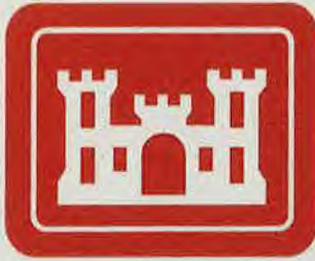


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**U.S. Army Corps of Engineers
New England District**

**FINAL
REMEDIAL INVESTIGATION REPORT
AREA OF CONTAMINATION (AOC) 50
DEVENS, MASSACHUSETTS**

VOLUME II OF III

**CONTRACT DACA31-94-D-0061
DELIVERY ORDER NUMBER 007**

**U.S. ARMY CORPS OF ENGINEERS
NEW ENGLAND DISTRICT
CONCORD, MASSACHUSETTS**

JANUARY 2000

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DELIVERY ORDER NUMBER 007

Prepared for:

U.S. Army Corps of Engineers
New England District
Concord, Massachusetts

Prepared by:

Harding Lawson Associates
Portland, Maine
Project No. 08740-03

January 2000

SOIL BORING AND BEDROCK CORE LOGS

- A-1 BORINGS
- A-2 BORINGS COMPLETED AS PIEZOMETERS
- A-3 BORINGS COMPLETED AS MONITORING WELLS
- A-4 OTHER

BORINGS

SOIL BORING LOG - FORT DEVENS, MA.			PROJECT NO.: 8740.02		BORING NO.: 50B-96-18X		
CLIENT: COE		DATE STARTED: 6/27/96		STUDY AREA: AOC 50			
CONTRACTOR: NHB		DATE COMPLETED: 6/27/96		PROTECTION: D (Mod.)			
METHOD: HSA 4.25'		BORING DIAMETER: 6"		PID METER: OVM 580B			
GROUND ELEV.:		REFERENCE PT. ELEV.:		TOTAL DEPTH: 24'			
LOGGED BY : R. M.		CHECKED BY: JCR		WATER TABLE BGS: ~10'			
SAMPLE		PEN/REC. (ft./ft.)	PID OF SPOON	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	ON SITE SCREENING
NO.	DEPTH						
S1	0-2'	2.0/1.2	0.7	Light brown (10yr6/4) fine sand, little subrounded gravel, mod. graded, dry, loose.	4,4,4,3	SP	
S2	5-7'	2.0/0.9	54	Brown (10yr5/4) fine sand, trace silt and gravel, piece of treated wood - (121 ppm) (fill).	3,3,5,3	SM	
S3	10-12'	2.0/1.2	16	Dark gray (10yr4/2) fine sand, little silt, moist to saturated, loose.	1,2,1,4	SM	BX501810XF
S4	15-17'	2.0/1.8	4	Greenish gray (5y5/3) fine sand, trace silt and gravel, saturated, loose.	1,3,6,8	SM	BX501815XF
S5	18-20'	2.0/1.9	NA	Greenish gray (5y5/4) fine sand, little subrounded gravel, poorly graded.	3,8,9,8	SM	BX501818XF
S6	20-22'	2.0/1.8	6.9	Same as above.	6,11,11,14	SM	BX501820XF
S7	22-24'	2.0/1.8	0	(5y5/4) fine sand, trace silt and gravel, saturated, mod. loose.	13,15,13,15	SM	
				BOB at 24' bgs (not auger refusal).			

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 8740.02		BORING NO.: 50B-96-19X		
CLIENT: COE		DATE STARTED: 11/1/96				STUDY AREA: AOC 50		
CONTRACTOR: NHB		DATE COMPLETED: 11/1/96				PROTECTION: D (Mod.)		
METHOD: D & W		BORING DIAMETER: 3"				PID METER: OVM 580B		
GROUND ELEV.:		REFERENCE PT. ELEV.:				TOTAL DEPTH: 69'		
LOGGED BY: GH		CHECKED BY: JCR				WATER TABLE BGS: -14'		
SAMPLE		PEN.	REC.	PID OF SPOON	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	ON SITE SCREENING
NO.	DEPTH							
S1	4-6'	2.0/	0.1	0	Gravel, sand, well graded, loose, not much sample.	5,4,4,4	GW	
S2	9-11'	2.0/	1	0	Sand, coarse to fine, poorly graded, loose, wet, orange to tan (last 6").	2,3,4,7	SP	BX501909
S3	14-16'	2.0/	1	0	Silty sand, nonplastic silt, sand is fine, poorly graded, wet to saturated, orange to tan, laminations throughout spoon.	7,9,8,9	SM	
S4	20-22'	2.0/	1	2.1	Silty sand, sand is very fine, uniform, poorly graded, loose, saturated, brown.	5,5,5,4	SM	BX501909
S5	25-27'	2.0/	1	0.3	0-0.5': same silty sand as above, 0.5-1.0': sand, medium to fine, 10% fines, poorly graded, medium dense, tan to brown, saturated, (silty sand had laminations), orange 0.5'.	7,6,7,6	SM SP - SM	
S6	30-32'	2.0/	1	3.6	Sand, medium to fine, mostly fine, 10% fines, poorly graded, medium dense, saturated, band of orange sand 0.1-0.2', several laminations of orange at 0.9-1.0'.	5,6,7,7	SP - SM	BX501930
S7	35-37'	2.0/	1.5	2.6	Sand, medium to fine, mostly fine, 10% fines, poorly graded, medium dense, tan, saturated.	8,10,9,5	SP - SM	
S8	40-42'	2.0/	1	6.6	Sand, medium to fine, same as above, slight lamination at 0-0.5'.	5,5,6,6	SP - SM	BX501940
S9	45-47'	2.0/	0.9	3	Same as above with clay lens at 0-0.1'. Clay was firm, nonplastic tan with orange lamination under clay lens in sand.	10,10,10,12	SP - SM	
S10	50-52'	2.0/	1	11.3	Sand, medium to fine, 10% fines, poorly graded, medium dense, saturated, tan with brown, laminations throughout.	6,6,5,6	SP - SM	BX501950
S11	55-57'	2.0/	1.5	11.3	Sand, medium to fine, mostly fine, <5% fines, poorly graded, uniform, tan, medium dense, some laminations throughout.	5,5,6,6	SP	
S12	60-62'	2.0/	2	9.5	Sand, medium to fine, mostly fine, 10% fine, poorly graded, medium dense, saturated, tan to brown with orange laminations throughout.	10,9,9,8	SP - SM	BX501960
S13	65-67'	2.0/	0.7	7.4	Sand, fine, 15% fines, poorly graded, medium dense, saturated, tan to brown with some laminations.	6,8,11,14	SM	BX501965
S14	67-69'	2.0/	2	2	0-1.0': sand, similar to above. 1.0-2.0': gravel with sand, 25% fines, well graded, very dense, saturated, brown, till.	6,8,36,38		BX501967
					End of boring at 69'.			

SOIL BORING LOG - FORT DEVENS, MA.

PROJECT NO.: 8740.02

BORING NO.: 50B-96-20X

CLIENT: COE
 CONTRACTOR: NHB
 METHOD: D & W
 GROUND ELEV.:
 LOGGED BY: GH

DATE STARTED: 11/9/96
 DATE COMPLETED: 11/9/96
 BORING DIAMETER: 6"
 REFERENCE PT. ELEV.:
 CHECKED BY: JCR

STUDY AREA: AOC 50
 PROTECTION: D (Mod.)
 PID METER: OVM 580B
 TOTAL DEPTH: 32'
 WATER TABLE BGS: 15.8'

SAMPLE		PEN.	REC.	PID OF SPOON	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	ON SITE SCREENING
NO.	DEPTH							
S1	0-2'	2.0/	1	0	Sand, fill, gravel.	20,12,18,19		
S2	5-7'	2.0/	1.5	0	Sand, fine, uniform, poorly graded, medium dense, dry to damp, lt. tan, bedding, layers visible.	5,6,6,7	SP	BX502005
S3	10-12'	2.0/	1	0	Sand, fine, uniform, poorly graded, medium dense, wet, lt. tan.	4,4,6,6	SP	
S4	15-17'	2.0/	0.6	0	Sand, medium to fine, 30% fines, poorly graded, loose, saturated, brown.	2,3,3,8	SM	BX502015
S5	20-22'	2.0/	2	0	Sand, medium to fine, mostly fine, 25% fines, poorly graded, loose, saturated, tan to olive, clay lens at 1.8-1.9'.	2,2,3,2	SM	BX502020
S6	25-27'	2.0/	2	0	Sand, medium to fine, same as above.	6,5,5,6	SM	BX502025
S7	30-32'	2.0/	2	0	Same as above.	2,1,1,1	SM	BX502030
					B.O.B. 32' , not refusal.			

SOIL BORING LOG - FORT DEVENS, MA.

PROJECT NO.: 8740.02

BORING NO.: 50B-96-21X

CLIENT: COE CONTRACTOR: NHB METHOD: D & W GROUND ELEV.: LOGGED BY: GH	DATE STARTED: 11/5/96 DATE COMPLETED: 11/5/96 BORING DIAMETER: 4" REFERENCE PT. ELEV.: CHECKED BY: JCR	STUDY AREA: AOC 50 PROTECTION: D (Mod.) PID METER: OVM 580B TOTAL DEPTH: 67' WATER TABLE BGS: -11'
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SAMPLE		PEN.	REC.	PID OF SPOON	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	ON SITE SCREENING
NO.	DEPTH							
S1	9-11'	2.0/	0.7	0	Sand, fine, 10% fines, poorly graded, medium dense, wet, brown.	6,6,7,7	SP-SM	BX502109
S2	19-21'	2.0/	1	16.7	0-0.3': clay, nonplastic, stiff. 0.3-1.0': sand, fine, uniform, poorly graded, medium dense, saturated, brown.	4,7,6,8	CL SP	BX502119
S3	29-31'	2.0/	1.5	0	Sand, mostly fine, poorly graded, medium dense, saturated, brown.	5,8,6,8	SP	BX502129
S4	39-41'	2.0/	2	3	Same sand as above with orange laminations.	7,8,3,4	SP	BX502139
S5	49-51'	2.0/	2	0	Sand, medium to fine, mostly fine, 10% fines, poorly graded, loose, saturated, gray.	7,6,4,4	SP-SM	BX502149
S6	59-61'	2.0/	2	1.9	Sand, same as above with orange laminations.	12,14,16,20	SP-SM	BX502159
S7	64-66'	2.0/	0.7	0	Gravelly sand, till, well graded, very dense, saturated, brown to gray.	42,65,68,103		BX502169
					Casing had refusal at 64' bgs. Roller bit in rock at 67' bgs. End of boring.			

SOIL BORING LOG FORT DEVENS, MA PROJECT NO.: 8740.02

CLIENT: USAEC
CONTRACTOR: GEOLOGIC
LOGGED BY: TDL
METHOD: DRIVE & WASH
DATE STARTED: 3/11/97
DATE COMPLETED: 3/11/97
PROTECTION: D

BORING NO.: 50B-97-22X
STUDY AREA: AOC-50
SOIL DRILLED: 70'
TOTAL DEPTH: 84'
WATER LEVEL:
PID METER: 580B OVM

SAMPLE NO.	DEPTH	PEN/ REC.	PID (ppm)	BLOWS PER 6'	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	USCS
					Drive & wash 4" casing adjacent to G6M-96-25A/B. Object was to go to rock and confirm this with core - no sampling until encounter till at 69'.	
S-1	69-70'	0.8/0.5	0	90-110/3 refusal	Advanced spoon once in till - blow counts of 90-110/0.3 refusal, at 69' recovered 0.5' for 0.8' penetration. Light gray to greenish gray silt and fine sand, poorly graded, non-plastic, very dense, TILL	SM
					Above till is sand as previously described in nearby borings. Cored 10' of rock from 74-84'. See rock coring log.	

ROCK CORING LOG

Project: Fort Devens <i>50B-97-22X</i>		Study Area: <i>ADC-50</i>		Project No. <i>8740-02</i>	
Client: USAEC		Driller's Name: <i>R. EASTWOOD</i>		Logged by: <i>TDL</i>	Checked by:
Drilling Contractor: <i>GEOLOGIC</i>		Protection Level: <i>D.</i>		Rig Type: <i>B-57</i>	Start Date: <i>3-11-97</i>
Drilling Method: <i>DRIVE & WASH THEN ROCK CORE</i>		P.I.D. (øV): <i>580B ØVM</i>		Casing Size: <i>4"</i>	Auger Size: <i>NA</i>
Bit type/size:		Bit Use:		Core Interval (to/from) (ft): <i>2 RUNS 74' TO 79' then 79' TO 84'</i>	

Depth (feet) Below GFD Surf.	Sample No. & Penetration/ Recovery (feet)	Graphic Log	Natural Core Breaks		Weathered Condition	Rock Quality			Drilling Rate min/ft	Color	Rock Description and Comments on Drilling
			Type/Dip	Surface Condition		Total 4" Core	RQD (%)	Rock Quality Description			
74											Rock is metamorphosed SED, Rock - possibly a SILTSTONE, DARK GRAY w/ thin wispy & common CALCITE VEINING, OF OLD FRACTURES - RE HEATED - FINE GRAINED, MED. HARD, SCRATCHED w/ KNIFE easily. Very broken 79' to 81', then broken to 84'
75	<i>Run #1</i> DRILLED 5' RECOVERED 4.5'		x	↑	NON-WEATHERED		95% to 100%	EXCELLENT	3.5 min./ft.	DARK GRAY	9 Breeds - ALL APPEAR TO BE MECHANICAL. ALL FRAC. FACES ARE FRESH & UNWEATHERED - INTERPRET THAT RQD IS 100% IF TAKE OUT DRILLING BREAKS MORE MASSIVE THAN RUN #2
76			x								
77			x	FRESH							
78			x	↓							
79			x	↓	SLIGHT		95% to 100%	EXCELLENT	3.5 min./ft.	DARK GRAY	From 80' to 81' some evidence of WEATHERING w/ minor FeO ₂ on FACES - SLIGHT - 79' to 81' NUMEROUS BREAKS Generally 3" to 3" - VERY Broken. Some WATER LOSS w/ DRILLING AT AROUND 81'. Very common PYRITE, SMALL BLOBS, ALL THROUGH CORE
80		✓	SLIGHT								
81			FeO ₂								
82		Many FRACS.	FRESH								
83				↓							
84											B.O.B. @ 84'

FIGURE 4-2
ROCK CORING LOG
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS

SOIL BORING LOG FORT DEVENS, MA PROJECT NO.: 8740.02

CLIENT: USAEC
CONTRACTOR: EEI
LOGGED BY: TDL
METHOD: DRIVE & WASH
CASING SIZE: 4"
DATE STARTED: 3/18/97
DATE COMPLETED: 3/19/97
PROTECTION: D

BORING NO.: 50B-97-23X
STUDY AREA: AOC-50
SOIL DRILLED: 68.5'
TOTAL DEPTH: 81.5'
WATER LEVEL:
PID METER: 580B OVM

SAMPLE NO.	DEPTH	REC.	PID (ppm)	BLOWS PER 6"	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	USCS
					<p>Advanced 4" casing to bedrock and seated casing at 72'. For geologic profile see G6M-96-24B. Bedrock surface at 68.5'. Set casing at 72'. Cored bedrock from 72-81.5' using NX core, see rock coring log for details.</p>	

ROCK CORING LOG

Project: Fort Devens		50B-97-23X		Study Area: AOC-50	Project No. 874002
Client: USAEC		Driller's Name: Roy Eastwood	Logged by: L. Tracy	Checked by:	Ground Elev.:
Drilling Contractor: EEI		Protection Level: D	Rig Type: B-57	Start Date: 3-18-97	Finish Date: 3-18-97
Drilling Method: 4" drive & wash the NR rock core			P.I.D. (8V): 580 Bova	Casing Size: 4"	Auger Size: —
Bit type/size: Diamonds/NK		Bit Use:	Core Interval (to/from)(ft): R-1 (72-77.0') & R-2 (77.0-81.5')		

Depth (feet) Below GRD Surf.	Sample No. & Penetration/Recovery (feet)	Graphic Log	Natural Core Breaks		Weathered Condition	Rock Quality			Drilling Rate min/ft	Color	Rock Description and Comments on Drilling			
			Type/Dip	Surface Condition		Total 4" Core	RQD (%)	Rock Quality Description						
73	R-1				Non-weathered	58"	97%	Excellent	3.5	Gray	Metamorphosed sedimentary rock - siltstone or phyllite with calcite stringers along healed fractures. Majority of breaks occurred along healed fractures. Most fracture faces are fresh. Some evidence of FeO _x on fractures near 73', 75', 79.7'. Quartz/granite present @ 77'. D.O.P. @ 81.5'			
74	72.0-77.0'								3					
75	Rec=								3.5					
76	4.9'								3.5					
77									L.T. Gray					
78	R-2								48"			89%	Good	Gray
79	77.0-81.5'													
80	Rec=													
81	4.0'													
82														

FIGURE 4-2
ROCK CORING LOG
 PROJECT OPERATIONS PLAN
 FORT DEVENS, MASSACHUSETTS
 ABB Environmental Services, Inc.

SOIL BORING LOG FORT DEVENS, MA PROJECT NO.: 8740.02

CLIENT: USAEC
CONTRACTOR: GEOLOGIC
LOGGED BY: TDL
METHOD: DRIVE & WASH
CASING SIZE: 4"
DATE STARTED: 3/13/97
DATE COMPLETED: 3/13/97
PROTECTION: D

BORING NO.: 50B-97-24X
STUDY AREA: AOC-50
SOIL DRILLED: 73.5'
TOTAL DEPTH: 85'
WATER LEVEL: ~6'
PID METER: 580B OVM

SAMPLE NO.	DEPTH	REC.	PID (ppm)	BLOWS PER 6"	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	USCS
S-1	4-6'	1.5	0	21,9,10,13	Lt. brown silt and very fine sand, well sorted, non-plastic, med. dense, damp, w/stratification due to water sorting, alluvium - micaceous just at sand/silt border.	SM
S-2	9-11'	1.5	0	3,4,4,3	As above, saturated.	SM
S-3	14-16'	1.3	0	10,13,15,22	Lt. brown w/yellow orange, strat., fine sand and silt lenses, as above.	SM
S-4	19-21'	1.4	0	10,9,13,14	As above.	SM
S-5	24-26'	1.4	0	19,33,37,40	As above, lt. brown and yellowish orange silt and sand (very fine) in strat. lenses, saturated, non-plastic, dense, very well sorted, alluvium w/occasional reddish lenses.	SM
S-6	29-31'	1.2	0	18,16,14,21	Gray brown very fine sand and silt, no reddish lenses, saturated, alluvium.	SM
S-7	34-36'	1.2	0	12,20,22,25	Yellowish and grayish brown silt and sand, alluvium - stratified, saturated, non-plastic, dense, very well sorted.	SM
S-8	39-41'	1.1	0	10,15,16,23	As above, lt. brown to olive brown.	SM
S-9	44-46'	1.0	0	7,10,14,17	As above (no sample collected due to lack of adequate number of jars).	SM
S-10	49-51'	1.1	0	8,14,20,25	As above.	SM
S-11	54-56'	1.0	0	19,27,36,44	As above, possibly slightly coarser, no sample collected.	SM
S-12	59-61'	1.1	0	23,34,47,41	Lt. brown to yellowish brown, stratified silts and sands, as above, no sample collected.	SM
S-13	64-66'	1.0	0	10,20,29,30	As above.	SM
S-14	69-71'	1.0	0	17,23,45,46	Lt. to olive brown, very fine sand and silt, as above, tip of spoon had gray to greenish gray of same, color change.	SM
					Resistance at 73.5', rock cored to 85', see rock core log.	

ROCK CORING LOG

Project: Fort Devens		50B-97-24X	Study Area: AOC-50		Project No. 8740-02
Client: USAEC		Driller's Name: JOHN/DARRYL		Logged by: TDL	Checked by:
Drilling Contractor: GEDLOGIC		Protection Level: D		Rig Type: B-57	Start Date: 3-13-97
Drilling Method: DRIVE & WASH TO ROCK THEN DIAMOND CORE		P.I.D. (eV): 5803 OVM		Casing Size: 4"	Auger Size: -
Bit type/size: NX / 3"		Bit Use:		Core Interval (to/from)(ft): 73.5' TO 85'	

Depth (feet) Below GRD Surf.	Sample No. & Penetration/Recovery (feet)	Graphic Log	Natural Core Breaks		Weathered Condition	Rock Quality			Drilling Rate min/ft	Color	Rock Description and Comments on Drilling							
			Type/Dip	Surface Condition		Total 4" Core	RQD (%)	Rock Quality Description										
												✓ = Natural	x = Mechanical					
70											# 50B-97-24X Rock Description and Comments on Drilling							
71										STARTED CORING AT 73.5' - HIT SAND SEAM @ 72' TO 74'. PLACED 3" CASING TO 80' THEN CORED 80' TO 85' W/OUT INCIDENT								
72										DK. GRAY SCHIST, LAYERED w/ WHITE CALCITE FILLING OF OLD FRAGMENTS								
73										TOP OF ROCK 73.5'								
74		RUN #1 DRILLED 5' RECOVERED 2' NO RECOVERY	x x x x		NONE TO VERY SLIGHT	0.9' OF 4" DRILLED	18%	VERY POOR	3 MINUTES/FE.	OLIVE GRAY TO DK. GRAY	FROM 73.5' TO 74.5' GOOD RECOVERY THEN FROM 74.5' TO 78.5' ONLY RECOVERED AS 1' AG IN ROUNDED FRAGMENTS							
75																	MASSIVE TO 74.5'	
76																		VERY BROKEN @ 74.5' TO 78.5'
77																		SOME PYRITE DISSEMINATED THROUGHOUT CORE & ESPECIALLY ASSOC. w/ CALCITE VEINING
78		RUN #2 NO RECOVERY	x x x x								NO RECOVERY TO RUN #2 - SAND SEAM AT 72' TO 74' - JAMMED LOGS							
79												TUBE - PLACED 3" CASING TO 80' THEN CORED AGAIN						
80		DRILLED 5' RECOVERED 4.8'	x x x x			4.2' OF 4.8' RECOVERY	88%	EXCEPT GOOD	OLIVE GRAY TO DK. GRAY	80 TO 80.5' NATURAL BROOKS 81' NATURAL BICENTRAL 82' NATURAL BROAD w/ FeO ₂ ON FACE	BROKEN TO BLOCKY TO MASSIVE							
81																		
82																	MIDDLE WEATHERING @ 84' (V. THIN)	
83																	84' NATURAL BREAK w/ FeO ₂ ON FACE - RESEMBLED FRAG. SOME HOLE w/ SOME VUGS	
84		RUN #3	x x x x															
85												BOTTOM OF BORING 85'						

FIGURE 4-2
ROCK CORING LOG
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
 ABB Environmental Services, Inc.

SOIL BORING LOG

Study Area: AOC 50
 Boring No.: 435 SOB-98-25X
 Protection: Modified D
 Completed: 11/13/98
 PI Meter: TE-580B
 Total Depth: 75'
 Below Ground: ~15'
 Page 1 of 2

Client: USAEC/USACE Project No. 8740-02
 Contractor: DL Maher Date Started: 11/11/98
 Method: Drive & Wash Casing Size: 4"
 Ground Elev.: Soil Drilled: 75'
 Logged by: MJP Checked by: _____
 Screen: (ft.) Riser: (ft.) Diam: (ID) Material:

DEPTH (FT)	SAMPLE NUMBER	SAMPLE DEPTH	ON-SITE SCREENING	RECOVERY	PID (ppm)	SOIL/ROCK/DISCHARGE WATER DESCRIPTION	SOIL CLASS	Blows / 6 inches	WELL DATA
5						0-10' Not Sampled due to sand backfill material from previous location of dry well.			
10	S-1	10-12	✓	0.5% / 2.0	0	10-12' No Recovery, changed baskets, over 10' from previous location of dry well	MP 11/12/98	4 4 6 13	
15	S-2	12-14	✓	0.9% / 2.0	0	12-14' Sand, similar fill material as above		6 12 17 20	
15	S-3	15-17	✓	1.1% / 2.0	0	15-17' Silty sand, well graded, fine, clean, soft >12% fines saturated, light tan. (SM)		7 9 12 16	OFFSITE SAMPLE TAKEN See log book
20	S-4	20-22	✓	1.0% / 2.0	0	20-22' Silty sand, well graded, fine, clean, soft >12% fines, saturated, light tan, very similar as above (SM)		4 4 10 12	Ended day @ 22' will resume on 11/12/98. See log book.
25	S-5	25-27	✓	1.3% / 2.0	0	25-27' Silty sand, well graded, similar as above light tan w/ Fe staining evident throughout interval. Contains clay layer slightly plastic, olive green, & dry layer 2" thick (SM) (S) saturated		5 12 16 18	
30	S-6	30-32	✓	1.3% / 2.0	0	30-32' Silty sand, similar to above (SM) w/ abundant muscovite flakes staining throughout. (SW)		7 11 12 14	OFFSITE SAMPLE TAKEN See log book
35	S-7	35-37	✓	1.0% / 2.0	0	35-37' Sand fine grained 5-12% fines, well graded w/ thin layers of coarse sand & thin muscovite sub angular dk. brown staining. soft, saturated, med. tan color. (SW-SM)		8 12 15 15	
40	S-8	40-42	✓	0.7% / 2.0	0	40-42' Sand, fine grained 5-12% fines, well graded several sand lenses of dk. brown staining. soft saturated, med tan color (SW-SM)		9 11 11 13	
45	S-9	45-47	✓	1.3% / 2.0	0	45-47' Sand, fine grained 5-12% fines, well graded, soft, saturated, med. tan color @ 45' w/ thin clay laminae w/ dk. Fe staining & sand/clay inter face (SW-SM)		9 12 12 14	
50									

SOIL BORING LOG

Study Area: **AOC 50**
 Boring No.: **2550B-98-25X**
 Protection: **Modified ID**
 Completed: **11/13/98**
 PI Meter: **TE-580B**
 Total Depth: **75'**
 Below Ground: **~15'**

Client: **USAEC/USACE** Project No. **8740-02**
 Contractor: **DL Maher** Date Started: **11/11/98**
 Method: **Drive Wash** Casing Size: **4"**
 Ground Elev.: Soil Drilled: **75'**
 Logged by: **MJT** Checked by:
 Screen: (ft.) Riser: (ft.) Diam: (ID) Material: Page **2** of: **2**

DEPTH (FT)	SAMPLE NUMBER	SAMPLE DEPTH	ON-SITE SCREENING	RECOVERY	PID (ppm)	SOIL/ROCK/DISCHARGE WATER DESCRIPTION	SOIL CLASS	Blows/6 inches				WELL DATA
								10	10	11	13	
50	S-10	50-52	✓	11/20	0	50-52 Sand, fine grained, 5-12% fines, well graded, soft saturated very similar to above, med tan color, several nodules of dk. Fe staining, contains siliceous (SW-5M)		10	10	11	13	
55	S-11	55-57	✓	11/20	*	55-57 Sand, fine grained, 5-12% fines, similar to above, soft saturated med tan, rich in bitumens & humate (SW-5M)		6	7	8	10	
60	S-12	60-62	✓	11/20	*	60-62 Sand, fine grained, 5-12% fines, similar to above, no changes except less bitumens, med tan Fe staining prominent to 61.5', med sat, med tan (SW-5M)		7	12	15	16	
65	S-13	65-67	✓	11/20	*	65-67 Sand, fine grained, 5-12% fines, similar to above, very fragment thin bands of Fe-stained sand, saturated, fine, med tan (SW-5M)		8	10	15	25	Last sample for 11/12/98 see log book.
70	S-14	70-72	✓	15/20	0	70-72 Top 0.2' gravel, well graded 45% fines, subangular to angular, silty, med grey, bl. (GW) then abrupt interface into silty gravel, poorly graded, 0.075-0.125, angular, grey, silty, med frag. Fe-staining, weathered fissile (GM)		25	40	50	52	Cont. 11/13/98 See log book. Into Till
75	<p>END OF SOIL BORING @ 75' BEGIN ROCK CORE 10' INTO BEDROCK. SEE ROCK CORE FIELD SHEET</p>											Drilling stopped @ 74' will core rock @ 75'. See log book
80												

* PID battery dead for intervals 55-57', 60-62', 65-67'.

** - Driller makes note that @ 67.5', change from sands seen above to till material by movement of the rig.

ROCK CORING LOG

Project: Devens - RFTA		Study Area: SOB-98-25 X		Project No. AOC 50	
Client: USAEC		Driller's Name: Bill Burns, Dave Brown		Logged by: MJP	
Drilling Contractor: DL-Maher		Protection Level: Modified D		Checked by:	
Drilling Method: Drive & Wash / Rock Core		Rig Type:		Start Date: 11/13/98	
		P.I.D. (aV): TE-580B		Finish Date: 11/13/98	
		Casing Size: 3"		Auger Size: -	

Bit type/size: **Diamond Impregnated 10-2** Bit Use: **Series 2 NQ2** Core Interval (to/from)(ft): **80.5' - 85' 75' - 80.5'**

Depth (feet) Below GRD Surf.	Sample No. & Penetration/Recovery (feet)	Graphic Log	Natural Core Breaks			Weathered Condition	Rock Quality			Drilling Rate min/ft	Color	Rock Description and Comments on Drilling
			Type/Dip	Surface Condition	✓ = Natural x = Mechanical		Total 4" Core	RQD (%)	Rock Quality Description			
75	R1				x					6		Grey, unweathered, meta siltstone, light green color on fresh surfaces. Micro faults offsetting calcite replaced joints & fractures. Mechanical breaks.
76					x					4		25-35° bedding planes consistent throughout entire 10' core, relatively evenly spaced 0.5" - 1.0". Some grey meta siltstone 25 above and continues throughout 10' interval. 80° white, calcite replaced joint, crosscutting bedding and calcite laminae. Majority of all joints and fractures effervesced when exposed to HCl, indicating clearly that Calcite (CaCO ₃) present. CaCO ₃ replaced joints vary from horizontal to 80°
77					x					4		Microfault, calcite laminations and similar 25-35° bedding planes continue.
78					x					5		micro fault, w/calcite replacement mechanical breaks? evidence of folded bedding planes, minor.
79					x					4		- several calcite lenses and sl. more prominent folded bedding planes.
80					x							- Pyrite found on surface, folded bedding seen. - majority of mechanical fractures @ 45° Rock Very Competent through 10' interval

X - indicates mechanical fractures
 Note: white, joint fractures effervesce w/ HCl - CaCO₃ present

ROCK CORING LOG

Project: Devens - RFTA		SOB-98-25X		Study Area: AOC 50	Project No. 8740-02
Client: USAEC		Driller's Name: DL - Maher Bill Burns, Dave Brown		Logged by: MJP	Checked by:
Drilling Contractor: DL - Maher		Protection Level: Modified D		Rig Type:	Start Date: 11/13/98
Drilling Method: Drive & Wash / Rock Core		P.I.D. (øV): TE-580B		Casing Size: 3"	Finish Date: 11/13/98
Bit type/size: Diamond Impregnated 1D-2"		Bit Use: Series 2 NQ2		Core Interval (to/from)(ft): 11/13/98 75' - 80.5' 80.5' - 85'	

Depth (feet) Below GRD Surf.	Sample No. & Penetration/ Recovery (feet)	Graphic Log	Natural Core Breaks		Weathered Condition	Rock Quality			Drilling Rate min/ft	Color	Rock Description and Comments on Drilling
			✓ = Natural x = Mechanical	Type/Dip		Surface Condition	Total 4" Core	RQD (%)			
81	R2				Weathered Condition ↑ ↓ ↑ ↓ ↑ ↓				5		Some grey, unweathered metabasaltstone 25 in previous 5' Run. Light green color on fresh broken surfaces. Evidence of microfractures. - 81' - 83' No natural or mechanical breaks. - 25° - 35° bedding planes.
82									6		- Calcite lens, effervesced w/ HCl.
83									6		- Calcite laminae prominent here -
84									6		- Some competent rock as in Run 1
85									7		- Minor folded bedding planes.
85	END OF BORING 85'										Run 2 had few mechanical breaks END OF CORE @ 85' 11/13/98

1: Note Joints marked w/ 1 remain saturated after core dries.
X: indicates mechanical fractures

SOIL BORING LOG

Study Area: AOC 50
 Boring No.: 252650B-98-26X
 Protection: Modified D
 Completed: 11/19/98
 PI Meter: TE-580B
 Total Depth: 91.3
 Below Ground: ~14'

Client: USAEC/USACE Project No. 8740-02
 Contractor: DL Maher Date Started: 11/18/98
 Method: Drive + Wash Casing Size: 4"
 Ground Elev.: Soil Drilled: 91.3'
 Logged by: MJP Checked by: _____
 Screen: (ft.) Riser: (ft.) Diam: (ID) Material: _____

DEPTH (FT)	SAMPLE NUMBER	SAMPLE DEPTH	ON-SITE SCREENING	RECOVERY	PID (ppm)	SOIL/ROCK/DISCHARGE WATER DESCRIPTION	SOIL CLASS	Blows/6 inches	WELL DATA
0-10						0-10' Not Sampled			
10-12	S-1	10-12	✓	0%	0	10-12' Sand, fine grained, 5-12% fines, firm, damp, well graded, 2 dk. bands, fragments near 10' depth. approx 0.2' thick each. med. brown. (SW-SM)	8 7 10 9		ON SITE Duplicate Fe taken
15-17	S-2	15-17	✓	0%	0	15-17' Sand fine grained, <5% fines, soft, saturated, well graded, med. brown (SW)	8 10 8 12		
20-22	S-3	20-22	✓	1.3%	0	20-22' Sand, fine grained, <5% fines, soft, saturated, well graded, similar as above w/ Fe-banding, multiple thin laminations throughout interval. med. brown (SW)	7 11 10 15		
25-27	S-4	25-27	✓	1.1%	0	25-27' Sand, fine grained, <5% fines, soft, med. saturated, well graded, similar as above w/ Fe-banding, without Fe-banding (SW)	15 14 21 32		3" Spoon collect off rock + clay duplicate
30-32	S-5	30-32	✓	1.5%	0	30-32' Sand, fine to med. grain, <5% fines, firm, well graded, saturated Fe-banding 0.2' thick, med. brown. (SW)			
35-37	S-6	35-37	✓	0%	0	35-37' Sand fine to med. grain, <5% fines, firm, well graded, extensive Fe-banding 0.2' thick, med. brown. (SW)	8 10 12 13		
40-42	S-7	40-42	✓	0.9%	0	40-42' Sand, fine to med. grain, <5% fines, firm, well graded, saturated Fe-banding restricted to 40.5' depth (0.2' thick). med. brown (SW)	11 11 12 17		
45-47	S-8	45-47	✓	1.8%	0	45-47' Clay, olive green, (0.2') thick @ 45' then silt med. plastic silt, olive grey (MH) then @ 45.8' another clay layer similar as above (0.2' thick) (CH)	6 12 15 15		Clay layers encountered

Depth clay layer V. thick (CH)
 End boring @ 47' For today
 Will continue on 11/19/98

SOIL BORING LOG

Study Area: AOC 50
 Boring No.: 26 SOB-98-26a
 Protection: Modified D
 Completed: 11/19/98
 PI Meter: TE-580B
 Total Depth: 91.3'
 Below Ground: ~15'

Client: USAEC/USACE Project No. 8740-02
 Contractor: DL Maher Date Started: 11/18/98
 Method: Drive & Wash Casing Size: 4"
 Ground Elev.: Soil Drilled: 91.3'
 Logged by: MJP Checked by: _____
 Screen: (ft.) Riser: (ft.) Diam: (ID) Material: _____

DEPTH (FT)	SAMPLE NUMBER	SAMPLE DEPTH	ON-SITE SCREENING	RECOVERY	PID (ppm)	SOIL/ROCK/DISCHARGE WATER DESCRIPTION	SOIL CLASS	Blows/6 inches	WELL DATA
50	S-9	50-52	✓	0.9/2.0	0	50-52' clay @ top 2.2', olive green, silty plastic, fine (CL) then sand, fine, well graded, med. dense, saturated, contains some Fe-bands near top part. med brown (SW)		9 10 14 20	Start 11/18/98
55	S-10	55-57	✓	0.7/2.0	0	55-57' Sand, fine grained, well graded, med dense, saturated, contains abundant muscovite med brown. (SW)		10 13 20 18	OFF SITE SAMPLE TAKEN
60	S-11	60-62	✓	1.0/2.0	0	60-62' Sand, similar to above, fine grained, well graded, med dense, saturated, abundant muscovite med brown. (SW)		14 17 16 31	ON SITE SAMPLE
65	S-12	65-67	✓	1.2/2.0	0	65-67' Sand, fine to med. grained, well graded, med dense, saturated, <5% fines, abundant muscovite, med brown (SW)		10 11 11 14	
70	S-13	70-72	✓	1.4/2.0	0	70-72' Sand, fine grained, well graded, med dense, saturated, <5% fines, muscovite abundant, med. brown (SW)		12 15 23 28	
75	S-14	75-77	✓	1.0/2.0	0	75-77' Sand, fine grained, well graded, dense saturated, <5% fines, muscovite abundant, similar to above (SW)		17 20 21 30	
80	S-15	80-82	✓	1.0/2.0	0	80-82' Sand, fine grained, well graded, med. dense, saturated, <5% fines similar to above, muscovite abundant, Fe-banding throughout interval, med. brown (SW)		13 16 20 25	
85	S-16	85-87	✓	0.8/1.0	0	85-87' Sand, fine grained, well graded, med dense, 5-12% fines, saturated, olive grey color (SW-SM)		10 14 18 22	
90	S-17	90-91.3	✓	1.3/1.3	0	90-91.3' - Top 0.6' fine sand similar to above, no bedding or banding seen 5-12% fines, light tan (SW-SM) then Rock frags (abrupt contact w/ above sand) contains calcite, meta-siltstone as seen in rock core, but weathered. Fissile, dk grey (0.3' thick) then Rock frags same as above w/ 7-12% fines, grey silt matt, soft. (SM)		20 20 100	END OF BORING 91.3' log 11/19/98
91.3								2-4"	

End of BORING @ 91.3'
 CASING Refused @ 91.5'

SOIL BORING LOG

Study Area: APC 50
 Boring No.: 52750B-98-276
 Protection: Modified D
 Completed: 11/18/98
 PI Meter: TE-580B
 Total Depth: 74'
 Below Ground: 4'5"

Client: USAEC/USACE Project No. 8740-02
 Contractor: DL Maher Date Started: 11/16/98
 Method: Drive & Wash Casing Size: 4"
 Ground Elev.: Soil Drilled: 74'
 Logged by: MJP Checked by: _____
 Screen: (ft.) Riser: (ft.) Diam: (ID) Material: _____

Page 1 of 2

DEPTH (FT)	SAMPLE NUMBER	SAMPLE DEPTH	ON-SITE SCREENING	RECOVERY	PID (ppm)	SOIL/ROCK/DISCHARGE WATER DESCRIPTION	SOIL CLASS	Blows/Ginches	WELL DATA
5						No samples taken until 10' bgs.			
10	S-1	10-12	✓	0.9/2.0	0	10-12' Sand, fine-grained, soft-firm, 2-5% fines, well graded, damp, vertical bands of Fe-staining, light tan, muscovite rich. (SW)		8 10 11 15	
15	S-2	15-17	✓	1.5/2.0	0	15-17' Sand, v. fine-fine-grained, soft-firm, 5-12% fines, well graded, saturated, abundant Fe staining, light tan, similar to above. (SW-SM)		14 15 17 15	OFFSITE, MS/MSD 3" Spec.
20	S-3	20-22	✓	1.0/2.0	0	20-22' Sand, med. grained, 2-5% fines, well graded, saturated, extensive Fe-staining in the coarse grained bands, @ 20' there is thin clay layer, olive green (0.1" thick). Abrupt change to the sand above, with decreased Fe staining, thin clay layer (0.05" thick) @ 21.3, tan (SW) (CL)		7 11 14 20	back to 3" Spec. and for the 24
25	S-4	25-27	✓	1.0/2.0	0	25-27' Sand, med. grained, 4-5% fines, well graded, saturated, olive green muscovite, little Fe staining (SW)		9 11 17 12	Begin @ 25" on 11/17/98.
30	S-5	30-32	✓	1.0/2.0	0	30-32' Sand, fine-med. grained, 2-5% fines, well graded, saturated, Fe-banding abundant throughout interval, contains muscovite, similar to above. (SW)		9 12 16 22	
35	S-6	35-37	✓	1.0/2.0	0	35-37' Sand, fine-med. grained, similar to above, Fe-staining banding throughout interval, abundant muscovite, olive green. (SW)		10 10 15 17	
40	S-7	40-42	✓	1.4/2.0	★	40-42' Clay @ 40' (0.2" thick), olive green, plastic firm, saturated (CL) then fine sand throughout interval, similar to above 35-37' Fe-banding, tan in color (SW)		12 13 17 12	
45	S-8	45-47	✓	2.0/2.0	★	45-47' Sand, med. grained silty sand, well graded, fine clean, soft, saturated, light tan, 7-12% fines (SM)		12 9 14 14	

See Next sheet

★ PID battery dead

SOIL BORING LOG

Study Area: **ADC 50**
 Boring No.: **2T50B-98-27X**
 Client: **USAEC/USACE** Project No. **8740-02**
 Protection: **(Mod. Field ID)**
 Contractor: **DL Maher** Date Started: **11/18/98** Completed: **11/18/98**
 Method: **Drive + Wash** Casing Size: **4"** PI Meter: **TE-580B**
 Ground Elev.: Soil Drilled: **74'** Total Depth: **74'**
 Logged by: **MJP** Checked by: **▽ Below Ground: ~1/5'**
 Screen: (ft.) Riser: (ft.) Diam: (ID) Material: Page **2** of: **2**

DEPTH (FT)	SAMPLE NUMBER	SAMPLE DEPTH	ON-SITE SCREENING	RECOVERY	PID (ppm)	SOIL/ROCK/DISCHARGE WATER DESCRIPTION	SOIL CLASS	Blow counts/penetration				WELL DATA
								8	10	13	14	
50	S-9	50-52	✓	1.0/2.0	*	50-52' Sand, fine to med, 25% fines, well graded, saturated, few Fe-staining bands, massive matrix. mod. brown. (SW)						
55	S-10	55-57	✓	1.0/2.0	*	55-57' Sand, fine to med, 25% fines, well graded, saturated, prominent Fe-bands, (6.0" thick @ 55.5' + 56.5'), similar as above. (SW)		12	15	18	15	
60	S-11	60-62	✓	1.0/2.0	*	60-62' Sand, fine to med, 25% fines, similar as above. Abundant Fe-bands, well graded. (SW)		14	20	22	25	
65	S-12	65-67	✓	1.0/1.0	*	65-67, top 0.2' coarse angular gravel, fragmentary 25% fines cobble above, then (MJP) well sorted, poorly sorted gravels dia 0.01" - 0.2" dia, angular, fragmentary of siltstone. (SW) (EP) some Fe-staining on frags.		50	100	200	250	ONSITE DUP OFFSITE SAMPLE till, gravel material
70	S-13	70-73	✓	1.0/1.0	*	70-73' Top 0.2' coarse gravel, fill with fragments of broken well sorted (SW) then poorly sorted gravel angular 70% fines, dia 0.01" - 0.2" silty grey color. (M)		50	100	200	250	see logbook for details on 71-73' interval
75						Casing Refused @ 73.9' Roller bit drilled to 75' (1' through bedrock) END OF BORING 27.						END FOR DAY! Will continue 11/15/98

* PID Battery Dead.

BORINGS COMPLETED AS PIEZOMETERS

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 8740.02		BORING NO.: G6P-96-03X	
CLIENT: COE		DATE STARTED: 6/28/96		STUDY AREA: AOC 50			
CONTRACTOR: NHB		DATE COMPLETED: 6/28/96		PROTECTION: D (Mod.)			
METHOD: HSA 4.25"		BORING DIAMETER: 6"		PID METER: OVM 580B			
GROUND ELEV.:		REFERENCE PT. ELEV.:		TOTAL DEPTH: 17.5'			
LOGGED BY : R. M.		CHECKED BY: JCR		WATER TABLE BGS: -9.5'			
SAMPLE				SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS			
NO.	DEPTH	PEN.	REC.	PID OF SPOON	BLOWS/6 IN.	USCS SOIL CLASS.	ON SITE SCREENING
S1	0-2'	2.0/	1.6	0	(10yr6/2) medium to fine sand with silt, little gravel, dry, loose.	4,4,7,11	SP
S2	5-7'	2.0/	1.5	0	(10yr6/2) fine sand (wet in center - dry on ends of spoon), trace silt and gravel, loose.	5,6,7,8,	SM
S3	10-12'	2.0/	1.8	0	(10yr6/3) same as above.	3,6,8,11	SM
S4	15-17'	2.0/	1.7	0	Same as above.	11,8,9,10	SM
					BOB at 17.5' bgs (not auger refusal).		

SOIL BORING LOG FORT DEVENS, MA PROJECT NO.: 8740.02

CLIENT: USAEC
CONTRACTOR: GEOLOGIC
LOGGED BY: TDL
METHOD: DRIVE & WASH
CASING SIZE: 4"
DATE STARTED: 3/20/97
DATE COMPLETED: 3/20/97
PROTECTION: D

BORING NO.: G6P-97-04X
STUDY AREA: AOC-50
SOIL DRILLED: 95'
TOTAL DEPTH: 107'
WATER LEVEL:
PID METER: 580B OVM

SAMPLE NO.	DEPTH	REC.	PID (ppm)	BLOWS PER 6"	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	USCS
S-1	69-71'	0.8	0	36,48,66,73	Lt. to yellowish brown silt and sand, very well sorted, non-plastic, very dense, saturated, stratified alluvium.	SM
S-2	74-76'	1.2	0	12,13,16,17	As above.	SM
S-3	79-81'	1.2	0	9,8,13,10	As above, slightly more silt.	SM
S-4	84-86'	1.3	0	4,5,9,9	Lt. brown to yellowish brown silt w/ trace fine sand, alluvium.	ML
S-5	89-91'	1.8	0	2,2,4,10	Greenish gray silt, very well sorted, slightly plastic, firm, saturated, layered - stratified w/firm clayey silt lenses, alluvium.	ML
S-6	94-96'	0.7	0	33,50/3"	Olive gray and lt. gray till, sand, silt, clay and gravel fragments w/ FeO ₂ - stained soil	GM
					Refusal at 95'. Hit till at 92.5' S6 had till for 94.8' over rock. Roller coned down to 97' then core from 97' to 107'.	

ROCK CORING LOG

Project: Fort Devens		G6P-97-04X		Study Area: AOC-50	Project No. 8740-02
Client: USAEC		Driller's Name: ^{**} Ray Eastwood	Logged by: R. Green	Checked by:	Ground Elev.:
Drilling Contractor: EEI		Protection Level: D	Rig Type: B-57	Start Date: 3-21-97	Finish Date: 3-21-97
Drilling Method: 4" casing (drive & wash) & NK core			P.I.D. (eV): 58000m	Casing Size: 4"	Auger Size:
Bit type/size: diamond/NK		Bit Use:	Core Interval (to/from)(ft): 97-102.0' (R-1), 102-107.0' (R-2)		

Depth (feet) Below GRD Surf.	Sample No. & Penetration/Recovery (feet)	Graphic Log	Natural Core Breaks		Weathered Condition	Rock Quality			Drilling Rate min/ft	Color	Rock Description and Comments on Drilling
			Type/Dip	Surface Condition		Total 4" Core	RQD (%)	Rock Quality Description			
98	R-1 97.0'	---	✓			6"					<p>Metamorphosed sedimentary rock - siltstone or phyllite with calcite stringers along healed fractures. Majority of mech. breaks occurred along healed fractures. Fractures near 100.5' moderately weathered. Remainder of natural breaks showed evidence of K₂O.</p> <p>BOB @ 107.0'</p> <p>** by Daryl Green</p>
99	102.0'	---	x			38"	98%	Excellent			
100	Rec= 4.9'	===	✓		Weathered	10"					
101		---	✓								
102		---	✓								
103	R-2 102.0'	---	x			37"					
104	107.0'	---	x								
105	Rec= 4.0'	===	✓			9"	88%	Good			
106		---	✓			7"					
107		---	x								

FIGURE 4-2
ROCK CORING LOG
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
 ABB Environmental Services, Inc.

SOIL BORING LOG FORT DEVENS, MA PROJECT NO.: 8740.02

CLIENT: USAEC
CONTRACTOR: EEI
LOGGED BY: LT
METHOD: DRIVE & WASH
CASING SIZE: 4"
DATE STARTED: 3/24/97
DATE COMPLETED: 3/24/97
PROTECTION: D

BORING NO.: G6P-97-05X
STUDY AREA: AOC-50
SOIL DRILLED: 44.1'
TOTAL DEPTH: 44.2'
WATER LEVEL: 23'
PID METER: 580B OVM

SAMPLE NO.	DEPTH	REC.	PID (ppm)	BLOWS PER 6"	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	USCS
S-1	4-6'			6,8,8,9	Tan fine sand, trace silt, medium sand, moist, poorly graded. Introduced wash water at 4' (casing at 9')	SP
S-2	9-11'			7,8,9,11	Similar to S-1, saturated.	SP
S-3	14-16'			8,7,9,9	Tan fine sand, trace silt, medium to coarse sand, fine gravel, saturated, poorly graded.	SP
S-4	19-21'			7,8,10,12	Brown fine sand, some silt, saturated, poorly graded.	SM
S-5	24-26'			9,8,7,9	Similar to S-4, except little silt.	SP-SM
S-6	29-31'			11,11,14,12	Similar to S-5, except little to trace silt.	SM-SP
S-7	34-36'			7,6,7,5	Similar to S-6.	SM-SP
S-8	39-41'			8,9,10,12	Brown fine sand, little silt, poorly graded, saturated.	SM-SP
S-9	44-46'			120/NP 50/2	44-44.1': brown silty fine sand; 44.1-44.2': weathered bedrock (phyllite).	SM-SP
					Roller bit refusal at 44.2', B.O.B. at 44.2'.	

BORINGS COMPLETED AS MONITORING WELLS

Harding Lawson Associates

CLIENT: USAEC
 CONTRACTOR: EEI
 LOGGED BY: LT
 METHOD: DRIVE & WASH
 CASING SIZE: 6" (0-29'), 5" (29-79'), 4" (79-144'), 3" (144-206.5')
 DATE STARTED: 4/22/97
 DATE COMPLETED: 5/7/97
 PROTECTION: D

BORING NO.: 36M-97-05B
 STUDY AREA: AOC-50
 SOIL DRILLED: 199'
 TOTAL DEPTH: 206.5'
 WATER LEVEL: 60'
 PID METER: 580B OVM

SAMPLE NO.	DEPTH	REC.	PID (ppm)	BLOWS PER 6"	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	USCS
					Advanced 6" casing to 29' and telescope & advanced 5" casing to 69' before sampling. For geologic profile, refer to G6M-92-05X	
S-1	69-71'	0.6'	bkg.	28,49,53,56	Brown fine sand, trace silt with gravelly fine sand, little silt layer from ~69-69.1', saturated, poorly graded, very dense.	SP
S-2	74-76'	0.6'	bkg.	20,24,38,40	Rust brown and brown fine sand, little-trace silt, trace medium to coarse sand, saturated, poorly graded, very dense.	SP-SM
S-3	79-81'	0.3'	bkg.	27,32,36,37	Similar to S-2 with trace silt, gravel. Terminated 5" casing at 79', continued with 4".	SP
S-4	84-86'	0.9'	bkg.	25,34,39,47	Brown fine sand, trace silt, with ~1" thick silty layers and rust-brown layers, saturated, very dense, poorly graded.	SP-SM
S-5	89-91'	0.8'	bkg.	20,25,30,56	Alternating layers of brown fine sand, trace silt and brown and rust-brown fine sand, little-some silt, saturated, poorly graded, very dense.	SP-SM
S-6	94-96'	1.0'	bkg.	27,28,46,55	Brown fine sand, little-some silt, saturated, poorly graded, very dense.	SM
S-7	99-101'	0.8'	bkg.	28,38,57,60	Similar to S-6 with rust-brown streaks.	SM
S-8	104-106'	0.8'	bkg.	26,40,60,65	Similar to S-7.	SM
S-9	109-111'	0.9'	bkg.		Brown and rust-brown fine sand, trace silt with silty fine sand layers (~1/2" thick), saturated, poorly graded, very dense.	SP-SM
S-10	114-116'	1.0'	bkg.	31,30,45,64	Alternating layers of brown fine sand, trace silt and fine sand, some silt, saturated, poorly graded, very dense.	SP-SM
S-11	119-121'	0.9'	bkg.	38,42,54,75	Similar to S-10 with a fine to medium sand, trace silt, coarse sand, gravel layer at ~119'.	SM-SP
S-12	124-126'	1.1'	bkg.	40,39,58,70	Similar to S-11 with silty fine sand layers.	SP-SM

CLIENT: USAEC

BORING NO.: 36M-97-05B

CONTRACTOR: EEI

STUDY AREA: AOC-50

LOGGED BY: LT

SOIL DRILLED: 199'

METHOD: DRIVE & WASH

TOTAL DEPTH: 206.5'

CASING SIZE: 6" (0-29'), 5" (29-79'), 4" (79-144'), 3" (144-206.5')

WATER LEVEL: 60'

DATE STARTED: 4/22/97

PID METER: 580B OVM

DATE COMPLETED: 5/7/97

PROTECTION: D

SAMPLE NO.	DEPTH	REC.	PID (ppm)	BLOWS PER 6"	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	USCS
S-13	129-131'	1.0'	bkg.	42,57,31,46	Brown fine sand, trace silt, with silty layers, saturated, very dense, poorly graded,	SP-SM
S-14	134-136'	0.8'	bkg.	29,49,55,58	Brown and rust-brown fine sand, little-trace silt, with occasional silty clay layers (1/4" thick), saturated, poorly graded, very dense,	SP
S-15	139-141'	1.0'	bkg.	37,51,50,80	Brown fine sand, little silt, grading to gray silty fine sand with increasing depth, saturated, poorly graded, very dense.	SM
S-16	144-146'	1.0'	bkg.	25,25,50,70	Gray silty fine sand, saturated, poorly graded, very dense. Terminated 4" casing at 144', drilled open hole.	SM
S-17	149-151'	0.9'	bkg.	29,37,58,77	Similar to S-16.	SM
S-18	154-156'	1.2'	bkg.	30,58,61,51	Similar to S-16 with trace gravel and silty clay, fine sandy silt, and fine sand, trace silt layers, saturated, poorly graded, very dense.	SM
S-19	159-161'	1.1'	bkg.	17,34,70,65	Similar to S-16.	SM
S-20	164-166'	1.9'	bkg.	66,65,56,85	Similar to S-16 with fine sand, trace silt layers (1/4" thick), saturated, poorly graded, very dense.	SM
S-21	169-171'	1.8'	bkg.	not recorded	Olive-brown fine sand, little-trace silt, trace medium to coarse sand, fine gravel, saturated, poorly graded.	SP-SM
S-22	174-176'	1.4'	bkg.	28,55,76,160	Brown fine sand, some to little silt with increasing depth, saturated, poorly graded, very dense.	SM
S-23	179-181'	1.0'	bkg.	50,60,133,198	Gray silty fine sand, saturated, poorly graded, very dense.	SM
S-24	184-186'	1.8'	bkg.	27,27,37,56	Similar to S-23 except brown.	SM
					Boulder 189-194' - gray, weathered phyllite, attempted spoon at 196' - borehole caved to 189'; wash 194-199': gray fine sand and gravel; attempted spoon at 199' - borehole caved to 189' and blew soil into casing at 187'; advanced casing to 194'.	
					Interpreted bedrock at 199'	
					Wash 199-201': gray weathered phyllite; wash 201-203': very weathered phyllite; wash 203-206.5': weathered phyllite; with increased resistance 206-206.5'	
					B.O.B. at 206.5'	

SOIL BORING LOG FORT DEVENS, MA PROJECT NO.: 8740.02

CLIENT: USAEC
CONTRACTOR: EEI
LOGGED BY: LT
METHOD: DRIVE & WASH
CASING SIZE: 5" to 19'. 4" to 114'
DATE STARTED: 3/27/97
DATE COMPLETED: 4/3/97
PROTECTION: D

BORING NO.: G6M-97-06B
STUDY AREA: AOC-50
SOIL DRILLED: 118.7'
TOTAL DEPTH: 120'
WATER LEVEL: 54'
PID METER: 580B OVM

SAMPLE NO.	DEPTH	REC.	PID (ppm)	BLOWS PER 6"	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	USCS
					Advanced 5" casing to 19' and telescoped 4" casing and advanced to 64' and begin sampling. For soil descriptions 0-64', see log for G6M-92-06X.	
S-1	64-66'	0.7'	bkg.	35,25,26,26	Brown fine sand, trace silt, medium sand, saturated, poorly graded, very dense.	SP
	69-71'			15,15,16,25	No recovery	
S-2	74-76'	0.6'	bkg.	20,17,21,30	Brown fine- medium sand, trace coarse sand, gravel, silt, poorly graded, dense.	SP
S-3	79-81'	0.9'	bkg.	10,14,23,34	Brown fine to medium sand, trace silt, saturated, poorly graded, dense.	SP
S-4	84-86'	0.9'	bkg.	16,20,20,28	Brown fine sand, trace medium sand, silt, saturated, poorly graded, dense.	SP
S-5	89-91'	0.7'	bkg.	16,26,26,35	Brown fine sand, trace silt, saturated, poorly graded, very dense, collected [TOC sample.]	SP
S-6	94-96'	1.0'	bkg.	22,21,22,26	Similar to S-5 to 95.5'; 95.5 +: gray silty fine sand, saturated, poorly graded, dense.	SP-SM
S-7	99-101'	1.0'	bkg.	19,20,31,26	Similar to S-6 (below 95.5'), with silt/clay lense (1/4" thick) at 101', very dense.	SM
S-8	104-106'	1.6'	bkg.	13,12,28,50	Gray silty fine sand, saturated, poorly graded, dense.	SM
S-9	109-111'	1.7'	bkg.	8,17,28,29	Gray silt, little fine sand, trace clay lenses, saturated 110': gray silty fine sand, trace medium to coarse sand, little gravel, saturated, poorly graded, (glacial till).	ML SM
S-10	114-116'	1.0'	bkg.	30,37,20,25	Similar to S-9 (below 110'), except some silt, very dense, cobbles 116-116.5'	SM
					120': weathered phyllite likely bedrock.	
					Refusal at 120' with rollerbit, end of boring.	

SOIL BORING LOG FORT DEVENS, MA PROJECT NO.: 8740.02

CLIENT: USAEC
CONTRACTOR: EEI
LOGGED BY: LT
METHOD: DRIVE & WASH
CASING SIZE: 5" to 24', 4" to 94'
DATE STARTED: 4/3/97
DATE COMPLETED: 4/7/97
PROTECTION: D

BORING NO.: G6M-97-08B
STUDY AREA: AOC-50
SOIL DRILLED: 107.7'
TOTAL DEPTH: 108.7'
WATER LEVEL:
PID METER: 580B OVM

SAMPLE NO.	DEPTH	REC.	PID (ppm)	BLOWS PER 6"	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	USCS
					Advanced 5" casing to 25' and telescoped 4" casing and advanced to 64' and begin sampling. For soil descriptions 0-64', see log for G6M-92-08X.	
S-1	64-66'	1.5'	bkg.	12,16,23,31	64-65.2±: brown silty fine sand, poorly graded, saturated. 65.2±: brown-tan fine sand, trace silt, saturated, poorly graded, dense.	SM SP
S-2	69-71'	1.1'	bkg.	24,21,27,40	Brown fine sand, little silt with rust-brown zones, saturated, poorly graded, dense.	SP-SM
S-3	74-76'	0.8'	bkg.	43,45,51,60	Similar to S-2, little to trace silt, very dense.	SP-SM
	79-81'			24,18,22,26	No recovery.	
S-4	81-86'	1.3'	bkg.	11,23,50,64	Similar to S-2, trace silt.	SP
S-5	89-91'	1.0'	bkg.	22,34,47,43	Brown fine sand, little-some silt, saturated, poorly graded, very dense. Collected TOC sample	SM
S-6	94-96'	1.9'	bkg.	18,26,28,32	Brown silty fine sand, trace, clay lenses, saturated, poorly graded.	SM
	97.4-100'				Cobbles	
S-7	101-103'	1.0'	bkg.	23,30,45,47	Gray gravelly fine sand, little-some silt, trace medium- coarse sand, saturated, poorly graded, very dense (glacial till).	SM
	107.7'				Cobbles	
	108.7'				Weathered phyllite likely bedrock.	
					Refusal at 108.7 with rollerbit, end of boring.	

SOIL BORING LOG FORT DEVENS, MA PROJECT NO.: 8740.02

CLIENT: USAEC
CONTRACTOR: EEI
LOGGED BY: LT
METHOD: DRIVE & WASH
CASING SIZE: 4"
DATE STARTED: 3/25/97
DATE COMPLETED: 3/27/97
PROTECTION: D

BORING NO.: G6M-97-09B
STUDY AREA: AOC-50
SOIL DRILLED: 82.5'
TOTAL DEPTH: 92.8'
WATER LEVEL: 46.5'
PID METER: 580B OVM

SAMPLE NO.	DEPTH	REC.	PID (ppm)	BLOWS PER 6"	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	USCS
					Advanced 4" casing to 44'. See G6M-92-09X for soil descriptions.	
S-1	44-46'	0.6'	bkg	45,31,37,45	Brown fine sand, trace silt, saturated, poorly graded, very dense.	SP
S-2	49-51'	1.0'	bkg	21,30,32,42	Brown fine sand, little silt, trace silt lenses (<1/4" thick), saturated, poorly graded, very dense.	SM-SP
S-3	54-56'	1.0'	bkg	24,29,27,29	Brown fine sand, little-trace silt, saturated, poorly graded, very dense.	SM-SP
S-4	59-60.9'	1.1'	bkg	25,44,53,100/4'	Similar to S-3.	SM-SP
S-5	64-66'	0.7'	bkg	43,51,58,54	Similar to S-3.	SM-SP
S-6	69-71'	0.4'	bkg	27,30,31,31	Brown fine sand, trace silt, saturated, poorly graded, very dense.	SP
S-7	74-76'	1.2'	bkg	25,30,36,36	Similar to above to 75.5' 75.5'+: olive brown fine sand, little-some silt, saturated, poorly graded, very dense. TOC sample collected. Observed silt/clay layers from 76-79' in wash.	
S-8	79-81'	1.4'	bkg	15,20,23,35	Gray fine sand, little-some silt, saturated, poorly graded, dense.	
	82.5'				Metamorphised sedimentary rock - siltstone/phyllite at 82.5'	
					Advanced bit and casing to 84' and cored rock to 92.8'. See rock core log for details.	

ROCK CORING LOG

Project: Fort Devens		GDM-97-09B		Study Area: ADC-50		Project No. 8740-02	
Client: USAEC		Driller's Name: Ray Washburn		Logged by: J Tracy		Checked by:	
Drilling Contractor: EEI		Protection Level: D		Rig Type: B-57		Start Date: 3/24/97	
Drilling Method: 4" Drive & Wash then Rock core		P.I.D. (øV): 580B ovm		Casing Size: 4"		Auger Size: —	
Bit type/size: Diamond / NK		Bit Use:		Core Interval (to/from) (ft): 84-92.8' 3 runs R1,2,3			

Depth (feet) Below GRD Surf.	Sample No. & Penetration/Recovery (feet)	Graphic Log	Natural Core Breaks		Weathered Condition	Rock Quality			Drilling Rate min/ft	Color	Rock Description and Comments on Drilling
			Type/Dip	Surface Condition		Total 4" Core	RQD (%)	Rock Quality Description			
85	R-1 84.8-87.3 Rec=20				Weathered	—	0%	Very poor	5	Gray	Meta-morphosed sedimentary rock - siltstone or phyllite. with calcite stringers along healed fractures. Majority of breaks along healed fractures. Most fracture faces are fresh - some evidence of K-feld on fractures @ approx. 87.5', 88.5', and 91-92'. Trace pyrite below 88'. Bob @ 92.8'. * majority of fractures/break along healed fractures
86	R-2 85.3-87.8 Rec=25		Numerous	Fractures	Weathered	—	0%	Very poor	3	Gray	
87	R-3 87.8-92.8 Rec=4.3'		X	X	Non-weathered	29"	0%	Good	3	Dark Gray	
88											
89											
90											
91											
92											
93											

FIGURE 4-2
ROCK CORING LOG
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
 ABB Environmental Services, Inc.

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 8740.02		BORING NO.: G6M-96-13B		
CLIENT: COE		DATE STARTED: 10/30/96		STUDY AREA: AOC 50		PROTECTION: D (Mod.)		
CONTRACTOR: NHB		DATE COMPLETED: 10/30/96		PID METER: OVM 580B		TOTAL DEPTH: 62.5'		
METHOD: D%W		BORING DIAMETER: 4"		WATER TABLE BGS: 11'				
GROUND ELEV.:		REFERENCE PT. ELEV.:						
LOGGED BY: J.P.		CHECKED BY: JCR						
SAMPLE		PEN. REC.		PID OF SPOON	SOL/RCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	ON SITE SCREENING
NO.	DEPTH							
S1	0-2'	2.0/	1.7	0	Gravel <2", well graded, <60% 40% sands, <5% fines, damp, medium dense, 2.5y5/2, 2.5y4/2, 2.5y5/6.	5,15,18,13	GM	
S2	5-7'	2.0/	0.7	0	Sand, fine, uniform, <5% fines, damp, loose, 2.5y6/2, bedding last 10", stratified oxidation layering.	6,4,6,5	SP	
S3	9-11'	2.0/	0.9	0	Fine sand, uniform, gravel <5%, <5% fines, saturated, 2.5y5/4, some bedding.	10,8,9,10	SP	
S4	14-16'	2.0/	1.6	0	Silty fine sand, uniform, sticky, nonplastic, saturated, firm, 2.5y5/4, stones <5% <4".	6,5,5,7	ML	
S5	19-21'	2.0/	1.1	0	1st 4": clay, slightly plastic, <5% gravel, 1/4" max., <30% sand, wet, tapers to 10" of silty sand, nonplastic, wet, 2.5y5/2 for clay, 2.5y6/6 for silty sand, very stiff, some oxidation	7,10,10,12	CL ML ML	
S6	24-26'	2.0/	1	4.1	Fine sand, 2.5y6/2, <5% fines, layered bedding, oxidation stripes, micas and quartz, wet, outwash.	8,9,12,12	SP	
S7	29-31'	2.0/	1.4	14	Fine sand, uniform, saturated, 2.5y7/3, medium dense, planar bedding, oxidation bands, <5% fines.	7,8,9,11	SP	BXG613B29
S8	34-36'	2.0/	1.3	0.4	Same as above, medium dense.	5,11,11,15	SP	
S9	39-41'	2.0/	1.5	12	Silty sand with clay bands; top 3": clay with some sand, saturated, stiff, 2.5y6/2 for clay, 2.5y5/6 for sand.	12,11,15,16	ML CL MH MH	
S10	44-46'	2.0/	1.8	6.8	Fine sands, <5% fines, wet, loose, 1/2-1/4" planar bedding, intermittent oxidation bands, 2.5y6/2, uniform.	8,6,4,3	SP	
S11	49-51'	2.0/	2	47	Sand, <5% fines, wet, loose, some oxidation, some bedding, 2.5y6/2, uniform.	5,5,6,6	SP	BXG613B49
S12	54-56'	2.0/	2	34	Fine sands, <5% fines, wet, loose, some oxidation, 1st foot no bedding, 2nd foot angular and deformed planar bedding, <10% fines, 2.5y6/2, uniform.	8,8,7,12	SP	
S13	56-58'	2.0/	1.3	5.4	Same characteristics as above except planar bedding, micaceous layers, medium dense.	8,15,19,26	SP	
S14	58-60'	2.0/	1.3	8.4	Top .8": uniform fine sands, similar to above, oxidized planar laminations visible, medium dense; bottom .4": silty fine sands, 10% silt, medium dense, stronger oxidation along bedding.	8,10,17,31	SP SP- SM	
S15	61-63'	2.0/	1.3		Top .2": gravel with sand, gravel <1/2", uniform gravel; middle .7": fine sands, <5% fines, no bedding, some oxy. stains; bottom .4": till/gravel, <1", 2.5y6/2, damp.	11,13,40,76	SW SP MH	BXG613B61
					B.O.B. at 62.5'			

SOIL BORING LOG - FORT DEVENS, MA.

PROJECT NO.: 8740.02

BORING NO.: G6M-96-21A

CLIENT: COE
 CONTRACTOR: NHB
 METHOD: HSA, 4.25"
 GROUND ELEV.:
 LOGGED BY: HKW

DATE STARTED: 10/9/96
 DATE COMPLETED: 10/9/96
 BORING DIAMETER: 8"
 REFERENCE PT. ELEV.:
 CHECKED BY: JCR

STUDY AREA: AOC 50
 PROTECTION: D (Mod.)
 PID METER: OVM 580B
 TOTAL DEPTH: 12'
 WATER TABLE BGS: 4'

SAMPLE		PEN.	REC.	PID OF SPOON	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	ON SITE SCREENING
NO.	DEPTH							
					Augered to 10', cuttings reveal brown fine to medium sand with silt, ~20% nonplastic silt.			
S1	10-12'	2.0/	13"	0	Brown-tan 10yr5/4 fine to medium uniform sand with silt, ~20% silt, nonplastic, loose, saturated.	5,9,9,10	SP	
					End of boring.			

SOIL BORING LOG - FORT DEVENS, MA.

PROJECT NO.: 8740.02

BORING NO.: G6M-96-21B

CLIENT: COE
 CONTRACTOR: NHB
 METHOD: D & W
 GROUND ELEV.:
 LOGGED BY : JCR

DATE STARTED: 10/4/96
 DATE COMPLETED:
 10/7/96
 BORING DIAMETER: 4"
 REFERENCE PT. ELEV.:
 CHECKED BY: JCR

STUDY AREA: AOC 50
 PROTECTION: D (Mod.)
 PID METER: OVM 580B
 TOTAL DEPTH: 68'
 WATER TABLE BGS: 4'

Page 1 of 2

SAMPLE		PEN.	REC.	PID OF SPOON	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	ON SITE SCREENING
NO.	DEPTH							
S1	0-2'	2.0/	1.4	0	0-.15': silt/roots, 30% sand .15-0.5': silty sands, well graded, 15% silt, fine to medium sand, loose, dry, 10yr6/3 pale brown. .5-1.0': sandy silt, 20% fine sand, loose, moist, 10yr3/1 brown gray. 1-1.4': silty sand, 20% silt, fine to medium sand, loose, 10yr5/6 yellow brown.	2,2,4,6	ML SM ML SM	
S2	5-7'	2.0/	1.5	0.1	Well graded sands, fine to coarse, 5% silt, medium dense, subang. - ang., saturated, 2.5yr6/2 l. brownish gray.	6,9,10,11	SW	
S3	9-11'	2.0/	1.3	0	Similar to above, 5-10% silt, dense, few oxidized grains, 2.5yr4/8 red.	20,30,15,17	SW	
S4	14-16'	2.0/	0.9	0	Sand, well graded, subangular, <5% fines, med. dense, saturated, 2.5yr6/3 l. yellow brown, at .1' 0.5" band oxidized, 5yr5/8 yellowish red.	12,11,12,15	SW	
S5	19-21'	2.0/	1.6	0	0-.35': coarse sand, <5% sand, subround - sloughed. .35-0.8': silty fine sands, poorly graded fine sand, 15-20% silt, very dense, saturated, 10yr6/6 brown yellow. 0.8-1.2': silty sand, fine to medium, 15% silt, mod. graded, very dense-med. dense, saturated, 10yr6/6. 1.2-1.6': silty fine sand, poorly graded, 15-20% silt, med. dense, saturated, 1" bands of oxidized sand 5yr5/8 yellow red.	27,28,16,12	SM	

SOIL BORING LOG - FORT DEVENS, MA.

PROJECT NO.: 8740.02

BORING NO.: G6M-96-21B

CLIENT: COE	DATE STARTED: 10/4/96	STUDY AREA: AOC 50
CONTRACTOR: NHB	DATE COMPLETED: 10/7/96	PROTECTION: D (Mod.)
METHOD: D & W	BORING DIAMETER: 4"	PID METER: OVM 580B
GROUND ELEV.:	REFERENCE PT. ELEV.:	TOTAL DEPTH: 68'
LOGGED BY : JCR	CHECKED BY: JCR	WATER TABLE BGS: 4'

Page 2 of 2

SAMPLE		PEN.	REC.	PID OF SPOON	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	ON SITE SCREENING
NO.	DEPTH							
S6	24-26'	2.0/	1.3	0	Alternating layers of medium sands, 15% silt with sandy silt/silty sand, med. dense, saturated, silt laminations visible, 30% silt, 2.5y6/3 l. yellow brown, with band of 5yr5/8 yellow red.	10,10,10,4	0-0.3 ML .3-.4 SM .4-.9 ML-SM .9-1.0 SM 1.0-1.1 ML-SM 1.2-1.3 SM	
S7	29-31'	2.0/	0.8	0	0-.25': fine sands, 5-10% silt, medium dense. .3-.4': medium to coarse sand, <5% silt, subrounded, dense. .4-.75': fine sands, faint laminations visible in fine sand, 5y5/4 olive.	18,14,14,14	SP-SW	
S8	34-36'	2.0/	0.7	0	Fine sands, fine to medium, ang.-subang., 10% silt, poorly graded sands, dense-very dense, saturated, 5y5/3 olive.	40,55,21,22	SP	
S9	39-41'	2.0/	1.6	0	Fine to medium sands, 10% silts, 80% very fine sand, discrete 1" bands of medium sands, mdium dense, saturated, 2.5y6/3 l yellow brown.	12,7,7,6	SP	
S10	44-46'	2.0/	2	0	Well graded sand, fine to medium, sub-ang., subrounded, dense-medium dense, 5-10% fines, saturated, 2.5y6/2 l. brown - gray. .4-.5, 1.8-2.0': very fine sand, poorly graded, 5-10% fines, saturated.	26,10,9,11	SW	
S11	49-51'	2.0/	1.7	0	Well graded sands, fine to coarse, sub-ang. 5% silt, very loose, saturated, 25y6/2 l. brown gray. .6-.7': coarse sand, mod. graded, subrounded, similar to above.	wor, wor,3,5	SW	
S12	54-56'	2.0/	0.8	0	Top .4' gravel slough; .4-.8': well graded sand, fine to medium, ang. - subang., <5% fines, med. dense, saturated, 10yr5/6 yellowish brown.	11,9,8,6	SW	
S13	59-61'	2.0/	0.4	0	Silty fine sands, poorly graded, 15-20% silt, saturated, med. dense, 2.5y6/4 l. yellowish brown, top .5" above sample, sub-ang. gravel (slough) ~2-4mm in diameter.	13,8,4,4	SM	
					Casing refusal at 62' bgs, rock core to 68'.			

ROCK CORING LOG

Project: Fort Devens 66M-96-21B		Study Area: ACL 50	Project No. 8740-02
Client: USAR	Driller's Name: NMS (GARSIDE) JLR	Logged by: JLR	Checked by: JLR
Drilling Contractor: NHS	Protection Level: MDD D	Rig Type: CME 750	Start Date: 10/7/95
Drilling Method: NX CORE BARREL 2 1/2" 2 7/8" OD		P.I.D. (AV): 388 B	Finish Date: 10/8
Bit type/size: NX	Bit Use: NEW	Core Interval (to/from)(ft): 63-68' (0832-0854)	

Depth (feet) Below GFD Surf.	Sample No. & Penetration/Recovery (feet)	Graphic Log	Natural Core Breaks		Weathered Condition	Rock Quality			Drilling Rate min/ft	Color	Rock Description and Comments on Drilling
			Type/Dip	Surface Condition		Total 4" Core	RQD (%)	Rock Quality Description			
63	Run #1		X 20	X 50	Highly	3.3'	3.2 / 5.0'	POOR	5	GREY BLACK w/ WHITE CALCITE VIEWS	8:32 START CORING 63-64.7 HIGHLY WEATHERED META-SILTSTONE w/ CALCITE STRINGERS AND VIEWS CHIEFLY COINCIDENT w/ BEDDING. EROSIONAL SURFACES (ALSO COINCIDENT) WITH BEDDING SHOW SULFIDE DEPOSITS (SECONDARY) OF HEMATITE AND POTENTIALLY CHLORIDE
64			X 20	X 10	NONE APPARENT			EXC	3		64.7-68' BGS SAME ROCK TYPE AS ABOVE BUT UNWEATHERED, ONLY MECHANICAL CORE BREAKS EVIDENT.
65			X 20	X 30					3		MECHANICAL BREAKS COINCIDENT w/ BEDDING PLANES AND CALCITE (SECONDARY) DEPOSITS
66			X 30	X 20					3		SECONDARY FRACTURING EVIDENT THROUGHOUT CORE. CALCITE AND QUARTZITE EVIDENT IN
67			X 20	X 30					4		HEALED FRACTURES NEARLY PERPENDICULAR TO BEDDING
68			X 30								

ROCK CORING LOG
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
 ABB Environmental Services, Inc.

SOIL BORING LOG - FORT DEVENS, MA.

PROJECT NO.: 8740.02

BORING NO.: G6M-96-22A

CLIENT: COE
 CONTRACTOR: NHB
 METHOD: HSA, 4.25"
 GROUND ELEV.:
 LOGGED BY: JP

DATE STARTED: 10/28/96
 DATE COMPLETED: 10/28/96
 BORING DIAMETER: 8"
 REFERENCE PT. ELEV.:
 CHECKED BY: JCR

STUDY AREA: AOC 50
 PROTECTION: D (Mod.)
 PID METER: OVM 580B
 TOTAL DEPTH: 50.5'
 WATER TABLE BGS: 4'

SAMPLE		PEN.	REC.	PID OF SPOON	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	ON SITE SCREENING
NO.	DEPTH							
					Muddy sand, org. material, wet, used auger for 5'.		SM	
S1	44-46'	2.0/	1.6		Poorly graded sand with very coarse sand 5%, silt <5%, 2.5y6/4 ft. yellowish brown.	6,4,4,7	SP	

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 8740.02		BORING NO.: G6M-96-22B			
CLIENT: COE		DATE STARTED: 10/24/96		STUDY AREA: AOC 50		PROTECTION: D (Mod.)			
CONTRACTOR: NHB		DATE COMPLETED: 10/25/96		PID METER: OVM 580B		TOTAL DEPTH: 71.5'			
METHOD: D&W		BORING DIAMETER: 4"		WATER TABLE BGS: 4'					
GROUND ELEV.:		REFERENCE PT. ELEV.:							
LOGGED BY : JCR		CHECKED BY: JCR							
SAMPLE									
NO.	DEPTH	PEN.	REC.	PID OF SPOON	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	ON SITE SCREENING	
				0	Drive and wash to 60', no spoons.				
				0	Washed to 25', water silty brown, fine to medium sands.		SW		
				0	30-40': water pale brown, uniform fine sands.		SP		
					40-45': water pale brown, slightly silty, fine to medium sands, poorly graded.		SP		
					45-55': similar to above, uniform fine sands.		SP		
					55-60': wash same as above.		SP		
S1	59-61'	2.0/	1.5	0	0-1.2': fine sand, uniform, medium dense, 10% silt, saturated, 2.5y6/3 yellow brown.	4,7,8,3	SP		
					1.2-1.3': fine to medium sand, poorly graded.				
					1.3-1.5': Same as 0-1.2'.				
S2	64-66'	2.0/	1.2	0	Sand, fine, uniform, 5-10% silt, loose, saturated, 2.5y7/6 yellow.	4,5,4,7	SP		
S3	69-71'	2.0/	2	0	Fine sand, similar to above.	4,4,10,26	SP		
					0-0.6': lightly oxidized 2.5y7/8 yellow.				
					0.6-1.5': 2.5y6/3 l. yellowish brown.				
					1.5-2.0': highly oxidized, some banding, 5yr5/8 yellowish red.				
					Tip of spoon: sandy silt, 20% fine sand, <5% clay, nonplastic-slightly plastic, slightly sticky, medium dense, damp.		ML		
S4	71.5-72.5'	2.0/	1.5	0	Top 1.1': blow-in (sands).	50,50	ML		
					Bottom .4': till, gravelly, sandy, silt, 10% ang. gravel (max. diam. .5")				
					20% fine sands, <5% clay, hard, damp				
					Casing driven to 71.5' bgs. End of boring.				

SOIL BORING LOG - FORT DEVENS, MA.

PROJECT NO.: 8740.02

BORING NO.: G6M-96-22C

CLIENT: COE
 CONTRACTOR: NHB
 METHOD: D & W
 GROUND ELEV.:
 LOGGED BY: JCR

DATE STARTED: 10/10/96
 DATE COMPLETED: 10/15/96
 BORING DIAMETER: 4"
 REFERENCE PT. ELEV.:
 CHECKED BY: JCR

STUDY AREA: AOC 50
 PROTECTION: D (Mod.)
 PID METER: OVM 580B
 TOTAL DEPTH: 99'
 WATER TABLE BGS: 4'

Page 1 of 3

SAMPLE		PEN.	REC.	PID OF SPOON	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	ON SITE SCREENING
NO.	DEPTH							
S1	0-2'	2.0/	1.6	0	0-0.7': sandy silt, 20% fine sand, v. slightly plastic, soft/sticky, abundant roots, organic rich, 10yr2/1 black, .7-1.1': well graded sand, fine to medium, 10% silt, loose, damp, 10yr6/4 l. yellow brown. 1.1-1.3': similar to above, 15% dark organic silt. 1.3-1.6': well graded sand, same as .7-1.1'.	2,3,2,4	ML SW SM SW	
S2	2-4'	2.0/	0.9	0	0-0.7': same as above, well graded sand .7-.9': organic silt 15%, abundant roots.	4,2,4,10	SW SM	
S3	4-6'	2.0/	1.4	0	Well graded sand, fine to coarse, subang., 5-10% silt, loose, saturated, 10yr6/2 l. brownish gray.	4,5,6,7	SW- SM	
S4	6-8'	2.0/	2	0	Same as above, .25-.40': coarse subrounded sand.	2,6,6,8	SW- SM	
S5	8-10'	2.0/	1.3	0	Well graded sands, fine to coarse, <5% coarse, sub-angular, 5-10% fines, medium dense-dense; .2-.45 fine sands, 10yr6/2 l. brownish gray, faint oxidation bands visible, 1/8" width, orange brown.	17,22,16,13	SW- SM	
S6	10-12'	2.0/	1.2	0	0-0.6': sand same as above. .6-.85': silty fine sand, 15% silt, medium dense, 10yr6/2 l. brown. .85-1.2': sand, same as above.	8,10,9,10	SW SM SW	
S7	12-14'	2.0/	1	0	Silty sand, fine to medium, 15% silt, subang. grains, saturated, loose, 10yr6/2 l. brownish gray, oxidation bands 10yr7/6 yellow, bedding laminations visible.	6,6,6,7	SM	
S8	14-16'	2.0/	1	0	0-.15': silty sand, same as above, oxidized last 0.5' orange/yellow. .15-.20': sandy silt, 40% fine sand, v. slightly sticky, v. slightly plastic, soft, saturated, 10yr6/1 gray. .2-1.0': silty sand, same as above, 10yr6/2, last .10' 10yr6/6 brownish yellow.	5,3,6,8	SM ML SM	
S9	16-18'	2.0/	1.2	0	0-.4': coarse sand, well graded, subrounded, loose, <5% silt, saturated, 5yr5/8 yellowish red, thin band finer sand 10yr6/2. .4-.6': fine silty sand, similar to 14-16'. .6-.65': coarse sand, similar to 0-.4', oxidation not as strong. .65-1.2': silty sand, fine to medium sand, 20% silt, saturated, 10yr7/1 l. gray. At .8 1/4" band of silt, similar to .15-.20 in 14-16'.	7,8,10,14	SW SM SW SM ML SM	
S10	18-20'	2.0/	1.2	0	0-.5': silty sand, fine to medium, 30% silt, loose, saturated, 5y6/1 gray. .5-.6': sand, poorly graded, sub-ang., medium to coarse, loose, saturated, 7.5yr5/6 strong brown. .6-1.2': silty sand, poorly graded, fine sand, 30% silt, s. plastic, saturated, 5y6/1 gray. .8-.9': sand, medium to coarse, 10% silt. - bedding lamination visible, =10-15° dip.	6,10,11,16	SM - ML SP SM - ML SW - SM SM - ML	

SOIL BORING LOG - FORT DEVENS, MA.

PROJECT NO.: 8740.02

BORING NO.: G6M-96-22C

CLIENT: COE
 CONTRACTOR: NHB
 METHOD: D & W
 GROUND ELEV.:
 LOGGED BY: JCR

DATE STARTED: 10/10/96
 DATE COMPLETED:
 10/15/96
 BORING DIAMETER: 4"
 REFERENCE PT. ELEV.:
 CHECKED BY: JCR

STUDY AREA: AOC 50
 PROTECTION: D (Mod.)
 PID METER: OVM 580B
 TOTAL DEPTH: 99'
 WATER TABLE BGS: 4'

Page 2 of 3

SAMPLE		PEN.	REC.	PID OF SPOON	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS	ON SITE SCREENING
NO.	DEPTH							
S11	20-22'	2.0/	1.2	0	Silty sand, same as above, fine to medium. 8-45': sand, fine to medium, <10% silt, loose, saturated, 7.5yr/5/8 strong brown. 45-1.2': silty sand, fine to medium, 10-15% silt, medium dense, saturated, 10yr/7/4 very pale brown.	10,18,25,17	SM - ML SW SM	
S12	22-24'	2.0/	1.2	0	Sand, well graded, fine to medium, 5-10% sand, dense, saturated, 1/8" oxidation bands throughout, 10yr/6/8 brownish yellow, non-oxidized sands 10yr/7/3 very pale brown, few subang. gravel fragments, 1/4" diameter - siltstone.	17,21,24,25	SW	
S13	24-26'	2.0/	0	0	No recovery.	6,8,12,14		
S14	26-28'	2.0/	2	0	0-.85': sand, uniform graded, medium sand, 10% silt, saturated, medium dense, 10yr/7/4 very pale brown. .85-.86': coarse sand. 86-2.0': fine sand, uniform graded, 5% silt, medium dense, saturated, very pale brown.	10,10,18,25	SP	
S15	28-30'	2.0/	1.4	0	Sand, fine to medium, well sorted, 10-15% silt, medium dense, saturated, very pale brown, at .5' 1/4" subang. gravel.	6,5,7,10	SW	
S16	30-32'	2.0/	2	0	Sands, fine to medium, well graded, loose, 5% silt, saturated, very pale brown. .75-.85': medium sand, poorly graded, no silt. 1.8-1.9': medium sand, poorly graded, no silt. Faint laminations visible in sands.	4,6,7,9	SW SP SW SP	
S17	32-34'	2.0/	1	0	Sand, fine to coarse, well graded, <5% silt, loose, saturated, very pale brown, .8' subrounded granite clast - 3/4" diameter.	2,4,7,8	SW	
S18	34-36'	2.0/	1.4	0	Silty sand, fine to medium, well graded, 5-10% silt, medium dense, saturated, pale brown.	6,7,9,17	SW - SM	
S19	36-38'	2.0/	1	0	Fine sand, uniform graded, 5% fines, medium dense, saturated, pale brown, at .5' ang. frag. of black siltstone.	6,9,12,12	SP	
S20	38-40'	2.0/	0.7	0	Same as above, at 25 and .85' ang. frag. of black siltstone 1/8" diam.	3,5,8,8	SP	
S21	40-42'	2.0/	1.6	0	Fine to medium sand, well graded, 5% silt, medium dense, saturated, pale brown. Bottom .2' fine sand, bedding lamination visible.	5,5,11,12	SW	
S22	42-44'	2.0/	1.3	0	Well graded fine to medium sand, 5% fines, medium dense, saturated, 10yr/7/4 very pale brown.	7,6,10,13	SW	
S23	44-46'	2.0/	1.4	0	Same as above, .8' band of black gravel 1/4" dia., bottom .4' more uniformly fine.	2,3,4,10	SW	
S24	46-48'	2.0/	1.6	0	Same as above, few ang. gravel frag. at .4'.	8,8,8,8	SW	
S25	48-50'	2.0/	1.55	0	0-.7': Same as above, 1/4" gravel band. .7: 1/4" thick gravel band. .7-1.55': Similar to above, 5-10% silt.	6,8,9,10	SW SW - SM	
S26	50-52'	2.0/	2	0	Sand, uniform, mostly fine, 5% silt, loose, saturated, 2.5yr/7/3 pale yellow. .83-.9': medium to coarse sand, subrounded. 1.25-1.27': dark micaceous layer.	3,8,4,5	SP	
S27	52-54'	2.0/	1.6	0	Sand, fine to medium, 5% fines, loose, medium dense, saturated, pale yellow.	2,4,11,10	SW	
S28	54-56'	2.0/	1.4	0	Similar to above, 5-10% fines, few 1/4" gravel frag., faint bedding (laminar) visible.	6,5,6,4	SW - SM	
S29	56-58'	2.0/	1.3	0	Sands, f. uniform, 5% fines, medium dense, saturated, 10yr/6/4 l. yellowish brown.	6,8,11,11	SP	

SOIL BORING LOG - FORT DEVENS, MA.

PROJECT NO.: 8740.02

BORING NO.: G6M-96-22C

CLIENT: COE
 CONTRACTOR: NHB
 METHOD: D & W
 GROUND ELEV.:
 LOGGED BY: JCR

DATE STARTED: 10/10/96
 DATE COMPLETED:
 10/15/96
 BORING DIAMETER: 4"
 REFERENCE PT. ELEV.:
 CHECKED BY: JCR

STUDY AREA: AOC 50
 PROTECTION: D (Mod.)
 PID METER: OVM 580B
 TOTAL DEPTH: 99'
 WATER TABLE BGS: 4'

Page 3 of 3

SAMPLE		PEN.	REC.	PID OF SPOON	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	ON SITE SCREENING
NO.	DEPTH							
S30	58-60'	2.0/	1.4	0.4	Same as above, .5-.6' - oxidation and, 10yr6/8 brownish yellow.	8,8,6,4	SP	
S31	60-62'	2.0/	1.15	1.1	Same as above, 10yr7/2 l. gray.	8,6,7,8	SP	
S32	62-64'	2.0/	1.7	0	Similar to above, 1/4" band of coarse sand at 7'; .7-1.7': planar laminae and thin streaks, 10yr5/8 yellowish brown, some micaceous beds.	1,2,5,6	SP	
S33	64-66'	2.0/	1.1	0	Fine sands, same as above, at .71' thin <1/8" bands of rusted sands.	4,4,6,8	SP	
S34	66-68'	2.0/	1.4	0	0-.6': same as above. .6-1.4': silty sand, fine, uniform, 15% fines, medium dense, saturated, 10yr6/4 light yellowish brown.	7,10,11,15	SP - SM	
S35	68-70'	2.0/	1.6	0	Fine sand, uniform, 10% fines, loose, saturated, 2.5y6/4 light yellowish brown, few thin bands <1/8" width of rust colored (10yr6/8) sand.	wor,wor,6,6	SP - SM	
S36	70-72'	2.0/	1.4	0	Fine sand, same as above, .1' faint brownish rust tint.	4,6,8,11	SP SM	
S37	72-74'	2.0/	2	0	0-1.5': similar to above, fine to medium sand, 2.5yr6/6 olive yellow. 1.5-2.0': till, rock frag. up to 1.5" in dia. in a clayey sandy silt, 5-10% clay, 30% fine to coarse sand, silt 30-40%, gravel remainder of matrix, sticky, slightly plastic, moist, hard, 2.5y5/00 gray, rock frag. comprised 60% of bottom .5', ang.-subang. frag. of metasiltstone, with hematite rusting on surface.	28,25,43,90	SP GM till rock w/ML	
S38	74-76'	2.0/	0.5	0	Same as 73.5-74', metasiltstone frag., ang. gravel in gray clayey sandy silt.	34,28,23,32	GM	
S39	76-78'	2.0/	1	0	Rollerbit drilled to 77', collapsed back to 76'; 0-0.5': sand, probable slough; .5-1.0': clean gravel and angular siltstone frag. 1/4" to 1". One fragment of siliceous siltstone (gray with pyrite in healed fractures); fractures and views contain sugary calcite.	21,13,15,18	GM	
S40	78-79'	2.0/	0.4	0	Clayey, silty sand, 5-10% clay, 30% silt, fine sand, slightly plastic, slightly sticky, dense, 2.5y6/0 gray.	29, 105	SM - MH	
					End of drive and wash - rock core to 99', split spoon refusal at 79' bgs, see rock core log.			

ROCK CORING LOG

Project: Fort Devens G6M-96-22C		Study Area: Ave 30	Project No.: E74002
Client: USACE	Driller's Name: CAROL, JAY	Logged by: JUR/STN	Checked by: JUR
Drilling Contractor: WAB	Protection Level: MOD	Rig Type: CME 750	Start Date: 10/15/92
Drilling Method: DRIVE WITH (4" CASE) TO ROCK, NK CORE BARKS		P.I.D. (eV): TE-5305 # 11	Finish Date: 10-16-96

Bit type/size: NK 2 7/8"	Bit Use: RECOMMENDED	Core Interval (to/from)(ft): 77-99'	p. 1 of 3
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Depth (feet) Below GRD Surf.	Sample No. & Penetration/Recovery (feet)	Graphic Log	Natural Core Breaks		Weathered Condition	Rock Quality			Drilling Rate min/ft	Color	Rock Description and Comments on Drilling
			Type/Dip	Surface Condition		Total 4" Core	RQD (%)	Rock Quality Description			
80	574.6 574.6 574.5		x 10°	FRESH	NOM	4.6	3.8 5.0	EXC.	6.5	gray white gray	MEMBERING, RECOMMENDED FAULT 1/4" DEPTH OF DARK CLAY BAND IN ROCK. 50' DOWN AT UNCONFORMABLE FRACTURES. MORE BENTONITE; FRACTURES FILLED WITH WHITE QUARTZ AND IRON PYRITE - ORIGINAL BEDDING IN ROCK IS 10° TO 15° FROM HORIZONTAL. WHITE BAND OF DARK CLAY ROCK WITH CAPSULE QZT GRAINS. 79.8 30" FRACTURE WIDTH 30°.
81			x 5°	FRESH	NOM				7.5	gray white gray	MIXED QUARTZ & PYRITE. CROSS CUTS VERTICAL FRACTURES.
82			x 5°	CRACK	NOM				5		80.1-80.2 INTERSECTIONS OF VERTICAL FRACTURES WITH CURVE LOCAL FILLED WITH QZT AND CALCITE, AND PYRITE.
83			x 5° x 20° x 30°		BRK X BRK X				4		80.3 FRACTURED PORTION OF ROCK = 2" THICK INTERSECTIONS OF CALCITE AND PYRITE.
84	Run 2		x 20° x 30° x 50°		BRK X BRK X				3.5		80.4 -> SOLID ROCK INTERSECTIONS FINE FRACTURES FILLED WITH CALCITE AND QUARTZ.
85			x 25°		FRESH X WETTER	5.0	3.8 5.0	POOR	3.5	gray	82.5 -> SPARS ALONG VERTICAL FRACTURES. MINORITY SPARS ALONG PORTIONS OF BASAL BEDDING NOT CONTINUOUS. LAST 80' LITHOM, UNIFORM BEDDING.
86			x 60° x 50°	FRESH	NOM			EXC.	3	gray	Metasiltstone with calcite stringers - coincident with bedding bedding. Natural fractures are are weathered (pyrite, chlorite). 85': Fractures healed with calcite (fractures are oriented 30° opposite bedding planes).
87			x 35° x 10°	FRESH	NOM			EXC.	3	gray	87': Bedding planes less visible.

ROCK CORING LOG
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
 ABB Environmental Services, Inc.

ROCK CORING LOG

Project: Fort Devens 66M-96-22C		Study Area: 10C50		Project No. 8740.02	
Client: USACE		Driller's Name: J. Garside		Logged by: JCR/SJM	Checked by: JCR
Drilling Contractor: NHB		Protection Level: Med-D		Rig Type: CME 750	Start Date: 10-15-96
Drilling Method: Drive + wash (4" casing) to rock, NX core barrel		P.I.D. (eV): TE 580B #M00111	Casing Size: 4"	Finish Date: 10-16-96	
Bit type/size: NX 2 7/8"		Bit Use: reconditioned		Core Interval (to/from)(ft): 79' - 99'	

p. 2 of 3

Depth (feet) Below GRD Surf.	Sample No. & Penetration/Recovery (feet)	Graphic Log	Natural Core Breaks		Weathered Condition	Rock Quality			Drilling Rate min/ft	Color	Rock Description and Comments on Drilling
			✓ = Natural x = Mechanical			Total 4" Core	ROD (%)	Rock Quality Description			
87	Run 2 (cont.)		✓ 100°	withrd	slight	5.0	3.5 5.0	exc.	3.0 2.5	greenish-gray	Siltstone appears to have been shattered and healed w/ calcite.
88			✓ 45° x 150° x 45° x 45° x 45° x 45° x 45° x 45°	fresh	non			exc.	2.5		
89	Run 3		✓ 45° x 45°	withrd	withrd	4.5'	3.3 4.5	exc.	2.5	greenish gray to gray	metasiltstone; bedding planes at 40° - same as above cores pyrite precipitated in fracture
90			✓ 60°				(4.3) 4.5	exc.	2.5		- Fracture healed by calcite (80°) - Porosity in fractures at 90-91'
91			✓ 75° x 150°	withrd				fair	2.5		- chlorite in 75° fracture at 91' } fewer calcite stringers
92			✓ 45°	slightly weathered				fair	2.5		- slight weathering in 45° fracture } healed fracture (nearly ⊥ to bedding planes)
93			x 60° x 80° x 80° x 80°	slightly weathered				fair	2.5		
94				nonwithrd				exc.	2.5		
95	(continued on p. 3)										

ROCK CORING LOG
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
 ABB Environmental Services, Inc.

ROCK CORING LOG

Project: Fort Devens		GM-96-22C		Study Area: AOC-50		Project No. 8740.02	
Client: USACE		Driller's Name: J. Garsido		Logged by: JCR/SJM		Checked by: JCR	
Drilling Contractor: NHB		Protection Level: Mod-D		Rig Type: CME 750		Start Date: 10-15-96	
Drilling Method: Dive + wash (4" casing) to rock, NX core barrel		P.I.D. (eV): TE 5803 #NHB311		Casing Size: 4"		Finish Date: 10-16-96	
Bit type/size: NX 2 7/8"		Bit Use: reconditioned		Core Interval (to/from) (ft): 79'-99'		p. 3 of 3	

Depth (feet) Below GRD Surf.	Sample No. & Penetration/Recovery (feet)	Graphic Log	Natural Core Breaks		Weathered Condition	Rock Quality			Drilling Rate min/ft	Color	Rock Description and Comments on Drilling
			Type/Dip	Surface Condition		Total 4" Core	RQD (%)	Rock Quality Description			
94-95	Run 4				non-weathered	4.8'	4.3 / 4.8	exc.	2.75	gray	<p>Metasiltstone with calcite stringers as above. Bedding is ^{less} more visible than it was in shallower cores. Calcite stringers are present at many fracture locations and are oriented at random \pm 5°.</p> <p>Calcite and chlorite are precipitated on fracture surfaces. Highly weathered area.</p> <p>Bedding ^{more} less visible.</p> <p>Bedding less visible. Fewer calcite stringers.</p> <p>Slight offset of beds — evidence of tiny normal fault (fracture is healed by calcite and/or quartz) — porous fracture along bedding plane.</p>
95			x 250°		non-weathered			exc.	3	gray to greenish gray	
96			x 50°		highly weathered			poor			
97			x 250°		non-weathered			exc.	2.75	gray	
97			x 10°		non-weathered			exc.	2.75	gray	
98			x 25°		non-weathered			exc.	2.75	gray	
99			x 45°		non-weathered			exc.	2.5	gray	

ROCK CORING LOG
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
 ABB Environmental Services, Inc.

SOIL BORING LOG - FORT DEVENS, MA.

PROJECT NO.: **8740.02**

BORING NO.: **G6M-96-23A**

CLIENT: **COE**
 CONTRACTOR: **NHB**
 METHOD: **HSA 4.25"**
 GROUND ELEV.:
 LOGGED BY : **JCR**

DATE STARTED: **10/24/96**
 DATE COMPLETED: **10/24/96**
 BORING DIAMETER: **6"**
 REFERENCE PT. ELEV.:
 CHECKED BY: **JCR**

STUDY AREA: **AOC 50**
 PROTECTION: **D (Mod.)**
 PID METER: **OVM 580B**
 TOTAL DEPTH: **13'**
 WATER TABLE BGS: **4'**

SAMPLE		PEN.	REC.	PID OF SPOON	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN:	USCS SOIL CLASS.	ON SITE SCREENING
NO.	DEPTH							
					Cuttings 0-10', silty sand, fine to coarse, well graded, 15% silt, loose, saturated, 10yr6/3 pale brown.		SM	
1	10-12'	2.0/	1.3		Same as above.	10,8,8,7	SM	
					Sample 10 to 12' for TOC and grain size. BXG62310			
					End of boring at 13' bgs.			

SOIL BORING LOG - FORT DEVENS, MA.

PROJECT NO.: 8740.02

BORING NO.: G6M-96-23B

CLIENT: COE
 CONTRACTOR: NHB
 METHOD: D&W
 GROUND ELEV.:
 LOGGED BY: HKW

DATE STARTED: 10/22/96
 DATE COMPLETED: 10/23/96
 BORING DIAMETER: 4"
 REFERENCE PT. ELEV.:
 CHECKED BY: JCR

STUDY AREA: AOC 50
 PROTECTION: D (Mod.)
 PID METER: OVM 580B
 TOTAL DEPTH: 77'
 WATER TABLE BGS: -1.5'

SAMPLE		PEN.	REC.	PID OF SPOON	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	ON SITE SCREENING
NO.	DEPTH							
S1	0-2'	2.0/	1.6	0	0-0.3': topsoil, silty sand with gravel and roots, 10yr3/2 dark brown, ~35% silt, slightly plastic, mostly fine sand; 0.3-1.6': lt. brown, fine to coarse sand with silt, trace gravel moist 10yr6/4	1,1,1,1	SP SW	
S2	5-7'	2.0/	1.2	0	Tan fine to medium sand with silt, ~10% silt, nonplastic, 10yr7/2, saturated.	4,6,8,11	SP	
S3	9-11'	2.0/	1.6	0	Tan, fine to medium sand with silt, ~10% silt, nonplastic, 10yr6/2, saturated, trace gravel.	4,6,6,3	SP	
S4	14-16'	2.0/	0.8	0	Tan, mostly fine sand with silt, <10% silt, trace gravel (rounded <1/4") 10yr7/1.	3,4,4,6	SP	
S5	19-21'	2.0/	0.7	0	Tan, fine to coarse sand with silt and gravel (rounded <3/4") 10yr7/2, ~25% silt, 1" lens of fine silty sand.	3,4,4,7	SW	
S6	24-26'	2.0/	1	0	Tan, fine sand with silt, ~10% silt, trace mica, 10yr7/2.	4,3,5,5	SP	
S7	29-31'	2.0/	1	0	Light brown fine silty sand, ~20% sl. plastic silt, saturated, 10yr5/3.	5,7,7,7	SM	
S8	34-36'	2.0/	1.2	0	Same as above.	6,5,6,6	SM	
S9	39-41'	2.0/	1.2	0	Brown, fine silty sand, 10yr5/3, ~20% sl. plastic silt, saturated, few seams 1/4" gray silty clay.	3,4,5,6	SM	
S10	44-46'	2.0/	1.3	0	Lt. brown fine sand with silt, ~10% silt, nonplastic, 10yr6/3, saturated.	wor/18",2	SP	
S11	46-48'	2.0/	1.1	0	Lt. brown, silty fine sand, ~20% silt, sl. plastic, 10yr6/3.	3,3,4,4	SM	
S12	48-50'	2.0/	1.3	0	Same as above.	wor,2,2,3	SM	
S13	50-52'	2.0/	1.6	0	Lt. brown silty fine very fine to fine sand, ~20% silt, sl. plastic, 10yr6/4.	1,5,5,5	SM	
S14	52-54'	2.0/	1.1	0	Lt. brown silty very fine to fine sand, same as S13 for top .8'; bottom: brown very fine, very silty sand with rock fragments, black siltstone, stone at tip, till.	3,4,4,25	SM	
S15	54-56'	2.0/	1.7	0	Lt. green-brown, fine to coarse silty sand with gravel, ~25% medium plastic silt, ~30% gravel, subangular, till, 5yr5/2.	22,17,22,27	SM	
S16	56-58'	2.0/	0.8	0	Lt. green-brown fine to coarse silty sand with 35% gravel, same as above, till.	13,25,17,20	SM	
S17	58-60'	2.0/	1.3	0	Same as above.	20,37,30,78	SM	
S18	60-61.5'	2.0/	1.2	0	0-.2': gravelly, silty sand, 15% ang.-subang. gravel, 1/4" dia., fine to medium sand, 15% silt, very dense, nonsticky, nonplastic, damp, 2.5y6/3 l. yellow-brown; .2-1.2': silty sand, few gravel frag. up to 1/2" dia., 35% silt, very dense, damp, sand-fine to medium, 5y6/1 gray, till, gravel-granite, metasilstone.	57,75,100/4"	SM	
S19	62-62.3'	2.0/	0.3	0	1' of material in spoon, probable slough - consisted of sand ang gravel; bottom 0.3': silty sand, same as above.	100/4"	SM	
S20	64-65'	2.0/	0.5	0	Gravelly, silty sand, <5% ang. gravel, 1/4" dia. fine to medium sand, 30% silt, nonsticky, very dense, damp, 5y6/1 gray till.	77,100/4"	SM	
					Casing refusal at 65.5', rock core 67-77', see rock core log.			

ROCK CORING LOG

Project: Fort Devens <i>TASK 7</i> <i>66M-96-23B</i>		Study Area: <i>ACC 5B</i>		Project No.: <i>8740.02</i>
Client: <i>USACE</i>		Driller's Name: <i>CARDOL</i>	Logged by: <i>JER</i>	Checked by: <i>JER</i>
Drilling Contractor: <i>NOTS</i>		Protection Level: <i>REC D</i>	Rig Type: <i>LME 790</i>	Start Date: <i>6/23/90</i>
Drilling Method: <i>4" DRILL AND WASH</i>		P.I.D. (eV): <i>530B</i>	Casing Size: <i>4"</i>	Finish Date: <i>6/23/91</i>
Bit type/size: <i>NX</i>		Bit Use: <i>REC.</i>	Core Interval (to/from)(ft): <i>67' - 77'</i>	

Depth (feet) Below GRD Surf.	Sample No. & Penetration/ Recovery (feet)	Graphic Log	Natural Core Breaks		Weathered Condition	Rock Quality			Drilling Rate min/ft	Color	Rock Description and Comments on Drilling
			Type/Dip	Surface Condition		Total 4" Core	RQD (%)	Rock Quality Description			
67	<i>Run 1</i> 5/5		15' x	FRESH	Rock consists of...	5'	4.2/5.0		2.5	<i>Green</i>	<p>META SCLEROTIC / SLIST. SHATTERED, FRACTURED AND FLOWING FRACTURED FULID AND HEAVY WITH CALCITE, IN FRESH FRACTURES CALCITE, PYRITE AND CHLORITE VISIBLE</p> <p>NATURAL FRACTURE ORIGINATED VERY VISIBLE AS THEMATIC STAIRING ON SURFACE</p> <p>MICRO POROSITY VISIBLE ALONG - SOME FRACTURES THROUGHOUT CUT CORE PARTICULARLY FROM 70-70' VERTICAL FRACTURES AND NUMEROUS BRANCHES ALONG WITH APPEARS TO BE ORIGINAL BEDDING</p> <p>ORIGINAL BEDDING VISIBLE AS LIGHT AND GREEN BANDS ALTERNATING WITH DARK GRAY AND THAT OF RED BANDS DIAMETER 3 75-40'</p> <p>LOST 2 50-100 GMS CORE</p>
68			10' x	WX					3.0		
69			25' x	FRESH					4.0		
70			15' x	WX					5.0		
71			20' x	FRESH					4.5		
72	<i>Run 2</i>		20' x	FRESH	Rock consists of...	5'	5/5		3.5		<p>ROCK SAME AS ABOVE, LOSS SHATTERED AND BLOWN. FRACTURES AND VIEWS OF CALCITE CONTAIN CHLORITE; FRACTURE AT 73' HAS GREEN STAIN AND STAIN VERY PYRITE CRYSTAL IN CALCITE PART.</p> <p>FRACTURES THROUGHOUT CORE HAVE MICRO PORES</p> <p>LARGE SECTION 73.6 - 75.6' HAS DISCOLORATION OF ROCK AROUND FRACTURED FULID W/ CALITE & CHLORITE - MAIN ROCK DARK GRAY, GREEN GRAY</p>
73			30' x	FRESH					3.5		
74			20' x	FRESH					3.5		
75			35' x	WX					3.5		

ROCK CORING LOG
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
 ABB Environmental Services, Inc.

ROCK CORING LOG

Project: Fort Devens <i>TABLE 7 66M-96-23B</i>		Study Area: <i>Asc 5</i>		Project No.: 9720.01
Client: <i>USACE</i>		Driller's Name: <i>J. CARBIDE</i>		Ground Elev.:
Drilling Contractor: <i>NHTB</i>		Protection Level: <i>1210 D.</i>		Finish Date: <i>10/23/90</i>
Drilling Method: <i>4" DRIVE, W/ST</i>		Rig Type: <i>CMR 750</i>		Auger Size:
Bit type/size: <i>NX</i>		Bit Use: <i>MOD.</i>		Core Interval (to/from)(ft): <i>67 - 77</i>
P.I.D. (eV): <i>50.8</i>		Casing Size: <i>4"</i>		Auger Size:

Depth (feet) Below GRD Surf.	Sample No. & Penetration/Recovery (feet)	Graphic Log	Natural Core Breaks		Weathered Condition	Rock Quality			Drilling Rate min/ft	Color	Rock Description and Comments on Drilling
			Type/Dip	Surface Condition		Total 4" Core	RQD (%)	Rock Quality Description			
75			✓	<i>FRESH</i>	<i>Rock Unbroken</i>	5'	100%		450	<i>DRILL CORE TO 1210</i>	<i>BEDDING OF ORIGINAL ROCK DIA 35-45% SOME WITH CONCRETE BANDS 1/8 - 1/2" THICK COMPOSED OF CALCEIN. CALCEIN 1/2" APERTURE OR SURFACE OR BREAKS.</i>
76			✓	<i>WX</i>	<i>GRAVEL</i>				400	<i>1210</i>	
77					<i>END OF CORE</i>						<i>77</i>

ROCK CORING LOG
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
 ABB Environmental Services, Inc.

SOIL BORING LOG - FORT DEVENS, MA.

PROJECT NO.: 8740.02

BORING NO.: G6M-95-24B

CLIENT: COE CONTRACTOR: NHB METHOD: D&W GROUND ELEV.: LOGGED BY: JP	DATE STARTED: 10/29/96 DATE COMPLETED: 10/29/96 BORING DIAMETER: 4" REFERENCE PT. ELEV.: CHECKED BY: JCR	STUDY AREA: AOC 50 PROTECTION: D (Mod.) PID METER: OVM 580B TOTAL DEPTH: 63' WATER TABLE BGS: 2'
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SAMPLE		PEN.	REC.	PID OF SPOON	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	ON SITE SCREENING
NO.	DEPTH							
S1	0-2'	2.0/	1.8	0	A horizon organ. soil, 50% sand, damp, very loose, poorly graded, end of recovery - poorly graded sand, 5y3/1 very dark gray.	2,2,4,4		
S2	5-7'	2.0/	1.9	0	Well graded sand, silt <5%, top 4" fine grained, bottom 4" fine grained, middle 1' well graded sand with fine gravel, loose, moist, 2.5y5/3 lt. olive brown.	2,4,5,7	SW	
S3	9-11'	2.0/		0.8	Very loose, fine sand, silt <5%, wet, 2.5y7/4, some org. mat., part of a branch.	3,3,3,4	SP	
S4	14-16'	2.0/	2	0.5	Loose, saturated, poorly graded fine sand, top of sample has some gravel and wood, 2.5y7/4 pale yellow.	6,2,3,5	SP	
S5	19-21'	2.0/	1	0.5	Very loose, saturated, poorly graded fine sand, same as above but no gravel.	4,4,3,4	SP	
S6	24-26'	2.0/	1.5	0.5	Same as above, very loose, saturated, nonplastic.	1,3,3,6	SP	
S7	29-31'	2.0/	1.7	0	Same as above.	6,6,8,5		
S8	34-36'	2.0/	1.4	0	Very loose, top .8' sandy silt, poorly graded, fine sands, silt <50%, 2.5y7/6 yellow, oxidation streaks, bottom .6" silty sand, 2.5y7/4 pale yellow, nonplastic, some oxidation.	5,7,9,10	SM ML ML	
S9	39-41'	2.0/	1.3	0	Very loose, same as bottom of above. Same as top .8' of S8.	1,1,5,6	ML SM-ML	
S10	44-46'	2.0/	1.6	0	Fine sand, poorly graded, uniform, 5-12% silt, very loose, saturated, 2.5y6/4 lt. yellow brown, abundant pyrite, quartzite, mica.	1,4,6,9	SP SM	
S11	49-51'	2.0/	1.9	0	Fine sand, loose, med. dense, wet, silt <5%, 2.5y6/4 lt. yellow brown, abundant pyrite, quartzite, mica.	8,9,8,11	SP	
S12	54-56'	2.0/	1.8	0	Sand, poorly graded, similar to above, oxidation staining.	5,6,7,12	SP	
S13	59.5-61.5'	2.0/	2	0.8	Same as above, no oxidation staining.	3,4,7,9	SP	
					Casing refusal at 63', end of boring.			

SOIL BORING LOG - FORT DEVENS, MA.

PROJECT NO.: 8740.02

BORING NO.: G6M-96-25A

CLIENT: COE CONTRACTOR: NHB METHOD: D & W GROUND ELEV.: LOGGED BY: GH	DATE STARTED: 11/4/96 DATE COMPLETED: 11/4/96 BORING DIAMETER: 6" REFERENCE PT. ELEV.: CHECKED BY: JCR	STUDY AREA: AOC 50 PROTECTION: D (Mod.) PID METER: OVM 580B TOTAL DEPTH: 19' WATER TABLE BGS: 11'
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SAMPLE		PEN.	REC.	PID OF SPOON	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	ON SITE SCREENING
NO.	DEPTH							
S1	15-17'	2.0/	2	0	0-1.2': sand, medium to fine, uniform, poorly graded, medium dense, tan to brown. 1.2-1.4': sand, coarse to fine, poorly graded, medium dense, saturated, brown. 1.4-2.0': silty sand, very fine sand with 40% fines, poorly graded, medium dense, saturated, tan to olive brown. Sample collected for grain size and TOC.	7,10,12,15	SP SP SM	
					Well set.			

SOIL BORING LOG - FORT DEVENS, MA.				PROJECT NO.: 8740.02		BORING NO.: G6M-96-25B	
CLIENT: COE		DATE STARTED: 10/31/96		STUDY AREA: AOC 50		PROTECTION: D (Mod.)	
CONTRACTOR: NHB		DATE COMPLETED: 10/31/96		PID METER: OVM 580B		TOTAL DEPTH: 90'	
METHOD: D&W		BORING DIAMETER: 4"		WATER TABLE BGS: 11'			
GROUND ELEV.:		REFERENCE PT. ELEV.:					
LOGGED BY: J.P.		CHECKED BY: JCR					
SAMPLE				SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS		ON SITE SCREENING	
NO.	DEPTH	PEN. REC.	PID OF SPOON		BLOWS/6 IN.	USCS SOIL CLASS.	
S1	0-2'	2.0/ 1.3	0	Gravelly sand, max. gravel size <1.5", loose, 2.5y6/2, damp, coarse sand, 2.5y2/4 gravel parking lot.	4,7,7,7	SW/GW	
S2	5-7'	2.0/ 1	0	Coarse sand, loose, <5% fines, 2.5y8/3, dry.	5,9,9,12	SP	
S3	9-11'	2.0/ 0.9	0	Coarse sand, loose, <5% fines, banded bottom .3', 2.5y3/2, top .7" 2.5y6/2, wet, glacial outwash deposit.	8,16,14,11	SW	
S4	14-16'	2.0/ 1	0	Coarse to fine sand, medium dense, <5% fines, some gravel <1", wet, 2.5y6/4, some bedding, some micaceous banding.	13,10,11,11	SW	
S5	19-21'	2.0/ 1	0	Fine sands, loose, <5% fines, wet to saturated, layered with oxidation bands every 1', 2.5y6/4.	7,5,4,6	SP	
S6	24-26'	2.0/ 1.8	0	Fine sands, loose, <5% fines, saturated, oxidation band at .4', 2.5y6/2, sand uniform.	7,6,6,5	SP	
S7	29-31'	2.0/ 2	0	.6': coarse sand on top, very loose, <5% fines, poorly graded, 2.5y6/6; 1.4': fine sand, same as sample 6.	4,3,2,2	SP	
S8	34-36'	2.0/ 2	0	.3-.5': layer of clay/sand, 2.5y6/6, remainder same as S6, saturated, very loose.	6,4,4,3	ML/SP	
S9	39-41'	2.0/ 1.5	0	Fine sands, very loose, fines <5%, 2.5y6/2, stratified angle layering, micaceous bands, oxidation staining, saturated.	4,5,2,2	SP	
S10	44-46'	2.0/ 2	0	Same as S9 except color change at bottom .5' to 2.5y6/6	4,4,4,3	SP	
S11	49-51'	2.0/ 2	0	Fine sand, very loose, saturated, <5% fines, some oxy, staining, 2.5y6/2, no bedding.	4,4,3,3	SP	
S12	54-56'	2.0/ 1.3	0	Fine sand, very loose, saturated, <5% fines, oxy. bands, layered micaceous banding.	4,11,11,13	SP	
S13	59-61'	2.0/ 0.8	0	Till, dense, 2.5y6/2, saturated, ≥50% silty clay, not sticky, not plastic, glacial till layer.	15,22,38,20	GM/ML	
S14	64-66'	2.0/ 0.9	0	Till, very dense, gravelly sand, <5% fines, some clay, 2.5y6/2, oxidation staining, glacial outwash.	36,30,41,35	SW/GW	
S15	69-71'	2.0/ 0.7	0	Till, very dense, damp, silty sand, lots of gravel ≤50%, 2.5y6/2, no oxidation.	36,42,28,35	SP/ML	
S16	79-81'	2.0/ 0.3	0	Till, very dense, 2.5y6/2, damp, silty clay, <20% sand, <40% gravel <1/2"	100	GC/GM	
				Till, rollerbit drilling to 90'. End of boring at 90'. Drilling rate 5 m/.5'			

SOIL BORING LOG - FORT DEVENS, MA.

PROJECT NO.: 8740.02

BORING NO.: G6M-96-26A

CLIENT: COE
 CONTRACTOR: NHB
 METHOD: HSA 4.25"
 GROUND ELEV.:
 LOGGED BY: GH

DATE STARTED: 11/7/96
 DATE COMPLETED: 11/7/96
 BORING DIAMETER: 6"
 REFERENCE PT. ELEV.:
 CHECKED BY: JCR

STUDY AREA: AOC 50
 PROTECTION: D (Mod.)
 PID METER: OVM 580B
 TOTAL DEPTH: 18'
 WATER TABLE BGS: 10.8'

SAMPLE		PEN.	REC.	PID OF SPOON	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	BLOWS/6 IN.	USCS SOIL CLASS.	ON SITE SCREENING
NO.	DEPTH							
S1	14-16'	2.0/	1.1	0	Fine sand, 30% fines, uniform, poorly graded, medium dense, saturated, brown.	6,6,6,6	SM	

SOIL BORING LOG FORT DEVENS, MA PROJECT NO.: 8740.02

CLIENT: USAEC
CONTRACTOR: EEI
LOGGED BY: LT
METHOD: DRIVE & WASH
CASING SIZE: 4"
DATE STARTED: 4/24/97
DATE COMPLETED: 4/25/97
PROTECTION: D

BORING NO.: G6M-97-27X
STUDY AREA: AOC-50
SOIL DRILLED: 31'
TOTAL DEPTH: 31'
WATER LEVEL: 7.5'
PID METER: 580B OVM

SAMPLE NO.	DEPTH	REC.	PID (ppm)	BLOWS PER 6"	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	USCS
					Advanced 4" casing to 31' and washed out casing.	
					No samples collected.	
					For geologic profile see G6M-92-12X.	
					Wash 14-19": brown fine sand with medium to coarse sand and gravel.	
					Wash 19-24": similar to above.	
					Wash 24-31": brown fine sand.	
					B.O.B. at 31', installed well.	

SOIL BORING LOG FORT DEVENS, MA PROJECT NO.: 8740.02

PAGE 1 OF 2

CLIENT: USAEC

BORING NO.: G6M-97-28X

CONTRACTOR: EEI

STUDY AREA: AOC-50

LOGGED BY: LT

SOIL DRILLED: 136.5'

METHOD: DRIVE & WASH

TOTAL DEPTH: 149.4'

CASING SIZE: 5" TO 29', 4" TO 114', 3" TO 139'

WATER LEVEL: 56.5'

DATE STARTED: 4/7/97

PID METER: 580B OVM

DATE COMPLETED: 4/11/97

PROTECTION: D

SAMPLE NO.	DEPTH	REC.	PID (ppm)	BLOWS PER 6"	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	USCS
S-1	4-6'	1.6'	bkg.	5,6,9,16	Tan-light brown fine sand, trace silt, moist, poorly graded, medium dense. Introduced water before S-2.	SP
S-2	9-11'	0.6'	bkg.	15,15,12,12	Brown fine-coarse sand, trace silt, gravel, saturated, well graded, medium dense.	SW
S-3	14-16'	0.6'	bkg.	15,12,12,13	Brown fine-coarse sand, trace medium sand, silt, gravel, saturated, poorly graded, medium dense.	SP
S-4	19-21'	0.5'	bkg.	20,12,9,14	Brown fine-medium sand, trace coarse sand, silt, gravel, saturated, poorly graded, medium dense.	SP
S-5	24-26'	0.3'	bkg.	10,18,19,15	Similar to S-4 except little gravel, dense.	SW
S-6	29-31'	0.4'	bkg.	42,18,23,37	Similar to S-5, dense.	SW
S-7	34-36'	0.7'	bkg.	35,31,29,34	Brown fine-medium sand, trace coarse sand, silt, gravel, saturated, poorly graded, very dense.	SP
S-8	39-41'	0.9'	bkg.	20,23,35,35	Similar to S-7.	SP
S-9	44-46'	1.0'	bkg.	29,29,36,42	Similar to S-7.	SP
S-10	49-51'	0.9'	bkg.	29,30,39,49	Alternating layers of brown fine -coarse sand, trace gravel, silt and fine sand, trace silt, saturated, poorly graded, very dense.	SW-SP
S-11	54-56'	1.0'	bkg.	38,45,57,45	Brown fine sand, trace medium-coarse sand, silt, gravel, saturated, poorly graded, very dense.	SP
	59-61'	NR		27,30,29,31	No recovery.	
S-12	64-66'	2.0'	bkg.	27,21,34,39	Alternating layers of brown fine -medium sand, trace silt and gravelly fine-coarse sand, trace silt to 65'. 65'+: brown fine sand, trace silt, saturated, poorly graded, very dense.	SW-SP SP

CLIENT: USAEC
 CONTRACTOR: EEI
 LOGGED BY: LT
 METHOD: DRIVE & WASH
 CASING SIZE: 5" TO 29', 4" TO 114', 3" TO 139'
 DATE STARTED: 4/7/97
 DATE COMPLETED: 4/11/97
 PROTECTION: D

BORING NO.: G6M-97-28X
 STUDY AREA: AOC-50
 SOIL DRILLED: 136.5'
 TOTAL DEPTH: 149.4'
 WATER LEVEL: 56.5'
 PID METER: 580B OVM

SAMPLE NO.	DEPTH	REC.	PID (ppm)	BLOWS PER 6"	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	USCS
S-13	69-71'	2.0'	bkg.	34,44,43,45	Brown fine sand, trace silt, medium -coarse sand, gravelly fine-coarse sand, trace silt layer from 70.5-70.8', saturated, poorly graded, very dense.	SP
	74-76'	NR		17,20,24,20	No recovery.	
S-14	79-81'	1.0'	bkg.	18,23,25,26	Brown fine sand, trace silt, saturated, poorly graded, dense.	SP
S-15	84-86'	0.7'	bkg.	18,24,27,29	Similar to S-14 with trace medium-coarse sand, gravel, very dense.	SP
S-16	89-91'	1.3'	bkg.	45,47,65,51	Similar to S-14 with fine-coarse sand, trace silt layers from ~90-90.2', very dense.	SP
S-17	94-96'	0.8'	bkg.	41,57,71,27	Similar to S-14, trace medium-coarse sand, very dense.	SP
S-18	99-101'	1.0'	bkg.	34,41,60,45	Similar to S-17, trace silt/clay lenses.	SP
S-19	104-106'	0.8'	bkg.	48,60,18,20	Brown fine sand, trace silt, saturated, poorly graded, very dense. Collected TOC sample.	SP
S-20	109-111'	0.2'	bkg.	34,47,59,71	Similar to S-19.	SP
S-21	114-116'	0.9'	bkg.	27,46,48,67	Alternating layers of brown silty fine sand, and fine sand, little silt, saturated, poorly graded, very dense.	SM
S-22	119-121'	1.5'	bkg.	15,24,41,52	Gray silty fine sand, saturated, poorly graded, very dense.	SM
S-23	124-126'	1.7'	bkg.	wor,14,33,47	Similar to S-22.	SM
S-24	129-131'	1.3'	bkg.	18,30,33,39	Gray silt, little-trace fine sand, with fine sand and clay lenses, saturated, poorly graded, very dense.	ML
S-25	134-135.5'	1.5'	bkg.		130.5': gray silty fine sand, trace medium-coarse sand, little-some gravel (glacial till), saturated, poorly graded. Cobbles at 131.5', 132', 133'. Gray and brown fine to coarse sandy gravel, little silt, saturated, well graded, very dense, till. 136.5': weathered phyllite (bedrock). Cored (NX) below 140', see rock coring log. B.O.B. at 149.4'.	SM GW-GM

ROCK CORING LOG

Project: Fort Devens		Study Area: ADM-97-28K		Project No. 3740-00	
Client: USAEC		Driller's Name: Ray Eastwood		Logged by: L Tracy	Checked by:
Drilling Contractor: EEI		Protection Level: D		Rig Type: Mobil B-57	Start Date: 4/7/97
Drilling Method: Drive & Wash 1/2 NX core		P.I.D. (eV): 50000V		Casing Size: 5", 4", 3"	Auger Size:
Bit type/size: NX		Bit Use: —		Core Interval (to/from)(ft): R-1 (140-144.7) & R-2 (144.7-149.4)	

Depth (feet) Below GFD Surf.	Sample No. & Penetration/Recovery (feet)	Graphic Log	Natural Core Breaks		Weathered Condition	Rock Quality			Drilling Rate min/ft	Color	Rock Description and Comments on Drilling
			Type/Dip	Surface Condition		Total 4" Core	ROD (%)	Rock Quality Description			
141	R-1 140.0-	X			Non weathered	18"			3	Metamorphosed sedimentary rock - siltstone or phyllite with calcite along healed fractures. Numerous breaks along healed fractures - evidence of weaker faces in the rock. Evidence of FeO ₂ on natural breaks. B.O.B. @ 149.4'	
142	144.7' (Rec=3.1')	X				5"	41%	Fair	3		
143		X				11"			2		
144		X							2 1/2		
145		X				18"			2 1/2		
146	R-2 144.7-	X				35"	95%	excellent	3		
147	149.4' (Rec=4.6')	X							2		
148		X							2		
149		X							2		
150											

FIGURE 4-2
ROCK CORING LOG
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
 ABB Environmental Services, Inc.

SOIL BORING LOG FORT DEVENS, MA PROJECT NO.: 8740.02

PAGE 1 OF 3

CLIENT: USAEC

BORING NO.: G6M-97-29X

CONTRACTOR: EEI

STUDY AREA: AOC-50

LOGGED BY: LT

SOIL DRILLED: 190.5'

METHOD: DRIVE & WASH

TOTAL DEPTH: 204.0'

CASING SIZE: 5" TO 29', 4" TO 149', 3" TO 194'

WATER LEVEL: 56'

DATE STARTED: 4/14/97

PID METER: 580B OVM

DATE COMPLETED: 4/29/97

PROTECTION: D

SAMPLE NO.	DEPTH	REC.	PID (ppm)	BLOWS PER 6"	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	USCS
S-1	4-6'	1.3'	bkg.	3,1,1,2	Brown fine sand, trace medium to coarse sand, gravel, little silt, moist, poorly graded, very loose. Introduced water prior to S-2.	SP-SM
S-2	9-11'	0.7'	bkg.	6,3,2,2	Similar to S-1.	SP-SM
S-3	14-16'	0.6'	bkg.	12,15,11,13	Brown fine sand, trace silt, saturated, medium dense, poorly graded.	SP
S-4	19-21'	0.7'	bkg.	19,14,13,13	Similar to S-3, with trace medium to coarse gravel.	SP
S-5	24-26'	0.4'	bkg.	22,13,11,11	Similar to S-4.	SP
S-6	29-31'	0.9'	bkg.	16,12,15,19	Similar to S-4.	SP
S-7	34-36'	0.8'	bkg.	12,16,15,21	Similar to S-4, dense.	SP
S-8	39-41'	0.9'	bkg.	14,17,18,17	Brown fine sand, some silt, wet-moist, poorly graded, dense.	SM
S-9	44-46'	1.0'	bkg.	13,19,24,28	Similar to S-8 except little silt (with horiz. rust-brown staining), saturated.	SM-SP
S-10	49-51'	1.1'	bkg.	21,19,24,27	Similar to S-8 with silt lenses.	SM-SP
S-11	54-56'	0.7'	bkg.	17,19,24,26	Brown fine sand, trace silt, with horiz. rust-brown staining, saturated, poorly graded, dense.	SP
S-12	59-61'	0.9'	bkg.	25,21,26,28	Similar to S-11.	SP
S-13	64-66'	2.0'	bkg.	7,7,5,11	Similar to S-11, medium dense.	SP
S-14	69-71'	0.1'	bkg.	22,23,26,27	Brown fine to coarse sand, trace fine gravel, silt, well graded, dense, saturated, cobbles at 72-73'	SP
S-15	74-76'	0.7'	bkg.	18,16,17,14	Brown fine sand, trace silt, medium to coarse sand, gravel, saturated, poorly graded, dense.	SP

SOIL BORING LOG FORT DEVENS, MA PROJECT NO.: 8740.02

PAGE 2 OF 3

CLIENT: USAEC
BORING NO.: G6M-97-29X
CONTRACTOR: EEI
STUDY AREA: AOC-50
LOGGED BY: LT
SOIL DRILLED: 190.5'
METHOD: DRIVE & WASH
TOTAL DEPTH: 204.0'
CASING SIZE: 5" TO 29', 4" TO 149', 3" TO 194'
WATER LEVEL: 56'
DATE STARTED: 4/14/97
PID METER: 580B OVM
DATE COMPLETED: 4/29/97
PROTECTION: D

SAMPLE NO.	DEPTH	REC.	PID (ppm)	BLOWS PER 6"	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	USCS
	79-81'	NR		24,21,25,22	No recovery. Encountered gravel and cobbles at 79-84'.	
S-16	84-86'	0.1'	bkg.	20,21,20,27	Brown fine to coarse sand, trace silt, with gravel, saturated, well graded, dense. Encountered gravel and cobbles at 84-89'.	SW
S-17	89-91'	0.8'	bkg.	26,26,30,28	Brown fine sand, trace medium to coarse sand, silt, saturated, poorly graded, very dense.	SP
S-18	94-96'	2.0'	bkg.	28,38,30,40	Similar to S-17 to ~95.5'. 95.5'+: brown fine to coarse sand, trace silt, fine gravel, well graded, very dense.	SP SW
S-19	99-101'	0.1'	bkg.	21,28,33,36	Brown fine sand, trace silt, medium to coarse sand, saturated, poorly graded, very dense.	SP
S-20	104-105'	0.2'	bkg.	24,24,21,23	Brown fine to coarse sand, trace silt, gravel, saturated, well graded, dense.	SW
S-21	109-111'	0.7'	bkg.	22,23,33,37	Alternating layers of brown fine to medium sand, trace silt, coarse sand, gravel and silty fine sand, saturated, poorly graded, very dense.	SP-SW
S-22	114-116'	0.5'	bkg.	40,46,34,35	Brown gravelly fine to coarse sand, little-trace silt, saturated, well graded, very dense.	SW
S-23	119-121'	0.8'	bkg.	24,26,25,30	Brown fine sand, trace medium to coarse sand, gravel, saturated, poorly graded, very dense.	SP
S-24	124-126'	0.3'	bkg.	24,20,31,39	Brown fine to medium sand, trace silt, coarse sand, gravel, saturated, poorly graded, very dense.	SP
S-25	129-131'	0.9'	bkg.	24,30,30,32	Similar to S-24 to 129.5'+ 129.5'+: brown fine sand, trace medium to coarse sand, little silt, saturated, poorly graded, very dense.	SP-SM
S-26	134-136'	0.8'	bkg.	29,31,45,56	Alternating layers of brown fine sand, trace silt and silty fine sand with trace clay lenses (<1/4" thick), saturated, wet, poorly graded, very dense.	SP-SM
S-27	139-141'	1.2'	bkg.	25,36,43,49	Brown silty fine sand with a fine to medium sand, trace silt layer at ~141' (1" thick), saturated, poorly graded, very dense.	SM
S-28	144-146'	1.4'	bkg.	23,28,34,53	Brown silty fine sand transitioning to olive brown fine sandy silt with depth, saturated, poorly graded, very dense.	SM-ML
S-29	149-151'	1.3'	bkg.	32,39,49,49	Olive brown silty fine sand, with rust-brown streaking, saturated, poorly graded, very dense.	SM

SOIL BORING LOG FORT DEVENS, MA PROJECT NO.: 8740.02

PAGE 3 OF 3

CLIENT: USAEC
 CONTRACTOR: EEI
 LOGGED BY: LT
 METHOD: DRIVE & WASH
 CASING SIZE:
 DATE STARTED: 4/14/97
 DATE COMPLETED: 4/29/97
 PROTECTION: D

BORING NO.: G6M-97-29X
 STUDY AREA: AOC-50
 SOIL DRILLED: 190.5'
 TOTAL DEPTH: 204.0'
 WATER LEVEL: 56'
 PID METER: 580B OVM

SAMPLE NO.	DEPTH	REC.	PID (ppm)	BLOWS PER 6"	SOIL/ROCK DESCRIPTION AND PHYSICAL CONDITIONS	USCS
S-29	149-151'	1.3'	bkg.	32,39,49,49	Olive brown silty fine sand, with rust-brown streaking, saturated, poorly graded, very dense.	SM
S-30	154-156'	1.3'	bkg.	12,27,38,45	Alternating layers of olive-brown silty fine sand and fine sand, little silt to ~155', 155.5'+ brown fine to medium sand, little silt, trace coarse sand, gravel, saturated, poorly graded, very dense.	SM
S-31	159-161'	0.9'	bkg.	31,39,78,50	Brown fine to medium sand, little silt, little-some gravel, trace coarse sand, saturated, well graded, very dense.	SP-SM
S-32	164-166'	1.2'	bkg.	57,44,54,60	Alternating layers of brown fine sand, trace silt, fine to coarse sand, and silty fine sand, occasional silt lenses (1/4-1/2" thick), saturated, poorly graded, very dense.	SW
					Wash 169-174': brown fine to coarse sand with gravel.	
					Wash 179-184': brown fine sand.	
					Wash 184-190.5': brown fine to coarse sand with gravel.	
					190.5': weathered phyllite (bedrock). Advanced rollerbit and 3" spun casing to 194'. Collected rock core samples below 194'. See rock coring log.	

ROCK CORING LOG

Project: Fort Devens <i>CUM-97-29K</i>		Study Area: <i>AOC-50</i>		Project No.: <i>8740-00</i>	
Client: USAEC		Driller's Name: <i>John Galvin</i>		Logged by: <i>L. Truitt</i>	Checked by:
Drilling Contractor: <i>EET</i>		Protection Level: <i>D</i>		Rig Type: <i>B-57</i>	Start Date: <i>4/21/97</i>
Drilling Method: <i>Drive & Wash & NX Core</i>		P.I.D. (eV): <i>5208 AM</i>		Casing Size: <i>4"</i>	Finish Date: <i>4/22/97</i>
Bit type/size: <i>Diamond/NX</i>		Bit Use:		Core Interval (to/from)(ft): <i>194.0-199.0' (R-1) & 199.0-204.0' (R-2)</i>	

Depth (feet) Below GFD Surf.	Sample No. & Penetration/Recovery (feet)	Graphic Log	Natural Core Breaks		Weathered Condition	Rock Quality			Drilling Rate min/ft	Color	Rock Description and Comments on Drilling	
			✓ = Natural	x = Mechanical		Total 4" Core	ROD (%)	Rock Quality Description				
195	R-1	---	x						3		metamorphosed sedi- mentary rock - silt- stone or phyllite. with calcite along healed fractures. majority of mech. breaks along healed fractures. Evidence of FeK along natural breaks. BOB @ 204.0'	
196	194-199.0	---	x			49"	92%	Good	3			
197	Rec = 4.1'	---	x		Non-weathered				2			
198		---	x							2		
199		---	x							2		
200	R-2	---	x							3.5		gray
201	199.0-204.0	---	x				61"	100%	Excellent	3		
202	Rec = 5.1'	---	x							3.5		
203		---	x							3.5		
204		---	x							3.5		

* potentially left core in borehole after R-1 & R-2 (mech. break @ core bottom)

FIGURE 4-2
ROCK CORING LOG
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
 ABB Environmental Services, Inc.

SOIL BORING LOG

Study Area: AOC 50

Boring No.: G6M-98-30X

Client: USAEC/USACE

Project No. 8740-02

Protection: Mod D

Contractor: DL Maher

Date Started: 12/17/98

Completed: 12/21/98

Method: 6.0x4.0" DWH

Casing Size: 6.0" and 4.0"

PI Meter:

Ground Elev.:

Soil Drilled: 66.5'

Total Depth: 71.4'

Logged by: JCS

Checked by:

Below Ground: 8.0'

Screen: 5 (ft.)

Riser: (ft.)

(ft.)

