669	0.1	94	0.00
87	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	92	0.02
88	TM	1,4-Dichlorobenzene	1.577	1.710	-8.4	96	0.00
89	TM	n-butylbenzene	3.923	4.242	-8.1	93	0.00
90	TM	1,2-Dichlorobenzene	1.239	1.363	-10.0	95	0.00
91	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
92	TM	1,2-Dibromo-3-chloropropane	0.078	0.076	2.6	80	0.03
	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
94	TM	1,2,4-Trichlorobenzene	0.766	0.779	-1.7	92	0.00
95	TM	Hexachlorobutadiene	0.483	0.513	-6.2	94	0.02
96	TM	Naphthalene	0.914	0.885	3.2	91	0.02
97	TM	1,2,3-Trichlorobenzene	0.558	0.580	-3.9	96	0.00
98	TM	1,3,5-Trichlorobenzene	1.072	1.156	-7.8	97	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
I29421Q.D V505048I.M Fri May 09 15:50:44 2008 Page 3

Data File : D:\HPCHEM\DATA\050908-I\I29421Q.D
Acq On : 9 May 2008 10:09 am
Sample : L505098I
Misc : 25000
Integration Params: rteint.p
Quant Time: May 9 10:17 2008

Vial: 3
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: V505048I.RES

Quant Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration
DataAcq Meth : V504258I

5.9.08 AK 5.12.08

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.48	168	228246	4.00	ug/L	0.00
39) Fluorobenzene	8.89	96	608280	4.00	ug/L	0.00
63) d5-Chlorobenzene	13.69	117	366135	4.00	ug/L	0.00
87) 1,4-Dichlorobenzene-d4	17.54	152	141798	4.00	ug/L	0.02
System Monitoring Compounds						
28) DB Holder #28	9.02	114	460937	3.74	ug/L	0.00
Spiked Amount 4.000	Range 70 - 130		Recovery = 93.50%			
36) 1,4-Difluorobenzene	9.02	114	460937	3.74	ug/L	0.00
Spiked Amount 4.000	Range 70 - 130		Recovery = 93.50%			
54) Bromofluorobenzene	15.63	95	163050	3.12	ug/L	0.02
Spiked Amount 4.000	Range 70 - 130		Recovery = 78.00%			
73) 1,2-Dichlorobenzene-d4	18.15	152	115042	3.48	ug/L	0.00
Spiked Amount 4.000	Range 70 - 130		Recovery = 87.00%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.82	85	54400	0.80	ug/L	98
3) Chloromethane	2.08	50	80987	0.79	ug/L	100
4) Vinyl Chloride	2.20	62	70868	0.94	ug/L	99
5) Bromomethane	2.72	94	48375	0.88	ug/L	94
6) Chloroethane	2.82	64	41300	0.85	ug/L	99
8) Trichlorofluoromethane	3.15	101	73564	0.86	ug/L	98
9) Diethyl ether	3.60	74	16004	0.88	ug/L	93
10) 1,1,2-Trichlorotrifluoroet	3.80	101	48323	0.94	ug/L	98
12) Acetone	3.88	43	23356	3.55	ug/L	99
13) 1,1-Dichloroethene	4.06	61	80212	0.93	ug/L	97
15) Di-isopropyl ether (DIPE)	5.93	45	151824	0.90	ug/L	100
16) Methylene Chloride	4.86	84	64633	0.72	ug/L	97
17) Carbon Disulfide	4.83	76	176255	0.92	ug/L	100
18) Acrylonitrile	5.08	53	5104	0.74	ug/L #	81
19) Methyl-tert-butyl ether (M	5.15	73	129657	1.75	ug/L	95
20) trans-1,2-Dichloroethene	5.35	96	49871	0.88	ug/L	94
21) 1,1-Dichloroethane	6.04	63	93625	0.90	ug/L	97
23) Methyl ethyl ketone	6.77	72	7206	4.12	ug/L #	97
24) Ethyl t-butyl ether (ETBE)	6.58	59	104579	0.88	ug/L	97
25) 2,2-Dichloropropane	6.96	77	75467	0.92	ug/L	100
26) cis-1,2-Dichloroethene	7.02	96	49398	0.90	ug/L	98
27) t-Amyl methyl ether (TAME)	8.38	73	75373	0.88	ug/L	95
29) Chloroform	7.27	83	82947	0.88	ug/L	97
30) Bromochloromethane	7.52	128	14891	0.85	ug/L	96
32) 1,1,1-Trichloroethane	7.90	97	72109	0.89	ug/L	92
34) 1,1-Dichloropropene	8.15	75	71418	0.86	ug/L	96

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\DATA\050908-I\I29421Q.D Vial: 3
Acq On : 9 May 2008 10:09 am Operator:
Sample : L505098I Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
Integration Params: rteint.p
Quant Time: May 9 10:17 2008 Quant Results File: V505048I.RES

Quant Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration
DataAcq Meth : V504258I

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
35)	Carbon Tetrachloride	8.29	119	56118	0.90 ug/L	96
37)	1,2-Dichloroethane	8.54	62	40865	0.91 ug/L	97
38)	Benzene	8.55	78	184634	0.85 ug/L	96
40)	Trichloroethene	9.50	95	48104	0.93 ug/L	98
41)	1,2-Dichloropropane	9.77	63	42197	0.92 ug/L	99
45)	Bromodichloromethane	10.12	83	51553	0.95 ug/L	99
46)	Dibromomethane	10.19	93	16942	0.94 ug/L	96
47)	1,4-Dioxane	10.20	88	3717	22.92 ug/L	86
51)	2-Hexanone	12.04	58	19640	3.61 ug/L	93
52)	Methyl isobutyl ketone	10.69	58	25842	4.06 ug/L	97
53)	cis-1,3-Dichloropropene	10.98	75	57172	0.94 ug/L	98
55)	Toluene	11.46	92	107336	0.90 ug/L	99
56)	trans-1,3-Dichloropropene	11.76	75	36739	0.83 ug/L	100
58)	1,1,2-Trichloroethane	12.00	83	17428	0.91 ug/L	92
59)	1,3-Dichloropropane	12.38	76	37077	0.88 ug/L	90
60)	Tetrachloroethene	12.48	166	42410	1.01 ug/L	99
61)	Dibromochloromethane	12.77	129	24413	0.89 ug/L	89
62)	1,2-Dibromoethane	13.09	107	18087	0.89 ug/L	98
64)	Chlorobenzene	13.75	112	100780	1.04 ug/L	94
65)	1,1,1,2-Tetrachloroethane	13.83	131	31131	1.02 ug/L	98
66)	Ethylbenzene	13.85	91	205181	1.04 ug/L	98
67)	m,p-Xylene	13.98	106	144979	2.07 ug/L	99
68)	o-Xylene	14.66	106	64024	1.00 ug/L	100
69)	Styrene	14.72	104	99125	1.01 ug/L	97
70)	Bromoform	15.23	173	10852	1.02 ug/L	97
71)	Isopropylbenzene	15.24	105	160027	0.91 ug/L	95
72)	1,1,2,2-Tetrachloroethane	15.50	83	19852	0.99 ug/L	89
74)	1,2,3-Trichloropropane	15.74	75	13235	0.90 ug/L	95
75)	trans-1,4-Dichloro-2-buten	15.88	88	2577	0.93 ug/L #	48
76)	n-Propylbenzene	15.88	91	233902	1.00 ug/L	97
77)	Bromobenzene	15.93	156	29564	0.98 ug/L #	78
78)	1,3,5-Trimethylbenzene	16.14	105	138973	1.03 ug/L	100
79)	2-Chlorotoluene	16.15	91	147472	1.05 ug/L	95
80)	4-Chlorotoluene	16.23	91	124821	1.01 ug/L	98
81)	tert-butylbenzene	16.72	119	115904	1.01 ug/L	97
82)	1,2,4-Trimethylbenzene	16.78	105	138156	1.04 ug/L	97
84)	sec-butylbenzene	17.06	105	190423	1.01 ug/L	99
85)	p-isopropyltoluene	17.29	119	138801	0.97 ug/L	96
86)	1,3-Dichlorobenzene	17.42	146	61210	1.00 ug/L	97
88)	1,4-Dichlorobenzene	17.59	146	60636	1.08 ug/L	99
89)	n-butylbenzene	17.96	91	150362	1.08 ug/L	95

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\DATA\050908-I\I29421Q.D Vial: 3
Acq On : 9 May 2008 10:09 am Operator:
Sample : L505098I Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
Integration Params: rteint.p
Quant Time: May 9 10:17 2008 Quant Results File: V505048I.RES

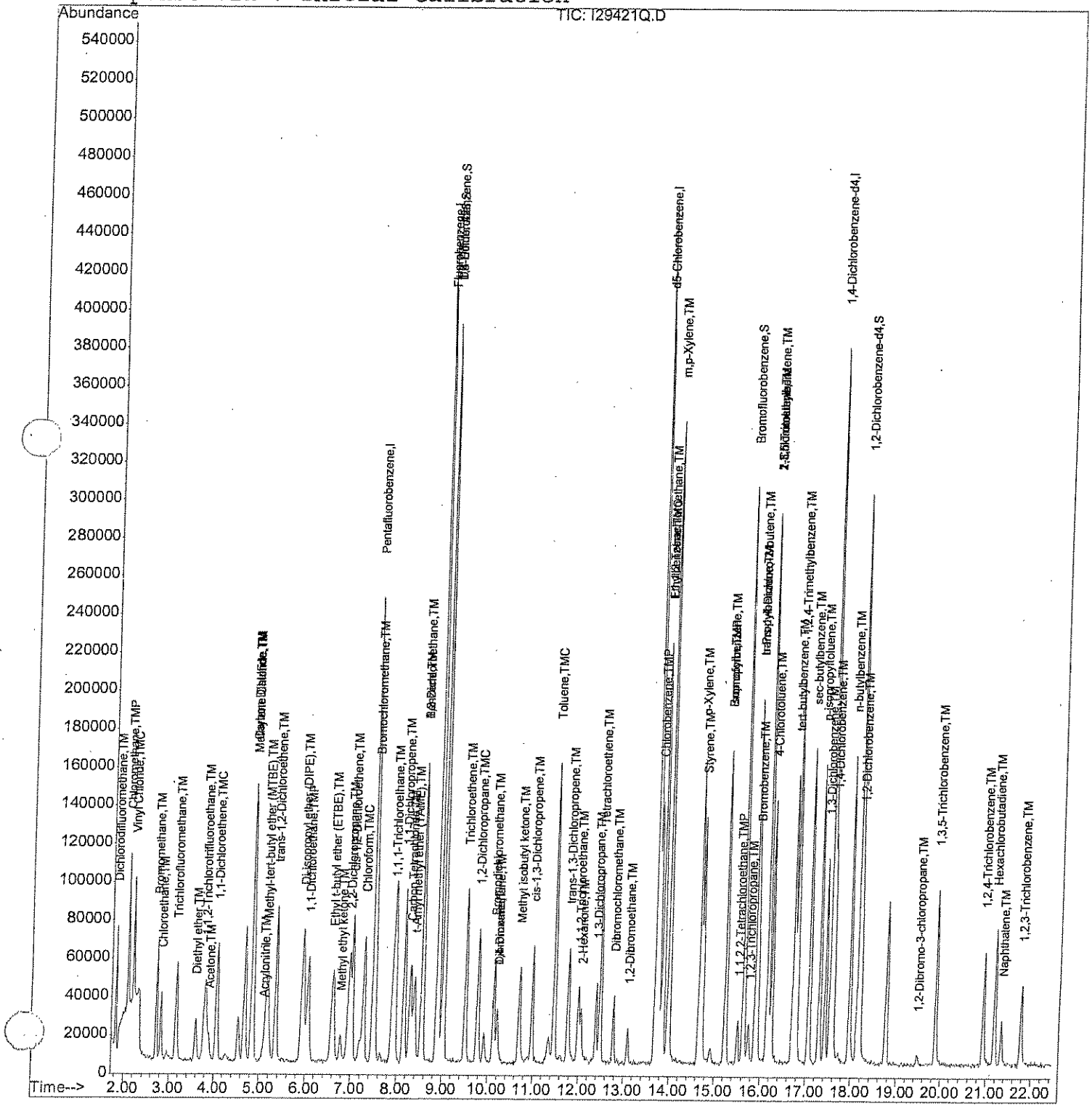
Quant Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration
DataAcq Meth : V504258I

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
90)	1,2-Dichlorobenzene	18.18	146	48307	1.10 ug/L	90
92)	1,2-Dibromo-3-chloropropan	19.49	75	2711	0.99 ug/L	88
94)	1,2,4-Trichlorobenzene	20.93	180	27610	1.02 ug/L	95
95)	Hexachlorobutadiene	21.18	225	18194	1.06 ug/L	93
96)	Naphthalene	21.34	128	31378	0.97 ug/L	95
97)	1,2,3-Trichlorobenzene	21.77	180	20561	1.04 ug/L	94
98)	1,3,5-Trichlorobenzene	19.88	180	40974	1.08 ug/L	95

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\DATA\050908-I\I29421Q.D Vial: 3
Acq On : 9 May 2008 10:09 am Operator:
Sample : L505098I Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 9 10:17 2008 Quant Results File: V505048I.R

Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration



I29421Q.D V505048I.M Fri May 09 10:17:12 2008 Page 4

Data File : D:\HPCHEM\DATA\050908-I\I29422Q.D
Acq On : 9 May 2008 10:17 am
Sample : L505098I2
Misc : 25000
MS Integration Params: rteint.p

Vial: 4
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 09 15:39:25 2008
Response via : Multiple Level Calibration

5.9.08 AK 5.12.

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	112	0.00
2	TM	Dichlorodifluoromethane	1.196	0.912	23.7	81	0.00
3	TMP	Chloromethane	1.706	1.338	21.6	85	0.00
4	TMC	Vinyl Chloride	1.349	1.144	15.2	91	0.00
5	TM	Bromomethane	0.968	0.812	16.1	93	0.00
6	TM	Chloroethane	0.849	0.687	19.1	84	0.00
7	TM	t-Butyl alcohol (TBA)	0.031	0.025	19.4	86	0.00
8	TM	Trichlorofluoromethane	1.506	1.235	18.0	84	0.00
9	TM	Diethyl ether	0.317	0.264	16.7	91	0.00
10	TM	1,1,2-Trichlorotrifluoroeth	0.896	0.809	9.7	95	0.01
11	T	Acrolein	0.252	0.020	92.1#	9#	0.02
12	TM	Acetone	0.100	0.081	19.0	82	0.00
13	TMC	1,1-Dichloroethene	1.507	1.353	10.2	94	0.00
14	T	Methyl iodide	0.000	0.000	0.0	0#	0.02
15	TM	Di-isopropyl ether (DIPE)	2.958	2.534	14.3	94	0.01
16	TM	Methylene Chloride	1.410	1.152	18.3	97	0.00
17	TM	Carbon Disulfide	3.360	2.974	11.5	95	0.00
18	TM	Acrylonitrile	0.120	0.101	15.8	90	0.00
19	TM	Methyl-tert-butyl ether (MT	1.299	2.176	-67.5#	188	0.00
20	TM	trans-1,2-Dichloroethene	0.998	0.836	16.2	90	0.00
21	TMP	1,1-Dichloroethane	1.823	1.566	14.1	89	0.01
22	T	Vinyl acetate	0.000	0.000	0.0	0#	0.00
23	TM	Methyl ethyl ketone	0.031	0.024	22.6	87	0.02
24	TM	Ethyl t-butyl ether (ETBE)	2.082	1.757	15.6	91	0.00
25	TM	2,2-Dichloropropane	1.445	1.296	10.3	92	0.01
26	TM	cis-1,2-Dichloroethene	0.958	0.846	11.7	96	0.01
27	TM	t-Amyl methyl ether (TAME)	1.508	1.262	16.3	93	0.01
28	S	DB Holder #28	2.158	1.988	7.9	103	0.00
29	TMC	Chloroform	1.643	1.461	11.1	94	0.00
30	TM	Bromochloromethane	0.305	0.254	16.7	96	0.00
31	TM	Tetrahydrofuran	0.094	0.086	8.5	81	0.03
32	TM	1,1,1-Trichloroethane	1.416	1.222	13.7	91	0.01
33	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
34	TM	1,1-Dichloropropene	1.447	1.230	15.0	89	0.00
35	TM	Carbon Tetrachloride	1.099	0.971	11.6	93	0.01
36	S	1,4-Difluorobenzene	2.158	1.988	7.9	103	0.00
37	TM	1,2-Dichloroethane	0.787	0.685	13.0	91	0.00
38	TM	Benzene	3.790	3.133	17.3	88	0.00
39	I	Fluorobenzene	1.000	1.000	0.0	102	0.00
40	TM	Trichloroethene	0.341	0.312	8.5	89	0.01

(#) = Out of Range

Data File : D:\HPCHEM\DATA\050908-1\129422Q.D Vial: 4
Acq On : 9 May 2008 10:17 am Operator:
Sample : L505098I2 Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p

Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 09 15:39:25 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	TMC	1,2-Dichloropropane	0.301	0.271	10.0	87	0.01
42	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
43	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
44	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
45	TM	Bromodichloromethane	0.355	0.341	3.9	93	0.00
46	TM	Dibromomethane	0.118	0.107	9.3	93	0.01
47	T	1,4-Dioxane	0.001	0.001	0.0	82	0.02
48	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
49	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
50	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.48
51	TM	2-Hexanone	0.036	0.025	30.6#	85	0.02
52	TM	Methyl isobutyl ketone	0.042	0.034	19.0	87	0.01
53	TM	cis-1,3-Dichloropropene	0.401	0.363	9.5	92	0.01
	S	Bromofluorobenzene	0.343	0.266	22.4	83	0.01
55	TMC	Toluene	0.781	0.697	10.8	89	0.00
56	TM	trans-1,3-Dichloropropene	0.293	0.229	21.8	81	0.00
57	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
58	TM	1,1,2-Trichloroethane	0.127	0.119	6.3	98	0.01
59	TM	1,3-Dichloropropane	0.276	0.241	12.7	88	0.01
60	TM	Tetrachloroethene	0.277	0.274	1.1	99	0.00
61	TM	Dibromochloromethane	0.181	0.155	14.4	88	0.01
62	TM	1,2-Dibromoethane	0.133	0.117	12.0	88	0.00
63	I	d5-Chlorobenzene	1.000	1.000	0.0	92	0.01
64	TMP	Chlorobenzene	1.060	1.114	-5.1	94	0.00
65	TM	1,1,1,2-Tetrachloroethane	0.335	0.341	-1.8	92	0.00
66	TMC	Ethylbenzene	2.150	2.246	-4.5	92	0.00
67	TM	m,p-Xylene	0.766	0.801	-4.6	91	0.00
68	TM	o-Xylene	0.700	0.703	-0.4	89	0.00
69	TM	Styrene	1.074	1.074	0.0	91	0.00
70	TMP	Bromoform	0.116	0.116	0.0	92	0.00
71	TM	Isopropylbenzene	1.922	1.751	8.9	80	0.00
72	TMP	1,1,2,2-Tetrachloroethane	0.220	0.214	2.7	88	0.00
73	S	1,2-Dichlorobenzene-d4	0.361	0.316	12.5	85	0.00
74	TM	1,2,3-Trichloropropane	0.160	0.145	9.4	90	0.00
75	TM	trans-1,4-Dichloro-2-butene	0.031	0.021	32.3#	69	0.02
76	TM	n-Propylbenzene	2.555	2.589	-1.3	89	0.01
77	TM	Bromobenzene	0.330	0.325	1.5	89	0.00
78	TM	1,3,5-Trimethylbenzene	1.478	1.495	-1.2	91	0.00
79	TM	2-Chlorotoluene	1.534	1.593	-3.8	92	0.00
80	TM	4-Chlorotoluene	1.349	1.362	-1.0	89	0.00

(#) = Out of Range

Data File : D:\HPCHEM\DATA\050908-I\I29422Q.D Vial: 4
Acq On : 9 May 2008 10:17 am Operator:
Sample : L505098I2 Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p

Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 09 15:39:25 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
81	TM	tert-butylbenzene	1.257	1.250	0.6	88	0.00
82	TM	1,2,4-Trimethylbenzene	1.450	1.485	-2.4	92	0.00
83	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.48
84	TM	sec-butylbenzene	2.052	2.086	-1.7	90	0.00
85	TM	p-isopropyltoluene	1.559	1.540	1.2	89	0.00
86	TM	1,3-Dichlorobenzene	0.670	0.657	1.9	90	0.01
87	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	89	0.01
88	TM	1,4-Dichlorobenzene	1.577	1.662	-5.4	91	0.00
89	TM	n-butylbenzene	3.923	4.338	-10.6	92	0.00
90	TM	1,2-Dichlorobenzene	1.239	1.368	-10.4	93	0.00
91	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
92	TM	1,2-Dibromo-3-chloropropane	0.078	0.073	6.4	74	0.01
9	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
9	TM	1,2,4-Trichlorobenzene	0.766	0.749	2.2	85	0.01
95	TM	Hexachlorobutadiene	0.483	0.506	-4.8	90	0.01
96	TM	Naphthalene	0.914	0.887	3.0	88	0.01
97	TM	1,2,3-Trichlorobenzene	0.558	0.576	-3.2	92	0.01
98	TM	1,3,5-Trichlorobenzene	1.072	1.156	-7.8	95	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
I29422Q.D V505048I.M Fri May 09 15:53:08 2008 Page 3

Data File : D:\HPCHEM\DATA\050908-I\I29422Q.D Vial: 4
Acq On : 9 May 2008 10:17 am Operator:
Sample : L505098I2 Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
Integration Params: rteint.p
Quant Time: May 9 15:52 2008 Quant Results File: V505048I.RES

Quant Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration
DataAcq Meth : V504258I

5.12.08 AK 5.12.08

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.48	168	228560	4.00	ug/L	0.00
39) Fluorobenzene	8.89	96	600652	4.00	ug/L	0.00
63) d5-Chlorobenzene	13.70	117	355782	4.00	ug/L	0.01
87) 1,4-Dichlorobenzene-d4	17.54	152	137628	4.00	ug/L	0.01
System Monitoring Compounds						
28) DB Holder #28	9.02	114	454266	3.68	ug/L	0.00
Spiked Amount 4.000	Range 70 - 130		Recovery = 92.00%			
36) 1,4-Difluorobenzene	9.02	114	454266	3.68	ug/L	0.00
Spiked Amount 4.000	Range 70 - 130		Recovery = 92.00%			
54) Bromofluorobenzene	15.63	95	159538	3.09	ug/L	0.01
Spiked Amount 4.000	Range 70 - 130		Recovery = 77.25%			
73) 1,2-Dichlorobenzene-d4	18.14	152	112332	3.50	ug/L	0.00
Spiked Amount 4.000	Range 70 - 130		Recovery = 87.50%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.82	85	52088	0.76	ug/L	98
3) Chloromethane	2.08	50	76442	0.74	ug/L	99
4) Vinyl Chloride	2.19	62	65363	0.85	ug/L	95
5) Bromomethane	2.72	94	46411	0.84	ug/L	98
6) Chloroethane	2.82	64	39270	0.81	ug/L	94
8) Trichlorofluoromethane	3.15	101	70575	0.82	ug/L	93
9) Diethyl ether	3.58	74	15057	0.83	ug/L	93
10) 1,1,2-Trichlorotrifluoroet	3.80	101	46201	0.90	ug/L	98
12) Acetone	3.88	43	23278m	3.53	ug/L	
13) 1,1-Dichloroethene	4.06	61	77333	0.90	ug/L	95
15) Di-isopropyl ether (DIPE)	5.93	45	144812	0.86	ug/L	98
16) Methylene Chloride	4.85	84	65825	0.74	ug/L	98
17) Carbon Disulfide	4.83	76	169953	0.89	ug/L	100
18) Acrylonitrile	5.06	53	5789	0.84	ug/L #	86
19) Methyl-tert-butyl ether (M	5.15	73	124317	1.67	ug/L	99
20) trans-1,2-Dichloroethene	5.35	96	47794	0.84	ug/L	95
21) 1,1-Dichloroethane	6.05	63	89505	0.86	ug/L	98
23) Methyl ethyl ketone	6.78	72	6826	3.90	ug/L #	92
24) Ethyl t-butyl ether (ETBE)	6.59	59	100375	0.84	ug/L	100
25) 2,2-Dichloropropane	6.96	77	74067	0.90	ug/L	97
26) cis-1,2-Dichloroethene	7.02	96	48368	0.88	ug/L	92
27) t-Amyl methyl ether (TAME)	8.37	73	72111	0.84	ug/L	93
29) Chloroform	7.27	83	83456	0.89	ug/L	100
30) Bromochloromethane	7.52	128	14489	0.83	ug/L	93
32) 1,1,1-Trichloroethane	7.90	97	69843	0.86	ug/L	96
34) 1,1-Dichloropropene	8.15	75	70294	0.85	ug/L	98

(#) = qualifier out of range (m) = manual integration
I29422Q.D V505048I.M Fri May 09 15:53:11 2008 Page 1

Data File : D:\HPCHEM\DATA\050908-I\I29422Q.D Vial: 4
Acq On : 9 May 2008 10:17 am Operator:
Sample : L505098I2 Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
Integration Params: rteint.p
Quant Time: May 9 15:52 2008 Quant Results File: V505048I.RES

Quant Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration
DataAcq Meth : V504258I

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
35) Carbon Tetrachloride	8.29	119	55511	0.88 ug/L	97
37) 1,2-Dichloroethane	8.53	62	39150	0.87 ug/L	95
38) Benzene	8.54	78	178996	0.83 ug/L	98
40) Trichloroethene	9.51	95	46835	0.92 ug/L	98
41) 1,2-Dichloropropane	9.77	63	40705	0.90 ug/L	99
45) Bromodichloromethane	10.12	83	51205	0.96 ug/L	96
46) Dibromomethane	10.20	93	16120	0.91 ug/L	97
47) 1,4-Dioxane	10.21	88	3249	20.29 ug/L	97
51) 2-Hexanone	12.04	58	19001m	3.54 ug/L	
52) Methyl isobutyl ketone	10.69	58	25556	4.07 ug/L	98
53) cis-1,3-Dichloropropene	10.98	75	54465	0.90 ug/L	96
55) Toluene	11.46	92	104699	0.89 ug/L	99
56) trans-1,3-Dichloropropene	11.76	75	34435	0.78 ug/L	99
58) 1,1,2-Trichloroethane	11.99	83	17942	0.94 ug/L	96
59) 1,3-Dichloropropane	12.39	76	36133	0.87 ug/L	97
60) Tetrachloroethene	12.47	166	41150	0.99 ug/L	94
61) Dibromochloromethane	12.78	129	23252	0.86 ug/L	96
62) 1,2-Dibromoethane	13.09	107	17565	0.88 ug/L	96
64) Chlorobenzene	13.75	112	99093	1.05 ug/L	93
65) 1,1,1,2-Tetrachloroethane	13.83	131	30320	1.02 ug/L	99
66) Ethylbenzene	13.84	91	199790	1.04 ug/L	96
67) m,p-Xylene	13.97	106	142484	2.09 ug/L	99
68) o-Xylene	14.65	106	62505	1.00 ug/L	100
69) Styrene	14.71	104	95502	1.00 ug/L	99
70) Bromoform	15.22	173	10293	0.99 ug/L	94
71) Isopropylbenzene	15.23	105	155730	0.91 ug/L	96
72) 1,1,2,2-Tetrachloroethane	15.51	83	19020	0.97 ug/L	93
74) 1,2,3-Trichloropropane	15.74	75	12938	0.91 ug/L #	87
75) trans-1,4-Dichloro-2-buten	15.88	88	1877	0.73 ug/L #	57
76) n-Propylbenzene	15.89	91	230249	1.01 ug/L	99
77) Bromobenzene	15.92	156	28945	0.99 ug/L	94
78) 1,3,5-Trimethylbenzene	16.14	105	132939	1.01 ug/L	98
79) 2-Chlorotoluene	16.15	91	141709	1.04 ug/L	95
80) 4-Chlorotoluene	16.23	91	121157	1.01 ug/L	98
81) tert-butylbenzene	16.71	119	111209	0.99 ug/L	95
82) 1,2,4-Trimethylbenzene	16.77	105	132098	1.02 ug/L	98
84) sec-butylbenzene	17.06	105	185530	1.02 ug/L	99
85) p-isopropyltoluene	17.28	119	136953	0.99 ug/L	97
86) 1,3-Dichlorobenzene	17.42	146	58447	0.98 ug/L	98
88) 1,4-Dichlorobenzene	17.59	146	57171	1.05 ug/L	95
89) n-butylbenzene	17.95	91	149272	1.11 ug/L	95

(#) = qualifier out of range (m) = manual integration
I29422Q.D V505048I.M Fri May 09 15:53:11 2008 Page 2

Data File : D:\HPCHEM\DATA\050908-I\I29422Q.D Vial: 4
Acq On : 9 May 2008 10:17 am Operator:
Sample : L505098I2 Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
Integration Params: rteint.p
Quant Time: May 9 15:52 2008 Quant Results File: V505048I.RES

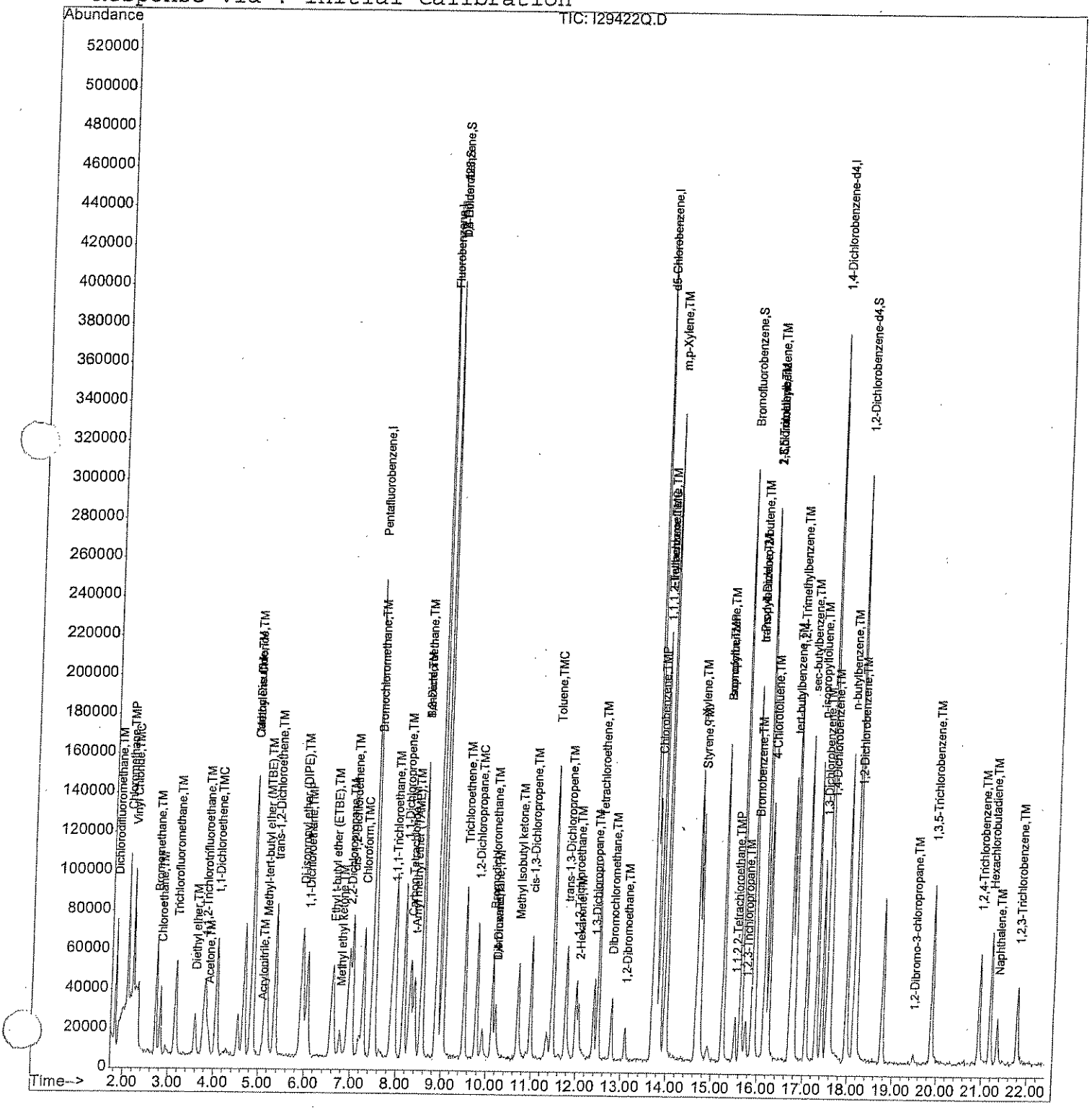
Quant Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration
DataAcq Meth : V504258I

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
90)	1,2-Dichlorobenzene	18.18	146	47056	1.10 ug/L	97
92)	1,2-Dibromo-3-chloropropan	19.47	75	2521	0.94 ug/L #	69
94)	1,2,4-Trichlorobenzene	20.93	180	25754	0.98 ug/L	97
95)	Hexachlorobutadiene	21.18	225	17423	1.05 ug/L	99
96)	Naphthalene	21.34	128	30521	0.97 ug/L	97
97)	1,2,3-Trichlorobenzene	21.78	180	19822	1.03 ug/L	97
98)	1,3,5-Trichlorobenzene	19.88	180	39764	1.08 ug/L	100

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\DATA\050908-I\I29422Q.D Vial: 4
Acq On : 9 May 2008 10:17 am Operator:
Sample : L505098I2 Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 9 15:52 2008 Quant Results File: V505048I.

Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 09 15:39:46 2008
Response via : Initial Calibration



I29422Q.D V505048I.M Fri May 09 15:53:11 2008 Page 4

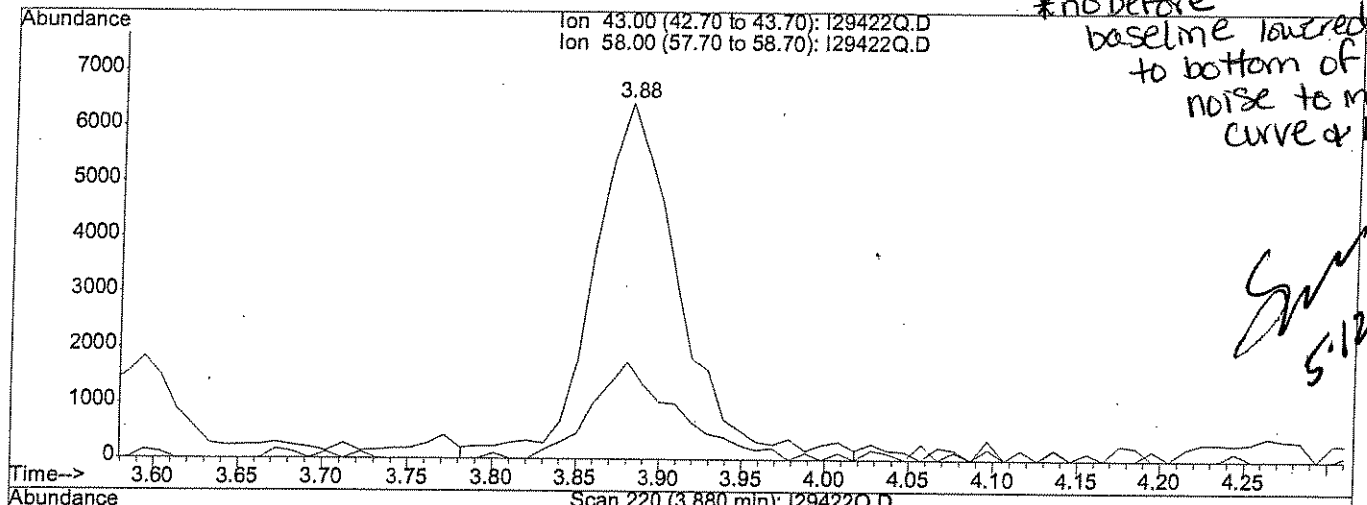
Data File : D:\HPCHEM\DATA\050908-I\I29422Q.D Vial: 4
Acq On : 9 May 2008 10:17 am Operator:
Sample : L505098I2 Inst : GC/MS I
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 9 15:52 2008 Quant Results File: temp.res

Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 12 07:46:49 2008
Response via : Single Level Calibration

AK 5.12.08

*no before baseline lowered to bottom of noise to match curve & LCS

5.12.08



(12) Acetone (TM)

3.88min 3.53ug/L m

response 23278

Ion	Exp%	Act%
43.00	100	100
58.00	29.90	27.17
0.00	0.00	0.00
0.00	0.00	0.00

I29422Q.D V505048I.M Mon May 12 13:39:10 2008

Data File : D:\HPCHEM\DATA\050908-I\I29422Q.D
Acq On : 9 May 2008 10:17 am
Sample : L505098I2
Misc : 25000
MS Integration Params: rteint.p
Quant Time: May 9 15:52 2008

Vial: 4
Operator:
Inst : GC/MS I
Multiplr: 1.00

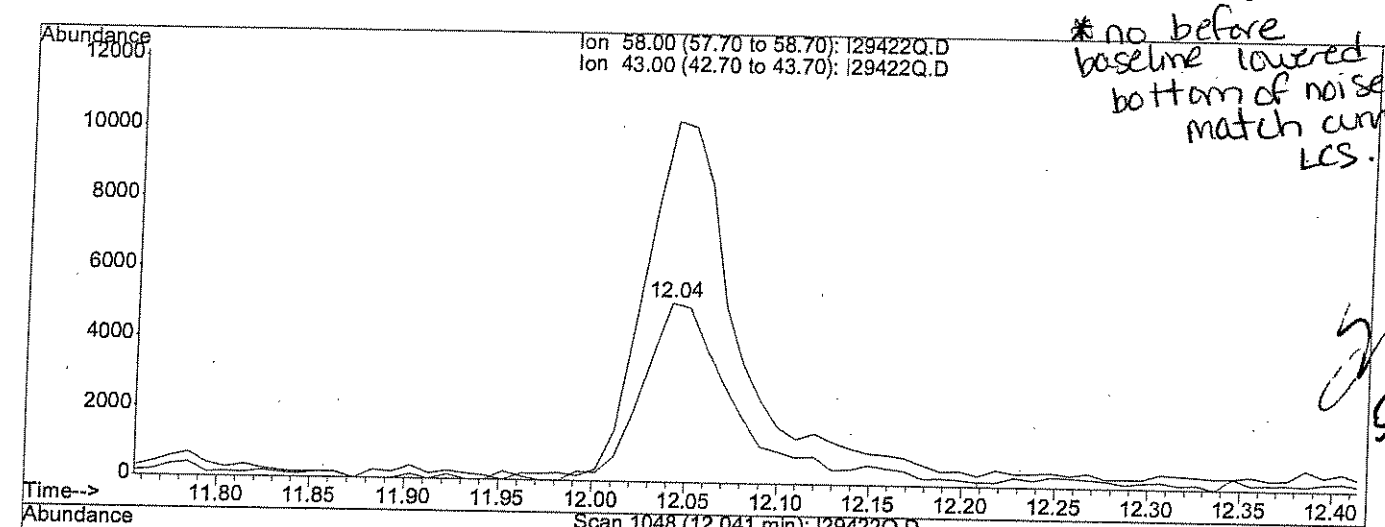
Quant Results File: temp.res

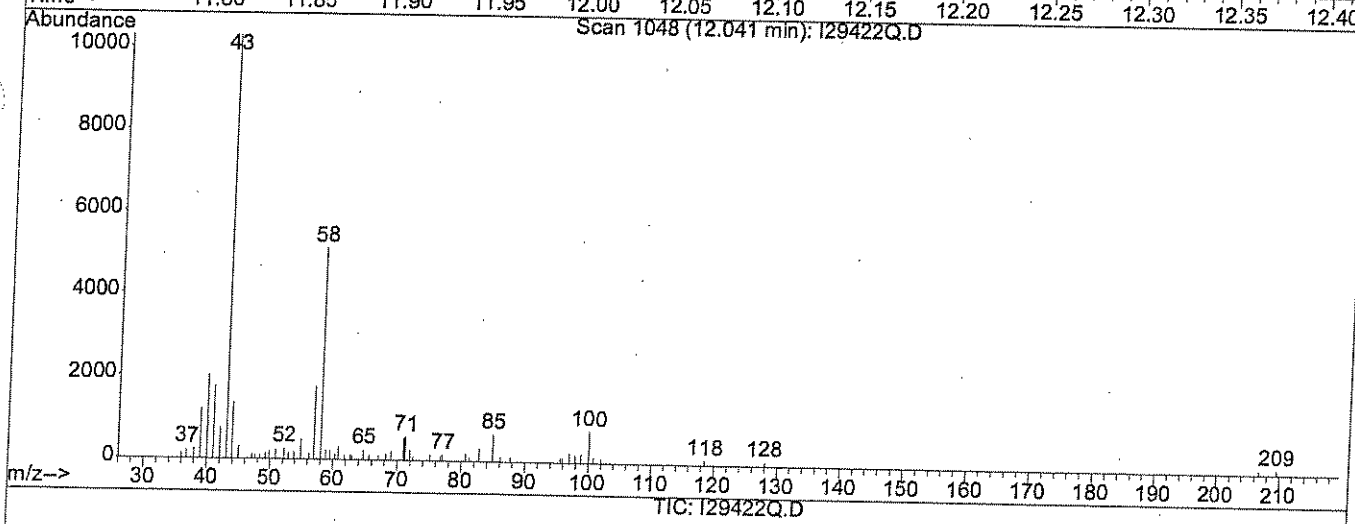
Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 12 07:46:49 2008
Response via : Single Level Calibration

AK 5.12.08

*no before baseline lowered to bottom of noise to match curve + LCS.

5.12.





(51) 2-Hexanone (TM)

12.04min 3.54ug/L m

response 19001

Ion	Exp%	Act%
58.00	100	100
43.00	187.00	203.62
0.00	0.00	0.00
0.00	0.00	0.00

I29422Q.D V505048I.M Mon May 12 13:39:17 2008

GC/MS Volatiles Instrument: I

analytics environmental laboratory LLC

IS only — Exp: —

SS+IS V7201 Exp: 3/16/08

Voltage 1706

Threshold 100

050408-I

Tube	Method	Sample	Vol	DF	Comments	File #	LB	pH
		W-I-050408-1-AK						
1	V5050481	Blank	25mL			129304	AK	N/A
2		BFB 25ng lvl V7213				05T		
3		0.1PPB STD				06S1		
4		0.2PPB				07S1		
5		0.5PPB				08S1		
6		1.0PPB				09S1		
7		2.0PPB				10S1		
8		5.0PPB				11S1		
9		10PPB				12S1		
10		20PPB				13S1		
11		Blank				14		
12		BFB 25ng lvl V7213				15T		
13		L5050481 1.25ml V7217 V7218				16Q		
14		L50504812 1.25ml V7217 V7218				17Q		
15		B5050481				18Q		
16		61203-4				19		<2
17		-5				20		<2
18		-6				21		<2
19		-7				22		<2
20		-8				23		<2
21		-9				24		<2
22		61197-7				25		<2
23		-8				26		<2
24		61200-2				27		<2
25		-3				28		<2
26		-1				29		<2
27		-4				30		<2
28		-5				31		<2
29		-7				32		<2
30		-6				33		<2
31		-8				34		<2

GC/MS Volatiles Instrument: I

analytics environmental laboratory LLC

IS only — Exp: —

SS+IS V7227 Exp: x 5/21/08

050908-I

Voltage 1706

Threshold 100

ube	Method	Sample	Vol	DF	Comments	File #	LB	pH
		W-I-050908-1-AK						
1	~~V5041581~~	BFB 25ng lot V7213	25mL	✓		1294197	AK	N/A
2		Blank				420		
3		L5050981 1.25ml V7226 → V7218		✓		21Q		
4		L5050981Z 1.25ml V7226 → V7218		✓		22Q		
5		B5050981		✓		23B		↓
6	V5050981	61274-2		✓		24		<2
7		61276-5		✓		25		<2
8		-1		✓		26		<2
9		-2		✓		27		<2
10		-3		✓		28		<2
11		↓ -4		✓ RR 2.5mL		29		<2
12		61274-1		✓		30		<2
13		61214-4		✓		31		<2
~~14~~		~~-5~~				~~32~~		
15		-6		~~5~~ 9.08		33		
16		↓ -7				34		
~~17~~		~~61257-1~~				~~35~~		
18		61274-1,DL	1.25mL	✓	Archive DL	32	SP	<2
19		61276-4,DL	↓	✓ same ↓	↓	33		<2
20		61276-1,MS	25mL	✓ same RR 5		34	SP	<2
21		↓ -1,MSD	↓	✓		35	SP	<2
22		~~61214~~ Blank		—		36		—
23		6124-5		✓		37		<2
24		↓ -6		✓		38		<2
25		↓ -7		✓		39		<2
26		61257-1	↓		*out of window-RR 25mL	40		<2
27		BLK	25mL			41		—
28		61286-1	*	✓ screens out of	*	42		<2
29		-2	↓	✓ ↓ 12hr	*	43		<2

VOLATILE ORGANIC
INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Instrument ID: I
GC Column: RTX-502.2
Column ID: 0.25 mm
Heated Purge (Y/N): N

SDG: 61274
BFB File ID: I29305T.D
BFB Injection Date: 05/04/08
BFB Injection Time: 11:48

LAB SAMPLE ID	DATA FILE ID	DATE & TIME ANALYZED
0.1PPB STD	I29306SI.D	5/4/08 12:33
0.2PPB STD	I29307SI.D	5/4/08 13:06
0.5PPB STD	I29308SI.D	5/4/08 13:39
1.0PPB STD	I29309SI.D	5/4/08 14:12
2.0PPB STD	I29310SI.D	5/4/08 14:45
5.0PPB STD	I29311SI.D	5/4/08 15:51
10PPB STD	I29312SI.D	5/4/08 16:24
20PPB STD	I29313SI.D	5/4/08 16:57

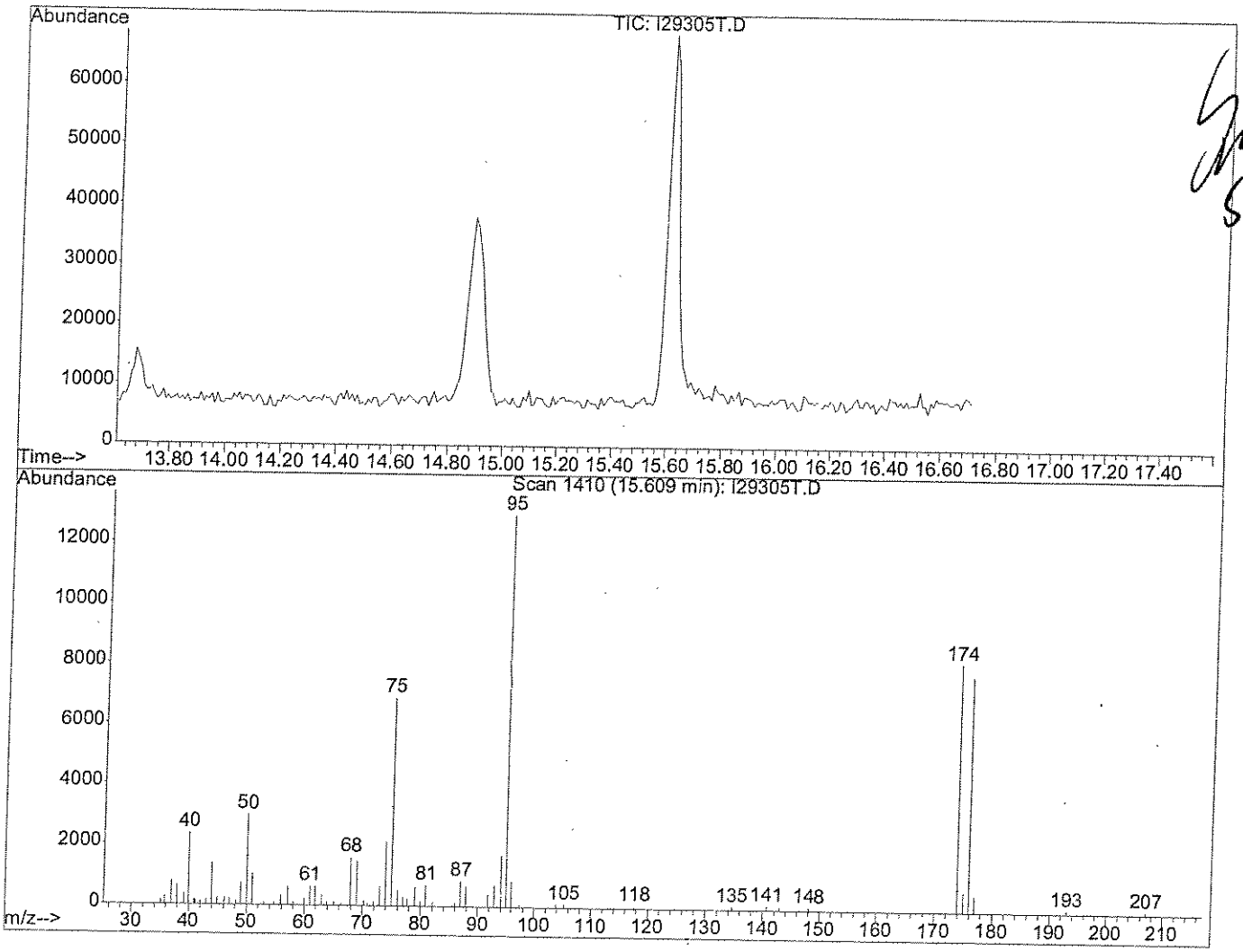
Refer to the BFB report I29305T.D for ion ratio evaluation.

VOA FORM 5

Data File : D:\HPCHEM\DATA\050408-I\I29305T.D
Acq On : 4 May 2008 11:48 am
Sample : BFB 25NG
Misc : 25000
MS Integration Params: rteint.p
Method : D:\HPCHEM\METHODS\V504258I.M (RTE Integrator)
Title : 524.2 Purgable Organics

Vial: 2
Operator:
Inst : GC/MS In.
Multiplr: 1.00

AK 5.06.08



5.7.08

Spectrum Information: Scan 1410

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.0	2979	PASS
75	95	30	60	53.1	6890	PASS
95	95	100	100	100.0	12972	PASS
96	95	5	9	6.9	898	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	63.3	8210	PASS
175	174	5	9	8.2	674	PASS
176	174	95	101	95.3	7827	PASS
177	176	5	9	7.1	558	PASS

I29305T.D V504258I.M Sun May 04 12:00:16 2008

VOLATILE ORGANIC
INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Instrument ID: I
GC Column: RTX-502.2
Column ID: 0.25 mm
Heated Purge (Y/N): N

SDG: 61274
BFB File ID: I29419T.D
BFB Injection Date: 05/09/08
BFB Injection Time: 09:00

LAB SAMPLE ID	DATA FILE ID	DATE & TIME ANALYZED
L505098I	I29421Q.D	5/9/08 10:09
L505098I2	I29422Q.D	5/9/08 10:17
B505098I	I29423B.D	5/9/08 11:23
61274-2	I29424.D	5/9/08 11:56
61274-1	I29430.D	5/9/08 15:15
61274-1, DL	I29432.D	5/9/08 16:27

Refer to the BFB report I29419T.D for ion ratio evaluation.

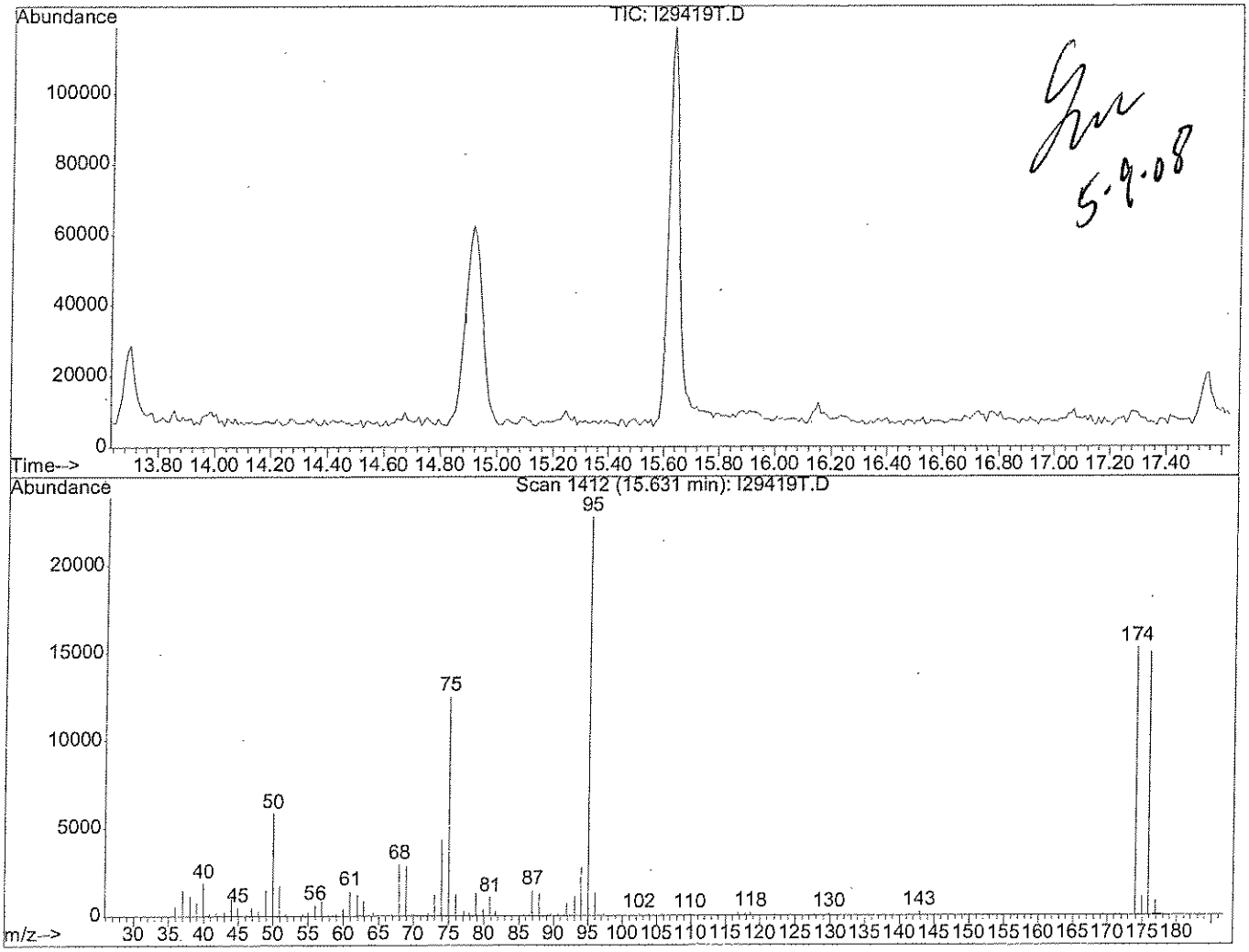
VOA FORM 5

BFB

Data File : D:\HPCHEM\DATA\050908-I\I29419T.D
Acq On : 9 May 2008 9:00 am
Sample : BFB 25NG
Misc : 25000
MS Integration Params: rteint.p
Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics

Vial: 1
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

AK 5.12.08



5.9.08

Spectrum Information: Scan 1412

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	25.7	5850	PASS
75	95	30	60	55.1	12537	PASS
95	95	100	100	100.0	22768	PASS
96	95	5	9	5.9	1337	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	67.2	15309	PASS
175	174	5	9	6.9	1059	PASS
176	174	95	101	98.4	15058	PASS
177	176	5	9	5.5	821	PASS

I29419T.D V505048I.M Fri May 09 09:03:29 2008

Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration

5.7.08 AK 5.06.08

Calibration Files
0.1 =I29306SI.D 0.2 =I29307SI.D 0.5 =I29308SI.D
1 =I29309SI.D 5 =I29311SI.D 10 =I29312SI.D

		Compound	0.1	0.2	0.5	1	5	10	Avg	%RSD
1)	I	Pentafluorobenzene	ISTD							
2)	TM	Dichlorodifluoromet		1.193	1.259	1.264	1.230	1.128	1.196	6.61
3)	TMP	Chloromethane		2.286	1.927	1.764	1.490	1.164	1.706	22.54
4)	TMC	Vinyl Chloride	1.617	1.601	1.404	0.931	0.693		1.236	30.24#
5)	TM	Bromomethane		1.181	1.087	0.980	0.872	0.862	0.968	12.81
6)	TM	Chloroethane		0.815	0.901	0.918	0.847	0.817	0.849	6.09
7)	TM	t-Butyl alcohol (TB			0.038	0.033	0.029	0.028	0.031	14.51
8)	TM	Trichlorofluorometh		1.390	1.566	1.638	1.539	1.491	1.506	6.49
9)	TM	Diethyl ether		0.347	0.319	0.323	0.316	0.309	0.317	5.15
10)	TM	1,1,2-Trichlorotrif		0.800	0.992	0.948	0.926	0.883	0.896	7.48
11)	T	Acrolein		0.229	0.246	0.267	0.268	0.261	0.252	5.46
12)	TM	Acetone			0.139	0.111	0.096	0.087	0.100	22.67
13)	TMC	1,1-Dichloroethene		1.388	1.624	1.602	1.574	1.487	1.507	7.41#
14)	T	Methyl iodide							0.000	-1.00
15)	TM	Di-isopropyl ether		2.753	3.076	3.023	3.118	2.992	2.958	5.83
16)	TM	Methylene Chloride		3.120	1.701	1.324	0.938	0.893	1.410	57.66
17)	TM	Carbon Disulfide		3.219	3.545	3.510	3.415	3.340	3.360	4.23
18)	TM	Acrylonitrile		0.115	0.155	0.125	0.126	0.103	0.120	14.64
19)	TM	Methyl-tert-butyl e		1.260	1.368	1.295	1.347	1.305	1.299	4.36
20)	TM	trans-1,2-Dichloroe		0.993	1.030	1.045	0.995	0.998	0.998	3.15
21)	TMP	1,1-Dichloroethane		1.736	1.915	1.959	1.873	1.795	1.823	6.19
22)	T	Vinyl acetate							0.000	-1.00
23)	TM	Methyl ethyl ketone			0.032	0.031	0.032	0.030	0.031	4.24
24)	TM	Ethyl t-butyl ether		1.963	2.056	2.148	2.199	2.129	2.082	5.24
25)	TM	2,2-Dichloropropane		1.444	1.608	1.577	1.448	1.379	1.445	8.94
26)	TM	cis-1,2-Dichloroeth		0.875	0.982	0.986	0.989	0.977	0.958	4.40
27)	TM	t-Amyl methyl ether		1.400	1.502	1.512	1.602	1.556	1.508	4.52
28)	S	DB Holder #28		2.180	2.164	2.166	2.194	2.137	2.158	2.06
29)	TMC	Chloroform		1.511	1.687	1.739	1.708	1.653	1.643	5.63#
30)	TM	Bromochloromethane		0.298	0.308	0.295	0.317	0.313	0.305	2.55
31)	TM	Tetrahydrofuran			0.127	0.118	0.083	0.081	0.094	24.12
32)	TM	1,1,1-Trichloroetha		1.365	1.469	1.510	1.459	1.413	1.416	5.71
33)	T	NO COMPOUND							0.000	-1.00
34)	TM	1,1-Dichloropropene		1.318	1.504	1.551	1.501	1.469	1.447	6.01
35)	TM	Carbon Tetrachlorid		0.987	1.157	1.173	1.125	1.111	1.099	6.14
36)	S	1,4-Difluorobenzene		2.180	2.164	2.166	2.194	2.137	2.158	2.06
37)	TM	1,2-Dichloroethane		0.789	0.830	0.843	0.821	0.763	0.787	8.83
38)	TM	Benzene		3.631	3.966	3.996	3.838	3.768	3.790	4.12
39)	I	Fluorobenzene	ISTD							
40)	TM	Trichloroethene		0.313	0.363	0.359	0.340	0.341	0.341	4.86
41)	TMC	1,2-Dichloropropane		0.289	0.318	0.318	0.303	0.302	0.301	4.40#
42)	T	NO COMPOUND							0.000	-1.00

(#) = Out of Range ### Number of calibration levels exceeded format ###
V505048I.M Mon May 05 12:45:00 2008 Page 1

Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration

Calibration Files
0.1 =I29306SI.D 0.2 =I29307SI.D 0.5 =I29308SI.D
1 =I29309SI.D 5 =I29311SI.D 10 =I29312SI.D

		Compound	0.1	0.2	0.5	1	5	10	Avg	%RSD
43)	T	NO COMPOUND							0.000	-1.00
44)	T	NO COMPOUND							0.000	-1.00
45)	TM	Bromodichloromethan	0.303	0.361	0.372	0.371	0.369	0.355		6.82
46)	TM	Dibromomethane	0.108	0.124	0.118	0.122	0.121	0.118		4.47
47)	T	1,4-Dioxane		0.001	0.001	0.001	0.001	0.001		8.06
48)	T	NO COMPOUND							0.000	-1.00
49)	T	NO COMPOUND							0.000	-1.00
50)	T	NO COMPOUND							0.000	-1.00
51)	TM	2-Hexanone		0.027	0.030	0.040	0.041	0.036		16.16
52)	TM	Methyl isobutyl ket		0.039	0.040	0.044	0.045	0.042		5.76
53)	TM	cis-1,3-Dichloropro	0.367	0.385	0.400	0.419	0.425	0.401		5.00
54)	S	Bromofluorobenzene	0.331	0.334	0.327	0.368	0.359	0.343		4.45
55)	TMC	Toluene	0.770	0.791	0.801	0.785	0.794	0.781		2.38#
56)	TM	trans-1,3-Dichlorop	0.253	0.286	0.287	0.317	0.316	0.293		7.50
57)	T	NO COMPOUND							0.000	-1.00
58)	TM	1,1,2-Trichloroetha	0.121	0.129	0.125	0.130	0.129	0.127		2.52
59)	TM	1,3-Dichloropropane	0.274	0.267	0.277	0.282	0.289	0.276		2.72
60)	TM	Tetrachloroethene	0.247	0.281	0.283	0.279	0.289	0.277		5.85
61)	TM	Dibromochloromethan	0.159	0.179	0.179	0.188	0.192	0.181		6.12
62)	TM	1,2-Dibromoethane	0.115	0.127	0.136	0.141	0.143	0.133		7.52
63)	I	d5-Chlorobenzene	ISTD							
64)	TMP	Chlorobenzene	0.965	1.108	1.085	1.063	1.079	1.060		4.31
65)	TM	1,1,1,2-Tetrachloro	0.310	0.346	0.341	0.338	0.342	0.335		3.66
66)	TMC	Ethylbenzene	1.959	2.218	2.237	2.183	2.196	2.150		4.39#
67)	TM	m,p-Xylene	0.668	0.787	0.806	0.781	0.790	0.766		6.06
68)	TM	o-Xylene	0.627	0.708	0.728	0.724	0.721	0.700		5.01
69)	TM	Styrene	0.881	1.051	1.084	1.148	1.149	1.074		8.62
70)	TMP	Bromoform	0.095	0.108	0.115	0.125	0.127	0.116		9.82
71)	TM	Isopropylbenzene	1.644	1.959	1.997	2.055	1.995	1.922		6.98
72)	TMP	1,1,2,2-Tetrachloro	0.190	0.215	0.224	0.237	0.232	0.220		7.02
73)	S	1,2-Dichlorobenzene	0.332	0.340	0.340	0.402	0.376	0.361		6.97
74)	TM	1,2,3-Trichloroprop	0.223	0.142	0.149	0.160	0.152	0.160		17.91
75)	TM	trans-1,4-Dichloro-	0.045	0.027	0.028	0.032	0.031	0.031		20.15
76)	TM	n-Propylbenzene	2.229	2.656	2.671	2.703	2.615	2.555		6.43
77)	TM	Bromobenzene	0.295	0.320	0.337	0.351	0.339	0.330		5.43
78)	TM	1,3,5-Trimethylbenz	1.225	1.460	1.513	1.625	1.556	1.478		8.46
79)	TM	2-Chlorotoluene	1.302	1.510	1.584	1.688	1.587	1.534		7.92
80)	TM	4-Chlorotoluene	1.181	1.331	1.404	1.466	1.396	1.349		6.75
81)	TM	tert-butylbenzene	1.060	1.218	1.302	1.394	1.314	1.257		8.24
82)	TM	1,2,4-Trimethylbenz	1.207	1.418	1.480	1.618	1.509	1.450		8.63
83)	T	NO COMPOUND							0.000	-1.00
84)	TM	sec-butylbenzene	1.662	2.042	2.131	2.287	2.137	2.052		9.39
85)	TM	p-isopropyltoluene	1.280	1.524	1.583	1.744	1.629	1.559		9.05

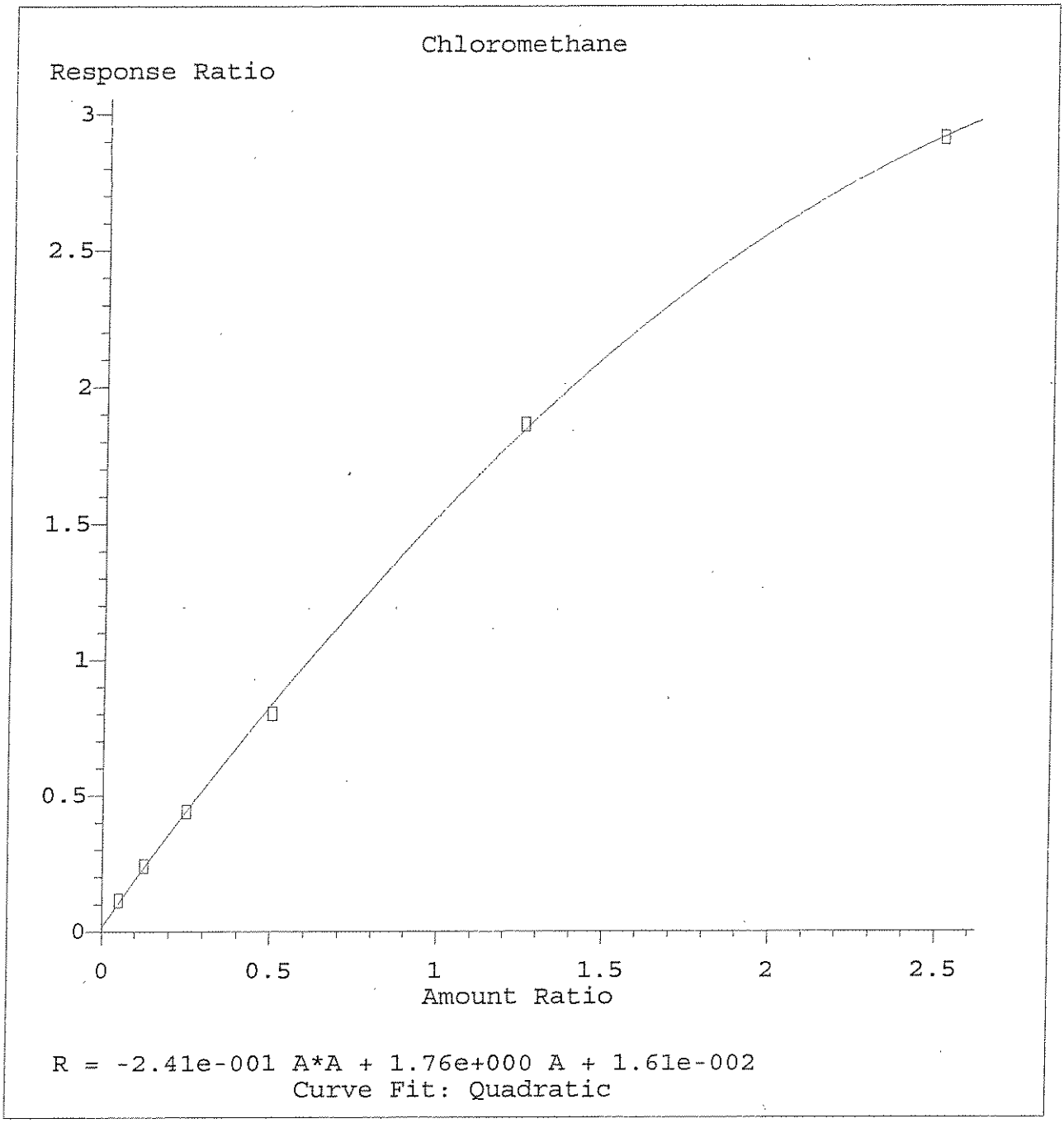
(#) = Out of Range ### Number of calibration levels exceeded format ###

Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration

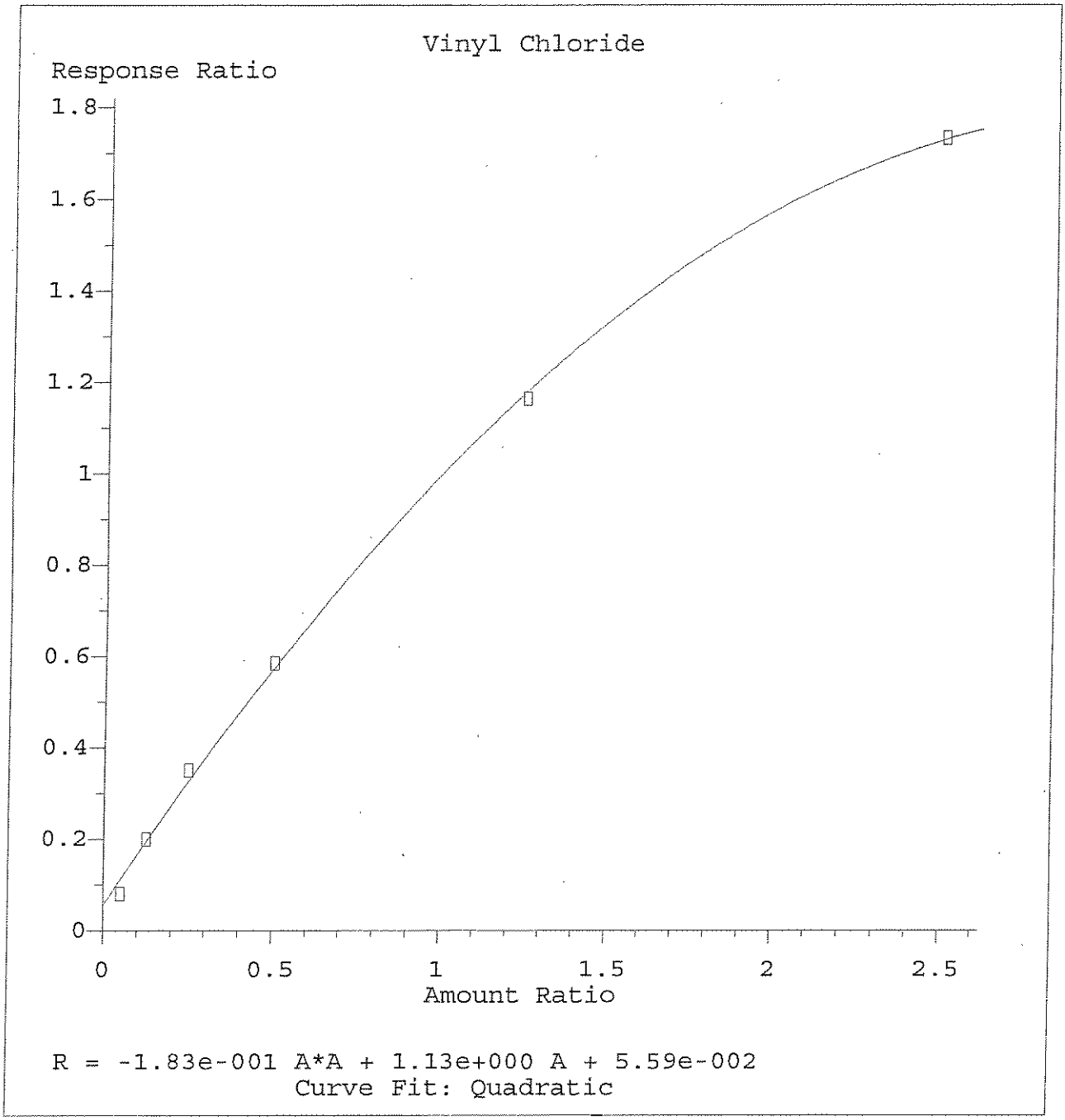
Calibration Files
0.1 =I29306SI.D 0.2 =I29307SI.D 0.5 =I29308SI.D
1 =I29309SI.D 5 =I29311SI.D 10 =I29312SI.D

		Compound	0.1	0.2	0.5	1	5	10	Avg	%RSI
86)	TM	1,3-Dichlorobenzene	0.560	0.637	0.670	0.749	0.708	0.670		8.89
87)	I	1,4-Dichlorobenzene-d	ISTD							
88)	TM	1,4-Dichlorobenzene	1.553	1.634	1.629	1.559	1.576	1.577		2.54
89)	TM	n-butylbenzene	3.447	4.013	4.172	3.992	4.025	3.923		5.82
90)	TM	1,2-Dichlorobenzene	1.092	1.303	1.309	1.240	1.263	1.239		5.90
91)	T	NO COMPOUND						0.000		-1.00
92)	TM	1,2-Dibromo-3-chlor	0.101	0.081	0.088	0.069	0.069	0.078		17.24
93)	T	NO COMPOUND						0.000		-1.00
94)	TM	1,2,4-Trichlorobenz	0.660	0.744	0.779	0.796	0.798	0.766		7.56
95)	TM	Hexachlorobutadiene	0.418	0.497	0.502	0.488	0.491	0.483		6.60
96)	TM	Naphthalene	0.726	0.796	0.892	0.992	1.014	0.914		13.82
97)	TM	1,2,3-Trichlorobenz	0.443	0.531	0.555	0.594	0.612	0.558		11.32
98)	TM	1,3,5-Trichlorobenz	0.892	1.090	1.087	1.108	1.117	1.072		8.56

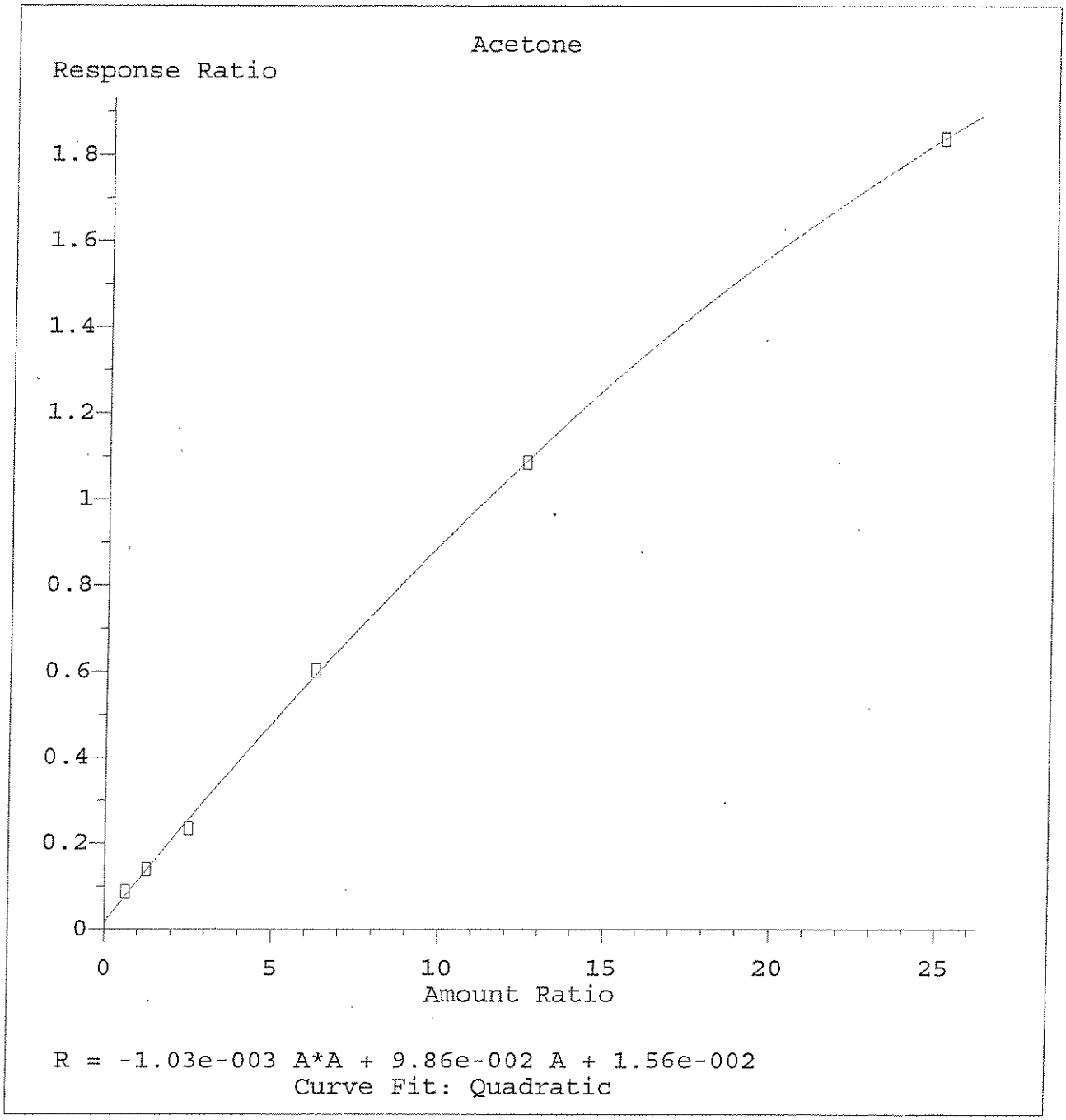
(#) = Out of Range ### Number of calibration levels exceeded format ###



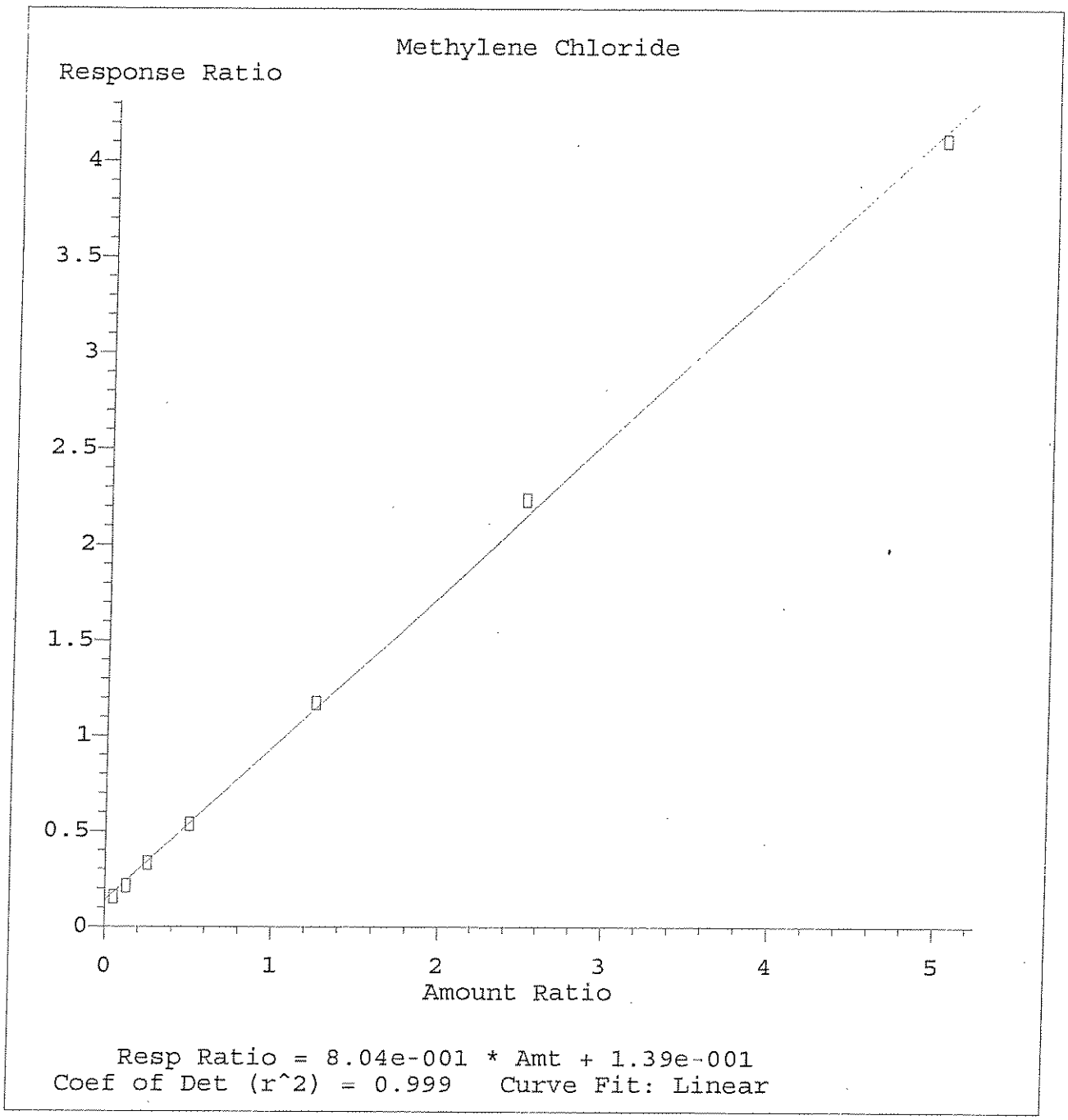
Method Name: D:\HPCHEM\METHODS\V505048I.M
Calibration Table Last Updated: Mon May 05 12:42:08 2008



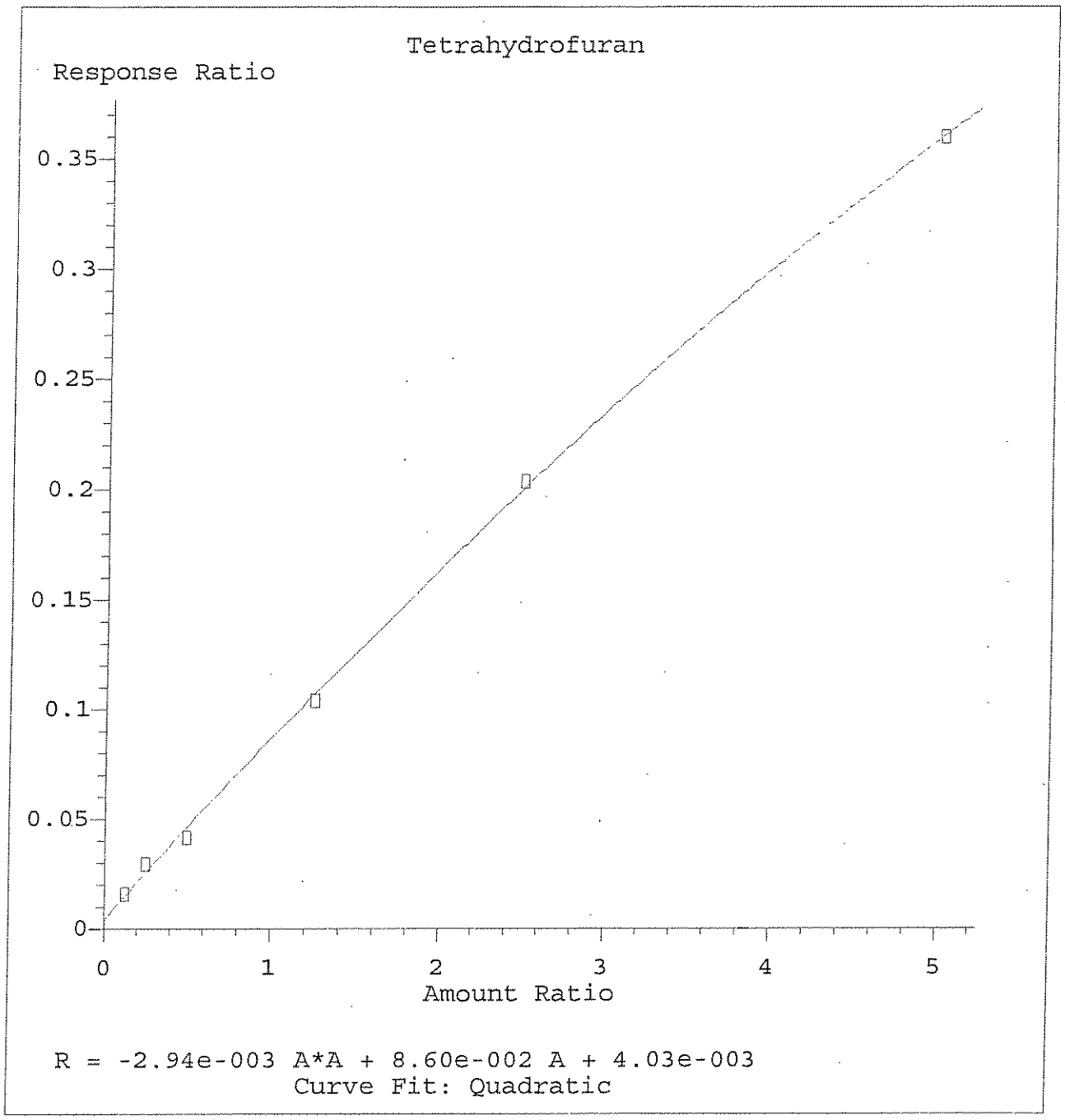
Method Name: D:\HPCHEM\METHODS\V505048I.M
Calibration Table Last Updated: Mon May 05 12:42:08 2008



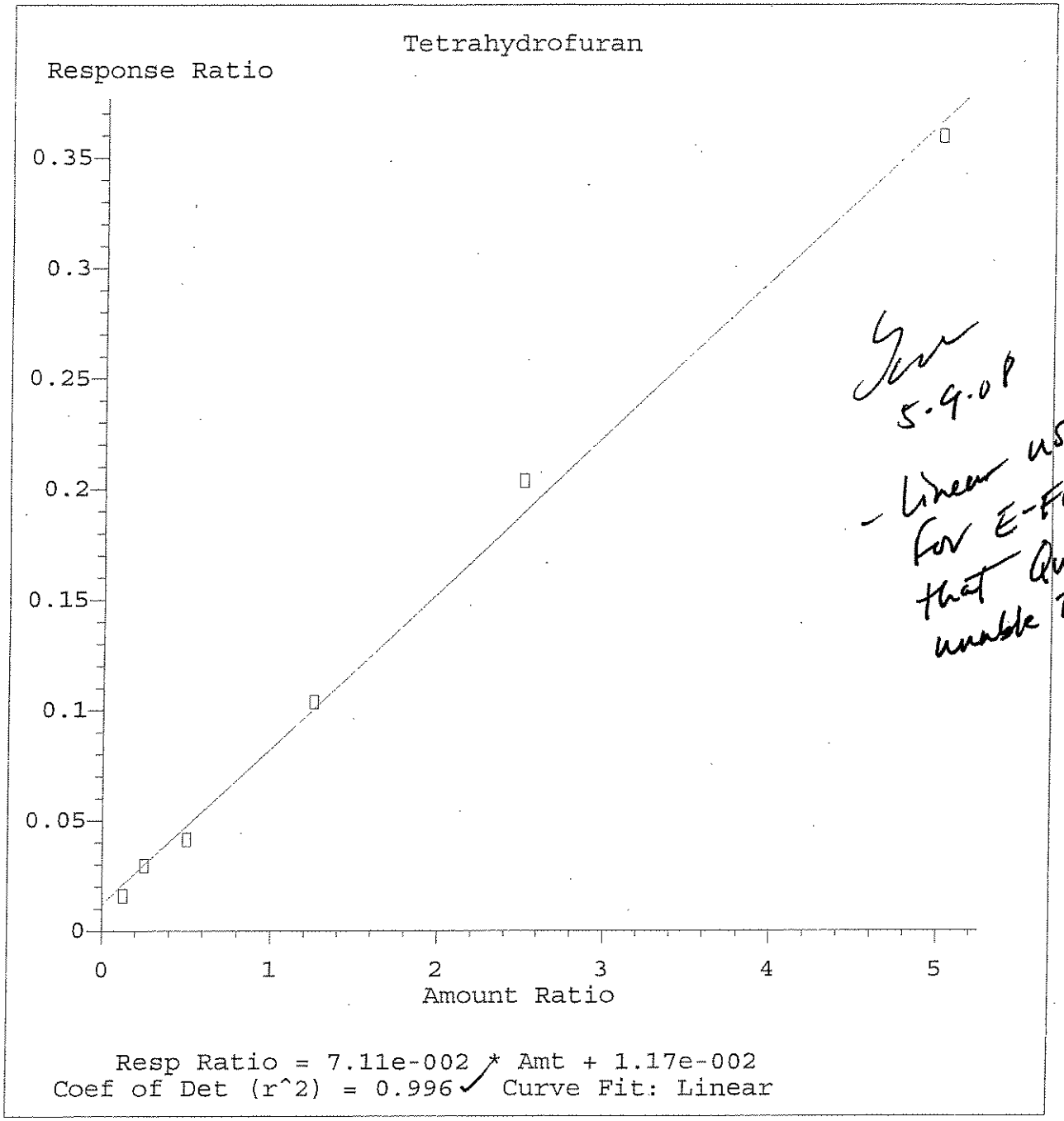
Method Name: D:\HPCHEM\METHODS\V505048I.M
Calibration Table Last Updated: Mon May 05 12:42:08 2008



Method Name: D:\HPCHEM\METHODS\V505048I.M
Calibration Table Last Updated: Mon May 05 12:42:08 2008



Method Name: D:\HPCHEM\METHODS\V505048I.M
Calibration Table Last Updated: Mon May 05 12:42:08 2008



5.9.08

- Linear used for E-Flags that Quadratic unable to quan

Method Name: D:\HPCHEM\METHODS\V505048I.M
Calibration Table Last Updated: Mon May 05 12:42:08 2008

Data File : D:\HPCHEM\DATA\050408-I\I29306SI.D Vial: 3
Acq On : 4 May 2008 12:33 pm Operator:
Sample : 0.1PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
S Integration Params: rteint.p
Quant Time: May 6 13:51 2008 Quant Results File: V505048I.RES

Quant Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration
DataAcq Meth : V505048I

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.47	168	214621	4.00	ug/L	0.00
39) Fluorobenzene	8.88	96	615691	4.00	ug/L	0.00
63) d5-Chlorobenzene	13.68	117	398534	4.00	ug/L	0.00
87) 1,4-Dichlorobenzene-d4	17.52	152	149545	4.00	ug/L	0.00
System Monitoring Compounds						
28) DB Holder #28	8.99	114	461565	3.99	ug/L	-0.02
Spiked Amount 4.000	Range 70 - 130		Recovery =	99.75%		
36) 1,4-Difluorobenzene	8.99	114	461565	3.99	ug/L	-0.02
Spiked Amount 4.000	Range 70 - 130		Recovery =	99.75%		
54) Bromofluorobenzene	15.61	95	194635	3.68	ug/L	0.00
Spiked Amount 4.000	Range 70 - 130		Recovery =	92.00%		
73) 1,2-Dichlorobenzene-d4	18.12	152	130628	3.63	ug/L	-0.02
Spiked Amount 4.000	Range 70 - 130		Recovery =	90.75%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.82	85	6608	0.10	ug/L	98
3) Chloromethane	2.08	50	20532	0.18	ug/L	98
4) Vinyl Chloride	2.19	62	10864	Below Cal		98
5) Bromomethane	2.71	94	6558	0.13	ug/L	98
6) Chloroethane	2.81	64	5597	0.12	ug/L	100
7) t-Butyl alcohol (TBA)	4.22	59	689	0.41	ug/L #	1
8) Trichlorofluoromethane	3.15	101	8876	0.11	ug/L	96
9) Diethyl ether	3.58	74	2533	0.15	ug/L	87
10) 1,1,2-Trichlorotrifluoroet	3.80	101	5506	0.11	ug/L	97
11) Acrolein	3.76	56	1336	0.10	ug/L #	23
12) Acetone	3.88	43	9029	1.08	ug/L	89
13) 1,1-Dichloroethene	4.05	61	9754	0.12	ug/L	97
15) Di-isopropyl ether (DIPE)	5.92	45	18843	0.12	ug/L	99
16) Methylene Chloride	4.83	84	26519	Below Cal		96
17) Carbon Disulfide	4.82	76	21320	0.12	ug/L #	93
18) Acrylonitrile	5.04	53	967	0.15	ug/L #	33
19) Methyl-tert-butyl ether (M	5.15	73	8969	0.13	ug/L #	69
20) trans-1,2-Dichloroethene	5.33	96	6396	0.12	ug/L	98
21) 1,1-Dichloroethane	6.03	63	11504	0.12	ug/L	93
23) Methyl ethyl ketone	6.77	72	1300	0.79	ug/L #	95
24) Ethyl t-butyl ether (ETBE)	6.59	59	12621	0.11	ug/L	94
25) 2,2-Dichloropropane	6.92	77	9877	0.13	ug/L	93
26) cis-1,2-Dichloroethene	7.00	96	6065	0.12	ug/L	83
27) t-Amyl methyl ether (TAME)	8.38	73	9478	0.12	ug/L #	70
29) Chloroform	7.26	83	9364	0.11	ug/L	96
30) Bromochloromethane	7.51	128	1730	0.11	ug/L #	89

(#) = qualifier out of range (m) = manual integration
I29306SI.D V505048I.M Tue May 06 13:51:17 2008 Page 1

Data File : D:\HPCHEM\DATA\050408-I\I29306SI.D Vial: 3
Acq On : 4 May 2008 12:33 pm Operator:
Sample : 0.1PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
S Integration Params: rteint.p
Quant Time: May 6 13:51 2008 Quant Results File: V505048I.RES

Quant Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration
DataAcq Meth : V505048I

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
31) Tetrahydrofuran	7.58	42	327	Below Cal	#	46
32) 1,1,1-Trichloroethane	7.88	97	8677	0.11 ug/L		96
34) 1,1-Dichloropropene	8.13	75	8996	0.12 ug/L		90
35) Carbon Tetrachloride	8.27	119	6321	0.11 ug/L		97
37) 1,2-Dichloroethane	8.51	62	4915	0.12 ug/L		96
38) Benzene	8.53	78	24020	0.12 ug/L		97
40) Trichloroethene	9.49	95	5816	0.11 ug/L		89
41) 1,2-Dichloropropane	9.75	63	5415	0.12 ug/L		91
45) Bromodichloromethane	10.11	83	5799	0.11 ug/L		94
46) Dibromomethane	10.18	93	2098	0.12 ug/L		79
47) 1,4-Dioxane	10.18	88	101	0.62 ug/L	#	1
51) 2-Hexanone	12.05	58	2565	0.47 ug/L		94
52) Methyl isobutyl ketone	10.69	58	3371	0.52 ug/L		93
53) cis-1,3-Dichloropropene	10.97	75	7586	0.12 ug/L		99
55) Toluene	11.45	92	15393	0.13 ug/L		98
56) trans-1,3-Dichloropropene	11.74	75	4702	0.10 ug/L		88
58) 1,1,2-Trichloroethane	11.97	83	2360	0.12 ug/L		94
59) 1,3-Dichloropropane	12.37	76	4790	0.11 ug/L		94
60) Tetrachloroethene	12.45	166	4894	0.11 ug/L		96
61) Dibromochloromethane	12.76	129	2731	0.10 ug/L		100
62) 1,2-Dibromoethane	13.08	107	2121	0.10 ug/L	#	71
64) Chlorobenzene	13.73	112	12532	0.12 ug/L		83
65) 1,1,1,2-Tetrachloroethane	13.81	131	3712	0.11 ug/L		90
66) Ethylbenzene	13.83	91	23508	0.11 ug/L		91
67) m,p-Xylene	13.95	106	18158	0.24 ug/L		91
68) o-Xylene	14.64	106	8075	0.12 ug/L		98
69) Styrene	14.70	104	10769	0.10 ug/L		94
70) Bromoform	15.22	173	1198	0.10 ug/L		79
71) Isopropylbenzene	15.22	105	20249	0.11 ug/L		99
72) 1,1,2,2-Tetrachloroethane	15.49	83	2658	0.12 ug/L	#	81
76) n-Propylbenzene	15.86	91	26852	0.11 ug/L		99
77) Bromobenzene	15.91	156	3804	0.12 ug/L		86
78) 1,3,5-Trimethylbenzene	16.13	105	14245	0.10 ug/L		95
79) 2-Chlorotoluene	16.13	91	16161	0.11 ug/L		93
80) 4-Chlorotoluene	16.22	91	15100	0.11 ug/L		92
81) tert-butylbenzene	16.69	119	12284	0.10 ug/L		98
82) 1,2,4-Trimethylbenzene	16.76	105	14702	0.10 ug/L		94
84) sec-butylbenzene	17.04	105	20874	0.10 ug/L		96
85) p-isopropyltoluene	17.27	119	15831	0.10 ug/L		94
86) 1,3-Dichlorobenzene	17.41	146	7061	0.11 ug/L		89
88) 1,4-Dichlorobenzene	17.57	146	6851	0.12 ug/L		86

(#) = qualifier out of range (m) = manual integration
I29306SI.D V505048I.M Tue May 06 13:51:17 2008 Page 2

Data File : D:\HPCHEM\DATA\050408-I\I29306SI.D Vial: 3
Acq On : 4 May 2008 12:33 pm Operator:
Sample : 0.1PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
S Integration Params: rteint.p
Quant Time: May 6 13:51 2008 Quant Results File: V505048I.RES

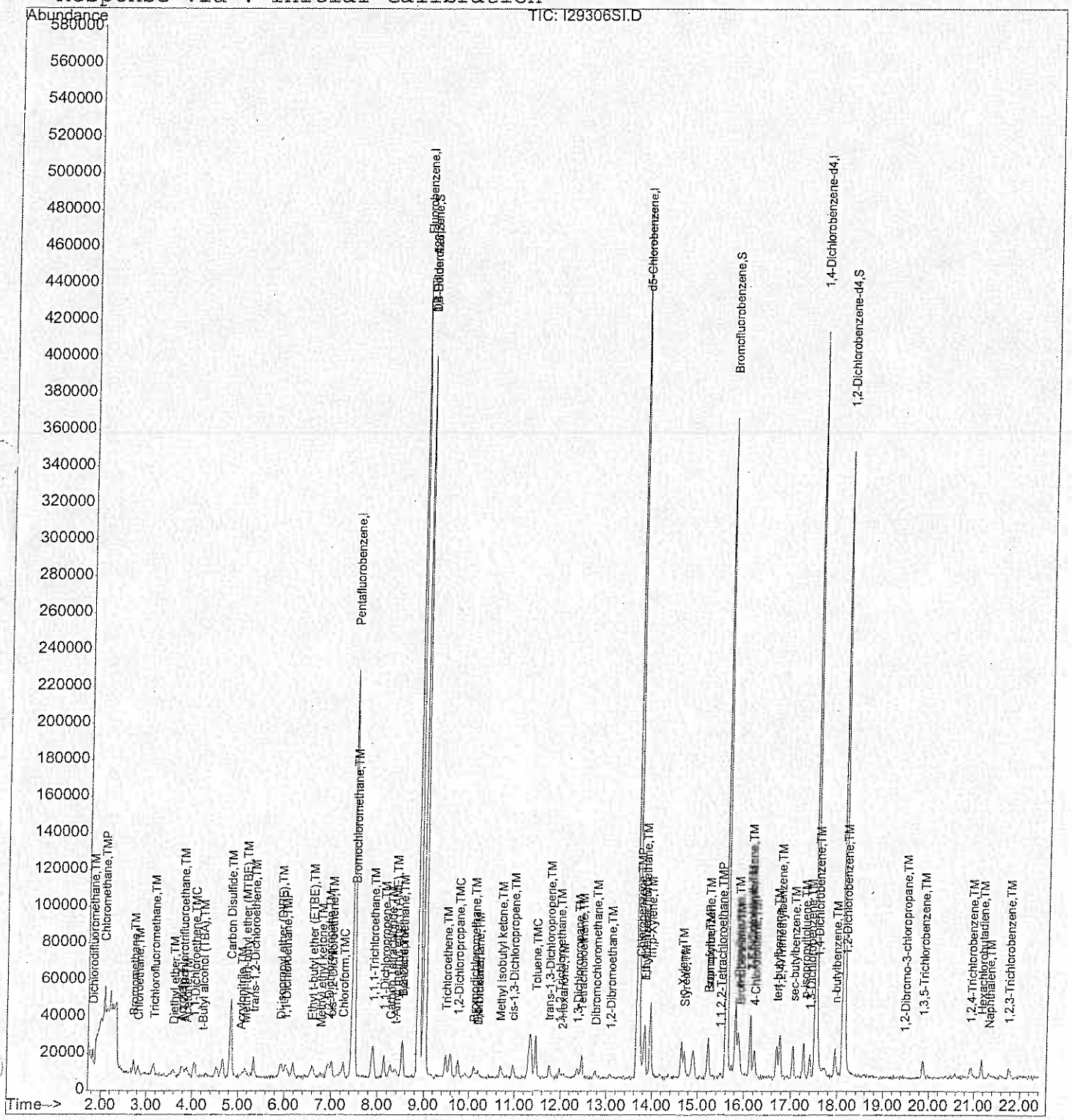
Quant Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration
DataAcq Meth : V505048I

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
89)	n-butylbenzene	17.93	91	16147	0.11 ug/L		90
90)	1,2-Dichlorobenzene	18.17	146	5622	0.12 ug/L		91
92)	1,2-Dibromo-3-chloropropan	19.46	75	234	0.08 ug/L	#	1
94)	1,2,4-Trichlorobenzene	20.92	180	3090	0.11 ug/L		86
95)	Hexachlorobutadiene	21.16	225	2283	0.13 ug/L		94
96)	Naphthalene	21.33	128	3242	0.09 ug/L		99
97)	1,2,3-Trichlorobenzene	21.76	180	2352	0.11 ug/L		94
98)	1,3,5-Trichlorobenzene	19.87	180	4179	0.10 ug/L		95

(#) = qualifier out of range (m) = manual integration
I29306SI.D V505048I.M Tue May 06 13:51:17 2008 Page 3

Data File : D:\HPCHEM\DATA\050408-I\I29306SI.D Vial: 3
Acq On : 4 May 2008 12:33 pm Operator:
Sample : 0.1PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 6 13:51 2008 Quant Results File: V505048I.R

Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration



Data File : D:\HPCHEM\DATA\050408-I\I29307SI.D Vial: 4
Acq On : 4 May 2008 1:06 pm Operator:
Sample : 0.2PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
S Integration Params: rteint.p
Quant Time: May 6 13:51 2008 Quant Results File: V505048I.RES

Quant Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration
DataAcq Meth : V505048I

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.47	168	203410	4.00	ug/L	0.00
39) Fluorobenzene	8.87	96	590218	4.00	ug/L	-0.01
63) d5-Chlorobenzene	13.68	117	387821	4.00	ug/L	0.00
87) 1,4-Dichlorobenzene-d4	17.52	152	146498	4.00	ug/L	0.00
System Monitoring Compounds						
28) DB Holder #28	9.00	114	443360	4.04	ug/L	-0.01
Spiked Amount 4.000	Range 70 - 130		Recovery = 101.00%			
36) 1,4-Difluorobenzene	9.00	114	443360	4.04	ug/L	-0.01
Spiked Amount 4.000	Range 70 - 130		Recovery = 101.00%			
54) Bromofluorobenzene	15.61	95	195496	3.86	ug/L	0.00
Spiked Amount 4.000	Range 70 - 130		Recovery = 96.50%			
73) 1,2-Dichlorobenzene-d4	18.12	152	128851	3.68	ug/L	-0.01
Spiked Amount 4.000	Range 70 - 130		Recovery = 92.00%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.82	85	12137	0.20	ug/L	97
3) Chloromethane	2.07	50	23248	0.22	ug/L	98
4) Vinyl Chloride	2.19	62	16450	0.09	ug/L	94
5) Bromomethane	2.71	94	12015	0.24	ug/L	99
6) Chloroethane	2.82	64	8285	0.19	ug/L	92
7) t-Butyl alcohol (TBA)	4.23	59	1146	0.72	ug/L #	60
8) Trichlorofluoromethane	3.14	101	14137	0.18	ug/L	90
9) Diethyl ether	3.58	74	3529	0.22	ug/L	92
10) 1,1,2-Trichlorotrifluoroet	3.77	101	8139	0.18	ug/L	94
11) Acrolein	3.77	56	2331	0.18	ug/L #	81
12) Acetone	3.87	43	8928	1.15	ug/L #	82
13) 1,1-Dichloroethene	4.04	61	14112	0.18	ug/L	99
15) Di-isopropyl ether (DIPE)	5.93	45	28003	0.19	ug/L	96
16) Methylene Chloride	4.84	84	31730	0.08	ug/L	93
17) Carbon Disulfide	4.82	76	32739	0.19	ug/L	99
18) Acrylonitrile	5.07	53	1172	0.19	ug/L #	54
19) Methyl-tert-butyl ether (M	5.15	73	12817	0.19	ug/L #	79
20) trans-1,2-Dichloroethene	5.34	96	10100	0.20	ug/L	98
21) 1,1-Dichloroethane	6.03	63	17660	0.19	ug/L	91
23) Methyl ethyl ketone	6.77	72	1618	1.04	ug/L #	89
24) Ethyl t-butyl ether (ETBE)	6.57	59	19968	0.19	ug/L #	42
25) 2,2-Dichloropropane	6.93	77	14683	0.20	ug/L	95
26) cis-1,2-Dichloroethene	7.00	96	8898	0.18	ug/L	99
27) t-Amyl methyl ether (TAME)	8.38	73	14243	0.19	ug/L #	80
29) Chloroform	7.25	83	15366	0.18	ug/L	98
30) Bromochloromethane	7.50	128	3035	0.20	ug/L	90

(#) = qualifier out of range (m) = manual integration
I29307SI.D V505048I.M Tue May 06 13:51:19 2008 Page 1

Data File : D:\HPCHEM\DATA\050408-I\I29307SI.D Vial: 4
Acq On : 4 May 2008 1:06 pm Operator:
Sample : 0.2PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
S Integration Params: rteint.p
Quant Time: May 6 13:51 2008 Quant Results File: V505048I.RES

Quant Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration
DataAcq Meth : V505048I

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
31)	Tetrahydrofuran	7.58	42	234	Below Cal	#	1
32)	1,1,1-Trichloroethane	7.88	97	13884	0.19 ug/L		87
34)	1,1-Dichloropropene	8.13	75	13403	0.18 ug/L		89
35)	Carbon Tetrachloride	8.27	119	10041	0.18 ug/L		98
37)	1,2-Dichloroethane	8.52	62	8020	0.20 ug/L		95
38)	Benzene	8.53	78	36934	0.19 ug/L		96
40)	Trichloroethene	9.49	95	9233	0.18 ug/L		86
41)	1,2-Dichloropropane	9.75	63	8515	0.19 ug/L		99
45)	Bromodichloromethane	10.10	83	8956	0.17 ug/L		90
46)	Dibromomethane	10.17	93	3182	0.18 ug/L		94
47)	1,4-Dioxane	10.18	88	168	1.07 ug/L	#	1
51)	2-Hexanone	12.05	58	2365	0.45 ug/L	#	50
52)	Methyl isobutyl ketone	10.68	58	4849	0.79 ug/L		93
53)	cis-1,3-Dichloropropene	10.96	75	10816	0.18 ug/L		97
55)	Toluene	11.45	92	22736	0.20 ug/L		96
56)	trans-1,3-Dichloropropene	11.74	75	7457	0.17 ug/L		98
58)	1,1,2-Trichloroethane	11.97	83	3563	0.19 ug/L		92
59)	1,3-Dichloropropane	12.37	76	8075	0.20 ug/L		91
60)	Tetrachloroethene	12.46	166	7295	0.18 ug/L		87
61)	Dibromochloromethane	12.75	129	4693	0.18 ug/L		99
62)	1,2-Dibromoethane	13.07	107	3402	0.17 ug/L		86
64)	Chlorobenzene	13.74	112	18717	0.18 ug/L	#	81
65)	1,1,1,2-Tetrachloroethane	13.81	131	6018	0.19 ug/L		93
66)	Ethylbenzene	13.83	91	37987	0.18 ug/L		94
67)	m,p-Xylene	13.95	106	25898	0.35 ug/L		87
68)	o-Xylene	14.64	106	12152	0.18 ug/L		88
69)	Styrene	14.70	104	17087	0.16 ug/L		92
70)	Bromoform	15.21	173	1843	0.16 ug/L		100
71)	Isopropylbenzene	15.22	105	31883	0.17 ug/L		93
72)	1,1,2,2-Tetrachloroethane	15.49	83	3687	0.17 ug/L		98
74)	1,2,3-Trichloropropane	15.72	75	4324	0.28 ug/L	#	91
75)	trans-1,4-Dichloro-2-buten	15.88	88	866	0.38 ug/L	#	2
76)	n-Propylbenzene	15.87	91	43224	0.17 ug/L		97
77)	Bromobenzene	15.91	156	5724	0.18 ug/L		93
78)	1,3,5-Trimethylbenzene	16.13	105	23749	0.17 ug/L		99
79)	2-Chlorotoluene	16.13	91	25244	0.17 ug/L		92
80)	4-Chlorotoluene	16.22	91	22900	0.18 ug/L		95
81)	tert-butylbenzene	16.69	119	20548	0.17 ug/L		94
82)	1,2,4-Trimethylbenzene	16.75	105	23401	0.17 ug/L		92
84)	sec-butylbenzene	17.04	105	32228	0.16 ug/L		95
85)	p-isopropyltoluene	17.27	119	24821	0.16 ug/L		98

(#) = qualifier out of range (m) = manual integration
I29307SI.D V505048I.M Tue May 06 13:51:19 2008 Page 2

Data File : D:\HPCHEM\DATA\050408-I\I29307SI.D Vial: 4
Acq On : 4 May 2008 1:06 pm Operator:
Sample : 0.2PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
S Integration Params: rteint.p
Quant Time: May 6 13:51 2008 Quant Results File: V505048I.RES

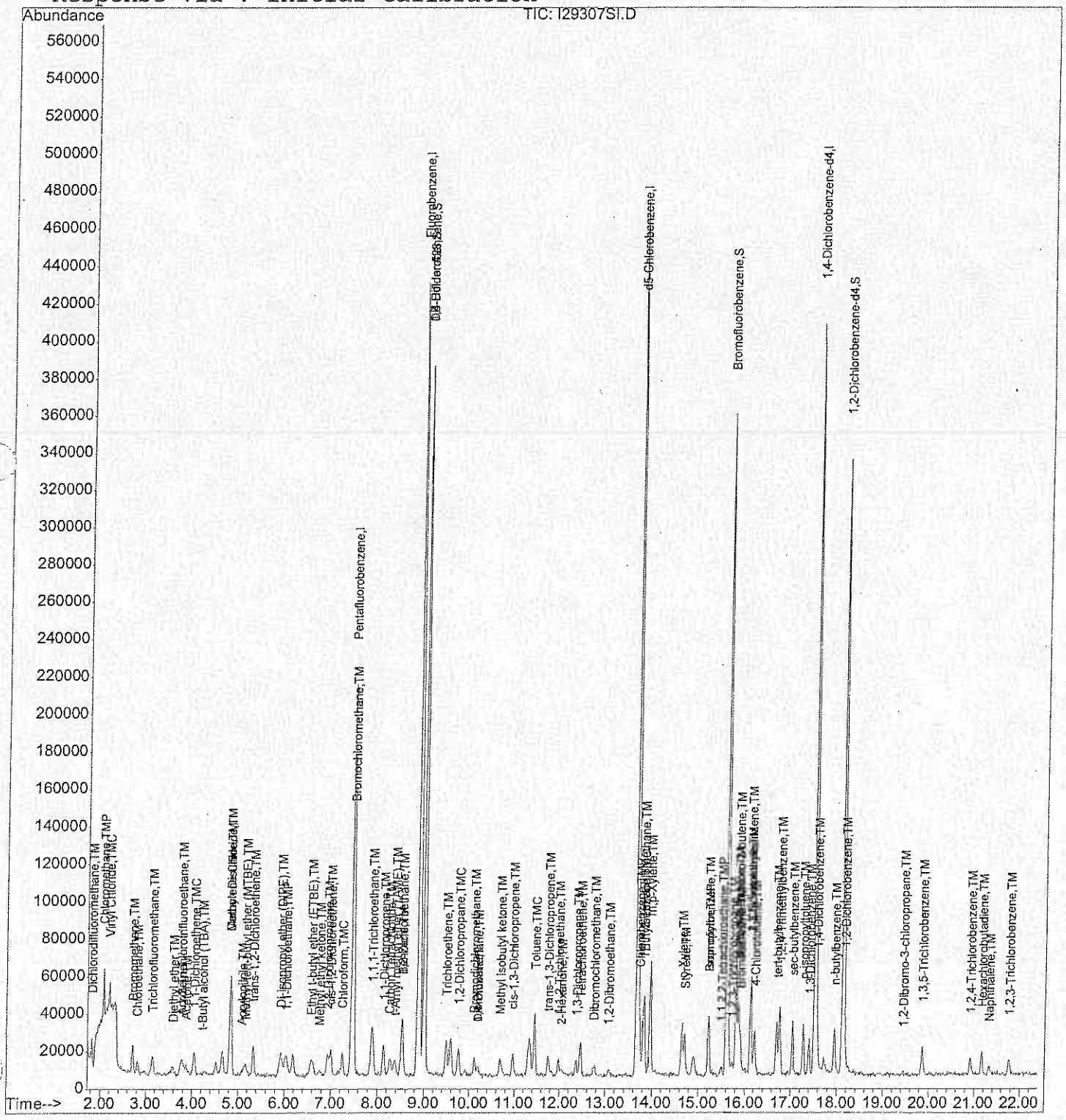
Quant Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration
DataAcq Meth : V505048I

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
86)	1,3-Dichlorobenzene	17.40	146	10853	0.17 ug/L	96
88)	1,4-Dichlorobenzene	17.57	146	11372	0.20 ug/L	96
89)	n-butylbenzene	17.95	91	25250	0.18 ug/L	92
90)	1,2-Dichlorobenzene	18.17	146	7996	0.18 ug/L	96
92)	1,2-Dibromo-3-chloropropan	19.44	75	743	0.26 ug/L #	40
94)	1,2,4-Trichlorobenzene	20.92	180	4834	0.17 ug/L	84
95)	Hexachlorobutadiene	21.16	225	3062	0.17 ug/L	90
96)	Naphthalene	21.33	128	5317	0.16 ug/L	88
97)	1,2,3-Trichlorobenzene	21.76	180	3247	0.16 ug/L	87
98)	1,3,5-Trichlorobenzene	19.87	180	6531	0.17 ug/L	86

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\DATA\050408-I\I29307SI.D Vial: 4
Acq On : 4 May 2008 1:06 pm Operator:
Sample : 0.2PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 6 13:51 2008 Quant Results File: V505048I.RE

Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration



Data File : D:\HPCHEM\DATA\050408-I\I29308SI.D Vial: 5
Acq On : 4 May 2008 1:39 pm Operator:
Sample : 0.5PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
S Integration Params: rteint.p
Quant Time: May 5 12:44 2008 Quant Results File: V505048I.RES

Quant Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration
DataAcq Meth : V505048I

5.7.08 AK 5.06.08

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.47	168	206030	4.00	ug/L	0.00
39) Fluorobenzene	8.88	96	593719 ✓	4.00	ug/L	0.00
63) d5-Chlorobenzene	13.68	117	392042 ✓	4.00	ug/L	0.00
87) 1,4-Dichlorobenzene-d4	17.52	152	153524	4.00	ug/L	0.00
System Monitoring Compounds						
28) DB Holder #28	8.99	114	445753	4.01	ug/L	-0.02
Spiked Amount 4.000	Range 70 - 130		Recovery = 100.25% ✓			
36) 1,4-Difluorobenzene	8.99	114	445753	4.01	ug/L	-0.02
Spiked Amount 4.000	Range 70 - 130		Recovery = 100.25% ✓			
54) Bromofluorobenzene	15.61	95	198226	3.89	ug/L	0.00
Spiked Amount 4.000	Range 70 - 130		Recovery = 97.25% ✓			
73) 1,2-Dichlorobenzene-d4	18.12	152	133153	3.76	ug/L	-0.02
Spiked Amount 4.000	Range 70 - 130		Recovery = 94.00% ✓			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.82	85	32426	0.53	ug/L	100
3) Chloromethane	2.08	50	49628	0.52	ug/L	95
4) Vinyl Chloride	2.19	62	41225	0.52	ug/L	97
5) Bromomethane	2.72	94	28007	0.56	ug/L	97
6) Chloroethane	2.81	64	23211	0.53	ug/L	98
8) Trichlorofluoromethane	3.15	101	40330	0.52	ug/L	99
9) Diethyl ether	3.58	74	8217	0.50	ug/L #	86
10) 1,1,2-Trichlorotrifluoroet	3.78	101	25540	0.55	ug/L	95
12) Acetone	3.88	43	17905	2.91	ug/L	98
13) 1,1-Dichloroethene	4.05	61	41822	0.54	ug/L	95
15) Di-isopropyl ether (DIPE)	5.92	45	79229	0.52	ug/L	99
16) Methylene Chloride	4.83	84	43797	0.36	ug/L	96
17) Carbon Disulfide	4.82	76	91301	0.53	ug/L	96
18) Acrylonitrile	5.07	53	3979	0.64	ug/L #	91
19) Methyl-tert-butyl ether (M	5.14	73	35220	0.53	ug/L	94
20) trans-1,2-Dichloroethene	5.33	96	26529	0.52	ug/L	96
21) 1,1-Dichloroethane	6.04	63	49310	0.53	ug/L	97
23) Methyl ethyl ketone	6.77	72	4069	2.58	ug/L #	89
24) Ethyl t-butyl ether (ETBE)	6.59	59	52939	0.49	ug/L	98
25) 2,2-Dichloropropane	6.93	77	41413	0.56	ug/L	96
26) cis-1,2-Dichloroethene	7.00	96	25282	0.51	ug/L	99
27) t-Amyl methyl ether (TAME)	8.36	73	38673	0.50	ug/L	94
29) Chloroform	7.26	83	43447	0.51	ug/L	99
30) Bromochloromethane	7.50	128	7927	0.50	ug/L	88
32) 1,1,1-Trichloroethane	7.88	97	37844	0.52	ug/L	93
34) 1,1-Dichloropropene	8.14	75	38721	0.52	ug/L	94

(#) = qualifier out of range (m) = manual integration
I29308SI.D V505048I.M Mon May 05 12:44:41 2008 Page 1

Data File : D:\HPCHEM\DATA\050408-I\I29308SI.D Vial: 5
Acq On : 4 May 2008 1:39 pm Operator:
Sample : 0.5PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
S Integration Params: rteint.p
Quant Time: May 5 12:44 2008 Quant Results File: V505048I.RES

Quant Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration
DataAcq Meth : V505048I

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
35)	Carbon Tetrachloride	8.27	119	29809	0.53 ug/L	98
37)	1,2-Dichloroethane	8.52	62	21366	0.53 ug/L	97
38)	Benzene	8.53	78	102152	0.52 ug/L	100
40)	Trichloroethene	9.49	95	26929	0.53 ug/L	99
41)	1,2-Dichloropropane	9.75	63	23569	0.53 ug/L	95
45)	Bromodichloromethane	10.11	83	26795	0.51 ug/L	93
46)	Dibromomethane	10.18	93	9210	0.52 ug/L	94
53)	cis-1,3-Dichloropropene	10.96	75	28585	0.48 ug/L	95
55)	Toluene	11.45	92	58724	0.51 ug/L	97
56)	trans-1,3-Dichloropropene	11.74	75	21223	0.49 ug/L	95
58)	1,1,2-Trichloroethane	11.97	83	9569	0.51 ug/L	99
59)	1,3-Dichloropropane	12.37	76	19845	0.48 ug/L	93
60)	Tetrachloroethene	12.45	166	20843	0.51 ug/L	97
61)	Dibromochloromethane	12.76	129	13309	0.50 ug/L	96
62)	1,2-Dibromoethane	13.07	107	9420	0.48 ug/L	94
64)	Chlorobenzene	13.74	112	54297	0.52 ug/L	96
65)	1,1,1,2-Tetrachloroethane	13.80	131	16960	0.52 ug/L	93
66)	Ethylbenzene	13.83	91	108682	0.52 ug/L	99
67)	m,p-Xylene	13.95	106	77132	1.03 ug/L	95
68)	o-Xylene	14.64	106	34677	0.51 ug/L	100
69)	Styrene	14.70	104	51488	0.49 ug/L	95
70)	Bromoform	15.20	173	5312	0.47 ug/L	87
71)	Isopropylbenzene	15.22	105	95992	0.51 ug/L	98
72)	1,1,2,2-Tetrachloroethane	15.49	83	10520	0.49 ug/L	94
74)	1,2,3-Trichloropropane	15.72	75	6980	0.45 ug/L	97
75)	trans-1,4-Dichloro-2-buten	15.85	88	1324	0.51 ug/L #	20
76)	n-Propylbenzene	15.86	91	130158	0.52 ug/L	98
77)	Bromobenzene	15.91	156	15705	0.49 ug/L	99
78)	1,3,5-Trimethylbenzene	16.13	105	71528	0.49 ug/L	96
79)	2-Chlorotoluene	16.13	91	73993	0.49 ug/L	96
80)	4-Chlorotoluene	16.22	91	65230	0.49 ug/L	99
81)	tert-butylbenzene	16.69	119	59699	0.48 ug/L	95
82)	1,2,4-Trimethylbenzene	16.76	105	69509	0.49 ug/L	99
84)	sec-butylbenzene	17.05	105	100083	0.50 ug/L	100
85)	p-isopropyltoluene	17.27	119	74669	0.49 ug/L	99
86)	1,3-Dichlorobenzene	17.40	146	31236	0.48 ug/L	97
88)	1,4-Dichlorobenzene	17.57	146	31353	0.52 ug/L	95
89)	n-butylbenzene	17.94	91	77016	0.51 ug/L	93
90)	1,2-Dichlorobenzene	18.17	146	25004	0.53 ug/L	96
92)	1,2-Dibromo-3-chloropropan	19.47	75	1561	0.52 ug/L	84
94)	1,2,4-Trichlorobenzene	20.91	180	14269	0.49 ug/L	91

(#) = qualifier out of range (m) = manual integration
I29308SI.D V505048I.M Mon May 05 12:44:41 2008 Page 2

Data File : D:\HPCHEM\DATA\050408-I\I29308SI.D Vial: 5
Acq On : 4 May 2008 1:39 pm Operator:
Sample : 0.5PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
S Integration Params: rteint.p
Quant Time: May 5 12:44 2008 Quant Results File: V505048I.RES

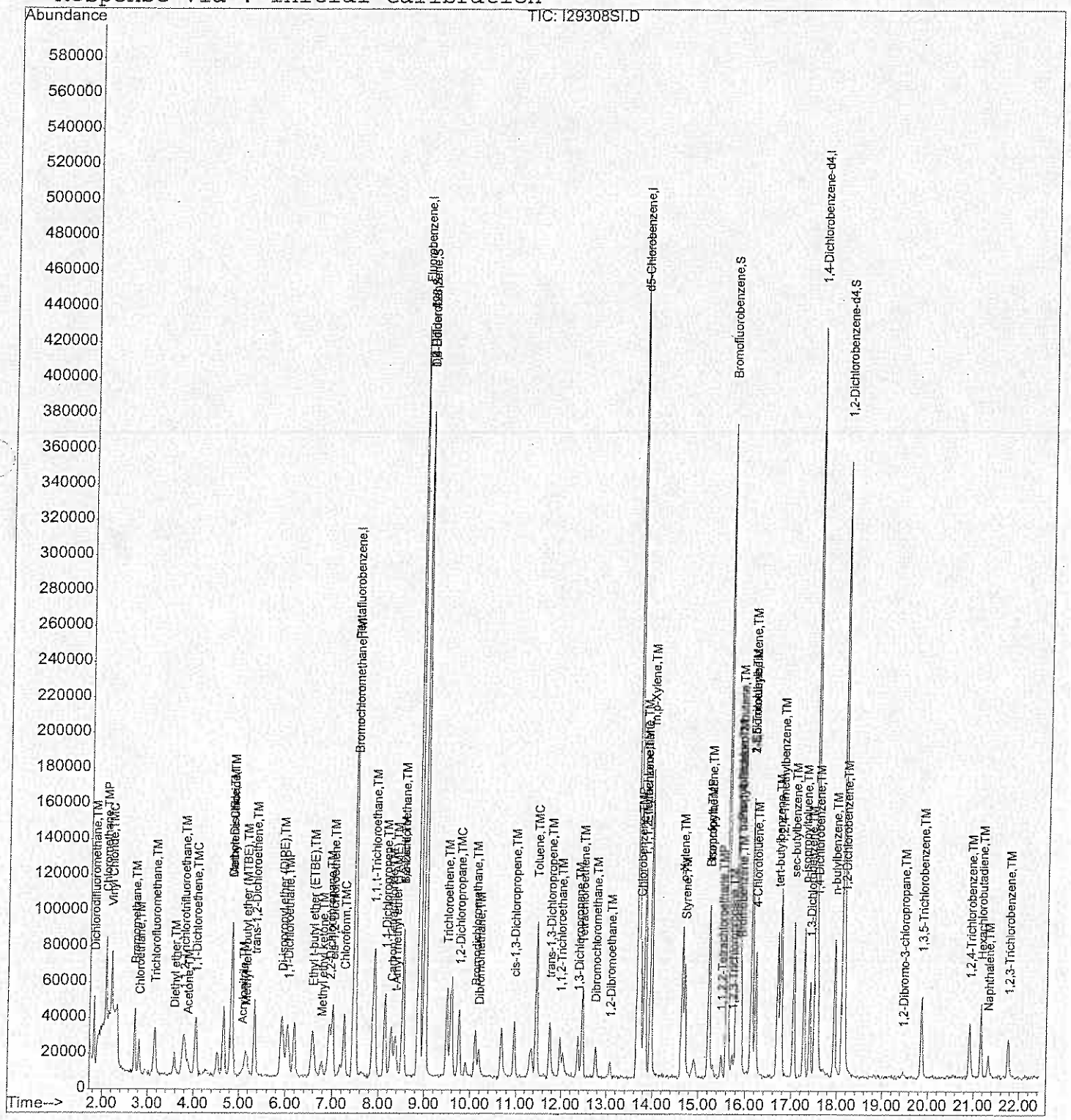
Quant Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration
DataAcq Meth : V505048I

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
95) Hexachlorobutadiene	21.16	225	9540	0.51 ug/L	98
96) Naphthalene	21.32	128	15274	0.44 ug/L	95
97) 1,2,3-Trichlorobenzene	21.76	180	10192	0.48 ug/L	99
98) 1,3,5-Trichlorobenzene	19.87	180	20909	0.51 ug/L	92

(#) = qualifier out of range (m) = manual integration
I29308SI.D V505048I.M Mon May 05 12:44:41 2008 Page 3

Data File : D:\HPCHEM\DATA\050408-I\I29308SI.D Vial: 5
Acq On : 4 May 2008 1:39 pm Operator:
Sample : 0.5PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 5 12:44 2008 Quant Results File: V505048I.RI

Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration



I29308SI.D V505048I.M Mon May 05 12:44:42 2008 Page 4

Data File : D:\HPCHEM\DATA\050408-I\I29309SI.D Vial: 6
Acq On : 4 May 2008 2:12 pm Operator:
Sample : 1.0PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
S Integration Params: rteint.p
Quant Time: May 5 12:44 2008 Quant Results File: V505048I.RES

Quant Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration
DataAcq Meth : V505048I

5.7.08 AK 5.06.08

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.47	168	204381	4.00	ug/L	0.00
39) Fluorobenzene	8.88	96	589601 ✓	4.00	ug/L	0.00
63) d5-Chlorobenzene	13.68	117	387633 ✓	4.00	ug/L	0.00
87) 1,4-Dichlorobenzene-d4	17.52	152	154825	4.00	ug/L	0.00
System Monitoring Compounds						
28) DB Holder #28	9.00	114	442652	4.01	ug/L	-0.02
Spiked Amount 4.000	Range 70 - 130		Recovery = 100.25% ✓			
36) 1,4-Difluorobenzene	9.00	114	442652	4.01	ug/L	-0.02
Spiked Amount 4.000	Range 70 - 130		Recovery = 100.25% ✓			
54) Bromofluorobenzene	15.61	95	192705	3.81	ug/L	0.00
Spiked Amount 4.000	Range 70 - 130		Recovery = 95.25% ✓			
73) 1,2-Dichlorobenzene-d4	18.12	152	131955	3.77	ug/L	-0.02
Spiked Amount 4.000	Range 70 - 130		Recovery = 94.25% ✓			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.82	85	64564	1.06	ug/L	97
3) Chloromethane	2.07	50	90136	1.00	ug/L	100
4) Vinyl Chloride	2.19	62	71754	1.10	ug/L	99
5) Bromomethane	2.71	94	50053	1.01	ug/L	98
6) Chloroethane	2.81	64	46928	1.08	ug/L	93
8) Trichlorofluoromethane	3.14	101	83675	1.09	ug/L	99
9) Diethyl ether	3.57	74	16528	1.02	ug/L	91
10) 1,1,2-Trichlorotrifluoroet	3.78	101	48458	1.06	ug/L	98
12) Acetone	3.88	43	28466	5.08	ug/L	97
13) 1,1-Dichloroethene	4.05	61	81869	1.06	ug/L	95
15) Di-isopropyl ether (DIPE)	5.92	45	154480	1.02	ug/L	98
16) Methylene Chloride	4.84	84	67655	0.95	ug/L	93
17) Carbon Disulfide	4.82	76	179352	1.04	ug/L	99
18) Acrylonitrile	5.06	53	6411	1.04	ug/L #	90
19) Methyl-tert-butyl ether (M	5.14	73	66150	1.00	ug/L	96
20) trans-1,2-Dichloroethene	5.33	96	53382	1.05	ug/L	98
21) 1,1-Dichloroethane	6.03	63	100112	1.07	ug/L	96
23) Methyl ethyl ketone	6.75	72	7871	5.03	ug/L	93
24) Ethyl t-butyl ether (ETBE)	6.57	59	109750	1.03	ug/L	97
25) 2,2-Dichloropropane	6.94	77	80571	1.09	ug/L	99
26) cis-1,2-Dichloroethene	7.00	96	50371	1.03	ug/L	95
27) t-Amyl methyl ether (TAME)	8.35	73	77259	1.00	ug/L	96
29) Chloroform	7.25	83	88868	1.06	ug/L	97
30) Bromochloromethane	7.50	128	15080	0.97	ug/L #	89
32) 1,1,1-Trichloroethane	7.88	97	77162	1.07	ug/L	98
34) 1,1-Dichloropropene	8.13	75	79226	1.07	ug/L	98

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\DATA\050408-I\I29309SI.D Vial: 6
Acq On : 4 May 2008 2:12 pm Operator:
Sample : 1.0PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
S Integration Params: rteint.p
Quant Time: May 5 12:44 2008 Quant Results File: V505048I.RES

Quant Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration
DataAcq Meth : V505048I

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
35)	Carbon Tetrachloride	8.27	119	59915	1.07 ug/L		99
37)	1,2-Dichloroethane	8.51	62	43070	1.07 ug/L		100
38)	Benzene	8.52	78	204165	1.05 ug/L		96
40)	Trichloroethene	9.49	95	52877	1.05 ug/L		96
41)	1,2-Dichloropropane	9.75	63	46939	1.06 ug/L		98
45)	Bromodichloromethane	10.10	83	54906	1.05 ug/L		97
46)	Dibromomethane	10.18	93	17368	0.99 ug/L		97
47)	1,4-Dioxane	10.20	88	3981	25.32 ug/L		93
51)	2-Hexanone	12.03	58	22453	4.26 ug/L		97
52)	Methyl isobutyl ketone	10.68	58	29385	4.77 ug/L		99
53)	cis-1,3-Dichloropropene	10.96	75	58957	1.00 ug/L		97
55)	Toluene	11.45	92	118021	1.03 ug/L		99
56)	trans-1,3-Dichloropropene	11.75	75	42352	0.98 ug/L		98
58)	1,1,2-Trichloroethane	11.97	83	18393	0.99 ug/L		94
59)	1,3-Dichloropropane	12.37	76	40891	1.01 ug/L		100
60)	Tetrachloroethene	12.46	166	41687	1.02 ug/L		96
61)	Dibromochloromethane	12.76	129	26443	0.99 ug/L		99
62)	1,2-Dibromoethane	13.07	107	19990	1.02 ug/L		89
64)	Chlorobenzene	13.74	112	105144	1.02 ug/L		97
65)	1,1,1,2-Tetrachloroethane	13.81	131	33093	1.02 ug/L		97
66)	Ethylbenzene	13.83	91	216821	1.04 ug/L		97
67)	m,p-Xylene	13.95	106	156159	2.11 ug/L		96
68)	o-Xylene	14.64	106	70548	1.04 ug/L		100
69)	Styrene	14.70	104	105027	1.01 ug/L		99
70)	Bromoform	15.21	173	11187	0.99 ug/L		100
71)	Isopropylbenzene	15.22	105	193528	1.04 ug/L		99
72)	1,1,2,2-Tetrachloroethane	15.49	83	21732	1.02 ug/L		100
74)	1,2,3-Trichloropropane	15.73	75	14408	0.93 ug/L	#	86
75)	trans-1,4-Dichloro-2-buten	15.86	88	2713	0.93 ug/L	#	26
76)	n-Propylbenzene	15.87	91	258814	1.05 ug/L		100
77)	Bromobenzene	15.90	156	32649	1.02 ug/L		94
78)	1,3,5-Trimethylbenzene	16.13	105	146649	1.02 ug/L		96
79)	2-Chlorotoluene	16.13	91	153471	1.03 ug/L		94
80)	4-Chlorotoluene	16.21	91	136032	1.04 ug/L		98
81)	tert-butylbenzene	16.69	119	126155	1.04 ug/L		94
82)	1,2,4-Trimethylbenzene	16.75	105	143449	1.02 ug/L		99
84)	sec-butylbenzene	17.04	105	206487	1.04 ug/L		98
85)	p-isopropyltoluene	17.27	119	153452	1.02 ug/L		99
86)	1,3-Dichlorobenzene	17.40	146	64910	1.00 ug/L		96
88)	1,4-Dichlorobenzene	17.57	146	63054	1.03 ug/L		97
89)	n-butylbenzene	17.95	91	161474	1.06 ug/L		96

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\DATA\050408-I\I29309SI.D Vial: 6
Acq On : 4 May 2008 2:12 pm Operator:
Sample : 1.0PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
'S Integration Params: rteint.p
Quant Time: May 5 12:44 2008 Quant Results File: V505048I.RES

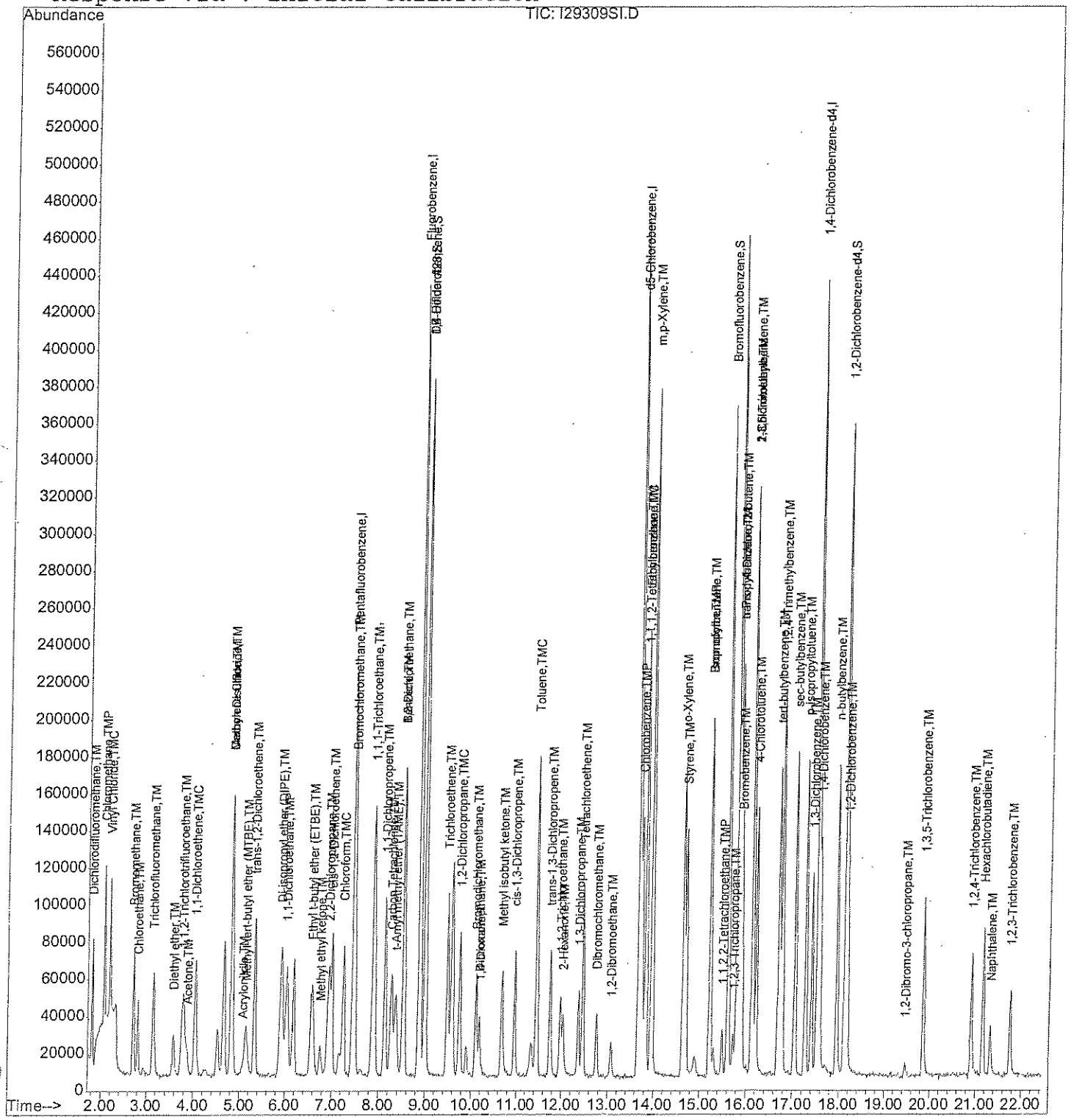
Quant Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration
DataAcq Meth : V505048I

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
90)	1,2-Dichlorobenzene	18.17	146	50659	1.06	ug/L		99
92)	1,2-Dibromo-3-chloropropan	19.46	75	3400	1.13	ug/L	#	67
94)	1,2,4-Trichlorobenzene	20.91	180	30133	1.02	ug/L		92
95)	Hexachlorobutadiene	21.16	225	19442	1.04	ug/L		100
96)	Naphthalene	21.32	128	34545	0.98	ug/L		99
97)	1,2,3-Trichlorobenzene	21.76	180	21469	0.99	ug/L		97
98)	1,3,5-Trichlorobenzene	19.86	180	42059	1.01	ug/L		98

(#) = qualifier out of range (m) = manual integration
I29309SI.D V505048I.M Mon May 05 12:44:43 2008 Page 3

Data File : D:\HPCHEM\DATA\050408-I\I29309SI.D Vial: 6
Acq On : 4 May 2008 2:12 pm Operator:
Sample : 1.0PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 5 12:44 2008 Quant Results File: V505048I.R

Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration



Data File : D:\HPCHEM\DATA\050408-I\I29310SI.D Vial: 7
Acq On : 4 May 2008 2:45 pm Operator:
Sample : 2.0PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
S Integration Params: rteint.p
Quant Time: May 5 12:44 2008 Quant Results File: V505048I.RES

Quant Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration
DataAcq Meth : V505048I

5.7.08 AK 5.06.08

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.46	168	203899	4.00	ug/L	0.00
39) Fluorobenzene	8.87	96	600739	4.00	ug/L	0.00
63) d5-Chlorobenzene	13.67	117	403991	4.00	ug/L	0.00
87) 1,4-Dichlorobenzene-d4	17.52	152	174984	4.00	ug/L	0.00
System Monitoring Compounds						
28) DB Holder #28	8.99	114	448269	4.07	ug/L	-0.02
Spiked Amount 4.000	Range 70 - 130		Recovery = 101.75%			
36) 1,4-Difluorobenzene	8.99	114	448269	4.07	ug/L	-0.02
Spiked Amount 4.000	Range 70 - 130		Recovery = 101.75%			
54) Bromofluorobenzene	15.61	95	208371	4.04	ug/L	0.00
Spiked Amount 4.000	Range 70 - 130		Recovery = 101.00%			
73) 1,2-Dichlorobenzene-d4	18.12	152	150804	4.13	ug/L	-0.02
Spiked Amount 4.000	Range 70 - 130		Recovery = 103.25%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.82	85	126695	2.08	ug/L	96
3) Chloromethane	2.07	50	163527	1.91	ug/L	98
4) Vinyl Chloride	2.19	62	119341	2.05	ug/L	97
5) Bromomethane	2.71	94	93687	1.90	ug/L	97
6) Chloroethane	2.81	64	88998	2.06	ug/L	98
7) t-Butyl alcohol (TBA)	4.24	59	16651	10.49	ug/L	97
8) Trichlorofluoromethane	3.15	101	158194	2.06	ug/L	98
9) Diethyl ether	3.57	74	31837	1.97	ug/L	98
10) 1,1,2-Trichlorotrifluoroet	3.80	101	91485	2.00	ug/L	99
12) Acetone	3.87	43	47837	9.10	ug/L	99
13) 1,1-Dichloroethene	4.04	61	157330	2.05	ug/L	96
15) Di-isopropyl ether (DIPE)	5.92	45	312822	2.07	ug/L	100
16) Methylene Chloride	4.83	84	109257	1.97	ug/L	97
17) Carbon Disulfide	4.81	76	339571	1.98	ug/L	100
18) Acrylonitrile	5.05	53	11500	1.88	ug/L #	89
19) Methyl-tert-butyl ether (M	5.14	73	134737	2.03	ug/L	97
20) trans-1,2-Dichloroethene	5.33	96	99773	1.96	ug/L	99
21) 1,1-Dichloroethane	6.02	63	189179	2.04	ug/L	97
23) Methyl ethyl ketone	6.75	72	15305	9.80	ug/L	92
24) Ethyl t-butyl ether (ETBE)	6.58	59	220981	2.08	ug/L	98
25) 2,2-Dichloropropane	6.93	77	146672	1.99	ug/L	100
26) cis-1,2-Dichloroethene	7.00	96	98854	2.02	ug/L	97
27) t-Amyl methyl ether (TAME)	8.36	73	156878	2.04	ug/L	96
29) Chloroform	7.26	83	171925	2.05	ug/L	98
30) Bromochloromethane	7.50	128	30881	1.98	ug/L	94
32) 1,1,1-Trichloroethane	7.88	97	146023	2.02	ug/L	99

(#) = qualifier out of range (m) = manual integration
I29310SI.D V505048I.M Mon May 05 12:44:45 2008 Page 1

Data File : D:\HPCHEM\DATA\050408-I\I29310SI.D Vial: 7
Acq On : 4 May 2008 2:45 pm Operator:
Sample : 2.0PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
'S Integration Params: rteint.p
Quant Time: May 5 12:44 2008 Quant Results File: V505048I.RES

Quant Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration
DataAcq Meth : V505048I

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
34) 1,1-Dichloropropene	8.13	75	147510	2.00 ug/L	96
35) Carbon Tetrachloride	8.27	119	113134	2.02 ug/L	97
37) 1,2-Dichloroethane	8.51	62	83612	2.09 ug/L	96
38) Benzene	8.53	78	382246	1.98 ug/L	95
40) Trichloroethene	9.48	95	100743	1.97 ug/L	99
41) 1,2-Dichloropropane	9.75	63	88759	1.96 ug/L	99
45) Bromodichloromethane	10.11	83	108150	2.03 ug/L	96
46) Dibromomethane	10.17	93	35858	2.02 ug/L	98
47) 1,4-Dioxane	10.18	88	7759	48.44 ug/L	95
51) 2-Hexanone	12.03	58	54040	10.07 ug/L	96
52) Methyl isobutyl ketone	10.67	58	62176	9.90 ug/L	99
53) cis-1,3-Dichloropropene	10.96	75	121461	2.02 ug/L	98
55) Toluene	11.45	92	223799	1.91 ug/L	97
56) trans-1,3-Dichloropropene	11.74	75	86971	1.98 ug/L	94
58) 1,1,2-Trichloroethane	11.97	83	37850	1.99 ug/L	95
59) 1,3-Dichloropropane	12.36	76	80779	1.95 ug/L	100
60) Tetrachloroethene	12.46	166	79484	1.91 ug/L	99
61) Dibromochloromethane	12.76	129	54095	1.99 ug/L	98
62) 1,2-Dibromoethane	13.07	107	38549	1.93 ug/L	89
64) Chlorobenzene	13.73	112	211963	1.98 ug/L	99
65) 1,1,1,2-Tetrachloroethane	13.81	131	66128	1.96 ug/L	96
66) Ethylbenzene	13.83	91	426019	1.96 ug/L	100
67) m,p-Xylene	13.96	106	302639	3.91 ug/L	98
68) o-Xylene	14.64	106	139093	1.97 ug/L	98
69) Styrene	14.70	104	218079	2.01 ug/L	97
70) Bromoform	15.21	173	24182	2.06 ug/L	99
71) Isopropylbenzene	15.22	105	382532	1.97 ug/L	99
72) 1,1,2,2-Tetrachloroethane	15.50	83	45550	2.05 ug/L	95
74) 1,2,3-Trichloropropane	15.72	75	31082	1.93 ug/L	95
75) trans-1,4-Dichloro-2-buten	15.85	88	5967	1.84 ug/L #	1
76) n-Propylbenzene	15.86	91	511911	1.98 ug/L	98
77) Bromobenzene	15.91	156	66395	1.99 ug/L	94
78) 1,3,5-Trimethylbenzene	16.13	105	302718	2.03 ug/L	97
79) 2-Chlorotoluene	16.14	91	320094	2.07 ug/L	97
80) 4-Chlorotoluene	16.22	91	274491	2.02 ug/L	98
81) tert-butylbenzene	16.69	119	254502	2.00 ug/L	94
82) 1,2,4-Trimethylbenzene	16.76	105	299023	2.04 ug/L	99
84) sec-butylbenzene	17.04	105	420904	2.03 ug/L	98
85) p-isopropyltoluene	17.27	119	320549	2.04 ug/L	98
86) 1,3-Dichlorobenzene	17.40	146	136182	2.01 ug/L	98
88) 1,4-Dichlorobenzene	17.58	146	133671	1.94 ug/L	98

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\DATA\050408-I\I29310SI.D Vial: 7
Acq On : 4 May 2008 2:45 pm Operator:
Sample : 2.0PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
S Integration Params: rteint.p
Quant Time: May 5 12:44 2008 Quant Results File: V505048I.RES

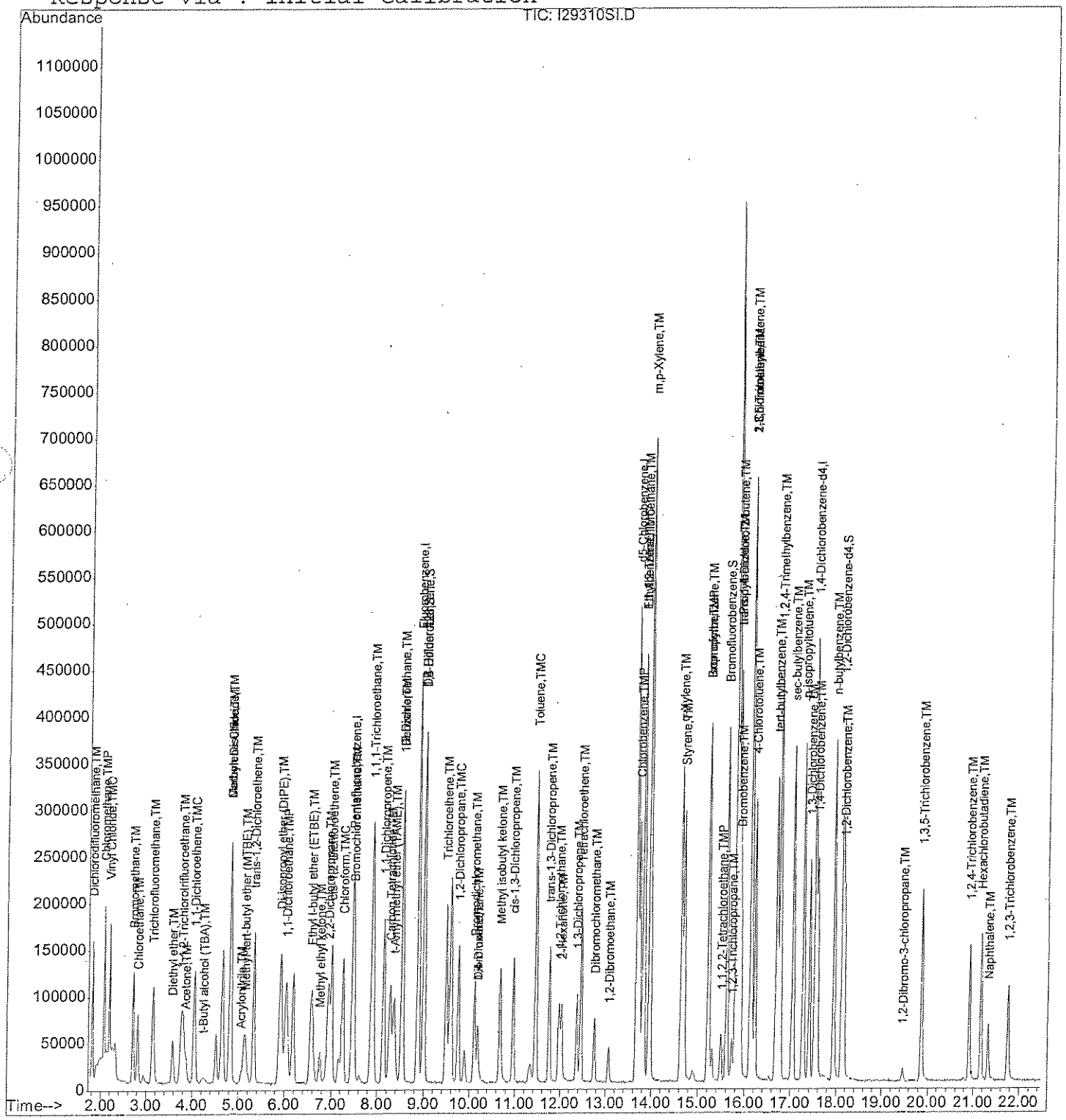
Quant Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration
DataAcq Meth : V505048I

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
89)	n-butylbenzene	17.94	91	339878	1.98	ug/L		98
90)	1,2-Dichlorobenzene	18.17	146	106268	1.96	ug/L		98
92)	1,2-Dibromo-3-chloropropan	19.45	75	6170	1.82	ug/L	#	62
94)	1,2,4-Trichlorobenzene	20.91	180	64901	1.94	ug/L		98
95)	Hexachlorobutadiene	21.15	225	40985	1.94	ug/L		92
96)	Naphthalene	21.32	128	77951	1.95	ug/L		97
97)	1,2,3-Trichlorobenzene	21.76	180	47344	1.94	ug/L		100
98)	1,3,5-Trichlorobenzene	19.86	180	90041	1.92	ug/L		95

(#) = qualifier out of range (m) = manual integration
I29310SI.D V505048I.M Mon May 05 12:44:45 2008 Page 3

Data File : D:\HPCHEM\DATA\050408-I\I29310SI.D Vial: 7
Acq On : 4 May 2008 2:45 pm Operator:
Sample : 2.0PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 5 12:44 2008 Quant Results File: V505048I.RI

Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration



Data File : D:\HPCHEM\DATA\050408-I\I29311SI.D Vial: 8
Acq On : 4 May 2008 3:51 pm Operator:
Sample : 5.0PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
S Integration Params: rteint.p
Quant Time: May 5 12:44 2008 Quant Results File: V505048I.RES

Quant Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration
DataAcq Meth : V505048I

5-7-08 MK 5.06.08

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.46	168	211082	4.00	ug/L	0.00
39) Fluorobenzene	8.87	96	616372 ✓	4.00	ug/L	0.00
63) d5-Chlorobenzene	13.67	117	422901 ✓	4.00	ug/L	0.00
87) 1,4-Dichlorobenzene-d4	17.53	152	197523	4.00	ug/L	0.00
System Monitoring Compounds						
28) DB Holder #28	9.00	114	463039	4.07	ug/L	0.00
Spiked Amount 4.000	Range 70 - 130		Recovery = 101.75% ✓			
36) 1,4-Difluorobenzene	9.00	114	463039	4.07	ug/L	0.00
Spiked Amount 4.000	Range 70 - 130		Recovery = 101.75% ✓			
54) Bromofluorobenzene	15.60	95	226626	4.28	ug/L	0.00
Spiked Amount 4.000	Range 70 - 130		Recovery = 107.00% ✓			
73) 1,2-Dichlorobenzene-d4	18.13	152	170082	4.45	ug/L	0.00
Spiked Amount 4.000	Range 70 - 130		Recovery = 111.25% ✓			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.82	85	324659	5.15	ug/L	100
3) Chloromethane	2.07	50	393068	5.07	ug/L	99
4) Vinyl Chloride	2.19	62	245542	4.91	ug/L	98
5) Bromomethane	2.71	94	230146	4.51	ug/L	94
6) Chloroethane	2.81	64	223364	4.98	ug/L	99
7) t-Butyl alcohol (TBA)	4.22	59	38183	23.23	ug/L	98
8) Trichlorofluoromethane	3.15	101	406063	5.11	ug/L	98
9) Diethyl ether	3.57	74	83329	4.98	ug/L	99
10) 1,1,2-Trichlorotrifluoroet	3.79	101	244344	5.17	ug/L	99
12) Acetone	3.86	43	127287	25.52	ug/L	96
13) 1,1-Dichloroethene	4.04	61	415187	5.22	ug/L	95
15) Di-isopropyl ether (DIPE)	5.91	45	822664	5.27	ug/L	99
16) Methylene Chloride	4.83	84	247522	5.14	ug/L	95
17) Carbon Disulfide	4.81	76	901155	5.08	ug/L	100
18) Acrylonitrile	5.06	53	33287	5.25	ug/L	97
19) Methyl-tert-butyl ether (M	5.14	73	355381	5.18	ug/L	98
20) trans-1,2-Dichloroethene	5.33	96	262418	4.98	ug/L	99
21) 1,1-Dichloroethane	6.02	63	494083	5.14	ug/L	99
23) Methyl ethyl ketone	6.74	72	42715	26.41	ug/L #	95
24) Ethyl t-butyl ether (ETBE)	6.58	59	580283	5.28	ug/L	99
25) 2,2-Dichloropropane	6.93	77	382099	5.01	ug/L	98
26) cis-1,2-Dichloroethene	7.00	96	260824	5.16	ug/L	99
27) t-Amyl methyl ether (TAME)	8.35	73	422767	5.31	ug/L	99
29) Chloroform	7.26	83	450689	5.20	ug/L	100
30) Bromochloromethane	7.50	128	83703	5.20	ug/L	95
31) Tetrahydrofuran	7.60	42	21932	4.85	ug/L	98

(#) = qualifier out of range (m) = manual integration
I29311SI.D V505048I.M Mon May 05 12:44:47 2008 Page 1

Data File : D:\HPCHEM\DATA\050408-I\I29311SI.D Vial: 8
Acq On : 4 May 2008 3:51 pm Operator:
Sample : 5.0PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
S Integration Params: rteint.p
Quant Time: May 5 12:44 2008 Quant Results File: V505048I.RES

Quant Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration
DataAcq Meth : V505048I

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32)	1,1,1-Trichloroethane	7.88	97	385087	5.15	ug/L	100
34)	1,1-Dichloropropene	8.13	75	396162	5.19	ug/L	97
35)	Carbon Tetrachloride	8.27	119	296924	5.12	ug/L	97
37)	1,2-Dichloroethane	8.51	62	216499	5.22	ug/L	97
38)	Benzene	8.53	78	1012673	5.06	ug/L	97
40)	Trichloroethene	9.48	95	261614	4.98	ug/L	98
41)	1,2-Dichloropropane	9.75	63	233343	5.03	ug/L	99
45)	Bromodichloromethane	10.10	83	285680	5.22	ug/L	99
46)	Dibromomethane	10.17	93	94206	5.16	ug/L	98
47)	1,4-Dioxane	10.17	88	21152	128.70	ug/L	99
51)	2-Hexanone	12.02	58	154838	28.11	ug/L	99
52)	Methyl isobutyl ketone	10.67	58	171168	26.57	ug/L	99
53)	cis-1,3-Dichloropropene	10.96	75	322926	5.22	ug/L	99
55)	Toluene	11.45	92	605017	5.03	ug/L	98
56)	trans-1,3-Dichloropropene	11.74	75	244511	5.42	ug/L	97
58)	1,1,2-Trichloroethane	11.97	83	100181	5.14	ug/L	96
59)	1,3-Dichloropropane	12.36	76	217624	5.12	ug/L	97
60)	Tetrachloroethene	12.46	166	214719	5.03	ug/L	97
61)	Dibromochloromethane	12.76	129	145221	5.20	ug/L	100
62)	1,2-Dibromoethane	13.07	107	108406	5.29	ug/L	95
64)	Chlorobenzene	13.73	112	562137	5.01	ug/L	98
65)	1,1,1,2-Tetrachloroethane	13.81	131	178865	5.05	ug/L	98
66)	Ethylbenzene	13.83	91	1154016	5.08	ug/L	100
67)	m,p-Xylene	13.96	106	825930	10.21	ug/L	98
68)	o-Xylene	14.64	106	382728	5.17	ug/L	100
69)	Styrene	14.70	104	607030	5.35	ug/L	99
70)	Bromoform	15.21	173	65978	5.36	ug/L	97
71)	Isopropylbenzene	15.22	105	1086103	5.35	ug/L	98
72)	1,1,2,2-Tetrachloroethane	15.50	83	125524	5.40	ug/L	94
74)	1,2,3-Trichloropropane	15.72	75	84353	4.99	ug/L	96
75)	trans-1,4-Dichloro-2-buten	15.85	88	17035	4.99	ug/L	96
76)	n-Propylbenzene	15.86	91	1429044	5.29	ug/L	99
77)	Bromobenzene	15.91	156	185417	5.32	ug/L	91
78)	1,3,5-Trimethylbenzene	16.13	105	858812	5.50	ug/L	100
79)	2-Chlorotoluene	16.14	91	892433	5.50	ug/L	97
80)	4-Chlorotoluene	16.22	91	775192	5.44	ug/L	99
81)	tert-butylbenzene	16.70	119	736743	5.54	ug/L	98
82)	1,2,4-Trimethylbenzene	16.76	105	855463	5.58	ug/L	99
84)	sec-butylbenzene	17.04	105	1208808	5.57	ug/L	99
85)	p-isopropyltoluene	17.27	119	921679	5.59	ug/L	98
86)	1,3-Dichlorobenzene	17.40	146	395801	5.59	ug/L	98

(#) = qualifier out of range (m) = manual integration
I29311SI.D V505048I.M Mon May 05 12:44:47 2008 Page 2

Data File : D:\HPCHEM\DATA\050408-I\I29311SI.D Vial: 8
Acq On : 4 May 2008 3:51 pm Operator:
Sample : 5.0PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
S Integration Params: rteint.p
Quant Time: May 5 12:44 2008 Quant Results File: V505048I.RES

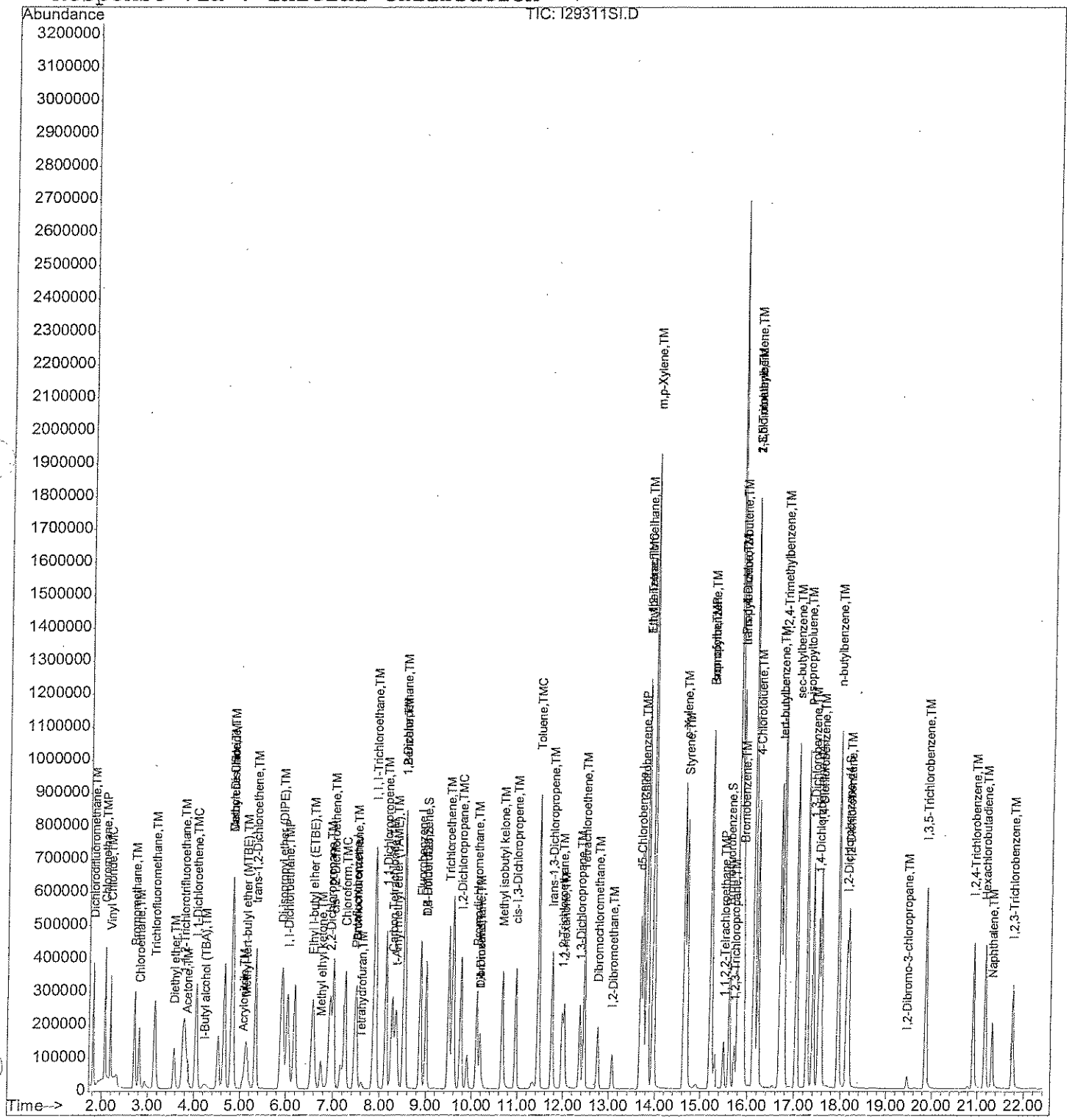
Quant Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration
DataAcq Meth : V505048I

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
88)	1,4-Dichlorobenzene	17.58	146	385009	4.94	ug/L	98
89)	n-butylbenzene	17.94	91	985684	5.09	ug/L	96
90)	1,2-Dichlorobenzene	18.17	146	306111	5.00	ug/L	99
92)	1,2-Dibromo-3-chloropropan	19.45	75	17126	4.47	ug/L	89
94)	1,2,4-Trichlorobenzene	20.91	180	196587	5.20	ug/L	99
95)	Hexachlorobutadiene	21.16	225	120400	5.05	ug/L	98
96)	Naphthalene	21.32	128	244958	5.43	ug/L	98
97)	1,2,3-Trichlorobenzene	21.76	180	146694	5.32	ug/L	98
98)	1,3,5-Trichlorobenzene	19.86	180	273453	5.17	ug/L	99

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\DATA\050408-I\I29311SI.D Vial: 8
Acq On : 4 May 2008 3:51 pm Operator:
Sample : 5.0PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 5 12:44 2008 Quant Results File: V505048I.RE

Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration



Data File : D:\HPCHEM\DATA\050408-I\I29312SI.D Vial: 9
Acq On : 4 May 2008 4:24 pm Operator:
Sample : 10PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
S Integration Params: rteint.p
Quant Time: May 5 12:44 2008 Quant Results File: V505048I.RES

Quant Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration
DataAcq Meth : V505048I

5.7.08

AK 5.06.08

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.46	168	237975	4.00	ug/L	-0.01
39) Fluorobenzene	8.87	96	677353	4.00	ug/L	-0.01
63) d5-Chlorobenzene	13.67	117	472595	4.00	ug/L	-0.01
87) 1,4-Dichlorobenzene-d4	17.53	152	204460	4.00	ug/L	0.00
System Monitoring Compounds						
28) DB Holder #28	9.00	114	508493	3.96	ug/L	-0.01
Spiked Amount 4.000	Range 70 - 130		Recovery = 99.00%			
36) 1,4-Difluorobenzene	9.00	114	508493	3.96	ug/L	-0.01
Spiked Amount 4.000	Range 70 - 130		Recovery = 99.00%			
54) Bromofluorobenzene	15.61	95	243273	4.18	ug/L	0.00
Spiked Amount 4.000	Range 70 - 130		Recovery = 104.50%			
73) 1,2-Dichlorobenzene-d4	18.13	152	177845	4.17	ug/L	-0.01
Spiked Amount 4.000	Range 70 - 130		Recovery = 104.25%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.81	85	670984	9.43	ug/L	99
3) Chloromethane	2.07	50	692748	9.97	ug/L	99
4) Vinyl Chloride	2.19	62	412540	10.06	ug/L	99
5) Bromomethane	2.70	94	512691	8.91	ug/L	99
6) Chloroethane	2.81	64	485975	9.62	ug/L	99
7) t-Butyl alcohol (TBA)	4.22	59	83366	44.99	ug/L	99
8) Trichlorofluoromethane	3.15	101	886845	9.90	ug/L	99
9) Diethyl ether	3.57	74	183981	9.75	ug/L	98
10) 1,1,2-Trichlorotrifluoroet	3.79	101	525517	9.86	ug/L	100
11) Acrolein	3.75	56	154994	10.32	ug/L	96
12) Acetone	3.86	43	258318	49.88	ug/L	96
13) 1,1-Dichloroethene	4.04	61	884521	9.87	ug/L	99
15) Di-isopropyl ether (DIPE)	5.91	45	1779821	10.11	ug/L	100
16) Methylene Chloride	4.83	84	531373	10.42	ug/L	99
17) Carbon Disulfide	4.81	76	1986794	9.94	ug/L	100
18) Acrylonitrile	5.05	53	61461	8.59	ug/L	93
19) Methyl-tert-butyl ether (M	5.13	73	776643	10.05	ug/L	100
20) trans-1,2-Dichloroethene	5.33	96	593821	10.00	ug/L	97
21) 1,1-Dichloroethane	6.02	63	1067729	9.84	ug/L	97
23) Methyl ethyl ketone	6.74	72	90611	49.69	ug/L	98
24) Ethyl t-butyl ether (ETBE)	6.57	59	1266651	10.23	ug/L	99
25) 2,2-Dichloropropane	6.93	77	820482	9.55	ug/L	100
26) cis-1,2-Dichloroethene	7.00	96	581150	10.20	ug/L	98
27) t-Amyl methyl ether (TAME)	8.35	73	925959	10.32	ug/L	99
29) Chloroform	7.26	83	983441	10.06	ug/L	99
30) Bromochloromethane	7.50	128	185989	10.24	ug/L	96

(#) = qualifier out of range (m) = manual integration
I29312SI.D V505048I.M Mon May 05 12:44:49 2008 Page 1

Data File : D:\HPCHEM\DATA\050408-I\I29312SI.D Vial: 9
Acq On : 4 May 2008 4:24 pm Operator:
Sample : 10PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
S Integration Params: rteint.p
Quant Time: May 5 12:44 2008 Quant Results File: V505048I.RES

Quant Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration
DataAcq Meth : V505048I

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
31)	Tetrahydrofuran	7.60	42	48465	10.17 ug/L	97
32)	1,1,1-Trichloroethane	7.88	97	840825	9.98 ug/L	99
34)	1,1-Dichloropropene	8.13	75	874069	10.15 ug/L	98
35)	Carbon Tetrachloride	8.27	119	661172	10.11 ug/L	99
37)	1,2-Dichloroethane	8.52	62	453640	9.69 ug/L	98
38)	Benzene	8.53	78	2241798	9.94 ug/L	98
40)	Trichloroethene	9.48	95	576830	10.00 ug/L	95
41)	1,2-Dichloropropane	9.75	63	511129	10.02 ug/L	99
45)	Bromodichloromethane	10.10	83	625403	10.40 ug/L	98
46)	Dibromomethane	10.17	93	204454	10.19 ug/L	97
47)	1,4-Dioxane	10.17	88	47813	264.74 ug/L	97
51)	2-Hexanone	12.02	58	351219	58.02 ug/L	97
52)	Methyl isobutyl ketone	10.67	58	377233	53.28 ug/L	99
53)	cis-1,3-Dichloropropene	10.96	75	719686	10.59 ug/L	99
55)	Toluene	11.44	92	1343818	10.16 ug/L	99
56)	trans-1,3-Dichloropropene	11.74	75	535755	10.82 ug/L	100
58)	1,1,2-Trichloroethane	11.97	83	218404	10.19 ug/L	95
59)	1,3-Dichloropropane	12.36	76	488684	10.46 ug/L	100
60)	Tetrachloroethene	12.46	166	489411	10.44 ug/L	100
61)	Dibromochloromethane	12.76	129	325423	10.61 ug/L	98
62)	1,2-Dibromoethane	13.07	107	242764	10.78 ug/L	100
64)	Chlorobenzene	13.73	112	1275014	10.18 ug/L	98
65)	1,1,1,2-Tetrachloroethane	13.81	131	404269	10.22 ug/L	98
66)	Ethylbenzene	13.83	91	2593997	10.21 ug/L	99
67)	m,p-Xylene	13.96	106	1866741	20.64 ug/L	99
68)	o-Xylene	14.64	106	851697	10.29 ug/L	100
69)	Styrene	14.70	104	1358051	10.71 ug/L	98
70)	Bromoform	15.21	173	149655	10.88 ug/L	99
71)	Isopropylbenzene	15.22	105	2357187	10.38 ug/L	98
72)	1,1,2,2-Tetrachloroethane	15.49	83	273582	10.53 ug/L	97
74)	1,2,3-Trichloropropane	15.72	75	179175	9.49 ug/L	98
75)	trans-1,4-Dichloro-2-buten	15.85	88	36356	10.09 ug/L	95
76)	n-Propylbenzene	15.86	91	3089433	10.23 ug/L	99
77)	Bromobenzene	15.91	156	400843	10.29 ug/L	98
78)	1,3,5-Trimethylbenzene	16.13	105	1838584	10.53 ug/L	99
79)	2-Chlorotoluene	16.14	91	1875409	10.35 ug/L	99
80)	4-Chlorotoluene	16.22	91	1649422	10.35 ug/L	99
81)	tert-butylbenzene	16.70	119	1552553	10.45 ug/L	98
82)	1,2,4-Trimethylbenzene	16.76	105	1783065	10.41 ug/L	100
84)	sec-butylbenzene	17.04	105	2524432	10.41 ug/L	100
85)	p-isopropyltoluene	17.27	119	1924497	10.45 ug/L	99

(#) = qualifier out of range (m) = manual integration
I29312SI.D V505048I.M Mon May 05 12:44:49 2008 Page 2

Data File : D:\HPCHEM\DATA\050408-I\I29312SI.D Vial: 9
Acq On : 4 May 2008 4:24 pm Operator:
Sample : 10PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
S Integration Params: rteint.p
Quant Time: May 5 12:44 2008 Quant Results File: V505048I.RES

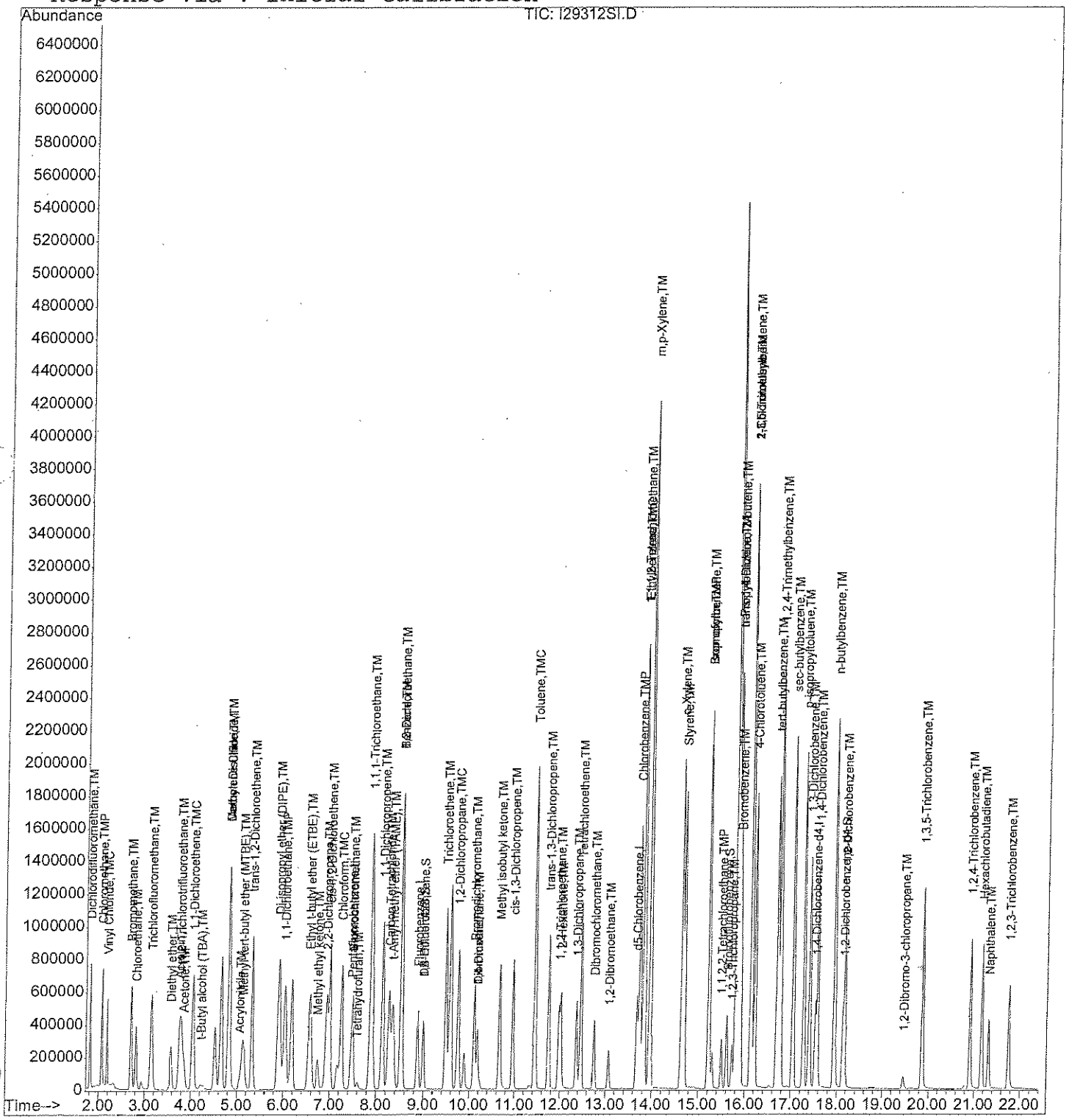
Quant Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration
DataAcq Meth : V505048I

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
86) 1,3-Dichlorobenzene	17.40	146	836673	10.58	ug/L	99
88) 1,4-Dichlorobenzene	17.58	146	805426	9.99	ug/L	99
89) n-butylbenzene	17.94	91	2057595	10.26	ug/L	98
90) 1,2-Dichlorobenzene	18.17	146	645581	10.19	ug/L	99
92) 1,2-Dibromo-3-chloropropan	19.45	75	35052	8.84	ug/L	84
94) 1,2,4-Trichlorobenzene	20.91	180	407998	10.43	ug/L	99
95) Hexachlorobutadiene	21.16	225	251124	10.18	ug/L	100
96) Naphthalene	21.31	128	518236	11.10	ug/L	100
97) 1,2,3-Trichlorobenzene	21.75	180	312761	10.96	ug/L	96
98) 1,3,5-Trichlorobenzene	19.86	180	570881	10.42	ug/L	99

(#) = qualifier out of range (m) = manual integration
I29312SI.D V505048I.M Mon May 05 12:44:49 2008 Page 3

Data File : D:\HPCHEM\DATA\050408-I\I29312SI.D Vial: 9
Acq On : 4 May 2008 4:24 pm Operator:
Sample : 10PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 5 12:44 2008 Quant Results File: V505048I.RE

Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration



Data File : D:\HPCHEM\DATA\050408-I\I29313SI.D Vial: 10
Acq On : 4 May 2008 4:57 pm Operator:
Sample : 20PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
S Integration Params: rteint.p
Quant Time: May 5 12:44 2008 Quant Results File: V505048I.RES

Quant Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration
DataAcq Meth : V505048I

5.7.08 AK 5.06.08

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.46	168	283782	4.00	ug/L	0.00
39) Fluorobenzene	8.87	96	778451	4.00	ug/L	0.00
63) d5-Chlorobenzene	13.67	117	539610	4.00	ug/L	0.00
87) 1,4-Dichlorobenzene-d4	17.53	152	229154	4.00	ug/L	0.00
System Monitoring Compounds						
28) DB Holder #28	8.99	114	587203	3.84	ug/L	-0.02
Spiked Amount 4.000	Range 70 - 130		Recovery = 96.00%			
36) 1,4-Difluorobenzene	8.99	114	587203	3.84	ug/L	-0.02
Spiked Amount 4.000	Range 70 - 130		Recovery = 96.00%			
54) Bromofluorobenzene	15.60	95	262711	3.93	ug/L	0.00
Spiked Amount 4.000	Range 70 - 130		Recovery = 98.25%			
73) 1,2-Dichlorobenzene-d4	18.13	152	196828	4.04	ug/L	0.00
Spiked Amount 4.000	Range 70 - 130		Recovery = 101.00%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.82	85	1492032	17.59	ug/L	99
3) Chloromethane	2.07	50	1278373	Below Cal		99
4) Vinyl Chloride	2.19	62	753848	Below Cal		98
5) Bromomethane	2.70	94	1236048	18.01	ug/L	99
6) Chloroethane	2.81	64	1097392	18.22	ug/L	100
7) t-Butyl alcohol (TBA)	4.22	59	182690	82.68	ug/L	96
8) Trichlorofluoromethane	3.15	101	1938771	18.15	ug/L	100
9) Diethyl ether	3.57	74	415946	18.49	ug/L	94
10) 1,1,2-Trichlorotrifluoroet	3.78	101	1172815	18.45	ug/L	99
11) Acrolein	3.75	56	352586	19.69	ug/L	97
12) Acetone	3.86	43	521650	100.00	ug/L	99
13) 1,1-Dichloroethene	4.04	61	1885801	17.64	ug/L	96
15) Di-isopropyl ether (DIPE)	5.91	45	3796849	18.09	ug/L	97
16) Methylene Chloride	4.83	84	1166264	19.76	ug/L	94
17) Carbon Disulfide	4.81	76	4484004	18.81	ug/L	99
18) Acrylonitrile	5.05	53	147910	17.34	ug/L	98
19) Methyl-tert-butyl ether (M	5.13	73	1700230	18.45	ug/L	98
20) trans-1,2-Dichloroethene	5.33	96	1347860	19.03	ug/L	93
21) 1,1-Dichloroethane	6.02	63	2311901	17.87	ug/L	98
23) Methyl ethyl ketone	6.73	72	203097	93.40	ug/L	92
24) Ethyl t-butyl ether (ETBE)	6.57	59	2712523	18.36	ug/L	98
25) 2,2-Dichloropropane	6.93	77	1727342	16.85	ug/L	97
26) cis-1,2-Dichloroethene	7.00	96	1315087	19.35	ug/L	92
27) t-Amyl methyl ether (TAME)	8.34	73	2049658	19.16	ug/L	95
29) Chloroform	7.26	83	2149677	18.44	ug/L	99
30) Bromochloromethane	7.50	128	430002	19.85	ug/L	91

(#) = qualifier out of range (m) = manual integration
I29313SI.D V505048I.M Mon May 05 12:44:51 2008 Page 1

Data File : D:\HPCHEM\DATA\050408-I\I29313SI.D Vial: 10
Acq On : 4 May 2008 4:57 pm Operator:
Sample : 20PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
S Integration Params: rteint.p
Quant Time: May 5 12:44 2008 Quant Results File: V505048I.RES

Quant Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration
DataAcq Meth : V505048I

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
31) Tetrahydrofuran	7.59	42	102097	19.96	ug/L	98
32) 1,1,1-Trichloroethane	7.88	97	1795114	17.86	ug/L	97
34) 1,1-Dichloropropene	8.13	75	1902569	18.53	ug/L	98
35) Carbon Tetrachloride	8.27	119	1458466	18.71	ug/L	99
37) 1,2-Dichloroethane	8.51	62	910132	16.31	ug/L	99
38) Benzene	8.53	78	5083631	18.90	ug/L	99
40) Trichloroethene	9.48	95	1305623	19.69	ug/L	90
41) 1,2-Dichloropropane	9.75	63	1105761	18.86	ug/L	99
45) Bromodichloromethane	10.10	83	1356974	19.63	ug/L	99
46) Dibromomethane	10.17	93	454976	19.74	ug/L	94
47) 1,4-Dioxane	10.17	88	111630	537.82	ug/L	91
51) 2-Hexanone	12.01	58	763435	109.74	ug/L	94
52) Methyl isobutyl ketone	10.67	58	818735	100.61	ug/L	97
53) cis-1,3-Dichloropropene	10.95	75	1589743	20.36	ug/L	100
55) Toluene	11.44	92	3040497	20.00	ug/L	99
56) trans-1,3-Dichloropropene	11.74	75	1161695	20.41	ug/L	98
58) 1,1,2-Trichloroethane	11.97	83	492341	19.99	ug/L	96
59) 1,3-Dichloropropane	12.36	76	1065031	19.83	ug/L	99
60) Tetrachloroethene	12.46	166	1149601	21.33	ug/L	98
61) Dibromochloromethane	12.76	129	736221	20.89	ug/L	98
62) 1,2-Dibromoethane	13.06	107	546200	21.11	ug/L	96
64) Chlorobenzene	13.73	112	2892587	20.22	ug/L	96
65) 1,1,1,2-Tetrachloroethane	13.81	131	911868	20.19	ug/L	99
66) Ethylbenzene	13.83	91	5800711	20.00	ug/L	99
67) m,p-Xylene	13.96	106	4196978	40.64	ug/L	97
68) o-Xylene	14.64	106	1904686	20.16	ug/L	97
69) Styrene	14.70	104	3029429	20.92	ug/L	96
70) Bromoform	15.20	173	337647	21.49	ug/L	99
71) Isopropylbenzene	15.22	105	5152343	19.87	ug/L	99
72) 1,1,2,2-Tetrachloroethane	15.49	83	581045	19.59	ug/L	97
74) 1,2,3-Trichloropropane	15.72	75	377393	17.50	ug/L	99
75) trans-1,4-Dichloro-2-buten	15.85	88	70877	19.97	ug/L	87
76) n-Propylbenzene	15.86	91	6681170	19.38	ug/L	100
77) Bromobenzene	15.91	156	911119	20.48	ug/L	98
78) 1,3,5-Trimethylbenzene	16.13	105	3957740	19.85	ug/L	98
79) 2-Chlorotoluene	16.14	91	4004938	19.35	ug/L	99
80) 4-Chlorotoluene	16.22	91	3518462	19.34	ug/L	99
81) tert-butylbenzene	16.70	119	3383500	19.95	ug/L	99
82) 1,2,4-Trimethylbenzene	16.76	105	3878476	19.83	ug/L	98
84) sec-butylbenzene	17.04	105	5450588	19.69	ug/L	100
85) p-isopropyltoluene	17.27	119	4232940	20.12	ug/L	99

(#) = qualifier out of range (m) = manual integration
I29313SI.D V505048I.M Mon May 05 12:44:51 2008 Page 2

Data File : D:\HPCHEM\DATA\050408-I\I29313SI.D Vial: 10
Acq On : 4 May 2008 4:57 pm Operator:
Sample : 20PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
'S Integration Params: rteint.p
Quant Time: May 5 12:44 2008 Quant Results File: V505048I.RES

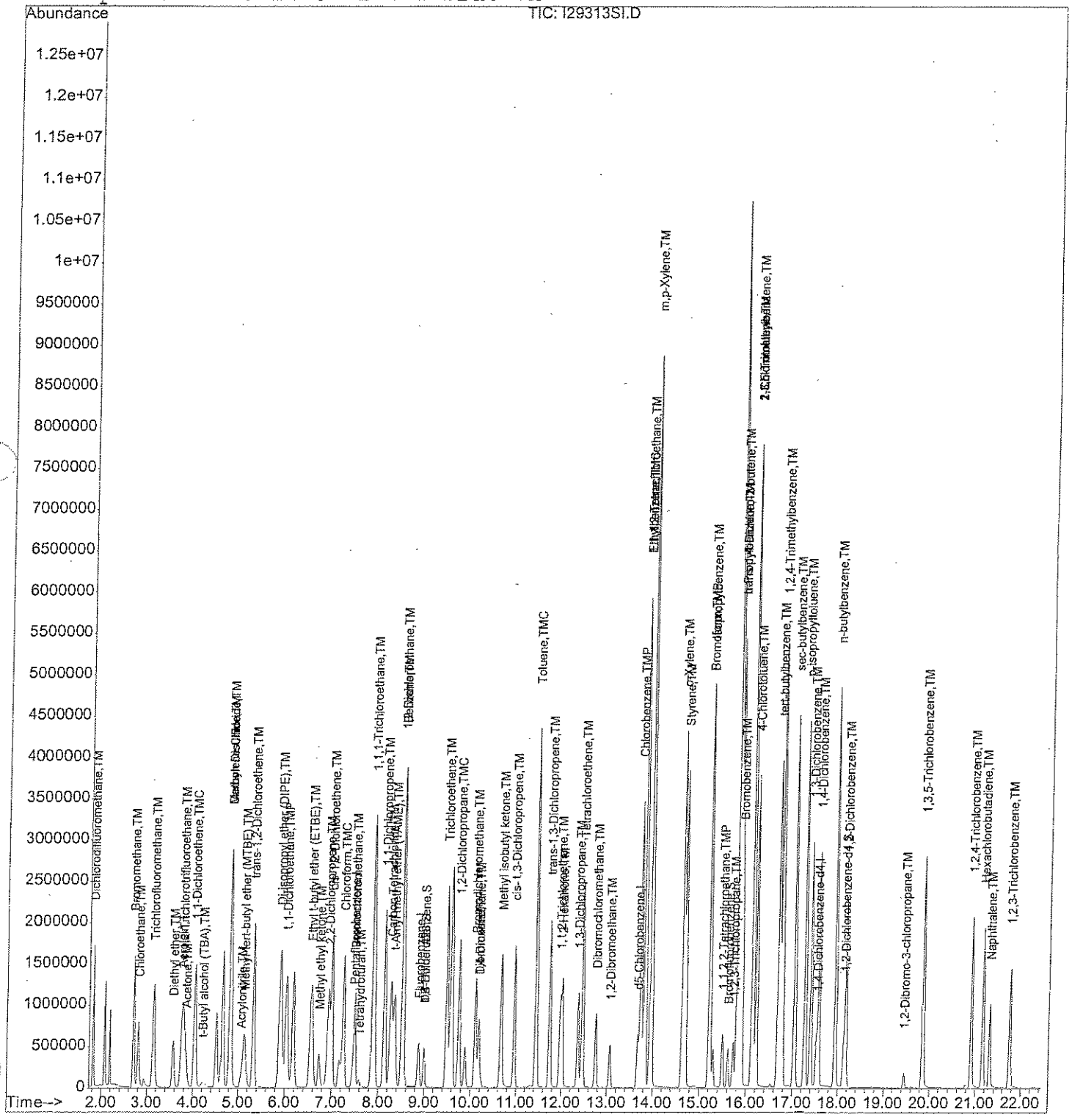
Quant Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration
DataAcq Meth : V505048I

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
86)	1,3-Dichlorobenzene	17.40	146	1860216	20.59 ug/L	99
88)	1,4-Dichlorobenzene	17.58	146	1786165	19.77 ug/L	98
89)	n-butylbenzene	17.94	91	4499840	20.02 ug/L	100
90)	1,2-Dichlorobenzene	18.17	146	1435589	20.22 ug/L	98
92)	1,2-Dibromo-3-chloropropan	19.45	75	73263	16.49 ug/L	96
94)	1,2,4-Trichlorobenzene	20.91	180	964049	21.98 ug/L	100
95)	Hexachlorobutadiene	21.16	225	589737	21.32 ug/L	99
96)	Naphthalene	21.31	128	1243451	23.75 ug/L	100
97)	1,2,3-Trichlorobenzene	21.75	180	725103	22.67 ug/L	96
98)	1,3,5-Trichlorobenzene	19.86	180	1355854	22.08 ug/L	98

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\DATA\050408-I\I29313SI.D Vial: 10
Acq On : 4 May 2008 4:57 pm Operator:
Sample : 20PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 5 12:44 2008 Quant Results File: V505048I.R

Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration



VOLATILE ORGANIC AQUEOUS
LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
PERCENT RECOVERY

Instrument ID: I
GC Column: RTX-502.2
Column ID: 0.25 mm

SDG: 61274
Non-spiked sample: B5050981
Spike: L5050981
Spike Duplicate L5050981 2

COMPOUND	SPIKE ADDED	LOWER LIMIT	UPPER LIMIT	RPD LIMIT	NON-SPIKE RESULT (ug/L)	SPIKE RESULT (ug/L)	SPIKE % REC	#	SPIKE DUP RESULT (ug/L)	SPIKE DUP % REC	#	RPD	#
Dichlorodifluoromethane	1	70	130	15	0.00	0.80	80		0.76	76		4	
Chloromethane	1	70	130	15	0.00	0.79	79		0.74	74		6	
Vinyl Chloride	1	70	130	15	0.00	0.94	94		0.85	85		11	
Bromomethane	1	70	130	15	0.00	0.88	88		0.84	84		4	
Chloroethane	1	70	130	15	0.00	0.85	85		0.81	81		5	
t-Butyl alcohol (TBA)	5	70	130	15	0.00	4.23	85		4.09	82		3	
Trichlorofluoromethane	1	70	130	15	0.00	0.86	86		0.82	82		4	
Diethyl ether	1	70	130	15	0.00	0.88	88		0.83	83		6	
1,1,2-Trichlorotrifluoroethane	1	70	130	15	0.00	0.94	94		0.90	90		5	
Acetone	5	70	130	15	0.00	3.55	71		3.53	71		1	
1,1-Dichloroethene	1	70	130	15	0.00	0.93	93		0.90	90		4	
Di-isopropyl ether (DIPE)	1	70	130	15	0.00	0.90	90		0.86	86		5	
Methylene Chloride	1	70	130	15	0.00	0.72	72		0.74	74		3	
Carbon Disulfide	1	70	130	15	0.00	0.92	92		0.89	89		4	
Acrylonitrile	1	70	130	15	0.00	0.74	74		0.84	84		12	
Methyl-tert-butyl ether (MTBE)	2	70	130	15	0.00	1.75	87		1.67	84		4	
trans-1,2-Dichloroethene	1	70	130	15	0.00	0.88	88		0.84	84		4	
1,1-Dichloroethane	1	70	130	15	0.00	0.90	90		0.86	86		5	
Methyl ethyl ketone	5	70	130	15	0.00	4.12	82		3.90	78		6	
Ethyl t-butyl ether (ETBE)	1	70	130	15	0.00	0.88	88		0.84	84		4	
2,2-Dichloropropane	1	70	130	15	0.00	0.92	92		0.90	90		2	
cis-1,2-Dichloroethene	1	70	130	15	0.00	0.90	90		0.88	88		2	
t-Amyl methyl ether (TAME)	1	70	130	15	0.00	0.88	88		0.84	84		5	
Chloroform	1	70	130	15	0.00	0.88	88		0.89	89		0	
Bromochloromethane	1	70	130	15	0.00	0.85	85		0.83	83		3	
Tetrahydrofuran	1	70	130	15	0.00	0.83	83		0.81	81		2	
1,1,1-Trichloroethane	1	70	130	15	0.00	0.89	89		0.86	86		3	
1,1-Dichloropropene	1	70	130	15	0.00	0.86	86		0.85	85		2	
Carbon Tetrachloride	1	70	130	15	0.00	0.90	90		0.88	88		1	
1,2-Dichloroethane	1	70	130	15	0.00	0.91	91		0.87	87		4	
Benzene	1	70	130	15	0.00	0.85	85		0.83	83		3	
Trichloroethene	1	70	130	15	0.00	0.93	93		0.92	92		1	
1,2-Dichloropropane	1	70	130	15	0.00	0.92	92		0.90	90		2	
Bromodichloromethane	1	70	130	15	0.00	0.95	95		0.96	96		1	
Dibromomethane	1	70	130	15	0.00	0.94	94		0.91	91		4	
2-Hexanone	5	70	130	15	0.00	3.61	72		3.54	71		2	
Methyl isobutyl ketone	5	70	130	15	0.00	4.06	81		4.07	81		0	
cis-1,3-Dichloropropene	1	70	130	15	0.00	0.94	94		0.90	90		4	
Toluene	1	70	130	15	0.00	0.90	90		0.89	89		1	
trans-1,3-Dichloropropene	1	70	130	15	0.00	0.83	83		0.78	78		5	
1,1,2-Trichloroethane	1	70	130	15	0.00	0.91	91		0.94	94		4	
1,3-Dichloropropane	1	70	130	15	0.00	0.88	88		0.87	87		1	
Tetrachloroethene	1	70	130	15	0.00	1.01	101		0.99	99		2	
Dibromochloromethane	1	70	130	15	0.00	0.89	89		0.86	86		4	
1,2-Dibromoethane	1	70	130	15	0.00	0.89	89		0.88	88		2	
Chlorobenzene	1	70	130	15	0.00	1.04	104		1.05	105		1	

VOA FORM 3

VOLATILE ORGANIC AQUEOUS
LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
PERCENT RECOVERY

Instrument ID: I
GC Column: RTX-502.2
Column ID: 0.25 mm

SDG: 61274
Non-spiked sample: B5050981
Spike: L505098I
Spike Duplicate L505098I2

COMPOUND	SPIKE ADDED	LOWER LIMIT	UPPER LIMIT	RPD LIMIT	NON-SPIKE RESULT (ug/L)	SPIKE RESULT (ug/L)	SPIKE % REC	#	SPIKE DUP RESULT (ug/L)	SPIKE DUP % REC	#	RPD	#
1,1,1,2-Tetrachloroethane	1	70	130	15	0.00	1.02	102		1.02	102		0	
Ethylbenzene	1	70	130	15	0.00	1.04	104		1.04	104		0	
m,p-Xylene	2	70	130	15	0.00	2.07	103		2.09	105		1	
o-Xylene	1	70	130	15	0.00	1.00	100		1.00	100		0	
Styrene	1	70	130	15	0.00	1.01	101		1.00	100		1	
Bromoform	1	70	130	15	0.00	1.02	102		0.99	99		2	
Isopropylbenzene	1	70	130	15	0.00	0.91	91		0.91	91		0	
1,1,2,2-Tetrachloroethane	1	70	130	15	0.00	0.99	99		0.97	97		1	
1,2,3-Trichloropropane	1	70	130	15	0.00	0.90	90		0.91	91		1	
trans-1,4-Dichloro-2-butene	1	70	130	15	0.00	0.93	93		0.73	73		25	*
n-Propylbenzene	1	70	130	15	0.00	1.00	100		1.01	101		1	
Bromobenzene	1	70	130	15	0.00	0.98	98		0.99	99		1	
1,3,5-Trimethylbenzene	1	70	130	15	0.00	1.03	103		1.01	101		2	
2-Chlorotoluene	1	70	130	15	0.00	1.05	105		1.04	104		1	
4-Chlorotoluene	1	70	130	15	0.00	1.01	101		1.01	101		0	
tert-butylbenzene	1	70	130	15	0.00	1.01	101		0.99	99		1	
1,2,4-Trimethylbenzene	1	70	130	15	0.00	1.04	104		1.02	102		2	
sec-butylbenzene	1	70	130	15	0.00	1.01	101		1.02	102		0	
p-isopropyltoluene	1	70	130	15	0.00	0.97	97		0.99	99		2	
1,3-Dichlorobenzene	1	70	130	15	0.00	1.00	100		0.98	98		2	
1,4-Dichlorobenzene	1	70	130	15	0.00	1.08	108		1.05	105		3	
n-butylbenzene	1	70	130	15	0.00	1.08	108		1.11	111		2	
1,2-Dichlorobenzene	1	70	130	15	0.00	1.10	110		1.10	110		0	
1,2-Dibromo-3-chloropropane	1	70	130	15	0.00	0.99	99		0.94	94		4	
1,2,4-Trichlorobenzene	1	70	130	15	0.00	1.02	102		0.98	98		4	
Hexachlorobutadiene	1	70	130	15	0.00	1.06	106		1.05	105		1	
Naphthalene	1	70	130	15	0.00	0.97	97		0.97	97		0	
1,2,3-Trichlorobenzene	1	70	130	15	0.00	1.04	104		1.03	103		1	
1,3,5-Trichlorobenzene	1	70	130	15	0.00	1.08	108		1.08	108		0	

Column to be used to flag recovery and RPD values outside of QC limits
* Values outside QC limits

Non-spike result of "0" used in place of "U" to allow calculation of spike recovery

Comments: _____

VOA FORM 3

Data File : D:\HPCHEM\DATA\050908-I\I29421Q.D Vial: 3
Acq On : 9 May 2008 10:09 am Operator:
Sample : L505098I Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p

Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 09 15:39:25 2008
Response via : Multiple Level Calibration

5.9.08 AK 5.12.

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	112	0.00
2	TM	Dichlorodifluoromethane	1.196	0.953	20.3	84	0.00
3	TMP	Chloromethane	1.706	1.419	16.8	90	0.00
4	TMC	Vinyl Chloride	1.349	1.242	7.9	99	0.00
5	TM	Bromomethane	0.968	0.848	12.4	97	0.00
6	TM	Chloroethane	0.849	0.724	14.7	88	0.00
7	TM	t-Butyl alcohol (TBA)	0.031	0.026	16.1	89	0.02
8	TM	Trichlorofluoromethane	1.506	1.289	14.4	88	0.00
9	TM	Diethyl ether	0.317	0.280	11.7	97	0.02
10	TM	1,1,2-Trichlorotrifluoroeth	0.896	0.847	5.5	100	0.02
11	T	Acrolein	0.252	0.011	NT 95.6#	5#	-0.01
12	TM	Acetone	0.100	0.082	18.0	82	0.00
13	TMC	1,1-Dichloroethene	1.507	1.406	6.7	98	0.00
14	T	Methyl iodide	0.000	0.000	0.0	0#	0.00
15	TM	Di-isopropyl ether (DIPE)	2.958	2.661	10.0	98	0.02
16	TM	Methylene Chloride	1.410	1.133	19.6	96	0.02
17	TM	Carbon Disulfide	3.360	3.089	8.1	98	0.00
18	TM	Acrylonitrile	0.120	0.089	25.8	80	0.00
19	TM	Methyl-tert-butyl ether (MT	1.299	2.272 Dec Value	74.9#	196	0.00
20	TM	trans-1,2-Dichloroethene	0.998	0.874	12.4	93	0.00
21	TMP	1,1-Dichloroethane	1.823	1.641	10.0	94	0.00
22	T	Vinyl acetate	0.000	0.000	0.0	0#	0.02
23	TM	Methyl ethyl ketone	0.031	0.025	19.4	92	0.02
24	TM	Ethyl t-butyl ether (ETBE)	2.082	1.833	12.0	95	0.00
25	TM	2,2-Dichloropropane	1.445	1.323	8.4	94	0.02
26	TM	cis-1,2-Dichloroethene	0.958	0.866	9.6	98	0.00
27	TM	t-Amyl methyl ether (TAME)	1.508	1.321	12.4	98	0.02
28	S	DB Holder #28	2.158	2.019	6.4	104	0.00
29	TMC	Chloroform	1.643	1.454	11.5	93	0.00
30	TM	Bromochloromethane	0.305	0.261	14.4	99	0.00
31	TM	Tetrahydrofuran	0.094	0.087	7.4	82	0.03
32	TM	1,1,1-Trichloroethane	1.416	1.264	10.7	93	0.02
33	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
34	TM	1,1-Dichloropropene	1.447	1.252	13.5	90	0.00
35	TM	Carbon Tetrachloride	1.099	0.983	10.6	94	0.02
36	S	1,4-Difluorobenzene	2.158	2.019	6.4	104	0.00
37	TM	1,2-Dichloroethane	0.787	0.716	9.0	95	0.00
38	TM	Benzene	3.790	3.236	14.6	90	0.00
39	I	Fluorobenzene	1.000	1.000	0.0	103	0.00
40	TM	Trichloroethene	0.341	0.316	7.3	91	0.00

(#) = Out of Range

Data File : D:\HPCHEM\DATA\050908-I\I29421Q.D Vial: 3
Acq On : 9 May 2008 10:09 am Operator:
Sample : L505098I Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p

Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 09 15:39:25 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	TMC	1,2-Dichloropropane	0.301	0.277	8.0	90	0.00
42	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
43	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
44	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
45	TM	Bromodichloromethane	0.355	0.339	4.5	94	0.00
46	TM	Dibromomethane	0.118	0.111	5.9	98	0.00
47	T	1,4-Dioxane	0.001	0.001	0.0	93	0.02
48	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
49	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
50	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.48
51	TM	2-Hexanone	0.036	0.026	27.8	87	0.02
52	TM	Methyl isobutyl ketone	0.042	0.034	19.0	88	0.02
53	TM	cis-1,3-Dichloropropene	0.401	0.376	6.2	97	0.02
54	S	Bromofluorobenzene	0.343	0.268	21.9	85	0.02
55	TMC	Toluene	0.781	0.706	9.6	91	0.00
56	TM	trans-1,3-Dichloropropene	0.293	0.242	17.4	87	0.00
57	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
58	TM	1,1,2-Trichloroethane	0.127	0.115	9.4	95	0.02
59	TM	1,3-Dichloropropane	0.276	0.244	11.6	91	0.00
60	TM	Tetrachloroethene	0.277	0.279	-0.7	102	0.00
61	TM	Dibromochloromethane	0.181	0.161	11.0	92	0.00
62	TM	1,2-Dibromoethane	0.133	0.119	10.5	90	0.00
63	I	d5-Chlorobenzene	1.000	1.000	0.0	94	0.00
64	TMP	Chlorobenzene	1.060	1.101	-3.9	96	0.00
65	TM	1,1,1,2-Tetrachloroethane	0.335	0.340	-1.5	94	0.00
66	TMC	Ethylbenzene	2.150	2.242	-4.3	95	0.00
67	TM	m,p-Xylene	0.766	0.792	-3.4	93	0.00
68	TM	o-Xylene	0.700	0.699	0.1	91	0.00
69	TM	Styrene	1.074	1.083	-0.8	94	0.00
70	TMP	Bromoform	0.116	0.119	-2.6	97	0.00
71	TM	Isopropylbenzene	1.922	1.748	9.1	83	0.00
72	TMP	1,1,2,2-Tetrachloroethane	0.220	0.217	1.4	91	0.00
73	S	1,2-Dichlorobenzene-d4	0.361	0.314	13.0	87	0.00
74	TM	1,2,3-Trichloropropane	0.160	0.145	9.4	92	0.00
75	TM	trans-1,4-Dichloro-2-butene	0.031	0.028	9.7	95	0.02
76	TM	n-Propylbenzene	2.555	2.555	0.0	90	0.00
77	TM	Bromobenzene	0.330	0.323	2.1	91	0.00
78	TM	1,3,5-Trimethylbenzene	1.478	1.518	-2.7	95	0.00
79	TM	2-Chlorotoluene	1.534	1.611	-5.0	96	0.00
80	TM	4-Chlorotoluene	1.349	1.364	-1.1	92	0.00

(#) = Out of Range
I29421Q.D V505048I.M Fri May 09 15:50:44 2008 Page 2

Data File : D:\HPCHEM\DATA\050908-I\I29421Q.D Vial: 3
Acq On : 9 May 2008 10:09 am Operator:
Sample : L505098I Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p

Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 09 15:39:25 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
81	TM	tert-butylbenzene	1.257	1.266	-0.7	92	0.00
82	TM	1,2,4-Trimethylbenzene	1.450	1.509	-4.1	96	0.00
83	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.48
84	TM	sec-butylbenzene	2.052	2.080	-1.4	92	0.00
85	TM	p-isopropyltoluene	1.559	1.516	2.8	90	0.00
86	TM	1,3-Dichlorobenzene	0.670	0.669	0.1	94	0.00
87	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	92	0.02
88	TM	1,4-Dichlorobenzene	1.577	1.710	-8.4	96	0.00
89	TM	n-butylbenzene	3.923	4.242	-8.1	93	0.00
90	TM	1,2-Dichlorobenzene	1.239	1.363	-10.0	95	0.00
91	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
92	TM	1,2-Dibromo-3-chloropropane	0.078	0.076	2.6	80	0.03
	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
94	TM	1,2,4-Trichlorobenzene	0.766	0.779	-1.7	92	0.00
95	TM	Hexachlorobutadiene	0.483	0.513	-6.2	94	0.02
96	TM	Naphthalene	0.914	0.885	3.2	91	0.02
97	TM	1,2,3-Trichlorobenzene	0.558	0.580	-3.9	96	0.00
98	TM	1,3,5-Trichlorobenzene	1.072	1.156	-7.8	97	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
I29421Q.D V505048I.M Fri May 09 15:50:44 2008 Page 3

Data File : D:\HPCHEM\DATA\050908-I\I29421Q.D Vial: 3
Acq On : 9 May 2008 10:09 am Operator:
Sample : L505098I Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
Integration Params: rteint.p
Quant Time: May 9 10:17 2008 Quant Results File: V505048I.RES

Quant Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration
DataAcq Meth : V504258I

5.9.08 AK 5.12.08

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.48	168	228246	4.00	ug/L	0.00
39) Fluorobenzene	8.89	96	608280	4.00	ug/L	0.00
63) d5-Chlorobenzene	13.69	117	366135	4.00	ug/L	0.00
87) 1,4-Dichlorobenzene-d4	17.54	152	141798	4.00	ug/L	0.02
System Monitoring Compounds						
28) DB Holder #28	9.02	114	460937	3.74	ug/L	0.00
Spiked Amount 4.000	Range 70 - 130		Recovery = 93.50%			
36) 1,4-Difluorobenzene	9.02	114	460937	3.74	ug/L	0.00
Spiked Amount 4.000	Range 70 - 130		Recovery = 93.50%			
54) Bromofluorobenzene	15.63	95	163050	3.12	ug/L	0.02
Spiked Amount 4.000	Range 70 - 130		Recovery = 78.00%			
73) 1,2-Dichlorobenzene-d4	18.15	152	115042	3.48	ug/L	0.00
Spiked Amount 4.000	Range 70 - 130		Recovery = 87.00%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.82	85	54400	0.80	ug/L	98
3) Chloromethane	2.08	50	80987	0.79	ug/L	100
4) Vinyl Chloride	2.20	62	70868	0.94	ug/L	99
5) Bromomethane	2.72	94	48375	0.88	ug/L	94
6) Chloroethane	2.82	64	41300	0.85	ug/L	99
8) Trichlorofluoromethane	3.15	101	73564	0.86	ug/L	98
9) Diethyl ether	3.60	74	16004	0.88	ug/L	93
10) 1,1,2-Trichlorotrifluoroet	3.80	101	48323	0.94	ug/L	98
12) Acetone	3.88	43	23356	3.55	ug/L	99
13) 1,1-Dichloroethene	4.06	61	80212	0.93	ug/L	97
15) Di-isopropyl ether (DIPE)	5.93	45	151824	0.90	ug/L	100
16) Methylene Chloride	4.86	84	64633	0.72	ug/L	97
17) Carbon Disulfide	4.83	76	176255	0.92	ug/L	100
18) Acrylonitrile	5.08	53	5104	0.74	ug/L #	81
19) Methyl-tert-butyl ether (M	5.15	73	129657	1.75	ug/L	95
20) trans-1,2-Dichloroethene	5.35	96	49871	0.88	ug/L	94
21) 1,1-Dichloroethane	6.04	63	93625	0.90	ug/L	97
23) Methyl ethyl ketone	6.77	72	7206	4.12	ug/L #	97
24) Ethyl t-butyl ether (ETBE)	6.58	59	104579	0.88	ug/L	97
25) 2,2-Dichloropropane	6.96	77	75467	0.92	ug/L	100
26) cis-1,2-Dichloroethene	7.02	96	49398	0.90	ug/L	98
27) t-Amyl methyl ether (TAME)	8.38	73	75373	0.88	ug/L	95
29) Chloroform	7.27	83	82947	0.88	ug/L	97
30) Bromochloromethane	7.52	128	14891	0.85	ug/L	96
32) 1,1,1-Trichloroethane	7.90	97	72109	0.89	ug/L	92
34) 1,1-Dichloropropene	8.15	75	71418	0.86	ug/L	96

(#) = qualifier out of range (m) = manual integration
I29421Q.D V505048I.M Fri May 09 10:17:11 2008 Page 1

Data File : D:\HPCHEM\DATA\050908-I\I29421Q.D Vial: 3
Acq On : 9 May 2008 10:09 am Operator:
Sample : L505098I Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
Integration Params: rteint.p
Quant Time: May 9 10:17 2008 Quant Results File: V505048I.RES

Quant Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration
DataAcq Meth : V5042581

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
35)	Carbon Tetrachloride	8.29	119	56118	0.90 ug/L	96
37)	1,2-Dichloroethane	8.54	62	40865	0.91 ug/L	97
38)	Benzene	8.55	78	184634	0.85 ug/L	96
40)	Trichloroethene	9.50	95	48104	0.93 ug/L	98
41)	1,2-Dichloropropane	9.77	63	42197	0.92 ug/L	99
45)	Bromodichloromethane	10.12	83	51553	0.95 ug/L	99
46)	Dibromomethane	10.19	93	16942	0.94 ug/L	96
47)	1,4-Dioxane	10.20	88	3717	22.92 ug/L	86
51)	2-Hexanone	12.04	58	19640	3.61 ug/L	93
52)	Methyl isobutyl ketone	10.69	58	25842	4.06 ug/L	97
53)	cis-1,3-Dichloropropene	10.98	75	57172	0.94 ug/L	98
55)	Toluene	11.46	92	107336	0.90 ug/L	99
56)	trans-1,3-Dichloropropene	11.76	75	36739	0.83 ug/L	100
58)	1,1,2-Trichloroethane	12.00	83	17428	0.91 ug/L	92
59)	1,3-Dichloropropane	12.38	76	37077	0.88 ug/L	90
60)	Tetrachloroethene	12.48	166	42410	1.01 ug/L	99
61)	Dibromochloromethane	12.77	129	24413	0.89 ug/L	89
62)	1,2-Dibromoethane	13.09	107	18087	0.89 ug/L	98
64)	Chlorobenzene	13.75	112	100780	1.04 ug/L	94
65)	1,1,1,2-Tetrachloroethane	13.83	131	31131	1.02 ug/L	98
66)	Ethylbenzene	13.85	91	205181	1.04 ug/L	98
67)	m,p-Xylene	13.98	106	144979	2.07 ug/L	99
68)	o-Xylene	14.66	106	64024	1.00 ug/L	100
69)	Styrene	14.72	104	99125	1.01 ug/L	97
70)	Bromoform	15.23	173	10852	1.02 ug/L	97
71)	Isopropylbenzene	15.24	105	160027	0.91 ug/L	95
72)	1,1,2,2-Tetrachloroethane	15.50	83	19852	0.99 ug/L	89
74)	1,2,3-Trichloropropane	15.74	75	13235	0.90 ug/L	95
75)	trans-1,4-Dichloro-2-buten	15.88	88	2577	0.93 ug/L #	48
76)	n-Propylbenzene	15.88	91	233902	1.00 ug/L	97
77)	Bromobenzene	15.93	156	29564	0.98 ug/L #	78
78)	1,3,5-Trimethylbenzene	16.14	105	138973	1.03 ug/L	100
79)	2-Chlorotoluene	16.15	91	147472	1.05 ug/L	95
80)	4-Chlorotoluene	16.23	91	124821	1.01 ug/L	98
81)	tert-butylbenzene	16.72	119	115904	1.01 ug/L	97
82)	1,2,4-Trimethylbenzene	16.78	105	138156	1.04 ug/L	97
84)	sec-butylbenzene	17.06	105	190423	1.01 ug/L	99
85)	p-isopropyltoluene	17.29	119	138801	0.97 ug/L	96
86)	1,3-Dichlorobenzene	17.42	146	61210	1.00 ug/L	97
88)	1,4-Dichlorobenzene	17.59	146	60636	1.08 ug/L	99
89)	n-butylbenzene	17.96	91	150362	1.08 ug/L	95

(#) = qualifier out of range (m) = manual integration
I29421Q.D V505048I.M Fri May 09 10:17:11 2008 Page 2

Data File : D:\HPCHEM\DATA\050908-I\I29421Q.D Vial: 3
Acq On : 9 May 2008 10:09 am Operator:
Sample : L505098I Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
Integration Params: rteint.p
Quant Time: May 9 10:17 2008 Quant Results File: V505048I.RES

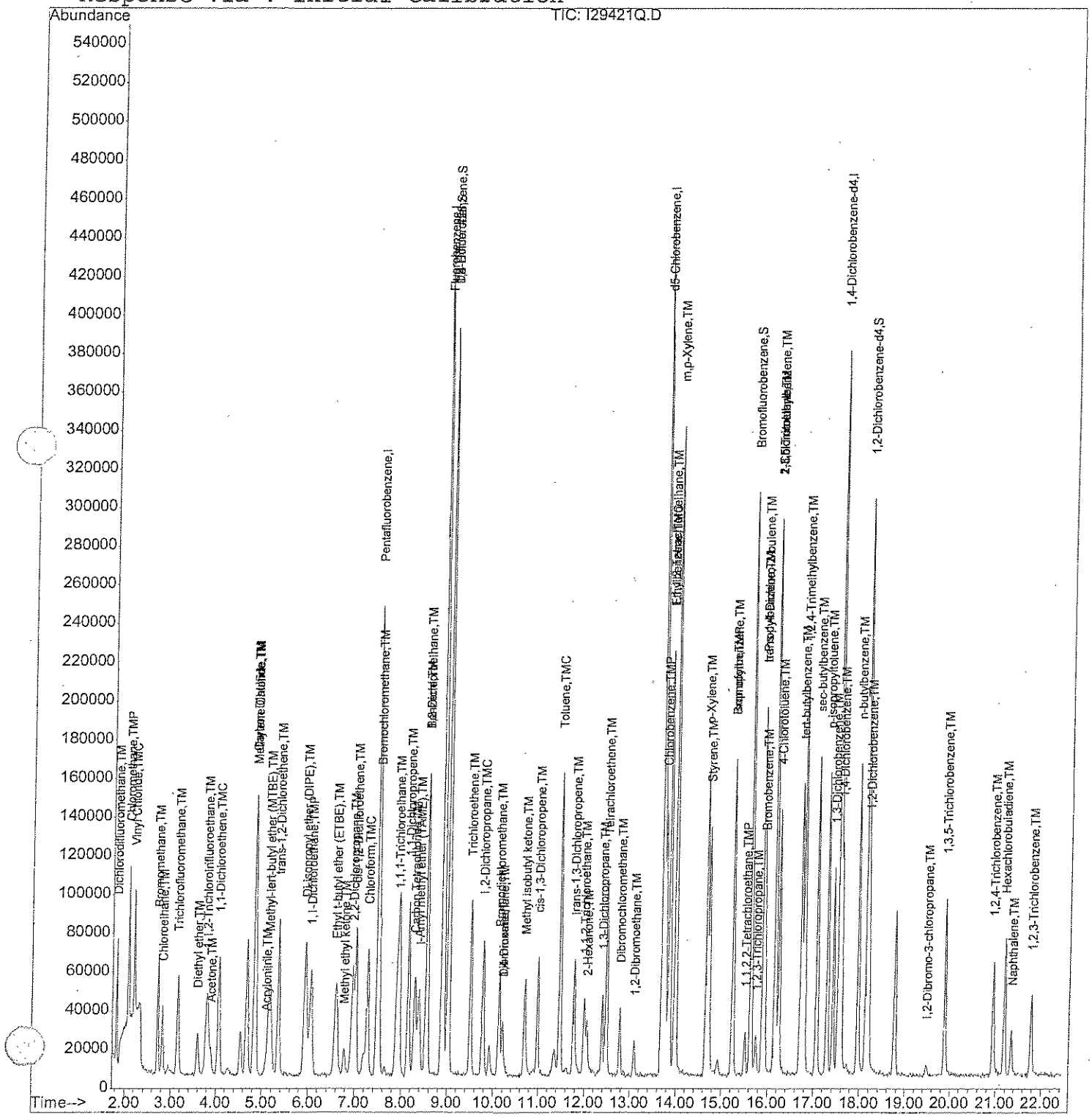
Quant Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration
DataAcq Meth : V504258I

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
90)	1,2-Dichlorobenzene	18.18	146	48307	1.10 ug/L	90
92)	1,2-Dibromo-3-chloropropan	19.49	75	2711	0.99 ug/L	88
94)	1,2,4-Trichlorobenzene	20.93	180	27610	1.02 ug/L	95
95)	Hexachlorobutadiene	21.18	225	18194	1.06 ug/L	93
96)	Naphthalene	21.34	128	31378	0.97 ug/L	95
97)	1,2,3-Trichlorobenzene	21.77	180	20561	1.04 ug/L	94
98)	1,3,5-Trichlorobenzene	19.88	180	40974	1.08 ug/L	95

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\DATA\050908-I\I29421Q.D Vial: 3
Acq On : 9 May 2008 10:09 am Operator:
Sample : L505098I Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 9 10:17 2008 Quant Results File: V505048I.RI

Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration



Data File : D:\HPCHEM\DATA\050908-I\I29422Q.D
Acq On : 9 May 2008 10:17 am
Sample : L505098I2
Misc : 25000
MS Integration Params: rteint.p

Vial: 4
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 09 15:39:25 2008
Response via : Multiple Level Calibration

5-9-08 AK 5.12.08

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF		%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000		0.0	112	0.00
2	TM	Dichlorodifluoromethane	1.196	0.912		23.7	81	0.00
3	TMP	Chloromethane	1.706	1.338		21.6	85	0.00
4	TMC	Vinyl Chloride	1.349	1.144		15.2	91	0.00
5	TM	Bromomethane	0.968	0.812		16.1	93	0.00
6	TM	Chloroethane	0.849	0.687		19.1	84	0.00
7	TM	t-Butyl alcohol (TBA)	0.031	0.025		19.4	86	0.00
8	TM	Trichlorofluoromethane	1.506	1.235		18.0	84	0.00
9	TM	Diethyl ether	0.317	0.264		16.7	91	0.00
10	TM	1,1,2-Trichlorotrifluoroeth	0.896	0.809		9.7	95	0.01
11	T	Acrolein	0.252	0.020	NT	92.1#	9#	0.02
12	TM	Acetone	0.100	0.081		19.0	82	0.00
13	TMC	1,1-Dichloroethene	1.507	1.353		10.2	94	0.00
14	T	Methyl iodide	0.000	0.000		0.0	0#	0.02
15	TM	Di-isopropyl ether (DIPE)	2.958	2.534		14.3	94	0.01
16	TM	Methylene Chloride	1.410	1.152		18.3	97	0.00
17	TM	Carbon Disulfide	3.360	2.974		11.5	95	0.00
18	TM	Acrylonitrile	0.120	0.101		15.8	90	0.00
19	TM	Methyl-tert-butyl ether (MT	1.299	2.176	Dee Tolee	67.5#	188	0.00
20	TM	trans-1,2-Dichloroethene	0.998	0.836		16.2	90	0.00
21	TMP	1,1-Dichloroethane	1.823	1.566		14.1	89	0.01
22	T	Vinyl acetate	0.000	0.000		0.0	0#	0.00
23	TM	Methyl ethyl ketone	0.031	0.024		22.6	87	0.02
24	TM	Ethyl t-butyl ether (ETBE)	2.082	1.757		15.6	91	0.00
25	TM	2,2-Dichloropropane	1.445	1.296		10.3	92	0.01
26	TM	cis-1,2-Dichloroethene	0.958	0.846		11.7	96	0.01
27	TM	t-Amyl methyl ether (TAME)	1.508	1.262		16.3	93	0.01
28	S	DB Holder #28	2.158	1.988		7.9	103	0.00
29	TMC	Chloroform	1.643	1.461		11.1	94	0.00
30	TM	Bromochloromethane	0.305	0.254		16.7	96	0.00
31	TM	Tetrahydrofuran	0.094	0.086		8.5	81	0.03
32	TM	1,1,1-Trichloroethane	1.416	1.222		13.7	91	0.01
33	T	NO COMPOUND	0.000	0.000		0.0	0#	-0.06
34	TM	1,1-Dichloropropene	1.447	1.230		15.0	89	0.00
35	TM	Carbon Tetrachloride	1.099	0.971		11.6	93	0.01
36	S	1,4-Difluorobenzene	2.158	1.988		7.9	103	0.00
37	TM	1,2-Dichloroethane	0.787	0.685		13.0	91	0.00
38	TM	Benzene	3.790	3.133		17.3	88	0.00
39	I	Fluorobenzene	1.000	1.000		0.0	102	0.00
40	TM	Trichloroethene	0.341	0.312		8.5	89	0.01

(#) = Out of Range

Data File : D:\HPCHEM\DATA\050908-I\I29422Q.D Vial: 4
Acq On : 9 May 2008 10:17 am Operator:
Sample : L505098I2 Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p

Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 09 15:39:25 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	TMC	1,2-Dichloropropane	0.301	0.271	10.0	87	0.01
42	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
43	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
44	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
45	TM	Bromodichloromethane	0.355	0.341	3.9	93	0.00
46	TM	Dibromomethane	0.118	0.107	9.3	93	0.01
47	T	1,4-Dioxane	0.001	0.001	0.0	82	0.02
48	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
49	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
50	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.48
51	TM	2-Hexanone	0.036	0.025	30.6#	85	0.02
52	TM	Methyl isobutyl ketone	0.042	0.034	19.0	87	0.01
53	TM	cis-1,3-Dichloropropene	0.401	0.363	9.5	92	0.01
	S	Bromofluorobenzene	0.343	0.266	22.4	83	0.01
55	TMC	Toluene	0.781	0.697	10.8	89	0.00
56	TM	trans-1,3-Dichloropropene	0.293	0.229	21.8	81	0.00
57	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
58	TM	1,1,2-Trichloroethane	0.127	0.119	6.3	98	0.01
59	TM	1,3-Dichloropropane	0.276	0.241	12.7	88	0.01
60	TM	Tetrachloroethene	0.277	0.274	1.1	99	0.00
61	TM	Dibromochloromethane	0.181	0.155	14.4	88	0.01
62	TM	1,2-Dibromoethane	0.133	0.117	12.0	88	0.00
63	I	d5-Chlorobenzene	1.000	1.000	0.0	92	0.01
64	TMP	Chlorobenzene	1.060	1.114	-5.1	94	0.00
65	TM	1,1,1,2-Tetrachloroethane	0.335	0.341	-1.8	92	0.00
66	TMC	Ethylbenzene	2.150	2.246	-4.5	92	0.00
67	TM	m,p-Xylene	0.766	0.801	-4.6	91	0.00
68	TM	o-Xylene	0.700	0.703	-0.4	89	0.00
69	TM	Styrene	1.074	1.074	0.0	91	0.00
70	TMP	Bromoform	0.116	0.116	0.0	92	0.00
71	TM	Isopropylbenzene	1.922	1.751	8.9	80	0.00
72	TMP	1,1,2,2-Tetrachloroethane	0.220	0.214	2.7	88	0.00
73	S	1,2-Dichlorobenzene-d4	0.361	0.316	12.5	85	0.00
74	TM	1,2,3-Trichloropropane	0.160	0.145	9.4	90	0.00
75	TM	trans-1,4-Dichloro-2-butene	0.031	0.021	32.3#	69	0.02
76	TM	n-Propylbenzene	2.555	2.589	-1.3	89	0.01
77	TM	Bromobenzene	0.330	0.325	1.5	89	0.00
78	TM	1,3,5-Trimethylbenzene	1.478	1.495	-1.2	91	0.00
79	TM	2-Chlorotoluene	1.534	1.593	-3.8	92	0.00
80	TM	4-Chlorotoluene	1.349	1.362	-1.0	89	0.00

(#) = Out of Range

Data File : D:\HPCHEM\DATA\050908-I\I29422Q.D Vial: 4
Acq On : 9 May 2008 10:17 am Operator:
Sample : L505098I2 Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p

Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 09 15:39:25 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
81	TM	tert-butylbenzene	1.257	1.250	0.6	88	0.00
82	TM	1,2,4-Trimethylbenzene	1.450	1.485	-2.4	92	0.00
83	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.48
84	TM	sec-butylbenzene	2.052	2.086	-1.7	90	0.00
85	TM	p-isopropyltoluene	1.559	1.540	1.2	89	0.00
86	TM	1,3-Dichlorobenzene	0.670	0.657	1.9	90	0.01
87	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	89	0.01
88	TM	1,4-Dichlorobenzene	1.577	1.662	-5.4	91	0.00
89	TM	n-butylbenzene	3.923	4.338	-10.6	92	0.00
90	TM	1,2-Dichlorobenzene	1.239	1.368	-10.4	93	0.00
91	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
92	TM	1,2-Dibromo-3-chloropropane	0.078	0.073	6.4	74	0.01
93	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
94	TM	1,2,4-Trichlorobenzene	0.766	0.749	2.2	85	0.01
95	TM	Hexachlorobutadiene	0.483	0.506	-4.8	90	0.01
96	TM	Naphthalene	0.914	0.887	3.0	88	0.01
97	TM	1,2,3-Trichlorobenzene	0.558	0.576	-3.2	92	0.01
98	TM	1,3,5-Trichlorobenzene	1.072	1.156	-7.8	95	0.00

Data File : D:\HPCHEM\DATA\050908-I\I29422Q.D Vial: 4
Acq On : 9 May 2008 10:17 am Operator:
Sample : L505098I2 Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
Integration Params: rteint.p
Quant Time: May 9 15:52 2008 Quant Results File: V505048I.RES

Quant Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration
DataAcq Meth : V504258I

5-12-08 AK 5.12.08

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.48	168	228560	4.00	ug/L	0.00
39) Fluorobenzene	8.89	96	600652	4.00	ug/L	0.00
63) d5-Chlorobenzene	13.70	117	355782	4.00	ug/L	0.01
87) 1,4-Dichlorobenzene-d4	17.54	152	137628	4.00	ug/L	0.01
System Monitoring Compounds						
28) DB Holder #28	9.02	114	454266	3.68	ug/L	0.00
Spiked Amount 4.000	Range 70 - 130		Recovery = 92.00%			
36) 1,4-Difluorobenzene	9.02	114	454266	3.68	ug/L	0.00
Spiked Amount 4.000	Range 70 - 130		Recovery = 92.00%			
54) Bromofluorobenzene	15.63	95	159538	3.09	ug/L	0.01
Spiked Amount 4.000	Range 70 - 130		Recovery = 77.25%			
73) 1,2-Dichlorobenzene-d4	18.14	152	112332	3.50	ug/L	0.00
Spiked Amount 4.000	Range 70 - 130		Recovery = 87.50%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.82	85	52088	0.76	ug/L	98
3) Chloromethane	2.08	50	76442	0.74	ug/L	99
4) Vinyl Chloride	2.19	62	65363	0.85	ug/L	95
5) Bromomethane	2.72	94	46411	0.84	ug/L	98
6) Chloroethane	2.82	64	39270	0.81	ug/L	94
8) Trichlorofluoromethane	3.15	101	70575	0.82	ug/L	93
9) Diethyl ether	3.58	74	15057	0.83	ug/L	93
10) 1,1,2-Trichlorotrifluoroet	3.80	101	46201	0.90	ug/L	98
12) Acetone	3.88	43	23278m	3.53	ug/L	
13) 1,1-Dichloroethene	4.06	61	77333	0.90	ug/L	95
15) Di-isopropyl ether (DIPE)	5.93	45	144812	0.86	ug/L	98
16) Methylene Chloride	4.85	84	65825	0.74	ug/L	98
17) Carbon Disulfide	4.83	76	169953	0.89	ug/L	100
18) Acrylonitrile	5.06	53	5789	0.84	ug/L #	86
19) Methyl-tert-butyl ether (M	5.15	73	124317	1.67	ug/L	99
20) trans-1,2-Dichloroethene	5.35	96	47794	0.84	ug/L	95
21) 1,1-Dichloroethane	6.05	63	89505	0.86	ug/L	98
23) Methyl ethyl ketone	6.78	72	6826	3.90	ug/L #	92
24) Ethyl t-butyl ether (ETBE)	6.59	59	100375	0.84	ug/L	100
25) 2,2-Dichloropropane	6.96	77	74067	0.90	ug/L	97
26) cis-1,2-Dichloroethene	7.02	96	48368	0.88	ug/L	92
27) t-Amyl methyl ether (TAME)	8.37	73	72111	0.84	ug/L	93
29) Chloroform	7.27	83	83456	0.89	ug/L	100
30) Bromochloromethane	7.52	128	14489	0.83	ug/L	93
32) 1,1,1-Trichloroethane	7.90	97	69843	0.86	ug/L	96
34) 1,1-Dichloropropene	8.15	75	70294	0.85	ug/L	98

(#) = qualifier out of range (m) = manual integration
I29422Q.D V505048I.M Fri May 09 15:53:11 2008 Page 1

Data File : D:\HPCHEM\DATA\050908-I\I29422Q.D Vial: 4
Acq On : 9 May 2008 10:17 am Operator:
Sample : L505098I2 Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
Integration Params: rteint.p
Quant Time: May 9 15:52 2008 Quant Results File: V505048I.RES

Quant Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration
DataAcq Meth : V504258I

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
35) Carbon Tetrachloride	8.29	119	55511	0.88 ug/L	97
37) 1,2-Dichloroethane	8.53	62	39150	0.87 ug/L	95
38) Benzene	8.54	78	178996	0.83 ug/L	98
40) Trichloroethene	9.51	95	46835	0.92 ug/L	98
41) 1,2-Dichloropropane	9.77	63	40705	0.90 ug/L	99
45) Bromodichloromethane	10.12	83	51205	0.96 ug/L	96
46) Dibromomethane	10.20	93	16120	0.91 ug/L	97
47) 1,4-Dioxane	10.21	88	3249	20.29 ug/L	97
51) 2-Hexanone	12.04	58	19001m	3.54 ug/L	
52) Methyl isobutyl ketone	10.69	58	25556	4.07 ug/L	98
53) cis-1,3-Dichloropropene	10.98	75	54465	0.90 ug/L	96
55) Toluene	11.46	92	104699	0.89 ug/L	99
56) trans-1,3-Dichloropropene	11.76	75	34435	0.78 ug/L	99
58) 1,1,2-Trichloroethane	11.99	83	17942	0.94 ug/L	96
59) 1,3-Dichloropropane	12.39	76	36133	0.87 ug/L	97
60) Tetrachloroethene	12.47	166	41150	0.99 ug/L	94
61) Dibromochloromethane	12.78	129	23252	0.86 ug/L	96
62) 1,2-Dibromoethane	13.09	107	17565	0.88 ug/L	96
64) Chlorobenzene	13.75	112	99093	1.05 ug/L	93
65) 1,1,1,2-Tetrachloroethane	13.83	131	30320	1.02 ug/L	99
66) Ethylbenzene	13.84	91	199790	1.04 ug/L	96
67) m,p-Xylene	13.97	106	142484	2.09 ug/L	99
68) o-Xylene	14.65	106	62505	1.00 ug/L	100
69) Styrene	14.71	104	95502	1.00 ug/L	99
70) Bromoform	15.22	173	10293	0.99 ug/L	94
71) Isopropylbenzene	15.23	105	155730	0.91 ug/L	96
72) 1,1,2,2-Tetrachloroethane	15.51	83	19020	0.97 ug/L	93
74) 1,2,3-Trichloropropane	15.74	75	12938	0.91 ug/L #	87
75) trans-1,4-Dichloro-2-buten	15.88	88	1877	0.73 ug/L #	57
76) n-Propylbenzene	15.89	91	230249	1.01 ug/L	99
77) Bromobenzene	15.92	156	28945	0.99 ug/L	94
78) 1,3,5-Trimethylbenzene	16.14	105	132939	1.01 ug/L	98
79) 2-Chlorotoluene	16.15	91	141709	1.04 ug/L	95
80) 4-Chlorotoluene	16.23	91	121157	1.01 ug/L	98
81) tert-butylbenzene	16.71	119	111209	0.99 ug/L	95
82) 1,2,4-Trimethylbenzene	16.77	105	132098	1.02 ug/L	98
84) sec-butylbenzene	17.06	105	185530	1.02 ug/L	99
85) p-isopropyltoluene	17.28	119	136953	0.99 ug/L	97
86) 1,3-Dichlorobenzene	17.42	146	58447	0.98 ug/L	98
88) 1,4-Dichlorobenzene	17.59	146	57171	1.05 ug/L	95
89) n-butylbenzene	17.95	91	149272	1.11 ug/L	95

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\DATA\050908-I\I29422Q.D Vial: 4
Acq On : 9 May 2008 10:17 am Operator:
Sample : L505098I2 Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
Integration Params: rteint.p
Quant Time: May 9 15:52 2008 Quant Results File: V505048I.RES

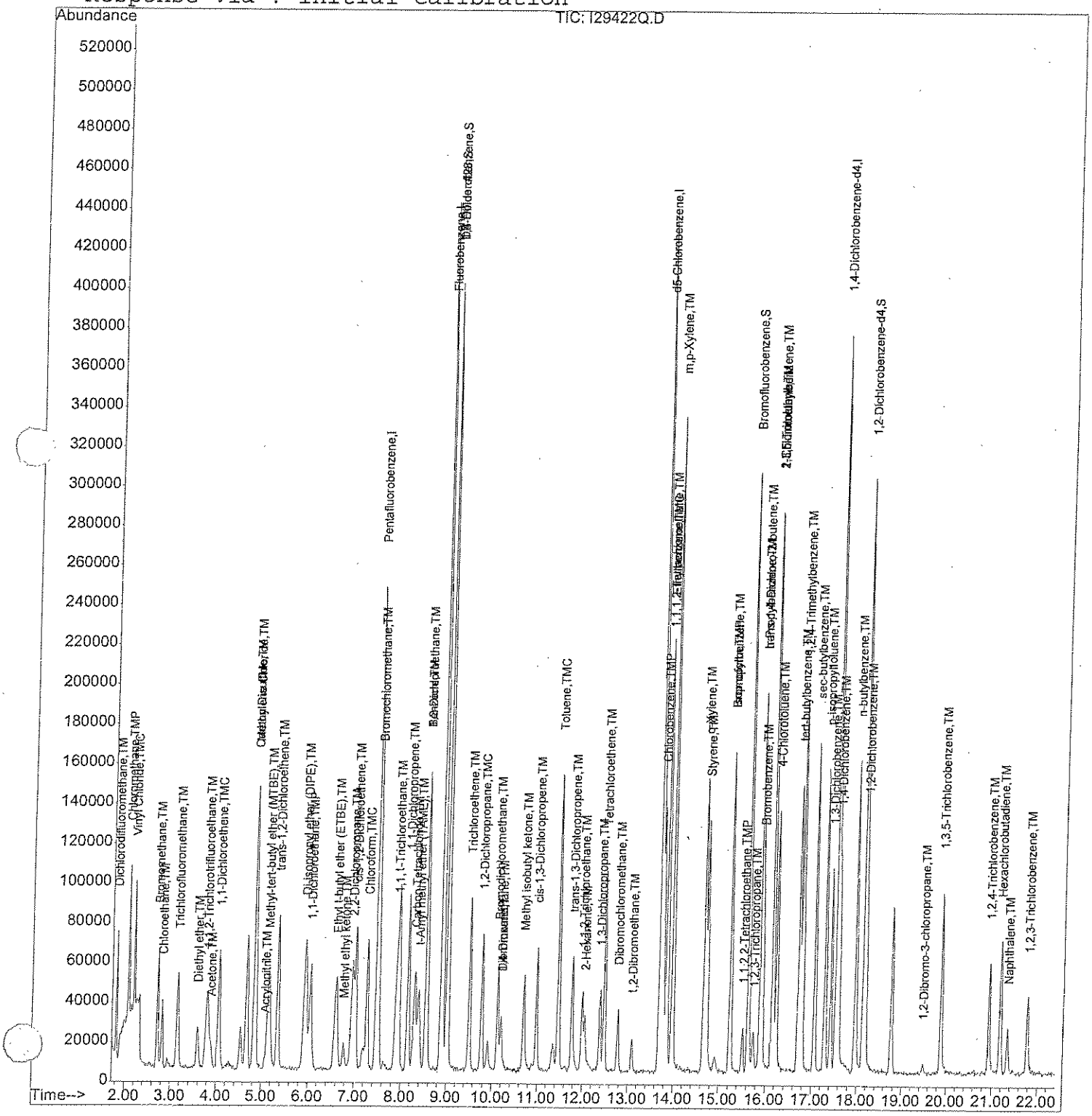
Quant Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 05 12:42:08 2008
Response via : Initial Calibration
DataAcq Meth : V504258I

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
90)	1,2-Dichlorobenzene	18.18	146	47056	1.10 ug/L	97
92)	1,2-Dibromo-3-chloropropan	19.47	75	2521	0.94 ug/L #	69
94)	1,2,4-Trichlorobenzene	20.93	180	25754	0.98 ug/L	97
95)	Hexachlorobutadiene	21.18	225	17423	1.05 ug/L	99
96)	Naphthalene	21.34	128	30521	0.97 ug/L	97
97)	1,2,3-Trichlorobenzene	21.78	180	19822	1.03 ug/L	97
98)	1,3,5-Trichlorobenzene	19.88	180	39764	1.08 ug/L	100

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\DATA\050908-I\I29422Q.D Vial: 4
Acq On : 9 May 2008 10:17 am Operator:
Sample : L505098I2 Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 9 15:52 2008 Quant Results File: V505048I.R

Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 09 15:39:46 2008
Response via : Initial Calibration



I29422Q.D V505048I.M Fri May 09 15:53:11 2008 Page 4

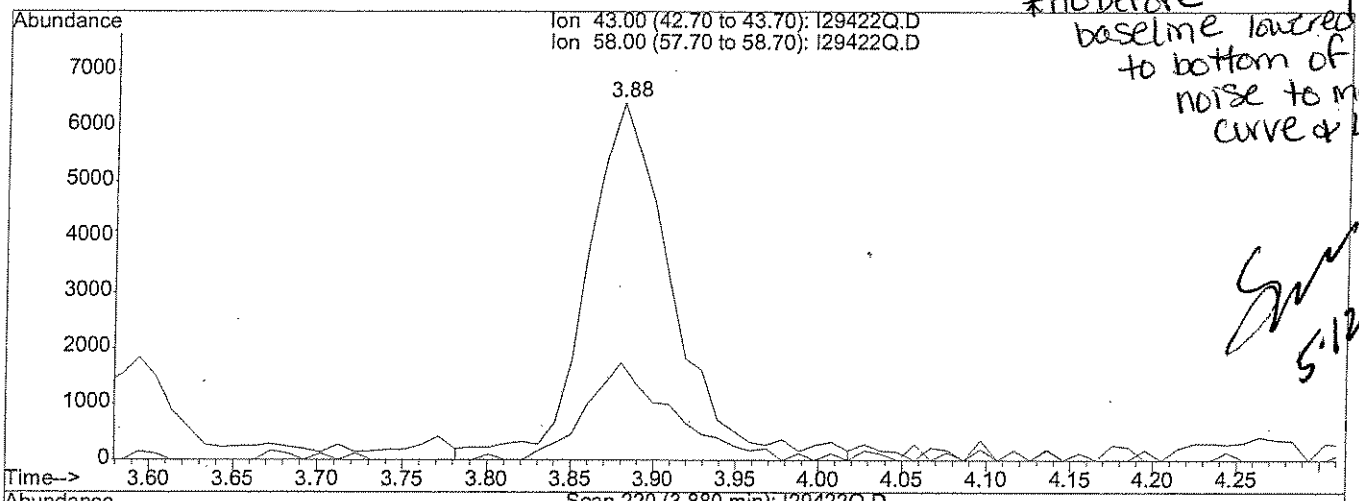
Data File : D:\HPCHEM\DATA\050908-I\I29422Q.D Vial: 4
Acq On : 9 May 2008 10:17 am Operator:
Sample : L505098I2 Inst : GC/MS In
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 9 15:52 2008 Quant Results File: temp.res

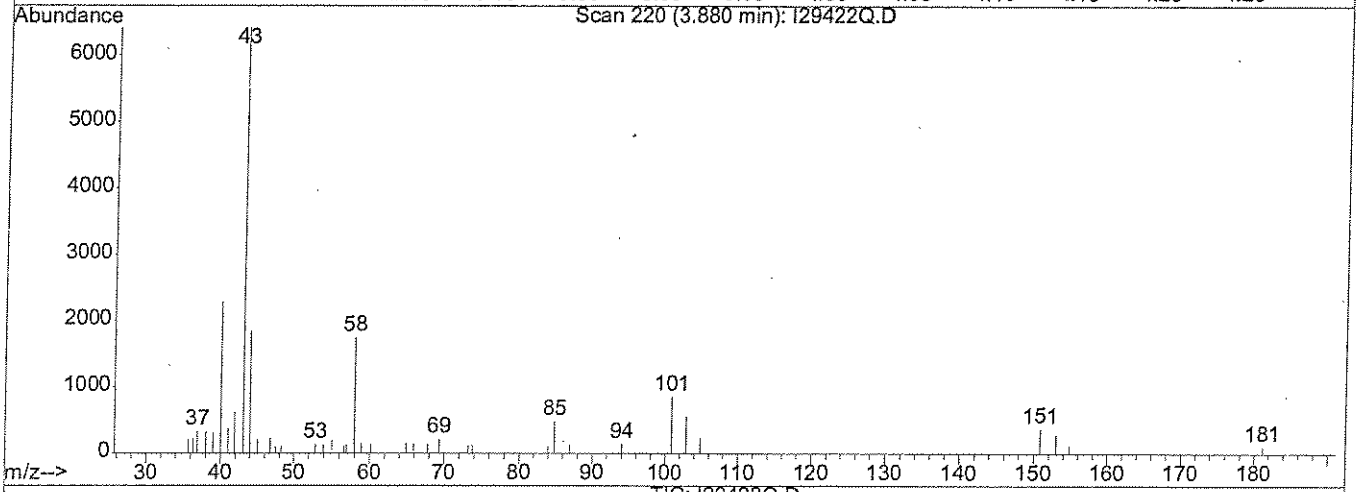
Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 12 07:46:49 2008
Response via : Single Level Calibration

AK 5.12.08

*no before baseline lowered to bottom of noise to match curve & LCS

5.12.08





(12) Acetone (TM)

3.88min 3.53ug/L m

response 23278

Ion	Exp%	Act%
43.00	100	100
58.00	29.90	27.17
0.00	0.00	0.00
0.00	0.00	0.00

I29422Q.D V505048I.M Mon May 12 13:39:10 2008

Data File : D:\HPCHEM\DATA\050908-I\I29422Q.D
Acq On : 9 May 2008 10:17 am
Sample : L505098I2
Misc : 25000
MS Integration Params: rteint.p
Quant Time: May 9 15:52 2008

Vial: 4
Operator:
Inst : GC/MS In
Multiplr: 1.00

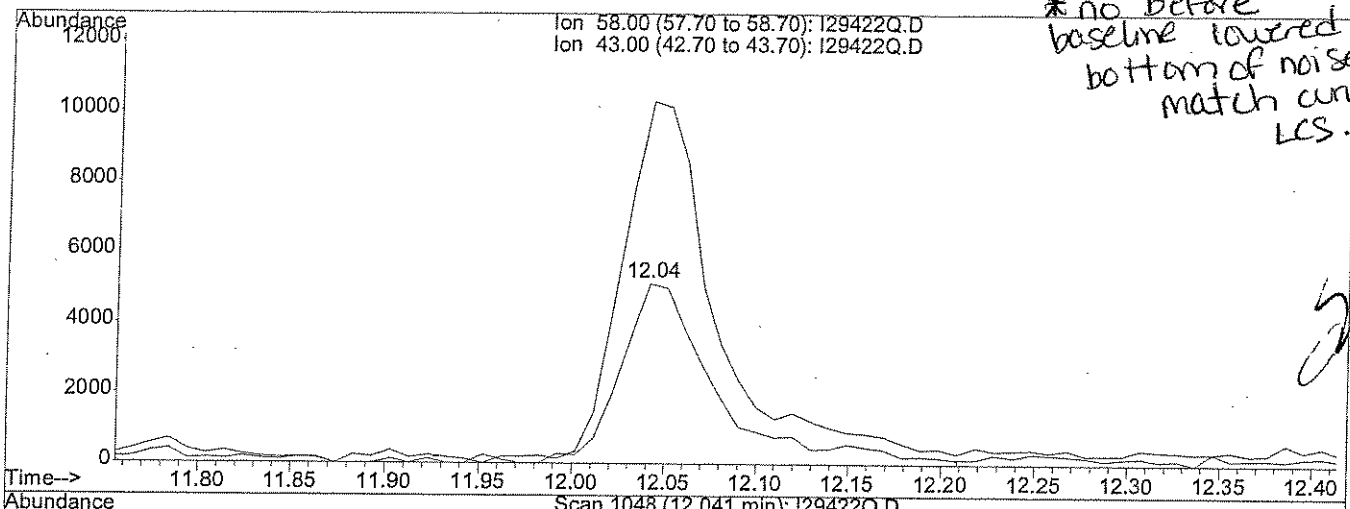
Quant Results File: temp.res

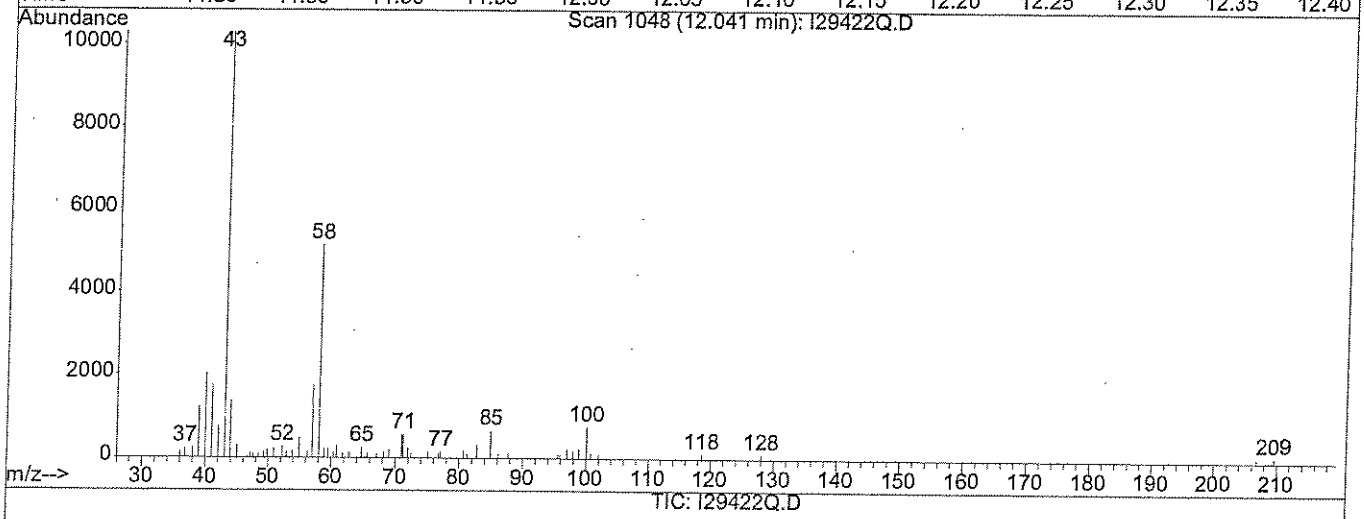
Method : D:\HPCHEM\METHODS\V505048I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Mon May 12 07:46:49 2008
Response via : Single Level Calibration

AK 5.12.08

*no before baseline lowered to bottom of noise to match curve + LCS.

5.12.08





(51) 2-Hexanone (TM)

12.04min 3.54ug/L m

response 19001

Ion	Exp%	Act%
58.00	100	100
43.00	187.00	203.62
0.00	0.00	0.00
0.00	0.00	0.00

I29422Q.D V505048I.M Mon May 12 13:39:17 2008

VOLATILE ORGANIC INTERNAL STANDARD AREA
AND RETENTION TIME SUMMARY

Instrument ID: I
GC Column: RTX-502.2
Column ID: 0.25 mm

SDG: 61274

12 HR STANDARD	IS 1 AREA	#	IS 1 RT	#	IS 2 AREA	#	IS 2 RT	#	IS 3 AREA	#	IS 3 RT	#	IS 4 AREA	#	IS 4 RT	#
1.0PPB STD	204381		7.47		589601		8.88		387633		13.68		154825		17.52	
Upper Limit	408762		7.53		1179202		8.94		775266		13.74		309650		17.58	
Lower limit	143067		7.41		412721		8.82		271343		13.62		108378		17.46	
SAMPLE ID																
0.1PPB STD	214621		7.47		615691		8.88		398534		13.68		149545		17.52	
0.2PPB STD	203410		7.47		590218		8.87		387821		13.68		146498		17.52	
0.5PPB STD	206030		7.47		593719		8.88		392042		13.68		153524		17.52	
1.0PPB STD	204381		7.47		589601		8.88		387633		13.68		154825		17.52	
2.0PPB STD	203899		7.46		600739		8.87		403991		13.67		174984		17.52	
5.0PPB STD	211082		7.46		616372		8.87		422901		13.67		197523		17.53	
10PPB STD	237975		7.46		677353		8.87		472595		13.67		204460		17.53	
20PPB STD	283782		7.46		778451		8.87		539610		13.67		229154		17.53	

IS 1 = Pentafluorobenzene
IS 2 = Fluorobenzene
IS 3 = d5-Chlorobenzene
IS 4 = 1,4-Dichlorobenzene-d4

Area upper limit = + 100% IS area
Area lower limit = - 30% IS area
RT upper limit = + 0.06 min of IS RRT
RT lower limit = - 0.06 min of IS RRT

\# Column to be used to flag values outside of QC limits
* Values outside QC limits

VOA FORM 8

ile : D:\HPCHEM\DATA\050408-I\I29305T.D
e : 4 May 2008 11:48 am

Calibration File : D:\HPCHEM\DATA\050408-I\I29309SI.D

AK 5.06.08

204381 589601 387633

154825

5-7-08

File	Sample	Surrogate Recovery %				Internal Standard Responses		
I29306SI.D	0.1PPB S	100	100	92	91	214621	615691	398534
				149545				
I29307SI.D	0.2PPB S	101	101	96	92	203410	590218	387821
				146498				
I29308SI.D	0.5PPB S	100	100	97	94	206030	593719	392042
				153524				
I29309SI.D	1.0PPB S	100	100	95	94	204381	589601	387633
				154825				
I29310SI.D	2.0PPB S	102	102	101	103	203899	600739	403991
				174984				
I29311SI.D	5.0PPB S	102	102	107	111	211082	616372	422901
				197523				
I29312SI.D	10PPB ST	99	99	105	104	237975	677353	472595
				204460				
I29313SI.D	20PPB ST	96	96	98	101	283782	778451	539610
				229154				

t - fails 12hr time check * - fails criteria

Created: Tue May 06 13:02:44 2008 GC
MS Ins

VOLATILE ORGANIC INTERNAL STANDARD AREA
AND RETENTION TIME SUMMARY

Instrument ID: I
GC Column: RTX-502.2
Column ID: 0.25 mm

SDG: 61274

12 HR STANDARD	IS 1 AREA	#	IS 1 RT	#	IS 2 AREA	#	IS 2 RT	#	IS 3 AREA	#	IS 3 RT	#	IS 4 AREA	#	IS 4 RT	#
L505098I	228246		7.48		608280		8.89		366135		13.69		141798		17.54	
Upper Limit	456492		7.54		1216560		8.95		732270		13.75		283596		17.60	
Lower limit	159772		7.42		425796		8.83		256295		13.63		99259		17.48	
SAMPLE ID																
L505098I	228246		7.48		608280		8.89		366135		13.69		141798		17.54	
L505098I2	228560		7.48		600652		8.89		355782		13.70		137628		17.54	
B505098I	232452		7.49		609607		8.89		349668		13.70		I25267		17.54	
61274-2	222878		7.49		585152		8.89		338942		13.70		111391		17.54	
61274-1	208367		7.49		554910		8.89		320229		13.70		111010		17.54	
61274-1, DL	208480		7.49		558710		8.90		335034		13.70		118568		17.54	

IS 1 = Pentafluorobenzene
IS 2 = Fluorobenzene
IS 3 = d5-Chlorobenzene
IS 4 = 1,4-Dichlorobenzene-d4

Area upper limit = + 100% IS area
Area lower limit = - 30% IS area
RT upper limit = + 0.06 min of IS RRT
RT lower limit = - 0.06 min of IS RRT

Column to be used to flag values outside of QC limits
* Values outside QC limits

VOA FORM 8

Tune File : D:\HPCHEM\DATA\050908-I\I29419T.D
Tune Time : 9 May 2008 9:00 am

Daily Calibration File : D:\HPCHEM\DATA\050908-I\I29421Q.D

AK 5.12.08

228246 608280 366135

141798

5.12.0

File	Sample	Surrogate Recovery %				Internal Standard Responses		
I29421Q.D	L505098I	94	94	78	87	228246	608280	366135
				141798				
I29422Q.D	L505098I	92	92	77	87	228560	600652	355782
				137628				
I29423B.D	B505098I	92	92	73	81	232452	609607	349668
				125267				
I29424.D	61274-2	93	93	71	73	222878	585152	338942
				111391				
I29425.D	61276-5	92	92	70	78	212994	556439	317029
				109003				
I29426.D	61276-1	94	94	72	78	207872	552641	317634
				107530				
I29427.D	61276-2	94	94	76	79	211114	557502	337927
				117356				
I29428.D	61276-3	95	95	72	78	206089	558179	332719
				112063				
I29429.D	61276-4	94	94	72	78	207210	556928	319503
				108367				
I29430.D	61274-1	95	95	71	77	208367	554910	320229
				111010				
I29431.D	61214-4	94	94	75	82	210264	550856	322568
				114301				
I29432.D	61274-1,	95	95	76	82	208480	558710	335034
				118568				
I29433.D	61276-4,	94	94	71	79	207671	552151	321401
				112515				
I29434SP.D	61276-1,	94	94	80	98	214432	569355	330124
				144220				
I29435SP.D	61276-1,	94	94	84	96	228290	602054	365771
				159153				
I29437.D	61214-5	94	94	75	84	213759	564992	332220
				120515				

						119970		
I29439.D	61214-7	94	94	75	82	211034	555540	330497
						118059		
I..40.D	t61257-1	94	94	74	81	204999	548787	327679
	RR in new window					115981		
I29442.D	t61286-1	94	94	74	78	208479	549687	321934
	OK					113829		
I29443.D	t61286-2	94	94	73	75	208160	550871	327258
						111607		

t - fails 12hr time check * - fails criteria

Created: Mon May 12 13:33:55 2008 GC
MS Ins

CHAIN OF CUSTODIES

Intercompany Chain of Custody

SDG/Job Reference	**125361**
PO Reference	TAI8050104
Project ID	WESTN1
Project Name	Maine FUDS
Due Date	Per Agreement with Steve Knollmeyer

Burlington
30 Community Drive, Suite 11
South Burlington, VT 05403

Tel: 802 660-1990 Fax: 802 660-1919

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

	Customer Sample ID	Lab Sample ID	Matrix	Date Sampled	Time Sampled	524.2 Revision 4
1	COLOGDI-050508	751318	WATER	05/05/2008	1720	X
2	TB-050508-01	751525	WATER	05/05/2008		X

61274-1
-2

VAK 5.08.08

Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Lori L Austin	05/08/08	1800	Pam Mutch	5/9/08	9:30

analytics environmental laboratory LLC

ANALYTICS SAMPLE RECEIPT CHECKLIST

AEL LAB#: 61274 COOLER NUMBER: _____

CLIENT: _____ NUMBER OF COOLERS: _____

PROJECT: _____ DATE RECEIVED: 5/9/08

A: PRELIMINARY EXAMINATION: DATE COOLER OPENED: 5/9/08

1. Cooler received by(initials) PM Date Received: 5/9/08

2. Circle one: Hand delivered Shipped

3. Did cooler come with a shipping slip? Fed EX (If so, skip 3) Y N

3a. Enter carrier name and airbill number here: 903844158952

4. Were custody seals on the outside of cooler? Y N
How many & where: 1 Seal Date: 5/8/08 Seal Name: QEX

5. Did the custody seals arrive unbroken and intact upon arrival? Y N

6. COC#: _____

7. Were Custody papers filled out properly (ink,signed, etc)? Y N

8. Were custody papers sealed in a plastic bag? Y N

9. Did you sign the COC in the appropriate place? Y N

10. Was the project identifiable from the COC papers? Y N

11. Was enough ice used to chill the cooler? Y N Temp. of cooler: 3.1°

B. Log-In: Date samples were logged in: 5/9/08 By: PM

12. Type of packing in cooler(bubble wrap, popcorn) Y N

13. Were all bottles sealed in separate plastic bags? Y N

14. Did all bottles arrive unbroken and were labels in good condition? Y N

15. Were all bottle labels complete(ID,Date,time,etc.) Y N

16. Did all bottle labels agree with custody papers? Y N

17. Were the correct containers used for the tests indicated: Y N

18. Were samples received at the correct pH? Y N/A

19. Was sufficient amount of sample sent for the tests indicated? Y N

20. Were bubbles absent in VOA samples? Y N

If NO, List sample #'s: _____

21. Laboratory labeling verified by (initials): AK Date: 5/08/08

CUSTODY SEAL

DATE 05/08/08

SIGNATURE

QEC

Quality Environmental Containers

800-255-3950 • 304-255-3900

DATA REVIEW CHECKLIST

SITE: Maine Fuds LO-58
LAB NUMBER: Analytics 61276
WESTON SAMPLE IDs: AMAC-TAP, VFW-TAP VFW-SP100T COLOGDI-050808, Trip Blank

Data Reviewed	Fraction						Comments
	524.2						
Chain of Custody	✓						
Percent Solids/RLs							
Preservation/Log Sheet							
Holding Time							
Field Blanks (Trip/Equip.)	✓						
Instrument/Method Blanks (Soils/Solids)							
Instrument/Method Blanks (Aqueous)	✓						
MS/MSD (Soil/Solids)							
MS/MSD (Aqueous)							
LCS/LCSD	None						
Blank Spikes (BS/BSD)							
Lab Duplicates							
Field Duplicates							
Surrogate Recoveries							

Note:
Data reviewed but not commented on is considered acceptable.
√ = Data Reviewed
NA = Not Applicable

Qualifiers Used:

Tetrahydrofuran 61276-4 above calib range in COLOGDI-050808 + no dilution found = (J) ~~Meth 2 did not meet cc std = J~~ DS

Data Reviewer Initials: DFG
Date: 9/4/08

(reviewed comments RDK 4/07/09)

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Mr. Ron Pentowski
Test America Burlington
30 Community Drive Suite 11
South Burlington VT 05403

Report Number: 61276

Revision: Rev. 0

Re: MEFUDS-LO-58 **03886.184**

Enclosed are the results of the analyses on your sample(s). Samples were received on 09 May 2008 and analyzed for the tests listed below. Samples were received in acceptable condition, with the exceptions noted below or on the chain of custody. These results pertain to samples as received by the laboratory and for the analytical tests requested on the chain of custody. The results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. Please see individual reports for specific methodologies and references.

Lab Number	Sample Date	Station Location	Analysis	Comments
61276-1	05/08/08	AMAC-TAP	EPA 524.2 Volatile Organics	
61276-2	05/08/08	VFW-TAP	EPA 524.2 Volatile Organics	
61276-3	05/08/08	VFW-SPIGOT	EPA 524.2 Volatile Organics	
61276-4	05/08/08	COLOGDI-050808	EPA 524.2 Volatile Organics	
61276-5	05/08/08	Trip Blank	Electronic Data Deliverable	
	05/08/08	Trip Blank	EPA 524.2 Volatile Organics	

Sample Receipt Exceptions: None

Analytics Environmental Laboratory is certified by the states of New Hampshire, Maine, Massachusetts, Connecticut, Rhode Island, New York, Virginia, Pennsylvania, and is validated by the U.S. Navy (NFESC). A list of actual certified parameters is available upon request.

If you have any further question on the analytical methods or these results, do not hesitate to call.

Authorized signature _____

Stephen L. Knollmeyer Laboratory Director

Date 5/9/2008

analytics environmental laboratory LLC

Summary Report

analytics environmental laboratory LLC

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Mr. Ron Pentowski
Test America Burlington
30 Community Drive Suite 11
South Burlington VT 05403

May 9, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS-LO-58

Project Number: 03886.184

Field Sample ID: LAB QC

SAMPLE DATA

Lab Sample ID: B505098I
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: N/A
Lab Receipt Date: N/A
Analysis Date: 05/09/08

ANALYTICAL RESULTS VOLATILE ORGANICS

COMPOUND	Quantitation Limit µg/L	Result µg/L	COMPOUND	Quantitation Limit µg/L	Result µg/L
Benzene	0.5	U	1,3-Dichloropropane	0.5	U
Bromobenzene	0.5	U	cis-1,3-Dichloropropene	0.5	U
Bromochloromethane	0.5	U	trans-1,3-Dichloropropene	0.5	U
Bromodichloromethane	0.5	U	2,2-Dichloropropane	0.5	U
Bromoform	0.5	U	1,1-Dichloropropene	0.5	U
Bromomethane	0.5	U	Ethylbenzene	0.5	U
n-butylbenzene	0.5	U	Hexachlorobutadiene	0.5	U
sec-butylbenzene	0.5	U	Isopropylbenzene	0.5	U
tert-butylbenzene	0.5	U	p-isopropyltoluene	0.5	U
Carbon Tetrachloride	0.5	U	Methylene Chloride	0.5	U
Chlorobenzene	0.5	U	Methyl-tert-butyl ether (MTBE)	0.5	U
Chloroethane	0.5	U	Naphthalene	0.5	U
Chloroform	0.5	U	n-Propylbenzene	0.5	U
Chloromethane	0.5	U	Styrene	0.5	U
2-Chlorotoluene	0.5	U	1,1,1,2-Tetrachloroethane	0.5	U
4-Chlorotoluene	0.5	U	1,1,2,2-Tetrachloroethane	0.5	U
Dibromochloromethane	0.5	U	Tetrachloroethene	0.5	U
1,2-Dibromo-3-chloropropane	0.5	U	Toluene	0.5	U
1,2-Dibromoethane	0.5	U	1,2,3-Trichlorobenzene	0.5	U
Dibromomethane	0.5	U	1,2,4-Trichlorobenzene	0.5	U
1,2-Dichlorobenzene	0.5	U	1,1,1-Trichloroethane	0.5	U
1,3-Dichlorobenzene	0.5	U	1,1,2-Trichloroethane	0.5	U
1,4-Dichlorobenzene	0.5	U	Trichloroethene	0.5	U
Dichlorodifluoromethane	0.5	U	Trichlorofluoromethane	0.5	U
1,1-Dichloroethane	0.5	U	1,2,3-Trichloropropane	0.5	U
1,2-Dichloroethane	0.5	U	1,2,4-Trimethylbenzene	0.5	U
1,1-Dichloroethene	0.5	U	1,3,5-Trimethylbenzene	0.5	U
cis-1,2-Dichloroethene	0.5	U	Vinyl Chloride	0.1	U
trans-1,2-Dichloroethene	0.5	U	o-Xylene	0.5	U
1,2-Dichloropropane	0.5	U	m,p-Xylene	0.5	U
Acetone	5	U	Diethyl ether	0.5	U
Carbon Disulfide	0.5	U	2-Hexanone	5	U
Tetrahydrofuran	2.5	U	Methyl isobutyl ketone	5	U
Methyl ethyl ketone	5	U	Di-isopropyl ether (DIPE)	0.5	U
t-Butyl alcohol (TBA)	10	U	Ethyl t-butyl ether (ETBE)	0.5	U
t-Amyl methyl ether (TAME)	0.5	U			

Surrogate Standard Recovery

1,4-Difluorobenzene	92 %	Bromofluorobenzene	73 %	1,2-Dichlorobenzene-d4	81 %

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analysis was conducted according to EPA 600, Method 524.2

COMMENTS:

NH 524 full(74)

Authorized signature

analytics environmental laboratory LLC

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May 9, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS-LO-58

Project Number: 03886.184

Field Sample ID: AMAC-TAP

SAMPLE DATA

Lab Sample ID: 61276-1
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 05/08/08
Lab Receipt Date: 05/09/08
Analysis Date: 05/09/08

ANALYTICAL RESULTS VOLATILE ORGANICS

COMPOUND	Quantitation Limit µg/L	Result µg/L	COMPOUND	Quantitation Limit µg/L	Result µg/L
Benzene	0.5	U	1,3-Dichloropropane	0.5	U
Bromobenzene	0.5	U	cis-1,3-Dichloropropene	0.5	U
Bromochloromethane	0.5	U	trans-1,3-Dichloropropene	0.5	U
Bromodichloromethane	0.5	U	2,2-Dichloropropane	0.5	U
Bromoform	0.5	U	1,1-Dichloropropene	0.5	U
Bromomethane	0.5	U	Ethylbenzene	0.5	U
n-butylbenzene	0.5	U	Hexachlorobutadiene	0.5	U
sec-butylbenzene	0.5	U	Isopropylbenzene	0.5	U
tert-butylbenzene	0.5	U	p-isopropyltoluene	0.5	U
Carbon Tetrachloride	0.5	U	Methylene Chloride	0.5	U
Chlorobenzene	0.5	U	Methyl-tert-butyl ether (MTBE)	0.5	U
Chloroethane	0.5	U	Naphthalene	0.5	U
Chloroform	0.5	U	n-Propylbenzene	0.5	U
Chloromethane	0.5	U	Styrene	0.5	U
2-Chlorotoluene	0.5	U	1,1,1,2-Tetrachloroethane	0.5	U
4-Chlorotoluene	0.5	U	1,1,2,2-Tetrachloroethane	0.5	U
Dibromochloromethane	0.5	U	Tetrachloroethene	0.5	U
1,2-Dibromo-3-chloropropane	0.5	U	Toluene	0.5	U
1,2-Dibromoethane	0.5	U	1,2,3-Trichlorobenzene	0.5	U
Dibromomethane	0.5	U	1,2,4-Trichlorobenzene	0.5	U
1,2-Dichlorobenzene	0.5	U	1,1,1-Trichloroethane	0.5	U
1,3-Dichlorobenzene	0.5	U	1,1,2-Trichloroethane	0.5	U
1,4-Dichlorobenzene	0.5	U	Trichloroethene	0.5	U
Dichlorodifluoromethane	0.5	U	Trichlorofluoromethane	0.5	U
1,1-Dichloroethane	0.5	U	1,2,3-Trichloropropane	0.5	U
1,2-Dichloroethane	0.5	U	1,2,4-Trimethylbenzene	0.5	U
1,1-Dichloroethene	0.5	U	1,3,5-Trimethylbenzene	0.5	U
cis-1,2-Dichloroethene	0.5	U	Vinyl Chloride	0.1	U
trans-1,2-Dichloroethene	0.5	U	o-Xylene	0.5	U
1,2-Dichloropropane	0.5	U	m,p-Xylene	0.5	U
Acetone	5	U	Diethyl ether	0.5	U
Carbon Disulfide	0.5	U	2-Hexanone	5	U
Tetrahydrofuran	2.5	U	Methyl isobutyl ketone	5	U
Methyl ethyl ketone	5	U	Di-isopropyl ether (DIPE)	0.5	U
t-Butyl alcohol (TBA)	10	U	Ethyl t-butyl ether (ETBE)	0.5	U
t-Amyl methyl ether (TAME)	0.5	U			

Surrogate Standard Recovery

1,4-Difluorobenzene	94 %	Bromofluorobenzene	72 %	1,2-Dichlorobenzene-d4	78 %

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analysis was conducted according to EPA 600, Method 524.2

COMMENTS:

NH 524 full(74)

Authorized signature

analytics environmental laboratory LLC

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Mr. Ron Pentowski
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May 9, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS-LO-58

Project Number: 03886.184

Field Sample ID: VFW-TAP

SAMPLE DATA

Lab Sample ID: 61276-2
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 05/08/08
Lab Receipt Date: 05/09/08
Analysis Date: 05/09/08

ANALYTICAL RESULTS VOLATILE ORGANICS

COMPOUND	Quantitation Limit µg/L	Result µg/L	COMPOUND	Quantitation Limit µg/L	Result µg/L
Benzene	0.5	U	1,3-Dichloropropane	0.5	U
Bromobenzene	0.5	U	cis-1,3-Dichloropropene	0.5	U
Bromochloromethane	0.5	U	trans-1,3-Dichloropropene	0.5	U
Bromodichloromethane	0.5	**2.2**	2,2-Dichloropropane	0.5	U
Bromoform	0.5	**3.6**	1,1-Dichloropropene	0.5	U
Bromomethane	0.5	U	Ethylbenzene	0.5	U
n-butylbenzene	0.5	U	Hexachlorobutadiene	0.5	U
sec-butylbenzene	0.5	U	Isopropylbenzene	0.5	U
tert-butylbenzene	0.5	U	p-isopropyltoluene	0.5	U
Carbon Tetrachloride	0.5	U	Methylene Chloride	0.5	U
Chlorobenzene	0.5	U	Methyl-tert-butyl ether (MTBE)	0.5	U
Chloroethane	0.5	U	Naphthalene	0.5	U
Chloroform	0.5	**4.9**	n-Propylbenzene	0.5	U
Chloromethane	0.5	U	Styrene	0.5	U
2-Chlorotoluene	0.5	U	1,1,1,2-Tetrachloroethane	0.5	U
4-Chlorotoluene	0.5	U	1,1,2,2-Tetrachloroethane	0.5	U
Dibromochloromethane	0.5	**3.1**	Tetrachloroethene	0.5	U
1,2-Dibromo-3-chloropropane	0.5	U	Toluene	0.5	U
1,2-Dibromoethane	0.5	U	1,2,3-Trichlorobenzene	0.5	U
Dibromomethane	0.5	U	1,2,4-Trichlorobenzene	0.5	U
1,2-Dichlorobenzene	0.5	U	1,1,1-Trichloroethane	0.5	U
1,3-Dichlorobenzene	0.5	U	1,1,2-Trichloroethane	0.5	U
1,4-Dichlorobenzene	0.5	U	Trichloroethene	0.5	**3.4**
Dichlorodifluoromethane	0.5	U	Trichlorofluoromethane	0.5	U
1,1-Dichloroethane	0.5	U	1,2,3-Trichloropropane	0.5	U
1,2-Dichloroethane	0.5	U	1,2,4-Trimethylbenzene	0.5	U
1,1-Dichloroethene	0.5	U	1,3,5-Trimethylbenzene	0.5	U
cis-1,2-Dichloroethene	0.5	U	Vinyl Chloride	0.1	U
trans-1,2-Dichloroethene	0.5	U	o-Xylene	0.5	U
1,2-Dichloropropane	0.5	U	m,p-Xylene	0.5	U
Acetone	5	U	Diethyl ether	0.5	U
Carbon Disulfide	0.5	U	2-Hexanone	5	U
Tetrahydrofuran	2.5	U	Methyl isobutyl ketone	5	U
Methyl ethyl ketone	5	U	Di-isopropyl ether (DIPE)	0.5	U
t-Butyl alcohol (TBA)	10	U	Ethyl t-butyl ether (ETBE)	0.5	U
t-Amyl methyl ether (TAME)	0.5	U			

Surrogate Standard Recovery

1,4-Difluorobenzene	94 %	Bromofluorobenzene	76 %	1,2-Dichlorobenzene-d4	79 %

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analysis was conducted according to EPA 600, Method 524.2

COMMENTS:

NH 524 full(74)

Authorized signature

analytics environmental laboratory LLC

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Mr. Ron Pentowski
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South Burlington VT 05403

May 9, 2008

SAMPLE DATA

CLIENT SAMPLE ID

Project Name: MEFUDS-LO-58

Project Number: 03886.184

Field Sample ID: VFW-SPIGOT

Lab Sample ID: 61276-3
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 05/08/08
Lab Receipt Date: 05/09/08
Analysis Date: 05/09/08

ANALYTICAL RESULTS VOLATILE ORGANICS

COMPOUND	Quantitation Limit µg/L	Result µg/L	COMPOUND	Quantitation Limit µg/L	Result µg/L
Benzene	0.5	U	1,3-Dichloropropane	0.5	U
Bromobenzene	0.5	U	cis-1,3-Dichloropropene	0.5	U
Bromochloromethane	0.5	U	trans-1,3-Dichloropropene	0.5	U
Bromodichloromethane	0.5	**0 .4J**	2,2-Dichloropropane	0.5	U
Bromoform	0.5	**2.4**	1,1-Dichloropropene	0.5	U
Bromomethane	0.5	U	Ethylbenzene	0.5	U
n-butylbenzene	0.5	U	Hexachlorobutadiene	0.5	U
sec-butylbenzene	0.5	U	Isopropylbenzene	0.5	U
tert-butylbenzene	0.5	U	p-isopropyltoluene	0.5	U
Carbon Tetrachloride	0.5	U	Methylene Chloride	0.5	U
Chlorobenzene	0.5	U	Methyl-tert-butyl ether (MTBE)	0.5	U
Chloroethane	0.5	U	Naphthalene	0.5	U
Chloroform	0.5	U	n-Propylbenzene	0.5	U
Chloromethane	0.5	U	Styrene	0.5	U
2-Chlorotoluene	0.5	U	1,1,1,2-Tetrachloroethane	0.5	U
4-Chlorotoluene	0.5	U	1,1,2,2-Tetrachloroethane	0.5	U
Dibromochloromethane	0.5	**1.3**	Tetrachloroethene	0.5	U
1,2-Dibromo-3-chloropropane	0.5	U	Toluene	0.5	U
1,2-Dibromoethane	0.5	U	1,2,3-Trichlorobenzene	0.5	U
Dibromomethane	0.5	U	1,2,4-Trichlorobenzene	0.5	U
1,2-Dichlorobenzene	0.5	U	1,1,1-Trichloroethane	0.5	U
1,3-Dichlorobenzene	0.5	U	1,1,2-Trichloroethane	0.5	U
1,4-Dichlorobenzene	0.5	U	Trichloroethene	0.5	**0.4 J**
Dichlorodifluoromethane	0.5	U	Trichlorofluoromethane	0.5	U
1,1-Dichloroethane	0.5	U	1,2,3-Trichloropropane	0.5	U
1,2-Dichloroethane	0.5	U	1,2,4-Trimethylbenzene	0.5	U
1,1-Dichloroethene	0.5	U	1,3,5-Trimethylbenzene	0.5	U
cis-1,2-Dichloroethene	0.5	U	Vinyl Chloride	0.1	U
trans-1,2-Dichloroethene	0.5	U	o-Xylene	0.5	U
1,2-Dichloropropane	0.5	U	m,p-Xylene	0.5	U
Acetone	5	U	Diethyl ether	0.5	U
Carbon Disulfide	0.5	U	2-Hexanone	5	U
Tetrahydrofuran	2.5	U	Methyl isobutyl ketone	5	U
Methyl ethyl ketone	5	U	Di-isopropyl ether (DIPE)	0.5	U
t-Butyl alcohol (TBA)	10	U	Ethyl t-butyl ether (ETBE)	0.5	U
t-Amyl methyl ether (TAME)	0.5	U			

Surrogate Standard Recovery

1,4-Difluorobenzene	95 %	Bromofluorobenzene	72 %	1,2-Dichlorobenzene-d4	78 %

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analysis was conducted according to EPA 600, Method 524.2

COMMENTS:

NH 524 full(74)

Authorized signature

analytics environmental laboratory LLC

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Mr. Ron Pentowski
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South Burlington VT 05403

May 9, 2008

SAMPLE DATA

CLIENT SAMPLE ID

Project Name: MEFUDS-LO-58

Project Number: 03886.184

Field Sample ID: COLOGDI-050808

Lab Sample ID: 61276-4
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 05/08/08
Lab Receipt Date: 05/09/08
Analysis Date: 05/09/08

ANALYTICAL RESULTS VOLATILE ORGANICS

COMPOUND	Quantitation Limit µg/L	Result µg/L	COMPOUND	Quantitation Limit µg/L	Result µg/L
Benzene	0.5	U	1,3-Dichloropropane	0.5	U
Bromobenzene	0.5	U	cis-1,3-Dichloropropene	0.5	U
Bromochloromethane	0.5	U	trans-1,3-Dichloropropene	0.5	U
Bromodichloromethane	0.5	U	2,2-Dichloropropane	0.5	U
Bromoform	0.5	U	1,1-Dichloropropene	0.5	U
Bromomethane	0.5	U	Ethylbenzene	0.5	U
n-butylbenzene	0.5	U	Hexachlorobutadiene	0.5	U
sec-butylbenzene	0.5	U	Isopropylbenzene	0.5	U
tert-butylbenzene	0.5	U	p-isopropyltoluene	0.5	U
Carbon Tetrachloride	0.5	U	Methylene Chloride	0.5	U
Chlorobenzene	0.5	**0.6**	Methyl-tert-butyl ether (MTBE)	0.5	U
Chloroethane	0.5	U	Naphthalene	0.5	U
Chloroform	0.5	U	n-Propylbenzene	0.5	U
Chloromethane	0.5	U	Styrene	0.5	U
2-Chlorotoluene	0.5	U	1,1,1,2-Tetrachloroethane	0.5	U
4-Chlorotoluene	0.5	U	1,1,2,2-Tetrachloroethane	0.5	U
Dibromochloromethane	0.5	U	Tetrachloroethene	0.5	U
1,2-Dibromo-3-chloropropane	0.5	U	Toluene	0.5	U
1,2-Dibromoethane	0.5	U	1,2,3-Trichlorobenzene	0.5	U
Dibromomethane	0.5	U	1,2,4-Trichlorobenzene	0.5	U
1,2-Dichlorobenzene	0.5	U	1,1,1-Trichloroethane	0.5	U
1,3-Dichlorobenzene	0.5	U	1,1,2-Trichloroethane	0.5	U
1,4-Dichlorobenzene	0.5	U	Trichloroethene	0.5	U
Dichlorodifluoromethane	0.5	U	Trichlorofluoromethane	0.5	U
1,1-Dichloroethane	0.5	U	1,2,3-Trichloropropane	0.5	U
1,2-Dichloroethane	0.5	U	1,2,4-Trimethylbenzene	0.5	U
1,1-Dichloroethene	0.5	U	1,3,5-Trimethylbenzene	0.5	U
cis-1,2-Dichloroethene	0.5	U	Vinyl Chloride	0.1	U
trans-1,2-Dichloroethene	0.5	U	o-Xylene	0.5	U
1,2-Dichloropropane	0.5	U	m,p-Xylene	0.5	U
Acetone	5	U	Diethyl ether	0.5	U
Carbon Disulfide	0.5	U	2-Hexanone	5	U
Tetrahydrofuran	2.5	**96 E**	Methyl isobutyl ketone	5	U
Methyl ethyl ketone	5	**14**	Di-isopropyl ether (DIPE)	0.5	U
t-Butyl alcohol (TBA)	10	U	Ethyl t-butyl ether (ETBE)	0.5	U
t-Amyl methyl ether (TAME)	0.5	U			

Surrogate Standard Recovery

1,4-Difluorobenzene	94 %	Bromofluorobenzene	72 %	1,2-Dichlorobenzene-d4	78 %

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analysis was conducted according to EPA 600, Method 524.2

COMMENTS:

NH 524 full(74)

Authorized signature

analytics environmental laboratory LLC

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Mr. Ron Pentowski
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South Burlington VT 05403

May 9, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS-LO-58

Project Number: 03886.184

Field Sample ID: Trip Blank

SAMPLE DATA

Lab Sample ID: 61276-5
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 05/08/08
Lab Receipt Date: 05/09/08
Analysis Date: 05/09/08

ANALYTICAL RESULTS VOLATILE ORGANICS

COMPOUND	Quantitation Limit µg/L	Result µg/L	COMPOUND	Quantitation Limit µg/L	Result µg/L
Benzene	0.5	U	1,3-Dichloropropane	0.5	U
Bromobenzene	0.5	U	cis-1,3-Dichloropropene	0.5	U
Bromochloromethane	0.5	U	trans-1,3-Dichloropropene	0.5	U
Bromodichloromethane	0.5	U	2,2-Dichloropropane	0.5	U
Bromoform	0.5	U	1,1-Dichloropropene	0.5	U
Bromomethane	0.5	U	Ethylbenzene	0.5	U
n-butylbenzene	0.5	U	Hexachlorobutadiene	0.5	U
sec-butylbenzene	0.5	U	Isopropylbenzene	0.5	U
tert-butylbenzene	0.5	U	p-isopropyltoluene	0.5	U
Carbon Tetrachloride	0.5	U	Methylene Chloride	0.5	U
Chlorobenzene	0.5	U	Methyl-tert-butyl ether (MTBE)	0.5	U
Chloroethane	0.5	U	Naphthalene	0.5	U
Chloroform	0.5	U	n-Propylbenzene	0.5	U
Chloromethane	0.5	U	Styrene	0.5	U
2-Chlorotoluene	0.5	U	1,1,1,2-Tetrachloroethane	0.5	U
4-Chlorotoluene	0.5	U	1,1,2,2-Tetrachloroethane	0.5	U
Dibromochloromethane	0.5	U	Tetrachloroethene	0.5	U
1,2-Dibromo-3-chloropropane	0.5	U	Toluene	0.5	U
1,2-Dibromoethane	0.5	U	1,2,3-Trichlorobenzene	0.5	U
Dibromomethane	0.5	U	1,2,4-Trichlorobenzene	0.5	U
1,2-Dichlorobenzene	0.5	U	1,1,1-Trichloroethane	0.5	U
1,3-Dichlorobenzene	0.5	U	1,1,2-Trichloroethane	0.5	U
1,4-Dichlorobenzene	0.5	U	Trichloroethene	0.5	U
Dichlorodifluoromethane	0.5	U	Trichlorofluoromethane	0.5	U
1,1-Dichloroethane	0.5	U	1,2,3-Trichloropropane	0.5	U
1,2-Dichloroethane	0.5	U	1,2,4-Trimethylbenzene	0.5	U
1,1-Dichloroethene	0.5	U	1,3,5-Trimethylbenzene	0.5	U
cis-1,2-Dichloroethene	0.5	U	Vinyl Chloride	0.1	U
trans-1,2-Dichloroethene	0.5	U	o-Xylene	0.5	U
1,2-Dichloropropane	0.5	U	m,p-Xylene	0.5	U
Acetone	5	U	Diethyl ether	0.5	U
Carbon Disulfide	0.5	U	2-Hexanone	5	U
Tetrahydrofuran	2.5	U	Methyl isobutyl ketone	5	U
Methyl ethyl ketone	5	U	Di-isopropyl ether (DIPE)	0.5	U
t-Butyl alcohol (TBA)	10	U	Ethyl t-butyl ether (ETBE)	0.5	U
t-Amyl methyl ether (TAME)	0.5	U			

Surrogate Standard Recovery

1,4-Difluorobenzene	92 %	Bromofluorobenzene	70 %	1,2-Dichlorobenzene-d4	78 %

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analysis was conducted according to EPA 600, Method 524.2

COMMENTS:

NH 524 full(74)

Authorized signature

CHAIN OF CUSTODIES

SEVERN TRENT STL
SEVERN TRENT LABORATORIES, INC.

TestAmerica
~~STL~~ Burlington
30 Community Drive, Suite 11
South Burlington, VT 05403 Tel: 802 660 1990

CHAIN OF CUSTODY RECORD

Report to:
Company: Weston Solutions
Address: 1 Wall St
Manchester, NH 03101
Contact: Joe Schmidl
Phone: 603 656 5400
Fax: 603 656 5401
Contract/ Quote:

Invoice to:
Company: TestAmerica
Address:
Contact: Ron Pentkowski
Phone:
Fax:

Sampler's Name: Andrew Fuller
Sampler's Signature: Andy Fuller

Proj. No.: 03886.184
Project Name: MEFUDS-LO-58

Matrix[1]	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	No/Type of Containers[2] VOA	A/G 1 Lt.	250 ml	P/O
W	5/8	1400		X	AMAC-TAP	4			
		1600		X	VFW-TAP	4			
		1605		X	VFW-SPIGOT	4			
↓	↓	1610		X	COLOGDI-050808	3			
↓					TB-050808-01	1			

ANALYSIS REQUESTED: VOCs 504.2 24hr TAT

Lab Use Only
Due Date:
Temp. of coolers when received (C°): 1 | 2 | 3 | 4 | 5
Custody Seal N / Y
Intact N / Y
Screened For Radioactivity ☐

Lab/Sample ID (Lab Use Only): 61276-1, -2, -3, -4, -5

Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time
Andy Fuller	5/8/08	1630	Pam Mutch	5/9/08	9:40
Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time

Remarks: TestAmerica Project! 24 hr TAT - Please Report to Joseph.Schmidl@westonsolutions.com
Client's delivery of samples constitutes acceptance of Severn Trent Laboratories terms and conditions contained in the Price Schedule.

[1]Matrix WW - Wastewater W - Water S - Soil L - Liquid A - Air bag C - Charcoal Tube SL - Sludge O - Oil
[2]Container VOA - 40 ml vial A/G - Amber / Or Glass 1 Liter 250 ml - Glass wide mouth P/O - Plastic or other

STL Cannot accept verbal changes. Please Fax written changes to (802) 660-1919

Analytics Report 61276_FRM1 page 0010 of 12

STL-8234-2007 (02/07)

analytics environmental laboratory LLC

ANALYTICS SAMPLE RECEIPT CHECKLIST

AEL LAB#: 61276 COOLER NUMBER: _____

CLIENT: _____ NUMBER OF COOLERS: 1

PROJECT: _____ DATE RECEIVED: 5/9/08

A: PRELIMINARY EXAMINATION: DATE COOLER OPENED: 5/9/08

1. Cooler received by(initials) PM Date Received: 5/9/08

2. Circle one: Hand delivered (If so, skip 3) Shipped

3. Did cooler come with a shipping slip? Y (Y) N

3a. Enter carrier name and airbill number here: Fed Ex 8612661875241e

4. Were custody seals on the outside of cooler? Taped No Seal (Y) N
How many & where: _____ Seal Date: _____ Seal Name: _____

5. Did the custody seals arrive unbroken and intact upon arrival? (Y) N

6. COC#: _____

7. Were Custody papers filled out properly (ink,signed, etc)? (Y) N

8. Were custody papers sealed in a plastic bag? (Y) N

9. Did you sign the COC in the appropriate place? (Y) N

10. Was the project identifiable from the COC papers? (Y) N

11. Was enough ice used to chill the cooler? (Y) N Temp. of cooler: 3.2°

B. Log-In: Date samples were logged in: 5/9/08 By: PM

12. Type of packing in cooler(bubble wrap, popcorn) (Y) N

13. Were all bottles sealed in separate plastic bags? (Y) N

14. Did all bottles arrive unbroken and were labels in good condition? (Y) N

15. Were all bottle labels complete(ID,Date,time,etc.) (Y) N

16. Did all bottle labels agree with custody papers? (Y) N

17. Were the correct containers used for the tests indicated: (Y) N

18. Were samples received at the correct pH? Y (N/A)

19. Was sufficient amount of sample sent for the tests indicated? (Y) N

20. Were bubbles absent in VOA samples? (Y) N

If NO, List sample #'s: _____

21. Laboratory labeling verified by (initials): AL Date: 5/09/08

FedEx. US Airbill Express

8612 6687 5746

0200 Form ID No.

FedEx Retrieval Copy

1 From

Date 5/8/08 Sender's FedEx Account Number 1015894104

Sender's Name Andrew Fuller Phone 603 969 2639

Company Weston Solutions, Inc.

Address 1 Wall St Suite 201 Dept./Floor/Suite/Room

City Manchester State NH ZIP 03101

2 Your Internal Billing Reference 03886.184

3 To

Recipient's Name Receiving Phone 603 436 5111

Company Analytics Environmental Labs LLC

Recipient's Address 195 Commerce Way Suite E

We cannot deliver to P.O. boxes or P.O. ZIP codes. Dept./Floor/Suite/Room

Address

To request a package be held at a specific FedEx location, print FedEx address here.

City Portsmouth State NH ZIP 03801

8612 6687 5746

4a Express Package Service — Packages up to 150 lbs.

1 [X] FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

5 [ ] FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

6 [ ] FedEx First Overnight — Earliest next business morning delivery to select locations.* Saturday Delivery NOT available.

3 [ ] FedEx 2Day — Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

20 [ ] FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

FedEx Envelope rate not available. Minimum charge: One-pound rate.

* To most locations.

4b Express Freight Service — Packages over 150 lbs.

7 [ ] FedEx 1Day Freight* — Next business day.** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

8 [ ] FedEx 2Day Freight — Second business day.** Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

83 [ ] FedEx 3Day Freight — Third business day.** Saturday Delivery NOT available.

* Call for Confirmation:

** To most locations.

5 Packaging

6 [ ] FedEx Envelope* 2 [ ] FedEx Pak* — Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak. 3 [ ] FedEx Box 4 [ ] FedEx Tube 1 [X] Other

* Declared value limit $500.

6 Special Handling — Include FedEx address in Section 3.

3 [ ] SATURDAY Delivery — Not available for FedEx Standard Overnight, FedEx First Overnight, FedEx Express Saver, or FedEx 3Day Freight.

1 [ ] HOLD Weekday at FedEx Location — Not available for FedEx First Overnight.

31 [ ] HOLD Saturday at FedEx Location — Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Does this shipment contain dangerous goods? One box must be checked.

[X] No 4 [ ] Yes — As per attached Shipper's Declaration. [ ] Yes — Shipper's Declaration not required. 6 [ ] Dry Ice — Dry Ice, 9, UN 1845 x kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging. [ ] Cargo Aircraft Only

7 Payment Bill to: — Enter FedEx Acct. No. or Credit Card No. below. Obtain Recip. Acct. No. [ ]

1 [X] Sender Acct. No. in Section 1 will be billed 2 [ ] Recipient 3 [ ] Third Party 4 [ ] Credit Card 5 [ ] Cash/Check

Total Packages 1 Total Weight 23 Credit Card Auth.

†Our liability is limited to $100 unless you declare a higher value. See the current FedEx Service Guide for details.

8 Residential Delivery Signature Options — If you require a signature, check Direct or Indirect.

[ ] No Signature Required — Package may be left without obtaining a signature for delivery.

10 [ ] Direct Signature — Someone at recipient's address may sign for delivery. Fee applies.

34 [ ] Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. Fee applies.

520

Rev. Date 10/06•Part #158286•©1994–2006 FedEx•PRINTED IN U.S.A. SRV

fedex.com 1.800.GoFedEx 1.800.463.3339

fedex.com 1.800.GoFedEx 1.800.463.3339

DATA REVIEW CHECKLIST

SITE: Maine Fuds
LAB NUMBER: Analytics 61287
WESTON SAMPLE IDs: COLOGDI-051108

Data Reviewed	Fraction						Comments
	8260B						
Chain of Custody	✓						
Percent Solids/RLs							
Preservation/Log Sheet							
Holding Time							
Field Blanks (Trip/Equip.)	No trip Blank.						
Instrument/Method Blanks (Soils/Solids)							
Instrument/Method Blanks (Aqueous)							
MS/MSD (Soil/Solids)							
MS/MSD (Aqueous)							
LCS/LCSD							
Blank Spikes (BS/BSD)							
Lab Duplicates							
Field Duplicates							
Surrogate Recoveries	✓						

Note:
Data reviewed but not commented on is considered acceptable.
√ = Data Reviewed
NA = Not Applicable

9/4/08
Spoke to Steve of Analytics

✓61787 (8260B) COLOG
✓61245 (DRO/GRO) OK 9/5/08
61374 (524.2)
✓61276 4-524.2
✓61307 (Lynns DI)
61399 DRO/GRO missing

11/4/08 vial resample missing

Qualifiers Used:

JQL (603-455-0946)

Data Reviewer Initials: DFG
Date: 9/3/08

analytics environmental laboratory LLC

195 Commerce Way Suite E
Portsmouth, New Hampshire 03801
603-436-5111 Fax 603-430-2151
800-929-9906
www.analyticslab.com

Mr. Ron Pentkowski
Test America Burlington
30 Community Drive Suite 11
South Burlington VT 05403

Report Number: 61287

Revision: Rev. 0

Re: MEFUDS **03886.184**

Enclosed are the results of the analyses on your sample(s). Samples were received on 12 May 2008 and analyzed for the tests listed below. Samples were received in acceptable condition, with the exceptions noted below or on the chain of custody. These results pertain to samples as received by the laboratory and for the analytical tests requested on the chain of custody. The results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. Please see individual reports for specific methodologies and references.

Lab Number	Sample Date	Station Location	Analysis	Comments
61287-1	05/11/08	COLOGDI-051108	Electronic Data Deliverable	
	05/11/08	COLOGDI-051108	EPA 8260 Volatile Organics	

Sample Receipt Exceptions: None

Analytics Environmental Laboratory is certified by the states of New Hampshire, Maine, Massachusetts, Connecticut, Rhode Island, New York, Virginia, Pennsylvania, and is validated by the U.S. Navy (NFESC). A list of actual certified parameters is available upon request.

If you have any further question on the analytical methods or these results, do not hesitate to call.

Authorized signature _____
Stephen L. Knollmeyer Laboratory Director

Date 05/12/08

analytics environmental laboratory LLC

195 Commerce Way
Portsmouth, New Hampshire 03801
603-436-5111 Fax 603-430-2151
800-929-9906

Mr. Ron Pentkowski
Test America Burlington
30 Community Drive Suite 11
South Burlington VT 05403

May 12, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS

Project Number: 03886.184

Field Sample ID: COLOGDI-051108

SAMPLE DATA

Lab Sample ID: 61287-1
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 05/11/08
Lab Receipt Date: 05/12/08
Analysis Date: 05/12/08

ANALYTICAL RESULTS VOLATILE ORGANICS

COMPOUND	Quantitation Limit µg/L	Result µg/L	COMPOUND	Quantitation Limit µg/L	Result µg/L
Benzene	2	U	1,3-Dichloropropane	2	U
Bromobenzene	2	U	cis-1,3-Dichloropropene	2	U
Bromochloromethane	2	U	trans-1,3-Dichloropropene	2	U
Bromodichloromethane	2	**3**	2,2-Dichloropropane	2	U
Bromoform	2	U	1,1-Dichloropropene	2	U
Bromomethane	2	U	Ethylbenzene	2	U
n-butylbenzene	2	U	Hexachlorobutadiene	2	U
sec-butylbenzene	2	U	Isopropylbenzene	2	U
tert-butylbenzene	2	U	p-isopropyltoluene	2	U
Carbon Tetrachloride	2	U	Methylene Chloride	5	**9**
Chlorobenzene	2	U	Methyl-tert-butyl ether (MTBE)	2	U
Chloroethane	2	U	Naphthalene	2	U
Chloroform	2	**86**	n-Propylbenzene	2	U
Chloromethane	2	U	Styrene	2	U
2-Chlorotoluene	2	U	1,1,1,2-Tetrachloroethane	2	U
4-Chlorotoluene	2	U	1,1,2,2-Tetrachloroethane	2	U
Dibromochloromethane	2	U	Tetrachloroethene	2	U
1,2-Dibromo-3-chloropropane	2	U	Toluene	2	U
1,2-Dibromoethane	2	U	1,2,3-Trichlorobenzene	2	U
Dibromomethane	2	U	1,2,4-Trichlorobenzene	2	U
1,2-Dichlorobenzene	2	U	1,1,1-Trichloroethane	2	U
1,3-Dichlorobenzene	2	U	1,1,2-Trichloroethane	2	U
1,4-Dichlorobenzene	2	U	Trichloroethene	2	U
Dichlorodifluoromethane	2	U	Trichlorofluoromethane	2	U
1,1-Dichloroethane	2	U	1,2,3-Trichloropropane	2	U
1,2-Dichloroethane	2	U	1,2,4-Trimethylbenzene	2	U
1,1-Dichloroethene	2	U	1,3,5-Trimethylbenzene	2	U
cis-1,2-Dichloroethene	2	U	Vinyl Chloride	2	U
trans-1,2-Dichloroethene	2	U	o-Xylene	2	U
1,2-Dichloropropane	2	U	m,p-Xylene	2	U
Acetone	10	**26**	Diethyl ether	2	U
Carbon Disulfide	2	U	2-Hexanone	10	U
Tetrahydrofuran	5	**40**	Methyl isobutyl ketone	10	U
Methyl ethyl ketone	10	**14**	Di-isopropyl ether (DIPE)	2	U
t-Butyl alcohol (TBA)	20	U	Ethyl t-butyl ether (ETBE)	2	U
t-Amyl methyl ether (TAME)	2	U			

Surrogate Standard Recovery

d4-1,2-Dichloroethane	95 %	d8-Toluene	99 %	Bromofluorobenzene	97 %

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8260B.

COMMENTS:

Authorized signature

Chain Of Custody Form

analytics environmental laboratory LLC
195 Commerce Way Suite E
Portsmouth, NH 03801
Phone (603) 436-5111
Fax (603) 430-2151

For Analytics Use Only Rev. 1, 10/1/02

Samples were:
1) Shipped or hand-delivered
2) Temp blank °C 0.5°
3) Received in good condition Y or N
4) pH checked by: N/A
5) Labels checked by: PM 5/12/08

Project#: 03586.184 Project: MEFUDS
Company: Weston Solutions / Cologs
Contact: Joe Schmidl (603) 455 0946
Address: 1 Wall Street
Manchester, NH 03101-1501
Phone: 603-656-5408 PO# Quote #
Sampler (Signature):

Matrix Key:
WW=Wastewater
SW=Surfacewater
GW=Groundwater
DW=Drinkingwater
S=Soil/Sludge
O=Oil
X=Other

Container Key
P=plastic G=glass

Preservation

Station Identification	Sample Date	Sample Time	Analysis	Unpres	4°C	HNO3	H2SO4	HCL	Methanol	Other	Matrix	Container number/type		pH	Analytics Sample #
COLOGDI-051108	5/11/08	1445	8260 VOC		X			X			W	3	V		61287-1

Email RESULTS? YES NO
Email joseph.schmidl@westonsolutions.com
Fax RESULTS? YES NO
Fax# 603-656-5401

Comments / Instructions: Rush TAT. Results as soon as possible Thank you. Please call Joe Schmidl w/ prelim results. (603) 455 0946

Turnaround Request
Standard ☐ Due Date
Priority ☒ Due Date

Client Code: WESTONM

Page 1 of 1

Analytics\AEL Documents\AEL COC

Received By: Jason Kemp Time: 9:30 Date: 5/12/08
Received By: Time: Date:
Received By: Time: Date:
Relinquished By Sampler: Date:
Relinquished By: Date:
Relinquished By: Date:

analytics environmental laboratory LLC

ANALYTICS SAMPLE RECEIPT CHECKLIST

AEL LAB#: 61287
CLIENT: TA-VT
PROJECT: MEFUDS

COOLER NUMBER: _____
NUMBER OF COOLERS: 1
DATE RECEIVED: 5/12/08

A: PRELIMINARY EXAMINATION:

DATE COOLER OPENED: 5/12/08

1. Cooler received by(initials) CP — Date Received: 5/12/08
2. Circle one: (Hand delivered) (If so, skip 3) — Shipped
3. Did cooler come with a shipping slip? — Y — N

3a. Enter carrier name and airbill number here: _____

4. Were custody seals on the outside of cooler? — Y — N
How many & where: _____ Seal Date: _____ Seal Name: _____
5. Did the custody seals arrive unbroken and intact upon arrival? — Y — N
6. COC#: _____
7. Were Custody papers filled out properly (ink,signed, etc)? — (Y) — N
8. Were custody papers sealed in a plastic bag? — (Y) — N
9. Did you sign the COC in the appropriate place? — (Y) — N
10. Was the project identifiable from the COC papers? — (Y) — N
11. Was enough ice used to chill the cooler? (Y) N — Temp. of cooler: 0.5°

B. Log-In: Date samples were logged in: 5/12/08 By: CP

12. Type of packing in cooler(bubble wrap, popcorn) — (Y) — N
13. Were all bottles sealed in separate plastic bags? — (Y) — N
14. Did all bottles arrive unbroken and were labels in good condition? — (Y) — N
15. Were all bottle labels complete(ID,Date,time,etc.) — (Y) — N
16. Did all bottle labels agree with custody papers? — (Y) — N
17. Were the correct containers used for the tests indicated: — (Y) — N
18. Were samples received at the correct pH? — Y — (N/A)
19. Was sufficient amount of sample sent for the tests indicated? — (Y) — N
20. Were bubbles absent in VOA samples? — (Y) — N

If NO, List sample #'s: _____

21. Laboratory labeling verified by (initials): DM — Date: 5/12/08

DATA REVIEW CHECKLIST

SITE: Maine Fuds (Loring DI)
LAB NUMBER: Analytics 61307
WESTON SAMPLE IDs: 01 DI + C
010360 1T DI only
Trip Blank

Data Reviewed	Fraction						Comments
	8260B						
Chain of Custody	✓						
Percent Solids/RLs							
Preservation/Log Sheet							
Holding Time							
Field Blanks* (Trip/Equip.)	Trip Blank results missing ★						
Instrument/Method Blanks (Soils/Solids)							
Instrument/Method Blanks (Aqueous) ★	No method blank results ★						
MS/MSD (Soil/Solids)							
MS/MSD (Aqueous)							
LCS/LCSD							
Blank Spikes (BS/BSD)							
Lab Duplicates							
Field Duplicates							
Surrogate Recoveries	✓						

Note:
Data reviewed but not commented on is considered acceptable.
√ = Data Reviewed
NA = Not Applicable

Qualifiers Used:

Data Reviewer Initials: DLQ
Date: 9/4/08

analytics environmental laboratory LLC

195 Commerce Way Suite E
Portsmouth, New Hampshire 03801
603-436-5111 Fax 603-430-2151
800-929-9906
www.analyticslab.com

Mr. Ron Pentkowski
Test America Burlington
30 Community Drive Suite 11
South Burlington VT 05403

Report Number: 61307

Revision: Rev. 0

Re: Loring DI

Enclosed are the results of the analyses on your sample(s). Samples were received on 12 May 2008 and analyzed for the tests listed below. Samples were received in acceptable condition, with the exceptions noted below or on the chain of custody. These results pertain to samples as received by the laboratory and for the analytical tests requested on the chain of custody. The results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. Please see individual reports for specific methodologies and references.

Lab Number	Sample Date	Station Location	Analysis	Comments
61307-1	05/12/08	01 DI & C	EPA 8260 Volatile Organics	
61307-2	05/12/08	0103601T DI only	EPA 8260 Volatile Organics	
61307-3	04/30/08	Trip Blank	EPA 8260 Volatile Organics	

Sample Receipt Exceptions: None

Analytics Environmental Laboratory is certified by the states of New Hampshire, Maine, Massachusetts, Connecticut, Rhode Island, New York, Virginia, Pennsylvania, and is validated by the U.S. Navy (NFESC). A list of actual certified parameters is available upon request.

If you have any further question on the analytical methods or these results, do not hesitate to call.

Authorized signature Melissa Miller

Stephen L. Knollmeyer Laboratory Director

Date 05/13/08

analytics environmental laboratory LLC

195 Commerce Way
Portsmouth, New Hampshire 03801
603-436-5111 Fax 603-430-2151
800-929-9906

Mr. Ron Pentkowski
Test America Burlington
30 Community Drive Suite 11
South Burlington VT 05403

May 13, 2008

CLIENT SAMPLE ID

Project Name: Loring DI

Project Number:

Field Sample ID: 01 DI & C

SAMPLE DATA

Lab Sample ID: 61307-1
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 05/12/08
Lab Receipt Date: 05/12/08
Analysis Date: 05/13/08

ANALYTICAL RESULTS VOLATILE ORGANICS

COMPOUND	Quantitation Limit µg/L	Result µg/L	COMPOUND	Quantitation Limit µg/L	Result µg/L
Benzene	2	U	1,3-Dichloropropane	2	U
Bromobenzene	2	U	cis-1,3-Dichloropropene	2	U
Bromochloromethane	2	U	trans-1,3-Dichloropropene	2	U
Bromodichloromethane	2	U	2,2-Dichloropropane	2	U
Bromoform	2	U	1,1-Dichloropropene	2	U
Bromomethane	2	U	Ethylbenzene	2	U
n-butylbenzene	2	U	Hexachlorobutadiene	2	U
sec-butylbenzene	2	U	Isopropylbenzene	2	U
tert-butylbenzene	2	U	p-isopropyltoluene	2	U
Carbon Tetrachloride	2	U	Methylene Chloride	5	U
Chlorobenzene	2	U	Methyl-tert-butyl ether (MTBE)	2	U
Chloroethane	2	U	Naphthalene	2	U
Chloroform	2	U	n-Propylbenzene	2	U
Chloromethane	2	U	Styrene	2	U
2-Chlorotoluene	2	U	1,1,1,2-Tetrachloroethane	2	U
4-Chlorotoluene	2	U	1,1,2,2-Tetrachloroethane	2	U
Dibromochloromethane	2	U	Tetrachloroethene	2	U
1,2-Dibromo-3-chloropropane	2	U	Toluene	2	U
1,2-Dibromoethane	2	U	1,2,3-Trichlorobenzene	2	U
Dibromomethane	2	U	1,2,4-Trichlorobenzene	2	U
1,2-Dichlorobenzene	2	U	1,1,1-Trichloroethane	2	U
1,3-Dichlorobenzene	2	U	1,1,2-Trichloroethane	2	U
1,4-Dichlorobenzene	2	U	Trichloroethene	2	U
Dichlorodifluoromethane	2	U	Trichlorofluoromethane	2	U
1,1-Dichloroethane	2	U	1,2,3-Trichloropropane	2	U
1,2-Dichloroethane	2	U	1,2,4-Trimethylbenzene	2	U
1,1-Dichloroethene	2	U	1,3,5-Trimethylbenzene	2	U
cis-1,2-Dichloroethene	2	U	Vinyl Chloride	2	U
trans-1,2-Dichloroethene	2	U	o-Xylene	2	U
1,2-Dichloropropane	2	U	m,p-Xylene	2	U
Acetone	10	**105**	Diethyl ether	2	U
Carbon Disulfide	2	U	2-Hexanone	10	U
Tetrahydrofuran	5	U	Methyl isobutyl ketone	10	U
Methyl ethyl ketone	10	U	Di-isopropyl ether (DIPE)	2	U
t-Butyl alcohol (TBA)	20	U	Ethyl t-butyl ether (ETBE)	2	U
t-Amyl methyl ether (TAME)	2	U			

Surrogate Standard Recovery

d4-1,2-Dichloroethane	98 %	d8-Toluene	97 %	Bromofluorobenzene	96 %

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8260B.

COMMENTS:

8260 Full (3):Res(71):Rec(3)

Authorized signature

analytics environmental laboratory LLC

195 Commerce Way
Portsmouth, New Hampshire 03801
603-436-5111 Fax 603-430-2151
800-929-9906

Mr. Ron Pentkowski
Test America Burlington
30 Community Drive Suite 11
South Burlington VT 05403

May 13, 2008

SAMPLE DATA

CLIENT SAMPLE ID

Project Name: Loring DI

Project Number:

Field Sample ID: 0103601T DI only

Lab Sample ID: 61307-2
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 05/12/08
Lab Receipt Date: 05/12/08
Analysis Date: 05/13/08

ANALYTICAL RESULTS VOLATILE ORGANICS

COMPOUND	Quantitation Limit µg/L	Result µg/L	COMPOUND	Quantitation Limit µg/L	Result µg/L
Benzene	2	U	1,3-Dichloropropane	2	U
Bromobenzene	2	U	cis-1,3-Dichloropropene	2	U
Bromochloromethane	2	U	trans-1,3-Dichloropropene	2	U
Bromodichloromethane	2	U	2,2-Dichloropropane	2	U
Bromoform	2	U	1,1-Dichloropropene	2	U
Bromomethane	2	U	Ethylbenzene	2	U
n-butylbenzene	2	U	Hexachlorobutadiene	2	U
sec-butylbenzene	2	U	Isopropylbenzene	2	U
tert-butylbenzene	2	U	p-isopropyltoluene	2	U
Carbon Tetrachloride	2	U	Methylene Chloride	5	U
Chlorobenzene	2	U	Methyl-tert-butyl ether (MTBE)	2	U
Chloroethane	2	U	Naphthalene	2	U
Chloroform	2	U	n-Propylbenzene	2	U
Chloromethane	2	U	Styrene	2	U
2-Chlorotoluene	2	U	1,1,1,2-Tetrachloroethane	2	U
4-Chlorotoluene	2	U	1,1,2,2-Tetrachloroethane	2	U
Dibromochloromethane	2	U	Tetrachloroethene	2	U
1,2-Dibromo-3-chloropropane	2	U	Toluene	2	U
1,2-Dibromoethane	2	U	1,2,3-Trichlorobenzene	2	U
Dibromomethane	2	U	1,2,4-Trichlorobenzene	2	U
1,2-Dichlorobenzene	2	U	1,1,1-Trichloroethane	2	U
1,3-Dichlorobenzene	2	U	1,1,2-Trichloroethane	2	U
1,4-Dichlorobenzene	2	U	Trichloroethene	2	U
Dichlorodifluoromethane	2	U	Trichlorofluoromethane	2	U
1,1-Dichloroethane	2	U	1,2,3-Trichloropropane	2	U
1,2-Dichloroethane	2	U	1,2,4-Trimethylbenzene	2	U
1,1-Dichloroethene	2	U	1,3,5-Trimethylbenzene	2	U
cis-1,2-Dichloroethene	2	U	Vinyl Chloride	2	U
trans-1,2-Dichloroethene	2	U	o-Xylene	2	U
1,2-Dichloropropane	2	U	m,p-Xylene	2	U
Acetone	10	U	Diethyl ether	2	U
Carbon Disulfide	2	U	2-Hexanone	10	U
Tetrahydrofuran	5	U	Methyl isobutyl ketone	10	U
Methyl ethyl ketone	10	U	Di-isopropyl ether (DIPE)	2	U
t-Butyl alcohol (TBA)	20	U	Ethyl t-butyl ether (ETBE)	2	U
t-Amyl methyl ether (TAME)	2	U			

Surrogate Standard Recovery

d4-1,2-Dichloroethane	98 %	d8-Toluene	98 %	Bromofluorobenzene	96 %

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analysis was conducted according to: Test Methods for Evaluating Solid Waste, SW-846 Method 8260B.

COMMENTS:

8260 Full (3):Res(71):Rec(3)

Authorized signature

Chain Of Custody Form

analytics environmental laboratory LLC

195 Commerce Way Suite E
Portsmouth, NH 03801
Phone (603) 436-5111
Fax (603) 430-2151

Project#: LORING DI   Proj. Name:
Company: COLOG
Contact: GREG BAUER 303 888 1430
Address: 810 Quail St. Suite E
LAKEWOOD, CO 80215
Phone: PO#   Quote #
Sampler (Signature): [signature]

Matrix Key:
C = Concrete
WP = Wipe
WW = Wastewater
SW = Surface Water
GW = Groundwater
DW = Drinking Water
S = Soil/Sludge
O = Oil
E = Extract

For Analytics Use Only Rev. 4 03/28/08

Samples were:
1) Shipped or hand-delivered (hand-delivered circled)
2) Temp blank °C none - well iced
3) Received in good condition (Y) or N
4) pH checked by: N/A
5) Labels checked by: SC 5/12/08

Container Key
P=plastic G=glass

Station Identification	Sample Date	Sample Time	Analysis	Unpres	4° C	HNO_3	H_2SO_4	HCL	Methanol	Other	Matrix	Container number	Container type	pH	Analytics Sample #
Ø1 DI & C	5/12/08	1707	8260					X			W	3	VOA		0130 1-1
0103601T DI only	5/12/08	1710	8260					X			W	2	VOA		-2
Trip Blank	4/30/08		8260							X	W	1	VOA		-3 *

Received By:	Time:	Date:	Relinquished By Sampler:
[signature]	1845	5/12/08	[signature]
Received By:	Time:	Date:	Relinquished By:
Received By:	Time:	Date:	Relinquished By:

Email Results to:

Comments / Instructions:
* -3 trip blank not preserved w/ HCL ~~but~~ Ane 5/12/08 Sodium Thiosulfate was used instead.

Turnaround Request
Standard ☐ Due Date ____
Priority ☐ Due Date ____
Lab Approval Required

Project Requirements:
Report Type*: ☐ MCP ☐ CTRCP ☐ DOD ☐ Level II ☐ Level III ☐ Level IV ☐ Standard
*Fee may apply
State: ☐ NH ☐ MA ☐ ME ☐ CT ☐ RI
Other: ____
State Standard: ____
(eg. S-1 or GW-1)
EDD Required: Y* N
Type: ____
Page ____ of ____

Note: use original analysis since surrogate recovery failure was seen during c/c reanalysis since 9 DRO CC recoveries met - no action was taken

DATA REVIEW CHECKLIST

SITE: Maine Fuels
LAB NUMBER: Analytics 61399
WESTON SAMPLE IDs: See attached

Data Reviewed	Fraction (GRO)	Fraction (DRO)	Comments
Chain of Custody	✓	✓	
Percent Solids/RLs			
Preservation/Log Sheet			
Holding Time			
Field Blanks (Trip/Equip)	✓	DRO = (92 / 124) x5 = 460 action level (RL)	RB-051808-01 → use original result 92 x5 = 460 action level
Instrument/Method Blanks (Soils/Solids)		~~124 x5 =~~	
Instrument/Method Blanks (Aqueous)	✓	✓	
MS/MSD (Soil/Solids)			
MS/MSD (Aqueous)		✓	
LCS/LCSD		✓	
Blank Spikes (BS/BSD)			
Lab Duplicates			
Field Duplicates	✓	✓	
Surrogate Recoveries	✓	✓	

Note:
Data reviewed but not commented on is considered acceptable.
√ = Data Reviewed
NA = Not Applicable

Qualifiers Used:

J3 Estimate all positive DRO results below action level of 460 ug/L since it was detected in RB-051808-01 - professional judgement was used in not deciding to qualify as undetected.

(accept non-detects)

Data Reviewer Initials: DFC
Date: 9/15/08

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June 17, 2008

Mr. Ron Pentowski
Test America Burlington
30 Community Drive Suite 11
South Burlington, VT 05403

RE: Analytical Results Case Narrative
ME FUDS LO-58 Project
Analytics # 61399

Dear Mr. Pentkowski:

Enclosed please find the analytical results for samples collected from the above-mentioned project. The attached Cover Page lists the sample IDs, Lab tracking numbers and collection dates for the samples included in this deliverable.

Samples were analyzed for the Gasoline Range Organics (GRO) by Maine HETL Method 4.2.17 and Diesel Range Organics (DRO) by Maine HETL Method 4.1.25.

Unless otherwise noted in the Non-conformance Summary listed below, all of the quality control (QC) criteria including initial calibration, calibration verification, surrogate recovery, holding time and method accuracy/precision for these analyses were within acceptable limits.

This Level IV package has been assembled in the following order including raw data:

Case Narrative/Non-Conformance Summary
Sample Log Sheet - Cover Page
Summary Report
Extraction Logbook Pages
GRO Form 1 Sample Data Results
    Chromatograms
GRO Form 3 MS/MSD and LCS Recoveries
GRO Form 4 Method Blank Summary (equiv.) GC/MS Logbook Sheets
GRO Form 6 Initial Calibration Data
GRO Form 7 Continuing Calibration Check
DRO Form 1 Sample Data Results
    Chromatograms
DRO Form 3 MS/MSD and LCS Recoveries
DRO Form 4 Method Blank Summary (equiv.) GC/MS Logbook Sheets
DRO Form 6 Initial Calibration Data
DRO Form 7 Continuing Calibration Check
Chain of Custody (COC) Forms
Sample Receipt Checklist

QC NON CONFORMANCE SUMMARY

Sample Receipt:
No QC deviations.

Gasoline Range Organics
No results were reported below the quantitation limit.

Diesel Range Organics
No results were reported below the quantitation limit.

m-Terphenyl surrogate had high recovery in the MSD analyzed on sample 61399-2 (LS58 DW2-0508-28.5). The DRO spike recoveries were in control. It appears the surrogate may have been added twice. All other QC and the samples had acceptable surrogate recoveries.

The closing resolution standard (file#G49572) analyzed 05/31/08 did not meet acceptance criteria for peak resolution. The DRO recoveries for the closing continuing calibration standard (file# G49573SC) were in control. All samples in this analytical window were reanalyzed 06/02/08 and had similar closing resolution standard results (file#G49644).. The results of both the analytical runs have been reported in this final report.

If you have any questions on this data submittal, please do not hesitate to contact me.

Sincerely,
ANALYTICS Environmental Laboratory, LLC

Melissa A. Gulli
Assistant Laboratory Director

analytics environmental laboratory LLC

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Mr. Ron Pentkowski
Test America Burlington
30 Community Drive Suite 11
South Burlington VT 05403

Report Number: 61399

Revision: Rev. 0

Re: MEFUDS LO-58 **03886.184**

Enclosed are the results of the analyses on your sample(s). Samples were received on 22 May 2008 and analyzed for the tests listed below. Samples were received in acceptable condition, with the exceptions noted below or on the chain of custody. These results pertain to samples as received by the laboratory and for the analytical tests requested on the chain of custody. The results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. Please see individual reports for specific methodologies and references.

Lab Number	Sample Date	Station Location	Analysis	Comments
61399-1	05/16/08	LS58DW2-0508-A16	Maine HETL Method 4.1.25	
	05/16/08	LS58DW2-0508-A16	Maine HETL Method 4.2.17	
61399-2	05/16/08	LS58DW2-0508-28.5	Maine HETL Method 4.1.25	
	05/16/08	LS58DW2-0508-28.5	Maine HETL Method 4.2.17	
61399-3	05/17/08	LS58DW2-0508-37	Maine HETL Method 4.1.25	
	05/17/08	LS58DW2-0508-37	Maine HETL Method 4.2.17	
61399-4	05/17/08	LS58DW2-0508-94.5	Maine HETL Method 4.1.25	
	05/17/08	LS58DW2-0508-94.5	Maine HETL Method 4.2.17	
61399-5	05/17/08	LS58DW2-0508-189	Maine HETL Method 4.1.25	
	05/17/08	LS58DW2-0508-189	Maine HETL Method 4.2.17	
61399-6	05/17/08	LS58DW2-0508-265	Maine HETL Method 4.1.25	
	05/17/08	LS58DW2-0508-265	Maine HETL Method 4.2.17	
61399-7	05/18/08	RB-051808-01	Maine HETL Method 4.1.25	

Sample Receipt Exceptions: None

Analytics Environmental Laboratory is certified by the states of New Hampshire, Maine, Massachusetts, Connecticut, Rhode Island, New York, Virginia, Pennsylvania, and is validated by the U.S. Navy (NFESC). A list of actual certified parameters is available upon request.

If you have any further question on the analytical methods or these results, do not hesitate to call.

Authorized signature _____
Stephen L. Knollmeyer Laboratory Director

Date 06/17/08

analytics environmental laboratory LLC

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Report Number: 61399

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Re: MEFUDS LO-58 **03886.184**

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Lab Number	Sample Date	Station Location	Analysis	Comments
	05/18/08	RB-051808-01	Maine HETL Method 4.2.17	
61399-8	05/18/08	LS58DW1-0508-056	Maine HETL Method 4.1.25	
	05/18/08	LS58DW1-0508-056	Maine HETL Method 4.2.17	
61399-9	05/19/08	LS58DW1-0508-051	Maine HETL Method 4.1.25	
	05/19/08	LS58DW1-0508-051	Maine HETL Method 4.2.17	
61399-10	05/19/08	LS58DW1-0508-041	Maine HETL Method 4.1.25	
	05/19/08	LS58DW1-0508-041	Maine HETL Method 4.2.17	
61399-11	05/20/08	LS58DW1-0508-034	Maine HETL Method 4.1.25	
	05/20/08	LS58DW1-0508-034	Maine HETL Method 4.2.17	
61399-12	05/20/08	LS58DW1-0508-034-E	Maine HETL Method 4.1.25	
	05/20/08	LS58DW1-0508-034-E	Maine HETL Method 4.2.17	
61399-13	05/20/08	LS58DW1-0508-029	Maine HETL Method 4.1.25	
	05/20/08	LS58DW1-0508-029	Maine HETL Method 4.2.17	

Sample Receipt Exceptions: None

Analytics Environmental Laboratory is certified by the states of New Hampshire, Maine, Massachusetts, Connecticut, Rhode Island, New York, Virginia, Pennsylvania, and is validated by the U.S. Navy (NFESC). A list of actual certified parameters is available upon request.

If you have any further question on the analytical methods or these results, do not hesitate to call.

Authorized signature _____
Stephen L. Knollmeyer Laboratory Director

Date 06/17/08

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Test America Burlington
30 Community Drive Suite 11
South Burlington VT 05403

Report Number: 61399

Revision: Rev. 0

Re: MEFUDS LO-58 **03886.184**

Enclosed are the results of the analyses on your sample(s). Samples were received on 22 May 2008 and analyzed for the tests listed below. Samples were received in acceptable condition, with the exceptions noted below or on the chain of custody. These results pertain to samples as received by the laboratory and for the analytical tests requested on the chain of custody. The results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. Please see individual reports for specific methodologies and references.

Lab Number	Sample Date	Station Location	Analysis	Comments
61399-14	05/20/08	RB-052008-01	Maine HETL Method 4.1.25	
	05/20/08	RB-052008-01	Maine HETL Method 4.2.17	
61399-15	05/20/08	TB-051608-01	Maine HETL Method 4.2.17	
61399-16	05/20/08	TB-051908-01	Electronic Data Deliverable	
	05/20/08	TB-051908-01	Maine HETL Method 4.2.17	

Sample Receipt Exceptions: None

Analytics Environmental Laboratory is certified by the states of New Hampshire, Maine, Massachusetts, Connecticut, Rhode Island, New York, Virginia, Pennsylvania, and is validated by the U.S. Navy (NFESC). A list of actual certified parameters is available upon request.

If you have any further question on the analytical methods or these results, do not hesitate to call.

Authorized signature MClerkalli for
Stephen L. Knollmeyer Laboratory Director

Date 06/17/08

analytics environmental laboratory LLC

Summary Report

analytics environmental laboratory LLC

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Mr. Ron Pentkowski
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June 17, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58
Project Number:
Client Sample ID: LABQC

SAMPLE DATA

Lab Sample ID: B05278KGRO
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date:
Lab Receipt Date:
Analysis Date: 05/27/08

ANALYTICAL RESULTS GASOLINE RANGE ORGANICS

Compound	Result	Units	Quantitation Limit
GRO	U	µg/L	10

ESTIMATED TARGET CONCENTRATIONS

Compound	Result	Units	Quantitation Limit
MTBE	U	µg/L	2
Benzene	U	µg/L	1

Surrogate Standard Recovery

Trifluorotoluene	111	%
Bromofluorobenzene	99	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to: "Maine HETL Method 4.2.17, September 6, 1995."

COMMENTS:

Authorized signature

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30 Community Drive Suite 11
South Burlington VT 05403

June 17, 2008

SAMPLE DATA

CLIENT SAMPLE ID

Project Name:	MEFUDS LO-58
Project Number:	03886.184
Field Sample ID:	LABQC

Lab Sample ID:	B05238DW
Matrix:	Aqueous
Percent Solid:	N/A
Dilution Factor:	1
Collection Date:	N/A
Lab Receipt Date:	N/A
Extraction Date:	05/23/08
Analysis Date:	05/29/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	86	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

DRO Report

Authorized signature

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South Burlington VT 05403

June 17, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58
Project Number: 03886.184
Field Sample ID: LABQC

SAMPLE DATA

Lab Sample ID: B05238DW RR
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: N/A
Lab Receipt Date: N/A
Extraction Date: 05/23/08
Analysis Date: 05/30/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	93	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

DRO Report

Authorized signature

analytics environmental laboratory LLC

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Mr. Ron Pentkowski
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30 Community Drive Suite 11
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June 17, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: LABQC

SAMPLE DATA

Lab Sample ID: B05238DW RR1
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: N/A
Lab Receipt Date: N/A
Extraction Date: 05/23/08
Analysis Date: 05/30/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	88	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

DRO Report

Authorized signature

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Mr. Ron Pentkowski
Test America Burlington
30 Community Drive Suite 11
South Burlington VT 05403

June 17, 2008

SAMPLE DATA

CLIENT SAMPLE ID

Project Name:	MEFUDS LO-58
Project Number:	03886.184
Field Sample ID:	LABQC

Lab Sample ID:	B05238DW RR2
Matrix:	Aqueous
Percent Solid:	N/A
Dilution Factor:	1
Collection Date:	N/A
Lab Receipt Date:	N/A
Extraction Date:	05/23/08
Analysis Date:	06/02/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	91	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

DRO Report

Authorized signature

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Mr. Ron Pentkowski
Test America Burlington
30 Community Drive Suite 11
South Burlington VT 05403

May 29, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58
Project Number: 03886.184
Client Sample ID: LS58DW2-0508-A16

SAMPLE DATA

Lab Sample ID: 61399-1
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 05/16/08
Lab Receipt Date: 05/22/08
Analysis Date: 05/28/08

ANALYTICAL RESULTS GASOLINE RANGE ORGANICS

Compound	Result	Units	Quantitation Limit
GRO	U	µg/L	10

ESTIMATED TARGET CONCENTRATIONS

Compound	Result	Units	Quantitation Limit
MTBE	U	µg/L	2
Benzene	U	µg/L	1

Surrogate Standard Recovery

Trifluorotoluene	102	%
Bromofluorobenzene	93	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to: "Maine HETL Method 4.2.17, September 6, 1995."

COMMENTS:

Authorized signature M Kendall

analytics environmental laboratory LLC

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Portsmouth, New Hampshire 03801
603-436-5111 Fax 603-430-2151
800-929-9906

Mr. Ron Pentkowski
Test America Burlington
30 Community Drive Suite 11
South Burlington VT 05403

June 10, 2008

SAMPLE DATA

CLIENT SAMPLE ID

Project Name:	MEFUDS LO-58
Project Number:	03886.184
Field Sample ID:	LS58DW2-0508-A16

Lab Sample ID:	61399-1
Matrix:	Aqueous
Percent Solid:	N/A
Dilution Factor:	1.0
Collection Date:	05/16/08
Lab Receipt Date:	05/22/08
Extraction Date:	05/23/08
Analysis Date:	05/30/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
1020	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	84	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

DRO Report

Authorized signature

analytics environmental laboratory LLC

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800-929-9906

Mr. Ron Pentkowski
Test America Burlington
30 Community Drive Suite 11
South Burlington VT 05403

May 29, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58
Project Number: 03886.184
Client Sample ID: LS58DW2-0508-28.5

SAMPLE DATA

Lab Sample ID: 61399-2
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 05/16/08
Lab Receipt Date: 05/22/08
Analysis Date: 05/28/08

ANALYTICAL RESULTS GASOLINE RANGE ORGANICS

Compound	Result	Units	Quantitation Limit
GRO	U	µg/L	10

ESTIMATED TARGET CONCENTRATIONS

Compound	Result	Units	Quantitation Limit
MTBE	U	µg/L	2
Benzene	U	µg/L	1

Surrogate Standard Recovery

Trifluorotoluene	94	%
Bromofluorobenzene	87	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to: "Maine HETL Method 4.2.17, September 6, 1995."

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June 3, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: LS58DW2-0508-28.5

SAMPLE DATA

Lab Sample ID: 61399-2
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 05/16/08
Lab Receipt Date: 05/22/08
Extraction Date: 05/23/08
Analysis Date: 05/31/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	88	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

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June 3, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: LS58DW2-0508-28.5

SAMPLE DATA

Lab Sample ID: 61399-2 RR
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 05/16/08
Lab Receipt Date: 05/22/08
Extraction Date: 05/23/08
Analysis Date: 06/02/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	93	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

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May 29, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58
Project Number: 03886.184
Client Sample ID: LS58DW2-0508-37

SAMPLE DATA

Lab Sample ID: 61399-3
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 05/17/08
Lab Receipt Date: 05/22/08
Analysis Date: 05/28/08

ANALYTICAL RESULTS GASOLINE RANGE ORGANICS

Compound	Result	Units	Quantitation Limit
GRO	U	µg/L	10

ESTIMATED TARGET CONCENTRATIONS

Compound	Result	Units	Quantitation Limit
MTBE	U	µg/L	2
Benzene	U	µg/L	1

Surrogate Standard Recovery

Trifluorotoluene	84	%
Bromofluorobenzene	77	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to: "Maine HETL Method 4.2.17, September 6, 1995."

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June 3, 2008

SAMPLE DATA

CLIENT SAMPLE ID

Project Name:	MEFUDS LO-58
Project Number:	03886.184
Field Sample ID:	LS58DW2-0508-37

Lab Sample ID:	61399-3
Matrix:	Aqueous
Percent Solid:	N/A
Dilution Factor:	1.0
Collection Date:	05/17/08
Lab Receipt Date:	05/22/08
Extraction Date:	05/23/08
Analysis Date:	05/31/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	92	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

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June 10, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58
Project Number: 03886.184
Field Sample ID: LS58DW2-0508-37

SAMPLE DATA

Lab Sample ID: 61399-3 RR
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 05/17/08
Lab Receipt Date: 05/22/08
Extraction Date: 05/23/08
Analysis Date: 06/02/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
50	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	99	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

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May 29, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58
Project Number: 03886.184
Client Sample ID: LS58DW2-0508-94.5

SAMPLE DATA

Lab Sample ID: 61399-4
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 05/17/08
Lab Receipt Date: 05/22/08
Analysis Date: 05/28/08

ANALYTICAL RESULTS GASOLINE RANGE ORGANICS

Compound	Result	Units	Quantitation Limit
GRO	U	µg/L	10

ESTIMATED TARGET CONCENTRATIONS

Compound	Result	Units	Quantitation Limit
MTBE	U	µg/L	2
Benzene	U	µg/L	1

Surrogate Standard Recovery

Trifluorotoluene	91	%
Bromofluorobenzene	84	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to: "Maine HETL Method 4.2.17, September 6, 1995."

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June 3, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: LS58DW2-0508-94.5

SAMPLE DATA

Lab Sample ID: 61399-4
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 05/17/08
Lab Receipt Date: 05/22/08
Extraction Date: 05/23/08
Analysis Date: 05/31/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	81	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

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June 10, 2008

SAMPLE DATA

CLIENT SAMPLE ID

Project Name:	MEFUDS LO-58
Project Number:	03886.184
Field Sample ID:	LS58DW2-0508-94.5

Lab Sample ID:	61399-4 RR
Matrix:	Aqueous
Percent Solid:	N/A
Dilution Factor:	1.0
Collection Date:	05/17/08
Lab Receipt Date:	05/22/08
Extraction Date:	05/23/08
Analysis Date:	06/02/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	88	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

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May 29, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58
Project Number: 03886.184
Client Sample ID: LS58DW2-0508-189

SAMPLE DATA

Lab Sample ID: 61399-5
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 05/17/08
Lab Receipt Date: 05/22/08
Analysis Date: 05/28/08

ANALYTICAL RESULTS GASOLINE RANGE ORGANICS

Compound	Result	Units	Quantitation Limit
GRO	U	µg/L	10

ESTIMATED TARGET CONCENTRATIONS

Compound	Result	Units	Quantitation Limit
MTBE	U	µg/L	2
Benzene	U	µg/L	1

Surrogate Standard Recovery

Trifluorotoluene	99	%
Bromofluorobenzene	92	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to: "Maine HETL Method 4.2.17, September 6, 1995."

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June 3, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: LS58DW2-0508-189

SAMPLE DATA

Lab Sample ID: 61399-5
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 05/17/08
Lab Receipt Date: 05/22/08
Extraction Date: 05/23/08
Analysis Date: 05/31/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	85	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

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June 3, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: LS58DW2-0508-189

SAMPLE DATA

Lab Sample ID: 61399-5 RR
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 05/17/08
Lab Receipt Date: 05/22/08
Extraction Date: 05/23/08
Analysis Date: 06/02/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	89	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

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May 29, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58
Project Number: 03886.184
Client Sample ID: LS58DW2-0508-265

SAMPLE DATA

Lab Sample ID: 61399-6
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 05/17/08
Lab Receipt Date: 05/22/08
Analysis Date: 05/28/08

ANALYTICAL RESULTS GASOLINE RANGE ORGANICS

Compound	Result	Units	Quantitation Limit
GRO	U	µg/L	10

ESTIMATED TARGET CONCENTRATIONS

Compound	Result	Units	Quantitation Limit
MTBE	U	µg/L	2
Benzene	U	µg/L	1

Surrogate Standard Recovery

Trifluorotoluene	95	%
Bromofluorobenzene	86	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to: "Maine HETL Method 4.2.17, September 6, 1995."

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June 3, 2008

SAMPLE DATA

CLIENT SAMPLE ID

Project Name:	MEFUDS LO-58
Project Number:	03886.184
Field Sample ID:	LS58DW2-0508-265

Lab Sample ID:	61399-6
Matrix:	Aqueous
Percent Solid:	N/A
Dilution Factor:	1.0
Collection Date:	05/17/08
Lab Receipt Date:	05/22/08
Extraction Date:	05/23/08
Analysis Date:	05/31/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
58	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	94	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

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June 3, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: LS58DW2-0508-265

SAMPLE DATA

Lab Sample ID: 61399-6 RR
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 05/17/08
Lab Receipt Date: 05/22/08
Extraction Date: 05/23/08
Analysis Date: 06/02/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
80	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	97	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

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May 29, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58
Project Number: 03886.184
Client Sample ID: RB-051808-01

SAMPLE DATA

Lab Sample ID: 61399-7
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 05/18/08
Lab Receipt Date: 05/22/08
Analysis Date: 05/28/08

ANALYTICAL RESULTS GASOLINE RANGE ORGANICS

Compound	Result	Units	Quantitation Limit
GRO	U	µg/L	10

ESTIMATED TARGET CONCENTRATIONS

Compound	Result	Units	Quantitation Limit
MTBE	U	µg/L	2
Benzene	U	µg/L	1

Surrogate Standard Recovery

Trifluorotoluene	94	%
Bromofluorobenzene	86	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to: "Maine HETL Method 4.2.17, September 6, 1995."

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June 3, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: RB-051808-01

SAMPLE DATA

Lab Sample ID: 61399-7
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 05/18/08
Lab Receipt Date: 05/22/08
Extraction Date: 05/23/08
Analysis Date: 05/31/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
92	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	89	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

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June 3, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: RB-051808-01

SAMPLE DATA

Lab Sample ID: 61399-7 RR
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 05/18/08
Lab Receipt Date: 05/22/08
Extraction Date: 05/23/08
Analysis Date: 06/02/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
124	µg/L	50

Surrogate Standard Recovery

m-Terphenyl 102 %

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

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May 29, 2008

CLIENT SAMPLE ID

Project Name:	MEFUDS LO-58
Project Number:	03886.184
Client Sample ID:	LS58DW1-0508-056

SAMPLE DATA

Lab Sample ID:	61399-8
Matrix:	Aqueous
Percent Solid:	N/A
Dilution Factor:	1
Collection Date:	05/18/08
Lab Receipt Date:	05/22/08
Analysis Date:	05/28/08

ANALYTICAL RESULTS GASOLINE RANGE ORGANICS

Compound	Result	Units	Quantitation Limit
GRO	27	µg/L	10

ESTIMATED TARGET CONCENTRATIONS

Compound	Result	Units	Quantitation Limit
MTBE	U	µg/L	2
Benzene	U	µg/L	1

Surrogate Standard Recovery

Trifluorotoluene	95	%
Bromofluorobenzene	89	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to: "Maine HETL Method 4.2.17, September 6, 1995."

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June 3, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: LS58DW1-0508-056

SAMPLE DATA

Lab Sample ID: 61399-8
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 05/18/08
Lab Receipt Date: 05/22/08
Extraction Date: 05/23/08
Analysis Date: 05/31/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
300	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	97	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

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SAMPLE DATA

CLIENT SAMPLE ID

Project Name:	MEFUDS LO-58
Project Number:	03886.184
Field Sample ID:	LS58DW1-0508-056

Lab Sample ID:	61399-8 RR
Matrix:	Aqueous
Percent Solid:	N/A
Dilution Factor:	1.0
Collection Date:	05/18/08
Lab Receipt Date:	05/22/08
Extraction Date:	05/23/08
Analysis Date:	06/02/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
350	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	100	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

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May 29, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58
Project Number: 03886.184
Client Sample ID: LS58DW1-0508-051

SAMPLE DATA

Lab Sample ID: 61399-9
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 05/19/08
Lab Receipt Date: 05/22/08
Analysis Date: 05/28/08

ANALYTICAL RESULTS GASOLINE RANGE ORGANICS

Compound	Result	Units	Quantitation Limit
GRO	U	µg/L	10

ESTIMATED TARGET CONCENTRATIONS

Compound	Result	Units	Quantitation Limit
MTBE	U	µg/L	2
Benzene	U	µg/L	1

Surrogate Standard Recovery

Trifluorotoluene	94	%
Bromofluorobenzene	86	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to: "Maine HETL Method 4.2.17, September 6, 1995."

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June 3, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: LS58DW1-0508-051

SAMPLE DATA

Lab Sample ID:	61399-9
Matrix:	Aqueous
Percent Solid:	N/A
Dilution Factor:	1.0
Collection Date:	05/19/08
Lab Receipt Date:	05/22/08
Extraction Date:	05/23/08
Analysis Date:	05/31/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	97	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

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June 3, 2008

SAMPLE DATA

CLIENT SAMPLE ID

Project Name:	MEFUDS LO-58
Project Number:	03886.184
Field Sample ID:	LS58DW1-0508-051

Lab Sample ID:	61399-9 RR
Matrix:	Aqueous
Percent Solid:	N/A
Dilution Factor:	1.0
Collection Date:	05/19/08
Lab Receipt Date:	05/22/08
Extraction Date:	05/23/08
Analysis Date:	06/02/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	100	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

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May 29, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58
Project Number: 03886.184
Client Sample ID: LS58DW1-0508-041

SAMPLE DATA

Lab Sample ID: 61399-10
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 05/19/08
Lab Receipt Date: 05/22/08
Analysis Date: 05/28/08

ANALYTICAL RESULTS GASOLINE RANGE ORGANICS

Compound	Result	Units	Quantitation Limit
GRO	14	µg/L	10

ESTIMATED TARGET CONCENTRATIONS

Compound	Result	Units	Quantitation Limit
MTBE	U	µg/L	2
Benzene	U	µg/L	1

Surrogate Standard Recovery

Trifluorotoluene	74	%
Bromofluorobenzene	65	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to: "Maine HETL Method 4.2.17, September 6, 1995."

COMMENTS:

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June 10, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: LS58DW1-0508-041

SAMPLE DATA

Lab Sample ID: 61399-10
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 05/19/08
Lab Receipt Date: 05/22/08
Extraction Date: 05/23/08
Analysis Date: 05/31/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	99	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

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June 3, 2008

SAMPLE DATA

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: LS58DW1-0508-041

Lab Sample ID: 61399-10 RR
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 05/19/08
Lab Receipt Date: 05/22/08
Extraction Date: 05/23/08
Analysis Date: 06/02/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
51	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	100	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

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May 29, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58
Project Number: 03886.184
Client Sample ID: LS58DW1-0508-034

SAMPLE DATA

Lab Sample ID: 61399-11
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 05/20/08
Lab Receipt Date: 05/22/08
Analysis Date: 05/28/08

ANALYTICAL RESULTS GASOLINE RANGE ORGANICS

Compound	Result	Units	Quantitation Limit
GRO	24	µg/L	10

ESTIMATED TARGET CONCENTRATIONS

Compound	Result	Units	Quantitation Limit
MTBE	U	µg/L	2
Benzene	U	µg/L	1

Surrogate Standard Recovery

Trifluorotoluene	85	%
Bromofluorobenzene	80	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to: "Maine HETL Method 4.2.17, September 6, 1995."

COMMENTS:

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June 3, 2008

SAMPLE DATA

CLIENT SAMPLE ID

Project Name:	MEFUDS LO-58
Project Number:	03886.184
Field Sample ID:	LS58DW1-0508-034

Lab Sample ID:	61399-11
Matrix:	Aqueous
Percent Solid:	N/A
Dilution Factor:	1.0
Collection Date:	05/20/08
Lab Receipt Date:	05/22/08
Extraction Date:	05/23/08
Analysis Date:	05/31/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	96	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

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June 3, 2008

SAMPLE DATA

CLIENT SAMPLE ID

Project Name:	MEFUDS LO-58
Project Number:	03886.184
Field Sample ID:	LS58DW1-0508-034

Lab Sample ID:	61399-11 RR
Matrix:	Aqueous
Percent Solid:	N/A
Dilution Factor:	1.0
Collection Date:	05/20/08
Lab Receipt Date:	05/22/08
Extraction Date:	05/23/08
Analysis Date:	06/03/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	97	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

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May 29, 2008

CLIENT SAMPLE ID

Project Name:	MEFUDS LO-58
Project Number:	03886.184
Client Sample ID:	LS58DW1-0508-034-E

SAMPLE DATA

Lab Sample ID:	61399-12
Matrix:	Aqueous
Percent Solid:	N/A
Dilution Factor:	1
Collection Date:	05/20/08
Lab Receipt Date:	05/22/08
Analysis Date:	05/28/08

ANALYTICAL RESULTS GASOLINE RANGE ORGANICS

Compound	Result	Units	Quantitation Limit
GRO	**23**	µg/L	10

ESTIMATED TARGET CONCENTRATIONS

Compound	Result	Units	Quantitation Limit
MTBE	U	µg/L	2
Benzene	U	µg/L	1

Surrogate Standard Recovery

Trifluorotoluene	94	%
Bromofluorobenzene	88	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to: "Maine HETL Method 4.2.17, September 6, 1995."

COMMENTS:

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June 3, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: LS58DW1-0508-034-E

SAMPLE DATA

Lab Sample ID: 61399-12
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 05/20/08
Lab Receipt Date: 05/22/08
Extraction Date: 05/23/08
Analysis Date: 05/31/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	80	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

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June 3, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: LS58DW1-0508-034-E

SAMPLE DATA

Lab Sample ID: 61399-12 RR
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 05/20/08
Lab Receipt Date: 05/22/08
Extraction Date: 05/23/08
Analysis Date: 06/03/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	82	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

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May 29, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58
Project Number: 03886.184
Client Sample ID: LS58DW1-0508-029

SAMPLE DATA

Lab Sample ID: 61399-13
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 05/20/08
Lab Receipt Date: 05/22/08
Analysis Date: 05/28/08

ANALYTICAL RESULTS GASOLINE RANGE ORGANICS

Compound	Result	Units	Quantitation Limit
GRO	**156**	µg/L	10

ESTIMATED TARGET CONCENTRATIONS

Compound	Result	Units	Quantitation Limit
MTBE	U	µg/L	2
Benzene	U	µg/L	1

Surrogate Standard Recovery

Trifluorotoluene	103	%
Bromofluorobenzene	95	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to: "Maine HETL Method 4.2.17, September 6, 1995."

COMMENTS:

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June 3, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: LS58DW1-0508-029

SAMPLE DATA

Lab Sample ID: 61399-13
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 05/20/08
Lab Receipt Date: 05/22/08
Extraction Date: 05/23/08
Analysis Date: 05/31/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	97	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

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June 3, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: LS58DW1-0508-029

SAMPLE DATA

Lab Sample ID: 61399-13 RR
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 05/20/08
Lab Receipt Date: 05/22/08
Extraction Date: 05/23/08
Analysis Date: 06/03/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	99	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

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May 29, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58
Project Number: 03886.184
Client Sample ID: RB-052008-01

SAMPLE DATA

Lab Sample ID: 61399-14
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 05/20/08
Lab Receipt Date: 05/22/08
Analysis Date: 05/28/08

ANALYTICAL RESULTS GASOLINE RANGE ORGANICS

Compound	Result	Units	Quantitation Limit
GRO	U	µg/L	10

ESTIMATED TARGET CONCENTRATIONS

Compound	Result	Units	Quantitation Limit
MTBE	U	µg/L	2
Benzene	U	µg/L	1

Surrogate Standard Recovery

Trifluorotoluene	93	%
Bromofluorobenzene	86	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to: "Maine HETL Method 4.2.17, September 6, 1995."

COMMENTS:

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June 3, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: RB-052008-01

SAMPLE DATA

Lab Sample ID: 61399-14
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 05/20/08
Lab Receipt Date: 05/22/08
Extraction Date: 05/23/08
Analysis Date: 05/31/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	93	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

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June 3, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: RB-052008-01

SAMPLE DATA

Lab Sample ID: 61399-14 RR
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 05/20/08
Lab Receipt Date: 05/22/08
Extraction Date: 05/23/08
Analysis Date: 06/03/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	99	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

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May 29, 2008

CLIENT SAMPLE ID

Project Name:	MEFUDS LO-58
Project Number:	03886.184
Client Sample ID:	TB-051608-01

SAMPLE DATA

Lab Sample ID:	61399-15
Matrix:	Aqueous
Percent Solid:	N/A
Dilution Factor:	1
Collection Date:	05/20/08
Lab Receipt Date:	05/22/08
Analysis Date:	05/28/08

ANALYTICAL RESULTS GASOLINE RANGE ORGANICS

Compound	Result	Units	Quantitation Limit
GRO	U	µg/L	10

ESTIMATED TARGET CONCENTRATIONS

Compound	Result	Units	Quantitation Limit
MTBE	U	µg/L	2
Benzene	U	µg/L	1

Surrogate Standard Recovery

Trifluorotoluene	109	%
Bromofluorobenzene	97	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to: "Maine HETL Method 4.2.17, September 6, 1995."

COMMENTS:

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May 29, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58
Project Number: 03886.184
Client Sample ID: TB-051908-01

SAMPLE DATA

Lab Sample ID: 61399-16
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 05/20/08
Lab Receipt Date: 05/22/08
Analysis Date: 05/28/08

ANALYTICAL RESULTS GASOLINE RANGE ORGANICS

Compound	Result	Units	Quantitation Limit
GRO	U	µg/L	10

ESTIMATED TARGET CONCENTRATIONS

Compound	Result	Units	Quantitation Limit
MTBE	U	µg/L	2
Benzene	U	µg/L	1

Surrogate Standard Recovery

Trifluorotoluene	109	%
Bromofluorobenzene	100	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to: "Maine HETL Method 4.2.17, September 6, 1995."

COMMENTS:

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EXTRACTION
LOGBOOK PAGES

Prep Home | All-Save | Select | Entry Loop | Print

Use the print button - it enters the transfer date

Transfer Date: 05/23/08

Initials: KR

EXTRACT TRANSFER SHEET

Petroleum Hydrocarbons:

Sample	Analysis	Extraction Date	Matrix	Initial Volume(mL)	Initial Weight(g)	Final Volume(mL)	% Solids	Extraction Comments
61380-11	4125W	05/23/08	Aqueous	1000		1.0		
61381-1	4125W	05/23/08	Aqueous	940		1.0		Emulsion
61394-1	4125W	05/23/08	Aqueous	1000		1.0		Emulsion
61395-1	4125W	05/23/08	Aqueous	1005		1.0		
61398-1	4125W	05/23/08	Aqueous	1020		1.0		
61399-1	4125W	05/23/08	Aqueous	1050		1.0		
61399-2	4125W	05/23/08	Aqueous	1050		1.0		
61399-3	4125W	05/23/08	Aqueous	1070		1.0		
61399-4	4125W	05/23/08	Aqueous	1080		1.0		
61399-5	4125W	05/23/08	Aqueous	1080		1.0		
61399-6	4125W	05/23/08	Aqueous	1085		1.0		
61399-7	4125W	05/23/08	Aqueous	1070		1.0		
61399-8	4125W	05/23/08	Aqueous	1070		1.0		
61399-9	4125W	05/23/08	Aqueous	1080		1.0		
61399-10	4125W	05/23/08	Aqueous	1080		1.0		
61399-11	4125W	05/23/08	Aqueous	1070		1.0		
61399-12	4125W	05/23/08	Aqueous	1070		1.0		
61399-13	4125W	05/23/08	Aqueous	1070		1.0		
61399-14	4125W	05/23/08	Aqueous	1050		1.0		

KR 5-23-08
JCB 5-23-08

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Total Petroleum Hydrocarbon/ Diesel Range Organics
Aqueous Preparation Logbook

Circle Method Reference: SW-846 3510 Liquid/Liquid extraction
ME HETL 4.1.25

Date: 5.23.08
Time: 9:00am
Initials: CB

QC Batch ID : Q-P-052308-1-KR
Prep. Batch ID P-P-052308-1-KR

Sample #	Initial Volume	pH<2	mL Surr (1)	mL Spike	Ex Vol	Final Vol $MeCl_2$	Cook Down Date
B052380W	1000	1.5	1.0 CB	—	7120	1.0 mL	5.23.08 KR
L052380W	1000	↓	↓	1.0 (2)	↓	1.0 mL	↓
LD052380W	1000	↓	↓	1.0 ↓	↓	1.0 mL	↓
L052380W#2	1000	↓	↓	1.0 (3)	↓	1.0 mL	↓
LD052380W#2	1000	↓	↓	1.0 ↓	↓	1.0 mL	↓
61380-11	1000	↓	1.0	—	↓	1.0 mL	↓
*61381-1	940	↓	↓	—	↓	1.0 mL	↓
*61394-1	1000	↓	↓	—	↓	1.0 mL	↓
61395-1	1005	1.5	1.0	—	↓	1.0mL	KR
61398-1	1020	↓	↓	—	↓	1.0mL	↓
61399-1	1050	↓	↓	—	↓	1.0mL	↓
-2	1050	↓	↓	—	↓	1.0mL	CB
-3	1070	↓	1.0 CB	—	↓	↓	↓
-4	1080	↓	↓	—	↓	↓	↓
-5	1080	↓	↓	—	↓	↓	↓
-6	1085	↓	↓	—	↓	↓	↓
-7	1070	1.5	↓	—	↓	↓	↓
-8	1070	1.5	↓	—	↓	↓	↓
-9	1080	1.5	↓	—	↓	↓	↓
-10	1080	1.5	1.0 CB	—	↓	↓	↓
-11	1070	1.5	1.0 CB	—	↓	↓	↓
-12	1070	↓	↓	—	↓	↓	↓
-13	1070	↓	↓	—	↓	↓	↓
-14	1050	↓	↓	—	↓	↓	↓
61399-2,ms	1080	↓	↓	(2) 1.0 CB	↓	↓	↓
-2,msd	1080	↓	↓	1.0 CB	↓	↓	↓

KRS-23-08

* = emulsion CB 5-23-08

$MeCl_2$ Lot Number: 48050
1:1 HCl Lot Number: M6454
Na_2SO_4 Lot Number: —

	Lot #	Exp Date
(1) DRO/TPH Surrogate (0.1 ug/mL):	T6402	9.24.08
(2) DRO Spike (1.0 ug/mL):	T6397	10-29-08
(3) #2 Fuel Oil Spike (1.0 ug/mL):	T6390	10.4.08

✓KRS 23-08

analytics environmental laboratory LLC

GRO
DATA SUMMARIES

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June 17, 2008

SAMPLE DATA

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58
Project Number:
Client Sample ID: LABQC

Lab Sample ID: B05278KGRO
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date:
Lab Receipt Date:
Analysis Date: 05/27/08

ANALYTICAL RESULTS GASOLINE RANGE ORGANICS

Compound	Result	Units	Quantitation Limit
GRO	U	µg/L	10

ESTIMATED TARGET CONCENTRATIONS

Compound	Result	Units	Quantitation Limit
MTBE	U	µg/L	2
Benzene	U	µg/L	1

Surrogate Standard Recovery

Trifluorotoluene	111	%
Bromofluorobenzene	99	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to: "Maine HETL Method 4.2.17, September 6, 1995."

COMMENTS:

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4.2.17 GRO WATER REPORT

Sample Name	**B05278KGRO**
Data File Name	K15998B.D
Date Acquired	5/27/2008 22:53
Misc Info	5000
Dilution Factor	1.00

GRO ANALYTICAL RESULTS	ug/L	RL	
GRO	U	10	
Methyl-t-butylether	U	2	
Benzene	U	1	
Toluene	U	2	
Ethylbenzene	U	2	
m,p-Xylenes	U	2	
o-Xylene	U	2	
1,3,5-Trimethylbenzene	U	2	
1,2,4-Trimethylbenzene	U	2	
Naphthalene	U	2	
TFT % Recovery (FID)	111%	60-140 %	PASS
BFB % Recovery (FID)	99%	60-140 %	PASS
TFT % Recovery (PID)	117%	60-140 %	PASS
BFB % Recovery (PID)	106%	60-140 %	PASS

RAW DATA

FID RESULTS	Raw Inst Amount ug/L	Reviewed & Calculated Inst Amount ug/L	Target Response	Target RT	Exp RT	RT Window	RT Accept	Sample Amount ug/L
TFT	44.47		320647	3.966	3.967	0.030	OK	
BFB	39.79		231389	7.095	7.096	0.030	OK	
GRO (<200)	-4.69	0.00	147685					
GRO (>200)	-11.15	0.00	147685					
GRO	-4.69	0.00						0
PID RESULTS								
TFT #2	46.88		358057	3.966	3.967	0.030	OK	
BFB #2	42.25		852949	7.094	7.095	0.030	OK	
Methyl-t-butylether #2	0.23	0.00	2111	2.161	2.192	0.030	*	0
Benzene #2	0.05	0.00	1084	3.524	3.520	0.030	OK	0
Toluene #2	0.18	0.00	4018	4.890	4.891	0.030	OK	0
Ethylbenzene #2	0.10	0.00	1870	6.129	6.132	0.030	OK	0
m,p-Xylene #2	0.16	0.00	3607	6.197	6.198	0.030	OK	0
o-Xylene #2	0.12	0.00	2327	6.571	6.569	0.030	OK	0
1,3,5-Trimethylbenzene #2	0.08	0.00	2095	7.378	7.378	0.030	OK	0
1,2,4-Trimethylbenzene #2	0.13	0.00	2665	7.725	7.725	0.030	OK	0
Naphthalene #2	0.19	0.00	2927	10.257	10.257	0.030	OK	0

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K15998B.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 27 May 2008 10:53 pm
Operator :
Sample : B05278KGRO
Misc : 100,5,SOIL, +100UL MEOH
ALS Vial : 45 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 27 23:13:05 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

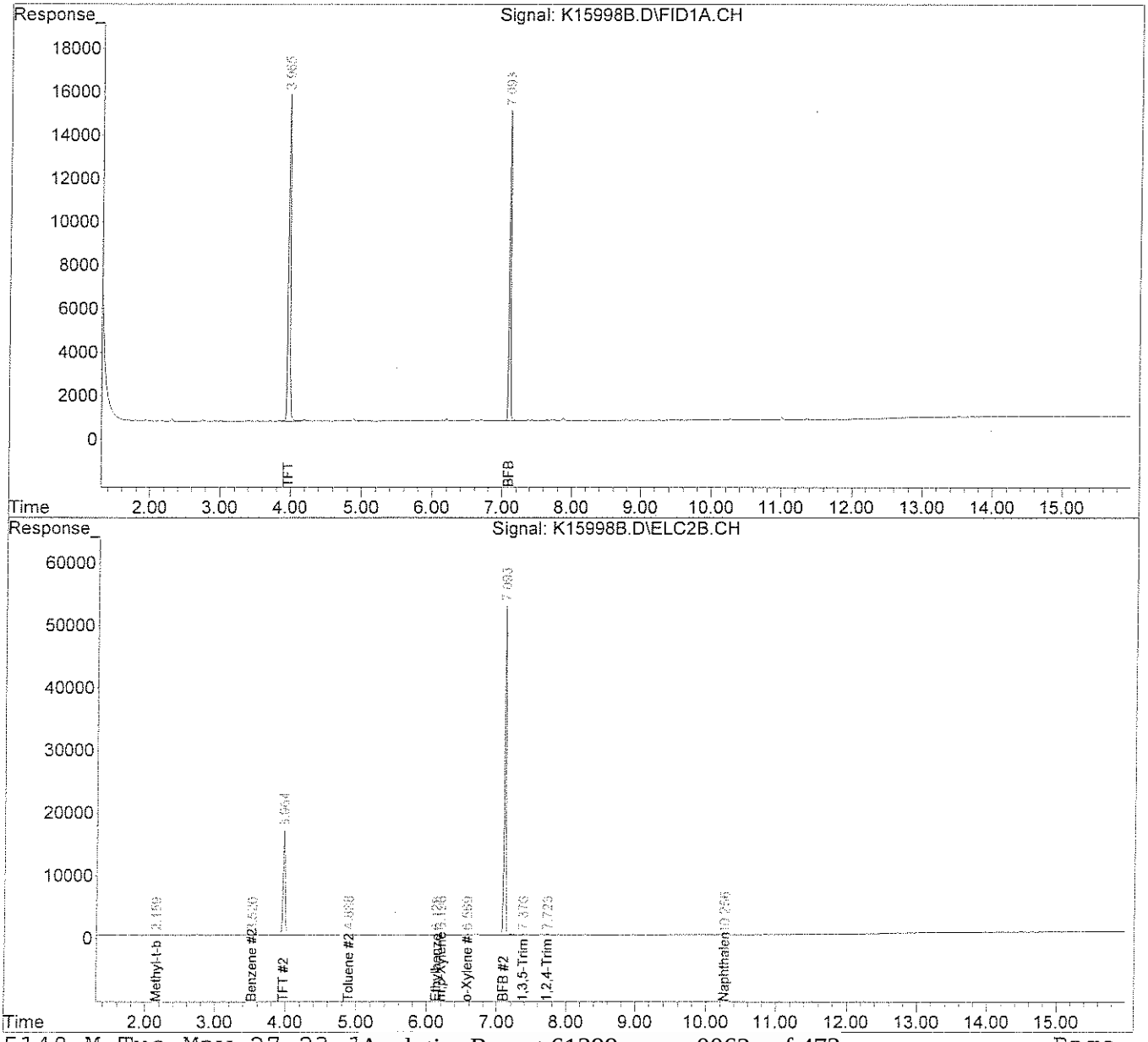
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
1)	S TFT	3.966	3.966	320647	358057	44.466	46.877
	Spiked Amount	40.000	Range 60 - 140		Recovery =	111.17%	117.19%
	S BFB	7.095	7.094	231389	852949	39.790	42.249
	Spiked Amount	40.000	Range 60 - 140		Recovery =	99.48%	105.62%
	Target Compounds						
3)	TM Methyl-t-...	2.212	2.161	54	2111	NoCal	0.231 #
4)	TM Benzene	3.523	3.524	504	1084	NoCal	0.045 #
5)	TM Toluene	4.890	4.890	3143	4018	NoCal	0.179 #
6)	TM Ethylbenzene	6.129	6.129	1398	1870	NoCal	0.095 #
7)	TM m,p-Xylene	6.198	6.197	1906	3607	NoCal	0.156 #
8)	TM o-Xylene	6.572	6.571	1834	2327	NoCal	0.119 #
9)	TM 1,3,5-Tri...	7.380	7.378	953	2095	NoCal	0.079 #
10)	TM 1,2,4-Tri...	7.725	7.725	2022	2665	NoCal	0.131 #
11)	TM Naphthalene	10.258	10.257	1627	2927	NoCal	0.193 #

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K15998B.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 27 May 2008 10:53 pm
Operator :
Sample : B05278KGRO
Misc : 100,5,SOIL, +100UL MEOH
ALS Vial : 45 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 27 23:13:05 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



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GC Volatiles Instrument: K

PID=3

GAS/GRO surr = V7231 x 6113/08
TFT only = V7251 x 6113/08
BFB only = V7216 x 5/28/08

051408-K

W-K-051408-RM

Position	Method	Sample	Vol.	Comments	File #	Analyst	pH
1	GRO051408m	Blank	5mL	sys idle	K15780	RM	NA
2		GRO 10		+.025uL V7233	81		
3		20		+.05 x6113/08	82		
4		50		+1.25	83		
5		100		+2.5	84		
6		200		+5	85		
7		500		+12.5	86		
8		1000		+25	87		
9		2500		+62.5	88		
10		Blank-CO			89		
11		GRO CC 200		+5uL V7237 x 6113/08	90SC		
12		GAS 200			91		
13		Blank-sys idle			92		
14		B05158KGRO			93B		
15		L05158KGRO		+5uL V7237 x 6113/08	94Q		
16		LD05158KGRO			95Q		
17		61279-1			96	RM	12
18		GRO 200			97SC		
19	GAS04178.m	GAS 200			98SC		
20		MB05158KGAS	100/5mL		99B		
21		LS05158KGAS		+5uL V7219 x 6/11/08	K15800Q		
22		LSD05158KGAS			01Q		
23		61327-2		8.5g 8mL FV	02		
24		-3		8.25g	03		
25		-4	5mL	8.02	04		
26		-1	25uL/5mL	8.23	05		
27		GAS 200	5mL	+5uL V7194 5/17/08	06SC		
28		B05158KGAS		window blank	07B		
29		Blank-sys idle			08		
30		61275-7 TB	100uL/5mL		09		
31		-5	50uL/5mL	7.24g 7mL FV	10		
32		-4	100uL/5mL	5.52g 5mL FV	11		
33		-1	50uL/5mL	6.09g, 6mL FV	12		
34		-6	5mL/5mL	4.6g, 5mL FV	13		
35		Blank-CO			14		
36					15		
37					16		
38					17		
39					18		
40					19		

next pg

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Mr. Ron Pentkowski
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30 Community Drive Suite 11
South Burlington VT 05403

May 29, 2008

SAMPLE DATA

CLIENT SAMPLE ID

Project Name:	MEFUDS LO-58
Project Number:	03886.184
Client Sample ID:	LS58DW2-0508-A16

Lab Sample ID:	61399-1
Matrix:	Aqueous
Percent Solid:	N/A
Dilution Factor:	1
Collection Date:	05/16/08
Lab Receipt Date:	05/22/08
Analysis Date:	05/28/08

ANALYTICAL RESULTS GASOLINE RANGE ORGANICS

Compound	Result	Units	Quantitation Limit
GRO	U	µg/L	10

ESTIMATED TARGET CONCENTRATIONS

Compound	Result	Units	Quantitation Limit
MTBE	U	µg/L	2
Benzene	U	µg/L	1

Surrogate Standard Recovery

Trifluorotoluene	102	%
Bromofluorobenzene	93	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to: "Maine HETL Method 4.2.17, September 6, 1995."

COMMENTS:

Authorized signature 

4.2.17 GRO WATER REPORT

Sample Name	61399-1
Data File Name	K16007.D
Date Acquired	5/28/2008 2:59
Misc Info	5000
Dilution Factor	1.00

GRO ANALYTICAL RESULTS	ug/L	RL	
GRO	U	10	
Methyl-t-butylether	U	2	
Benzene	U	1	
Toluene	3	2	
Ethylbenzene	U	2	
m,p-Xylenes	U	2	
o-Xylene	U	2	
1,3,5-Trimethylbenzene	U	2	
1,2,4-Trimethylbenzene	U	2	
Naphthalene	U	2	
TFT % Recovery (FID)	102%	60-140 %	PASS
BFB % Recovery (FID)	93%	60-140 %	PASS
TFT % Recovery (PID)	107%	60-140 %	PASS
BFB % Recovery (PID)	97%	60-140 %	PASS

RAW DATA

FID RESULTS	Raw Inst Amount ug/L	Reviewed & Calculated Inst Amount ug/L	Target Response	Target RT	Exp RT	RT Window	RT Accept	Sample Amount ug/L
TFT	40.97		295460	3.968	3.967	0.030	OK	
BFB	37.11		215791	7.095	7.096	0.030	OK	
GRO (<200)	5.04	0.00	258394					
GRO (>200)	-1.34	0.00	258394					
GRO	5.04	0.00						0
PID RESULTS								
TFT #2	42.84		327250	3.968	3.967	0.030	OK	
BFB #2	38.99		787131	7.095	7.095	0.030	OK	
Methyl-t-butylether #2	0.07	0.00	634	2.220	2.192	0.030	OK	0
Benzene #2	0.17	0.00	4045	3.521	3.520	0.030	OK	0
Toluene #2	2.71	2.71	60768	4.891	4.891	0.030	OK	3
Ethylbenzene #2	0.06	0.00	1177	6.129	6.132	0.030	OK	0
m,p-Xylene #2	0.09	0.00	2106	6.198	6.198	0.030	OK	0
o-Xylene #2	0.24	0.00	4719	6.554	6.569	0.030	OK	0
1,3,5-Trimethylbenzene #2	0.02	0.00	633	7.385	7.378	0.030	OK	0
1,2,4-Trimethylbenzene #2	0.19	0.00	3907	7.720	7.725	0.030	OK	0
Naphthalene #2	0.57	0.00	8682	10.256	10.257	0.030	OK	0

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K16007.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 28 May 2008 2:59 am
Operator :
Sample : 61399-1
Misc : 5000
ALS Vial : 54 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 28 12:02:37 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
1)	S TFT	3.968	3.968	295460	327250	40.973	42.844	
	Spiked Amount 40.000	Range 60 - 140		Recovery = 102.43%			107.11%	
2)	S BFB	7.095	7.095	215791	787131	37.108	38.988	
	Spiked Amount 40.000	Range 60 - 140		Recovery = 92.77%			97.47%	
	Target Compounds							
3)	TM Methyl-t-...	2.185	2.220	578	634	NoCal	0.069	#
4)	TM Benzene	3.523	3.521	2025	4045	NoCal	0.169	#
5)	TM Toluene	4.892	4.891	32332	60768	NoCal	2.711	#
6)	TM Ethylbenzene	6.133	6.129	1360	1177	NoCal	0.060	#
7)	TM m,p-Xylene	6.200	6.198	1592	2106	NoCal	0.091	#
8)	TM o-Xylene	6.553	6.554	4892	4719	NoCal	0.241	#
9)	TM 1,3,5-Tri...	7.385	7.385	574	633	NoCal	0.024	#
10)	TM 1,2,4-Tri...	7.714	7.720	3785	3907	NoCal	0.192	#
11)	TM Naphthalene	10.257	10.256	4284	8682	NoCal	0.573	#
12)	GRO (<200)	6.238	0.000	258394	0	5.045m	N.D.	#

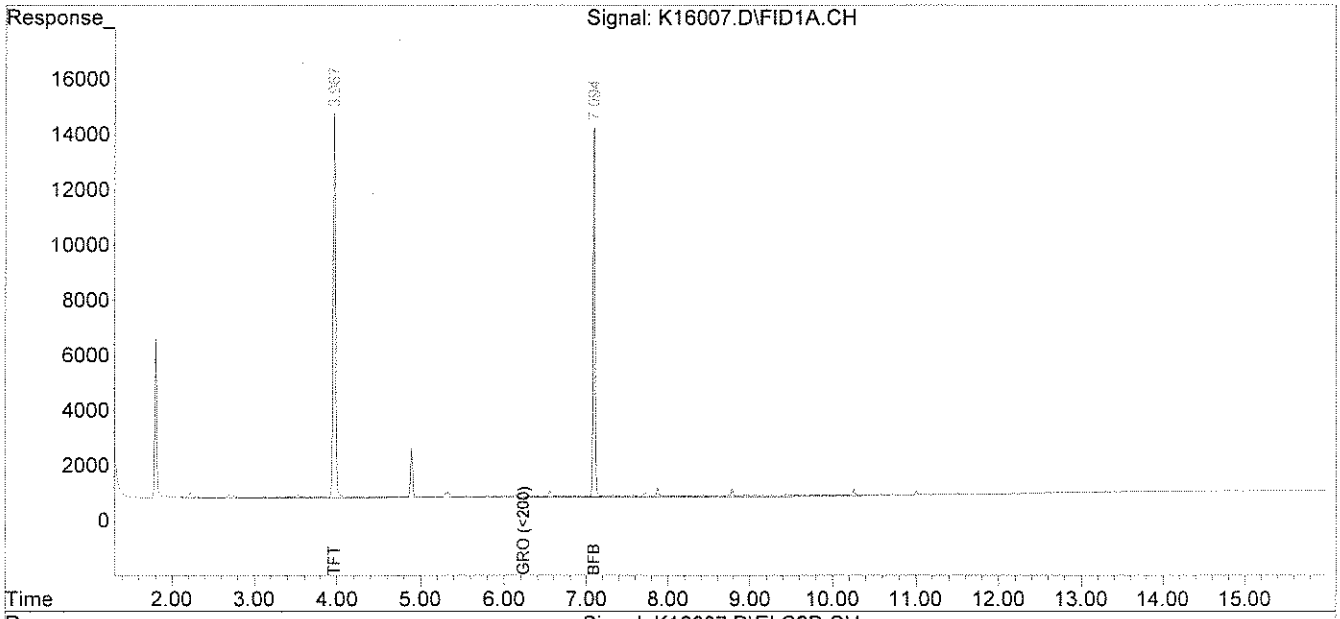
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

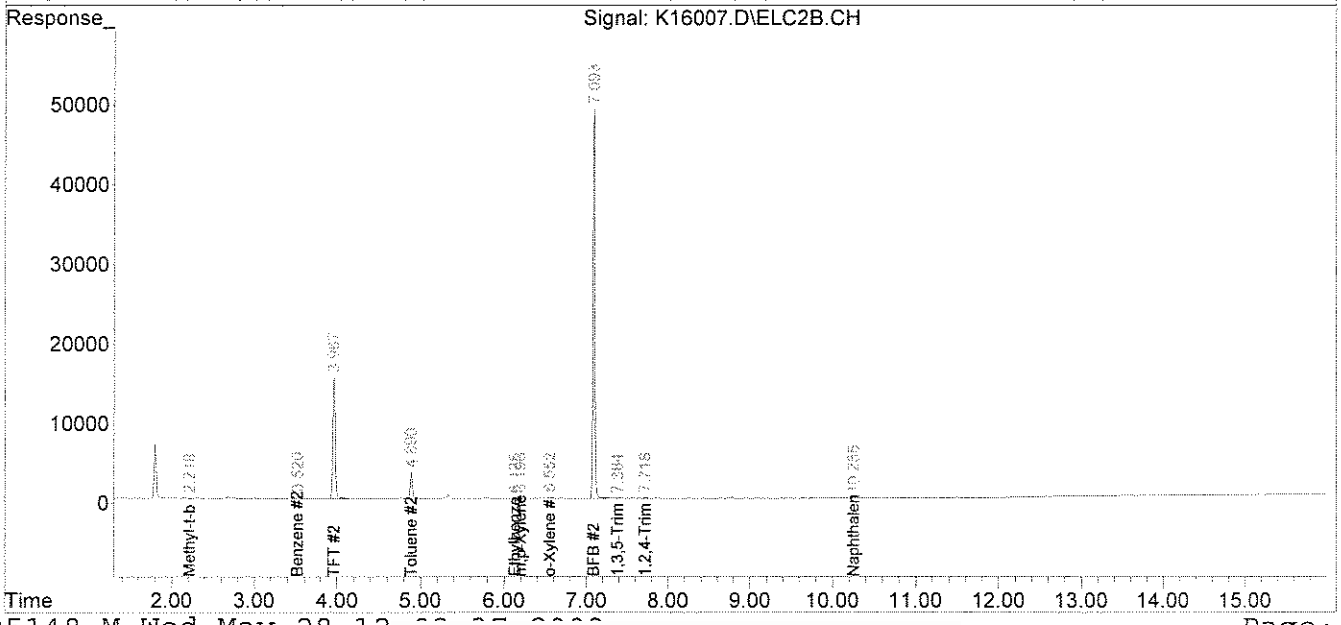
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K16007.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 28 May 2008 2:59 am
Operator :
Sample : 61399-1 FR36204
Misc : 5000
ALS Vial : 54 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 28 12:02:37 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





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Mr. Ron Pentkowski
Test America Burlington
30 Community Drive Suite 11
South Burlington VT 05403

May 29, 2008

CLIENT SAMPLE ID

Project Name:	MEFUDS LO-58
Project Number:	03886.184
Client Sample ID:	LS58DW2-0508-28.5

SAMPLE DATA

Lab Sample ID:	61399-2
Matrix:	Aqueous
Percent Solid:	N/A
Dilution Factor:	1
Collection Date:	05/16/08
Lab Receipt Date:	05/22/08
Analysis Date:	05/28/08

ANALYTICAL RESULTS GASOLINE RANGE ORGANICS

Compound	Result	Units	Quantitation Limit
GRO	U	µg/L	10

ESTIMATED TARGET CONCENTRATIONS

Compound	Result	Units	Quantitation Limit
MTBE	U	µg/L	2
Benzene	U	µg/L	1

Surrogate Standard Recovery

Trifluorotoluene	94	%
Bromofluorobenzene	87	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to: "Maine HETL Method 4.2.17, September 6, 1995."

COMMENTS:

Authorized signature

4.2.17 GRO WATER REPORT

Sample Name	61399-2
Data File Name	K16008.D
Date Acquired	5/28/2008 3:22
Misc Info	5000
Dilution Factor	1.00

GRO ANALYTICAL RESULTS	ug/L	RL	
GRO	U	10	
Methyl-t-butylether	U	2	
Benzene	U	1	
Toluene	U	2	
Ethylbenzene	U	2	
m,p-Xylenes	U	2	
o-Xylene	U	2	
1,3,5-Trimethylbenzene	U	2	
1,2,4-Trimethylbenzene	U	2	
Naphthalene	U	2	
TFT % Recovery (FID)	94%	60-140 %	PASS
BFB % Recovery (FID)	87%	60-140 %	PASS
TFT % Recovery (PID)	98%	60-140 %	PASS
BFB % Recovery (PID)	92%	60-140 %	PASS

RAW DATA

FID RESULTS	Raw Inst Amount ug/L	Reviewed & Calculated Inst Amount ug/L	Target Response	Target RT	Exp RT	RT Window	RT Accept	Sample Amount ug/L
TFT	37.49		270379	3.965	3.967	0.030	OK	
BFB	34.79		202312	7.094	7.096	0.030	OK	
GRO (<200)	0.63	0.00	208216					
GRO (>200)	-5.79	0.00	208216					
GRO	0.63	0.00						0
PID RESULTS								
TFT #2	39.39		300843	3.965	3.967	0.030	OK	
BFB #2	36.77		742337	7.094	7.095	0.030	OK	
Methyl-t-butylether #2	0.02	0.00	138	2.206	2.192	0.030	OK	0
Benzene #2	0.02	0.00	510	3.526	3.520	0.030	OK	0
Toluene #2	0.17	0.00	3780	4.889	4.891	0.030	OK	0
Ethylbenzene #2	0.02	0.00	449	6.132	6.132	0.030	OK	0
m,p-Xylene #2	0.03	0.00	717	6.196	6.198	0.030	OK	0
o-Xylene #2	0.04	0.00	852	6.582	6.569	0.030	OK	0
1,3,5-Trimethylbenzene #2	0.03	0.00	724	7.373	7.378	0.030	OK	0
1,2,4-Trimethylbenzene #2	0.08	0.00	1556	7.727	7.725	0.030	OK	0
Naphthalene #2	0.12	0.00	1777	10.254	10.257	0.030	OK	0

5/28/2008 12:04 PM

C:\msdchem\custrpt\GROH20SAMPLE.CRT

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K16008.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 28 May 2008 3:22 am
Operator :
Sample : 61399-2 DR 26-906
Misc : 5000
ALS Vial : 55 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 28 12:02:38 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
1)	S TFT	3.965	3.965	270379	300843	37.495	39.386	
	Spiked Amount	40.000	Range 60 - 140		Recovery =	93.74%	98.47%	
2)	S BFB	7.094	7.094	202312	742337	34.790	36.770	
	Spiked Amount	40.000	Range 60 - 140		Recovery =	86.98%	91.93%	
	Target Compounds							
3)	TM Methyl-t-...	2.200	2.206	90	138	NoCal	0.015	#
4)	TM Benzene	3.524	3.526	683	510	NoCal	0.021	#
5)	TM Toluene	4.891	4.889	2649	3780	NoCal	0.169	#
6)	TM Ethylbenzene	6.136	6.132	333	449	NoCal	0.023	#
7)	TM m,p-Xylene	6.200	6.196	850	717	NoCal	0.031	#
8)	TM o-Xylene	6.556	6.582	664	852	NoCal	0.044	#
9)	TM 1,3,5-Tri...	7.378	7.373	297	724	NoCal	0.027	#
10)	TM 1,2,4-Tri...	7.734	7.727	1522	1556	NoCal	0.076	#
11)	TM Naphthalene	10.252	10.254	128	1777	NoCal	0.117	#
12)	GRO (<200)	6.238	0.000	208216	0	0.631m	N.D.	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

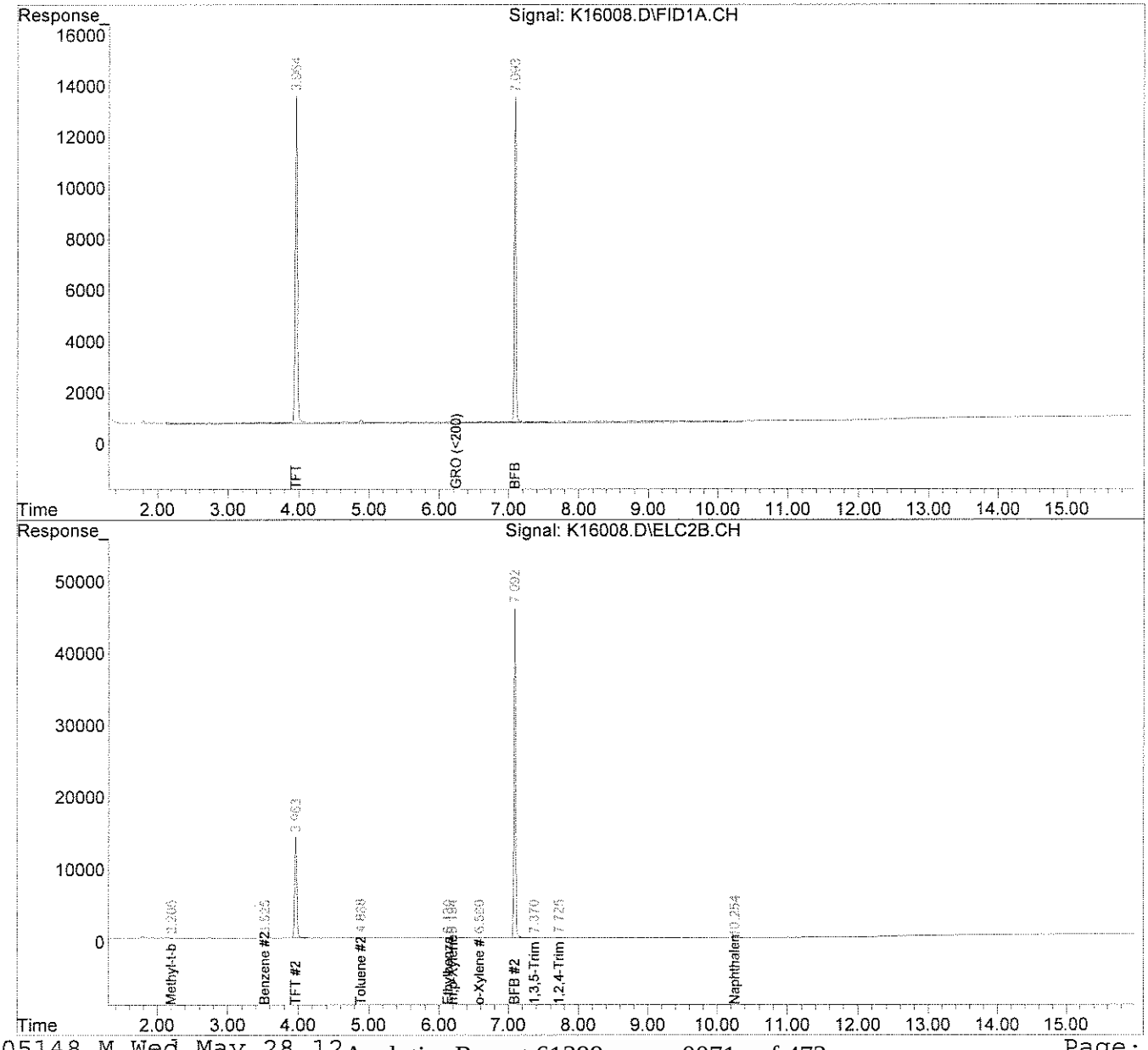
26-906

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K16008.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 28 May 2008 3:22 am
Operator :
Sample : 61399-2 BC 5-28-08
Misc : 5000
ALS Vial : 55 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 28 12:02:38 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



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South Burlington VT 05403

May 29, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58
Project Number: 03886.184
Client Sample ID: LS58DW2-0508-37

SAMPLE DATA

Lab Sample ID: 61399-3
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 05/17/08
Lab Receipt Date: 05/22/08
Analysis Date: 05/28/08

ANALYTICAL RESULTS GASOLINE RANGE ORGANICS

Compound	Result	Units	Quantitation Limit
GRO	U	µg/L	10

ESTIMATED TARGET CONCENTRATIONS

Compound	Result	Units	Quantitation Limit
MTBE	U	µg/L	2
Benzene	U	µg/L	1

Surrogate Standard Recovery

Trifluorotoluene	84	%
Bromofluorobenzene	77	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to: "Maine HETL Method 4.2.17, September 6, 1995."

COMMENTS:

Authorized signature 

4.2.17 GRO WATER REPORT

Sample Name	61399-3
Data File Name	K16011.D
Date Acquired	5/28/2008 4:32
Misc Info	5000
Dilution Factor	1.00

GRO ANALYTICAL RESULTS	ug/L	RL	
GRO	U	10	
Methyl-t-butylether	U	2	
Benzene	U	1	
Toluene	5	2	
Ethylbenzene	U	2	
m,p-Xylenes	U	2	
o-Xylene	U	2	
1,3,5-Trimethylbenzene	U	2	
1,2,4-Trimethylbenzene	U	2	
Naphthalene	U	2	
TFT % Recovery (FID)	84%	60-140 %	PASS
BFB % Recovery (FID)	77%	60-140 %	PASS
TFT % Recovery (PID)	89%	60-140 %	PASS
BFB % Recovery (PID)	81%	60-140 %	PASS

RAW DATA

FID RESULTS	Raw Inst Amount ug/L	Reviewed & Calculated Inst Amount ug/L	Target Response	Target RT	Exp RT	RT Window	RT Accept	Sample Amount ug/L
TFT	33.74		243277	3.967	3.967	0.030	OK	
BFB	30.77		178958	7.095	7.096	0.030	OK	
GRO (<200)	4.31	0.00	250056					
GRO (>200)	-2.08	0.00	250056					
GRO	4.31	0.00						0
PID RESULTS								
TFT #2	35.45		270800	3.966	3.967	0.030	OK	
BFB #2	32.39		653842	7.094	7.095	0.030	OK	
Methyl-t-butylether #2	0.25	0.00	2247	2.142	2.192	0.030	*	0
Benzene #2	0.06	0.00	1461	3.521	3.520	0.030	OK	0
Toluene #2	4.93	4.93	110426	4.890	4.891	0.030	OK	5
Ethylbenzene #2	0.07	0.00	1389	6.128	6.132	0.030	OK	0
m,p-Xylene #2	0.10	0.00	2322	6.197	6.198	0.030	OK	0
o-Xylene #2	0.12	0.00	2292	6.573	6.569	0.030	OK	0
1,3,5-Trimethylbenzene #2	0.07	0.00	1788	7.377	7.378	0.030	OK	0
1,2,4-Trimethylbenzene #2	0.16	0.00	3193	7.726	7.725	0.030	OK	0
Naphthalene #2	0.34	0.00	5185	10.256	10.257	0.030	OK	0

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K16011.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 28 May 2008 4:32 am
Operator :
Sample : 61399-3 ~~AA~~ 26-908
Misc : 5000
ALS Vial : 58 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 28 12:02:41 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
1)	S TFT	3.967	3.966	243277	270800	33.736	35.453	
	Spiked Amount	40.000	Range 60 - 140		Recovery =	84.34%	88.63%	
2)	S BFB	7.095	7.094	178958	653842	30.774	32.386	
	Spiked Amount	40.000	Range 60 - 140		Recovery =	76.94%	80.97%	
	Target Compounds							
3)	TM Methyl-t-...	2.225	2.142	53	2247	NoCal	~~0.246~~	#
4)	TM Benzene	3.525	3.521	848	1461	NoCal	~~0.061~~	#
5)	TM Toluene	4.891	4.890	59551	110426	NoCal	4.926	#
6)	TM Ethylbenzene	6.136	6.128	947	1389	NoCal	0.071	#
7)	TM m,p-Xylene	6.197	6.197	1356	2322	NoCal	0.100	#
8)	TM o-Xylene	6.562	6.573	1215	2292	NoCal	0.117	#
9)	TM 1,3,5-Tri...	7.381	7.377	726	1788	NoCal	0.067	#
10)	TM 1,2,4-Tri...	7.726	7.726	1517	3193	NoCal	0.157	#
11)	TM Naphthalene	10.258	10.256	2406	5185	NoCal	0.342	#
12)	GRO (<200)	6.238	0.000	250056	0	4.311m	N.D.	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

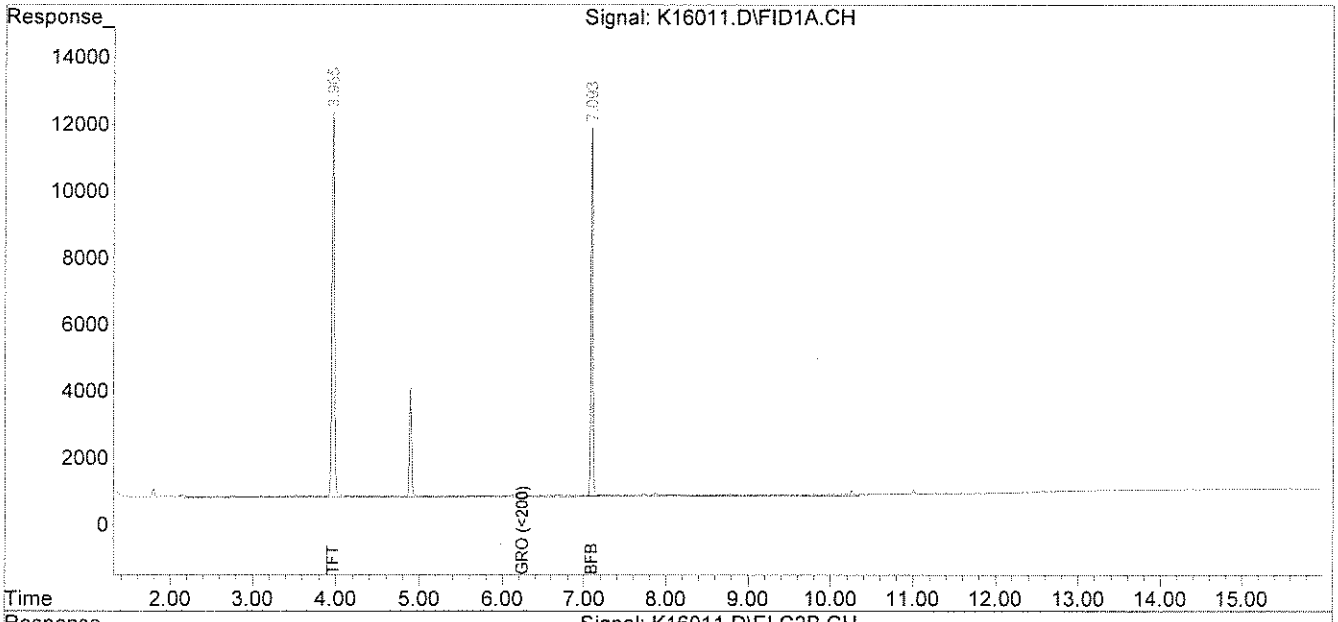
26-908

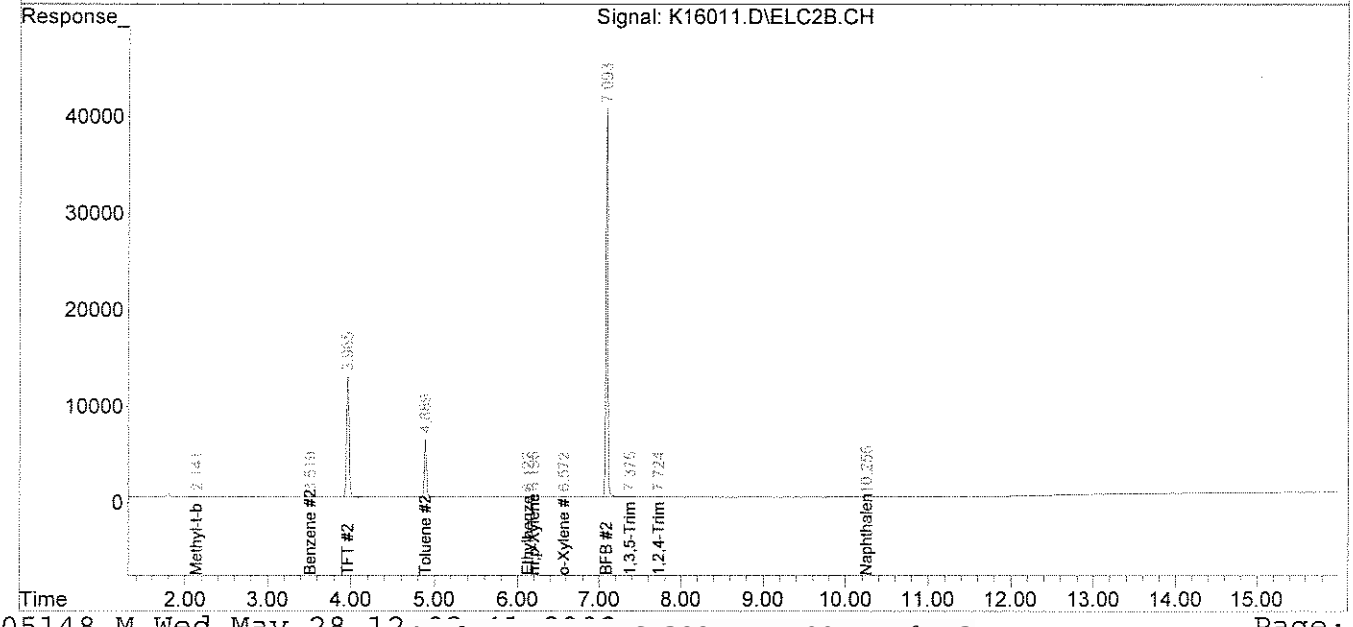
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K16011.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 28 May 2008 4:32 am
Operator :
Sample : 61399-3 DR 5-9-08
Misc : 5000
ALS Vial : 58 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 28 12:02:41 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





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South Burlington VT 05403

May 29, 2008

CLIENT SAMPLE ID

Project Name:	MEFUDS LO-58
Project Number:	03886.184
Client Sample ID:	LS58DW2-0508-94.5

SAMPLE DATA

Lab Sample ID:	61399-4
Matrix:	Aqueous
Percent Solid:	N/A
Dilution Factor:	1
Collection Date:	05/17/08
Lab Receipt Date:	05/22/08
Analysis Date:	05/28/08

ANALYTICAL RESULTS GASOLINE RANGE ORGANICS

Compound	Result	Units	Quantitation Limit
GRO	U	µg/L	10

ESTIMATED TARGET CONCENTRATIONS

Compound	Result	Units	Quantitation Limit
MTBE	U	µg/L	2
Benzene	U	µg/L	1

Surrogate Standard Recovery

Trifluorotoluene	91	%
Bromofluorobenzene	84	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to: "Maine HETL Method 4.2.17, September 6, 1995."

COMMENTS:

Authorized signature

4.2.17 GRO WATER REPORT

Sample Name	**61399-4**
Data File Name	K16012.D
Date Acquired	5/28/2008 4:56
Misc Info	5000
Dilution Factor	1.00

GRO ANALYTICAL RESULTS	ug/L	RL	
GRO	U	10	
Methyl-t-butylether	U	2	
Benzene	U	1	
Toluene	6	2	
Ethylbenzene	U	2	
m,p-Xylenes	U	2	
o-Xylene	U	2	
1,3,5-Trimethylbenzene	U	2	
1,2,4-Trimethylbenzene	U	2	
Naphthalene	U	2	
TFT % Recovery (FID)	91%	60-140 %	PASS
BFB % Recovery (FID)	84%	60-140 %	PASS
TFT % Recovery (PID)	95%	60-140 %	PASS
BFB % Recovery (PID)	88%	60-140 %	PASS

RAW DATA

FID RESULTS	Raw Inst Amount ug/L	Reviewed & Calculated Inst Amount ug/L	Target Response	Target RT	Exp RT	RT Window	RT Accept	Sample Amount ug/L
TFT	36.30		261769	3.965	3.967	0.030	OK	
BFB	33.49		194754	7.095	7.096	0.030	OK	
GRO (<200)	6.10	0.00	270344					
GRO (>200)	-0.28	0.00	270344					
GRO	6.10	0.00						0
PID RESULTS								
TFT #2	38.19		291682	3.965	3.967	0.030	OK	
BFB #2	35.21		710900	7.094	7.095	0.030	OK	
Methyl-t-butylether #2	0.29	0.00	2654	2.156	2.192	0.030	*	0
Benzene #2	0.07	0.00	1611	3.517	3.520	0.030	OK	0
Toluene #2	6.36	6.36	142632	4.889	4.891	0.030	OK	6
Ethylbenzene #2	0.05	0.00	948	6.132	6.132	0.030	OK	0
m,p-Xylene #2	0.05	0.00	1262	6.197	6.198	0.030	OK	0
o-Xylene #2	0.07	0.00	1387	6.581	6.569	0.030	OK	0
1,3,5-Trimethylbenzene #2	0.02	0.00	548	7.373	7.378	0.030	OK	0
1,2,4-Trimethylbenzene #2	0.08	0.00	1709	7.728	7.725	0.030	OK	0
Naphthalene #2	0.12	0.00	1802	10.256	10.257	0.030	OK	0

5/28/2008 12:04 PM

C:\msdchem\custrpt\GROH20SAMPLE.CRT

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K16012.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 28 May 2008 4:56 am
Operator :
Sample : 61399-4
Misc : 5000
ALS Vial : 59 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 28 12:02:42 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
1)	S TFT	3.965	3.965	261769	291682	36.301	38.187	
	Spiked Amount 40.000	Range 60 - 140		Recovery =		90.75%	95.47%	
2)	S BFB	7.095	7.094	194754	710900	33.490	35.213	
	Spiked Amount 40.000	Range 60 - 140		Recovery =		83.73%	88.03%	
	Target Compounds							
3)	TM Methyl-t-...	2.201	2.156	329	2654	NoCal	0.290	#
4)	TM Benzene	3.522	3.517	1415	1611	NoCal	0.067	#
5)	TM Toluene	4.890	4.889	77617	142632	NoCal	6.363	#
6)	TM Ethylbenzene	6.133	6.132	599	948	NoCal	0.048	#
7)	TM m,p-Xylene	6.198	6.197	1123	1262	NoCal	0.055	#
8)	TM o-Xylene	6.579	6.581	1530	1387	NoCal	0.071	#
9)	TM 1,3,5-Tri...	7.384	7.373	646	548	NoCal	0.021	#
10)	TM 1,2,4-Tri...	7.728	7.728	1721	1709	NoCal	0.084	#
11)	TM Naphthalene	10.255	10.256	1184	1802	NoCal	0.119	#
12)	GRO (<200)	6.238	0.000	270344	0	6.096m	N.D.	#

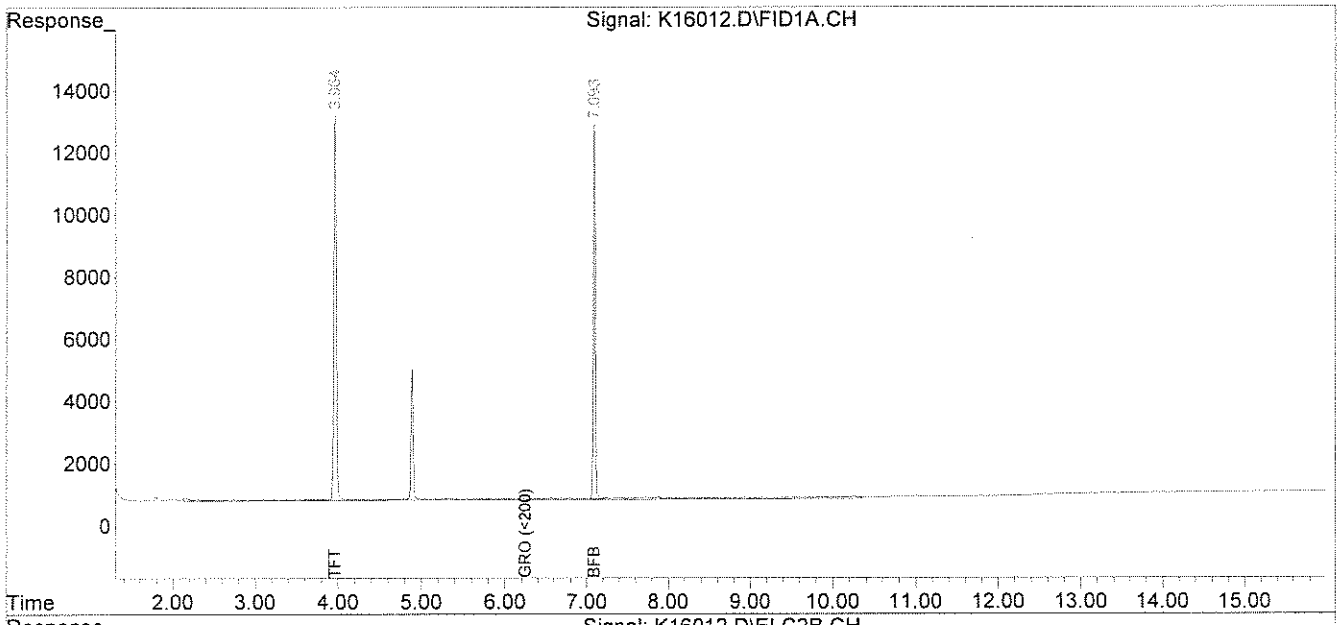
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

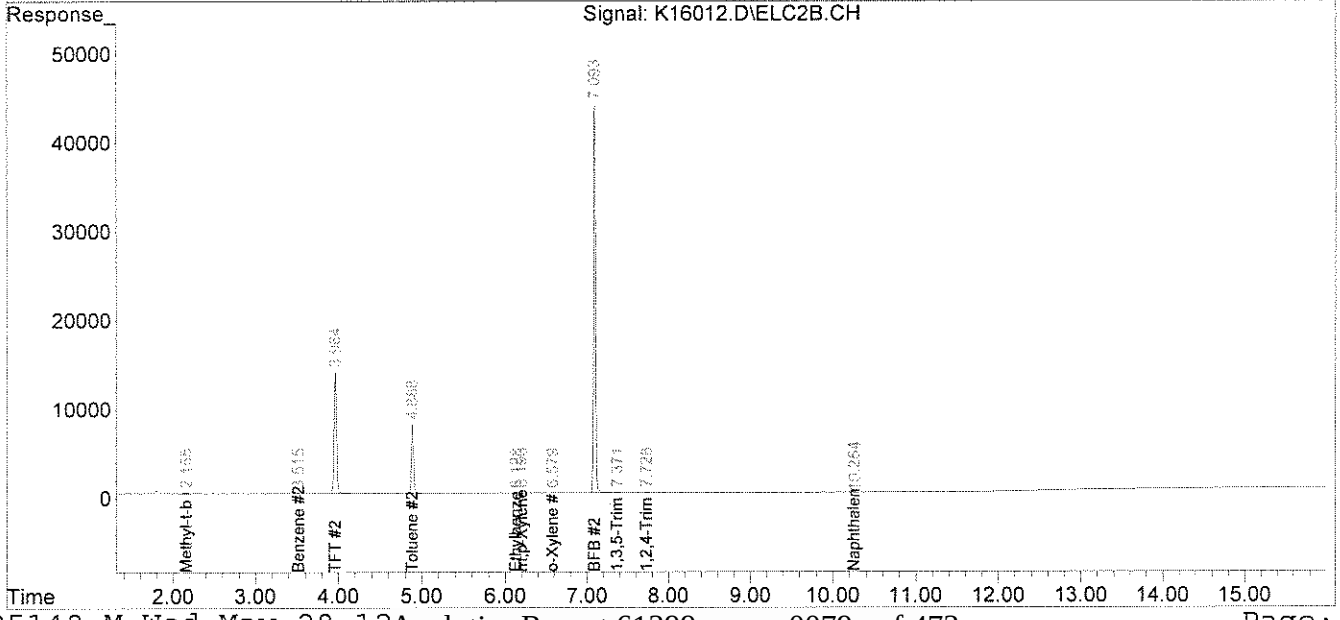
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K16012.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 28 May 2008 4:56 am
Operator :
Sample : 61399-4 GR 26908
Misc : 5000
ALS Vial : 59 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 28 12:02:42 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





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South Burlington VT 05403

May 29, 2008

CLIENT SAMPLE ID

Project Name:	MEFUDS LO-58
Project Number:	03886.184
Client Sample ID:	LS58DW2-0508-189

SAMPLE DATA

Lab Sample ID:	61399-5
Matrix:	Aqueous
Percent Solid:	N/A
Dilution Factor:	1
Collection Date:	05/17/08
Lab Receipt Date:	05/22/08
Analysis Date:	05/28/08

ANALYTICAL RESULTS GASOLINE RANGE ORGANICS

Compound	Result	Units	Quantitation Limit
GRO	U	µg/L	10

ESTIMATED TARGET CONCENTRATIONS

Compound	Result	Units	Quantitation Limit
MTBE	U	µg/L	2
Benzene	U	µg/L	1

Surrogate Standard Recovery

Trifluorotoluene	99	%
Bromofluorobenzene	92	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to: "Maine HETL Method 4.2.17, September 6, 1995."

COMMENTS:

Authorized signature

4.2.17 GRO WATER REPORT

Sample Name	61399-5
Data File Name	K16013.D
Date Acquired	5/28/2008 5:19
Misc Info	5000
Dilution Factor	1.00

GRO ANALYTICAL RESULTS	ug/L	RL	
GRO	U	10	
Methyl-t-butylether	U	2	
Benzene	U	1	
Toluene	U	2	
Ethylbenzene	U	2	
m,p-Xylenes	U	2	
o-Xylene	U	2	
1,3,5-Trimethylbenzene	U	2	
1,2,4-Trimethylbenzene	U	2	
Naphthalene	U	2	
TFT % Recovery (FID)	99%	60-140 %	PASS
BFB % Recovery (FID)	92%	60-140 %	PASS
TFT % Recovery (PID)	104%	60-140 %	PASS
BFB % Recovery (PID)	97%	60-140 %	PASS

RAW DATA

FID RESULTS	Raw Inst Amount ug/L	Reviewed & Calculated Inst Amount ug/L	Target Response	Target RT	Exp RT	RT Window	RT Accept	Sample Amount ug/L
TFT	39.77		286760	3.966	3.967	0.030	OK	
BFB	36.75		213722	7.095	7.096	0.030	OK	
GRO (<200)	-1.75	0.00	181199					
GRO (>200)	-8.18	0.00	181199					
GRO	-1.75	0.00						0
PID RESULTS								
TFT #2	41.68		318329	3.965	3.967	0.030	OK	
BFB #2	38.78		782987	7.094	7.095	0.030	OK	
Methyl-t-butylether #2	0.13	0.00	1169	2.163	2.192	0.030	OK	0
Benzene #2	0.03	0.00	830	3.521	3.520	0.030	OK	0
Toluene #2	0.94	0.00	21074	4.890	4.891	0.030	OK	0
Ethylbenzene #2	0.04	0.00	737	6.131	6.132	0.030	OK	0
m,p-Xylene #2	0.06	0.00	1293	6.197	6.198	0.030	OK	0
o-Xylene #2	0.07	0.00	1367	6.572	6.569	0.030	OK	0
1,3,5-Trimethylbenzene #2	0.04	0.00	1017	7.378	7.378	0.030	OK	0
1,2,4-Trimethylbenzene #2	0.09	0.00	1846	7.736	7.725	0.030	OK	0
Naphthalene #2	0.10	0.00	1471	10.257	10.257	0.030	OK	0

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K16013.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 28 May 2008 5:19 am
Operator :
Sample : 61399-5 ~~RE~~ J+.206
Misc : 5000
ALS Vial : 60 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 28 12:02:43 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
1)	S TFT	3.966	3.965	286760	318329	39.766	41.676
	Spiked Amount	40.000	Range 60 - 140		Recovery =	99.41%	104.19%
2)	S BFB	7.095	7.094	213722	782987	36.752	38.783
	Spiked Amount	40.000	Range 60 - 140		Recovery =	91.88%	96.96%
	Target Compounds						
3)	TM Methyl-t-...	2.159	2.163	1734	1169	NoCal	0.128 #
4)	TM Benzene	3.530	3.521	1191	830	NoCal	0.035 #
5)	TM Toluene	4.890	4.890	12035	21074	NoCal	0.940 #
6)	TM Ethylbenzene	6.134	6.131	623	737	NoCal	0.038 #
7)	TM m,p-Xylene	6.200	6.197	1090	1293	NoCal	0.056 #
8)	TM o-Xylene	6.569	6.572	646	1367	NoCal	0.070 #
9)	TM 1,3,5-Tri...	7.373	7.378	535	1017	NoCal	0.038 #
10)	TM 1,2,4-Tri...	7.726	7.736	1665	1846	NoCal	0.091 #
11)	TM Naphthalene	10.254	10.257	1168	1471	NoCal	0.097 #

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

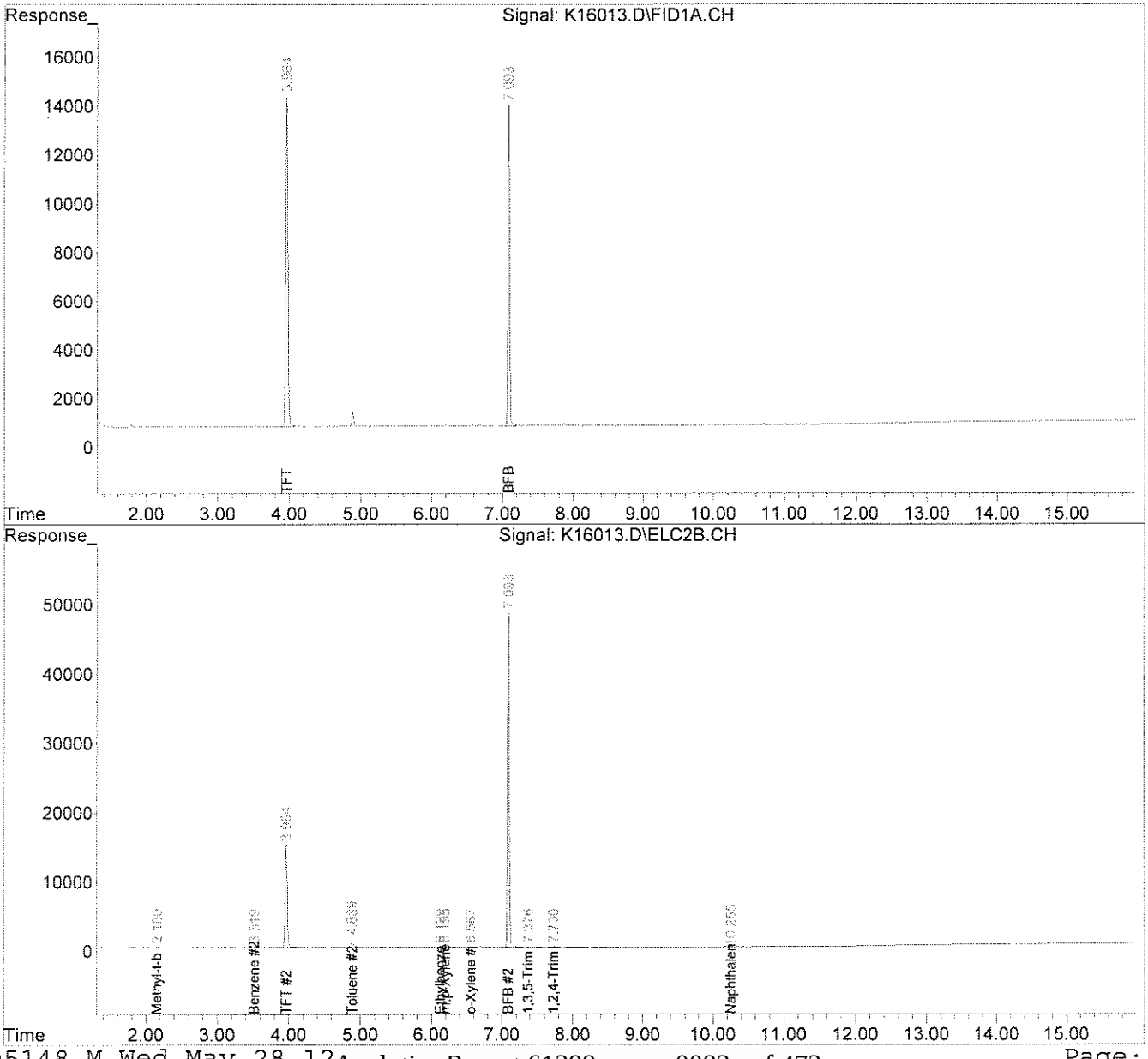
5-6-08

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K16013.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 28 May 2008 5:19 am
Operator :
Sample : 61399-5, LR 7490
Misc : 5000
ALS Vial : 60 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 28 12:02:43 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



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South Burlington VT 05403

May 29, 2008

CLIENT SAMPLE ID

Project Name:	MEFUDS LO-58
Project Number:	03886.184
Client Sample ID:	LS58DW2-0508-265

SAMPLE DATA

Lab Sample ID:	61399-6
Matrix:	Aqueous
Percent Solid:	N/A
Dilution Factor:	1
Collection Date:	05/17/08
Lab Receipt Date:	05/22/08
Analysis Date:	05/28/08

ANALYTICAL RESULTS GASOLINE RANGE ORGANICS

Compound	Result	Units	Quantitation Limit
GRO	U	µg/L	10

ESTIMATED TARGET CONCENTRATIONS

Compound	Result	Units	Quantitation Limit
MTBE	U	µg/L	2
Benzene	U	µg/L	1

Surrogate Standard Recovery

Trifluorotoluene	95	%
Bromofluorobenzene	86	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to: "Maine HETL Method 4.2.17, September 6, 1995."

COMMENTS:

Authorized signature 

4.2.17 GRO WATER REPORT

Sample Name	**61399-6**
Data File Name	K16014.D
Date Acquired	5/28/2008 5:43
Misc Info	5000
Dilution Factor	1.00

GRO ANALYTICAL RESULTS	ug/L	RL	
GRO	U	10	
Methyl-t-butylether	U	2	
Benzene	U	1	
Toluene	3	2	
Ethylbenzene	U	2	
m,p-Xylenes	U	2	
o-Xylene	U	2	
1,3,5-Trimethylbenzene	U	2	
1,2,4-Trimethylbenzene	U	2	
Naphthalene	U	2	
TFT % Recovery (FID)	95%	60-140 %	PASS
BFB % Recovery (FID)	86%	60-140 %	PASS
TFT % Recovery (PID)	100%	60-140 %	PASS
BFB % Recovery (PID)	91%	60-140 %	PASS

RAW DATA

FID RESULTS	Raw Inst Amount ug/L	Reviewed & Calculated Inst Amount ug/L	Target Response	Target RT	Exp RT	RT Window	RT Accept	Sample Amount ug/L
TFT	37.89		273220	3.967	3.967	0.030	OK	
BFB	34.58		201116	7.095	7.096	0.030	OK	
GRO (<200)	1.97	0.00	223454					
GRO (>200)	-4.43	0.00	223454					
GRO	1.97	0.00						0
PID RESULTS								
TFT #2	39.83		304238	3.966	3.967	0.030	OK	
BFB #2	36.52		737272	7.094	7.095	0.030	OK	
Methyl-t-butylether #2	0.05	0.00	473	2.209	2.192	0.030	OK	0
Benzene #2	0.08	0.00	1956	3.521	3.520	0.030	OK	0
Toluene #2	2.82	2.82	63244	4.890	4.891	0.030	OK	3
Ethylbenzene #2	0.06	0.00	1175	6.132	6.132	0.030	OK	0
m,p-Xylene #2	0.13	0.00	3102	6.197	6.198	0.030	OK	0
o-Xylene #2	0.09	0.00	1762	6.578	6.569	0.030	OK	0
1,3,5-Trimethylbenzene #2	0.03	0.00	765	7.375	7.378	0.030	OK	0
1,2,4-Trimethylbenzene #2	0.09	0.00	1891	7.726	7.725	0.030	OK	0
Naphthalene #2	0.15	0.00	2310	10.256	10.257	0.030	OK	0

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K16014.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 28 May 2008 5:43 am
Operator :
Sample : 61399-6
Misc : 5000
ALS Vial : 61 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 28 12:02:44 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
1)	S TFT	3.967	3.966	273220	304238	37.889	39.831	
	Spiked Amount	40.000	Range 60 - 140		Recovery =	94.72%	99.58%	
2)	S BFB	7.095	7.094	201116	737272	34.584	36.519	
	Spiked Amount	40.000	Range 60 - 140		Recovery =	86.46%	91.30%	
	Target Compounds							
3)	TM Methyl-t-...	2.151	2.209	362	473	NoCal	0.052	#
4)	TM Benzene	3.521	3.521	1296	1956	NoCal	0.082	#
5)	TM Toluene	4.891	4.890	34077	63244	NoCal	2.821	#
6)	TM Ethylbenzene	6.132	6.132	1026	1175	NoCal	0.060	#
7)	TM m,p-Xylene	6.197	6.197	1565	3102	NoCal	0.134	#
8)	TM o-Xylene	6.560	6.578	2022	1762	NoCal	0.090	#
9)	TM 1,3,5-Tri...	7.381	7.375	580	765	NoCal	0.029	#
10)	TM 1,2,4-Tri...	7.726	7.726	1932	1891	NoCal	0.093	#
11)	TM Naphthalene	10.258	10.256	1137	2310	NoCal	0.152	#
12)	GRO (<200)	6.238	0.000	223454	0	1.972m	N.D.	#

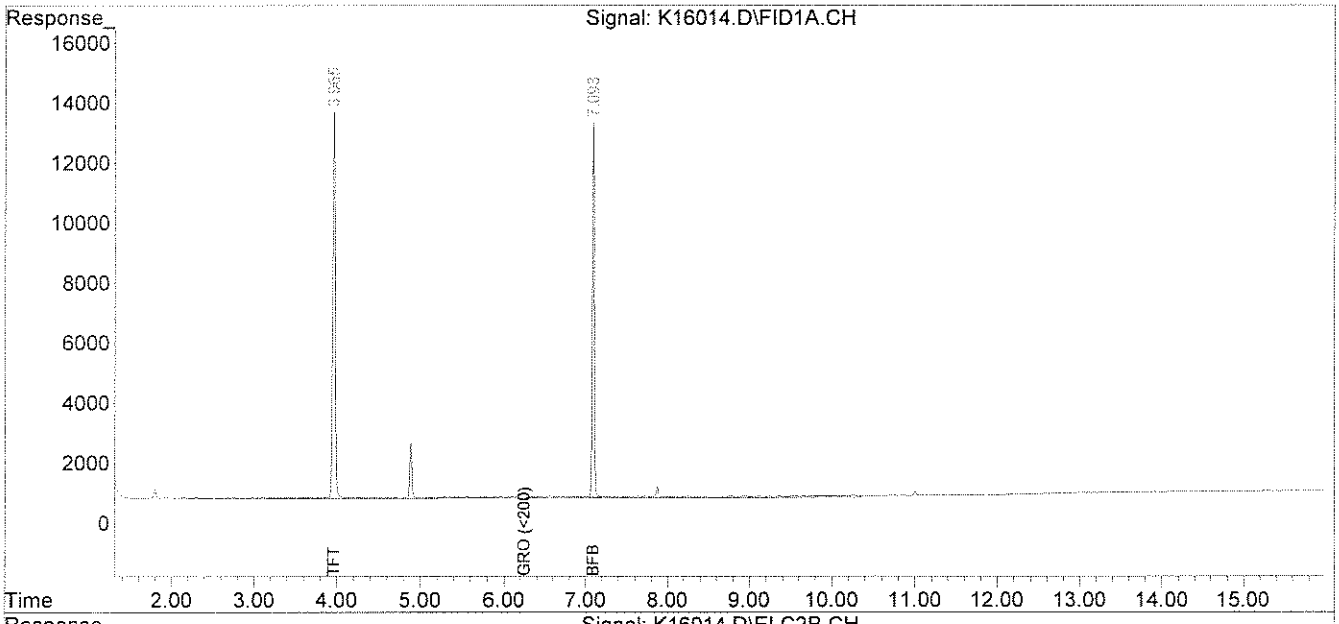
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

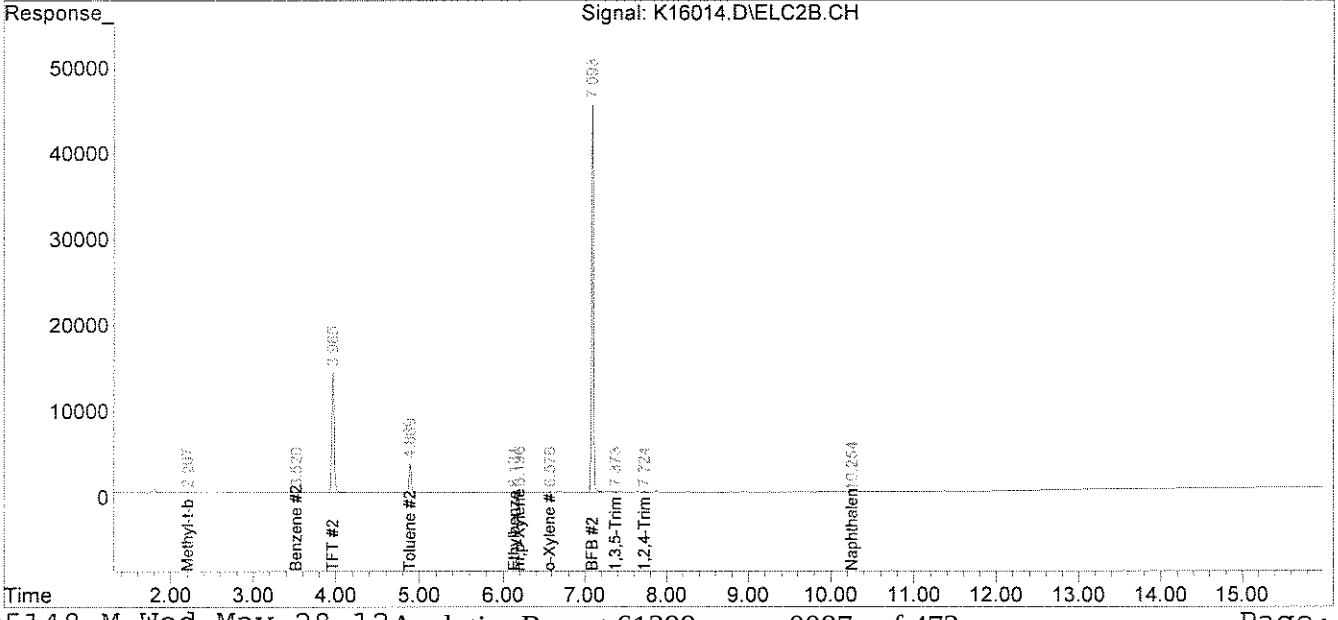
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K16014.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 28 May 2008 5:43 am
Operator :
Sample : 61399-6
Misc : 5000
ALS Vial : 61 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 28 12:02:44 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





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May 29, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58
Project Number: 03886.184
Client Sample ID: RB-051808-01

SAMPLE DATA

Lab Sample ID: 61399-7
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 05/18/08
Lab Receipt Date: 05/22/08
Analysis Date: 05/28/08

ANALYTICAL RESULTS GASOLINE RANGE ORGANICS

Compound	Result	Units	Quantitation Limit
GRO	U	µg/L	10

ESTIMATED TARGET CONCENTRATIONS

Compound	Result	Units	Quantitation Limit
MTBE	U	µg/L	2
Benzene	U	µg/L	1

Surrogate Standard Recovery

Trifluorotoluene	94	%
Bromofluorobenzene	86	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to: "Maine HETL Method 4.2.17, September 6, 1995."

COMMENTS:

Authorized signature

4.2.17 GRO WATER REPORT

Sample Name	**61399-7**
Data File Name	K16015.D
Date Acquired	5/28/2008 6:06
Misc Info	5000
Dilution Factor	1.00

GRO ANALYTICAL RESULTS	ug/L	RL	
GRO	U	10	
Methyl-t-butylether	U	2	
Benzene	U	1	
Toluene	U	2	
Ethylbenzene	U	2	
m,p-Xylenes	U	2	
o-Xylene	U	2	
1,3,5-Trimethylbenzene	U	2	
1,2,4-Trimethylbenzene	U	2	
Naphthalene	U	2	
TFT % Recovery (FID)	94%	60-140 %	PASS
BFB % Recovery (FID)	86%	60-140 %	PASS
TFT % Recovery (PID)	98%	60-140 %	PASS
BFB % Recovery (PID)	91%	60-140 %	PASS

RAW DATA

FID RESULTS	Raw Inst Amount ug/L	Reviewed & Calculated Inst Amount ug/L	Target Response	Target RT	Exp RT	RT Window	RT Accept	Sample Amount ug/L
TFT	37.54		270738	3.966	3.967	0.030	OK	
BFB	34.33		199635	7.095	7.096	0.030	OK	
GRO (<200)	0.94	0.00	211783					
GRO (>200)	-5.47	0.00	211783					
GRO	0.94	0.00						0
PID RESULTS								
TFT #2	39.39		300856	3.966	3.967	0.030	OK	
BFB #2	36.23		731370	7.094	7.095	0.030	OK	
Methyl-t-butylether #2	0.01	0.00	84	2.209	2.192	0.030	OK	0
Benzene #2	0.04	0.00	1019	3.517	3.520	0.030	OK	0
Toluene #2	0.99	0.00	22153	4.890	4.891	0.030	OK	0
Ethylbenzene #2	0.06	0.00	1146	6.133	6.132	0.030	OK	0
m,p-Xylene #2	0.09	0.00	2163	6.198	6.198	0.030	OK	0
o-Xylene #2	0.15	0.00	2896	6.557	6.569	0.030	OK	0
1,3,5-Trimethylbenzene #2	0.03	0.00	875	7.377	7.378	0.030	OK	0
1,2,4-Trimethylbenzene #2	0.12	0.00	2401	7.727	7.725	0.030	OK	0
Naphthalene #2	0.09	0.00	1412	10.254	10.257	0.030	OK	0

5/28/2008 12:05 PM

C:\msdchem\custrpt\GROH20SAMPLE.CRT

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K16015.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 28 May 2008 6:06 am
Operator :
Sample : 61399-7
Misc : 5000
ALS Vial : 62 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 28 12:02:46 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
1)	S TFT	3.966	3.966	270738	300856	37.544	39.388	
	Spiked Amount	40.000	Range 60 - 140		Recovery =	93.86%	98.47%	
2)	S BFB	7.095	7.094	199635	731370	34.330	36.227	
	Spiked Amount	40.000	Range 60 - 140		Recovery =	85.82%	90.57%	
	Target Compounds							
3)	TM Methyl-t-...	2.187	2.209	112	84	NoCal	0.009	#
4)	TM Benzene	3.519	3.517	869	1019	NoCal	0.043	#
5)	TM Toluene	4.891	4.890	11699	22153	NoCal	0.988	#
6)	TM Ethylbenzene	6.131	6.133	1366	1146	NoCal	0.058	#
7)	TM m,p-Xylene	6.198	6.197	1569	2163	NoCal	0.094	#
8)	TM o-Xylene	6.554	6.557	2283	2896	NoCal	0.148	#
9)	TM 1,3,5-Tri...	7.384	7.377	330	875	NoCal	0.038	#
10)	TM 1,2,4-Tri...	7.718	7.727	1169	2401	NoCal	0.118	#
11)	TM Naphthalene	10.250	10.254	534	1412	NoCal	0.093	#
12)	GRO (<200)	6.238	0.000	211783	0	0.945m	N.D.	#

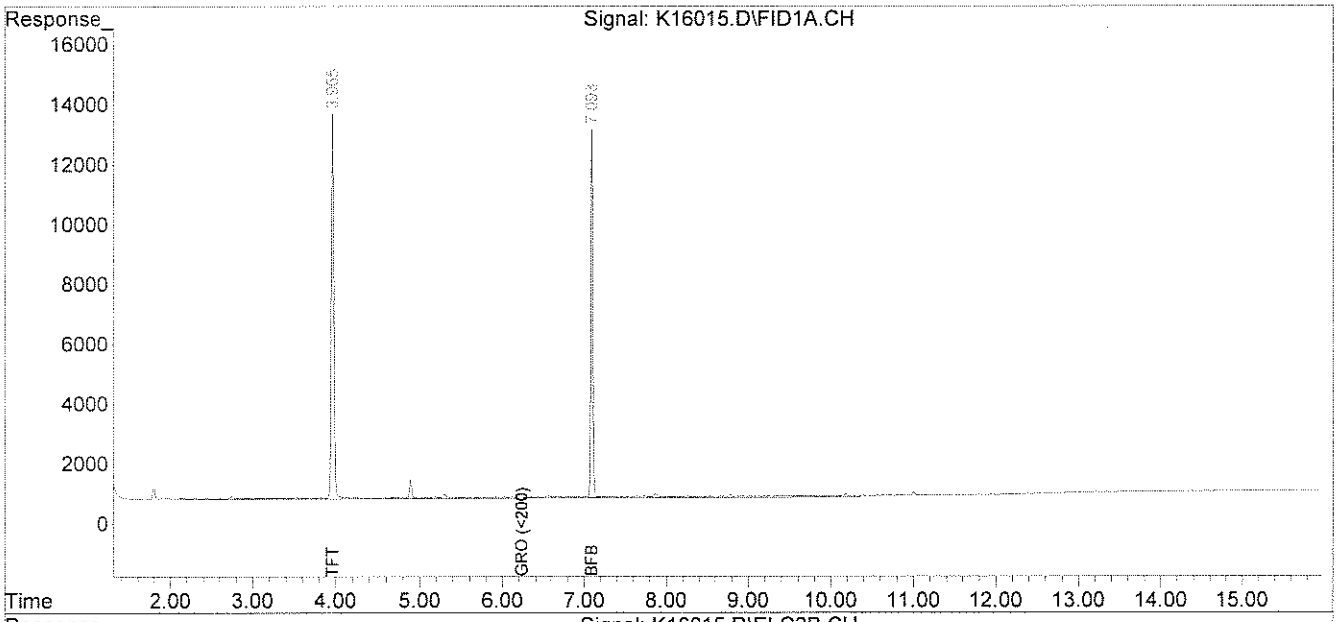
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

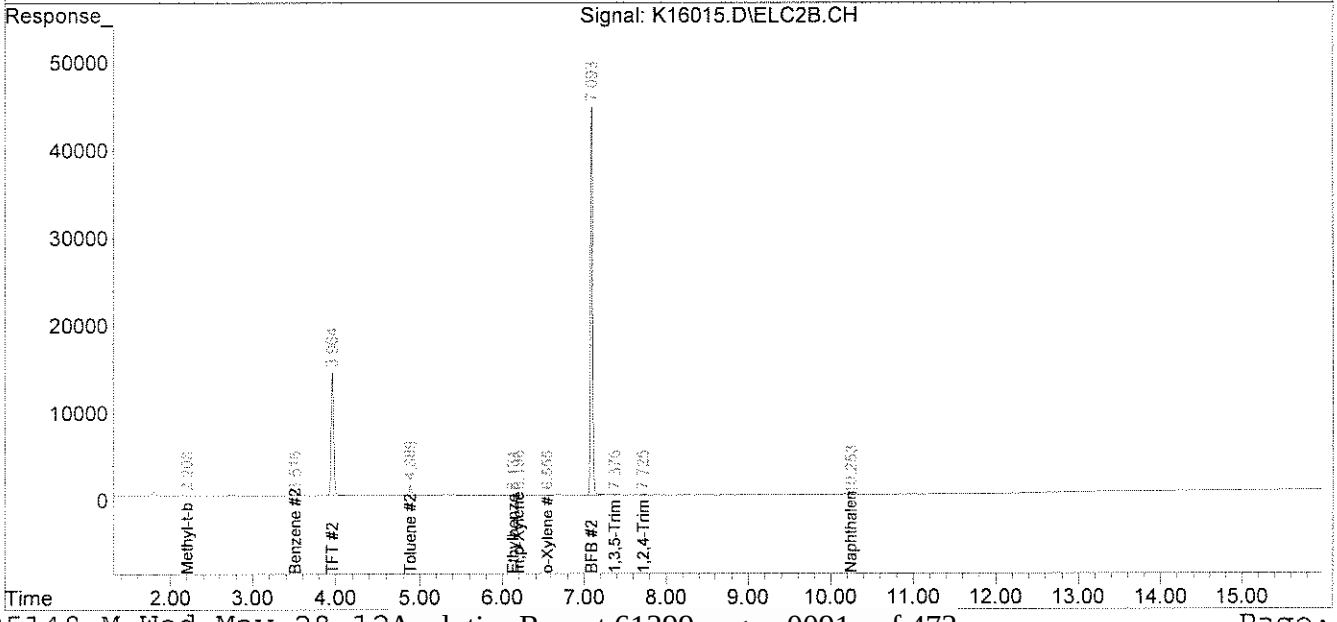
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K16015.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 28 May 2008 6:06 am
Operator :
Sample : 61399-7
Misc : 5000
ALS Vial : 62 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 28 12:02:46 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





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May 29, 2008

CLIENT SAMPLE ID

Project Name:	MEFUDS LO-58
Project Number:	03886.184
Client Sample ID:	LS58DW1-0508-056

SAMPLE DATA

Lab Sample ID:	61399-8
Matrix:	Aqueous
Percent Solid:	N/A
Dilution Factor:	1
Collection Date:	05/18/08
Lab Receipt Date:	05/22/08
Analysis Date:	05/28/08

ANALYTICAL RESULTS GASOLINE RANGE ORGANICS

Compound	Result	Units	Quantitation Limit
GRO	27	µg/L	10

ESTIMATED TARGET CONCENTRATIONS

Compound	Result	Units	Quantitation Limit
MTBE	U	µg/L	2
Benzene	U	µg/L	1

Surrogate Standard Recovery

Trifluorotoluene	95	%
Bromofluorobenzene	89	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to: "Maine HETL Method 4.2.17, September 6, 1995."

COMMENTS:

Authorized signature

4.2.17 GRO WATER REPORT

Sample Name	**61399-8**
Data File Name	K16016.D
Date Acquired	5/28/2008 6:30
Misc Info	5000
Dilution Factor	1.00

GRO ANALYTICAL RESULTS	ug/L	RL	
GRO	27	10	
Methyl-t-butylether	U	2	
Benzene	U	1	
Toluene	26	2	
Ethylbenzene	U	2	
m,p-Xylenes	U	2	
o-Xylene	U	2	
1,3,5-Trimethylbenzene	U	2	
1,2,4-Trimethylbenzene	U	2	
Naphthalene	U	2	
TFT % Recovery (FID)	95%	60-140 %	PASS
BFB % Recovery (FID)	89%	60-140 %	PASS
TFT % Recovery (PID)	106%	60-140 %	PASS
BFB % Recovery (PID)	95%	60-140 %	PASS

RAW DATA

FID RESULTS	Raw Inst Amount ug/L	Reviewed & Calculated Inst Amount ug/L	Target Response	Target RT	Exp RT	RT Window	RT Accept	Sample Amount ug/L
TFT	37.84		272885	3.965	3.967	0.030	OK	
BFB	35.67		207429	7.094	7.096	0.030	OK	
GRO (<200)	26.69	26.69	504509					
GRO (>200)	20.48	20.48	504509					
GRO	26.69	26.69						27
PID RESULTS								
TFT #2	42.54		324953	3.964	3.967	0.030	OK	
BFB #2	37.88		764676	7.094	7.095	0.030	OK	
Methyl-t-butylether #2	0.21	0.00	1888	2.164	2.192	0.030	OK	0
Benzene #2	0.17	0.00	3958	3.517	3.520	0.030	OK	0
Toluene #2	25.74	25.74	577013	4.889	4.891	0.030	OK	26
Ethylbenzene #2	0.03	0.00	606	6.129	6.132	0.030	OK	0
m,p-Xylene #2	0.06	0.00	1293	6.197	6.198	0.030	OK	0
o-Xylene #2	0.13	0.00	2557	6.556	6.569	0.030	OK	0
1,3,5-Trimethylbenzene #2	0.03	0.00	826	7.381	7.378	0.030	OK	0
1,2,4-Trimethylbenzene #2	0.13	0.00	2565	7.743	7.725	0.030	OK	0
Naphthalene #2	0.17	0.00	2529	10.256	10.257	0.030	OK	0

5/28/2008 12:05 PM

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K16016.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 28 May 2008 6:30 am
Operator :
Sample : 61399-8
Misc : 5000
ALS Vial : 63 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 28 12:02:47 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
1)	S TFT	3.965	3.964	272885	324953	37.842	42.543	
	Spiked Amount	40.000	Range 60 - 140		Recovery =	94.60%	106.36%	
2)	S BFB	7.094	7.094	207429	764676	35.670	37.876	
	Spiked Amount	40.000	Range 60 - 140		Recovery =	89.18%	94.69%	
	Target Compounds							
3)	TM Methyl-t-...	2.201	2.164	473	1888	NoCal	0.207	#
4)	TM Benzene	3.518	3.517	2170	3958	NoCal	0.166	#
5)	TM Toluene	4.890	4.889	311521	577013	NoCal	25.739	#
6)	TM Ethylbenzene	6.133	6.129	798	606	NoCal	0.031	#
7)	TM m,p-Xylene	6.197	6.197	1001	1293	NoCal	0.056	#
8)	TM o-Xylene	6.553	6.556	1824	2557	NoCal	0.130	#
9)	TM 1,3,5-Tri...	7.375	7.381	370	826	NoCal	0.031	#
10)	TM 1,2,4-Tri...	7.713	7.743	1579	2565	NoCal	0.126	#
11)	TM Naphthalene	10.258	10.256	1591	2529	NoCal	0.167	#
12)	GRO (<200)	6.238	0.000	504509	0	26.692m	N.D.	#
13)	GRO (>200)	6.238	0.000	504509	0	20.484m	N.D.	#

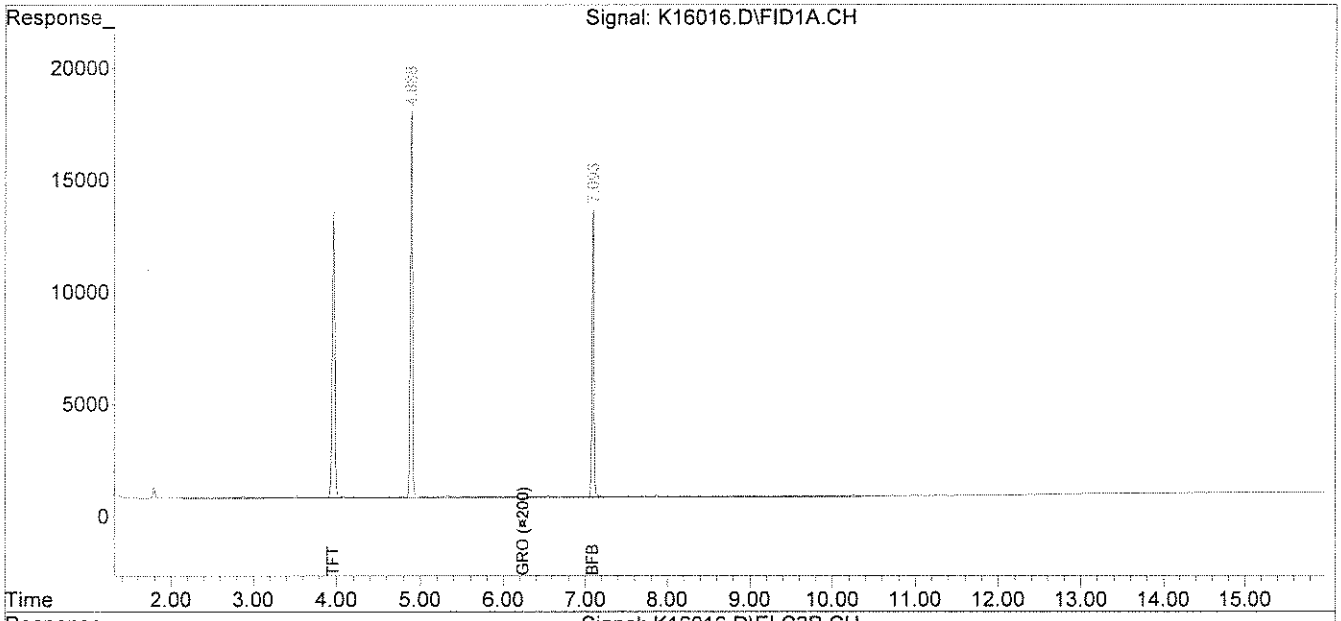
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

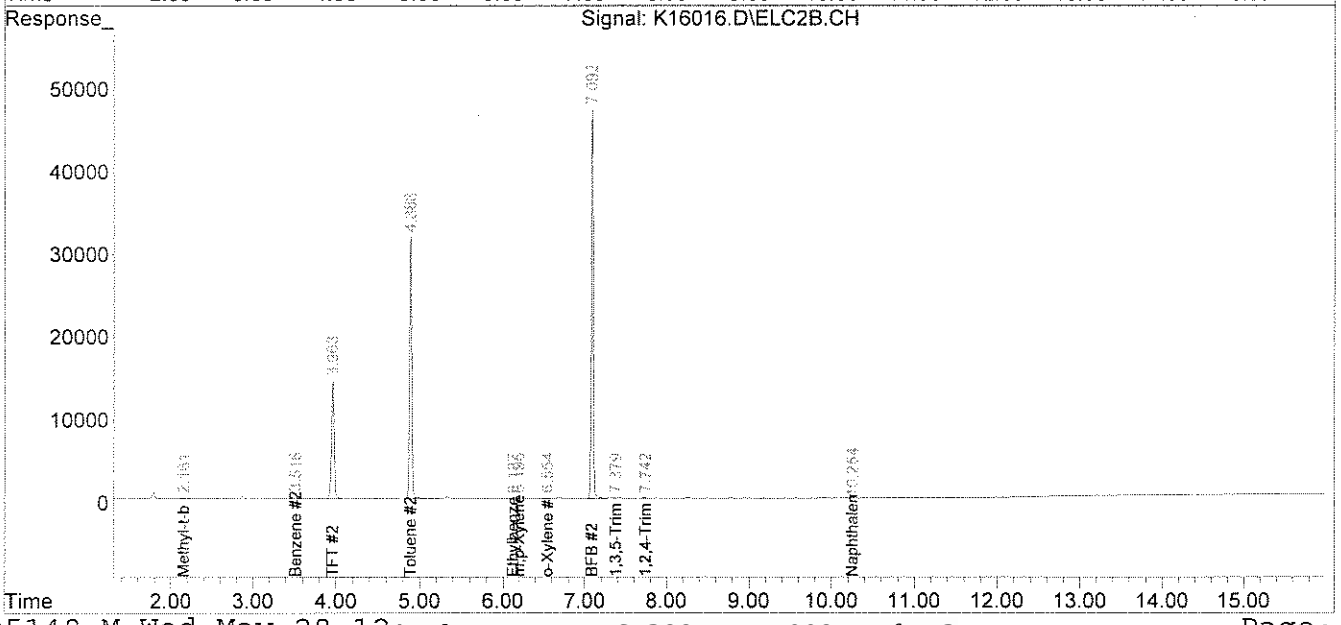
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K16016.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 28 May 2008 6:30 am
Operator :
Sample : 61399-8
Misc : 5000
ALS Vial : 63 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 28 12:02:47 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





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May 29, 2008

CLIENT SAMPLE ID

Project Name:	MEFUDS LO-58
Project Number:	03886.184
Client Sample ID:	LS58DW1-0508-051

SAMPLE DATA

Lab Sample ID:	61399-9
Matrix:	Aqueous
Percent Solid:	N/A
Dilution Factor:	1
Collection Date:	05/19/08
Lab Receipt Date:	05/22/08
Analysis Date:	05/28/08

ANALYTICAL RESULTS GASOLINE RANGE ORGANICS

Compound	Result	Units	Quantitation Limit
GRO	U	µg/L	10

ESTIMATED TARGET CONCENTRATIONS

Compound	Result	Units	Quantitation Limit
MTBE	U	µg/L	2
Benzene	U	µg/L	1

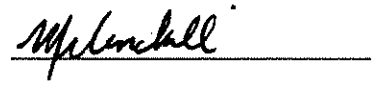
Surrogate Standard Recovery

Trifluorotoluene	94	%
Bromofluorobenzene	86	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to: "Maine HETL Method 4.2.17, September 6, 1995."

COMMENTS:

Authorized signature 

4.2.17 GRO WATER REPORT

Sample Name	**61399-9**
Data File Name	K16017.D
Date Acquired	5/28/2008 6:53
Misc Info	5000
Dilution Factor	1.00

GRO ANALYTICAL RESULTS	ug/L	RL	
GRO	U	10	
Methyl-t-butylether	U	2	
Benzene	U	1	
Toluene	U	2	
Ethylbenzene	U	2	
m,p-Xylenes	U	2	
o-Xylene	U	2	
1,3,5-Trimethylbenzene	U	2	
1,2,4-Trimethylbenzene	U	2	
Naphthalene	U	2	
TFT % Recovery (FID)	94%	60-140 %	PASS
BFB % Recovery (FID)	86%	60-140 %	PASS
TFT % Recovery (PID)	111%	60-140 %	PASS
BFB % Recovery (PID)	91%	60-140 %	PASS

RAW DATA

FID RESULTS	Raw Inst Amount ug/L	Reviewed & Calculated Inst Amount ug/L	Target Response	Target RT	Exp RT	RT Window	RT Accept	Sample Amount ug/L
TFT	37.55		270812	3.966	3.967	0.030	OK	
BFB	34.25		199171	7.094	7.096	0.030	OK	
GRO (<200)	0.21	0.00	203482					
GRO (>200)	-6.20	0.00	203482					
GRO	0.21	0.00						0
PID RESULTS								
TFT #2	44.50		339910	3.965	3.967	0.030	OK	
BFB #2	36.32		733183	7.094	7.095	0.030	OK	
Methyl-t-butylether #2	0.05	0.00	482	2.232	2.192	0.030	*	0
Benzene #2	0.02	0.00	364	3.531	3.520	0.030	OK	0
Toluene #2	0.40	0.00	9056	4.890	4.891	0.030	OK	0
Ethylbenzene #2	0.02	0.00	458	6.135	6.132	0.030	OK	0
m,p-Xylene #2	0.03	0.00	714	6.197	6.198	0.030	OK	0
o-Xylene #2	0.08	0.00	1600	6.592	6.569	0.030	OK	0
1,3,5-Trimethylbenzene #2	0.02	0.00	411	7.385	7.378	0.030	OK	0
1,2,4-Trimethylbenzene #2	0.10	0.00	1939	7.746	7.725	0.030	OK	0
Naphthalene #2	0.06	0.00	933	10.256	10.257	0.030	OK	0

5/28/2008 12:05 PM

C:\msdchem\custrpt\GROH20SAMPLE.CRT

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K16017.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 28 May 2008 6:53 am
Operator :
Sample : 61399-9
Misc : 5000
ALS Vial : 64 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 28 12:02:48 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
1)	S TFT	3.966	3.965	270812	339910	37.555	44.501	
	Spiked Amount 40.000	Range 60 - 140		Recovery =		93.89%	111.25%	
2)	S BFB	7.094	7.094	199171	733183	34.250	36.316	
	Spiked Amount 40.000	Range 60 - 140		Recovery =		85.63%	90.79%	
	Target Compounds							
3)	TM Methyl-t-...	2.156	2.232	2881	482	NoCal	0.053	#
4)	TM Benzene	3.514	3.531	364	364	NoCal	0.015	#
5)	TM Toluene	4.891	4.890	5231	9056	NoCal	0.404	#
6)	TM Ethylbenzene	6.144	6.135	211	458	NoCal	0.023	#
7)	TM m,p-Xylene	6.199	6.197	754	714	NoCal	0.031	#
8)	TM o-Xylene	6.582	6.592	1270	1600	NoCal	0.082	#
9)	TM 1,3,5-Tri...	7.382	7.385	443	411	NoCal	0.015	#
10)	TM 1,2,4-Tri...	7.722	7.746	967	1939	NoCal	0.095	#
11)	TM Naphthalene	10.259	10.256	708	933	NoCal	0.062	#
12)	GRO (<200)	6.238	0.000	203482	0	0.215m	N.D.	#

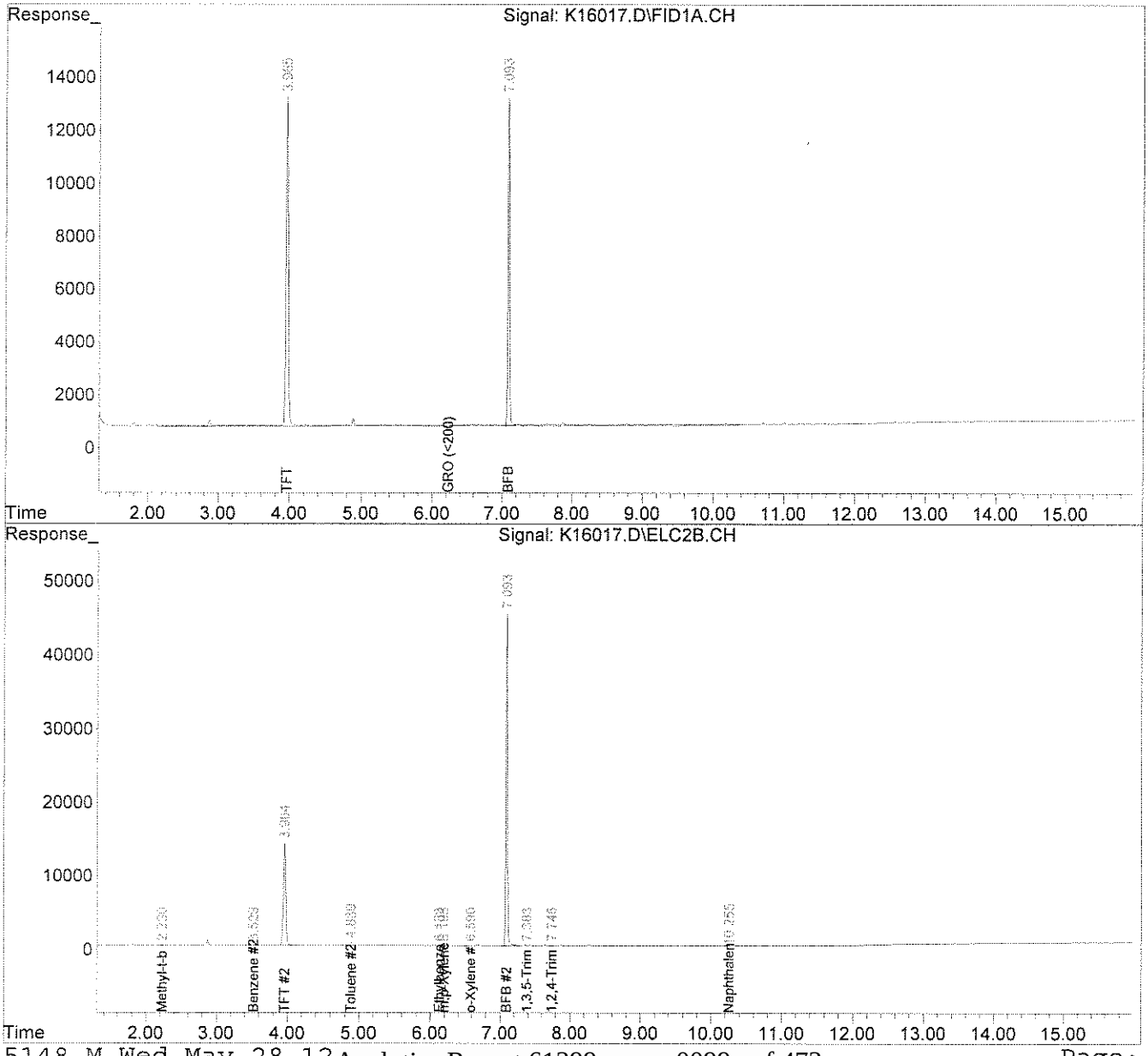
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K16017.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 28 May 2008 6:53 am
Operator :
Sample : 61399-9
Misc : 5000
ALS Vial : 64 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 28 12:02:48 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



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May 29, 2008

CLIENT SAMPLE ID

Project Name:	MEFUDS LO-58
Project Number:	03886.184
Client Sample ID:	LS58DW1-0508-041

SAMPLE DATA

Lab Sample ID:	61399-10
Matrix:	Aqueous
Percent Solid:	N/A
Dilution Factor:	1
Collection Date:	05/19/08
Lab Receipt Date:	05/22/08
Analysis Date:	05/28/08

ANALYTICAL RESULTS GASOLINE RANGE ORGANICS

Compound	Result	Units	Quantitation Limit
GRO	**14**	µg/L	10

ESTIMATED TARGET CONCENTRATIONS

Compound	Result	Units	Quantitation Limit
MTBE	U	µg/L	2
Benzene	U	µg/L	1

Surrogate Standard Recovery

Trifluorotoluene	74	%
Bromofluorobenzene	65	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to: "Maine HETL Method 4.2.17, September 6, 1995."

COMMENTS:

Authorized signature 

4.2.17 GRO WATER REPORT

Sample Name	**61399-10**
Data File Name	K16018.D
Date Acquired	5/28/2008 7:17
Misc Info	5000
Dilution Factor	1.00

GRO ANALYTICAL RESULTS	ug/L	RL	
GRO	14	10	
Methyl-t-butylether	U	2	
Benzene	U	1	
Toluene	14	2	
Ethylbenzene	U	2	
m,p-Xylenes	U	2	
o-Xylene	U	2	
1,3,5-Trimethylbenzene	U	2	
1,2,4-Trimethylbenzene	U	2	
Naphthalene	U	2	
TFT % Recovery (FID)	74%	60-140 %	PASS
BFB % Recovery (FID)	65%	60-140 %	PASS
TFT % Recovery (PID)	92%	60-140 %	PASS
BFB % Recovery (PID)	69%	60-140 %	PASS

RAW DATA

FID RESULTS	Raw Inst Amount ug/L	Reviewed & Calculated Inst Amount ug/L	Target Response	Target RT	Exp RT	RT Window	RT Accept	Sample Amount ug/L
TFT	29.66		213904	3.965	3.967	0.030	OK	
BFB	25.90		150623	7.094	7.096	0.030	OK	
GRO (<200)	13.70	13.70	356804					
GRO (>200)	7.39	0.00	356804					
GRO	13.70	13.70						14
PID RESULTS								
TFT #2	36.65		279907	3.964	3.967	0.030	OK	
BFB #2	27.49		554915	7.094	7.095	0.030	OK	
Methyl-t-butylether #2	0.12	0.00	1085	2.163	2.192	0.030	OK	0
Benzene #2	0.07	0.00	1678	3.520	3.520	0.030	OK	0
Toluene #2	13.73	13.73	307779	4.890	4.891	0.030	OK	14
Ethylbenzene #2	0.03	0.00	552	6.129	6.132	0.030	OK	0
m,p-Xylene #2	0.05	0.00	1041	6.197	6.198	0.030	OK	0
o-Xylene #2	0.07	0.00	1296	6.551	6.569	0.030	OK	0
1,3,5-Trimethylbenzene #2	0.02	0.00	465	7.382	7.378	0.030	OK	0
1,2,4-Trimethylbenzene #2	0.12	0.00	2436	7.718	7.725	0.030	OK	0
Naphthalene #2	0.07	0.00	1091	10.260	10.257	0.030	OK	0

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K16018.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 28 May 2008 7:17 am
Operator :
Sample : 61399-10
Misc : 5000
ALS Vial : 65 Sample Multiplier: 1

5/28/08

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 28 12:02:49 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
1)	S TFT	3.965	3.964	213904	279907	29.663	36.645	
	Spiked Amount 40.000	Range 60 - 140		Recovery =		74.16%	91.61%	
2)	S BFB	7.094	7.094	150623	554915	25.901	27.486	
	Spiked Amount 40.000	Range 60 - 140		Recovery =		64.75%	68.72%	
	Target Compounds							
3)	TM Methyl-t-...	2.219	2.163	60	1085	NoCal	~~0.119~~	#
4)	TM Benzene	3.516	3.520	1169	1678	NoCal	~~0.070~~	#
5)	TM Toluene	4.890	4.890	164536	307779	NoCal	13.729	#
6)	TM Ethylbenzene	6.135	6.129	554	552	NoCal	0.028	#
7)	TM m,p-Xylene	6.197	6.197	778	1041	NoCal	0.045	#
8)	TM o-Xylene	6.584	6.551	721	1296	NoCal	0.066	#
9)	TM 1,3,5-Tri...	7.364	7.382	183	465	NoCal	0.017	#
10)	TM 1,2,4-Tri...	7.712	7.718	1662	2436	NoCal	0.120	#
11)	TM Naphthalene	10.256	10.260	539	1091	NoCal	0.072	#
12)	GRO (<200)	6.238	0.000	356804	0	13.700m	N.D.	#
13)	GRO (>200)	6.238	0.000	356804	0	~~7.389m~~	N.D.	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

26.908

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May 29, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58
Project Number: 03886.184
Client Sample ID: LS58DW1-0508-034

SAMPLE DATA

Lab Sample ID: 61399-11
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 05/20/08
Lab Receipt Date: 05/22/08
Analysis Date: 05/28/08

ANALYTICAL RESULTS GASOLINE RANGE ORGANICS

Compound	Result	Units	Quantitation Limit
GRO	**24**	µg/L	10

ESTIMATED TARGET CONCENTRATIONS

Compound	Result	Units	Quantitation Limit
MTBE	U	µg/L	2
Benzene	U	µg/L	1

Surrogate Standard Recovery

Trifluorotoluene	85	%
Bromofluorobenzene	80	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to: "Maine HETL Method 4.2.17, September 6, 1995."

COMMENTS:

Authorized signature

4.2.17 GRO WATER REPORT

Sample Name	**61399-11**
Data File Name	K16019.D
Date Acquired	5/28/2008 7:40
Misc Info	5000
Dilution Factor	1.00

GRO ANALYTICAL RESULTS	ug/L	RL	
GRO	24	10	
Methyl-t-butylether	U	2	
Benzene	U	1	
Toluene	27 NT	2	
Ethylbenzene	U	2	
m,p-Xylenes	U	2	
o-Xylene	U	2	
1,3,5-Trimethylbenzene	U	2	
1,2,4-Trimethylbenzene	U	2	
Naphthalene	U	2	
TFT % Recovery (FID)	85%	60-140 %	PASS
BFB % Recovery (FID)	80%	60-140 %	PASS
TFT % Recovery (PID)	101%	60-140 %	PASS
BFB % Recovery (PID)	86%	60-140 %	PASS

RAW DATA

FID RESULTS	Raw Inst Amount ug/L	Reviewed & Calculated Inst Amount ug/L	Target Response	Target RT	Exp RT	RT Window	RT Accept	Sample Amount ug/L
TFT	34.06		245589	3.964	3.967	0.030	OK	
BFB	31.83		185081	7.094	7.096	0.030	OK	
GRO (<200)	24.12	24.12	475288					
GRO (>200)	17.89	17.89	475288					
GRO	24.12	24.12						24
PID RESULTS								
TFT #2	40.45		308974	3.964	3.967	0.030	OK	
BFB #2	34.43		695139	7.093	7.095	0.030	OK	
Methyl-t-butylether #2	0.03	0.00	302	2.208	2.192	0.030	OK	0
Benzene #2	0.04	0.00	1029	3.540	3.520	0.030	OK	0
Toluene #2	26.78	26.78	600316	4.889	4.891	0.030	OK	27
Ethylbenzene #2	0.02	0.00	426	6.127	6.132	0.030	OK	0
m,p-Xylene #2	0.06	0.00	1495	6.193	6.198	0.030	OK	0
o-Xylene #2	0.08	0.00	1612	6.558	6.569	0.030	OK	0
1,3,5-Trimethylbenzene #2	0.01	0.00	381	7.372	7.378	0.030	OK	0
1,2,4-Trimethylbenzene #2	0.03	0.00	589	7.711	7.725	0.030	OK	0
Naphthalene #2	0.09	0.00	1437	10.300	10.257	0.030	*	0

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K16019.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 28 May 2008 7:40 am
Operator :
Sample : 61399-11
Misc : 5000
ALS Vial : 66 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 28 12:02:50 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
1)	S TFT	3.964	3.964	245589	308974	34.057	40.451	
	Spiked Amount 40.000	Range 60 - 140		Recovery =		85.14%	101.13%	
2)	S BFB	7.094	7.093	185081	695139	31.827	34.432	
	Spiked Amount 40.000	Range 60 - 140		Recovery =		79.57%	86.08%	
	Target Compounds							
3)	TM Methyl-t-...	2.212	2.208	71	302	NoCal	~~0.033~~	#
4)	TM Benzene	3.519	3.540	883	1029	NoCal	~~0.043~~	#
5)	TM Toluene	4.889	4.889	317176	600316	NoCal	26.779	#
6)	TM Ethylbenzene	6.131	6.127	507	426	NoCal	0.022	#
7)	TM m,p-Xylene	6.193	6.193	896	1495	NoCal	0.065	#
8)	TM o-Xylene	6.551	6.558	1128	1612	NoCal	0.082	#
9)	TM 1,3,5-Tri...	7.379	7.372	671	381	NoCal	0.014	#
10)	TM 1,2,4-Tri...	7.716	7.711	1533	589	NoCal	0.029	#
11)	TM Naphthalene	10.250	10.300	871	1437	NoCal	0.095	#
12)	GRO (<200)	6.238	0.000	475288	0	24.122m	N.D.	#
13)	GRO (>200)	6.238	0.000	475288	0	~~17.893m~~	N.D.	#

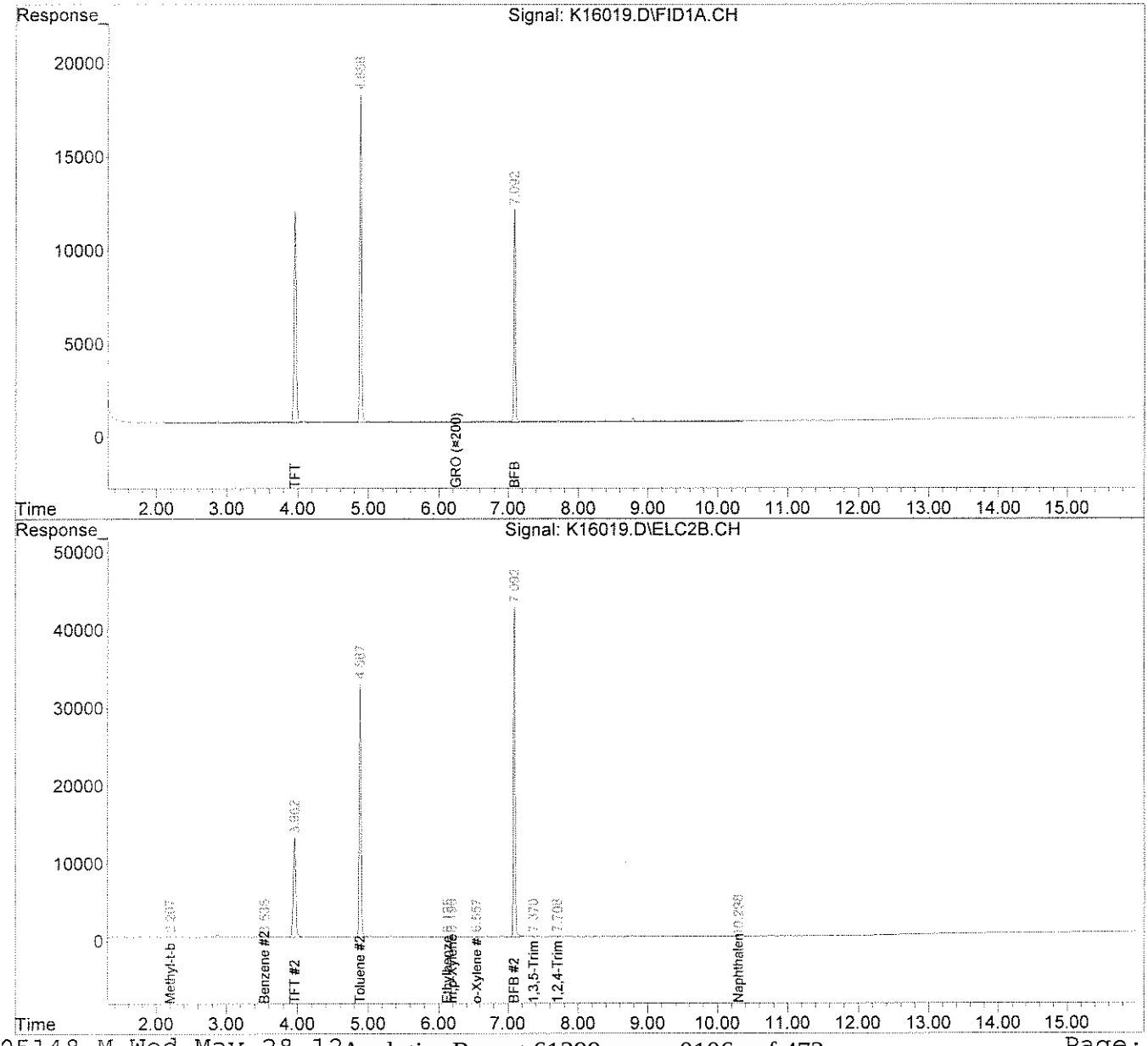
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K16019.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 28 May 2008 7:40 am
Operator :
Sample : 61399-11
Misc : 5000
ALS Vial : 66 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 28 12:02:50 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



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May 29, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58
Project Number: 03886.184
Client Sample ID: LS58DW1-0508-034-E

SAMPLE DATA

Lab Sample ID: 61399-12
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 05/20/08
Lab Receipt Date: 05/22/08
Analysis Date: 05/28/08

ANALYTICAL RESULTS GASOLINE RANGE ORGANICS

Compound	Result	Units	Quantitation Limit
GRO	23	µg/L	10

ESTIMATED TARGET CONCENTRATIONS

Compound	Result	Units	Quantitation Limit
MTBE	U	µg/L	2
Benzene	U	µg/L	1

Surrogate Standard Recovery

Trifluorotoluene	94	%
Bromofluorobenzene	88	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to: "Maine HETL Method 4.2.17, September 6, 1995."

COMMENTS:

Authorized signature

4.2.17 GRO WATER REPORT

Sample Name	**61399-12**
Data File Name	K16020.D
Date Acquired	5/28/2008 8:03
Misc Info	5000
Dilution Factor	1.00

GRO ANALYTICAL RESULTS	ug/L	RL	
GRO	23	10	
Methyl-t-butylether	U	2	
Benzene	U	1	
Toluene	24	2	
Ethylbenzene	U	2	
m,p-Xylenes	U	2	
o-Xylene	U	2	
1,3,5-Trimethylbenzene	U	2	
1,2,4-Trimethylbenzene	U	2	
Naphthalene	U	2	
TFT % Recovery (FID)	94%	60-140 %	PASS
BFB % Recovery (FID)	88%	60-140 %	PASS
TFT % Recovery (PID)	113%	60-140 %	PASS
BFB % Recovery (PID)	96%	60-140 %	PASS

RAW DATA

FID RESULTS	Raw Inst Amount ug/L	Reviewed & Calculated Inst Amount ug/L	Target Response	Target RT	Exp RT	RT Window	RT Accept	Sample Amount ug/L
TFT	37.73		272058	3.964	3.967	0.030	OK	
BFB	35.25		205000	7.094	7.096	0.030	OK	
GRO (<200)	23.19	23.19	464661					
GRO (>200)	16.95	16.95	464661					
GRO	23.19	23.19						23
PID RESULTS								
TFT #2	45.01		343759	3.964	3.967	0.030	OK	
BFB #2	38.21		771398	7.093	7.095	0.030	OK	
Methyl-t-butylether #2	0.08	0.00	731	2.198	2.192	0.030	OK	0
Benzene #2	0.04	0.00	999	3.515	3.520	0.030	OK	0
Toluene #2	23.61	23.61	529264	4.889	4.891	0.030	OK	24
Ethylbenzene #2	0.03	0.00	661	6.131	6.132	0.030	OK	0
m,p-Xylene #2	0.05	0.00	1161	6.198	6.198	0.030	OK	0
o-Xylene #2	0.05	0.00	949	6.547	6.569	0.030	OK	0
1,3,5-Trimethylbenzene #2	0.01	0.00	324	7.385	7.378	0.030	OK	0
1,2,4-Trimethylbenzene #2	0.06	0.00	1224	7.716	7.725	0.030	OK	0
Naphthalene #2	0.06	0.00	871	10.262	10.257	0.030	OK	0

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K16020.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 28 May 2008 8:03 am
Operator :
Sample : 61399-12
Misc : 5000
ALS Vial : 67 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 28 12:02:51 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
1)	S TFT	3.964	3.964	272058	343759	37.727	45.005
	Spiked Amount	40.000	Range 60 - 140		Recovery =	94.32%	112.51%
2)	S BFB	7.094	7.093	205000	771398	35.252	38.209
	Spiked Amount	40.000	Range 60 - 140		Recovery =	88.13%	95.52%
	Target Compounds						
3)	TM Methyl-t-...	2.172	2.198	660	731	NoCal	~~0.080~~ #
4)	TM Benzene	3.517	3.515	540	999	NoCal	~~0.042~~ #
5)	TM Toluene	4.889	4.889	279393	529264	NoCal	23.609 #
6)	TM Ethylbenzene	6.149	6.131	680	661	NoCal	0.034 #
7)	TM m,p-Xylene	6.199	6.198	683	1161	NoCal	0.050 #
8)	TM o-Xylene	6.557	6.547	1254	949	NoCal	0.048 #
9)	TM 1,3,5-Tri...	7.386	7.385	546	324	NoCal	0.012 #
10)	TM 1,2,4-Tri...	7.712	7.716	1927	1224	NoCal	0.060 #
11)	TM Naphthalene	10.270	10.262	447	871	NoCal	0.057 #
12)	GRO (<200)	6.238	0.000	464661	0	23.187m	N.D. #
13)	GRO (>200)	6.238	0.000	464661	0	~~16.951m~~	N.D. #

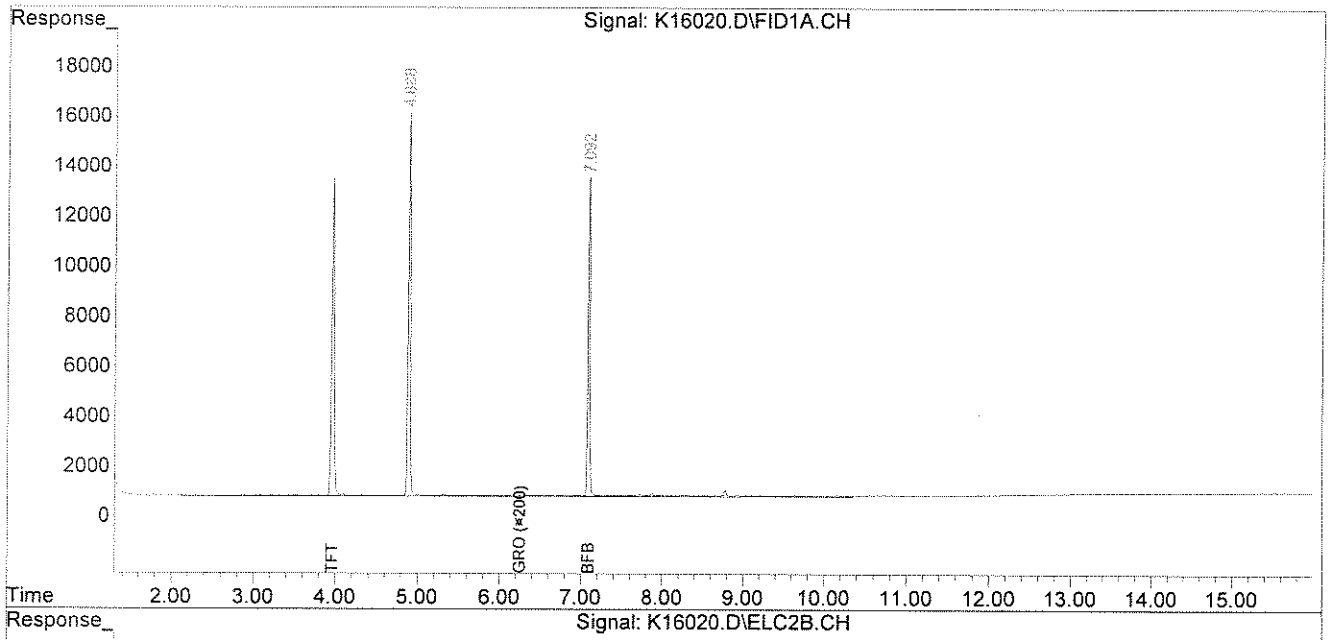
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

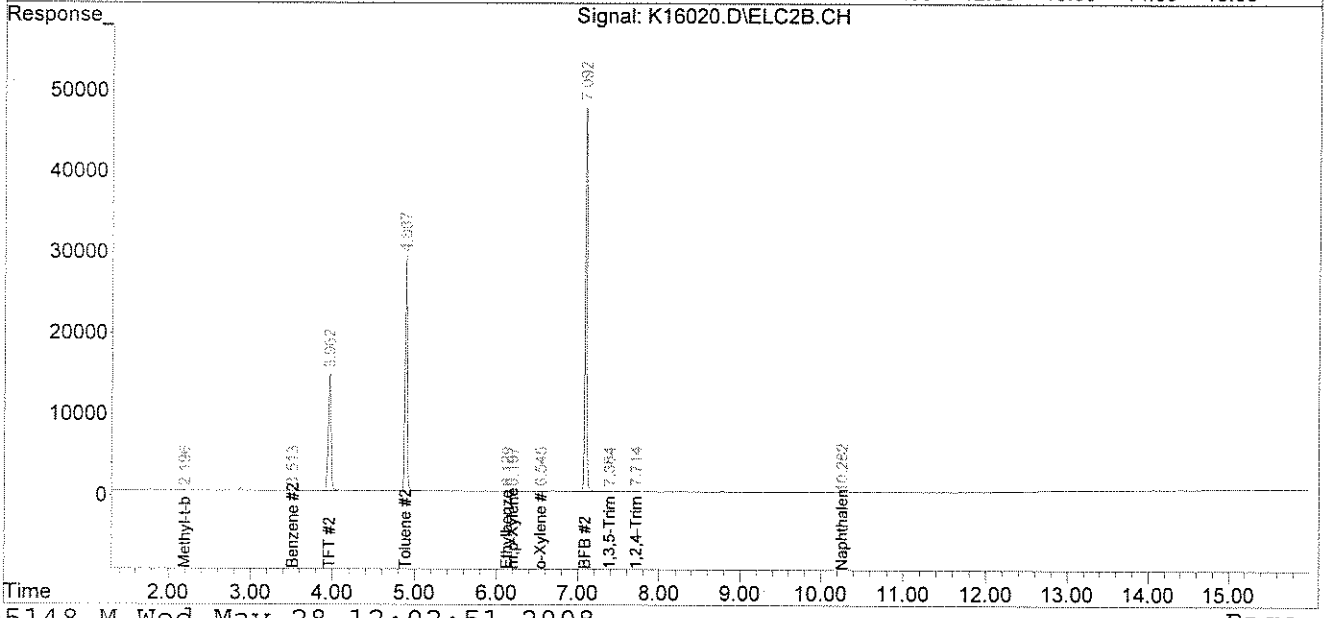
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K16020.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 28 May 2008 8:03 am
Operator :
Sample : 61399-12
Misc : 5000
ALS Vial : 67 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 28 12:02:51 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





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South Burlington VT 05403

May 29, 2008

SAMPLE DATA

CLIENT SAMPLE ID

Project Name:	MEFUDS LO-58
Project Number:	03886.184
Client Sample ID:	LS58DW1-0508-029

Lab Sample ID:	61399-13
Matrix:	Aqueous
Percent Solid:	N/A
Dilution Factor:	1
Collection Date:	05/20/08
Lab Receipt Date:	05/22/08
Analysis Date:	05/28/08

ANALYTICAL RESULTS GASOLINE RANGE ORGANICS

Compound	Result	Units	Quantitation Limit
GRO	**156**	µg/L	10

ESTIMATED TARGET CONCENTRATIONS

Compound	Result	Units	Quantitation Limit
MTBE	U	µg/L	2
Benzene	U	µg/L	1

Surrogate Standard Recovery

Trifluorotoluene	103	%
Bromofluorobenzene	95	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to: "Maine HETL Method 4.2.17, September 6, 1995."