Diam: (ID)

(ID)

Material:

Page

of:

DEPTH (FT)	SAMPLE NUMBER	SAMPLE DEPTH	ON-SITE SCREENING	RECOVERY	PID (ppm)	SOIL/ROCK/DISCHARGE WATER DESCRIPTION	SOIL CLASS	WELL DATA
5	S-1	X		1.0 2.0		SAND - fine to medium, loose, dry, non-plastic, dk brown to light brown w/ depth;	SP	12 14 17 20
5	S-2	X		1.0 2.0		similar to above w/ > 90% of coarse sand	SP	14 14 17 19
10	S-3	X		1.5 2.0		similar to above but wet	SP	12 13 17 18
15	S-4	X		0.7 2.0		upper 0.5 similar to above 0.5 to 0.7 SANDY SILT - mod. plastic, wet, soft, Lt brown	SP ML	8 8 10 7
20	S-5	X		1.7 2.0		SANDY SILT fine sand, mod. plastic, wet, soft, Lt brown SILTY-SAND similar to S-5		9 7 8 8
25	S-6	X		0.3 2.0				8 8 7 7
30	S-7	X		1.1 2.0		similar to S-5 w/ modeled layer @ ~ 31'	ML	16 7 1 2
35	S-8	X		1.3 2.0		similar to S-5 > 90% of silt	ML	16 4 1 16
40	S-9	X				SANDY SILT - 10% fine sand plastic, soft, wet	ML	12 10 8 8
45	S-10	X				similar to S-9		8 7 5 10
50								

Modeled zone at stratigraphic change ~ 16'

SOIL BORING LOG				Study Area: AOC 50	
Client: USAEC/USACE		Project No. 8740-02		Boring No.: G6M-98-30X	
Contractor: DL Maher		Date Started: 12/17/98		Protection: Mod D	
Method: D and W		Casing Size: 6.0" and 4.0"		Completed:	
Ground Elev.:		Soil Drilled:		PI Meter: FE 580	
Logged by: JCS		Checked by:		<input checked="" type="checkbox"/> Below Ground:	
Screen: (ft.)	Riser: (ft.)	Diam: (ID)	Material:	Page 2 of 2	

DEPTH (FT)	SAMPLE NUMBER	SAMPLE DEPTH	ON-SITE SCREENING	RECOVERY	PID (ppm)	SOIL/ROCK/DISCHARGE WATER DESCRIPTION	SOIL CLASS	WELL DATA
	S-11	X				Similar to S-9	ML 87711	
55	S-12	X				Similar to S-9 Casing is driving much slower	ML 991012	
60	S-13	X				No recovery - apparent bedrock chips in split-spoon nose.	ML 22192826	
65	S-14	X				SANDY SILT - fine sand (~10%) w/ fine to med. rounded gravel, dense, non-plastic, wet - <u>TILL</u>	ML 10201610	for 0.2' stopped for 12/18/98
70						Boring advanced to 66.5' and top of bedrock encountered.		
75						Bedrock coring from 66.0' to 71.0'. See bedrock core log for detail.		
80						The bedrock was back-filled with bentonite chips and well set.		
85						See Monitoring Well diagram for detail		
90								
95								
100								

ROCK CORING LOG

Project: Devens - RFTA G6M-98-30X		Study Area: AOC 50		Project No.: 8740-02
Client: USAEC		Driller's Name: B. Burns	Logged by: [Signature]	Checked by: [Signature]
Drilling Contractor: Marker		Protection Level: Mod 0	Rig Type: ATV	Start Date: 12/21/98
Drilling Method: Reverse Core		P.I.D. (eV): BRE	Casing Size: 6"	Auger Size:
Bit type/size: NX		Bit Use:		Core Interval (to/from)(ft): 66" - 73.5"

Depth (feet) Below GRD Surf.	Sample No. & Penetration/ Recovery (feet)	Graphic Log	Natural Core Breaks		Weathered Condition	Rock Quality			Drilling Rate min/ft	Color	Rock Description and Comments on Drilling
			Type/Dip	Surface Condition		Total 4" Core	RQD (%)	Rock Quality Description			
Time 10:55 10:55	66.0	66.3	✓ 45°	Subst	Non-ox	2.15	100%	100	7 min/ft		Core to 66.0 is shale with some sedimentation, calcite infilling. 45° fracture @ 66.3, intact cross cuts bedding.
1:04 12:04 AFC	67								5 min/ft		Bedding @ 65° thru out, heat core
1:1	68	68.1	X 75°	Fresh	Non-ox	1.7			5 min/ft		← Outer casing appears to chip ~ 2"
1:14	69	69.2	✓ 45°	Subst	Non-ox	2.2	100%	100	5 min/ft		45° fracture @ 69.2, intact cross cuts bedding.
1:19	70	70.3	X 45°	Fresh	Non-ox	0.7			5 min/ft		
		70.5	X 35°	"	"	0.2					
		70.7	X 65°	"	"	0.2					
11:24	71	71.4	X 45°	Fresh		0.4					

SOIL BORING LOG

Study Area: AOC 50
 Boring No.: 66M-98-31B
 Protection: Med. D
 Completed: 12/17/98
 PI Meter: TR 580
 Total Depth: 96.3'
 Below Ground: 42'
 Page 1 of: 2

Client: USAEC/USACE Project No. 8740-02

Contractor: DL Maher Date Started: 12/15/98

Method: D&W Casing Casing Size: 6.0" and 4.0" ID

Ground Elev.: _____ Soil Drilled: 96.3'

Logged by: JCS Checked by: _____

Screen: 5 (ft.) Riser: 93 (ft.) Diam: 2.0 (ID) Material: PVC

DEPTH (FT)	SAMPLE NUMBER	SAMPLE DEPTH	ON-SITE SCREENING	RECOVERY	PID (ppm)	SOIL/ROCK/DISCHARGE WATER DESCRIPTION	SOIL CLASS	WELL DATA
5						<p>No soil samples collected from ground surface to 95 ft bgs. See boring log from 66M-98-31C for soil descriptions.</p> <p>6.0" casing set to 25' 4.0" casing to bottom of boring</p>		
10								
15								
20								
25								
30								
35								
40								
45								
50								

SOIL BORING LOG

Study Area: *AOC 50*
 Boring No.: *GLM-98-31B*

Client: *USAEC/USACE* Project No. *8740-02*

Protection: *Mod. D*

Contractor: *DL Maher* Date Started: *12/15/98*

Completed: *12/17/98*

Method: *D+W Casing* Casing Size: *6.0" and 4.0"*

PI Meter: *TE 580*

Ground Elev.: Soil Drilled: *96.3'*

Total Depth: *96.3'*

Logged by: *JCS* Checked by:

Below Ground: *42'*

Screen: *5 (ft.)* Riser: *93 (ft.)* Diam: *2.0 (ID)* Material: *PK*

Page *2* of: *2*

DEPTH (FT)	SAMPLE NUMBER	SAMPLE DEPTH	ON-SITE SCREENING	RECOVERY	PID (ppm)	SOIL/ROCK/DISCHARGE WATER DESCRIPTION	SOIL CLASS	WELL DATA		
55						<p><i>No soil samples collected from ground surface to 94'</i></p>		<p><i>Drilling completed for 12/15/98</i> <i>Begin on 12/16/98</i></p>		
60										
65										
70										
75										
80										
85										
90										
95	<i>S-1</i>	<input checked="" type="checkbox"/>					<p><i>Gravel, tr. silt and fine sand, mostly wash angular gravel / chips of bedrock, loose, some fine sand, or silt adhered to rock chips, color of rock changes from drk brown/black to gray at 95'</i></p>		<p><i>40 40 70 100 for 0.3'</i></p>	<p><i>Grouting and PC completed 12/17/98</i></p>
96.3										
100										
							<p><i>Bottom of Boring at 96.3' bgs</i></p>			

SOIL BORING LOG

Study Area: AOC 50
 Boring No.: GGM-98-31/C KS 12/16/98
 Protection: 0
 Completed: 12/14/98
 PI Meter: OUK 580B
 Total Depth: 116'
 Below Ground:
 Page 1 of: 5

Client: USAEC/USACE Project No. 8740-02
 Contractor: DL Maher Date Started: 12/3/98
 Method: Drive & Wash Casing Size: 6" (0-)
 Ground Elev.: Soil Drilled: 99'
 Logged by: G. Hawley Checked by: KS
 Screen: 5 (ft.) Riser: 113 (ft.) Diam: 2.0 (ID) Material: PVC

DEPTH (FT)	SAMPLE NUMBER	SAMPLE DEPTH	ON-SITE SCREENING	RECOVERY	PID (ppm) over 5/10/15 If over 5/10/15	SOIL/ROCK/DISCHARGE WATER DESCRIPTION	SOIL CLASS	WELL DATA
40	S1	40-42		2.0/2.0	0.0/0.0	Drive and wash to 40" Sand (Fine), 10% silt, poorly graded med. dense, saturated, Brown to tan, Gr var: from grain size with orange bands.	SP	7 9 13 14 13 34
45	S2	45-47		1.0/2.0	0.0/0.0	Same fine silty sand as above	SP	5 5 9 14 14 40
50	S-3	50-52		1.2/2.0	0.0/0.0	SAND - fine, well sorted, friable, non-plastic, STRATIFIED w/ GRAY BROWN & yellowish BRN. Lenses F. F. SANDS w/ SILT FRACTION But non-plastic wet @ 51'	SP	7 9 15 21

12/14/98

SOIL BORING LOG				Study Area:	AOC 50
Client: USAEC/USACE		Project No. 8740-02		Boring No.:	G6M-98-31/E
Contractor: DL Maher		Date Started: 12-3-98		Protection:	D
Method: DRIVE WITH		Casing Size: 6"		Completed:	12/14/98
Ground Elev.:		Soil Drilled: 99'		PI Meter:	OVM 580B
Logged by: TDL		Checked by: JCS		<input checked="" type="checkbox"/> Below Ground:	
Screen: 5 (ft.)	Riser: 113 (ft.)	Diam: 2.0 (ID)	Material: PVC	Page 2 of 5	

DEPTH (FT)	SAMPLE NUMBER	SAMPLE DEPTH	ON-SITE SCREENING	RECOVERY	PID (ppm) Spoon/JM	SOIL/ROCK/DISCHARGE WATER DESCRIPTION	SOIL CLASS	WELL DATA
55	S-4	55-57		1.1/2.0	0.2/0.2	SAND - F.F. TO V.W. SORTED, FRIABLE to loose, non-plastic, STRAT. AS ABOVE BUT w/ REDDISH BROWN OILY 56'; SATURATED	SP/SM	10 15 20 26
						CASING MOVED DOWN ~1' when pulled spoon out @ 55'-57'		
60	S-5	60-62		1.6/2.0	0.0/0.0	FINE SAND - V. WELL SORTED, BROWN, NON-PLASTIC, V. FINE TO FINE, STRATIFIED, DENSE, w/ TR. SILT SIZED GRAYING	SP/SM	7 12 17
						TO LITTLE EVEN THOUGH HAVE APPRECIABLE AMOUNT OF SILT-SIZE FRACTION, THE SOIL IS NON-COHESIVE & GRAY		
65	S-6	65-67		0.9/2.0	0.0/0.0	FINE SAND w/ LENSES OF CLAYEY SILT. SAND AS ABOVE, SILT LENSES SL. PLASTIC, BRN. TO LT. BRN. SAND w/ REDDISH BRN. (OXIDATION) LENSES; SILT LENSES 2mm & OLIVE GRAY	SP/ML	6 6 8 17
70	S-7	70-72		1.5/2.0	0.0/0.0	SAND, F. TO V.F., V. W. SORTED, NON-PLASTIC, DENSE, STRATIFIED; LIGHT GRAY w/ LT. BRN. LENSES.	SP	10 12 13 20
75	S-8	75-77	✓	0.9/2.0	0.0/0.9	SAND - V.F. TO FINE, V. WELL SORTED, NON-PLASTIC, DENSE TO V. DENSE, STRATIFIED; GRAY BRN. TO 76' then Rusty Reddish Brn. to 77'	SP	16 23 31 39
	S-9	77-79	✓	1.0/2.0	0.0/0.2	SAND - AS ABOVE AT 76'-77' - V.F. SAND, V.W. SORTED, STRAT., NON-PLASTIC, DENSE REDDISH BROWN	SP	15 16 25 30
80								BX503175F BX503179F LW 77

SOIL BORING LOG

Study Area: **AOC 50** JCS 12/16/98

Boring No.: **66M-98-31/C**

Client: **USAEC/USACE**

Project No. **8740-02**

Protection: **D**

Contractor: **DL Maher**

Date Started: **12-3-98**

Completed: **12/14/98**

Method: **DRIVE & WASH**

Casing Size: **6" TO 4.5" Then 4" BELOW**

PI Meter: **580 B OVM M00125**

Ground Elev.: _____

Soil Drilled: **99**

Total Depth: **116**

Logged by: **TDL**

Checked by: **JCS**

Below Ground:

Screen: **5 (ft.)**

Riser: **113 (ft.)**

Diam: **2.0 (ID)**

Material: **PVC**

Page **3** of **5**

DEPTH (FT)	SAMPLE NUMBER	SAMPLE DEPTH	ON-SITE SCREENING	RECOVERY	SPERM JAR PID (ppm)	SOIL/ROCK/DISCHARGE WATER DESCRIPTION	SOIL CLASS	WELL DATA
79	S-10	79	BX50377AF	1.0 / 2.0	0.0 / 0.0	SAND - FINE TO V. FINE, V. WELL SORTED, NON-PLASTIC w/ cohesive, V. Dense, STRATIFIED; GRAY BRN. w/ occasional thin (2mm.) Rusty reddish brown lenses, TR. SILT STARTING TO APPEAR	SP TO 1/2" M	19 23 29 33
81	S-11	81	BX50381F	0.5 / 2.0	0.0 / 0.0	SAND - AS ABOVE - BROWN TO LT. YELLOWISH BRN. Browns are low because drove a water sampler first, so the soil is disturbed - water sample not collected at this depth	SP	6 8 10 20
83	S-12	83	BX50383F	1.2 / 2.0	0.0 / 0.0	SAND - AS ABOVE - FINE-TO V. FINE, V. WELL SORTED, NON-COHESIVE, DENSE, STRATIFIED, MICACEOUS; OLIVE BROWN w/ Rusty reddish brown lenses - VERY CONSISTENT	SP	14 17 25 28
85	S-13	85	BX50385F	1.2 / 2.0	0.0 / 0.0	SAND AS ABOVE BUT W/ OUT Rusty brown coloration - ALL OLIVE BROWN	SP	16 18 22 34
87	S-14	87	BX50387F	1.1 / 2.0	0.0 / 0.0	SAND - AS ABOVE TO 87.5' - VERY DENSE, DENSE BRN. w/ SOME Rusty RED LENSES AT TOP - Then ABRUPT Δ TO ILL - GRAVEL & WENTHOLD Rock (30%) w/ SAND, LITTLE SILT, TR. clay V. DENSE, MOTTLED, OLIVE RED, OLIVE BROWN	SP / GM	18 32 67 90

12.8.98

SOIL BORING LOG

Study Area: AOC 50
 Boring No.: GLM-98-31/C ¹⁵ 12/14/98

Client: <u>USAEC/USACE</u>	Project No. <u>8740-02</u>	Protection: <u>D</u>
Contractor: <u>DL Maher</u>	Date Started: <u>12-3-98</u>	Completed: <u>12/14/98</u>
Method: <u>DRIVE & WASH</u>	Casing Size: <u>6" TO 45" Then 4" BELOW</u>	PI Meter: <u>9808 ovrm M00125</u>
Ground Elev.: _____	Soil Drilled: <u>99'</u>	Total Depth: <u>116'</u>
Logged by: <u>TDL</u>	Checked by: <u>JCS</u>	<input checked="" type="checkbox"/> Below Ground:
Screen: <u>S (11.)</u>	Riser: <u>113 (ft.)</u>	Diam: <u>2.0 (ID)</u>
		Material: <u>PVC</u>
		Page <u>4</u> of <u>5</u>

DEPTH (FT)	SAMPLE NUMBER	SAMPLE DEPTH	ON-SITE SCREENING	RECOVERY	SP ₁₀₀ / T ₂₀₀	SOIL/ROCK/DISCHARGE WATER DESCRIPTION	SOIL CLASS	WELL DATA
2-9-98 89	S-15	89'	BX503189F	0.9 / 2.0	0.0 / 0.0	GRAVEL, SAND, SILT MIX FR. CLAY-TILL OLIVE BROWN, MOTTLED; GRAVEL (50%) V. ANGULAR; FINE GRANUL & MAYBE - DK. GRAY - SOIL IS V. DENSE & MOTTLED - NON-PLASTIC <u>TILL</u>	GM 44 48 52 58	
91	S-16	91'	BX503191F	1.0 / 1.8	0.0 / 0.0	AS ABOVE BUT LESS SANDY - C. SAND TO GRAVEL > 70%, V. ANGULAR, BLACK - DK. GRAY ROCK, PINE GRANITE - LOOSE - NOT MUCH GRANULINITY OF SAND & SILT - LOT OF FRAC. ROCK	GM 44 85 115/6	THIS ZONE IS TAKING WATER - LOSING DRILLING WATER IN THE HOLE
93	S-17	93'	BX503193F	1.0 / 1.5	0.0 / 0.0	GRAVEL - TR. FINES - MOSTLY WASHED SAND, C. SAND & GRAVEL - VERY ANGULAR & SHARP - OLIVE TO DARK GRAY - W/ TR. OLIVE BROWN TILL MATERIAL ADHERING TO FEW ROCK FRACS DRILLER SAYS SPOON FEELS LIKE FOLLOWING FRACTURE IN ROCK - NO	GP 85 50 35 40	
14:40 95	S-18	95'	BX503195F	1.0 / 2.0	0.0 / 0.0	AS ABOVE BUT W/ LITTLE MORE ADHESIVE SOIL. WAS ABLE TO COLLECT ANALYTICAL HERE - DARK GRAY ANGULAR GRAVEL - MOSTLY LOOSE, BROKEN ROCK	GP 33 40 37 50	
2-9-98 2-10-98 97	S-19	97'	BX503197F	0.8 / 1.3	0.0 / 0.0	ROCK AS ABOVE & GREENISH GRAY TILL - VERY DENSE TILL GRANULINITY & DARK GRAY, ANGULAR CLEAN GRAVEL - TILL IS SANDY ROCK FLOW - POWDERY & DENSE & WELL GRADED CLAY TO SAND MIX	GM 30 55 100/35	
99		99'						

SOIL BORING LOG

Study Area: AOC 50 JCS 12/16/98
 Boring No.: G6M-98-31/E

Client: <u>USAEC/USACE</u>	Project No. <u>8740-02</u>	Protection: <u>6</u>
Contractor: <u>DL Maher</u>	Date Started: <u>12-3-98</u>	Completed: <u>12/14/98</u>
Method: <u>DRIVE & WASH</u>	Casing Size: <u>4" 6" to 4.5" then 4"</u>	PI Meter: <u>583 B OVM</u>
Ground Elev.: _____	Soil Drilled: <u>99'</u>	Total Depth: <u>116'</u>
Logged by: <u>TDL</u>	Checked by: <u>JCS</u>	<input checked="" type="checkbox"/> Below Ground:
Screen: <u>5</u> (ft.)	Riser: <u>113</u> (ft.)	Diam: <u>2.0</u> (ID)
		Material: <u>PVC</u>
		Page <u>5</u> of <u>5</u>

10-98
11-98

DEPTH (FT)	SAMPLE NUMBER	SAMPLE DEPTH	ON-SITE SCREENING	RECOVERY	PID (ppm)	SOIL/ROCK/DISCHARGE WATER DESCRIPTION	SOIL CLASS	WELL DATA
99	S-20	99	BX50399F	0.3 0.4	0.0 0.0	TILL - greenish GRAY TO LT GRAY SILT w/ LITTLE CLAY & SAND; SAND IS COARSE & ANGULAR & GRADES TO FINE GRAVEL; SILT FRACTION IS V. DENSE w/ TR. BRIGHT YELLOW OXIDATION IN ONE SPOT - A VERY DENSE TILL - SPUN ALSO INTO CLEAN, WASHED, FINE GRAVEL FROM 3000 RPM	GC	120/52
101		101				Top of bedrock @ 99.5' bgs		
103						Bedrock core samples collected from 101' to 116' bgs (see rock core logs for description)		
105						Bottom of boring 116' bgs See well installation diagram		

ROCK CORING LOG

Project: Devens - RFTA 66M-98-31XC YS 12/11/98		Study Area: FAC 50		Project No. 8740-02
Client: USAEC	Driller's Name: BILL BURNS	Logged by: TDL	Checked by: JCS	Ground Elev.:
Drilling Contractor: D.L. MAHER	Protection Level: D	Rig Type: GP-660C	Start Date: 12-3-98	Finish Date: 12/14/98
Drilling Method: DRIVE WASH TO ROCK THEN CORE		P.I.D. (eV):	Casing Size:	Auger Size:

Bit type/size: NX - IMPREGNATED	Bit Use:	Core interval (to/from)(ft): 101' to 116'	T.D. = 116' bgs.
--	----------	--	-------------------------

Depth (feet) Below GRD Surf.	Sample No. & Penetration/ Recovery (feet)	Number of Circulating Breaks / FE.	Natural Core Breaks		Type/Dip	Surface Condition	Weathered Condition	Rock Quality			Drilling Rate min/ft	Color	Rock Description and Comments on Drilling
			✓ = Natural	x = Mechanical				Total Core	RQD (%)	Rock Quality Description			
101	RUN-1 (R-1) DRILLED 10' - RECOVERED 10'	4	3=x	1=✓						7		<p>Rock is quite broken & has 24 breaks in 10' (AVE. 2.4/ft.) BUT ARE INTERPRETED AS MECHANICAL BREAKS DUE TO DRILLING. RQD IS EX. BUT ROCK TENDS TO BREAK EASILY (WEAK) ALONG APPARENT BEDDING - WATER TENDS TO PERSIST ON DRIED CORE ALONG MICRO-FRACTURES ALONG BEDDING PLANES; INDICATES SOME (BUT V. LITTLE) POROSITY/PERMEABILITY. Rock is DARK COLORED, FINE-GRAINED & LAYERED - EXHIBITS BEDDING - AND HAS BRECCIATED SECTIONS RE-HEALED w/ WHITE CALCITE/QTZ. HAS SOME OLIVE GREEN CALCITE & FINE-GRAINED PYRITE ALONG THESE RE-HEALED FACES.</p> <p>META-SEDIMENT BEDDING ≈ 25° FROM HORIZONTAL</p>	
102		2		ALL X						10			
103		4		X							11		
104		3		X							9		
105		1		X							8		
106		1		X							8		
107		2		X							10		
108		4		X							7		
109		2		X							7		
110		1		X							8		
111	RUN-2 (R-2) DEMONSTRATED REE-5'	1		X							9	<p>SAME AS R-1 VEINING & BIRGIN SWARM AT 113' TO 114.5' - ALL RE-HEALED</p> <p>113' TO 115' HAS NUMEROUS THIN MICRO-FRACTURES THAT HOLD WATER WHEN REST OF CORE HAS DRIED.</p>	
112		3		X							7		
113		0		X							7		
114		4		X							7		
115		0		-							7		

SOIL BORING LOG

Study Area: AOC 50
 Boring No.: GLEM-98-32X
 Protection: Mod D
 Completed: 12/2/98
 PI Meter:
 Total Depth: 135'
 Below Ground:
 Page 1 of: 1

Client: USAEC/USACE Project No. 8740-02
 Contractor: DL Maher Date Started: 11/23/98
 Method: D&W Casing Casing Size: 4.0" ID
 Ground Elev.: Soil Drilled: 135'
 Logged by: G. Hamilton Checked by: J. Swauden
 Screen: 5 (ft.) Riser: 132 (ft.) Diam: 2.0 (ID) Material: PVC

DEPTH (FT)	SAMPLE NUMBER	SAMPLE DEPTH	ON-SITE SCREENING	RECOVERY	PID (ppm)	SOIL/ROCK/DISCHARGE WATER DESCRIPTION	SOIL CLASS	WELL DATA
						<p>Boring was advanced to 135'. One soil sample was collected from 130'-132' for off-site laboratory analysis.</p> <p>A monitoring well was installed at 135' to replace XSA-97-46X. See well installation diagram for details.</p> <p>See boring log for GLEM-97-29X for soil descriptions.</p>		

SOIL BORING LOG

Study Area: AOC 50

Boring No.: G6M-98-33X

Client: USAEC/USACE

Project No. 8740-02

Protection: Modified D

Contractor: DL Maher

Date Started: 11/20/98

Completed: 11/23/98

Method: Hollow Stem Auger

Gaging Size: Auger size: 4 1/4" ID

PI Meter: TE-580 B

Ground Elev.:

Soil Drilled: 45' then filled sand to 41.2'

Total Depth: 41.2' mp 11/23/98

Logged by: MJP

Checked by:

Below Ground: 36' bgs 35' 2' bgs

Screen: (ft.) Riser: (ft.) Diam: (ID) Material:

Page 1 of 3

DEPTH (FT)	SAMPLE NUMBER	SAMPLE DEPTH	ON-SITE SCREENING	RECOVERY	PID (ppm)	(0-2') SOIL/ROCK/DISCHARGE WATER DESCRIPTION	SOIL CLASS	WELL DATA
0	S-1	0-2	No	100%	0	Top 0.4' dk organic soil, silty sand, fines >12%, soft, contains organics, (grass, weed), dk brown, moist (recent rains) Sim-MC then abrupt contact into coarse sand, clean, fill material,	1 3 5 7	
2								
4						5-7' sand, v.f. clean, uniform color, yellow tan, firm, dry, <5% fines, SW	5 4 5 7	
5	S-2	5-7		114/2.0	0			
6								
7								
8								
10	S-3	mp 10-12		114/2.0	0	10-12', sand, v.f., similar to above no change in color, firm, dry, <5% fines SW	4 5 8 10	
12								
14								
15								
16	S-4	15-17		1.3/2.0	0	15-17' Top 0.1' wf. sand, ashlike, white, few rounded gravel, <5% gravel rounded, poorly graded, SP then sand, med. grained, well graded, dry, med. dense, Fe-staining w/ trace organics SW	4 5 8 12	
17								
18								

SOIL BORING LOG

Study Area: AOC 50

Boring No.: 66M-98-33X

Client: USAEC/USACE

Project No. 8740-02

Protection: Modified D

Contractor: DL Maher

Date Started: 11/20/98

Completed: 11/23/98

Method: Hollow Stem Auger

Casing Size: Auger Size: 4 1/4" ID

PI Meter: TE-580 B

Ground Elev.: _____

Soil Drilled: 45' then filled sand to 41.2'

Total Depth: 41.2' 31' MP

Logged by: MJP

Checked by: _____

Below Ground: 38' Bgs 35' 2 bgs MP 11/23/98

Screen: (ft.) Riser: (ft.) Diam: (ID) Material: _____

Page 2 of: 3

DEPTH (FT)	SAMPLE NUMBER	SAMPLE DEPTH	ON-SITE SCREENING	RECOVERY	PID (ppm)	SOIL/ROCK/DISCHARGE WATER DESCRIPTION	SOIL CLASS	Blows/6inches	WELL DATA
20	S-5	20-22	No	1.2	0	20-22' Top 0.5' med grained sand, similar as above then 0.3' Coarse sand, <5% fines, trace of gravel, dia. 0.01-0.03' then 0.4' of sand, med grained, similar as the top 0.5' section.		5 7 9 10	
22		22		2.0					
24	S-6	25-27		1.1	0	25-27' top 0.2' sand, med grained, similar as above then silty sand, saturated, dk. brown, Fe stains evident, 0.7' thick, then sand, med grained, similar as top 0.2', dry, Fe staining.	dry	3 5 10 12	Note: Perched water table (3 zones)
26		27		2.0					
28	S-7	30-32		1.3	0	30-32' Sand, fine, med brown, organics, well graded, damp, 0.1' thick, then (0.2') thick clay layer, silty, then saturated @ 31', sand, fine grained, clean, tan, abundant Fe-staining, H ₂ O table @ 31'.		4 9 10 12	Collect offsite EPH, VPH sample
30		32		2.0					
32	S-8	35-37		1.5		35-37' sand, fine, med brown, well graded, saturated, some few bands Fe staining.		1 3 5 5	Collect offsite EPH/VPH sample
34		37		2.0					
36									
38									

top of casing
248.32
MMSL

* Water table @ 31' according to the soil sampling
Will drill to 37' so that screen sits
6' below H₂O table -
in

SOIL BORING LOG

Study Area: AOC 50
 Boring No.: G6M-98-33X
 Protection: Modified D
 Completed: 11/23/98
 PI Meter: TE5800
 Total Depth: 41.2'
 Below Ground: 35.2' bgs
 Page 3 of: 3

Client: USAEC/USACE Project No. 8740-02
 Contractor: DL Maher Date Started: 11/20/98
 Method: Hollow Stem Auger Casing Size: Auger size: 4 1/4" ID
 Ground Elev.: _____ Soil Drilled: 45', then filled sand to 41.2'
 Logged by: MJP Checked by: _____

Screen: (ft.) Riser: (ft.) Diam: (ID) Material:

DEPTH (FT)	SAMPLE NUMBER	SAMPLE DEPTH	ON-SITE SCREENING	RECOVERY	PID (ppm)	SOIL/ROCK/DISCHARGE WATER DESCRIPTION	SOIL CLASS	WELL DATA
40	S-9	40	No	1.7	0	40-42' Sand, fine, 5-12% fines, Saturated, firm, Fe-banding throughout, well graded. (SW SM)	4557	
42		42		2.0				
44								
45	S-10	45		1.6	0	45-47' Sand, fine to med, 5% fines, Saturated, firm, some Fe-banding, well graded (SW)		
46		47		2.0				
47								
48								

END BORING @ 42' For today will continue Monday 11/23/98
 Continue 11/23/98
 Lost Spill + Spinn

OTHER

Boring #: HA-1 Project: FORT DEVENS WASTEWATER Project #: 10884-044
Project Address: City: FORT DEVENS State: MA Zip: --
Date Start: 06/27/95 Date End: 07/05/95 Location: See Plan

Casing TYPE: H-S-A Sampler S/S SIZE: 4 1/4 in. I.D. Casing TYPE: H-S-A Sampler S/S SIZE: 4 1/4 in. I.D.
HAMMER: 140 lbs. FALL: 30 in. 1 3/8 in. I.D.

GROUND WATER OBSERVATION

DATE: 06/27/95 DEPTH: 69' CASING: OUT STABILIZATION PER.: Upon Completion

DP.	S./#	DEPTH	PEN	REC	BLOWS/6"	ST/CH	SAMPLE DESCRIPTION
-	S-1	0"-2'	24"	10"	2-3 4-5	4'	Loose, brown silty fine SAND, trace fine gravel, trace coarse to medium sand. -GRANULAR FILL-
5'	S-2	5'-7'	24"	15"	10-12 8-7		Medium dense, brown medium to fine SAND, little fine gravel, trace coarse sand, trace silt. -GLACIAFLUVIAL DEPOSIT-
-	S-3	10'-12'	24"	9"	10-12 14-10		Medium dense, brown coarse to fine SAND, little fine gravel.
15'	S-4	15'-17'	24"	10"	9-11 13-13		Medium dense, brown coarse to fine SAND, little fine gravel.
20'	S-5	20'-22'	24"	10"	5-7 12-14		Medium dense, brown coarse to fine SAND, little fine gravel. -GLACIOFLUVIAL DEPOSITS-
25'	N/R	25'-27'	0"	0"	22-16 15-19		No recovery
30'	S-6	30'-32'	24"	2"	9-9 9-9	Medium dense, brown coarse to fine SAND, little coarse to fine gravel	

DRILLER: J.Garside HELPER: M.Thompson INSPECTOR: J.Bode

MARKS: Page 1 of 6.

Boring #: HA-1 Project: FORT DEVENS WASTEWATER Project # : 10884-C
Project Address: City: FORT DEVENS State: MA Zip: - -
Date Start: 06/27/95 Date End: 07/05/95 Location: See Plan

Casing Sampler Casing Sampler
TYPE : H-S-A S/S SIZE: 4 1/4 in. I.D. 1 3/8 in. I.D.
HAMMER: 140 lbs. FALL: 30 in.

GROUNDWATER OBSERVATION

DATE DEPTH CASING STABILIZATION PER.
06/27/95 69' OUT Upon Completion

DP.	S./#	DEPTH	PEN	REC	BLOWS/6"	ST/CH	SAMPLE DESCRIPTION
35'	S-7	35'-37'	24"	6"	9-10 7-8		Medium dense, brown fine SAND, trace coarse to medium sand, silt -GLACIOFLUVIAL DEPOSITS-
40'	S-8	40'-42'	24"	15"	12-17 18-9		Dense, brown medium to fine SAND
45'	S-9	45'-47'	24"	7"	9-13 15-16		Medium dense, brown medium to fine SAND, trace coarse sand, trace silt.
50'	S-10	50'-52'	24"	8"	14-19 22-30	50'	Dense gray brown fine SAND, little silt in frequent partings, trace coarse to medium sand.
55'	S-11	55'-57'	24"	12"	18-24 29-21		Dense, gray brown fine SAND, little silt, trace coarse to medium sand.
60'	S-12	60'-62'	24"	15"	27-24 37-35		Very dense, gray brown fine SAND, trace silt in occasional partings.

DRILLER: J.Garside HELPER: M.Thompson INSPECTOR: J.Bode

REMARKS: Page 2 of 6.

ing #:HA-1 Project:FORT DEVENS WASTEWATER Project # : 10884-044
Project Address: City:FORT DEVENS State:MA Zip:--
Date Start:06/27/95 Date End:07/05/95 Location:See Plan

Casing Sampler Casing Sampler
TYPE :H-S-A S/S SIZE:4 1/4 in. I.D. 1 3/8 in. I.D.
HAMMER: 140 lbs. FALL: 30 in.

GROUNDWATER OBSERVATION

DATE 06/27/95 DEPTH 69' CASING OUT STABILIZATION PER. Upon Completion

DP.	S./#	DEPTH	PEN	REC	BLOWS/6"	ST/CH	SAMPLE DESCRIPTION
65'	S-13	65'-67'	24"	15"	15-15 17-19		Dense, gray brown fine SAND, trace silt.
	S-14	70'-72'	24"	12"	13-17 18-24		Dense, gray brown fine SAND, trace silt. -GLACIOFLUVIAL DEPOSITS-
75'	S-15	75'-77'	24"	2"	17-15 17-18		Dense, gray brown fine SAND.
80'	S-16	80'-82'	24"	15"	22-25 32-28	79'	Very dense, brown occasionally stratified fine SAND, little fine gravel, trace coarse to medium sand. -GLACIOFLUVIAL DEPOSITS-
85'	S-17	85'-87'	24"	6"	33-38 40-37		Very dense, brown coarse to fine SAND, little fine gravel, little silt with cobbles. -GLACIOFLUVIAL DEPOSITS-
90'	N/R	90'-92'	0"	0"	22-31 25-25	90'	No recovery

DRILLER: J.Garside HELPER:M.Thompson INSPECTOR: J.Bode

MARKS: Page 3 of 6.

Boring #: HA-1 Project: FORT DEVENS WASTEWATER Project # : 10884-r
Project Address: City: FORT DEVENS State: MA Zip: --
Date Start: 06/27/95 Date End: 07/05/95 Location: See Plan

Casing Sampler Casing Sampler
TYPE : H-S-A S/S SIZE: 4 1/4 in. I.D. 1 3/8 in. I.D.
HAMMER: 140 lbs. FALL: 30 in.

GROUNDWATER OBSERVATION

DATE DEPTH CASING STABILIZATION PER.
06/27/95 69' OUT Upon Completion

DP.	S./#	DEPTH	PEN	REC	BLOWS/6"	ST/CH	SAMPLE DESCRIPTION
95'	S-18	95'-97'	24"	5"	23-24 28-33		Very dense, brown fine SAND, trace coarse to medium sand.
100'	S-19	100'-102'	24"	16"	13-27		Very dense, brown fine SAND.
105'	S-20	105'-107'	24"	10"	30-49 58-54		Very dense, brown fine SAND, little laminated silt in frequent layers, trace medium sand, trace clay in occasional varve.
110'	S-21	110'-112'	24"	9"	30-46 51-51		Very dense brown silty fine SAND.
115'	S-22	115'-117'	24"	6"	21-29 30-30		Very dnese brown fine SAND, trace silt.
120'	S-23	120'-122'	24"	16"	29-41 42-46		Very dense, brown fine SAND, little silt in occasional layer.

DRILLER: J.Garside HELPER: M.Thompson INSPECTOR: J.Bode

REMARKS: Page 4 of 6.

ring #:HA-1 Project:FORT DEVENS WASTEWATER Project # : 10884-044
Project Address: City:FORT DEVENS State:MA Zip: -
Date Start:06/27/95 Date End:07/05/95 Location:See Plan

Casing Sampler Casing Sampler
TYPE :H-S-A S/S SIZE:4 1/4 in. I.D. 1 3/8 in. I.D.
HAMMER: 140 lbs. FALL: 30 in.

GROUNDWATER OBSERVATION

DATE DEPTH CASING STABILIZATION PER.
06/27/95 69' OUT Upon Completion

DP.	S./#	DEPTH	PEN	REC	BLOWS/6"	ST/CH	SAMPLE DESCRIPTION
-							
-							
-							
125'	S-24	125'-127'	24"	10"	30-42 48-47		Very dense, brown fine SAND, trace silt.
-							
-							
-							
130'	S-25	130'-132'	24"	13"	30-45 50-52		Very dense, brown fine SAND,
-							
-							
135'	S-26	135'-137'	24"	10"	34-53 63-45		Very dense, brown fine SAND.
-							
-							
140'	S-27	140'-142'	24"	16"	37-47 64-65		Very dense, brown fine SAND, little silt.
-							
-							
145'	S-28	145'-147'	24"	12"	28-48 49-55		Very dense brown fine SAND, trace silt.
-							
-							
150'	S-29	150'-152'	24"	15"	26-39 42-48		Very dense, brown fine SAND, trace silt.

DRILLER: J.Garside HELPER:M.Thompson INSPECTOR: J.Bode

MARKS: Page 5 of 6.

Boring #: HA-1 Project: FORT DEVENS WASTEWATER Project # : 10884-0
Project Address: City: FORT DEVENS State: MA Zip: --
Date Start: 06/27/95 Date End: 07/05/95 Location: See Plan

Casing Sampler Casing Sampler
TYPE : H-S-A S/S SIZE: 4 1/4 in. I.D. 1 3/8 in. I.D.
HAMMER: 140 lbs. FALL: 30 in.

GROUND WATER OBSERVATION

DATE DEPTH CASING STABILIZATION PER.
06/27/95 69' OUT Upon Completion

DP.	S./#	DEPTH	PEN	REC	BLOWS/6"	ST/CH	SAMPLE DESCRIPTION
155'	S-30	155'-157'	24"	4"	23-39 63-70		Very dense, gray brown fine SAND, trace silt. NOTE: Loosing all water below 162.5'. No water return from casing. Drill action indicates weathered and fractured bedrock.
160'						162.5	Top of probable bedrock.
165'	S-31	165'-166'	24"	2"	70-100		Very dense, dark gray black coarse to fine SAND, little fine gravel, little silt, sample appears to be slightly decomposed and weathered bedrock. Bottom of exploration at 166'. Installed 2" monitoring well at 160.5'
170'							
175'							
180'							

DRILLER: J.GARSDIE HELPER: M.THOMPSON INSPECTOR: J.BODE

REMARKS: PAGE 6 OF 6.

ing #:HA-2 Project:FORT DEVENS WASTEWATER Project # : 10884-044
Project Address: City:FORT DEVENS State:MA Zip:-
Date Start:07/11/95 Date End:07/12/95 Location:See Plan

Casing Sampler Casing Sampler
TYPE :H-S-A S/S SIZE:4 1/4 in. I.D. 1 3/8 in. I.D.
HAMMER: 140 lbs. FALL: 30 in.

GROUND WATER OBSERVATION

DATE DEPTH CASING STABILIZATION PER.
07/11/95 8.5' OUT Upon Completion

DP.	S./#	DEPTH	PEN	REC	BLOWS/6"	ST/CH	SAMPLE DESCRIPTION
5'	S-1	5'-7'	24"	20"	4-3 2-2		Loose gray, brown fine sandy SILT, trace root fibers. -ALLUVIAL DEPOSITS-
	S-2	9'-11'	24"	15"	7-12 7-10		Medium dense, gray dark brown silty fine SAND, trace root fibers
15'	S-3	14'-16'	24"	12"	9-16 21-16	12'	Dense, dark brown fine gravelly coarse to fine SAND, trace silt with cobbles. -GLACIOFLUVIAL DEPOSITS-
20'	S-4	19'-21'	24"	3"	15-15 10-11		Medium dense, dark brown fine gravelly coarse to fine SAND, trace silt with cobbles.
25'	S-5	24'-26'	24"	5"	4-11 17-30		Medium dense dark brown coarse to fine SAND, little fine gravel with occasional cobble.
30'	S-6	29'-31'	24"	2"	6-10 11-6		Medium dense dark brown coarse to fine sandy, fine GRAVEL, with cobbles.

DRILLER: J.Garside HELPER:M.Thompson INSPECTOR: J.Bode

Boring #: HA-2 Project: FORT DEVENS WASTEWATER Project # : 10884- 4
Project Address: City: FORT DEVENS State: MA Zip: -
Date Start: 07/11/95 Date End: 07/12/95 Location: See Plan

Casing Sampler Casing Sampler
TYPE : H-S-A S/S SIZE: 4 1/4 in. I.D. 1 3/8 in. I.D.
HAMMER: 140 lbs. FALL: 30 in.

G R O U N D W A T E R O B S E R V A T I O N

DATE DEPTH CASING STABILIZATION PER.
07/11/95 8.5' OUT Upon Completion

DP.	S./#	DEPTH	PEN	REC	BLOWS/6"	ST/CH	SAMPLE DESCRIPTION
-							-GLACIALFLUVIAL DEPOSITS-
35'	S-7	34'-36'	24"	8"	7-15 17-20		Dense, brown FINE GRAVEL, little coarse to fine sand.
40'	S-8	39'-41'	24"	12"	16-15 21-16		Dense, brown fine GRAVEL, little coarse to fine sand, trace silt with cobbles.
45'	S-9	44'-46'	24"	12"	10-26 16-8		Dense, brown coarse to fine sandy fine GRAVEL with cobbles.
50'	S-10	49'-51'	24"	4"	8-10 12-11		Medium dense, brown fine gravelly coarse to fine SAND with cobbles.
55'	S-11	54'-56'	24"	10"	11-9 9-10		Medium dense, brown coarse to fine SAND, little fine gravel.
60'	S-12	59'-61'	24"	8"	6-8 10-12		Medium dense, brown coarse to fine SAND, little fine gravel.

DRILLER: J.Garside HELPER: M.Thompson INSPECTOR: J.Bode

REMARKS: Page 2 of 3.

ing #:HA-2 Project:FORT DEVENS WASTEWATER Project # : 10884-044
Project Address: City:FORT DEVENS State:MA Zip:--
Date Start:07/11/95 Date End:07/12/95 Location:See Plan

Casing Sampler Casing Sampler
TYPE :H-S-A S/S SIZE:4 1/4 in. I.D. 1 3/8 in. I.D.
HAMMER: 140 lbs. FALL: 30 in.

GROUNDWATER OBSERVATION

DATE DEPTH CASING STABILIZATION PER.
07/11/95 8.5' OUT Upon Completion

DP.	S./#	DEPTH	PEN	REC	BLOWS/6"	ST/CH	SAMPLE DESCRIPTION
65'	N/R	64'-66'	24"	0"	11-11 11-11	63'	No recovery.
	S-13	69'-71'	24"	10"	6-12 18-26		Medium dense, brown fine SAND, trace coarse to medium sand.
75'	S-14	74'-76'	24"	4"	5-6 10-10		Medium dense, brown fine SAND.
80'	N/R	80'-82'	24"	0"	12-15 38-45	79'	NOTE: Drill action indicates change at 79' from fine sand to a coarser material. Sampled from 80'-82', spoon broke off of rods and stayed down borehole. Bottom of exploration at 82'. Well installed at 79'.
85'							
90'							

DRILLER: J.Garside HELPER:M.Thompson INSPECTOR: J.Bode

MARKS: Page 3 of 3.

Core #: HA-3 Project: FORT DEVENS WASTEWATER Project # : 10884-044
Project Address: City: FORT DEVENS State: MA Zip: --
Date Start: 07/18/95 Date End: 07/20/95 Location: See Plan

Casing TYPE : H-S-A Sampler S/S Casing SIZE: 4 1/4 in. I.D. Sampler 1 3/8 in. I.D.
HAMMER: 140 lbs. FALL: 30 in.

GROUNDWATER OBSERVATION
DATE: 07/20/95 DEPTH: 24.6' CASING: OUT STABILIZATION PER.: Upon Completion

DP.	S./#	DEPTH	PEN	REC	BLOWS/6"	ST/CH	SAMPLE DESCRIPTION
-	S-1	0"-2'	24"	13"	4-9 9-21	1"	Brown FOREST MAT/MOSS S-1: Medium dense, brown coarse to fine SAND, little coarse to fine gravel, roots.
5'	S-2	5'-7'	24"	16"	16-24 34-20		S-2: Very dense brown coarse to fine gravelly coarse to fine SAND.
-	S-3	10'-11'	24"	12"	6-9	11'	S-3: Medium dense tan medium to fine SAND, trace silt.
-	S-3A	11'-12'			13-17		S-3A: Medium dense tan coarse to fine SAND, trace silt.
15'	S-4	14'-16'	24"	11"	9-19 19-28		S-4: Dense brown, coarse to fine gravelly coarse to fine SAND, trace silt. -GLACIOFLUVIAL DEPOSITS-
20'	S-5	19'-20'	24"	11"	20-29	20'	S-5: Dense brown coarse to fine gravelly coarse to fine SAND, trace silt.
-	S-5A	20'-21'			26-26		Top of bedrock at 20'. S-5A: Dense grey weathered rock.
25'	C-1	23.5'-28.5'	60"	57"	11min/ft 10min/ft 9 min/ft 9 min/ft 10min/ft 8 min/ft 9 min/ft		-WEATHERED BEDROCK- 23': Refusal, could not advance casing. 23.5' - started coring
30'	C-2	28.5'-33.5'	60"	60"	7 min/ft		See Next Page for Rock Description.

DRILLER: M.D'Ambrosio HELPER: S.Garside INSPECTOR: L.Gaskins

REMARKS: Page 1 of 2.

Boring #:HA-3 Project:FORT DEVENS WASTEWATER Project # : 01884-
Project Address: City:FORT DEVENS State:MA Zip:-
Date Start:07/18/95 Date End:07/20/95 Location:See Plan

Casing Sampler Casing Sampler
TYPE :H-S-A S/S SIZE:4 1/4 in. I.D. 1 3/8 in. I.D.
HAMMER: 140 lbs. FALL: 30 in.

GROUNDWATER OBSERVATION

DATE DEPTH CASING STABILIZATION PER.
07/20/95 24.6' OUT Upon Completion

DP.	S./#	DEPTH	PEN	REC	BLOWS/6"	ST/CH	SAMPLE DESCRIPTION
-					7 min/ft		Hard to moderately hard, fresh, gray, fine-grained to aphanitic SCHIST, foliation thin to extremely thin, horizontal to moderately dipping, frequently undetectable. Joints parallel to foliation moderately close to extremely close, smooth to rough, planar, fresh to discolored, open. Occasional thin calcite veins dipping at moderate to high angles.
-					7 min/ft		
-					7 min/ft		
-					30min/ft		
35'	C-3	33.5'-37.5'	48"	48"	8 min/ft		
-					8 min/ft		
-					7 min/ft		
-					12min/ft		
-					8 min/ft		
40'	C-4	37.5'-42.5'	60"	100	7 min/ft		
-					6 min/ft		
-					6 min/ft		
45'							Bottom of exploration at 42.5' Well installed at 42.5'
-							
-							
-							
50'							
-							
-							
-							
55'							
-							
60'							

DRILLER: M.D'Ambrosio HELPER:S.Garside INSPECTOR: L.Gaskins

REMARKS: Page 2 of 2.

Boring #: HA-4 Project: FORT DEVENS WASTEWATER Project #: 10884-044
Project Address: City: FORT DEVENS State: MA Zip: --
Date Start: 07/18/95 Date End: 07/18/95 Location: See Plan

Casing TYPE: H-S-A Hammer: Sampler S/S 140 lbs. Casing SIZE: 4 1/4 in. I.D. FALL: Sampler 1 3/8 in. I.D. 30 in.

GROUNDWATER OBSERVATION

DATE: 07/18/95 DEPTH: 22.9' CASING: 24' STABILIZATION PER. Borehole at 26'

DP.	S./#	DEPTH	PEN	REC	BLOWS/6"	ST/CH	SAMPLE DESCRIPTION
-	S-1	0"-2'	24"	7"	4-14 20-26		Dense, brown coarse to fine SAND, little coarse to fine gravel, tr. silt, roots, with cobbles. -GRANULAR FILL-
5'	S-2	5'-7'	24"	6"	6-7 5-7		S-2: Medium dense brown coarse to fine SAND, little coarse to fine gravel, little silt.
	S-3	10'-10.5'	24"	14"	4-4	10.5'	S-3: Loose, brown coarse to fine SAND, little coarse to fine gravel little silt.
	S-3A	10.6'-12'			6-8		S-3A: Medium dense, tan faintly stratified fine SAND.
15'	S-4	14'-16'	24"	9"	7-10 12-13		S-4: Medium dense tan faintly stratified fine SAND, trace silt.
20'	S-5	19'-21'	24"	6"	7-10 10-12		S-5: Medium dense, tan coarse to fine SAND, trace silt. -GLACIOFLUVIAL DEPOSITS-
25'	S-6	24'-26'	24"	5"	8-6 7-8	23'	S-6: Medium dense, brown sandy coarse to fine GRAVEL, trace silt. -GLACIOFLUVIAL DEPOSITS- Bottom of exploration at 26'.
30'							

DRILLER: M.D'Ambrosio HELPER: S.Garside INSPECTOR: B.Miller

REMARKS: NOTE: Borehole grouted upon completion.

Ring #: HA-5 Project: FORT DEVENS WASTEWATER Project # : 10884-044
Project Address: City: FORT DEVENS State: MA Zip: -
Date Start: 07/10/95 Date End: 07/11/95 Location: See Plan

Casing Sampler Casing Sampler
TYPE : H-S-A S/S SIZE: 4 1/4 in. I.D. 1 3/8 in. I.D.
HAMMER: 140 lbs. FALL: 30 in.

GROUNDWATER OBSERVATION

DATE DEPTH CASING STABILIZATION PER.
07/11/95 36' 49' Borehole at 50.5'

DP.	S./#	DEPTH	PEN	REC	BLOWS/6"	ST/CH	SAMPLE DESCRIPTION
5'	S-1	5'-7'	24"	20"	4-5 9-8		Medium dense, light brown fine SAND, trace fine gravel, coarse to medium sand. -GLACIALFLUVIAL DEPOSITS-
10'	S-2	10'-12'	24"	15"	5-8 10-7		Medium dense brown coarse to fine SAND, little fine gravel in occasional layer.
15'	S-3	15'-17'	24"	10"	7-5 6-8		Medium dense, brown medium to fine SAND.
20'	S-4	20'-22'	24"	8"	9-8 23-37		Dense, brown, fine SAND, little fine gravel, trace coarse to medium sand with occasional cobble -GLACIOFLUVIAL DEPOSITS-
25'	S-5	25'-27'	24"	10"	11-11 13-12		Medium dense, dark brown coarse to fine SAND, little fine gravel, little silt with cobbles.
30'	S-6	30'-32'	24"	10"	15-21 21-29		Dense, brown fine SAND. -GLACIOFLUVIAL DEPOSITS-

DRILLER: M.D'Ambrosio HELPER: S.Garside INSPECTOR: J.Bode

REMARKS: Page 1 of 2.

Boring #: HA-5 Project: FORT DEVENS WASTEWATER Project # : 10884-74
Project Address: City: FORT DEVENS State: MA Zip: -
Date Start: 07/10/95 Date End: 07/11/95 Location: See Plan

Casing Sampler Casing Sampler
TYPE : H-S-A S/S SIZE: 4 1/4 in. I.D. 1 3/8 in. I.D.
HAMMER: 140 lbs. FALL: 30 in.

GROUNDWATER OBSERVATION

DATE DEPTH CASING STABILIZATION PER.
07/11/95 36' 49' Borehole at 50.5'

DP.	S./#	DEPTH	PEN	REC	BLOWS/6"	ST/CH	SAMPLE DESCRIPTION
-							
-							
-							
35'	N/R	35'-37'	24"	0"	22-26 26-28		No recovery.
-							
-							
40'	S-7	40'-42'	24"	24"	11-14 12-12		Medium dense, dark brown fine gravelly coarse to fine SAND, little silt with cobbles.
-							
-							
45'	S-8	45'-47'	24"	12"	13-19 27-38	45'	Very dense, brown silty coarse to fine SAND, little fine gravel with cobbles, well bonded in-situ.
-							
-							
50'							NOTE: Advance roller bit into boulder or bedrock from 48.5' to 51.5'
-							
-							
-							
55'						51.5'	Roller bit refusal at 51.5' in boulder or bedrock.
-							
-							
-							
60'							Borehole grouted upon completion.
-							

DRILLER: M.D'Ambrosio HELPER: S.Garside INSPECTOR: J.Bode

REMARKS: Page 2 of 2.

ring #: HA-6 Project: FORT DEVENS WASTEWATER Project # : 10884-044
Project Address: City: FORT DEVENS State: MA Zip: --
Date Start: 07/20/95 Date End: 07/25/95 Location: See Plan

Casing TYPE : H-S-A Sampler S/S Casing SIZE: 4 1/4 in. I.D. Sampler 1 3/8 in. I.D.
HAMMER: 140 lbs. FALL: 30 in.

GROUNDWATER OBSERVATION

DATE: 07/21/95 DEPTH: 13' CASING: 44' STABILIZATION PER. Borehole at 46'

DP.	S./#	DEPTH	PEN	REC	BLOWS/6"	ST/CH	SAMPLE DESCRIPTION
-	S-1	0"-6"	24"	12"	1-1	.5"	Very loose brown silty medium to fine SAND, roots.
-	S-1A	6"-1'			3-7		
-	S-1B	1'-2'					
5'	S-2	5'-7'	24"	16"	3-6 8-9		Very loose tan faintly stratified medium to fine SAND, little silt. S-1B: LOOSE, tan coarse to fine SAND, trace fine gravel, tr.silt. S-2: Medium dense faintly stratified tan coarse to fine SAND, tr fine gravel, trace silt.
-							
-							
-	S-3	10'-12'	24"	16"	5-10 15-14		-GLACIOFLUVIAL DEPOSITS- S-3: Medium dense tan coarse to medium SAND, little coarse to fine gravel, trace silt. NOTE: Layering of sands and gravel No recovery.
15'	N/R	14'-16'	24"	0"	9-10 11-12		
-							
20'	S-4	19'-21'	24"	8"	6-6 7-7		S-4: Medium dense faintly stratified tan medium to fine SAND, trace silt.
25'	S-5	24'-26'	24"	11"	4-6 6-8		S-5: Medium dense tan medium to fine SAND, trace silt.
30'	S-6	29'-31'	24"	12"	4-5 7-9		S-6: Medium dense tan faintly stratified fine SAND, little silt.

DRILLER: M.D'Ambrosio HELPER: S.Garside INSPECTOR: L.Gaskins

REMARKS: Page 1 of 3.

Boring #: HA-6 Project: FORT DEVENS WASTEWATER Project # : 10884-C
Project Address: City: FORT DEVENS State: MA Zip: -
Date Start: 07/20/95 Date End: 07/25/95 Location: See Plan

Casing TYPE : H-S-A Sampler S/S Casing SIZE: 4 1/4 in. I.D. Sampler 1 3/8 in. I.D.
HAMMER: 140 lbs. FALL: 30 in.

GROUNDWATER OBSERVATION

DATE: 07/21/95 DEPTH: 13' CASING: 44' STABILIZATION PER. Borehole at 46'

DP.	S./#	DEPTH	PEN	REC	BLOWS/6"	ST/CH	SAMPLE DESCRIPTION
-							
35'	S-7	34'-36'	24"	11"	4-5 6-7		S-7: Medium dense stratified tan fine SAND, little silt. -GLACIOFLUVIAL DEPOSITS-
40'	S-8	39'-41'	24"	9"	6-8 10-13		S-8: Medium dense faintly stratified tan medium to fine SAND trace silt.
45'	S-9	44'-46'	24"	10"	5-8 10-13		S-9: Medium dense faintly stratified tan medium to fine SAND, trace silt.
50'	S-10	49'-51'	24"	17"	7-11 23-15		S-10: Dense stratified tan silty coarse to fine SAND, trace coarse fine gravel. NOTE: Fine sand with a 1/2" layer of coarse sand, trace gravel, throughout.
55'	N/R	54'-56'	24"	0"	8-11 12-14		No recovery. -GLACIOFLUVIAL DEPOSITS-
60'	S-11	59'-61'	24"	10"	10-13 8-10		S-11: Med dense, tan brown fine SAND, tr. silt, piece of decomposed fine gravel in middle of sample.

DRILLER: M.D. Ambrosio HELPER: S. Garside INSPECTOR: L. Gaskins

REMARKS: Page 2 of 3.

ing #:HA-6 Project:FORT DEVENS WASTWATER Project # : 10884-044
Project Address: City:FORT DEVENS State:MA Zip:-
Date Start:07/20/95 Date End:07/25/95 Location:See Plan

Casing Sampler Casing Sampler
TYPE :H-S-A S/S SIZE:4 1/4 in. I.D. 1 3/8 in. I.D.
HAMMER: 140 lbs. FALL: 30 in.

GROUNDWATER OBSERVATION

DATE 07/21/95 DEPTH 13' CASING 44' STABILIZATION PER. Borehole at 46'

DP.	S./#	DEPTH	PEN	REC	BLOWS/6"	ST/CH	SAMPLE DESCRIPTION
-	-	-	-	-	-	-	-
65'	S-12	64'-66'	24"	22"	10-12 13-15		Top 12" Medium dense, brown fine SAND. Bottom 10": Medium dense, brown coarse to fine SAND, little fine gravel.
-	S-13	69'-71'	24"	10"	22-28 31-17	69'	S-13: Very dense brown, coarse to fine SAND, little fine gravel, little silt, well bonded in-situ.
75'	S-14	74'-76'	24"	10"	28-32 30-28		S-14: Very dense, tan brown silty coarse to fine SAND, little fine gravel, simi well bonded in-situ.
80'	S-15	79'-81'	24"	15"	20-79 30-52	80'	Top 10": Very dense, brown medium to fine SAND, trace coarse sand. Bottom 5": Very dense, red brown coarse to fine SAND, little fine gravel, trace silt, bottom 5" is piece of decomposed cobble.
85'	S-16	84'-84.5'	6"	4"	96-100/0	84.5'	-GLACIAL TILL DEPOSITS- S-16:Very dense, gray silt, medium to fine SAND, trace fine gravel, well bonded in-situ. Bottom of exploration 84.5' Install observation well at 79'.
90'	-	-	-	-	-	-	-

DRILLER: M.D'Ambrosio HELPER:S.Garside INSPECTOR: L.Gaskins

MARKS: Page 3 of 3.

NEW HAMPSHIRE BORING INC.
P.O. BOX 165
DERRY NH 03038

TEL:-603-437-1610

Boring #: PZ-1 Project: FORT DEVENS WASTEWATER Project # : 10884-044
Project Address: City: FORT DEVENS State: MA Zip: --
Date Start: 07/07/95 Date End: 07/07/95 Location: See Plan

Casing Sampler Casing Sampler
TYPE : H-S-A S/S SIZE: 4 1/4 in. I.D. 1 3/8 in. I.D.
HAMMER: 140 lbs. FALL: 30 in.

GROUNDWATER OBSERVATION

DATE DEPTH CASING STABILIZATION PER.
07/07/95 69' OUT Upon Completion

DP.	S./#	DEPTH	PEN	REC	BLOWS/6"	ST/CH	SAMPLE DESCRIPTION
-							NO SAMPLES REQUIRED IN THIS BORING
-							
-							
-							
20'							-GLACIOFLUVIAL DEPOSITS- Coarse to fine SAND, little fine gravel.
-							
-							
-							
50'							-GLACIALFLUVIAL DEPOSITS- Fine sand.
-							
60'							
-							
-							
-							
75'							Bottom of exploration at 75'. Piezometer installed at 75'.
-							
80'							
-							
-							
100							
-							
-							
120'							
-							

DRILLER: J.Garside HELPER: M.Thompson INSPECTOR: J.Bode

REMARKS:

Boring #:PZ-2 Project:FORT DEVENS WASTEWATER Project # : 10884-011
Project Address: City:FORT DEVENS State:MA Zip:- -
Date Start:07/06/95 Date End:07/06/95 Location:See Plan

Casing Sampler Casing Sampler
TYPE :H-S-A S/S SIZE:4 1/4 in. I.D. 1 3/8 in. I.D.
HAMMER: 140 lbs. FALL: 30 in.

GROUNDWATER OBSERVATION
DATE 07/06/95 DEPTH 68.5' CASING 80' STABILIZATION PER. Borehole at 80'

DP.	S./#	DEPTH	PEN	REC	BLOWS/6"	ST/CH	SAMPLE DESCRIPTION
-							NO SAMPLES REQUIRED
20'							
40'							Coarse to fine SAND, little fine gravel. -GLACIOFLUVIAL DEPOSITS-
60'						50'	
80'						79'	-GLACIOFLUVIAL DEPOSITS-
						90'	Fine sand.
100'						100'	Bottom of exploration at 100' Piezometer installed at 100'
120'							

DRILLER: J.Garside HELPER:M.Thompson INSPECTOR: J.Bode

REMARKS:

Boring #: PZ-3 Project: FORT DEVENS WASTEWATER Project # : 10884-044

Project Address: City: FORT DEVENS State: MA Zip: --

Date Start: 07/11/95 Date End: 07/11/95 Location: See Plan

Casing TYPE : H-S-A Hammer: Sampler S/S 140 lbs. Casing SIZE: 4 1/4 in. I.D. FALL: Sampler 1 3/8 in. I.D. 30 in.

GROUNDWATER OBSERVATION

DATE 07/11/95 DEPTH 11' CASING 15' STABILIZATION PER. Borehole at 15'

DP.	S./#	DEPTH	PEN	REC	BLOWS/6"	ST/CH	SAMPLE DESCRIPTION
-							-ALLUVIAL DEPOSITS-
5'	S-1	5'-7'	24"	10"	11-8 12-16		Medium dense, brown fine sandy SILT, little coarse to medium sand in occasional layer.
10'	S-2	10'-12'	24"	13"	1-1 2-3		Very loose brown fine SAND, trace silt, trace root fibers.
15'	S-3	15'-17'	24"	12"	4-8 10-6	14'	Medium dense, brown coarse to fine SAND, little fine gravel. -ALLUVIAL DEPOSITS- Bottom of exploration at 17'. Installed piezometer at 15'.
20'							
25'							
30'							

DRILLER: M.D'Ambrosio HELPER: S.Garside INSPECTOR: J.Bode

REMARKS:

Boring #:PZ-4 Project:FORT DEVENS WASTEWATER Project # : 10884-001
Project Address: City:FORT DEVENS State:MA Zip:- -
Date Start:07/26/95 Date End:07/26/95 Location:See Plan

Casing Sampler Casing Sampler
TYPE :H-S-A S/S SIZE:4 1/4 in. I.D. 1 3/8 in. I.D.
HAMMER: 140 lbs. FALL: 30 in.

G R O U N D W A T E R O B S E R V A T I O N

DATE DEPTH CASING STABILIZATION PER.

DP.	S./#	DEPTH	PEN	REC	BLOWS/6"	ST/CH	SAMPLE DESCRIPTION
-							
5'	S-1	5'-7'	24"	20"	1-3 2-4		Loose, dense brown SILT, little fine sand, trace root fibers. -ALLUVIAL DEPOSITS-
10'	S-2	10'-12'	24"	24"	1-1 1-2		S-2: Very loose, gray fine SAND. little silt, trace root fibers.
15'	S-3	15'-17'	24"	8"	6-12 24-23	13' 17'	-ALLUVIAL DEPOSITS- S-3: Very dense brown coarse to fine SAND, little fine gravel with cobbles, 2" layer of wood from tree branch in middle of sample. Bottom of exploration at 17'. Install observation well at 15'.
20'							
25'							
30'							

DRILLER: M.D'Ambrosio HELPER:S.Garside INSPECTOR: J.Bode

REMARKS:

ing #:PZ-5 Project:FORT DEVENS WASTEWATER Project # : 10884-044
 Project Address: City:FORT DEVENS State:MA Zip:
 Date Start:07/26/95 Date End:07/26/95 Location:See Plan

Casing Sampler Casing Sampler
 TYPE :H-S-A S/S SIZE:4 1/4 in. I.D. 1 3/8 in. I.D.
 HAMMER: 140 lbs. FALL: 30 in.

GROUNDWATER OBSERVATION

DATE DEPTH CASING STABILIZATION PER.
 07/26/95 22.8' 29' Borehole at 32'

DP.	S./#	DEPTH	PEN	REC	BLOWS/6"	ST/CH	SAMPLE DESCRIPTION
-							of stratified fine sand in nose of spoon.
-							
-							
-							
35'						34'	Bottom of exploration at 34'. Install piezometer at 30'.
-							
-							
-							
45'							
-							
-							
-							
50'							
-							
-							
-							
55'							
-							
-							
-							
60'							

DRILLER: M.D'Ambrosio HELPER:S.Garside INSPECTOR: J.Bode

MARKS: Page 2 of 2.

Boring #: PZ-6 Project: FORT DEVENS WASTEWATER Project #: 10884-C
Project Address: City: FORT DEVENS State: MA Zip: -
Date Start: 07/20/95 Date End: 07/20/95 Location: See Plan

Casing Sampler Casing Sampler
TYPE : H-S-A S/S SIZE: 4 1/4 in. I.D. 1 3/8 in. I.D.
HAMMER: 140 lbs. FALL: 30 in.

GROUNDWATER OBSERVATION

DATE 07/20/95 DEPTH 16.3' CASING OUT STABILIZATION PER. Upon Completion

DP.	S./#	DEPTH	PEN	REC	BLOWS/6"	ST/CH	SAMPLE DESCRIPTION
-	S-1	0"-2'	24"	19"	3-3 3-7	.5"	Topsoil, roots Loose brown silty medium to fine SAND, roots.
5'	S-2	5'-7'	24"	18"	4-7 8-10		.5": Loose red brown silty coarse to fine SAND. S-2: Med.dense, faintly stratified tan coarse to fine SAND, little silt.
10'	S-3	9'-11'	24"	12"	10-13 13-16		-GLACIOFLUVIAL DEPOSITS- S-3: Medium dense stratified brk silty coarse to fine SAND, trace fine gravel.
15'	S-4 S-4A	14'-15.6' 15.6"-16'	24"	13"	6-11 15-18	15.6	NOTE: Thin band of coarse sands in between layers of silty fine sands Also 3 bands of rusted sand. S-4: Medium dense stratified tan medium to fine SAND, little silt. S-4A: Medium dense stratified brown coarse to fine SAND, trace silt.
20'	S-5	20'-22'	24"	5"	12-15 13-10		S-5: Medium dense tan coarse to fine SAND, little coarse to fine gravel, trace silt. Bottom of exploration at 22'. Installed piezometer at 20'.
25'							
30'							

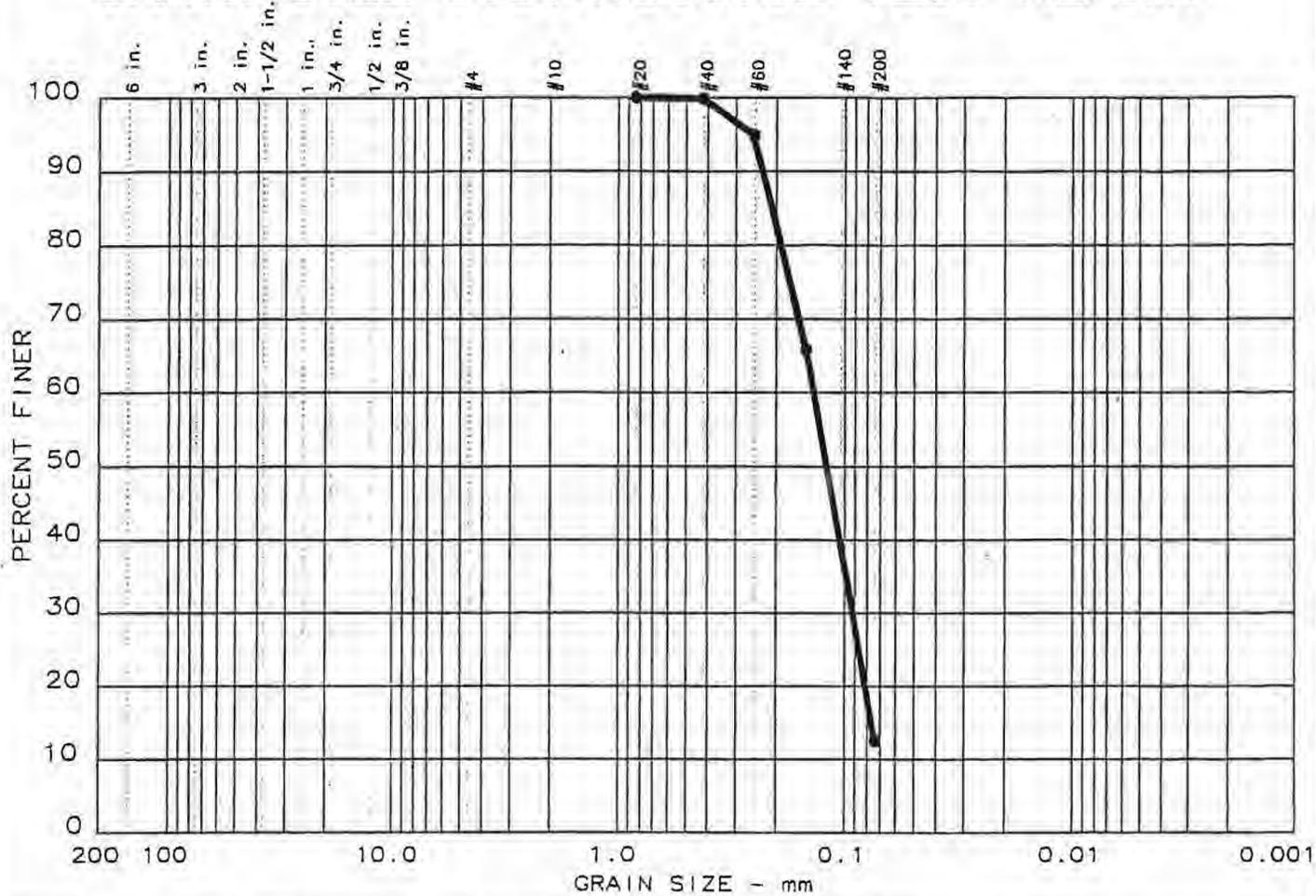
DRILLER: M. D'Ambrósio HELPER: S.Garside INSPECTOR: L. Gaskins

REMARKS:

GEOTECHNICAL DATA

Harding Lawson Associates

GRAIN SIZE DISTRIBUTION TEST REPORT



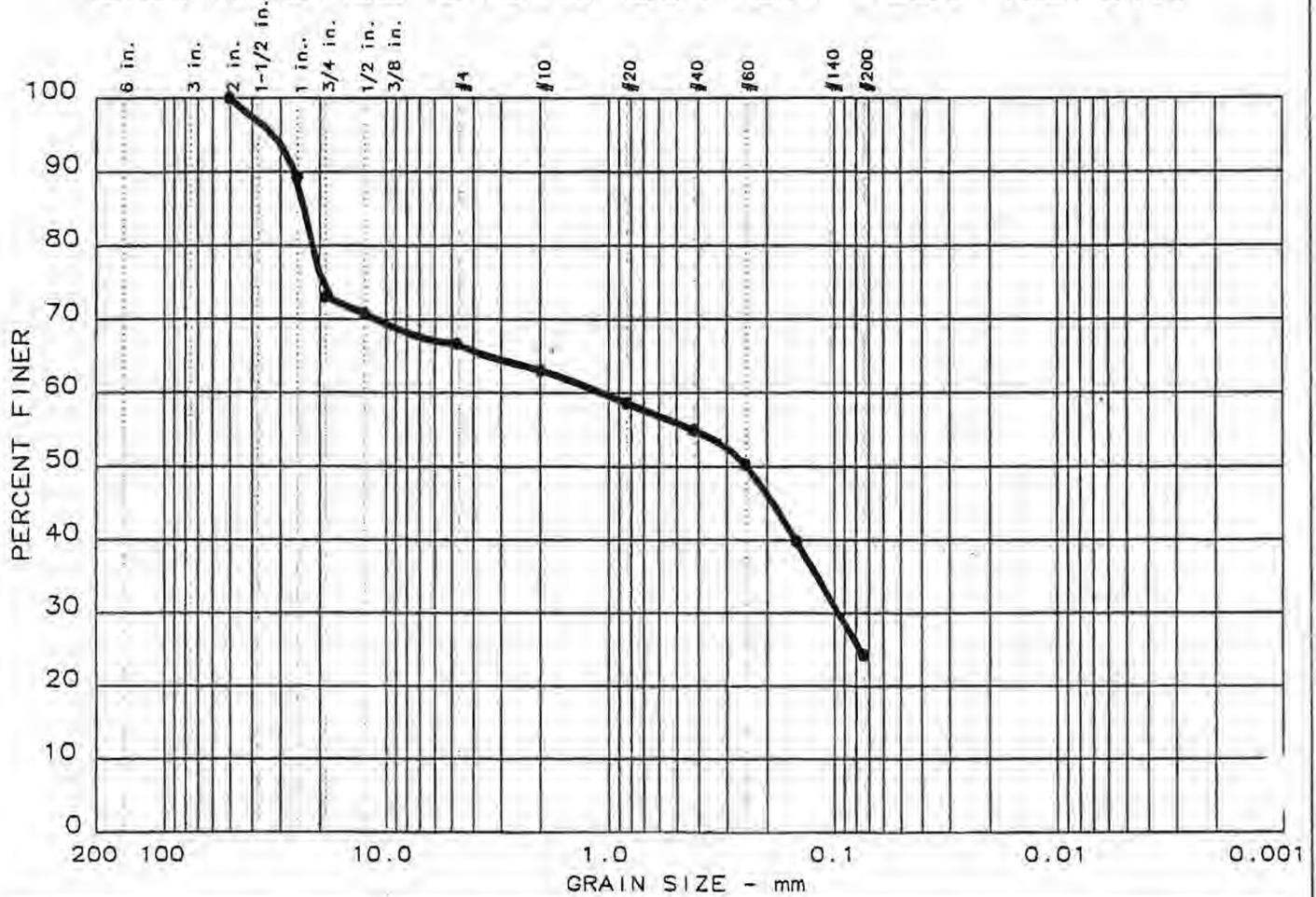
● % +3"	% GRAVEL	% SAND	% FINES
0.0	0.0	87.5	12.5

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
— —	— —	0.21	0.14	0.12	0.092	0.0763			

MATERIAL DESCRIPTION	USCS	AASHTO
● Silty SAND	SM	— — —

Project No.: 8740.02 Project: Fort Devens Task 7 - AOL 50 ● Location: Ayer, MA Date: January 9, 1997	Remarks: Station No. BX501935 Sta. Location 50B-96-19X (35-37) As rec'd w% = 22.6
---	---

GRAIN SIZE DISTRIBUTION TEST REPORT



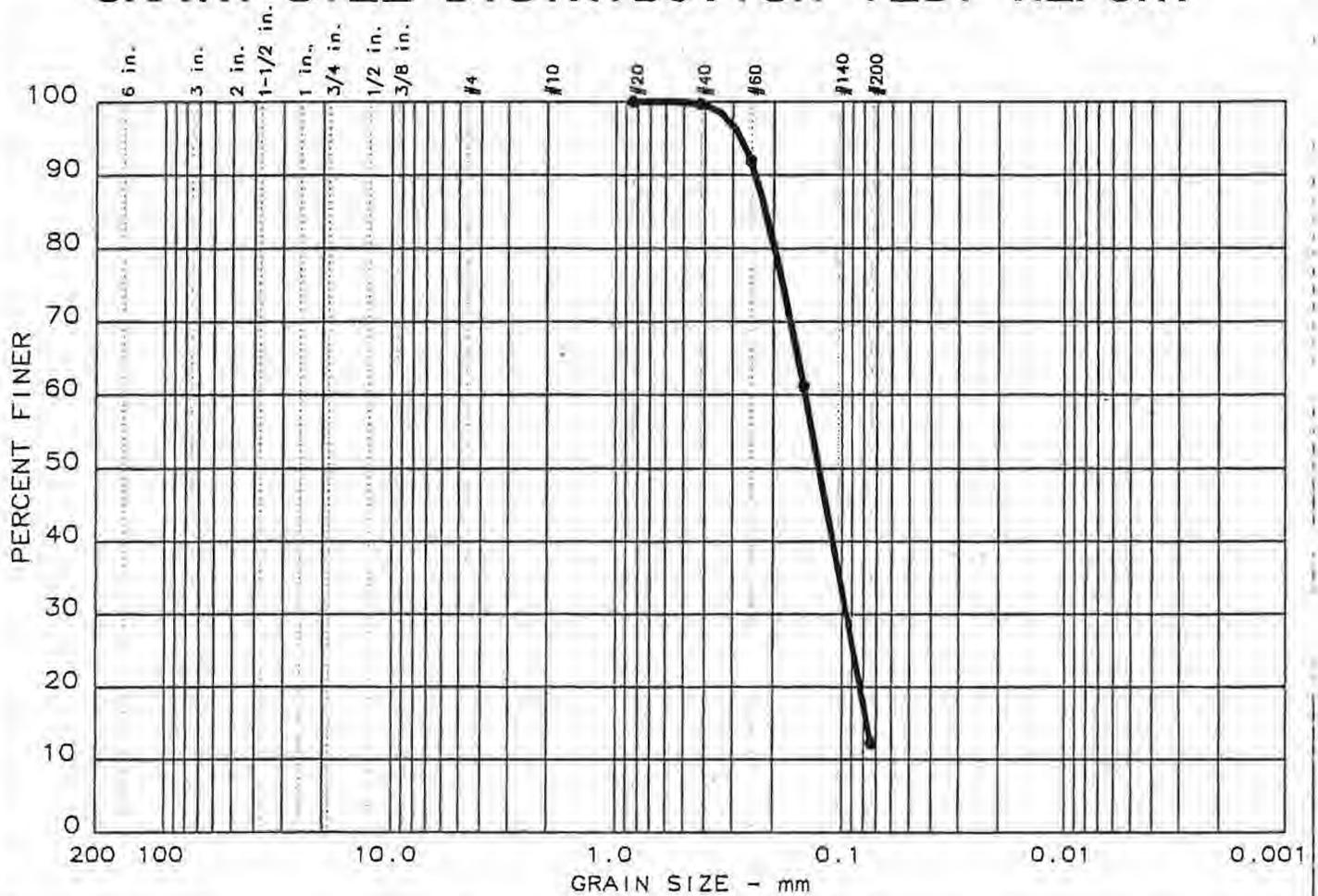
% +3"	% GRAVEL	% SAND	% FINES
0.0	33.3	42.4	24.3

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
-- --	-- --	23.44	1.07	0.25	0.095				

MATERIAL DESCRIPTION	USCS	AASHTO
● Silty SAND with Gravel	SM	-- --

<p>Project No.: 8740.02 Project: Fort Devens Task 7 - AOL 50 ● Location: Ayer, MA</p> <p>Date: January 9, 1997</p>	<p>Remarks: Station No. BX501967 Sta. Location 50B-96-19' (67-69)</p> <p>As rec'd w% = 12.8</p>
--	--

GRAIN SIZE DISTRIBUTION TEST REPORT



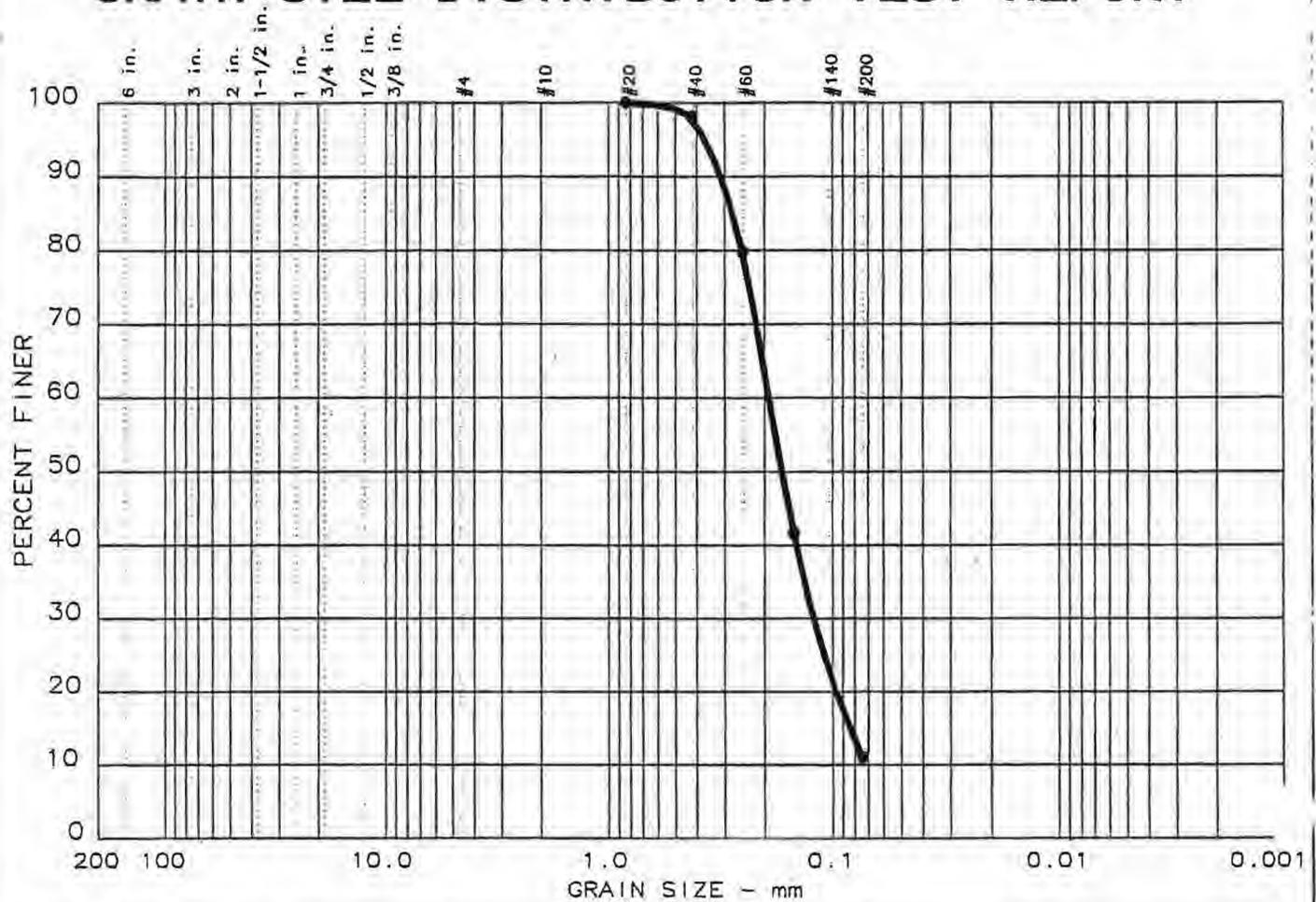
% +3"	% GRAVEL	% SAND	% FINES
0.0	0.0	87.7	12.3

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
-- --	-- --	0.22	0.15	0.13	0.095	0.0769			

MATERIAL DESCRIPTION	USCS	AASHTO
● Silty SAND	SM	-- --

<p>Project No.: 8740.02 Project: Fort Devens Task 7 - AOL 50 ● Location: Ayer, MA</p> <p>Date: January 9, 1997</p>	<p>Remarks:</p> <p style="text-align: center;">Station No. BX502139 Sta. Location 50B-96-21X (39-41)</p> <p>As rec'd w% = 22.6</p>
GRAIN SIZE DISTRIBUTION TEST REPORT THE GEOTECHNICAL GROUP, INC.	
SL - 017	

GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	0.0	88.9	11.1

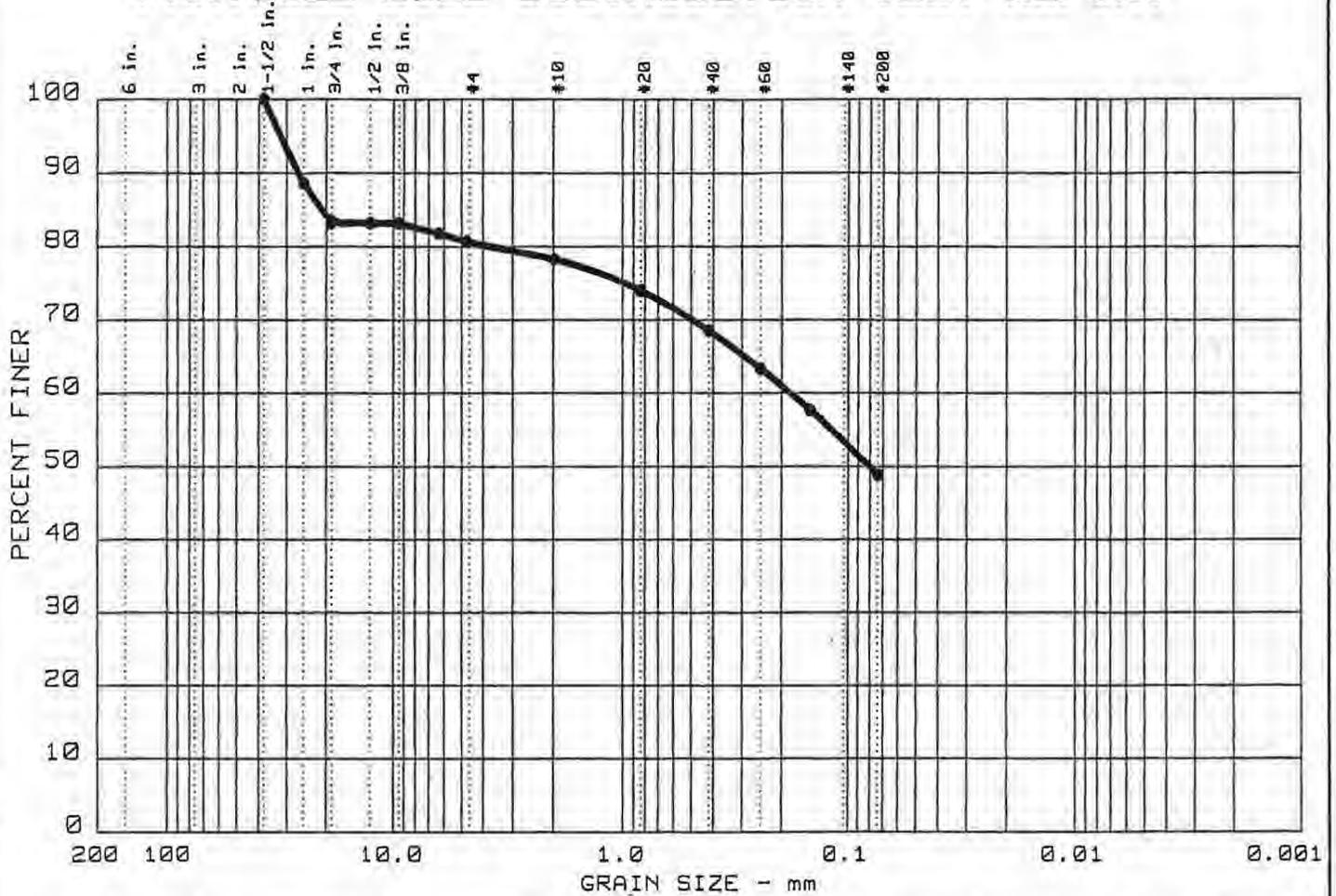
LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
-- --	-- --	0.28	0.19	0.17	0.122	0.0833			

MATERIAL DESCRIPTION	USCS	AASHTO
● Poorly Graded SAND with Silt	SP-SM	-- --

Project No.: 8740.02
 Project: Fort Devens Task 7 - AOL 50
 ● Location: Ayer, MA
 Date: January 9, 1997

Remarks:
 Station No. BX502149
 Sta. Location 50B-96-21X
 (49-51)
 As rec'd w% = 22.2

PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	19.3	31.8	48.9		ML		

SIEVE Inches size	PERCENT FINER	SIEVE number size	PERCENT FINER
1.5	100.0	4	80.7
1	88.6	10	78.3
0.75	83.2	20	74.0
0.5	83.2	40	68.5
0.375	83.2	60	63.3
0.25	81.8	100	57.7
GRAIN SIZE			
D ₆₀	0.18	200	48.9
D ₃₀			
D ₁₀			
COEFFICIENTS			
C _c			
C _u			

SIEVE number size	PERCENT FINER
4	80.7
10	78.3
20	74.0
40	68.5
60	63.3
100	57.7
200	48.9

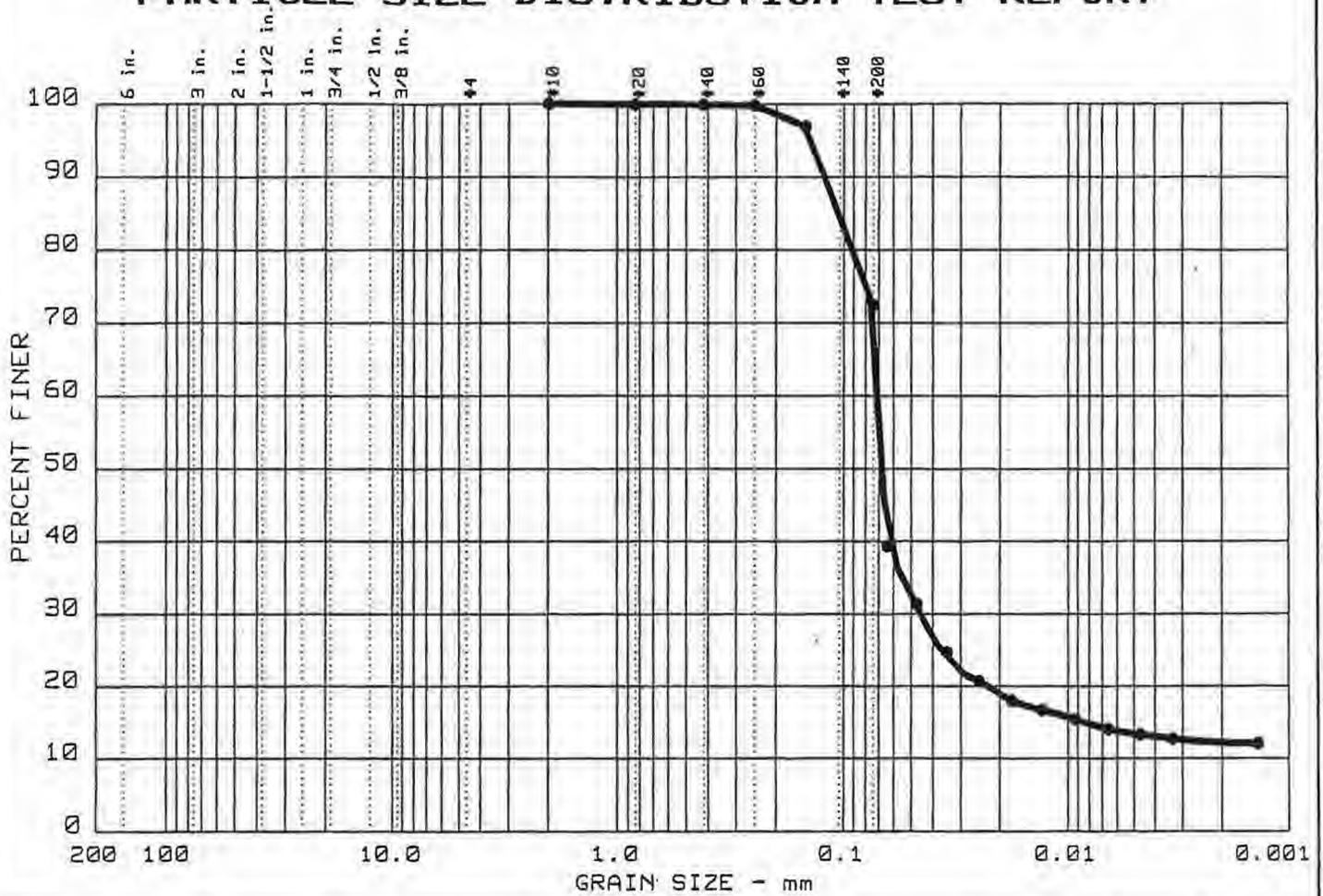
Sample information:
 • BX502269
 Sandy silt with gravel.
 50B-47-22x
 (69-71)

Remarks:
 SIEVE
 WC%=7.6

ABB Environmental Services, Inc.

Project No.: 08740.02
 Project: Fort Devens
 Date: 05/22/97
 Data Sheet No. 21

PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.0	27.5	59.0	13.5	ML		

SIEVE Inches size	PERCENT FINER		
	●		
X	GRAIN SIZE		
D ₆₀	0.05		
D ₃₀			
D ₁₀			
X	COEFFICIENTS		
C _c			
C _u			

SIEVE number size	PERCENT FINER		
	●		
10	100.0		
20	100.0		
40	99.9		
60	99.8		
100	96.9		
200	72.5		

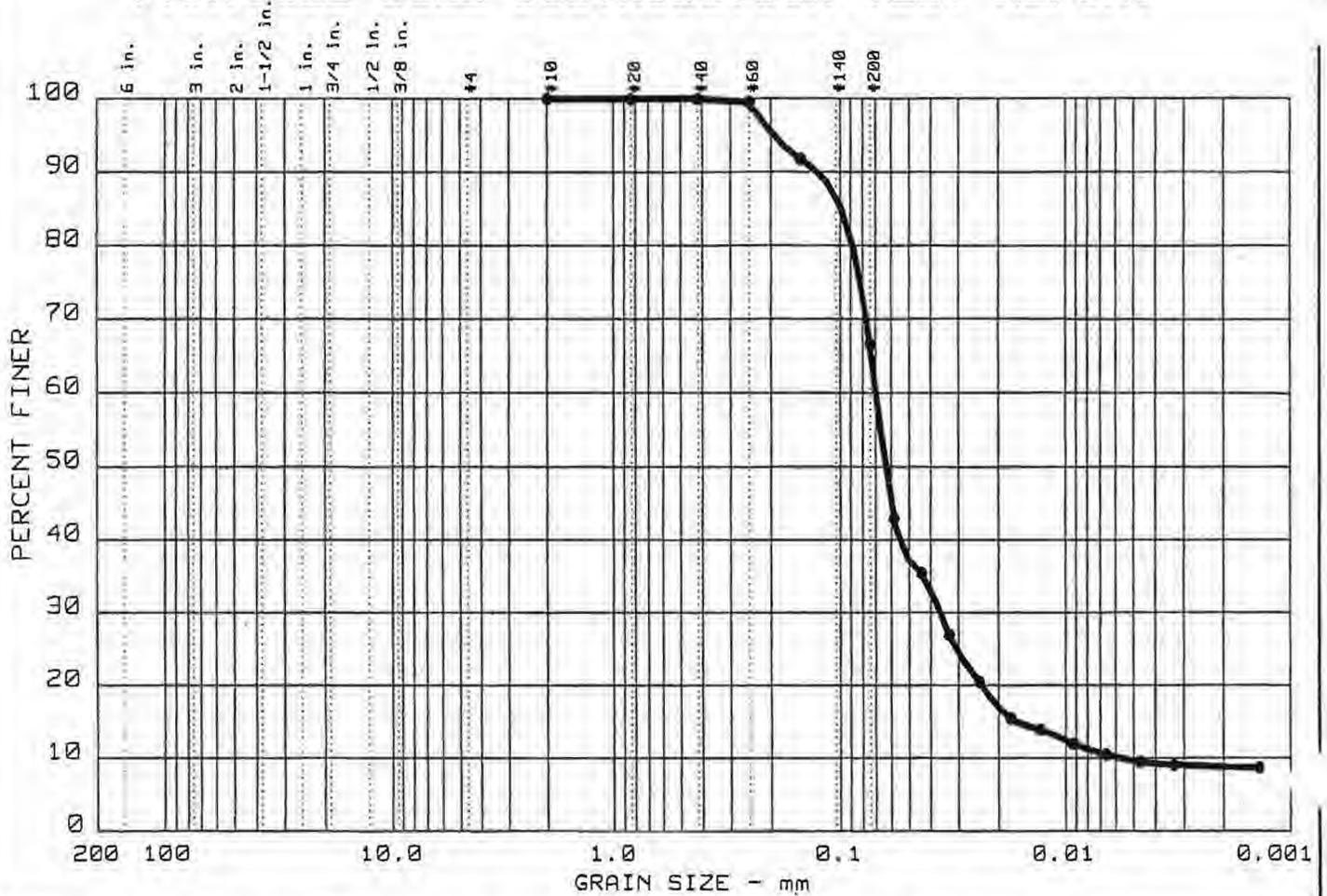
Sample information:
 ● BXG6P484
 Sandy silt with clay.
 GL#-97-04X
 (84-86)

Remarks:
 SIEVE/HYDROMETER
 WC%=24.3

ABB Environmental Services, Inc.

Project No.: 08740.02
 Project: Fort Devens
 Date: 05/22/97

PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.0	33.4	57.0	9.6	ML		

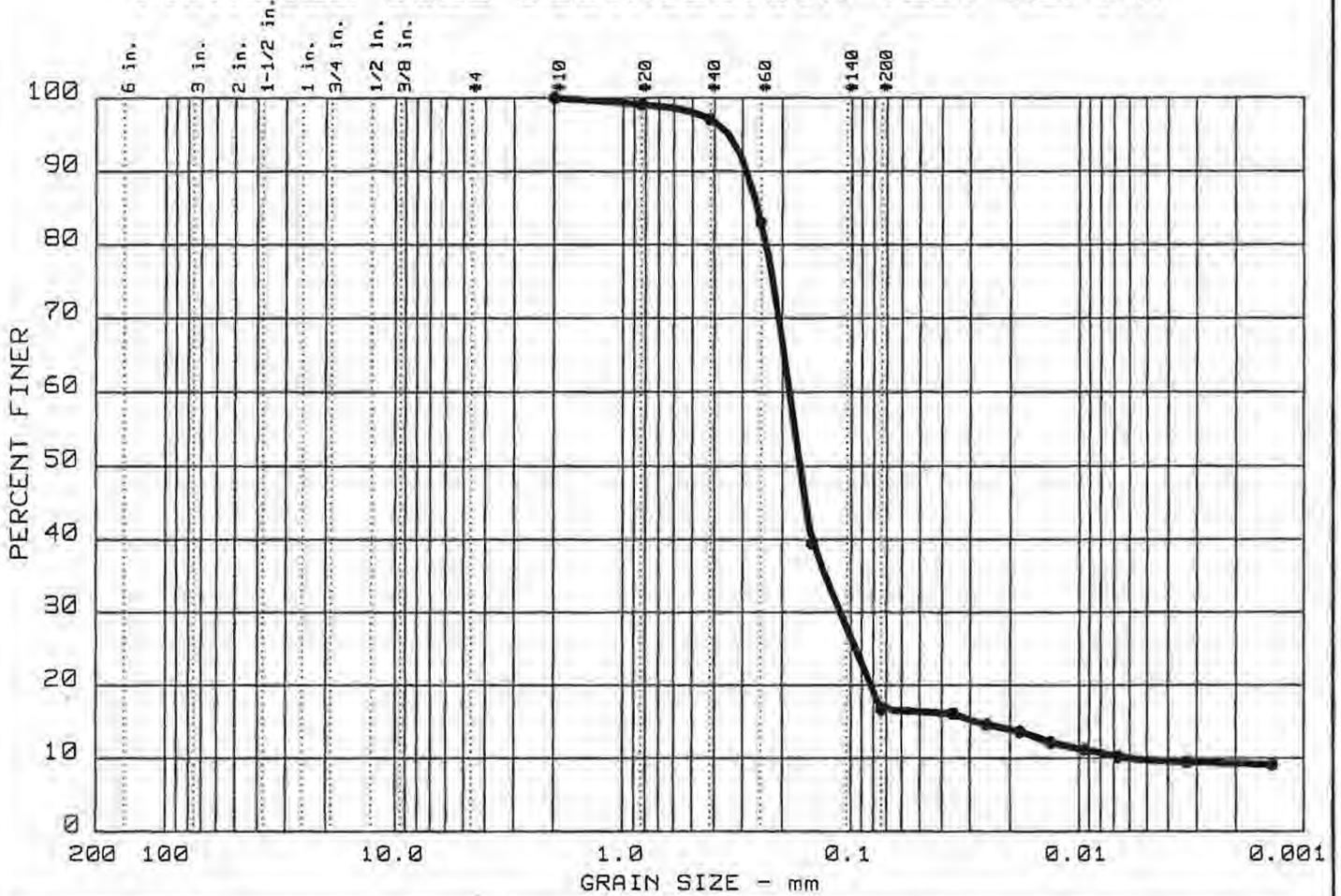
SIEVE Inches size	PERCENT FINER	
X	GRAIN SIZE	
D 60	0.04	
D 30	0.00	
D 10		
X	COEFFICIENTS	
C _c	3.29	
C _u	12.1	

SIEVE number size	PERCENT FINER	
10	100.0	
20	100.0	
40	100.0	
60	99.5	
100	91.7	
200	66.6	

Sample information:
 • BXG6P539
 Sandy silt.
 66P-97-05X
 (39-41)

Remarks:
 SIEVE/HYDROMETER
 WC%=25.3

PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.0	83.3	6.9	9.8	SC		

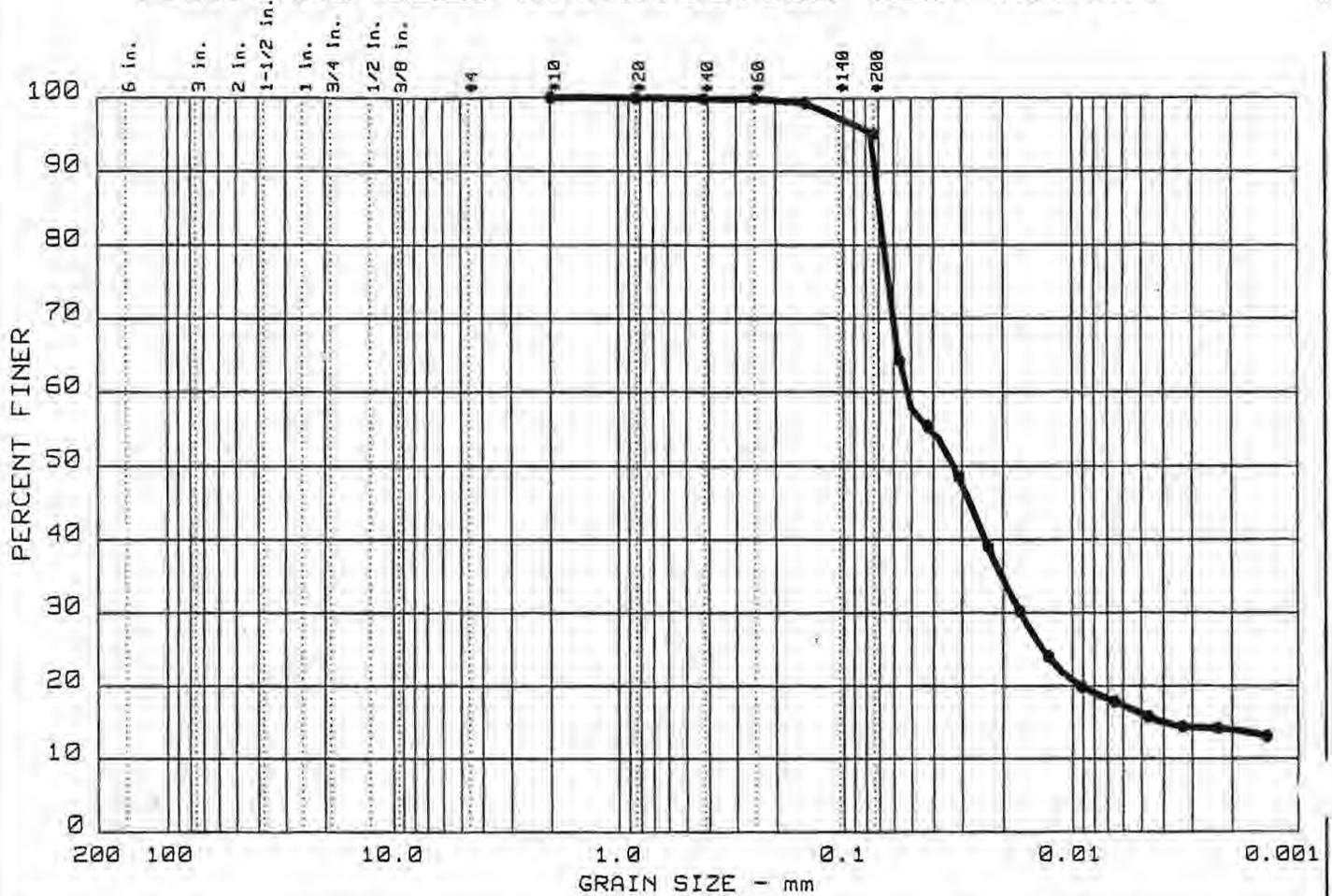
SIEVE Inches size	PERCENT FINER	
●		
GRAIN SIZE		
D ₆₀	0.19	
D ₃₀	0.11	
D ₁₀	0.00	
COEFFICIENTS		
C _c	11.18	
C _u	31.0	

SIEVE number size	PERCENT FINER	
●		
10	100.0	
20	99.1	
40	97.0	
60	83.0	
100	39.5	
200	16.7	

Sample information:
 ● BG65B129
 Clayey sand with silt,
 66H-97-05B
 (129-131)

Remarks:
 SIEVE/HYDROMETER
 WC%=24.5

PARTICLE SIZE DISTRIBUTION TEST REPORT



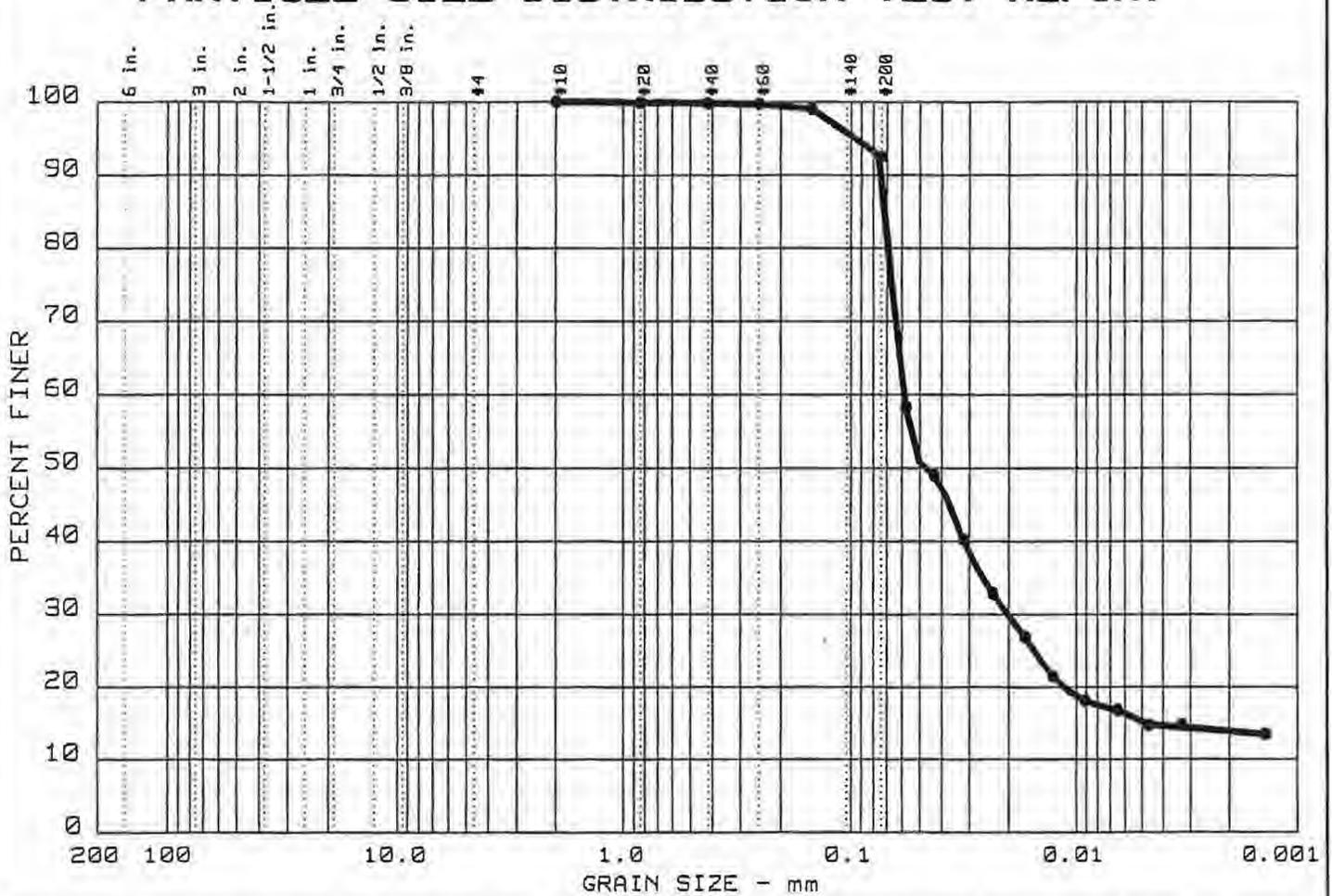
% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.0	4.9	78.9	16.2	ML		

SIEVE Inches size	PERCENT FINER			SIEVE number size	PERCENT FINER		
	●			10	100.0		
				20	100.0		
				40	99.9		
				60	99.9		
				100	99.4		
				200	95.1		
X	GRAIN SIZE						
D ₆₀	0.02						
D ₃₀							
D ₁₀							
X	COEFFICIENTS						
C _c							
C _u							

Sample information:
 ● BXG65B144
 Silt with clay.
 06M-97-05B
 (144-146)

Remarks:
 SIEVE/HYDROMETER
 WC%=24.0

PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.0	7.5	77.3	15.2	ML		

SIEVE Inches size	PERCENT FINER		
●			
X	GRAIN SIZE		
D ₆₀	0.02		
D ₃₀			
D ₁₀			
X	COEFFICIENTS		
C _c			
C _u			

SIEVE number size	PERCENT FINER		
●			
10	100.0		
20	99.9		
40	99.8		
60	99.7		
100	99.1		
200	92.5		

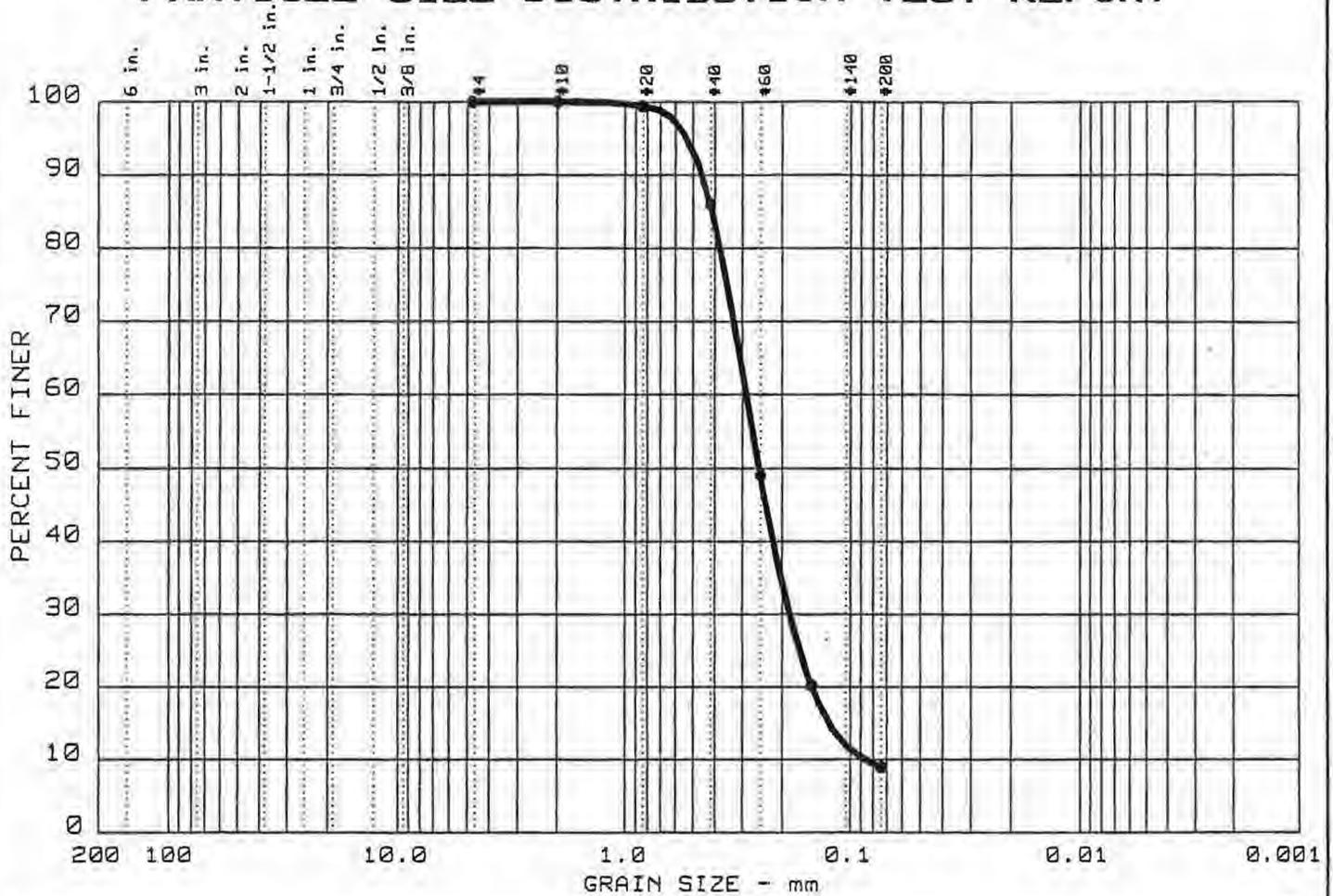
Sample information:
 ● BXG65B179
 Silt with clay.
 66N-97-05B
 (179-181)

Remarks:
 SIEVE/HYDROMETER
 WC%=22.9

ABB Environmental Services, Inc.

Project No.: 08740.02
 Project: Fort Devens
 Date: 05/22/97
 Data Sheet No. 21

PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.0	91.0	9.0		SP-SM		

SIEVE Inches size	PERCENT FINER	
	●	
X	GRAIN SIZE	
D ₆₀	0.29	
D ₃₀	0.19	
D ₁₀	0.08	
X	COEFFICIENTS	
C _c	1.39	
C _u	3.4	

SIEVE number size	PERCENT FINER	
	●	
4	100.0	
10	100.0	
20	99.4	
40	86.1	
60	49.1	
100	20.2	
200	9.0	

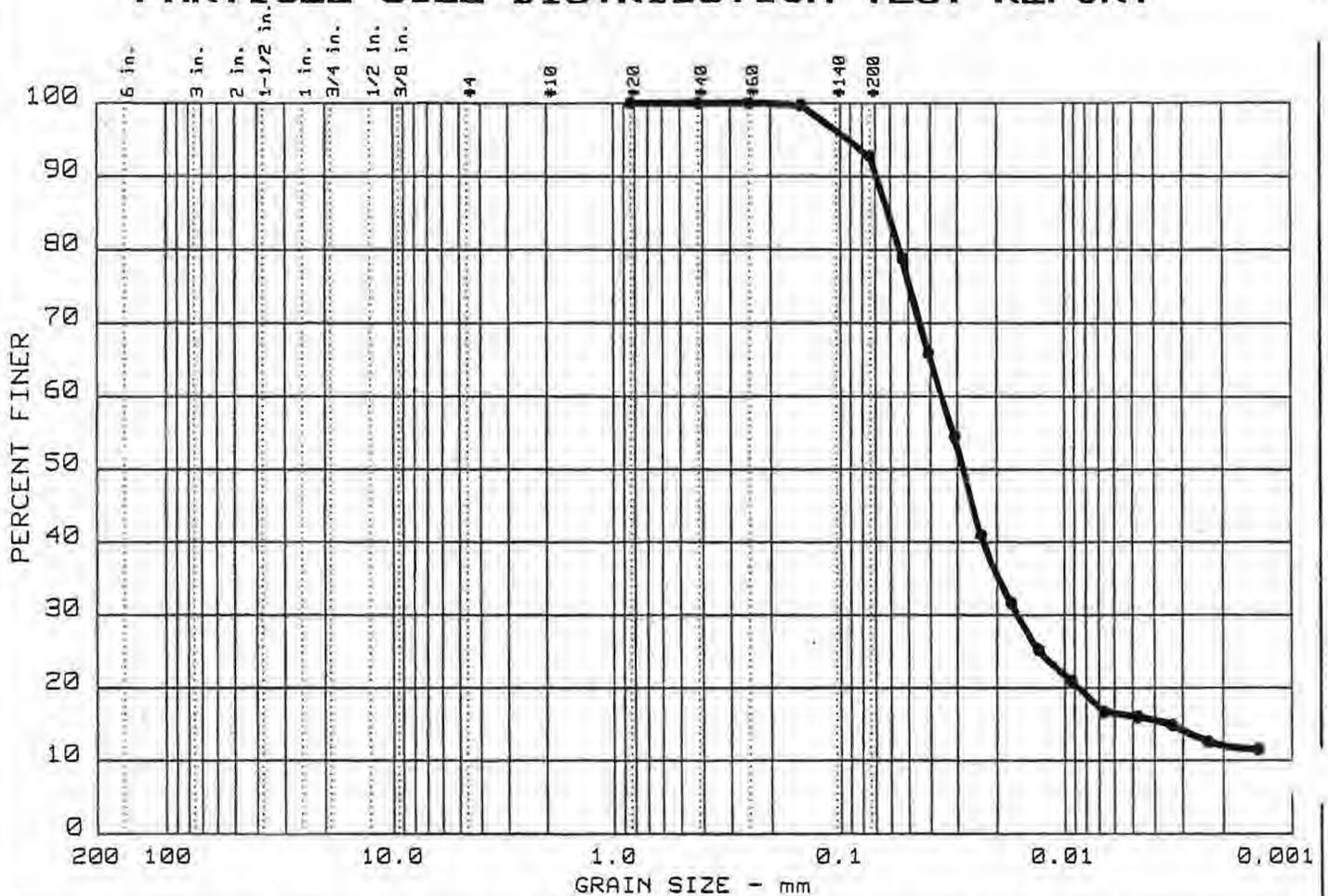
Sample information:
 ● BXG66889
 Poorly graded sand with silt.
 66M-97-06B
 (89-91)

Remarks:
 SIEVE
 WC%=22.2

ABB Environmental Services, Inc.

Project No.: 08740.02
 Project: Fort Devens
 Date: 05/22/97
 Data Sheet No. 21

PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.0	7.2	76.6	16.2	ML		

SIEVE Inches size	PERCENT FINER		
●			
X	GRAIN SIZE		
D ₆₀	0.02		
D ₃₀			
D ₁₀			
X	COEFFICIENTS		
C _c			
C _u			

SIEVE number size	PERCENT FINER		
●			
20	100.0		
40	100.0		
60	99.9		
100	99.7		
200	92.8		

Sample information:
 ● BXG68894
 Silt with clay.
 66M-96-66B
 (94-96)

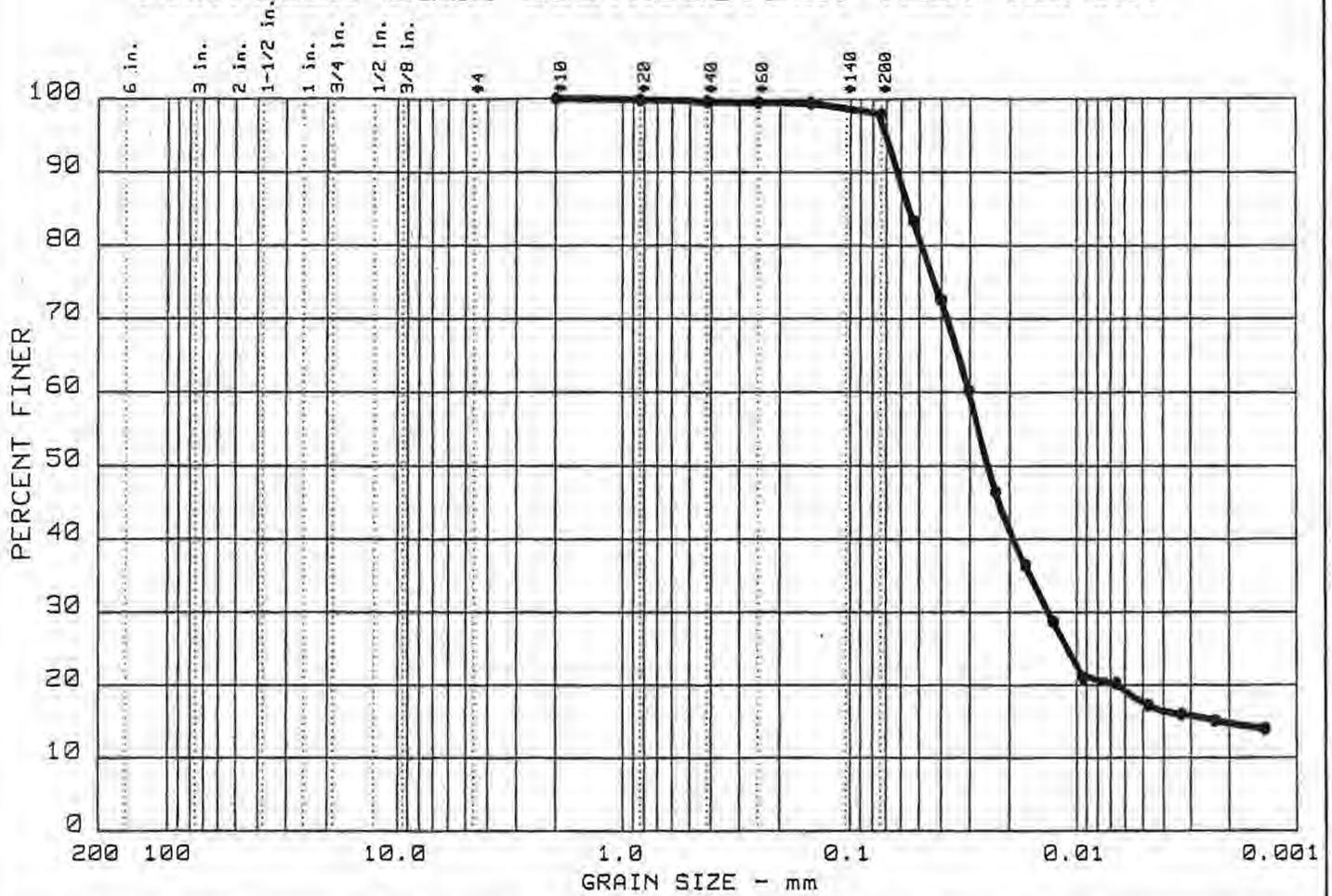
Remarks:
 SIEVE/HYDROMETER
 WC%=26.1

ABB Environmental Services, Inc.

Project No.: 08740.02
 Project: Fort Devens
 Date: 05/22/97

Data Sheet No. 21

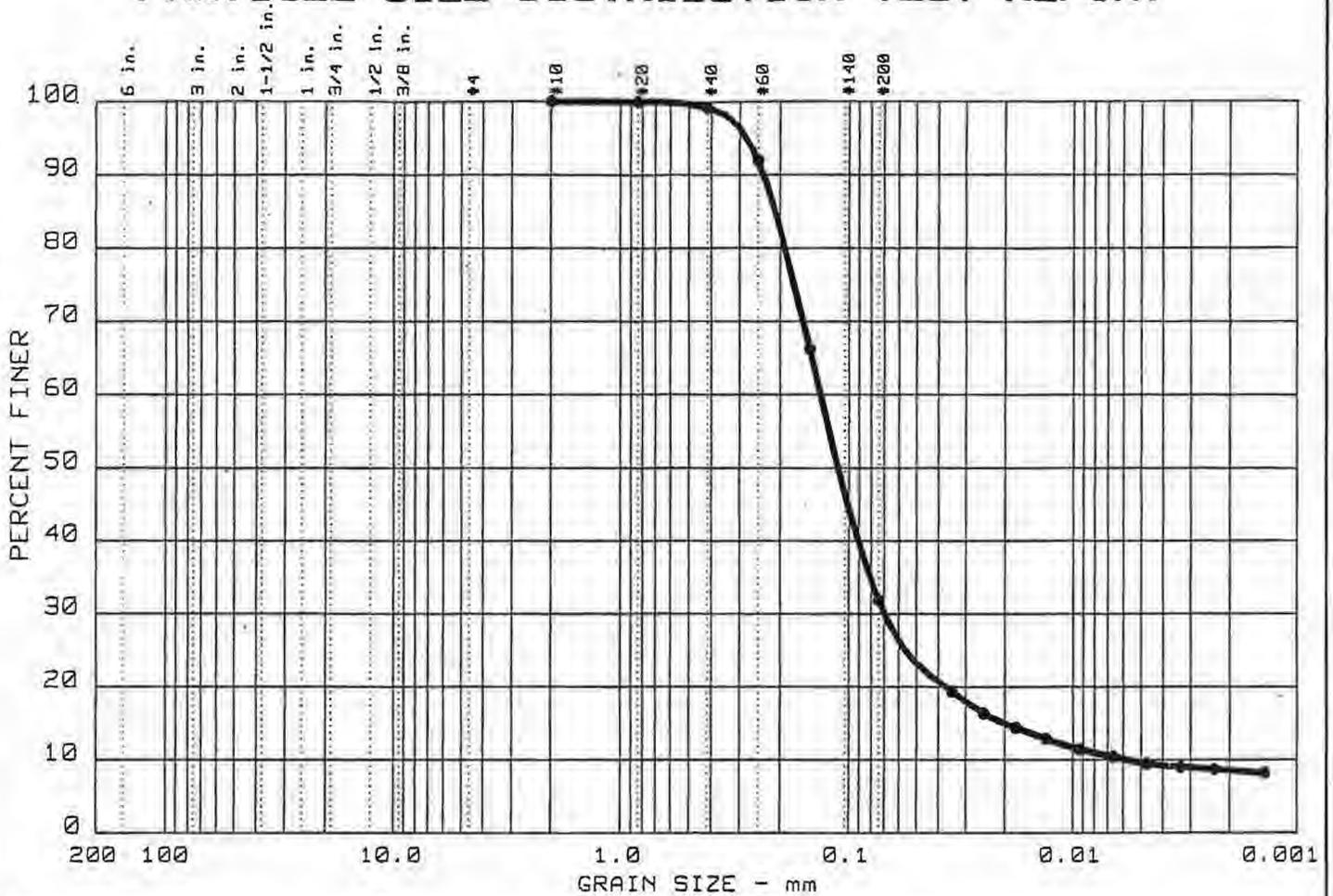
PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.0	2.0	80.4	17.6	ML		

SIEVE Inches size	PERCENT FINER		SIEVE number size	PERCENT FINER		Sample information: ● BXG66B104 Silt with clay. 66M-97-06B (104-106)	
	●		●				
			10	100.0			
			20	99.9			
			40	99.7			
			60	99.6			
			100	99.5			
			200	98.0			
GRAIN SIZE							
D ₅₀ D ₃₀ D ₁₀	0.01					Remarks: SIEVE/HYDROMETER WC%=22.9	
COEFFICIENTS							
C _c C _u							

PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.0	68.1	22.3	9.6	SM		

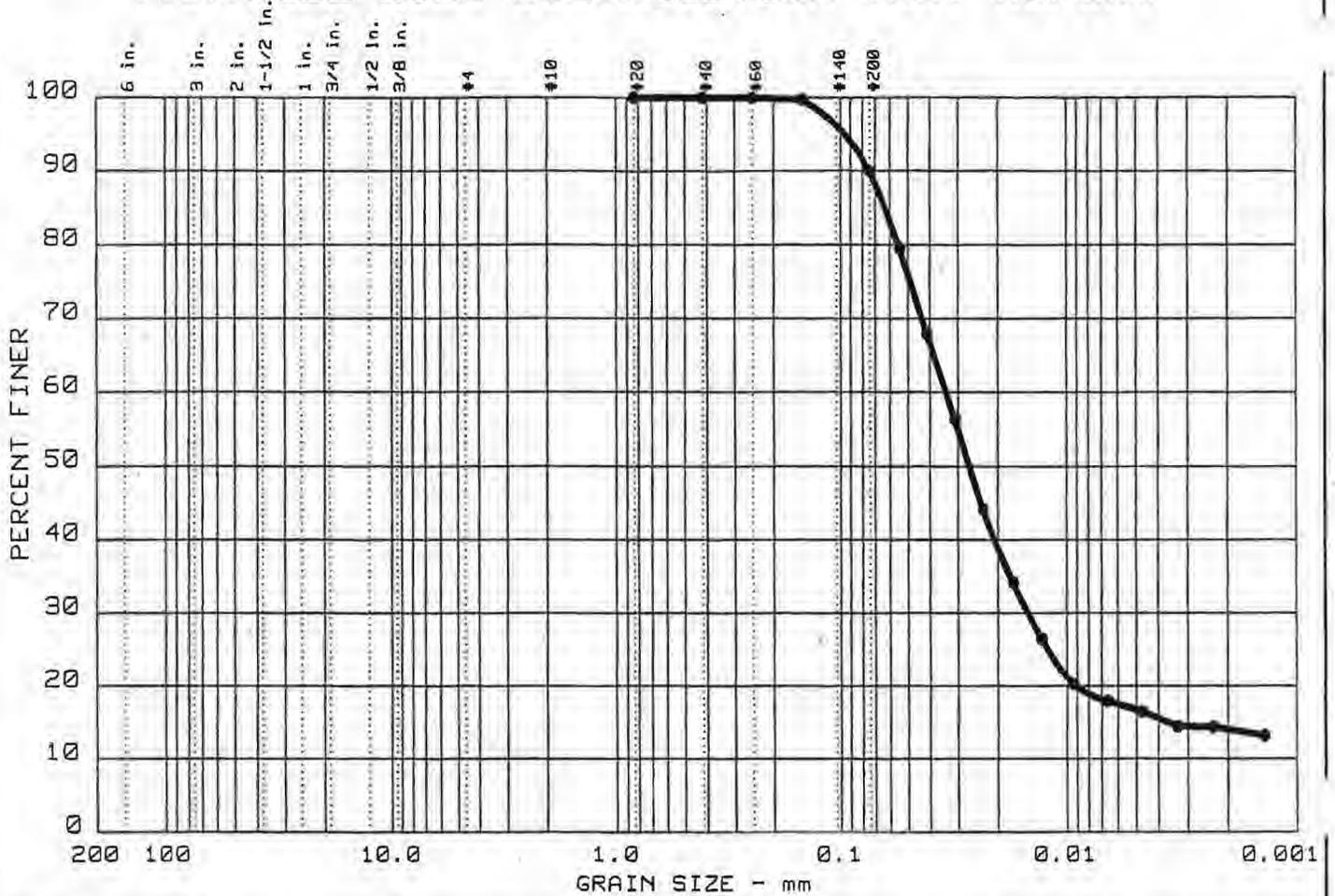
SIEVE Inches size	PERCENT FINER	
	●	
X	GRAIN SIZE	
D ₆₀	0.13	
D ₃₀	0.07	
D ₁₀	0.00	
X	COEFFICIENTS	
C _c	6.31	
C _u	23.4	

SIEVE number size	PERCENT FINER	
	●	
10	100.0	
20	100.0	
40	99.2	
60	92.0	
100	66.2	
200	31.9	

Sample information:
 ● BXG69B74
 Silty sand.
 GGM-97-09B
 (74-76)

Remarks:
 SIEVE/HYDROMETER
 WC%=19.3

PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.0	10.1	73.1	16.8	ML		

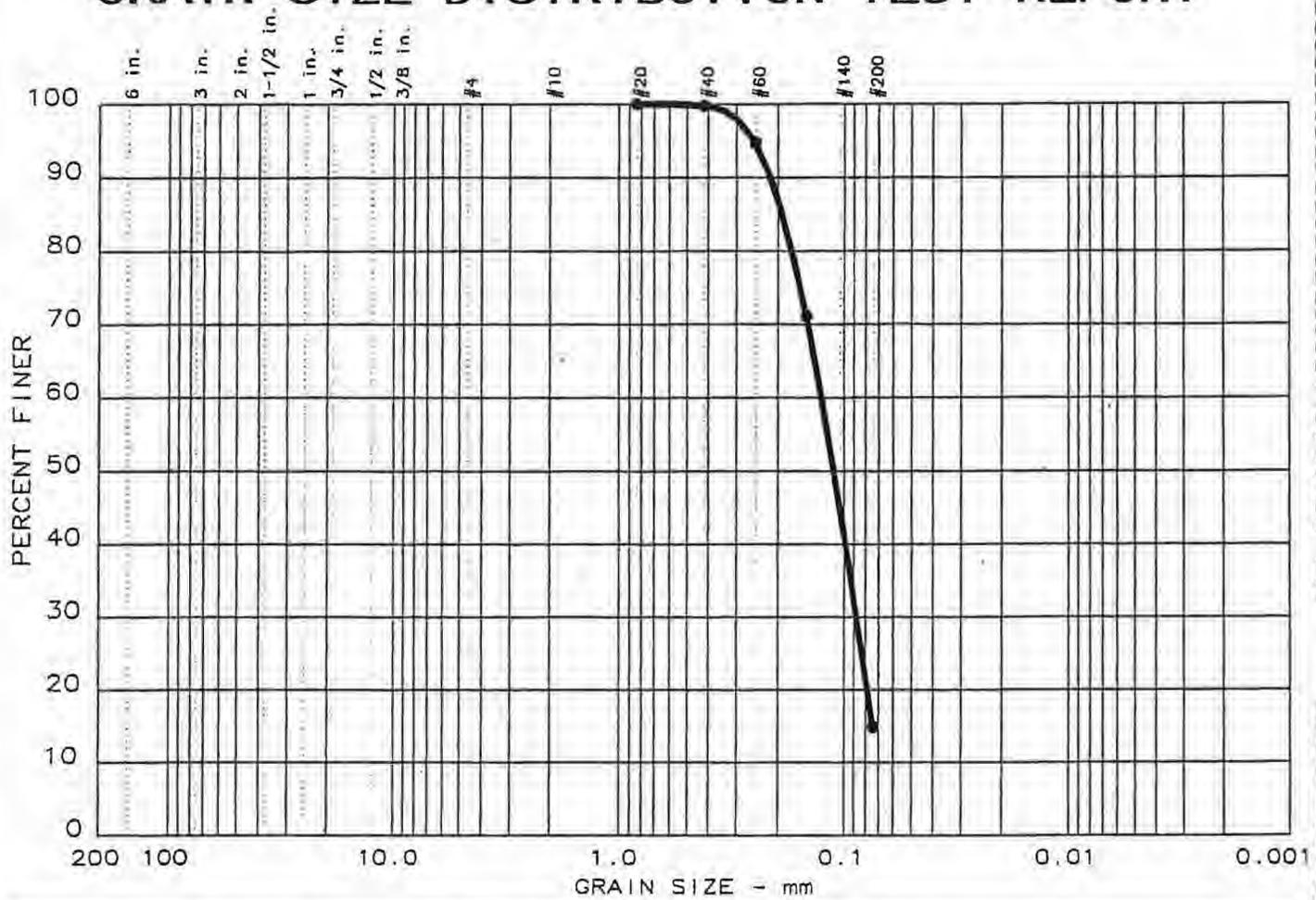
SIEVE Inches size	PERCENT FINER	
X	GRAIN SIZE	
D ₆₀	0.01	
D ₃₀		
D ₁₀		
X	COEFFICIENTS	
C _c		
C _u		

SIEVE number size	PERCENT FINER	
20	100.0	
40	100.0	
60	100.0	
100	99.7	
200	89.9	

Sample information:
 • BXG69879
 Silt with clay.
 66M-97-093
 (79-81)

Remarks:
 SIEVE/HYDROMETER
 WCX=21.5

GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	0.0	85.1	14.9

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
---	---	0.19	0.13	0.11	0.088				

MATERIAL DESCRIPTION	USCS	AASHTO
● Silty SAND	SM	---

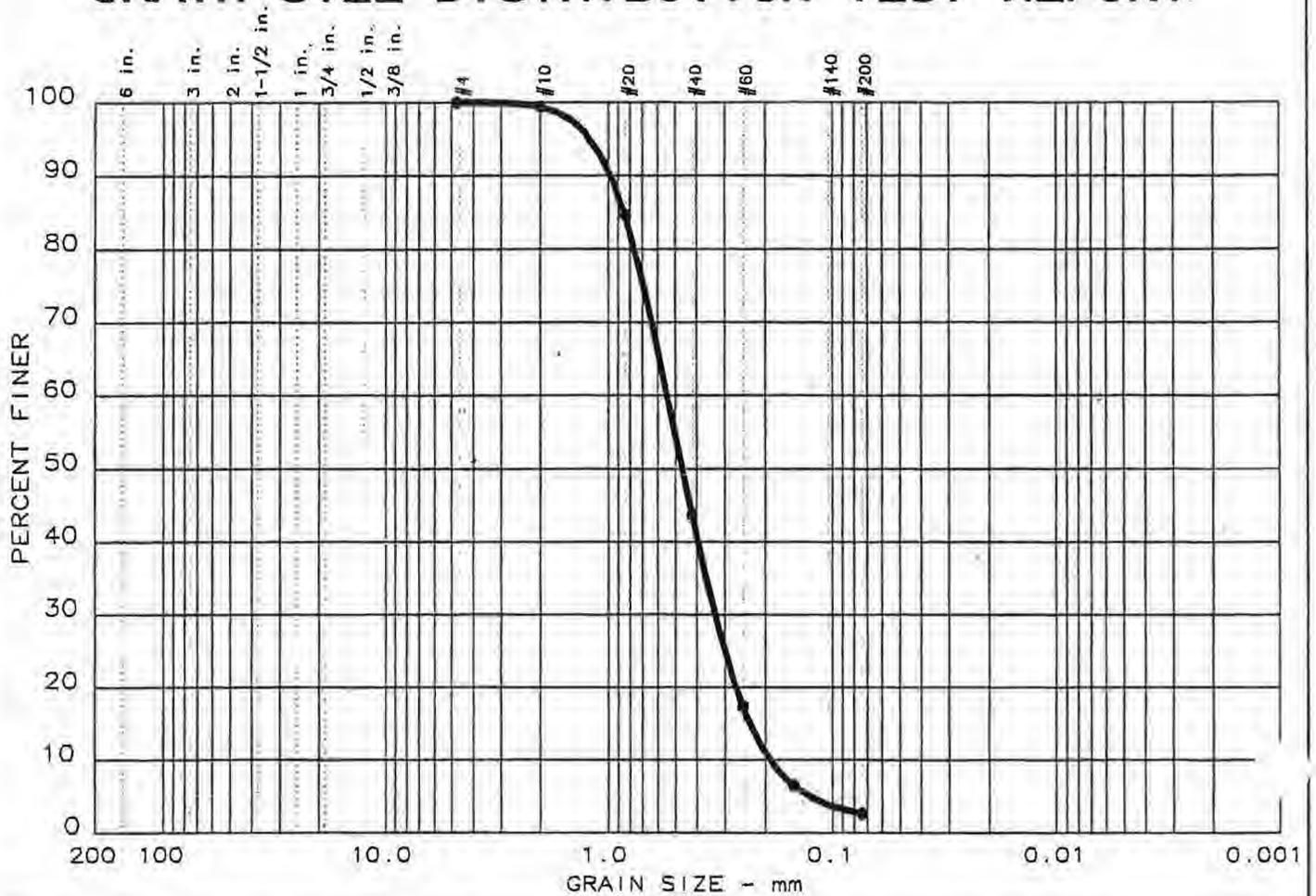
Project No.: 8740.02
 Project: Fort Devens Task 7 - AOL 50
 ● Location: Ayer, MA

 Date: January 9, 1997

Remarks:
 Station No. BXG61354
 Sta. Location G6M-96-13B
 (54-56)

 As rec'd w% = 24.4

GRAIN SIZE DISTRIBUTION TEST REPORT



● % +3"	% GRAVEL	% SAND	% FINES
0.0	0.0	97.4	2.6

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
— —	— —	0.85	0.54	0.46	0.331	0.2317	0.1884	1.08	2.9

MATERIAL DESCRIPTION	USCS	AASHTO
● Poorly Graded SAND	SP	— —

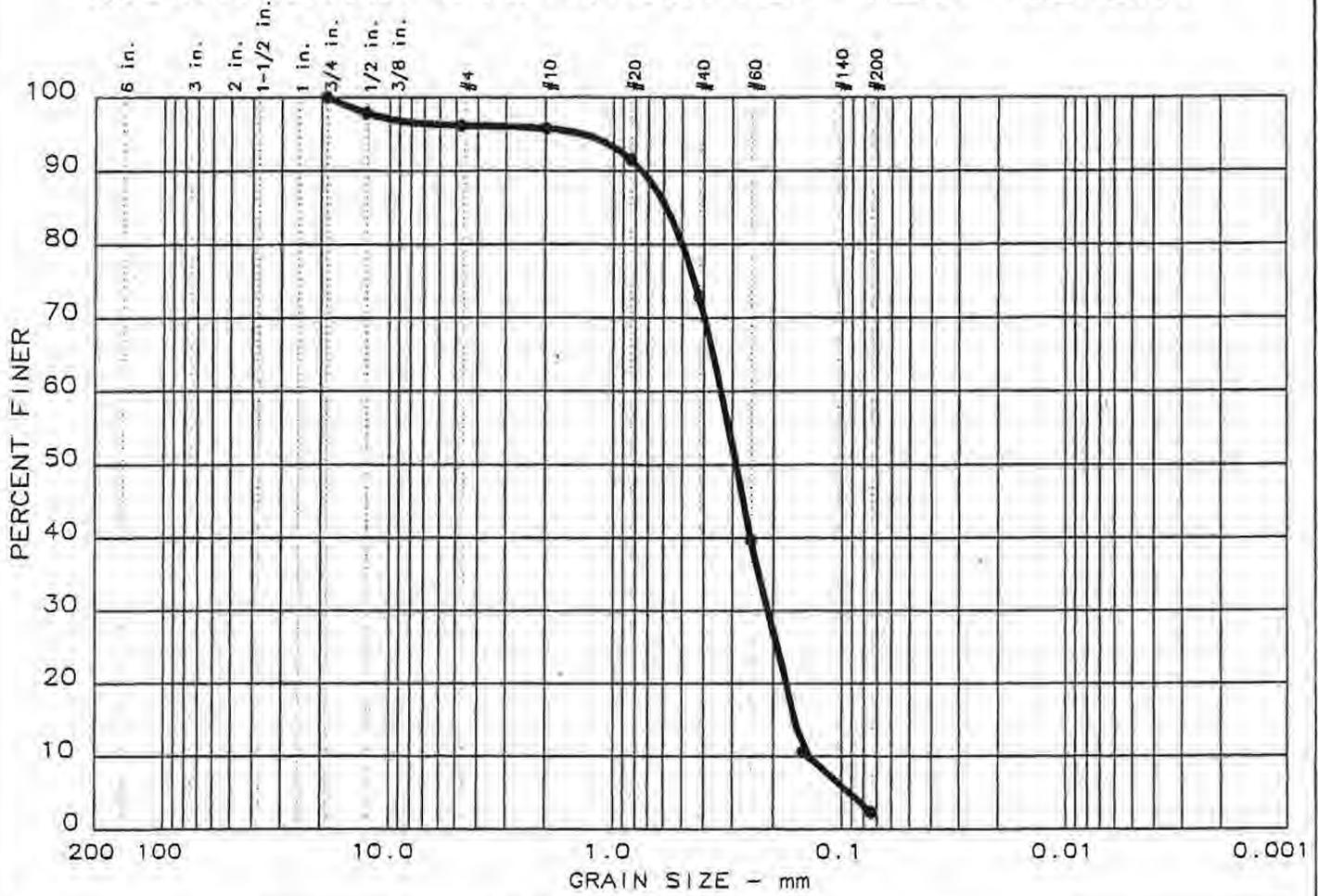
Project No.: 8740.02
 Project: Fort Devens Task 7 - AOL 50
 ● Location: Ayer, MA

Remarks:
 Station No. BXG62110
 Sta. Location G6M-96-21
 (10-12)

Date: January 9, 1997

As rec'd w% = 23.9

GRAIN SIZE DISTRIBUTION TEST REPORT



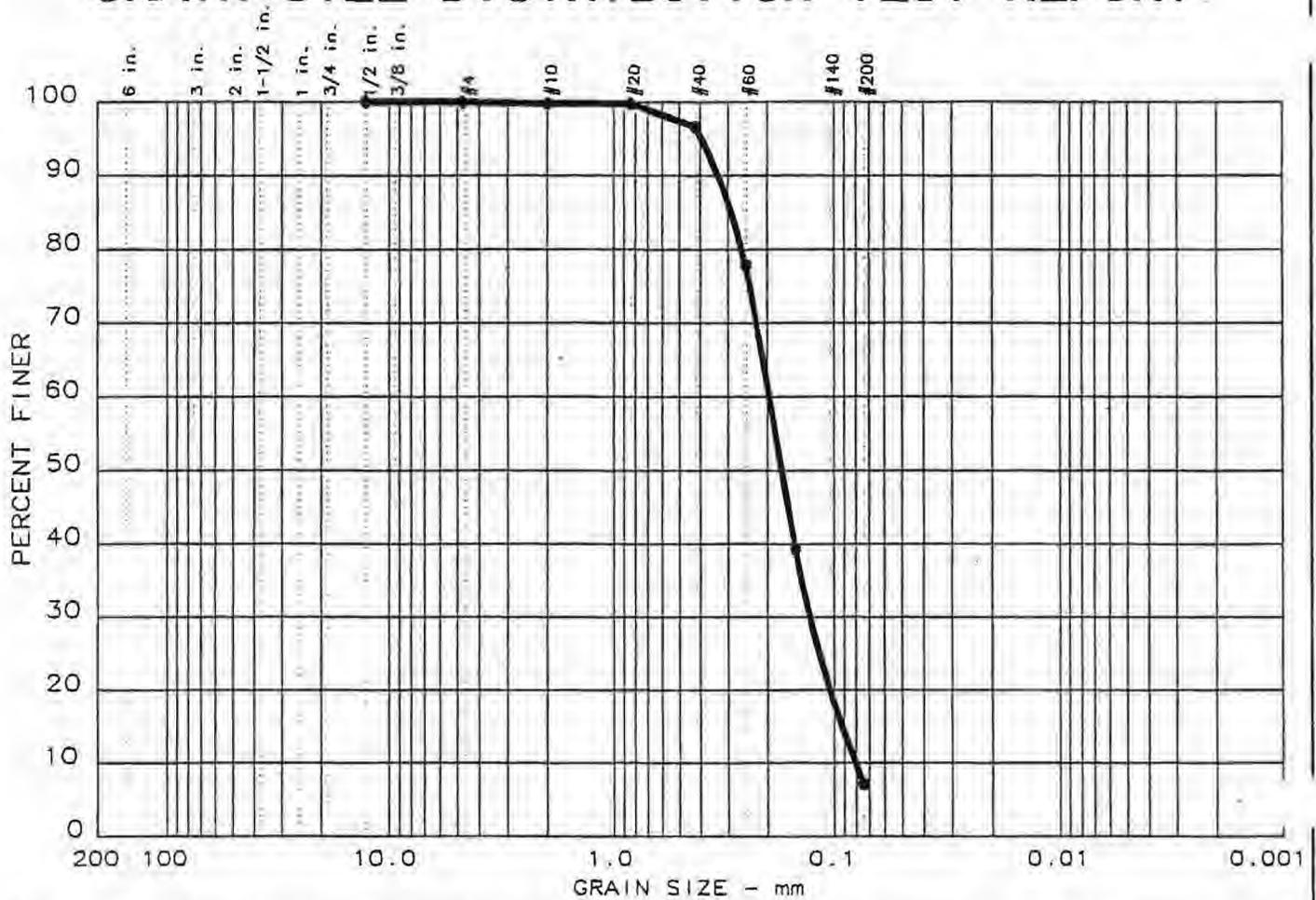
% +3"	% GRAVEL	% SAND	% FINES
0.0	3.8	93.9	2.3

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
-- --	-- --	0.58	0.34	0.29	0.210	0.1609	0.1401	0.94	2.4

MATERIAL DESCRIPTION	USCS	AASHTO
● Poorly Graded SAND	SP	-- --

<p>Project No.: 8740.02 Project: Fort Devens Task 7 - AOL 50 ● Location: Ayer, MA</p> <p>Date: January 9, 1997</p>	<p>Remarks: Station No. BXG62244 Sta. Location G6M-96-22A (44-46)</p> <p>As rec'd w% = 22.1</p>
--	--

GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	0.0	92.8	7.2

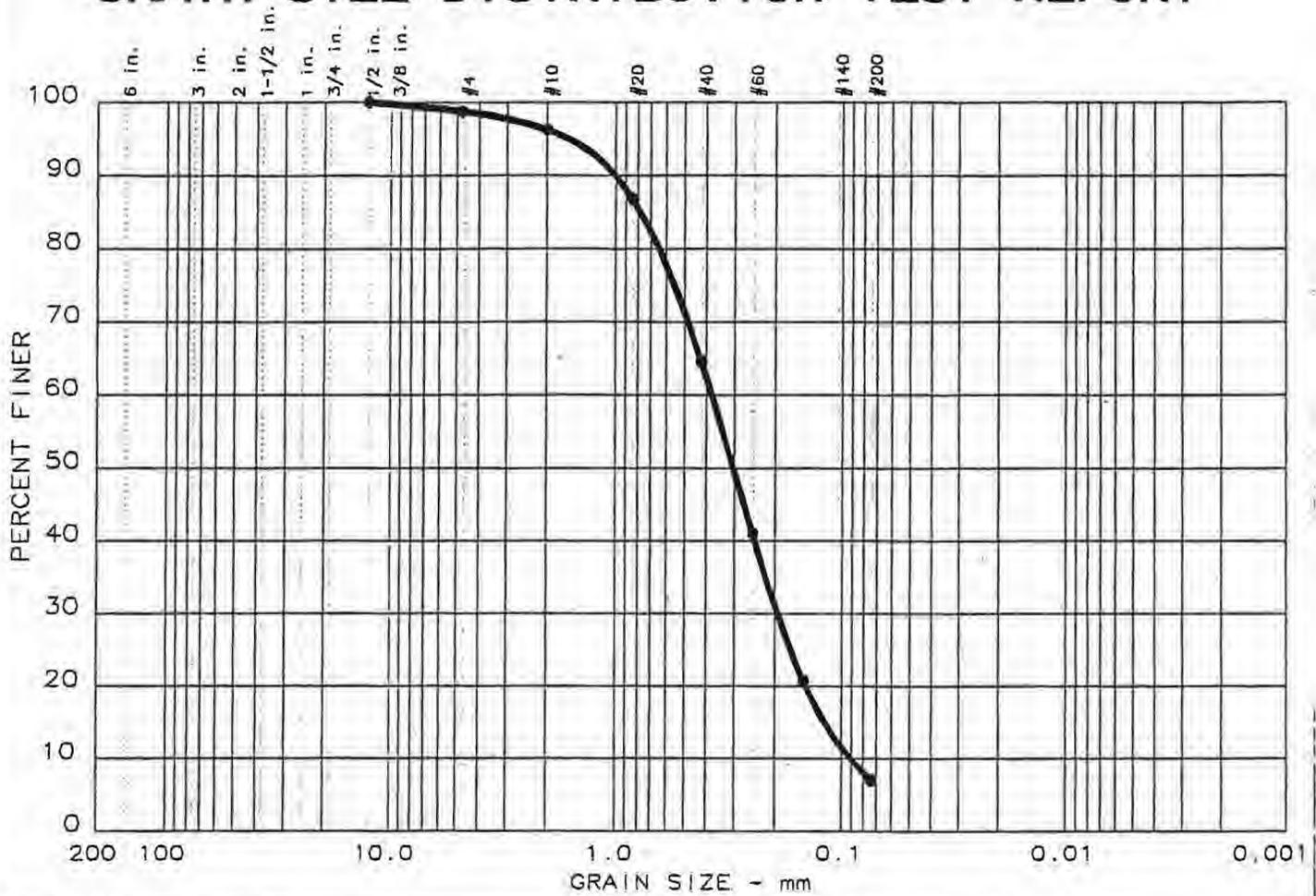
LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
-- --	-- --	0.29	0.19	0.17	0.128	0.0920	0.0802	1.05	2.4

MATERIAL DESCRIPTION	USCS	AASHTO
● Poorly Graded SAND with Silt	SP-SM	-- --

Project No.: 8740.02
 Project: Fort Devens Task 7 - AOL 50
 ● Location: Ayer, MA
 Date: January 9, 1997

Remarks:
 Station No. BXG62269
 Sta. Location G6M-96-22B
 (69-71)
 As rec'd w% = 21.9

GRAIN SIZE DISTRIBUTION TEST REPORT



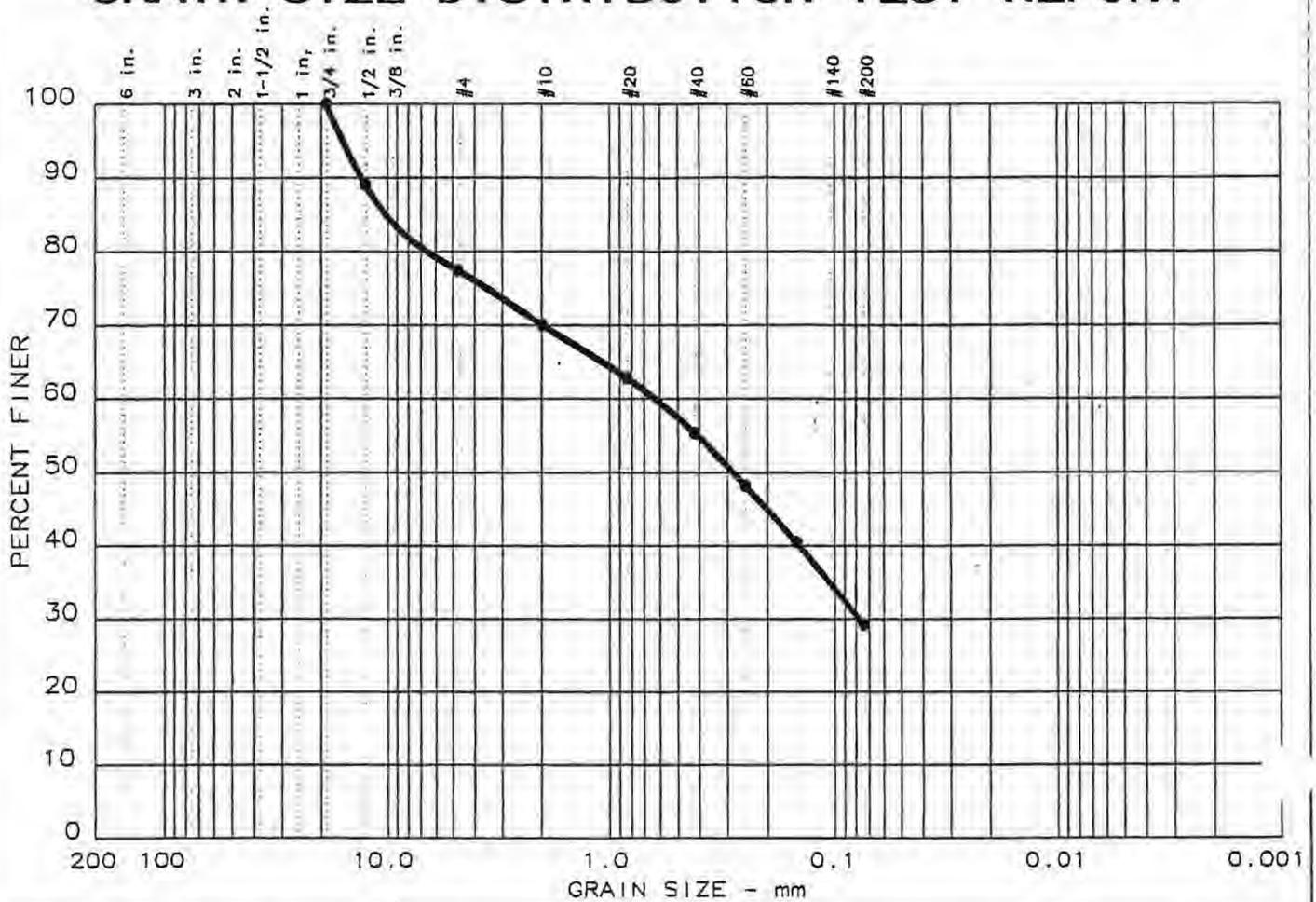
% +3"	% GRAVEL	% SAND	% FINES
0.0	1.3	91.7	7.0

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
-- --	-- --	0.78	0.38	0.30	0.193	0.1193	0.0905	1.10	4.2

MATERIAL DESCRIPTION	USCS	AASHTO
● Poorly Graded SAND with Silt	SP-SM	-- --

Project No.: 8740.02 Project: Fort Devens Task 7 - AOL 50 ● Location: Ayer, MA Date: January 9, 1997	Remarks: Station No. BXG62310 Sta. Location G6M-96-23A (10-12) As rec'd w% = 19.8
---	---

GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	22.5	48.2	29.3

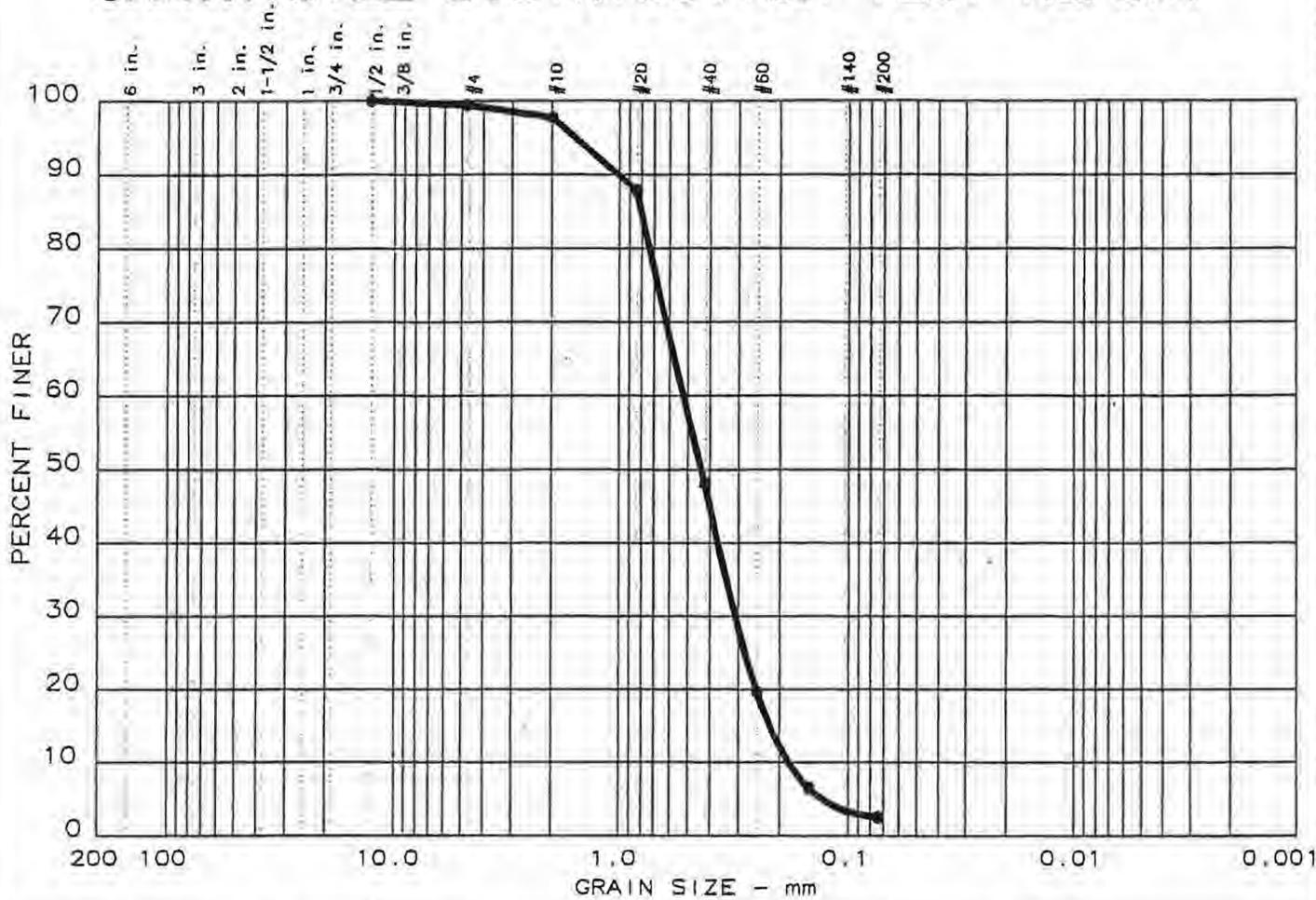
LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
-- --	-- --	10.12	0.62	0.28	0.077				