COMMENTS:

Authorized signature 

Sample Name	**61399-13**
Data File Name	K16021.D
Date Acquired	5/28/2008 8:27
Misc Info	5000
Dilution Factor	1.00

GRO ANALYTICAL RESULTS	ug/L	RL	
GRO	156	10	
Methyl-t-butylether	U	2	
Benzene	U	1	
Toluene	145	2	
Ethylbenzene	U	2	
m,p-Xylenes	U	2	
o-Xylene	U	2	
1,3,5-Trimethylbenzene	U	2	
1,2,4-Trimethylbenzene	U	2	
Naphthalene	U	2	
TFT % Recovery (FID)	103%	60-140 %	PASS
BFB % Recovery (FID)	95%	60-140 %	PASS
TFT % Recovery (PID)	117%	60-140 %	PASS
BFB % Recovery (PID)	102%	60-140 %	PASS

RAW DATA

FID RESULTS	Raw Inst Amount ug/L	Reviewed & Calculated Inst Amount ug/L	Target Response	Target RT	Exp RT	RT Window	RT Accept	Sample Amount ug/L
TFT	41.38		298421	3.966	3.967	0.030	OK	
BFB	37.92		220522	7.094	7.096	0.030	OK	
GRO (<200)	155.52	155.52	1969193					
GRO (>200)	150.34	150.34	1969193					
GRO	155.52	155.52						156
PID RESULTS								
TFT #2	46.89		358170	3.965	3.967	0.030	OK	
BFB #2	40.73		822233	7.093	7.095	0.030	OK	
Methyl-t-butylether #2	0.05	0.00	454	2.213	2.192	0.030	OK	0
Benzene #2	0.55	0.00	13068	3.518	3.520	0.030	OK	0
Toluene #2	144.93	144.93	3248938	4.890	4.891	0.030	OK	145
Ethylbenzene #2	0.08	0.00	1622	6.131	6.132	0.030	OK	0
m,p-Xylene #2	0.11	0.00	2651	6.196	6.198	0.030	OK	0
o-Xylene #2	0.19	0.00	3660	6.566	6.569	0.030	OK	0
1,3,5-Trimethylbenzene #2	0.03	0.00	728	7.380	7.378	0.030	OK	0
1,2,4-Trimethylbenzene #2	0.30	0.00	6026	7.745	7.725	0.030	OK	0
Naphthalene #2	0.09	0.00	1313	10.261	10.257	0.030	OK	0

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K16021.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 28 May 2008 8:27 am
Operator :
Sample : 61399-13
Misc : 5000
ALS Vial : 68 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 28 12:02:53 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
1)	S TFT	3.966	3.965	298421	358170	41.383	46.892	
	Spiked Amount 40.000	Range 60 - 140		Recovery = 103.46%			117.23%	
2)	S BFB	7.094	7.093	220522	822233	37.922	40.727	
	Spiked Amount 40.000	Range 60 - 140		Recovery = 94.80%			101.82%	
	Target Compounds							
3)	TM Methyl-t-...	2.166	2.213	505	454	NoCal	0.050	#
4)	TM Benzene	3.518	3.518	6807	13068	NoCal	0.547	#
5)	TM Toluene	4.891	4.890	1755218	3248938	NoCal	144.928	#
6)	TM Ethylbenzene	6.133	6.131	665	1622	NoCal	0.083	#
7)	TM m,p-Xylene	6.199	6.196	1332	2651	NoCal	0.115	#
8)	TM o-Xylene	6.564	6.566	1427	3660	NoCal	0.187	#
9)	TM 1,3,5-Tri...	7.380	7.380	454	728	NoCal	0.027	#
10)	TM 1,2,4-Tri...	7.746	7.745	3857	6026	NoCal	0.296	#
11)	TM Naphthalene	10.249	10.261	379	1313	NoCal	0.087	#
12)	GRO (<200)	6.238	0.000	1969193	0	155.520m	N.D.	#
13)	GRO (>200)	6.238	0.000	1969193	0	150.343m	N.D.	#

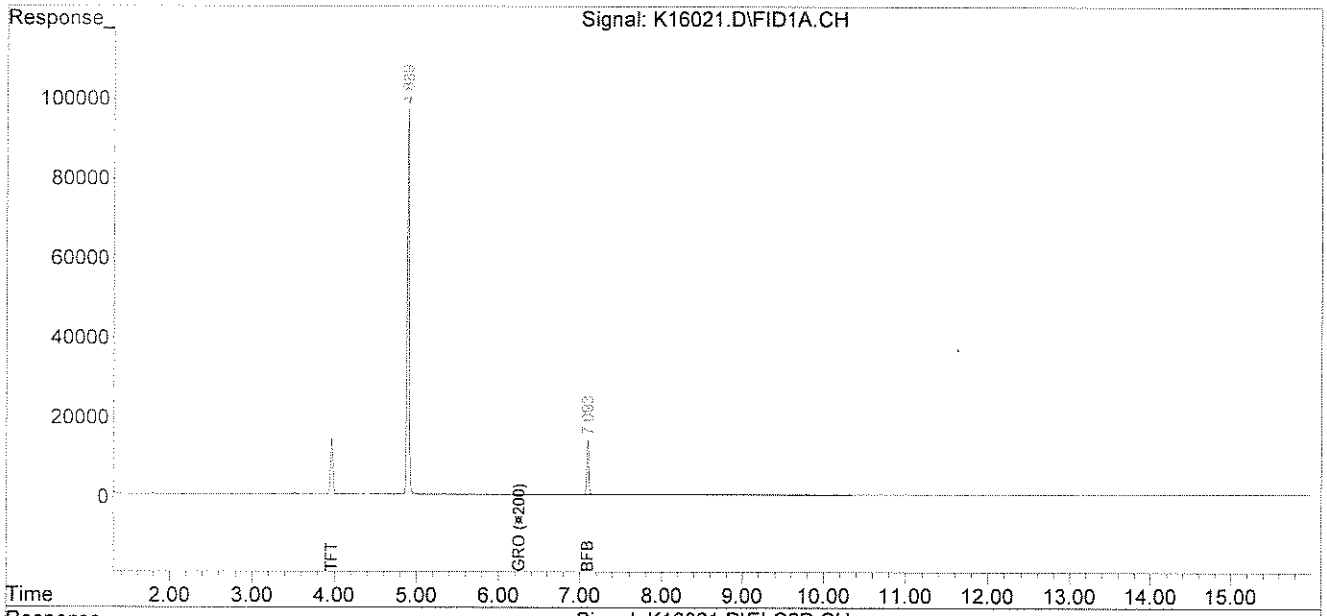
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

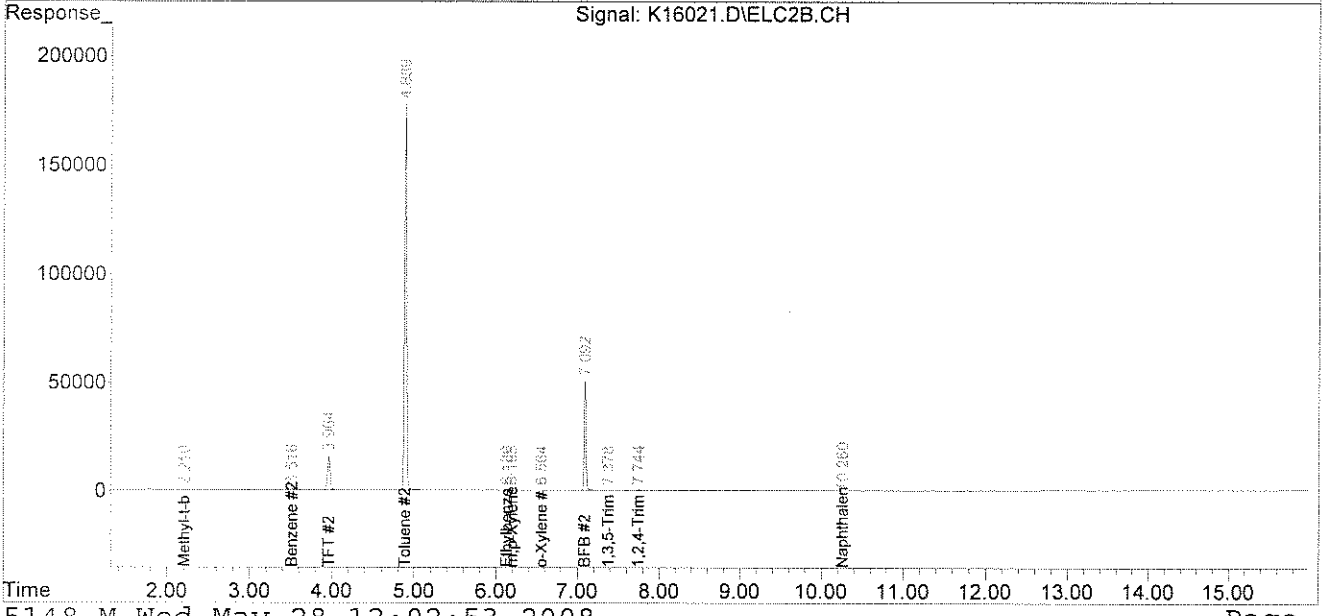
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K16021.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 28 May 2008 8:27 am
Operator :
Sample : 61399-13
Misc : 5000
ALS Vial : 68 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 28 12:02:53 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





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May 29, 2008

SAMPLE DATA

CLIENT SAMPLE ID

Project Name:	MEFUDS LO-58
Project Number:	03886.184
Client Sample ID:	RB-052008-01

Lab Sample ID:	61399-14
Matrix:	Aqueous
Percent Solid:	N/A
Dilution Factor:	1
Collection Date:	05/20/08
Lab Receipt Date:	05/22/08
Analysis Date:	05/28/08

ANALYTICAL RESULTS GASOLINE RANGE ORGANICS

Compound	Result	Units	Quantitation Limit
GRO	U	µg/L	10

ESTIMATED TARGET CONCENTRATIONS

Compound	Result	Units	Quantitation Limit
MTBE	U	µg/L	2
Benzene	U	µg/L	1

Surrogate Standard Recovery

Trifluorotoluene	93	%
Bromofluorobenzene	86	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to: "Maine HETL Method 4.2.17, September 6, 1995."

COMMENTS:

Authorized signature 

4.2.17 GRO WATER REPORT

Sample Name	**61399-14**
Data File Name	K16022.D
Date Acquired	5/28/2008 8:50
Misc Info	5000
Dilution Factor	1.00

GRO ANALYTICAL RESULTS	ug/L	RL	
GRO	U	10	
Methyl-t-butylether	U	2	
Benzene	U	1	
Toluene	U	2	
Ethylbenzene	U	2	
m,p-Xylenes	U	2	
o-Xylene	U	2	
1,3,5-Trimethylbenzene	U	2	
1,2,4-Trimethylbenzene	U	2	
Naphthalene	U	2	
TFT % Recovery (FID)	93%	60-140 %	PASS
BFB % Recovery (FID)	86%	60-140 %	PASS
TFT % Recovery (PID)	100%	60-140 %	PASS
BFB % Recovery (PID)	91%	60-140 %	PASS

RAW DATA

FID RESULTS	Raw Inst Amount ug/L	Reviewed & Calculated Inst Amount ug/L	Target Response	Target RT	Exp RT	RT Window	RT Accept	Sample Amount ug/L
TFT	37.32		269108	3.966	3.967	0.030	OK	
BFB	34.35		199731	7.094	7.096	0.030	OK	
GRO (<200)	0.79	0.00	209992					
GRO (>200)	-5.63	0.00	209992					
GRO	0.79	0.00						0
PID RESULTS								
TFT #2	39.81		304112	3.965	3.967	0.030	OK	
BFB #2	36.59		738807	7.094	7.095	0.030	OK	
Methyl-t-butylether #2	0.16	0.00	1432	2.158	2.192	0.030	*	0
Benzene #2	0.06	0.00	1340	3.522	3.520	0.030	OK	0
Toluene #2	0.21	0.00	4608	4.890	4.891	0.030	OK	0
Ethylbenzene #2	0.04	0.00	858	6.131	6.132	0.030	OK	0
m,p-Xylene #2	0.06	0.00	1316	6.197	6.198	0.030	OK	0
o-Xylene #2	0.31	0.00	6001	6.567	6.569	0.030	OK	0
1,3,5-Trimethylbenzene #2	0.06	0.00	1629	7.432	7.378	0.030	*	0
1,2,4-Trimethylbenzene #2	0.08	0.00	1569	7.746	7.725	0.030	OK	0
Naphthalene #2	0.06	0.00	945	10.259	10.257	0.030	OK	0

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K16022.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 28 May 2008 8:50 am
Operator :
Sample : 61399-14
Misc : 5000
ALS Vial : 69 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 28 12:02:54 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
1)	S TFT	3.966	3.965	269108	304112	37.318	39.814	
	Spiked Amount 40.000	Range 60 - 140		Recovery =		93.29%	99.53%	
2)	S BFB	7.094	7.094	199731	738807	34.346	36.595	
	Spiked Amount 40.000	Range 60 - 140		Recovery =		85.86%	91.49%	
	Target Compounds							
3)	TM Methyl-t-...	2.165	2.158	824	1432	NoCal	0.157	#
4)	TM Benzene	3.521	3.522	675	1340	NoCal	0.056	#
5)	TM Toluene	4.892	4.890	2778	4608	NoCal	0.206	#
6)	TM Ethylbenzene	6.122	6.131	713	858	NoCal	0.044	#
7)	TM m,p-Xylene	6.204	6.197	631	1316	NoCal	0.057	#
8)	TM o-Xylene	6.567	6.567	4541	6001	NoCal	0.306	#
9)	TM 1,3,5-Tri...	7.393	7.432	534	1629	NoCal	0.061	#
10)	TM 1,2,4-Tri...	7.724	7.746	775	1569	NoCal	0.077	#
11)	TM Naphthalene	10.264	10.259	403	945	NoCal	0.062	#
12)	GRO (<200)	6.238	0.000	209992	0	0.787m	N.D.	#

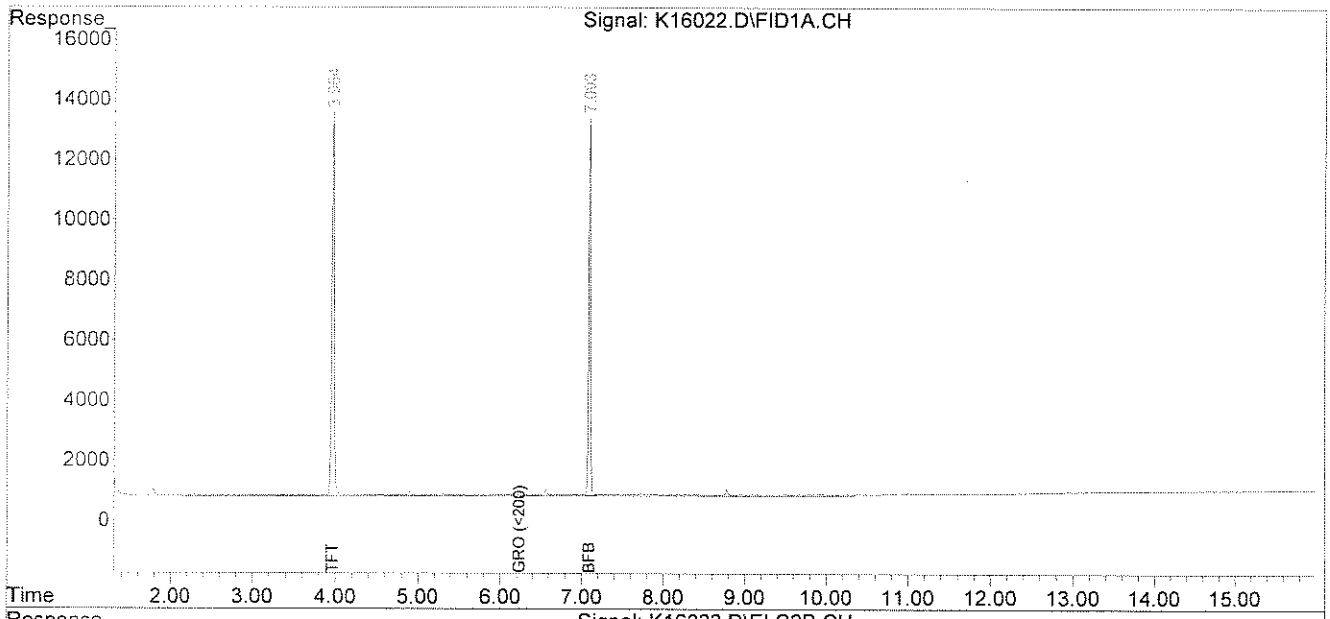
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

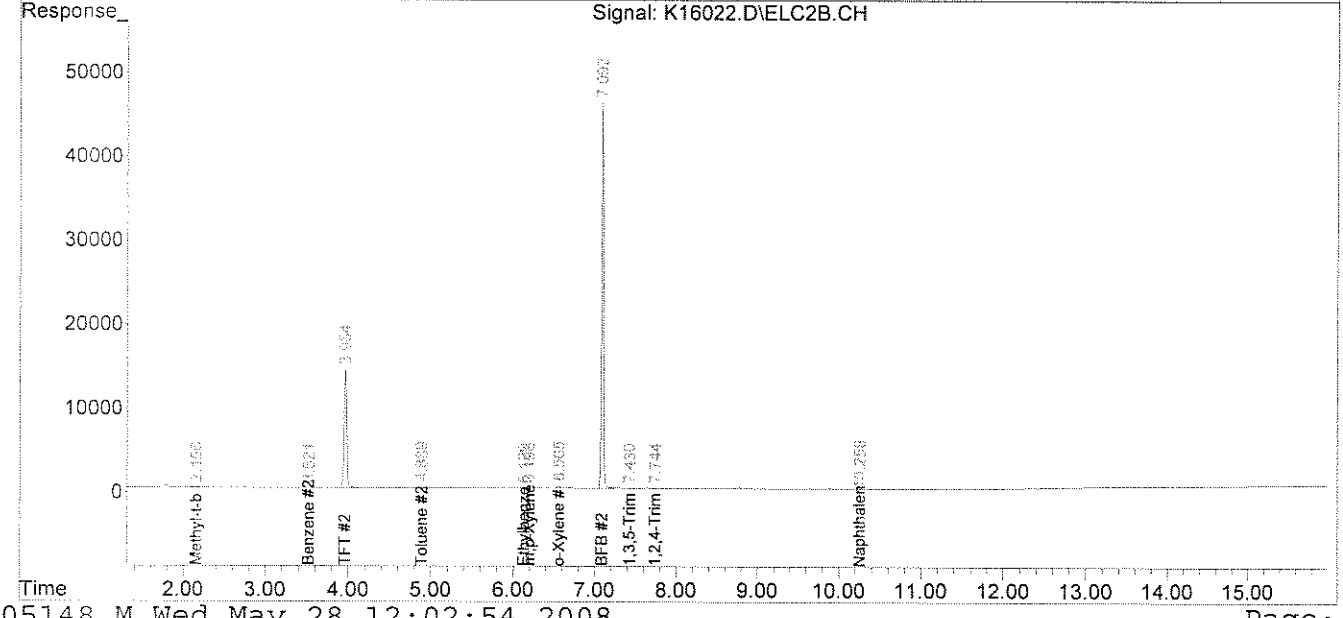
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K16022.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 28 May 2008 8:50 am
Operator :
Sample : 61399-14
Misc : 5000
ALS Vial : 69 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 28 12:02:54 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





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May 29, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58
Project Number: 03886.184
Client Sample ID: TB-051608-01

SAMPLE DATA

Lab Sample ID: 61399-15
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 05/20/08
Lab Receipt Date: 05/22/08
Analysis Date: 05/28/08

ANALYTICAL RESULTS GASOLINE RANGE ORGANICS

Compound	Result	Units	Quantitation Limit
GRO	U	µg/L	10

ESTIMATED TARGET CONCENTRATIONS

Compound	Result	Units	Quantitation Limit
MTBE	U	µg/L	2
Benzene	U	µg/L	1

Surrogate Standard Recovery

Trifluorotoluene	109	%
Bromofluorobenzene	97	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to: "Maine HETL Method 4.2.17, September 6, 1995."

COMMENTS:

Authorized signature

Sample Name	**61399-15**
Data File Name	K16001.D
Date Acquired	5/28/2008 12:27
Misc Info	5000,,T.B.
Dilution Factor	1.00

GRO ANALYTICAL RESULTS	ug/L	RL	
GRO	U	10	
Methyl-t-butylether	U	2	
Benzene	U	1	
Toluene	U	2	
Ethylbenzene	U	2	
m,p-Xylenes	U	2	
o-Xylene	U	2	
1,3,5-Trimethylbenzene	U	2	
1,2,4-Trimethylbenzene	U	2	
Naphthalene	U	2	
TFT % Recovery (FID)	109%	60-140 %	PASS
BFB % Recovery (FID)	97%	60-140 %	PASS
TFT % Recovery (PID)	116%	60-140 %	PASS
BFB % Recovery (PID)	105%	60-140 %	PASS

RAW DATA

FID RESULTS	Raw Inst Amount ug/L	Reviewed & Calculated Inst Amount ug/L	Target Response	Target RT	Exp RT	RT Window	RT Accept	Sample Amount ug/L
TFT	43.65		314786	3.967	3.967	0.030	OK	
BFB	38.96		226560	7.095	7.096	0.030	OK	
GRO (<200)	-3.98	0.00	155791					
GRO (>200)	-10.43	0.00	155791					
GRO	-3.98	0.00						0
PID RESULTS								
TFT #2	46.44		354714	3.966	3.967	0.030	OK	
BFB #2	41.87		845365	7.095	7.095	0.030	OK	
Methyl-t-butylether #2	0.34	0.00	3067	2.159	2.192	0.030	*	0
Benzene #2	0.04	0.00	879	3.521	3.520	0.030	OK	0
Toluene #2	0.09	0.00	1937	4.892	4.891	0.030	OK	0
Ethylbenzene #2	0.07	0.00	1293	6.131	6.132	0.030	OK	0
m,p-Xylene #2	0.13	0.00	3028	6.197	6.198	0.030	OK	0
o-Xylene #2	0.10	0.00	1970	6.570	6.569	0.030	OK	0
1,3,5-Trimethylbenzene #2	0.08	0.00	2079	7.379	7.378	0.030	OK	0
1,2,4-Trimethylbenzene #2	0.13	0.00	2631	7.726	7.725	0.030	OK	0
Naphthalene #2	0.29	0.00	4401	10.258	10.257	0.030	OK	0

5/28/2008 11:00 PM

C:\msdchem\custrpt\GROH20SAMPLE.CRT

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K16001.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 28 May 2008 12:27 am
Operator :
Sample : 61399-15
Misc : 5000,,T.B.
ALS Vial : 48 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 28 00:45:52 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
System Monitoring Compounds						
1) S TFT	3.967	3.966	314786	354714	43.653	46.439
Spiked Amount	40.000	Range 60 - 140	Recovery =		109.13%	116.10%
2) S BFB	7.095	7.095	226560	845365	38.960	41.873
Spiked Amount	40.000	Range 60 - 140	Recovery =		97.40%	104.68%
Target Compounds						
3) TM Methyl-t-...	2.184	2.159	329	3067	NoCal	0.335 #
4) TM Benzene	3.520	3.521	979	879	NoCal	0.037 #
5) TM Toluene	4.891	4.892	1263	1937	NoCal	0.086 #
6) TM Ethylbenzene	6.134	6.131	959	1293	NoCal	0.066 #
7) TM m,p-Xylene	6.198	6.197	1636	3028	NoCal	0.131 #
8) TM o-Xylene	6.575	6.570	1972	1970	NoCal	0.101 #
9) TM 1,3,5-Tri...	7.378	7.379	1030	2079	NoCal	0.078 #
10) TM 1,2,4-Tri...	7.724	7.726	2030	2631	NoCal	0.129 #
11) TM Naphthalene	10.258	10.258	2112	4401	NoCal	0.290 #

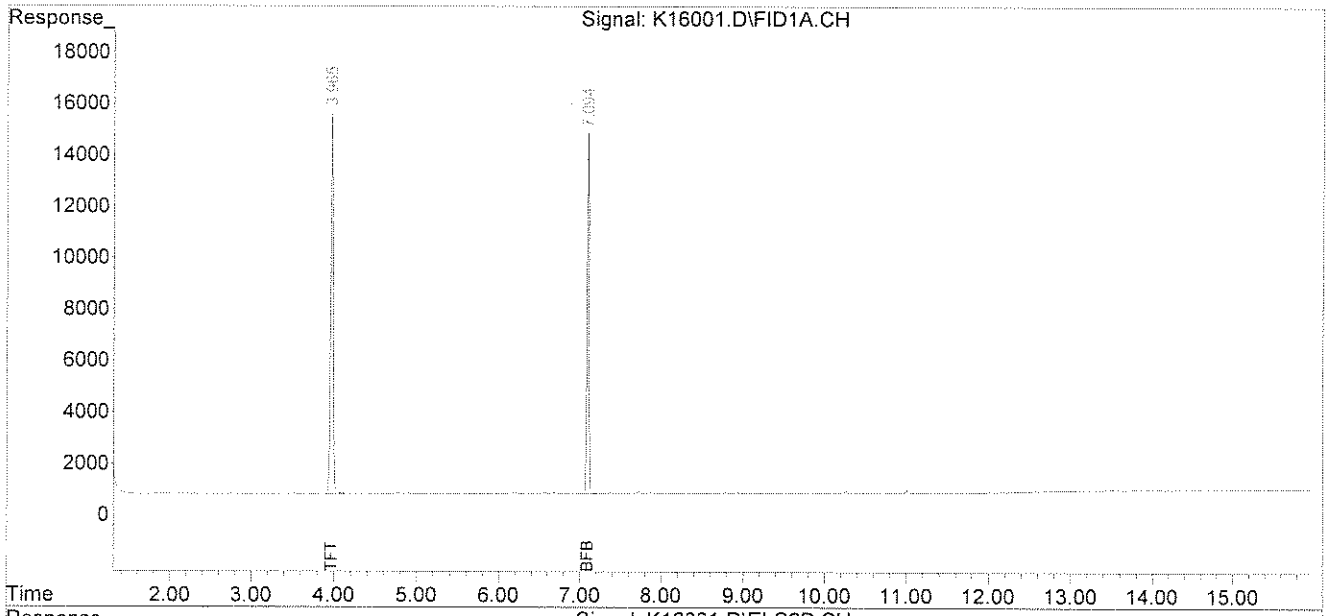
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

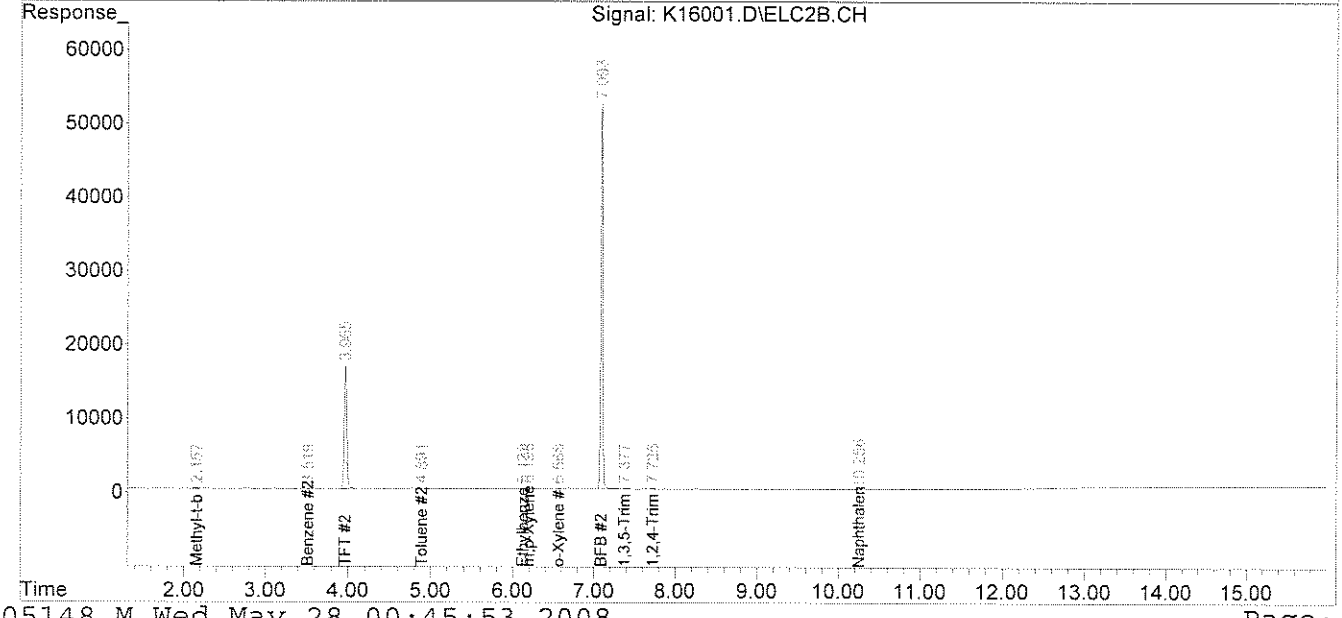
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K16001.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 28 May 2008 12:27 am
Operator :
Sample : 61399-15
Misc : 5000,,T.B.
ALS Vial : 48 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 28 00:45:52 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





analytics environmental laboratory LLC

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Mr. Ron Pentkowski
Test America Burlington
30 Community Drive Suite 11
South Burlington VT 05403

May 29, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58
Project Number: 03886.184
Client Sample ID: TB-051908-01

SAMPLE DATA

Lab Sample ID: 61399-16
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 05/20/08
Lab Receipt Date: 05/22/08
Analysis Date: 05/28/08

ANALYTICAL RESULTS GASOLINE RANGE ORGANICS

Compound	Result	Units	Quantitation Limit
GRO	U	µg/L	10

ESTIMATED TARGET CONCENTRATIONS

Compound	Result	Units	Quantitation Limit
MTBE	U	µg/L	2
Benzene	U	µg/L	1

Surrogate Standard Recovery

Trifluorotoluene	109 %
Bromofluorobenzene	100 %

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to: "Maine HETL Method 4.2.17, September 6, 1995."

COMMENTS:

Authorized signature

4.2.17 GRO WATER REPORT

Sample Name	**61399-16**
Data File Name	K16002.D
Date Acquired	5/28/2008 12:51
Misc Info	5000,,T.B.
Dilution Factor	1.00

GRO ANALYTICAL RESULTS	ug/L	RL	
GRO	U	10	
Methyl-t-butylether	U	2	
Benzene	U	1	
Toluene	U	2	
Ethylbenzene	U	2	
m,p-Xylenes	U	2	
o-Xylene	U	2	
1,3,5-Trimethylbenzene	U	2	
1,2,4-Trimethylbenzene	U	2	
Naphthalene	U	2	
TFT % Recovery (FID)	109%	60-140 %	PASS
BFB % Recovery (FID)	100%	60-140 %	PASS
TFT % Recovery (PID)	115%	60-140 %	PASS
BFB % Recovery (PID)	106%	60-140 %	PASS

RAW DATA

FID RESULTS	Raw Inst Amount ug/L	Reviewed & Calculated Inst Amount ug/L	Target Response	Target RT	Exp RT	RT Window	RT Accept	Sample Amount ug/L
TFT	43.71		315217	3.968	3.967	0.030	OK	
BFB	39.94		232232	7.095	7.096	0.030	OK	
GRO (<200)	-2.98	0.00	167170					
GRO (>200)	-9.42	0.00	167170					
GRO	-2.98	0.00						0
PID RESULTS								
TFT #2	46.17		352678	3.967	3.967	0.030	OK	
BFB #2	42.40		855921	7.095	7.095	0.030	OK	
Methyl-t-butylether #2	0.04	0.00	320	2.228	2.192	0.030	*	0
Benzene #2	0.04	0.00	1072	3.526	3.520	0.030	OK	0
Toluene #2	0.05	0.00	1197	4.895	4.891	0.030	OK	0
Ethylbenzene #2	0.02	0.00	422	6.128	6.132	0.030	OK	0
m,p-Xylene #2	0.05	0.00	1057	6.197	6.198	0.030	OK	0
o-Xylene #2	0.06	0.00	1148	6.585	6.569	0.030	OK	0
1,3,5-Trimethylbenzene #2	0.06	0.00	1591	7.383	7.378	0.030	OK	0
1,2,4-Trimethylbenzene #2	0.08	0.00	1635	7.729	7.725	0.030	OK	0
Naphthalene #2	0.10	0.00	1576	10.257	10.257	0.030	OK	0

J6-906

5/28/2008 11:00 PM

C:\msdchem\custrpt\GROH20SAMPLE.CRT

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K16002.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 28 May 2008 12:51 am
Operator :
Sample : 61399-16
Misc : 5000,,T.B.
ALS Vial : 49 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 28 01:24:30 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L
	System Monitoring Compounds						
1)	S TFT	3.968	3.967	315217	352678	43.713	46.173
	Spiked Amount	40.000	Range 60 - 140		Recovery =	109.28%	115.43%
2)	S BFB	7.095	7.095	232232	855921	39.935	42.396
	Spiked Amount	40.000	Range 60 - 140		Recovery =	99.84%	105.99%
	Target Compounds						
3)	TM Methyl-t-...	2.191	2.228	216	320	NoCal	0.035 #
4)	TM Benzene	3.515	3.526	194	1072	NoCal	0.045 #
5)	TM Toluene	4.890	4.895	859	1197	NoCal	0.053 #
6)	TM Ethylbenzene	6.130	6.128	532	422	NoCal	0.021 #
7)	TM m,p-Xylene	6.199	6.197	789	1057	NoCal	0.046 #
8)	TM o-Xylene	6.572	6.585	1156	1148	NoCal	0.059 #
9)	TM 1,3,5-Tri...	7.385	7.383	601	1591	NoCal	0.060 #
10)	TM 1,2,4-Tri...	7.720	7.729	716	1635	NoCal	0.080 #
11)	TM Naphthalene	10.255	10.257	844	1576	NoCal	0.104 #

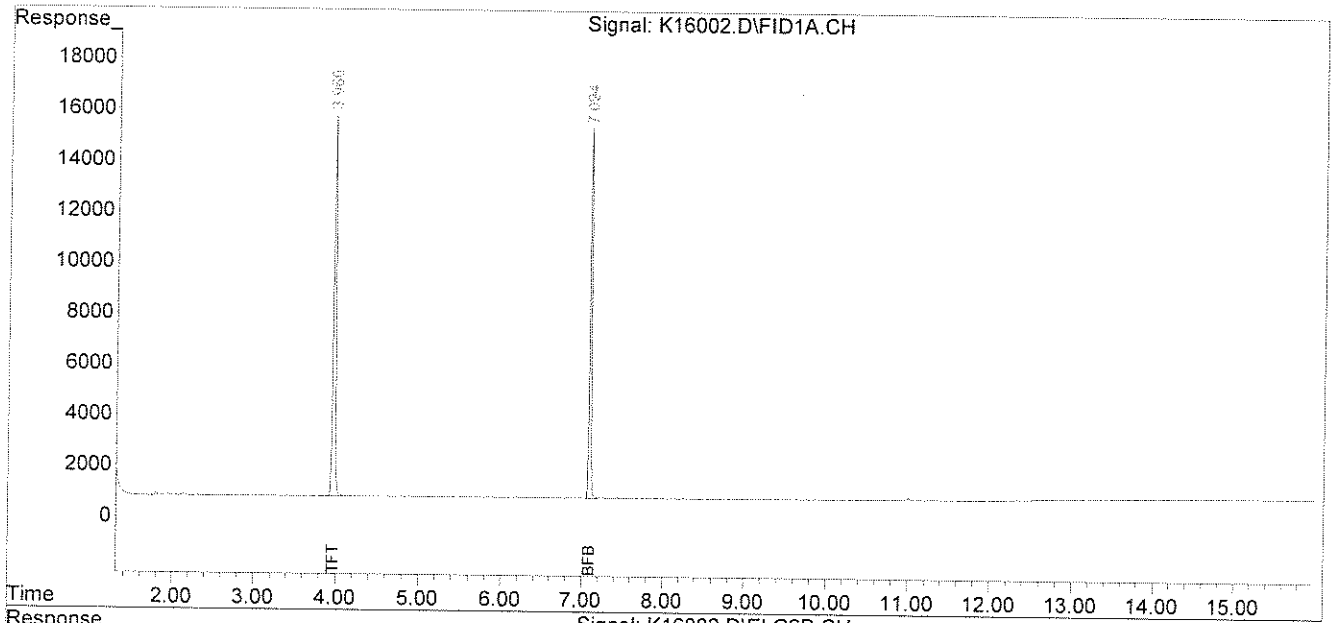
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

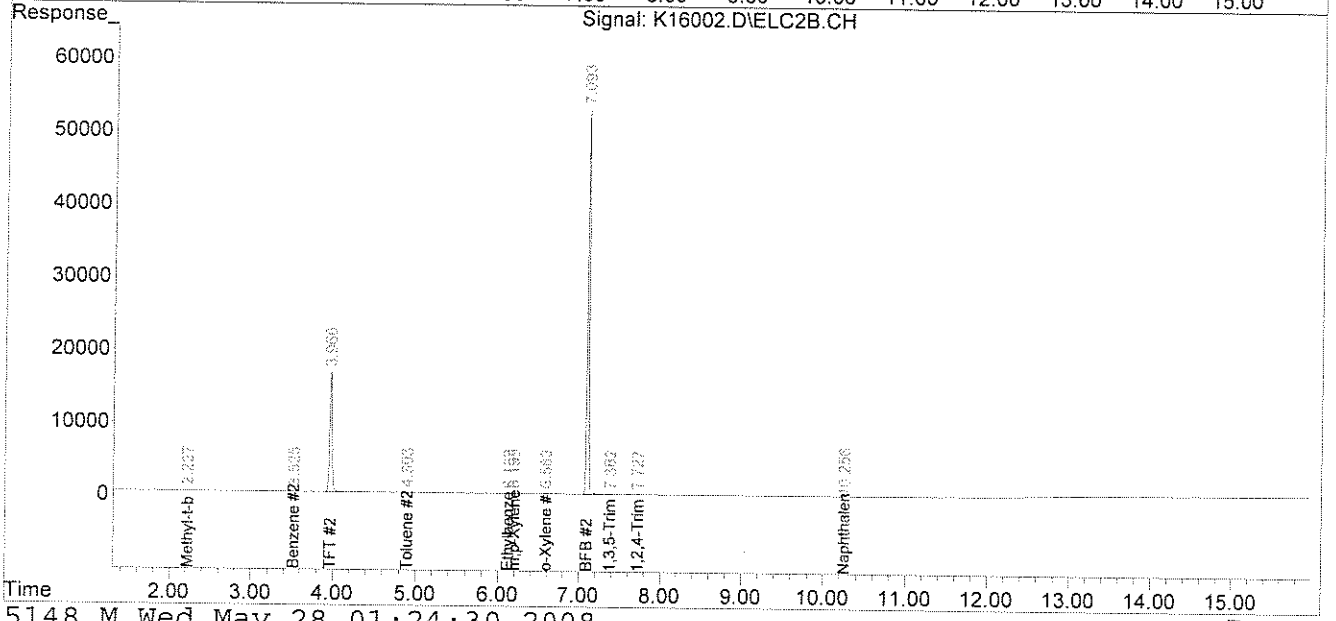
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K16002.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 28 May 2008 12:51 am
Operator :
Sample : 61399-16
Misc : 5000,,T.B.
ALS Vial : 49 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 28 01:24:30 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





analytics environmental laboratory LLC

GRO
QC FORMS

AnalyticsLLC:AEL Documents LLC:Pkg Dividers:GROQC.doc

GASOLINE RANGE ORGANICS WATER
SYSTEM MONITORING COMPOUNDS
SUMMARY

Instrument ID: K
GC Column: RTX-502.2
Column ID: 0.25 mm

SDG: 61399

SAMPLE ID	SMC 1 (%)	#	SMC 2 (%)	#	SMC 3 (%)	#	SMC 4 (%)	#
B05278KGRO	111		99		117		106	
L05278KGRO	105		98		111		104	
L05278KGRO2	105		97		110		103	
61399-15	109		97		116		105	
61399-16	109		100		115		106	
61399-1	102		93		107		97	
61399-2	94		87		98		92	
61399-2,MS	92		86		96		92	
61399-2,MSD	95		90		101		95	
61399-3	84		77		89		81	
61399-4	91		84		95		88	
61399-5	99		92		104		97	
61399-6	95		86		100		91	
61399-7	94		86		98		91	
61399-8	95		89		106		95	
61399-9	94		86		111		91	
61399-10	74		65		92		69	
61399-11	85		80		101		86	
61399-12	94		88		113		96	
61399-13	103		95		117		102	
61399-14	93		86		100		91	

	Lower Limit	Upper Limit
SMC #1 = TFT (FID)	60	140
SMC #2 = BFB (FID)	60	140
SMC #3 = TFT (PID)	60	140
SMC #4 = BFB (PID)	60	140

Column to be used to flag recovery values outside of QC limits
* Values outside QC limits
D System Monitoring Compound diluted out

GRO FORM 2

GASOLINE RANGE ORGANICS WATER
LABORATORY CONTROL SAMPLE/DUPLICATE
PERCENT RECOVERY

Instrument ID: K
GC Column: RTX-502.2
Column ID: 0.25 mm

SDG: 61399
Non-spiked sample: B05278KGRO
Spike: L05278KGRO
Spike duplicate: L05278KGRO2

COMPOUND	LCS SPIKE ADDED (ug/L)	LCSD SPIKE ADDED (ug/L)	LOWER LIMIT	UPPER LIMIT	RPD LIMIT	NON-SPIKE RESULT (ug/L)	SPIKE RESULT (ug/L)	SPIKE % REC	#	SPIKE DUP RESULT (ug/L)	SPIKE DUP % REC	#	RPD	#
GRO (<200)	200	200	67	125	25	0	196	98		194	97		1	
GRO (>200)	200	200	67	125	25	0	191	95		189	95		1	
Methyl-t-butylether #2	20	20	67	125	25	0	19	96		19	95		1	
Benzene #2	20	20	67	125	25	0	22	108		21	107		1	
Toluene #2	20	20	67	125	25	0	22	108		22	107		1	
Ethylbenzene #2	20	20	67	125	25	0	21	107		21	106		1	
m,p-Xylene #2	40	40	67	125	25	0	43	107		43	106		1	
o-Xylene #2	20	20	67	125	25	0	22	108		22	107		1	
1,3,5-Trimethylbenzene #2	20	20	67	125	25	0	22	108		22	107		1	
1,2,4-Trimethylbenzene #2	20	20	67	125	25	0	22	108		22	108		1	
Naphthalene #2	20	20	67	125	25	0	20	98		20	98		1	

Column to be used to flag recovery and RPD values outside of QC limits
* Values outside QC limits

Non-spike result of "0" used in place of "U" to allow calculation of spike recovery.

Comments: _____

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K15999Q.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 27 May 2008 11:17 pm
Operator :
Sample : L05278KGRO
Misc : 100,5,SOIL, + 100UL MEOH
ALS Vial : 46 Sample Multiplier: 1

5/28/08
V5290C

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 28 00:16:14 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

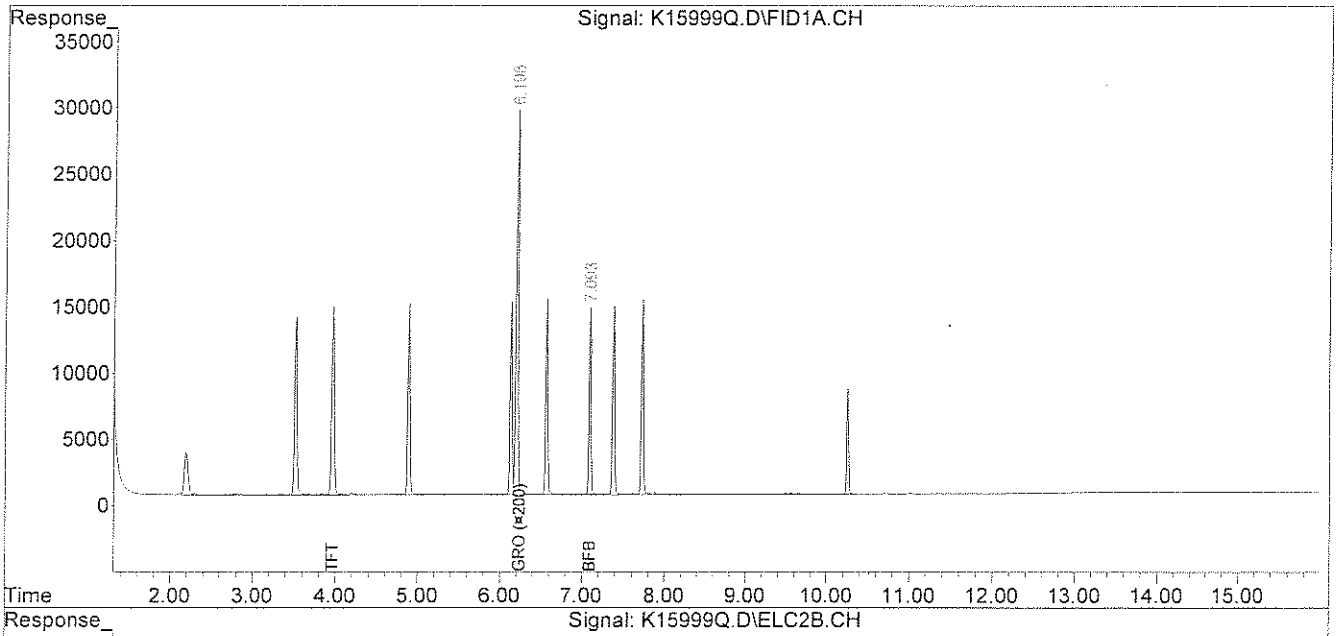
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
1)	S TFT	3.966	3.965	302128	337969	41.898	44.247	
	Spiked Amount	40.000	Range 60 - 140		Recovery =	104.75%	110.62%	
)	S BFB	7.095	7.094	228511	840693	39.295	41.641	
	Spiked Amount	40.000	Range 60 - 140		Recovery =	98.24%	104.10%	
	Target Compounds							
3)	TM Methyl-t-...	2.191	2.191	103326	177149	NoCal	19.373	#
4)	TM Benzene	3.519	3.518	261432	517092	NoCal	21.634	#
5)	TM Toluene	4.890	4.890	263903	488340	NoCal	21.784	#
6)	TM Ethylbenzene	6.131	6.131	253796	421186	NoCal	21.431	#
7)	TM m,p-Xylene	6.197	6.197	516442	995614	NoCal	43.033	#
8)	TM o-Xylene	6.568	6.568	260677	427185	NoCal	21.799	#
9)	TM 1,3,5-Tri...	7.378	7.378	251368	577450	NoCal	21.702	#
.0)	TM 1,2,4-Tri...	7.725	7.725	251571	444110	NoCal	21.816	#
.1)	TM Naphthalene	10.256	10.256	127874	299331	NoCal	19.747	#
.2)	GRO (<200)	6.238	0.000	2426106	0	195.709m	N.D.	#
.3)	GRO (>200)	6.238	0.000	2426106	0	190.853m	N.D.	#

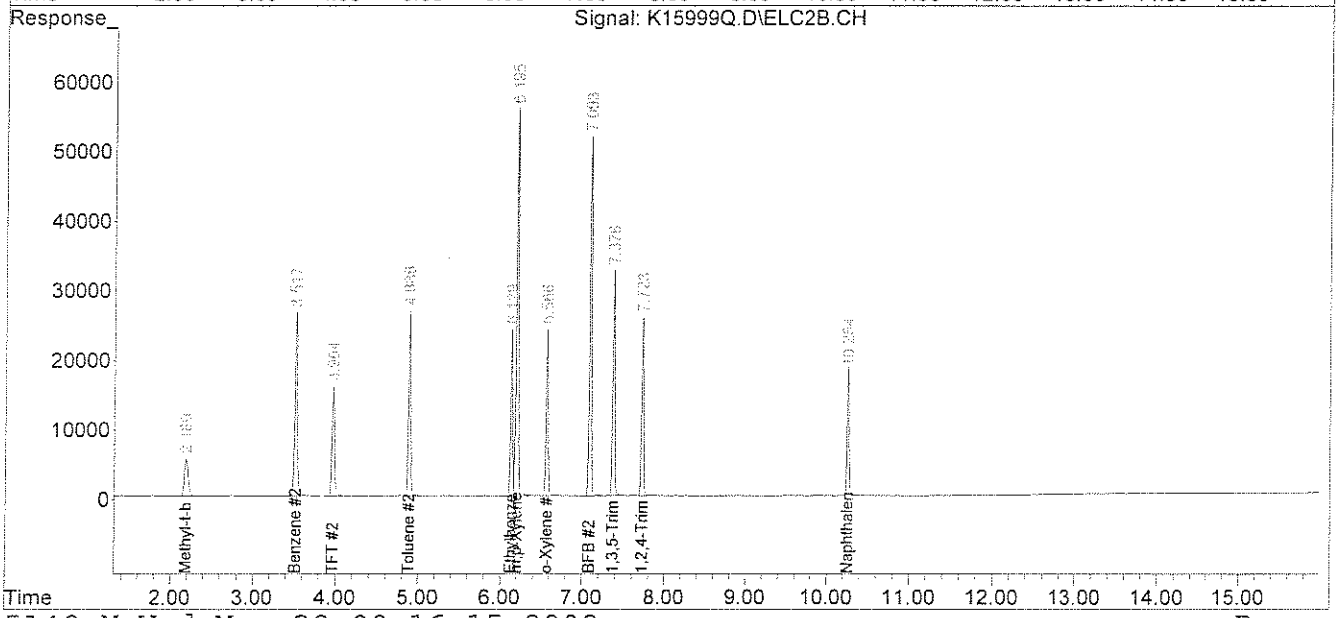
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K15999Q.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 27 May 2008 11:17 pm
Operator :
Sample : L05278KGRO
Misc : 100,5,SOIL, + 100UL MEOH
ALS Vial : 46 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 28 00:16:14 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K16000Q.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 27 May 2008 11:40 pm
Operator :
Sample : L05278KGRO2
Misc : 100,5,SOIL, + 100UL MEOH
ALS Vial : 47 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 28 00:10:08 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

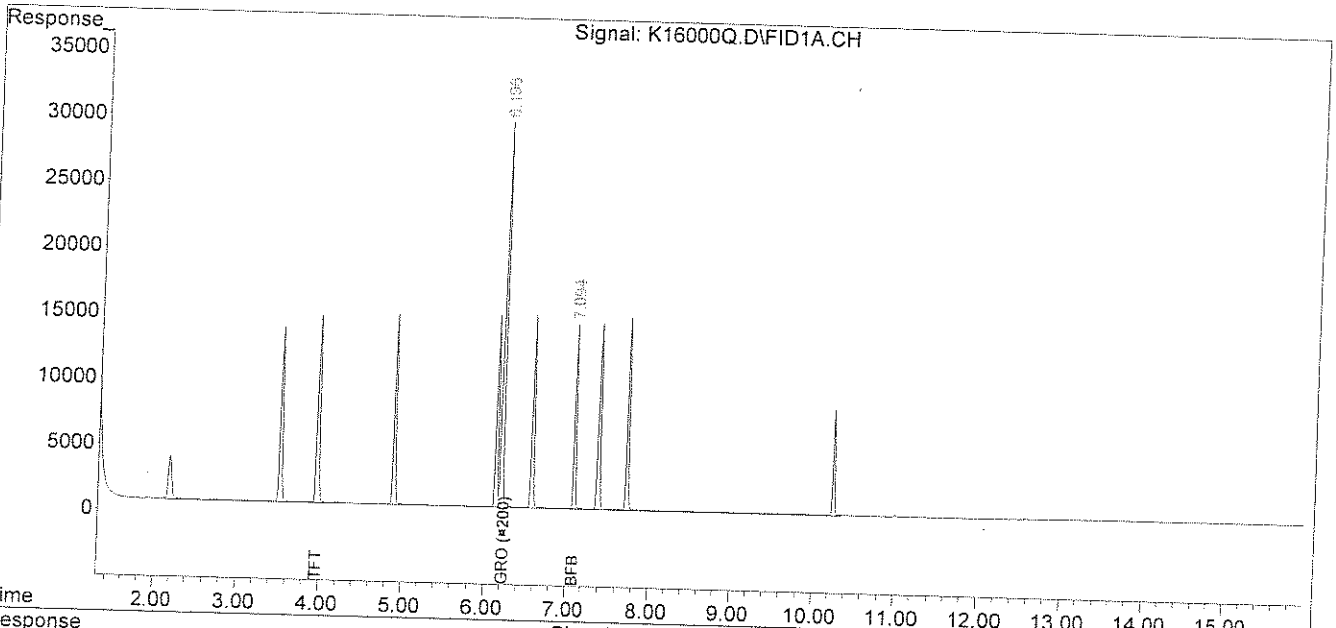
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
1)	S TFT	3.967	3.967	301945	335592	41.872	43.936	
	Spiked Amount	40.000	Range 60 - 140		Recovery =	104.68%	109.84%	
)	S BFB	7.095	7.094	226306	831285	38.916	41.176	
	Spiked Amount	40.000	Range 60 - 140		Recovery =	97.29%	102.94%	
	Target Compounds							
3)	TM Methyl-t-...	2.193	2.193	101409	175545	NoCal	19.197	#
4)	TM Benzene	3.520	3.520	260868	512651	NoCal	21.448	#
5)	TM Toluene	4.891	4.891	264403	485395	NoCal	21.652	#
6)	TM Ethylbenzene	6.132	6.131	253371	418508	NoCal	21.295	#
7)	TM m,p-Xylene	6.198	6.197	515367	987945	NoCal	42.701	#
8)	TM o-Xylene	6.569	6.568	259895	423531	NoCal	21.612	#
9)	TM 1,3,5-Tri...	7.378	7.378	251119	572780	NoCal	21.527	#
0)	TM 1,2,4-Tri...	7.726	7.725	250002	441146	NoCal	21.670	#
1)	TM Naphthalene	10.257	10.256	129142	301132	NoCal	19.866	#
2)	GRO (<200)	6.238	0.000	2406906	0	194.020m	N.D.	#
3)	GRO (>200)	6.238	0.000	2406906	0	189.151m	N.D.	#

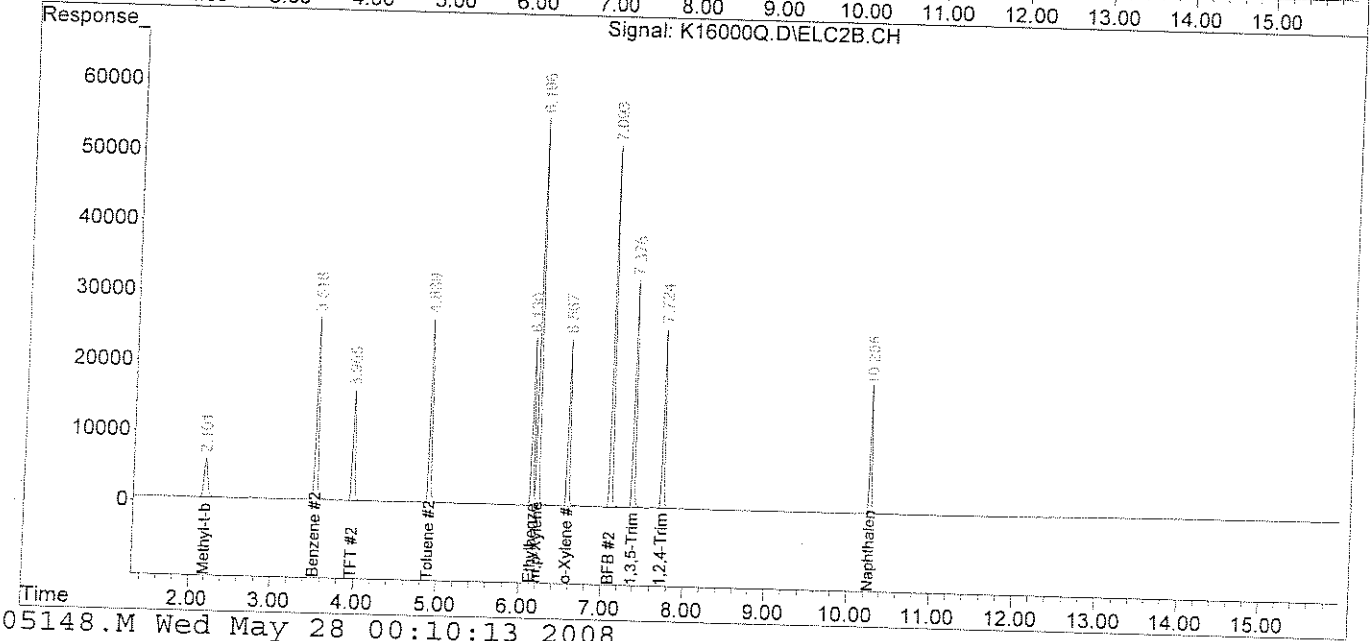
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K16000Q.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 27 May 2008 11:40 pm
Operator :
Sample : L05278KGRO2
Misc : 100,5,SOIL, + 100UL MEOH
ALS Vial : 47 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 28 00:10:08 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :





GASOLINE RANGE ORGANICS WATER
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
PERCENT RECOVERY

Instrument ID: K
GC Column: RTX-502.2
Column ID: 0.25 mm

SDG: 61399
Non-spiked sample: 61399-2
Spike: 61399-2,MS
Spike duplicate: 61399-2,MSD

COMPOUND	MS SPIKE ADDED (ug/L)	MSD SPIKE ADDED (ug/L)	LOWER LIMIT	UPPER LIMIT	RPD LIMIT	NON-SPIKE RESULT (ug/L)	SPIKE RESULT (ug/L)	SPIKE % REC	#	SPIKE DUP RESULT (ug/L)	SPIKE DUP % REC	#	RPD	#
GRO (<200)	200	200	67	125	25	0	170	85		175	88		3	
GRO (>200)	200	200	67	125	25	0	165	83		170	85		3	
Methyl-t-butylether #2	20	20	67	125	25	0	17	87		18	92		5	
Benzene #2	20	20	67	125	25	0	19	96		20	100		4	
Toluene #2	20	20	67	125	25	0	19	95		20	99		4	
Ethylbenzene #2	20	20	67	125	25	0	19	94		19	97		4	
m,p-Xylene #2	40	40	67	125	25	0	37	92		38	95		3	
o-Xylene #2	20	20	67	125	25	0	19	94		19	96		3	
1,3,5-Trimethylbenzene #2	20	20	67	125	25	0	18	89		18	89		1	
1,2,4-Trimethylbenzene #2	20	20	67	125	25	0	18	90		18	90		1	
Naphthalene #2	20	20	67	125	25	0	17	84		18	91		8	

Column to be used to flag recovery and RPD values outside of QC limits
* Values outside QC limits

Non-spike result of "0" used in place of "U" to allow calculation of spike recovery.

Comments: _____

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K16009SP.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 28 May 2008 3:46 am
Operator :
Sample : 61399-2,MS
Misc : 5000
ALS Vial : 56 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 28 12:02:39 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

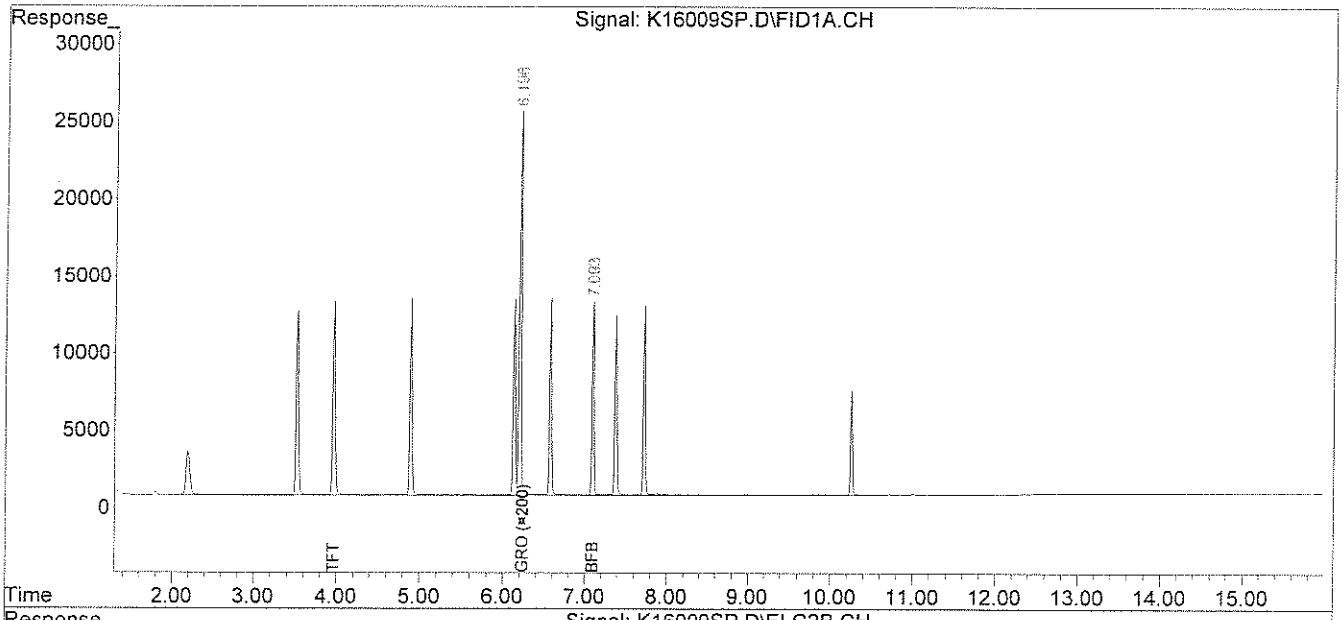
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
1)	S TFT	3.966	3.966	264941	293605	36.741	38.439	
	Spiked Amount	40.000	Range 60 - 140		Recovery =	91.85%	96.10%	
	S BFB	7.095	7.094	200661	739107	34.506	36.610	
	Spiked Amount	40.000	Range 60 - 140		Recovery =	86.27%	91.53%	
	Target Compounds							
3)	TM Methyl-t-...	2.190	2.190	93364	159583	NoCal	17.452	#
4)	TM Benzene	3.518	3.518	232610	457954	NoCal	19.160	#
5)	TM Toluene	4.891	4.890	232946	430554	NoCal	19.206	#
6)	TM Ethylbenzene	6.131	6.131	222081	369009	NoCal	18.776	#
7)	TM m,p-Xylene	6.197	6.197	444171	856714	NoCal	37.029	#
8)	TM o-Xylene	6.568	6.568	225306	368380	NoCal	18.798	#
9)	TM 1,3,5-Tri...	7.378	7.378	207242	472981	NoCal	17.776	#
10)	TM 1,2,4-Tri...	7.725	7.725	207385	367084	NoCal	18.032	#
11)	TM Naphthalene	10.257	10.256	109129	256095	NoCal	16.895	#
12)	GRO (<200)	6.238	0.000	2135118	0	170.114m	N.D.	#
13)	GRO (>200)	6.238	0.000	2135118	0	165.054m	N.D.	#

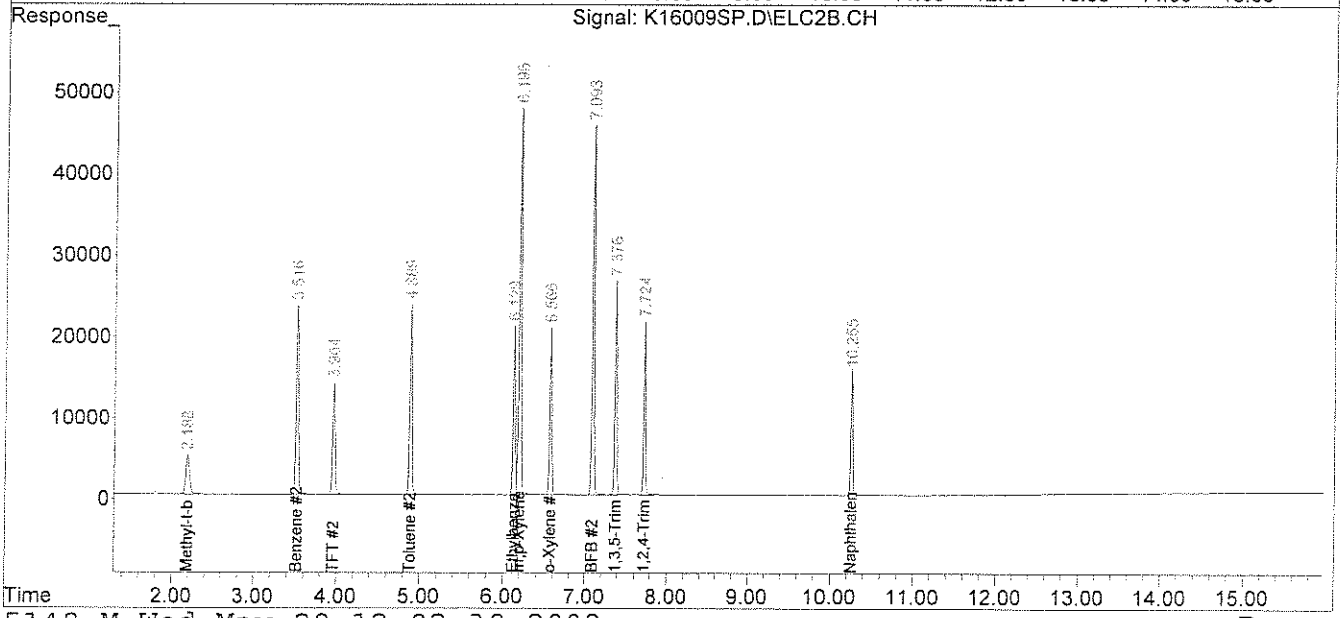
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K16009SP.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 28 May 2008 3:46 am
Operator :
Sample : 61399-2,MS
Misc : 5000
ALS Vial : 56 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 28 12:02:39 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K16010SP.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 28 May 2008 4:09 am
Operator :
Sample : 61399-2,MSD
Misc : 5000
ALS Vial : 57 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 28 12:02:40 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

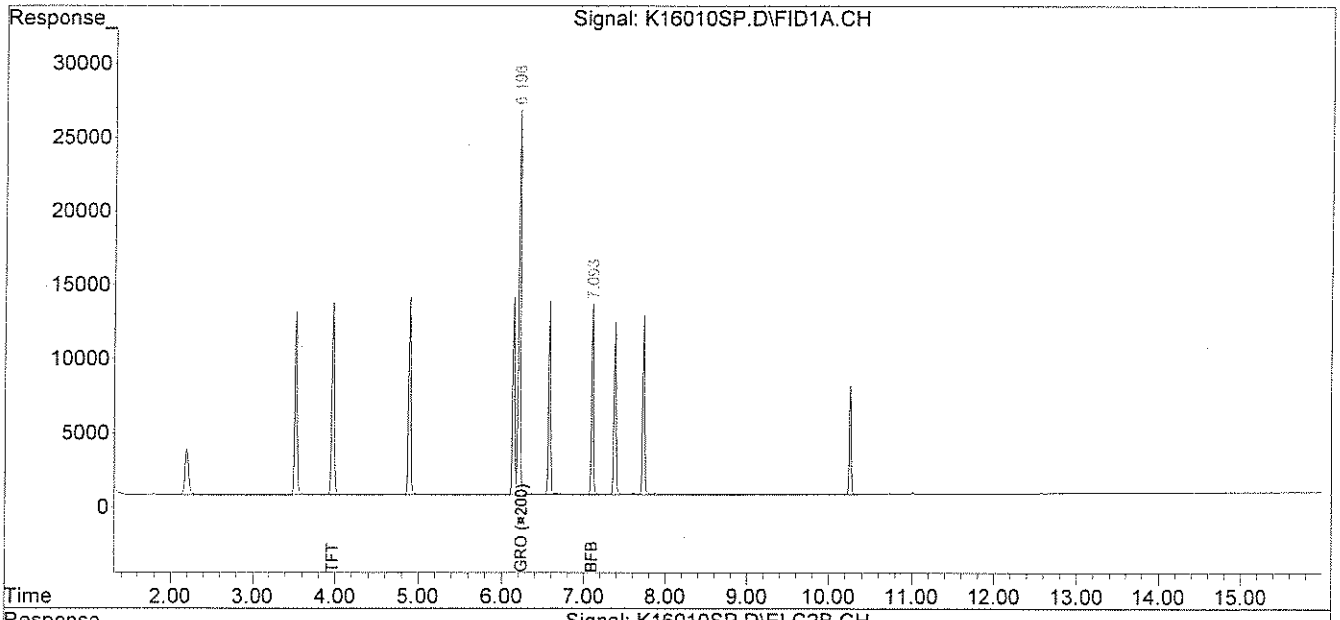
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
1)	S TFT	3.967	3.966	274924	307877	38.125	40.307	
	Spiked Amount	40.000	Range 60 - 140		Recovery =	95.31%	100.77%	
	S BFB	7.095	7.094	208482	769327	35.851	38.107	
	Spiked Amount	40.000	Range 60 - 140		Recovery =	89.63%	95.27%	
	Target Compounds							
3)	TM Methyl-t-...	2.192	2.192	97440	168239	NoCal	18.398	#
4)	TM Benzene	3.519	3.519	241355	477556	NoCal	19.980	#
5)	TM Toluene	4.891	4.890	240959	446746	NoCal	19.928	#
6)	TM Ethylbenzene	6.131	6.131	230550	382951	NoCal	19.486	#
7)	TM m,p-Xylene	6.197	6.197	457427	879725	NoCal	38.024	#
8)	TM o-Xylene	6.568	6.568	233372	378655	NoCal	19.322	#
9)	TM 1,3,5-Tri...	7.378	7.378	207576	475491	NoCal	17.870	#
10)	TM 1,2,4-Tri...	7.726	7.725	209644	369089	NoCal	18.131	#
11)	TM Naphthalene	10.256	10.256	118519	277567	NoCal	18.311	#
12)	GRO (<200)	6.238	0.000	2194232	0	175.314m	N.D.	#
13)	GRO (>200)	6.238	0.000	2194232	0	170.295m	N.D.	#

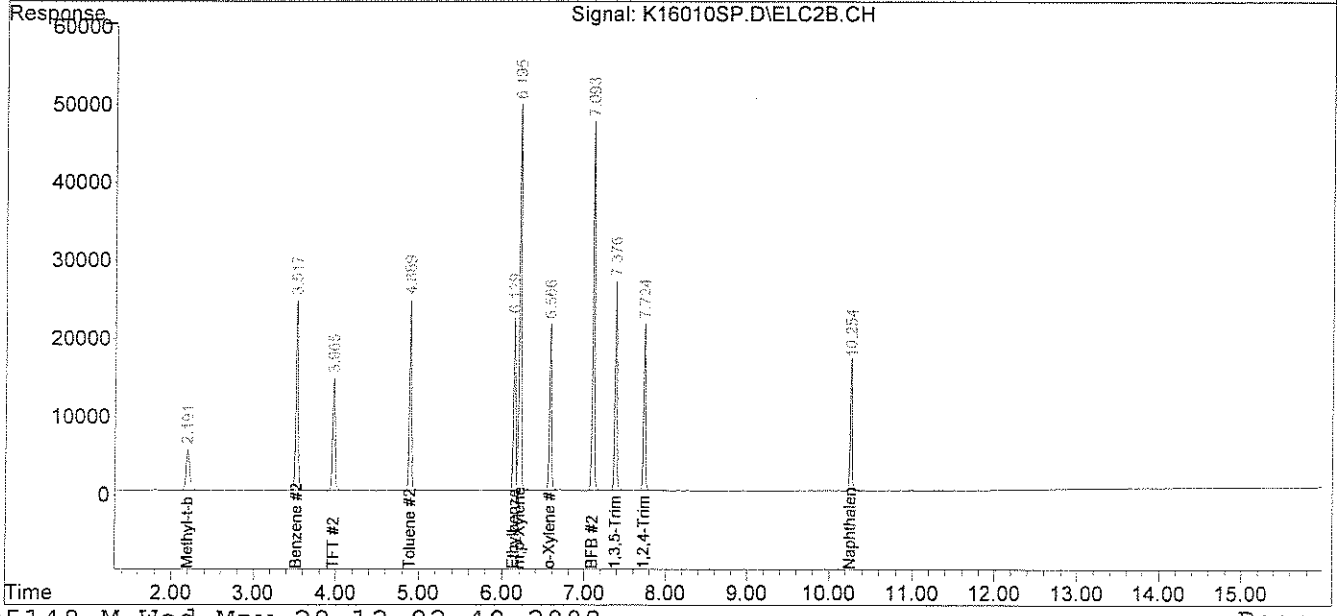
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K16010SP.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 28 May 2008 4:09 am
Operator :
Sample : 61399-2,MSD
Misc : 5000
ALS Vial : 57 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 28 12:02:40 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





PID=3

analytics environmental laboratory LLC

GC Volatiles Instrument: K

GAS/GRO Surr = V7231 x 6/13/08

TFT only = V7251 x 6/13/08

BFB only = V7216 x 5/28/08

051408-K

W-K-051408-RM

Position	Method	Sample	Vol.	Comments	File #	Analyst	pH
1	GRO051408M	Blank	5mL	sys idle	K15780	RM	NA
2		GRO 10		r. 025uL V7233	81		
3		20		r. 05 x6/13/08	82		
4		50		r 1.25	83		
5		100		r 2.5	84		
6		200		r 5	85		
7		500		r 12.5	86		
8		1000		r 25	87		
9		2500		r 62.5	88		
10		Blank-CO			89		
11		GRO CC 200		r 5uL V7237 x 6/13/08	90SC		
12		GAS 200			91		
13		Blank-sys idle			92		
14		B051158KGRO			93B		
15		L051158KGRO		r 5uL V7237 x 6/13/08	94Q		
16		LD051158KGRO			95Q		
17		61279-1			96	RM	4.2
18		GRO 200			97SC		
19	GAS04178.M	GAS 200			98SC		
20		MB051158KGAS	100/5mL		99B		
21		LS051158KGAS		r 5uL V7219 x 6/11/08	K15800Q		
22		LSD051158KGAS			01Q		
23		61327-2		8.5g 8mLFV	02		
24		-3		8.25g	03		
25		-4	5mL/5	8.02	04		
26		-1	25uL/5	8.23	05		
27		GAS 200	5mL	r 5uL V7191 5/17/08	06SC		
28		B051158KGAS		window blank	07B		
29		Blank-sys idle			08		
30		61275-7 TB	100uL/5mL		09		
31		-5	50uL/5mL	7.26g 7mLFV	10		
32		-4	100uL/5mL	5.52g 5mLFV	11		
33		-1	50uL/5mL	6.09g, 6mLFV	12		
34		-6	5mL/5mL	4.6g, 5mLFV	13		
35		Blank-CO			14		
36					15		
37					16		
38					17		
39					18		
40					19		

*ran't on next pg

analytics environmental laboratory LLC

052308-K PID = 3 GRO Std. V7258 x 6/21/08
ALR 5/27/08
GC Volatiles Instrument: K
GRO Surr. V7231 x 6/13/08
GRO LCS V7237 x 6/13/08
BFB V7264 x 6/27/08
GAS CC V7219 x 6/1/08

LQ-K-052308-1-ALR ALR 5/27/08

Position	Method	Sample	Vol.	Comments	File #	Analyst	pH
41		BLK	5mL		K15994	ALR	N/A
42	GRO5148	GRO 200µL		↑TFT PID	95SC		
43		BLK			96		
44		GRO 200µL		✓	97SC		
45		BOS2378KGRO		✓ + 100µL MeOH or H_2O+Sol	C8B		
46		LOS2378KGRO		✓ +	99Q		
47		LOS2378KGRO2		✓ +	K16000Q		
48		61399-15 T.B	5mL	✓	01		<2
49		-16 T.B		✓	02		<2
50		61393-1	100µL/5mL	✓ 5.40g	03		N/A
51		61380-8	2.5mL	✓ Confirms TSum. Rpt. this	04		
52		BLK-CO	5mL		05		N/A
53		61381-1		✓	06		<2
54		61399-1		✓	07		<2
55		-2		✓	08		<2
56		-2,MS		✓	09SC		<2
57		-2,MSD		✓	10SC		<2
58		-3		✓	11		<2
59		-4		✓	12		<2
60		-5		✓	13		<2
61		-6		✓	14		<2
62		-7		✓	15		<2
63		-8		✓	16		<2
64		-9		✓	17		<2
65		-10		✓	18		<2
66		-11		✓	19		<2
67		-12		✓	20		<2
68		-13		✓	21		<2
69		GAS CC 200µL			22		N/A
70		GRO 200µL			23SC		
69		61399-14	5mL	✓	22		<2
70		GAS CC 200µL		✓ 60%	23		N/A
71		GRO 200µL		✓	24SC		

6/28/08

Response Factor Report HP G1530A

Method Path : C:\msdchem\1\METHODS\
Method File : GRO05148.M
Title : Volatile Petroleum Hydrocarbons
Last Update : Thu May 15 06:23:16 2008
Response Via : Initial Calibration

6.3.08

6/2/08

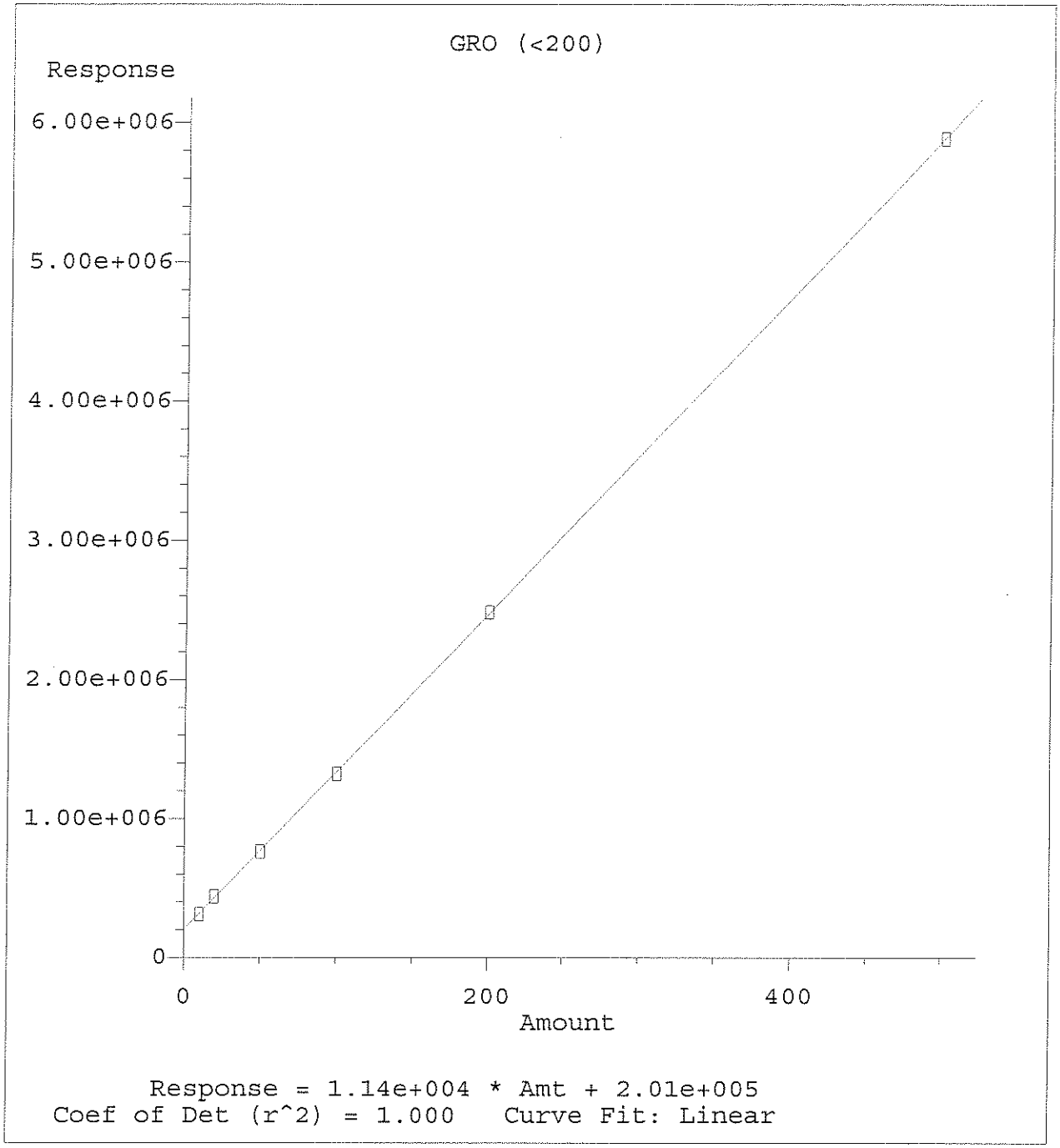
Calibration Files
1 =K15781SI.D 2 =K15782SI.D 5 =K15783SI.D
10 =K15784SI.D 20 =K15785SI.D 50 =K15786SI.D

		Compound	1	2	5	10	20	50	Avg		%RSD
1)	S	TFT	6.738	6.900	7.274	7.244	7.457	7.337	7.211	E3	4.02
2)	S	BFB	5.509	5.809	5.783	5.812	5.931	5.859	5.815	E3	2.68
3)		Methyl-t-buty...							0.000		-1.00
4)		Benzene							0.000		-1.00
5)		Toluene							0.000		-1.00
6)		Ethylbenzene							0.000		-1.00
7)		m,p-Xylene							0.000		-1.00
8)		o-Xylene							0.000		-1.00
9)		1,3,5-Trimeth...							0.000		-1.00
10)		1,2,4-Trimeth...							0.000		-1.00
11)		Naphthalene							0.000		-1.00
12)	HM	GRO (<200)	3.126	2.208	1.527	1.324	1.243	1.177	1.767	E4	43.22
13)	HM	GRO (>200)			1.527	1.324	1.243	1.177	1.266	E4	11.35

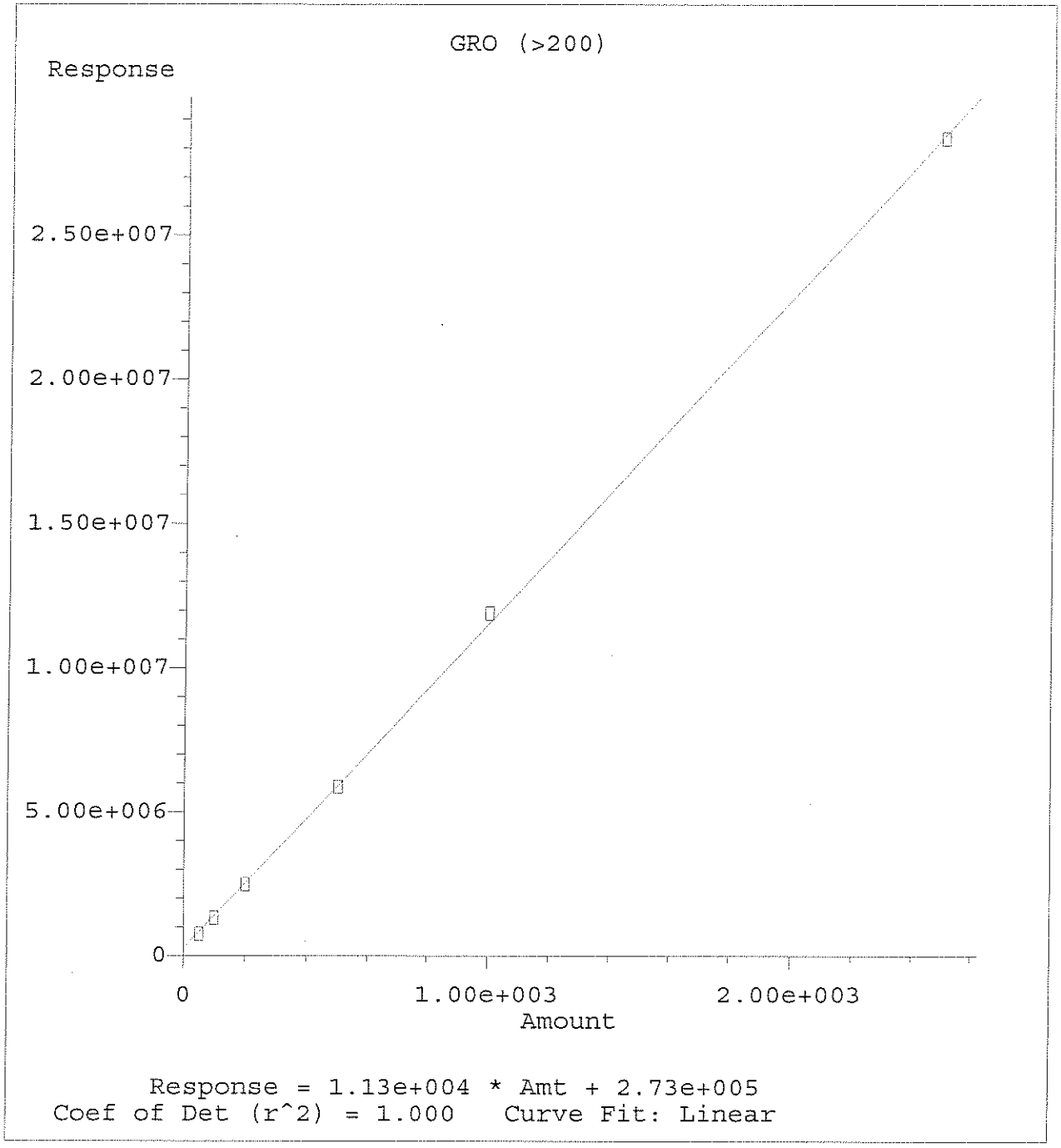
Signal #2 Calibration Files
1 =K15781SI.D 2 =K15782SI.D 5 =K15783SI.D
10 =K15784SI.D 20 =K15785SI.D 50 =K15786SI.D

		Compound	1	2	5	10	20	50	Avg		%RSD
1)	S	TFT		7.561	7.613	7.578	7.699	7.609	7.638	E3	1.05
2)	S	BFB		2.025	2.002	1.994	2.036	2.023	2.019	E4	1.55
3)	TM	Methyl-t-buty...		1.013	0.929	0.893	0.917	0.897	0.914	E4	5.65
4)	TM	Benzene	2.224	2.430	2.421	2.418	2.454	2.404	2.390	E4	3.35
5)	TM	Toluene		2.283	2.256	2.251	2.269	2.229	2.242	E4	2.27
6)	TM	Ethylbenzene		1.975	1.965	1.959	1.990	1.963	1.965	E4	1.66
7)	TM	m,p-Xylene		2.339	2.313	2.307	2.343	2.318	2.314	E4	2.08
8)	TM	o-Xylene		1.989	1.964	1.939	1.987	1.961	1.960	E4	1.99
9)	TM	1,3,5-Trimeth...		2.613	2.639	2.658	2.702	2.676	2.661	E4	1.70
10)	TM	1,2,4-Trimeth...		2.022	2.020	2.013	2.065	2.046	2.036	E4	1.43
11)	TM	Naphthalene		1.615	1.442	1.377	1.470	1.525	1.516	E4	5.90
12)		GRO (<200)							0.000		-1.00
13)		GRO (>200)							0.000		-1.00

(#) = Out of Range ### Number of calibration levels exceeded format ###



Method Name: C:\msdchem\1\METHODS\GRO05148.M
Calibration Table Last Updated: Thu May 15 06:23:16 2008



Method Name: C:\msdchem\1\METHODS\GRO05148.M
Calibration Table Last Updated: Thu May 15 06:23:16 2008

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\051408-K\
Data File : K15781SI.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 14 May 2008 4:13 pm
Operator :
Sample : GRO 10
Misc : 5000
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 15 06:16:11 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Wed Aug 22 18:37:56 2007
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
1)	S TFT	3.968	3.967	13476	13808	1.969	1.894	
	Spiked Amount	40.000	Range 60 - 140	Recovery	=	4.92%#	4.73%#	
	S BFB	7.095	7.094	11017	36824	2.112	2.029	
	Spiked Amount	40.000	Range 60 - 140	Recovery	=	5.28%#	5.07%#	
	Target Compounds							
3)	TM Methyl-t-...	2.193	2.192	6679	10715	NoCal	1.364	#
4)	TM Benzene	3.521	3.520	12464	22245	NoCal	1.031	#
5)	TM Toluene	4.891	4.891	12670	22383	NoCal	1.098	#
6)	TM Ethylbenzene	6.131	6.131	11830	18182	NoCal	1.033	#
7)	TM m,p-Xylene	6.197	6.196	23058	42199	NoCal	2.029	#
8)	TM o-Xylene	6.568	6.568	12383	18648	NoCal	1.054	#
9)	TM 1,3,5-Tri...	7.378	7.377	11200	23300	NoCal	0.940	#
10)	TM 1,2,4-Tri...	7.725	7.725	12402	18770	NoCal	0.981	#
11)	TM Naphthalene	10.257	10.256	7104	14792	NoCal	0.925	#
12)	GRO (<200)	6.238	0.000	312575	0	18.189m	N.D.	#
13)	GRO (>200)	6.238	0.000	312575	0	17.712m	N.D.	#

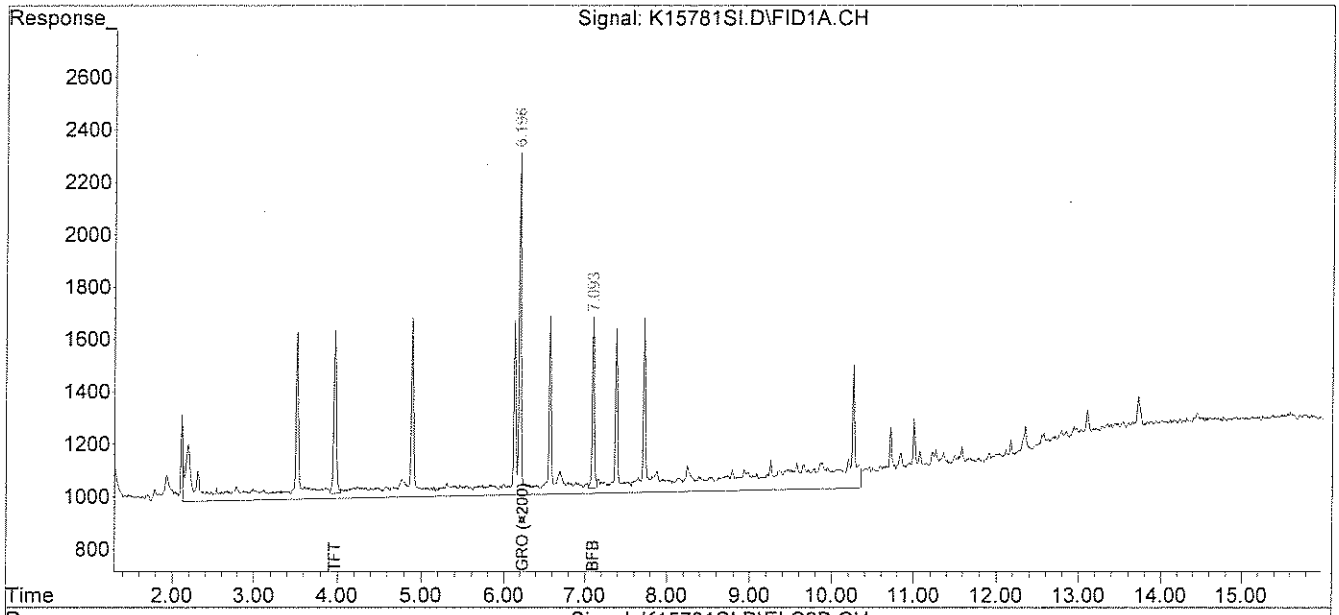
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

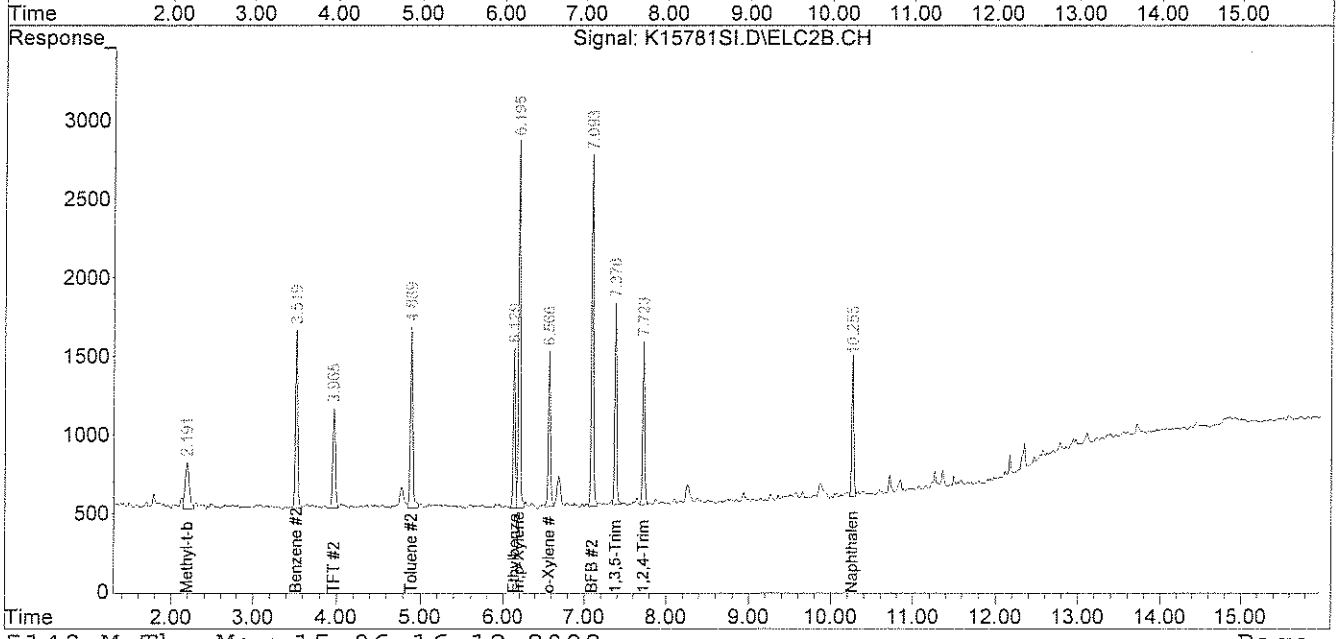
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\051408-K\
Data File : K15781SI.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 14 May 2008 4:13 pm
Operator :
Sample : GRO 10
Misc : 5000
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 15 06:16:11 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Wed Aug 22 18:37:56 2007
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\051408-K\
Data File : K15782SI.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 14 May 2008 4:36 pm
Operator :
Sample : GRO 20
Misc : 5000
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 15 06:16:13 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Wed Aug 22 18:37:56 2007
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

pm 5/15/08

5-14-08

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
1)	S TFT	3.968	3.968	27600	30243	4.032	4.150	
	Spiked Amount	40.000	Range 60 - 140	Recovery =		10.08%#	10.38%#	
	S BFB	7.095	7.094	23234	81018	4.453	4.465	
	Spiked Amount	40.000	Range 60 - 140	Recovery =		11.13%#	11.16%#	
	Target Compounds							
3)	TM Methyl-t-...	2.195	2.194	12625	20252	NoCal	2.578	#
4)	TM Benzene	3.521	3.521	25888	48591	NoCal	2.251	#
5)	TM Toluene	4.892	4.891	26285	45661	NoCal	2.239	#
6)	TM Ethylbenzene	6.132	6.131	25494	39491	NoCal	2.244	#
7)	TM m,p-Xylene	6.198	6.197	50355	93544	NoCal	4.499	#
8)	TM o-Xylene	6.569	6.568	26315	39776	NoCal	2.249	#
9)	TM 1,3,5-Tri...	7.378	7.378	24321	52261	NoCal	2.108	#
10)	TM 1,2,4-Tri...	7.726	7.725	24854	40450	NoCal	2.115	#
11)	TM Naphthalene	10.257	10.256	14757	32298	NoCal	2.020	#
12)	GRO (<200)	6.238	0.000	441554	0	29.823m	N.D.	#
13)	GRO (>200)	6.238	0.000	441554	0	29.446m	N.D.	#

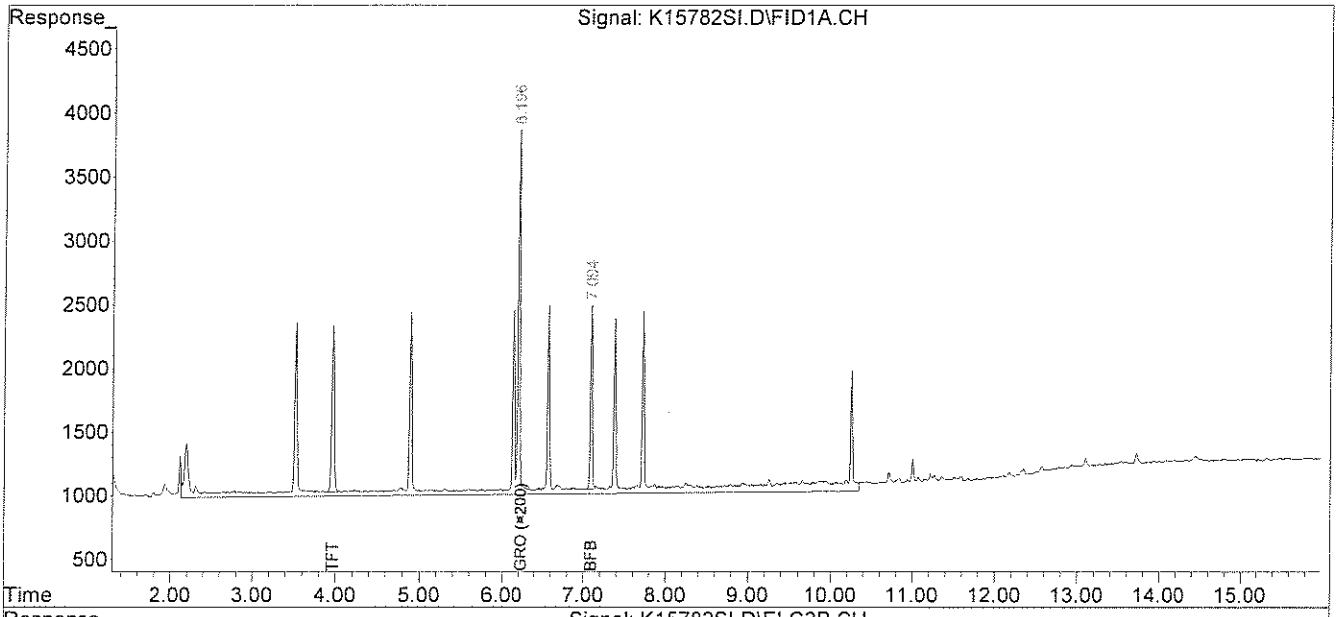
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

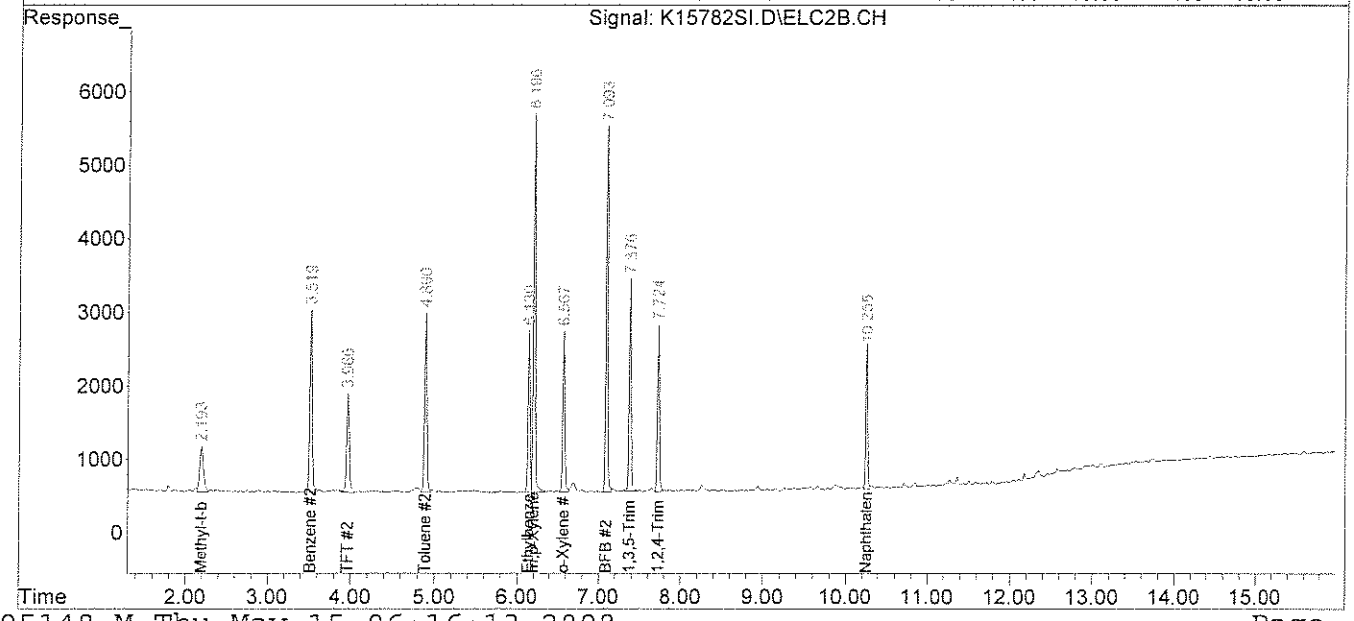
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\051408-K\
Data File : K15782SI.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 14 May 2008 4:36 pm
Operator :
Sample : GRO 20
Misc : 5000
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 15 06:16:13 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Wed Aug 22 18:37:56 2007
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\051408-K\
Data File : K15783SI.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 14 May 2008 4:59 pm
Operator :
Sample : GRO 50
Misc : 5000
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 15 06:16:14 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Wed Aug 22 18:37:56 2007
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

RM 5/15/08

5/19/08

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
1)	S TFT	3.968	3.967	72737	76128	10.626	10.445	
	Spiked Amount	40.000	Range 60 - 140		Recovery =	26.57%#	26.11%#	
	S BFB	7.095	7.095	57830	200180	11.084	11.032	
	Spiked Amount	40.000	Range 60 - 140		Recovery =	27.71%#	27.58%#	
	Target Compounds							
3)	TM Methyl-t-...	2.193	2.193	29373	46431	NoCal	5.911	#
4)	TM Benzene	3.521	3.520	65069	121057	NoCal	5.608	#
5)	TM Toluene	4.891	4.891	64876	112804	NoCal	5.531	#
6)	TM Ethylbenzene	6.131	6.131	63060	98260	NoCal	5.584	#
7)	TM m,p-Xylene	6.197	6.197	126885	231335	NoCal	11.125	#
8)	TM o-Xylene	6.569	6.568	63353	98211	NoCal	5.554	#
9)	TM 1,3,5-Tri...	7.378	7.378	61451	131941	NoCal	5.323	#
10)	TM 1,2,4-Tri...	7.726	7.725	61526	100998	NoCal	5.281	#
11)	TM Naphthalene	10.257	10.256	32914	72086	NoCal	4.508	#
12)	GRO (<200)	6.238	0.000	763541	0	58.867m	N.D.	#
13)	GRO (>200)	6.238	0.000	763541	0	58.740m	N.D.	#

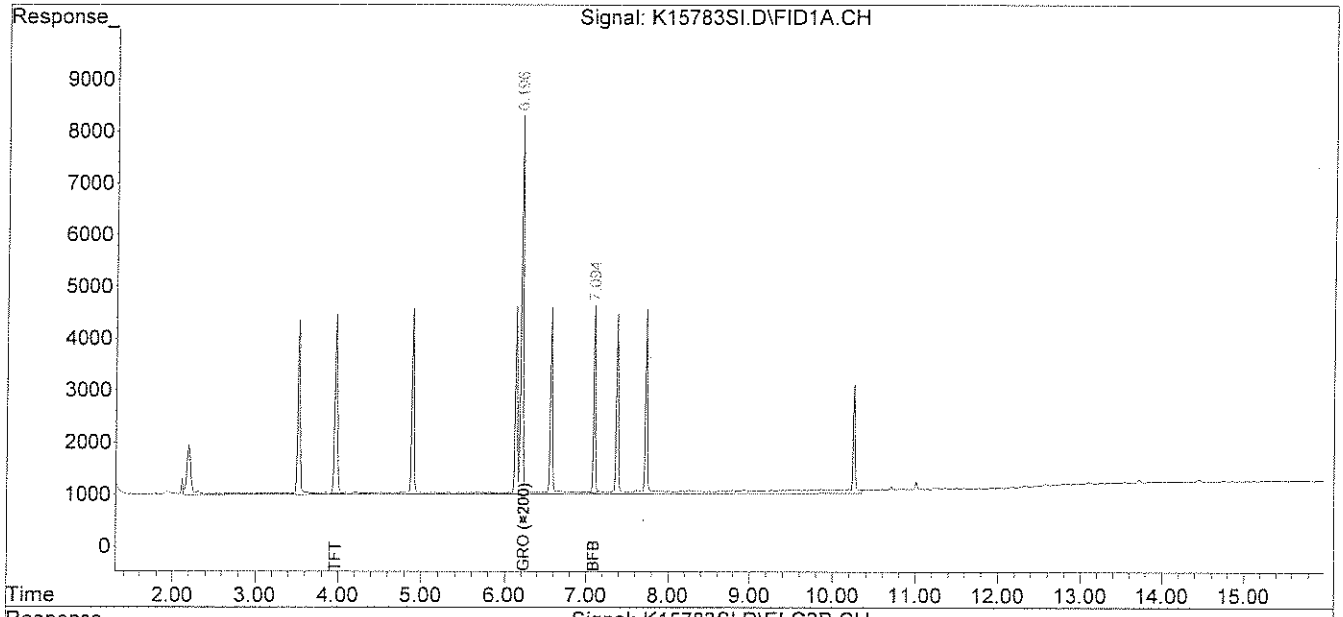
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

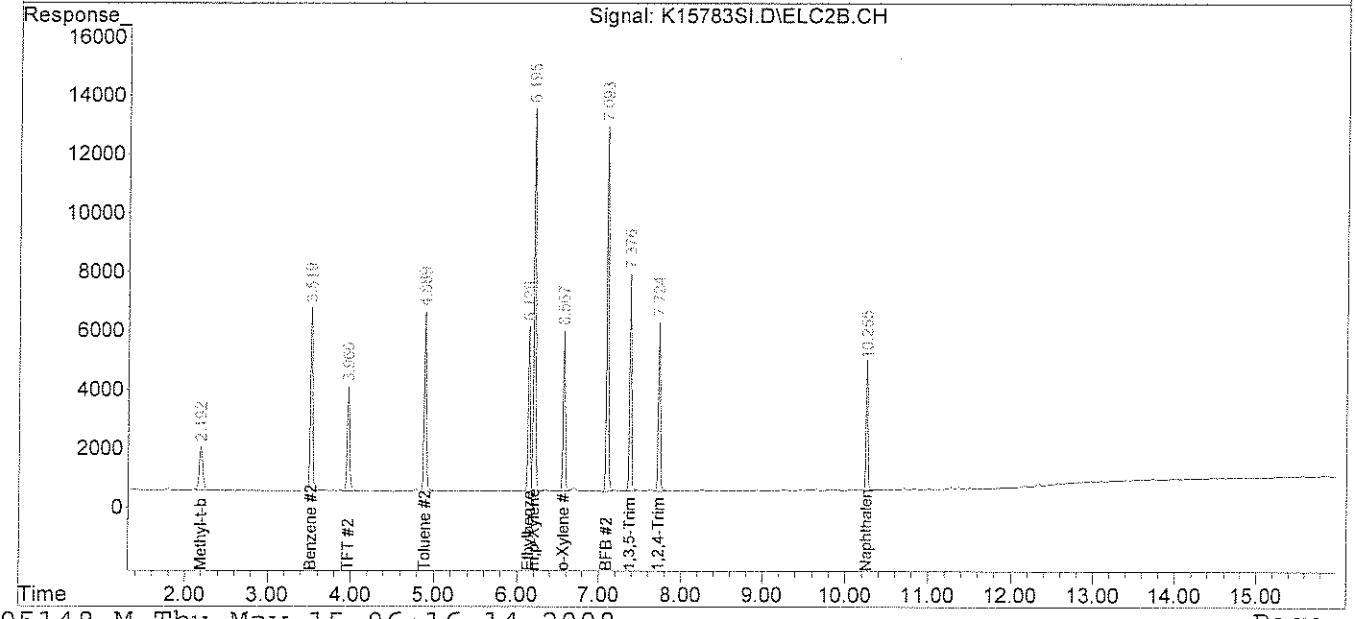
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\051408-K\
Data File : K15783SI.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 14 May 2008 4:59 pm
Operator :
Sample : GRO 50
Misc : 5000
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 15 06:16:14 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Wed Aug 22 18:37:56 2007
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\051408-K\
Data File : K15784SI.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 14 May 2008 5:23 pm
Operator :
Sample : GRO 100
Misc : 5000
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 15 06:16:15 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Wed Aug 22 18:37:56 2007
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

RM 5/15/08

5-19-08

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
1)	S TFT	3.966	3.965	144877	151558	21.166	20.794	
	Spiked Amount	40.000	Range 60 - 140		Recovery =	52.91%#	51.99%#	
	S BFB	7.095	7.094	116249	398855	22.281	21.980	
	Spiked Amount	40.000	Range 60 - 140		Recovery =	55.70%#	54.95%#	
	Target Compounds							
3)	TM Methyl-t-...	2.190	2.190	54813	89288	NoCal	11.368	#
4)	TM Benzene	3.518	3.518	129881	241775	NoCal	11.201	#
5)	TM Toluene	4.890	4.890	128083	225077	NoCal	11.037	#
6)	TM Ethylbenzene	6.131	6.131	125309	195924	NoCal	11.134	#
7)	TM m,p-Xylene	6.197	6.196	254588	461311	NoCal	22.185	#
8)	TM o-Xylene	6.569	6.568	127516	193892	NoCal	10.964	#
9)	TM 1,3,5-Tri...	7.379	7.378	124125	265765	NoCal	10.721	#
10)	TM 1,2,4-Tri...	7.726	7.725	121821	201251	NoCal	10.522	#
11)	TM Naphthalene	10.257	10.256	62794	137744	NoCal	8.613	#
12)	GRO (<200)	6.238	0.000	1323676	0	109.392m	N.D.	#
13)	GRO (>200)	6.238	0.000	1323676	0	109.700m	N.D.	#

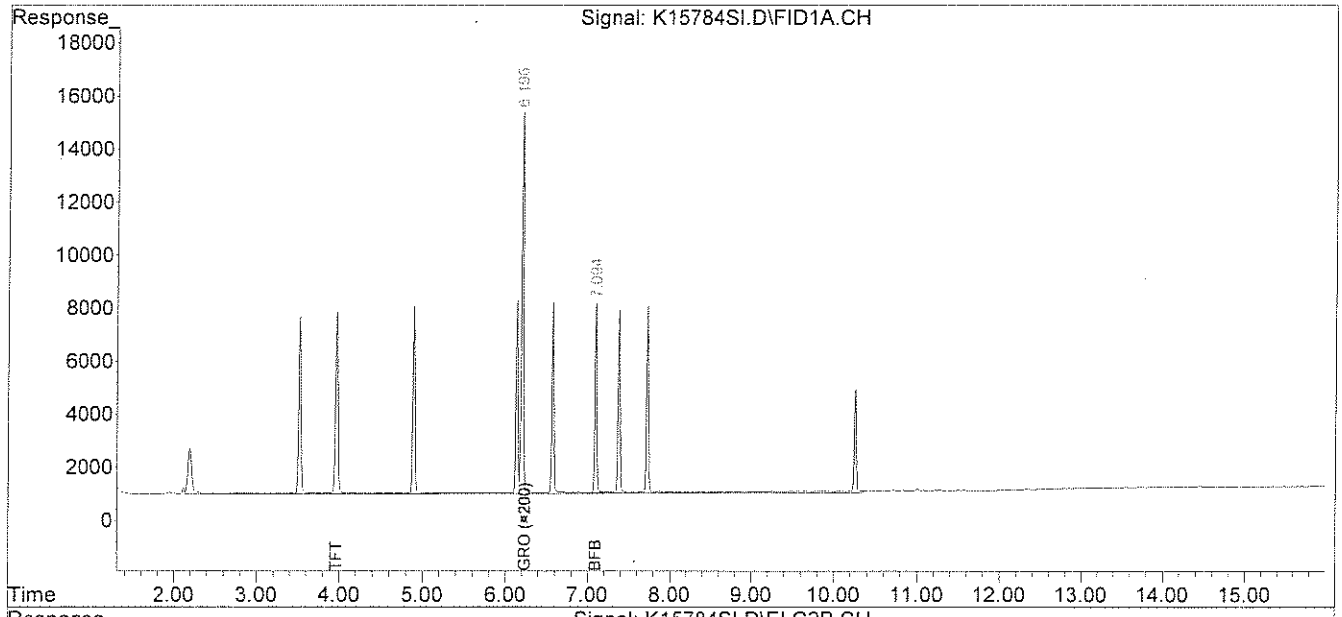
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

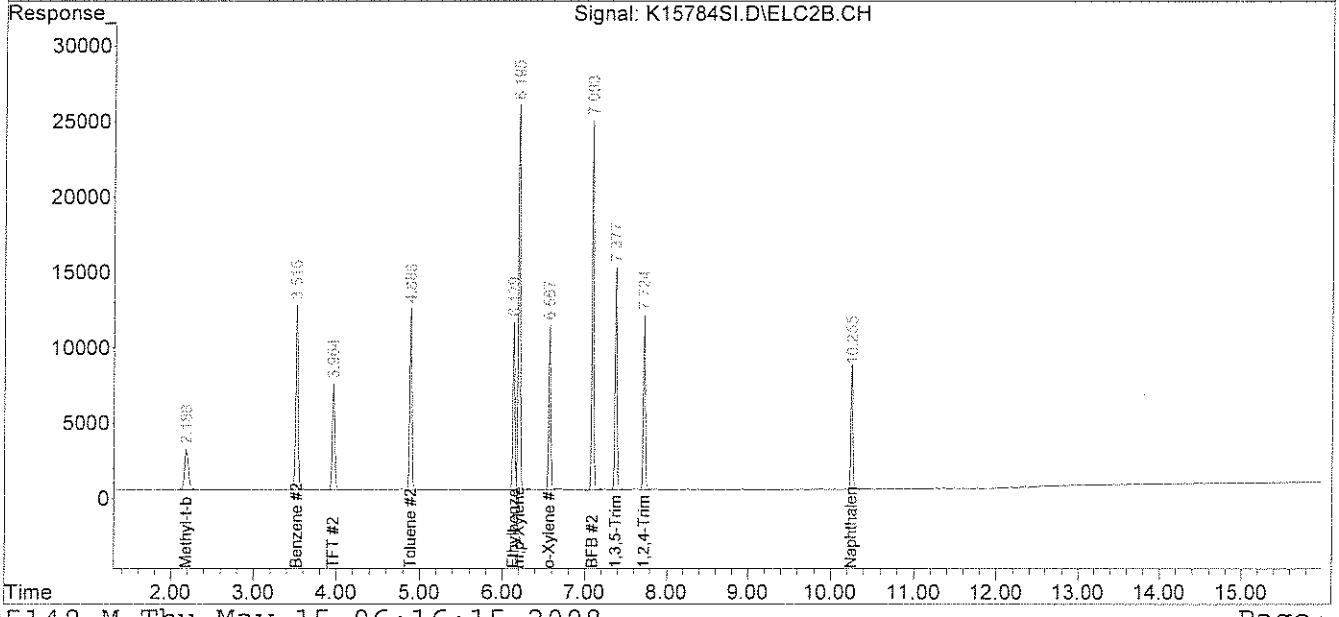
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\051408-K\
Data File : K15784SI.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 14 May 2008 5:23 pm
Operator :
Sample : GRO 100
Misc : 5000
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 15 06:16:15 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Wed Aug 22 18:37:56 2007
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\051408-K\
Data File : K15785SI.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 14 May 2008 5:46 pm
Operator :
Sample : GRO 200
Misc : 5000
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 15 06:16:17 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Wed Aug 22 18:37:56 2007
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

gm 5/15/08

5/19/08

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
1)	S TFT	3.966	3.965	298276	307963	43.577	42.254	
	Spiked Amount 40.000	Range 60 - 140		Recovery = 108.94%			105.63%	
	S BFB	7.095	7.094	237233	814337	45.469	44.877	
	Spiked Amount 40.000	Range 60 - 140		Recovery = 113.67%			112.19%	
	Target Compounds							
3)	TM Methyl-t-...	2.190	2.189	114336	183451	NoCal	23.357	#
4)	TM Benzene	3.518	3.518	266480	490832	NoCal	22.740	#
5)	TM Toluene	4.890	4.890	262492	453814	NoCal	22.253	#
6)	TM Ethylbenzene	6.131	6.130	256661	398023	NoCal	22.618	#
7)	TM m,p-Xylene	6.197	6.197	521828	937181	NoCal	45.070	#
8)	TM o-Xylene	6.568	6.568	259735	397349	NoCal	22.469	#
9)	TM 1,3,5-Tri...	7.378	7.378	252780	540489	NoCal	21.804	#
10)	TM 1,2,4-Tri...	7.725	7.725	249928	413083	NoCal	21.597	#
11)	TM Naphthalene	10.257	10.256	133431	294079	NoCal	18.389	#
12)	GRO (<200)	6.238	0.000	2485414	0	214.181m	N.D.	#
13)	GRO (>200)	6.238	0.000	2485414	0	215.394m	N.D.	#

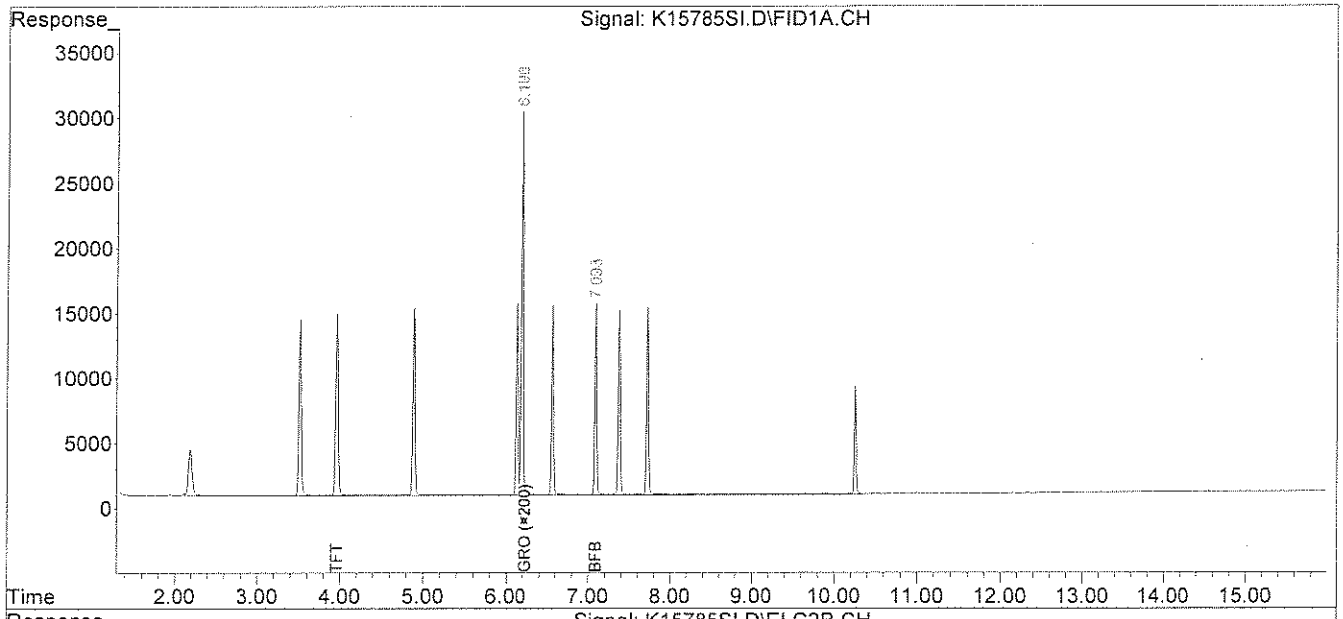
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

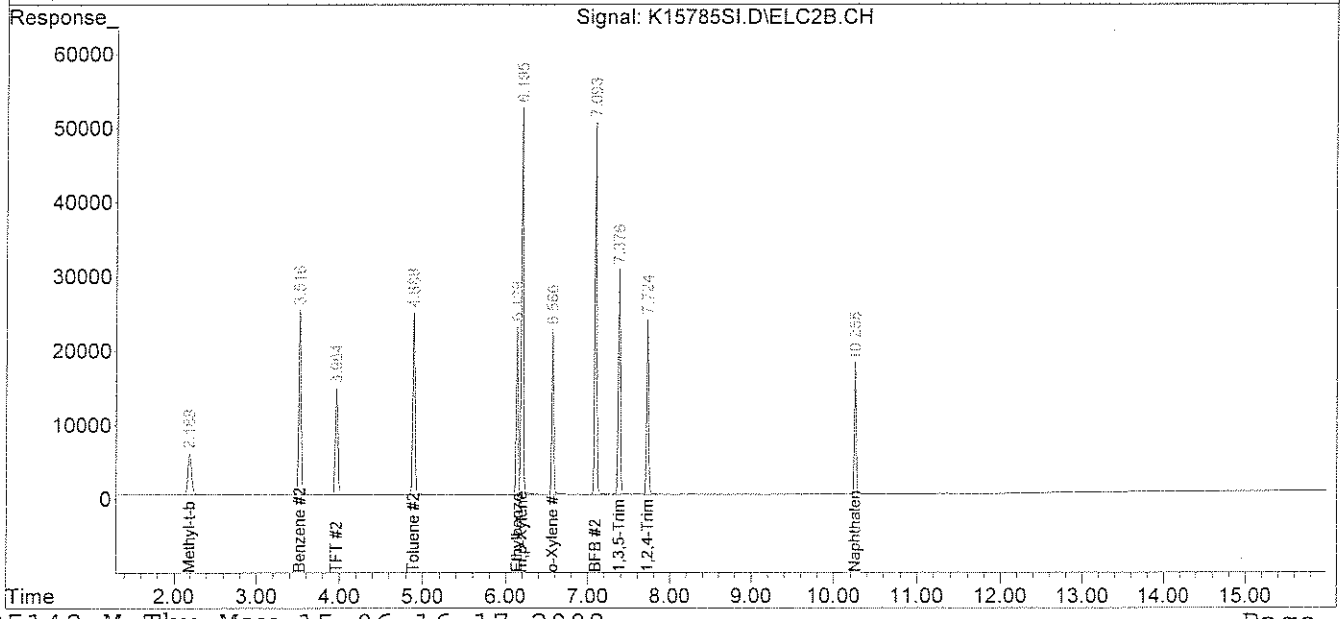
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\051408-K\
Data File : K15785SI.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 14 May 2008 5:46 pm
Operator :
Sample : GRO 200
Misc : 5000
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 15 06:16:17 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Wed Aug 22 18:37:56 2007
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\051408-K\
Data File : K15786SI.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 14 May 2008 6:09 pm
Operator :
Sample : GRO 500
Misc : 5000
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 15 06:16:18 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Wed Aug 22 18:37:56 2007
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
1)	S TFT	3.967	3.967	733656	760887	107.183	104.396	
	Spiked Amount	40.000	Range 60 - 140		Recovery =	267.96%#	260.99%#	
2)	S BFB	7.096	7.095	585865	2023425	112.289	111.508	
	Spiked Amount	40.000	Range 60 - 140		Recovery =	280.72%#	278.77%#	
	Target Compounds							
3)	TM Methyl-t-...	2.192	2.192	278223	448313	NoCal	57.078	#
4)	TM Benzene	3.520	3.520	652876	1202192	NoCal	55.696	#
5)	TM Toluene	4.892	4.891	646267	1114303	NoCal	54.640	#
6)	TM Ethylbenzene	6.132	6.132	633251	981732	NoCal	55.789	#
7)	TM m,p-Xylene	6.198	6.198	1286613	2317847	NoCal	111.467	#
8)	TM o-Xylene	6.569	6.569	638720	980593	NoCal	55.449	#
9)	TM 1,3,5-Tri...	7.379	7.378	625598	1337950	NoCal	53.974	#
10)	TM 1,2,4-Tri...	7.726	7.725	622269	1022973	NoCal	53.485	#
11)	TM Naphthalene	10.257	10.257	349716	762630	NoCal	47.689	#
12)	GRO (<200)	6.238	0.000	5884450	0	520.778m	N.D.	#
13)	GRO (>200)	6.238	0.000	5884450	0	524.633m	N.D.	#

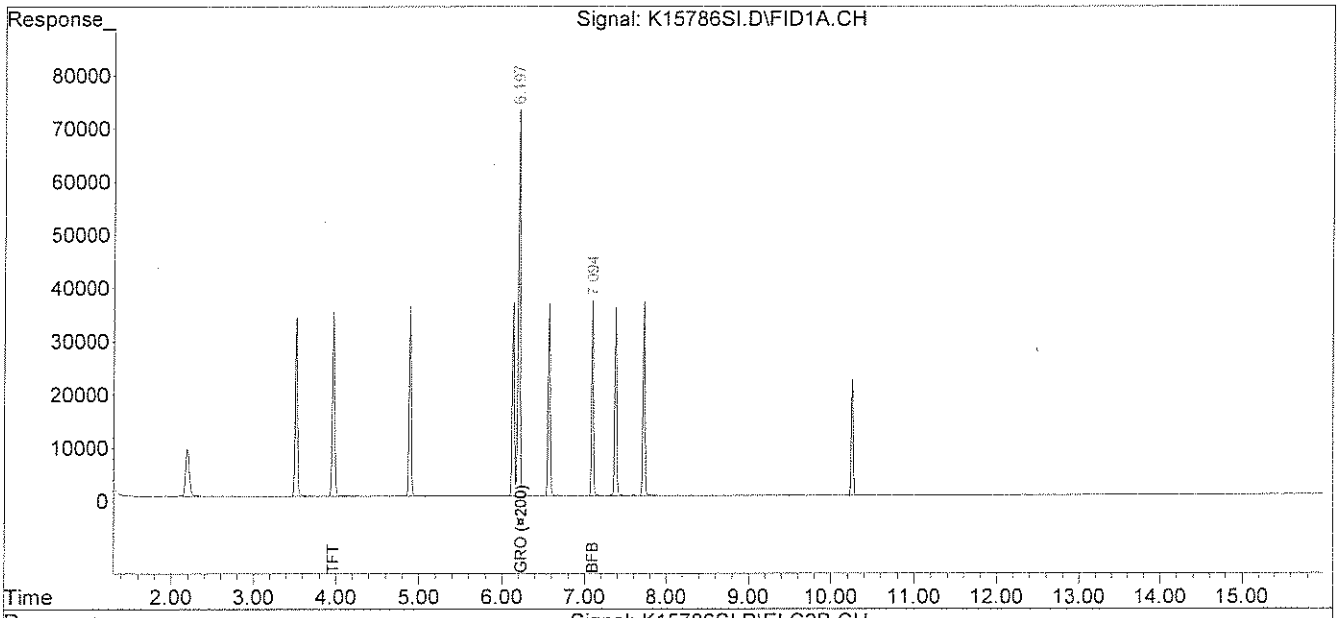
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

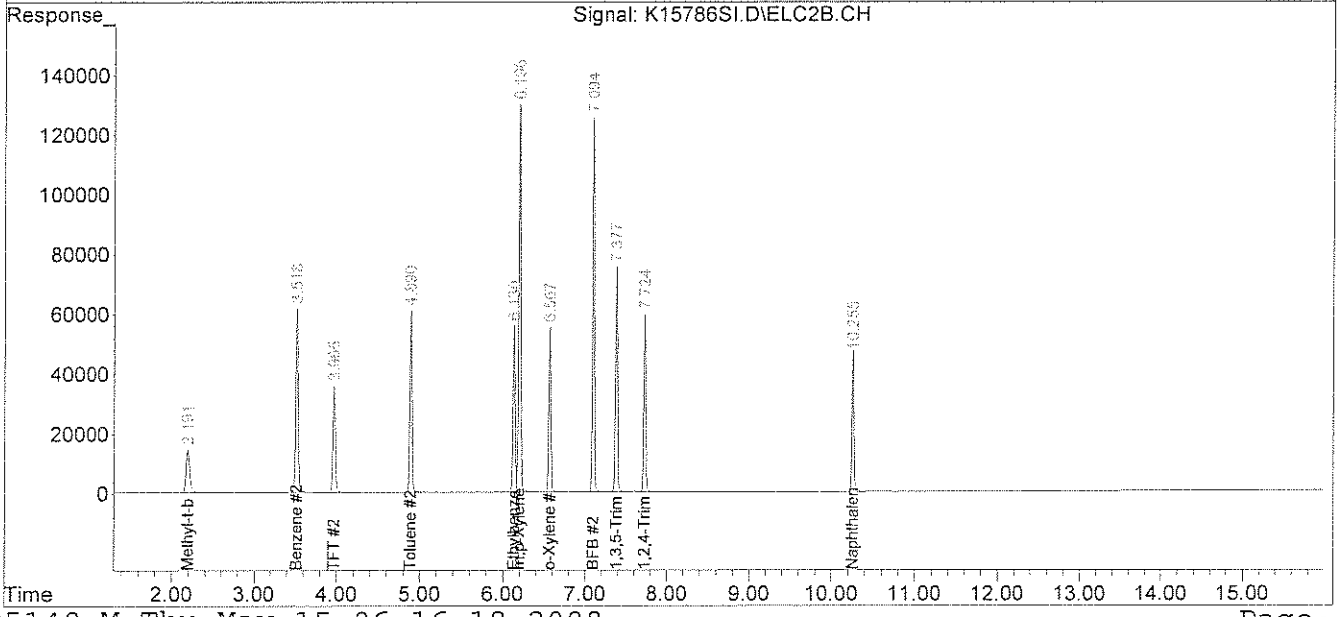
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\051408-K\
Data File : K15786SI.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 14 May 2008 6:09 pm
perator :
Sample : GRO 500
Misc : 5000
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 15 06:16:18 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Wed Aug 22 18:37:56 2007
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\051408-K\
Data File : K15787SI.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 14 May 2008 6:32 pm
Operator :
Sample : GRO 1000
Misc : 5000
ALS Vial : 8 Sample Multiplier: 1

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Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 15 06:16:19 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Wed Aug 22 18:37:56 2007
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
1)	S TFT	3.967	3.967	1505805	1553987	219.990	213.212	
	Spiked Amount	40.000	Range 60 - 140		Recovery =	549.98%#	533.03%#	
2)	S BFB	7.096	7.095	1200858	4146572	230.160	228.511	
	Spiked Amount	40.000	Range 60 - 140		Recovery =	575.40%#	571.28%#	
	Target Compounds							
3)	TM Methyl-t-...	2.192	2.192	572628	911821	NoCal	116.091	#
4)	TM Benzene	3.520	3.520	1337812	2454858	NoCal	113.730	#
5)	TM Toluene	4.891	4.891	1323542	2271450	NoCal	111.381	#
6)	TM Ethylbenzene	6.132	6.132	1299700	2003729	NoCal	113.865	#
7)	TM m,p-Xylene	6.199	6.199	2643479	4724654	NoCal	227.212	#
8)	TM o-Xylene	6.569	6.569	1315737	1994695	NoCal	112.793	#
9)	TM 1,3,5-Tri...	7.379	7.379	1284276	2729549	NoCal	110.112	#
10)	TM 1,2,4-Tri...	7.726	7.726	1271139	2081113	NoCal	108.808	#
11)	TM Naphthalene	10.257	10.257	734794	1581879	NoCal	98.918	#
12)	GRO (<200)	6.238	0.000	11902763	0	1063.635m	N.D.	#
13)	GRO (>200)	6.238	0.000	11902763	0	1072.172m	N.D.	#

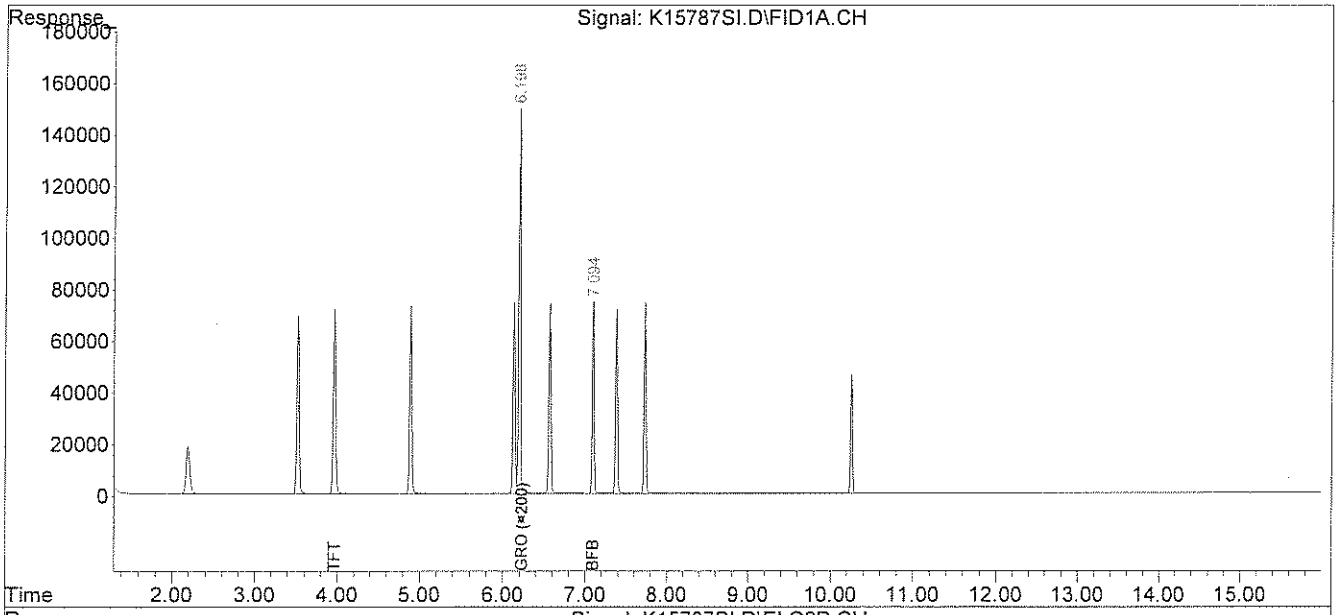
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

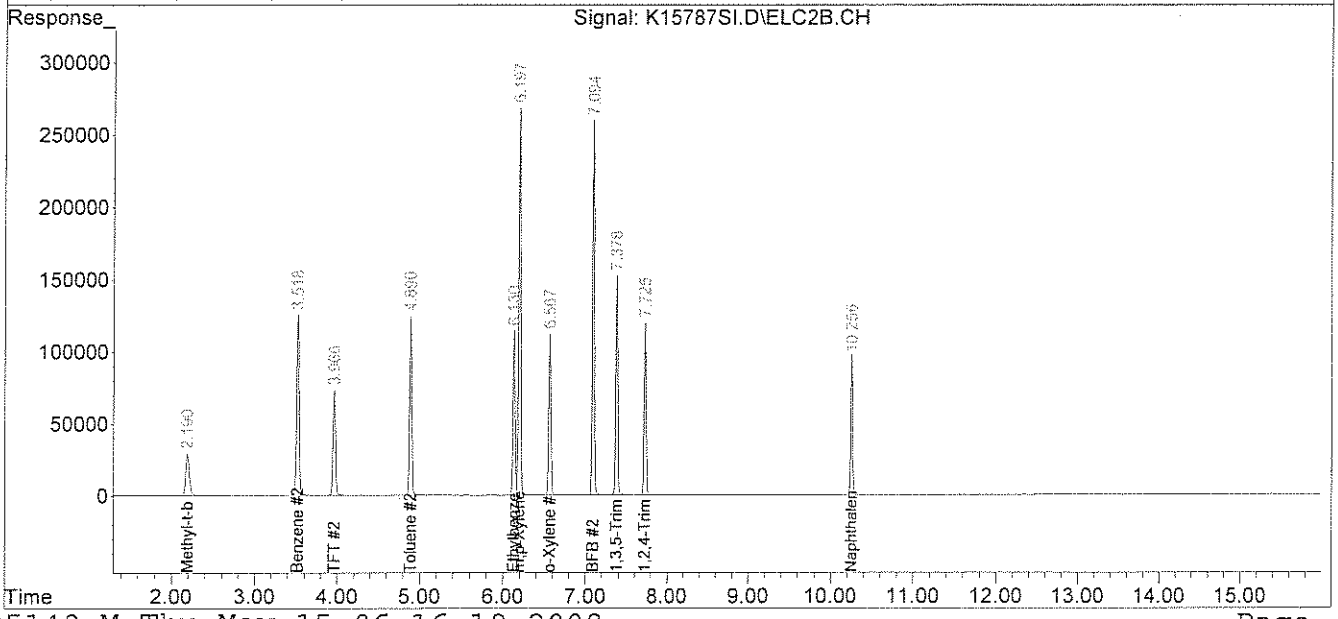
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\051408-K\
Data File : K15787SI.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 14 May 2008 6:32 pm
Operator :
Sample : GRO 1000
Misc : 5000
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 15 06:16:19 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Wed Aug 22 18:37:56 2007
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\051408-K\
Data File : K15788SI.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 14 May 2008 6:56 pm
Operator :
Sample : GRO 2500
Misc : 5000
ALS Vial : 9 Sample Multiplier: 1

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Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 15 06:16:20 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Wed Aug 22 18:37:56 2007
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
1)	S TFT	3.970	3.970	3517303	3596677	513.860	493.476	
	Spiked Amount	40.000	Range 60 - 140		Recovery =	1284.65%#	1233.69%#	
2)	S BFB	7.098	7.097	2886500	9890530	553.235	545.052	
	Spiked Amount	40.000	Range 60 - 140		Recovery =	1383.09%#	1362.63%#	
	Target Compounds							
3)	TM Methyl-t-...	2.194	2.193	1329223	2102783	NoCal	267.722	#
4)	TM Benzene	3.522	3.522	3161830	5787454	NoCal	268.125	#
5)	TM Toluene	4.894	4.893	3129903	5333251	NoCal	261.517	#
6)	TM Ethylbenzene	6.134	6.134	3089226	4751861	NoCal	270.032	#
7)	TM m,p-Xylene	6.203	6.202	6284342	11068210	NoCal	532.277	#
8)	TM o-Xylene	6.571	6.571	3142301	4708272	NoCal	266.236	#
9)	TM 1,3,5-Tri...	7.381	7.381	3095941	6519950	NoCal	263.020	#
10)	TM 1,2,4-Tri...	7.728	7.728	3080801	5006255	NoCal	261.745	#
11)	TM Naphthalene	10.258	10.258	1862643	3998310	NoCal	250.021	#
12)	GRO (<200)	6.238	0.000	28344719	0	2546.715m	N.D.	#
13)	GRO (>200)	6.238	0.000	28344719	0	2568.039m	N.D.	#

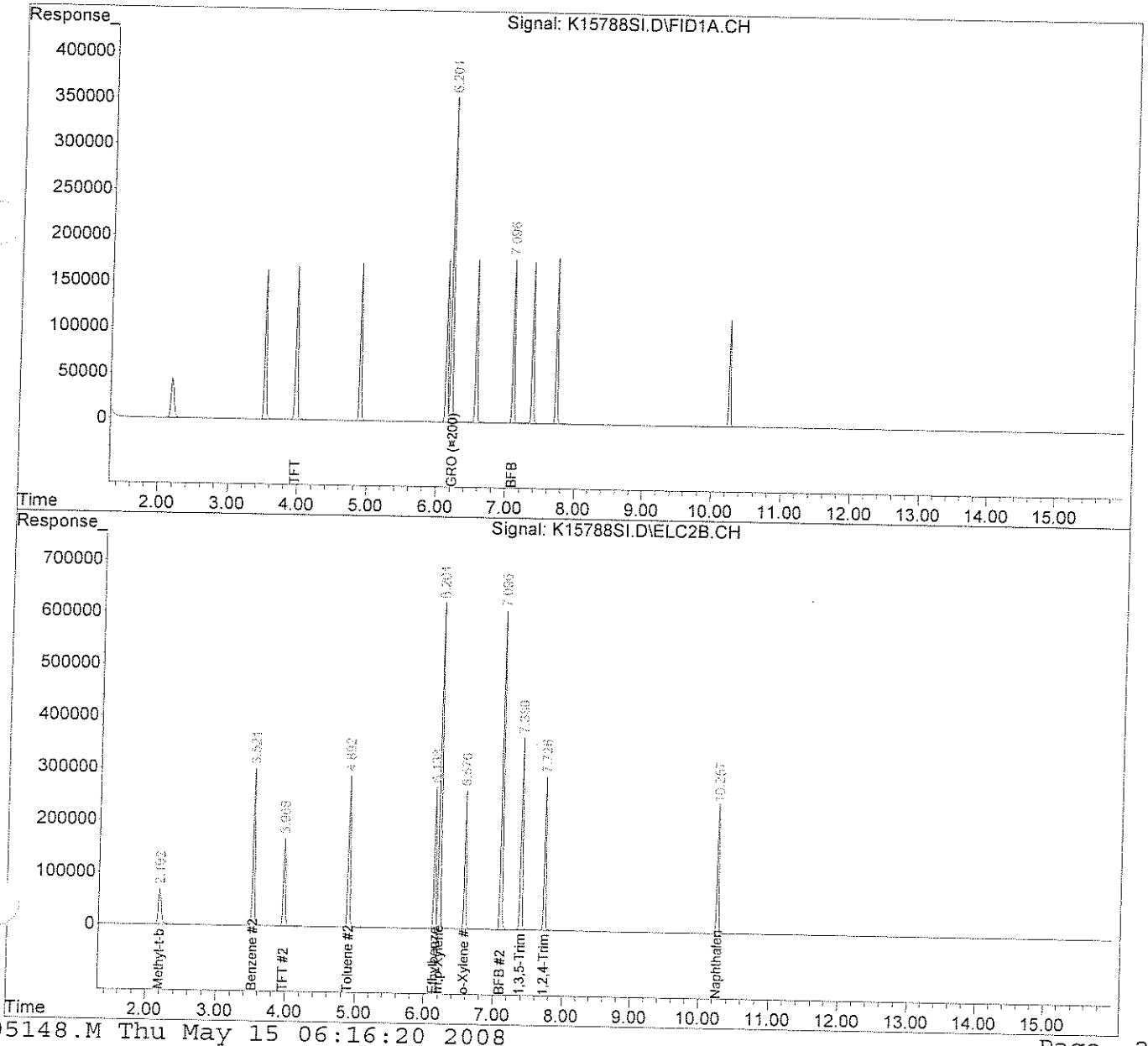
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\051408-K\
Data File : K15788SI.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 14 May 2008 6:56 pm
perator :
Sample : GRO 2500
Misc : 5000
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 15 06:16:20 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Wed Aug 22 18:37:56 2007
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase :
Signal #1 Info :
Signal #2 Phase:
Signal #2 Info :



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\051408-K\
Data File : K15790SC.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 14 May 2008 7:43 pm
Operator :
Sample : GRO CC 200
Misc : 5000
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 15 06:24:08 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

PM 5/15/08

5.19.08

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
1)	S TFT	3.965	3.965	311086	321974	43.140	42.153	
	Spiked Amount 40.000	Range 60 - 140		Recovery =		107.85%	105.38%	
	S BFB	7.095	7.095	241552	825581	41.538	40.893	
	Spiked Amount 40.000	Range 60 - 140		Recovery =		103.84%	102.23%	
	Target Compounds							
3)	TM Methyl-t-...	2.187	2.186	112468	177402	NoCal	19.401	#
4)	TM Benzene	3.518	3.517	274861	503310	NoCal	21.058	#
5)	TM Toluene	4.890	4.890	272416	473978	NoCal	21.143	#
6)	TM Ethylbenzene	6.131	6.131	266589	411449	NoCal	20.936	#
7)	TM m,p-Xylene	6.197	6.197	542266	970195	NoCal	41.934	#
8)	TM o-Xylene	6.569	6.568	273636	414775	NoCal	21.165	#
9)	TM 1,3,5-Tri...	7.379	7.378	268520	571121	NoCal	21.464	#
10)	TM 1,2,4-Tri...	7.726	7.725	268217	438536	NoCal	21.542	#
11)	TM Naphthalene	10.257	10.257	145439	317735	NoCal	20.961	#
12)	GRO (<200)	6.238	0.000	2616642	0	212.467m	N.D.	#
13)	GRO (>200)	6.238	0.000	2616642	0	207.746m	N.D.	#

low

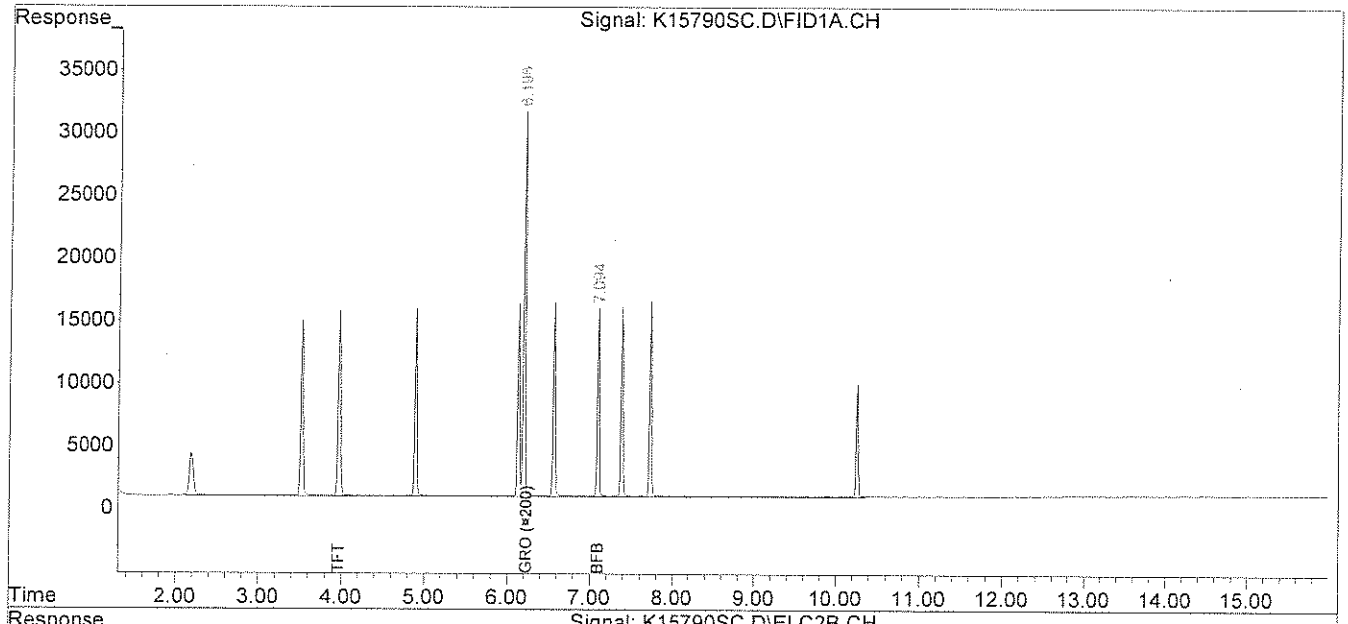
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

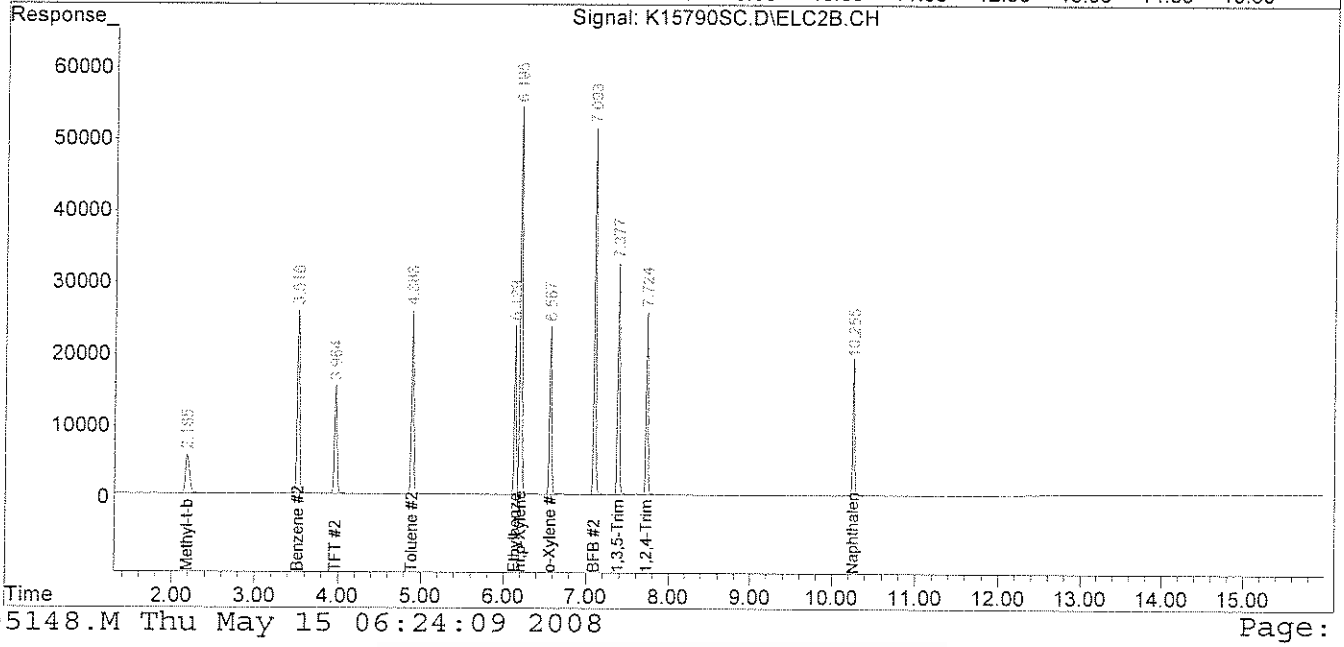
Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\051408-K\
Data File : K15790SC.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 14 May 2008 7:43 pm
Operator :
Sample : GRO CC 200
Misc : 5000
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 15 06:24:08 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





GASOLINE RANGE ORGANICS
CONTINUING CALIBRATION

Instrument ID: K
GC Column: RTX-502.2
Column ID: 0.25 mm

SDG: 61399
Standard ID: GRO 200UG/L
Data File ID: K15997SC.D

COMPOUND	STANDARD RESULT (ug/L)	% Recovery	#
TFT	43.8	110	
BFB	38.9	97	
GRO (<200)	198	99	
GRO (>200)	193	96	
TFT #2	46.5	116	
BFB #2	41.6	104	
Methyl-t-butylether #2	20.6	103	
Benzene #2	22.2	111	
Toluene #2	22.0	110	
Ethylbenzene #2	21.9	110	
m,p-Xylene #2	44.0	110	
o-Xylene #2	21.9	109	
1,3,5-Trimethylbenzene #2	22.1	110	
1,2,4-Trimethylbenzene #2	22.0	110	
Naphthalene #2	19.6	98	

Lower Limit	Upper Limit
80	120

Column to be used to flag recovery values outside of QC limits
* Values outside QC limits

Comments: _____

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K15997SC.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 27 May 2008 10:20 pm
Operator :
Sample : GRO 200UG/L
Misc : 5000
ALS Vial : 44 Sample Multiplier: 1

5/28/08

05-2906

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 27 22:38:03 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

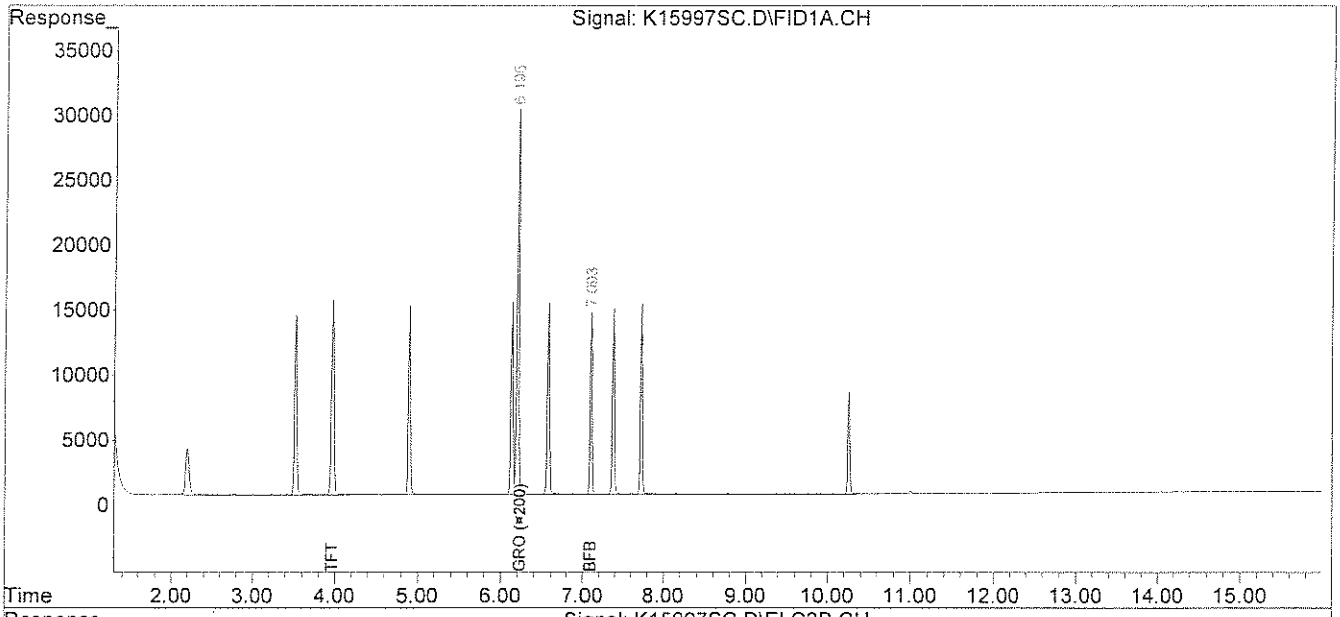
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
1) S	TFT	3.968	3.968	316185	355025	43.847	46.480	
Spiked Amount	40.000	Range	60 - 140	Recovery	=	109.62%	116.20%	
) S	BFB	7.095	7.094	226496	839699	38.949	41.592	
Spiked Amount	40.000	Range	60 - 140	Recovery	=	97.37%	103.98%	
	Target Compounds							
3) TM	Methyl-t-...	2.194	2.193	107264	188106	NoCal	20.571	#
4) TM	Benzene	3.521	3.521	265147	529884	NoCal	22.169	#
5) TM	Toluene	4.892	4.891	264313	493256	NoCal	22.003	#
6) TM	Ethylbenzene	6.131	6.131	258018	431232	NoCal	21.942	#
7) TM	m,p-Xylene	6.198	6.197	524340	1017093	NoCal	43.961	#
8) TM	o-Xylene	6.569	6.568	259614	428428	NoCal	21.862	#
9) TM	1,3,5-Tri...	7.378	7.378	254672	587020	NoCal	22.062	#
0) TM	1,2,4-Tri...	7.725	7.725	252596	448718	NoCal	22.042	#
1) TM	Naphthalene	10.257	10.256	125899	297171	NoCal	19.604	#
2)	GRO (<200)	6.238	0.000	2448302	0	197.661m	N.D.	#
3)	GRO (>200)	6.238	0.000	2448302	0	192.821m	N.D.	#

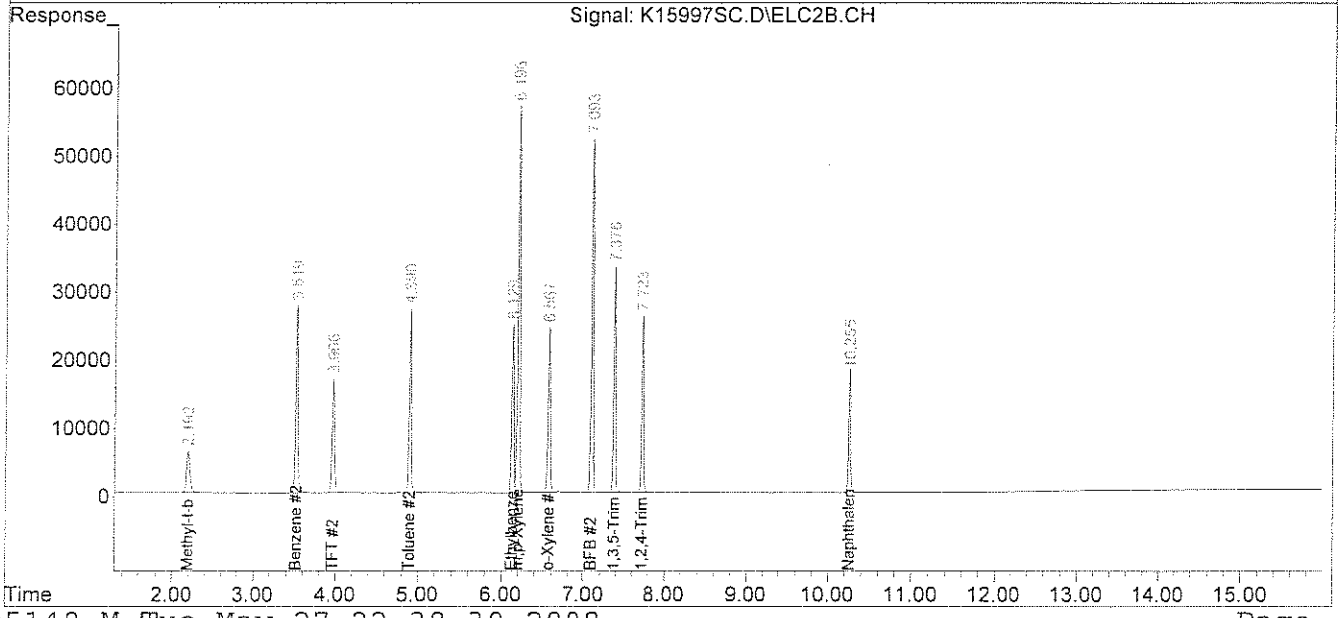
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K15997SC.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 27 May 2008 10:20 pm
Operator :
Sample : GRO 200UG/L
Misc : 5000
ALS Vial : 44 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 27 22:38:03 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





GASOLINE RANGE ORGANICS
CONTINUING CALIBRATION

Instrument ID: K
GC Column: RTX-502.2
Column ID: 0.25 mm

SDG: 61399
Standard ID: GRO 200UG/L
Data File ID: K16024SC.D

COMPOUND	STANDARD RESULT (ug/L)	% Recovery	#
TFT	41.8	105	
BFB	38.6	96	
GRO (<200)	196	98	
GRO (>200)	191	95	
TFT #2	44.5	111	
BFB #2	41.1	103	
Methyl-t-butylether #2	20.4	102	
Benzene #2	21.5	108	
Toluene #2	21.4	107	
Ethylbenzene #2	21.3	107	
m,p-Xylene #2	42.7	107	
o-Xylene #2	21.3	107	
1,3,5-Trimethylbenzene #2	21.5	108	
1,2,4-Trimethylbenzene #2	21.5	107	
Naphthalene #2	19.8	99	

Lower Limit	Upper Limit
80	120

Column to be used to flag recovery values outside of QC limits
* Values outside QC limits

Comments: _____

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K16024SC.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 28 May 2008 9:36 am
Operator :
Sample : GRO 200UG/L
Misc : 5000
ALS Vial : 71 Sample Multiplier: 1

5-28-08
5-29-08

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 28 11:55:50 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

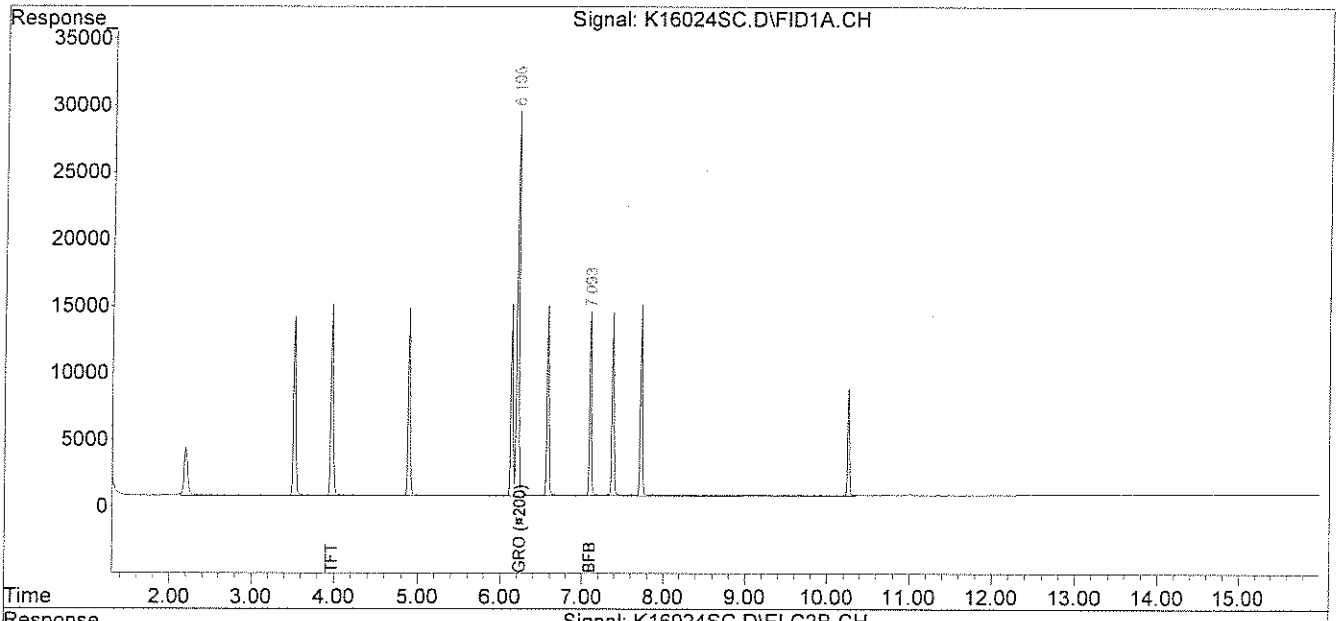
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/L	ug/L	
	System Monitoring Compounds							
1)	S TFT	3.968	3.967	301536	339783	41.815	44.484	
	Spiked Amount	40.000	Range 60 - 140		Recovery =	104.54%	111.21%	
	S BFB	7.095	7.094	224391	830163	38.587	41.120	
	Spiked Amount	40.000	Range 60 - 140		Recovery =	96.47%	102.80%	
	Target Compounds							
3)	TM Methyl-t-...	2.194	2.194	108035	186370	NoCal	20.381	#
4)	TM Benzene	3.521	3.521	258514	513950	NoCal	21.503	#
5)	TM Toluene	4.891	4.891	256505	479110	NoCal	21.372	#
6)	TM Ethylbenzene	6.131	6.131	251544	419380	NoCal	21.339	#
7)	TM m,p-Xylene	6.197	6.197	511446	986973	NoCal	42.659	#
8)	TM o-Xylene	6.568	6.568	255288	418304	NoCal	21.345	#
9)	TM 1,3,5-Tri...	7.378	7.377	248497	572073	NoCal	21.500	#
10)	TM 1,2,4-Tri...	7.725	7.725	246287	436709	NoCal	21.452	#
11)	TM Naphthalene	10.256	10.255	128389	300846	NoCal	19.847	#
12)	GRO (<200)	6.238	0.000	2426533	0	195.746m	N.D.	#
13)	GRO (>200)	6.238	0.000	2426533	0	190.891m	N.D.	#

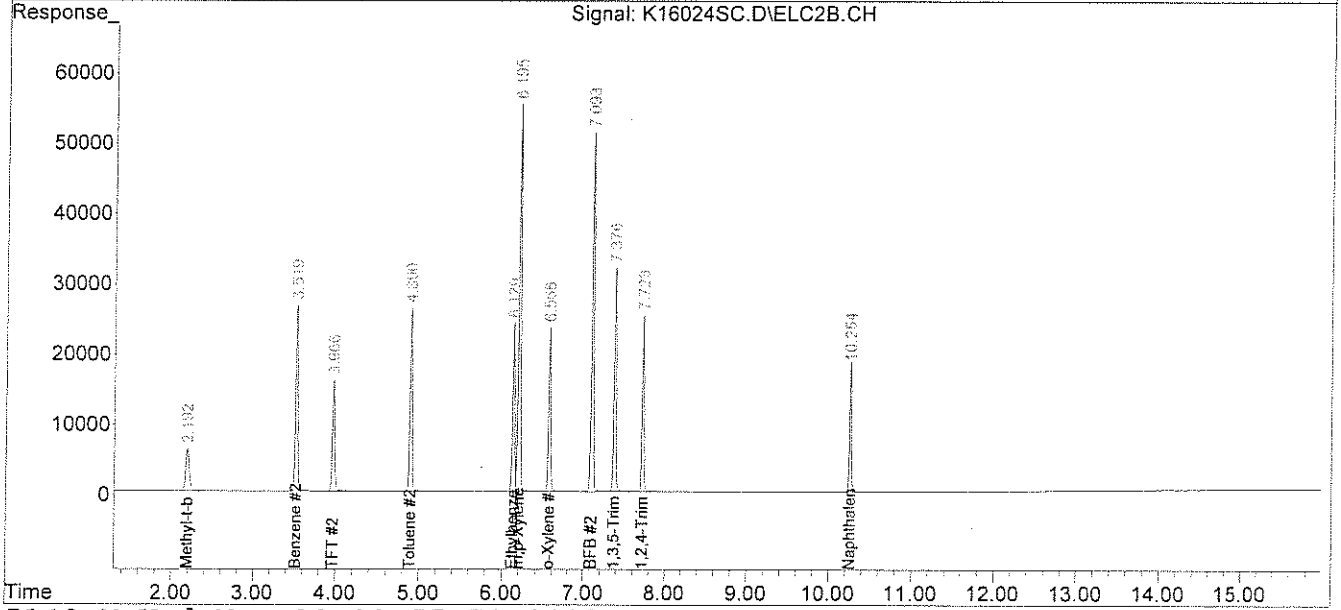
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\msdchem\1\DATA\052708-K\
Data File : K16024SC.D
Signal(s) : Signal #1: FID1A.CH Signal #2: ELC2B.CH
Acq On : 28 May 2008 9:36 am
Operator :
Sample : GRO 200UG/L
Misc : 5000
ALS Vial : 71 Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: May 28 11:55:50 2008
Quant Method : C:\msdchem\1\METHODS\GRO05148.M
Quant Title : Volatile Petroleum Hydrocarbons
QLast Update : Thu May 15 06:23:16 2008
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





DRO
DATA SUMMARIES

analytics environmental laboratory LLC

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Mr. Ron Pentkowski
Test America Burlington
30 Community Drive Suite 11
South Burlington VT 05403

June 17, 2008

SAMPLE DATA

CLIENT SAMPLE ID

Project Name:	MEFUDS LO-58
Project Number:	03886.184
Field Sample ID:	LABQC

Lab Sample ID:	B05238DW
Matrix:	Aqueous
Percent Solid:	N/A
Dilution Factor:	1
Collection Date:	N/A
Lab Receipt Date:	N/A
Extraction Date:	05/23/08
Analysis Date:	05/29/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	86	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

DRO Report

Authorized signature

Quantitation Report (QT Reviewed)

Data File : D:\TPH\052908-G\G49496B.D Vial: 9
Acq On : 29 May 2008 15:30 Operator:
Sample : B05238DW Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: May 30 8:02 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

JLC 5.30.08

6.2.08

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.68	3707151	85.760 ug/ml
Spiked Amount 100.000	Range 60 - 140	Recovery = 85.76%	
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	1215079	0.016 mg/ml
3) HM DRO HIGH (>1.0)	13.01	1215079	0.028 mg/ml

ND

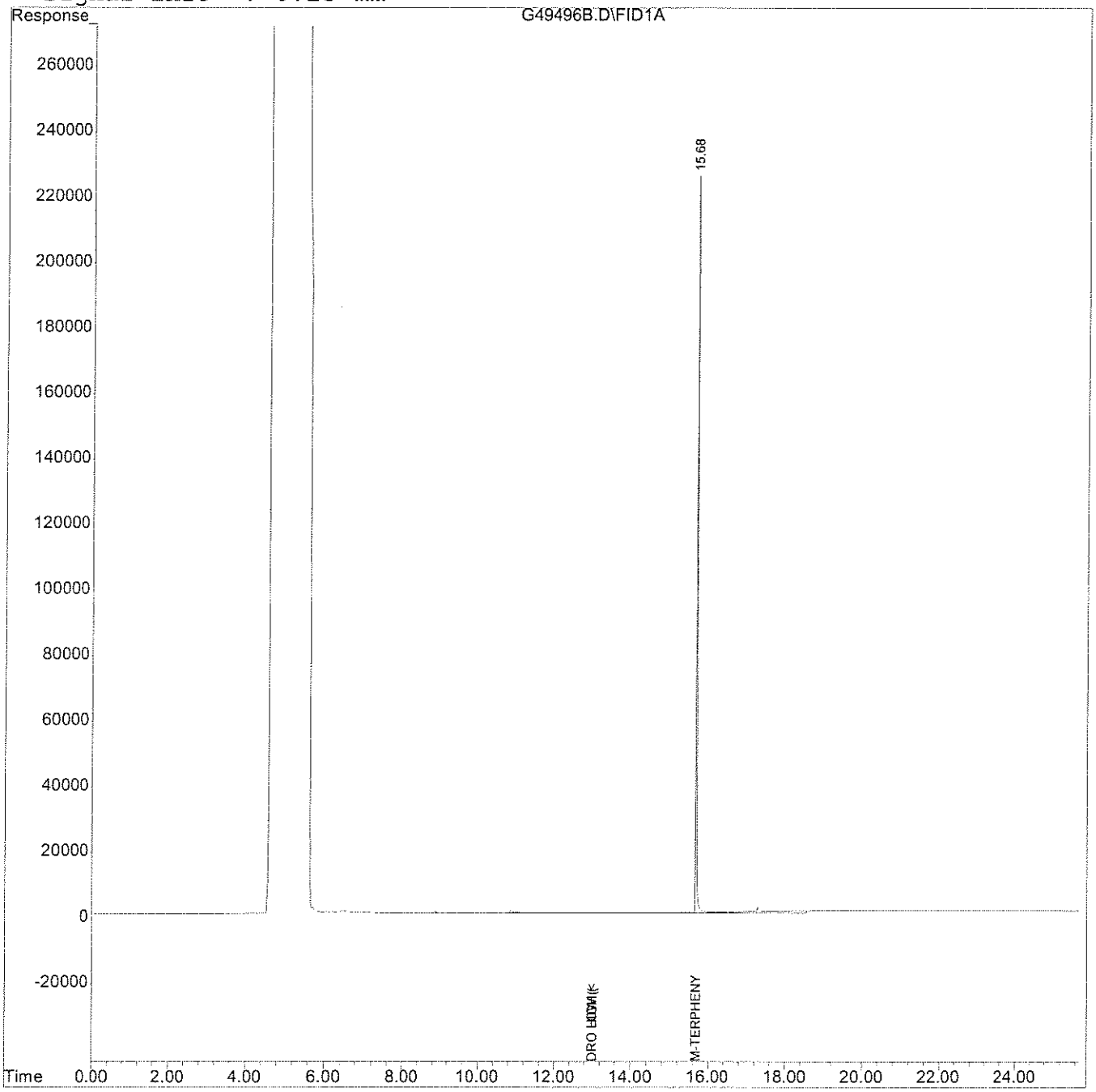
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : D:\TPH\052908-G\G49496B.D Vial: 9
Acq On : 29 May 2008 15:30 Operator:
Sample : B05238DW Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: May 30 8:02 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm



analytics environmental laboratory LLC

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603-436-5111 Fax 603-430-2151
800-929-9906

Mr. Ron Pentkowski
Test America Burlington
30 Community Drive Suite 11
South Burlington VT 05403

June 17, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: LABQC

SAMPLE DATA

Lab Sample ID: B05238DW RR
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: N/A
Lab Receipt Date: N/A
Extraction Date: 05/23/08
Analysis Date: 05/30/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	93	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

DRO Report

Authorized signature

4125 DRO WATER REPORT

Sample Name	**B05238DW, RR**
Data File Name	G49531B.D
Date Acquired	5/30/2008 19:51
Misc Info	
Sample Volume (mL)	**1000**
Final Volume (mL)	**1.0**
Analyst Dilution (1:X)	**1**
Calculation Factor	1000.0000
Dilution Factor	1.0

JE 6.2.08

6.2.08

4125 DRO ANALYTICAL RESULTS	ug/L	RL	
DRO	U	50	
m-Terphenyl	93%	60-140%	PASS ✓

RAW DATA

	Raw Inst Amount mg/mL	Reviewed & Calculated Inst Amount ug/L	Target Response	Sample Amount ug/L
M-TERPHENYL	93.21		4029368.77	
DRO LOW (<1.0)	0.0097	0.00	931228.077	
DRO HIGH (>1.0)	0.0264	26.41	1143489.551	
DRO	0.01	0.00		0

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49531B.D Vial: 12
Acq On : 30 May 2008 19:51 Operator:
Sample : B05238DW, RR Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 2 8:25 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JK 6.2.08

6.2.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.67	4029369	93.214 ug/ml
Spiked Amount 100.000	Range 60 - 140	Recovery =	93.21%
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	931228	0.010 mg/ml
3) HM DRO HIGH (>1.0)	13.01	1143490	0.026 mg/ml

ND

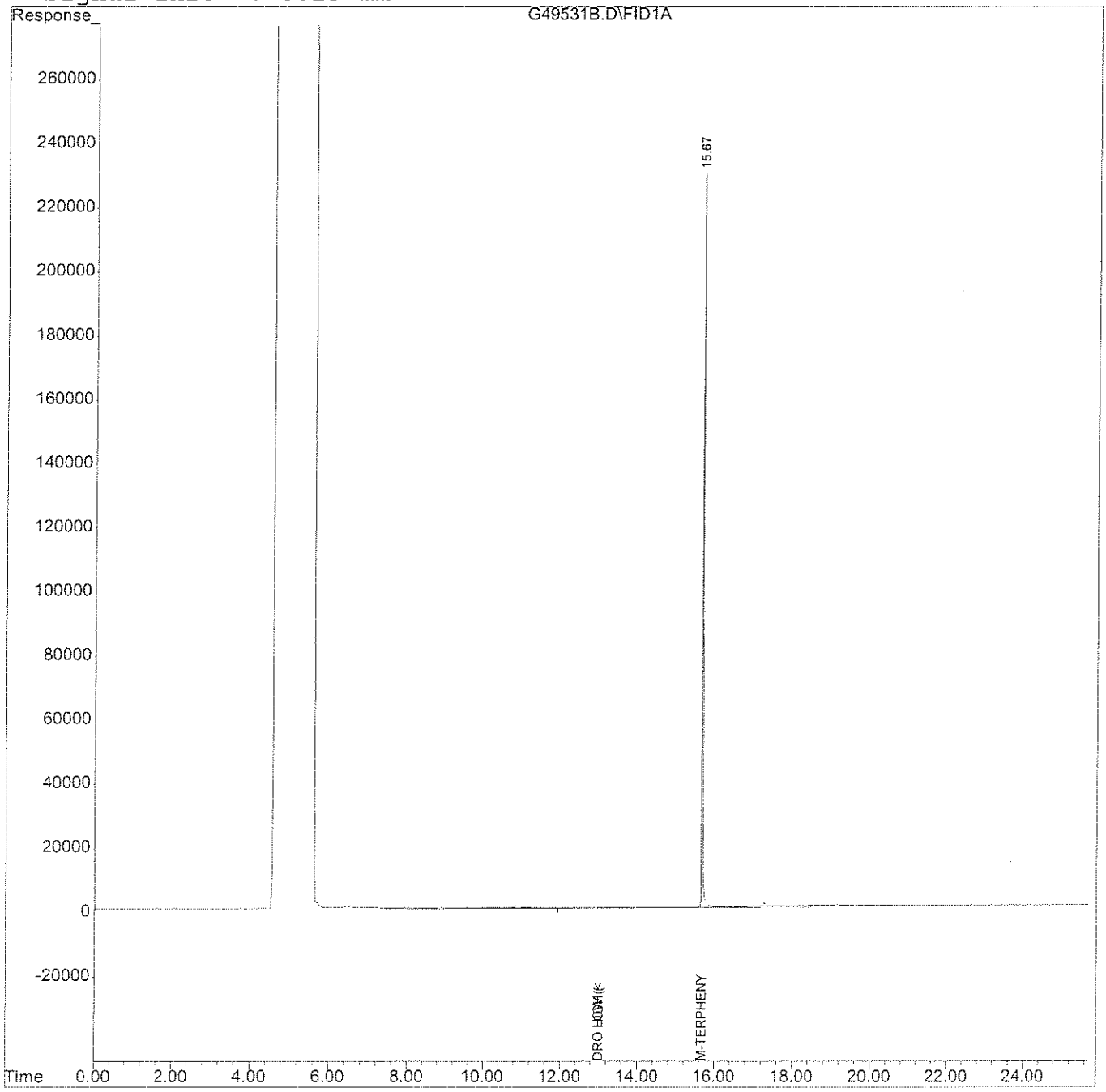
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49531B.D Vial: 12
Acq On : 30 May 2008 19:51 Operator:
Sample : B05238DW, RR Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 2 8:25 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

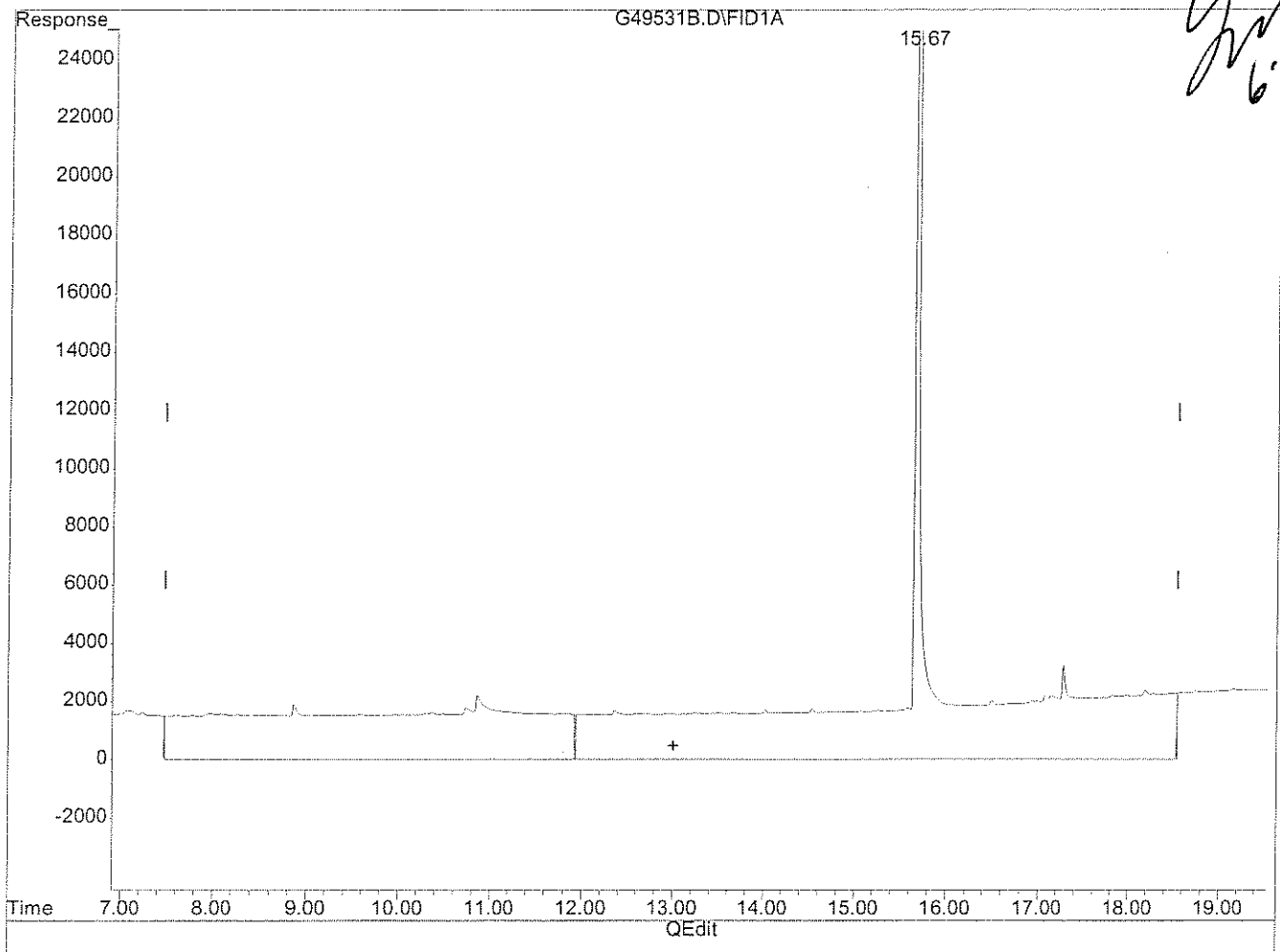


Quantitation Report (Qedit)

Data File : D:\TPH\053008-G\G49531B.D Vial: 12
Acq On : 30 May 2008 19:51 Operator:
Sample : B05238DW, RR Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 2 8:24 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Multiple Level Calibration

JLC 6-2-08
* Baseline



(2) DRO LOW (<1.0) (HM)

13.01min 0.243mg/ml m

response 10922725

(+) = Expected Retention Time

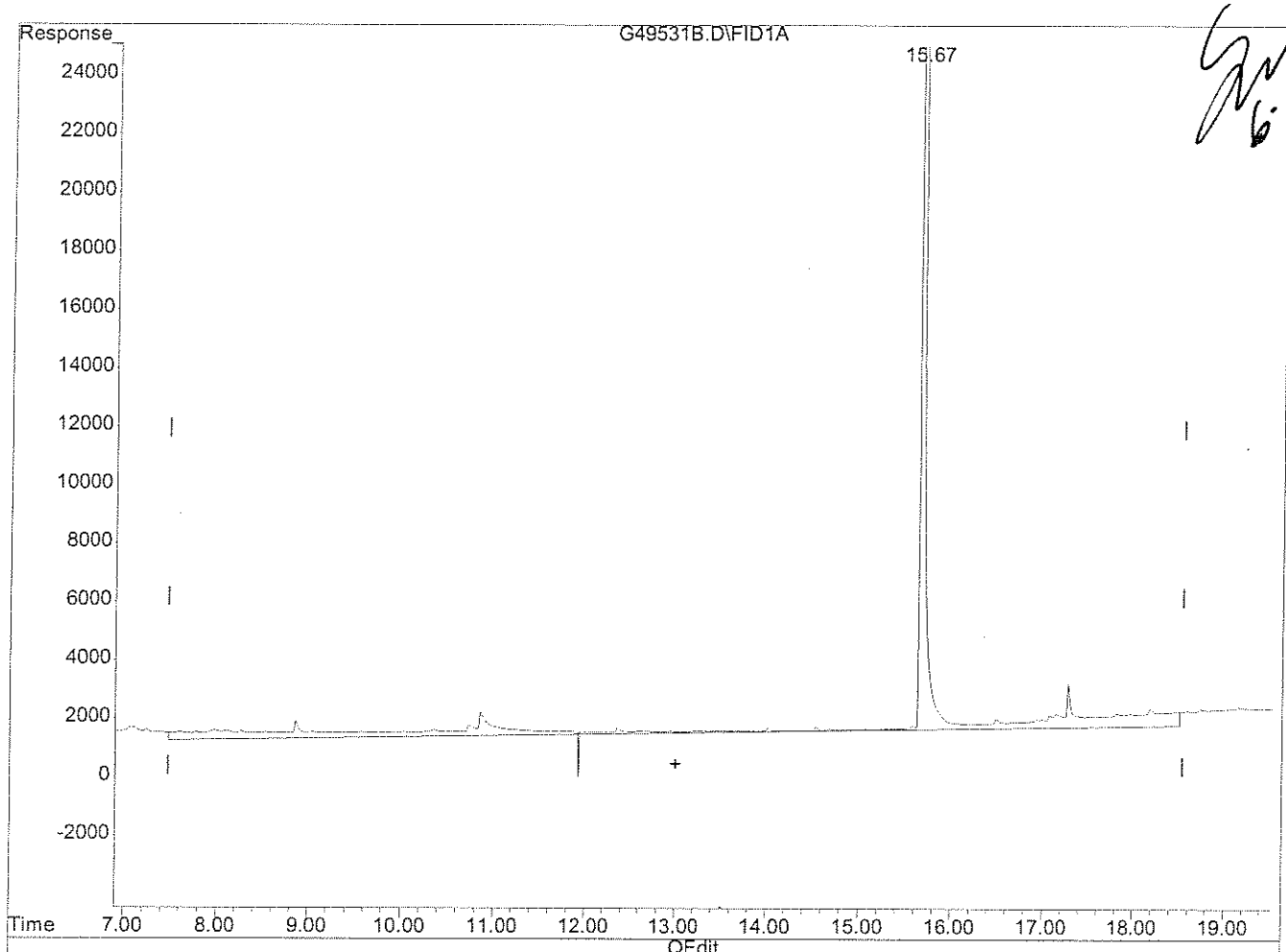
G49531B.D D040108A.M Mon Jun 02 08:24:58 2008

Quantitation Report (Qedit)

Data File : D:\TPH\053008-G\G49531B.D Vial: 12
Acq On : 30 May 2008 19:51 Operator:
Sample : B05238DW, RR Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 2 8:24 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Multiple Level Calibration

JK 6.2.08



(2) DRO LOW (<1.0) (HM)

13.01min 0.010mg/ml m

response 931228

(+) = Expected Retention Time

G49531B.D D040108A.M Mon Jun 02 08:25:04 2008

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June 17, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58
Project Number: 03886.184
Field Sample ID: LABQC

SAMPLE DATA

Lab Sample ID: B05238DW RR1
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: N/A
Lab Receipt Date: N/A
Extraction Date: 05/23/08
Analysis Date: 05/30/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	88	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

DRO Report

Authorized signature

4125 DRO WATER REPORT

Sample Name	**B05238DW, RR1**
Data File Name	G49556.D
Date Acquired	5/31/2008 8:46
Misc Info	
Sample Volume (mL)	**1000**
Final Volume (mL)	**1.0**
Analyst Dilution (1:X)	**1**
Calculation Factor	1000.0000
Dilution Factor	1.0

JE 6.3.08

6.4.08

4125 DRO ANALYTICAL RESULTS	ug/L	RL	
DRO	U	50	
m-Terphenyl	88%	60-140%	PASS

RAW DATA

	Raw Inst Amount mg/mL	Reviewed & Calculated Inst Amount ug/L	Target Response	Sample Amount ug/L
M-TERPHENYL	87.83		3796574.704	
DRO LOW (<1.0)	0.0277	0.00	1702305.296	
DRO HIGH (>1.0)	0.0393	39.31	1702305.296	
DRO	0.03	0.00		0

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49556.D Vial: 12
Acq On : 31 May 2008 8:46 Operator:
Sample : B05238DW, RR1 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 11:56 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JE 6.3.08

GN 6.4.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.66	3796575	87.829 ug/ml
Spiked Amount 100.000	Range 60 - 140	Recovery = 87.83%	
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	1702305	0.028 mg/ml
3) HM DRO HIGH (>1.0)	13.01	1702305	0.039 mg/ml

ND

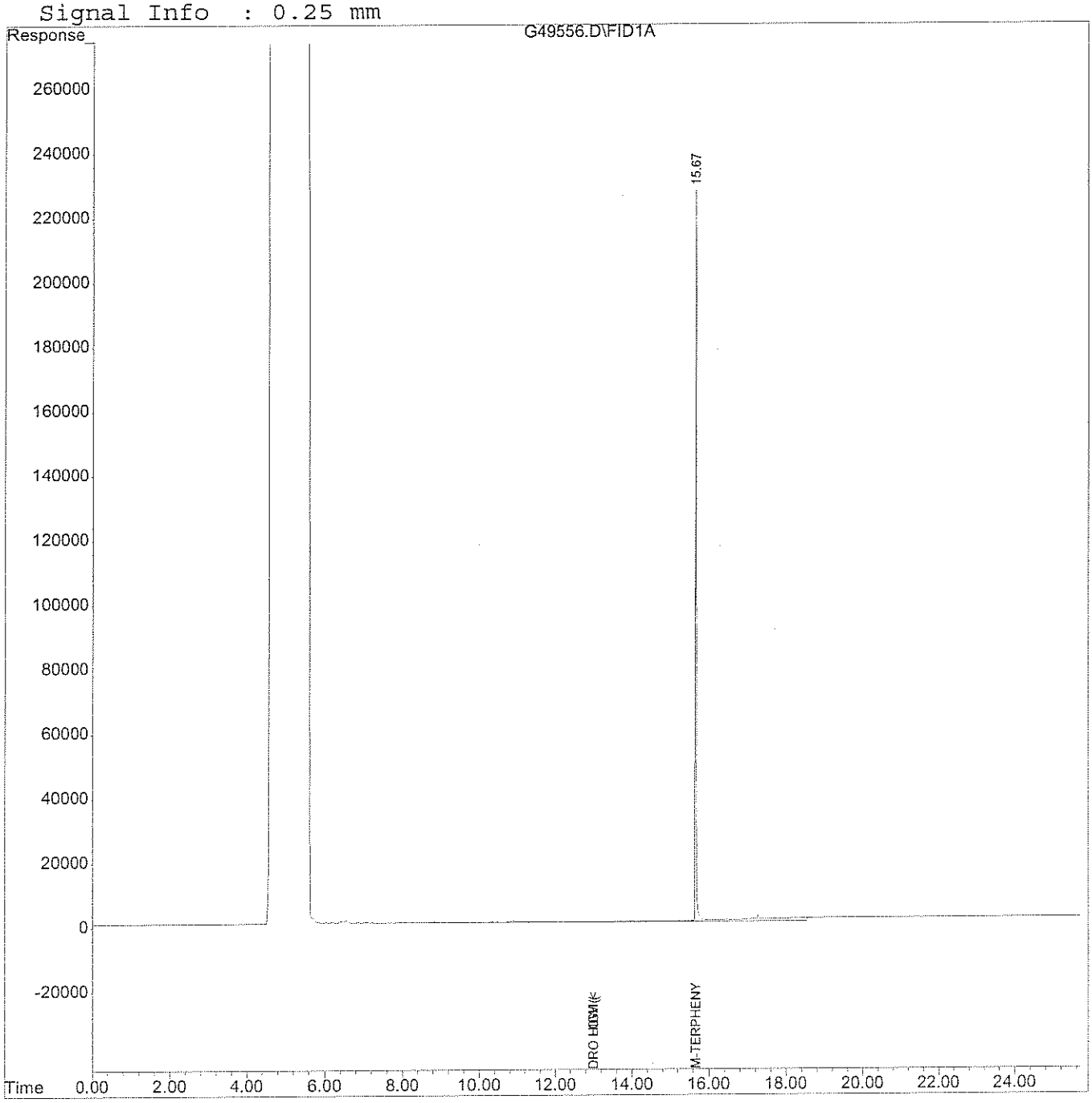
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49556.D Vial: 12
Acq On : 31 May 2008 8:46 Operator:
Sample : B05238DW, RR1 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 11:56 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm



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June 17, 2008

SAMPLE DATA

CLIENT SAMPLE ID

Project Name:	MEFUDS LO-58
Project Number:	03886.184
Field Sample ID:	LABQC

Lab Sample ID:	B05238DW RR2
Matrix:	Aqueous
Percent Solid:	N/A
Dilution Factor:	1
Collection Date:	N/A
Lab Receipt Date:	N/A
Extraction Date:	05/23/08
Analysis Date:	06/02/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	91	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

DRO Report

Authorized signature

4125 DRO WATER REPORT

Sample Name	**B05238DW** RR2
Data File Name	G49620B.D
Date Acquired	6/2/2008 17:28
Misc Info	
Sample Volume (mL)	**1000**
Final Volume (mL)	**1.0**
Analyst Dilution (1:X)	**1**
Calculation Factor	1000.0000
Dilution Factor	1.0

6-3-08

JC 6.3.08

4125 DRO ANALYTICAL RESULTS	ug/L	RL	
DRO	U	50	
m-Terphenyl	91%	60-140%	PASS ✓

RAW DATA

	Raw Inst Amount mg/mL	Reviewed & Calculated Inst Amount ug/L	Target Response	Sample Amount ug/L
M-TERPHENYL	91.36		3949120.207	
DRO LOW (<1.0)	0.0337	0.00	1961424.793	
DRO HIGH (>1.0)	0.0453	45.30	1961424.793	
DRO	0.03	0.00		0

Quantitation Report (QT Reviewed)

Data File : D:\TPH\060208-G\G49620B.D Vial: 7
Acq On : 2 Jun 2008 17:28 Operator:
Sample : B05238DW RR2 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 9:02 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JK 6.3.08

6.3.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.67	3949120	91.358 ug/ml
Spiked Amount 100.000 Range 60 - 140 Recovery = 91.36%			
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	1961425	0.034 mg/ml
3) HM DRO HIGH (>1.0)	13.01	1961425	0.045 mg/ml

ND

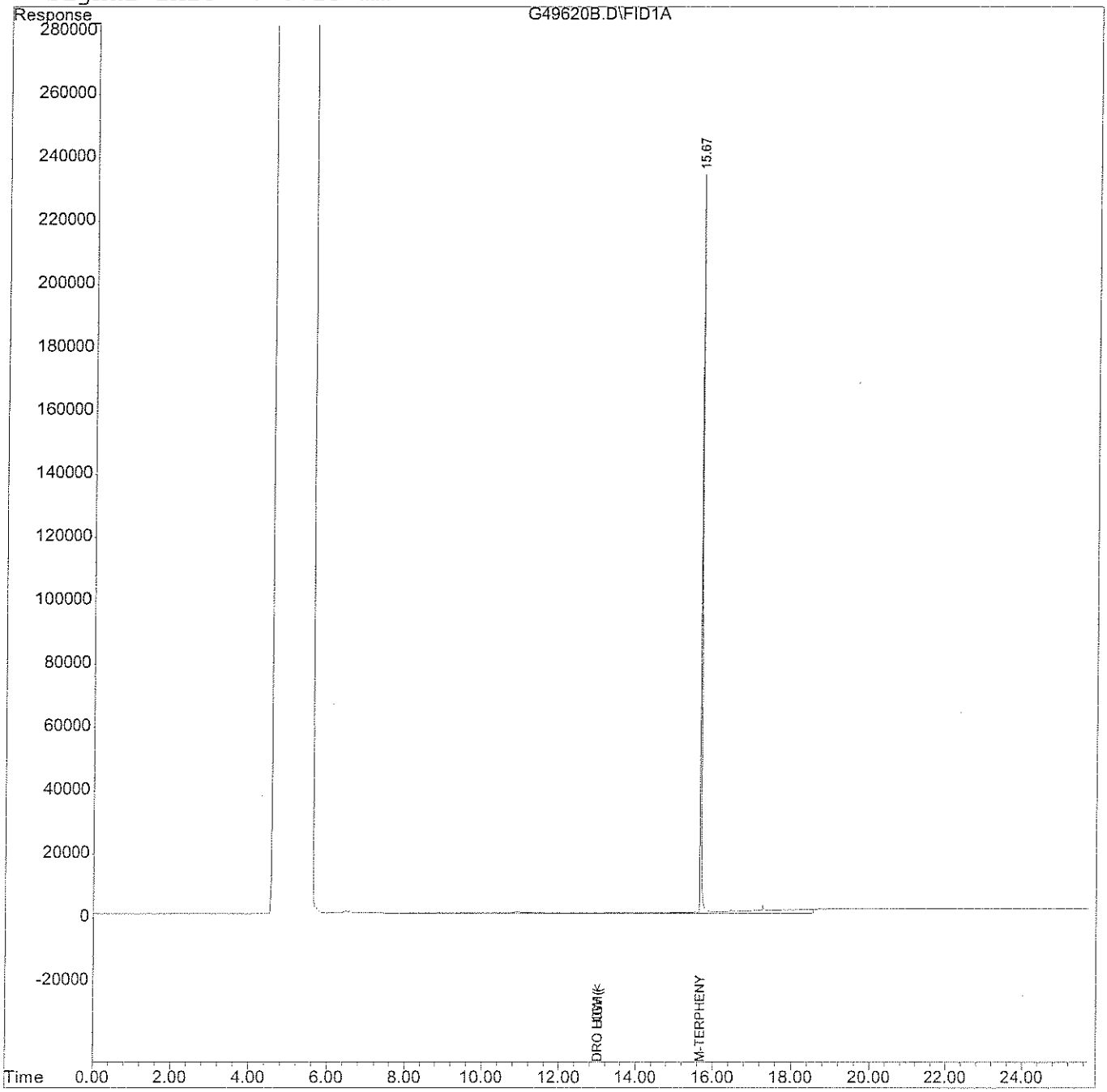
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : D:\TPH\060208-G\G49620B.D Vial: 7
Acq On : 2 Jun 2008 17:28 Operator:
Sample : B05238DW RR2 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 9:02 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm



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June 10, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: LS58DW2-0508-A16

SAMPLE DATA

Lab Sample ID: 61399-1
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 05/16/08
Lab Receipt Date: 05/22/08
Extraction Date: 05/23/08
Analysis Date: 05/30/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
1020	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	84	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

DRO Report

Authorized signature

4125 DRO WATER REPORT

Sample Name	**61399-1**
Data File Name	G49536.D
Date Acquired	5/30/2008 22:32
Misc Info	
Sample Volume (mL)	**1050**
Final Volume (mL)	**1.0**
Analyst Dilution (1:X)	**1**
Calculation Factor	952.3810
Dilution Factor	1.0

JLC 6.2.08

4125 DRO ANALYTICAL RESULTS	ug/L	RL	
DRO	1022	48	
m-Terphenyl	84%	60-140%	PASS

RAW DATA

	Raw Inst Amount mg/mL	Reviewed & Calculated Inst Amount ug/L	Target Response	Sample Amount ug/L
M-TERPHENYL	84.33		3645205.051	
DRO LOW (<1.0)	1.0403	990.79	45077636.8	
DRO HIGH (>1.0)	1.0735	1022.40	46483802.66	
DRO	1.07	1022.40		1022

6-6-08

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49536.D Vial: 17
Acq On : 30 May 2008 22:32 Operator:
Sample : 61399-1 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 2 10:09 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JLC 6.2.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.67	3645205	84.327 ug/mlm
Spiked Amount 100.000	Range 60 - 140	Recovery =	84.33%
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	45077637	1.040 mg/ml
3) HM DRO HIGH (>1.0)	13.01	46483803	1.074 mg/ml

JL 6.2.08

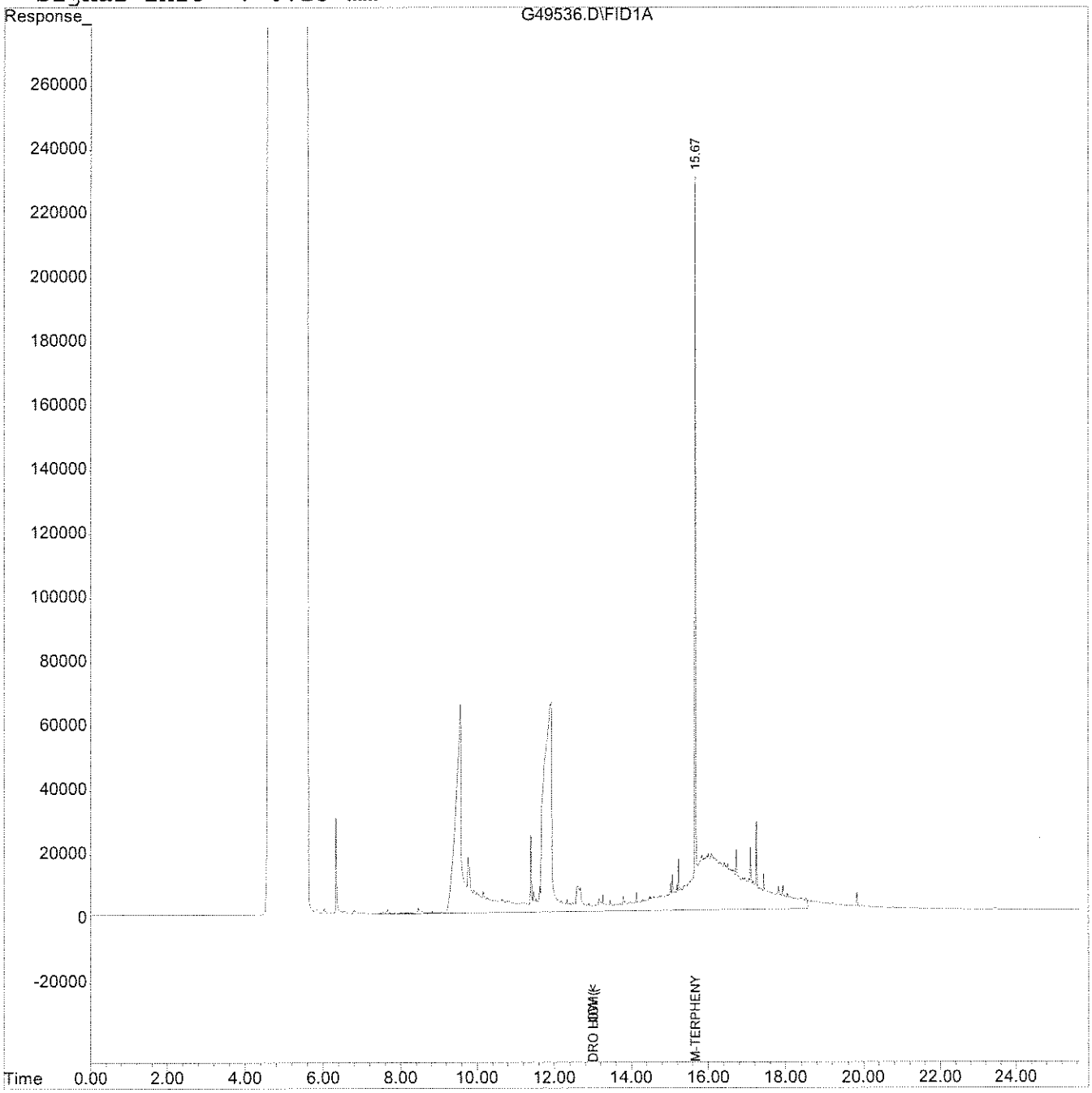
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49536.D Vial: 17
Acq On : 30 May 2008 22:32 Operator:
Sample : 61399-1 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 2 10:09 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

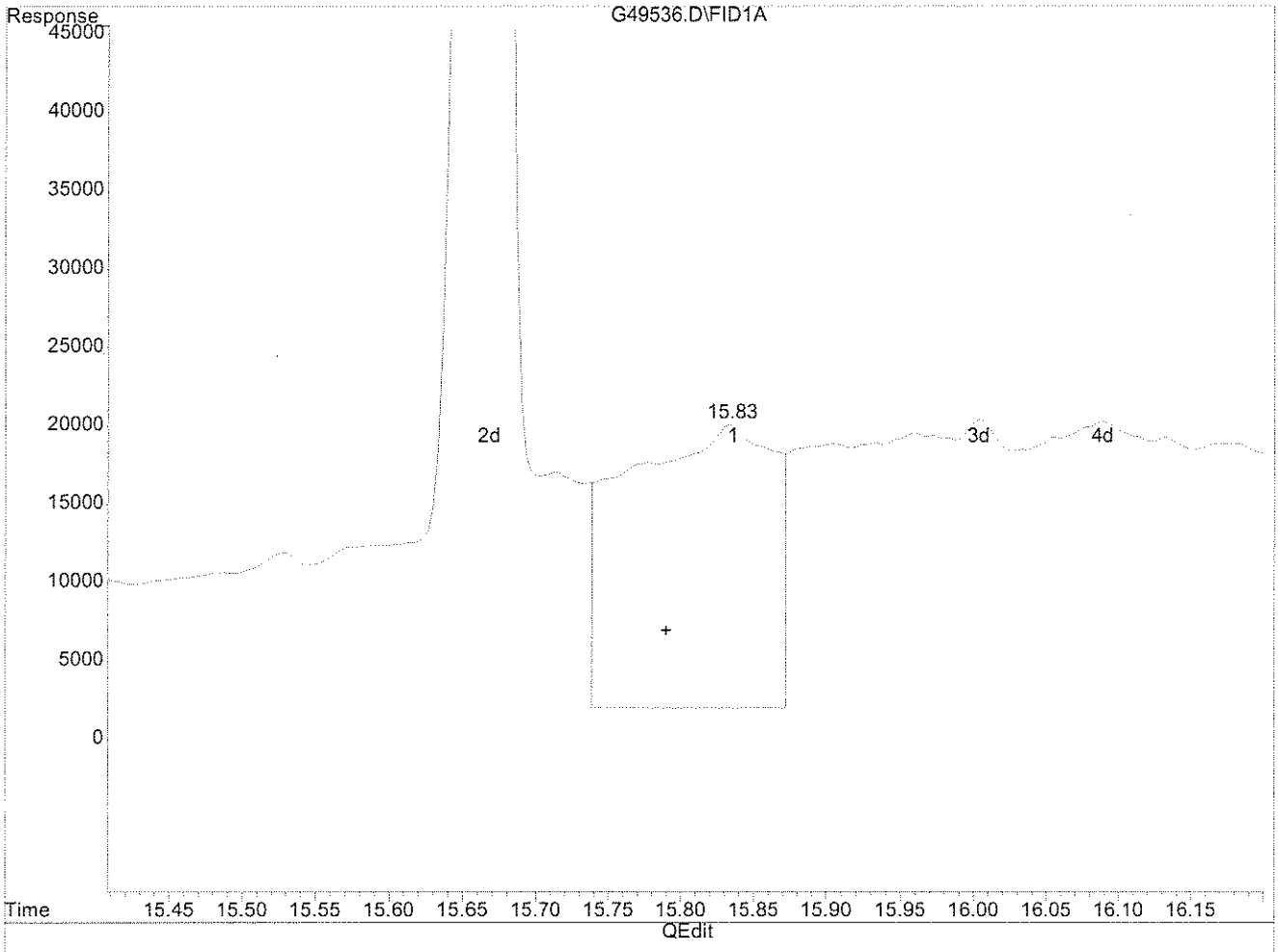


Quantitation Report (Qedit)

Data File : D:\TPH\053008-G\G49536.D Vial: 17
Acq On : 30 May 2008 22:32 Operator:
Sample : 61399-1 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 2 8:32 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Multiple Level Calibration

JE 6.2.08
*M.P.