MATERIAL DESCRIPTION	USCS	AASHTO
● Silty SAND with Gravel	SM	-- --

Project No.: 8740.02
 Project: Fort Devens Task 7 - AOL 50
 ● Location: Ayer, MA
 Date: January 9, 1997

Remarks:
 Station No. BXG62354
 Sta. Location G6M-96-23E
 (54-56)
 As rec'd w% = 10.8

GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	0.6	96.9	2.5

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
-- --	-- --	0.80	0.52	0.44	0.310	0.2198	0.1824	1.01	2.9

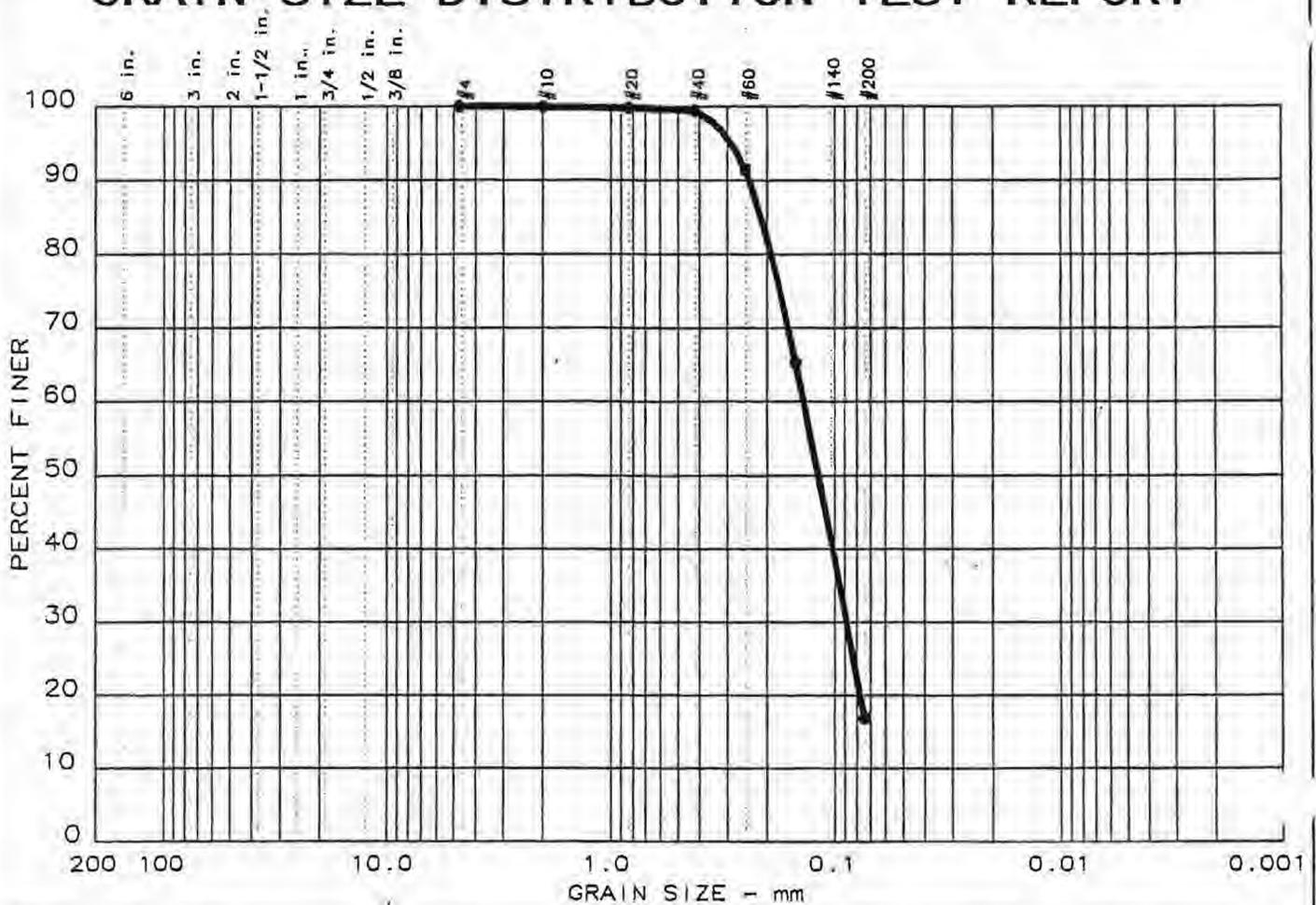
MATERIAL DESCRIPTION	USCS	AASHTO
● Poorly Graded SAND	SP	-- --

Project No.: 8740.02
 Project: Fort Devens Task 7 - AOL 50
 ● Location: Ayer, MA

 Date: January 9, 1997

Remarks:
 Station No. BXG62405
 Sta. Location G6M-96-24A
 (05-07)
 As rec'd w% = 24.6

GRAIN SIZE DISTRIBUTION TEST REPORT



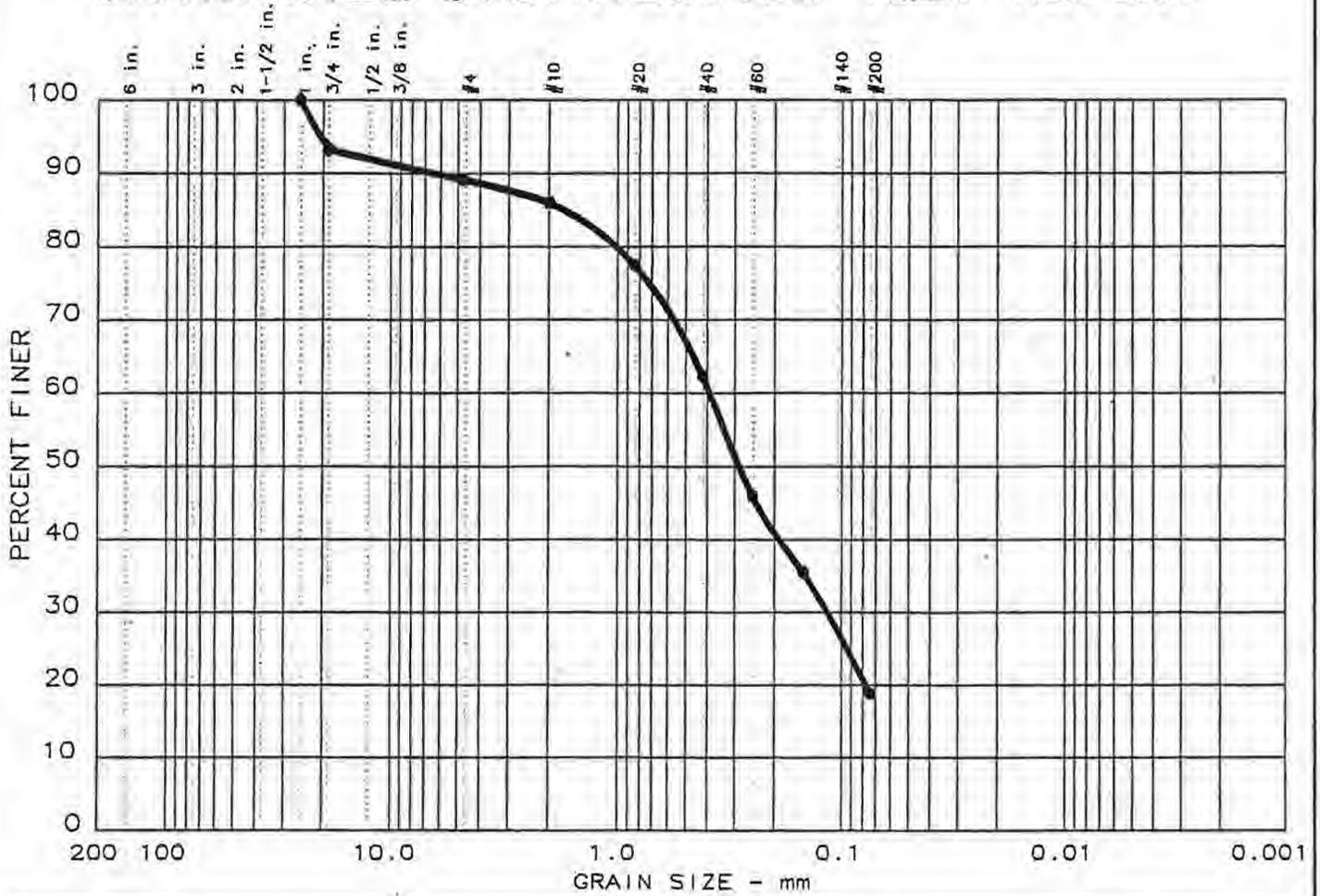
% +3"	% GRAVEL	% SAND	% FINES
0.0	0.0	83.1	16.9

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
-- --	-- --	0.21	0.14	0.12	0.089				

MATERIAL DESCRIPTION	USCS	AASHTO
● Silty SAND	SM	-- --

Project No.: 8740.02 Project: Fort Devens Task 7 - AOL 50 ● Location: Ayer, MA Date: January 9, 1997	Remarks: Station No. BXG62459 Sta. Location G6M-96-24P (59-61) As rec'd w% = 23.6
---	---

GRAIN SIZE DISTRIBUTION TEST REPORT



● % +3"	% GRAVEL	% SAND	% FINES
0.0	10.9	70.3	18.8

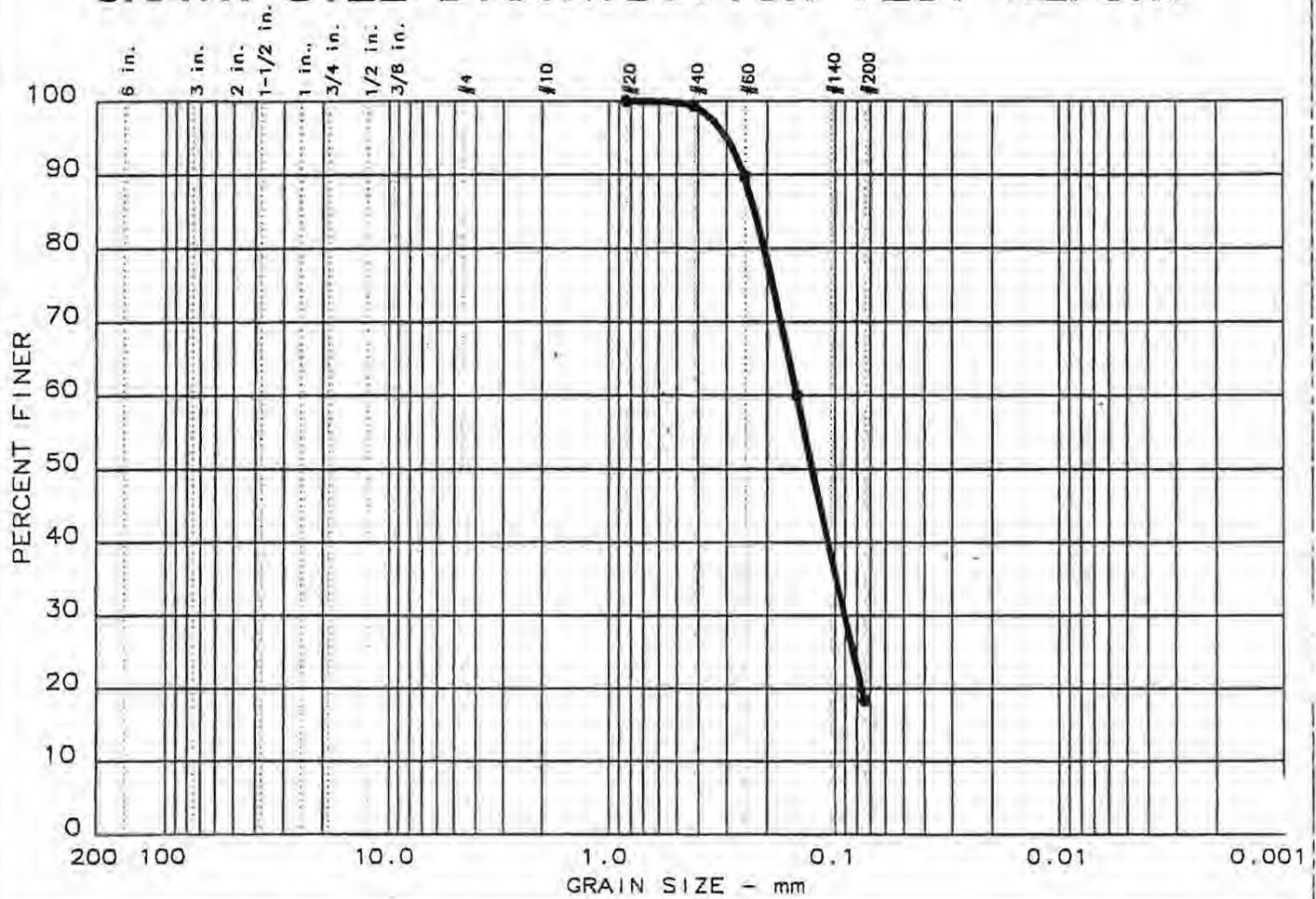
LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
-- --	-- --	1.72	0.39	0.29	0.115				

MATERIAL DESCRIPTION	USCS	AASHTO
● Silty SAND	SM	-- --

Project No.: 8740.02
 Project: Fort Devens Task 7 - AOL 50
 ● Location: Ayer, MA
 Date: January 9, 1997

Remarks:
 Station No. BXG62515
 Sta. Location G6M-96-25A
 (15-17)
 As rec'd w% = 16.1

GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	0.0	81.6	18.4

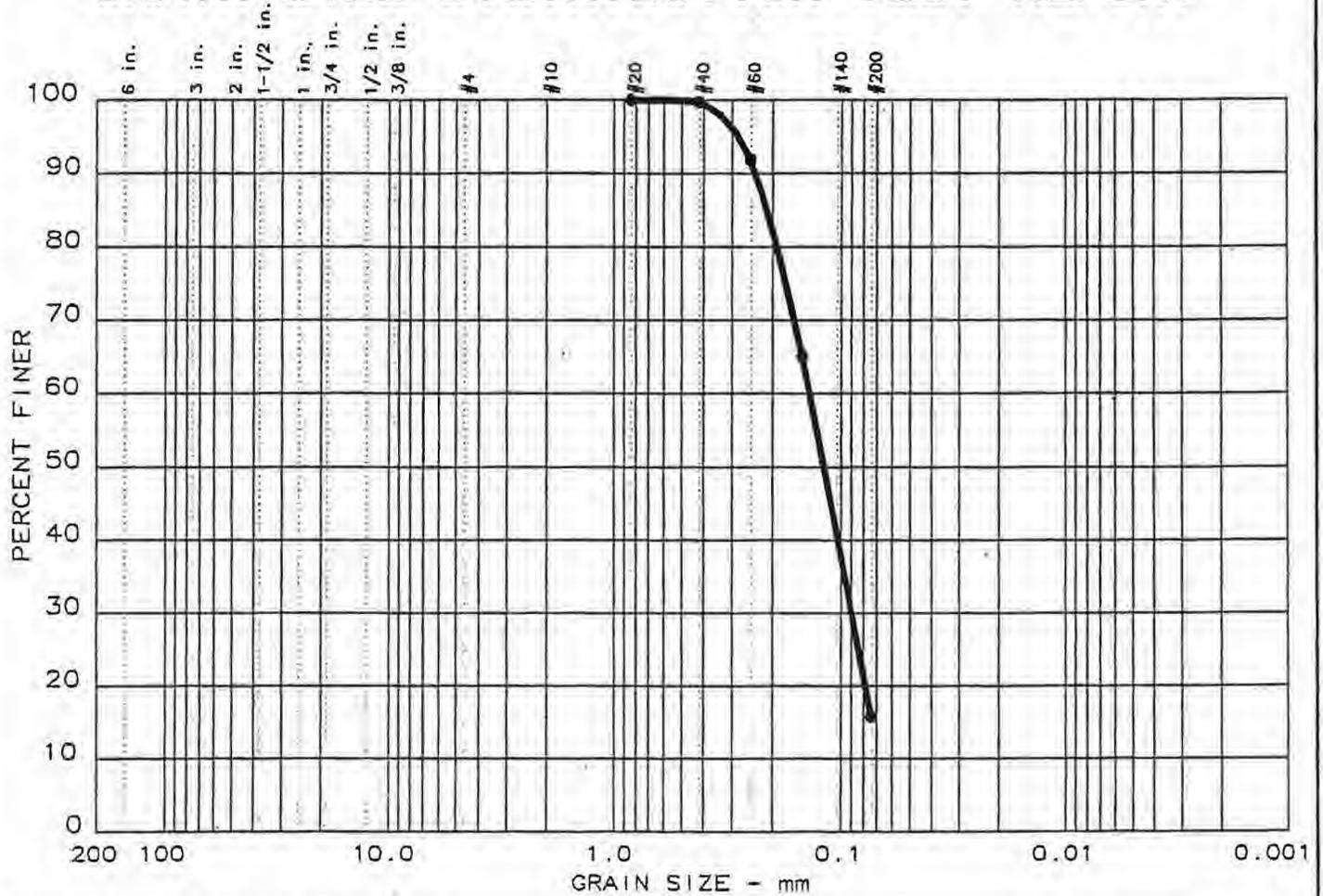
LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
-- --	-- --	0.22	0.15	0.13	0.090				

MATERIAL DESCRIPTION	USCS	AASHTO
● Silty SAND	SM	-- --

Project No.: 8740.02
 Project: Fort Devens Task 7 - AOL 50
 ● Location: Ayer, MA
 Date: January 9, 1997

Remarks:
 Station No. BXG62544
 Sta. Location G6M-96-25B
 (44-46)
 As rec'd w% = 25.1

GRAIN SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% FINES
0.0	0.0	84.2	15.8

LL	PI	D ₈₅	D ₆₀	D ₅₀	D ₃₀	D ₁₅	D ₁₀	C _c	C _u
---	---	0.21	0.14	0.12	0.090				

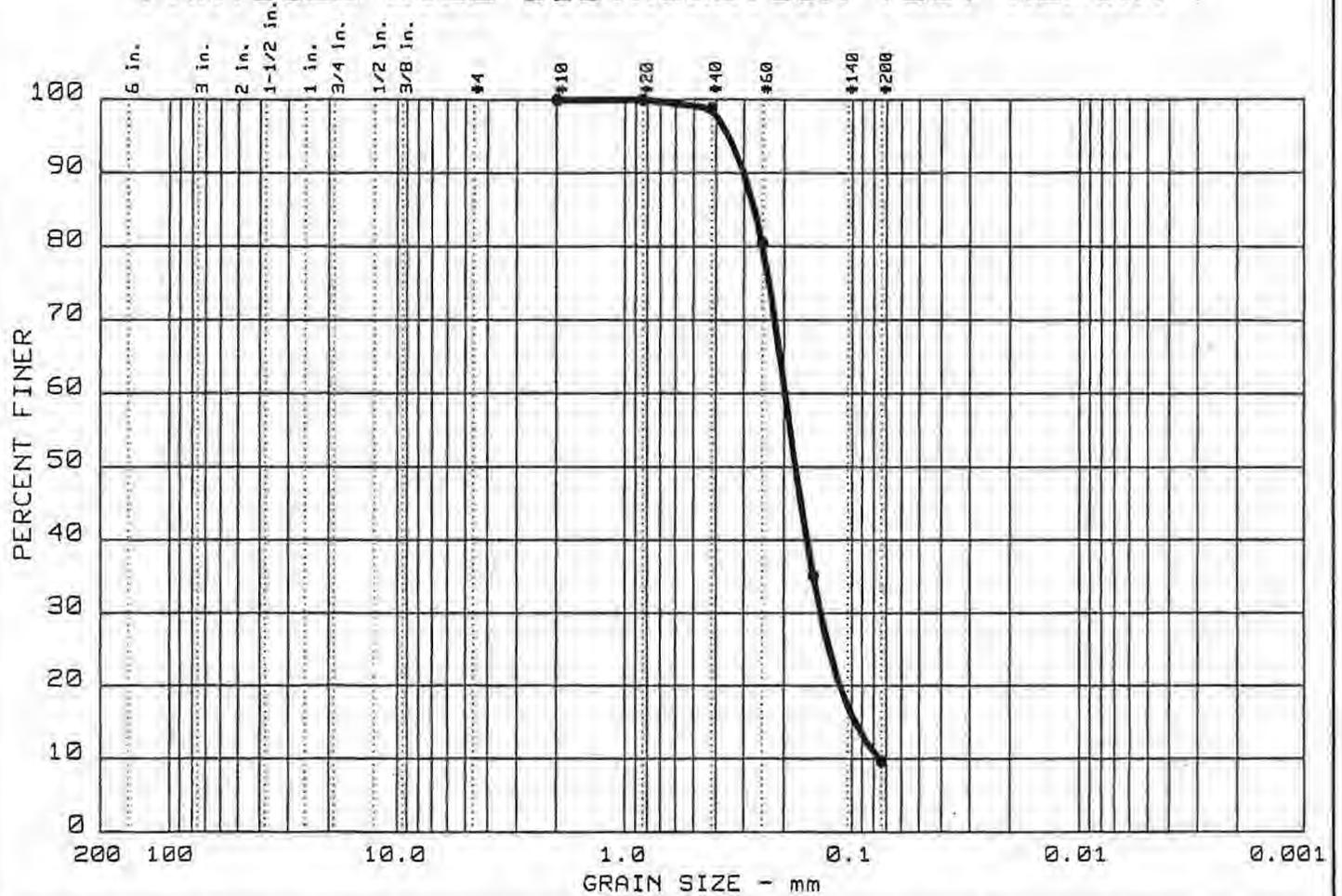
MATERIAL DESCRIPTION	USCS	AASHTO
● Silty SAND	SM	---

Project No.: 8740.02
 Project: Fort Devens Task 7 - AOL 50
 ● Location: Ayer, MA

Date: January 9, 1997

Remarks:
 Station No. BXG62606
 Sta. Location G6M-96-26A
 (6-8)
 As rec'd w% = 20.2

PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.0	90.4	9.6		SP-SM		

SIEVE Inches size	PERCENT FINER	
●		
GRAIN SIZE		
D ₆₀	0.20	
D ₃₀	0.14	
D ₁₀	0.07	
COEFFICIENTS		
C _c	1.29	
C _u	2.6	

SIEVE number size	PERCENT FINER	
●		
10	100.0	
20	100.0	
40	98.8	
60	80.4	
100	35.1	
200	9.6	

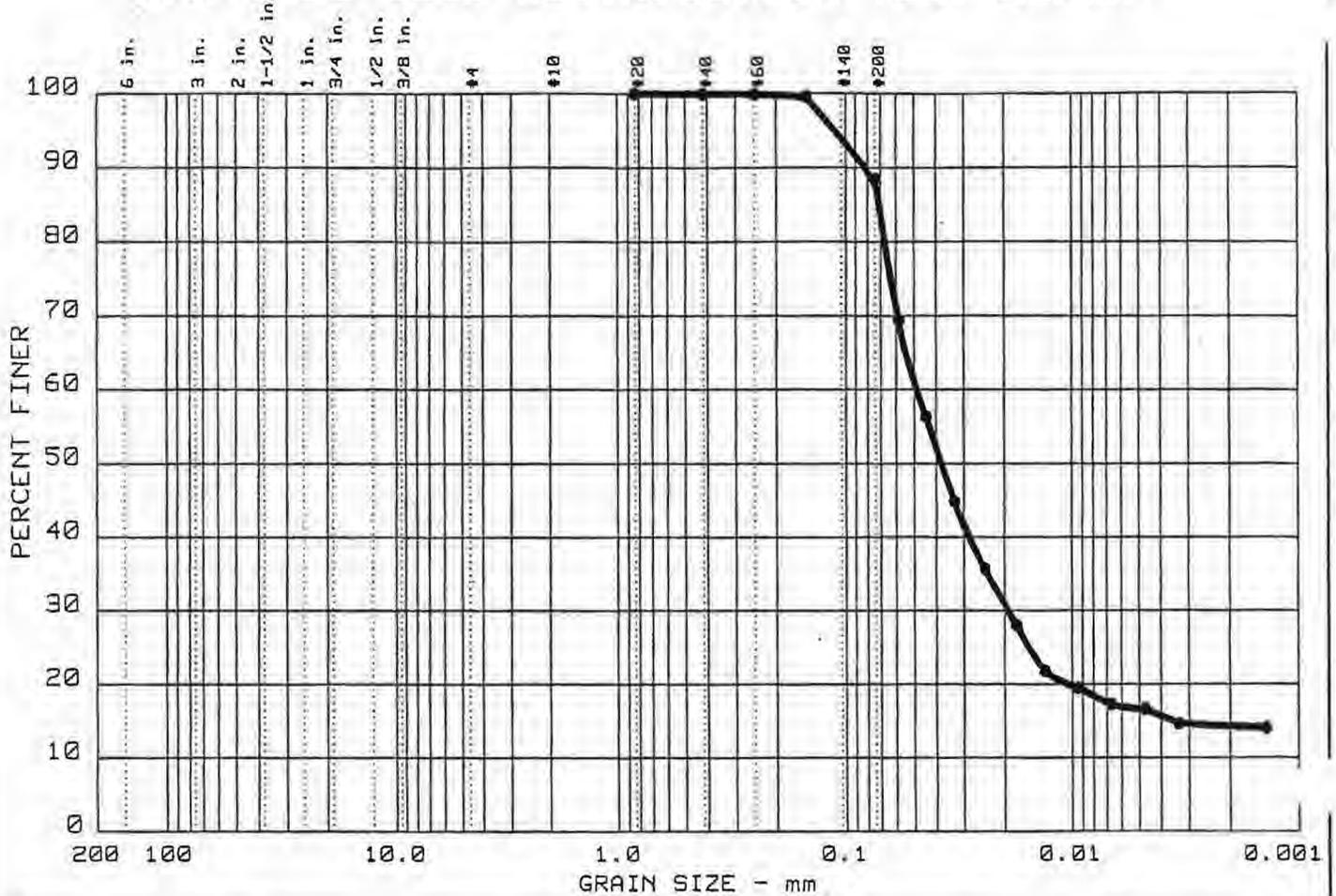
Sample information:
 ● BXG628109
 Poorly graded sand with silt.
 GCM-97-28X
 (109-111)

Remarks:
 SIEVE
 WC%=27.0

ABB Environmental Services, Inc.

Project No.: 08740.02
 Project: Fort Devens
 Date: 05/22/97
 Data Sheet No. 21

PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.0	11.5	71.8	16.7	ML		

SIEVE Inches size	PERCENT FINER		
●			
X	GRAIN SIZE		
D ₆₀	0.02		
D ₃₀			
D ₁₀			
X	COEFFICIENTS		
C _c			
C _u			

SIEVE number size	PERCENT FINER		
●			
20	100.0		
40	100.0		
60	99.9		
100	99.5		
200	88.5		

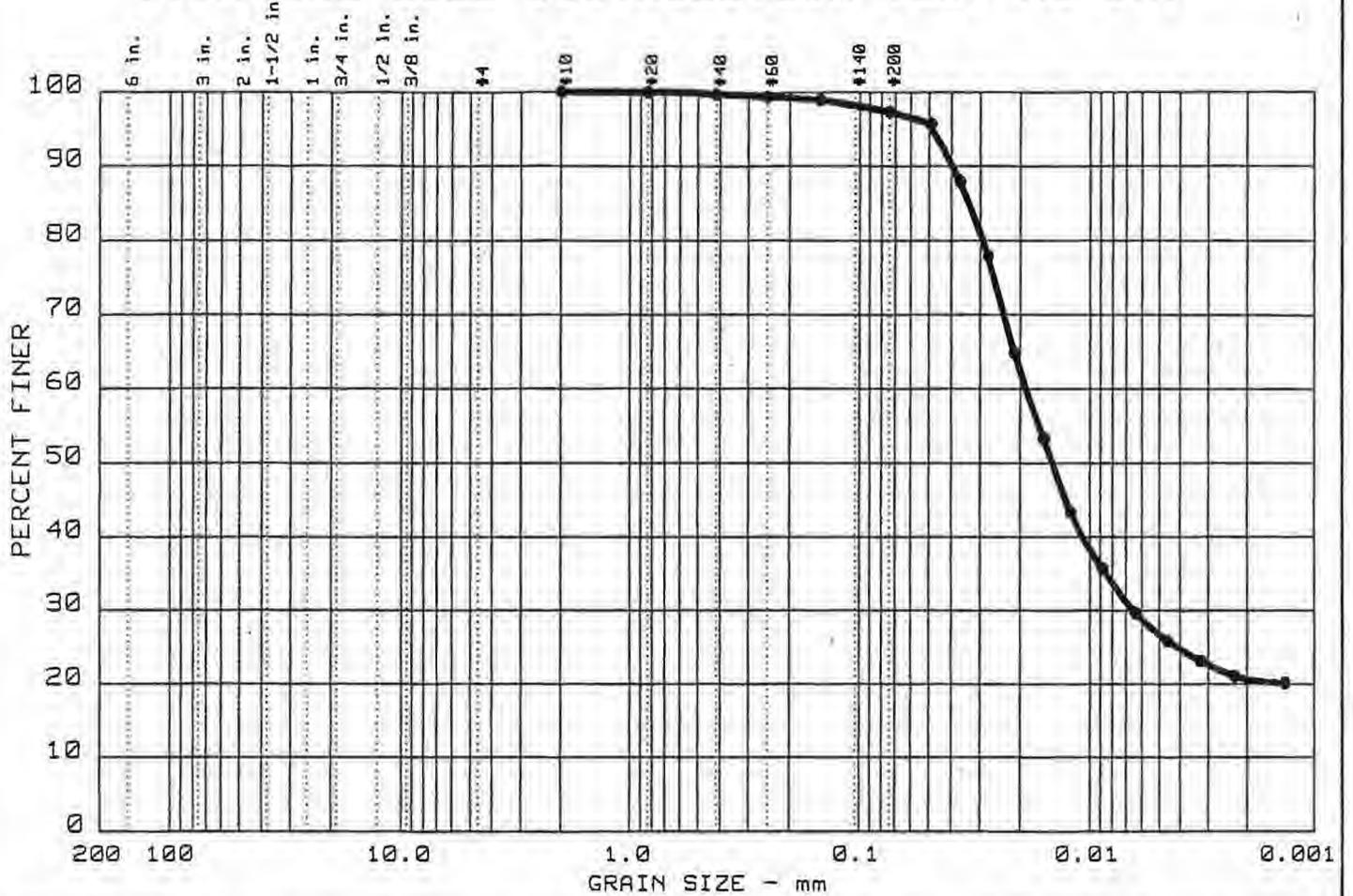
Sample information:
 ● BXC628119
 Silt with clay.
 66M-97-28x
 (119-121)

Remarks:
 SIEVE/HYDROMETER
 WC%=22.3

ABB Environmental Services, Inc.

Project No.: 08740.02
 Project: Fort Devens
 Date: 05/22/97
 Data Sheet No. 21

PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.0	2.7	70.6	26.7	ML		

SIEVE Inches size	PERCENT FINER		
	●		
X	GRAIN SIZE		
D ₆₀	0.01		
D ₃₀			
D ₁₀			
X	COEFFICIENTS		
C _u			
C _c			

SIEVE number size	PERCENT FINER		
	●		
10	100.0		
20	100.0		
40	99.8		
60	99.4		
100	99.0		
200	97.3		

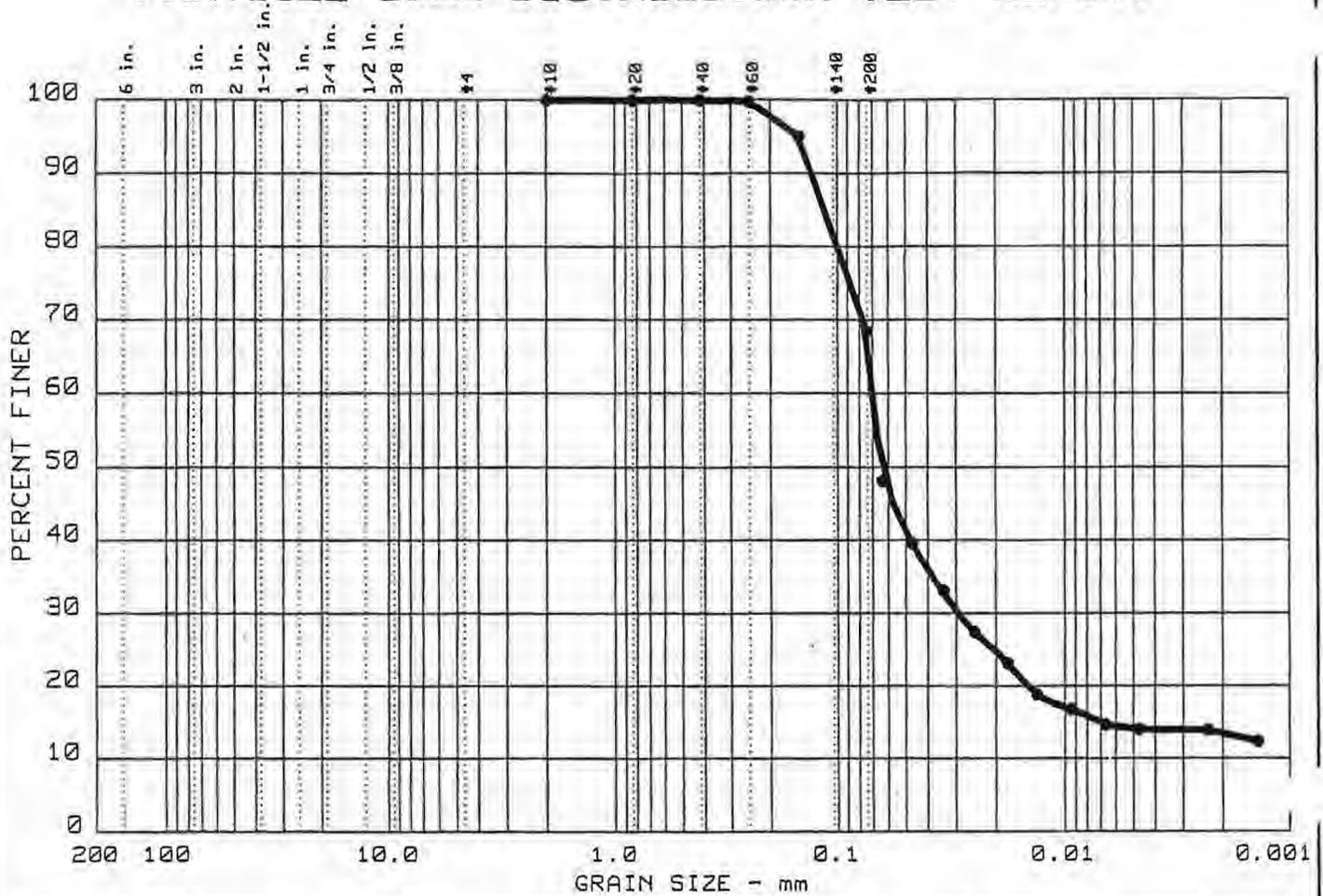
Sample information:
 ● BXG629144
 Silt with clay.
 061-97-29X
 (144-146)

Remarks:
 SIEVE/HYDROMETER
 WC%=28.4

ABB Environmental Services, Inc.

Project No.: 08740.02
 Project: Fort Devens
 Date: 05/22/97
 Data Sheet No. 21

PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.0	31.5	54.4	14.1	ML		

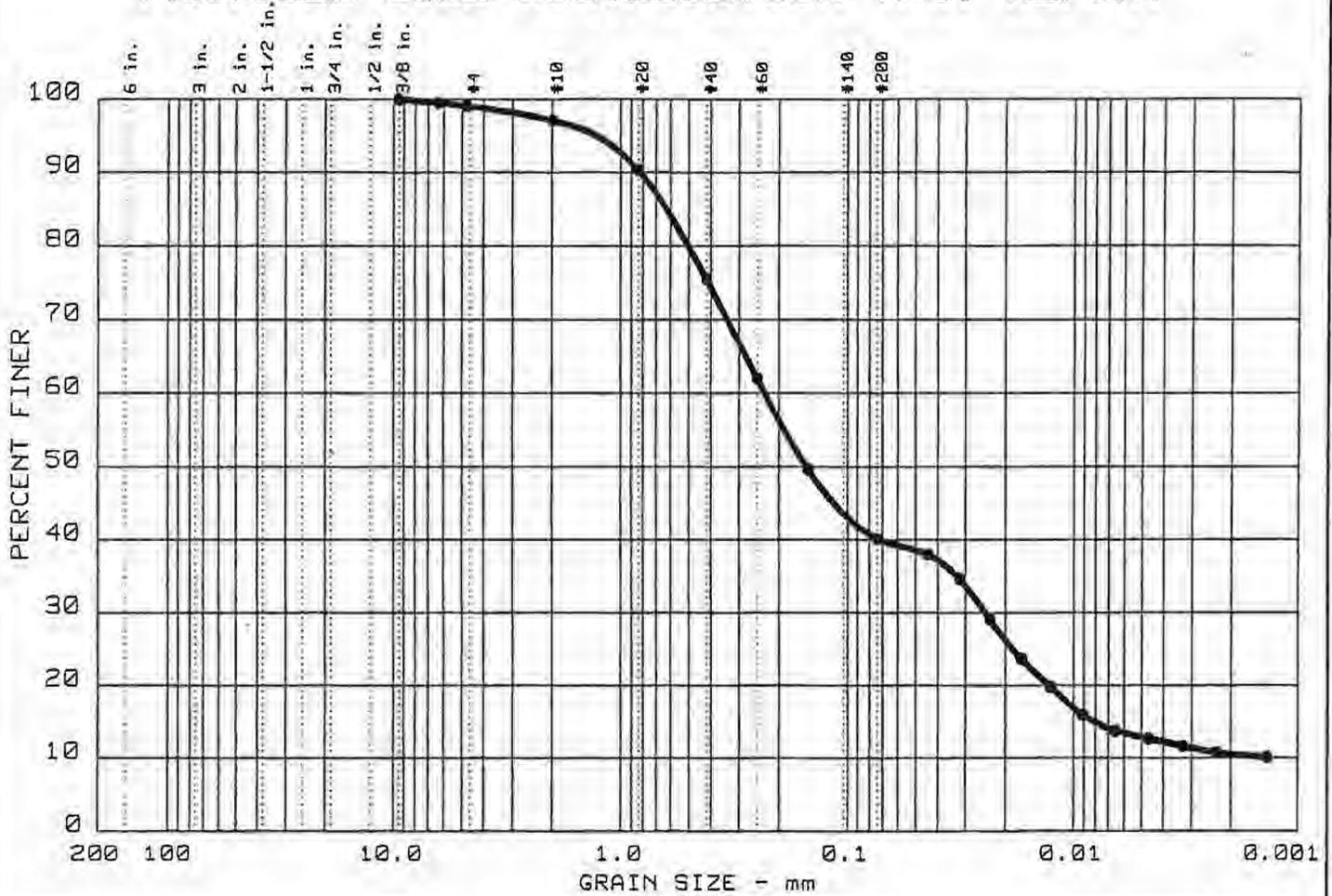
SIEVE Inches size	PERCENT FINER		
●			
X	GRAIN SIZE		
D ₆₀ D ₃₀ D ₁₀	0.03		
X	COEFFICIENTS		
C _c C _u			

SIEVE number size	PERCENT FINER		
●			
10	100.0		
20	100.0		
40	99.9		
60	99.7		
100	95.0		
200	68.5		

Sample information:
 ● BXG629149
 Sandy silt with clay.
 66M-97-29X
 (149-151)

Remarks:
 SIEVE/HYDROMETER
 WC%=23.1

PARTICLE SIZE DISTRIBUTION TEST REPORT



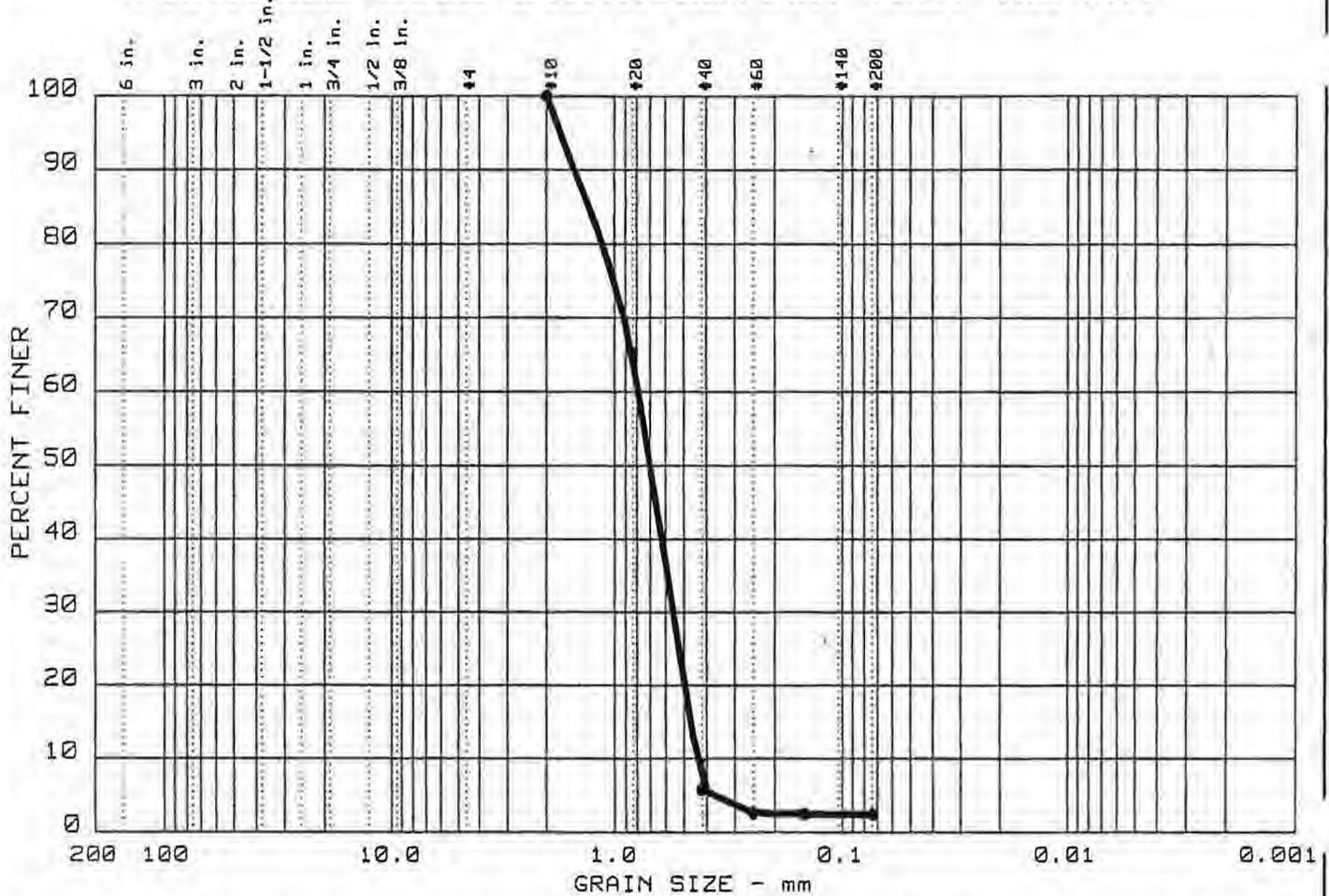
% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	1.0	58.9	27.3	12.8	SM		

SIEVE Inches size	PERCENT FINER		SIEVE number size	PERCENT FINER	
0.375	●	100.0	4	●	99.0
0.25		99.5	10		97.0
			20		90.3
			40		75.5
			60		62.0
			100		49.6
			200		40.1
GRAIN SIZE					
D ₆₀		0.23			
D ₃₀		0.02			
D ₁₀					
COEFFICIENTS					
C _c					
C _u					

Sample information:
 ● BXG629164
 Silty sand with clay.
 66n-97-29X
 (164-166)

Remarks:
 SIEVE/DROMETER
 WC%=14.5

PARTICLE SIZE DISTRIBUTION TEST REPORT



% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
0.0	0.0	97.6	2.4		SP		

SIEVE Inches size	PERCENT FINER		SIEVE number size	PERCENT FINER		Sample information: ● SAND ACK Poorly graded sand. Remarks: SIEVE WC%=3.5
	●			●		
			10	100.0		
			20	65.3		
			40	5.8		
			60	2.6		
			100	2.5		
			200	2.4		
X	GRAIN SIZE					
D ₆₀	0.79					
D ₃₀	0.56					
D ₁₀	0.44					
X	COEFFICIENTS					
C _c	0.89					
C _u	1.8					

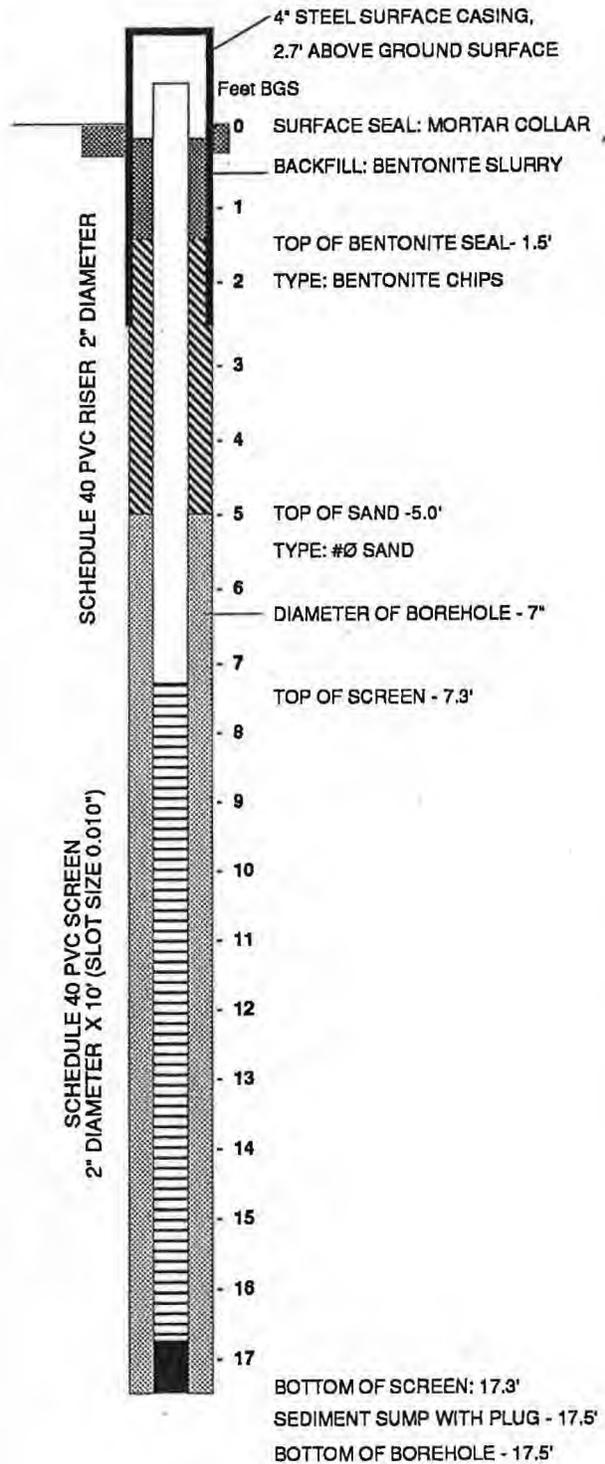
MONITORING WELL CONSTRUCTION DIAGRAMS

C-1 PIEZOMETERS

C-2 MONITORING WELLS

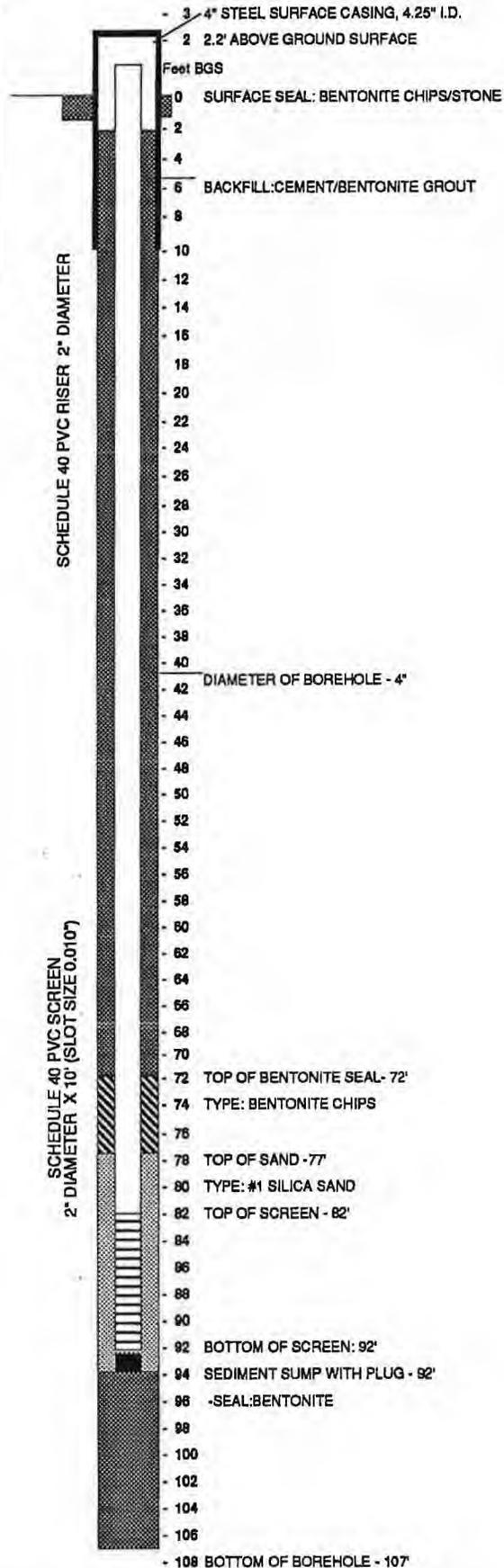
PIEZOMETERS

PROJECT:	FORT DEVENS
PROJECT NO.:	8740-03
STUDY AREA:	A0C 50
BORING NO.:	G6P-96-03X
GEOLOGIST:	R. McCOY
DRILLER:	NHB
DRILLING METHOD:	HSA 4.25"
DATE INSTALLED	6/28/96
DEVELOPMENT:	SURGE & PUMP



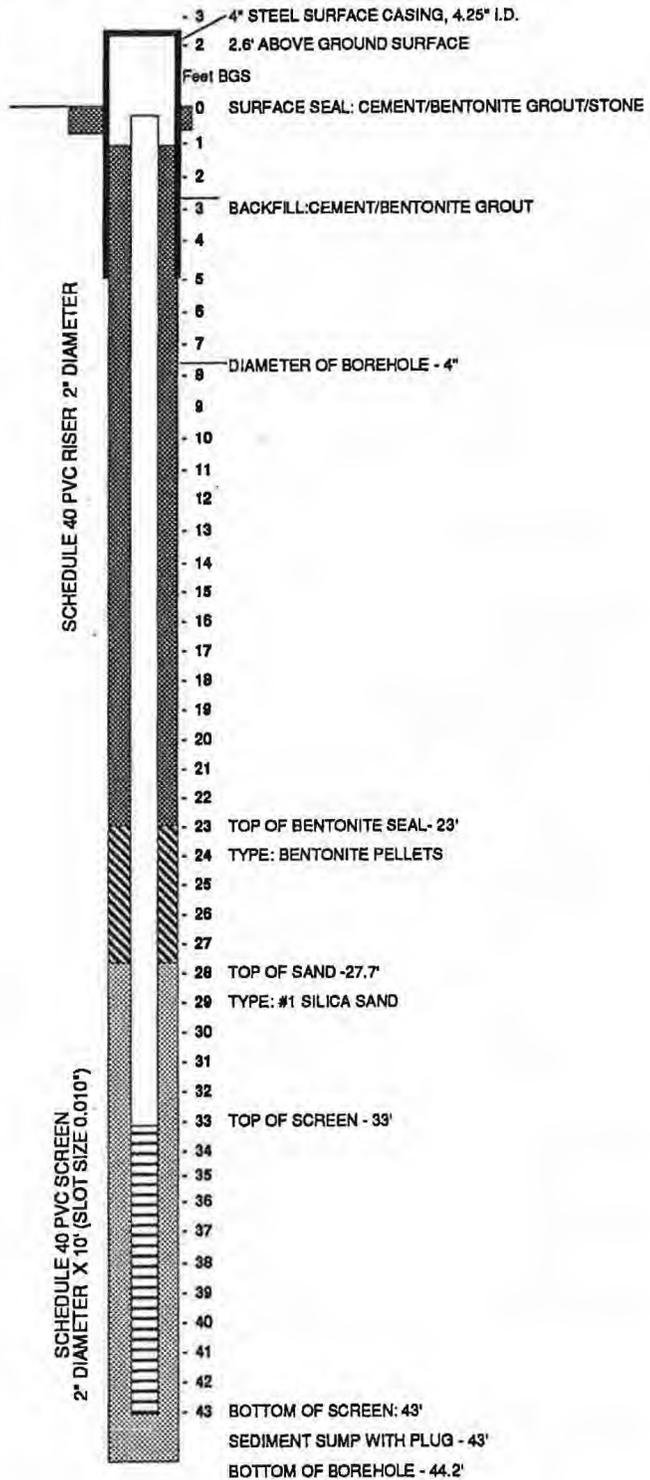
MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
 PROJECT NO.: 8740-02
 STUDY AREA: A0C 50
 BORING NO.: G6P-97-04X
 GEOLOGIST: L. TRACY
 DRILLER: EEI
 DRILLING METHOD: D&W
 DATE INSTALLED: 3/24/97
 DEVELOPMENT: SURGE & PUMP



MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
 PROJECT NO.: 8740-02
 STUDY AREA: A0C 50
 BORING NO.: G6P-97-05X
 GEOLOGIST: L. TRACY
 DRILLER: EEI
 DRILLING METHOD: D&W
 DATE INSTALLED: 3/25/97
 DEVELOPMENT: SURGE & PUMP



MicroWell® Installation Log

G6P-98-06A

Project Name: HLA/Devens	Date: 10/22/98
PSA Project Number: 98250	Equipment: VDH641
Location: Behind AVS Co.	PSA Personnel: MA/MG
Pipe ID: 1.05", Pipe OD: 1.32" Screen Slot Width: 0.015"	W.L.: Not Taken

<p style="text-align: center;"><u>Well Schematic</u> (not to scale)</p> <p style="text-align: center;">Refusal: No</p>	<p style="text-align: center;"><u>Not Sampled</u></p> <p style="text-align: center; margin-top: 100px;"><u>Comments:</u> Piezometer well. Couplet to G6P-98-06B</p>
--	---

<u>Materials</u>	
Unscreened Pipe: 3 feet Screen Length: 10 feet Points: 1 Finish: Locking Top	Additional Tubing: 0 feet Additional Vials: 0 Bailers: 0

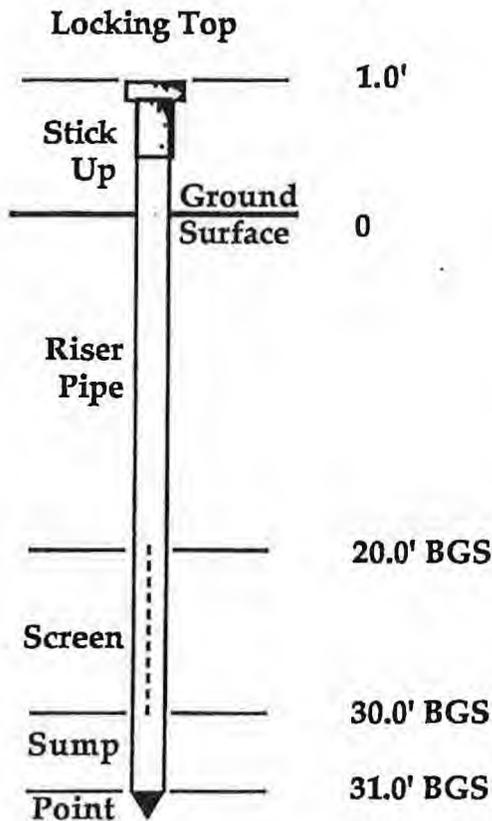
MicroWell® Installation Log

G6P-98-06B

Project Name: HLA/Devens	Date: 10/22/98
PSA Project Number: 98250	Equipment: VDH662
Location: Behind AVS Co.	PSA Personnel: MA/MG
Pipe ID: 1.05", Pipe OD: 1.32" Screen Slot Width: 0.015"	W.L.: 4.25', TOC: 5.25' (may not be stabilized)

Well Schematic

(not to scale)



Refusal: No

Not Sampled

Comments: Piezometer well.
Couplet to G6P-98-06A

Materials

Unscreened Pipe: 22.0 feet
 Screen Length: 10 feet
 Points: 1
 Finish: Locking Top

Additional Tubing: 0 feet
 Additional Vials: 0
 Bailers: 0

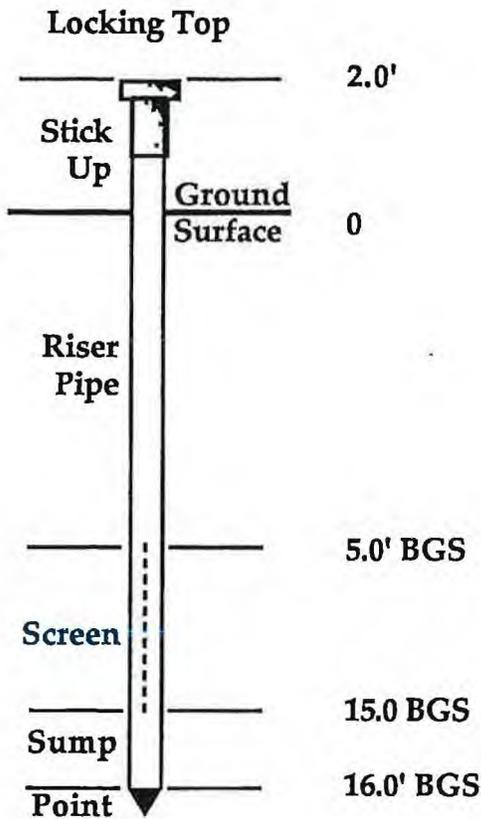
MicroWell® Installation Log

G6P-98-07A

Project Name: HLA/Devens	Date: 10/22/98
PSA Project Number: 98250	Equipment: VDH641
Location: Game Farm	PSA Personnel: MA/MG
Pipe ID: 1.05", Pipe OD: 1.32" Screen Slot Width: 0.015"	W.L.: Not Taken

Well Schematic

(not to scale)



Refusal: No

Not Sampled

Comments Piezometer well.
Couplet to G6P-98-07B

Materials

Unscreened Pipe: 8 feet
Screen Length: 10 feet
Points: 1
Finish: Locking Top

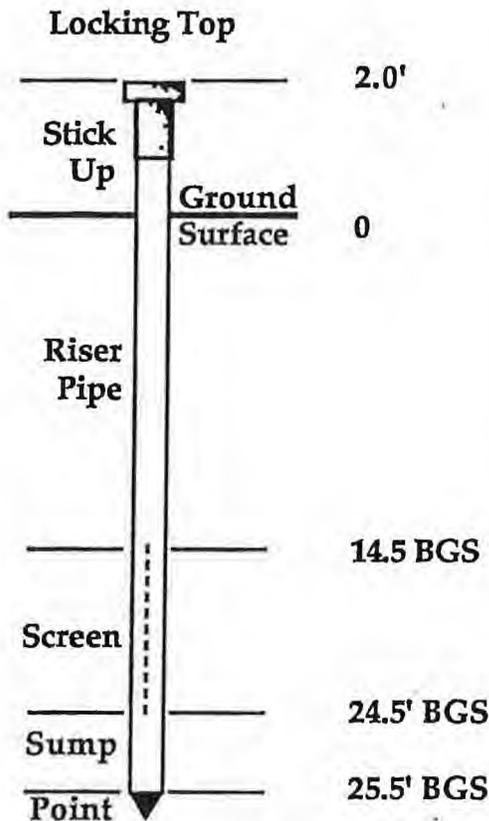
Additional Tubing: 0 feet
Additional Vials: 0
Bailers: 0

MicroWell® Installation Log

G6P-98-07B

Project Name: HLA/Devens	Date: 10/22/98
PSA Project Number: 98250	Equipment: VDH641
Location: Game Farm	PSA Personnel: MA/MG
Pipe ID: 1.05", Pipe OD: 1.32" Screen Slot Width: 0.015"	W.L.: Not Taken

Well Schematic
(not to scale)



Refusal: No

Not Sampled

Comments: Piezometer well.
Couplet to G6P-98-07A

Materials

Unscreened Pipe: 17.5 feet
Screen Length: 10 feet
Points: 1
Finish: Locking Top

Additional Tubing: 0 feet
Additional Vials: 0
Bailers: 0

MONITORING WELLS

Harding Lawson Associates



ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT No.: 6917-04
STUDY AREA: GROUP 6
BORING No.: G6M-92-01X
GEOLOGIST: NWH
DRILLER: D.L MAHER
DRILLING METHOD: HSA
DATE INSTALLED: 6/17/92
TOP OF RISER ELEV.: 265.41'
GROUND SURF. ELEV.: 263.10'

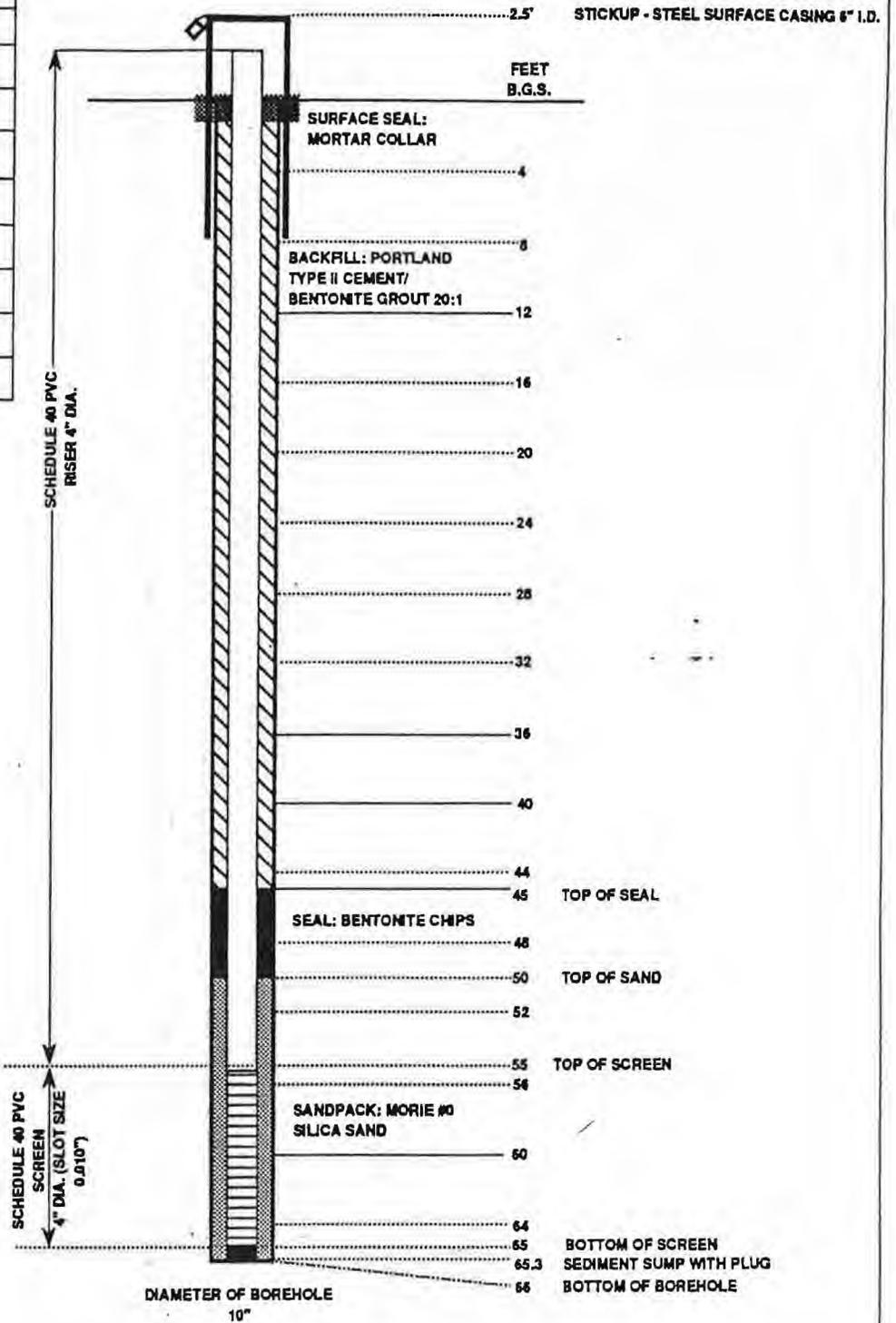




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS

PROJECT No.: 6917-04

STUDY AREA: GROUP 6

BORING No.: G6M-92-02X

GEOLOGIST: R. RUSTAD

DRILLER: D.L MAHER

DRILLING METHOD: HSA

DATE INSTALLED: 6/11/92

TOP OF RISER ELEV.: 271.00'

GROUND SURF. ELEV.: 268.60'

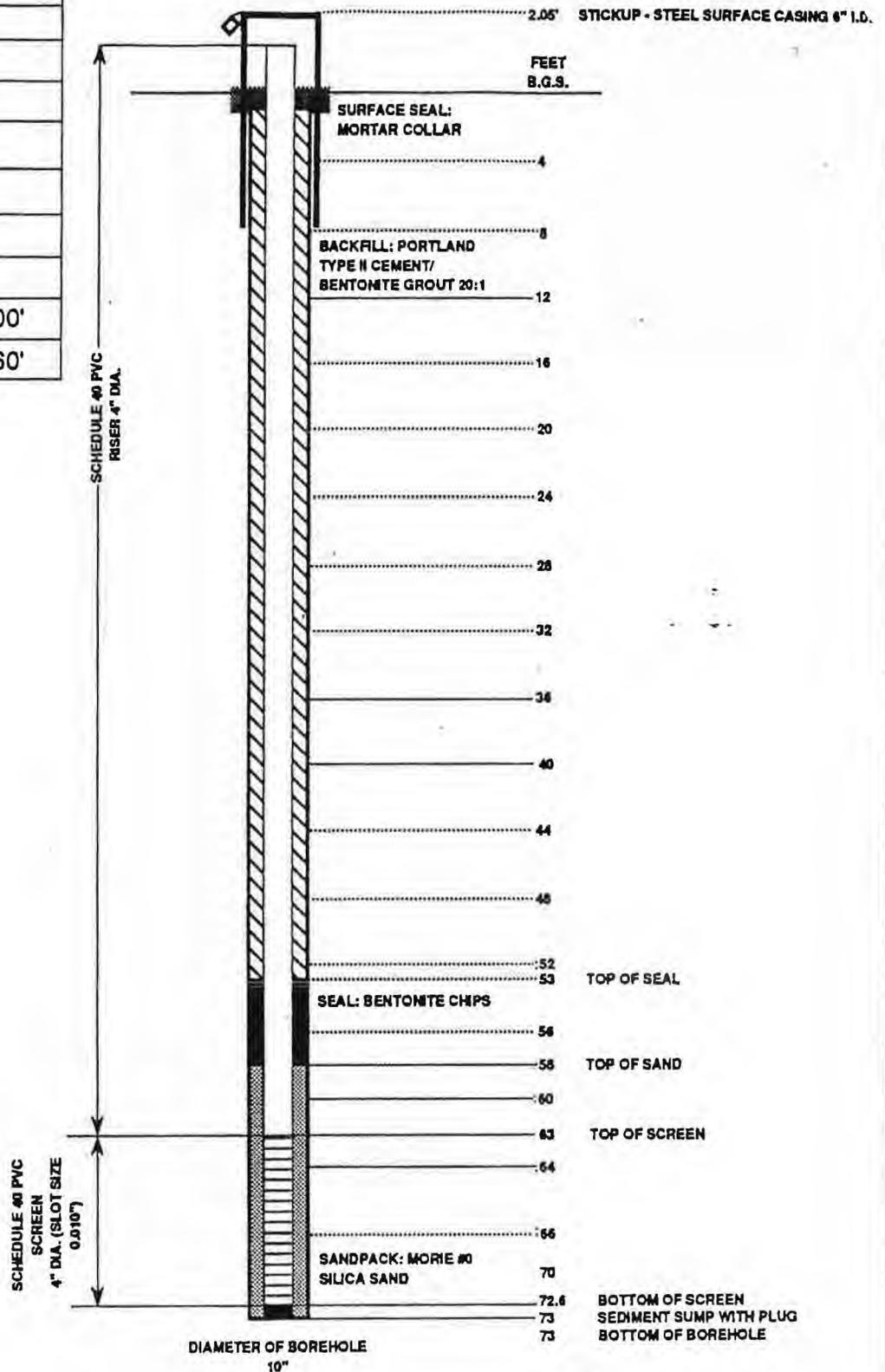




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT No.: 6917-04
STUDY AREA: GROUP 6
BORING No.: G6M-92-03X
GEOLOGIST: R. RUSTAD
DRILLER: D.L MAHER
DRILLING METHOD: HSA
DATE INSTALLED: 6/10/92
TOP OF RISER ELEV.: 269.53'
GROUND SURF. ELEV.: 267.00'

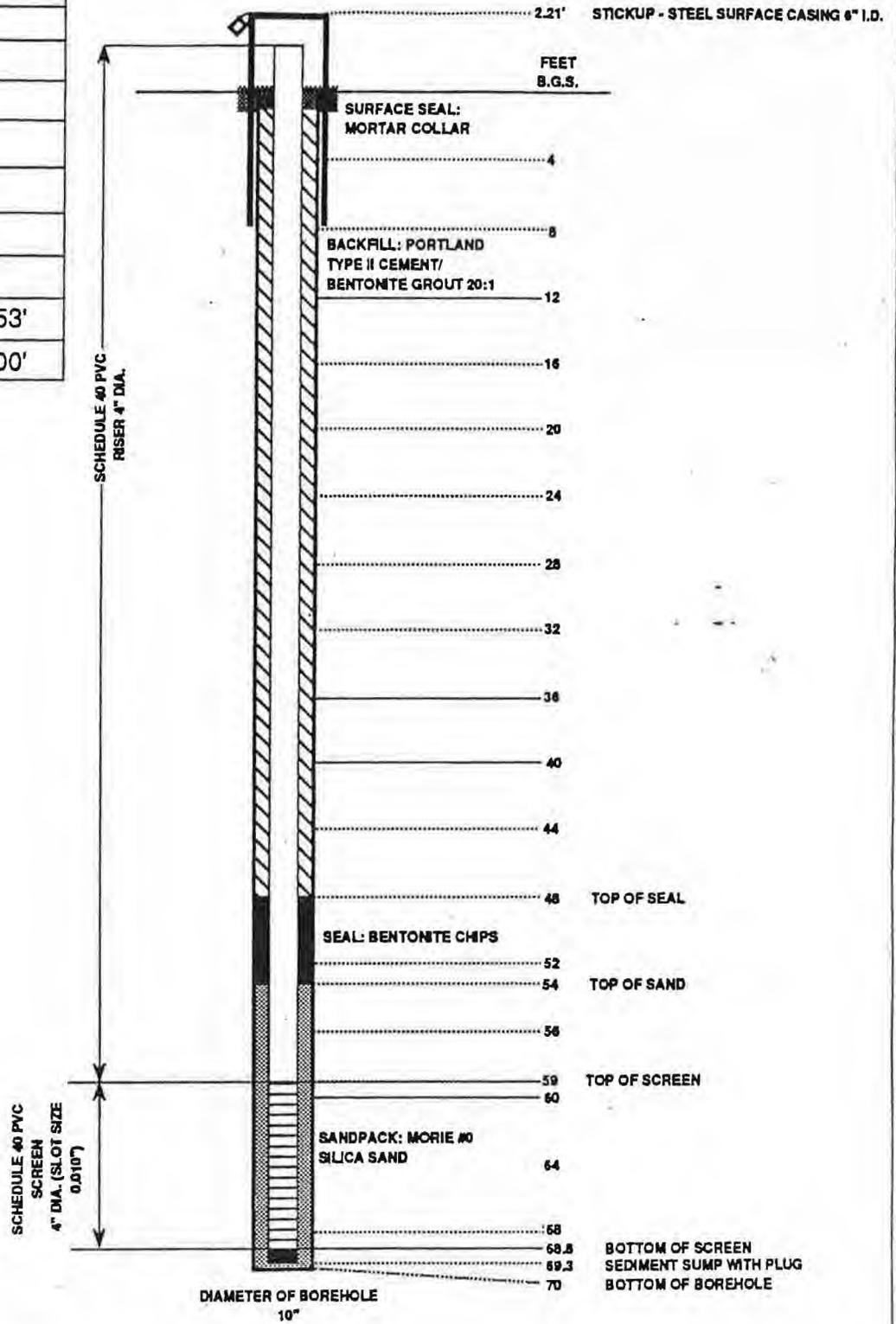
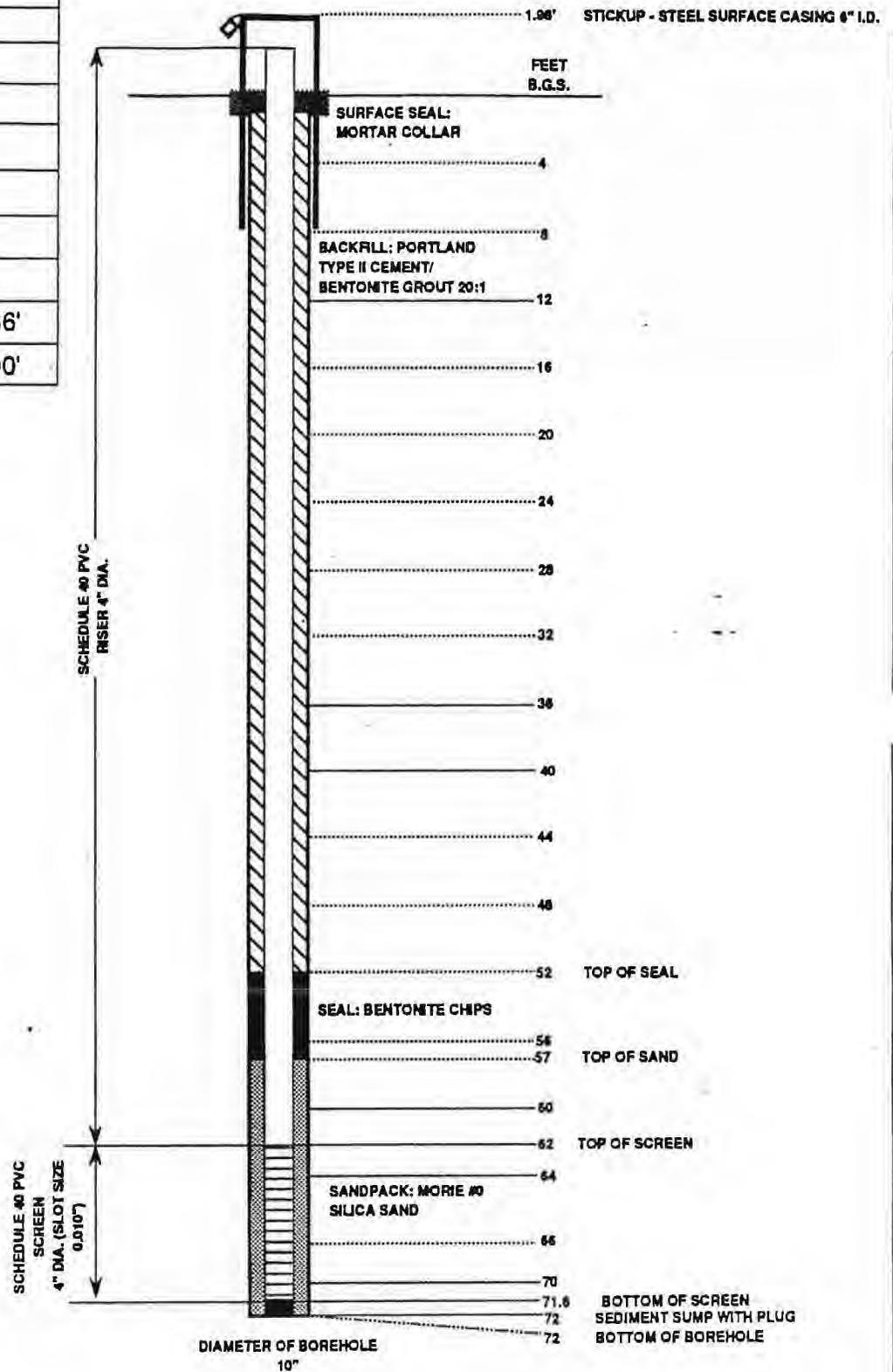




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT No.: 6917-04
STUDY AREA: GROUP 6
BORING No.: G6M-92-04X
GEOLOGIST: R. RUSTAD
DRILLER: D.L MAHER
DRILLING METHOD: HSA
DATE INSTALLED: 6/16/92
TOP OF RISER ELEV.: 270.36'
GROUND SURF. ELEV.: 268.00'



MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
 PROJECT NO.: 8740-02
 STUDY AREA: A0C 50
 BORING NO.: G6M-97-05B
 GEOLOGIST: L. TRACY
 DRILLER: EEI
 DRILLING METHOD: D&W
 DATE INSTALLED: 3/25/97
 DEVELOPMENT: SURGE & PUMP

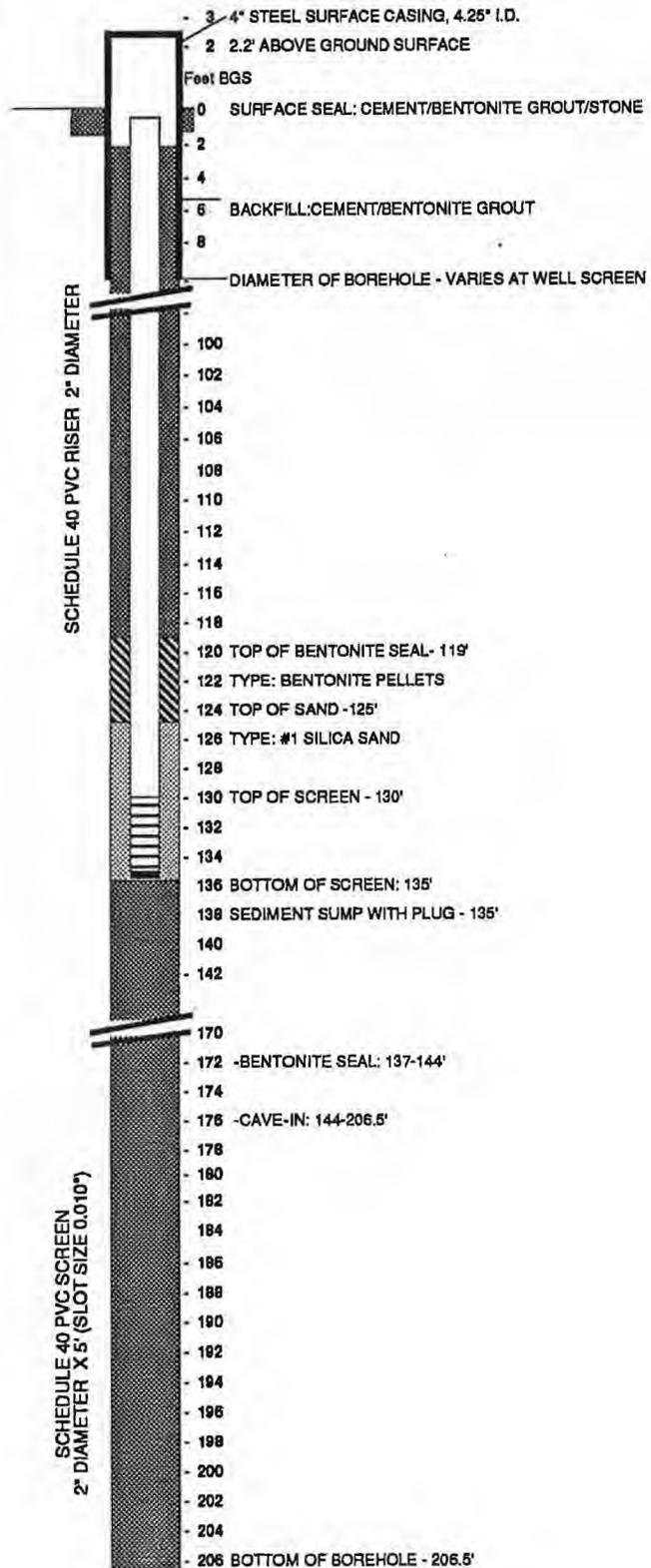
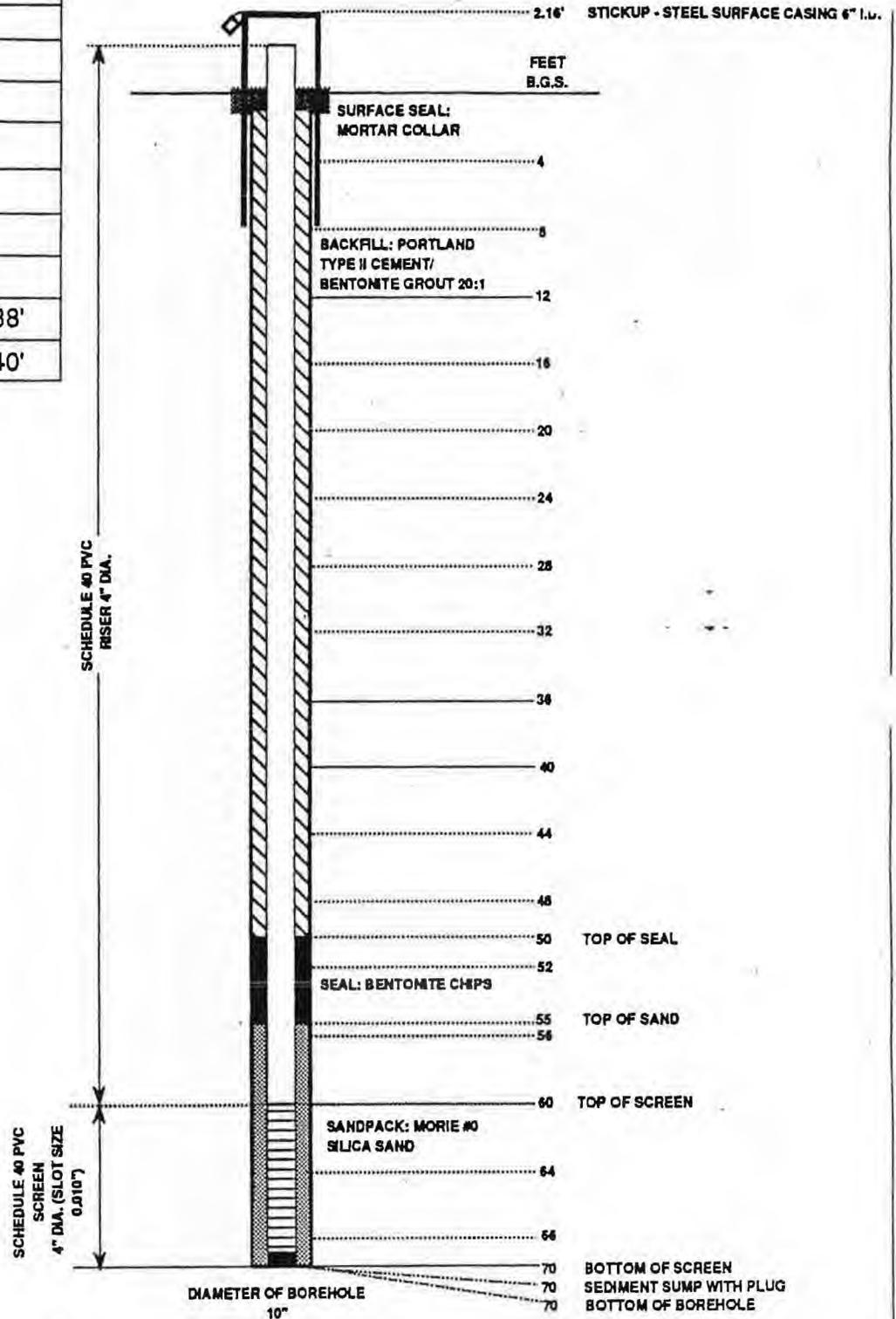




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT No.: 6917-04
STUDY AREA: GROUP 6
BORING No.: G6M-92-05X
GEOLOGIST: NWH, GCF
DRILLER: D.L MAHER
DRILLING METHOD: HSA
DATE INSTALLED: 6/16/92
TOP OF RISER ELEV.: 268.88'
GROUND SURF. ELEV.: 266.40'



MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
 PROJECT NO.: 8740-02
 STUDY AREA: A0C 50
 BORING NO.: G6M-97-06B
 GEOLOGIST: L. TRACY
 DRILLER: EEI
 DRILLING METHOD: D&W
 DATE INSTALLED: 4/3/97
 DEVELOPMENT: SURGE & PUMP

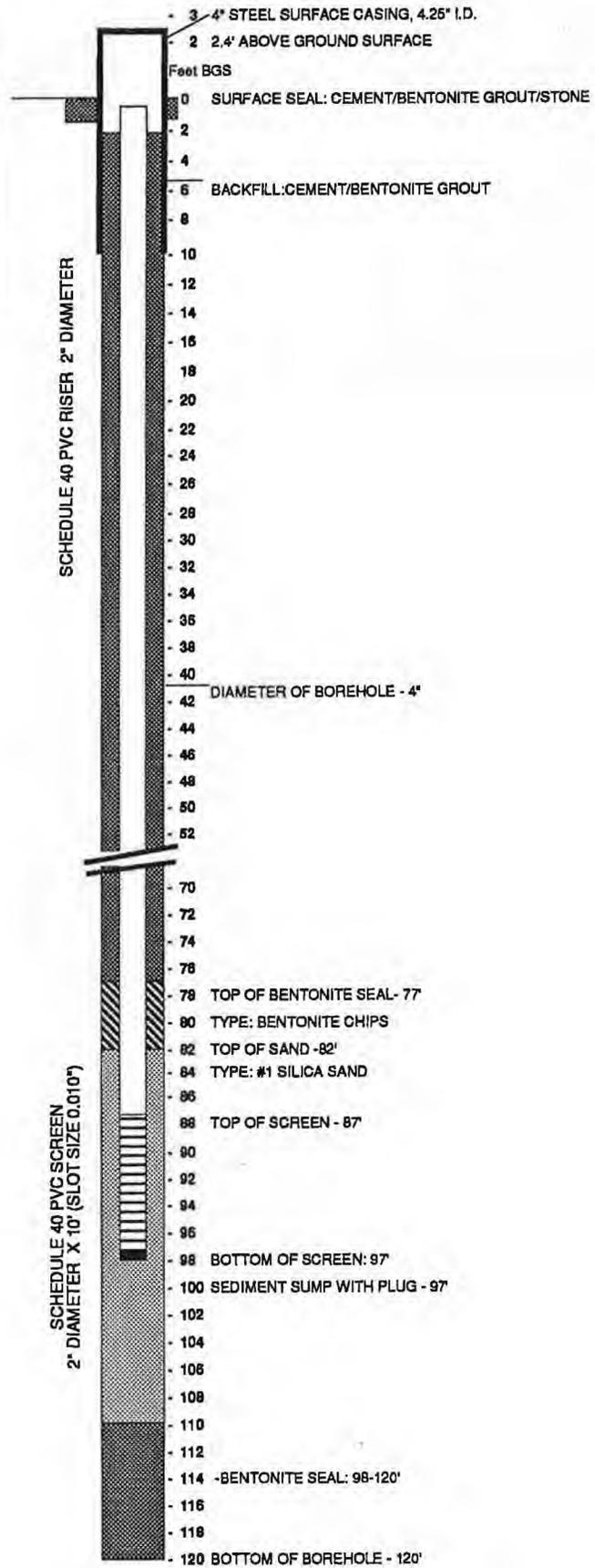




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT No.: 6917-04
STUDY AREA: GROUP 6
BORING No.: G6M-92-06X
GEOLOGIST: R. RUSTAD
DRILLER: D.L MAHER
DRILLING METHOD: HSA
DATE INSTALLED: 6/17/92
TOP OF RISER ELEV.: 263.79'
GROUND SURF. ELEV.: 261.60'

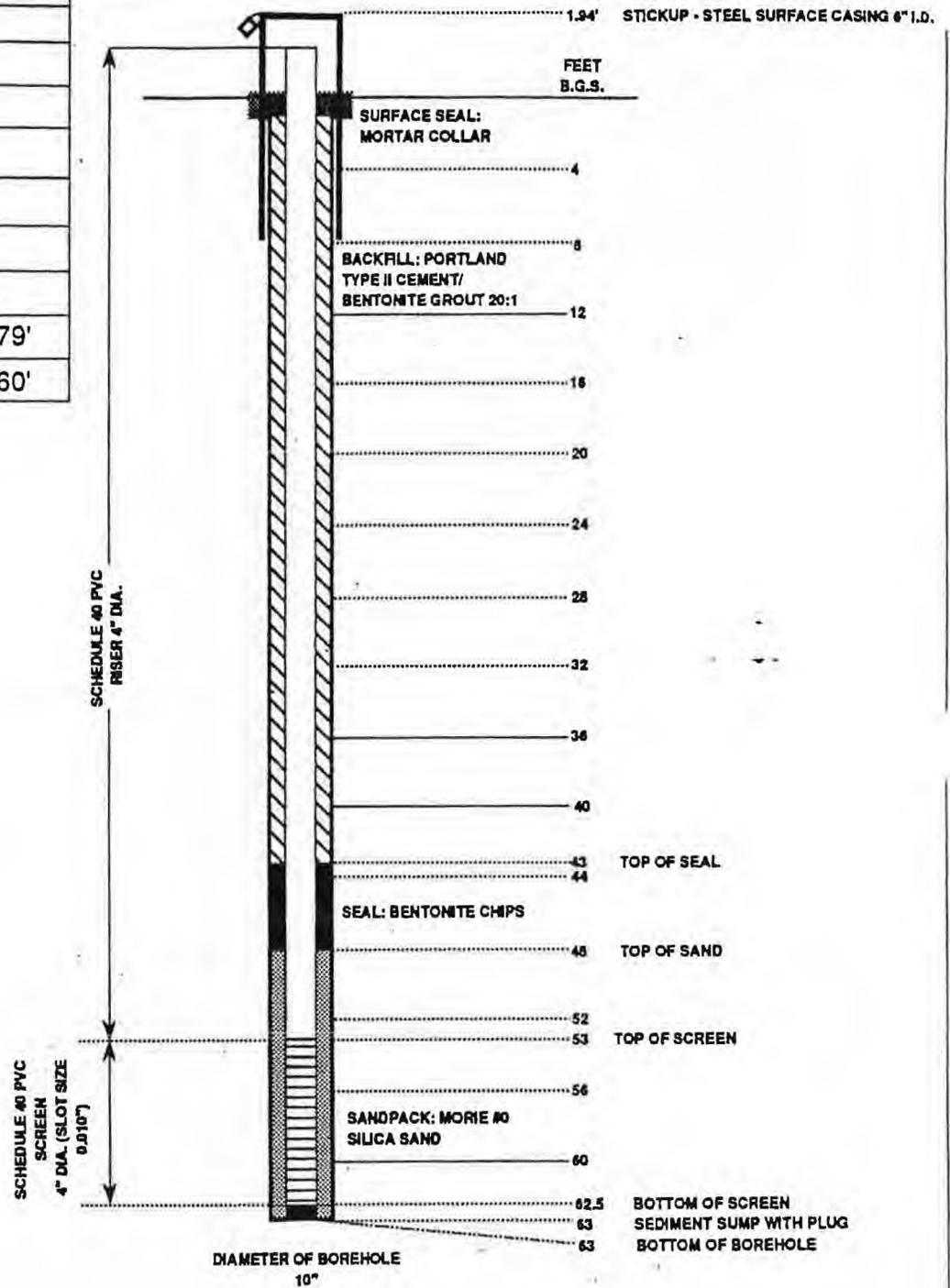




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT No.: 6917-04
STUDY AREA: GROUP 6
BORING No.: G6M-92-07X
GEOLOGIST: R. RUSTAD
DRILLER: D.L MAHER
DRILLING METHOD: HSA
DATE INSTALLED: 6/25/92
TOP OF RISER ELEV.: 266.86'
GROUND SURF. ELEV.: 264.40'

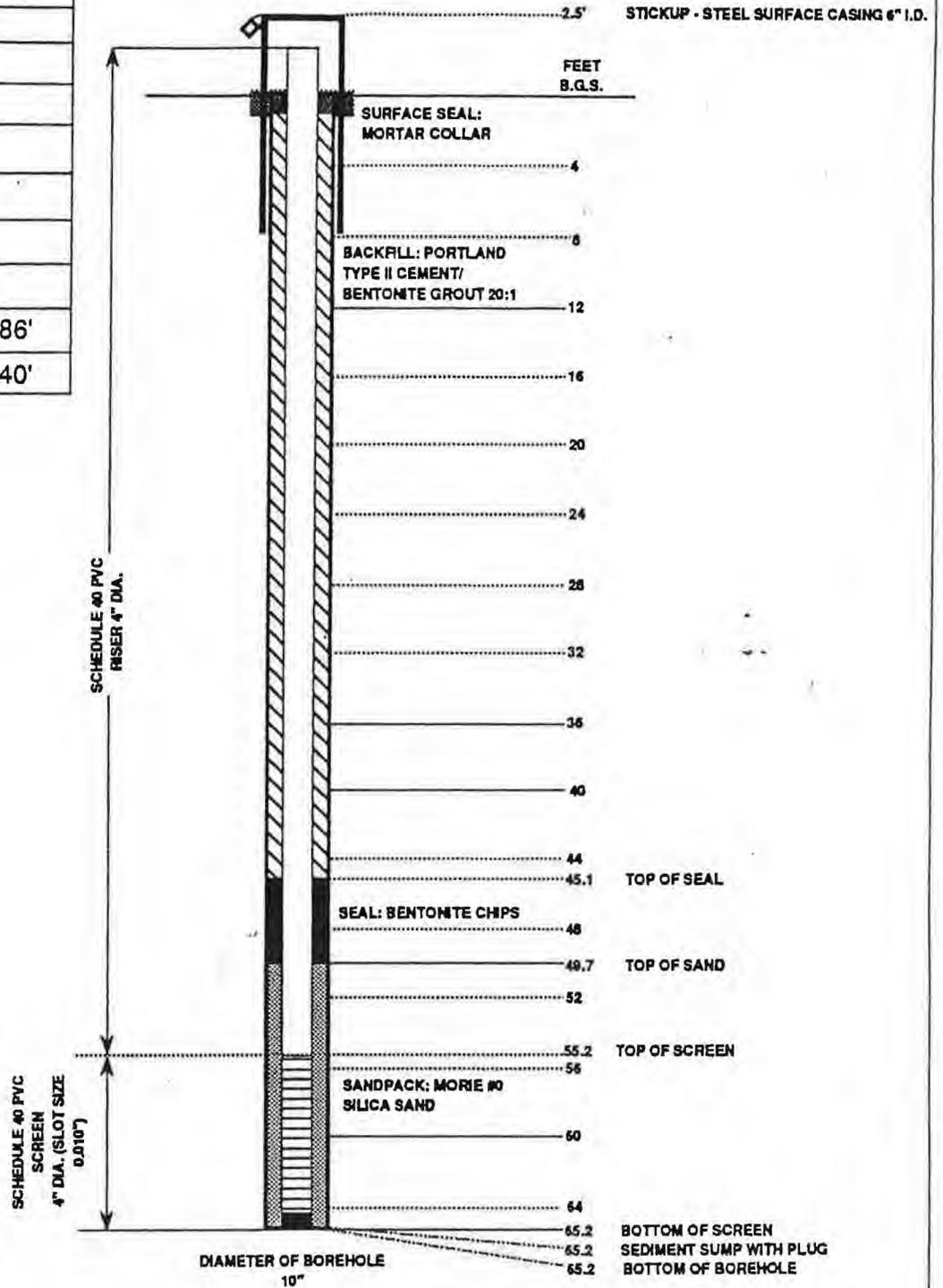




ABB Environmental
Services, Inc.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT NO.: 8740-02
STUDY AREA: A0C 50
BORING NO.: G6M-97-08B
GEOLOGIST: L. TRACY
DRILLER: EEI
DRILLING METHOD: D&W
DATE INSTALLED: 4/6-7/1997
DEVELOPMENT: SURGE & PUMP

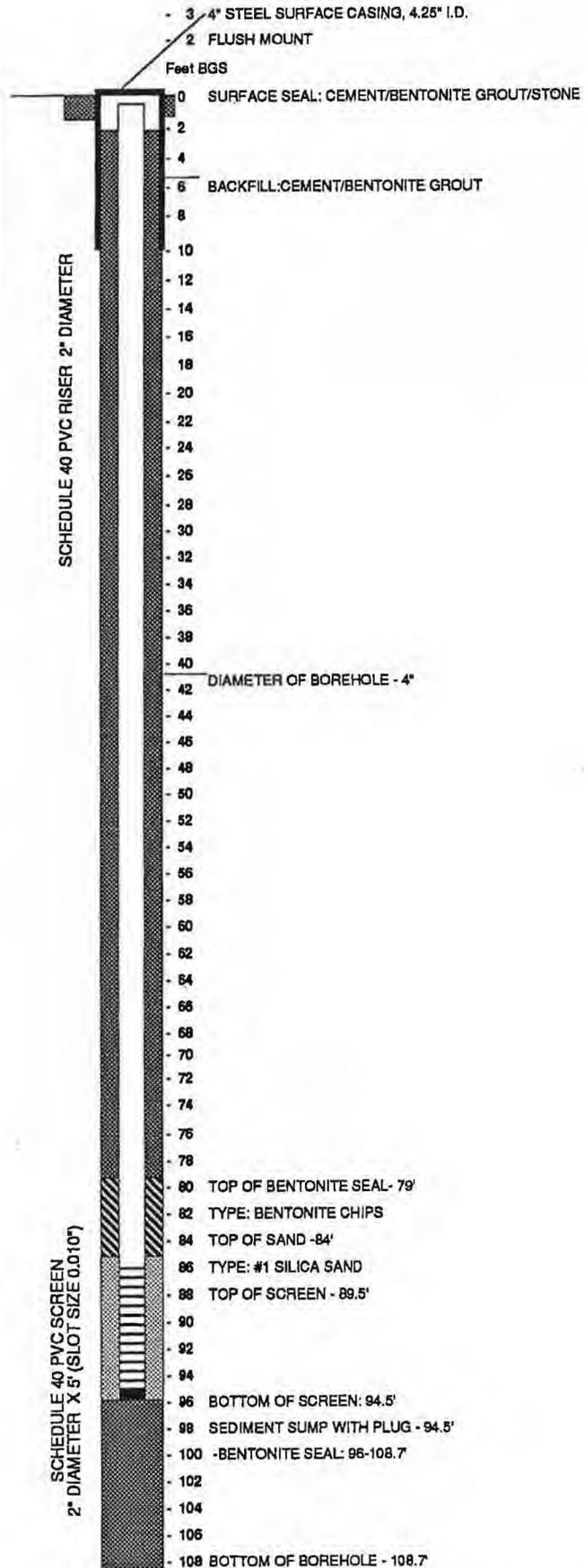
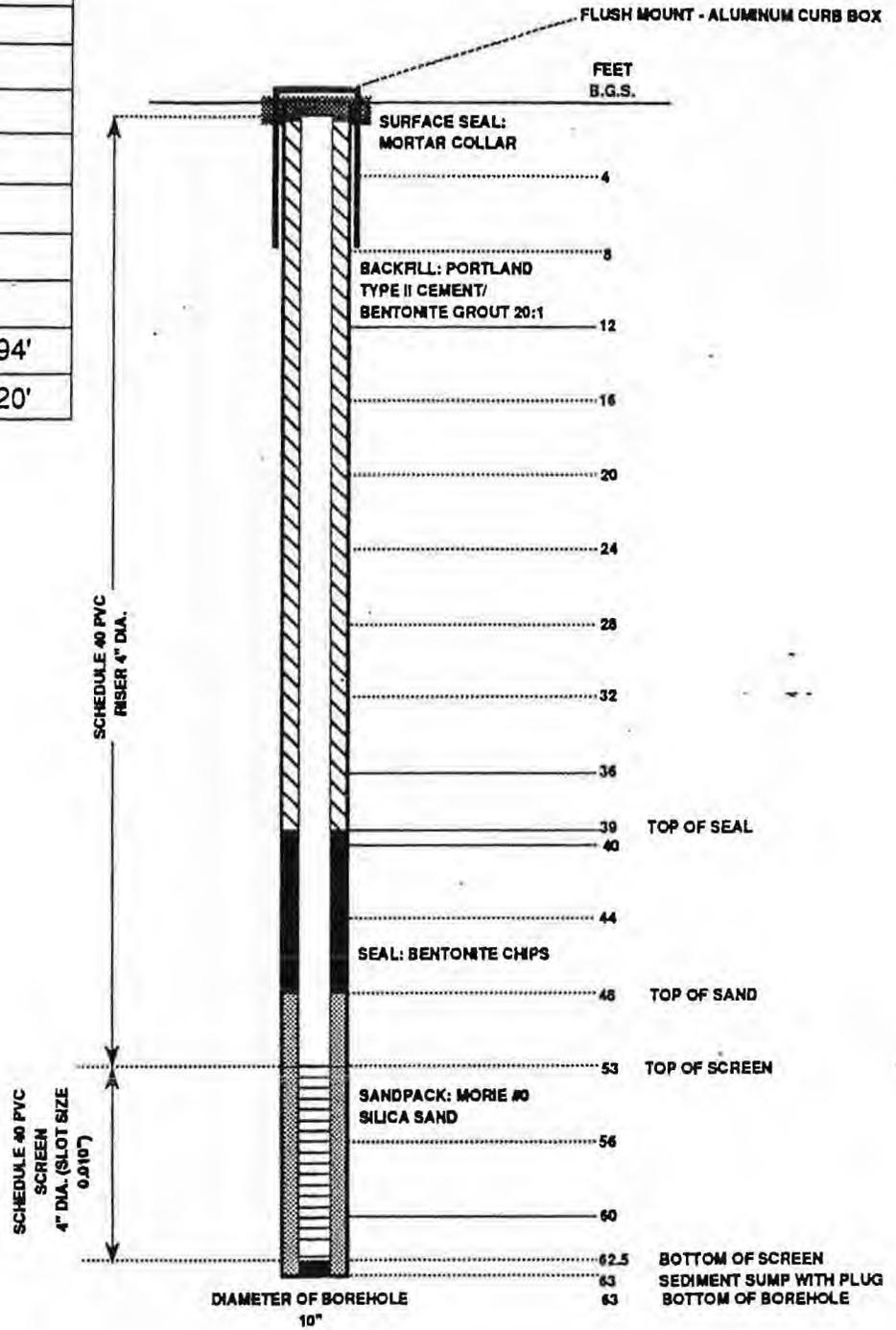




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT No.: 6917-04
STUDY AREA: GROUP 6
BORING No.: G6M-92-08X
GEOLOGIST: R. RUSTAD
DRILLER: D.L MAHER
DRILLING METHOD: HSA
DATE INSTALLED: 6/23/92
TOP OF RISER ELEV.: 262.94'
GROUND SURF. ELEV.: 263.20'



MONITORING WELL DIAGRAM

PROJECT:	FORT DEVENS
PROJECT NO.:	8740-02
STUDY AREA:	A0C 50
BORING NO.:	G6M-97-09B
GEOLOGIST:	L. TRACY
DRILLER:	EEI
DRILLING METHOD:	D&W
DATE INSTALLED	3/27/97
DEVELOPMENT:	SURGE & PUMP

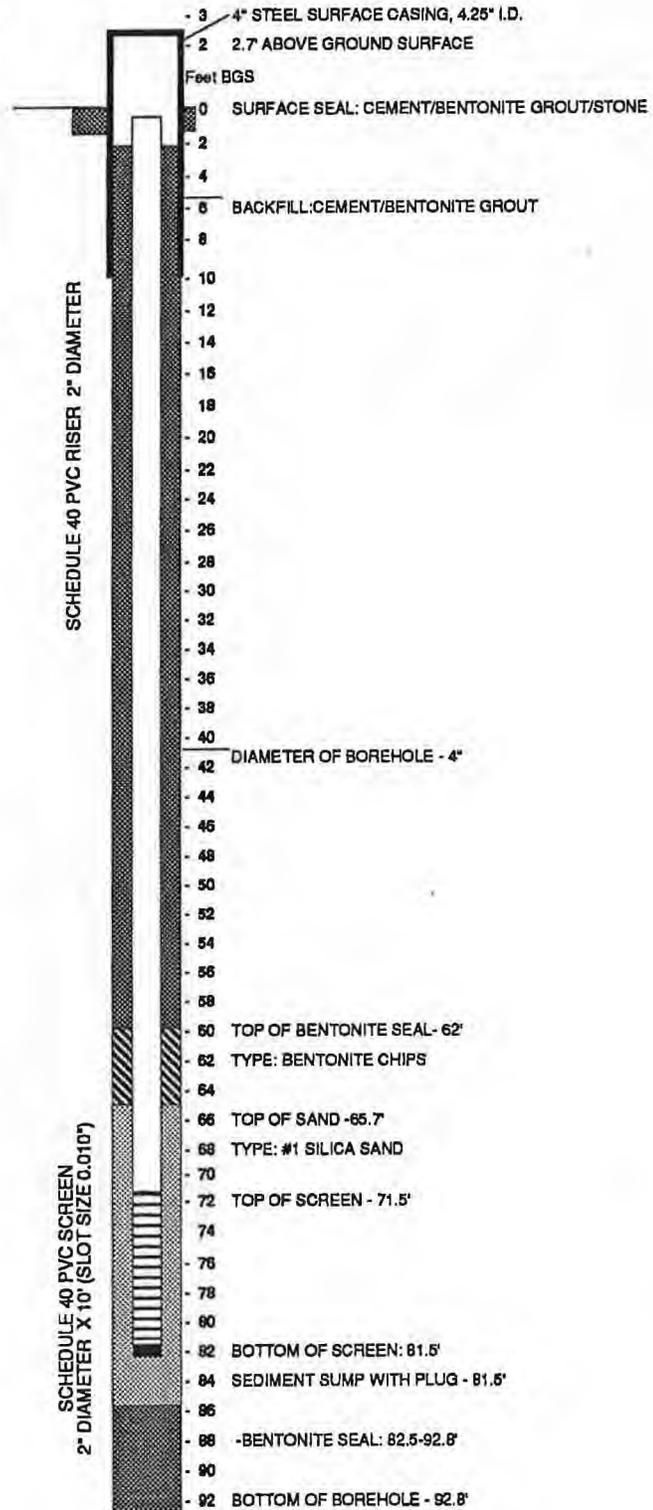




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT No.: 6917-04
STUDY AREA: GROUP 6
BORING No.: G6M-92-09X
GEOLOGIST: R. RUSTAD
DRILLER: D.L MAHER
DRILLING METHOD: HSA
DATE INSTALLED: 6/19/92
TOP OF RISER ELEV.: 261.25'
GROUND SURF. ELEV.: 258.60'

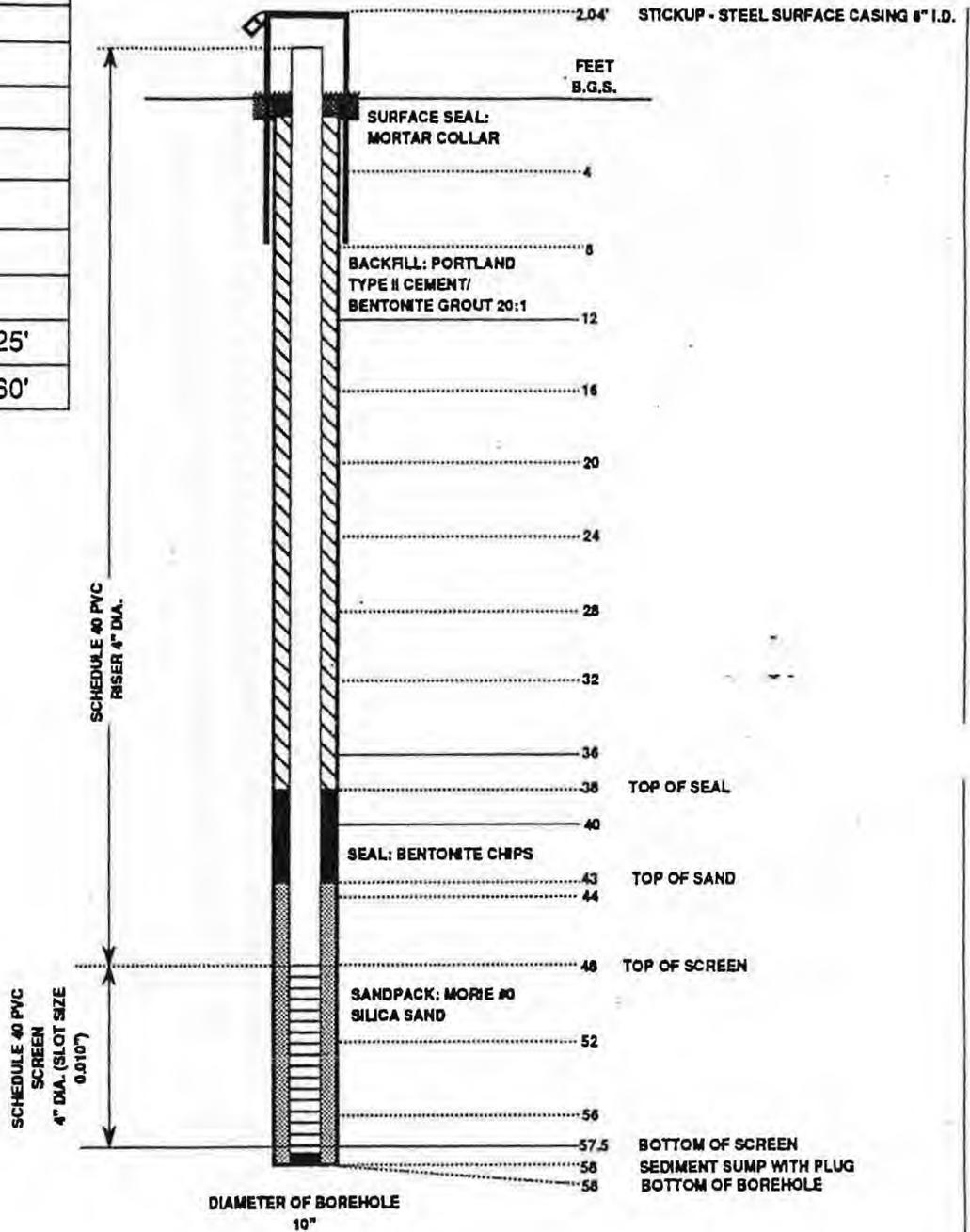




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT No.: 6917-04
STUDY AREA: WWII FUEL POINT
BORING No.: G6M-92-10X
GEOLOGIST: C. LYONS
DRILLER: D.L MAHER
DRILLING METHOD: HSA
DATE INSTALLED: 6/24/92
TOP OF RISER ELEV.: 225.81'
GROUND SURF. ELEV.: 223.20'

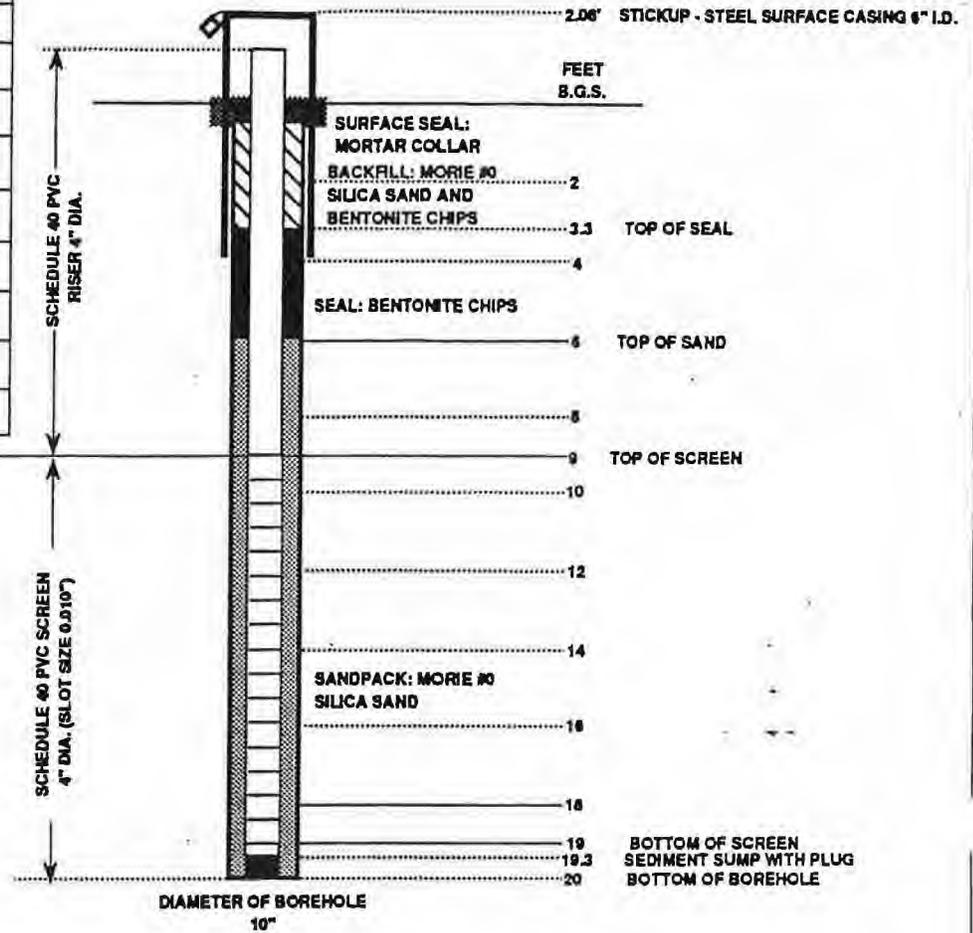




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
 PROJECT No.: 6917-04
 STUDY AREA: WWII FUEL POINT
 BORING No.: G6M-92-11X
 GEOLOGIST: G. FLAHERTY
 DRILLER: D.L MAHER
 DRILLING METHOD: HSA
 DATE INSTALLED: 6/24/92
 TOP OF RISER ELEV.: 225.62'
 GROUND SURF. ELEV.: 223.20'

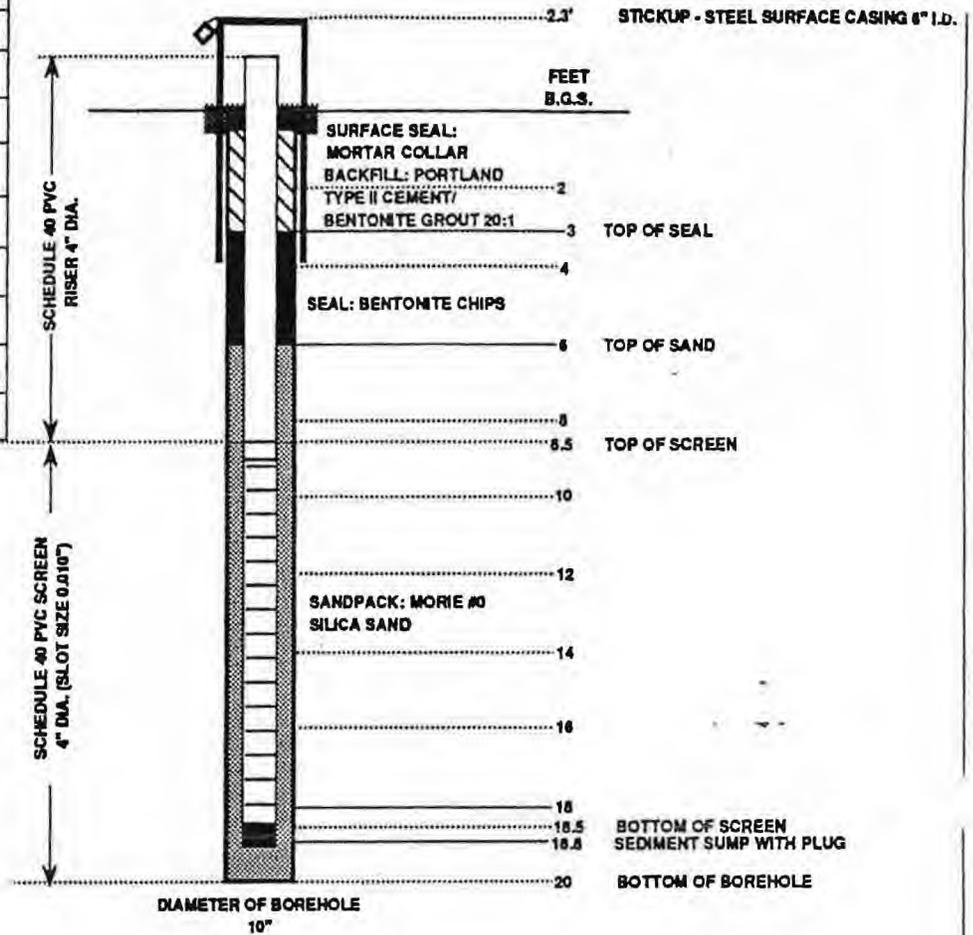
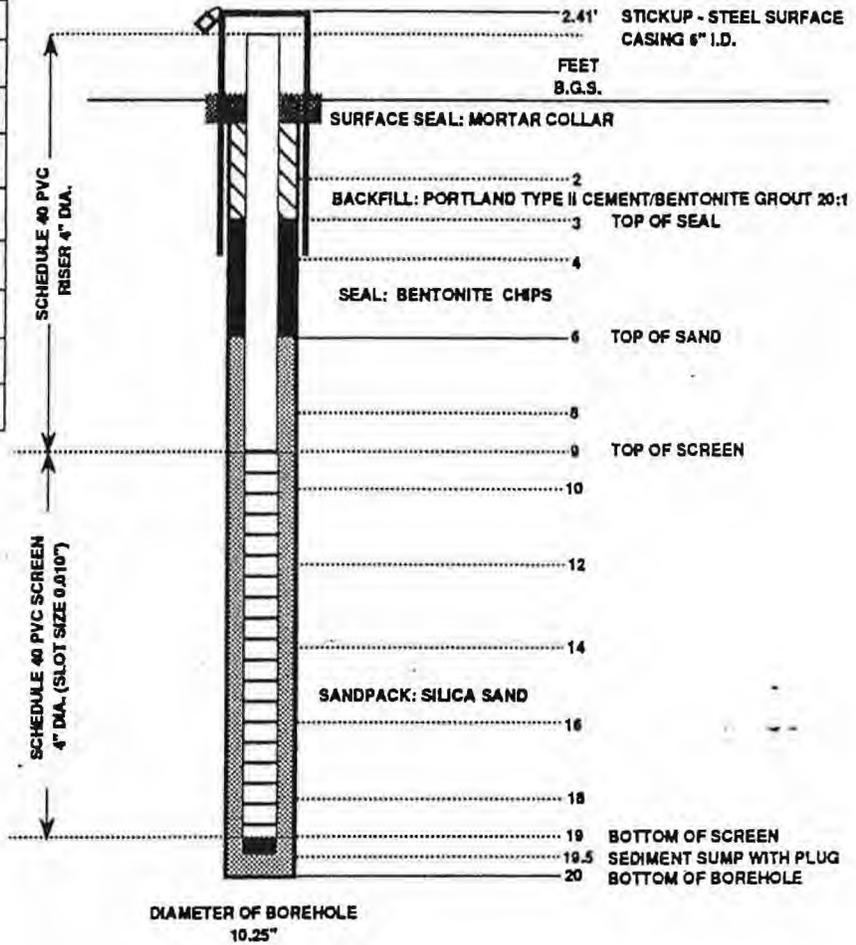




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT No.: 6917-04
STUDY AREA: WWII FUEL POINT
BORING No.: G6M-93-12X
GEOLOGIST: S. MURRAY
DRILLER: NHB
DRILLING METHOD: 6.25"HSA
DATE INSTALLED: 6/2/93
TOP OF RISER ELEV.: 224.73'
GROUND SURF. ELEV.: 223.10'



PROJECT: FORT DEVENS
 PROJECT NO.: 8740-03
 STUDY AREA: A0C 50
 BORING NO.: G6M-96-13B
 GEOLOGIST: G. PORTANTE
 DRILLER: NHB
 DRILLING METHOD: DRIVE & WASH
 DATE INSTALLED: 10/31/96
 DEVELOPMENT: SURGE & PUMP

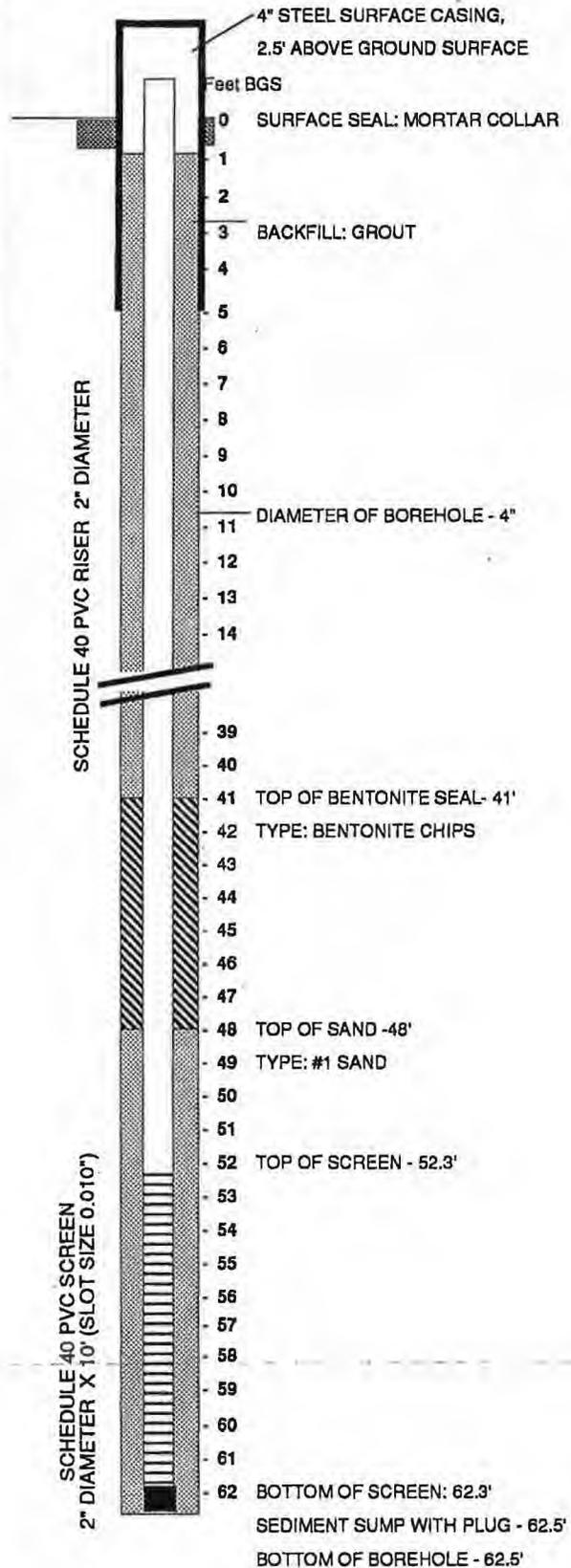




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT No.: 6917-04
STUDY AREA: WWII FUEL POINT
BORING No.: G6M-93-13X
GEOLOGIST: S. MURRAY
DRILLER: NHB
DRILLING METHOD: 6.25"HSA
DATE INSTALLED: 6/1/93
TOP OF RISER ELEV.: 225.58'
GROUND SURF. ELEV.: 223.70'

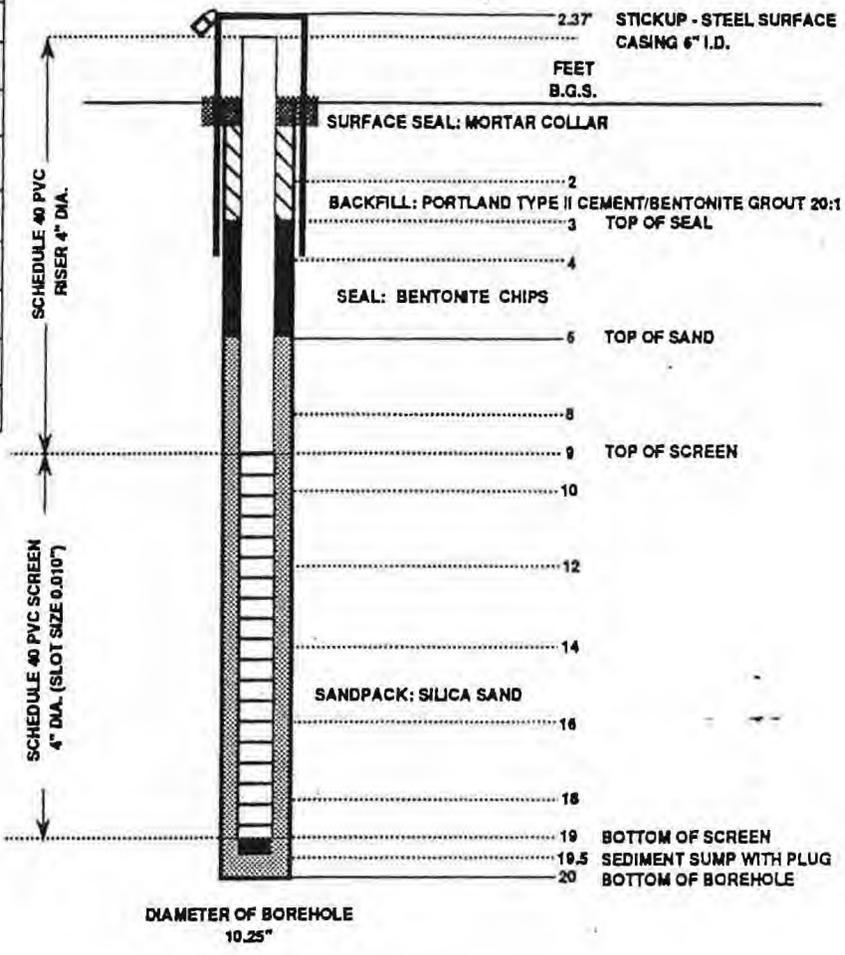




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT No.: 6917-04
STUDY AREA: WWII FUEL POINT
BORING No.: G6M-93-14X
GEOLOGIST: S. MURRAY
DRILLER: NHB
DRILLING METHOD: 6.25"HSA
DATE INSTALLED: 6/3/93
TOP OF RISER ELEV.: 224.89'
GROUND SURF. ELEV.: 223.20'

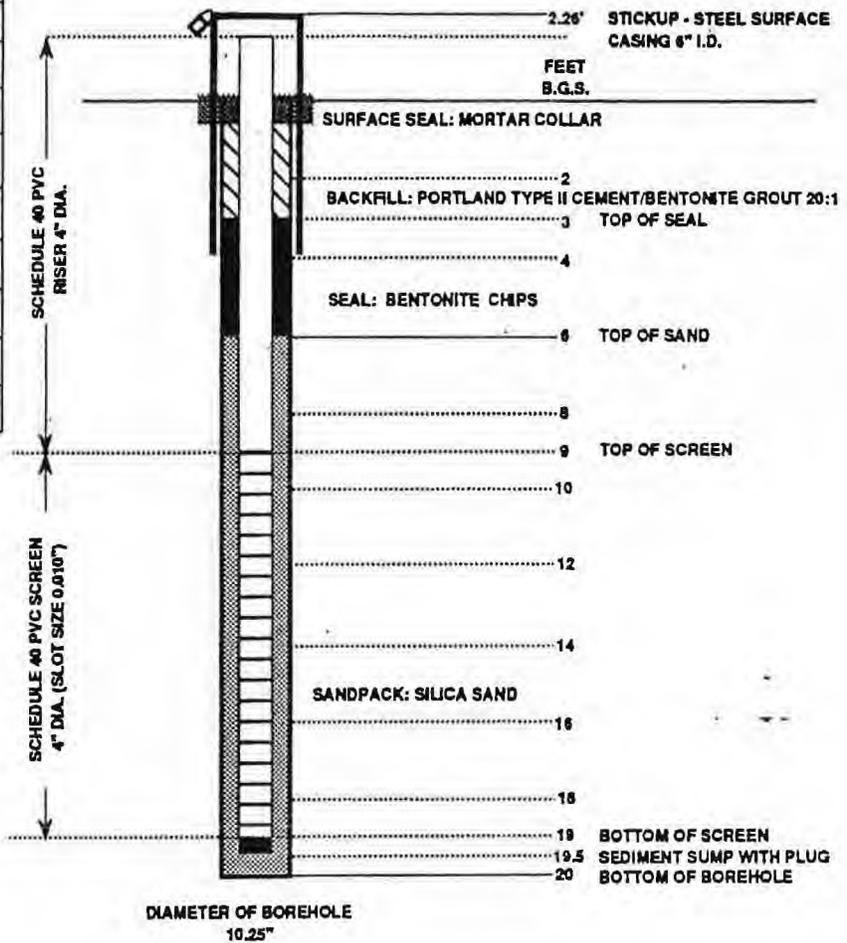




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS

PROJECT No.: 6917-04

STUDY AREA: WWII FUEL POINT

BORING No.: G6M-94-15A

GEOLOGIST: R. RUSTAD

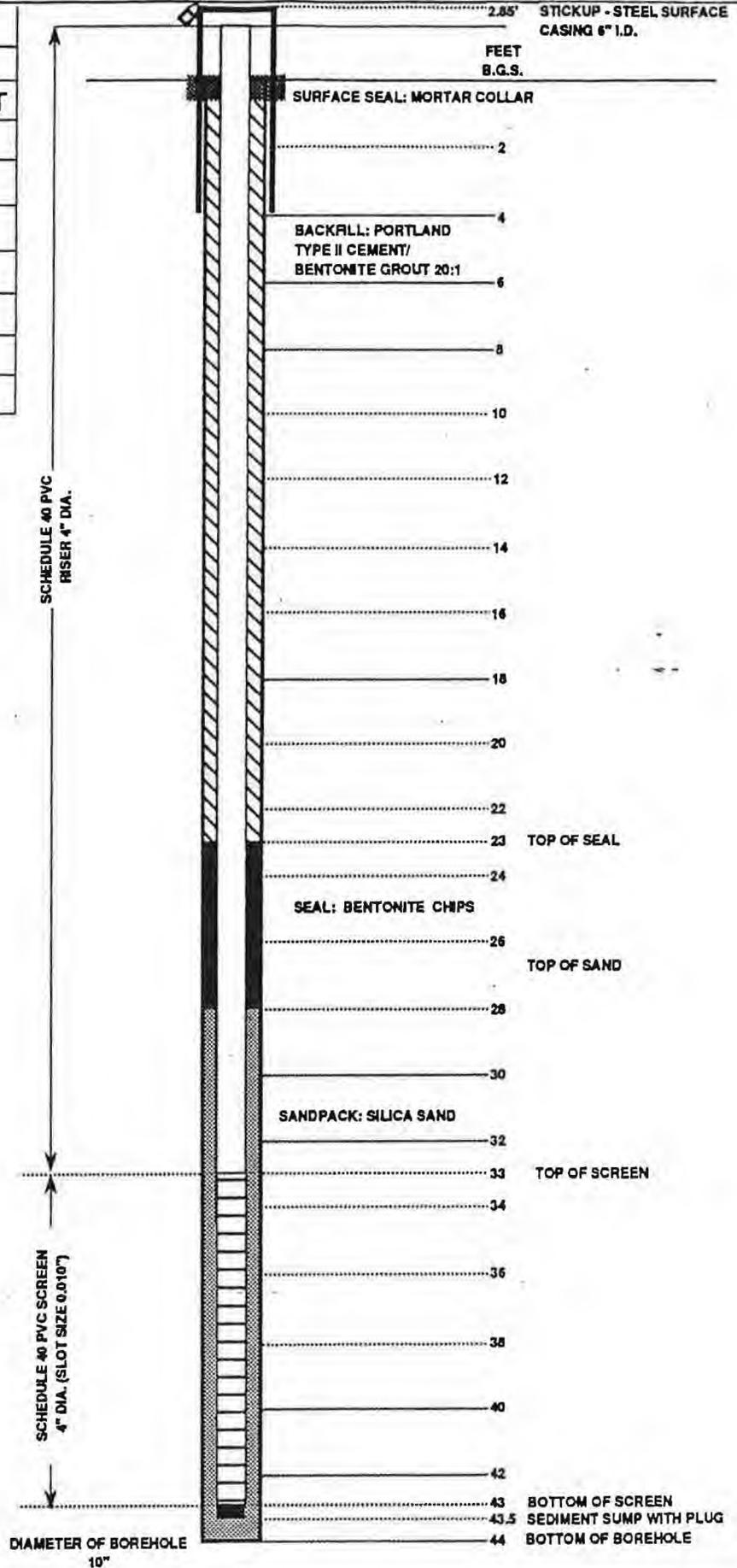
DRILLER: NHB

DRILLING METHOD: 6.25"HSA

DATE INSTALLED: 8/9/94

TOP OF RISER ELEV.: 253.67'

GROUND SURF. ELEV.: 251.50'



MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
 PROJECT NO.: 8740-03
 STUDY AREA: A0C 50
 BORING NO.: G6M-96-16B
 GEOLOGIST: J. ROWLAND
 DRILLER: NHB
 DRILLING METHOD: HSA 4.25"
 DATE INSTALLED 10/3/96
 DEVELOPMENT: SURGE & PUMP

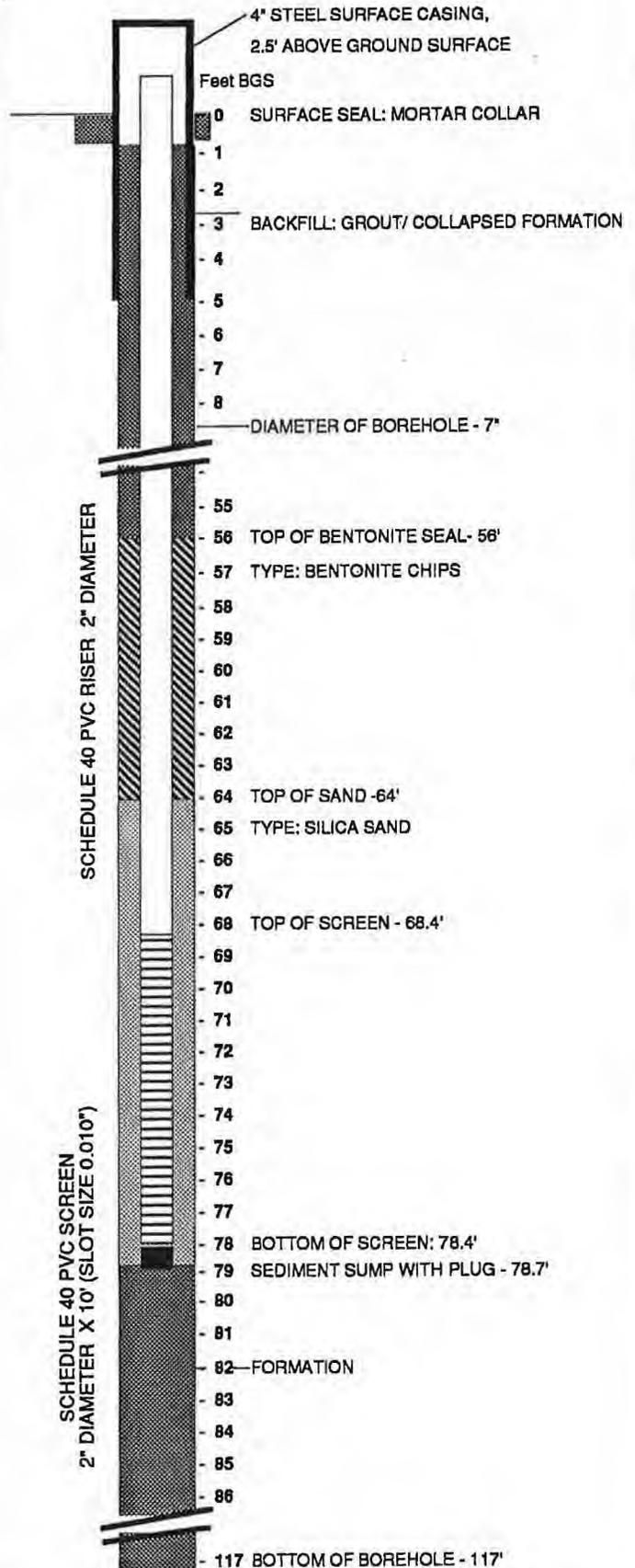




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT No.: 6917-04
STUDY AREA: WWII FUEL POINT
BORING No.: G6M-94-16X
GEOLOGIST: R. RUSTAD
DRILLER: NHB
DRILLING METHOD: 6.25"HSA
DATE INSTALLED: 8/11/94
TOP OF RISER ELEV.: 254.77'
GROUND SURF. ELEV.: 252.90'

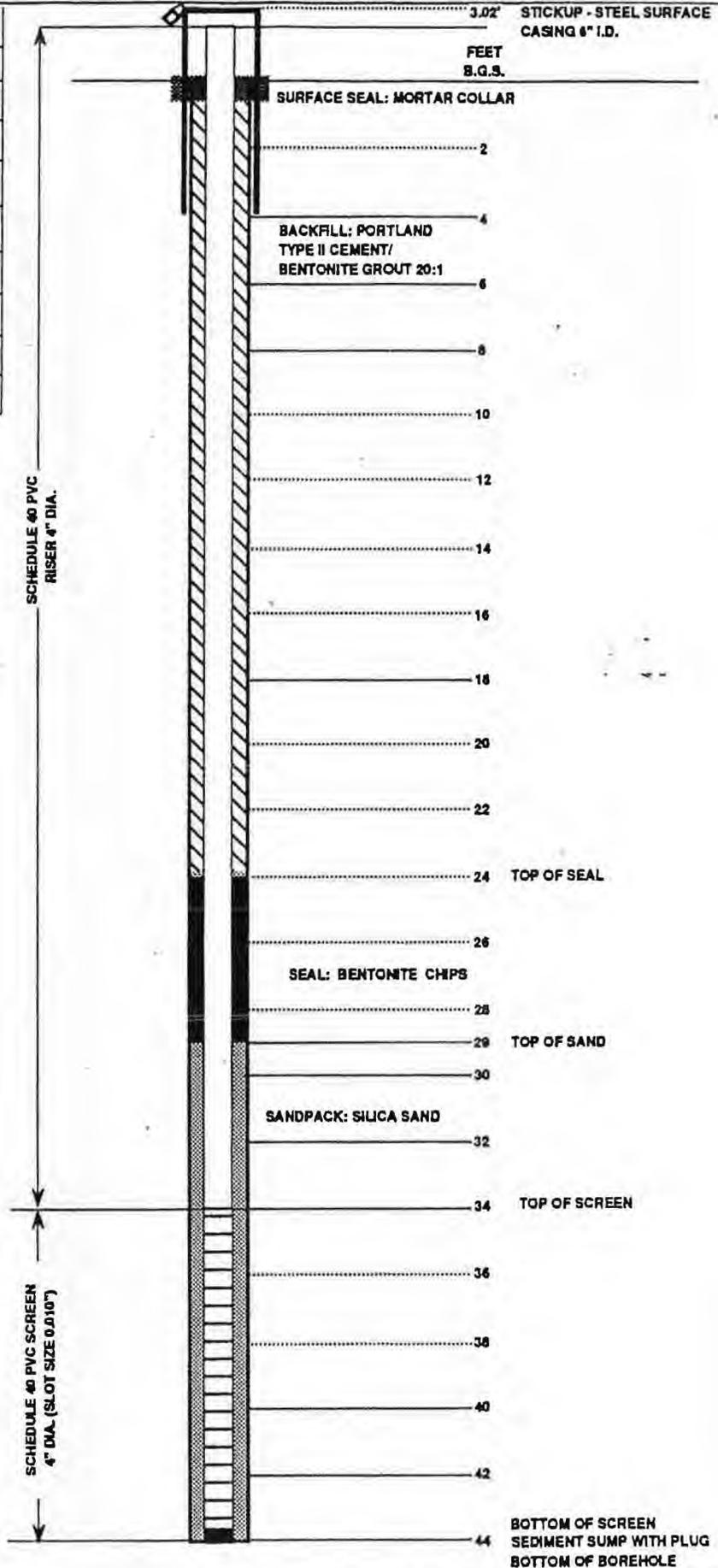




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT No.: 6917-04
STUDY AREA: WWII FUEL POINT
BORING No.: G6M-94-17A
GEOLOGIST: D. PIERCE
DRILLER: NHB
DRILLING METHOD: 6.25" HSA
DATE INSTALLED: 8/10/94
TOP OF RISER ELEV.: 256.17'
GROUND SURF. ELEV.: 253.00'

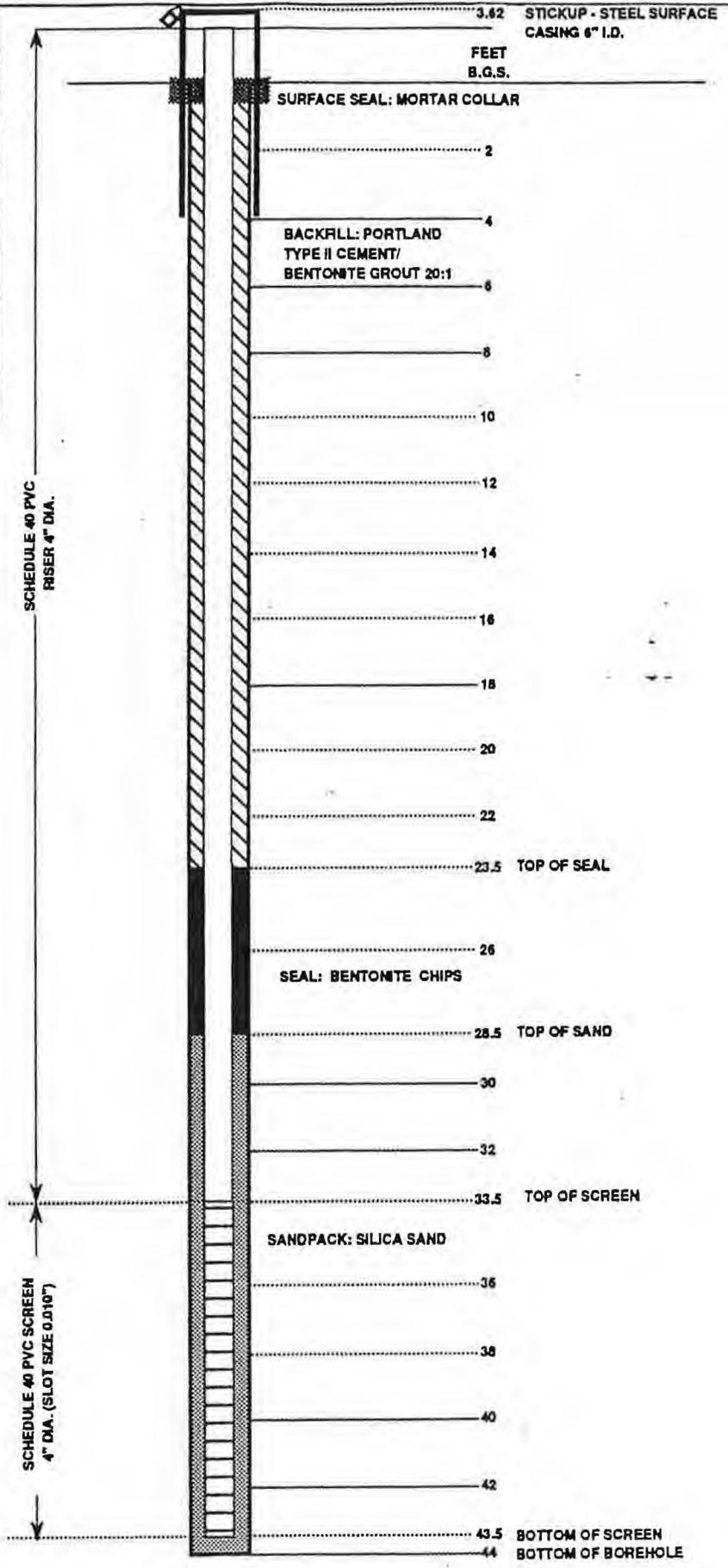




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT No.: 6917-04
STUDY AREA: WWII FUEL POINT
BORING No.: G6M-94-18X
GEOLOGIST: R. RUSTAD
DRILLER: NHB
DRILLING METHOD: 4" D & W
DATE INSTALLED: 8/18/94
TOP OF RISER ELEV.: 225.78'
GROUND SURF. ELEV.: 223.60'

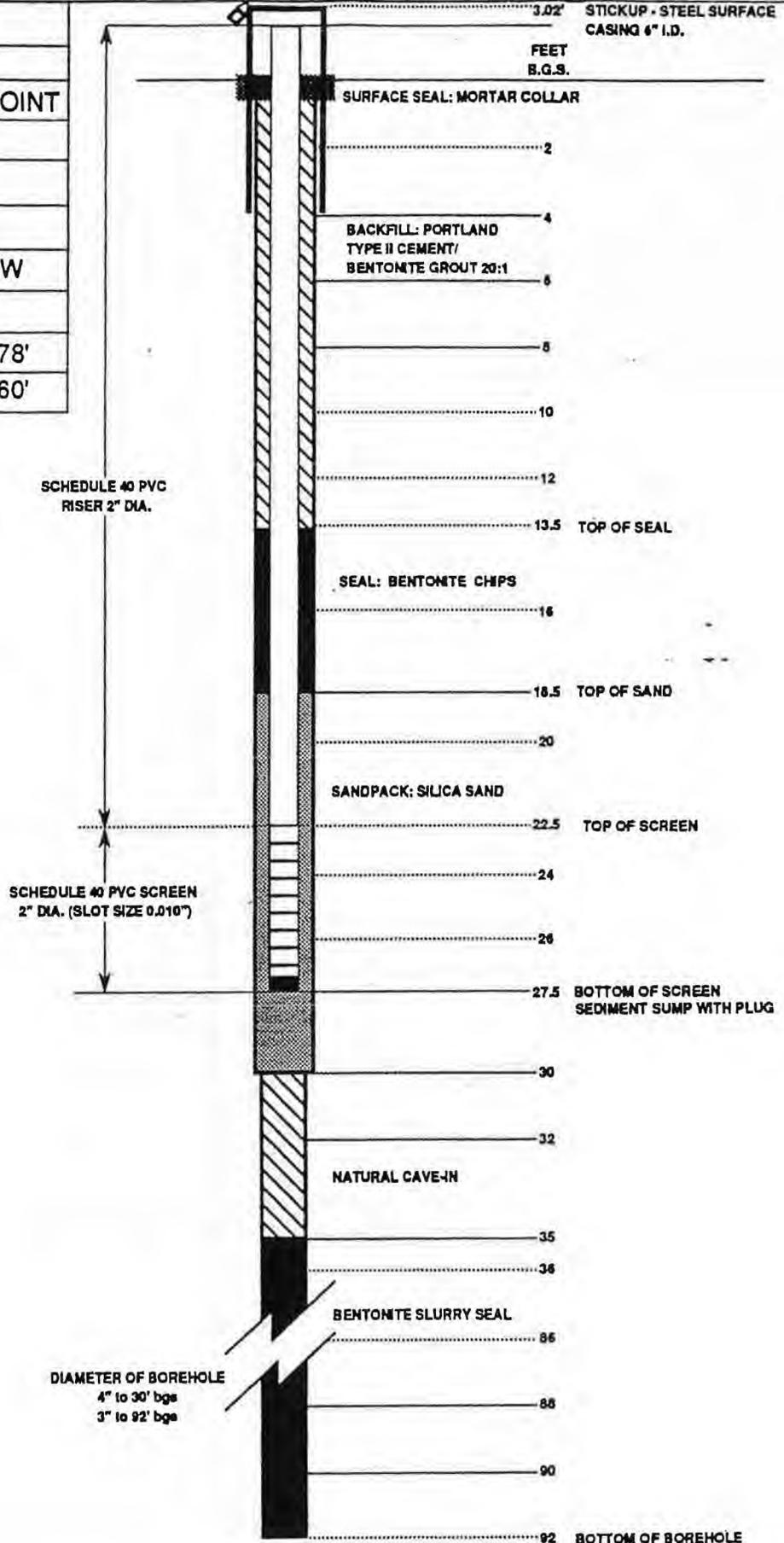




ABB ENVIRONMENTAL SERVICES, INC.

MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS

PROJECT No.: 6917-04

STUDY AREA: WWII FUEL POINT

BORING No.: G6M-95-19X

GEOLOGIST: H. COLBY

DRILLER: NHB

DRILLING METHOD: 4" D & W

DATE INSTALLED: 1/25/95

TOP OF RISER ELEV.: 224.59'

GROUND SURF. ELEV.: 222.80'

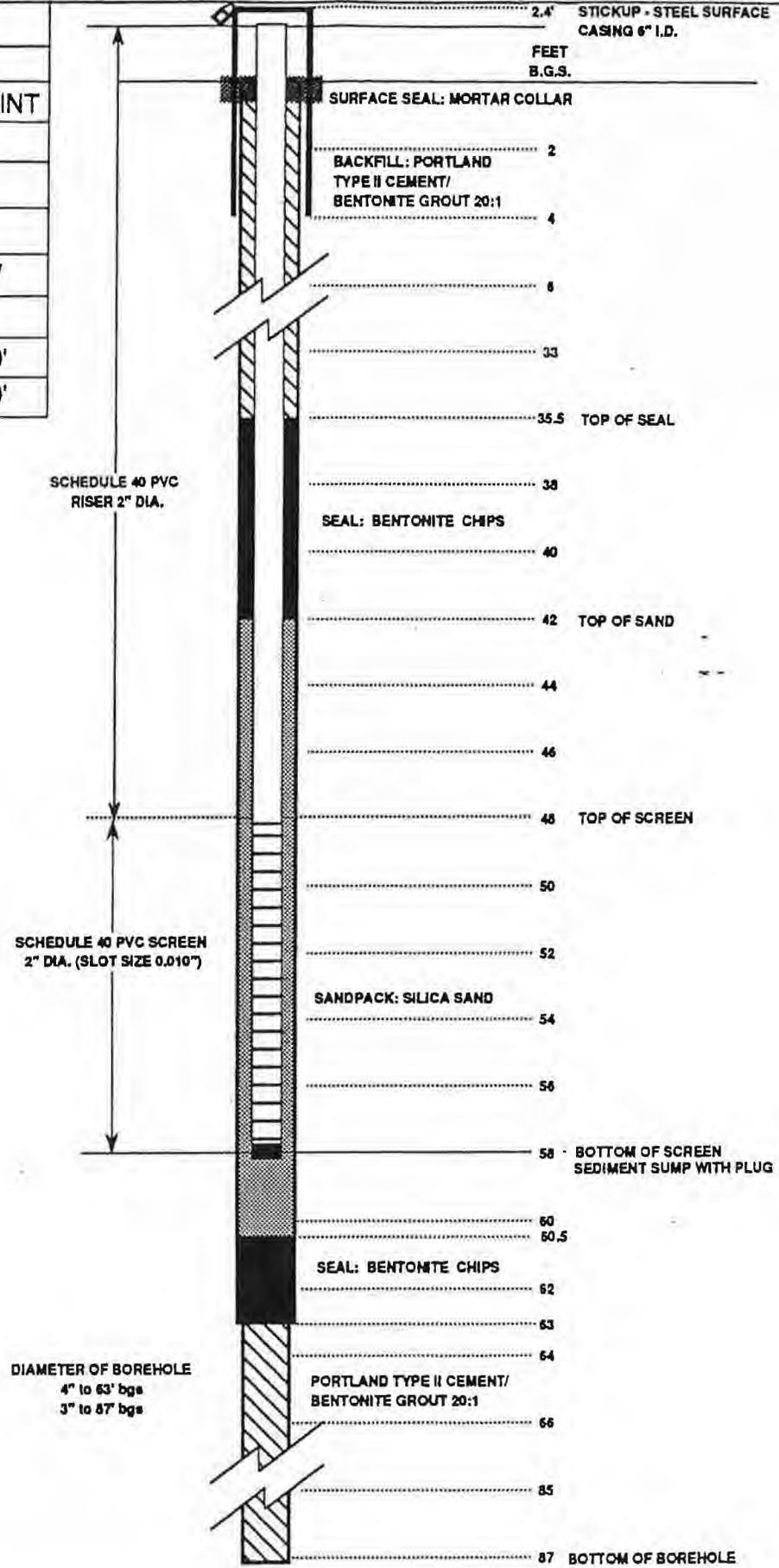
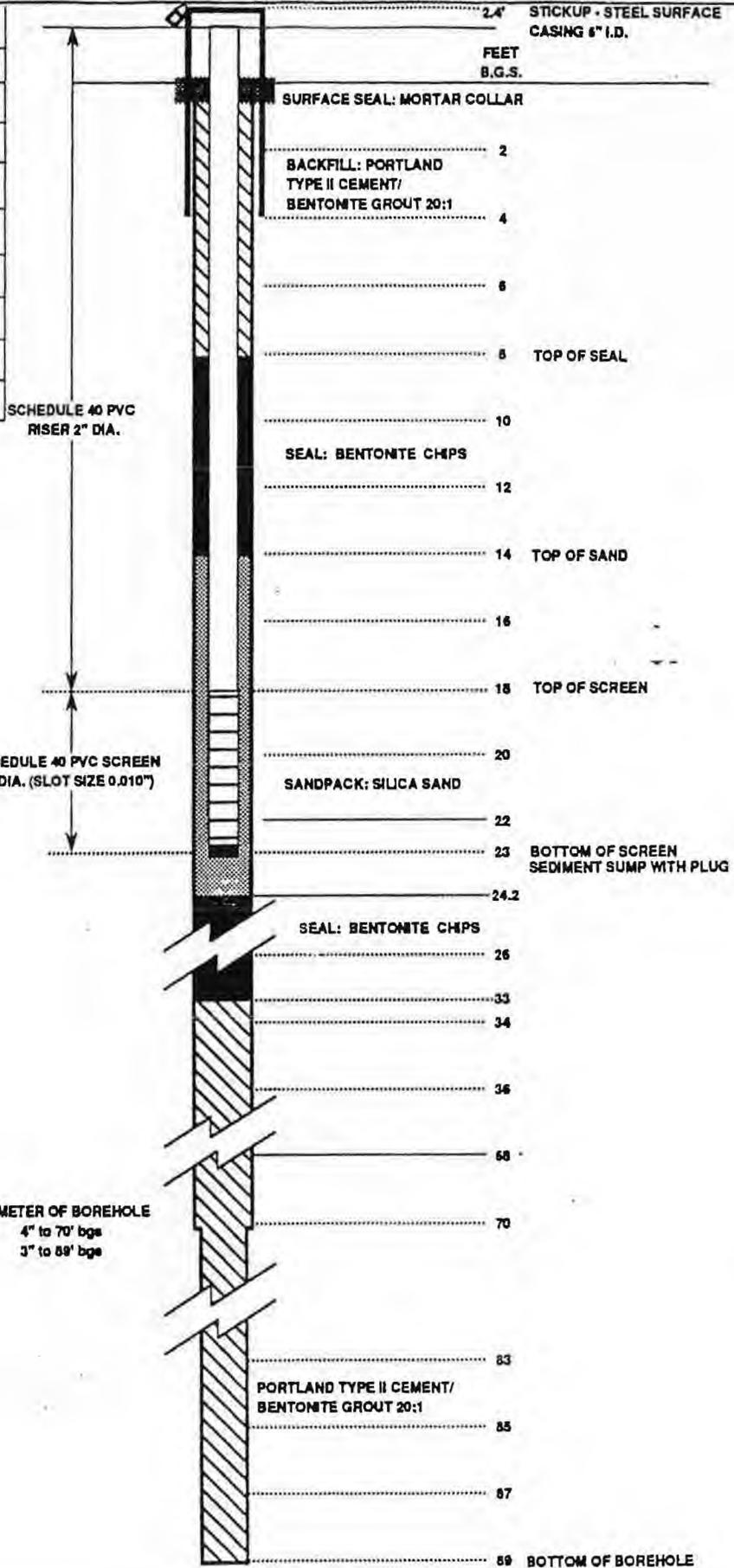




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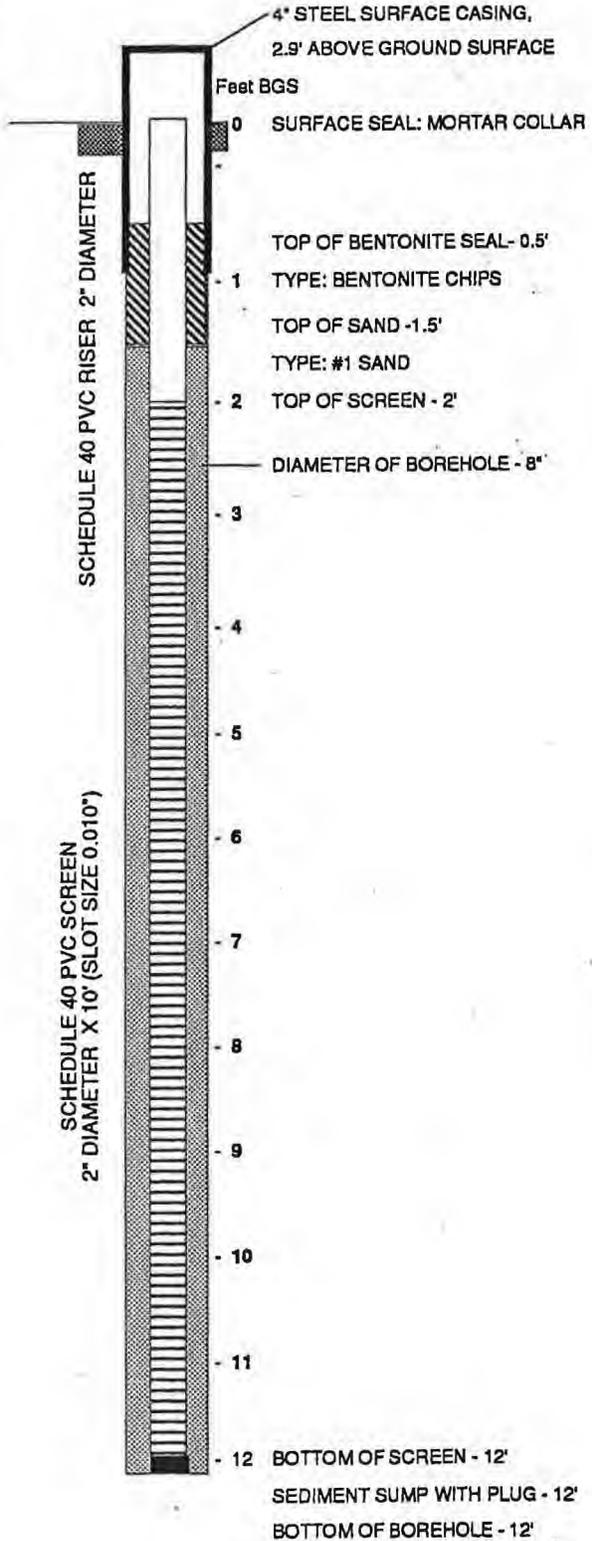
MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT No.: 6917-04
STUDY AREA: WWII FUEL POINT
BORING No.: G6M-95-20X
GEOLOGIST: J. HEALEY
DRILLER: NHB
DRILLING METHOD: 4" D & W
DATE INSTALLED: 1/19/95
TOP OF RISER ELEV.: 225.31'
GROUND SURF. ELEV.: 223.00'



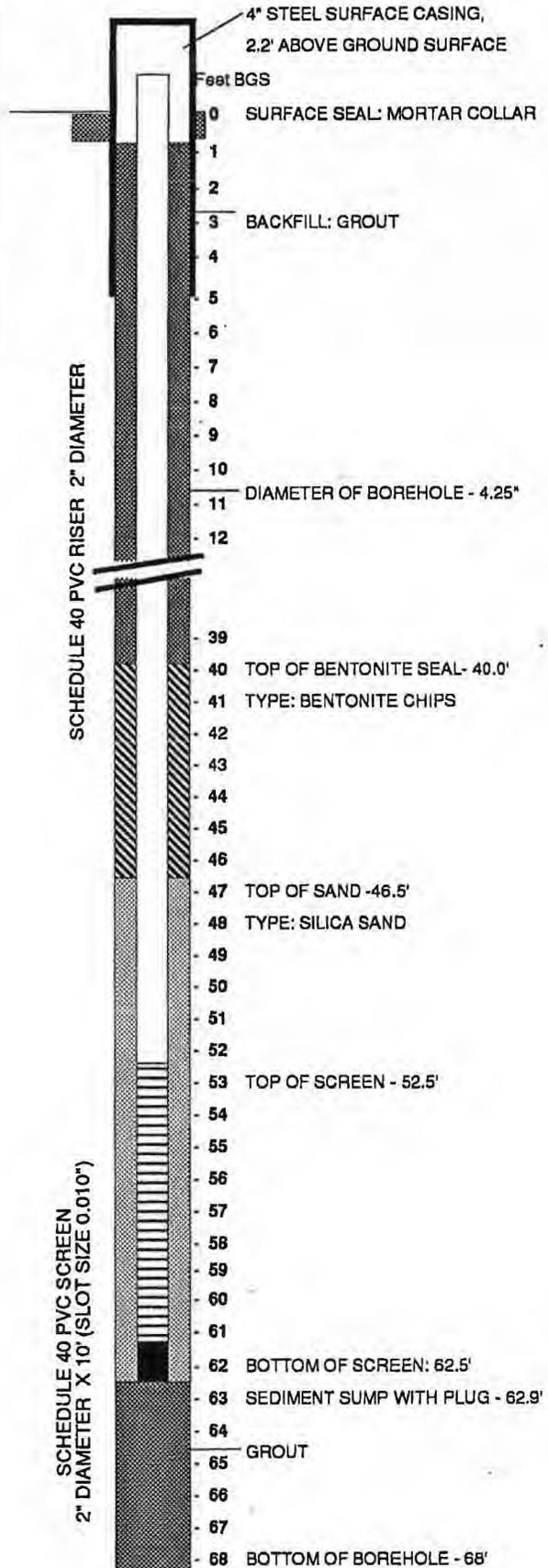
MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
 PROJECT NO.: 8740-03
 STUDY AREA: A0C 50
 BORING NO.: G6M-96-21A
 GEOLOGIST: K. WILSON
 DRILLER: NHB
 DRILLING METHOD: HSA 4.25"
 DATE INSTALLED: 10/9/96
 DEVELOPMENT: SURGE & PUMP



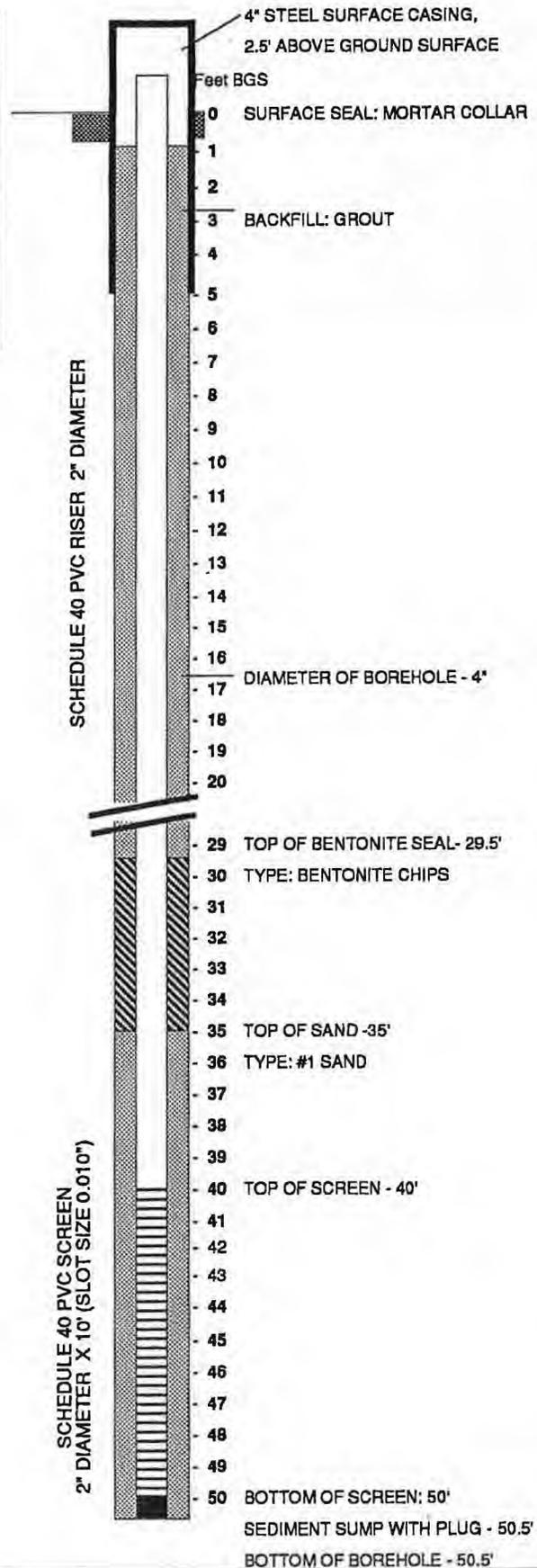
MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
 PROJECT NO.: 8740-03
 STUDY AREA: A0C 50
 BORING NO.: G6M-96-21B
 GEOLOGIST: K. WILSON
 DRILLER: NHB
 DRILLING METHOD: DRIVE & WASH
 DATE INSTALLED: 10/9/96
 DEVELOPMENT: SURGE & PUMP

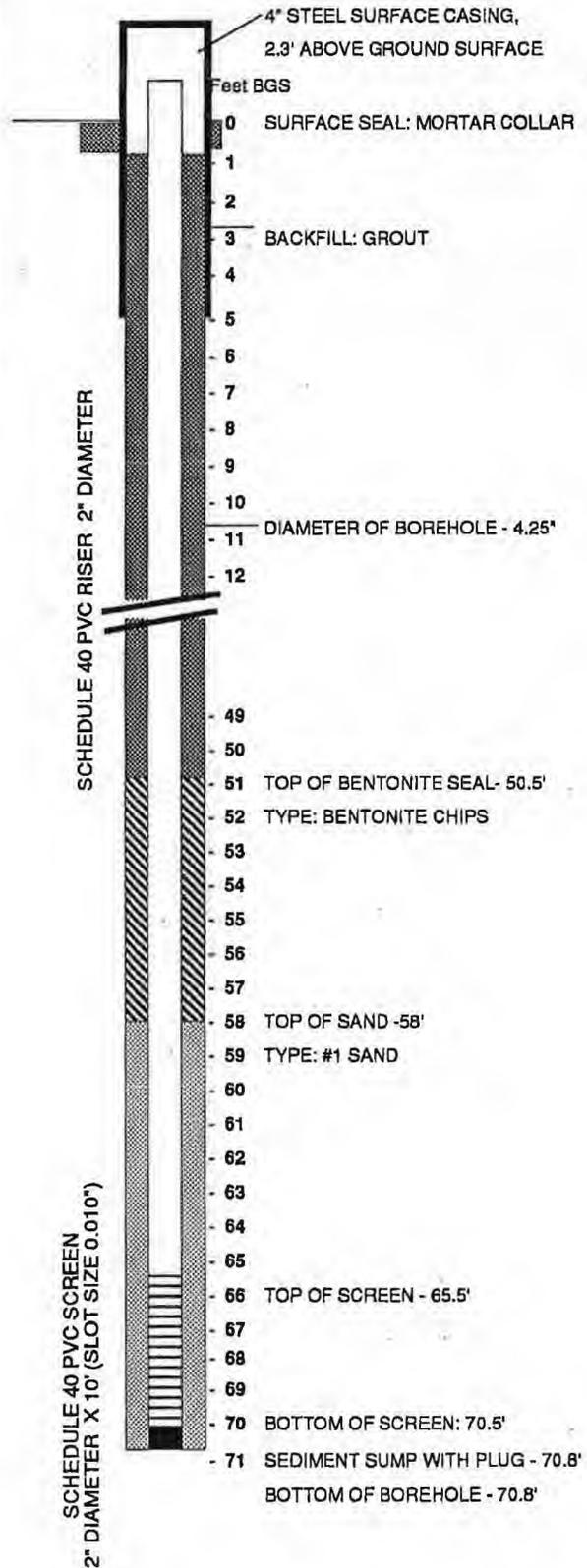


MONITORING WELL DIAGRAM

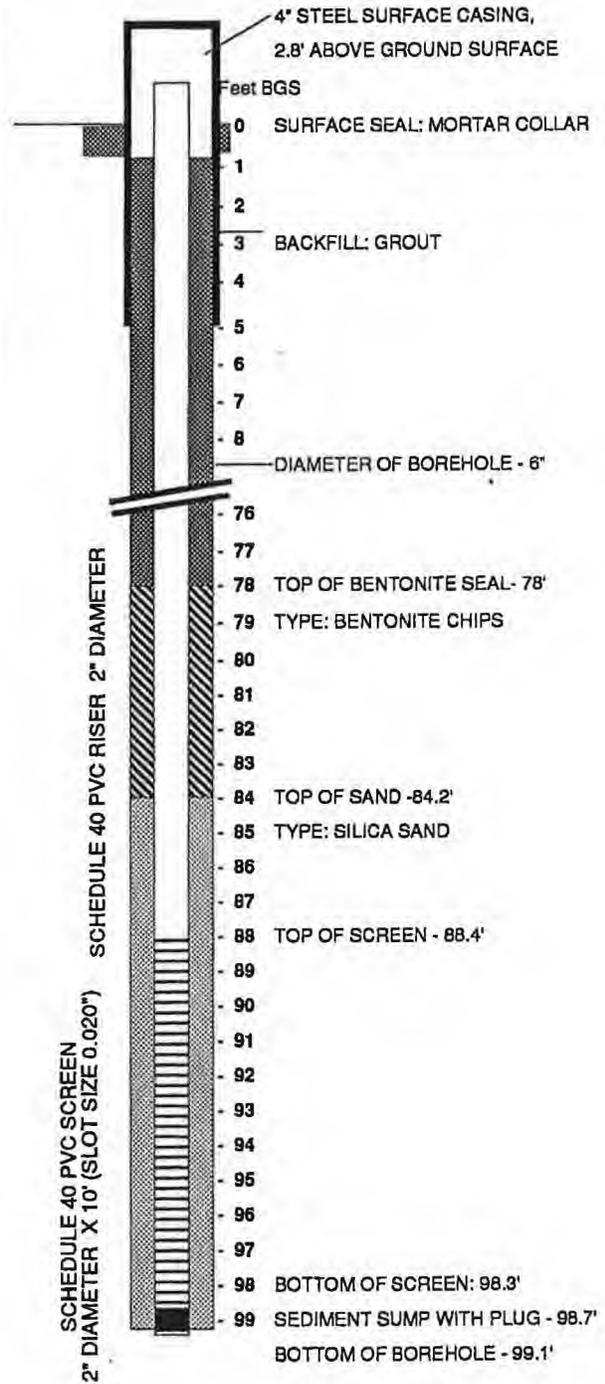
PROJECT: FORT DEVENS
 PROJECT NO.: 8740-03
 STUDY AREA: A0C 50
 BORING NO.: G6M-96-22A
 GEOLOGIST: G. PORTANTE
 DRILLER: NHB
 DRILLING METHOD: DRIVE & WASH
 DATE INSTALLED: 10/28/96
 DEVELOPMENT: SURGE & PUMP



PROJECT: FORT DEVENS
 PROJECT NO.: 8740-03
 STUDY AREA: A0C 50
 BORING NO.: G6M-96-22B
 GEOLOGIST: G. PORTANTE
 DRILLER: NHB
 DRILLING METHOD: DRIVE & WASH
 DATE INSTALLED: 10/24/96
 DEVELOPMENT: SURGE & PUMP

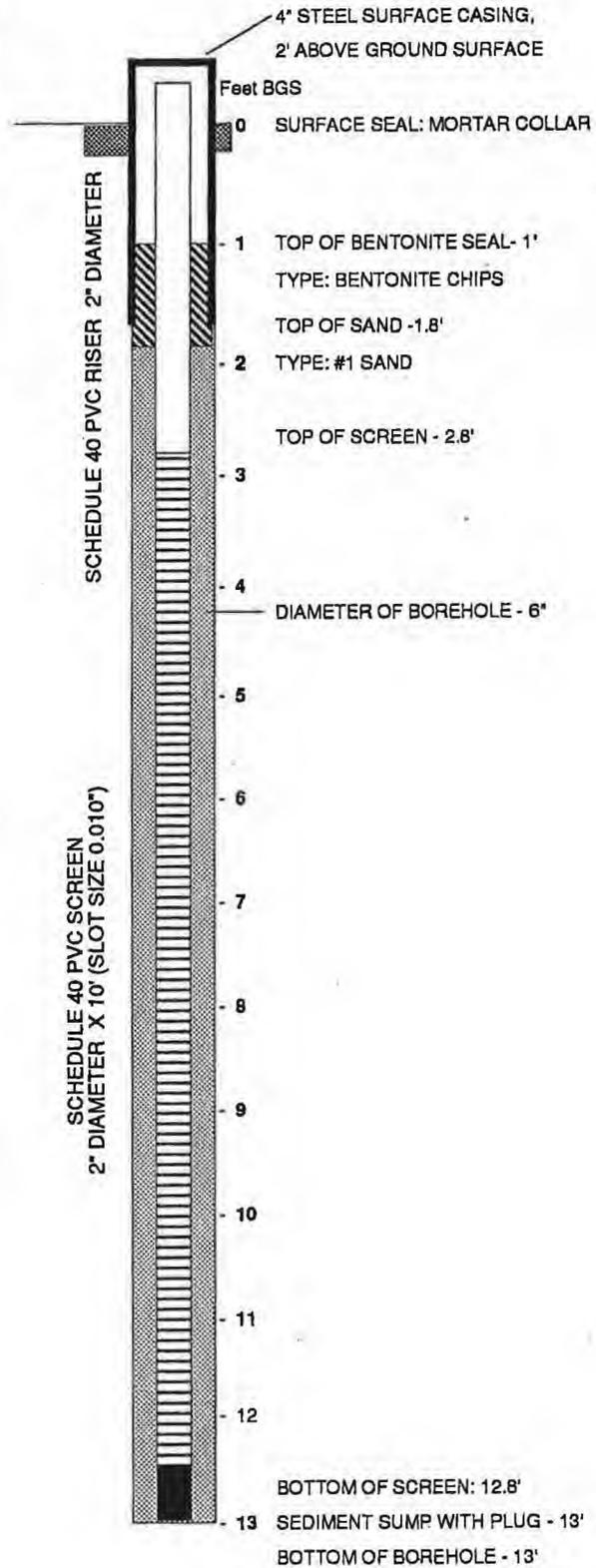


PROJECT: FORT DEVENS
 PROJECT NO.: 8740-03
 STUDY AREA: A0C 50
 BORING NO.: G6M-96-22C
 GEOLOGIST: J. ROWLAND
 DRILLER: NHB
 DRILLING METHOD: DRIVE & WASH
 DATE INSTALLED: 10/18/96
 DEVELOPMENT: SURGE & PUMP



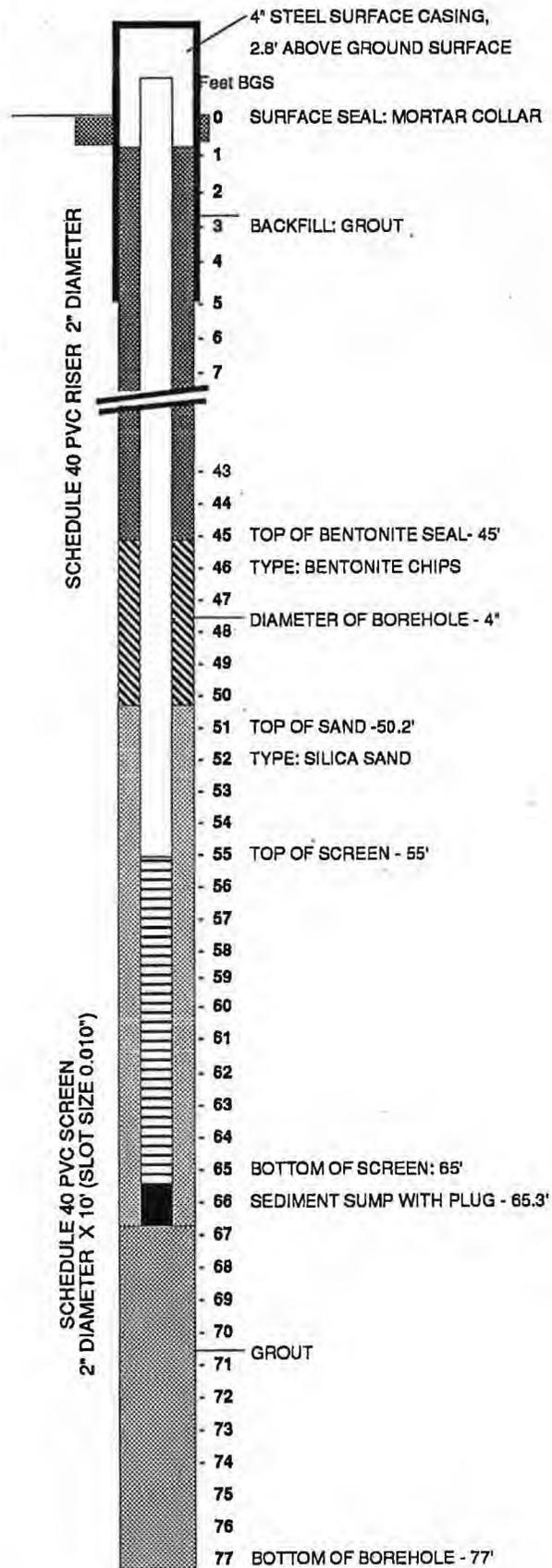
MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
 PROJECT NO.: 8740-03
 STUDY AREA: A0C 50
 BORING NO.: G6M-96-23A
 GEOLOGIST: J. ROWLAND
 DRILLER: NHB
 DRILLING METHOD: HSA 4.25"
 DATE INSTALLED 10/24/96
 DEVELOPMENT: SURGE & PUMP



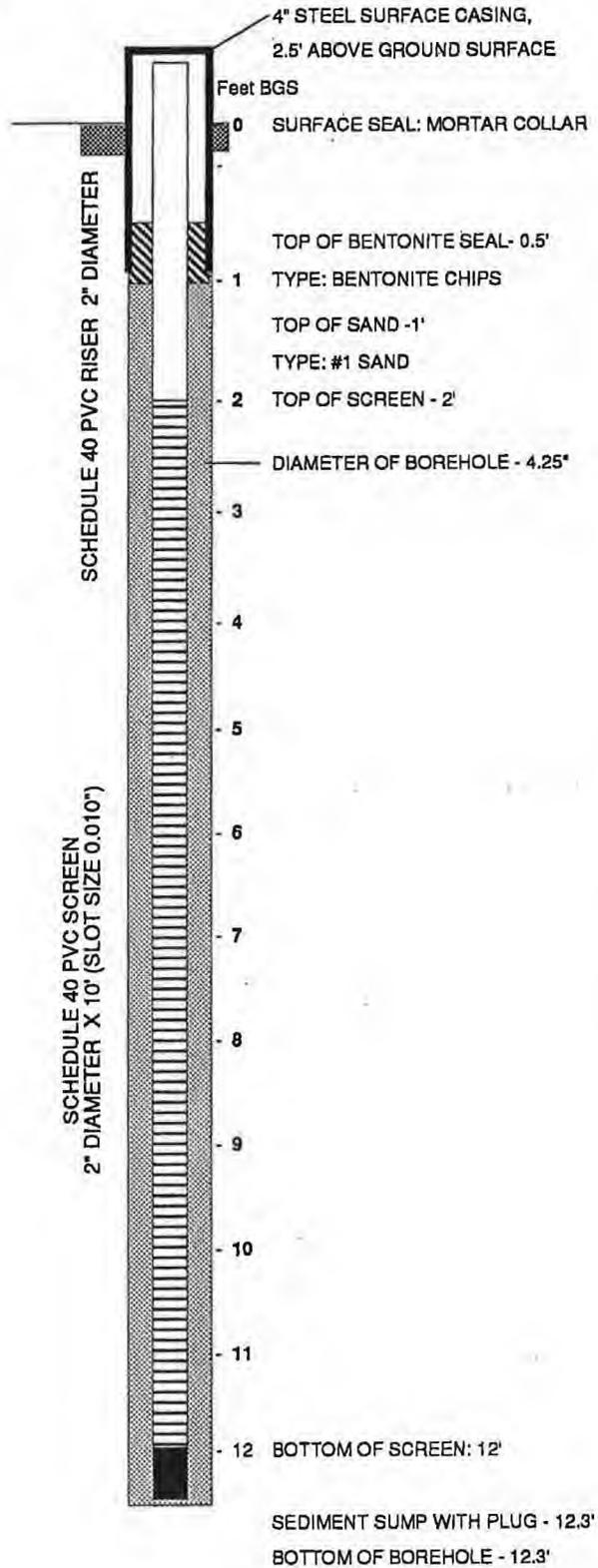
MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
 PROJECT NO.: 8740-03
 STUDY AREA: A0C 50
 BORING NO.: G6M-96-23B
 GEOLOGIST: J. ROWLAND
 DRILLER: NHB
 DRILLING METHOD: DRIVE & WASH
 DATE INSTALLED: 10/23/96
 DEVELOPMENT: SURGE & PUMP

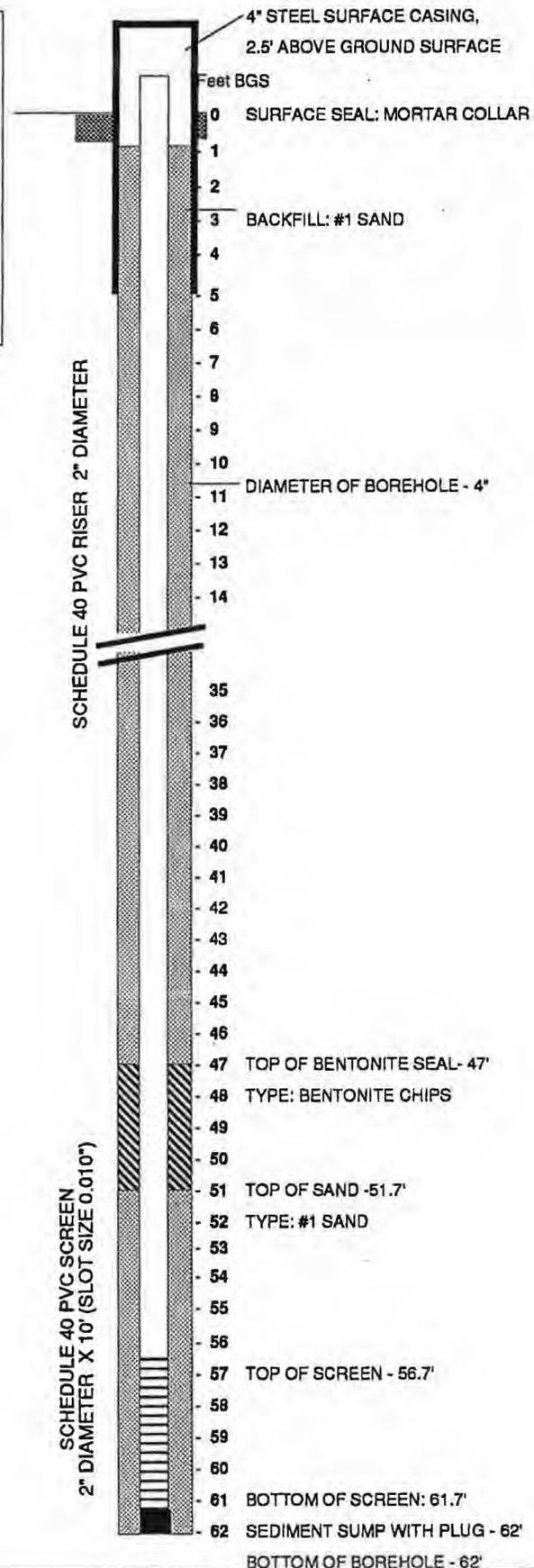


MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
 PROJECT NO.: 8740-03
 STUDY AREA: A0C 50
 BORING NO.: G6M-96-24A
 GEOLOGIST: G. PORTANTE
 DRILLER: NHB
 DRILLING METHOD: HSA 4.25"
 DATE INSTALLED: 10/30/96
 DEVELOPMENT: SURGE & PUMP

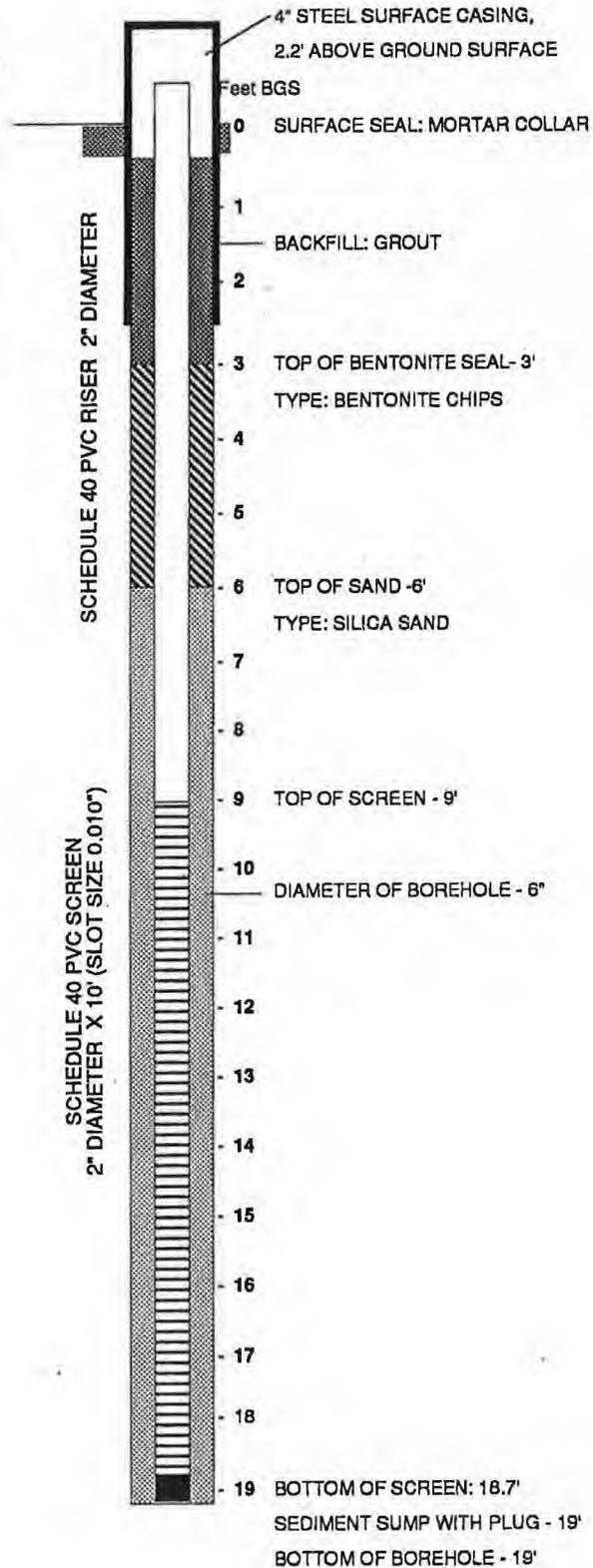


PROJECT: FORT DEVENS
 PROJECT NO.: 8740-03
 STUDY AREA: AOC 50
 BORING NO.: G6M-96-24B
 GEOLOGIST: G. PORTANTE
 DRILLER: NHB
 DRILLING METHOD: DRIVE & WASH
 DATE INSTALLED: 10/29/96
 DEVELOPMENT: SURGE & PUMP



MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
 PROJECT NO.: 8740-03
 STUDY AREA: AOC 50
 BORING NO.: G6M-96-25A
 GEOLOGIST: G. HAMILTON
 DRILLER: NHB
 DRILLING METHOD: HSA 4.25"
 DATE INSTALLED 11/4/96
 DEVELOPMENT: SURGE & PUMP



PROJECT: FORT DEVENS
 PROJECT NO.: 8740-03
 STUDY AREA: A0C 50
 BORING NO.: G6M-96-25B
 GEOLOGIST: G. HAMILTON
 DRILLER: NHB
 DRILLING METHOD: DRIVE & WASH
 DATE INSTALLED 11/4/96
 DEVELOPMENT: SURGE & PUMP

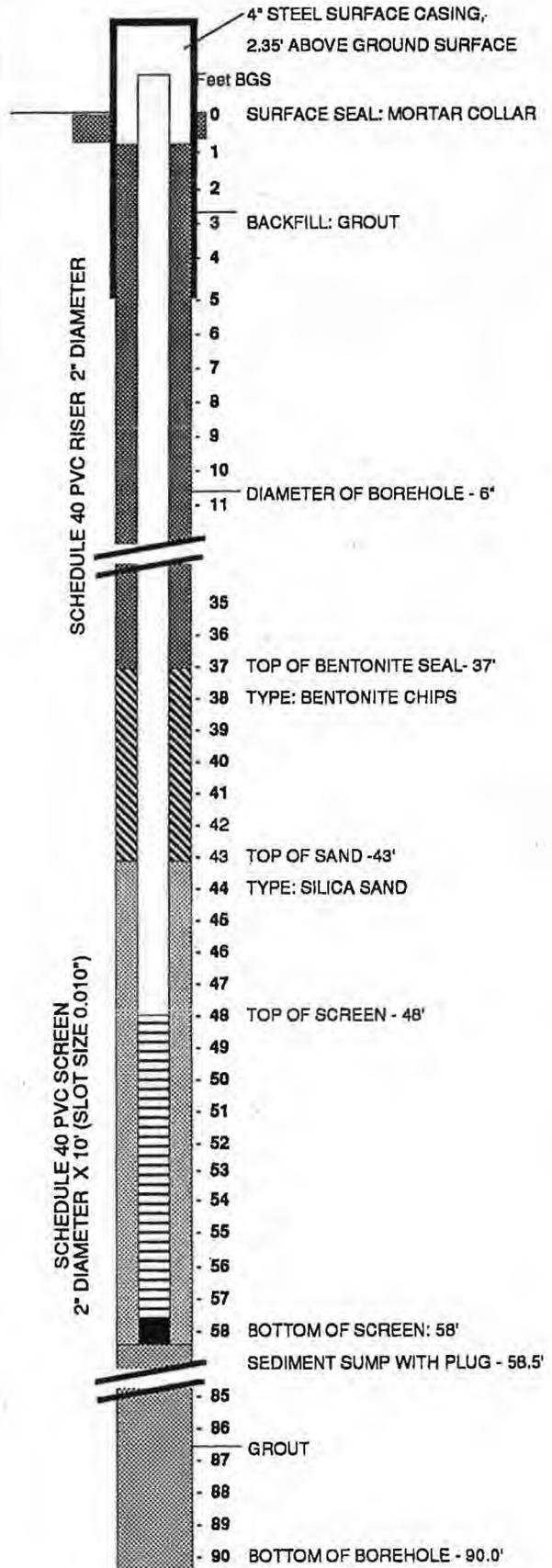
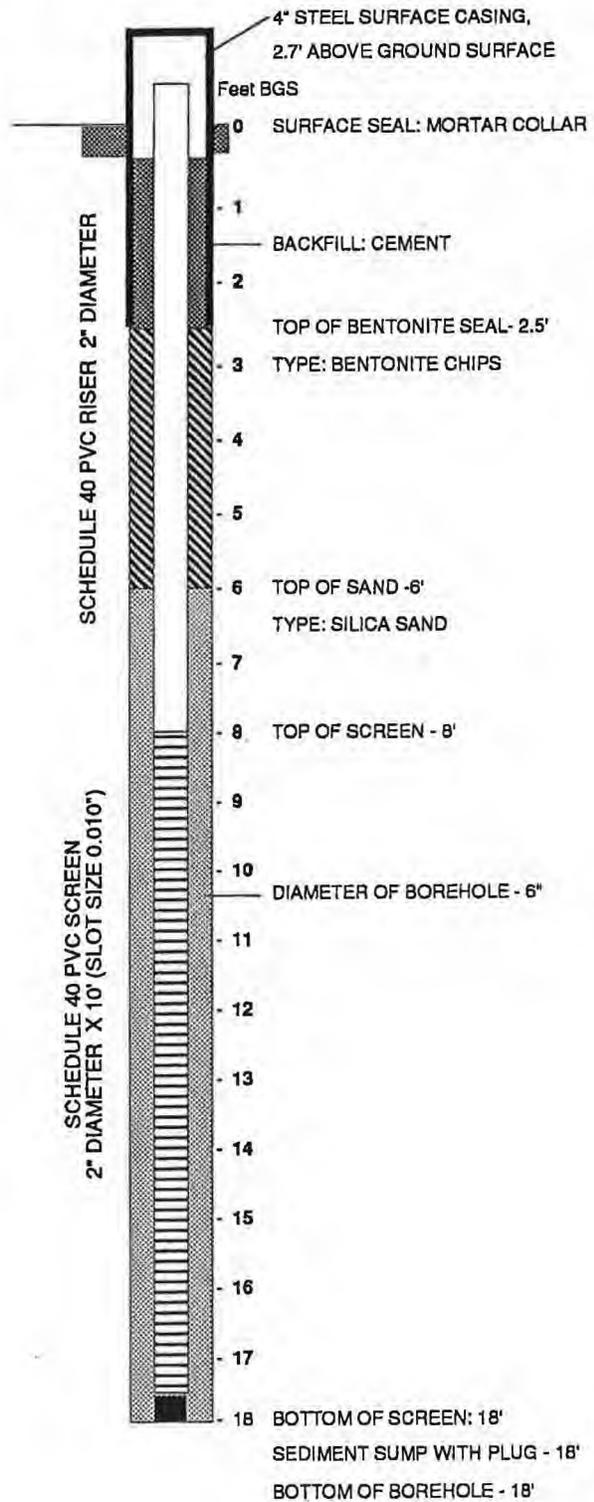




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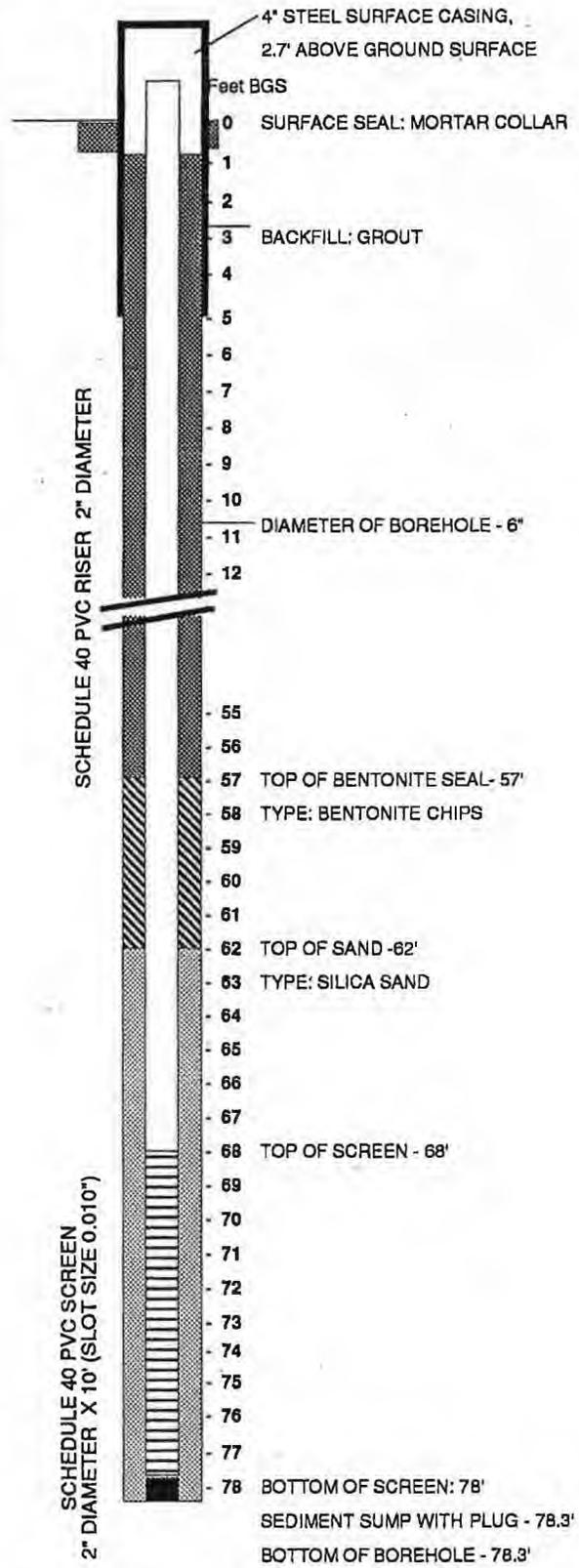
MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
PROJECT NO.: 8740-03
STUDY AREA: A0C 50
BORING NO.: G6M-96-26A
GEOLOGIST: G. HAMILTON
DRILLER: NHB
DRILLING METHOD: HSA 4.25"
DATE INSTALLED: 11/7/96
DEVELOPMENT: SURGE & PUMP



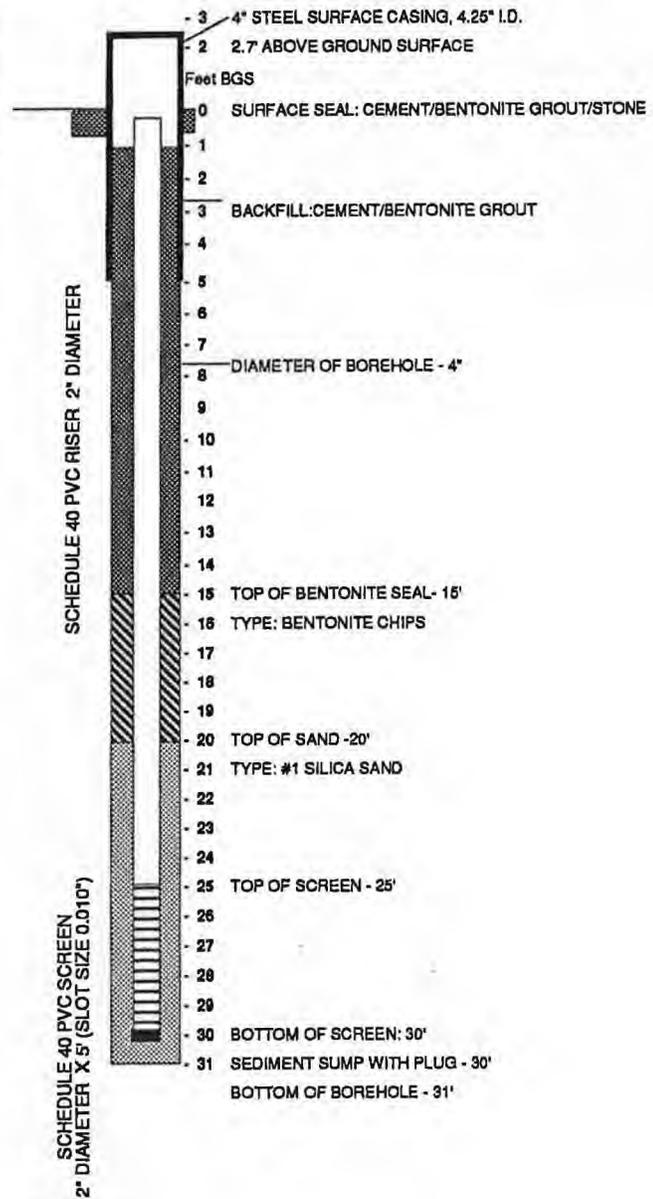
MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
 PROJECT NO.: 8740-03
 STUDY AREA: A0C 50
 BORING NO.: G6M-96-26B
 GEOLOGIST: G. HAMILTON
 DRILLER: NHB
 DRILLING METHOD: HSA
 DATE INSTALLED: 11/7/96
 DEVELOPMENT: SURGE & PUMP



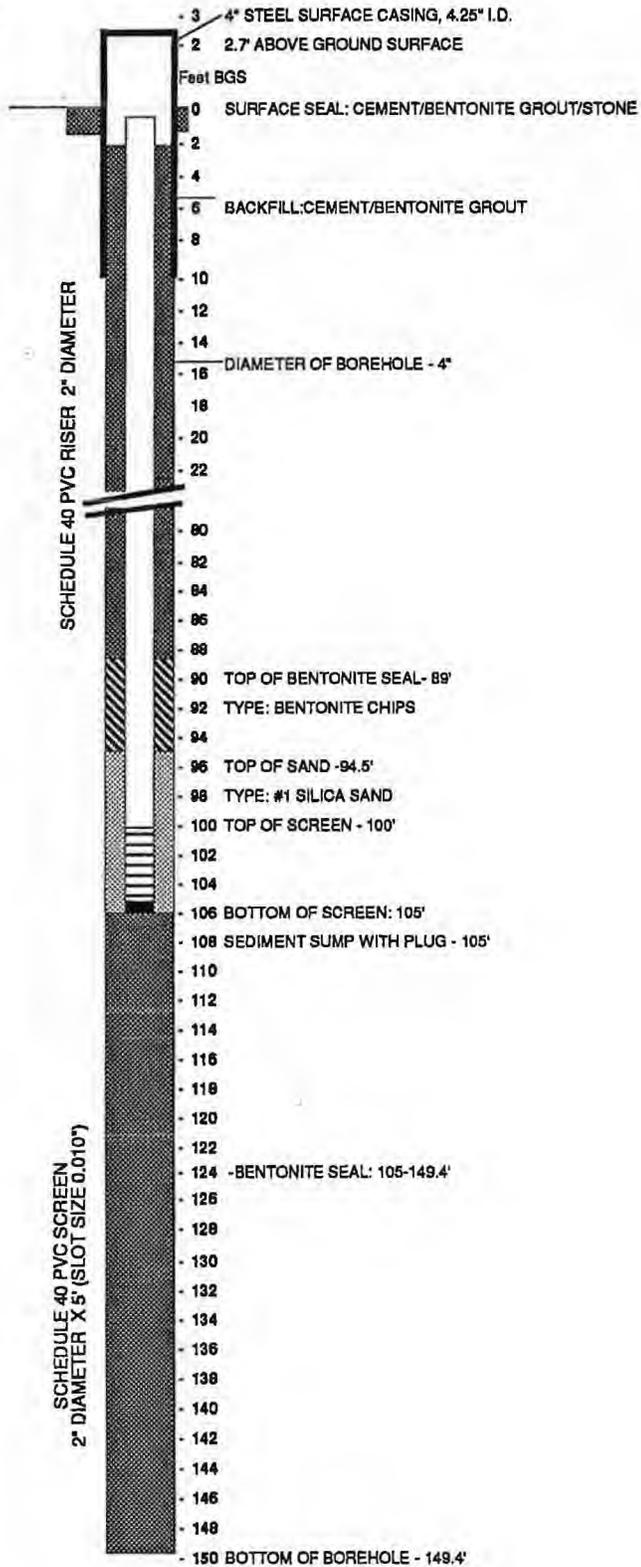
MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
 PROJECT NO.: 8740-02
 STUDY AREA: A0C 50
 BORING NO.: G6M-97-27X
 GEOLOGIST: L. TRACY
 DRILLER: EEI
 DRILLING METHOD: D&W
 DATE INSTALLED 4/25/97
 DEVELOPMENT: SURGE & PUMP



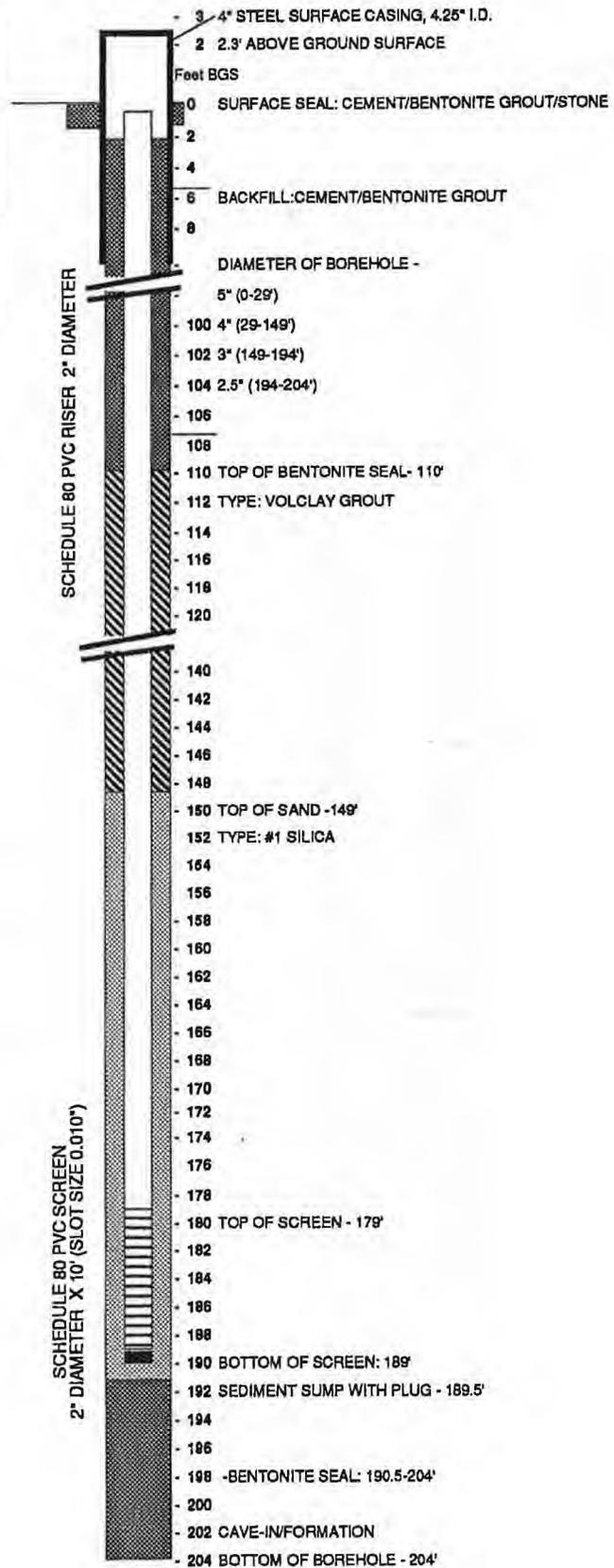
MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
 PROJECT NO.: 8740-02
 STUDY AREA: A0C 50
 BORING NO.: G6M-97-28X
 GEOLOGIST: L. TRACY
 DRILLER: EEI
 DRILLING METHOD: D&W
 DATE INSTALLED: 4/11/97
 DEVELOPMENT: SURGE & PUMP



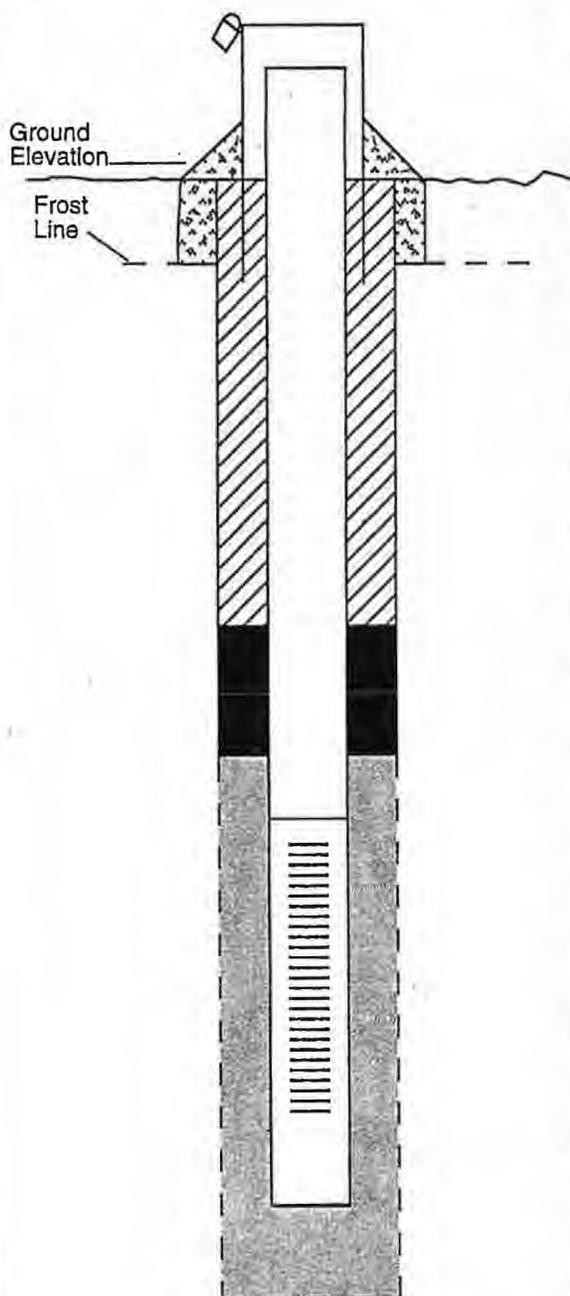
MONITORING WELL DIAGRAM

PROJECT: FORT DEVENS
 PROJECT NO.: 8740-02
 STUDY AREA: AOC 50
 BORING NO.: G6M-97-29X
 GEOLOGIST: L. TRACY
 DRILLER: EEI
 DRILLING METHOD: D&W
 DATE INSTALLED: 4/28-29/1997
 DEVELOPMENT: SURGE & PUMP



MONITORING WELL CONSTRUCTION RECORD

Project: DEVENS Study Area: AOC 50 Driller: MAHER ENVIRONMENTAL
Project No.: 44953/874203 Boring No.: G6M-98-30 Drilling Method: DRIVE & WASH (3")
Date Installed: 12-21-98 Development Method: _____
Field Geologist: SCOTT CALVIN



Stick-up of Casing Above Ground Surface: not recorded

Type of Surface Seal/Other Protection: cement

Type of Surface Casing: stand pipe

ID of Surface Casing: not recorded

Diameter of Borehole: 3"

Riser Pipe ID: 2"

Type of Riser Pipe: Schedule 40 PVC

Type of Backfill: cement grout

Depth of Top of Seal: 51.3'

Type of Seal: Bentonite drips

Depth of Top of Sand: 54.9'

Depth of Top of Screen: 60.0'

Type of Screen: SCHEDULE 40 PVC

Slot Size x Length: 0.010" x 5'

ID of Screen: 2"

Type of Sandpack: 0-GRADE

Depth of Bottom of Screen: 65.0'

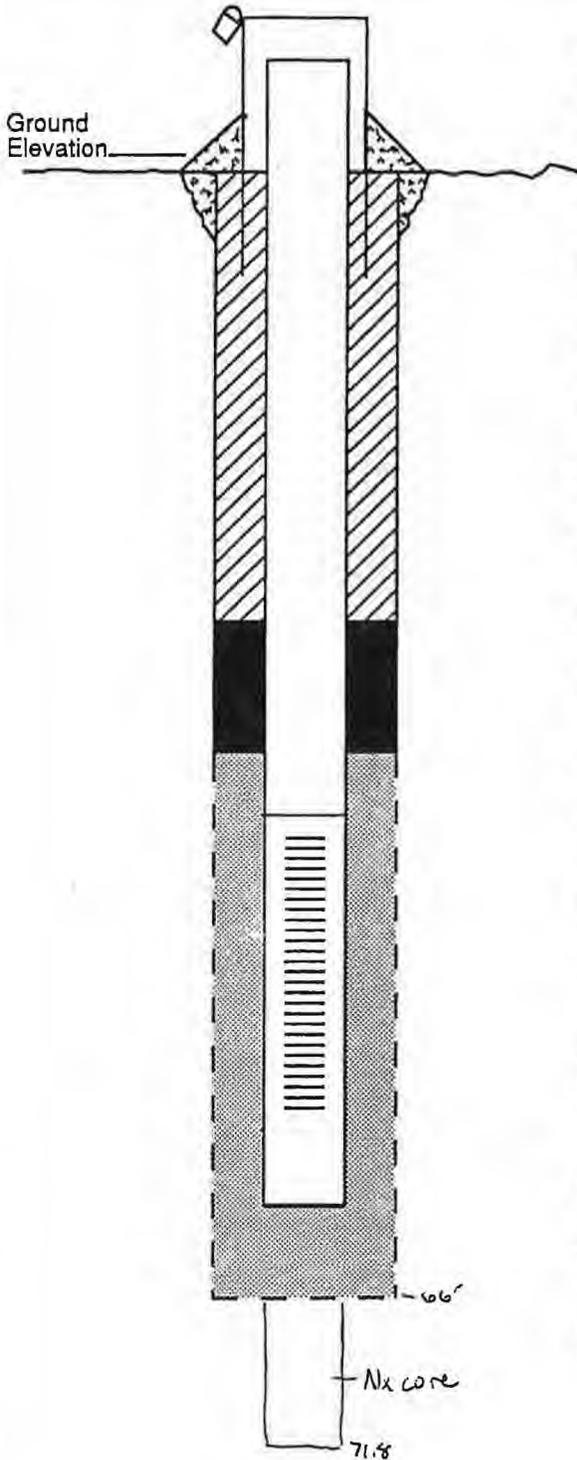
Depth of Sediment Sump with Plug: N/A

Depth of Bottom of Borehole: 66.0 (cored

66.0 - 71.8' bgs
using NX cored barrel)
- backfilled with
bentonite drips

MONITORING WELL CONSTRUCTION DIAGRAM

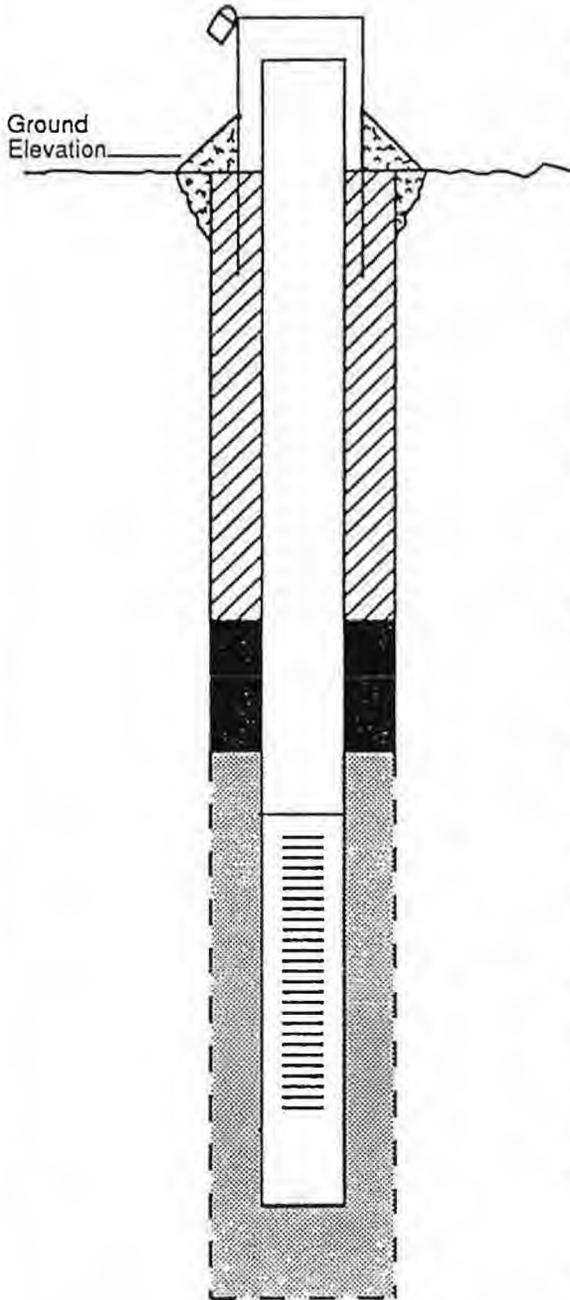
Project Fort Devens - RFTA Study Area AOC-50 Driller DL Maher (B. Burns)
 Project No. 8740-02 Boring No. G6M-98-30X Drilling Method Drive and Wash
 Date Installed 12/21/98 Development Method _____
 Field Geologist G. Hamilton



Stick-up of Casing Above Ground Surface: _____
 Type of Surface Seal/ Other Protection: _____
 Type of Surface Casing: _____
 ID of Surface Casing: _____
 Diameter of Borehole: 4"
 Riser Pipe ID: 2"
 Type of Riser Pipe: Sch 40 PVC
 Type of Backfill: Cement/bent. grout.
 Depth of Top of Seal: 51.3
 Type of Seal: Bentonite chips
 Depth of Top of Sand: 54.9
 Depth of Top of Screen: 60'
 Type of Screen: Sch 40 PVC
 Slot Size x Length: 0.01" x 5'
 ID of Screen: 2"
 Type of Sandpack: #0 sand
 Depth of Bottom of Screen: 65.0
 Depth of Sediment Sump with Plug: 65.1
 Depth of Bottom of Borehole: 71.8
Bentonite chips
71.8 to 66' BGS

MONITORING WELL CONSTRUCTION DIAGRAM

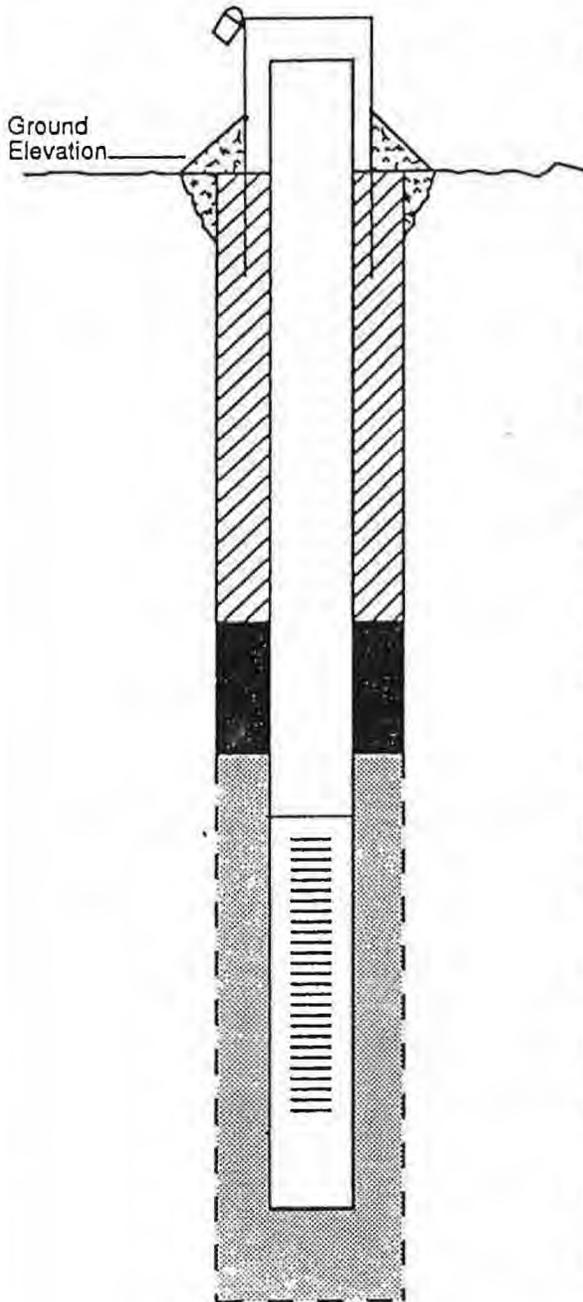
Project Devens - RFTA Study Area AOC 5D Driller D.L. Maher
 Project No. 8740-02 Boring No. G6M-98-31B Drilling Method D+W Casing 4.0"
 Date Installed 12/16/98 Development Method _____
 Field Geologist JCS



Stick-up of Casing Above Ground Surface: _____
 Type of Surface Seal/ Other Protection: _____
 Type of Surface Casing: Steel 4.0" ID
 ID of Surface Casing: 4.0" ID
 Diameter of Borehole: 4.0" ID
 Riser Pipe ID: 2.0" ID
 Type of Riser Pipe: Sch 40 PVC
 Type of Backfill: Cement/Bentonite
 Depth of Top of Seal: 83.5'
 Type of Seal: Bentonite Chips
 Depth of Top of Sand: 88.7'
 Depth of Top of Screen: 91.3'
 Type of Screen: Sch 40 PVC
 Slot Size x Length: 0.010" x 5'
 ID of Screen: 2.0"
 Type of Sandpack: 00 Sand
 Depth of Bottom of Screen: 96.3'
 Depth of Sediment Sump with Plug: 96.3'
 Depth of Bottom of Borehole: 96.3'

MONITORING WELL CONSTRUCTION DIAGRAM

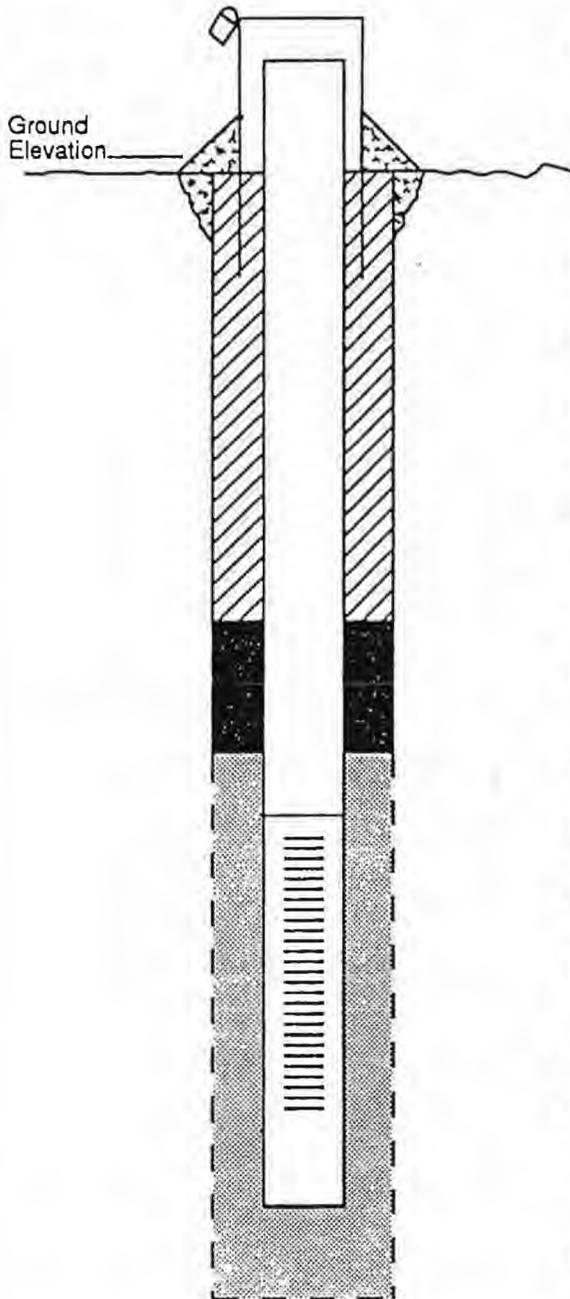
Project Devens - RFTA Study Area AOC 50 Driller D.L. Maher
 Project No. 8740-02 Boring No. GLM-98-31XC Drilling Method Drives Wash
 Date Installed 12/14/98 ^{2/25/98} Development Method _____
 Field Geologist TDL/XS



Stick-up of Casing Above Ground Surface: _____
 Type of Surface Seal/ Other Protection: _____
 Type of Surface Casing: Steel
 ID of Surface Casing: _____
 Diameter of Borehole: 4.0"
 Riser Pipe ID: 2.0"
 Type of Riser Pipe: PVC - Sch 40
 Type of Backfill: Cement/Bentonite
 Depth of Top of Seal: 97.5
 Type of Seal: Bentonite chips
 Depth of Top of Sand: 100.5
 Depth of Top of Screen: 101.8
 Type of Screen: PVC - Sch 40
 Slot Size x Length: 0.010 x 5.0'
 ID of Screen: 2.0"
 Type of Sandpack: _____
 Depth of Bottom of Screen: 106.8
 Depth of Sediment Sump with Plug: _____
 Depth of Bottom of Borehole: 116'

MONITORING WELL CONSTRUCTION DIAGRAM

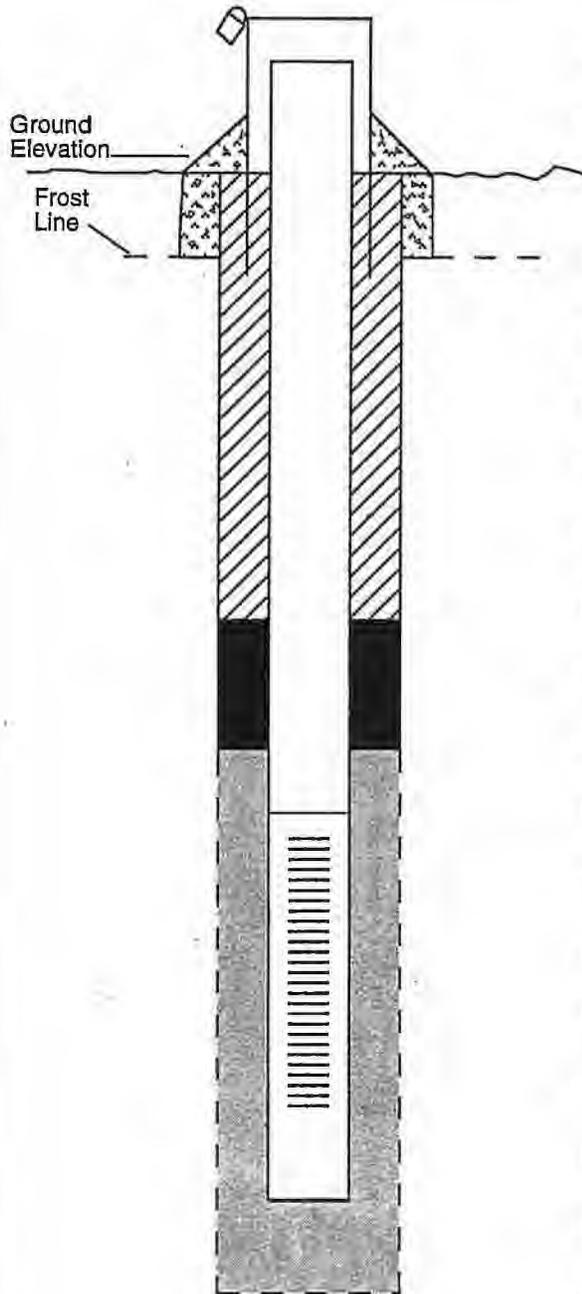
Project Devens - RFTA Study Area AOC 50 Driller D.L. Maher
 Project No. 8740-02 Boring No. GCM-98-32X Drilling Method washed drive
 Date Installed 12/2/98 Development Method _____
 Field Geologist Gordon Hamilton



Stick-up of Casing Above Ground Surface: _____
 Type of Surface Seal/ Other Protection: cement/grout
 Type of Surface Casing: 9
 ID of Surface Casing: 2"
 Diameter of Borehole: 6" to 45, 9" (45-135)
 Riser Pipe ID: 2"
 Type of Riser Pipe: Schedule 40 PVC
 Type of Backfill: Grout
 Depth of Top of Seal: 120
 Type of Seal: Bentonite chips
 Depth of Top of Sand: 125
 Depth of Top of Screen: 130
 Type of Screen: PVC Schedule 40
 Slot Size x Length: 0.010 x 10"
 ID of Screen: 2"
 Type of Sandpack: #4 silica sand
 Depth of Bottom of Screen: 135
 Depth of Sediment Sump with Plug: 135
 Depth of Bottom of Borehole: 136"

MONITORING WELL CONSTRUCTION RECORD

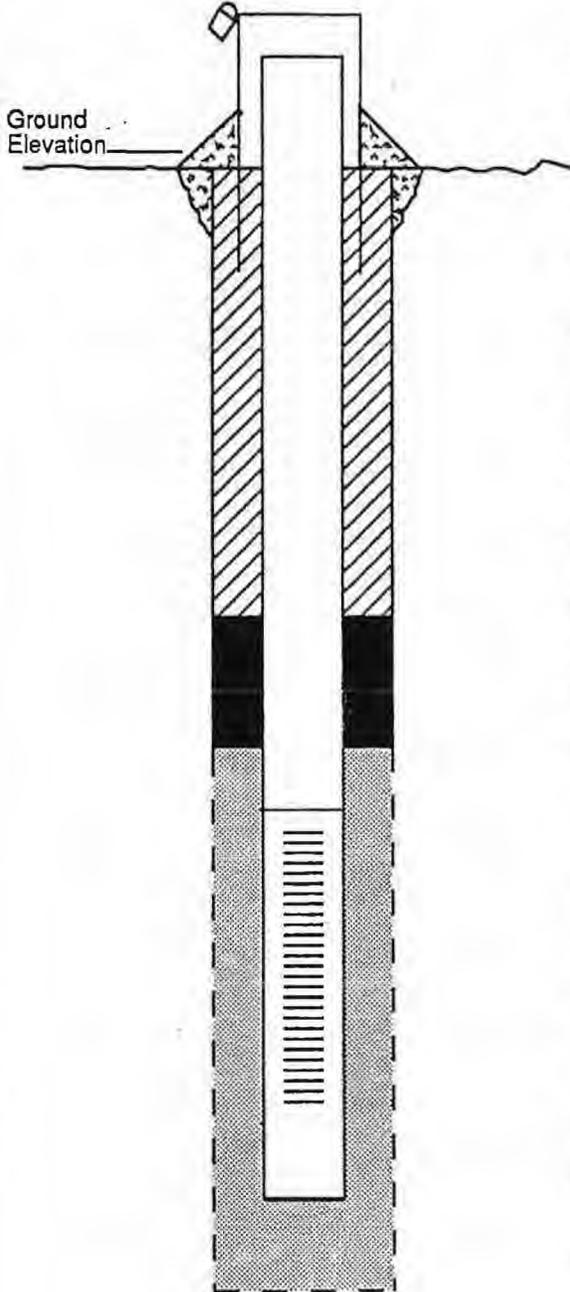
Project: DEVENS Study Area: AOC 50 Driller: MAHER ENVIRONMENTAL
 Project No.: 44953/0740.03 Boring No.: GGM-98-33 Drilling Method: 4 1/4" (ID) HSAs
 Date Installed: 11-20-98 Development Method: _____
 Field Geologist: MARK PHANELUF



Stick-up of Casing Above Ground Surface: not recorded
 Type of Surface Seal/Other Protection: cement
 Type of Surface Casing: stand pipe
 ID of Surface Casing: not recorded
 Diameter of Borehole: ~ 8"
 Riser Pipe ID: 2"
 Type of Riser Pipe: Schedule 40 PVC
 Type of Backfill: cement grout
 Depth of Top of Seal: 21.2'
 Type of Seal: bentonite chips
 Depth of Top of Sand: 26.2'
 Depth of Top of Screen: 31.2'
 Type of Screen: Schedule 40 PVC
 Slot Size x Length: 0.010" x 10'
 ID of Screen: 2"
 Type of Sandpack: 0-GRADE
 Depth of Bottom of Screen: 41.2'
 Depth of Sediment Sump with Plug: N/A
 Depth of Bottom of Borehole: 45'

MONITORING WELL CONSTRUCTION DIAGRAM

Project Fort Devens RFTA Study Area AOC-50 Driller D.L. Maher (Bill Burns)
 Project No. 8740-02 Boring No. GLM-98-33X Drilling Method HSA
 Date Installed 11/23/98 Development Method _____
 Field Geologist G Hamilton



Stick-up of Casing Above Ground Surface: _____

Type of Surface Seal/ Other Protection: _____

Type of Surface Casing: _____

ID of Surface Casing: _____

Diameter of Borehole: 8"

Riser Pipe ID: 2"

Type of Riser Pipe: Sch 40 PVC

Type of Backfill: Cement/bentonite grout

Depth of Top of Seal: 21.1

Type of Seal: Bentonite chips

Depth of Top of Sand: 26.1

Depth of Top of Screen: 31.1

Type of Screen: Sch 40 PVC

Slot Size x Length: 0.01" x 10'

ID of Screen: 2"

Type of Sandpack: #00 sand?

Depth of Bottom of Screen: 41.1

Depth of Sediment Sump with Plug: 41.2

Depth of Bottom of Borehole: 47.86

HYDROGEOLOGIC DATA

- D-1 PRECIPITATION DATA
- D-2 HORIZONTAL GRADIENT CALCULATIONS
- D-3 LONG-TERM WATER LEVEL DATA
- D-4 IN SITU HYDRAULIC CONDUCTIVITY TEST RESULTS

PRECIPITATION DATA

**DAILY PRECIPITATION DATA
COLLECTED AT THE WORCHESTER, MA
MUNICIPAL AIRPORT**

-1 = trace quantity	
-99 = missing data	
DATE	PRECIPITATION (inches)
5/1/96	-1
5/2/96	0.02
5/3/96	0.32
5/4/96	0.12
5/5/96	0.01
5/6/96	0.22
5/7/96	0
5/8/96	0.03
5/9/96	-1
5/10/96	0.28
5/11/96	0.58
5/12/96	0.15
5/13/96	0
5/14/96	0
5/15/96	0
5/16/96	0.62
5/17/96	0.01
5/18/96	0.01
5/19/96	-1
5/20/96	0
5/21/96	0.18
5/22/96	0
5/23/96	0.01
5/24/96	0.04
5/25/96	0
5/26/96	0
5/27/96	0
5/28/96	0
5/29/96	0.01
5/30/96	0.73
5/31/96	0
6/1/96	0
6/2/96	0
6/3/96	0.38
6/4/96	-1
6/5/96	0.02
6/6/96	0
6/7/96	0
6/8/96	0.55
6/9/96	0
6/10/96	0.09
6/11/96	0

DATE	PRECIPITATION (inches)
6/12/96	-1
6/13/96	0.07
6/14/96	0
6/15/96	-1
6/16/96	0
6/17/96	0
6/18/96	0
6/19/96	0.07
6/20/96	1.46
6/21/96	0.01
6/22/96	0.03
6/23/96	0
6/24/96	0.13
6/25/96	0.05
6/26/96	0
6/27/96	0.02
6/28/96	0.03
6/29/96	-1
6/30/96	0.1
7/1/96	0
7/2/96	0
7/3/96	0.26
7/4/96	0.07
7/5/96	0
7/6/96	0
7/7/96	0
7/8/96	-1
7/9/96	0.88
7/10/96	0
7/11/96	0
7/12/96	-1
7/13/96	3.26
7/14/96	0
7/15/96	0.01
7/16/96	0.15
7/17/96	-1
7/18/96	0
7/19/96	0.12
7/20/96	0
7/21/96	0
7/22/96	0
7/23/96	0.86
7/24/96	0
7/25/96	0
7/26/96	0.41
7/27/96	0
7/28/96	0
7/29/96	0.03
7/30/96	0

DATE	PRECIPITATION (inches)
7/31/96	0.44
8/1/96	0.02
8/2/96	0
8/3/96	1.52
8/4/96	0
8/5/96	0
8/6/96	0
8/7/96	0
8/8/96	0
8/9/96	0.81
8/10/96	0.01
8/11/96	0
8/12/96	0
8/13/96	0.23
8/14/96	0
8/15/96	0
8/16/96	0
8/17/96	0
8/18/96	0
8/19/96	0
8/20/96	0
8/21/96	0.01
8/22/96	0
8/23/96	1.07
8/24/96	0.32
8/25/96	0
8/26/96	0
8/27/96	0
8/28/96	-1
8/29/96	0
8/30/96	0
8/31/96	0
9/1/96	0
9/2/96	-1
9/3/96	0
9/4/96	0
9/5/96	-1
9/6/96	0
9/7/96	0.49
9/8/96	0.04
9/9/96	0
9/10/96	0.15
9/11/96	0
9/12/96	0.01
9/13/96	0.18
9/14/96	0.02
9/15/96	0
9/16/96	0.01
9/17/96	1.17

DATE	PRECIPITATION (inches)
9/18/96	2.28
9/19/96	0
9/20/96	0
9/21/96	0
9/22/96	0.84
9/23/96	0.2
9/24/96	0.08
9/25/96	0.04
9/26/96	0
9/27/96	0
9/28/96	0.15
9/29/96	0.41
9/30/96	0
10/1/96	0
10/2/96	0.06
10/3/96	0.02
10/4/96	0
10/5/96	0
10/6/96	0
10/7/96	0
10/8/96	1
10/9/96	0.42
10/10/96	0.17
10/11/96	-1
10/12/96	0
10/13/96	0
10/14/96	-1
10/15/96	0
10/16/96	0
10/17/96	0
10/18/96	0
10/19/96	0.15
10/20/96	3.39
10/21/96	-1
10/22/96	0.06
10/23/96	0.24
10/24/96	0.01
10/25/96	0
10/26/96	0
10/27/96	-1
10/28/96	0.25
10/29/96	0
10/30/96	0.04
10/31/96	0
11/1/96	0
11/2/96	0
11/3/96	0
11/4/96	0
11/5/96	0

DATE	PRECIPITATION (inches)
11/6/96	0
11/7/96	0.09
11/8/96	0.49
11/9/96	0.86
11/10/96	0.01
11/11/96	-1
11/12/96	0
11/13/96	-1
11/14/96	0
11/15/96	0
11/16/96	0
11/17/96	0
11/18/96	0
11/19/96	0.03
11/20/96	-1
11/21/96	0
11/22/96	0
11/23/96	0
11/24/96	0
11/25/96	0.09
11/26/96	1.36
11/27/96	-1
11/28/96	-1
11/29/96	0
11/30/96	-1
12/1/96	0.3
12/2/96	1.46
12/3/96	0
12/4/96	-1
12/5/96	0
12/6/96	0.36
12/7/96	0.82
12/8/96	1
12/9/96	0
12/10/96	0
12/11/96	0.14
12/12/96	0.49
12/13/96	-1
12/14/96	0.13
12/15/96	0.03
12/16/96	-1
12/17/96	0.69
12/18/96	0
12/19/96	0.45
12/20/96	0.01
12/21/96	0
12/22/96	0
12/23/96	-1
12/24/96	0.68

DATE	PRECIPITATION (inches)
12/25/96	0.06
12/26/96	0
12/27/96	0
12/28/96	-1
12/29/96	0.24
12/30/96	0
12/31/96	0.05
1/1/97	0
1/2/97	0.1
1/3/97	0
1/4/97	0
1/5/97	0.07
1/6/97	0.01
1/7/97	-1
1/8/97	0
1/9/97	0.04
1/10/97	0.12
1/11/97	0.02
1/12/97	0
1/13/97	0
1/14/97	0
1/15/97	0
1/16/97	0.95
1/17/97	-1
1/18/97	-1
1/19/97	-1
1/20/97	-1
1/21/97	0
1/22/97	0.11
1/23/97	0
1/24/97	0.03
1/25/97	0.86
1/26/97	0
1/27/97	0.09
1/28/97	0.82
1/29/97	0
1/30/97	-1
1/31/97	0.01
2/1/97	0.09
2/2/97	0
2/3/97	0.1
2/4/97	0.11
2/5/97	0.64
2/6/97	0
2/7/97	-1
2/8/97	0
2/9/97	0
2/10/97	0
2/11/97	-1

DATE	PRECIPITATION (inches)
2/12/97	-1
2/13/97	0
2/14/97	0.32
2/15/97	0.05
2/16/97	-1
2/17/97	0.01
2/18/97	0
2/19/97	0.07
2/20/97	0
2/21/97	-1
2/22/97	0.11
2/23/97	0
2/24/97	-1
2/25/97	-1
2/26/97	0.04
2/27/97	0.17
2/28/97	0
3/1/97	-1
3/2/97	0.18
3/3/97	0.01
3/4/97	0.03
3/5/97	0.26
3/6/97	0.24
3/7/97	-1
3/8/97	0.06
3/9/97	-1
3/10/97	0.18
3/11/97	0.06
3/12/97	-1
3/13/97	0
3/14/97	0.75
3/15/97	0.05
3/16/97	0
3/17/97	0
3/18/97	0
3/19/97	0
3/20/97	0.07
3/21/97	-1
3/22/97	0.17
3/23/97	0
3/24/97	0
3/25/97	0.04
3/26/97	1.01
3/27/97	0
3/28/97	0
3/29/97	0.32
3/30/97	0
3/31/97	1.23
4/1/97	0.34

DATE	PRECIPITATION (inches)
4/2/97	-1
4/3/97	0.11
4/4/97	0
4/5/97	0
4/6/97	0.02
4/7/97	-1
4/8/97	0
4/9/97	-1
4/10/97	0
4/11/97	0
4/12/97	0.73
4/13/97	0.12
4/14/97	0
4/15/97	0
4/16/97	0
4/17/97	0.23
4/18/97	0.63
4/19/97	0.47
4/20/97	0
4/21/97	-1
4/22/97	-1
4/23/97	0
4/24/97	-1
4/25/97	0
4/26/97	0
4/27/97	-1
4/28/97	0.57
4/29/97	0
4/30/97	0
5/1/97	0.1
5/2/97	0
5/3/97	0.54
5/4/97	0.01
5/5/97	0
5/6/97	0.22
5/7/97	0
5/8/97	0
5/9/97	0.13
5/10/97	0.11
5/11/97	0
5/12/97	0
5/13/97	0.09
5/14/97	-1
5/15/97	0.01
5/16/97	0.1
5/17/97	0.09
5/18/97	0
5/19/97	1.09
5/20/97	0.07

DATE	PRECIPITATION (inches)
5/21/97	0.01
5/22/97	-1
5/23/97	0
5/24/97	0
5/25/97	0.15
5/26/97	0
5/27/97	0
5/28/97	0
5/29/97	0
5/30/97	-1
5/31/97	0
6/1/97	0.08
6/2/97	0.03
6/3/97	0
6/4/97	0
6/5/97	0
6/6/97	0
6/7/97	0
6/8/97	0
6/9/97	0
6/10/97	0
6/11/97	0
6/12/97	0.06
6/13/97	-99
6/14/97	-99
6/15/97	-99
6/16/97	-99
6/17/97	-99
6/18/97	-99
6/19/97	-99
6/20/97	-99
6/21/97	-99
6/22/97	-99
6/23/97	-99
6/24/97	-99
6/25/97	-99
6/26/97	-99
6/27/97	-99
6/28/97	-99
6/29/97	-99
6/30/97	-99

Worcester, MA Daily Climate Data For The Period Jul 1 to Dec 6 1997 through 1999

Date	Max T	Min T	Ave T	H Deg	Pcpn	Snow On	Gnd	Mx	Wnd
7/ 1/1997	82	62	72	0	0.00	0.0	M	SW	18
7/ 2/1997	79	62	71	0	0.10	0.0	M	S	21
7/ 3/1997	74	66	70	0	1.74	0.0	M	S	32
7/ 4/1997	76	63	70	0	T	0.0	M	W	29
7/ 5/1997	74	55	65	0	0.00	0.0	M	NW	28
7/ 6/1997	77	56	67	0	0.00	0.0	M	NE	16
7/ 7/1997	79	59	69	0	0.03	0.0	M	SW	31
7/ 8/1997	79	61	70	0	0.00	0.0	M	W	20
7/ 9/1997	82	62	72	0	0.84	0.0	M	W	41
7/10/1997	75	57	66	0	0.04	0.0	M	N	21
7/11/1997	79	58	69	0	0.00	0.0	M	W	17
7/12/1997	82	62	72	0	0.00	0.0	M	SW	20
7/13/1997	82	62	72	0	0.00	0.0	M	W	21
7/14/1997	85	68	77	0	0.00	0.0	M	W	22
7/15/1997	75	62	69	0	0.01	0.0	M	NE	17
7/16/1997	82	60	71	0	T	0.0	M	NE	15
7/17/1997	87	67	77	0	0.03	0.0	M	NW	38
7/18/1997	86	67	77	0	0.00	0.0	M	NW	23
7/19/1997	71	54	63	2	0.00	0.0	M	NW	30
7/20/1997	74	50	62	3	0.00	0.0	M	W	21
7/21/1997	71	60	66	0	0.09	0.0	M	N	11
7/22/1997	78	57	68	0	0.08	0.0	M	NE	18
7/23/1997	73	57	65	0	0.00	0.0	M	N	18
7/24/1997	63	52	58	7	0.01	0.0	M	NE	21
7/25/1997	71	53	62	3	0.01	0.0	M	NE	28
7/26/1997	83	54	69	0	0.00	0.0	M	W	17
7/27/1997	83	65	74	0	T	0.0	M	S	22
7/28/1997	83	67	75	0	0.00	0.0	M	W	24
7/29/1997	75	59	67	0	0.00	0.0	M	NW	29
7/30/1997	79	57	68	0	0.00	0.0	M	N	20
7/31/1997	83	61	72	0	0.00	0.0	M	W	17
8/ 1/1997	81	64	73	0	0.00	0.0	M	N	20
8/ 2/1997	84	66	75	0	0.00	0.0	M	SW	26
8/ 3/1997	82	66	74	0	T	0.0	M	S	18
8/ 4/1997	68	54	61	4	0.36	0.0	M	NE	17
8/ 5/1997	73	54	64	1	0.52	0.0	M	NE	16
8/ 6/1997	73	56	65	0	0.00	0.0	M	SE	15
8/ 7/1997	75	57	66	0	0.00	0.0	M	NW	24
8/ 8/1997	77	60	69	0	0.00	0.0	M	SE	18
8/ 9/1997	79	60	70	0	0.00	0.0	M	SW	20
8/10/1997	85	65	75	0	0.00	0.0	M	W	21
8/11/1997	83	63	73	0	0.00	0.0	M	SW	22
8/12/1997	77	63	70	0	0.00	0.0	M	N	20
8/13/1997	71	62	67	0	0.00	0.0	M	S	21
8/14/1997	75	63	69	0	0.00	0.0	M	NW	18
8/15/1997	73	60	67	0	T	0.0	M	S	20
8/16/1997	87	66	77	0	0.03	0.0	M	SW	28
8/17/1997	85	68	77	0	T	0.0	M	W	29
8/18/1997	73	55	64	1	0.36	0.0	M	N	21
8/19/1997	74	54	64	1	0.00	0.0	M	NW	17
8/20/1997	71	58	65	0	0.15	0.0	M	S	14
8/21/1997	59	55	57	8	1.34	0.0	M	NE	28
8/22/1997	73	57	65	0	T	0.0	M	W	17
8/23/1997	71	55	63	2	T	0.0	M	W	24
8/24/1997	72	55	64	1	0.00	0.0	M	W	21
8/25/1997	74	59	67	0	T	0.0	M	SE	13
8/26/1997	77	57	67	0	0.00	0.0	M	SW	14
8/27/1997	76	61	69	0	0.00	0.0	M	S	23
8/28/1997	71	61	66	0	0.23	0.0	M	S	17
8/29/1997	69	61	65	0	0.02	0.0	M	N	13
8/30/1997	75	57	66	0	0.01	0.0	M	NW	15
8/31/1997	78	60	69	0	0.00	0.0	M	SW	16

9/ 1/1997	72	63	68	0	0.12	0.0	M	SW 13
9/ 2/1997	78	62	70	0	0.01	0.0	M	SW 21
9/ 3/1997	70	50	60	5	0.06	0.0	M	N 28
9/ 4/1997	61	45	53	12	0.00	0.0	M	N 23
9/ 5/1997	71	48	60	5	0.00	0.0	M	W 24
9/ 6/1997	73	52	63	2	0.00	0.0	M	SW 20
9/ 7/1997	76	58	67	0	0.00	0.0	M	SW 15
9/ 8/1997	66	58	62	3	T	0.0	M	NE 18
9/ 9/1997	71	57	64	1	0.00	0.0	M	NE 18
9/10/1997	69	57	63	2	T	0.0	M	E 16
9/11/1997	66	59	63	2	0.61	0.0	M	E 16
9/12/1997	78	64	71	0	0.00	0.0	M	SW 17
9/13/1997	73	60	67	0	0.00	0.0	M	W 17
9/14/1997	74	59	67	0	0.00	0.0	M	NW 15
9/15/1997	73	59	66	0	0.00	0.0	M	W 22
9/16/1997	75	55	65	0	0.00	0.0	M	NW 21
9/17/1997	71	51	61	4	0.00	0.0	M	SW 21
9/18/1997	75	60	68	0	T	0.0	M	SW 18
9/19/1997	77	55	66	0	0.00	0.0	M	N 21
9/20/1997	77	48	63	2	0.15	0.0	M	NW 33
9/21/1997	57	40	49	16	0.00	0.0	M	NW 28
9/22/1997	62	39	51	14	0.00	0.0	M	SW 28
9/23/1997	59	46	53	12	T	0.0	M	SW 23
9/24/1997	56	39	48	17	0.00	0.0	M	NW 21
9/25/1997	62	39	51	14	0.04	0.0	M	SW 29
9/26/1997	64	47	56	9	T	0.0	M	W 20
9/27/1997	62	44	53	12	0.00	0.0	M	N 14
9/28/1997	61	43	52	13	0.04	0.0	M	E 16
9/29/1997	64	50	57	8	0.40	0.0	M	W 46
9/30/1997	65	54	60	5	0.01	0.0	M	SW 40
10/ 1/1997	55	36	46	19	T	0.0	M	NW 26
10/ 2/1997	56	33	45	20	0.00	0.0	M	NW 24
10/ 3/1997	49	41	45	20	0.27	0.0	M	S 14
10/ 4/1997	64	47	56	9	0.00	0.0	M	SE 16
10/ 5/1997	70	56	63	2	0.30	0.0	M	SW 23
10/ 6/1997	79	54	67	0	0.00	0.0	M	W 28
10/ 7/1997	72	53	63	2	0.00	0.0	M	NW 24
10/ 8/1997	69	51	60	5	0.00	0.0	M	N 17
10/ 9/1997	68	49	59	6	0.00	0.0	M	SW 18
10/10/1997	76	54	65	0	T	0.0	M	W 30
10/11/1997	62	43	53	12	0.00	0.0	M	N 22
10/12/1997	63	43	53	12	0.00	0.0	M	W 13
10/13/1997	68	47	58	7	0.00	0.0	M	M 47
10/14/1997	61	48	55	10	0.00	0.0	M	SE 11
10/15/1997	57	49	53	12	0.04	0.0	M	NW 13
10/16/1997	50	41	46	19	0.12	0.0	M	N 17
10/17/1997	54	34	44	21	0.00	0.0	M	W 15
10/18/1997	54	38	46	19	0.00	0.0	M	N 15
10/19/1997	49	39	44	21	0.00	0.0	M	NE 20
10/20/1997	59	42	51	14	T	0.0	M	W 25
10/21/1997	52	35	44	21	0.00	0.0	M	NW 25
10/22/1997	47	28	38	27	0.00	0.0	M	W 38
10/23/1997	43	23	33	32	0.00	0.0	M	SW 24
10/24/1997	50	30	40	25	0.00	0.0	M	W 25
10/25/1997	43	35	39	26	0.43	0.0	M	N 22
10/26/1997	44	28	36	29	0.11	0.0	M	E 20
10/27/1997	46	37	42	23	0.69	0.0	M	NW 29
10/28/1997	43	32	38	27	0.00	0.0	M	W 41
10/29/1997	49	31	40	25	0.00	0.0	M	W 24
10/30/1997	56	38	47	18	0.00	0.0	M	W 24
10/31/1997	59	41	50	15	0.15	0.0	M	S 23
11/ 1/1997	55	48	52	13	1.75	0.0	M	E 41
11/ 2/1997	63	49	56	9	0.42	0.0	M	S 40
11/ 3/1997	59	39	49	16	0.00	0.0	M	S 32
11/ 4/1997	56	41	49	16	0.01	0.0	M	W 29
11/ 5/1997	50	35	43	22	0.00	0.0	M	W 22
11/ 6/1997	50	38	44	21	0.00	0.0	M	NE 17
11/ 7/1997	46	38	42	23	T	0.0	M	NE 33

11/ 8/1997	41	39	40	25	0.12	0.0	M	NE 31
11/ 9/1997	43	39	41	24	1.07	0.0	M	NE 29
11/10/1997	45	37	41	24	0.00	0.0	M	NW 24
11/11/1997	45	28	37	28	0.00	0.0	M	NW 24
11/12/1997	37	24	31	34	0.00	0.0	M	SW 23
11/13/1997	37	23	30	35	0.00	0.0	M	W 16
11/14/1997	28	22	25	40	0.77	0.0	M	N 30
11/15/1997	32	27	30	35	T	5.0	M	N 21
11/16/1997	32	22	27	38	T	T	M	W 30
11/17/1997	37	21	29	36	0.00	0.0	M	W 34
11/18/1997	38	26	32	33	0.00	0.0	M	W 18
11/19/1997	40	24	32	33	0.00	0.0	M	SW 14
11/20/1997	40	26	33	32	0.00	0.0	M	W 29
11/21/1997	48	26	37	28	T	0.0	M	SW 21
11/22/1997	45	28	37	28	0.54	0.0	M	NE 30
11/23/1997	29	25	27	38	0.05	0.0	M	NE 15
11/24/1997	33	21	27	38	T	0.0	M	NW 36
11/25/1997	33	16	25	40	0.00	0.0	M	SW 31
11/26/1997	49	32	41	24	0.18	0.0	M	W 29
11/27/1997	41	25	33	32	T	0.0	M	W 52
11/28/1997	35	25	30	35	T	T	M	W 20
11/29/1997	41	31	36	29	0.00	0.0	M	NW 29
11/30/1997	42	30	36	29	0.59	0.0	M	W 20
12/ 1/1997	36	24	30	35	0.17	0.0	M	NW 43
12/ 2/1997	34	24	29	36	T	0.0	M	W 44
12/ 3/1997	44	26	35	30	0.00	0.0	M	NW 28
12/ 4/1997	43	34	39	26	0.04	0.0	M	SW 21
12/ 5/1997	38	30	34	31	0.01	0.0	M	W 23
12/ 6/1997	36	26	31	34	0.00	0.0	M	W 28
7/ 1/1998	72	58	65	0	0.09	0.0	M	NW 29
7/ 2/1998	77	57	67	0	0.00	0.0	M	NW 20
7/ 3/1998	80	61	71	0	0.00	0.0	M	W 11
7/ 4/1998	80	61	71	0	0.00	0.0	M	S 18
7/ 5/1998	75	62	69	0	0.01	0.0	M	NW 25
7/ 6/1998	75	59	67	0	0.00	0.0	M	SW 13
7/ 7/1998	75	60	68	0	0.01	0.0	M	W 17
7/ 8/1998	71	56	64	1	0.16	0.0	M	W 18
7/ 9/1998	75	56	66	0	0.00	0.0	M	NW 17
7/10/1998	75	57	66	0	0.00	0.0	M	W 28
7/11/1998	73	53	63	2	0.00	0.0	M	NW 31
7/12/1998	75	56	66	0	0.00	0.0	M	NW 18
7/13/1998	81	61	71	0	0.00	0.0	M	W 21
7/14/1998	84	63	74	0	0.00	0.0	M	SW 21
7/15/1998	85	64	75	0	0.00	0.0	M	S 18
7/16/1998	84	69	77	0	0.00	0.0	M	SW 18
7/17/1998	83	68	76	0	0.01	0.0	M	W 24
7/18/1998	81	62	72	0	0.00	0.0	M	NW 22
7/19/1998	81	63	72	0	0.00	0.0	M	S 16
7/20/1998	82	66	74	0	0.02	0.0	M	SW 21
7/21/1998	85	66	76	0	0.00	0.0	M	SW 21
7/22/1998	85	69	77	0	0.00	0.0	M	W 26
7/23/1998	84	69	77	0	0.73	0.0	M	SW 25
7/24/1998	77	58	68	0	0.00	0.0	M	W 24
7/25/1998	75	56	66	0	0.00	0.0	M	W 21
7/26/1998	76	62	69	0	0.00	0.0	M	N 16
7/27/1998	79	57	68	0	0.00	0.0	M	S 24
7/28/1998	81	64	73	0	0.00	0.0	M	SW 23
7/29/1998	82	63	73	0	0.04	0.0	M	W 30
7/30/1998	78	60	69	0	T	0.0	M	W 21
7/31/1998	74	60	67	0	0.68	0.0	M	N 18
8/ 1/1998	76	58	67	0	0.00	0.0	M	N 22
8/ 2/1998	78	60	69	0	0.00	0.0	M	SW 18
8/ 3/1998	82	62	72	0	0.00	0.0	M	N 15
8/ 4/1998	79	65	72	0	0.00	0.0	M	NE 13
8/ 5/1998	82	65	74	0	0.00	0.0	M	SE 11
8/ 6/1998	82	65	74	0	0.17	0.0	M	SE 14
8/ 7/1998	78	65	72	0	0.01	0.0	M	SW 10
8/ 8/1998	82	65	74	0	0.00	0.0	M	S 16

8/ 9/1998	81	63	72	0	0.00	0.0	M	SW 18
8/10/1998	83	65	74	0	0.00	0.0	M	SW 22
8/11/1998	81	65	73	0	0.03	0.0	M	NW 21
8/12/1998	71	57	64	1	0.13	0.0	M	NW 20
8/13/1998	73	54	64	1	0.00	0.0	M	W 14
8/14/1998	78	59	69	0	0.00	0.0	M	SW 22
8/15/1998	80	62	71	0	0.01	0.0	M	SW 23
8/16/1998	84	64	74	0	0.00	0.0	M	W 15
8/17/1998	71	66	69	0	0.38	0.0	M	NE 15
8/18/1998	82	56	69	0	0.31	0.0	M	N 23
8/19/1998	70	53	62	3	0.00	0.0	M	N 21
8/20/1998	73	50	62	3	0.00	0.0	M	W 16
8/21/1998	77	57	67	0	0.00	0.0	M	S 21
8/22/1998	79	59	69	0	0.00	0.0	M	W 15
8/23/1998	76	63	70	0	0.00	0.0	M	S 20
8/24/1998	87	65	76	0	0.90	0.0	M	W 34
8/25/1998	84	69	77	0	0.00	0.0	M	SW 30
8/26/1998	80	67	74	0	0.42	0.0	M	W 28
8/27/1998	82	68	75	0	0.00	0.0	M	N 17
8/28/1998	82	65	74	0	0.00	0.0	M	E 17
8/29/1998	78	62	70	0	0.01	0.0	M	N 21
8/30/1998	80	63	72	0	0.01	0.0	M	SW 18
8/31/1998	73	60	67	0	0.01	0.0	M	NW 20
9/ 1/1998	76	56	66	0	0.00	0.0	M	W 15
9/ 2/1998	73	56	65	0	0.07	0.0	M	S 15
9/ 3/1998	75	56	66	0	0.00	0.0	M	W 13
9/ 4/1998	78	56	67	0	0.00	0.0	M	NW 16
9/ 5/1998	72	54	63	2	0.00	0.0	M	NW 28
9/ 6/1998	84	56	70	0	0.00	0.0	M	M 56
9/ 7/1998	73	60	67	0	0.31	0.0	M	W 32
9/ 8/1998	68	52	60	5	0.01	0.0	M	NW 23
9/ 9/1998	61	47	54	11	0.01	0.0	M	NW 31
9/10/1998	67	49	58	7	0.00	0.0	M	W 32
9/11/1998	72	49	61	4	0.00	0.0	M	W 21
9/12/1998	79	59	69	0	T	0.0	M	W 28
9/13/1998	74	59	67	0	0.00	0.0	M	NW 16
9/14/1998	67	58	63	2	0.00	0.0	M	SW 16
9/15/1998	81	63	72	0	0.02	0.0	M	SW 23
9/16/1998	78	59	69	0	0.03	0.0	M	SW 25
9/17/1998	75	53	64	1	0.00	0.0	M	W 16
9/18/1998	68	51	60	5	0.00	0.0	M	NE 18
9/19/1998	74	53	64	1	0.00	0.0	M	SW 22
9/20/1998	81	59	70	0	0.00	0.0	M	W 16
9/21/1998	79	61	70	0	0.00	0.0	M	SW 22
9/22/1998	69	53	61	4	1.02	0.0	M	NW 21
9/23/1998	58	42	50	15	0.00	0.0	M	N 29
9/24/1998	61	40	51	14	0.00	0.0	M	SW 17
9/25/1998	68	46	57	8	0.00	0.0	M	M 46
9/26/1998	75	56	66	0	0.01	0.0	M	W 21
9/27/1998	82	63	73	0	0.10	0.0	M	W 39
9/28/1998	70	48	59	6	0.00	0.0	M	NW 30
9/29/1998	65	45	55	10	0.00	0.0	M	SW 18
9/30/1998	70	51	61	4	0.11	0.0	M	SW 23
10/ 1/1998	69	42	56	9	0.01	0.0	M	W 52
10/ 2/1998	57	35	46	19	0.00	0.0	M	W 37
10/ 3/1998	57	40	49	16	0.00	0.0	M	NW 21
10/ 4/1998	60	38	49	16	0.00	0.0	M	W 16
10/ 5/1998	63	43	53	12	0.00	0.0	M	NW 22
10/ 6/1998	52	36	44	21	0.00	0.0	M	NE 14
10/ 7/1998	57	38	48	17	0.00	0.0	M	S 18
10/ 8/1998	62	51	57	8	2.00	0.0	M	SW 24
10/ 9/1998	61	51	56	9	0.45	0.0	M	NE 28
10/10/1998	57	51	54	11	1.38	0.0	M	N 28
10/11/1998	67	54	61	4	0.03	0.0	M	N 32
10/12/1998	56	48	52	13	T	0.0	M	N 15
10/13/1998	53	47	50	15	0.00	0.0	M	S 15
10/14/1998	51	46	49	16	0.83	0.0	M	SE 21
10/15/1998	54	44	49	16	0.00	0.0	M	NW 26

10/16/1998	57	44	51	14	0.00	0.0	M	NW 25
10/17/1998	60	38	49	16	0.00	0.0	M	W 20
10/18/1998	73	52	63	2	0.00	0.0	M	W 29
10/19/1998	62	47	55	10	T	0.0	M	W 36
10/20/1998	59	41	50	15	0.00	0.0	M	NW 41
10/21/1998	52	37	45	20	0.00	0.0	M	W 28
10/22/1998	50	34	42	23	0.00	0.0	M	NW 29
10/23/1998	56	33	45	20	0.00	0.0	M	W 26
10/24/1998	69	38	54	11	0.00	0.0	M	W 28
10/25/1998	68	50	59	6	0.00	0.0	M	W 17
10/26/1998	54	40	47	18	0.00	0.0	M	NE 15
10/27/1998	50	38	44	21	0.00	0.0	M	SW 11
10/28/1998	58	40	49	16	0.23	0.0	M	SW 30
10/29/1998	52	40	46	19	0.00	0.0	M	N 37
10/30/1998	50	38	44	21	0.00	0.0	M	NW 41
10/31/1998	55	42	49	16	0.00	0.0	M	NW 24
11/ 1/1998	49	38	44	21	0.00	0.0	M	W 28
11/ 2/1998	50	37	44	21	T	0.0	M	W 36
11/ 3/1998	42	30	36	29	0.00	0.0	M	W 28
11/ 4/1998	41	25	33	32	0.00	0.0	M	W 25
11/ 5/1998	46	27	37	28	0.00	0.0	M	NW 17
11/ 6/1998	44	29	37	28	0.00	0.0	M	W 21
11/ 7/1998	44	30	37	28	0.00	0.0	M	NW 23
11/ 8/1998	42	32	37	28	0.00	0.0	M	NW 18
11/ 9/1998	42	28	35	30	0.00	0.0	M	NW 17
11/10/1998	42	29	36	29	0.02	0.0	M	SE 17
11/11/1998	62	40	51	14	0.73	0.0	M	S 43
11/12/1998	48	35	42	23	0.00	0.0	M	W 25
11/13/1998	50	33	42	23	0.00	0.0	M	W 26
11/14/1998	46	29	38	27	0.00	0.0	M	W 16
11/15/1998	54	38	46	19	0.04	0.0	M	W 43
11/16/1998	46	36	41	24	0.00	0.0	M	W 23
11/17/1998	41	34	38	27	0.24	0.0	M	N 21
11/18/1998	43	33	38	27	0.02	0.0	M	NW 16
11/19/1998	45	30	38	27	0.08	0.0	M	SE 13
11/20/1998	51	42	47	18	0.30	0.0	M	N 17
11/21/1998	43	33	38	27	T	0.0	M	W 29
11/22/1998	44	29	37	28	0.00	0.0	M	SW 28
11/23/1998	58	38	48	17	0.00	0.0	M	SW 43
11/24/1998	53	35	44	21	T	0.0	M	W 39
11/25/1998	44	29	37	28	0.00	0.0	M	W 21
11/26/1998	48	34	41	24	0.87	0.0	M	W 46
11/27/1998	43	38	41	24	T	0.0	M	W 37
11/28/1998	50	35	43	22	0.00	0.0	M	W 26
11/29/1998	45	38	42	23	0.00	0.0	M	E 13
11/30/1998	52	40	46	19	0.00	0.0	M	SW 21
12/ 1/1998	54	38	46	19	0.04	0.0	M	W 53
12/ 2/1998	58	34	46	19	0.00	0.0	M	SW 34
12/ 3/1998	57	47	52	13	0.00	0.0	M	W 25
12/ 4/1998	65	47	56	9	0.00	0.0	M	W 39
12/ 5/1998	50	36	43	22	0.00	0.0	M	S 10
12/ 6/1998	61	44	53	12	0.00	0.0	M	SW 17
7/ 1/1999	72	64	68	0	1.44	0.0	M	SW 26
7/ 2/1999	79	66	73	0	0.35	0.0	M	NW 37
7/ 3/1999	85	65	75	0	0.00	0.0	M	SW 22
7/ 4/1999	85	69	77	0	0.38	0.0	M	SW 26
7/ 5/1999	91	73	82	0	0.00	0.0	M	W 32
7/ 6/1999	91	70	81	0	0.60	0.0	M	W 33
7/ 7/1999	79	63	71	0	0.00	0.0	M	W 28
7/ 8/1999	74	59	67	0	T	0.0	M	W 31
7/ 9/1999	68	57	63	2	0.18	0.0	M	W 23
7/10/1999	79	56	68	0	0.06	0.0	M	W 32
7/11/1999	72	52	62	3	0.00	0.0	M	W 23
7/12/1999	75	56	66	0	0.00	0.0	M	S 15
7/13/1999	70	55	63	2	0.01	0.0	M	NE 17
7/14/1999	76	53	65	0	0.00	0.0	M	S 16
7/15/1999	82	59	71	0	0.00	0.0	M	W 15
7/16/1999	86	62	74	0	0.00	0.0	M	W 18

7/17/1999	89	68	79	0	0.00	0.0	M	W 25
7/18/1999	90	71	81	0	0.00	0.0	M	NW 23
7/19/1999	82	63	73	0	0.00	0.0	M	N 24
7/20/1999	79	62	71	0	0.00	0.0	M	N 22
7/21/1999	78	59	69	0	0.00	0.0	M	SW 18
7/22/1999	80	64	72	0	0.00	0.0	M	S 24
7/23/1999	87	67	77	0	0.00	0.0	M	W 20
7/24/1999	84	67	76	0	0.57	0.0	M	S 31
7/25/1999	87	63	75	0	0.01	0.0	M	SW 22
7/26/1999	78	65	72	0	0.03	0.0	M	E 13
7/27/1999	86	66	76	0	0.00	0.0	M	NW 21
7/28/1999	85	66	76	0	0.00	0.0	M	W 20
7/29/1999	87	67	77	0	T	0.0	M	SE 13
7/30/1999	85	67	76	0	0.00	0.0	M	SE 15
7/31/1999	87	67	77	0	0.00	0.0	M	SW 21
8/ 1/1999	90	71	81	0	0.00	0.0	M	W 23
8/ 2/1999	82	65	74	0	0.00	0.0	M	NW 21
8/ 3/1999	M	M	M	M	M	M	M	M M
8/ 4/1999	M	M	M	M	M	M	M	M M
8/ 5/1999	M	M	M	M	M	M	M	M M
8/ 6/1999	M	M	M	M	M	M	M	M M
8/ 7/1999	M	M	M	M	M	M	M	M M
8/ 8/1999	M	M	M	M	M	M	M	M M
8/ 9/1999	M	M	M	M	M	M	M	M M
8/10/1999	M	M	M	M	M	M	M	M M
8/11/1999	M	M	M	M	M	M	M	M M
8/12/1999	M	M	M	M	M	M	M	M M
8/13/1999	M	M	M	M	M	M	M	M M
8/14/1999	M	M	M	M	M	M	M	M M
8/15/1999	M	M	M	M	M	M	M	M M
8/16/1999	M	M	M	M	M	M	M	M M
8/17/1999	M	M	M	M	M	M	M	M M
8/18/1999	M	M	M	M	M	M	M	M M
8/19/1999	M	M	M	M	M	M	M	M M
8/20/1999	M	M	M	M	M	M	M	M M
8/21/1999	M	M	M	M	M	M	M	M M
8/22/1999	M	M	M	M	M	M	M	M M
8/23/1999	M	M	M	M	M	M	M	M M
8/24/1999	M	M	M	M	M	M	M	M M
8/25/1999	M	M	M	M	M	M	M	M M
8/26/1999	M	M	M	M	M	M	M	M M
8/27/1999	M	M	M	M	M	M	M	M M
8/28/1999	M	M	M	M	M	M	M	M M
8/29/1999	M	M	M	M	M	M	M	M M
8/30/1999	M	M	M	M	M	M	M	M M
8/31/1999	M	M	M	M	M	M	M	M M
9/ 1/1999	M	M	M	M	M	M	M	M M
9/ 2/1999	M	M	M	M	M	M	M	M M
9/ 3/1999	M	M	M	M	M	M	M	M M
9/ 4/1999	M	M	M	M	M	M	M	M M
9/ 5/1999	M	M	M	M	M	M	M	M M
9/ 6/1999	M	M	M	M	M	M	M	M M
9/ 7/1999	M	M	M	M	M	M	M	M M
9/ 8/1999	M	M	M	M	M	M	M	M M
9/ 9/1999	M	M	M	M	M	M	M	M M
9/10/1999	M	M	M	M	M	M	M	M M
9/11/1999	M	M	M	M	M	M	M	M M
9/12/1999	M	M	M	M	M	M	M	M M
9/13/1999	M	M	M	M	M	M	M	M M
9/14/1999	M	M	M	M	M	M	M	M M
9/15/1999	M	M	M	M	M	M	M	M M
9/16/1999	M	M	M	M	M	M	M	M M
9/17/1999	M	M	M	M	M	M	M	M M
9/18/1999	M	M	M	M	M	M	M	M M
9/19/1999	M	M	M	M	M	M	M	M M
9/20/1999	M	M	M	M	M	M	M	M M
9/21/1999	M	M	M	M	M	M	M	M M
9/22/1999	M	M	M	M	M	M	M	M M

9/23/1999	M	M	M	M	M	M	M	M	M
9/24/1999	M	M	M	M	M	M	M	M	M
9/25/1999	M	M	M	M	M	M	M	M	M
9/26/1999	M	M	M	M	M	M	M	M	M
9/27/1999	M	M	M	M	M	M	M	M	M
9/28/1999	M	M	M	M	M	M	M	M	M
9/29/1999	M	M	M	M	M	M	M	M	M
9/30/1999	M	M	M	M	M	M	M	M	M
10/ 1/1999	M	M	M	M	M	M	M	M	M
10/ 2/1999	M	M	M	M	M	M	M	M	M
10/ 3/1999	M	M	M	M	M	M	M	M	M
10/ 4/1999	M	M	M	M	M	M	M	M	M
10/ 5/1999	M	M	M	M	M	M	M	M	M
10/ 6/1999	M	M	M	M	M	M	M	M	M
10/ 7/1999	M	M	M	M	M	M	M	M	M
10/ 8/1999	M	M	M	M	M	M	M	M	M
10/ 9/1999	M	M	M	M	M	M	M	M	M
10/10/1999	M	M	M	M	M	M	M	M	M
10/11/1999	M	M	M	M	M	M	M	M	M
10/12/1999	M	M	M	M	M	M	M	M	M
10/13/1999	M	M	M	M	M	M	M	M	M
10/14/1999	M	M	M	M	M	M	M	M	M
10/15/1999	M	M	M	M	M	M	M	M	M
10/16/1999	M	M	M	M	M	M	M	M	M
10/17/1999	M	M	M	M	M	M	M	M	M
10/18/1999	M	M	M	M	M	M	M	M	M
10/19/1999	M	M	M	M	M	M	M	M	M
10/20/1999	M	M	M	M	M	M	M	M	M
10/21/1999	M	M	M	M	M	M	M	M	M
10/22/1999	M	M	M	M	M	M	M	M	M
10/23/1999	M	M	M	M	M	M	M	M	M
10/24/1999	M	M	M	M	M	M	M	M	M
10/25/1999	M	M	M	M	M	M	M	M	M
10/26/1999	M	M	M	M	M	M	M	M	M
10/27/1999	M	M	M	M	M	M	M	M	M
10/28/1999	M	M	M	M	M	M	M	M	M
10/29/1999	M	M	M	M	M	M	M	M	M
10/30/1999	M	M	M	M	M	M	M	M	M
10/31/1999	M	M	M	M	M	M	M	M	M
11/ 1/1999	M	M	M	M	M	M	M	M	M
11/ 2/1999	M	M	M	M	M	M	M	M	M
11/ 3/1999	M	M	M	M	M	M	M	M	M
11/ 4/1999	M	M	M	M	M	M	M	M	M
11/ 5/1999	M	M	M	M	M	M	M	M	M
11/ 6/1999	M	M	M	M	M	M	M	M	M
11/ 7/1999	M	M	M	M	M	M	M	M	M
11/ 8/1999	M	M	M	M	M	M	M	M	M
11/ 9/1999	M	M	M	M	M	M	M	M	M
11/10/1999	M	M	M	M	M	M	M	M	M
11/11/1999	M	M	M	M	M	M	M	M	M
11/12/1999	M	M	M	M	M	M	M	M	M
11/13/1999	M	M	M	M	M	M	M	M	M
11/14/1999	M	M	M	M	M	M	M	M	M
11/15/1999	M	M	M	M	M	M	M	M	M
11/16/1999	M	M	M	M	M	M	M	M	M
11/17/1999	M	M	M	M	M	M	M	M	M
11/18/1999	M	M	M	M	M	M	M	M	M
11/19/1999	M	M	M	M	M	M	M	M	M
11/20/1999	M	M	M	M	M	M	M	M	M
11/21/1999	M	M	M	M	M	M	M	M	M
11/22/1999	M	M	M	M	M	M	M	M	M
11/23/1999	M	M	M	M	M	M	M	M	M
11/24/1999	M	M	M	M	M	M	M	M	M
11/25/1999	M	M	M	M	M	M	M	M	M
11/26/1999	M	M	M	M	M	M	M	M	M
11/27/1999	M	M	M	M	M	M	M	M	M
11/28/1999	M	M	M	M	M	M	M	M	M
11/29/1999	M	M	M	M	M	M	M	M	M

11/30/1999	M	M	M	M	M	M	M	M	M
12/ 1/1999	M	M	M	M	M	M	M	M	M
12/ 2/1999	M	M	M	M	M	M	M	M	M
12/ 3/1999	M	M	M	M	M	M	M	M	M
12/ 4/1999	M	M	M	M	M	M	M	M	M
12/ 5/1999	M	M	M	M	M	M	M	M	M
12/ 6/1999	M	M	M	M	M	M	M	M	M

Period Averages And Totals

Max T	Min T	Ave T	H Deg	Pcpn	Snow	On Gnd	Mx Wnd
66.7	50.4	58.5	1421	14.50	2.3		W 23.3

Daily Extremes

High Max Temp	91	Jul/ 5/1999	Low Max Temp	28	Nov/14/1997
Low Min Temp	16	Nov/25/1997	High Min Temp	73	Jul/ 5/1999
High Pcpn	2.00	Oct/ 8/1998			
High Snow	5.0	Nov/15/1997			

Period Extremes

High Maximum Temp	81.8	1999	Low Maximum Temp	63.5	1997
Low Minimum Temp	47.8	1997	High Minimum Temp	63.5	1999
High Precipitation	15.27	1997	Low Precipitation	3.63	1999
High Snowfall	5.0	1997	Low Snowfall	0.0	1998

Total Number Of Days Above Or Below Limits

Consecutive Days Above Or Below Limits

First And Last Dates

HORIZONTAL GRADIENT CALCULATIONS

Harding Lawson Associates

PROJECT
DEVENS. AOC 50 RI
HORIZONTAL HYDRAULIC GRADIENTS

COMP. BY
JER
CHK. BY

JOB NO.
3740.03
DATE
5/4/97

1/3

WATER TABLE GRADIENTS - APRIL 7, 1997
FROM AOC 50 - RIVER

$$\frac{216 - 206 \text{ ft}}{2900 \text{ ft}} = 0.003 \text{ feet/foot}$$

AOC 50 TO MIDDLE OF AIRFIELD

$$\frac{216 - 207 \text{ ft}}{1350 \text{ ft}} = 0.0066 \text{ feet/foot}$$

MIDDLE OF AIRFIELD TO RIVER

$$\frac{1 \text{ foot}}{1550} = 0.00065 \text{ feet/foot}$$

WATER TABLE GRADIENTS JUNE 2, 1997

$$\frac{215 - 200 \text{ ft}}{2900} = 0.005 \text{ ft/foot}$$

AOC 50 TO MIDDLE:

$$\frac{215 - 207}{1350} = 0.006$$

MIDDLE OF AIRFIELD TO RIVER

$$\frac{207 - 200}{1550} = 0.0045 \text{ ft/foot}$$

PROJECT DEVENS AOL 50 RI HORIZONTAL HYDRAULIC GRADIENTS	COMP. BY JUR	JOB NO. 8740.03
	CHK. BY	DATE 8/4/97

2/3

WATER TABLE GRADIENTS JULY 2, 1997

AOL 50 TO RIVER

$$\frac{214 - 199.41}{2900} = 0.005 \text{ ft/foot}$$

AOL 50 TO MIDDLE OF AIRFIELD

$$\frac{214 - 205}{1400} = 0.006 \text{ ft/foot}$$

MIDDLE OF AIRFIELD TO RIVER

$$\frac{205 - 199.41}{1500} = 0.004 \text{ ft/foot}$$

DEEP GROUNDWATER GRADIENTS 4/7/97

AOL 50 - MIDDLE OF AIRFIELD

$$\frac{215 - 207}{1400} = 0.006 \text{ ft/foot}$$

AOL 50 TO RIVER RIVER ~ 206

$$\frac{215 - 206}{3000 \text{ ft}} = 0.003 \text{ ft/foot}$$

MIDDLE TO RIVER (RIVER ~ 206)

$$\frac{207 - 206}{1600} = 0.0006 \text{ ft/foot}$$

PROJECT
DEVENS AOC 50 RI
HORIZONTAL HYDRAULIC GRADIENTS

COMP. BY
JCR
CHK. BY
1

JOB NO.
8740.03
DATE
8/4/97
S/3

DEEP GROUNDWATER GRADIENTS

JUNE 2, 1997

AOC 50 TO RIVER

$$\frac{214 - 201.75 \text{ ft}}{2900 \text{ ft}} = 0.004 \text{ ft/foot}$$

AOC 50 TO MIDDLE OF AIRFIELD

$$\frac{214 - 207}{1400} = 0.005 \text{ ft/foot}$$

MIDDLE OF AIRFIELD TO RIVER

$$\frac{207 - 201.75 \text{ ft}}{1500} = 0.004 \text{ ft/foot}$$

DEEP GROUNDWATER HORIZONTAL GRADIENTS

JULY 2, 1997

AOC 50 TO RIVER

$$\frac{213 - 200.68 \text{ ft}}{2900 \text{ ft}} = 0.004 \text{ ft/foot}$$

AOC 50 TO MID AIRFIELD

$$\frac{213 - 206 \text{ ft}}{1300 \text{ ft}} = 0.005 \text{ ft/foot}$$

MID AIRFIELD TO RIVER

$$\frac{206 - 200.68}{1600 \text{ ft}} = 0.003 \text{ ft/foot}$$

PROJECT

DEVENS - AOC 50

ESTIMATED GROUNDWATER FLOW VELOCITIES

COMP. BY

JER

JOB NO.

8740.03

CHK. BY

DATE

8/4/97

RANGE IN GRADIENT (i): 0.004 - 0.007 ft/foot

GEOMEAN $K = 4.7 \times 10^{-4}$ cm/sec

POROSITY (n) = 0.25

$$Velocity (v) = \frac{K \cdot i}{n}$$

$$4.7 \times 10^{-4} \text{ cm/sec} \times 2835 = 1.33 \text{ ft/day}$$

$$V_1 = \frac{1.33 \text{ ft/day} \times 0.004 \text{ ft/foot}}{.25} = 0.021 \text{ ft/day}$$

$$\times 365 = 7.78 \text{ ft/yr}$$

$$V_2 = \frac{1.33 \text{ ft/day} \times 0.007 \text{ ft/foot}}{.25} = 0.037 \text{ ft/day}$$

$$\times 365 = 13.5 \text{ ft/yr}$$

MAX $K = 2.0 \times 10^{-2}$ cm/s (66m-92-04K) 13.5 ft/yr

$$V = \frac{56.7 \text{ ft/day} \times 0.007 \text{ ft/foot}}{.25} = 1.6 \text{ ft/day}$$

$$580 \text{ ft/yr}$$

WATER TABLE 8.2×10^{-4} cm/s = 2.32 ft/day

$$\frac{2.32 \text{ ft/day} \times 0.004}{.25} = 0.037 \text{ ft/day} \times 365 = 13.55 \text{ ft/yr}$$

$$\frac{2.32 \text{ ft/day} \times 0.007}{.25} = 0.065 \text{ ft/day} \times 365 = 23.71 \text{ ft/yr}$$

PROJECT
DEVENS - AOC 5P
ESTIMATED GROUNDWATER FLOW VELOCITIES

COMP. BY
JER
CHK. BY

JOB NO.
8740.03
DATE
8/4/97

DEEPER WELLS

$$K = 2.2 \times 10^{-4} \text{ cm/s} = 0.6237 \text{ ft/day}$$

$$\frac{0.624 \text{ ft/day} \times 0.004}{.25} = 0.0101 \text{ ft/day} \\ \times 365 = 3.65 \text{ ft/yr}$$

$$\frac{0.624 \text{ ft/day} \times 0.007}{.25} = 0.0175 \text{ ft/day} \\ = 6.39 \text{ ft/yr}$$

LONG-TERM WATER LEVEL DATA

G6M-92-06X MAY 1 TO JULY 2, 1997						
IN_SITU INC.	Troll					
Report generated:	7/31/97	12:14:39				
Report from file:	A:\TEST02.DAT					
Serial number:	553					
Unit name:	g6m9206x					
Test name:	g6m9206x					
Test defined on:	5/1/97	10:13:07				
Test scheduled for:	5/1/97	18:00:00				
Test started on:	5/1/97	18:00:00				
Test stopped on:	7/2/97	15:57:51				
Test extracted on:	7/11/97	9:51:09				
Data gathered using Linear testing						
Time between data points:	720.0000		Minutes.			
Number of data samples:	124					
TOTAL DATA SAMPLES	124					
Channel number [2]						
Measurement type:	Pressure/Level					
Channel name:	ONBOARD PRESSURE					
Specific gravity:	1					
Mode:	Surface					
User-defined reference:	0 Meters H2O					
Referenced on:	channel definition.					
Pressure head at reference:	3.002 Meters H2O					
Channel number [1]						
Measurement type:	Temperature					
Channel name:	TEMPERATURE					
			Chan[2]			Chan[1]
Date	Time	ET (min)	Meters H2O	Feet (H2O)		Celsius
*****	*****	*****	*****			*****
5/1/97	18:00:00	0	0.002	0.007	208.500	11.59
5/2/97	6:00:00	720	-0.009	-0.030	208.464	11.59
5/2/97	18:00:00	1440	-0.016	-0.052	208.441	11.59
5/3/97	6:00:00	2160	-0.019	-0.062	208.431	11.59
5/3/97	18:00:00	2880	-0.002	-0.007	208.487	11.6
5/4/97	6:00:00	3600	-0.014	-0.046	208.447	11.6
5/4/97	18:00:00	4320	-0.025	-0.082	208.411	11.6
5/5/97	6:00:00	5040	-0.034	-0.112	208.382	11.6

Date	Time	ET (min)	Meters H2O	Feet (H2O)		Celsius
5/5/97	18:00:00	5760	-0.028	-0.092	208.402	11.6
5/6/97	6:00:00	6480	-0.026	-0.085	208.408	11.6
5/6/97	18:00:00	7200	-0.027	-0.089	208.405	11.62
5/7/97	6:00:00	7920	-0.033	-0.108	208.385	11.6
5/7/97	18:00:00	8640	-0.037	-0.121	208.372	11.6
5/8/97	6:00:00	9360	-0.042	-0.138	208.356	11.6
5/8/97	18:00:00	10080	-0.043	-0.141	208.352	11.61
5/9/97	6:00:00	10800	-0.045	-0.148	208.346	11.6
5/9/97	18:00:00	11520	-0.042	-0.138	208.356	11.61
5/10/97	6:00:00	12240	-0.046	-0.151	208.342	11.62
5/10/97	18:00:00	12960	-0.054	-0.177	208.316	11.61
5/11/97	6:00:00	13680	-0.06	-0.197	208.297	11.61
5/11/97	18:00:00	14400	-0.064	-0.210	208.283	11.62
5/12/97	6:00:00	15120	-0.071	-0.233	208.260	11.62
5/12/97	18:00:00	15840	-0.072	-0.236	208.257	11.62
5/13/97	6:00:00	16560	-0.082	-0.269	208.224	11.62
5/13/97	18:00:00	17280	-0.084	-0.276	208.218	11.62
5/14/97	6:00:00	18000	-0.091	-0.299	208.195	11.63
5/14/97	18:00:00	18720	-0.098	-0.322	208.172	11.63
5/15/97	6:00:00	19440	-0.103	-0.338	208.155	11.63
5/15/97	18:00:00	20160	-0.107	-0.351	208.142	11.63
5/16/97	6:00:00	20880	-0.111	-0.364	208.129	11.63
5/16/97	18:00:00	21600	-0.121	-0.397	208.096	11.64
5/17/97	6:00:00	22320	-0.131	-0.430	208.064	11.65
5/17/97	18:00:00	23040	-0.136	-0.446	208.047	11.64
5/18/97	6:00:00	23760	-0.147	-0.482	208.011	11.65
5/18/97	18:00:00	24480	-0.154	-0.505	207.988	11.65
5/19/97	6:00:00	25200	-0.16	-0.525	207.968	11.65
5/19/97	18:00:00	25920	-0.168	-0.551	207.942	11.65
5/20/97	6:00:00	26640	-0.174	-0.571	207.923	11.65
5/20/97	18:00:00	27360	-0.181	-0.594	207.900	11.65
5/21/97	6:00:00	28080	-0.188	-0.617	207.877	11.64
5/21/97	18:00:00	28800	-0.194	-0.636	207.857	11.64
5/22/97	6:00:00	29520	-0.197	-0.646	207.847	11.63
5/22/97	18:00:00	30240	-0.2	-0.656	207.837	11.63
5/23/97	6:00:00	30960	-0.205	-0.673	207.821	11.63
5/23/97	18:00:00	31680	-0.208	-0.682	207.811	11.63
5/24/97	6:00:00	32400	-0.214	-0.702	207.791	11.63
5/24/97	18:00:00	33120	-0.214	-0.702	207.791	11.63
5/25/97	6:00:00	33840	-0.217	-0.712	207.781	11.64
5/25/97	18:00:00	34560	-0.22	-0.722	207.772	11.64
5/26/97	6:00:00	35280	-0.225	-0.738	207.755	11.64
5/26/97	18:00:00	36000	-0.233	-0.764	207.729	11.64
5/27/97	6:00:00	36720	-0.241	-0.791	207.703	11.65
5/27/97	18:00:00	37440	-0.247	-0.810	207.683	11.65
5/28/97	6:00:00	38160	-0.254	-0.833	207.660	11.65
5/28/97	18:00:00	38880	-0.257	-0.843	207.650	11.65
5/29/97	6:00:00	39600	-0.266	-0.873	207.621	11.65

Date	Time	ET (min)	Meters H2O	Feet (H2O)		Celsius
5/29/97	18:00:00	40320	-0.271	-0.889	207.604	11.65
5/30/97	6:00:00	41040	-0.276	-0.906	207.588	11.65
5/30/97	18:00:00	41760	-0.282	-0.925	207.568	11.65
5/31/97	6:00:00	42480	-0.286	-0.938	207.555	11.65
5/31/97	18:00:00	43200	-0.292	-0.958	207.535	11.65
6/1/97	6:00:00	43920	-0.299	-0.981	207.512	11.66
6/1/97	18:00:00	44640	-0.306	-1.004	207.489	11.66
6/2/97	6:00:00	45360	-0.313	-1.027	207.466	11.66
6/2/97	18:00:00	46080	-0.322	-1.056	207.437	11.66
6/3/97	6:00:00	46800	-0.329	-1.079	207.414	11.66
6/3/97	18:00:00	47520	-0.336	-1.102	207.391	11.66
6/4/97	6:00:00	48240	-0.342	-1.122	207.371	11.66
6/4/97	18:00:00	48960	-0.35	-1.148	207.345	11.66
6/5/97	6:00:00	49680	-0.357	-1.171	207.322	11.66
6/5/97	18:00:00	50400	-0.365	-1.198	207.296	11.66
6/6/97	6:00:00	51120	-0.374	-1.227	207.266	11.66
6/6/97	18:00:00	51840	-0.381	-1.250	207.243	11.66
6/7/97	6:00:00	52560	-0.389	-1.276	207.217	11.66
6/7/97	18:00:00	53280	-0.394	-1.293	207.201	11.66
6/8/97	6:00:00	54000	-0.404	-1.325	207.168	11.66
6/8/97	18:00:00	54720	-0.41	-1.345	207.148	11.66
6/9/97	6:00:00	55440	-0.418	-1.371	207.122	11.66
6/9/97	18:00:00	56160	-0.425	-1.394	207.099	11.66
6/10/97	6:00:00	56880	-0.432	-1.417	207.076	11.66
6/10/97	18:00:00	57600	-0.438	-1.437	207.056	11.66
6/11/97	6:00:00	58320	-0.445	-1.460	207.033	11.66
6/11/97	18:00:00	59040	-0.452	-1.483	207.010	11.66
6/12/97	6:00:00	59760	-0.459	-1.506	206.987	11.66
6/12/97	18:00:00	60480	-0.466	-1.529	206.965	11.67
6/13/97	6:00:00	61200	-0.474	-1.555	206.938	11.67
6/13/97	18:00:00	61920	-0.48	-1.575	206.919	11.67
6/14/97	6:00:00	62640	-0.489	-1.604	206.889	11.66
6/14/97	18:00:00	63360	-0.496	-1.627	206.866	11.67
6/15/97	6:00:00	64080	-0.506	-1.660	206.833	11.67
6/15/97	18:00:00	64800	-0.512	-1.680	206.814	11.66
6/16/97	6:00:00	65520	-0.52	-1.706	206.787	11.67
6/16/97	18:00:00	66240	-0.525	-1.722	206.771	11.66
6/17/97	6:00:00	66960	-0.532	-1.745	206.748	11.67
6/17/97	18:00:00	67680	-0.54	-1.772	206.722	11.67
6/18/97	6:00:00	68400	-0.548	-1.798	206.695	11.67
6/18/97	18:00:00	69120	-0.552	-1.811	206.682	11.67
6/19/97	6:00:00	69840	-0.56	-1.837	206.656	11.67
6/19/97	18:00:00	70560	-0.567	-1.860	206.633	11.67
6/20/97	6:00:00	71280	-0.575	-1.886	206.607	11.67
6/20/97	18:00:00	72000	-0.581	-1.906	206.587	11.66
6/21/97	6:00:00	72720	-0.584	-1.916	206.577	11.66
6/21/97	18:00:00	73440	-0.588	-1.929	206.564	11.66
6/22/97	6:00:00	74160	-0.591	-1.939	206.554	11.66

Date	Time	ET (min)	Meters H2O	Feet (H2O)		Celsius
6/22/97	18:00:00	74880	-0.597	-1.959	206.535	11.66
6/23/97	6:00:00	75600	-0.603	-1.978	206.515	11.66
6/23/97	18:00:00	76320	-0.607	-1.991	206.502	11.66
6/24/97	6:00:00	77040	-0.612	-2.008	206.486	11.66
6/24/97	18:00:00	77760	-0.617	-2.024	206.469	11.66
6/25/97	6:00:00	78480	-0.621	-2.037	206.456	11.66
6/25/97	18:00:00	79200	-0.624	-2.047	206.446	11.66
6/26/97	6:00:00	79920	-0.63	-2.067	206.426	11.66
6/26/97	18:00:00	80640	-0.634	-2.080	206.413	11.66
6/27/97	6:00:00	81360	-0.641	-2.103	206.390	11.66
6/27/97	18:00:00	82080	-0.647	-2.123	206.371	11.66
6/28/97	6:00:00	82800	-0.652	-2.139	206.354	11.66
6/28/97	18:00:00	83520	-0.657	-2.156	206.338	11.67
6/29/97	6:00:00	84240	-0.663	-2.175	206.318	11.66
6/29/97	18:00:00	84960	-0.667	-2.188	206.305	11.66
6/30/97	6:00:00	85680	-0.674	-2.211	206.282	11.67
6/30/97	18:00:00	86400	-0.678	-2.224	206.269	11.66
7/1/97	6:00:00	87120	-0.683	-2.241	206.253	11.66
7/1/97	18:00:00	87840	-0.688	-2.257	206.236	11.66
7/2/97	6:00:00	88560	-0.694	-2.277	206.216	11.67

G6M-97-06B: MAY 1 TO JULY 10, 1997							
IN_SITU	INC.	TROLL					
Serial	number:	10110					
Unit	name:	g6m9606b					
Report	generated:	7/10/97	17:21:47				
Report	from	file:	A:\G6M6B710.BIN				
Test	name:	g6m9606b					
Test	defined	on:	5/1/97			10:36:41	
Test	scheduled	for:	5/1/97			18:00:00	
Test	started	on:	5/1/97			18:00:00	
Test	stopped	on:	N/A			N/A	
Test	extracted	on:	7/10/97			12:36:13	
Data	gathered	using	Linear	testing			
	Time	between	data	points:	720	Minutes.	
	Number	of	data	samples:	140		
Channel	number	[2]					
	Measurem	type:	Pressure/Level				
	Channel	name:	onboard			pressure	
	Specific	gravity:	1				
	Mode:	Surface					
	User-defin	reference:	0			Meters	H2O
	Reference	on:	channel			definition.	
	Pressure	head	at			reference:	4.765
Channel	number	[1]					
	Measurem	type:	Temperature				
	Channel	name:	OnBoard				
	Channel[2]	Channel[1]					
							H2O
Date	Time	ET (min)	Δ (meters)	Δ corrected *	Δ (feet)	Temp	Elevation (ft amsl)
5/1/97	18:00:00	0	0.006	0.006	0.020	11.51	208.500
5/2/97	6:00:00	720	-0.005	-0.005	-0.016	11.54	208.464
5/2/97	18:00:00	1440	-0.012	-0.012	-0.039	11.54	208.441
5/3/97	6:00:00	2160	-0.014	-0.014	-0.046	11.53	208.434
5/3/97	18:00:00	2880	0.003	0.003	0.010	11.53	208.490
5/4/97	6:00:00	3600	-0.01	-0.01	-0.033	11.53	208.447
5/4/97	18:00:00	4320	-0.019	-0.019	-0.062	11.53	208.418
5/5/97	6:00:00	5040	-0.029	-0.029	-0.095	11.53	208.385
5/5/97	18:00:00	5760	-0.024	-0.024	-0.079	11.53	208.402
5/6/97	6:00:00	6480	-0.02	-0.02	-0.066	11.53	208.415
5/6/97	18:00:00	7200	0.056	-0.021	-0.069	11.54	208.411

Date	Time	ET (min)	Δ (meters)	Δ corrected *	Δ (feet)	Temp	Elevation (ft amsl)
5/7/97	6:00:00	7920	0.051	-0.029	-0.095	11.53	208.385
5/7/97	18:00:00	8640	0.049	-0.031	-0.102	11.53	208.379
5/8/97	6:00:00	9360	0.043	-0.037	-0.121	11.53	208.359
5/8/97	18:00:00	10080	0.042	-0.038	-0.125	11.53	208.356
5/9/97	6:00:00	10800	0.04	-0.04	-0.131	11.53	208.349
5/9/97	18:00:00	11520	0.042	-0.038	-0.125	11.53	208.356
5/10/97	6:00:00	12240	0.038	-0.042	-0.138	11.53	208.343
5/10/97	18:00:00	12960	0.031	-0.049	-0.161	11.53	208.320
5/11/97	6:00:00	13680	0.025	-0.055	-0.180	11.53	208.300
5/11/97	18:00:00	14400	0.021	-0.059	-0.194	11.52	208.287
5/12/97	6:00:00	15120	0.014	-0.066	-0.217	11.53	208.264
5/12/97	18:00:00	15840	0.012	-0.068	-0.223	11.52	208.257
5/13/97	6:00:00	16560	0.003	-0.077	-0.253	11.53	208.228
5/13/97	18:00:00	17280	0	-0.08	-0.262	11.52	208.218
5/14/97	6:00:00	18000	-0.007	-0.087	-0.285	11.52	208.195
5/14/97	18:00:00	18720	-0.014	-0.094	-0.308	11.52	208.172
5/15/97	6:00:00	19440	-0.019	-0.099	-0.325	11.52	208.155
5/15/97	18:00:00	20160	-0.024	-0.104	-0.341	11.52	208.139
5/16/97	6:00:00	20880	-0.026	-0.106	-0.348	11.52	208.133
5/16/97	18:00:00	21600	-0.036	-0.116	-0.381	11.52	208.100
5/17/97	6:00:00	22320	-0.047	-0.127	-0.417	11.52	208.064
5/17/97	18:00:00	23040	-0.053	-0.133	-0.436	11.52	208.044
5/18/97	6:00:00	23760	-0.063	-0.143	-0.469	11.53	208.011
5/18/97	18:00:00	24480	-0.071	-0.151	-0.495	11.52	207.985
5/19/97	6:00:00	25200	-0.076	-0.156	-0.512	11.52	207.968
5/19/97	18:00:00	25920	-0.084	-0.164	-0.538	11.52	207.942
5/20/97	6:00:00	26640	-0.09	-0.17	-0.558	11.52	207.923
5/20/97	18:00:00	27360	-0.097	-0.177	-0.581	11.52	207.900
5/21/97	6:00:00	28080	-0.103	-0.183	-0.600	11.52	207.880
5/21/97	18:00:00	28800	-0.109	-0.189	-0.620	11.52	207.860
5/22/97	6:00:00	29520	-0.111	-0.191	-0.627	11.52	207.854
5/22/97	18:00:00	30240	-0.114	-0.194	-0.636	11.52	207.844
5/23/97	6:00:00	30960	-0.119	-0.199	-0.653	11.52	207.827
5/23/97	18:00:00	31680	-0.123	-0.203	-0.666	11.52	207.814
5/24/97	6:00:00	32400	-0.128	-0.208	-0.682	11.52	207.798
5/24/97	18:00:00	33120	-0.13	-0.21	-0.689	11.52	207.791
5/25/97	6:00:00	33840	-0.133	-0.213	-0.699	11.52	207.781
5/25/97	18:00:00	34560	-0.135	-0.215	-0.705	11.53	207.775
5/26/97	6:00:00	35280	-0.14	-0.22	-0.722	11.52	207.759
5/26/97	18:00:00	36000	-0.149	-0.229	-0.751	11.52	207.729
5/27/97	6:00:00	36720	-0.157	-0.237	-0.778	11.53	207.703
5/27/97	18:00:00	37440	-0.099	-0.244	-0.801	11.52	207.680
5/28/97	6:00:00	38160	-0.104	-0.249	-0.817	11.52	207.663
5/28/97	18:00:00	38880	-0.109	-0.254	-0.833	11.52	207.647
5/29/97	6:00:00	39600	-0.117	-0.262	-0.860	11.52	207.621
5/29/97	18:00:00	40320	-0.123	-0.268	-0.879	11.53	207.601
5/30/97	6:00:00	41040	-0.128	-0.273	-0.896	11.52	207.585
5/30/97	18:00:00	41760	-0.135	-0.28	-0.919	11.52	207.562

Date	Time	ET (min)	Δ (meters)	Δ corrected *	Δ (feet)	Temp	Elevation (ft amsl)
5/31/97	6:00:00	42480	-0.139	-0.284	-0.932	11.52	207.549
5/31/97	18:00:00	43200	-0.145	-0.29	-0.951	11.52	207.529
6/1/97	6:00:00	43920	-0.152	-0.297	-0.974	11.52	207.506
6/1/97	18:00:00	44640	-0.159	-0.304	-0.997	11.52	207.483
6/2/97	6:00:00	45360	-0.166	-0.311	-1.020	11.53	207.460
6/2/97	18:00:00	46080	-0.175	-0.32	-1.050	11.52	207.430
6/3/97	6:00:00	46800	-0.182	-0.327	-1.073	11.53	207.407
6/3/97	18:00:00	47520	-0.109	-0.334	-1.096	11.58	207.384
6/4/97	6:00:00	48240	-0.114	-0.339	-1.112	11.53	207.368
6/4/97	18:00:00	48960	-0.122	-0.347	-1.138	11.53	207.342
6/5/97	6:00:00	49680	-0.13	-0.355	-1.165	11.53	207.316
6/5/97	18:00:00	50400	-0.138	-0.363	-1.191	11.52	207.289
6/6/97	6:00:00	51120	-0.146	-0.371	-1.217	11.52	207.263
6/6/97	18:00:00	51840	-0.154	-0.379	-1.243	11.52	207.237
6/7/97	6:00:00	52560	-0.16	-0.385	-1.263	11.52	207.217
6/7/97	18:00:00	53280	-0.167	-0.392	-1.286	11.52	207.194
6/8/97	6:00:00	54000	-0.175	-0.4	-1.312	11.52	207.168
6/8/97	18:00:00	54720	-0.182	-0.407	-1.335	11.53	207.145
6/9/97	6:00:00	55440	-0.19	-0.415	-1.362	11.53	207.119
6/9/97	18:00:00	56160	-0.197	-0.422	-1.385	11.53	207.096
6/10/97	6:00:00	56880	-0.203	-0.428	-1.404	11.53	207.076
6/10/97	18:00:00	57600	-0.211	-0.436	-1.430	11.53	207.050
6/11/97	6:00:00	58320	-0.217	-0.442	-1.450	11.53	207.030
6/11/97	18:00:00	59040	-0.225	-0.45	-1.476	11.53	207.004
6/12/97	6:00:00	59760	-0.23	-0.455	-1.493	11.53	206.988
6/12/97	18:00:00	60480	-0.238	-0.463	-1.519	11.53	206.961
6/13/97	6:00:00	61200	-0.245	-0.47	-1.542	11.53	206.938
6/13/97	18:00:00	61920	-0.252	-0.477	-1.565	11.53	206.915
6/14/97	6:00:00	62640	-0.261	-0.486	-1.594	11.53	206.886
6/14/97	18:00:00	63360	-0.268	-0.493	-1.617	11.53	206.863
6/15/97	6:00:00	64080	-0.277	-0.502	-1.647	11.53	206.833
6/15/97	18:00:00	64800	-0.284	-0.509	-1.670	11.53	206.810
6/16/97	6:00:00	65520	-0.292	-0.517	-1.696	11.53	206.784
6/16/97	18:00:00	66240	-0.296	-0.521	-1.709	11.53	206.771
6/17/97	6:00:00	66960	-0.304	-0.529	-1.736	11.53	206.745
6/17/97	18:00:00	67680	-0.313	-0.538	-1.765	11.53	206.715
6/18/97	6:00:00	68400	-0.32	-0.545	-1.788	11.53	206.692
6/18/97	18:00:00	69120	-0.323	-0.548	-1.798	11.53	206.682
6/19/97	6:00:00	69840	-0.333	-0.558	-1.831	11.53	206.650
6/19/97	18:00:00	70560	-0.34	-0.565	-1.854	11.53	206.627
6/20/97	6:00:00	71280	-0.348	-0.573	-1.880	11.53	206.600
6/20/97	18:00:00	72000	-0.353	-0.578	-1.896	11.53	206.584
6/21/97	6:00:00	72720	-0.355	-0.58	-1.903	11.53	206.577
6/21/97	18:00:00	73440	-0.36	-0.585	-1.919	11.54	206.561
6/22/97	6:00:00	74160	-0.362	-0.587	-1.926	11.53	206.554
6/22/97	18:00:00	74880	-0.369	-0.594	-1.949	11.54	206.531
6/23/97	6:00:00	75600	-0.374	-0.599	-1.965	11.54	206.515
6/23/97	18:00:00	76320	-0.379	-0.604	-1.982	11.54	206.499

Date	Time	ET (min)	Δ (meters)	Δ corrected *	Δ (feet)	Temp	Elevation (ft amsl)
6/24/97	6:00:00	77040	-0.383	-0.608	-1.995	11.54	206.486
6/24/97	18:00:00	77760	-0.389	-0.614	-2.014	11.54	206.466
6/25/97	6:00:00	78480	-0.391	-0.616	-2.021	11.54	206.459
6/25/97	18:00:00	79200	-0.394	-0.619	-2.031	11.54	206.449
6/26/97	6:00:00	79920	-0.401	-0.626	-2.054	11.54	206.426
6/26/97	18:00:00	80640	-0.405	-0.63	-2.067	11.54	206.413
6/27/97	6:00:00	81360	-0.412	-0.637	-2.090	11.54	206.390
6/27/97	18:00:00	82080	-0.418	-0.643	-2.110	11.54	206.371
6/28/97	6:00:00	82800	-0.424	-0.649	-2.129	11.55	206.351
6/28/97	18:00:00	83520	-0.428	-0.653	-2.142	11.54	206.338
6/29/97	6:00:00	84240	-0.434	-0.659	-2.162	11.55	206.318
6/29/97	18:00:00	84960	-0.439	-0.664	-2.178	11.55	206.302
6/30/97	6:00:00	85680	-0.445	-0.67	-2.198	11.55	206.282
6/30/97	18:00:00	86400	-0.45	-0.675	-2.215	11.55	206.266
7/1/97	6:00:00	87120	-0.455	-0.68	-2.231	11.55	206.249
7/1/97	18:00:00	87840	-0.46	-0.685	-2.247	11.55	206.233
7/2/97	6:00:00	88560	-0.465	-0.69	-2.264	11.55	206.217
7/2/97	18:00:00	89280	-0.393	-0.695	-2.280	11.55	206.200
7/3/97	6:00:00	90000	-0.398	-0.7	-2.297	11.55	206.184
7/3/97	18:00:00	90720	-0.403	-0.705	-2.313	11.55	206.167
7/4/97	6:00:00	91440	-0.408	-0.71	-2.329	11.55	206.151
7/4/97	18:00:00	92160	-0.412	-0.714	-2.343	11.55	206.138
7/5/97	6:00:00	92880	-0.417	-0.719	-2.359	11.55	206.121
7/5/97	18:00:00	93600	-0.419	-0.721	-2.365	11.55	206.115
7/6/97	6:00:00	94320	-0.423	-0.725	-2.379	11.55	206.102
7/6/97	18:00:00	95040	-0.425	-0.727	-2.385	11.55	206.095
7/7/97	6:00:00	95760	-0.427	-0.729	-2.392	11.55	206.089
7/7/97	18:00:00	96480	-0.428	-0.73	-2.395	11.55	206.085
7/8/97	6:00:00	97200	-0.433	-0.735	-2.411	11.55	206.069
7/8/97	18:00:00	97920	-0.435	-0.737	-2.418	11.56	206.062
7/9/97	6:00:00	98640	-0.437	-0.739	-2.425	11.55	206.056
7/9/97	18:00:00	99360	-0.444	-0.746	-2.448	11.55	206.033
7/10/97	6:00:00	100080	-0.445	-0.747	-2.451	11.55	206.030
Note:	* due to sampling, surveying, and water level measurements the in-well transducer was disturbed on several dates, resulting in abrupt changes in the water level. Prior to plotting, the data was corrected to remove the abrupt changes in water levels. The correction was made by the examining the change in water levels for several readings preceding and following the artificial change and adjusting the data to match the observed trend.						