(1) M-TERPHENYL (S)

15.84min 29.830ug/ml

response 1289484

JE 6.2.08

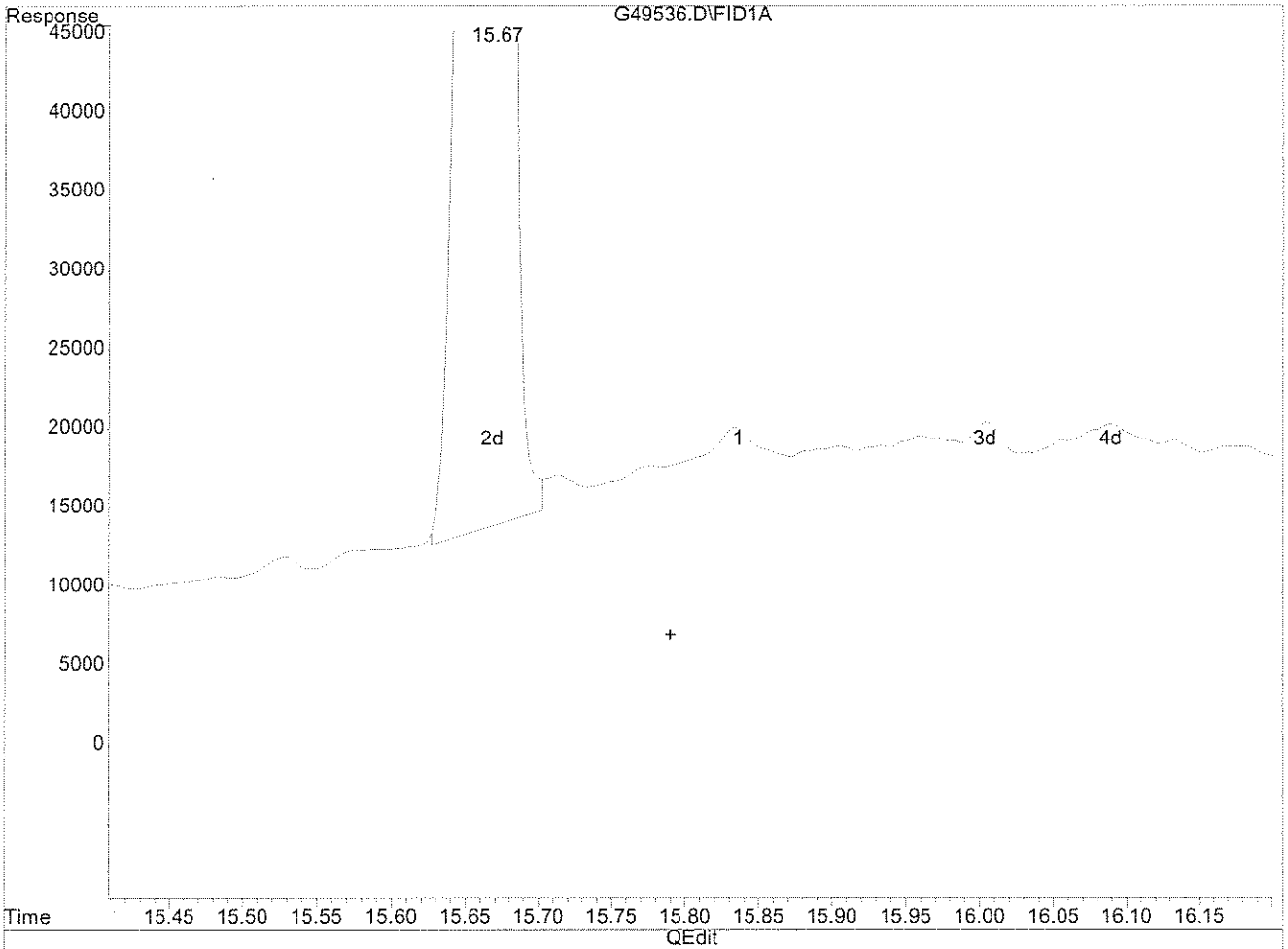
(+) = Expected Retention Time
G49536.D D040108A.M Mon Jun 02 08:32:08 2008

Quantitation Report (Qedit)

Data File : D:\TPH\053008-G\G49536.D Vial: 17
Acq On : 30 May 2008 22:32 Operator:
Sample : 61399-1 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 2 8:32 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Multiple Level Calibration

JC 6/2/09



(1) M-TERPHENYL (S)

15.67min 84.327ug/ml m

response 3645205

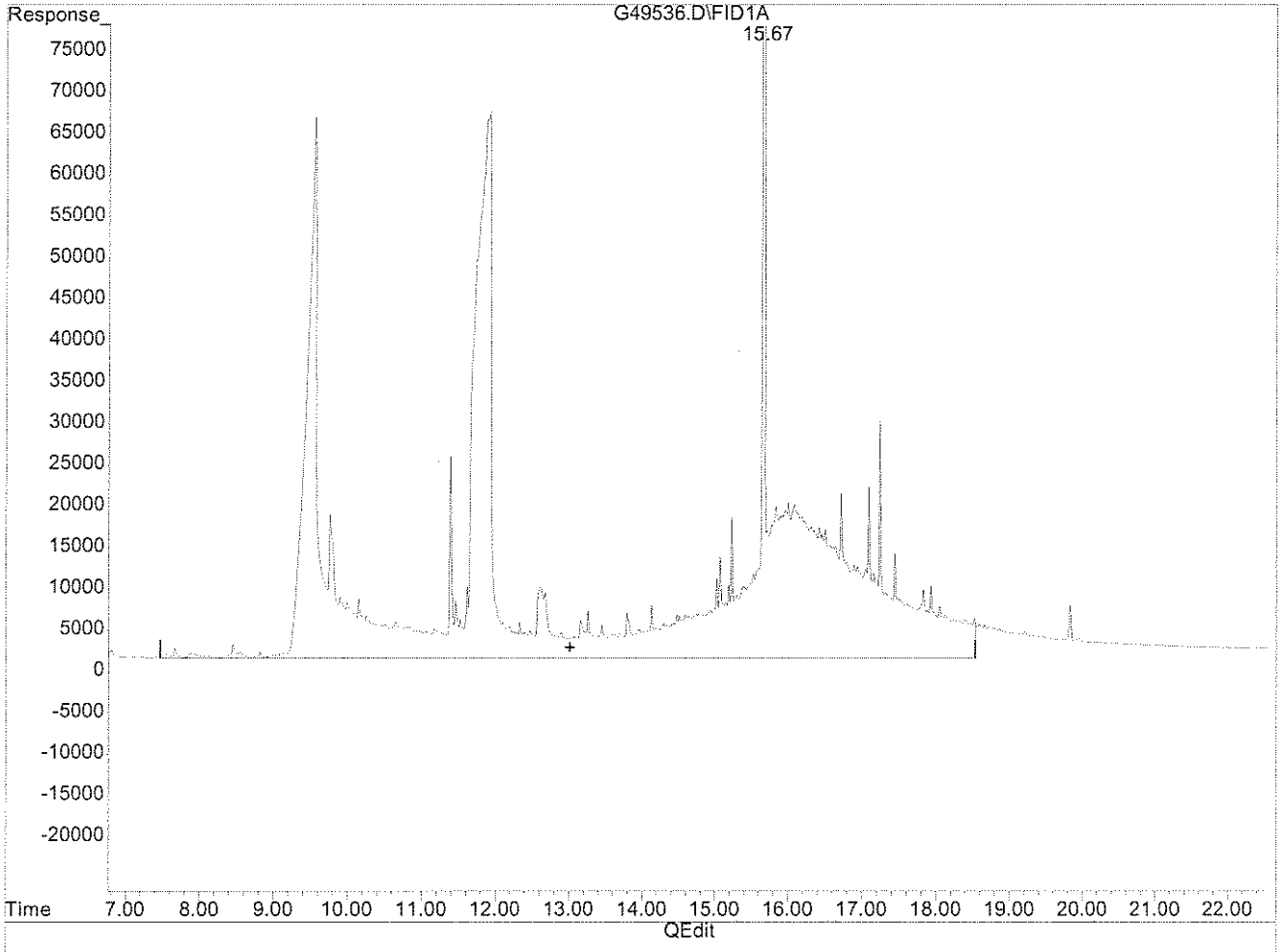
JC-9/06

(+) = Expected Retention Time
G49536.D D040108A.M Mon Jun 02 08:32:12 2008

Quantitation Report (Qedit)

Data File : D:\TPH\053008-G\G49536.D Vial: 17
Acq On : 30 May 2008 22:32 Operator:
Sample : 61399-1 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 2 8:32 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008 JW 6.2.08 *Baseline
Response via : Multiple Level Calibration



(3) DRO HIGH (>1.0) (HM)

13.01min 1.170mg/ml m

response 50672074

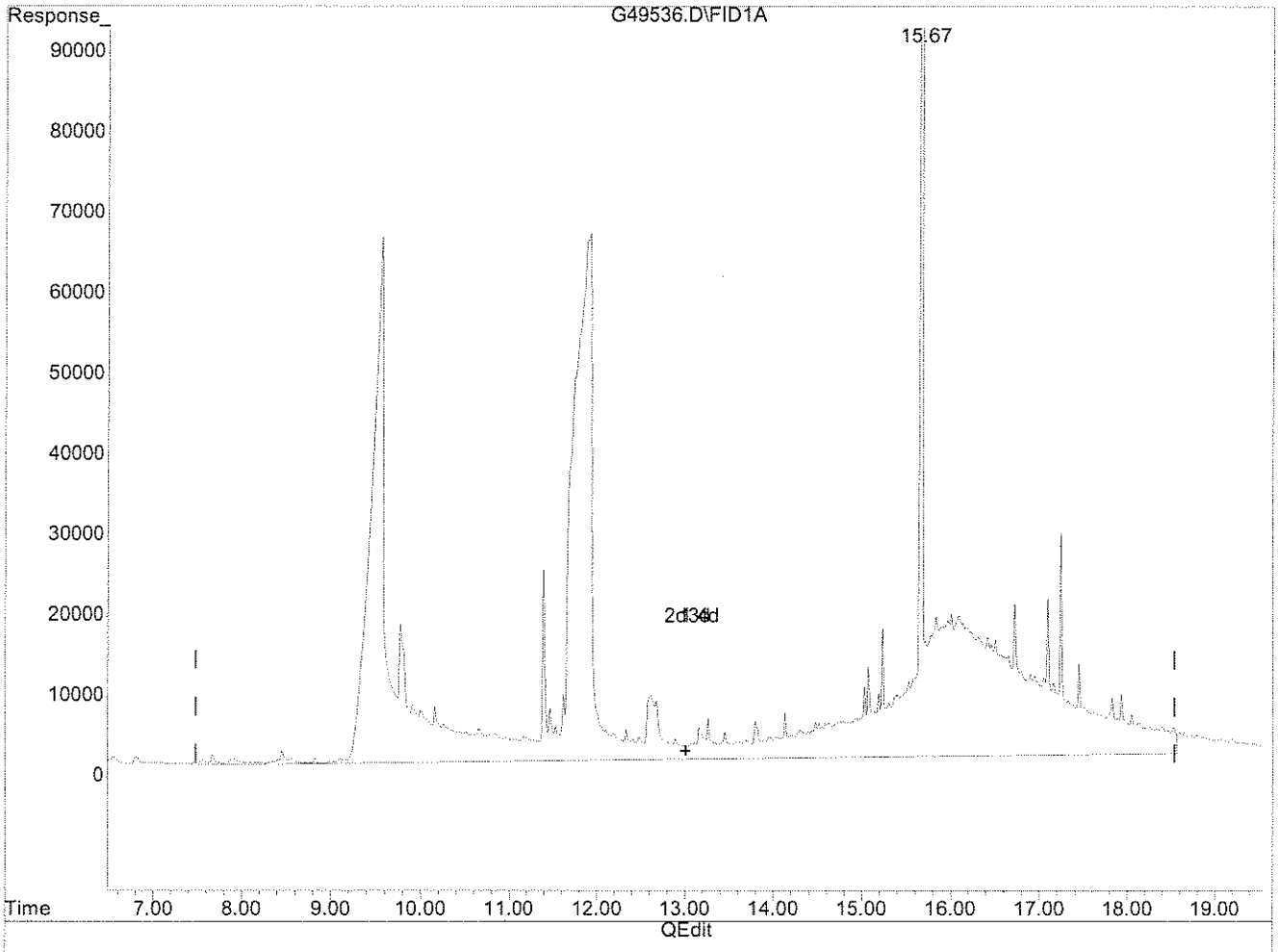
1/12908

(+) = Expected Retention Time
G49536.D D040108A.M Mon Jun 02 08:32:48 2008

Quantitation Report (Qedit)

Data File : D:\TPH\053008-G\G49536.D Vial: 17
Acq On : 30 May 2008 22:32 Operator:
Sample : 61399-1 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 2 10:09 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008 JK 6.2.08
Response via : Multiple Level Calibration



(3) DRO HIGH (>1.0) (HM)

13.01min 1.074mg/ml m

response 46483803

6-9-08

(+) = Expected Retention Time
G49536.D D040108A.M Mon Jun 02 10:10:30 2008

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June 3, 2008

SAMPLE DATA

CLIENT SAMPLE ID

Project Name:	MEFUDS LO-58
Project Number:	03886.184
Field Sample ID:	LS58DW2-0508-28.5

Lab Sample ID:	61399-2
Matrix:	Aqueous
Percent Solid:	N/A
Dilution Factor:	1.0
Collection Date:	05/16/08
Lab Receipt Date:	05/22/08
Extraction Date:	05/23/08
Analysis Date:	05/31/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	88	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

DRO Report

Authorized signature

4125 DRO WATER REPORT

Sample Name	**61399-2**
Data File Name	G49557.D
Date Acquired	5/31/2008 9:30
Misc Info	
Sample Volume (mL)	**1050**
Final Volume (mL)	**1.0**
Analyst Dilution (1:X)	**1**
Calculation Factor	952.3810
Dilution Factor	1.0

JK 6.3.08

4125 DRO ANALYTICAL RESULTS	ug/L	RL	
DRO	U	48	
m-Terphenyl	88%	60-140%	PASS ✓

RAW DATA

	Raw Inst Amount mg/mL	Reviewed & Calculated Inst Amount ug/L	Target Response	Sample Amount ug/L
M-TERPHENYL	88.44		3822791.362	
DRO LOW (<1.0)	0.0371	0.00	2106911.638	
DRO HIGH (>1.0)	0.0487	46.34	2106911.638	
DRO	0.04	0.00		0

JL 6.9.08

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49557.D Vial: 34
Acq On : 31 May 2008 9:30 Operator:
Sample : 61399-2 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 11:56 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JJC 6.3.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.66	3822791	88.435 ug/ml
Spiked Amount 100.000 Range 60 - 140		Recovery =	88.44%
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	2106912	0.037 mg/ml
3) HM DRO HIGH (>1.0)	13.01	2106912	0.049 mg/ml

ND

JC 6.9.08

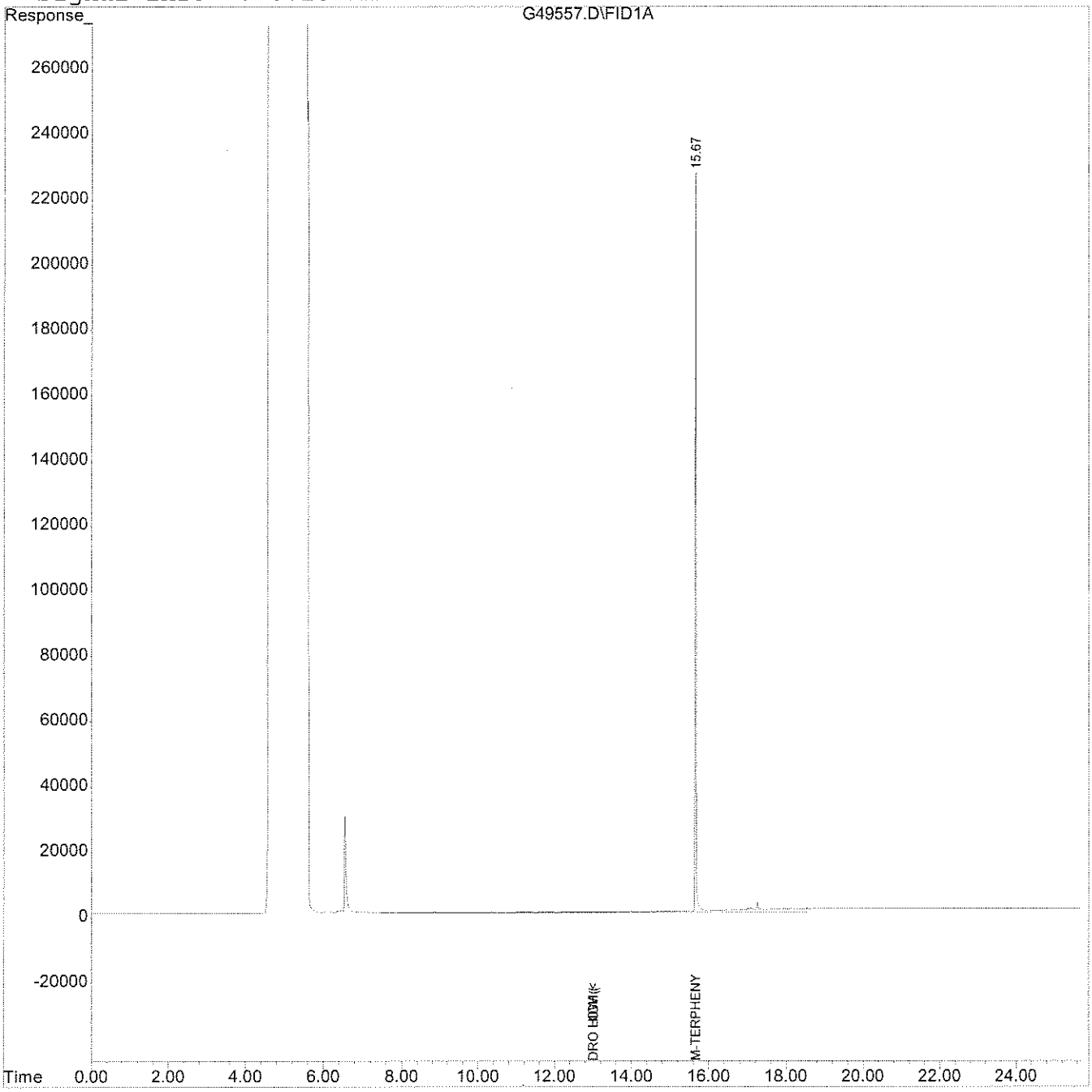
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49557.D Vial: 34
Acq On : 31 May 2008 9:30 Operator:
Sample : 61399-2 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 11:56 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm



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South Burlington VT 05403

June 3, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: LS58DW2-0508-28.5

SAMPLE DATA

Lab Sample ID: 61399-2 RR
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 05/16/08
Lab Receipt Date: 05/22/08
Extraction Date: 05/23/08
Analysis Date: 06/02/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	93	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

DRO Report

Authorized signature

4125 DRO WATER REPORT

Sample Name	61399-2, RR
Data File Name	G49624.D
Date Acquired	6/2/2008 19:25
Misc Info	
Sample Volume (mL)	**1050**
Final Volume (mL)	**1.0**
Analyst Dilution (1:X)	**1**
Calculation Factor	952.3810
Dilution Factor	1.0

JLG 6-3-08

4125 DRO ANALYTICAL RESULTS	ug/L	RL	
DRO	U	48	
m-Terphenyl	93%	60-140%	PASS

RAW DATA

	Raw Inst Amount mg/mL	Reviewed & Calculated Inst Amount ug/L	Target Response	Sample Amount ug/L
M-TERPHENYL	92.65		4004888.867	
DRO LOW (<1.0)	0.0481	0.00	2576620.499	
DRO HIGH (>1.0)	0.0617	58.73	2670037.59	
DRO	0.05	0.00		0

MJ 6-9-08

Quantitation Report (QT Reviewed)

Data File : D:\TPH\060208-G\G49624.D Vial: 11
Acq On : 2 Jun 2008 19:25 Operator:
Sample : 61399-2 IRR Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 7:52 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JLC 6.3.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.67	4004889	92.648 ug/ml
Spiked Amount 100.000 Range 60 - 140 Recovery = 92.65%			
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	2576620	0.048 mg/ml
3) HM DRO HIGH (>1.0)	13.01	2670038	0.062 mg/ml

ND

VJC-9.03

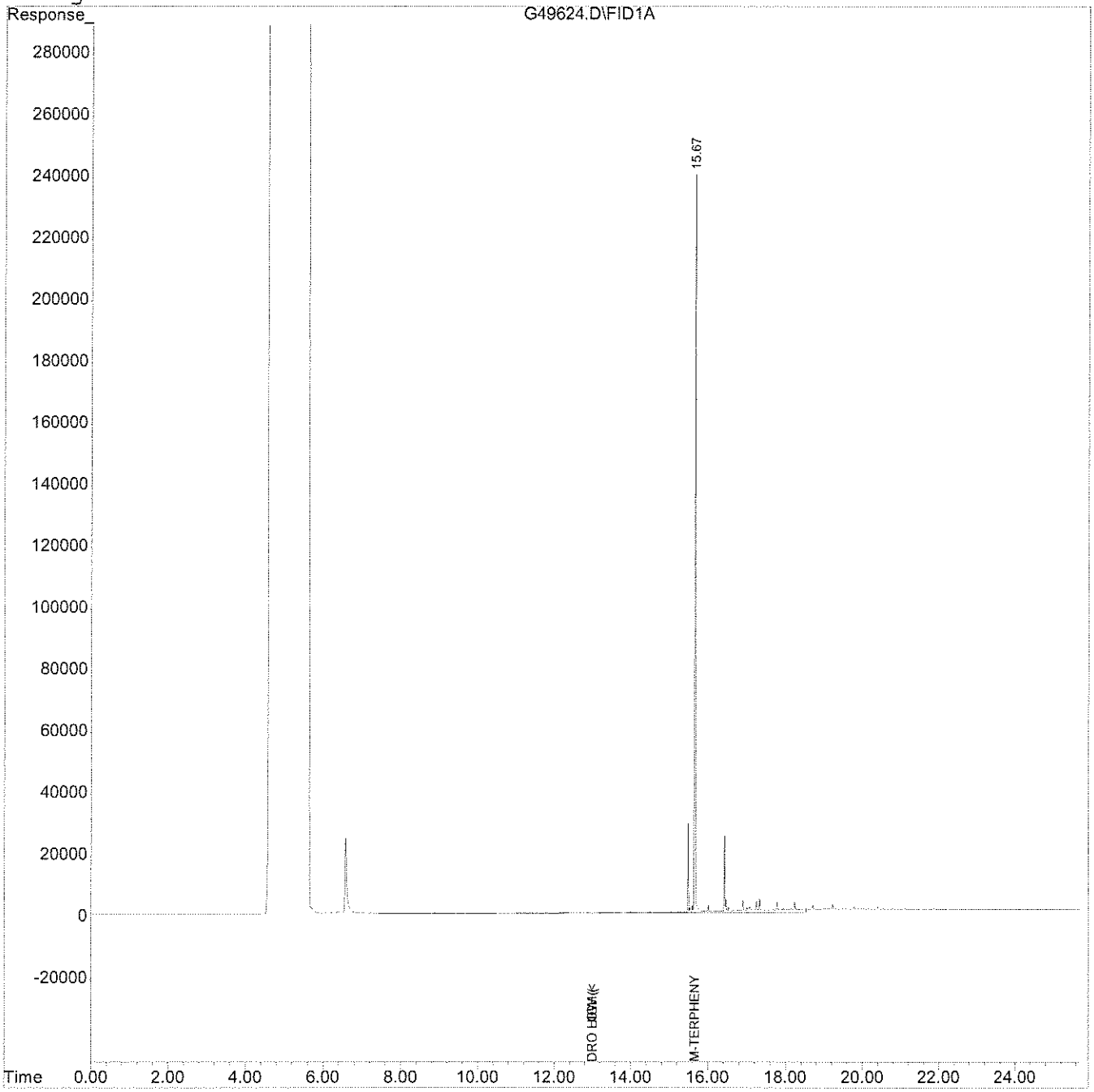
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : D:\TPH\060208-G\G49624.D Vial: 11
Acq On : 2 Jun 2008 19:25 Operator:
Sample : 61399-2 IRR Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 7:52 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

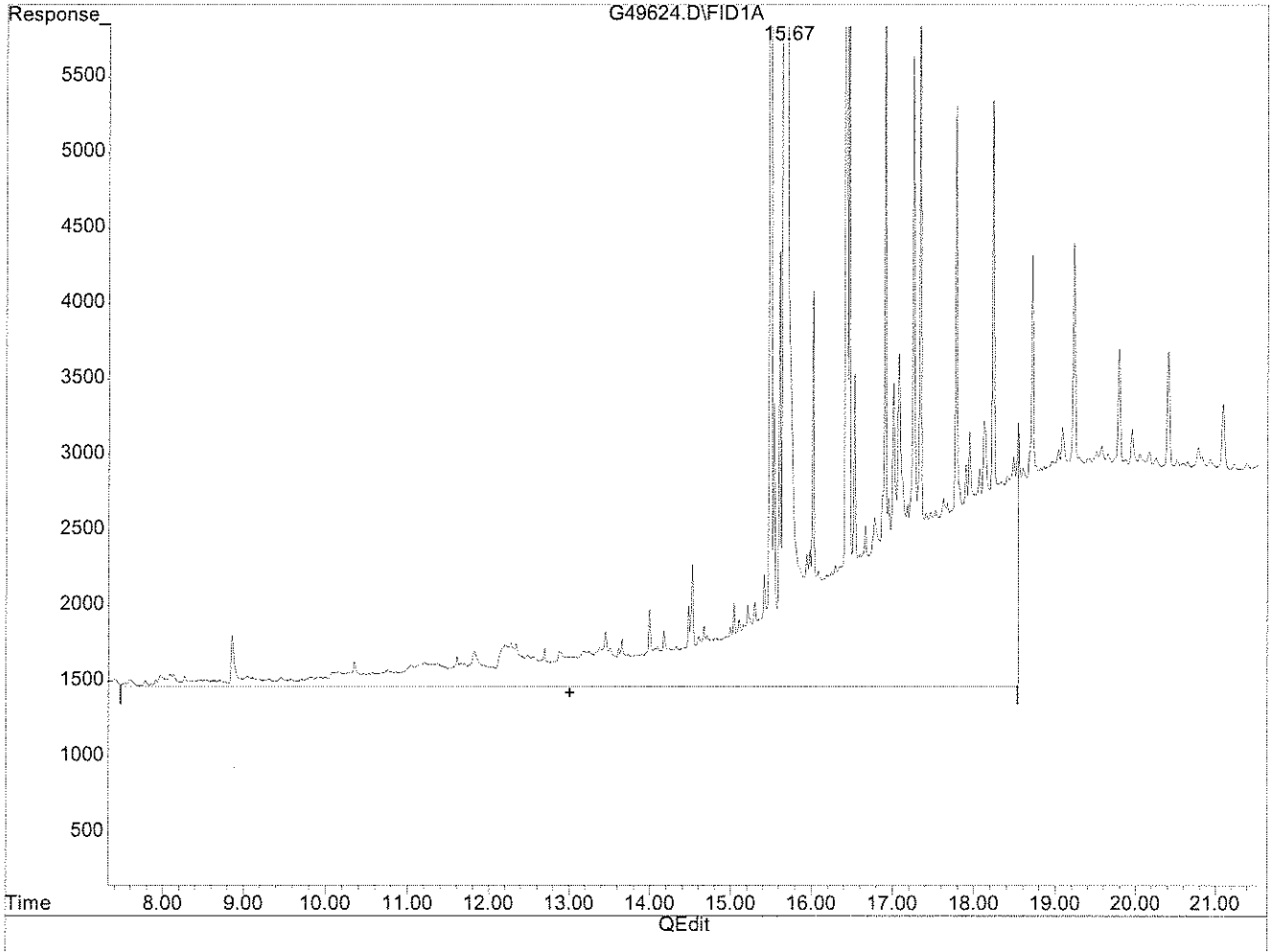


Quantitation Report (Qedit)

Data File : D:\TPH\060208-G\G49624.D Vial: 11
Acq On : 2 Jun 2008 19:25 Operator:
Sample : 61399-2 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 7:51 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration

JLC 6.3.08 + Baseline



(2) DRO LOW (<1.0) (HM)

13.01min 0.074mg/ml m

response 3680836

MJ 6.9.08

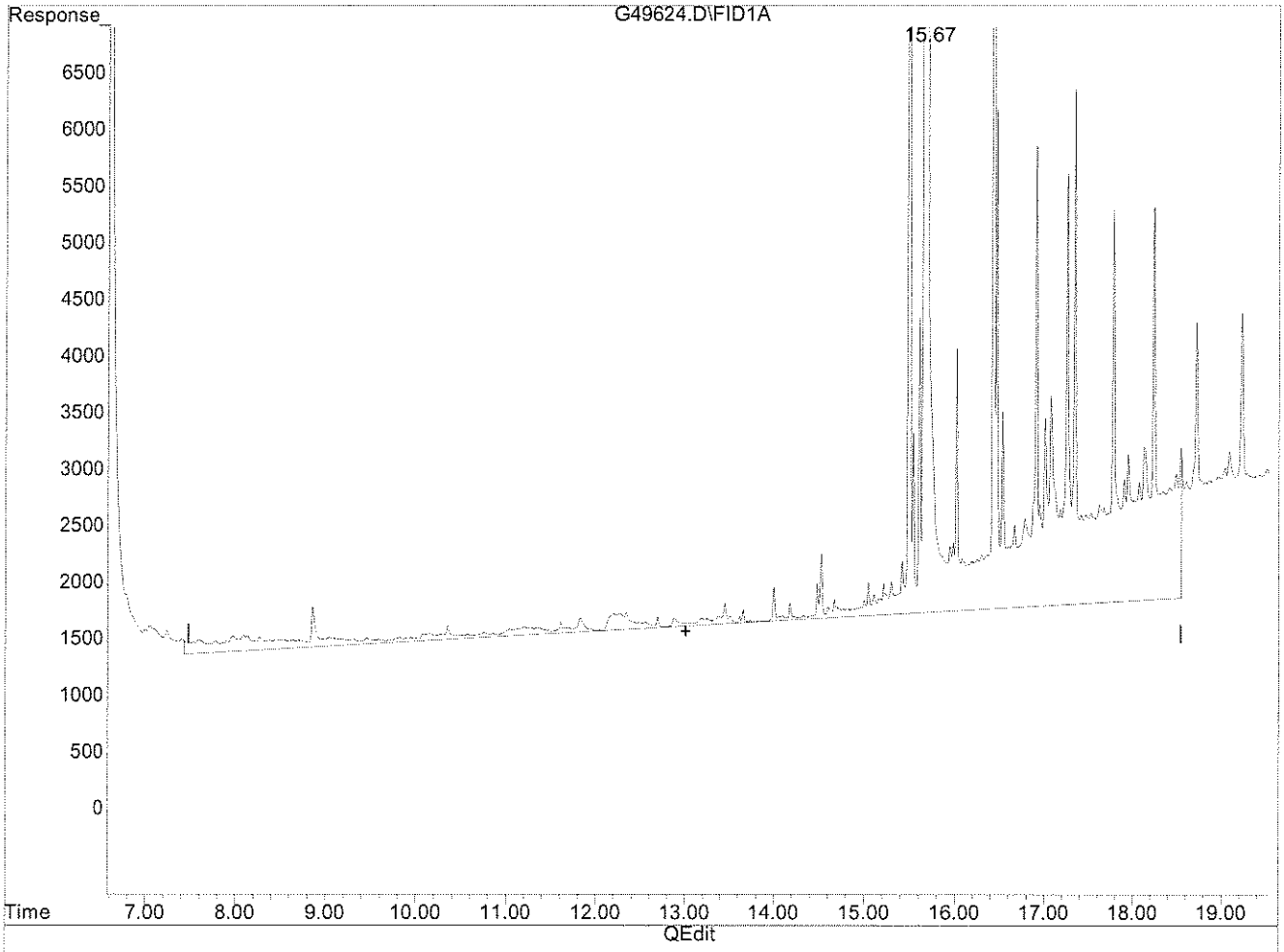
(+) = Expected Retention Time
G49624.D D040108A.M Tue Jun 03 07:52:15 2008

Quantitation Report (Qedit)

Data File : D:\TPH\060208-G\G49624.D Vial: 11
Acq On : 2 Jun 2008 19:25 Operator:
Sample : 61399-2 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 7:51 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration

JE 6.3.08



(2) DRO LOW (<1.0) (HM)

13.01min 0.048mg/ml m

response 2576620

JE 7.08

(+) = Expected Retention Time
G49624.D D040108A.M Tue Jun 03 07:53:02 2008

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June 3, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: LS58DW2-0508-37

SAMPLE DATA

Lab Sample ID: 61399-3
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 05/17/08
Lab Receipt Date: 05/22/08
Extraction Date: 05/23/08
Analysis Date: 05/31/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	92	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

DRO Report

Authorized signature

4125 DRO WATER REPORT

Sample Name	**61399-3**
Data File Name	G49558.D
Date Acquired	5/31/2008 9:59
Misc Info	
Sample Volume (mL)	**1070**
Final Volume (mL)	**1.0**
Analyst Dilution (1:X)	**1**
Calculation Factor	934.5794
Dilution Factor	0.9

JK 6.3.08

4125 DRO ANALYTICAL RESULTS	ug/L	RL	
DRO	U	47	
m-Terphenyl	92%	60-140%	PASS ✓

RAW DATA

	Raw Inst Amount mg/mL	Reviewed & Calculated Inst Amount ug/L	Target Response	Sample Amount ug/L
M-TERPHENYL	91.93		3974075.991	
DRO LOW (<1.0)	0.0367	0.00	2089275.531	
DRO HIGH (>1.0)	0.0497	46.49	2153864.338	
DRO	0.04	0.00		0

VJ 6.9.08

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49558.D Vial: 35
Acq On : 31 May 2008 9:59 Operator:
Sample : 61399-3 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 11:57 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JK 6.3.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.66	3974076	91.935 ug/ml
Spiked Amount 100.000	Range 60 - 140	Recovery =	91.94%
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	2089276	0.037 mg/ml
3) HM DRO HIGH (>1.0)	13.01	2153864	0.050 mg/ml

JK 6.3.08

ND

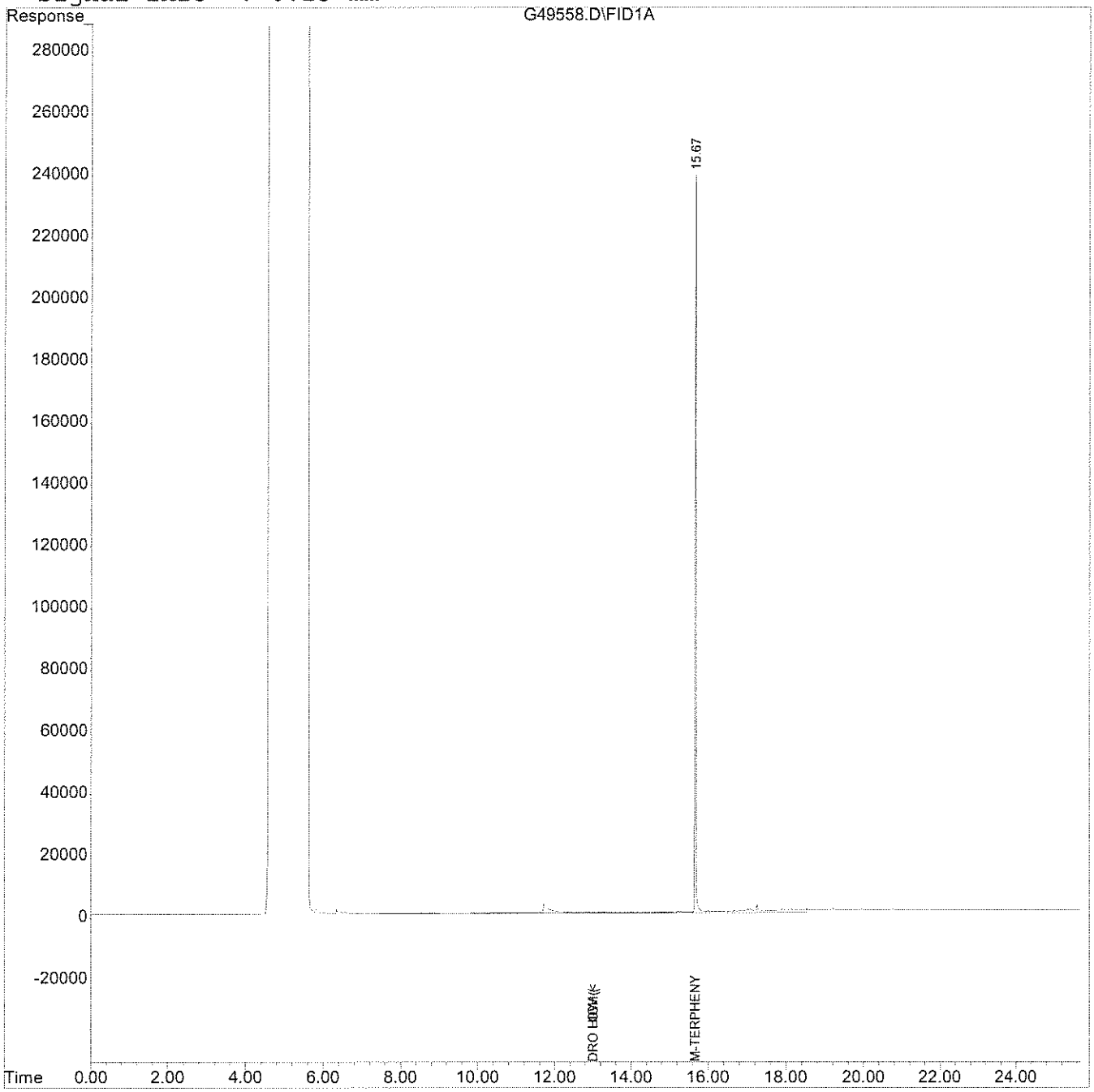
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49558.D Vial: 35
Acq On : 31 May 2008 9:59 Operator:
Sample : 61399-3 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 11:57 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

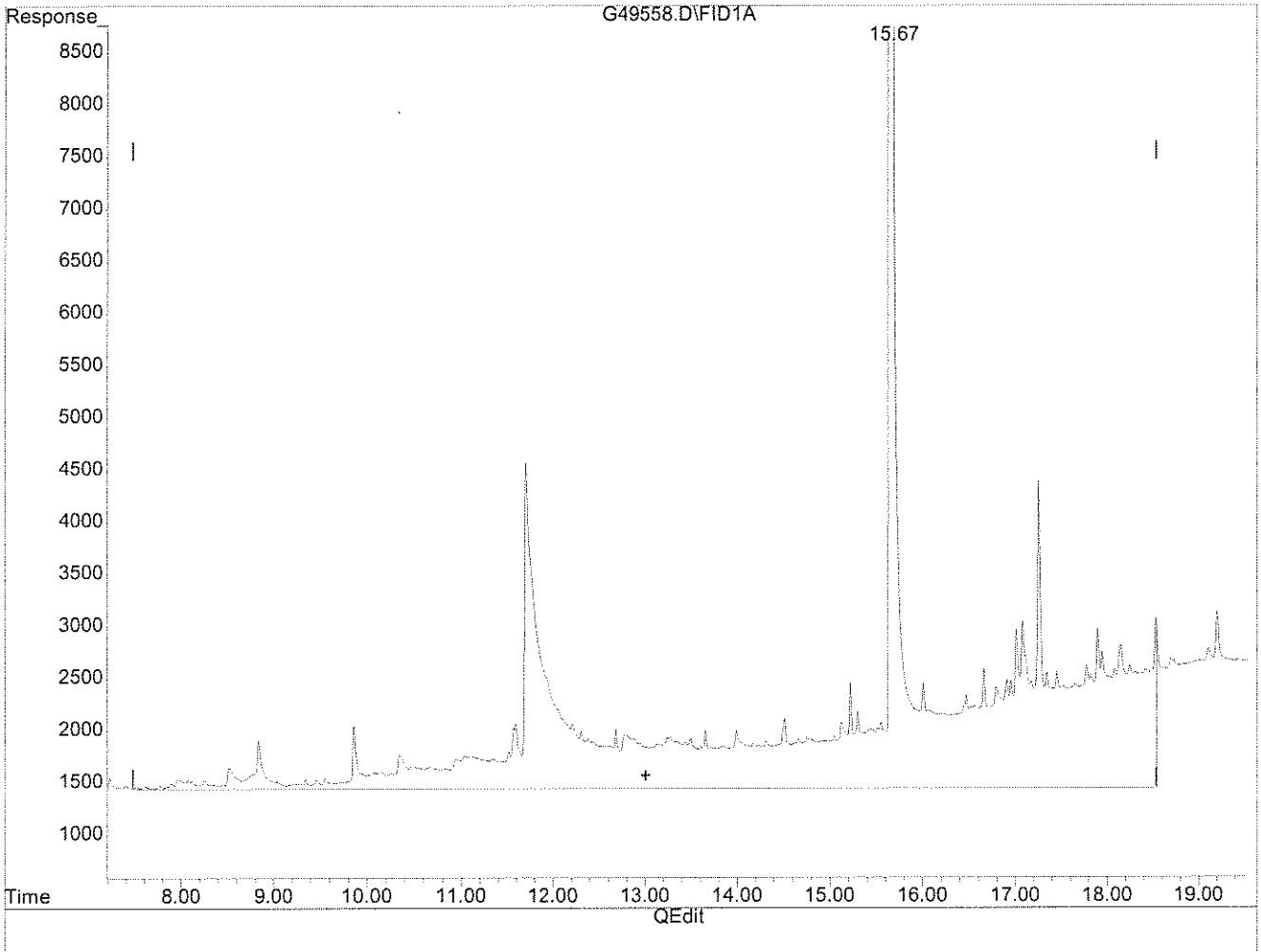


Quantitation Report (Qedit)

Data File : D:\TPH\053008-G\G49558.D Vial: 35
Acq On : 31 May 2008 9:59 Operator:
Sample : 61399-3 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 11:57 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration

JLC 6.3.08 *Baseline



(2) DRO LOW (<1.0) (HM)

13.01min 0.065mg/ml m

response 3321302

JLC 6.9.08

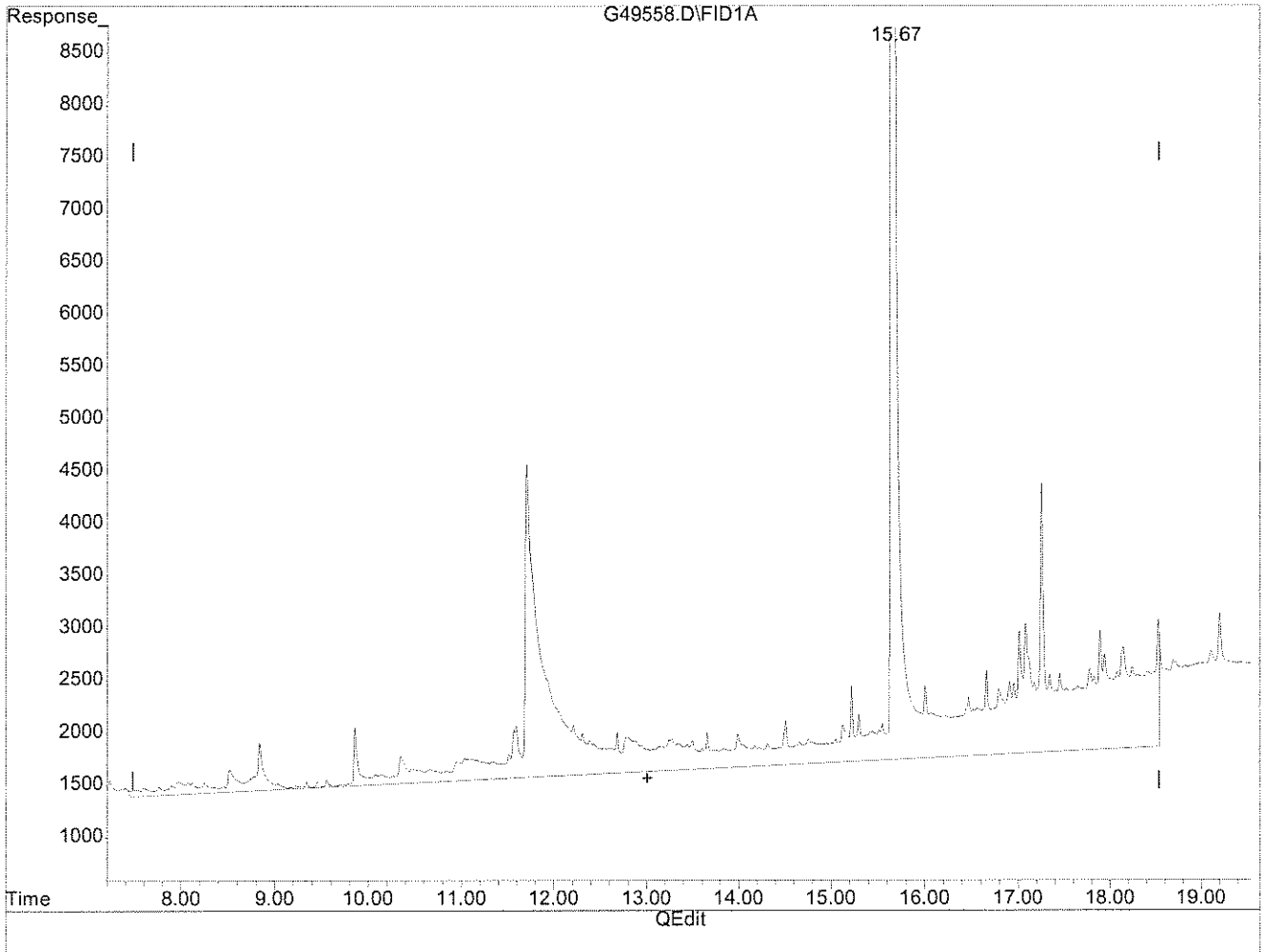
(+) = Expected Retention Time
G49558.D D040108A.M Tue Jun 03 11:57:10 2008

Quantitation Report (Qedit)

Data File : D:\TPH\053008-G\G49558.D Vial: 35
Acq On : 31 May 2008 9:59 Operator:
Sample : 61399-3 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 11:57 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration

JC 6.3.08



(2) DRO LOW (<1.0) (HM)

13.01min 0.037mg/ml m

response 2089276

3.4.08

(+) = Expected Retention Time
G49558.D D040108A.M Tue Jun 03 11:57:19 2008

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June 10, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: LS58DW2-0508-37

SAMPLE DATA

Lab Sample ID: 61399-3 RR
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 05/17/08
Lab Receipt Date: 05/22/08
Extraction Date: 05/23/08
Analysis Date: 06/02/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
50	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	99	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

DRO Report

Authorized signature

4125 DRO WATER REPORT

Sample Name	**61399-3** RR
Data File Name	G49625.D
Date Acquired	6/2/2008 20:09
Misc Info	
Sample Volume (mL)	**1070**
Final Volume (mL)	**1.0**
Analyst Dilution (1:X)	**1**
Calculation Factor	934.5794
Dilution Factor	0.9

JE 6.3.08

4125 DRO ANALYTICAL RESULTS	ug/L	RL	
DRO	50	47	
m-Terphenyl	99%	60-140%	PASS ✓

RAW DATA

	Raw Inst Amount mg/mL	Reviewed & Calculated Inst Amount ug/L	Target Response	Sample Amount ug/L
M-TERPHENYL	98.86		4273487.373	
DRO LOW (<1.0)	0.0532	49.68	2793008.634	
DRO HIGH (>1.0)	0.0674	62.98	2918149.965	
DRO	0.05	49.68		50

6/9/08

Quantitation Report (QT Reviewed)

Data File : D:\TPH\060208-G\G49625.D Vial: 12
Acq On : 2 Jun 2008 20:09 Operator:
Sample : 61399-3 RR Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 9:11 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

VIC 6-3-08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.67	4273487	98.861 ug/ml
Spiked Amount 100.000	Range 60 - 140	Recovery =	98.86%
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	2793009	0.053 mg/ml
3) HM DRO HIGH (>1.0)	13.01	2918150	0.067 mg/ml

6/9/08

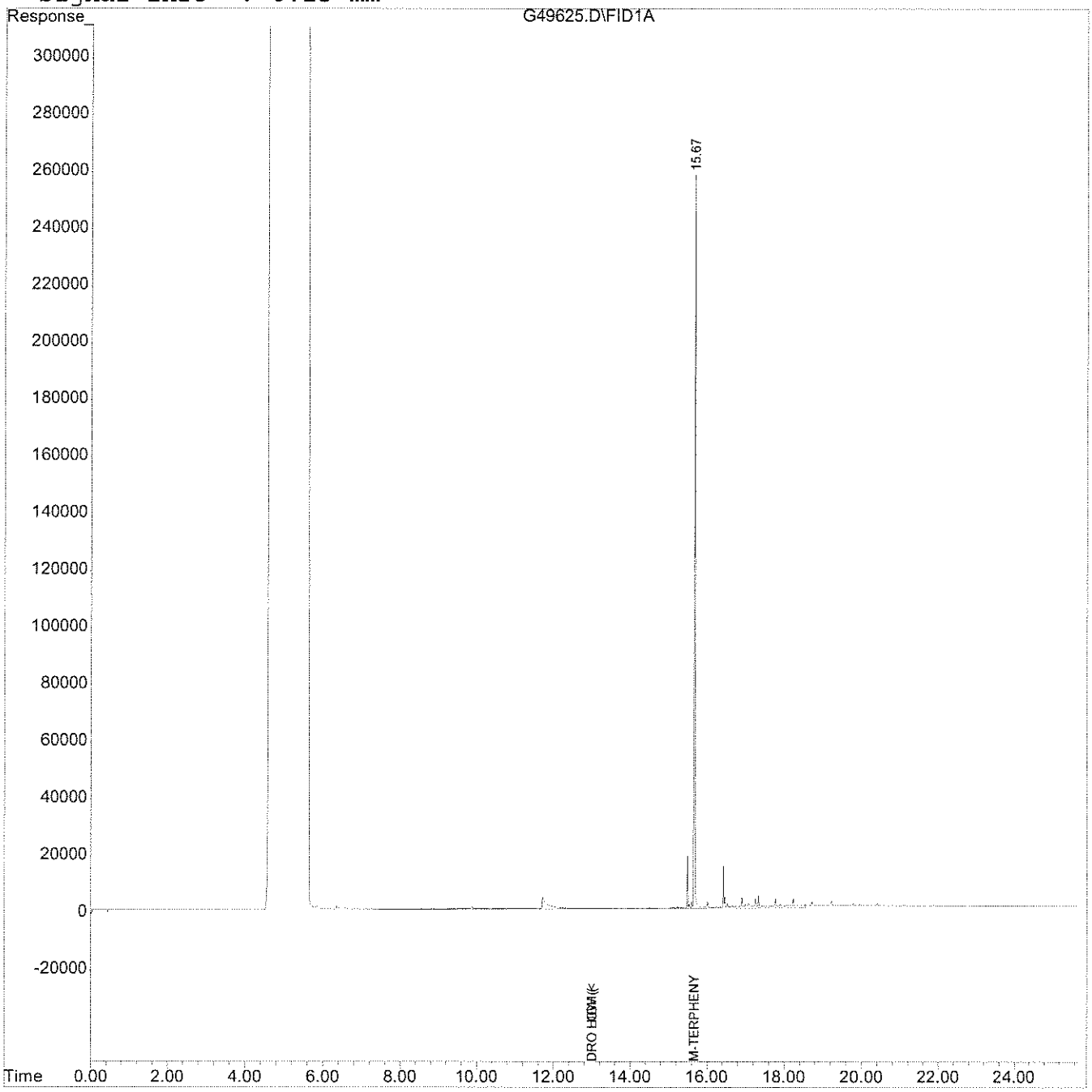
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : D:\TPH\060208-G\G49625.D Vial: 12
Acq On : 2 Jun 2008 20:09 Operator:
Sample : 61399-3 RR Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 9:11 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

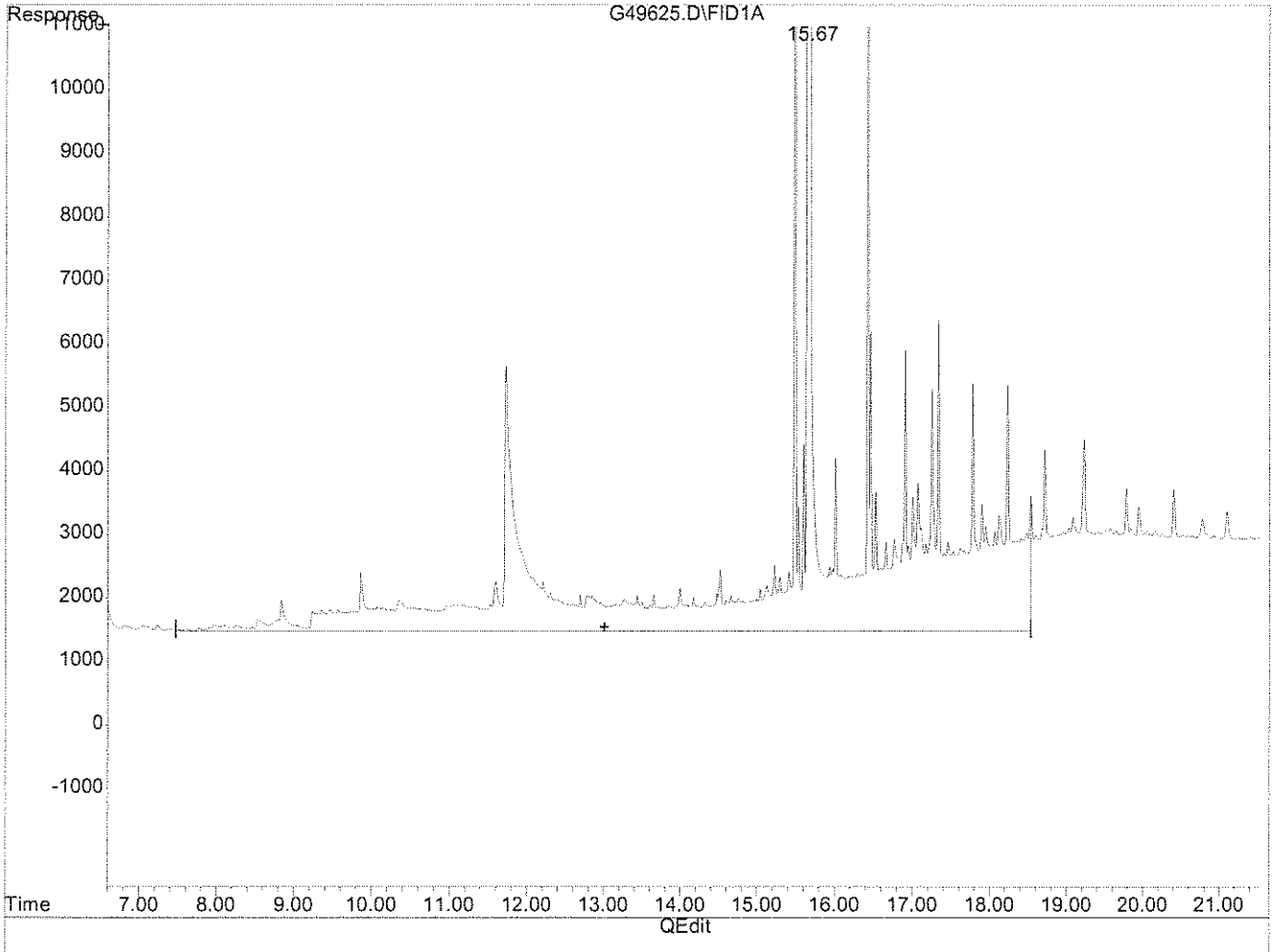


Quantitation Report (Qedit)

Data File : D:\TPH\060208-G\G49625.D Vial: 12
Acq On : 2 Jun 2008 20:09 Operator:
Sample : 61399-3 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 7:53 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration

JC 6.3.08 *Baseline



(2) DRO LOW (<1.0) (HM)

13.01min 0.101mg/ml m

response 4826039

JC 6.9.08

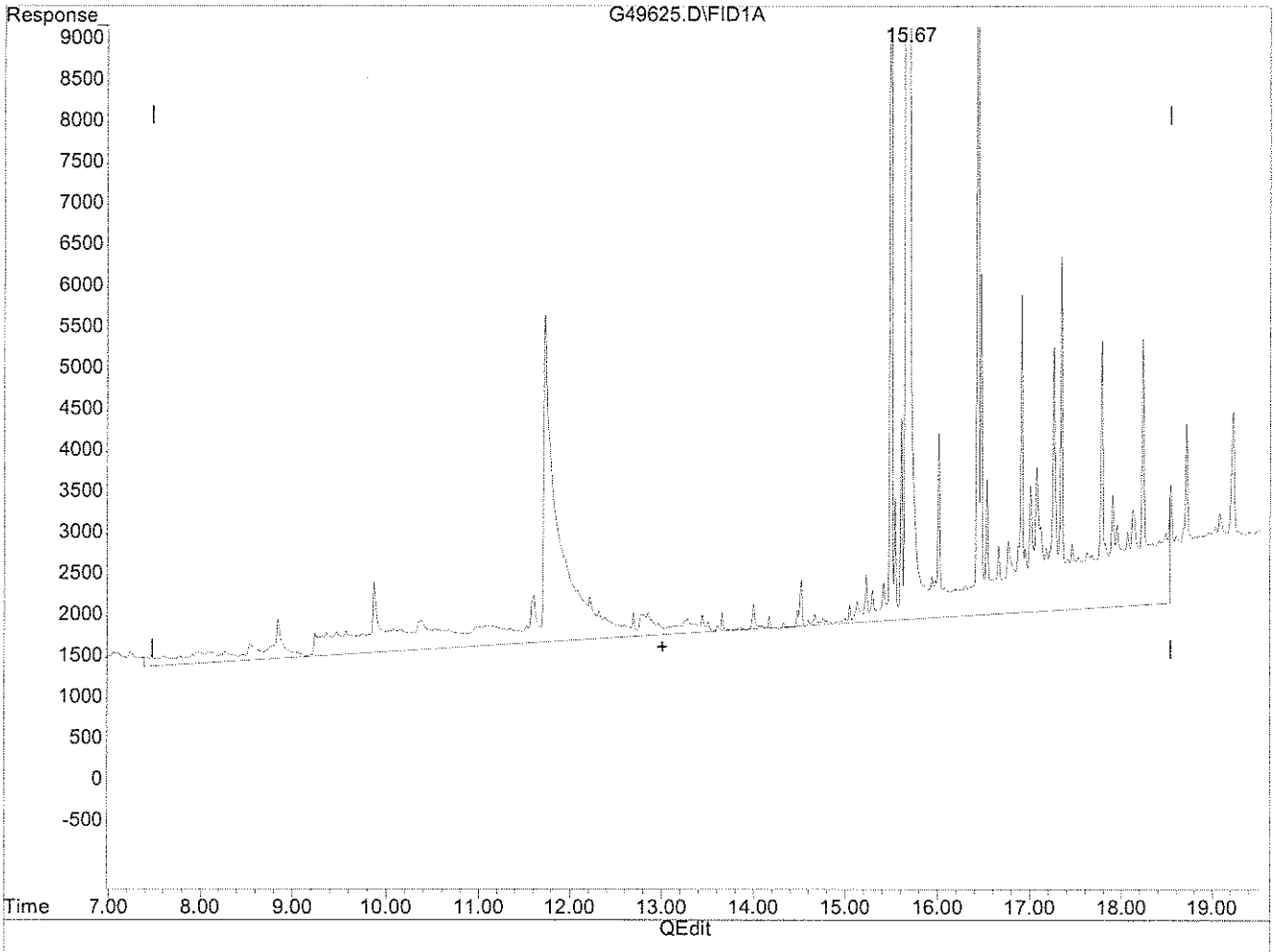
(+) = Expected Retention Time
G49625.D D040108A.M Tue Jun 03 07:53:30 2008

Quantitation Report (Qedit)

Data File : D:\TPH\060208-G\G49625.D Vial: 12
Acq On : 2 Jun 2008 20:09 Operator:
Sample : 61399-3 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 7:53 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration

JK 6.3.08



(2) DRO LOW (<1.0) (HM)

13.01min 0.053mg/ml m

response 2793009

JK 6.3.08

(+) = Expected Retention Time
G49625.D D040108A.M Tue Jun 03 07:54:53 2008

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South Burlington VT 05403

June 3, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: LS58DW2-0508-94.5

SAMPLE DATA

Lab Sample ID: 61399-4
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 05/17/08
Lab Receipt Date: 05/22/08
Extraction Date: 05/23/08
Analysis Date: 05/31/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	81	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

DRO Report

Authorized signature

4125 DRO WATER REPORT

Sample Name	**61399-4**
Data File Name	G49559.D
Date Acquired	5/31/2008 10:29
Misc Info	
Sample Volume (mL)	**1080**
Final Volume (mL)	**1.0**
Analyst Dilution (1:X)	**1**
Calculation Factor	925.9259
Dilution Factor	0.9

JC 6.3.08

4125 DRO ANALYTICAL RESULTS	ug/L	RL	
DRO	U	46	
m-Terphenyl	81%	60-140%	PASS

RAW DATA

	Raw Inst Amount mg/mL	Reviewed & Calculated Inst Amount ug/L	Target Response	Sample Amount ug/L
M-TERPHENYL	80.81		3493118.971	
DRO LOW (<1.0)	0.0320	0.00	1884929.89	
DRO HIGH (>1.0)	0.0339	31.36	1466655.149	
DRO	0.03	0.00		0

JC 6.9.08

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49559.D Vial: 36
Acq On : 31 May 2008 10:29 Operator:
Sample : 61399-4 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 11:57 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JL 6.3.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.66	3493119	80.809 ug/ml
Spiked Amount 100.000 Range 60 - 140		Recovery = 80.81%	
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	1884930	0.032 mg/ml
3) HM DRO HIGH (>1.0)	13.01	1466655	0.034 mg/ml

ND

JL 6.3.08

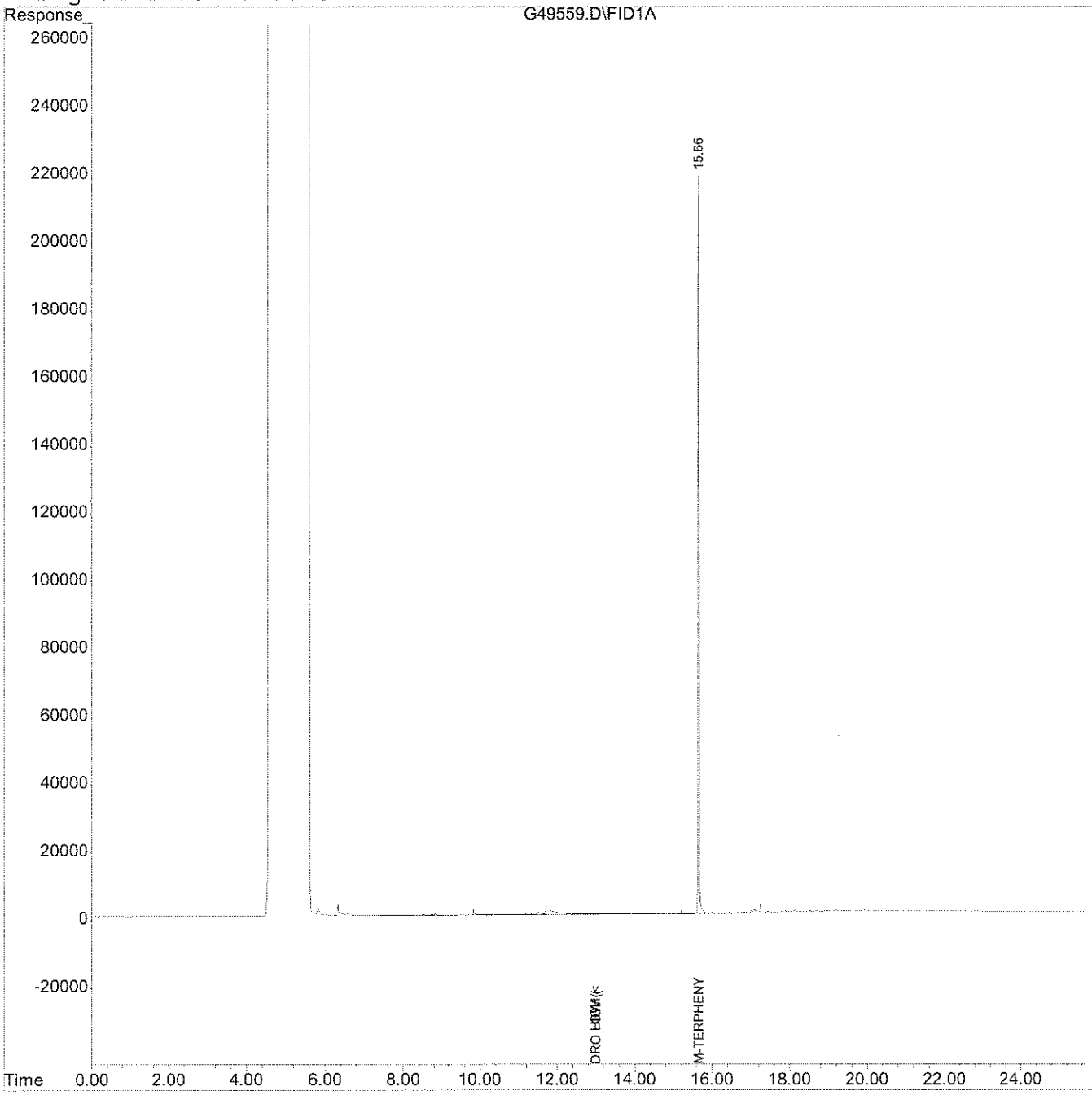
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49559.D Vial: 36
Acq On : 31 May 2008 10:29 Operator:
Sample : 61399-4 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 11:57 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

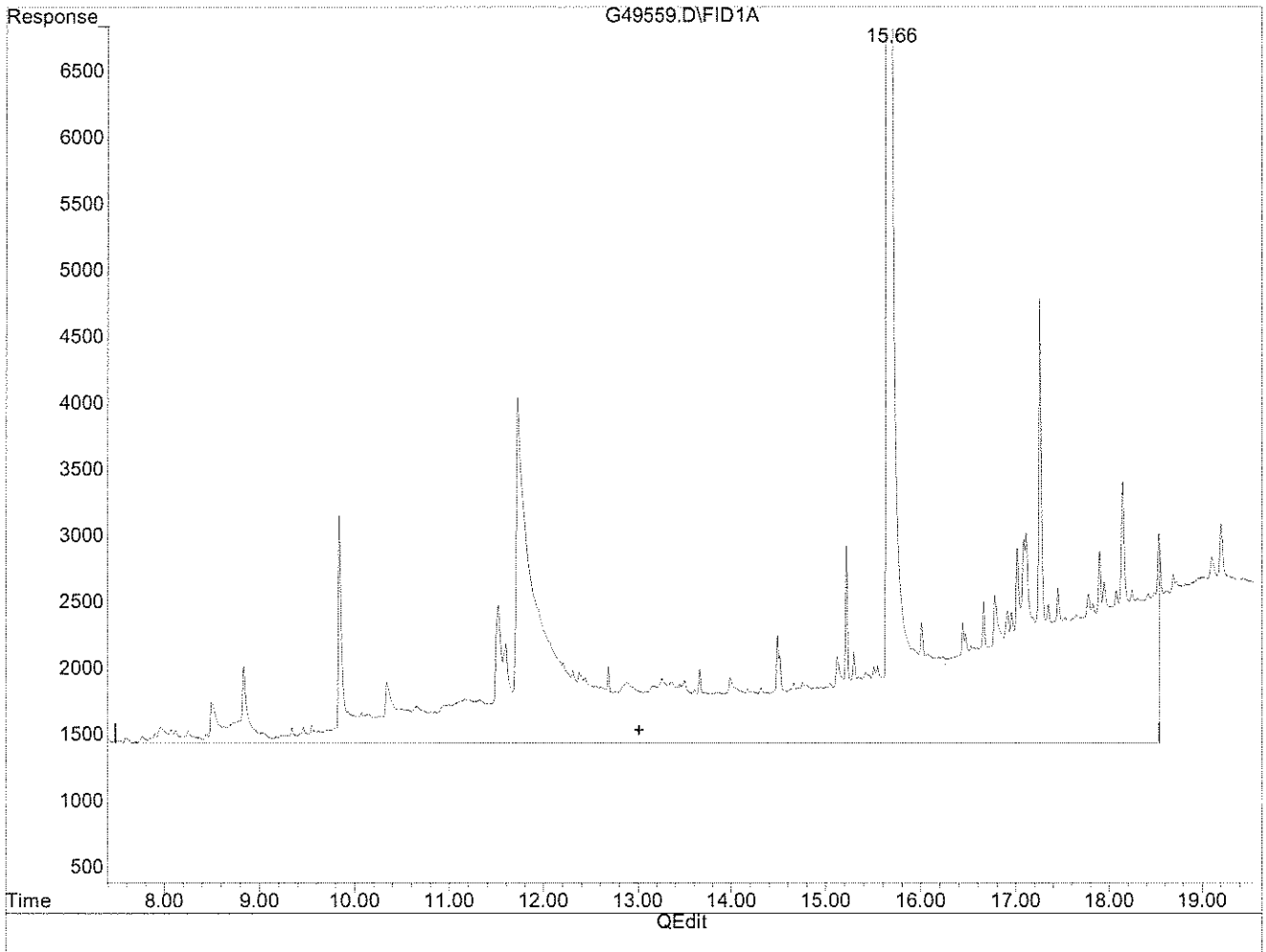


Quantitation Report (Qedit)

Data File : D:\TPH\053008-G\G49559.D Vial: 36
Acq On : 31 May 2008 10:29 Operator:
Sample : 61399-4 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 11:57 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration

JC 6.3.08 *Baseline



(2) DRO LOW (<1.0) (HM)

13.01min 0.066mg/ml m

response 3360553

36.900

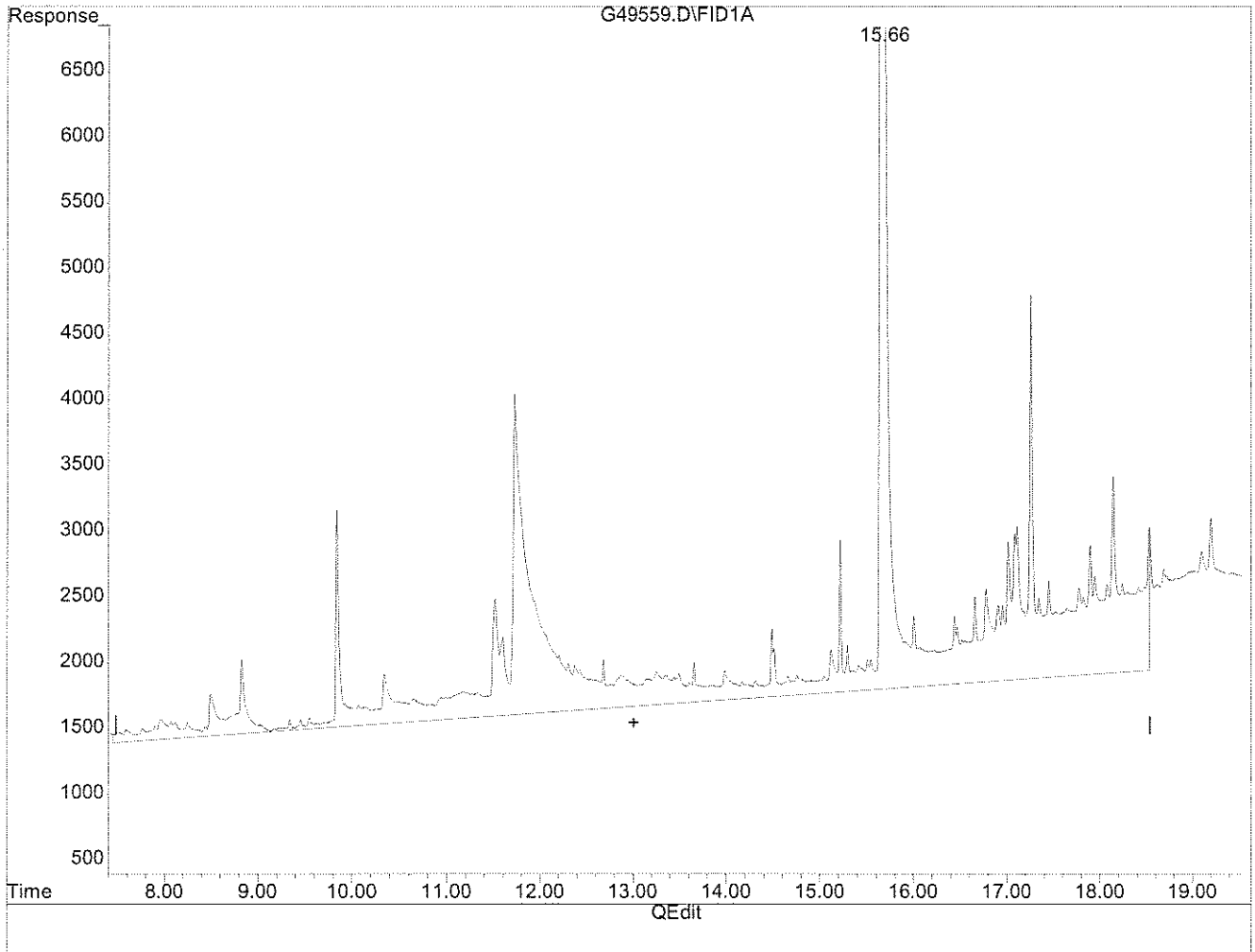
(+) = Expected Retention Time
G49559.D D040108A.M Tue Jun 03 11:57:43 2008

Quantitation Report (Qedit)

Data File : D:\TPH\053008-G\G49559.D Vial: 36
Acq On : 31 May 2008 10:29 Operator:
Sample : 61399-4 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 11:57 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration

JK 6.3.08



(2) DRO LOW (<1.0) (HM)

13.01min 0.032mg/ml m

response 1884930

JK 6.3.08

(+) = Expected Retention Time
G49559.D D040108A.M Tue Jun 03 11:57:51 2008

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June 10, 2008

SAMPLE DATA

CLIENT SAMPLE ID

Project Name:	MEFUDS LO-58
Project Number:	03886.184
Field Sample ID:	LS58DW2-0508-94.5

Lab Sample ID:	61399-4 RR
Matrix:	Aqueous
Percent Solid:	N/A
Dilution Factor:	1.0
Collection Date:	05/17/08
Lab Receipt Date:	05/22/08
Extraction Date:	05/23/08
Analysis Date:	06/02/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	88	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

DRO Report

Authorized signature

4125 DRO WATER REPORT

Sample Name	**61399-4** RR
Data File Name	G49626.D
Date Acquired	6/2/2008 20:39
Misc Info	
Sample Volume (mL)	**1080**
Final Volume (mL)	**1.0**
Analyst Dilution (1:X)	**1**
Calculation Factor	925.9259
Dilution Factor	0.9

JLC 6.3.08

4125 DRO ANALYTICAL RESULTS	ug/L	RL	
DRO	U	46	
m-Terphenyl	88%	60-140%	PASS ✓

RAW DATA

	Raw Inst Amount mg/mL	Reviewed & Calculated Inst Amount ug/L	Target Response	Sample Amount ug/L
M-TERPHENYL	88.45		3823520.665	
DRO LOW (<1.0)	0.0492	0.00	2624398.437	
DRO HIGH (>1.0)	0.0689	63.83	2985046.832	
DRO	0.05	0.00		0

JLC 6-3-08

Quantitation Report (QT Reviewed)

Data File : D:\TPH\060208-G\G49626.D Vial: 13
Acq On : 2 Jun 2008 20:39 Operator:
Sample : 61399-4, RR Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 7:55 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JLC 6.3.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.67	3823521	88.452 ug/ml
Spiked Amount 100.000 Range 60 - 140 Recovery = 88.45%			
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	2624398	0.049 mg/ml
3) HM DRO HIGH (>1.0)	13.01	2985047	0.069 mg/ml

ND

76-90C

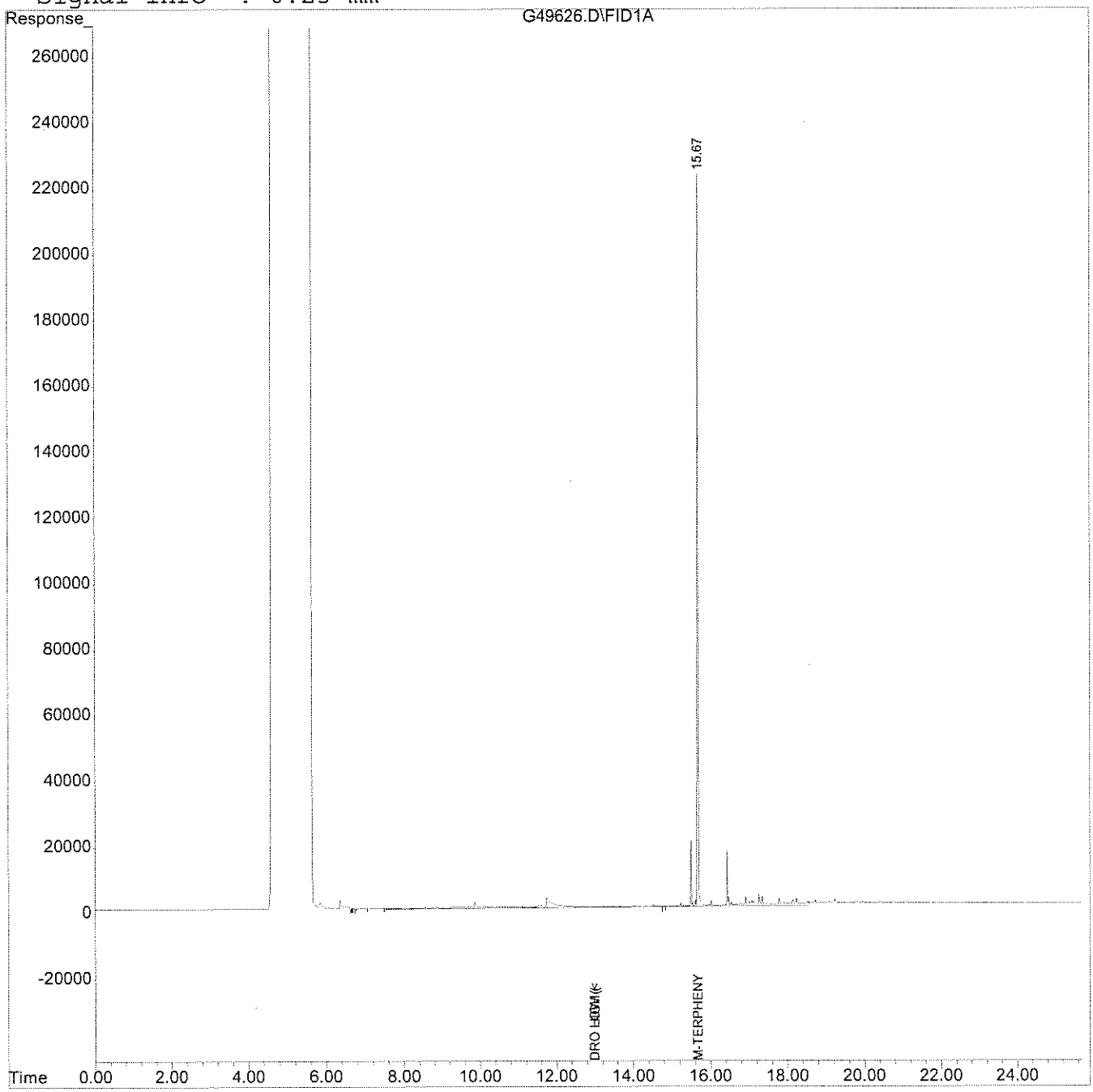
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : D:\TPH\060208-G\G49626.D Vial: 13
Acq On : 2 Jun 2008 20:39 Operator:
Sample : 61399-4 RR Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 7:55 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

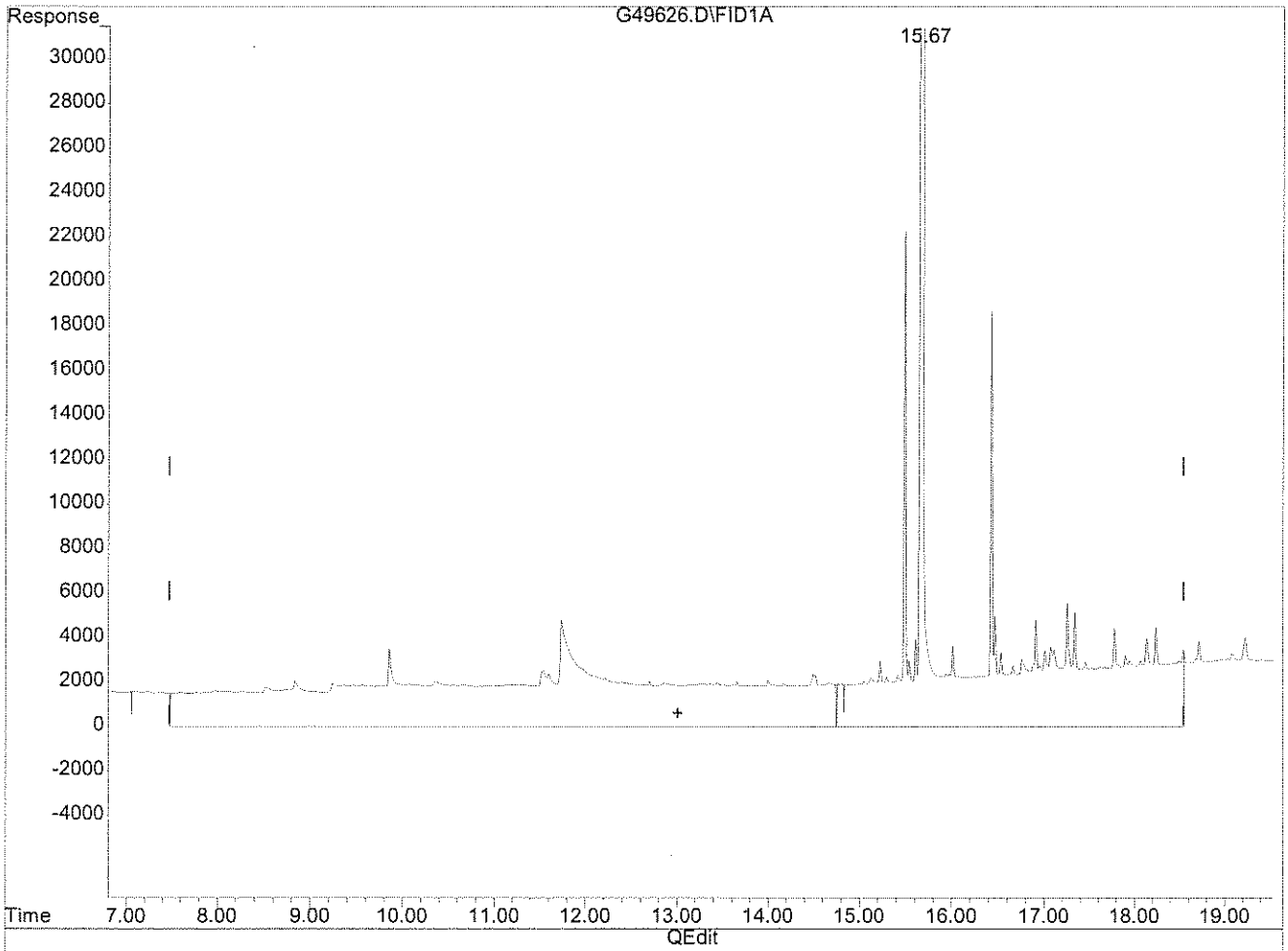


Quantitation Report (Qedit)

Data File : D:\TPH\060208-G\G49626.D Vial: 13
Acq On : 2 Jun 2008 20:39 Operator:
Sample : 61399-4, RR Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 7:55 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration

JK 6.3.08 * Baseline



(2) DRO LOW (<1.0) (HM)

13.01min 0.322mg/ml m

response 14296225

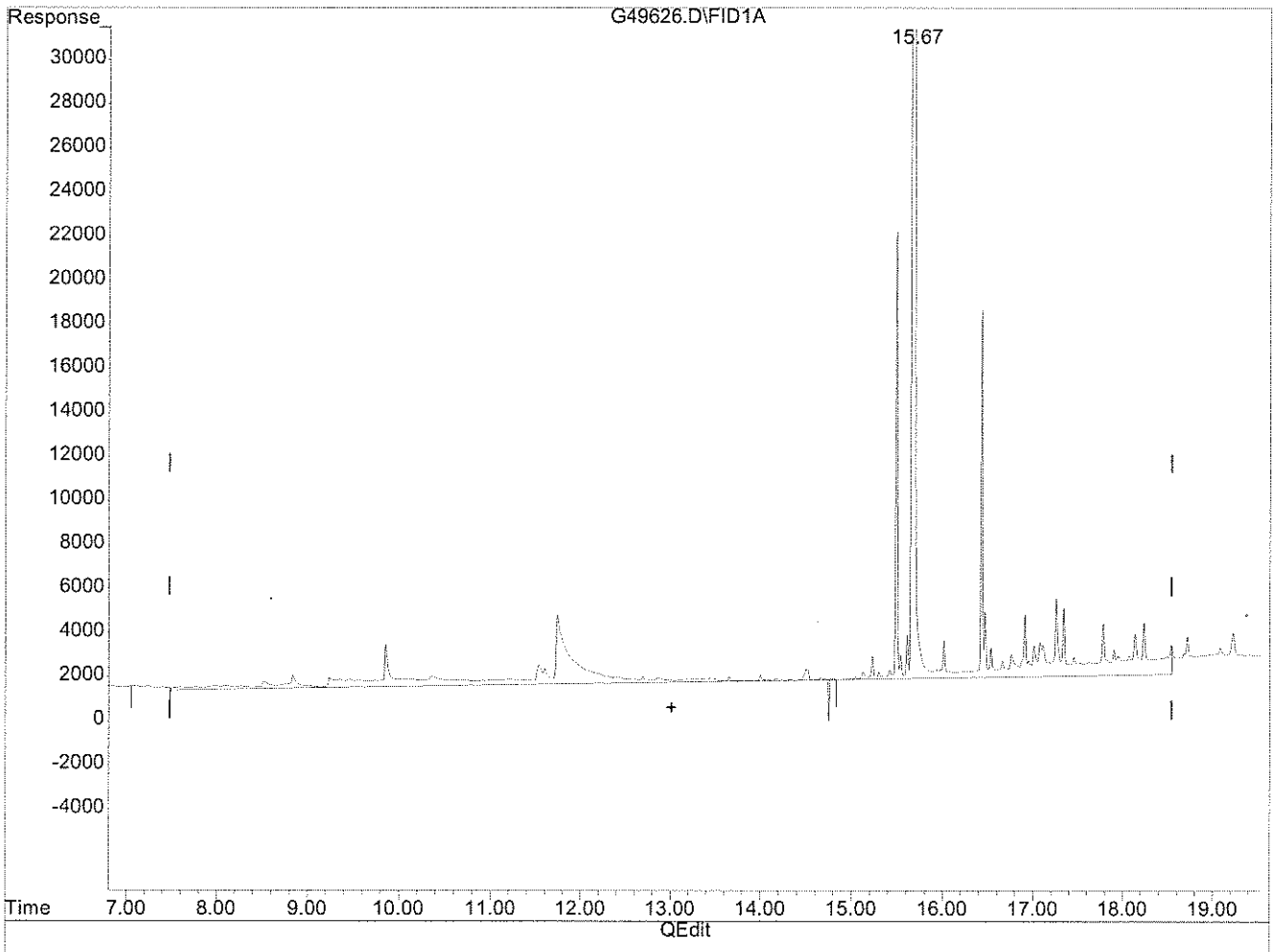
6.4.08

(+) = Expected Retention Time
G49626.D D040108A.M Tue Jun 03 07:55:25 2008

Quantitation Report (Qedit)

Data File : D:\TPH\060208-G\G49626.D Vial: 13
Acq On : 2 Jun 2008 20:39 Operator:
Sample : 61399-4 RR Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 7:55 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008 JLC 6-3-08
Response via : Multiple Level Calibration



(2) DRO LOW (<1.0) (HM)

13.01min 0.049mg/ml m

response 2624398

BG-908

(+) = Expected Retention Time
G49626.D D040108A.M Tue Jun 03 07:55:50 2008

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June 3, 2008

SAMPLE DATA

CLIENT SAMPLE ID

Project Name:	MEFUDS LO-58
Project Number:	03886.184
Field Sample ID:	LS58DW2-0508-189

Lab Sample ID:	61399-5
Matrix:	Aqueous
Percent Solid:	N/A
Dilution Factor:	1.0
Collection Date:	05/17/08
Lab Receipt Date:	05/22/08
Extraction Date:	05/23/08
Analysis Date:	05/31/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	85	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

DRO Report

Authorized signature

4125 DRO WATER REPORT

Sample Name	**61399-5**
Data File Name	G49560.D
Date Acquired	5/31/2008 10:58
Misc Info	
Sample Volume (mL)	**1080**
Final Volume (mL)	**1.0**
Analyst Dilution (1:X)	**1**
Calculation Factor	925.9259
Dilution Factor	0.9

JL 6-3-08

4125 DRO ANALYTICAL RESULTS	ug/L	RL	
DRO	U	46	
m-Terphenyl	85%	60-140%	PASS ✓

RAW DATA

	Raw Inst Amount mg/mL	Reviewed & Calculated Inst Amount ug/L	Target Response	Sample Amount ug/L
M-TERPHENYL	85.00		3674104.399	
DRO LOW (<1.0)	0.0301	0.00	1803736.183	
DRO HIGH (>1.0)	0.0439	40.66	1901291.445	
DRO	0.03	0.00		0

JL 6-9-08

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49560.D Vial: 37
Acq On : 31 May 2008 10:58 Operator:
Sample : 61399-5 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 11:58 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JLC 6.3.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.66	3674104	84.995 ug/ml
Spiked Amount 100.000 Range 60 - 140		Recovery = 85.00%	
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	1803736	0.030 mg/ml
3) HM DRO HIGH (>1.0)	13.01	1901291	0.044 mg/ml

ND

36.90

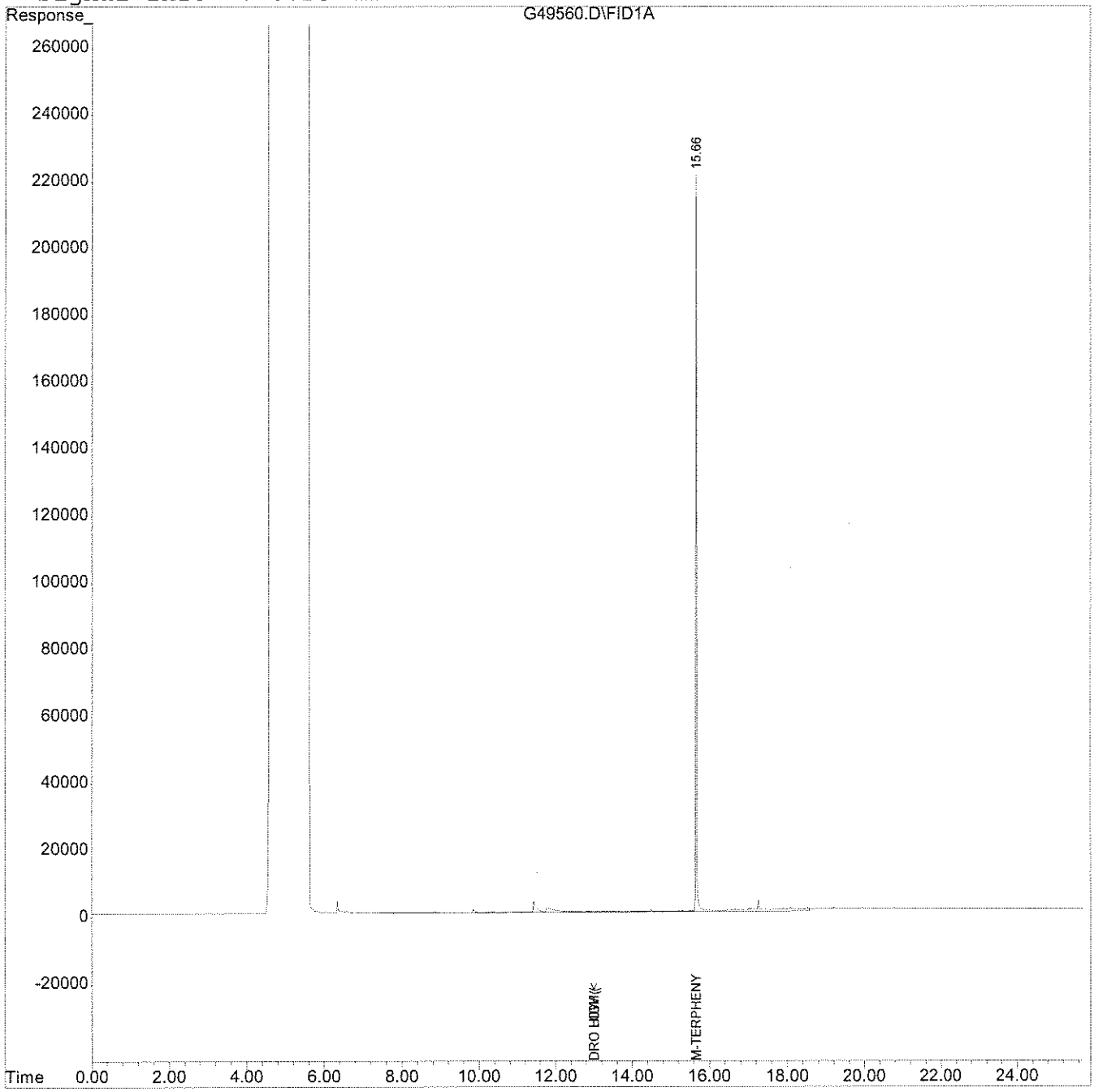
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49560.D Vial: 37
Acq On : 31 May 2008 10:58 Operator:
Sample : 61399-5 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 11:58 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

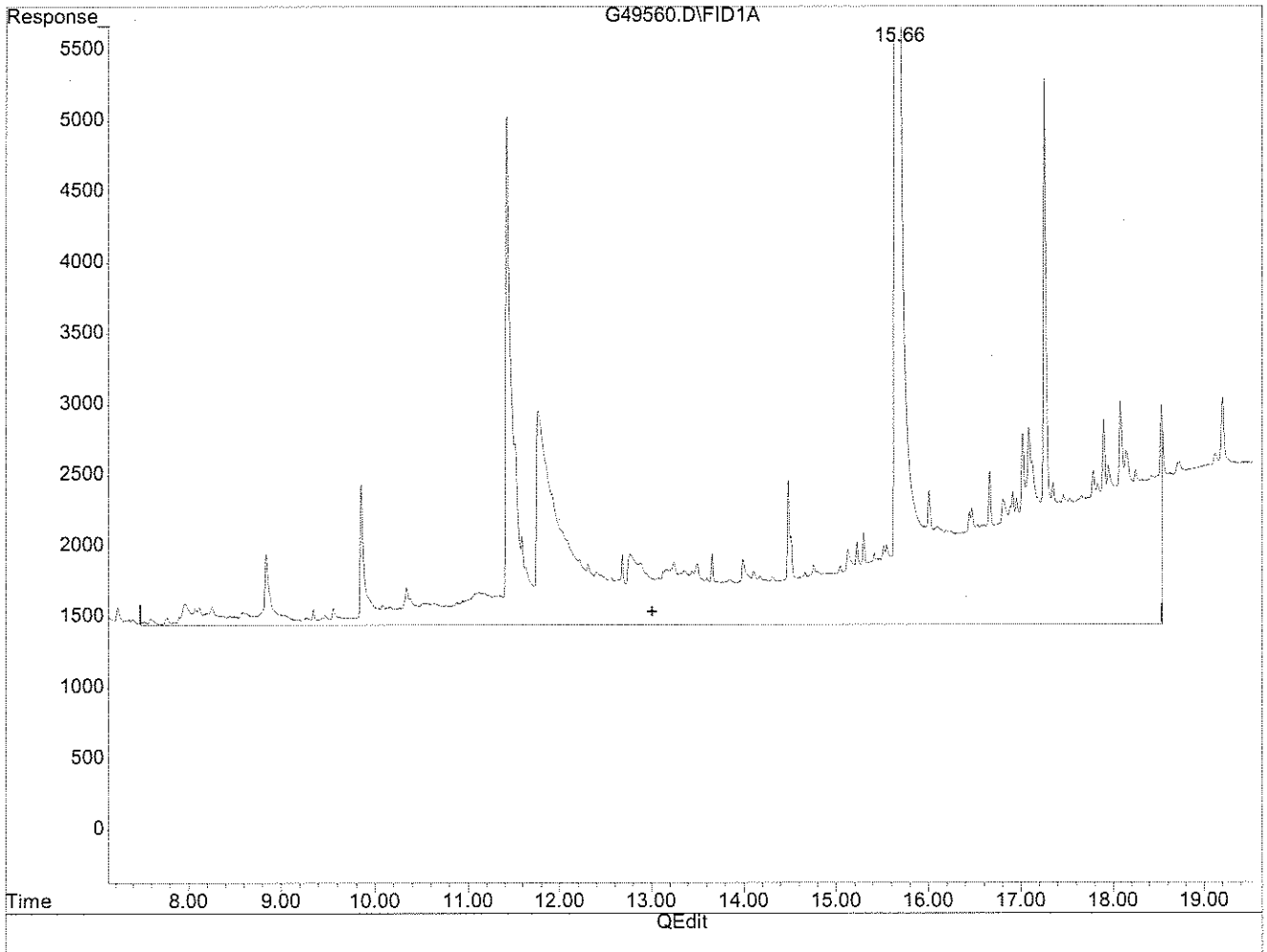


Quantitation Report (Qedit)

Data File : D:\TPH\053008-G\G49560.D Vial: 37
Acq On : 31 May 2008 10:58 Operator:
Sample : 61399-5 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 11:58 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration

JK 6.3.08 #Baseline



(2) DRO LOW (<1.0) (HM)

13.01min 0.059mg/ml m

response 3025534

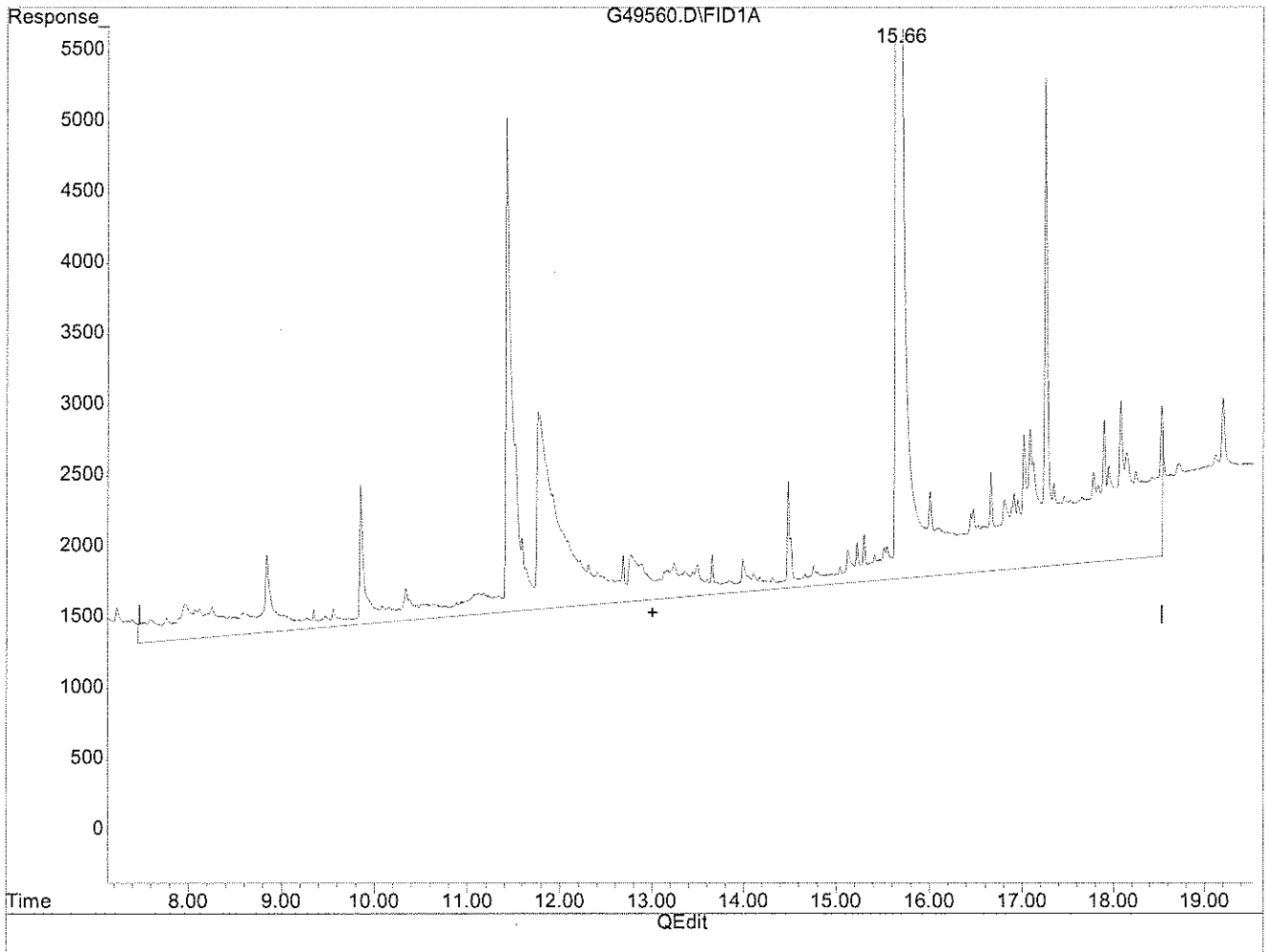
3 6.960

(+) = Expected Retention Time
G49560.D D040108A.M Tue Jun 03 11:58:15 2008

Quantitation Report (Qedit)

Data File : D:\TPH\053008-G\G49560.D Vial: 37
Acq On : 31 May 2008 10:58 Operator:
Sample : 61399-5 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 11:58 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008 JR 6.3.08
Response via : Multiple Level Calibration



(2) DRO LOW (<1.0) (HM)

13.01min 0.030mg/ml m

response 1803736

JR 6.9.08

(+) = Expected Retention Time
G49560.D D040108A.M Tue Jun 03 11:58:29 2008

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June 3, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: LS58DW2-0508-189

SAMPLE DATA

Lab Sample ID: 61399-5 RR
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 05/17/08
Lab Receipt Date: 05/22/08
Extraction Date: 05/23/08
Analysis Date: 06/02/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	89	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

DRO Report

Authorized signature

4125 DRO WATER REPORT

Sample Name	**61399-5, RR**
Data File Name	G49627.D
Date Acquired	6/2/2008 21:08
Misc Info	
Sample Volume (mL)	**1080**
Final Volume (mL)	**1.0**
Analyst Dilution (1:X)	**1**
Calculation Factor	925.9259
Dilution Factor	0.9

JLC 6.3.08

4125 DRO ANALYTICAL RESULTS	ug/L	RL	
DRO	U	46	
m-Terphenyl	89%	60-140%	PASS ✓

RAW DATA

	Raw Inst Amount mg/mL	Reviewed & Calculated Inst Amount ug/L	Target Response	Sample Amount ug/L
M-TERPHENYL	89.34		3861728.171	
DRO LOW (<1.0)	0.0470	0.00	2528544.167	
DRO HIGH (>1.0)	0.0620	57.37	2682983.586	
DRO	0.05	0.00		0

VJ 6.9.08

Quantitation Report (QT Reviewed)

Data File : D:\TPH\060208-G\G49627.D Vial: 14
Acq On : 2 Jun 2008 21:08 Operator:
Sample : 61399-5 IRL Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:01 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

VJC 6.3.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.67	3861728	89.336 ug/ml
Spiked Amount 100.000 Range 60 - 140 Recovery = 89.34%			
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	2528544	0.047 mg/ml
3) HM DRO HIGH (>1.0)	13.01	2682984	0.062 mg/ml

ND

6.3.08

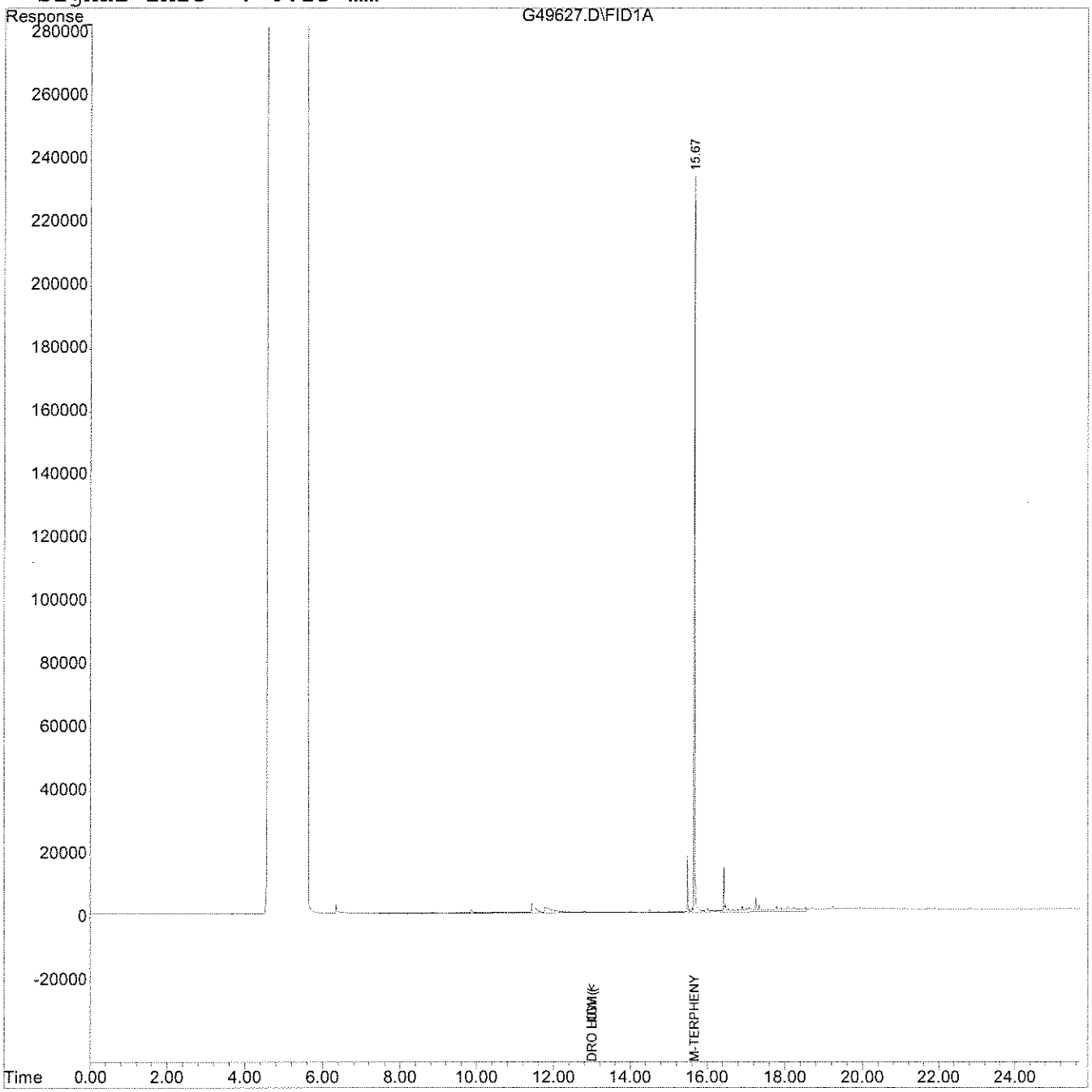
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : D:\TPH\060208-G\G49627.D Vial: 14
Acq On : 2 Jun 2008 21:08 Operator:
Sample : 61399-5 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:01 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

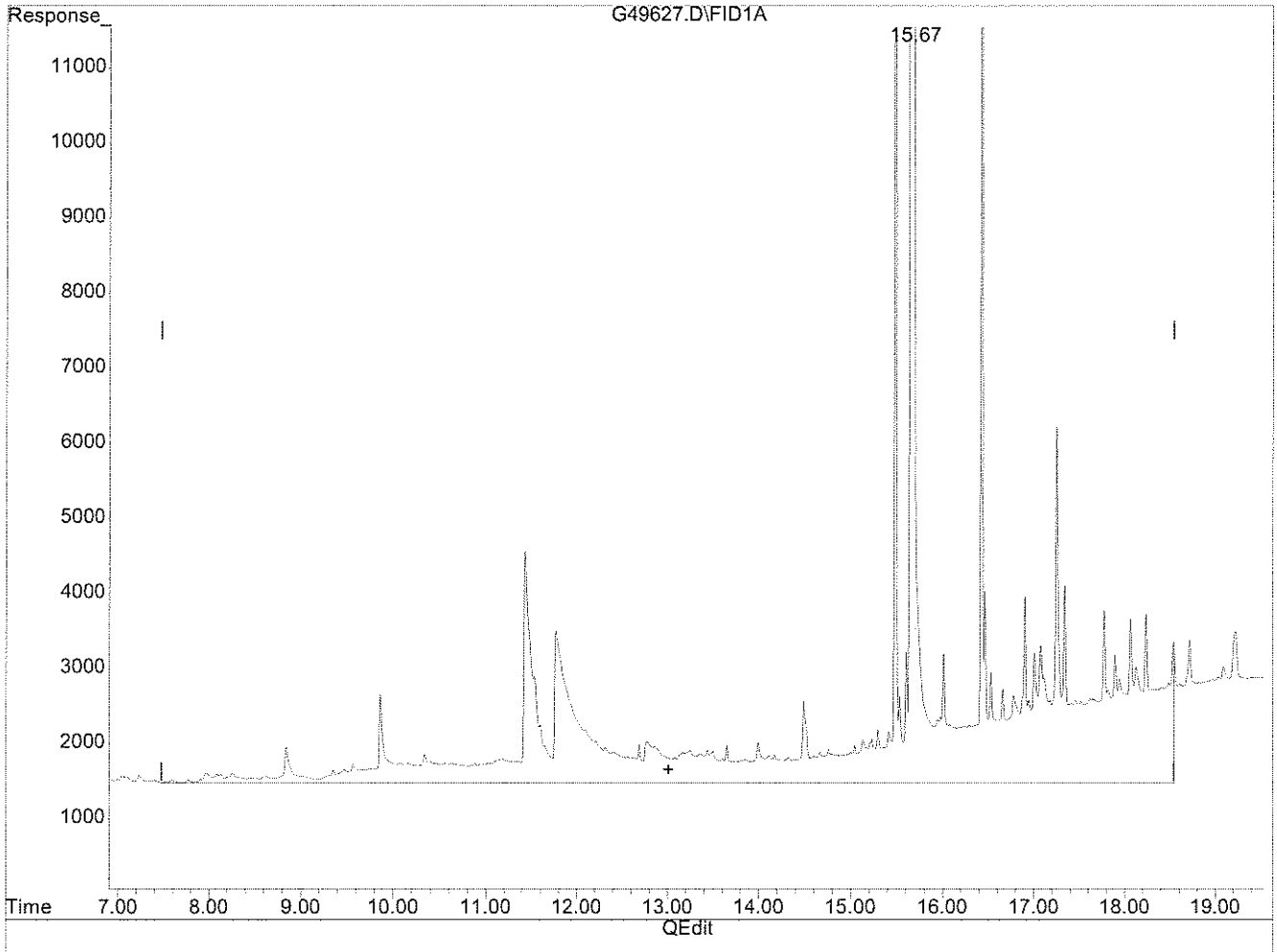


Quantitation Report (Qedit)

Data File : D:\TPH\060208-G\G49627.D Vial: 14
Acq On : 2 Jun 2008 21:08 Operator:
Sample : 61399-5 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:00 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration

JIC 6.3.08 *Baseline



(2) DRO LOW (<1.0) (HM)

13.01min 0.083mg/ml m

response 4077173

JC-9DE

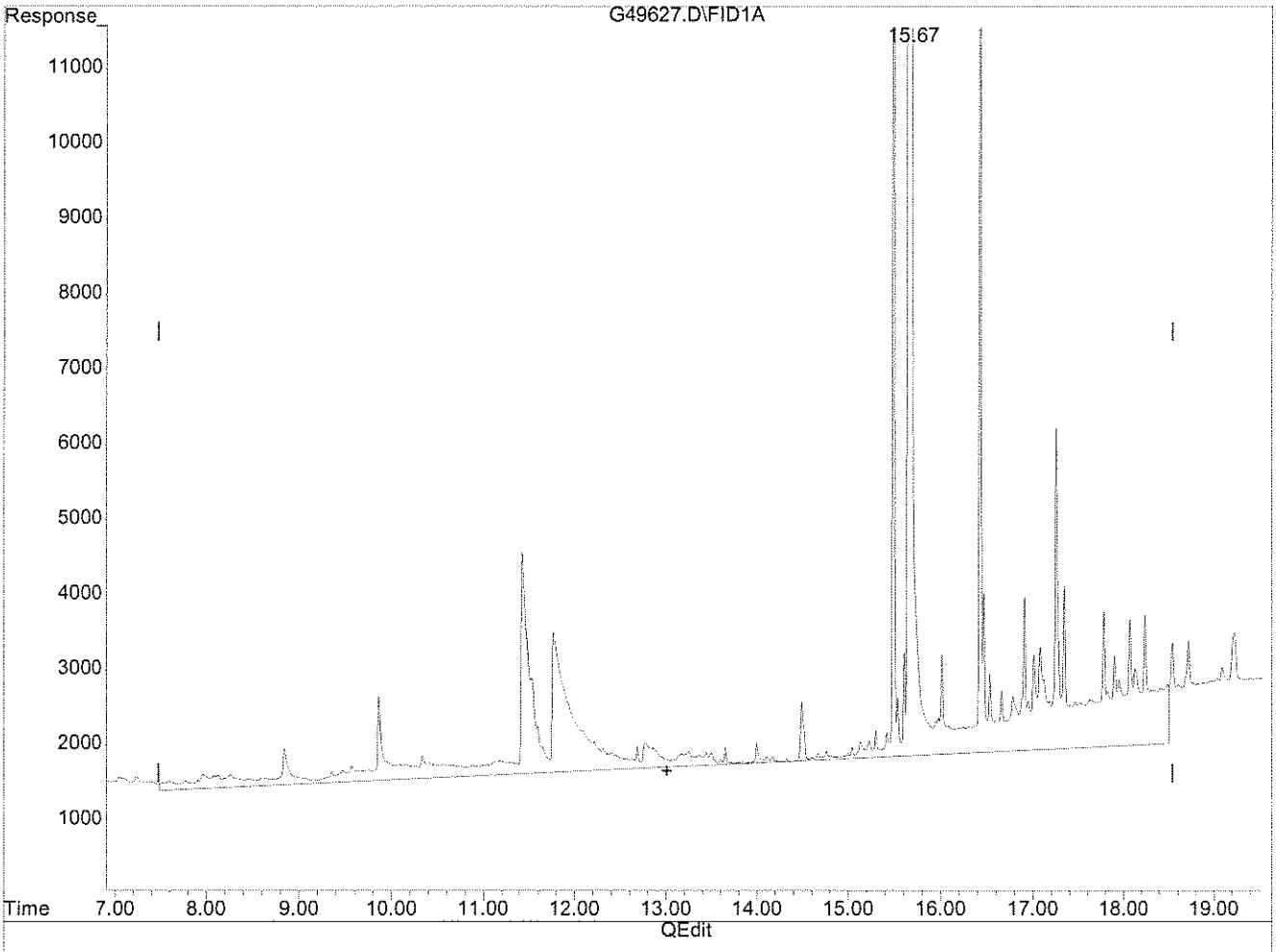
(+) = Expected Retention Time
G49627.D D040108A.M Tue Jun 03 08:00:32 2008

Quantitation Report (Qedit)

Data File : D:\TPH\060208-G\G49627.D Vial: 14
Acq On : 2 Jun 2008 21:08 Operator:
Sample : 61399-5 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:00 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration

JLC 6-3-08



(2) DRO LOW (<1.0) (HM)

13.01min 0.047mg/ml m

response 2528544

JG 6-3-08

(+) = Expected Retention Time
G49627.D D040108A.M Tue Jun 03 08:01:14 2008

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June 3, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: LS58DW2-0508-265

SAMPLE DATA

Lab Sample ID: 61399-6
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 05/17/08
Lab Receipt Date: 05/22/08
Extraction Date: 05/23/08
Analysis Date: 05/31/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
58	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	94	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

DRO Report

Authorized signature M Lindall

4125 DRO WATER REPORT

Sample Name	**61399-6**
Data File Name	G49561.D
Date Acquired	5/31/2008 11:27
Misc Info	
Sample Volume (mL)	**1085**
Final Volume (mL)	**1.0**
Analyst Dilution (1:X)	**1**
Calculation Factor	921.6590
Dilution Factor	0.9

JE 6-3-08

4125 DRO ANALYTICAL RESULTS	ug/L	RL	
DRO	58	46	
m-Terphenyl	94%	60-140%	PASS

RAW DATA

	Raw Inst Amount mg/mL	Reviewed & Calculated Inst Amount ug/L	Target Response	Sample Amount ug/L
M-TERPHENYL	94.31		4076733.698	
DRO LOW (<1.0)	0.0626	57.68	3196644.616	
DRO HIGH (>1.0)	0.0752	69.34	3257864.322	
DRO	0.06	57.68		58

JE 6-3-08

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49561.D Vial: 38
Acq On : 31 May 2008 11:27 Operator:
Sample : 61399-6 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 11:59 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JLC 6.3.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.66	4076734	94.310 ug/ml
Spiked Amount 100.000 Range 60 - 140		Recovery =	94.31%
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	3196645	0.063 mg/ml
3) HM DRO HIGH (>1.0)	13.01	3257864	0.075 mg/ml

J6908

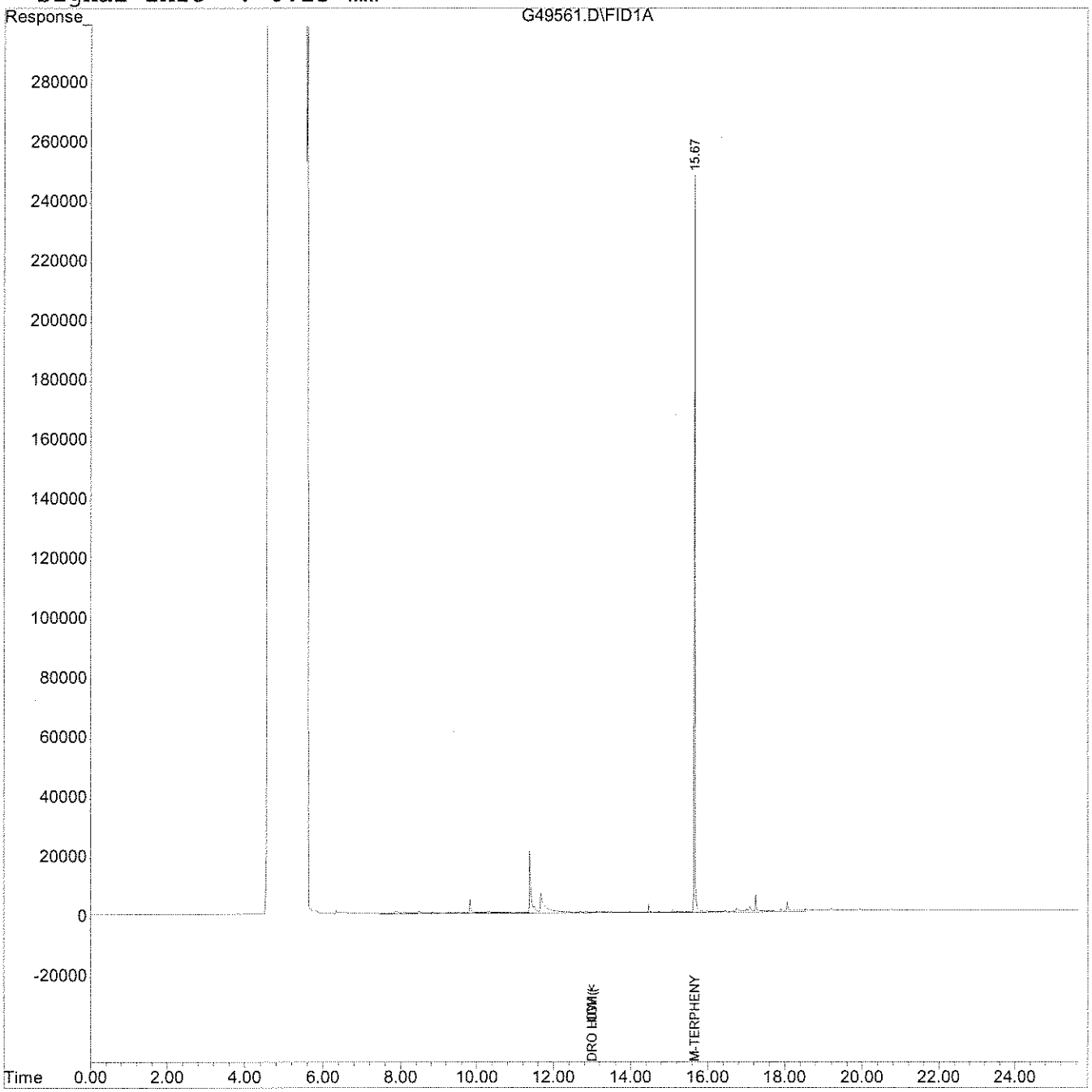
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49561.D Vial: 38
Acq On : 31 May 2008 11:27 Operator:
Sample : 61399-6 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 11:59 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

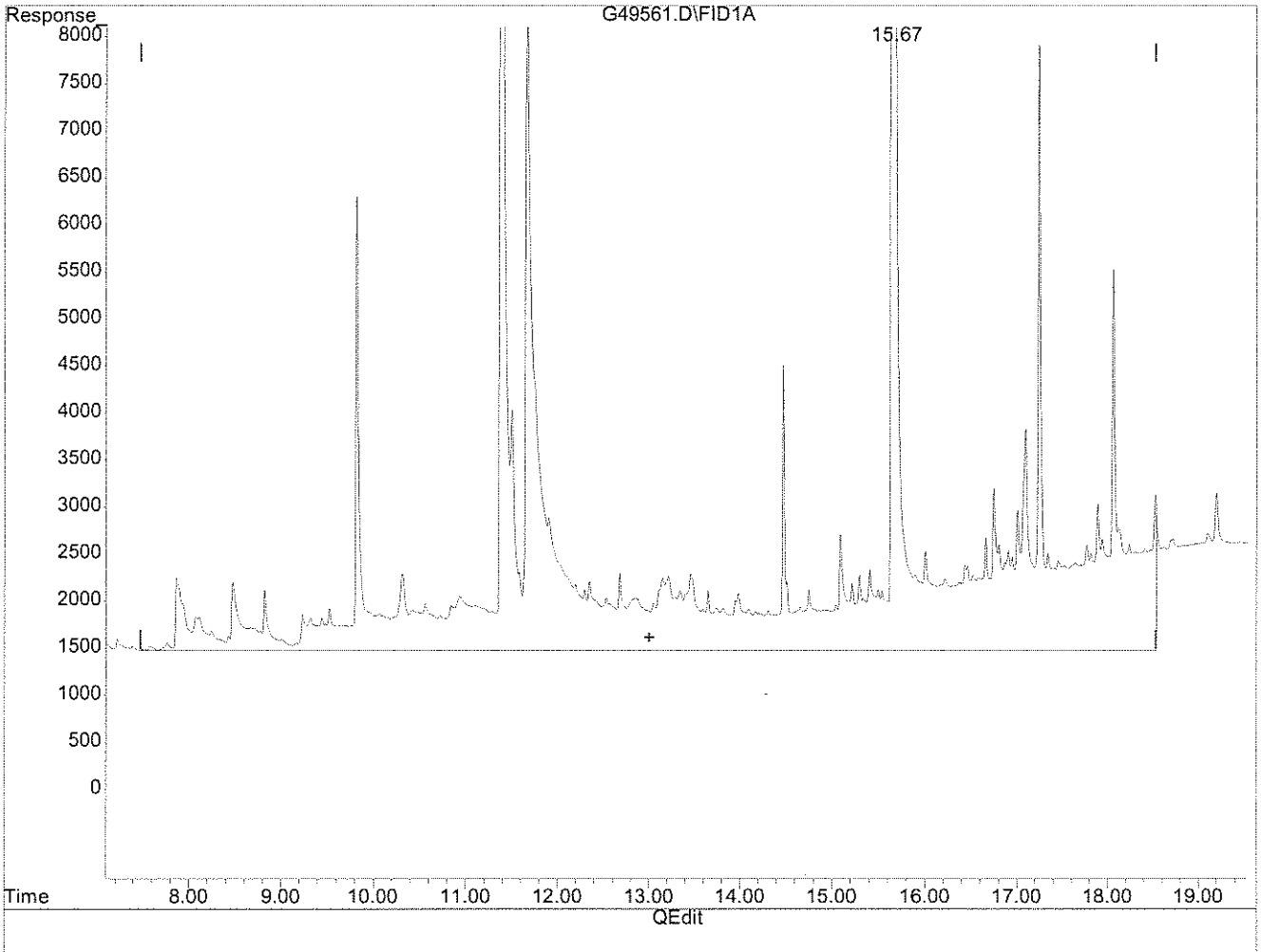


Quantitation Report (Qedit)

Data File : D:\TPH\053008-G\G49561.D Vial: 38
Acq On : 31 May 2008 11:27 Operator:
Sample : 61399-6 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 11:58 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration

JLC 6-3-08 *Baseline



(2) DRO LOW (<1.0) (HM)

13.01min 0.102mg/ml m

response 4893491

JLC-6-08

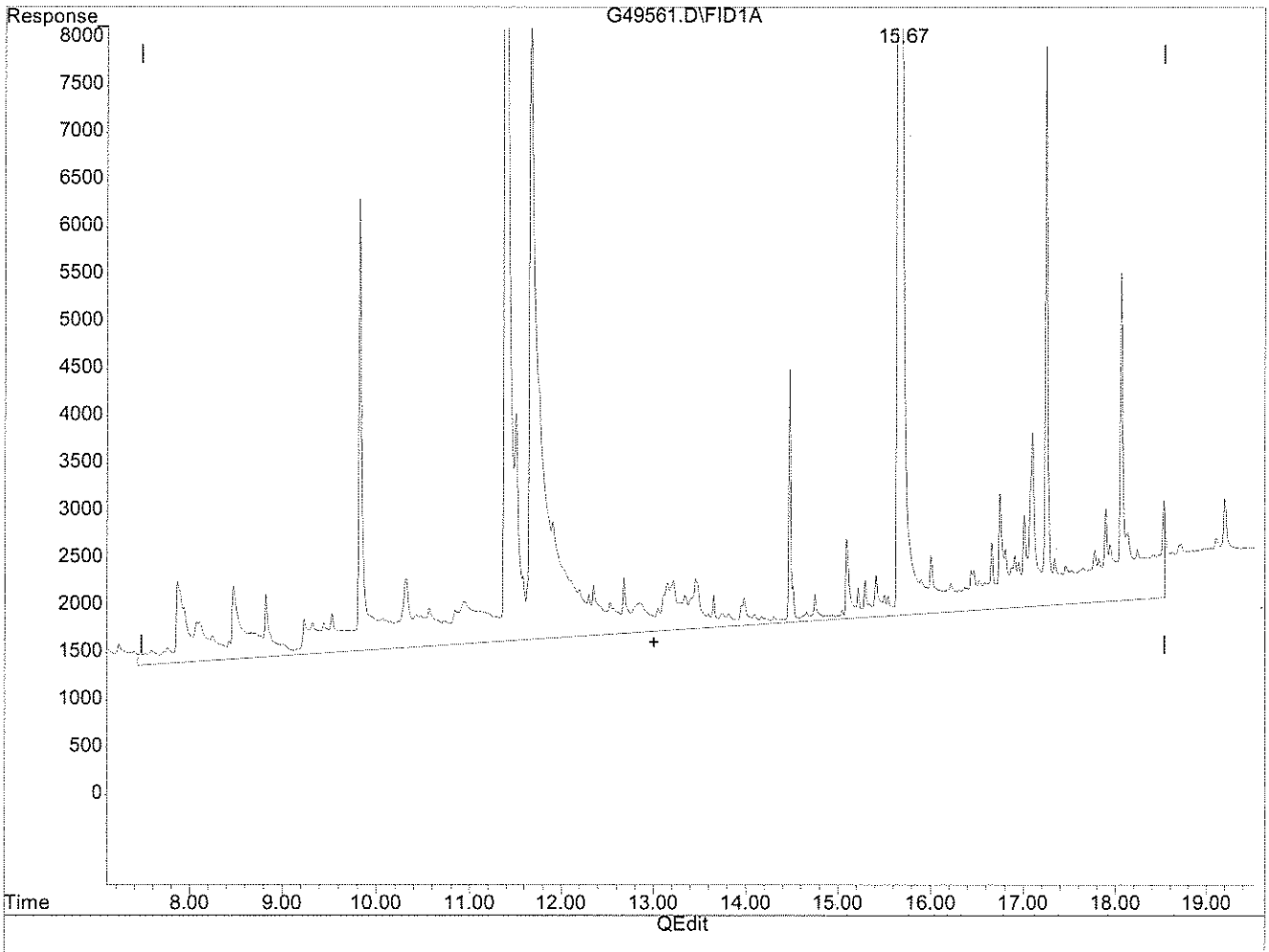
(+) = Expected Retention Time

G49561.D D040108A.M Tue Jun 03 11:58:58 2008

Quantitation Report (Qedit)

Data File : D:\TPH\053008-G\G49561.D Vial: 38
Acq On : 31 May 2008 11:27 Operator:
Sample : 61399-6 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 11:58 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008 VH 6.3.08
Response via : Multiple Level Calibration



(2) DRO LOW (<1.0) (HM)

13.01min 0.063mg/ml m

response 3196645

VJG 6.9.08

(+) = Expected Retention Time
G49561.D D040108A.M Tue Jun 03 11:59:08 2008

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Mr. Ron Pentkowski
Test America Burlington
30 Community Drive Suite 11
South Burlington VT 05403

June 3, 2008

SAMPLE DATA

CLIENT SAMPLE ID

Project Name:	MEFUDS LO-58
Project Number:	03886.184
Field Sample ID:	LS58DW2-0508-265

Lab Sample ID:	61399-6 RR
Matrix:	Aqueous
Percent Solid:	N/A
Dilution Factor:	1.0
Collection Date:	05/17/08
Lab Receipt Date:	05/22/08
Extraction Date:	05/23/08
Analysis Date:	06/02/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
80	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	97	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

DRO Report

Authorized signature

4125 DRO WATER REPORT

Sample Name	**61399-6** MR
Data File Name	G49628.D
Date Acquired	6/2/2008 21:37
Misc Info	
Sample Volume (mL)	**1085**
Final Volume (mL)	**1.0**
Analyst Dilution (1:X)	**1**
Calculation Factor	921.6590
Dilution Factor	0.9

JTC 6.3.08

4125 DRO ANALYTICAL RESULTS	ug/L	RL	
DRO	80	46	
m-Terphenyl	97%	60-140%	PASS ✓

RAW DATA

	Raw Inst Amount mg/mL	Reviewed & Calculated Inst Amount ug/L	Target Response	Sample Amount ug/L
M-TERPHENYL	97.48		4213850.818	
DRO LOW (<1.0)	0.0873	80.43	4253855.101	
DRO HIGH (>1.0)	0.0998	91.94	4319602.678	
DRO	0.09	80.43		80

136906

Quantitation Report (QT Reviewed)

Data File : D:\TPH\060208-G\G49628.D Vial: 15
Acq On : 2 Jun 2008 21:37 Operator:
Sample : 61399-6 IRN Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:02 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JE 6.3.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.66	4213851	97.482 ug/ml
Spiked Amount 100.000 Range 60 - 140 Recovery = 97.48%			
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	4253855	0.087 mg/ml
3) HM DRO HIGH (>1.0)	13.01	4319603	0.100 mg/ml

D6-9-08

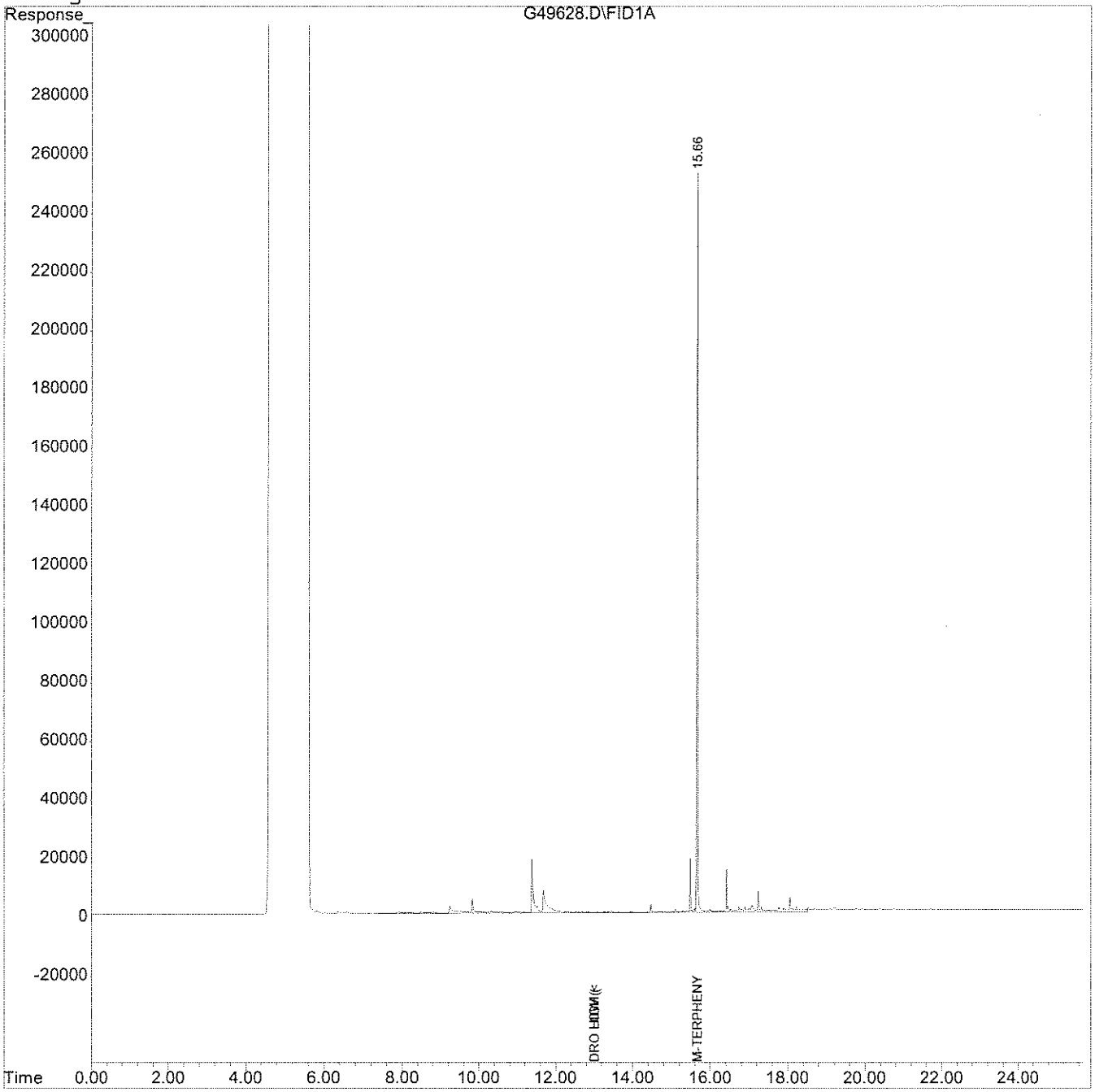
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : D:\TPH\060208-G\G49628.D Vial: 15
Acq On : 2 Jun 2008 21:37 Operator:
Sample : 61399-6 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:02 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

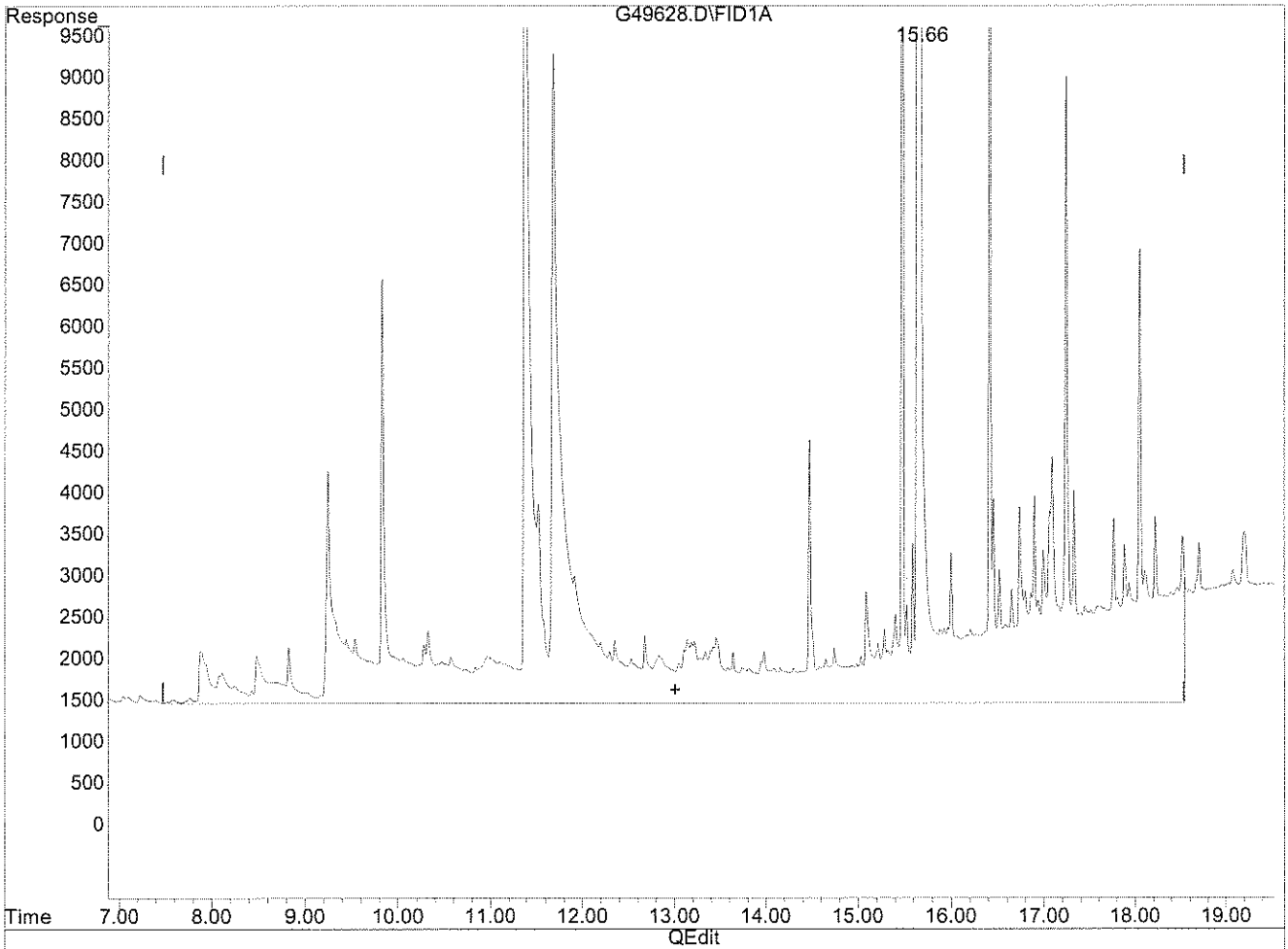


Quantitation Report (Qedit)

Data File : D:\TPH\060208-G\G49628.D Vial: 15
Acq On : 2 Jun 2008 21:37 Operator:
Sample : 61399-6 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:01 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration

JK 6-3-08 *Baseline



(2) DRO LOW (<1.0) (HM)

13.01min 0.129mg/ml m

response 6051265

JK-9-08

(+) = Expected Retention Time
G49628.D D040108A.M Tue Jun 03 08:01:40 2008

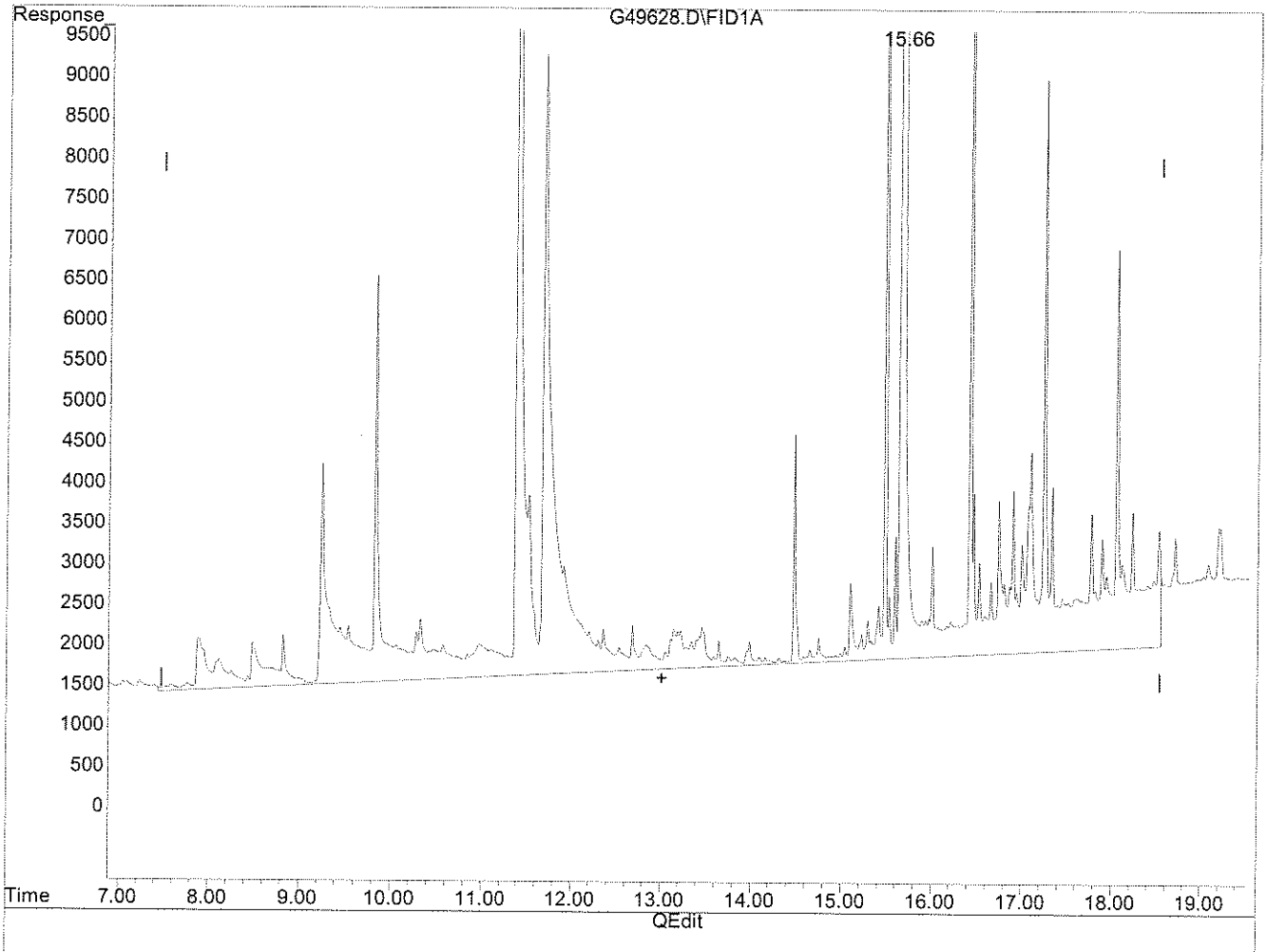
Quantitation Report (Qedit)

Data File : D:\TPH\060208-G\G49628.D
Acq On : 2 Jun 2008 21:37
Sample : 61399-6
Misc :
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:01 2008 Quant Results File: D040108A.RES

Vial: 15
Operator:
Inst : INST G
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration

JK 6.3.08



(2) DRO LOW (<1.0) (HM)

13.01min 0.087mg/ml m

response 4253855

VJG.8.08

(+) = Expected Retention Time
G49628.D D040108A.M Tue Jun 03 08:01:49 2008

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South Burlington VT 05403

June 3, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: RB-051808-01

SAMPLE DATA

Lab Sample ID: 61399-7
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 05/18/08
Lab Receipt Date: 05/22/08
Extraction Date: 05/23/08
Analysis Date: 05/31/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
92	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	89	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

DRO Report

Authorized signature

4125 DRO WATER REPORT

Sample Name	**61399-7**
Data File Name	G49562.D
Date Acquired	5/31/2008 11:56
Misc Info	
Sample Volume (mL)	**1070**
Final Volume (mL)	**1.0**
Analyst Dilution (1:X)	**1**
Calculation Factor	934.5794
Dilution Factor	0.9

JLC 6.3.08

4125 DRO ANALYTICAL RESULTS	ug/L	RL	
DRO	92	47	
m-Terphenyl	89%	60-140%	PASS ✓

RAW DATA

	Raw Inst Amount mg/mL	Reviewed & Calculated Inst Amount ug/L	Target Response	Sample Amount ug/L
M-TERPHENYL	88.58		3828899.613	
DRO LOW (<1.0)	0.0988	92.34	4747967.413	
DRO HIGH (>1.0)	0.1087	101.57	4705904.892	
DRO	0.10	92.34		92

JG 6.9.08

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49562.D Vial: 39
Acq On : 31 May 2008 11:56 Operator:
Sample : 61399-7 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 12:00 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JLC 6.3.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.67	3828900	88.576 ug/mlm
Spiked Amount 100.000 Range 60 - 140 Recovery = 88.58%			
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	4747967	0.099 mg/ml
3) HM DRO HIGH (>1.0)	13.01	4705905	0.109 mg/ml

B6gdc

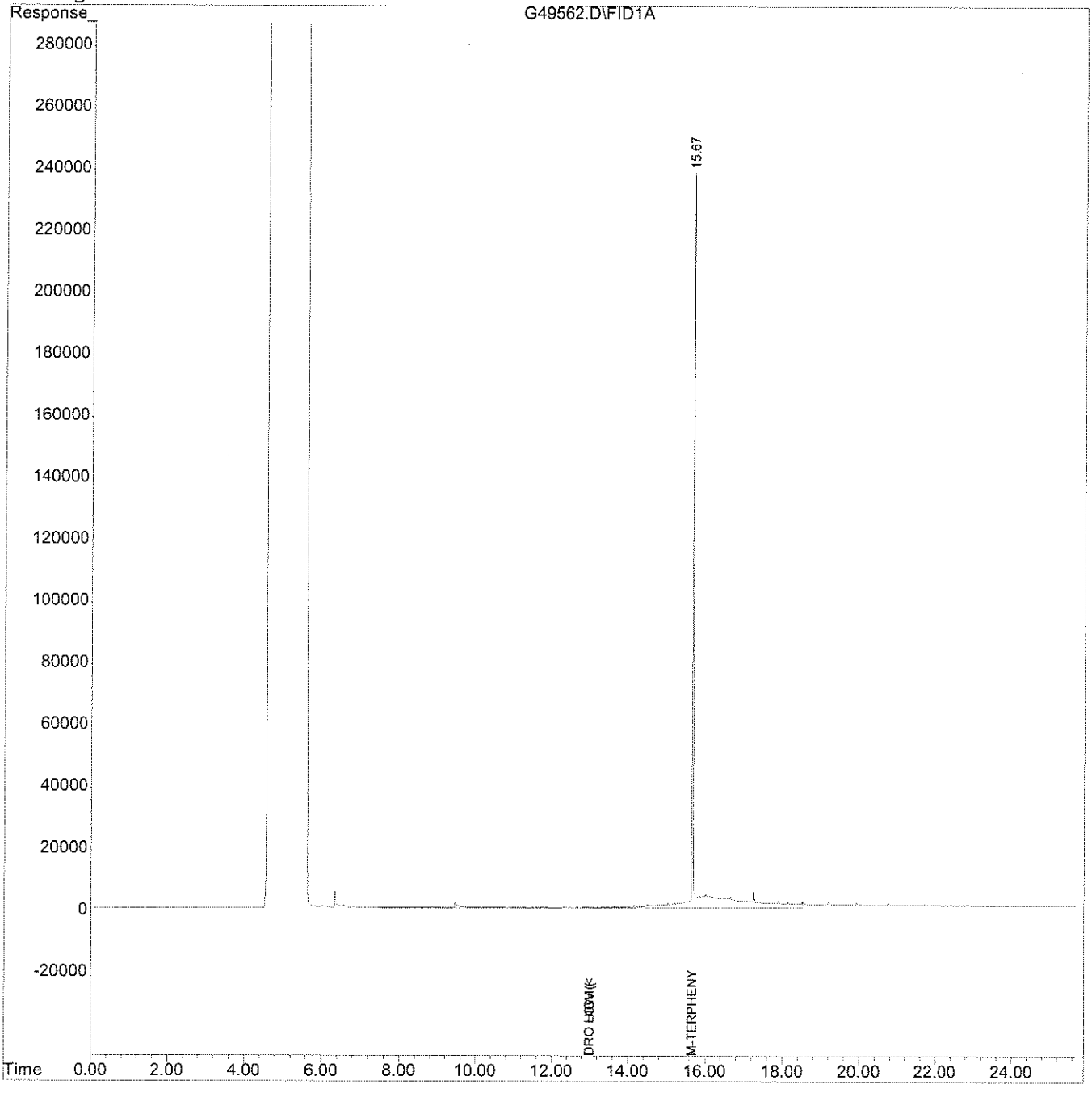
(f)=RT Delta > 1/2 Window (m)=manual int.
G49562.D D040108A.M Tue Jun 03 12:00:24 2008 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49562.D Vial: 39
Acq On : 31 May 2008 11:56 Operator:
Sample : 61399-7 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 12:00 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm



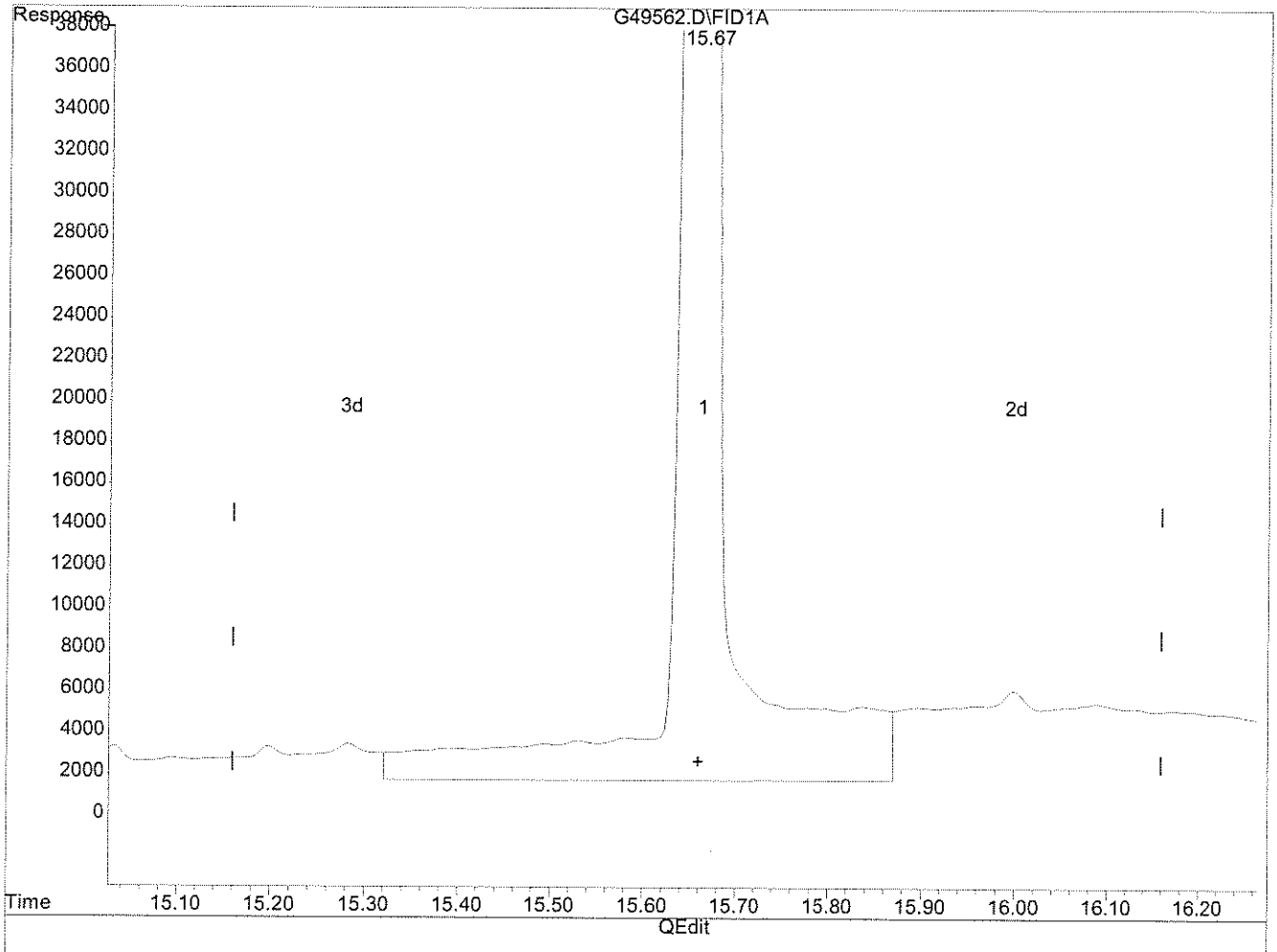
Quantitation Report (Qedit)

Data File : D:\TPH\053008-G\G49562.D
Acq On : 31 May 2008 11:56
Sample : 61399-7
Misc :
IntFile : AUTOINT1.E
Quant Time: Jun 3 11:59 2008 Quant Results File: D040108A.RES

Vial: 39
Operator:
Inst : INST G
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration

JK 6.3.08 K.E.A.



(1) M-TERPHENYL (S)

15.66min 105.646ug/ml

response 4566745

JK 6.3.08

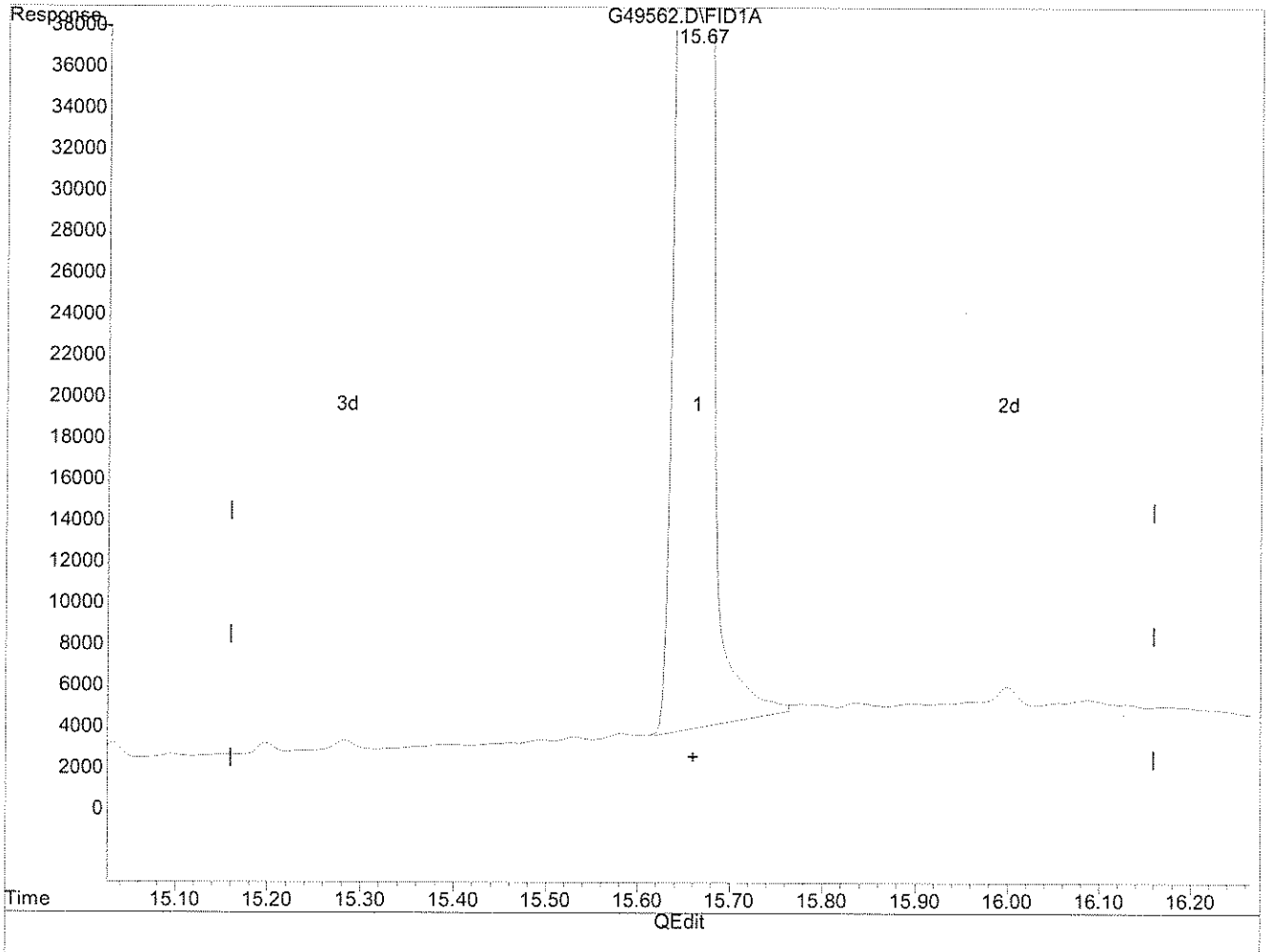
(+) = Expected Retention Time
G49562.D D040108A.M Tue Jun 03 11:59:50 2008

Quantitation Report (Qedit)

Data File : D:\TPH\053008-G\G49562.D Vial: 39
Acq On : 31 May 2008 11:56 Operator:
Sample : 61399-7 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 11:59 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration

JLC 6.3.08



(1) M-TERPHENYL (S)

15.67min 88.576ug/ml m

response 3828900

36.500

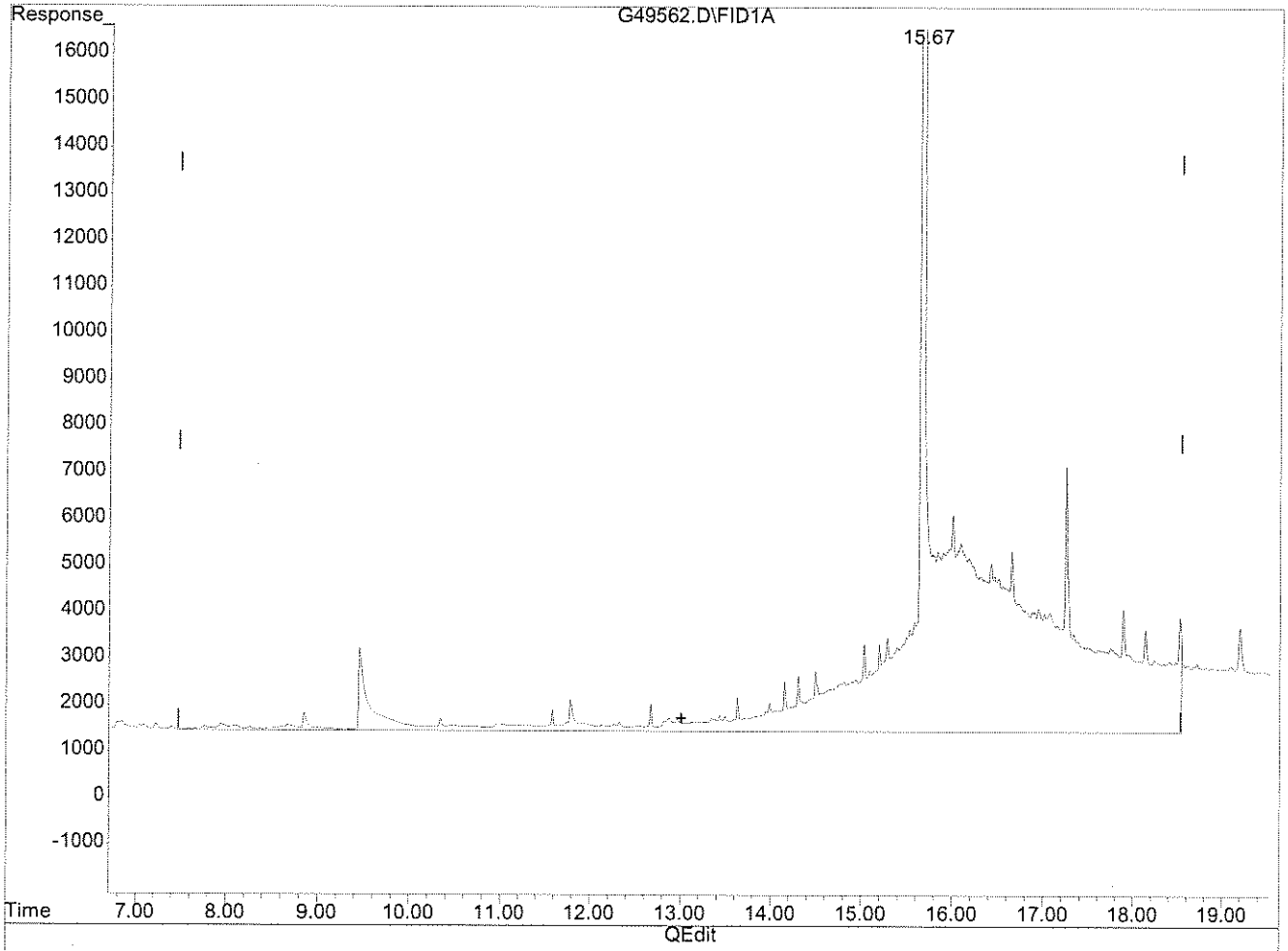
(+) = Expected Retention Time
G49562.D D040108A.M Tue Jun 03 11:59:54 2008

Quantitation Report (Qedit)

Data File : D:\TPH\053008-G\G49562.D Vial: 39
Acq On : 31 May 2008 11:56 Operator:
Sample : 61399-7 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 11:59 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration

JLC 6.3.08 *Baseline



(2) DRO LOW (<1.0) (HM)

13.01min 0.132mg/ml m

response 6189249

J6.9.08

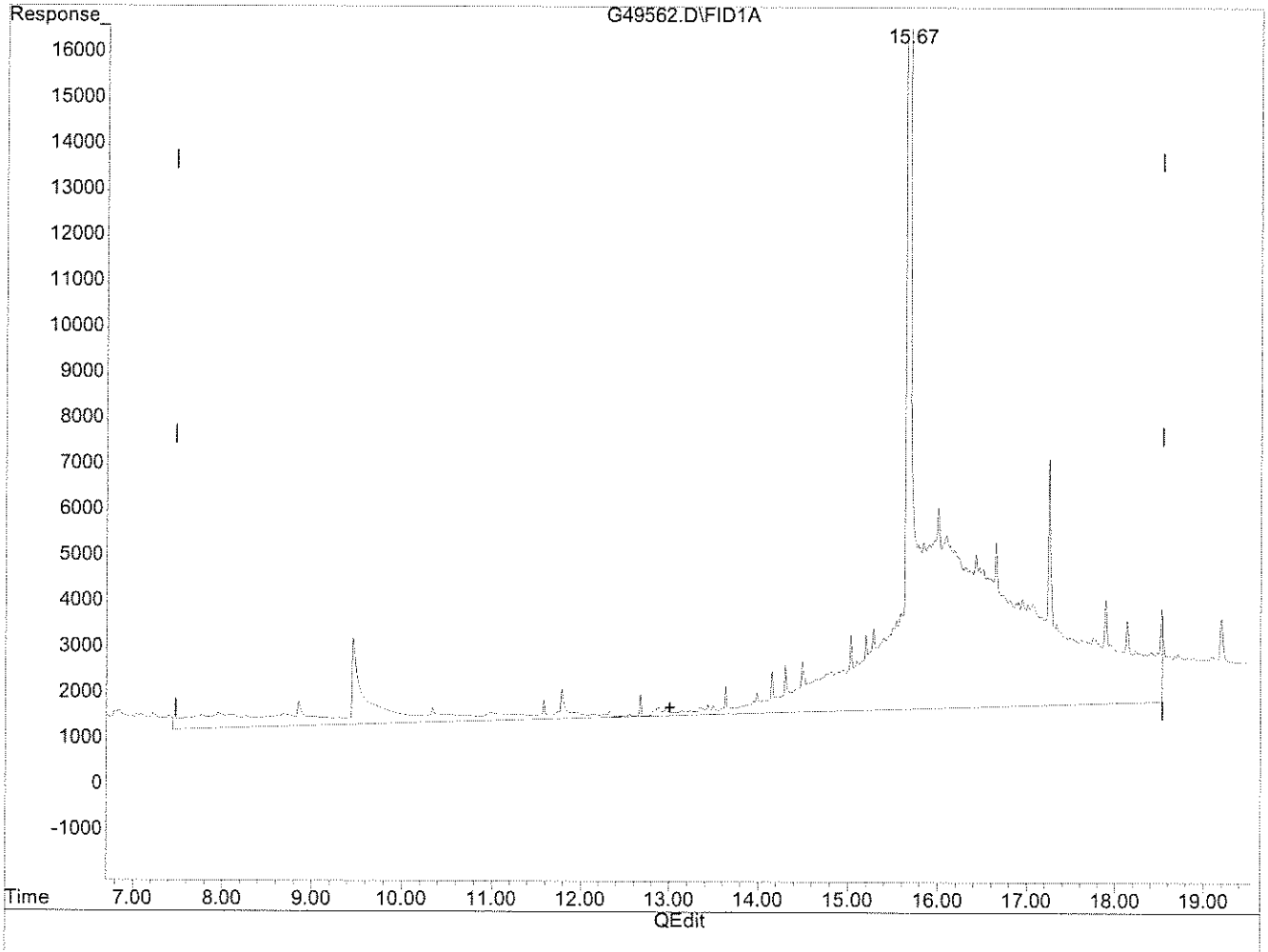
(+) = Expected Retention Time
G49562.D D040108A.M Tue Jun 03 12:00:00 2008

Quantitation Report (Qedit)

Data File : D:\TPH\053008-G\G49562.D Vial: 39
Acq On : 31 May 2008 11:56 Operator:
Sample : 61399-7 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 11:59 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration

JRC 6.3.08



(2) DRO LOW (<1.0) (HM)

13.01min 0.099mg/ml m

response 4747967

JRC 6.3.08

(+) = Expected Retention Time
G49562.D D040108A.M Tue Jun 03 12:00:07 2008

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800-929-9906

Mr. Ron Pentkowski
Test America Burlington
30 Community Drive Suite 11
South Burlington VT 05403

June 3, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: RB-051808-01

SAMPLE DATA

Lab Sample ID: 61399-7 RR
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 05/18/08
Lab Receipt Date: 05/22/08
Extraction Date: 05/23/08
Analysis Date: 06/02/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
124	µg/L	50

Surrogate Standard Recovery

m-Terphenyl 102 %

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

DRO Report

Authorized signature

4125 DRO WATER REPORT

Sample Name	**61399-7 RR**
Data File Name	G49629.D
Date Acquired	6/2/2008 22:06
Misc Info	
Sample Volume (mL)	**1070**
Final Volume (mL)	**1.0**
Analyst Dilution (1:X)	**1**
Calculation Factor	934.5794
Dilution Factor	0.9

JLC 6.3.08

4125 DRO ANALYTICAL RESULTS	ug/L	RL	
DRO	124	47	
m-Terphenyl	102%	60-140%	PASS ✓

RAW DATA

	Raw Inst Amount mg/mL	Reviewed & Calculated Inst Amount ug/L	Target Response	Sample Amount ug/L
M-TERPHENYL	101.50		4387580.982	
DRO LOW (<1.0)	0.1328	124.16	6206257.042	
DRO HIGH (>1.0)	0.1436	134.16	6215776.989	
DRO	0.13	124.16		124

Quantitation Report (QT Reviewed)

Data File : D:\TPH\060208-G\G49629.D Vial: 16
Acq On : 2 Jun 2008 22:06 Operator:
Sample : 61399-7 IRZ Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:03 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

VLC 6.3.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.66	4387581	101.501 ug/ml
Spiked Amount 100.000	Range 60 - 140	Recovery = 101.50%	
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	6206257	0.133 mg/ml
3) HM DRO HIGH (>1.0)	13.01	6215777	0.144 mg/ml

JC 6.9.08

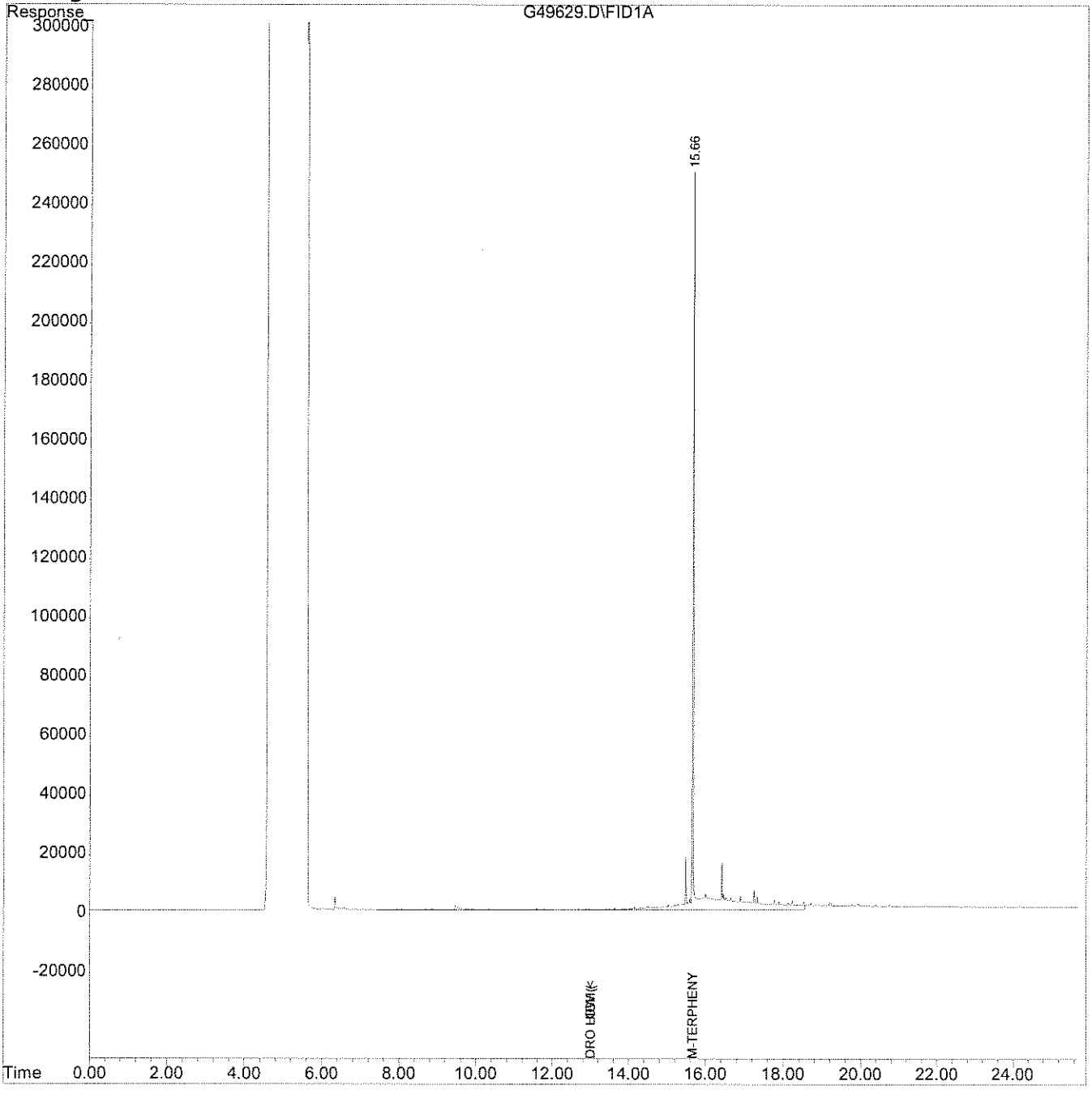
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : D:\TPH\060208-G\G49629.D Vial: 16
Acq On : 2 Jun 2008 22:06 Operator:
Sample : 61399-7 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:03 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

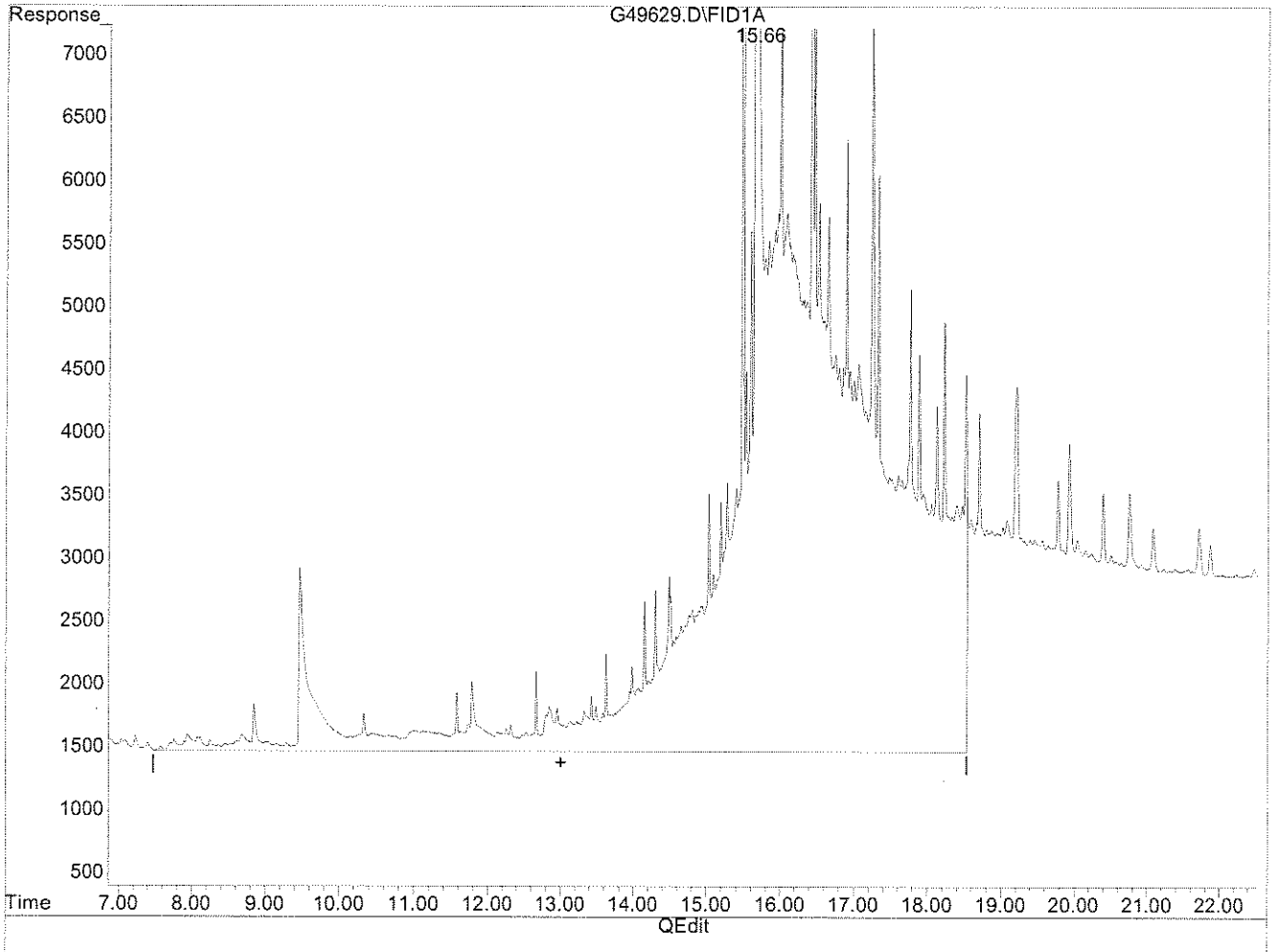


Quantitation Report (Qedit)

Data File : D:\TPH\060208-G\G49629.D Vial: 16
Acq On : 2 Jun 2008 22:06 Operator:
Sample : 61399-7 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:02 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration

JLC 6.3.08 *Baseline



(2) DRO LOW (<1.0) (HM)

13.01min 0.151mg/ml m

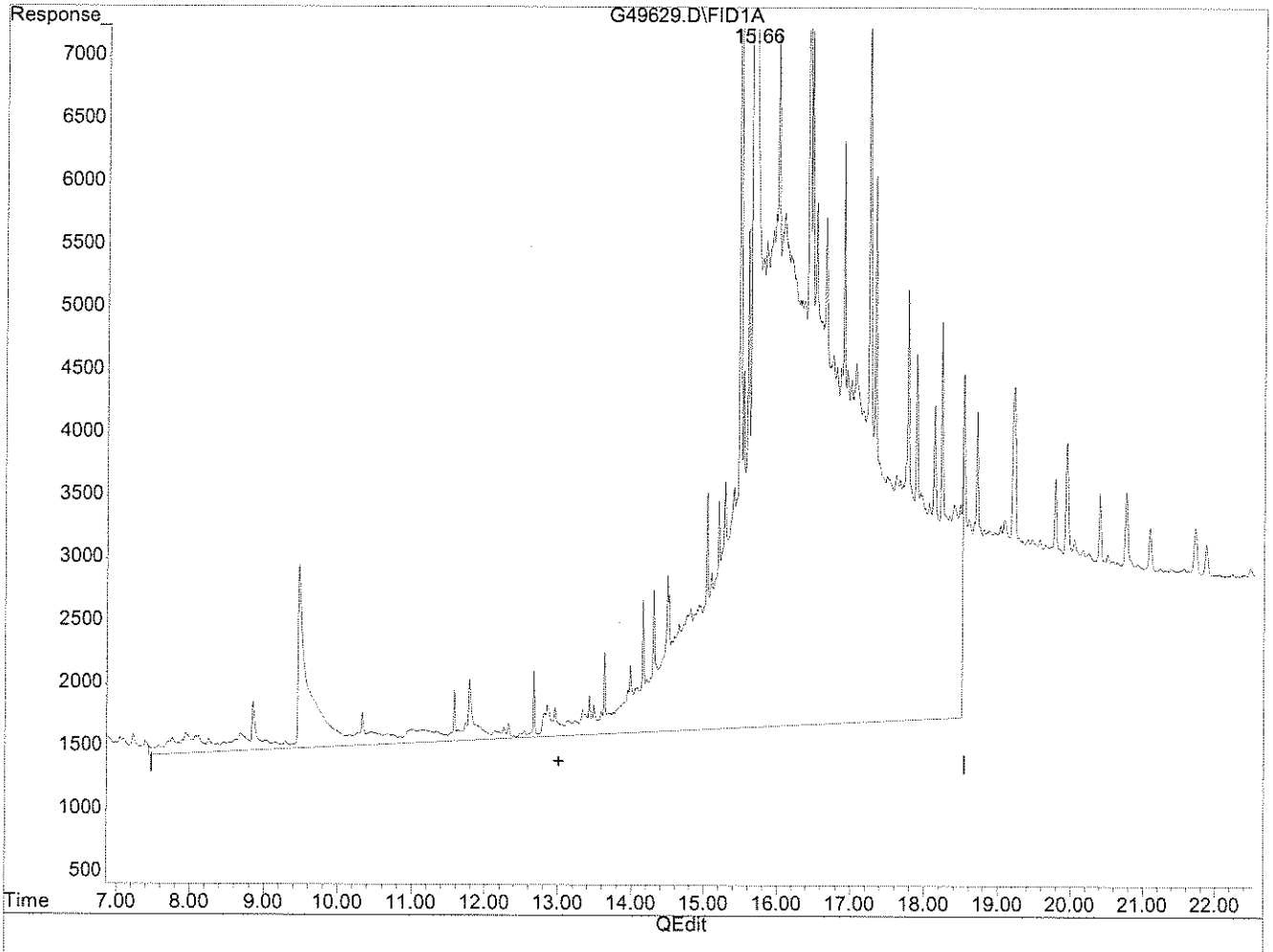
response 6997196

(+) = Expected Retention Time
G49629.D D040108A.M Tue Jun 03 08:02:49 2008

Quantitation Report (Qedit)

Data File : D:\TPH\060208-G\G49629.D Vial: 16
Acq On : 2 Jun 2008 22:06 Operator:
Sample : 61399-7 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:02 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008 JIC 6.3.08
Response via : Multiple Level Calibration



(2) DRO LOW (<1.0) (HM)

13.01min 0.133mg/ml m

response 6206257

G49629

(+) = Expected Retention Time
G49629.D D040108A.M Tue Jun 03 08:03:01 2008

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30 Community Drive Suite 11
South Burlington VT 05403

June 3, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: LS58DW1-0508-056

SAMPLE DATA

Lab Sample ID: 61399-8
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 05/18/08
Lab Receipt Date: 05/22/08
Extraction Date: 05/23/08
Analysis Date: 05/31/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
300	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	97	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

DRO Report

Authorized signature 

4125 DRO WATER REPORT

Sample Name	**61399-8**
Data File Name	G49563.D
Date Acquired	5/31/2008 12:40
Misc Info	
Sample Volume (mL)	**1070**
Final Volume (mL)	**1.0**
Analyst Dilution (1:X)	**1**
Calculation Factor	934.5794
Dilution Factor	0.9

JE 6.3.08

4125 DRO ANALYTICAL RESULTS	ug/L	RL	
DRO	300	47	
m-Terphenyl	97%	60-140%	PASS ✓

RAW DATA

	Raw Inst Amount mg/mL	Reviewed & Calculated Inst Amount ug/L	Target Response	Sample Amount ug/L
M-TERPHENYL	96.80		4184492.549	
DRO LOW (<1.0)	0.3209	299.95	14263364.3	
DRO HIGH (>1.0)	0.3347	312.76	14490667.98	
DRO	0.32	299.95		300

6-3-08

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49563.D Vial: 40
Acq On : 31 May 2008 12:40 Operator:
Sample : 61399-8 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 12:00 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JL 6.3.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.67	4184493	96.803 ug/ml
Spiked Amount 100.000	Range 60 - 140	Recovery = 96.80%	
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	14263364	0.321 mg/ml
3) HM DRO HIGH (>1.0)	13.01	14490668	0.335 mg/ml

6.6.08

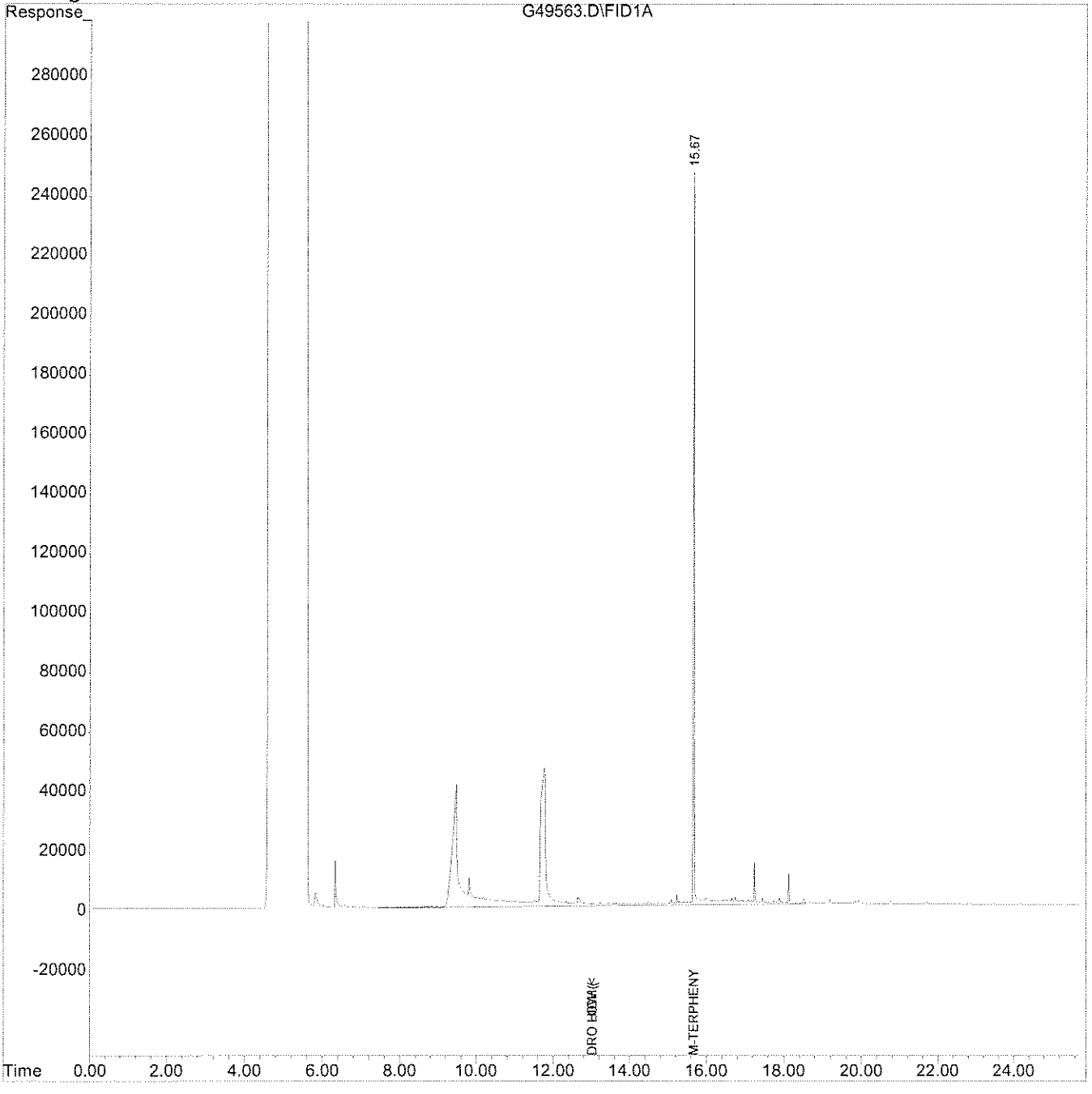
(f)=RT Delta > 1/2 Window (m)=manual int.
G49563.D D040108A.M Tue Jun 03 12:00:58 2008 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49563.D Vial: 40
Acq On : 31 May 2008 12:40 Operator:
Sample : 61399-8 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 12:00 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

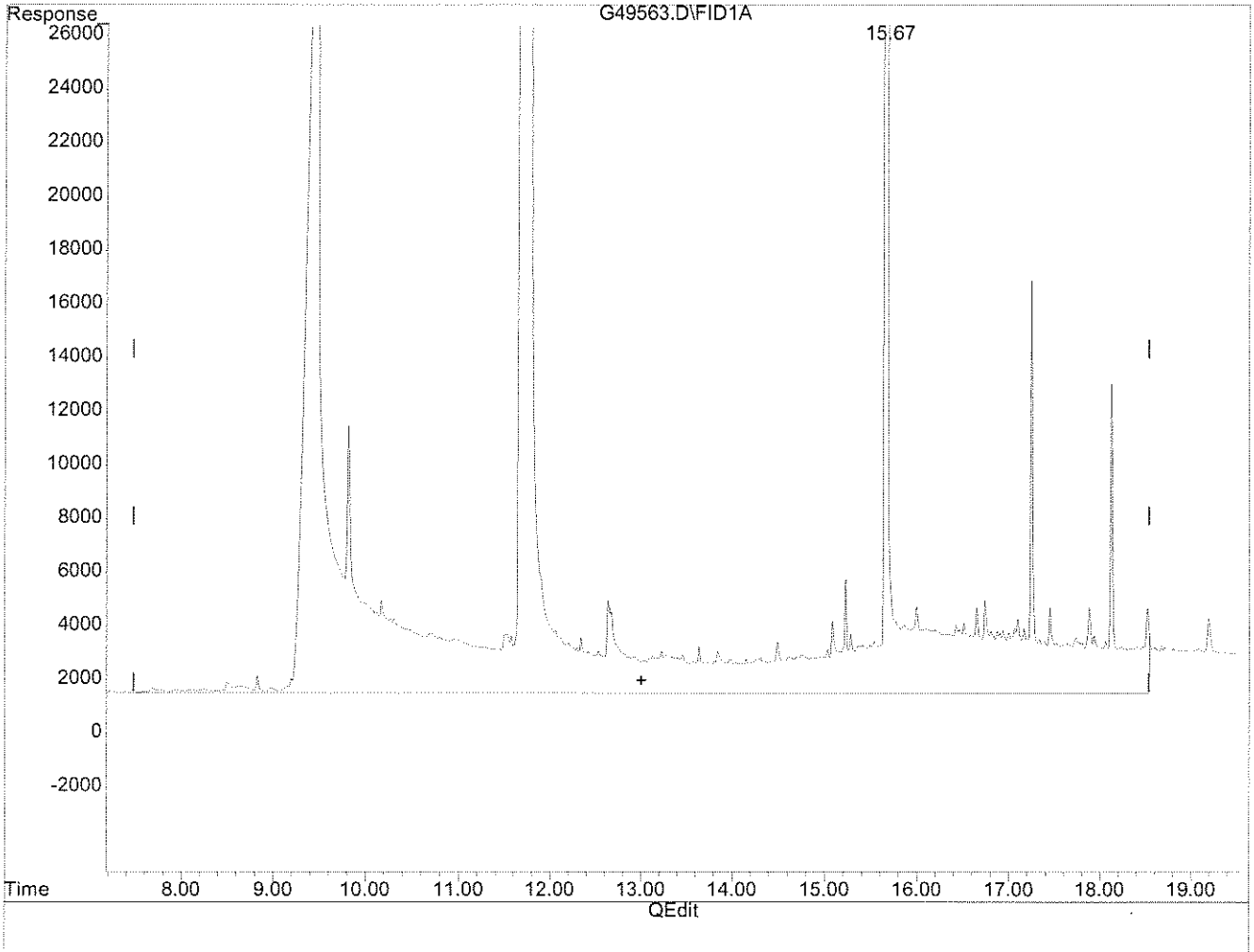


Quantitation Report (Qedit)

Data File : D:\TPH\053008-G\G49563.D Vial: 40
Acq On : 31 May 2008 12:40 Operator:
Sample : 61399-8 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 12:00 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration

JIC 6.3.08 *Baseline



(2) DRO LOW (<1.0) (HM)

13.01min 0.410mg/ml m

response 18094863

JC 6.3.08

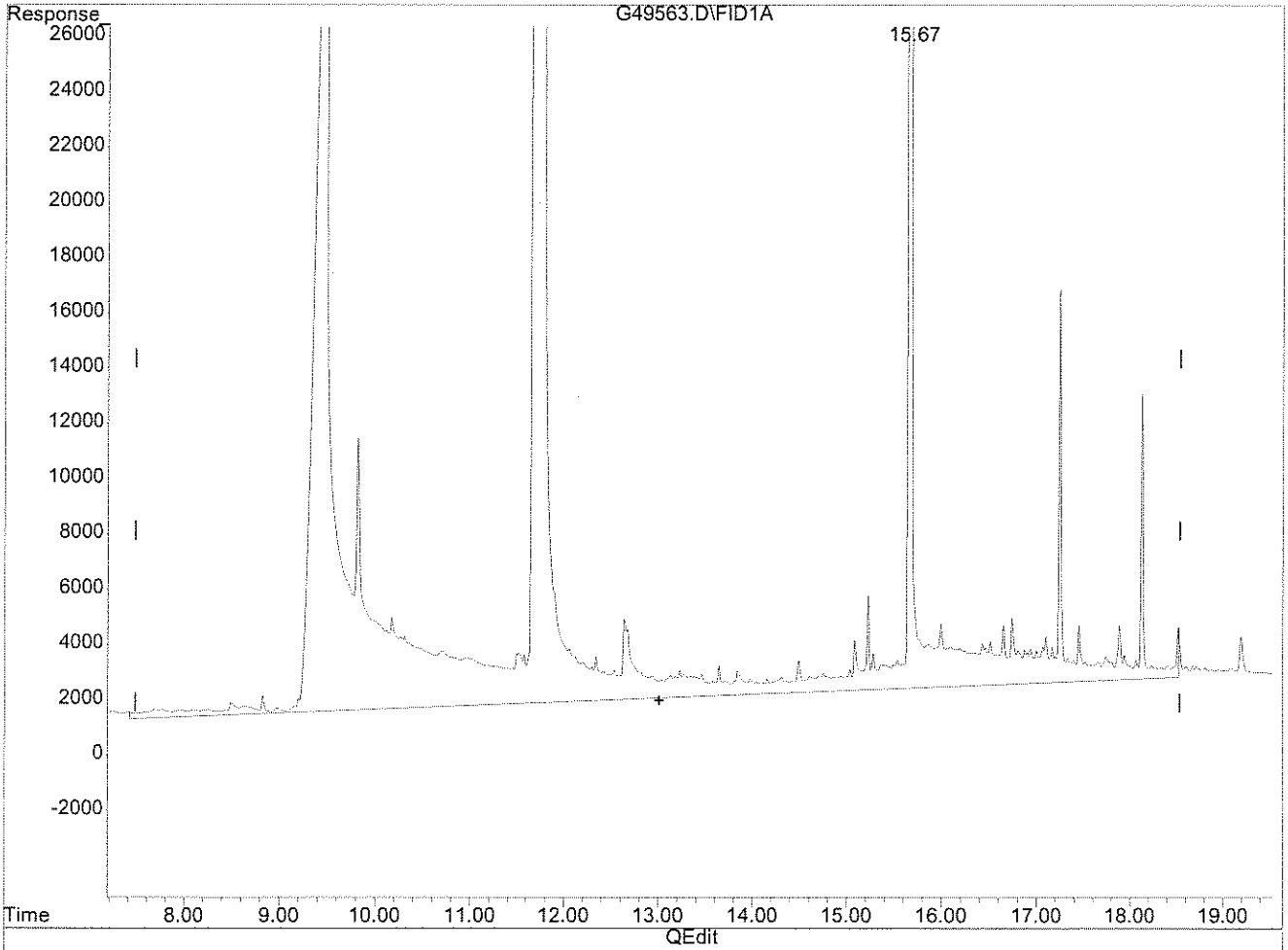
(+) = Expected Retention Time
G49563.D D040108A.M Tue Jun 03 12:00:35 2008

Quantitation Report (Qedit)

Data File : D:\TPH\053008-G\G49563.D Vial: 40
Acq On : 31 May 2008 12:40 Operator:
Sample : 61399-8 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 12:00 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration

JIC 6.3.08



(2) DRO LOW (<1.0) (HM)

13.01min 0.321mg/ml m

response 14263364

VJ6908

(+) = Expected Retention Time
G49563.D D040108A.M Tue Jun 03 12:00:47 2008

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June 3, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: LS58DW1-0508-056

SAMPLE DATA

Lab Sample ID: 61399-8 RR
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 05/18/08
Lab Receipt Date: 05/22/08
Extraction Date: 05/23/08
Analysis Date: 06/02/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
350	µg/L	50

Surrogate Standard Recovery

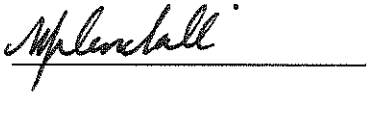
m-Terphenyl	100	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

DRO Report

Authorized signature 

4125 DRO WATER REPORT

Sample Name	**61399-8** RE
Data File Name	G49630.D
Date Acquired	6/2/2008 22:36
Misc Info	
Sample Volume (mL)	**1070**
Final Volume (mL)	**1.0**
Analyst Dilution (1:X)	**1**
Calculation Factor	934.5794
Dilution Factor	0.9

JLC 6.3.08

4125 DRO ANALYTICAL RESULTS	ug/L	RL	
DRO	350	47	
m-Terphenyl	100%	60-140%	PASS ✓

RAW DATA

	Raw Inst Amount mg/mL	Reviewed & Calculated Inst Amount ug/L	Target Response	Sample Amount ug/L
M-TERPHENYL	99.58		4304577.384	
DRO LOW (<1.0)	0.3745	350.00	16557364.99	
DRO HIGH (>1.0)	0.3797	354.89	16442370.63	
DRO	0.37	350.00		350

√6.9.08

Quantitation Report (QT Reviewed)

Data File : D:\TPH\060208-G\G49630.D Vial: 17
Acq On : 2 Jun 2008 22:36 Operator:
Sample : 61399-8 ER Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:04 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JLC 6.3.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.66	4304577	99.581 ug/ml
Spiked Amount 100.000	Range 60 - 140	Recovery =	99.58%
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	16557365	0.375 mg/ml
3) HM DRO HIGH (>1.0)	13.01	16442371	0.380 mg/ml

JG 6.3.08

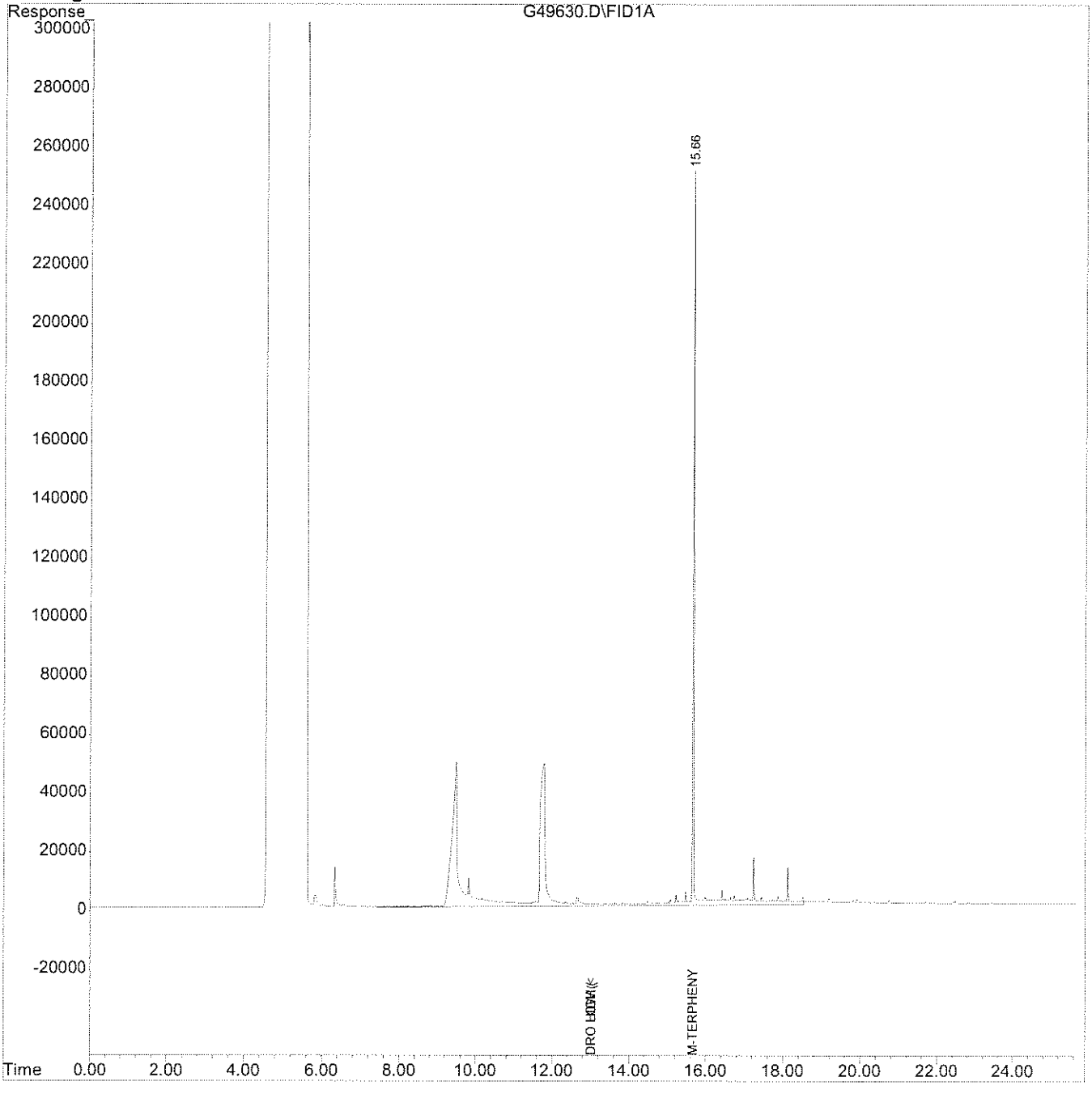
(f)=RT Delta > 1/2 Window (m)=manual int.
G49630.D D040108A.M Tue Jun 03 08:04:14 2008 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\TPH\060208-G\G49630.D Vial: 17
Acq On : 2 Jun 2008 22:36 Operator:
Sample : 61399-8 1RR Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:04 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

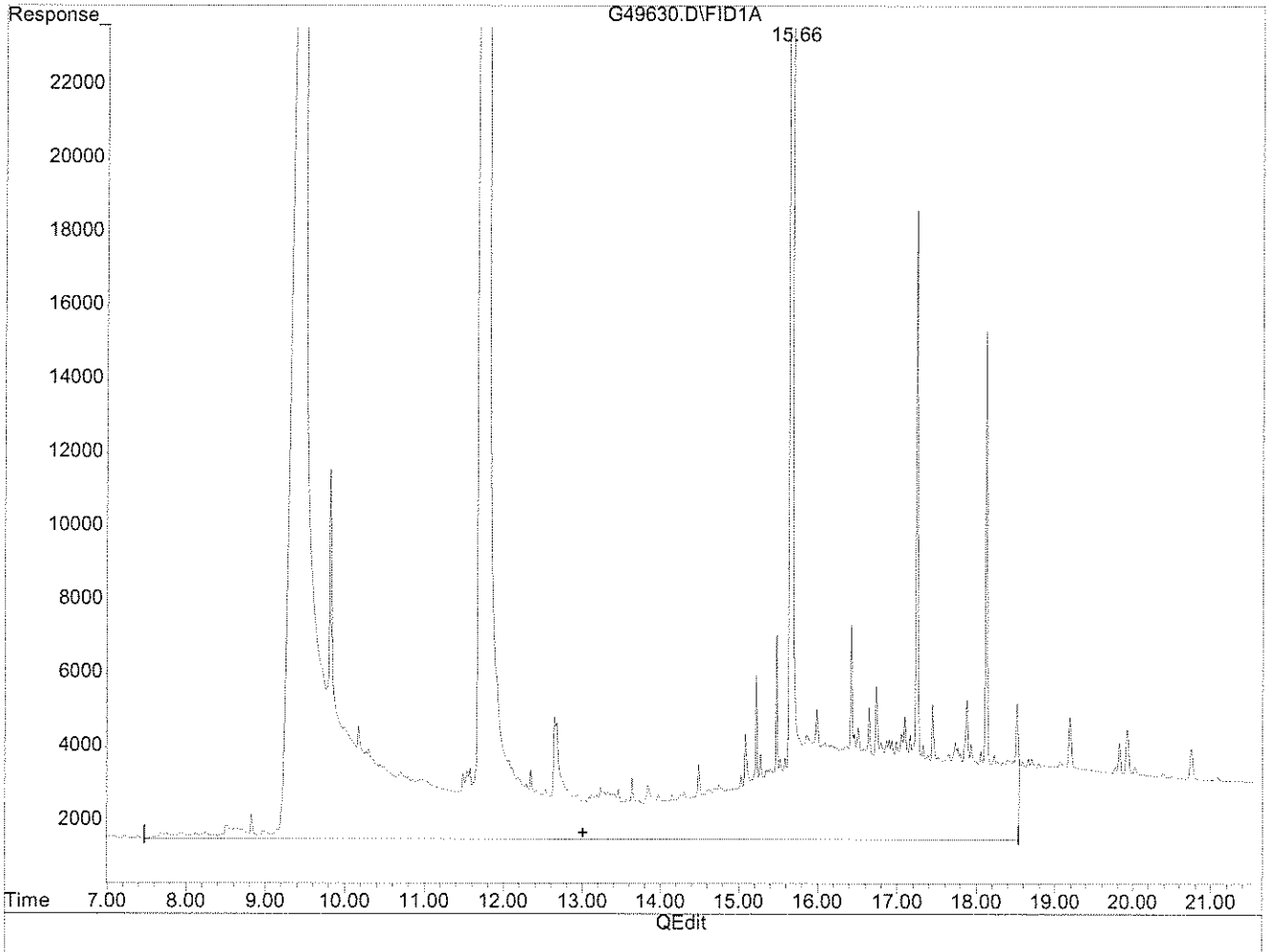
Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm



Quantitation Report (Qedit)

Data File : D:\TPH\060208-G\G49630.D Vial: 17
Acq On : 2 Jun 2008 22:36 Operator:
Sample : 61399-8 RE Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:03 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008 JK 6.3.08 *Baseline
Response via : Multiple Level Calibration



(2) DRO LOW (<1.0) (HM)

13.01min 0.442mg/ml m

response 19428049

(+) = Expected Retention Time
G49630.D D040108A.M Tue Jun 03 08:03:48 2008

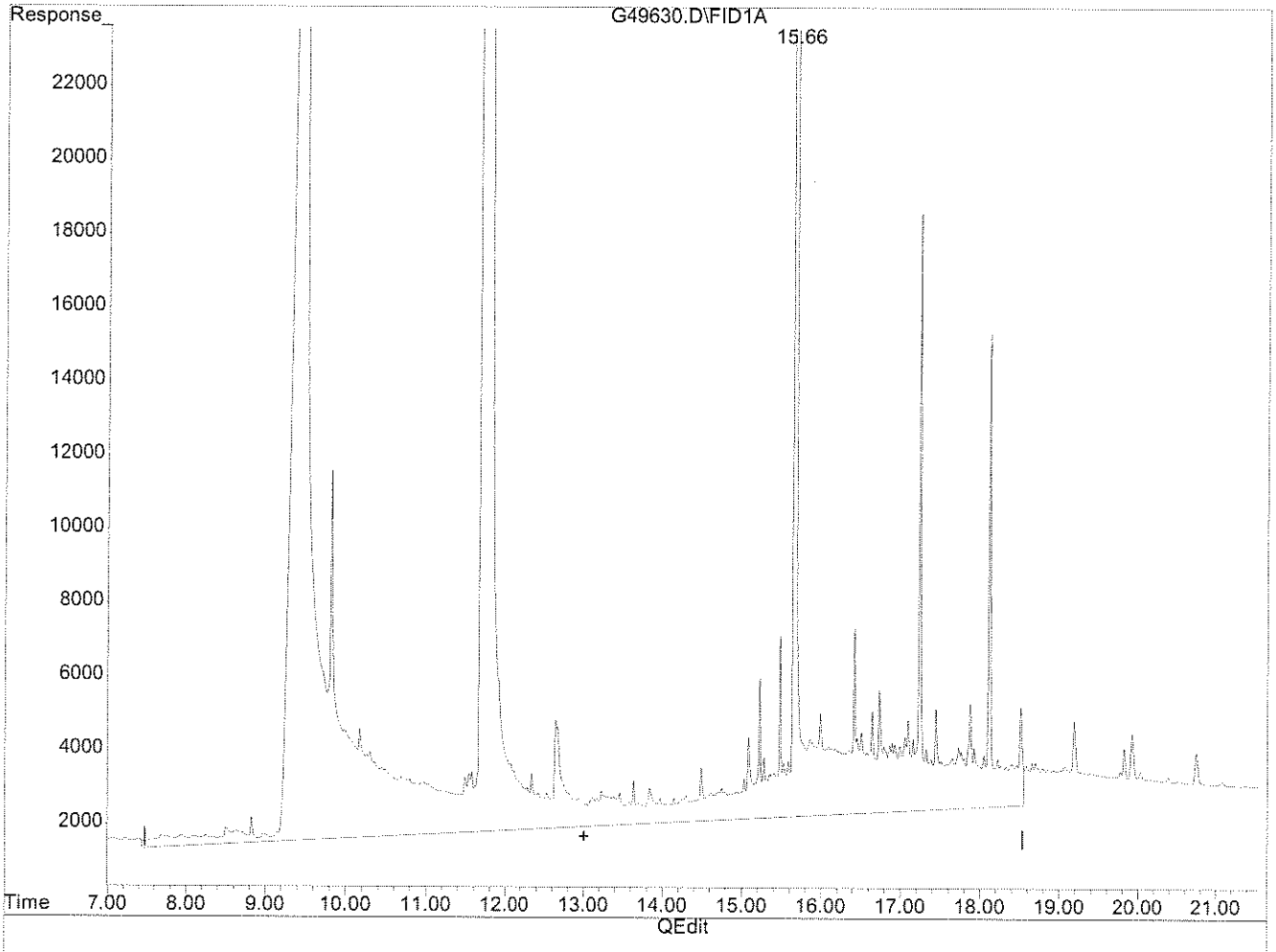
Quantitation Report (Qedit)

Data File : D:\TPH\060208-G\G49630.D
Acq On : 2 Jun 2008 22:36
Sample : 61399-8, RE
Misc :
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:03 2008 Quant Results File: D040108A.RES

Vial: 17
Operator:
Inst : INST G
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration

JK 6.3.08



(2) DRO LOW (<1.0) (HM)

13.01min 0.375mg/ml m

response 16557365

JK-7.08

(+) = Expected Retention Time
G49630.D D040108A.M Tue Jun 03 08:03:57 2008

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South Burlington VT 05403

June 3, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: LS58DW1-0508-051

SAMPLE DATA

Lab Sample ID: 61399-9
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 05/19/08
Lab Receipt Date: 05/22/08
Extraction Date: 05/23/08
Analysis Date: 05/31/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	97	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

DRO Report

Authorized signature

4125 DRO WATER REPORT

Sample Name	**61399-9**
Data File Name	G49564.D
Date Acquired	5/31/2008 13:10
Misc Info	
Sample Volume (mL)	**1080**
Final Volume (mL)	**1.0**
Analyst Dilution (1:X)	**1**
Calculation Factor	925.9259
Dilution Factor	0.9

JL 6.3.08

4125 DRO ANALYTICAL RESULTS	ug/L	RL	
DRO	U	46	
m-Terphenyl	97%	60-140%	PASS

RAW DATA

	Raw Inst Amount mg/mL	Reviewed & Calculated Inst Amount ug/L	Target Response	Sample Amount ug/L
M-TERPHENYL	96.92		4189355.115	
DRO LOW (<1.0)	0.0242	0.00	1550503.306	
DRO HIGH (>1.0)	0.0398	36.85	1723339.314	
DRO	0.02	0.00		0

JL 6.3.08

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49564.D Vial: 41
Acq On : 31 May 2008 13:10 Operator:
Sample : 61399-9 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 12:01 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JK 6.3.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.66	4189355	96.915 ug/ml
Spiked Amount 100.000 Range 60 - 140 Recovery = 96.92%			
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	1550503	0.024 mg/ml
3) HM DRO HIGH (>1.0)	13.01	1723339	0.040 mg/ml

ND

JK-9.08

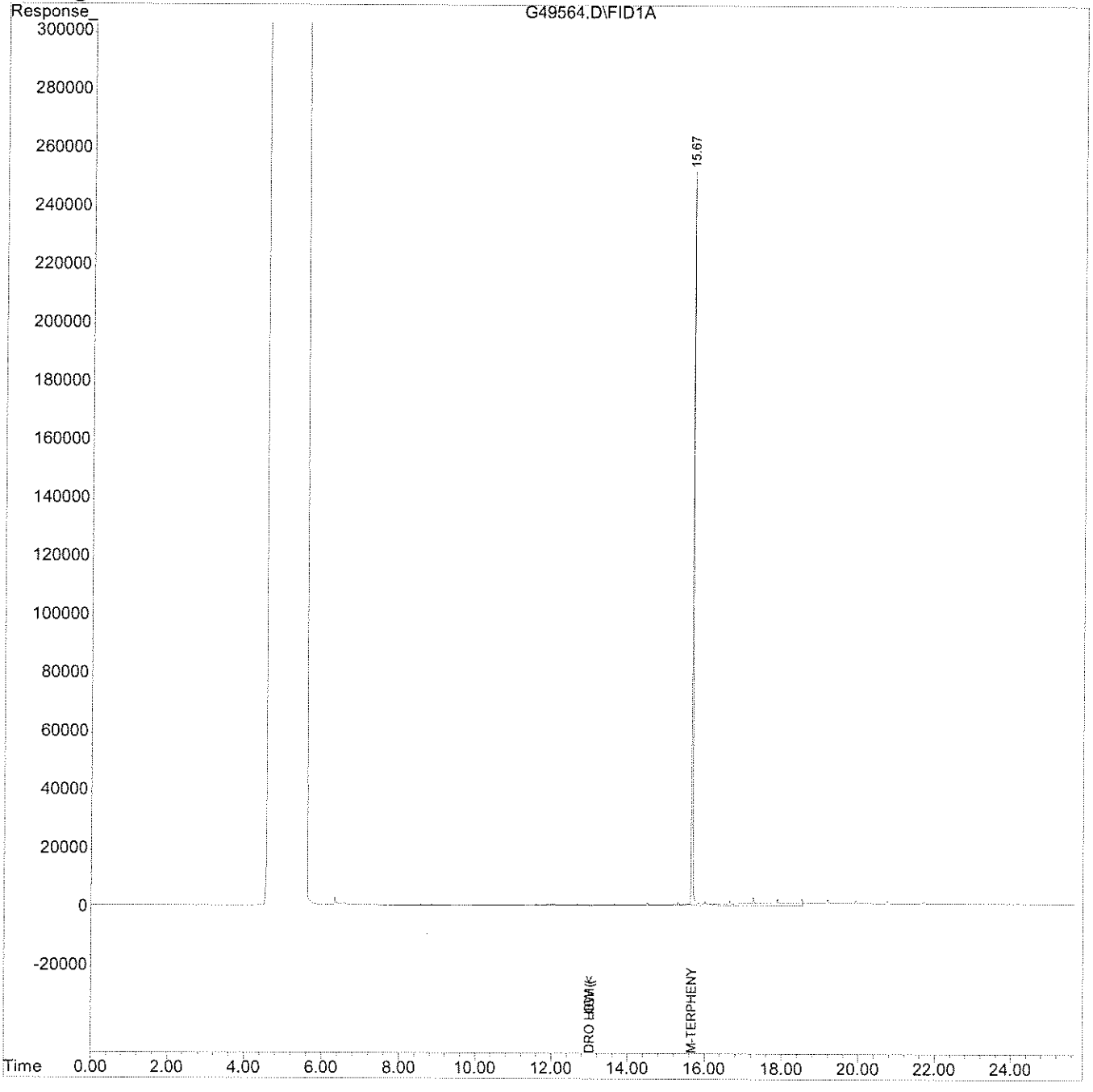
(f)=RT Delta > 1/2 Window (m)=manual int.
G49564.D D040108A.M Tue Jun 03 12:01:33 2008 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49564.D Vial: 41
Acq On : 31 May 2008 13:10 Operator:
Sample : 61399-9 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 12:01 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

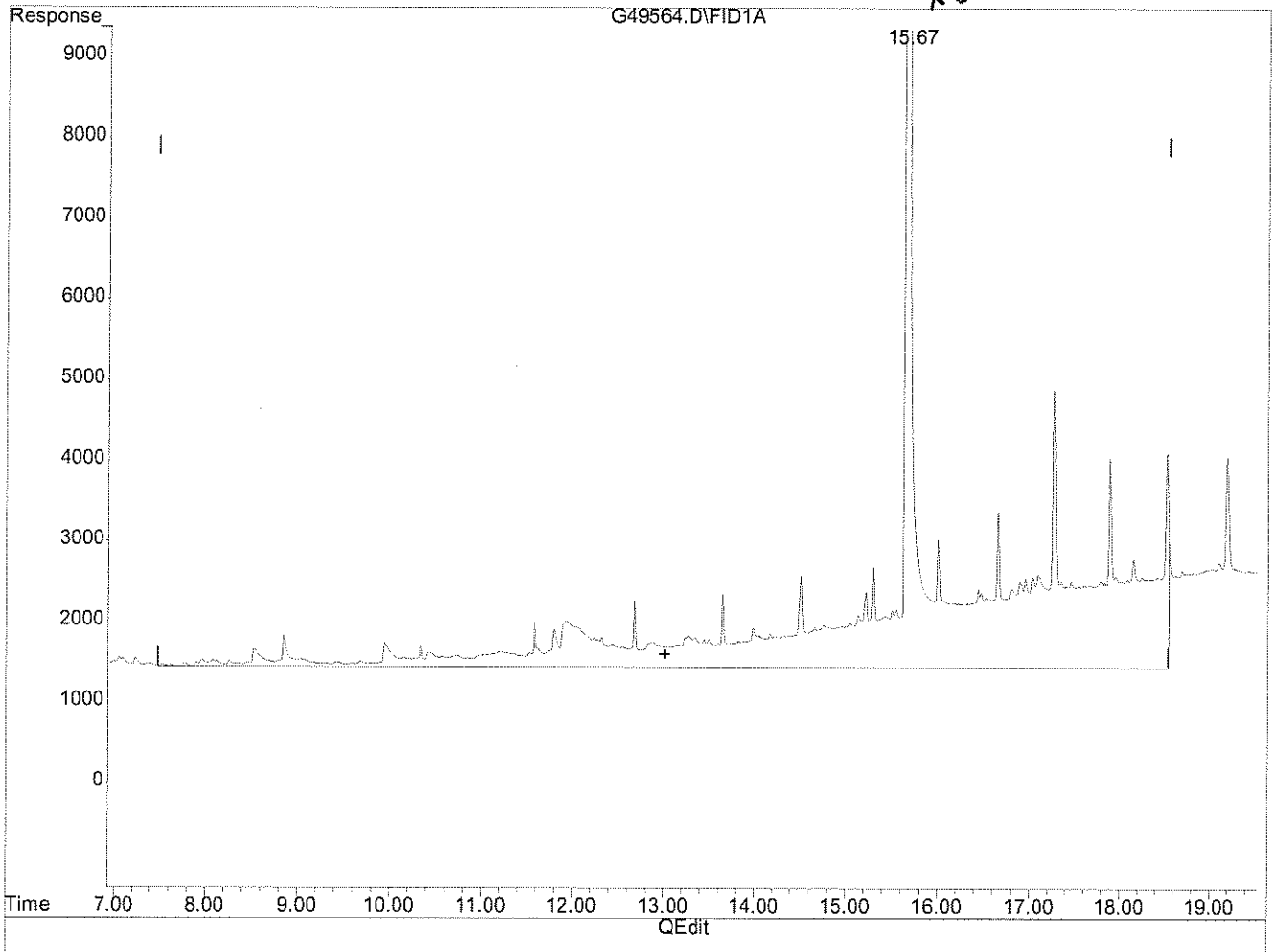


Quantitation Report (Qedit)

Data File : D:\TPH\053008-G\G49564.D Vial: 41
Acq On : 31 May 2008 13:10 Operator:
Sample : 61399-9 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 12:01 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration

JE 6.3.08 *Baseline



(2) DRO LOW (<1.0) (HM)

13.01min 0.057mg/ml m

response 2948798

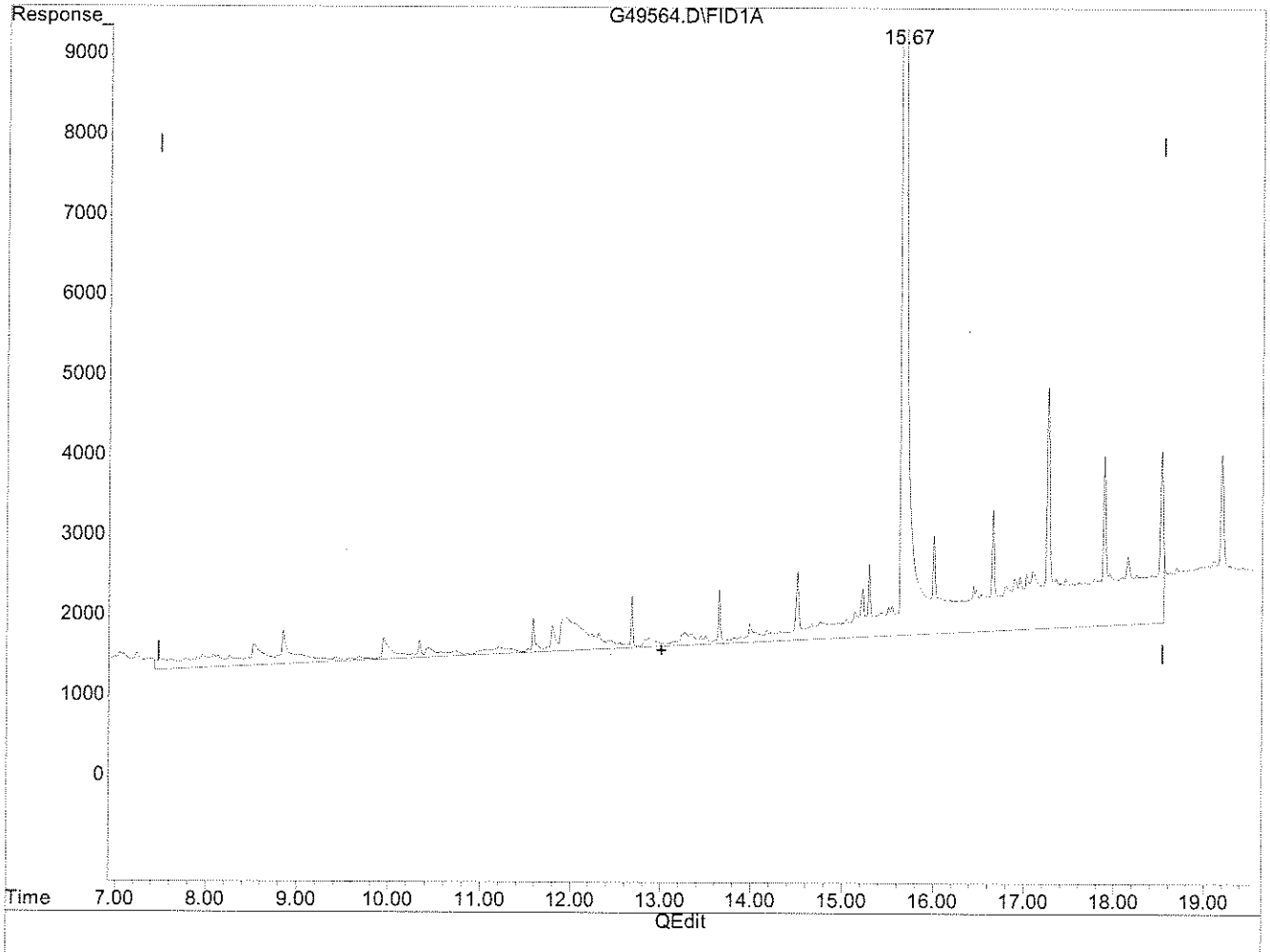
JE 6.9.08

(+) = Expected Retention Time
G49564.D D040108A.M Tue Jun 03 12:01:11 2008

Quantitation Report (Qedit)

Data File : D:\TPH\053008-G\G49564.D Vial: 41
Acq On : 31 May 2008 13:10 Operator:
Sample : 61399-9 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 12:01 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008 JK 6.3.08
Response via : Multiple Level Calibration



(2) DRO LOW (<1.0) (HM)

13.01min 0.024mg/ml m

response 1550503

1/30.9 MB

(+) = Expected Retention Time
G49564.D D040108A.M Tue Jun 03 12:01:19 2008

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Mr. Ron Pentkowski
Test America Burlington
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South Burlington VT 05403

June 3, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: LS58DW1-0508-051

SAMPLE DATA

Lab Sample ID: 61399-9 RR
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 05/19/08
Lab Receipt Date: 05/22/08
Extraction Date: 05/23/08
Analysis Date: 06/02/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	100	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

DRO Report

Authorized signature

4125 DRO WATER REPORT

Sample Name	**61399-9** RR
Data File Name	G49631.D
Date Acquired	6/2/2008 23:05
Misc Info	
Sample Volume (mL)	**1080**
Final Volume (mL)	**1.0**
Analyst Dilution (1:X)	**1**
Calculation Factor	925.9259
Dilution Factor	0.9

JLC 6.3.08

4125 DRO ANALYTICAL RESULTS	ug/L	RL	
DRO	U	46	
m-Terphenyl	100%	60-140%	PASS ✓

RAW DATA

	Raw Inst Amount mg/mL	Reviewed & Calculated Inst Amount ug/L	Target Response	Sample Amount ug/L
M-TERPHENYL	99.70		4309712.359	
DRO LOW (<1.0)	0.0300	0.00	1799434.736	
DRO HIGH (>1.0)	0.0467	43.20	2020088.424	
DRO	0.03	0.00		0

Quantitation Report (QT Reviewed)

Data File : D:\TPH\060208-G\G49631.D Vial: 18
Acq On : 2 Jun 2008 23:05 Operator:
Sample : 61399-9,RR Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:04 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JIC 6.3.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.66	4309712	99.699 ug/ml
Spiked Amount 100.000	Range 60 - 140	Recovery =	99.70%
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	1799435	0.030 mg/ml
3) HM DRO HIGH (>1.0)	13.01	2020088	0.047 mg/ml

ND

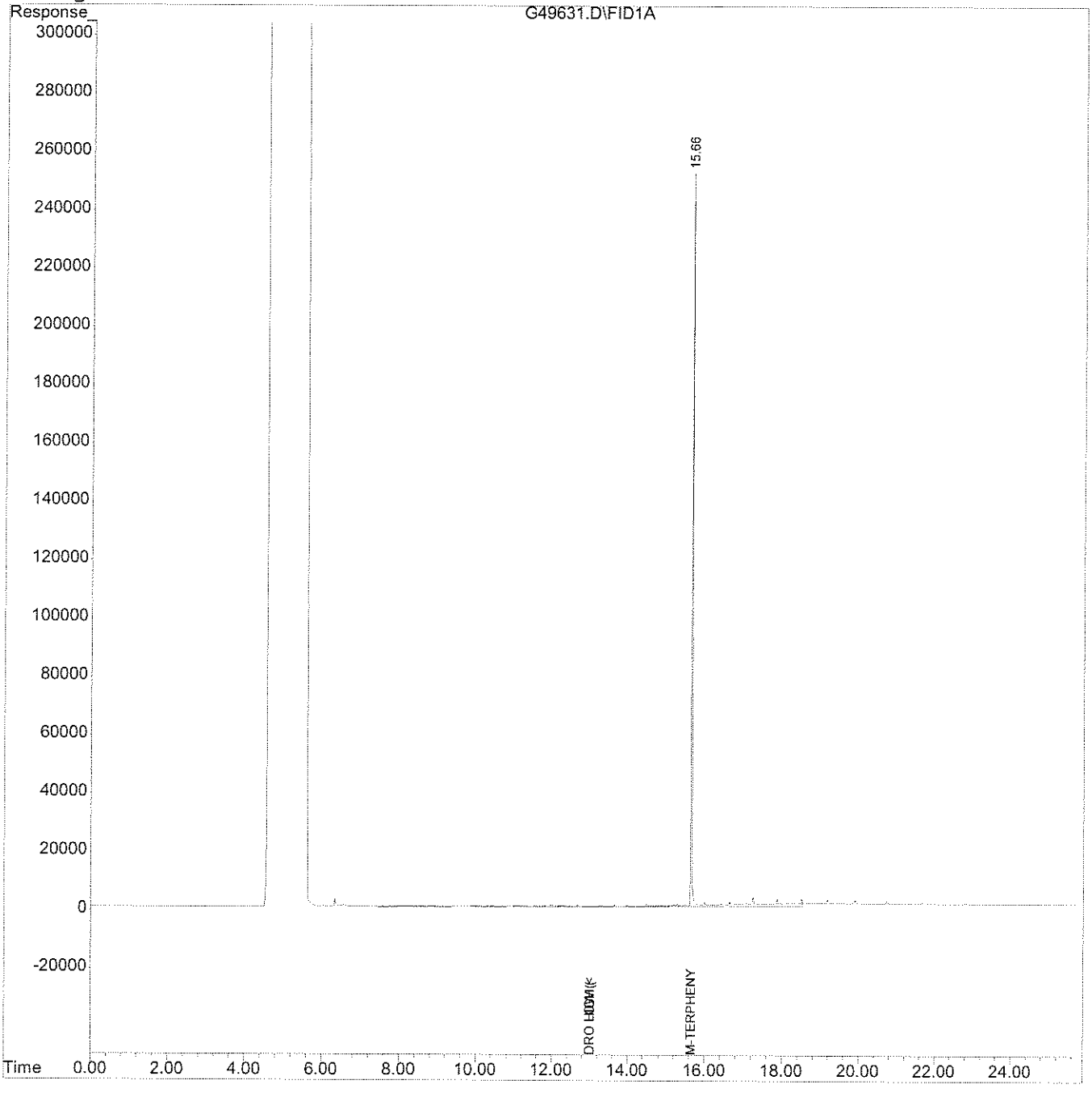
(f)=RT Delta > 1/2 Window (m)=manual int.
G49631.D D040108A.M Tue Jun 03 08:04:49 2008 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\TPH\060208-G\G49631.D Vial: 18
Acq On : 2 Jun 2008 23:05 Operator:
Sample : 61399-9 IRR Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:04 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm



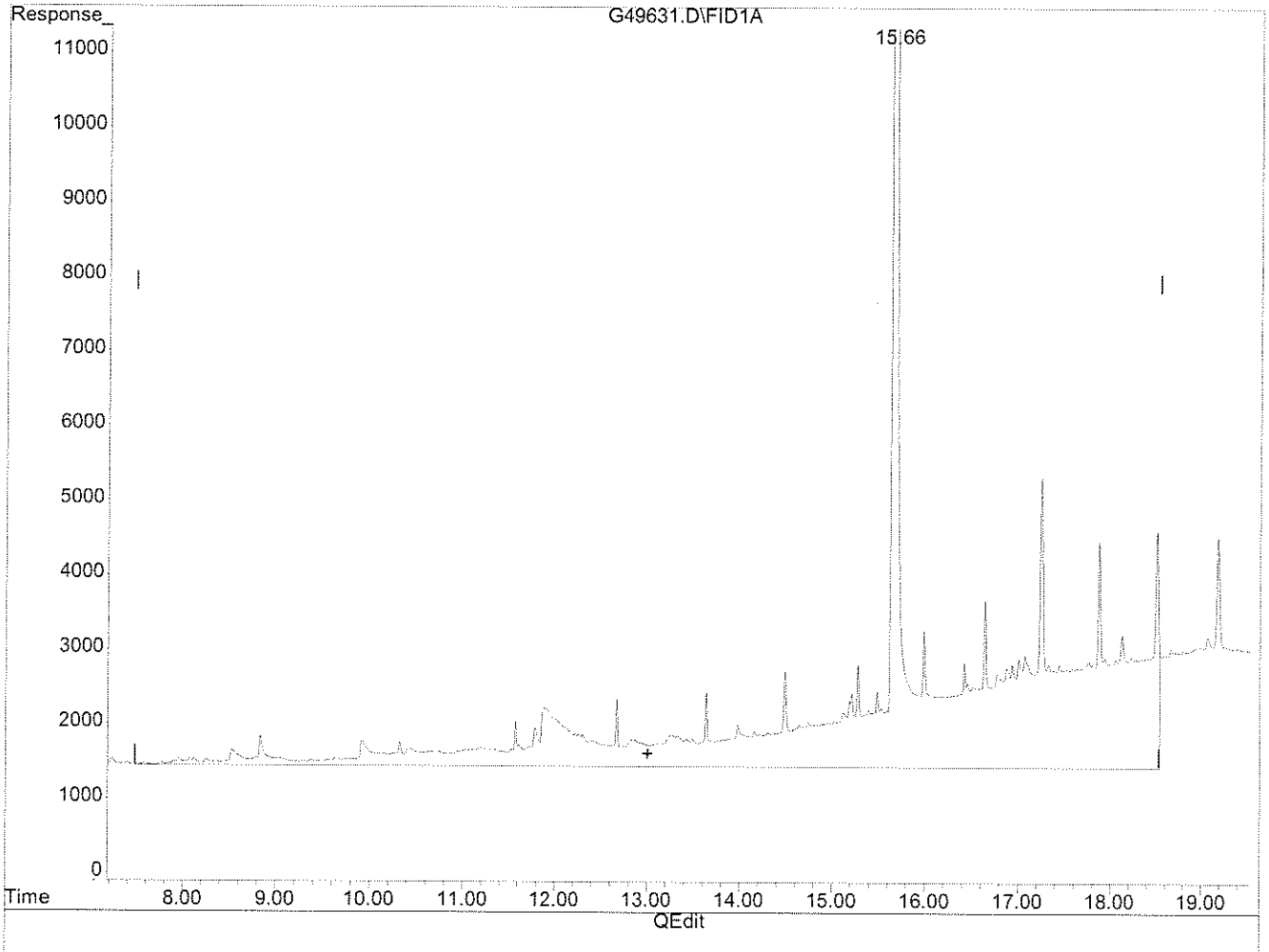
Quantitation Report (Qedit)

Data File : D:\TPH\060208-G\G49631.D
Acq On : 2 Jun 2008 23:05
Sample : 61399-9, RR
Misc :
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:04 2008 Quant Results File: D040108A.RES

Vial: 18
Operator:
Inst : INST G
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration

JLC 6.3.08 *Baseline



(2) DRO LOW (<1.0) (HM)

13.01min 0.073mg/ml m

response 3652380

(+) = Expected Retention Time

G49631.D D040108A.M Tue Jun 03 08:04:27 2008

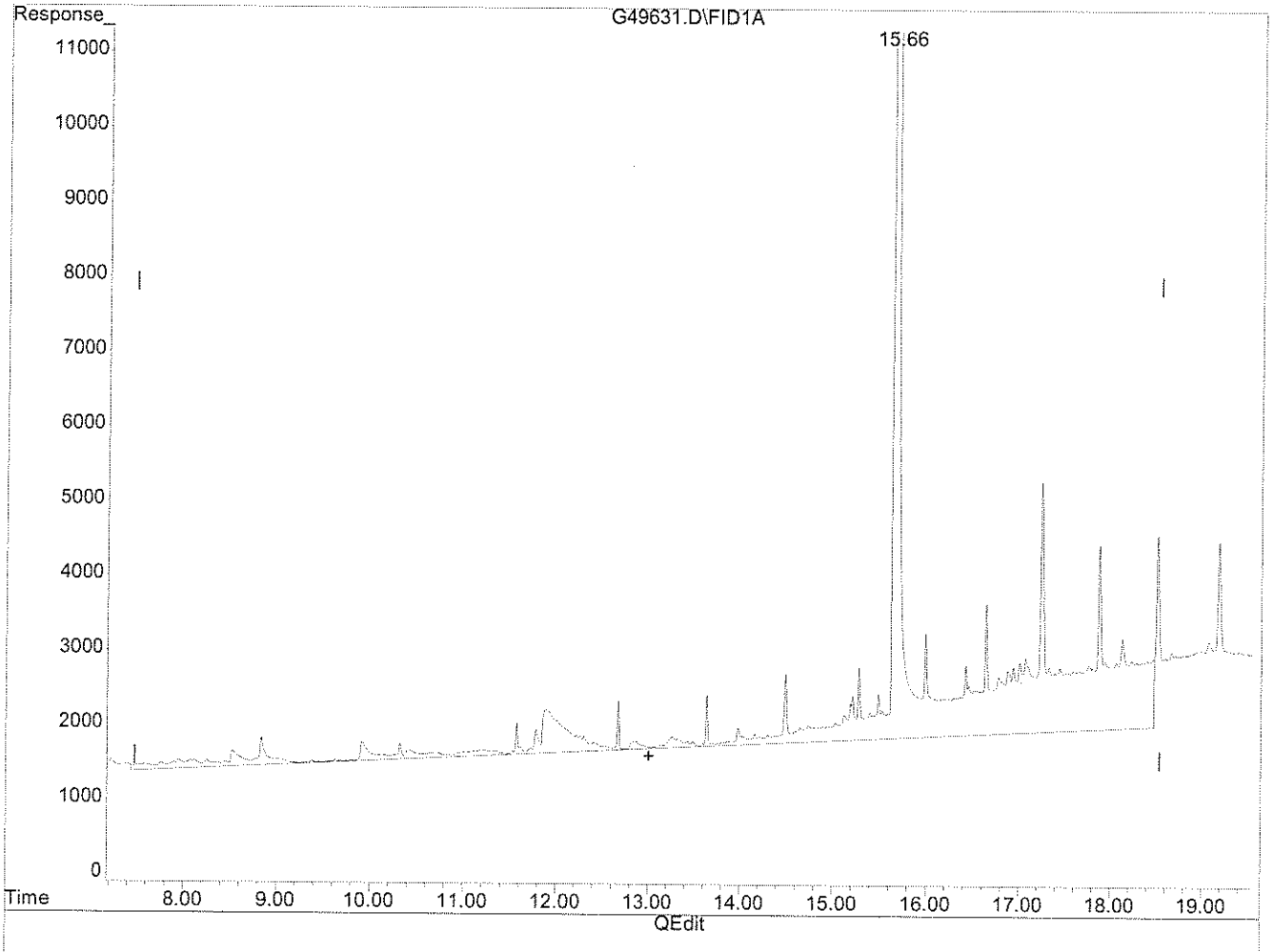
Quantitation Report (Qedit)

Data File : D:\TPH\060208-G\G49631.D
Acq On : 2 Jun 2008 23:05
Sample : 61399-9 IRR
Misc :
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:04 2008 Quant Results File: D040108A.RES

Vial: 18
Operator:
Inst : INST G
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration

JLC 6.3.08



(2) DRO LOW (<1.0) (HM)

13.01min 0.030mg/ml m

response 1799435

(+) = Expected Retention Time

G49631.D D040108A.M Tue Jun 03 08:04:35 2008

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June 10, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: LS58DW1-0508-041

SAMPLE DATA

Lab Sample ID: 61399-10
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 05/19/08
Lab Receipt Date: 05/22/08
Extraction Date: 05/23/08
Analysis Date: 05/31/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	99	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

DRO Report

Authorized signature

4125 DRO WATER REPORT

Sample Name	**61399-10**
Data File Name	G49565.D
Date Acquired	5/31/2008 13:39
Misc Info	
Sample Volume (mL)	**1080**
Final Volume (mL)	**1.0**
Analyst Dilution (1:X)	**1**
Calculation Factor	925.9259
Dilution Factor	0.9

JLC 6.3.08

4125 DRO ANALYTICAL RESULTS	ug/L	RL	
DRO	~~40~~ 54	~~40~~ 50	
m-Terphenyl	99%	60-140%	PASS ✓

RAW DATA

	Raw Inst Amount mg/mL	Reviewed & Calculated Inst Amount ug/L	Target Response	Sample Amount ug/L
M-TERPHENYL	99.08		4282905.112	
DRO LOW (<1.0)	0.0524	48.54	2761566.45	
DRO HIGH (>1.0)	0.0610	56.52	2642982.412	
DRO	0.05	48.54		49

JLC 6.3.08

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49565.D Vial: 42
Acq On : 31 May 2008 13:39 Operator:
Sample : 61399-10 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 12:02 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JVC 6.3.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.67	4282905	99.079 ug/ml
Spiked Amount 100.000	Range 60 - 140	Recovery =	99.08%
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	2761566	0.052 mg/ml
3) HM DRO HIGH (>1.0)	13.01	2642982	0.061 mg/ml

VJC 6.3.08

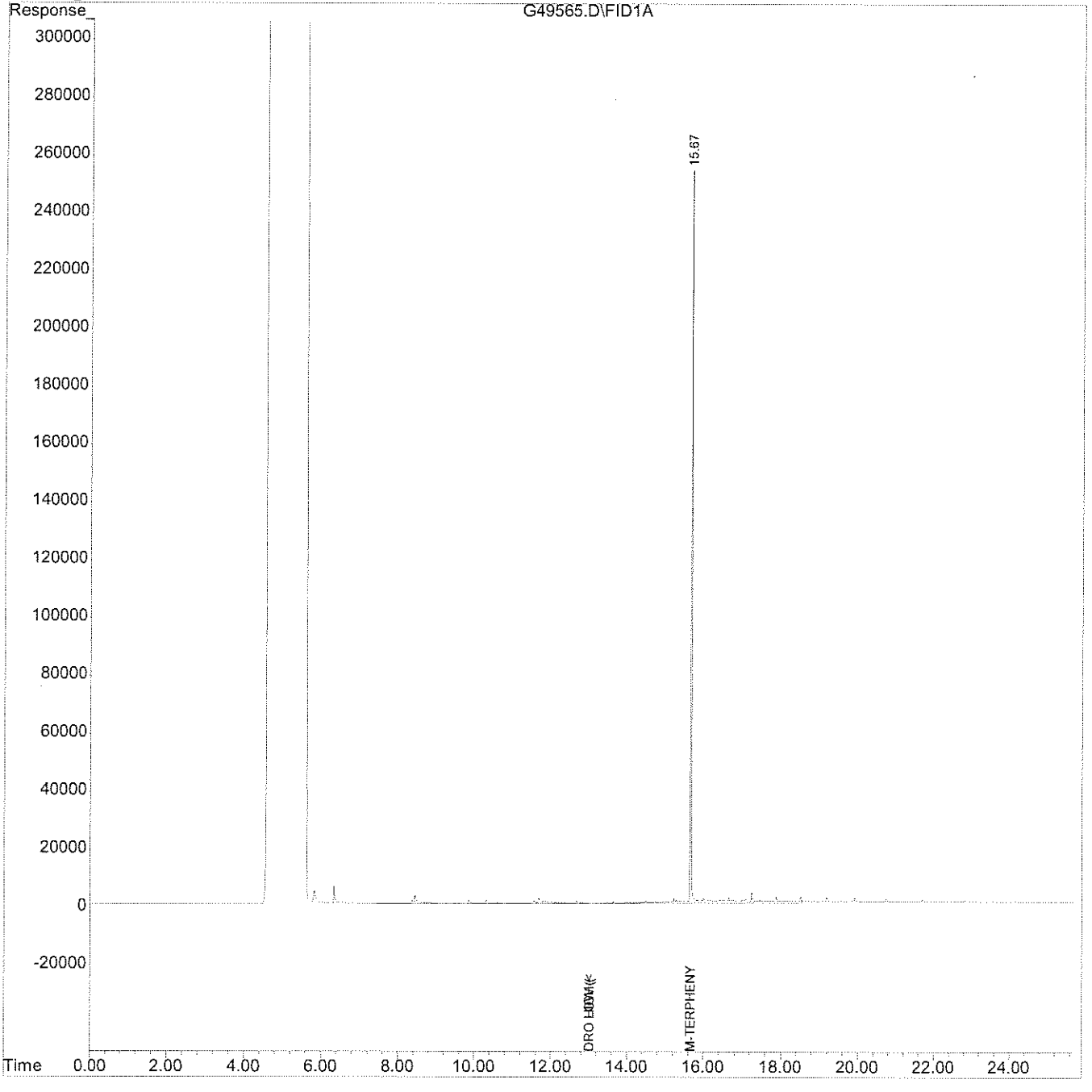
(f)=RT Delta > 1/2 Window (m)=manual int.
G49565.D D040108A.M Tue Jun 03 12:02:06 2008 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49565.D Vial: 42
Acq On : 31 May 2008 13:39 Operator:
Sample : 61399-10 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 12:02 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

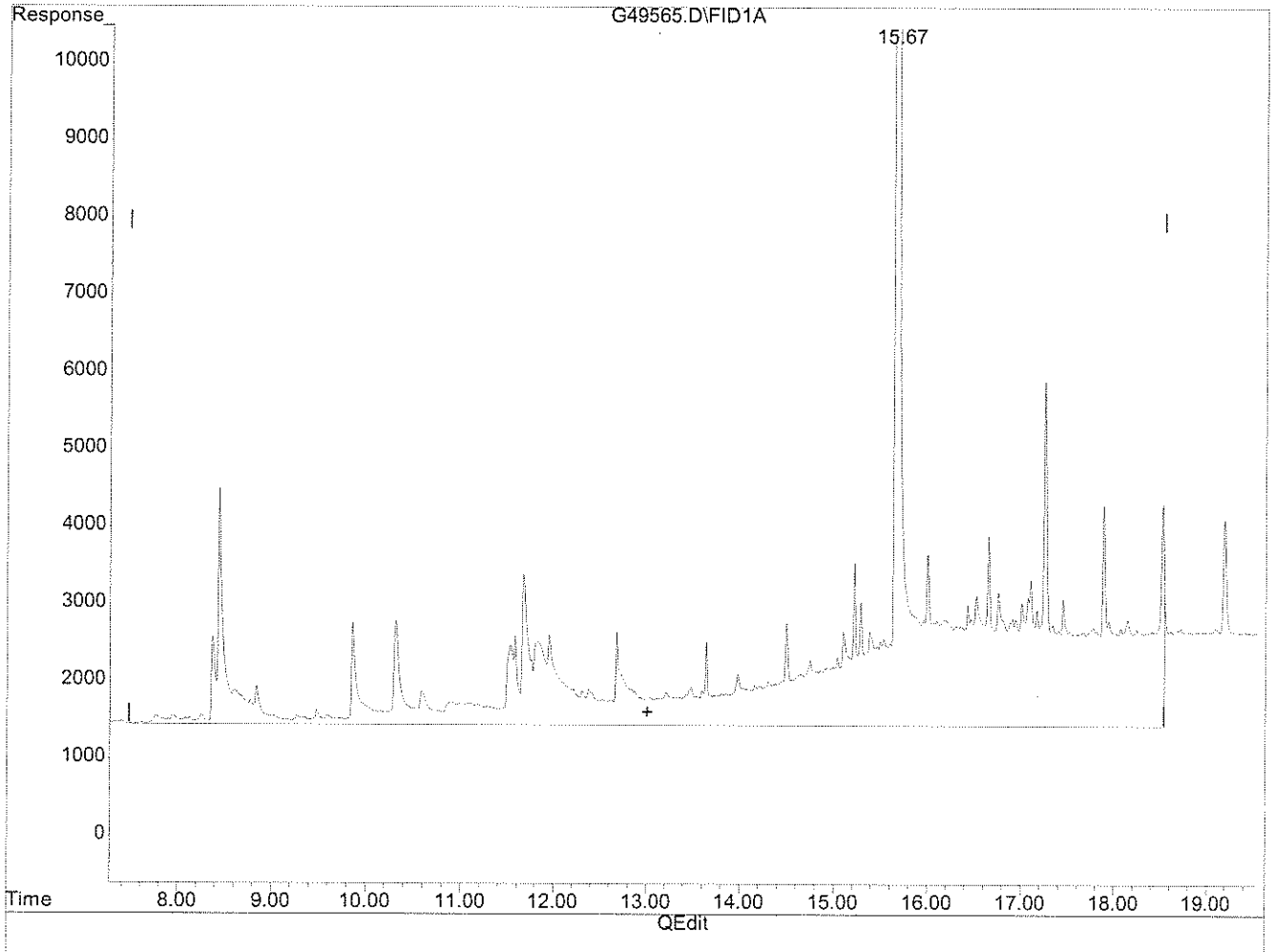


Quantitation Report (Qedit)

Data File : D:\TPH\053008-G\G49565.D Vial: 42
Acq On : 31 May 2008 13:39 Operator:
Sample : 61399-10 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 12:01 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration

JK 6.3.08 *Baseline



(2) DRO LOW (<1.0) (HM)

13.01min 0.091mg/ml m

response 4414045

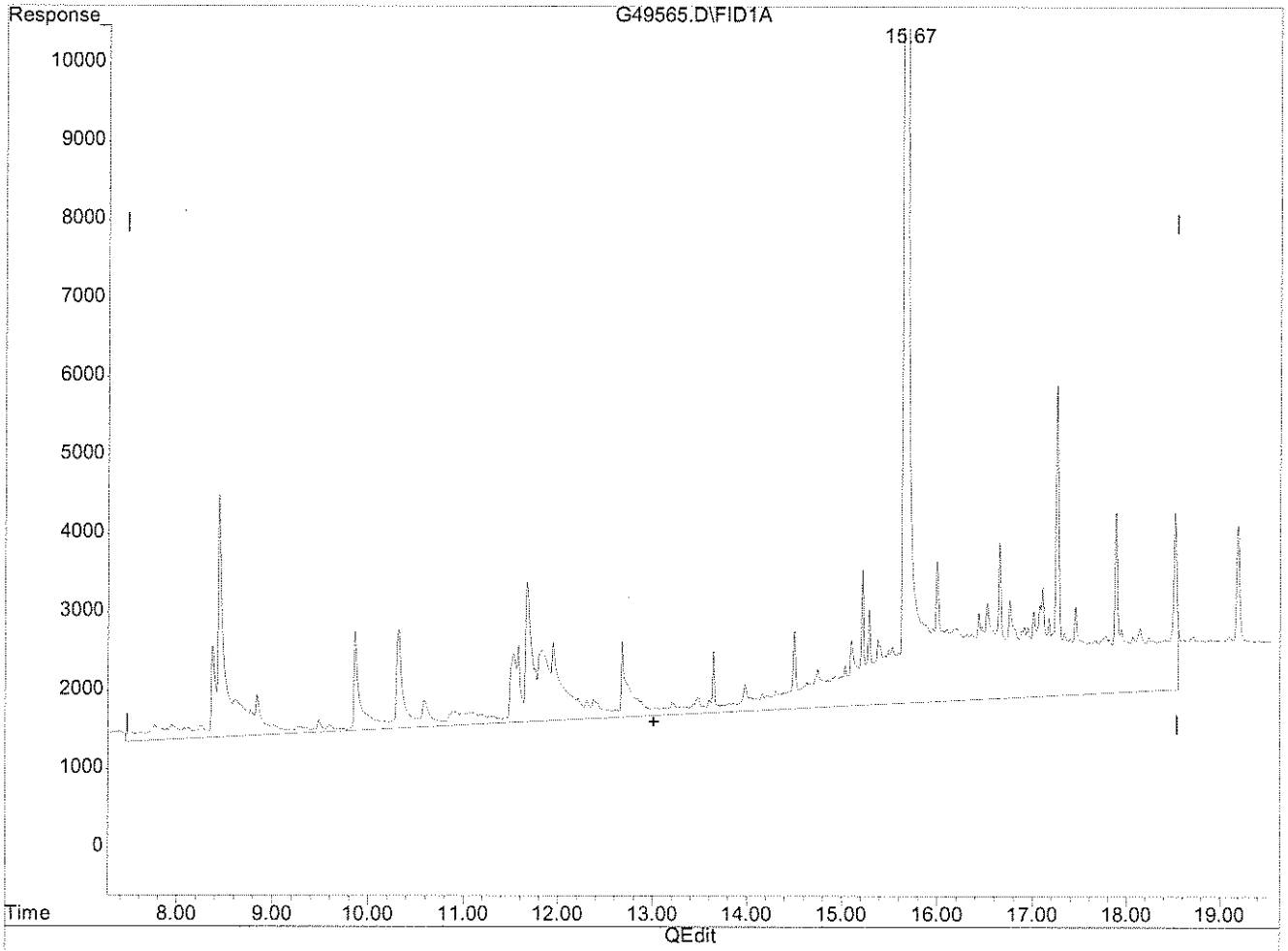
JK 6.3.08

(+) = Expected Retention Time
G49565.D D040108A.M Tue Jun 03 12:01:44 2008

Quantitation Report (Qedit)

Data File : D:\TPH\053008-G\G49565.D Vial: 42
Acq On : 31 May 2008 13:39 Operator:
Sample : 61399-10 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 12:01 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008 JK 6.3.08
Response via : Multiple Level Calibration



(2) DRO LOW (<1.0) (HM)

13.01min 0.052mg/ml m

response 2761566

JK 6.3.08

(+) = Expected Retention Time
G49565.D D040108A.M Tue Jun 03 12:01:54 2008

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June 3, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: LS58DW1-0508-041

SAMPLE DATA

Lab Sample ID: 61399-10 RR
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 05/19/08
Lab Receipt Date: 05/22/08
Extraction Date: 05/23/08
Analysis Date: 06/02/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
51	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	100	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

DRO Report

Authorized signature M Marshall

4125 DRO WATER REPORT

Sample Name	**61399-10, RE**
Data File Name	G49632.D
Date Acquired	6/2/2008 23:49
Misc Info	
Sample Volume (mL)	**1080**
Final Volume (mL)	**1.0**
Analyst Dilution (1:X)	**1**
Calculation Factor	925.9259
Dilution Factor	0.9

JLC 6.3.08

4125 DRO ANALYTICAL RESULTS	ug/L	RL	
DRO	51	46	
m-Terphenyl	100%	60-140%	PASS ✓

RAW DATA

	Raw Inst Amount mg/mL	Reviewed & Calculated Inst Amount ug/L	Target Response	Sample Amount ug/L
M-TERPHENYL	100.07		4325517.362	
DRO LOW (<1.0)	0.0552	51.08	2878799.989	
DRO HIGH (>1.0)	0.0681	63.06	2949124.969	
DRO	0.06	51.08		51

JL 6.9.08

Quantitation Report (QT Reviewed)

Data File : D:\TPH\060208-G\G49632.D Vial: 19
Acq On : 2 Jun 2008 23:49 Operator:
Sample : 61399-10,RE Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:07 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JE 6.3.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.66	4325517	100.065 ug/ml
Spiked Amount 100.000 Range 60 - 140 Recovery = 100.07%			
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	2878800	0.055 mg/ml
3) HM DRO HIGH (>1.0)	13.01	2949125	0.068 mg/ml

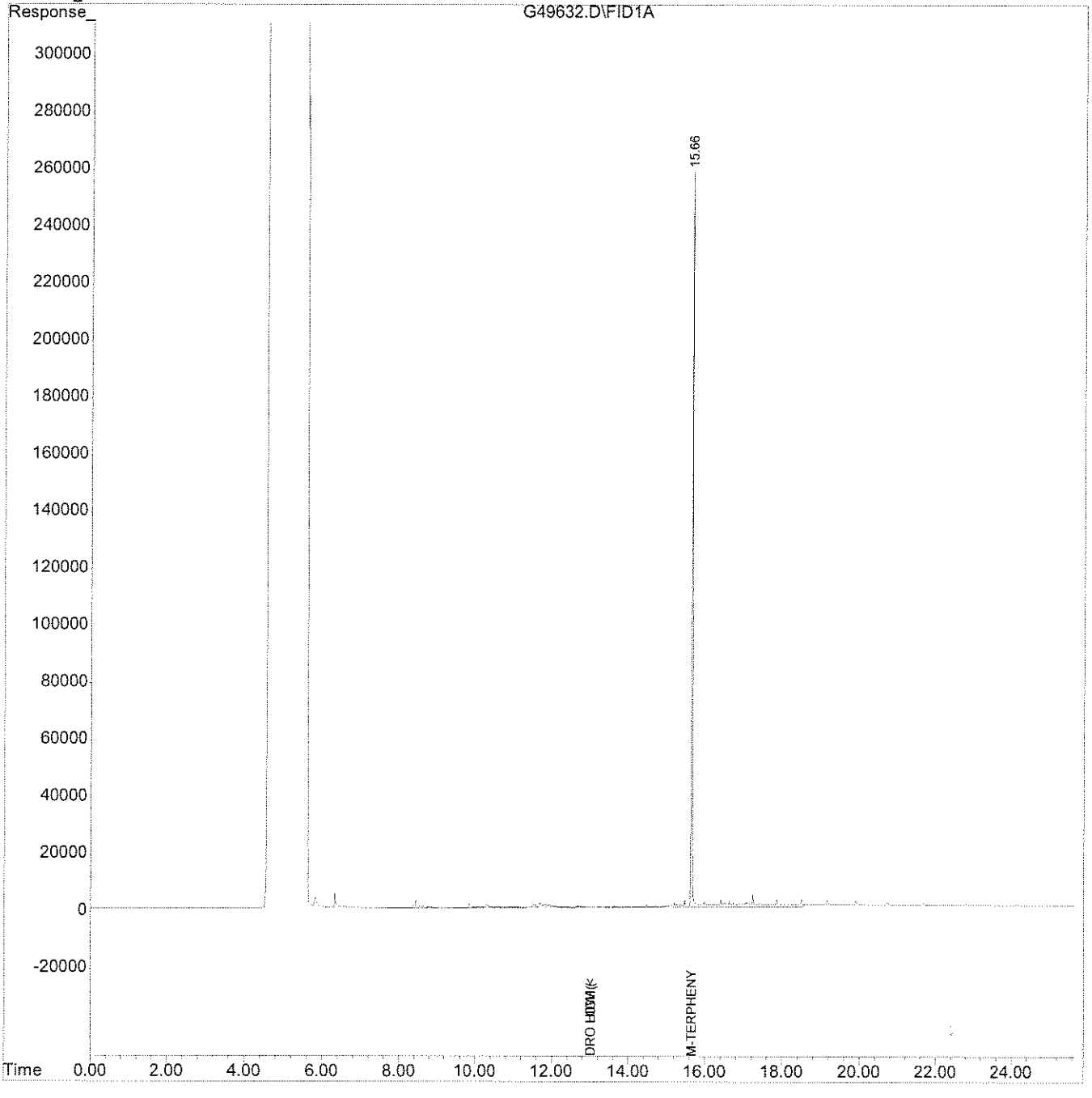
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : D:\TPH\060208-G\G49632.D Vial: 19
Acq On : 2 Jun 2008 23:49 Operator:
Sample : 61399-10,RL Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:07 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

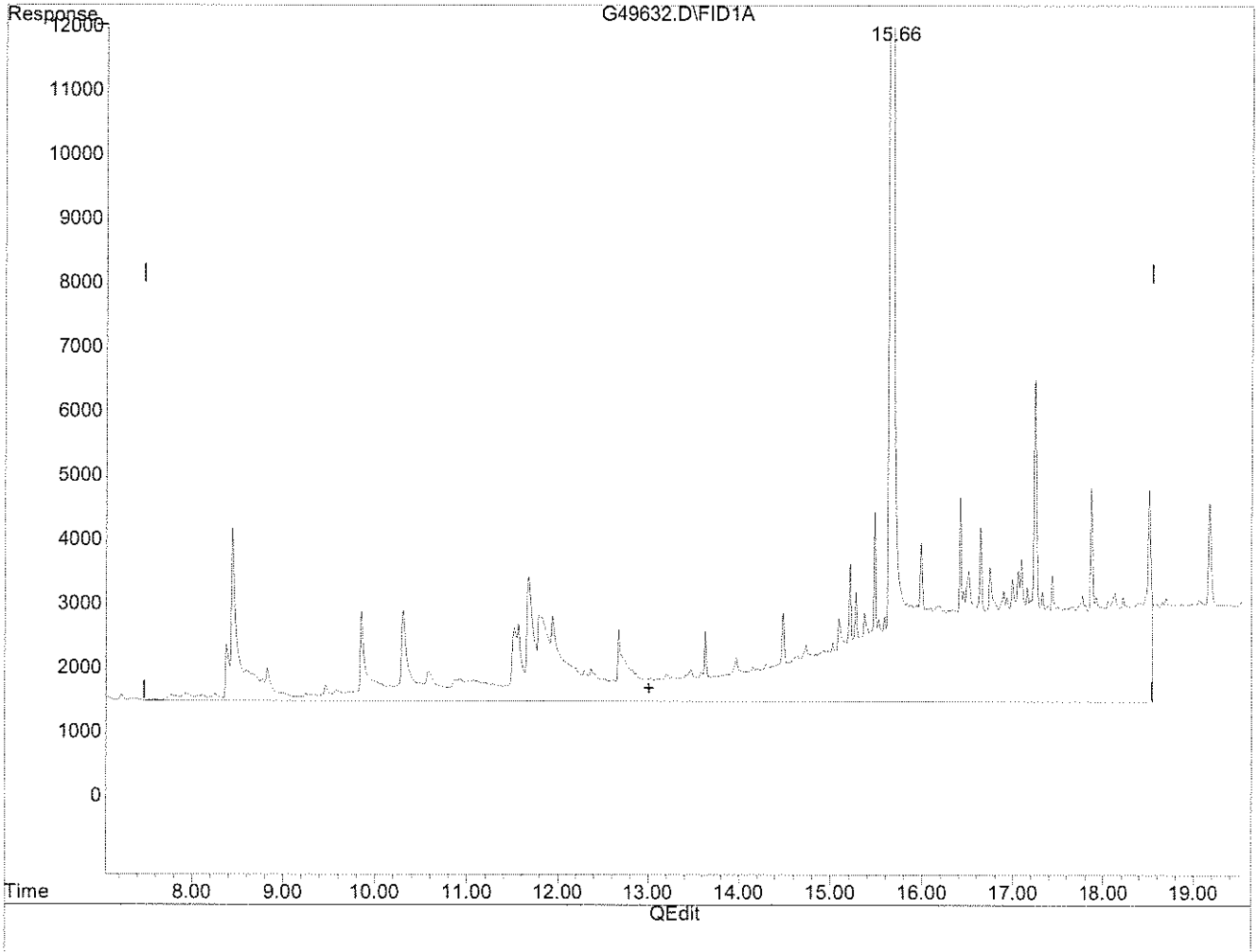


Quantitation Report (Qedit)

Data File : D:\TPH\060208-G\G49632.D Vial: 19
Acq On : 2 Jun 2008 23:49 Operator:
Sample : 61399-10,RR Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:04 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration

JK 6.3.08 *Baseline



(2) DRO LOW (<1.0) (HM)

13.01min 0.106mg/ml m

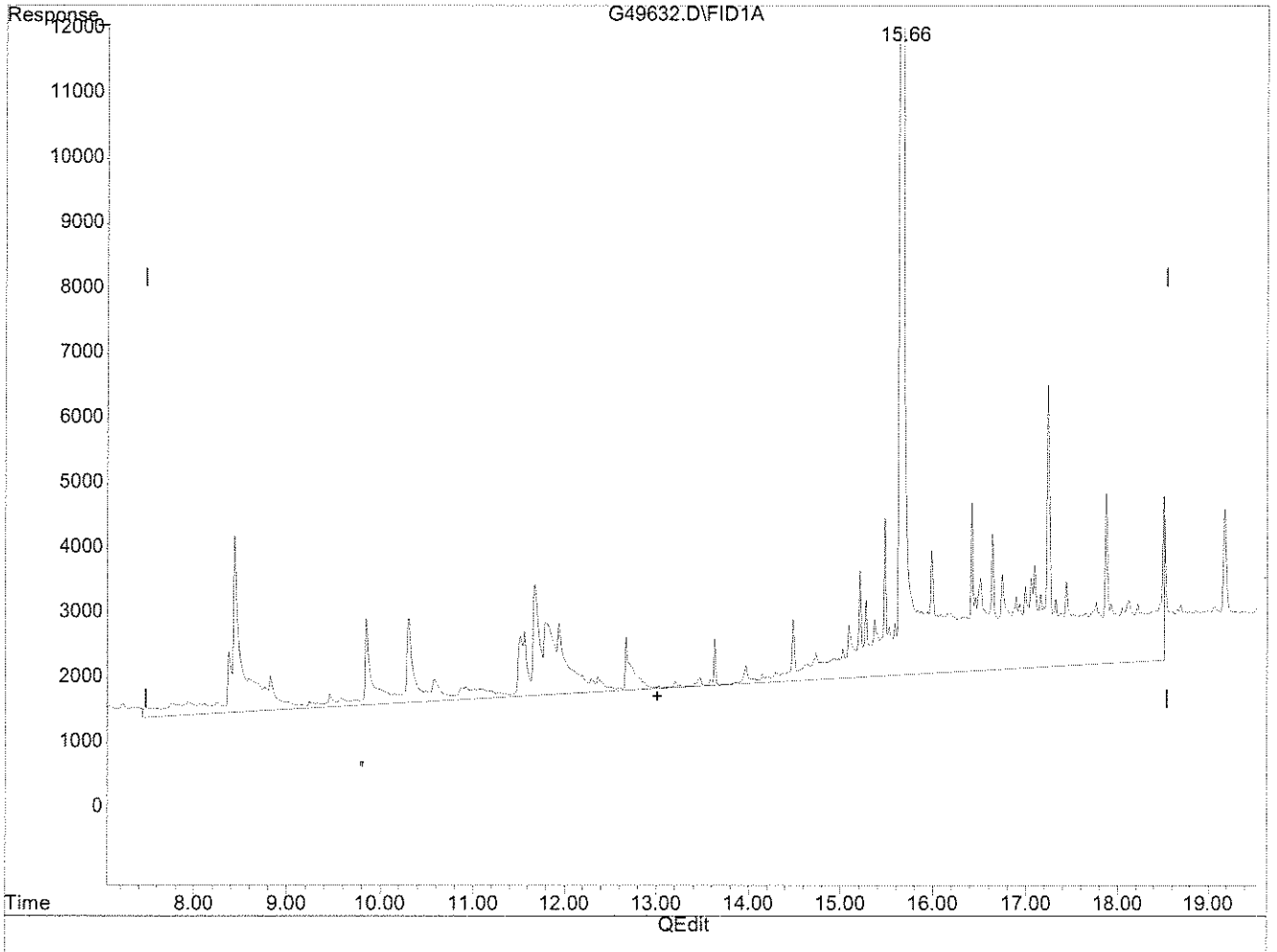
response 5043127

(+) = Expected Retention Time
G49632.D D040108A.M Tue Jun 03 08:05:01 2008

Quantitation Report (Qedit)

Data File : D:\TPH\060208-G\G49632.D Vial: 19
Acq On : 2 Jun 2008 23:49 Operator:
Sample : 61399-10,RR Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:04 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008 JK 6.3.08
Response via : Multiple Level Calibration



(2) DRO LOW (<1.0) (HM)

13.01min 0.055mg/ml m

response 2882852

(+) = Expected Retention Time
G49632.D D040108A.M Tue Jun 03 08:05:20 2008

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June 3, 2008

SAMPLE DATA

Lab Sample ID:	61399-11
Matrix:	Aqueous
Percent Solid:	N/A
Dilution Factor:	1.0
Collection Date:	05/20/08
Lab Receipt Date:	05/22/08
Extraction Date:	05/23/08
Analysis Date:	05/31/08

CLIENT SAMPLE ID

Project Name:	MEFUDS LO-58
Project Number:	03886.184
Field Sample ID:	LS58DW1-0508-034

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	96	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

DRO Report

Authorized signature

4125 DRO WATER REPORT

Sample Name	**61399-11**
Data File Name	G49566.D
Date Acquired	5/31/2008 14:08
Misc Info	
Sample Volume (mL)	**1070**
Final Volume (mL)	**1.0**
Analyst Dilution (1:X)	**1**
Calculation Factor	934.5794
Dilution Factor	0.9

4125 DRO ANALYTICAL RESULTS	ug/L	RL	
DRO	U	47	
m-Terphenyl	96%	60-140%	PASS

RAW DATA

	Raw Inst Amount mg/mL	Reviewed & Calculated Inst Amount ug/L	Target Response	Sample Amount ug/L
M-TERPHENYL	95.71		4137087.877	
DRO LOW (<1.0)	0.0278	0.00	1706202.29	
DRO HIGH (>1.0)	0.0446	41.69	1931666.948	
DRO	0.03	0.00		0

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49566.D Vial: 43
Acq On : 31 May 2008 14:08 Operator:
Sample : 61399-11 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 12:02 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JK 6.3.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.67	4137088	95.706 ug/ml
Spiked Amount 100.000 Range 60 - 140 Recovery = 95.71%			
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	1706202	0.028 mg/ml
3) HM DRO HIGH (>1.0)	13.01	1931667	0.045 mg/ml

ND

√36.90G

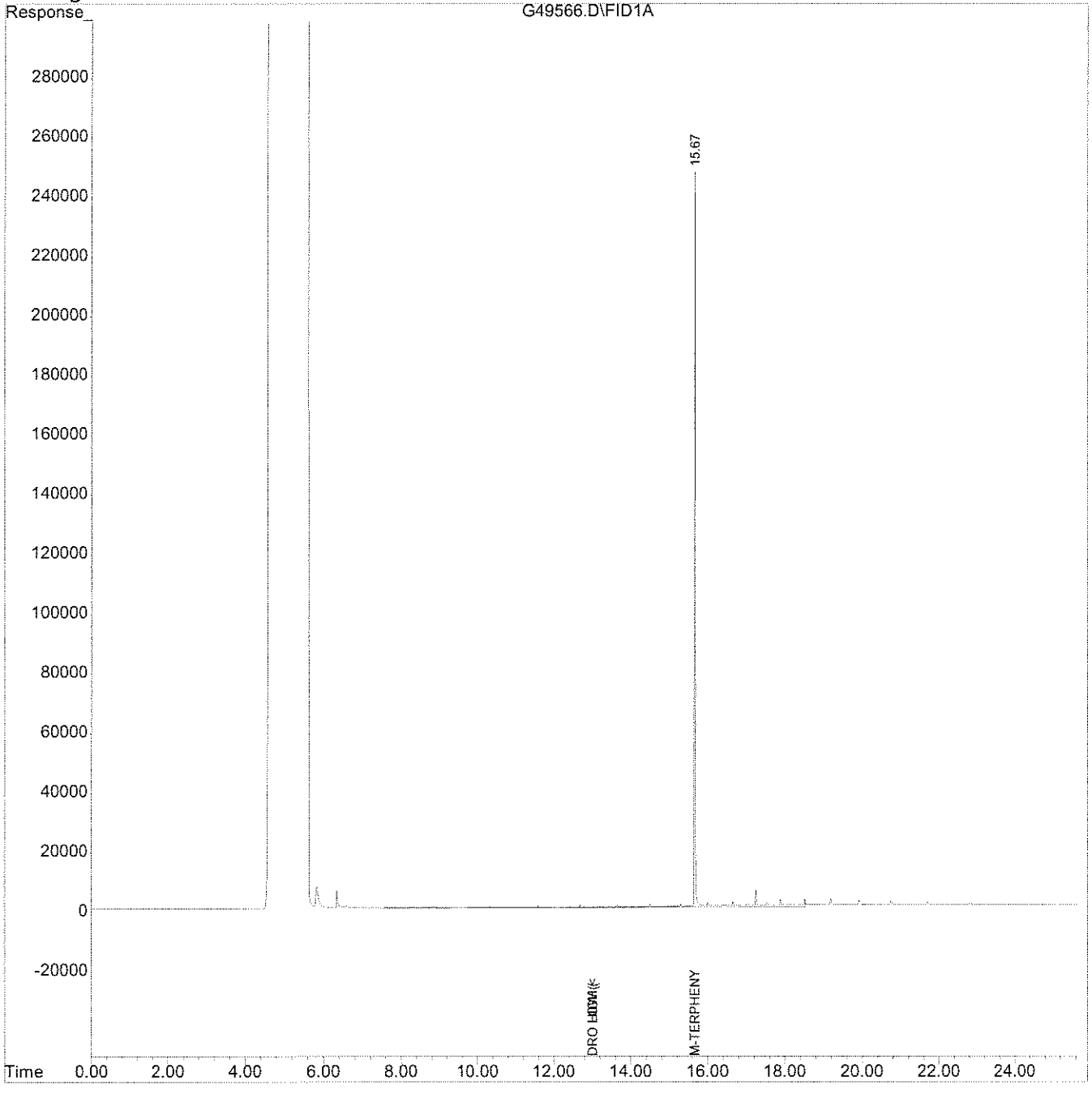
(f)=RT Delta > 1/2 Window (m)=manual int.
G49566.D D040108A.M Tue Jun 03 12:02:39 2008 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49566.D Vial: 43
Acq On : 31 May 2008 14:08 Operator:
Sample : 61399-11 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 12:02 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