IN-SITU, INC.
 WELL SENTINEL
 Serial # L3K0478

Downloaded: 10/19/99 08:11
 Unit ID: G6M9210X
 Test name : G6M9210X
 Linearity : 0.089
 Scale Factor: 15.021
 Offset: -0.001
 Specific Gravity: 1
 Data Type : Level
 Units: English
 Mode: Surface
 Ref. Level: 214.23
 Ref. Taken: 01/22/97 14:39
 Test Begun: 01/22/97 18:00
 G6M9210X

Real Time		Reading
1/22/97	18:00	214.234
1/23/97	6:00	214.21
1/23/97	18:00	214.043
1/24/97	6:00	213.972
1/24/97	18:00	214.067
1/25/97	6:00	214.61
1/25/97	18:00	214.321
1/26/97	6:00	214.306
1/26/97	18:00	214.228
1/27/97	6:00	214.187
1/27/97	18:00	214.234
1/28/97	6:00	214.541
1/28/97	18:00	214.389
1/29/97	6:00	214.08
1/29/97	18:00	214.206
1/30/97	6:00	214.193
1/30/97	18:00	214.254
1/31/97	6:00	214.362
1/31/97	18:00	214.675
2/1/97	6:00	214.319
2/1/97	18:00	214.228
2/2/97	6:00	214.043
2/2/97	18:00	213.896
2/3/97	6:00	214.041
2/3/97	18:00	213.989
2/4/97	6:00	213.959
2/4/97	18:00	213.995
2/5/97	6:00	214.15
2/5/97	18:00	214.332
2/6/97	6:00	214.145
2/6/97	18:00	214.271
2/7/97	6:00	214.317
2/7/97	18:00	214.328
2/8/97	6:00	214.289
2/8/97	18:00	214.273
2/9/97	6:00	214.26
2/9/97	18:00	214.239
2/10/97	6:00	214.2
2/10/97	18:00	214.174
2/11/97	6:00	214.132
2/11/97	18:00	214.108
2/12/97	6:00	214.102
2/12/97	18:00	214.106
2/13/97	6:00	213.93
2/13/97	18:00	213.93

G6M9210X

Real Time		Reading
2/14/97	6:00	213.961
2/14/97	18:00	214.163
2/15/97	6:00	214.102
2/15/97	18:00	213.993
2/16/97	6:00	213.854
2/16/97	18:00	213.872
2/17/97	6:00	213.861
2/17/97	18:00	213.839
2/18/97	6:00	213.9
2/18/97	18:00	213.946
2/19/97	6:00	213.998
2/19/97	18:00	214.137
2/20/97	6:00	213.854
2/20/97	18:00	213.941
2/21/97	6:00	214.126
2/21/97	18:00	214.247
2/22/97	6:00	214.336
2/22/97	18:00	214.328
2/23/97	6:00	214.347
2/23/97	18:00	214.425
2/24/97	6:00	214.46
2/24/97	18:00	214.491
2/25/97	6:00	214.412
2/25/97	18:00	214.341
2/26/97	6:00	214.273
2/26/97	18:00	214.219
2/27/97	6:00	214.197
2/27/97	18:00	214.276
2/28/97	6:00	214.132
2/28/97	18:00	214.145
3/1/97	6:00	214.132
3/1/97	18:00	214.171
3/2/97	6:00	214.21
3/2/97	18:00	214.113
3/3/97	6:00	214.041
3/3/97	18:00	214.008
3/4/97	6:00	213.993
3/4/97	18:00	213.972
3/5/97	6:00	213.917
3/5/97	18:00	213.939
3/6/97	6:00	214.143
3/6/97	18:00	214.028
3/7/97	6:00	213.87
3/7/97	18:00	213.987
3/8/97	6:00	214.002
3/8/97	18:00	214.002
3/9/97	6:00	213.878
3/9/97	18:00	213.954
3/10/97	6:00	214.063
3/10/97	18:00	213.989
3/11/97	6:00	213.972
3/11/97	18:00	213.954
3/12/97	6:00	213.861
3/12/97	18:00	213.87
3/13/97	6:00	213.804
3/13/97	18:00	213.809
3/14/97	6:00	213.817
3/14/97	18:00	213.935
3/15/97	6:00	213.915
3/15/97	18:00	213.781
3/16/97	6:00	213.826
3/16/97	18:00	213.817
3/17/97	6:00	213.791

G6M9210X

Real Time		Reading
3/17/97	18:00	213.915
3/18/97	6:00	213.781
3/18/97	18:00	213.744
3/19/97	6:00	213.754
3/19/97	18:00	213.852
3/20/97	6:00	213.87
3/20/97	18:00	213.859
3/21/97	6:00	213.811
3/21/97	18:00	213.87
3/22/97	6:00	213.987
3/22/97	18:00	213.909
3/23/97	6:00	213.896
3/23/97	18:00	213.848
3/24/97	6:00	213.781
3/24/97	18:00	213.748
3/25/97	6:00	213.72
3/25/97	18:00	213.811
3/26/97	6:00	213.935
3/26/97	18:00	214.032
3/27/97	6:00	214.219
3/27/97	18:00	214.386
3/28/97	6:00	214.46
3/28/97	18:00	214.538
3/29/97	6:00	214.569
3/29/97	18:00	214.825
3/30/97	6:00	214.819
3/30/97	18:00	214.612
3/31/97	6:00	214.649
3/31/97	18:00	214.862
4/1/97	6:00	214.699
4/1/97	18:00	214.436
4/2/97	6:00	214.31
4/2/97	18:00	214.332
4/3/97	6:00	214.339
4/3/97	18:00	214.425
4/4/97	6:00	214.458
4/4/97	18:00	214.452
4/5/97	6:00	214.647
4/5/97	18:00	214.799
4/6/97	6:00	214.864
4/6/97	18:00	214.934
4/7/97	6:00	214.949
4/7/97	18:00	214.945
4/8/97	6:00	214.899
4/8/97	18:00	214.873
4/9/97	6:00	214.801
4/9/97	18:00	214.762
4/10/97	6:00	214.682
4/10/97	18:00	214.645
4/11/97	6:00	214.58
4/11/97	18:00	214.599
4/12/97	6:00	214.543
4/12/97	18:00	214.582
4/13/97	6:00	214.625
4/13/97	18:00	214.612
4/14/97	6:00	214.525
4/14/97	18:00	214.495
4/15/97	6:00	214.462
4/15/97	18:00	214.508
4/16/97	6:00	214.478
4/16/97	18:00	214.528
4/17/97	6:00	214.512
4/17/97	18:00	214.521

G6M9210X

Real Time		Reading
4/18/97	6:00	214.591
4/18/97	18:00	214.706
4/19/97	6:00	214.651
4/19/97	18:00	214.816
4/20/97	6:00	214.992
4/20/97	18:00	215.099
4/21/97	6:00	215.121
4/21/97	18:00	215.129
4/22/97	6:00	215.123
4/22/97	18:00	215.103
4/23/97	6:00	215.06
4/23/97	18:00	215.04
4/24/97	6:00	215.025
4/24/97	18:00	214.968
4/25/97	6:00	214.897
4/25/97	18:00	214.882
4/26/97	6:00	214.838
4/26/97	18:00	214.829
4/27/97	6:00	214.782
4/27/97	18:00	214.808
4/28/97	6:00	214.825
4/28/97	18:00	214.905
4/29/97	6:00	214.834
4/29/97	18:00	214.81
4/30/97	6:00	214.793
4/30/97	18:00	214.829
5/1/97	6:00	214.825
5/1/97	18:00	214.873
5/2/97	6:00	214.753
5/2/97	18:00	214.701
5/3/97	6:00	214.697
5/3/97	18:00	214.871
5/4/97	6:00	214.782
5/4/97	18:00	214.721
5/5/97	6:00	214.69
5/5/97	18:00	214.753
5/6/97	6:00	214.78
5/6/97	18:00	214.766
5/7/97	6:00	214.719
5/7/97	18:00	214.708
5/8/97	6:00	214.68
5/8/97	18:00	214.693
5/9/97	6:00	214.703
5/9/97	18:00	214.738
5/10/97	6:00	214.719
5/10/97	18:00	214.671
5/11/97	6:00	214.654
5/11/97	18:00	214.654
5/12/97	6:00	214.621
5/12/97	18:00	214.651
5/13/97	6:00	214.597
5/13/97	18:00	214.614
5/14/97	6:00	214.567
5/14/97	18:00	214.562
5/15/97	6:00	214.569
5/15/97	18:00	214.582
5/16/97	6:00	214.593
5/16/97	18:00	214.504
5/17/97	6:00	214.482
5/17/97	18:00	214.497
5/18/97	6:00	214.441
5/18/97	18:00	214.452
5/19/97	6:00	214.469

G6M9210X

Real Time		Reading
5/19/97	18:00	214.447
5/20/97	6:00	214.493
5/20/97	18:00	214.493
5/21/97	6:00	214.519
5/21/97	18:00	214.528
5/22/97	6:00	214.525
5/22/97	18:00	214.504
5/23/97	6:00	214.462
5/23/97	18:00	214.454
5/24/97	6:00	214.43
5/24/97	18:00	214.46
5/25/97	6:00	214.458
5/25/97	18:00	214.475
5/26/97	6:00	214.415
5/26/97	18:00	214.345
5/27/97	6:00	214.306
5/27/97	18:00	214.313
5/28/97	6:00	214.291
5/28/97	18:00	214.304
5/29/97	6:00	214.265
5/29/97	18:00	214.265
5/30/97	6:00	214.237
5/30/97	18:00	214.256
5/31/97	6:00	214.232
5/31/97	18:00	214.241
6/1/97	6:00	214.208
6/1/97	18:00	214.189
6/2/97	6:00	214.163
6/2/97	18:00	214.13
6/3/97	6:00	214.113
6/3/97	18:00	214.104
6/4/97	6:00	214.1
6/4/97	18:00	214.078
6/5/97	6:00	214.045
6/5/97	18:00	214.028
6/6/97	6:00	213.989
6/6/97	18:00	213.985
6/7/97	6:00	213.965
6/7/97	18:00	213.967
6/8/97	6:00	213.935
6/8/97	18:00	213.915
6/9/97	6:00	213.891
6/9/97	18:00	213.898
6/10/97	6:00	213.874
6/10/97	18:00	213.863
6/11/97	6:00	213.835
6/11/97	18:00	213.822
6/12/97	6:00	213.802
6/12/97	18:00	213.791
6/13/97	6:00	213.767
6/13/97	18:00	213.748
6/14/97	6:00	213.696
6/14/97	18:00	213.652
6/15/97	6:00	213.611
6/15/97	18:00	213.624
6/16/97	6:00	213.589
6/16/97	18:00	213.6
6/17/97	6:00	213.581
6/17/97	18:00	213.548
6/18/97	6:00	213.516
6/18/97	18:00	213.559
6/19/97	6:00	213.55
6/19/97	18:00	213.509

G6M9210X

Real Time		Reading
6/20/97	6:00	213.485
6/20/97	18:00	213.485
6/21/97	6:00	213.485
6/21/97	18:00	213.483
6/22/97	6:00	213.459
6/22/97	18:00	213.422
6/23/97	6:00	213.366
6/23/97	18:00	213.346
6/24/97	6:00	213.335
6/24/97	18:00	213.338
6/25/97	6:00	213.329
6/25/97	18:00	213.388
6/26/97	6:00	213.307
6/26/97	18:00	213.312
6/27/97	6:00	213.214
6/27/97	18:00	213.196
6/28/97	6:00	213.175
6/28/97	18:00	213.188
6/29/97	6:00	213.151
6/29/97	18:00	213.153
6/30/97	6:00	213.12
6/30/97	18:00	213.129
7/1/97	6:00	213.112
7/1/97	18:00	213.16
7/2/97	6:00	213.123
7/2/97	18:00	212.988
7/3/97	6:00	212.99
7/3/97	18:00	213.003
7/4/97	6:00	212.986
7/4/97	18:00	212.949
7/5/97	6:00	212.908
7/5/97	18:00	212.897
7/6/97	6:00	212.869
7/6/97	18:00	212.864
7/7/97	6:00	212.845
7/7/97	18:00	212.838
7/8/97	6:00	212.808
7/8/97	18:00	212.821
7/9/97	6:00	212.814
7/9/97	18:00	212.784
7/10/97	6:00	212.775
7/10/97	18:00	212.773
7/11/97	6:00	212.767
7/11/97	18:00	212.771
7/12/97	6:00	212.749
7/12/97	18:00	212.758
7/13/97	6:00	212.743
7/13/97	18:00	212.73
7/14/97	6:00	212.71
7/14/97	18:00	212.689
7/15/97	6:00	212.662
7/15/97	18:00	212.643
7/16/97	6:00	212.645
7/16/97	18:00	212.652
7/17/97	6:00	212.63
7/17/97	18:00	212.63
7/18/97	6:00	212.606
7/18/97	18:00	212.595
7/19/97	6:00	212.556
7/19/97	18:00	212.517
7/20/97	6:00	212.497
7/20/97	18:00	212.493
7/21/97	6:00	212.478

G6M9210X

Real Time		Reading
7/21/97	18:00	212.469
7/22/97	6:00	212.454
7/22/97	18:00	212.432
7/23/97	6:00	212.4
7/23/97	18:00	212.387
7/24/97	6:00	212.376
7/24/97	18:00	212.385
7/25/97	6:00	212.376
7/25/97	18:00	212.369
7/26/97	6:00	212.341
7/26/97	18:00	212.324
7/27/97	6:00	212.304
7/27/97	18:00	212.3
7/28/97	6:00	212.28
7/28/97	18:00	212.259
7/29/97	6:00	212.218
7/29/97	18:00	212.185
7/30/97	6:00	212.161
7/30/97	18:00	212.159
7/31/97	6:00	212.142
7/31/97	18:00	212.139
8/1/97	6:00	212.12
8/1/97	18:00	212.122
8/2/97	6:00	212.105
8/2/97	18:00	212.089
8/3/97	6:00	212.061
8/3/97	18:00	212.048
8/4/97	6:00	212.031
8/4/97	18:00	212.033
8/5/97	6:00	212.027
8/5/97	18:00	212.001
8/6/97	6:00	211.988
8/6/97	18:00	211.977
8/7/97	6:00	211.957
8/7/97	18:00	211.957
8/8/97	6:00	211.933
8/8/97	18:00	211.938
8/9/97	6:00	211.918
8/9/97	18:00	211.909
8/10/97	6:00	211.89
8/10/97	18:00	211.886
8/11/97	6:00	211.868
8/11/97	18:00	211.866
8/12/97	6:00	211.825
8/12/97	18:00	211.827
8/13/97	6:00	211.838
8/13/97	18:00	211.864
8/14/97	6:00	211.816
8/14/97	18:00	211.812
8/15/97	6:00	211.797
8/15/97	18:00	211.816
8/16/97	6:00	211.82
8/16/97	18:00	211.794
8/17/97	6:00	211.784
8/17/97	18:00	211.764
8/18/97	6:00	211.742
8/18/97	18:00	211.725
8/19/97	6:00	211.708
8/19/97	18:00	211.705
8/20/97	6:00	211.69
8/20/97	18:00	211.692
8/21/97	6:00	211.697
8/21/97	18:00	211.74

G6M9210X

Real Time		Reading
8/22/97	6:00	211.701
8/22/97	18:00	211.714
8/23/97	6:00	211.703
8/23/97	18:00	211.695
8/24/97	6:00	211.675
8/24/97	18:00	211.669
8/25/97	6:00	211.658
8/25/97	18:00	211.662
8/26/97	6:00	211.658
8/26/97	18:00	211.666
8/27/97	6:00	211.653
8/27/97	18:00	211.658
8/28/97	6:00	211.651
8/28/97	18:00	211.645
8/29/97	6:00	211.625
8/29/97	18:00	211.606
8/30/97	6:00	211.58
8/30/97	18:00	211.58
8/31/97	6:00	211.551
8/31/97	18:00	211.545
9/1/97	6:00	211.525
9/1/97	18:00	211.519
9/2/97	6:00	211.514
9/2/97	18:00	211.54
9/3/97	6:00	211.534
9/3/97	18:00	211.484
9/4/97	6:00	211.486
9/4/97	18:00	211.469
9/5/97	6:00	211.46
9/5/97	18:00	211.445
9/6/97	6:00	211.426
9/6/97	18:00	211.423
9/7/97	6:00	211.415
9/7/97	18:00	211.404
9/8/97	6:00	211.38
9/8/97	18:00	211.36
9/9/97	6:00	211.345
9/9/97	18:00	211.339
9/10/97	6:00	211.33
9/10/97	18:00	211.315
9/11/97	6:00	211.306
9/11/97	18:00	211.306
9/12/97	6:00	211.298
9/12/97	18:00	211.289
9/13/97	6:00	211.269
9/13/97	18:00	211.265
9/14/97	6:00	211.239
9/14/97	18:00	211.239
9/15/97	6:00	211.228
9/15/97	18:00	211.226
9/16/97	6:00	211.198
9/16/97	18:00	211.187
9/17/97	6:00	211.163
9/17/97	18:00	211.18
9/18/97	6:00	211.154
9/18/97	18:00	211.137
9/19/97	6:00	211.124
9/19/97	18:00	211.139
9/20/97	6:00	211.139
9/20/97	18:00	211.104
9/21/97	6:00	211.055
9/21/97	18:00	211.042
9/22/97	6:00	211.035

G6M9210X

Real Time		Reading
9/22/97	18:00	211.061
9/23/97	6:00	211.065
9/23/97	18:00	211.046
9/24/97	6:00	210.983
9/24/97	18:00	211.018
9/25/97	6:00	211.028
9/25/97	18:00	211.026
9/26/97	6:00	210.981
9/26/97	18:00	210.944
9/27/97	6:00	210.924
9/27/97	18:00	210.931
9/28/97	6:00	210.92
9/28/97	18:00	210.95
9/29/97	6:00	211.044
9/29/97	18:00	210.92
9/30/97	6:00	210.924
9/30/97	18:00	210.89
10/1/97	6:00	210.844
10/1/97	18:00	210.827
10/2/97	6:00	210.827
10/2/97	18:00	210.827
10/3/97	6:00	210.822
10/3/97	18:00	210.814
10/4/97	6:00	210.799
10/4/97	18:00	210.805
10/5/97	6:00	210.809
10/5/97	18:00	210.796
10/6/97	6:00	210.799
10/6/97	18:00	210.77
10/7/97	6:00	210.746
10/7/97	18:00	210.729
10/8/97	6:00	210.712
10/8/97	18:00	210.72
10/9/97	6:00	210.705
10/9/97	18:00	210.731
10/10/97	6:00	210.733
10/10/97	18:00	210.71
10/11/97	6:00	210.66
10/11/97	18:00	210.671
10/12/97	6:00	210.651
10/12/97	18:00	210.666
10/13/97	6:00	210.649
10/13/97	18:00	210.653
10/14/97	6:00	210.636
10/14/97	18:00	210.632
10/15/97	6:00	210.619
10/15/97	18:00	210.61
10/16/97	6:00	210.603
10/16/97	18:00	210.597
10/17/97	6:00	210.584
10/17/97	18:00	210.582
10/18/97	6:00	210.566
10/18/97	18:00	210.566
10/19/97	6:00	210.553
10/19/97	18:00	210.582
10/20/97	6:00	210.558
10/20/97	18:00	210.536
10/21/97	6:00	210.508
10/21/97	18:00	210.519
10/22/97	6:00	210.514
10/22/97	18:00	210.471
10/23/97	6:00	210.469
10/23/97	18:00	210.478

G6M9210X

Real Time		Reading
10/24/97	6:00	210.447
10/24/97	18:00	210.441
10/25/97	6:00	210.445
10/25/97	18:00	210.436
10/26/97	6:00	210.395
10/26/97	18:00	210.417
10/27/97	6:00	210.506
10/27/97	18:00	210.456
10/28/97	6:00	210.432
10/28/97	18:00	210.393
10/29/97	6:00	210.397
10/29/97	18:00	210.402
10/30/97	6:00	210.389
10/30/97	18:00	210.378
10/31/97	6:00	210.367
10/31/97	18:00	210.382
11/1/97	6:00	210.384
11/1/97	18:00	210.46
11/2/97	6:00	210.452
11/2/97	18:00	210.514
11/3/97	6:00	210.425
11/3/97	18:00	210.471
11/4/97	6:00	210.493
11/4/97	18:00	210.545
11/5/97	6:00	210.475
11/5/97	18:00	210.504
11/6/97	6:00	210.532
11/6/97	18:00	210.562
11/7/97	6:00	210.575
11/7/97	18:00	210.595
11/8/97	6:00	210.597
11/8/97	18:00	210.601
11/9/97	6:00	210.601
11/9/97	18:00	210.625
11/10/97	6:00	210.601
11/10/97	18:00	210.61
11/11/97	6:00	210.625
11/11/97	18:00	210.634
11/12/97	6:00	210.655
11/12/97	18:00	210.666
11/13/97	6:00	210.653
11/13/97	18:00	210.677
11/14/97	6:00	210.744
11/14/97	18:00	210.777
11/15/97	6:00	210.72
11/15/97	18:00	210.705
11/16/97	6:00	210.74
11/16/97	18:00	210.692
11/17/97	6:00	210.684
11/17/97	18:00	210.66
11/18/97	6:00	210.649
11/18/97	18:00	210.666
11/19/97	6:00	210.671
11/19/97	18:00	210.677
11/20/97	6:00	210.671
11/20/97	18:00	210.616
11/21/97	6:00	210.625
11/21/97	18:00	210.634
11/22/97	6:00	210.649
11/22/97	18:00	210.619
11/23/97	6:00	210.625
11/23/97	18:00	210.664
11/24/97	6:00	210.694

G6M9210X

Real Time		Reading
11/24/97	18:00	210.649
11/25/97	6:00	210.636
11/25/97	18:00	210.714
11/26/97	6:00	210.718
11/26/97	18:00	210.753
11/27/97	6:00	210.727
11/27/97	18:00	210.621
11/28/97	6:00	210.666
11/28/97	18:00	210.738
11/29/97	6:00	210.677
11/29/97	18:00	210.684
11/30/97	6:00	210.714
11/30/97	18:00	210.749
12/1/97	6:00	210.773
12/1/97	18:00	210.725
12/2/97	6:00	210.72
12/2/97	18:00	210.71
12/3/97	6:00	210.718
12/3/97	18:00	210.742
12/4/97	6:00	210.805
12/4/97	18:00	210.801
12/5/97	6:00	210.809
12/5/97	18:00	210.816
12/6/97	6:00	210.801
12/6/97	18:00	210.803
12/7/97	6:00	210.794
12/7/97	18:00	210.788
12/8/97	6:00	210.764
12/8/97	18:00	210.757
12/9/97	6:00	210.768
12/9/97	18:00	210.79
12/10/97	6:00	210.803
12/10/97	18:00	210.803
12/11/97	6:00	210.751
12/11/97	18:00	210.746
12/12/97	6:00	210.781
12/12/97	18:00	210.794
12/13/97	6:00	210.79
12/13/97	18:00	210.788
12/14/97	6:00	210.788
12/14/97	18:00	210.714
12/15/97	6:00	210.71
12/15/97	18:00	210.736
12/16/97	6:00	210.723
12/16/97	18:00	210.749
12/17/97	6:00	210.744
12/17/97	18:00	210.714
12/18/97	6:00	210.692
12/18/97	18:00	210.69
12/19/97	6:00	210.716
12/19/97	18:00	210.697
12/20/97	6:00	210.675
12/20/97	18:00	210.662
12/21/97	6:00	210.616
12/21/97	18:00	210.614
12/22/97	6:00	210.61
12/22/97	18:00	210.636
12/23/97	6:00	210.679
12/23/97	18:00	210.658
12/24/97	6:00	210.61
12/24/97	18:00	210.605
12/25/97	6:00	210.668
12/25/97	18:00	210.666

G6M9210X

Real Time		Reading
12/26/97	6:00	210.64
12/26/97	18:00	210.603
12/27/97	6:00	210.621
12/27/97	18:00	210.653
12/28/97	6:00	210.621
12/28/97	18:00	210.56
12/29/97	6:00	210.575
12/29/97	18:00	210.638
12/30/97	6:00	210.788
12/30/97	18:00	210.701
12/31/97	6:00	210.681
12/31/97	18:00	210.647
1/1/98	6:00	210.666
1/1/98	18:00	210.744
1/2/98	6:00	210.762
1/2/98	18:00	210.731
1/3/98	6:00	210.768
1/3/98	18:00	210.76
1/4/98	6:00	210.738
1/4/98	18:00	210.694
1/5/98	6:00	210.764
1/5/98	18:00	210.799
1/6/98	6:00	210.827
1/6/98	18:00	210.827
1/7/98	6:00	210.866
1/7/98	18:00	210.966
1/8/98	6:00	211.187
1/8/98	18:00	211.399
1/9/98	6:00	211.525
1/9/98	18:00	211.582
1/10/98	6:00	211.53
1/10/98	18:00	211.554
1/11/98	6:00	211.575
1/11/98	18:00	211.569
1/12/98	6:00	211.54
1/12/98	18:00	211.584
1/13/98	6:00	211.634
1/13/98	18:00	211.645
1/14/98	6:00	211.577
1/14/98	18:00	211.606
1/15/98	6:00	211.636
1/15/98	18:00	211.679
1/16/98	6:00	211.701
1/16/98	18:00	211.695
1/17/98	6:00	211.673
1/17/98	18:00	211.653
1/18/98	6:00	211.666
1/18/98	18:00	211.658
1/19/98	6:00	211.671
1/19/98	18:00	211.671
1/20/98	6:00	211.69
1/20/98	18:00	211.677
1/21/98	6:00	211.649
1/21/98	18:00	211.634
1/22/98	6:00	211.612
1/22/98	18:00	211.612
1/23/98	6:00	211.612
1/23/98	18:00	211.703
1/24/98	6:00	211.799
1/24/98	18:00	211.961
1/25/98	6:00	212.074
1/25/98	18:00	212.044
1/26/98	6:00	212.072

G6M9210X

Real Time		Reading
1/26/98	18:00	212.068
1/27/98	6:00	212.07
1/27/98	18:00	212.098
1/28/98	6:00	212.131
1/28/98	18:00	212.15
1/29/98	6:00	212.133
1/29/98	18:00	212.109
1/30/98	6:00	212.109
1/30/98	18:00	212.109
1/31/98	6:00	212.085
1/31/98	18:00	212.059
2/1/98	6:00	212.035
2/1/98	18:00	212.046
2/2/98	6:00	212.059
2/2/98	18:00	212.068
2/3/98	6:00	212.079
2/3/98	18:00	212.055
2/4/98	6:00	212.059
2/4/98	18:00	212.079
2/5/98	6:00	212.098
2/5/98	18:00	212.087
2/6/98	6:00	212.061
2/6/98	18:00	212.044
2/7/98	6:00	212.04
2/7/98	18:00	212.046
2/8/98	6:00	212.053
2/8/98	18:00	212.04
2/9/98	6:00	212.042
2/9/98	18:00	212.042
2/10/98	6:00	212.009
2/10/98	18:00	212.022
2/11/98	6:00	212.035
2/11/98	18:00	212.07
2/12/98	6:00	212.172
2/12/98	18:00	212.202
2/13/98	6:00	212.222
2/13/98	18:00	212.302
2/14/98	6:00	212.35
2/14/98	18:00	212.352
2/15/98	6:00	212.324
2/15/98	18:00	212.335
2/16/98	6:00	212.337
2/16/98	18:00	212.348
2/17/98	6:00	212.365
2/17/98	18:00	212.391
2/18/98	6:00	212.458
2/18/98	18:00	212.634
2/19/98	6:00	212.738
2/19/98	18:00	212.788
2/20/98	6:00	212.838
2/20/98	18:00	212.91
2/21/98	6:00	212.929
2/21/98	18:00	212.932
2/22/98	6:00	212.938
2/22/98	18:00	212.96
2/23/98	6:00	212.988
2/23/98	18:00	213.003
2/24/98	6:00	213.042
2/24/98	18:00	213.183
2/25/98	6:00	213.309
2/25/98	18:00	213.357
2/26/98	6:00	213.398
2/26/98	18:00	213.459

G6M9210X

Real Time		Reading
2/27/98	6:00	213.518
2/27/98	18:00	213.548
2/28/98	6:00	213.572
2/28/98	18:00	213.615
3/1/98	6:00	213.737
3/1/98	18:00	213.789
3/2/98	6:00	213.733
3/2/98	18:00	213.77
3/3/98	6:00	213.776
3/3/98	18:00	213.741
3/4/98	6:00	213.687
3/4/98	18:00	213.661
3/5/98	6:00	213.639
3/5/98	18:00	213.6
3/6/98	6:00	213.557
3/6/98	18:00	213.553
3/7/98	6:00	213.539
3/7/98	18:00	213.529
3/8/98	6:00	213.483
3/8/98	18:00	213.496
3/9/98	6:00	213.691
3/9/98	18:00	214.143
3/10/98	6:00	214.545
3/10/98	18:00	214.708
3/11/98	6:00	214.71
3/11/98	18:00	214.695
3/12/98	6:00	214.673
3/12/98	18:00	214.606
3/13/98	6:00	214.532
3/13/98	18:00	214.545
3/14/98	6:00	214.543
3/14/98	18:00	214.558
3/15/98	6:00	214.425
3/15/98	18:00	214.369
3/16/98	6:00	214.334
3/16/98	18:00	214.332
3/17/98	6:00	214.304
3/17/98	18:00	214.328
3/18/98	6:00	214.306
3/18/98	18:00	214.317
3/19/98	6:00	214.334
3/19/98	18:00	214.532
3/20/98	6:00	214.69
3/20/98	18:00	214.662
3/21/98	6:00	214.673
3/21/98	18:00	214.682
3/22/98	6:00	214.703
3/22/98	18:00	214.599
3/23/98	6:00	214.538
3/23/98	18:00	214.515
3/24/98	6:00	214.497
3/24/98	18:00	214.486
3/25/98	6:00	214.432
3/25/98	18:00	214.501
3/26/98	6:00	214.51
3/26/98	18:00	214.604
3/27/98	6:00	214.575
3/27/98	18:00	214.564
3/28/98	6:00	214.569
3/28/98	18:00	214.621
3/29/98	6:00	214.586
3/29/98	18:00	214.538
3/30/98	6:00	214.525

G6M9210X

Real Time		Reading
3/30/98	18:00	214.567
3/31/98	6:00	214.532
3/31/98	18:00	214.536
4/1/98	6:00	214.445
4/1/98	18:00	214.525
4/2/98	6:00	214.523
4/2/98	18:00	214.515
4/3/98	6:00	214.528
4/3/98	18:00	214.523
4/4/98	6:00	214.532
4/4/98	18:00	214.538
4/5/98	6:00	214.545
4/5/98	18:00	214.517
4/6/98	6:00	214.515
4/6/98	18:00	214.51
4/7/98	6:00	214.473
4/7/98	18:00	214.473
4/8/98	6:00	214.447
4/8/98	18:00	214.471
4/9/98	6:00	214.473
4/9/98	18:00	214.517
4/10/98	6:00	214.478
4/10/98	18:00	214.43
4/11/98	6:00	214.386
4/11/98	18:00	214.399
4/12/98	6:00	214.365
4/12/98	18:00	214.389
4/13/98	6:00	214.391
4/13/98	18:00	214.434
4/14/98	6:00	214.397
4/14/98	18:00	214.432
4/15/98	6:00	214.399
4/15/98	18:00	214.384
4/16/98	6:00	214.356
4/16/98	18:00	214.384
4/17/98	6:00	214.393
4/17/98	18:00	214.378
4/18/98	6:00	214.31
4/18/98	18:00	214.315
4/19/98	6:00	214.319
4/19/98	18:00	214.358
4/20/98	6:00	214.41
4/20/98	18:00	214.334
4/21/98	6:00	214.347
4/21/98	18:00	214.378
4/22/98	6:00	214.358
4/22/98	18:00	214.397
4/23/98	6:00	214.384
4/23/98	18:00	214.423
4/24/98	6:00	214.432
4/24/98	18:00	214.445
4/25/98	6:00	214.478
4/25/98	18:00	214.458
4/26/98	6:00	214.449
4/26/98	18:00	214.508
4/27/98	6:00	214.467
4/27/98	18:00	214.443
4/28/98	6:00	214.423
4/28/98	18:00	214.439
4/29/98	6:00	214.406
4/29/98	18:00	214.441
4/30/98	6:00	214.406
4/30/98	18:00	214.41

G6M9210X

Real Time		Reading
5/1/98	6:00	214.369
5/1/98	18:00	214.369
5/2/98	6:00	214.419
5/2/98	18:00	214.373
5/3/98	6:00	214.341
5/3/98	18:00	214.339
5/4/98	6:00	214.306
5/4/98	18:00	214.319
5/5/98	6:00	214.295
5/5/98	18:00	214.308
5/6/98	6:00	214.302
5/6/98	18:00	214.343
5/7/98	6:00	214.389
5/7/98	18:00	214.447
5/8/98	6:00	214.469
5/8/98	18:00	214.495
5/9/98	6:00	214.471
5/9/98	18:00	214.467
5/10/98	6:00	214.482
5/10/98	18:00	214.512
5/11/98	6:00	214.564
5/11/98	18:00	214.599
5/12/98	6:00	214.664
5/12/98	18:00	214.738
5/13/98	6:00	214.784
5/13/98	18:00	214.829
5/14/98	6:00	214.829
5/14/98	18:00	214.849
5/15/98	6:00	214.819
5/15/98	18:00	214.81
5/16/98	6:00	214.749
5/16/98	18:00	214.706
5/17/98	6:00	214.684
5/17/98	18:00	214.693
5/18/98	6:00	214.654
5/18/98	18:00	214.627
5/19/98	6:00	214.597
5/19/98	18:00	214.556
5/20/98	6:00	214.53
5/20/98	18:00	214.528
5/21/98	6:00	214.504
5/21/98	18:00	214.445
5/22/98	6:00	214.425
5/22/98	18:00	214.38
5/23/98	6:00	214.371
5/23/98	18:00	214.36
5/24/98	6:00	214.33
5/24/98	18:00	214.313
5/25/98	6:00	214.304
5/25/98	18:00	214.297
5/26/98	6:00	214.282
5/26/98	18:00	214.232
5/27/98	6:00	214.193
5/27/98	18:00	214.213
5/28/98	6:00	214.187
5/28/98	18:00	214.178
5/29/98	6:00	214.171
5/29/98	18:00	214.154
5/30/98	6:00	214.121
5/30/98	18:00	214.095
5/31/98	6:00	214.082
5/31/98	18:00	214.174
6/1/98	6:00	214.219

G6M9210X

Real Time		Reading
6/1/98	18:00	214.221
6/2/98	6:00	214.254
6/2/98	18:00	214.343
6/3/98	6:00	214.369
6/3/98	18:00	214.339
6/4/98	6:00	214.347
6/4/98	18:00	214.367
6/5/98	6:00	214.367
6/5/98	18:00	214.339
6/6/98	6:00	214.306
6/6/98	18:00	214.26
6/7/98	6:00	214.256
6/7/98	18:00	214.258
6/8/98	6:00	214.256
6/8/98	18:00	214.219
6/9/98	6:00	214.221
6/9/98	18:00	214.247
6/10/98	6:00	214.234
6/10/98	18:00	214.226
6/11/98	6:00	214.193
6/11/98	18:00	214.187
6/12/98	6:00	214.174
6/12/98	18:00	214.191
6/13/98	6:00	214.228
6/13/98	18:00	214.564
6/14/98	6:00	214.975
6/14/98	18:00	215.394
6/15/98	6:00	215.711
6/15/98	18:00	215.811
6/16/98	6:00	215.831
6/16/98	18:00	215.79
6/17/98	6:00	215.751
6/17/98	18:00	215.731
6/18/98	6:00	215.69
6/18/98	18:00	215.655
6/19/98	6:00	215.622
6/19/98	18:00	215.601
6/20/98	6:00	215.564
6/20/98	18:00	215.522
6/21/98	6:00	215.472
6/21/98	18:00	215.438
6/22/98	6:00	215.416
6/22/98	18:00	215.423
6/23/98	6:00	215.392
6/23/98	18:00	215.388
6/24/98	6:00	215.355
6/24/98	18:00	215.336
6/25/98	6:00	215.314
6/25/98	18:00	215.307
6/26/98	6:00	215.314
6/26/98	18:00	215.307
6/27/98	6:00	215.307
6/27/98	18:00	215.199
6/28/98	6:00	215.201
6/28/98	18:00	215.197
6/29/98	6:00	215.207
6/29/98	18:00	215.24
6/30/98	6:00	215.229
6/30/98	18:00	215.273
7/1/98	6:00	215.268
7/1/98	18:00	215.216
7/2/98	6:00	215.227
7/2/98	18:00	215.231

G6M9210X

Real Time		Reading
7/3/98	6:00	215.238
7/3/98	18:00	215.238
7/4/98	6:00	215.236
7/4/98	18:00	215.227
7/5/98	6:00	215.192
7/5/98	18:00	215.138
7/6/98	6:00	215.116
7/6/98	18:00	215.105
7/7/98	6:00	215.097
7/7/98	18:00	215.079
7/8/98	6:00	215.081
7/8/98	18:00	215.075
7/9/98	6:00	215.071
7/9/98	18:00	215.042
7/10/98	6:00	215.034
7/10/98	18:00	214.982
7/11/98	6:00	214.988
7/11/98	18:00	214.938
7/12/98	6:00	214.923
7/12/98	18:00	214.905
7/13/98	6:00	214.888
7/13/98	18:00	214.877
7/14/98	6:00	214.86
7/14/98	18:00	214.834
7/15/98	6:00	214.823
7/15/98	18:00	214.801
7/16/98	6:00	214.795
7/16/98	18:00	214.782
7/17/98	6:00	214.771
7/17/98	18:00	214.753
7/18/98	6:00	214.712
7/18/98	18:00	214.664
7/19/98	6:00	214.645
7/19/98	18:00	214.647
7/20/98	6:00	214.651
7/20/98	18:00	214.627
7/21/98	6:00	214.58
7/21/98	18:00	214.58
7/22/98	6:00	214.582
7/22/98	18:00	214.532
7/23/98	6:00	214.521
7/23/98	18:00	214.519
7/24/98	6:00	214.473
7/24/98	18:00	214.425
7/25/98	6:00	214.404
7/25/98	18:00	214.391
7/26/98	6:00	214.378
7/26/98	18:00	214.362
7/27/98	6:00	214.341
7/27/98	18:00	214.33
7/28/98	6:00	214.319
7/28/98	18:00	214.284
7/29/98	6:00	214.278
7/29/98	18:00	214.237
7/30/98	6:00	214.204
7/30/98	18:00	214.187
7/31/98	6:00	214.178
7/31/98	18:00	213.837
8/1/98	6:00	213.804
8/1/98	18:00	213.857
8/2/98	6:00	213.826
8/2/98	18:00	213.993
8/3/98	6:00	214.008

G6M9210X

Real Time		Reading
8/3/98	18:00	214.076
8/4/98	6:00	213.978
8/4/98	18:00	214.013
8/5/98	6:00	214.013
8/5/98	18:00	214
8/6/98	6:00	213.976
8/6/98	18:00	213.974
8/7/98	6:00	213.906
8/7/98	18:00	213.889
8/8/98	6:00	213.82
8/8/98	18:00	213.887
8/9/98	6:00	213.887
8/9/98	18:00	213.904
8/10/98	6:00	213.889
8/10/98	18:00	213.876
8/11/98	6:00	213.867
8/11/98	18:00	213.815
8/12/98	6:00	213.757
8/12/98	18:00	213.728
8/13/98	6:00	213.735
8/13/98	18:00	213.739
8/14/98	6:00	213.718
8/14/98	18:00	213.707
8/15/98	6:00	213.689
8/15/98	18:00	213.661
8/16/98	6:00	213.624
8/16/98	18:00	213.611
8/17/98	6:00	213.605
8/17/98	18:00	213.644
8/18/98	6:00	213.622
8/18/98	18:00	213.559
8/19/98	6:00	213.522
8/19/98	18:00	213.507
8/20/98	6:00	213.487
8/20/98	18:00	213.498
8/21/98	6:00	213.472
8/21/98	18:00	213.457
8/22/98	6:00	213.444
8/22/98	18:00	213.433
8/23/98	6:00	213.409
8/23/98	18:00	213.433
8/24/98	6:00	213.392
8/24/98	18:00	213.383
8/25/98	6:00	213.327
8/25/98	18:00	213.34
8/26/98	6:00	213.253
8/26/98	18:00	213.279
8/27/98	6:00	213.238
8/27/98	18:00	213.231
8/28/98	6:00	213.214
8/28/98	18:00	213.218
8/29/98	6:00	213.22
8/29/98	18:00	213.177
8/30/98	6:00	213.147
8/30/98	18:00	213.133
8/31/98	6:00	213.116
8/31/98	18:00	213.112
9/1/98	6:00	213.075
9/1/98	18:00	213.088
9/2/98	6:00	213.068
9/2/98	18:00	213.044
9/3/98	6:00	212.997
9/3/98	18:00	212.99

G6M9210X

Real Time		Reading
9/4/98	6:00	212.971
9/4/98	18:00	212.966
9/5/98	6:00	212.912
9/5/98	18:00	212.906
9/6/98	6:00	212.925
9/6/98	18:00	212.923
9/7/98	6:00	212.962
9/7/98	18:00	213.018
9/8/98	6:00	213.084
9/8/98	18:00	213.027
9/9/98	6:00	212.94
9/9/98	18:00	212.838
9/10/98	6:00	212.723
9/10/98	18:00	212.717
9/11/98	6:00	212.704
9/11/98	18:00	212.764
9/12/98	6:00	212.76
9/12/98	18:00	212.725
9/13/98	6:00	212.686
9/13/98	18:00	212.675
9/14/98	6:00	212.66
9/14/98	18:00	212.656
9/15/98	6:00	212.643
9/15/98	18:00	212.632
9/16/98	6:00	212.61
9/16/98	18:00	212.584
9/17/98	6:00	212.573
9/17/98	18:00	212.565
9/18/98	6:00	212.519
9/18/98	18:00	212.532
9/19/98	6:00	212.517
9/19/98	18:00	212.508
9/20/98	6:00	212.482
9/20/98	18:00	212.474
9/21/98	6:00	212.45
9/21/98	18:00	212.445
9/22/98	6:00	212.424
9/22/98	18:00	212.508
9/23/98	6:00	212.497
9/23/98	18:00	212.5
9/24/98	6:00	212.504
9/24/98	18:00	212.528
9/25/98	6:00	212.537
9/25/98	18:00	212.541
9/26/98	6:00	212.53
9/26/98	18:00	212.532
9/27/98	6:00	212.545
9/27/98	18:00	212.539
9/28/98	6:00	212.471
9/28/98	18:00	212.422
9/29/98	6:00	212.395
9/29/98	18:00	212.411
9/30/98	6:00	212.406
9/30/98	18:00	212.391
10/1/98	6:00	212.426
10/1/98	18:00	212.311
10/2/98	6:00	212.315
10/2/98	18:00	212.298
10/3/98	6:00	212.272
10/3/98	18:00	212.235
10/4/98	6:00	212.207
10/4/98	18:00	212.213
10/5/98	6:00	212.189

G6M9210X

Real Time		Reading
10/5/98	18:00	212.178
10/6/98	6:00	212.142
10/6/98	18:00	212.155
10/7/98	6:00	212.142
10/7/98	18:00	212.15
10/8/98	6:00	212.152
10/8/98	18:00	212.12
10/9/98	6:00	212.122
10/9/98	18:00	212.155
10/10/98	6:00	212.198
10/10/98	18:00	212.218
10/11/98	6:00	212.228
10/11/98	18:00	212.239
10/12/98	6:00	212.265
10/12/98	18:00	212.313
10/13/98	6:00	212.356
10/13/98	18:00	212.393
10/14/98	6:00	212.398
10/14/98	18:00	211.883
10/15/98	6:00	211.84
10/15/98	18:00	211.705
10/16/98	6:00	211.857
10/16/98	18:00	211.859
10/17/98	6:00	211.766
10/17/98	18:00	211.942
10/18/98	6:00	212.109
10/18/98	18:00	212.313
10/19/98	6:00	212.343
10/19/98	18:00	212.209
10/20/98	6:00	212.239
10/20/98	18:00	212.246
10/21/98	6:00	212.189
10/21/98	18:00	212.228
10/22/98	6:00	212.124
10/22/98	18:00	212.009
10/23/98	6:00	211.964
10/23/98	18:00	212.079
10/24/98	6:00	212.029
10/24/98	18:00	212.105
10/25/98	6:00	212.04
10/25/98	18:00	211.968
10/26/98	6:00	211.799
10/26/98	18:00	211.74
10/27/98	6:00	211.679
10/27/98	18:00	211.853
10/28/98	6:00	212.04
10/28/98	18:00	212.168
10/29/98	6:00	212.146
10/29/98	18:00	212.02
10/30/98	6:00	212.1
10/30/98	18:00	212.202
10/31/98	6:00	211.92
10/31/98	18:00	211.894
11/1/98	6:00	211.903
11/1/98	18:00	211.894
11/2/98	6:00	211.894
11/2/98	18:00	211.864
11/3/98	6:00	211.851
11/3/98	18:00	211.836
11/4/98	6:00	211.829
11/4/98	18:00	211.803
11/5/98	6:00	211.79
11/5/98	18:00	211.779

G6M9210X

Real Time		Reading
11/6/98	6:00	211.777
11/6/98	18:00	211.738
11/7/98	6:00	211.727
11/7/98	18:00	211.714
11/8/98	6:00	211.695
11/8/98	18:00	211.695
11/9/98	6:00	211.664
11/9/98	18:00	211.649
11/10/98	6:00	211.629
11/10/98	18:00	211.649
11/11/98	6:00	211.736
11/11/98	18:00	211.625
11/12/98	6:00	211.593
11/12/98	18:00	211.606
11/13/98	6:00	211.593
11/13/98	18:00	211.59
11/14/98	6:00	211.571
11/14/98	18:00	211.584
11/15/98	6:00	211.61
11/15/98	18:00	211.514
11/16/98	6:00	211.491
11/16/98	18:00	211.491
11/17/98	6:00	211.495
11/17/98	18:00	211.465
11/18/98	6:00	211.439
11/18/98	18:00	211.441
11/19/98	6:00	211.441
11/19/98	18:00	211.48
11/20/98	6:00	211.473
11/20/98	18:00	211.458
11/21/98	6:00	211.417
11/21/98	18:00	211.384
11/22/98	6:00	211.356
11/22/98	18:00	211.373
11/23/98	6:00	211.399
11/23/98	18:00	211.439
11/24/98	6:00	211.363
11/24/98	18:00	211.289
11/25/98	6:00	211.267
11/25/98	18:00	211.276
11/26/98	6:00	211.311
11/26/98	18:00	211.417
11/27/98	6:00	211.3
11/27/98	18:00	211.269
11/28/98	6:00	211.291
11/28/98	18:00	211.295
11/29/98	6:00	211.276
11/29/98	18:00	211.271
11/30/98	6:00	211.298
11/30/98	18:00	211.369
12/1/98	6:00	211.373
12/1/98	18:00	211.254
12/2/98	6:00	211.28
12/2/98	18:00	211.315
12/3/98	6:00	211.276
12/3/98	18:00	211.295
12/4/98	6:00	211.267
12/4/98	18:00	211.232
12/5/98	6:00	211.2
12/5/98	18:00	211.226
12/6/98	6:00	211.235
12/6/98	18:00	211.217
12/7/98	6:00	211.243

G6M9210X

Real Time		Reading
12/7/98	18:00	211.137
12/8/98	6:00	211.133
12/8/98	18:00	211.183
12/9/98	6:00	211.141
12/9/98	18:00	211.12
12/10/98	6:00	211.113
12/10/98	18:00	211.139
12/11/98	6:00	211.115
12/11/98	18:00	211.068
12/12/98	6:00	211.074
12/12/98	18:00	211.098
12/13/98	6:00	211.087
12/13/98	18:00	211.078
12/14/98	6:00	211.042
12/14/98	18:00	211.018
12/15/98	6:00	211.037
12/15/98	18:00	211.048
12/16/98	6:00	211.022
12/16/98	18:00	211.035
12/17/98	6:00	211.011
12/17/98	18:00	211.007
12/18/98	6:00	210.955
12/18/98	18:00	210.909
12/19/98	6:00	210.937
12/19/98	18:00	210.946
12/20/98	6:00	210.918
12/20/98	18:00	210.892
12/21/98	6:00	210.909
12/21/98	18:00	210.942
12/22/98	6:00	211.02
12/22/98	18:00	210.829
12/23/98	6:00	210.82
12/23/98	18:00	210.857
12/24/98	6:00	210.877
12/24/98	18:00	210.853
12/25/98	6:00	210.814
12/25/98	18:00	210.816
12/26/98	6:00	210.827
12/26/98	18:00	210.853
12/27/98	6:00	210.779
12/27/98	18:00	210.786
12/28/98	6:00	210.814
12/28/98	18:00	210.79
12/29/98	6:00	210.783
12/29/98	18:00	210.827
12/30/98	6:00	210.835
12/30/98	18:00	210.703
12/31/98	6:00	210.701
12/31/98	18:00	210.731
1/1/99	6:00	210.729
1/1/99	18:00	210.655
1/2/99	6:00	210.662
1/2/99	18:00	210.688
1/3/99	6:00	210.716
1/3/99	18:00	210.82
1/4/99	6:00	210.679
1/4/99	18:00	210.664
1/5/99	6:00	210.662
1/5/99	18:00	210.655
1/6/99	6:00	210.671
1/6/99	18:00	210.712
1/7/99	6:00	210.694
1/7/99	18:00	210.655

G6M9210X

Real Time		Reading
1/8/99	6:00	210.649
1/8/99	18:00	210.72
1/9/99	6:00	210.764
1/9/99	18:00	210.718
1/10/99	6:00	210.666
1/10/99	18:00	210.699
1/11/99	6:00	210.707
1/11/99	18:00	210.653
1/12/99	6:00	210.749
1/12/99	18:00	210.634
1/13/99	6:00	210.668
1/13/99	18:00	210.579
1/14/99	6:00	210.579
1/14/99	18:00	210.627
1/15/99	6:00	210.733
1/15/99	18:00	210.814
1/16/99	6:00	210.642
1/16/99	18:00	210.684
1/17/99	6:00	210.621
1/17/99	18:00	210.619
1/18/99	6:00	210.649
1/18/99	18:00	210.751
1/19/99	6:00	210.718
1/19/99	18:00	210.736
1/20/99	6:00	210.753
1/20/99	18:00	210.755
1/21/99	6:00	210.746
1/21/99	18:00	210.764
1/22/99	6:00	210.74
1/22/99	18:00	210.731
1/23/99	6:00	210.762
1/23/99	18:00	210.803
1/24/99	6:00	210.879
1/24/99	18:00	210.983
1/25/99	6:00	211.1
1/25/99	18:00	211.156
1/26/99	6:00	211.178
1/26/99	18:00	211.23
1/27/99	6:00	211.261
1/27/99	18:00	211.295
1/28/99	6:00	211.276
1/28/99	18:00	211.276
1/29/99	6:00	211.245
1/29/99	18:00	211.243
1/30/99	6:00	211.245
1/30/99	18:00	211.237
1/31/99	6:00	211.206
1/31/99	18:00	211.258
2/1/99	6:00	211.278
2/1/99	18:00	211.274
2/2/99	6:00	211.25
2/2/99	18:00	211.304
2/3/99	6:00	211.493
2/3/99	18:00	211.534
2/4/99	6:00	211.608
2/4/99	18:00	211.664
2/5/99	6:00	211.636
2/5/99	18:00	211.632
2/6/99	6:00	211.677
2/6/99	18:00	211.705
2/7/99	6:00	211.653
2/7/99	18:00	211.677
2/8/99	6:00	211.658

G6M9210X

Real Time		Reading
2/8/99	18:00	211.629
2/9/99	6:00	211.629
2/9/99	18:00	211.671
2/10/99	6:00	211.64
2/10/99	18:00	211.584
2/11/99	6:00	211.564
2/11/99	18:00	211.606
2/12/99	6:00	211.64
2/12/99	18:00	211.412
2/13/99	6:00	211.345
2/13/99	18:00	211.174
2/14/99	6:00	211.078
2/14/99	18:00	211.113
2/15/99	6:00	211.122
2/15/99	18:00	211.313
2/16/99	6:00	211.293
2/16/99	18:00	211.343
2/17/99	6:00	211.354
2/17/99	18:00	211.486
2/18/99	6:00	211.606
2/18/99	18:00	211.692
2/19/99	6:00	211.692
2/19/99	18:00	211.701
2/20/99	6:00	211.701
2/20/99	18:00	211.697
2/21/99	6:00	211.675
2/21/99	18:00	211.653
2/22/99	6:00	211.606
2/22/99	18:00	211.61
2/23/99	6:00	211.586
2/23/99	18:00	211.582
2/24/99	6:00	211.567
2/24/99	18:00	211.582
2/25/99	6:00	211.601
2/25/99	18:00	211.625
2/26/99	6:00	211.603
2/26/99	18:00	211.551
2/27/99	6:00	211.534
2/27/99	18:00	211.527
2/28/99	6:00	211.527
2/28/99	18:00	211.593
3/1/99	6:00	211.777
3/1/99	18:00	211.833
3/2/99	6:00	211.833
3/2/99	18:00	211.792
3/3/99	6:00	211.797
3/3/99	18:00	211.842
3/4/99	6:00	212.079
3/4/99	18:00	212.207
3/5/99	6:00	212.079
3/5/99	18:00	212.044
3/6/99	6:00	212.022
3/6/99	18:00	212.076
3/7/99	6:00	212.001
3/7/99	18:00	211.912
3/8/99	6:00	211.909
3/8/99	18:00	211.916
3/9/99	6:00	211.931
3/9/99	18:00	211.933
3/10/99	6:00	211.912
3/10/99	18:00	211.912
3/11/99	6:00	211.899
3/11/99	18:00	211.868

G6M9210X

Real Time		Reading
3/12/99	6:00	211.855
3/12/99	18:00	211.807
3/13/99	6:00	211.781
3/13/99	18:00	211.781
3/14/99	6:00	211.773
3/14/99	18:00	211.781
3/15/99	6:00	211.842
3/15/99	18:00	211.836
3/16/99	6:00	211.777
3/16/99	18:00	211.777
3/17/99	6:00	211.76
3/17/99	18:00	211.81
3/18/99	6:00	211.909
3/18/99	18:00	212.007
3/19/99	6:00	212.185
3/19/99	18:00	212.172
3/20/99	6:00	212.148
3/20/99	18:00	212.116
3/21/99	6:00	212.079
3/21/99	18:00	212.083
3/22/99	6:00	212.202
3/22/99	18:00	212.419
3/23/99	6:00	212.428
3/23/99	18:00	212.38
3/24/99	6:00	212.339
3/24/99	18:00	212.337
3/25/99	6:00	212.25
3/25/99	18:00	212.226
3/26/99	6:00	212.194
3/26/99	18:00	212.196
3/27/99	6:00	212.163
3/27/99	18:00	212.178
3/28/99	6:00	212.157
3/28/99	18:00	212.176
3/29/99	6:00	212.209
3/29/99	18:00	212.205
3/30/99	6:00	212.183
3/30/99	18:00	212.172
3/31/99	6:00	212.178
3/31/99	18:00	212.205
4/1/99	6:00	212.174
4/1/99	18:00	212.174
4/2/99	6:00	212.118
4/2/99	18:00	212.133
4/3/99	6:00	212.105
4/3/99	18:00	212.155
4/4/99	6:00	212.139
4/4/99	18:00	212.087
4/5/99	6:00	212.042
4/5/99	18:00	212.063
4/6/99	6:00	212.044
4/6/99	18:00	212.094
4/7/99	6:00	212.092
4/7/99	18:00	212.042
4/8/99	6:00	212.059
4/8/99	18:00	212.044
4/9/99	6:00	212.003
4/9/99	18:00	212.035
4/10/99	6:00	211.974
4/10/99	18:00	211.935
4/11/99	6:00	211.94
4/11/99	18:00	211.99
4/12/99	6:00	211.979

G6M9210X

Real Time		Reading
4/12/99	18:00	211.942
4/13/99	6:00	211.933
4/13/99	18:00	211.931
4/14/99	6:00	211.92
4/14/99	18:00	211.886
4/15/99	6:00	211.883
4/15/99	18:00	211.872
4/16/99	6:00	211.875
4/16/99	18:00	211.868
4/17/99	6:00	211.849
4/17/99	18:00	211.844
4/18/99	6:00	211.823
4/18/99	18:00	211.792
4/19/99	6:00	211.771
4/19/99	18:00	211.788
4/20/99	6:00	211.768
4/20/99	18:00	211.76
4/21/99	6:00	211.738
4/21/99	18:00	211.755
4/22/99	6:00	211.723
4/22/99	18:00	211.716
4/23/99	6:00	211.703
4/23/99	18:00	211.729
4/24/99	6:00	211.671
4/24/99	18:00	211.677
4/25/99	6:00	211.656
4/25/99	18:00	211.703
4/26/99	6:00	211.701
4/26/99	18:00	211.651
4/27/99	6:00	211.606
4/27/99	18:00	211.588
4/28/99	6:00	211.582
4/28/99	18:00	211.606
4/29/99	6:00	211.584
4/29/99	18:00	211.562
4/30/99	6:00	211.532
4/30/99	18:00	211.543
5/1/99	6:00	211.523
5/1/99	18:00	211.534
5/2/99	6:00	211.504
5/2/99	18:00	211.506
5/3/99	6:00	211.491
5/3/99	18:00	211.499
5/4/99	6:00	211.484
5/4/99	18:00	211.478
5/5/99	6:00	211.456
5/5/99	18:00	211.447
5/6/99	6:00	211.436
5/6/99	18:00	211.434
5/7/99	6:00	211.408
5/7/99	18:00	211.415
5/8/99	6:00	211.397
5/8/99	18:00	211.421
5/9/99	6:00	211.389
5/9/99	18:00	211.369
5/10/99	6:00	211.352
5/10/99	18:00	211.332
5/11/99	6:00	211.298
5/11/99	18:00	211.332
5/12/99	6:00	211.315
5/12/99	18:00	211.326
5/13/99	6:00	211.291
5/13/99	18:00	211.269

G6M9210X

Real Time		Reading
5/14/99	6:00	211.239
5/14/99	18:00	211.254
5/15/99	6:00	211.206
5/15/99	18:00	211.217
5/16/99	6:00	211.198
5/16/99	18:00	211.213
5/17/99	6:00	211.18
5/17/99	18:00	211.189
5/18/99	6:00	211.167
5/18/99	18:00	211.172
5/19/99	6:00	211.165
5/19/99	18:00	211.161
5/20/99	6:00	211.143
5/20/99	18:00	211.137
5/21/99	6:00	211.12
5/21/99	18:00	211.122
5/22/99	6:00	211.098
5/22/99	18:00	211.1
5/23/99	6:00	211.085
5/23/99	18:00	211.089
5/24/99	6:00	211.091
5/24/99	18:00	211.104
5/25/99	6:00	211.052
5/25/99	18:00	211.005
5/26/99	6:00	211.033
5/26/99	18:00	211
5/27/99	6:00	210.981
5/27/99	18:00	210.987
5/28/99	6:00	210.881
5/28/99	18:00	210.896
5/29/99	6:00	210.816
5/29/99	18:00	210.822
5/30/99	6:00	210.733
5/30/99	18:00	210.855
5/31/99	6:00	210.818
5/31/99	18:00	210.922
6/1/99	6:00	210.909
6/1/99	18:00	210.92
6/2/99	6:00	210.892
6/2/99	18:00	210.918
6/3/99	6:00	210.92
6/3/99	18:00	210.874
6/4/99	6:00	210.751
6/4/99	18:00	210.694
6/5/99	6:00	210.586
6/5/99	18:00	210.629
6/6/99	6:00	210.612
6/6/99	18:00	210.82
6/7/99	6:00	210.799
6/7/99	18:00	210.809
6/8/99	6:00	210.777
6/8/99	18:00	210.753
6/9/99	6:00	210.575
6/9/99	18:00	210.499
6/10/99	6:00	210.386
6/10/99	18:00	210.391
6/11/99	6:00	210.324
6/11/99	18:00	210.471
6/12/99	6:00	210.395
6/12/99	18:00	210.499
6/13/99	6:00	210.499
6/13/99	18:00	210.623
6/14/99	6:00	210.61

G6M9210X

Real Time		Reading
6/14/99	18:00	210.642
6/15/99	6:00	210.562
6/15/99	18:00	210.491
6/16/99	6:00	210.402
6/16/99	18:00	210.525
6/17/99	6:00	210.497
6/17/99	18:00	210.497
6/18/99	6:00	210.452
6/18/99	18:00	210.386
6/19/99	6:00	210.304
6/19/99	18:00	210.343
6/20/99	6:00	210.298
6/20/99	18:00	210.421
6/21/99	6:00	210.404
6/21/99	18:00	210.421
6/22/99	6:00	210.41
6/22/99	18:00	210.425
6/23/99	6:00	210.378
6/23/99	18:00	210.402
6/24/99	6:00	210.365
6/24/99	18:00	210.373
6/25/99	6:00	210.356
6/25/99	18:00	210.36
6/26/99	6:00	210.326
6/26/99	18:00	210.321
6/27/99	6:00	210.245
6/27/99	18:00	210.332
6/28/99	6:00	210.352
6/28/99	18:00	210.488
6/29/99	6:00	210.527
6/29/99	18:00	210.523
6/30/99	6:00	210.183
6/30/99	18:00	210.128
7/1/99	6:00	210.094
7/1/99	18:00	210.211
7/2/99	6:00	210.224
7/2/99	18:00	210.202
7/3/99	6:00	210.105
7/3/99	18:00	210.191
7/4/99	6:00	210.17
7/4/99	18:00	210.269
7/5/99	6:00	210.3
7/5/99	18:00	210.334
7/6/99	6:00	210.304
7/6/99	18:00	210.365
7/7/99	6:00	210.302
7/7/99	18:00	210.298
7/8/99	6:00	210.287
7/8/99	18:00	210.206
7/9/99	6:00	210.128
7/9/99	18:00	210.258
7/10/99	6:00	210.115
7/10/99	18:00	210
7/11/99	6:00	209.885
7/11/99	18:00	209.838
7/12/99	6:00	209.723
7/12/99	18:00	209.766
7/13/99	6:00	209.788
7/13/99	18:00	209.901
7/14/99	6:00	209.853
7/14/99	18:00	209.946
7/15/99	6:00	209.929
7/15/99	18:00	209.957

G6M9210X

Real Time		Reading
7/16/99	6:00	209.916
7/16/99	18:00	209.944
7/17/99	6:00	209.92
7/17/99	18:00	209.925
7/18/99	6:00	209.881
7/18/99	18:00	209.931
7/19/99	6:00	209.92
7/19/99	18:00	209.957
7/20/99	6:00	209.866
7/20/99	18:00	209.844
7/21/99	6:00	209.755
7/21/99	18:00	209.872
7/22/99	6:00	209.894
7/22/99	18:00	209.99
7/23/99	6:00	209.99
7/23/99	18:00	210.061
7/24/99	6:00	210.048
7/24/99	18:00	209.855
7/25/99	6:00	209.807
7/25/99	18:00	209.836
7/26/99	6:00	209.833
7/26/99	18:00	209.805
7/27/99	6:00	209.766
7/27/99	18:00	209.81
7/28/99	6:00	209.768
7/28/99	18:00	209.84
7/29/99	6:00	209.82
7/29/99	18:00	209.894
7/30/99	6:00	209.87
7/30/99	18:00	209.844
7/31/99	6:00	209.725
7/31/99	18:00	209.803
8/1/99	6:00	209.864
8/1/99	18:00	209.831
8/2/99	6:00	209.608
8/2/99	18:00	209.608
8/3/99	6:00	209.541
8/3/99	18:00	209.61
8/4/99	6:00	209.604
8/4/99	18:00	209.684
8/5/99	6:00	209.742
8/5/99	18:00	209.784
8/6/99	6:00	209.664
8/6/99	18:00	209.758
8/7/99	6:00	209.56
8/7/99	18:00	209.586
8/8/99	6:00	209.706
8/8/99	18:00	209.643
8/9/99	6:00	209.513
8/9/99	18:00	209.486
8/10/99	6:00	209.491
8/10/99	18:00	209.51
8/11/99	6:00	209.482
8/11/99	18:00	209.478
8/12/99	6:00	209.463
8/12/99	18:00	209.463
8/13/99	6:00	209.439
8/13/99	18:00	209.493
8/14/99	6:00	209.497
8/14/99	18:00	209.441
8/15/99	6:00	209.393
8/15/99	18:00	209.402
8/16/99	6:00	209.389

G6M9210X

Real Time		Reading
8/16/99	18:00	209.415
8/17/99	6:00	209.424
8/17/99	18:00	209.491
8/18/99	6:00	209.495
8/18/99	18:00	209.434
8/19/99	6:00	209.339
8/19/99	18:00	209.337
8/20/99	6:00	209.326
8/20/99	18:00	209.328
8/21/99	6:00	209.333
8/21/99	18:00	209.35
8/22/99	6:00	209.328
8/22/99	18:00	209.335
8/23/99	6:00	209.32
8/23/99	18:00	209.326
8/24/99	6:00	209.276
8/24/99	18:00	209.283
8/25/99	6:00	209.261
8/25/99	18:00	209.294
8/26/99	6:00	209.294
8/26/99	18:00	209.33
8/27/99	6:00	209.307
8/27/99	18:00	209.385
8/28/99	6:00	209.432
8/28/99	18:00	209.491
8/29/99	6:00	209.452
8/29/99	18:00	209.33
8/30/99	6:00	209.198
8/30/99	18:00	209.209
8/31/99	6:00	209.196
8/31/99	18:00	209.215
9/1/99	6:00	209.198
9/1/99	18:00	209.213
9/2/99	6:00	209.205
9/2/99	18:00	209.244
9/3/99	6:00	209.213
9/3/99	18:00	209.239
9/4/99	6:00	209.137
9/4/99	18:00	209.142
9/5/99	6:00	209.129
9/5/99	18:00	209.157
9/6/99	6:00	209.161
9/6/99	18:00	209.242
9/7/99	6:00	209.252
9/7/99	18:00	209.378
9/8/99	6:00	209.367
9/8/99	18:00	209.402
9/9/99	6:00	209.335
9/9/99	18:00	209.341
9/10/99	6:00	209.333
9/10/99	18:00	209.447
9/11/99	6:00	209.33
9/11/99	18:00	209.209
9/12/99	6:00	209.174
9/12/99	18:00	209.209
9/13/99	6:00	209.211
9/13/99	18:00	209.235
9/14/99	6:00	209.237
9/14/99	18:00	209.255
9/15/99	6:00	209.244
9/15/99	18:00	209.248
9/16/99	6:00	209.285
9/16/99	18:00	209.441

G6M9210X

Real Time		Reading
9/17/99	6:00	209.64
9/17/99	18:00	209.558
9/18/99	6:00	209.662
9/18/99	18:00	209.747
9/19/99	6:00	209.797
9/19/99	18:00	209.866
9/20/99	6:00	209.896
9/20/99	18:00	209.938
9/21/99	6:00	209.961
9/21/99	18:00	209.979
9/22/99	6:00	210
9/22/99	18:00	210.013
9/23/99	6:00	210
9/23/99	18:00	209.99
9/24/99	6:00	209.998
9/24/99	18:00	210.016
9/25/99	6:00	210.005
9/25/99	18:00	209.979
9/26/99	6:00	209.961
9/26/99	18:00	209.996
9/27/99	6:00	209.99
9/27/99	18:00	210.009
9/28/99	6:00	210.003
9/28/99	18:00	210.016
9/29/99	6:00	210.016
9/29/99	18:00	210.039
9/30/99	6:00	210.072
9/30/99	18:00	209.998
10/1/99	6:00	209.996
10/1/99	18:00	210.018
10/2/99	6:00	209.985
10/2/99	18:00	210.016
10/3/99	6:00	210.016
10/3/99	18:00	210.005
10/4/99	6:00	210.039
10/4/99	18:00	210.031
10/5/99	6:00	210.042
10/5/99	18:00	210.063
10/6/99	6:00	210.07
10/6/99	18:00	210.052
10/7/99	6:00	210.013
10/7/99	18:00	210.018
10/8/99	6:00	210.02
10/8/99	18:00	210.07
10/9/99	6:00	210.091
10/9/99	18:00	210.074
10/10/99	6:00	210.065
10/10/99	18:00	210.115
10/11/99	6:00	210.074
10/11/99	18:00	210.05
10/12/99	6:00	210.022
10/12/99	18:00	210.061
10/13/99	6:00	210.083
10/13/99	18:00	210.126
10/14/99	6:00	210.148
10/14/99	18:00	209.99
10/15/99	6:00	210.009
10/15/99	18:00	210.057
10/16/99	6:00	210.063
10/16/99	18:00	210.085
10/17/99	6:00	210.091
10/17/99	18:00	210.096
10/18/99	6:00	210.102

G6M9210X

Real Time		Reading
10/18/99	18:00	210.029
10/19/99	6:00	210.02

G6M-93-12X: MAY 2, 1996 TO JANUARY 22, 1997					
	IN-SITU,	INC.			
	WELL	SENTINEL			
	Serial	#	L3K00476		

Downloaded	1/22/97	13:40			
Unit	ID:	XGM9406X			
Test	name:	g6m9312			
Linearity:	0.07				
Scale	Factor:	15.1			
Offset:	-0.003				
Specific	Gravity:	1			
Data	Type:	Level			
Units:	English				
Mode:	Top	of	Casing		
Ref.	Level:	0			
Ref.	Taken:	5/2/96	14:51		
Test	Begun:	5/2/96	18:00		
Elapsed			Reading		
time (min)	time (days)	Date	Δ wl (feet)	wl (ft amsl)	
0	0	5/2/96	-0.002	216.398	
720	0.5	5/3/96	-0.063	216.337	
1440	1	5/3/96	0.072	216.472	
2160	1.5	5/4/96	0.057	216.457	
2880	2	5/4/96	0.148	216.548	
3600	2.5	5/5/96	0.041	216.441	
4320	3	5/5/96	0.007	216.407	
5040	3.5	5/6/96	0.033	216.433	
5760	4	5/6/96	0.085	216.485	
6480	4.5	5/7/96	0.068	216.468	
7200	5	5/7/96	0.144	216.544	
7920	5.5	5/8/96	0.144	216.544	
8640	6	5/8/96	0.172	216.572	
9360	6.5	5/9/96	0.098	216.498	
10080	7	5/9/96	0.111	216.511	
10800	7.5	5/10/96	0.118	216.518	
11520	8	5/10/96	0.199	216.599	
12240	8.5	5/11/96	0.384	216.784	
12960	9	5/11/96	0.485	216.885	
13680	9.5	5/12/96	0.323	216.723	
14400	10	5/12/96	0.131	216.531	
15120	10.5	5/13/96	0.231	216.631	
15840	11	5/13/96	0.273	216.673	
16560	11.5	5/14/96	0.269	216.669	
17280	12	5/14/96	0.297	216.697	
18000	12.5	5/15/96	0.247	216.647	
18720	13	5/15/96	0.286	216.686	
19440	13.5	5/16/96	0.227	216.627	

time (min)	time (days)	Date	Δ wl (feet)	wl (ft amsl)
20160	14	5/16/96	0.253	216.653
20880	14.5	5/17/96	0.277	216.677
21600	15	5/17/96	0.266	216.666
22320	15.5	5/18/96	0.234	216.634
23040	16	5/18/96	0.247	216.647
23760	16.5	5/19/96	0.277	216.677
24480	17	5/19/96	0.277	216.677
25200	17.5	5/20/96	0.319	216.719
25920	18	5/20/96	0.269	216.669
26640	18.5	5/21/96	0.301	216.701
27360	19	5/21/96	0.269	216.669
28080	19.5	5/22/96	0.114	216.514
28800	20	5/22/96	0.07	216.47
29520	20.5	5/23/96	0.048	216.448
30240	21	5/23/96	0.061	216.461
30960	21.5	5/24/96	-0.007	216.393
31680	22	5/24/96	0.002	216.402
32400	22.5	5/25/96	-0.033	216.367
33120	23	5/25/96	-0.017	216.383
33840	23.5	5/26/96	-0.065	216.335
34560	24	5/26/96	-0.044	216.356
35280	24.5	5/27/96	-0.079	216.321
36000	25	5/27/96	-0.089	216.311
36720	25.5	5/28/96	-0.131	216.269
37440	26	5/28/96	-0.116	216.284
38160	26.5	5/29/96	-0.124	216.276
38880	27	5/29/96	-0.138	216.262
39600	27.5	5/30/96	-0.159	216.241
40320	28	5/30/96	-0.258	216.142
41040	28.5	5/31/96	-0.266	216.134
41760	29	5/31/96	-0.277	216.123
42480	29.5	6/1/96	-0.325	216.075
43200	30	6/1/96	-0.321	216.079
43920	30.5	6/2/96	-0.356	216.044
44640	31	6/2/96	-0.338	216.062
45360	31.5	6/3/96	-0.36	216.04
46080	32	6/3/96	-0.312	216.088
46800	32.5	6/4/96	-0.266	216.134
47520	33	6/4/96	-0.321	216.079
48240	33.5	6/5/96	-0.406	215.994
48960	34	6/5/96	-0.349	216.051
49680	34.5	6/6/96	-0.465	215.935
50400	35	6/6/96	-0.426	215.974
51120	35.5	6/7/96	-0.421	215.979
51840	36	6/7/96	-0.292	216.108
52560	36.5	6/8/96	-0.391	216.009
53280	37	6/8/96	-0.463	215.937
54000	37.5	6/9/96	-0.561	215.839

time (min)	time (days)	Date	Δ wl (feet)	wl (ft amsl)
54720	38	6/9/96	-0.537	215.863
55440	38.5	6/10/96	-0.528	215.872
56160	39	6/10/96	-0.439	215.961
56880	39.5	6/11/96	-0.415	215.985
57600	40	6/11/96	-0.33	216.07
58320	40.5	6/12/96	-0.362	216.038
59040	41	6/12/96	-0.271	216.129
59760	41.5	6/13/96	-0.301	216.099
60480	42	6/13/96	-0.22	216.18
61200	42.5	6/14/96	-0.242	216.158
61920	43	6/14/96	-0.474	215.926
62640	43.5	6/15/96	-0.565	215.835
63360	44	6/15/96	-0.587	215.813
64080	44.5	6/16/96	-0.827	215.573
64800	45	6/16/96	-0.77	215.63
65520	45.5	6/17/96	-0.731	215.669
66240	46	6/17/96	-0.618	215.782
66960	46.5	6/18/96	-0.683	215.717
67680	47	6/18/96	-0.764	215.636
68400	47.5	6/19/96	-0.814	215.586
69120	48	6/19/96	-0.705	215.695
69840	48.5	6/20/96	-0.716	215.684
70560	49	6/20/96	-0.657	215.743
71280	49.5	6/21/96	-0.701	215.699
72000	50	6/21/96	-0.764	215.636
72720	50.5	6/22/96	-0.921	215.479
73440	51	6/22/96	-0.797	215.603
74160	51.5	6/23/96	-0.971	215.429
74880	52	6/23/96	-1.113	215.287
75600	52.5	6/24/96	-1.122	215.278
76320	53	6/24/96	-1.083	215.317
77040	53.5	6/25/96	-0.952	215.448
77760	54	6/25/96	-1.096	215.304
78480	54.5	6/26/96	-1.207	215.193
79200	55	6/26/96	-1.22	215.18
79920	55.5	6/27/96	-1.233	215.167
80640	56	6/27/96	-1.231	215.169
81360	56.5	6/28/96	-1.275	215.125
82080	57	6/28/96	-1.301	215.099
82800	57.5	6/29/96	-1.316	215.084
83520	58	6/29/96	-1.296	215.104
84240	58.5	6/30/96	-1.262	215.138
84960	59	6/30/96	-1.17	215.23
85680	59.5	7/1/96	-1.113	215.287
86400	60	7/1/96	-1.041	215.359
87120	60.5	7/2/96	-1.078	215.322
87840	61	7/2/96	-1.15	215.25
88560	61.5	7/3/96	-1.286	215.114

time (min)	time (days)	Date	Δ wl (feet)	wl (ft amsl)
89280	62	7/3/96	-1.185	215.215
90000	62.5	7/4/96	-1.181	215.219
90720	63	7/4/96	-1.229	215.171
91440	63.5	7/5/96	-1.44	214.96
92160	64	7/5/96	-1.532	214.868
92880	64.5	7/6/96	-1.523	214.877
93600	65	7/6/96	-1.543	214.857
94320	65.5	7/7/96	-1.569	214.831
95040	66	7/7/96	-1.497	214.903
95760	66.5	7/8/96	-1.397	215.003
96480	67	7/8/96	-1.504	214.896
97200	67.5	7/9/96	-1.541	214.859
97920	68	7/9/96	-1.499	214.901
98640	68.5	7/10/96	-1.711	214.689
99360	69	7/10/96	-1.715	214.685
100080	69.5	7/11/96	-1.733	214.667
100800	70	7/11/96	-1.733	214.667
101520	70.5	7/12/96	-1.757	214.643
102240	71	7/12/96	-1.742	214.658
102960	71.5	7/13/96	-1.722	214.678
103680	72	7/13/96	-1.294	215.106
104400	72.5	7/14/96	-0.867	215.533
105120	73	7/14/96	-0.74	215.66
105840	73.5	7/15/96	-0.722	215.678
106560	74	7/15/96	-0.692	215.708
107280	74.5	7/16/96	-0.766	215.634
108000	75	7/16/96	-0.775	215.625
108720	75.5	7/17/96	-0.829	215.571
109440	76	7/17/96	-0.871	215.529
110160	76.5	7/18/96	-0.919	215.481
110880	77	7/18/96	-0.936	215.464
111600	77.5	7/19/96	-0.956	215.444
112320	78	7/19/96	-0.945	215.455
113040	78.5	7/20/96	-1.067	215.333
113760	79	7/20/96	-1.115	215.285
114480	79.5	7/21/96	-1.17	215.23
115200	80	7/21/96	-1.231	215.169
115920	80.5	7/22/96	-1.262	215.138
116640	81	7/22/96	-1.279	215.121
117360	81.5	7/23/96	-1.312	215.088
118080	82	7/23/96	-1.338	215.062
118800	82.5	7/24/96	-1.351	215.049
119520	83	7/24/96	-1.344	215.056
120240	83.5	7/25/96	-1.379	215.021
120960	84	7/25/96	-1.377	215.023
121680	84.5	7/26/96	-1.401	214.999
122400	85	7/26/96	-1.401	214.999
123120	85.5	7/27/96	-1.436	214.964

time (min)	time (days)	Date	Δ wl (feet)	wl (ft amsl)
123840	86	7/27/96	-1.475	214.925
124560	86.5	7/28/96	-1.517	214.883
125280	87	7/28/96	-1.517	214.883
126000	87.5	7/29/96	-1.539	214.861
126720	88	7/29/96	-1.55	214.85
127440	88.5	7/30/96	-1.563	214.837
128160	89	7/30/96	-1.567	214.833
128880	89.5	7/31/96	-1.598	214.802
129600	90	7/31/96	-1.591	214.809
130320	90.5	8/1/96	-1.613	214.787
131040	91	8/1/96	-1.624	214.776
131760	91.5	8/2/96	-1.659	214.741
132480	92	8/2/96	-1.683	214.717
133200	92.5	8/3/96	-1.72	214.68
133920	93	8/3/96	-1.735	214.665
134640	93.5	8/4/96	-1.759	214.641
135360	94	8/4/96	-1.763	214.637
136080	94.5	8/5/96	-1.794	214.606
136800	95	8/5/96	-1.792	214.608
137520	95.5	8/6/96	-1.824	214.576
138240	96	8/6/96	-1.822	214.578
138960	96.5	8/7/96	-1.853	214.547
139680	97	8/7/96	-1.842	214.558
140400	97.5	8/8/96	-1.862	214.538
141120	98	8/8/96	-1.827	214.573
141840	98.5	8/9/96	-1.776	214.624
142560	99	8/9/96	-1.731	214.669
143280	99.5	8/10/96	-1.759	214.641
144000	100	8/10/96	-1.772	214.628
144720	100.5	8/11/96	-1.966	214.434
145440	101	8/11/96	-1.979	214.421
146160	101.5	8/12/96	-2.067	214.333
146880	102	8/12/96	-1.986	214.414
147600	102.5	8/13/96	-1.949	214.451
148320	103	8/13/96	-1.831	214.569
149040	103.5	8/14/96	-2.058	214.342
149760	104	8/14/96	-2.093	214.307
150480	104.5	8/15/96	-2.23	214.17
151200	105	8/15/96	-2.147	214.253
151920	105.5	8/16/96	-2.15	214.25
152640	106	8/16/96	-2.097	214.303
153360	106.5	8/17/96	-2.123	214.277
154080	107	8/17/96	-2.102	214.298
154800	107.5	8/18/96	-2.211	214.189
155520	108	8/18/96	-2.204	214.196
156240	108.5	8/19/96	-2.363	214.037
156960	109	8/19/96	-2.357	214.043
157680	109.5	8/20/96	-2.379	214.021

time (min)	time (days)	Date	Δ wl (feet)	wl (ft amsl)
158400	110	8/20/96	-2.304	214.096
159120	110.5	8/21/96	-2.217	214.183
159840	111	8/21/96	-2.339	214.061
160560	111.5	8/22/96	-2.451	213.949
161280	112	8/22/96	-2.381	214.019
162000	112.5	8/23/96	-2.394	214.006
162720	113	8/23/96	-2.28	214.12
163440	113.5	8/24/96	-2.294	214.106
164160	114	8/24/96	-2.335	214.065
164880	114.5	8/25/96	-2.418	213.982
165600	115	8/25/96	-2.455	213.945
166320	115.5	8/26/96	-2.538	213.862
167040	116	8/26/96	-2.483	213.917
167760	116.5	8/27/96	-2.619	213.781
168480	117	8/27/96	-2.693	213.707
169200	117.5	8/28/96	-2.723	213.677
169920	118	8/28/96	-2.649	213.751
170640	118.5	8/29/96	-2.571	213.829
171360	119	8/29/96	-2.481	213.919
172080	119.5	8/30/96	-2.664	213.736
172800	120	8/30/96	-2.63	213.77
173520	120.5	8/31/96	-2.712	213.688
174240	121	8/31/96	-2.64	213.76
174960	121.5	9/1/96	-2.664	213.736
175680	122	9/1/96	-2.603	213.797
176400	122.5	9/2/96	-2.632	213.768
177120	123	9/2/96	-2.673	213.727
177840	123.5	9/3/96	-2.728	213.672
178560	124	9/3/96	-2.763	213.637
179280	124.5	9/4/96	-2.85	213.55
180000	125	9/4/96	-2.828	213.572
180720	125.5	9/5/96	-2.931	213.469
181440	126	9/5/96	-2.904	213.496
182160	126.5	9/6/96	-2.946	213.454
182880	127	9/6/96	-2.839	213.561
183600	127.5	9/7/96	-2.874	213.526
184320	128	9/7/96	-2.828	213.572
185040	128.5	9/8/96	-2.817	213.583
185760	129	9/8/96	-2.874	213.526
186480	129.5	9/9/96	-2.819	213.581
187200	130	9/9/96	-2.819	213.581
187920	130.5	9/10/96	-2.878	213.522
188640	131	9/10/96	-2.839	213.561
189360	131.5	9/11/96	-2.976	213.424
190080	132	9/11/96	-2.961	213.439
190800	132.5	9/12/96	-3.013	213.387
191520	133	9/12/96	-2.92	213.48
192240	133.5	9/13/96	-2.845	213.555

time (min)	time (days)	Date	Δ wl (feet)	wl (ft amsl)
192960	134	9/13/96	-2.902	213.498
193680	134.5	9/14/96	-2.878	213.522
194400	135	9/14/96	-3.042	213.358
195120	135.5	9/15/96	-3.208	213.192
195840	136	9/15/96	-3.208	213.192
196560	136.5	9/16/96	-3.214	213.186
197280	137	9/16/96	-3.225	213.175
198000	137.5	9/17/96	-3.214	213.186
198720	138	9/17/96	-3.175	213.225
199440	138.5	9/18/96	-2.904	213.496
200160	139	9/18/96	-2.821	213.579
200880	139.5	9/19/96	-2.49	213.91
201600	140	9/19/96	-2.383	214.017
202320	140.5	9/20/96	-2.346	214.054
203040	141	9/20/96	-2.318	214.082
203760	141.5	9/21/96	-2.35	214.05
204480	142	9/21/96	-2.352	214.048
205200	142.5	9/22/96	-2.372	214.028
205920	143	9/22/96	-2.387	214.013
206640	143.5	9/23/96	-2.424	213.976
207360	144	9/23/96	-2.431	213.969
208080	144.5	9/24/96	-2.42	213.98
208800	145	9/24/96	-2.392	214.008
209520	145.5	9/25/96	-2.409	213.991
210240	146	9/25/96	-2.47	213.93
210960	146.5	9/26/96	-2.512	213.888
211680	147	9/26/96	-2.52	213.88
212400	147.5	9/27/96	-2.555	213.845
213120	148	9/27/96	-2.547	213.853
213840	148.5	9/28/96	-2.564	213.836
214560	149	9/28/96	-2.562	213.838
215280	149.5	9/29/96	-2.632	213.768
216000	150	9/29/96	-2.643	213.757
216720	150.5	9/30/96	-2.706	213.694
217440	151	9/30/96	-2.728	213.672
218160	151.5	10/1/96	-2.763	213.637
218880	152	10/1/96	-2.756	213.644
219600	152.5	10/2/96	-2.778	213.622
220320	153	10/2/96	-2.754	213.646
221040	153.5	10/3/96	-2.8	213.6
221760	154	10/3/96	-2.893	213.507
222480	154.5	10/4/96	-2.92	213.48
223200	155	10/4/96	-2.928	213.472
223920	155.5	10/5/96	-2.97	213.43
224640	156	10/5/96	-2.957	213.443
225360	156.5	10/6/96	-2.928	213.472
226080	157	10/6/96	-2.911	213.489
226800	157.5	10/7/96	-2.935	213.465

time (min)	time (days)	Date	Δ wl (feet)	wl (ft amsl)
227520	158	10/7/96	-2.948	213.452
228240	158.5	10/8/96	-2.968	213.432
228960	159	10/8/96	-2.939	213.461
229680	159.5	10/9/96	-2.874	213.526
230400	160	10/9/96	-2.931	213.469
231120	160.5	10/10/96	-2.773	213.627
231840	161	10/10/96	-2.695	213.705
232560	161.5	10/11/96	-2.719	213.681
233280	162	10/11/96	-2.701	213.699
234000	162.5	10/12/96	-2.677	213.723
234720	163	10/12/96	-2.636	213.764
235440	163.5	10/13/96	-2.649	213.751
236160	164	10/13/96	-2.614	213.786
236880	164.5	10/14/96	-2.603	213.797
237600	165	10/14/96	-2.691	213.709
238320	165.5	10/15/96	-2.749	213.651
239040	166	10/15/96	-2.76	213.64
239760	166.5	10/16/96	-2.758	213.642
240480	167	10/16/96	-2.787	213.613
241200	167.5	10/17/96	-2.843	213.557
241920	168	10/17/96	-2.887	213.513
242640	168.5	10/18/96	-2.913	213.487
243360	169	10/18/96	-2.913	213.487
244080	169.5	10/19/96	-2.926	213.474
244800	170	10/19/96	-2.948	213.452
245520	170.5	10/20/96	-2.946	213.454
246240	171	10/20/96	-2.51	213.89
246960	171.5	10/21/96	-1.386	215.014
247680	172	10/21/96	-0.716	215.684
248400	172.5	10/22/96	-0.646	215.754
249120	173	10/22/96	-0.624	215.776
249840	173.5	10/23/96	-0.622	215.778
250560	174	10/23/96	-0.607	215.793
251280	174.5	10/24/96	-0.62	215.78
252000	175	10/24/96	-0.664	215.736
252720	175.5	10/25/96	-0.696	215.704
253440	176	10/25/96	-0.729	215.671
254160	176.5	10/26/96	-0.757	215.643
254880	177	10/26/96	-0.753	215.647
255600	177.5	10/27/96	-0.755	215.645
256320	178	10/27/96	-0.729	215.671
257040	178.5	10/28/96	-0.698	215.702
257760	179	10/28/96	-0.76	215.64
258480	179.5	10/29/96	-0.784	215.616
259200	180	10/29/96	-0.797	215.603
259920	180.5	10/30/96	-0.744	215.656
260640	181	10/30/96	-0.716	215.684
261360	181.5	10/31/96	-0.766	215.634

time (min)	time (days)	Date	Δ wl (feet)	wl (ft amsl)
262080	182	10/31/96	-0.755	215.645
262800	182.5	11/1/96	-0.775	215.625
263520	183	11/1/96	-0.755	215.645
264240	183.5	11/2/96	-0.762	215.638
264960	184	11/2/96	-0.764	215.636
265680	184.5	11/3/96	-0.803	215.597
266400	185	11/3/96	-0.814	215.586
267120	185.5	11/4/96	-0.819	215.581
267840	186	11/4/96	-0.812	215.588
268560	186.5	11/5/96	-0.808	215.592
269280	187	11/5/96	-0.823	215.577
270000	187.5	11/6/96	-0.821	215.579
270720	188	11/6/96	-0.803	215.597
271440	188.5	11/7/96	-0.784	215.616
272160	189	11/7/96	-0.698	215.702
272880	189.5	11/8/96	-0.679	215.721
273600	190	11/8/96	-0.685	215.715
274320	190.5	11/9/96	-0.659	215.741
275040	191	11/9/96	-0.746	215.654
275760	191.5	11/10/96	-0.712	215.688
276480	192	11/10/96	-0.709	215.691
277200	192.5	11/11/96	-0.731	215.669
277920	193	11/11/96	-0.744	215.656
278640	193.5	11/12/96	-0.764	215.636
279360	194	11/12/96	-0.792	215.608
280080	194.5	11/13/96	-0.801	215.599
280800	195	11/13/96	-0.703	215.697
281520	195.5	11/14/96	-0.705	215.695
282240	196	11/14/96	-0.718	215.682
282960	196.5	11/15/96	-0.749	215.651
283680	197	11/15/96	-0.751	215.649
284400	197.5	11/16/96	-0.738	215.662
285120	198	11/16/96	-0.725	215.675
285840	198.5	11/17/96	-0.733	215.667
286560	199	11/17/96	-0.714	215.686
287280	199.5	11/18/96	-0.698	215.702
288000	200	11/18/96	-0.701	215.699
288720	200.5	11/19/96	-0.718	215.682
289440	201	11/19/96	-0.736	215.664
290160	201.5	11/20/96	-0.753	215.647
290880	202	11/20/96	-0.777	215.623
291600	202.5	11/21/96	-0.788	215.612
292320	203	11/21/96	-0.493	215.907
293040	203.5	11/22/96	-0.513	215.887
293760	204	11/22/96	-0.541	215.859
294480	204.5	11/23/96	-0.554	215.846
295200	205	11/23/96	-0.526	215.874
295920	205.5	11/24/96	-0.613	215.787

time (min)	time (days)	Date	Δ wl (feet)	wl (ft amsl)
296640	206	11/24/96	-0.6	215.8
297360	206.5	11/25/96	-0.605	215.795
298080	207	11/25/96	-0.605	215.795
298800	207.5	11/26/96	-0.539	215.861
299520	208	11/26/96	-0.504	215.896
300240	208.5	11/27/96	-0.491	215.909
300960	209	11/27/96	-0.45	215.95
301680	209.5	11/28/96	-0.38	216.02
302400	210	11/28/96	-0.338	216.062
303120	210.5	11/29/96	-0.362	216.038
303840	211	11/29/96	-0.389	216.011
304560	211.5	11/30/96	-0.41	215.99
305280	212	11/30/96	-0.41	215.99
306000	212.5	12/1/96	-0.404	215.996
306720	213	12/1/96	-0.393	216.007
307440	213.5	12/2/96	-0.336	216.064
308160	214	12/2/96	-0.408	215.992
308880	214.5	12/3/96	-0.301	216.099
309600	215	12/3/96	-0.207	216.193
310320	215.5	12/4/96	-0.179	216.221
311040	216	12/4/96	-0.201	216.199
311760	216.5	12/5/96	-0.223	216.177
312480	217	12/5/96	-0.212	216.188
313200	217.5	12/6/96	-0.183	216.217
313920	218	12/6/96	-0.264	216.136
314640	218.5	12/7/96	-0.314	216.086
315360	219	12/7/96	-0.29	216.11
316080	219.5	12/8/96	-0.231	216.169
316800	220	12/8/96	-0.369	216.031
317520	220.5	12/9/96	-0.378	216.022
318240	221	12/9/96	-0.41	215.99
318960	221.5	12/10/96	-0.447	215.953
319680	222	12/10/96	-0.539	215.861
320400	222.5	12/11/96	-0.565	215.835
321120	223	12/11/96	-0.611	215.789
321840	223.5	12/12/96	-0.637	215.763
322560	224	12/12/96	-0.659	215.741
323280	224.5	12/13/96	-0.629	215.771
324000	225	12/13/96	-0.605	215.795
324720	225.5	12/14/96	-0.602	215.798
325440	226	12/14/96	-0.62	215.78
326160	226.5	12/15/96	-0.568	215.832
326880	227	12/15/96	-0.493	215.907
327600	227.5	12/16/96	-0.391	216.009
328320	228	12/16/96	-0.338	216.062
329040	228.5	12/17/96	-0.258	216.142
329760	229	12/17/96	-0.172	216.228
330480	229.5	12/18/96	-0.055	216.345

time (min)	time (days)	Date	Δ wl (feet)	wl (ft amsl)
331200	230	12/18/96	0.068	216.468
331920	230.5	12/19/96	0.129	216.529
332640	231	12/19/96	0.238	216.638
333360	231.5	12/20/96	0.214	216.614
334080	232	12/20/96	0.251	216.651
334800	232.5	12/21/96	0.253	216.653
335520	233	12/21/96	0.266	216.666
336240	233.5	12/22/96	0.266	216.666
336960	234	12/22/96	0.24	216.64
337680	234.5	12/23/96	0.192	216.592
338400	235	12/23/96	0.179	216.579
339120	235.5	12/24/96	0.205	216.605
339840	236	12/24/96	0.231	216.631
340560	236.5	12/25/96	0.127	216.527
341280	237	12/25/96	0.09	216.49
342000	237.5	12/26/96	0.055	216.455
342720	238	12/26/96	0.142	216.542
343440	238.5	12/27/96	0.181	216.581
344160	239	12/27/96	0.116	216.516
344880	239.5	12/28/96	0.114	216.514
345600	240	12/28/96	0.14	216.54
346320	240.5	12/29/96	0.14	216.54
347040	241	12/29/96	0.155	216.555
347760	241.5	12/30/96	0.033	216.433
348480	242	12/30/96	-0.017	216.383
349200	242.5	12/31/96	0.033	216.433
349920	243	12/31/96	-0.024	216.376
350640	243.5	1/1/97	-0.028	216.372
351360	244	1/1/97	0.013	216.413
352080	244.5	1/2/97	0.085	216.485
352800	245	1/2/97	0.028	216.428
353520	245.5	1/3/97	0.065	216.465
354240	246	1/3/97	-0.041	216.359
354960	246.5	1/4/97	-0.074	216.326
355680	247	1/4/97	-0.068	216.332
356400	247.5	1/5/97	-0.02	216.38
357120	248	1/5/97	0.037	216.437
357840	248.5	1/6/97	-0.046	216.354
358560	249	1/6/97	-0.089	216.311
359280	249.5	1/7/97	-0.083	216.317
360000	250	1/7/97	-0.083	216.317
360720	250.5	1/8/97	-0.105	216.295
361440	251	1/8/97	-0.159	216.241
362160	251.5	1/9/97	-0.159	216.241
362880	252	1/9/97	-0.083	216.317
363600	252.5	1/10/97	0.013	216.413
364320	253	1/10/97	-0.153	216.247
365040	253.5	1/11/97	-0.122	216.278

time (min)	time (days)	Date	Δ wl (feet)	wl (ft amsl)
365760	254	1/11/97	-0.188	216.212
366480	254.5	1/12/97	-0.214	216.186
367200	255	1/12/97	-0.21	216.19
367920	255.5	1/13/97	-0.244	216.156
368640	256	1/13/97	-0.242	216.158
369360	256.5	1/14/97	-0.236	216.164
370080	257	1/14/97	-0.271	216.129
370800	257.5	1/15/97	-0.264	216.136
371520	258	1/15/97	-0.175	216.225
372240	258.5	1/16/97	-0.07	216.33
372960	259	1/16/97	-0.028	216.372
373680	259.5	1/17/97	-0.059	216.341
374400	260	1/17/97	-0.041	216.359
375120	260.5	1/18/97	-0.015	216.385
375840	261	1/18/97	-0.072	216.328
376560	261.5	1/19/97	-0.094	216.306
377280	262	1/19/97	-0.074	216.326
378000	262.5	1/20/97	-0.059	216.341
378720	263	1/20/97	-0.089	216.311
379440	263.5	1/21/97	-0.227	216.173
380160	264	1/21/97	-0.244	216.156
380880	264.5	1/22/97	-0.155	216.245

IN-SITU, INC
 WELL SENTINEL
 Serial # L3K00476

 Downloaded: 10/19/99 08:00
 Unit ID: G6M9313
 Test name : G6M9313
 Linearity : 0.07
 Scale Factor: 15.1
 Offset: -0.003
 Specific Gravity: 1
 Data Type : Level
 Units: English
 Mode: Surface
 Ref. Level: 214.6
 Ref. Taken: 01/22/97 14:21
 Test Begun: 01/22/97 18:00
 G6M9313X

Real Time		Reading
-----	-----	-----
1/22/97	18:00	214.589
1/23/97	6:00	214.55
1/23/97	18:00	214.308
1/24/97	6:00	214.281
1/24/97	18:00	214.425
1/25/97	6:00	214.646
1/25/97	18:00	214.563
1/26/97	6:00	214.406
1/26/97	18:00	214.345
1/27/97	6:00	214.362
1/27/97	18:00	214.463
1/28/97	6:00	214.731
1/28/97	18:00	214.471
1/29/97	6:00	214.425
1/29/97	18:00	214.412
1/30/97	6:00	214.439
1/30/97	18:00	214.545
1/31/97	6:00	214.589
1/31/97	18:00	214.596
2/1/97	6:00	214.572
2/1/97	18:00	214.432
2/2/97	6:00	214.342
2/2/97	18:00	214.34
2/3/97	6:00	214.347
2/3/97	18:00	214.279
2/4/97	6:00	214.22
2/4/97	18:00	214.31
2/5/97	6:00	214.48
2/5/97	18:00	214.421
2/6/97	6:00	214.358
2/6/97	18:00	214.358
2/7/97	6:00	214.353
2/7/97	18:00	214.347
2/8/97	6:00	214.327
2/8/97	18:00	214.371
2/9/97	6:00	214.386
2/9/97	18:00	214.373
2/10/97	6:00	214.345
2/10/97	18:00	214.327
2/11/97	6:00	214.292
2/11/97	18:00	214.277

G6M9313X

Real Time		Reading
2/12/97	6:00	214.284
2/12/97	18:00	214.301
2/13/97	6:00	214.083
2/13/97	18:00	214.118
2/14/97	6:00	214.181
2/14/97	18:00	214.388
2/15/97	6:00	214.242
2/15/97	18:00	214.144
2/16/97	6:00	214.046
2/16/97	18:00	214.063
2/17/97	6:00	214.052
2/17/97	18:00	214.037
2/18/97	6:00	214.124
2/18/97	18:00	214.168
2/19/97	6:00	214.131
2/19/97	18:00	214.17
2/20/97	6:00	213.934
2/20/97	18:00	214.009
2/21/97	6:00	214.164
2/21/97	18:00	214.249
2/22/97	6:00	214.253
2/22/97	18:00	214.116
2/23/97	6:00	213.993
2/23/97	18:00	214.044
2/24/97	6:00	214.087
2/24/97	18:00	214.133
2/25/97	6:00	214.063
2/25/97	18:00	214.109
2/26/97	6:00	214.135
2/26/97	18:00	214.131
2/27/97	6:00	214.164
2/27/97	18:00	214.179
2/28/97	6:00	213.926
2/28/97	18:00	213.906
3/1/97	6:00	213.945
3/1/97	18:00	214.098
3/2/97	6:00	214.196
3/2/97	18:00	213.993
3/3/97	6:00	213.882
3/3/97	18:00	213.932
3/4/97	6:00	213.967
3/4/97	18:00	213.974
3/5/97	6:00	213.919
3/5/97	18:00	213.987
3/6/97	6:00	214.225
3/6/97	18:00	213.902
3/7/97	6:00	213.876
3/7/97	18:00	213.867
3/8/97	6:00	213.954
3/8/97	18:00	213.963
3/9/97	6:00	213.843
3/9/97	18:00	213.985
3/10/97	6:00	214.126
3/10/97	18:00	214.022
3/11/97	6:00	214.002
3/11/97	18:00	213.958
3/12/97	6:00	213.86
3/12/97	18:00	213.882
3/13/97	6:00	213.81

G6M9313X

Real Time		Reading
3/13/97	18:00	213.843
3/14/97	6:00	213.865
3/14/97	18:00	214.017
3/15/97	6:00	213.952
3/15/97	18:00	213.775
3/16/97	6:00	213.78
3/16/97	18:00	213.784
3/17/97	6:00	213.784
3/17/97	18:00	213.932
3/18/97	6:00	213.773
3/18/97	18:00	213.751
3/19/97	6:00	213.756
3/19/97	18:00	213.865
3/20/97	6:00	213.841
3/20/97	18:00	213.828
3/21/97	6:00	213.742
3/21/97	18:00	213.797
3/22/97	6:00	213.86
3/22/97	18:00	213.684
3/23/97	6:00	213.675
3/23/97	18:00	213.692
3/24/97	6:00	213.666
3/24/97	18:00	213.673
3/25/97	6:00	213.679
3/25/97	18:00	213.823
3/26/97	6:00	213.921
3/26/97	18:00	213.821
3/27/97	6:00	213.869
3/27/97	18:00	213.945
3/28/97	6:00	213.913
3/28/97	18:00	214.011
3/29/97	6:00	214.044
3/29/97	18:00	214.092
3/30/97	6:00	214.026
3/30/97	18:00	213.989
3/31/97	6:00	214.046
3/31/97	18:00	214.111
4/1/97	6:00	214.048
4/1/97	18:00	214.017
4/2/97	6:00	214.052
4/2/97	18:00	214.094
4/3/97	6:00	214.12
4/3/97	18:00	214.207
4/4/97	6:00	214.231
4/4/97	18:00	214.196
4/5/97	6:00	214.22
4/5/97	18:00	214.367
4/6/97	6:00	214.415
4/6/97	18:00	214.511
4/7/97	6:00	214.506
4/7/97	18:00	214.478
4/8/97	6:00	214.425
4/8/97	18:00	214.454
4/9/97	6:00	214.449
4/9/97	18:00	214.436
4/10/97	6:00	214.393
4/10/97	18:00	214.393
4/11/97	6:00	214.36
4/11/97	18:00	214.419

G6M9313X

Real Time		Reading
4/12/97	6:00	214.371
4/12/97	18:00	214.454
4/13/97	6:00	214.487
4/13/97	18:00	214.454
4/14/97	6:00	214.347
4/14/97	18:00	214.325
4/15/97	6:00	214.308
4/15/97	18:00	214.382
4/16/97	6:00	214.36
4/16/97	18:00	214.436
4/17/97	6:00	214.423
4/17/97	18:00	214.443
4/18/97	6:00	214.482
4/18/97	18:00	214.473
4/19/97	6:00	214.484
4/19/97	18:00	214.528
4/20/97	6:00	214.607
4/20/97	18:00	214.7
4/21/97	6:00	214.735
4/21/97	18:00	214.775
4/22/97	6:00	214.807
4/22/97	18:00	214.827
4/23/97	6:00	214.829
4/23/97	18:00	214.849
4/24/97	6:00	214.875
4/24/97	18:00	214.844
4/25/97	6:00	214.801
4/25/97	18:00	214.818
4/26/97	6:00	214.805
4/26/97	18:00	214.829
4/27/97	6:00	214.794
4/27/97	18:00	214.855
4/28/97	6:00	214.892
4/28/97	18:00	214.951
4/29/97	6:00	214.871
4/29/97	18:00	214.862
4/30/97	6:00	214.849
4/30/97	18:00	214.921
5/1/97	6:00	214.925
5/1/97	18:00	214.999
5/2/97	6:00	214.853
5/2/97	18:00	214.823
5/3/97	6:00	214.831
5/3/97	18:00	215.067
5/4/97	6:00	214.919
5/4/97	18:00	214.875
5/5/97	6:00	214.847
5/5/97	18:00	214.951
5/6/97	6:00	214.991
5/6/97	18:00	214.951
5/7/97	6:00	214.916
5/7/97	18:00	214.906
5/8/97	6:00	214.89
5/8/97	18:00	214.927
5/9/97	6:00	214.951
5/9/97	18:00	215.002
5/10/97	6:00	214.975
5/10/97	18:00	214.914
5/11/97	6:00	214.897

G6M9313X

Real Time		Reading
5/11/97	18:00	214.916
5/12/97	6:00	214.884
5/12/97	18:00	214.927
5/13/97	6:00	214.868
5/13/97	18:00	214.906
5/14/97	6:00	214.84
5/14/97	18:00	214.851
5/15/97	6:00	214.868
5/15/97	18:00	214.899
5/16/97	6:00	214.921
5/16/97	18:00	214.801
5/17/97	6:00	214.781
5/17/97	18:00	214.825
5/18/97	6:00	214.742
5/18/97	18:00	214.779
5/19/97	6:00	214.81
5/19/97	18:00	214.772
5/20/97	6:00	214.816
5/20/97	18:00	214.818
5/21/97	6:00	214.84
5/21/97	18:00	214.849
5/22/97	6:00	214.844
5/22/97	18:00	214.818
5/23/97	6:00	214.768
5/23/97	18:00	214.777
5/24/97	6:00	214.748
5/24/97	18:00	214.858
5/25/97	6:00	214.84
5/25/97	18:00	214.844
5/26/97	6:00	214.768
5/26/97	18:00	214.683
5/27/97	6:00	214.593
5/27/97	18:00	214.639
5/28/97	6:00	214.62
5/28/97	18:00	214.659
5/29/97	6:00	214.596
5/29/97	18:00	214.609
5/30/97	6:00	214.589
5/30/97	18:00	214.626
5/31/97	6:00	214.596
5/31/97	18:00	214.617
6/1/97	6:00	214.567
6/1/97	18:00	214.541
6/2/97	6:00	214.513
6/2/97	18:00	214.467
6/3/97	6:00	214.449
6/3/97	18:00	214.452
6/4/97	6:00	214.452
6/4/97	18:00	214.436
6/5/97	6:00	214.391
6/5/97	18:00	214.373
6/6/97	6:00	214.329
6/6/97	18:00	214.332
6/7/97	6:00	214.316
6/7/97	18:00	214.334
6/8/97	6:00	214.297
6/8/97	18:00	214.275
6/9/97	6:00	214.251
6/9/97	18:00	214.281

G6M9313X

Real Time		Reading
6/10/97	6:00	214.246
6/10/97	18:00	214.253
6/11/97	6:00	214.209
6/11/97	18:00	214.207
6/12/97	6:00	214.19
6/12/97	18:00	214.185
6/13/97	6:00	214.15
6/13/97	18:00	214.131
6/14/97	6:00	214.07
6/14/97	18:00	214.022
6/15/97	6:00	213.967
6/15/97	18:00	214.017
6/16/97	6:00	213.969
6/16/97	18:00	214.011
6/17/97	6:00	213.985
6/17/97	18:00	213.948
6/18/97	6:00	213.915
6/18/97	18:00	213.967
6/19/97	6:00	213.937
6/19/97	18:00	213.9
6/20/97	6:00	213.86
6/20/97	18:00	213.889
6/21/97	6:00	213.889
6/21/97	18:00	213.9
6/22/97	6:00	213.867
6/22/97	18:00	213.821
6/23/97	6:00	213.753
6/23/97	18:00	213.736
6/24/97	6:00	213.729
6/24/97	18:00	213.74
6/25/97	6:00	213.736
6/25/97	18:00	213.782
6/26/97	6:00	213.675
6/26/97	18:00	213.673
6/27/97	6:00	213.59
6/27/97	18:00	213.581
6/28/97	6:00	213.553
6/28/97	18:00	213.579
6/29/97	6:00	213.533
6/29/97	18:00	213.553
6/30/97	6:00	213.507
6/30/97	18:00	213.531
7/1/97	6:00	213.502
7/1/97	18:00	213.505
7/2/97	6:00	213.468
7/2/97	18:00	213.424
7/3/97	6:00	213.426
7/3/97	18:00	213.433
7/4/97	6:00	213.406
7/4/97	18:00	213.365
7/5/97	6:00	213.324
7/5/97	18:00	213.321
7/6/97	6:00	213.291
7/6/97	18:00	213.297
7/7/97	6:00	213.273
7/7/97	18:00	213.278
7/8/97	6:00	213.238
7/8/97	18:00	213.265
7/9/97	6:00	213.256

G6M9313X

Real Time		Reading
7/9/97	18:00	213.214
7/10/97	6:00	213.195
7/10/97	18:00	213.199
7/11/97	6:00	213.199
7/11/97	18:00	213.219
7/12/97	6:00	213.19
7/12/97	18:00	213.208
7/13/97	6:00	213.182
7/13/97	18:00	213.177
7/14/97	6:00	213.153
7/14/97	18:00	213.134
7/15/97	6:00	213.099
7/15/97	18:00	213.081
7/16/97	6:00	213.081
7/16/97	18:00	213.101
7/17/97	6:00	213.066
7/17/97	18:00	213.079
7/18/97	6:00	213.047
7/18/97	18:00	213.047
7/19/97	6:00	212.996
7/19/97	18:00	212.946
7/20/97	6:00	212.944
7/20/97	18:00	212.935
7/21/97	6:00	212.924
7/21/97	18:00	212.905
7/22/97	6:00	212.9
7/22/97	18:00	212.876
7/23/97	6:00	212.841
7/23/97	18:00	212.835
7/24/97	6:00	212.824
7/24/97	18:00	212.844
7/25/97	6:00	212.835
7/25/97	18:00	212.828
7/26/97	6:00	212.8
7/26/97	18:00	212.791
7/27/97	6:00	212.767
7/27/97	18:00	212.767
7/28/97	6:00	212.739
7/28/97	18:00	212.73
7/29/97	6:00	212.676
7/29/97	18:00	212.639
7/30/97	6:00	212.621
7/30/97	18:00	212.63
7/31/97	6:00	212.61
7/31/97	18:00	212.61
8/1/97	6:00	212.588
8/1/97	18:00	212.602
8/2/97	6:00	212.582
8/2/97	18:00	212.58
8/3/97	6:00	212.538
8/3/97	18:00	212.527
8/4/97	6:00	212.506
8/4/97	18:00	212.512
8/5/97	6:00	212.501
8/5/97	18:00	212.471
8/6/97	6:00	212.453
8/6/97	18:00	212.444
8/7/97	6:00	212.423
8/7/97	18:00	212.436

G6M9313X

Real Time		Reading
8/8/97	6:00	212.407
8/8/97	18:00	212.423
8/9/97	6:00	212.392
8/9/97	18:00	212.383
8/10/97	6:00	212.364
8/10/97	18:00	212.37
8/11/97	6:00	212.342
8/11/97	18:00	212.349
8/12/97	6:00	212.303
8/12/97	18:00	212.311
8/13/97	6:00	212.318
8/13/97	18:00	212.342
8/14/97	6:00	212.283
8/14/97	18:00	212.281
8/15/97	6:00	212.263
8/15/97	18:00	212.29
8/16/97	6:00	212.281
8/16/97	18:00	212.263
8/17/97	6:00	212.239
8/17/97	18:00	212.229
8/18/97	6:00	212.205
8/18/97	18:00	212.187
8/19/97	6:00	212.172
8/19/97	18:00	212.167
8/20/97	6:00	212.161
8/20/97	18:00	212.15
8/21/97	6:00	212.15
8/21/97	18:00	212.183
8/22/97	6:00	212.135
8/22/97	18:00	212.148
8/23/97	6:00	212.137
8/23/97	18:00	212.122
8/24/97	6:00	212.098
8/24/97	18:00	212.093
8/25/97	6:00	212.08
8/25/97	18:00	212.08
8/26/97	6:00	212.078
8/26/97	18:00	212.08
8/27/97	6:00	212.074
8/27/97	18:00	212.078
8/28/97	6:00	212.069
8/28/97	18:00	212.067
8/29/97	6:00	212.037
8/29/97	18:00	212.019
8/30/97	6:00	211.997
8/30/97	18:00	212
8/31/97	6:00	211.969
8/31/97	18:00	211.969
9/1/97	6:00	211.954
9/1/97	18:00	211.945
9/2/97	6:00	211.941
9/2/97	18:00	211.971
9/3/97	6:00	211.952
9/3/97	18:00	211.906
9/4/97	6:00	211.908
9/4/97	18:00	211.888
9/5/97	6:00	211.88
9/5/97	18:00	211.867
9/6/97	6:00	211.853

G6M9313X

Real Time		Reading
9/6/97	18:00	211.862
9/7/97	6:00	211.843
9/7/97	18:00	211.829
9/8/97	6:00	211.808
9/8/97	18:00	211.792
9/9/97	6:00	211.788
9/9/97	18:00	211.773
9/10/97	6:00	211.751
9/10/97	18:00	211.749
9/11/97	6:00	211.736
9/11/97	18:00	211.734
9/12/97	6:00	211.725
9/12/97	18:00	211.714
9/13/97	6:00	211.699
9/13/97	18:00	211.694
9/14/97	6:00	211.666
9/14/97	18:00	211.666
9/15/97	6:00	211.655
9/15/97	18:00	211.653
9/16/97	6:00	211.627
9/16/97	18:00	211.611
9/17/97	6:00	211.592
9/17/97	18:00	211.609
9/18/97	6:00	211.581
9/18/97	18:00	211.568
9/19/97	6:00	211.548
9/19/97	18:00	211.563
9/20/97	6:00	211.572
9/20/97	18:00	211.509
9/21/97	6:00	211.481
9/21/97	18:00	211.472
9/22/97	6:00	211.465
9/22/97	18:00	211.489
9/23/97	6:00	211.478
9/23/97	18:00	211.463
9/24/97	6:00	211.413
9/24/97	18:00	211.444
9/25/97	6:00	211.45
9/25/97	18:00	211.441
9/26/97	6:00	211.402
9/26/97	18:00	211.369
9/27/97	6:00	211.35
9/27/97	18:00	211.352
9/28/97	6:00	211.343
9/28/97	18:00	211.367
9/29/97	6:00	211.461
9/29/97	18:00	211.33
9/30/97	6:00	211.334
9/30/97	18:00	211.304
10/1/97	6:00	211.258
10/1/97	18:00	211.23
10/2/97	6:00	211.234
10/2/97	18:00	211.234
10/3/97	6:00	211.221
10/3/97	18:00	211.217
10/4/97	6:00	211.197
10/4/97	18:00	211.201
10/5/97	6:00	211.208
10/5/97	18:00	211.184

G6M9313X

Real Time		Reading
10/6/97	6:00	211.188
10/6/97	18:00	211.162
10/7/97	6:00	211.132
10/7/97	18:00	211.116
10/8/97	6:00	211.101
10/8/97	18:00	211.103
10/9/97	6:00	211.088
10/9/97	18:00	211.106
10/10/97	6:00	211.11
10/10/97	18:00	211.077
10/11/97	6:00	211.044
10/11/97	18:00	211.047
10/12/97	6:00	211.036
10/12/97	18:00	211.034
10/13/97	6:00	211.018
10/13/97	18:00	211.016
10/14/97	6:00	211.007
10/14/97	18:00	210.999
10/15/97	6:00	210.986
10/15/97	18:00	210.975
10/16/97	6:00	210.964
10/16/97	18:00	210.957
10/17/97	6:00	210.942
10/17/97	18:00	210.933
10/18/97	6:00	210.918
10/18/97	18:00	210.918
10/19/97	6:00	210.903
10/19/97	18:00	210.918
10/20/97	6:00	210.905
10/20/97	18:00	210.877
10/21/97	6:00	210.855
10/21/97	18:00	210.861
10/22/97	6:00	210.855
10/22/97	18:00	210.807
10/23/97	6:00	210.807
10/23/97	18:00	210.811
10/24/97	6:00	210.779
10/24/97	18:00	210.768
10/25/97	6:00	210.779
10/25/97	18:00	210.761
10/26/97	6:00	210.717
10/26/97	18:00	210.735
10/27/97	6:00	210.816
10/27/97	18:00	210.755
10/28/97	6:00	210.728
10/28/97	18:00	210.68
10/29/97	6:00	210.685
10/29/97	18:00	210.683
10/30/97	6:00	210.667
10/30/97	18:00	210.656
10/31/97	6:00	210.654
10/31/97	18:00	210.652
11/1/97	6:00	210.667
11/1/97	18:00	210.733
11/2/97	6:00	210.667
11/2/97	18:00	210.709
11/3/97	6:00	210.622
11/3/97	18:00	210.652
11/4/97	6:00	210.683

G6M9313X

Real Time		Reading
11/4/97	18:00	210.715
11/5/97	6:00	210.65
11/5/97	18:00	210.678
11/6/97	6:00	210.698
11/6/97	18:00	210.722
11/7/97	6:00	210.741
11/7/97	18:00	210.741
11/8/97	6:00	210.746
11/8/97	18:00	210.748
11/9/97	6:00	210.757
11/9/97	18:00	210.755
11/10/97	6:00	210.713
11/10/97	18:00	210.709
11/11/97	6:00	210.726
11/11/97	18:00	210.728
11/12/97	6:00	210.757
11/12/97	18:00	210.757
11/13/97	6:00	210.739
11/13/97	18:00	210.757
11/14/97	6:00	210.818
11/14/97	18:00	210.84
11/15/97	6:00	210.792
11/15/97	18:00	210.77
11/16/97	6:00	210.796
11/16/97	18:00	210.755
11/17/97	6:00	210.741
11/17/97	18:00	210.72
11/18/97	6:00	210.709
11/18/97	18:00	210.726
11/19/97	6:00	210.739
11/19/97	18:00	210.741
11/20/97	6:00	210.737
11/20/97	18:00	210.683
11/21/97	6:00	210.693
11/21/97	18:00	210.698
11/22/97	6:00	210.717
11/22/97	18:00	210.674
11/23/97	6:00	210.68
11/23/97	18:00	210.711
11/24/97	6:00	210.739
11/24/97	18:00	210.689
11/25/97	6:00	210.683
11/25/97	18:00	210.761
11/26/97	6:00	210.757
11/26/97	18:00	210.796
11/27/97	6:00	210.744
11/27/97	18:00	210.65
11/28/97	6:00	210.704
11/28/97	18:00	210.763
11/29/97	6:00	210.691
11/29/97	18:00	210.702
11/30/97	6:00	210.739
11/30/97	18:00	210.768
12/1/97	6:00	210.774
12/1/97	18:00	210.735
12/2/97	6:00	210.724
12/2/97	18:00	210.702
12/3/97	6:00	210.713
12/3/97	18:00	210.746

G6M9313X

Real Time		Reading
12/4/97	6:00	210.8
12/4/97	18:00	210.794
12/5/97	6:00	210.802
12/5/97	18:00	210.798
12/6/97	6:00	210.792
12/6/97	18:00	210.781
12/7/97	6:00	210.776
12/7/97	18:00	210.77
12/8/97	6:00	210.737
12/8/97	18:00	210.731
12/9/97	6:00	210.741
12/9/97	18:00	210.765
12/10/97	6:00	210.783
12/10/97	18:00	210.779
12/11/97	6:00	210.728
12/11/97	18:00	210.728
12/12/97	6:00	210.759
12/12/97	18:00	210.774
12/13/97	6:00	210.772
12/13/97	18:00	210.77
12/14/97	6:00	210.774
12/14/97	18:00	210.687
12/15/97	6:00	210.685
12/15/97	18:00	210.711
12/16/97	6:00	210.702
12/16/97	18:00	210.735
12/17/97	6:00	210.735
12/17/97	18:00	210.698
12/18/97	6:00	210.683
12/18/97	18:00	210.683
12/19/97	6:00	210.707
12/19/97	18:00	210.68
12/20/97	6:00	210.674
12/20/97	18:00	210.661
12/21/97	6:00	210.622
12/21/97	18:00	210.617
12/22/97	6:00	210.619
12/22/97	18:00	210.641
12/23/97	6:00	210.678
12/23/97	18:00	210.656
12/24/97	6:00	210.608
12/24/97	18:00	210.608
12/25/97	6:00	210.678
12/25/97	18:00	210.65
12/26/97	6:00	210.628
12/26/97	18:00	210.6
12/27/97	6:00	210.619
12/27/97	18:00	210.654
12/28/97	6:00	210.6
12/28/97	18:00	210.569
12/29/97	6:00	210.58
12/29/97	18:00	210.656
12/30/97	6:00	210.75
12/30/97	18:00	210.602
12/31/97	6:00	210.563
12/31/97	18:00	210.539
1/1/98	6:00	210.563
1/1/98	18:00	210.652
1/2/98	6:00	210.654

G6M9313X

Real Time		Reading
1/2/98	18:00	210.65
1/3/98	6:00	210.678
1/3/98	18:00	210.68
1/4/98	6:00	210.65
1/4/98	18:00	210.6
1/5/98	6:00	210.678
1/5/98	18:00	210.707
1/6/98	6:00	210.744
1/6/98	18:00	210.731
1/7/98	6:00	210.741
1/7/98	18:00	210.785
1/8/98	6:00	210.859
1/8/98	18:00	210.914
1/9/98	6:00	210.94
1/9/98	18:00	211.031
1/10/98	6:00	211.023
1/10/98	18:00	211.088
1/11/98	6:00	211.14
1/11/98	18:00	211.162
1/12/98	6:00	211.162
1/12/98	18:00	211.208
1/13/98	6:00	211.282
1/13/98	18:00	211.289
1/14/98	6:00	211.243
1/14/98	18:00	211.263
1/15/98	6:00	211.3
1/15/98	18:00	211.341
1/16/98	6:00	211.372
1/16/98	18:00	211.372
1/17/98	6:00	211.354
1/17/98	18:00	211.339
1/18/98	6:00	211.35
1/18/98	18:00	211.348
1/19/98	6:00	211.365
1/19/98	18:00	211.372
1/20/98	6:00	211.389
1/20/98	18:00	211.378
1/21/98	6:00	211.361
1/21/98	18:00	211.35
1/22/98	6:00	211.337
1/22/98	18:00	211.339
1/23/98	6:00	211.354
1/23/98	18:00	211.435
1/24/98	6:00	211.465
1/24/98	18:00	211.472
1/25/98	6:00	211.498
1/25/98	18:00	211.457
1/26/98	6:00	211.494
1/26/98	18:00	211.522
1/27/98	6:00	211.577
1/27/98	18:00	211.635
1/28/98	6:00	211.679
1/28/98	18:00	211.72
1/29/98	6:00	211.734
1/29/98	18:00	211.731
1/30/98	6:00	211.738
1/30/98	18:00	211.751
1/31/98	6:00	211.744
1/31/98	18:00	211.729

G6M9313X

Real Time		Reading
2/1/98	6:00	211.723
2/1/98	18:00	211.738
2/2/98	6:00	211.758
2/2/98	18:00	211.766
2/3/98	6:00	211.781
2/3/98	18:00	211.764
2/4/98	6:00	211.777
2/4/98	18:00	211.786
2/5/98	6:00	211.821
2/5/98	18:00	211.81
2/6/98	6:00	211.808
2/6/98	18:00	211.792
2/7/98	6:00	211.786
2/7/98	18:00	211.797
2/8/98	6:00	211.801
2/8/98	18:00	211.803
2/9/98	6:00	211.801
2/9/98	18:00	211.801
2/10/98	6:00	211.784
2/10/98	18:00	211.801
2/11/98	6:00	211.823
2/11/98	18:00	211.845
2/12/98	6:00	211.93
2/12/98	18:00	211.891
2/13/98	6:00	211.834
2/13/98	18:00	211.86
2/14/98	6:00	211.899
2/14/98	18:00	211.899
2/15/98	6:00	211.908
2/15/98	18:00	211.934
2/16/98	6:00	211.943
2/16/98	18:00	211.962
2/17/98	6:00	212.006
2/17/98	18:00	212.03
2/18/98	6:00	212.082
2/18/98	18:00	212.089
2/19/98	6:00	212.109
2/19/98	18:00	212.113
2/20/98	6:00	212.135
2/20/98	18:00	212.178
2/21/98	6:00	212.194
2/21/98	18:00	212.189
2/22/98	6:00	212.196
2/22/98	18:00	212.213
2/23/98	6:00	212.242
2/23/98	18:00	212.281
2/24/98	6:00	212.349
2/24/98	18:00	212.373
2/25/98	6:00	212.37
2/25/98	18:00	212.366
2/26/98	6:00	212.401
2/26/98	18:00	212.427
2/27/98	6:00	212.471
2/27/98	18:00	212.497
2/28/98	6:00	212.521
2/28/98	18:00	212.554
3/1/98	6:00	212.597
3/1/98	18:00	212.628
3/2/98	6:00	212.643

G6M9313X

Real Time		Reading
3/2/98	18:00	212.678
3/3/98	6:00	212.704
3/3/98	18:00	212.711
3/4/98	6:00	212.693
3/4/98	18:00	212.711
3/5/98	6:00	212.728
3/5/98	18:00	212.739
3/6/98	6:00	212.735
3/6/98	18:00	212.756
3/7/98	6:00	212.783
3/7/98	18:00	212.802
3/8/98	6:00	212.789
3/8/98	18:00	212.833
3/9/98	6:00	212.9
3/9/98	18:00	212.981
3/10/98	6:00	213.016
3/10/98	18:00	213.018
3/11/98	6:00	213.09
3/11/98	18:00	213.147
3/12/98	6:00	213.228
3/12/98	18:00	213.254
3/13/98	6:00	213.295
3/13/98	18:00	213.372
3/14/98	6:00	213.446
3/14/98	18:00	213.498
3/15/98	6:00	213.468
3/15/98	18:00	213.472
3/16/98	6:00	213.494
3/16/98	18:00	213.529
3/17/98	6:00	213.557
3/17/98	18:00	213.603
3/18/98	6:00	213.631
3/18/98	18:00	213.668
3/19/98	6:00	213.688
3/19/98	18:00	213.734
3/20/98	6:00	213.753
3/20/98	18:00	213.766
3/21/98	6:00	213.814
3/21/98	18:00	213.867
3/22/98	6:00	213.917
3/22/98	18:00	213.856
3/23/98	6:00	213.852
3/23/98	18:00	213.871
3/24/98	6:00	213.897
3/24/98	18:00	213.902
3/25/98	6:00	213.889
3/25/98	18:00	213.976
3/26/98	6:00	214.004
3/26/98	18:00	214.089
3/27/98	6:00	214.081
3/27/98	18:00	214.072
3/28/98	6:00	214.074
3/28/98	18:00	214.135
3/29/98	6:00	214.107
3/29/98	18:00	214.087
3/30/98	6:00	214.102
3/30/98	18:00	214.161
3/31/98	6:00	214.14
3/31/98	18:00	214.168

G6M9313X

Real Time		Reading
4/1/98	6:00	214.102
4/1/98	18:00	214.212
4/2/98	6:00	214.203
4/2/98	18:00	214.207
4/3/98	6:00	214.222
4/3/98	18:00	214.231
4/4/98	6:00	214.242
4/4/98	18:00	214.27
4/5/98	6:00	214.279
4/5/98	18:00	214.27
4/6/98	6:00	214.279
4/6/98	18:00	214.281
4/7/98	6:00	214.26
4/7/98	18:00	214.279
4/8/98	6:00	214.268
4/8/98	18:00	214.303
4/9/98	6:00	214.318
4/9/98	18:00	214.382
4/10/98	6:00	214.327
4/10/98	18:00	214.288
4/11/98	6:00	214.249
4/11/98	18:00	214.281
4/12/98	6:00	214.249
4/12/98	18:00	214.305
4/13/98	6:00	214.321
4/13/98	18:00	214.377
4/14/98	6:00	214.338
4/14/98	18:00	214.375
4/15/98	6:00	214.349
4/15/98	18:00	214.334
4/16/98	6:00	214.301
4/16/98	18:00	214.351
4/17/98	6:00	214.367
4/17/98	18:00	214.351
4/18/98	6:00	214.281
4/18/98	18:00	214.288
4/19/98	6:00	214.312
4/19/98	18:00	214.38
4/20/98	6:00	214.395
4/20/98	18:00	214.314
4/21/98	6:00	214.325
4/21/98	18:00	214.367
4/22/98	6:00	214.347
4/22/98	18:00	214.395
4/23/98	6:00	214.384
4/23/98	18:00	214.454
4/24/98	6:00	214.415
4/24/98	18:00	214.419
4/25/98	6:00	214.434
4/25/98	18:00	214.401
4/26/98	6:00	214.393
4/26/98	18:00	214.458
4/27/98	6:00	214.415
4/27/98	18:00	214.399
4/28/98	6:00	214.401
4/28/98	18:00	214.434
4/29/98	6:00	214.412
4/29/98	18:00	214.467
4/30/98	6:00	214.434

G6M9313X

Real Time		Reading
4/30/98	18:00	214.452
5/1/98	6:00	214.41
5/1/98	18:00	214.425
5/2/98	6:00	214.482
5/2/98	18:00	214.423
5/3/98	6:00	214.393
5/3/98	18:00	214.386
5/4/98	6:00	214.345
5/4/98	18:00	214.364
5/5/98	6:00	214.34
5/5/98	18:00	214.358
5/6/98	6:00	214.351
5/6/98	18:00	214.377
5/7/98	6:00	214.41
5/7/98	18:00	214.458
5/8/98	6:00	214.458
5/8/98	18:00	214.469
5/9/98	6:00	214.443
5/9/98	18:00	214.439
5/10/98	6:00	214.454
5/10/98	18:00	214.473
5/11/98	6:00	214.5
5/11/98	18:00	214.497
5/12/98	6:00	214.526
5/12/98	18:00	214.576
5/13/98	6:00	214.604
5/13/98	18:00	214.648
5/14/98	6:00	214.657
5/14/98	18:00	214.692
5/15/98	6:00	214.685
5/15/98	18:00	214.703
5/16/98	6:00	214.659
5/16/98	18:00	214.663
5/17/98	6:00	214.663
5/17/98	18:00	214.696
5/18/98	6:00	214.665
5/18/98	18:00	214.668
5/19/98	6:00	214.646
5/19/98	18:00	214.624
5/20/98	6:00	214.607
5/20/98	18:00	214.622
5/21/98	6:00	214.609
5/21/98	18:00	214.552
5/22/98	6:00	214.539
5/22/98	18:00	214.495
5/23/98	6:00	214.491
5/23/98	18:00	214.5
5/24/98	6:00	214.46
5/24/98	18:00	214.469
5/25/98	6:00	214.467
5/25/98	18:00	214.471
5/26/98	6:00	214.456
5/26/98	18:00	214.399
5/27/98	6:00	214.351
5/27/98	18:00	214.412
5/28/98	6:00	214.377
5/28/98	18:00	214.397
5/29/98	6:00	214.386
5/29/98	18:00	214.369

G6M9313X

Real Time		Reading
5/30/98	6:00	214.334
5/30/98	18:00	214.325
5/31/98	6:00	214.312
5/31/98	18:00	214.432
6/1/98	6:00	214.417
6/1/98	18:00	214.404
6/2/98	6:00	214.428
6/2/98	18:00	214.565
6/3/98	6:00	214.561
6/3/98	18:00	214.524
6/4/98	6:00	214.537
6/4/98	18:00	214.565
6/5/98	6:00	214.563
6/5/98	18:00	214.528
6/6/98	6:00	214.487
6/6/98	18:00	214.447
6/7/98	6:00	214.454
6/7/98	18:00	214.445
6/8/98	6:00	214.434
6/8/98	18:00	214.382
6/9/98	6:00	214.38
6/9/98	18:00	214.434
6/10/98	6:00	214.41
6/10/98	18:00	214.415
6/11/98	6:00	214.367
6/11/98	18:00	214.38
6/12/98	6:00	214.364
6/12/98	18:00	214.393
6/13/98	6:00	214.423
6/13/98	18:00	214.585
6/14/98	6:00	214.908
6/14/98	18:00	215.172
6/15/98	6:00	215.215
6/15/98	18:00	215.268
6/16/98	6:00	215.32
6/16/98	18:00	215.32
6/17/98	6:00	215.34
6/17/98	18:00	215.379
6/18/98	6:00	215.39
6/18/98	18:00	215.39
6/19/98	6:00	215.403
6/19/98	18:00	215.432
6/20/98	6:00	215.421
6/20/98	18:00	215.421
6/21/98	6:00	215.394
6/21/98	18:00	215.412
6/22/98	6:00	215.418
6/22/98	18:00	215.466
6/23/98	6:00	215.458
6/23/98	18:00	215.486
6/24/98	6:00	215.46
6/24/98	18:00	215.477
6/25/98	6:00	215.469
6/25/98	18:00	215.512
6/26/98	6:00	215.517
6/26/98	18:00	215.536
6/27/98	6:00	215.536
6/27/98	18:00	215.408
6/28/98	6:00	215.436

G6M9313X

Real Time		Reading
6/28/98	18:00	215.475
6/29/98	6:00	215.499
6/29/98	18:00	215.549
6/30/98	6:00	215.53
6/30/98	18:00	215.569
7/1/98	6:00	215.547
7/1/98	18:00	215.504
7/2/98	6:00	215.506
7/2/98	18:00	215.549
7/3/98	6:00	215.558
7/3/98	18:00	215.582
7/4/98	6:00	215.573
7/4/98	18:00	215.589
7/5/98	6:00	215.523
7/5/98	18:00	215.471
7/6/98	6:00	215.438
7/6/98	18:00	215.456
7/7/98	6:00	215.436
7/7/98	18:00	215.429
7/8/98	6:00	215.429
7/8/98	18:00	215.432
7/9/98	6:00	215.418
7/9/98	18:00	215.397
7/10/98	6:00	215.377
7/10/98	18:00	215.322
7/11/98	6:00	215.327
7/11/98	18:00	215.277
7/12/98	6:00	215.25
7/12/98	18:00	215.246
7/13/98	6:00	215.224
7/13/98	18:00	215.248
7/14/98	6:00	215.207
7/14/98	18:00	215.205
7/15/98	6:00	215.183
7/15/98	18:00	215.187
7/16/98	6:00	215.174
7/16/98	18:00	215.183
7/17/98	6:00	215.159
7/17/98	18:00	215.163
7/18/98	6:00	215.08
7/18/98	18:00	215.047
7/19/98	6:00	215.012
7/19/98	18:00	215.058
7/20/98	6:00	215.058
7/20/98	18:00	215.028
7/21/98	6:00	214.954
7/21/98	18:00	215.004
7/22/98	6:00	215.004
7/22/98	18:00	214.947
7/23/98	6:00	214.923
7/23/98	18:00	214.938
7/24/98	6:00	214.86
7/24/98	18:00	214.814
7/25/98	6:00	214.786
7/25/98	18:00	214.792
7/26/98	6:00	214.772
7/26/98	18:00	214.772
7/27/98	6:00	214.735
7/27/98	18:00	214.757

G6M9313X

Real Time		Reading
7/28/98	6:00	214.729
7/28/98	18:00	214.713
7/29/98	6:00	214.694
7/29/98	18:00	214.639
7/30/98	6:00	214.587
7/30/98	18:00	214.598
7/31/98	6:00	214.567
7/31/98	18:00	214.569
8/1/98	6:00	214.495
8/1/98	18:00	214.515
8/2/98	6:00	214.493
8/2/98	18:00	214.517
8/3/98	6:00	214.476
8/3/98	18:00	214.46
8/4/98	6:00	214.397
8/4/98	18:00	214.404
8/5/98	6:00	214.377
8/5/98	18:00	214.362
8/6/98	6:00	214.334
8/6/98	18:00	214.318
8/7/98	6:00	214.288
8/7/98	18:00	214.275
8/8/98	6:00	214.24
8/8/98	18:00	214.257
8/9/98	6:00	214.222
8/9/98	18:00	214.264
8/10/98	6:00	214.229
8/10/98	18:00	214.236
8/11/98	6:00	214.209
8/11/98	18:00	214.155
8/12/98	6:00	214.089
8/12/98	18:00	214.048
8/13/98	6:00	214.046
8/13/98	18:00	214.072
8/14/98	6:00	214.039
8/14/98	18:00	214.039
8/15/98	6:00	214.015
8/15/98	18:00	213.996
8/16/98	6:00	213.95
8/16/98	18:00	213.939
8/17/98	6:00	213.928
8/17/98	18:00	213.961
8/18/98	6:00	213.924
8/18/98	18:00	213.865
8/19/98	6:00	213.823
8/19/98	18:00	213.819
8/20/98	6:00	213.79
8/20/98	18:00	213.812
8/21/98	6:00	213.784
8/21/98	18:00	213.771
8/22/98	6:00	213.753
8/22/98	18:00	213.749
8/23/98	6:00	213.721
8/23/98	18:00	213.747
8/24/98	6:00	213.699
8/24/98	18:00	213.69
8/25/98	6:00	213.633
8/25/98	18:00	213.651
8/26/98	6:00	213.564

G6M9313X

Real Time		Reading
8/26/98	18:00	213.59
8/27/98	6:00	213.54
8/27/98	18:00	213.544
8/28/98	6:00	213.522
8/28/98	18:00	213.531
8/29/98	6:00	213.533
8/29/98	18:00	213.481
8/30/98	6:00	213.457
8/30/98	18:00	213.444
8/31/98	6:00	213.424
8/31/98	18:00	213.417
9/1/98	6:00	213.378
9/1/98	18:00	213.387
9/2/98	6:00	213.372
9/2/98	18:00	213.352
9/3/98	6:00	213.302
9/3/98	18:00	213.304
9/4/98	6:00	213.278
9/4/98	18:00	213.273
9/5/98	6:00	213.223
9/5/98	18:00	213.221
9/6/98	6:00	213.221
9/6/98	18:00	213.225
9/7/98	6:00	213.204
9/7/98	18:00	213.208
9/8/98	6:00	213.171
9/8/98	18:00	213.125
9/9/98	6:00	213.105
9/9/98	18:00	213.075
9/10/98	6:00	213.04
9/10/98	18:00	213.036
9/11/98	6:00	213.023
9/11/98	18:00	213.051
9/12/98	6:00	213.04
9/12/98	18:00	212.996
9/13/98	6:00	212.942
9/13/98	18:00	212.927
9/14/98	6:00	212.918
9/14/98	18:00	212.913
9/15/98	6:00	212.896
9/15/98	18:00	212.892
9/16/98	6:00	212.859
9/16/98	18:00	212.837
9/17/98	6:00	212.833
9/17/98	18:00	212.817
9/18/98	6:00	212.767
9/18/98	18:00	212.787
9/19/98	6:00	212.767
9/19/98	18:00	212.763
9/20/98	6:00	212.73
9/20/98	18:00	212.724
9/21/98	6:00	212.7
9/21/98	18:00	212.693
9/22/98	6:00	212.68
9/22/98	18:00	212.682
9/23/98	6:00	212.652
9/23/98	18:00	212.671
9/24/98	6:00	212.678
9/24/98	18:00	212.715

G6M9313X

Real Time		Reading
9/25/98	6:00	212.721
9/25/98	18:00	212.728
9/26/98	6:00	212.711
9/26/98	18:00	212.704
9/27/98	6:00	212.715
9/27/98	18:00	212.715
9/28/98	6:00	212.634
9/28/98	18:00	212.591
9/29/98	6:00	212.564
9/29/98	18:00	212.593
9/30/98	6:00	212.58
9/30/98	18:00	212.571
10/1/98	6:00	212.615
10/1/98	18:00	212.475
10/2/98	6:00	212.492
10/2/98	18:00	212.475
10/3/98	6:00	212.447
10/3/98	18:00	212.444
10/4/98	6:00	212.418
10/4/98	18:00	212.416
10/5/98	6:00	212.396
10/5/98	18:00	212.364
10/6/98	6:00	212.344
10/6/98	18:00	212.353
10/7/98	6:00	212.344
10/7/98	18:00	212.357
10/8/98	6:00	212.357
10/8/98	18:00	212.32
10/9/98	6:00	212.298
10/9/98	18:00	212.307
10/10/98	6:00	212.342
10/10/98	18:00	212.346
10/11/98	6:00	212.322
10/11/98	18:00	212.322
10/12/98	6:00	212.338
10/12/98	18:00	212.37
10/13/98	6:00	212.407
10/13/98	18:00	212.434
10/14/98	6:00	212.436
10/14/98	18:00	212.558
10/15/98	6:00	212.532
10/15/98	18:00	212.492
10/16/98	6:00	212.479
10/16/98	18:00	212.495
10/17/98	6:00	212.479
10/17/98	18:00	212.516
10/18/98	6:00	212.525
10/18/98	18:00	212.532
10/19/98	6:00	212.497
10/19/98	18:00	212.431
10/20/98	6:00	212.449
10/20/98	18:00	212.425
10/21/98	6:00	212.41
10/21/98	18:00	212.386
10/22/98	6:00	212.37
10/22/98	18:00	212.335
10/23/98	6:00	212.338
10/23/98	18:00	212.349
10/24/98	6:00	212.318