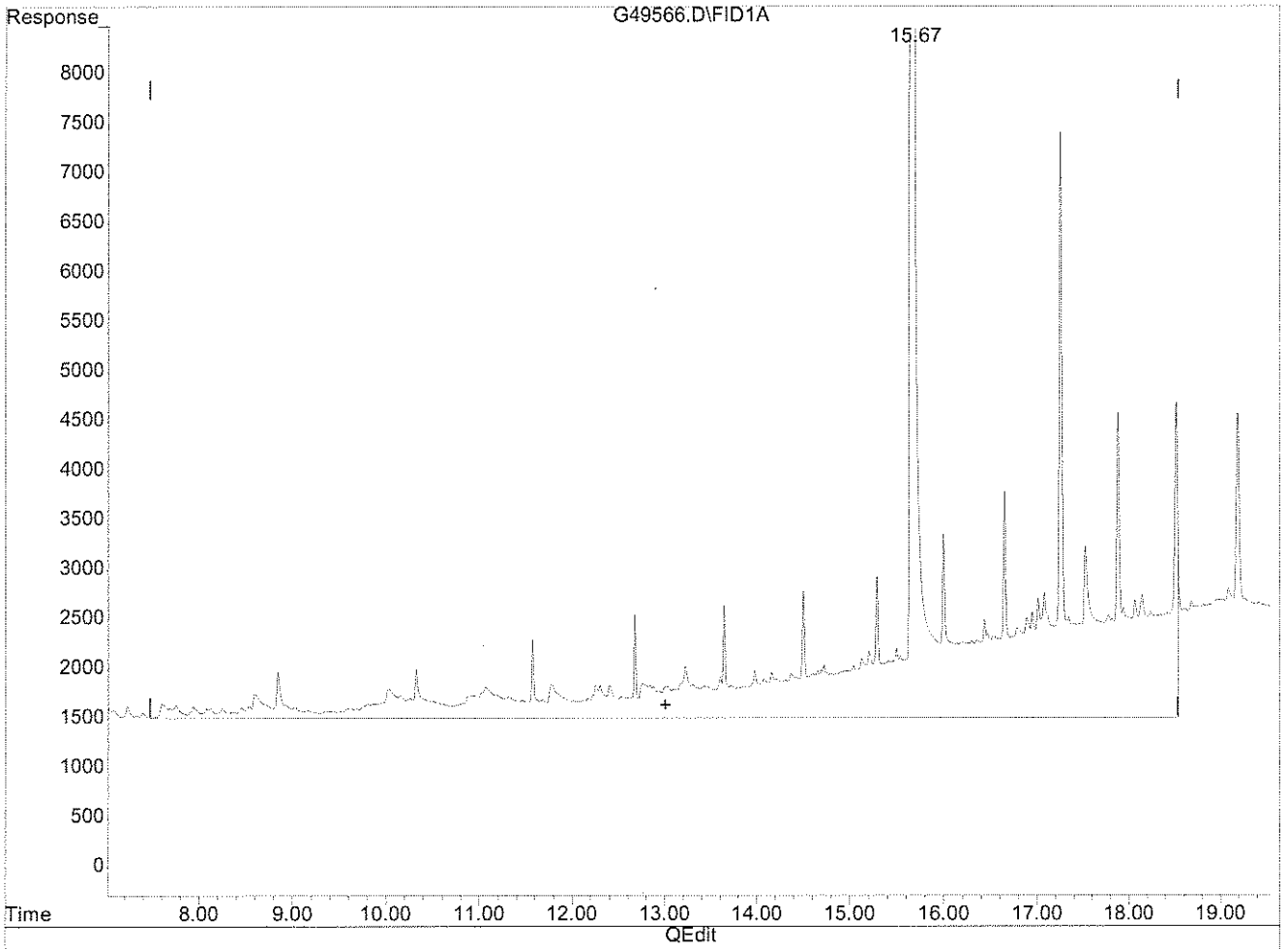


Quantitation Report (Qedit)

Data File : D:\TPH\053008-G\G49566.D Vial: 43
Acq On : 31 May 2008 14:08 Operator:
Sample : 61399-11 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 12:02 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration

JK 6.3.08 *Baseline



(2) DRO LOW (<1.0) (HM)

13.01min 0.058mg/ml m

response 2995927

JK 6-9-08

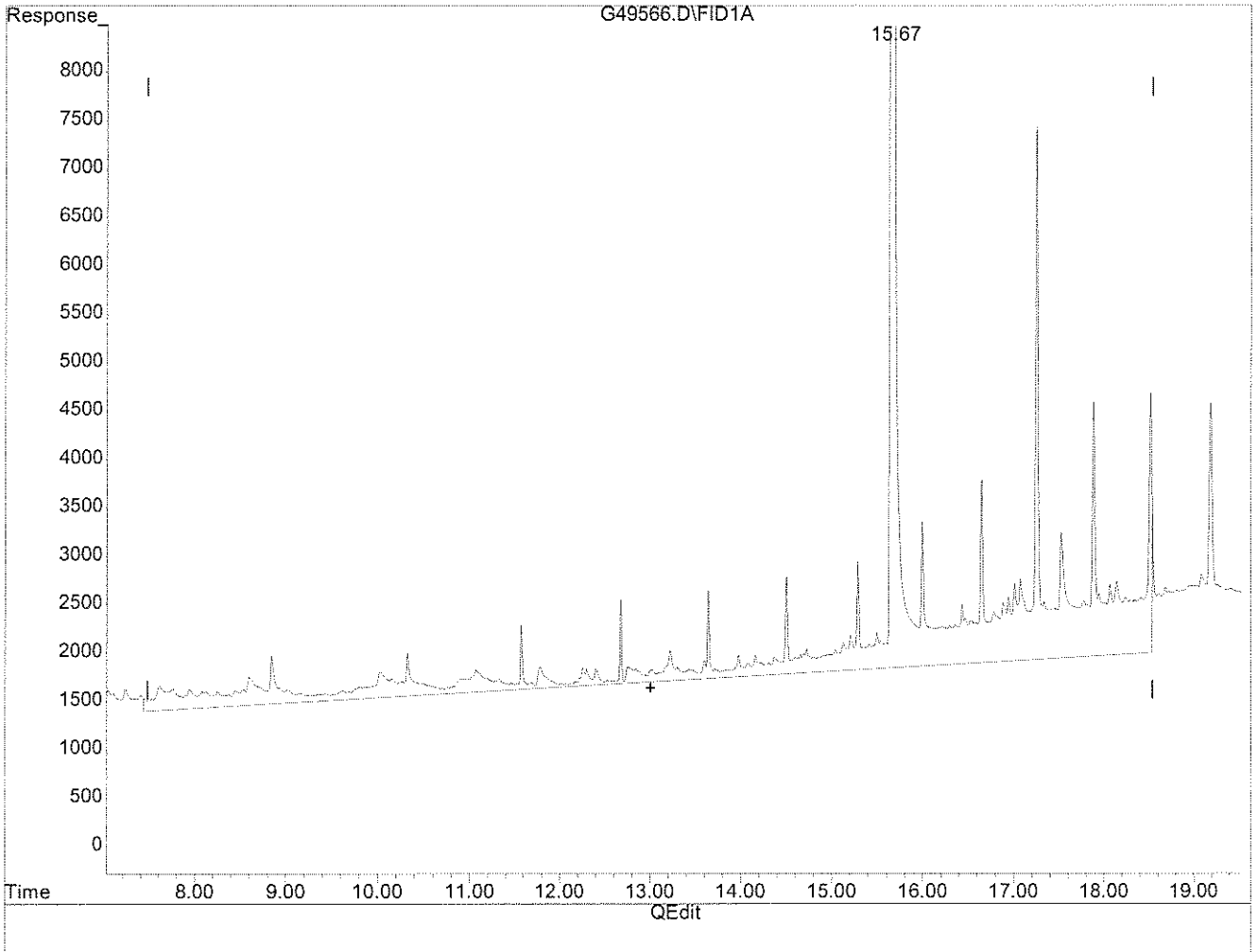
(+) = Expected Retention Time
G49566.D D040108A.M Tue Jun 03 12:02:16 2008

Quantitation Report (Qedit)

Data File : D:\TPH\053008-G\G49566.D Vial: 43
Acq On : 31 May 2008 14:08 Operator:
Sample : 61399-11 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 12:02 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration

JK 6.3.08



(2) DRO LOW (<1.0) (HM)

13.01min 0.028mg/ml m

response 1706202

JK 6.9.08

(+) = Expected Retention Time
G49566.D D040108A.M Tue Jun 03 12:02:28 2008

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June 3, 2008

SAMPLE DATA

CLIENT SAMPLE ID

Project Name:	MEFUDS LO-58
Project Number:	03886.184
Field Sample ID:	LS58DW1-0508-034

Lab Sample ID:	61399-11 RR
Matrix:	Aqueous
Percent Solid:	N/A
Dilution Factor:	1.0
Collection Date:	05/20/08
Lab Receipt Date:	05/22/08
Extraction Date:	05/23/08
Analysis Date:	06/03/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	97	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

DRO Report

Authorized signature MKendall

4125 DRO WATER REPORT

Sample Name	**61399-11 RR**
Data File Name	G49633.D
Date Acquired	6/3/2008 0:18
Misc Info	
Sample Volume (mL)	**1070**
Final Volume (mL)	**1.0**
Analyst Dilution (1:X)	**1**
Calculation Factor	934.5794
Dilution Factor	0.9

JK 6.3.08

4125 DRO ANALYTICAL RESULTS	ug/L	RL	
DRO	U	47	
m-Terphenyl	97%	60-140%	PASS ✓

RAW DATA

	Raw Inst Amount mg/mL	Reviewed & Calculated Inst Amount ug/L	Target Response	Sample Amount ug/L
M-TERPHENYL	97.38		4209326.757	
DRO LOW (<1.0)	0.0486	0.00	2597547.728	
DRO HIGH (>1.0)	0.0643	60.08	2783403.66	
DRO	0.05	0.00		0

7-900

Quantitation Report (QT Reviewed)

Data File : D:\TPH\060208-G\G49633.D Vial: 20
Acq On : 3 Jun 2008 00:18 Operator:
Sample : 61399-11 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:08 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JK 6.3.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.65	4209327	97.377 ug/ml
Spiked Amount 100.000 Range 60 - 140 Recovery = 97.38%			
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	2597548	0.049 mg/ml
3) HM DRO HIGH (>1.0)	13.01	2783404	0.064 mg/ml

ND

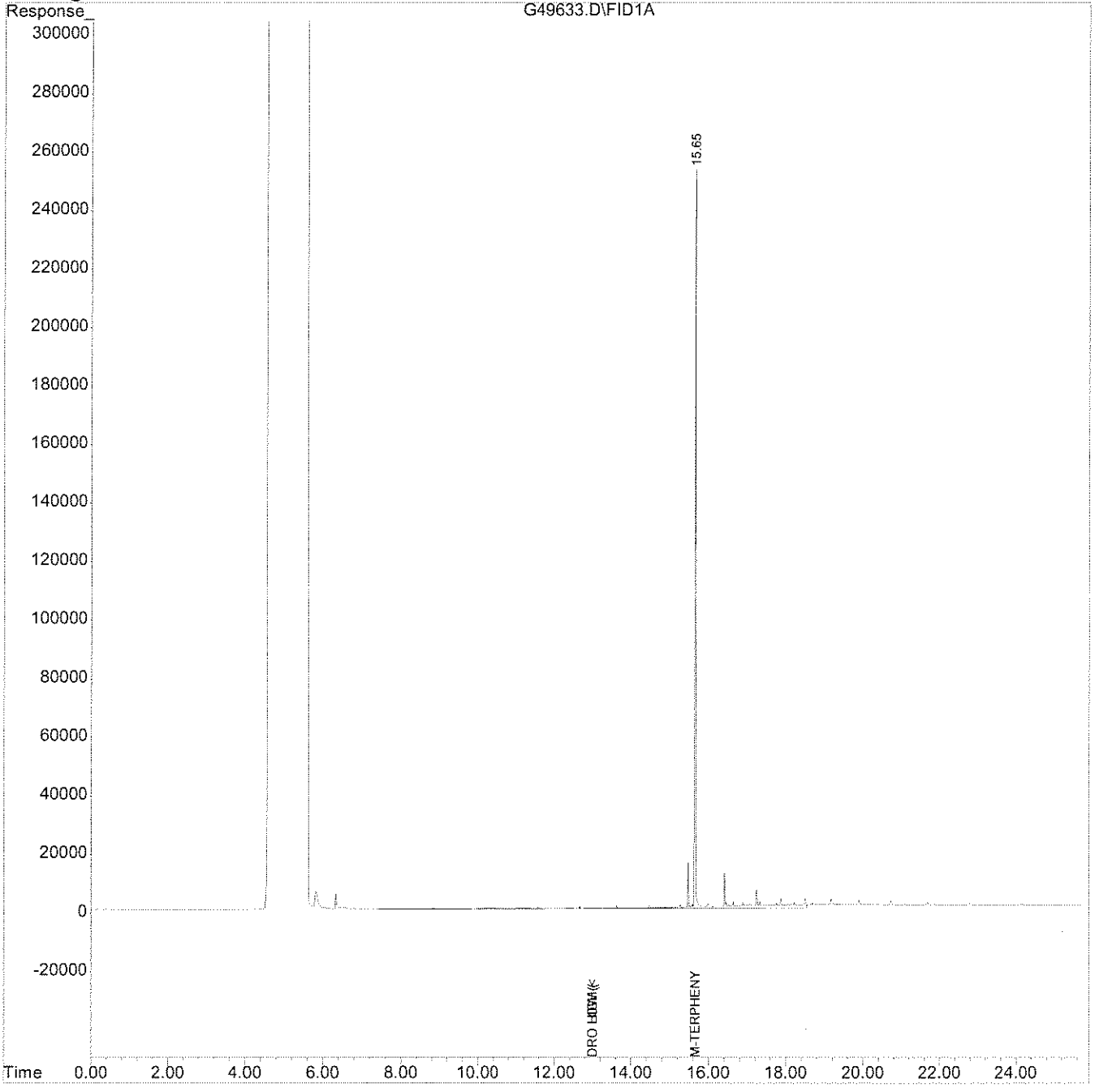
(f)=RT Delta > 1/2 Window (m)=manual int.
G49633.D D040108A.M Tue Jun 03 08:08:13 2008 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\TPH\060208-G\G49633.D Vial: 20
Acq On : 3 Jun 2008 00:18 Operator:
Sample : 61399-11 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:08 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

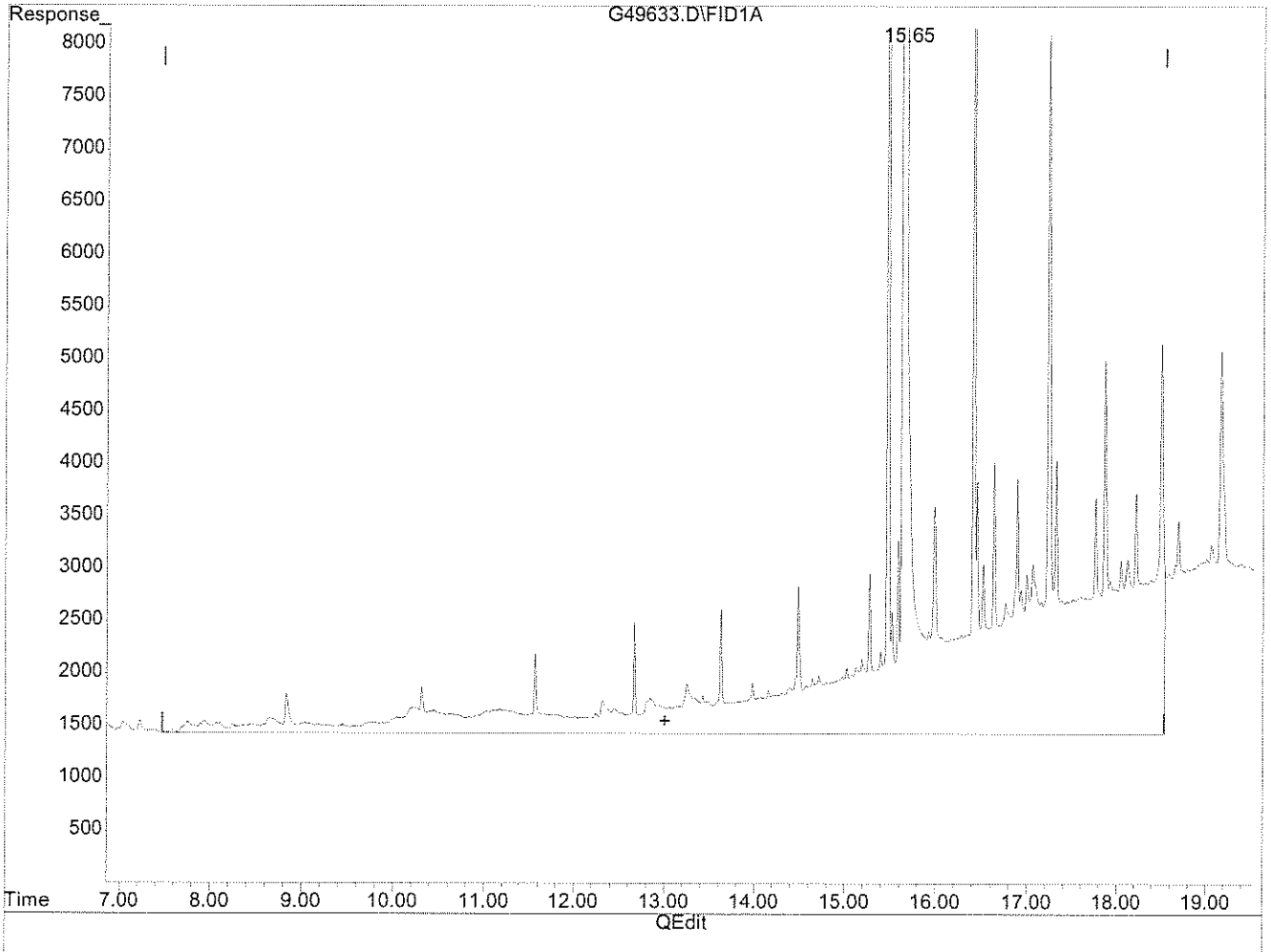


Quantitation Report (Qedit)

Data File : D:\TPH\060208-G\G49633.D Vial: 20
Acq On : 3 Jun 2008 00:18 Operator:
Sample : 61399-11 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:07 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration

VIC 6-3-09 *Baseline



(2) DRO LOW (<1.0) (HM)

13.01min 0.079mg/ml m

response 3901761

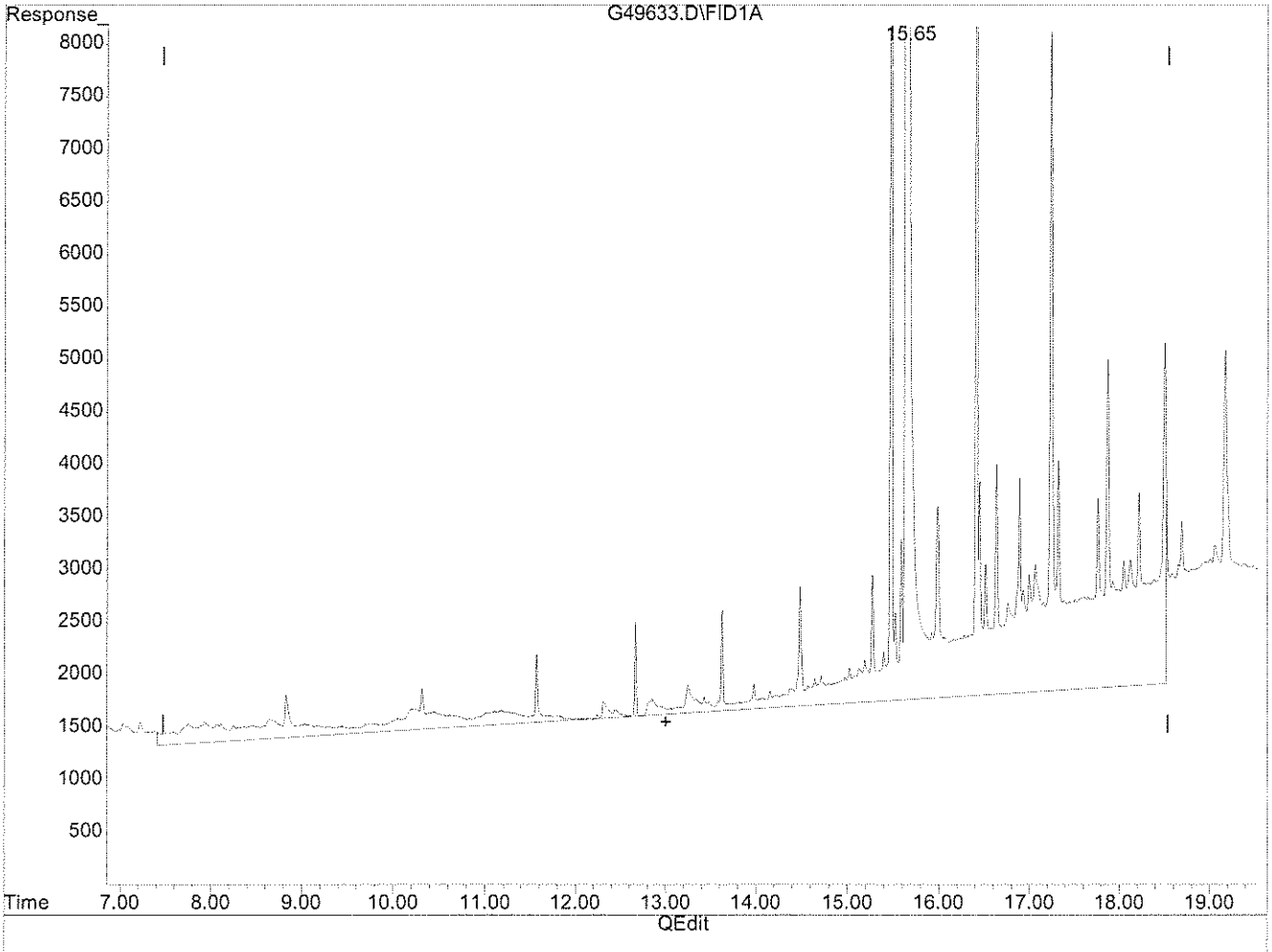
26.90

(+) = Expected Retention Time
G49633.D D040108A.M Tue Jun 03 08:07:32 2008

Quantitation Report (Qedit)

Data File : D:\TPH\060208-G\G49633.D Vial: 20
Acq On : 3 Jun 2008 00:18 Operator:
Sample : 61399-11 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:07 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008 JK 6.3.08
Response via : Multiple Level Calibration



(2) DRO LOW (<1.0) (HM)

13.01min 0.049mg/ml m

response 2597548

JG-20E

(+) = Expected Retention Time
G49633.D D040108A.M Tue Jun 03 08:07:58 2008

Analytics environmental laboratory LLC

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Mr. Ron Pentkowski
Test America Burlington
30 Community Drive Suite 11
South Burlington VT 05403

June 3, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: LS58DW1-0508-034-E

SAMPLE DATA

Lab Sample ID: 61399-12
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 05/20/08
Lab Receipt Date: 05/22/08
Extraction Date: 05/23/08
Analysis Date: 05/31/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	80	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

DRO Report

Authorized signature

4125 DRO WATER REPORT

Sample Name	**61399-12**
Data File Name	G49567.D
Date Acquired	5/31/2008 14:37
Misc Info	
Sample Volume (mL)	**1070**
Final Volume (mL)	**1.0**
Analyst Dilution (1:X)	**1**
Calculation Factor	934.5794
Dilution Factor	0.9

JJC 6.3.08

4125 DRO ANALYTICAL RESULTS	ug/L	RL	
DRO	U	47	
m-Terphenyl	80%	60-140%	PASS

RAW DATA

	Raw Inst Amount mg/mL	Reviewed & Calculated Inst Amount ug/L	Target Response	Sample Amount ug/L
M-TERPHENYL	80.43		3476898.681	
DRO LOW (<1.0)	0.0260	0.00	1628090.237	
DRO HIGH (>1.0)	0.0355	33.18	1537267.137	
DRO	0.03	0.00		0

JJC 6.9.08

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49567.D Vial: 44
Acq On : 31 May 2008 14:37 Operator:
Sample : 61399-12 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 12:03 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JK 6.3.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.66	3476899	80.433 ug/ml
Spiked Amount 100.000	Range 60 - 140	Recovery = 80.43%	
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	1628090	0.026 mg/ml
3) HM DRO HIGH (>1.0)	13.01	1537267	0.036 mg/ml

ND

6-9-08

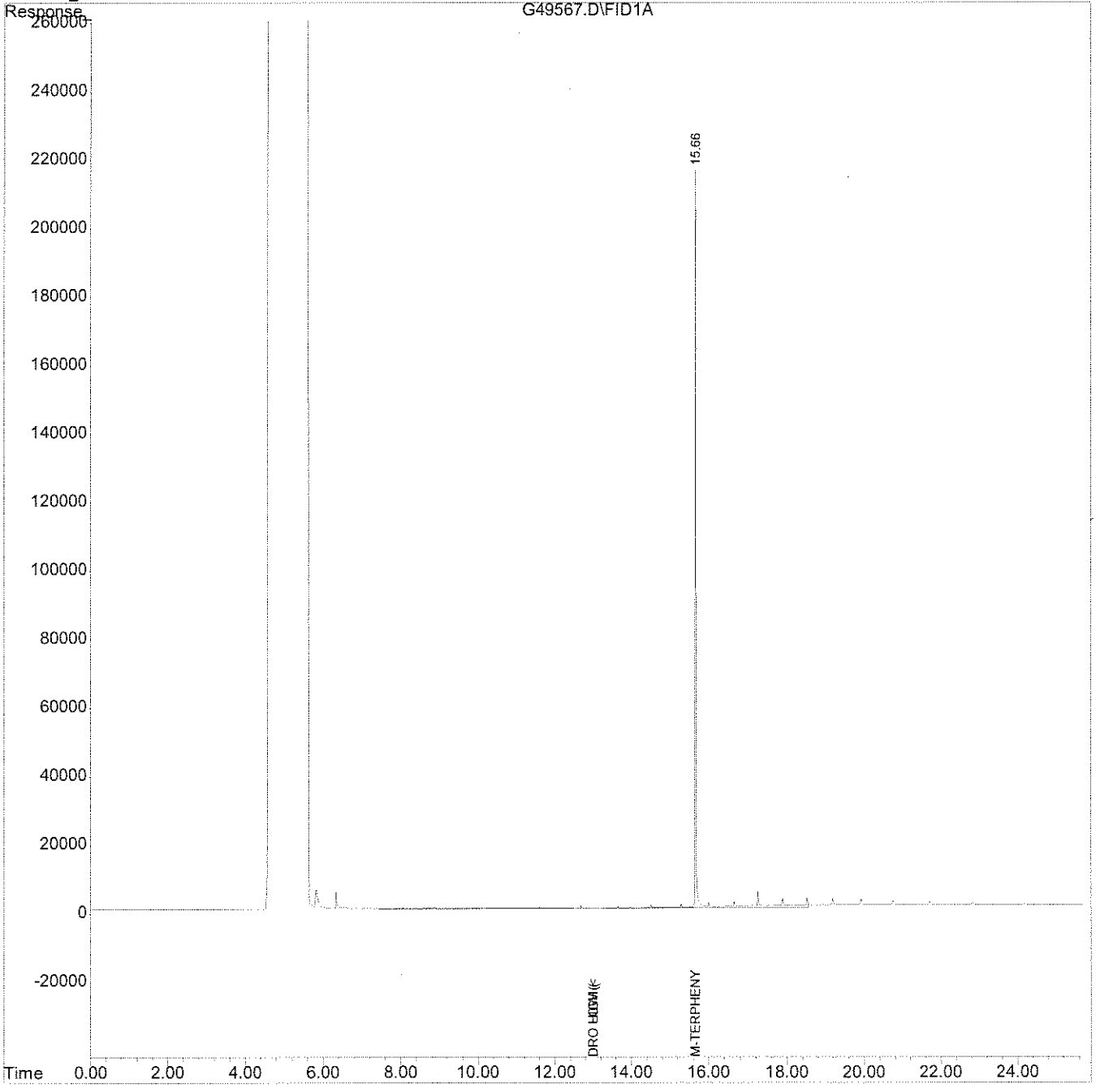
(f)=RT Delta > 1/2 Window (m)=manual int.
G49567.D D040108A.M Tue Jun 03 12:03:10 2008 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49567.D Vial: 44
Acq On : 31 May 2008 14:37 Operator:
Sample : 61399-12 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 12:03 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

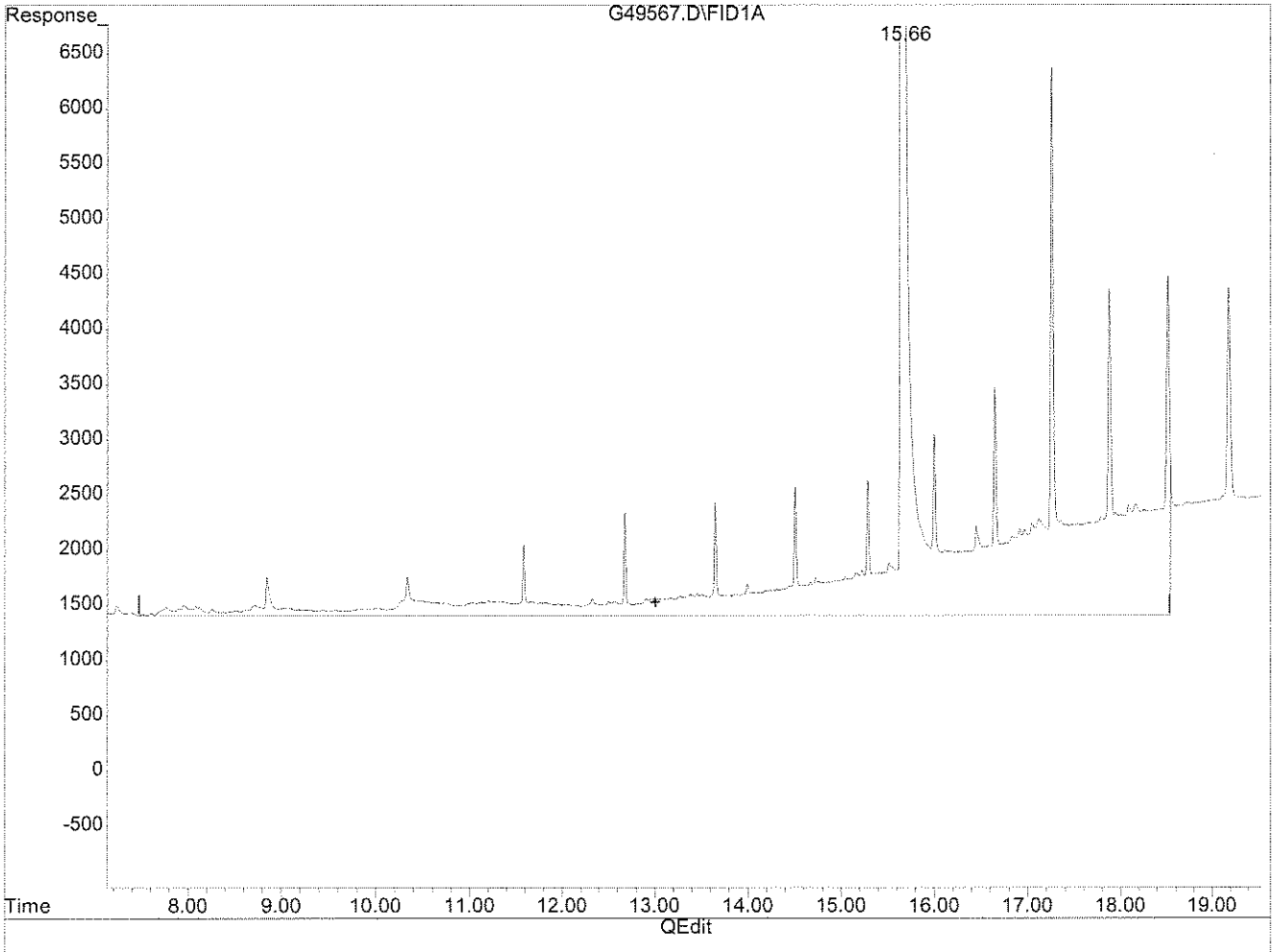


Quantitation Report (Qedit)

Data File : D:\TPH\053008-G\G49567.D Vial: 44
Acq On : 31 May 2008 14:37 Operator:
Sample : 61399-12 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 12:02 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration

JK 6.3.08 * Baseline



(2) DRO LOW (<1.0) (HM)

13.01min 0.040mg/ml m

response 2213226

6.3.08

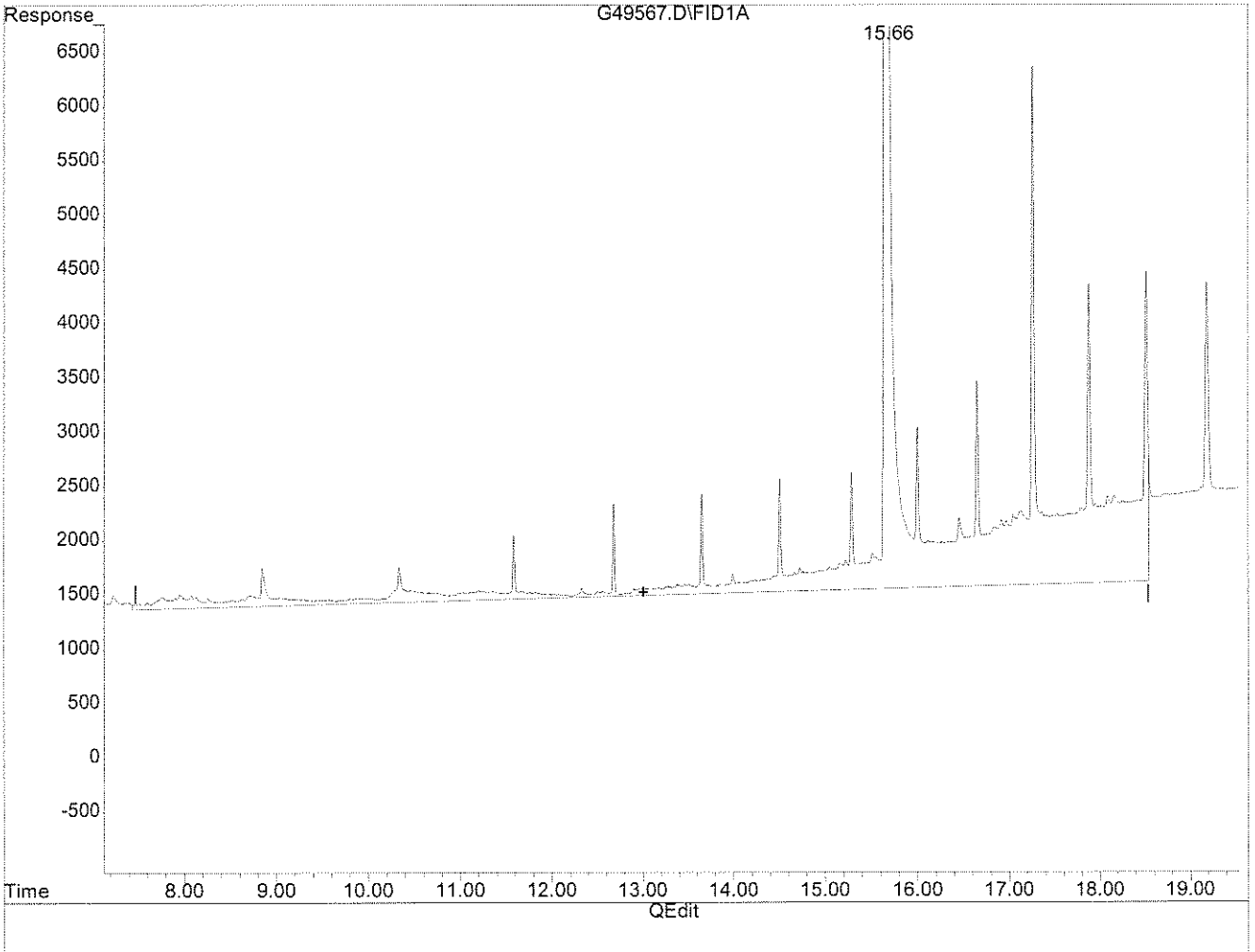
(+) = Expected Retention Time
G49567.D D040108A.M Tue Jun 03 12:02:51 2008

Quantitation Report (Qedit)

Data File : D:\TPH\053008-G\G49567.D Vial: 44
Acq On : 31 May 2008 14:37 Operator:
Sample : 61399-12 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 12:02 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration

JLC 6-3-08



(2) DRO LOW (<1.0) (HM)

13.01min 0.026mg/ml m

response 1628090

JLC 6-3-08

(+) = Expected Retention Time
G49567.D D040108A.M Tue Jun 03 12:02:59 2008

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Mr. Ron Pentkowski
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South Burlington VT 05403

June 3, 2008

SAMPLE DATA

CLIENT SAMPLE ID

Project Name:	MEFUDS LO-58
Project Number:	03886.184
Field Sample ID:	LS58DW1-0508-034-E

Lab Sample ID:	61399-12 RR
Matrix:	Aqueous
Percent Solid:	N/A
Dilution Factor:	1.0
Collection Date:	05/20/08
Lab Receipt Date:	05/22/08
Extraction Date:	05/23/08
Analysis Date:	06/03/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	82	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

DRO Report

Authorized signature

4125 DRO WATER REPORT

Sample Name	61399-12, RR
Data File Name	G49634.D
Date Acquired	6/3/2008 0:47
Misc Info	
Sample Volume (mL)	**1070**
Final Volume (mL)	**1.0**
Analyst Dilution (1:X)	**1**
Calculation Factor	934.5794
Dilution Factor	0.9

JLC 6.3.08

4125 DRO ANALYTICAL RESULTS	ug/L	RL	
DRO	U	47	
m-Terphenyl	82%	60-140%	PASS ✓

RAW DATA

	Raw Inst Amount mg/mL	Reviewed & Calculated Inst Amount ug/L	Target Response	Sample Amount ug/L
M-TERPHENYL	82.46		3564287.943	
DRO LOW (<1.0)	0.0326	0.00	1912338.021	
DRO HIGH (>1.0)	0.0460	42.97	1991041.503	
DRO	0.03	0.00		0

JG-6-08

Quantitation Report (QT Reviewed)

Data File : D:\TPH\060208-G\G49634.D Vial: 21
Acq On : 3 Jun 2008 00:47 Operator:
Sample : 61399-12, RR Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:08 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JK 6.3.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.65	3564288	82.455 ug/ml
Spiked Amount 100.000 Range 60 - 140 Recovery = 82.45%			
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	1912338	0.033 mg/ml
3) HM DRO HIGH (>1.0)	13.01	1991042	0.046 mg/ml

ND

JK 6-2-08

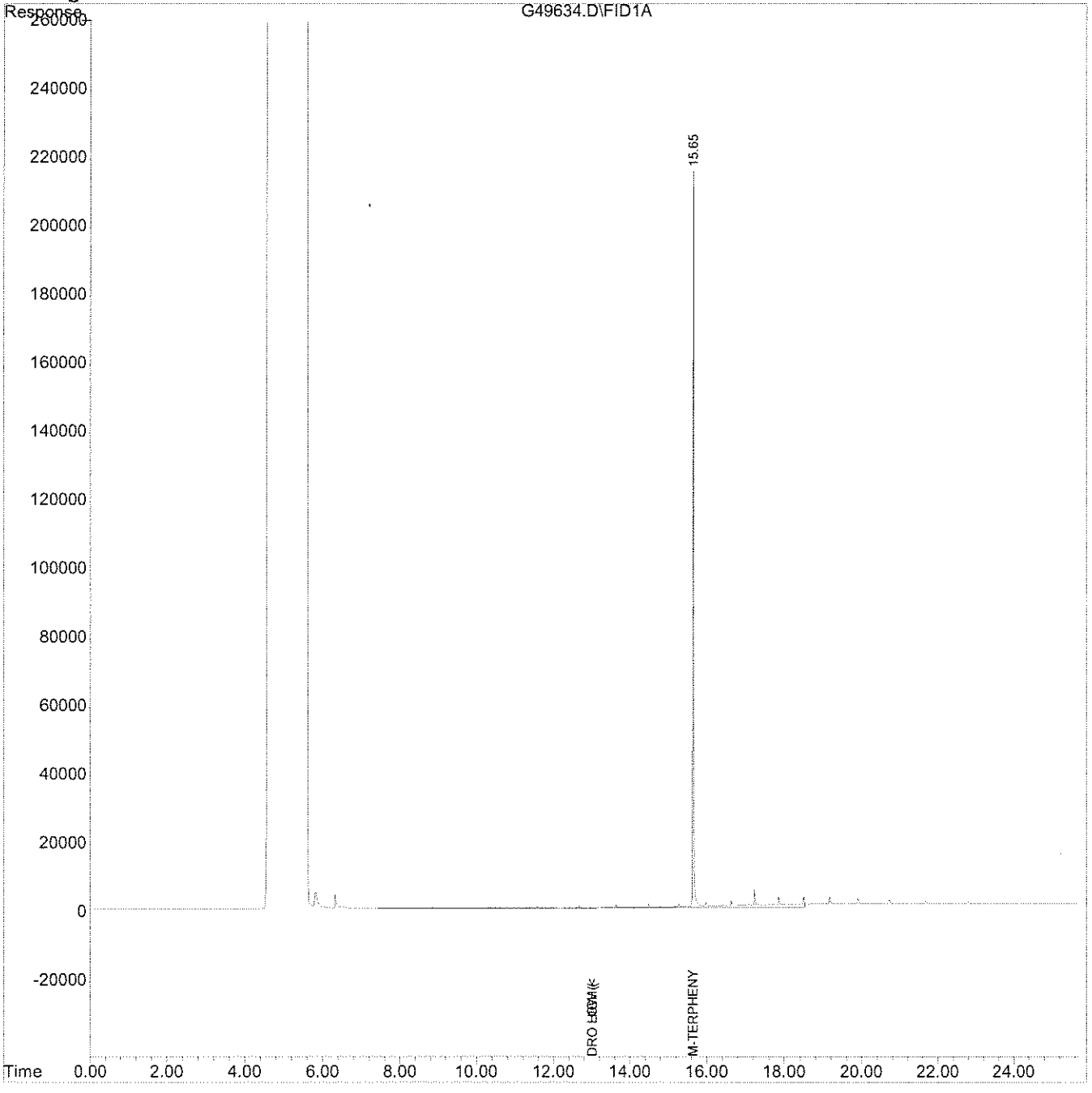
(f)=RT Delta > 1/2 Window (m)=manual int.
G49634.D D040108A.M Tue Jun 03 08:08:48 2008 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\TPH\060208-G\G49634.D Vial: 21
Acq On : 3 Jun 2008 00:47 Operator:
Sample : 61399-12, RR Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:08 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

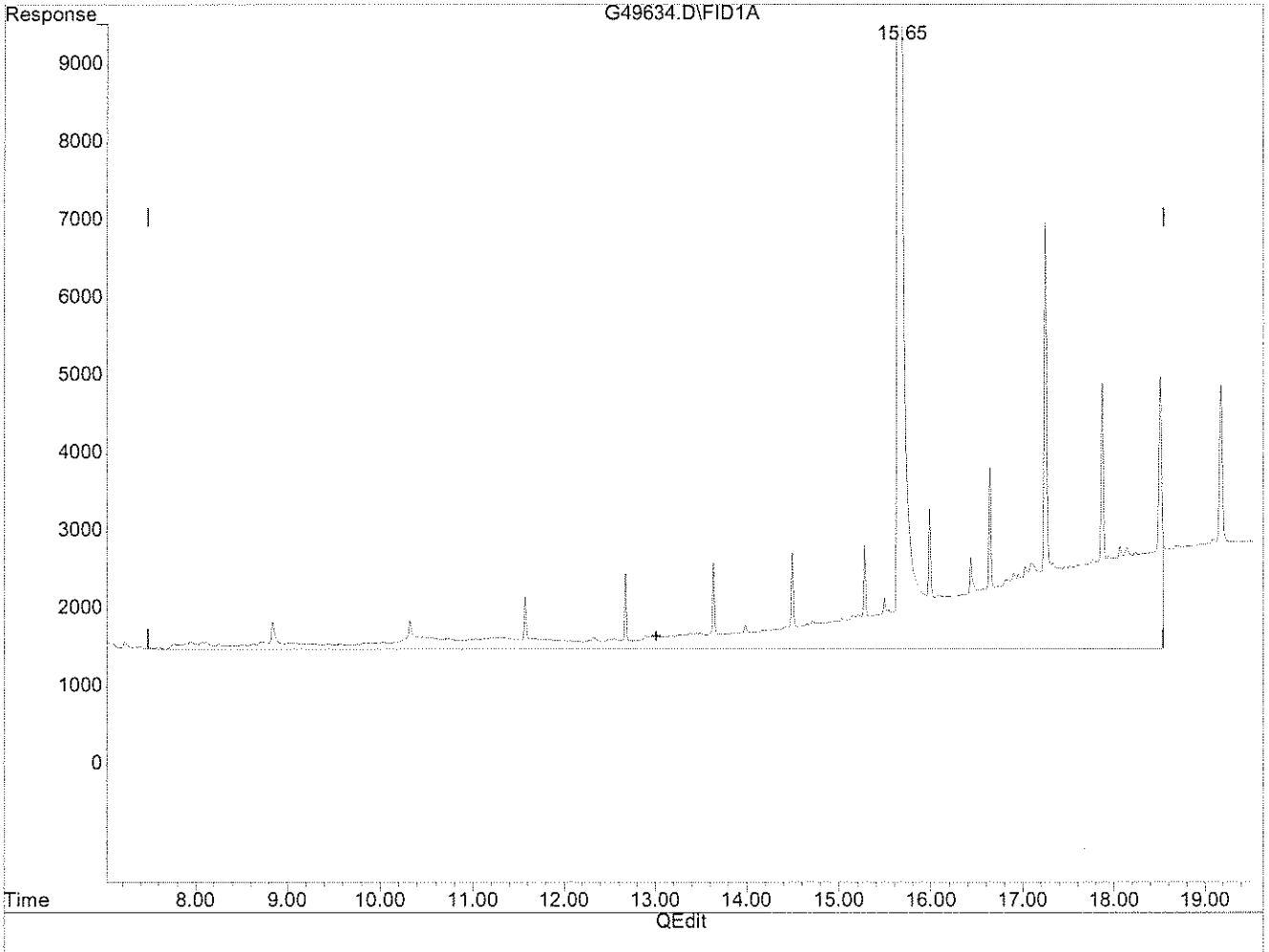


Quantitation Report (Qedit)

Data File : D:\TPH\060208-G\G49634.D Vial: 21
Acq On : 3 Jun 2008 00:47 Operator:
Sample : 61399-12, RR Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:08 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration

JLC 6.3.09 *Baseline



(2) DRO LOW (<1.0) (HM)

13.01min 0.050mg/ml m

response 2651585

JLC 6.3.09

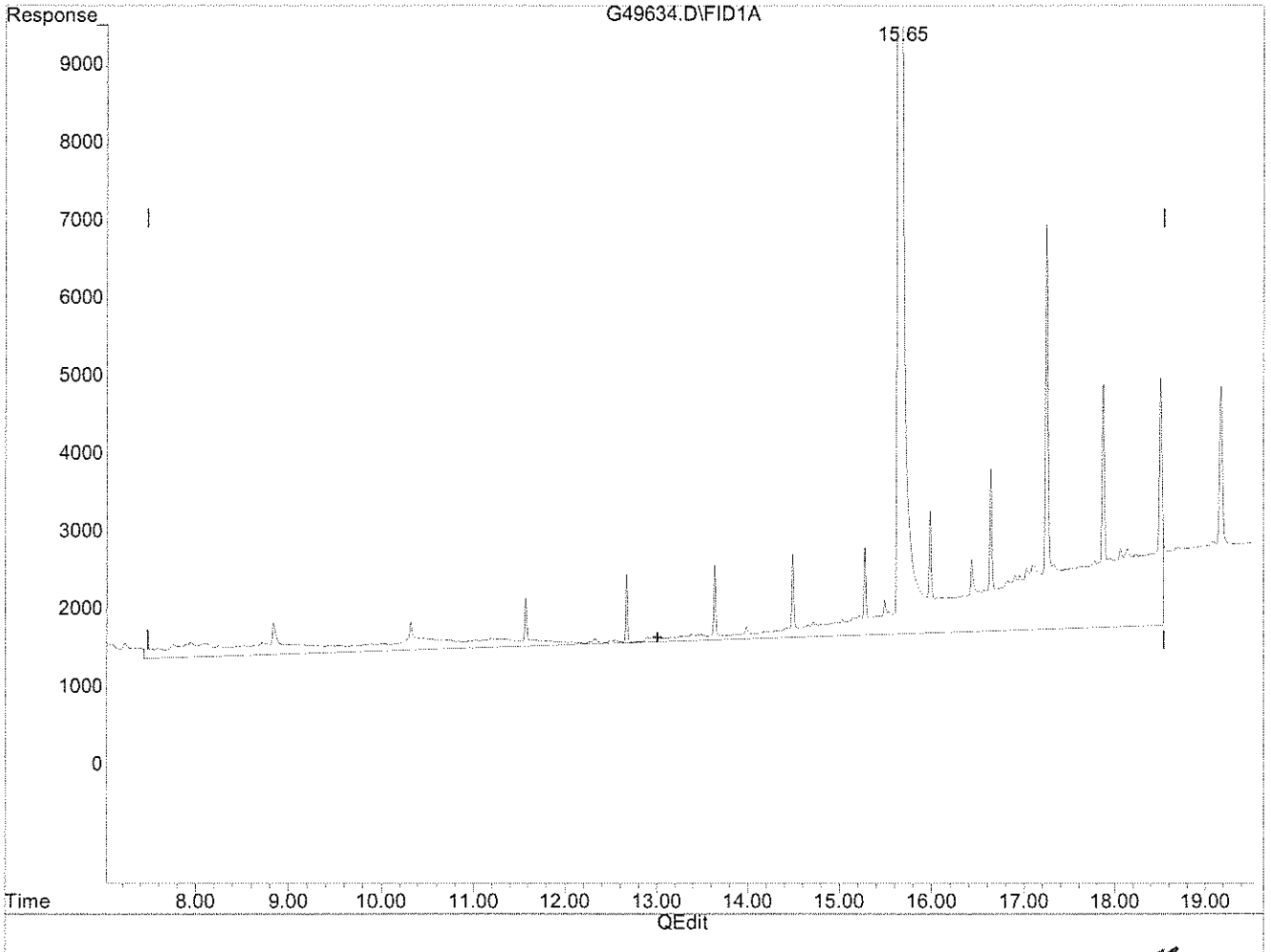
(+) = Expected Retention Time
G49634.D D040108A.M Tue Jun 03 08:08:23 2008

Quantitation Report (Qedit)

Data File : D:\TPH\060208-G\G49634.D Vial: 21
Acq On : 3 Jun 2008 00:47 Operator:
Sample : 61399-12,RR Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:08 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration

JLC
6.3.08



(2) DRO LOW (<1.0) (HM)

13.01min 0.033mg/ml m

response 1912338

(+) = Expected Retention Time
G49634.D D040108A.M Tue Jun 03 08:08:32 2008

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800-929-9906

Mr. Ron Pentkowski
Test America Burlington
30 Community Drive Suite 11
South Burlington VT 05403

June 3, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: LS58DW1-0508-029

SAMPLE DATA

Lab Sample ID: 61399-13
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 05/20/08
Lab Receipt Date: 05/22/08
Extraction Date: 05/23/08
Analysis Date: 05/31/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	97	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

DRO Report

Authorized signature

4125 DRO WATER REPORT

Sample Name	**61399-13**
Data File Name	G49568.D
Date Acquired	5/31/2008 15:07
Misc Info	
Sample Volume (mL)	**1070**
Final Volume (mL)	**1.0**
Analyst Dilution (1:X)	**1**
Calculation Factor	934.5794
Dilution Factor	0.9

JIC 6.3.08

4125 DRO ANALYTICAL RESULTS	ug/L	RL	
DRO	U	47	
m-Terphenyl	97%	60-140%	PASS ✓

RAW DATA

	Raw Inst Amount mg/mL	Reviewed & Calculated Inst Amount ug/L	Target Response	Sample Amount ug/L
M-TERPHENYL	96.86		4187062.905	
DRO LOW (<1.0)	0.0399	0.00	2226940.031	
DRO HIGH (>1.0)	0.0556	51.95	2407032.014	
DRO	0.04	0.00		0

JD 6.9.08

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49568.D Vial: 45
Acq On : 31 May 2008 15:07 Operator:
Sample : 61399-13 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 12:03 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JLC 6.3.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.66	4187063	96.862 ug/ml
Spiked Amount 100.000	Range 60 - 140	Recovery =	96.86%
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	2226940	0.040 mg/ml
3) HM DRO HIGH (>1.0)	13.01	2407032	0.056 mg/ml

ND

96.9%

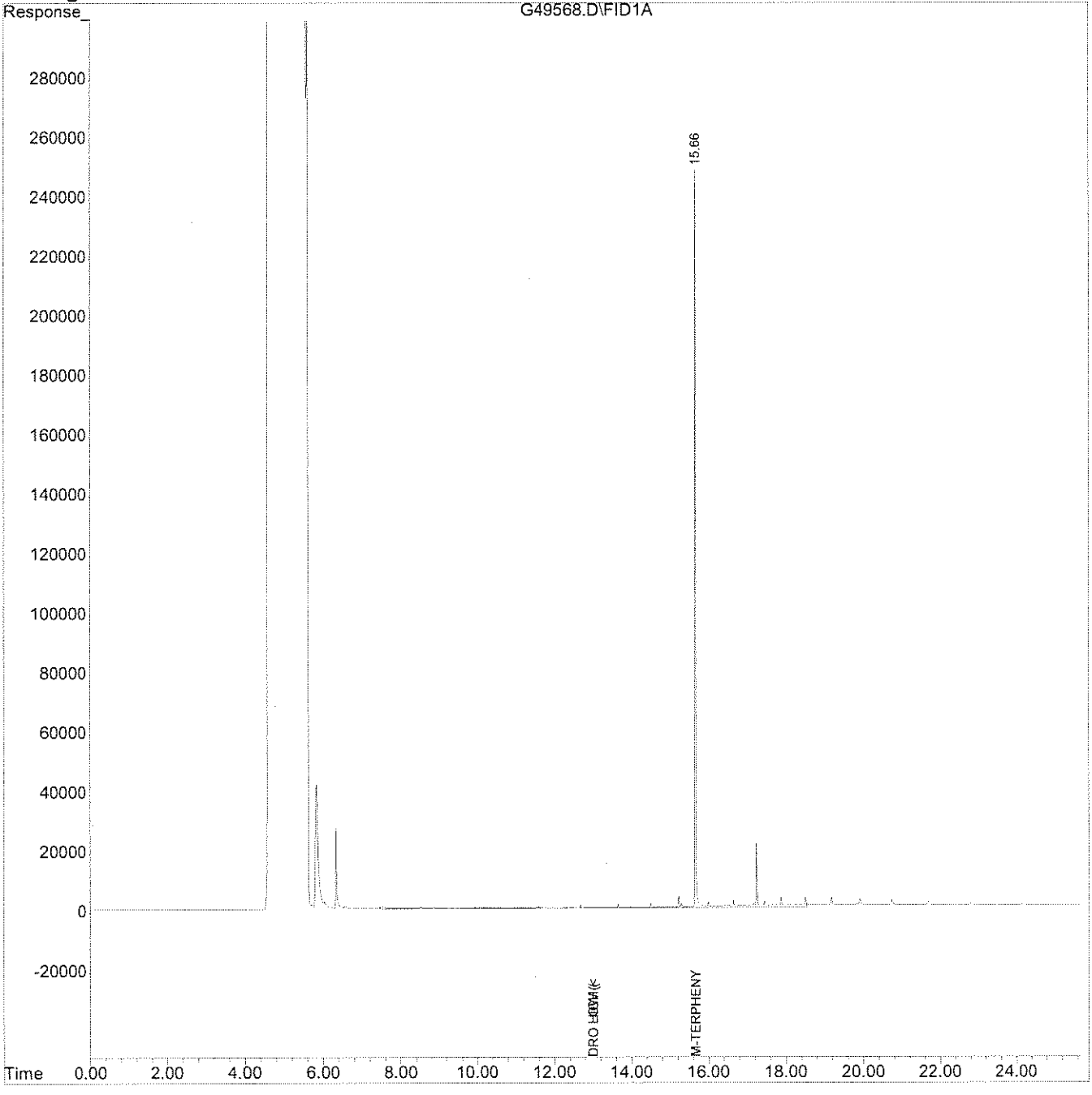
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49568.D Vial: 45
Acq On : 31 May 2008 15:07 Operator:
Sample : 61399-13 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 12:03 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

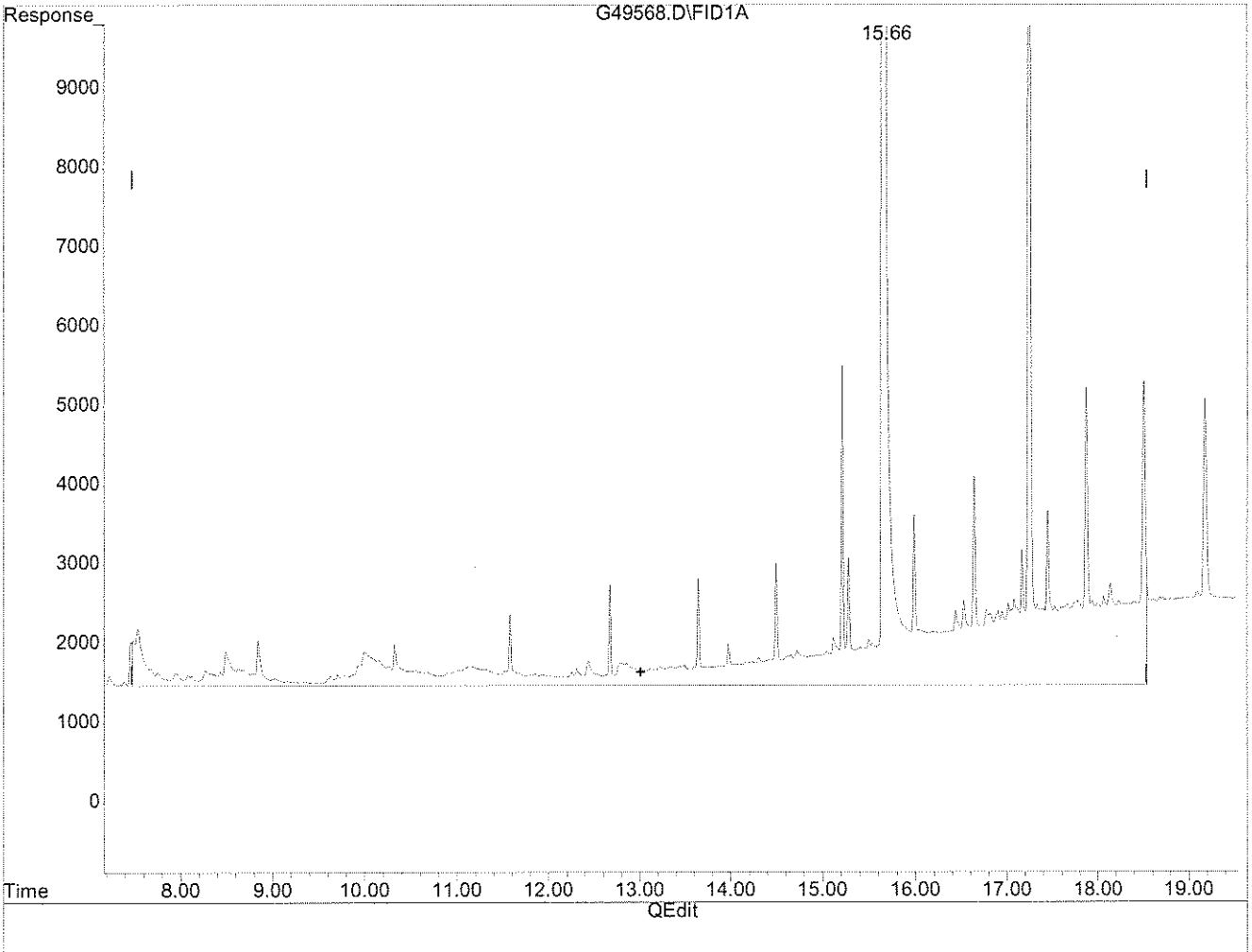


Quantitation Report (Qedit)

Data File : D:\TPH\053008-G\G49568.D Vial: 45
Acq On : 31 May 2008 15:07 Operator:
Sample : 61399-13 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 12:03 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration

JR 6.3.08 * Baseline



(2) DRO LOW (<1.0) (HM)

13.01min 0.061mg/ml m

response 3142211

JR 6.9.08

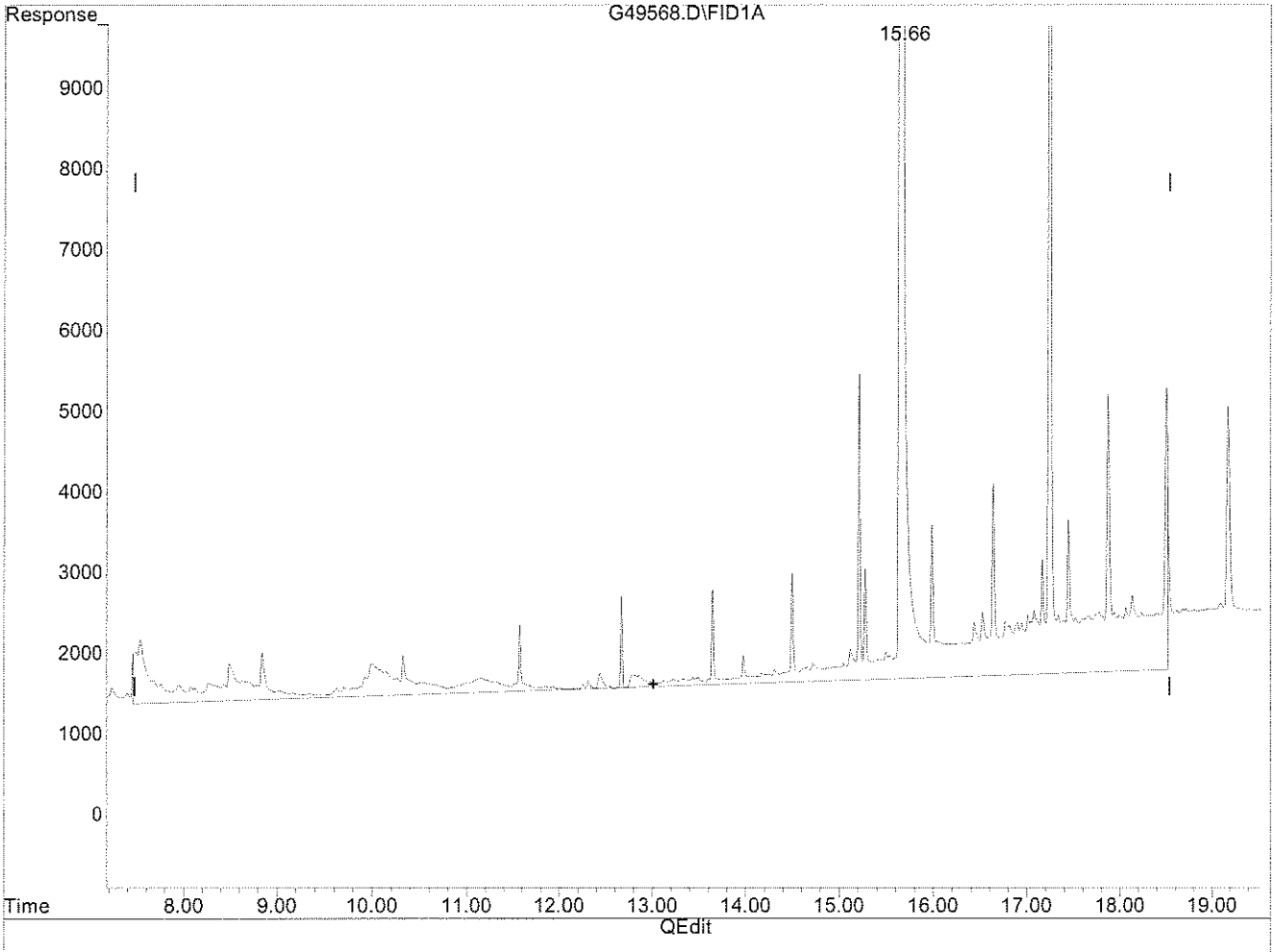
(+) = Expected Retention Time
G49568.D D040108A.M Tue Jun 03 12:03:24 2008

Quantitation Report (Qedit)

Data File : D:\TPH\053008-G\G49568.D Vial: 45
Acq On : 31 May 2008 15:07 Operator:
Sample : 61399-13 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 12:03 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration

JK 6.3.08



(2) DRO LOW (<1.0) (HM)

13.01min 0.040mg/ml m

response 2226940

JK 6-9-08

(+) = Expected Retention Time
G49568.D D040108A.M Tue Jun 03 12:03:31 2008

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South Burlington VT 05403

June 3, 2008

SAMPLE DATA

CLIENT SAMPLE ID

Project Name:	MEFUDS LO-58
Project Number:	03886.184
Field Sample ID:	LS58DW1-0508-029

Lab Sample ID:	61399-13 RR
Matrix:	Aqueous
Percent Solid:	N/A
Dilution Factor:	1.0
Collection Date:	05/20/08
Lab Receipt Date:	05/22/08
Extraction Date:	05/23/08
Analysis Date:	06/03/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	99	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

DRO Report

Authorized signature M Kimball

4125 DRO WATER REPORT

Sample Name	61399-13, RE
Data File Name	G49635.D
Date Acquired	6/3/2008 1:17
Misc Info	
Sample Volume (mL)	**1070**
Final Volume (mL)	**1.0**
Analyst Dilution (1:X)	**1**
Calculation Factor	934.5794
Dilution Factor	0.9

JK 6.3.08

4125 DRO ANALYTICAL RESULTS	ug/L	RL	
DRO	U	47	
m-Terphenyl	99%	60-140%	PASS ✓

RAW DATA

	Raw Inst Amount mg/mL	Reviewed & Calculated Inst Amount ug/L	Target Response	Sample Amount ug/L
M-TERPHENYL	99.05		4281830.967	
DRO LOW (<1.0)	0.0421	0.00	2317252.869	
DRO HIGH (>1.0)	0.0610	57.03	2642379.105	
DRO	0.04	0.00		0

JL 6.9.08

Quantitation Report (QT Reviewed)

Data File : D:\TPH\060208-G\G49635.D Vial: 22
Acq On : 3 Jun 2008 1:17 Operator:
Sample : 61399-13 RE2 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:09 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

VL 6.3.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.66	4281831	99.054 ug/mlm
Spiked Amount 100.000 Range 60 - 140 Recovery = 99.05%			
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	2317253	0.042 mg/ml
3) HM DRO HIGH (>1.0)	13.01	2642379	0.061 mg/ml

ND

6-7-08

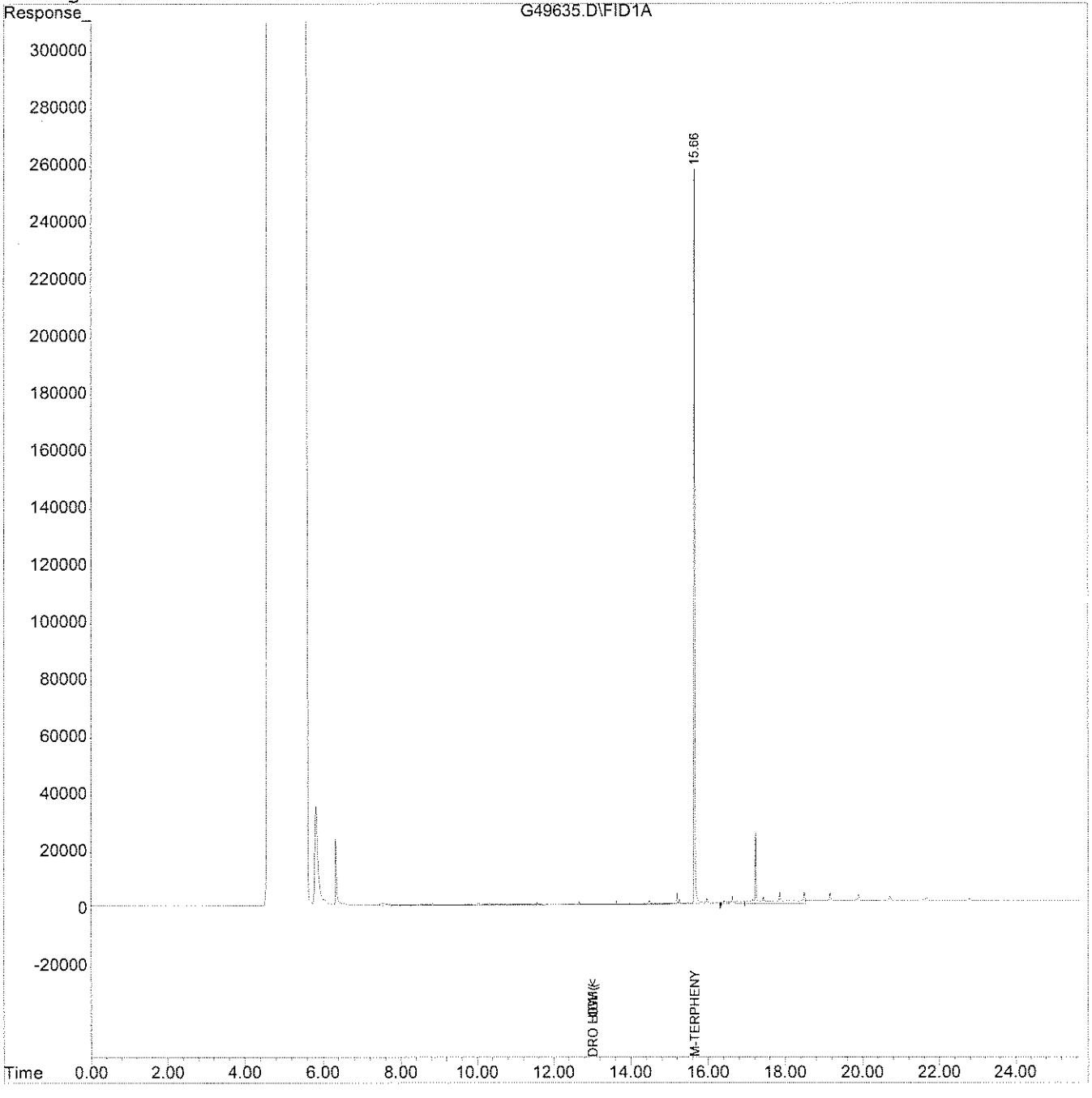
(f)=RT Delta > 1/2 Window (m)=manual int.
G49635.D D040108A.M Tue Jun 03 08:09:40 2008 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\TPH\060208-G\G49635.D Vial: 22
Acq On : 3 Jun 2008 1:17 Operator:
Sample : 61399-13 IRK Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:09 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

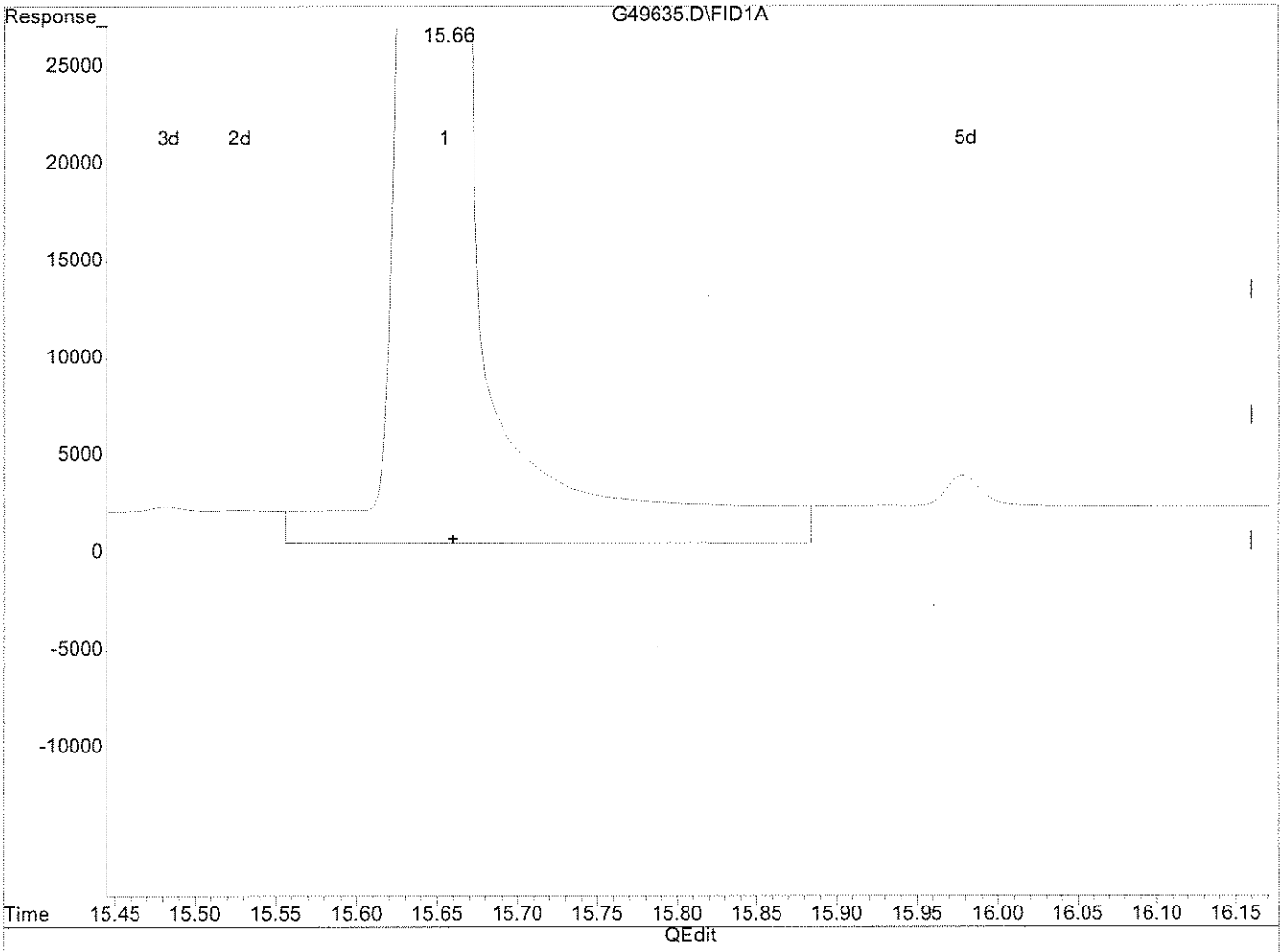


Quantitation Report (Qedit)

Data File : D:\TPH\060208-G\G49635.D Vial: 22
Acq On : 3 Jun 2008 1:17 Operator:
Sample : 61399-13 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:08 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration

JLC 6.3.08 *E.A.



(1) M-TERPHENYL (S)

15.65min 107.714ug/ml

response 4656172

96.908

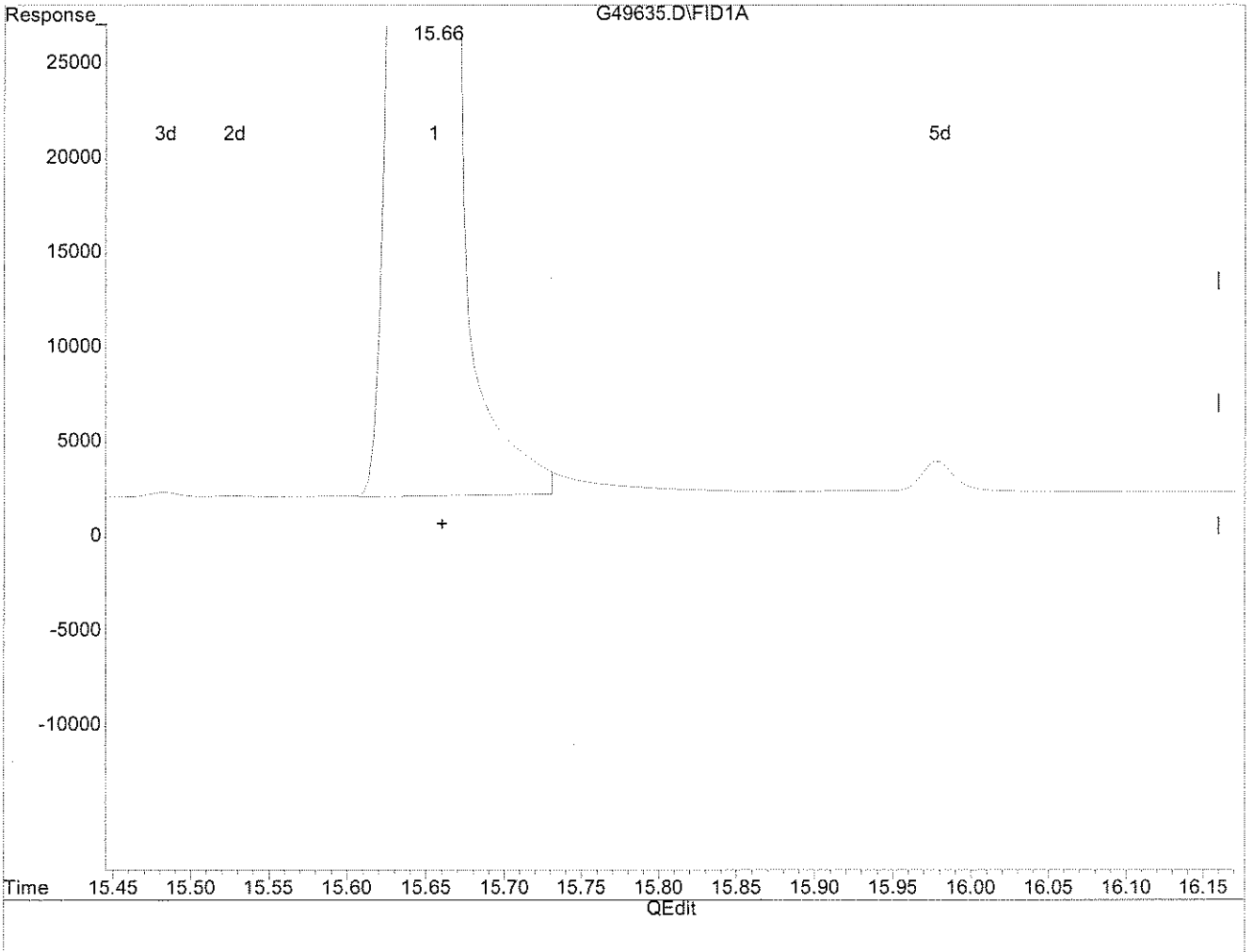
(+) = Expected Retention Time
G49635.D D040108A.M Tue Jun 03 08:08:57 2008

Quantitation Report (Qedit)

Data File : D:\TPH\060208-G\G49635.D Vial: 22
Acq On : 3 Jun 2008 1:17 Operator:
Sample : 61399-13 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:08 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration

JJC 6.3.08



(1) M-TERPHENYL (S)

15.66min 99.054ug/ml m

response 4281831

JJC 6.3.08

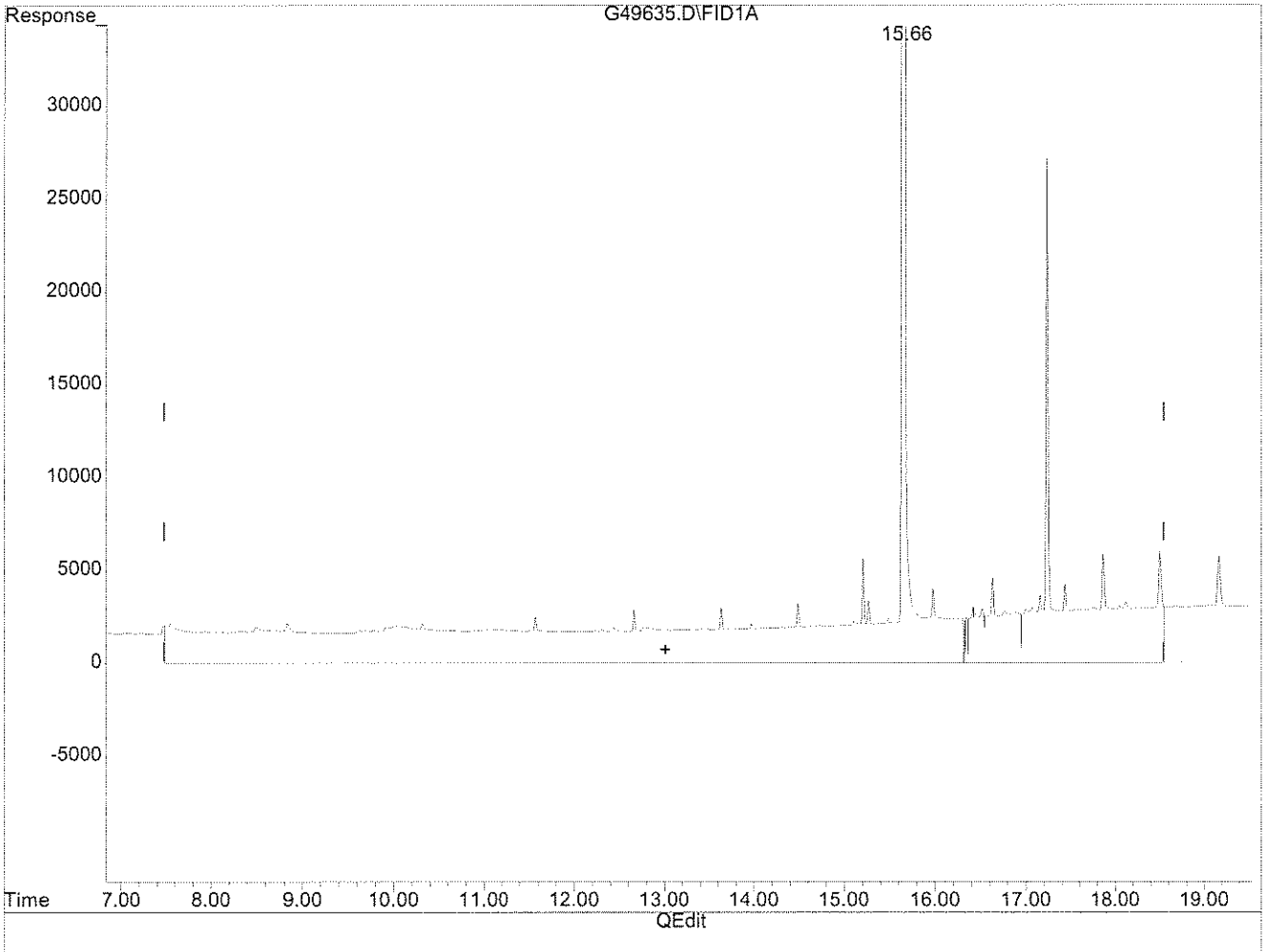
(+) = Expected Retention Time
G49635.D D040108A.M Tue Jun 03 08:09:01 2008

Quantitation Report (Qedit)

Data File : D:\TPH\060208-G\G49635.D Vial: 22
Acq On : 3 Jun 2008 1:17 Operator:
Sample : 61399-13 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:08 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration

JK 6.3.08 *Baseline



(2) DRO LOW (<1.0) (HM)

13.01min 0.317mg/ml m

response 14097488

RJG-9/8

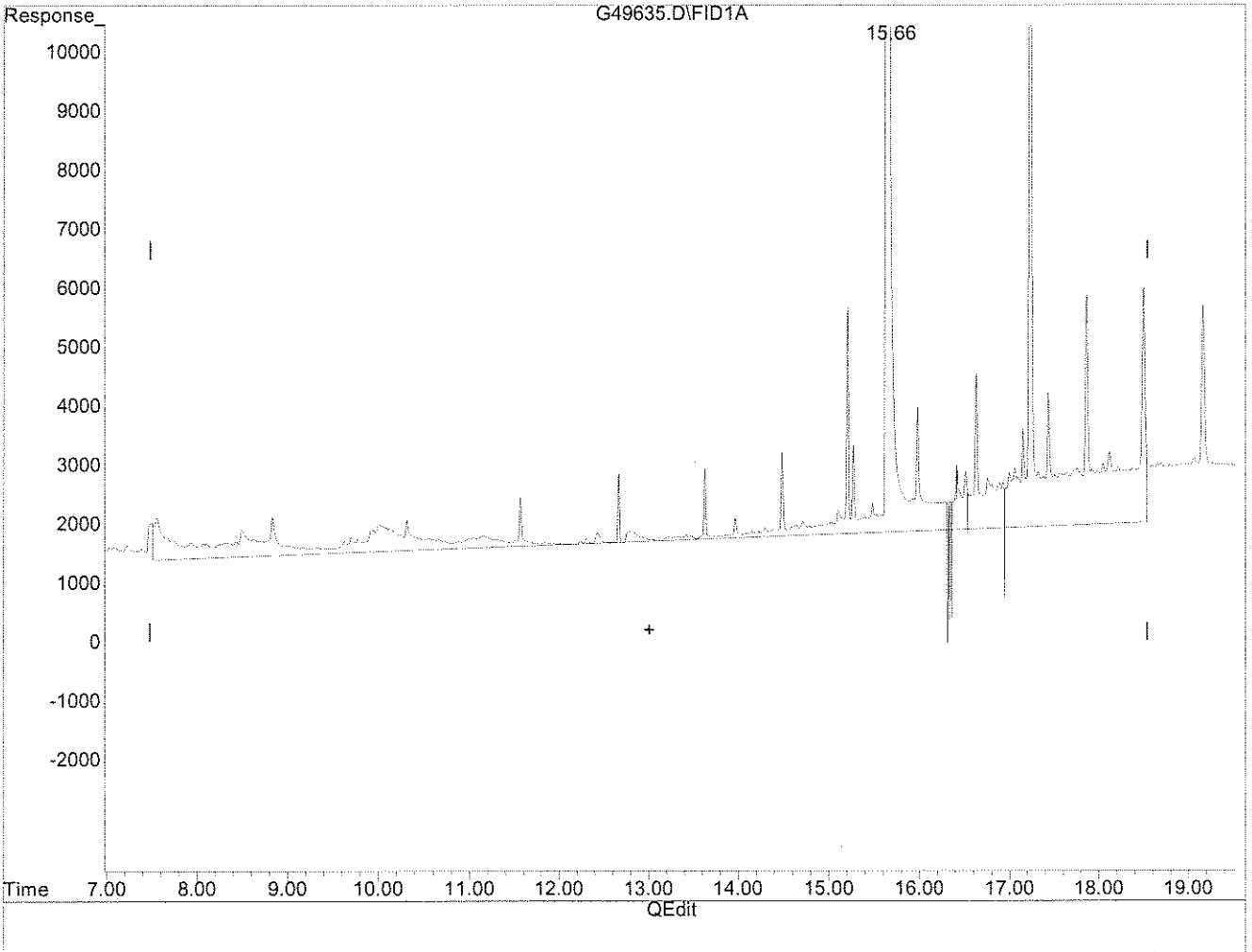
(+) = Expected Retention Time
G49635.D D040108A.M Tue Jun 03 08:09:06 2008

Quantitation Report (Qedit)

Data File : D:\TPH\060208-G\G49635.D Vial: 22
Acq On : 3 Jun 2008 1:17 Operator:
Sample : 61399-13 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:08 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration

VIC 6.3.08



(2) DRO LOW (<1.0) (HM)

13.01min 0.042mg/ml m

response 2317253

6.3.08

(+) = Expected Retention Time
G49635.D D040108A.M Tue Jun 03 08:09:26 2008

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June 3, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: RB-052008-01

SAMPLE DATA

Lab Sample ID: 61399-14
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 05/20/08
Lab Receipt Date: 05/22/08
Extraction Date: 05/23/08
Analysis Date: 05/31/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	93	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

DRO Report

Authorized signature

4125 DRO WATER REPORT

Sample Name	**61399-14**
Data File Name	G49569.D
Date Acquired	5/31/2008 15:36
Misc Info	
Sample Volume (mL)	**1050**
Final Volume (mL)	**1.0**
Analyst Dilution (1:X)	**1**
Calculation Factor	952.3810
Dilution Factor	1.0

JK 6.3.08

4125 DRO ANALYTICAL RESULTS	ug/L	RL	
DRO	U	48	
m-Terphenyl	93%	60-140%	PASS ✓

RAW DATA

	Raw Inst Amount mg/mL	Reviewed & Calculated Inst Amount ug/L	Target Response	Sample Amount ug/L
M-TERPHENYL	93.50		4041647.597	
DRO LOW (<1.0)	0.0295	0.00	1779468.403	
DRO HIGH (>1.0)	0.0411	39.14	1779468.403	
DRO	0.03	0.00		0

6-9-08

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49569.D Vial: 46
Acq On : 31 May 2008 15:36 Operator:
Sample : 61399-14 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 12:03 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JLL 6.3.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.66	4041648	93.498 ug/ml
Spiked Amount 100.000 Range 60 - 140		Recovery =	93.50%
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	1779468	0.029 mg/ml
3) HM DRO HIGH (>1.0)	13.01	1779468	0.041 mg/ml

NO

VJ 6.9.08

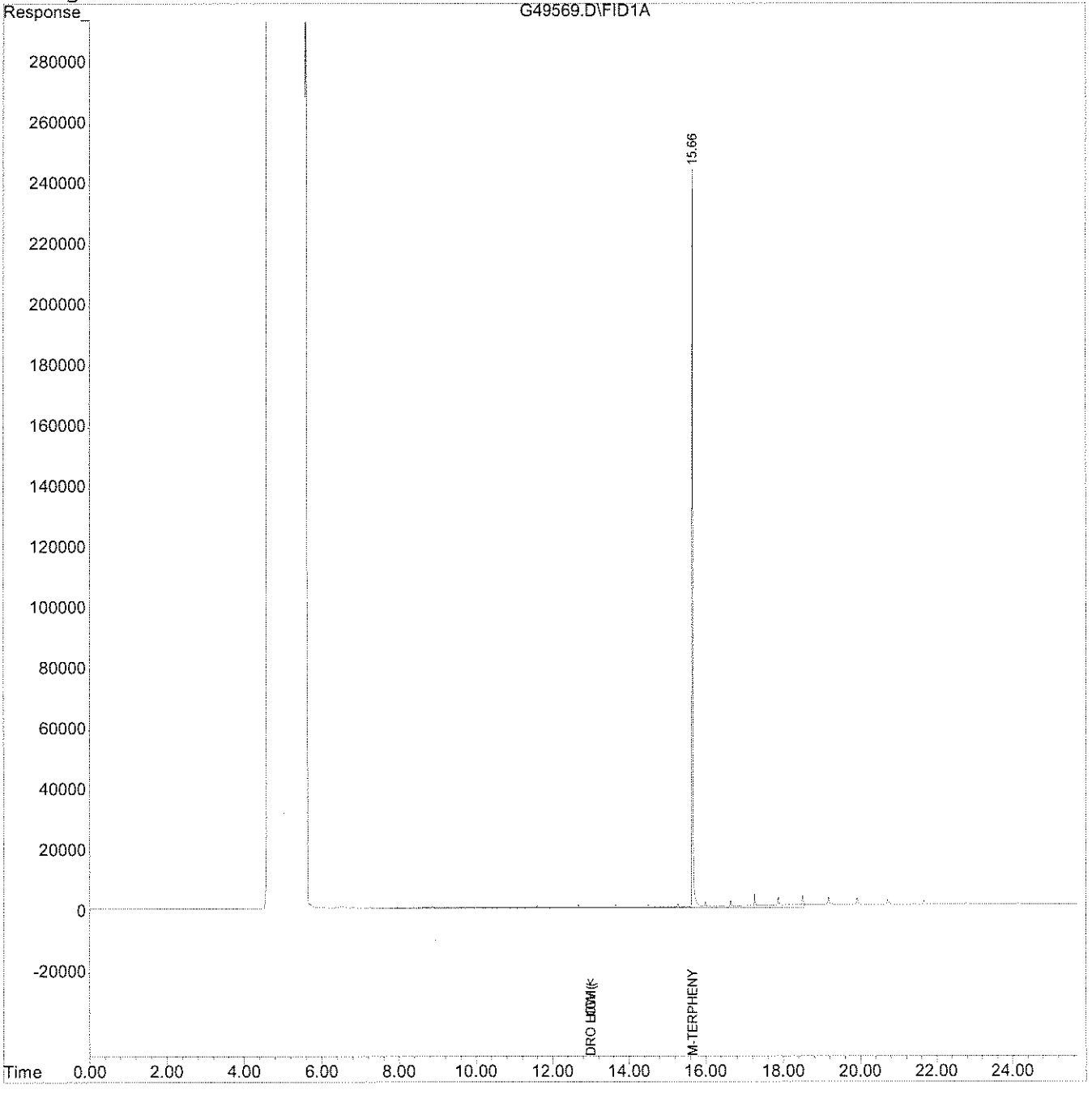
(f)=RT Delta > 1/2 Window (m)=manual int.
G49569.D D040108A.M Tue Jun 03 12:03:58 2008 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49569.D Vial: 46
Acq On : 31 May 2008 15:36 Operator:
Sample : 61399-14 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 12:03 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm



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June 3, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: RB-052008-01

SAMPLE DATA

Lab Sample ID: 61399-14 RR
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 05/20/08
Lab Receipt Date: 05/22/08
Extraction Date: 05/23/08
Analysis Date: 06/03/08

ANALYTICAL RESULTS DIESEL RANGE ORGANICS

Result	Units	Quantitation Limit
U	µg/L	50

Surrogate Standard Recovery

m-Terphenyl	99	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analyzed according to "Maine HETL Method 4.1.25, September 6, 1995".

COMMENTS:

DRO Report

Authorized signature

4125 DRO WATER REPORT

Sample Name	**61399-14, RE**
Data File Name	G49636.D
Date Acquired	6/3/2008 1:46
Misc Info	
Sample Volume (mL)	**1050**
Final Volume (mL)	**1.0**
Analyst Dilution (1:X)	**1**
Calculation Factor	952.3810
Dilution Factor	1.0

JK 6.3.08

4125 DRO ANALYTICAL RESULTS	ug/L	RL	
DRO	U	48	
m-Terphenyl	96%	60-140%	PASS ✓

RAW DATA

	Raw Inst Amount mg/mL	Reviewed & Calculated Inst Amount ug/L	Target Response	Sample Amount ug/L
M-TERPHENYL	96.43		4168582.93	
DRO LOW (<1.0)	0.0393	0.00	2197567.07	
DRO HIGH (>1.0)	0.0508	48.33	2197567.07	
DRO	0.04	0.00		0

✓ 6.9.08

Quantitation Report (QT Reviewed)

Data File : D:\TPH\060208-G\G49636.D Vial: 23
Acq On : 3 Jun 2008 1:46 Operator:
Sample : 61399-14 RR Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:09 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JK 6.3.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.65	4168583	96.435 ug/ml
Spiked Amount 100.000 Range 60 - 140 Recovery = 96.44%			
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	2197567	0.039 mg/ml
3) HM DRO HIGH (>1.0)	13.01	2197567	0.051 mg/ml

ND

JK 6-3-08

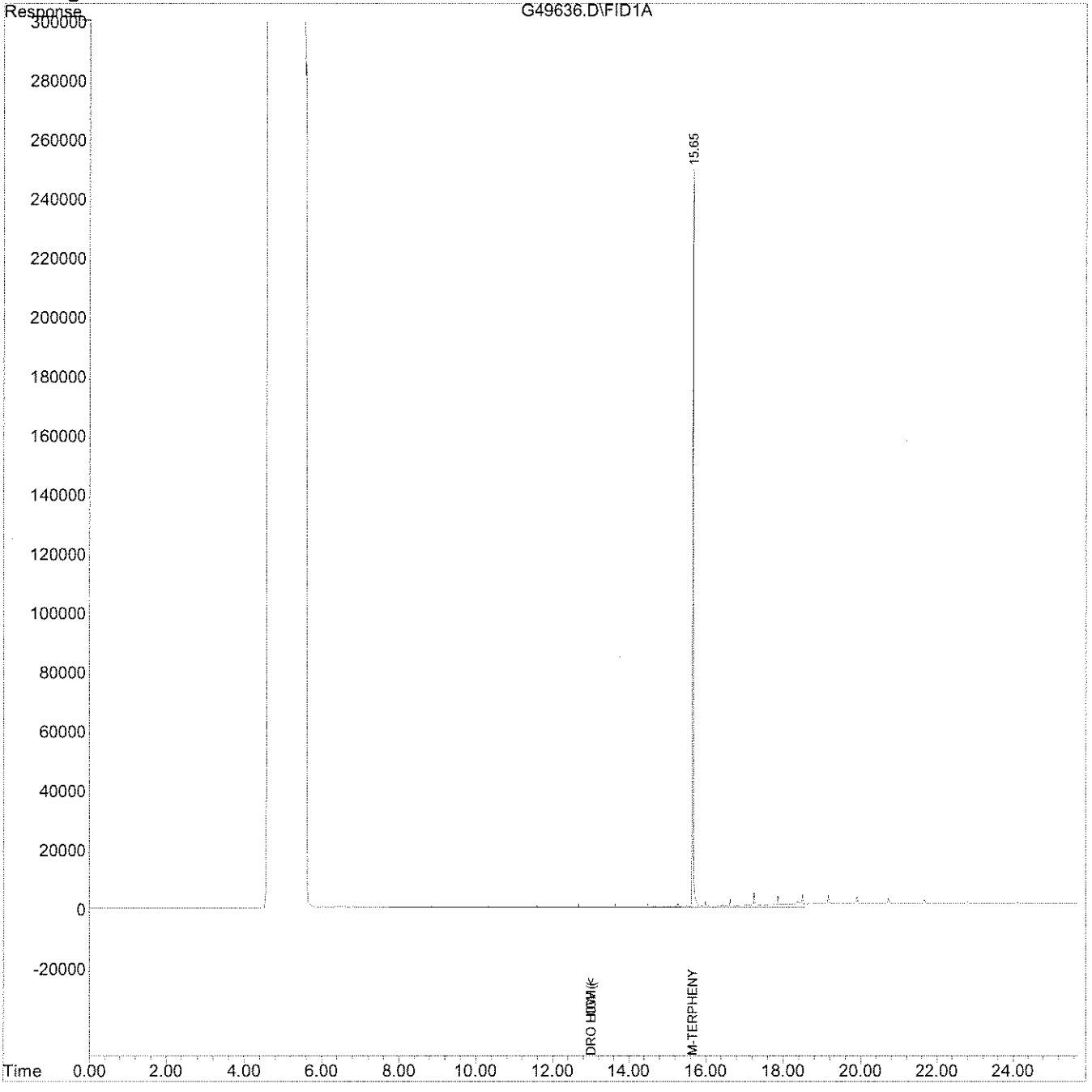
(f)=RT Delta > 1/2 Window (m)=manual int.
G49636.D D040108A.M Tue Jun 03 08:09:55 2008 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\TPH\060208-G\G49636.D Vial: 23
Acq On : 3 Jun 2008 1:46 Operator:
Sample : 61399-14 ,RE Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:09 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm



DRO
QC FORMS

DIESEL RANGE ORGANICS AQUEOUS
SYSTEM MONITORING COMPOUNDS
SUMMARY

Instrument ID: G SDG: 61399
GC Column: RTX-5ms
Column ID: 0.25 mm

SAMPLE ID	SMC 1 (%)	#
B05238DW	86	
L05238DW	91	
LD05238DW	87	
L05238DW#2	84	
LD05238DW#2	88	

	Lower Limit	Upper Limit
SMC #1 = m-terphenyl	60	140

Column to be used to flag recovery values outside of QC limits
* Values outside QC limits
D System Monitoring Compound diluted out

DRO FORM 2

DIESEL RANGE ORGANICS AQUEOUS
SYSTEM MONITORING COMPOUNDS
SUMMARY

Instrument ID: G SDG: 61399
GC Column: RTX-5ms
Column ID: 0.25 mm

SAMPLE ID	SMC 1 (%)	#
B05238DW, RR	93	
L05238DW, RR	92	
LD05238DW, RR	86	
61399-1	84	

	Lower Limit	Upper Limit
SMC #1 = m-terphenyl	60	140

Column to be used to flag recovery values outside of QC limits
* Values outside QC limits
D System Monitoring Compound diluted out

DRO FORM 2

DIESEL RANGE ORGANICS AQUEOUS
SYSTEM MONITORING COMPOUNDS
SUMMARY

Instrument ID: G SDG: 61399
GC Column: RTX-5ms
Column ID: 0.25 mm

SAMPLE ID	SMC 1 (%)	#
B05238DW, RR1	88	
61399-2	88	
61399-3	92	
61399-4	81	
61399-5	85	
61399-6	94	
61399-7	89	
61399-8	97	
61399-9	97	
61399-10	99	
61399-11	96	
61399-12	80	
61399-13	97	
61399-14	93	
61399-2, MS	98	
61399-2, MSD	183	*

	Lower Limit	Upper Limit
SMC #1 = m-terphenyl	60	140

\# Column to be used to flag recovery values outside of QC limits
* Values outside QC limits
D System Monitoring Compound diluted out

DRO FORM 2

DIESEL RANGE ORGANICS AQUEOUS
SYSTEM MONITORING COMPOUNDS
SUMMARY

Instrument ID: G SDG: 61399
GC Column: RTX-5ms
Column ID: 0.25 mm

SAMPLE ID	SMC 1 (%)	#
B05238DW, RR1	88	
61399-2, RR	88	
61399-3, RR	92	
61399-4, RR	81	
61399-5, RR	85	
61399-6, RR	94	
61399-7, RR	89	
61399-8, RR	97	
61399-9, RR	97	
61399-10, RR	99	
61399-11, RR	96	
61399-12, RR	80	
61399-13, RR	97	
61399-14, RR	93	
61399-2, MS, RR	98	
61399-2, MSD, RR	183	*

	Lower Limit	Upper Limit
SMC #1 = m-terphenyl	60	140

Column to be used to flag recovery values outside of QC limits
* Values outside QC limits
D System Monitoring Compound diluted out

DRO FORM 2

DIESEL RANGE ORGANICS AQUEOUS
LABORATORY CONTROL/DUPLICATE
PERCENT RECOVERY

Instrument ID: G
GC Column: RTX-5ms
Column ID: 0.25 mm

SDG: 61399
Non-spiked sample: B05238DW
Spike: L05238DW
Spike duplicate: LD05238DW

COMPOUND	LCS SPIKE ADDED (ug/L)	LCSD SPIKE ADDED (ug/L)	LOWER LIMIT	UPPER LIMIT	RPD LIMIT	NON-SPIKE RESULT (ug/L)	SPIKE RESULT (ug/L)	SPIKE % REC	#	SPIKE DUP RESULT (ug/L)	SPIKE DUP % REC	#	RPD	#
DRO LOW (<1.0)	1000	1000	60	140	20	0	876	88		854	85		2	
DRO HIGH (>1.0)	1000	1000	60	140	20	0	878	88		857	86		2	

Column to be used to flag recovery and RPD values outside of QC limits
* Values outside QC limits
Spike added values have been volume adjusted.

Non-spike result of "0" used in place of "U" to allow calculation of spike recovery.

Comments: _____

_____

DRO FORM 3

Quantitation Report (QT Reviewed)

Data File : D:\TPH\052908-G\G49497Q.D
Acq On : 29 May 2008 15:59
Sample : L05238DW
Misc :
IntFile : AUTOINT1.E
Quant Time: May 30 8:03 2008 Quant Results File: D040108A.RES

Vial: 10
Operator:
Inst : INST G
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

6-2-08

VR 5-30-08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.68	3923163	90.757 ug/mlm
Spiked Amount 100.000	Range 60 - 140	Recovery =	90.76% 91
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	38030542	0.876 mg/ml
3) HM DRO HIGH (>1.0)	13.01	38030542	0.878 mg/ml

(f)=RT Delta > 1/2 Window (m)=manual int.

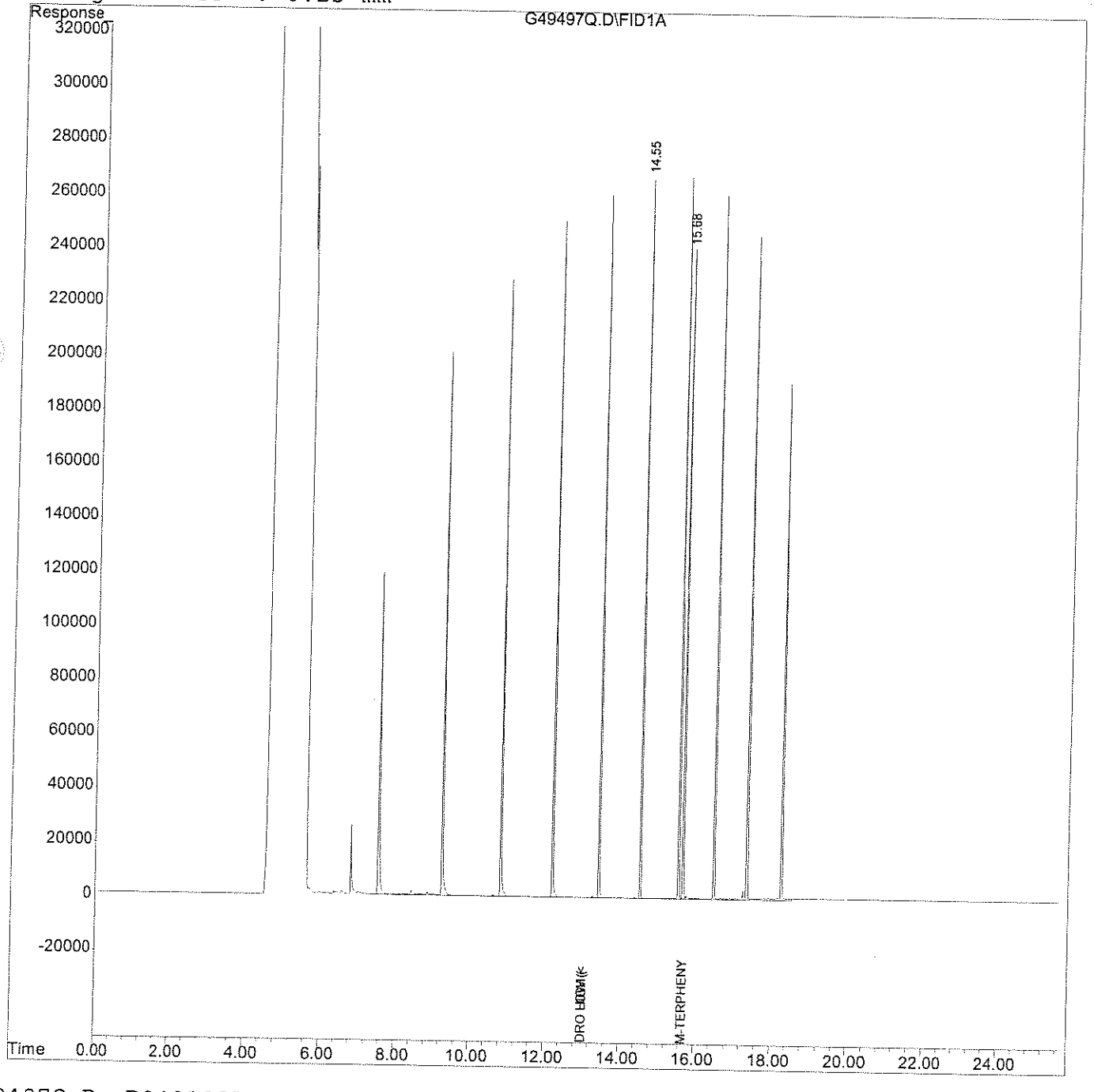
Quantitation Report (QT Reviewed)

Data File : D:\TPH\052908-G\G49497Q.D
Acq On : 29 May 2008 15:59
Sample : L05238DW
Misc :
IntFile : AUTOINT1.E
Quant Time: May 30 8:03 2008 Quant Results File: D040108A.RES

Vial: 10
Operator:
Inst : INST G
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm



Quantitation Report (Qedit)

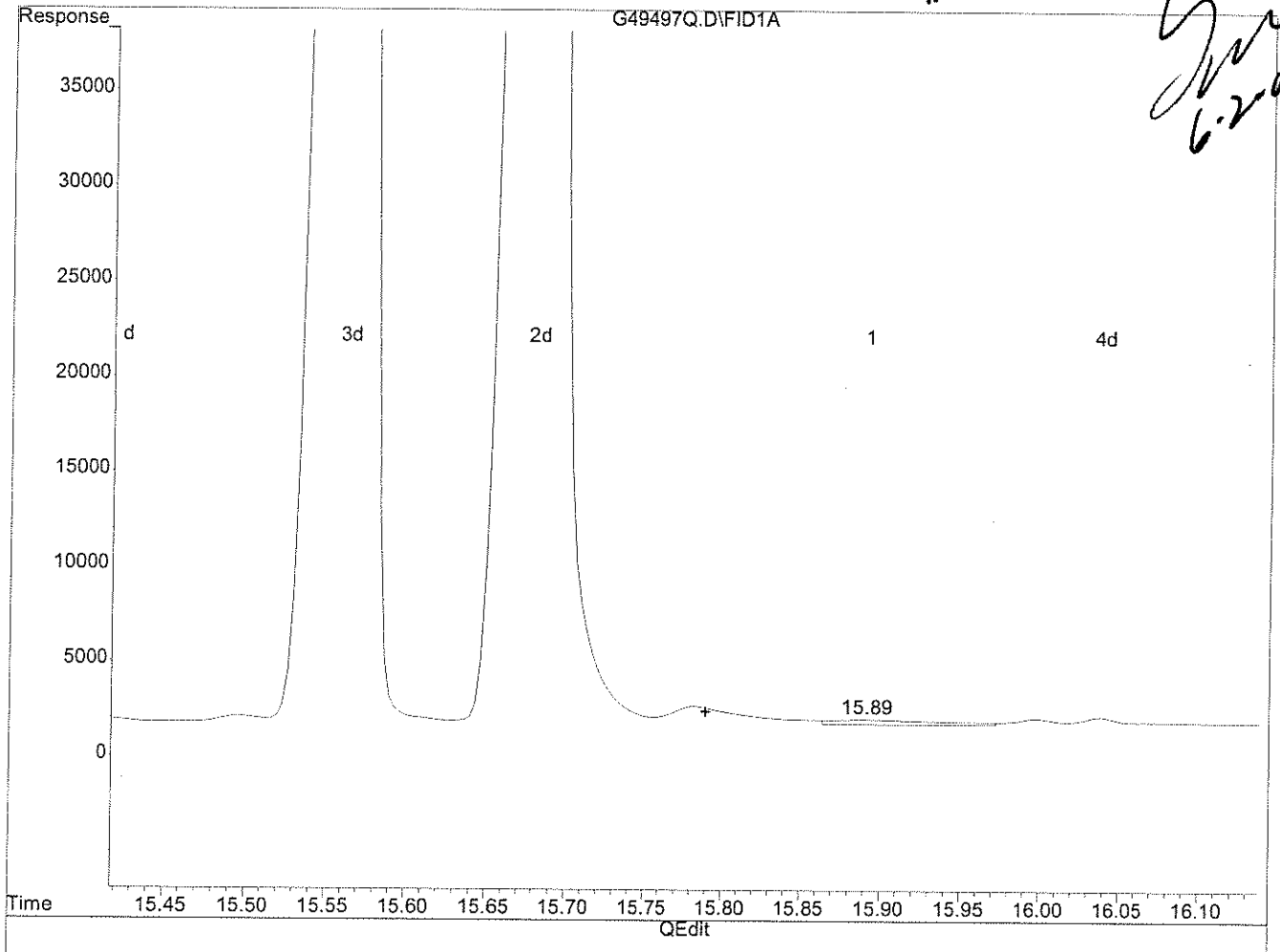
Data File : D:\TPH\052908-G\G49497Q.D
Acq On : 29 May 2008 15:59
Sample : L05238DW
Misc :
IntFile : AUTOINT1.E
Quant Time: May 30 8:03 2008 Quant Results File: D040108A.RES

Vial: 10
Operator:
Inst : INST G
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Multiple Level Calibration

JW 5-30-08 *M.P.

6-2-08



(1) M-TERPHENYL (S)

15.89min 0.272ug/ml

response 11766

(+) = Expected Retention Time

G49497Q.D D040108A.M Fri May 30 08:03:07 2008

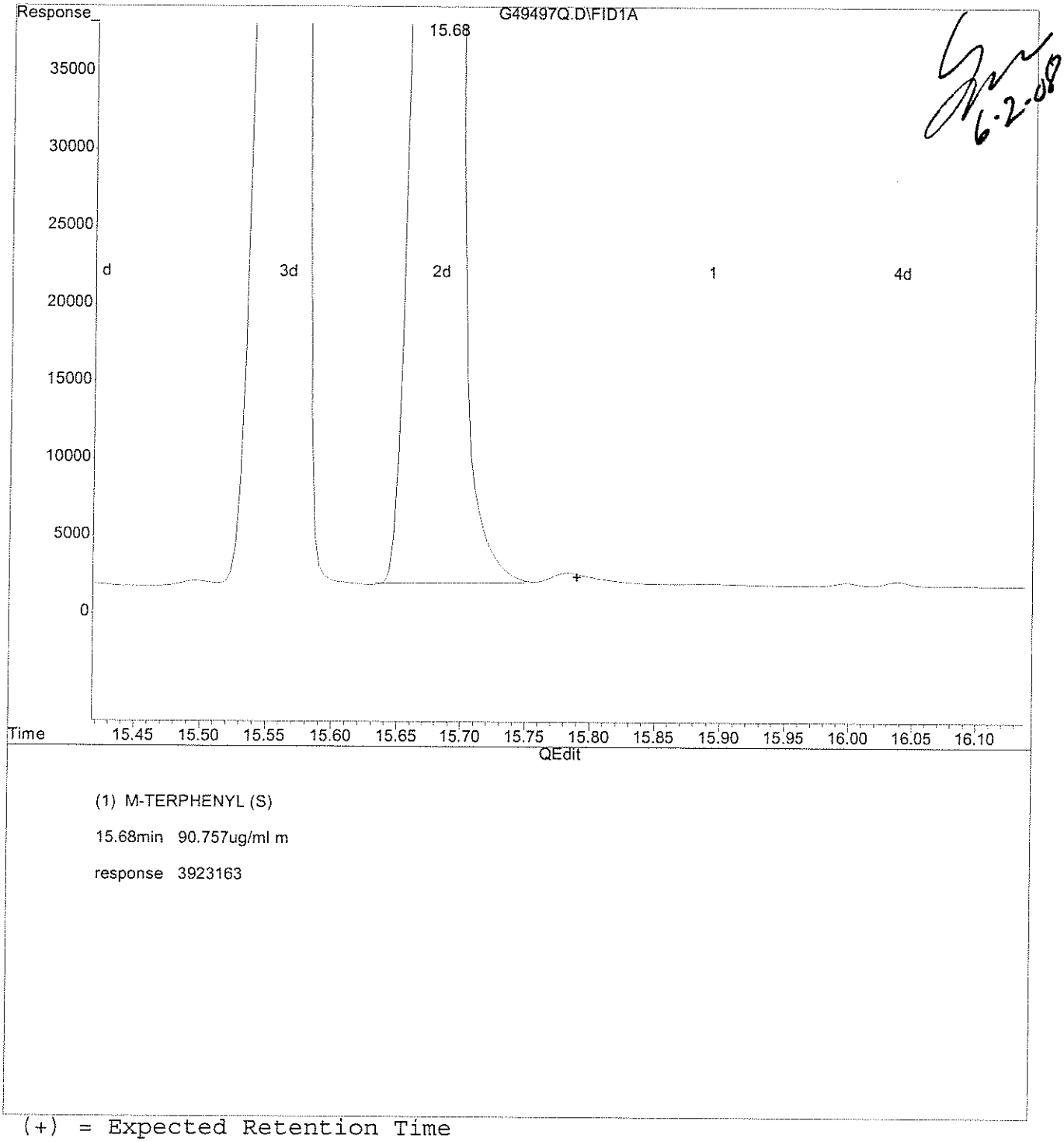
Quantitation Report (Qedit)

Data File : D:\TPH\052908-G\G49497Q.D
Acq On : 29 May 2008 15:59
Sample : L05238DW
Misc :
IntFile : AUTOINT1.E
Quant Time: May 30 8:03 2008 Quant Results File: D040108A.RES

Vial: 10
Operator:
Inst : INST G
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Multiple Level Calibration

JK 5.30.08



6-2-08

(1) M-TERPHENYL (S)

15.68min 90.757ug/ml m

response 3923163

(+) = Expected Retention Time

G49497Q.D D040108A.M Fri May 30 08:03:11 2008

Quantitation Report (QT Reviewed)

Data File : D:\TPH\052908-G\G49498Q.D Vial: 11
Acq On : 29 May 2008 16:29 Operator:
Sample : LD05238DW Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: May 30 8:03 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

JLC 5.30.08

6.2.08

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.68	3763607	87.066 ug/mlm
Spiked Amount 100.000 Range 60 - 140		Recovery = 87.07%	87
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	37110787	0.854 mg/ml
3) HM DRO HIGH (>1.0)	13.01	37110787	0.857 mg/ml

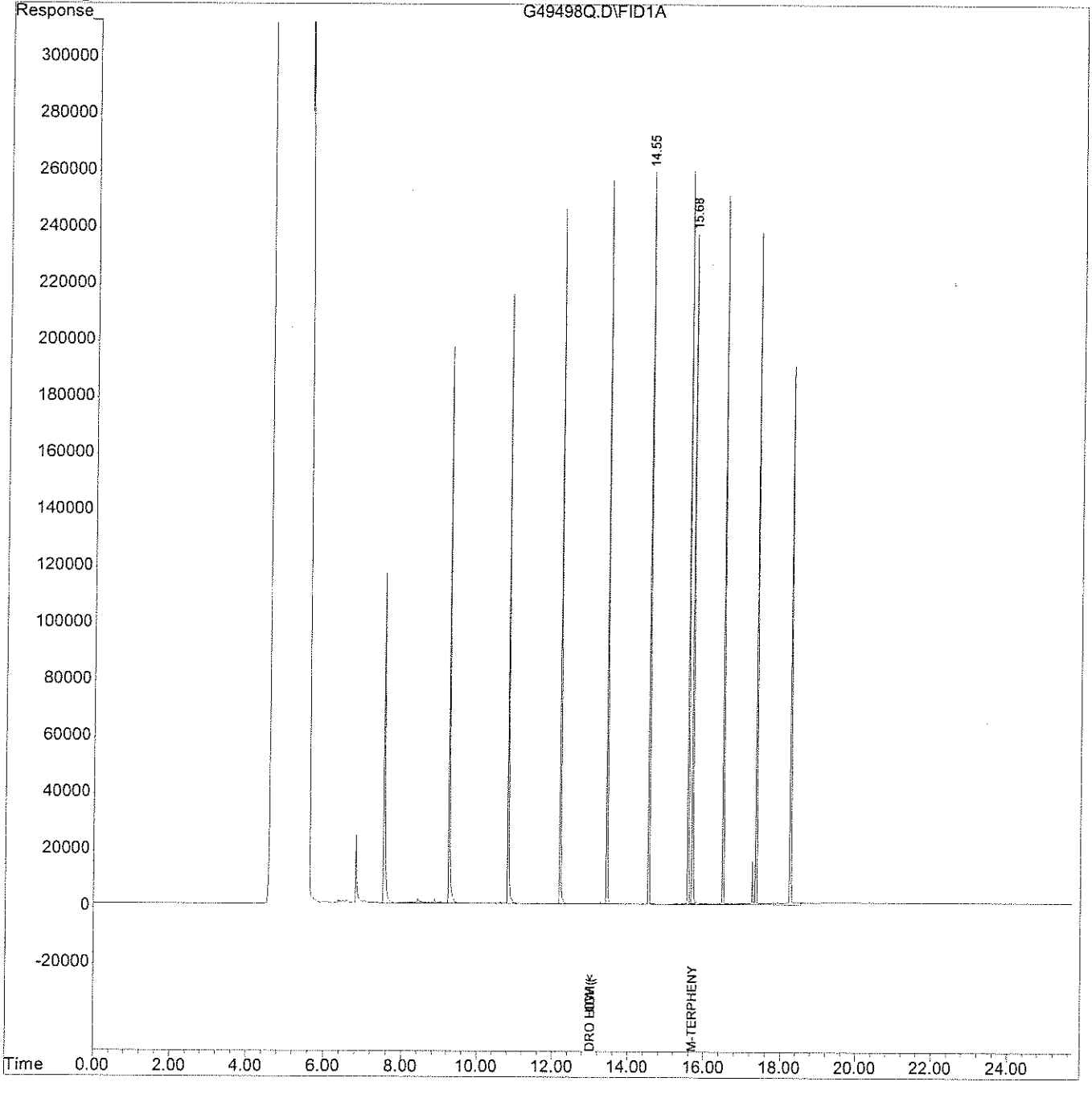
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : D:\TPH\052908-G\G49498Q.D Vial: 11
Acq On : 29 May 2008 16:29 Operator:
Sample : LD05238DW Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: May 30 8:03 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm



Quantitation Report (Qedit)

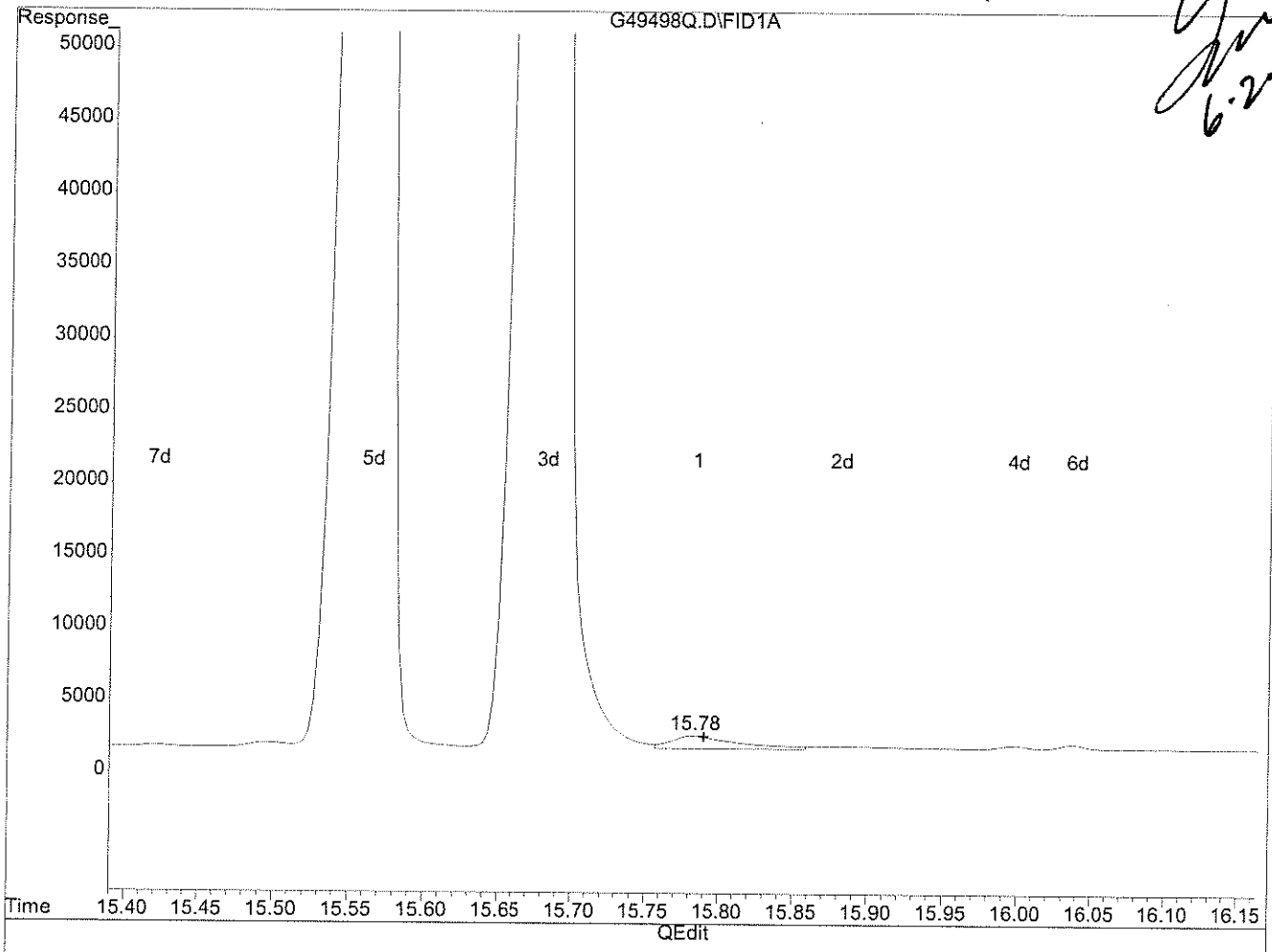
Data File : D:\TPH\052908-G\G49498Q.D
Acq On : 29 May 2008 16:29
Sample : LD05238DW
Misc :
IntFile : AUTOINT1.E
Quant Time: May 30 8:03 2008 Quant Results File: D040108A.RES

Vial: 11
Operator:
Inst : INST G
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Multiple Level Calibration

JK 5.30.08 M.P.

6.2.08



(1) M-TERPHENYL (S)

15.78min 0.647ug/ml

response 27951

(+) = Expected Retention Time

G49498Q.D D040108A.M Fri May 30 08:03:34 2008

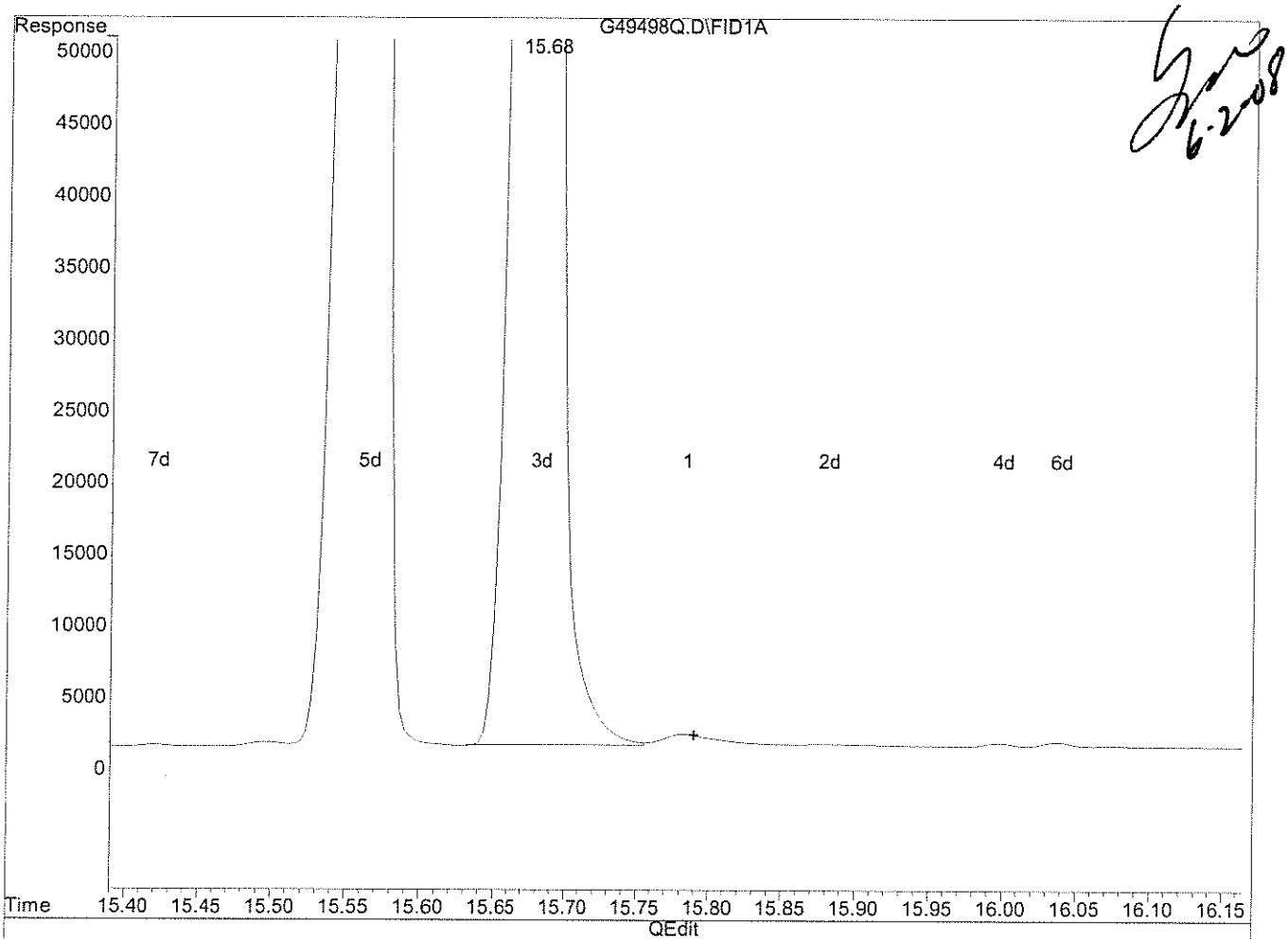
Quantitation Report (Qedit)

Data File : D:\TPH\052908-G\G49498Q.D
Acq On : 29 May 2008 16:29
Sample : LD05238DW
Misc :
IntFile : AUTOINT1.E
Quant Time: May 30 8:03 2008 Quant Results File: D040108A.RES

Vial: 11
Operator:
Inst : INST G
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Multiple Level Calibration

JLC 5.30.08



(1) M-TERPHENYL (S)

15.68min 87.066ug/ml m

response 3763607

(+) = Expected Retention Time

G49498Q.D D040108A.M Fri May 30 08:03:37 2008

DIESEL RANGE ORGANICS AQUEOUS
LABORATORY CONTROL/DUPLICATE
PERCENT RECOVERY

Instrument ID: G
GC Column: RTX-5ms
Column ID: 0.25 mm

SDG: 61399
Non-spiked sample: B05238DW
Spike: L05238DW#2
Spike duplicate: LD05238DW#2

COMPOUND	LCS SPIKE ADDED (ug/L)	LCSD SPIKE ADDED (ug/L)	LOWER LIMIT	UPPER LIMIT	RPD LIMIT	NON-SPIKE RESULT (ug/L)	SPIKE RESULT (ug/L)	SPIKE % REC	#	SPIKE DUP RESULT (ug/L)	SPIKE DUP % REC	#	RPD	#
DRO LOW (<1.0)	1000	1000	60	140	20	0	722	72		760	76		5	
DRO HIGH (>1.0)	1000	1000	60	140	20	0	727	73		764	76		5	

Column to be used to flag recovery and RPD values outside of QC limits
* Values outside QC limits
Spike added values have been volume adjusted.

Non-spike result of "0" used in place of "U" to allow calculation of spike recovery.

Comments: _____

Quantitation Report (QT Reviewed)

Data File : D:\TPH\052908-G\G49499Q.D Vial: 12
Acq On : 29 May 2008 16:58 Operator:
Sample : L05238DW#2 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: May 30 8:04 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JM 5.30.08

6.2.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.68	3637033	84.138 ug/mlm
Spiked Amount 100.000	Range 60 - 140	Recovery =	84.14% 84
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	31462314	0.722 mg/ml
3) HM DRO HIGH (>1.0)	13.01	31462314	0.727 mg/ml

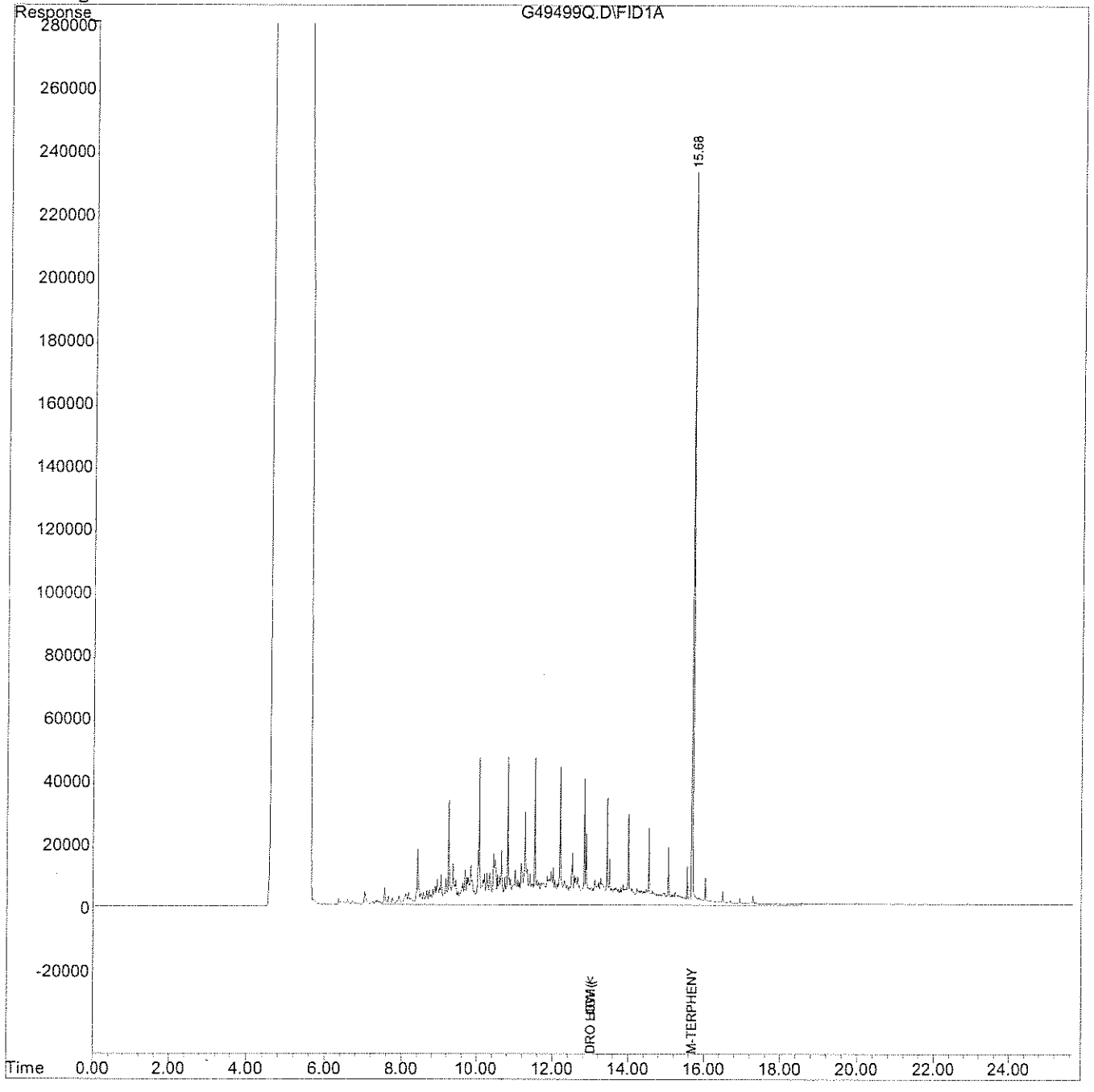
(f)=RT Delta > 1/2 Window (m)=manual int.
G49499Q.D D040108A.M Fri May 30 08:04:10 2008 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\TPH\052908-G\G49499Q.D Vial: 12
Acq On : 29 May 2008 16:58 Operator:
Sample : L05238DW#2 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: May 30 8:04 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm



Quantitation Report (Qedit)

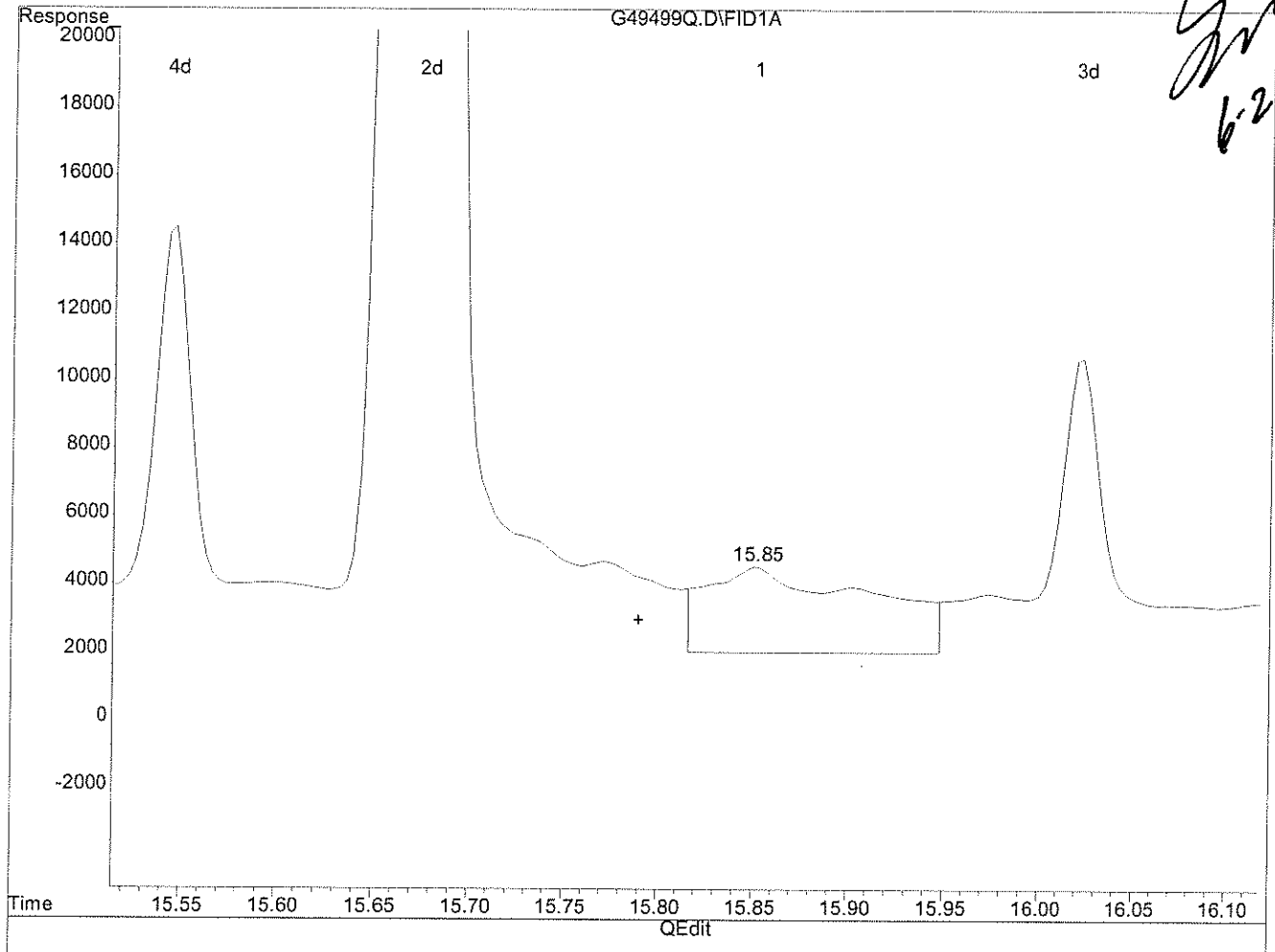
Data File : D:\TPH\052908-G\G49499Q.D
Acq On : 29 May 2008 16:58
Sample : L05238DW#2
Misc :
IntFile : AUTOINT1.E
Quant Time: May 30 8:03 2008 Quant Results File: D040108A.RES

Vial: 12
Operator:
Inst : INST G
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Multiple Level Calibration

JK 5.30.08 #M.P.

6-2-08



(1) M-TERPHENYL (S)

15.85min 3.494ug/ml

response 151030

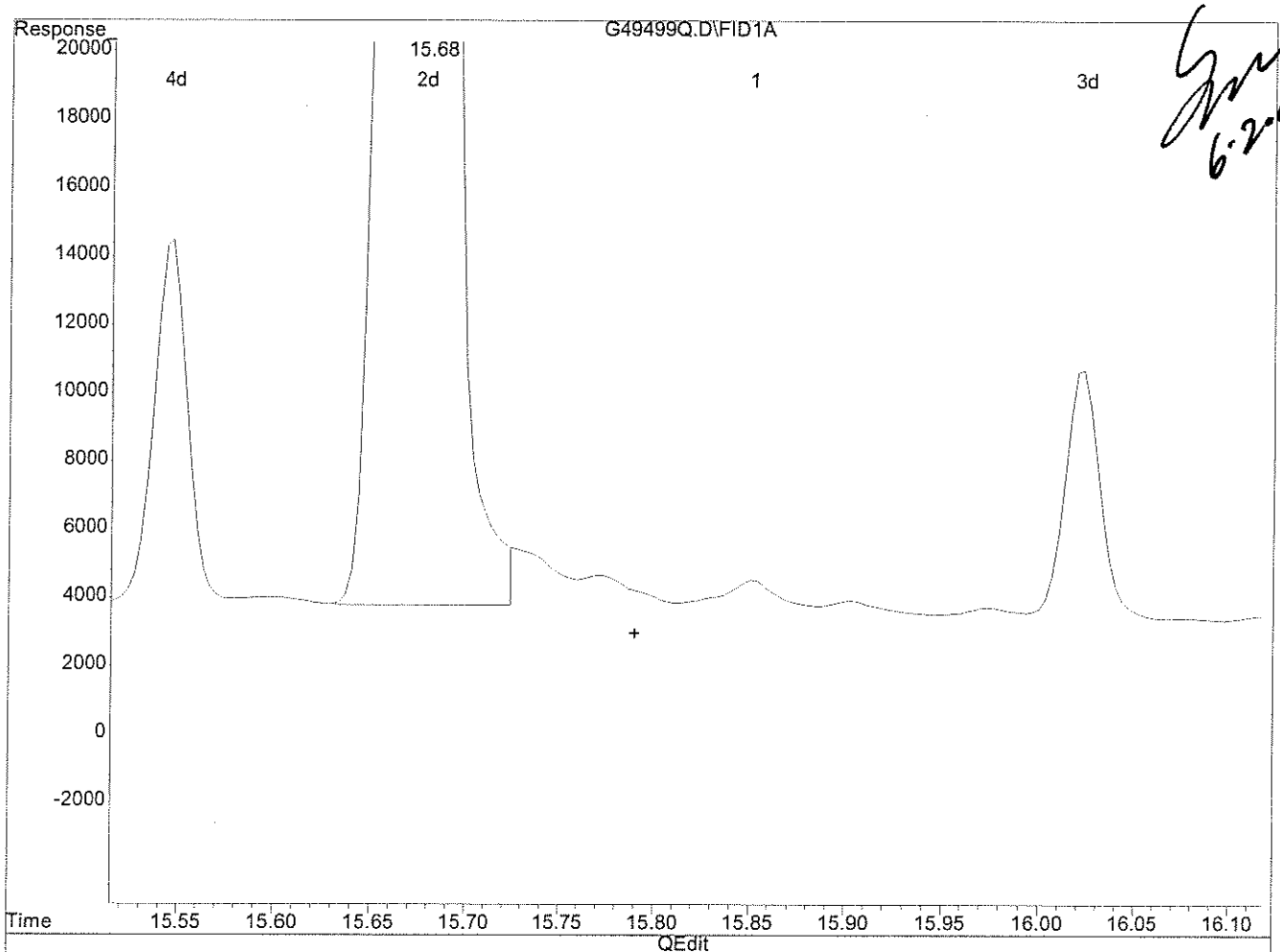
(+) = Expected Retention Time

G49499Q.D D040108A.M Fri May 30 08:03:55 2008

Quantitation Report (Qedit)

Data File : D:\TPH\052908-G\G49499Q.D Vial: 12
Acq On : 29 May 2008 16:58 Operator:
Sample : L05238DW#2 Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: May 30 8:03 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008 JK 5.30.08
Response via : Multiple Level Calibration



6-2-08

(1) M-TERPHENYL (S)

15.68min 84.138ug/ml m

response 3637033

(+) = Expected Retention Time
G49499Q.D D040108A.M Fri May 30 08:04:02 2008

Quantitation Report (QT Reviewed)

Data File : D:\TPH\052908-G\G49500Q.D
Acq On : 29 May 2008 17:27
Sample : LD05238DW#2
Misc :
IntFile : AUTOINT1.E
Quant Time: May 30 8:04 2008 Quant Results File: D040108A.RES

Vial: 13
Operator:
Inst : INST G
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JH 5.30.08

6-2-08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.68	3808145	88.096 ug/mlm
Spiked Amount 100.000	Range 60 - 140	Recovery =	88.10% 88✓
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	33083582	0.760 mg/ml
3) HM DRO HIGH (>1.0)	13.01	33083582	0.764 mg/ml

(f)=RT Delta > 1/2 Window (m)=manual int.

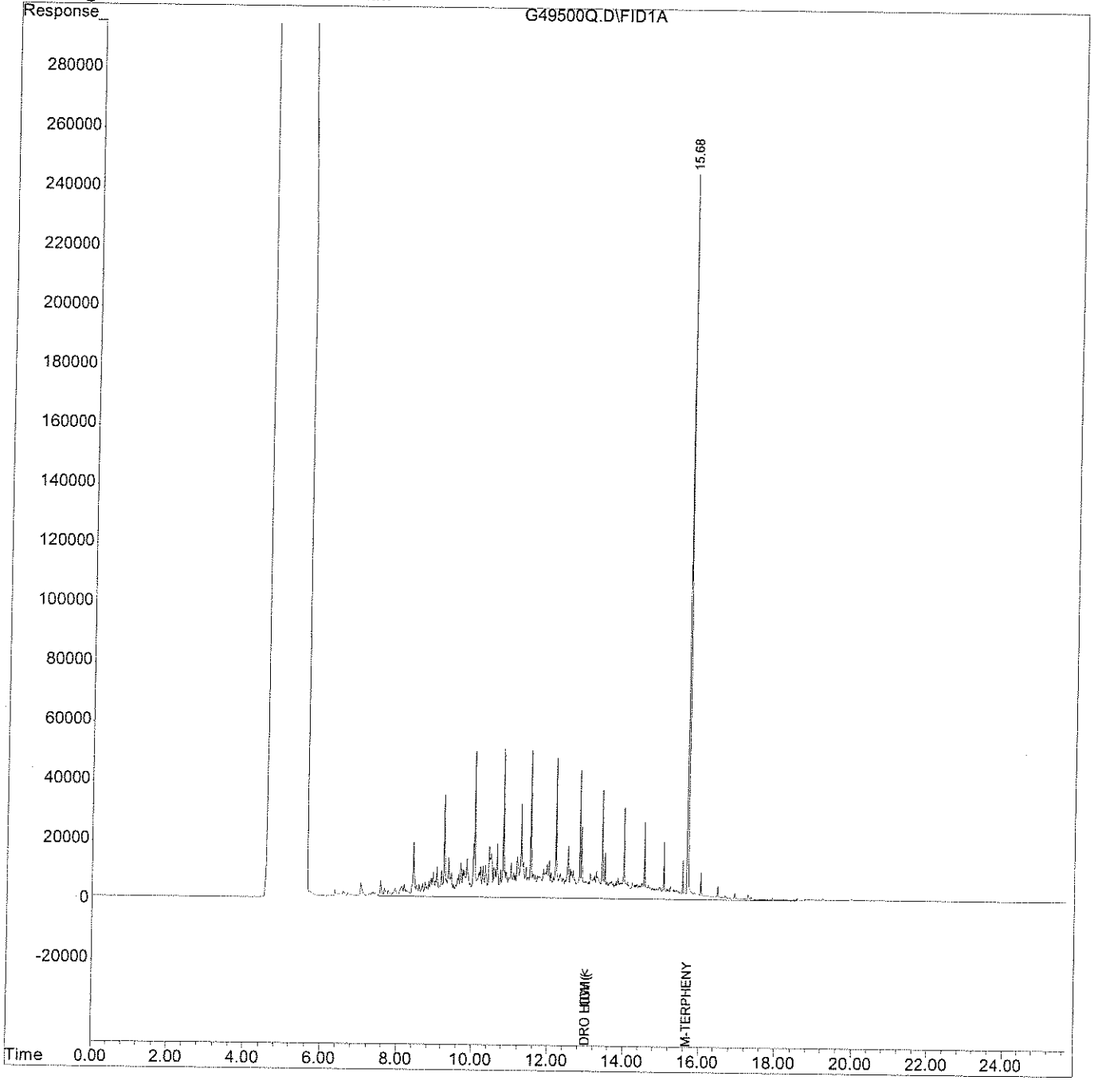
Quantitation Report (QT Reviewed)

Data File : D:\TPH\052908-G\G49500Q.D
Acq On : 29 May 2008 17:27
Sample : LD05238DW#2
Misc :
IntFile : AUTOINT1.E
Quant Time: May 30 8:04 2008 Quant Results File: D040108A.RES

Vial: 13
Operator:
Inst : INST G
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm



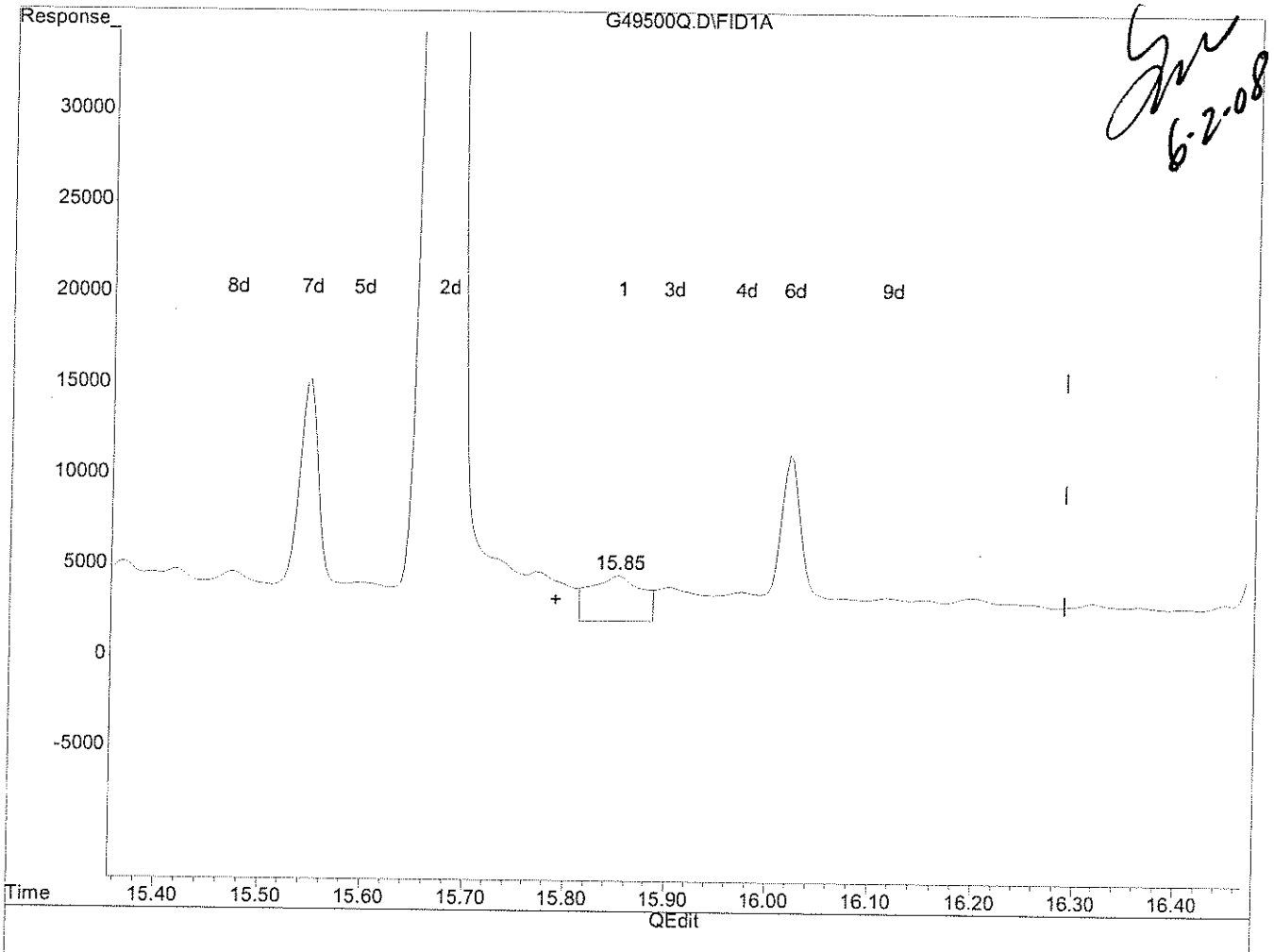
Quantitation Report (Qedit)

Data File : D:\TPH\052908-G\G49500Q.D
Acq On : 29 May 2008 17:27
Sample : LD05238DW#2
Misc :
IntFile : AUTOINT1.E
Quant Time: May 30 8:04 2008 Quant Results File: D040108A.RES

Vial: 13
Operator:
Inst : INST G
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Multiple Level Calibration

JLC 5.30.08
* M.P.



6-2-08

(1) M-TERPHENYL (S)

15.85min 2.072ug/ml

response 89574

(+) = Expected Retention Time

G49500Q.D D040108A.M Fri May 30 08:04:19 2008

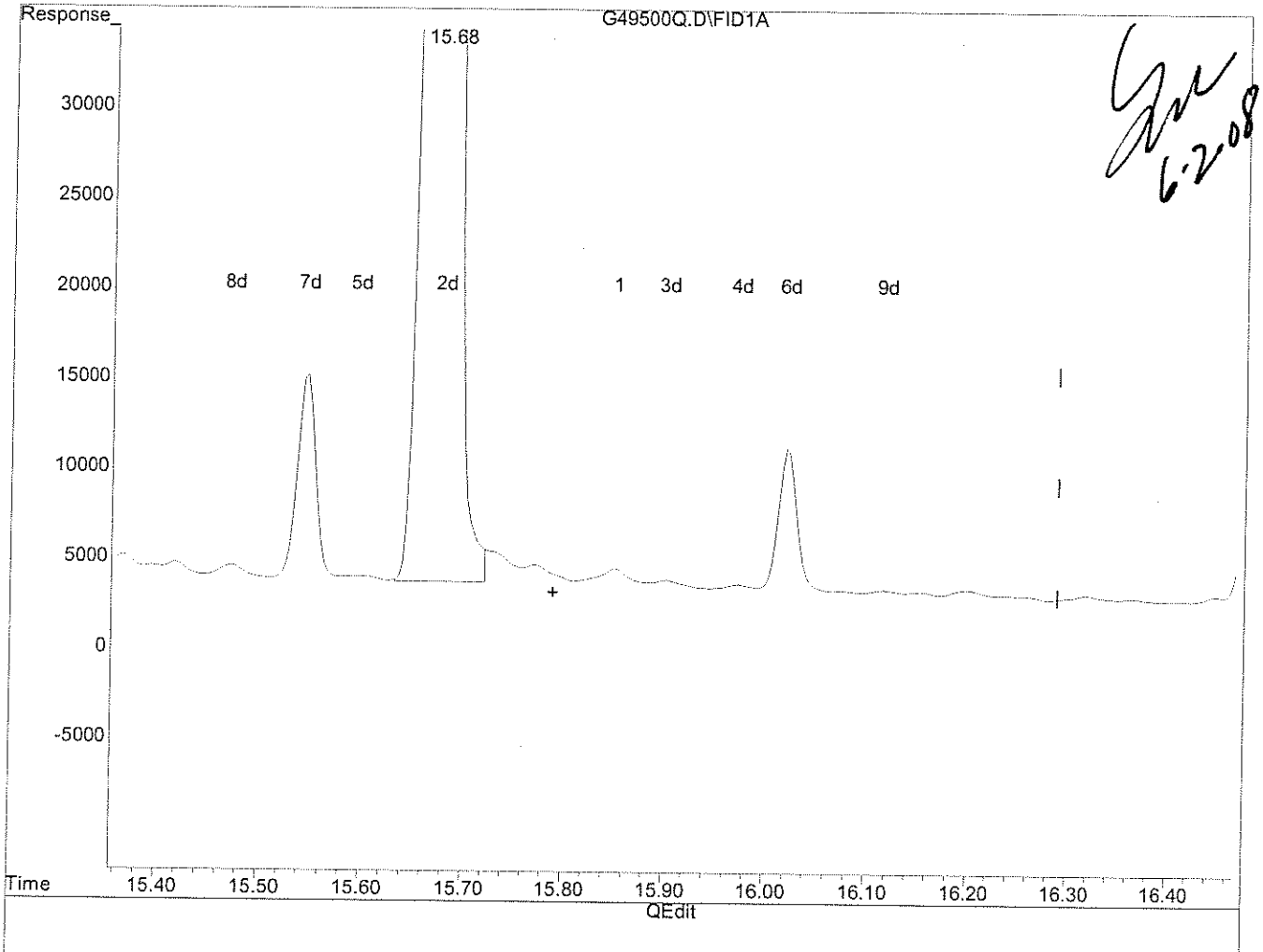
Quantitation Report (Qedit)

Data File : D:\TPH\052908-G\G49500Q.D
Acq On : 29 May 2008 17:27
Sample : LD05238DW#2
Misc :
IntFile : AUTOINT1.E
Quant Time: May 30 8:04 2008 Quant Results File: D040108A.RES

Vial: 13
Operator:
Inst : INST G
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Multiple Level Calibration

JK 5.30.08



6.2.08

(1) M-TERPHENYL (S)

15.68min 88.096ug/ml m

response 3808145

(+) = Expected Retention Time

G49500Q.D D040108A.M Fri May 30 08:04:24 2008

DIESEL RANGE ORGANICS AQUEOUS
LABORATORY CONTROL/DUPLICATE
PERCENT RECOVERY

Instrument ID: G
GC Column: RTX-5ms
Column ID: 0.25 mm

SDG: 61399
Non-spiked sample: B05238DW, RR
Spike: L05238DW, RR
Spike duplicate: LD05238DW, RR

COMPOUND	LCS SPIKE ADDED (ug/L)	LCSD SPIKE ADDED (ug/L)	LOWER LIMIT	UPPER LIMIT	RPD LIMIT	NON-SPIKE RESULT (ug/L)	SPIKE RESULT (ug/L)	SPIKE % REC	#	SPIKE DUP RESULT (ug/L)	SPIKE DUP % REC	#	RPD	#
DRO LOW (<1.0)	1000	1000	60	140	20	0	879	88		992	99		12	
DRO HIGH (>1.0)	1000	1000	60	140	20	0	882	88		994	99		12	

Column to be used to flag recovery and RPD values outside of QC limits
* Values outside QC limits
Spike added values have been volume adjusted.

Non-spike result of "0" used in place of "U" to allow calculation of spike recovery.

Comments: _____

_____

DRO FORM 3

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49532Q.D Vial: 13
Acq On : 30 May 2008 20:20 Operator:
Sample : L05238DW, RR Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 2 8:25 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

JLC 6.2.08

6.2.08

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.67	3971076	91.865 ug/mlm
Spiked Amount 100.000	Range 60 - 140	Recovery =	91.86% 92
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	38181842	0.879 mg/ml
3) HM DRO HIGH (>1.0)	13.01	38181842	0.882 mg/ml

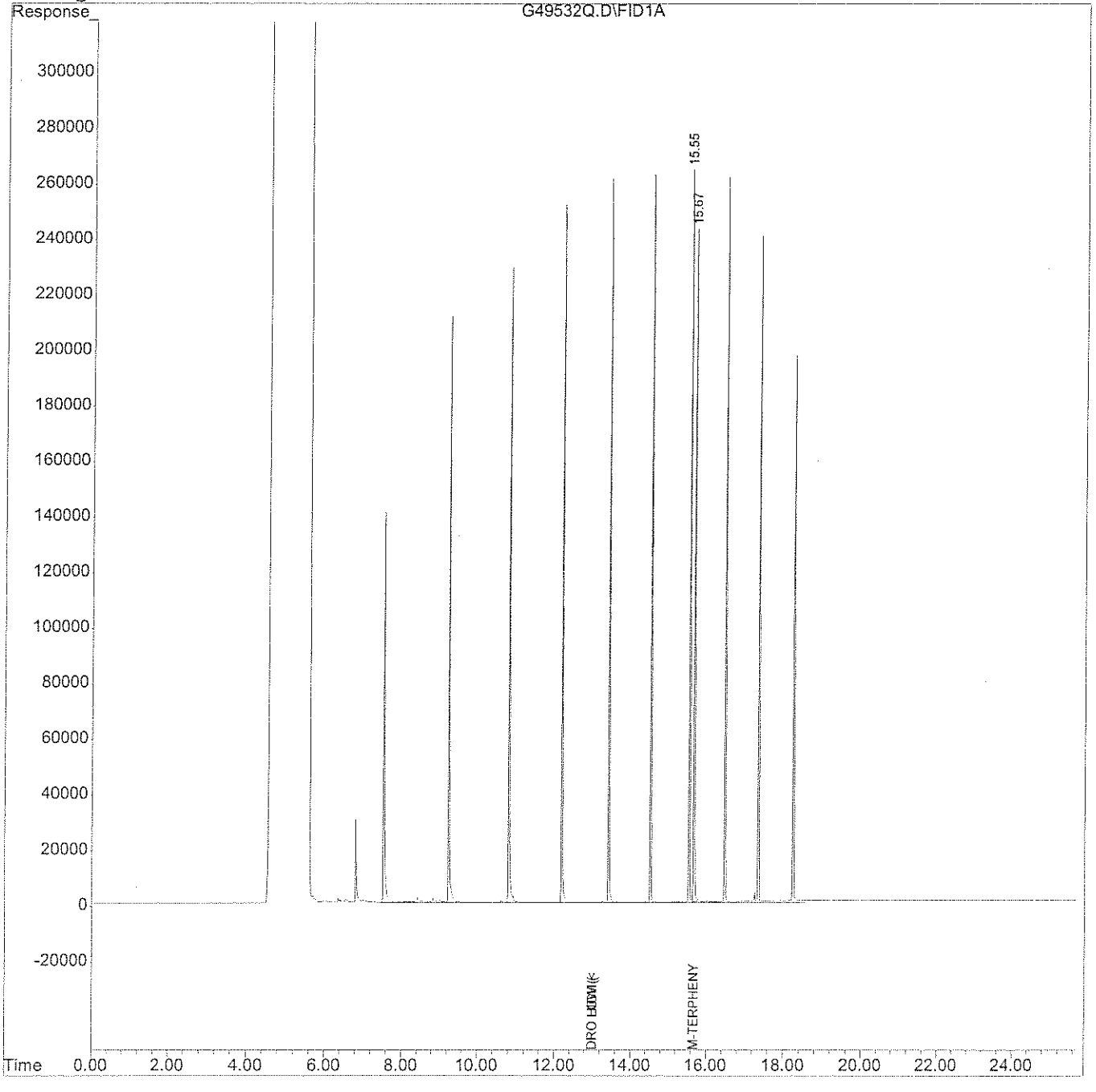
(f)=RT Delta > 1/2 Window (m)=manual int.
G49532Q.D D040108A.M Mon Jun 02 08:25:38 2008 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49532Q.D Vial: 13
Acq On : 30 May 2008 20:20 Operator:
Sample : L05238DW, RR Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 2 8:25 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm



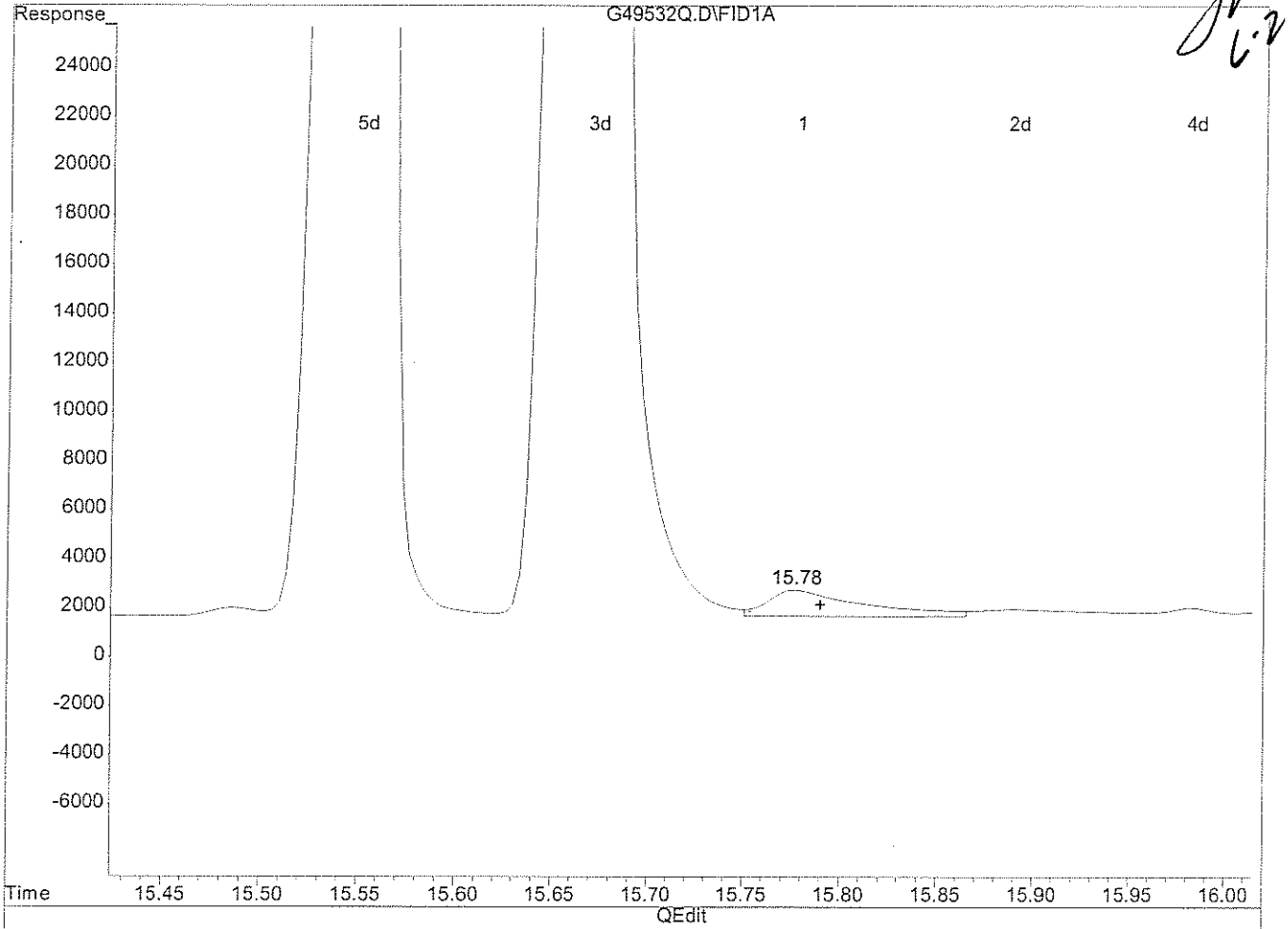
Quantitation Report (Qedit)

Data File : D:\TPH\053008-G\G49532Q.D Vial: 13
Acq On : 30 May 2008 20:20 Operator:
Sample : L05238DW, RR Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 2 8:25 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Multiple Level Calibration

JL 6.2.08 FM.P.

6.2.08



(1) M-TERPHENYL (S)

15.78min 0.844ug/ml

response 36463

(+) = Expected Retention Time

G49532Q.D D040108A.M Mon Jun 02 08:25:26 2008

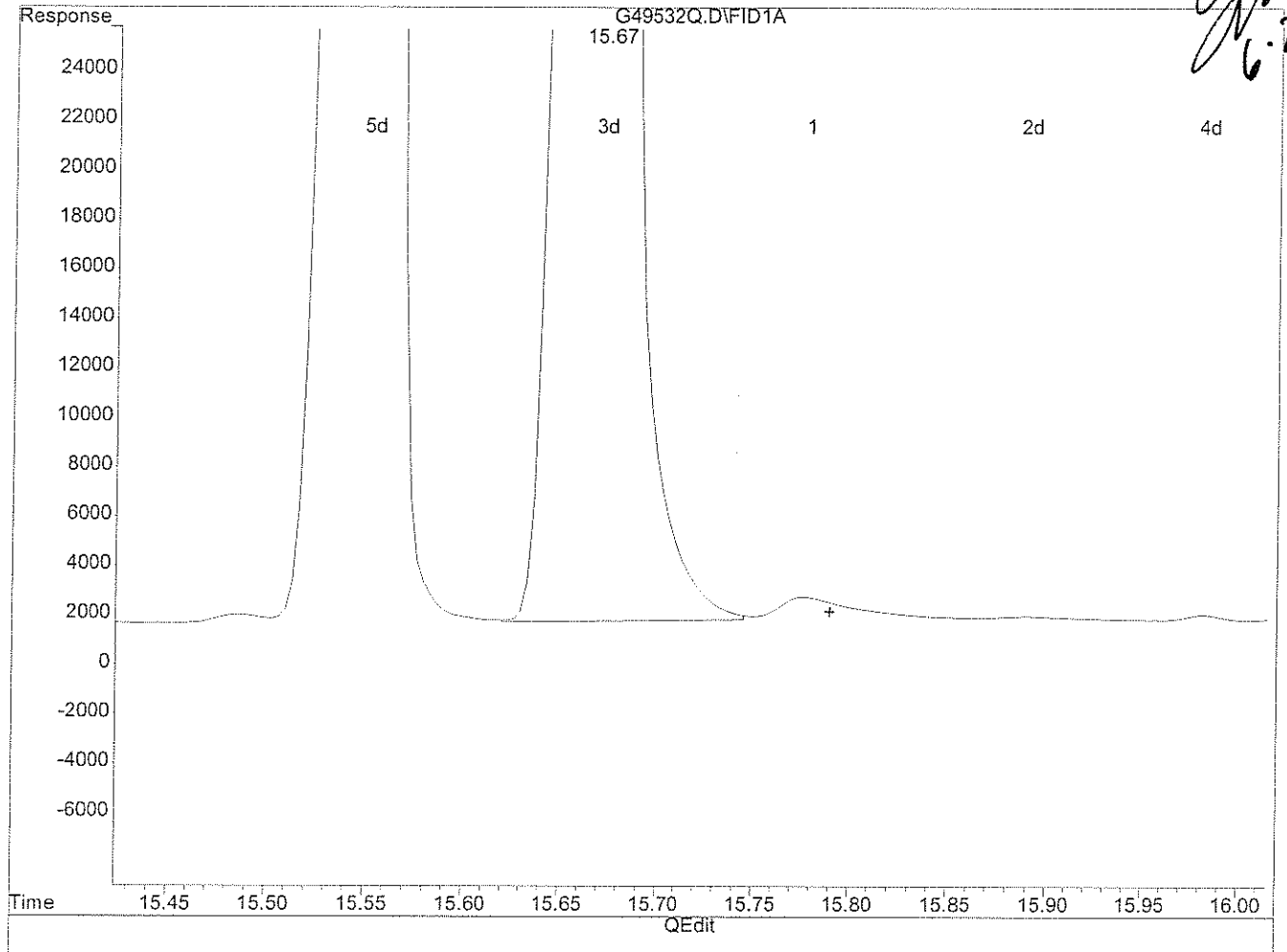
Quantitation Report (Qedit)

Data File : D:\TPH\053008-G\G49532Q.D Vial: 13
Acq On : 30 May 2008 20:20 Operator:
Sample : L05238DW, RR Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 2 8:25 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Multiple Level Calibration

JK 6.2.08

6.2.08



(1) M-TERPHENYL (S)

15.67min 91.865ug/ml m

response 3971076

(+) = Expected Retention Time

G49532Q.D D040108A.M Mon Jun 02 08:25:30 2008

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49533Q.D Vial: 14
Acq On : 30 May 2008 20:49 Operator:
Sample : LD05238DW, RR Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 2 8:25 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

JLC 6.2.08

6.2.08

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.67	3735411	86.414 ug/mlm
Spiked Amount 100.000	Range 60 - 140	Recovery =	86.41% 86
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	43022800	0.992 mg/ml
3) HM DRO HIGH (>1.0)	13.01	43022800	0.994 mg/ml

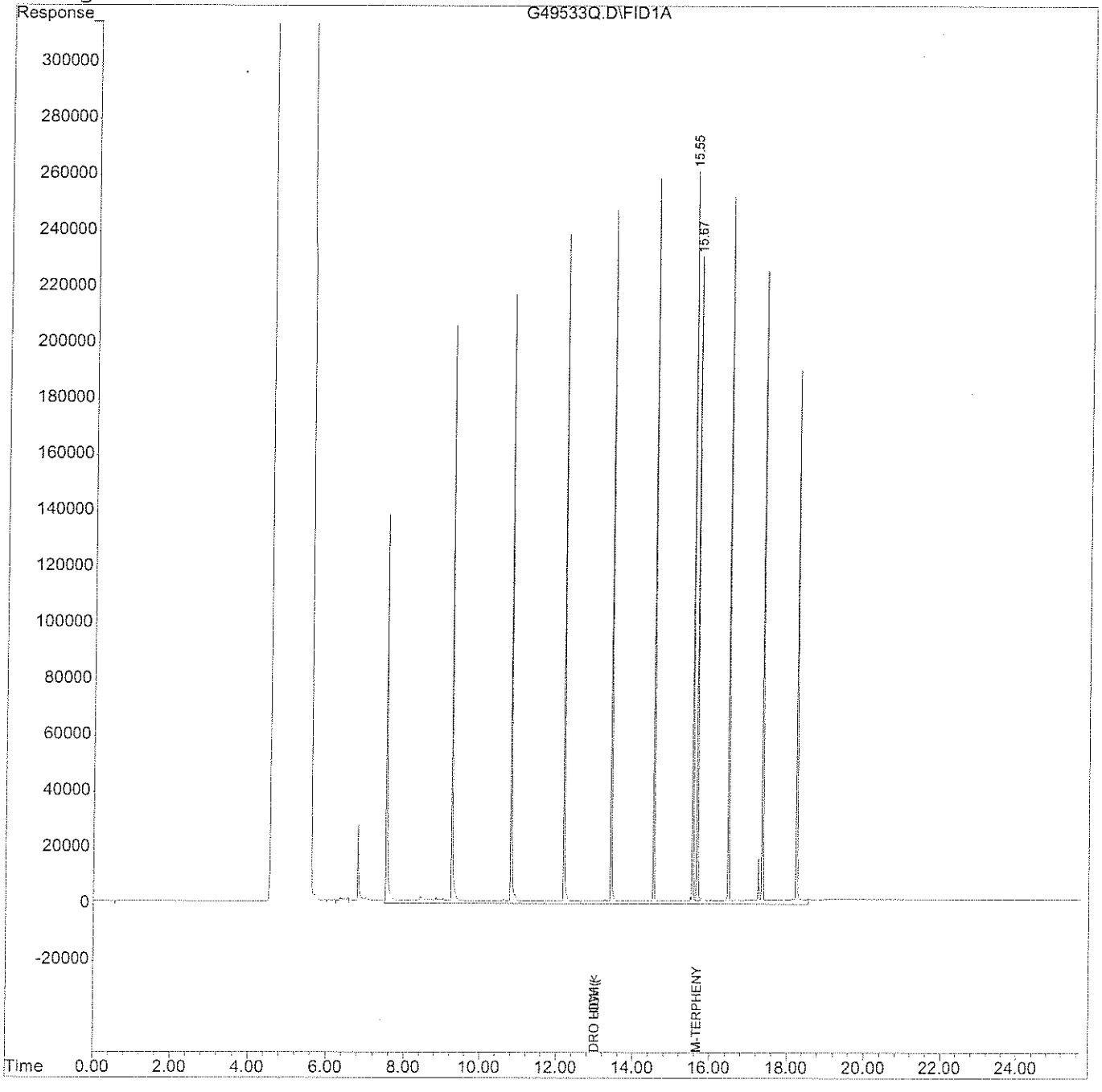
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49533Q.D Vial: 14
Acq On : 30 May 2008 20:49 Operator:
Sample : LD05238DW, RR Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 2 8:25 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

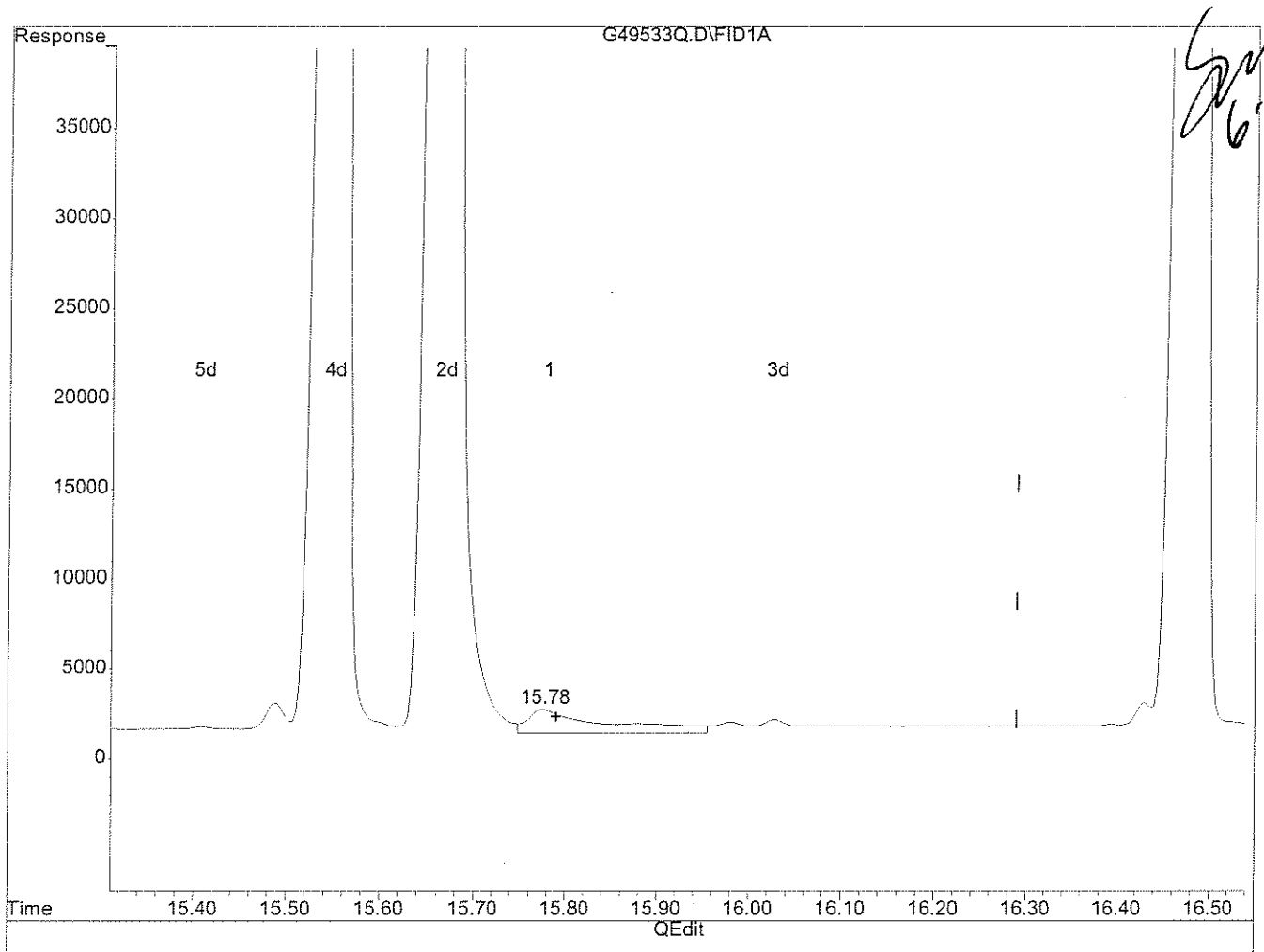


Quantitation Report (Qedit)

Data File : D:\TPH\053008-G\G49533Q.D Vial: 14
Acq On : 30 May 2008 20:49 Operator:
Sample : LD05238DW, RR Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 2 8:25 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Multiple Level Calibration

JLC 6.2.08
* M.P.



(1) M-TERPHENYL (S)

15.78min 1.809ug/ml

response 78215

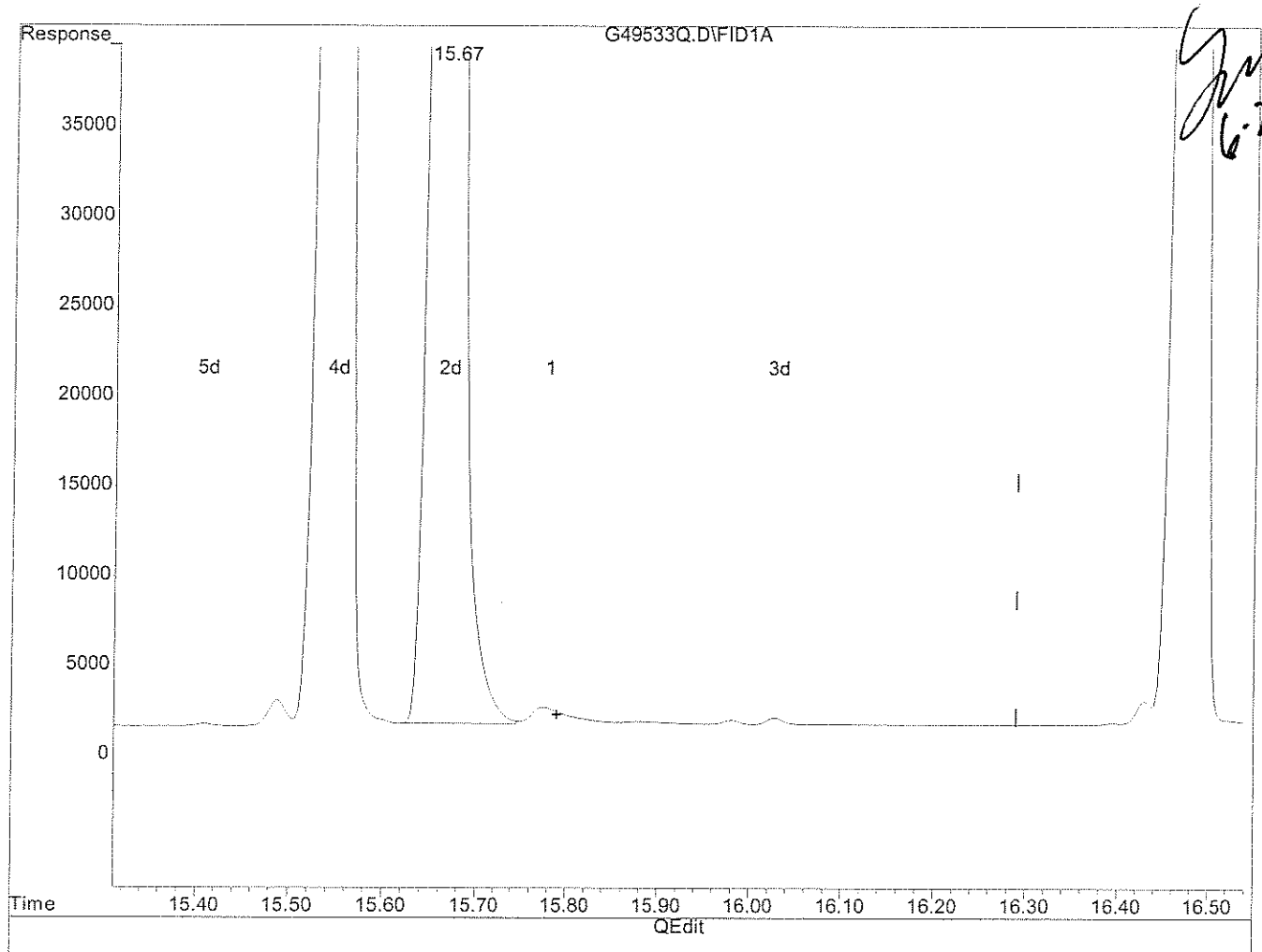
(+) = Expected Retention Time
G49533Q.D D040108A.M Mon Jun 02 08:25:51 2008

Quantitation Report (Qedit)

Data File : D:\TPH\053008-G\G49533Q.D Vial: 14
Acq On : 30 May 2008 20:49 Operator:
Sample : LD05238DW, RR Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 2 8:25 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Multiple Level Calibration

JLC 6.2.08



6-2-08

(1) M-TERPHENYL (S)

15.67min 86.414ug/ml m

response 3735411

(+) = Expected Retention Time
G49533Q.D D040108A.M Mon Jun 02 08:25:56 2008

DIESEL RANGE ORGANICS AQUEOUS
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
PERCENT RECOVERY

Instrument ID: G
GC Column: RTX-5ms
Column ID: 0.25 mm

SDG: 61399
Non-spiked sample: 61399-2
Spike: 61399-2, MS
Spike duplicate: 61399-2, MSD

COMPOUND	MS SPIKE ADDED (ug/L)	MSD SPIKE ADDED (ug/L)	LOWER LIMIT	UPPER LIMIT	RPD LIMIT	NON-SPIKE RESULT (ug/L)	SPIKE RESULT (ug/L)	SPIKE % REC	#	SPIKE DUP RESULT (ug/L)	SPIKE DUP % REC	#	RPD	#
DRO LOW (<1.0)	1	1	60	140	20	0	1	95		1	87		8	
DRO HIGH (>1.0)	1	1	60	140	20	0	1	95		1	88		8	

Column to be used to flag recovery and RPD values outside of QC limits
* Values outside QC limits
Spike added values have been volume adjusted.

Non-spike result of "0" used in place of "U" to allow calculation of spike recovery.

Comments: _____

_____

DRO FORM 3

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49570SP.D Vial: 47
Acq On : 31 May 2008 16:20 Operator:
Sample : 61399-2, MS Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 12:04 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

6.4.08

JK 6.3.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.67	4248468	98.283 ug/ml
Spiked Amount 100.000	Range 60 - 140	Recovery =	98.28% 98 ✓
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	41080944	0.947 mg/ml
3) HM DRO HIGH (>1.0)	13.01	41080944	0.949 mg/ml

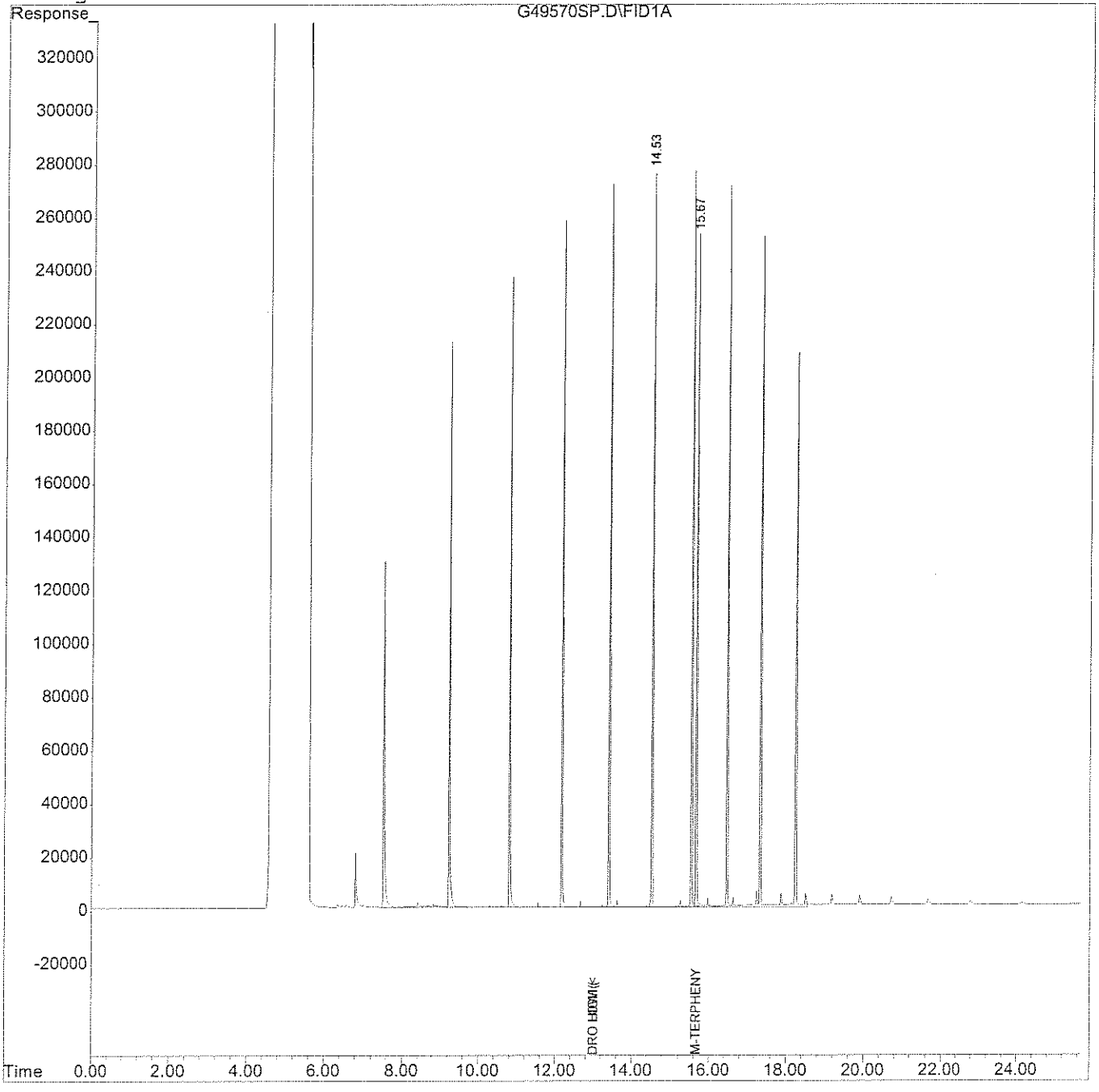
(f)=RT Delta > 1/2 Window (m)=manual int.
G49570SP.D D040108A.M Tue Jun 03 12:04:12 2008 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49570SP.D Vial: 47
Acq On : 31 May 2008 16:20 Operator:
Sample : 61399-2, MS Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 12:04 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm



Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49571SP.D Vial: 48
Acq On : 31 May 2008 16:49 Operator:
Sample : 61399-2, MSD Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 4 13:09 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

6.4.08

JL 6.4.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.68	7930795	183.468 ug/ml
Spiked Amount 100.000 Range 60 - 140 Recovery = 183.47%#			
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	37865239	0.872 mg/ml
3) HM DRO HIGH (>1.0)	13.01	37865239	0.874 mg/ml

Appears Surr. was added twice

See QA M

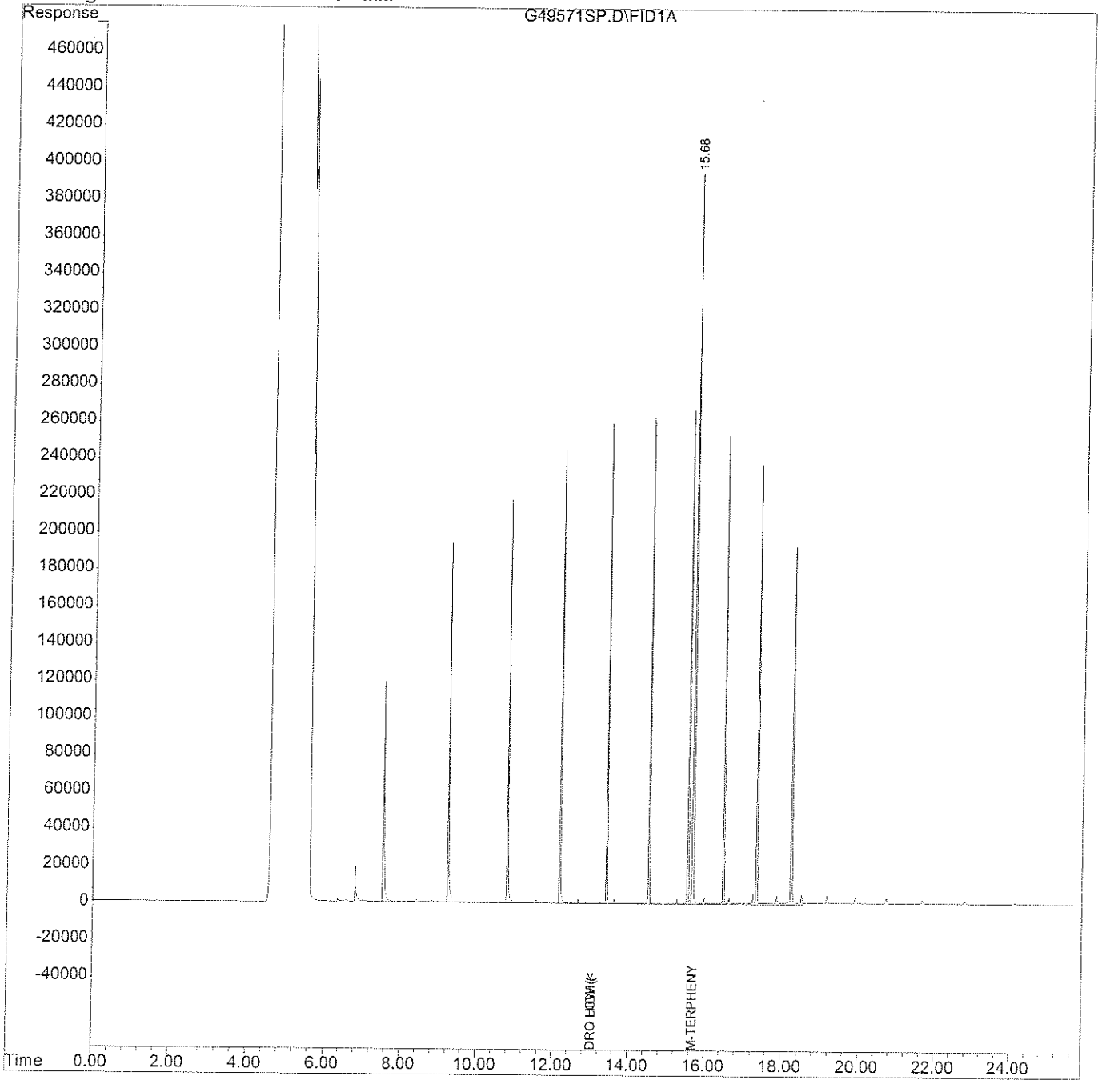
(f)=RT Delta > 1/2 Window (m)=manual int.
G49571SP.D D040108A.M Wed Jun 04 13:09:38 2008 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49571SP.D Vial: 48
Acq On : 31 May 2008 16:49 Operator:
Sample : 61399-2, MSD Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 4 13:09 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm



DIESEL RANGE ORGANICS AQUEOUS
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
PERCENT RECOVERY

Instrument ID: G
GC Column: RTX-5ms
Column ID: 0.25 mm

SDG: 61399
Non-spiked sample: 61399-2, RR
Spike: 61399-2, MS, RR
Spike duplicate: 61399-2, MSD, RR

COMPOUND	MS SPIKE ADDED (ug/L)	MSD SPIKE ADDED (ug/L)	LOWER LIMIT	UPPER LIMIT	RPD LIMIT	NON-SPIKE RESULT (ug/L)	SPIKE RESULT (ug/L)	SPIKE % REC	#	SPIKE DUP RESULT (ug/L)	SPIKE DUP % REC	#	RPD	#
DRO LOW (<1.0)	1	1	60	140	20	0	1	96		1	88		8	
DRO HIGH (>1.0)	1	1	60	140	20	0	1	96		1	89		8	

Column to be used to flag recovery and RPD values outside of QC limits
* Values outside QC limits
Spike added values have been volume adjusted.

Non-spike result of "0" used in place of "U" to allow calculation of spike recovery.

Comments: _____

DRO FORM 3

Quantitation Report (QT Reviewed)

Data File : D:\TPH\060208-G\G49637SP.D Vial: 24
Acq On : 3 Jun 2008 2:15 Operator:
Sample : 61399-2, MS, RR Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:10 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JK 6.3.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.66	4314156	99.802 ug/ml
Spiked Amount 100.000	Range 60 - 140	Recovery =	99.80%
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	41676448	0.961 mg/ml
3) HM DRO HIGH (>1.0)	13.01	41676448	0.962 mg/ml

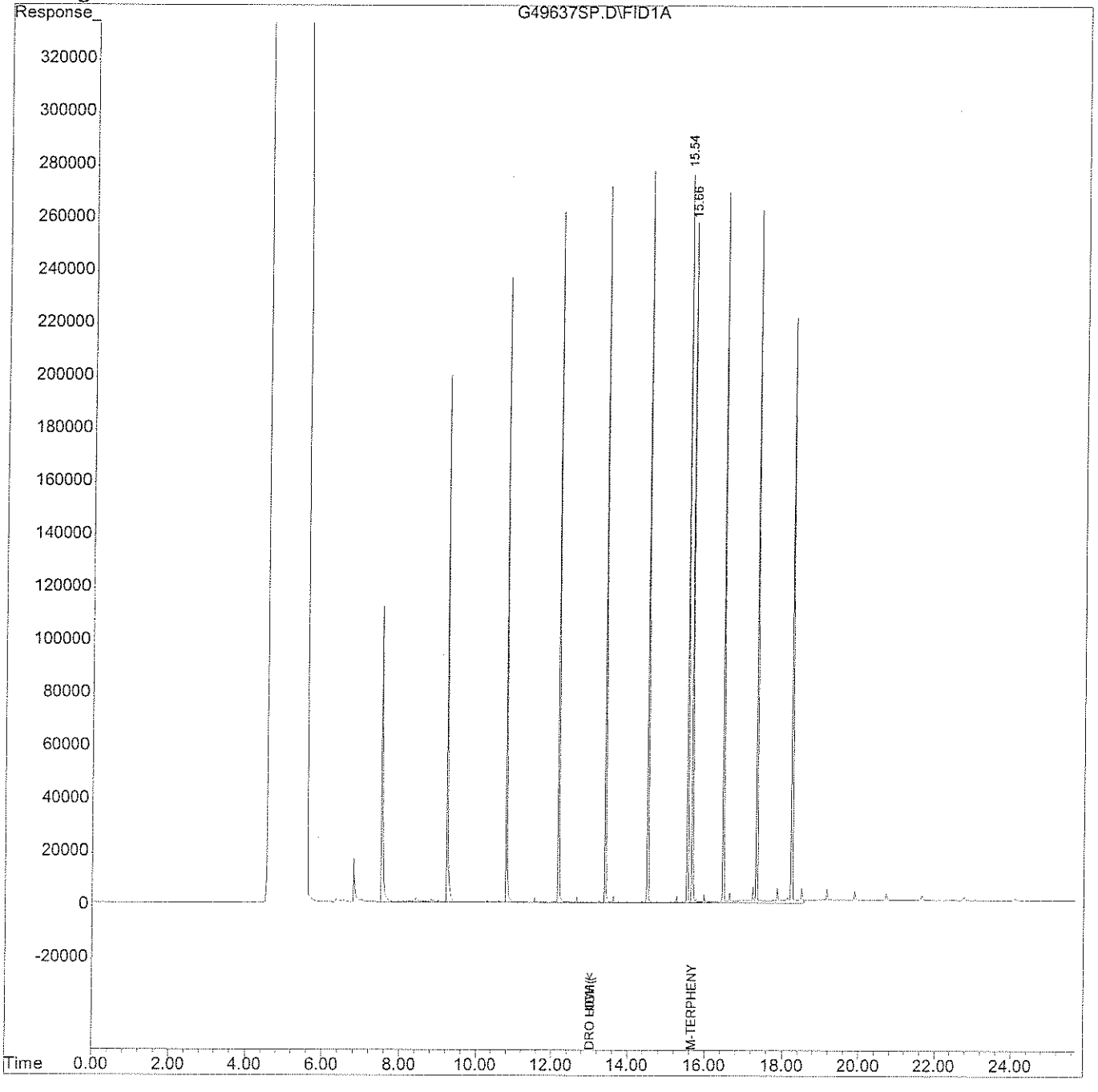
(f)=RT Delta > 1/2 Window (m)=manual int.
G49637SP.D D040108A.M Tue Jun 03 08:10:14 2008 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\TPH\060208-G\G49637SP.D Vial: 24
Acq On : 3 Jun 2008 2:15 Operator:
Sample : 61399-2, MS, RR Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 8:10 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm



Quantitation Report (QT Reviewed)

Data File : D:\TPH\060208-G\G49638SP.D Vial: 25
Acq On : 3 Jun 2008 2:44 Operator:
Sample : 61399-2, MSD RR Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 4 13:19 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

mj 6/17/08

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.67	7891029	182.548 ug/ml
Spiked Amount 100.000	Range 60 - 140	Recovery =	182.55%#
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	38627413	0.890 mg/ml
3) HM DRO HIGH (>1.0)	13.01	38627413	0.892 mg/ml

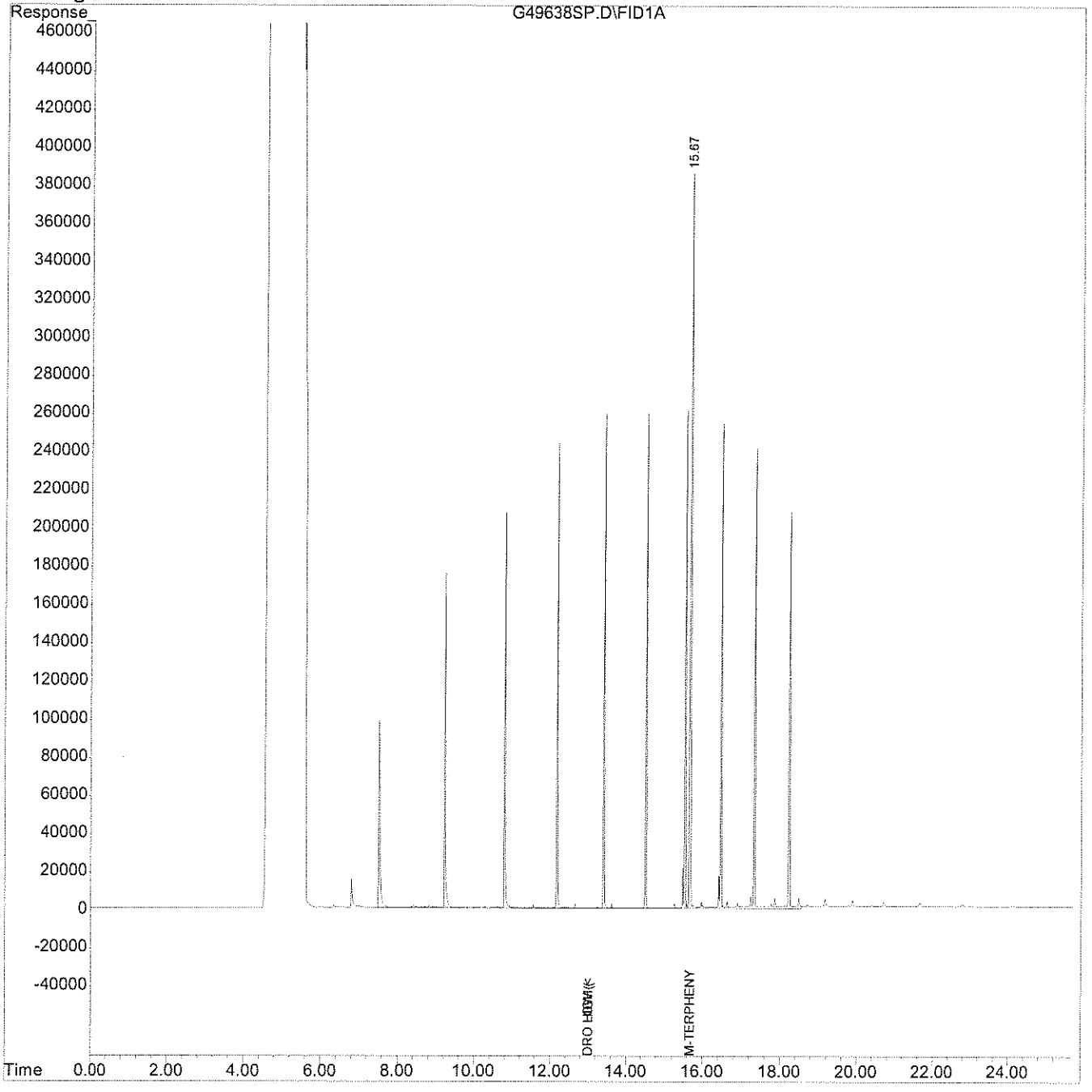
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : D:\TPH\060208-G\G49638SP.D Vial: 25
Acq On : 3 Jun 2008 2:44 Operator:
Sample : 61399-2, MSD, RR Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 4 13:19 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm



analytics environmental laboratory LLC

TPH / DRO Instrument: G

Load: JK

Detector: A 0401086 Unload: JK

Run	Vial #	Sample	Method	Comments
G48496	100	MeCl2	D03178A.M.	
477	1	T6352 #2 FO 0.05/DRO CONF		
78SC	2	T6334 DRO 0.5mg/mL		Suspect Concent. Run
79B	7	B03288DW		4125H2O
80Q	8	L03288DW		
81Q	9	LD03288DW		
82Q	10	L03288DW #2		4125H2O
83Q	11	LD03288DW #2		
84Q	12	L03278DAS		4125ASE
85	13	60920-2		4125H2O
86	14	60920-1		
87	15	60928-1		
88	16	60928-2		
89	17	60927-1		
90	18	60915-2		4125ASE
91	19	60915-5		
92	20	60915-1		
93	21	60915-3		
94	22	60915-4		
95SC	3	T6389 DRO 1.0mg/mL		
96SC	2	T6396 DRO 0.5mg/mL		Run After File # G48478SC
97S1	7	T6331 DRO 0.025mg/mL	D0401086A.M.	
98S1	8	T6332 DRO 0.05mg/mL		
99S1	9	T6333 DRO 0.1mg/mL		
50051	10	T6386 DRO 0.5mg/mL		
0151	11	T6387 DRO 1.0mg/mL		
0251	12	T6336 DRO 5.0mg/mL		
0351	13	T6337 DRO 10.0mg/mL		
04SC	14	T6338 DRO CC 1.0mg/mL		
05B	15	B03288DW	D0401BAM	4125H2O
06Q	16	L03288DW		
07Q	17	LD03288DW		
08Q	18	L03288DW #2		
09Q	19	LD03288DW #2		
10Q	20	L03278DAS		4125ASE

* Continued on Next pg.

analytics environmental laboratory LLC

TPH / DRO Instrument: G

Load: JK

Detector: A 052908G Unload: JK

Run	Vial #	Sample	Method	Comments
G49491	100	MeCl2- Lot 48050	D04018AM	
92	1	T6388 #2 FO 0.05 DRO CONF		
935C	2	T6386 DRO 0.5 mg/mL		
94B	7	B05228DW-2		4125H2O
95Q	8	L05228DW-2		
96B	9	B05238DW		
97Q	10	L05238DW		
98Q	11	LD05238DW		
99Q	12	L05238DW#2		
500Q	13	LD05238DW#2		
01B	14	B05278DW, RR		
02Q	15	L05278DW		
03Q	16	LD05278DW		
04	17	61378-1, RR		
05	18	61395-1		
06	19	61397-1		
07	20	61397-2		
08	21	61397-3		
09	22	61397-4		
10	23	61397-5		
11	24	61397-6		
12	25	61418-1		
13	26	61418-2		
14	27	61419-2		
15	28	61419-3		
16	29	61398-1		
17	30	61419-1		
18	31	61380-11		
19	32	61394-1		
20	33	61381-1		
21	1	T6388 #2 FO 0.05 DRO CONF		
225C	3	T6387 DRO 1.0 mg/mL		
			JK 5.30.08	

analytics environmental laboratory LLC

TPH / DRO Instrument: G

Detector: A 053008G Load: JW Unload: JW

Run	Vial #	Sample	Method	Comments
G49523	100	MeCl2	D04018AM	
24	1	T6388 #2 FO 0.05/DRO CONF		
25SL	2	T6386 DRO 0.5mg/mL		
26B	7	B05308DW		4125H20
27Q	8	L05308DW		
28Q	9	LD05308DW		
29Q	10	L05308DW#2		
30Q	11	LD05308DW#2		
31B	12	B05238DW,RR		
32Q	13	L05238DW,RR		
33Q	14	LD05238DW,RR		
34	15	61420-17		
35	16	61420-16		
36	17	61399-1		
37	18	61420-20		
38	19	61420-21		
39	20	61439-6		
40	21	61420-18		
41	22	61420-23		
42	23	61439-8		
43	24	61439-2		
44	25	61439-5		
45	26	61439-1		
46	27	61439-7		
47	28	61420-22		
48	29	61439-4		
49	30	61439-3		
50	31	61420-15		
51	32	61420-19		
52	33	61439-9		
53	1	T6388 #2 FO 0.05/DRO CONF		
54	2	T6386 DRO 0.5mg/mL		
55	3	T6387 DRO 1.0mg/mL		
56B	12	B05238DW, RR1		
57	34	61399-2		4125H20

Files Not Used DRO CONF FAILED NOT

C:\ANALYTICS LLC\AEL Documents\logbooks\sequence

* Continued on to Next page.

REV 2- 09/11/06

analytics environmental laboratory LLC

TPH / DRO Instrument: G

Load: JK

Detector: A 053008G Unload: JW

*Continued from previous pg

Run	Vial #	Sample	Method	Comments
G49558	35	61399-3	D04018AM	4125H20
59	36	61399-4		
60	37	61399-5		
61	38	61399-6		
62	39	61399-7		
63	40	61399-8		
64	41	61399-9		
65	42	61399-10		
66	43	61399-11		
67	44	61399-12		
68	45	61399-13		
69	46	61399-14		
70SP	47	61399-2,MS		
71SP	48	61399-2,MSD		
72	1	T6388 #2 FO 0.05 DRO CONF		
73SC	2	T6386 DRO 0.5mg/mL		
74SC	3	T6387 DRO 1.0mg/mL		
75B	49	B05298DAS		4125ASE
76Q	50	L05298DAS		
77Q	51	LD05298DAS		
78B	52	B05308DAS		
79Q	53	L05308DAS		
80Q	54	LD05308DAS		
81	55	61420-14		
82	56	61424-3		
83	57	61420-8		
84	58	61420-10		
85	59	61424-1		
86	60	61424-5		
87SP	61	61424-5,MS		
88SP	62	61424-5,MSD		
89	63	61420-11		
90	64	61422-1		
91	65	61420-9		
92	66	61420-1		

Files Not Used DRO CONF DID NOT PASS

* Continued Onto Next Pg

analytics environmental laboratory LLC

TPH / DRO Instrument: G

Detector: A 060208G Load: JK Unload: JW

Run	Vial #	Sample	Method	Comments
G49605	100	MeCl2	D04018AM	
06	1	T6388 #2 FO 0.05 DRO CONF	↓	
07SC	2	T6386 DRO 0.5 mg/mL	↓	
08SC	4	T6380 #2 FO 0.5mg/mL	T04248AM	
09B	7	B05298DAS	D4018AM / T04248AM	
10Q	8	L05298DAS	D04018AM	
11Q	9	LDO5298DAS	↓	
12Q	10	L05298TAS	T04248AM	
13	11	61427-1	↓	
14	12	61427-2	↓	
15	13	61426-1	↓	
16	14	61422-1	D04018AM	4125ASE
17	1	T6388 #2 FO 0.05 DRO CONF	↓	
18SC	3	T6387 DRO 1.0 mg/mL	↓	
19SC	5	T6381 #2 FO 1.0mg/mL	T04248AM	
~~20B~~	~~7~~	~~B05298DAS, RR~~		JK 5-2-08
~~21~~	~~8~~	~~61426 1,20X~~		
~~22SC~~	~~5~~	~~T6381 #2 FO 1.0mg/mL~~		
20B	7	B05238DW, RR2	D04018AM	4125H20
21B	8	B05308DAS		4125ASE
22Q	9	L05308DAS		↓
23Q	10	LDO5308DAS		
24	11	61399-2, RR		4125H20
25	12	61399-3, RR		
26	13	61399-4, RR		
27	14	61399-5, RR		
28	15	61399-6, RR		
29	16	61399-7, RR		
30	17	61399-8, RR		
31	18	61399-9, RR		
32	19	61399-10, RR		
33	20	61399-11, RR		
34	21	61399-12, RR		
35	22	61399-13, RR		
36	23	61399-14, RR		

X Continued onto Next Pg

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TPH / DRO Instrument: G

Detector: A 060208G Load: JK Unload: JW

* Continued from previous pg

Run	Vial #	Sample	Method	Comments
G49637JP	24	61399-2,MS, RR2	✓ D04018 AM	4125H2O 1086
38SP	25	61399-2,MSD, RR2	✓	↓ 1080
39	26	61424-3	✓	4125ABE
40	27	61424-1	✓	
41	28	61424-5	✓	
42SP	29	61424-5,MS	✓	15.98
43SP	30	61424-5,MSD	✓	15.47
44	#1	T6388 #2 FO 0.05/DRO CONF	✓	Poor peak resolution
45	3	T6408 DRO 1.0 mg/L	✓	
46	1	T6388 #2 FO 0.05/DRO CONF	✓	

JK 6-3-08

Response Factor Report INST G

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008

Calibration Files
1 =G48497SI.D 2 =G48498SI.D 3 =G48499SI.D
4 =G48500SI.D 5 =G48501SI.D 6 =G48502SI.D

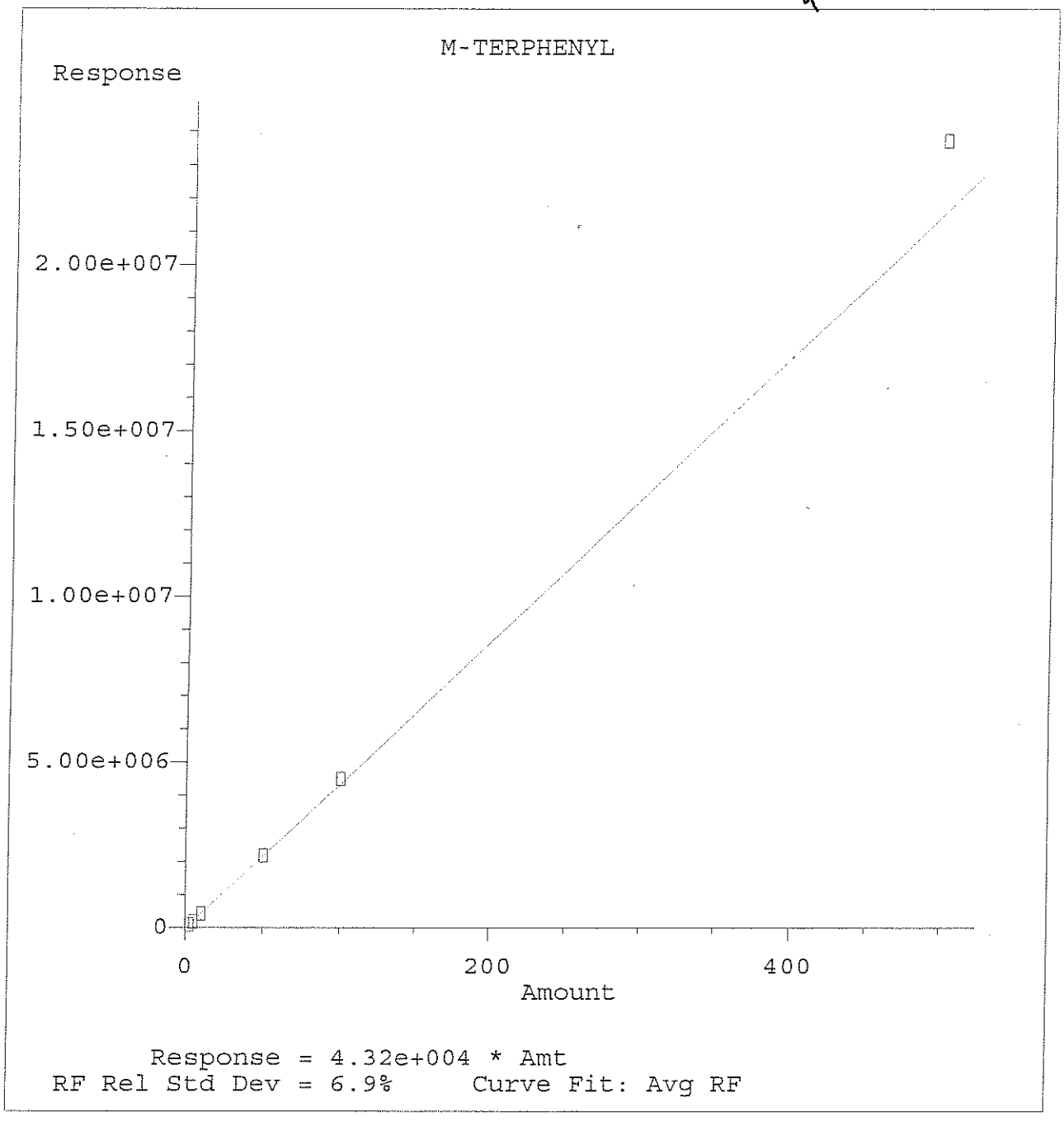
		Compound	1	2	3	4	5	6	Avg		%
1)	S	M-TERPHENYL	4.172	3.857	4.313	4.360	4.490	4.744	4.323	E4	6
2)	HM	DRO LOW (<1.0)	7.222	5.226	4.692	4.357	4.343		5.168	E7	23
3)	HM	DRO HIGH (>1.0)			4.692	4.357	4.343	4.314	4.330	E7	6

Linear I

JL 4.2.08

(#) = Out of Range ### Number of calibration levels exceeded format ###
D040108A.M Wed Apr 02 09:42:12 2008 Page 1

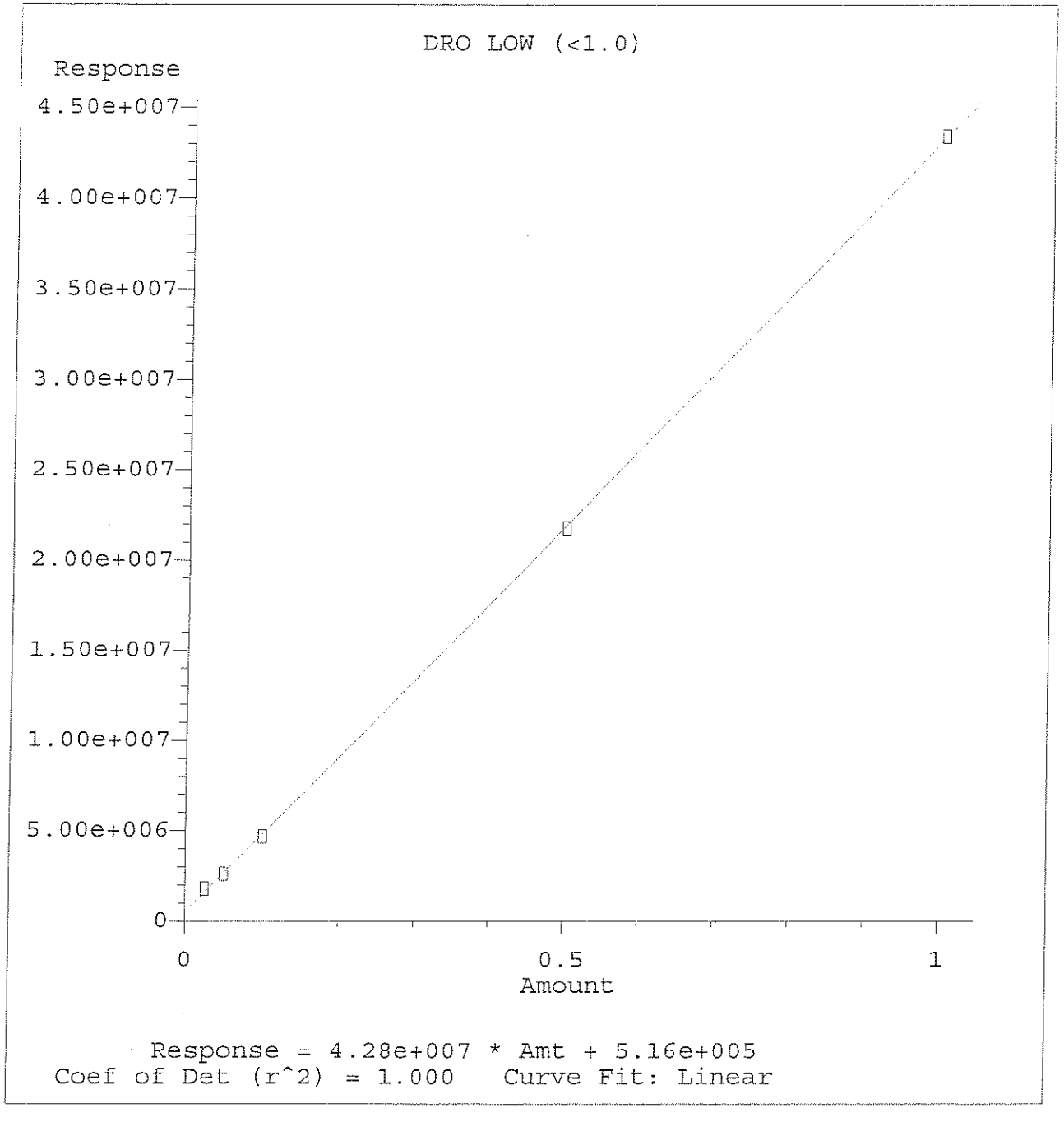
JK 4-2-08



Method Name: C:\HPCHEM\1\METHODS\D040108A.M
Calibration Table Last Updated: Wed Apr 02 09:34:08 2008

5/4/2008

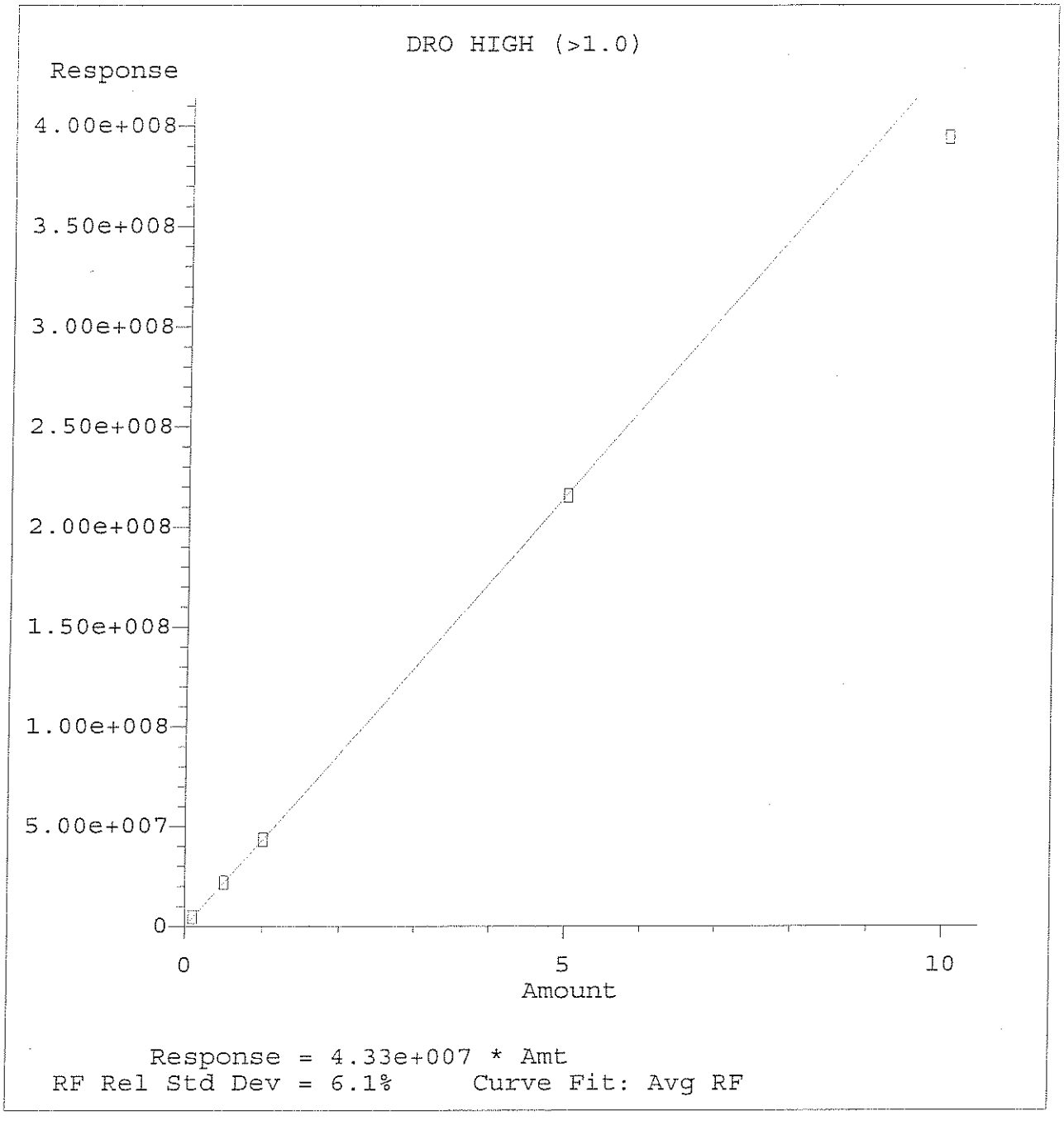
JE 4.2.08



Method Name: C:\HPCHEM\1\METHODS\D040108A.M
Calibration Table Last Updated: Wed Apr 02 09:34:08 2008

4.2.08

JK 4.2.08



Method Name: C:\HPCHEM\1\METHODS\D040108A.M
Calibration Table Last Updated: Wed Apr 02 09:36:40 2008

VS 4.2.08

Quantitation Report (QT Reviewed)

Data File : D:\TPH\040108-G\G48497SI.D Vial: 7
Acq On : 1 Apr 2008 14:36 Operator:
Sample : T6331 DRO 0.025MG/ML Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Apr 2 8:36 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Tue Mar 18 08:01:06 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

4.2.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.78	104297	2.811 ug/mlm
Spiked Amount 100.000	Range 60 - 140	Recovery =	2.81%#
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	1805505	0.025 mg/ml
3) HM DRO HIGH (>1.0)	13.01	1805505	N.D. mg/ml

4.2.08

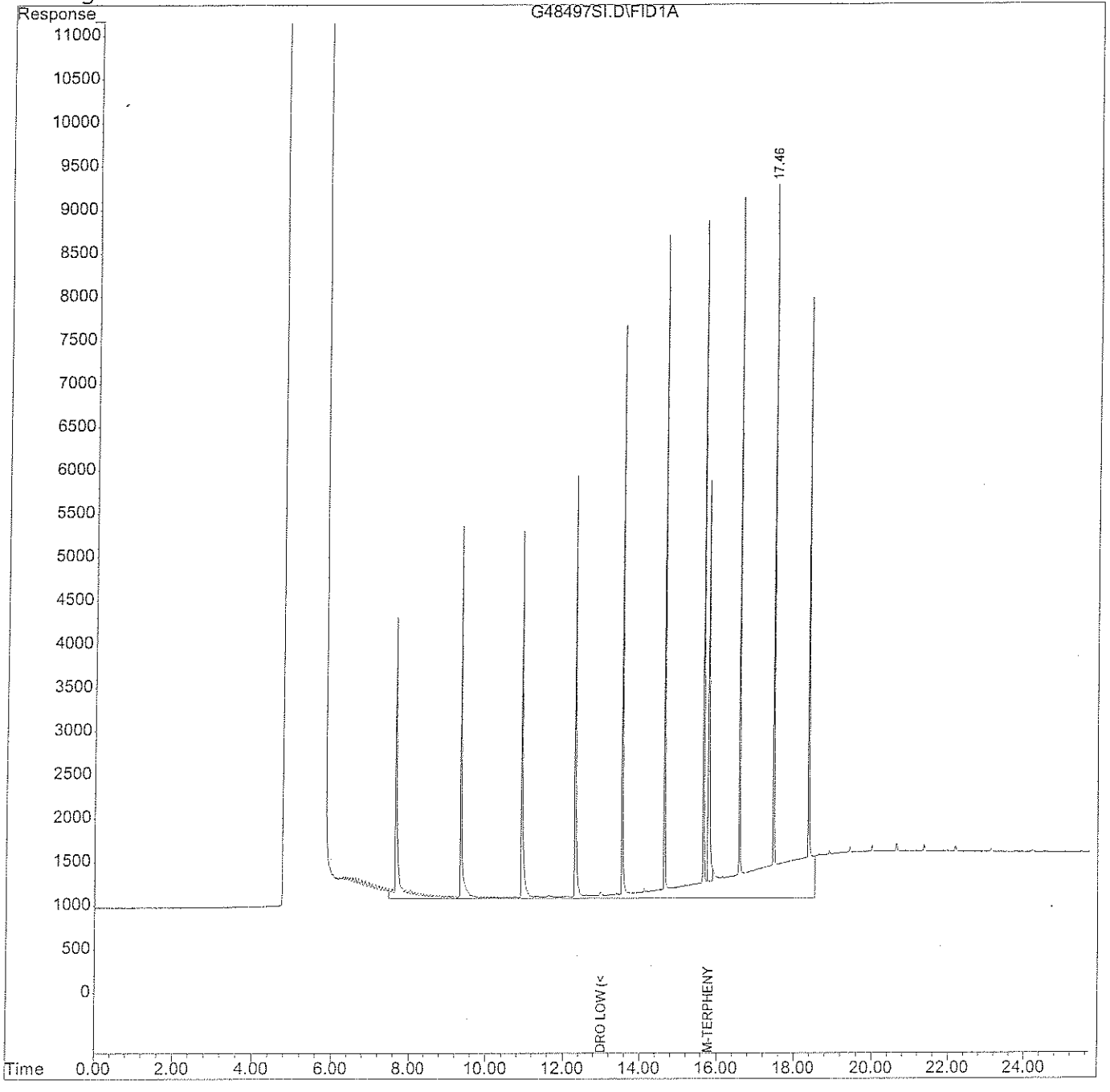
(f)=RT Delta > 1/2 Window (m)=manual int.
G48497SI.D D040108A.M Wed Apr 02 08:44:11 2008 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\TPH\040108-G\G48497SI.D Vial: 7
Acq On : 1 Apr 2008 14:36 Operator:
Sample : T6331 DRO 0.025MG/ML Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Apr 2 8:36 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Tue Mar 18 08:01:06 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm



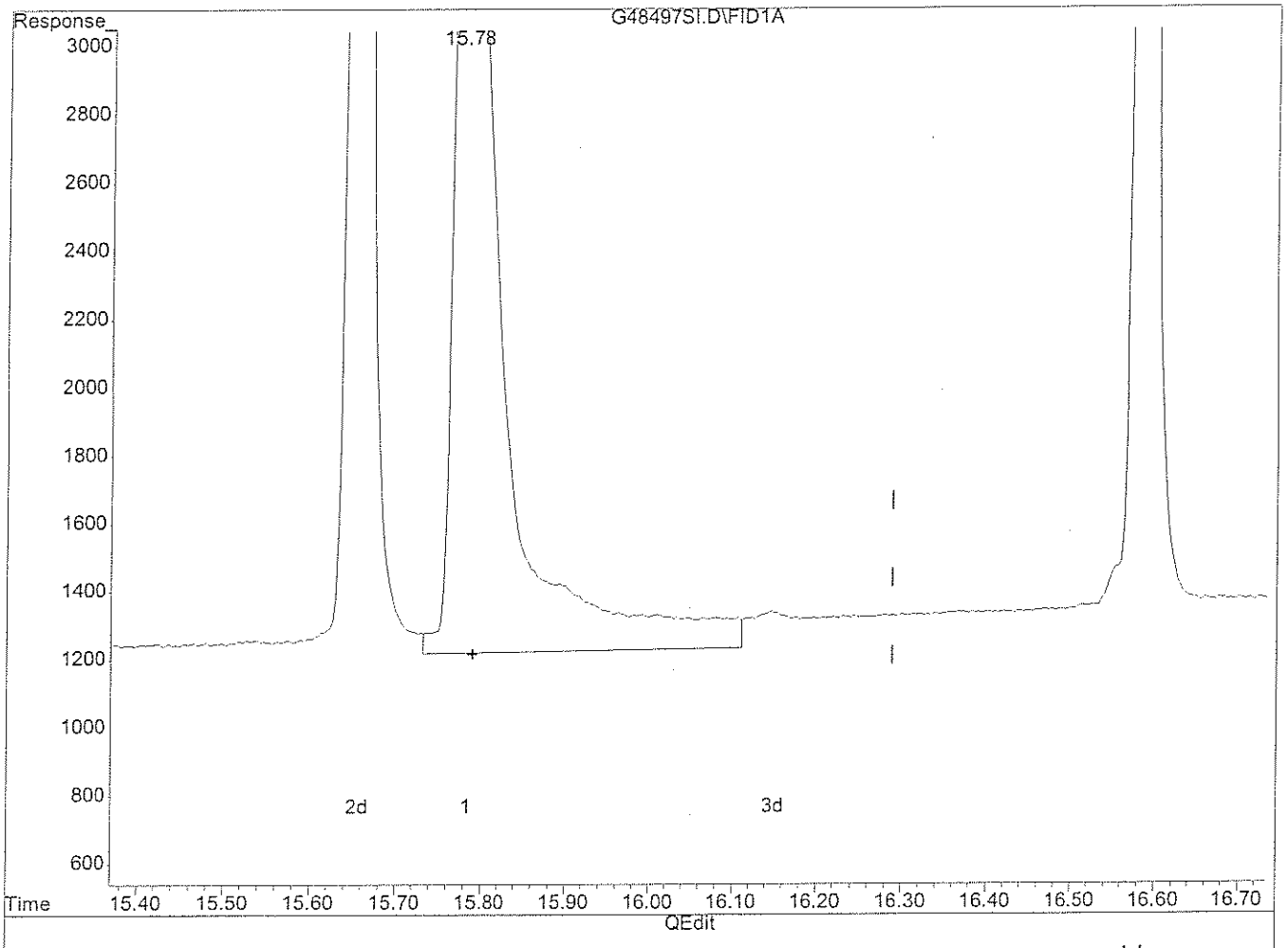
Quantitation Report (Qedit)

Data File : D:\TPH\040108-G\G48497SI.D
Acq On : 1 Apr 2008 14:36
Sample : T6331 DRO 0.025MG/ML
Misc :
IntFile : AUTOINT1.E
Quant Time: Apr 2 8:36 2008 Quant Results File: D040108A.RES

Vial: 7
Operator:
Inst : INST G
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Tue Mar 18 08:01:06 2008
Response via : Multiple Level Calibration

JW 4.2.08 KEK



(1) M-TERPHENYL (S)

15.78min 3.368ug/ml

response 124934

TJ 7-2008

(+) = Expected Retention Time
G48497SI.D D040108A.M Wed Apr 02 08:36:13 2008

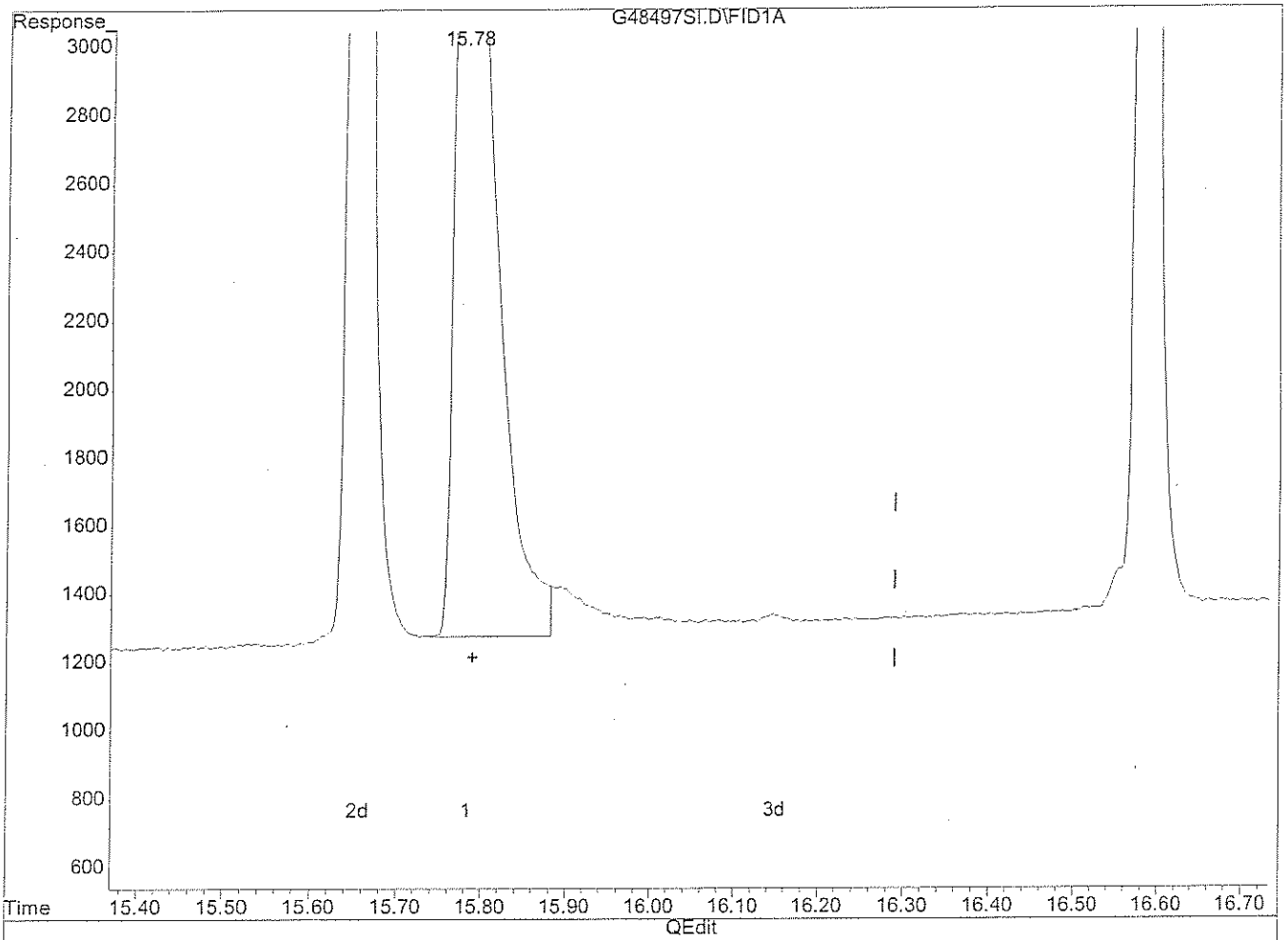
Quantitation Report (Qedit)

Data File : D:\TPH\040108-G\G48497SI.D
Acq On : 1 Apr 2008 14:36
Sample : T6331 DRO 0.025MG/ML
Misc :
IntFile : AUTOINT1.E
Quant Time: Apr 2 8:36 2008 Quant Results File: D040108A.RES

Vial: 7
Operator:
Inst : INST G
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Tue Mar 18 08:01:06 2008
Response via : Multiple Level Calibration

JK 4-2-08



(1) M-TERPHENYL (S)

15.78min 2.811ug/ml m

response 104297

4-2-08

(+) = Expected Retention Time
G48497SI.D D040108A.M Wed Apr 02 08:36:23 2008

Quantitation Report (QT Reviewed)

Data File : D:\TPH\040108-G\G48498SI.D Vial: 8
Acq On : 1 Apr 2008 15:05 Operator:
Sample : T6331 DRO 0.05 MG/ML Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Apr 2 8:36 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Tue Mar 18 08:01:06 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

JK 4.2.08

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.76	192850	5.198 ug/mlm
Spiked Amount 100.000	Range 60 - 140	Recovery =	5.20%#
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	2613191	0.045 mg/ml
3) HM DRO HIGH (>1.0)	13.01	2613191	N.D. mg/ml

4-2-2008

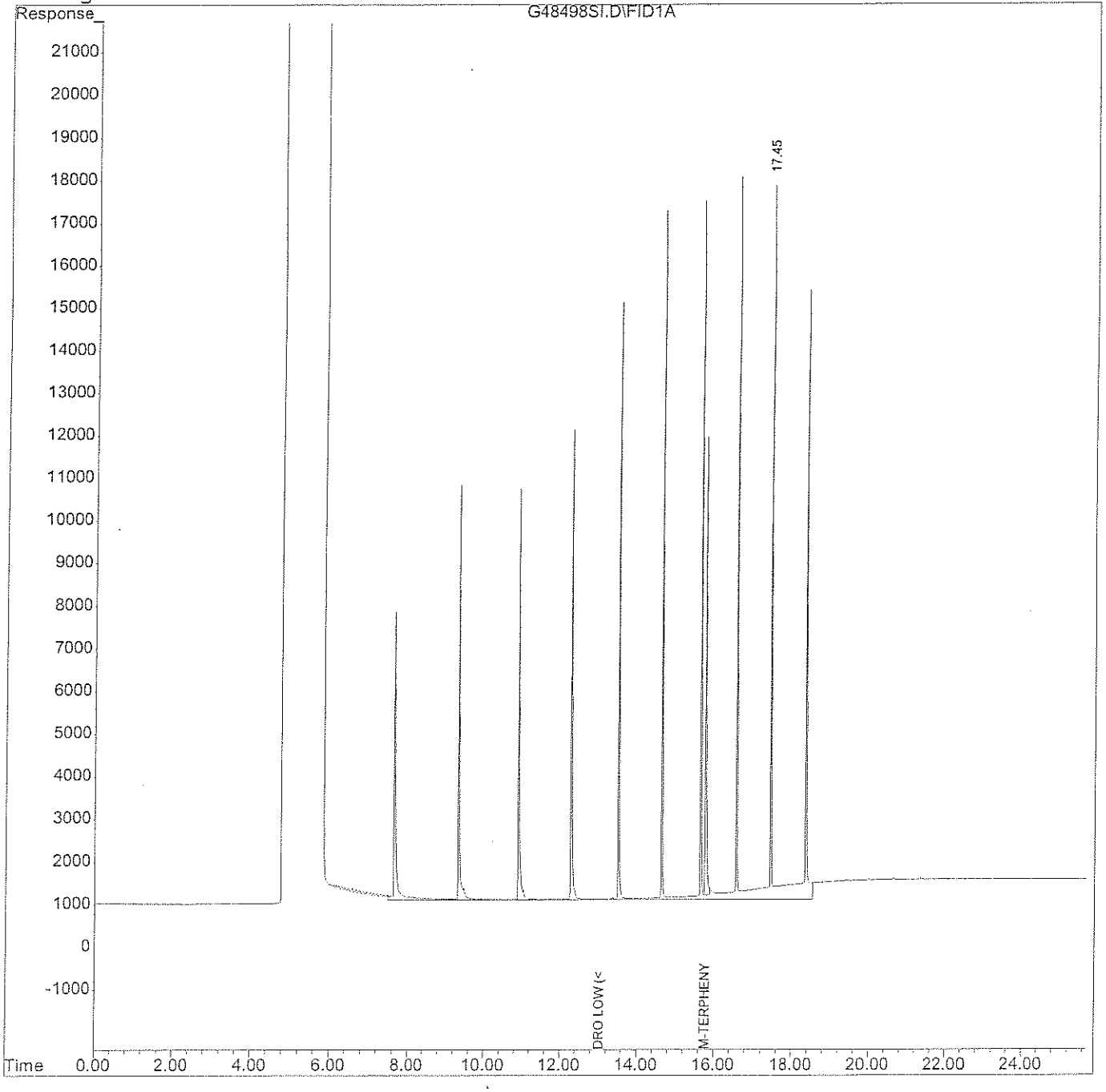
(f)=RT Delta > 1/2 Window (m)=manual int.
G48498SI.D D040108A.M Wed Apr 02 08:44:14 2008 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\TPH\040108-G\G48498SI.D Vial: 8
Acq On : 1 Apr 2008 15:05 Operator:
Sample : T6331 DRO 0.05 MG/ML Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Apr 2 8:36 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Tue Mar 18 08:01:06 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

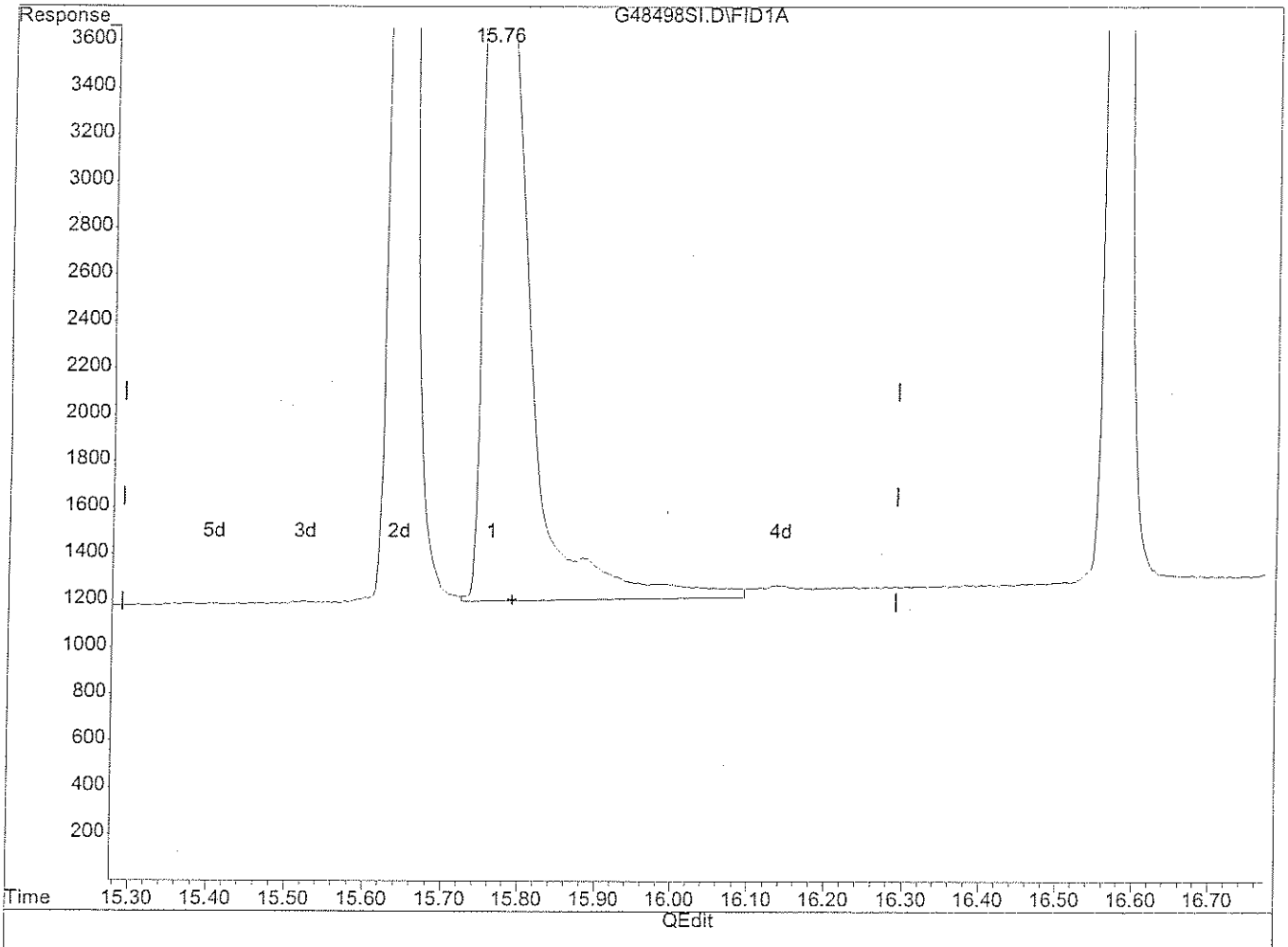


Quantitation Report (Qedit)

Data File : D:\TPH\040108-G\G48498SI.D Vial: 8
Acq On : 1 Apr 2008 15:05 Operator:
Sample : T6331 DRO 0.05 MG/ML Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Apr 2 8:36 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Tue Mar 18 08:01:06 2008
Response via : Multiple Level Calibration

JK 4.2.08 *E.A.



(1) M-TERPHENYL (S)

15.76min 5.513ug/ml

response 204516

√ 4.2.08

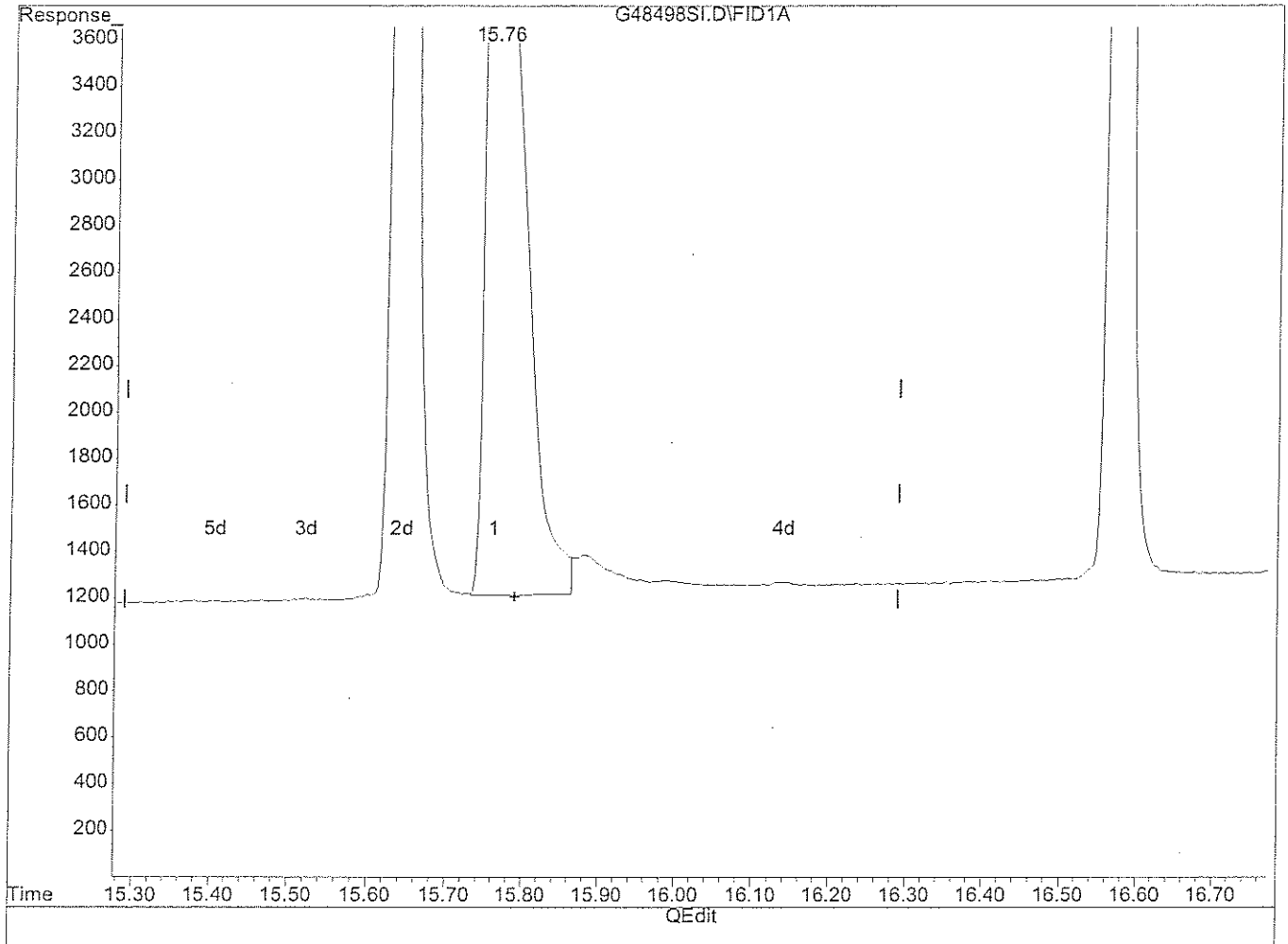
(+) = Expected Retention Time
G48498SI.D D040108A.M Wed Apr 02 08:36:49 2008

Quantitation Report (Qedit)

Data File : D:\TPH\040108-G\G48498SI.D Vial: 8
Acq On : 1 Apr 2008 15:05 Operator:
Sample : T6331 DRO 0.05 MG/ML Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Apr 2 8:36 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Tue Mar 18 08:01:06 2008
Response via : Multiple Level Calibration

JW 4.2.08



(1) M-TERPHENYL (S)

15.76min 5.198ug/ml m

response 192850

4.2.08

(+) = Expected Retention Time
G48498SI.D D040108A.M Wed Apr 02 08:37:00 2008

Quantitation Report (QT Reviewed)

Data File : D:\TPH\040108-G\G48499SI.D Vial: 9
Acq On : 1 Apr 2008 15:34 Operator:
Sample : T6333 DRO 0.1 MG/ML Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Apr 2 8:37 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Tue Mar 18 08:01:06 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

JK 4.2.08

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.75	431333	11.627 ug/ml
Spiked Amount 100.000	Range 60 - 140	Recovery =	11.63%#
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	4692465	0.097 mg/ml
3) HM DRO HIGH (>1.0)	13.01	4692465	N.D. mg/ml

4.2.08

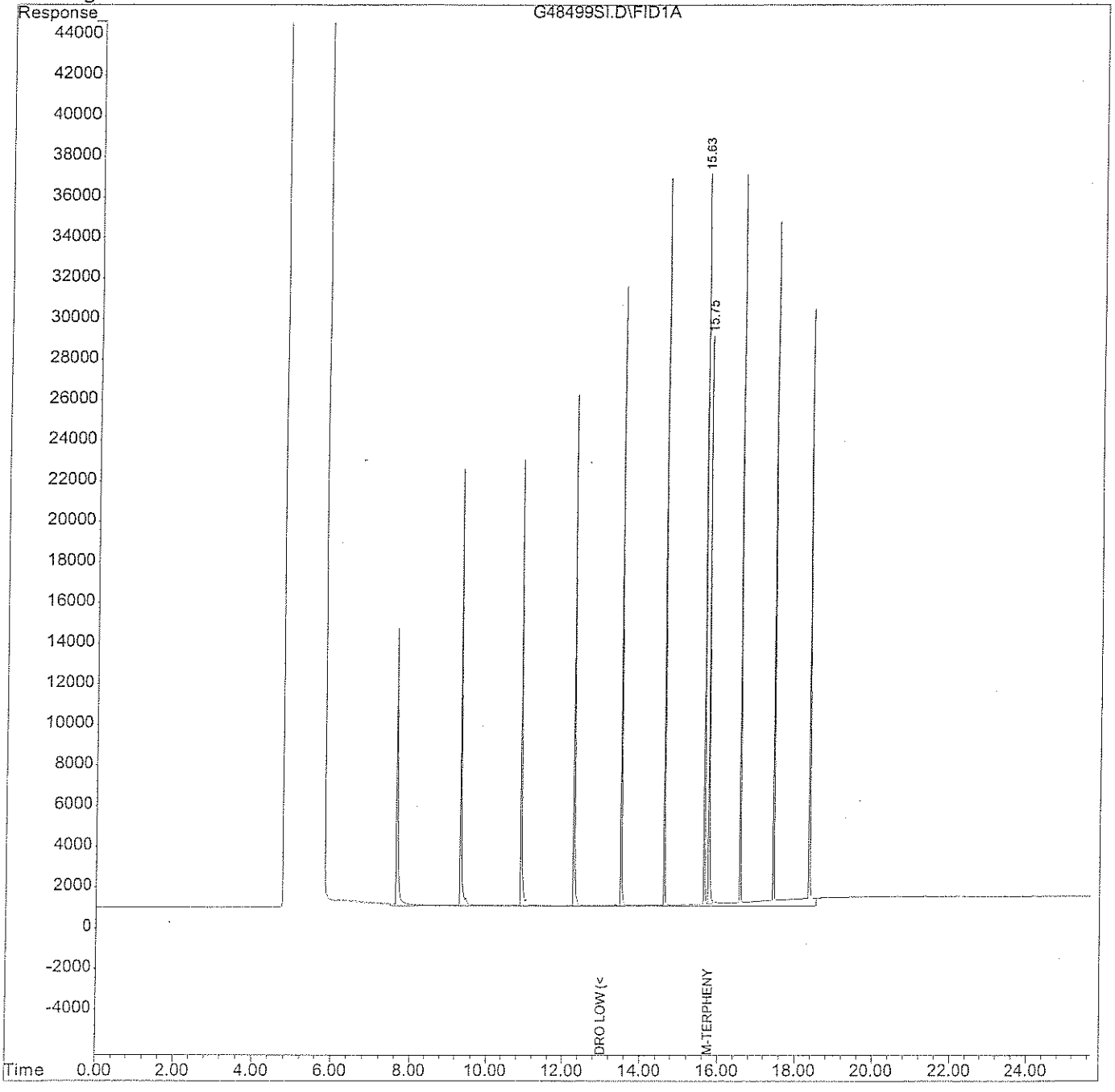
(f)=RT Delta > 1/2 Window (m)=manual int.
G48499SI.D D040108A.M Wed Apr 02 08:44:18 2008 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\TPH\040108-G\G48499SI.D Vial: 9
Acq On : 1 Apr 2008 15:34 Operator:
Sample : T6333 DRO 0.1 MG/ML Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Apr 2 8:37 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Tue Mar 18 08:01:06 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm



Quantitation Report (QT Reviewed)

Data File : D:\TPH\040108-G\G48500SI.D Vial: 10
Acq On : 1 Apr 2008 16:04 Operator:
Sample : T6386 DRO 0.5 MG/ML Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Apr 2 8:37 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Tue Mar 18 08:01:06 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

JK 4.2.08

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.76	2179883	58.759 ug/mlm
Spiked Amount 100.000	Range 60 - 140	Recovery =	58.76%#
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	21783150	0.522 mg/ml
3) HM DRO HIGH (>1.0)	13.01	21783150	0.473 mg/ml

√ 4.2.08

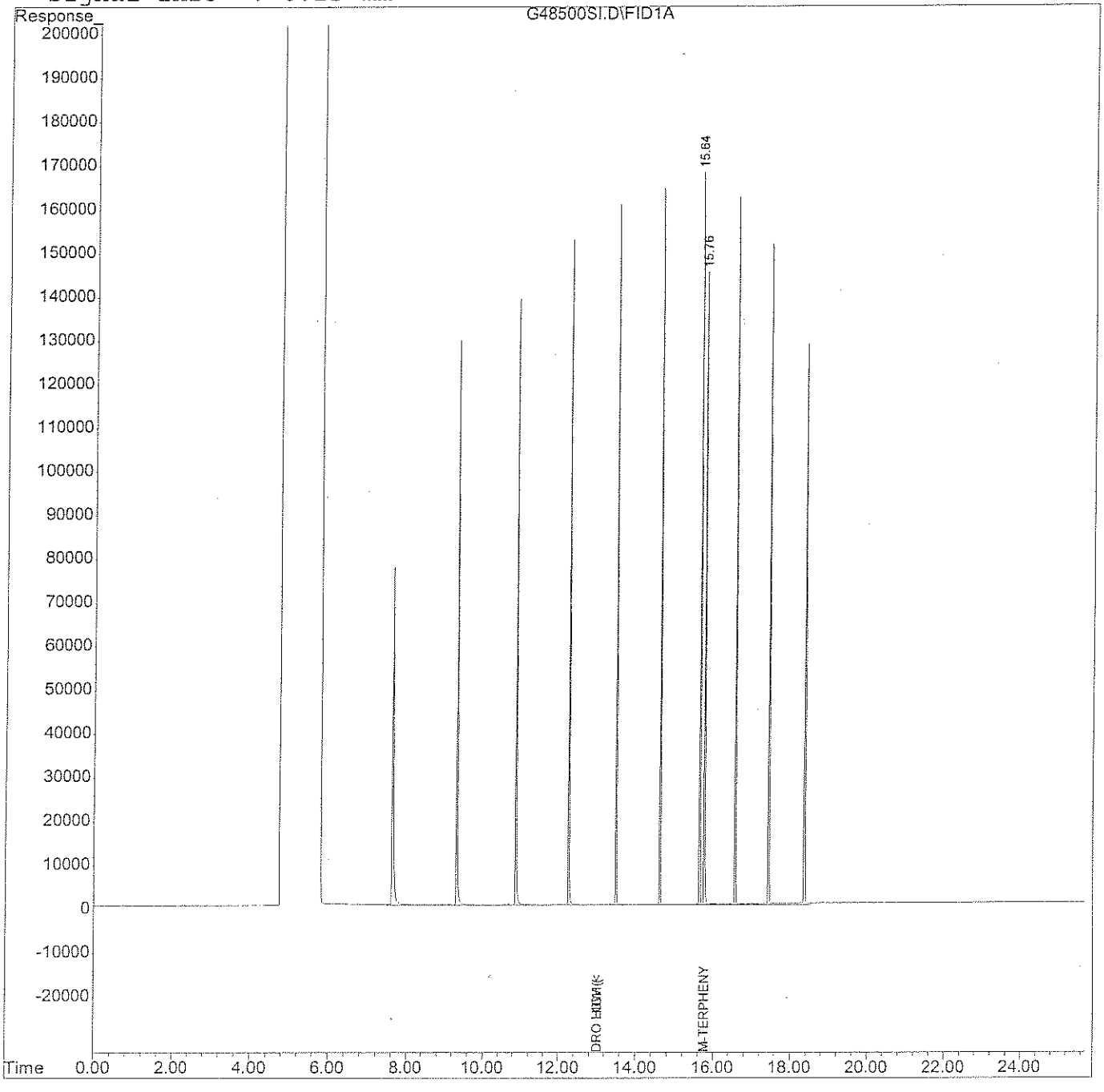
(f)=RT Delta > 1/2 Window (m)=manual int.
G48500SI.D D040108A.M Wed Apr 02 08:44:22 2008 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\TPH\040108-G\G48500SI.D Vial: 10
Acq On : 1 Apr 2008 16:04 Operator:
Sample : T6386 DRO 0.5 MG/ML Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Apr 2 8:37 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Tue Mar 18 08:01:06 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm



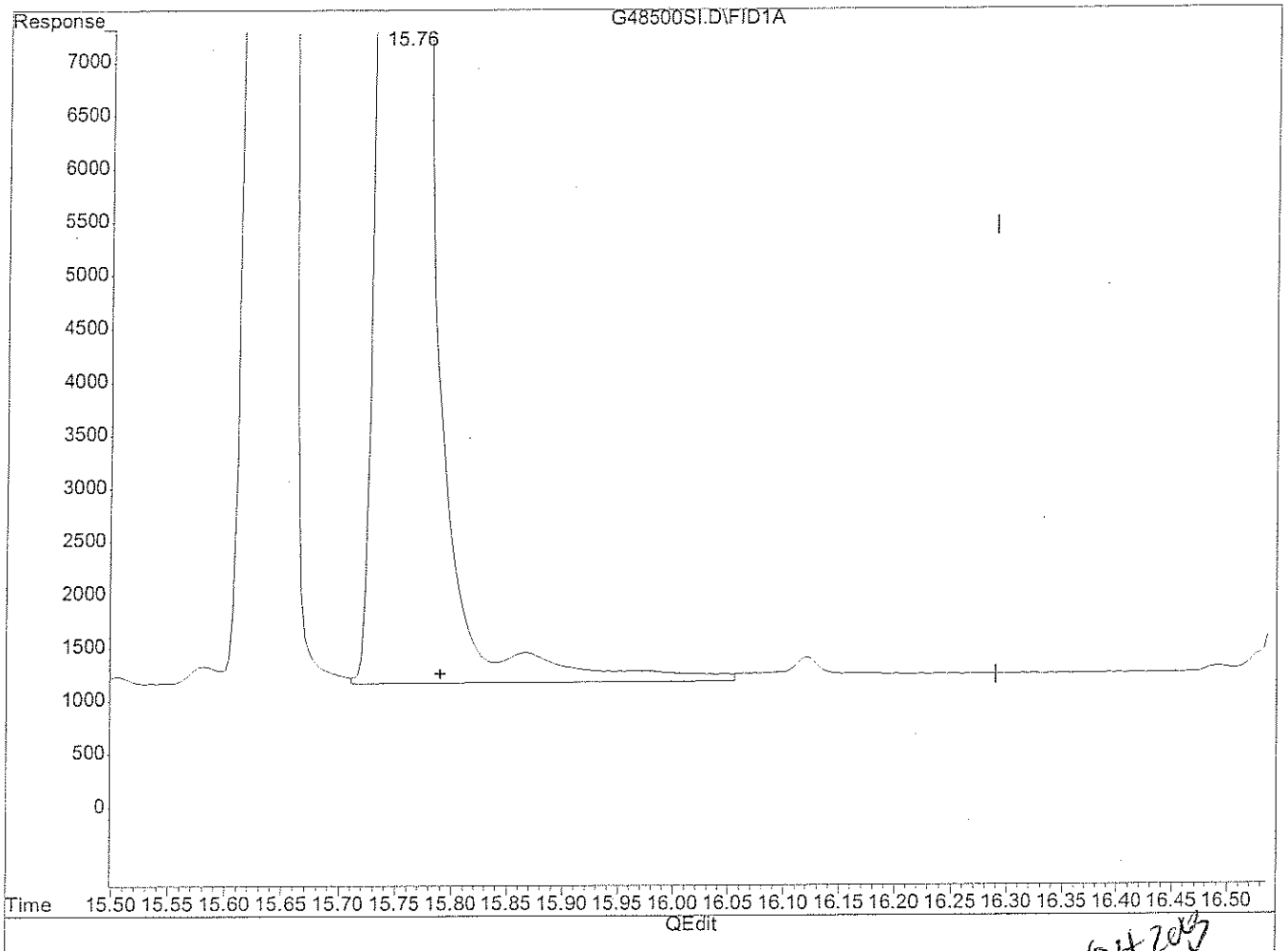
Quantitation Report (Qedit)

Data File : D:\TPH\040108-G\G48500SI.D
Acq On : 1 Apr 2008 16:04
Sample : T6386 DRO 0.5 MG/ML
Misc :
IntFile : AUTOINT1.E
Quant Time: Apr 2 8:37 2008 Quant Results File: D040108A.RES

Vial: 10
Operator:
Inst : INST G
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Tue Mar 18 08:01:06 2008
Response via : Multiple Level Calibration

JK 4.2.08 KE.A



4-2-08

(1) M-TERPHENYL (S)

15.76min 59.232ug/ml

response 2197420

(+) = Expected Retention Time

G48500SI.D D040108A.M Wed Apr 02 08:37:39 2008

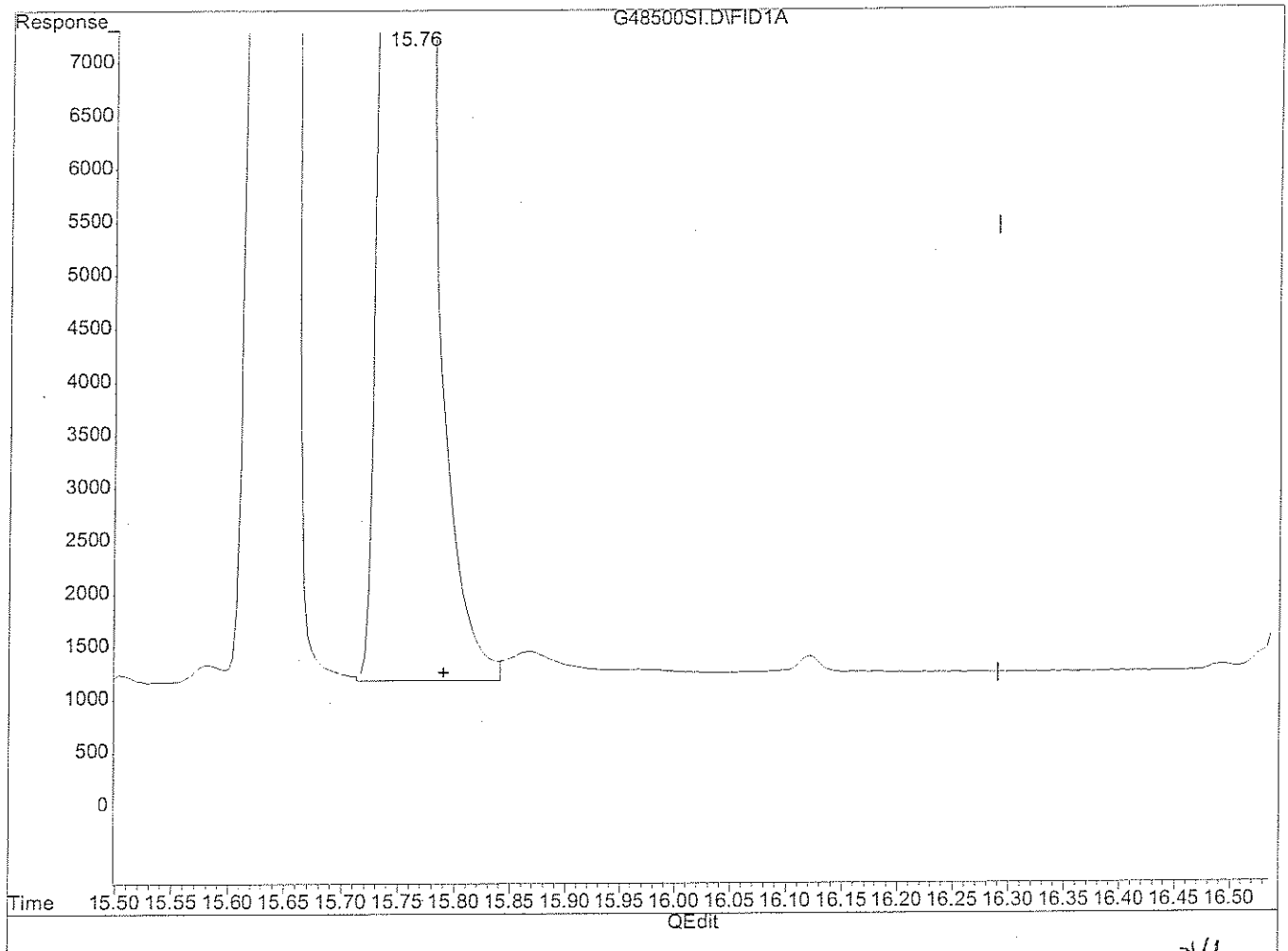
Quantitation Report (Qedit)

Data File : D:\TPH\040108-G\G48500SI.D
Acq On : 1 Apr 2008 16:04
Sample : T6386 DRO 0.5 MG/ML
Misc :
IntFile : AUTOINT1.E
Quant Time: Apr 2 8:37 2008 Quant Results File: D040108A.RES

Vial: 10
Operator:
Inst : INST G
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Tue Mar 18 08:01:06 2008
Response via : Multiple Level Calibration

JK 4.2.08



(1) M-TERPHENYL (S)

15.76min 58.759ug/ml m

response 2179883

JK 4.2.08

(+) = Expected Retention Time

G48500SI.D D040108A.M Wed Apr 02 08:37:45 2008

Quantitation Report (QT Reviewed)

Data File : D:\TPH\040108-G\G48501SI.D Vial: 11
Acq On : 1 Apr 2008 16:33 Operator:
Sample : T6387 DRO 1.0 MG/ML Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Apr 2 8:38 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Tue Mar 18 08:01:06 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

JH 4-2-08

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.77	4490135	121.033 ug/ml
Spiked Amount 100.000	Range 60 - 140	Recovery = 121.03%	
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	43432413	1.061 mg/ml
3) HM DRO HIGH (>1.0)	13.01	43432413	1.117 mg/ml

JD 4-2-08

(f)=RT Delta > 1/2 Window (m)=manual int.
G48501SI.D D040108A.M Wed Apr 02 08:44:25 2008 Page 1

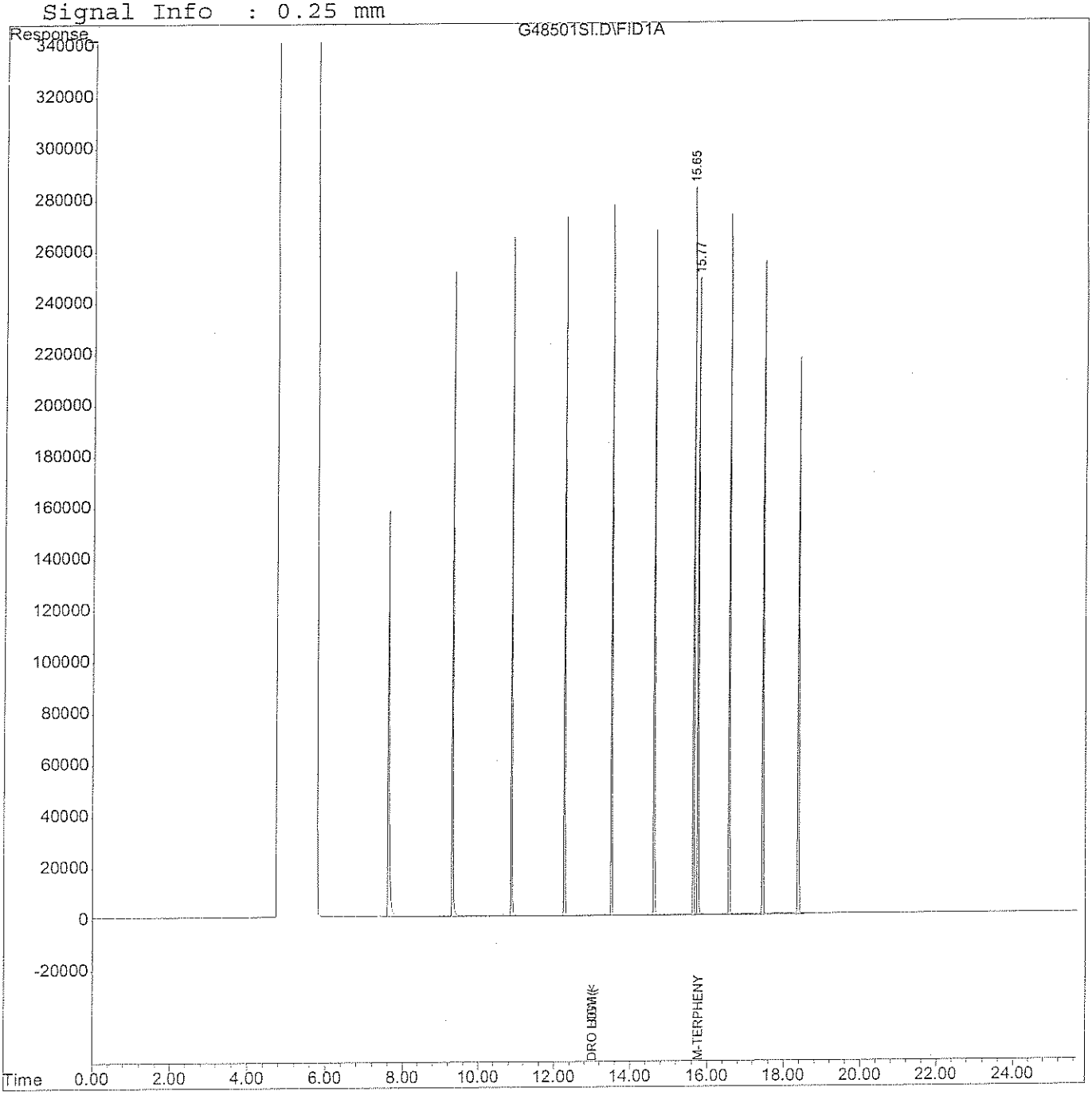
Quantitation Report (QT Reviewed)

Data File : D:\TPH\040108-G\G48501SI.D
Acq On : 1 Apr 2008 16:33
Sample : T6387 DRO 1.0 MG/ML
Misc :
IntFile : AUTOINT1.E
Quant Time: Apr 2 8:38 2008 Quant Results File: D040108A.RES

Vial: 11
Operator:
Inst : INST G
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Tue Mar 18 08:01:06 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm



Quantitation Report (QT Reviewed)

Data File : D:\TPH\040108-G\G48502SI.D Vial: 12
Acq On : 1 Apr 2008 17:17 Operator:
Sample : T6336 DRO 5.0 MG/ML Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Apr 2 8:46 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Tue Mar 18 08:01:06 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

JK 4-2-08

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.71	23720745	639.398 ug/mlm
Spiked Amount 100.000 Range 60 - 140		Recovery = 639.40%#	
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	215716546	5.346 mg/ml
3) HM DRO HIGH (>1.0)	13.01	215716546	6.239 mg/ml

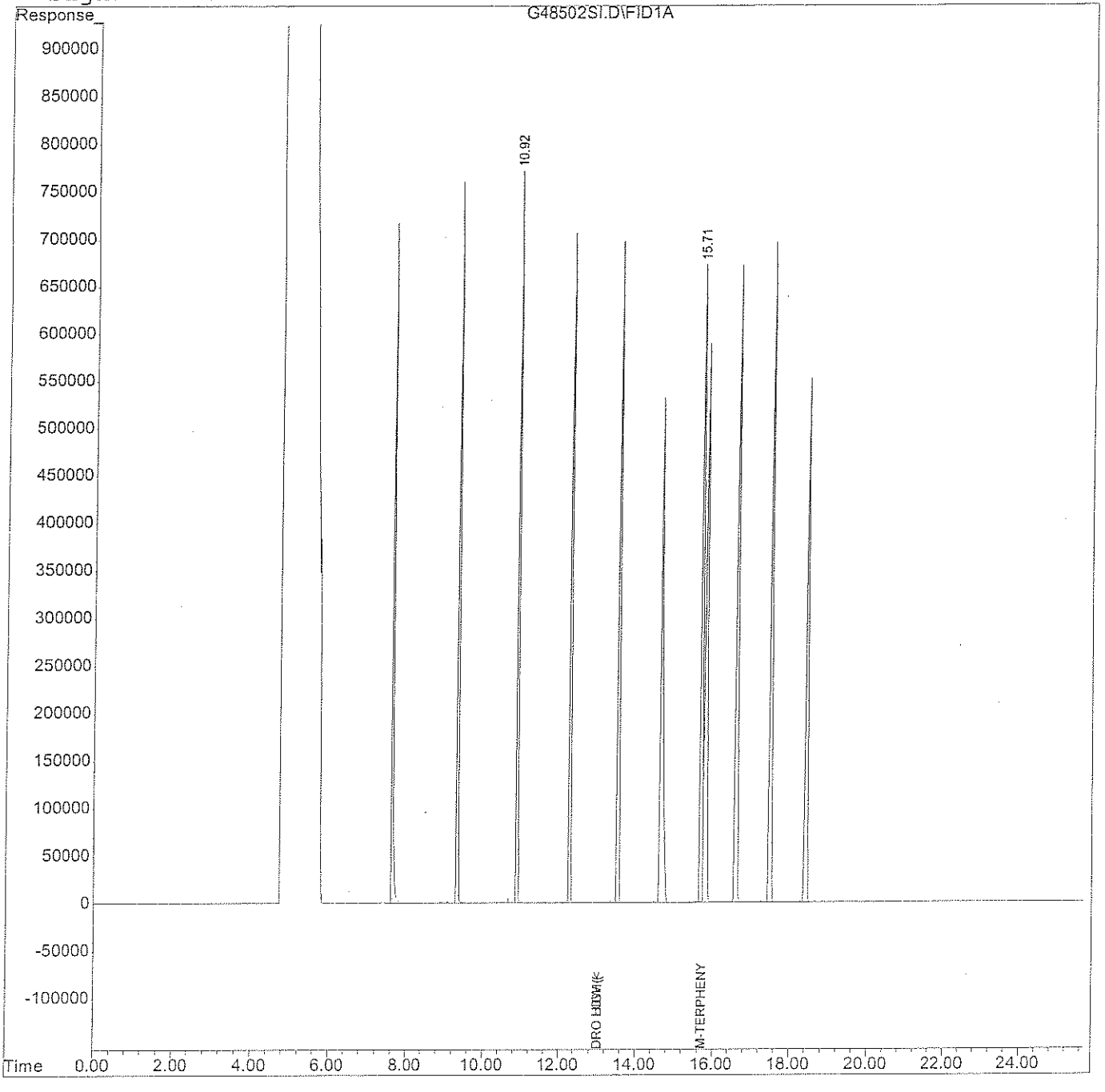
✓ 4-2-08

(f)=RT Delta > 1/2 Window (m)=manual int.
G48502SI.D D040108A.M Wed Apr 02 08:46:10 2008 Page 1

Data File : D:\TPH\040108-G\G48502SI.D Vial: 12
Acq On : 1 Apr 2008 17:17 Operator:
Sample : T6336 DRO 5.0 MG/ML Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Apr 2 8:46 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Tue Mar 18 08:01:06 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm



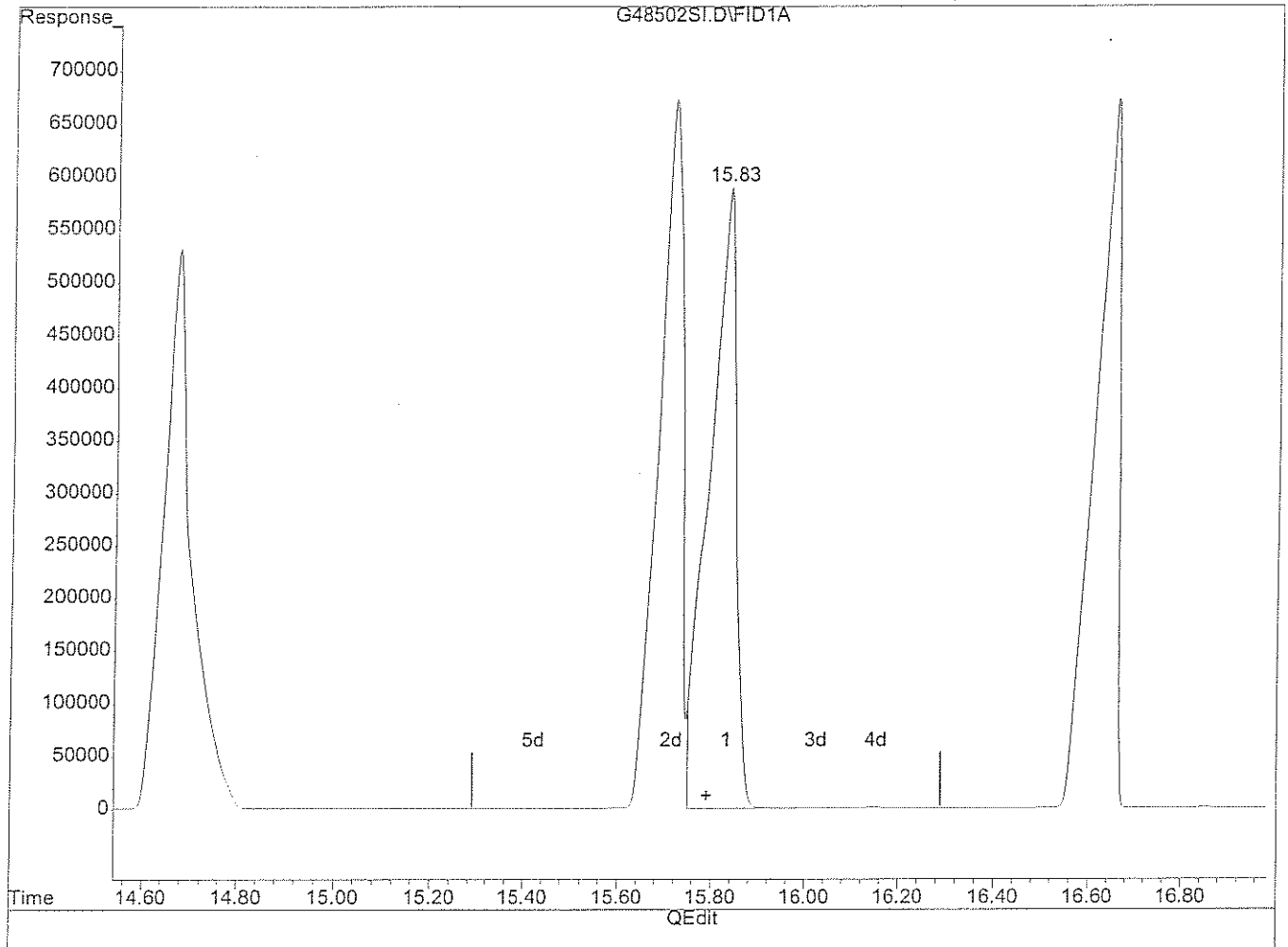
Quantitation Report (Qedit)

Data File : D:\TPH\040108-G\G48502SI.D
Acq On : 1 Apr 2008 17:17
Sample : T6336 DRO 5.0 MG/ML
Misc :
IntFile : AUTOINT1.E
Quant Time: Apr 2 8:39 2008 Quant Results File: D040108A.RES

Vial: 12
Operator:
Inst : INST G
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Tue Mar 18 08:01:06 2008
Response via : Multiple Level Calibration

JW 4.2.08 KMP.



(1) M-TERPHENYL (S)

15.83min 626.756ug/ml

response 23251758

4-2-08

(+) = Expected Retention Time
G48502SI.D D040108A.M Wed Apr 02 08:45:56 2008

Data File : D:\TPH\040108-G\G48503SI.D Vial: 13
Acq On : 1 Apr 2008 17:46 Operator:
Sample : T6337 DRO10.0 MG/ML Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Apr 2 8:40 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Tue Mar 18 08:01:06 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

JK 4.2.08

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.79	65200892	1757.505 ug/ml
Spiked Amount 100.000	Range 60 - 140	Recovery	= 1757.51%#
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	394354391	9.789 mg/ml
3) HM DRO HIGH (>1.0)	13.01	394354391	11.549 mg/ml

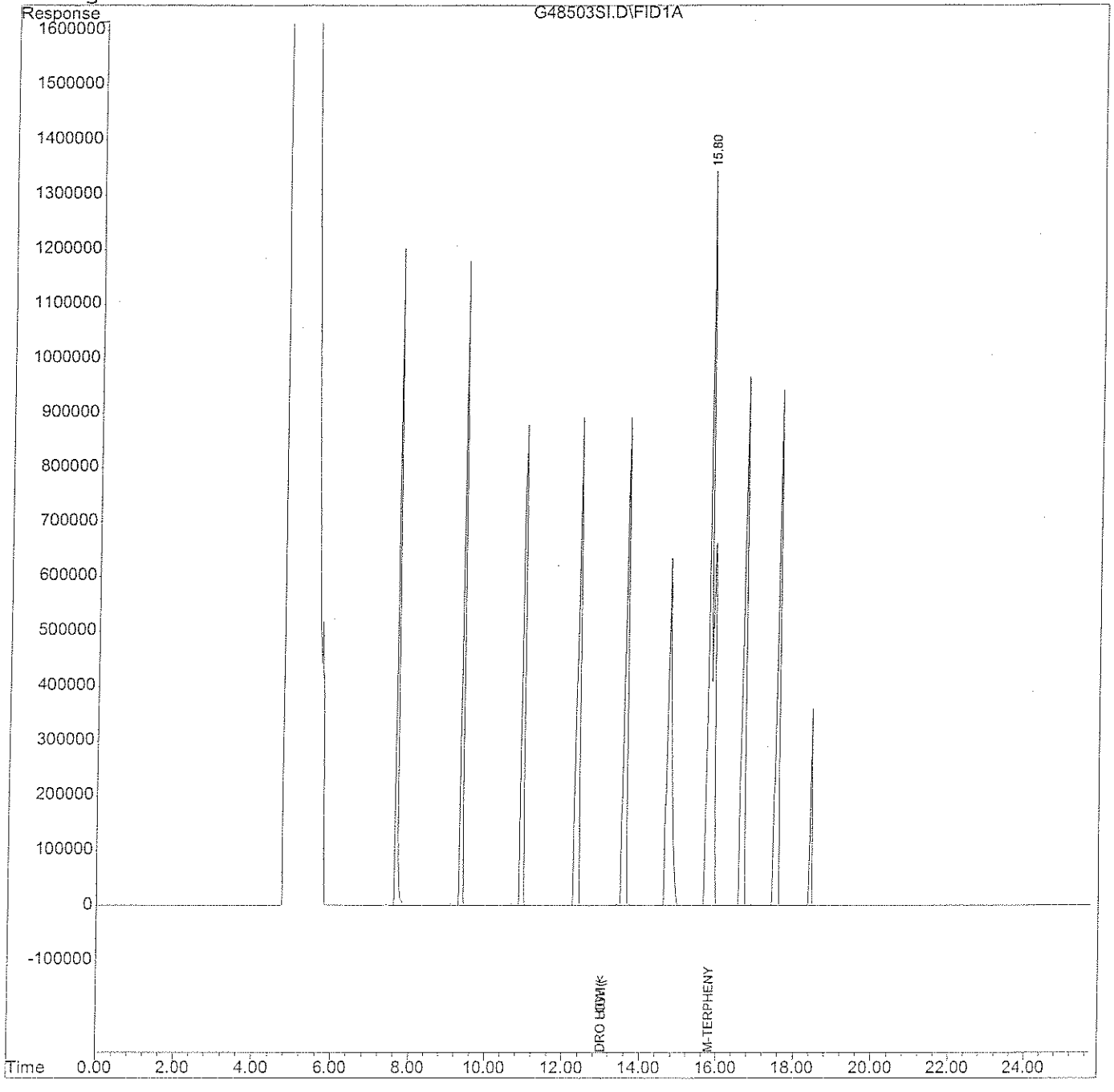
✓ 4.2.08

(f)=RT Delta > 1/2 Window (m)=manual int.
G48503SI.D D040108A.M Wed Apr 02 08:44:36 2008 Page 1

Data File : D:\TPH\040108-G\G48503SI.D Vial: 13
Acq On : 1 Apr 2008 17:46 Operator:
Sample : T6337 DRO10.0 MG/ML Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Apr 2 8:40 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Tue Mar 18 08:01:06 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm



Quantitation Report (QT Reviewed)

Data File : D:\TPH\040108-G\G48504SC.D Vial: 14
Acq On : 1 Apr 2008 18:15 Operator:
Sample : T6338 DRO CC 1.0 MG/ML Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Apr 2 9:47 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JK 4.2.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.77	4534241	104.894 ug/ml
Spiked Amount 100.000	Range 60 - 140	Recovery = 104.89%	
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	42625706	0.983 mg/ml
3) HM DRO HIGH (>1.0)	13.01	42625706	0.984 mg/ml

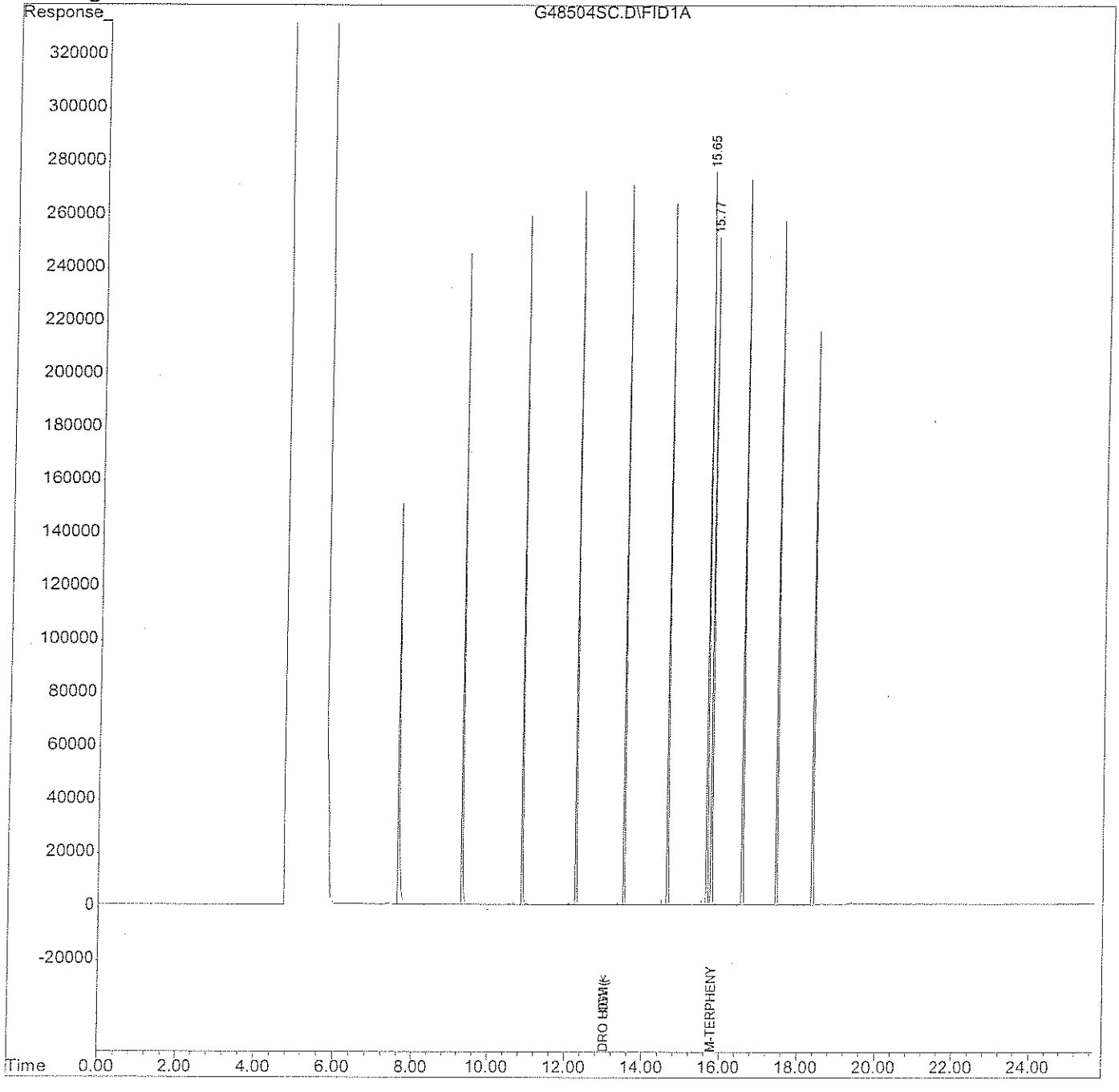
√ 4.2.08

(f)=RT Delta > 1/2 Window (m)=manual int.
G48504SC.D D040108A.M Wed Apr 02 09:48:07 2008 Page 1

Data File : D:\TPH\040108-G\G48504SC.D Vial: 14
Acq On : 1 Apr 2008 18:15 Operator:
Sample : T6338 DRO CC 1.0 MG/ML Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Apr 2 9:47 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm



Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49524.D Vial: 1
Acq On : 30 May 2008 14:08 Operator:
Sample : T6388 #2 FO 0.05/DRO CONF Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: May 30 15:08 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JC 5-30-08

6-2-08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.70	279787	6.472 ug/ml
Spiked Amount 100.000 Range 60 - 140		Recovery =	~~6.47%#~~
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	2504690	0.046 mg/ml 92
3) HM DRO HIGH (>1.0)	13.01	2434886	~~0.056~~ mg/ml

(f)=RT Delta > 1/2 Window (m)=manual int.
G49524.D D040108A.M Fri May 30 15:08:27 2008 Page 1

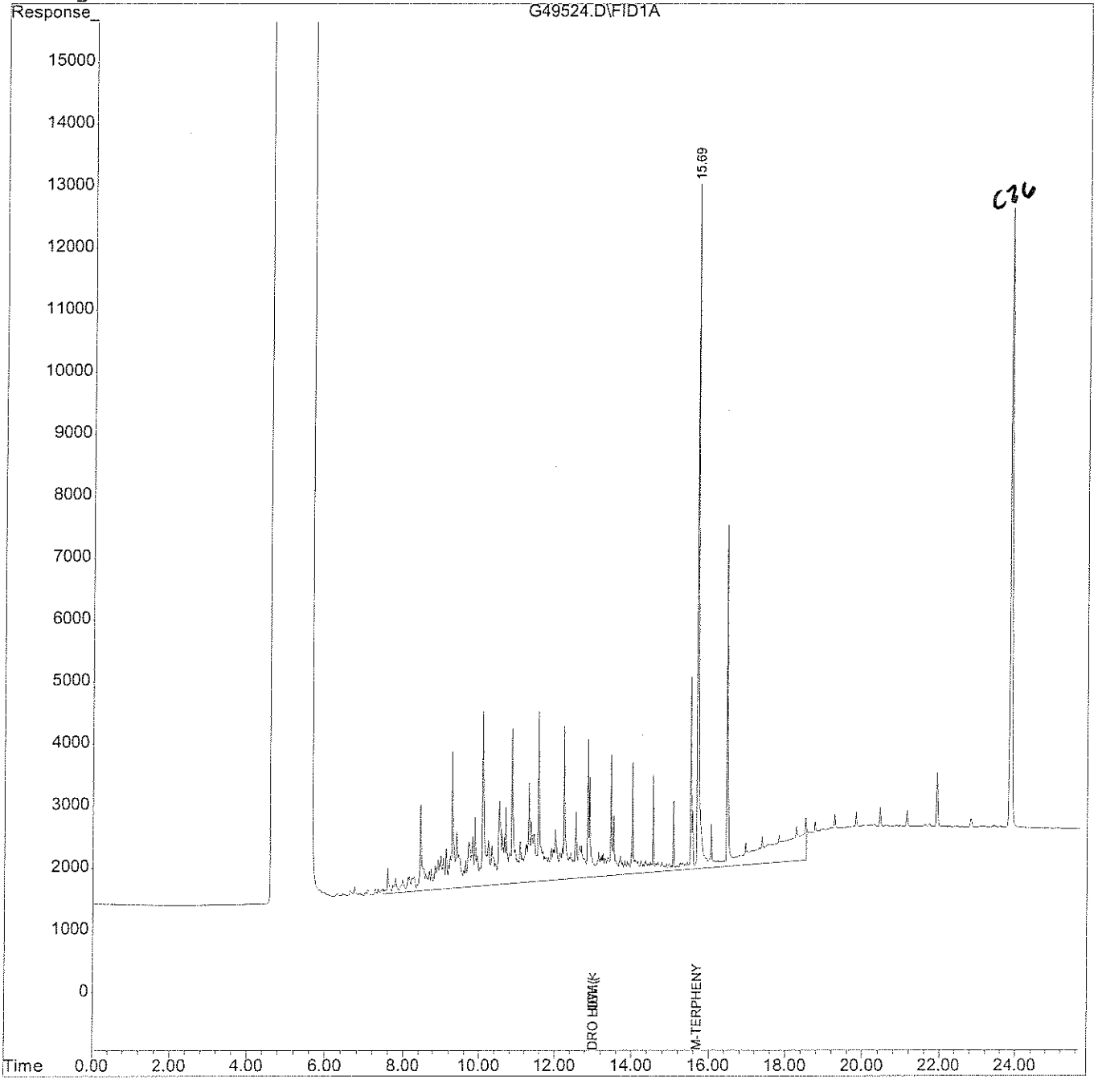
Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49524.D Vial: 1
Acq On : 30 May 2008 14:08 Operator:
Sample : T6388 #2 FO 0.05/DRO CONF Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: May 30 15:08 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

JC 5.30.08

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm



Chromatographic Resolution Report

Data File : D:\TPH\053008-G\G49524.D
Acq On : 30 May 2008 14:08
Sample : T6388 #2 FO 0.05/DRO CONF
Misc :
tFile : AUTOINT1.E

Vial: 1
Operator:
Inst : INST G
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO

SK 5.30.08

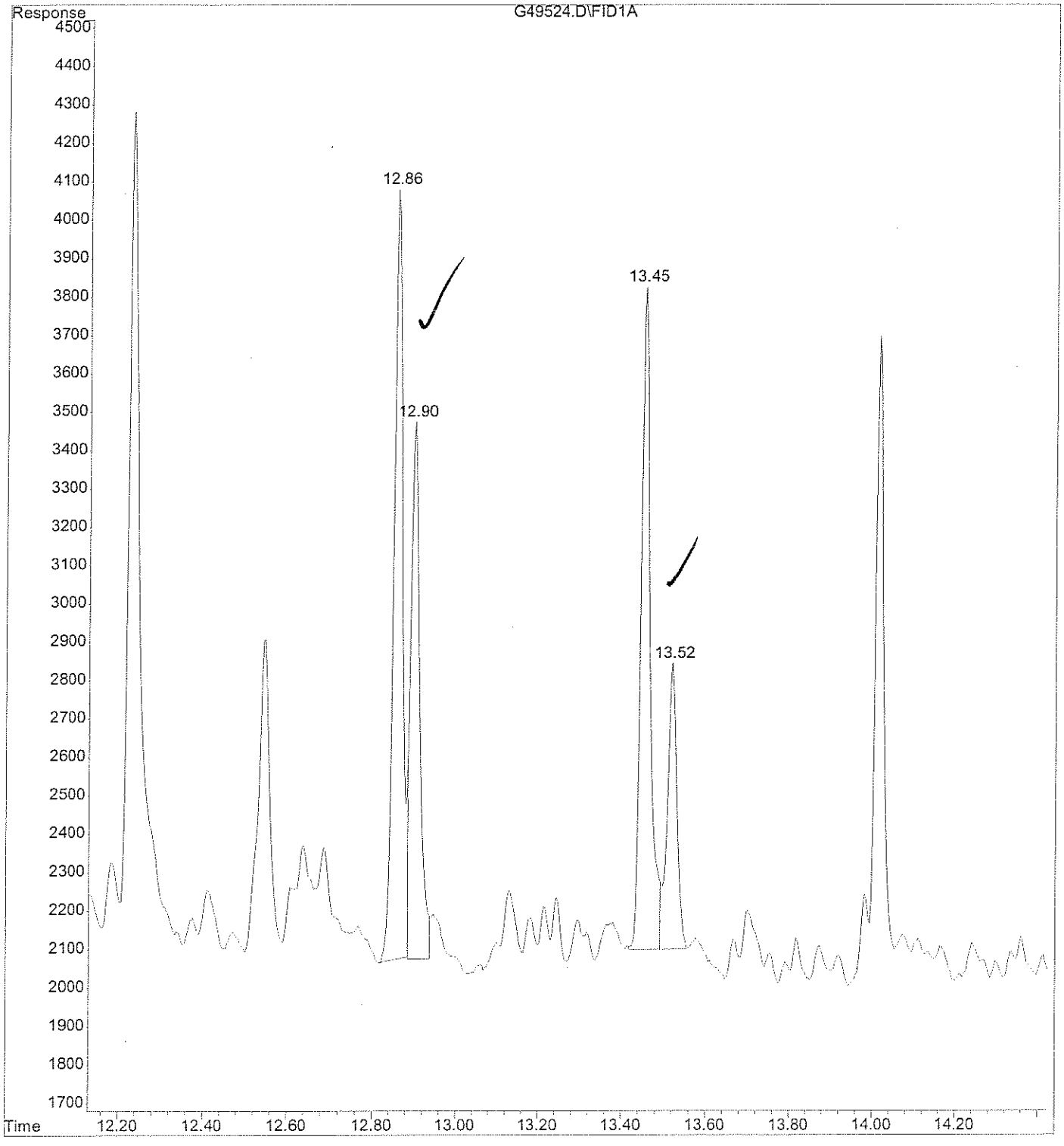
RT#1	RT#2	Resolution
12.857	12.900	71.21%
13.453	13.519	77.87%

G49524.D D040108A.M Fri May 30 15:30:50 2008

6.2.08

File : D:\TPH\053008-G\G49524.D
Operator :
Acquired : 30 May 2008 14:08 using AcqMethod TPHEPH1.M
Instrument : INST G
Sample Name: T6388 #2 FO 0.05/DRO CONF
Misc Info :
Vial Number: 1

JK 5.30.08



DIESEL RANGE ORGANICS
CONTINUING CALIBRATION

Instrument ID: G
GC Column: RTX-5ms
Column ID: 0.25 mm

SDG: 61399
Standard ID: T6386 DRO 0.5 MG/ML
Data File ID: G49525SC.D

COMPOUND	STANDARD RESULT (mg/mL)	% Recovery	#
M-TERPHENYL	52.4	105	
DRO LOW (<1.0)	0.551	110	
DRO HIGH (>1.0)	0.557	111	

Lower Limit	Upper Limit
80	120

Column to be used to flag recovery values outside of QC limits
* Values outside QC limits

Comments: _____

DRO FORM 7

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49525SC.D Vial: 2
Acq On : 30 May 2008 14:37 Operator:
Sample : T6386 DRO 0.5 MG/ML Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: May 30 15:09 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JIC 5.30.08

6.2.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.68	2265161	52.401 ug/mlm
Spiked Amount 100.000	Range 60 - 140	Recovery =	52.40%#
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	24106956	0.551 mg/ml
3) HM DRO HIGH (>1.0)	13.01	24106956	0.557 mg/ml

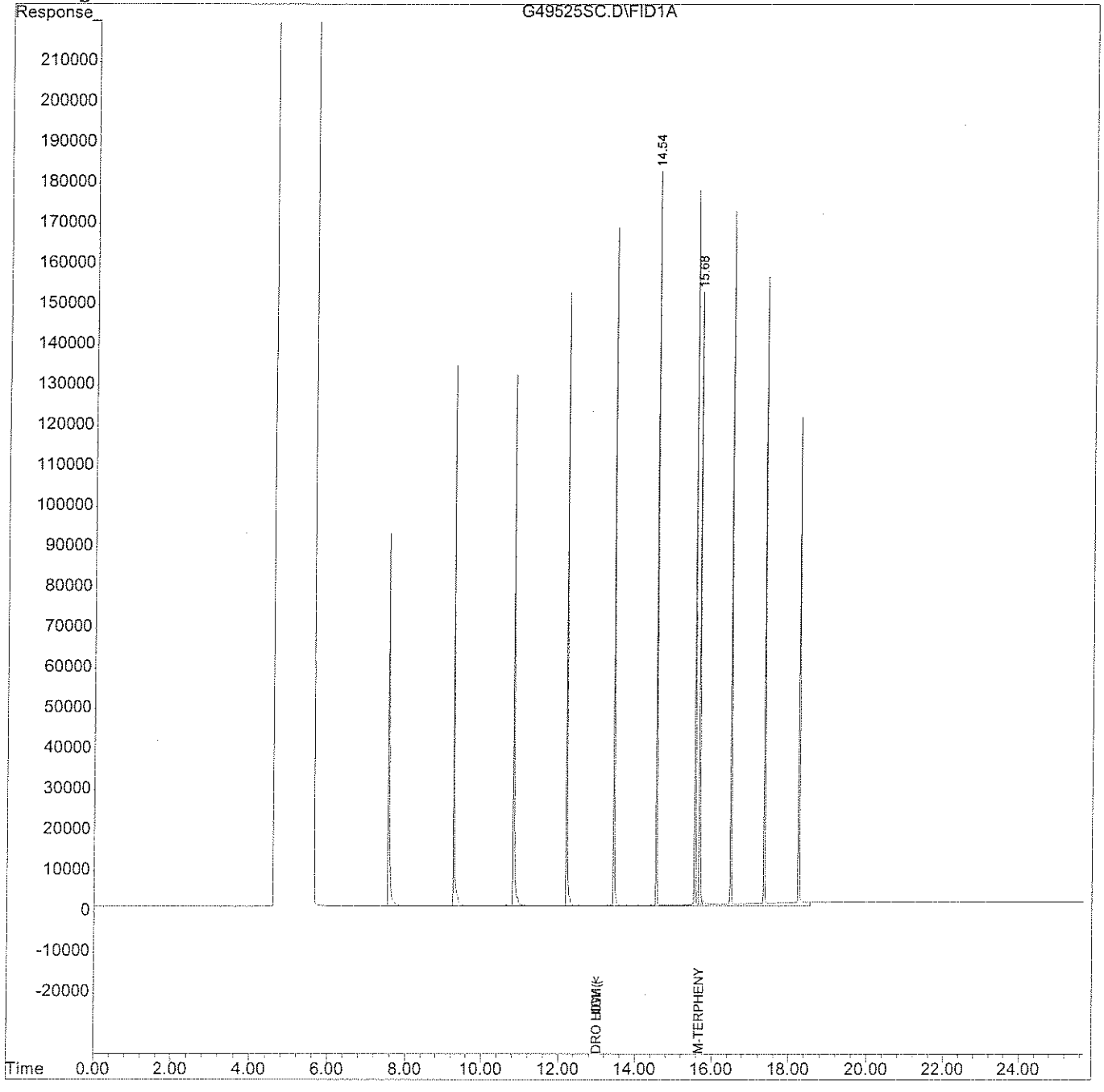
(f)=RT Delta > 1/2 Window (m)=manual int.
G49525SC.D D040108A.M Fri May 30 15:09:20 2008 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49525SC.D Vial: 2
Acq On : 30 May 2008 14:37 Operator:
Sample : T6386 DRO 0.5 MG/ML Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: May 30 15:09 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm



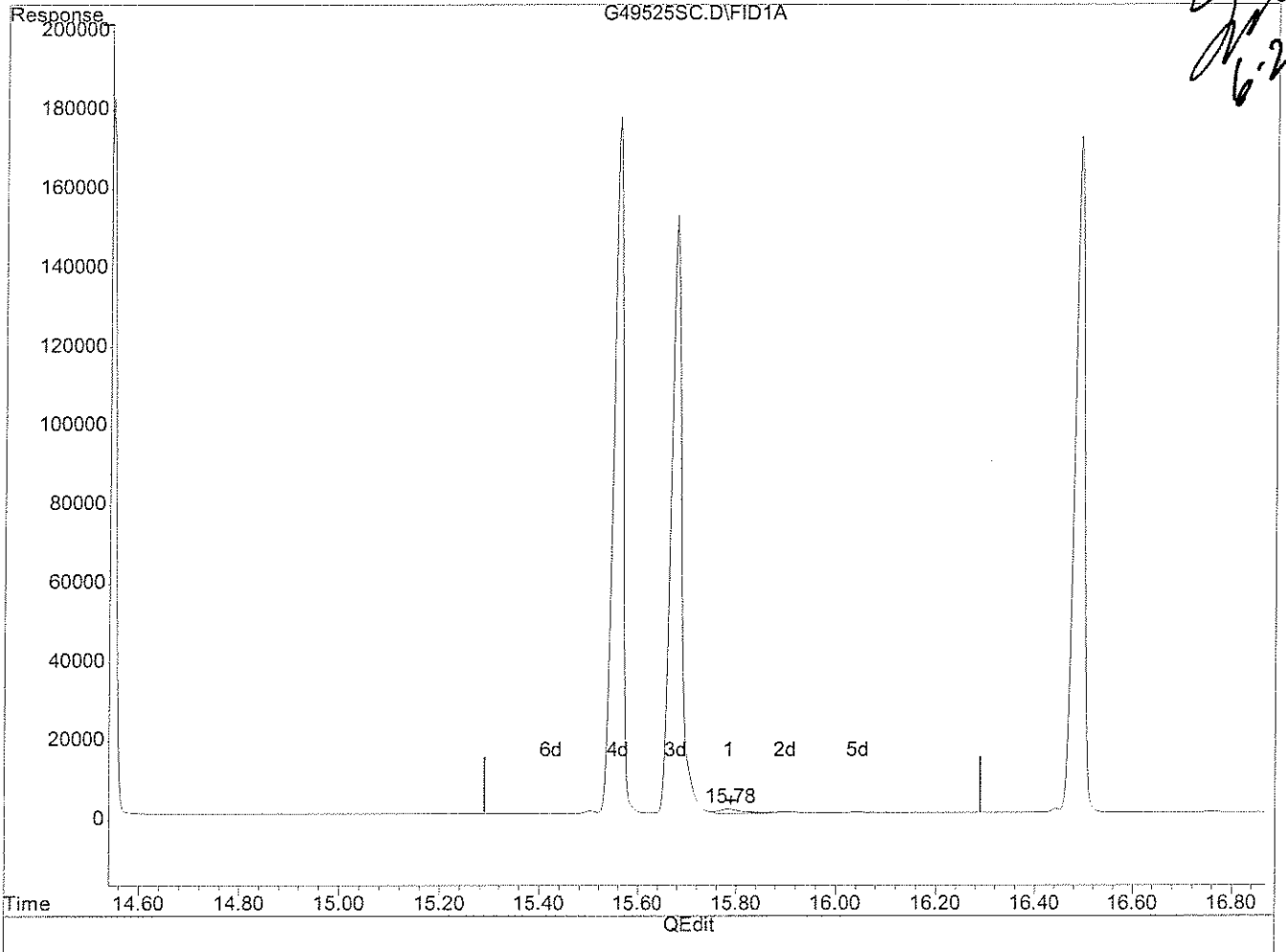
Quantitation Report (Qedit)

Data File : D:\TPH\053008-G\G49525SC.D Vial: 2
Acq On : 30 May 2008 14:37 Operator:
Sample : T6386 DRO 0.5 MG/ML Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: May 30 15:08 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Multiple Level Calibration

JC 5.30.08 *M.P.

6.2.08



(1) M-TERPHENYL (S)

15.78min 0.899ug/ml

response 38883

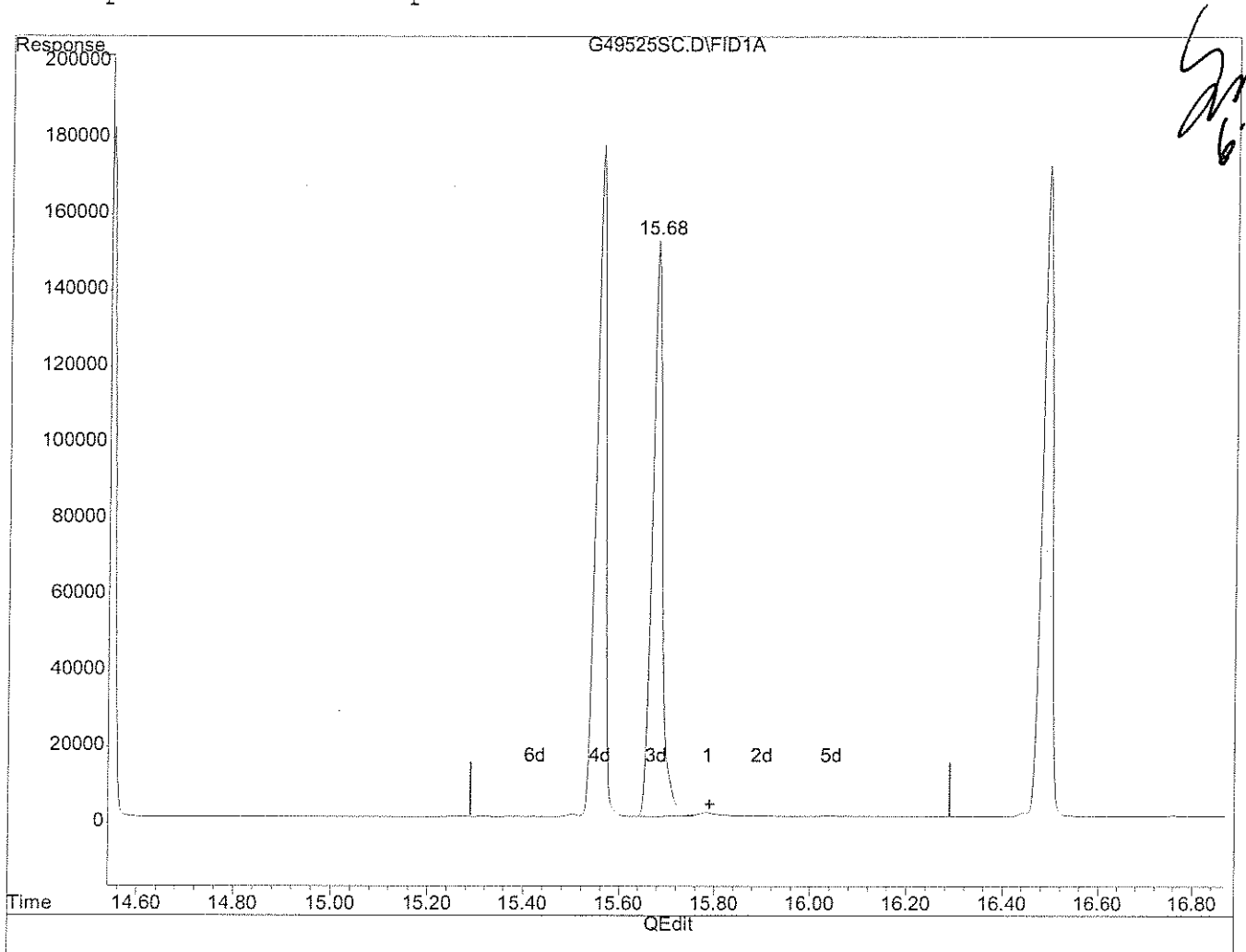
(+) = Expected Retention Time

G49525SC.D D040108A.M Fri May 30 15:08:40 2008

Quantitation Report (Qedit)

Data File : D:\TPH\053008-G\G49525SC.D Vial: 2
Acq On : 30 May 2008 14:37 Operator:
Sample : T6386 DRO 0.5 MG/ML Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: May 30 15:08 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008 JK 5-30-08
Response via : Multiple Level Calibration



(1) M-TERPHENYL (S)

15.68min 52.401ug/ml m

response 2265161

(+) = Expected Retention Time
G49525SC.D D040108A.M Fri May 30 15:09:16 2008

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49553.D Vial: 1
Acq On : 31 May 2008 7:18 Operator:
Sample : T6388 #2 FO 0.05/DRO CONF Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 2 8:16 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JK 6.2.09

6.2.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.68	202392	4.682 ug/ml
Spiked Amount 100.000 Range 60 - 140		Recovery =	~~4.68%#~~
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	1933300	0.033 mg/ml
3) HM DRO HIGH (>1.0)	13.01	1986626	~~0.046 mg/ml~~

66-

(f)=RT Delta > 1/2 Window (m)=manual int.

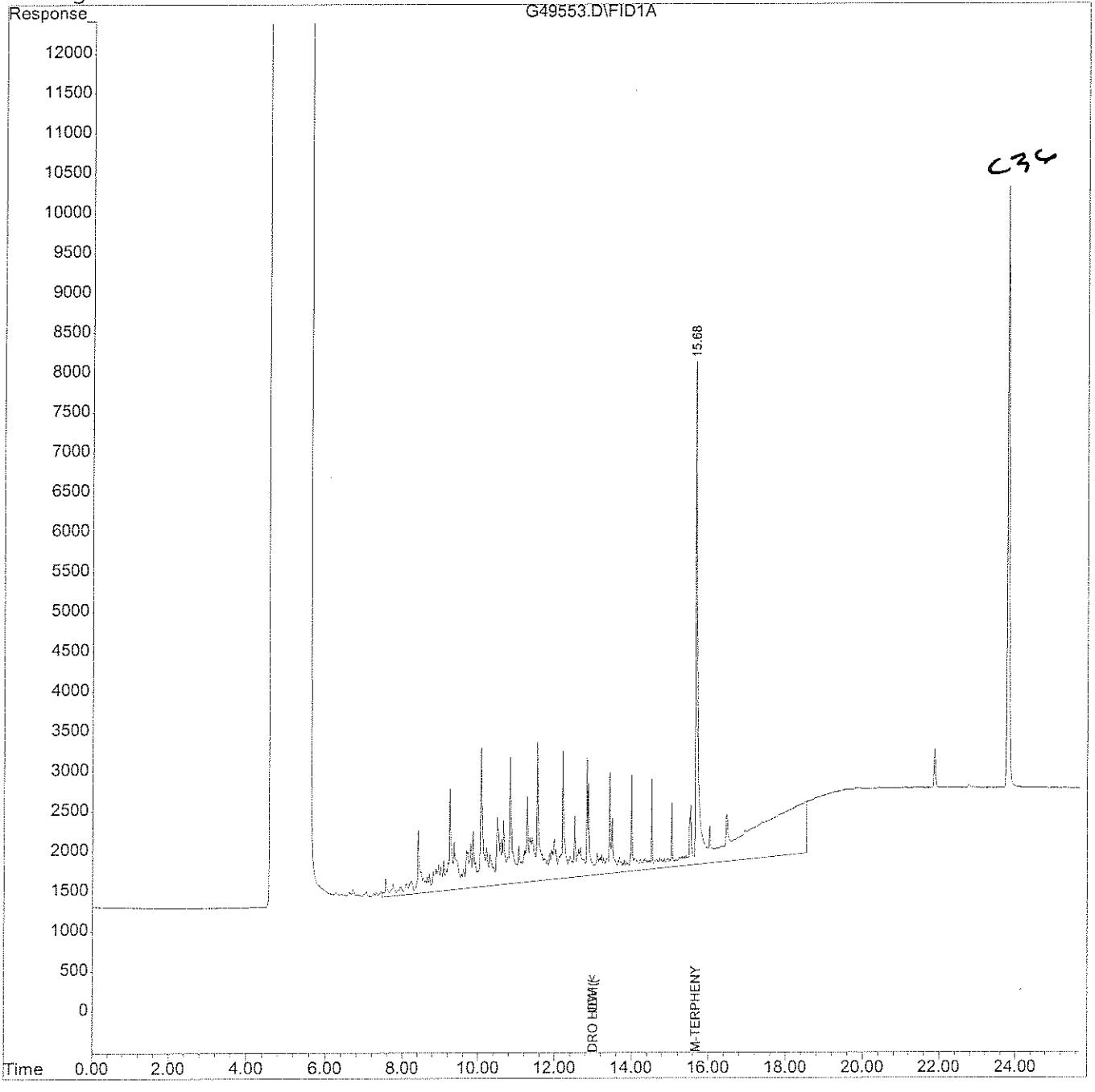
Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49553.D Vial: 1
Acq On : 31 May 2008 7:18 Operator:
Sample : T6388 #2 FO 0.05/DRO CONF Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 2 8:16 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

JK 6.2.08

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm



Chromatographic Resolution Report

Data File : D:\TPH\053008-G\G49553.D
Acq On : 31 May 2008 7:18
Sample : T6388 #2 FO 0.05/DRO CONF
Misc :
.tFile : AUTOINT1.E

Vial: 1
Operator:
Inst : INST G
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO

JK 6-2-08

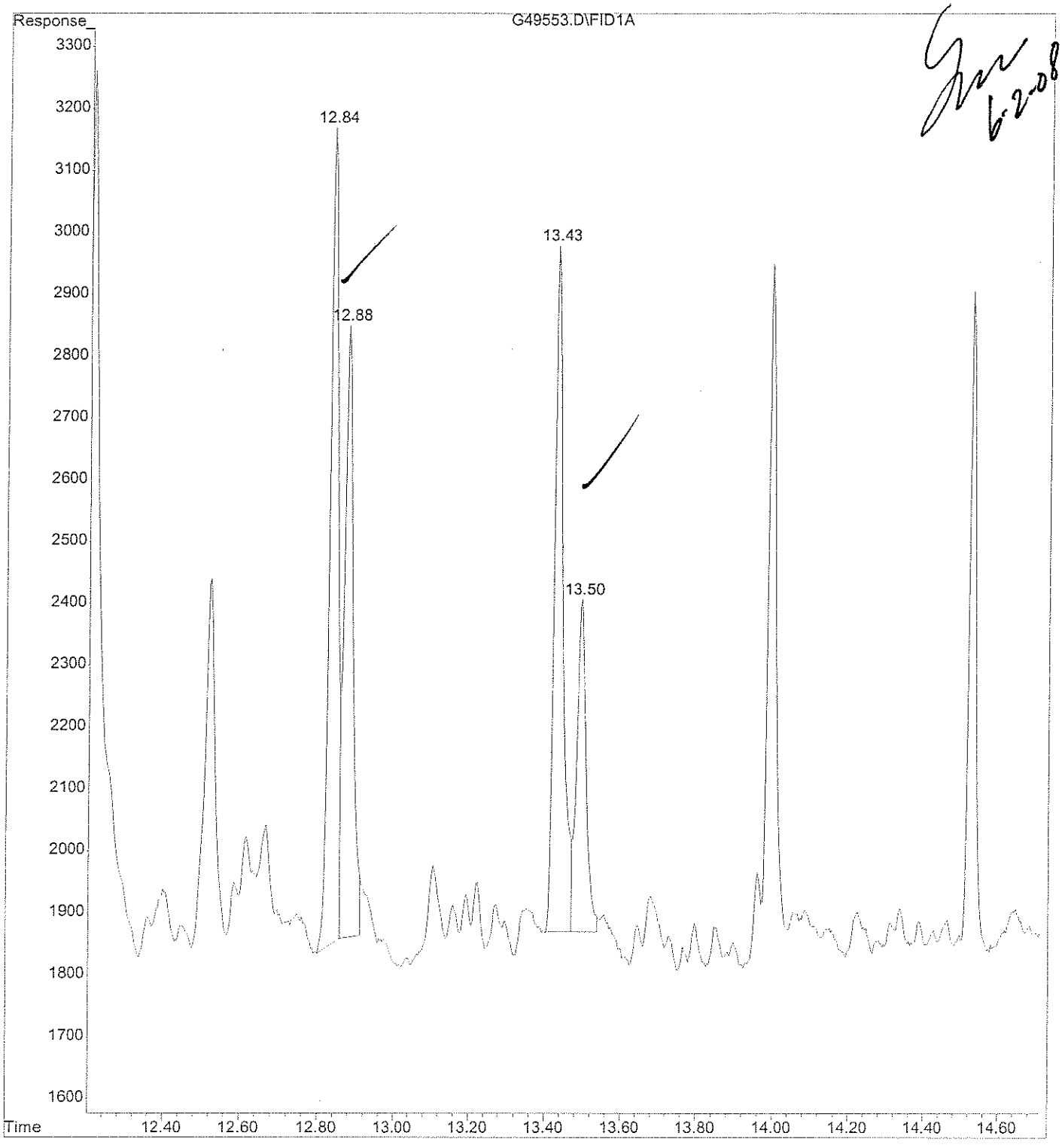
RT#1	RT#2	Resolution
12.837	12.876	60.16%
13.431	13.496	71.72%

G49553.D D040108A.M Mon Jun 02 08:17:19 2008

6-2-08

File : D:\TPH\053008-G\G49553.D
Operator :
Acquired : 31 May 2008 7:18 using AcqMethod TPHEPH1.M
Instrument : INST G
Sample Name: T6388 #2 FO 0.05/DRO CONF
Misc Info :
Vial Number: 1

SK 6.2.08



6-2-08

DIESEL RANGE ORGANICS
CONTINUING CALIBRATION

Instrument ID: G
GC Column: RTX-5ms
Column ID: 0.25 mm

SDG: 61399
Standard ID: T6386 DRO 0.5 MG/ML
Data File ID: G49554SC.D

COMPOUND	STANDARD RESULT (mg/mL)	% Recovery	#
M-TERPHENYL	50.6	101	
DRO LOW (<1.0)	0.538	108	
DRO HIGH (>1.0)	0.544	109	

Lower Limit	Upper Limit
80	120

Column to be used to flag recovery values outside of QC limits
* Values outside QC limits

Comments: _____

DRO FORM 7

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49554SC.D Vial: 2
Acq On : 31 May 2008 7:48 Operator:
Sample : T6386 DRO 0.5 MG/ML Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 2 8:17 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JK 6.2.08

GW 6.2.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.66	2185883	50.567 ug/mlm
Spiked Amount 100.000	Range 60 - 140	Recovery =	50.57%#
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	23574054	0.538 mg/ml
3) HM DRO HIGH (>1.0)	13.01	23574054	0.544 mg/ml

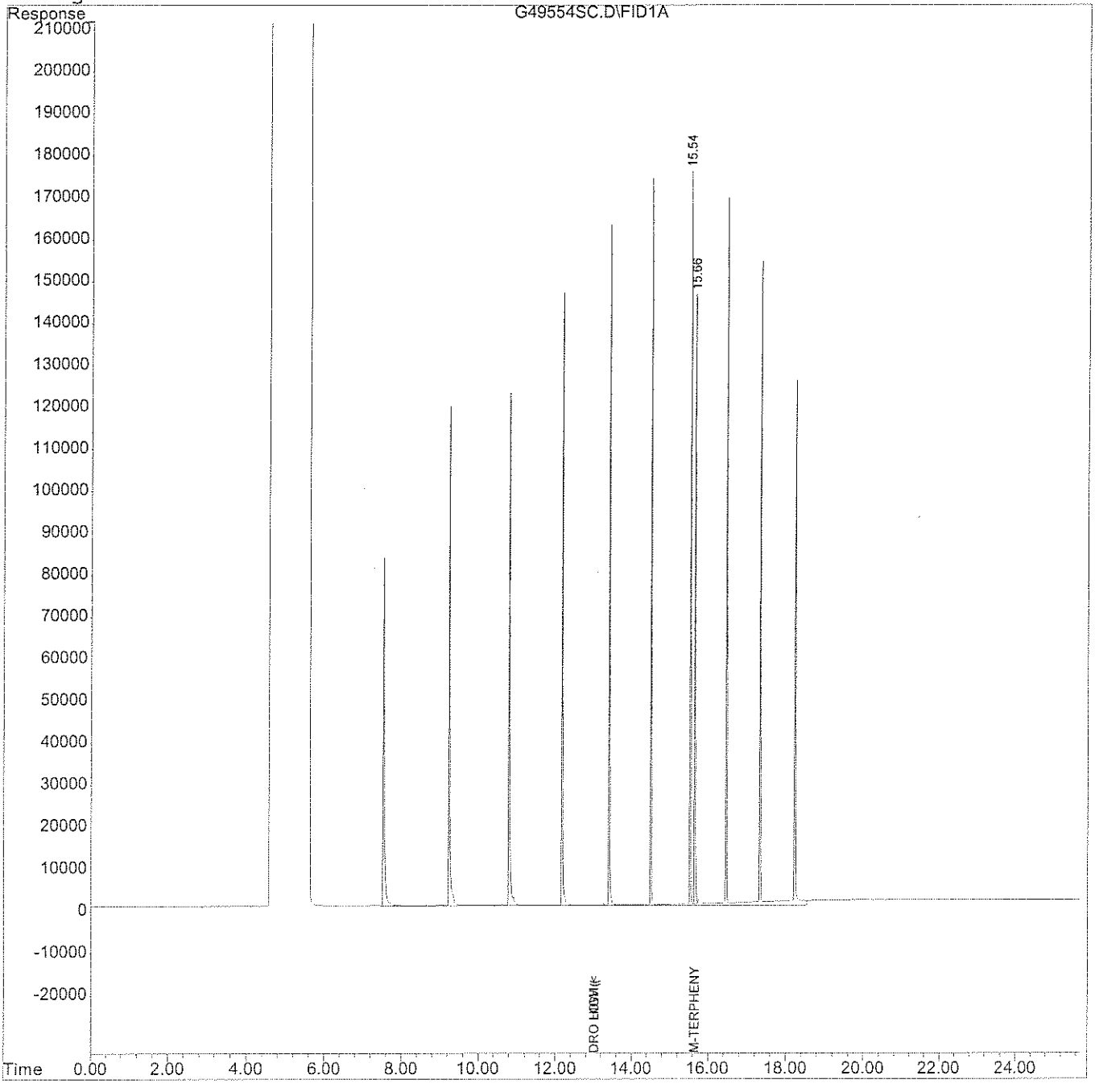
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49554SC.D Vial: 2
Acq On : 31 May 2008 7:48 Operator:
Sample : T6386 DRO 0.5 MG/ML Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 2 8:17 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm



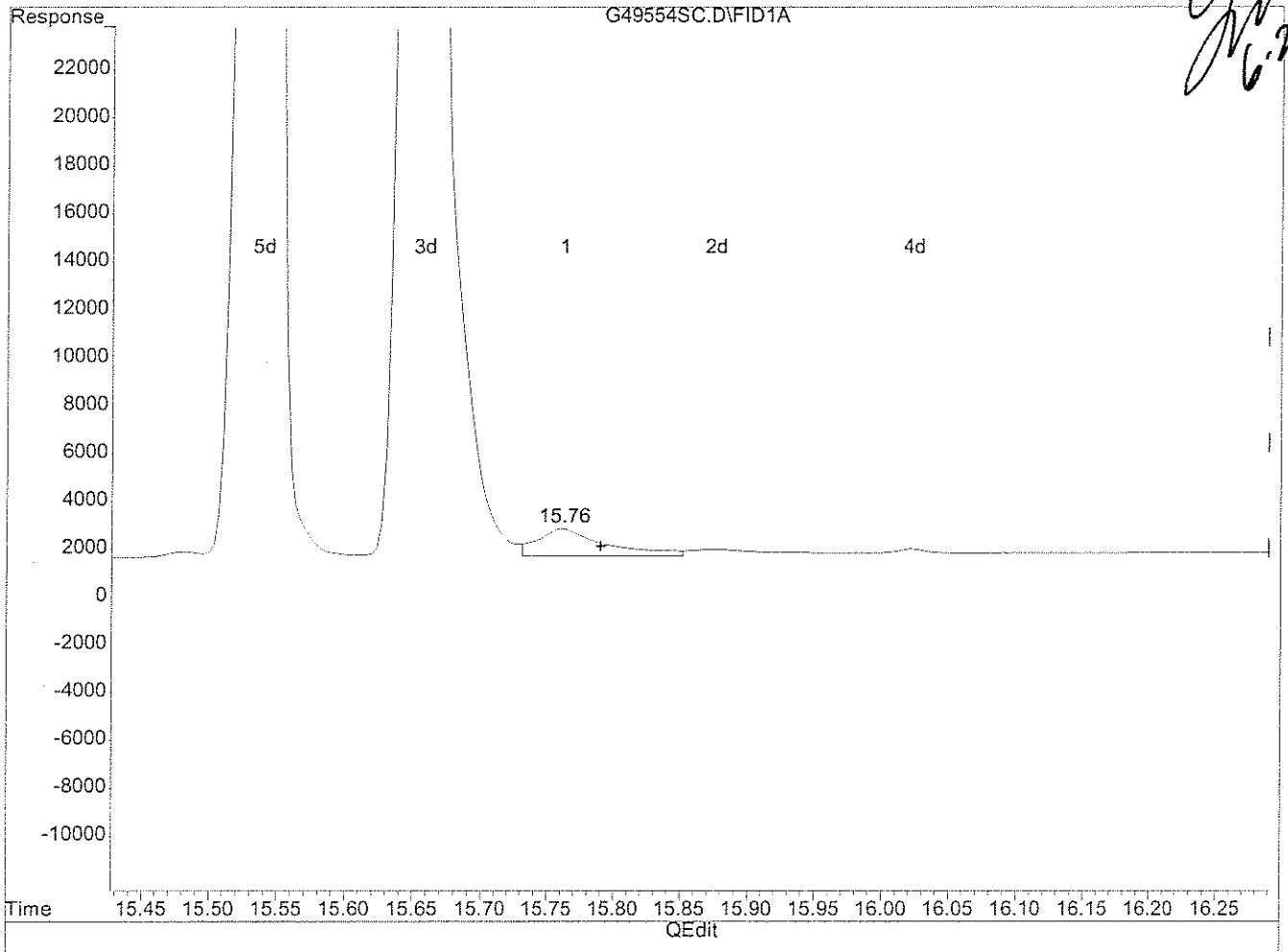
Quantitation Report (Qedit)

Data File : D:\TPH\053008-G\G49554SC.D Vial: 2
Acq On : 31 May 2008 7:48 Operator:
Sample : T6386 DRO 0.5 MG/ML Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 2 8:17 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Multiple Level Calibration

JLC 6-2-08
* M.P.

6-2-08



(1) M-TERPHENYL (S)

15.76min 0.936ug/ml

response 40469

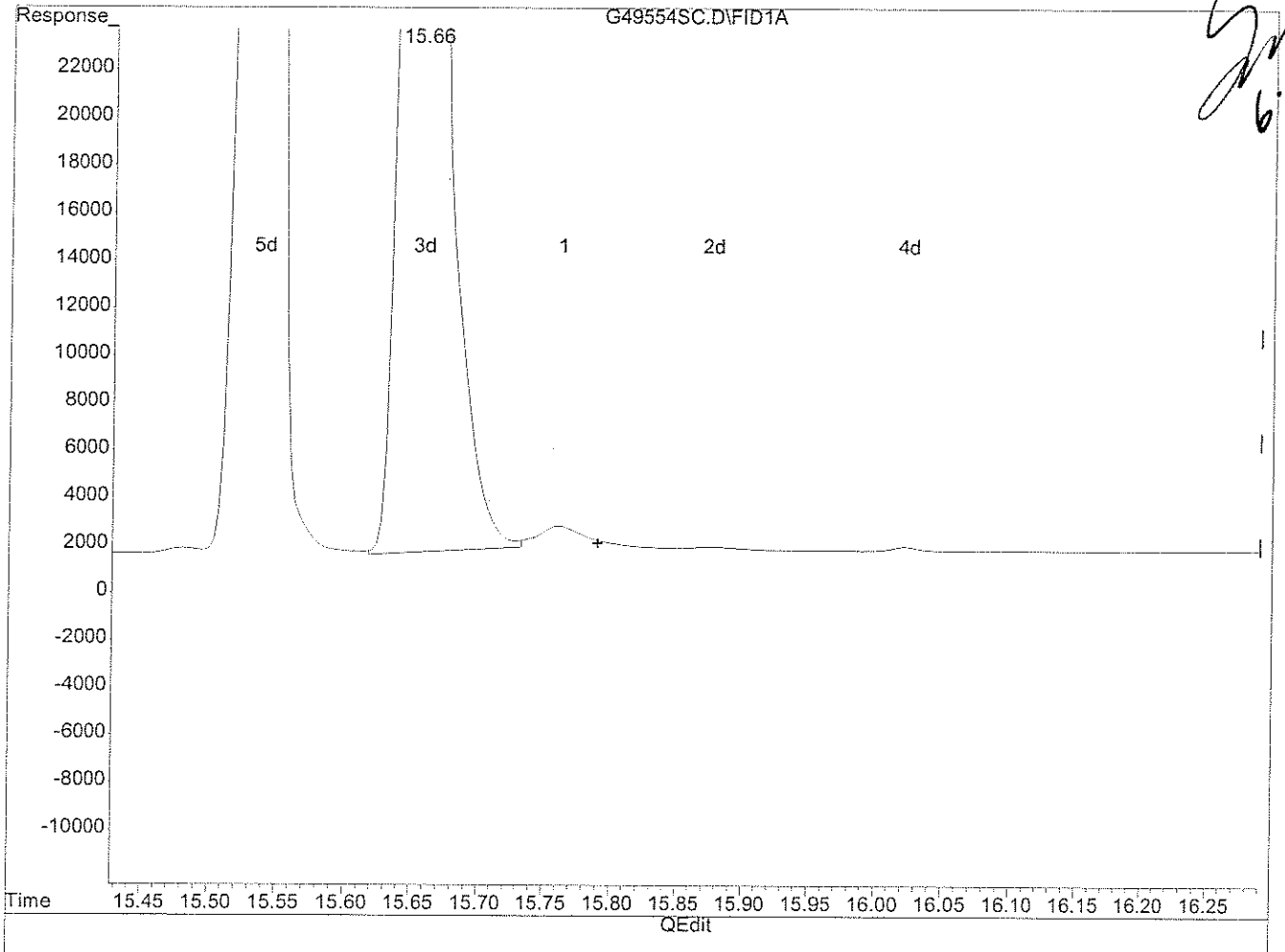
(+) = Expected Retention Time

G49554SC.D D040108A.M Mon Jun 02 08:17:52 2008

Quantitation Report (Qedit)

Data File : D:\TPH\053008-G\G49554SC.D Vial: 2
Acq On : 31 May 2008 7:48 Operator:
Sample : T6386 DRO 0.5 MG/ML Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 2 8:17 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008 JJC 6-2-08
Response via : Multiple Level Calibration



6.2.08

(1) M-TERPHENYL (S)

15.66min 50.567ug/ml m

response 2185883

(+) = Expected Retention Time
G49554SC.D D040108A.M Mon Jun 02 08:17:56 2008

DIESEL RANGE ORGANICS
CONTINUING CALIBRATION

Instrument ID: G
GC Column: RTX-5ms
Column ID: 0.25 mm

SDG: 61399
Standard ID: T6387 DRO 1.0 MG/ML
Data File ID: G49555SC.D

COMPOUND	STANDARD RESULT (mg/mL)	% Recovery	#
M-TERPHENYL	105.0	105	
DRO LOW (<1.0)	1.056	106	
DRO HIGH (>1.0)	1.057	106	

Lower Limit	Upper Limit
80	120

Column to be used to flag recovery values outside of QC limits
* Values outside QC limits

Comments: _____

DRO FORM 7

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49555SC.D Vial: 3
Acq On : 31 May 2008 8:17 Operator:
Sample : T6387 DRO 1.0 MG/ML Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 2 8:18 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JK 6.2.08

6.2.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.67	4540957	105.049 ug/mlm
Spiked Amount 100.000 Range 60 - 140 Recovery = 105.05%			
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	45767734	1.056 mg/ml
3) HM DRO HIGH (>1.0)	13.01	45767734	1.057 mg/ml

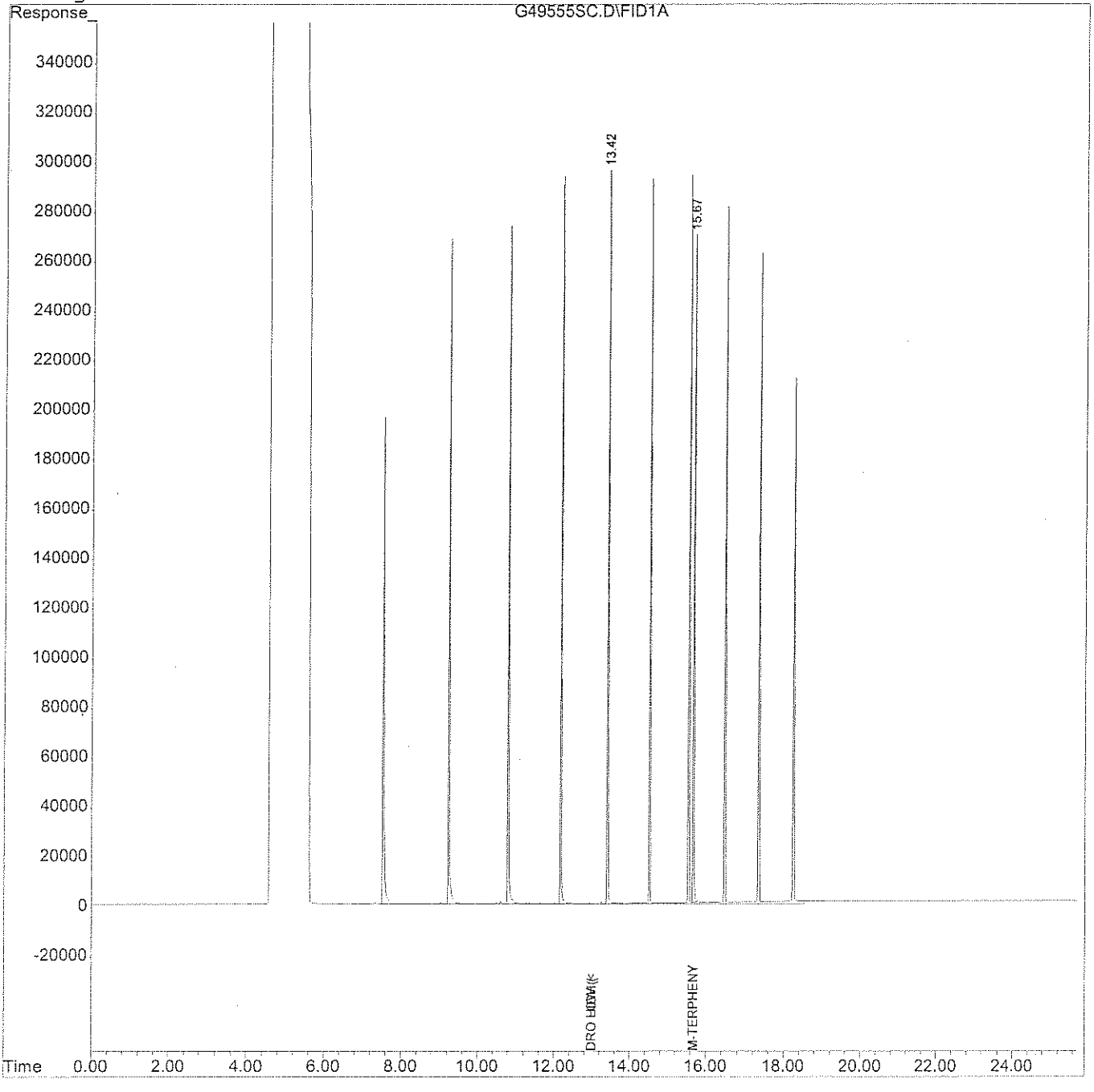
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49555SC.D Vial: 3
Acq On : 31 May 2008 8:17 Operator:
Sample : T6387 DRO 1.0 MG/ML Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 2 8:18 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

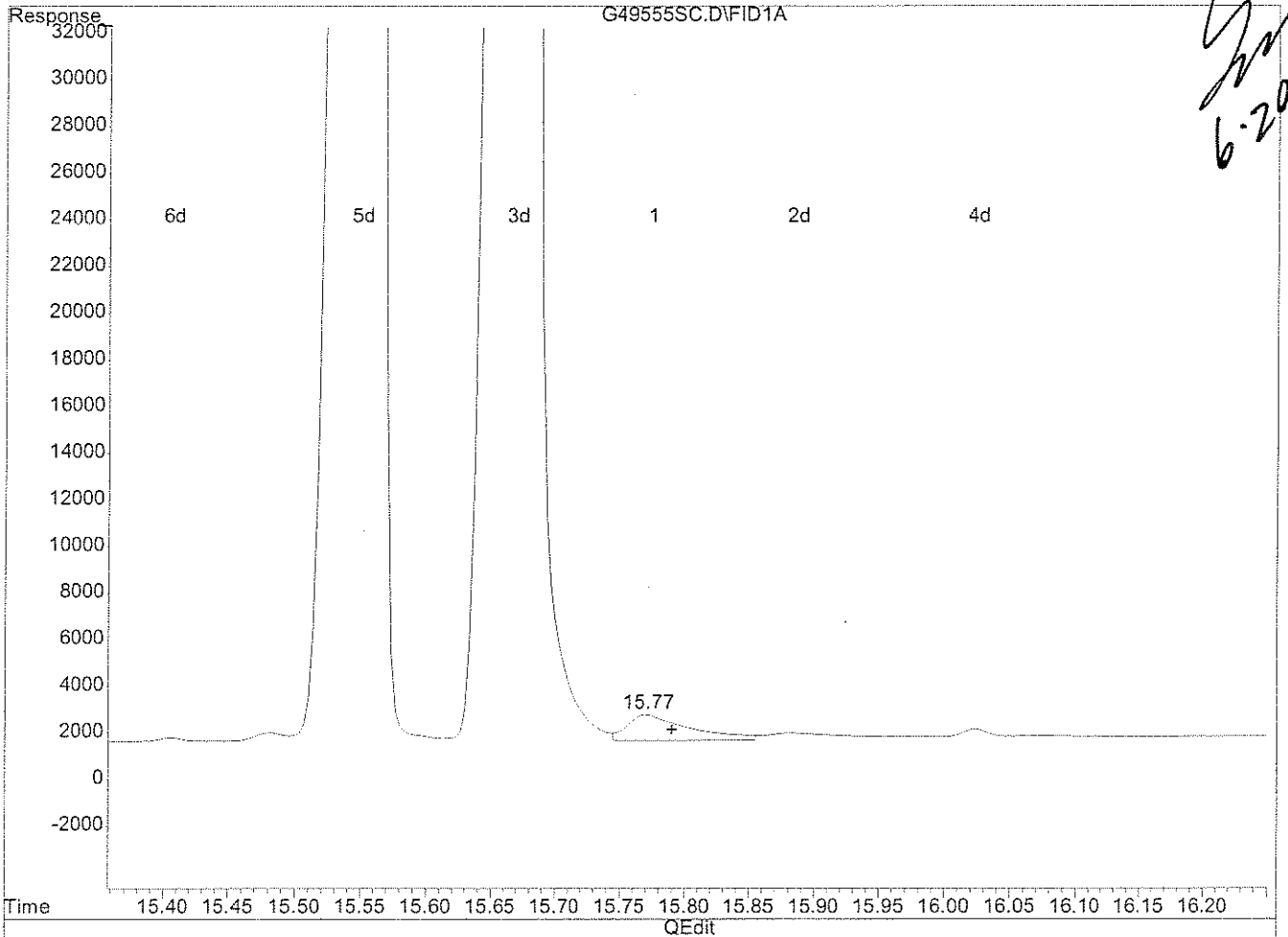


Quantitation Report (Qedit)

Data File : D:\TPH\053008-G\G49555SC.D Vial: 3
Acq On : 31 May 2008 8:17 Operator:
Sample : T6387 DRO 1.0 MG/ML Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 2 8:18 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008
Response via : Multiple Level Calibration

JC 6.2.08
*M.P.



(1) M-TERPHENYL (S)

15.78min 0.858ug/ml

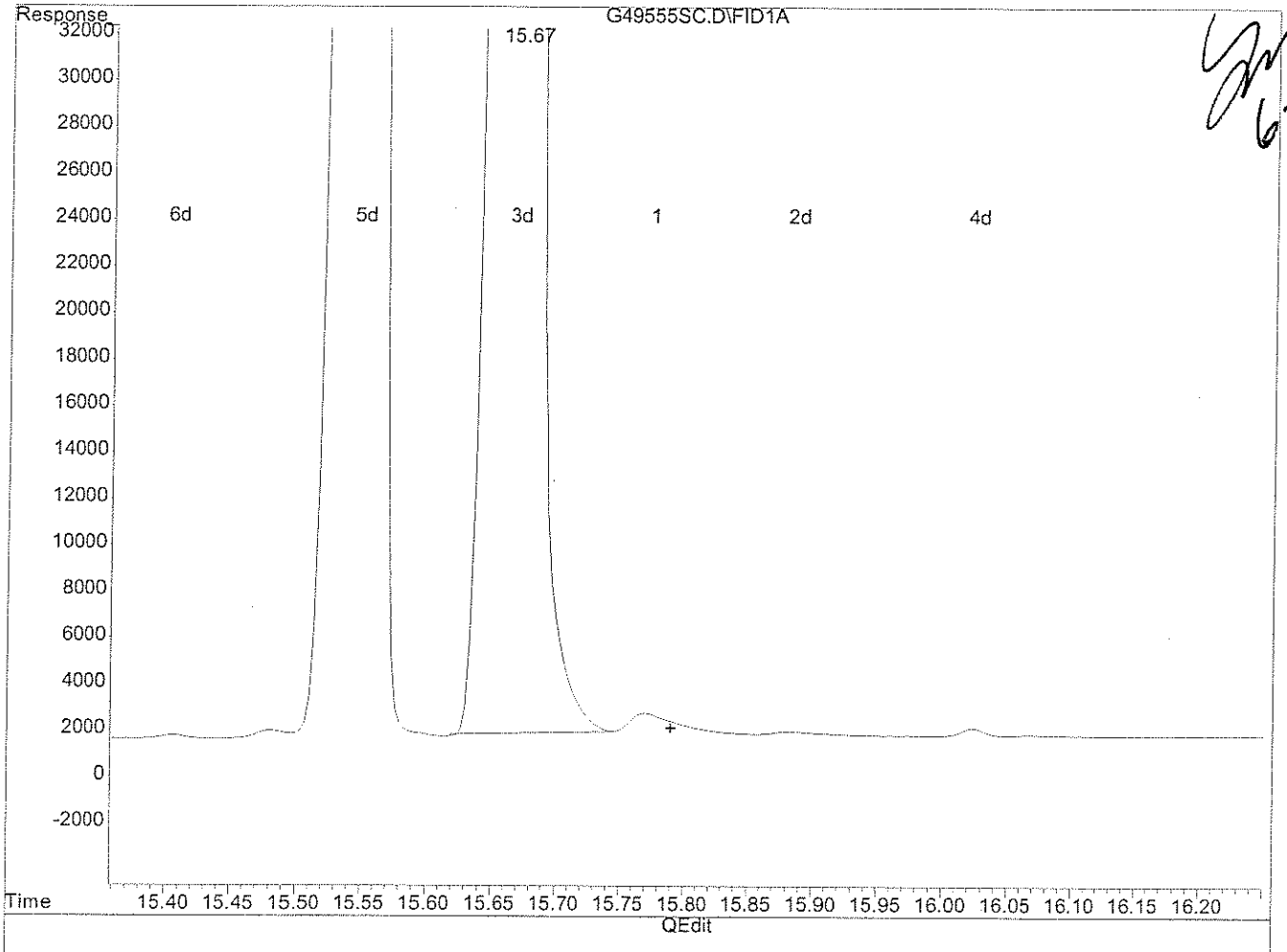
response 37071

(+) = Expected Retention Time
G49555SC.D D040108A.M Mon Jun 02 08:18:13 2008

Quantitation Report (Qedit)

Data File : D:\TPH\053008-G\G49555SC.D Vial: 3
Acq On : 31 May 2008 8:17 Operator:
Sample : T6387 DRO 1.0 MG/ML Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 2 8:18 2008 Quant Results File: D040108A.RES

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Wed Apr 02 09:36:40 2008 JK 6.2.08
Response via : Multiple Level Calibration



(1) M-TERPHENYL (S)

15.67min 105.049ug/ml m

response 4540957

(+) = Expected Retention Time
G49555SC.D D040108A.M Mon Jun 02 08:18:18 2008

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49572.D Vial: 1
Acq On : 31 May 2008 17:18 Operator:
Sample : T6388 #2 FO 0.05/DRO CONF Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 12:04 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JN 6.3.08

JN 6.4.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.69	193025	4.465 ug/ml
Spiked Amount 100.000 Range 60 - 140		Recovery =	~~446%#~~
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	2036985	0.036 mg/ml
3) HM DRO HIGH (>1.0)	13.01	2133172	~~0.049 mg/ml~~

72-

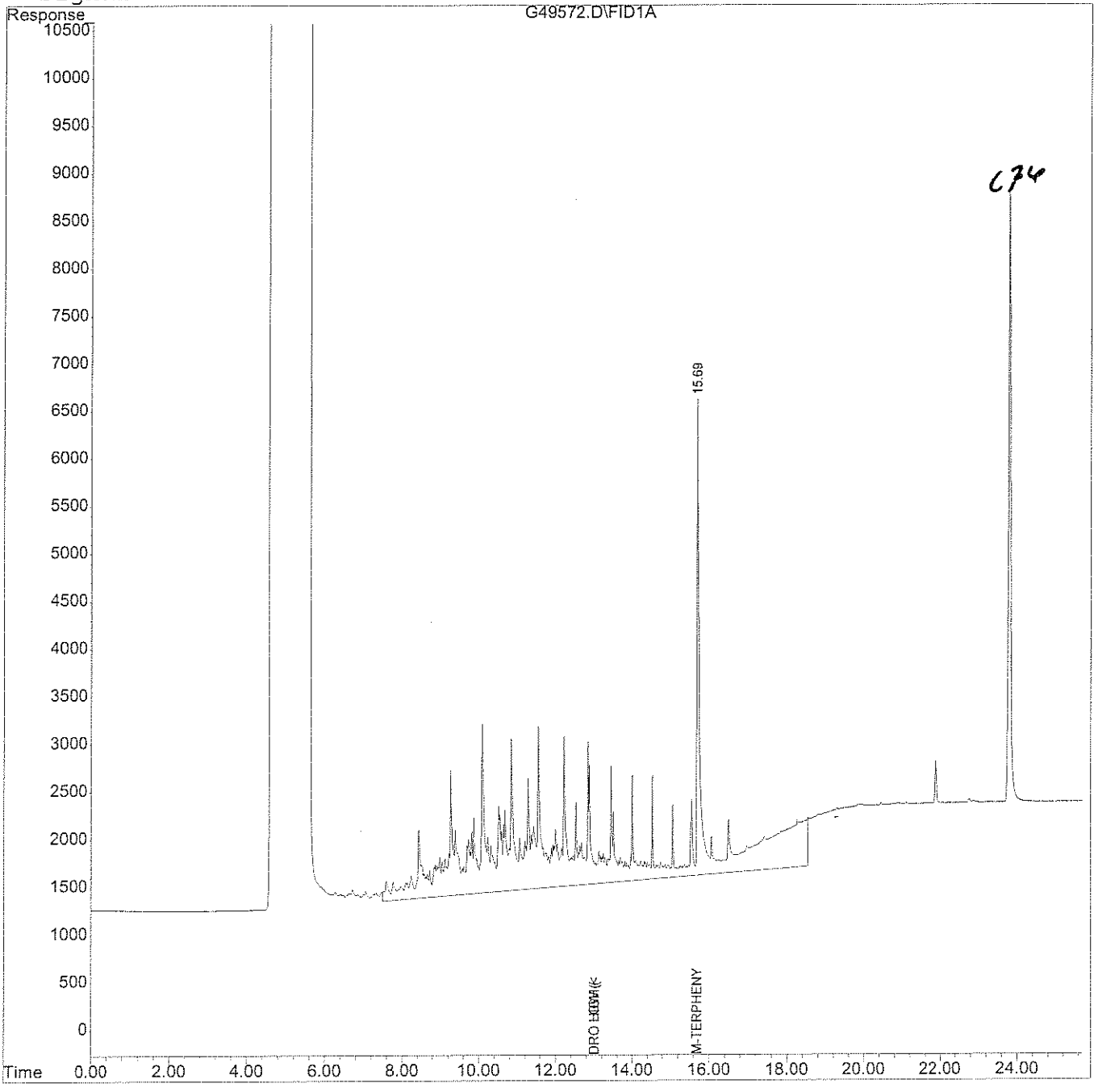
(f)=RT Delta > 1/2 Window (m)=manual int.
G49572.D D040108A.M Tue Jun 03 12:04:57 2008 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49572.D Vial: 1
Acq On : 31 May 2008 17:18 Operator:
Sample : T6388 #2 FO 0.05/DRO CONF Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 12:04 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm



Chromatographic Resolution Report

Data File : D:\TPH\053008-G\G49572.D
Acq On : 31 May 2008 17:18
Sample : T6388 #2 FO 0.05/DRO CONF
Misc :
:File : AUTOINT1.E

Vial: 1
Operator:
Inst : INST G
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO

JLC 6.3.08

RT#1	RT#2	Resolution
12.845	12.881	49.54%
13.439	13.501	74.77%

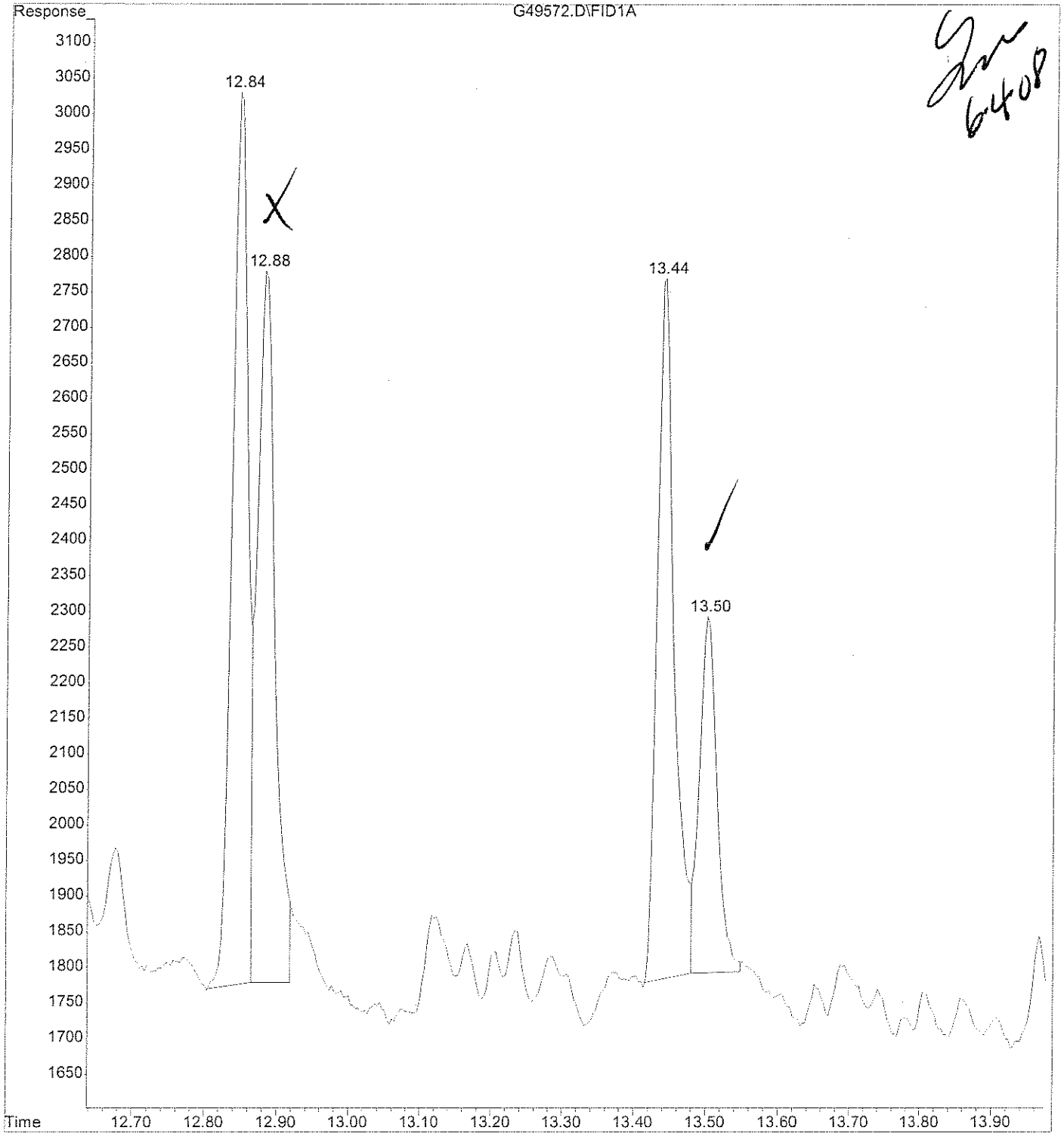
G49572.D D040108A.M Tue Jun 03 12:05:13 2008

6.4.08

Poor peak resolution.
Re-run new window.

File : D:\TPH\053008-G\G49572.D
Operator :
Acquired : 31 May 2008 17:18 using AcqMethod TPHEPH1.M
Instrument : INST G
Sample Name: T6388 #2 FO 0.05/DRO CONF
Misc Info :
Vial Number: 1

JLC 6.3.08



6408

DIESEL RANGE ORGANICS
CONTINUING CALIBRATION

Instrument ID: G
GC Column: RTX-5ms
Column ID: 0.25 mm

SDG: 61399
Standard ID: T6386 DRO 0.5 MG/ML
Data File ID: G49573SC.D

COMPOUND	STANDARD RESULT (mg/mL)	% Recovery	#
M-TERPHENYL	50.8	102	
DRO LOW (<1.0)	0.538	108	
DRO HIGH (>1.0)	0.544	109	

Lower Limit	Upper Limit
80	120

Column to be used to flag recovery values outside of QC limits
* Values outside QC limits

Comments: _____

DRO FORM 7

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49573SC.D Vial: 2
Acq On : 31 May 2008 17:48 Operator:
Sample : T6386 DRO 0.5 MG/ML Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 12:05 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

6.4.08

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JC 6.3.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.66	2195768	50.796 ug/ml
Spiked Amount 100.000	Range 60 - 140	Recovery =	50.80%#
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	23576191	0.538 mg/ml
3) HM DRO HIGH (>1.0)	13.01	23576191	0.544 mg/ml

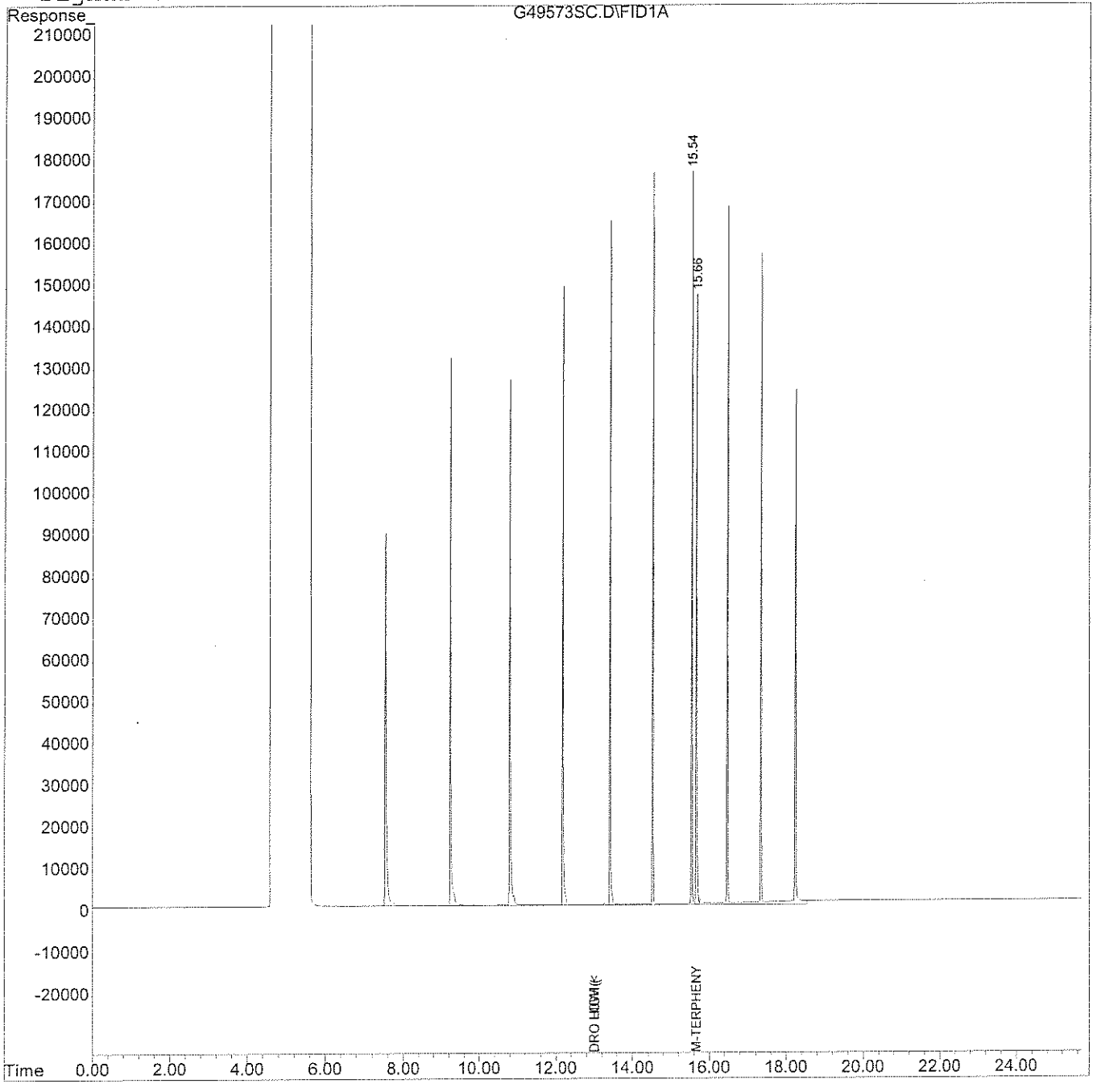
(f)=RT Delta > 1/2 Window (m)=manual int.
G49573SC.D D040108A.M Tue Jun 03 12:05:40 2008 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49573SC.D Vial: 2
Acq On : 31 May 2008 17:48 Operator:
Sample : T6386 DRO 0.5 MG/ML Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 12:05 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm



DIESEL RANGE ORGANICS
CONTINUING CALIBRATION

Instrument ID: G
GC Column: RTX-5ms
Column ID: 0.25 mm

SDG: 61399
Standard ID: T6386 DRO 1.0 MG/ML
Data File ID: G49574SC.D

COMPOUND	STANDARD RESULT (mg/mL)	% Recovery	#
M-TERPHENYL	105.2	105	
DRO LOW (<1.0)	1.041	104	
DRO HIGH (>1.0)	1.042	104	

Lower Limit	Upper Limit
80	120

Column to be used to flag recovery values outside of QC limits
* Values outside QC limits

Comments: _____

DRO FORM 7

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49574SC.D Vial: 3
Acq On : 31 May 2008 18:17 Operator:
Sample : T6381 DRO 1.0 MG/ML Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 12:05 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JLC 6.3.08

6.4.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.67	4547959	105.211 ug/ml
Spiked Amount 100.000 Range 60 - 140 Recovery = 105.21%			
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	45126801	1.041 mg/ml
3) HM DRO HIGH (>1.0)	13.01	45126801	1.042 mg/ml

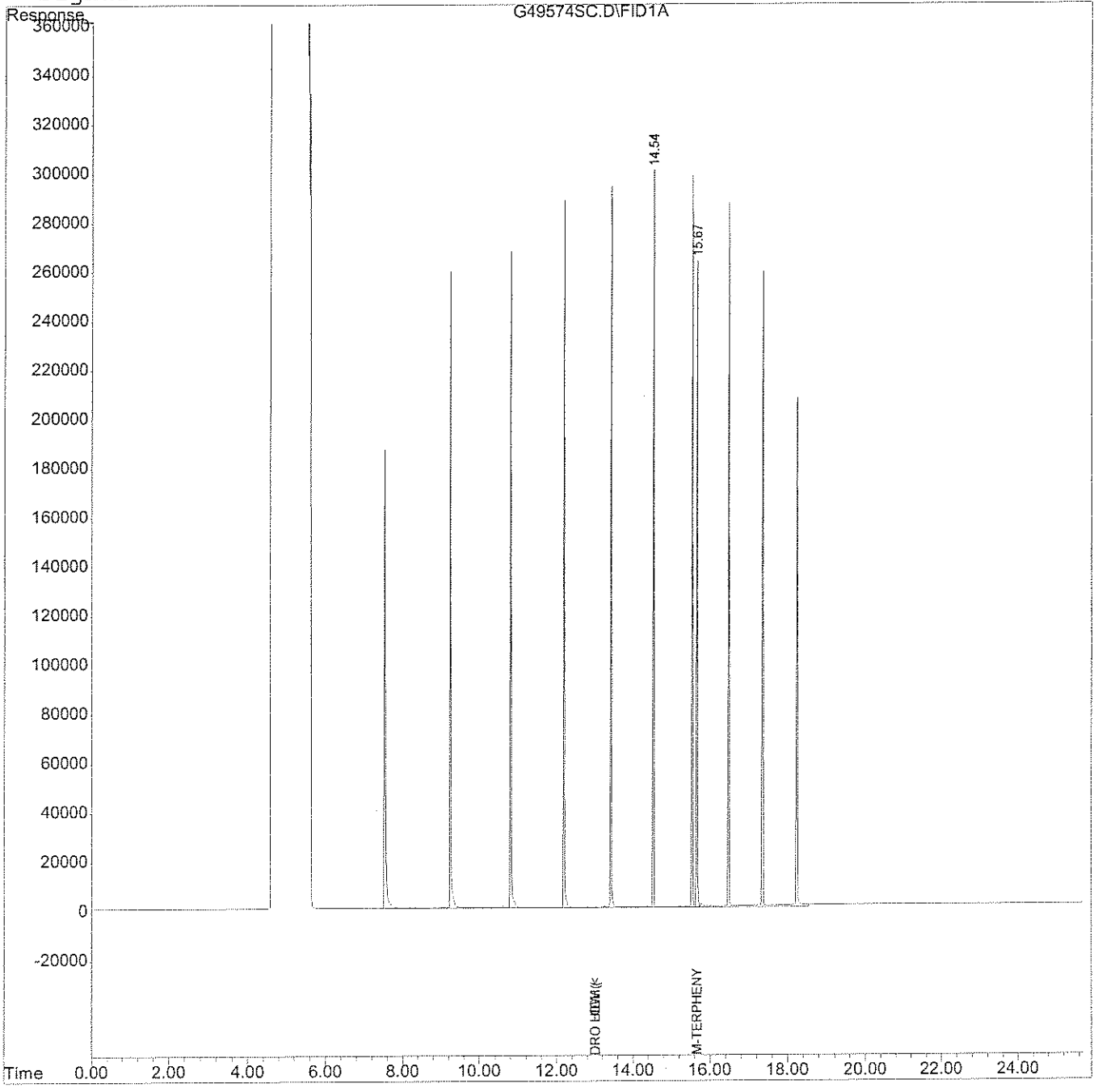
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : D:\TPH\053008-G\G49574SC.D Vial: 3
Acq On : 31 May 2008 18:17 Operator:
Sample : T6386 DRO 1.0 MG/ML Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 12:05 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm



Quantitation Report (QT Reviewed)

Data File : D:\TPH\060208-G\G49617.D Vial: 1
Acq On : 2 Jun 2008 15:55 Operator:
Sample : T6388 #2 FO 0.05/DRO CONF Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 2 16:11 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JL 6.2.08

JL 6.3.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.68	231845	5.363 ug/ml
Spiked Amount 100.000 Range 60 - 140		Recovery =	~~5.36%#~~
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	2419347	0.044 mg/ml
3) HM DRO HIGH (>1.0)	13.01	2422613	~~0.056 m~~g/ml

88

(f)=RT Delta > 1/2 Window (m)=manual int.
G49617.D D040108A.M Mon Jun 02 16:11:44 2008 Page 1

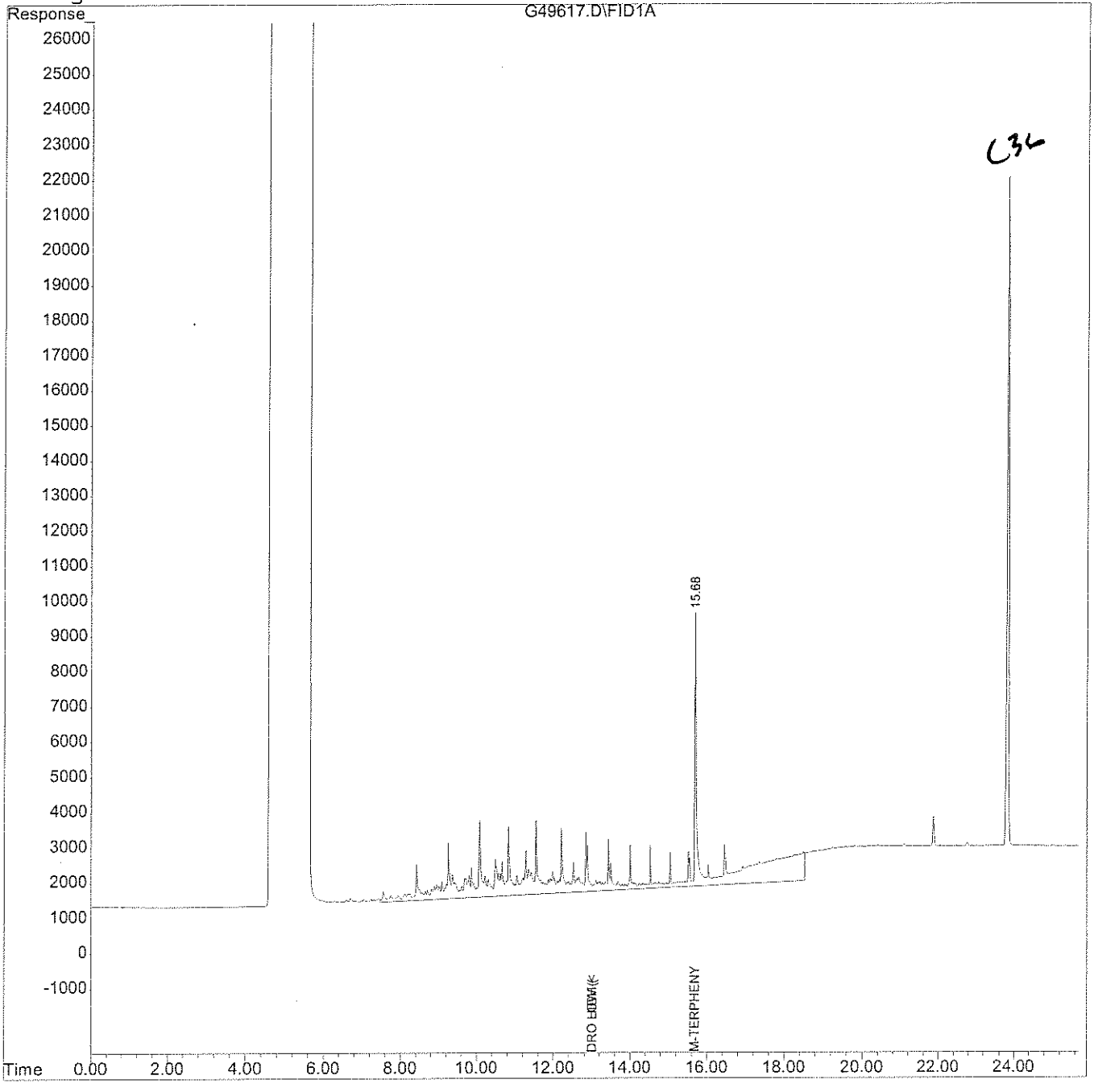
Quantitation Report (QT Reviewed)

Data File : D:\TPH\060208-G\G49617.D Vial: 1
Acq On : 2 Jun 2008 15:55 Operator:
Sample : T6388 #2 FO 0.05/DRO CONF Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 2 16:11 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JE 6.2.08



Chromatographic Resolution Report

Data File : D:\TPH\060208-G\G49617.D
Acq On : 2 Jun 2008 15:55
Sample : T6388 #2 FO 0.05/DRO CONF
Misc :
IntFile : AUTOINT1.E

Vial: 1
Operator:
Inst : INST G
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO

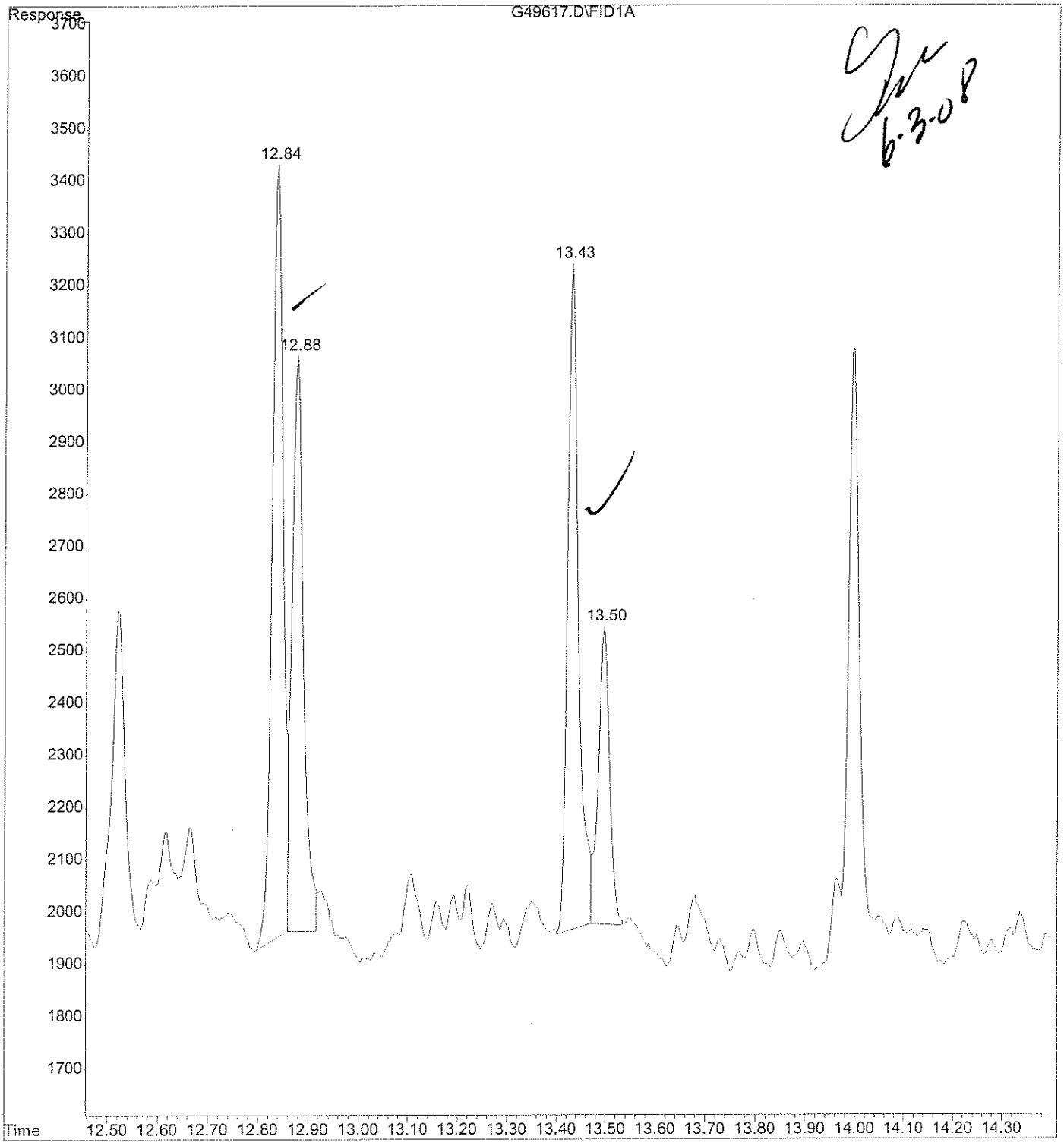
JVL 6.3.08

RT#1	RT#2	Resolution
12.836	12.876	65.89%
13.430	13.496	76.75%

G49617.D D040108A.M Tue Jun 03 07:59:19 2008

File : D:\TPH\060208-G\G49617.D
Operator :
Acquired : 2 Jun 2008 15:55 using AcqMethod TPHEPH1.M
Instrument : INST G
Sample Name: T6388 #2 FO 0.05/DRO CONF
Misc Info :
Vial Number: 1

JK 6-3-08



JK 6-3-08

DIESEL RANGE ORGANICS
CONTINUING CALIBRATION

Instrument ID: G
GC Column: RTX-5ms
Column ID: 0.25 mm

SDG: 61399
Standard ID: T6387 DRO 1.0 MG/ML
Data File ID: G49618SC.D

COMPOUND	STANDARD RESULT (mg/mL)	% Recovery	#
M-TERPHENYL	103.7	104	
DRO LOW (<1.0)	1.016	102	
DRO HIGH (>1.0)	1.016	102	

Lower Limit	Upper Limit
80	120

Column to be used to flag recovery values outside of QC limits
* Values outside QC limits

Comments: _____

DRO FORM 7

Quantitation Report (QT Reviewed)

Data File : D:\TPH\060208-G\G49618SC.D Vial: 3
Acq On : 2 Jun 2008 16:26 Operator:
Sample : T6387 DRO 1.0 MG/ML Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 2 16:41 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

JK 6.2.08

6.3.08

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.68	4484147	103.735 ug/ml
Spiked Amount 100.000	Range 60 - 140	Recovery = 103.74%	
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	44013827	1.015 mg/ml
3) HM DRO HIGH (>1.0)	13.01	44013827	1.016 mg/ml

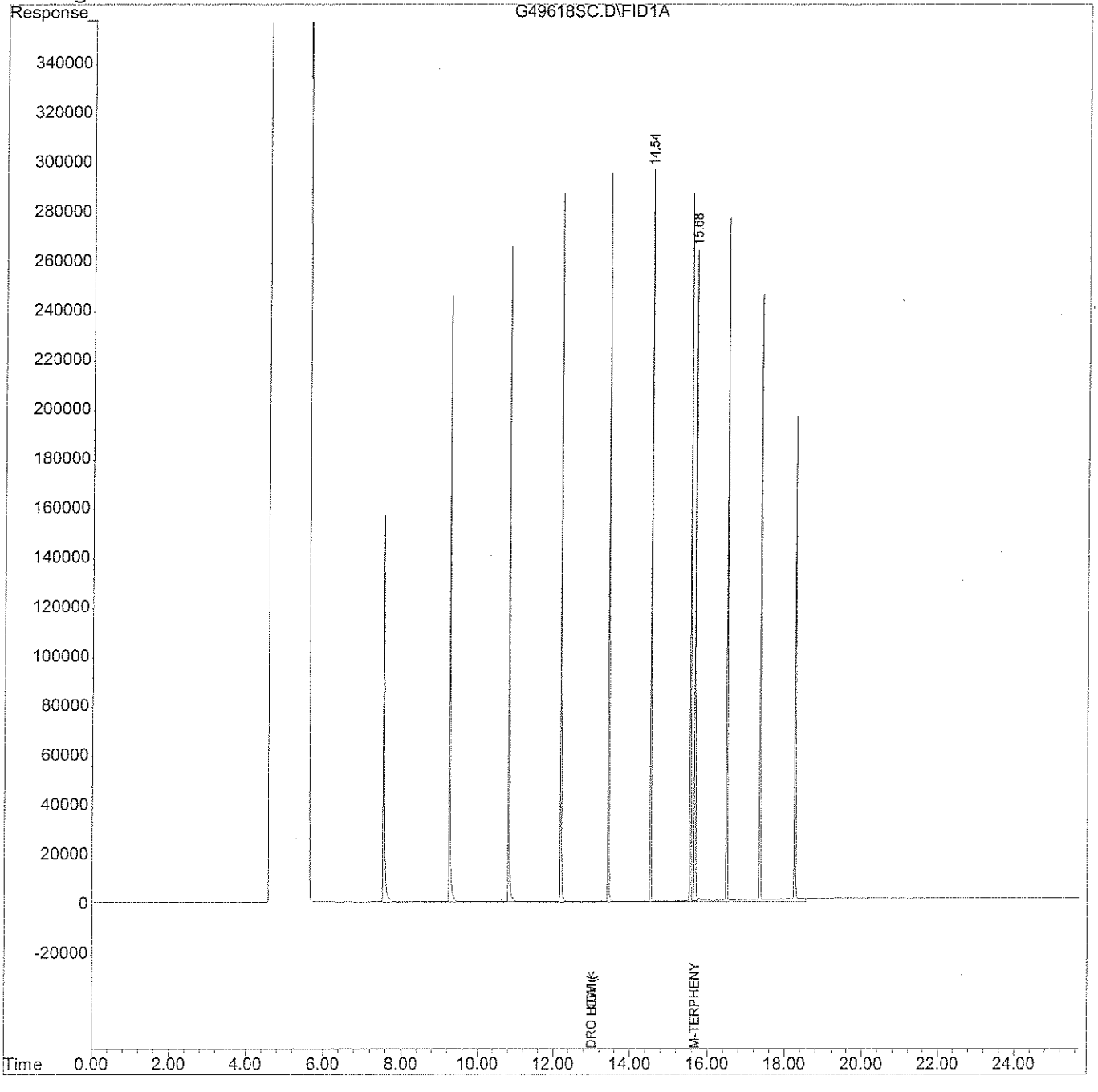
(f)=RT Delta > 1/2 Window (m)=manual int.
G49618SC.D D040108A.M Mon Jun 02 16:41:59 2008 Page 1

Quantitation Report (QT Reviewed)

Data File : D:\TPH\060208-G\G49618SC.D Vial: 3
Acq On : 2 Jun 2008 16:26 Operator:
Sample : T6387 DRO 1.0 MG/ML Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 2 16:41 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm



Quantitation Report (QT Reviewed)

Data File : D:\TPH\060208-G\G49644.D Vial: 1
Acq On : 3 Jun 2008 5:55 Operator:
Sample : T6388 #2 FO 0.05/DRO CONF Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 7:48 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JC 6.3.08

6.3.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.69	233533	5.402 ug/ml
Spiked Amount 100.000	Range 60 - 140	Recovery =	5.40%#
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	2412307	0.044 mg/ml
3) HM DRO HIGH (>1.0)	13.01	2418003	0.056 mg/ml

(f)=RT Delta > 1/2 Window (m)=manual int.
G49644.D D040108A.M Tue Jun 03 08:37:20 2008 Page 1

Quantitation Report (QT Reviewed)

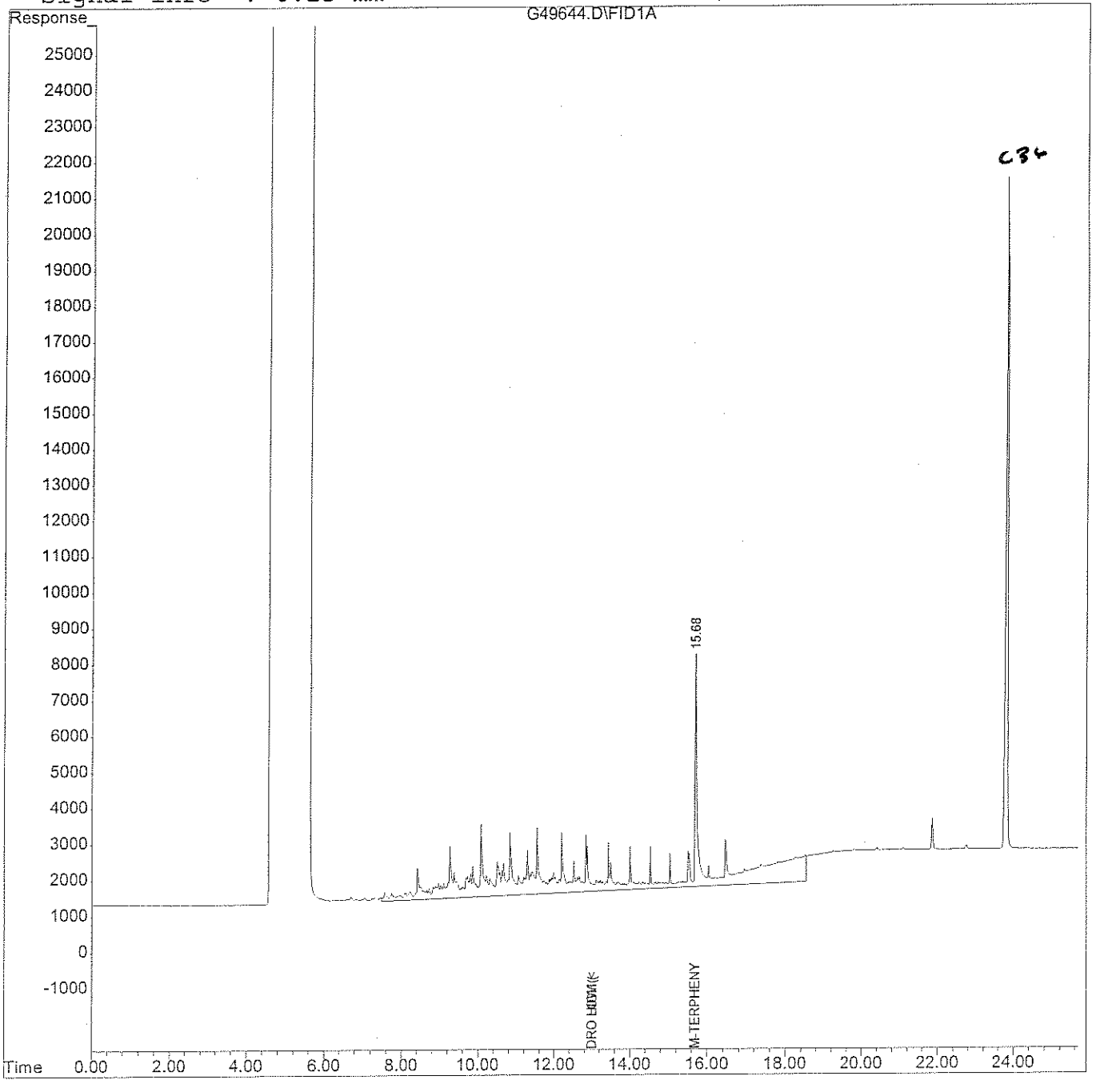
Data File : D:\TPH\060208-G\G49644.D
Acq On : 3 Jun 2008 5:55
Sample : T6388 #2 FO 0.05/DRO CONF
Misc :
IntFile : AUTOINT1.E
Quant Time: Jun 3 7:48 2008 Quant Results File: D040108A.RES

Vial: 1
Operator:
Inst : INST G
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

DRE 6.3.08



Chromatographic Resolution Report

Data File : D:\TPH\060208-G\G49644.D
Acq On : 3 Jun 2008 5:55
Sample : T6388 #2 FO 0.05/DRO CONF
Misc :
IntFile : AUTOINT1.E

Vial: 1
Operator:
Inst : INST G
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO

JJC 6.3.08

RT#1	RT#2	Resolution
12.835	12.871	51.63%
13.428	13.491	80.39%

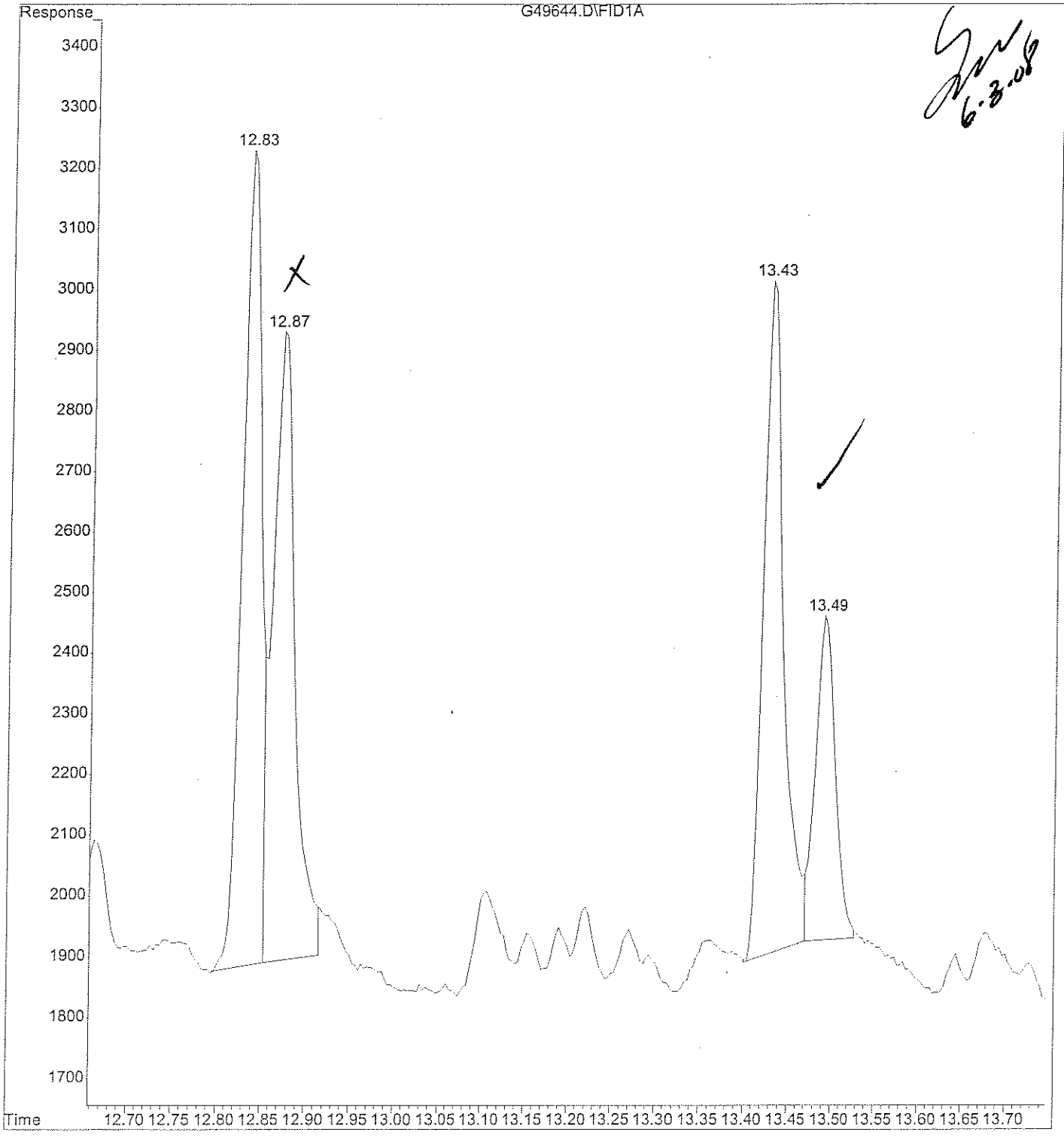
G49644.D D040108A.M Tue Jun 03 08:37:04 2008

6.3.08

See QA Memo

File : D:\TPH\060208-G\G49644.D
Operator :
Acquired : 3 Jun 2008 5:55 using AcqMethod TPHEPH1.M
Instrument : INST G
Sample Name: T6388 #2 FO 0.05/DRO CONF
Misc Info :
Vial Number: 1

JL 6.3.08



6.3.08

DIESEL RANGE ORGANICS
CONTINUING CALIBRATION

Instrument ID: G
GC Column: RTX-5ms
Column ID: 0.25 mm

SDG: 61399
Standard ID: T6408 DRO 1.0 MG/ML
Data File ID: G49645SC.D

COMPOUND	STANDARD RESULT (mg/mL)	% Recovery	#
M-TERPHENYL	105.2	105	
DRO LOW (<1.0)	1.067	107	
DRO HIGH (>1.0)	1.068	107	

Lower Limit	Upper Limit
80	120

Column to be used to flag recovery values outside of QC limits
* Values outside QC limits

Comments: _____

DRO FORM 7

Quantitation Report (QT Reviewed)

Data File : D:\TPH\060208-G\G49645SC.D Vial: 3
Acq On : 3 Jun 2008 6:24 Operator:
Sample : T6408 DRO 1.0 MG/ML Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 7:49 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Initial Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm

JLC 6.3.08

6.3.08

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S M-TERPHENYL	15.67	4547100	105.191 ug/ml
Spiked Amount 100.000	Range 60 - 140	Recovery = 105.19%	
Target Compounds			
2) HM DRO LOW (<1.0)	13.01	46232189	1.067 mg/ml
3) HM DRO HIGH (>1.0)	13.01	46232189	1.068 mg/ml

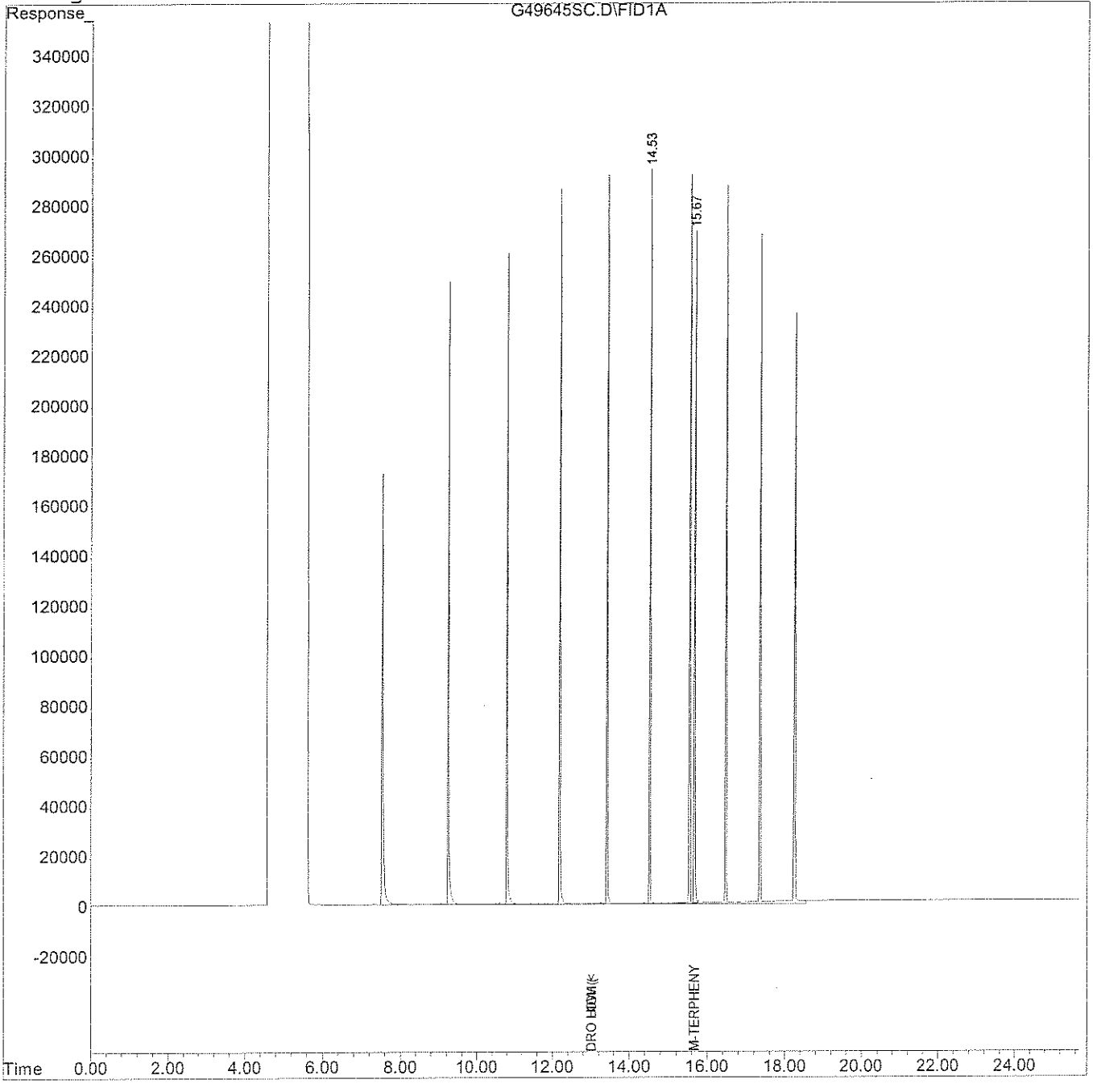
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : D:\TPH\060208-G\G49645SC.D Vial: 3
Acq On : 3 Jun 2008 6:24 Operator:
Sample : T6408 DRO 1.0 MG/ML Inst : INST G
Misc : Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 3 7:49 2008 Quant Results File: D040108A.RES

Quant Method : C:\HPCHEM\1\METHODS\D040108A.M (Chemstation Integrator)
Title : DRO
Last Update : Mon Jun 02 11:41:57 2008
Response via : Multiple Level Calibration
DataAcq Meth : TPHEPH1.M

Volume Inj. : 1ul
Signal Phase : Rtx-5MS
Signal Info : 0.25 mm



CHAIN OF CUSTODIES

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Burlington
30 Community Drive, Suite 11
South Burlington, VT 05403 Tel: 802 660 1990

CHAIN OF CUSTODY RECORD

pH checked on ORO amber CP 5/22/08

Report to:	Invoice to:
Company: Weston Solutions	Company:
Address: Hall St	Address: Same
Manchester, NH 03101	
Contact: Joe Schmidt	Contact: Cathy Trombley
Phone: 603 656 5400	Phone:
Fax: 603 656 5401	Fax: Same
Contract/ Quote:	

Sampler's Name: Andrew Fullerton
Sampler's Signature:

Proj. No.: 03838.184
Project Name: MEFUDS LO-58
No/Type of Containers²

ANALYSIS REQUESTED: 1,4-Dioxane (8270 SIM); Low Level VOC (8260); MEK (8260); MIBK (8260); Naphthalene (8270 SIM); Total Volatile Hydrocarbons (VPH); Lead (6010B); Lead (7421)

Lab Use Only
Due Date:
Temp. of coolers when received (C°): 1 | 2 | 3 | 4 | 5
Custody Seal N / Y
Intact N / Y
Screened For Radioactivity ☐

Labels Jed SU 5/22/08

Matrix¹	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	VOA	A/G 1 Lt.	250 ml	P/O	1,4-Dioxane (8270 SIM)	Low Level VOC (8260)	MEK (8260)	MIBK (8260)	Naphthalene (8270 SIM)	Total Volatile Hydrocarbons (VPH)	Lead (6010B)	Lead (7421)	Lab/Sample ID (Lab Use Only)
W	5/16	1538		X	LSSBDW2-0508-[illegible]16	X	A			3	3	3	2		1.5	1.5			61399 -1
	5/16	1830		X	LSSBDW2-0508-[illegible]295	X	A			3	3	3	2		1.5	1.5			-2
	5/17	1004		X	LSSBDW2-0508[illegible]37	X	A			3	2	3	2		1.5	1.5			-3
	5/17	1538		X	LSSBDW2-0508-94.5	X	A			3	2	3	2		1.5	1.5			-4
	5/17	1838		X	LSSBDW2-0508-189	X	A			3	2	3	2		1.5	1.5			-5
	5/17	2115		X	LSSBDW2-0508-265	X	A			3	2	3	3		1.5	1.5			-6
	5/18	1010		X	AB-051808-01	X	A			3		3	1		1.5	1.5			-7
	5/18	1310		X	LSSBDW1-0508-056	X	A			3	2	3	2		1.5	1.5			-8
	5/18	0758		X	LSSBDW1-0508-051	X	A			3	2	3	2		1.5	1.5			-9
	5/18	1515		X	LSSBDW1-0508-[illegible]041										1.5	1.5			-10

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	5/19/08	1503			
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

Remarks: No MS/MSD on SOIL. Please call w/ questions. Thanks!

Client's delivery of samples constitutes acceptance of TestAmerica terms and conditions contained in the Price Schedule.

¹Matrix WW - Wastewater W - Water S - Soil L - Liquid A - Air bag C - Charcoal Tube SL - Sludge O - Oil
²Container VOA - 40 ml vial A/G - Amber / Or Glass 1 Liter 250 ml - Glass wide mouth P/O - Plastic or other _____

TestAmerica Cannot accept verbal changes. Please Fax written changes to (802) 660-1919

TAL-8234(1007)

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Burlington
30 Community Drive, Suite 11
South Burlington, VT 05403 Tel: 802 660 1990

CHAIN OF CUSTODY RECORD

Report to:	Invoice to:
Company: Weston Solutions, Inc	Company: same
Address: 1 Wall St Manchester NH 03101	Address: same
Contact: Joe Schmidl	Contact: Cathy Tremblay
Phone: 603 656 5400	Phone: same
Fax: 603 656 5401	Fax:
Contract/ Quote:	

Sampler's Name: Andrew Fuller
Sampler's Signature:

Proj. No.: 03586.154
Project Name: VFW/AMAC LO-58
No./Type of Containers[2]: A=2 V=9

Lab Use Only
Due Date:

Temp. of coolers when received (C°): 1 | 2 | 3 | 4 | 5

Custody Seal N / Y
Intact N / Y

Screened For Radioactivity ☐

Labels ved SL 5/22/08

Matrix[1]	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	VOA	A/G 1 Lt.	250 ml	P/O	TPH-GRO	TPH-DRO	VOC SW8260	8260 Full List (EDD)	48Hr turn on these samples	pH checked on DRO ambers CP 5/22/08	Lab/Sample ID (Lab Use Only)
W	5/20	1200		X	LSSBDWI-0508-034	X	A			3	2	3	3		1.5	1.5	61399 -11
W	5/20	1200		X	LSSBDWI-0508-034-E	X	A			3	2	3			1.5	1.5	-12
W	5/20	1605		X	LSSBDWI-0508-039	X	A			3	2	3	3		1.5	1.5	-13
W	5/20	1800		X	RB-052008-01	X	A			3	2/1	3			1.5	1	-14
					TB-051608-01	X				2		2					-15
					TB-051908-01	X				2		2					-16
	5/21	0640			VFW-TAP	X						3		X			~~-17~~ CP 5/22/08
	5/21	0710			~~VFW~~ AMAC-TAP	X						3		X			

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	5/22/08	1325			
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

Remarks: Quickturn on two — rop samples. Please call w/ any questions.

Client's delivery of samples constitutes acceptance of TestAmerica terms and conditions contained in the Price Schedule.

[1]Matrix WW - Wastewater W - Water S - Soil L - Liquid A - Air bag C - Charcoal Tube SL - Sludge O - Oil
[2]Container VOA - 40 ml vial A/G - Amber / Or Glass 1 Liter 250 ml - Glass wide mouth P/O - Plastic or other _____

TestAmerica Cannot accept verbal changes. Please Fax written changes to (802) 660-1919

TAL-8234(1007)

ANALYTICS SAMPLE RECEIPT CHECKLIST

analytics environmental laboratory LLC

AEL LAB#: 61399

CLIENT: ~~TA-VT~~ CP TA-VT

PROJECT: MEFUDS LO-58

COOLER NUMBER: _____

NUMBER OF COOLERS: 4

DATE RECEIVED: 5/22/08

A: PRELIMINARY EXAMINATION:

DATE COOLER OPENED: 5/22/08

1. Cooler received by(initials) CP Date Received: 5/22/08

2. Circle one: (Hand delivered (If so, skip 3)) Shipped

	Y	N
3. Did cooler come with a shipping slip?		
3a. Enter carrier name and airbill number here: _____		
4. Were custody seals on the outside of cooler? How many & where: _____ Seal Date: _____ Seal Name: _____		
5. Did the custody seals arrive unbroken and intact upon arrival?		
6. COC#: _____		
7. Were Custody papers filled out properly (ink,signed, etc)?	Y	N
8. Were custody papers sealed in a plastic bag?	Y	N
9. Did you sign the COC in the appropriate place?	Y	N
10. Was the project identifiable from the COC papers?	Y	N
11. Was enough ice used to chill the cooler?	Y	N

Temp. of cooler: 1°-4°

B. Log-In: Date samples were logged in: 5/22/08 By: CP

	Y	N
12. Type of packing in cooler(bubble wrap, popcorn)	Y	N
13. Were all bottles sealed in separate plastic bags?	Y	N
14. Did all bottles arrive unbroken and were labels in good condition?	Y	N
15. Were all bottle labels complete(ID,Date,time,etc.)	Y	N
16. Did all bottle labels agree with custody papers?	Y	N
17. Were the correct containers used for the tests indicated:	Y	N
18. Were samples received at the correct pH?	Y	~~N~~ N/A
19. Was sufficient amount of sample sent for the tests indicated?	Y	N
20. Were bubbles absent in VOA samples?	Y	N

If NO, List sample #'s: _____

21. Laboratory labeling verified by (initials): JLL Date: 5/22/08

DATA REVIEW CHECKLIST

SITE: Maine Fuds
LAB NUMBER: Analytics 61408
WESTON SAMPLE IDs: VTW - TAP, AMAC - TAP
~~AMAC - TAP~~ DC

Data Reviewed	Fraction: 524.2						Comments
Chain of Custody	✓						
Percent Solids/RLs	N/A						
Preservation/Log Sheet							
Holding Time	✓						
Field Blanks (Trip/Equip.)							
Instrument/Method Blanks (Soils/Solids)							
Instrument/Method Blanks (Aqueous)	✓						
MS/MSD (Soil/Solids)							
MS/MSD (Aqueous)	NA						
LCS/LCSD	Not ~~available~~ done?						
Blank Spikes (BS/BSD)							
Lab Duplicates							
Field Duplicates	✓						
Surrogate Recoveries	✓						

Note:
Data reviewed but not commented on is considered acceptable.
√ = Data Reviewed
NA = Not Applicable

Qualifiers Used: No qualifications were made.

Data Reviewer Initials: DCC
Date: 9/8/08

analytics environmental laboratory LLC

195 Commerce Way Suite E
Portsmouth, New Hampshire 03801
603-436-5111 Fax 603-430-2151
800-929-9906
www.analyticslab.com

June 9, 2008

Mr. Ron Pentkowski
Test America Burlington
30 Community Drive Suite 11
South Burlington VT 05403

RE: Analytical Results Case Narrative
ME FUDS LO-58
Analytics # 61408

Dear Mr. Pentkowski:

Enclosed please find the analytical results for samples collected from the above-mentioned project. The attached Cover Page lists the sample IDs, Lab tracking numbers and collection dates for the samples included in this deliverable.

Samples were analyzed for the target volatile organic compounds using EPA Method 524.2.

Unless otherwise noted in the Non-conformance Summary listed below, all of the quality control (QC) criteria including initial calibration, calibration verification, surrogate recovery, holding time and method accuracy/precision for these analyses were within acceptable limits.

This Level IV package has been assembled in the following order with raw data:

Case Narrative/Non-Conformance Summary
Sample Log Sheet - Cover Page
VOA Form 1 Sample Data Results
Chromatograms
VOA Form 2 Surrogate Recoveries
VOA Form 3 MS/MSD and LCS Recoveries
VOA Form 4 Method Blank Summary (equiv.) GC/MS Logbook Sheets
VOA Form 5 BFB Tune Summaries
VOA Form 6 Initial Calibration Data (equiv..) Response Factor Report
VOA Form 7 Continuing Calibration Check (equiv.)
VOA Form 8 Int. Standard and RT Summary
Chain of Custody (COC) Forms
Sample Receipt Checklist

QC NON CONFORMANCE SUMMARY

Sample Receipt:
No QC deviations.

EPA Method 524.2 Volatile Organics:
This narrative is specific to target analytes reported on the Form 1 data pages. Non-target (NT) analyte deviations were not addressed. The following analytes were not 'J" flagged in this report: Vinyl Chloride, Methylene choride, Diethyl ether, Acetone, Hexachlorobutadiene, and Naphthalene.

If you have any questions on this data submittal, please do not hesitate to contact me.

Sincerely,
ANALYTICS Environmental Laboratory, LLC

Stephen Knollmeyer
Laboratory Director

analytics environmental laboratory LLC

195 Commerce Way Suite E
Portsmouth, New Hampshire 03801
603-436-5111 Fax 603-430-2151
800-929-9906
www.analyticslab.com

Mr. Ron Pentkowski
Test America Burlington
30 Community Drive Suite 11
South Burlington VT 05403

Report Number: 61408

Revision: Rev. 0

Re: MEFUDS LO-58 **03886.184**

Enclosed are the results of the analyses on your sample(s). Samples were received on 22 May 2008 and analyzed for the tests listed below. Samples were received in acceptable condition, with the exceptions noted below or on the chain of custody. These results pertain to samples as received by the laboratory and for the analytical tests requested on the chain of custody. The results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. Please see individual reports for specific methodologies and references.

Lab Number	Sample Date	Station Location	Analysis	Comments
61408-1	05/21/08	VTW-TAP	EPA 524.2 Volatile Organics	
61408-2	05/21/08	AMAC-TAP	Electronic Data Deliverable	
	05/21/08	AMAC-TAP	EPA 524.2 Volatile Organics	

Sample Receipt Exceptions: None

Analytics Environmental Laboratory is certified by the states of New Hampshire, Maine, Massachusetts, Connecticut, Rhode Island, New York, Virginia, Pennsylvania, and is validated by the U.S. Navy (NFESC). A list of actual certified parameters is available upon request.

If you have any further question on the analytical methods or these results, do not hesitate to call.

Authorized signature _____

Stephen L. Knollmeyer Laboratory Director

Date 5/27/2008

analytics environmental laboratory LLC

Summary Report

analytics environmental laboratory LLC

195 Commerce Way
Portsmouth, New Hampshire 03801
603-436-5111 Fax 603-430-2151
800-929-9906

Mr. Ron Pentkowski
Test America Burlington
30 Community Drive Suite 11
South Burlington VT 05403

May 27, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: LAB QC

SAMPLE DATA

Lab Sample ID: B505238I
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: N/A
Lab Receipt Date: N/A
Analysis Date: 05/23/08

ANALYTICAL RESULTS VOLATILE ORGANICS

COMPOUND	Quantitation Limit µg/L	Result µg/L	COMPOUND	Quantitation Limit µg/L	Result µg/L
Benzene	0.5	U	1,3-Dichloropropane	0.5	U
Bromobenzene	0.5	U	cis-1,3-Dichloropropene	0.5	U
Bromochloromethane	0.5	U	trans-1,3-Dichloropropene	0.5	U
Bromodichloromethane	0.5	U	2,2-Dichloropropane	0.5	U
Bromoform	0.5	U	1,1-Dichloropropene	0.5	U
Bromomethane	0.5	U	Ethylbenzene	0.5	U
n-butylbenzene	0.5	U	Hexachlorobutadiene	0.5	U
sec-butylbenzene	0.5	U	Isopropylbenzene	0.5	U
tert-butylbenzene	0.5	U	p-isopropyltoluene	0.5	U
Carbon Tetrachloride	0.5	U	Methylene Chloride	0.5	U
Chlorobenzene	0.5	U	Methyl-tert-butyl ether (MTBE)	0.5	U
Chloroethane	0.5	U	Naphthalene	0.5	U
Chloroform	0.5	U	n-Propylbenzene	0.5	U
Chloromethane	0.5	U	Styrene	0.5	U
2-Chlorotoluene	0.5	U	1,1,1,2-Tetrachloroethane	0.5	U
4-Chlorotoluene	0.5	U	1,1,2,2-Tetrachloroethane	0.5	U
Dibromochloromethane	0.5	U	Tetrachloroethene	0.5	U
1,2-Dibromo-3-chloropropane	0.5	U	Toluene	0.5	U
1,2-Dibromoethane	0.5	U	1,2,3-Trichlorobenzene	0.5	U
Dibromomethane	0.5	U	1,2,4-Trichlorobenzene	0.5	U
1,2-Dichlorobenzene	0.5	U	1,1,1-Trichloroethane	0.5	U
1,3-Dichlorobenzene	0.5	U	1,1,2-Trichloroethane	0.5	U
1,4-Dichlorobenzene	0.5	U	Trichloroethene	0.5	U
Dichlorodifluoromethane	0.5	U	Trichlorofluoromethane	0.5	U
1,1-Dichloroethane	0.5	U	1,2,3-Trichloropropane	0.5	U
1,2-Dichloroethane	0.5	U	1,2,4-Trimethylbenzene	0.5	U
1,1-Dichloroethene	0.5	U	1,3,5-Trimethylbenzene	0.5	U
cis-1,2-Dichloroethene	0.5	U	Vinyl Chloride	0.5	U
trans-1,2-Dichloroethene	0.5	U	o-Xylene	0.5	U
1,2-Dichloropropane	0.5	U	m,p-Xylene	0.5	U
Acetone	5	U	Diethyl ether	0.5	U
Carbon Disulfide	0.5	U	2-Hexanone	5	U
Tetrahydrofuran	2.5	U	Methyl isobutyl ketone	5	U
Methyl ethyl ketone	5	U	Di-isopropyl ether (DIPE)	0.5	U
t-Butyl alcohol (TBA)	10	U	Ethyl t-butyl ether (ETBE)	0.5	U
t-Amyl methyl ether (TAME)	0.5	U			

Surrogate Standard Recovery

1,4-Difluorobenzene	99 %	Bromofluorobenzene	96 %	1,2-Dichlorobenzene-d4	100 %

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analysis was conducted according to EPA 600, Method 524.2

COMMENTS:

NH 524 full(74)

Authorized signature

analytics environmental laboratory LLC

195 Commerce Way
Portsmouth, New Hampshire 03801
603-436-5111 Fax 603-430-2151
800-929-9906

Mr. Ron Pentkowski
Test America Burlington
30 Community Drive Suite 11
South Burlington VT 05403

May 27, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: VTW-TAP

SAMPLE DATA

Lab Sample ID: 61408-1
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 05/21/08
Lab Receipt Date: 05/22/08
Analysis Date: 05/23/08

ANALYTICAL RESULTS VOLATILE ORGANICS

COMPOUND	Quantitation Limit µg/L	Result µg/L	COMPOUND	Quantitation Limit µg/L	Result µg/L
Benzene	0.5	U	1,3-Dichloropropane	0.5	U
Bromobenzene	0.5	U	cis-1,3-Dichloropropene	0.5	U
Bromochloromethane	0.5	U	trans-1,3-Dichloropropene	0.5	U
Bromodichloromethane	0.5	U	2,2-Dichloropropane	0.5	U
Bromoform	0.5	U	1,1-Dichloropropene	0.5	U
Bromomethane	0.5	U	Ethylbenzene	0.5	U
n-butylbenzene	0.5	U	Hexachlorobutadiene	0.5	U
sec-butylbenzene	0.5	U	Isopropylbenzene	0.5	U
tert-butylbenzene	0.5	U	p-isopropyltoluene	0.5	U
Carbon Tetrachloride	0.5	U	Methylene Chloride	0.5	U
Chlorobenzene	0.5	U	Methyl-tert-butyl ether (MTBE)	0.5	U
Chloroethane	0.5	U	Naphthalene	0.5	U
Chloroform	0.5	U	n-Propylbenzene	0.5	U
Chloromethane	0.5	U	Styrene	0.5	U
2-Chlorotoluene	0.5	U	1,1,1,2-Tetrachloroethane	0.5	U
4-Chlorotoluene	0.5	U	1,1,2,2-Tetrachloroethane	0.5	U
Dibromochloromethane	0.5	U	Tetrachloroethene	0.5	U
1,2-Dibromo-3-chloropropane	0.5	U	Toluene	0.5	1.0
1,2-Dibromoethane	0.5	U	1,2,3-Trichlorobenzene	0.5	U
Dibromomethane	0.5	U	1,2,4-Trichlorobenzene	0.5	U
1,2-Dichlorobenzene	0.5	U	1,1,1-Trichloroethane	0.5	U
1,3-Dichlorobenzene	0.5	U	1,1,2-Trichloroethane	0.5	U
1,4-Dichlorobenzene	0.5	U	Trichloroethene	0.5	U
Dichlorodifluoromethane	0.5	U	Trichlorofluoromethane	0.5	U
1,1-Dichloroethane	0.5	U	1,2,3-Trichloropropane	0.5	U
1,2-Dichloroethane	0.5	U	1,2,4-Trimethylbenzene	0.5	U
1,1-Dichloroethene	0.5	U	1,3,5-Trimethylbenzene	0.5	U
cis-1,2-Dichloroethene	0.5	U	Vinyl Chloride	0.5	U
trans-1,2-Dichloroethene	0.5	U	o-Xylene	0.5	U
1,2-Dichloropropane	0.5	U	m,p-Xylene	0.5	U
Acetone	5	U	Diethyl ether	0.5	U
Carbon Disulfide	0.5	U	2-Hexanone	5	U
Tetrahydrofuran	2.5	U	Methyl isobutyl ketone	5	U
Methyl ethyl ketone	5	U	Di-isopropyl ether (DIPE)	0.5	U
t-Butyl alcohol (TBA)	10	U	Ethyl t-butyl ether (ETBE)	0.5	U
t-Amyl methyl ether (TAME)	0.5	U			

Surrogate Standard Recovery

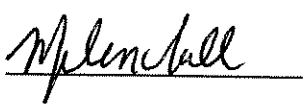
1,4-Difluorobenzene	99 %	Bromofluorobenzene	96 %	1,2-Dichlorobenzene-d4	99 %

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analysis was conducted according to EPA 600, Method 524.2

COMMENTS:

NH 524 full(74)

Authorized signature 

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603-436-5111 Fax 603-430-2151
800-929-9906

Mr. Ron Pentkowski
Test America Burlington
30 Community Drive Suite 11
South Burlington VT 05403

May 27, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: AMAC-TAP

SAMPLE DATA

Lab Sample ID: 61408-2
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 05/21/08
Lab Receipt Date: 05/22/08
Analysis Date: 05/23/08

ANALYTICAL RESULTS VOLATILE ORGANICS

COMPOUND	Quantitation Limit µg/L	Result µg/L	COMPOUND	Quantitation Limit µg/L	Result µg/L
Benzene	0.5	U	1,3-Dichloropropane	0.5	U
Bromobenzene	0.5	U	cis-1,3-Dichloropropene	0.5	U
Bromochloromethane	0.5	U	trans-1,3-Dichloropropene	0.5	U
Bromodichloromethane	0.5	U	2,2-Dichloropropane	0.5	U
Bromoform	0.5	U	1,1-Dichloropropene	0.5	U
Bromomethane	0.5	U	Ethylbenzene	0.5	U
n-butylbenzene	0.5	U	Hexachlorobutadiene	0.5	U
sec-butylbenzene	0.5	U	Isopropylbenzene	0.5	U
tert-butylbenzene	0.5	U	p-isopropyltoluene	0.5	U
Carbon Tetrachloride	0.5	U	Methylene Chloride	0.5	U
Chlorobenzene	0.5	U	Methyl-tert-butyl ether (MTBE)	0.5	U
Chloroethane	0.5	U	Naphthalene	0.5	U
Chloroform	0.5	U	n-Propylbenzene	0.5	U
Chloromethane	0.5	U	Styrene	0.5	U
2-Chlorotoluene	0.5	U	1,1,1,2-Tetrachloroethane	0.5	U
4-Chlorotoluene	0.5	U	1,1,2,2-Tetrachloroethane	0.5	U
Dibromochloromethane	0.5	U	Tetrachloroethene	0.5	U
1,2-Dibromo-3-chloropropane	0.5	U	Toluene	0.5	U
1,2-Dibromoethane	0.5	U	1,2,3-Trichlorobenzene	0.5	U
Dibromomethane	0.5	U	1,2,4-Trichlorobenzene	0.5	U
1,2-Dichlorobenzene	0.5	U	1,1,1-Trichloroethane	0.5	U
1,3-Dichlorobenzene	0.5	U	1,1,2-Trichloroethane	0.5	U
1,4-Dichlorobenzene	0.5	U	Trichloroethene	0.5	U
Dichlorodifluoromethane	0.5	U	Trichlorofluoromethane	0.5	U
1,1-Dichloroethane	0.5	U	1,2,3-Trichloropropane	0.5	U
1,2-Dichloroethane	0.5	U	1,2,4-Trimethylbenzene	0.5	U
1,1-Dichloroethene	0.5	U	1,3,5-Trimethylbenzene	0.5	U
cis-1,2-Dichloroethene	0.5	U	Vinyl Chloride	0.5	U
trans-1,2-Dichloroethene	0.5	U	o-Xylene	0.5	U
1,2-Dichloropropane	0.5	U	m,p-Xylene	0.5	U
Acetone	5	U	Diethyl ether	0.5	U
Carbon Disulfide	0.5	U	2-Hexanone	5	U
Tetrahydrofuran	2.5	U	Methyl isobutyl ketone	5	U
Methyl ethyl ketone	5	U	Di-isopropyl ether (DIPE)	0.5	U
t-Butyl alcohol (TBA)	10	U	Ethyl t-butyl ether (ETBE)	0.5	U
t-Amyl methyl ether (TAME)	0.5	U			

Surrogate Standard Recovery

1,4-Difluorobenzene	101 %	Bromofluorobenzene	97 %	1,2-Dichlorobenzene-d4	100 %

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analysis was conducted according to EPA 600, Method 524.2

COMMENTS:

NH 524 full(74)

Authorized signature

VOLATILE
DATA SUMMARIES

analytics environmental laboratory LLC

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South Burlington VT 05403

May 27, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: LAB QC

SAMPLE DATA

Lab Sample ID: B505238I
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: N/A
Lab Receipt Date: N/A
Analysis Date: 05/23/08

ANALYTICAL RESULTS VOLATILE ORGANICS

COMPOUND	Quantitation Limit µg/L	Result µg/L	COMPOUND	Quantitation Limit µg/L	Result µg/L
Benzene	0.5	U	1,3-Dichloropropane	0.5	U
Bromobenzene	0.5	U	cis-1,3-Dichloropropene	0.5	U
Bromochloromethane	0.5	U	trans-1,3-Dichloropropene	0.5	U
Bromodichloromethane	0.5	U	2,2-Dichloropropane	0.5	U
Bromoform	0.5	U	1,1-Dichloropropene	0.5	U
Bromomethane	0.5	U	Ethylbenzene	0.5	U
n-butylbenzene	0.5	U	Hexachlorobutadiene	0.5	U
sec-butylbenzene	0.5	U	Isopropylbenzene	0.5	U
tert-butylbenzene	0.5	U	p-isopropyltoluene	0.5	U
Carbon Tetrachloride	0.5	U	Methylene Chloride	0.5	U
Chlorobenzene	0.5	U	Methyl-tert-butyl ether (MTBE)	0.5	U
Chloroethane	0.5	U	Naphthalene	0.5	U
Chloroform	0.5	U	n-Propylbenzene	0.5	U
Chloromethane	0.5	U	Styrene	0.5	U
2-Chlorotoluene	0.5	U	1,1,1,2-Tetrachloroethane	0.5	U
4-Chlorotoluene	0.5	U	1,1,2,2-Tetrachloroethane	0.5	U
Dibromochloromethane	0.5	U	Tetrachloroethene	0.5	U
1,2-Dibromo-3-chloropropane	0.5	U	Toluene	0.5	U
1,2-Dibromoethane	0.5	U	1,2,3-Trichlorobenzene	0.5	U
Dibromomethane	0.5	U	1,2,4-Trichlorobenzene	0.5	U
1,2-Dichlorobenzene	0.5	U	1,1,1-Trichloroethane	0.5	U
1,3-Dichlorobenzene	0.5	U	1,1,2-Trichloroethane	0.5	U
1,4-Dichlorobenzene	0.5	U	Trichloroethene	0.5	U
Dichlorodifluoromethane	0.5	U	Trichlorofluoromethane	0.5	U
1,1-Dichloroethane	0.5	U	1,2,3-Trichloropropane	0.5	U
1,2-Dichloroethane	0.5	U	1,2,4-Trimethylbenzene	0.5	U
1,1-Dichloroethene	0.5	U	1,3,5-Trimethylbenzene	0.5	U
cis-1,2-Dichloroethene	0.5	U	Vinyl Chloride	0.5	U
trans-1,2-Dichloroethene	0.5	U	o-Xylene	0.5	U
1,2-Dichloropropane	0.5	U	m,p-Xylene	0.5	U
Acetone	5	U	Diethyl ether	0.5	U
Carbon Disulfide	0.5	U	2-Hexanone	5	U
Tetrahydrofuran	2.5	U	Methyl isobutyl ketone	5	U
Methyl ethyl ketone	5	U	Di-isopropyl ether (DIPE)	0.5	U
t-Butyl alcohol (TBA)	10	U	Ethyl t-butyl ether (ETBE)	0.5	U
t-Amyl methyl ether (TAME)	0.5	U			

Surrogate Standard Recovery

1,4-Difluorobenzene	99 %	Bromofluorobenzene	96 %	1,2-Dichlorobenzene-d4	100 %

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analysis was conducted according to EPA 600, Method 524.2

COMMENTS:

NH 524 Jul(74)

Authorized signature

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\DATA\052308-I\I29657B.D
Acq On : 23 May 2008 5:45 pm
Sample : B505238I
Misc : 25000
MS Integration Params: rteint.p
Quant Time: May 27 10:19 2008

Vial: 15
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: V505238I.RES

Quant Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration
DataAcq Meth : V505238I

AK 5.27.08

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.50	168	265172	4.00	ug/L	-0.03
39) Fluorobenzene	8.91	96	595051	4.00	ug/L	-0.02
63) d5-Chlorobenzene	13.71	117	365246	4.00	ug/L	-0.03
87) 1,4-Dichlorobenzene-d4	17.55	152	131834	4.00	ug/L	-0.03
System Monitoring Compounds						
28) DB Holder #28	9.03	114	481678	3.96	ug/L	-0.03
Spiked Amount 4.000	Range 70 - 130		Recovery = 99.00%			
36) 1,4-Difluorobenzene	9.03	114	481678	3.96	ug/L	-0.03
Spiked Amount 4.000	Range 70 - 130		Recovery = 99.00%			
54) Bromofluorobenzene	15.64	95	151567	3.85	ug/L	-0.03
Spiked Amount 4.000	Range 70 - 130		Recovery = 96.25%			
73) 1,2-Dichlorobenzene-d4	18.15	152	107977	3.99	ug/L	-0.03
Spiked Amount 4.000	Range 70 - 130		Recovery = 99.75%			
Target Compounds						Qvalue
~~16) Methylene Chloride~~	4.87	84	29478	~~Below Cal~~		94

ND

5/27/08

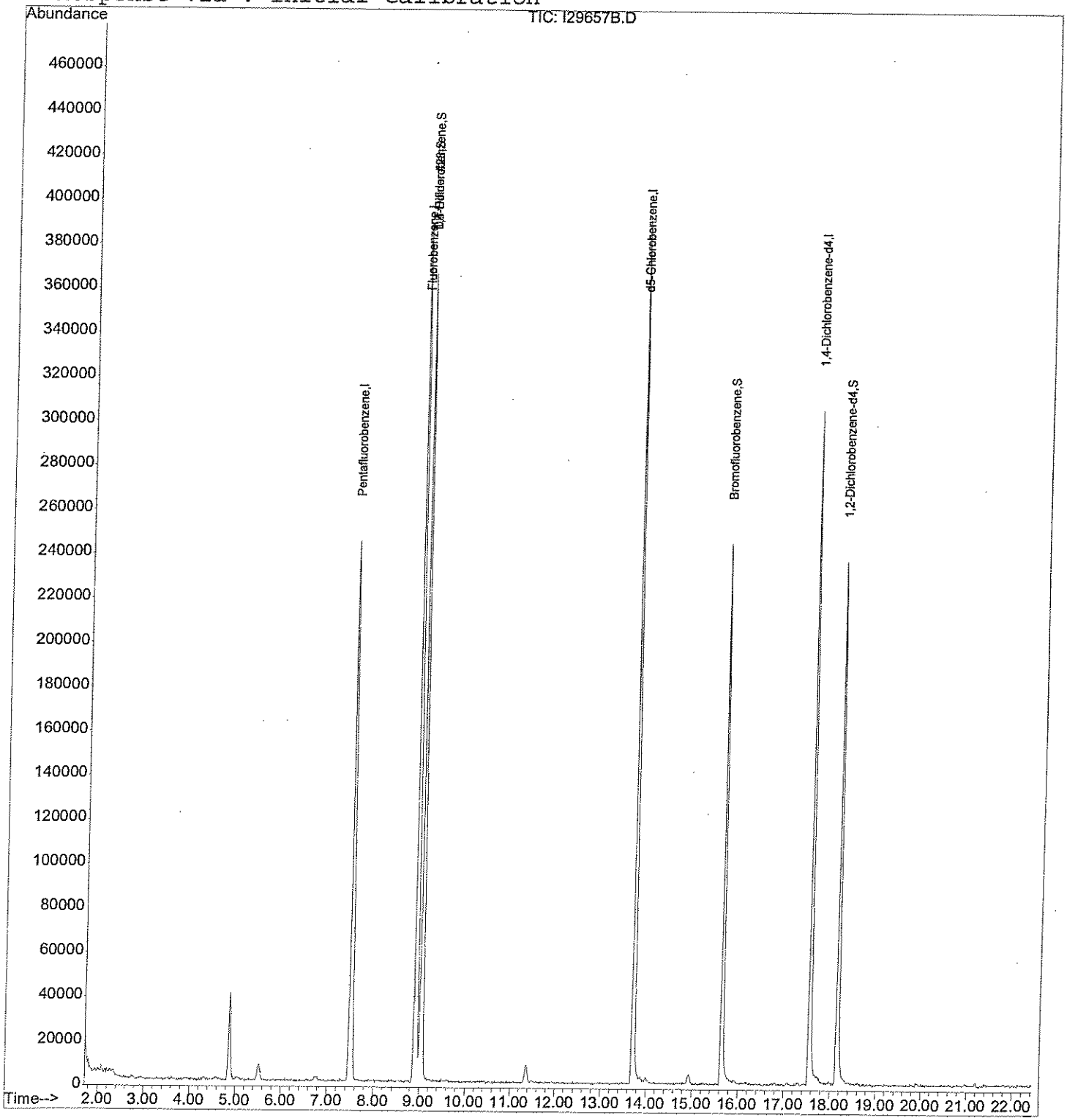
(#) = qualifier out of range (m) = manual integration
I29657B.D V505238I.M Tue May 27 10:19:37 2008 Page 1

Data File : D:\HPCHEM\DATA\052308-I\I29657B.D
Acq On : 23 May 2008 5:45 pm
Sample : B505238I
Misc : 25000
MS Integration Params: rteint.p
Quant Time: May 27 10:19 2008

Vial: 15
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: V505238I.RE

Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration



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Mr. Ron Pentkowski
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30 Community Drive Suite 11
South Burlington VT 05403

May 27, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: VTW-TAP

SAMPLE DATA

Lab Sample ID: 61408-1
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 05/21/08
Lab Receipt Date: 05/22/08
Analysis Date: 05/23/08

ANALYTICAL RESULTS VOLATILE ORGANICS

COMPOUND	Quantitation Limit µg/L	Result µg/L	COMPOUND	Quantitation Limit µg/L	Result µg/L
Benzene	0.5	U	1,3-Dichloropropane	0.5	U
Bromobenzene	0.5	U	cis-1,3-Dichloropropene	0.5	U
Bromochloromethane	0.5	U	trans-1,3-Dichloropropene	0.5	U
Bromodichloromethane	0.5	U	2,2-Dichloropropane	0.5	U
Bromoform	0.5	U	1,1-Dichloropropene	0.5	U
Bromomethane	0.5	U	Ethylbenzene	0.5	U
n-butylbenzene	0.5	U	Hexachlorobutadiene	0.5	U
sec-butylbenzene	0.5	U	Isopropylbenzene	0.5	U
tert-butylbenzene	0.5	U	p-isopropyltoluene	0.5	U
Carbon Tetrachloride	0.5	U	Methylene Chloride	0.5	U
Chlorobenzene	0.5	U	Methyl-tert-butyl ether (MTBE)	0.5	U
Chloroethane	0.5	U	Naphthalene	0.5	U
Chloroform	0.5	U	n-Propylbenzene	0.5	U
Chloromethane	0.5	U	Styrene	0.5	U
2-Chlorotoluene	0.5	U	1,1,1,2-Tetrachloroethane	0.5	U
4-Chlorotoluene	0.5	U	1,1,2,2-Tetrachloroethane	0.5	U
Dibromochloromethane	0.5	U	Tetrachloroethene	0.5	U
1,2-Dibromo-3-chloropropane	0.5	U	Toluene	0.5	**1.0**
1,2-Dibromoethane	0.5	U	1,2,3-Trichlorobenzene	0.5	U
Dibromomethane	0.5	U	1,2,4-Trichlorobenzene	0.5	U
1,2-Dichlorobenzene	0.5	U	1,1,1-Trichloroethane	0.5	U
1,3-Dichlorobenzene	0.5	U	1,1,2-Trichloroethane	0.5	U
1,4-Dichlorobenzene	0.5	U	Trichloroethene	0.5	U
Dichlorodifluoromethane	0.5	U	Trichlorofluoromethane	0.5	U
1,1-Dichloroethane	0.5	U	1,2,3-Trichloropropane	0.5	U
1,2-Dichloroethane	0.5	U	1,2,4-Trimethylbenzene	0.5	U
1,1-Dichloroethene	0.5	U	1,3,5-Trimethylbenzene	0.5	U
cis-1,2-Dichloroethene	0.5	U	Vinyl Chloride	0.5	U
trans-1,2-Dichloroethene	0.5	U	o-Xylene	0.5	U
1,2-Dichloropropane	0.5	U	m,p-Xylene	0.5	U
Acetone	5	U	Diethyl ether	0.5	U
Carbon Disulfide	0.5	U	2-Hexanone	5	U
Tetrahydrofuran	2.5	U	Methyl isobutyl ketone	5	U
Methyl ethyl ketone	5	U	Di-isopropyl ether (DIPE)	0.5	U
t-Butyl alcohol (TBA)	10	U	Ethyl t-butyl ether (ETBE)	0.5	U
t-Amyl methyl ether (TAME)	0.5	U			

Surrogate Standard Recovery

1,4-Difluorobenzene	99 %	Bromofluorobenzene	96 %	1,2-Dichlorobenzene-d4	99 %

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analysis was conducted according to EPA 600, Method 524.2

COMMENTS:

NH 524 full(74)

Authorized signature 

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\DATA\052308-I\I29663.D
Acq On : 23 May 2008 9:09 pm
Sample : 61408-1
Misc : 25000
MS Integration Params: rteint.p
Quant Time: May 27 9:17 2008

Vial: 21
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: V505238I.RES

Quant Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration
DataAcq Meth : V505238I

AK 5.27.08
DF=1
DL=0.5

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.48	168	244590	4.00	ug/L	-0.05
39) Fluorobenzene	8.89	96	562753	4.00	ug/L	-0.04
63) d5-Chlorobenzene	13.70	117	337796	4.00	ug/L	-0.04
87) 1,4-Dichlorobenzene-d4	17.54	152	122090	4.00	ug/L	-0.04
System Monitoring Compounds						
28) DB Holder #28	9.02	114	445136	3.97	ug/L	-0.04
Spiked Amount 4.000	Range 70 - 130		Recovery = 99.25%			
36) 1,4-Difluorobenzene	9.02	114	445136	3.97	ug/L	-0.04
Spiked Amount 4.000	Range 70 - 130		Recovery = 99.25%			
54) Bromofluorobenzene	15.63	95	143471	3.85	ug/L	-0.04
Spiked Amount 4.000	Range 70 - 130		Recovery = 96.25%			
73) 1,2-Dichlorobenzene-d4	18.14	152	99484	3.98	ug/L	-0.04
Spiked Amount 4.000	Range 70 - 130		Recovery = 99.50%			
Target Compounds						Qvalue
16) Methylene Chloride	4.85	84	1535	Below Cal		88
55) Toluene	11.47	92	89332	1.02	ug/L	97

JS 5.27.08

(#) = qualifier out of range (m) = manual integration
I29663.D V505238I.M Tue May 27 09:17:47 2008 Page 1

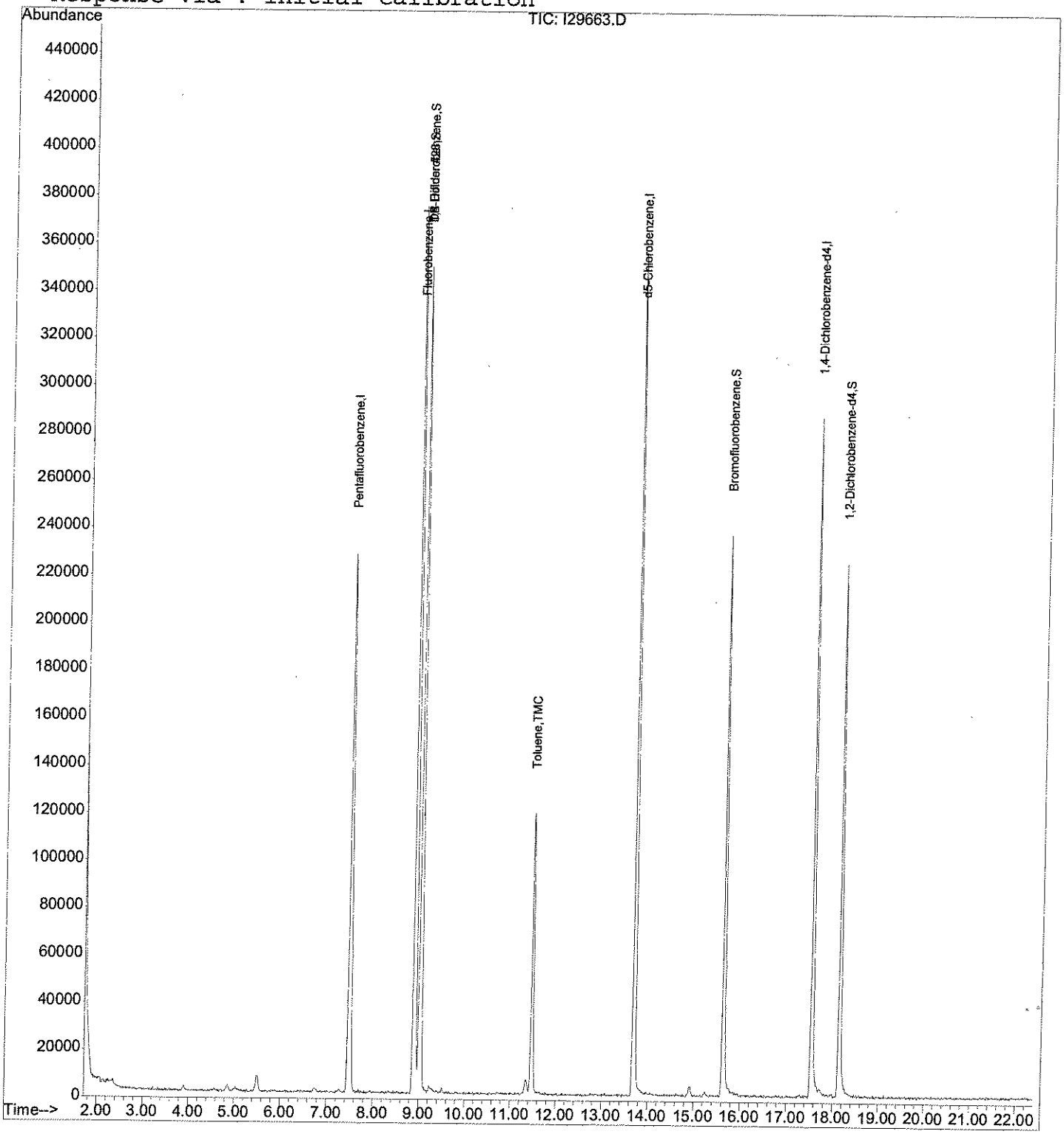
Quantitation Report

Data File : D:\HPCHEM\DATA\052308-I\I29663.D
Acq On : 23 May 2008 9:09 pm
Sample : 61408-1
Misc : 25000
MS Integration Params: rteint.p
Quant Time: May 27 9:17 2008

Vial: 21
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: V505238I.RES

Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration



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Mr. Ron Pentkowski
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South Burlington VT 05403

May 27, 2008

CLIENT SAMPLE ID

Project Name: MEFUDS LO-58

Project Number: 03886.184

Field Sample ID: AMAC-TAP

SAMPLE DATA

Lab Sample ID: 61408-2
Matrix: Aqueous
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 05/21/08
Lab Receipt Date: 05/22/08
Analysis Date: 05/23/08

ANALYTICAL RESULTS VOLATILE ORGANICS

COMPOUND	Quantitation Limit µg/L	Result µg/L	COMPOUND	Quantitation Limit µg/L	Result µg/L
Benzene	0.5	U	1,3-Dichloropropane	0.5	U
Bromobenzene	0.5	U	cis-1,3-Dichloropropene	0.5	U
Bromochloromethane	0.5	U	trans-1,3-Dichloropropene	0.5	U
Bromodichloromethane	0.5	U	2,2-Dichloropropane	0.5	U
Bromoform	0.5	U	1,1-Dichloropropene	0.5	U
Bromomethane	0.5	U	Ethylbenzene	0.5	U
n-butylbenzene	0.5	U	Hexachlorobutadiene	0.5	U
sec-butylbenzene	0.5	U	Isopropylbenzene	0.5	U
tert-butylbenzene	0.5	U	p-isopropyltoluene	0.5	U
Carbon Tetrachloride	0.5	U	Methylene Chloride	0.5	U
Chlorobenzene	0.5	U	Methyl-tert-butyl ether (MTBE)	0.5	U
Chloroethane	0.5	U	Naphthalene	0.5	U
Chloroform	0.5	U	n-Propylbenzene	0.5	U
Chloromethane	0.5	U	Styrene	0.5	U
2-Chlorotoluene	0.5	U	1,1,1,2-Tetrachloroethane	0.5	U
4-Chlorotoluene	0.5	U	1,1,2,2-Tetrachloroethane	0.5	U
Dibromochloromethane	0.5	U	Tetrachloroethene	0.5	U
1,2-Dibromo-3-chloropropane	0.5	U	Toluene	0.5	U
1,2-Dibromoethane	0.5	U	1,2,3-Trichlorobenzene	0.5	U
Dibromomethane	0.5	U	1,2,4-Trichlorobenzene	0.5	U
1,2-Dichlorobenzene	0.5	U	1,1,1-Trichloroethane	0.5	U
1,3-Dichlorobenzene	0.5	U	1,1,2-Trichloroethane	0.5	U
1,4-Dichlorobenzene	0.5	U	Trichloroethene	0.5	U
Dichlorodifluoromethane	0.5	U	Trichlorofluoromethane	0.5	U
1,1-Dichloroethane	0.5	U	1,2,3-Trichloropropane	0.5	U
1,2-Dichloroethane	0.5	U	1,2,4-Trimethylbenzene	0.5	U
1,1-Dichloroethene	0.5	U	1,3,5-Trimethylbenzene	0.5	U
cis-1,2-Dichloroethene	0.5	U	Vinyl Chloride	0.5	U
trans-1,2-Dichloroethene	0.5	U	o-Xylene	0.5	U
1,2-Dichloropropane	0.5	U	m,p-Xylene	0.5	U
Acetone	5	U	Diethyl ether	0.5	U
Carbon Disulfide	0.5	U	2-Hexanone	5	U
Tetrahydrofuran	2.5	U	Methyl isobutyl ketone	5	U
Methyl ethyl ketone	5	U	Di-isopropyl ether (DIPE)	0.5	U
t-Butyl alcohol (TBA)	10	U	Ethyl t-butyl ether (ETBE)	0.5	U
t-Amyl methyl ether (TAME)	0.5	U			

Surrogate Standard Recovery

1,4-Difluorobenzene	101 %	Bromofluorobenzene	97 %	1,2-Dichlorobenzene-d4	100 %

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in Blank

METHODOLOGY: Sample analysis was conducted according to EPA 600, Method 524.2

COMMENTS:

NH 524 full(74)

Authorized signature

Quantitation Report (Not Reviewed)

Q

Data File : D:\HPCHEM\DATA\052308-I\I29664.D
Acq On : 23 May 2008 9:42 pm
Sample : 61408-2
Misc : 25000
MS Integration Params: rteint.p
Quant Time: May 27 9:17 2008

Vial: 22
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: V505238I.RES

Quant Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration
DataAcq Meth : V505238I

AK 5.27.08
DF=1
DL=0.5

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.48	168	246347	4.00	ug/L	-0.05
39) Fluorobenzene	8.89	96	563203	4.00	ug/L	-0.04
63) d5-Chlorobenzene	13.70	117	341814 ✓	4.00	ug/L	-0.04
87) 1,4-Dichlorobenzene-d4	17.54	152	122116	4.00	ug/L	-0.04
System Monitoring Compounds						
28) DB Holder #28	9.02	114	456105	4.04	ug/L	-0.04
Spiked Amount 4.000	Range 70 - 130		Recovery = 101.00% ✓			
36) 1,4-Difluorobenzene	9.02	114	456236	4.04	ug/L	-0.04
Spiked Amount 4.000	Range 70 - 130		Recovery = 101.00% ✓			
54) Bromofluorobenzene	15.63	95	144288	3.87	ug/L	-0.04
Spiked Amount 4.000	Range 70 - 130		Recovery = 96.75% ✓			
73) 1,2-Dichlorobenzene-d4	18.14	152	101378	4.00	ug/L	-0.04
Spiked Amount 4.000	Range 70 - 130		Recovery = 100.00% ✓			
Target Compounds						Qvalue
~~16)~~ Methylene Chloride	4.86	84	1564	~~Below Cal~~		80

ND

052708

(#) = qualifier out of range (m) = manual integration
I29664.D V505238I.M Tue May 27 09:17:48 2008 Page 1

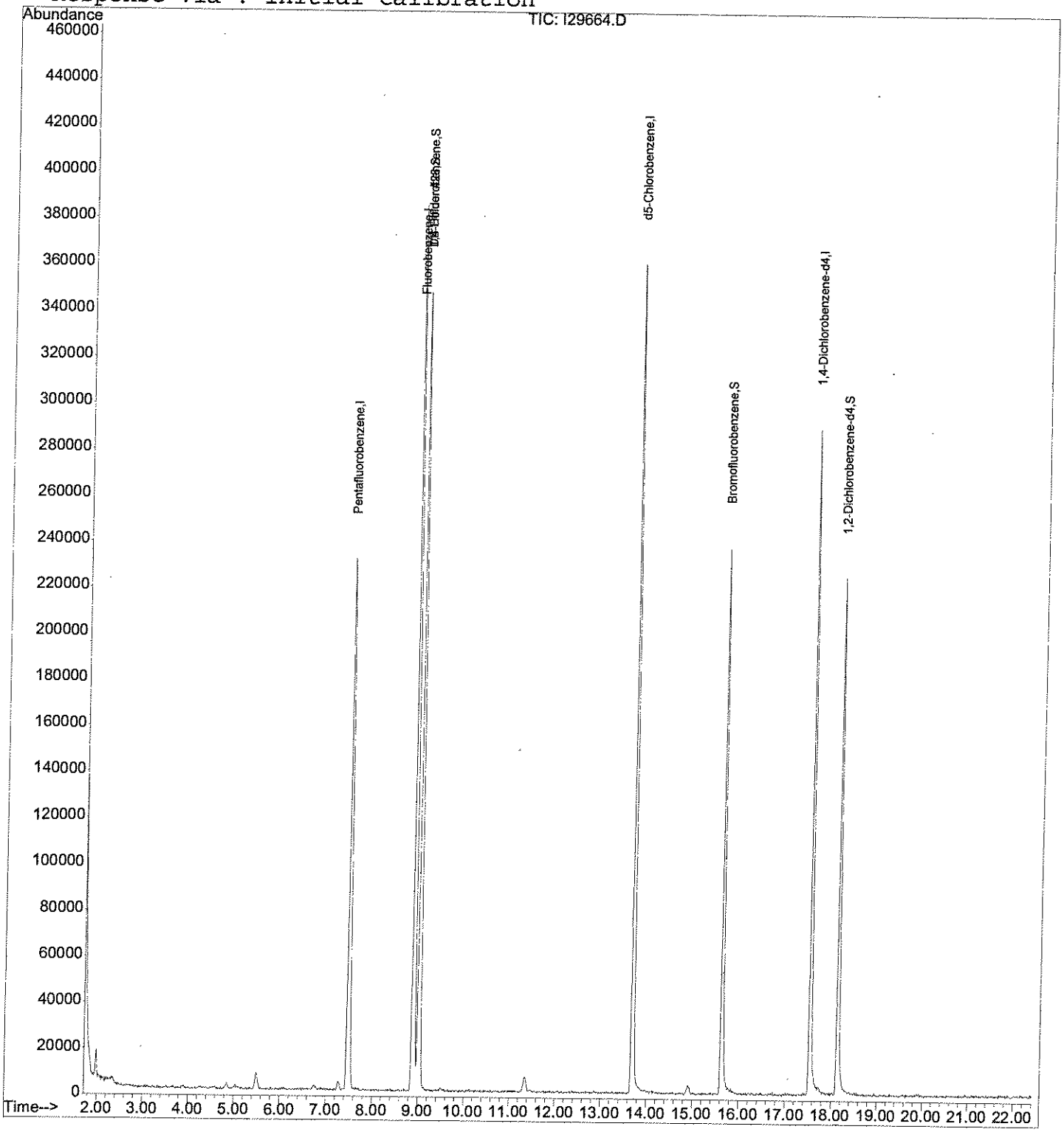
Quantitation Report

Data File : D:\HPCHEM\DATA\052308-I\I29664.D
Acq On : 23 May 2008 9:42 pm
Sample : 61408-2
Misc : 25000
MS Integration Params: rteint.p
Quant Time: May 27 9:17 2008

Vial: 22
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: V505238I.RES

Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration



analytics environmental laboratory LLC

VOLATILE
QC FORMS

AnalyticsLLC:AEL Documents LLC:Pkg Dividers:VOCQC.doc

VOLATILE ORGANIC AQUEOUS
SYSTEM MONITORING COMPOUNDS
SUMMARY

Instrument ID: I
GC Column: RTX-502.2
Column ID: 0.25 mm

SDG: 61408

SAMPLE ID	SMC 1 (%)	#	SMC 2 (%)	#	SMC 3 (%)	#
L505238I	98		97		99	
L505238I2	100		101		100	
B5052381	99		96		100	
61408-1	99		96		99	
61408-2	101		97		100	

		Lower Limit	Upper Limit
SMC #1 =	1,4-Difluorobenzene	70	130
SMC #2 =	Bromofluorobenzene	70	130
SMC #3 =	1,2-Dichlorobenzene-d4	70	130

\# Column to be used to flag recovery values outside of QC limits
* Values outside QC limits
D System Monitoring Compound diluted out

VOA FORM 2

VOLATILE ORGANIC AQUEOUS
LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
PERCENT RECOVERY

Instrument ID: I
GC Column: RTX-502.2
Column ID: 0.25 mm

SDG: 61408
Non-spiked sample: B505238I
Spike: L505238I
Spike Duplicate L505238I2

COMPOUND	SPIKE ADDED	LOWER LIMIT	UPPER LIMIT	RPD LIMIT	NON-SPIKE RESULT (ug/L)	SPIKE RESULT (ug/L)	SPIKE % REC	#	SPIKE DUP RESULT (ug/L)	SPIKE DUP % REC	#	RPD	#
Dichlorodifluoromethane	1	70	130	15	0.00	1.10	110		1.03	103		7	
Chloromethane	1	70	130	15	0.00	1.15	115		1.02	102		12	
Vinyl Chloride	1	70	130	15	0.00	1.03	103		0.95	95		9	
Bromomethane	1	70	130	15	0.00	1.15	115		1.09	109		5	
Chloroethane	1	70	130	15	0.00	1.01	101		0.97	97		4	
t-Butyl alcohol (TBA)	5	70	130	15	0.00	4.94	99		5.43	109		9	
Trichlorofluoromethane	1	70	130	15	0.00	0.98	98		0.93	93		6	
Diethyl ether	1	70	130	15	0.00	0.98	98		1.01	101		3	
1,1,2-Trichlorotrifluoroethane	1	70	130	15	0.00	1.18	118		1.07	107		10	
Acetone	5	70	130	15	0.00	5.71	114		6.32	126		10	
1,1-Dichloroethene	1	70	130	15	0.00	1.10	110		1.01	101		8	
Di-isopropyl ether (DIPE)	1	70	130	15	0.00	0.98	98		0.95	95		3	
Methylene Chloride	1	70	130	15	0.00	0.92	92		0.93	93		0	
Carbon Disulfide	1	70	130	15	0.00	1.13	113		1.03	103		9	
Acrylonitrile	1	70	130	15	0.00	1.01	101		1.00	100		1	
Methyl-tert-butyl ether (MTBE)	2	70	130	15	0.00	1.90	95		1.99	100		5	
trans-1,2-Dichloroethene	1	70	130	15	0.00	1.06	106		1.01	101		5	
1,1-Dichloroethane	1	70	130	15	0.00	1.04	104		1.00	100		4	
Methyl ethyl ketone	5	70	130	15	0.00	5.62	112		6.19	124		10	
Ethyl t-butyl ether (ETBE)	1	70	130	15	0.00	0.94	94		0.97	97		3	
2,2-Dichloropropane	1	70	130	15	0.00	0.94	94		0.90	90		5	
cis-1,2-Dichloroethene	1	70	130	15	0.00	1.07	107		1.04	104		2	
t-Amyl methyl ether (TAME)	1	70	130	15	0.00	0.94	94		0.97	97		3	
Chloroform	1	70	130	15	0.00	1.01	101		0.98	98		3	
Bromochloromethane	1	70	130	15	0.00	0.99	99		0.95	95		4	
Tetrahydrofuran	1	70	130	15	0.00	1.03	103		1.19	119		14	
1,1,1-Trichloroethane	1	70	130	15	0.00	1.04	104		0.98	98		6	
1,1-Dichloropropene	1	70	130	15	0.00	1.05	105		0.99	99		6	
Carbon Tetrachloride	1	70	130	15	0.00	1.05	105		0.98	98		6	
1,2-Dichloroethane	1	70	130	15	0.00	0.99	99		0.97	97		2	
Benzene	1	70	130	15	0.00	1.04	104		1.02	102		2	
Trichloroethene	1	70	130	15	0.00	1.08	108		1.02	102		6	
1,2-Dichloropropane	1	70	130	15	0.00	1.02	102		1.02	102		1	
Bromodichloromethane	1	70	130	15	0.00	1.03	103		1.02	102		1	
Dibromomethane	1	70	130	15	0.00	0.97	97		0.99	99		2	
2-Hexanone	5	70	130	15	0.00	5.58	112		5.81	116		4	
Methyl isobutyl ketone	5	70	130	15	0.00	5.48	110		5.93	119		8	
cis-1,3-Dichloropropene	1	70	130	15	0.00	1.00	100		0.99	99		1	
Toluene	1	70	130	15	0.00	1.06	106		1.03	103		2	
trans-1,3-Dichloropropene	1	70	130	15	0.00	0.88	88		0.84	84		4	
1,1,2-Trichloroethane	1	70	130	15	0.00	1.06	106		1.04	104		2	
1,3-Dichloropropane	1	70	130	15	0.00	1.04	104		1.05	105		1	
Tetrachloroethene	1	70	130	15	0.00	1.11	111		1.03	103		8	
Dibromochloromethane	1	70	130	15	0.00	0.98	98		0.98	98		1	
1,2-Dibromoethane	1	70	130	15	0.00	0.99	99		1.03	103		4	
Chlorobenzene	1	70	130	15	0.00	1.04	104		0.99	99		5	

VOA FORM 3

VOLATILE ORGANIC AQUEOUS
LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
PERCENT RECOVERY

Instrument ID: 1
GC Column: RTX-502.2
Column ID: 0.25 mm

SDG: 61408
Non-spiked sample: B5052381
Spike: L5052381
Spike Duplicate L505238I2

COMPOUND	SPIKE ADDED	LOWER LIMIT	UPPER LIMIT	RPD LIMIT	NON-SPIKE RESULT (ug/L)	SPIKE RESULT (ug/L)	SPIKE % REC	#	SPIKE DUP RESULT (ug/L)	SPIKE DUP % REC	#	RPD	#
1,1,1,2-Tetrachloroethane	1	70	130	15	0.00	1.07	107		1.01	101		6	
Ethylbenzene	1	70	130	15	0.00	1.08	108		1.02	102		6	
m,p-Xylene	2	70	130	15	0.00	2.21	110		2.06	103		7	
o-Xylene	1	70	130	15	0.00	1.06	106		1.01	101		5	
Styrene	1	70	130	15	0.00	1.07	107		1.01	101		6	
Bromoform	1	70	130	15	0.00	0.96	96		0.98	98		2	
Isopropylbenzene	1	70	130	15	0.00	0.97	97		0.90	90		7	
1,1,2,2-Tetrachloroethane	1	70	130	15	0.00	0.95	95		0.95	95		0	
1,2,3-Trichloropropane	1	70	130	15	0.00	1.02	102		1.09	109		6	
trans-1,4-Dichloro-2-butene	1	70	130	15	0.00	0.93	93		0.90	90		3	
n-Propylbenzene	1	70	130	15	0.00	1.07	107		0.98	98		9	
Bromobenzene	1	70	130	15	0.00	1.06	106		1.02	102		4	
1,3,5-Trimethylbenzene	1	70	130	15	0.00	1.11	111		1.02	102		9	
2-Chlorotoluene	1	70	130	15	0.00	1.07	107		1.03	103		4	
4-Chlorotoluene	1	70	130	15	0.00	1.07	107		1.01	101		6	
tert-butylbenzene	1	70	130	15	0.00	1.09	109		0.99	99		9	
1,2,4-Trimethylbenzene	1	70	130	15	0.00	1.14	114		1.06	106		7	
sec-butylbenzene	1	70	130	15	0.00	1.08	108		0.99	99		8	
p-isopropyltoluene	1	70	130	15	0.00	1.06	106		0.97	97		8	
1,3-Dichlorobenzene	1	70	130	15	0.00	1.05	105		1.00	100		5	
1,4-Dichlorobenzene	1	70	130	15	0.00	1.04	104		0.96	96		7	
n-butylbenzene	1	70	130	15	0.00	1.14	114		1.00	100		13	
1,2-Dichlorobenzene	1	70	130	15	0.00	1.05	105		1.01	101		4	
1,2-Dibromo-3-chloropropane	1	70	130	15	0.00	0.99	99		0.93	93		6	
1,2,4-Trichlorobenzene	1	70	130	15	0.00	1.03	103		0.99	99		4	
Hexachlorobutadiene	1	70	130	15	0.00	1.12	112		1.04	104		8	
Naphthalene	1	70	130	15	0.00	0.96	96		0.94	94		2	
1,2,3-Trichlorobenzene	1	70	130	15	0.00	1.04	104		1.01	101		2	
1,3,5-Trichlorobenzene	1	70	130	15	0.00	1.09	109		1.05	105		4	

Column to be used to flag recovery and RPD values outside of QC limits
* Values outside QC limits

Non-spike result of "0" used in place of "U" to allow calculation of spike recovery

Comments: _____

VOA FORM 3

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\DATA\052308-I\I29655Q.D Vial: 13
Acq On : 23 May 2008 4:39 pm Operator:
Sample : L505238I Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
Integration Params: rteint.p
Quant Time: May 27 10:08 2008 Quant Results File: V505238I.RES

Quant Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration
DataAcq Meth : V505238I

AK 5.27.08 GN 5.2

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.51	168	264207	4.00 ug/L	-0.02
39) Fluorobenzene	8.92	96	596202	4.00 ug/L	-0.02
63) d5-Chlorobenzene	13.71	117	355389	4.00 ug/L	-0.02
87) 1,4-Dichlorobenzene-d4	17.56	152	129533	4.00 ug/L	-0.02
System Monitoring Compounds					
28) DB Holder #28	9.03	114	474739	3.92 ug/L	-0.02
Spiked Amount 4.000	Range 70 - 130		Recovery = 98.00%		
36) 1,4-Difluorobenzene	9.03	114	474739	3.92 ug/L	-0.02
Spiked Amount 4.000	Range 70 - 130		Recovery = 98.00%		
54) Bromofluorobenzene	15.65	95	152440	3.86 ug/L	-0.02
Spiked Amount 4.000	Range 70 - 130		Recovery = 96.50%		
73) 1,2-Dichlorobenzene-d4	18.16	152	103789	3.94 ug/L	-0.02
Spiked Amount 4.000	Range 70 - 130		Recovery = 98.50%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.83	85	72934	1.10 ug/L	97
3) Chloromethane	2.09	50	36399	1.15 ug/L	99
4) Vinyl Chloride	2.22	62	25350	1.03 ug/L	97
5) Bromomethane	2.73	94	54372	1.15 ug/L	99
6) Chloroethane	2.84	64	37865	1.01 ug/L	95
7) t-Butyl alcohol (TBA)	4.27	59	4979	4.94 ug/L #	92
8) Trichlorofluoromethane	3.17	101	73560	0.98 ug/L	100
9) Diethyl ether	3.61	74	11230	0.98 ug/L	92
10) 1,1,2-Trichlorotrifluoroet	3.82	101	50522	1.18 ug/L	92
11) Acrolein	3.79	56	728	0.08 ug/L	96
12) Acetone	3.91	43	17319	5.71 ug/L #	87
13) 1,1-Dichloroethene	4.08	61	69659	1.10 ug/L	99
15) Di-isopropyl ether (DIPE)	5.96	45	102193	0.98 ug/L	95
16) Methylene Chloride	4.88	84	66223	0.92 ug/L	91
17) Carbon Disulfide	4.85	76	152530	1.13 ug/L	100
18) Acrylonitrile	5.09	53	4355	1.01 ug/L	95
19) Methyl-tert-butyl ether (M	5.17	73	90280	1.90 ug/L #	89
20) trans-1,2-Dichloroethene	5.37	96	48136	1.06 ug/L	97
21) 1,1-Dichloroethane	6.07	63	77255	1.04 ug/L	98
22) Vinyl acetate	6.12	43	18005	0.65 ug/L #	90
23) Methyl ethyl ketone	6.80	72	6034	5.62 ug/L	84
24) Ethyl t-butyl ether (ETBE)	6.62	59	75133	0.94 ug/L	96
25) 2,2-Dichloropropane	6.98	77	54004	0.94 ug/L	99
26) cis-1,2-Dichloroethene	7.04	96	46010	1.07 ug/L	97
27) t-Amyl methyl ether (TAME)	8.40	73	51449	0.94 ug/L #	93
29) Chloroform	7.29	83	69356	1.01 ug/L	99

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\DATA\052308-I\I29655Q.D
Acq On : 23 May 2008 4:39 pm
Sample : L505238I
Misc : 25000
Integration Params: rteint.p
Quant Time: May 27 10:08 2008

Vial: 13
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: V505238I.RES

Quant Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration
DataAcq Meth : V505238I

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
30) Bromochloromethane	7.54	128	14664	0.99 ug/L #	80
31) Tetrahydrofuran	7.68	42	2732	1.03 ug/L	88
32) 1,1,1-Trichloroethane	7.92	97	66998	1.04 ug/L	96
34) 1,1-Dichloropropene	8.17	75	61908	1.05 ug/L	99
35) Carbon Tetrachloride	8.32	119	54123	1.05 ug/L	97
37) 1,2-Dichloroethane	8.55	62	30661	0.99 ug/L	99
38) Benzene	8.57	78	153075	1.04 ug/L	96
40) Trichloroethene	9.53	95	47441	1.08 ug/L	93
41) 1,2-Dichloropropane	9.79	63	33601	1.02 ug/L	99
45) Bromodichloromethane	10.14	83	41994	1.03 ug/L	93
46) Dibromomethane	10.22	93	14012	0.97 ug/L	94
47) 1,4-Dioxane	10.24	88	2668	24.40 ug/L	99
51) 2-Hexanone	12.06	58	17344	5.58 ug/L	92
52) Methyl isobutyl ketone	10.72	58	22708	5.48 ug/L	90
53) cis-1,3-Dichloropropene	11.00	75	42586	1.00 ug/L	98
55) Toluene	11.49	92	97993	1.06 ug/L	99
56) trans-1,3-Dichloropropene	11.78	75	26812	0.88 ug/L	98
58) 1,1,2-Trichloroethane	12.01	83	14374	1.06 ug/L	98
59) 1,3-Dichloropropane	12.40	76	29766	1.04 ug/L	100
60) Tetrachloroethene	12.49	166	45179	1.11 ug/L	96
61) Dibromochloromethane	12.79	129	22187	0.98 ug/L	99
62) 1,2-Dibromoethane	13.11	107	16224	0.99 ug/L	95
64) Chlorobenzene	13.77	112	96017	1.04 ug/L	98
65) 1,1,1,2-Tetrachloroethane	13.84	131	29813	1.07 ug/L	95
66) Ethylbenzene	13.86	91	185570	1.08 ug/L	97
67) m,p-Xylene	13.99	106	141199	2.21 ug/L	98
68) o-Xylene	14.68	106	62095	1.06 ug/L	96
69) Styrene	14.74	104	93118	1.07 ug/L	94
70) Bromoform	15.24	173	9309	0.96 ug/L	94
71) Isopropylbenzene	15.26	105	158559	0.97 ug/L	96
72) 1,1,2,2-Tetrachloroethane	15.53	83	14338	0.95 ug/L	99
74) 1,2,3-Trichloropropane	15.76	75	10618	1.02 ug/L	97
75) trans-1,4-Dichloro-2-buten	15.89	88	1419	0.93 ug/L #	63
76) n-Propylbenzene	15.90	91	207979	1.07 ug/L	95
77) Bromobenzene	15.94	156	29356	1.06 ug/L #	85
78) 1,3,5-Trimethylbenzene	16.16	105	135637	1.11 ug/L	98
79) 2-Chlorotoluene	16.17	91	125784	1.07 ug/L	95
80) 4-Chlorotoluene	16.25	91	112388	1.07 ug/L	92
81) tert-butylbenzene	16.73	119	112718	1.09 ug/L	94
82) 1,2,4-Trimethylbenzene	16.79	105	133298	1.14 ug/L	100
84) sec-butylbenzene	17.07	105	178721	1.08 ug/L	96

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\DATA\052308-I\I29655Q.D
Acq On : 23 May 2008 4:39 pm
Sample : L505238I
Misc : 25000
Integration Params: rteint.p
Quant Time: May 27 10:08 2008

Vial: 13
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: V505238I.RES

Quant Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration
DataAcq Meth : V505238I

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
85) p-isopropyltoluene	17.31	119	134266	1.06 ug/L	100
86) 1,3-Dichlorobenzene	17.44	146	56988	1.05 ug/L	97
88) 1,4-Dichlorobenzene	17.61	146	54213	1.04 ug/L	98
89) n-butylbenzene	17.97	91	132978	1.14 ug/L	92
90) 1,2-Dichlorobenzene	18.21	146	43242	1.05 ug/L	100
92) 1,2-Dibromo-3-chloropropan	19.50	75	1810	0.99 ug/L	94
94) 1,2,4-Trichlorobenzene	20.95	180	26612	1.03 ug/L	99
95) Hexachlorobutadiene	21.20	225	19259	1.12 ug/L	98
96) Naphthalene	21.36	128	26554	0.96 ug/L	95
97) 1,2,3-Trichlorobenzene	21.79	180	19772	1.04 ug/L	95
98) 1,3,5-Trichlorobenzene	19.90	180	40880	1.09 ug/L	98

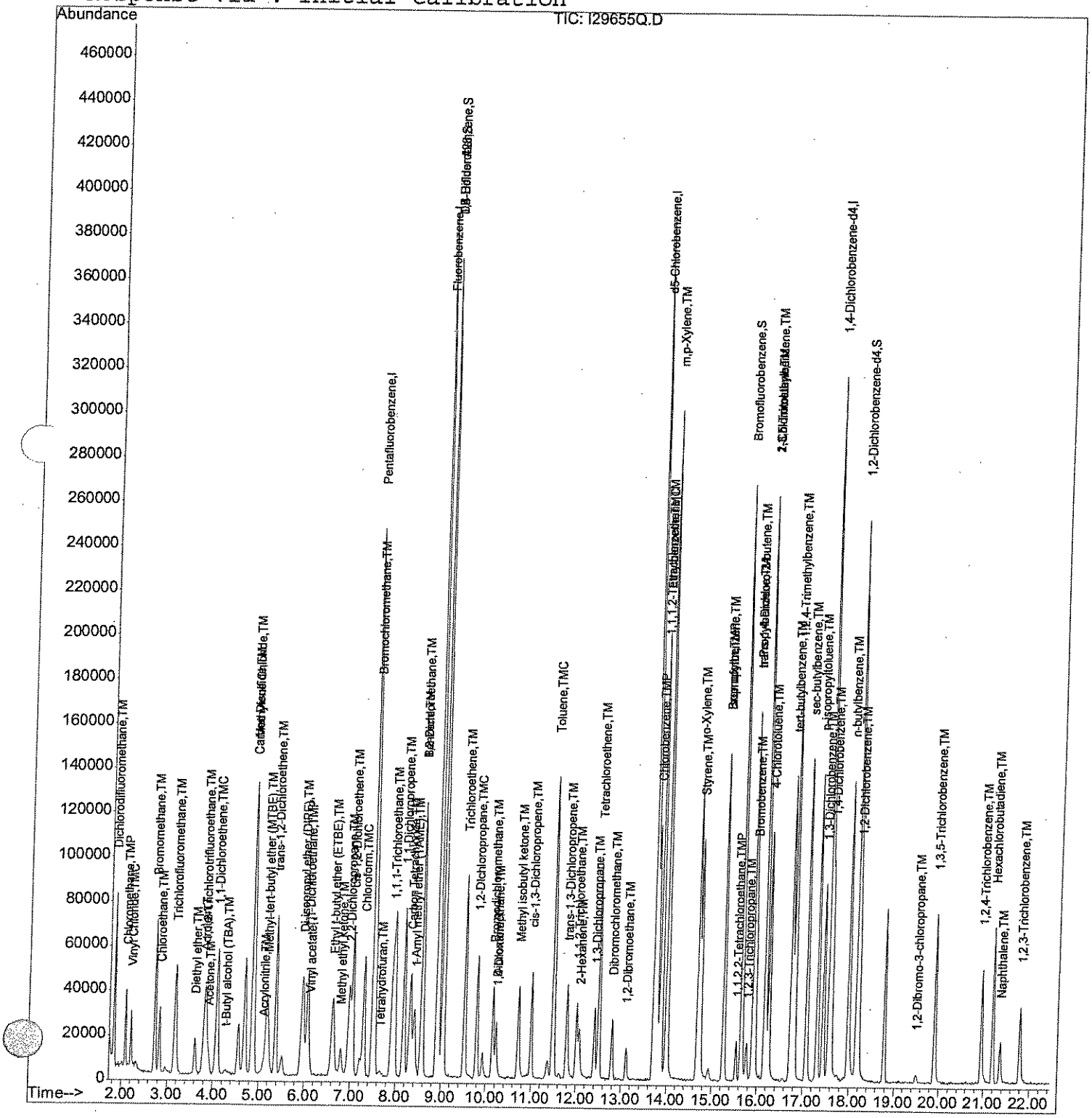
(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\DATA\052308-I\I29655Q.D
Acq On : 23 May 2008 4:39 pm
Sample : L505238I
Misc : 25000
MS Integration Params: rteint.p
Quant Time: May 27 10:08 2008

Vial: 13
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: V505238I.RE

Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration



Data File : D:\HPCHEM\DATA\052308-I\I29656Q.D
Acq On : 23 May 2008 5:12 pm
Sample : L505238I2
Misc : 25000
Integration Params: rteint.p
Quant Time: May 27 10:08 2008

Vial: 14
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: V505238I.RES

Quant Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration
DataAcq Meth : V505238I

5.27.08 AK 5.27.08

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.50	168	263080	4.00	ug/L	-0.03
39) Fluorobenzene	8.91	96	590700	4.00	ug/L	-0.02
63) d5-Chlorobenzene	13.71	117	366157	4.00	ug/L	-0.03
87) 1,4-Dichlorobenzene-d4	17.56	152	135310	4.00	ug/L	-0.02
System Monitoring Compounds						
28) DB Holder #28	9.03	114	483580	4.01	ug/L	-0.03
Spiked Amount 4.000	Range 70 - 130		Recovery = 100.25%			
36) 1,4-Difluorobenzene	9.03	114	483580	4.01	ug/L	-0.03
Spiked Amount 4.000	Range 70 - 130		Recovery = 100.25%			
54) Bromofluorobenzene	15.65	95	158015	4.04	ug/L	-0.02
Spiked Amount 4.000	Range 70 - 130		Recovery = 101.00%			
73) 1,2-Dichlorobenzene-d4	18.16	152	108048	3.98	ug/L	-0.02
Spiked Amount 4.000	Range 70 - 130		Recovery = 99.50%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.83	85	68031	1.03	ug/L	99
3) Chloromethane	2.08	50	32171	1.02	ug/L	93
4) Vinyl Chloride	2.21	62	23163	0.95	ug/L	99
5) Bromomethane	2.73	94	51474	1.09	ug/L	96
6) Chloroethane	2.83	64	36085	0.97	ug/L	98
7) t-Butyl alcohol (TBA)	4.27	59	5449	5.43	ug/L #	93
8) Trichlorofluoromethane	3.18	101	68870	0.93	ug/L	99
9) Diethyl ether	3.61	74	11469	1.01	ug/L #	90
10) 1,1,2-Trichlorotrifluoroet	3.83	101	45704	1.07	ug/L	95
11) Acrolein	3.79	56	730	0.08	ug/L	91
12) Acetone	3.91	43	19104	6.32	ug/L	96
13) 1,1-Dichloroethene	4.07	61	63974	1.01	ug/L	98
15) Di-isopropyl ether (DIPE)	5.96	45	98549	0.95	ug/L	96
16) Methylene Chloride	4.87	84	66019	0.93	ug/L	90
17) Carbon Disulfide	4.85	76	138792	1.03	ug/L	100
18) Acrylonitrile	5.09	53	4292	1.00	ug/L	91
19) Methyl-tert-butyl ether (M	5.18	73	94220	1.99	ug/L #	91
20) trans-1,2-Dichloroethene	5.37	96	45651	1.01	ug/L	97
21) 1,1-Dichloroethane	6.06	63	74185	1.00	ug/L	97
22) Vinyl acetate	6.10	43	17376	0.63	ug/L #	93
23) Methyl ethyl ketone	6.79	72	6615	6.19	ug/L	95
24) Ethyl t-butyl ether (ETBE)	6.62	59	77333	0.97	ug/L	96
25) 2,2-Dichloropropane	6.98	77	51373	0.90	ug/L	98
26) cis-1,2-Dichloroethene	7.04	96	44756	1.04	ug/L	94
27) t-Amyl methyl ether (TAME)	8.40	73	52889	0.97	ug/L	93
29) Chloroform	7.30	83	67208	0.98	ug/L	99

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\DATA\052308-I\I29656Q.D
Acq On : 23 May 2008 5:12 pm
Sample : L505238I2
Misc : 25000
Integration Params: rteint.p
Quant Time: May 27 10:08 2008

Vial: 14
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: V505238I.RES

Quant Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration
DataAcq Meth : V505238I

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
30)	Bromochloromethane	7.54	128	14069	0.95 ug/L #	80
31)	Tetrahydrofuran	7.67	42	3137	1.19 ug/L #	65
32)	1,1,1-Trichloroethane	7.93	97	62604	0.98 ug/L	95
34)	1,1-Dichloropropene	8.17	75	58012	0.99 ug/L	97
35)	Carbon Tetrachloride	8.31	119	50533	0.98 ug/L	100
37)	1,2-Dichloroethane	8.56	62	29913	0.97 ug/L	96
38)	Benzene	8.57	78	148786	1.02 ug/L	99
40)	Trichloroethene	9.52	95	44385	1.02 ug/L	89
41)	1,2-Dichloropropane	9.79	63	33035	1.02 ug/L	97
45)	Bromodichloromethane	10.14	83	41020	1.02 ug/L	98
46)	Dibromomethane	10.21	93	14181	0.99 ug/L	92
47)	1,4-Dioxane	10.22	88	2710	25.02 ug/L #	76
51)	2-Hexanone	12.06	58	18143	5.81 ug/L	97
52)	Methyl isobutyl ketone	10.71	58	24344	5.93 ug/L	91
53)	cis-1,3-Dichloropropene	10.99	75	41826	0.99 ug/L	98
55)	Toluene	11.48	92	94831	1.03 ug/L	97
56)	trans-1,3-Dichloropropene	11.78	75	25408	0.84 ug/L	97
58)	1,1,2-Trichloroethane	12.02	83	13982	1.04 ug/L	91
59)	1,3-Dichloropropane	12.40	76	29676	1.05 ug/L	96
60)	Tetrachloroethene	12.50	166	41407	1.03 ug/L	97
61)	Dibromochloromethane	12.79	129	22155	0.98 ug/L	95
62)	1,2-Dibromoethane	13.11	107	16704	1.03 ug/L	94
64)	Chlorobenzene	13.77	112	94056	0.99 ug/L	98
65)	1,1,1,2-Tetrachloroethane	13.85	131	29050	1.01 ug/L	95
66)	Ethylbenzene	13.87	91	180174	1.02 ug/L	98
67)	m,p-Xylene	14.00	106	135549	2.06 ug/L	98
68)	o-Xylene	14.68	106	60778	1.01 ug/L	98
69)	Styrene	14.73	104	90739	1.01 ug/L	94
70)	Bromoform	15.25	173	9800	0.98 ug/L	95
71)	Isopropylbenzene	15.26	105	151940	0.90 ug/L	97
72)	1,1,2,2-Tetrachloroethane	15.53	83	14790	0.95 ug/L	99
74)	1,2,3-Trichloropropane	15.76	75	11666	1.09 ug/L	92
75)	trans-1,4-Dichloro-2-buten	15.90	88	1408	0.90 ug/L #	68
76)	n-Propylbenzene	15.90	91	196783	0.98 ug/L	96
77)	Bromobenzene	15.95	156	29030	1.02 ug/L #	88
78)	1,3,5-Trimethylbenzene	16.16	105	128043	1.02 ug/L	98
79)	2-Chlorotoluene	16.17	91	125005	1.03 ug/L	97
80)	4-Chlorotoluene	16.25	91	108781	1.01 ug/L	93
81)	tert-butylbenzene	16.73	119	105978	0.99 ug/L	97
82)	1,2,4-Trimethylbenzene	16.79	105	127995	1.06 ug/L	100
84)	sec-butylbenzene	17.08	105	169975	0.99 ug/L	97

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\DATA\052308-I\I29656Q.D
Acq On : 23 May 2008 5:12 pm
Sample : L505238I2
Misc : 25000
Integration Params: rteint.p
Quant Time: May 27 10:08 2008

Vial: 14
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: V505238I.RES

Quant Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration
DataAcq Meth : V505238I

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
85) p-isopropyltoluene	17.31	119	127209	0.97 ug/L	97
86) 1,3-Dichlorobenzene	17.43	146	55814	1.00 ug/L	97
88) 1,4-Dichlorobenzene	17.61	146	52591	0.96 ug/L	100
89) n-butylbenzene	17.98	91	122136	1.00 ug/L	93
90) 1,2-Dichlorobenzene	18.20	146	43223	1.01 ug/L	99
92) 1,2-Dibromo-3-chloropropan	19.48	75	1777	0.93 ug/L #	68
94) 1,2,4-Trichlorobenzene	20.95	180	26685	0.99 ug/L	99
95) Hexachlorobutadiene	21.20	225	18579	1.04 ug/L	96
96) Naphthalene	21.36	128	27108	0.94 ug/L	96
97) 1,2,3-Trichlorobenzene	21.80	180	20173	1.01 ug/L	94
98) 1,3,5-Trichlorobenzene	19.90	180	41048	1.05 ug/L	100

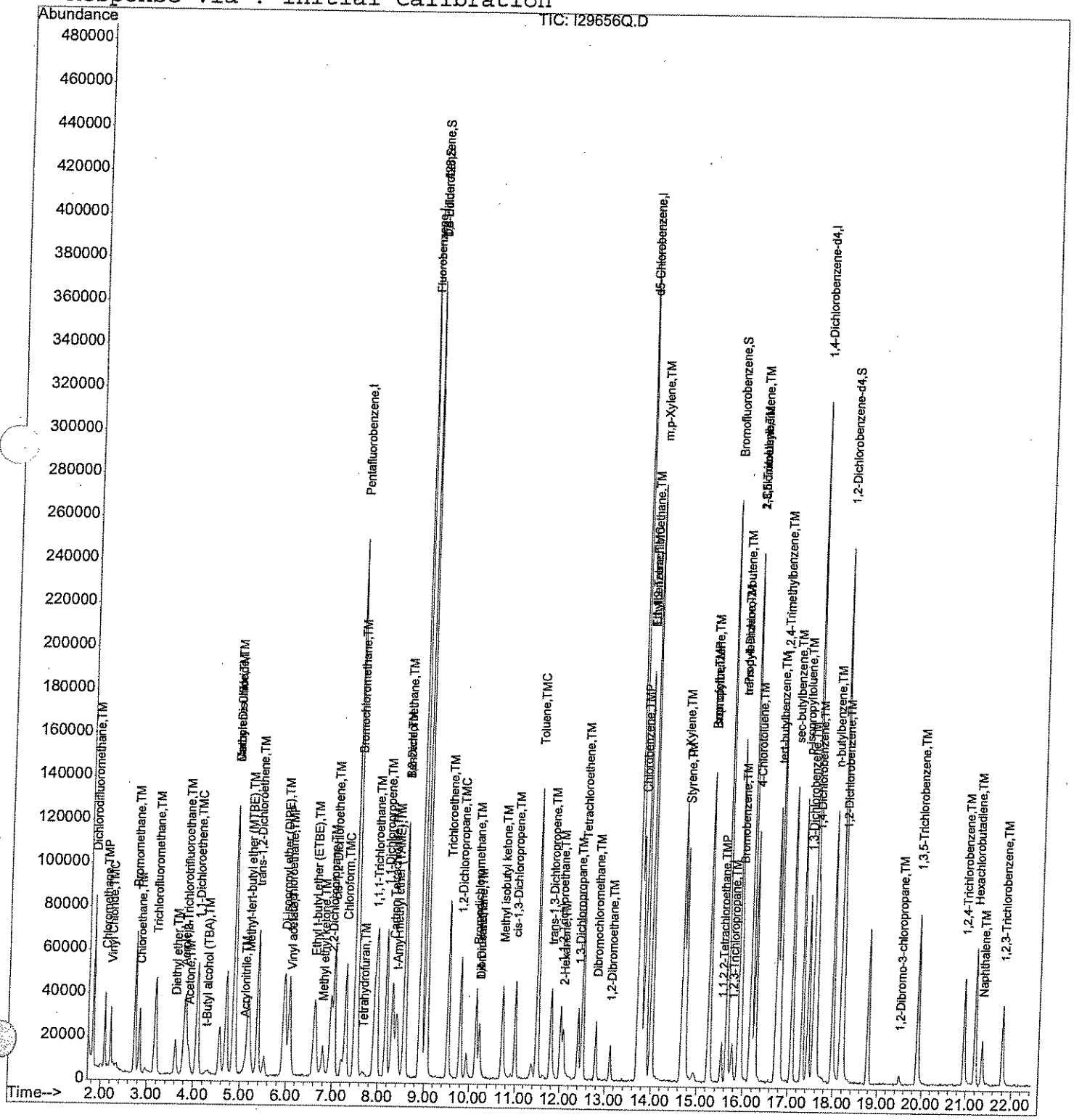
(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\DATA\052308-I\I29656Q.D
Acq On : 23 May 2008 5:12 pm
Sample : L505238I2
Misc : 25000
MS Integration Params: rteint.p
Quant Time: May 27 10:08 2008

Vial: 14
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: V505238I.RE

Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration



GC/MS Volatiles Instrument: I

analytics environmental laboratory LLC

052308-I

IS only ✓ Exp: ✓

SS+IS V7261 Exp: 6/6/08

Voltage 1647

Threshold 100

Tube	Method	Sample	Vol	DF	Comments	File #	LB	pH
		W-I-052308-1-AK						
1	V505238I	Blank	25mL			129613	AK	N/A
2		BFB 25ng 1ul V7234			✓	44T		
3		0.1 PPB STD			✓	45S1		
4		0.2			✓	46S1		
5		0.5			✓	47S1		
6		1.0			✓	48S1		
7		2.0			✓	49S1		
8		5.0			✓	50S1		
9		10			✓	51S1		
10		20			✓	52S1		
11		Blank			✓	53		
12		BFB 25ng 1ul V7234			✓	54T		
13		L505238I 1.25ul V7260 1.25ul V7246			✓	55Q		
14		L505238I2 1.25ul V7260 1.25ul V7246			✓	56Q		
15		B505238I			✓	57B		↓
16/17/18		61386-5/61410-7/61409-4			✓ ✓ ✓	58/59/60		<2 <2 <2
18/19		61375-1			✓	61		<2
19/20		61386-1			✓	62		<2
20/21		61408-1			✓	63		<2
21/22		↓ -2			✓	64		<2
22/23		61409-1			✓	65		<2
23/24		-2			✓	66		<2
24/25		-3			✓	67		<2
25		-4				67		
26		61410-6	↓		✓	68		<2

VOLATILE ORGANIC
INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Instrument ID: I
GC Column: RTX-502.2
Column ID: 0.25 mm
Heated Purge (Y/N): N

SDG: 61408
BFB File ID: I29644T.D
BFB Injection Date: 05/23/08
BFB Injection Time: 09:35

LAB SAMPLE ID	DATA FILE ID	DATE & TIME ANALYZED
0.1 PPB STD	I29645SI.D	5/23/08 10:23
0.2 PPB STD	I29646SI.D	5/23/08 10:56
0.5 PPB STD	I29647SI.D	5/23/08 11:29
1.0 PPB STD	I29648SI.D	5/23/08 12:02
2.0 PPB STD	I29649SI.D	5/23/08 12:35
5.0 PPB STD	I29650SI.D	5/23/08 13:41
10 PPB STD	I29651SI.D	5/23/08 14:14
20 PPB STD	I29652SI.D	5/23/08 14:48

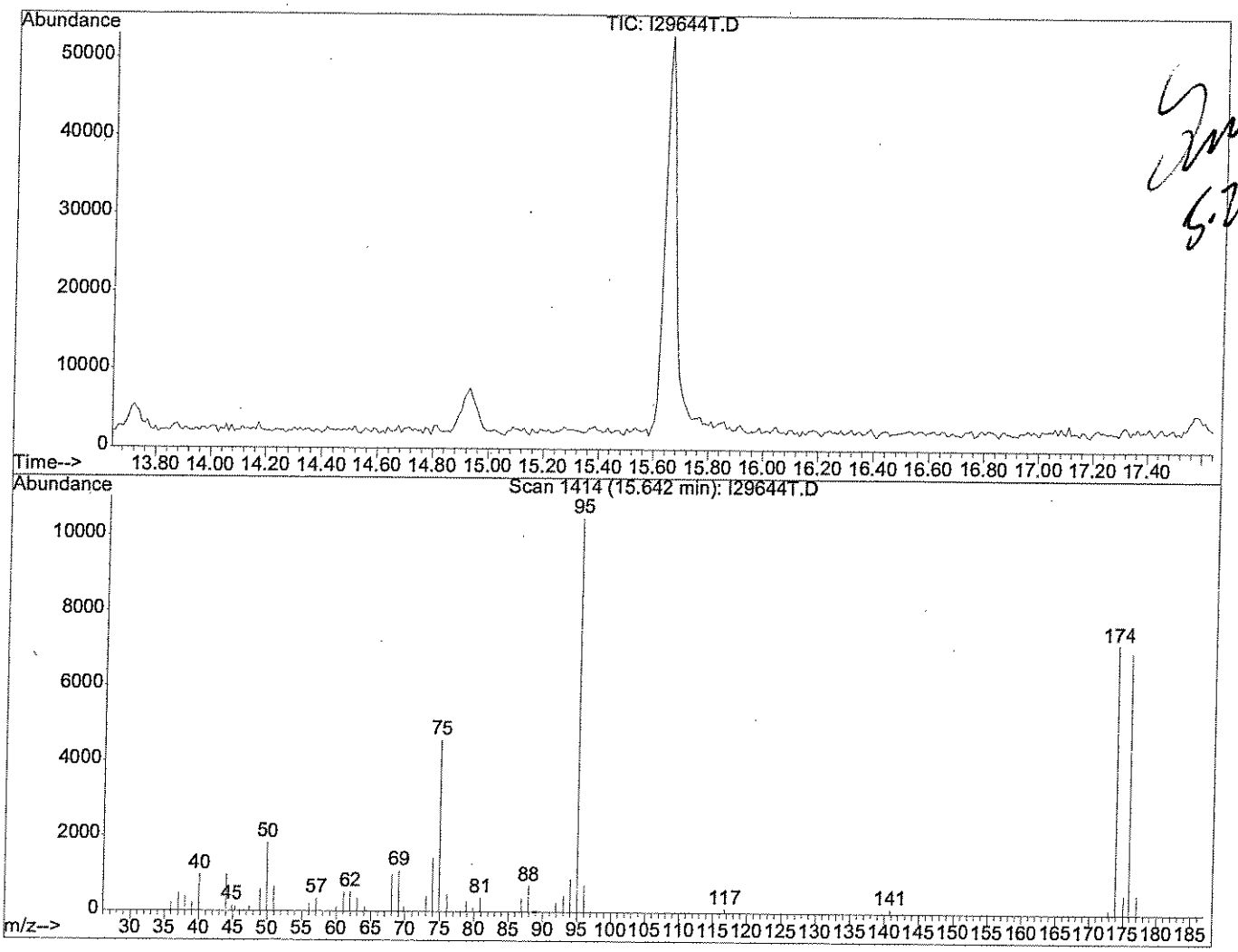
Refer to the BFB report I29644T.D for ion ratio evaluation.