G6M9313X

Real Time		Reading
10/24/98	18:00	212.327
10/25/98	6:00	212.296
10/25/98	18:00	212.272
10/26/98	6:00	212.239
10/26/98	18:00	212.237
10/27/98	6:00	212.242
10/27/98	18:00	212.255
10/28/98	6:00	212.277
10/28/98	18:00	212.274
10/29/98	6:00	212.213
10/29/98	18:00	212.181
10/30/98	6:00	212.191
10/30/98	18:00	212.167
10/31/98	6:00	212.137
10/31/98	18:00	212.113
11/1/98	6:00	212.124
11/1/98	18:00	212.113
11/2/98	6:00	212.115
11/2/98	18:00	212.089
11/3/98	6:00	212.072
11/3/98	18:00	212.063
11/4/98	6:00	212.054
11/4/98	18:00	212.034
11/5/98	6:00	212.026
11/5/98	18:00	212.002
11/6/98	6:00	212.008
11/6/98	18:00	211.973
11/7/98	6:00	211.967
11/7/98	18:00	211.945
11/8/98	6:00	211.939
11/8/98	18:00	211.936
11/9/98	6:00	211.915
11/9/98	18:00	211.897
11/10/98	6:00	211.871
11/10/98	18:00	211.899
11/11/98	6:00	211.986
11/11/98	18:00	211.851
11/12/98	6:00	211.829
11/12/98	18:00	211.836
11/13/98	6:00	211.834
11/13/98	18:00	211.81
11/14/98	6:00	211.816
11/14/98	18:00	211.834
11/15/98	6:00	211.849
11/15/98	18:00	211.76
11/16/98	6:00	211.734
11/16/98	18:00	211.74
11/17/98	6:00	211.74
11/17/98	18:00	211.699
11/18/98	6:00	211.677
11/18/98	18:00	211.666
11/19/98	6:00	211.668
11/19/98	18:00	211.699
11/20/98	6:00	211.683
11/20/98	18:00	211.672
11/21/98	6:00	211.638
11/21/98	18:00	211.594
11/22/98	6:00	211.566
11/22/98	18:00	211.592

G6M9313X

Real Time		Reading
11/23/98	6:00	211.609
11/23/98	18:00	211.659
11/24/98	6:00	211.574
11/24/98	18:00	211.544
11/25/98	6:00	211.526
11/25/98	18:00	211.531
11/26/98	6:00	211.561
11/26/98	18:00	211.633
11/27/98	6:00	211.511
11/27/98	18:00	211.485
11/28/98	6:00	211.491
11/28/98	18:00	211.476
11/29/98	6:00	211.472
11/29/98	18:00	211.463
11/30/98	6:00	211.498
11/30/98	18:00	211.557
12/1/98	6:00	211.526
12/1/98	18:00	211.435
12/2/98	6:00	211.465
12/2/98	18:00	211.491
12/3/98	6:00	211.45
12/3/98	18:00	211.463
12/4/98	6:00	211.448
12/4/98	18:00	211.413
12/5/98	6:00	211.396
12/5/98	18:00	211.413
12/6/98	6:00	211.433
12/6/98	18:00	211.402
12/7/98	6:00	211.43
12/7/98	18:00	211.334
12/8/98	6:00	211.328
12/8/98	18:00	211.389
12/9/98	6:00	211.334
12/9/98	18:00	211.313
12/10/98	6:00	211.319
12/10/98	18:00	211.339
12/11/98	6:00	211.319
12/11/98	18:00	211.278
12/12/98	6:00	211.282
12/12/98	18:00	211.304
12/13/98	6:00	211.282
12/13/98	18:00	211.284
12/14/98	6:00	211.243
12/14/98	18:00	211.225
12/15/98	6:00	211.243
12/15/98	18:00	211.245
12/16/98	6:00	211.221
12/16/98	18:00	211.243
12/17/98	6:00	211.225
12/17/98	18:00	211.221
12/18/98	6:00	211.164
12/18/98	18:00	211.116
12/19/98	6:00	211.149
12/19/98	18:00	211.147
12/20/98	6:00	211.112
12/20/98	18:00	211.099
12/21/98	6:00	211.103
12/21/98	18:00	211.149
12/22/98	6:00	211.221

G6M9313X

Real Time		Reading
12/22/98	18:00	211.038
12/23/98	6:00	211.034
12/23/98	18:00	211.071
12/24/98	6:00	211.084
12/24/98	18:00	211.049
12/25/98	6:00	211.025
12/25/98	18:00	211.018
12/26/98	6:00	211.025
12/26/98	18:00	211.055
12/27/98	6:00	210.975
12/27/98	18:00	210.994
12/28/98	6:00	211.003
12/28/98	18:00	210.99
12/29/98	6:00	210.983
12/29/98	18:00	211.023
12/30/98	6:00	211.018
12/30/98	18:00	210.916
12/31/98	6:00	210.907
12/31/98	18:00	210.922
1/1/99	6:00	210.925
1/1/99	18:00	210.842
1/2/99	6:00	210.859
1/2/99	18:00	210.885
1/3/99	6:00	210.903
1/3/99	18:00	211.005
1/4/99	6:00	210.857
1/4/99	18:00	210.837
1/5/99	6:00	210.824
1/5/99	18:00	210.811
1/6/99	6:00	210.826
1/6/99	18:00	210.861
1/7/99	6:00	210.84
1/7/99	18:00	210.85
1/8/99	6:00	210.831
1/8/99	18:00	210.881
1/9/99	6:00	210.927
1/9/99	18:00	210.859
1/10/99	6:00	210.809
1/10/99	18:00	210.84
1/11/99	6:00	210.833
1/11/99	18:00	210.794
1/12/99	6:00	210.872
1/12/99	18:00	210.798
1/13/99	6:00	210.833
1/13/99	18:00	210.768
1/14/99	6:00	210.72
1/14/99	18:00	210.748
1/15/99	6:00	210.84
1/15/99	18:00	210.824
1/16/99	6:00	210.731
1/16/99	18:00	210.741
1/17/99	6:00	210.689
1/17/99	18:00	210.689
1/18/99	6:00	210.709
1/18/99	18:00	210.792
1/19/99	6:00	210.72
1/19/99	18:00	210.704
1/20/99	6:00	210.704
1/20/99	18:00	210.711

G6M9313X

Real Time		Reading
1/21/99	6:00	210.711
1/21/99	18:00	210.711
1/22/99	6:00	210.7
1/22/99	18:00	210.693
1/23/99	6:00	210.737
1/23/99	18:00	210.761
1/24/99	6:00	210.824
1/24/99	18:00	210.805
1/25/99	6:00	210.798
1/25/99	18:00	210.798
1/26/99	6:00	210.813
1/26/99	18:00	210.901
1/27/99	6:00	210.938
1/27/99	18:00	211.027
1/28/99	6:00	210.964
1/28/99	18:00	210.962
1/29/99	6:00	210.973
1/29/99	18:00	210.973
1/30/99	6:00	210.955
1/30/99	18:00	210.942
1/31/99	6:00	210.951
1/31/99	18:00	211.023
2/1/99	6:00	211.053
2/1/99	18:00	211.092
2/2/99	6:00	211.097
2/2/99	18:00	211.361
2/3/99	6:00	211.149
2/3/99	18:00	211.047
2/4/99	6:00	211.112
2/4/99	18:00	211.169
2/5/99	6:00	211.13
2/5/99	18:00	211.136
2/6/99	6:00	211.221
2/6/99	18:00	211.265
2/7/99	6:00	211.217
2/7/99	18:00	211.269
2/8/99	6:00	211.254
2/8/99	18:00	211.245
2/9/99	6:00	211.26
2/9/99	18:00	211.308
2/10/99	6:00	211.284
2/10/99	18:00	211.243
2/11/99	6:00	211.236
2/11/99	18:00	211.278
2/12/99	6:00	211.33
2/12/99	18:00	211.363
2/13/99	6:00	211.271
2/13/99	18:00	211.269
2/14/99	6:00	211.291
2/14/99	18:00	211.302
2/15/99	6:00	211.311
2/15/99	18:00	211.341
2/16/99	6:00	211.343
2/16/99	18:00	211.337
2/17/99	6:00	211.345
2/17/99	18:00	211.358
2/18/99	6:00	211.376
2/18/99	18:00	211.363
2/19/99	6:00	211.35

G6M9313X

Real Time		Reading
2/19/99	18:00	211.358
2/20/99	6:00	211.374
2/20/99	18:00	211.385
2/21/99	6:00	211.382
2/21/99	18:00	211.367
2/22/99	6:00	211.332
2/22/99	18:00	211.352
2/23/99	6:00	211.348
2/23/99	18:00	211.358
2/24/99	6:00	211.363
2/24/99	18:00	211.38
2/25/99	6:00	211.413
2/25/99	18:00	211.444
2/26/99	6:00	211.428
2/26/99	18:00	211.38
2/27/99	6:00	211.352
2/27/99	18:00	211.352
2/28/99	6:00	211.378
2/28/99	18:00	211.461
3/1/99	6:00	211.683
3/1/99	18:00	211.461
3/2/99	6:00	211.369
3/2/99	18:00	211.356
3/3/99	6:00	211.391
3/3/99	18:00	211.461
3/4/99	6:00	211.539
3/4/99	18:00	211.428
3/5/99	6:00	211.4
3/5/99	18:00	211.457
3/6/99	6:00	211.498
3/6/99	18:00	211.601
3/7/99	6:00	211.555
3/7/99	18:00	211.509
3/8/99	6:00	211.537
3/8/99	18:00	211.57
3/9/99	6:00	211.607
3/9/99	18:00	211.614
3/10/99	6:00	211.618
3/10/99	18:00	211.627
3/11/99	6:00	211.627
3/11/99	18:00	211.603
3/12/99	6:00	211.603
3/12/99	18:00	211.577
3/13/99	6:00	211.548
3/13/99	18:00	211.561
3/14/99	6:00	211.559
3/14/99	18:00	211.581
3/15/99	6:00	211.64
3/15/99	18:00	211.627
3/16/99	6:00	211.579
3/16/99	18:00	211.579
3/17/99	6:00	211.555
3/17/99	18:00	211.583
3/18/99	6:00	211.609
3/18/99	18:00	211.542
3/19/99	6:00	211.531
3/19/99	18:00	211.537
3/20/99	6:00	211.55
3/20/99	18:00	211.568

G6M9313X

Real Time		Reading
3/21/99	6:00	211.577
3/21/99	18:00	211.585
3/22/99	6:00	211.701
3/22/99	18:00	211.59
3/23/99	6:00	211.592
3/23/99	18:00	211.627
3/24/99	6:00	211.655
3/24/99	18:00	211.701
3/25/99	6:00	211.67
3/25/99	18:00	211.679
3/26/99	6:00	211.694
3/26/99	18:00	211.723
3/27/99	6:00	211.718
3/27/99	18:00	211.74
3/28/99	6:00	211.731
3/28/99	18:00	211.764
3/29/99	6:00	211.762
3/29/99	18:00	211.762
3/30/99	6:00	211.742
3/30/99	18:00	211.755
3/31/99	6:00	211.766
3/31/99	18:00	211.784
4/1/99	6:00	211.777
4/1/99	18:00	211.799
4/2/99	6:00	211.76
4/2/99	18:00	211.786
4/3/99	6:00	211.773
4/3/99	18:00	211.821
4/4/99	6:00	211.803
4/4/99	18:00	211.781
4/5/99	6:00	211.758
4/5/99	18:00	211.784
4/6/99	6:00	211.781
4/6/99	18:00	211.825
4/7/99	6:00	211.832
4/7/99	18:00	211.795
4/8/99	6:00	211.825
4/8/99	18:00	211.845
4/9/99	6:00	211.812
4/9/99	18:00	211.816
4/10/99	6:00	211.777
4/10/99	18:00	211.747
4/11/99	6:00	211.76
4/11/99	18:00	211.801
4/12/99	6:00	211.795
4/12/99	18:00	211.773
4/13/99	6:00	211.766
4/13/99	18:00	211.764
4/14/99	6:00	211.768
4/14/99	18:00	211.734
4/15/99	6:00	211.738
4/15/99	18:00	211.729
4/16/99	6:00	211.734
4/16/99	18:00	211.734
4/17/99	6:00	211.725
4/17/99	18:00	211.71
4/18/99	6:00	211.703
4/18/99	18:00	211.677
4/19/99	6:00	211.668

G6M9313X

Real Time		Reading
4/19/99	18:00	211.688
4/20/99	6:00	211.677
4/20/99	18:00	211.67
4/21/99	6:00	211.648
4/21/99	18:00	211.668
4/22/99	6:00	211.653
4/22/99	18:00	211.642
4/23/99	6:00	211.633
4/23/99	18:00	211.659
4/24/99	6:00	211.616
4/24/99	18:00	211.618
4/25/99	6:00	211.598
4/25/99	18:00	211.648
4/26/99	6:00	211.653
4/26/99	18:00	211.618
4/27/99	6:00	211.574
4/27/99	18:00	211.577
4/28/99	6:00	211.568
4/28/99	18:00	211.577
4/29/99	6:00	211.566
4/29/99	18:00	211.539
4/30/99	6:00	211.524
4/30/99	18:00	211.533
5/1/99	6:00	211.515
5/1/99	18:00	211.52
5/2/99	6:00	211.505
5/2/99	18:00	211.505
5/3/99	6:00	211.487
5/3/99	18:00	211.494
5/4/99	6:00	211.474
5/4/99	18:00	211.467
5/5/99	6:00	211.448
5/5/99	18:00	211.433
5/6/99	6:00	211.42
5/6/99	18:00	211.426
5/7/99	6:00	211.393
5/7/99	18:00	211.4
5/8/99	6:00	211.387
5/8/99	18:00	211.404
5/9/99	6:00	211.378
5/9/99	18:00	211.363
5/10/99	6:00	211.35
5/10/99	18:00	211.313
5/11/99	6:00	211.295
5/11/99	18:00	211.321
5/12/99	6:00	211.317
5/12/99	18:00	211.319
5/13/99	6:00	211.291
5/13/99	18:00	211.265
5/14/99	6:00	211.239
5/14/99	18:00	211.247
5/15/99	6:00	211.208
5/15/99	18:00	211.219
5/16/99	6:00	211.204
5/16/99	18:00	211.212
5/17/99	6:00	211.186
5/17/99	18:00	211.193
5/18/99	6:00	211.177
5/18/99	18:00	211.182

G6M9313X

Real Time		Reading
5/19/99	6:00	211.173
5/19/99	18:00	211.167
5/20/99	6:00	211.154
5/20/99	18:00	211.134
5/21/99	6:00	211.125
5/21/99	18:00	211.13
5/22/99	6:00	211.11
5/22/99	18:00	211.112
5/23/99	6:00	211.101
5/23/99	18:00	211.106
5/24/99	6:00	211.106
5/24/99	18:00	211.112
5/25/99	6:00	211.066
5/25/99	18:00	211.18
5/26/99	6:00	211.171
5/26/99	18:00	211.112
5/27/99	6:00	211.086
5/27/99	18:00	211.073
5/28/99	6:00	211.047
5/28/99	18:00	211.051
5/29/99	6:00	211.025
5/29/99	18:00	211.021
5/30/99	6:00	211.01
5/30/99	18:00	211.04
5/31/99	6:00	211.01
5/31/99	18:00	211.007
6/1/99	6:00	210.994
6/1/99	18:00	210.992
6/2/99	6:00	210.981
6/2/99	18:00	210.99
6/3/99	6:00	210.979
6/3/99	18:00	210.957
6/4/99	6:00	210.918
6/4/99	18:00	210.905
6/5/99	6:00	210.888
6/5/99	18:00	210.896
6/6/99	6:00	210.894
6/6/99	18:00	210.929
6/7/99	6:00	210.914
6/7/99	18:00	210.903
6/8/99	6:00	210.883
6/8/99	18:00	210.868
6/9/99	6:00	210.796
6/9/99	18:00	210.807
6/10/99	6:00	210.792
6/10/99	18:00	210.798
6/11/99	6:00	210.787
6/11/99	18:00	210.807
6/12/99	6:00	210.779
6/12/99	18:00	210.785
6/13/99	6:00	210.768
6/13/99	18:00	210.779
6/14/99	6:00	210.77
6/14/99	18:00	210.781
6/15/99	6:00	210.731
6/15/99	18:00	210.698
6/16/99	6:00	210.687
6/16/99	18:00	210.707
6/17/99	6:00	210.696

G6M9313X

Real Time		Reading
6/17/99	18:00	210.685
6/18/99	6:00	210.67
6/18/99	18:00	210.648
6/19/99	6:00	210.643
6/19/99	18:00	210.643
6/20/99	6:00	210.635
6/20/99	18:00	210.641
6/21/99	6:00	210.632
6/21/99	18:00	210.635
6/22/99	6:00	210.626
6/22/99	18:00	210.617
6/23/99	6:00	210.598
6/23/99	18:00	210.606
6/24/99	6:00	210.593
6/24/99	18:00	210.574
6/25/99	6:00	210.584
6/25/99	18:00	210.584
6/26/99	6:00	210.554
6/26/99	18:00	210.558
6/27/99	6:00	210.521
6/27/99	18:00	210.554
6/28/99	6:00	210.576
6/28/99	18:00	210.7
6/29/99	6:00	210.746
6/29/99	18:00	210.547
6/30/99	6:00	210.441
6/30/99	18:00	210.447
7/1/99	6:00	210.449
7/1/99	18:00	210.471
7/2/99	6:00	210.465
7/2/99	18:00	210.436
7/3/99	6:00	210.428
7/3/99	18:00	210.447
7/4/99	6:00	210.428
7/4/99	18:00	210.441
7/5/99	6:00	210.445
7/5/99	18:00	210.423
7/6/99	6:00	210.397
7/6/99	18:00	210.412
7/7/99	6:00	210.367
7/7/99	18:00	210.38
7/8/99	6:00	210.386
7/8/99	18:00	210.343
7/9/99	6:00	210.347
7/9/99	18:00	210.393
7/10/99	6:00	210.489
7/10/99	18:00	210.34
7/11/99	6:00	210.292
7/11/99	18:00	210.288
7/12/99	6:00	210.279
7/12/99	18:00	210.286
7/13/99	6:00	210.284
7/13/99	18:00	210.281
7/14/99	6:00	210.262
7/14/99	18:00	210.277
7/15/99	6:00	210.26
7/15/99	18:00	210.262
7/16/99	6:00	210.244
7/16/99	18:00	210.251

G6M9313X

Real Time		Reading
7/17/99	6:00	210.236
7/17/99	18:00	210.234
7/18/99	6:00	210.205
7/18/99	18:00	210.216
7/19/99	6:00	210.205
7/19/99	18:00	210.229
7/20/99	6:00	210.153
7/20/99	18:00	210.149
7/21/99	6:00	210.135
7/21/99	18:00	210.177
7/22/99	6:00	210.17
7/22/99	18:00	210.244
7/23/99	6:00	210.244
7/23/99	18:00	210.316
7/24/99	6:00	210.316
7/24/99	18:00	210.229
7/25/99	6:00	210.17
7/25/99	18:00	210.201
7/26/99	6:00	210.188
7/26/99	18:00	210.157
7/27/99	6:00	210.12
7/27/99	18:00	210.164
7/28/99	6:00	210.116
7/28/99	18:00	210.186
7/29/99	6:00	210.168
7/29/99	18:00	210.242
7/30/99	6:00	210.218
7/30/99	18:00	210.196
7/31/99	6:00	210.074
7/31/99	18:00	210.146
8/1/99	6:00	210.214
8/1/99	18:00	210.179
8/2/99	6:00	209.937
8/2/99	18:00	209.931
8/3/99	6:00	209.917
8/3/99	18:00	209.944
8/4/99	6:00	209.904
8/4/99	18:00	210.018
8/5/99	6:00	210.081
8/5/99	18:00	210.153
8/6/99	6:00	210.018
8/6/99	18:00	210.118
8/7/99	6:00	209.9
8/7/99	18:00	209.915
8/8/99	6:00	210.053
8/8/99	18:00	210.105
8/9/99	6:00	209.944
8/9/99	18:00	209.854
8/10/99	6:00	209.795
8/10/99	18:00	209.859
8/11/99	6:00	209.791
8/11/99	18:00	209.8
8/12/99	6:00	209.771
8/12/99	18:00	209.78
8/13/99	6:00	209.754
8/13/99	18:00	209.867
8/14/99	6:00	209.911
8/14/99	18:00	209.837
8/15/99	6:00	209.71

G6M9313X

Real Time		Reading
8/15/99	18:00	209.706
8/16/99	6:00	209.704
8/16/99	18:00	209.728
8/17/99	6:00	209.691
8/17/99	18:00	209.878
8/18/99	6:00	209.915
8/18/99	18:00	209.856
8/19/99	6:00	209.662
8/19/99	18:00	209.647
8/20/99	6:00	209.654
8/20/99	18:00	209.665
8/21/99	6:00	209.658
8/21/99	18:00	209.68
8/22/99	6:00	209.669
8/22/99	18:00	209.689
8/23/99	6:00	209.66
8/23/99	18:00	209.697
8/24/99	6:00	209.591
8/24/99	18:00	209.619
8/25/99	6:00	209.58
8/25/99	18:00	209.652
8/26/99	6:00	209.669
8/26/99	18:00	209.728
8/27/99	6:00	209.708
8/27/99	18:00	209.795
8/28/99	6:00	209.658
8/28/99	18:00	209.741
8/29/99	6:00	209.693
8/29/99	18:00	209.569
8/30/99	6:00	209.51
8/30/99	18:00	209.516
8/31/99	6:00	209.506
8/31/99	18:00	209.519
9/1/99	6:00	209.506
9/1/99	18:00	209.512
9/2/99	6:00	209.506
9/2/99	18:00	209.514
9/3/99	6:00	209.49
9/3/99	18:00	209.499
9/4/99	6:00	209.445
9/4/99	18:00	209.449
9/5/99	6:00	209.44
9/5/99	18:00	209.46
9/6/99	6:00	209.458
9/6/99	18:00	209.49
9/7/99	6:00	209.497
9/7/99	18:00	209.628
9/8/99	6:00	209.625
9/8/99	18:00	209.462
9/9/99	6:00	209.412
9/9/99	18:00	209.431
9/10/99	6:00	209.434
9/10/99	18:00	209.558
9/11/99	6:00	209.427
9/11/99	18:00	209.362
9/12/99	6:00	209.381
9/12/99	18:00	209.414
9/13/99	6:00	209.425
9/13/99	18:00	209.451

G6M9313X

Real Time		Reading
9/14/99	6:00	209.453
9/14/99	18:00	209.468
9/15/99	6:00	209.458
9/15/99	18:00	209.458
9/16/99	6:00	209.475
9/16/99	18:00	209.676
9/17/99	6:00	209.525
9/17/99	18:00	209.519
9/18/99	6:00	209.625
9/18/99	18:00	209.691
9/19/99	6:00	209.732
9/19/99	18:00	209.819
9/20/99	6:00	209.867
9/20/99	18:00	209.922
9/21/99	6:00	209.965
9/21/99	18:00	209.998
9/22/99	6:00	210.024
9/22/99	18:00	210.057
9/23/99	6:00	210.048
9/23/99	18:00	210.053
9/24/99	6:00	210.077
9/24/99	18:00	210.096
9/25/99	6:00	210.094
9/25/99	18:00	210.072
9/26/99	6:00	210.068
9/26/99	18:00	210.111
9/27/99	6:00	210.101
9/27/99	18:00	210.14
9/28/99	6:00	210.135
9/28/99	18:00	210.157
9/29/99	6:00	210.175
9/29/99	18:00	210.199
9/30/99	6:00	210.244
9/30/99	18:00	210.181
10/1/99	6:00	210.177
10/1/99	18:00	210.19
10/2/99	6:00	210.205
10/2/99	18:00	210.242
10/3/99	6:00	210.244
10/3/99	18:00	210.238
10/4/99	6:00	210.292
10/4/99	18:00	210.271
10/5/99	6:00	210.281
10/5/99	18:00	210.271
10/6/99	6:00	210.279
10/6/99	18:00	210.258
10/7/99	6:00	210.236
10/7/99	18:00	210.236
10/8/99	6:00	210.247
10/8/99	18:00	210.299
10/9/99	6:00	210.279
10/9/99	18:00	210.301
10/10/99	6:00	210.312
10/10/99	18:00	210.347
10/11/99	6:00	210.284
10/11/99	18:00	210.295
10/12/99	6:00	210.279
10/12/99	18:00	210.31
10/13/99	6:00	210.336

G6M9313X

Real Time		Reading
10/13/99	18:00	210.377
10/14/99	6:00	210.395
10/14/99	18:00	210.262
10/15/99	6:00	210.277
10/15/99	18:00	210.312
10/16/99	6:00	210.329
10/16/99	18:00	210.329
10/17/99	6:00	210.358
10/17/99	18:00	210.362
10/18/99	6:00	210.367
10/18/99	18:00	210.286
10/19/99	6:00	210.397

G6M-96-13B: JANUARY 22 TO JULY 2, 1997					
IN_SITU INC.	TROLL				
Serial number:	10111				
Unit name:	G6M9613B				
Report generated:	7/31/97	8:21:45			
Report from file:	C:\SITUCOM\G6M13B72.BIN				
Test name:	G6M9613B				
Test defined on:	1/22/97	15:56:34			
Test scheduled for:	1/22/97	18:00:00			
Test started on:	1/22/97	18:00:00			
Test stopped on:	N/A	N/A			
Test extracted on:	7/2/97	8:44:30			
Data gathered using Linear testing					
Time between data points:	720.0000 Minutes.				
Number of data samples:	322				
Channel number [2]					
Measurement type:	Pressure/Level				
Channel name:	OnBoard Pressure				
Specific gravity:	1				
Mode:	Surface				
User-defined reference:	65.004 Meters H2O				
Referenced on:	test start				
Pressure head at reference:	5.616 Meters H2O				
Channel number [1]					
Measurement type:	Temperature				
Channel name:	OnBoard Temp				
			Channel[2]	Channel[1]	
Date	Time	ET (min)	Meters H2O	Celsius	Feet H2O
1/22/97	18:00:00	0	65.004	10.68	213.268
1/23/97	6:00:00	720	64.994	10.72	213.235
1/23/97	18:00:00	1440	64.912	10.72	212.966
1/24/97	6:00:00	2160	64.917	10.72	212.982
1/24/97	18:00:00	2880	64.972	10.71	213.163
1/25/97	6:00:00	3600	65.052	10.72	213.425
1/25/97	18:00:00	4320	65.01	10.72	213.287
1/26/97	6:00:00	5040	64.959	10.72	213.120
1/26/97	18:00:00	5760	64.939	10.71	213.054
1/27/97	6:00:00	6480	64.949	10.71	213.087
1/27/97	18:00:00	7200	64.989	10.71	213.219
1/28/97	6:00:00	7920	65.068	10.71	213.478

Date	Time	ET (min)	Meters H2O	Celsius	Feet H2O
1/28/97	18:00:00	8640	64.97	10.71	213.156
1/29/97	6:00:00	9360	64.962	10.71	213.130
1/29/97	18:00:00	10080	64.963	10.71	213.133
1/30/97	6:00:00	10800	64.972	10.71	213.163
1/30/97	18:00:00	11520	65.006	10.71	213.274
1/31/97	6:00:00	12240	65.015	10.71	213.304
1/31/97	18:00:00	12960	65.015	10.7	213.304
2/1/97	6:00:00	13680	65.008	10.7	213.281
2/1/97	18:00:00	14400	64.964	10.7	213.136
2/2/97	6:00:00	15120	64.945	10.7	213.074
2/2/97	18:00:00	15840	64.952	10.7	213.097
2/3/97	6:00:00	16560	64.961	10.69	213.127
2/3/97	18:00:00	17280	64.939	10.69	213.054
2/4/97	6:00:00	18000	64.928	10.69	213.018
2/4/97	18:00:00	18720	64.953	10.69	213.100
2/5/97	6:00:00	19440	65.015	10.69	213.304
2/5/97	18:00:00	20160	64.99	10.69	213.222
2/6/97	6:00:00	20880	64.969	10.68	213.153
2/6/97	18:00:00	21600	64.973	10.68	213.166
2/7/97	6:00:00	22320	64.971	10.68	213.159
2/7/97	18:00:00	23040	64.97	10.67	213.156
2/8/97	6:00:00	23760	64.962	10.67	213.130
2/8/97	18:00:00	24480	64.976	10.67	213.176
2/9/97	6:00:00	25200	64.979	10.67	213.186
2/9/97	18:00:00	25920	64.972	10.67	213.163
2/10/97	6:00:00	26640	64.962	10.67	213.130
2/10/97	18:00:00	27360	64.961	10.67	213.127
2/11/97	6:00:00	28080	64.95	10.66	213.091
2/11/97	18:00:00	28800	64.95	10.66	213.091
2/12/97	6:00:00	29520	64.952	10.66	213.097
2/12/97	18:00:00	30240	64.957	10.66	213.114
2/13/97	6:00:00	30960	64.883	10.66	212.871
2/13/97	18:00:00	31680	64.91	10.66	212.959
2/14/97	6:00:00	32400	64.932	10.65	213.032
2/14/97	18:00:00	33120	65.002	10.65	213.261
2/15/97	6:00:00	33840	64.94	10.64	213.058
2/15/97	18:00:00	34560	64.913	10.64	212.969
2/16/97	6:00:00	35280	64.881	10.64	212.864
2/16/97	18:00:00	36000	64.903	10.64	212.936
2/17/97	6:00:00	36720	64.9	10.63	212.927
2/17/97	18:00:00	37440	64.896	10.62	212.913
2/18/97	6:00:00	38160	64.923	10.63	213.002
2/18/97	18:00:00	38880	64.936	10.62	213.045
2/19/97	6:00:00	39600	64.92	10.62	212.992
2/19/97	18:00:00	40320	64.933	10.61	213.035
2/20/97	6:00:00	41040	64.854	10.61	212.776
2/20/97	18:00:00	41760	64.893	10.61	212.904
2/21/97	6:00:00	42480	64.938	10.61	213.051

Date	Time	ET (min)	Meters H2O	Celsius	Feet H2O
2/21/97	18:00:00	43200	64.957	10.61	213.114
2/22/97	6:00:00	43920	64.952	10.59	213.097
2/22/97	18:00:00	44640	64.904	10.59	212.940
2/23/97	6:00:00	45360	64.875	10.59	212.844
2/23/97	18:00:00	46080	64.898	10.59	212.920
2/24/97	6:00:00	46800	64.905	10.58	212.943
2/24/97	18:00:00	47520	64.919	10.59	212.989
2/25/97	6:00:00	48240	64.889	10.57	212.890
2/25/97	18:00:00	48960	64.908	10.58	212.953
2/26/97	6:00:00	49680	64.91	10.56	212.959
2/26/97	18:00:00	50400	64.908	10.56	212.953
2/27/97	6:00:00	51120	64.919	10.56	212.989
2/27/97	18:00:00	51840	64.925	10.55	213.009
2/28/97	6:00:00	52560	64.844	10.55	212.743
2/28/97	18:00:00	53280	64.855	10.55	212.779
3/1/97	6:00:00	54000	64.868	10.54	212.822
3/1/97	18:00:00	54720	64.912	10.54	212.966
3/2/97	6:00:00	55440	64.933	10.53	213.035
3/2/97	18:00:00	56160	64.861	10.53	212.799
3/3/97	6:00:00	56880	64.831	10.53	212.700
3/3/97	18:00:00	57600	64.858	10.54	212.789
3/4/97	6:00:00	58320	64.865	10.53	212.812
3/4/97	18:00:00	59040	64.869	10.51	212.825
3/5/97	6:00:00	59760	64.852	10.52	212.769
3/5/97	18:00:00	60480	64.912	10.56	212.966
3/6/97	6:00:00	61200	65	10.57	213.255
3/6/97	18:00:00	61920	64.874	10.53	212.841
3/7/97	6:00:00	62640	64.874	10.5	212.841
3/7/97	18:00:00	63360	64.875	10.49	212.844
3/8/97	6:00:00	64080	64.898	10.5	212.920
3/8/97	18:00:00	64800	64.897	10.49	212.917
3/9/97	6:00:00	65520	64.853	10.45	212.772
3/9/97	18:00:00	66240	64.905	10.46	212.943
3/10/97	6:00:00	66960	64.952	10.5	213.097
3/10/97	18:00:00	67680	64.909	10.45	212.956
3/11/97	6:00:00	68400	64.902	10.43	212.933
3/11/97	18:00:00	69120	64.897	10.4	212.917
3/12/97	6:00:00	69840	64.865	10.43	212.812
3/12/97	18:00:00	70560	64.879	10.41	212.858
3/13/97	6:00:00	71280	64.855	10.42	212.779
3/13/97	18:00:00	72000	64.869	10.39	212.825
3/14/97	6:00:00	72720	64.876	10.41	212.848
3/14/97	18:00:00	73440	64.927	10.42	213.015
3/15/97	6:00:00	74160	64.901	10.37	212.930
3/15/97	18:00:00	74880	64.848	10.38	212.756
3/16/97	6:00:00	75600	64.855	10.37	212.779
3/16/97	18:00:00	76320	64.858	10.38	212.789
3/17/97	6:00:00	77040	64.855	10.37	212.779

Date	Time	ET (min)	Meters H2O	Celsius	Feet H2O
3/17/97	18:00:00	77760	64.909	10.39	212.956
3/18/97	6:00:00	78480	64.846	10.35	212.749
3/18/97	18:00:00	79200	64.847	10.38	212.753
3/19/97	6:00:00	79920	64.848	10.35	212.756
3/19/97	18:00:00	80640	64.887	10.37	212.884
3/20/97	6:00:00	81360	64.876	10.34	212.848
3/20/97	18:00:00	82080	64.874	10.35	212.841
3/21/97	6:00:00	82800	64.845	10.34	212.746
3/21/97	18:00:00	83520	64.872	10.32	212.835
3/22/97	6:00:00	84240	64.891	10.34	212.897
3/22/97	18:00:00	84960	64.829	10.35	212.694
3/23/97	6:00:00	85680	64.824	10.36	212.677
3/23/97	18:00:00	86400	64.831	10.34	212.700
3/24/97	6:00:00	87120	64.82	10.34	212.664
3/24/97	18:00:00	87840	64.824	10.35	212.677
3/25/97	6:00:00	88560	64.822	10.35	212.671
3/25/97	18:00:00	89280	64.87	10.34	212.828
3/26/97	6:00:00	90000	64.91	10.34	212.959
3/26/97	18:00:00	90720	64.859	10.33	212.792
3/27/97	6:00:00	91440	64.864	10.34	212.808
3/27/97	18:00:00	92160	64.874	10.31	212.841
3/28/97	6:00:00	92880	64.854	10.32	212.776
3/28/97	18:00:00	93600	64.883	10.33	212.871
3/29/97	6:00:00	94320	64.891	10.34	212.897
3/29/97	18:00:00	95040	64.906	10.33	212.946
3/30/97	6:00:00	95760	64.882	10.33	212.867
3/30/97	18:00:00	96480	64.869	10.33	212.825
3/31/97	6:00:00	97200	64.887	10.32	212.884
3/31/97	18:00:00	97920	64.91	10.31	212.959
4/1/97	6:00:00	98640	64.884	10.32	212.874
4/1/97	18:00:00	99360	64.869	10.32	212.825
4/2/97	6:00:00	100080	64.877	10.32	212.851
4/2/97	18:00:00	100800	64.886	10.31	212.881
4/3/97	6:00:00	101520	64.89	10.31	212.894
4/3/97	18:00:00	102240	64.916	10.3	212.979
4/4/97	6:00:00	102960	64.916	10.31	212.979
4/4/97	18:00:00	103680	64.897	10.3	212.917
4/5/97	6:00:00	104400	64.899	10.3	212.923
4/5/97	18:00:00	105120	64.938	10.32	213.051
4/6/97	6:00:00	105840	64.941	10.3	213.061
4/6/97	18:00:00	106560	64.975	10.3	213.173
4/7/97	6:00:00	107280	64.971	10.3	213.159
4/7/97	18:00:00	108000	64.958	10.29	213.117
4/8/97	6:00:00	108720	64.947	10.29	213.081
4/8/97	18:00:00	109440	64.959	10.29	213.120
4/9/97	6:00:00	110160	64.958	10.28	213.117
4/9/97	18:00:00	110880	64.957	10.27	213.114
4/10/97	6:00:00	111600	64.947	10.27	213.081

Date	Time	ET (min)	Meters H2O	Celsius	Feet H2O
4/10/97	18:00:00	112320	64.95	10.27	213.091
4/11/97	6:00:00	113040	64.94	10.27	213.058
4/11/97	18:00:00	113760	64.964	10.27	213.136
4/12/97	6:00:00	114480	64.951	10.27	213.094
4/12/97	18:00:00	115200	64.98	10.27	213.189
4/13/97	6:00:00	115920	64.999	10.26	213.251
4/13/97	18:00:00	116640	64.981	10.26	213.192
4/14/97	6:00:00	117360	64.946	10.25	213.077
4/14/97	18:00:00	118080	64.947	10.24	213.081
4/15/97	6:00:00	118800	64.948	10.26	213.084
4/15/97	18:00:00	119520	64.975	10.25	213.173
4/16/97	6:00:00	120240	64.966	10.24	213.143
4/16/97	18:00:00	120960	64.994	10.24	213.235
4/17/97	6:00:00	121680	64.988	10.23	213.215
4/17/97	18:00:00	122400	64.994	10.24	213.235
4/18/97	6:00:00	123120	65.014	10.24	213.301
4/18/97	18:00:00	123840	65.007	10.23	213.278
4/19/97	6:00:00	124560	65.014	10.22	213.301
4/19/97	18:00:00	125280	65.014	10.22	213.301
4/20/97	6:00:00	126000	65.026	10.22	213.340
4/20/97	18:00:00	126720	65.047	10.22	213.409
4/21/97	6:00:00	127440	65.049	10.21	213.415
4/21/97	18:00:00	128160	65.056	10.21	213.438
4/22/97	6:00:00	128880	65.062	10.22	213.458
4/22/97	18:00:00	129600	65.066	10.21	213.471
4/23/97	6:00:00	130320	65.061	10.22	213.455
4/23/97	18:00:00	131040	65.069	10.21	213.481
4/24/97	6:00:00	131760	65.075	10.2	213.501
4/24/97	18:00:00	132480	65.061	10.17	213.455
4/25/97	6:00:00	133200	65.049	10.22	213.415
4/25/97	18:00:00	133920	65.059	10.18	213.448
4/26/97	6:00:00	134640	65.054	10.18	213.432
4/26/97	18:00:00	135360	65.064	10.16	213.465
4/27/97	6:00:00	136080	65.052	10.18	213.425
4/27/97	18:00:00	136800	65.078	10.19	213.511
4/28/97	6:00:00	137520	65.09	10.19	213.550
4/28/97	18:00:00	138240	65.113	10.14	213.625
4/29/97	6:00:00	138960	65.074	10.16	213.497
4/29/97	18:00:00	139680	65.073	10.15	213.494
4/30/97	6:00:00	140400	65.074	10.15	213.497
4/30/97	18:00:00	141120	65.097	10.15	213.573
5/1/97	6:00:00	141840	65.093	10.14	213.560
5/1/97	18:00:00	142560	65.112	10.14	213.622
5/2/97	6:00:00	143280	65.06	10.14	213.451
5/2/97	18:00:00	144000	65.054	10.14	213.432
5/3/97	6:00:00	144720	65.071	10.14	213.488
5/3/97	18:00:00	145440	65.149	10.14	213.743
5/4/97	6:00:00	146160	65.09	10.13	213.550

Date	Time	ET (min)	Meters H2O	Celsius	Feet H2O
5/4/97	18:00:00	146880	65.068	10.12	213.478
5/5/97	6:00:00	147600	65.069	10.12	213.481
5/5/97	18:00:00	148320	65.104	10.13	213.596
5/6/97	6:00:00	149040	65.114	10.12	213.629
5/6/97	18:00:00	149760	65.105	10.11	213.599
5/7/97	6:00:00	150480	65.089	10.1	213.547
5/7/97	18:00:00	151200	65.089	10.1	213.547
5/8/97	6:00:00	151920	65.085	10.1	213.533
5/8/97	18:00:00	152640	65.1	10.11	213.583
5/9/97	6:00:00	153360	65.106	10.1	213.602
5/9/97	18:00:00	154080	65.121	10.09	213.652
5/10/97	6:00:00	154800	65.111	10.08	213.619
5/10/97	18:00:00	155520	65.092	10.09	213.556
5/11/97	6:00:00	156240	65.092	10.08	213.556
5/11/97	18:00:00	156960	65.1	10.08	213.583
5/12/97	6:00:00	157680	65.089	10.08	213.547
5/12/97	18:00:00	158400	65.111	10.06	213.619
5/13/97	6:00:00	159120	65.087	10.08	213.540
5/13/97	18:00:00	159840	65.104	10.08	213.596
5/14/97	6:00:00	160560	65.084	10.05	213.530
5/14/97	18:00:00	161280	65.091	10.05	213.553
5/15/97	6:00:00	162000	65.099	10.06	213.579
5/15/97	18:00:00	162720	65.108	10.05	213.609
5/16/97	6:00:00	163440	65.116	10.06	213.635
5/16/97	18:00:00	164160	65.073	10.03	213.494
5/17/97	6:00:00	164880	65.075	10.04	213.501
5/17/97	18:00:00	165600	65.089	10.05	213.547
5/18/97	6:00:00	166320	65.064	10.04	213.465
5/18/97	18:00:00	167040	65.082	10.04	213.524
5/19/97	6:00:00	167760	65.092	10.05	213.556
5/19/97	18:00:00	168480	65.082	10.06	213.524
5/20/97	6:00:00	169200	65.102	10.03	213.589
5/20/97	18:00:00	169920	65.092	10.02	213.556
5/21/97	6:00:00	170640	65.095	10.03	213.566
5/21/97	18:00:00	171360	65.094	10.03	213.563
5/22/97	6:00:00	172080	65.091	10	213.553
5/22/97	18:00:00	172800	65.082	10.01	213.524
5/23/97	6:00:00	173520	65.069	9.98	213.481
5/23/97	18:00:00	174240	65.075	10.02	213.501
5/24/97	6:00:00	174960	65.071	10	213.488
5/24/97	18:00:00	175680	65.089	10	213.547
5/25/97	6:00:00	176400	65.088	10	213.543
5/25/97	18:00:00	177120	65.096	9.98	213.570
5/26/97	6:00:00	177840	65.066	9.99	213.471
5/26/97	18:00:00	178560	65.039	9.99	213.383
5/27/97	6:00:00	179280	65.034	9.98	213.366
5/27/97	18:00:00	180000	65.052	9.9	213.425
5/28/97	6:00:00	180720	65.043	9.87	213.396

Date	Time	ET (min)	Meters H2O	Celsius	Feet H2O
5/28/97	18:00:00	181440	65.059	9.85	213.448
5/29/97	6:00:00	182160	65.037	9.88	213.376
5/29/97	18:00:00	182880	65.046	9.87	213.406
5/30/97	6:00:00	183600	65.035	9.85	213.369
5/30/97	18:00:00	184320	65.046	9.98	213.406
5/31/97	6:00:00	185040	65.034	10.02	213.366
5/31/97	18:00:00	185760	65.046	10.02	213.406
6/1/97	6:00:00	186480	65.027	10.03	213.343
6/1/97	18:00:00	187200	65.023	10.03	213.330
6/2/97	6:00:00	187920	65.015	10.02	213.304
6/2/97	18:00:00	188640	65.008	10.02	213.281
6/3/97	6:00:00	189360	65.004	9.97	213.268
6/3/97	18:00:00	190080	65.008	10	213.281
6/4/97	6:00:00	190800	65.008	10	213.281
6/4/97	18:00:00	191520	65.002	10	213.261
6/5/97	6:00:00	192240	64.988	9.99	213.215
6/5/97	18:00:00	192960	64.984	9.99	213.202
6/6/97	6:00:00	193680	64.973	10.01	213.166
6/6/97	18:00:00	194400	64.978	9.99	213.182
6/7/97	6:00:00	195120	64.973	9.98	213.166
6/7/97	18:00:00	195840	64.98	9.98	213.189
6/8/97	6:00:00	196560	64.966	10	213.143
6/8/97	18:00:00	197280	64.96	10	213.123
6/9/97	6:00:00	198000	64.954	9.99	213.104
6/9/97	18:00:00	198720	64.964	9.98	213.136
6/10/97	6:00:00	199440	64.953	9.97	213.100
6/10/97	18:00:00	200160	64.957	9.97	213.114
6/11/97	6:00:00	200880	64.943	9.98	213.068
6/11/97	18:00:00	201600	64.947	9.98	213.081
6/12/97	6:00:00	202320	64.938	9.98	213.051
6/12/97	18:00:00	203040	64.94	9.97	213.058
6/13/97	6:00:00	203760	64.927	9.97	213.015
6/13/97	18:00:00	204480	64.923	9.97	213.002
6/14/97	6:00:00	205200	64.902	9.97	212.933
6/14/97	18:00:00	205920	64.893	9.97	212.904
6/15/97	6:00:00	206640	64.879	9.97	212.858
6/15/97	18:00:00	207360	64.901	9.96	212.930
6/16/97	6:00:00	208080	64.883	9.96	212.871
6/16/97	18:00:00	208800	64.898	9.95	212.920
6/17/97	6:00:00	209520	64.888	9.96	212.887
6/17/97	18:00:00	210240	64.876	9.95	212.848
6/18/97	6:00:00	210960	64.866	9.95	212.815
6/18/97	18:00:00	211680	64.89	9.95	212.894
6/19/97	6:00:00	212400	64.883	9.95	212.871
6/19/97	18:00:00	213120	64.869	9.94	212.825
6/20/97	6:00:00	213840	64.859	9.95	212.792
6/20/97	18:00:00	214560	64.867	9.94	212.818
6/21/97	6:00:00	215280	64.865	9.95	212.812

Date	Time	ET (min)	Meters H2O	Celsius	Feet H2O
6/21/97	18:00:00	216000	64.867	9.94	212.818
6/22/97	6:00:00	216720	64.855	9.94	212.779
6/22/97	18:00:00	217440	64.841	9.94	212.733
6/23/97	6:00:00	218160	64.822	9.94	212.671
6/23/97	18:00:00	218880	64.823	9.94	212.674
6/24/97	6:00:00	219600	64.82	9.93	212.664
6/24/97	18:00:00	220320	64.831	9.93	212.700
6/25/97	6:00:00	221040	64.82	9.93	212.664
6/25/97	18:00:00	221760	64.841	9.93	212.733
6/26/97	6:00:00	222480	64.803	9.92	212.608
6/26/97	18:00:00	223200	64.81	9.92	212.631
6/27/97	6:00:00	223920	64.782	9.92	212.539
6/27/97	18:00:00	224640	64.788	9.92	212.559
6/28/97	6:00:00	225360	64.777	9.92	212.523
6/28/97	18:00:00	226080	64.791	9.92	212.569
6/29/97	6:00:00	226800	64.775	9.92	212.516
6/29/97	18:00:00	227520	64.783	9.91	212.543
6/30/97	6:00:00	228240	64.767	9.91	212.490
6/30/97	18:00:00	228960	64.777	9.92	212.523
7/1/97	6:00:00	229680	64.765	9.92	212.484
7/1/97	18:00:00	230400	64.767	9.9	212.490
7/2/97	6:00:00	231120	64.753	9.9	212.444

G6M-94-16X: JANUARY 22 TO APRIL 21, 1997 AND MAY 1 TO JULY 2, 1997			
	IN-SITU,	INC.	
	WELL	SENTINEL	
	Serial	#	L3K00475

Downloaded:	4/21/97	13:43	
Unit	ID:	G6M9416X	
Test	name:	G6M9416X	
Linearity:	0.043		
Scale	Factor:	10.068	
Offset:	-0.021		
Specific	Gravity:	1	
Data	Type:	Level	
Units:	English		
Mode:	Surface		
Ref.	Level:	218.9	
Ref.	Taken:	1/22/97	13:54
Test	Begun:	1/22/97	18:00
Elapsed	(min.)		
Time (min)	Time (days)	Date	Reading
0	0.5	1/22/97	218.9
720	1	1/23/97	218.888
1440	1.5	1/23/97	218.763
2160	2	1/24/97	218.711
2880	2.5	1/24/97	218.759
3600	3	1/25/97	218.867
4320	3.5	1/25/97	218.833
5040	4	1/26/97	218.728
5760	4.5	1/26/97	218.651
6480	5	1/27/97	218.61
7200	5.5	1/27/97	218.639
7920	6	1/28/97	218.791
8640	6.5	1/28/97	218.671
9360	7	1/29/97	218.615
10080	7.5	1/29/97	218.58
10800	8	1/30/97	218.574
11520	8.5	1/30/97	218.61
12240	9	1/31/97	218.639
12960	9.5	1/31/97	218.652
13680	10	2/1/97	218.657
14400	10.5	2/1/97	218.572
15120	11	2/2/97	218.508
15840	11.5	2/2/97	218.482
16560	12	2/3/97	218.459
17280	12.5	2/3/97	218.396
18000	13	2/4/97	218.328
18720	13.5	2/4/97	218.351

19440	14	2/5/97	218.447
20160	14.5	2/5/97	218.403
20880	15	2/6/97	218.323
21600	15.5	2/6/97	218.302
22320	16	2/7/97	218.306
23040	16.5	2/7/97	218.335
23760	17	2/8/97	218.347
24480	17.5	2/8/97	218.382
25200	18	2/9/97	218.393
25920	18.5	2/9/97	218.377
26640	19	2/10/97	218.345
27360	19.5	2/10/97	218.312
28080	20	2/11/97	218.268
28800	20.5	2/11/97	218.242
29520	21	2/12/97	218.22
30240	21.5	2/12/97	218.208
30960	22	2/13/97	218.063
31680	22.5	2/13/97	218.037
32400	23	2/14/97	218.048
33120	23.5	2/14/97	218.192
33840	24	2/15/97	218.08
34560	24.5	2/15/97	217.999
35280	25	2/16/97	217.919
36000	25.5	2/16/97	217.894
36720	26	2/17/97	217.869
37440	26.5	2/17/97	217.828
38160	27	2/18/97	217.872
38880	27.5	2/18/97	217.892
39600	28	2/19/97	217.863
40320	28.5	2/19/97	217.882
41040	29	2/20/97	217.728
41760	29.5	2/20/97	217.742
42480	30	2/21/97	217.831
43200	30.5	2/21/97	217.887
43920	31	2/22/97	217.887
44640	31.5	2/22/97	217.769
45360	32	2/23/97	217.667
46080	32.5	2/23/97	217.665
46800	33	2/24/97	217.674
47520	33.5	2/24/97	217.706
48240	34	2/25/97	217.646
48960	34.5	2/25/97	217.665
49680	35	2/26/97	217.68
50400	35.5	2/26/97	217.668
51120	36	2/27/97	217.693
51840	36.5	2/27/97	217.699
52560	37	2/28/97	217.528
53280	37.5	2/28/97	217.488
54000	38	3/1/97	217.48

54720	38.5	3/1/97	217.574
55440	39	3/2/97	217.658
56160	39.5	3/2/97	217.491
56880	40	3/3/97	217.396
57600	40.5	3/3/97	217.387
58320	41	3/4/97	217.393
59040	41.5	3/4/97	217.379
59760	42	3/5/97	217.336
60480	42.5	3/5/97	217.361
61200	43	3/6/97	217.555
61920	43.5	3/6/97	217.303
62640	44	3/7/97	217.249
63360	44.5	3/7/97	217.208
64080	45	3/8/97	217.213
64800	45.5	3/8/97	217.202
65520	46	3/9/97	217.093
66240	46.5	3/9/97	217.167
66960	47	3/10/97	217.287
67680	47.5	3/10/97	217.163
68400	48	3/11/97	217.165
69120	48.5	3/11/97	217.137
69840	49	3/12/97	217.058
70560	49.5	3/12/97	217.045
71280	50	3/13/97	216.97
72000	50.5	3/13/97	216.967
72720	51	3/14/97	216.964
73440	51.5	3/14/97	217.117
74160	52	3/15/97	217.095
74880	52.5	3/15/97	216.885
75600	53	3/16/97	216.853
76320	53.5	3/16/97	216.827
77040	54	3/17/97	216.804
77760	54.5	3/17/97	216.92
78480	55	3/18/97	216.77
79200	55.5	3/18/97	216.743
79920	56	3/19/97	216.731
80640	56.5	3/19/97	216.817
81360	57	3/20/97	216.798
82080	57.5	3/20/97	216.785
82800	58	3/21/97	216.711
83520	58.5	3/21/97	216.74
84240	59	3/22/97	216.795
84960	59.5	3/22/97	216.644
85680	60	3/23/97	216.604
86400	60.5	3/23/97	216.585
87120	61	3/24/97	216.545
87840	61.5	3/24/97	216.524
88560	62	3/25/97	216.508
89280	62.5	3/25/97	216.62

90000	63	3/26/97	216.725
90720	63.5	3/26/97	216.606
91440	64	3/27/97	216.562
92160	64.5	3/27/97	216.585
92880	65	3/28/97	216.523
93600	65.5	3/28/97	216.588
94320	66	3/29/97	216.62
95040	66.5	3/29/97	216.681
95760	67	3/30/97	216.631
96480	67.5	3/30/97	216.572
97200	68	3/31/97	216.609
97920	68.5	3/31/97	216.673
98640	69	4/1/97	216.607
99360	69.5	4/1/97	216.553
100080	70	4/2/97	216.555
100800	70.5	4/2/97	216.591
101520	71	4/3/97	216.598
102240	71.5	4/3/97	216.677
102960	72	4/4/97	216.695
103680	72.5	4/4/97	216.638
104400	73	4/5/97	216.61
105120	73.5	4/5/97	216.711
105840	74	4/6/97	216.754
106560	74.5	4/6/97	216.865
107280	75	4/7/97	216.911
108000	75.5	4/7/97	216.917
108720	76	4/8/97	216.887
109440	76.5	4/8/97	216.962
110160	77	4/9/97	216.993
110880	77.5	4/9/97	217.034
111600	78	4/10/97	217.038
112320	78.5	4/10/97	217.08
113040	79	4/11/97	217.087
113760	79.5	4/11/97	217.173
114480	80	4/12/97	217.179
115200	80.5	4/12/97	217.272
115920	81	4/13/97	217.336
116640	81.5	4/13/97	217.341
117360	82	4/14/97	217.288
118080	82.5	4/14/97	217.278
118800	83	4/15/97	217.278
119520	83.5	4/15/97	217.349
120240	84	4/16/97	217.367
120960	84.5	4/16/97	217.44
121680	85	4/17/97	217.472
122400	85.5	4/17/97	217.515
123120	86	4/18/97	217.571
123840	86.5	4/18/97	217.591
124560	87	4/19/97	217.597

125280	87.5	4/19/97	217.59
126000	88	4/20/97	217.61
126720	88.5	4/20/97	217.665
127440	89	4/21/97	217.702
Downloaded: 7/2/97 11:01			
Unit	ID:	G6M9416X	
Test	name:	G6M9416X	
Linearity:	0.043		
Scale	Factor:	10.068	
Offset:	-0.021		
Specific	Gravity:	1	
Data	Type:	Level	
Units:	English		
Mode:	Surface		
Ref.	Level:	0	
Ref.	Taken:	5/1/97	12:51
Test	Begun:	5/1/97	18:00
Real Time Reading			
		Δ wl (feet)	wl (ft amsl)
5/1/97	18:00	0.026	218.586
5/2/97	6:00	-0.022	218.538
5/2/97	18:00	-0.02	218.54
5/3/97	6:00	-0.001	218.559
5/3/97	18:00	0.135	218.695
5/4/97	6:00	0.089	218.649
5/4/97	18:00	0.092	218.652
5/5/97	6:00	0.083	218.643
5/5/97	18:00	0.149	218.709
5/6/97	6:00	0.189	218.749
5/6/97	18:00	0.186	218.746
5/7/97	6:00	0.198	218.758
5/7/97	18:00	0.21	218.77
5/8/97	6:00	0.221	218.781
5/8/97	18:00	0.253	218.813
5/9/97	6:00	0.291	218.851
5/9/97	18:00	0.331	218.891
5/10/97	6:00	0.344	218.904
5/10/97	18:00	0.339	218.899
5/11/97	6:00	0.352	218.912
5/11/97	18:00	0.373	218.933
5/12/97	6:00	0.371	218.931
5/12/97	18:00	0.396	218.956
5/13/97	6:00	0.396	218.956
5/13/97	18:00	0.422	218.982
5/14/97	6:00	0.402	218.962
5/14/97	18:00	0.419	218.979
5/15/97	6:00	0.443	219.003

5/15/97	18:00	0.457	219.017
5/16/97	6:00	0.488	219.048
5/16/97	18:00	0.44	219
5/17/97	6:00	0.434	218.994
5/17/97	18:00	0.457	219.017
5/18/97	6:00	0.424	218.984
5/18/97	18:00	0.438	218.998
5/19/97	6:00	0.45	219.01
5/19/97	18:00	0.431	218.991
5/20/97	6:00	0.443	219.003
5/20/97	18:00	0.43	218.99
5/21/97	6:00	0.425	218.985
5/21/97	18:00	0.415	218.975
5/22/97	6:00	0.405	218.965
5/22/97	18:00	0.382	218.942
5/23/97	6:00	0.352	218.912
5/23/97	18:00	0.344	218.904
5/24/97	6:00	0.323	218.883
5/24/97	18:00	0.344	218.904
5/25/97	6:00	0.345	218.905
5/25/97	18:00	0.344	218.904
5/26/97	6:00	0.307	218.867
5/26/97	18:00	0.239	218.799
5/27/97	6:00	0.197	218.757
5/27/97	18:00	0.198	218.758
5/28/97	6:00	0.17	218.73
5/28/97	18:00	0.169	218.729
5/29/97	6:00	0.127	218.687
5/29/97	18:00	0.138	218.698
5/30/97	6:00	0.115	218.675
5/30/97	18:00	0.116	218.676
5/31/97	6:00	0.1	218.66
5/31/97	18:00	0.093	218.653
6/1/97	6:00	0.061	218.621
6/1/97	18:00	0.036	218.596
6/2/97	6:00	0.01	218.57
6/2/97	18:00	-0.029	218.531
6/3/97	6:00	-0.057	218.503
6/3/97	18:00	-0.08	218.48
6/4/97	6:00	-0.099	218.461
6/4/97	18:00	-0.125	218.435
6/5/97	6:00	-0.165	218.395
6/5/97	18:00	-0.198	218.362
6/6/97	6:00	-0.243	218.317
6/6/97	18:00	-0.275	218.285
6/7/97	6:00	-0.303	218.257
6/7/97	18:00	-0.315	218.245
6/8/97	6:00	-0.358	218.202
6/8/97	18:00	-0.389	218.171

6/9/97	6:00	-0.424	218.136
6/9/97	18:00	-0.427	218.133
6/10/97	6:00	-0.457	218.103
6/10/97	18:00	-0.47	218.09
6/11/97	6:00	-0.507	218.053
6/11/97	18:00	-0.52	218.04
6/12/97	6:00	-0.542	218.018
6/12/97	18:00	-0.558	218.002
6/13/97	6:00	-0.593	217.967
6/13/97	18:00	-0.619	217.941
6/14/97	6:00	-0.668	217.892
6/14/97	18:00	-0.715	217.845
6/15/97	6:00	-0.769	217.791
6/15/97	18:00	-0.769	217.791
6/16/97	6:00	-0.811	217.749
6/16/97	18:00	-0.808	217.752
6/17/97	6:00	-0.836	217.724
6/17/97	18:00	-0.872	217.688
6/18/97	6:00	-0.911	217.649
6/18/97	18:00	-0.89	217.67
6/19/97	6:00	-0.93	217.63
6/19/97	18:00	-0.971	217.589
6/20/97	6:00	-1.013	217.547
6/20/97	18:00	-1.022	217.538
6/21/97	6:00	-1.034	217.526
6/21/97	18:00	-1.045	217.515
6/22/97	6:00	-1.076	217.484
6/22/97	18:00	-1.117	217.443
6/23/97	6:00	-1.173	217.387
6/23/97	18:00	-1.2	217.36
6/24/97	6:00	-1.226	217.334
6/24/97	18:00	-1.237	217.323
6/25/97	6:00	-1.246	217.314
6/25/97	18:00	-1.229	217.331
6/26/97	6:00	-1.302	217.258
6/26/97	18:00	-1.318	217.242
6/27/97	6:00	-1.382	217.178
6/27/97	18:00	-1.408	217.152
6/28/97	6:00	-1.453	217.107
6/28/97	18:00	-1.451	217.109
6/29/97	6:00	-1.495	217.065
6/29/97	18:00	-1.502	217.058
6/30/97	6:00	-1.553	217.007
6/30/97	18:00	-1.555	217.005
7/1/97	6:00	-1.594	216.966
7/1/97	18:00	-1.612	216.948
7/2/97	6:00	-1.658	216.902

IN-SITU, INC.
 WELL SENTINEL
 Serial # L3K0475

Downloaded: 10/19/99 07:54
 Unit ID: G6M9416X
 Test name : G6M9416X
 Linearity : 0.043
 Scale Factor: 10.068
 Offset: -0.021
 Specific Gravity: 1
 Data Type : Level
 Units: English
 Mode: Surface
 Ref. Level: 0
 Ref. Taken: 05/01/97 12:51
 Test Begun: 05/01/97 18:00
 G6M9416X

Real Time		Reading
5/1/97	18:00	0.026
5/2/97	6:00	-0.022
5/2/97	18:00	-0.02
5/3/97	6:00	-0.001
5/3/97	18:00	0.135
5/4/97	6:00	0.089
5/4/97	18:00	0.092
5/5/97	6:00	0.083
5/5/97	18:00	0.149
5/6/97	6:00	0.189
5/6/97	18:00	0.186
5/7/97	6:00	0.198
5/7/97	18:00	0.21
5/8/97	6:00	0.221
5/8/97	18:00	0.253
5/9/97	6:00	0.291
5/9/97	18:00	0.331
5/10/97	6:00	0.344
5/10/97	18:00	0.339
5/11/97	6:00	0.352
5/11/97	18:00	0.373
5/12/97	6:00	0.371
5/12/97	18:00	0.396
5/13/97	6:00	0.396
5/13/97	18:00	0.422
5/14/97	6:00	0.402
5/14/97	18:00	0.419
5/15/97	6:00	0.443
5/15/97	18:00	0.457
5/16/97	6:00	0.488
5/16/97	18:00	0.44
5/17/97	6:00	0.434
5/17/97	18:00	0.457
5/18/97	6:00	0.424
5/18/97	18:00	0.438
5/19/97	6:00	0.45
5/19/97	18:00	0.431
5/20/97	6:00	0.443
5/20/97	18:00	0.43
5/21/97	6:00	0.425
5/21/97	18:00	0.415
5/22/97	6:00	0.405
5/22/97	18:00	0.382

G6M9416X

Real Time		Reading
5/23/97	6:00	0.352
5/23/97	18:00	0.344
5/24/97	6:00	0.323
5/24/97	18:00	0.344
5/25/97	6:00	0.345
5/25/97	18:00	0.344
5/26/97	6:00	0.307
5/26/97	18:00	0.239
5/27/97	6:00	0.197
5/27/97	18:00	0.198
5/28/97	6:00	0.17
5/28/97	18:00	0.169
5/29/97	6:00	0.127
5/29/97	18:00	0.138
5/30/97	6:00	0.115
5/30/97	18:00	0.116
5/31/97	6:00	0.1
5/31/97	18:00	0.093
6/1/97	6:00	0.061
6/1/97	18:00	0.036
6/2/97	6:00	0.01
6/2/97	18:00	-0.029
6/3/97	6:00	-0.057
6/3/97	18:00	-0.08
6/4/97	6:00	-0.099
6/4/97	18:00	-0.125
6/5/97	6:00	-0.165
6/5/97	18:00	-0.198
6/6/97	6:00	-0.243
6/6/97	18:00	-0.275
6/7/97	6:00	-0.303
6/7/97	18:00	-0.315
6/8/97	6:00	-0.358
6/8/97	18:00	-0.389
6/9/97	6:00	-0.424
6/9/97	18:00	-0.427
6/10/97	6:00	-0.457
6/10/97	18:00	-0.47
6/11/97	6:00	-0.507
6/11/97	18:00	-0.52
6/12/97	6:00	-0.542
6/12/97	18:00	-0.558
6/13/97	6:00	-0.593
6/13/97	18:00	-0.619
6/14/97	6:00	-0.668
6/14/97	18:00	-0.715
6/15/97	6:00	-0.769
6/15/97	18:00	-0.769
6/16/97	6:00	-0.811
6/16/97	18:00	-0.808
6/17/97	6:00	-0.836
6/17/97	18:00	-0.872
6/18/97	6:00	-0.911
6/18/97	18:00	-0.89
6/19/97	6:00	-0.93
6/19/97	18:00	-0.971
6/20/97	6:00	-1.013
6/20/97	18:00	-1.022
6/21/97	6:00	-1.034
6/21/97	18:00	-1.045
6/22/97	6:00	-1.076

G6M9416X

Real Time		Reading
6/22/97	18:00	-1.117
6/23/97	6:00	-1.173
6/23/97	18:00	-1.2
6/24/97	6:00	-1.226
6/24/97	18:00	-1.237
6/25/97	6:00	-1.246
6/25/97	18:00	-1.229
6/26/97	6:00	-1.302
6/26/97	18:00	-1.318
6/27/97	6:00	-1.382
6/27/97	18:00	-1.408
6/28/97	6:00	-1.453
6/28/97	18:00	-1.451
6/29/97	6:00	-1.495
6/29/97	18:00	-1.502
6/30/97	6:00	-1.553
6/30/97	18:00	-1.555
7/1/97	6:00	-1.594
7/1/97	18:00	-1.612
7/2/97	6:00	-1.658
7/2/97	18:00	-1.68
7/3/97	6:00	-1.699
7/3/97	18:00	-1.709
7/4/97	6:00	-1.748
7/4/97	18:00	-1.804
7/5/97	6:00	-1.868
7/5/97	18:00	-1.897
7/6/97	6:00	-1.942
7/6/97	18:00	-1.955
7/7/97	6:00	-1.983
7/7/97	18:00	-1.993
7/8/97	6:00	-2.031
7/8/97	18:00	-2.023
7/9/97	6:00	-2.036
7/9/97	18:00	-2.076
7/10/97	6:00	-2.108
7/10/97	18:00	-2.128
7/11/97	6:00	-2.153
7/11/97	18:00	-2.148
7/12/97	6:00	-2.179
7/12/97	18:00	-2.173
7/13/97	6:00	-2.197
7/13/97	18:00	-2.205
7/14/97	6:00	-2.23
7/14/97	18:00	-2.255
7/15/97	6:00	-2.288
7/15/97	18:00	-2.319
7/16/97	6:00	-2.32
7/16/97	18:00	-2.304
7/17/97	6:00	-2.336
7/17/97	18:00	-2.325
7/18/97	6:00	-2.361
7/18/97	18:00	-2.362
7/19/97	6:00	-2.413
7/19/97	18:00	-2.467
7/20/97	6:00	-2.485
7/20/97	18:00	-2.489
7/21/97	6:00	-2.511
7/21/97	18:00	-2.524
7/22/97	6:00	-2.534
7/22/97	18:00	-2.56

G6M9416X

Real Time		Reading
7/23/97	6:00	-2.602
7/23/97	18:00	-2.616
7/24/97	6:00	-2.627
7/24/97	18:00	-2.604
7/25/97	6:00	-2.611
7/25/97	18:00	-2.614
7/26/97	6:00	-2.645
7/26/97	18:00	-2.655
7/27/97	6:00	-2.685
7/27/97	18:00	-2.677
7/28/97	6:00	-2.71
7/28/97	18:00	-2.72
7/29/97	6:00	-2.783
7/29/97	18:00	-2.825
7/30/97	6:00	-2.853
7/30/97	18:00	-2.841
7/31/97	6:00	-2.867
7/31/97	18:00	-2.866
8/1/97	6:00	-2.892
8/1/97	18:00	-2.879
8/2/97	6:00	-2.898
8/2/97	18:00	-2.905
8/3/97	6:00	-2.95
8/3/97	18:00	-2.973
8/4/97	6:00	-2.994
8/4/97	18:00	-2.991
8/5/97	6:00	-3.008
8/5/97	18:00	-3.05
8/6/97	6:00	-3.077
8/6/97	18:00	-3.093
8/7/97	6:00	-3.125
8/7/97	18:00	-3.11
8/8/97	6:00	-3.155
8/8/97	18:00	-3.135
8/9/97	6:00	-3.173
8/9/97	18:00	-3.177
8/10/97	6:00	-3.212
8/10/97	18:00	-3.208
8/11/97	6:00	-3.242
8/11/97	18:00	-3.228
8/12/97	6:00	-3.299
8/12/97	18:00	-3.292
8/13/97	6:00	-3.27
8/13/97	18:00	-3.247
8/14/97	6:00	-3.337
8/14/97	18:00	-3.352
8/15/97	6:00	-3.378
8/15/97	18:00	-3.353
8/16/97	6:00	-3.363
8/16/97	18:00	-3.391
8/17/97	6:00	-3.417
8/17/97	18:00	-3.434
8/18/97	6:00	-3.468
8/18/97	18:00	-3.484
8/19/97	6:00	-3.509
8/19/97	18:00	-3.512
8/20/97	6:00	-3.528
8/20/97	18:00	-3.53
8/21/97	6:00	-3.533
8/21/97	18:00	-3.496
8/22/97	6:00	-3.576

G6M9416X

Real Time		Reading
8/22/97	18:00	-3.567
8/23/97	6:00	-3.59
8/23/97	18:00	-3.61
8/24/97	6:00	-3.644
8/24/97	18:00	-3.642
8/25/97	6:00	-3.654
8/25/97	18:00	-3.644
8/26/97	6:00	-3.647
8/26/97	18:00	-3.629
8/27/97	6:00	-3.644
8/27/97	18:00	-3.631
8/28/97	6:00	-3.632
8/28/97	18:00	-3.635
8/29/97	6:00	-3.664
8/29/97	18:00	-3.679
8/30/97	6:00	-3.702
8/30/97	18:00	-3.69
8/31/97	6:00	-3.725
8/31/97	18:00	-3.718
9/1/97	6:00	-3.737
9/1/97	18:00	-3.74
9/2/97	6:00	-3.741
9/2/97	18:00	-3.683
9/3/97	6:00	-3.698
9/3/97	18:00	-3.77
9/4/97	6:00	-3.76
9/4/97	18:00	-3.783
9/5/97	6:00	-3.792
9/5/97	18:00	-3.802
9/6/97	6:00	-3.823
9/6/97	18:00	-3.811
9/7/97	6:00	-3.834
9/7/97	18:00	-3.845
9/8/97	6:00	-3.874
9/8/97	18:00	-3.894
9/9/97	6:00	-3.914
9/9/97	18:00	-3.923
9/10/97	6:00	-3.939
9/10/97	18:00	-3.951
9/11/97	6:00	-3.962
9/11/97	18:00	-3.959
9/12/97	6:00	-3.978
9/12/97	18:00	-3.99
9/13/97	6:00	-4.015
9/13/97	18:00	-4.02
9/14/97	6:00	-4.06
9/14/97	18:00	-4.054
9/15/97	6:00	-4.071
9/15/97	18:00	-4.076
9/16/97	6:00	-4.106
9/16/97	18:00	-4.127
9/17/97	6:00	-4.148
9/17/97	18:00	-4.124
9/18/97	6:00	-4.166
9/18/97	18:00	-4.186
9/19/97	6:00	-4.205
9/19/97	18:00	-4.176
9/20/97	6:00	-4.173
9/20/97	18:00	-4.26
9/21/97	6:00	-4.297
9/21/97	18:00	-4.305

G6M9416X

Real Time		Reading
9/22/97	6:00	-4.307
9/22/97	18:00	-4.273
9/23/97	6:00	-4.276
9/23/97	18:00	-4.313
9/24/97	6:00	-4.384
9/24/97	18:00	-4.339
9/25/97	6:00	-4.317
9/25/97	18:00	-4.33
9/26/97	6:00	-4.399
9/26/97	18:00	-4.454
9/27/97	6:00	-4.465
9/27/97	18:00	-4.455
9/28/97	6:00	-4.462
9/28/97	18:00	-4.431
9/29/97	6:00	-4.301
9/29/97	18:00	-4.499
9/30/97	6:00	-4.48
9/30/97	18:00	-4.534
10/1/97	6:00	-4.585
10/1/97	18:00	-4.617
10/2/97	6:00	-4.599
10/2/97	18:00	-4.599
10/3/97	6:00	-4.599
10/3/97	18:00	-4.625
10/4/97	6:00	-4.646
10/4/97	18:00	-4.64
10/5/97	6:00	-4.635
10/5/97	18:00	-4.669
10/6/97	6:00	-4.659
10/6/97	18:00	-4.708
10/7/97	6:00	-4.74
10/7/97	18:00	-4.763
10/8/97	6:00	-4.782
10/8/97	18:00	-4.772
10/9/97	6:00	-4.794
10/9/97	18:00	-4.765
10/10/97	6:00	-4.765
10/10/97	18:00	-4.817
10/11/97	6:00	-4.859
10/11/97	18:00	-4.852
10/12/97	6:00	-4.871
10/12/97	18:00	-4.861
10/13/97	6:00	-4.884
10/13/97	18:00	-4.891
10/14/97	6:00	-4.9
10/14/97	18:00	-4.919
10/15/97	6:00	-4.933
10/15/97	18:00	-4.945
10/16/97	6:00	-4.96
10/16/97	18:00	-4.968
10/17/97	6:00	-4.986
10/17/97	18:00	-5.003
10/18/97	6:00	-5.019
10/18/97	18:00	-5.024
10/19/97	6:00	-5.031
10/19/97	18:00	-5.005
10/20/97	6:00	-5.037
10/20/97	18:00	-5.08
10/21/97	6:00	-5.109
10/21/97	18:00	-5.096
10/22/97	6:00	-5.096

G6M9416X

Real Time		Reading
10/22/97	18:00	-5.173
10/23/97	6:00	-5.16
10/23/97	18:00	-5.153
10/24/97	6:00	-5.202
10/24/97	18:00	-5.215
10/25/97	6:00	-5.188
10/25/97	18:00	-5.215
10/26/97	6:00	-5.284
10/26/97	18:00	-5.246
10/27/97	6:00	-5.134
10/27/97	18:00	-5.237
10/28/97	6:00	-5.272
10/28/97	18:00	-5.348
10/29/97	6:00	-5.327
10/29/97	18:00	-5.336
10/30/97	6:00	-5.348
10/30/97	18:00	-5.375
10/31/97	6:00	-5.377
10/31/97	18:00	-5.378
11/1/97	6:00	-5.364
11/1/97	18:00	-5.274
11/2/97	6:00	-5.388
11/2/97	18:00	-5.339
11/3/97	6:00	-5.479
11/3/97	18:00	-5.451
11/4/97	6:00	-5.429
11/4/97	18:00	-5.412
11/5/97	6:00	-5.515
11/5/97	18:00	-5.486
11/6/97	6:00	-5.468
11/6/97	18:00	-5.441
11/7/97	6:00	-5.426
11/7/97	18:00	-5.428
11/8/97	6:00	-5.429
11/8/97	18:00	-5.428
11/9/97	6:00	-5.426
11/9/97	18:00	-5.426
11/10/97	6:00	-5.484
11/10/97	18:00	-5.484
11/11/97	6:00	-5.477
11/11/97	18:00	-5.487
11/12/97	6:00	-5.467
11/12/97	18:00	-5.468
11/13/97	6:00	-5.49
11/13/97	18:00	-5.471
11/14/97	6:00	-5.388
11/14/97	18:00	-5.381
11/15/97	6:00	-5.458
11/15/97	18:00	-5.463
11/16/97	6:00	-5.413
11/16/97	18:00	-5.471
11/17/97	6:00	-5.46
11/17/97	18:00	-5.481
11/18/97	6:00	-5.474
11/18/97	18:00	-5.439
11/19/97	6:00	-5.431
11/19/97	18:00	-5.417
11/20/97	6:00	-5.425
11/20/97	18:00	-5.477
11/21/97	6:00	-5.449
11/21/97	18:00	-5.439

G6M9416X

Real Time		Reading
11/22/97	6:00	-5.407
11/22/97	18:00	-5.471
11/23/97	6:00	-5.452
11/23/97	18:00	-5.419
11/24/97	6:00	-5.399
11/24/97	18:00	-5.477
11/25/97	6:00	-5.476
11/25/97	18:00	-5.371
11/26/97	6:00	-5.397
11/26/97	18:00	-5.345
11/27/97	6:00	-5.419
11/27/97	18:00	-5.526
11/28/97	6:00	-5.448
11/28/97	18:00	-5.368
11/29/97	6:00	-5.471
11/29/97	18:00	-5.445
11/30/97	6:00	-5.399
11/30/97	18:00	-5.361
12/1/97	6:00	-5.364
12/1/97	18:00	-5.426
12/2/97	6:00	-5.431
12/2/97	18:00	-5.449
12/3/97	6:00	-5.438
12/3/97	18:00	-5.412
12/4/97	6:00	-5.34
12/4/97	18:00	-5.367
12/5/97	6:00	-5.352
12/5/97	18:00	-5.364
12/6/97	6:00	-5.37
12/6/97	18:00	-5.368
12/7/97	6:00	-5.372
12/7/97	18:00	-5.375
12/8/97	6:00	-5.401
12/8/97	18:00	-5.397
12/9/97	6:00	-5.374
12/9/97	18:00	-5.338
12/10/97	6:00	-5.317
12/10/97	18:00	-5.314
12/11/97	6:00	-5.38
12/11/97	18:00	-5.362
12/12/97	6:00	-5.303
12/12/97	18:00	-5.285
12/13/97	6:00	-5.288
12/13/97	18:00	-5.282
12/14/97	6:00	-5.269
12/14/97	18:00	-5.375
12/15/97	6:00	-5.346
12/15/97	18:00	-5.311
12/16/97	6:00	-5.317
12/16/97	18:00	-5.266
12/17/97	6:00	-5.268
12/17/97	18:00	-5.307
12/18/97	6:00	-5.319
12/18/97	18:00	-5.308
12/19/97	6:00	-5.262
12/19/97	18:00	-5.291
12/20/97	6:00	-5.294
12/20/97	18:00	-5.314
12/21/97	6:00	-5.356
12/21/97	18:00	-5.348
12/22/97	6:00	-5.342

G6M9416X

Real Time		Reading
12/22/97	18:00	-5.303
12/23/97	6:00	-5.25
12/23/97	18:00	-5.295
12/24/97	6:00	-5.345
12/24/97	18:00	-5.346
12/25/97	6:00	-5.237
12/25/97	18:00	-5.295
12/26/97	6:00	-5.317
12/26/97	18:00	-5.359
12/27/97	6:00	-5.335
12/27/97	18:00	-5.276
12/28/97	6:00	-5.346
12/28/97	18:00	-5.415
12/29/97	6:00	-5.368
12/29/97	18:00	-5.284
12/30/97	6:00	-5.173
12/30/97	18:00	-5.377
12/31/97	6:00	-5.41
12/31/97	18:00	-5.476
1/1/98	6:00	-5.444
1/1/98	18:00	-5.336
1/2/98	6:00	-5.358
1/2/98	18:00	-5.374
1/3/98	6:00	-5.339
1/3/98	18:00	-5.351
1/4/98	6:00	-5.381
1/4/98	18:00	-5.449
1/5/98	6:00	-5.354
1/5/98	18:00	-5.327
1/6/98	6:00	-5.303
1/6/98	18:00	-5.342
1/7/98	6:00	-5.348
1/7/98	18:00	-5.313
1/8/98	6:00	-5.229
1/8/98	18:00	-5.202
1/9/98	6:00	-5.197
1/9/98	18:00	-5.117
1/10/98	6:00	-5.167
1/10/98	18:00	-5.09
1/11/98	6:00	-5.031
1/11/98	18:00	-5.021
1/12/98	6:00	-5.041
1/12/98	18:00	-4.964
1/13/98	6:00	-4.867
1/13/98	18:00	-4.87
1/14/98	6:00	-4.944
1/14/98	18:00	-4.89
1/15/98	6:00	-4.839
1/15/98	18:00	-4.765
1/16/98	6:00	-4.73
1/16/98	18:00	-4.72
1/17/98	6:00	-4.742
1/17/98	18:00	-4.742
1/18/98	6:00	-4.691
1/18/98	18:00	-4.676
1/19/98	6:00	-4.643
1/19/98	18:00	-4.605
1/20/98	6:00	-4.567
1/20/98	18:00	-4.558
1/21/98	6:00	-4.569
1/21/98	18:00	-4.548

G6M9416X

Real Time		Reading
1/22/98	6:00	-4.557
1/22/98	18:00	-4.519
1/23/98	6:00	-4.483
1/23/98	18:00	-4.346
1/24/98	6:00	-4.308
1/24/98	18:00	-4.284
1/25/98	6:00	-4.255
1/25/98	18:00	-4.326
1/26/98	6:00	-4.282
1/26/98	18:00	-4.255
1/27/98	6:00	-4.218
1/27/98	18:00	-4.124
1/28/98	6:00	-4.066
1/28/98	18:00	-4
1/29/98	6:00	-3.989
1/29/98	18:00	-3.965
1/30/98	6:00	-3.942
1/30/98	18:00	-3.893
1/31/98	6:00	-3.887
1/31/98	18:00	-3.872
2/1/98	6:00	-3.881
2/1/98	18:00	-3.813
2/2/98	6:00	-3.781
2/2/98	18:00	-3.725
2/3/98	6:00	-3.69
2/3/98	18:00	-3.69
2/4/98	6:00	-3.654
2/4/98	18:00	-3.61
2/5/98	6:00	-3.561
2/5/98	18:00	-3.557
2/6/98	6:00	-3.56
2/6/98	18:00	-3.551
2/7/98	6:00	-3.552
2/7/98	18:00	-3.493
2/8/98	6:00	-3.491
2/8/98	18:00	-3.462
2/9/98	6:00	-3.459
2/9/98	18:00	-3.42
2/10/98	6:00	-3.449
2/10/98	18:00	-3.394
2/11/98	6:00	-3.36
2/11/98	18:00	-3.311
2/12/98	6:00	-3.194
2/12/98	18:00	-3.254
2/13/98	6:00	-3.32
2/13/98	18:00	-3.253
2/14/98	6:00	-3.208
2/14/98	18:00	-3.203
2/15/98	6:00	-3.212
2/15/98	18:00	-3.154
2/16/98	6:00	-3.141
2/16/98	18:00	-3.094
2/17/98	6:00	-3.039
2/17/98	18:00	-2.982
2/18/98	6:00	-2.898
2/18/98	18:00	-2.889
2/19/98	6:00	-2.869
2/19/98	18:00	-2.876
2/20/98	6:00	-2.854
2/20/98	18:00	-2.794
2/21/98	6:00	-2.79

G6M9416X

Real Time		Reading
2/21/98	18:00	-2.806
2/22/98	6:00	-2.809
2/22/98	18:00	-2.774
2/23/98	6:00	-2.749
2/23/98	18:00	-2.677
2/24/98	6:00	-2.573
2/24/98	18:00	-2.553
2/25/98	6:00	-2.589
2/25/98	18:00	-2.633
2/26/98	6:00	-2.597
2/26/98	18:00	-2.582
2/27/98	6:00	-2.549
2/27/98	18:00	-2.527
2/28/98	6:00	-2.534
2/28/98	18:00	-2.496
3/1/98	6:00	-2.444
3/1/98	18:00	-2.418
3/2/98	6:00	-2.41
3/2/98	18:00	-2.37
3/3/98	6:00	-2.355
3/3/98	18:00	-2.355
3/4/98	6:00	-2.393
3/4/98	18:00	-2.367
3/5/98	6:00	-2.364
3/5/98	18:00	-2.357
3/6/98	6:00	-2.378
3/6/98	18:00	-2.333
3/7/98	6:00	-2.313
3/7/98	18:00	-2.285
3/8/98	6:00	-2.314
3/8/98	18:00	-2.252
3/9/98	6:00	-2.154
3/9/98	18:00	-2.071
3/10/98	6:00	-2.08
3/10/98	18:00	-2.148
3/11/98	6:00	-2.121
3/11/98	18:00	-2.079
3/12/98	6:00	-2.038
3/12/98	18:00	-2.016
3/13/98	6:00	-2.013
3/13/98	18:00	-1.9
3/14/98	6:00	-1.823
3/14/98	18:00	-1.712
3/15/98	6:00	-1.764
3/15/98	18:00	-1.748
3/16/98	6:00	-1.718
3/16/98	18:00	-1.636
3/17/98	6:00	-1.603
3/17/98	18:00	-1.485
3/18/98	6:00	-1.449
3/18/98	18:00	-1.361
3/19/98	6:00	-1.303
3/19/98	18:00	-1.229
3/20/98	6:00	-1.178
3/20/98	18:00	-1.133
3/21/98	6:00	-1.064
3/21/98	18:00	-0.983
3/22/98	6:00	-0.891
3/22/98	18:00	-0.897
3/23/98	6:00	-0.878
3/23/98	18:00	-0.831

G6M9416X

Real Time		Reading
3/24/98	6:00	-0.798
3/24/98	18:00	-0.754
3/25/98	6:00	-0.763
3/25/98	18:00	-0.664
3/26/98	6:00	-0.628
3/26/98	18:00	-0.507
3/27/98	6:00	-0.481
3/27/98	18:00	-0.447
3/28/98	6:00	-0.421
3/28/98	18:00	-0.341
3/29/98	6:00	-0.322
3/29/98	18:00	-0.306
3/30/98	6:00	-0.282
3/30/98	18:00	-0.186
3/31/98	6:00	-0.176
3/31/98	18:00	-0.119
4/1/98	6:00	-0.15
4/1/98	18:00	-0.057
4/2/98	6:00	-0.036
4/2/98	18:00	-0.016
4/3/98	6:00	0.012
4/3/98	18:00	0.042
4/4/98	6:00	0.057
4/4/98	18:00	0.098
4/5/98	6:00	0.114
4/5/98	18:00	0.122
4/6/98	6:00	0.135
4/6/98	18:00	0.147
4/7/98	6:00	0.133
4/7/98	18:00	0.154
4/8/98	6:00	0.138
4/8/98	18:00	0.169
4/9/98	6:00	0.185
4/9/98	18:00	0.232
4/10/98	6:00	0.204
4/10/98	18:00	0.176
4/11/98	6:00	0.122
4/11/98	18:00	0.127
4/12/98	6:00	0.079
4/12/98	18:00	0.109
4/13/98	6:00	0.105
4/13/98	18:00	0.154
4/14/98	6:00	0.121
4/14/98	18:00	0.159
4/15/98	6:00	0.131
4/15/98	18:00	0.118
4/16/98	6:00	0.079
4/16/98	18:00	0.095
4/17/98	6:00	0.093
4/17/98	18:00	0.082
4/18/98	6:00	0.016
4/18/98	18:00	0.001
4/19/98	6:00	-0.007
4/19/98	18:00	0.033
4/20/98	6:00	0.041
4/20/98	18:00	-0.036
4/21/98	6:00	-0.068
4/21/98	18:00	-0.06
4/22/98	6:00	-0.095
4/22/98	18:00	-0.063
4/23/98	6:00	-0.079

G6M9416X

Real Time		Reading
4/23/98	18:00	-0.017
4/24/98	6:00	-0.051
4/24/98	18:00	-0.076
4/25/98	6:00	-0.095
4/25/98	18:00	-0.137
4/26/98	6:00	-0.176
4/26/98	18:00	-0.135
4/27/98	6:00	-0.178
4/27/98	18:00	-0.198
4/28/98	6:00	-0.218
4/28/98	18:00	-0.195
4/29/98	6:00	-0.223
4/29/98	18:00	-0.163
4/30/98	6:00	-0.185
4/30/98	18:00	-0.159
5/1/98	6:00	-0.192
5/1/98	18:00	-0.181
5/2/98	6:00	-0.131
5/2/98	18:00	-0.175
5/3/98	6:00	-0.22
5/3/98	18:00	-0.24
5/4/98	6:00	-0.285
5/4/98	18:00	-0.29
5/5/98	6:00	-0.322
5/5/98	18:00	-0.326
5/6/98	6:00	-0.338
5/6/98	18:00	-0.338
5/7/98	6:00	-0.336
5/7/98	18:00	-0.316
5/8/98	6:00	-0.325
5/8/98	18:00	-0.325
5/9/98	6:00	-0.349
5/9/98	18:00	-0.367
5/10/98	6:00	-0.363
5/10/98	18:00	-0.363
5/11/98	6:00	-0.357
5/11/98	18:00	-0.386
5/12/98	6:00	-0.396
5/12/98	18:00	-0.389
5/13/98	6:00	-0.377
5/13/98	18:00	-0.323
5/14/98	6:00	-0.303
5/14/98	18:00	-0.245
5/15/98	6:00	-0.226
5/15/98	18:00	-0.178
5/16/98	6:00	-0.195
5/16/98	18:00	-0.181
5/17/98	6:00	-0.169
5/17/98	18:00	-0.122
5/18/98	6:00	-0.121
5/18/98	18:00	-0.108
5/19/98	6:00	-0.106
5/19/98	18:00	-0.111
5/20/98	6:00	-0.115
5/20/98	18:00	-0.098
5/21/98	6:00	-0.092
5/21/98	18:00	-0.125
5/22/98	6:00	-0.137
5/22/98	18:00	-0.175
5/23/98	6:00	-0.185
5/23/98	18:00	-0.182

G6M9416X

Real Time		Reading
5/24/98	6:00	-0.213
5/24/98	18:00	-0.218
5/25/98	6:00	-0.226
5/25/98	18:00	-0.224
5/26/98	6:00	-0.234
5/26/98	18:00	-0.285
5/27/98	6:00	-0.341
5/27/98	18:00	-0.313
5/28/98	6:00	-0.345
5/28/98	18:00	-0.341
5/29/98	6:00	-0.349
5/29/98	18:00	-0.365
5/30/98	6:00	-0.4
5/30/98	18:00	-0.421
5/31/98	6:00	-0.443
5/31/98	18:00	-0.348
6/1/98	6:00	-0.387
6/1/98	18:00	-0.457
6/2/98	6:00	-0.489
6/2/98	18:00	-0.418
6/3/98	6:00	-0.432
6/3/98	18:00	-0.488
6/4/98	6:00	-0.494
6/4/98	18:00	-0.502
6/5/98	6:00	-0.499
6/5/98	18:00	-0.517
6/6/98	6:00	-0.545
6/6/98	18:00	-0.569
6/7/98	6:00	-0.561
6/7/98	18:00	-0.561
6/8/98	6:00	-0.568
6/8/98	18:00	-0.609
6/9/98	6:00	-0.61
6/9/98	18:00	-0.559
6/10/98	6:00	-0.565
6/10/98	18:00	-0.54
6/11/98	6:00	-0.569
6/11/98	18:00	-0.545
6/12/98	6:00	-0.531
6/12/98	18:00	-0.482
6/13/98	6:00	-0.427
6/13/98	18:00	-0.352
6/14/98	6:00	-0.301
6/14/98	18:00	-0.223
6/15/98	6:00	-0.122
6/15/98	18:00	-0.01
6/16/98	6:00	0.1
6/16/98	18:00	0.178
6/17/98	6:00	0.256
6/17/98	18:00	0.336
6/18/98	6:00	0.4
6/18/98	18:00	0.459
6/19/98	6:00	0.53
6/19/98	18:00	0.62
6/20/98	6:00	0.712
6/20/98	18:00	0.846
6/21/98	6:00	1.015
6/21/98	18:00	1.2
6/22/98	6:00	1.359
6/22/98	18:00	1.497
6/23/98	6:00	1.614

G6M9416X

Real Time		Reading
6/23/98	18:00	1.719
6/24/98	6:00	1.799
6/24/98	18:00	1.873
6/25/98	6:00	1.932
6/25/98	18:00	1.996
6/26/98	6:00	2.053
6/26/98	18:00	2.092
6/27/98	6:00	2.128
6/27/98	18:00	2.124
6/28/98	6:00	2.146
6/28/98	18:00	2.165
6/29/98	6:00	2.178
6/29/98	18:00	2.198
6/30/98	6:00	2.203
6/30/98	18:00	2.219
7/1/98	6:00	2.21
7/1/98	18:00	2.172
7/2/98	6:00	2.15
7/2/98	18:00	2.144
7/3/98	6:00	2.14
7/3/98	18:00	2.141
7/4/98	6:00	2.131
7/4/98	18:00	2.133
7/5/98	6:00	2.106
7/5/98	18:00	2.083
7/6/98	6:00	2.06
7/6/98	18:00	2.053
7/7/98	6:00	2.034
7/7/98	18:00	2.023
7/8/98	6:00	2.015
7/8/98	18:00	2.007
7/9/98	6:00	1.993
7/9/98	18:00	1.974
7/10/98	6:00	1.953
7/10/98	18:00	1.921
7/11/98	6:00	1.905
7/11/98	18:00	1.872
7/12/98	6:00	1.846
7/12/98	18:00	1.818
7/13/98	6:00	1.793
7/13/98	18:00	1.773
7/14/98	6:00	1.745
7/14/98	18:00	1.722
7/15/98	6:00	1.69
7/15/98	18:00	1.671
7/16/98	6:00	1.649
7/16/98	18:00	1.624
7/17/98	6:00	1.602
7/17/98	18:00	1.578
7/18/98	6:00	1.538
7/18/98	18:00	1.5
7/19/98	6:00	1.468
7/19/98	18:00	1.449
7/20/98	6:00	1.426
7/20/98	18:00	1.394
7/21/98	6:00	1.352
7/21/98	18:00	1.333
7/22/98	6:00	1.312
7/22/98	18:00	1.26
7/23/98	6:00	1.228
7/23/98	18:00	1.199

G6M9416X

Real Time		Reading
7/24/98	6:00	1.143
7/24/98	18:00	1.084
7/25/98	6:00	1.037
7/25/98	18:00	0.996
7/26/98	6:00	0.957
7/26/98	18:00	0.915
7/27/98	6:00	0.868
7/27/98	18:00	0.839
7/28/98	6:00	0.797
7/28/98	18:00	0.756
7/29/98	6:00	0.717
7/29/98	18:00	0.664
7/30/98	6:00	0.613
7/30/98	18:00	0.583
7/31/98	6:00	0.539
7/31/98	18:00	0.583
8/1/98	6:00	0.532
8/1/98	18:00	0.505
8/2/98	6:00	0.472
8/2/98	18:00	0.451
8/3/98	6:00	0.409
8/3/98	18:00	0.373
8/4/98	6:00	0.319
8/4/98	18:00	0.287
8/5/98	6:00	0.24
8/5/98	18:00	0.198
8/6/98	6:00	0.149
8/6/98	18:00	0.103
8/7/98	6:00	0.054
8/7/98	18:00	0.003
8/8/98	6:00	-0.057
8/8/98	18:00	-0.098
8/9/98	6:00	-0.159
8/9/98	18:00	-0.197
8/10/98	6:00	-0.258
8/10/98	18:00	-0.309
8/11/98	6:00	-0.367
8/11/98	18:00	-0.448
8/12/98	6:00	-0.54
8/12/98	18:00	-0.623
8/13/98	6:00	-0.67
8/13/98	18:00	-0.69
8/14/98	6:00	-0.735
8/14/98	18:00	-0.767
8/15/98	6:00	-0.807
8/15/98	18:00	-0.85
8/16/98	6:00	-0.906
8/16/98	18:00	-0.943
8/17/98	6:00	-0.978
8/17/98	18:00	-0.984
8/18/98	6:00	-1.025
8/18/98	18:00	-1.088
8/19/98	6:00	-1.144
8/19/98	18:00	-1.181
8/20/98	6:00	-1.227
8/20/98	18:00	-1.239
8/21/98	6:00	-1.28
8/21/98	18:00	-1.306
8/22/98	6:00	-1.338
8/22/98	18:00	-1.361
8/23/98	6:00	-1.399

G6M9416X

Real Time		Reading
8/23/98	18:00	-1.4
8/24/98	6:00	-1.446
8/24/98	18:00	-1.467
8/25/98	6:00	-1.536
8/25/98	18:00	-1.552
8/26/98	6:00	-1.66
8/26/98	18:00	-1.668
8/27/98	6:00	-1.743
8/27/98	18:00	-1.763
8/28/98	6:00	-1.808
8/28/98	18:00	-1.812
8/29/98	6:00	-1.823
8/29/98	18:00	-1.876
8/30/98	6:00	-1.919
8/30/98	18:00	-1.943
8/31/98	6:00	-1.975
8/31/98	18:00	-1.99
9/1/98	6:00	-2.034
9/1/98	18:00	-2.044
9/2/98	6:00	-2.064
9/2/98	18:00	-2.089
9/3/98	6:00	-2.14
9/3/98	18:00	-2.156
9/4/98	6:00	-2.189
9/4/98	18:00	-2.202
9/5/98	6:00	-2.261
9/5/98	18:00	-2.277
9/6/98	6:00	-2.284
9/6/98	18:00	-2.282
9/7/98	6:00	-2.298
9/7/98	18:00	-2.309
9/8/98	6:00	-2.349
9/8/98	18:00	-2.403
9/9/98	6:00	-2.431
9/9/98	18:00	-2.476
9/10/98	6:00	-2.52
9/10/98	18:00	-2.537
9/11/98	6:00	-2.557
9/11/98	18:00	-2.544
9/12/98	6:00	-2.549
9/12/98	18:00	-2.591
9/13/98	6:00	-2.655
9/13/98	18:00	-2.675
9/14/98	6:00	-2.69
9/14/98	18:00	-2.7
9/15/98	6:00	-2.722
9/15/98	18:00	-2.732
9/16/98	6:00	-2.768
9/16/98	18:00	-2.796
9/17/98	6:00	-2.809
9/17/98	18:00	-2.824
9/18/98	6:00	-2.879
9/18/98	18:00	-2.86
9/19/98	6:00	-2.889
9/19/98	18:00	-2.892
9/20/98	6:00	-2.93
9/20/98	18:00	-2.94
9/21/98	6:00	-2.966
9/21/98	18:00	-2.973
9/22/98	6:00	-2.998
9/22/98	18:00	-3.008

G6M9416X

Real Time		Reading
9/23/98	6:00	-3.08
9/23/98	18:00	-3.094
9/24/98	6:00	-3.122
9/24/98	18:00	-3.114
9/25/98	6:00	-3.116
9/25/98	18:00	-3.126
9/26/98	6:00	-3.145
9/26/98	18:00	-3.149
9/27/98	6:00	-3.129
9/27/98	18:00	-3.132
9/28/98	6:00	-3.222
9/28/98	18:00	-3.276
9/29/98	6:00	-3.304
9/29/98	18:00	-3.273
9/30/98	6:00	-3.29
9/30/98	18:00	-3.295
10/1/98	6:00	-3.242
10/1/98	18:00	-3.429
10/2/98	6:00	-3.392
10/2/98	18:00	-3.418
10/3/98	6:00	-3.452
10/3/98	18:00	-3.458
10/4/98	6:00	-3.493
10/4/98	18:00	-3.482
10/5/98	6:00	-3.512
10/5/98	18:00	-3.549
10/6/98	6:00	-3.57
10/6/98	18:00	-3.558
10/7/98	6:00	-3.568
10/7/98	18:00	-3.552
10/8/98	6:00	-3.545
10/8/98	18:00	-3.605
10/9/98	6:00	-3.64
10/9/98	18:00	-3.641
10/10/98	6:00	-3.618
10/10/98	18:00	-3.638
10/11/98	6:00	-3.685
10/11/98	18:00	-3.718
10/12/98	6:00	-3.727
10/12/98	18:00	-3.714
10/13/98	6:00	-3.686
10/13/98	18:00	-3.67
10/14/98	6:00	-3.68
10/14/98	18:00	-3.667
10/15/98	6:00	-3.699
10/15/98	18:00	-3.738
10/16/98	6:00	-3.743
10/16/98	18:00	-3.733
10/17/98	6:00	-3.74
10/17/98	18:00	-3.695
10/18/98	6:00	-3.674
10/18/98	18:00	-3.656
10/19/98	6:00	-3.689
10/19/98	18:00	-3.741
10/20/98	6:00	-3.699
10/20/98	18:00	-3.728
10/21/98	6:00	-3.724
10/21/98	18:00	-3.743
10/22/98	6:00	-3.747
10/22/98	18:00	-3.781
10/23/98	6:00	-3.763

G6M9416X

Real Time		Reading
10/23/98	18:00	-3.743
10/24/98	6:00	-3.767
10/24/98	18:00	-3.75
10/25/98	6:00	-3.778
10/25/98	18:00	-3.802
10/26/98	6:00	-3.826
10/26/98	18:00	-3.829
10/27/98	6:00	-3.811
10/27/98	18:00	-3.776
10/28/98	6:00	-3.74
10/28/98	18:00	-3.735
10/29/98	6:00	-3.814
10/29/98	18:00	-3.853
10/30/98	6:00	-3.836
10/30/98	18:00	-3.858
10/31/98	6:00	-3.901
10/31/98	18:00	-3.927
11/1/98	6:00	-3.895
11/1/98	18:00	-3.907
11/2/98	6:00	-3.9
11/2/98	18:00	-3.941
11/3/98	6:00	-3.945
11/3/98	18:00	-3.961
11/4/98	6:00	-3.965
11/4/98	18:00	-3.994
11/5/98	6:00	-3.999
11/5/98	18:00	-4.025
11/6/98	6:00	-4.018
11/6/98	18:00	-4.067
11/7/98	6:00	-4.07
11/7/98	18:00	-4.093
11/8/98	6:00	-4.099
11/8/98	18:00	-4.096
11/9/98	6:00	-4.138
11/9/98	18:00	-4.151
11/10/98	6:00	-4.17
11/10/98	18:00	-4.135
11/11/98	6:00	-4.003
11/11/98	18:00	-4.196
11/12/98	6:00	-4.22
11/12/98	18:00	-4.21
11/13/98	6:00	-4.217
11/13/98	18:00	-4.227
11/14/98	6:00	-4.223
11/14/98	18:00	-4.205
11/15/98	6:00	-4.173
11/15/98	18:00	-4.307
11/16/98	6:00	-4.329
11/16/98	18:00	-4.323
11/17/98	6:00	-4.31
11/17/98	18:00	-4.361
11/18/98	6:00	-4.391
11/18/98	18:00	-4.394
11/19/98	6:00	-4.38
11/19/98	18:00	-4.33
11/20/98	6:00	-4.349
11/20/98	18:00	-4.371
11/21/98	6:00	-4.41
11/21/98	18:00	-4.471
11/22/98	6:00	-4.499
11/22/98	18:00	-4.47

G6M9416X

Real Time		Reading
11/23/98	6:00	-4.441
11/23/98	18:00	-4.393
11/24/98	6:00	-4.502
11/24/98	18:00	-4.534
11/25/98	6:00	-4.55
11/25/98	18:00	-4.535
11/26/98	6:00	-4.486
11/26/98	18:00	-4.393
11/27/98	6:00	-4.567
11/27/98	18:00	-4.609
11/28/98	6:00	-4.588
11/28/98	18:00	-4.605
11/29/98	6:00	-4.631
11/29/98	18:00	-4.649
11/30/98	6:00	-4.609
11/30/98	18:00	-4.54
12/1/98	6:00	-4.574
12/1/98	18:00	-4.71
12/2/98	6:00	-4.659
12/2/98	18:00	-4.631
12/3/98	6:00	-4.676
12/3/98	18:00	-4.66
12/4/98	6:00	-4.681
12/4/98	18:00	-4.739
12/5/98	6:00	-4.758
12/5/98	18:00	-4.729
12/6/98	6:00	-4.704
12/6/98	18:00	-4.736
12/7/98	6:00	-4.695
12/7/98	18:00	-4.855
12/8/98	6:00	-4.829
12/8/98	18:00	-4.746
12/9/98	6:00	-4.814
12/9/98	18:00	-4.835
12/10/98	6:00	-4.83
12/10/98	18:00	-4.795
12/11/98	6:00	-4.824
12/11/98	18:00	-4.894
12/12/98	6:00	-4.867
12/12/98	18:00	-4.836
12/13/98	6:00	-4.855
12/13/98	18:00	-4.861
12/14/98	6:00	-4.912
12/14/98	18:00	-4.932
12/15/98	6:00	-4.9
12/15/98	18:00	-4.887
12/16/98	6:00	-4.925
12/16/98	18:00	-4.877
12/17/98	6:00	-4.912
12/17/98	18:00	-4.917
12/18/98	6:00	-4.99
12/18/98	18:00	-5.035
12/19/98	6:00	-4.97
12/19/98	18:00	-4.974
12/20/98	6:00	-5.018
12/20/98	18:00	-5.032
12/21/98	6:00	-5.002
12/21/98	18:00	-4.96
12/22/98	6:00	-4.874
12/22/98	18:00	-5.137
12/23/98	6:00	-5.109

G6M9416X

Real Time		Reading
12/23/98	18:00	-5.048
12/24/98	6:00	-5.022
12/24/98	18:00	-5.076
12/25/98	6:00	-5.118
12/25/98	18:00	-5.108
12/26/98	6:00	-5.085
12/26/98	18:00	-5.064
12/27/98	6:00	-5.17
12/27/98	18:00	-5.143
12/28/98	6:00	-5.108
12/28/98	18:00	-5.134
12/29/98	6:00	-5.144
12/29/98	18:00	-5.085
12/30/98	6:00	-5.101
12/30/98	18:00	-5.272
12/31/98	6:00	-5.253
12/31/98	18:00	-5.213
1/1/99	6:00	-5.214
1/1/99	18:00	-5.332
1/2/99	6:00	-5.268
1/2/99	18:00	-5.236
1/3/99	6:00	-5.21
1/3/99	18:00	-5.082
1/4/99	6:00	-5.319
1/4/99	18:00	-5.335
1/5/99	6:00	-5.336
1/5/99	18:00	-5.351
1/6/99	6:00	-5.329
1/6/99	18:00	-5.281
1/7/99	6:00	-5.313
1/7/99	18:00	-5.415
1/8/99	6:00	-5.399
1/8/99	18:00	-5.307
1/9/99	6:00	-5.276
1/9/99	18:00	-5.397
1/10/99	6:00	-5.439
1/10/99	18:00	-5.38
1/11/99	6:00	-5.394
1/11/99	18:00	-5.46
1/12/99	6:00	-5.343
1/12/99	18:00	-5.46
1/13/99	6:00	-5.397
1/13/99	18:00	-5.537
1/14/99	6:00	-5.518
1/14/99	18:00	-5.457
1/15/99	6:00	-5.34
1/15/99	18:00	-5.387
1/16/99	6:00	-5.519
1/16/99	18:00	-5.473
1/17/99	6:00	-5.558
1/17/99	18:00	-5.534
1/18/99	6:00	-5.493
1/18/99	18:00	-5.377
1/19/99	6:00	-5.521
1/19/99	18:00	-5.55
1/20/99	6:00	-5.544
1/20/99	18:00	-5.54
1/21/99	6:00	-5.535
1/21/99	18:00	-5.518
1/22/99	6:00	-5.537
1/22/99	18:00	-5.538

G6M9416X

Real Time		Reading
1/23/99	6:00	-5.489
1/23/99	18:00	-5.464
1/24/99	6:00	-5.404
1/24/99	18:00	-5.452
1/25/99	6:00	-5.428
1/25/99	18:00	-5.339
1/26/99	6:00	-5.249
1/26/99	18:00	-5.127
1/27/99	6:00	-5.067
1/27/99	18:00	-4.997
1/28/99	6:00	-5.019
1/28/99	18:00	-5.013
1/29/99	6:00	-5.044
1/29/99	18:00	-5.022
1/30/99	6:00	-5.015
1/30/99	18:00	-5.032
1/31/99	6:00	-5.047
1/31/99	18:00	-4.96
2/1/99	6:00	-4.954
2/1/99	18:00	-4.971
2/2/99	6:00	-4.986
2/2/99	18:00	-4.912
2/3/99	6:00	-4.945
2/3/99	18:00	-5.006
2/4/99	6:00	-4.931
2/4/99	18:00	-4.894
2/5/99	6:00	-4.958
2/5/99	18:00	-4.954
2/6/99	6:00	-4.872
2/6/99	18:00	-4.855
2/7/99	6:00	-4.915
2/7/99	18:00	-4.861
2/8/99	6:00	-4.888
2/8/99	18:00	-4.913
2/9/99	6:00	-4.88
2/9/99	18:00	-4.838
2/10/99	6:00	-4.884
2/10/99	18:00	-4.928
2/11/99	6:00	-4.935
2/11/99	18:00	-4.868
2/12/99	6:00	-4.814
2/12/99	18:00	-4.788
2/13/99	6:00	-4.888
2/13/99	18:00	-4.907
2/14/99	6:00	-4.883
2/14/99	18:00	-4.886
2/15/99	6:00	-4.874
2/15/99	18:00	-4.84
2/16/99	6:00	-4.862
2/16/99	18:00	-4.868
2/17/99	6:00	-4.865
2/17/99	18:00	-4.851
2/18/99	6:00	-4.845
2/18/99	18:00	-4.859
2/19/99	6:00	-4.884
2/19/99	18:00	-4.875
2/20/99	6:00	-4.874
2/20/99	18:00	-4.871
2/21/99	6:00	-4.88
2/21/99	18:00	-4.9
2/22/99	6:00	-4.936

G6M9416X

Real Time		Reading
2/22/99	18:00	-4.913
2/23/99	6:00	-4.923
2/23/99	18:00	-4.919
2/24/99	6:00	-4.919
2/24/99	18:00	-4.902
2/25/99	6:00	-4.871
2/25/99	18:00	-4.838
2/26/99	6:00	-4.878
2/26/99	18:00	-4.945
2/27/99	6:00	-4.945
2/27/99	18:00	-4.949
2/28/99	6:00	-4.928
2/28/99	18:00	-4.84
3/1/99	6:00	-4.833
3/1/99	18:00	-4.948
3/2/99	6:00	-4.971
3/2/99	18:00	-5.021
3/3/99	6:00	-4.976
3/3/99	18:00	-4.903
3/4/99	6:00	-4.823
3/4/99	18:00	-4.986
3/5/99	6:00	-5.042
3/5/99	18:00	-4.995
3/6/99	6:00	-4.942
3/6/99	18:00	-4.832
3/7/99	6:00	-4.928
3/7/99	18:00	-5
3/8/99	6:00	-4.965
3/8/99	18:00	-4.929
3/9/99	6:00	-4.9
3/9/99	18:00	-4.903
3/10/99	6:00	-4.912
3/10/99	18:00	-4.906
3/11/99	6:00	-4.913
3/11/99	18:00	-4.938
3/12/99	6:00	-4.941
3/12/99	18:00	-4.979
3/13/99	6:00	-4.996
3/13/99	18:00	-4.98
3/14/99	6:00	-4.97
3/14/99	18:00	-4.952
3/15/99	6:00	-4.881
3/15/99	18:00	-4.912
3/16/99	6:00	-4.979
3/16/99	18:00	-4.979
3/17/99	6:00	-4.995
3/17/99	18:00	-4.961
3/18/99	6:00	-4.923
3/18/99	18:00	-5
3/19/99	6:00	-5.013
3/19/99	18:00	-5
3/20/99	6:00	-4.979
3/20/99	18:00	-4.967
3/21/99	6:00	-4.961
3/21/99	18:00	-4.935
3/22/99	6:00	-4.784
3/22/99	18:00	-4.977
3/23/99	6:00	-4.973
3/23/99	18:00	-4.932
3/24/99	6:00	-4.897
3/24/99	18:00	-4.848

G6M9416X

Real Time		Reading
3/25/99	6:00	-4.915
3/25/99	18:00	-4.912
3/26/99	6:00	-4.91
3/26/99	18:00	-4.881
3/27/99	6:00	-4.884
3/27/99	18:00	-4.854
3/28/99	6:00	-4.852
3/28/99	18:00	-4.813
3/29/99	6:00	-4.827
3/29/99	18:00	-4.835
3/30/99	6:00	-4.851
3/30/99	18:00	-4.842
3/31/99	6:00	-4.807
3/31/99	18:00	-4.775
4/1/99	6:00	-4.788
4/1/99	18:00	-4.776
4/2/99	6:00	-4.814
4/2/99	18:00	-4.775
4/3/99	6:00	-4.795
4/3/99	18:00	-4.711
4/4/99	6:00	-4.745
4/4/99	18:00	-4.775
4/5/99	6:00	-4.792
4/5/99	18:00	-4.745
4/6/99	6:00	-4.739
4/6/99	18:00	-4.679
4/7/99	6:00	-4.675
4/7/99	18:00	-4.714
4/8/99	6:00	-4.667
4/8/99	18:00	-4.688
4/9/99	6:00	-4.704
4/9/99	18:00	-4.662
4/10/99	6:00	-4.721
4/10/99	18:00	-4.731
4/11/99	6:00	-4.688
4/11/99	18:00	-4.628
4/12/99	6:00	-4.627
4/12/99	18:00	-4.659
4/13/99	6:00	-4.647
4/13/99	18:00	-4.638
4/14/99	6:00	-4.627
4/14/99	18:00	-4.67
4/15/99	6:00	-4.64
4/15/99	18:00	-4.647
4/16/99	6:00	-4.614
4/16/99	18:00	-4.614
4/17/99	6:00	-4.621
4/17/99	18:00	-4.621
4/18/99	6:00	-4.625
4/18/99	18:00	-4.646
4/19/99	6:00	-4.641
4/19/99	18:00	-4.604
4/20/99	6:00	-4.624
4/20/99	18:00	-4.617
4/21/99	6:00	-4.628
4/21/99	18:00	-4.598
4/22/99	6:00	-4.624
4/22/99	18:00	-4.612
4/23/99	6:00	-4.635
4/23/99	18:00	-4.58
4/24/99	6:00	-4.637

G6M9416X

Real Time		Reading
4/24/99	18:00	-4.625
4/25/99	6:00	-4.631
4/25/99	18:00	-4.573
4/26/99	6:00	-4.564
4/26/99	18:00	-4.624
4/27/99	6:00	-4.657
4/27/99	18:00	-4.662
4/28/99	6:00	-4.659
4/28/99	18:00	-4.622
4/29/99	6:00	-4.63
4/29/99	18:00	-4.656
4/30/99	6:00	-4.665
4/30/99	18:00	-4.646
5/1/99	6:00	-4.662
5/1/99	18:00	-4.643
5/2/99	6:00	-4.669
5/2/99	18:00	-4.657
5/3/99	6:00	-4.663
5/3/99	18:00	-4.646
5/4/99	6:00	-4.675
5/4/99	18:00	-4.679
5/5/99	6:00	-4.697
5/5/99	18:00	-4.707
5/6/99	6:00	-4.715
5/6/99	18:00	-4.705
5/7/99	6:00	-4.737
5/7/99	18:00	-4.727
5/8/99	6:00	-4.74
5/8/99	18:00	-4.713
5/9/99	6:00	-4.752
5/9/99	18:00	-4.774
5/10/99	6:00	-4.788
5/10/99	18:00	-4.813
5/11/99	6:00	-4.838
5/11/99	18:00	-4.79
5/12/99	6:00	-4.8
5/12/99	18:00	-4.787
5/13/99	6:00	-4.829
5/13/99	18:00	-4.862
5/14/99	6:00	-4.884
5/14/99	18:00	-4.864
5/15/99	6:00	-4.912
5/15/99	18:00	-4.891
5/16/99	6:00	-4.906
5/16/99	18:00	-4.891
5/17/99	6:00	-4.929
5/17/99	18:00	-4.916
5/18/99	6:00	-4.936
5/18/99	18:00	-4.925
5/19/99	6:00	-4.941
5/19/99	18:00	-4.944
5/20/99	6:00	-4.986
5/20/99	18:00	-4.996
5/21/99	6:00	-5.009
5/21/99	18:00	-5.005
5/22/99	6:00	-5.034
5/22/99	18:00	-5.025
5/23/99	6:00	-5.041
5/23/99	18:00	-5.032
5/24/99	6:00	-5.034
5/24/99	18:00	-5.038

G6M9416X

Real Time		Reading
5/25/99	6:00	-5.108
5/25/99	18:00	-5.098
5/26/99	6:00	-5.082
5/26/99	18:00	-5.112
5/27/99	6:00	-5.114
5/27/99	18:00	-5.136
5/28/99	6:00	-5.165
5/28/99	18:00	-5.156
5/29/99	6:00	-5.185
5/29/99	18:00	-5.191
5/30/99	6:00	-5.21
5/30/99	18:00	-5.172
5/31/99	6:00	-5.207
5/31/99	18:00	-5.199
6/1/99	6:00	-5.215
6/1/99	18:00	-5.217
6/2/99	6:00	-5.243
6/2/99	18:00	-5.221
6/3/99	6:00	-5.236
6/3/99	18:00	-5.269
6/4/99	6:00	-5.304
6/4/99	18:00	-5.32
6/5/99	6:00	-5.338
6/5/99	18:00	-5.311
6/6/99	6:00	-5.314
6/6/99	18:00	-5.282
6/7/99	6:00	-5.317
6/7/99	18:00	-5.308
6/8/99	6:00	-5.338
6/8/99	18:00	-5.356
6/9/99	6:00	-5.445
6/9/99	18:00	-5.413
6/10/99	6:00	-5.429
6/10/99	18:00	-5.407
6/11/99	6:00	-5.423
6/11/99	18:00	-5.403
6/12/99	6:00	-5.441
6/12/99	18:00	-5.426
6/13/99	6:00	-5.448
6/13/99	18:00	-5.426
6/14/99	6:00	-5.439
6/14/99	18:00	-5.429
6/15/99	6:00	-5.494
6/15/99	18:00	-5.518
6/16/99	6:00	-5.526
6/16/99	18:00	-5.496
6/17/99	6:00	-5.521
6/17/99	18:00	-5.531
6/18/99	6:00	-5.547
6/18/99	18:00	-5.561
6/19/99	6:00	-5.585
6/19/99	18:00	-5.569
6/20/99	6:00	-5.583
6/20/99	18:00	-5.566
6/21/99	6:00	-5.588
6/21/99	18:00	-5.585
6/22/99	6:00	-5.592
6/22/99	18:00	-5.595
6/23/99	6:00	-5.625
6/23/99	18:00	-5.617
6/24/99	6:00	-5.635

G6M9416X

Real Time		Reading
6/24/99	18:00	-5.634
6/25/99	6:00	-5.643
6/25/99	18:00	-5.641
6/26/99	6:00	-5.669
6/26/99	18:00	-5.673
6/27/99	6:00	-5.699
6/27/99	18:00	-5.665
6/28/99	6:00	-5.676
6/28/99	18:00	-5.692
6/29/99	6:00	-5.694
6/29/99	18:00	-5.724
6/30/99	6:00	-5.781
6/30/99	18:00	-5.756
7/1/99	6:00	-5.763
7/1/99	18:00	-5.727
7/2/99	6:00	-5.758
7/2/99	18:00	-5.784
7/3/99	6:00	-5.794
7/3/99	18:00	-5.758
7/4/99	6:00	-5.803
7/4/99	18:00	-5.787
7/5/99	6:00	-5.792
7/5/99	18:00	-5.817
7/6/99	6:00	-5.821
7/6/99	18:00	-5.837
7/7/99	6:00	-5.862
7/7/99	18:00	-5.846
7/8/99	6:00	-5.855
7/8/99	18:00	-5.88
7/9/99	6:00	-5.882
7/9/99	18:00	-5.855
7/10/99	6:00	-5.877
7/10/99	18:00	-5.938
7/11/99	6:00	-5.942
7/11/99	18:00	-5.946
7/12/99	6:00	-5.957
7/12/99	18:00	-5.942
7/13/99	6:00	-5.945
7/13/99	18:00	-5.948
7/14/99	6:00	-5.968
7/14/99	18:00	-5.949
7/15/99	6:00	-5.974
7/15/99	18:00	-5.97
7/16/99	6:00	-5.999
7/16/99	18:00	-5.991
7/17/99	6:00	-6.005
7/17/99	18:00	-6.01
7/18/99	6:00	-6.035
7/18/99	18:00	-6.028
7/19/99	6:00	-6.041
7/19/99	18:00	-6.047
7/20/99	6:00	-6.079
7/20/99	18:00	-6.076
7/21/99	6:00	-6.098
7/21/99	18:00	-6.063
7/22/99	6:00	-6.074
7/22/99	18:00	-6.083
7/23/99	6:00	-6.095
7/23/99	18:00	-6.1
7/24/99	6:00	-6.109
7/24/99	18:00	-6.108

G6M9416X

Real Time		Reading
7/25/99	6:00	-6.144
7/25/99	18:00	-6.147
7/26/99	6:00	-6.151
7/26/99	18:00	-6.163
7/27/99	6:00	-6.177
7/27/99	18:00	-6.175
7/28/99	6:00	-6.192
7/28/99	18:00	-6.193
7/29/99	6:00	-6.204
7/29/99	18:00	-6.204
7/30/99	6:00	-6.22
7/30/99	18:00	-6.244
7/31/99	6:00	-6.26
7/31/99	18:00	-6.244
8/1/99	6:00	-6.246
8/1/99	18:00	-6.285
8/2/99	6:00	-6.313
8/2/99	18:00	-6.304
8/3/99	6:00	-6.31
8/3/99	18:00	-6.302
8/4/99	6:00	-6.31
8/4/99	18:00	-6.298
8/5/99	6:00	-6.308
8/5/99	18:00	-6.334
8/6/99	6:00	-6.355
8/6/99	18:00	-6.339
8/7/99	6:00	-6.397
8/7/99	18:00	-6.375
8/8/99	6:00	-6.343
8/8/99	18:00	-6.365
8/9/99	6:00	-6.419
8/9/99	18:00	-6.429
8/10/99	6:00	-6.429
8/10/99	18:00	-6.42
8/11/99	6:00	-6.439
8/11/99	18:00	-6.445
8/12/99	6:00	-6.462
8/12/99	18:00	-6.464
8/13/99	6:00	-6.481
8/13/99	18:00	-6.448
8/14/99	6:00	-6.485
8/14/99	18:00	-6.512
8/15/99	6:00	-6.548
8/15/99	18:00	-6.535
8/16/99	6:00	-6.554
8/16/99	18:00	-6.52
8/17/99	6:00	-6.514
8/17/99	18:00	-6.514
8/18/99	6:00	-6.552
8/18/99	18:00	-6.593
8/19/99	6:00	-6.616
8/19/99	18:00	-6.616
8/20/99	6:00	-6.619
8/20/99	18:00	-6.607
8/21/99	6:00	-6.623
8/21/99	18:00	-6.612
8/22/99	6:00	-6.644
8/22/99	18:00	-6.644
8/23/99	6:00	-6.661
8/23/99	18:00	-6.658
8/24/99	6:00	-6.696

G6M9416X

Real Time		Reading
8/24/99	18:00	-6.686
8/25/99	6:00	-6.703
8/25/99	18:00	-6.689
8/26/99	6:00	-6.699
8/26/99	18:00	-6.7
8/27/99	6:00	-6.725
8/27/99	18:00	-6.709
8/28/99	6:00	-6.724
8/28/99	18:00	-6.737
8/29/99	6:00	-6.769
8/29/99	18:00	-6.808
8/30/99	6:00	-6.82
8/30/99	18:00	-6.802
8/31/99	6:00	-6.814
8/31/99	18:00	-6.792
9/1/99	6:00	-6.818
9/1/99	18:00	-6.815
9/2/99	6:00	-6.833
9/2/99	18:00	-6.824
9/3/99	6:00	-6.854
9/3/99	18:00	-6.852
9/4/99	6:00	-6.904
9/4/99	18:00	-6.886
9/5/99	6:00	-6.898
9/5/99	18:00	-6.882
9/6/99	6:00	-6.891
9/6/99	18:00	-6.889
9/7/99	6:00	-6.908
9/7/99	18:00	-6.894
9/8/99	6:00	-6.928
9/8/99	18:00	-6.936
9/9/99	6:00	-6.958
9/9/99	18:00	-6.959
9/10/99	6:00	-6.949
9/10/99	18:00	-6.937
9/11/99	6:00	-7.001
9/11/99	18:00	-6.995
9/12/99	6:00	-7.013
9/12/99	18:00	-6.989
9/13/99	6:00	-6.994
9/13/99	18:00	-6.975
9/14/99	6:00	-6.984
9/14/99	18:00	-6.968
9/15/99	6:00	-6.992
9/15/99	18:00	-6.991
9/16/99	6:00	-6.968
9/16/99	18:00	-6.792
9/17/99	6:00	-6.95
9/17/99	18:00	-6.963
9/18/99	6:00	-6.852
9/18/99	18:00	-6.747
9/19/99	6:00	-6.68
9/19/99	18:00	-6.56
9/20/99	6:00	-6.483
9/20/99	18:00	-6.388
9/21/99	6:00	-6.321
9/21/99	18:00	-6.254
9/22/99	6:00	-6.192
9/22/99	18:00	-6.137
9/23/99	6:00	-6.128
9/23/99	18:00	-6.08

G6M9416X

Real Time		Reading
9/24/99	6:00	-6.022
9/24/99	18:00	-5.961
9/25/99	6:00	-5.92
9/25/99	18:00	-5.925
9/26/99	6:00	-5.893
9/26/99	18:00	-5.804
9/27/99	6:00	-5.769
9/27/99	18:00	-5.712
9/28/99	6:00	-5.686
9/28/99	18:00	-5.638
9/29/99	6:00	-5.59
9/29/99	18:00	-5.528
9/30/99	6:00	-5.439
9/30/99	18:00	-5.534
10/1/99	6:00	-5.487
10/1/99	18:00	-5.433
10/2/99	6:00	-5.435
10/2/99	18:00	-5.359
10/3/99	6:00	-5.324
10/3/99	18:00	-5.316
10/4/99	6:00	-5.201
10/4/99	18:00	-5.229
10/5/99	6:00	-5.195
10/5/99	18:00	-5.147
10/6/99	6:00	-5.111
10/6/99	18:00	-5.137
10/7/99	6:00	-5.143
10/7/99	18:00	-5.104
10/8/99	6:00	-5.072
10/8/99	18:00	-4.99
10/9/99	6:00	-4.961
10/9/99	18:00	-4.976
10/10/99	6:00	-4.948
10/10/99	18:00	-4.871
10/11/99	6:00	-4.942
10/11/99	18:00	-4.941
10/12/99	6:00	-4.949
10/12/99	18:00	-4.886
10/13/99	6:00	-4.827
10/13/99	18:00	-4.772
10/14/99	6:00	-4.731
10/14/99	18:00	-4.949
10/15/99	6:00	-4.89
10/15/99	18:00	-4.826
10/16/99	6:00	-4.791
10/16/99	18:00	-4.774
10/17/99	6:00	-4.753
10/17/99	18:00	-4.745
10/18/99	6:00	-4.753
10/18/99	18:00	-4.864
10/19/99	6:00	-4.84

G6M-96-16B: JANUARY 22 TO APRIL 1997					
IN SITU	INC.	TROLL			
Serial	number:	10110			
Unit	name:	G6M9616B			
Report	generated:	4/25/97	14:35:37		
Report	from	file:	C:\DEVENS\TASK7\WLMONG616B421.BIN		
Test	name:	G6M9616B			
Test	defined	on:	1/22/97	15:38:47	
Test	scheduled	for:	1/22/97	18:00:00	
Test	started	on:	1/22/97	18:00:00	
Test	stopped	on:	N/A	N/A	
Test	extracted	on:	4/21/97	13:52:41	
Data	gathered	using	Linear	testing	
	Time	between	data	points:	720 Minutes.
	Number	of	data	samples:	178
Channel	number	[2]			
	Measurement	type:	Pressure/Level		
	Channel	name:	G6M9616B		
	Specific	gravity:	1		
	Mode:	Surface			
	User-defined	reference:	213.64	Feet	H2O
	Referenced	on:	test start		
	Pressure	head	at	reference:	10.355 Feet H2O
Channel	number	[1]			
	Measurement	type:	Temperature		
	Channel	name:	OnBoard	Temp	
	Channel[2]	Channel[1]			
Date	Time	ET (min)	Feet H2O	Celsius	
-----	-----	-----	-----	-----	
1/22/97	18:00:00	0	213.64	10.12	
1/23/97	6:00:00	720	213.612	10.15	
1/23/97	18:00:00	1440	213.34	10.15	
1/24/97	6:00:00	2160	213.345	10.15	
1/24/97	18:00:00	2880	213.52	10.15	
1/25/97	6:00:00	3600	213.788	10.15	
1/25/97	18:00:00	4320	213.649	10.15	
1/26/97	6:00:00	5040	213.483	10.15	
1/26/97	18:00:00	5760	213.398	10.15	
1/27/97	6:00:00	6480	213.43	10.15	
1/27/97	18:00:00	7200	213.555	10.16	
1/28/97	6:00:00	7920	213.829	10.16	
1/28/97	18:00:00	8640	213.506	10.16	
1/29/97	6:00:00	9360	213.472	10.16	

Date	Time	ET (min)	Feet H2O	Celsius		
1/29/97	18:00:00	10080	213.472	10.16		
1/30/97	6:00:00	10800	213.502	10.16		
1/30/97	18:00:00	11520	213.612	10.16		
1/31/97	6:00:00	12240	213.654	10.16		
1/31/97	18:00:00	12960	213.661	10.16		
2/1/97	6:00:00	13680	213.645	10.16		
2/1/97	18:00:00	14400	213.497	10.16		
2/2/97	6:00:00	15120	213.423	10.17		
2/2/97	18:00:00	15840	213.442	10.16		
2/3/97	6:00:00	16560	213.467	10.16		
2/3/97	18:00:00	17280	213.391	10.17		
2/4/97	6:00:00	18000	213.352	10.16		
2/4/97	18:00:00	18720	213.444	10.17		
2/5/97	6:00:00	19440	213.647	10.18		
2/5/97	18:00:00	20160	213.559	10.18		
2/6/97	6:00:00	20880	213.49	10.18		
2/6/97	18:00:00	21600	213.497	10.18		
2/7/97	6:00:00	22320	213.495	10.18		
2/7/97	18:00:00	23040	213.49	10.18		
2/8/97	6:00:00	23760	213.462	10.18		
2/8/97	18:00:00	24480	213.509	10.18		
2/9/97	6:00:00	25200	213.527	10.18		
2/9/97	18:00:00	25920	213.504	10.19		
2/10/97	6:00:00	26640	213.479	10.18		
2/10/97	18:00:00	27360	213.472	10.18		
2/11/97	6:00:00	28080	213.437	10.18		
2/11/97	18:00:00	28800	213.432	10.19		
2/12/97	6:00:00	29520	213.446	10.19		
2/12/97	18:00:00	30240	213.462	10.19		
2/13/97	6:00:00	30960	213.216	10.19		
2/13/97	18:00:00	31680	213.296	10.19		
2/14/97	6:00:00	32400	213.368	10.19		
2/14/97	18:00:00	33120	213.603	10.2		
2/15/97	6:00:00	33840	213.409	10.2		
2/15/97	18:00:00	34560	213.315	10.2		
2/16/97	6:00:00	35280	213.206	10.2		
2/16/97	18:00:00	36000	213.273	10.21		
2/17/97	6:00:00	36720	213.262	10.21		
2/17/97	18:00:00	37440	213.246	10.21		
2/18/97	6:00:00	38160	213.34	10.21		
2/18/97	18:00:00	38880	213.382	10.21		
2/19/97	6:00:00	39600	213.333	10.21		
2/19/97	18:00:00	40320	213.379	10.21		
2/20/97	6:00:00	41040	213.112	10.22		
2/20/97	18:00:00	41760	213.229	10.22		
2/21/97	6:00:00	42480	213.379	10.22		
2/21/97	18:00:00	43200	213.451	10.22		
2/22/97	6:00:00	43920	213.439	10.22		
2/22/97	18:00:00	44640	213.285	10.22		
2/23/97	6:00:00	45360	213.186	10.22		

Date	Time	ET (min)	Feet H2O	Celsius		
2/23/97	18:00:00	46080	213.257	10.22		
2/24/97	6:00:00	46800	213.285	10.22		
2/24/97	18:00:00	47520	213.333	10.23		
2/25/97	6:00:00	48240	213.234	10.23		
2/25/97	18:00:00	48960	213.296	10.23		
2/26/97	6:00:00	49680	213.308	10.23		
2/26/97	18:00:00	50400	213.301	10.23		
2/27/97	6:00:00	51120	213.338	10.24		
2/27/97	18:00:00	51840	213.361	10.23		
2/28/97	6:00:00	52560	213.089	10.24		
2/28/97	18:00:00	53280	213.114	10.24		
3/1/97	6:00:00	54000	213.153	10.24		
3/1/97	18:00:00	54720	213.301	10.24		
3/2/97	6:00:00	55440	213.382	10.24		
3/2/97	18:00:00	56160	213.146	10.24		
3/3/97	6:00:00	56880	213.045	10.24		
3/3/97	18:00:00	57600	213.123	10.24		
3/4/97	6:00:00	58320	213.149	10.24		
3/4/97	18:00:00	59040	213.16	10.24		
3/5/97	6:00:00	59760	213.103	10.24		
3/5/97	18:00:00	60480	213.165	10.24		
3/6/97	6:00:00	61200	213.455	10.24		
3/6/97	18:00:00	61920	213.049	10.25		
3/7/97	6:00:00	62640	213.038	10.25		
3/7/97	18:00:00	63360	213.036	10.25		
3/8/97	6:00:00	64080	213.107	10.25		
3/8/97	18:00:00	64800	213.1	10.25		
3/9/97	6:00:00	65520	212.957	10.26		
3/9/97	18:00:00	66240	213.121	10.25		
3/10/97	6:00:00	66960	213.282	10.26		
3/10/97	18:00:00	67680	213.119	10.25		
3/11/97	6:00:00	68400	213.103	10.26		
3/11/97	18:00:00	69120	213.075	10.26		
3/12/97	6:00:00	69840	212.973	10.26		
3/12/97	18:00:00	70560	213.017	10.26		
3/13/97	6:00:00	71280	212.941	10.26		
3/13/97	18:00:00	72000	212.98	10.26		
3/14/97	6:00:00	72720	213.01	10.26		
3/14/97	18:00:00	73440	213.176	10.26		
3/15/97	6:00:00	74160	213.089	10.26		
3/15/97	18:00:00	74880	212.913	10.26		
3/16/97	6:00:00	75600	212.932	10.26		
3/16/97	18:00:00	76320	212.939	10.26		
3/17/97	6:00:00	77040	212.93	10.26		
3/17/97	18:00:00	77760	213.103	10.26		
3/18/97	6:00:00	78480	212.9	10.27		
3/18/97	18:00:00	79200	212.9	10.27		
3/19/97	6:00:00	79920	212.906	10.27		
3/19/97	18:00:00	80640	213.036	10.27		
3/20/97	6:00:00	81360	212.999	10.27		

Date	Time	ET (min)	Feet H2O	Celsius		
3/20/97	18:00:00	82080	212.99	10.27		
3/21/97	6:00:00	82800	212.897	10.27		
3/21/97	18:00:00	83520	212.98	10.27		
3/22/97	6:00:00	84240	213.047	10.27		
3/22/97	18:00:00	84960	212.844	10.27		
3/23/97	6:00:00	85680	212.828	10.27		
3/23/97	18:00:00	86400	212.847	10.27		
3/24/97	6:00:00	87120	212.81	10.27		
3/24/97	18:00:00	87840	212.814	10.27		
3/25/97	6:00:00	88560	212.812	10.27		
3/25/97	18:00:00	89280	212.966	10.27		
3/26/97	6:00:00	90000	213.089	10.27		
3/26/97	18:00:00	90720	212.925	10.27		
3/27/97	6:00:00	91440	212.943	10.27		
3/27/97	18:00:00	92160	212.98	10.28		
3/28/97	6:00:00	92880	212.918	10.27		
3/28/97	18:00:00	93600	213.015	10.27		
3/29/97	6:00:00	94320	213.043	10.27		
3/29/97	18:00:00	95040	213.091	10.28		
3/30/97	6:00:00	95760	213.013	10.28		
3/30/97	18:00:00	96480	212.969	10.28		
3/31/97	6:00:00	97200	213.031	10.28		
3/31/97	18:00:00	97920	213.103	10.28		
4/1/97	6:00:00	98640	213.017	10.28		
4/1/97	18:00:00	99360	212.969	10.28		
4/2/97	6:00:00	100080	212.99	10.28		
4/2/97	18:00:00	100800	213.022	10.28		
4/3/97	6:00:00	101520	213.033	10.28		
4/3/97	18:00:00	102240	213.114	10.29		
4/4/97	6:00:00	102960	213.116	10.28		
4/4/97	18:00:00	103680	213.052	10.28		
4/5/97	6:00:00	104400	213.061	10.29		
4/5/97	18:00:00	105120	213.193	10.29		
4/6/97	6:00:00	105840	213.204	10.29		
4/6/97	18:00:00	106560	213.317	10.28		
4/7/97	6:00:00	107280	213.303	10.29		
4/7/97	18:00:00	108000	213.269	10.29		
4/8/97	6:00:00	108720	213.239	10.29		
4/8/97	18:00:00	109440	213.282	10.29		
4/9/97	6:00:00	110160	213.276	10.29		
4/9/97	18:00:00	110880	213.276	10.29		
4/10/97	6:00:00	111600	213.239	10.29		
4/10/97	18:00:00	112320	213.246	10.29		
4/11/97	6:00:00	113040	213.218	10.29		
4/11/97	18:00:00	113760	213.294	10.29		
4/12/97	6:00:00	114480	213.252	10.29		
4/12/97	18:00:00	115200	213.345	10.29		
4/13/97	6:00:00	115920	213.398	10.29		
4/13/97	18:00:00	116640	213.338	10.29		
4/14/97	6:00:00	117360	213.232	10.29		

Date	Time	ET (min)	Feet H2O	Celsius		
4/14/97	18:00:00	118080	213.232	10.29		
4/15/97	6:00:00	118800	213.239	10.29		
4/15/97	18:00:00	119520	213.322	10.29		
4/16/97	6:00:00	120240	213.299	10.29		
4/16/97	18:00:00	120960	213.386	10.29		
4/17/97	6:00:00	121680	213.37	10.29		
4/17/97	18:00:00	122400	213.391	10.29		
4/18/97	6:00:00	123120	213.451	10.29		
4/18/97	18:00:00	123840	213.423	10.29		
4/19/97	6:00:00	124560	213.439	10.3		
4/19/97	18:00:00	125280	213.446	10.29		
4/20/97	6:00:00	126000	213.495	10.29		
4/20/97	18:00:00	126720	213.566	10.29		
4/21/97	6:00:00	127440	213.58	10.29		

G6M-94-15A: JUNE 17 TO OCTOBER 14, 1996 AND OCTOBER 29, 1996 TO JANUARY 22,1997				
	IN-SITU, WELL	INC. SENTINEL		
	Serial	#	L3K00475	

Downloaded:	10/14/96	13:25		
Unit	ID:	XGM9301X		
Test	name:	g6m9415A		
Linearity:	0.043			
Scale	Factor:	10.068		
Offset:	-0.021			
Specific	Gravity:	1		
Data	Type:	Level		
Units:	English			
Mode:	Top	of	Casing	
Ref.	Level:	0		
Ref.	Taken:	6/17/96	13:27	
Test	Begun:	6/17/96	18:00	
Elapsed	(min.)	Reading		
time (min)	time (days)	Date	Δ wl (feet)	wl (amsl)
0	0	6/17/96	0	216.37
720	0.5	6/18/96	-0.076	216.294
1440	1	6/18/96	-0.115	216.255
2160	1.5	6/19/96	-0.14	216.23
2880	2	6/19/96	-0.12	216.25
3600	2.5	6/20/96	-0.146	216.224
4320	3	6/20/96	-0.143	216.227
5040	3.5	6/21/96	-0.179	216.191
5760	4	6/21/96	-0.221	216.149
6480	4.5	6/22/96	-0.287	216.083
7200	5	6/22/96	-0.246	216.124
7920	5.5	6/23/96	-0.322	216.048
8640	6	6/23/96	-0.387	215.983
9360	6.5	6/24/96	-0.427	215.943
10080	7	6/24/96	-0.358	216.012
10800	7.5	6/25/96	-0.377	215.993
11520	8	6/25/96	-0.51	215.86
12240	8.5	6/26/96	-0.552	215.818
12960	9	6/26/96	-0.574	215.796
13680	9.5	6/27/96	-0.62	215.75
14400	10	6/27/96	-0.617	215.753
15120	10.5	6/28/96	-0.68	215.69
15840	11	6/28/96	-0.712	215.658
16560	11.5	6/29/96	-0.747	215.623
17280	12	6/29/96	-0.711	215.659
18000	12.5	6/30/96	-0.735	215.635
18720	13	6/30/96	-0.753	215.617

time (min)	time (days)	Date	Δ wl (feet)	wl (amsl)
19440	13.5	7/1/96	-0.783	215.587
20160	14	7/1/96	-0.795	215.575
20880	14.5	7/2/96	-0.861	215.509
21600	15	7/2/96	-0.837	215.533
22320	15.5	7/3/96	-0.875	215.495
23040	16	7/3/96	-0.89	215.48
23760	16.5	7/4/96	-0.952	215.418
24480	17	7/4/96	-1.01	215.36
25200	17.5	7/5/96	-1.088	215.282
25920	18	7/5/96	-1.127	215.243
26640	18.5	7/6/96	-1.124	215.246
27360	19	7/6/96	-1.118	215.252
28080	19.5	7/7/96	-1.188	215.182
28800	20	7/7/96	-1.14	215.23
29520	20.5	7/8/96	-1.172	215.198
30240	21	7/8/96	-1.229	215.141
30960	21.5	7/9/96	-1.252	215.118
31680	22	7/9/96	-1.262	215.108
32400	22.5	7/10/96	-1.379	214.991
33120	23	7/10/96	-1.424	214.946
33840	23.5	7/11/96	-1.464	214.906
34560	24	7/11/96	-1.444	214.926
35280	24.5	7/12/96	-1.491	214.879
36000	25	7/12/96	-1.463	214.907
36720	25.5	7/13/96	-1.478	214.892
37440	26	7/13/96	-1.204	215.166
38160	26.5	7/14/96	-1.456	214.914
38880	27	7/14/96	-1.303	215.067
39600	27.5	7/15/96	-1.269	215.101
40320	28	7/15/96	-1.124	215.246
41040	28.5	7/16/96	-1.197	215.173
41760	29	7/16/96	-1.114	215.256
42480	29.5	7/17/96	-1.136	215.234
43200	30	7/17/96	-1.09	215.28
43920	30.5	7/18/96	-1.106	215.264
44640	31	7/18/96	-1.031	215.339
45360	31.5	7/19/96	-0.976	215.394
46080	32	7/19/96	-0.874	215.496
46800	32.5	7/20/96	-1.054	215.316
47520	33	7/20/96	-1.029	215.341
48240	33.5	7/21/96	-1.082	215.288
48960	34	7/21/96	-1.117	215.253
49680	34.5	7/22/96	-1.139	215.231
50400	35	7/22/96	-1.105	215.265
51120	35.5	7/23/96	-1.127	215.243
51840	36	7/23/96	-1.13	215.24
52560	36.5	7/24/96	-1.173	215.197
53280	37	7/24/96	-1.144	215.226

time (min)	time (days)	Date	Δ wl (feet)	wl (amsl)
54000	37.5	7/25/96	-1.185	215.185
54720	38	7/25/96	-1.137	215.233
55440	38.5	7/26/96	-1.155	215.215
56160	39	7/26/96	-1.153	215.217
56880	39.5	7/27/96	-1.208	215.162
57600	40	7/27/96	-1.236	215.134
58320	40.5	7/28/96	-1.296	215.074
59040	41	7/28/96	-1.259	215.111
59760	41.5	7/29/96	-1.302	215.068
60480	42	7/29/96	-1.28	215.09
61200	42.5	7/30/96	-1.293	215.077
61920	43	7/30/96	-1.288	215.082
62640	43.5	7/31/96	-1.32	215.05
63360	44	7/31/96	-1.287	215.083
64080	44.5	8/1/96	-1.32	215.05
64800	45	8/1/96	-1.341	215.029
65520	45.5	8/2/96	-1.371	214.999
66240	46	8/2/96	-1.379	214.991
66960	46.5	8/3/96	-1.434	214.936
67680	47	8/3/96	-1.437	214.933
68400	47.5	8/4/96	-1.485	214.885
69120	48	8/4/96	-1.46	214.91
69840	48.5	8/5/96	-1.515	214.855
70560	49	8/5/96	-1.486	214.884
71280	49.5	8/6/96	-1.556	214.814
72000	50	8/6/96	-1.531	214.839
72720	50.5	8/7/96	-1.582	214.788
73440	51	8/7/96	-1.553	214.817
74160	51.5	8/8/96	-1.585	214.785
74880	52	8/8/96	-1.572	214.798
75600	52.5	8/9/96	-1.603	214.767
76320	53	8/9/96	-1.626	214.744
77040	53.5	8/10/96	-1.67	214.7
77760	54	8/10/96	-1.691	214.679
78480	54.5	8/11/96	-1.763	214.607
79200	55	8/11/96	-1.731	214.639
79920	55.5	8/12/96	-1.785	214.585
80640	56	8/12/96	-1.77	214.6
81360	56.5	8/13/96	-1.788	214.582
82080	57	8/13/96	-1.769	214.601
82800	57.5	8/14/96	-1.833	214.537
83520	58	8/14/96	-1.85	214.52
84240	58.5	8/15/96	-1.913	214.457
84960	59	8/15/96	-1.875	214.495
85680	59.5	8/16/96	-1.901	214.469
86400	60	8/16/96	-1.907	214.463
87120	60.5	8/17/96	-1.953	214.417
87840	61	8/17/96	-1.972	214.398

time (min)	time (days)	Date	Δ wl (feet)	wl (amsl)
88560	61.5	8/18/96	-2.022	214.348
89280	62	8/18/96	-2.029	214.341
90000	62.5	8/19/96	-2.111	214.259
90720	63	8/19/96	-2.095	214.275
91440	63.5	8/20/96	-2.129	214.241
92160	64	8/20/96	-2.08	214.29
92880	64.5	8/21/96	-2.105	214.265
93600	65	8/21/96	-2.14	214.23
94320	65.5	8/22/96	-2.212	214.158
95040	66	8/22/96	-2.201	214.169
95760	66.5	8/23/96	-2.233	214.137
96480	67	8/23/96	-2.225	214.145
97200	67.5	8/24/96	-2.281	214.089
97920	68	8/24/96	-2.307	214.063
98640	68.5	8/25/96	-2.345	214.025
99360	69	8/25/96	-2.317	214.053
100080	69.5	8/26/96	-2.393	213.977
100800	70	8/26/96	-2.394	213.976
101520	70.5	8/27/96	-2.455	213.915
102240	71	8/27/96	-2.481	213.889
102960	71.5	8/28/96	-2.486	213.884
103680	72	8/28/96	-2.48	213.89
104400	72.5	8/29/96	-2.492	213.878
105120	73	8/29/96	-2.512	213.858
105840	73.5	8/30/96	-2.595	213.775
106560	74	8/30/96	-2.58	213.79
107280	74.5	8/31/96	-2.633	213.737
108000	75	8/31/96	-2.62	213.75
108720	75.5	9/1/96	-2.659	213.711
109440	76	9/1/96	-2.666	213.704
110160	76.5	9/2/96	-2.662	213.708
110880	77	9/2/96	-2.73	213.64
111600	77.5	9/3/96	-2.758	213.612
112320	78	9/3/96	-2.777	213.593
113040	78.5	9/4/96	-2.82	213.55
113760	79	9/4/96	-2.822	213.548
114480	79.5	9/5/96	-2.873	213.497
115200	80	9/5/96	-2.868	213.502
115920	80.5	9/6/96	-2.899	213.471
116640	81	9/6/96	-2.892	213.478
117360	81.5	9/7/96	-2.94	213.43
118080	82	9/7/96	-2.944	213.426
118800	82.5	9/8/96	-2.948	213.422
119520	83	9/8/96	-2.959	213.411
120240	83.5	9/9/96	-2.979	213.391
120960	84	9/9/96	-3.018	213.352
121680	84.5	9/10/96	-3.041	213.329
122400	85	9/10/96	-3.065	213.305

time (min)	time (days)	Date	Δ wl (feet)	wl (amsl)
123120	85.5	9/11/96	-3.108	213.262
123840	86	9/11/96	-3.11	213.26
124560	86.5	9/12/96	-3.13	213.24
125280	87	9/12/96	-3.132	213.238
126000	87.5	9/13/96	-3.137	213.233
126720	88	9/13/96	-3.145	213.225
127440	88.5	9/14/96	-3.172	213.198
128160	89	9/14/96	-3.223	213.147
128880	89.5	9/15/96	-3.273	213.097
129600	90	9/15/96	-3.289	213.081
130320	90.5	9/16/96	-3.309	213.061
131040	91	9/16/96	-3.324	213.046
131760	91.5	9/17/96	-3.319	213.051
132480	92	9/17/96	-3.309	213.061
133200	92.5	9/18/96	-3.258	213.112
133920	93	9/18/96	-3.328	213.042
134640	93.5	9/19/96	-3.283	213.087
135360	94	9/19/96	-3.268	213.102
136080	94.5	9/20/96	-3.236	213.134
136800	95	9/20/96	-3.194	213.176
137520	95.5	9/21/96	-3.203	213.167
138240	96	9/21/96	-3.148	213.222
138960	96.5	9/22/96	-3.143	213.227
139680	97	9/22/96	-3.113	213.257
140400	97.5	9/23/96	-3.156	213.214
141120	98	9/23/96	-3.207	213.163
141840	98.5	9/24/96	-3.199	213.171
142560	99	9/24/96	-3.155	213.215
143280	99.5	9/25/96	-3.142	213.228
144000	100	9/25/96	-3.222	213.148
144720	100.5	9/26/96	-3.257	213.113
145440	101	9/26/96	-3.217	213.153
146160	101.5	9/27/96	-3.223	213.147
146880	102	9/27/96	-3.159	213.211
147600	102.5	9/28/96	-3.143	213.227
148320	103	9/28/96	-3.107	213.263
149040	103.5	9/29/96	-3.203	213.167
149760	104	9/29/96	-3.18	213.19
150480	104.5	9/30/96	-3.241	213.129
151200	105	9/30/96	-3.261	213.109
151920	105.5	10/1/96	-3.271	213.099
152640	106	10/1/96	-3.222	213.148
153360	106.5	10/2/96	-3.219	213.151
154080	107	10/2/96	-3.155	213.215
154800	107.5	10/3/96	-3.187	213.183
155520	108	10/3/96	-3.326	213.044
156240	108.5	10/4/96	-3.332	213.038
156960	109	10/4/96	-3.321	213.049

time (min)	time (days)	Date	Δ wl (feet)	wl (amsl)
157680	109.5	10/5/96	-3.348	213.022
158400	110	10/5/96	-3.303	213.067
159120	110.5	10/6/96	-3.312	213.058
159840	111	10/6/96	-3.255	213.115
160560	111.5	10/7/96	-3.271	213.099
161280	112	10/7/96	-3.281	213.089
162000	112.5	10/8/96	-3.306	213.064
162720	113	10/8/96	-3.264	213.106
163440	113.5	10/9/96	-3.214	213.156
164160	114	10/9/96	-3.376	212.994
164880	114.5	10/10/96	-3.321	213.049
165600	115	10/10/96	-3.289	213.081
166320	115.5	10/11/96	-3.411	212.959
167040	116	10/11/96	-3.377	212.993
167760	116.5	10/12/96	-3.353	213.017
168480	117	10/12/96	-3.278	213.092
169200	117.5	10/13/96	-3.292	213.078
169920	118	10/13/96	-3.222	213.148
170640	118.5	10/14/96	-3.162	213.208
	IN-SITU,	INC.		
	WELL	SENTINEL		
	Serial	#	L3K00475	