BFB

Data File : D:\HPCHEM\DATA\052308-I\I29644T.D
Acq On : 23 May 2008 9:35 am
Sample : BFB 25NG
Misc : 25000
MS Integration Params: rteint.p
Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics

Vial: 2
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

AK 5.27.8



5.27.08

Spectrum Information: Scan 1414

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.3	1816	PASS
75	95	30	60	43.5	4570	PASS
95	95	100	100	100.0	10494	PASS
96	95	5	9	6.9	721	PASS
173	174	0.00	2	1.6	118	PASS
174	95	50	100	68.4	7182	PASS
175	174	5	9	7.1	513	PASS
176	174	95	101	97.1	6977	PASS
177	176	5	9	7.5	521	PASS

I29644T.D V505238I.M Tue May 27 10:08:32 2008

VOLATILE ORGANIC
INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Instrument ID: I
GC Column: RTX-502.2
Column ID: 0.25 mm
Heated Purge (Y/N): N

SDG: 61408
BFB File ID: I29654T.D
BFB Injection Date: 05/23/08
BFB Injection Time: 15:54

LAB SAMPLE ID	DATA FILE ID	DATE & TIME ANALYZED
L505238I	I29655Q.D	5/23/08 16:39
L505238I2	I29656Q.D	5/23/08 17:12
B505238I	I29657B.D	5/23/08 17:45
61408-1	I29663.D	5/23/08 21:09
61408-2	I29664.D	5/23/08 21:42

Refer to the BFB report I29654T.D for ion ratio evaluation.

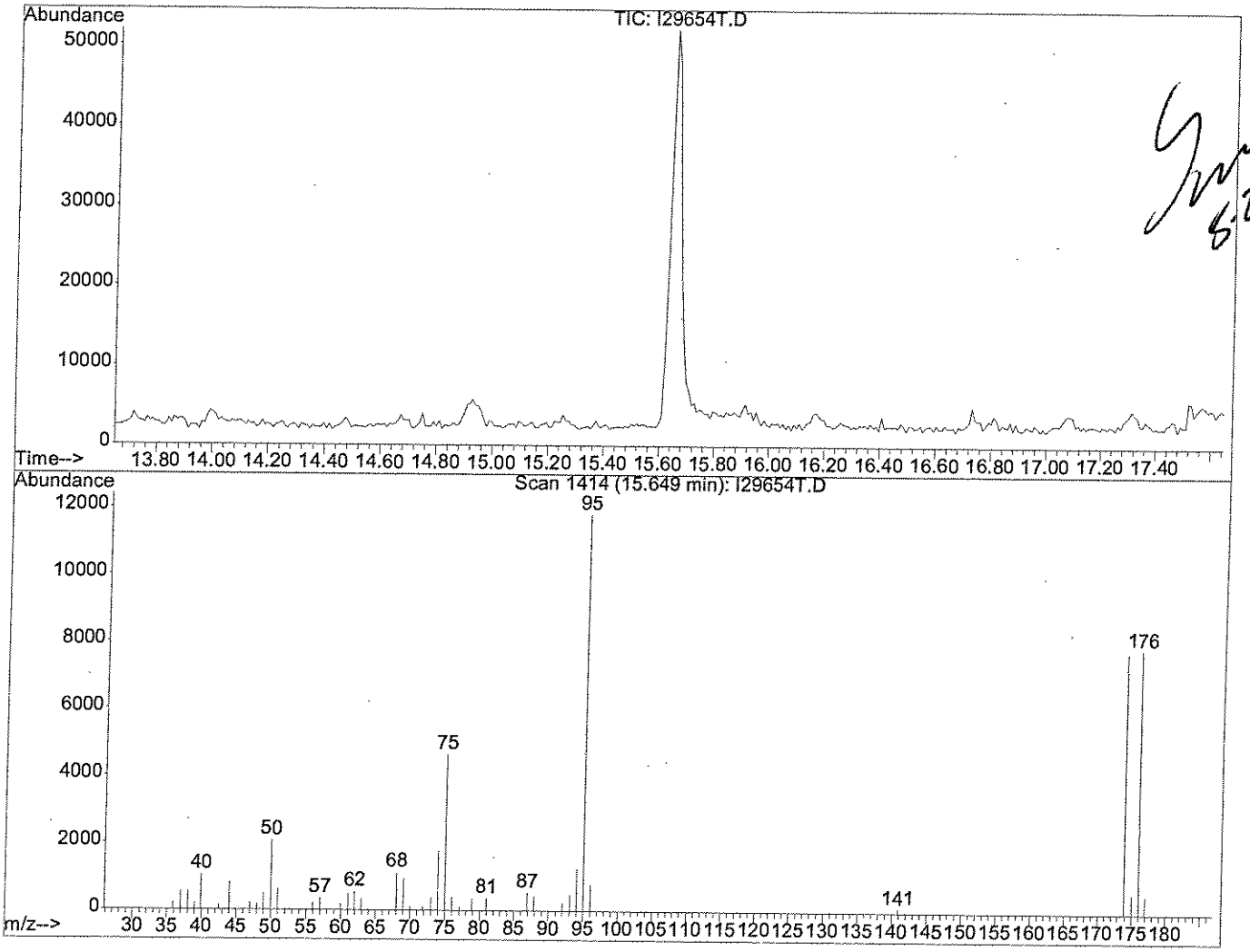
VOA FORM 5

BFB

Data File : D:\HPCHEM\DATA\052308-I\I29654T.D
Acq On : 23 May 2008 3:54 pm
Sample : BFB 25NG
Misc : 25000
MS Integration Params: rteint.p
Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics

Vial: 12
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

AK 5.27.08



5.27.08

Spectrum Information: Scan 1414

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.5	2063	PASS
75	95	30	60	39.2	4633	PASS
95	95	100	100	100.0	11817	PASS
96	95	5	9	6.7	786	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	65.9	7790	PASS
175	174	5	9	7.4	580	PASS
176	174	95	101	100.7	7843	PASS
177	176	5	9	6.8	532	PASS

I29654T.D V505238I.M Fri May 23 16:01:11 2008

Response Factor Report GC/MS Ins

Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration

AK 5.27.8

Calibration Files
0.1 =I29645SI.D 0.2 =I29646SI.D 0.5 =I29647SI.D
1 =I29648SI.D 5 =I29650SI.D 10 =I29651SI.D

		Compound	0.1	0.2	0.5	1	5	10	Avg	%RSD
1)	I	Pentafluorobenzene	ISTD							
2)	TM	Dichlorodifluoromet		1.040	0.972	1.027	1.014	0.975	1.001	2.65
3)	TMP	Chloromethane		0.627	0.508	0.492	0.447	0.418	0.481	15.15
4)	TMC	Vinyl Chloride	0.446	0.420	0.377	0.377	0.338	0.334	0.372	11.26#
5)	TM	Bromomethane		0.841	0.761	0.730	0.667	0.657	0.715	9.43
6)	TM	Chloroethane		0.598	0.550	0.596	0.564	0.553	0.568	4.32
7)	TM	t-Butyl alcohol (TB			0.016	0.015	0.016	0.014	0.015	5.70
8)	TM	Trichlorofluorometh		1.133	1.068	1.162	1.152	1.134	1.132	2.67
9)	TM	Diethyl ether			0.166	0.186	0.180	0.167	0.173	4.66
10)	TM	1,1,2-Trichlorotrif		0.631	0.630	0.673	0.663	0.660	0.650	2.66
11)	T	Acrolein			0.127	0.143	0.153	0.142	0.140	6.15
12)	TM	Acetone			0.052	0.049	0.048	0.041	0.046	9.63
13)	TMC	1,1-Dichloroethene		0.934	0.936	0.982	0.969	0.965	0.958	1.98#
14)	T	Methyl iodide							0.000	-1.00
15)	TM	Di-isopropyl ether		1.663	1.540	1.613	1.649	1.526	1.578	4.04
16)	TM	Methylene Chloride			1.444	1.017	0.623	0.563	0.825	42.77
17)	TM	Carbon Disulfide		2.033	1.976	2.127	2.059	2.054	2.045	2.89
18)	TM	Acrylonitrile			0.068	0.069	0.062	0.063	0.065	4.24
19)	TM	Methyl-tert-butyl e		0.728	0.701	0.728	0.752	0.705	0.719	2.60
20)	TM	trans-1,2-Dichloroe		0.683	0.669	0.699	0.700	0.689	0.687	1.78
21)	TMP	1,1-Dichloroethane		1.165	1.065	1.186	1.139	1.101	1.126	3.81
22)	T	Vinyl acetate		0.469	0.385	0.431	0.441	0.395	0.419	7.11
23)	TM	Methyl ethyl ketone			0.016	0.017	0.017	0.016	0.016	4.00
24)	TM	Ethyl t-butyl ether		1.222	1.180	1.242	1.261	1.185	1.208	2.94
25)	TM	2,2-Dichloropropane		0.898	0.847	0.895	0.880	0.859	0.872	2.42
26)	TM	cis-1,2-Dichloroeth		0.652	0.623	0.678	0.667	0.648	0.653	2.86
27)	TM	t-Amyl methyl ether		0.864	0.801	0.841	0.866	0.816	0.833	3.10
28)	S	DB Holder #28	1.806	1.817	1.866	1.882	1.837	1.817	1.835	1.46
29)	TMC	Chloroform		1.055	1.027	1.062	1.062	1.021	1.039	1.97#
30)	TM	Bromochloromethane		0.242	0.230	0.222	0.229	0.219	0.225	4.18
31)	TM	Tetrahydrofuran			0.030	0.051	0.044	0.037	0.040	17.68
32)	TM	1,1,1-Trichloroetha		0.968	0.934	1.003	0.993	0.979	0.975	2.27
33)	T	NO COMPOUND							0.000	-1.00
34)	TM	1,1-Dichloropropene		0.876	0.840	0.924	0.915	0.900	0.893	3.25
35)	TM	Carbon Tetrachlorid		0.721	0.734	0.802	0.810	0.811	0.784	5.21
36)	S	1,4-Difluorobenzene	1.806	1.817	1.866	1.882	1.837	1.817	1.835	1.46
37)	TM	1,2-Dichloroethane		0.489	0.446	0.490	0.484	0.450	0.469	3.94
38)	TM	Benzene		2.258	2.110	2.326	2.279	2.202	2.229	3.36
39)	I	Fluorobenzene	ISTD							
40)	TM	Trichloroethene		0.297	0.285	0.294	0.296	0.299	0.295	1.81
41)	TMC	1,2-Dichloropropane		0.229	0.207	0.228	0.221	0.219	0.220	3.22#
42)	T	NO COMPOUND							0.000	-1.00

(#) = Out of Range ### Number of calibration levels exceeded format ###

Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration

Calibration Files
0.1 =I29645SI.D 0.2 =I29646SI.D 0.5 =I29647SI.D
1 =I29648SI.D 5 =I29650SI.D 10 =I29651SI.D

		Compound	0.1	0.2	0.5	1	5	10	Avg	%RSD
43)	T	NO COMPOUND							0.000	-1.00
44)	T	NO COMPOUND							0.000	-1.00
45)	TM	Bromodichloromethan		0.275	0.259	0.269	0.281	0.277	0.273	2.80
46)	TM	Dibromomethane		0.098	0.087	0.104	0.100	0.097	0.097	5.33
47)	T	1,4-Dioxane			0.001	0.001	0.001	0.001	0.001	13.23
48)	T	NO COMPOUND							0.000	-1.00
49)	T	NO COMPOUND							0.000	-1.00
50)	T	NO COMPOUND							0.000	-1.00
51)	TM	2-Hexanone		0.011	0.016	0.019	0.026	0.027	0.021	28.68
52)	TM	Methyl isobutyl ket			0.025	0.027	0.030	0.029	0.028	7.11
53)	TM	cis-1,3-Dichloropro		0.280	0.258	0.280	0.303	0.301	0.287	5.68
54)	S	Bromofluorobenzene	0.249	0.266	0.268	0.264	0.271	0.271	0.265	2.74
55)	TMC	Toluene		0.611	0.584	0.628	0.638	0.638	0.620	3.04#
56)	TM	trans-1,3-Dichlorop			0.182	0.193	0.216	0.218	0.205	7.69
57)	T	NO COMPOUND							0.000	-1.00
58)	TM	1,1,2-Trichloroetha		0.086	0.091	0.093	0.096	0.093	0.091	3.58
59)	TM	1,3-Dichloropropane		0.179	0.184	0.192	0.202	0.198	0.192	4.16
60)	TM	Tetrachloroethene		0.277	0.254	0.268	0.278	0.282	0.273	3.47
61)	TM	Dibromochloromethan		0.149	0.139	0.143	0.161	0.161	0.152	6.40
62)	TM	1,2-Dibromoethane		0.101	0.102	0.108	0.118	0.116	0.110	6.59
63)	I	d5-Chlorobenzene		----------ISTD----------						
64)	TMP	Chlorobenzene		1.063	0.998	1.065	1.049	1.025	1.039	2.34
65)	TM	1,1,1,2-Tetrachloro		0.311	0.290	0.320	0.320	0.318	0.313	3.43
66)	TMC	Ethylbenzene		1.887	1.810	1.969	1.985	1.964	1.926	3.42#
67)	TM	m,p-Xylene		0.704	0.686	0.735	0.739	0.726	0.720	3.51
68)	TM	o-Xylene		0.651	0.622	0.652	0.676	0.675	0.658	2.96
69)	TM	Styrene		0.875	0.891	0.985	1.047	1.036	0.978	6.96
70)	TMP	Bromoform			0.102	0.103	0.116	0.113	0.109	5.59
71)	TM	Isopropylbenzene		1.724	1.686	1.883	1.903	1.919	1.837	5.31
72)	TMP	1,1,2,2-Tetrachloro		0.177	0.163	0.173	0.175	0.167	0.170	3.12
73)	S	1,2-Dichlorobenzene	0.292	0.296	0.299	0.304	0.300	0.293	0.296	1.43
74)	TM	1,2,3-Trichloroprop			0.132	0.113	0.118	0.108	0.117	7.38
75)	TM	trans-1,4-Dichloro-			0.012	0.014	0.023	0.023	0.019	25.14
76)	TM	n-Propylbenzene		2.137	2.078	2.252	2.253	2.219	2.185	4.24
77)	TM	Bromobenzene		0.307	0.297	0.316	0.323	0.313	0.311	2.67
78)	TM	1,3,5-Trimethylbenz		1.329	1.298	1.402	1.432	1.410	1.377	4.17
79)	TM	2-Chlorotoluene		1.327	1.286	1.382	1.365	1.324	1.327	4.51
80)	TM	4-Chlorotoluene		1.225	1.061	1.200	1.208	1.188	1.180	5.18
81)	TM	tert-butylbenzene		1.072	1.083	1.166	1.194	1.212	1.165	5.38
82)	TM	1,2,4-Trimethylbenz		1.201	1.213	1.359	1.373	1.362	1.314	5.86
83)	T	NO COMPOUND							0.000	-1.00
84)	TM	sec-butylbenzene		1.764	1.696	1.903	1.920	1.950	1.868	5.51
85)	TM	p-isopropyltoluene		1.310	1.288	1.436	1.468	1.505	1.426	6.41

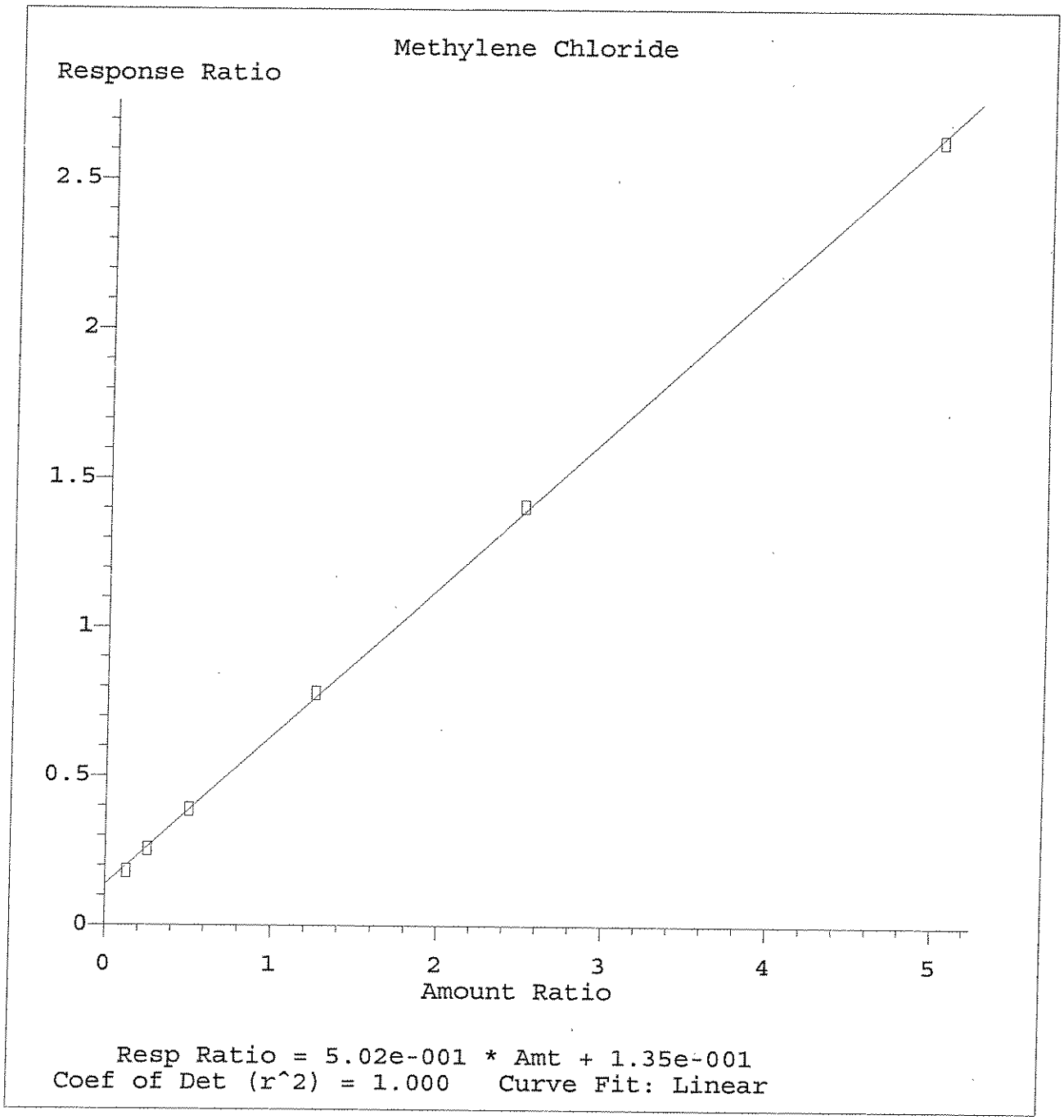
(#) = Out of Range ### Number of calibration levels exceeded format ###

Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration

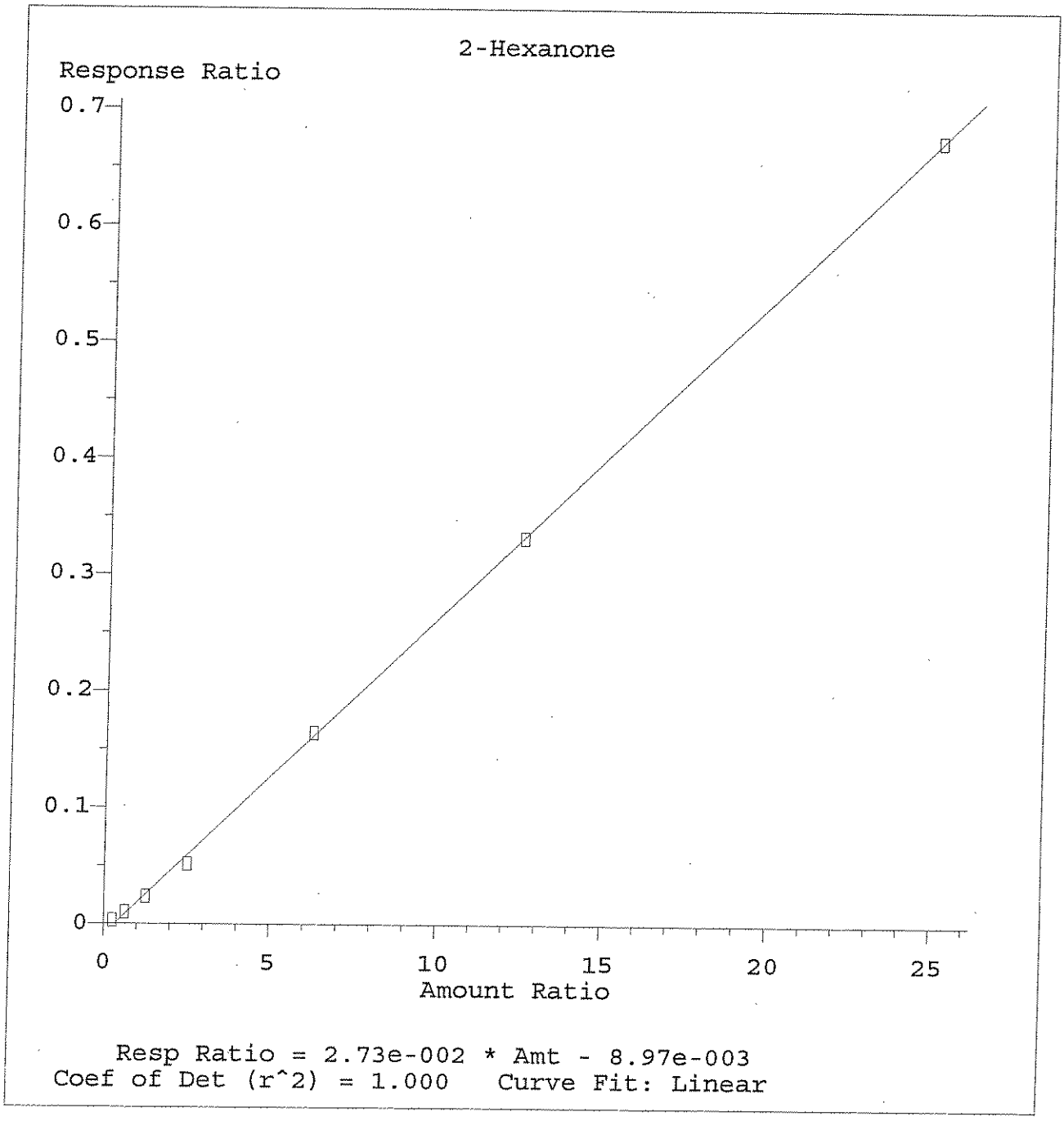
Calibration Files
0.1 =I29645SI.D 0.2 =I29646SI.D 0.5 =I29647SI.D
1 =I29648SI.D 5 =I29650SI.D 10 =I29651SI.D

		Compound	0.1	0.2	0.5	1	5	10	Avg	%RSD
86)	TM	1,3-Dichlorobenzene	0.586	0.568	0.631	0.629	0.623	0.609		3.85
87)	I	1,4-Dichlorobenzene-d	ISTD							
88)	TM	1,4-Dichlorobenzene	1.716	1.517	1.663	1.602	1.602	1.615		3.90
89)	TM	n-butylbenzene	3.164	3.230	3.615	3.774	3.886	3.612		8.32
90)	TM	1,2-Dichlorobenzene	1.357	1.204	1.294	1.273	1.249	1.268		3.82
91)	T	NO COMPOUND						0.000		-1.00
92)	TM	1,2-Dibromo-3-chlor		0.059	0.052	0.058	0.056	0.056		5.10
93)	T	NO COMPOUND						0.000		-1.00
94)	TM	1,2,4-Trichlorobenz	0.705	0.731	0.791	0.837	0.856	0.801		7.86
95)	TM	Hexachlorobutadiene	0.479	0.483	0.532	0.537	0.554	0.530		6.67
96)	TM	Naphthalene	0.717	0.708	0.816	0.928	0.966	0.856		13.83
97)	TM	1,2,3-Trichlorobenz	0.544	0.533	0.569	0.621	0.626	0.589		7.25
98)	TM	1,3,5-Trichlorobenz	1.116	1.052	1.149	1.178	1.208	1.156		4.87

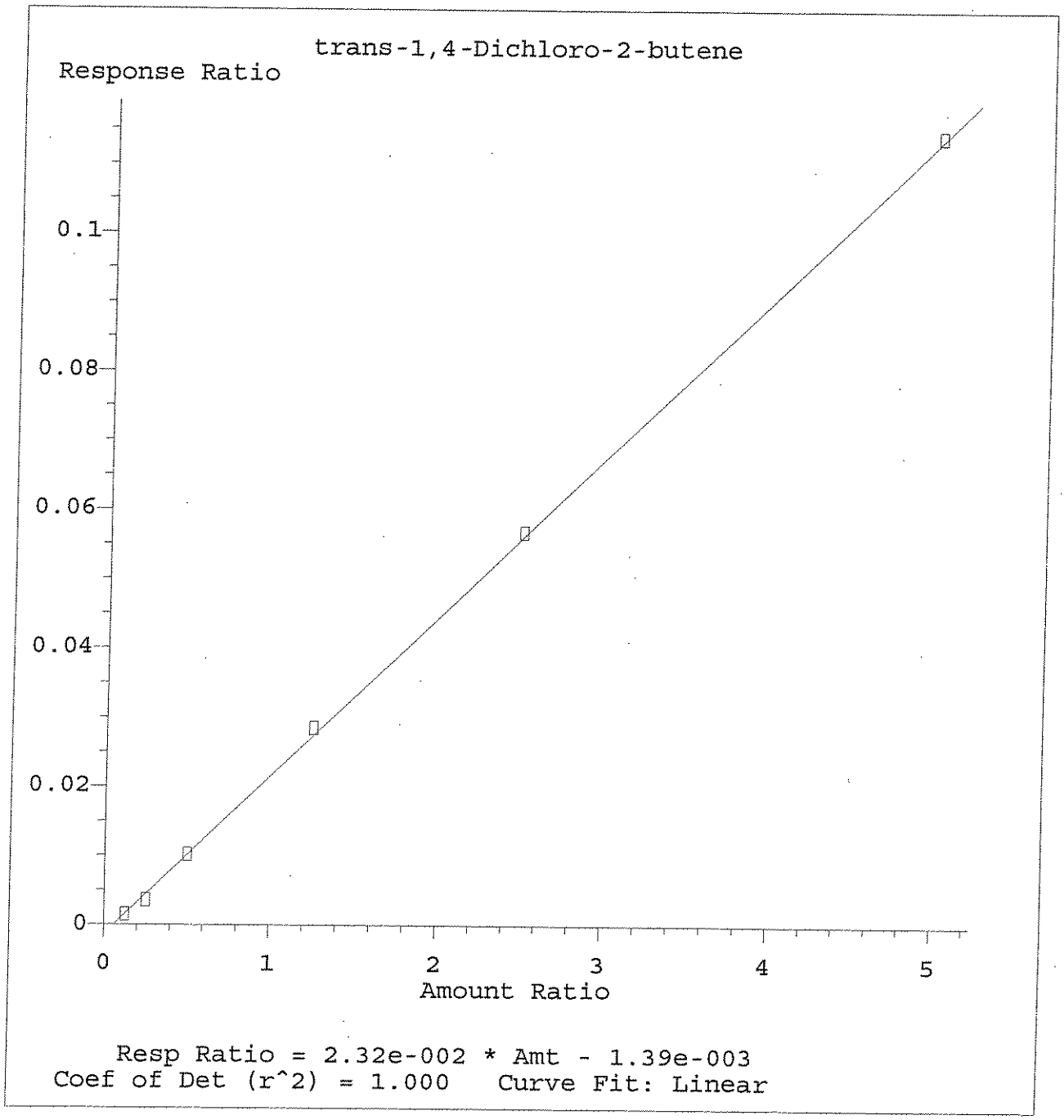
(#) = Out of Range ### Number of calibration levels exceeded format ###



Method Name: D:\HPCHEM\METHODS\V505238I.M
Calibration Table Last Updated: Fri May 23 14:54:04 2008



Method Name: D:\HPCHEM\METHODS\V505238I.M
Calibration Table Last Updated: Fri May 23 14:54:04 2008



Method Name: D:\HPCHEM\METHODS\V505238I.M
Calibration Table Last Updated: Fri May 23 14:54:04 2008

Data File : D:\HPCHEM\DATA\052308-I\I29645SI.D
Acq On : 23 May 2008 10:23 am
Sample : 0.1 PPB STD
Misc : 25000
Integration Params: rteint.p
Quant Time: May 27 10:07 2008

Vial: 3
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: V505238I.RES

Quant Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration
DataAcq Meth : V505238I

5.27.08 AK 5.27.08

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.50	168	250256	4.00	ug/L	-0.03
39) Fluorobenzene	8.91	96	568707	4.00	ug/L	-0.02
63) d5-Chlorobenzene	13.71	117	339136 ✓	4.00	ug/L	-0.03
87) 1,4-Dichlorobenzene-d4	17.55	152	120362	4.00	ug/L	-0.03
System Monitoring Compounds						
28) DB Holder #28	9.03	114	452020	3.94	ug/L	-0.03
Spiked Amount 4.000	Range 70 - 130		Recovery = 98.50% ✓			
36) 1,4-Difluorobenzene	9.03	114	452020	3.94	ug/L	-0.03
Spiked Amount 4.000	Range 70 - 130		Recovery = 98.50% ✓			
54) Bromofluorobenzene	15.64	95	141758	3.77	ug/L	-0.03
Spiked Amount 4.000	Range 70 - 130		Recovery = 94.25% ✓			
73) 1,2-Dichlorobenzene-d4	18.15	152	99123	3.95	ug/L	-0.03
Spiked Amount 4.000	Range 70 - 130		Recovery = 98.75% ✓			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.82	85	6950	0.11	ug/L	98
3) Chloromethane	2.08	50	5792	0.19	ug/L	93
4) Vinyl Chloride	2.21	62	2788	0.12	ug/L	93
5) Bromomethane	2.73	94	6160	0.14	ug/L	81
6) Chloroethane	2.83	64	3847	0.11	ug/L	98
7) t-Butyl alcohol (TBA)	4.31	59	659	0.69	ug/L #	72
8) Trichlorofluoromethane	3.17	101	7859	0.11	ug/L	94
9) Diethyl ether	3.62	74	1653	0.15	ug/L #	84
10) 1,1,2-Trichlorotrifluoroet	3.82	101	4604	0.11	ug/L	94
11) Acrolein	3.78	56	619	0.07	ug/L #	39
12) Acetone	3.92	43	2798	0.97	ug/L #	73
13) 1,1-Dichloroethene	4.08	61	6658	0.11	ug/L	92
15) Di-isopropyl ether (DIPE)	5.97	45	10166	0.10	ug/L	95
16) Methylene Chloride	4.87	84	31382	Below Cal		92
17) Carbon Disulfide	4.85	76	14465	0.11	ug/L #	95
18) Acrylonitrile	5.12	53	500	0.12	ug/L #	43
19) Methyl-tert-butyl ether (M	5.19	73	4913	0.11	ug/L #	68
20) trans-1,2-Dichloroethene	5.37	96	4823	0.11	ug/L	92
21) 1,1-Dichloroethane	6.06	63	7965	0.11	ug/L	96
22) Vinyl acetate	6.10	43	3486	0.13	ug/L #	67
23) Methyl ethyl ketone	6.82	72	448	0.44	ug/L #	1
24) Ethyl t-butyl ether (ETBE)	6.63	59	7797	0.10	ug/L #	79
25) 2,2-Dichloropropane	6.98	77	6634	0.12	ug/L	97
26) cis-1,2-Dichloroethene	7.04	96	4457	0.11	ug/L	97
27) t-Amyl methyl ether (TAME)	8.40	73	5525	0.11	ug/L #	81
29) Chloroform	7.29	83	7636	0.12	ug/L	92

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\DATA\052308-I\I29645SI.D
Acq On : 23 May 2008 10:23 am
Sample : 0.1 PPB STD
Misc : 25000
Integration Params: rteint.p
Quant Time: May 27 10:07 2008

Vial: 3
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: V505238I.RES

Quant Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration
DataAcq Meth : V505238I

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
30) Bromochloromethane	7.53	128	1349	0.10 ug/L #	61
31) Tetrahydrofuran	7.67	42	166	0.07 ug/L #	91
32) 1,1,1-Trichloroethane	7.92	97	6901	0.11 ug/L	96
34) 1,1-Dichloropropene	8.17	75	6492	0.12 ug/L	97
35) Carbon Tetrachloride	8.30	119	5862	0.12 ug/L	84
37) 1,2-Dichloroethane	8.54	62	3362	0.11 ug/L	96
38) Benzene	8.56	78	16309	0.12 ug/L	96
40) Trichloroethene	9.52	95	5190	0.12 ug/L	87
41) 1,2-Dichloropropane	9.80	63	3674	0.12 ug/L	80
45) Bromodichloromethane	10.15	83	4192	0.11 ug/L #	72
46) Dibromomethane	10.21	93	1484	0.11 ug/L #	76
47) 1,4-Dioxane	10.23	88	192	1.84 ug/L #	20
51) 2-Hexanone	12.10	58	1049	1.58 ug/L #	52
52) Methyl isobutyl ketone	10.72	58	1619	0.41 ug/L #	81
53) cis-1,3-Dichloropropene	10.99	75	3707	0.09 ug/L	97
55) Toluene	11.48	92	10083	0.11 ug/L	88
56) trans-1,3-Dichloropropene	11.78	75	2992	0.10 ug/L	96
58) 1,1,2-Trichloroethane	12.01	83	1435	0.11 ug/L	95
59) 1,3-Dichloropropane	12.40	76	3216	0.12 ug/L	97
60) Tetrachloroethene	12.49	166	4326	0.11 ug/L	92
61) Dibromochloromethane	12.79	129	2288	0.11 ug/L	97
62) 1,2-Dibromoethane	13.11	107	1581	0.10 ug/L	88
64) Chlorobenzene	13.77	112	10214	0.12 ug/L	88
65) 1,1,1,2-Tetrachloroethane	13.84	131	2873	0.11 ug/L	97
66) Ethylbenzene	13.86	91	17752	0.11 ug/L	95
67) m,p-Xylene	13.98	106	13474	0.22 ug/L	97
68) o-Xylene	14.67	106	5818	0.10 ug/L	88
69) Styrene	14.74	104	7766	0.09 ug/L	97
70) Bromoform	15.23	173	1024	0.11 ug/L	98
71) Isopropylbenzene	15.25	105	16449	0.11 ug/L	99
72) 1,1,2,2-Tetrachloroethane	15.53	83	1522	0.11 ug/L #	85
76) n-Propylbenzene	15.89	91	20041	0.11 ug/L	95
77) Bromobenzene	15.94	156	2881	0.11 ug/L	91
78) 1,3,5-Trimethylbenzene	16.16	105	12473	0.11 ug/L	87
79) 2-Chlorotoluene	16.17	91	12139	0.11 ug/L	98
80) 4-Chlorotoluene	16.25	91	10165	0.10 ug/L	91
81) tert-butylbenzene	16.72	119	10344	0.10 ug/L	94
82) 1,2,4-Trimethylbenzene	16.79	105	11309	0.10 ug/L	99
84) sec-butylbenzene	17.08	105	16614	0.10 ug/L	98
85) p-isopropyltoluene	17.30	119	12656	0.10 ug/L	94
86) 1,3-Dichlorobenzene	17.43	146	5416	0.10 ug/L	94

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\DATA\052308-I\I29645SI.D Vial: 3
Acq On : 23 May 2008 10:23 am Operator:
Sample : 0.1 PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
Integration Params: rteint.p
Quant Time: May 27 10:07 2008 Quant Results File: V505238I.RES

Quant Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration
DataAcq Meth : V505238I

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
88) 1,4-Dichlorobenzene	17.61	146	5783	0.12 ug/L	94
89) n-butylbenzene	17.97	91	11259	0.10 ug/L	96
90) 1,2-Dichlorobenzene	18.20	146	4663	0.12 ug/L	90
92) 1,2-Dibromo-3-chloropropan	19.52	75	125	0.07 ug/L #	1
94) 1,2,4-Trichlorobenzene	20.95	180	2387	0.10 ug/L	98
95) Hexachlorobutadiene	21.19	225	1948	0.12 ug/L	96
96) Naphthalene	21.36	128	2263	0.09 ug/L	73
97) 1,2,3-Trichlorobenzene	21.81	180	1662	0.09 ug/L	79
98) 1,3,5-Trichlorobenzene	19.90	180	3682	0.11 ug/L	91

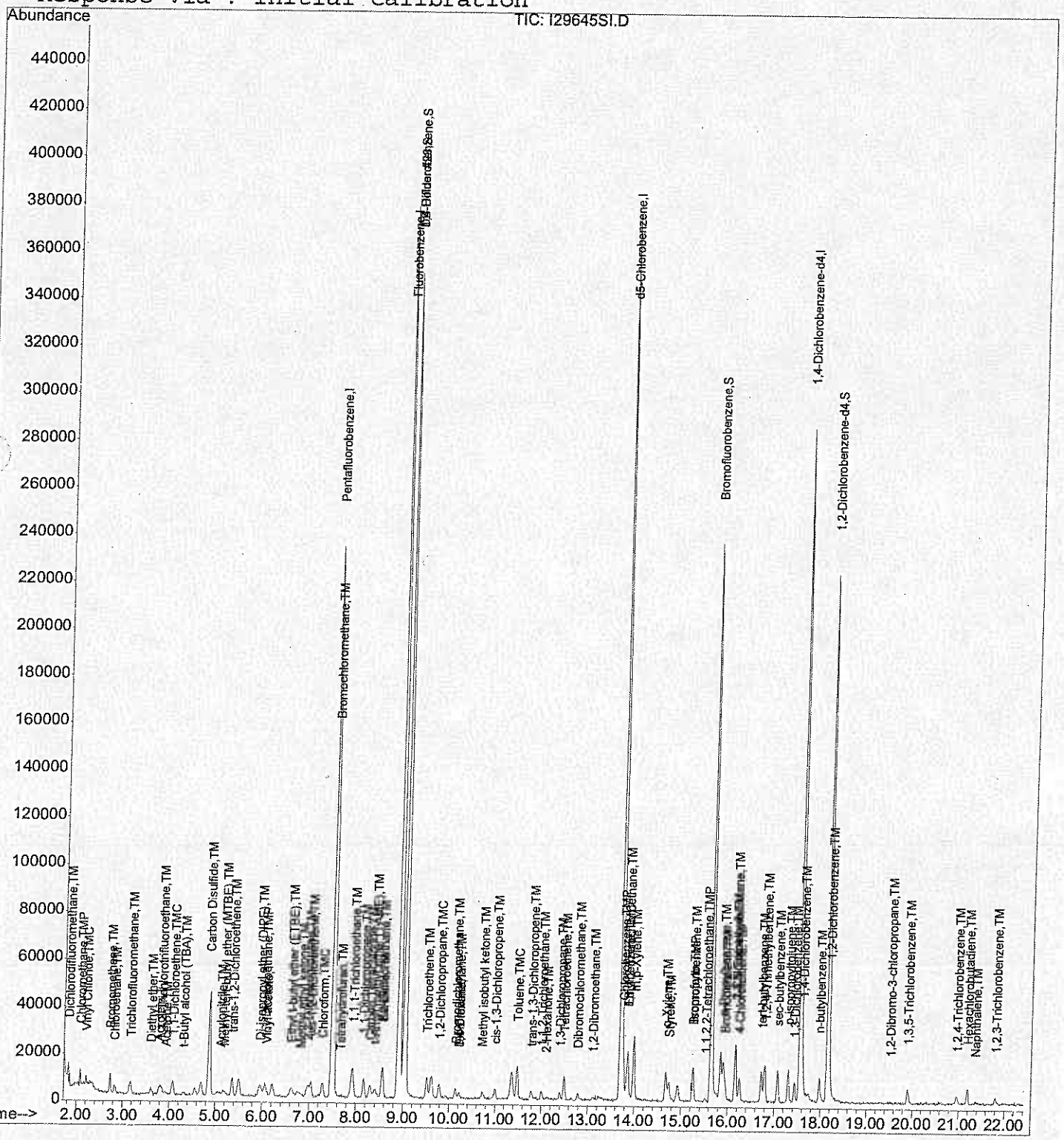
(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\DATA\052308-I\I29645SI.D
Acq On : 23 May 2008 10:23 am
Sample : 0.1 PPB STD
Misc : 25000
MS Integration Params: rteint.p
Quant Time: May 27 10:07 2008

Vial: 3
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: V505238I.RE

Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration



Data File : D:\HPCHEM\DATA\052308-I\I29646SI.D
Acq On : 23 May 2008 10:56 am
Sample : 0.2 PPB STD
Misc : 25000
Integration Params: rteint.p
Quant Time: May 27 10:07 2008

Vial: 4
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: V505238I.RES

Quant Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration
DataAcq Meth : V505238I

5.27.08 5.27.08

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.49	168	249233	4.00	ug/L	-0.04
39) Fluorobenzene	8.90	96	567130 ✓	4.00	ug/L	-0.03
63) d5-Chlorobenzene	13.70	117	344377 ✓	4.00	ug/L	-0.04
87) 1,4-Dichlorobenzene-d4	17.55	152	127991	4.00	ug/L	-0.03
System Monitoring Compounds						
28) DB Holder #28	9.03	114	452967	3.96	ug/L	-0.03
Spiked Amount 4.000	Range 70 - 130		Recovery = 99.00% ✓			
36) 1,4-Difluorobenzene	9.03	114	452967	3.96	ug/L	-0.03
Spiked Amount 4.000	Range 70 - 130		Recovery = 99.00% ✓			
54) Bromofluorobenzene	15.64	95	150991	4.02	ug/L	-0.03
Spiked Amount 4.000	Range 70 - 130		Recovery = 100.50% ✓			
73) 1,2-Dichlorobenzene-d4	18.16	152	101843	3.99	ug/L	-0.03
Spiked Amount 4.000	Range 70 - 130		Recovery = 99.75% ✓			

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.83	85	12955	0.21	ug/L	96
3) Chloromethane	2.09	50	7814	0.26	ug/L	95
4) Vinyl Chloride	2.21	62	5230	0.23	ug/L	95
5) Bromomethane	2.73	94	10482	0.24	ug/L	98
6) Chloroethane	2.83	64	7452	0.21	ug/L	96
7) t-Butyl alcohol (TBA)	4.27	59	732	0.77	ug/L #	72
8) Trichlorofluoromethane	3.17	101	14114	0.20	ug/L	98
9) Diethyl ether	3.60	74	2491	0.23	ug/L #	91
10) 1,1,2-Trichlorotrifluoroet	3.83	101	7869	0.19	ug/L	93
11) Acrolein	3.79	56	1626	0.19	ug/L #	61
12) Acetone	3.90	43	5283	1.85	ug/L	99
13) 1,1-Dichloroethene	4.08	61	11639	0.19	ug/L	93
15) Di-isopropyl ether (DIPE)	5.95	45	20720	0.21	ug/L #	90
16) Methylene Chloride	4.86	84	34786	0.04	ug/L #	87
17) Carbon Disulfide	4.84	76	25338	0.20	ug/L	96
18) Acrylonitrile	5.08	53	809	0.20	ug/L #	25
19) Methyl-tert-butyl ether (M	5.18	73	9073	0.20	ug/L #	79
20) trans-1,2-Dichloroethene	5.37	96	8516	0.20	ug/L	94
21) 1,1-Dichloroethane	6.06	63	14516	0.21	ug/L	95
22) Vinyl acetate	6.11	43	5842	0.22	ug/L #	88
23) Methyl ethyl ketone	6.81	72	1025	1.01	ug/L #	65
24) Ethyl t-butyl ether (ETBE)	6.62	59	15234	0.20	ug/L	95
25) 2,2-Dichloropropane	6.96	77	11196	0.21	ug/L	100
26) cis-1,2-Dichloroethene	7.04	96	8129	0.20	ug/L	93
27) t-Amyl methyl ether (TAME)	8.41	73	10762	0.21	ug/L #	86
29) Chloroform	7.30	83	13142	0.20	ug/L	88

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\DATA\052308-I\I29646SI.D Vial: 4
Acq On : 23 May 2008 10:56 am Operator:
Sample : 0.2 PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
Integration Params: rteint.p
Quant Time: May 27 10:07 2008 Quant Results File: V505238I.RES

Quant Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration
DataAcq Meth : V505238I

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
30) Bromochloromethane	7.53	128	3020	0.22 ug/L #	81
31) Tetrahydrofuran	7.67	42	919	0.37 ug/L #	37
32) 1,1,1-Trichloroethane	7.91	97	12065	0.20 ug/L	96
34) 1,1-Dichloropropene	8.16	75	10919	0.20 ug/L	90
35) Carbon Tetrachloride	8.30	119	8987	0.18 ug/L	98
37) 1,2-Dichloroethane	8.55	62	6089	0.21 ug/L	98
38) Benzene	8.56	78	28139	0.20 ug/L	95
40) Trichloroethene	9.51	95	8413	0.20 ug/L	84
41) 1,2-Dichloropropane	9.79	63	6490	0.21 ug/L	89
45) Bromodichloromethane	10.14	83	7791	0.20 ug/L	94
46) Dibromomethane	10.20	93	2775	0.20 ug/L #	85
47) 1,4-Dioxane	10.24	88	339	3.26 ug/L #	60
51) 2-Hexanone	12.09	58	1605	1.73 ug/L #	71
52) Methyl isobutyl ketone	10.72	58	3663	0.93 ug/L	89
53) cis-1,3-Dichloropropene	10.99	75	7945	0.20 ug/L	89
55) Toluene	11.48	92	17339	0.20 ug/L	97
56) trans-1,3-Dichloropropene	11.78	75	5297	0.18 ug/L	97
58) 1,1,2-Trichloroethane	12.01	83	2449	0.19 ug/L	91
59) 1,3-Dichloropropane	12.40	76	5079	0.19 ug/L	97
60) Tetrachloroethene	12.50	166	7862	0.20 ug/L	89
61) Dibromochloromethane	12.79	129	4225	0.20 ug/L	91
62) 1,2-Dibromoethane	13.10	107	2877	0.18 ug/L	89
64) Chlorobenzene	13.76	112	18305	0.20 ug/L	97
65) 1,1,1,2-Tetrachloroethane	13.84	131	5355	0.20 ug/L	89
66) Ethylbenzene	13.86	91	32489	0.20 ug/L	100
67) m,p-Xylene	13.99	106	24236	0.39 ug/L	92
68) o-Xylene	14.68	106	11215	0.20 ug/L	97
69) Styrene	14.74	104	15067	0.18 ug/L	99
70) Bromoform	15.24	173	1791	0.19 ug/L	78
71) Isopropylbenzene	15.25	105	29690	0.19 ug/L	94
72) 1,1,2,2-Tetrachloroethane	15.51	83	3051	0.21 ug/L #	82
74) 1,2,3-Trichloropropane	15.75	75	3023	0.30 ug/L	95
76) n-Propylbenzene	15.90	91	36805	0.20 ug/L	92
77) Bromobenzene	15.95	156	5287	0.20 ug/L	93
78) 1,3,5-Trimethylbenzene	16.16	105	22889	0.19 ug/L	90
79) 2-Chlorotoluene	16.17	91	22851	0.20 ug/L	91
80) 4-Chlorotoluene	16.24	91	21094	0.21 ug/L	88
81) tert-butylbenzene	16.73	119	18462	0.18 ug/L	83
82) 1,2,4-Trimethylbenzene	16.79	105	20686	0.18 ug/L	99
84) sec-butylbenzene	17.07	105	30366	0.19 ug/L	97
85) p-isopropyltoluene	17.30	119	22561	0.18 ug/L	94

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\DATA\052308-I\I29646SI.D
Acq On : 23 May 2008 10:56 am
Sample : 0.2 PPB STD
Misc : 25000
Integration Params: rteint.p
Quant Time: May 27 10:07 2008

Vial: 4
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: V505238I.RES

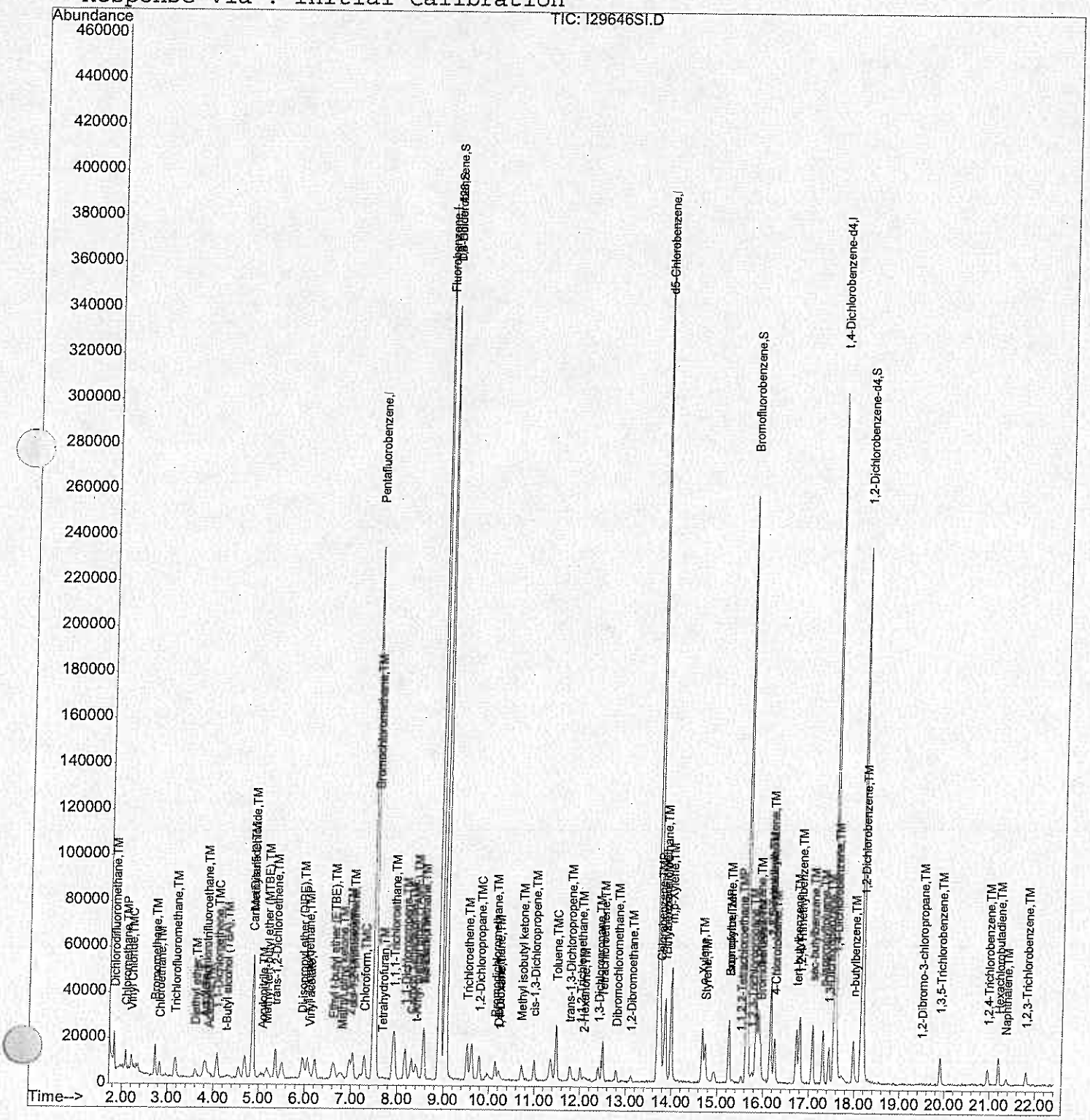
Quant Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration
DataAcq Meth : V505238I

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
86) 1,3-Dichlorobenzene	17.44	146	10095	0.19 ug/L	94
88) 1,4-Dichlorobenzene	17.60	146	10980	0.21 ug/L	95
89) n-butylbenzene	17.98	91	20250	0.18 ug/L	94
90) 1,2-Dichlorobenzene	18.19	146	8682	0.21 ug/L	97
92) 1,2-Dibromo-3-chloropropan	19.49	75	297	0.17 ug/L #	1
94) 1,2,4-Trichlorobenzene	20.95	180	4512	0.18 ug/L	90
95) Hexachlorobutadiene	21.19	225	3064	0.18 ug/L	100
96) Naphthalene	21.36	128	4586	0.17 ug/L	97
97) 1,2,3-Trichlorobenzene	21.79	180	3481	0.18 ug/L	94
98) 1,3,5-Trichlorobenzene	19.90	180	7140	0.19 ug/L	88

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\DATA\052308-I\I29646SI.D Vial: 4
Acq On : 23 May 2008 10:56 am Operator:
Sample : 0.2 PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 27 10:07 2008 Quant Results File: V505238I.RE

Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration



Data File : D:\HPCHEM\DATA\052308-I\I29647SI.D Vial: 5
Acq On : 23 May 2008 11:29 am Operator:
Sample : 0.5 PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
Integration Params: rteint.p
Quant Time: May 27 10:07 2008 Quant Results File: V505238I.RES

Quant Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration
DataAcq Meth : V505238I

5.27.08 AW 5.27.08

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	7.49	168	252109	4.00 ug/L	-0.04
39) Fluorobenzene	8.90	96	585967	4.00 ug/L	-0.03
63) d5-Chlorobenzene	13.71	117	357343	4.00 ug/L	-0.03
87) 1,4-Dichlorobenzene-d4	17.55	152	132956	4.00 ug/L	-0.03
System Monitoring Compounds					
28) DB Holder #28	9.03	114	470386	4.07 ug/L	-0.03
Spiked Amount 4.000	Range 70 - 130		Recovery = 101.75%		
36) 1,4-Difluorobenzene	9.03	114	470386	4.07 ug/L	-0.03
Spiked Amount 4.000	Range 70 - 130		Recovery = 101.75%		
54) Bromofluorobenzene	15.64	95	157175	4.05 ug/L	-0.03
Spiked Amount 4.000	Range 70 - 130		Recovery = 101.25%		
73) 1,2-Dichlorobenzene-d4	18.16	152	106869	4.04 ug/L	-0.03
Spiked Amount 4.000	Range 70 - 130		Recovery = 101.00%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.83	85	30646	0.49 ug/L	97
3) Chloromethane	2.08	50	16013	0.53 ug/L	95
4) Vinyl Chloride	2.21	62	11884	0.51 ug/L	97
5) Bromomethane	2.73	94	23992	0.53 ug/L	92
6) Chloroethane	2.83	64	17317	0.48 ug/L	96
7) t-Butyl alcohol (TBA)	4.27	59	2544	2.65 ug/L #	85
8) Trichlorofluoromethane	3.17	101	33659	0.47 ug/L	98
9) Diethyl ether	3.60	74	5217	0.48 ug/L #	84
10) 1,1,2-Trichlorotrifluoroet	3.82	101	19853	0.48 ug/L	93
11) Acrolein	3.79	56	4015	0.45 ug/L	98
12) Acetone	3.91	43	8265	2.86 ug/L #	86
13) 1,1-Dichloroethene	4.08	61	29482	0.49 ug/L	94
15) Di-isopropyl ether (DIPE)	5.95	45	48527	0.49 ug/L	92
16) Methylene Chloride	4.86	84	45518	0.36 ug/L	89
17) Carbon Disulfide	4.84	76	62284	0.48 ug/L	99
18) Acrylonitrile	5.09	53	2151	0.52 ug/L	93
19) Methyl-tert-butyl ether (M	5.18	73	22076	0.49 ug/L #	92
20) trans-1,2-Dichloroethene	5.37	96	21096	0.49 ug/L	98
21) 1,1-Dichloroethane	6.07	63	33559	0.47 ug/L	100
22) Vinyl acetate	6.10	43	12134	0.46 ug/L #	93
23) Methyl ethyl ketone	6.80	72	2455	2.40 ug/L #	63
24) Ethyl t-butyl ether (ETBE)	6.62	59	37195	0.49 ug/L	97
25) 2,2-Dichloropropane	6.97	77	26692	0.49 ug/L	98
26) cis-1,2-Dichloroethene	7.04	96	19630	0.48 ug/L	99
27) t-Amyl methyl ether (TAME)	8.39	73	25228	0.48 ug/L	91
29) Chloroform	7.29	83	32355	0.49 ug/L	92

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\DATA\052308-I\I29647SI.D Vial: 5
Acq On : 23 May 2008 11:29 am Operator:
Sample : 0.5 PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
Integration Params: rteint.p
Quant Time: May 27 10:07 2008 Quant Results File: V505238I.RES

Quant Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration
DataAcq Meth : V505238I

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
30) Bromochloromethane	7.54	128	7244	0.51 ug/L #	82
31) Tetrahydrofuran	7.65	42	940	0.37 ug/L #	84
32) 1,1,1-Trichloroethane	7.92	97	29418	0.48 ug/L	96
34) 1,1-Dichloropropene	8.16	75	26456	0.47 ug/L	98
35) Carbon Tetrachloride	8.30	119	23129	0.47 ug/L	93
37) 1,2-Dichloroethane	8.55	62	14057	0.48 ug/L	99
38) Benzene	8.56	78	66498	0.47 ug/L	98
40) Trichloroethene	9.51	95	20848	0.48 ug/L #	81
41) 1,2-Dichloropropane	9.79	63	15187	0.47 ug/L	96
45) Bromodichloromethane	10.14	83	18940	0.47 ug/L	98
46) Dibromomethane	10.21	93	6365	0.45 ug/L	90
47) 1,4-Dioxane	10.25	88	1097	10.21 ug/L	97
51) 2-Hexanone	12.08	58	5897	2.79 ug/L	98
52) Methyl isobutyl ketone	10.72	58	9117	2.24 ug/L #	88
53) cis-1,3-Dichloropropene	10.99	75	18886	0.45 ug/L	98
55) Toluene	11.48	92	42749	0.47 ug/L	100
56) trans-1,3-Dichloropropene	11.78	75	13348	0.45 ug/L	96
58) 1,1,2-Trichloroethane	12.01	83	6679	0.50 ug/L	95
59) 1,3-Dichloropropane	12.40	76	13493	0.48 ug/L	95
60) Tetrachloroethene	12.49	166	18595	0.47 ug/L	94
61) Dibromochloromethane	12.80	129	10210	0.46 ug/L	96
62) 1,2-Dibromoethane	13.10	107	7451	0.46 ug/L	95
64) Chlorobenzene	13.77	112	44563	0.48 ug/L	98
65) 1,1,1,2-Tetrachloroethane	13.84	131	12940	0.46 ug/L	96
66) Ethylbenzene	13.86	91	80867	0.47 ug/L	92
67) m,p-Xylene	13.99	106	61262	0.95 ug/L	97
68) o-Xylene	14.68	106	27798	0.47 ug/L	96
69) Styrene	14.74	104	39810	0.46 ug/L	97
70) Bromoform	15.24	173	4541	0.46 ug/L	96
71) Isopropylbenzene	15.26	105	75297	0.46 ug/L	100
72) 1,1,2,2-Tetrachloroethane	15.52	83	7283	0.48 ug/L	92
74) 1,2,3-Trichloropropane	15.76	75	5914	0.56 ug/L	92
75) trans-1,4-Dichloro-2-buten	15.90	88	533	0.50 ug/L	84
76) n-Propylbenzene	15.90	91	92809	0.48 ug/L	92
77) Bromobenzene	15.94	156	13257	0.48 ug/L #	82
78) 1,3,5-Trimethylbenzene	16.16	105	57991	0.47 ug/L	98
79) 2-Chlorotoluene	16.16	91	57465	0.48 ug/L	97
80) 4-Chlorotoluene	16.25	91	47411	0.45 ug/L	94
81) tert-butylbenzene	16.73	119	48373	0.46 ug/L	96
82) 1,2,4-Trimethylbenzene	16.79	105	54175	0.46 ug/L	98
84) sec-butylbenzene	17.07	105	75755	0.45 ug/L	95

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\DATA\052308-I\I29647SI.D
Acq On : 23 May 2008 11:29 am
Sample : 0.5 PPB STD
Misc : 25000
Integration Params: rteint.p
Quant Time: May 27 10:07 2008

Vial: 5
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: V505238I.RES

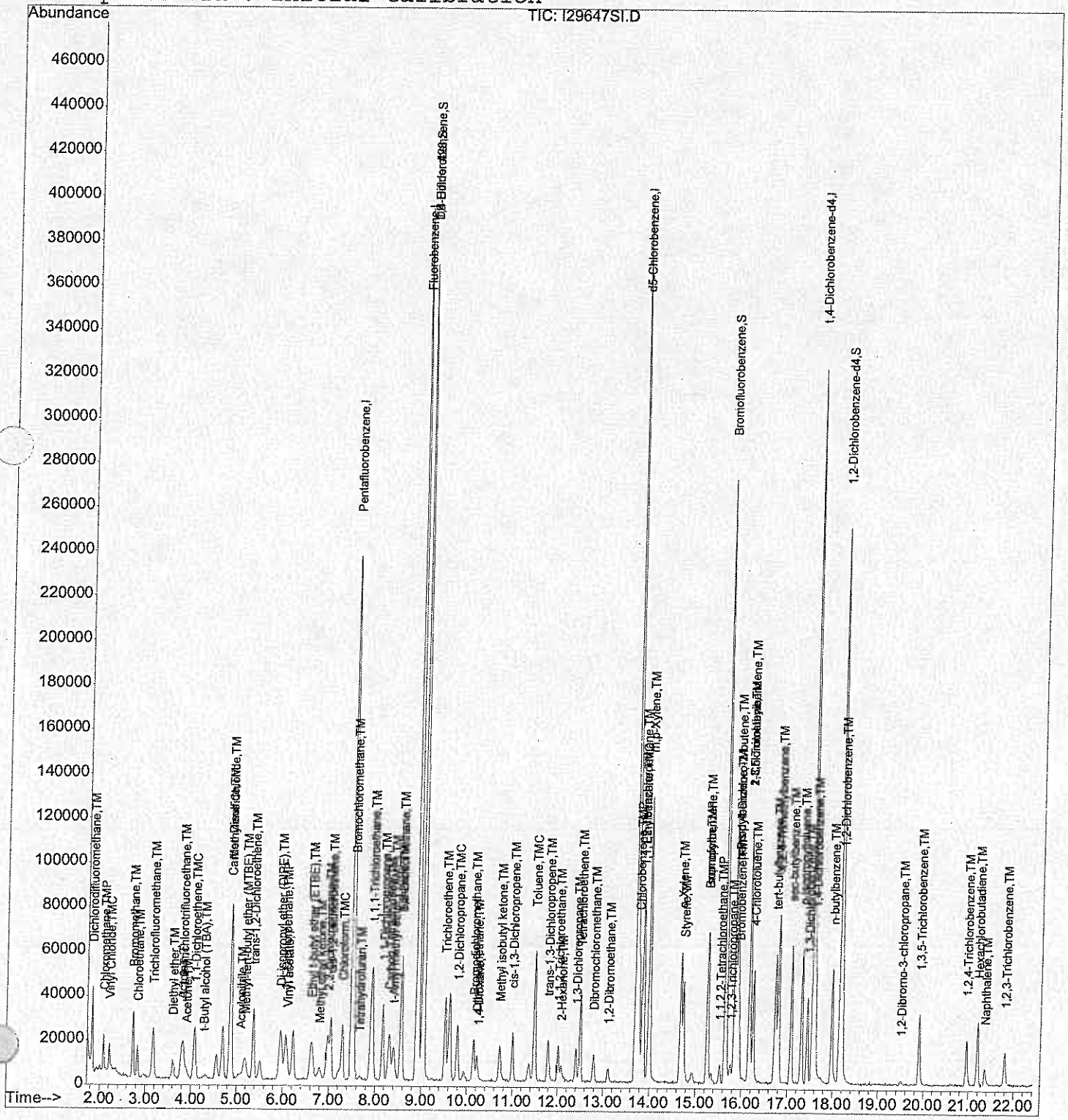
Quant Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration
DataAcq Meth : V505238I

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
85) p-isopropyltoluene	17.31	119	57525	0.45 ug/L	97
86) 1,3-Dichlorobenzene	17.44	146	25385	0.47 ug/L	95
88) 1,4-Dichlorobenzene	17.60	146	25204	0.47 ug/L	97
89) n-butylbenzene	17.98	91	53686	0.45 ug/L	97
90) 1,2-Dichlorobenzene	18.19	146	20004	0.47 ug/L	95
92) 1,2-Dibromo-3-chloropropan	19.50	75	978	0.52 ug/L #	64
94) 1,2,4-Trichlorobenzene	20.95	180	12155	0.46 ug/L	98
95) Hexachlorobutadiene	21.19	225	8019	0.46 ug/L	94
96) Naphthalene	21.36	128	11759	0.41 ug/L	90
97) 1,2,3-Trichlorobenzene	21.80	180	8856	0.45 ug/L	89
98) 1,3,5-Trichlorobenzene	19.90	180	17487	0.46 ug/L	97

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\DATA\052308-I\I29647SI.D Vial: 5
Acq On : 23 May 2008 11:29 am Operator:
Sample : 0.5 PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 27 10:07 2008 Quant Results File: V505238I.RE

Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration



Data File : D:\HPCHEM\DATA\052308-I\I29648SI.D Vial: 6
Acq On : 23 May 2008 12:02 pm Operator:
Sample : 1.0 PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
Integration Params: rteint.p
Quant Time: May 27 10:07 2008 Quant Results File: V505238I.RES

Quant Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration
DataAcq Meth : V505238I

5.27.08 AK 5.27.08

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.50	168	249325	4.00	ug/L	-0.03
39) Fluorobenzene	8.91	96	585860	4.00	ug/L	-0.02
63) d5-Chlorobenzene	13.71	117	348982	4.00	ug/L	-0.03
87) 1,4-Dichlorobenzene-d4	17.56	152	130071	4.00	ug/L	-0.02
System Monitoring Compounds						
28) DB Holder #28	9.03	114	469172	4.10	ug/L	-0.03
Spiked Amount 4.000	Range 70 - 130		Recovery = 102.50%			
36) 1,4-Difluorobenzene	9.03	114	469172	4.10	ug/L	-0.03
Spiked Amount 4.000	Range 70 - 130		Recovery = 102.50%			
54) Bromofluorobenzene	15.65	95	154774	3.99	ug/L	-0.02
Spiked Amount 4.000	Range 70 - 130		Recovery = 99.75%			
73) 1,2-Dichlorobenzene-d4	18.16	152	106089	4.10	ug/L	-0.02
Spiked Amount 4.000	Range 70 - 130		Recovery = 102.50%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.82	85	64014	1.03	ug/L	98
3) Chloromethane	2.08	50	30641	1.02	ug/L	99
4) Vinyl Chloride	2.21	62	23504	1.01	ug/L	94
5) Bromomethane	2.73	94	45486	1.02	ug/L	100
6) Chloroethane	2.83	64	37121	1.05	ug/L	99
7) t-Butyl alcohol (TBA)	4.28	59	4798	5.05	ug/L #	89
8) Trichlorofluoromethane	3.17	101	72441	1.03	ug/L	99
9) Diethyl ether	3.61	74	11588	1.07	ug/L #	90
10) 1,1,2-Trichlorotrifluoroet	3.80	101	41951	1.04	ug/L	94
11) Acrolein	3.78	56	8919	1.02	ug/L	95
12) Acetone	3.90	43	15146	5.29	ug/L	91
13) 1,1-Dichloroethene	4.07	61	61226	1.02	ug/L	97
15) Di-isopropyl ether (DIPE)	5.95	45	100513	1.02	ug/L	95
16) Methylene Chloride	4.88	84	63396	0.95	ug/L	93
17) Carbon Disulfide	4.85	76	132596	1.04	ug/L	100
18) Acrylonitrile	5.09	53	4273	1.05	ug/L	96
19) Methyl-tert-butyl ether (M	5.18	73	45353	1.01	ug/L #	92
20) trans-1,2-Dichloroethene	5.37	96	43583	1.02	ug/L	98
21) 1,1-Dichloroethane	6.06	63	73932	1.05	ug/L	99
22) Vinyl acetate	6.11	43	26854	1.03	ug/L	95
23) Methyl ethyl ketone	6.79	72	5276	5.21	ug/L #	81
24) Ethyl t-butyl ether (ETBE)	6.61	59	77411	1.03	ug/L	97
25) 2,2-Dichloropropane	6.98	77	55797	1.03	ug/L	97
26) cis-1,2-Dichloroethene	7.05	96	42247	1.04	ug/L	92
27) t-Amyl methyl ether (TAME)	8.40	73	52392	1.01	ug/L #	93
29) Chloroform	7.29	83	66189	1.02	ug/L	99

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\DATA\052308-I\I29648SI.D Vial: 6
Acq On : 23 May 2008 12:02 pm Operator:
Sample : 1.0 PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
Integration Params: rteint.p
Quant Time: May 27 10:07 2008 Quant Results File: V505238I.RES

Quant Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration
DataAcq Meth : V505238I

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
30)	Bromochloromethane	7.54	128	13822	0.98 ug/L	#	68
31)	Tetrahydrofuran	7.66	42	3170	1.27 ug/L	#	82
32)	1,1,1-Trichloroethane	7.91	97	62549	1.03 ug/L		97
34)	1,1-Dichloropropene	8.17	75	57625	1.04 ug/L		99
35)	Carbon Tetrachloride	8.31	119	50009	1.02 ug/L		97
37)	1,2-Dichloroethane	8.55	62	30548	1.04 ug/L		98
38)	Benzene	8.56	78	144979	1.04 ug/L		98
40)	Trichloroethene	9.52	95	43069	1.00 ug/L		89
41)	1,2-Dichloropropane	9.78	63	33321	1.03 ug/L		94
45)	Bromodichloromethane	10.14	83	39444	0.99 ug/L		96
46)	Dibromomethane	10.22	93	15199	1.07 ug/L		93
47)	1,4-Dioxane	10.23	88	2569	23.91 ug/L		91
51)	2-Hexanone	12.07	58	13785	4.76 ug/L		96
52)	Methyl isobutyl ketone	10.71	58	19853	4.88 ug/L	#	87
53)	cis-1,3-Dichloropropene	11.00	75	41000	0.98 ug/L		92
55)	Toluene	11.48	92	91926	1.01 ug/L		95
56)	trans-1,3-Dichloropropene	11.77	75	28304	0.94 ug/L		100
58)	1,1,2-Trichloroethane	12.00	83	13634	1.02 ug/L		94
59)	1,3-Dichloropropane	12.41	76	28117	1.00 ug/L		99
60)	Tetrachloroethene	12.49	166	39312	0.98 ug/L		98
61)	Dibromochloromethane	12.79	129	20988	0.94 ug/L		95
62)	1,2-Dibromoethane	13.11	107	15848	0.98 ug/L		99
64)	Chlorobenzene	13.77	112	92923	1.03 ug/L		96
65)	1,1,1,2-Tetrachloroethane	13.84	131	27934	1.02 ug/L		99
66)	Ethylbenzene	13.86	91	171796	1.02 ug/L		97
67)	m,p-Xylene	13.99	106	128182	2.04 ug/L		99
68)	o-Xylene	14.67	106	56844	0.99 ug/L		91
69)	Styrene	14.73	104	85980	1.01 ug/L		93
70)	Bromoform	15.24	173	9009	0.94 ug/L		91
71)	Isopropylbenzene	15.25	105	164260	1.03 ug/L		97
72)	1,1,2,2-Tetrachloroethane	15.52	83	15110	1.02 ug/L		94
74)	1,2,3-Trichloropropane	15.76	75	9862	0.96 ug/L		99
75)	trans-1,4-Dichloro-2-buten	15.88	88	1252	0.86 ug/L	#	1
76)	n-Propylbenzene	15.89	91	196497	1.03 ug/L		93
77)	Bromobenzene	15.94	156	27537	1.02 ug/L	#	85
78)	1,3,5-Trimethylbenzene	16.16	105	122301	1.02 ug/L		97
79)	2-Chlorotoluene	16.17	91	120598	1.04 ug/L		95
80)	4-Chlorotoluene	16.25	91	104684	1.02 ug/L		95
81)	tert-butylbenzene	16.73	119	101726	1.00 ug/L		95
82)	1,2,4-Trimethylbenzene	16.79	105	118585	1.03 ug/L		99
84)	sec-butylbenzene	17.08	105	165987	1.02 ug/L		96

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\DATA\052308-I\I29648SI.D Vial: 6
Acq On : 23 May 2008 12:02 pm Operator:
Sample : 1.0 PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
Integration Params: rteint.p
Quant Time: May 27 10:07 2008 Quant Results File: V505238I.RES

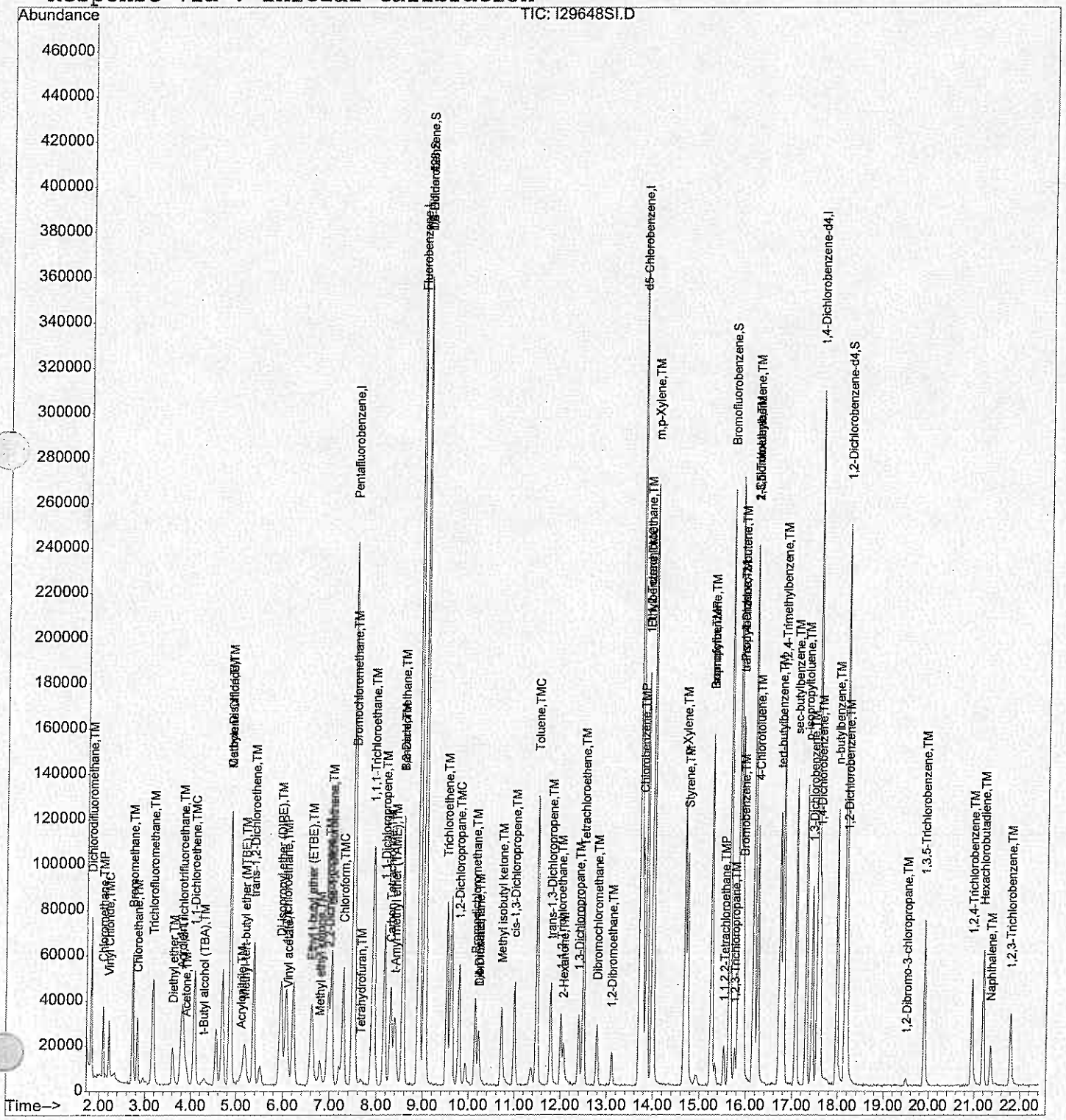
Quant Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration
DataAcq Meth : V505238I

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
85)	p-isopropyltoluene	17.30	119	125315	1.01	ug/L	100
86)	1,3-Dichlorobenzene	17.43	146	55038	1.04	ug/L	99
88)	1,4-Dichlorobenzene	17.61	146	54073	1.03	ug/L	98
89)	n-butylbenzene	17.97	91	117538	1.00	ug/L	94
90)	1,2-Dichlorobenzene	18.20	146	42063	1.02	ug/L	97
92)	1,2-Dibromo-3-chloropropan	19.50	75	1677	0.92	ug/L	82
94)	1,2,4-Trichlorobenzene	20.95	180	25735	0.99	ug/L	94
95)	Hexachlorobutadiene	21.18	225	17309	1.00	ug/L	97
96)	Naphthalene	21.35	128	26521	0.95	ug/L	98
97)	1,2,3-Trichlorobenzene	21.79	180	18506	0.97	ug/L	96
98)	1,3,5-Trichlorobenzene	19.89	180	37379	0.99	ug/L	93

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\DATA\052308-I\I29648SI.D Vial: 6
Acq On : 23 May 2008 12:02 pm Operator:
Sample : 1.0 PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 27 10:07 2008 Quant Results File: V505238I.RES

Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration



Data File : D:\HPCHEM\DATA\052308-I\I29649SI.D Vial: 7
Acq On : 23 May 2008 12:35 pm Operator:
Sample : 2.0 PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
Integration Params: rteint.p
Quant Time: May 27 10:07 2008 Quant Results File: V505238I.RES

Quant Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration
DataAcq Meth : V505238I

5.27.08 AK 5.27.08

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.50	168	254175	4.00	ug/L	-0.03
39) Fluorobenzene	8.90	96	583903	4.00	ug/L	-0.03
63) d5-Chlorobenzene	13.71	117	350133	4.00	ug/L	-0.03
87) 1,4-Dichlorobenzene-d4	17.55	152	128324	4.00	ug/L	-0.03
System Monitoring Compounds						
28) DB Holder #28	9.03	114	461360	3.96	ug/L	-0.03
Spiked Amount 4.000	Range 70 - 130		Recovery = 99.00%			
36) 1,4-Difluorobenzene	9.03	114	461360	3.96	ug/L	-0.03
Spiked Amount 4.000	Range 70 - 130		Recovery = 99.00%			
54) Bromofluorobenzene	15.64	95	151758	3.93	ug/L	-0.03
Spiked Amount 4.000	Range 70 - 130		Recovery = 98.25%			
73) 1,2-Dichlorobenzene-d4	18.16	152	102638	3.96	ug/L	-0.03
Spiked Amount 4.000	Range 70 - 130		Recovery = 99.00%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.83	85	126537	1.99	ug/L	98
3) Chloromethane	2.08	50	57666	1.89	ug/L	100
4) Vinyl Chloride	2.20	62	45243	1.91	ug/L	98
5) Bromomethane	2.73	94	87504	1.92	ug/L	98
6) Chloroethane	2.83	64	74316	2.06	ug/L	98
7) t-Butyl alcohol (TBA)	4.27	59	9072	9.36	ug/L	98
8) Trichlorofluoromethane	3.17	101	145069	2.02	ug/L	98
9) Diethyl ether	3.60	74	21531	1.96	ug/L	90
10) 1,1,2-Trichlorotrifluoroet	3.82	101	83490	2.02	ug/L	93
11) Acrolein	3.78	56	17160	1.93	ug/L	94
12) Acetone	3.90	43	26588	9.11	ug/L #	89
13) 1,1-Dichloroethene	4.08	61	123787	2.03	ug/L	99
15) Di-isopropyl ether (DIPE)	5.95	45	198377	1.98	ug/L	95
16) Methylene Chloride	4.87	84	98455	2.01	ug/L	92
17) Carbon Disulfide	4.84	76	266783	2.05	ug/L	99
18) Acrylonitrile	5.09	53	8370	2.02	ug/L #	90
19) Methyl-tert-butyl ether (M	5.17	73	89086	1.95	ug/L	94
20) trans-1,2-Dichloroethene	5.37	96	88064	2.02	ug/L	96
21) 1,1-Dichloroethane	6.07	63	144260	2.02	ug/L	98
22) Vinyl acetate	6.11	43	53136	1.99	ug/L #	92
23) Methyl ethyl ketone	6.79	72	9988	9.67	ug/L	82
24) Ethyl t-butyl ether (ETBE)	6.61	59	147761	1.93	ug/L	97
25) 2,2-Dichloropropane	6.97	77	111635	2.01	ug/L	100
26) cis-1,2-Dichloroethene	7.04	96	84472	2.04	ug/L	94
27) t-Amyl methyl ether (TAME)	8.39	73	102888	1.94	ug/L	94
29) Chloroform	7.29	83	131636	1.99	ug/L	96

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\DATA\052308-I\I29649SI.D Vial: 7
Acq On : 23 May 2008 12:35 pm Operator:
Sample : 2.0 PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
Integration Params: rteint.p
Quant Time: May 27 10:07 2008 Quant Results File: V505238I.RES

Quant Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration
DataAcq Meth : V505238I

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
30) Bromochloromethane	7.53	128	27113	1.89 ug/L #	70
31) Tetrahydrofuran	7.66	42	5098	2.00 ug/L #	87
32) 1,1,1-Trichloroethane	7.92	97	124192	2.00 ug/L	97
34) 1,1-Dichloropropene	8.16	75	115707	2.04 ug/L	98
35) Carbon Tetrachloride	8.30	119	99461	2.00 ug/L	99
37) 1,2-Dichloroethane	8.55	62	59434	1.99 ug/L	97
38) Benzene	8.57	78	287955	2.03 ug/L	97
40) Trichloroethene	9.52	95	87981	2.04 ug/L	91
41) 1,2-Dichloropropane	9.79	63	64221	2.00 ug/L	96
45) Bromodichloromethane	10.14	83	78915	1.98 ug/L	100
46) Dibromomethane	10.21	93	28387	2.00 ug/L	90
47) 1,4-Dioxane	10.22	88	4763	44.49 ug/L #	75
51) 2-Hexanone	12.06	58	30120	8.87 ug/L	93
52) Methyl isobutyl ketone	10.71	58	38650	9.53 ug/L	92
53) cis-1,3-Dichloropropene	10.99	75	82729	1.98 ug/L	97
55) Toluene	11.48	92	181871	2.01 ug/L	96
56) trans-1,3-Dichloropropene	11.78	75	57707	1.93 ug/L	100
58) 1,1,2-Trichloroethane	12.01	83	25833	1.94 ug/L	99
59) 1,3-Dichloropropane	12.40	76	55956	2.00 ug/L	98
60) Tetrachloroethene	12.49	166	79593	2.00 ug/L	99
61) Dibromochloromethane	12.79	129	43340	1.95 ug/L	99
62) 1,2-Dibromoethane	13.10	107	31744	1.97 ug/L	96
64) Chlorobenzene	13.77	112	183439	2.02 ug/L	99
65) 1,1,1,2-Tetrachloroethane	13.84	131	55278	2.02 ug/L	99
66) Ethylbenzene	13.86	91	346633	2.06 ug/L	97
67) m,p-Xylene	13.99	106	263965	4.19 ug/L	98
68) o-Xylene	14.68	106	118042	2.05 ug/L	100
69) Styrene	14.74	104	176726	2.07 ug/L	94
70) Bromoform	15.24	173	18833	1.97 ug/L	93
71) Isopropylbenzene	15.25	105	337013	2.10 ug/L	98
72) 1,1,2,2-Tetrachloroethane	15.52	83	29821	2.00 ug/L	98
74) 1,2,3-Trichloropropane	15.75	75	21059	2.05 ug/L	100
75) trans-1,4-Dichloro-2-buten	15.89	88	3553	1.99 ug/L #	1
76) n-Propylbenzene	15.90	91	401851	2.10 ug/L	95
77) Bromobenzene	15.94	156	54797	2.01 ug/L #	82
78) 1,3,5-Trimethylbenzene	16.16	105	252068	2.09 ug/L	96
79) 2-Chlorotoluene	16.17	91	242754	2.09 ug/L	94
80) 4-Chlorotoluene	16.24	91	216505	2.10 ug/L	92
81) tert-butylbenzene	16.73	119	215061	2.11 ug/L	94
82) 1,2,4-Trimethylbenzene	16.79	105	242140	2.11 ug/L	99
84) sec-butylbenzene	17.07	105	346588	2.12 ug/L	96

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\DATA\052308-I\I29649SI.D Vial: 7
Acq On : 23 May 2008 12:35 pm Operator:
Sample : 2.0 PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
Integration Params: rteint.p
Quant Time: May 27 10:07 2008 Quant Results File: V505238I.RES

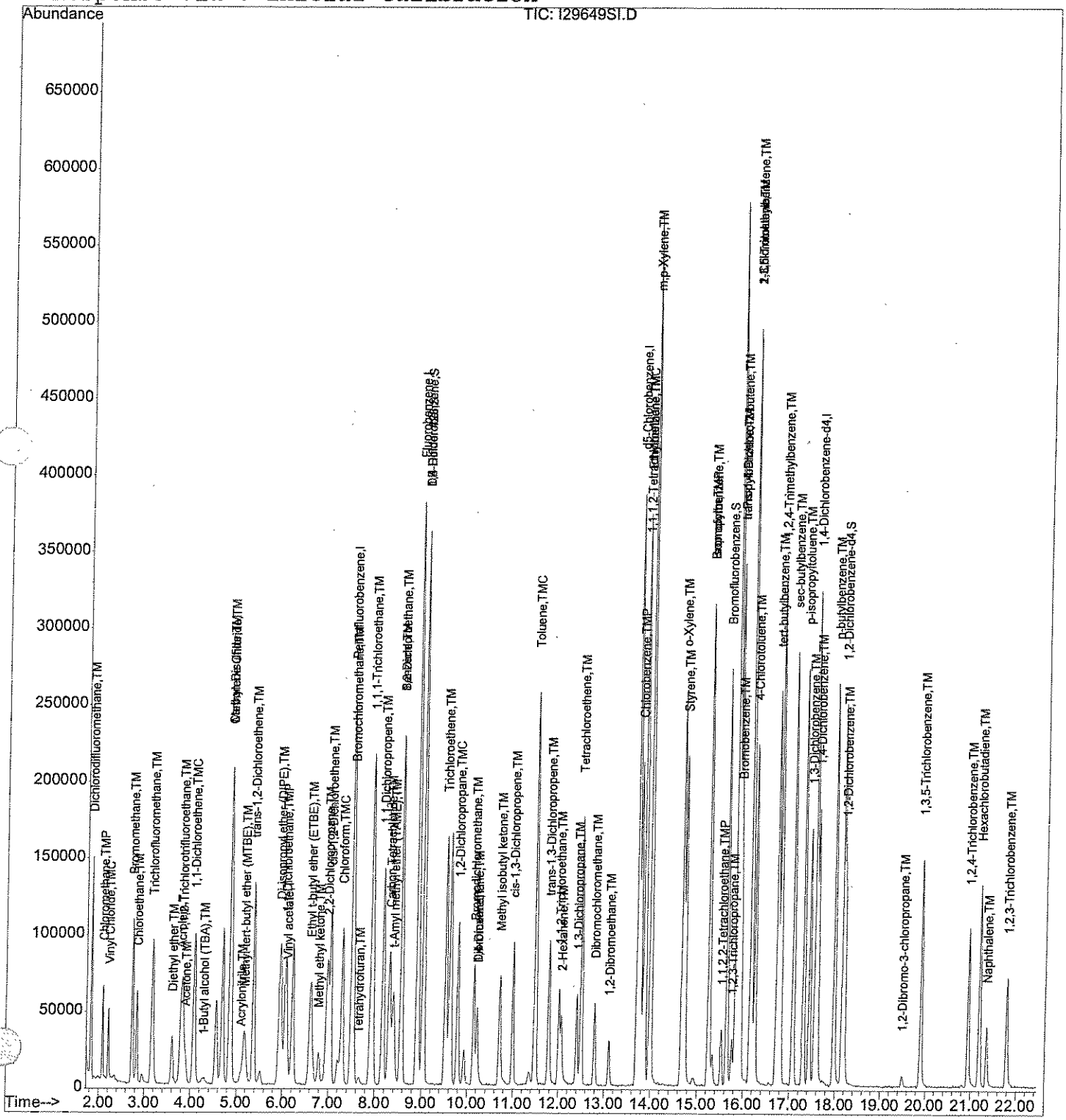
Quant Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration
DataAcq Meth : V505238I

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
85) p-isopropyltoluene	17.31	119	265593	2.13 ug/L	98
86) 1,3-Dichlorobenzene	17.44	146	108002	2.02 ug/L	99
88) 1,4-Dichlorobenzene	17.60	146	104332	2.01 ug/L	98
89) n-butylbenzene	17.97	91	250271	2.16 ug/L	90
90) 1,2-Dichlorobenzene	18.20	146	81124	1.99 ug/L	97
92) 1,2-Dibromo-3-chloropropan	19.49	75	3495	1.94 ug/L #	67
94) 1,2,4-Trichlorobenzene	20.94	180	51953	2.02 ug/L	99
95) Hexachlorobutadiene	21.19	225	36114	2.13 ug/L	95
96) Naphthalene	21.35	128	54501	1.98 ug/L	99
97) 1,2,3-Trichlorobenzene	21.79	180	37615	1.99 ug/L	99
98) 1,3,5-Trichlorobenzene	19.90	180	75518	2.04 ug/L	99

(#) = qualifier out of range (m) = manual integration
I29649SI.D V505238I.M Tue May 27 10:07:58 2008 Page 3

Data File : D:\HPCHEM\DATA\052308-I\I29649SI.D Vial: 7
Acq On : 23 May 2008 12:35 pm Operator:
Sample : 2.0 PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 27 10:07 2008 Quant Results File: V505238I.RE

Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration



Data File : D:\HPCHEM\DATA\052308-I\I29650SI.D Vial: 8
Acq On : 23 May 2008 1:41 pm Operator:
Sample : 5.0 PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
Integration Params: rteint.p
Quant Time: May 27 10:07 2008 Quant Results File: V505238I.RES

Quant Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration
DataAcq Meth : V505238I

5.27.08 AK 5.27.08

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.50	168	253466	4.00	ug/L	-0.03
39) Fluorobenzene	8.91	96	583941	4.00	ug/L	-0.02
63) d5-Chlorobenzene	13.71	117	358730	4.00	ug/L	-0.03
87) 1,4-Dichlorobenzene-d4	17.56	152	134715	4.00	ug/L	-0.02
System Monitoring Compounds						
28) DB Holder #28	9.04	114	465540	4.00	ug/L	-0.02
Spiked Amount 4.000	Range 70 - 130		Recovery = 100.00%			
36) 1,4-Difluorobenzene	9.04	114	465540	4.00	ug/L	-0.02
Spiked Amount 4.000	Range 70 - 130		Recovery = 100.00%			
54) Bromofluorobenzene	15.65	95	158375	4.10	ug/L	-0.02
Spiked Amount 4.000	Range 70 - 130		Recovery = 102.50%			
73) 1,2-Dichlorobenzene-d4	18.16	152	107471	4.05	ug/L	-0.02
Spiked Amount 4.000	Range 70 - 130		Recovery = 101.25%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.82	85	321287	5.07	ug/L	100
3) Chloromethane	2.08	50	141588	4.65	ug/L	100
4) Vinyl Chloride	2.21	62	107139	4.54	ug/L	97
5) Bromomethane	2.73	94	211463	4.66	ug/L	98
6) Chloroethane	2.83	64	178647	4.96	ug/L	98
7) t-Butyl alcohol (TBA)	4.25	59	25030	25.91	ug/L	100
8) Trichlorofluoromethane	3.17	101	364948	5.09	ug/L	100
9) Diethyl ether	3.60	74	57107	5.20	ug/L	91
10) 1,1,2-Trichlorotrifluoroet	3.81	101	210167	5.10	ug/L	93
11) Acrolein	3.78	56	48539	5.46	ug/L	99
12) Acetone	3.89	43	75965	26.10	ug/L	96
13) 1,1-Dichloroethene	4.08	61	307023	5.06	ug/L	99
15) Di-isopropyl ether (DIPE)	5.94	45	522533	5.22	ug/L	93
16) Methylene Chloride	4.87	84	197328	5.13	ug/L	91
17) Carbon Disulfide	4.85	76	652442	5.03	ug/L	100
18) Acrylonitrile	5.09	53	19660	4.76	ug/L	95
19) Methyl-tert-butyl ether (M	5.16	73	238129	5.23	ug/L	93
20) trans-1,2-Dichloroethene	5.37	96	221807	5.10	ug/L	95
21) 1,1-Dichloroethane	6.06	63	360987	5.06	ug/L	99
22) Vinyl acetate	6.11	43	139826	5.26	ug/L #	93
23) Methyl ethyl ketone	6.79	72	27155	26.37	ug/L	83
24) Ethyl t-butyl ether (ETBE)	6.60	59	399465	5.22	ug/L	97
25) 2,2-Dichloropropane	6.98	77	278844	5.04	ug/L	99
26) cis-1,2-Dichloroethene	7.04	96	211441	5.11	ug/L	99
27) t-Amyl methyl ether (TAME)	8.39	73	274500	5.20	ug/L	95
29) Chloroform	7.29	83	336592	5.11	ug/L	99

(#) = qualifier out of range (m) = manual integration
I29650SI.D V505238I.M Tue May 27 10:07:59 2008 Page 1

Data File : D:\HPCHEM\DATA\052308-I\I29650SI.D Vial: 8
Acq On : 23 May 2008 1:41 pm Operator:
Sample : 5.0 PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
Integration Params: rteint.p
Quant Time: May 27 10:07 2008 Quant Results File: V505238I.RES

Quant Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration
DataAcq Meth : V505238I

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
30) Bromochloromethane	7.54	128	72441	5.08 ug/L #	81
31) Tetrahydrofuran	7.64	42	14092	5.54 ug/L #	83
32) 1,1,1-Trichloroethane	7.91	97	314510	5.09 ug/L	98
34) 1,1-Dichloropropene	8.17	75	289994	5.12 ug/L	98
35) Carbon Tetrachloride	8.31	119	256792	5.17 ug/L	99
37) 1,2-Dichloroethane	8.55	62	153284	5.16 ug/L	98
38) Benzene	8.56	78	722079	5.11 ug/L	99
40) Trichloroethene	9.52	95	216342	5.02 ug/L	90
41) 1,2-Dichloropropane	9.79	63	161493	5.02 ug/L	96
45) Bromodichloromethane	10.14	83	205180	5.15 ug/L	96
46) Dibromomethane	10.21	93	73213	5.17 ug/L	89
47) 1,4-Dioxane	10.22	88	14405	134.53 ug/L	93
51) 2-Hexanone	12.05	58	95966	25.39 ug/L	97
52) Methyl isobutyl ketone	10.70	58	110334	27.21 ug/L	92
53) cis-1,3-Dichloropropene	11.00	75	220971	5.28 ug/L	100
55) Toluene	11.48	92	466023	5.14 ug/L	98
56) trans-1,3-Dichloropropene	11.78	75	157557	5.27 ug/L	100
58) 1,1,2-Trichloroethane	12.00	83	70248	5.27 ug/L	96
59) 1,3-Dichloropropane	12.40	76	147371	5.26 ug/L	98
60) Tetrachloroethene	12.50	166	202793	5.09 ug/L	98
61) Dibromochloromethane	12.79	129	117857	5.30 ug/L	98
62) 1,2-Dibromoethane	13.11	107	85897	5.33 ug/L	99
64) Chlorobenzene	13.77	112	470507	5.05 ug/L	98
65) 1,1,1,2-Tetrachloroethane	13.85	131	143568	5.11 ug/L	97
66) Ethylbenzene	13.87	91	889947	5.15 ug/L	98
67) m,p-Xylene	13.99	106	662704	10.27 ug/L	100
68) o-Xylene	14.67	106	303135	5.14 ug/L	98
69) Styrene	14.73	104	469491	5.35 ug/L	94
70) Bromoform	15.24	173	51996	5.30 ug/L	98
71) Isopropylbenzene	15.25	105	853393	5.18 ug/L	97
72) 1,1,2,2-Tetrachloroethane	15.53	83	78476	5.14 ug/L	95
74) 1,2,3-Trichloropropane	15.76	75	53105	5.05 ug/L	94
75) trans-1,4-Dichloro-2-buten	15.88	88	10221	5.16 ug/L	75
76) n-Propylbenzene	15.89	91	1010120	5.15 ug/L	95
77) Bromobenzene	15.94	156	144941	5.20 ug/L	92
78) 1,3,5-Trimethylbenzene	16.16	105	641997	5.20 ug/L	99
79) 2-Chlorotoluene	16.17	91	612128	5.14 ug/L	97
80) 4-Chlorotoluene	16.25	91	541795	5.12 ug/L	95
81) tert-butylbenzene	16.73	119	535233	5.12 ug/L	96
82) 1,2,4-Trimethylbenzene	16.79	105	615585	5.23 ug/L	97
84) sec-butylbenzene	17.08	105	861136	5.14 ug/L	97

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\DATA\052308-I\I29650SI.D Vial: 8
Acq On : 23 May 2008 1:41 pm Operator:
Sample : 5.0 PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
Integration Params: rteint.p
Quant Time: May 27 10:07 2008 Quant Results File: V505238I.RES

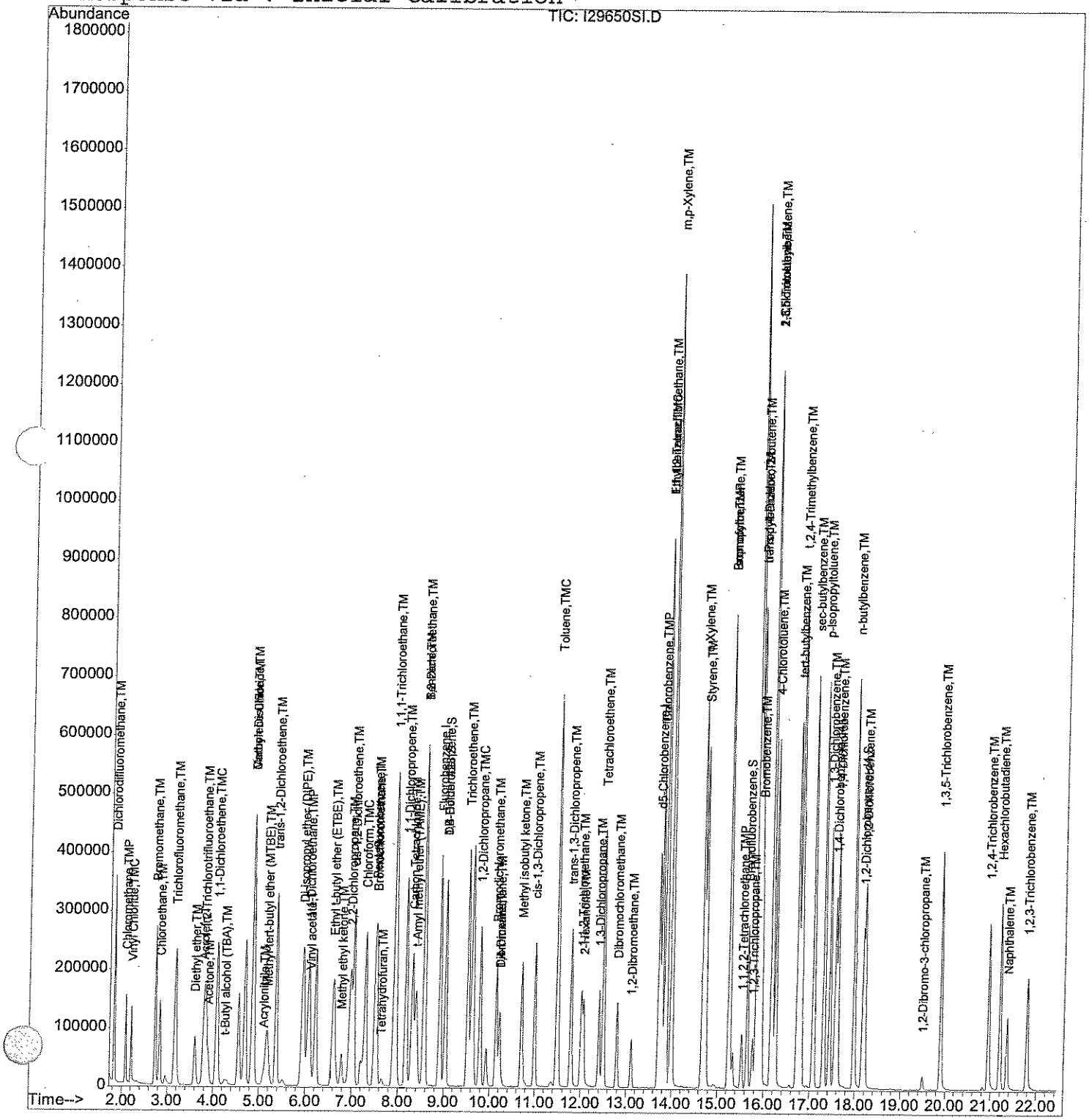
Quant Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration
DataAcq Meth : V505238I

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
85) p-isopropyltoluene	17.30	119	658301	5.15	ug/L	99
86) 1,3-Dichlorobenzene	17.43	146	281997	5.16	ug/L	100
88) 1,4-Dichlorobenzene	17.61	146	269812	4.96	ug/L	99
89) n-butylbenzene	17.97	91	635447	5.22	ug/L	94
90) 1,2-Dichlorobenzene	18.20	146	214405	5.02	ug/L	98
92) 1,2-Dibromo-3-chloropropan	19.49	75	9761	5.15	ug/L	89
94) 1,2,4-Trichlorobenzene	20.94	180	140914	5.23	ug/L	95
95) Hexachlorobutadiene	21.20	225	90458	5.07	ug/L	99
96) Naphthalene	21.35	128	156280	5.42	ug/L	99
97) 1,2,3-Trichlorobenzene	21.80	180	104531	5.27	ug/L	96
98) 1,3,5-Trichlorobenzene	19.90	180	198414	5.10	ug/L	99

(#) = qualifier out of range (m) = manual integration
I29650SI.D V505238I.M Tue May 27 10:08:00 2008 Page 3

Data File : D:\HPCHEM\DATA\052308-I\I29650SI.D Vial: 8
Acq On : 23 May 2008 1:41 pm Operator:
Sample : 5.0 PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 27 10:07 2008 Quant Results File: V505238I.RE

Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration



Data File : D:\HPCHEM\DATA\052308-I\I29651SI.D
Acq On : 23 May 2008 2:14 pm
Sample : 10 PPB STD
Misc : 25000
Integration Params: rteint.p
Quant Time: May 27 10:08 2008

Vial: 9
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: V505238I.RES

Quant Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration
DataAcq Meth : V505238I

5.27.08 AK 5.27.08

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.50	168	251356	4.00	ug/L	-0.03
39) Fluorobenzene	8.91	96	563792	4.00	ug/L	-0.02
63) d5-Chlorobenzene	13.71	117	354449	4.00	ug/L	-0.03
87) 1,4-Dichlorobenzene-d4	17.56	152	131274	4.00	ug/L	-0.02
System Monitoring Compounds						
28) DB Holder #28	9.03	114	456621	3.96	ug/L	-0.03
Spiked Amount 4.000	Range 70 - 130		Recovery = 99.00%			
36) 1,4-Difluorobenzene	9.03	114	456621	3.96	ug/L	-0.03
Spiked Amount 4.000	Range 70 - 130		Recovery = 99.00%			
54) Bromofluorobenzene	15.65	95	152754	4.09	ug/L	-0.02
Spiked Amount 4.000	Range 70 - 130		Recovery = 102.25%			
73) 1,2-Dichlorobenzene-d4	18.16	152	103938	3.96	ug/L	-0.02
Spiked Amount 4.000	Range 70 - 130		Recovery = 99.00%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.82	85	612655	9.74	ug/L	100
3) Chloromethane	2.08	50	262783	8.70	ug/L	98
4) Vinyl Chloride	2.20	62	209828	8.97	ug/L	99
5) Bromomethane	2.72	94	413141	9.19	ug/L	100
6) Chloroethane	2.83	64	347363	9.72	ug/L	99
7) t-Butyl alcohol (TBA)	4.26	59	44180	46.12	ug/L	100
8) Trichlorofluoromethane	3.16	101	712312	10.02	ug/L	99
9) Diethyl ether	3.60	74	104934	9.64	ug/L	91
10) 1,1,2-Trichlorotrifluoroet	3.81	101	414774	10.15	ug/L	93
11) Acrolein	3.78	56	89293	10.13	ug/L	100
12) Acetone	3.88	43	130103	45.08	ug/L	90
13) 1,1-Dichloroethene	4.07	61	606277	10.07	ug/L	100
15) Di-isopropyl ether (DIPE)	5.94	45	958746	9.67	ug/L	94
16) Methylene Chloride	4.87	84	353563	10.14	ug/L	90
17) Carbon Disulfide	4.85	76	1290921	10.04	ug/L	100
18) Acrylonitrile	5.09	53	39577	9.66	ug/L	96
19) Methyl-tert-butyl ether (M	5.16	73	442772	9.80	ug/L	94
20) trans-1,2-Dichloroethene	5.37	96	433016	10.04	ug/L	95
21) 1,1-Dichloroethane	6.06	63	691723	9.78	ug/L	98
22) Vinyl acetate	6.10	43	247966	9.41	ug/L	95
23) Methyl ethyl ketone	6.78	72	49923	48.89	ug/L	87
24) Ethyl t-butyl ether (ETBE)	6.60	59	744379	9.81	ug/L	98
25) 2,2-Dichloropropane	6.97	77	540038	9.85	ug/L	99
26) cis-1,2-Dichloroethene	7.04	96	407495	9.93	ug/L	97
27) t-Amyl methyl ether (TAME)	8.39	73	512573	9.79	ug/L	97
29) Chloroform	7.29	83	641554	9.82	ug/L	98

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\DATA\052308-I\I29651SI.D Vial: 9
Acq On : 23 May 2008 2:14 pm Operator:
Sample : 10 PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
Integration Params: rteint.p
Quant Time: May 27 10:08 2008 Quant Results File: V505238I.RES

Quant Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration
DataAcq Meth : V505238I

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
30)	Bromochloromethane	7.54	128	137561	9.72 ug/L #	84
31)	Tetrahydrofuran	7.64	42	23411	9.28 ug/L	93
32)	1,1,1-Trichloroethane	7.91	97	615377	10.04 ug/L	98
34)	1,1-Dichloropropene	8.17	75	565533	10.08 ug/L	99
35)	Carbon Tetrachloride	8.31	119	509878	10.35 ug/L	100
37)	1,2-Dichloroethane	8.55	62	282810	9.59 ug/L	96
38)	Benzene	8.56	78	1383523	9.88 ug/L	100
40)	Trichloroethene	9.52	95	421958	10.14 ug/L	90
41)	1,2-Dichloropropane	9.79	63	308452	9.94 ug/L	96
45)	Bromodichloromethane	10.14	83	390540	10.15 ug/L	99
46)	Dibromomethane	10.21	93	136175	9.96 ug/L	93
47)	1,4-Dioxane	10.21	88	29080	281.29 ug/L	95
51)	2-Hexanone	12.05	58	186928	49.89 ug/L	99
52)	Methyl isobutyl ketone	10.70	58	202711	51.77 ug/L	93
53)	cis-1,3-Dichloropropene	11.00	75	423650	10.49 ug/L	99
55)	Toluene	11.48	92	899330	10.28 ug/L	98
56)	trans-1,3-Dichloropropene	11.78	75	307813	10.67 ug/L	100
58)	1,1,2-Trichloroethane	12.00	83	131557	10.21 ug/L	93
59)	1,3-Dichloropropane	12.40	76	279706	10.34 ug/L	98
60)	Tetrachloroethene	12.50	166	398079	10.35 ug/L	98
61)	Dibromochloromethane	12.79	129	226445	10.54 ug/L	99
62)	1,2-Dibromoethane	13.11	107	162812	10.47 ug/L	99
64)	Chlorobenzene	13.77	112	908414	9.87 ug/L	99
65)	1,1,1,2-Tetrachloroethane	13.85	131	281831	10.16 ug/L	97
66)	Ethylbenzene	13.86	91	1740706	10.20 ug/L	98
67)	m,p-Xylene	13.99	106	1285916	20.17 ug/L	100
68)	o-Xylene	14.67	106	598182	10.27 ug/L	99
69)	Styrene	14.73	104	918308	10.60 ug/L	93
70)	Bromoform	15.24	173	100342	10.35 ug/L	98
71)	Isopropylbenzene	15.25	105	1700779	10.45 ug/L	97
72)	1,1,2,2-Tetrachloroethane	15.53	83	148084	9.82 ug/L	96
74)	1,2,3-Trichloropropane	15.76	75	95876	9.23 ug/L	98
75)	trans-1,4-Dichloro-2-buten	15.88	88	20123	10.04 ug/L	86
76)	n-Propylbenzene	15.89	91	1966107	10.15 ug/L	96
77)	Bromobenzene	15.94	156	277046	10.06 ug/L #	88
78)	1,3,5-Trimethylbenzene	16.16	105	1249622	10.24 ug/L	98
79)	2-Chlorotoluene	16.17	91	1173127	9.98 ug/L	96
80)	4-Chlorotoluene	16.25	91	1052780	10.07 ug/L	95
81)	tert-butylbenzene	16.73	119	1074210	10.41 ug/L	96
82)	1,2,4-Trimethylbenzene	16.79	105	1206657	10.37 ug/L	100
84)	sec-butylbenzene	17.08	105	1727877	10.44 ug/L	97

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\DATA\052308-I\I29651SI.D Vial: 9
Acq On : 23 May 2008 2:14 pm Operator:
Sample : 10 PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
Integration Params: rteint.p
Quant Time: May 27 10:08 2008 Quant Results File: V505238I.RES

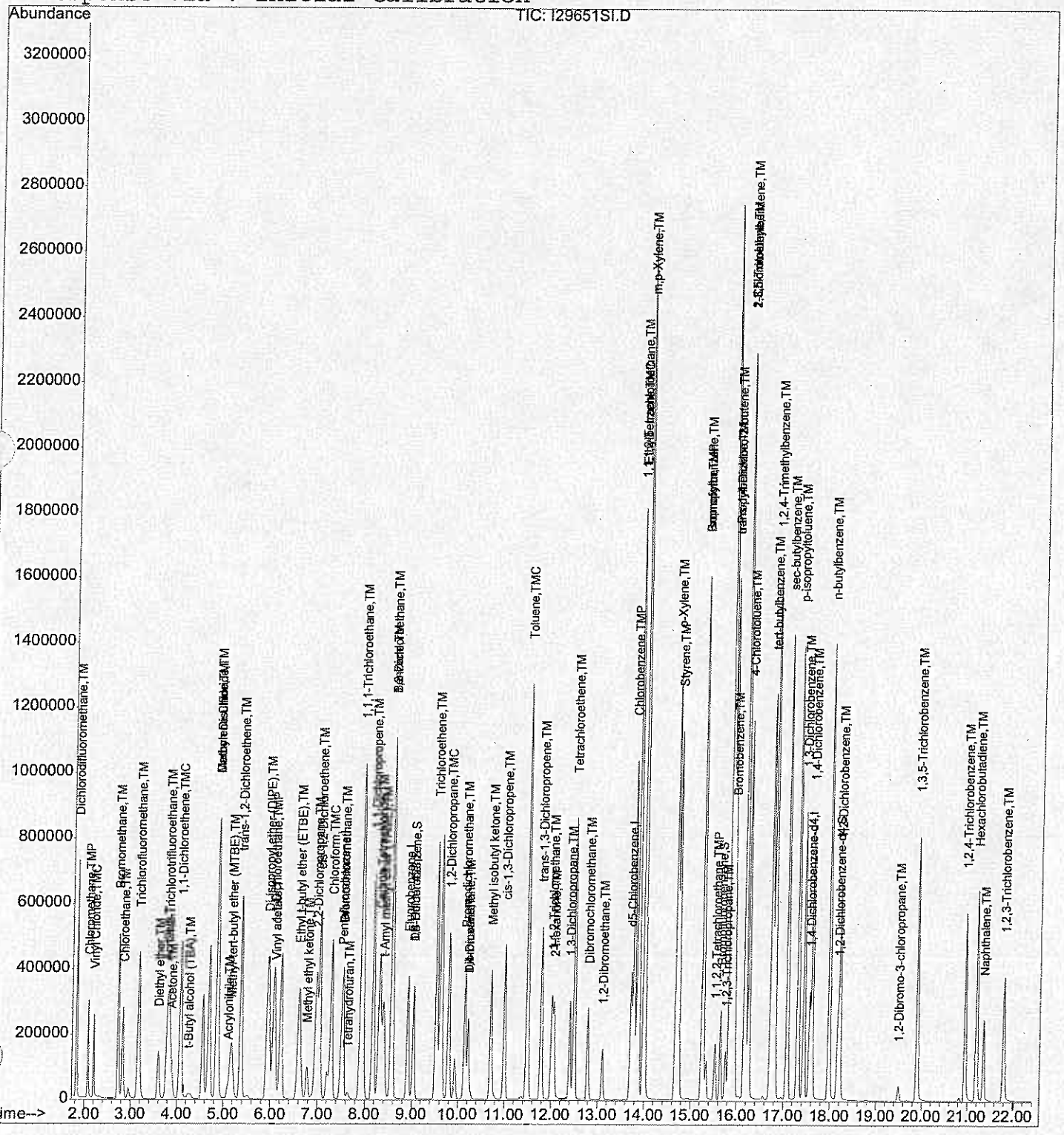
Quant Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration
DataAcq Meth : V505238I

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
85) p-isopropyltoluene	17.30	119	1333837	10.55	ug/L	99
86) 1,3-Dichlorobenzene	17.43	146	551700	10.22	ug/L	100
88) 1,4-Dichlorobenzene	17.61	146	525763	9.92	ug/L	99
89) n-butylbenzene	17.97	91	1275265	10.76	ug/L	92
90) 1,2-Dichlorobenzene	18.20	146	409859	9.85	ug/L	99
92) 1,2-Dibromo-3-chloropropan	19.49	75	18341	9.94	ug/L	94
94) 1,2,4-Trichlorobenzene	20.95	180	280970	10.69	ug/L	97
95) Hexachlorobutadiene	21.20	225	181800	10.46	ug/L	99
96) Naphthalene	21.35	128	317033	11.28	ug/L	99
97) 1,2,3-Trichlorobenzene	21.80	180	205341	10.62	ug/L	95
98) 1,3,5-Trichlorobenzene	19.89	180	396492	10.45	ug/L	100

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\DATA\052308-I\I29651SI.D Vial: 9
Acq On : 23 May 2008 2:14 pm Operator:
Sample : 10 PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 27 10:08 2008 Quant Results File: V505238I.RE

Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration



Data File : D:\HPCHEM\DATA\052308-I\I29652SI.D Vial: 10
Acq On : 23 May 2008 2:48 pm Operator:
Sample : 20 PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
Integration Params: rteint.p
Quant Time: May 27 10:08 2008 Quant Results File: V505238I.RES

Quant Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration
DataAcq Meth : V505238I

AK 5.27.08 5.27.08

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.50	168	256284	4.00	ug/L	-0.03
39) Fluorobenzene	8.91	96	580925 ✓	4.00	ug/L	-0.02
63) d5-Chlorobenzene	13.71	117	362462	4.00	ug/L	-0.03
87) 1,4-Dichlorobenzene-d4	17.56	152	135610	4.00	ug/L	-0.02
System Monitoring Compounds						
28) DB Holder #28	9.04	114	471354	4.01	ug/L	-0.02
Spiked Amount 4.000	Range 70 - 130		Recovery = 100.25% ✓			
36) 1,4-Difluorobenzene	9.04	114	471354	4.01	ug/L	-0.02
Spiked Amount 4.000	Range 70 - 130		Recovery = 100.25% ✓			
54) Bromofluorobenzene	15.65	95	155566	4.05	ug/L	-0.02
Spiked Amount 4.000	Range 70 - 130		Recovery = 101.25% ✓			
73) 1,2-Dichlorobenzene-d4	18.16	152	106132	3.95	ug/L	-0.02
Spiked Amount 4.000	Range 70 - 130		Recovery = 98.75% ✓			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.82	85	1258074	19.62	ug/L	100
3) Chloromethane	2.08	50	537299	17.45	ug/L	99
4) Vinyl Chloride	2.20	62	423692	17.76	ug/L	99
5) Bromomethane	2.72	94	848688	18.52	ug/L	98
6) Chloroethane	2.83	64	685605	18.82	ug/L	98
7) t-Butyl alcohol (TBA)	4.25	59	101188	103.59	ug/L	95
8) Trichlorofluoromethane	3.16	101	1452073	20.02	ug/L	100
9) Diethyl ether	3.60	74	219501	19.78	ug/L	92
10) 1,1,2-Trichlorotrifluoroet	3.81	101	815094	19.57	ug/L	94
11) Acrolein	3.77	56	179965	20.03	ug/L	100
12) Acetone	3.88	43	277537	94.31	ug/L	97
13) 1,1-Dichloroethene	4.07	61	1216533	19.81	ug/L	99
15) Di-isopropyl ether (DIPE)	5.93	45	1918844	18.97	ug/L	95
16) Methylene Chloride	4.87	84	674441	19.90	ug/L	94
17) Carbon Disulfide	4.85	76	2520522	19.23	ug/L	100
18) Acrylonitrile	5.09	53	81587	19.52	ug/L	96
19) Methyl-tert-butyl ether (M	5.16	73	921742	20.01	ug/L	95
20) trans-1,2-Dichloroethene	5.36	96	861335	19.58	ug/L	99
21) 1,1-Dichloroethane	6.06	63	1396835	19.36	ug/L	98
22) Vinyl acetate	6.10	43	508954	18.94	ug/L	95
23) Methyl ethyl ketone	6.77	72	104058	99.95	ug/L	90
24) Ethyl t-butyl ether (ETBE)	6.60	59	1539529	19.90	ug/L	98
25) 2,2-Dichloropropane	6.97	77	1087143	19.45	ug/L	100
26) cis-1,2-Dichloroethene	7.04	96	818026	19.55	ug/L	96
27) t-Amyl methyl ether (TAME)	8.39	73	1070024	20.05	ug/L	97
29) Chloroform	7.29	83	1297344	19.48	ug/L	99

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\DATA\052308-I\I29652SI.D Vial: 10
Acq On : 23 May 2008 2:48 pm Operator:
Sample : 20 PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
Integration Params: rteint.p
Quant Time: May 27 10:08 2008 Quant Results File: V505238I.RES

Quant Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration
DataAcq Meth : V505238I

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
30) Bromochloromethane	7.54	128	284092	19.69 ug/L #	83
31) Tetrahydrofuran	7.63	42	49040	19.07 ug/L	91
32) 1,1,1-Trichloroethane	7.91	97	1243958	19.91 ug/L	98
34) 1,1-Dichloropropene	8.17	75	1134842	19.83 ug/L	100
35) Carbon Tetrachloride	8.31	119	1058251	21.07 ug/L	100
37) 1,2-Dichloroethane	8.55	62	587211	19.53 ug/L	98
38) Benzene	8.56	78	2768476	19.39 ug/L	98
40) Trichloroethene	9.52	95	856124	19.96 ug/L	92
41) 1,2-Dichloropropane	9.79	63	633137	19.79 ug/L	97
45) Bromodichloromethane	10.14	83	810234	20.45 ug/L	98
46) Dibromomethane	10.21	93	279566	19.85 ug/L	94
47) 1,4-Dioxane	10.21	88	60481	567.78 ug/L	93
51) 2-Hexanone	12.05	58	391545	100.07 ug/L	99
52) Methyl isobutyl ketone	10.70	58	424128	105.12 ug/L	93
53) cis-1,3-Dichloropropene	11.00	75	874923	21.02 ug/L	99
55) Toluene	11.48	92	1804662	20.03 ug/L	98
56) trans-1,3-Dichloropropene	11.78	75	639700	21.53 ug/L	99
58) 1,1,2-Trichloroethane	12.00	83	264198	19.91 ug/L	98
59) 1,3-Dichloropropane	12.40	76	569077	20.42 ug/L	98
60) Tetrachloroethene	12.49	166	805958	20.34 ug/L	99
61) Dibromochloromethane	12.79	129	477168	21.56 ug/L	99
62) 1,2-Dibromoethane	13.11	107	345845	21.58 ug/L	99
64) Chlorobenzene	13.78	112	1857205	19.73 ug/L	99
65) 1,1,1,2-Tetrachloroethane	13.84	131	572770	20.20 ug/L	98
66) Ethylbenzene	13.86	91	3422072	19.61 ug/L	98
67) m,p-Xylene	13.99	106	2518751	38.63 ug/L	99
68) o-Xylene	14.68	106	1181973	19.84 ug/L	98
69) Styrene	14.73	104	1810037	20.43 ug/L	95
70) Bromoform	15.24	173	207969	20.98 ug/L	99
71) Isopropylbenzene	15.25	105	3290885	19.77 ug/L	97
72) 1,1,2,2-Tetrachloroethane	15.53	83	298947	19.39 ug/L	96
74) 1,2,3-Trichloropropane	15.76	75	201781	18.99 ug/L	96
75) trans-1,4-Dichloro-2-buten	15.88	88	41372	19.95 ug/L	97
76) n-Propylbenzene	15.90	91	3736340	18.87 ug/L	97
77) Bromobenzene	15.94	156	555744	19.74 ug/L	92
78) 1,3,5-Trimethylbenzene	16.16	105	2401709	19.25 ug/L	97
79) 2-Chlorotoluene	16.17	91	2208263	18.36 ug/L	96
80) 4-Chlorotoluene	16.25	91	2061420	19.29 ug/L	96
81) tert-butylbenzene	16.73	119	2172908	20.58 ug/L	96
82) 1,2,4-Trimethylbenzene	16.79	105	2364626	19.86 ug/L	98
84) sec-butylbenzene	17.08	105	3380177	19.97 ug/L	97

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\DATA\052308-I\I29652SI.D Vial: 10
Acq On : 23 May 2008 2:48 pm Operator:
Sample : 20 PPB STD Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
Integration Params: rteint.p
Quant Time: May 27 10:08 2008 Quant Results File: V505238I.RES

Quant Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration
DataAcq Meth : V505238I

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
85)	p-isopropyltoluene	17.30	119	2645969	20.47	ug/L	98
86)	1,3-Dichlorobenzene	17.43	146	1109969	20.10	ug/L	99
88)	1,4-Dichlorobenzene	17.61	146	1071640	19.57	ug/L	98
89)	n-butylbenzene	17.97	91	2519981	20.58	ug/L	94
90)	1,2-Dichlorobenzene	18.20	146	838445	19.50	ug/L	99
92)	1,2-Dibromo-3-chloropropan	19.49	75	39833	20.89	ug/L	91
94)	1,2,4-Trichlorobenzene	20.95	180	591971	21.81	ug/L	97
95)	Hexachlorobutadiene	21.19	225	379812	21.15	ug/L	99
96)	Naphthalene	21.35	128	684812	23.59	ug/L	99
97)	1,2,3-Trichlorobenzene	21.80	180	436583	21.87	ug/L	95
98)	1,3,5-Trichlorobenzene	19.89	180	820285	20.93	ug/L	100

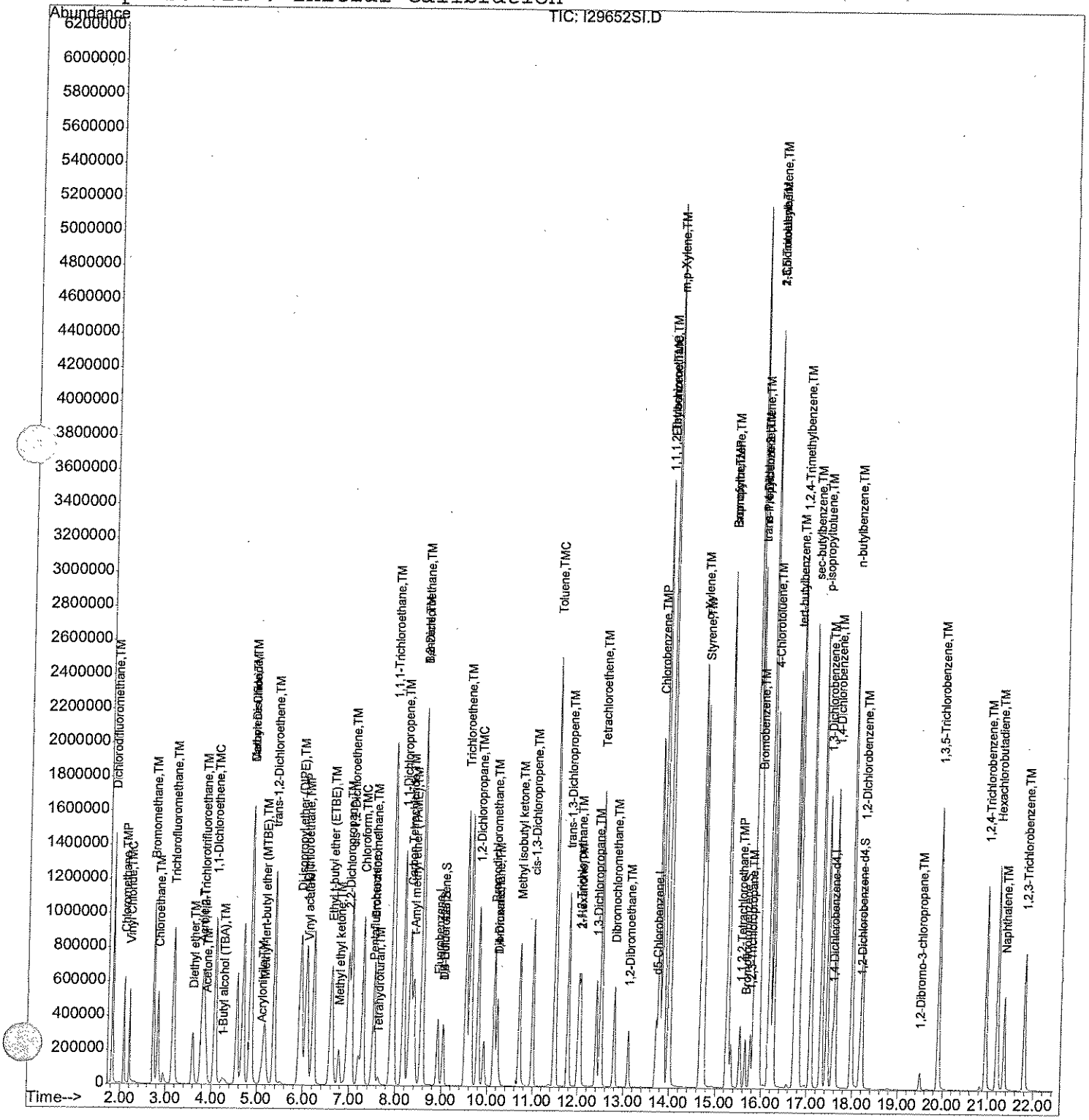
(#) = qualifier out of range (m) = manual integration
I29652SI.D V505238I.M Tue May 27 10:08:03 2008 Page 3

Data File : D:\HPCHEM\DATA\052308-I\I29652SI.D
Acq On : 23 May 2008 2:48 pm
Sample : 20 PPB STD
Misc : 25000
MS Integration Params: rteint.p
Quant Time: May 27 10:08 2008

Vial: 10
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: V505238I.RE

Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration



VOLATILE ORGANIC AQUEOUS
LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
PERCENT RECOVERY

AK 5.27.08

Instrument ID: I
GC Column: RTX-502.2
Column ID: 0.25 mm

SDG:
Non-spiked sample: B505238I
Spike: L505238I
Spike Duplicate L505238I2

COMPOUND	SPIKE ADDED	LOWER LIMIT	UPPER LIMIT	RPD LIMIT	NON-SPIKE RESULT (ug/L)	SPIKE RESULT (ug/L)	SPIKE % REC	#	SPIKE DUP RESULT (ug/L)	SPIKE DUP % REC	#	RPD	#
Dichlorodifluoromethane	1	70	130	15	0.00	1.10	110		1.03	103		7	
Chloromethane	1	70	130	15	0.00	1.15	115		1.02	102		12	
Vinyl Chloride	1	70	130	15	0.00	1.03	103		0.95	95		9	
Bromomethane	1	70	130	15	0.00	1.15	115		1.09	109		5	
Chloroethane	1	70	130	15	0.00	1.01	101		0.97	97		4	
t-Butyl alcohol (TBA)	5	70	130	15	0.00	4.94	99		5.43	109		9	
Trichlorofluoromethane	1	70	130	15	0.00	0.98	98		0.93	93		6	
Diethyl ether	1	70	130	15	0.00	0.98	98		1.01	101		3	
1,1,2-Trichlorotrifluoroethane	1	70	130	15	0.00	1.18	118		1.07	107		10	
Acetone	5	70	130	15	0.00	5.71	114		6.32	126		10	
1,1-Dichloroethene	1	70	130	15	0.00	1.10	110		1.01	101		8	
Di-isopropyl ether (DIPE)	1	70	130	15	0.00	0.98	98		0.95	95		3	
Methylene Chloride	1	70	130	15	0.00	0.92	92		0.93	93		0	
Carbon Disulfide	1	70	130	15	0.00	1.13	113		1.03	103		9	
Acrylonitrile	1	70	130	15	0.00	1.01	101		1.00	100		1	
Methyl-tert-butyl ether (MTBE)	2	70	130	15	0.00	1.90	95		1.99	100		5	
trans-1,2-Dichloroethene	1	70	130	15	0.00	1.06	106		1.01	101		5	
1,1-Dichloroethane	1	70	130	15	0.00	1.04	104		1.00	100		4	
Methyl ethyl ketone	5	70	130	15	0.00	5.62	112		6.19	124		10	
Ethyl t-butyl ether (ETBE)	1	70	130	15	0.00	0.94	94		0.97	97		3	
2,2-Dichloropropane	1	70	130	15	0.00	0.94	94		0.90	90		5	
cis-1,2-Dichloroethene	1	70	130	15	0.00	1.07	107		1.04	104		2	
t-Amyl methyl ether (TAME)	1	70	130	15	0.00	0.94	94		0.97	97		3	
Chloroform	1	70	130	15	0.00	1.01	101		0.98	98		3	
Bromochloromethane	1	70	130	15	0.00	0.99	99		0.95	95		4	
Tetrahydrofuran	1	70	130	15	0.00	1.03	103		1.19	119		14	
1,1,1-Trichloroethane	1	70	130	15	0.00	1.04	104		0.98	98		6	
1,1-Dichloropropene	1	70	130	15	0.00	1.05	105		0.99	99		6	
Carbon Tetrachloride	1	70	130	15	0.00	1.05	105		0.98	98		6	
1,2-Dichloroethane	1	70	130	15	0.00	0.99	99		0.97	97		2	
Benzene	1	70	130	15	0.00	1.04	104		1.02	102		2	
Trichloroethene	1	70	130	15	0.00	1.08	108		1.02	102		6	
1,2-Dichloropropane	1	70	130	15	0.00	1.02	102		1.02	102		1	
Bromodichloromethane	1	70	130	15	0.00	1.03	103		1.02	102		1	
Dibromomethane	1	70	130	15	0.00	0.97	97		0.99	99		2	
2-Hexanone	5	70	130	15	0.00	5.58	112		5.81	116		4	
Methyl isobutyl ketone	5	70	130	15	0.00	5.48	110		5.93	119		8	
cis-1,3-Dichloropropene	1	70	130	15	0.00	1.00	100		0.99	99		1	
Toluene	1	70	130	15	0.00	1.06	106		1.03	103		2	
trans-1,3-Dichloropropene	1	70	130	15	0.00	0.88	88		0.84	84		4	
1,1,2-Trichloroethane	1	70	130	15	0.00	1.06	106		1.04	104		2	
1,3-Dichloropropane	1	70	130	15	0.00	1.04	104		1.05	105		1	
Tetrachloroethene	1	70	130	15	0.00	1.11	111		1.03	103		8	
Dibromochloromethane	1	70	130	15	0.00	0.98	98		0.98	98		1	
1,2-Dibromoethane	1	70	130	15	0.00	0.99	99		1.03	103		4	
Chlorobenzene	1	70	130	15	0.00	1.04	104		0.99	99		5	

VOA FORM 3

VOLATILE ORGANIC AQUEOUS
LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
PERCENT RECOVERY

Instrument ID: I
GC Column: RTX-502.2
Column ID: 0.25 mm

SDG:
Non-spiked sample: B505238I
Spike: L505238I
Spike Duplicate L505238I2

COMPOUND	SPIKE ADDED	LOWER LIMIT	UPPER LIMIT	RPD LIMIT	NON-SPIKE RESULT (ug/L)	SPIKE RESULT (ug/L)	SPIKE % REC	#	SPIKE DUP RESULT (ug/L)	SPIKE DUP % REC	#	RPD	#
1,1,1,2-Tetrachloroethane	1	70	130	15	0.00	1.07	107		1.01	101		6	
Ethylbenzene	1	70	130	15	0.00	1.08	108		1.02	102		6	
m,p-Xylene	2	70	130	15	0.00	2.21	110		2.06	103		7	
o-Xylene	1	70	130	15	0.00	1.06	106		1.01	101		5	
Styrene	1	70	130	15	0.00	1.07	107		1.01	101		6	
Bromoform	1	70	130	15	0.00	0.96	96		0.98	98		2	
Isopropylbenzene	1	70	130	15	0.00	0.97	97		0.90	90		7	
1,1,2,2-Tetrachloroethane	1	70	130	15	0.00	0.95	95		0.95	95		0	
1,2,3-Trichloropropane	1	70	130	15	0.00	1.02	102		1.09	109		6	
trans-1,4-Dichloro-2-butene	1	70	130	15	0.00	0.93	93		0.90	90		3	
n-Propylbenzene	1	70	130	15	0.00	1.07	107		0.98	98		9	
Bromobenzene	1	70	130	15	0.00	1.06	106		1.02	102		4	
1,3,5-Trimethylbenzene	1	70	130	15	0.00	1.11	111		1.02	102		9	
2-Chlorotoluene	1	70	130	15	0.00	1.07	107		1.03	103		4	
4-Chlorotoluene	1	70	130	15	0.00	1.07	107		1.01	101		6	
tert-butylbenzene	1	70	130	15	0.00	1.09	109		0.99	99		9	
1,2,4-Trimethylbenzene	1	70	130	15	0.00	1.14	114		1.06	106		7	
sec-butylbenzene	1	70	130	15	0.00	1.08	108		0.99	99		8	
p-isopropyltoluene	1	70	130	15	0.00	1.06	106		0.97	97		8	
1,3-Dichlorobenzene	1	70	130	15	0.00	1.05	105		1.00	100		5	
1,4-Dichlorobenzene	1	70	130	15	0.00	1.04	104		0.96	96		7	
n-butylbenzene	1	70	130	15	0.00	1.14	114		1.00	100		13	
1,2-Dichlorobenzene	1	70	130	15	0.00	1.05	105		1.01	101		4	
1,2-Dibromo-3-chloropropane	1	70	130	15	0.00	0.99	99		0.93	93		6	
1,2,4-Trichlorobenzene	1	70	130	15	0.00	1.03	103		0.99	99		4	
Hexachlorobutadiene	1	70	130	15	0.00	1.12	112		1.04	104		8	
Naphthalene	1	70	130	15	0.00	0.96	96		0.94	94		2	
1,2,3-Trichlorobenzene	1	70	130	15	0.00	1.04	104		1.01	101		2	
1,3,5-Trichlorobenzene	1	70	130	15	0.00	1.09	109		1.05	105		4	

Column to be used to flag recovery and RPD values outside of QC limits
* Values outside QC limits

Non-spike result of "0" used in place of "U" to allow calculation of spike recovery

Comments: _____

VOA FORM 3

Data File : D:\HPCHEM\DATA\052308-I\I29655Q.D Vial: 13
Acq On : 23 May 2008 4:39 pm Operator:
Sample : L505238I Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p

Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Multiple Level Calibration

AK 5.27.08

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 500%

GW 5.27

		Compound	AvgRF	CCRF		%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000		0.0	106	-0.02
2	TM	Dichlorodifluoromethane	1.001	1.104		-10.3	114	-0.02
3	TMP	Chloromethane	0.481	0.551		-14.6	119	-0.02
4	TMC	Vinyl Chloride	0.372	0.384		-3.2	108	-0.02
5	TM	Bromomethane	0.715	0.823		-15.1	120	-0.02
6	TM	Chloroethane	0.568	0.573		-0.9	102	-0.02
7	TM	t-Butyl alcohol (TBA)	0.015	0.015		0.0	104	-0.04
8	TM	Trichlorofluoromethane	1.132	1.114		1.6	102	-0.02
9	TM	Diethyl ether	0.173	0.170		1.7	97	-0.02
10	TM	1,1,2-Trichlorotrifluoroeth	0.650	0.765		-17.7	120	-0.02
11	T	Acrolein	0.140	0.011	NT	92.1#	8#	-0.02
12	TM	Acetone	0.046	0.052		-13.0	114	-0.02
13	TMC	1,1-Dichloroethene	0.958	1.055		-10.1	114	-0.02
14	T	Methyl iodide	0.000	0.000		0.0	93	-0.02
15	TM	Di-isopropyl ether (DIPE)	1.578	1.547		2.0	102	-0.02
16	TM	Methylene Chloride	0.825	1.003		-21.6	104	-0.02
17	TM	Carbon Disulfide	2.045	2.309		-12.9	115	-0.03
18	TM	Acrylonitrile	0.065	0.066		-1.5	102	-0.02
19	TM	Methyl-tert-butyl ether (MT	0.719	1.367	Decline	-90.1#	199	-0.03
20	TM	trans-1,2-Dichloroethene	0.687	0.729		-6.1	110	-0.03
21	TMP	1,1-Dichloroethane	1.126	1.170		-3.9	104	-0.02
22	T	Vinyl acetate	0.419	0.273	NT	34.8#	67	-0.02
23	TM	Methyl ethyl ketone	0.016	0.018		-12.5	114	-0.02
24	TM	Ethyl t-butyl ether (ETBE)	1.208	1.137		5.9	97	-0.02
25	TM	2,2-Dichloropropane	0.872	0.818		6.2	97	-0.02
26	TM	cis-1,2-Dichloroethene	0.653	0.697		-6.7	109	-0.02
27	TM	t-Amyl methyl ether (TAME)	0.833	0.779		6.5	98	-0.02
28	S	DB Holder #28	1.835	1.797		2.1	101	-0.02
29	TMC	Chloroform	1.039	1.050		-1.1	105	-0.02
30	TM	Bromochloromethane	0.225	0.222		1.3	106	-0.03
31	TM	Tetrahydrofuran	0.040	0.041		-2.5	86	-0.02
32	TM	1,1,1-Trichloroethane	0.975	1.014		-4.0	107	-0.02
33	T	NO COMPOUND	0.000	0.000		0.0	0#	-0.06
34	TM	1,1-Dichloropropene	0.893	0.937		-4.9	107	-0.02
35	TM	Carbon Tetrachloride	0.784	0.819		-4.5	108	-0.02
36	S	1,4-Difluorobenzene	1.835	1.797		2.1	101	-0.02
37	TM	1,2-Dichloroethane	0.469	0.464		1.1	100	-0.02
38	TM	Benzene	2.229	2.318		-4.0	106	-0.02
39	I	Fluorobenzene	1.000	1.000		0.0	102	-0.02
40	TM	Trichloroethene	0.295	0.318		-7.8	110	-0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\DATA\052308-I\I29655Q.D Vial: 13
Acq On : 23 May 2008 4:39 pm Operator:
Sample : L505238I Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p

Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	TMC	1,2-Dichloropropane	0.220	0.225	-2.3	101	-0.02
42	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
43	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
44	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
45	TM	Bromodichloromethane	0.273	0.282	-3.3	106	-0.03
46	TM	Dibromomethane	0.097	0.094	3.1	92	-0.02
47	T	1,4-Dioxane	0.001	0.001	0.0	104	-0.02
48	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
49	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
50	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.48
51	TM	2-Hexanone	0.021	0.023	-9.5	126	-0.02
52	TM	Methyl isobutyl ketone	0.028	0.030	-7.1	114	-0.02
53	TM	cis-1,3-Dichloropropene	0.287	0.286	0.3	104	-0.02
54	S	Bromofluorobenzene	0.265	0.256	3.4	98	-0.02
55	TMC	Toluene	0.620	0.657	-6.0	107	-0.02
56	TM	trans-1,3-Dichloropropene	0.205	0.180	12.2	95	-0.02
57	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
58	TM	1,1,2-Trichloroethane	0.091	0.096	-5.5	105	-0.02
59	TM	1,3-Dichloropropane	0.192	0.200	-4.2	106	-0.02
60	TM	Tetrachloroethene	0.273	0.303	-11.0	115	-0.02
61	TM	Dibromochloromethane	0.152	0.149	2.0	106	-0.02
62	TM	1,2-Dibromoethane	0.110	0.109	0.9	102	-0.02
63	I	d5-Chlorobenzene	1.000	1.000	0.0	102	-0.02
64	TMP	Chlorobenzene	1.039	1.081	-4.0	103	-0.02
65	TM	1,1,1,2-Tetrachloroethane	0.313	0.336	-7.3	107	-0.02
66	TMC	Ethylbenzene	1.926	2.089	-8.5	108	-0.02
67	TM	m,p-Xylene	0.720	0.795	-10.4	110	-0.02
68	TM	o-Xylene	0.658	0.699	-6.2	109	-0.02
69	TM	Styrene	0.978	1.048	-7.2	108	-0.02
70	TMP	Bromoform	0.109	0.105	3.7	103	-0.02
71	TM	Isopropylbenzene	1.837	1.785	2.8	97	-0.02
72	TMP	1,1,2,2-Tetrachloroethane	0.170	0.161	5.3	95	-0.02
73	S	1,2-Dichlorobenzene-d4	0.296	0.292	1.4	98	-0.02
74	TM	1,2,3-Trichloropropane	0.117	0.120	-2.6	108	-0.02
75	TM	trans-1,4-Dichloro-2-butene	0.019	0.016	15.8	113	-0.01
76	TM	n-Propylbenzene	2.185	2.341	-7.1	106	-0.02
77	TM	Bromobenzene	0.311	0.330	-6.1	107	-0.02
78	TM	1,3,5-Trimethylbenzene	1.377	1.527	-10.9	111	-0.02
79	TM	2-Chlorotoluene	1.327	1.416	-6.7	104	-0.02
80	TM	4-Chlorotoluene	1.180	1.265	-7.2	107	-0.02

(#) = Out of Range

Data File : D:\HPCHEM\DATA\052308-I\I29655Q.D Vial: 13
Acq On : 23 May 2008 4:39 pm Operator:
Sample : L505238I Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p

Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
81	TM	tert-butylbenzene	1.165	1.269	-8.9	111	-0.02
82	TM	1,2,4-Trimethylbenzene	1.314	1.500	-14.2	112	-0.02
83	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.48
84	TM	sec-butylbenzene	1.868	2.012	-7.7	108	-0.02
85	TM	p-isopropyltoluene	1.426	1.511	-6.0	107	-0.02
86	TM	1,3-Dichlorobenzene	0.609	0.641	-5.3	104	-0.02
87	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	100	-0.02
88	TM	1,4-Dichlorobenzene	1.615	1.674	-3.7	100	-0.02
89	TM	n-butylbenzene	3.612	4.106	-13.7	113	-0.02
90	TM	1,2-Dichlorobenzene	1.268	1.335	-5.3	103	-0.02
91	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
92	TM	1,2-Dibromo-3-chloropropane	0.056	0.056	0.0	108	-0.02
[illegible]	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
[illegible]	TM	1,2,4-Trichlorobenzene	0.801	0.822	-2.6	103	-0.02
95	TM	Hexachlorobutadiene	0.530	0.595	-12.3	111	-0.02
96	TM	Naphthalene	0.856	0.820	4.2	100	-0.02
97	TM	1,2,3-Trichlorobenzene	0.589	0.611	-3.7	107	-0.02
98	TM	1,3,5-Trichlorobenzene	1.156	1.262	-9.2	109	-0.02

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\DATA\052308-I\I29655Q.D Vial: 13
Acq On : 23 May 2008 4:39 pm Operator:
Sample : L505238I Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
Integration Params: rteint.p
Quant Time: May 27 10:08 2008 Quant Results File: V505238I.RES

Quant Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration
DataAcq Meth : V505238I

AK 5.27.08 GN 5.2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.51	168	264207	4.00	ug/L	-0.02
39) Fluorobenzene	8.92	96	596202	4.00	ug/L	-0.02
63) d5-Chlorobenzene	13.71	117	355389	4.00	ug/L	-0.02
87) 1,4-Dichlorobenzene-d4	17.56	152	129533	4.00	ug/L	-0.02
System Monitoring Compounds						
28) DB Holder #28	9.03	114	474739	3.92	ug/L	-0.02
Spiked Amount 4.000	Range 70 - 130		Recovery = 98.00%			
36) 1,4-Difluorobenzene	9.03	114	474739	3.92	ug/L	-0.02
Spiked Amount 4.000	Range 70 - 130		Recovery = 98.00%			
54) Bromofluorobenzene	15.65	95	152440	3.86	ug/L	-0.02
Spiked Amount 4.000	Range 70 - 130		Recovery = 96.50%			
73) 1,2-Dichlorobenzene-d4	18.16	152	103789	3.94	ug/L	-0.02
Spiked Amount 4.000	Range 70 - 130		Recovery = 98.50%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.83	85	72934	1.10	ug/L	97
3) Chloromethane	2.09	50	36399	1.15	ug/L	99
4) Vinyl Chloride	2.22	62	25350	1.03	ug/L	97
5) Bromomethane	2.73	94	54372	1.15	ug/L	99
6) Chloroethane	2.84	64	37865	1.01	ug/L	95
7) t-Butyl alcohol (TBA)	4.27	59	4979	4.94	ug/L #	92
8) Trichlorofluoromethane	3.17	101	73560	0.98	ug/L	100
9) Diethyl ether	3.61	74	11230	0.98	ug/L	92
10) 1,1,2-Trichlorotrifluoroet	3.82	101	50522	1.18	ug/L	92
11) Acrolein	3.79	56	728	0.08	ug/L	96
12) Acetone	3.91	43	17319	5.71	ug/L #	87
13) 1,1-Dichloroethene	4.08	61	69659	1.10	ug/L	99
15) Di-isopropyl ether (DIPE)	5.96	45	102193	0.98	ug/L	95
16) Methylene Chloride	4.88	84	66223	0.92	ug/L	91
17) Carbon Disulfide	4.85	76	152530	1.13	ug/L	100
18) Acrylonitrile	5.09	53	4355	1.01	ug/L	95
19) Methyl-tert-butyl ether (M	5.17	73	90280	1.90	ug/L #	89
20) trans-1,2-Dichloroethene	5.37	96	48136	1.06	ug/L	97
21) 1,1-Dichloroethane	6.07	63	77255	1.04	ug/L	98
22) Vinyl acetate	6.12	43	18005	0.65	ug/L #	90
23) Methyl ethyl ketone	6.80	72	6034	5.62	ug/L	84
24) Ethyl t-butyl ether (ETBE)	6.62	59	75133	0.94	ug/L	96
25) 2,2-Dichloropropane	6.98	77	54004	0.94	ug/L	99
26) cis-1,2-Dichloroethene	7.04	96	46010	1.07	ug/L	97
27) t-Amyl methyl ether (TAME)	8.40	73	51449	0.94	ug/L #	93
29) Chloroform	7.29	83	69356	1.01	ug/L	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\DATA\052308-I\I29655Q.D Vial: 13
Acq On : 23 May 2008 4:39 pm Operator:
Sample : L505238I Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
Integration Params: rteint.p
Quant Time: May 27 10:08 2008 Quant Results File: V505238I.RES

Quant Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration
DataAcq Meth : V505238I

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
30) Bromochloromethane	7.54	128	14664	0.99 ug/L #	80
31) Tetrahydrofuran	7.68	42	2732	1.03 ug/L	88
32) 1,1,1-Trichloroethane	7.92	97	66998	1.04 ug/L	96
34) 1,1-Dichloropropene	8.17	75	61908	1.05 ug/L	99
35) Carbon Tetrachloride	8.32	119	54123	1.05 ug/L	97
37) 1,2-Dichloroethane	8.55	62	30661	0.99 ug/L	99
38) Benzene	8.57	78	153075	1.04 ug/L	96
40) Trichloroethene	9.53	95	47441	1.08 ug/L	93
41) 1,2-Dichloropropane	9.79	63	33601	1.02 ug/L	99
45) Bromodichloromethane	10.14	83	41994	1.03 ug/L	93
46) Dibromomethane	10.22	93	14012	0.97 ug/L	94
47) 1,4-Dioxane	10.24	88	2668	24.40 ug/L	99
51) 2-Hexanone	12.06	58	17344	5.58 ug/L	92
52) Methyl isobutyl ketone	10.72	58	22708	5.48 ug/L	90
53) cis-1,3-Dichloropropene	11.00	75	42586	1.00 ug/L	98
55) Toluene	11.49	92	97993	1.06 ug/L	99
56) trans-1,3-Dichloropropene	11.78	75	26812	0.88 ug/L	98
58) 1,1,2-Trichloroethane	12.01	83	14374	1.06 ug/L	98
59) 1,3-Dichloropropane	12.40	76	29766	1.04 ug/L	100
60) Tetrachloroethene	12.49	166	45179	1.11 ug/L	96
61) Dibromochloromethane	12.79	129	22187	0.98 ug/L	99
62) 1,2-Dibromoethane	13.11	107	16224	0.99 ug/L	95
64) Chlorobenzene	13.77	112	96017	1.04 ug/L	98
65) 1,1,1,2-Tetrachloroethane	13.84	131	29813	1.07 ug/L	95
66) Ethylbenzene	13.86	91	185570	1.08 ug/L	97
67) m,p-Xylene	13.99	106	141199	2.21 ug/L	98
68) o-Xylene	14.68	106	62095	1.06 ug/L	96
69) Styrene	14.74	104	93118	1.07 ug/L	94
70) Bromoform	15.24	173	9309	0.96 ug/L	94
71) Isopropylbenzene	15.26	105	158559	0.97 ug/L	96
72) 1,1,2,2-Tetrachloroethane	15.53	83	14338	0.95 ug/L	99
74) 1,2,3-Trichloropropane	15.76	75	10618	1.02 ug/L	97
75) trans-1,4-Dichloro-2-buten	15.89	88	1419	0.93 ug/L #	63
76) n-Propylbenzene	15.90	91	207979	1.07 ug/L	95
77) Bromobenzene	15.94	156	29356	1.06 ug/L #	85
78) 1,3,5-Trimethylbenzene	16.16	105	135637	1.11 ug/L	98
79) 2-Chlorotoluene	16.17	91	125784	1.07 ug/L	95
80) 4-Chlorotoluene	16.25	91	112388	1.07 ug/L	92
81) tert-butylbenzene	16.73	119	112718	1.09 ug/L	94
82) 1,2,4-Trimethylbenzene	16.79	105	133298	1.14 ug/L	100
84) sec-butylbenzene	17.07	105	178721	1.08 ug/L	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\DATA\052308-I\I29655Q.D Vial: 13
Acq On : 23 May 2008 4:39 pm Operator:
Sample : L505238I Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
Integration Params: rteint.p
Quant Time: May 27 10:08 2008 Quant Results File: V505238I.RES

Quant Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration
DataAcq Meth : V505238I

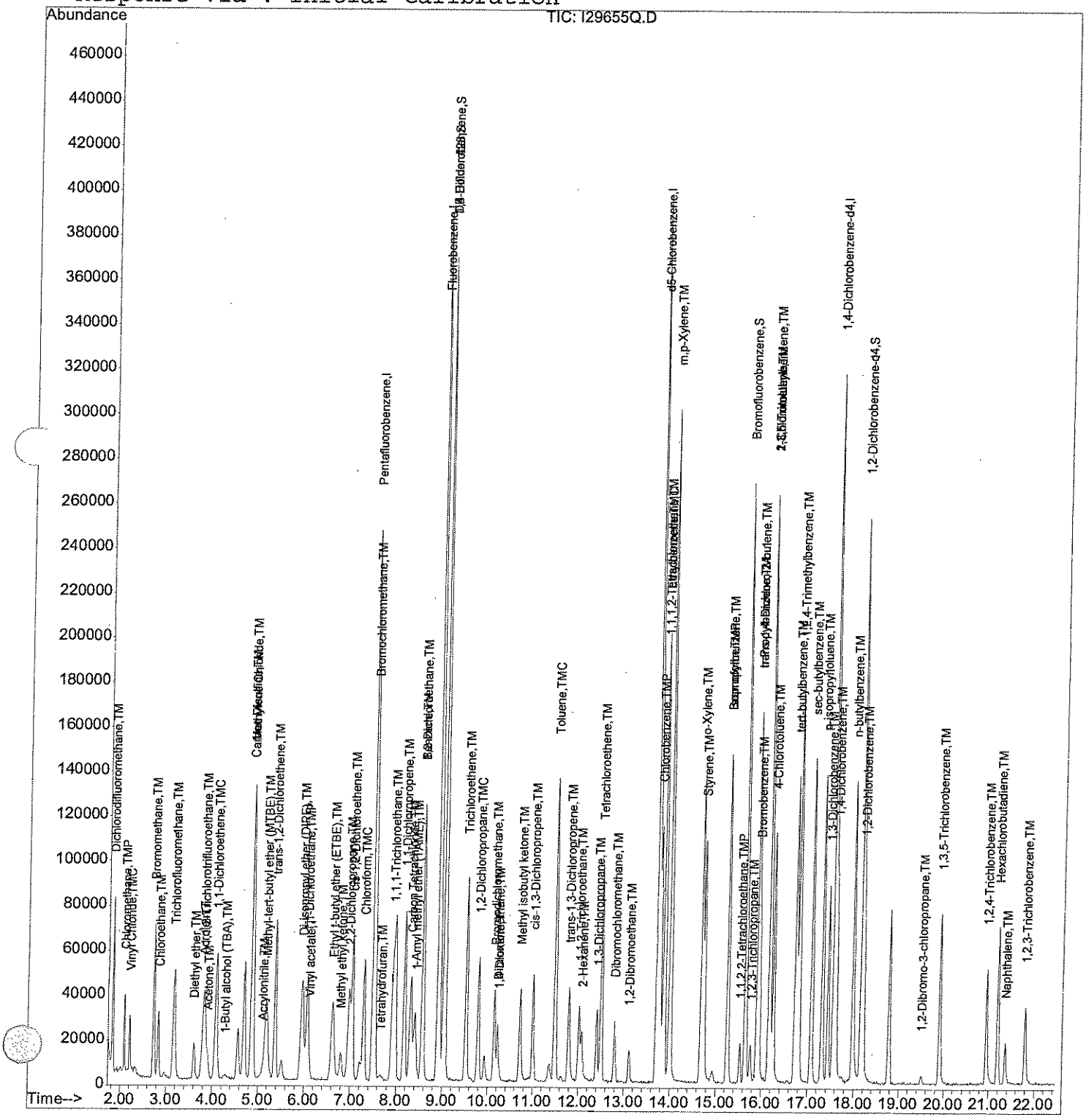
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
85) p-isopropyltoluene	17.31	119	134266	1.06 ug/L	100
86) 1,3-Dichlorobenzene	17.44	146	56988	1.05 ug/L	97
88) 1,4-Dichlorobenzene	17.61	146	54213	1.04 ug/L	98
89) n-butylbenzene	17.97	91	132978	1.14 ug/L	92
90) 1,2-Dichlorobenzene	18.21	146	43242	1.05 ug/L	100
92) 1,2-Dibromo-3-chloropropan	19.50	75	1810	0.99 ug/L	94
94) 1,2,4-Trichlorobenzene	20.95	180	26612	1.03 ug/L	99
95) Hexachlorobutadiene	21.20	225	19259	1.12 ug/L	98
96) Naphthalene	21.36	128	26554	0.96 ug/L	95
97) 1,2,3-Trichlorobenzene	21.79	180	19772	1.04 ug/L	95
98) 1,3,5-Trichlorobenzene	19.90	180	40880	1.09 ug/L	98

(#) = qualifier out of range (m) = manual integration
I29655Q.D V505238I.M Tue May 27 10:08:05 2008 Page 3

Quantitation Report

Data File : D:\HPCHEM\DATA\052308-I\I29655Q.D Vial: 13
Acq On : 23 May 2008 4:39 pm Operator:
Sample : L505238I Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 27 10:08 2008 Quant Results File: V505238I.RE

Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration



Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\DATA\052308-I\I29656Q.D Vial: 14
Acq On : 23 May 2008 5:12 pm Operator:
Sample : L505238I2 Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p

Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Multiple Level Calibration

5.27.08 AK 5.27.08

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF		%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000		0.0	106	-0.03
2	TM	Dichlorodifluoromethane	1.001	1.034		-3.3	106	-0.02
3	TMP	Chloromethane	0.481	0.489		-1.7	105	-0.02
4	TMC	Vinyl Chloride	0.372	0.352		5.4	99	-0.02
5	TM	Bromomethane	0.715	0.783		-9.5	113	-0.02
6	TM	Chloroethane	0.568	0.549		3.3	97	-0.02
7	TM	t-Butyl alcohol (TBA)	0.015	0.017		-13.3	114	-0.04
8	TM	Trichlorofluoromethane	1.132	1.047		7.5	95	-0.02
9	TM	Diethyl ether	0.173	0.174		-0.6	99	-0.02
10	TM	1,1,2-Trichlorotrifluoroeth	0.650	0.695		-6.9	109	-0.02
11	T	Acrolein	0.140	0.011	NT	92.1#	8#	-0.03
12	TM	Acetone	0.046	0.058		-26.1	126	-0.02
13	TMC	1,1-Dichloroethene	0.958	0.973		-1.6	104	-0.03
14	T	Methyl iodide	0.000	0.000		0.0	91	-0.03
15	TM	Di-isopropyl ether (DIPE)	1.578	1.498		5.1	98	-0.02
16	TM	Methylene Chloride	0.825	1.004		-21.7	104	-0.03
17	TM	Carbon Disulfide	2.045	2.110		-3.2	105	-0.03
18	TM	Acrylonitrile	0.065	0.065		0.0	100	-0.03
19	TM	Methyl-tert-butyl ether (MT	0.719	1.433		-99.3#	208	-0.03
20	TM	trans-1,2-Dichloroethene	0.687	0.694		-1.0	105	-0.03
21	TMP	1,1-Dichloroethane	1.126	1.128		-0.2	100	-0.03
22	T	Vinyl acetate	0.419	0.264	NT	37.0#	65	-0.03
23	TM	Methyl ethyl ketone	0.016	0.020		-25.0	125	-0.02
24	TM	Ethyl t-butyl ether (ETBE)	1.208	1.176		2.6	100	-0.02
25	TM	2,2-Dichloropropane	0.872	0.781		10.4	92	-0.02
26	TM	cis-1,2-Dichloroethene	0.653	0.680		-4.1	106	-0.03
27	TM	t-Amyl methyl ether (TAME)	0.833	0.804		3.5	101	-0.02
28	S	DB Holder #28	1.835	1.838		-0.2	103	-0.03
29	TMC	Chloroform	1.039	1.022		1.6	102	-0.02
30	TM	Bromochloromethane	0.225	0.214		4.9	102	-0.03
31	TM	Tetrahydrofuran	0.040	0.048		-20.0	99	-0.02
32	TM	1,1,1-Trichloroethane	0.975	0.952		2.4	100	-0.02
33	T	NO COMPOUND	0.000	0.000		0.0	0#	-0.06
34	TM	1,1-Dichloropropene	0.893	0.882		1.2	101	-0.02
35	TM	Carbon Tetrachloride	0.784	0.768		2.0	101	-0.03
36	S	1,4-Difluorobenzene	1.835	1.838		-0.2	103	-0.03
37	TM	1,2-Dichloroethane	0.469	0.455		3.0	98	-0.02
38	TM	Benzene	2.229	2.262		-1.5	103	-0.03
39	I	Fluorobenzene	1.000	1.000		0.0	101	-0.02
40	TM	Trichloroethene	0.295	0.301		-2.0	103	-0.03

(#) = Out of Range

Data File : D:\HPCHEM\DATA\052308-I\I29656Q.D Vial: 14
Acq On : 23 May 2008 5:12 pm Operator:
Sample : L505238I2 Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p

Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	TMC	1,2-Dichloropropane	0.220	0.224	-1.8	99	-0.03
42	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
43	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
44	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
45	TM	Bromodichloromethane	0.273	0.278	-1.8	104	-0.03
46	TM	Dibromomethane	0.097	0.096	1.0	93	-0.03
47	T	1,4-Dioxane	0.001	0.001	0.0	105	-0.04
48	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
49	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
50	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.48
51	TM	2-Hexanone	0.021	0.025	-19.0	132	-0.02
52	TM	Methyl isobutyl ketone	0.028	0.033	-17.9	123	-0.02
53	TM	cis-1,3-Dichloropropene	0.287	0.283	1.4	102	-0.03
54	S	Bromofluorobenzene	0.265	0.268	-1.1	102	-0.02
55	TMC	Toluene	0.620	0.642	-3.5	103	-0.03
56	TM	trans-1,3-Dichloropropene	0.205	0.172	16.1	90	-0.02
57	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
58	TM	1,1,2-Trichloroethane	0.091	0.095	-4.4	103	-0.01
59	TM	1,3-Dichloropropane	0.192	0.201	-4.7	106	-0.03
60	TM	Tetrachloroethene	0.273	0.280	-2.6	105	-0.02
61	TM	Dibromochloromethane	0.152	0.150	1.3	106	-0.02
62	TM	1,2-Dibromoethane	0.110	0.113	-2.7	105	-0.02
63	I	d5-Chlorobenzene	1.000	1.000	0.0	105	-0.03
64	TMP	Chlorobenzene	1.039	1.027	1.2	101	-0.03
65	TM	1,1,1,2-Tetrachloroethane	0.313	0.317	-1.3	104	-0.02
66	TMC	Ethylbenzene	1.926	1.968	-2.2	105	-0.02
67	TM	m,p-Xylene	0.720	0.740	-2.8	106	-0.02
68	TM	o-Xylene	0.658	0.664	-0.9	107	-0.03
69	TM	Styrene	0.978	0.991	-1.3	106	-0.02
70	TMP	Bromoform	0.109	0.107	1.8	109	-0.02
71	TM	Isopropylbenzene	1.837	1.660	9.6	92	-0.02
72	TMP	1,1,2,2-Tetrachloroethane	0.170	0.162	4.7	98	-0.01
73	S	1,2-Dichlorobenzene-d4	0.296	0.295	0.3	102	-0.02
74	TM	1,2,3-Trichloropropane	0.117	0.127	-8.5	118	-0.02
75	TM	trans-1,4-Dichloro-2-butene	0.019	0.015	21.1	112	0.00
76	TM	n-Propylbenzene	2.185	2.150	1.6	100	-0.03
77	TM	Bromobenzene	0.311	0.317	-1.9	105	-0.02
78	TM	1,3,5-Trimethylbenzene	1.377	1.399	-1.6	105	-0.02
79	TM	2-Chlorotoluene	1.327	1.366	-2.9	104	-0.02
80	TM	4-Chlorotoluene	1.180	1.188	-0.7	104	-0.02

(#) = Out of Range

Data File : D:\HPCHEM\DATA\052308-I\I29656Q.D Vial: 14
Acq On : 23 May 2008 5:12 pm Operator:
Sample : L505238I2 Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p

Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 500%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
81	TM	tert-butylbenzene	1.165	1.158	0.6	104	-0.03
82	TM	1,2,4-Trimethylbenzene	1.314	1.398	-6.4	108	-0.02
83	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.48
84	TM	sec-butylbenzene	1.868	1.857	0.6	102	-0.02
85	TM	p-isopropyltoluene	1.426	1.390	2.5	102	-0.02
86	TM	1,3-Dichlorobenzene	0.609	0.610	-0.2	101	-0.02
87	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	104	-0.02
88	TM	1,4-Dichlorobenzene	1.615	1.555	3.7	97	-0.02
89	TM	n-butylbenzene	3.612	3.611	0.0	104	-0.02
90	TM	1,2-Dichlorobenzene	1.268	1.278	-0.8	103	-0.02
91	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
92	TM	1,2-Dibromo-3-chloropropane	0.056	0.053	5.4	106	-0.03
93	T	NO COMPOUND	0.000	0.000	0.0	0#	-0.06
94	TM	1,2,4-Trichlorobenzene	0.801	0.789	1.5	104	-0.02
95	TM	Hexachlorobutadiene	0.530	0.549	-3.6	107	-0.02
96	TM	Naphthalene	0.856	0.801	6.4	102	-0.03
97	TM	1,2,3-Trichlorobenzene	0.589	0.596	-1.2	109	-0.02
98	TM	1,3,5-Trichlorobenzene	1.156	1.213	-4.9	110	-0.02

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\DATA\052308-I\I29656Q.D
Acq On : 23 May 2008 5:12 pm
Sample : L505238I2
Misc : 25000
Integration Params: rteint.p
Quant Time: May 27 10:08 2008

Vial: 14
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: V505238I.RES

Quant Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration
DataAcq Meth : V505238I

5.27.08 AK 5.27.08

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.50	168	263080	4.00	ug/L	-0.03
39) Fluorobenzene	8.91	96	590700	4.00	ug/L	-0.02
63) d5-Chlorobenzene	13.71	117	366157	4.00	ug/L	-0.03
87) 1,4-Dichlorobenzene-d4	17.56	152	135310	4.00	ug/L	-0.02
System Monitoring Compounds						
28) DB Holder #28	9.03	114	483580	4.01	ug/L	-0.03
Spiked Amount 4.000	Range 70 - 130		Recovery = 100.25%			
36) 1,4-Difluorobenzene	9.03	114	483580	4.01	ug/L	-0.03
Spiked Amount 4.000	Range 70 - 130		Recovery = 100.25%			
54) Bromofluorobenzene	15.65	95	158015	4.04	ug/L	-0.02
Spiked Amount 4.000	Range 70 - 130		Recovery = 101.00%			
73) 1,2-Dichlorobenzene-d4	18.16	152	108048	3.98	ug/L	-0.02
Spiked Amount 4.000	Range 70 - 130		Recovery = 99.50%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.83	85	68031	1.03	ug/L	99
3) Chloromethane	2.08	50	32171	1.02	ug/L	93
4) Vinyl Chloride	2.21	62	23163	0.95	ug/L	99
5) Bromomethane	2.73	94	51474	1.09	ug/L	96
6) Chloroethane	2.83	64	36085	0.97	ug/L	98
7) t-Butyl alcohol (TBA)	4.27	59	5449	5.43	ug/L #	93
8) Trichlorofluoromethane	3.18	101	68870	0.93	ug/L	99
9) Diethyl ether	3.61	74	11469	1.01	ug/L #	90
10) 1,1,2-Trichlorotrifluoroet	3.83	101	45704	1.07	ug/L	95
11) Acrolein	3.79	56	730	0.08	ug/L	91
12) Acetone	3.91	43	19104	6.32	ug/L	96
13) 1,1-Dichloroethene	4.07	61	63974	1.01	ug/L	98
15) Di-isopropyl ether (DIPE)	5.96	45	98549	0.95	ug/L	96
16) Methylene Chloride	4.87	84	66019	0.93	ug/L	90
17) Carbon Disulfide	4.85	76	138792	1.03	ug/L	100
18) Acrylonitrile	5.09	53	4292	1.00	ug/L	91
19) Methyl-tert-butyl ether (M	5.18	73	94220	1.99	ug/L #	91
20) trans-1,2-Dichloroethene	5.37	96	45651	1.01	ug/L	97
21) 1,1-Dichloroethane	6.06	63	74185	1.00	ug/L	97
22) Vinyl acetate	6.10	43	17376	0.63	ug/L #	93
23) Methyl ethyl ketone	6.79	72	6615	6.19	ug/L	95
24) Ethyl t-butyl ether (ETBE)	6.62	59	77333	0.97	ug/L	96
25) 2,2-Dichloropropane	6.98	77	51373	0.90	ug/L	98
26) cis-1,2-Dichloroethene	7.04	96	44756	1.04	ug/L	94
27) t-Amyl methyl ether (TAME)	8.40	73	52889	0.97	ug/L	93
29) Chloroform	7.30	83	67208	0.98	ug/L	99

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\DATA\052308-I\I29656Q.D Vial: 14
Acq On : 23 May 2008 5:12 pm Operator:
Sample : L505238I2 Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
Integration Params: rteint.p
Quant Time: May 27 10:08 2008 Quant Results File: V505238I.RES

Quant Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration
DataAcq Meth : V505238I

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
30) Bromochloromethane	7.54	128	14069	0.95 ug/L #	80
31) Tetrahydrofuran	7.67	42	3137	1.19 ug/L #	65
32) 1,1,1-Trichloroethane	7.93	97	62604	0.98 ug/L	95
34) 1,1-Dichloropropene	8.17	75	58012	0.99 ug/L	97
35) Carbon Tetrachloride	8.31	119	50533	0.98 ug/L	100
37) 1,2-Dichloroethane	8.56	62	29913	0.97 ug/L	96
38) Benzene	8.57	78	148786	1.02 ug/L	99
40) Trichloroethene	9.52	95	44385	1.02 ug/L	89
41) 1,2-Dichloropropane	9.79	63	33035	1.02 ug/L	97
45) Bromodichloromethane	10.14	83	41020	1.02 ug/L	98
46) Dibromomethane	10.21	93	14181	0.99 ug/L	92
47) 1,4-Dioxane	10.22	88	2710	25.02 ug/L #	76
51) 2-Hexanone	12.06	58	18143	5.81 ug/L	97
52) Methyl isobutyl ketone	10.71	58	24344	5.93 ug/L	91
53) cis-1,3-Dichloropropene	10.99	75	41826	0.99 ug/L	98
55) Toluene	11.48	92	94831	1.03 ug/L	97
56) trans-1,3-Dichloropropene	11.78	75	25408	0.84 ug/L	97
58) 1,1,2-Trichloroethane	12.02	83	13982	1.04 ug/L	91
59) 1,3-Dichloropropane	12.40	76	29676	1.05 ug/L	96
60) Tetrachloroethene	12.50	166	41407	1.03 ug/L	97
61) Dibromochloromethane	12.79	129	22155	0.98 ug/L	95
62) 1,2-Dibromoethane	13.11	107	16704	1.03 ug/L	94
64) Chlorobenzene	13.77	112	94056	0.99 ug/L	98
65) 1,1,1,2-Tetrachloroethane	13.85	131	29050	1.01 ug/L	95
66) Ethylbenzene	13.87	91	180174	1.02 ug/L	98
67) m,p-Xylene	14.00	106	135549	2.06 ug/L	98
68) o-Xylene	14.68	106	60778	1.01 ug/L	98
69) Styrene	14.73	104	90739	1.01 ug/L	94
70) Bromoform	15.25	173	9800	0.98 ug/L	95
71) Isopropylbenzene	15.26	105	151940	0.90 ug/L	97
72) 1,1,2,2-Tetrachloroethane	15.53	83	14790	0.95 ug/L	99
74) 1,2,3-Trichloropropane	15.76	75	11666	1.09 ug/L	92
75) trans-1,4-Dichloro-2-buten	15.90	88	1408	0.90 ug/L #	68
76) n-Propylbenzene	15.90	91	196783	0.98 ug/L	96
77) Bromobenzene	15.95	156	29030	1.02 ug/L #	88
78) 1,3,5-Trimethylbenzene	16.16	105	128043	1.02 ug/L	98
79) 2-Chlorotoluene	16.17	91	125005	1.03 ug/L	97
80) 4-Chlorotoluene	16.25	91	108781	1.01 ug/L	93
81) tert-butylbenzene	16.73	119	105978	0.99 ug/L	97
82) 1,2,4-Trimethylbenzene	16.79	105	127995	1.06 ug/L	100
84) sec-butylbenzene	17.08	105	169975	0.99 ug/L	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\DATA\052308-I\I29656Q.D Vial: 14
Acq On : 23 May 2008 5:12 pm Operator:
Sample : L505238I2 Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
Integration Params: rteint.p
Quant Time: May 27 10:08 2008 Quant Results File: V505238I.RES

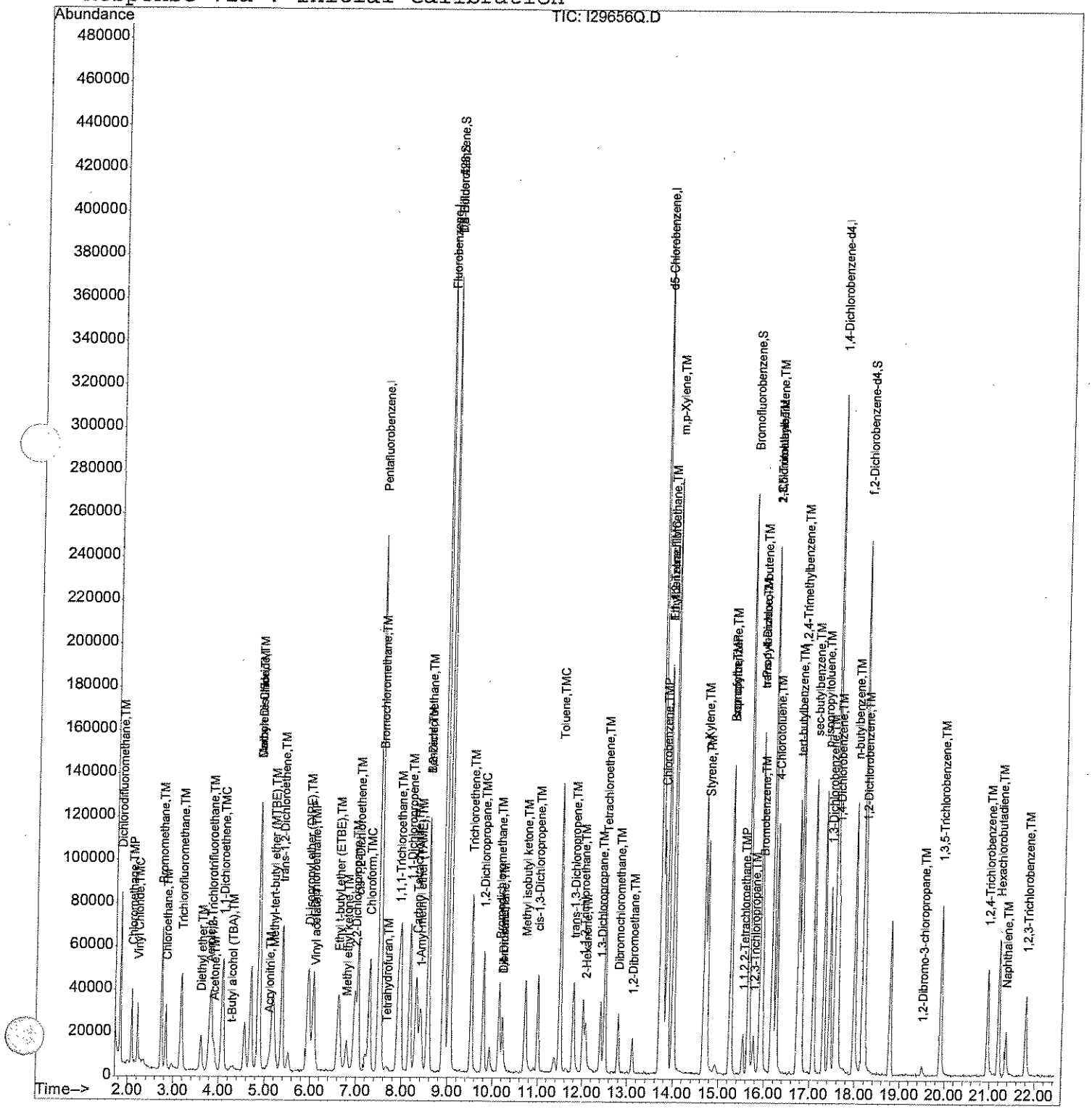
Quant Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration
DataAcq Meth : V505238I

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
85) p-isopropyltoluene	17.31	119	127209	0.97 ug/L	97
86) 1,3-Dichlorobenzene	17.43	146	55814	1.00 ug/L	97
88) 1,4-Dichlorobenzene	17.61	146	52591	0.96 ug/L	100
89) n-butylbenzene	17.98	91	122136	1.00 ug/L	93
90) 1,2-Dichlorobenzene	18.20	146	43223	1.01 ug/L	99
92) 1,2-Dibromo-3-chloropropan	19.48	75	1777	0.93 ug/L #	68
94) 1,2,4-Trichlorobenzene	20.95	180	26685	0.99 ug/L	99
95) Hexachlorobutadiene	21.20	225	18579	1.04 ug/L	96
96) Naphthalene	21.36	128	27108	0.94 ug/L	96
97) 1,2,3-Trichlorobenzene	21.80	180	20173	1.01 ug/L	94
98) 1,3,5-Trichlorobenzene	19.90	180	41048	1.05 ug/L	100

(#) = qualifier out of range (m) = manual integration

Data File : D:\HPCHEM\DATA\052308-I\I29656Q.D Vial: 14
Acq On : 23 May 2008 5:12 pm Operator:
Sample : L505238I2 Inst : GC/MS Ins
Misc : 25000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: May 27 10:08 2008 Quant Results File: V505238I.RE

Method : D:\HPCHEM\METHODS\V505238I.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Fri May 23 14:54:04 2008
Response via : Initial Calibration



VOLATILE ORGANIC INTERNAL STANDARD AREA
AND RETENTION TIME SUMMARY

Instrument ID: 1
GC Column: RTX-502.2
Column ID: 0.25 mm

SDG: 61408

12 HR STANDARD	IS 1 AREA	#	IS 1 RT	#	IS 2 AREA	#	IS 2 RT	#	IS 3 AREA	#	IS 3 RT	#	IS 4 AREA	#	IS 4 RT	#
1.0 PPB STD	249325		7.50		585860		8.91		348982		13.71		130071		17.56	
Upper Limit	498650		7.56		1171720		8.97		697964		13.77		260142		17.62	
Lower limit	174528		7.44		410102		8.85		244287		13.65		91050		17.50	
SAMPLE ID																
0.1 PPB STD	250256		7.50		568707		8.91		339136		13.71		120362		17.55	
0.2 PPB STD	249233		7.49		567130		8.90		344377		13.70		127991		17.55	
0.5 PPB STD	252109		7.49		585967		8.90		357343		13.71		132956		17.55	
1.0 PPB STD	249325		7.50		585860		8.91		348982		13.71		130071		17.56	
2.0 PPB STD	254175		7.50		583903		8.90		350133		13.71		128324		17.55	
5.0 PPB STD	253466		7.50		583941		8.91		358730		13.71		134715		17.56	
10 PPB STD	251356		7.50		563792		8.91		354449		13.71		131274		17.56	
20 PPB STD	256284		7.50		580925		8.91		362462		13.71		135610		17.56	

IS 1 = Pentafluorobenzene
IS 2 = Fluorobenzene
IS 3 = d5-Chlorobenzene
IS 4 = 1,4-Dichlorobenzene-d4

Area upper limit = + 100% IS area
Area lower limit = - 30% IS area
RT upper limit = + 0.06 min of IS RRT
RT lower limit = - 0.06 min of IS RRT

Column to be used to flag values outside of QC limits
* Values outside QC limits

VOA FORM 8

Tune File : D:\HPCHEM\DATA\052308-I\I29644T.D
Tune Time : 23 May 2008 9:35 am

Daily Calibration File : D:\HPCHEM\DATA\052308-I\I29648SI.D

AK 5.27.08

249325 585860 348982

130071

Jm 5.27.08

File	Sample	Surrogate Recovery %				Internal Standard Responses		
I29645SI.D	0.1 PPB	98	98	94	99	250256	568707	339136
				120362				
I29646SI.D	0.2 PPB	99	99	101	100	249233	567130	344377
				127991				
I29647SI.D	0.5 PPB	102	102	101	101	252109	585967	357343
				132956				
I29648SI.D	1.0 PPB	103	103	100	103	249325	585860	348982
				130071				
I29649SI.D	2.0 PPB	99	99	98	99	254175	583903	350133
				128324				
I29650SI.D	5.0 PPB	100	100	102	101	253466	583941	358730
				134715				
I29651SI.D	10 PPB S	99	99	102	99	251356	563792	354449
				131274				
I29652SI.D	20 PPB S	100	100	101	99	256284	580925	362462
				135610				

t - fails 12hr time check * - fails criteria

Created: Tue May 27 10:08:50 2008 GC
MS Ins

VOLATILE ORGANIC INTERNAL STANDARD AREA
AND RETENTION TIME SUMMARY

Instrument ID: I
GC Column: RTX-502.2
Column ID: 0.25 mm

SDG: 61408

12 HR STANDARD	IS 1 AREA	#	IS 1 RT	#	IS 2 AREA	#	IS 2 RT	#	IS 3 AREA	#	IS 3 RT	#	IS 4 AREA	#	IS 4 RT	#
L5052381	264207		7.51		596202		8.92		355389		13.72		129533		17.56	
Upper Limit	528414		7.57		1192404		8.98		710778		13.78		259066		17.62	
Lower limit	184945		7.45		417341		8.86		248772		13.66		90673		17.50	
SAMPLE ID																
L5052381	264207		7.51		596202		8.92		355389		13.72		129533		17.56	
L50523812	263080		7.50		590700		8.91		366157		13.71		135310		17.56	
B5052381	265172		7.50		595051		8.91		365246		13.71		131834		17.55	
61408-1	244590		7.48		562753		8.89		337796		13.70		122090		17.54	
61408-2	246347		7.48		563203		8.89		341814		13.70		122116		17.54	

IS 1 = Pentafluorobenzene
IS 2 = Fluorobenzene
IS 3 = d5-Chlorobenzene
IS 4 = 1,4-Dichlorobenzene-d4

Area upper limit = + 100% IS area
Area lower limit = - 30% IS area
RT upper limit = + 0.06 min of IS RRT
RT lower limit = - 0.06 min of IS RRT

Column to be used to flag values outside of QC limits
* Values outside QC limits

VOA FORM 8

Tune File : D:\HPCHEM\DATA\052308-I\I29654T.D
Tune Time : 23 May 2008 3:54 pm

Daily Calibration File : D:\HPCHEM\DATA\052308-I\I29655Q.D

AK 5.27.08

						Internal Standard Responses		
						264207	596202	355389
						129533		
File	Sample	Surrogate Recovery %						
I29655Q.D	L505238I	98	98	97	99	264207	596202	355389
						129533		
I29656Q.D	L505238I	100	100	101	100	263080	590700	366157
						135310		
I29657B.D	B505238I	99	99	96	100	265172	595051	365246
						131834		
I29658.D	61386-5	99	99	96	99	252722	574251	346222
						124934		
I29659.D	61410-7	99	99	99	98	251954	571444	351700
						126752		
I29660.D	61409-4	101	101	98	101	246861	573286	353366
						130792		
I29661.D	61375-1	101	101	97	101	253609	586245	347158
						126131		
I29662.D	61386-1	101	101	97	102	244838	574148	341302
						125136		
I29663.D	61408-1	99	99	96	99	244590	562753	337796
						122090		
I29664.D	61408-2	101	101	97	100	246347	563203	341814
						122116		
I29665.D	61409-1	101	101	100	101	245218	573961	350733
						125760		
I29666.D	61409-2	102	102	99	102	241957	571711	347576
						126381		
I29667.D	61409-3	100	100	96	99	243245	560178	334412
						120535		
I29668.D	61409-6	101	101	97	99	237618	556855	334754
						118271		

t - fails 12hr time check * - fails criteria

Created: Tue May 27 10:10:03 2008 GC
MS Ins

CHAIN OF CUSTODIES

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Burlington
30 Community Drive, Suite 11
South Burlington, VT 05403 Tel: 802 660 1990

CHAIN OF CUSTODY RECORD

Report to:
Company: Weston Solutions, Inc
Address: 1 Wall St
Manchester, NH 03101
Contact: Joe Schmidl
Phone: 603 656 5400
Fax: 603 656 5401
Contract/
Quote:

Invoice to:
Company: Same
Address:
Contact: Cathy Tremblay
Phone:
Fax: Same

Sampler's Name: Andrew Fullen
Sampler's Signature:

Proj. No.: 13586.184
Project Name: MEPHAS. LO-58
No/Type of Containers²: A=2 V=9

ANALYSIS REQUESTED: TPH-GRO; TPH-DRO (WCS 524.2); 524.2 (EDB); 48Hr turn on these four samples; pH checked on DRO ambers CP 5/22/08

Lab Use Only
Due Date:
Temp. of coolers when received (C°): 1-4° on ice
1 | 2 | 3 | 4 | 5
Custody Seal Intact: N Y
Screened For Radioactivity

Labels 5/22/08 CP 5/22

Matrix¹	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	VOA	A/G 1 Lt.	250 ml	P/O	TPH-GRO	TPH-DRO (WCS 524.2)	524.2 (EDB)	48Hr turn	pH	Lab/Sample ID (Lab Use Only)
W	5/20	1200	X		LS58DW1-0508-034	X	A			3	2	3	3	5/22/08	61408-1
W	5/20	1200	X		LS58DW1-0508-034-E	X	A			3	2	3		1.5	1.5	-12
W	5/20	1605	X		LS58DW1-0508-039	X	A			3	2	3		1.5	1.5	-13
W	5/20	1800	X		RB 052008-01	X	A			3	2	3	3	1.5	1	-14
					VB-051608-01	X				2		2				-15
					TB-051908-01	X				2		2				-16
	5/21	0640			VFW-TAP	X						3	X			-17
	5/21	0710			~~VFW~~ AMAC-TAP	X						3	X			61408-1 -2

CP 5/22/08

Labels ✓ PM 5/22/08

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	5/22/08	1328			
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

Remarks: Quick turn on two — top samples. Please call w/ any questions.

Client's delivery of samples constitutes acceptance of TestAmerica terms and conditions contained in the Price Schedule.

¹Matrix: WW - Wastewater; W - Water; S - Soil; L - Liquid; A - Air bag; C - Charcoal Tube; SL - Sludge; O - Oil
²Container: VOA - 40 ml vial; A/G - Amber / Or Glass t Liter; 250 ml - Glass wide mouth; P/O - Plastic or other

TestAmerica Cannot accept verbal changes. Please Fax written changes to (802) 660-1919

TAL-8234(1007)

analytics environmental laboratory LLC

ANALYTICS SAMPLE RECEIPT CHECKLIST

AEL LAB#: 61408
CLIENT: TA-VT
PROJECT: MEFUDS Lo-58

COOLER NUMBER: _____
NUMBER OF COOLERS: 1
DATE RECEIVED: 5/22/08

A: PRELIMINARY EXAMINATION:

DATE COOLER OPENED: 5/22/08

1. Cooler received by(initials) — Date Received: 5/22/08
2. Circle one: (Hand delivered (If so, skip 3)) Shipped
3. Did cooler come with a shipping slip? Y N

3a. Enter carrier name and airbill number here: _____

4. Were custody seals on the outside of cooler? Y N
How many & where: _____ Seal Date: _____ Seal Name: _____
5. Did the custody seals arrive unbroken and intact upon arrival? Y N
6. COC#: _____
7. Were Custody papers filled out properly (ink,signed, etc)? (Y) N
8. Were custody papers sealed in a plastic bag? (Y) N
9. Did you sign the COC in the appropriate place? (Y) N
10. Was the project identifiable from the COC papers? (Y) N
11. Was enough ice used to chill the cooler? (Y) N — Temp. of cooler: 1-4°C

B. Log-In: Date samples were logged in: 5/22/08 By: CP

12. Type of packing in cooler(bubble wrap, popcorn) (Y) N
13. Were all bottles sealed in separate plastic bags? (Y) N
14. Did all bottles arrive unbroken and were labels in good condition? (Y) N
15. Were all bottle labels complete(ID,Date,time,etc.) (Y) N
16. Did all bottle labels agree with custody papers? (Y) N
17. Were the correct containers used for the tests indicated: (Y) N
18. Were samples received at the correct pH? Y (N/A)
19. Was sufficient amount of sample sent for the tests indicated? (Y) N
20. Were bubbles absent in VOA samples? (Y) N

If NO, List sample #'s: _____

21. Laboratory labeling verified by (initials): PM Date: 5/27/08

MISSING 524.2 ✓

DATA REVIEW CHECKLIST

03886.184.001
*0508

SITE: MEFUDS SDG
LAB NUMBER: TestAm, Burlington, VT 125362
WESTON SAMPLE IDs: COLOGD1-050508, TB

Data Reviewed	Fraction						Comments
	524.2						
Chain of Custody	✓						
Percent Solids/RLs							
Preservation/Log Sheet							
Holding Time ✓							
Field Blanks (Trip/Equip.)	~~✓~~						
Instrument/Method Blanks (Soils/Solids)							
Instrument/Method Blanks (Aqueous)	✓						
MS/MSD (Soil/Solids)							
MS/MSD (Aqueous)							
LCS/LCSD	MS 70-130 LCS 60-140 ✓						
Blank Spikes (BS/BSD) 60-140	✓						
Lab Duplicates							
Field Duplicates	✓						
Surrogate Recoveries	✓						

Note:
Data reviewed but not commented on is considered acceptable.
√ = Data Reviewed
NA = Not Applicable

Qualifiers Used:

Data Reviewer Initials: DFG
Date:

TestAmerica
South Burlington, VT

Sample Data Summary Package

SDG: 125362

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

May 15, 2008

TestAmerica Laboratories, Inc.

Mr. Andrew Fuller
Weston Solutions
One Wall Street
Manchester, NH 03101-1501

Re: Laboratory Project No. 28000
Case: MEFUDS; SDG: 125362

Dear Mr. Fuller:

Enclosed are the analytical results for the samples that were received by TestAmerica Burlington on May 7th, 2008. Laboratory identification numbers were assigned, and designated as follows:

Lab ID	Client Sample ID	Sample Date	Sample Matrix
	Received: 05/07/08 ETR No: 125362		
751319	COLOGDI-050508	05/05/08	WATER
751320	TB-050508-01	05/05/08	WATER

Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal.

Method 504.1:
Due to inherent software limitations, the sample identification for COLOGDI-050508 was truncated.

Due to insufficient sample volume, the laboratory was unable to perform a matrix spike and/or matrix spike duplicate analysis.

Manual integration of quantitation peaks was performed where necessary. Documentation of each manual integration was provided in the supportive documentation. Secondary review was performed by the laboratory on all of the manual integrations within this submittal.

For dual column analyses, the laboratory reported the lower of the two confirmed results for each analyte.

Any reference within this report to Severn Trent Laboratories, Inc. or STL, should be understood to refer to TestAmerica Laboratories, Inc. (formerly known as Severn Trent Laboratories, Inc.) The analytical results associated with the samples presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the Laboratory Director's designee as verified by the following signature.

30 Community Drive Suite 11 South Burlington, VT 05403 **tel** 802.660.1990 **fax** 802.660.1919 **www.testamericainc.com**

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

If there are any questions regarding this submittal, please contact me at 802 660-1990.

Sincerely,

Ron Pentkowski
Project Manager

Enclosure

TestAmerica Burlington Data Qualifier Definitions

Organic

U: Compound analyzed but not detected at a concentration above the reporting limit.

J: Estimated value.

N: Indicates presumptive evidence of a compound. This flag is used only for tentatively identified compounds (TICs) where the identification of a compound is based on a mass spectral library search.

P: SW-846: The relative percent difference for detected concentrations between two GC columns is greater than 40%. Unless otherwise specified the higher of the two values is reported on the Form I.

CLP SOW: Greater than 25% difference for detected concentrations between two GC columns. Unless otherwise specified the lower of the two values is reported on the Form I.

C: Pesticide result whose identification has been confirmed by GC/MS.

B: Analyte is found in the sample and the associated method blank. The flag is used for tentatively identified compounds as well as positively identified compounds.

E: Compounds whose concentrations exceed the upper limit of the calibration range of the instrument for that specific analysis.

D: Concentrations identified from analysis of the sample at a secondary dilution.

A: Tentatively identified compound is a suspected aldol conden sation product.

X,Y,Z: Laboratory defined flags that may be used alone or combined, as needed. If used, the description of the flag is defined in the project narrative.

Inorganic/Metals

E: Reported value is estimated due to the presence of interference.

N: Matrix spike sample recovery is not within control limits.

*: Duplicate sample analysis is not within control limits.

B: The result reported is less than the reporting limit but greater than the instrument detection limit.

U: Analyte was analyzed for but not detected above the reporting limit.

Method Codes:

P	ICP-AES
MS	ICP-MS
CV	Cold Vapor AA
AS	Semi-Automated Spectrophotometric

SEVERN TRENT

~~SEVERN TRENT LABORATORIES, INC.~~

~~STL~~ Burlington
30 Community Drive, Suite 11
South Burlington, VT 05403 Tel: 802 660 1990

CHAIN OF CUSTODY RECORD

Report to:	Invoice to:
Company: Weston Solutions, Inc	Company: Weston
Address: 1 Wall St Manchester, NH 03101	Address: Same
Contact: Joe Schmid	Contact: Cathy Tremblay
Phone: 603 656 5400	Phone: 603 656 5400
Fax: 603 656 5401	Fax: 603 656 5401
Contract/ Quote:	

Sampler's Name: Andrew Fuller

Sampler's Signature:

Proj. No.: 03666.184

Project Name: MEFUDS

No/Type of Containers²: 4/Voas

ANALYSIS REQUESTED: VOCs 524.2; 504.1; 24 hr TAT

Lab Use Only
Due Date:

Temp. of coolers when received (C°):

1	2	3	4	5

Custody Seal N / Y

Intact N / Y

Screened For Radioactivity ☐

Matrix¹	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	VOA	A/G 1 Lt.	250 ml	P/O	VOCs 524.2	504.1	24 hr TAT	Lab/Sample ID (Lab Use Only)
W	5/5	1720		X	COLOG DI-050508	X				4	4	4	
					TB-050508-01	X				X	X		

Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time
	5/5/08	1800		5/7/08	0920
Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time

Remarks
24 hr. Turn around Time!
Thanks. Call w/ questions.

Client's delivery of samples constitutes acceptance of Severn Trent Laboratories terms and conditions contained in the Price Schedule.

¹Matrix WW - Wastewater W - Water S - Soil L - Liquid A - Air bag C - Charcoal Tube SL - Sludge O - Oil

²Container VOA - 40 ml vial A/G - Amber / Or Glass 1 Liter 250 ml - Glass wide mouth P/O - Plastic or other _____

STL Cannot accept verbal changes. Please Fax written changes to (802) 660-1919

STL8234-200 (02/07)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sample Data Summary – 504.1 Volatile

FORM 1
504.1 ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

OLOGDI050508

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125362

Matrix: (soil/water) WATER Lab Sample ID: 751319

Sample wt/vol: 34.66 (g/mL) ML Lab File ID: 08MAY081317-R091

% Moisture: _____ decanted: (Y/N)___ Date Received: 05/07/08

Extraction: (SepF/Cont/Sonc) OTHER Date Extracted: 05/08/08

Concentrated Extract Volume: 2(mL) Date Analyzed: 05/08/08

Injection Volume: 1.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-93-4	1,2-Dibromoethane	0.010	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.010	U
96-18-4	1,2,3-Trichloropropane	0.020	U

FORM 1

504.1 ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

TB-050508-01

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125362

Matrix: (soil/water) WATER Lab Sample ID: 751320

Sample wt/vol: 34.85 (g/mL) ML Lab File ID: 08MAY081317-R101

% Moisture: _____ decanted: (Y/N)___ Date Received: 05/07/08

Extraction: (SepF/Cont/Sonc) OTHER Date Extracted: 05/08/08

Concentrated Extract Volume: 2(mL) Date Analyzed: 05/08/08

Injection Volume: 1.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-93-4	1,2-Dibromoethane	0.010	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.010	U
96-18-4	1,2,3-Trichloropropane	0.020	U

FORM 1
504.1 ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MBLKE050808A

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125362

Matrix: (soil/water) WATER Lab Sample ID: MBLKE050808A

Sample wt/vol: 35.00 (g/mL) ML Lab File ID: 08MAY081317-R051

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) OTHER Date Extracted: 05/08/08

Concentrated Extract Volume: 2(mL) Date Analyzed: 05/08/08

Injection Volume: 1.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-93-4	1,2-Dibromoethane	0.010	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.010	U
96-18-4	1,2,3-Trichloropropane	0.020	U

FORM 1

504.1 ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EA050808LCS

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125362

Matrix: (soil/water) WATER Lab Sample ID: EA050808LCS

Sample wt/vol: 35.00 (g/mL) ML Lab File ID: 08MAY081317-R071

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) OTHER Date Extracted: 05/08/08

Concentrated Extract Volume: 2(mL) Date Analyzed: 05/08/08

Injection Volume: 1.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-93-4	1,2-Dibromoethane	0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	0.20	
96-18-4	1,2,3-Trichloropropane	0.18	

FORM 1
504.1 ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EA050808LMBS

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125362

Matrix: (soil/water) WATER Lab Sample ID: EA050808LMBS

Sample wt/vol: 35.00 (g/mL) ML Lab File ID: 08MAY081317-R061

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) OTHER Date Extracted: 05/08/08

Concentrated Extract Volume: 2(mL) Date Analyzed: 05/08/08

Injection Volume: 1.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-93-4	1,2-Dibromoethane	0.023	
96-12-8	1,2-Dibromo-3-Chloropropane	0.023	
96-18-4	1,2,3-Trichloropropane	0.018	J

FORM 1
504.1 ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EA050808MBS

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125362

Matrix: (soil/water) WATER Lab Sample ID: EA050808MBS

Sample wt/vol: 35.00 (g/mL) ML Lab File ID: 08MAY081317-R081

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) OTHER Date Extracted: 05/08/08

Concentrated Extract Volume: 2(mL) Date Analyzed: 05/08/08

Injection Volume: 1.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-93-4	1,2-Dibromoethane	0.20	
96-12-8	1,2-Dibromo-3-Chloropropane	0.21	
96-18-4	1,2,3-Trichloropropane	0.21	

FORM 2
WATER 504.1 SURROGATE RECOVERY

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125362

GC Column(1): RTX-35 ID: 0.32 (mm) GC Column(2): RTX-CLP ID: 0.32 (mm)

	CLIENT SAMPLE NO.	S1 1 %REC	#	S1 2 %REC	#	S2 1 %REC	#	S2 2 %REC	#	S3 1 %REC	#	S3 2 %REC	#	TOT OUT
01	MBLKE050808A	111		114										0
02	EA050808LMBS	131		96										0
03	EA050808LCS	105		98										0
04	EA050808MBS	106		106										0
05	OLOGDI050508	106		110										0
06	TB-050508-01	104		107										0
07														
08														
09														
10														
11														
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25														
26														
27														
28														

ADVISORY
QC LIMITS

S1 = 1-Bromo-3-chloropropan (60-140)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

FORM 3
WATER 504.1 BLANK SPIKE RECOVERY

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125362

Matrix Spike - Sample No.: EA050808LMBS

COMPOUND	SPIKE ADDED (ug/L)	BLANK CONCENTRATION (ug/L)	BS CONCENTRATION (ug/L)	BS % REC #	QC. LIMITS REC.
1,2-Dibromoethane	0.020		0.023	115	60-140
1,2-Dibromo-3-Chloropro	0.020		0.023	115	60-140
1,2,3-Trichloropropane	0.020		0.018	90	60-140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 3 outside limits

COMMENTS: _____

FORM 3
WATER 504.1 BLANK SPIKE RECOVERY

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125362

Matrix Spike - Sample No.: EA050808MBS

COMPOUND	SPIKE ADDED (ug/L)	BLANK CONCENTRATION (ug/L)	BS CONCENTRATION (ug/L)	BS % REC #	QC. LIMITS REC.
1,2-Dibromoethane	0.20		0.20	100	70-130
1,2-Dibromo-3-Chloropro	0.20		0.21	105	70-130
1,2,3-Trichloropropane	0.20		0.21	105	70-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 3 outside limits

COMMENTS: _____

FORM 3
WATER 504.1 LAB CONTROL SAMPLE

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125362

Matrix Spike - Sample No.: EA050808LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
1,2-Dibromoethane	0.20		0.20	100	60-140
1,2-Dibromo-3-Chloropro	0.20		0.20	100	60-140
1,2,3-Trichloropropane	0.20		0.18	90	60-140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 3 outside limits

COMMENTS: _____

FORM 4
504.1 METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

MBLKE050808A

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125362

Lab Sample ID: MBLKE050808A Lab File ID: 08MAY081317-R051

Matrix (soil/water) WATER Extraction:(SepF/Cont/Sonc) OTHER

Sulfur Cleanup (Y/N) N Date Extracted: 05/08/08

Date Analyzed (1): 05/08/08 Date Analyzed (2): 05/08/08

Time Analyzed (1): 1601 Time Analyzed (2): 1601

Instrument ID (1): 2404_1 Instrument ID (2): 2404_2

GC Column (1): RTX-35 ID: 0.32(mm) GC Column (2): RTX-CLP ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	EA050808LMBS	EA050808LMBS	05/08/08	05/08/08
02	EA050808LCS	EA050808LCS	05/08/08	05/08/08
03	EA050808MBS	EA050808MBS	05/08/08	05/08/08
04	OLOGDI050508	751319	05/08/08	05/08/08
05	TB-050508-01	751320	05/08/08	05/08/08
06				
07				
08				
09				
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20				
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22				
23				
24				

COMMENTS: _____

FORM 6
504.1 INITIAL CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125362

Instrument ID: 2404_1 Calibration Date(s): 04/25/08 04/25/08

Column: RTX-35 ID: 0.32 (mm) Calibration Time(s): 1004 1326

LAB FILE ID: RF0.175: 25AP08083RF0.35: 25AP080839RF0.875: 25AP08083
RF1.75: 25AP080839RF3.5: 25AP080839-RF4.375: 25AP08083

COMPOUND	RF0.175	RF0.35	RF0.875	RF1.75	RF3.5	RF4.375
1,2-Dibromoethane	16462.857	15057.143	14098.286	14948.000	13900.857	13538.286
1,2-Dibromo-3-Chloropropane	17188.571	17160.000	16553.143	16397.143	15502.286	15754.057
1,2,3-Trichloropropane		1977.143	2182.857	2188.571	2069.428	2049.828
1-Bromo-3-chloropropane	4702.857	4345.714	4372.571	4665.714	4270.286	4168.914

FORM 6
504.1 INITIAL CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125362

Instrument ID: 2404_1 Calibration Date(s): 04/25/08 04/25/08

Column: RTX-35 ID: 0.32 (mm) Calibration Time(s): 1004 1326

COMPOUND	CURVE	COEFFICENT A1	%RSD OR R^2	MAX %RSD OR R^2	
1,2-Dibromoethane	AVRG	14667.5714	7.241	20.000	
1,2-Dibromo-3-Chloropropane	AVRG	16425.8667	4.255	20.000	
1,2,3-Trichloropropane	AVRG	2093.56571	4.342	20.000	<-
1-Bromo-3-chloropropane	AVRG	4421.00952	4.889	20.000	

FORM 6
504.1 INITIAL CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125362

Instrument ID: 2404_2 Calibration Date(s): 04/25/08 04/25/08

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): 1004 1326

LAB FILE ID: RF0.175: 25AP08083RF0.35: 25AP080839RF0.875: 25AP08083
RF1.75: 25AP080839RF3.5: 25AP080839-RF4.375: 25AP08083

COMPOUND	RF0.175	RF0.35	RF0.875	RF1.75	RF3.5	RF4.375
1,2-Dibromoethane	2868.571	3057.143	3043.428	3097.143	3102.857	2975.086
1,2-Dibromo-3-Chloropropane	3771.428	3874.286	3797.714	3739.428	3772.571	3708.800
1,2,3-Trichloropropane		545.714	660.571	631.428	651.428	661.943
1-Bromo-3-chloropropane	1085.714	1057.143	1076.571	1113.714	1131.428	1102.628

FORM 6
504.1 INITIAL CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125362

Instrument ID: 2404_2 Calibration Date(s): 04/25/08 04/25/08

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): 1004 1326

COMPOUND	CURVE	COEFFICENT A1	%RSD OR R^2	MAX %RSD OR R^2	
1,2-Dibromoethane	AVRG	3024.03810	2.943	20.000	
1,2-Dibromo-3-Chloropropane	AVRG	3777.37143	1.498	20.000	
1,2,3-Trichloropropane	AVRG	630.217143	7.741	20.000	<-
1-Bromo-3-chloropropane	AVRG	1094.53333	2.449	20.000	

FORM 7
504.1 CALIBRATION VERIFICATION SUMMARY

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125362

Instrument ID: 2404_1 Calibration Date: 05/08/08 Time: 1521

Lab File ID: 08MAY081317-R0 Init. Calib. Date(s): 04/25/08 04/25/08

Init. Calib. Times: 1004 1326

GC Column: RTX-35 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF 1.75	MIN RRF	%D	MAX %D
1,2-Dibromoethane	14667.572	15062.857		2.7	30.0
1,2-Dibromo-3-Chloropropane	16425.867	16648.000		1.4	30.0
1,2,3-Trichloropropane	2093.565	2246.286		7.3	30.0
1-Bromo-3-chloropropane	4421.009	4689.143		6.1	30.0

FORM 7
504.1 CALIBRATION VERIFICATION SUMMARY

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125362

Instrument ID: 2404_1 Calibration Date: 05/08/08 Time: 2045

Lab File ID: 08MAY081317-R1 Init. Calib. Date(s): 04/25/08 04/25/08

Init. Calib. Times: 1004 1326

GC Column: RTX-35 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF 1.75	MIN RRF	%D	MAX %D
1,2-Dibromoethane	14667.572	15006.857		2.3	30.0
1,2-Dibromo-3-Chloropropane	16425.867	18434.286		12.2	30.0
1,2,3-Trichloropropane	2093.565	2268.571		8.4	30.0
1-Bromo-3-chloropropane	4421.009	4961.143		12.2	30.0

FORM 7
504.1 CALIBRATION VERIFICATION SUMMARY

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125362

Instrument ID: 2404_2 Calibration Date: 05/08/08 Time: 1521

Lab File ID: 08MAY081317-R0 Init. Calib. Date(s): 04/25/08 04/25/08

Init. Calib. Times: 1004 1326

GC Column: RTX-CLP ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF 1.75	MIN RRF	%D	MAX %D
1,2-Dibromoethane	3024.038	3142.286		3.9	30.0
1,2-Dibromo-3-Chloropropane	3777.371	3970.857		5.1	30.0
1,2,3-Trichloropropane	630.217	660.571		4.8	30.0
1-Bromo-3-chloropropane	1094.533	1154.857		5.5	30.0

FORM 7
504.1 CALIBRATION VERIFICATION SUMMARY

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125362

Instrument ID: 2404_2 Calibration Date: 05/08/08 Time: 2045

Lab File ID: 08MAY081317-R1 Init. Calib. Date(s): 04/25/08 04/25/08

Init. Calib. Times: 1004 1326

GC Column: RTX-CLP ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF 1.75	MIN RRF	%D	MAX %D
1,2-Dibromoethane	3024.038	3251.428		7.5	30.0
1,2-Dibromo-3-Chloropropane	3777.371	4161.714		10.2	30.0
1,2,3-Trichloropropane	630.217	731.428		16.0	30.0
1-Bromo-3-chloropropane	1094.533	1226.857		12.1	30.0

FORM 8
504.1 ANALYTICAL SEQUENCE

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125362

GC Column: RTX-35 ID: 0.32 (mm) Init. Calib. Date(s): 04/25/08 04/25/08

Instrument ID: 2404_1

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 8.77

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	0.175 PPB	0.175 PPB	04/25/08	1004	8.78	
02	0.350 PPB	0.350 PPB	04/25/08	1044	8.76	
03	0.875 PPB	0.875 PPB	04/25/08	1125	8.76	
04	1.75 PPB	1.75 PPB	04/25/08	1205	8.77	
05	3.50 PPB	3.50 PPB	04/25/08	1246	8.75	
06	4.375 PPB	4.375 PPB	04/25/08	1326	8.75	
07	RESC	RESC	04/25/08	1447	8.74	
08	1.75 PPB	1.75 PPB	05/08/08	1521	8.75	
09	MBLKE050808A	MBLKE050808A	05/08/08	1601	8.74	
10	EA050808LMBS	EA050808LMBS	05/08/08	1642	8.73	
11	EA050808LCS	EA050808LCS	05/08/08	1722	8.75	
12	EA050808MBS	EA050808MBS	05/08/08	1803	8.76	
13	OLOGDI050508	751319	05/08/08	1843	8.76	
14	TB-050508-01	751320	05/08/08	1924	8.74	
15	1.75 PPB	1.75 PPB	05/08/08	2045	8.74	
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						

QC LIMITS
S1 = 1-Bromo-3-chloropropan (+/- 0.15 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 8
504.1 ANALYTICAL SEQUENCE

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125362

GC Column: RTX-CLP ID: 0.32 (mm) Init. Calib. Date(s): 04/25/08 04/25/08

Instrument ID: 2404_2

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 6.58

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	0.175 PPB	0.175 PPB	04/25/08	1004	6.59	
02	0.350 PPB	0.350 PPB	04/25/08	1044	6.57	
03	0.875 PPB	0.875 PPB	04/25/08	1125	6.58	
04	1.75 PPB	1.75 PPB	04/25/08	1205	6.58	
05	3.50 PPB	3.50 PPB	04/25/08	1246	6.57	
06	4.375 PPB	4.375 PPB	04/25/08	1326	6.57	
07	RESC	RESC	04/25/08	1447	6.57	
08	1.75 PPB	1.75 PPB	05/08/08	1521	6.57	
09	MBLKE050808A	MBLKE050808A	05/08/08	1601	6.56	
10	EA050808LMBS	EA050808LMBS	05/08/08	1642	6.56	
11	EA050808LCS	EA050808LCS	05/08/08	1722	6.57	
12	EA050808MBS	EA050808MBS	05/08/08	1803	6.58	
13	OLOGDI050508	751319	05/08/08	1843	6.58	
14	TB-050508-01	751320	05/08/08	1924	6.56	
15	1.75 PPB	1.75 PPB	05/08/08	2045	6.57	
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						

QC LIMITS
S1 = 1-Bromo-3-chloropropan (+/- 0.15 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 10
504.1 IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

EA050808LCS

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125362

Lab Sample ID: EA050808LCS Date(s) Analyzed: 05/08/08 05/08/08

Instrument ID (1): 2404_1 Instrument ID (2): 2404_2

GC Column(1): RTX-35 ID: 0.32(mm) GC Column(2): RTX-CLP ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
1,2-Dibromoethane	1	5.20	5.06	5.36	0.20	
	2	3.66	3.52	3.82	0.20	0.0
1,2-Dibromo-3-Chloropropa	1	17.13	17.08	17.18	0.21	
	2	16.17	16.13	16.23	0.20	4.9
1,2,3-Trichloropropane	1	13.74	13.61	13.91	0.20	
	2	10.05	9.92	10.22	0.18	11
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM 10
504.1 IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

EA050808LMBS

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125362

Lab Sample ID: EA050808LMBS Date(s) Analyzed: 05/08/08 05/08/08

Instrument ID (1): 2404_1 Instrument ID (2): 2404_2

GC Column(1): RTX-35 ID: 0.32(mm) GC Column(2): RTX-CLP ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
1,2-Dibromoethane	1	5.18	5.06	5.36	0.023	
	2	3.66	3.52	3.82	0.024	4.3
1,2-Dibromo-3-Chloropropa	1	17.12	17.08	17.18	0.025	
	2	16.17	16.13	16.23	0.023	8.3
1,2,3-Trichloropropane	1	13.73	13.61	13.91	0.019	
	2	10.03	9.92	10.22	0.018	5.4
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM 10
504.1 IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

EA050808MBS

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125362

Lab Sample ID: EA050808MBS Date(s) Analyzed: 05/08/08 05/08/08

Instrument ID (1): 2404_1 Instrument ID (2): 2404_2

GC Column(1): RTX-35 ID: 0.32(mm) GC Column(2): RTX-CLP ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
1,2-Dibromoethane	1	5.20	5.06	5.36	0.20	
	2	3.67	3.52	3.82	0.21	4.9
1,2-Dibromo-3-Chloropropa	1	17.13	17.08	17.18	0.21	
	2	16.18	16.13	16.23	0.21	0.0
1,2,3-Trichloropropane	1	13.75	13.61	13.91	0.21	
	2	10.07	9.92	10.22	0.22	4.7
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

DATA REVIEW CHECKLIST

SITE: Maine Fuds 125508
LAB NUMBER: Test Am 125508
WESTON SAMPLE IDs: VFW-TAP-051508
TB-051508-1

Data Reviewed	Fraction						Comments
	524.2						
Chain of Custody	✓						
Percent Solids/RLs							
Preservation/Log Sheet							
Holding Time		✓					
Field Blanks (Trip/Equip.)	✓						
Instrument/Method Blanks (Soils/Solids)							
Instrument/Method Blanks (Aqueous)	✓						
MS/MSD (Soil/Solids)							
MS/MSD (Aqueous)							
LCS/LCSD	✓						
Blank Spikes (BS/BSD)							
Lab Duplicates							
Field Duplicates		✓					
Surrogate Recoveries	✓						

Note:
Data reviewed but not commented on is considered acceptable.
√ = Data Reviewed
NA = Not Applicable

Qualifiers Used: No qualifications were made.

Data Reviewer Initials: DFG
Date: 6/4/08

TestAmerica
South Burlington, VT

Sample Data Summary Package

SDG: 125508

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

May 21, 2008

TestAmerica Laboratories, Inc.

Mr. Andrew Fuller
Weston Solutions
One Wall Street
Manchester, NH 03101-1501

Re: Laboratory Project No. 28000
Case: MEFUDS; SDG: 125508

Dear Mr. Fuller:

Enclosed are the analytical results for the samples that were received by TestAmerica Burlington on May 16th, 2008. Laboratory identification numbers were assigned, and designated as follows:

Lab ID	Client Sample ID	Sample Date	Sample Matrix
	Received: 05/16/08 ETR No: 125508		
752267	VFW-TAP-051508	05/15/08	WATER
752268	TB-051508-01	05/15/08	WATER

Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal.

EPA Method 524.2 - Volatile Organics
The laboratory noted no exceptions to the method quality control requirements during the analysis of the samples referenced above.

Any reference within this report to Severn Trent Laboratories, Inc. or STL, should be understood to refer to TestAmerica Laboratories, Inc. (formerly known as Severn Trent Laboratories, Inc.) The analytical results associated with the samples presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the Laboratory Director's designee as verified by the following signature.

If there are any questions regarding this submittal, please contact me at 802 660-1990.

Sincerely,

Ron Pentkowski
Project Manager

Enclosure

30 Community Drive Suite 11 South Burlington, VT 05403 **tel** 802.660.1990 **fax** 802.660.1919 **www.testamericainc.com**

TestAmerica Burlington Data Qualifier Definitions

Organic

U: Compound analyzed but not detected at a concentration above the reporting limit.

J: Estimated value.

N: Indicates presumptive evidence of a compound. This flag is used only for tentatively identified compounds (TICs) where the identification of a compound is based on a mass spectral library search.

P: SW-846: The relative percent difference for detected concentrations between two GC columns is greater than 40%. Unless otherwise specified the higher of the two values is reported on the Form I.

CLP SOW: Greater than 25% difference for detected concentrations between two GC columns. Unless otherwise specified the lower of the two values is reported on the Form I.

C: Pesticide result whose identification has been confirmed by GC/MS.

B: Analyte is found in the sample and the associated method blank. The flag is used for tentatively identified compounds as well as positively identified compounds.

E: Compounds whose concentrations exceed the upper limit of the calibration range of the instrument for that specific analysis.

D: Concentrations identified from analysis of the sample at a secondary dilution.

A: Tentatively identified compound is a suspected aldol conden sation product.

X,Y,Z: Laboratory defined flags that may be used alone or combined, as needed. If used, the description of the flag is defined in the project narrative.

Inorganic/Metals

E: Reported value is estimated due to the presence of interference.

N: Matrix spike sample recovery is not within control limits.

*: Duplicate sample analysis is not within control limits.

B: The result reported is less than the reporting limit but greater than the instrument detection limit.

U: Analyte was analyzed for but not detected above the reporting limit.

Method Codes:

P	ICP-AES
MS	ICP-MS
CV	Cold Vapor AA
AS	Semi-Automated Spectrophotometric

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Burlington
30 Community Drive, Suite 11
South Burlington, VT 05403 Tel: 802 660 1990

CHAIN OF CUSTODY RECORD

Report to:
Company: Western Solutions
Address: One Wall Street
Manchester, NH 03101
Contact: Joseph Schmidl
Phone: (603) 656-5441
Fax: 603 (656-5401
Contract/ Quote:

Invoice to:
Company:
Address:
Contact: Karen Tremblay
Phone:
Fax:

ANALYSIS REQUESTED

Lab Use Only
Due Date:

Temp. of coolers when received (C°):
1 | 2 | 3 | 4 | 5

Custody Seal N / Y
Intact N / Y

Screened For Radioactivity ☐

Sampler's Name: Joseph Schmidl
Sampler's Signature:

Proj. No.
Project Name
No/Type of Containers²

Matrix¹	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	VOA	A/G 1 Lt.	250 ml	P/O	VOC's Exp 624.2 (24-hour TAT)	Lab/Sample ID (Lab Use Only)
DW	5/15/08	1630		✓	WFW-TRIP-051508	4				✓	
TB	5/15/08			✓	TB-051508-01	1				✓	

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Remarks
	5/15/08	1700				
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date 05/16/08	Time 1030	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Client's delivery of samples constitutes acceptance of TestAmerica terms and conditions contained in the Price Schedule.