Downloaded:	1/22/97	13:17		
Unit	ID:	XGM9301X		
Test	name:	g6m9415A		
Linearity:	0.043			
Scale	Factor:	10.068		
Offset:	-0.021			
Specific	Gravity:	1		
Data	Type:	Level		
Units:	English			
Mode:	Top	of	Casing	
Ref.	Level:	0		
Ref.	Taken:	10/29/96	11:22	
Test	Begun:	10/29/96	18:00	
Elapsed	(min.)	Reading		
Time (min)	Time (days)	Date	Δ wl (feet)	wl (amsl)
0	0	10/29/96	-0.047	217.189
720	0.5	10/30/96	-0.259	216.977
1440	1	10/30/96	-0.438	216.798
2160	1.5	10/31/96	-0.451	216.785
2880	2	10/31/96	-0.569	216.667
3600	2.5	11/1/96	-0.629	216.607
4320	3	11/1/96	-0.735	216.501
5040	3.5	11/2/96	-0.786	216.45
5760	4	11/2/96	-0.849	216.387

time (min)	time (days)	Date	Δ wl (feet)	wl (amsl)
6480	4.5	11/3/96	-0.821	216.415
7200	5	11/3/96	-0.852	216.384
7920	5.5	11/4/96	-0.884	216.352
8640	6	11/4/96	-0.952	216.284
9360	6.5	11/5/96	-0.962	216.274
10080	7	11/5/96	-0.971	216.265
10800	7.5	11/6/96	-0.971	216.265
11520	8	11/6/96	-1.019	216.217
12240	8.5	11/7/96	-1.063	216.173
12960	9	11/7/96	8.846	
13680	9.5	11/8/96	8.846	
14400	10	11/8/96	8.846	
15120	10.5	11/9/96	8.846	
15840	11	11/9/96	8.846	
16560	11.5	11/10/96	8.846	
17280	12	11/10/96	8.846	
18000	12.5	11/11/96	8.846	
18720	13	11/11/96	8.846	
19440	13.5	11/12/96	8.846	
20160	14	11/12/96	8.846	
20880	14.5	11/13/96	8.846	
21600	15	11/13/96	8.846	
22320	15.5	11/14/96	8.846	
23040	16	11/14/96	8.846	
23760	16.5	11/15/96	8.846	
24480	17	11/15/96	8.846	
25200	17.5	11/16/96	8.846	
25920	18	11/16/96	8.846	
26640	18.5	11/17/96	8.846	
27360	19	11/17/96	8.846	
28080	19.5	11/18/96	8.846	
28800	20	11/18/96	8.846	
29520	20.5	11/19/96	8.846	
30240	21	11/19/96	8.846	
30960	21.5	11/20/96	8.846	
31680	22	11/20/96	8.846	
32400	22.5	11/21/96	8.846	
33120	23	11/21/96	-0.336	216.9
33840	23.5	11/22/96	-0.285	216.951
34560	24	11/22/96	-0.224	217.012
35280	24.5	11/23/96	-0.162	217.074
36000	25	11/23/96	-0.201	217.035
36720	25.5	11/24/96	-0.051	217.185
37440	26	11/24/96	-0.057	217.179
38160	26.5	11/25/96	-0.042	217.194
38880	27	11/25/96	-0.032	217.204
39600	27.5	11/26/96	-0.114	217.122
40320	28	11/26/96	0.001	217.237

time (min)	time (days)	Date	Δ wl (feet)	wl (amsl)
41040	28.5	11/27/96	0.115	217.351
41760	29	11/27/96	0.172	217.408
42480	29.5	11/28/96	0.115	217.351
43200	30	11/28/96	0.093	217.329
43920	30.5	11/29/96	0.162	217.398
44640	31	11/29/96	0.213	217.449
45360	31.5	11/30/96	0.236	217.472
46080	32	11/30/96	0.233	217.469
46800	32.5	12/1/96	0.21	217.446
47520	33	12/1/96	0.201	217.437
48240	33.5	12/2/96	0.137	217.373
48960	34	12/2/96	0.435	217.671
49680	34.5	12/3/96	0.419	217.655
50400	35	12/3/96	0.348	217.584
51120	35.5	12/4/96	0.355	217.591
51840	36	12/4/96	0.422	217.658
52560	36.5	12/5/96	0.454	217.69
53280	37	12/5/96	0.422	217.658
54000	37.5	12/6/96	0.361	217.597
54720	38	12/6/96	0.501	217.737
55440	38.5	12/7/96	0.537	217.773
56160	39	12/7/96	0.485	217.721
56880	39.5	12/8/96	0.358	217.594
57600	40	12/8/96	0.623	217.859
58320	40.5	12/9/96	0.633	217.869
59040	41	12/9/96	0.694	217.93
59760	41.5	12/10/96	0.716	217.952
60480	42	12/10/96	0.686	217.922
61200	42.5	12/11/96	0.719	217.955
61920	43	12/11/96	0.787	218.023
62640	43.5	12/12/96	0.828	218.064
63360	44	12/12/96	0.863	218.099
64080	44.5	12/13/96	0.821	218.057
64800	45	12/13/96	0.815	218.051
65520	45.5	12/14/96	0.838	218.074
66240	46	12/14/96	0.895	218.131
66960	46.5	12/15/96	0.879	218.115
67680	47	12/15/96	0.872	218.108
68400	47.5	12/16/96	0.827	218.063
69120	48	12/16/96	0.815	218.051
69840	48.5	12/17/96	0.742	217.978
70560	49	12/17/96	0.71	217.946
71280	49.5	12/18/96	0.751	217.987
72000	50	12/18/96	0.696	217.932
72720	50.5	12/19/96	0.638	217.874
73440	51	12/19/96	0.463	217.699
74160	51.5	12/20/96	0.651	217.887
74880	52	12/20/96	0.671	217.907

time (min)	time (days)	Date	Δ wl (feet)	wl (amsl)
75600	52.5	12/21/96	0.626	217.862
76320	53	12/21/96	0.523	217.759
77040	53.5	12/22/96	0.443	217.679
77760	54	12/22/96	0.384	217.62
78480	54.5	12/23/96	0.384	217.62
79200	55	12/23/96	0.326	217.562
79920	55.5	12/24/96	0.207	217.443
80640	56	12/24/96	0.109	217.345
81360	56.5	12/25/96	0.261	217.497
82080	57	12/25/96	0.298	217.534
82800	57.5	12/26/96	0.314	217.55
83520	58	12/26/96	0.165	217.401
84240	58.5	12/27/96	0.074	217.31
84960	59	12/27/96	0.138	217.374
85680	59.5	12/28/96	0.055	217.291
86400	60	12/28/96	0.004	217.24
87120	60.5	12/29/96	-0.031	217.205
87840	61	12/29/96	-0.082	217.154
88560	61.5	12/30/96	0.036	217.272
89280	62	12/30/96	0.057	217.293
90000	62.5	12/31/96	-0.052	217.184
90720	63	12/31/96	-0.009	217.227
91440	63.5	1/1/97	-0.033	217.203
92160	64	1/1/97	-0.096	217.14
92880	64.5	1/2/97	-0.221	217.015
93600	65	1/2/97	-0.169	217.067
94320	65.5	1/3/97	-0.245	216.991
95040	66	1/3/97	-0.116	217.12
95760	66.5	1/4/97	-0.084	217.152
96480	67	1/4/97	-0.124	217.112
97200	67.5	1/5/97	-0.215	217.021
97920	68	1/5/97	-0.303	216.933
98640	68.5	1/6/97	-0.205	217.031
99360	69	1/6/97	-0.159	217.077
100080	69.5	1/7/97	-0.195	217.041
100800	70	1/7/97	-0.199	217.037
101520	70.5	1/8/97	-0.198	217.038
102240	71	1/8/97	-0.131	217.105
102960	71.5	1/9/97	-0.16	217.076
103680	72	1/9/97	-0.262	216.974
104400	72.5	1/10/97	-0.403	216.833
105120	73	1/10/97	-0.179	217.057
105840	73.5	1/11/97	-0.24	216.996
106560	74	1/11/97	-0.165	217.071
107280	74.5	1/12/97	-0.146	217.09
108000	75	1/12/97	-0.178	217.058
108720	75.5	1/13/97	-0.14	217.096
109440	76	1/13/97	-0.146	217.09

time (min)	time (days)	Date	Δ wl (feet)	wl (amsl)
110160	76.5	1/14/97	-0.169	217.067
110880	77	1/14/97	-0.137	217.099
111600	77.5	1/15/97	-0.151	217.085
112320	78	1/15/97	-0.143	217.093
113040	78.5	1/16/97	-0.284	216.952
113760	79	1/16/97	-0.256	216.98
114480	79.5	1/17/97	-0.095	217.141
115200	80	1/17/97	-0.109	217.127
115920	80.5	1/18/97	-0.154	217.082
116640	81	1/18/97	-0.099	217.137
117360	81.5	1/19/97	-0.108	217.128
118080	82	1/19/97	-0.134	217.102
118800	82.5	1/20/97	-0.162	217.074
119520	83	1/20/97	-0.137	217.099
120240	83.5	1/21/97	0.029	217.265
120960	84	1/21/97	0.041	217.277
121680	84.5	1/22/97	-0.087	217.149

Date	Time	ET (min)	Feet H2O	Celsius	corrected H2O*
1/29/97	6:00:00	9360	214.899	10.62	215.429
1/29/97	18:00:00	10080	214.65	10.62	215.21
1/30/97	6:00:00	10800	214.479	10.65	215.055
1/30/97	18:00:00	11520	214.378	10.66	214.965
1/31/97	6:00:00	12240	214.309	10.64	214.898
1/31/97	18:00:00	12960	214.253	10.68	214.841
2/1/97	6:00:00	13680	214.202	10.66	214.785
2/1/97	18:00:00	14400	214.062	10.7	214.705
2/2/97	6:00:00	15120	214.027	10.69	214.624
2/2/97	18:00:00	15840	213.963	10.67	214.575
2/3/97	6:00:00	16560	213.951	10.7	214.538
2/3/97	18:00:00	17280	213.909	10.65	214.898
2/4/97	6:00:00	18000	213.909	10.62	214.534
2/4/97	18:00:00	18720	213.861	10.68	214.485
2/5/97	6:00:00	19440	213.93	10.69	214.571
2/5/97	18:00:00	20160	214.731	10.64	216.153
2/6/97	6:00:00	20880	214.74	10.61	215.583
2/6/97	18:00:00	21600	214.625	10.64	215.876
2/7/97	6:00:00	22320	214.491	10.62	215.436
2/7/97	18:00:00	23040	214.426	10.62	215.265
2/8/97	6:00:00	23760	214.311	10.61	215.136
2/8/97	18:00:00	24480	214.239	10.62	215.034
2/9/97	6:00:00	25200	214.14	10.64	214.956
2/9/97	18:00:00	25920	214.073	10.64	214.871
2/10/97	6:00:00	26640	213.969	10.58	214.795
2/10/97	18:00:00	27360	213.912	10.57	214.725
2/11/97	6:00:00	28080	213.856	10.66	214.661
2/11/97	18:00:00	28800	213.826	10.6	214.596
2/12/97	6:00:00	29520	213.796	10.61	214.55
2/12/97	18:00:00	30240	213.766	10.61	214.504
2/13/97	6:00:00	30960	213.711	10.6	214.414
2/13/97	18:00:00	31680	213.63	10.59	214.372
2/14/97	6:00:00	32400	213.649	10.65	214.342
2/14/97	18:00:00	33120	213.706	10.63	214.398
2/15/97	6:00:00	33840	213.693	10.64	214.356
2/15/97	18:00:00	34560	213.649	10.61	214.615
2/16/97	6:00:00	35280	213.614	10.61	214.455
2/16/97	18:00:00	36000	213.591	10.61	214.386
2/17/97	6:00:00	36720	213.587	10.58	214.342
2/17/97	18:00:00	37440	213.552	10.6	214.289
2/18/97	6:00:00	38160	213.559	10.56	214.28
2/18/97	18:00:00	38880	213.577	10.64	214.824
2/19/97	6:00:00	39600	213.605	10.61	214.61
2/19/97	18:00:00	40320	213.658	10.56	215.447
2/20/97	6:00:00	41040	213.711	10.59	214.979
2/20/97	18:00:00	41760	213.711	10.56	214.804
2/21/97	6:00:00	42480	213.723	10.54	214.744
2/21/97	18:00:00	43200	213.783	10.59	214.986

Date	Time	ET (min)	Feet H2O	Celsius	corrected H2O*
2/22/97	6:00:00	43920	213.831	10.56	214.933
2/22/97	18:00:00	44640	213.903	10.53	215.044
2/23/97	6:00:00	45360	213.826	10.54	214.857
2/23/97	18:00:00	46080	213.79	10.53	214.758
2/24/97	6:00:00	46800	213.766	10.46	214.686
2/24/97	18:00:00	47520	213.753	10.51	214.628
2/25/97	6:00:00	48240	213.7	10.54	214.55
2/25/97	18:00:00	48960	213.674	10.49	214.502
2/26/97	6:00:00	49680	213.658	10.48	214.46
2/26/97	18:00:00	50400	213.642	10.49	214.421
2/27/97	6:00:00	51120	213.637	10.49	214.469
2/27/97	18:00:00	51840	213.695	10.48	214.601
2/28/97	6:00:00	52560	213.649	10.46	214.46
2/28/97	18:00:00	53280	213.58	10.52	214.4
3/1/97	6:00:00	54000	213.563	10.52	214.365
3/1/97	18:00:00	54720	213.575	10.43	214.375
3/2/97	6:00:00	55440	213.63	10.45	214.4
3/2/97	18:00:00	56160	213.64	10.4	214.359
3/3/97	6:00:00	56880	213.547	10.4	214.303
3/3/97	18:00:00	57600	213.508	10.51	214.343
3/4/97	6:00:00	58320	213.52	10.44	214.306
3/4/97	18:00:00	59040	213.506	10.38	214.285
3/5/97	6:00:00	59760	213.492	10.36	214.248
3/5/97	18:00:00	60480	194.337	10.15	214.253
3/6/97	6:00:00	61200	214.269	10.48	214.659
3/6/97	18:00:00	61920	213.527	10.11	214.709
3/7/97	6:00:00	62640	214.2	10.03	214.622
3/7/97	18:00:00	63360	214.145	10.02	214.546
3/8/97	6:00:00	64080	214.099	10.03	214.483
3/8/97	18:00:00	64800	214.115	10	214.444
3/9/97	6:00:00	65520	214.006	10.1	214.363
3/9/97	18:00:00	66240	214.009	10.18	214.356
3/10/97	6:00:00	66960	214.05	10.12	214.386
3/10/97	18:00:00	67680	214.073	10.27	214.386
3/11/97	6:00:00	68400	214.05	10.29	214.37
3/11/97	18:00:00	69120	214.002	10.3	214.345
3/12/97	6:00:00	69840	213.942	10.33	214.303
3/12/97	18:00:00	70560	213.926	10.29	214.283
3/13/97	6:00:00	71280	213.882	10.35	214.225
3/13/97	18:00:00	72000	213.859	10.33	214.204
3/14/97	6:00:00	72720	213.856	10.33	214.183
3/14/97	18:00:00	73440	213.898	10.31	214.23
3/15/97	6:00:00	74160	214.036	10.33	214.437
3/15/97	18:00:00	74880	214.043	10.33	214.548
3/16/97	6:00:00	75600	214.036	10.27	214.49
3/16/97	18:00:00	76320	214.011	10.34	214.43
3/17/97	6:00:00	77040	213.979	10.34	214.363
3/17/97	18:00:00	77760	214.006	10.27	214.359

Date	Time	ET (min)	Feet H2O	Celsius	corrected H2O*
3/18/97	6:00:00	78480	213.956	10.37	214.278
3/18/97	18:00:00	79200	213.889	10.29	214.234
3/19/97	6:00:00	79920	213.879	10.3	214.204
3/19/97	18:00:00	80640	213.907	10.28	214.227
3/20/97	6:00:00	81360	213.909	10.27	214.211
3/20/97	18:00:00	82080	213.914	10.31	214.236
3/21/97	6:00:00	82800	213.898	10.28	214.216
3/21/97	18:00:00	83520	213.916	10.32	214.292
3/22/97	6:00:00	84240	214.039	10.27	214.396
3/22/97	18:00:00	84960	214.082	10.27	214.453
3/23/97	6:00:00	85680	214.025	10.27	214.391
3/23/97	18:00:00	86400	213.995	10.23	214.352
3/24/97	6:00:00	87120	213.933	10.24	214.271
3/24/97	18:00:00	87840	213.9	10.23	214.239
3/25/97	6:00:00	88560	213.861	10.27	214.183
3/25/97	18:00:00	89280	213.896	10.28	214.234
3/26/97	6:00:00	90000	214.302	10.27	215.946
3/26/97	18:00:00	90720	214.705	10.21	215.528
3/27/97	6:00:00	91440	214.657	10.21	215.302
3/27/97	18:00:00	92160	214.682	10.18	215.233
3/28/97	6:00:00	92880	214.611	10.1	215.099
3/28/97	18:00:00	93600	214.611	10.2	215.062
3/29/97	6:00:00	94320	214.59	10.14	215.009
3/29/97	18:00:00	95040	214.62	10.18	215.544
3/30/97	6:00:00	95760	214.731	10.17	215.233
3/30/97	18:00:00	96480	214.643	10.16	215.113
3/31/97	6:00:00	97200	214.615	10.15	215.062
3/31/97	18:00:00	97920	214.927	10.05	215.697
4/1/97	6:00:00	98640	214.945	10.08	215.63
4/1/97	18:00:00	99360	214.98	10.08	215.637
4/2/97	6:00:00	100080	214.92	10.08	215.533
4/2/97	18:00:00	100800	214.927	10.09	215.646
4/3/97	6:00:00	101520	214.938	10.05	215.524
4/3/97	18:00:00	102240	214.991	9.96	215.717
4/4/97	6:00:00	102960	215.019	10.04	215.584
4/4/97	18:00:00	103680	215.174	10.03	215.934
4/5/97	6:00:00	104400	215.16	10.05	215.759
4/5/97	18:00:00	105120	215.229	10.04	215.844
4/6/97	6:00:00	105840	215.208	9.99	215.761
4/6/97	18:00:00	106560	215.247	10.04	215.747
4/7/97	6:00:00	107280	215.229	10.04	215.69
4/7/97	18:00:00	108000	215.183	9.95	215.639
4/8/97	6:00:00	108720	215.107	9.99	215.554
4/8/97	18:00:00	109440	215.081	9.95	215.505
4/9/97	6:00:00	110160	215.042	9.94	215.459
4/9/97	18:00:00	110880	215.005	9.95	215.408
4/10/97	6:00:00	111600	214.947	9.9	215.348
4/10/97	18:00:00	112320	214.92	9.92	215.314

Date	Time	ET (min)	Feet H2O	Celsius	corrected H2O*
4/11/97	6:00:00	113040	214.871	9.97	215.256
4/11/97	18:00:00	113760	214.864	9.95	215.251
4/12/97	6:00:00	114480	214.821	9.9	215.208
4/12/97	18:00:00	115200	214.823	9.92	215.268
4/13/97	6:00:00	115920	215.213	9.9	215.87
4/13/97	18:00:00	116640	215.132	9.91	215.692
4/14/97	6:00:00	117360	215.056	9.84	215.556
4/14/97	18:00:00	118080	214.966	9.83	215.443
4/15/97	6:00:00	118800	214.908	9.87	215.358
4/15/97	18:00:00	119520	214.892	9.82	215.325
4/16/97	6:00:00	120240	214.853	9.88	215.274
4/16/97	18:00:00	120960	214.848	9.9	215.261
4/17/97	6:00:00	121680	214.83	9.87	215.228
4/17/97	18:00:00	122400	214.839	9.84	215.261
4/18/97	6:00:00	123120	215.107	9.84	216.066
4/18/97	18:00:00	123840	215.3	9.87	216.059
4/19/97	6:00:00	124560	215.566	9.82	216.497
4/19/97	18:00:00	125280	215.704	9.74	216.465
4/20/97	6:00:00	126000	215.704	9.77	216.398
4/20/97	18:00:00	126720	215.693	9.77	216.34
4/21/97	6:00:00	127440	215.658	9.72	216.287
4/21/97	18:00:00	128160	215.623	9.81	216.234
4/22/97	6:00:00	128880	215.591	9.84	216.195
4/22/97	18:00:00	129600	215.563	9.84	216.149
4/23/97	6:00:00	130320	215.524	9.83	216.093
4/23/97	18:00:00	131040	215.485	9.83	216.029
4/24/97	6:00:00	131760	215.448	9.87	215.969
4/24/97	18:00:00	132480	215.397	9.89	215.888
4/25/97	6:00:00	133200	215.344	9.84	215.81
4/25/97	18:00:00	133920	215.291	9.84	215.757
4/26/97	6:00:00	134640	215.259	9.82	215.708
4/26/97	18:00:00	135360	215.21	9.79	215.662
4/27/97	6:00:00	136080	215.171	9.78	215.616
4/27/97	18:00:00	136800	215.139	9.83	215.59
4/28/97	6:00:00	137520	215.174	9.84	215.754
4/28/97	18:00:00	138240	215.379	9.82	216.158
4/29/97	6:00:00	138960	215.358	9.74	216.04
4/29/97	18:00:00	139680	215.28	9.75	215.916
4/30/97	6:00:00	140400	215.229	9.78	215.812
4/30/97	18:00:00	141120	215.197	9.8	215.752
5/1/97	6:00:00	141840	215.298	9.72	215.791

Note: * During the course of groundwater sampling on 3/3/97 the water level measurement increase by approximately .5'. This jump results in poor agreement between in-well elevation measurements and measurements made with an electric water level indicator at times after 3/3/97. Therefore the data was corrected to remove this artificial change in water level.

G6M-96-22C: JANUARY 22 TO JULY 2, 1997					
IN_SITU INC.	TROLL				
Serial number:	1080				
Unit name:	G6M9622C				
Report generated:	7/8/97	9:22:40			
Report from file:	H:\ESPS7JS\50DATLOG\G6M22C72.BIN				
Test name:	G6M9622C				
Test defined on:	1/22/97	16:42:35			
Test scheduled for:	1/22/97	18:00:00			
Test started on:	1/22/97	18:00:00			
Test stopped on:	N/A	N/A			
Test extracted on:	7/2/97	8:28:14			
Data gathered using Linear testing					
Time between data points:	720.0000 Minutes.				
Number of data samples:	322				
Channel number [2]					
Measurement type:	Pressure/Level				
Channel name:	ONBOARD PRESSURE				
Specific gravity:	1				
Mode:	Surface				
User-defined reference:	65.361 Meters H2O				
Referenced on:	test start				
Pressure head at reference:	7.072 Meters H2O				
Channel number [1]					
Measurement type:	Temperature				
Channel name:	oNBOARD tEMP				
			Channel[2]	Channel[1]	
Date	Time	ET (min)	Meters H2O	Celsius	Feet H2O
-----	-----	-----	-----	-----	
1/22/97	18:00:00	0	65.361	10.86	214.439
1/23/97	6:00:00	720	65.357	10.8	214.426
1/23/97	18:00:00	1440	65.331	10.74	214.341
1/24/97	6:00:00	2160	65.307	10.7	214.262
1/24/97	18:00:00	2880	65.305	10.74	214.255
1/25/97	6:00:00	3600	65.336	10.71	214.357
1/25/97	18:00:00	4320	65.586	10.65	215.177
1/26/97	6:00:00	5040	65.564	10.73	215.105
1/26/97	18:00:00	5760	65.504	10.71	214.908
1/27/97	6:00:00	6480	65.464	10.76	214.777
1/27/97	18:00:00	7200	65.457	10.74	214.754
1/28/97	6:00:00	7920	65.495	10.71	214.879

Date	Time	ET (min)	Meters H2O	Celsius	Feet H2O
1/28/97	18:00:00	8640	65.556	10.68	215.079
1/29/97	6:00:00	9360	65.501	10.62	214.898
1/29/97	18:00:00	10080	65.425	10.62	214.649
1/30/97	6:00:00	10800	65.373	10.65	214.478
1/30/97	18:00:00	11520	65.342	10.66	214.377
1/31/97	6:00:00	12240	65.321	10.64	214.308
1/31/97	18:00:00	12960	65.304	10.68	214.252
2/1/97	6:00:00	13680	65.289	10.66	214.203
2/1/97	18:00:00	14400	65.246	10.7	214.062
2/2/97	6:00:00	15120	65.235	10.69	214.026
2/2/97	18:00:00	15840	65.215	10.67	213.960
2/3/97	6:00:00	16560	65.212	10.7	213.950
2/3/97	18:00:00	17280	65.199	10.65	213.907
2/4/97	6:00:00	18000	65.199	10.62	213.907
2/4/97	18:00:00	18720	65.185	10.68	213.862
2/5/97	6:00:00	19440	65.206	10.69	213.930
2/5/97	18:00:00	20160	65.45	10.64	214.731
2/6/97	6:00:00	20880	65.452	10.61	214.738
2/6/97	18:00:00	21600	65.417	10.64	214.623
2/7/97	6:00:00	22320	65.376	10.62	214.488
2/7/97	18:00:00	23040	65.357	10.62	214.426
2/8/97	6:00:00	23760	65.322	10.61	214.311
2/8/97	18:00:00	24480	65.3	10.62	214.239
2/9/97	6:00:00	25200	65.27	10.64	214.140
2/9/97	18:00:00	25920	65.249	10.64	214.072
2/10/97	6:00:00	26640	65.218	10.58	213.970
2/10/97	18:00:00	27360	65.2	10.57	213.911
2/11/97	6:00:00	28080	65.183	10.66	213.855
2/11/97	18:00:00	28800	65.174	10.6	213.825
2/12/97	6:00:00	29520	65.165	10.61	213.796
2/12/97	18:00:00	30240	65.156	10.61	213.766
2/13/97	6:00:00	30960	65.139	10.6	213.711
2/13/97	18:00:00	31680	65.114	10.59	213.629
2/14/97	6:00:00	32400	65.12	10.65	213.648
2/14/97	18:00:00	33120	65.137	10.63	213.704
2/15/97	6:00:00	33840	65.133	10.64	213.691
2/15/97	18:00:00	34560	65.12	10.61	213.648
2/16/97	6:00:00	35280	65.109	10.61	213.612
2/16/97	18:00:00	36000	65.102	10.61	213.589
2/17/97	6:00:00	36720	65.101	10.58	213.586
2/17/97	18:00:00	37440	65.09	10.6	213.550
2/18/97	6:00:00	38160	65.092	10.56	213.556
2/18/97	18:00:00	38880	65.098	10.64	213.576
2/19/97	6:00:00	39600	65.107	10.61	213.606
2/19/97	18:00:00	40320	65.123	10.56	213.658
2/20/97	6:00:00	41040	65.139	10.59	213.711
2/20/97	18:00:00	41760	65.139	10.56	213.711
2/21/97	6:00:00	42480	65.142	10.54	213.720

Date	Time	ET (min)	Meters H2O	Celsius	Feet H2O
2/21/97	18:00:00	43200	65.161	10.59	213.783
2/22/97	6:00:00	43920	65.175	10.56	213.829
2/22/97	18:00:00	44640	65.197	10.53	213.901
2/23/97	6:00:00	45360	65.174	10.54	213.825
2/23/97	18:00:00	46080	65.163	10.53	213.789
2/24/97	6:00:00	46800	65.156	10.46	213.766
2/24/97	18:00:00	47520	65.152	10.51	213.753
2/25/97	6:00:00	48240	65.135	10.54	213.698
2/25/97	18:00:00	48960	65.128	10.49	213.675
2/26/97	6:00:00	49680	65.123	10.48	213.658
2/26/97	18:00:00	50400	65.118	10.49	213.642
2/27/97	6:00:00	51120	65.116	10.49	213.635
2/27/97	18:00:00	51840	65.134	10.48	213.694
2/28/97	6:00:00	52560	65.12	10.46	213.648
2/28/97	18:00:00	53280	65.099	10.52	213.579
3/1/97	6:00:00	54000	65.094	10.52	213.563
3/1/97	18:00:00	54720	65.097	10.43	213.573
3/2/97	6:00:00	55440	65.114	10.45	213.629
3/2/97	18:00:00	56160	65.117	10.4	213.638
3/3/97	6:00:00	56880	65.089	10.4	213.547
3/3/97	18:00:00	57600	65.077	10.51	213.507
3/4/97	6:00:00	58320	65.081	10.44	213.520
3/4/97	18:00:00	59040	65.076	10.38	213.504
3/5/97	6:00:00	59760	65.072	10.36	213.491
3/5/97	18:00:00	60480	59.234	10.15	194.337
3/6/97	6:00:00	61200	65.309	10.48	214.268
3/6/97	18:00:00	61920	65.083	10.11	213.527
3/7/97	6:00:00	62640	65.288	10.03	214.199
3/7/97	18:00:00	63360	65.271	10.02	214.144
3/8/97	6:00:00	64080	65.257	10.03	214.098
3/8/97	18:00:00	64800	65.262	10	214.114
3/9/97	6:00:00	65520	65.229	10.1	214.006
3/9/97	18:00:00	66240	65.23	10.18	214.009
3/10/97	6:00:00	66960	65.242	10.12	214.049
3/10/97	18:00:00	67680	65.249	10.27	214.072
3/11/97	6:00:00	68400	65.242	10.29	214.049
3/11/97	18:00:00	69120	65.227	10.3	213.999
3/12/97	6:00:00	69840	65.209	10.33	213.940
3/12/97	18:00:00	70560	65.204	10.29	213.924
3/13/97	6:00:00	71280	65.191	10.35	213.881
3/13/97	18:00:00	72000	65.184	10.33	213.858
3/14/97	6:00:00	72720	65.183	10.33	213.855
3/14/97	18:00:00	73440	65.196	10.31	213.898
3/15/97	6:00:00	74160	65.238	10.33	214.035
3/15/97	18:00:00	74880	65.24	10.33	214.042
3/16/97	6:00:00	75600	65.238	10.27	214.035
3/16/97	18:00:00	76320	65.23	10.34	214.009
3/17/97	6:00:00	77040	65.22	10.34	213.976

Date	Time	ET (min)	Meters H2O	Celsius	Feet H2O
3/17/97	18:00:00	77760	65.229	10.27	214.006
3/18/97	6:00:00	78480	65.213	10.37	213.953
3/18/97	18:00:00	79200	65.193	10.29	213.888
3/19/97	6:00:00	79920	65.19	10.3	213.878
3/19/97	18:00:00	80640	65.199	10.28	213.907
3/20/97	6:00:00	81360	65.199	10.27	213.907
3/20/97	18:00:00	82080	65.201	10.31	213.914
3/21/97	6:00:00	82800	65.196	10.28	213.898
3/21/97	18:00:00	83520	65.201	10.32	213.914
3/22/97	6:00:00	84240	65.239	10.27	214.039
3/22/97	18:00:00	84960	65.252	10.27	214.081
3/23/97	6:00:00	85680	65.234	10.27	214.022
3/23/97	18:00:00	86400	65.225	10.23	213.993
3/24/97	6:00:00	87120	65.206	10.24	213.930
3/24/97	18:00:00	87840	65.197	10.23	213.901
3/25/97	6:00:00	88560	65.185	10.27	213.862
3/25/97	18:00:00	89280	65.195	10.28	213.894
3/26/97	6:00:00	90000	65.319	10.27	214.301
3/26/97	18:00:00	90720	65.442	10.21	214.705
3/27/97	6:00:00	91440	65.427	10.21	214.656
3/27/97	18:00:00	92160	65.435	10.18	214.682
3/28/97	6:00:00	92880	65.413	10.1	214.610
3/28/97	18:00:00	93600	65.413	10.2	214.610
3/29/97	6:00:00	94320	65.407	10.14	214.590
3/29/97	18:00:00	95040	65.416	10.18	214.619
3/30/97	6:00:00	95760	65.45	10.17	214.731
3/30/97	18:00:00	96480	65.423	10.16	214.642
3/31/97	6:00:00	97200	65.414	10.15	214.613
3/31/97	18:00:00	97920	65.509	10.05	214.925
4/1/97	6:00:00	98640	65.515	10.08	214.944
4/1/97	18:00:00	99360	65.526	10.08	214.980
4/2/97	6:00:00	100080	65.507	10.08	214.918
4/2/97	18:00:00	100800	65.509	10.09	214.925
4/3/97	6:00:00	101520	65.513	10.05	214.938
4/3/97	18:00:00	102240	65.529	9.96	214.990
4/4/97	6:00:00	102960	65.538	10.04	215.020
4/4/97	18:00:00	103680	65.585	10.03	215.174
4/5/97	6:00:00	104400	65.58	10.05	215.157
4/5/97	18:00:00	105120	65.601	10.04	215.226
4/6/97	6:00:00	105840	65.595	9.99	215.207
4/6/97	18:00:00	106560	65.607	10.04	215.246
4/7/97	6:00:00	107280	65.601	10.04	215.226
4/7/97	18:00:00	108000	65.587	9.95	215.180
4/8/97	6:00:00	108720	65.564	9.99	215.105
4/8/97	18:00:00	109440	65.556	9.95	215.079
4/9/97	6:00:00	110160	65.545	9.94	215.043
4/9/97	18:00:00	110880	65.533	9.95	215.003
4/10/97	6:00:00	111600	65.516	9.9	214.948

Date	Time	ET (min)	Meters H2O	Celsius	Feet H2O
4/10/97	18:00:00	112320	65.507	9.92	214.918
4/11/97	6:00:00	113040	65.493	9.97	214.872
4/11/97	18:00:00	113760	65.49	9.95	214.862
4/12/97	6:00:00	114480	65.477	9.9	214.820
4/12/97	18:00:00	115200	65.478	9.92	214.823
4/13/97	6:00:00	115920	65.597	9.9	215.213
4/13/97	18:00:00	116640	65.572	9.91	215.131
4/14/97	6:00:00	117360	65.549	9.84	215.056
4/14/97	18:00:00	118080	65.521	9.83	214.964
4/15/97	6:00:00	118800	65.504	9.87	214.908
4/15/97	18:00:00	119520	65.499	9.82	214.892
4/16/97	6:00:00	120240	65.487	9.88	214.852
4/16/97	18:00:00	120960	65.485	9.9	214.846
4/17/97	6:00:00	121680	65.48	9.87	214.829
4/17/97	18:00:00	122400	65.483	9.84	214.839
4/18/97	6:00:00	123120	65.564	9.84	215.105
4/18/97	18:00:00	123840	65.623	9.87	215.299
4/19/97	6:00:00	124560	65.704	9.82	215.564
4/19/97	18:00:00	125280	65.746	9.74	215.702
4/20/97	6:00:00	126000	65.746	9.77	215.702
4/20/97	18:00:00	126720	65.743	9.77	215.692
4/21/97	6:00:00	127440	65.732	9.72	215.656
4/21/97	18:00:00	128160	65.722	9.81	215.623
4/22/97	6:00:00	128880	65.712	9.84	215.591
4/22/97	18:00:00	129600	65.703	9.84	215.561
4/23/97	6:00:00	130320	65.691	9.83	215.522
4/23/97	18:00:00	131040	65.68	9.83	215.486
4/24/97	6:00:00	131760	65.668	9.87	215.446
4/24/97	18:00:00	132480	65.653	9.89	215.397
4/25/97	6:00:00	133200	65.637	9.84	215.344
4/25/97	18:00:00	133920	65.62	9.84	215.289
4/26/97	6:00:00	134640	65.611	9.82	215.259
4/26/97	18:00:00	135360	65.596	9.79	215.210
4/27/97	6:00:00	136080	65.584	9.78	215.171
4/27/97	18:00:00	136800	65.574	9.83	215.138
4/28/97	6:00:00	137520	65.585	9.84	215.174
4/28/97	18:00:00	138240	65.647	9.82	215.377
4/29/97	6:00:00	138960	65.641	9.74	215.358
4/29/97	18:00:00	139680	65.617	9.75	215.279
4/30/97	6:00:00	140400	65.601	9.78	215.226
4/30/97	18:00:00	141120	65.592	9.8	215.197
5/1/97	6:00:00	141840	65.623	9.72	215.299
5/1/97	18:00:00	142560	65.596	9.56	215.210
5/2/97	6:00:00	143280	65.572	9.58	215.131
5/2/97	18:00:00	144000	65.548	9.53	215.053
5/3/97	6:00:00	144720	65.535	9.55	215.010
5/3/97	18:00:00	145440	65.583	9.41	215.167
5/4/97	6:00:00	146160	65.606	9.51	215.243

Date	Time	ET (min)	Meters H2O	Celsius	Feet H2O
5/4/97	18:00:00	146880	65.577	9.56	215.148
5/5/97	6:00:00	147600	65.554	9.53	215.072
5/5/97	18:00:00	148320	65.547	9.54	215.049
5/6/97	6:00:00	149040	65.542	9.45	215.033
5/6/97	18:00:00	149760	65.547	9.43	215.049
5/7/97	6:00:00	150480	65.534	9.55	215.007
5/7/97	18:00:00	151200	65.519	9.59	214.957
5/8/97	6:00:00	151920	65.507	9.54	214.918
5/8/97	18:00:00	152640	65.495	9.52	214.879
5/9/97	6:00:00	153360	65.49	9.5	214.862
5/9/97	18:00:00	154080	65.491	9.33	214.865
5/10/97	6:00:00	154800	65.489	9.48	214.859
5/10/97	18:00:00	155520	65.474	9.35	214.810
5/11/97	6:00:00	156240	65.466	9.47	214.783
5/11/97	18:00:00	156960	65.454	9.38	214.744
5/12/97	6:00:00	157680	65.445	9.39	214.715
5/12/97	18:00:00	158400	65.44	9.31	214.698
5/13/97	6:00:00	159120	65.43	9.43	214.665
5/13/97	18:00:00	159840	65.424	9.31	214.646
5/14/97	6:00:00	160560	65.422	9.41	214.639
5/14/97	18:00:00	161280	65.407	9.46	214.590
5/15/97	6:00:00	162000	65.4	9.46	214.567
5/15/97	18:00:00	162720	65.401	9.57	214.570
5/16/97	6:00:00	163440	65.398	9.56	214.560
5/16/97	18:00:00	164160	65.391	9.5	214.537
5/17/97	6:00:00	164880	65.375	9.51	214.485
5/17/97	18:00:00	165600	65.372	9.56	214.475
5/18/97	6:00:00	166320	65.363	9.4	214.446
5/18/97	18:00:00	167040	65.354	9.43	214.416
5/19/97	6:00:00	167760	65.353	9.53	214.413
5/19/97	18:00:00	168480	65.381	9.52	214.505
5/20/97	6:00:00	169200	65.466	9.53	214.783
5/20/97	18:00:00	169920	65.491	9.48	214.865
5/21/97	6:00:00	170640	65.478	9.43	214.823
5/21/97	18:00:00	171360	65.464	9.58	214.777
5/22/97	6:00:00	172080	65.449	9.45	214.728
5/22/97	18:00:00	172800	65.43	9.3	214.665
5/23/97	6:00:00	173520	65.41	9.37	214.600
5/23/97	18:00:00	174240	65.39	9.43	214.534
5/24/97	6:00:00	174960	65.379	9.38	214.498
5/24/97	18:00:00	175680	65.366	9.47	214.455
5/25/97	6:00:00	176400	65.364	9.49	214.449
5/25/97	18:00:00	177120	65.368	9.46	214.462
5/26/97	6:00:00	177840	65.358	9.35	214.429
5/26/97	18:00:00	178560	65.335	9.53	214.354
5/27/97	6:00:00	179280	65.321	9.46	214.308
5/27/97	18:00:00	180000	65.301	9.68	214.242
5/28/97	6:00:00	180720	65.294	9.59	214.219

Date	Time	ET (min)	Meters H2O	Celsius	Feet H2O
5/28/97	18:00:00	181440	65.287	9.66	214.196
5/29/97	6:00:00	182160	65.281	9.67	214.177
5/29/97	18:00:00	182880	65.274	9.58	214.154
5/30/97	6:00:00	183600	65.268	9.66	214.134
5/30/97	18:00:00	184320	65.264	9.61	214.121
5/31/97	6:00:00	185040	65.26	9.57	214.108
5/31/97	18:00:00	185760	65.254	9.62	214.088
6/1/97	6:00:00	186480	65.249	9.58	214.072
6/1/97	18:00:00	187200	65.242	9.59	214.049
6/2/97	6:00:00	187920	65.236	9.59	214.029
6/2/97	18:00:00	188640	58.289	18.06	191.237
6/3/97	6:00:00	189360	58.289	11.39	191.237
6/3/97	18:00:00	190080	58.289	9.96	191.237
6/4/97	6:00:00	190800	61.077	9.83	200.384
6/4/97	18:00:00	191520	64.145	9.61	210.449
6/5/97	6:00:00	192240	64.945	9.33	213.074
6/5/97	18:00:00	192960	65.097	9.32	213.573
6/6/97	6:00:00	193680	65.123	9.32	213.658
6/6/97	18:00:00	194400	65.121	9.35	213.652
6/7/97	6:00:00	195120	65.122	9.33	213.655
6/7/97	18:00:00	195840	65.114	9.39	213.629
6/8/97	6:00:00	196560	65.114	9.36	213.629
6/8/97	18:00:00	197280	65.104	9.38	213.596
6/9/97	6:00:00	198000	65.102	9.4	213.589
6/9/97	18:00:00	198720	65.095	9.39	213.566
6/10/97	6:00:00	199440	65.092	9.38	213.556
6/10/97	18:00:00	200160	65.083	9.39	213.527
6/11/97	6:00:00	200880	65.079	9.43	213.514
6/11/97	18:00:00	201600	65.069	9.43	213.481
6/12/97	6:00:00	202320	65.064	9.44	213.465
6/12/97	18:00:00	203040	65.059	9.42	213.448
6/13/97	6:00:00	203760	65.052	9.45	213.425
6/13/97	18:00:00	204480	65.04	9.45	213.386
6/14/97	6:00:00	205200	65.013	9.46	213.297
6/14/97	18:00:00	205920	64.998	9.46	213.248
6/15/97	6:00:00	206640	64.991	9.47	213.225
6/15/97	18:00:00	207360	64.993	9.45	213.232
6/16/97	6:00:00	208080	64.993	9.47	213.232
6/16/97	18:00:00	208800	64.995	9.48	213.238
6/17/97	6:00:00	209520	64.994	9.47	213.235
6/17/97	18:00:00	210240	64.991	9.47	213.225
6/18/97	6:00:00	210960	64.985	9.48	213.205
6/18/97	18:00:00	211680	64.995	9.47	213.238
6/19/97	6:00:00	212400	65.034	9.56	213.366
6/19/97	18:00:00	213120	65.033	9.47	213.363
6/20/97	6:00:00	213840	65.025	9.57	213.337
6/20/97	18:00:00	214560	65.008	9.62	213.281
6/21/97	6:00:00	215280	65.002	9.48	213.261

Date	Time	ET (min)	Meters H2O	Celsius	Feet H2O
6/21/97	18:00:00	216000	64.988	9.52	213.215
6/22/97	6:00:00	216720	64.982	9.53	213.196
6/22/97	18:00:00	217440	64.967	9.59	213.146
6/23/97	6:00:00	218160	64.956	9.54	213.110
6/23/97	18:00:00	218880	64.938	9.52	213.051
6/24/97	6:00:00	219600	64.935	9.57	213.041
6/24/97	18:00:00	220320	64.927	9.51	213.015
6/25/97	6:00:00	221040	64.926	9.51	213.012
6/25/97	18:00:00	221760	64.923	9.52	213.002
6/26/97	6:00:00	222480	64.918	9.6	212.986
6/26/97	18:00:00	223200	64.908	9.55	212.953
6/27/97	6:00:00	223920	64.899	9.53	212.923
6/27/97	18:00:00	224640	64.89	9.53	212.894
6/28/97	6:00:00	225360	64.881	9.54	212.864
6/28/97	18:00:00	226080	64.879	9.53	212.858
6/29/97	6:00:00	226800	64.875	9.6	212.844
6/29/97	18:00:00	227520	64.869	9.58	212.825
6/30/97	6:00:00	228240	64.862	9.63	212.802
6/30/97	18:00:00	228960	64.857	9.58	212.785
7/1/97	6:00:00	229680	64.852	9.55	212.769
7/1/97	18:00:00	230400	64.847	9.55	212.753
7/2/97	6:00:00	231120	64.841	9.57	212.733

IN SITU HYDRAULIC CONDUCTIVITY TEST RESULTS

Harding Lawson Associates

CALCULATION OF HYDRAULIC CONDUCTIVITIES USING THE HVORSLEV EQUATION

AOC 50 REMEDIAL INVESTIGATION

DEVENS, MASSACHUSETTS

$$K = -[(\text{LOG } H_{t1} - \text{LOG } H_{t2}) / (t_1 - t_2)] \{ [(r)^2 \text{ LOG } (L/R)] / 2L \}$$

WHERE:

t1 = TIME 1 (MINUTES)

t2 = TIME 2 (MINUTES)

Ht1 = HEAD STRESS AT TIME 1 (FEET)

Ht2 = HEAD STRESS AT TIME 2 (FEET)

r = RADIUS OF WELL CASING (FEET)

R = RADUS OF BOREHOLE (FEET)

L = EFFECTIVE SATURATED LENGTH OF SCREEN (FEET)

WELL	t1	t2	Ht1	Ht2	r	R	L	TYPE	K (FT/MIN)	K (CM/SEC)	Av. K (cm/sec)
G6P-97-04X	0.400	2.000	1.661	0.478	0.083	0.167	16.000	RISING	1.4E-04	7.3E-05	
G6P-97-04X	0.200	0.700	2.284	1.541	0.083	0.167	16.000	FALLING	1.5E-04	7.4E-05	7.4E-05
G6P-97-05X	0.100	1.000	2.819	1.579	0.083	0.167	15.300	FALLING	1.2E-04	6.3E-05	
G6P-97-05X	0.200	2.000	2.486	1.126	0.083	0.167	15.300	RISING	8.4E-05	4.3E-05	5.3E-05
G6M-92-03X	0.200	0.400	0.824	0.440	0.167	0.417	11.200	RISING	2.4E-03	1.2E-03	
G6M-92-03X	0.200	0.400	0.830	0.446	0.167	0.417	11.200	RISING	2.4E-03	1.2E-03	1.2E-03
G6M-92-06X	0.025	0.083	0.748	0.188	0.167	0.417	10.000	RISING	2.0E-02	1.0E-02	
G6M-92-06X	0.050	0.100	0.453	0.151	0.167	0.417	10.000	RISING	1.8E-02	9.3E-03	9.7E-03
G6M-97-06B	0.200	0.400	0.811	0.289	0.083	0.167	15.000	RISING	1.0E-03	5.1E-04	
G6M-97-06B	0.100	0.200	1.416	0.837	0.083	0.167	15.000	FALLING	1.0E-03	5.2E-04	5.2E-04
G6M-97-08B	0.500	1.000	1.000	0.396	0.083	0.167	10.500	FALLING	4.7E-04	2.4E-04	
G6M-97-08B	0.500	1.000	1.051	0.409	0.083	0.167	10.500	RISING	4.8E-04	2.5E-04	2.4E-04
G6M-92-09X	0.167	0.500	1.315	0.742	0.167	0.417	11.600	RISING	1.3E-03	6.6E-04	
G6M-92-09X	0.200	0.533	1.239	0.679	0.167	0.417	11.600	RISING	1.4E-03	6.9E-04	6.7E-04
G6M-97-09B	0.200	0.400	1.195	0.654	0.083	0.167	15.800	FALLING	5.6E-04	2.9E-04	
G6M-97-09B	0.200	0.400	1.208	0.648	0.083	0.167	15.800	FALLING	5.8E-04	3.0E-04	
G6M-97-09B	0.092	0.292	2.762	1.768	0.083	0.167	15.800	RISING	4.2E-04	2.1E-04	2.6E-04
G6M-96-13B	0.350	1.000	1.401	0.448	0.083	0.167	14.500	FALLING	3.5E-04	1.8E-04	
G6M-96-13B	0.177	0.850	1.912	0.561	0.083	0.167	14.500	RISING	3.6E-04	1.9E-04	1.8E-04
G6M-96-16B	0.500	0.833	0.763	0.321	0.083	0.290	14.700	FALLING	4.5E-04	2.3E-04	
G6M-96-16B	0.153	0.917	1.660	0.208	0.083	0.290	14.700	RISING	4.7E-04	2.4E-04	2.3E-04

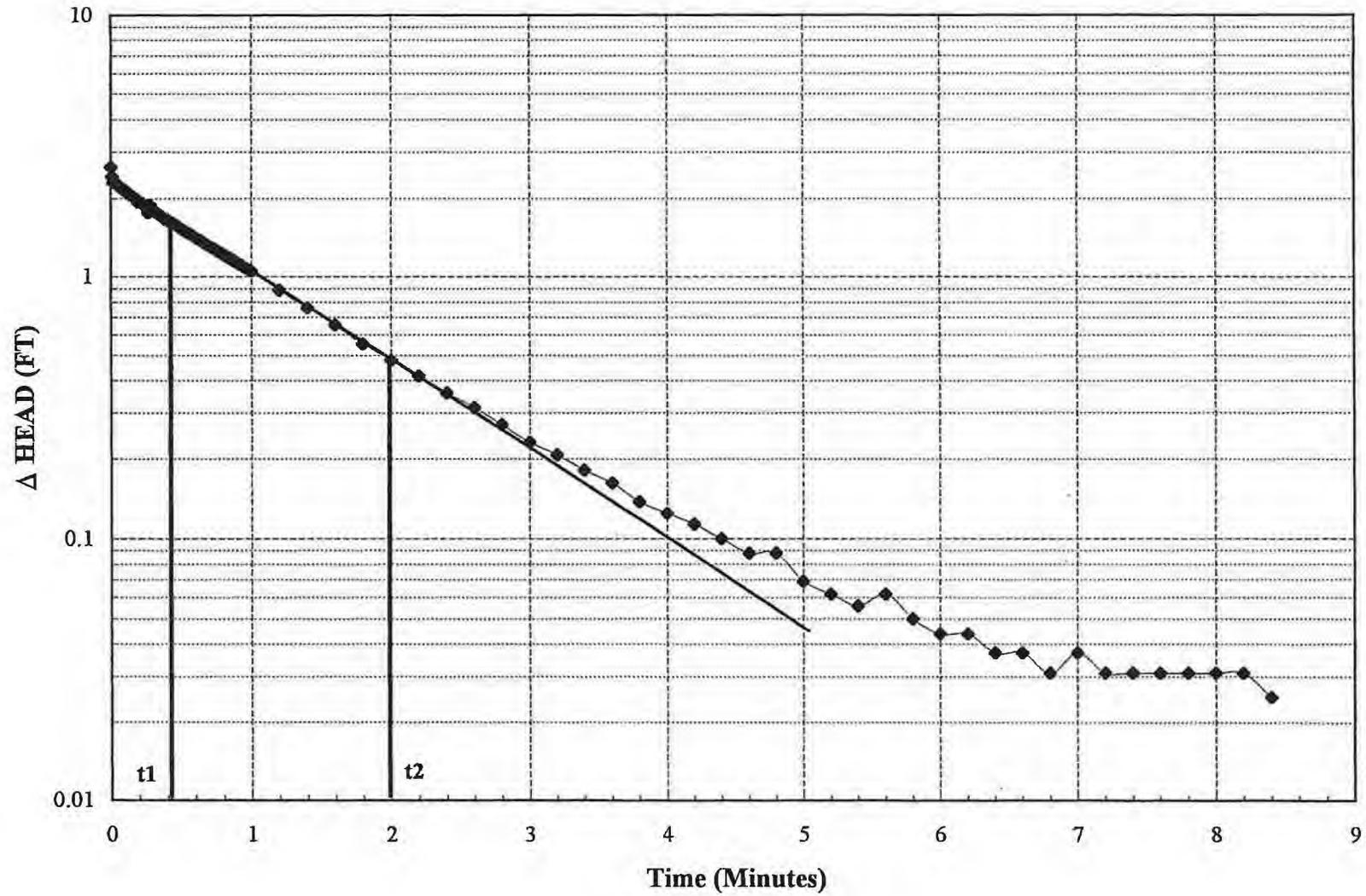
WELL	t1	t2	Ht1	Ht2	r	R	L	TYPE	K (FT/MIN)	K (CM/SEC)	Av. K (cm/sec)
G6M-96-21A	0.080	0.120	0.637	0.309	0.083	0.290	10.500	RISING	4.0E-03	2.0E-03	
G6M-96-21A	0.093	0.144	0.624	0.252	0.083	0.290	10.500	RISING	4.0E-03	2.0E-03	2.0E-03
G6M-96-21B	0.367	0.617	0.460	0.189	0.083	0.167	16.400	FALLING	6.5E-04	3.3E-04	
G6M-96-21B	0.070	0.327	1.919	0.593	0.083	0.167	16.400	RISING	8.3E-04	4.2E-04	3.8E-04
G6M-96-22A	0.300	0.733	1.085	0.397	0.083	0.167	15.500	FALLING	4.4E-04	2.2E-04	
G6M-96-22A	0.130	0.433	1.938	0.820	0.083	0.167	15.500	RISING	5.4E-04	2.7E-04	2.5E-04
G6M-96-22B	0.287	0.667	0.947	0.340	0.083	0.167	12.800	FALLING	5.9E-04	3.0E-04	
G6M-96-22B	0.167	0.517	1.508	0.517	0.083	0.167	12.800	RISING	6.7E-04	3.4E-04	3.2E-04
G6M-96-23A	0.120	0.173	0.536	0.315	0.083	0.290	10.420	RISING	2.2E-03	1.1E-03	
G6M-96-23A	0.099	0.153	0.631	0.359	0.083	0.290	10.420	RISING	2.3E-03	1.2E-03	1.2E-03
G6M-96-23B	2.000	4.000	1.035	0.423	0.083	0.167	16.300	FALLING	8.2E-05	4.1E-05	
G6M-96-23B	2.000	4.000	1.161	0.505	0.083	0.167	16.300	RISING	7.6E-05	3.9E-05	4.0E-05
G6M-96-24A	0.123	0.187	0.454	0.252	0.083	0.290	10.610	RISING	2.0E-03	1.0E-03	
G6M-96-24A	0.130	0.193	0.460	0.246	0.083	0.290	10.610	RISING	2.2E-03	1.1E-03	1.1E-03
G6M-96-24B	0.292	0.650	1.262	0.580	0.083	0.167	10.300	FALLING	5.6E-04	2.9E-04	
G6M-96-24B	0.173	0.500	1.969	0.909	0.083	0.167	10.300	RISING	6.2E-04	3.1E-04	3.0E-04
G6M-96-25A	0.030	0.073	1.414	0.378	0.083	0.083	9.750	RISING	9.7E-03	4.9E-03	
G6M-96-25A	0.037	0.070	1.218	0.435	0.083	0.083	9.750	RISING	9.8E-03	5.0E-03	4.9E-03
G6M-96-25B	0.367	0.833	1.445	0.694	0.083	0.167	15.500	FALLING	3.0E-04	1.5E-04	
G6M-96-25B	0.237	0.833	1.780	0.637	0.083	0.167	15.500	RISING	3.3E-04	1.7E-04	1.6E-04
G6M-96-26A	0.650	2.000	0.542	0.258	0.083	0.290	9.840	RISING	1.3E-04	6.5E-05	
G6M-96-26A	0.767	2.000	0.473	0.239	0.083	0.290	9.840	RISING	1.3E-04	6.5E-05	6.5E-05
G6M-96-26B	0.333	0.917	1.085	0.258	0.083	0.290	16.300	FALLING	4.0E-04	2.0E-04	
G6M-96-26B	0.147	0.820	1.773	0.246	0.083	0.290	16.300	RISING	4.7E-04	2.4E-04	2.2E-04
G6M-97-27X	0.200	0.400	1.202	0.566	0.083	0.167	10.000	RISING	1.0E-03	5.1E-04	
G6M-97-27X	0.267	0.500	0.900	0.383	0.083	0.167	10.000	FALLING	9.7E-04	4.9E-04	5.0E-04
G6M-97-28X	0.150	0.300	0.736	0.144	0.083	0.167	10.000	FALLING	2.9E-03	1.5E-03	
G6M-97-28X	0.200	0.400	0.597	0.195	0.083	0.167	10.000	RISING	1.5E-03	7.6E-04	1.1E-03
G6M-97-29X	0.100	0.200	1.108	0.422	0.083	0.167	10.500	RISING	2.5E-03	1.3E-03	
G6M-97-29X	0.175	0.258	0.402	0.188	0.083	0.167	10.500	FALLING	2.3E-03	1.2E-03	1.2E-03

Note: The duration of the initial slope of recovery for G6M-96-25A is greater than what would occur due to filter pack drainage alone, therefore the radius of the well casing was used for R on the assumption that the formation has a hydraulic conductivity equal to or greater than the filter pack.

Permeability Testing Results
 AOC 50
 Supplemental RI

Well ID	Type of Test	K (ft/min)	
		Bouwer and Rice	Hvorslev
G6M-98-30X	Rising Head	0.0015	0.0013
	Falling Head	0.0021	0.0019
G6M-98-31B	Inertial effects yielded unusable results. Estimate K > 0.1 ft/min		
G6M-98-31C	Rising Head	0.0007	0.0008
	Falling Head	0.0007	0.0007
G6M-98-32X	Rising Head	0.2	0.18
	Falling Head	0.18	0.18
G6M-98-33X	Rising Head	0.002	0.003

G6P-97-04X RISING HEAD PERMEABILITY TEST No. 1

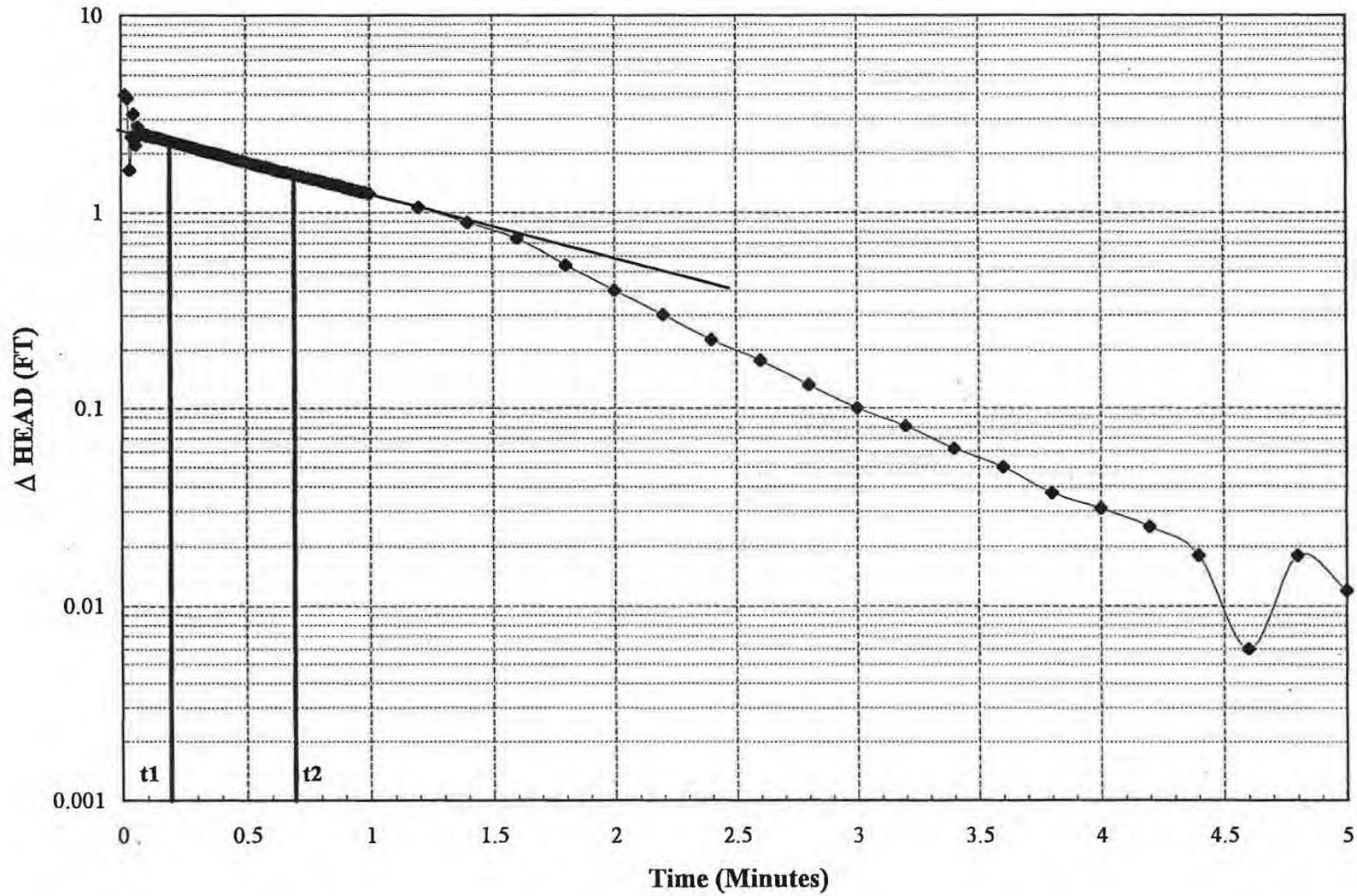


G6P-97-04X RISING HEAD TES	
Time (min)	ΔH (ft)
0	2.63
0.0083	2.423
0.0166	2.297
0.025	2.328
0.0333	2.297
0.0416	2.284
0.05	2.259
0.0583	2.234
0.0666	2.202
0.075	2.196
0.0833	2.177
0.0916	2.171
0.1	2.139
0.1083	2.139
0.1166	2.102
0.125	2.089
0.1333	2.083
0.1416	2.058
0.15	2.045
0.1583	2.039
0.1666	2.013
0.175	2.001
0.1833	1.988
0.1916	1.944
0.2	1.957
0.2083	1.938
0.2166	1.925
0.225	1.913
0.2333	1.9
0.2416	1.881
0.25	1.881
0.2583	1.869
0.2666	1.762
0.275	1.837
0.2833	1.888
0.2916	1.812
0.3	1.8
0.3083	1.787
0.3166	1.774
0.325	1.762
0.3333	1.755
0.35	1.73
0.3666	1.705
0.3833	1.661
0.4	1.661

Time (min)	ΔH (ft)
0.4166	1.636
0.4333	1.617
0.45	1.598
0.4666	1.579
0.4833	1.554
0.5	1.535
0.5166	1.516
0.5333	1.497
0.55	1.472
0.5666	1.46
0.5833	1.447
0.6	1.416
0.6166	1.397
0.6333	1.384
0.65	1.365
0.6666	1.346
0.6833	1.327
0.7	1.315
0.7166	1.296
0.7333	1.283
0.75	1.265
0.7666	1.246
0.7833	1.233
0.8	1.214
0.8166	1.202
0.8333	1.189
0.85	1.176
0.8666	1.158
0.8833	1.145
0.9	1.132
0.9166	1.113
0.9333	1.107
0.95	1.088
0.9666	1.076
0.9833	1.063
1	1.051
1.2	0.887
1.4	0.761
1.6	0.654
1.8	0.553
2	0.478
2.2	0.415
2.4	0.358
2.6	0.314
2.8	0.27
3	0.232
3.2	0.207
3.4	0.182

Time (min)	ΔH (ft)
3.6	0.163
3.8	0.138
4	0.125
4.2	0.113
4.4	0.1
4.6	0.088
4.8	0.088
5	0.069
5.2	0.062
5.4	0.056
5.6	0.062
5.8	0.05
6	0.044
6.2	0.044
6.4	0.037
6.6	0.037
6.8	0.031
7	0.037
7.2	0.031
7.4	0.031
7.6	0.031
7.8	0.031
8	0.031
8.2	0.031
8.4	0.025

G6P-97-04X FALLING HEAD PERMEABILITY TEST

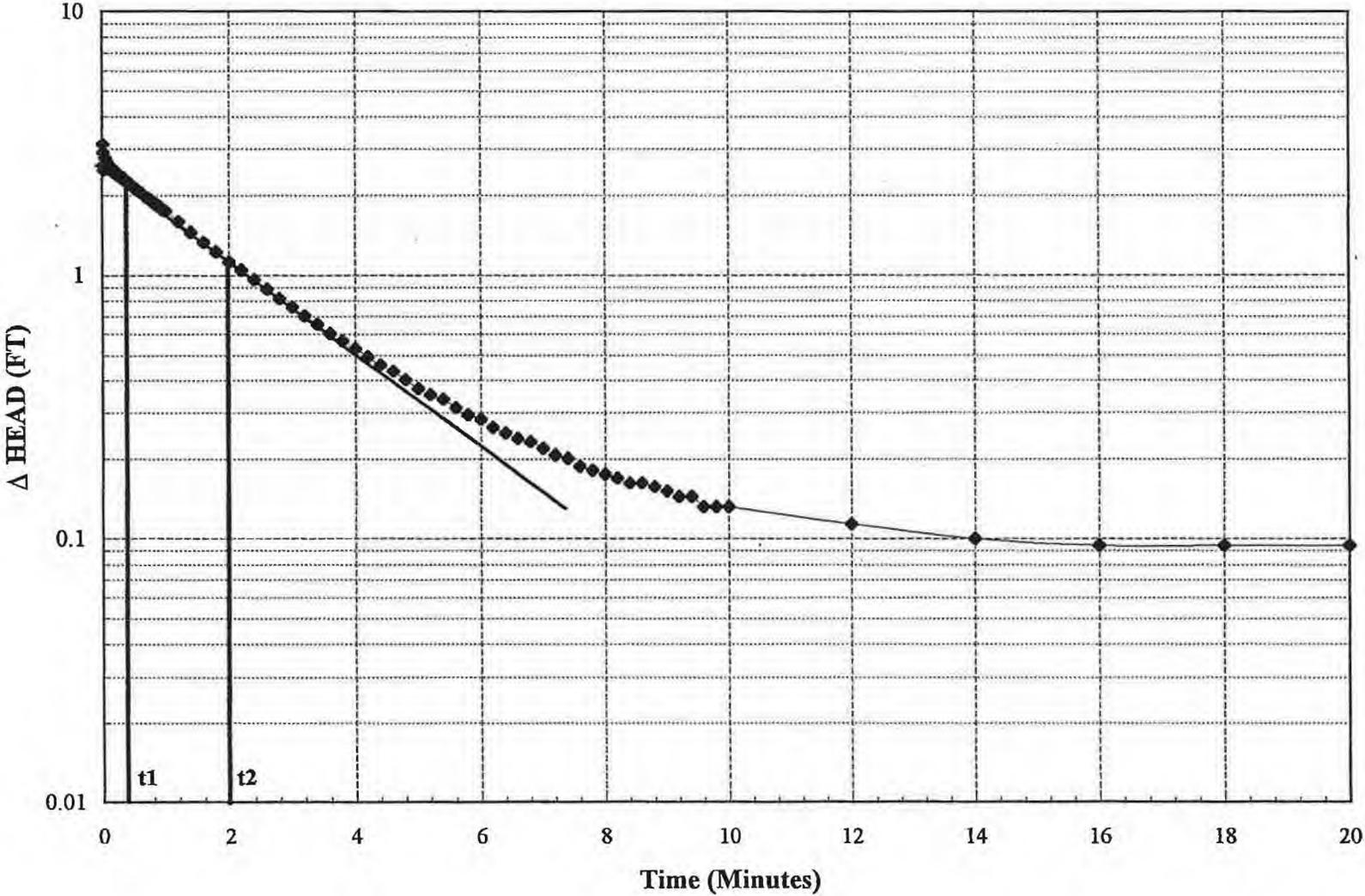


G6P-97-04X		
FALLING HEAD TEST		
Time (min)	ΔH (ft)	Absolute
		Value ΔH (ft)
0	-0.012	0.012
0.0083	-2.41	2.41
0.0166	-3.971	3.971
0.025	-3.826	3.826
0.0333	-1.642	1.642
0.0416	-2.442	2.442
0.05	-3.165	3.165
0.0583	-2.196	2.196
0.0666	-2.737	2.737
0.075	-2.467	2.467
0.0833	-2.53	2.53
0.0916	-2.523	2.523
0.1	-2.448	2.448
0.1083	-2.467	2.467
0.1166	-2.442	2.442
0.125	-2.416	2.416
0.1333	-2.41	2.41
0.1416	-2.404	2.404
0.15	-2.385	2.385
0.1583	-2.366	2.366
0.1666	-2.353	2.353
0.175	-2.335	2.335
0.1833	-2.316	2.316
0.1916	-2.303	2.303
0.2	-2.284	2.284
0.2083	-2.272	2.272
0.2166	-2.259	2.259
0.225	-2.24	2.24
0.2333	-2.221	2.221
0.2416	-2.209	2.209
0.25	-2.196	2.196
0.2583	-2.177	2.177
0.2666	-2.165	2.165
0.275	-2.152	2.152
0.2833	-2.139	2.139
0.2916	-2.121	2.121
0.3	-2.108	2.108
0.3083	-2.089	2.089
0.3166	-2.076	2.076
0.325	-2.064	2.064
0.3333	-2.051	2.051
0.35	-2.026	2.026
0.3666	-2.001	2.001
0.3833	-1.976	1.976

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.4	-1.951	1.951
0.4166	-1.925	1.925
0.4333	-1.9	1.9
0.45	-1.875	1.875
0.4666	-1.85	1.85
0.4833	-1.825	1.825
0.5	-1.806	1.806
0.5166	-1.781	1.781
0.5333	-1.755	1.755
0.55	-1.73	1.73
0.5666	-1.711	1.711
0.5833	-1.693	1.693
0.6	-1.674	1.674
0.6166	-1.648	1.648
0.6333	-1.623	1.623
0.65	-1.604	1.604
0.6666	-1.592	1.592
0.6833	-1.573	1.573
0.7	-1.541	1.541
0.7166	-1.529	1.529
0.7333	-1.51	1.51
0.75	-1.491	1.491
0.7666	-1.472	1.472
0.7833	-1.46	1.46
0.8	-1.441	1.441
0.8166	-1.422	1.422
0.8333	-1.403	1.403
0.85	-1.39	1.39
0.8666	-1.372	1.372
0.8833	-1.359	1.359
0.9	-1.34	1.34
0.9166	-1.321	1.321
0.9333	-1.302	1.302
0.95	-1.29	1.29
0.9666	-1.271	1.271
0.9833	-1.258	1.258
1	-1.246	1.246
1.2	-1.057	1.057
1.4	-0.893	0.893
1.6	-0.742	0.742
1.8	-0.541	0.541
2	-0.402	0.402
2.2	-0.302	0.302
2.4	-0.226	0.226
2.6	-0.176	0.176
2.8	-0.132	0.132
3	-0.1	0.1

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
3.2	-0.081	0.081
3.4	-0.062	0.062
3.6	-0.05	0.05
3.8	-0.037	0.037
4	-0.031	0.031
4.2	-0.025	0.025
4.4	-0.018	0.018
4.6	-0.006	0.006
4.8	-0.018	0.018
5	-0.012	0.012
5.2	-0.012	0.012
5.4	-0.006	0.006
5.6	-0.006	0.006
5.8	0	0
6	0	0
6.2	0	0
6.4	0	0
6.6	0	0

G6P-97-05X RISING HEAD PERMEABILITY TEST

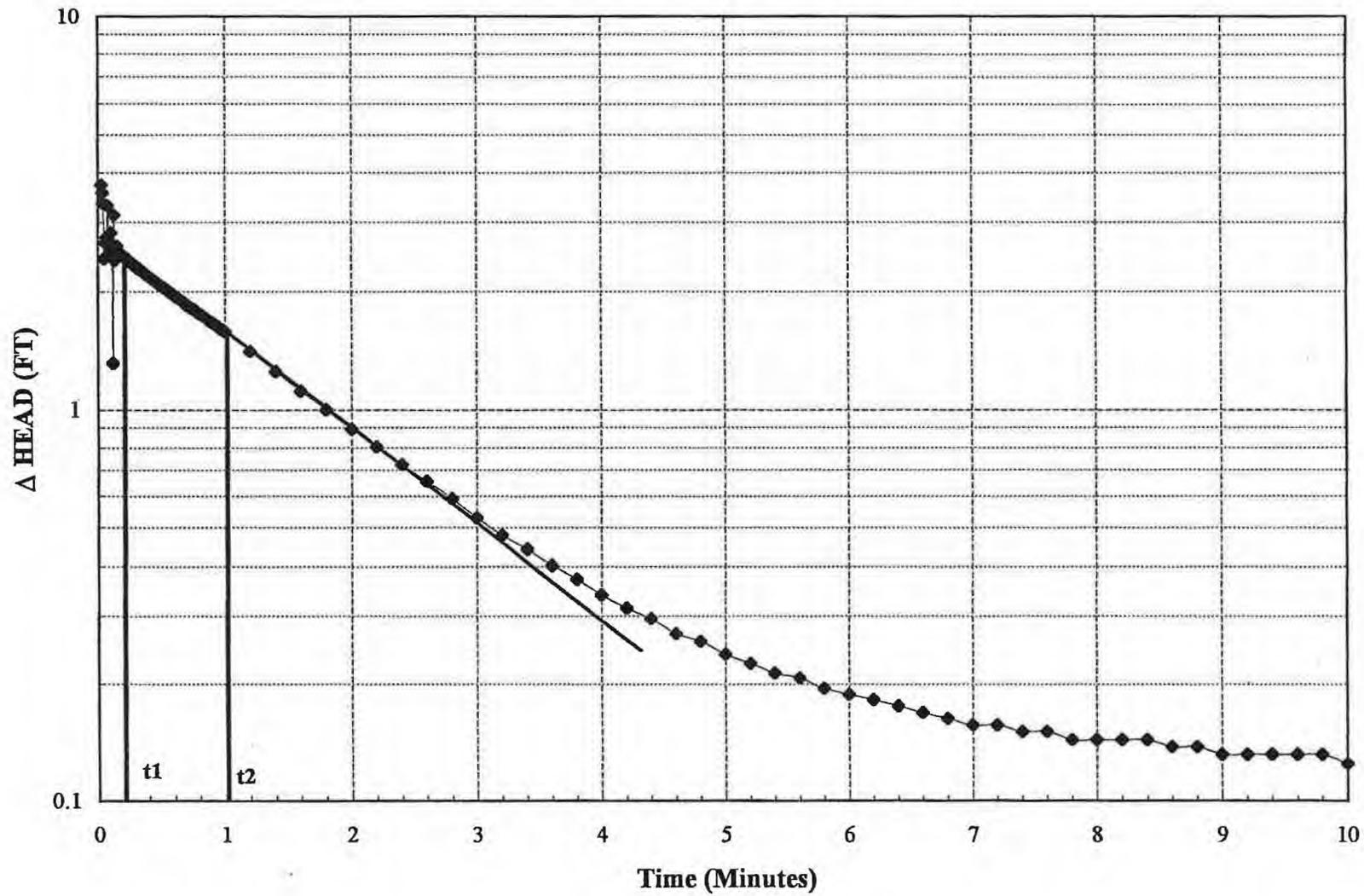


G69-97-05X		
RISING HEAD TEST		
Time (min)	ΔH (ft)	
0	2.914	0
0.0083	6.048	3.134
0.0166	5.834	2.92
0.025	5.406	2.492
0.0333	5.557	2.643
0.0416	5.708	2.794
0.05	5.689	2.775
0.0583	5.633	2.719
0.0666	5.62	2.706
0.075	5.601	2.687
0.0833	5.589	2.675
0.0916	5.557	2.643
0.1	5.557	2.643
0.1083	5.532	2.618
0.1166	5.519	2.605
0.125	5.507	2.593
0.1333	5.494	2.58
0.1416	5.482	2.568
0.15	5.469	2.555
0.1583	5.456	2.542
0.1666	5.444	2.53
0.175	5.431	2.517
0.1833	5.419	2.505
0.1916	5.406	2.492
0.2	5.4	2.486
0.2083	5.387	2.473
0.2166	5.375	2.461
0.225	5.362	2.448
0.2333	5.356	2.442
0.2416	5.343	2.429
0.25	5.331	2.417
0.2583	5.318	2.404
0.2666	5.312	2.398
0.275	5.305	2.391
0.2833	5.299	2.385
0.2916	5.286	2.372
0.3	5.274	2.36
0.3083	5.268	2.354
0.3166	5.261	2.347
0.325	5.255	2.341
0.3333	5.242	2.328
0.35	5.224	2.31
0.3666	5.205	2.291
0.3833	5.186	2.272
0.4	5.167	2.253

Time (min)	ΔH (ft)	
0.4166	5.148	2.234
0.4333	5.135	2.221
0.45	5.117	2.203
0.4666	5.098	2.184
0.4833	5.079	2.165
0.5	5.066	2.152
0.5166	5.047	2.133
0.5333	5.035	2.121
0.55	5.016	2.102
0.5666	5.003	2.089
0.5833	4.984	2.07
0.6	4.972	2.058
0.6166	4.959	2.045
0.6333	4.94	2.026
0.65	4.928	2.014
0.6666	4.915	2.001
0.6833	4.896	1.982
0.7	4.884	1.97
0.7166	4.871	1.957
0.7333	4.858	1.944
0.75	4.846	1.932
0.7666	4.833	1.919
0.7833	4.821	1.907
0.8	4.802	1.888
0.8166	4.789	1.875
0.8333	4.777	1.863
0.85	4.77	1.856
0.8666	4.751	1.837
0.8833	4.739	1.825
0.9	4.726	1.812
0.9166	4.72	1.806
0.9333	4.701	1.787
0.95	4.689	1.775
0.9666	4.676	1.762
0.9833	4.67	1.756
1	4.657	1.743
1.2	4.506	1.592
1.4	4.368	1.454
1.6	4.248	1.334
1.8	4.141	1.227
2	4.04	1.126
2.2	3.958	1.044
2.4	3.877	0.963
2.6	3.801	0.887
2.8	3.732	0.818
3	3.675	0.761
3.2	3.619	0.705
3.4	3.568	0.654

Time (min)	ΔH (ft)	
3.6	3.518	0.604
3.8	3.48	0.566
4	3.442	0.528
4.2	3.405	0.491
4.4	3.373	0.459
4.6	3.348	0.434
4.8	3.316	0.402
5	3.285	0.371
5.2	3.266	0.352
5.4	3.254	0.34
5.6	3.228	0.314
5.8	3.209	0.295
6	3.197	0.283
6.2	3.178	0.264
6.4	3.165	0.251
6.6	3.153	0.239
6.8	3.147	0.233
7	3.134	0.22
7.2	3.121	0.207
7.4	3.115	0.201
7.6	3.102	0.188
7.8	3.096	0.182
8	3.09	0.176
8.2	3.084	0.17
8.4	3.077	0.163
8.6	3.077	0.163
8.8	3.071	0.157
9	3.065	0.151
9.2	3.058	0.144
9.4	3.058	0.144
9.6	3.046	0.132
9.8	3.046	0.132
10	3.046	0.132
12	3.027	0.113
14	3.014	0.1
16	3.008	0.094
18	3.008	0.094
20	3.008	0.094

G6P-97-05X FALLING HEAD PERMEABILITY TEST

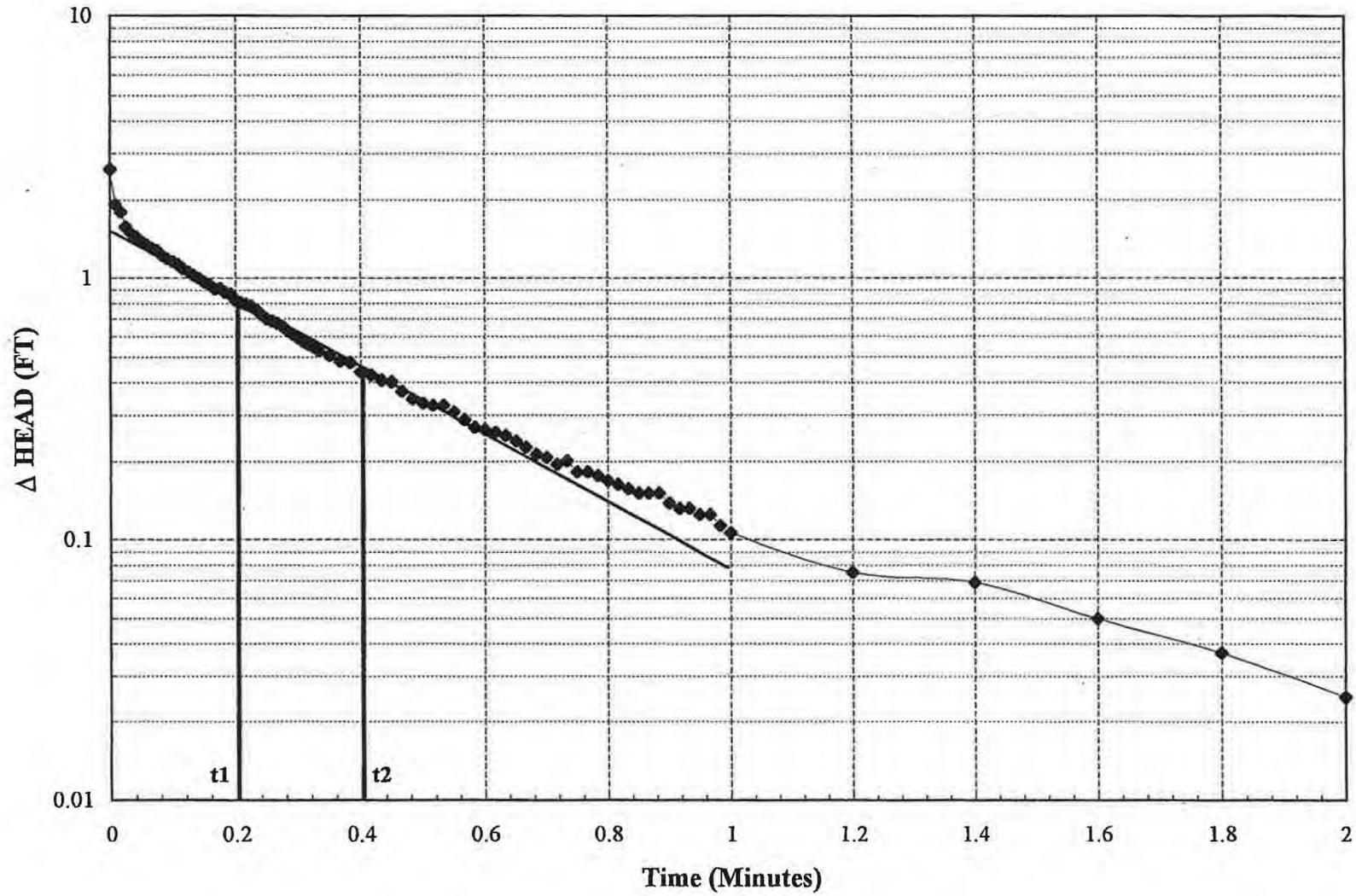


G6P-97-05X:		
FALLING HEAD TEST		
Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0	0.012	-0.012
0.0083	0.006	-0.006
0.0166	-3.304	3.304
0.025	-3.719	3.719
0.0333	-3.556	3.556
0.0416	-3.348	3.348
0.05	-2.429	2.429
0.0583	-2.656	2.656
0.0666	-2.744	2.744
0.075	-3.304	3.304
0.0833	-2.706	2.706
0.0916	-2.523	2.523
0.1	-2.819	2.819
0.1083	-2.612	2.612
0.1166	-1.315	1.315
0.125	-3.121	3.121
0.1333	-2.404	2.404
0.1416	-2.435	2.435
0.15	-2.605	2.605
0.1583	-2.536	2.536
0.1666	-2.492	2.492
0.175	-2.492	2.492
0.1833	-2.492	2.492
0.1916	-2.479	2.479
0.2	-2.46	2.46
0.2083	-2.448	2.448
0.2166	-2.435	2.435
0.225	-2.429	2.429
0.2333	-2.423	2.423
0.2416	-2.398	2.398
0.25	-2.391	2.391
0.2583	-2.379	2.379
0.2666	-2.366	2.366
0.275	-2.353	2.353
0.2833	-2.341	2.341
0.2916	-2.335	2.335
0.3	-2.322	2.322
0.3083	-2.309	2.309
0.3166	-2.297	2.297
0.325	-2.291	2.291
0.3333	-2.278	2.278
0.35	-2.259	2.259
0.3666	-2.234	2.234
0.3833	-2.209	2.209

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.4	-2.19	2.19
0.4166	-2.171	2.171
0.4333	-2.152	2.152
0.45	-2.127	2.127
0.4666	-2.108	2.108
0.4833	-2.089	2.089
0.5	-2.07	2.07
0.5166	-2.051	2.051
0.5333	-2.032	2.032
0.55	-2.014	2.014
0.5666	-1.995	1.995
0.5833	-1.976	1.976
0.6	-1.957	1.957
0.6166	-1.938	1.938
0.6333	-1.925	1.925
0.65	-1.907	1.907
0.6666	-1.888	1.888
0.6833	-1.869	1.869
0.7	-1.85	1.85
0.7166	-1.837	1.837
0.7333	-1.818	1.818
0.75	-1.806	1.806
0.7666	-1.787	1.787
0.7833	-1.774	1.774
0.8	-1.756	1.756
0.8166	-1.743	1.743
0.8333	-1.724	1.724
0.85	-1.711	1.711
0.8666	-1.693	1.693
0.8833	-1.68	1.68
0.9	-1.667	1.667
0.9166	-1.649	1.649
0.9333	-1.636	1.636
0.95	-1.623	1.623
0.9666	-1.604	1.604
0.9833	-1.592	1.592
1	-1.579	1.579
1.2	-1.403	1.403
1.4	-1.252	1.252
1.6	-1.114	1.114
1.8	-1	1
2	-0.893	0.893
2.2	-0.805	0.805
2.4	-0.723	0.723
2.6	-0.654	0.654
2.8	-0.591	0.591
3	-0.528	0.528

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
3.2	-0.478	0.478
3.4	-0.44	0.44
3.6	-0.402	0.402
3.8	-0.371	0.371
4	-0.339	0.339
4.2	-0.314	0.314
4.4	-0.295	0.295
4.6	-0.27	0.27
4.8	-0.258	0.258
5	-0.239	0.239
5.2	-0.226	0.226
5.4	-0.213	0.213
5.6	-0.207	0.207
5.8	-0.195	0.195
6	-0.188	0.188
6.2	-0.182	0.182
6.4	-0.176	0.176
6.6	-0.169	0.169
6.8	-0.163	0.163
7	-0.157	0.157
7.2	-0.157	0.157
7.4	-0.151	0.151
7.6	-0.151	0.151
7.8	-0.144	0.144
8	-0.144	0.144
8.2	-0.144	0.144
8.4	-0.144	0.144
8.6	-0.138	0.138
8.8	-0.138	0.138
9	-0.132	0.132
9.2	-0.132	0.132
9.4	-0.132	0.132
9.6	-0.132	0.132
9.8	-0.132	0.132
10	-0.125	0.125

G6M-92-03X RISING HEAD PERMEABILITY TEST No. 1

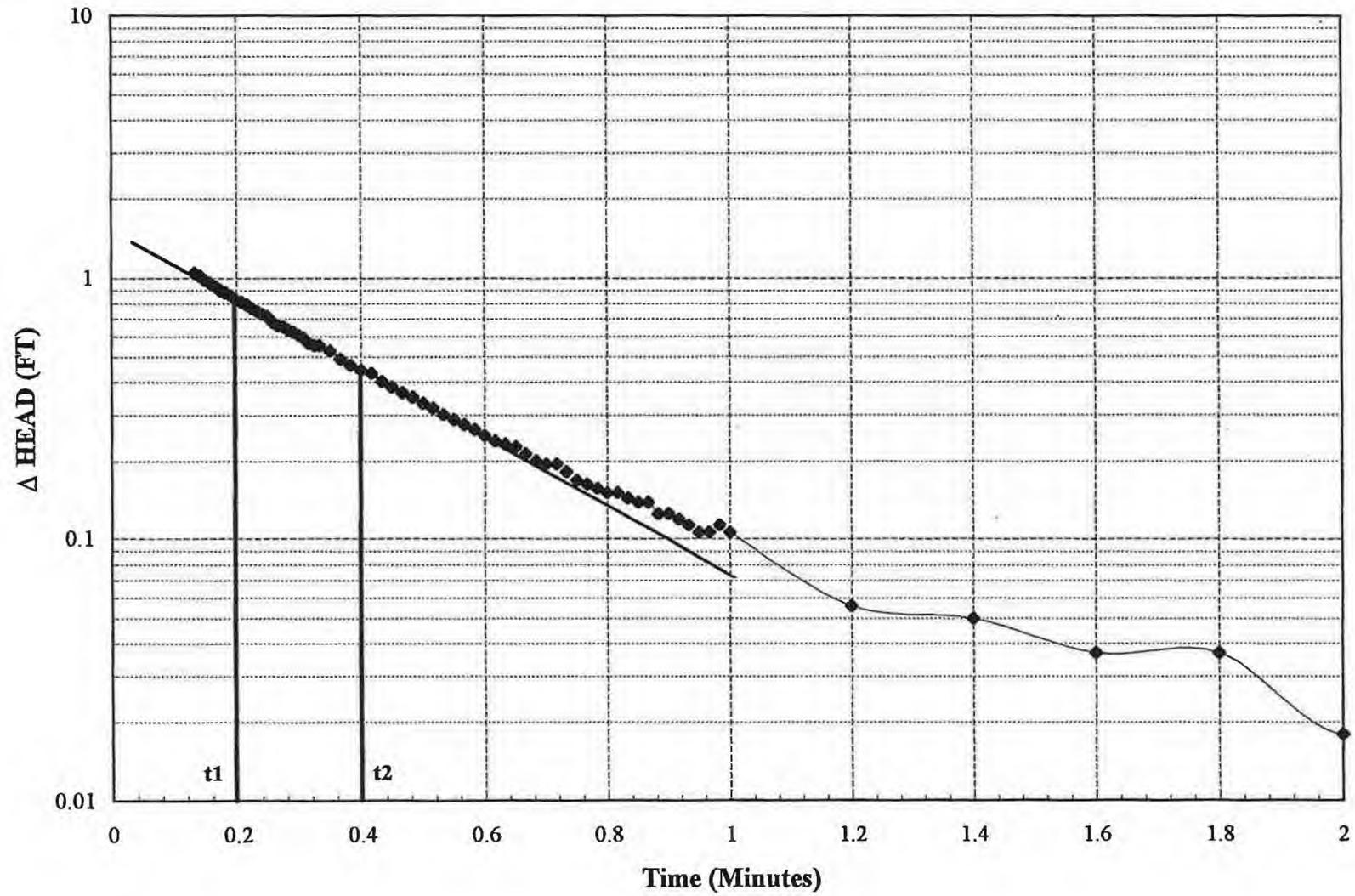


G6M-92-03X RISING HEAD TEST 1	
Time (min)	ΔH (ft)
0	2.624
0.0083	1.925
0.0166	1.793
0.025	1.573
0.0333	1.497
0.0416	1.447
0.05	1.39
0.0583	1.346
0.0666	1.302
0.075	1.277
0.0833	1.22
0.0916	1.183
0.1	1.157
0.1083	1.126
0.1166	1.088
0.125	1.057
0.1333	1.025
0.1416	1
0.15	0.969
0.1583	0.944
0.1666	0.906
0.175	0.912
0.1833	0.881
0.1916	0.868
0.2	0.824
0.2083	0.805
0.2166	0.792
0.225	0.78
0.2333	0.755
0.2416	0.723
0.25	0.698
0.2583	0.685
0.2666	0.673
0.275	0.654
0.2833	0.629
0.2916	0.61
0.3	0.591
0.3083	0.572
0.3166	0.56
0.325	0.547
0.3333	0.528
0.35	0.509
0.3666	0.484
0.3833	0.478
0.4	0.44

Time (min)	ΔH (ft)
0.4166	0.427
0.4333	0.409
0.45	0.402
0.4666	0.371
0.4833	0.346
0.5	0.333
0.5166	0.327
0.5333	0.327
0.55	0.308
0.5666	0.289
0.5833	0.27
0.6	0.264
0.6166	0.258
0.6333	0.251
0.65	0.239
0.6666	0.226
0.6833	0.213
0.7	0.207
0.7166	0.195
0.7333	0.201
0.75	0.182
0.7666	0.182
0.7833	0.176
0.8	0.169
0.8166	0.163
0.8333	0.157
0.85	0.151
0.8666	0.151
0.8833	0.151
0.9	0.138
0.9166	0.132
0.9333	0.132
0.95	0.125
0.9666	0.125
0.9833	0.113
1	0.106
1.2	0.075
1.4	0.069
1.6	0.05
1.8	0.037
2	0.025
2.2	0.025
2.4	0.031
2.6	-0.012
2.8	0.025
3	0.025
3.2	0.025
3.4	0.018

Time (min)	ΔH (ft)
3.6	0.012
3.8	0.018
4	0.006
4.2	0.012
4.4	0.006
4.6	0.006
4.8	0.012
5	0.012
5.2	0.012
5.4	0.012
5.6	0.018
5.8	0.018
6	0.012
6.2	0.006
6.4	0.012
6.6	0.012
6.8	0.012
7	0.012
7.2	0.006
7.4	0.012
7.6	0.012
7.8	0
8	0.006
8.2	0.012
8.4	0.006
8.6	0.006
8.8	0.012

G6M-92-03X RISING HEAD PERMEABILITY TEST No. 2

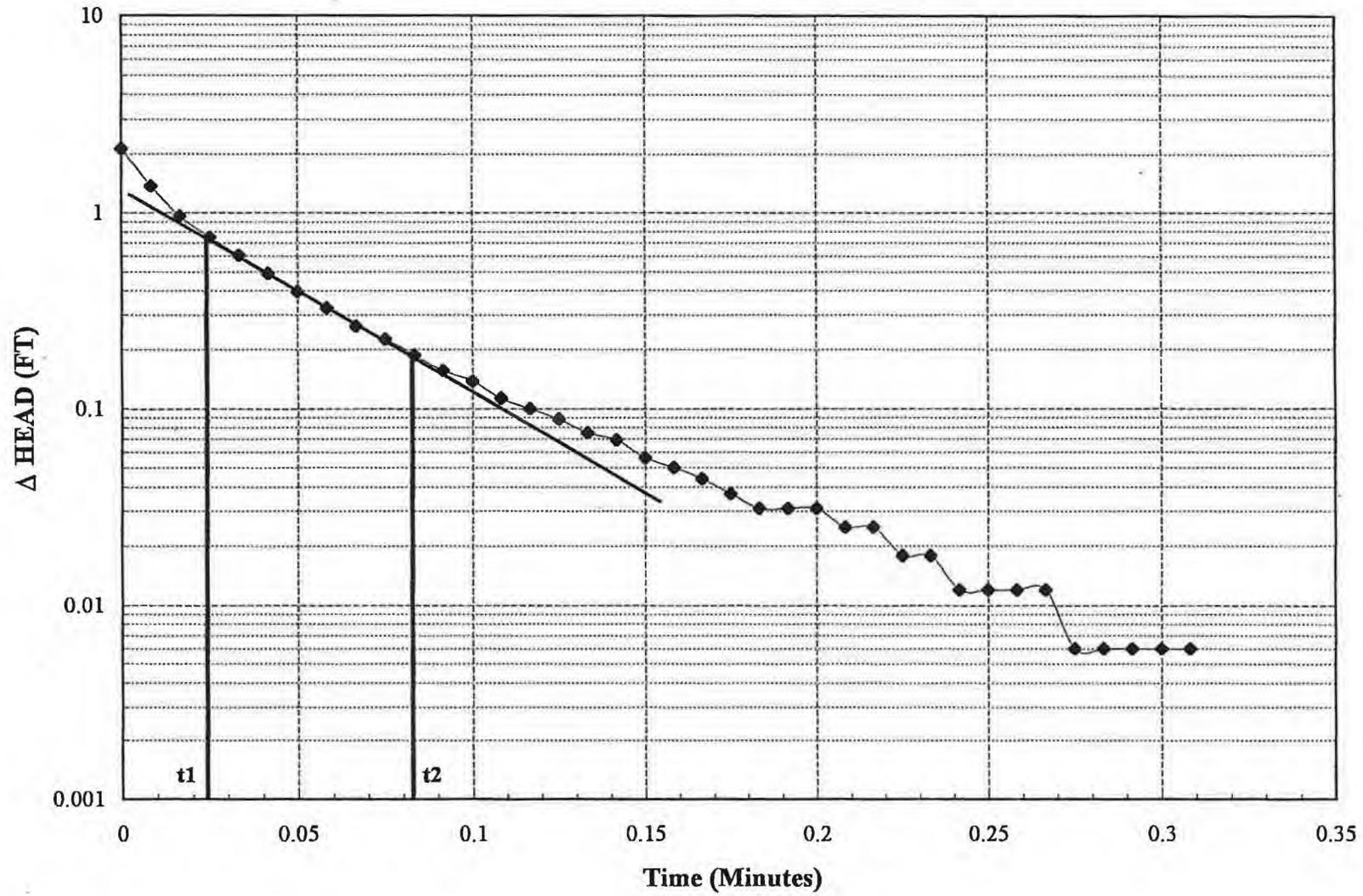


G6M-92-03X	
RISING HEAD TEST 2	
Time (min)	ΔH (ft)
0.1333	1.044
0.1416	1.019
0.15	0.981
0.1583	0.956
0.1666	0.931
0.175	0.899
0.1833	0.881
0.1916	0.855
0.2	0.83
0.2083	0.811
0.2166	0.792
0.225	0.767
0.2333	0.748
0.2416	0.73
0.25	0.717
0.2583	0.679
0.2666	0.66
0.275	0.654
0.2833	0.635
0.2916	0.623
0.3	0.604
0.3083	0.591
0.3166	0.566
0.325	0.553
0.3333	0.553
0.35	0.528
0.3666	0.49
0.3833	0.465
0.4	0.446
0.4166	0.434
0.4333	0.402
0.45	0.383
0.4666	0.365
0.4833	0.352
0.5	0.333
0.5166	0.32
0.5333	0.302
0.55	0.289
0.5666	0.276
0.5833	0.264
0.6	0.251
0.6166	0.239
0.6333	0.232
0.65	0.226
0.6666	0.213

Time (min)	ΔH (ft)
0.6833	0.201
0.7	0.195
0.7166	0.195
0.7333	0.182
0.75	0.169
0.7666	0.163
0.7833	0.157
0.8	0.151
0.8166	0.151
0.8333	0.144
0.85	0.138
0.8666	0.138
0.8833	0.125
0.9	0.125
0.9166	0.119
0.9333	0.113
0.95	0.106
0.9666	0.106
0.9833	0.113
1	0.106
1.2	0.056
1.4	0.05
1.6	0.037
1.8	0.037
2	0.018
2.2	0.031
2.4	0.012
2.6	0.018
2.8	0.012
3	0.031
3.2	0.012
3.4	0.018
3.6	0.012
3.8	0.025
4	0.018
4.2	0.012
4.4	0.006
4.6	0.012
4.8	0.006
5	0.006
5.2	0.006
5.4	0.006
5.6	0.006
5.8	0.006
6	0.006
6.2	0.006
6.4	0.018
6.6	0.006

Time (min)	ΔH (ft)
6.8	0
7	0
7.2	0.012
7.4	-0.006
7.6	0.006
7.8	0.012
8	-0.006
8.2	0.012
8.4	0.012
8.6	0.006

G6M-92-06X RISING HEAD PERMEABILITY TEST No. 1

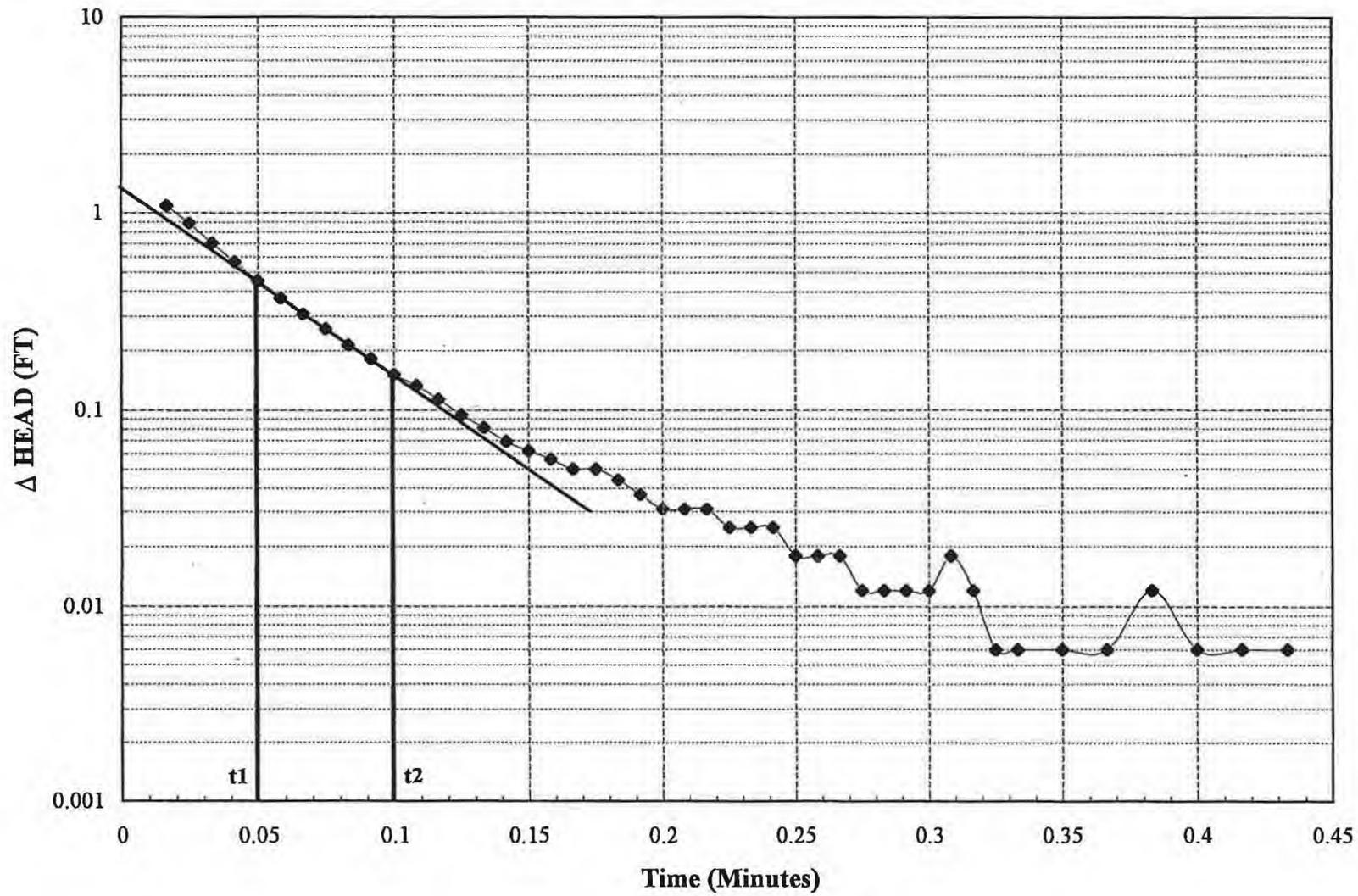


G6M-92-06X	
RISING HEAD TEST 1	
Time (min)	ΔH (ft)
0	2.12
0.0083	1.378
0.0166	0.962
0.025	0.748
0.0333	0.604
0.0416	0.49
0.05	0.396
0.0583	0.327
0.0666	0.264
0.075	0.226
0.0833	0.188
0.0916	0.157
0.1	0.138
0.1083	0.113
0.1166	0.1
0.125	0.088
0.1333	0.075
0.1416	0.069
0.15	0.056
0.1583	0.05
0.1666	0.044
0.175	0.037
0.1833	0.031
0.1916	0.031
0.2	0.031
0.2083	0.025
0.2166	0.025
0.225	0.018
0.2333	0.018
0.2416	0.012
0.25	0.012
0.2583	0.012
0.2666	0.012
0.275	0.006
0.2833	0.006
0.2916	0.006
0.3	0.006
0.3083	0.006
0.3166	0
0.325	0
0.3333	0.006
0.35	0
0.3666	0
0.3833	0
0.4	-0.006

Time (min)	ΔH (ft)
0.4166	-0.006
0.4333	0
0.45	-0.006
0.4666	-0.006
0.4833	-0.006
0.5	-0.006
0.5166	-0.006
0.5333	-0.006
0.55	-0.006
0.5666	-0.006
0.5833	-0.006
0.6	-0.006
0.6166	-0.006
0.6333	-0.006
0.65	-0.006
0.6666	-0.006
0.6833	-0.006
0.7	-0.006
0.7166	-0.006
0.7333	-0.006
0.75	-0.006
0.7666	-0.006
0.7833	-0.006
0.8	-0.006
0.8166	-0.006
0.8333	-0.006
0.85	-0.006
0.8666	-0.006
0.8833	-0.006
0.9	-0.006
0.9166	-0.006
0.9333	-0.006
0.95	-0.006
0.9666	-0.006
0.9833	-0.006
1	-0.006
1.2	-0.006
1.4	-0.006
1.6	-0.006
1.8	-0.006
2	-0.006
2.2	-0.006
2.4	-0.006
2.6	-0.006
2.8	-0.006
3	-0.006
3.2	-0.006
3.4	-0.006

Time (min)	ΔH (ft)
3.6	-0.006
3.8	-0.006
4	-0.006
4.2	-0.006
4.4	-0.006
4.6	-0.006

G6M-92-06X RISING HEAD PERMEABILITY TEST No. 2



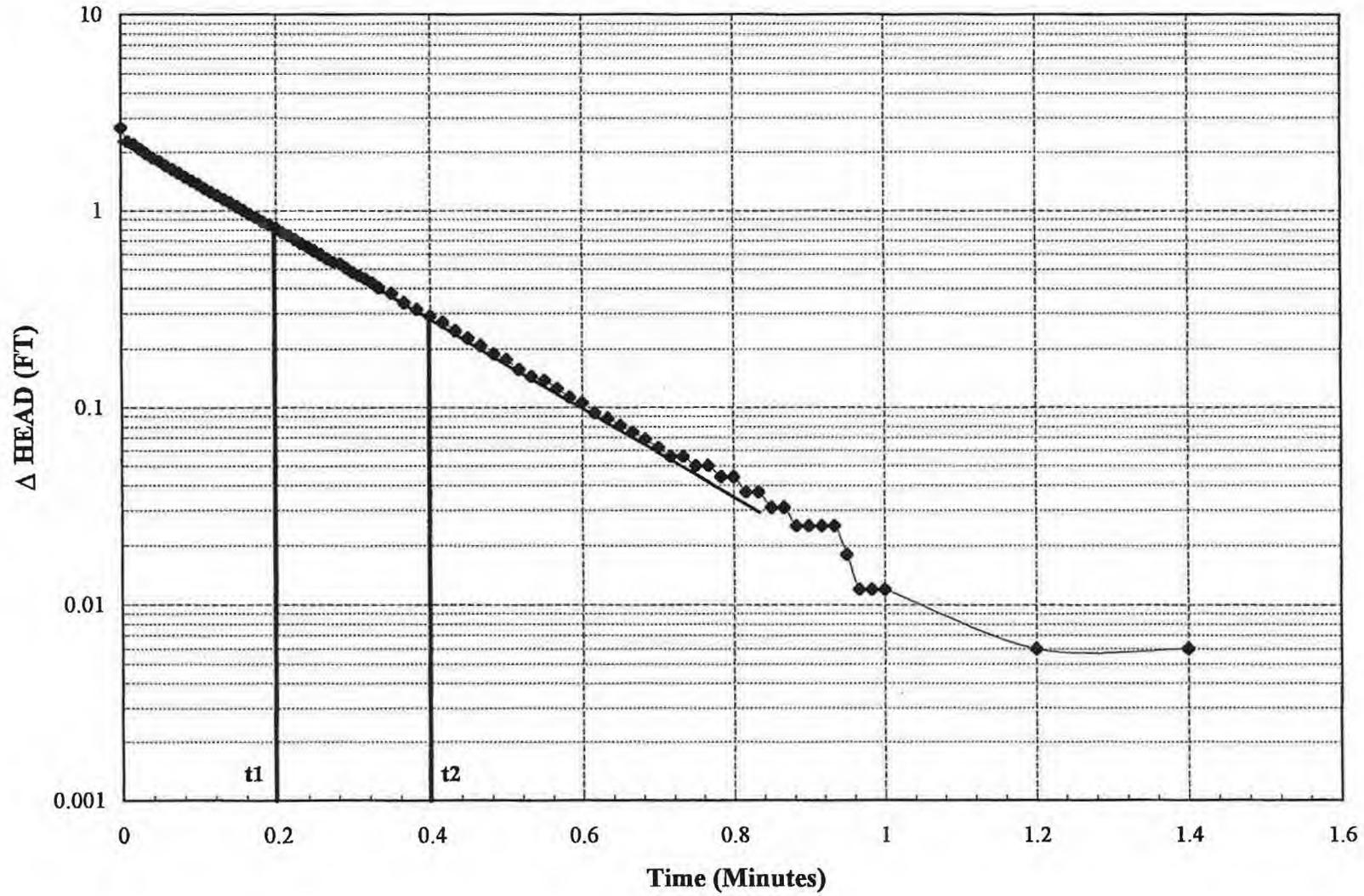
**G6M-92-06X
RISING HEAD TEST 2**

Time (min)	ΔH (ft)
0	0.755
0.0083	0.736
0.0166	1.088
0.025	0.887
0.0333	0.704
0.0416	0.566
0.05	0.453
0.0583	0.371
0.0666	0.308
0.075	0.258
0.0833	0.213
0.0916	0.182
0.1	0.151
0.1083	0.132
0.1166	0.113
0.125	0.094
0.1333	0.081
0.1416	0.069
0.15	0.062
0.1583	0.056
0.1666	0.05
0.175	0.05
0.1833	0.044
0.1916	0.037
0.2	0.031
0.2083	0.031
0.2166	0.031
0.225	0.025
0.2333	0.025
0.2416	0.025
0.25	0.018
0.2583	0.018
0.2666	0.018
0.275	0.012
0.2833	0.012
0.2916	0.012
0.3	0.012
0.3083	0.018
0.3166	0.012
0.325	0.006
0.3333	0.006
0.35	0.006
0.3666	0.006
0.3833	0.012
0.4	0.006

0.4166	0.006
0.4333	0.006
0.45	0
0.4666	0.006
0.4833	0.006
0.5	0
0.5166	0.006
0.5333	0
0.55	0
0.5666	0
0.5833	0
0.6	0
0.6166	0
0.6333	0
0.65	0
0.6666	0
0.6833	0
0.7	0
0.7166	0
0.7333	0
0.75	0
0.7666	0
0.7833	0
0.8	0
0.8166	0
0.8333	0
0.85	0
0.8666	0
0.8833	0
0.9	0
0.9166	0
0.9333	0
0.95	0
0.9666	0
0.9833	0
1	0
1.2	0
1.4	0
1.6	0
1.8	0
2	0
2.2	-0.006
2.4	-0.006
2.6	-0.006
2.8	0
3	0
3.2	0
3.4	0
3.6	0

3.8	0
4	0

G6M-97-06B RISING HEAD PERMEABILITY TEST

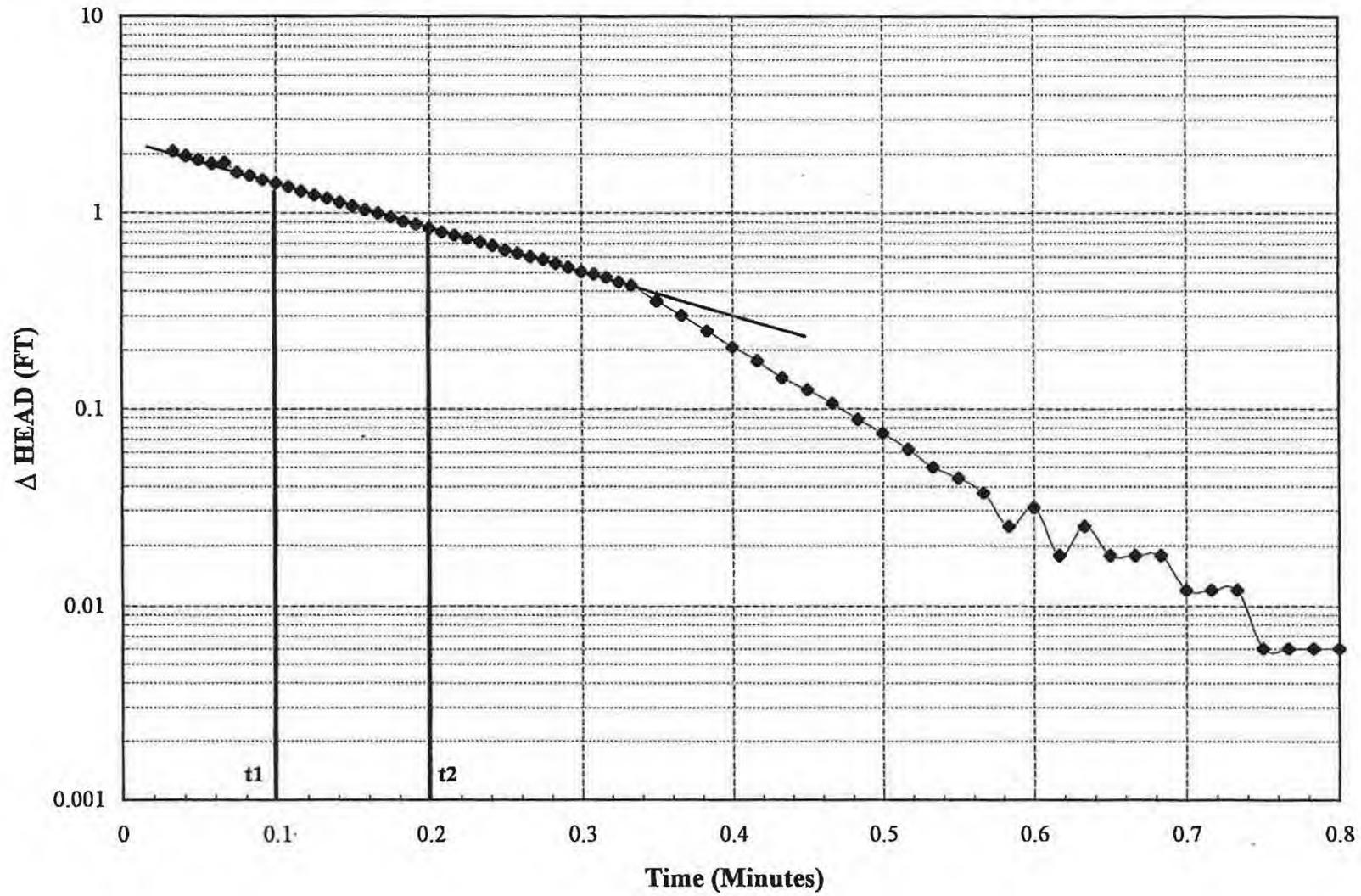


G6M-97-06B	
RISING HEAD TEST	
Time (min)	ΔH (ft)
0	2.662
0.0083	2.259
0.0166	2.177
0.025	2.057
0.0333	1.957
0.0416	1.862
0.05	1.787
0.0583	1.692
0.0666	1.617
0.075	1.548
0.0833	1.478
0.0916	1.416
0.1	1.359
0.1083	1.296
0.1166	1.239
0.125	1.189
0.1333	1.139
0.1416	1.095
0.15	1.044
0.1583	1
0.1666	0.956
0.175	0.918
0.1833	0.881
0.1916	0.843
0.2	0.811
0.2083	0.774
0.2166	0.742
0.225	0.711
0.2333	0.679
0.2416	0.654
0.25	0.623
0.2583	0.597
0.2666	0.566
0.275	0.547
0.2833	0.534
0.2916	0.509
0.3	0.484
0.3083	0.465
0.3166	0.446
0.325	0.427
0.3333	0.402
0.35	0.377
0.3666	0.339
0.3833	0.314
0.4	0.289

Time (min)	ΔH (ft)
0.4166	0.27
0.4333	0.245
0.45	0.226
0.4666	0.207
0.4833	0.188
0.5	0.176
0.5166	0.157
0.5333	0.144
0.55	0.138
0.5666	0.125
0.5833	0.113
0.6	0.106
0.6166	0.094
0.6333	0.088
0.65	0.081
0.6666	0.075
0.6833	0.069
0.7	0.062
0.7166	0.056
0.7333	0.056
0.75	0.05
0.7666	0.05
0.7833	0.044
0.8	0.044
0.8166	0.037
0.8333	0.037
0.85	0.031
0.8666	0.031
0.8833	0.025
0.9	0.025
0.9166	0.025
0.9333	0.025
0.95	0.018
0.9666	0.012
0.9833	0.012
1	0.012
1.2	0.006
1.4	0.006
1.6	0
1.8	0
2	0
2.2	0
2.4	0
2.6	0
2.8	0
3	0
3.2	0
3.4	0.006

Time (min)	ΔH (ft)
3.6	0
3.8	0
4	0
4.2	0.006
4.4	0
4.6	0
4.8	0
5	0
5.2	0.006
5.4	0
5.6	0
5.8	0
6	0.006
6.2	0
6.4	0
6.6	0
6.8	0.006
7	0
7.2	0
7.4	0
7.6	0.006
7.8	0
8	0.006
8.2	0
8.4	0
8.6	0
8.8	0.006
9	0
9.2	0
9.4	0
9.6	0.006
9.8	0.006

G6M-97-06B FALLING HEAD PERMEABILITY TEST

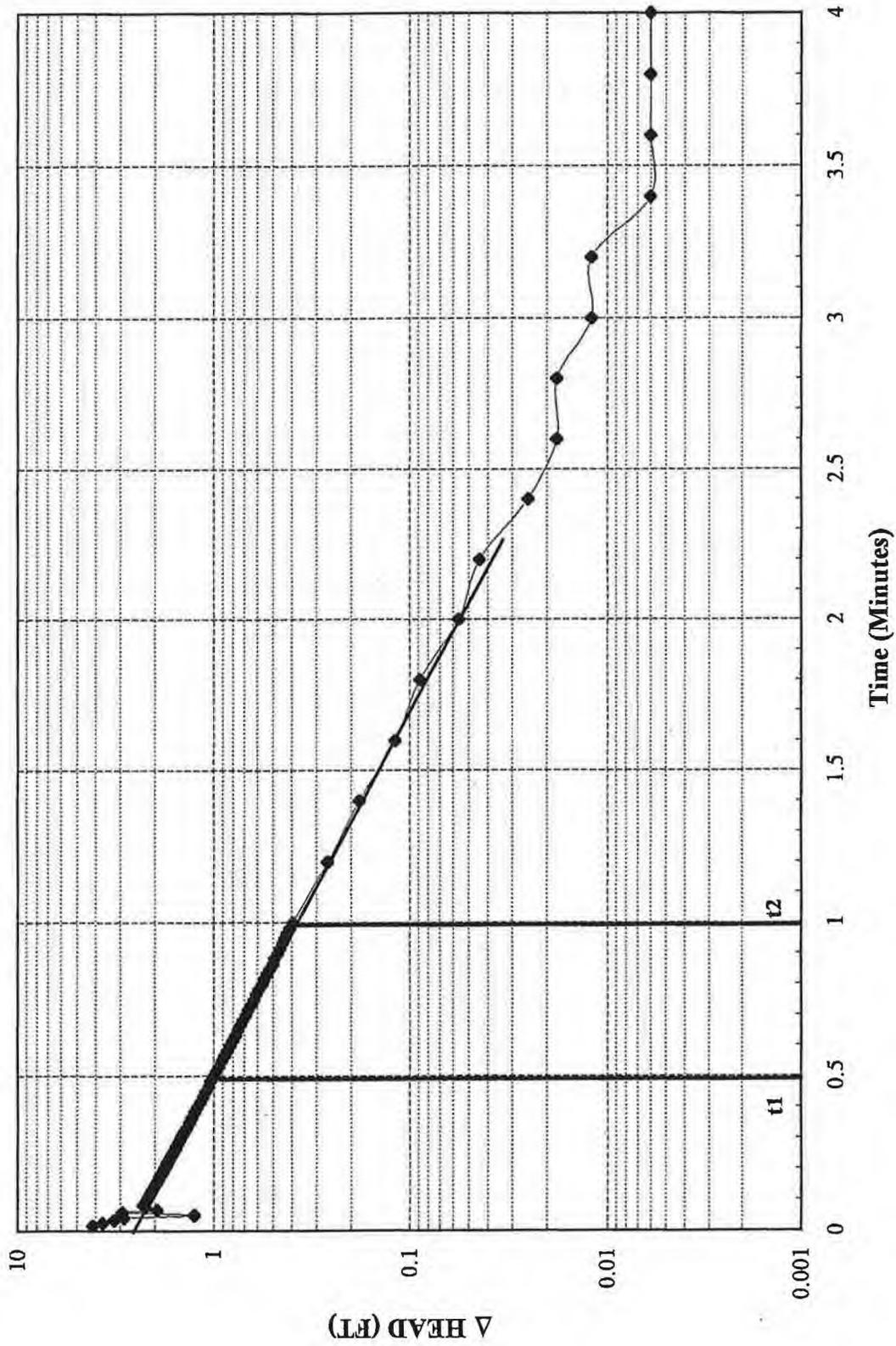


G6M-97-06B		
FALLING HEAD TEST		
Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0	-3.008	3.008
0.0083	-3.442	3.442
0.0166	-2.46	2.46
0.025	-1.56	1.56
0.0333	-2.058	2.058
0.0416	-1.957	1.957
0.05	-1.875	1.875
0.0583	-1.787	1.787
0.0666	-1.812	1.812
0.075	-1.617	1.617
0.0833	-1.548	1.548
0.0916	-1.479	1.479
0.1	-1.416	1.416
0.1083	-1.353	1.353
0.1166	-1.29	1.29
0.125	-1.233	1.233
0.1333	-1.183	1.183
0.1416	-1.132	1.132
0.15	-1.082	1.082
0.1583	-1.032	1.032
0.1666	-0.994	0.994
0.175	-0.95	0.95
0.1833	-0.906	0.906
0.1916	-0.874	0.874
0.2	-0.837	0.837
0.2083	-0.799	0.799
0.2166	-0.767	0.767
0.225	-0.742	0.742
0.2333	-0.711	0.711
0.2416	-0.679	0.679
0.25	-0.648	0.648
0.2583	-0.623	0.623
0.2666	-0.597	0.597
0.275	-0.579	0.579
0.2833	-0.553	0.553
0.2916	-0.528	0.528
0.3	-0.503	0.503
0.3083	-0.49	0.49
0.3166	-0.472	0.472
0.325	-0.446	0.446
0.3333	-0.427	0.427
0.35	-0.358	0.358
0.3666	-0.302	0.302
0.3833	-0.251	0.251

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.4	-0.207	0.207
0.4166	-0.176	0.176
0.4333	-0.144	0.144
0.45	-0.125	0.125
0.4666	-0.106	0.106
0.4833	-0.088	0.088
0.5	-0.075	0.075
0.5166	-0.062	0.062
0.5333	-0.05	0.05
0.55	-0.044	0.044
0.5666	-0.037	0.037
0.5833	-0.025	0.025
0.6	-0.031	0.031
0.6166	-0.018	0.018
0.6333	-0.025	0.025
0.65	-0.018	0.018
0.6666	-0.018	0.018
0.6833	-0.018	0.018
0.7	-0.012	0.012
0.7166	-0.012	0.012
0.7333	-0.012	0.012
0.75	-0.006	0.006
0.7666	-0.006	0.006
0.7833	-0.006	0.006
0.8	-0.006	0.006
0.8166	0	0
0.8333	0	0
0.85	0	0
0.8666	0	0
0.8833	0	0
0.9	0	0
0.9166	0	0
0.9333	0	0
0.95	0.006	-0.006
0.9666	0.006	-0.006
0.9833	0	0
1	0	0
1.2	0	0
1.4	0.006	-0.006
1.6	0.006	-0.006
1.8	0.006	-0.006
2	0.006	-0.006
2.2	0.006	-0.006
2.4	0	0
2.6	0	0
2.8	0	0
3	0.006	-0.006

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
3.2	0.006	-0.006
3.4	0.006	-0.006
3.6	0	0
3.8	0.006	-0.006
4	0	0
4.2	0.006	-0.006
4.4	0	0
4.6	0	0
4.8	0	0
5	0.006	-0.006
5.2	0.006	-0.006
5.4	0	0
5.6	0	0
5.8	0	0
6	0	0
6.2	0	0
6.4	0	0
6.6	0.006	-0.006
6.8	0	0
7	0.006	-0.006
7.2	0.006	-0.006
7.4	0.006	-0.006
7.6	0	0
7.8	0	0
8	0.006	-0.006
8.2	0	0
8.4	0	0
8.6	0.006	-0.006
8.8	0	0
9	0.006	-0.006

G6M-97-08B FALLING HEAD PERMEABILITY TEST

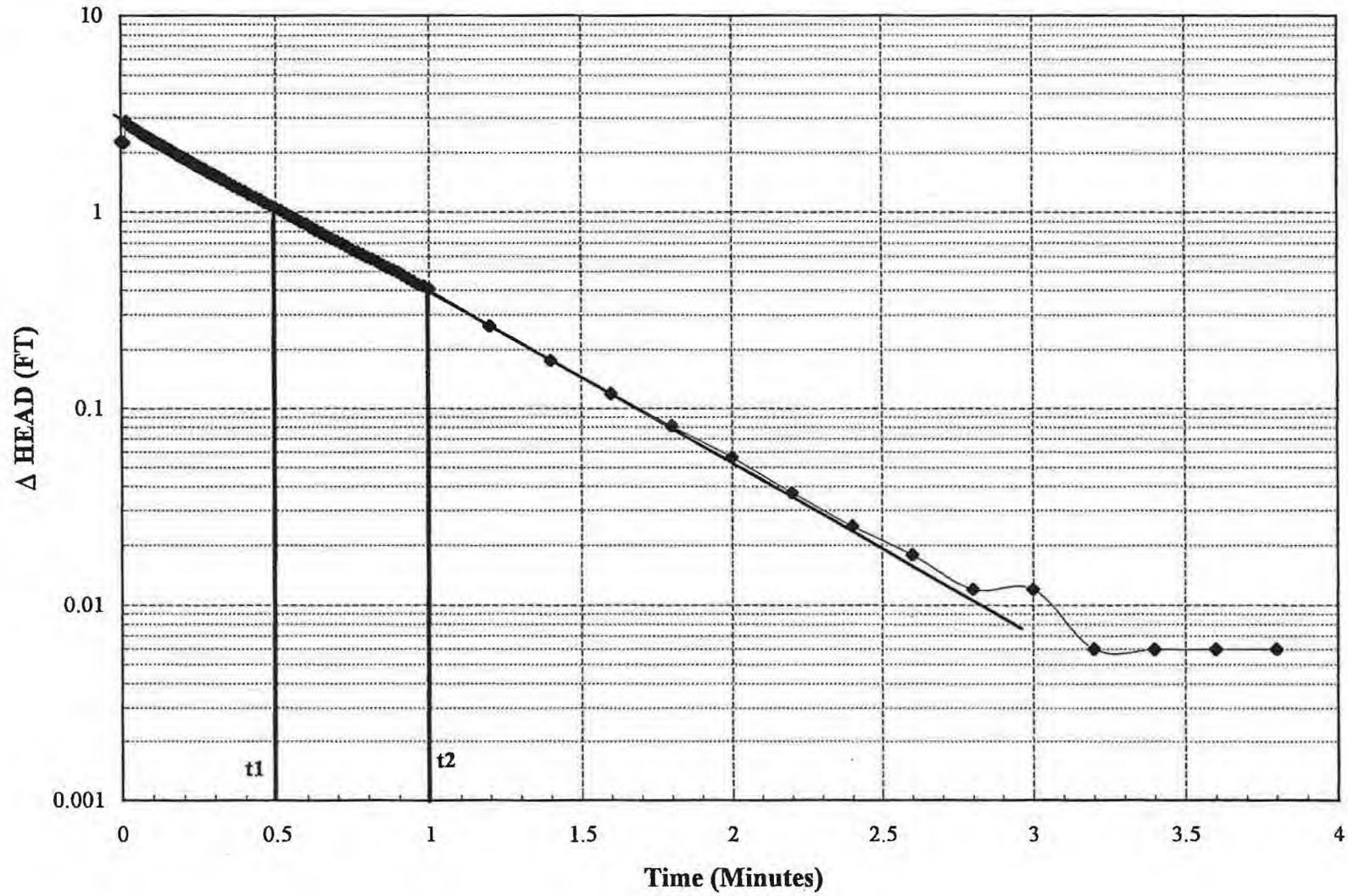


G6M-97-08B		
FALLING HEAD TEST		
Time (min)	ΔH (ft)	Absolute
		Value ΔH (ft)
0	-1.025	1.025
0.0083	-3.266	3.266
0.0166	-4.141	4.141
0.025	-3.675	3.675
0.0333	-3.209	3.209
0.0416	-2.863	2.863
0.05	-1.265	1.265
0.0583	-2.92	2.92
0.0666	-1.951	1.951
0.075	-2.227	2.227
0.0833	-2.284	2.284
0.0916	-2.221	2.221
0.1	-2.19	2.19
0.1083	-2.152	2.152
0.1166	-2.114	2.114
0.125	-2.076	2.076
0.1333	-2.045	2.045
0.1416	-2.007	2.007
0.15	-1.976	1.976
0.1583	-1.944	1.944
0.1666	-1.913	1.913
0.175	-1.881	1.881
0.1833	-1.85	1.85
0.1916	-1.818	1.818
0.2	-1.793	1.793
0.2083	-1.755	1.755
0.2166	-1.73	1.73
0.225	-1.705	1.705
0.2333	-1.674	1.674
0.2416	-1.648	1.648
0.25	-1.623	1.623
0.2583	-1.598	1.598
0.2666	-1.567	1.567
0.275	-1.548	1.548
0.2833	-1.523	1.523
0.2916	-1.497	1.497
0.3	-1.472	1.472
0.3083	-1.453	1.453
0.3166	-1.428	1.428
0.325	-1.403	1.403
0.3333	-1.378	1.378
0.35	-1.334	1.334
0.3666	-1.296	1.296
0.3833	-1.252	1.252

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.4	-1.214	1.214
0.4166	-1.17	1.17
0.4333	-1.132	1.132
0.45	-1.101	1.101
0.4666	-1.063	1.063
0.4833	-1.038	1.038
0.5	-1	1
0.5166	-0.969	0.969
0.5333	-0.937	0.937
0.55	-0.912	0.912
0.5666	-0.881	0.881
0.5833	-0.855	0.855
0.6	-0.824	0.824
0.6166	-0.799	0.799
0.6333	-0.774	0.774
0.65	-0.755	0.755
0.6666	-0.73	0.73
0.6833	-0.711	0.711
0.7	-0.686	0.686
0.7166	-0.667	0.667
0.7333	-0.641	0.641
0.75	-0.623	0.623
0.7666	-0.604	0.604
0.7833	-0.585	0.585
0.8	-0.566	0.566
0.8166	-0.553	0.553
0.8333	-0.534	0.534
0.85	-0.516	0.516
0.8666	-0.497	0.497
0.8833	-0.49	0.49
0.9	-0.472	0.472
0.9166	-0.459	0.459
0.9333	-0.446	0.446
0.95	-0.434	0.434
0.9666	-0.421	0.421
0.9833	-0.409	0.409
1	-0.396	0.396
1.2	-0.264	0.264
1.4	-0.182	0.182
1.6	-0.119	0.119
1.8	-0.088	0.088
2	-0.056	0.056
2.2	-0.044	0.044
2.4	-0.025	0.025
2.6	-0.018	0.018
2.8	-0.018	0.018
3	-0.012	0.012

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
3.2	-0.012	0.012
3.4	-0.006	0.006
3.6	-0.006	0.006
3.8	-0.006	0.006
4	-0.006	0.006
4.2	-0.006	0.006
4.4	-0.006	0.006
4.6	-0.006	0.006
4.8	-0.006	0.006
5	-0.006	0.006
5.2	0	0
5.4	0	0
5.6	0	0
5.8	-0.006	0.006
6	-0.006	0.006
6.2	0	0
6.4	-0.006	0.006
6.6	-0.006	0.006
6.8	-0.006	0.006
7	0	0
7.2	0	0
7.4	-0.006	0.006
7.6	0	0
7.8	0	0
8	0	0
8.2	0	0
8.4	-0.006	0.006
8.6	0	0
8.8	-0.006	0.006
9	0	0
9.2	0	0
9.4	0	0

G6M-97-08B RISING HEAD PERMEABILITY TEST



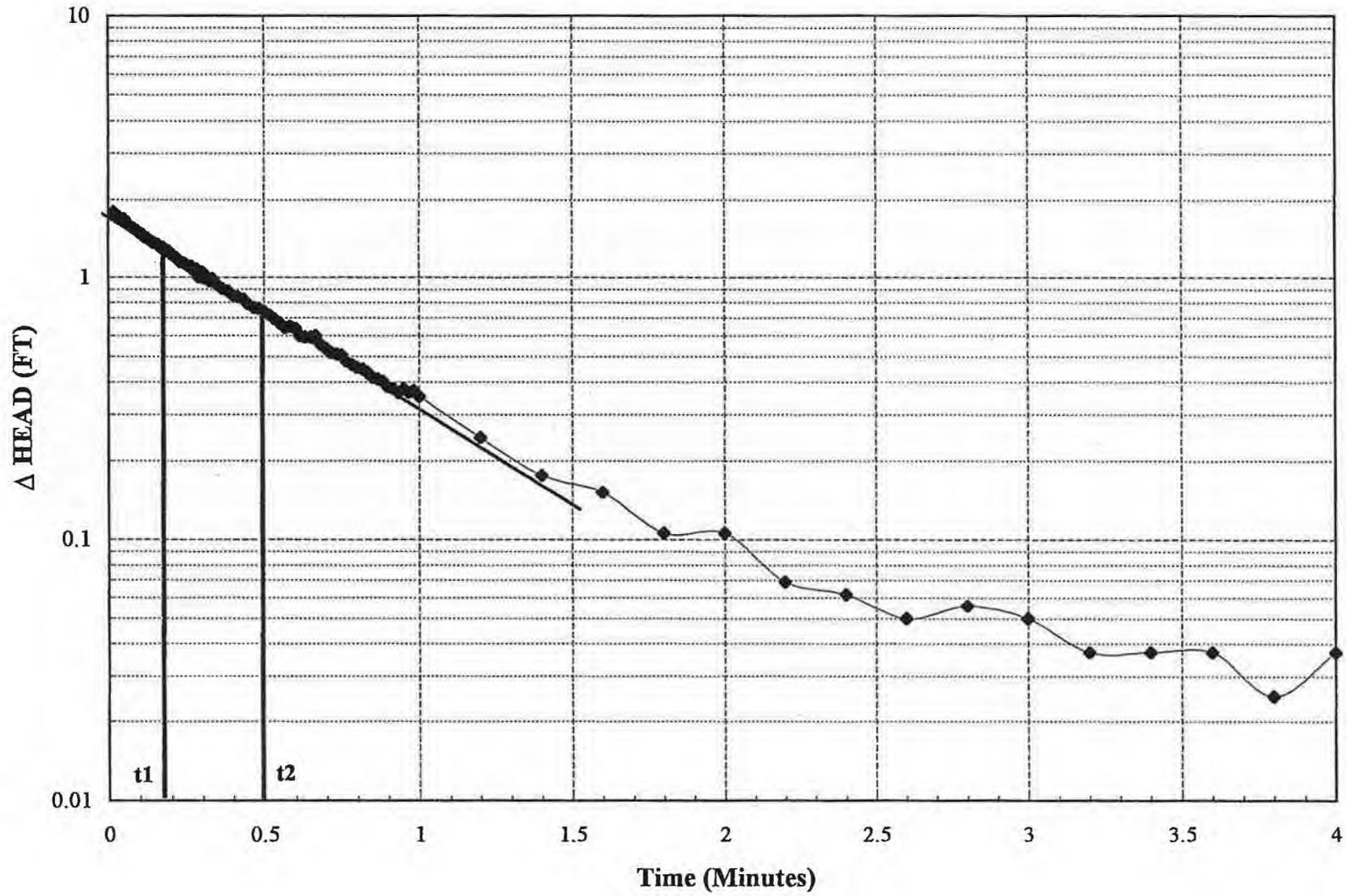
**G6M-97-08B
RISING HEAD TEST**

Time (min)	ΔH (ft)
0	2.271
0.0083	2.246
0.0166	2.857
0.025	2.75
0.0333	2.693
0.0416	2.643
0.05	2.592
0.0583	2.536
0.0666	2.485
0.075	2.441
0.0833	2.404
0.0916	2.36
0.1	2.322
0.1083	2.278
0.1166	2.234
0.125	2.202
0.1333	2.164
0.1416	2.127
0.15	2.089
0.1583	2.058
0.1666	2.02
0.175	1.988
0.1833	1.951
0.1916	1.919
0.2	1.888
0.2083	1.856
0.2166	1.831
0.225	1.799
0.2333	1.768
0.2416	1.737
0.25	1.711
0.2583	1.68
0.2666	1.655
0.275	1.63
0.2833	1.598
0.2916	1.573
0.3	1.554
0.3083	1.523
0.3166	1.504
0.325	1.479
0.3333	1.453
0.35	1.403
0.3666	1.359
0.3833	1.315
0.4	1.277

Time (min)	ΔH (ft)
0.4166	1.233
0.4333	1.195
0.45	1.158
0.4666	1.12
0.4833	1.082
0.5	1.051
0.5166	1.019
0.5333	0.988
0.55	0.95
0.5666	0.925
0.5833	0.893
0.6	0.868
0.6166	0.837
0.6333	0.811
0.65	0.786
0.6666	0.761
0.6833	0.736
0.7	0.717
0.7166	0.692
0.7333	0.673
0.75	0.648
0.7666	0.629
0.7833	0.61
0.8	0.591
0.8166	0.579
0.8333	0.56
0.85	0.541
0.8666	0.522
0.8833	0.509
0.9	0.497
0.9166	0.478
0.9333	0.459
0.95	0.446
0.9666	0.427
0.9833	0.421
1	0.409
1.2	0.264
1.4	0.176
1.6	0.119
1.8	0.081
2	0.056
2.2	0.037
2.4	0.025
2.6	0.018
2.8	0.012
3	0.012
3.2	0.006
3.4	0.006

Time (min)	ΔH (ft)
3.6	0.006
3.8	0.006
4	0
4.2	0.006
4.4	0.006
4.6	0.006
4.8	0
5	0.006
5.2	0.006
5.4	0
5.6	0.006
5.8	0
6	0
6.2	0
6.4	0
6.6	0
6.8	0
7	0
7.2	0
7.4	0
7.6	0

G6M-92-09X RISING HEAD PERMEABILITY TEST No. 1

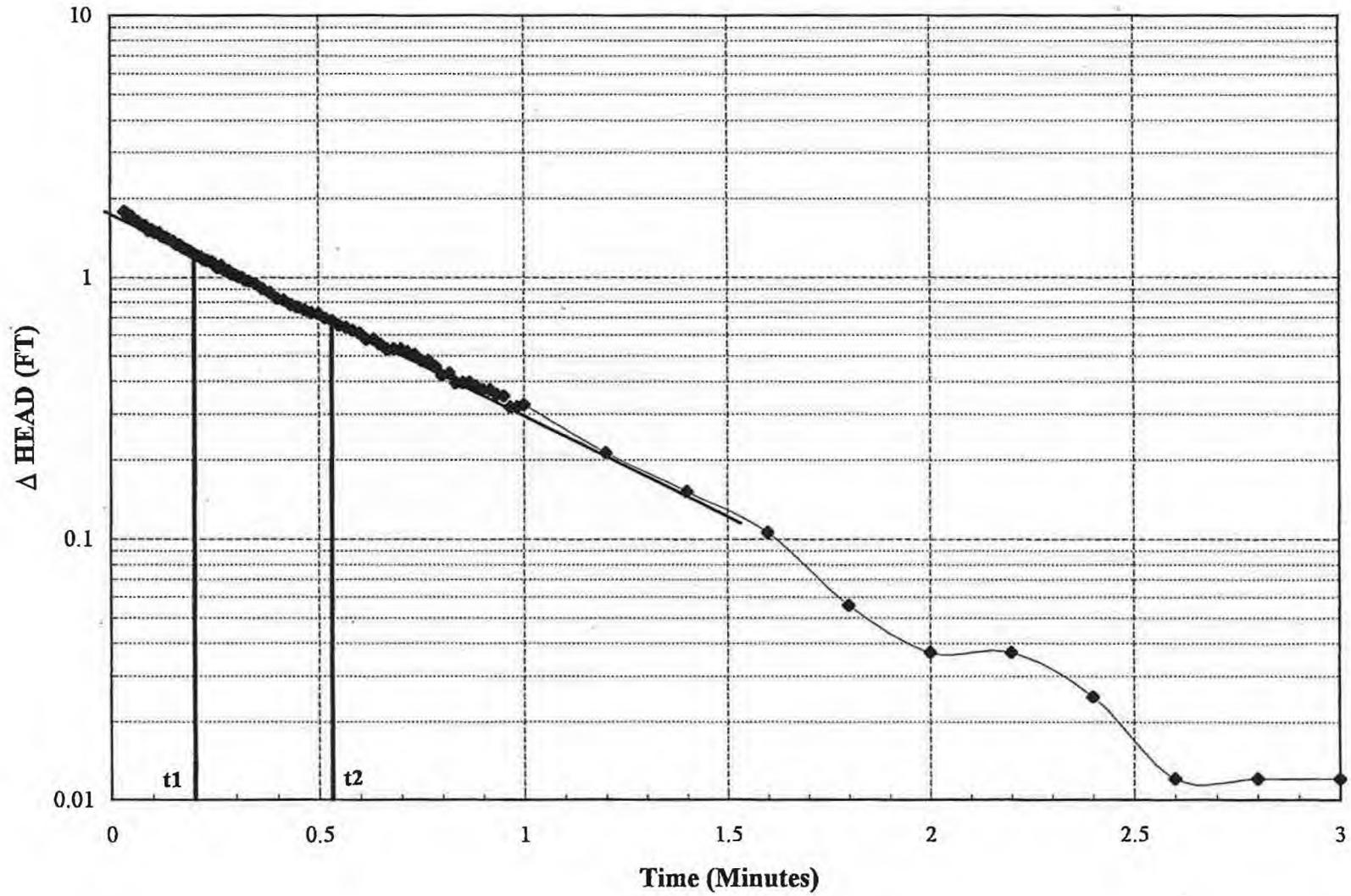


G6M-92-09X RISING HEAD TEST 1	
Time (min)	ΔH (ft)
0	1.881
0.0083	0.83
0.0166	1.799
0.025	1.749
0.0333	1.724
0.0416	1.68
0.05	1.686
0.0583	1.623
0.0666	1.604
0.075	1.573
0.0833	1.548
0.0916	1.516
0.1	1.497
0.1083	1.478
0.1166	1.434
0.125	1.428
0.1333	1.397
0.1416	1.371
0.15	1.359
0.1583	1.346
0.1666	1.315
0.175	1.315
0.1833	1.264
0.1916	1.271
0.2	1.239
0.2083	1.22
0.2166	1.195
0.225	1.17
0.2333	1.145
0.2416	1.139
0.25	1.126
0.2583	1.107
0.2666	1.107
0.275	1.063
0.2833	1.082
0.2916	1
0.3	1.051
0.3083	0.994
0.3166	1.006
0.325	0.969
0.3333	0.988
0.35	0.937
0.3666	0.906
0.3833	0.887
0.4	0.855

Time (min)	ΔH (ft)
0.4166	0.843
0.4333	0.824
0.45	0.792
0.4666	0.767
0.4833	0.761
0.5	0.742
0.5166	0.717
0.5333	0.692
0.55	0.667
0.5666	0.641
0.5833	0.648
0.6	0.635
0.6166	0.597
0.6333	0.591
0.65	0.591
0.6666	0.597
0.6833	0.553
0.7	0.534
0.7166	0.516
0.7333	0.509
0.75	0.503
0.7666	0.478
0.7833	0.465
0.8	0.453
0.8166	0.446
0.8333	0.434
0.85	0.415
0.8666	0.409
0.8833	0.402
0.9	0.383
0.9166	0.377
0.9333	0.365
0.95	0.377
0.9666	0.365
0.9833	0.371
1	0.352
1.2	0.245
1.4	0.176
1.6	0.151
1.8	0.106
2	0.106
2.2	0.069
2.4	0.062
2.6	0.05
2.8	0.056
3	0.05
3.2	0.037
3.4	0.037

Time (min)	ΔH (ft)
3.6	0.037
3.8	0.025
4	0.037
4.2	0.018
4.4	0.018
4.6	0.018
4.8	0.012
5	0.018
5.2	0.012
5.4	0.006
5.6	0.012
5.8	0.006
6	0.006
6.2	0.006
6.4	0.012
6.6	0.006
6.8	0
7	0.006
7.2	0.006
7.4	-0.006
7.6	0

G6M-97-09X RISING HEAD PERMEABILITY TEST No. 2

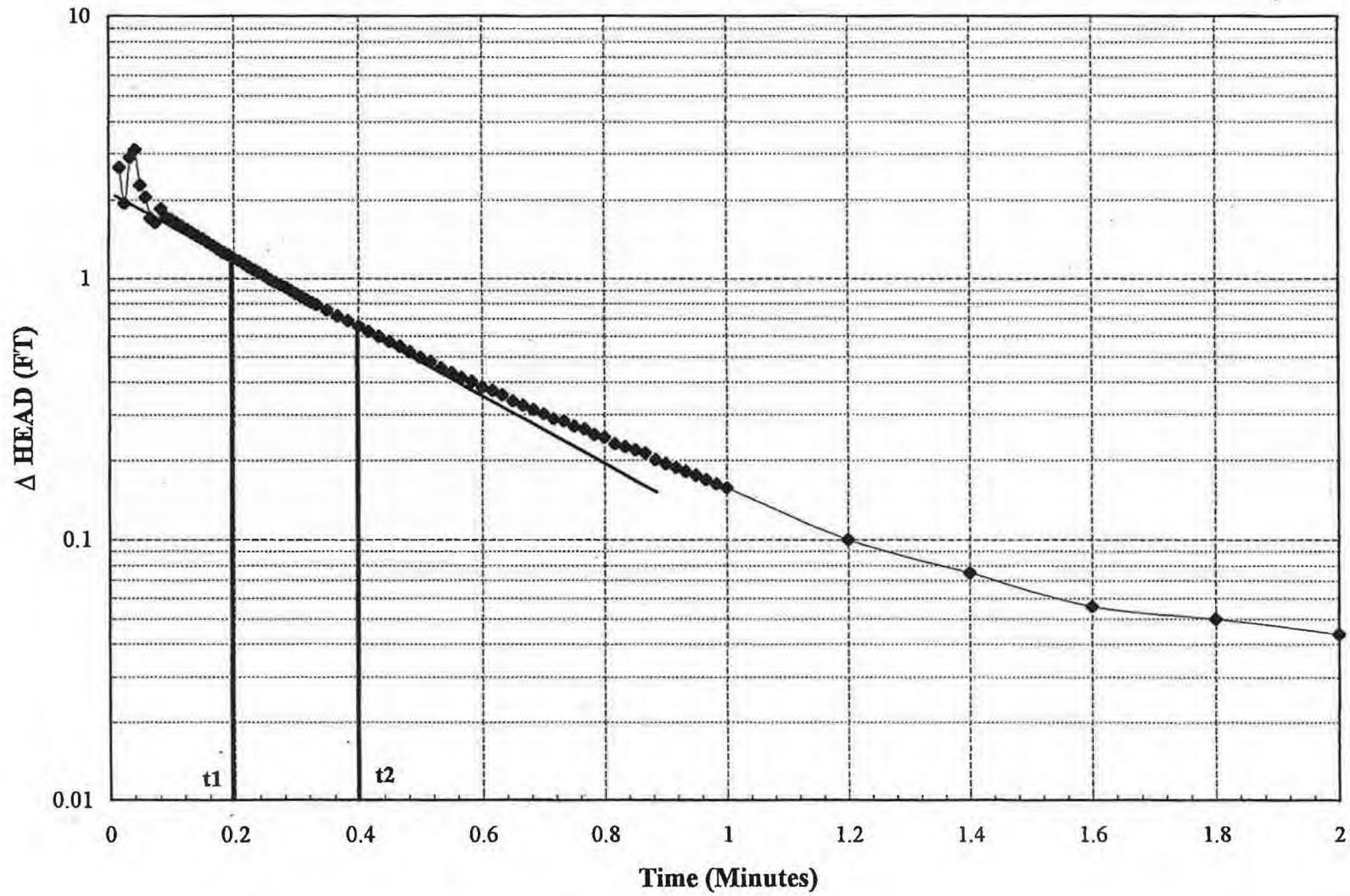


G6M-97-09X	
RISING HEAD TEST 2	
Time (min)	ΔH (ft)
0	-0.006
0.0083	1.384
0.0166	1.038
0.025	1.472
0.0333	1.781
0.0416	1.743
0.05	1.711
0.0583	1.667
0.0666	1.636
0.075	1.592
0.0833	1.579
0.0916	1.516
0.1	1.516
0.1083	1.491
0.1166	1.485
0.125	1.441
0.1333	1.428
0.1416	1.403
0.15	1.384
0.1583	1.346
0.1666	1.34
0.175	1.309
0.1833	1.283
0.1916	1.264
0.2	1.239
0.2083	1.214
0.2166	1.202
0.225	1.176
0.2333	1.164
0.2416	1.151
0.25	1.132
0.2583	1.095
0.2666	1.113
0.275	1.069
0.2833	1.069
0.2916	1.032
0.3	1.025
0.3083	1.006
0.3166	1
0.325	0.975
0.3333	0.969
0.35	0.944
0.3666	0.906
0.3833	0.874
0.4	0.83