¹Matrix WW - Wastewater W - Water S - Soil L - Liquid A - Air bag C - Charcoal Tube SL - Sludge O - Oil
²Container VOA - 40 ml vial A/G - Amber / Or Glass 1 Liter 250 ml - Glass wide mouth P/O - Plastic or other _____

TestAmerica Cannot accept verbal changes. Please Fax written changes to (802) 660-1919

TAL-8234(1007)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sample Data Summary – 524.2 Volatile

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

TB-051508-01

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125508

Matrix: (soil/water) WATER Lab Sample ID: 752268

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752268

Level: (low/med) LOW Date Received: 05/16/08

% Moisture: not dec. _____ Date Analyzed: 05/16/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl-t-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

TB-051508-01

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125508

Matrix: (soil/water) WATER Lab Sample ID: 752268

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752268

Level: (low/med) LOW Date Received: 05/16/08

% Moisture: not dec. _____ Date Analyzed: 05/16/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-41-4	Ethylbenzene	0.50	U
1330-20-7	m- & p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
99-87-6	p-Isopropyltoluene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

VFW-TAP-051508

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125508

Matrix: (soil/water) WATER Lab Sample ID: 752267

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752267

Level: (low/med) LOW Date Received: 05/16/08

% Moisture: not dec. _____ Date Analyzed: 05/16/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl-t-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.69	
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.26	J
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	1.1	
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	3.5	
108-90-7	Chlorobenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

VFW-TAP-051508

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125508

Matrix: (soil/water) WATER Lab Sample ID: 752267

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752267

Level: (low/med) LOW Date Received: 05/16/08

% Moisture: not dec. _____ Date Analyzed: 05/16/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-41-4	Ethylbenzene	0.50	U
1330-20-7	m- & p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	6.0	
98-82-8	Isopropylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
99-87-6	p-Isopropyltoluene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MBLK051608LA

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125508

Matrix: (soil/water) WATER Lab Sample ID: MBLK051608LA

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: LUCB02A

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 05/16/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl-t-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MBLK051608LA

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125508

Matrix: (soil/water) WATER Lab Sample ID: MBLK051608LA

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: LUCB02A

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 05/16/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-41-4	Ethylbenzene	0.50	U
1330-20-7	m- & p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
99-87-6	p-Isopropyltoluene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LA051608LCS

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125508

Matrix: (soil/water) WATER Lab Sample ID: LA051608LCS

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: LUC01AQ

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 05/16/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.2	
74-87-3	Chloromethane	0.87	
75-01-4	Vinyl Chloride	1.1	
74-83-9	Bromomethane	1.1	
75-00-3	Chloroethane	1.0	
75-69-4	Trichlorofluoromethane	0.94	
75-35-4	1,1-Dichloroethene	0.96	
75-09-2	Methylene Chloride	0.97	
156-60-5	trans-1,2-Dichloroethene	0.92	
1634-04-4	Methyl-t-Butyl Ether	0.97	
75-34-3	1,1-Dichloroethane	0.95	
594-20-7	2,2-Dichloropropane	1.0	
156-59-2	cis-1,2-Dichloroethene	1.0	
74-97-5	Bromochloromethane	1.0	
67-66-3	Chloroform	0.97	
71-55-6	1,1,1-Trichloroethane	0.99	
56-23-5	Carbon Tetrachloride	0.94	
563-58-6	1,1-Dichloropropene	0.97	
71-43-2	Benzene	0.98	
107-06-2	1,2-Dichloroethane	0.95	
79-01-6	Trichloroethene	0.93	
78-87-5	1,2-Dichloropropane	1.0	
74-95-3	Dibromomethane	0.99	
75-27-4	Bromodichloromethane	0.92	
10061-01-5	cis-1,3-Dichloropropene	0.96	
108-88-3	Toluene	1.0	
10061-02-6	trans-1,3-Dichloropropene	0.98	
79-00-5	1,1,2-Trichloroethane	1.1	
127-18-4	Tetrachloroethene	1.0	
142-28-9	1,3-Dichloropropane	1.0	
124-48-1	Dibromochloromethane	0.96	
108-90-7	Chlorobenzene	0.99	
630-20-6	1,1,1,2-Tetrachloroethane	1.0	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LA051608LCS

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125508

Matrix: (soil/water) WATER Lab Sample ID: LA051608LCS

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: LUC01AQ

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 05/16/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-41-4	Ethylbenzene	0.97	
1330-20-7	m- & p-Xylene	1.9	
95-47-6	o-Xylene	0.99	
100-42-5	Styrene	0.99	
75-25-2	Bromoform	0.93	
98-82-8	Isopropylbenzene	1.0	
108-86-1	Bromobenzene	0.99	
79-34-5	1,1,2,2-Tetrachloroethane	0.98	
103-65-1	n-Propylbenzene	1.0	
95-49-8	2-Chlorotoluene	1.0	
106-43-4	4-Chlorotoluene	1.0	
108-67-8	1,3,5-Trimethylbenzene	0.98	
98-06-6	tert-Butylbenzene	1.0	
95-63-6	1,2,4-Trimethylbenzene	0.98	
135-98-8	sec-Butylbenzene	0.99	
541-73-1	1,3-Dichlorobenzene	0.99	
99-87-6	p-Isopropyltoluene	1.0	
106-46-7	1,4-Dichlorobenzene	0.97	
95-50-1	1,2-Dichlorobenzene	0.98	
104-51-8	n-Butylbenzene	1.0	
120-82-1	1,2,4-Trichlorobenzene	1.0	
87-68-3	Hexachlorobutadiene	1.0	
91-20-3	Naphthalene	1.0	

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125508

Matrix Spike - Sample No.: LA051608LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Xylene (total)	3.0		3.0	100	70-130
Dichlorodifluoromethane	1.0		1.2	120	70-130
Chloromethane	1.0		0.87	87	70-130
Vinyl Chloride	1.0		1.1	110	70-130
Bromomethane	1.0		1.1	110	70-130
Chloroethane	1.0		1.0	100	70-130
Trichlorofluoromethane	1.0		0.94	94	70-130
1,1-Dichloroethene	1.0		0.96	96	70-130
Methylene Chloride	1.0		0.97	97	70-130
trans-1,2-Dichloroethen	1.0		0.92	92	70-130
Methyl-t-Butyl Ether	1.0		0.97	97	70-130
1,1-Dichloroethane	1.0		0.95	95	70-130
2,2-Dichloropropane	1.0		1.0	100	70-130
cis-1,2-Dichloroethene	1.0		1.0	100	70-130
Bromochloromethane	1.0		1.0	100	70-130
Chloroform	1.0		0.97	97	70-130
1,1,1-Trichloroethane	1.0		0.99	99	70-130
Carbon Tetrachloride	1.0		0.94	94	70-130
1,1-Dichloropropene	1.0		0.97	97	70-130
Benzene	1.0		0.98	98	70-130
1,2-Dichloroethane	1.0		0.95	95	70-130
Trichloroethene	1.0		0.93	93	70-130
1,2-Dichloropropane	1.0		1.0	100	70-130
Dibromomethane	1.0		0.99	99	70-130
Bromodichloromethane	1.0		0.92	92	70-130
cis-1,3-Dichloropropene	1.0		0.96	96	70-130
Toluene	1.0		1.0	100	70-130
trans-1,3-Dichloroprope	1.0		0.98	98	70-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125508

Matrix Spike - Sample No.: LA051608LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
1,1,2-Trichloroethane	1.0		1.1	110	70-130
Tetrachloroethene	1.0		1.0	100	70-130
1,3-Dichloropropane	1.0		1.0	100	70-130
Dibromochloromethane	1.0		0.96	96	70-130
Chlorobenzene	1.0		0.99	99	70-130
1,1,1,2-Tetrachloroetha	1.0		1.0	100	70-130
Ethylbenzene	1.0		0.97	97	70-130
m- & p-Xylene	2.0		1.9	95	70-130
o-Xylene	1.0		0.99	99	70-130
Styrene	1.0		0.99	99	70-130
Bromoform	1.0		0.93	93	70-130
Isopropylbenzene	1.0		1.0	100	70-130
Bromobenzene	1.0		0.99	99	70-130
1,1,2,2-Tetrachloroetha	1.0		0.98	98	70-130
n-Propylbenzene	1.0		1.0	100	70-130
2-Chlorotoluene	1.0		1.0	100	70-130
4-Chlorotoluene	1.0		1.0	100	70-130
1,3,5-Trimethylbenzene	1.0		0.98	98	70-130
tert-Butylbenzene	1.0		1.0	100	70-130
1,2,4-Trimethylbenzene	1.0		0.98	98	70-130
sec-Butylbenzene	1.0		0.99	99	70-130
1,3-Dichlorobenzene	1.0		0.99	99	70-130
p-Isopropyltoluene	1.0		1.0	100	70-130
1,4-Dichlorobenzene	1.0		0.97	97	70-130
1,2-Dichlorobenzene	1.0		0.98	98	70-130
n-Butylbenzene	1.0		1.0	100	70-130
1,2,4-Trichlorobenzene	1.0		1.0	100	70-130
Hexachlorobutadiene	1.0		1.0	100	70-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125508

Matrix Spike - Sample No.: LA051608LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Naphthalene	1.0		1.0	100	70-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 57 outside limits

COMMENTS: _____

FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

MBLK051608LA

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125508

Lab File ID: LUCB02A Lab Sample ID: MBLK051608LA

Date Analyzed: 05/16/08 Time Analyzed: 1009

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) N

Instrument ID: L

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LA051608LCS	LA051608LCS	LUC01AQ	0904
02	TB-051508-01	752268	752268	1752
03	VFW-TAP-0515	752267	752267	1825
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
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COMMENTS:

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125508

Lab File ID: LUC01PV BFB Injection Date: 05/15/08

Instrument ID: L BFB Injection Time: 0826

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.5
75	30.0 - 60.0% of mass 95	42.4
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.4
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	73.4
175	5.0 - 9.0% of mass 174	5.6 (7.7)1
176	95.0 - 101.0% of mass 174	72.3 (98.5)1
177	5.0 - 9.0% of mass 176	4.9 (6.8)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD0.5	VSTD0.5	LUC005V	05/15/08	0912
02	VSTD002	VSTD002	LUC02V	05/15/08	0945
03	VSTD010	VSTD010	LUC10V	05/15/08	1017
04	VSTD020	VSTD020	LUC20V	05/15/08	1050
05	VSTD030	VSTD030	LUC30V	05/15/08	1123
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125508

Lab File ID: LUC02PV BFB Injection Date: 05/16/08

Instrument ID: L BFB Injection Time: 0746

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	15.7
75	30.0 - 60.0% of mass 95	41.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.4
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	72.5
175	5.0 - 9.0% of mass 174	5.5 (7.6)1
176	95.0 - 101.0% of mass 174	72.1 (99.4)1
177	5.0 - 9.0% of mass 176	4.6 (6.4)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD002	VSTD002	LUC02AV	05/16/08	0831
02	LA051608LCS	LA051608LCS	LUC01AQ	05/16/08	0904
03	MBLK051608LA	MBLK051608LA	LUCB02A	05/16/08	1009
04	TB-051508-01	752268	752268	05/16/08	1752
05	VFW-TAP-0515	752267	752267	05/16/08	1825
06					
07					
08					
09					
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20					
21					
22					

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125508

Instrument ID: L Calibration Date(s): 05/15/08 05/15/08

Heated Purge: (Y/N) N Calibration Time(s): 0912 1123

GC Column: CAP ID: 0.53 (mm)

LAB FILE ID: RRF0.5=LUC005V RRF2 =LUC02V
RRF10 =LUC10V RRF20 =LUC20V RRF30 =LUC30V

COMPOUND	RRF0.5	RRF2	RRF10	RRF20	RRF30	$\overline{RRF}$	% RSD
Dichlorodifluoromethane *	0.322	0.315	0.329	0.304	0.317	0.317	3.0*
Chloromethane *	0.166	0.176	0.170	0.158	0.164	0.167	4.0*
Vinyl Chloride *	0.238	0.233	0.253	0.229	0.234	0.237	4.0*
Bromomethane *	0.112	0.114	0.131	0.133	0.136	0.125	9.0*
Chloroethane *	0.169	0.163	0.167	0.146	0.142	0.157	7.8*
Trichlorofluoromethane *	0.550	0.549	0.577	0.538	0.560	0.555	2.7*
1,1-Dichloroethene *	0.258	0.257	0.287	0.259	0.267	0.266	4.8*
Methylene Chloride *	0.289	0.268	0.283	0.261	0.266	0.273	4.4*
trans-1,2-Dichloroethene *	0.330	0.303	0.321	0.296	0.305	0.311	4.5*
Methyl-t-Butyl Ether *	0.594	0.572	0.617	0.577	0.605	0.593	3.2*
1,1-Dichloroethane *	0.589	0.585	0.625	0.580	0.596	0.595	3.0*
2,2-Dichloropropane *	0.538	0.497	0.510	0.467	0.483	0.499	5.4*
cis-1,2-Dichloroethene *	0.340	0.326	0.344	0.318	0.332	0.332	3.2*
Bromochloromethane *	0.234	0.212	0.232	0.217	0.219	0.223	4.4*
Chloroform *	0.600	0.613	0.647	0.604	0.633	0.619	3.2*
1,1,1-Trichloroethane *	0.550	0.515	0.554	0.521	0.547	0.537	3.3*
Carbon Tetrachloride *	0.514	0.523	0.556	0.529	0.560	0.536	3.9*
1,1-Dichloropropene *	0.480	0.483	0.528	0.496	0.516	0.501	4.1*
Benzene *	0.953	0.896	0.958	0.875	0.915	0.919	3.9*
1,2-Dichloroethane *	0.313	0.301	0.330	0.308	0.322	0.315	3.6*
Trichloroethene *	0.399	0.384	0.411	0.382	0.402	0.396	3.1*
1,2-Dichloropropane *	0.341	0.359	0.392	0.362	0.370	0.365	5.1*
Dibromomethane *	0.338	0.308	0.326	0.303	0.315	0.318	4.5*
Bromodichloromethane *	0.605	0.600	0.651	0.607	0.641	0.621	3.8*
cis-1,3-Dichloropropene *	0.534	0.533	0.591	0.550	0.562	0.554	4.3*
Toluene *	0.648	0.606	0.662	0.608	0.627	0.630	3.9*
trans-1,3-Dichloropropene *	0.439	0.446	0.482	0.452	0.475	0.459	4.0*
1,1,2-Trichloroethane *	0.272	0.262	0.284	0.266	0.278	0.272	3.3*
Tetrachloroethene *	0.499	0.525	0.544	0.511	0.527	0.521	3.3*
1,3-Dichloropropane *	0.520	0.501	0.536	0.495	0.518	0.514	3.1*
Dibromochloromethane *	0.669	0.643	0.708	0.703	0.720	0.689	4.6*
Chlorobenzene *	0.935	0.963	0.996	0.956	0.961	0.962	2.3*
1,1,1,2-Tetrachloroethane *	0.506	0.493	0.520	0.515	0.520	0.511	2.2*
Ethylbenzene *	1.478	1.435	1.500	1.464	1.476	1.471	1.6*
m- & p-Xylene *	0.565	0.552	0.580	0.569	0.563	0.566	1.8*
o-Xylene *	0.526	0.540	0.556	0.536	0.535	0.539	2.1*
Styrene *	0.910	0.902	0.944	0.921	0.921	0.920	1.7*

* Compounds with required minimum RRF and maximim %RSD values.
All other compounds must meet a minimim RRF of 0.010.

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125508

Instrument ID: L Calibration Date(s): 05/15/08 05/15/08

Heated Purge: (Y/N) N Calibration Time(s): 0912 1123

GC Column: CAP ID: 0.53 (mm)

LAB FILE ID: RRF0.5=LUC005V RRF2 =LUC02V
RRF10 =LUC10V RRF20 =LUC20V RRF30 =LUC30V

COMPOUND	RRF0.5	RRF2	RRF10	RRF20	RRF30	$\overline{RRF}$	% RSD
Bromoform *	0.496	0.507	0.540	0.539	0.557	0.528	4.8*
Isopropylbenzene *	1.595	1.547	1.620	1.582	1.577	1.584	1.7*
Bromobenzene *	0.512	0.507	0.532	0.514	0.517	0.516	1.8*
1,1,2,2-Tetrachloroethane *	0.639	0.595	0.627	0.605	0.605	0.614	2.9*
n-Propylbenzene *	0.420	0.414	0.431	0.414	0.410	0.418	2.0*
2-Chlorotoluene *	0.424	0.383	0.406	0.389	0.384	0.397	4.4*
4-Chlorotoluene *	0.435	0.390	0.411	0.391	0.394	0.404	4.7*
1,3,5-Trimethylbenzene *	1.183	1.160	1.198	1.174	1.169	1.177	1.2*
tert-Butylbenzene *	0.353	0.353	0.356	0.346	0.347	0.351	1.2*
1,2,4-Trimethylbenzene *	1.137	1.150	1.170	1.151	1.146	1.151	1.0*
sec-Butylbenzene *	1.730	1.698	1.783	1.731	1.727	1.734	1.8*
1,3-Dichlorobenzene *	0.850	0.788	0.837	0.836	0.831	0.828	2.8*
p-Isopropyltoluene *	1.366	1.392	1.447	1.422	1.408	1.407	2.2*
1,4-Dichlorobenzene *	0.855	0.843	0.878	0.869	0.872	0.863	1.6*
1,2-Dichlorobenzene *	0.728	0.721	0.741	0.739	0.732	0.732	1.1*
n-Butylbenzene *	1.200	1.202	1.256	1.228	1.217	1.221	1.9*
1,2,4-Trichlorobenzene *	0.597	0.537	0.580	0.573	0.582	0.574	3.9*
Hexachlorobutadiene *	0.328	0.329	0.347	0.344	0.351	0.340	3.2*
Naphthalene *	0.938	0.896	0.954	0.966	0.984	0.948	3.5*
1,2-Dichloroethane-d4 *	0.304	0.267	0.281	0.257	0.272	0.276	6.4*
Toluene-d8 *	0.869	0.898	0.954	0.885	0.923	0.906	3.7*
Bromofluorobenzene *	0.768	0.708	0.727	0.712	0.705	0.724	3.6*
1,2-Dichlorobenzene-d4 *	0.495	0.486	0.496	0.479	0.480	0.487	1.7*

* Compounds with required minimum RRF and maximim %RSD values.
All other compounds must meet a minimim RRF of 0.010.

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125508

Instrument ID: L Calibration Date: 05/16/08 Time: 0831

Lab File ID: LUC02AV Init. Calib. Date(s): 05/15/08 05/15/08

Heated Purge: (Y/N) N Init. Calib. Times: 0912 1123

GC Column: CAP ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF2	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.317	0.313		1.3	30.0
Chloromethane	0.167	0.177		6.0	30.0
Vinyl Chloride	0.237	0.244		3.0	30.0
Bromomethane	0.125	0.111		11.2	30.0
Chloroethane	0.157	0.166		5.7	30.0
Trichlorofluoromethane	0.555	0.569		2.5	30.0
1,1-Dichloroethene	0.266	0.280		5.3	30.0
Methylene Chloride	0.273	0.274		0.4	30.0
trans-1,2-Dichloroethene	0.311	0.308		1.0	30.0
Methyl-t-Butyl Ether	0.593	0.603		1.7	30.0
1,1-Dichloroethane	0.595	0.596		0.2	30.0
2,2-Dichloropropane	0.499	0.504		1.0	30.0
cis-1,2-Dichloroethene	0.332	0.328		1.2	30.0
Bromochloromethane	0.223	0.236		5.8	30.0
Chloroform	0.619	0.626		1.1	30.0
1,1,1-Trichloroethane	0.537	0.522		2.8	30.0
Carbon Tetrachloride	0.536	0.516		3.7	30.0
1,1-Dichloropropene	0.501	0.510		1.8	30.0
Benzene	0.919	0.944		2.7	30.0
1,2-Dichloroethane	0.315	0.318		1.0	30.0
Trichloroethene	0.396	0.388		2.0	30.0
1,2-Dichloropropane	0.365	0.380		4.1	30.0
Dibromomethane	0.318	0.321		0.9	30.0
Bromodichloromethane	0.621	0.614		1.1	30.0
cis-1,3-Dichloropropene	0.554	0.565		2.0	30.0
Toluene	0.630	0.627		0.5	30.0
trans-1,3-Dichloropropene	0.459	0.467		1.7	30.0
1,1,2-Trichloroethane	0.272	0.276		1.5	30.0
Tetrachloroethene	0.521	0.530		1.7	30.0
1,3-Dichloropropane	0.514	0.520		1.2	30.0
Dibromochloromethane	0.689	0.672		2.5	30.0
Chlorobenzene	0.962	0.958		0.4	30.0
1,1,1,2-Tetrachloroethane	0.511	0.507		0.8	30.0
Ethylbenzene	1.471	1.454		1.2	30.0
m- & p-Xylene	0.566	0.560		1.1	30.0
o-Xylene	0.539	0.547		1.5	30.0
Styrene	0.920	0.932		1.3	30.0

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125508

Instrument ID: L Calibration Date: 05/16/08 Time: 0831

Lab File ID: LUC02AV Init. Calib. Date(s): 05/15/08 05/15/08

Heated Purge: (Y/N) N Init. Calib. Times: 0912 1123

GC Column: CAP ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF2	MIN RRF	%D	MAX %D
Bromoform	0.528	0.506		4.2	30.0
Isopropylbenzene	1.584	1.559		1.6	30.0
Bromobenzene	0.516	0.515		0.2	30.0
1,1,2,2-Tetrachloroethane	0.614	0.623		1.5	30.0
n-Propylbenzene	0.418	0.428		2.4	30.0
2-Chlorotoluene	0.397	0.384		3.3	30.0
4-Chlorotoluene	0.404	0.385		4.7	30.0
1,3,5-Trimethylbenzene	1.177	1.142		3.0	30.0
tert-Butylbenzene	0.351	0.351		0.0	30.0
1,2,4-Trimethylbenzene	1.151	1.141		0.9	30.0
sec-Butylbenzene	1.734	1.735		0.0	30.0
1,3-Dichlorobenzene	0.828	0.820		1.0	30.0
p-Isopropyltoluene	1.407	1.405		0.1	30.0
1,4-Dichlorobenzene	0.863	0.843		2.3	30.0
1,2-Dichlorobenzene	0.732	0.723		1.2	30.0
n-Butylbenzene	1.221	1.219		0.2	30.0
1,2,4-Trichlorobenzene	0.574	0.555		3.3	30.0
Hexachlorobutadiene	0.340	0.336		1.2	30.0
Naphthalene	0.948	0.918		3.2	30.0
1,2-Dichloroethane-d4	0.276	0.276		0.0	30.0
Toluene-d8	0.906	0.912		0.7	30.0
Bromofluorobenzene	0.724	0.717		1.0	30.0
1,2-Dichlorobenzene-d4	0.487	0.484		0.6	30.0

FORM 8
VOLATILE INTERNAL STANDARD/SURROGATE AREA AND RT SUMMARY

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125508

Lab File ID (Standard): LUC02AV Date Analyzed: 05/16/08

Instrument ID: L Time Analyzed: 0831

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) N

		SS1(DCA) AREA #	RT #	IS2(FBZ) AREA #	RT #	SS3(TOL) AREA #	RT #
	12 HOUR STD	104064	9.08	376742	9.67	343766	12.53
	UPPER LIMIT	135283	9.58	489765	10.17	446896	13.03
	LOWER LIMIT	72845	8.58	263719	9.17	240636	12.03
	CLIENT SAMPLE NO.						
01	LA051608LCS	103366	9.07	385355	9.67	345769	12.54
02	MBLK051608LA	103613	9.09	375871	9.67	345780	12.54
03	TB-051508-01	99690	9.09	378375	9.68	361029	12.54
04	VFW-TAP-0515	98590	9.09	388521	9.69	355430	12.54
05							
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22							

SS1 (DCA) = 1,2-Dichloroethane-d4
IS2 (FBZ) = Fluorobenzene
SS3 (TOL) = Toluene-d8

AREA UPPER LIMIT = + 30% of internal standard/surrogate area
AREA LOWER LIMIT = - 30% of internal standard/surrogate area
RT UPPER LIMIT = + 0.50 minutes of internal standard/surrogate RT
RT LOWER LIMIT = - 0.50 minutes of internal standard/surrogate RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM 8
VOLATILE INTERNAL STANDARD/SURROGATE AREA AND RT SUMMARY

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125508

Lab File ID (Standard): LUC02AV Date Analyzed: 05/16/08

Instrument ID: L Time Analyzed: 0831

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) N

		IS4(CBZ) AREA #	RT #	SS5(BFB) AREA #	RT #	IS6(DCB) AREA #	RT #
	12 HOUR STD	330621	15.44	237136	18.15	181574	19.91
	UPPER LIMIT	429807	15.94	308277	18.65	236046	20.41
	LOWER LIMIT	231435	14.94	165995	17.65	127102	19.41
	CLIENT SAMPLE NO.						
01	LA051608LCS	333097	15.45	234743	18.14	181625	19.91
02	MBLK051608LA	320389	15.45	224663	18.17	175240	19.93
03	TB-051508-01	332651	15.45	239650	18.15	178841	19.93
04	VFW-TAP-0515	337038	15.45	235405	18.16	174582	19.92
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22							

IS4 (CBZ) = Chlorobenzene-d5
SS5 (BFB) = Bromofluorobenzene
IS6 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = + 30% of internal standard/surrogate area
AREA LOWER LIMIT = - 30% of internal standard/surrogate area
RT UPPER LIMIT = + 0.50 minutes of internal standard/surrogate RT
RT LOWER LIMIT = - 0.50 minutes of internal standard/surrogate RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM 8
VOLATILE INTERNAL STANDARD/SURROGATE AREA AND RT SUMMARY

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125508

Lab File ID (Standard): LUC02AV Date Analyzed: 05/16/08

Instrument ID: L Time Analyzed: 0831

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) N

		SS7(DCZ) AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	159903	20.35				
	UPPER LIMIT	207874	20.85				
	LOWER LIMIT	111932	19.85				
	CLIENT SAMPLE NO.						
01	LA051608LCS	157458	20.37				
02	MBLK051608LA	157474	20.37				
03	TB-051508-01	160388	20.37				
04	VFW-TAP-0515	165135	20.37				
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21							
22							

SS7 (DCZ) = 1,2-Dichlorobenzene-d4

AREA UPPER LIMIT = + 30% of internal standard/surrogate area
AREA LOWER LIMIT = - 30% of internal standard/surrogate area
RT UPPER LIMIT = + 0.50 minutes of internal standard/surrogate RT
RT LOWER LIMIT = - 0.50 minutes of internal standard/surrogate RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

MISSING DRO 16RO

DATA REVIEW CHECKLIST

SITE: Maine FUDS

LAB NUMBER: Test AM 125630

WESTON SAMPLE IDs: LS58DW2-0508-16, LS58DW2-0508-28.5, LS58DW2-0508-037, LS58DW2-0508-94.5, LS58DW2-0508-189, LS58DW2-0508-265, RB-051808-01, LS58DW1-0508-056, LS58DW1-0508-051, LS58DW1-0508-041, LS58DW1-0508-34, -E, LS58DW1-0508-29, RB-052008-01, TB-051608-01, TB-051908-01

Data Reviewed	Fraction 524.1			Fraction 524.2			Comments
Chain of Custody	✓			✓			
Percent Solids/RLs							
Preservation/Log Sheet							
Holding Time							
Field Blanks (Trip/Equip.)				EB Toluene 4.7 J 5=2.35 Trichloroethene = .20 J 5=1.0			
Instrument/Method Blanks (Soils/Solids)							
Instrument/Method Blanks (Aqueous)							
MS/MSD (Soil/Solids)							
MS/MSD (Aqueous)	✓						
LCS/LCSD	✓						
Blank Spikes (BS/BSD)	✓						
Lab Duplicates							
Field Duplicates	NA			✓			
Surrogate Recoveries	✓			✓			

Note:
Data reviewed but not commented on is considered acceptable.
√ = Data Reviewed
NA = Not Applicable

Qualifiers Used: Questions 524.1 60-140 (LCS) 2 BS Recoveries 70-130

U1-Qualify toluene as undetected in 1-0508-051 since it was detected in rinsate blank

2-0508-189 2-0508-265

Data Reviewer Initials: DFG
Date: 6/24/08

TestAmerica
South Burlington, VT

Sample Data Summary Package

SDG: 125630

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

May 30, 2008

TestAmerica Laboratories, Inc.

Mr. Andrew Fuller
Weston Solutions
One Wall Street
Manchester, NH 03101-1501

Re: Laboratory Project No. 28000
Case: MEFUDS; SDG: 125630; Job: Maine FUDs

Dear Mr. Fuller:

Enclosed are the analytical results for the samples that were received by TestAmerica Burlington on May 23rd, 2008. Laboratory identification numbers were assigned, and designated as follows:

Lab ID	Client Sample ID	Sample Date	Sample Matrix
	Received: 05/23/08 ETR No: 125630		
752972	LS58DW2-0508-16	05/16/08	WATER
752973	LS58DW2-0508-28.5	05/16/08	WATER
752974	LS58DW2-0508-037	05/17/08	WATER
752975	LS58DW2-0508-94.5	05/17/08	WATER
752976	LS58DW2-0508-189	05/17/08	WATER
752977	LS58DW2-0508-265	05/17/08	WATER
752978	RB-051808-01	05/18/08	WATER
752979	LS58DW1-0508-056	05/18/08	WATER
752980	LS58DW1-0508-051	05/19/08	WATER
752981	LS58DW1-0508-041	05/19/08	WATER
752982	LS58DW1-0508-034	05/20/08	WATER
752983	LS58DW1-0508-034-E	05/20/08	WATER
752984	LS58DW1-0508-029	05/20/08	WATER
752985	RB-052008-01	05/20/08	WATER
752986	TB-051608-01	05/16/08	WATER
752987	TB-051908-01	05/16/08	WATER
753973MS	LS58DW2-0508-28.5MS	05/16/08	WATER
753973MD	LS58DW2-0508-28.5MSD	05/16/08	WATER

Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal.

Method 504.1:
Due to inherent software limitations, the sample identifications for LS58DW2-0508-16, LS58DW2-0508-28.5, LS58DW2-0508-28.5MS, LS58DW2-0508-28.5MSD, LS58DW2-0508-037, LS58DW2-0508-94.5, LS58DW2-0508-189, LS58DW2-0508-265, LS58DW1-0508-056,

30 Community Drive Suite 11 South Burlington, VT 05403 **tel** 802.660.1990 **fax** 802.660.1919 **www.testamericainc.com**

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

LS58DW1-0508-051, LS58DW1-0508-041, LS58DW1-0508-034, LS58DW1-0508-029 and TB-051608-01 were truncated.

Manual integration of quantitation peaks was performed where necessary. Documentation of each manual integration was provided in the supportive documentation. Secondary review was performed by the laboratory on all of the manual integrations within this submittal.

For dual column analyses, the laboratory reported the lower of the two confirmed results for each analyte.

EPA Method 524.2 – Volatile Organics:
Due to inherent software limitations, the sample identifications for LS58DW2-0508-16, LS58DW2-0508-28.5, LS58DW2-0508-28.5MSD, LS58DW2-0508-28.5MS, LS58DW2-0508-037, LS58DW2-0508-94.5, LS58DW2-0508-189, LS58DW2-0508-265, LS58DW1-0508-056, LS58DW1-0508-051, LS58DW1-0508-041, LS58DW1-0508-034, LS58DW1-0508-034-E and LS58DW1-0508-029 were truncated. As such, "LS58DW" removed from client identifiers. Additionally, point, "." was removed from samples LS58DW2-0508-28.5 and LS58DW2-0508-94.5 and hyphens were removed from samples LS58DW2-0508-28.5 and the associated matrix spike and matrix spike samples.

The original analysis of the field sample LS58DW1-0508-029 yielded a concentration of Toluene that exceeded the calibration range of the instrument. A subsequent dilution analysis was performed in order to get the response of the analyte with the highest concentration within the initial calibration range. The results for both the original analysis and the dilution analysis were provided.

Manual integration of quantitation peaks was performed where necessary. Documentation of each manual integration was provided in the supportive documentation. Secondary review was performed by the laboratory on all of the manual integrations within this submittal.

Any reference within this report to Severn Trent Laboratories, Inc. or STL, should be understood to refer to TestAmerica Laboratories, Inc. (formerly known as Severn Trent Laboratories, Inc.) The analytical results associated with the samples presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the Laboratory Director's designee as verified by the following signature.

If there are any questions regarding this submittal, please contact me at 802 660-1990.

Sincerely,

Ron Pentkowski
Project Manager

Enclosure

TestAmerica Burlington Data Qualifier Definitions

Organic

U: Compound analyzed but not detected at a concentration above the reporting limit.

J: Estimated value.

N: Indicates presumptive evidence of a compound. This flag is used only for tentatively identified compounds (TICs) where the identification of a compound is based on a mass spectral library search.

P: SW-846: The relative percent difference for detected concentrations between two GC columns is greater than 40%. Unless otherwise specified the higher of the two values is reported on the Form I.

CLP SOW: Greater than 25% difference for detected concentrations between two GC columns. Unless otherwise specified the lower of the two values is reported on the Form I.

C: Pesticide result whose identification has been confirmed by GC/MS.

B: Analyte is found in the sample and the associated method blank. The flag is used for tentatively identified compounds as well as positively identified compounds.

E: Compounds whose concentrations exceed the upper limit of the calibration range of the instrument for that specific analysis.

D: Concentrations identified from analysis of the sample at a secondary dilution.

A: Tentatively identified compound is a suspected aldol conden sation product.

X,Y,Z: Laboratory defined flags that may be used alone or combined, as needed. If used, the description of the flag is defined in the project narrative.

Inorganic/Metals

E: Reported value is estimated due to the presence of interference.

N: Matrix spike sample recovery is not within control limits.

*: Duplicate sample analysis is not within control limits.

B: The result reported is less than the reporting limit but greater than the instrument detection limit.

U: Analyte was analyzed for but not detected above the reporting limit.

Method Codes:

P	ICP-AES
MS	ICP-MS
CV	Cold Vapor AA
AS	Semi-Automated Spectrophotometric

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Burlington
30 Community Drive, Suite 11
South Burlington, VT 05403 Tel: 802 660 1990

CHAIN OF CUSTODY RECORD

Report to:
Company: Weston Solutions
Address: 1 Wall St
Manchester, NH 03101
Contact: Joe Schmidt
Phone: 603 656 5400
Fax: 603 656 5401
Contract/ Quote:

Invoice to:
Company:
Address: Same
Contact: Cathy Tremblay
Phone:
Fax: Same

Lab Use Only
Due Date:

Temp. of coolers when received (C°): 1.0-4.0°

1	2	3	4	5

Custody Seal (N) Y Y
Intact (N/A) Y Y

Screened For Radioactivity ☐

Sampler's Name: Andrew Fullop
Sampler's Signature:

Proj. No.: 03886.184
Project Name: MEFUDS LO-58

Matrix[1]	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	No/Type of Containers[2] VOA	A/G 1 Lt.	250 ml	P/O	VOCs 524.2	VOCs 504.1	ME-GRO TPH	ME-DRO TPH	MS/MSD Triple Volume (NOT 504.1)	Lab/Sample ID (Lab Use Only)
W	5/16	1538		X	LS58DW2-0508-016	X	A			3	3	3	2		
	5/16	1830		X	LS58DW2-0508-228.5	X	X			9	9	9	6	X	
	5/17	1214		X	LS58DW2-0508037	X	A			3	2	3	2		
	5/17	1535		X	LS58DW2-0508-94.5	X	A			3	2	3	2		
	5/17	1855		X	LS58DW2-0508-189	X	A			3	2	3	2		
	5/17	2150		X	LS58DW2-0508-265	X	A			3	2	3	2		
	5/18	1010		X	RB-051808-01	X	A			3		3	1		
	5/18	1910		X	LS58DW1-0508-056	X	A			3	2	3	2		
	5/19	0930		X	LS58DW1-0508-051	X	A			3	2	3	2		
	5/19	1815		X	LS58DW1-0508-041	X	A			3	2	3	2		

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	5/22/08	1328			
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
				05/23/08	0930
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

Remarks: No MS/MSD on 504.1. Please call w/ questions. Thanks!

Client's delivery of samples constitutes acceptance of TestAmerica terms and conditions contained in the Price Schedule.

[1]Matrix WW - Wastewater W - Water S - Soil L - Liquid A - Air bag C - Charcoal Tube SL - Sludge O - Oil
[2]Container VOA - 40 ml vial A/G - Amber / Or Glass 1 Liter 250 ml - Glass wide mouth P/O - Plastic or other _____

TestAmerica Cannot accept verbal changes. Please Fax written changes to (802) 660-1919

TAL-8234(1007)

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Burlington
30 Community Drive, Suite 11
South Burlington, VT 05403 Tel: 802 660 1990

CHAIN OF CUSTODY RECORD

Report to:
Company: Weston Solutions, Inc
Address: 1 Wall St
Manchester, NH 03101
Contact: Joe Schmidl
Phone: 603 656 5400
Fax: 603 656 5401
Contract/
Quote:

Invoice to:
Company: Same
Address:
Contact: Cathy Tremblay
Phone: Same
Fax:

Sampler's Name: Andrew Fuller
Sampler's Signature:

Proj. No. 03886.184
Project Name: MEFMDS. LO-58
No/Type of Containers²: A=2 V=9

ANALYSIS REQUESTED: TPH-GRO; TPH-DRO; VOC 524.2; 504.1 (EDB); 48 Hr turn on these two samples

Lab Use Only
Due Date:

Temp. of coolers when received (C°): 1-4°
1 | 2 | 3 | 4 | 5

Custody Seal N / Y
Intact N / Y

Screened For Radioactivity ☐

Matrix¹	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	VOA	A/G 1 Lt.	250 ml	P/O	TPH-GRO	TPH-DRO	VOC 524.2	504.1 (EDB)	48 Hr turn on these two samples	Lab/Sample ID (Lab Use Only)
W	5/20	1200		X	LS58DW1-0508-034	X	A			3	2	3	3		
W	5/20	1200		X	LS58DW1-0508-034-E	X	A			3	2	3			
W	5/20	1605		X	LS58DW1-0508-029	X	A			3	2	3	3		
W	5/20	1800		X	RB-052008-01	X	A			3	2	3			
					TB-051608-01	X				2		2			
					TB-051908-01	X				2		2			
	5/21	0640			VFW-TAP	X						3		X	
	5/21	0710			~~VFW~~ AMAC-TAP	X						3		X	

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	5/22/08	1328			
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
				05/23/08	0930
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

Remarks: Quick turn on two — Top samples. Please call w/ any questions.

Client's delivery of samples constitutes acceptance of TestAmerica terms and conditions contained in the Price Schedule.

¹Matrix WW - Wastewater W - Water S - Soil L - Liquid A - Air bag C - Charcoal Tube SL - Sludge O - Oil
²Container VOA - 40 ml vial A/G - Amber / Or Glass 1 Liter 250 ml - Glass wide mouth P/O - Plastic or other _____

TestAmerica Cannot accept verbal changes. Please Fax written changes to (802) 660-1919

TAL-8234(1007)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sample Data Summary – 504.1 Volatile

FORM 1
504.1 ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

58DW10508029

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752984

Sample wt/vol: 34.02 (g/mL) ML Lab File ID: 28MAY081140-R151

% Moisture: _____ decanted: (Y/N)___ Date Received: 05/23/08

Extraction: (SepF/Cont/Sonc) OTHER Date Extracted: 05/28/08

Concentrated Extract Volume: 2(mL) Date Analyzed: 05/28/08

Injection Volume: 1.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-93-4	1,2-Dibromoethane	0.010	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.010	U
96-18-4	1,2,3-Trichloropropane	0.021	U

FORM 1
504.1 ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

58DW10508034

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752982

Sample wt/vol: 34.20 (g/mL) ML Lab File ID: 28MAY081140-R141

% Moisture: _____ decanted: (Y/N)___ Date Received: 05/23/08

Extraction: (SepF/Cont/Sonc) OTHER Date Extracted: 05/28/08

Concentrated Extract Volume: 2(mL) Date Analyzed: 05/28/08

Injection Volume: 1.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-93-4	1,2-Dibromoethane	0.010	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.010	U
96-18-4	1,2,3-Trichloropropane	0.020	U

FORM 1
504.1 ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

58DW10508041

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752981

Sample wt/vol: 34.80 (g/mL) ML Lab File ID: 28MAY081140-R131

% Moisture: _____ decanted: (Y/N)___ Date Received: 05/23/08

Extraction: (SepF/Cont/Sonc) OTHER Date Extracted: 05/28/08

Concentrated Extract Volume: 2(mL) Date Analyzed: 05/28/08

Injection Volume: 1.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-93-4	1,2-Dibromoethane	0.010	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.010	U
96-18-4	1,2,3-Trichloropropane	0.020	U

FORM 1
504.1 ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.
58DW10508051

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752980

Sample wt/vol: 34.37 (g/mL) ML Lab File ID: 28MAY081140-R121

% Moisture: _____ decanted: (Y/N)___ Date Received: 05/23/08

Extraction: (SepF/Cont/Sonc) OTHER Date Extracted: 05/28/08

Concentrated Extract Volume: 2(mL) Date Analyzed: 05/28/08

Injection Volume: 1.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-93-4	1,2-Dibromoethane	0.010	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.010	U
96-18-4	1,2,3-Trichloropropane	0.020	U

FORM 1
504.1 ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.
58DW10508056

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752979

Sample wt/vol: 34.47 (g/mL) ML Lab File ID: 28MAY081140-R111

% Moisture: _____ decanted: (Y/N)___ Date Received: 05/23/08

Extraction: (SepF/Cont/Sonc) OTHER Date Extracted: 05/28/08

Concentrated Extract Volume: 2(mL) Date Analyzed: 05/28/08

Injection Volume: 1.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-93-4	1,2-Dibromoethane	0.010	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.010	U
96-18-4	1,2,3-Trichloropropane	0.020	U

FORM 1
504.1 ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

58DW20508037

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752974

Sample wt/vol: 34.14 (g/mL) ML Lab File ID: 28MAY081140-R051

% Moisture: _____ decanted: (Y/N)___ Date Received: 05/23/08

Extraction: (SepF/Cont/Sonc) OTHER Date Extracted: 05/28/08

Concentrated Extract Volume: 2(mL) Date Analyzed: 05/28/08

Injection Volume: 1.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-93-4	1,2-Dibromoethane	0.010	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.010	U
96-18-4	1,2,3-Trichloropropane	0.021	U

FORM 1
504.1 ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

58DW2050816

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752972

Sample wt/vol: 34.56 (g/mL) ML Lab File ID: 28MAY081140-R011

% Moisture: _____ decanted: (Y/N)___ Date Received: 05/23/08

Extraction: (SepF/Cont/Sonc) OTHER Date Extracted: 05/28/08

Concentrated Extract Volume: 2(mL) Date Analyzed: 05/28/08

Injection Volume: 1.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-93-4	1,2-Dibromoethane	0.010	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.010	U
96-18-4	1,2,3-Trichloropropane	0.020	U

FORM 1
504.1 ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

58DW20508189

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752976

Sample wt/vol: 35.24 (g/mL) ML Lab File ID: 28MAY081140-R091

% Moisture: _____ decanted: (Y/N)___ Date Received: 05/23/08

Extraction: (SepF/Cont/Sonc) OTHER Date Extracted: 05/28/08

Concentrated Extract Volume: 2(mL) Date Analyzed: 05/28/08

Injection Volume: 1.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-93-4	1,2-Dibromoethane	0.0099	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.0099	U
96-18-4	1,2,3-Trichloropropane	0.020	U

FORM 1
504.1 ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

58DW20508265

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752977

Sample wt/vol: 34.20 (g/mL) ML Lab File ID: 28MAY081140-R101

% Moisture: _____ decanted: (Y/N)___ Date Received: 05/23/08

Extraction: (SepF/Cont/Sonc) OTHER Date Extracted: 05/28/08

Concentrated Extract Volume: 2(mL) Date Analyzed: 05/28/08

Injection Volume: 1.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-93-4	1,2-Dibromoethane	0.010	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.010	U
96-18-4	1,2,3-Trichloropropane	0.020	U

FORM 1
504.1 ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

58DW20508945

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752975

Sample wt/vol: 34.32 (g/mL) ML Lab File ID: 28MAY081140-R061

% Moisture: _____ decanted: (Y/N)___ Date Received: 05/23/08

Extraction: (SepF/Cont/Sonc) OTHER Date Extracted: 05/28/08

Concentrated Extract Volume: 2(mL) Date Analyzed: 05/28/08

Injection Volume: 1.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-93-4	1,2-Dibromoethane	0.010	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.010	U
96-18-4	1,2,3-Trichloropropane	0.020	U

FORM 1
504.1 ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

TB05160801

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752986

Sample wt/vol: 34.15 (g/mL) ML Lab File ID: 28MAY081140-R161

% Moisture: _____ decanted: (Y/N)___ Date Received: 05/23/08

Extraction: (SepF/Cont/Sonc) OTHER Date Extracted: 05/28/08

Concentrated Extract Volume: 2(mL) Date Analyzed: 05/28/08

Injection Volume: 1.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-93-4	1,2-Dibromoethane	0.010	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.010	U
96-18-4	1,2,3-Trichloropropane	0.020	U

FORM 1
504.1 ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

W20508285

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752973

Sample wt/vol: 33.68 (g/mL) ML Lab File ID: 28MAY081140-R021

% Moisture: _____ decanted: (Y/N)___ Date Received: 05/23/08

Extraction: (SepF/Cont/Sonc) OTHER Date Extracted: 05/28/08

Concentrated Extract Volume: 2(mL) Date Analyzed: 05/28/08

Injection Volume: 1.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-93-4	1,2-Dibromoethane	0.010	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.010	U
96-18-4	1,2,3-Trichloropropane	0.021	U

FORM 1
504.1 ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MBLKE052808A

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: MBLKE052808A

Sample wt/vol: 35.00 (g/mL) ML Lab File ID: 28MAY080706-R041

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) OTHER Date Extracted: 05/28/08

Concentrated Extract Volume: 2(mL) Date Analyzed: 05/28/08

Injection Volume: 1.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-93-4	1,2-Dibromoethane	0.010	U
96-12-8	1,2-Dibromo-3-Chloropropane	0.010	U
96-18-4	1,2,3-Trichloropropane	0.020	U

FORM 1
504.1 ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

W20508285MS

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752973MS

Sample wt/vol: 34.16 (g/mL) ML Lab File ID: 28MAY081140-R031

% Moisture: _____ decanted: (Y/N)___ Date Received: 05/23/08

Extraction: (SepF/Cont/Sonc) OTHER Date Extracted: 05/28/08

Concentrated Extract Volume: 2(mL) Date Analyzed: 05/28/08

Injection Volume: 1.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-93-4	1,2-Dibromoethane	0.094	
96-12-8	1,2-Dibromo-3-Chloropropane	0.097	
96-18-4	1,2,3-Trichloropropane	0.084	

FORM 1
504.1 ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

W20508285MSD

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752973MD

Sample wt/vol: 34.57 (g/mL) ML Lab File ID: 28MAY081140-R041

% Moisture: _____ decanted: (Y/N)___ Date Received: 05/23/08

Extraction: (SepF/Cont/Sonc) OTHER Date Extracted: 05/28/08

Concentrated Extract Volume: 2(mL) Date Analyzed: 05/28/08

Injection Volume: 1.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-93-4	1,2-Dibromoethane	0.093	
96-12-8	1,2-Dibromo-3-Chloropropane	0.10	
96-18-4	1,2,3-Trichloropropane	0.088	

FORM 1
504.1 ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EA052808LCS

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: EA052808LCS

Sample wt/vol: 35.00 (g/mL) ML Lab File ID: 28MAY080706-R061

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) OTHER Date Extracted: 05/28/08

Concentrated Extract Volume: 2(mL) Date Analyzed: 05/28/08

Injection Volume: 1.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-93-4	1,2-Dibromoethane	0.18	
96-12-8	1,2-Dibromo-3-Chloropropane	0.19	
96-18-4	1,2,3-Trichloropropane	0.16	

FORM 1
504.1 ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EA052808LMBS

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: EA052808LMBS

Sample wt/vol: 35.00 (g/mL) ML Lab File ID: 28MAY080706-R051

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) OTHER Date Extracted: 05/28/08

Concentrated Extract Volume: 2(mL) Date Analyzed: 05/28/08

Injection Volume: 1.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-93-4	1,2-Dibromoethane	0.017	
96-12-8	1,2-Dibromo-3-Chloropropane	0.020	
96-18-4	1,2,3-Trichloropropane	0.017	J

FORM 1
504.1 ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

EA082808MBS

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: EA082808MBS

Sample wt/vol: 35.00 (g/mL) ML Lab File ID: 28MAY080706-R071

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) OTHER Date Extracted: 05/28/08

Concentrated Extract Volume: 2(mL) Date Analyzed: 05/28/08

Injection Volume: 1.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
106-93-4	1,2-Dibromoethane	0.17	
96-12-8	1,2-Dibromo-3-Chloropropane	0.19	
96-18-4	1,2,3-Trichloropropane	0.17	

FORM 2
WATER 504.1 SURROGATE RECOVERY

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

GC Column(1): RTX-35 ID: 0.32 (mm) GC Column(2): RTX-CLP ID: 0.32 (mm)

	CLIENT SAMPLE NO.	S1 1 %REC #	S1 2 %REC #	S2 1 %REC #	S2 2 %REC #	S3 1 %REC #	S3 2 %REC #	TOT OUT
01	MBLKE052808A	103	73					0
02	EA052808LMBS	115	72					0
03	EA052808LCS	104	80					0
04	EA082808MBS	102	76					0
05	58DW2050816	104	75					0
06	W20508285	100	77					0
07	W20508285MS	111	78					0
08	W20508285MSD	114	81					0
09	58DW20508037	105	85					0
10	58DW20508945	104	82					0
11	58DW20508189	101	81					0
12	58DW20508265	103	88					0
13	58DW10508056	102	86					0
14	58DW10508051	114	96					0
15	58DW10508041	103	83					0
16	58DW10508034	106	90					0
17	58DW10508029	107	92					0
18	TB05160801	103	89					0
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								

ADVISORY
QC LIMITS

S1 = 1-Bromo-3-chloropropan (60-140)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

FORM 3
WATER 504.1 MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix Spike - WESTN1 Sample No.: W20508285

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
1,2-Dibromoethane	0.10	0.0	0.094	94	65-135
1,2-Dibromo-3-Chloropro	0.10	0.0	0.097	97	65-135
1,2,3-Trichloropropane	0.10	0.0	0.084	84	65-135

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,2-Dibromoethane	0.10	0.093	93	1	30	65-135
1,2-Dibromo-3-Chloropro	0.10	0.10	100	3	40	65-135
1,2,3-Trichloropropane	0.10	0.088	88	5	40	65-135

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 3 outside limits
Spike Recovery: 0 out of 6 outside limits

COMMENTS: _____

FORM 3
WATER 504.1 BLANK SPIKE RECOVERY

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix Spike - Sample No.: EA052808LMBS

COMPOUND	SPIKE ADDED (ug/L)	BLANK CONCENTRATION (ug/L)	BS CONCENTRATION (ug/L)	BS % REC #	QC. LIMITS REC.
1,2-Dibromoethane	0.020		0.017	85	60-140
1,2-Dibromo-3-Chloropro	0.020		0.020	100	60-140
1,2,3-Trichloropropane	0.020		0.017	85	60-140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 3 outside limits

COMMENTS: _____

FORM 3
WATER 504.1 BLANK SPIKE RECOVERY

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix Spike - Sample No.: EA082808MBS

COMPOUND	SPIKE ADDED (ug/L)	BLANK CONCENTRATION (ug/L)	BS CONCENTRATION (ug/L)	BS % REC #	QC. LIMITS REC.
1,2-Dibromoethane	0.20		0.17	85	70-130
1,2-Dibromo-3-Chloropro	0.20		0.19	95	70-130
1,2,3-Trichloropropane	0.20		0.17	85	70-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 3 outside limits

COMMENTS: _____

FORM 3
WATER 504.1 LAB CONTROL SAMPLE

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix Spike - Sample No.: EA052808LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
1,2-Dibromoethane	0.20		0.18	90	60-140
1,2-Dibromo-3-Chloropro	0.20		0.19	95	60-140
1,2,3-Trichloropropane	0.20		0.16	80	60-140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 3 outside limits

COMMENTS: _____

FORM 4
504.1 METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

MBLKE052808A

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Lab Sample ID: MBLKE052808A Lab File ID: 28MAY080706-R041

Matrix (soil/water) WATER Extraction:(SepF/Cont/Sonc) OTHER

Sulfur Cleanup (Y/N) N Date Extracted: 05/28/08

Date Analyzed (1): 05/28/08 Date Analyzed (2): 05/28/08

Time Analyzed (1): 0909 Time Analyzed (2): 0909

Instrument ID (1): 2404_1 Instrument ID (2): 2404_2

GC Column (1): RTX-35 ID: 0.32(mm) GC Column (2): RTX-CLP ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	EA052808LMBS	EA052808LMBS	05/28/08	05/28/08
02	EA052808LCS	EA052808LCS	05/28/08	05/28/08
03	EA082808MBS	EA082808MBS	05/28/08	05/28/08
04	58DW2050816	752972	05/28/08	05/28/08
05	W20508285	752973	05/28/08	05/28/08
06	W20508285MS	752973MS	05/28/08	05/28/08
07	W20508285MSD	752973MD	05/28/08	05/28/08
08	58DW20508037	752974	05/28/08	05/28/08
09	58DW20508945	752975	05/28/08	05/28/08
10	58DW20508189	752976	05/28/08	05/28/08
11	58DW20508265	752977	05/28/08	05/28/08
12	58DW10508056	752979	05/28/08	05/28/08
13	58DW10508051	752980	05/28/08	05/28/08
14	58DW10508041	752981	05/28/08	05/28/08
15	58DW10508034	752982	05/28/08	05/28/08
16	58DW10508029	752984	05/28/08	05/28/08
17	TB05160801	752986	05/28/08	05/28/08
18				
19				
20				
21				
22				
23				
24				

COMMENTS: _____

FORM 6
504.1 INITIAL CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Instrument ID: 2404_1 Calibration Date(s): 04/25/08 04/25/08

Column: RTX-35 ID: 0.32 (mm) Calibration Time(s): 1004 1326

LAB FILE ID: RF0.175: 25AP08083RF0.35: 25AP080839RF0.875: 25AP08083
RF1.75: 25AP080839RF3.5: 25AP080839-RF4.375: 25AP08083

COMPOUND	RF0.175	RF0.35	RF0.875	RF1.75	RF3.5	RF4.375
1,2-Dibromoethane	16462.857	15057.143	14098.286	14948.000	13900.857	13538.286
1,2-Dibromo-3-Chloropropane	17188.571	17160.000	16553.143	16397.143	15502.286	15754.057
1,2,3-Trichloropropane		1977.143	2182.857	2188.571	2069.428	2049.828
1-Bromo-3-chloropropane	4702.857	4345.714	4372.571	4665.714	4270.286	4168.914

FORM 6
504.1 INITIAL CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Instrument ID: 2404_1 Calibration Date(s): 04/25/08 04/25/08

Column: RTX-35 ID: 0.32 (mm) Calibration Time(s): 1004 1326

COMPOUND	CURVE	COEFFICENT A1	%RSD OR R^2	MAX %RSD OR R^2	
1,2-Dibromoethane	AVRG	14667.5714	7.241	20.000	
1,2-Dibromo-3-Chloropropane	AVRG	16425.8667	4.255	20.000	
1,2,3-Trichloropropane	AVRG	2093.56571	4.342	20.000	<-
1-Bromo-3-chloropropane	AVRG	4421.00952	4.889	20.000	

FORM 6
504.1 INITIAL CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Instrument ID: 2404_2 Calibration Date(s): 04/25/08 04/25/08

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): 1004 1326

LAB FILE ID: RF0.175: 25AP08083RF0.35: 25AP080839RF0.875: 25AP08083
RF1.75: 25AP080839RF3.5: 25AP080839-RF4.375: 25AP08083

COMPOUND	RF0.175	RF0.35	RF0.875	RF1.75	RF3.5	RF4.375
1,2-Dibromoethane	2868.571	3057.143	3043.428	3097.143	3102.857	2975.086
1,2-Dibromo-3-Chloropropane	3771.428	3874.286	3797.714	3739.428	3772.571	3708.800
1,2,3-Trichloropropane		545.714	660.571	631.428	651.428	661.943
1-Bromo-3-chloropropane	1085.714	1057.143	1076.571	1113.714	1131.428	1102.628

FORM 6
504.1 INITIAL CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Instrument ID: 2404_2 Calibration Date(s): 04/25/08 04/25/08

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): 1004 1326

COMPOUND	CURVE	COEFFICENT A1	%RSD OR R^2	MAX %RSD OR R^2	
1,2-Dibromoethane	AVRG	3024.03810	2.943	20.000	
1,2-Dibromo-3-Chloropropane	AVRG	3777.37143	1.498	20.000	
1,2,3-Trichloropropane	AVRG	630.217143	7.741	20.000	<-
1-Bromo-3-chloropropane	AVRG	1094.53333	2.449	20.000	

FORM 7
504.1 CALIBRATION VERIFICATION SUMMARY

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Instrument ID: 2404_1 Calibration Date: 05/28/08 Time: 0829

Lab File ID: 28MAY080706-R0 Init. Calib. Date(s): 04/25/08 04/25/08

Init. Calib. Times: 1004 1326

GC Column: RTX-35 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF 1.75	MIN RRF	%D	MAX %D
1,2-Dibromoethane	14667.572	14554.857		0.8	30.0
1,2-Dibromo-3-Chloropropane	16425.867	18241.143		11.0	30.0
1,2,3-Trichloropropane	2093.565	2137.714		2.1	30.0
1-Bromo-3-chloropropane	4421.009	4954.286		12.1	30.0

FORM 7
504.1 CALIBRATION VERIFICATION SUMMARY

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Instrument ID: 2404_1 Calibration Date: 05/28/08 Time: 1632

Lab File ID: 28MAY081140-R0 Init. Calib. Date(s): 04/25/08 04/25/08

Init. Calib. Times: 1004 1326

GC Column: RTX-35 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF 1.75	MIN RRF	%D	MAX %D
1,2-Dibromoethane	14667.572	15256.571		4.0	30.0
1,2-Dibromo-3-Chloropropane	16425.867	18029.714		9.8	30.0
1,2,3-Trichloropropane	2093.565	2204.000		5.3	30.0
1-Bromo-3-chloropropane	4421.009	4996.571		13.0	30.0

FORM 7
504.1 CALIBRATION VERIFICATION SUMMARY

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Instrument ID: 2404_1 Calibration Date: 05/28/08 Time: 2315

Lab File ID: 28MAY081140-R1 Init. Calib. Date(s): 04/25/08 04/25/08

Init. Calib. Times: 1004 1326

GC Column: RTX-35 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF 1.75	MIN RRF	%D	MAX %D
1,2-Dibromoethane	14667.572	15300.000		4.3	30.0
1,2-Dibromo-3-Chloropropane	16425.867	19172.000		16.7	30.0
1,2,3-Trichloropropane	2093.565	2345.714		12.0	30.0
1-Bromo-3-chloropropane	4421.009	5137.714		16.2	30.0

FORM 7
504.1 CALIBRATION VERIFICATION SUMMARY

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Instrument ID: 2404_2 Calibration Date: 05/28/08 Time: 0829

Lab File ID: 28MAY080706-R0 Init. Calib. Date(s): 04/25/08 04/25/08

Init. Calib. Times: 1004 1326

GC Column: RTX-CLP ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF 1.75	MIN RRF	%D	MAX %D
1,2-Dibromoethane	3024.038	2649.143		12.4	30.0
1,2-Dibromo-3-Chloropropane	3777.371	3409.714		9.7	30.0
1,2,3-Trichloropropane	630.217	542.286		14.0	30.0
1-Bromo-3-chloropropane	1094.533	800.000		26.9	30.0

FORM 7
504.1 CALIBRATION VERIFICATION SUMMARY

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Instrument ID: 2404_2 Calibration Date: 05/28/08 Time: 1632

Lab File ID: 28MAY081140-R0 Init. Calib. Date(s): 04/25/08 04/25/08

Init. Calib. Times: 1004 1326

GC Column: RTX-CLP ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF 1.75	MIN RRF	%D	MAX %D
1,2-Dibromoethane	3024.038	3020.000		0.1	30.0
1,2-Dibromo-3-Chloropropane	3777.371	3982.286		5.4	30.0
1,2,3-Trichloropropane	630.217	587.428		6.8	30.0
1-Bromo-3-chloropropane	1094.533	948.571		13.3	30.0

FORM 7
504.1 CALIBRATION VERIFICATION SUMMARY

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Instrument ID: 2404_2 Calibration Date: 05/28/08 Time: 2315

Lab File ID: 28MAY081140-R1 Init. Calib. Date(s): 04/25/08 04/25/08

Init. Calib. Times: 1004 1326

GC Column: RTX-CLP ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF 1.75	MIN RRF	%D	MAX %D
1,2-Dibromoethane	3024.038	2974.857		1.6	30.0
1,2-Dibromo-3-Chloropropane	3777.371	4269.714		13.0	30.0
1,2,3-Trichloropropane	630.217	694.857		10.2	30.0
1-Bromo-3-chloropropane	1094.533	991.428		9.4	30.0

FORM 8
504.1 ANALYTICAL SEQUENCE

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

GC Column: RTX-35 ID: 0.32 (mm) Init. Calib. Date(s): 04/25/08 04/25/08

Instrument ID: 2404_1

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 8.77

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	0.175 PPB	0.175 PPB	04/25/08	1004	8.78	
02	0.350 PPB	0.350 PPB	04/25/08	1044	8.76	
03	0.875 PPB	0.875 PPB	04/25/08	1125	8.76	
04	1.75 PPB	1.75 PPB	04/25/08	1205	8.77	
05	3.50 PPB	3.50 PPB	04/25/08	1246	8.75	
06	4.375 PPB	4.375 PPB	04/25/08	1326	8.75	
07	RESC	RESC	04/25/08	1447	8.74	
08	1.75 PPB	1.75 PPB	05/28/08	0829	8.76	
09	MBLKE052808A	MBLKE052808A	05/28/08	0909	8.75	
10	EA052808LMBS	EA052808LMBS	05/28/08	0949	8.73	
11	EA052808LCS	EA052808LCS	05/28/08	1030	8.73	
12	EA082808MBS	EA082808MBS	05/28/08	1110	8.73	
13	58DW2050816	752972	05/28/08	1150	8.74	
14	W20508285	752973	05/28/08	1230	8.73	
15	W20508285MS	752973MS	05/28/08	1310	8.72	
16	W20508285MSD	752973MD	05/28/08	1351	8.73	
17	58DW20508037	752974	05/28/08	1431	8.72	
18	58DW20508945	752975	05/28/08	1511	8.74	
19	1.75 PPB	1.75 PPB	05/28/08	1632	8.72	
20	58DW20508189	752976	05/28/08	1712	8.72	
21	58DW20508265	752977	05/28/08	1752	8.73	
22	58DW10508056	752979	05/28/08	1833	8.73	
23	58DW10508051	752980	05/28/08	1913	8.73	
24	58DW10508041	752981	05/28/08	1953	8.72	
25	58DW10508034	752982	05/28/08	2034	8.72	
26	58DW10508029	752984	05/28/08	2114	8.72	
27	TB05160801	752986	05/28/08	2154	8.72	
28	1.75 PPB	1.75 PPB	05/28/08	2315	8.72	
29						
30						
31						
32						

QC LIMITS
S1 = 1-Bromo-3-chloropropan (+/- 0.15 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 8
504.1 ANALYTICAL SEQUENCE

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

GC Column: RTX-CLP ID: 0.32 (mm) Init. Calib. Date(s): 04/25/08 04/25/08

Instrument ID: 2404_2

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 6.58

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	0.175 PPB	0.175 PPB	04/25/08	1004	6.59	
02	0.350 PPB	0.350 PPB	04/25/08	1044	6.57	
03	0.875 PPB	0.875 PPB	04/25/08	1125	6.58	
04	1.75 PPB	1.75 PPB	04/25/08	1205	6.58	
05	3.50 PPB	3.50 PPB	04/25/08	1246	6.57	
06	4.375 PPB	4.375 PPB	04/25/08	1326	6.57	
07	RESC	RESC	04/25/08	1447	6.57	
08	1.75 PPB	1.75 PPB	05/28/08	0829	6.58	
09	MBLKE052808A	MBLKE052808A	05/28/08	0909	6.57	
10	EA052808LMBS	EA052808LMBS	05/28/08	0949	6.56	
11	EA052808LCS	EA052808LCS	05/28/08	1030	6.56	
12	EA082808MBS	EA082808MBS	05/28/08	1110	6.55	
13	58DW2050816	752972	05/28/08	1150	6.57	
14	W20508285	752973	05/28/08	1230	6.56	
15	W20508285MS	752973MS	05/28/08	1310	6.55	
16	W20508285MSD	752973MD	05/28/08	1351	6.57	
17	58DW20508037	752974	05/28/08	1431	6.56	
18	58DW20508945	752975	05/28/08	1511	6.56	
19	1.75 PPB	1.75 PPB	05/28/08	1632	6.55	
20	58DW20508189	752976	05/28/08	1712	6.57	
21	58DW20508265	752977	05/28/08	1752	6.55	
22	58DW10508056	752979	05/28/08	1833	6.56	
23	58DW10508051	752980	05/28/08	1913	6.55	
24	58DW10508041	752981	05/28/08	1953	6.55	
25	58DW10508034	752982	05/28/08	2034	6.55	
26	58DW10508029	752984	05/28/08	2114	6.54	
27	TB05160801	752986	05/28/08	2154	6.55	
28	1.75 PPB	1.75 PPB	05/28/08	2315	6.54	
29						
30						
31						
32						

QC LIMITS
S1 = 1-Bromo-3-chloropropan (+/- 0.15 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII 504.1

FORM 10
504.1 IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

WESTN1 SAMPLE NO.

W20508285MS

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Lab Sample ID: 752973MS Date(s) Analyzed: 05/28/08 05/28/08

Instrument ID (1): 2404_1 Instrument ID (2): 2404_2

GC Column(1): RTX-35 ID: 0.32(mm) GC Column(2): RTX-CLP ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
1,2-Dibromoethane	1	5.18	5.06	5.36	0.10	
	2	3.65	3.52	3.82	0.094	6.2
1,2-Dibromo-3-Chloropropa	1	17.12	17.08	17.18	0.11	
	2	16.17	16.13	16.23	0.097	13
1,2,3-Trichloropropane	1	13.73	13.61	13.91	0.11	
	2	10.02	9.92	10.22	0.084	27
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM 10
504.1 IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

WESTN1 SAMPLE NO.

W20508285MSD

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Lab Sample ID: 752973MD Date(s) Analyzed: 05/28/08 05/28/08

Instrument ID (1): 2404_1 Instrument ID (2): 2404_2

GC Column(1): RTX-35 ID: 0.32(mm) GC Column(2): RTX-CLP ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
1,2-Dibromoethane	1	5.19	5.06	5.36	0.10	
	2	3.66	3.52	3.82	0.093	7.3
1,2-Dibromo-3-Chloropropa	1	17.13	17.08	17.18	0.11	
	2	16.18	16.13	16.23	0.100	9.5
1,2,3-Trichloropropane	1	13.73	13.61	13.91	0.11	
	2	10.03	9.92	10.22	0.088	22
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM 10
504.1 IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

EA052808LCS

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Lab Sample ID: EA052808LCS Date(s) Analyzed: 05/28/08 05/28/08

Instrument ID (1): 2404_1 Instrument ID (2): 2404_2

GC Column(1): RTX-35 ID: 0.32(mm) GC Column(2): RTX-CLP ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
1,2-Dibromoethane	1	5.18	5.06	5.36	0.20	
	2	3.65	3.52	3.82	0.18	11
1,2-Dibromo-3-Chloropropa	1	17.11	17.08	17.18	0.21	
	2	16.17	16.13	16.23	0.19	10
1,2,3-Trichloropropane	1	13.72	13.61	13.91	0.20	
	2	10.03	9.92	10.22	0.16	22
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM 10
504.1 IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

EA052808LMBS

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Lab Sample ID: EA052808LMBS Date(s) Analyzed: 05/28/08 05/28/08

Instrument ID (1): 2404_1 Instrument ID (2): 2404_2

GC Column(1): RTX-35 ID: 0.32(mm) GC Column(2): RTX-CLP ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
1,2-Dibromoethane	1	5.19	5.06	5.36	0.021	
	2	3.66	3.52	3.82	0.017	21
1,2-Dibromo-3-Chloropropa	1	17.13	17.08	17.18	0.022	
	2	16.17	16.13	16.23	0.020	9.5
1,2,3-Trichloropropane	1	13.73	13.61	13.91	0.019	
	2	10.03	9.92	10.22	0.017	11
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM 10
504.1 IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

EA082808MBS

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Lab Sample ID: EA082808MBS Date(s) Analyzed: 05/28/08 05/28/08

Instrument ID (1): 2404_1 Instrument ID (2): 2404_2

GC Column(1): RTX-35 ID: 0.32(mm) GC Column(2): RTX-CLP ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	RPD
1,2-Dibromoethane	1	5.18	5.06	5.36	0.19	
	2	3.65	3.52	3.82	0.17	11
1,2-Dibromo-3-Chloropropa	1	17.12	17.08	17.18	0.22	
	2	16.16	16.13	16.23	0.19	15
1,2,3-Trichloropropane	1	13.73	13.61	13.91	0.21	
	2	10.04	9.92	10.22	0.17	21
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sample Data Summary – 524.2 Volatile

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

1-0508-029

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752984

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752984

Level: (low/med) LOW Date Received: 05/23/08

% Moisture: not dec. _____ Date Analyzed: 05/29/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl-t-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.52	
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.46	J
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	1.8	
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	120	E
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

1-0508-029

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752984

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752984

Level: (low/med) LOW Date Received: 05/23/08

% Moisture: not dec. _____ Date Analyzed: 05/29/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-41-4	Ethylbenzene	0.50	U
1330-20-7	m- & p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
99-87-6	p-Isopropyltoluene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

1-0508-029DL

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752984D1

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752984D2

Level: (low/med) LOW Date Received: 05/23/08

% Moisture: not dec. _____ Date Analyzed: 05/29/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 6.1

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	3.1	U
74-87-3	Chloromethane	3.1	U
75-01-4	Vinyl Chloride	3.1	U
74-83-9	Bromomethane	3.1	U
75-00-3	Chloroethane	3.1	U
75-69-4	Trichlorofluoromethane	3.1	U
75-35-4	1,1-Dichloroethene	3.1	U
75-09-2	Methylene Chloride	3.1	U
156-60-5	trans-1,2-Dichloroethene	3.1	U
1634-04-4	Methyl-t-Butyl Ether	3.1	U
75-34-3	1,1-Dichloroethane	3.1	U
594-20-7	2,2-Dichloropropane	3.1	U
156-59-2	cis-1,2-Dichloroethene	3.1	U
74-97-5	Bromochloromethane	3.1	U
67-66-3	Chloroform	3.1	U
71-55-6	1,1,1-Trichloroethane	3.1	U
56-23-5	Carbon Tetrachloride	3.1	U
563-58-6	1,1-Dichloropropene	3.1	U
71-43-2	Benzene	3.1	U
107-06-2	1,2-Dichloroethane	3.1	U
79-01-6	Trichloroethene	1.8	DJ
78-87-5	1,2-Dichloropropane	3.1	U
74-95-3	Dibromomethane	3.1	U
75-27-4	Bromodichloromethane	3.1	U
10061-01-5	cis-1,3-Dichloropropene	3.1	U
108-88-3	Toluene	120	D
10061-02-6	trans-1,3-Dichloropropene	3.1	U
79-00-5	1,1,2-Trichloroethane	3.1	U
127-18-4	Tetrachloroethene	3.1	U
142-28-9	1,3-Dichloropropane	3.1	U
124-48-1	Dibromochloromethane	3.1	U
108-90-7	Chlorobenzene	3.1	U
630-20-6	1,1,1,2-Tetrachloroethane	3.1	U

FORM 1 WESTN1 SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

1-0508-029DL

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752984D1

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752984D2

Level: (low/med) LOW Date Received: 05/23/08

% Moisture: not dec. _____ Date Analyzed: 05/29/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 6.1

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-41-4	Ethylbenzene	3.1	U
1330-20-7	m- & p-Xylene	3.1	U
95-47-6	o-Xylene	3.1	U
100-42-5	Styrene	3.1	U
75-25-2	Bromoform	3.1	U
98-82-8	Isopropylbenzene	3.1	U
108-86-1	Bromobenzene	3.1	U
79-34-5	1,1,2,2-Tetrachloroethane	3.1	U
103-65-1	n-Propylbenzene	3.1	U
95-49-8	2-Chlorotoluene	3.1	U
106-43-4	4-Chlorotoluene	3.1	U
108-67-8	1,3,5-Trimethylbenzene	3.1	U
98-06-6	tert-Butylbenzene	3.1	U
95-63-6	1,2,4-Trimethylbenzene	3.1	U
135-98-8	sec-Butylbenzene	3.1	U
541-73-1	1,3-Dichlorobenzene	3.1	U
99-87-6	p-Isopropyltoluene	3.1	U
106-46-7	1,4-Dichlorobenzene	3.1	U
95-50-1	1,2-Dichlorobenzene	3.1	U
104-51-8	n-Butylbenzene	3.1	U
120-82-1	1,2,4-Trichlorobenzene	3.1	U
87-68-3	Hexachlorobutadiene	3.1	U
91-20-3	Naphthalene	3.1	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

1-0508-034

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752982

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752982

Level: (low/med) LOW Date Received: 05/23/08

% Moisture: not dec. _____ Date Analyzed: 05/29/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl-t-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.44	J
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	2.5	
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	25	
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

1-0508-034

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752982

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752982

Level: (low/med) LOW Date Received: 05/23/08

% Moisture: not dec. _____ Date Analyzed: 05/29/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-41-4	Ethylbenzene	0.50	U
1330-20-7	m- & p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
99-87-6	p-Isopropyltoluene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

1-0508-034-E

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752983

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752983

Level: (low/med) LOW Date Received: 05/23/08

% Moisture: not dec. _____ Date Analyzed: 05/29/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl-t-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.45	J
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	2.5	
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	22	
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

1-0508-034-E

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752983

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752983

Level: (low/med) LOW Date Received: 05/23/08

% Moisture: not dec. _____ Date Analyzed: 05/29/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-41-4	Ethylbenzene	0.50	U
1330-20-7	m- & p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
99-87-6	p-Isopropyltoluene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

1-0508-041

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752981

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752981

Level: (low/med) LOW Date Received: 05/23/08

% Moisture: not dec. _____ Date Analyzed: 05/29/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl-t-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	1.2	
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.24	J
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	3.4	
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	12	
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

1-0508-041

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752981

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752981

Level: (low/med) LOW Date Received: 05/23/08

% Moisture: not dec. _____ Date Analyzed: 05/29/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-41-4	Ethylbenzene	0.50	U
1330-20-7	m- & p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
99-87-6	p-Isopropyltoluene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

1-0508-051

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752980

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752980

Level: (low/med) LOW Date Received: 05/23/08

% Moisture: not dec. _____ Date Analyzed: 05/29/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl-t-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.96	
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	3.1	
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	0.32	J
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

1-0508-051

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752980

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752980

Level: (low/med) LOW Date Received: 05/23/08

% Moisture: not dec. _____ Date Analyzed: 05/29/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-41-4	Ethylbenzene	0.50	U
1330-20-7	m- & p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
99-87-6	p-Isopropyltoluene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

1-0508-056

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752979

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752979

Level: (low/med) LOW Date Received: 05/23/08

% Moisture: not dec. _____ Date Analyzed: 05/28/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl-t-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.52	
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.34	J
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	2.0	
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	22	
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

1-0508-056

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752979

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752979

Level: (low/med) LOW Date Received: 05/23/08

% Moisture: not dec. _____ Date Analyzed: 05/28/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-41-4	Ethylbenzene	0.50	U
1330-20-7	m- & p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
99-87-6	p-Isopropyltoluene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

2-0508-037

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752974

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752974

Level: (low/med) LOW Date Received: 05/23/08

% Moisture: not dec. _____ Date Analyzed: 05/28/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl-t-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	4.0	
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

2-0508-037

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752974

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752974

Level: (low/med) LOW Date Received: 05/23/08

% Moisture: not dec. _____ Date Analyzed: 05/28/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-41-4	Ethylbenzene	0.50	U
1330-20-7	m- & p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
99-87-6	p-Isopropyltoluene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

2-0508-16

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752972

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752972

Level: (low/med) LOW Date Received: 05/23/08

% Moisture: not dec. _____ Date Analyzed: 05/28/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl-t-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	2.4	
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

2-0508-16

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752972

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752972

Level: (low/med) LOW Date Received: 05/23/08

% Moisture: not dec. _____ Date Analyzed: 05/28/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-41-4	Ethylbenzene	0.50	U
1330-20-7	m- & p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
99-87-6	p-Isopropyltoluene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.56	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

2-0508-189

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752976

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752976

Level: (low/med) LOW Date Received: 05/23/08

% Moisture: not dec. _____ Date Analyzed: 05/28/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl-t-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.23	J
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	2.3	
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.26	J
108-90-7	Chlorobenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

2-0508-189

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752976

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752976

Level: (low/med) LOW Date Received: 05/23/08

% Moisture: not dec. _____ Date Analyzed: 05/28/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-41-4	Ethylbenzene	0.50	U
1330-20-7	m- & p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
99-87-6	p-Isopropyltoluene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.
2-0508-265

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752977

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752977

Level: (low/med) LOW Date Received: 05/23/08

% Moisture: not dec. _____ Date Analyzed: 05/28/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl-t-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	0.79	
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

2-0508-265

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752977

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752977

Level: (low/med) LOW Date Received: 05/23/08

% Moisture: not dec. _____ Date Analyzed: 05/28/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-41-4	Ethylbenzene	0.50	U
1330-20-7	m- & p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
99-87-6	p-Isopropyltoluene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

2-0508-945

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752975

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752975

Level: (low/med) LOW Date Received: 05/23/08

% Moisture: not dec. _____ Date Analyzed: 05/28/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl-t-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	5.5	
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

2-0508-945

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752975

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752975

Level: (low/med) LOW Date Received: 05/23/08

% Moisture: not dec. _____ Date Analyzed: 05/28/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-41-4	Ethylbenzene	0.50	U
1330-20-7	m- & p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
99-87-6	p-Isopropyltoluene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

2-0508285

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752973

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752973

Level: (low/med) LOW Date Received: 05/23/08

% Moisture: not dec. _____ Date Analyzed: 05/28/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl-t-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

2-0508285

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752973

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752973

Level: (low/med) LOW Date Received: 05/23/08

% Moisture: not dec. _____ Date Analyzed: 05/28/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-41-4	Ethylbenzene	0.50	U
1330-20-7	m- & p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
99-87-6	p-Isopropyltoluene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

RB-051808-01

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752978

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752978

Level: (low/med) LOW Date Received: 05/23/08

% Moisture: not dec. _____ Date Analyzed: 05/28/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl-t-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	0.47	J
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

RB-051808-01

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752978

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752978

Level: (low/med) LOW Date Received: 05/23/08

% Moisture: not dec. _____ Date Analyzed: 05/28/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-41-4	Ethylbenzene	0.50	U
1330-20-7	m- & p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
99-87-6	p-Isopropyltoluene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

RB-052008-01

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752985

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752985

Level: (low/med) LOW Date Received: 05/23/08

% Moisture: not dec. _____ Date Analyzed: 05/28/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl-t-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.20	J
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

RB-052008-01

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752985

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752985

Level: (low/med) LOW Date Received: 05/23/08

% Moisture: not dec. _____ Date Analyzed: 05/28/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-41-4	Ethylbenzene	0.50	U
1330-20-7	m- & p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
99-87-6	p-Isopropyltoluene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

TB-051608-01

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752986

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752986

Level: (low/med) LOW Date Received: 05/23/08

% Moisture: not dec. _____ Date Analyzed: 05/28/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl-t-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

TB-051608-01

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752986

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752986

Level: (low/med) LOW Date Received: 05/23/08

% Moisture: not dec. _____ Date Analyzed: 05/28/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-41-4	Ethylbenzene	0.50	U
1330-20-7	m- & p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
99-87-6	p-Isopropyltoluene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

TB-051908-01

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752987

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752987

Level: (low/med) LOW Date Received: 05/23/08

% Moisture: not dec. _____ Date Analyzed: 05/28/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl-t-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

TB-051908-01

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752987

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752987

Level: (low/med) LOW Date Received: 05/23/08

% Moisture: not dec. _____ Date Analyzed: 05/28/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-41-4	Ethylbenzene	0.50	U
1330-20-7	m- & p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
99-87-6	p-Isopropyltoluene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MBLK052808LB

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: MBLK052808LB

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: LUCB02F

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 05/28/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl-t-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MBLK052808LB

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: MBLK052808LB

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: LUCB02F

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 05/28/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-41-4	Ethylbenzene	0.50	U
1330-20-7	m- & p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
99-87-6	p-Isopropyltoluene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MBLK052908LA

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: MBLK052908LA

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: LUCB02G

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 05/29/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl-t-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MBLK052908LA

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: MBLK052908LA

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: LUCB02G

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 05/29/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-41-4	Ethylbenzene	0.50	U
1330-20-7	m- & p-Xylene	0.50	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
99-87-6	p-Isopropyltoluene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LB052808LCS

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: LB052808LCS

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: LUC01FQ

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 05/28/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.3	
74-87-3	Chloromethane	1.2	
75-01-4	Vinyl Chloride	1.1	
74-83-9	Bromomethane	1.1	
75-00-3	Chloroethane	1.1	
75-69-4	Trichlorofluoromethane	1.0	
75-35-4	1,1-Dichloroethene	1.0	
75-09-2	Methylene Chloride	1.0	
156-60-5	trans-1,2-Dichloroethene	1.0	
1634-04-4	Methyl-t-Butyl Ether	1.0	
75-34-3	1,1-Dichloroethane	1.1	
594-20-7	2,2-Dichloropropane	1.1	
156-59-2	cis-1,2-Dichloroethene	1.1	
74-97-5	Bromochloromethane	1.1	
67-66-3	Chloroform	1.1	
71-55-6	1,1,1-Trichloroethane	1.1	
56-23-5	Carbon Tetrachloride	1.0	
563-58-6	1,1-Dichloropropene	1.0	
71-43-2	Benzene	1.0	
107-06-2	1,2-Dichloroethane	1.0	
79-01-6	Trichloroethene	1.0	
78-87-5	1,2-Dichloropropane	1.1	
74-95-3	Dibromomethane	1.1	
75-27-4	Bromodichloromethane	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.1	
108-88-3	Toluene	1.1	
10061-02-6	trans-1,3-Dichloropropene	1.1	
79-00-5	1,1,2-Trichloroethane	1.1	
127-18-4	Tetrachloroethene	1.0	
142-28-9	1,3-Dichloropropane	1.0	
124-48-1	Dibromochloromethane	1.0	
108-90-7	Chlorobenzene	1.0	
630-20-6	1,1,1,2-Tetrachloroethane	1.0	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LB052808LCS

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: LB052808LCS

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: LUC01FQ

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 05/28/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-41-4	Ethylbenzene	1.0	
1330-20-7	m- & p-Xylene	2.2	
95-47-6	o-Xylene	1.1	
100-42-5	Styrene	1.0	
75-25-2	Bromoform	0.99	
98-82-8	Isopropylbenzene	1.1	
108-86-1	Bromobenzene	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	
103-65-1	n-Propylbenzene	1.0	
95-49-8	2-Chlorotoluene	1.0	
106-43-4	4-Chlorotoluene	0.98	
108-67-8	1,3,5-Trimethylbenzene	1.0	
98-06-6	tert-Butylbenzene	1.1	
95-63-6	1,2,4-Trimethylbenzene	1.0	
135-98-8	sec-Butylbenzene	1.0	
541-73-1	1,3-Dichlorobenzene	1.0	
99-87-6	p-Isopropyltoluene	1.0	
106-46-7	1,4-Dichlorobenzene	1.0	
95-50-1	1,2-Dichlorobenzene	1.0	
104-51-8	n-Butylbenzene	1.1	
120-82-1	1,2,4-Trichlorobenzene	1.0	
87-68-3	Hexachlorobutadiene	1.1	
91-20-3	Naphthalene	1.0	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LA052908LCS

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: LA052908LCS

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: LUC01GQ

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 05/29/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.2	
74-87-3	Chloromethane	1.0	
75-01-4	Vinyl Chloride	1.2	
74-83-9	Bromomethane	1.2	
75-00-3	Chloroethane	1.1	
75-69-4	Trichlorofluoromethane	1.0	
75-35-4	1,1-Dichloroethene	1.0	
75-09-2	Methylene Chloride	0.98	
156-60-5	trans-1,2-Dichloroethene	1.0	
1634-04-4	Methyl-t-Butyl Ether	1.0	
75-34-3	1,1-Dichloroethane	1.1	
594-20-7	2,2-Dichloropropane	1.0	
156-59-2	cis-1,2-Dichloroethene	1.1	
74-97-5	Bromochloromethane	1.0	
67-66-3	Chloroform	1.1	
71-55-6	1,1,1-Trichloroethane	1.0	
56-23-5	Carbon Tetrachloride	1.0	
563-58-6	1,1-Dichloropropene	1.1	
71-43-2	Benzene	1.1	
107-06-2	1,2-Dichloroethane	1.0	
79-01-6	Trichloroethene	1.1	
78-87-5	1,2-Dichloropropane	1.1	
74-95-3	Dibromomethane	1.1	
75-27-4	Bromodichloromethane	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	
108-88-3	Toluene	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.1	
79-00-5	1,1,2-Trichloroethane	1.1	
127-18-4	Tetrachloroethene	1.1	
142-28-9	1,3-Dichloropropane	1.1	
124-48-1	Dibromochloromethane	1.0	
108-90-7	Chlorobenzene	1.1	
630-20-6	1,1,1,2-Tetrachloroethane	1.0	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LA052908LCS

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: LA052908LCS

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: LUC01GQ

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 05/29/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-41-4	Ethylbenzene	1.1	
1330-20-7	m- & p-Xylene	2.2	
95-47-6	o-Xylene	1.0	
100-42-5	Styrene	1.0	
75-25-2	Bromoform	0.99	
98-82-8	Isopropylbenzene	1.1	
108-86-1	Bromobenzene	1.0	
79-34-5	1,1,2,2-Tetrachloroethane	1.1	
103-65-1	n-Propylbenzene	1.1	
95-49-8	2-Chlorotoluene	1.1	
106-43-4	4-Chlorotoluene	1.0	
108-67-8	1,3,5-Trimethylbenzene	1.1	
98-06-6	tert-Butylbenzene	1.1	
95-63-6	1,2,4-Trimethylbenzene	1.1	
135-98-8	sec-Butylbenzene	1.1	
541-73-1	1,3-Dichlorobenzene	1.0	
99-87-6	p-Isopropyltoluene	1.1	
106-46-7	1,4-Dichlorobenzene	1.1	
95-50-1	1,2-Dichlorobenzene	1.1	
104-51-8	n-Butylbenzene	1.1	
120-82-1	1,2,4-Trichlorobenzene	1.1	
87-68-3	Hexachlorobutadiene	1.1	
91-20-3	Naphthalene	1.1	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

2-0508285MS

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752973MS

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752973M

Level: (low/med) LOW Date Received: 05/23/08

% Moisture: not dec. _____ Date Analyzed: 05/29/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	2.2	
74-87-3	Chloromethane	1.9	
75-01-4	Vinyl Chloride	2.2	
74-83-9	Bromomethane	1.9	
75-00-3	Chloroethane	2.2	
75-69-4	Trichlorofluoromethane	1.9	
75-35-4	1,1-Dichloroethene	2.0	
75-09-2	Methylene Chloride	2.0	
156-60-5	trans-1,2-Dichloroethene	1.9	
1634-04-4	Methyl-t-Butyl Ether	1.9	
75-34-3	1,1-Dichloroethane	2.0	
594-20-7	2,2-Dichloropropane	1.8	
156-59-2	cis-1,2-Dichloroethene	2.0	
74-97-5	Bromochloromethane	2.0	
67-66-3	Chloroform	2.0	
71-55-6	1,1,1-Trichloroethane	1.9	
56-23-5	Carbon Tetrachloride	1.9	
563-58-6	1,1-Dichloropropene	2.0	
71-43-2	Benzene	2.0	
107-06-2	1,2-Dichloroethane	2.0	
79-01-6	Trichloroethene	2.0	
78-87-5	1,2-Dichloropropane	2.1	
74-95-3	Dibromomethane	1.9	
75-27-4	Bromodichloromethane	2.0	
10061-01-5	cis-1,3-Dichloropropene	1.9	
108-88-3	Toluene	2.1	
10061-02-6	trans-1,3-Dichloropropene	1.9	
79-00-5	1,1,2-Trichloroethane	2.0	
127-18-4	Tetrachloroethene	1.9	
142-28-9	1,3-Dichloropropane	2.0	
124-48-1	Dibromochloromethane	1.9	
108-90-7	Chlorobenzene	1.9	
630-20-6	1,1,1,2-Tetrachloroethane	1.9	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

2-0508285MS

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752973MS

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752973M

Level: (low/med) LOW Date Received: 05/23/08

% Moisture: not dec. _____ Date Analyzed: 05/29/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-41-4	Ethylbenzene	1.9	
1330-20-7	m- & p-Xylene	3.8	
95-47-6	o-Xylene	2.0	
100-42-5	Styrene	1.9	
75-25-2	Bromoform	1.8	
98-82-8	Isopropylbenzene	1.9	
108-86-1	Bromobenzene	1.9	
79-34-5	1,1,2,2-Tetrachloroethane	2.0	
103-65-1	n-Propylbenzene	1.9	
95-49-8	2-Chlorotoluene	1.9	
106-43-4	4-Chlorotoluene	1.9	
108-67-8	1,3,5-Trimethylbenzene	1.9	
98-06-6	tert-Butylbenzene	1.9	
95-63-6	1,2,4-Trimethylbenzene	1.9	
135-98-8	sec-Butylbenzene	1.9	
541-73-1	1,3-Dichlorobenzene	1.9	
99-87-6	p-Isopropyltoluene	1.9	
106-46-7	1,4-Dichlorobenzene	1.9	
95-50-1	1,2-Dichlorobenzene	1.9	
104-51-8	n-Butylbenzene	2.0	
120-82-1	1,2,4-Trichlorobenzene	1.8	
87-68-3	Hexachlorobutadiene	1.9	
91-20-3	Naphthalene	1.9	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

2-0508285MSD

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752973MD

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752973S

Level: (low/med) LOW Date Received: 05/23/08

% Moisture: not dec. _____ Date Analyzed: 05/29/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	2.4	
74-87-3	Chloromethane	1.9	
75-01-4	Vinyl Chloride	2.2	
74-83-9	Bromomethane	2.2	
75-00-3	Chloroethane	2.0	
75-69-4	Trichlorofluoromethane	1.9	
75-35-4	1,1-Dichloroethene	2.1	
75-09-2	Methylene Chloride	1.9	
156-60-5	trans-1,2-Dichloroethene	1.9	
1634-04-4	Methyl-t-Butyl Ether	1.9	
75-34-3	1,1-Dichloroethane	2.0	
594-20-7	2,2-Dichloropropane	1.8	
156-59-2	cis-1,2-Dichloroethene	2.1	
74-97-5	Bromochloromethane	2.0	
67-66-3	Chloroform	2.0	
71-55-6	1,1,1-Trichloroethane	2.0	
56-23-5	Carbon Tetrachloride	2.0	
563-58-6	1,1-Dichloropropene	2.0	
71-43-2	Benzene	2.0	
107-06-2	1,2-Dichloroethane	2.0	
79-01-6	Trichloroethene	2.0	
78-87-5	1,2-Dichloropropane	2.1	
74-95-3	Dibromomethane	2.0	
75-27-4	Bromodichloromethane	2.0	
10061-01-5	cis-1,3-Dichloropropene	2.0	
108-88-3	Toluene	2.1	
10061-02-6	trans-1,3-Dichloropropene	2.0	
79-00-5	1,1,2-Trichloroethane	2.1	
127-18-4	Tetrachloroethene	2.0	
142-28-9	1,3-Dichloropropane	2.0	
124-48-1	Dibromochloromethane	2.0	
108-90-7	Chlorobenzene	2.0	
630-20-6	1,1,1,2-Tetrachloroethane	2.0	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

WESTN1 SAMPLE NO.

2-0508285MSD

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix: (soil/water) WATER Lab Sample ID: 752973MD

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 752973S

Level: (low/med) LOW Date Received: 05/23/08

% Moisture: not dec. _____ Date Analyzed: 05/29/08

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
100-41-4	Ethylbenzene	2.0	
1330-20-7	m- & p-Xylene	4.1	
95-47-6	o-Xylene	2.0	
100-42-5	Styrene	2.0	
75-25-2	Bromoform	1.9	
98-82-8	Isopropylbenzene	2.0	
108-86-1	Bromobenzene	2.0	
79-34-5	1,1,2,2-Tetrachloroethane	2.0	
103-65-1	n-Propylbenzene	2.1	
95-49-8	2-Chlorotoluene	2.0	
106-43-4	4-Chlorotoluene	2.0	
108-67-8	1,3,5-Trimethylbenzene	2.1	
98-06-6	tert-Butylbenzene	2.0	
95-63-6	1,2,4-Trimethylbenzene	2.0	
135-98-8	sec-Butylbenzene	2.1	
541-73-1	1,3-Dichlorobenzene	2.0	
99-87-6	p-Isopropyltoluene	2.1	
106-46-7	1,4-Dichlorobenzene	2.0	
95-50-1	1,2-Dichlorobenzene	2.0	
104-51-8	n-Butylbenzene	2.1	
120-82-1	1,2,4-Trichlorobenzene	2.0	
87-68-3	Hexachlorobutadiene	2.0	
91-20-3	Naphthalene	1.9	

FORM 3
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix Spike - WESTN1 Sample No.: 2-0508285

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Dichlorodifluoromethane	2.0	0.0	2.2	110	70-130
Chloromethane	2.0	0.0	1.9	95	70-130
Vinyl Chloride	2.0	0.0	2.2	110	70-130
Bromomethane	2.0	0.0	1.9	95	70-130
Chloroethane	2.0	0.0	2.2	110	70-130
Trichlorofluoromethane	2.0	0.0	1.9	95	70-130
1,1-Dichloroethene	2.0	0.0	2.0	100	70-130
Methylene Chloride	2.0	0.0	2.0	100	70-130
trans-1,2-Dichloroethen	2.0	0.0	1.9	95	70-130
Methyl-t-Butyl Ether	2.0	0.0	1.9	95	70-130
1,1-Dichloroethane	2.0	0.0	2.0	100	70-130
2,2-Dichloropropane	2.0	0.0	1.8	90	70-130
cis-1,2-Dichloroethene	2.0	0.0	2.0	100	70-130
Bromochloromethane	2.0	0.0	2.0	100	70-130
Chloroform	2.0	0.0	2.0	100	70-130
1,1,1-Trichloroethane	2.0	0.0	1.9	95	70-130
Carbon Tetrachloride	2.0	0.0	1.9	95	70-130
1,1-Dichloropropene	2.0	0.0	2.0	100	70-130
Benzene	2.0	0.0	2.0	100	70-130
1,2-Dichloroethane	2.0	0.0	2.0	100	70-130
Trichloroethene	2.0	0.0	2.0	100	70-130
1,2-Dichloropropane	2.0	0.0	2.1	105	70-130
Dibromomethane	2.0	0.0	1.9	95	70-130
Bromodichloromethane	2.0	0.0	2.0	100	70-130
cis-1,3-Dichloropropene	2.0	0.0	1.9	95	70-130
Toluene	2.0	0.0	2.1	105	70-130
trans-1,3-Dichloroprope	2.0	0.0	1.9	95	70-130
1,1,2-Trichloroethane	2.0	0.0	2.0	100	70-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix Spike - WESTN1 Sample No.: 2-0508285

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Tetrachloroethene	2.0	0.0	1.9	95	70-130
1,3-Dichloropropane	2.0	0.0	2.0	100	70-130
Dibromochloromethane	2.0	0.0	1.9	95	70-130
Chlorobenzene	2.0	0.0	1.9	95	70-130
1,1,1,2-Tetrachloroetha	2.0	0.0	1.9	95	70-130
Ethylbenzene	2.0	0.0	1.9	95	70-130
m- & p-Xylene	4.0	0.0	3.8	95	70-130
o-Xylene	2.0	0.0	2.0	100	70-130
Styrene	2.0	0.0	1.9	95	70-130
Bromoform	2.0	0.0	1.8	90	70-130
Isopropylbenzene	2.0	0.0	1.9	95	70-130
Bromobenzene	2.0	0.0	1.9	95	70-130
1,1,2,2-Tetrachloroetha	2.0	0.0	2.0	100	70-130
n-Propylbenzene	2.0	0.0	1.9	95	70-130
2-Chlorotoluene	2.0	0.0	1.9	95	70-130
4-Chlorotoluene	2.0	0.0	1.9	95	70-130
1,3,5-Trimethylbenzene	2.0	0.0	1.9	95	70-130
tert-Butylbenzene	2.0	0.0	1.9	95	70-130
1,2,4-Trimethylbenzene	2.0	0.0	1.9	95	70-130
sec-Butylbenzene	2.0	0.0	1.9	95	70-130
1,3-Dichlorobenzene	2.0	0.0	1.9	95	70-130
p-Isopropyltoluene	2.0	0.0	1.9	95	70-130
1,4-Dichlorobenzene	2.0	0.0	1.9	95	70-130
1,2-Dichlorobenzene	2.0	0.0	1.9	95	70-130
n-Butylbenzene	2.0	0.0	2.0	100	70-130
1,2,4-Trichlorobenzene	2.0	0.0	1.8	90	70-130
Hexachlorobutadiene	2.0	0.0	1.9	95	70-130
Naphthalene	2.0	0.0	1.9	95	70-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix Spike - WESTN1 Sample No.: 2-0508285

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	2.0	2.4	120	9	40	70-130
Chloromethane	2.0	1.9	95	0	40	70-130
Vinyl Chloride	2.0	2.2	110	0	40	70-130
Bromomethane	2.0	2.2	110	15	40	70-130
Chloroethane	2.0	2.0	100	10	40	70-130
Trichlorofluoromethane	2.0	1.9	95	0	40	70-130
1,1-Dichloroethene	2.0	2.1	105	5	40	70-130
Methylene Chloride	2.0	1.9	95	5	40	70-130
trans-1,2-Dichloroethen	2.0	1.9	95	0	40	70-130
Methyl-t-Butyl Ether	2.0	1.9	95	0	40	70-130
1,1-Dichloroethane	2.0	2.0	100	0	40	70-130
2,2-Dichloropropane	2.0	1.8	90	0	40	70-130
cis-1,2-Dichloroethene	2.0	2.1	105	5	40	70-130
Bromochloromethane	2.0	2.0	100	0	40	70-130
Chloroform	2.0	2.0	100	0	40	70-130
1,1,1-Trichloroethane	2.0	2.0	100	5	40	70-130
Carbon Tetrachloride	2.0	2.0	100	5	40	70-130
1,1-Dichloropropene	2.0	2.0	100	0	40	70-130
Benzene	2.0	2.0	100	0	40	70-130
1,2-Dichloroethane	2.0	2.0	100	0	40	70-130
Trichloroethene	2.0	2.0	100	0	40	70-130
1,2-Dichloropropane	2.0	2.1	105	0	40	70-130
Dibromomethane	2.0	2.0	100	5	40	70-130
Bromodichloromethane	2.0	2.0	100	0	40	70-130
cis-1,3-Dichloropropene	2.0	2.0	100	5	40	70-130
Toluene	2.0	2.1	105	0	40	70-130
trans-1,3-Dichloroprope	2.0	2.0	100	5	40	70-130
1,1,2-Trichloroethane	2.0	2.1	105	5	40	70-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix Spike - WESTN1 Sample No.: 2-0508285

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Tetrachloroethene	2.0	2.0	100	5	40	70-130
1,3-Dichloropropane	2.0	2.0	100	0	40	70-130
Dibromochloromethane	2.0	2.0	100	5	40	70-130
Chlorobenzene	2.0	2.0	100	5	40	70-130
1,1,1,2-Tetrachloroetha	2.0	2.0	100	5	40	70-130
Ethylbenzene	2.0	2.0	100	5	40	70-130
m- & p-Xylene	4.0	4.1	102	7	40	70-130
o-Xylene	2.0	2.0	100	0	40	70-130
Styrene	2.0	2.0	100	5	40	70-130
Bromoform	2.0	1.9	95	5	40	70-130
Isopropylbenzene	2.0	2.0	100	5	40	70-130
Bromobenzene	2.0	2.0	100	5	40	70-130
1,1,2,2-Tetrachloroetha	2.0	2.0	100	0	40	70-130
n-Propylbenzene	2.0	2.1	105	10	40	70-130
2-Chlorotoluene	2.0	2.0	100	5	40	70-130
4-Chlorotoluene	2.0	2.0	100	5	40	70-130
1,3,5-Trimethylbenzene	2.0	2.1	105	10	40	70-130
tert-Butylbenzene	2.0	2.0	100	5	40	70-130
1,2,4-Trimethylbenzene	2.0	2.0	100	5	40	70-130
sec-Butylbenzene	2.0	2.1	105	10	40	70-130
1,3-Dichlorobenzene	2.0	2.0	100	5	40	70-130
p-Isopropyltoluene	2.0	2.1	105	10	40	70-130
1,4-Dichlorobenzene	2.0	2.0	100	5	40	70-130
1,2-Dichlorobenzene	2.0	2.0	100	5	40	70-130
n-Butylbenzene	2.0	2.1	105	5	40	70-130
1,2,4-Trichlorobenzene	2.0	2.0	100	10	40	70-130
Hexachlorobutadiene	2.0	2.0	100	5	40	70-130
Naphthalene	2.0	1.9	95	0	40	70-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 56 outside limits
Spike Recovery: 0 out of 112 outside limits

COMMENTS: _____

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix Spike - Sample No.: LB052808LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Dichlorodifluoromethane	1.0		1.3	130	70-130
Chloromethane	1.0		1.2	120	70-130
Vinyl Chloride	1.0		1.1	110	70-130
Bromomethane	1.0		1.1	110	70-130
Chloroethane	1.0		1.1	110	70-130
Trichlorofluoromethane	1.0		1.0	100	70-130
1,1-Dichloroethene	1.0		1.0	100	70-130
Methylene Chloride	1.0		1.0	100	70-130
trans-1,2-Dichloroethen	1.0		1.0	100	70-130
Methyl-t-Butyl Ether	1.0		1.0	100	70-130
1,1-Dichloroethane	1.0		1.1	110	70-130
2,2-Dichloropropane	1.0		1.1	110	70-130
cis-1,2-Dichloroethene	1.0		1.1	110	70-130
Bromochloromethane	1.0		1.1	110	70-130
Chloroform	1.0		1.1	110	70-130
1,1,1-Trichloroethane	1.0		1.1	110	70-130
Carbon Tetrachloride	1.0		1.0	100	70-130
1,1-Dichloropropene	1.0		1.0	100	70-130
Benzene	1.0		1.0	100	70-130
1,2-Dichloroethane	1.0		1.0	100	70-130
Trichloroethene	1.0		1.0	100	70-130
1,2-Dichloropropane	1.0		1.1	110	70-130
Dibromomethane	1.0		1.1	110	70-130
Bromodichloromethane	1.0		1.0	100	70-130
cis-1,3-Dichloropropene	1.0		1.1	110	70-130
Toluene	1.0		1.1	110	70-130
trans-1,3-Dichloroprope	1.0		1.1	110	70-130
1,1,2-Trichloroethane	1.0		1.1	110	70-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

_____

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix Spike - Sample No.: LB052808LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Tetrachloroethene	1.0		1.0	100	70-130
1,3-Dichloropropane	1.0		1.0	100	70-130
Dibromochloromethane	1.0		1.0	100	70-130
Chlorobenzene	1.0		1.0	100	70-130
1,1,1,2-Tetrachloroetha	1.0		1.0	100	70-130
Ethylbenzene	1.0		1.0	100	70-130
m- & p-Xylene	2.0		2.2	110	70-130
o-Xylene	1.0		1.1	110	70-130
Styrene	1.0		1.0	100	70-130
Bromoform	1.0		0.99	99	70-130
Isopropylbenzene	1.0		1.1	110	70-130
Bromobenzene	1.0		1.0	100	70-130
1,1,2,2-Tetrachloroetha	1.0		1.0	100	70-130
n-Propylbenzene	1.0		1.0	100	70-130
2-Chlorotoluene	1.0		1.0	100	70-130
4-Chlorotoluene	1.0		0.98	98	70-130
1,3,5-Trimethylbenzene	1.0		1.0	100	70-130
tert-Butylbenzene	1.0		1.1	110	70-130
1,2,4-Trimethylbenzene	1.0		1.0	100	70-130
sec-Butylbenzene	1.0		1.0	100	70-130
1,3-Dichlorobenzene	1.0		1.0	100	70-130
p-Isopropyltoluene	1.0		1.0	100	70-130
1,4-Dichlorobenzene	1.0		1.0	100	70-130
1,2-Dichlorobenzene	1.0		1.0	100	70-130
n-Butylbenzene	1.0		1.1	110	70-130
1,2,4-Trichlorobenzene	1.0		1.0	100	70-130
Hexachlorobutadiene	1.0		1.1	110	70-130
Naphthalene	1.0		1.0	100	70-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 56 outside limits

COMMENTS: _____

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix Spike - Sample No.: LA052908LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Dichlorodifluoromethane	1.0		1.2	120	70-130
Chloromethane	1.0		1.0	100	70-130
Vinyl Chloride	1.0		1.2	120	70-130
Bromomethane	1.0		1.2	120	70-130
Chloroethane	1.0		1.1	110	70-130
Trichlorofluoromethane	1.0		1.0	100	70-130
1,1-Dichloroethene	1.0		1.0	100	70-130
Methylene Chloride	1.0		0.98	98	70-130
trans-1,2-Dichloroethen	1.0		1.0	100	70-130
Methyl-t-Butyl Ether	1.0		1.0	100	70-130
1,1-Dichloroethane	1.0		1.1	110	70-130
2,2-Dichloropropane	1.0		1.0	100	70-130
cis-1,2-Dichloroethene	1.0		1.1	110	70-130
Bromochloromethane	1.0		1.0	100	70-130
Chloroform	1.0		1.1	110	70-130
1,1,1-Trichloroethane	1.0		1.0	100	70-130
Carbon Tetrachloride	1.0		1.0	100	70-130
1,1-Dichloropropene	1.0		1.1	110	70-130
Benzene	1.0		1.1	110	70-130
1,2-Dichloroethane	1.0		1.0	100	70-130
Trichloroethene	1.0		1.1	110	70-130
1,2-Dichloropropane	1.0		1.1	110	70-130
Dibromomethane	1.0		1.1	110	70-130
Bromodichloromethane	1.0		1.0	100	70-130
cis-1,3-Dichloropropene	1.0		1.0	100	70-130
Toluene	1.0		1.0	100	70-130
trans-1,3-Dichloroprope	1.0		1.1	110	70-130
1,1,2-Trichloroethane	1.0		1.1	110	70-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Matrix Spike - Sample No.: LA052908LCS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Tetrachloroethene	1.0		1.1	110	70-130
1,3-Dichloropropane	1.0		1.1	110	70-130
Dibromochloromethane	1.0		1.0	100	70-130
Chlorobenzene	1.0		1.1	110	70-130
1,1,1,2-Tetrachloroetha	1.0		1.0	100	70-130
Ethylbenzene	1.0		1.1	110	70-130
m- & p-Xylene	2.0		2.2	110	70-130
o-Xylene	1.0		1.0	100	70-130
Styrene	1.0		1.0	100	70-130
Bromoform	1.0		0.99	99	70-130
Isopropylbenzene	1.0		1.1	110	70-130
Bromobenzene	1.0		1.0	100	70-130
1,1,2,2-Tetrachloroetha	1.0		1.1	110	70-130
n-Propylbenzene	1.0		1.1	110	70-130
2-Chlorotoluene	1.0		1.1	110	70-130
4-Chlorotoluene	1.0		1.0	100	70-130
1,3,5-Trimethylbenzene	1.0		1.1	110	70-130
tert-Butylbenzene	1.0		1.1	110	70-130
1,2,4-Trimethylbenzene	1.0		1.1	110	70-130
sec-Butylbenzene	1.0		1.1	110	70-130
1,3-Dichlorobenzene	1.0		1.0	100	70-130
p-Isopropyltoluene	1.0		1.1	110	70-130
1,4-Dichlorobenzene	1.0		1.1	110	70-130
1,2-Dichlorobenzene	1.0		1.1	110	70-130
n-Butylbenzene	1.0		1.1	110	70-130
1,2,4-Trichlorobenzene	1.0		1.1	110	70-130
Hexachlorobutadiene	1.0		1.1	110	70-130
Naphthalene	1.0		1.1	110	70-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 56 outside limits

COMMENTS: _____

FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

MBLK052808LB

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Lab File ID: LUCB02F Lab Sample ID: MBLK052808LB

Date Analyzed: 05/28/08 Time Analyzed: 1753

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) N

Instrument ID: L

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LB052808LCS	LB052808LCS	LUC01FQ	1723
02	TB-051608-01	752986	752986	1832
03	TB-051908-01	752987	752987	1904
04	RB-052008-01	752985	752985	1937
05	RB-051808-01	752978	752978	2009
06	2-0508-16	752972	752972	2042
07	2-0508285	752973	752973	2114
08	2-0508-037	752974	752974	2147
09	2-0508-945	752975	752975	2219
10	2-0508-189	752976	752976	2252
11	2-0508-265	752977	752977	2324
12	1-0508-056	752979	752979	2356
13	1-0508-051	752980	752980	0029
14	1-0508-041	752981	752981	0101
15	1-0508-034	752982	752982	0134
16	1-0508-034-E	752983	752983	0206
17	1-0508-029	752984	752984	0238
18	2-0508285MS	752973MS	752973M	0311
19	2-0508285MSD	752973MD	752973S	0343
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

MBLK052908LA

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Lab File ID: LUCB02G Lab Sample ID: MBLK052908LA

Date Analyzed: 05/29/08 Time Analyzed: 1101

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) N

Instrument ID: L

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LA052908LCS	LA052908LCS	LUC01GQ	1028
02	1-0508-029DL	752984D1	752984D2	1255
03				
04				
05				
06				
07				
08				
09				
10				
11				
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14				
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30				

COMMENTS:

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Lab File ID: LUC01PV BFB Injection Date: 05/15/08

Instrument ID: L BFB Injection Time: 0826

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.5
75	30.0 - 60.0% of mass 95	42.4
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.4
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	73.4
175	5.0 - 9.0% of mass 174	5.6 (7.7)1
176	95.0 - 101.0% of mass 174	72.3 (98.5)1
177	5.0 - 9.0% of mass 176	4.9 (6.8)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD0.5	VSTD0.5	LUC005V	05/15/08	0912
02	VSTD002	VSTD002	LUC02V	05/15/08	0945
03	VSTD010	VSTD010	LUC10V	05/15/08	1017
04	VSTD020	VSTD020	LUC20V	05/15/08	1050
05	VSTD030	VSTD030	LUC30V	05/15/08	1123
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
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20					
21					
22					

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Lab File ID: LUC07PV BFB Injection Date: 05/28/08

Instrument ID: L BFB Injection Time: 1608

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.0
75	30.0 - 60.0% of mass 95	41.6
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.3
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	74.8
175	5.0 - 9.0% of mass 174	5.5 (7.4)1
176	95.0 - 101.0% of mass 174	73.9 (98.8)1
177	5.0 - 9.0% of mass 176	4.7 (6.4)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD002	VSTD002	LUC02FV	05/28/08	1653
02	LB052808LCS	LB052808LCS	LUC01FQ	05/28/08	1723
03	MBLK052808LB	MBLK052808LB	LUCB02F	05/28/08	1753
04	TB-051608-01	752986	752986	05/28/08	1832
05	TB-051908-01	752987	752987	05/28/08	1904
06	RB-052008-01	752985	752985	05/28/08	1937
07	RB-051808-01	752978	752978	05/28/08	2009
08	2-0508-16	752972	752972	05/28/08	2042
09	2-0508285	752973	752973	05/28/08	2114
10	2-0508-037	752974	752974	05/28/08	2147
11	2-0508-945	752975	752975	05/28/08	2219
12	2-0508-189	752976	752976	05/28/08	2252
13	2-0508-265	752977	752977	05/28/08	2324
14	1-0508-056	752979	752979	05/28/08	2356
15	1-0508-051	752980	752980	05/29/08	0029
16	1-0508-041	752981	752981	05/29/08	0101
17	1-0508-034	752982	752982	05/29/08	0134
18	1-0508-034-E	752983	752983	05/29/08	0206
19	1-0508-029	752984	752984	05/29/08	0238
20	2-0508285MS	752973MS	752973M	05/29/08	0311
21	2-0508285MSD	752973MD	752973S	05/29/08	0343
22					

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Lab File ID: LUC08PV BFB Injection Date: 05/29/08

Instrument ID: L BFB Injection Time: 0900

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.7
75	30.0 - 60.0% of mass 95	42.9
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.1 (0.2)1
174	50.0 - 120.0% of mass 95	71.0
175	5.0 - 9.0% of mass 174	5.4 (7.6)1
176	95.0 - 101.0% of mass 174	70.8 (99.7)1
177	5.0 - 9.0% of mass 176	4.6 (6.5)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD002	VSTD002	LUC02GV	05/29/08	0956
02	LA052908LCS	LA052908LCS	LUC01GQ	05/29/08	1028
03	MBLK052908LA	MBLK052908LA	LUCB02G	05/29/08	1101
04	1-0508-029DL	752984D1	752984D2	05/29/08	1255
05					
06					
07					
08					
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6A
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Instrument ID: L Calibration Date(s): 05/15/08 05/15/08

Heated Purge: (Y/N) N Calibration Time(s): 0912 1123

GC Column: CAP ID: 0.53 (mm)

LAB FILE ID: RRF0.5=LUC005V RRF2 =LUC02V
RRF10 =LUC10V RRF20 =LUC20V RRF30 =LUC30V

COMPOUND	RRF0.5	RRF2	RRF10	RRF20	RRF30	$\overline{RRF}$	% RSD
Dichlorodifluoromethane *	0.322	0.315	0.329	0.304	0.317	0.317	3.0*
Chloromethane *	0.166	0.176	0.170	0.158	0.164	0.167	4.0*
Vinyl Chloride *	0.238	0.233	0.253	0.229	0.234	0.237	4.0*
Bromomethane *	0.112	0.114	0.131	0.133	0.136	0.125	9.0*
Chloroethane *	0.169	0.163	0.167	0.146	0.142	0.157	7.8*
Trichlorofluoromethane *	0.550	0.549	0.577	0.538	0.560	0.555	2.7*
1,1-Dichloroethene *	0.258	0.257	0.287	0.259	0.267	0.266	4.8*
Methylene Chloride *	0.289	0.268	0.283	0.261	0.266	0.273	4.4*
trans-1,2-Dichloroethene *	0.330	0.303	0.321	0.296	0.305	0.311	4.5*
Methyl-t-Butyl Ether *	0.594	0.572	0.617	0.577	0.605	0.593	3.2*
1,1-Dichloroethane *	0.589	0.585	0.625	0.580	0.596	0.595	3.0*
2,2-Dichloropropane *	0.538	0.497	0.510	0.467	0.483	0.499	5.4*
cis-1,2-Dichloroethene *	0.340	0.326	0.344	0.318	0.332	0.332	3.2*
Bromochloromethane *	0.234	0.212	0.232	0.217	0.219	0.223	4.4*
Chloroform *	0.600	0.613	0.647	0.604	0.633	0.619	3.2*
1,1,1-Trichloroethane *	0.550	0.515	0.554	0.521	0.547	0.537	3.3*
Carbon Tetrachloride *	0.514	0.523	0.556	0.529	0.560	0.536	3.9*
1,1-Dichloropropene *	0.480	0.483	0.528	0.496	0.516	0.501	4.1*
Benzene *	0.953	0.896	0.958	0.875	0.915	0.919	3.9*
1,2-Dichloroethane *	0.313	0.301	0.330	0.308	0.322	0.315	3.6*
Trichloroethene *	0.399	0.384	0.411	0.382	0.402	0.396	3.1*
1,2-Dichloropropane *	0.341	0.359	0.392	0.362	0.370	0.365	5.1*
Dibromomethane *	0.338	0.308	0.326	0.303	0.315	0.318	4.5*
Bromodichloromethane *	0.605	0.600	0.651	0.607	0.641	0.621	3.8*
cis-1,3-Dichloropropene *	0.534	0.533	0.591	0.550	0.562	0.554	4.3*
Toluene *	0.648	0.606	0.662	0.608	0.627	0.630	3.9*
trans-1,3-Dichloropropene *	0.439	0.446	0.482	0.452	0.475	0.459	4.0*
1,1,2-Trichloroethane *	0.272	0.262	0.284	0.266	0.278	0.272	3.3*
Tetrachloroethene *	0.499	0.525	0.544	0.511	0.527	0.521	3.3*
1,3-Dichloropropane *	0.520	0.501	0.536	0.495	0.518	0.514	3.1*
Dibromochloromethane *	0.669	0.643	0.708	0.703	0.720	0.689	4.6*
Chlorobenzene *	0.935	0.963	0.996	0.956	0.961	0.962	2.3*
1,1,1,2-Tetrachloroethane *	0.506	0.493	0.520	0.515	0.520	0.511	2.2*
Ethylbenzene *	1.478	1.435	1.500	1.464	1.476	1.471	1.6*
m- & p-Xylene *	0.565	0.552	0.580	0.569	0.563	0.566	1.8*
o-Xylene *	0.526	0.540	0.556	0.536	0.535	0.539	2.1*
Styrene *	0.910	0.902	0.944	0.921	0.921	0.920	1.7*

* Compounds with required minimum RRF and maximim %RSD values.
All other compounds must meet a minimim RRF of 0.010.

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Instrument ID: L Calibration Date(s): 05/15/08 05/15/08

Heated Purge: (Y/N) N Calibration Time(s): 0912 1123

GC Column: CAP ID: 0.53 (mm)

LAB FILE ID: RRF0.5=LUC005V RRF2 =LUC02V
RRF10 =LUC10V RRF20 =LUC20V RRF30 =LUC30V

COMPOUND	RRF0.5	RRF2	RRF10	RRF20	RRF30	$\overline{RRF}$	% RSD
Bromoform *	0.496	0.507	0.540	0.539	0.557	0.528	4.8*
Isopropylbenzene *	1.595	1.547	1.620	1.582	1.577	1.584	1.7*
Bromobenzene *	0.512	0.507	0.532	0.514	0.517	0.516	1.8*
1,1,2,2-Tetrachloroethane *	0.639	0.595	0.627	0.605	0.605	0.614	2.9*
n-Propylbenzene *	0.420	0.414	0.431	0.414	0.410	0.418	2.0*
2-Chlorotoluene *	0.424	0.383	0.406	0.389	0.384	0.397	4.4*
4-Chlorotoluene *	0.435	0.390	0.411	0.391	0.394	0.404	4.7*
1,3,5-Trimethylbenzene *	1.183	1.160	1.198	1.174	1.169	1.177	1.2*
tert-Butylbenzene *	0.353	0.353	0.356	0.346	0.347	0.351	1.2*
1,2,4-Trimethylbenzene *	1.137	1.150	1.170	1.151	1.146	1.151	1.0*
sec-Butylbenzene *	1.730	1.698	1.783	1.731	1.727	1.734	1.8*
1,3-Dichlorobenzene *	0.850	0.788	0.837	0.836	0.831	0.828	2.8*
p-Isopropyltoluene *	1.366	1.392	1.447	1.422	1.408	1.407	2.2*
1,4-Dichlorobenzene *	0.855	0.843	0.878	0.869	0.872	0.863	1.6*
1,2-Dichlorobenzene *	0.728	0.721	0.741	0.739	0.732	0.732	1.1*
n-Butylbenzene *	1.200	1.202	1.256	1.228	1.217	1.221	1.9*
1,2,4-Trichlorobenzene *	0.597	0.537	0.580	0.573	0.582	0.574	3.9*
Hexachlorobutadiene *	0.328	0.329	0.347	0.344	0.351	0.340	3.2*
Naphthalene *	0.938	0.896	0.954	0.966	0.984	0.948	3.5*
1,2-Dichloroethane-d4 *	0.304	0.267	0.281	0.257	0.272	0.276	6.4*
Toluene-d8 *	0.869	0.898	0.954	0.885	0.923	0.906	3.7*
Bromofluorobenzene *	0.768	0.708	0.727	0.712	0.705	0.724	3.6*
1,2-Dichlorobenzene-d4 *	0.495	0.486	0.496	0.479	0.480	0.487	1.7*

* Compounds with required minimum RRF and maximim %RSD values.
All other compounds must meet a minimim RRF of 0.010.

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Instrument ID: L Calibration Date: 05/28/08 Time: 1653

Lab File ID: LUC02FV Init. Calib. Date(s): 05/15/08 05/15/08

Heated Purge: (Y/N) N Init. Calib. Times: 0912 1123

GC Column: CAP ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF2	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.317	0.333		5.0	30.0
Chloromethane	0.167	0.181		8.4	30.0
Vinyl Chloride	0.237	0.254		7.2	30.0
Bromomethane	0.125	0.121		3.2	30.0
Chloroethane	0.157	0.176		12.1	30.0
Trichlorofluoromethane	0.555	0.583		5.0	30.0
1,1-Dichloroethene	0.266	0.290		9.0	30.0
Methylene Chloride	0.273	0.296		8.4	30.0
trans-1,2-Dichloroethene	0.311	0.328		5.5	30.0
Methyl-t-Butyl Ether	0.593	0.615		3.7	30.0
1,1-Dichloroethane	0.595	0.625		5.0	30.0
2,2-Dichloropropane	0.499	0.523		4.8	30.0
cis-1,2-Dichloroethene	0.332	0.351		5.7	30.0
Bromochloromethane	0.223	0.239		7.2	30.0
Chloroform	0.619	0.662		6.9	30.0
1,1,1-Trichloroethane	0.537	0.563		4.8	30.0
Carbon Tetrachloride	0.536	0.556		3.7	30.0
1,1-Dichloropropene	0.501	0.542		8.2	30.0
Benzene	0.919	0.964		4.9	30.0
1,2-Dichloroethane	0.315	0.326		3.5	30.0
Trichloroethene	0.396	0.409		3.3	30.0
1,2-Dichloropropane	0.365	0.396		8.5	30.0
Dibromomethane	0.318	0.343		7.9	30.0
Bromodichloromethane	0.621	0.646		4.0	30.0
cis-1,3-Dichloropropene	0.554	0.573		3.4	30.0
Toluene	0.630	0.653		3.6	30.0
trans-1,3-Dichloropropene	0.459	0.480		4.6	30.0
1,1,2-Trichloroethane	0.272	0.298		9.6	30.0
Tetrachloroethene	0.521	0.549		5.4	30.0
1,3-Dichloropropane	0.514	0.546		6.2	30.0
Dibromochloromethane	0.689	0.696		1.0	30.0
Chlorobenzene	0.962	0.986		2.5	30.0
1,1,1,2-Tetrachloroethane	0.511	0.517		1.2	30.0
Ethylbenzene	1.471	1.507		2.4	30.0
m- & p-Xylene	0.566	0.574		1.4	30.0
o-Xylene	0.539	0.560		3.9	30.0
Styrene	0.920	0.929		1.0	30.0

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Instrument ID: L Calibration Date: 05/28/08 Time: 1653

Lab File ID: LUC02FV Init. Calib. Date(s): 05/15/08 05/15/08

Heated Purge: (Y/N) N Init. Calib. Times: 0912 1123

GC Column: CAP ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF2	MIN RRF	%D	MAX %D
Bromoform	0.528	0.528		0.0	30.0
Isopropylbenzene	1.584	1.632		3.0	30.0
Bromobenzene	0.516	0.518		0.4	30.0
1,1,2,2-Tetrachloroethane	0.614	0.635		3.4	30.0
n-Propylbenzene	0.418	0.428		2.4	30.0
2-Chlorotoluene	0.397	0.400		0.8	30.0
4-Chlorotoluene	0.404	0.405		0.2	30.0
1,3,5-Trimethylbenzene	1.177	1.200		2.0	30.0
tert-Butylbenzene	0.351	0.353		0.6	30.0
1,2,4-Trimethylbenzene	1.151	1.176		2.2	30.0
sec-Butylbenzene	1.734	1.785		2.9	30.0
1,3-Dichlorobenzene	0.828	0.827		0.1	30.0
p-Isopropyltoluene	1.407	1.453		3.3	30.0
1,4-Dichlorobenzene	0.863	0.854		1.0	30.0
1,2-Dichlorobenzene	0.732	0.737		0.7	30.0
n-Butylbenzene	1.221	1.254		2.7	30.0
1,2,4-Trichlorobenzene	0.574	0.552		3.8	30.0
Hexachlorobutadiene	0.340	0.344		1.2	30.0
Naphthalene	0.948	0.964		1.7	30.0
1,2-Dichloroethane-d4	0.276	0.276		0.0	30.0
Toluene-d8	0.906	0.969		7.0	30.0
Bromofluorobenzene	0.724	0.724		0.0	30.0
1,2-Dichlorobenzene-d4	0.487	0.496		1.8	30.0

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Instrument ID: L Calibration Date: 05/29/08 Time: 0956

Lab File ID: LUC02GV Init. Calib. Date(s): 05/15/08 05/15/08

Heated Purge: (Y/N) N Init. Calib. Times: 0912 1123

GC Column: CAP ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF2	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.317	0.309		2.5	30.0
Chloromethane	0.167	0.180		7.8	30.0
Vinyl Chloride	0.237	0.231		2.5	30.0
Bromomethane	0.125	0.101		19.2	30.0
Chloroethane	0.157	0.167		6.4	30.0
Trichlorofluoromethane	0.555	0.528		4.9	30.0
1,1-Dichloroethene	0.266	0.284		6.8	30.0
Methylene Chloride	0.273	0.266		2.6	30.0
trans-1,2-Dichloroethene	0.311	0.299		3.8	30.0
Methyl-t-Butyl Ether	0.593	0.592		0.2	30.0
1,1-Dichloroethane	0.595	0.579		2.7	30.0
2,2-Dichloropropane	0.499	0.492		1.4	30.0
cis-1,2-Dichloroethene	0.332	0.330		0.6	30.0
Bromochloromethane	0.223	0.233		4.5	30.0
Chloroform	0.619	0.604		2.4	30.0
1,1,1-Trichloroethane	0.537	0.530		1.3	30.0
Carbon Tetrachloride	0.536	0.509		5.0	30.0
1,1-Dichloropropene	0.501	0.503		0.4	30.0
Benzene	0.919	0.879		4.4	30.0
1,2-Dichloroethane	0.315	0.330		4.8	30.0
Trichloroethene	0.396	0.385		2.8	30.0
1,2-Dichloropropane	0.365	0.373		2.2	30.0
Dibromomethane	0.318	0.302		5.0	30.0
Bromodichloromethane	0.621	0.618		0.5	30.0
cis-1,3-Dichloropropene	0.554	0.539		2.7	30.0
Toluene	0.630	0.611		3.0	30.0
trans-1,3-Dichloropropene	0.459	0.458		0.2	30.0
1,1,2-Trichloroethane	0.272	0.281		3.3	30.0
Tetrachloroethene	0.521	0.512		1.7	30.0
1,3-Dichloropropane	0.514	0.521		1.4	30.0
Dibromochloromethane	0.689	0.706		2.5	30.0
Chlorobenzene	0.962	0.994		3.3	30.0
1,1,1,2-Tetrachloroethane	0.511	0.520		1.8	30.0
Ethylbenzene	1.471	1.501		2.0	30.0
m- & p-Xylene	0.566	0.591		4.4	30.0
o-Xylene	0.539	0.577		7.0	30.0
Styrene	0.920	0.973		5.8	30.0

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Instrument ID: L Calibration Date: 05/29/08 Time: 0956

Lab File ID: LUC02GV Init. Calib. Date(s): 05/15/08 05/15/08

Heated Purge: (Y/N) N Init. Calib. Times: 0912 1123

GC Column: CAP ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF2	MIN RRF	%D	MAX %D
Bromoform	0.528	0.533		0.9	30.0
Isopropylbenzene	1.584	1.613		1.8	30.0
Bromobenzene	0.516	0.512		0.8	30.0
1,1,2,2-Tetrachloroethane	0.614	0.668		8.8	30.0
n-Propylbenzene	0.418	0.426		1.9	30.0
2-Chlorotoluene	0.397	0.407		2.5	30.0
4-Chlorotoluene	0.404	0.421		4.2	30.0
1,3,5-Trimethylbenzene	1.177	1.215		3.2	30.0
tert-Butylbenzene	0.351	0.370		5.4	30.0
1,2,4-Trimethylbenzene	1.151	1.209		5.0	30.0
sec-Butylbenzene	1.734	1.802		3.9	30.0
1,3-Dichlorobenzene	0.828	0.834		0.7	30.0
p-Isopropyltoluene	1.407	1.451		3.1	30.0
1,4-Dichlorobenzene	0.863	0.884		2.4	30.0
1,2-Dichlorobenzene	0.732	0.723		1.2	30.0
n-Butylbenzene	1.221	1.318		7.9	30.0
1,2,4-Trichlorobenzene	0.574	0.572		0.3	30.0
Hexachlorobutadiene	0.340	0.351		3.2	30.0
Naphthalene	0.948	0.996		5.1	30.0
1,2-Dichloroethane-d4	0.276	0.261		5.4	30.0
Toluene-d8	0.906	0.876		3.3	30.0
Bromofluorobenzene	0.724	0.756		4.4	30.0
1,2-Dichlorobenzene-d4	0.487	0.505		3.7	30.0

FORM 8
VOLATILE INTERNAL STANDARD/SURROGATE AREA AND RT SUMMARY

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Lab File ID (Standard): LUC02FV Date Analyzed: 05/28/08

Instrument ID: L Time Analyzed: 1653

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) N

		SS1(DCA) AREA #	RT #	IS2(FBZ) AREA #	RT #	SS3(TOL) AREA #	RT #
	12 HOUR STD	106589	9.09	386496	9.68	374391	12.56
	UPPER LIMIT	138566	9.59	502445	10.18	486708	13.06
	LOWER LIMIT	74612	8.59	270547	9.18	262074	12.06
	CLIENT SAMPLE NO.						
01	LB052808LCS	103253	9.09	390087	9.69	368353	12.56
02	MBLK052808LB	103670	9.10	396720	9.70	362422	12.55
03	TB-051608-01	104795	9.10	383500	9.68	343168	12.55
04	TB-051908-01	103437	9.09	393328	9.68	359517	12.56
05	RB-052008-01	104845	9.11	389293	9.70	361950	12.56
06	RB-051808-01	104126	9.10	386147	9.70	362573	12.57
07	2-0508-16	99667	9.09	390463	9.70	357088	12.57
08	2-0508285	102764	9.10	389326	9.70	359174	12.57
09	2-0508-037	105338	9.10	394794	9.70	359287	12.57
10	2-0508-945	100908	9.11	391382	9.70	358102	12.56
11	2-0508-189	102756	9.10	387789	9.70	362378	12.56
12	2-0508-265	104325	9.10	398236	9.70	360241	12.55
13	1-0508-056	99443	9.12	392004	9.71	340355	12.57
14	1-0508-051	108125	9.11	390958	9.70	355753	12.56
15	1-0508-041	104627	9.10	390652	9.70	361294	12.57
16	1-0508-034	100480	9.11	393824	9.70	363106	12.56
17	1-0508-034-E	104249	9.09	400920	9.68	360340	12.56
18	1-0508-029	103326	9.10	387400	9.70	365329	12.57
19	2-0508285MS	108606	9.10	402732	9.70	373184	12.57
20	2-0508285MSD	109491	9.11	402258	9.70	363279	12.56
21							
22							

SS1 (DCA) = 1,2-Dichloroethane-d4
IS2 (FBZ) = Fluorobenzene
SS3 (TOL) = Toluene-d8

AREA UPPER LIMIT = + 30% of internal standard/surrogate area
AREA LOWER LIMIT = - 30% of internal standard/surrogate area
RT UPPER LIMIT = + 0.50 minutes of internal standard/surrogate RT
RT LOWER LIMIT = - 0.50 minutes of internal standard/surrogate RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM 8
VOLATILE INTERNAL STANDARD/SURROGATE AREA AND RT SUMMARY

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Lab File ID (Standard): LUC02FV Date Analyzed: 05/28/08

Instrument ID: L Time Analyzed: 1653

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) N

		IS4(CBZ) AREA #	RT #	SS5(BFB) AREA #	RT #	IS6(DCB) AREA #	RT #
	12 HOUR STD	342120	15.47	247554	18.17	183902	19.91
	UPPER LIMIT	444756	15.97	321820	18.67	239073	20.41
	LOWER LIMIT	239484	14.97	173288	17.67	128731	19.41
	CLIENT SAMPLE NO.						
01	LB052808LCS	347110	15.47	258862	18.17	191171	19.92
02	MBLK052808LB	347466	15.46	254609	18.17	184387	19.91
03	TB-051608-01	344202	15.48	251362	18.17	184505	19.91
04	TB-051908-01	345231	15.47	254093	18.17	184331	19.93
05	RB-052008-01	351860	15.49	254647	18.17	191020	19.91
06	RB-051808-01	346488	15.50	258635	18.18	183089	19.93
07	2-0508-16	338996	15.48	250473	18.19	178982	19.93
08	2-0508285	339223	15.48	253051	18.18	185571	19.93
09	2-0508-037	350944	15.48	254144	18.17	189074	19.93
10	2-0508-945	344761	15.49	247844	18.17	182233	19.91
11	2-0508-189	351195	15.48	254147	18.17	187005	19.93
12	2-0508-265	348834	15.48	256425	18.18	190977	19.93
13	1-0508-056	347757	15.50	241463	18.18	188736	19.93
14	1-0508-051	343488	15.49	251829	18.19	185537	19.93
15	1-0508-041	349023	15.48	253688	18.17	189964	19.93
16	1-0508-034	349645	15.49	259686	18.17	189064	19.91
17	1-0508-034-E	350929	15.49	257945	18.17	191405	19.91
18	1-0508-029	353219	15.48	257786	18.17	185576	19.93
19	2-0508285MS	358636	15.48	265711	18.17	195615	19.91
20	2-0508285MSD	350591	15.47	258323	18.17	192846	19.91
21							
22							

IS4 (CBZ) = Chlorobenzene-d5
SS5 (BFB) = Bromofluorobenzene
IS6 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = + 30% of internal standard/surrogate area
AREA LOWER LIMIT = - 30% of internal standard/surrogate area
RT UPPER LIMIT = + 0.50 minutes of internal standard/surrogate RT
RT LOWER LIMIT = - 0.50 minutes of internal standard/surrogate RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM 8
VOLATILE INTERNAL STANDARD/SURROGATE AREA AND RT SUMMARY

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Lab File ID (Standard): LUC02FV Date Analyzed: 05/28/08

Instrument ID: L Time Analyzed: 1653

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) N

		SS7(DCZ) AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	169598	20.37				
	UPPER LIMIT	220477	20.87				
	LOWER LIMIT	118719	19.87				
	CLIENT SAMPLE NO.						
01	LB052808LCS	175257	20.37				
02	MBLK052808LB	173638	20.36				
03	TB-051608-01	169637	20.36				
04	TB-051908-01	167488	20.36				
05	RB-052008-01	177156	20.37				
06	RB-051808-01	176626	20.38				
07	2-0508-16	169440	20.36				
08	2-0508285	172498	20.38				
09	2-0508-037	173684	20.36				
10	2-0508-945	168612	20.37				
11	2-0508-189	172052	20.38				
12	2-0508-265	172735	20.38				
13	1-0508-056	165372	20.38				
14	1-0508-051	172037	20.37				
15	1-0508-041	175261	20.36				
16	1-0508-034	176758	20.37				
17	1-0508-034-E	176655	20.37				
18	1-0508-029	178210	20.36				
19	2-0508285MS	179397	20.36				
20	2-0508285MSD	175641	20.36				
21							
22							

SS7 (DCZ) = 1,2-Dichlorobenzene-d4

AREA UPPER LIMIT = + 30% of internal standard/surrogate area
AREA LOWER LIMIT = - 30% of internal standard/surrogate area
RT UPPER LIMIT = + 0.50 minutes of internal standard/surrogate RT
RT LOWER LIMIT = - 0.50 minutes of internal standard/surrogate RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM 8
VOLATILE INTERNAL STANDARD/SURROGATE AREA AND RT SUMMARY

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Lab File ID (Standard): LUC02GV Date Analyzed: 05/29/08

Instrument ID: L Time Analyzed: 0956

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) N

		SS1(DCA) AREA #	RT #	IS2(FBZ) AREA #	RT #	SS3(TOL) AREA #	RT #
	12 HOUR STD	107865	9.10	412758	9.70	361452	12.55
	UPPER LIMIT	140224	9.60	536585	10.20	469888	13.05
	LOWER LIMIT	75506	8.60	288931	9.20	253016	12.05
	CLIENT SAMPLE NO.						
01	LA052908LCS	97724	9.11	400851	9.70	361551	12.56
02	MBLK052908LA	106441	9.10	383825	9.70	349458	12.55
03	1-0508-029DL	111054	9.11	386321	9.70	363234	12.56
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SS1 (DCA) = 1,2-Dichloroethane-d4
IS2 (FBZ) = Fluorobenzene
SS3 (TOL) = Toluene-d8

AREA UPPER LIMIT = + 30% of internal standard/surrogate area
AREA LOWER LIMIT = - 30% of internal standard/surrogate area
RT UPPER LIMIT = + 0.50 minutes of internal standard/surrogate RT
RT LOWER LIMIT = - 0.50 minutes of internal standard/surrogate RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM 8
VOLATILE INTERNAL STANDARD/SURROGATE AREA AND RT SUMMARY

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Lab File ID (Standard): LUC02GV Date Analyzed: 05/29/08

Instrument ID: L Time Analyzed: 0956

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) N

		IS4(CBZ) AREA #	RT #	SS5(BFB) AREA #	RT #	IS6(DCB) AREA #	RT #
	12 HOUR STD	338369	15.48	255799	18.17	191071	19.91
	UPPER LIMIT	439880	15.98	332539	18.67	248392	20.41
	LOWER LIMIT	236858	14.98	179059	17.67	133750	19.41
	CLIENT SAMPLE NO.						
01	LA052908LCS	349260	15.49	253093	18.17	190048	19.91
02	MBLK052908LA	341449	15.47	245683	18.17	188109	19.91
03	1-0508-029DL	342665	15.49	265879	18.17	179119	19.93
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22							

IS4 (CBZ) = Chlorobenzene-d5
SS5 (BFB) = Bromofluorobenzene
IS6 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = + 30% of internal standard/surrogate area
AREA LOWER LIMIT = - 30% of internal standard/surrogate area
RT UPPER LIMIT = + 0.50 minutes of internal standard/surrogate RT
RT LOWER LIMIT = - 0.50 minutes of internal standard/surrogate RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM 8
VOLATILE INTERNAL STANDARD/SURROGATE AREA AND RT SUMMARY

Lab Name: TESTAMERICA BURLINGTON Contract: 28000

Lab Code: STLV Case No.: MEFUDS SAS No.: SDG No.: 125630

Lab File ID (Standard): LUC02GV Date Analyzed: 05/29/08

Instrument ID: L Time Analyzed: 0956

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) N

		SS7(DCZ) AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	170763	20.36				
	UPPER LIMIT	221992	20.86				
	LOWER LIMIT	119534	19.86				
	CLIENT SAMPLE NO.						
01	LA052908LCS	171300	20.37				
02	MBLK052908LA	170949	20.36				
03	1-0508-029DL	178953	20.37				
04							
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21							
22							

SS7 (DCZ) = 1,2-Dichlorobenzene-d4

AREA UPPER LIMIT = + 30% of internal standard/surrogate area
AREA LOWER LIMIT = - 30% of internal standard/surrogate area
RT UPPER LIMIT = + 0.50 minutes of internal standard/surrogate RT
RT LOWER LIMIT = - 0.50 minutes of internal standard/surrogate RT

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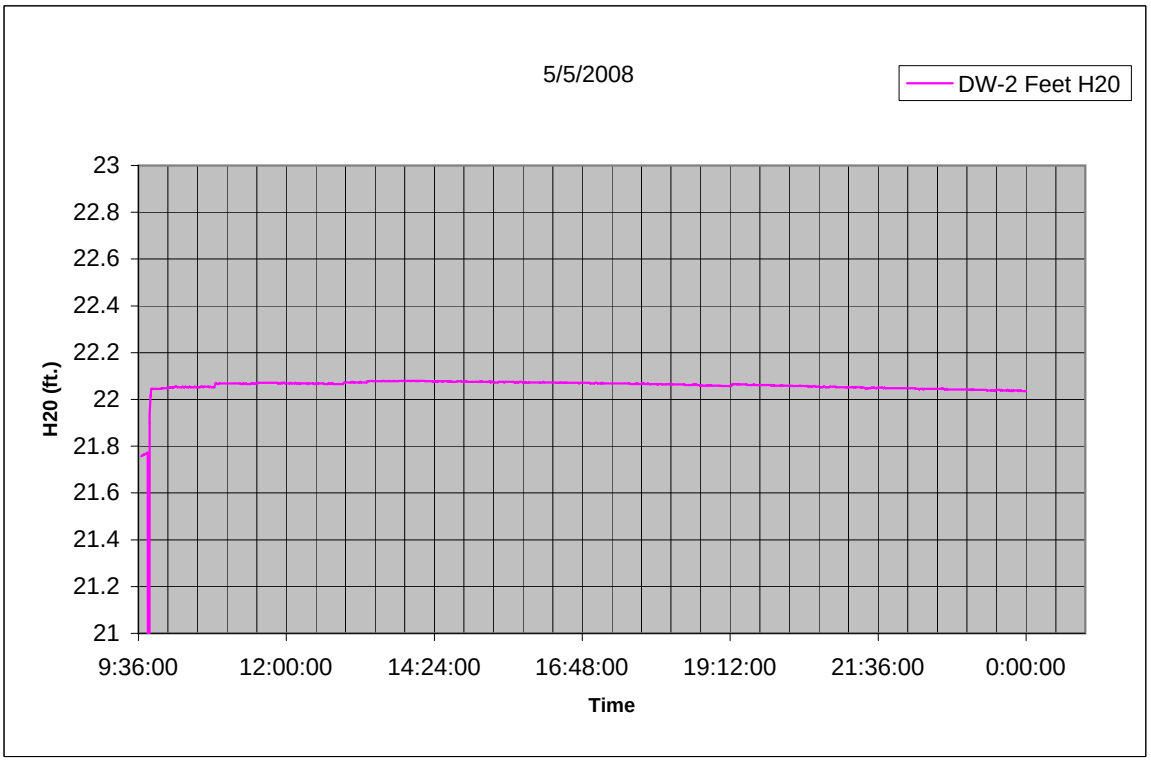
* Values outside of QC limits.

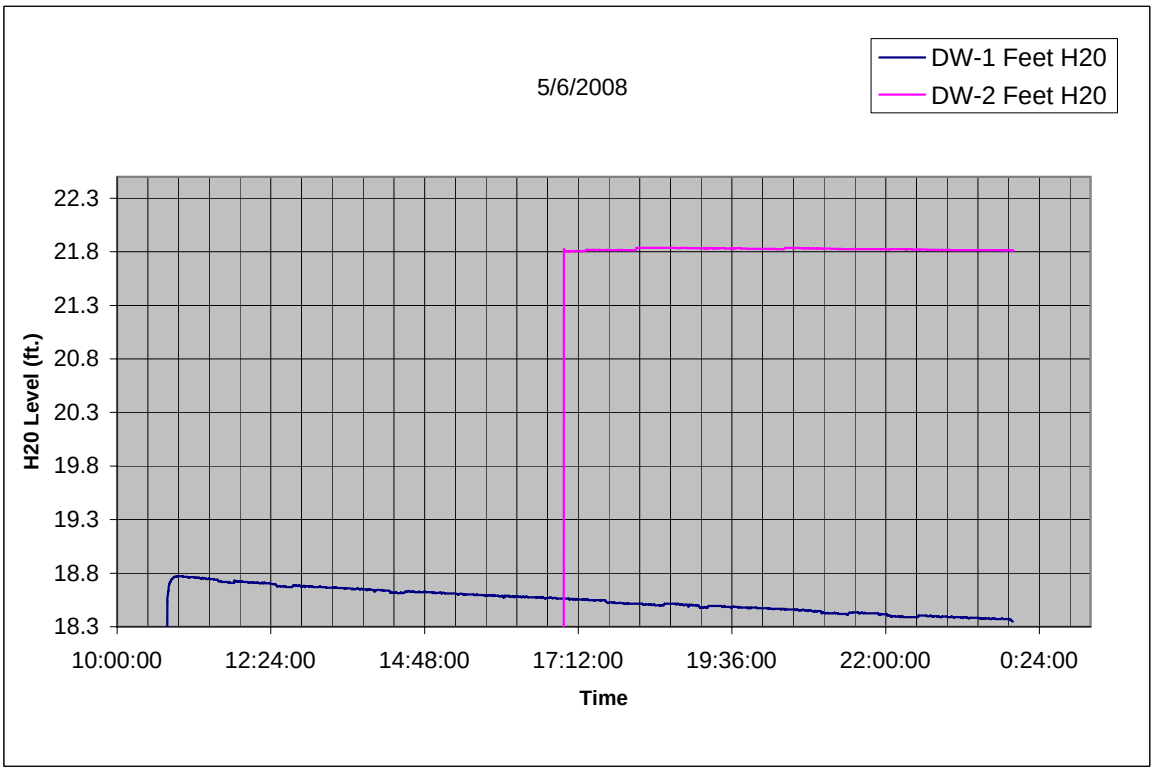
APPENDIX E

WESTON PRESSURE TRANSDUCER DATA SUMMARIES AND CARIBOU, MAINE PRECIPITATION RECORDS MAY 2008

Appendix E

Groundwater Elevation Graphs
Borehole Hydrophysics and Geophysics Report





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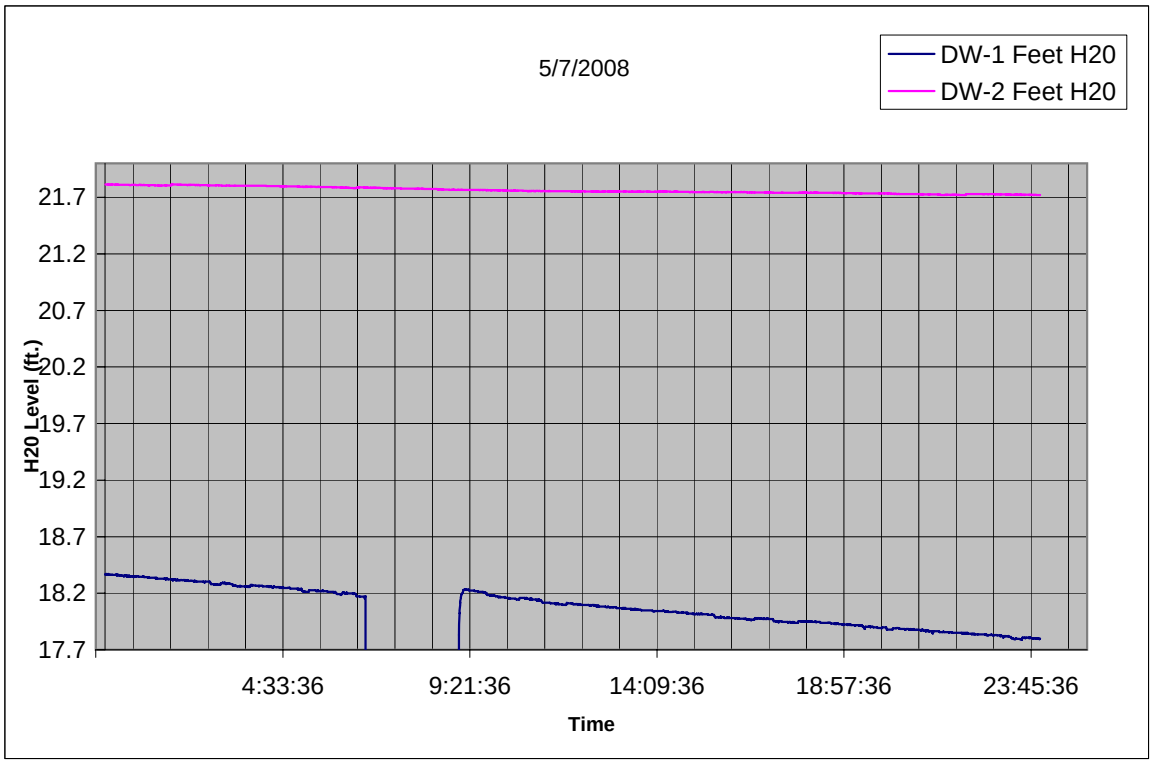

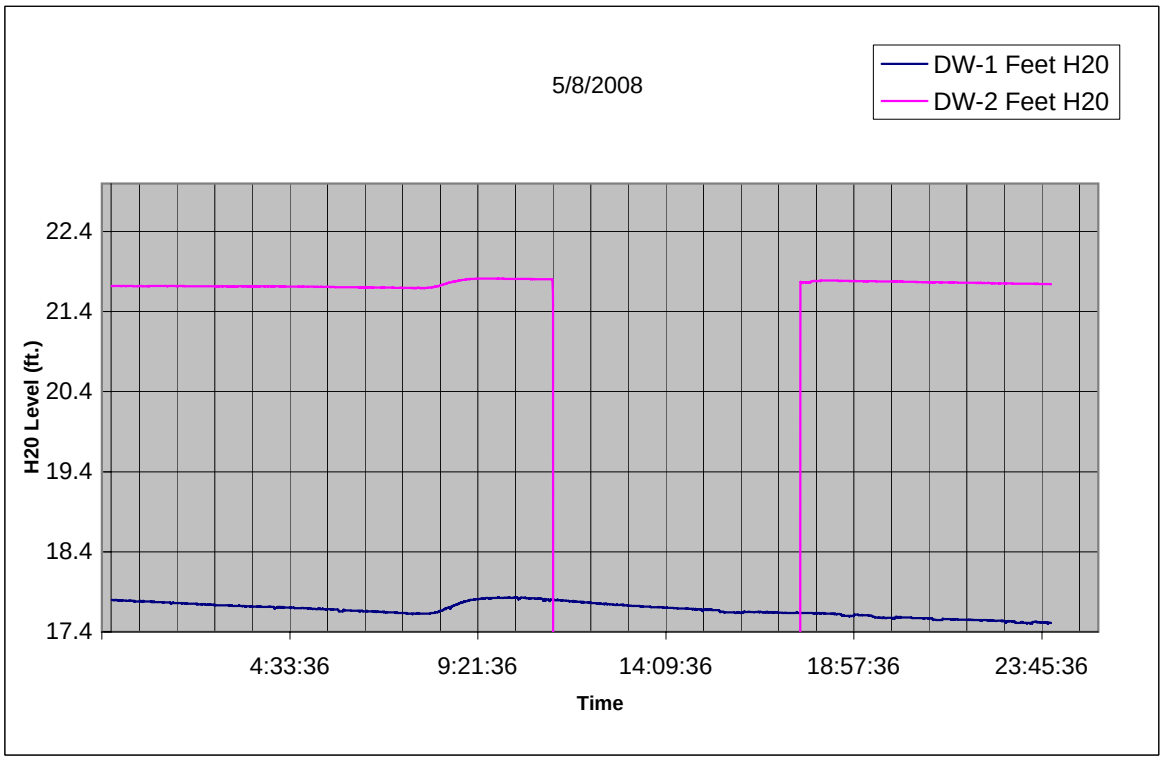

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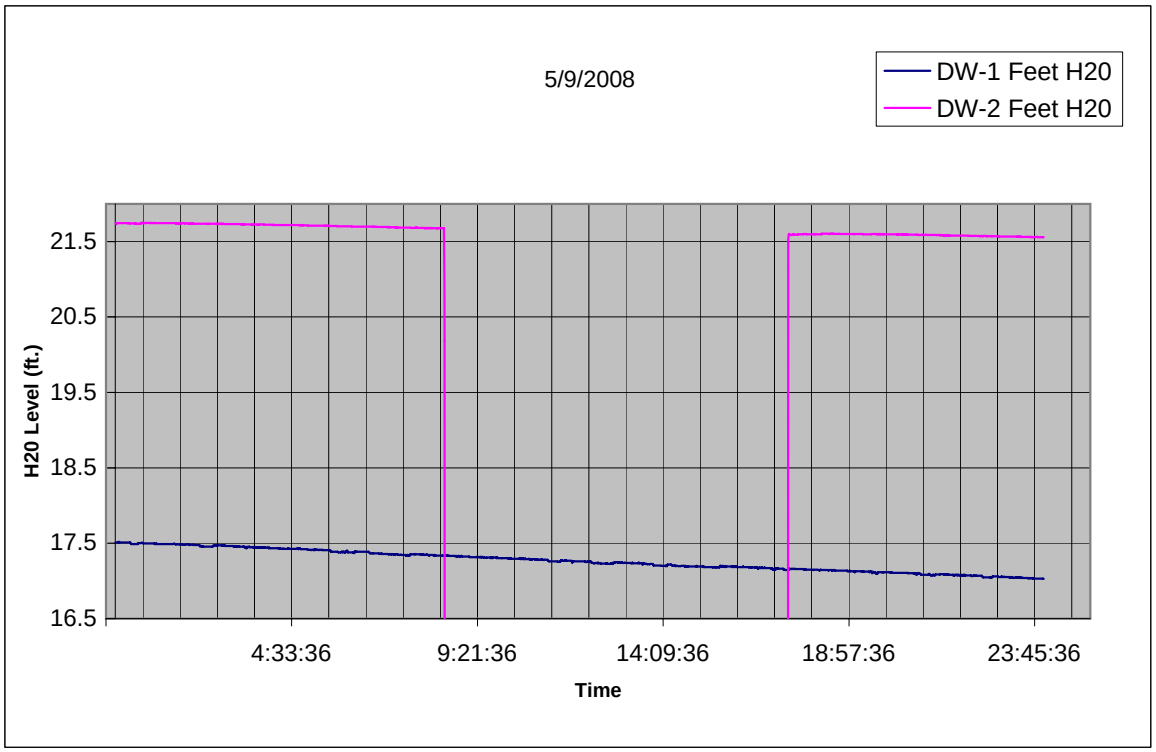

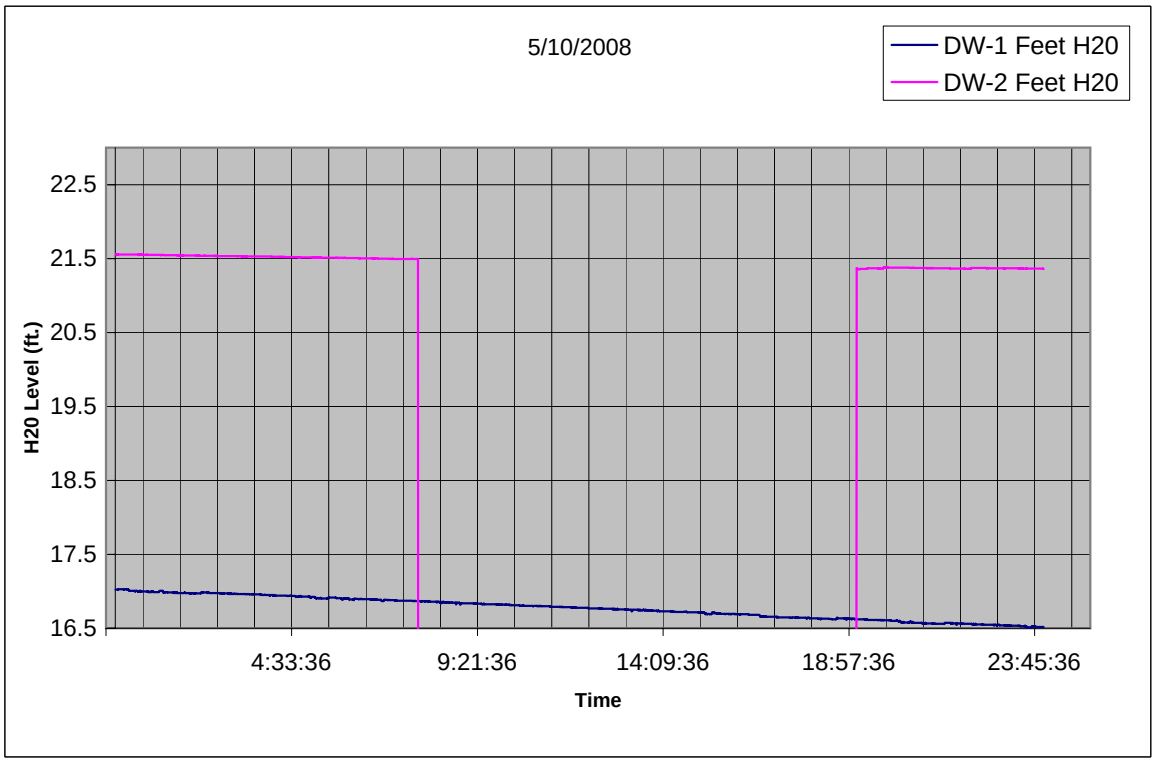

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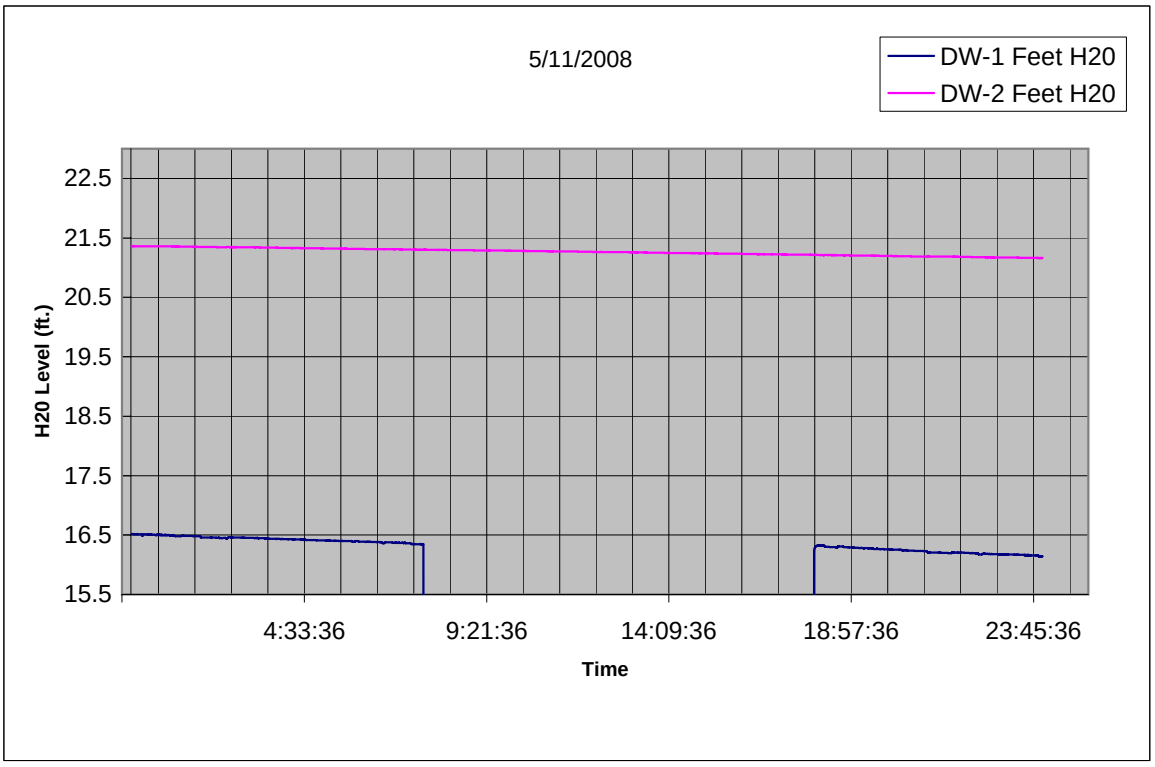

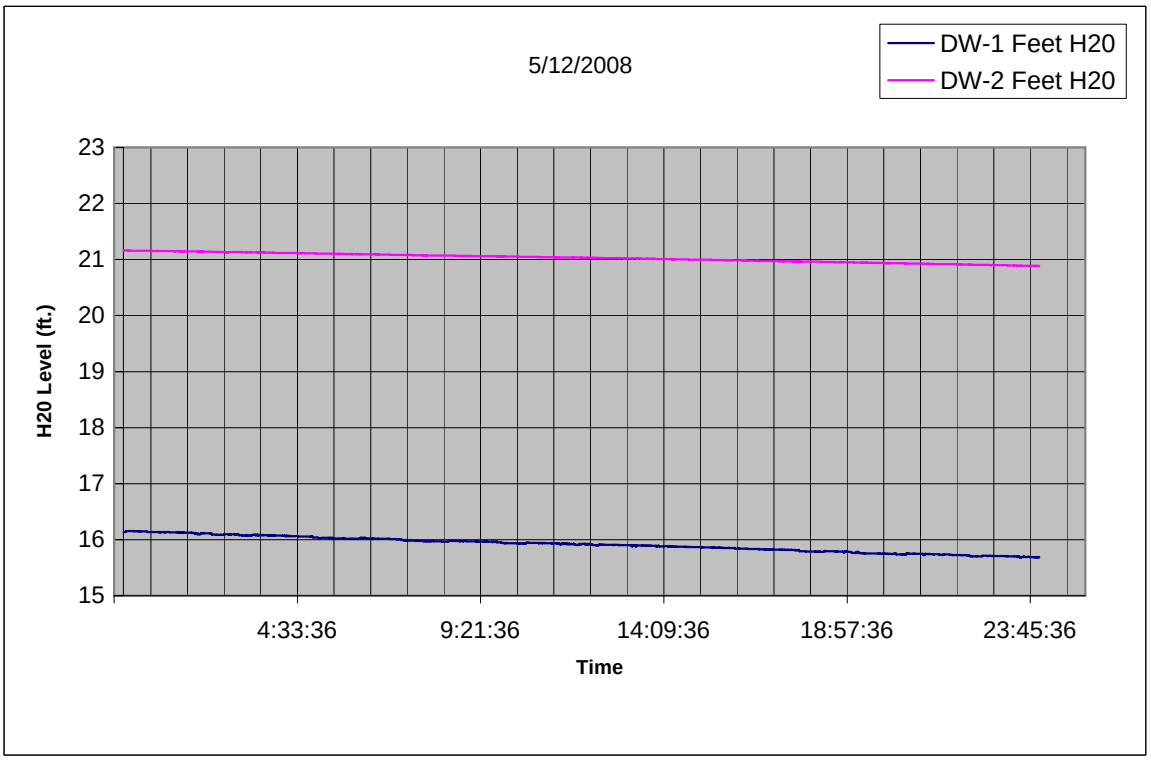

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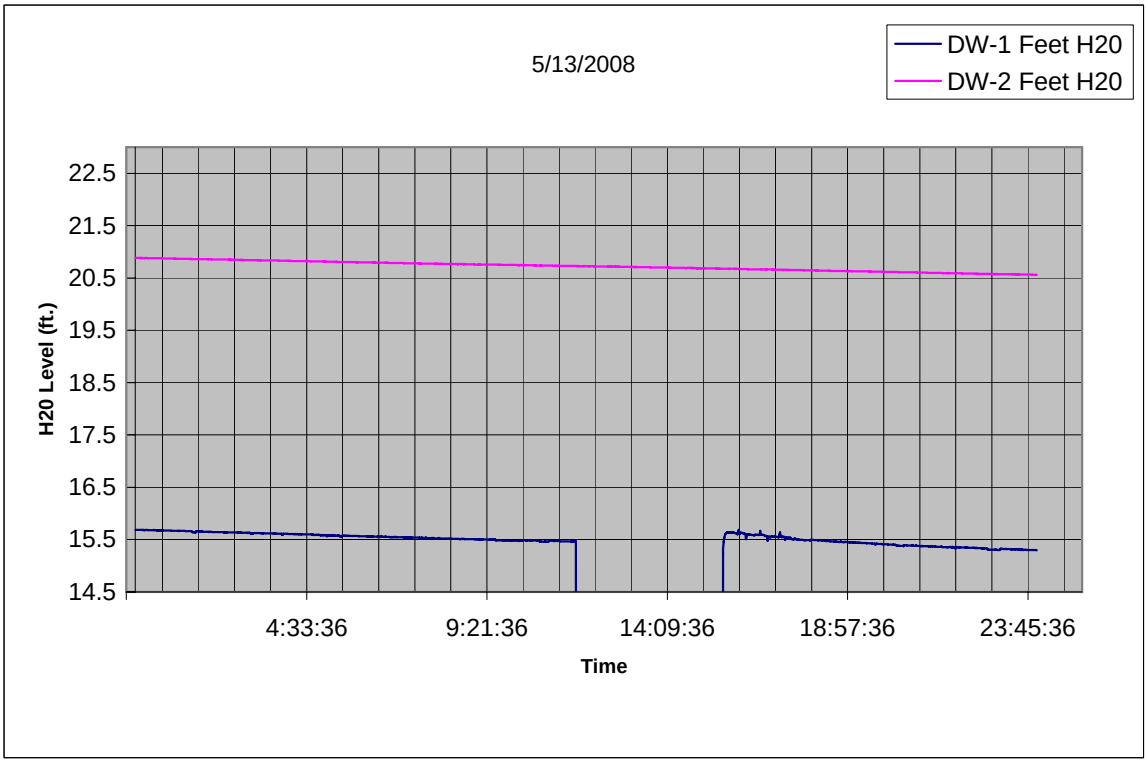

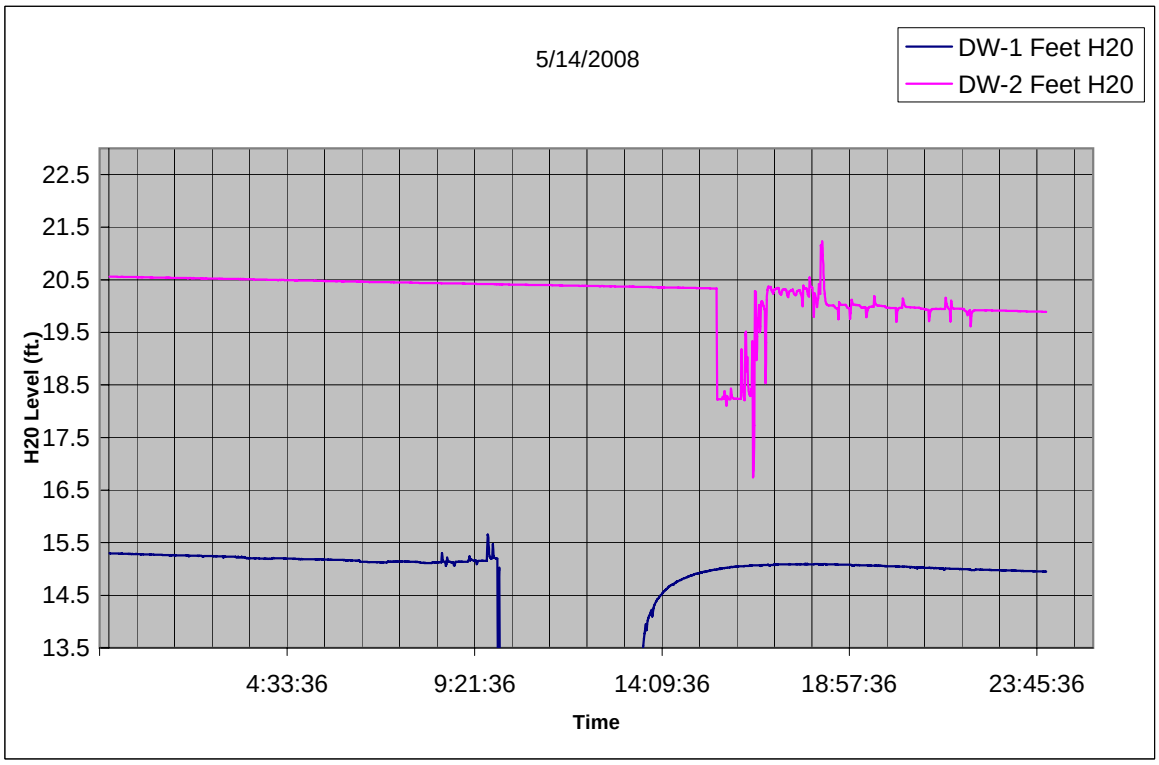

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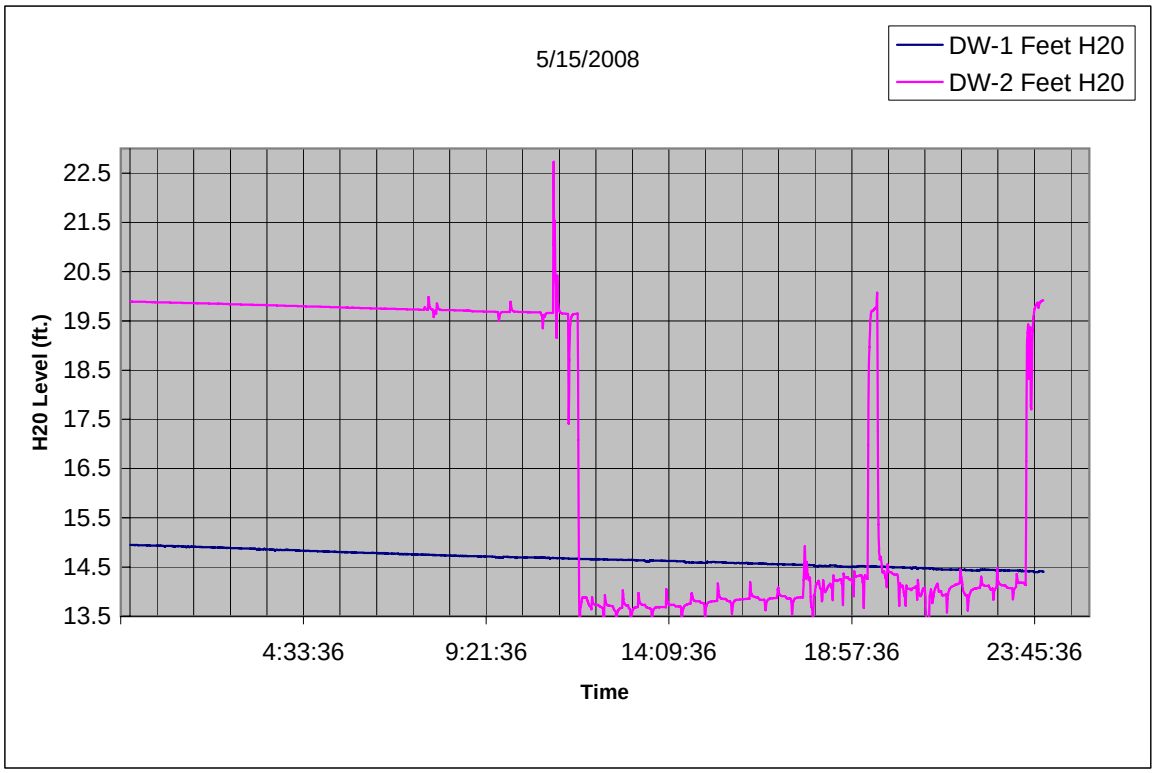

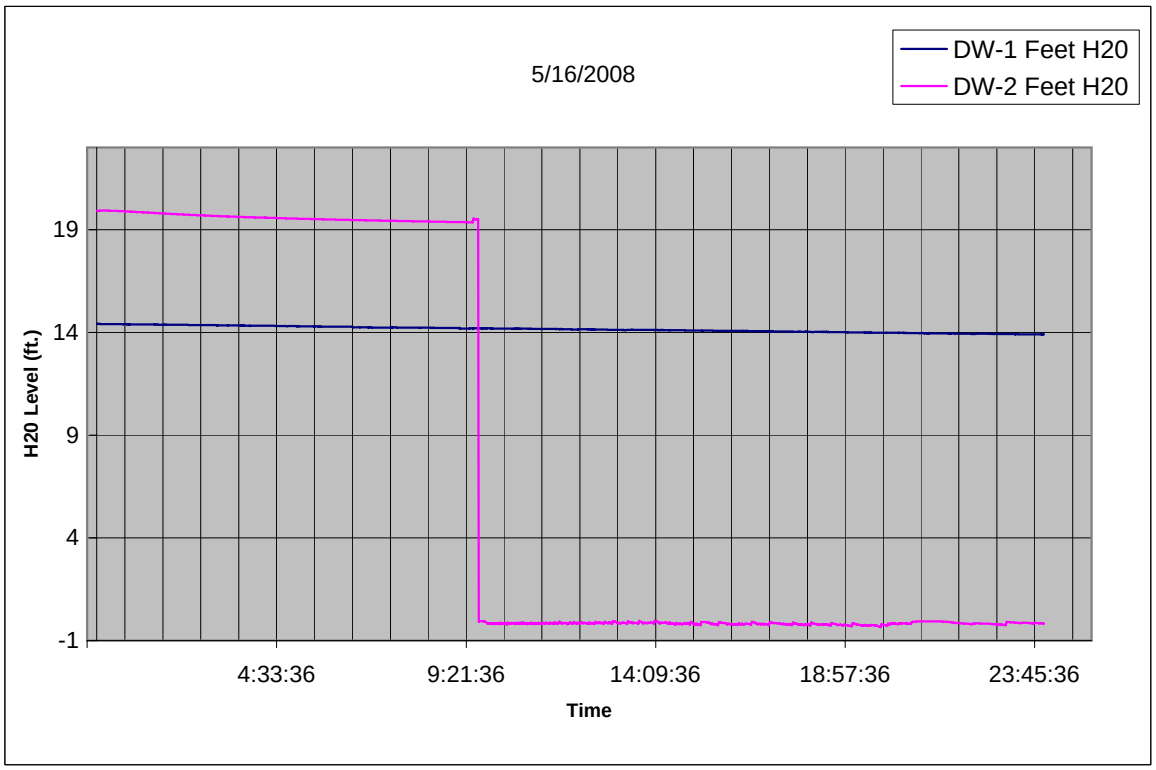

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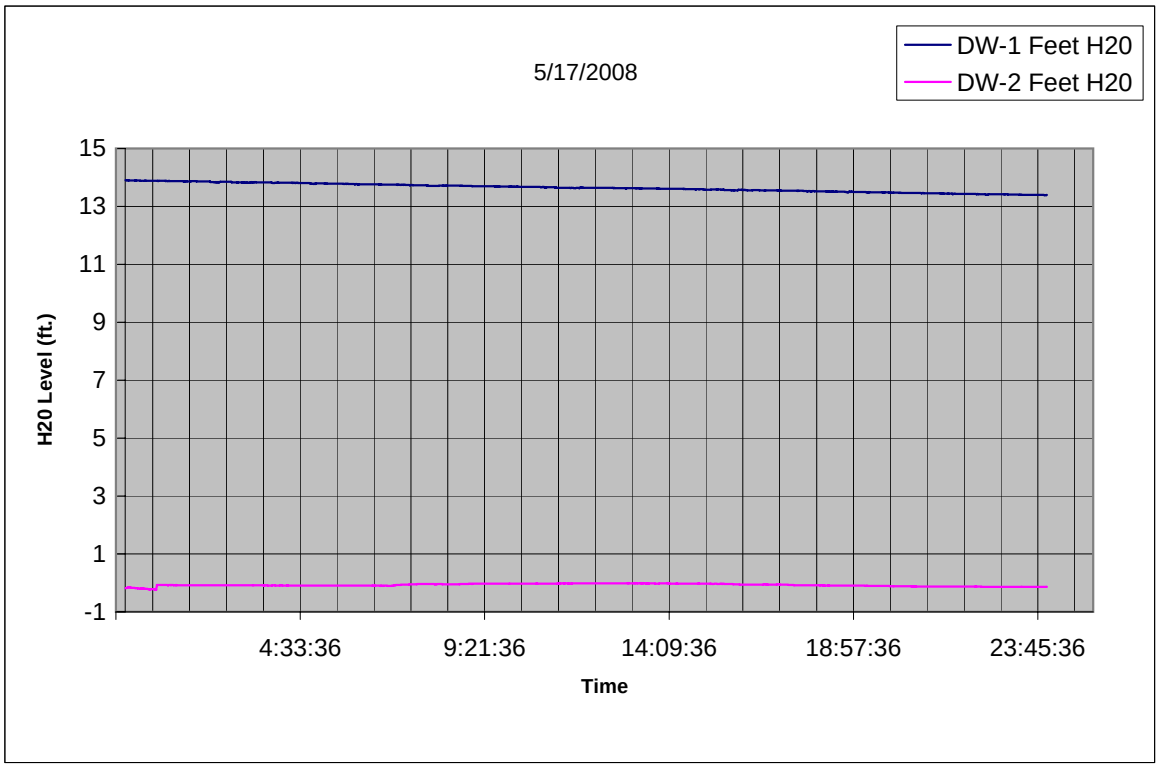

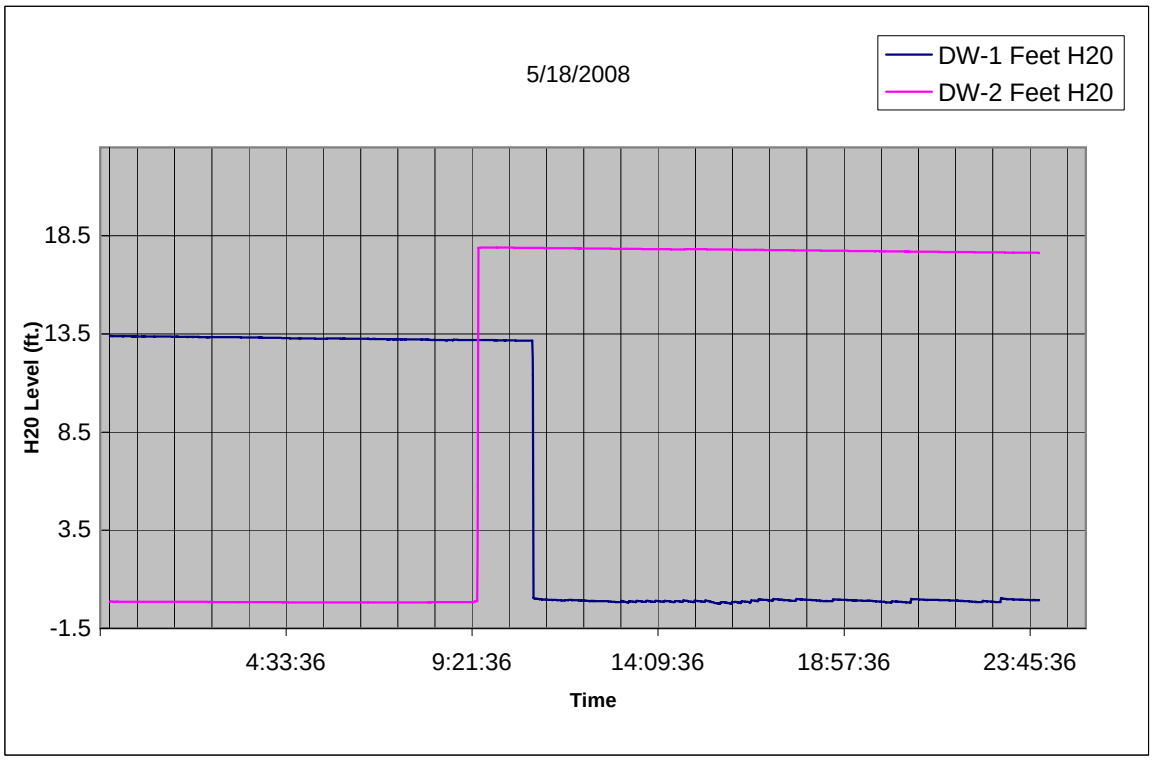

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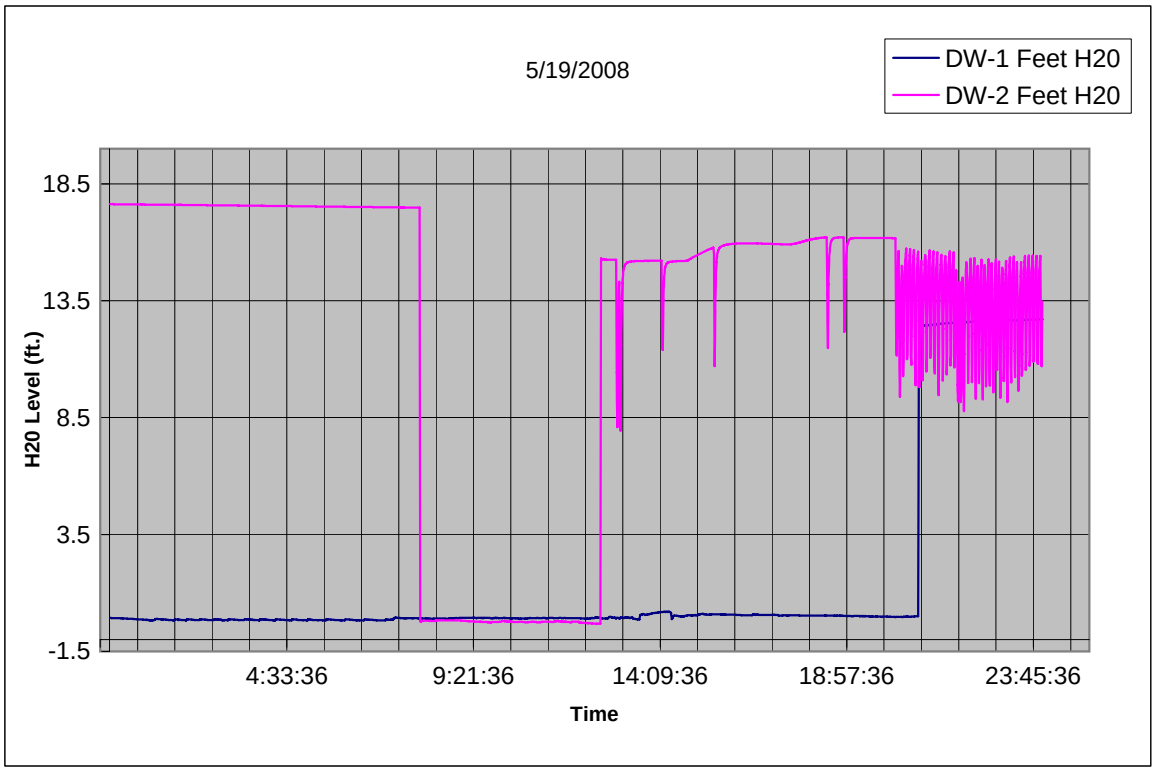

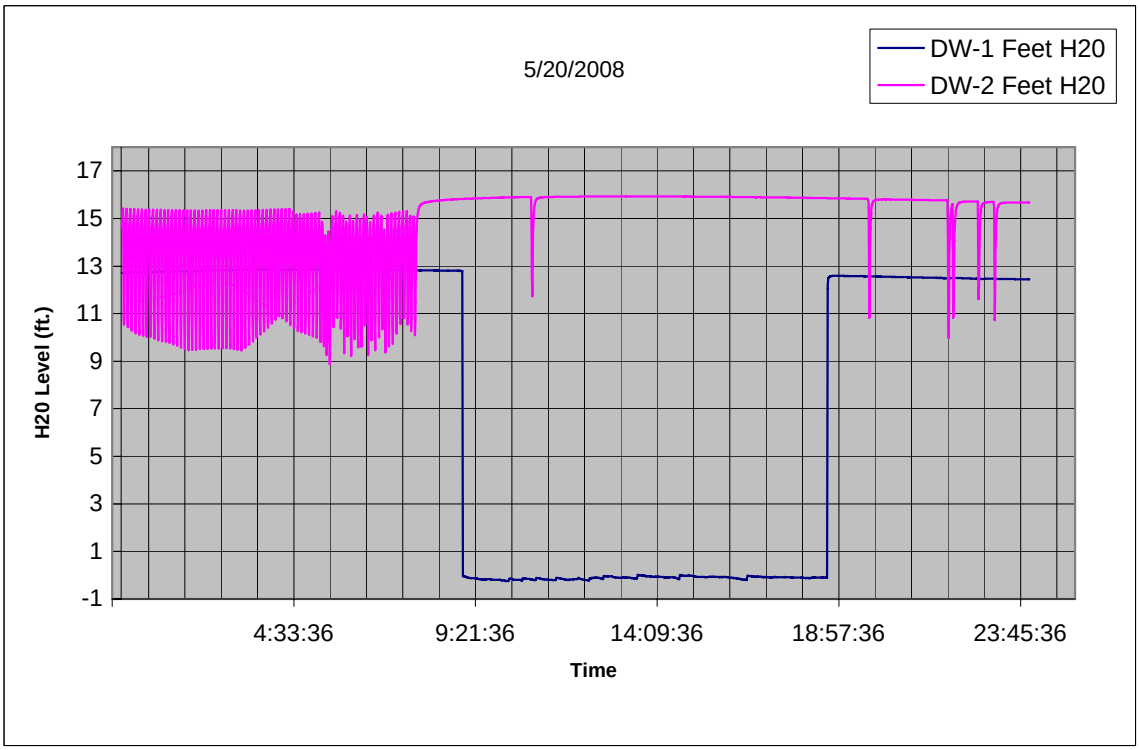

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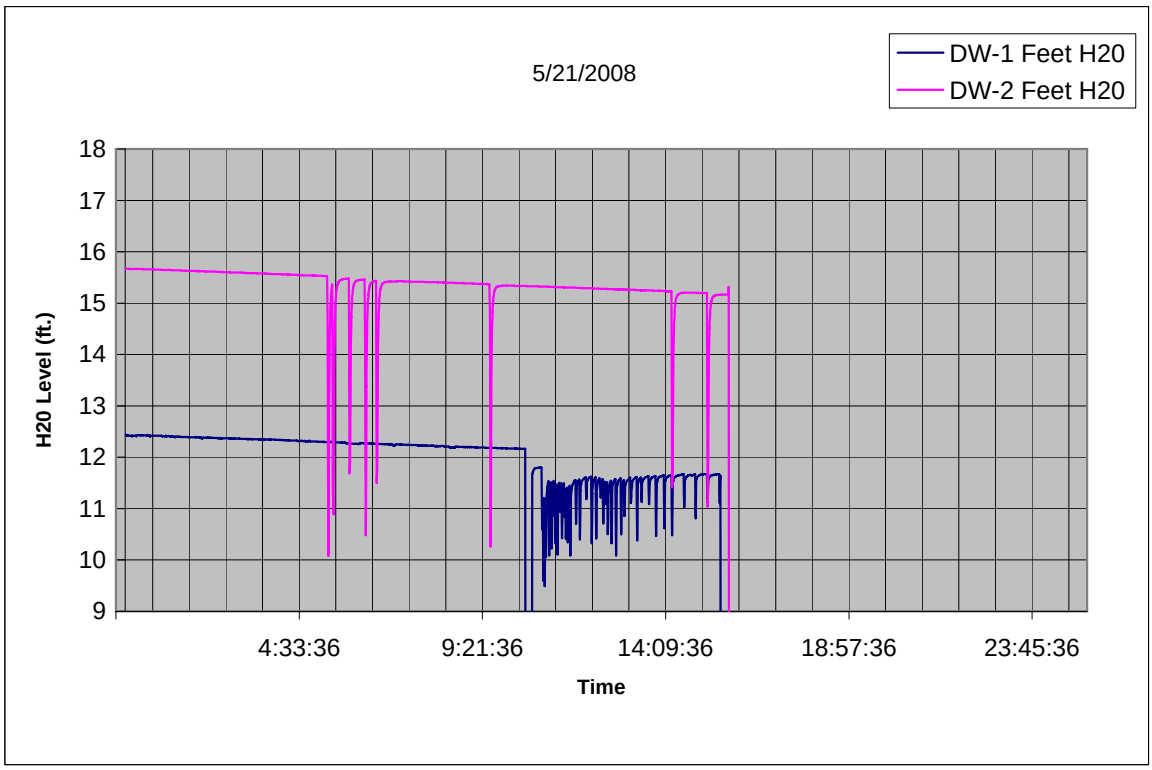

Event Chronology
Borehole Hydrophysics and Geophysics Report

Date	Time	Activity
4/30/08	1810	Start MW-4 test
	1815	Start MW-2 test
	1824	Start MW-1 test
	1830	Start MW-5 test
	1843	Start MW-3 test
5/5/2008		
	945	Pull DW-2 pump and start transducer test.
	1505	Pull MW-1 transducer (start geophysics).
	1803	Replace MW-1 transducer.
5/6/2008	730	Pull DW-1 pump.
	905	Pull DW-2 transducer.
	908	Pull MW-4 transducer (start geophysics).
	1130	Start DW-2 VSP test.
	1150	Start DW-1 transducer test.
	1205	Stop MW-4 transducer test. Sync with computer clock and restart test.
	1220	Replace MW-4 transducer.
	1225	Pull MW-3 transducer (start geophysics).
	1306	Stop MW-3 transducer test. Sync with computer clock and restart test.
	1608	Replace MW-3 transducer.
	1645	Pull MW-2 transducer (start geophysics).
	1656	Stop DW-2 transducer test. Sync with computer clock and restart test.
	1718	Replace MW-2 transducer. Stop MW-2 transducer test, sync with computer clock, and restart test.
5/7/2008	750	Pull DW-1 transducer.
	754	Stop DW-1 transducer test. Sync with computer clock and restart test.
	810	Start DW-1 VSP test.
	915	Replace DW-1 transducer.
	930	Pull MW-4 transducer.
	945	Start MW-4 VSP test.
	1135	Replace MW-4 transducer.
	1213	Pull MW-1 transducer. Start VSP test.
	1216	Stop MW-1 transducer test. Sync with computer clock and restart.
	1240	Pull MW-2 transducer (start geophysics).
	1537	Replace MW-1 transducer.
	1630	Pull MW-3 transducer. Start VSP.
	1700	Replace MW-2 transducer.
	1711	Pull MW-5 transducer.
	1715	Stop MW-5 transducer test. Sync with computer clock.
	1716	Restart MW-5 transducer test.
	1718	Replace MW-3 transducer.
	1724	Start MW-5 geophysics.
	1824	Replace MW-5 transducer.

Event Chronology
Borehole Hydrophysics and Geophysics Report

Date	Time	Activity
5/8/2008	733	Pull MW-2 transducer. Start VSP test.
	854	Pull MW-5 transducer. Start geophysics.
	908	Replace MW-2 transducer. Done VSP test.
	1040	Replace MW-5 transducer.
	1115	Pull DW-2 transducer. Start geophysics.
	1255	Replace MW-5 transducer. Done VSP test.
	1733	Replace DW-2 transducer. Done geophysics for day.
5/9/2008	829	Pull DW-2 transducer.
	933	Start DW-2 geophysics tests.
	1720	Replace DW-2 transducer.
5/10/2008	750	Pull DW-2 transducer.
	957	Start geophysics tests.
	1908	Replace DW-2 transducer.
5/11/2008	741	Pull DW-1 transducer.
	844	Start geophysics tests.
	1756	Replace DW-1 transducer.
5/12/2008		No work performed.
5/13/2008	1140	Pull DW-1 transducer. Set up for hydrophysics.
		Start fluid replacement with DI water.
	1300	Bore fluid is completely replaced.
		Log well fluid..
	1536	Replace DW-1 transducer.
5/14/2008	820	Start ambient logging on DW-1.
	953	Pumping test begins. Inject and pump at 7 gpm.
	1210	Production test begins on DW-1. Pump rate = 1.4 gpm.
	1355	Done DW-1 Tests.
	1615	Start DI fluid replacement in DW-2.
	1810	Done fluid replacement. Start ambient logs.
5/15/2008	755	Begin DW-2 logging.
	1110	Pumps inserted in DW-2 and production test begin.
	1810	Start injection at 1.2 gpm and extraction at 7.6 gpm.
	2332	Test complete.

Event Chronology
Borehole Hydrophysics and Geophysics Report

Date	Time	Activity
5/16/2008	939	Pull DW-2 transducer.
	1245	Inflate packers at 16-20 ft bgs.
	1338	Start pumping for low flow sampling. Pump cuts out and packers are leaking.
	1358	Reinflate packers. Begin pumping and sampling.
	1538	Sample collected from 16-20 ft bgs interval. Start drawdown test. No significant flow.
	1630	Deflate packers.
	1715	Inflate packers at 28.5-32.5 ft bgs.
	1755	Start pumping for low flow sampling. Pump at 1.35 gpm, no drawdown
	1830	Sample 28.5-32.5 ft bgs interval. COLOG begins transmissivity/hydraulic conductivity testing.
	1955	COLOG done testing.
5/17/2008	1110	Inflate packers at 37-41.7 ft bgs.
	1140	Start pumping for low flow sampling.
	1214	Sample collected from 37-42 ft bgs. interval.
	1220	Start transmissivity and hydraulic conductivity test.
	1327	Stop pumping. Allow to recover and deflate packers.
	1400	Lower and inflate packers at 94.5-98.5 ft bgs.
	1428	Start pumping for low flow sampling.
	1535	Sample collected from 94.5-98.5 ft bgs interval.
	1540	Start transmissivity and hydraulic conductivity test.
	1637	Stop pumping. Allow to recover and deflate packers.
	1655	Deflate packers.
	1729	Lower and inflate packers at 187.9-192.2 ft bgs.
	1745	Start pumping for low flow sampling.
	1855	Sample collected from 187.9-192.2 ft bgs interval.
	1900	Start transmissivity and hydraulic conductivity test.
	1942	Stop pumping. Allow to recover and deflate packers.
	1958	Deflate packers.
	2036	Lower and inflate packers at 265 ft bgs-bottom interval.
	2117	Start pumping for low flow sampling.
	2150	Sample collected from 265 ft bgs-bottom interval.
	2200	Start transmissivity and hydraulic conductivity test.
	2256	Stop pumping. Allow to recover and deflate packers.
5/18/2008	930	Pull packers from DW-2 and replace transducer.
	1054	Pull DW-1 transducer.
	1757	Inflate packers at 56 ft bgs-bottom interval.
	1814	Start pumping for low flow sampling.
	1910	Sample collected from 56 ft bgs-bottom interval. Allow well to stabilize.
	`	

Event Chronology
Borehole Hydrophysics and Geophysics Report

Date	Time	Activity
5/19/2008	745	Remove and reinstall DW-2 transducer while reinstalling well pump.
	824	Inflate packers at 51 ft bgs-bottom interval in DW-1.
	830	Start pumping for low flow sampling.
	930	Sample collected from 51 ft bgs-bottom interval.
	935	Start transmissivity and hydraulic conductivity test (7 gpm).
	1038	Stop pump and allow well to stabilize.
	1059	Deflate packers and lower to 56 ft bgs-bottom zone again.
	1204	Start transmissivity and hydraulic conductivity test (78 ml/min)
	1256	Stop pump and allow well to stabilize.
	1700	Inflate packers at 41.2-51.9 ft bgs.
	1735	Start pumping for low flow sampling.
	1815	Sample collected from 41.2-51.9 ft bgs interval.
	1817	Start transmissivity and hydraulic conductivity test (6.33 gpm)
	1925	Stop pump and allow well to stabilize.
	1951	Deflate packers.
	2050	Replace DW-1 transducer.
5/20/2008	900	Pull DW-1 transducer.
	1046	Inflate packers at 33.75-38.5 ft bgs.
	1107	Start pumping for low flow sampling.
	1200	Sample collected from 33.75-38.5 ft bgs interval.
	1232	Start transmissivity and hydraulic conductivity test (2.7 gpm).
	1334	Stop pump and allow well to stabilize.
	1349	Deflate packers and set for shallow zone sample.
	1445	Inflate packer at 33.15 ft bgs for shallow zone sampling.
	1501	Start pumping for low flow sampling.
	1605	Sample collected from surface-33.15 ft bgs interval.
	1607	Start transmissivity and hydraulic conductivity test.
	1709	Stop pump and allow well to stabilize.
	1811	Deflate packers.
	1839	Replace DW-1 transducer.
5/21/2008	1028	Pull DW-1 transducer. Replace well pump.
	1039	Replace DW-1 transducer.
	1505	Stop MW-4 test and remove transducer.
	1514	Stop MW-2 test and remove transducer.
	1521	Stop MW-1 test and remove transducer.
	1528	Stop MW-5 test and remove transducer.
	1536	Stop DW-1 test and remove transducer.
	1541	Stop MW-3 test and remove transducer.
	1548	Stop DW-2 test and remove transducer.

Notes:
VSP = vertical seismic profiling
DI = deionized
gpm = gallons per minute
ft = feet
bgs = below ground surface
mL/min. = milliliter per minute
COLOG = Colog Division of Layne Christensen Company

Rainfall Totals During MEFUDS Hydro-Geophysics Investigation	
Date	**Rainfall Ammount (in)**
4/30/2008	Trace
5/1/2008	0
5/2/2008	0
5/3/2008	0
5/4/2008	0.17
5/5/2008	0
5/6/2008	0
5/7/2008	0
5/8/2008	0.55
5/9/2008	0
5/10/2008	0
5/11/2008	0
5/12/2008	0
5/13/2008	0
5/14/2008	0
5/15/2008	Trace
5/16/2008	Trace
5/17/2008	0
5/18/2008	0
5/19/2008	0.81
5/20/2008	Trace
5/21/2008	0.04

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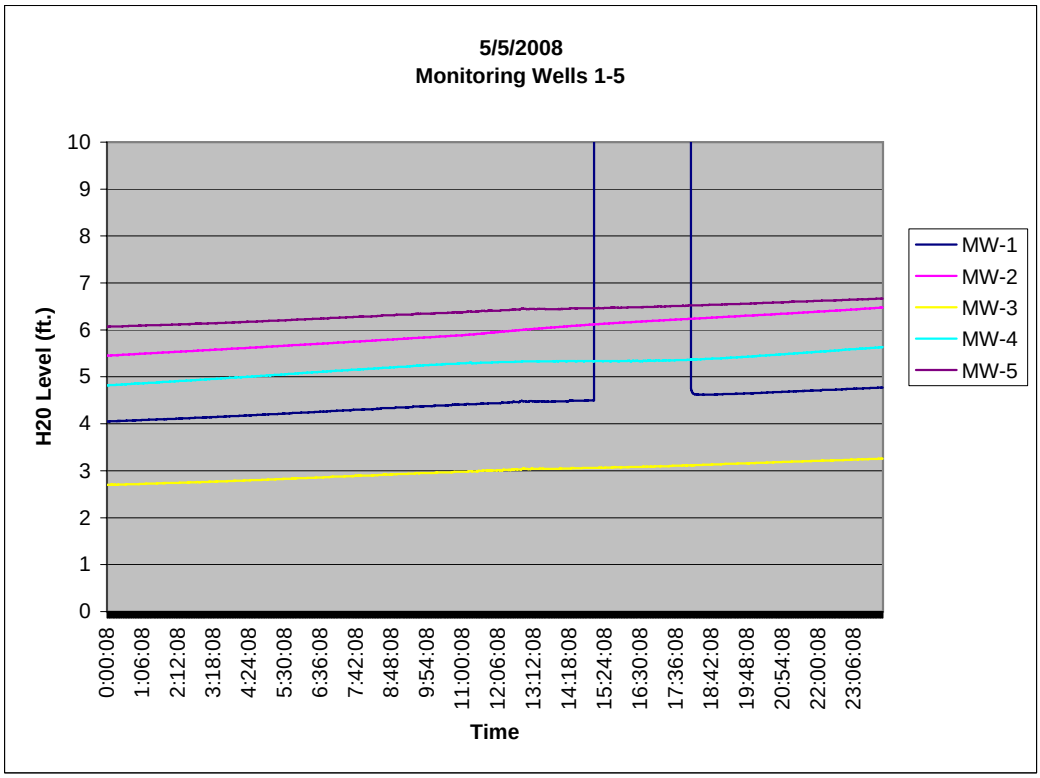

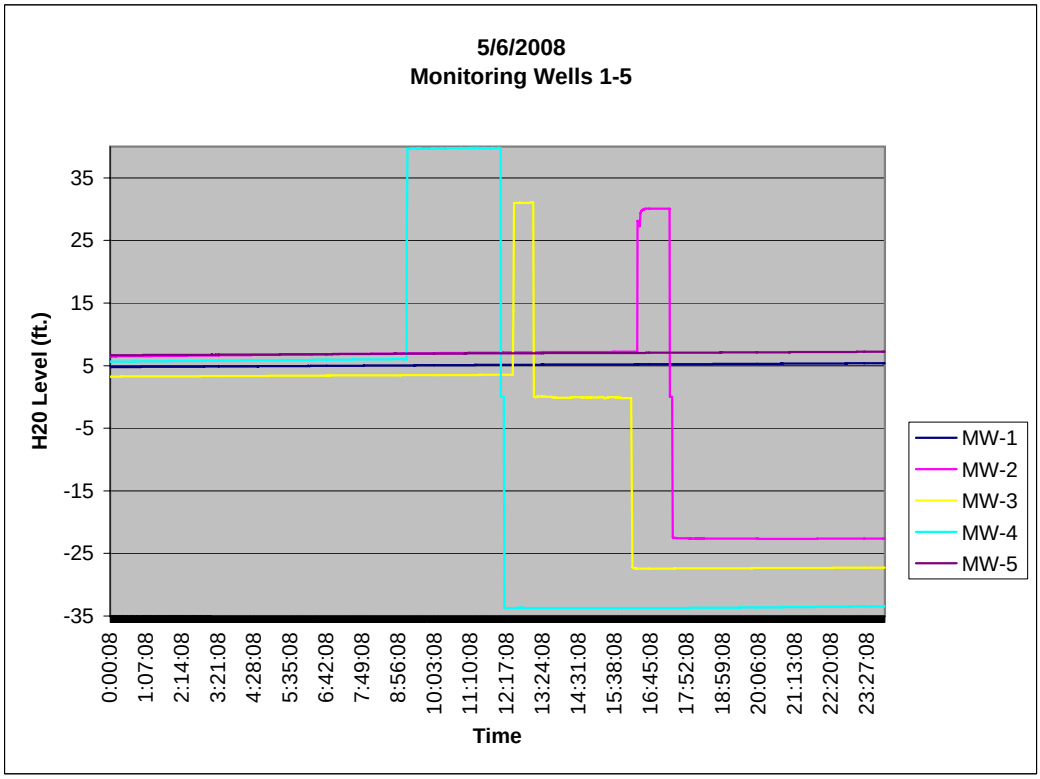

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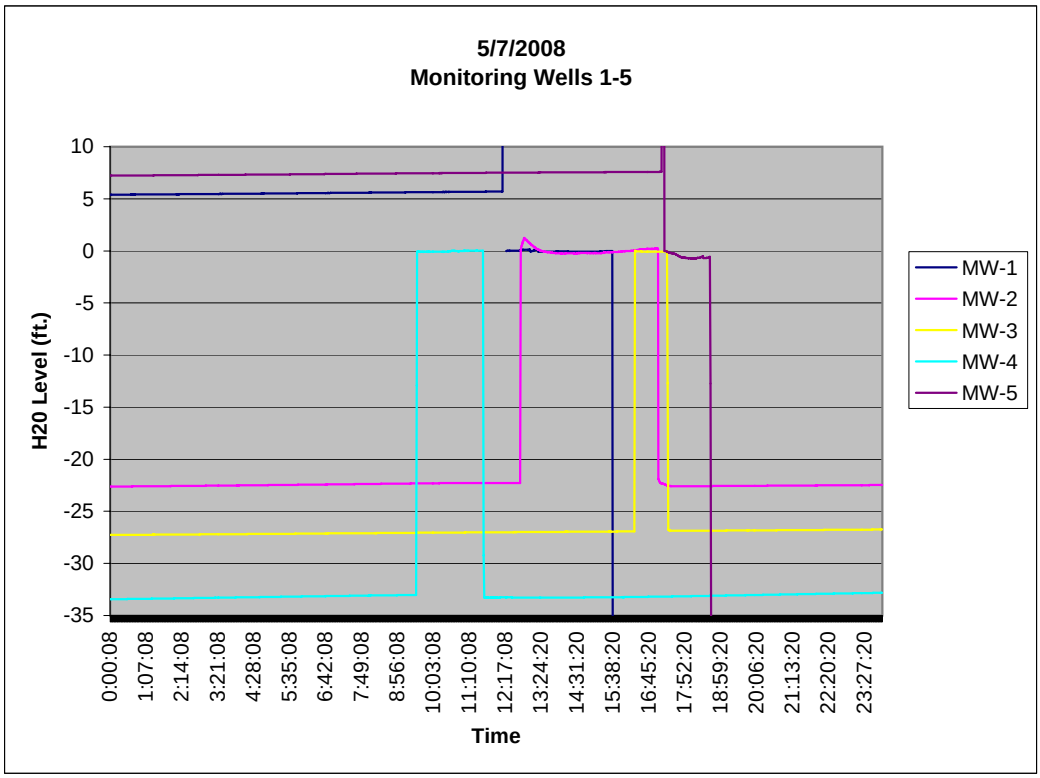

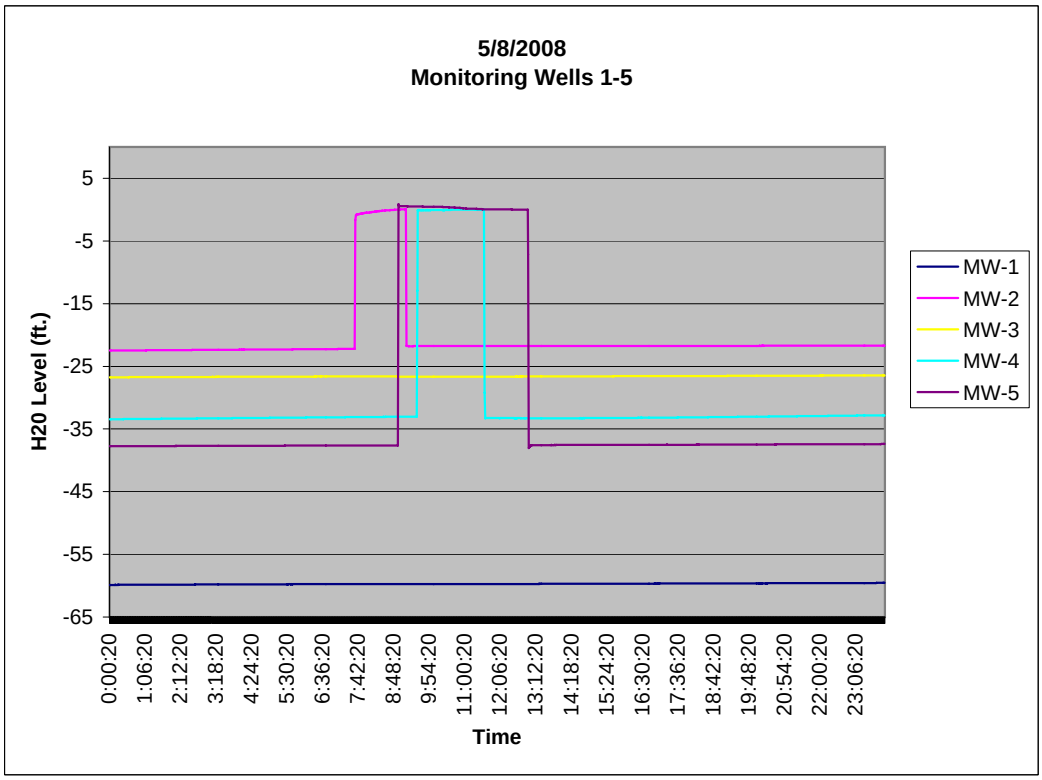

Appendix E

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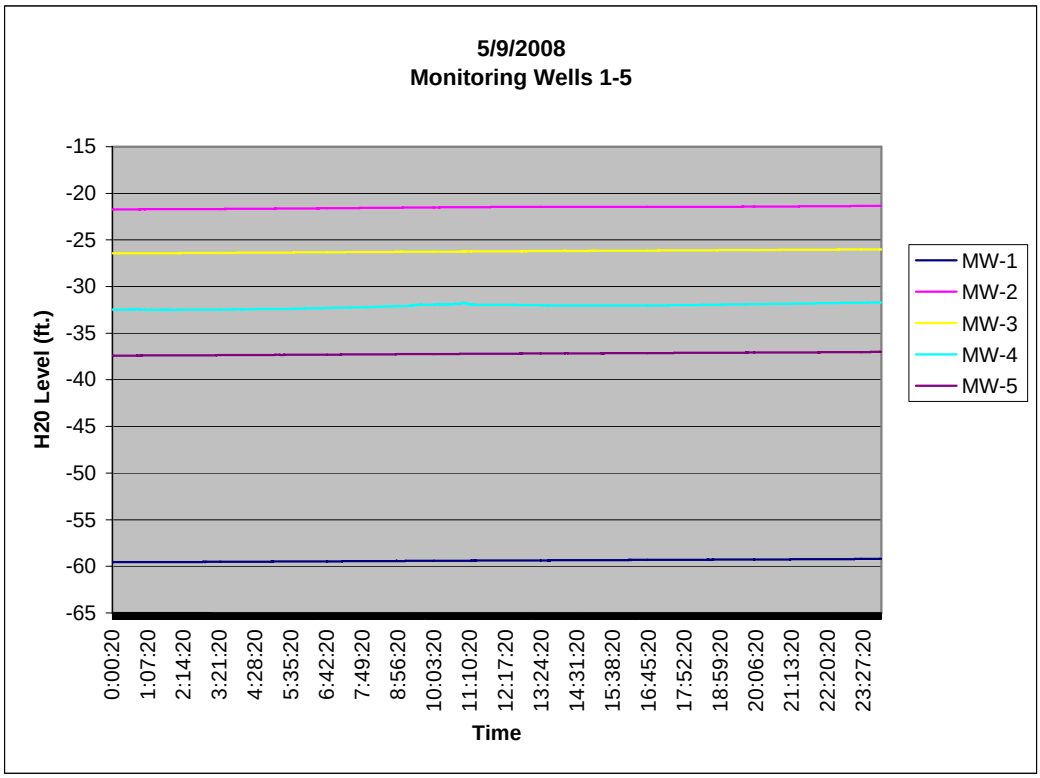

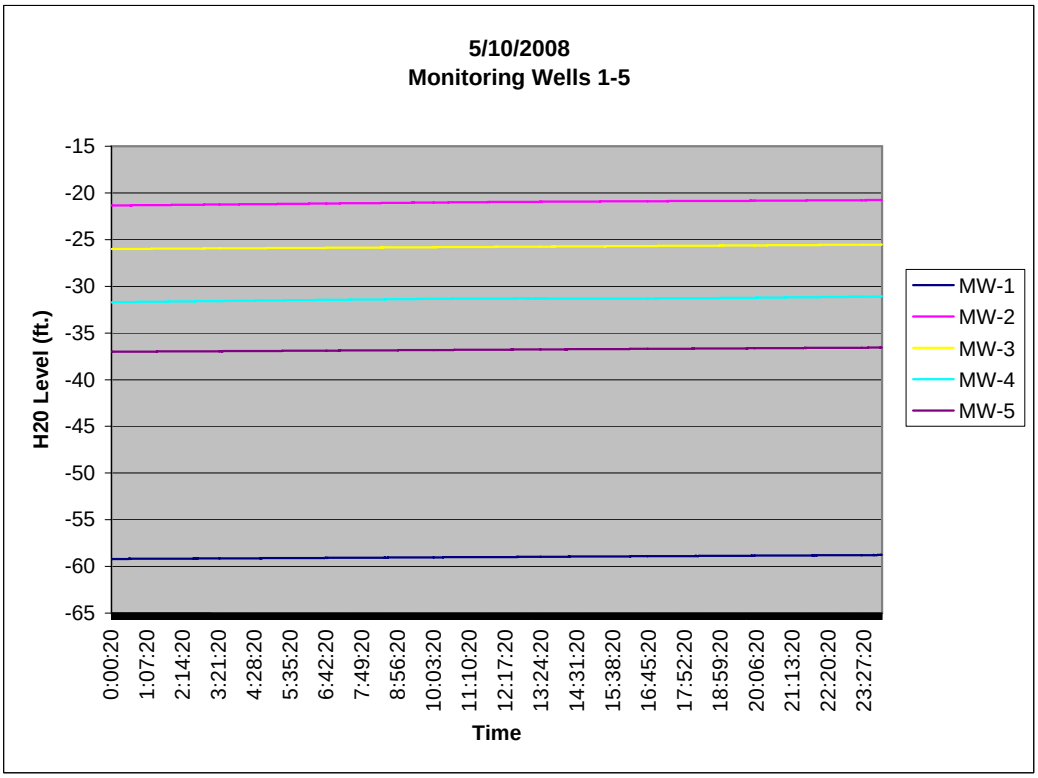

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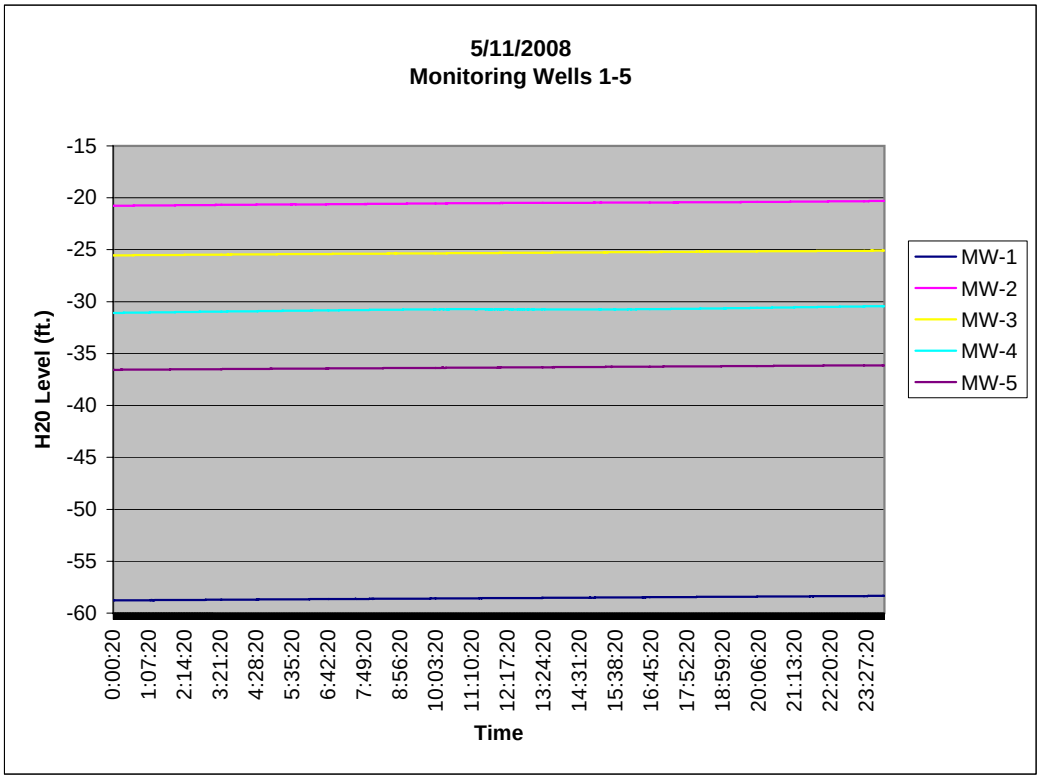

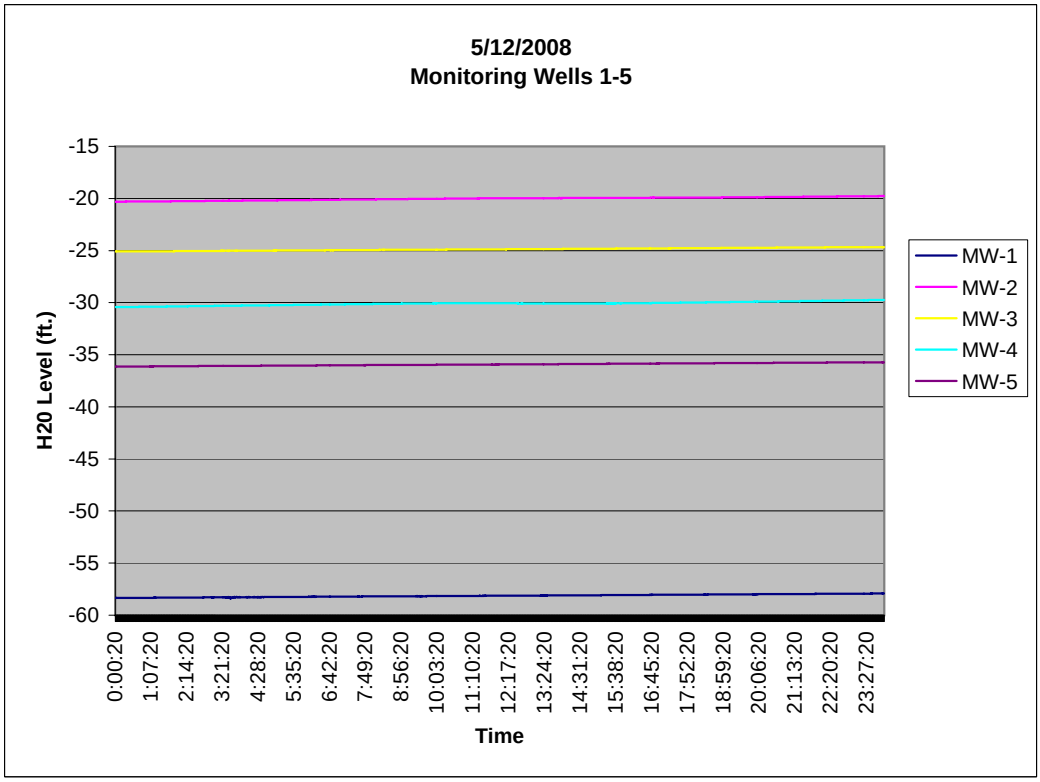

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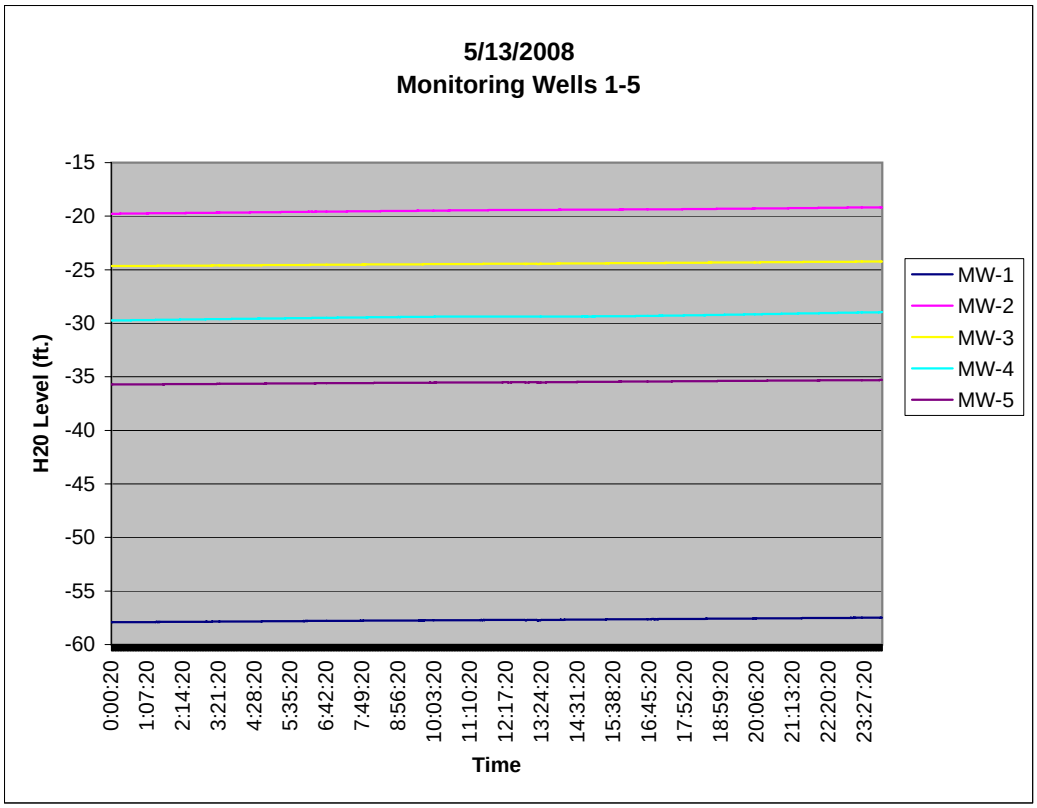

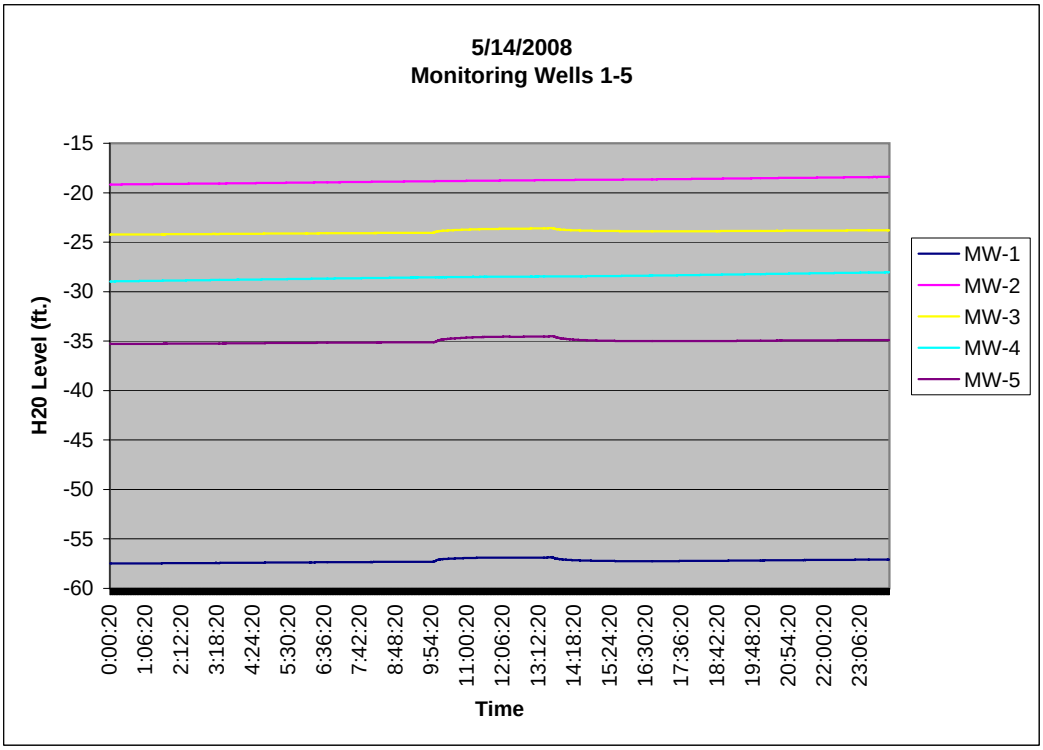

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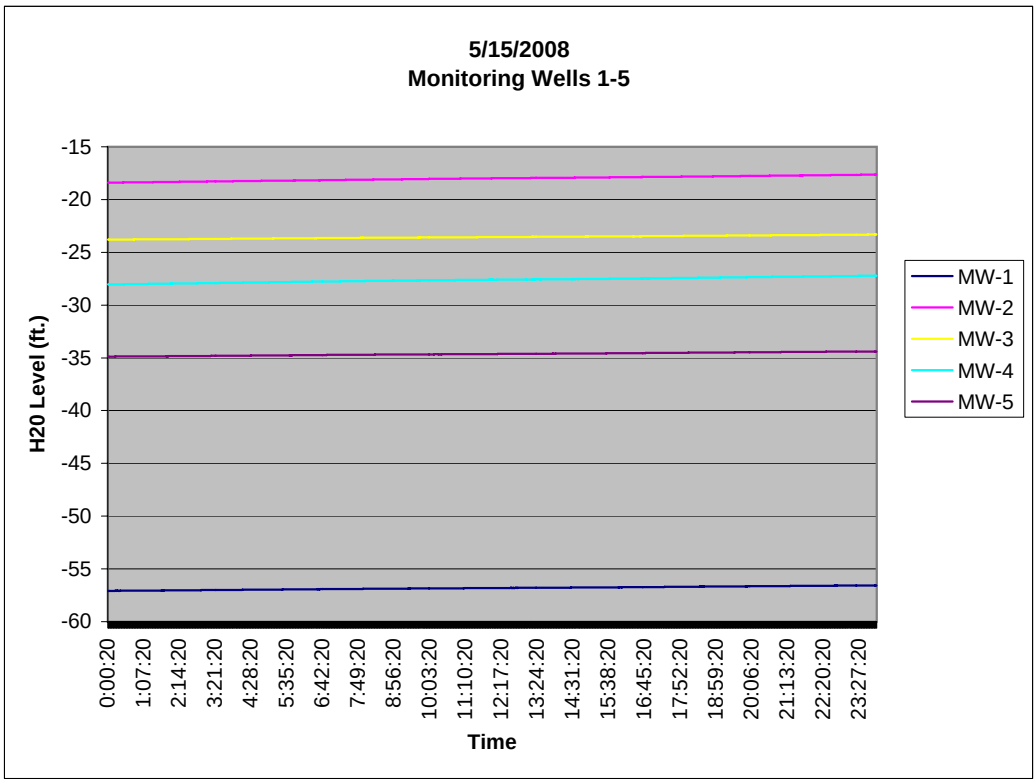

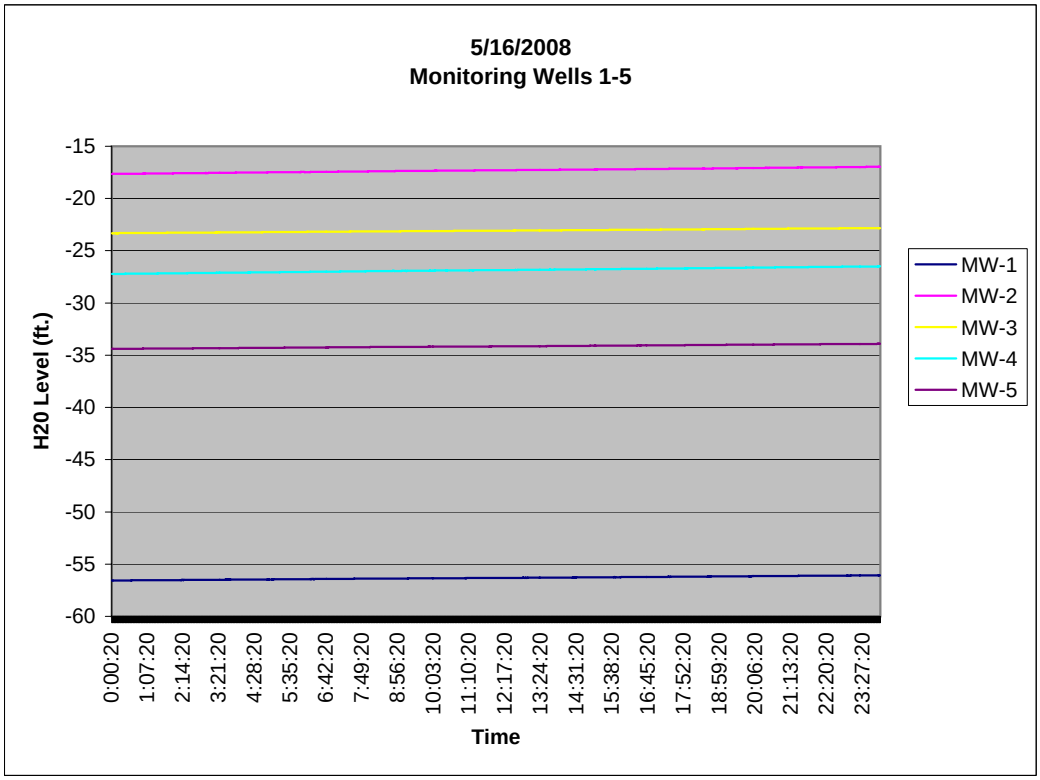

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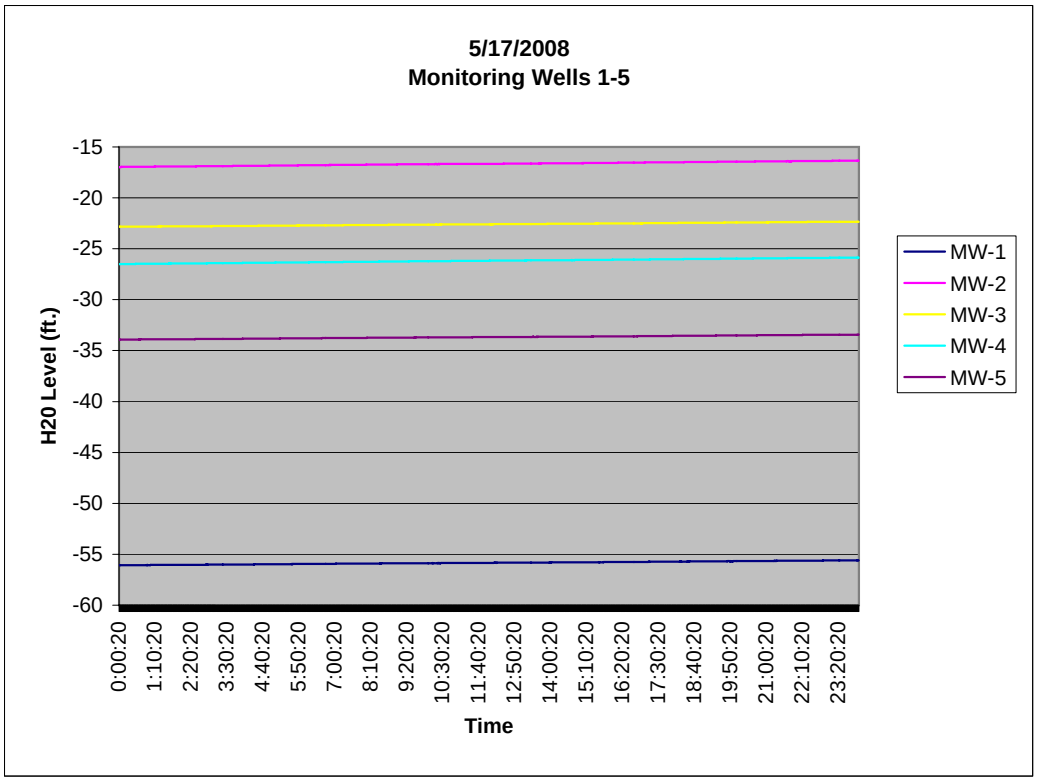

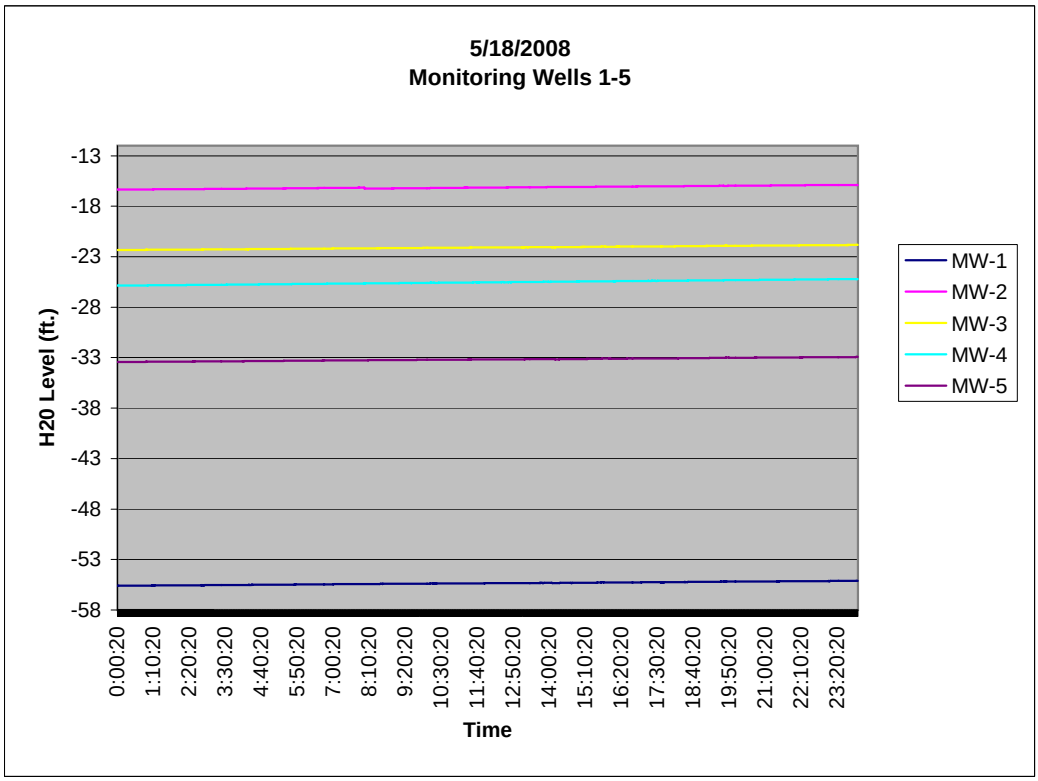

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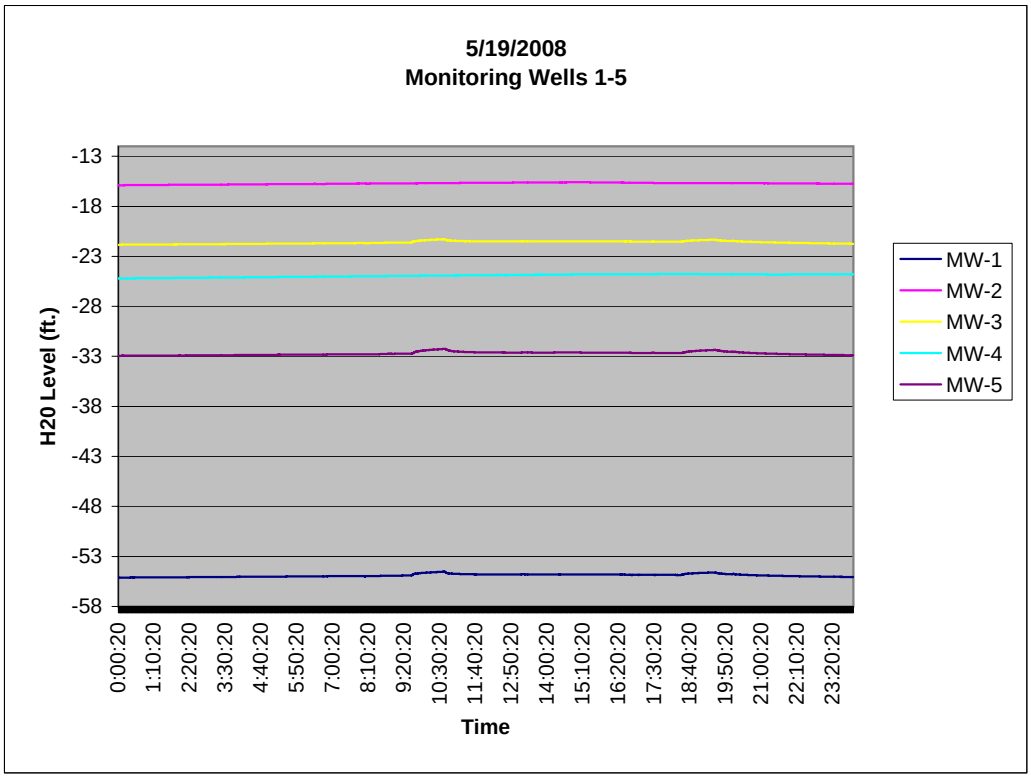

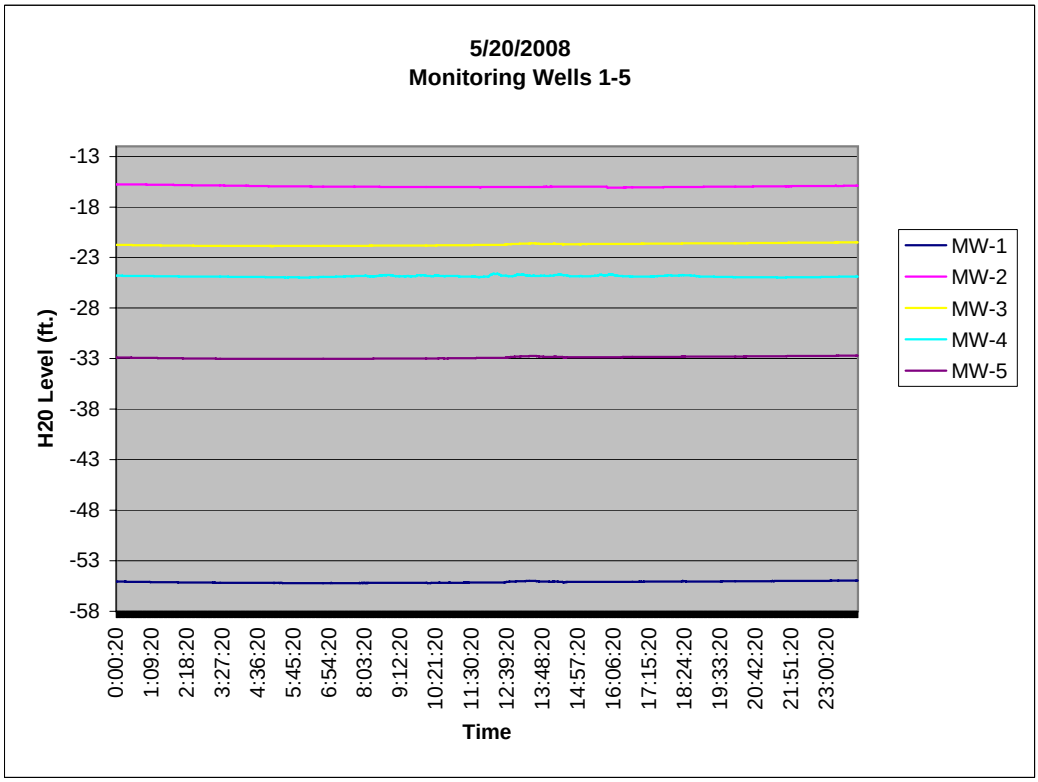

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