Time (min)	ΔH (ft)
0.4166	0.818
0.4333	0.786
0.45	0.767
0.4666	0.748
0.4833	0.73
0.5	0.723
0.5166	0.698
0.5333	0.679
0.55	0.654
0.5666	0.641
0.5833	0.623
0.6	0.61
0.6166	0.578
0.6333	0.578
0.65	0.553
0.6666	0.528
0.6833	0.528
0.7	0.528
0.7166	0.516
0.7333	0.503
0.75	0.478
0.7666	0.478
0.7833	0.453
0.8	0.421
0.8166	0.427
0.8333	0.396
0.85	0.396
0.8666	0.396
0.8833	0.383
0.9	0.371
0.9166	0.371
0.9333	0.358
0.95	0.352
0.9666	0.32
0.9833	0.32
1	0.327
1.2	0.213
1.4	0.151
1.6	0.106
1.8	0.056
2	0.037
2.2	0.037
2.4	0.025
2.6	0.012
2.8	0.012
3	0.012
3.2	0.006
3.4	-0.006

Time (min)	ΔH (ft)
3.6	0
3.8	0.006
4	-0.012
4.2	-0.012
4.4	0.006
4.6	-0.018
4.8	-0.018
5	-0.018
5.2	-0.025
5.4	-0.025
5.6	0
5.8	-0.006
6	-0.012
6.2	-0.025
6.4	-0.037
6.6	-0.025
6.8	-0.025
7	-0.018
7.2	-0.006
7.4	-0.018
7.6	-0.018
7.8	-0.025

G6M-97-09B FALLING HEAD PERMEABILITY TEST No. 1

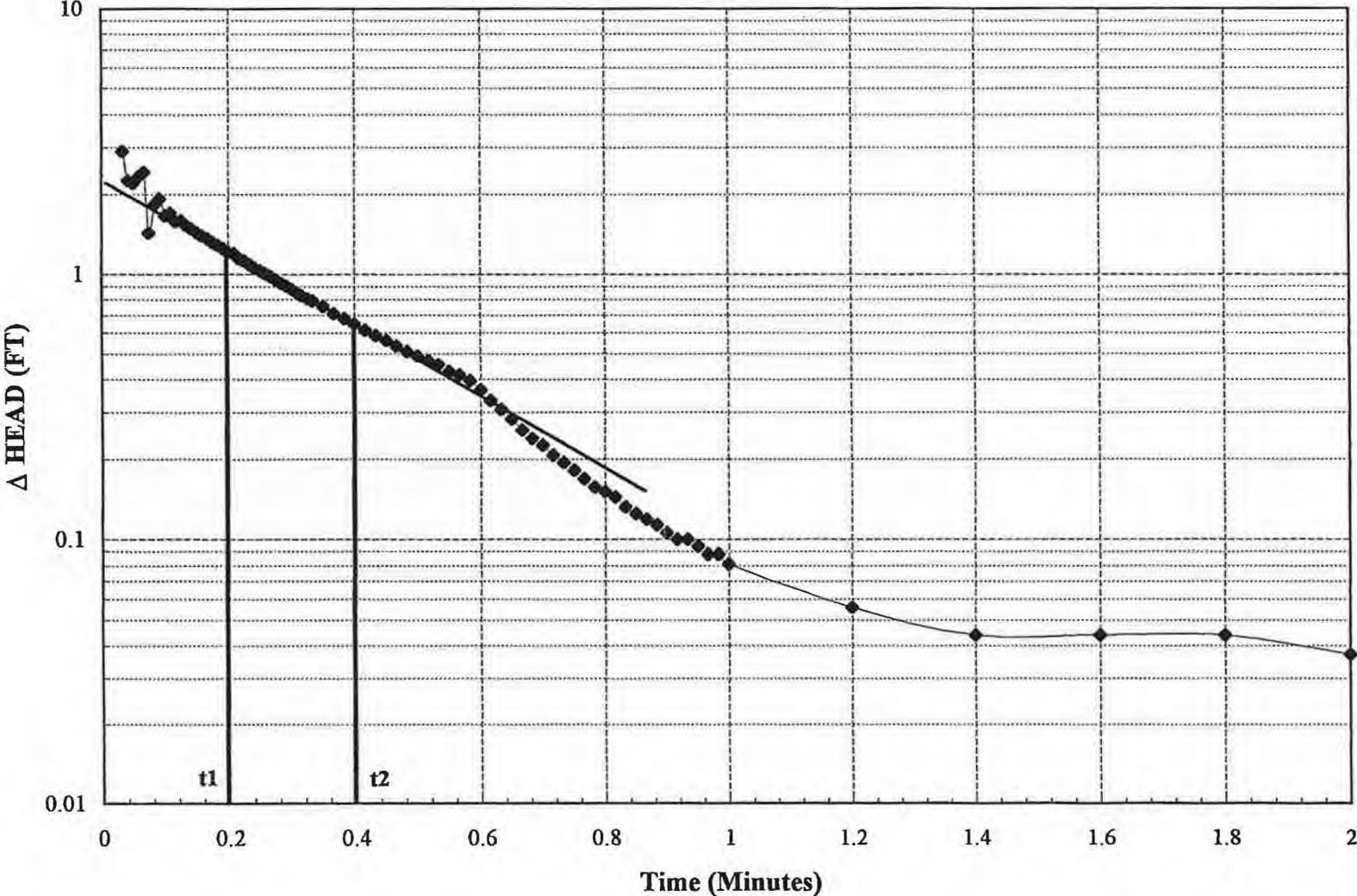


G6M-97-09B		
FALLING HEAD TEST 1		
Time (min)	ΔH (ft)	Absolute
		Value ΔH (ft)
0	-0.025	0.025
0.0083	-1.8	1.8
0.0166	-2.656	2.656
0.025	-1.944	1.944
0.0333	-2.895	2.895
0.0416	-3.102	3.102
0.05	-2.278	2.278
0.0583	-2.045	2.045
0.0666	-1.705	1.705
0.075	-1.642	1.642
0.0833	-1.85	1.85
0.0916	-1.718	1.718
0.1	-1.68	1.68
0.1083	-1.63	1.63
0.1166	-1.586	1.586
0.125	-1.542	1.542
0.1333	-1.497	1.497
0.1416	-1.453	1.453
0.15	-1.416	1.416
0.1583	-1.378	1.378
0.1666	-1.34	1.34
0.175	-1.302	1.302
0.1833	-1.265	1.265
0.1916	-1.233	1.233
0.2	-1.195	1.195
0.2083	-1.17	1.17
0.2166	-1.139	1.139
0.225	-1.107	1.107
0.2333	-1.076	1.076
0.2416	-1.051	1.051
0.25	-1.025	1.025
0.2583	-0.994	0.994
0.2666	-0.969	0.969
0.275	-0.944	0.944
0.2833	-0.925	0.925
0.2916	-0.9	0.9
0.3	-0.874	0.874
0.3083	-0.855	0.855
0.3166	-0.83	0.83
0.325	-0.811	0.811
0.3333	-0.793	0.793
0.35	-0.755	0.755
0.3666	-0.717	0.717
0.3833	-0.686	0.686

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.4	-0.654	0.654
0.4166	-0.623	0.623
0.4333	-0.597	0.597
0.45	-0.572	0.572
0.4666	-0.547	0.547
0.4833	-0.522	0.522
0.5	-0.497	0.497
0.5166	-0.478	0.478
0.5333	-0.453	0.453
0.55	-0.434	0.434
0.5666	-0.415	0.415
0.5833	-0.402	0.402
0.6	-0.383	0.383
0.6166	-0.371	0.371
0.6333	-0.358	0.358
0.65	-0.339	0.339
0.6666	-0.327	0.327
0.6833	-0.314	0.314
0.7	-0.302	0.302
0.7166	-0.289	0.289
0.7333	-0.283	0.283
0.75	-0.27	0.27
0.7666	-0.264	0.264
0.7833	-0.251	0.251
0.8	-0.245	0.245
0.8166	-0.232	0.232
0.8333	-0.226	0.226
0.85	-0.22	0.22
0.8666	-0.213	0.213
0.8833	-0.201	0.201
0.9	-0.195	0.195
0.9166	-0.188	0.188
0.9333	-0.182	0.182
0.95	-0.176	0.176
0.9666	-0.169	0.169
0.9833	-0.163	0.163
1	-0.157	0.157
1.2	-0.1	0.1
1.4	-0.075	0.075
1.6	-0.056	0.056
1.8	-0.05	0.05
2	-0.044	0.044
2.2	-0.037	0.037
2.4	-0.037	0.037
2.6	-0.037	0.037
2.8	-0.037	0.037
3	-0.037	0.037

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
3.2	-0.037	0.037
3.4	-0.037	0.037
3.6	-0.037	0.037
3.8	-0.031	0.031
4	-0.037	0.037
4.2	-0.037	0.037
4.4	-0.037	0.037
4.6	-0.037	0.037
4.8	-0.037	0.037
5	-0.037	0.037
5.2	-0.037	0.037
5.4	-0.037	0.037
5.6	-0.037	0.037
5.8	-0.037	0.037
6	-0.037	0.037
6.2	-0.037	0.037
6.4	-0.037	0.037
6.6	-0.037	0.037
6.8	-0.044	0.044
7	-0.044	0.044
7.2	-0.044	0.044
7.4	-0.044	0.044
7.6	-0.044	0.044
7.8	-0.037	0.037
8	-0.037	0.037
8.2	-0.037	0.037
8.4	-0.044	0.044
8.6	-0.044	0.044
8.8	-0.037	0.037
9	-0.044	0.044
9.2	-0.044	0.044

G6M-97-09B FALLING HEAD PERMEABILITY TEST No. 2

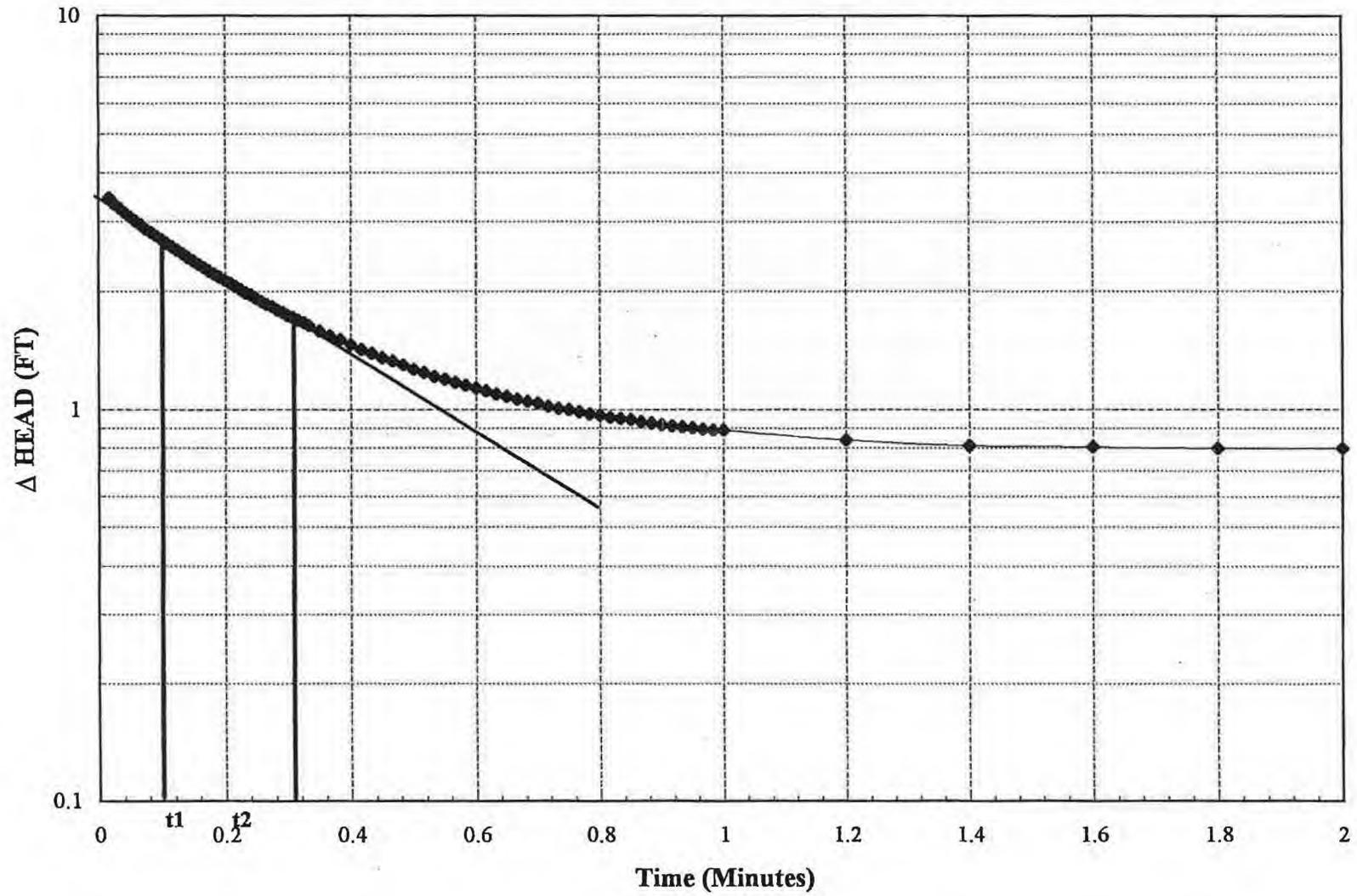


G6M-97-09B		
FALLING HEAD TEST 2		
Time (min)	ΔH (ft)	Absolute
		Value ΔH (ft)
0	0	0
0.0083	-0.006	0.006
0.0166	-0.686	0.686
0.025	-2.366	2.366
0.0333	-2.901	2.901
0.0416	-2.259	2.259
0.05	-2.202	2.202
0.0583	-2.335	2.335
0.0666	-2.423	2.423
0.075	-1.435	1.435
0.0833	-1.825	1.825
0.0916	-1.925	1.925
0.1	-1.667	1.667
0.1083	-1.693	1.693
0.1166	-1.586	1.586
0.125	-1.592	1.592
0.1333	-1.529	1.529
0.1416	-1.491	1.491
0.15	-1.441	1.441
0.1583	-1.397	1.397
0.1666	-1.365	1.365
0.175	-1.321	1.321
0.1833	-1.29	1.29
0.1916	-1.252	1.252
0.2	-1.208	1.208
0.2083	-1.195	1.195
0.2166	-1.145	1.145
0.225	-1.126	1.126
0.2333	-1.088	1.088
0.2416	-1.057	1.057
0.25	-1.032	1.032
0.2583	-1.007	1.007
0.2666	-0.981	0.981
0.275	-0.956	0.956
0.2833	-0.925	0.925
0.2916	-0.906	0.906
0.3	-0.881	0.881
0.3083	-0.855	0.855
0.3166	-0.83	0.83
0.325	-0.811	0.811
0.3333	-0.793	0.793
0.35	-0.755	0.755
0.3666	-0.711	0.711
0.3833	-0.679	0.679

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.4	-0.648	0.648
0.4166	-0.616	0.616
0.4333	-0.585	0.585
0.45	-0.56	0.56
0.4666	-0.534	0.534
0.4833	-0.509	0.509
0.5	-0.49	0.49
0.5166	-0.472	0.472
0.5333	-0.453	0.453
0.55	-0.427	0.427
0.5666	-0.415	0.415
0.5833	-0.396	0.396
0.6	-0.365	0.365
0.6166	-0.333	0.333
0.6333	-0.308	0.308
0.65	-0.283	0.283
0.6666	-0.258	0.258
0.6833	-0.239	0.239
0.7	-0.226	0.226
0.7166	-0.207	0.207
0.7333	-0.195	0.195
0.75	-0.182	0.182
0.7666	-0.169	0.169
0.7833	-0.157	0.157
0.8	-0.151	0.151
0.8166	-0.144	0.144
0.8333	-0.132	0.132
0.85	-0.125	0.125
0.8666	-0.119	0.119
0.8833	-0.113	0.113
0.9	-0.106	0.106
0.9166	-0.1	0.1
0.9333	-0.1	0.1
0.95	-0.094	0.094
0.9666	-0.088	0.088
0.9833	-0.088	0.088
1	-0.081	0.081
1.2	-0.056	0.056
1.4	-0.044	0.044
1.6	-0.044	0.044
1.8	-0.044	0.044
2	-0.037	0.037
2.2	-0.037	0.037
2.4	-0.037	0.037
2.6	-0.037	0.037
2.8	-0.037	0.037
3	-0.044	0.044

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
3.2	-0.044	0.044
3.4	-0.044	0.044
3.6	-0.044	0.044
3.8	-0.037	0.037
4	-0.044	0.044
4.2	-0.037	0.037
4.4	-0.044	0.044
4.6	-0.044	0.044
4.8	-0.037	0.037
5	-0.044	0.044
5.2	-0.037	0.037
5.4	-0.044	0.044
5.6	-0.037	0.037
5.8	-0.037	0.037
6	-0.037	0.037
6.2	-0.037	0.037
6.4	-0.044	0.044
6.6	-0.037	0.037
6.8	-0.037	0.037
7	-0.037	0.037
7.2	-0.037	0.037
7.4	-0.037	0.037
7.6	-0.037	0.037
7.8	-0.037	0.037
8	-0.037	0.037
8.2	-0.037	0.037
8.4	-0.037	0.037
8.6	-0.044	0.044
8.8	-0.044	0.044
9	-0.044	0.044
9.2	-0.044	0.044
9.4	-0.044	0.044
9.6	-0.044	0.044
9.8	-0.044	0.044
10	-0.044	0.044

G6M-97-09B RISING HEAD PERMEABILITY TEST

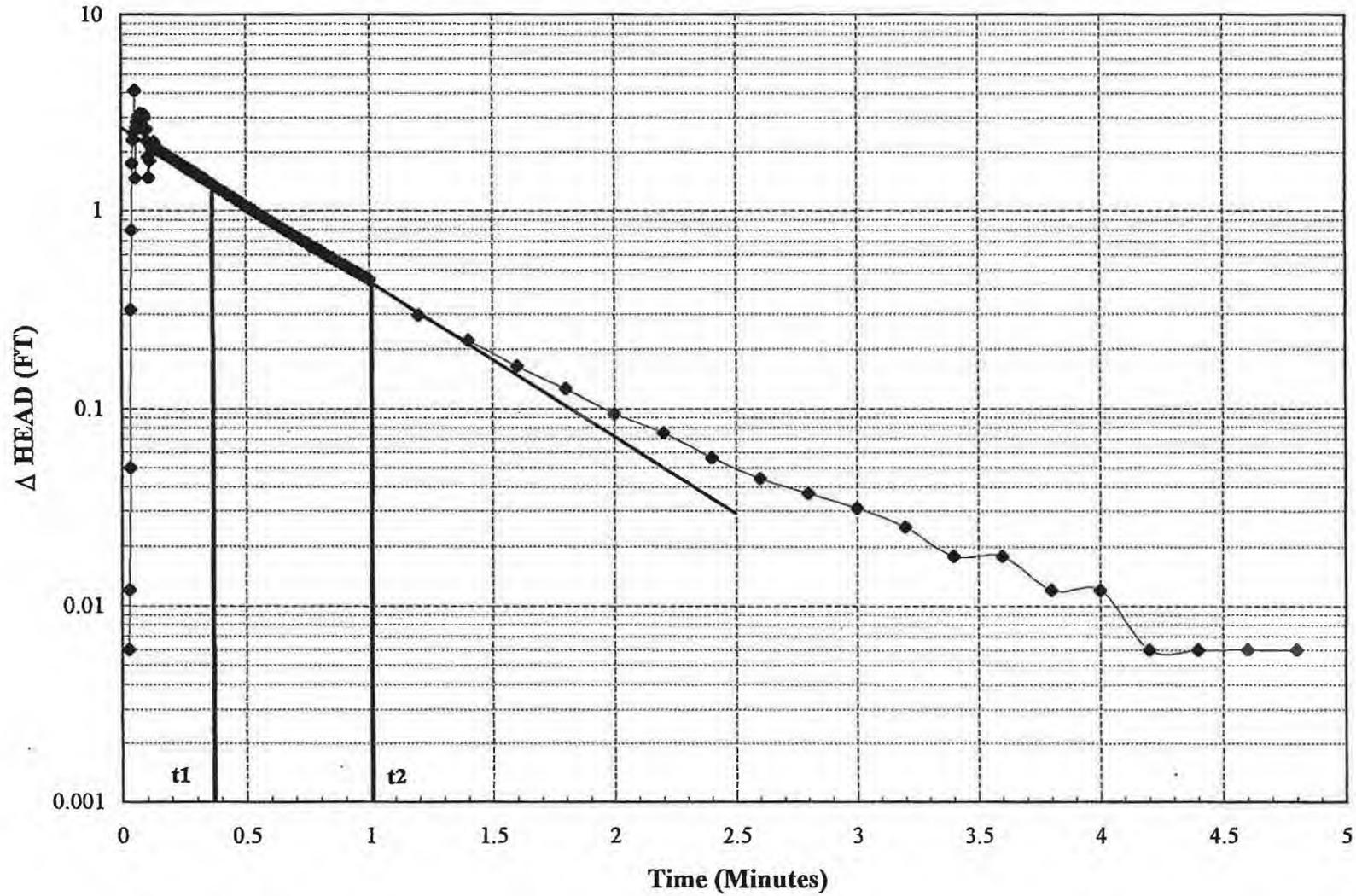


G6M-97-09B	
RISING HEAD TEST	
Time (min)	ΔH (ft)
0	4.084
0.0083	3.033
0.0166	3.442
0.025	3.323
0.0333	3.241
0.0416	3.153
0.05	3.077
0.0583	3.008
0.0666	2.939
0.075	2.869
0.0833	2.813
0.0916	2.762
0.1	2.693
0.1083	2.637
0.1166	2.586
0.125	2.536
0.1333	2.486
0.1416	2.435
0.15	2.385
0.1583	2.341
0.1666	2.297
0.175	2.253
0.1833	2.209
0.1916	2.171
0.2	2.133
0.2083	2.095
0.2166	2.058
0.225	2.02
0.2333	1.982
0.2416	1.951
0.25	1.919
0.2583	1.881
0.2666	1.85
0.275	1.825
0.2833	1.793
0.2916	1.768
0.3	1.737
0.3083	1.711
0.3166	1.686
0.325	1.661
0.3333	1.636
0.35	1.586
0.3666	1.542
0.3833	1.504
0.4	1.46

Time (min)	ΔH (ft)
0.4166	1.422
0.4333	1.39
0.45	1.353
0.4666	1.328
0.4833	1.296
0.5	1.265
0.5166	1.239
0.5333	1.214
0.55	1.195
0.5666	1.17
0.5833	1.151
0.6	1.132
0.6166	1.114
0.6333	1.095
0.65	1.082
0.6666	1.063
0.6833	1.051
0.7	1.038
0.7166	1.019
0.7333	1.007
0.75	1
0.7666	0.988
0.7833	0.975
0.8	0.969
0.8166	0.956
0.8333	0.95
0.85	0.944
0.8666	0.931
0.8833	0.925
0.9	0.918
0.9166	0.912
0.9333	0.906
0.95	0.9
0.9666	0.893
0.9833	0.887
1	0.887
1.2	0.837
1.4	0.811
1.6	0.805
1.8	0.799
2	0.799
2.2	0.793
2.4	0.793
2.6	0.793
2.8	0.793
3	0.793
3.2	0.793
3.4	0.793

Time (min)	ΔH (ft)
3.6	0.793
3.8	0.793
4	0.793
4.2	0.793
4.4	0.793
4.6	0.786
4.8	0.793
5	0.786
5.2	0.793
5.4	0.786
5.6	0.793
5.8	0.793
6	0.793
6.2	0.793
6.4	0.793
6.6	0.793
6.8	0.793
7	0.786
7.2	0.793
7.4	0.793

G6M-96-13B FALLING HEAD PERMEABILITY TEST



G6M-96-13B		
FALLING HEAD TEST		
Time (min)	ΔH (ft)	Absolute
		Value ΔH (ft)
0	-0.012	0.012
0.0033	-0.012	0.012
0.0066	-0.012	0.012
0.01	-0.012	0.012
0.0133	-0.006	0.006
0.0166	-0.006	0.006
0.02	0.006	0.006
0.0233	0	0
0.0266	-0.006	0.006
0.03	-0.012	0.012
0.0333	0.05	0.05
0.0366	0.315	0.315
0.04	0.795	0.795
0.0433	1.742	1.742
0.0466	2.297	2.297
0.05	2.499	2.499
0.0533	4.116	4.116
0.0566	1.464	1.464
0.06	2.664	2.664
0.0633	2.847	2.847
0.0666	2.847	2.847
0.07	3.049	3.049
0.0733	3.042	3.042
0.0766	3.156	3.156
0.08	2.784	2.784
0.0833	2.948	2.948
0.0866	2.967	2.967
0.09	3.118	3.118
0.0933	2.992	2.992
0.0966	2.569	2.569
0.1	2.619	2.619
0.1033	2.291	2.291
0.1066	1.881	1.881
0.11	1.477	1.477
0.1133	1.799	1.799
0.1166	2.171	2.171
0.12	2.203	2.203
0.1233	2.064	2.064
0.1266	2.165	2.165
0.13	2.253	2.253
0.1333	2.234	2.234
0.1366	2.14	2.14
0.14	2.045	2.045
0.1433	2.045	2.045

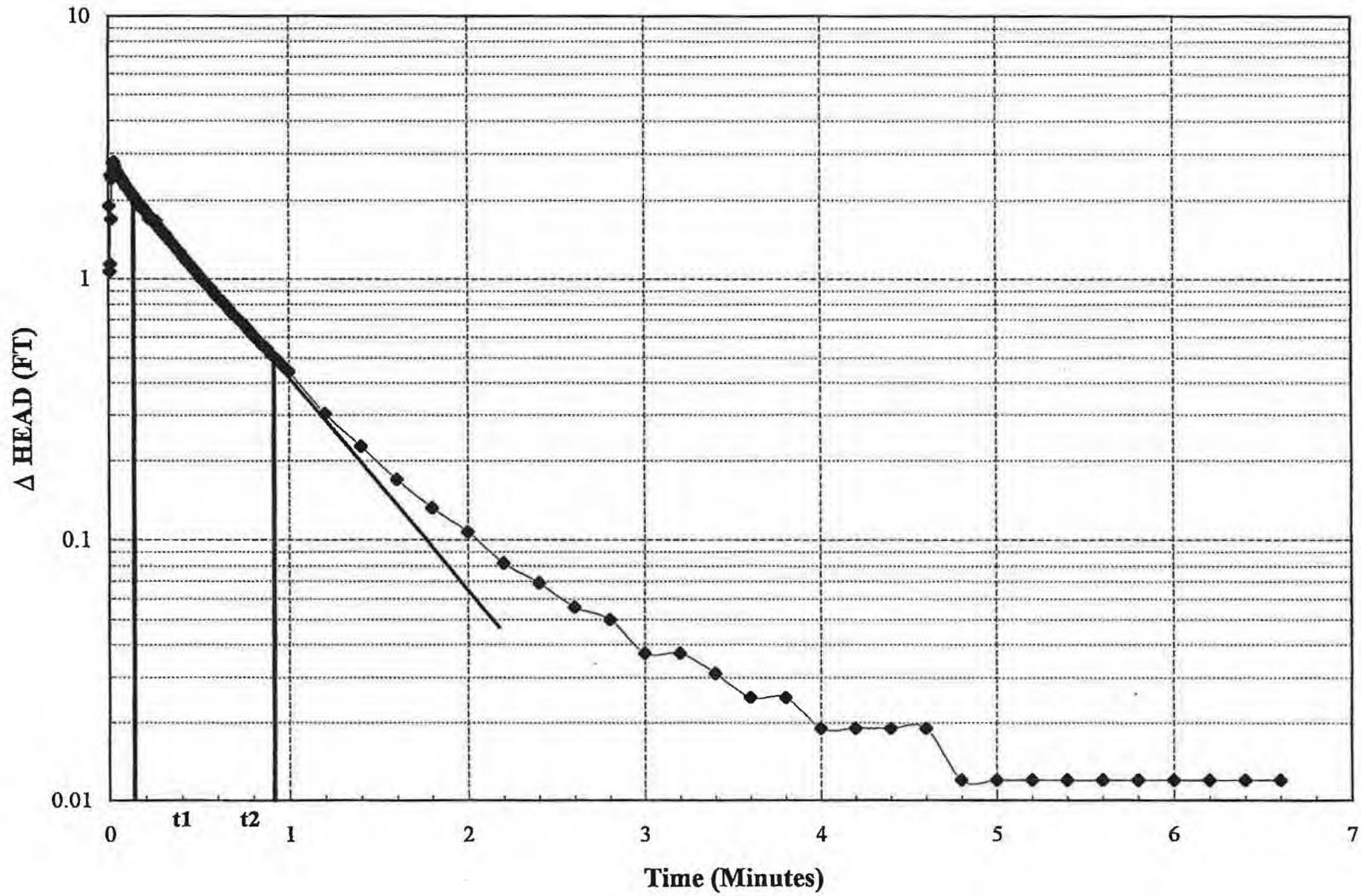
Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.1466	2.045	2.045
0.15	2.02	2.02
0.1533	2.026	2.026
0.1566	2.026	2.026
0.16	2.013	2.013
0.1633	2.001	2.001
0.1666	1.982	1.982
0.17	1.963	1.963
0.1733	1.95	1.95
0.1766	1.944	1.944
0.18	1.931	1.931
0.1833	1.919	1.919
0.1866	1.906	1.906
0.19	1.893	1.893
0.1933	1.881	1.881
0.1966	1.868	1.868
0.2	1.855	1.855
0.2033	1.843	1.843
0.2066	1.83	1.83
0.21	1.824	1.824
0.2133	1.811	1.811
0.2166	1.799	1.799
0.22	1.786	1.786
0.2233	1.773	1.773
0.2266	1.767	1.767
0.23	1.754	1.754
0.2333	1.742	1.742
0.2366	1.729	1.729
0.24	1.723	1.723
0.2433	1.71	1.71
0.2466	1.698	1.698
0.25	1.691	1.691
0.2533	1.679	1.679
0.2566	1.666	1.666
0.26	1.66	1.66
0.2633	1.647	1.647
0.2666	1.641	1.641
0.27	1.628	1.628
0.2733	1.616	1.616
0.2766	1.609	1.609
0.28	1.597	1.597
0.2833	1.59	1.59
0.2866	1.578	1.578
0.29	1.571	1.571
0.2933	1.559	1.559
0.2966	1.552	1.552
0.3	1.54	1.54

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.3033	1.534	1.534
0.3066	1.521	1.521
0.31	1.515	1.515
0.3133	1.502	1.502
0.3166	1.496	1.496
0.32	1.483	1.483
0.3233	1.477	1.477
0.3266	1.47	1.47
0.33	1.458	1.458
0.3333	1.451	1.451
0.35	1.401	1.401
0.3666	1.357	1.357
0.3833	1.313	1.313
0.4	1.275	1.275
0.4166	1.237	1.237
0.4333	1.193	1.193
0.45	1.161	1.161
0.4666	1.123	1.123
0.4833	1.092	1.092
0.5	1.054	1.054
0.5166	1.022	1.022
0.5333	0.997	0.997
0.55	0.965	0.965
0.5666	0.934	0.934
0.5833	0.909	0.909
0.6	0.883	0.883
0.6166	0.858	0.858
0.6333	0.833	0.833
0.65	0.808	0.808
0.6666	0.782	0.782
0.6833	0.763	0.763
0.7	0.738	0.738
0.7166	0.719	0.719
0.7333	0.7	0.7
0.75	0.681	0.681
0.7666	0.656	0.656
0.7833	0.643	0.643
0.8	0.625	0.625
0.8166	0.606	0.606
0.8333	0.587	0.587
0.85	0.574	0.574
0.8666	0.555	0.555
0.8833	0.542	0.542
0.9	0.53	0.53
0.9166	0.511	0.511
0.9333	0.498	0.498
0.95	0.486	0.486

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.9666	0.473	0.473
0.9833	0.46	0.46
1	0.448	0.448
1.2	0.296	0.296
1.4	0.22	0.22
1.6	0.164	0.164
1.8	0.126	0.126
2	0.094	0.094
2.2	0.075	0.075
2.4	0.056	0.056
2.6	0.044	0.044
2.8	0.037	0.037
3	0.031	0.031
3.2	0.025	0.025
3.4	0.018	0.018
3.6	0.018	0.018
3.8	0.012	0.012
4	0.012	0.012
4.2	0.006	0.006
4.4	0.006	0.006
4.6	0.006	0.006
4.8	0.006	0.006
5	0	0
5.2	0	0
5.4	0	0
5.6	0	0
5.8	0	0
6	0	0
6.2	0	0
6.4	0	0
6.6	0	0
6.8	0	0
7	0	0
7.2	0	0
7.4	0	0
7.6	0	0
7.8	0	0
8	0	0
8.2	0	0
8.4	0	0
8.6	0	0
8.8	0	0
9	-0.006	0.006
9.2	0	0
9.4	-0.006	0.006
9.6	-0.006	0.006
9.8	0	0

Time (min)	ΔH (ft)	Absolute
		Value ΔH (ft)
10	0	0

G6M-96-13B RISING HEAD PERMEABILITY TEST



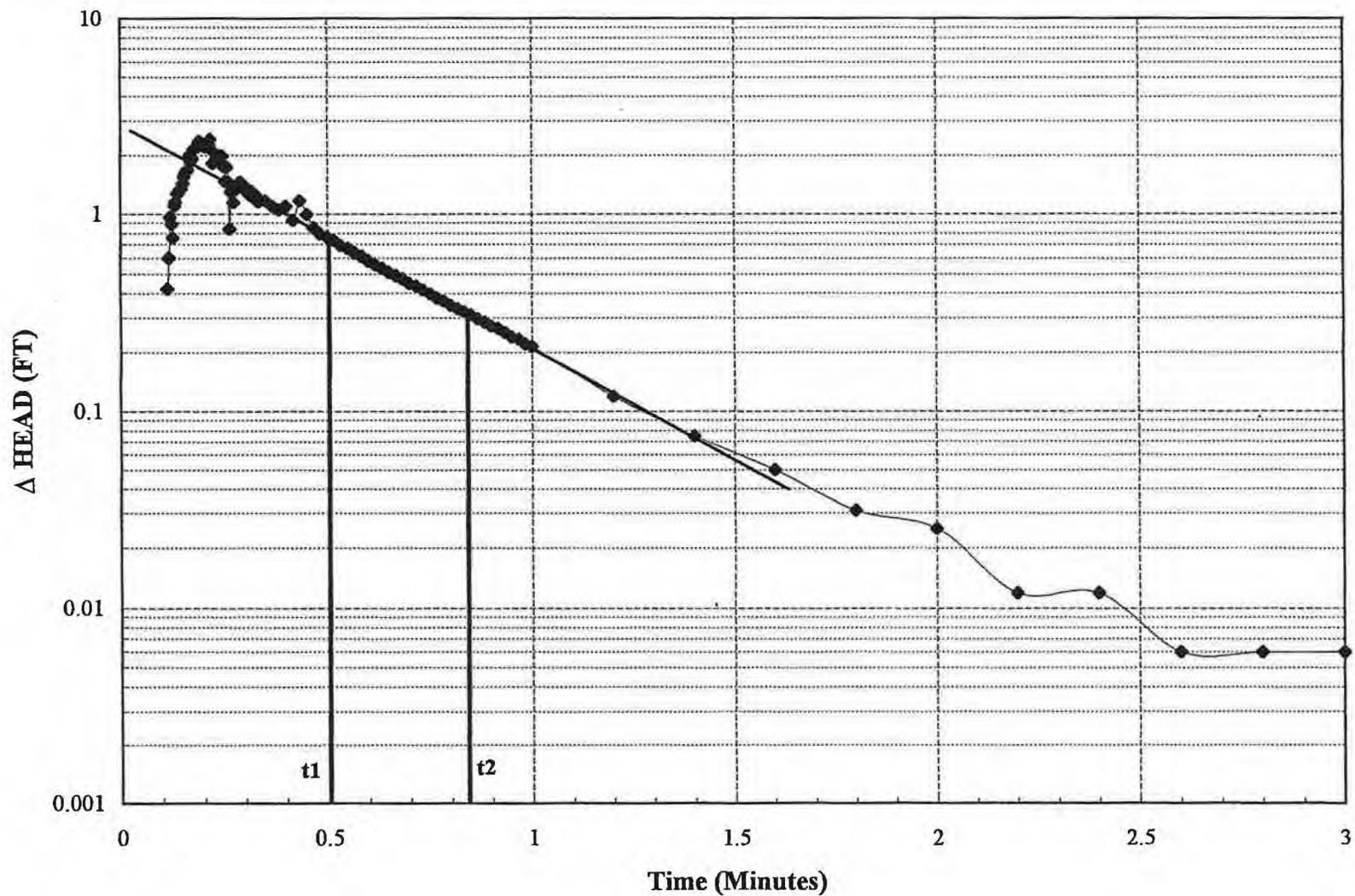
G6M-96-13B RISING HEAD TEST		
Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0	-0.707	0.707
0.0033	-1.906	1.906
0.0066	-1.066	1.066
0.01	-1.136	1.136
0.0133	-2.481	2.481
0.0166	-1.685	1.685
0.02	-2.417	2.417
0.0233	-2.777	2.777
0.0266	-2.777	2.777
0.03	-2.796	2.796
0.0333	-2.746	2.746
0.0366	-2.689	2.689
0.04	-2.632	2.632
0.0433	-2.607	2.607
0.0466	-2.588	2.588
0.05	-2.575	2.575
0.0533	-2.544	2.544
0.0566	-2.512	2.512
0.06	-2.506	2.506
0.0633	-2.462	2.462
0.0666	-2.443	2.443
0.07	-2.424	2.424
0.0733	-2.405	2.405
0.0766	-2.386	2.386
0.08	-2.367	2.367
0.0833	-2.348	2.348
0.0866	-2.329	2.329
0.09	-2.316	2.316
0.0933	-2.297	2.297
0.0966	-2.279	2.279
0.1	-2.247	2.247
0.1033	-2.234	2.234
0.1066	-2.222	2.222
0.11	-2.209	2.209
0.1133	-2.196	2.196
0.1166	-2.178	2.178
0.12	-2.165	2.165
0.1233	-2.146	2.146
0.1266	-2.127	2.127
0.13	-2.121	2.121
0.1333	-2.102	2.102
0.1366	-2.095	2.095
0.14	-2.07	2.07
0.1433	-2.058	2.058

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.1466	-2.032	2.032
0.15	-2.032	2.032
0.1533	-2.013	2.013
0.1566	-2.001	2.001
0.16	-1.95	1.95
0.1633	-1.969	1.969
0.1666	-1.963	1.963
0.17	-1.944	1.944
0.1733	-1.9	1.9
0.1766	-1.912	1.912
0.18	-1.912	1.912
0.1833	-1.893	1.893
0.1866	-1.881	1.881
0.19	-1.887	1.887
0.1933	-1.856	1.856
0.1966	-1.843	1.843
0.2	-1.83	1.83
0.2033	-1.837	1.837
0.2066	-1.805	1.805
0.21	-1.799	1.799
0.2133	-1.786	1.786
0.2166	-1.773	1.773
0.22	-1.761	1.761
0.2233	-1.748	1.748
0.2266	-1.698	1.698
0.23	-1.736	1.736
0.2333	-1.717	1.717
0.2366	-1.71	1.71
0.24	-1.672	1.672
0.2433	-1.685	1.685
0.2466	-1.679	1.679
0.25	-1.666	1.666
0.2533	-1.654	1.654
0.2566	-1.641	1.641
0.26	-1.635	1.635
0.2633	-1.616	1.616
0.2666	-1.66	1.66
0.27	-1.597	1.597
0.2733	-1.59	1.59
0.2766	-1.578	1.578
0.28	-1.565	1.565
0.2833	-1.559	1.559
0.2866	-1.553	1.553
0.29	-1.534	1.534
0.2933	-1.527	1.527
0.2966	-1.527	1.527
0.3	-1.515	1.515

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.3033	-1.496	1.496
0.3066	-1.496	1.496
0.31	-1.483	1.483
0.3133	-1.483	1.483
0.3166	-1.47	1.47
0.32	-1.458	1.458
0.3233	-1.445	1.445
0.3266	-1.433	1.433
0.33	-1.433	1.433
0.3333	-1.42	1.42
0.35	-1.376	1.376
0.3666	-1.332	1.332
0.3833	-1.287	1.287
0.4	-1.25	1.25
0.4166	-1.212	1.212
0.4333	-1.174	1.174
0.45	-1.136	1.136
0.4666	-1.104	1.104
0.4833	-1.066	1.066
0.5	-1.035	1.035
0.5166	-1.003	1.003
0.5333	-0.978	0.978
0.55	-0.947	0.947
0.5666	-0.921	0.921
0.5833	-0.89	0.89
0.6	-0.864	0.864
0.6166	-0.839	0.839
0.6333	-0.82	0.82
0.65	-0.795	0.795
0.6666	-0.77	0.77
0.6833	-0.745	0.745
0.7	-0.726	0.726
0.7166	-0.707	0.707
0.7333	-0.688	0.688
0.75	-0.669	0.669
0.7666	-0.65	0.65
0.7833	-0.631	0.631
0.8	-0.612	0.612
0.8166	-0.593	0.593
0.8333	-0.58	0.58
0.85	-0.561	0.561
0.8666	-0.549	0.549
0.8833	-0.536	0.536
0.9	-0.517	0.517
0.9166	-0.505	0.505
0.9333	-0.492	0.492
0.95	-0.479	0.479

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.9666	-0.467	0.467
0.9833	-0.454	0.454
1	-0.442	0.442
1.2	-0.303	0.303
1.4	-0.227	0.227
1.6	-0.17	0.17
1.8	-0.132	0.132
2	-0.107	0.107
2.2	-0.082	0.082
2.4	-0.069	0.069
2.6	-0.056	0.056
2.8	-0.05	0.05
3	-0.037	0.037
3.2	-0.037	0.037
3.4	-0.031	0.031
3.6	-0.025	0.025
3.8	-0.025	0.025
4	-0.019	0.019
4.2	-0.019	0.019
4.4	-0.019	0.019
4.6	-0.019	0.019
4.8	-0.012	0.012
5	-0.012	0.012
5.2	-0.012	0.012
5.4	-0.012	0.012
5.6	-0.012	0.012
5.8	-0.012	0.012
6	-0.012	0.012
6.2	-0.012	0.012
6.4	-0.012	0.012
6.6	-0.012	0.012

G6M-96-16B FALLING HEAD PERMEABILITY TEST



G6M-96-16B		
FALLING HEAD TEST		
Time (min)	ΔH (ft)	Absolute
		Value ΔH (ft)
0	0.006	0.006
0.0033	0.006	0.006
0.0066	0.006	0.006
0.01	0.012	0.012
0.0133	0.012	0.012
0.0166	0.012	0.012
0.02	0.006	0.006
0.0233	0	0
0.0266	0	0
0.03	0	0
0.0333	0	0
0.0366	0.012	0.012
0.04	0.006	0.006
0.0433	0.006	0.006
0.0466	0.006	0.006
0.05	-0.006	0.006
0.0533	0	0
0.0566	0.012	0.012
0.06	0.018	0.018
0.0633	0	0
0.0666	0.006	0.006
0.07	0	0
0.0733	0.012	0.012
0.0766	0.006	0.006
0.08	0.006	0.006
0.0833	0.006	0.006
0.0866	0.006	0.006
0.09	0.012	0.012
0.0933	0.037	0.037
0.0966	0.012	0.012
0.1	0	0
0.1033	0.025	0.025
0.1066	0.006	0.006
0.11	0.29	0.29
0.1133	0.422	0.422
0.1166	0.599	0.599
0.12	0.959	0.959
0.1233	0.89	0.89
0.1266	0.757	0.757
0.13	1.104	1.104
0.1333	1.155	1.155
0.1366	1.275	1.275
0.14	1.281	1.281
0.1433	1.338	1.338

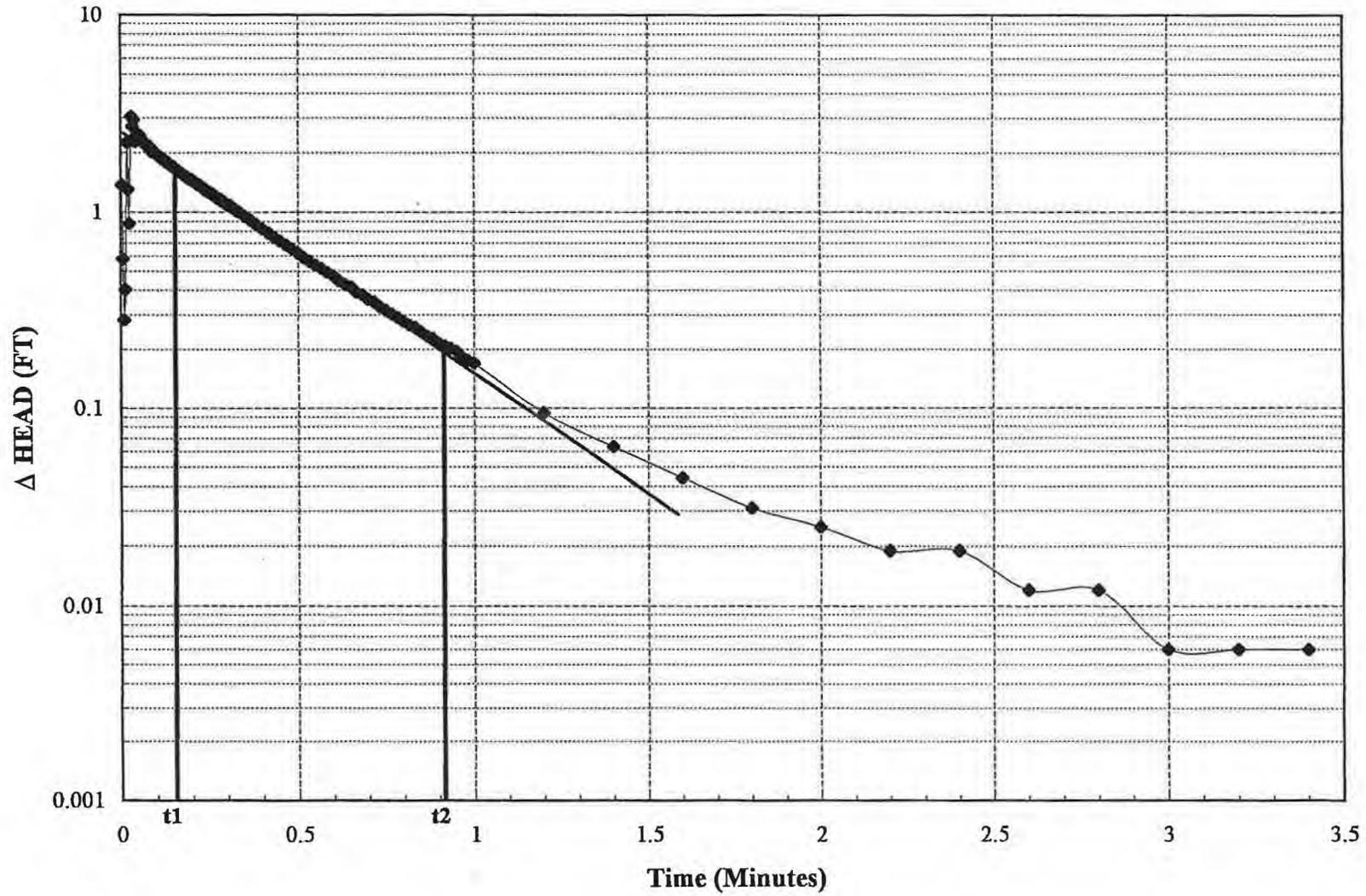
Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.1466	1.35	1.35
0.15	1.439	1.439
0.1533	1.546	1.546
0.1566	1.622	1.622
0.16	1.653	1.653
0.1633	1.698	1.698
0.1666	1.994	1.994
0.17	1.855	1.855
0.1733	1.919	1.919
0.1766	2.127	2.127
0.18	2.177	2.177
0.1833	2.184	2.184
0.1866	2.215	2.215
0.19	2.348	2.348
0.1933	2.323	2.323
0.1966	2.272	2.272
0.2	2.266	2.266
0.2033	2.215	2.215
0.2066	2.209	2.209
0.21	2.241	2.241
0.2133	2.247	2.247
0.2166	2.405	2.405
0.22	2.127	2.127
0.2233	1.824	1.824
0.2266	2.07	2.07
0.23	1.912	1.912
0.2333	1.906	1.906
0.2366	1.988	1.988
0.24	1.957	1.957
0.2433	1.988	1.988
0.2466	1.982	1.982
0.25	1.748	1.748
0.2533	1.47	1.47
0.2566	1.736	1.736
0.26	1.477	1.477
0.2633	0.839	0.839
0.2666	1.306	1.306
0.27	1.376	1.376
0.2733	1.142	1.142
0.2766	1.325	1.325
0.28	1.357	1.357
0.2833	1.407	1.407
0.2866	1.445	1.445
0.29	1.451	1.451
0.2933	1.433	1.433
0.2966	1.401	1.401
0.3	1.363	1.363

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.3033	1.332	1.332
0.3066	1.294	1.294
0.31	1.325	1.325
0.3133	1.249	1.249
0.3166	1.313	1.313
0.32	1.224	1.224
0.3233	1.256	1.256
0.3266	1.243	1.243
0.33	1.199	1.199
0.3333	1.155	1.155
0.35	1.167	1.167
0.3666	1.092	1.092
0.3833	1.054	1.054
0.4	1.092	1.092
0.4166	0.934	0.934
0.4333	1.167	1.167
0.45	0.991	0.991
0.4666	0.852	0.852
0.4833	0.795	0.795
0.5	0.763	0.763
0.5166	0.732	0.732
0.5333	0.694	0.694
0.55	0.669	0.669
0.5666	0.637	0.637
0.5833	0.612	0.612
0.6	0.58	0.58
0.6166	0.561	0.561
0.6333	0.536	0.536
0.65	0.511	0.511
0.6666	0.492	0.492
0.6833	0.473	0.473
0.7	0.448	0.448
0.7166	0.435	0.435
0.7333	0.416	0.416
0.75	0.397	0.397
0.7666	0.378	0.378
0.7833	0.366	0.366
0.8	0.347	0.347
0.8166	0.334	0.334
0.8333	0.321	0.321
0.85	0.309	0.309
0.8666	0.296	0.296
0.8833	0.284	0.284
0.9	0.271	0.271
0.9166	0.265	0.265
0.9333	0.252	0.252
0.95	0.239	0.239

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.9666	0.233	0.233
0.9833	0.22	0.22
1	0.214	0.214
1.2	0.119	0.119
1.4	0.075	0.075
1.6	0.05	0.05
1.8	0.031	0.031
2	0.025	0.025
2.2	0.012	0.012
2.4	0.012	0.012
2.6	0.006	0.006
2.8	0.006	0.006
3	0.006	0.006
3.2	0.006	0.006
3.4	0.006	0.006
3.6	0.006	0.006
3.8	0.006	0.006
4	0.006	0.006
4.2	0.006	0.006
4.4	0.006	0.006
4.6	0.006	0.006
4.8	0.006	0.006
5	0.006	0.006
5.2	0.006	0.006
5.4	0.006	0.006
5.6	0.006	0.006
5.8	0.006	0.006
6	0.006	0.006
6.2	0.006	0.006
6.4	0.006	0.006
6.6	0.006	0.006
6.8	0.006	0.006
7	0.006	0.006
7.2	0.006	0.006
7.4	0.006	0.006
7.6	0.006	0.006
7.8	0.006	0.006
8	0.006	0.006
8.2	0.006	0.006
8.4	0.006	0.006
8.6	0.006	0.006
8.8	0.006	0.006
9	0.006	0.006
9.2	0.006	0.006
9.4	0.006	0.006
9.6	0.006	0.006
9.8	0.006	0.006

Time (min)	ΔH (ft)	Absolute
		Value ΔH (ft)
10	0.006	0.006
12	0.006	0.006

G6M-96-16B RISING HEAD PERMEABILITY TEST



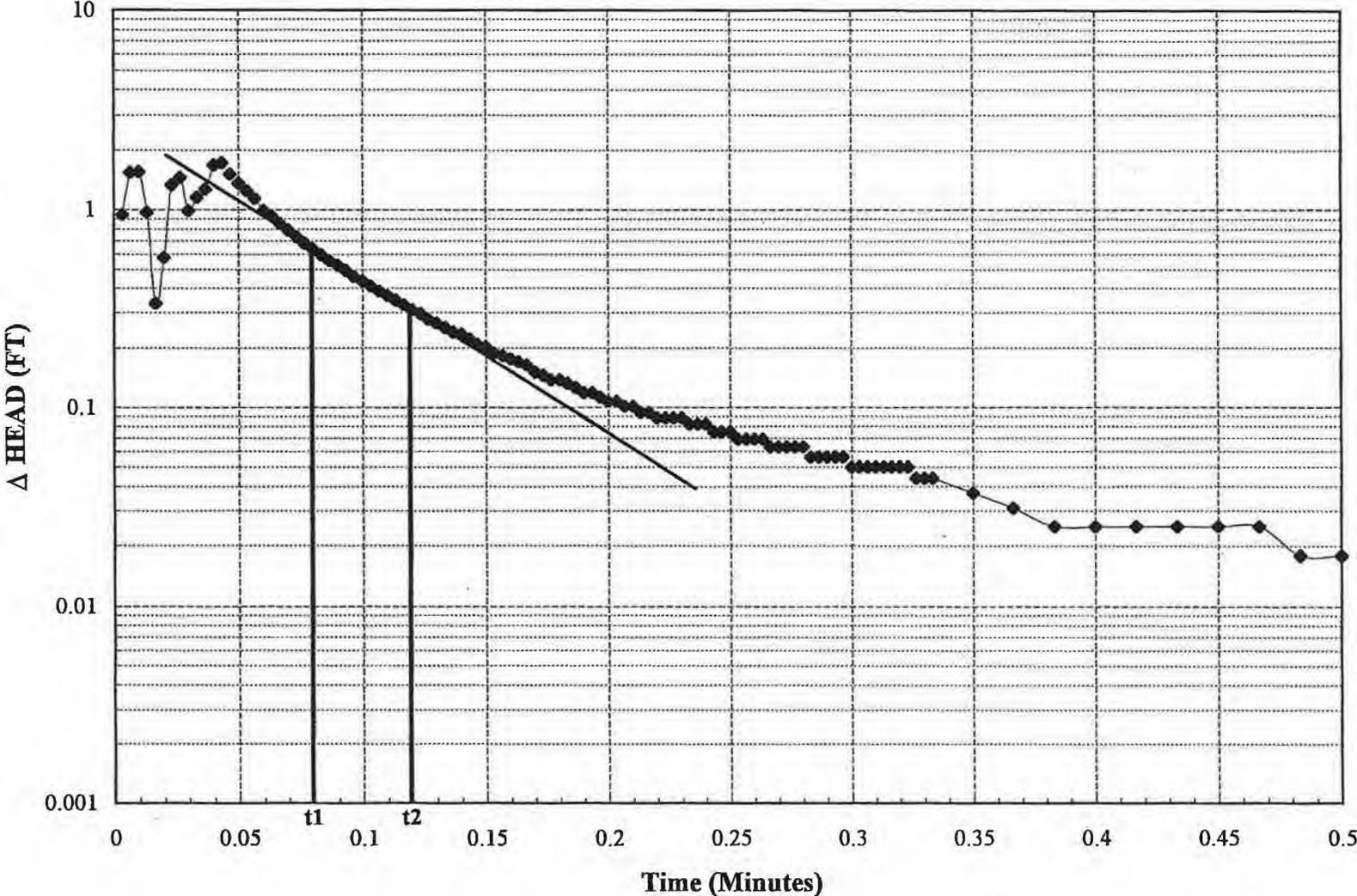
G6M-96-16B RISING HEAD TEST		
Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0	0.006	0.006
0.0033	-1.376	1.376
0.0066	-0.58	0.58
0.01	-0.284	0.284
0.0133	0.404	0.404
0.0166	-2.253	2.253
0.02	-1.306	1.306
0.0233	-0.877	0.877
0.0266	-2.285	2.285
0.03	-3.049	3.049
0.0333	-2.727	2.727
0.0366	-2.916	2.916
0.04	-2.272	2.272
0.0433	-2.342	2.342
0.0466	-2.455	2.455
0.05	-2.468	2.468
0.0533	-2.449	2.449
0.0566	-2.38	2.38
0.06	-2.323	2.323
0.0633	-2.253	2.253
0.0666	-2.222	2.222
0.07	-2.197	2.197
0.0733	-2.171	2.171
0.0766	-2.133	2.133
0.08	-2.152	2.152
0.0833	-2.108	2.108
0.0866	-2.051	2.051
0.09	-2.013	2.013
0.0933	-2.013	2.013
0.0966	-2.007	2.007
0.1	-1.976	1.976
0.1033	-1.963	1.963
0.1066	-1.919	1.919
0.11	-1.912	1.912
0.1133	-1.893	1.893
0.1166	-1.856	1.856
0.12	-1.856	1.856
0.1233	-1.83	1.83
0.1266	-1.799	1.799
0.13	-1.786	1.786
0.1333	-1.774	1.774
0.1366	-1.755	1.755
0.14	-1.736	1.736
0.1433	-1.717	1.717

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.1466	-1.698	1.698
0.15	-1.685	1.685
0.1533	-1.66	1.66
0.1566	-1.647	1.647
0.16	-1.628	1.628
0.1633	-1.609	1.609
0.1666	-1.597	1.597
0.17	-1.584	1.584
0.1733	-1.565	1.565
0.1766	-1.546	1.546
0.18	-1.534	1.534
0.1833	-1.521	1.521
0.1866	-1.508	1.508
0.19	-1.489	1.489
0.1933	-1.477	1.477
0.1966	-1.464	1.464
0.2	-1.452	1.452
0.2033	-1.439	1.439
0.2066	-1.426	1.426
0.21	-1.414	1.414
0.2133	-1.395	1.395
0.2166	-1.382	1.382
0.22	-1.37	1.37
0.2233	-1.363	1.363
0.2266	-1.344	1.344
0.23	-1.332	1.332
0.2333	-1.319	1.319
0.2366	-1.306	1.306
0.24	-1.294	1.294
0.2433	-1.281	1.281
0.2466	-1.275	1.275
0.25	-1.262	1.262
0.2533	-1.25	1.25
0.2566	-1.237	1.237
0.26	-1.224	1.224
0.2633	-1.212	1.212
0.2666	-1.205	1.205
0.27	-1.193	1.193
0.2733	-1.18	1.18
0.2766	-1.168	1.168
0.28	-1.161	1.161
0.2833	-1.149	1.149
0.2866	-1.136	1.136
0.29	-1.13	1.13
0.2933	-1.117	1.117
0.2966	-1.104	1.104
0.3	-1.098	1.098

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.3033	-1.085	1.085
0.3066	-1.079	1.079
0.31	-1.066	1.066
0.3133	-1.06	1.06
0.3166	-1.048	1.048
0.32	-1.041	1.041
0.3233	-1.029	1.029
0.3266	-1.016	1.016
0.33	-1.01	1.01
0.3333	-1.003	1.003
0.35	-0.953	0.953
0.3666	-0.909	0.909
0.3833	-0.864	0.864
0.4	-0.82	0.82
0.4166	-0.782	0.782
0.4333	-0.745	0.745
0.45	-0.713	0.713
0.4666	-0.681	0.681
0.4833	-0.65	0.65
0.5	-0.618	0.618
0.5166	-0.587	0.587
0.5333	-0.561	0.561
0.55	-0.536	0.536
0.5666	-0.517	0.517
0.5833	-0.492	0.492
0.6	-0.473	0.473
0.6166	-0.448	0.448
0.6333	-0.429	0.429
0.65	-0.416	0.416
0.6666	-0.391	0.391
0.6833	-0.378	0.378
0.7	-0.359	0.359
0.7166	-0.347	0.347
0.7333	-0.328	0.328
0.75	-0.315	0.315
0.7666	-0.303	0.303
0.7833	-0.29	0.29
0.8	-0.277	0.277
0.8166	-0.265	0.265
0.8333	-0.258	0.258
0.85	-0.246	0.246
0.8666	-0.233	0.233
0.8833	-0.227	0.227
0.9	-0.214	0.214
0.9166	-0.208	0.208
0.9333	-0.202	0.202
0.95	-0.195	0.195

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.9666	-0.183	0.183
0.9833	-0.176	0.176
1	-0.17	0.17
1.2	-0.094	0.094
1.4	-0.063	0.063
1.6	-0.044	0.044
1.8	-0.031	0.031
2	-0.025	0.025
2.2	-0.019	0.019
2.4	-0.019	0.019
2.6	-0.012	0.012
2.8	-0.012	0.012
3	-0.006	0.006
3.2	-0.006	0.006
3.4	-0.006	0.006

G6M-96-21A RISING HEAD PERMEABILITY TEST No. 1



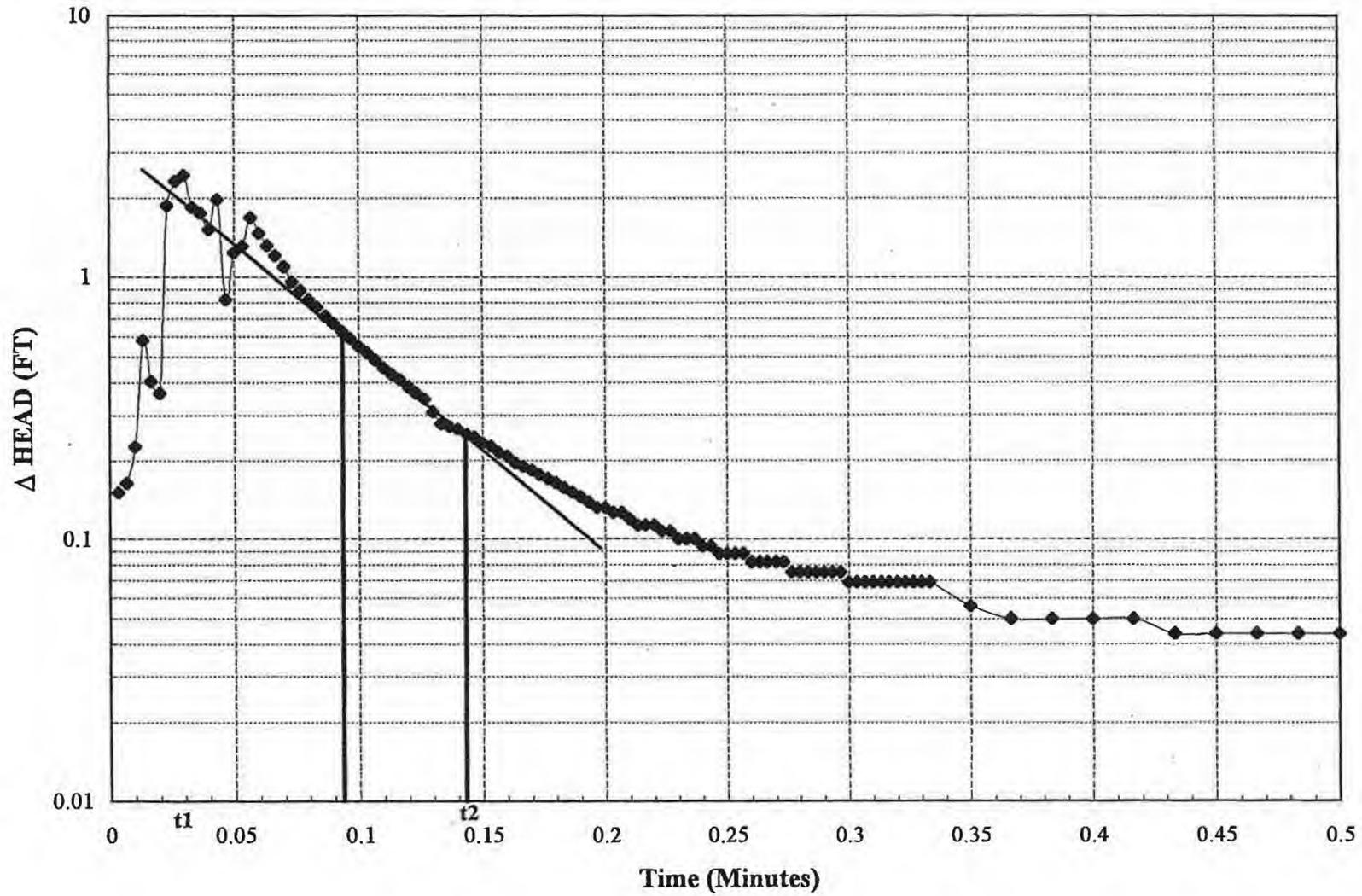
G6M-96-21A		
RISING HEAD TEST 1		
Time (min)	ΔH (ft)	Absolute
		Value ΔH (ft)
0	-0.359	0.359
0.0033	-0.946	0.946
0.0066	-1.546	1.546
0.01	-1.552	1.552
0.0133	-0.972	0.972
0.0166	0.334	0.334
0.02	-0.574	0.574
0.0233	-1.338	1.338
0.0266	-1.458	1.458
0.03	-0.991	0.991
0.0333	-1.155	1.155
0.0366	-1.275	1.275
0.04	-1.679	1.679
0.0433	-1.723	1.723
0.0466	-1.515	1.515
0.05	-1.369	1.369
0.0533	-1.249	1.249
0.0566	-1.142	1.142
0.06	-0.991	0.991
0.0633	-0.934	0.934
0.0666	-0.852	0.852
0.07	-0.789	0.789
0.0733	-0.732	0.732
0.0766	-0.681	0.681
0.08	-0.637	0.637
0.0833	-0.593	0.593
0.0866	-0.555	0.555
0.09	-0.523	0.523
0.0933	-0.492	0.492
0.0966	-0.46	0.46
0.1	-0.435	0.435
0.1033	-0.41	0.41
0.1066	-0.385	0.385
0.11	-0.366	0.366
0.1133	-0.347	0.347
0.1166	-0.328	0.328
0.12	-0.309	0.309
0.1233	-0.296	0.296
0.1266	-0.277	0.277
0.13	-0.265	0.265
0.1333	-0.252	0.252
0.1366	-0.239	0.239
0.14	-0.233	0.233
0.1433	-0.22	0.22

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.1466	-0.208	0.208
0.15	-0.202	0.202
0.1533	-0.189	0.189
0.1566	-0.183	0.183
0.16	-0.176	0.176
0.1633	-0.17	0.17
0.1666	-0.164	0.164
0.17	-0.151	0.151
0.1733	-0.145	0.145
0.1766	-0.138	0.138
0.18	-0.138	0.138
0.1833	-0.132	0.132
0.1866	-0.126	0.126
0.19	-0.119	0.119
0.1933	-0.119	0.119
0.1966	-0.113	0.113
0.2	-0.107	0.107
0.2033	-0.107	0.107
0.2066	-0.101	0.101
0.21	-0.101	0.101
0.2133	-0.094	0.094
0.2166	-0.094	0.094
0.22	-0.088	0.088
0.2233	-0.088	0.088
0.2266	-0.088	0.088
0.23	-0.088	0.088
0.2333	-0.082	0.082
0.2366	-0.082	0.082
0.24	-0.082	0.082
0.2433	-0.075	0.075
0.2466	-0.075	0.075
0.25	-0.075	0.075
0.2533	-0.069	0.069
0.2566	-0.069	0.069
0.26	-0.069	0.069
0.2633	-0.069	0.069
0.2666	-0.063	0.063
0.27	-0.063	0.063
0.2733	-0.063	0.063
0.2766	-0.063	0.063
0.28	-0.063	0.063
0.2833	-0.056	0.056
0.2866	-0.056	0.056
0.29	-0.056	0.056
0.2933	-0.056	0.056
0.2966	-0.056	0.056
0.3	-0.05	0.05

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.3033	-0.05	0.05
0.3066	-0.05	0.05
0.31	-0.05	0.05
0.3133	-0.05	0.05
0.3166	-0.05	0.05
0.32	-0.05	0.05
0.3233	-0.05	0.05
0.3266	-0.044	0.044
0.33	-0.044	0.044
0.3333	-0.044	0.044
0.35	-0.037	0.037
0.3666	-0.031	0.031
0.3833	-0.025	0.025
0.4	-0.025	0.025
0.4166	-0.025	0.025
0.4333	-0.025	0.025
0.45	-0.025	0.025
0.4666	-0.025	0.025
0.4833	-0.018	0.018
0.5	-0.018	0.018
0.5166	-0.018	0.018
0.5333	-0.018	0.018
0.55	-0.018	0.018
0.5666	-0.018	0.018
0.5833	-0.018	0.018
0.6	-0.018	0.018
0.6166	-0.012	0.012
0.6333	-0.018	0.018
0.65	-0.012	0.012
0.6666	-0.012	0.012
0.6833	-0.012	0.012
0.7	-0.012	0.012
0.7166	-0.012	0.012
0.7333	-0.012	0.012
0.75	-0.012	0.012
0.7666	-0.012	0.012
0.7833	-0.012	0.012
0.8	-0.012	0.012
0.8166	-0.012	0.012
0.8333	-0.012	0.012
0.85	-0.012	0.012
0.8666	-0.012	0.012
0.8833	-0.012	0.012
0.9	-0.012	0.012
0.9166	-0.012	0.012
0.9333	-0.006	0.006
0.95	-0.006	0.006

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.9666	-0.006	0.006
0.9833	-0.006	0.006
1	-0.012	0.012
1.2	0.006	0.006
1.4	0.006	0.006
1.6	0.012	0.012
1.8	0.012	0.012
2	0.012	0.012
2.2	0.012	0.012
2.4	0.012	0.012
2.6	0.012	0.012
2.8	0.012	0.012
3	0.012	0.012
3.2	0.012	0.012
3.4	0.012	0.012
3.6	0.012	0.012

G6M-96-21A RISING HEAD PERMEABILITY TEST No. 2



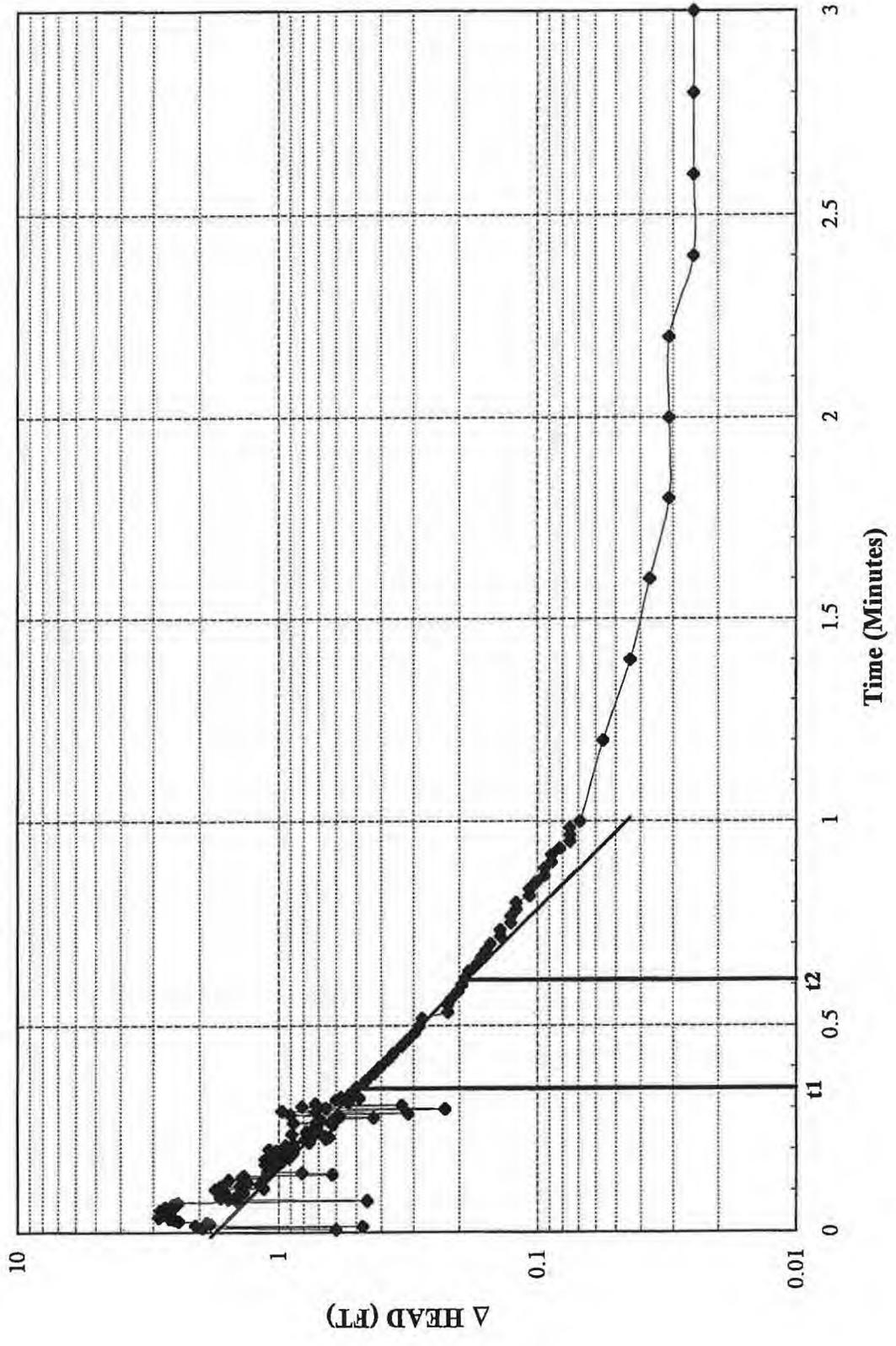
G6M-96-21A		
RISING HEAD TEST 2		
Time (min)	ΔH (ft)	Absolute
		Value ΔH (ft)
0	0	0
0.0033	-0.151	0.151
0.0066	0.164	0.164
0.01	0.227	0.227
0.0133	0.58	0.58
0.0166	0.404	0.404
0.02	-0.366	0.366
0.0233	-1.868	1.868
0.0266	-2.316	2.316
0.03	-2.443	2.443
0.0333	-1.843	1.843
0.0366	-1.748	1.748
0.04	-1.515	1.515
0.0433	-1.969	1.969
0.0466	-0.826	0.826
0.05	-1.231	1.231
0.0533	-1.306	1.306
0.0566	-1.679	1.679
0.06	-1.464	1.464
0.0633	-1.313	1.313
0.0666	-1.199	1.199
0.07	-1.092	1.092
0.0733	-0.959	0.959
0.0766	-0.89	0.89
0.08	-0.826	0.826
0.0833	-0.77	0.77
0.0866	-0.713	0.713
0.09	-0.669	0.669
0.0933	-0.624	0.624
0.0966	-0.587	0.587
0.1	-0.549	0.549
0.1033	-0.517	0.517
0.1066	-0.486	0.486
0.11	-0.454	0.454
0.1133	-0.429	0.429
0.1166	-0.41	0.41
0.12	-0.385	0.385
0.1233	-0.366	0.366
0.1266	-0.347	0.347
0.13	-0.309	0.309
0.1333	-0.277	0.277
0.1366	-0.271	0.271
0.14	-0.265	0.265
0.1438	-0.252	0.252

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.1466	-0.246	0.246
0.15	-0.233	0.233
0.1533	-0.227	0.227
0.1566	-0.214	0.214
0.16	-0.208	0.208
0.1633	-0.195	0.195
0.1666	-0.189	0.189
0.17	-0.183	0.183
0.1733	-0.176	0.176
0.1766	-0.17	0.17
0.18	-0.164	0.164
0.1833	-0.157	0.157
0.1866	-0.151	0.151
0.19	-0.145	0.145
0.1933	-0.138	0.138
0.1966	-0.132	0.132
0.2	-0.132	0.132
0.2033	-0.126	0.126
0.2066	-0.126	0.126
0.21	-0.119	0.119
0.2133	-0.113	0.113
0.2166	-0.113	0.113
0.22	-0.113	0.113
0.2233	-0.107	0.107
0.2266	-0.107	0.107
0.23	-0.1	0.1
0.2333	-0.1	0.1
0.2366	-0.1	0.1
0.24	-0.094	0.094
0.2433	-0.094	0.094
0.2466	-0.088	0.088
0.25	-0.088	0.088
0.2533	-0.088	0.088
0.2566	-0.088	0.088
0.26	-0.082	0.082
0.2633	-0.082	0.082
0.2666	-0.082	0.082
0.27	-0.082	0.082
0.2733	-0.082	0.082
0.2766	-0.075	0.075
0.28	-0.075	0.075
0.2833	-0.075	0.075
0.2866	-0.075	0.075
0.29	-0.075	0.075
0.2933	-0.075	0.075
0.2966	-0.075	0.075
0.3	-0.069	0.069

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.3033	-0.069	0.069
0.3066	-0.069	0.069
0.31	-0.069	0.069
0.3133	-0.069	0.069
0.3166	-0.069	0.069
0.32	-0.069	0.069
0.3233	-0.069	0.069
0.3266	-0.069	0.069
0.33	-0.069	0.069
0.3333	-0.069	0.069
0.35	-0.056	0.056
0.3666	-0.05	0.05
0.3833	-0.05	0.05
0.4	-0.05	0.05
0.4166	-0.05	0.05
0.4333	-0.044	0.044
0.45	-0.044	0.044
0.4666	-0.044	0.044
0.4833	-0.044	0.044
0.5	-0.044	0.044
0.5166	-0.044	0.044
0.5333	-0.044	0.044
0.55	-0.044	0.044
0.5666	-0.044	0.044
0.5833	-0.044	0.044
0.6	-0.037	0.037
0.6166	-0.037	0.037
0.6333	-0.044	0.044
0.65	-0.037	0.037
0.6666	-0.037	0.037
0.6833	-0.037	0.037
0.7	-0.037	0.037
0.7166	-0.037	0.037
0.7333	-0.037	0.037
0.75	-0.037	0.037
0.7666	-0.037	0.037
0.7833	-0.037	0.037
0.8	-0.037	0.037
0.8166	-0.037	0.037
0.8333	-0.037	0.037
0.85	-0.037	0.037
0.8666	-0.037	0.037
0.8833	-0.037	0.037
0.9	-0.037	0.037
0.9166	-0.037	0.037
0.9333	-0.037	0.037
0.95	-0.037	0.037

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.9666	-0.037	0.037
0.9833	-0.037	0.037
1	-0.037	0.037
1.2	-0.025	0.025
1.4	-0.025	0.025
1.6	-0.025	0.025
1.8	-0.025	0.025
2	-0.025	0.025
2.2	-0.025	0.025
2.4	-0.025	0.025
2.6	-0.025	0.025

G6M-96-21B FALLING HEAD PERMEABILITY TEST



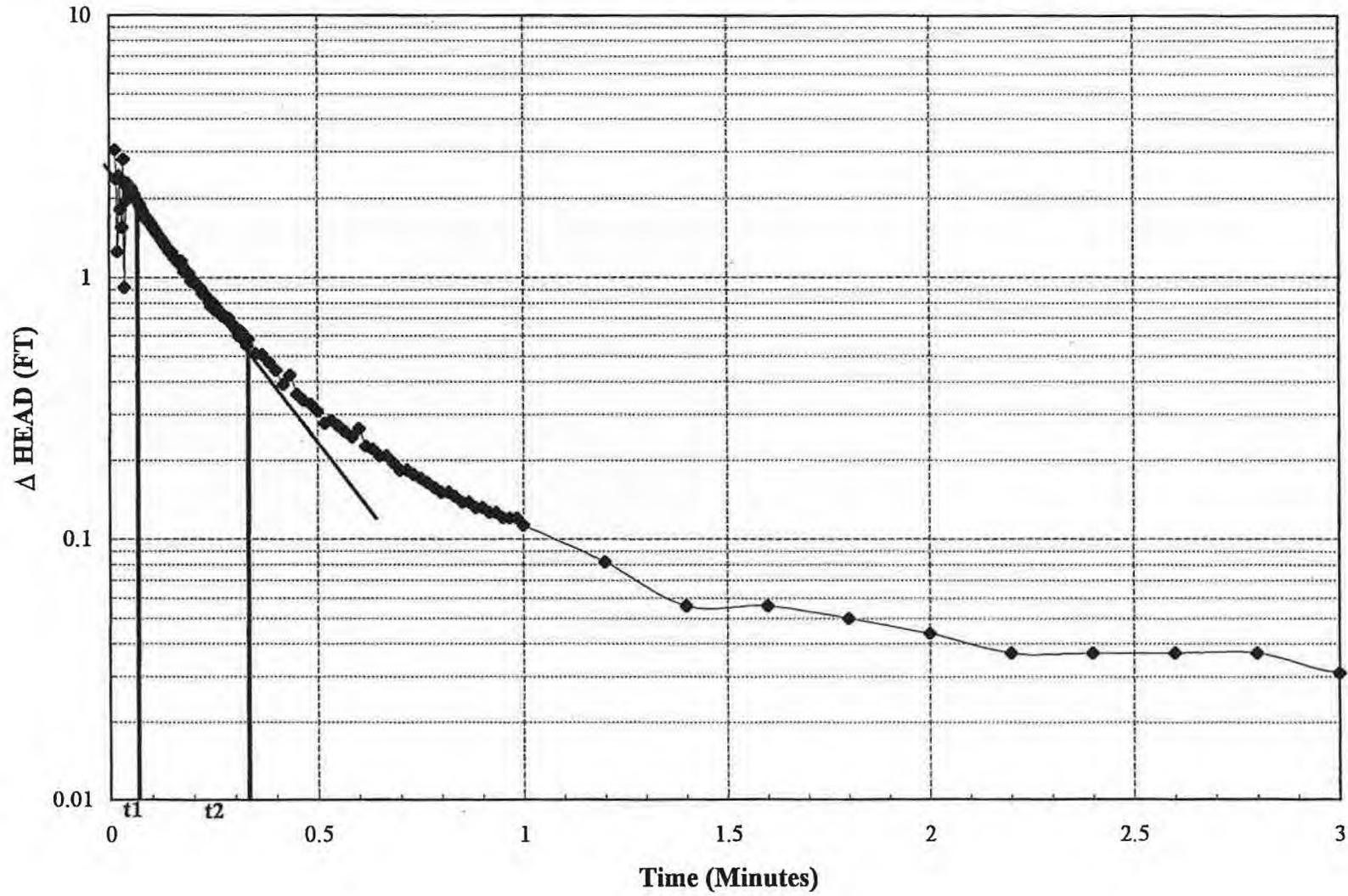
G6M-96-21B FALLING HEAD TEST		
Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0	0.006	0.006
0.0033	0.006	0.006
0.0066	0.599	0.599
0.01	1.95	1.95
0.0133	0.473	0.473
0.0166	2.07	2.07
0.02	1.824	1.824
0.0233	1.875	1.875
0.0266	2.399	2.399
0.03	2.481	2.481
0.0333	2.594	2.594
0.0366	2.859	2.859
0.04	2.657	2.657
0.0433	2.777	2.777
0.0466	2.695	2.695
0.05	2.676	2.676
0.0533	2.821	2.821
0.0566	2.594	2.594
0.06	2.702	2.702
0.0633	2.481	2.481
0.0666	2.518	2.518
0.07	2.411	2.411
0.0733	1.426	1.426
0.0766	0.454	0.454
0.08	1.553	1.553
0.0833	1.66	1.66
0.0866	1.559	1.559
0.09	1.401	1.401
0.0933	1.414	1.414
0.0966	1.357	1.357
0.1	1.616	1.616
0.1033	1.736	1.736
0.1066	1.142	1.142
0.11	1.66	1.66
0.1133	1.401	1.401
0.1166	1.18	1.18
0.12	1.313	1.313
0.1233	1.357	1.357
0.1266	1.546	1.546
0.13	1.136	1.136
0.1333	1.376	1.376
0.1366	1.357	1.357
0.14	0.618	0.618
0.1433	0.814	0.814

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.1466	1.104	1.104
0.15	1.092	1.092
0.1533	1.066	1.066
0.1566	1.041	1.041
0.16	1.048	1.048
0.1633	1.123	1.123
0.1666	1.073	1.073
0.17	0.978	0.978
0.1733	1.041	1.041
0.1766	1.123	1.123
0.18	0.915	0.915
0.1833	0.984	0.984
0.1866	1.054	1.054
0.19	0.896	0.896
0.1933	0.877	0.877
0.1966	1.022	1.022
0.2	1.085	1.085
0.2033	0.89	0.89
0.2066	0.928	0.928
0.21	0.94	0.94
0.2133	0.877	0.877
0.2166	0.763	0.763
0.22	0.757	0.757
0.2233	0.795	0.795
0.2266	0.656	0.656
0.23	0.637	0.637
0.2333	0.662	0.662
0.2366	0.89	0.89
0.24	0.713	0.713
0.2433	0.782	0.782
0.2466	0.726	0.726
0.25	0.713	0.713
0.2533	0.726	0.726
0.2566	0.707	0.707
0.26	0.618	0.618
0.2633	0.877	0.877
0.2666	0.713	0.713
0.27	0.681	0.681
0.2733	0.599	0.599
0.2766	0.429	0.429
0.28	0.58	0.58
0.2833	0.902	0.902
0.2866	0.315	0.315
0.29	0.719	0.719
0.2933	0.972	0.972
0.2966	0.227	0.227
0.3	0.656	0.656

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.3033	0.814	0.814
0.3066	0.334	0.334
0.31	0.719	0.719
0.3133	0.536	0.536
0.3166	0.543	0.543
0.32	0.599	0.599
0.3233	0.486	0.486
0.3266	0.574	0.574
0.33	0.498	0.498
0.3333	0.53	0.53
0.35	0.498	0.498
0.3666	0.46	0.46
0.3833	0.429	0.429
0.4	0.404	0.404
0.4166	0.378	0.378
0.4333	0.359	0.359
0.45	0.334	0.334
0.4666	0.315	0.315
0.4833	0.296	0.296
0.5	0.284	0.284
0.5166	0.277	0.277
0.5333	0.221	0.221
0.55	0.221	0.221
0.5666	0.214	0.214
0.5833	0.202	0.202
0.6	0.195	0.195
0.6166	0.189	0.189
0.6333	0.183	0.183
0.65	0.17	0.17
0.6666	0.164	0.164
0.6833	0.157	0.157
0.7	0.151	0.151
0.7166	0.138	0.138
0.7333	0.138	0.138
0.75	0.126	0.126
0.7666	0.126	0.126
0.7833	0.12	0.12
0.8	0.12	0.12
0.8166	0.107	0.107
0.8333	0.107	0.107
0.85	0.101	0.101
0.8666	0.094	0.094
0.8833	0.094	0.094
0.9	0.088	0.088
0.9166	0.088	0.088
0.9333	0.082	0.082
0.95	0.075	0.075

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.9666	0.075	0.075
0.9833	0.075	0.075
1	0.069	0.069
1.2	0.056	0.056
1.4	0.044	0.044
1.6	0.037	0.037
1.8	0.031	0.031
2	0.031	0.031
2.2	0.031	0.031
2.4	0.025	0.025
2.6	0.025	0.025
2.8	0.025	0.025
3	0.025	0.025
3.2	0.025	0.025
3.4	0.018	0.018
3.6	0.018	0.018
3.8	0.018	0.018
4	0.018	0.018
4.2	0.018	0.018
4.4	0.012	0.012
4.6	0.018	0.018
4.8	0.018	0.018
5	0.012	0.012
5.2	0.012	0.012
5.4	0.018	0.018
5.6	0.018	0.018
5.8	0.018	0.018
6	0.018	0.018
6.2	0.018	0.018
6.4	0.018	0.018
6.6	0.018	0.018
6.8	0.012	0.012
7	0.018	0.018
7.2	0.018	0.018
7.4	0.012	0.012
7.6	0.012	0.012
7.8	0.012	0.012
8	0.012	0.012

G6M-96-21B RISING HEAD PERMEABILITY TEST



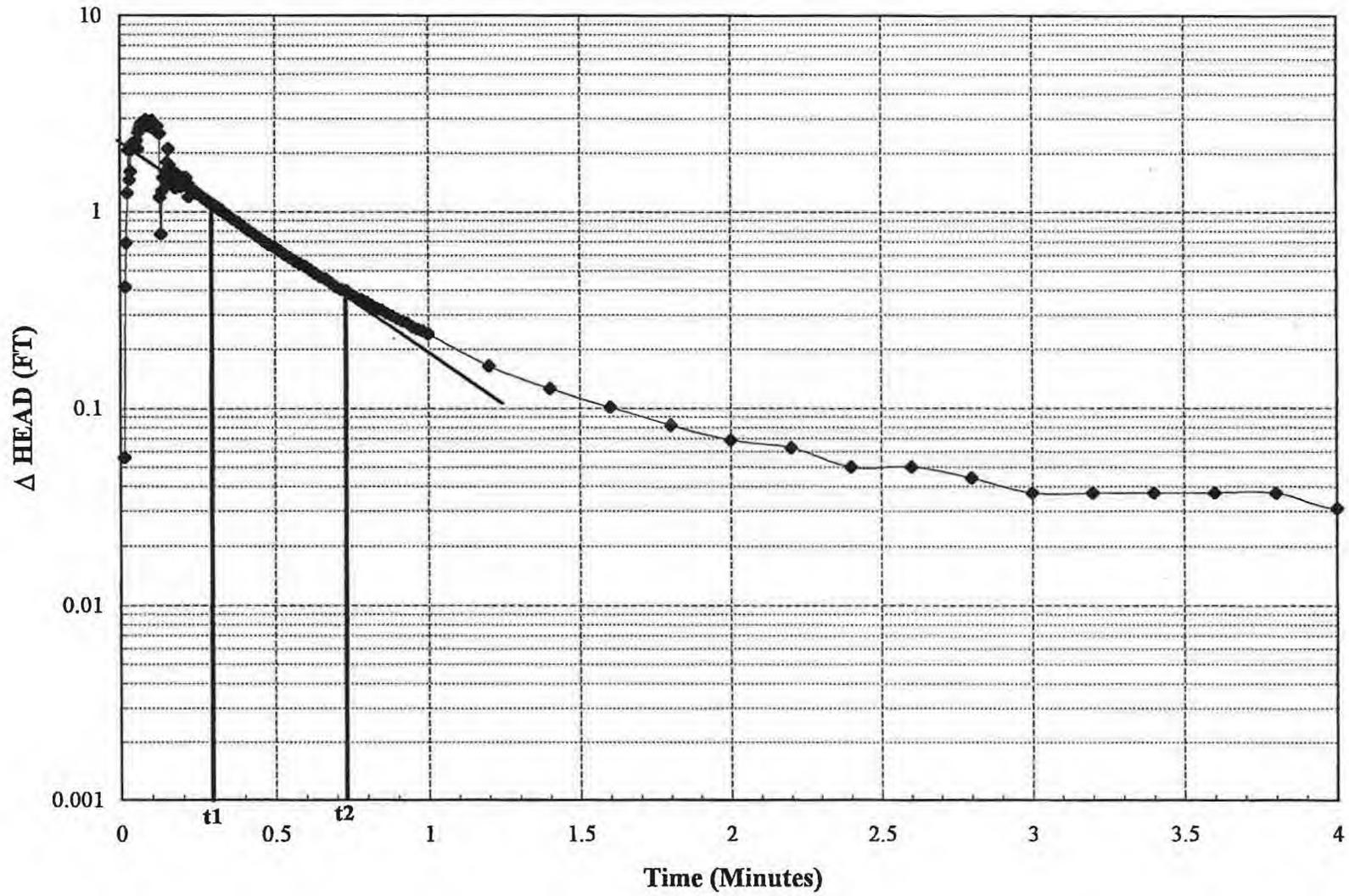
G6M-96-21B		
RISING HEAD TEST		
Time (min)	ΔH (ft)	Absolute
		Value ΔH (ft)
0	0	0
0.0033	0.012	0.012
0.0066	0	0
0.01	-0.019	0.019
0.0133	-3.042	3.042
0.0166	-2.361	2.361
0.02	-1.256	1.256
0.0233	-2.43	2.43
0.0266	-1.818	1.818
0.03	-1.553	1.553
0.0333	-2.803	2.803
0.0366	-0.915	0.915
0.04	-1.963	1.963
0.0433	-2.291	2.291
0.0466	-2.159	2.159
0.05	-2.215	2.215
0.0533	-2.171	2.171
0.0566	-2.095	2.095
0.06	-2.064	2.064
0.0633	-2.007	2.007
0.0666	-1.969	1.969
0.07	-1.919	1.919
0.0733	-1.887	1.887
0.0766	-1.843	1.843
0.08	-1.792	1.792
0.0833	-1.723	1.723
0.0866	-1.723	1.723
0.09	-1.654	1.654
0.0933	-1.66	1.66
0.0966	-1.628	1.628
0.1	-1.603	1.603
0.1033	-1.571	1.571
0.1066	-1.54	1.54
0.11	-1.515	1.515
0.1133	-1.489	1.489
0.1166	-1.464	1.464
0.12	-1.439	1.439
0.1233	-1.414	1.414
0.1266	-1.388	1.388
0.13	-1.363	1.363
0.1333	-1.338	1.338
0.1366	-1.319	1.319
0.14	-1.3	1.3
0.1433	-1.268	1.268

0.1465	-1.249	1.949
0.15	-1.249	1.949
0.1532	-1.212	1.912
0.1569	-1.185	1.885
0.16	-1.18	1.88
0.1633	-1.191	1.861
0.1669	-1.192	1.842
0.17	-1.125	1.825
0.1717	-1.155	1.857
0.1766	-1.164	1.864
0.18	-1.084	1.854
0.1843	-1.054	1.884
0.1886	-1.055	1.905
0.19	-1.011	1.941
0.1933	-1.01	1.93
0.1969	-0.965	1.965
0.2	-0.965	1.965
0.2033	-0.965	1.965
0.2069	-0.965	1.965
0.21	-0.965	1.965
0.2133	-0.965	1.965
0.2166	-0.915	1.915
0.22	-0.915	1.915
0.2233	-0.875	1.875
0.2266	-0.875	1.875
0.23	-0.858	1.858
0.2333	-0.84	1.84
0.2366	-0.831	1.831
0.24	-0.808	1.808
0.2433	-0.806	1.806
0.2466	-0.801	1.801
0.25	-0.79	1.795
0.2533	-0.781	1.781
0.2566	-0.77	1.77
0.26	-0.757	1.757
0.2633	-0.749	1.749
0.2666	-0.738	1.738
0.27	-0.721	1.721
0.2733	-0.709	1.709
0.2766	-0.707	1.707
0.28	-0.7	1.7
0.2833	-0.691	1.691
0.2866	-0.7	1.69
0.29	-0.679	1.679
0.2933	-0.669	1.669
0.2966	-0.656	1.656
0.3	-0.65	1.65
0.3033	-0.639	1.639
0.3066	-0.631	1.631

0.31	-0.599	0.599
0.3133	-0.625	0.625
0.3166	-0.618	0.618
0.32	-0.612	0.612
0.3233	-0.593	0.593
0.3266	-0.593	0.593
0.33	-0.549	0.549
0.3333	-0.58	0.58
0.35	-0.511	0.511
0.3666	-0.505	0.505
0.3833	-0.473	0.473
0.4	-0.441	0.441
0.4166	-0.391	0.391
0.4333	-0.423	0.423
0.45	-0.359	0.359
0.4666	-0.34	0.34
0.4833	-0.328	0.328
0.5	-0.309	0.309
0.5166	-0.277	0.277
0.5333	-0.284	0.284
0.55	-0.271	0.271
0.5666	-0.258	0.258
0.5833	-0.246	0.246
0.6	-0.265	0.265
0.6166	-0.227	0.227
0.6333	-0.221	0.221
0.65	-0.208	0.208
0.6666	-0.208	0.208
0.6833	-0.195	0.195
0.7	-0.183	0.183
0.7166	-0.183	0.183
0.7333	-0.176	0.176
0.75	-0.17	0.17
0.7666	-0.164	0.164
0.7833	-0.157	0.157
0.8	-0.151	0.151
0.8166	-0.151	0.151
0.8333	-0.145	0.145
0.85	-0.138	0.138
0.8666	-0.138	0.138
0.8833	-0.132	0.132
0.9	-0.132	0.132
0.9166	-0.126	0.126
0.9333	-0.126	0.126
0.95	-0.12	0.12
0.9666	-0.12	0.12
0.9833	-0.12	0.12
1	-0.113	0.113
1.2	-0.082	0.082

1.4	-0.056	0.056
1.6	-0.056	0.056
1.8	-0.05	0.05
2	-0.044	0.044
2.2	-0.037	0.037
2.4	-0.037	0.037
2.6	-0.037	0.037
2.8	-0.037	0.037
3	-0.031	0.031
3.2	-0.031	0.031
3.4	-0.025	0.025
3.6	-0.025	0.025
3.8	-0.019	0.019
4	-0.025	0.025
4.2	-0.025	0.025
4.4	-0.019	0.019
4.6	-0.019	0.019
4.8	-0.019	0.019
5	-0.019	0.019
5.2	-0.019	0.019
5.4	-0.019	0.019
5.6	-0.019	0.019

G6M-96-22A FALLING HEAD PERMEABILITY TEST



G6M-96-22A		
FALLING HEAD TEST		
Time (min)	ΔH (ft)	Absolute
		Value ΔH (ft)
0	-0.006	0.006
0.0033	-0.006	0.006
0.0066	0	0
0.01	0	0
0.0133	0.056	0.056
0.0166	0.416	0.416
0.02	0.694	0.694
0.0233	1.243	1.243
0.0266	2.058	2.058
0.03	1.458	1.458
0.0333	1.597	1.597
0.0366	2.058	2.058
0.04	2.222	2.222
0.0433	2.203	2.203
0.0466	2.171	2.171
0.05	2.234	2.234
0.0533	2.31	2.31
0.0566	2.089	2.089
0.06	2.531	2.531
0.0633	2.67	2.67
0.0666	2.765	2.765
0.07	2.847	2.847
0.0733	2.727	2.727
0.0766	2.828	2.828
0.08	2.859	2.859
0.0833	2.922	2.922
0.0866	2.746	2.746
0.09	2.714	2.714
0.0933	2.885	2.885
0.0966	2.866	2.866
0.1	2.765	2.765
0.1033	2.897	2.897
0.1066	2.657	2.657
0.11	2.847	2.847
0.1133	2.796	2.796
0.1166	2.701	2.701
0.12	2.733	2.733
0.1233	2.537	2.537
0.1266	2.506	2.506
0.13	1.186	1.186
0.1333	0.77	0.77
0.1366	1.275	1.275
0.14	1.496	1.496
0.1433	1.502	1.502

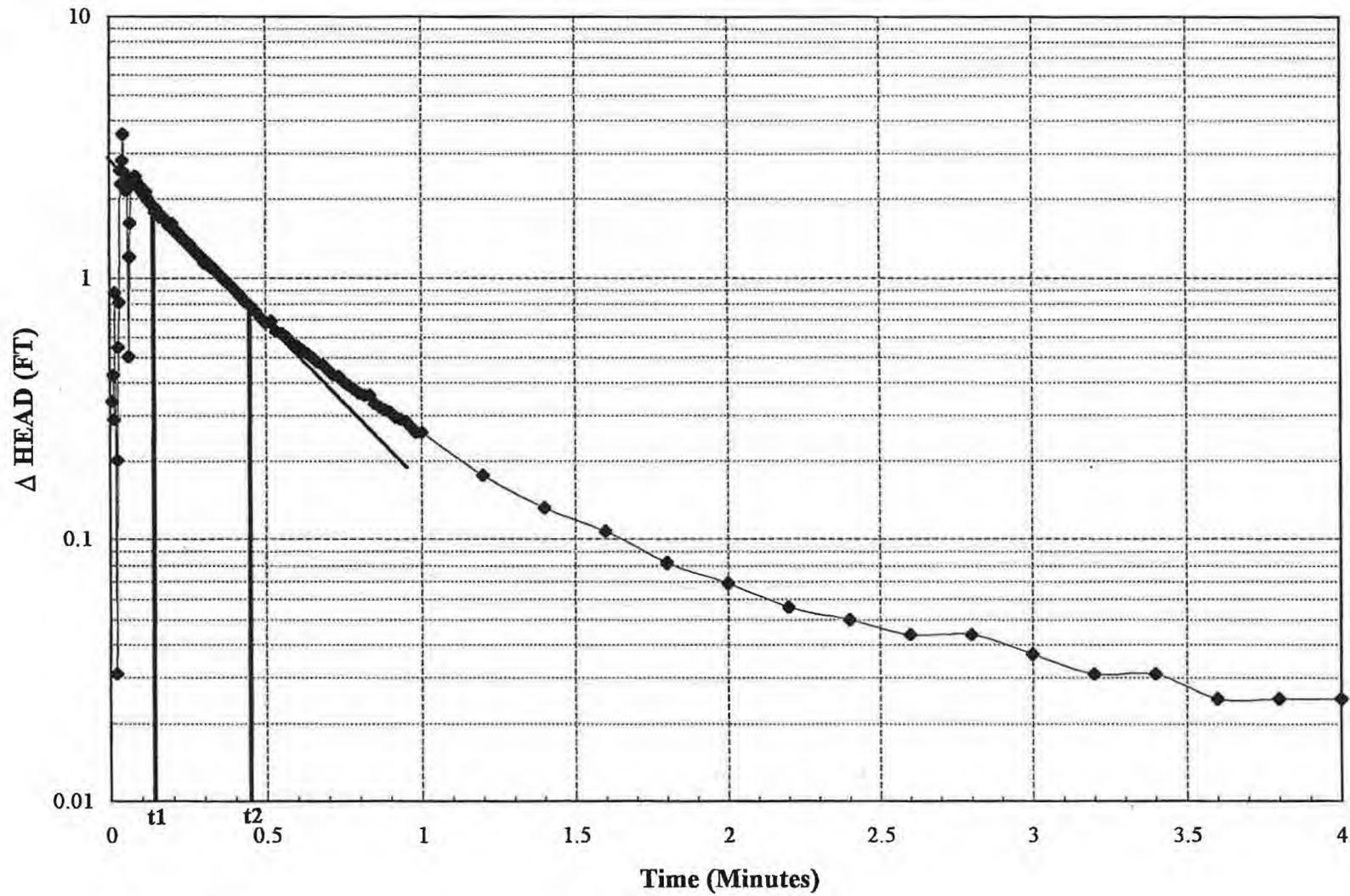
Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.1466	1.597	1.597
0.15	1.357	1.357
0.1533	1.786	1.786
0.1566	2.083	2.083
0.16	1.729	1.729
0.1633	1.483	1.483
0.1666	1.635	1.635
0.17	1.609	1.609
0.1733	1.363	1.363
0.1766	1.376	1.376
0.18	1.319	1.319
0.1833	1.559	1.559
0.1866	1.445	1.445
0.19	1.452	1.452
0.1933	1.489	1.489
0.1966	1.338	1.338
0.2	1.496	1.496
0.2033	1.363	1.363
0.2066	1.414	1.414
0.21	1.401	1.401
0.2133	1.489	1.489
0.2166	1.344	1.344
0.22	1.388	1.388
0.2233	1.193	1.193
0.2266	1.325	1.325
0.23	1.287	1.287
0.2333	1.25	1.25
0.2366	1.281	1.281
0.24	1.243	1.243
0.2433	1.268	1.268
0.2466	1.25	1.25
0.25	1.231	1.231
0.2533	1.224	1.224
0.2566	1.218	1.218
0.26	1.205	1.205
0.2633	1.193	1.193
0.2666	1.18	1.18
0.27	1.174	1.174
0.2733	1.161	1.161
0.2766	1.155	1.155
0.28	1.142	1.142
0.2833	1.13	1.13
0.2866	1.123	1.123
0.29	1.111	1.111
0.2933	1.104	1.104
0.2966	1.098	1.098
0.3	1.085	1.085

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.3033	1.073	1.073
0.3066	1.066	1.066
0.31	1.06	1.06
0.3133	1.047	1.047
0.3166	1.041	1.041
0.32	1.035	1.035
0.3233	1.022	1.022
0.3266	1.016	1.016
0.33	1.01	1.01
0.3333	0.997	0.997
0.35	0.953	0.953
0.3666	0.915	0.915
0.3833	0.877	0.877
0.4	0.839	0.839
0.4166	0.801	0.801
0.4333	0.77	0.77
0.45	0.738	0.738
0.4666	0.707	0.707
0.4833	0.681	0.681
0.5	0.656	0.656
0.5166	0.631	0.631
0.5333	0.606	0.606
0.55	0.58	0.58
0.5666	0.561	0.561
0.5833	0.542	0.542
0.6	0.524	0.524
0.6166	0.505	0.505
0.6333	0.486	0.486
0.65	0.467	0.467
0.6666	0.454	0.454
0.6833	0.435	0.435
0.7	0.416	0.416
0.7166	0.404	0.404
0.7333	0.397	0.397
0.75	0.378	0.378
0.7666	0.366	0.366
0.7833	0.359	0.359
0.8	0.347	0.347
0.8166	0.334	0.334
0.8333	0.321	0.321
0.85	0.315	0.315
0.8666	0.303	0.303
0.8833	0.296	0.296
0.9	0.284	0.284
0.9166	0.277	0.277
0.9333	0.271	0.271
0.95	0.258	0.258

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.9666	0.252	0.252
0.9833	0.246	0.246
1	0.239	0.239
1.2	0.164	0.164
1.4	0.126	0.126
1.6	0.101	0.101
1.8	0.082	0.082
2	0.069	0.069
2.2	0.063	0.063
2.4	0.05	0.05
2.6	0.05	0.05
2.8	0.044	0.044
3	0.037	0.037
3.2	0.037	0.037
3.4	0.037	0.037
3.6	0.037	0.037
3.8	0.037	0.037
4	0.031	0.031
4.2	0.037	0.037
4.4	0.031	0.031
4.6	0.037	0.037
4.8	0.031	0.031
5	0.031	0.031
5.2	0.031	0.031
5.4	0.037	0.037
5.6	0.037	0.037
5.8	0.037	0.037
6	0.037	0.037
6.2	0.025	0.025
6.4	0.018	0.018
6.6	0.012	0.012
6.8	0.012	0.012
7	0.006	0.006
7.2	0.006	0.006
7.4	0.006	0.006
7.6	0.006	0.006
7.8	0.006	0.006
8	0.006	0.006
8.2	0	0
8.4	0	0
8.6	0	0
8.8	0	0
9	0	0
9.2	0	0
9.4	0	0
9.6	0	0
9.8	0	0

Time (min)	ΔH (ft)	Absolute
		Value ΔH (ft)
10	0	0

G6M-96-22A RISING HEAD PERMEABILITY TEST



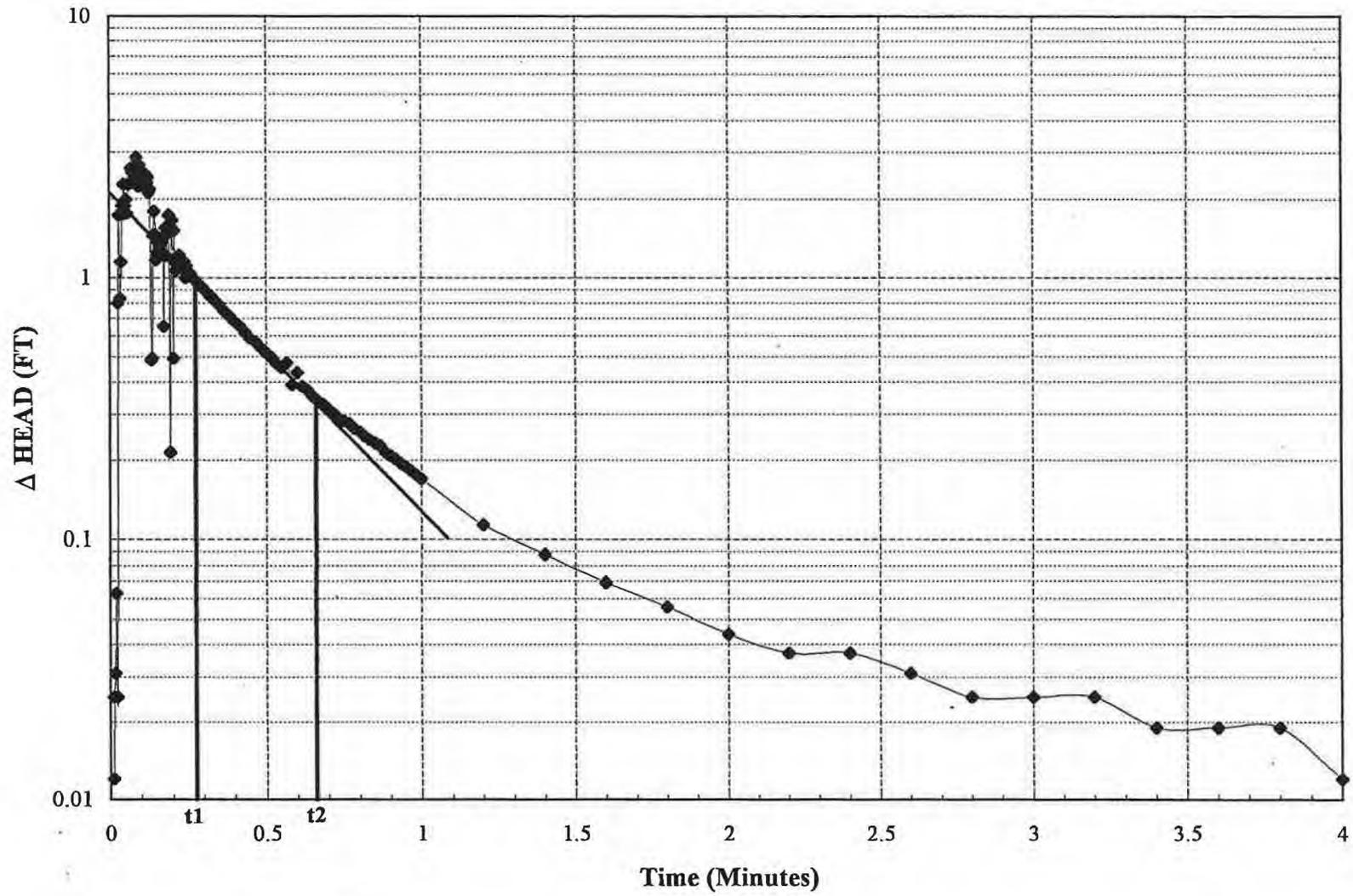
G6M-96-22A		
RISING HEAD TEST		
Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0	0	0
0.0033	0	0
0.0066	0.34	0.34
0.01	0.429	0.429
0.0133	0.29	0.29
0.0166	0.883	0.883
0.02	-0.031	0.031
0.0233	-0.202	0.202
0.0266	-0.549	0.549
0.03	-0.814	0.814
0.0333	-2.582	2.582
0.0366	-2.291	2.291
0.04	-2.821	2.821
0.0433	-3.547	3.547
0.0466	-2.544	2.544
0.05	-2.272	2.272
0.0533	-2.152	2.152
0.0566	-2.398	2.398
0.06	-0.505	0.505
0.0633	-1.199	1.199
0.0666	-1.616	1.616
0.07	-2.272	2.272
0.0733	-2.323	2.323
0.0766	-2.405	2.405
0.08	-2.449	2.449
0.0833	-2.449	2.449
0.0866	-2.342	2.342
0.09	-2.285	2.285
0.0933	-2.234	2.234
0.0966	-2.19	2.19
0.1	-2.241	2.241
0.1033	-2.146	2.146
0.1066	-2.133	2.133
0.11	-2.083	2.083
0.1133	-2.058	2.058
0.1166	-2.127	2.127
0.12	-2.02	2.02
0.1233	-1.982	1.982
0.1266	-1.963	1.963
0.13	-1.938	1.938
0.1333	-1.919	1.919
0.1366	-1.9	1.9
0.14	-1.887	1.887
0.1433	-1.849	1.849

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.1466	-1.78	1.78
0.15	-1.83	1.83
0.1533	-1.786	1.786
0.1566	-1.78	1.78
0.16	-1.755	1.755
0.1633	-1.691	1.691
0.1666	-1.729	1.729
0.17	-1.704	1.704
0.1733	-1.679	1.679
0.1766	-1.672	1.672
0.18	-1.66	1.66
0.1833	-1.635	1.635
0.1866	-1.622	1.622
0.19	-1.584	1.584
0.1933	-1.597	1.597
0.1966	-1.571	1.571
0.2	-1.609	1.609
0.2033	-1.54	1.54
0.2066	-1.521	1.521
0.21	-1.502	1.502
0.2133	-1.496	1.496
0.2166	-1.483	1.483
0.22	-1.489	1.489
0.2233	-1.452	1.452
0.2266	-1.445	1.445
0.23	-1.426	1.426
0.2333	-1.407	1.407
0.2366	-1.407	1.407
0.24	-1.388	1.388
0.2433	-1.376	1.376
0.2466	-1.363	1.363
0.25	-1.351	1.351
0.2533	-1.338	1.338
0.2566	-1.325	1.325
0.26	-1.332	1.332
0.2633	-1.3	1.3
0.2666	-1.287	1.287
0.27	-1.281	1.281
0.2733	-1.269	1.269
0.2766	-1.25	1.25
0.28	-1.243	1.243
0.2833	-1.231	1.231
0.2866	-1.218	1.218
0.29	-1.212	1.212
0.2933	-1.199	1.199
0.2966	-1.186	1.186
0.3	-1.18	1.18

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.3033	-1.142	1.142
0.3066	-1.161	1.161
0.31	-1.149	1.149
0.3133	-1.136	1.136
0.3166	-1.13	1.13
0.32	-1.111	1.111
0.3233	-1.111	1.111
0.3266	-1.098	1.098
0.33	-1.092	1.092
0.3333	-1.085	1.085
0.35	-1.035	1.035
0.3666	-0.991	0.991
0.3833	-0.947	0.947
0.4	-0.909	0.909
0.4166	-0.864	0.864
0.4333	-0.82	0.82
0.45	-0.789	0.789
0.4666	-0.751	0.751
0.4833	-0.713	0.713
0.5	-0.681	0.681
0.5166	-0.688	0.688
0.5333	-0.631	0.631
0.55	-0.618	0.618
0.5666	-0.599	0.599
0.5833	-0.574	0.574
0.6	-0.555	0.555
0.6166	-0.536	0.536
0.6333	-0.517	0.517
0.65	-0.498	0.498
0.6666	-0.479	0.479
0.6833	-0.467	0.467
0.7	-0.448	0.448
0.7166	-0.429	0.429
0.7333	-0.423	0.423
0.75	-0.404	0.404
0.7666	-0.391	0.391
0.7833	-0.378	0.378
0.8	-0.366	0.366
0.8166	-0.359	0.359
0.8333	-0.359	0.359
0.85	-0.334	0.334
0.8666	-0.322	0.322
0.8833	-0.315	0.315
0.9	-0.309	0.309
0.9166	-0.296	0.296
0.9333	-0.29	0.29
0.95	-0.284	0.284

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.9666	-0.271	0.271
0.9833	-0.258	0.258
1	-0.258	0.258
1.2	-0.176	0.176
1.4	-0.132	0.132
1.6	-0.107	0.107
1.8	-0.082	0.082
2	-0.069	0.069
2.2	-0.056	0.056
2.4	-0.05	0.05
2.6	-0.044	0.044
2.8	-0.044	0.044
3	-0.037	0.037
3.2	-0.031	0.031
3.4	-0.031	0.031
3.6	-0.025	0.025
3.8	-0.025	0.025
4	-0.025	0.025
4.2	-0.025	0.025
4.4	-0.019	0.019
4.6	-0.019	0.019
4.8	-0.019	0.019
5	-0.019	0.019
5.2	-0.006	0.006
5.4	-0.012	0.012
5.6	-0.012	0.012
5.8	-0.012	0.012
6	-0.012	0.012
6.2	-0.012	0.012
6.4	-0.012	0.012
6.6	-0.012	0.012
6.8	-0.012	0.012
7	-0.006	0.006
7.2	-0.012	0.012
7.4	-0.012	0.012

G6M-96-22B FALLING HEAD PERMEABILITY TEST



G6M-96-22B FALLING HEAD TEST		
Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0	0.006	0.006
0.0033	0	0
0.0066	0.031	0.031
0.01	0.012	0.012
0.0133	0.025	0.025
0.0166	0.031	0.031
0.02	0.063	0.063
0.0233	0.025	0.025
0.0266	0.801	0.801
0.03	1.742	1.742
0.0333	0.833	0.833
0.0366	1.155	1.155
0.04	1.887	1.887
0.0433	1.748	1.748
0.0466	2.266	2.266
0.05	1.887	1.887
0.0533	1.988	1.988
0.0566	1.767	1.767
0.06	2.272	2.272
0.0633	2.266	2.266
0.0666	2.316	2.316
0.07	2.607	2.607
0.0733	2.518	2.518
0.0766	2.493	2.493
0.08	2.468	2.468
0.0833	2.582	2.582
0.0866	2.853	2.853
0.09	2.594	2.594
0.0933	2.228	2.228
0.0966	2.689	2.689
0.1	2.493	2.493
0.1033	2.481	2.481
0.1066	2.354	2.354
0.11	2.43	2.43
0.1133	2.481	2.481
0.1166	2.436	2.436
0.12	2.297	2.297
0.1233	2.411	2.411
0.1266	2.108	2.108
0.13	2.171	2.171
0.1333	0.486	0.486
0.1366	0.492	0.492
0.14	1.452	1.452
0.1433	1.799	1.799

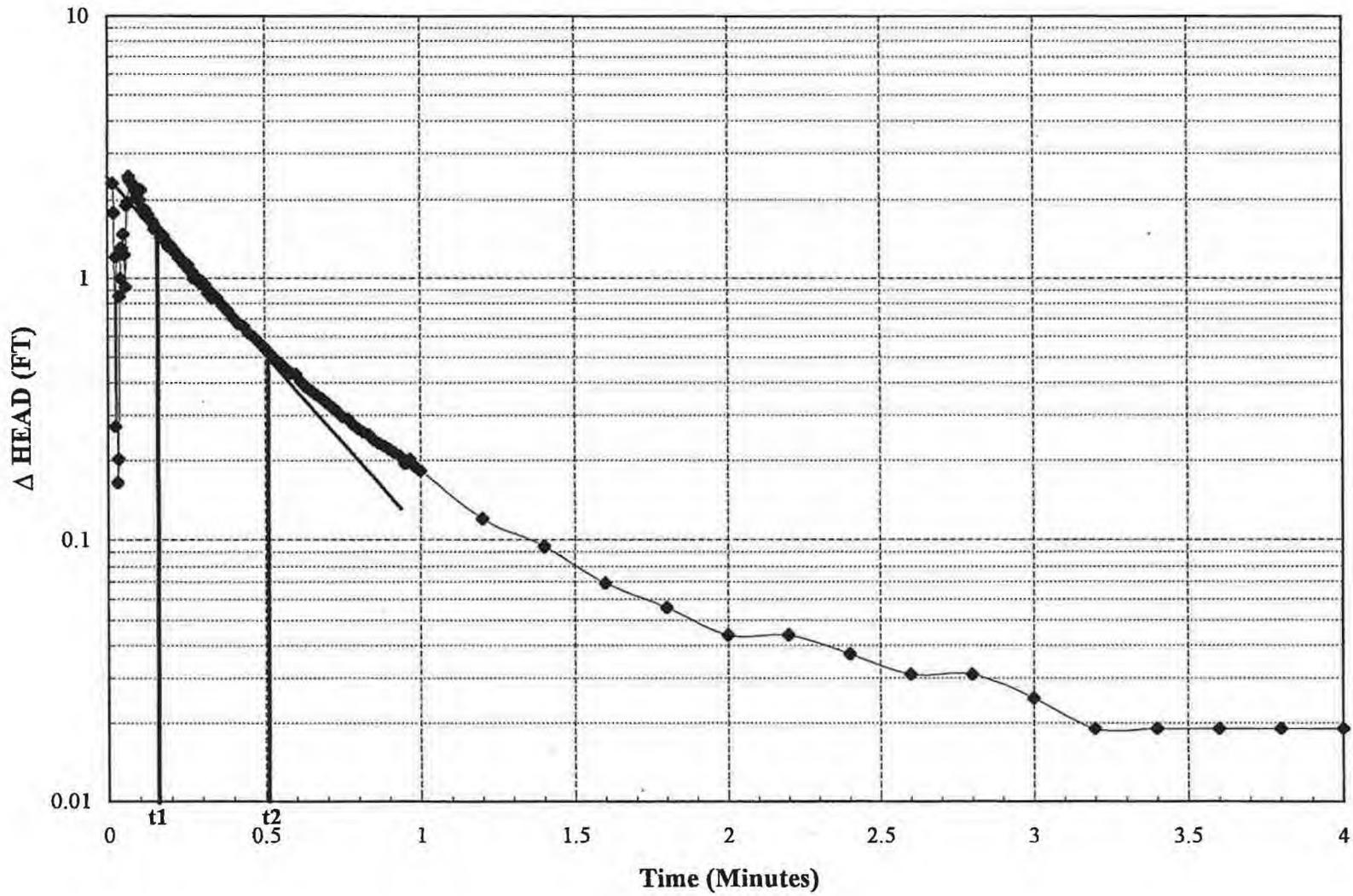
Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.1466	1.47	1.47
0.15	1.167	1.167
0.1533	1.243	1.243
0.1566	1.363	1.363
0.16	1.294	1.294
0.1633	1.344	1.344
0.1666	1.363	1.363
0.17	1.388	1.388
0.1733	0.65	0.65
0.1766	1.439	1.439
0.18	1.553	1.553
0.1833	1.218	1.218
0.1866	1.565	1.565
0.19	1.736	1.736
0.1933	0.214	0.214
0.1966	1.571	1.571
0.2	1.66	1.66
0.2033	0.492	0.492
0.2066	1.515	1.515
0.21	1.149	1.149
0.2133	1.066	1.066
0.2166	1.085	1.085
0.22	1.117	1.117
0.2233	1.224	1.224
0.2266	1.111	1.111
0.23	1.174	1.174
0.2333	1.111	1.111
0.2366	1.104	1.104
0.24	1.155	1.155
0.2433	1.003	1.003
0.2466	1.111	1.111
0.25	1.048	1.048
0.2533	1.048	1.048
0.2566	1.041	1.041
0.26	1.022	1.022
0.2633	1.016	1.016
0.2666	1.003	1.003
0.27	0.991	0.991
0.2733	0.984	0.984
0.2766	0.972	0.972
0.28	0.965	0.965
0.2833	0.953	0.953
0.2866	0.947	0.947
0.29	0.934	0.934
0.2933	0.928	0.928
0.2966	0.921	0.921
0.3	0.909	0.909

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.3033	0.902	0.902
0.3066	0.89	0.89
0.31	0.883	0.883
0.3133	0.877	0.877
0.3166	0.871	0.871
0.32	0.858	0.858
0.3233	0.852	0.852
0.3266	0.846	0.846
0.33	0.833	0.833
0.3333	0.827	0.827
0.35	0.789	0.789
0.3666	0.751	0.751
0.3833	0.713	0.713
0.4	0.681	0.681
0.4166	0.65	0.65
0.4333	0.618	0.618
0.45	0.587	0.587
0.4666	0.568	0.568
0.4833	0.542	0.542
0.5	0.517	0.517
0.5166	0.498	0.498
0.5333	0.473	0.473
0.55	0.454	0.454
0.5666	0.473	0.473
0.5833	0.391	0.391
0.6	0.435	0.435
0.6166	0.385	0.385
0.6333	0.372	0.372
0.65	0.353	0.353
0.6666	0.34	0.34
0.6833	0.328	0.328
0.7	0.315	0.315
0.7166	0.303	0.303
0.7333	0.29	0.29
0.75	0.284	0.284
0.7666	0.277	0.277
0.7833	0.265	0.265
0.8	0.258	0.258
0.8166	0.246	0.246
0.8333	0.239	0.239
0.85	0.233	0.233
0.8666	0.227	0.227
0.8833	0.214	0.214
0.9	0.208	0.208
0.9166	0.202	0.202
0.9333	0.195	0.195
0.95	0.189	0.189

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.9666	0.183	0.183
0.9833	0.176	0.176
1	0.17	0.17
1.2	0.113	0.113
1.4	0.088	0.088
1.6	0.069	0.069
1.8	0.056	0.056
2	0.044	0.044
2.2	0.037	0.037
2.4	0.037	0.037
2.6	0.031	0.031
2.8	0.025	0.025
3	0.025	0.025
3.2	0.025	0.025
3.4	0.019	0.019
3.6	0.019	0.019
3.8	0.019	0.019
4	0.012	0.012
4.2	0.019	0.019
4.4	0.012	0.012
4.6	0.012	0.012
4.8	0.012	0.012
5	0.012	0.012
5.2	0.006	0.006
5.4	0.012	0.012
5.6	0.006	0.006
5.8	0.006	0.006
6	0.006	0.006
6.2	0.006	0.006
6.4	0.006	0.006
6.6	0.006	0.006
6.8	0.006	0.006
7	0.006	0.006
7.2	0.006	0.006
7.4	0.006	0.006
7.6	0.006	0.006
7.8	0.006	0.006
8	0.006	0.006
8.2	0.012	0.012
8.4	0.006	0.006
8.6	0.012	0.012
8.8	0.006	0.006
9	0.006	0.006
9.2	0.006	0.006
9.4	0.006	0.006
9.6	0.006	0.006
9.8	0.006	0.006

Time (min)	ΔH (ft)	Absolute
		Value ΔH (ft)
10	0.006	0.006

G6M-96-22B RISING HEAD PERMEABILITY TEST



**G6M-96-22B
RISING HEAD TEST**

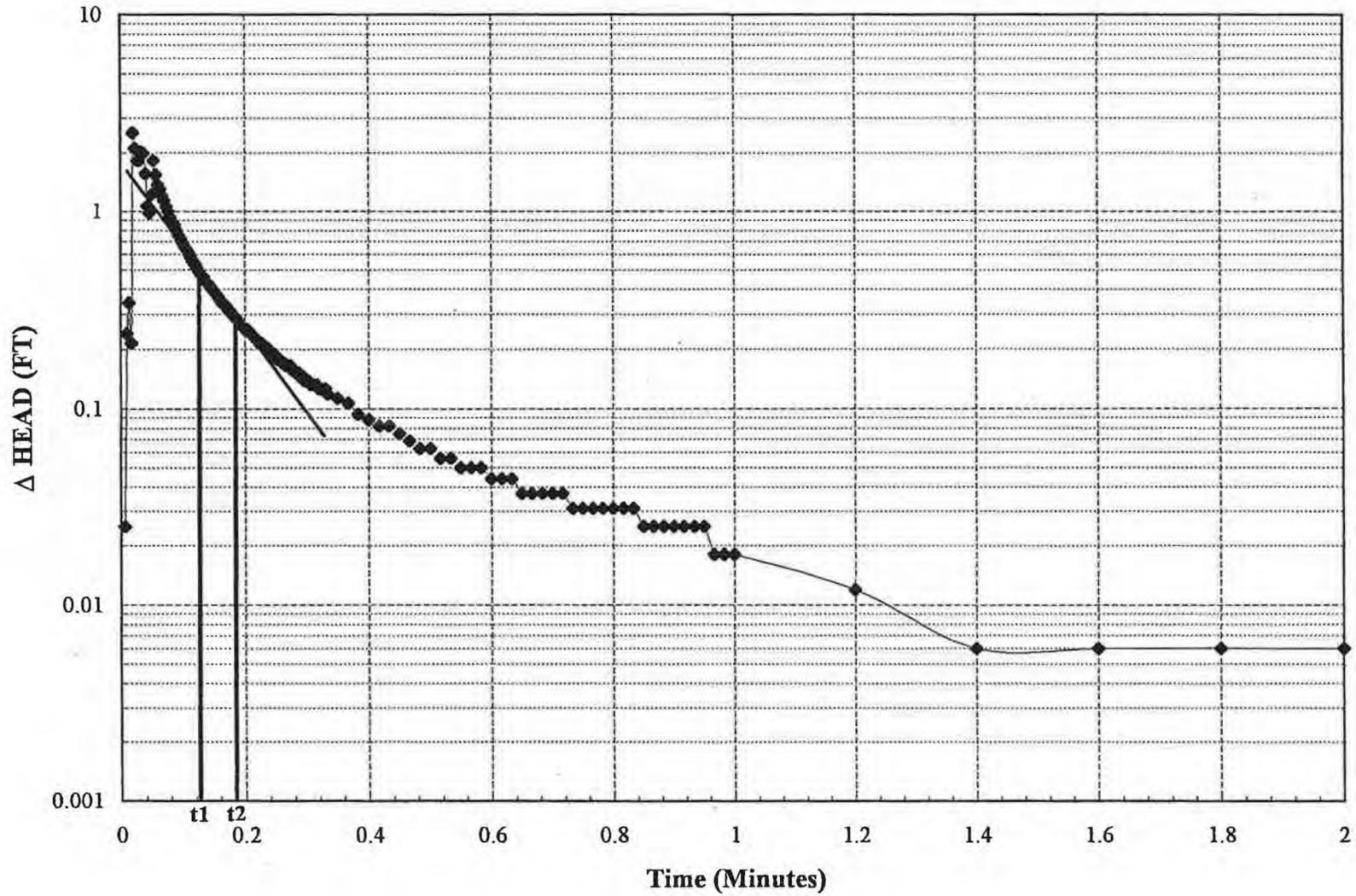
Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0	0	0
0.0033	0	0
0.0066	0	0
0.01	0	0
0.0133	-0.019	0.019
0.0166	-2.316	2.316
0.02	-1.792	1.792
0.0233	-0.271	0.271
0.0266	-1.212	1.212
0.03	-0.164	0.164
0.0333	-0.202	0.202
0.0366	-0.852	0.852
0.04	-1.003	1.003
0.0433	-1.313	1.313
0.0466	-1.306	1.306
0.05	-1.483	1.483
0.0533	-1.231	1.231
0.0566	-0.928	0.928
0.06	-1.906	1.906
0.0633	-1.957	1.957
0.0666	-2.449	2.449
0.07	-2.392	2.392
0.0733	-2.361	2.361
0.0766	-2.335	2.335
0.08	-2.298	2.298
0.0833	-2.26	2.26
0.0866	-2.222	2.222
0.09	-2.146	2.146
0.0933	-2.083	2.083
0.0966	-2.07	2.07
0.1	-1.988	1.988
0.1033	-2.001	2.001
0.1066	-2.184	2.184
0.11	-1.862	1.862
0.1133	-1.843	1.843
0.1166	-1.811	1.811
0.12	-1.83	1.83
0.1233	-1.748	1.748
0.1266	-1.774	1.774
0.13	-1.767	1.767
0.1333	-1.698	1.698
0.1366	-1.685	1.685
0.14	-1.66	1.66
0.1433	-1.66	1.66

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.1466	-1.628	1.628
0.15	-1.553	1.553
0.1533	-1.578	1.578
0.1566	-1.559	1.559
0.16	-1.54	1.54
0.1633	-1.515	1.515
0.1666	-1.508	1.508
0.17	-1.445	1.445
0.1733	-1.464	1.464
0.1766	-1.433	1.433
0.18	-1.458	1.458
0.1833	-1.401	1.401
0.1866	-1.388	1.388
0.19	-1.382	1.382
0.1933	-1.332	1.332
0.1966	-1.351	1.351
0.2	-1.344	1.344
0.2033	-1.325	1.325
0.2066	-1.3	1.3
0.21	-1.3	1.3
0.2133	-1.269	1.269
0.2166	-1.269	1.269
0.22	-1.243	1.243
0.2233	-1.231	1.231
0.2266	-1.205	1.205
0.23	-1.205	1.205
0.2333	-1.186	1.186
0.2366	-1.186	1.186
0.24	-1.167	1.167
0.2433	-1.149	1.149
0.2466	-1.13	1.13
0.25	-1.13	1.13
0.2533	-1.111	1.111
0.2566	-1.123	1.123
0.26	-1.085	1.085
0.2633	-1.079	1.079
0.2666	-1.06	1.06
0.27	-1.06	1.06
0.2733	-1.003	1.003
0.2766	-1.022	1.022
0.28	-1.022	1.022
0.2833	-1.01	1.01
0.2866	-1.003	1.003
0.29	-0.997	0.997
0.2933	-0.978	0.978
0.2966	-0.953	0.953
0.3	-0.978	0.978

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.3033	-0.959	0.959
0.3066	-0.947	0.947
0.31	-0.947	0.947
0.3133	-0.928	0.928
0.3166	-0.915	0.915
0.32	-0.877	0.877
0.3233	-0.902	0.902
0.3266	-0.883	0.883
0.33	-0.883	0.883
0.3333	-0.839	0.839
0.35	-0.839	0.839
0.3666	-0.789	0.789
0.3833	-0.751	0.751
0.4	-0.707	0.707
0.4166	-0.669	0.669
0.4333	-0.656	0.656
0.45	-0.618	0.618
0.4666	-0.593	0.593
0.4833	-0.568	0.568
0.5	-0.542	0.542
0.5166	-0.517	0.517
0.5333	-0.492	0.492
0.55	-0.473	0.473
0.5666	-0.454	0.454
0.5833	-0.435	0.435
0.6	-0.429	0.429
0.6166	-0.404	0.404
0.6333	-0.385	0.385
0.65	-0.372	0.372
0.6666	-0.359	0.359
0.6833	-0.347	0.347
0.7	-0.334	0.334
0.7166	-0.322	0.322
0.7333	-0.309	0.309
0.75	-0.296	0.296
0.7666	-0.29	0.29
0.7833	-0.277	0.277
0.8	-0.265	0.265
0.8166	-0.258	0.258
0.8333	-0.252	0.252
0.85	-0.24	0.24
0.8666	-0.233	0.233
0.8833	-0.227	0.227
0.9	-0.221	0.221
0.9166	-0.214	0.214
0.9333	-0.208	0.208
0.95	-0.195	0.195

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.9666	-0.202	0.202
0.9833	-0.189	0.189
1	-0.183	0.183
1.2	-0.12	0.12
1.4	-0.094	0.094
1.6	-0.069	0.069
1.8	-0.056	0.056
2	-0.044	0.044
2.2	-0.044	0.044
2.4	-0.037	0.037
2.6	-0.031	0.031
2.8	-0.031	0.031
3	-0.025	0.025
3.2	-0.019	0.019
3.4	-0.019	0.019
3.6	-0.019	0.019
3.8	-0.019	0.019
4	-0.019	0.019
4.2	-0.019	0.019
4.4	-0.019	0.019
4.6	-0.012	0.012
4.8	-0.012	0.012
5	-0.012	0.012
5.2	-0.012	0.012
5.4	-0.012	0.012
5.6	-0.012	0.012
5.8	-0.012	0.012
6	-0.012	0.012

G6M-96-23B RISING HEAD PERMEABILITY TEST No. 1



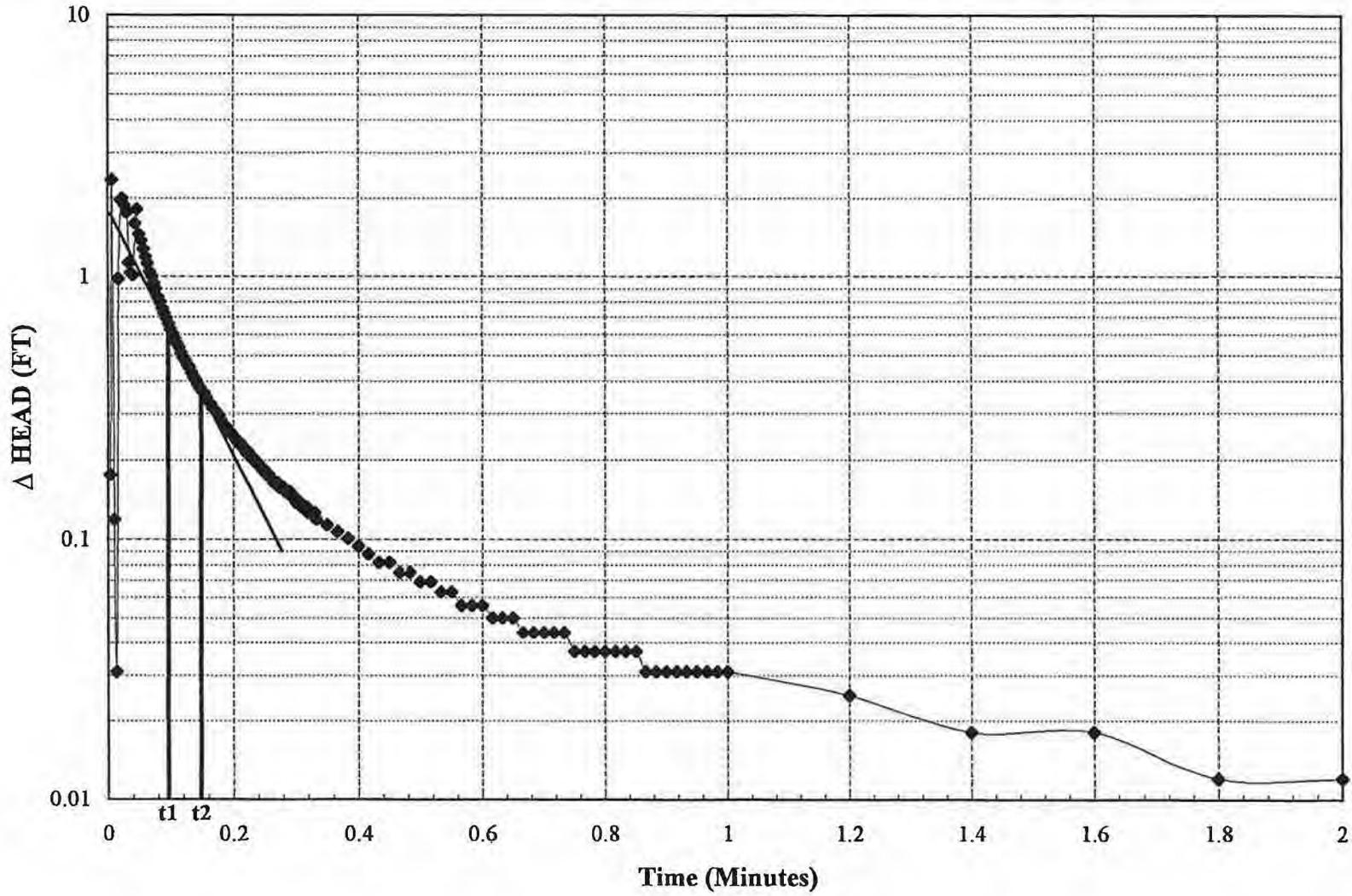
G6M-96-23A RISING HEAD TEST 1		
Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0	0	0
0.0033	0	0
0.0066	-0.025	0.025
0.01	-0.239	0.239
0.0133	0.34	0.34
0.0166	-0.214	0.214
0.02	-2.518	2.518
0.0233	-2.095	2.095
0.0266	-1.818	1.818
0.03	-1.805	1.805
0.0333	-2.013	2.013
0.0366	-1.975	1.975
0.04	-1.559	1.559
0.0433	-1.066	1.066
0.0466	-0.984	0.984
0.05	-1.218	1.218
0.0533	-1.818	1.818
0.0566	-1.54	1.54
0.06	-1.369	1.369
0.0633	-1.3	1.3
0.0666	-1.205	1.205
0.07	-1.136	1.136
0.0733	-1.06	1.06
0.0766	-1.003	1.003
0.08	-0.934	0.934
0.0833	-0.877	0.877
0.0866	-0.852	0.852
0.09	-0.801	0.801
0.0933	-0.757	0.757
0.0966	-0.726	0.726
0.1	-0.688	0.688
0.1033	-0.656	0.656
0.1066	-0.631	0.631
0.11	-0.606	0.606
0.1133	-0.58	0.58
0.1166	-0.555	0.555
0.12	-0.536	0.536
0.1233	-0.511	0.511
0.1266	-0.492	0.492
0.13	-0.473	0.473
0.1333	-0.46	0.46
0.1366	-0.441	0.441
0.14	-0.429	0.429
0.1433	-0.416	0.416

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.1466	-0.404	0.404
0.15	-0.391	0.391
0.1533	-0.378	0.378
0.1566	-0.366	0.366
0.16	-0.353	0.353
0.1633	-0.34	0.34
0.1666	-0.334	0.334
0.17	-0.328	0.328
0.1733	-0.315	0.315
0.1766	-0.309	0.309
0.18	-0.296	0.296
0.1833	-0.29	0.29
0.1866	-0.284	0.284
0.19	-0.277	0.277
0.1933	-0.265	0.265
0.1966	-0.258	0.258
0.2	-0.252	0.252
0.2033	-0.252	0.252
0.2066	-0.246	0.246
0.21	-0.239	0.239
0.2133	-0.233	0.233
0.2166	-0.227	0.227
0.22	-0.221	0.221
0.2233	-0.214	0.214
0.2266	-0.214	0.214
0.23	-0.208	0.208
0.2333	-0.202	0.202
0.2366	-0.202	0.202
0.24	-0.195	0.195
0.2433	-0.189	0.189
0.2466	-0.189	0.189
0.25	-0.183	0.183
0.2533	-0.176	0.176
0.2566	-0.176	0.176
0.26	-0.17	0.17
0.2633	-0.17	0.17
0.2666	-0.164	0.164
0.27	-0.164	0.164
0.2733	-0.164	0.164
0.2766	-0.157	0.157
0.28	-0.157	0.157
0.2833	-0.151	0.151
0.2866	-0.151	0.151
0.29	-0.145	0.145
0.2933	-0.145	0.145
0.2966	-0.138	0.138
0.3	-0.138	0.138

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.3033	-0.138	0.138
0.3066	-0.132	0.132
0.31	-0.132	0.132
0.3133	-0.132	0.132
0.3166	-0.132	0.132
0.32	-0.126	0.126
0.3233	-0.126	0.126
0.3266	-0.126	0.126
0.33	-0.126	0.126
0.3333	-0.119	0.119
0.35	-0.113	0.113
0.3666	-0.107	0.107
0.3833	-0.094	0.094
0.4	-0.088	0.088
0.4166	-0.082	0.082
0.4333	-0.082	0.082
0.45	-0.075	0.075
0.4666	-0.069	0.069
0.4833	-0.063	0.063
0.5	-0.063	0.063
0.5166	-0.056	0.056
0.5333	-0.056	0.056
0.55	-0.05	0.05
0.5666	-0.05	0.05
0.5833	-0.05	0.05
0.6	-0.044	0.044
0.6166	-0.044	0.044
0.6333	-0.044	0.044
0.65	-0.037	0.037
0.6666	-0.037	0.037
0.6833	-0.037	0.037
0.7	-0.037	0.037
0.7166	-0.037	0.037
0.7333	-0.031	0.031
0.75	-0.031	0.031
0.7666	-0.031	0.031
0.7833	-0.031	0.031
0.8	-0.031	0.031
0.8166	-0.031	0.031
0.8333	-0.031	0.031
0.85	-0.025	0.025
0.8666	-0.025	0.025
0.8833	-0.025	0.025
0.9	-0.025	0.025
0.9166	-0.025	0.025
0.9333	-0.025	0.025
0.95	-0.025	0.025

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.9666	-0.018	0.018
0.9833	-0.018	0.018
1	-0.018	0.018
1.2	-0.012	0.012
1.4	-0.006	0.006
1.6	-0.006	0.006
1.8	-0.006	0.006
2	-0.006	0.006
2.2	0	0
2.4	0	0
2.6	0	0
2.8	0	0
3	0	0
3.2	0	0
3.4	0	0
3.6	0	0
3.8	0	0
4	0	0
4.2	0	0
4.4	0	0
4.6	-0.006	0.006
4.8	-0.006	0.006
5	-0.006	0.006
5.2	-0.006	0.006
5.4	-0.006	0.006
5.6	-0.006	0.006

G6M-96-23A RISING HEAD PERMEABILITY TEST No. 2



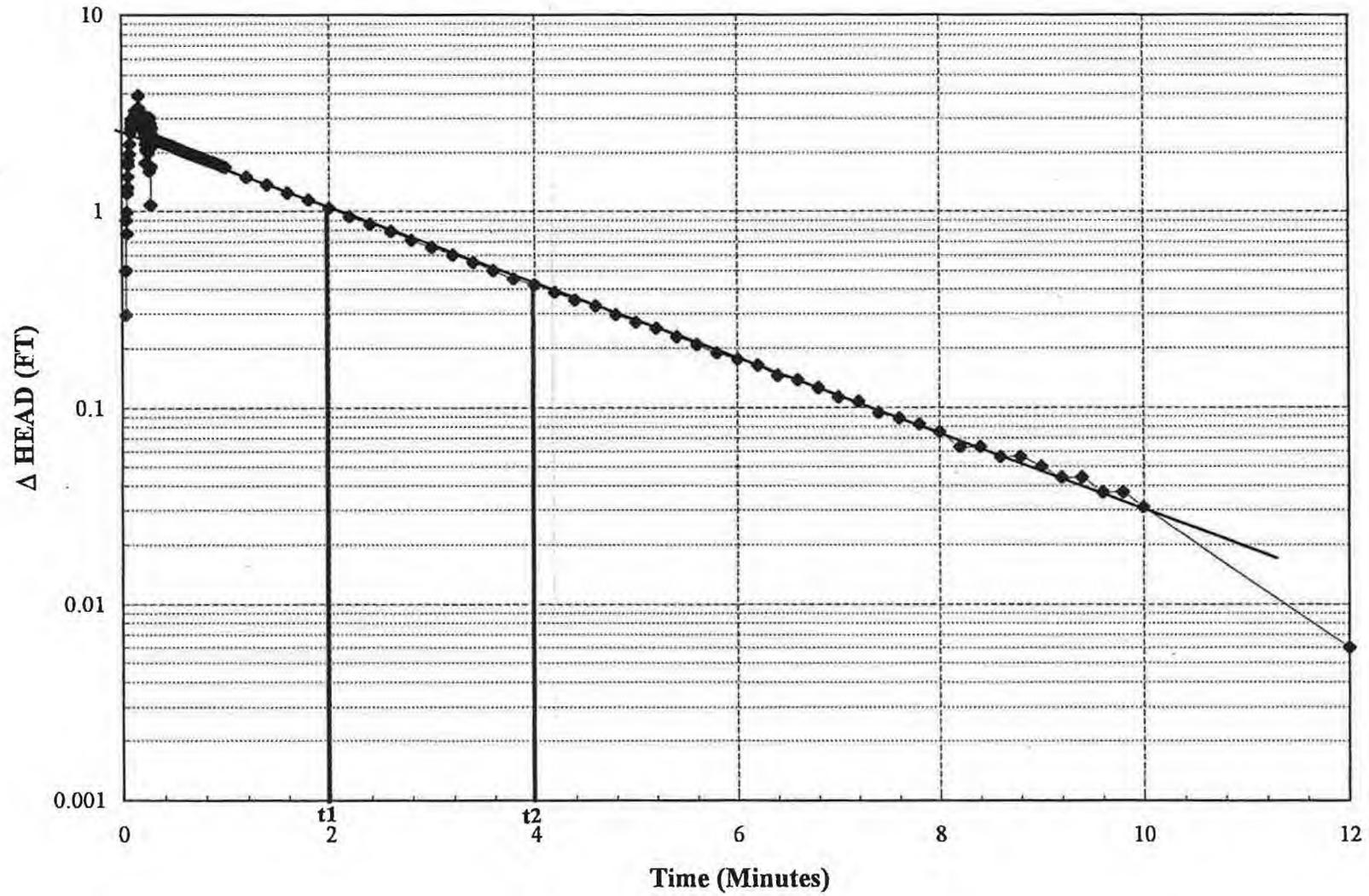
G6M-96-23A		
RISING HEAD TEST 2		
Time (min)	ΔH (ft)	Absolute
		Value ΔH (ft)
0	0	0
0.0033	-0.176	0.176
0.0066	-2.354	2.354
0.01	-0.119	0.119
0.0133	0.031	0.031
0.0166	-0.984	0.984
0.02	-1.969	1.969
0.0233	-2.001	2.001
0.0266	-1.881	1.881
0.03	-1.761	1.761
0.0333	-1.13	1.13
0.0366	-1.029	1.029
0.04	-1.016	1.016
0.0433	-1.603	1.603
0.0466	-1.811	1.811
0.05	-1.452	1.452
0.0533	-1.369	1.369
0.0566	-1.275	1.275
0.06	-1.193	1.193
0.0633	-1.123	1.123
0.0666	-1.047	1.047
0.07	-1.003	1.003
0.0733	-0.946	0.946
0.0766	-0.902	0.902
0.08	-0.839	0.839
0.0833	-0.801	0.801
0.0866	-0.757	0.757
0.09	-0.726	0.726
0.0933	-0.694	0.694
0.0966	-0.662	0.662
0.099	-0.631	0.631
0.1033	-0.606	0.606
0.1066	-0.58	0.58
0.11	-0.555	0.555
0.1133	-0.536	0.536
0.1166	-0.511	0.511
0.12	-0.492	0.492
0.1233	-0.479	0.479
0.1266	-0.46	0.46
0.13	-0.448	0.448
0.1333	-0.429	0.429
0.1366	-0.416	0.416
0.14	-0.404	0.404
0.1433	-0.391	0.391

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.1466	-0.378	0.378
0.15	-0.366	0.366
0.1533	-0.359	0.359
0.1566	-0.347	0.347
0.16	-0.334	0.334
0.1633	-0.328	0.328
0.1666	-0.315	0.315
0.17	-0.309	0.309
0.1733	-0.303	0.303
0.1766	-0.296	0.296
0.18	-0.284	0.284
0.1833	-0.277	0.277
0.1866	-0.271	0.271
0.19	-0.265	0.265
0.1933	-0.258	0.258
0.1966	-0.252	0.252
0.2	-0.246	0.246
0.2033	-0.239	0.239
0.2066	-0.233	0.233
0.21	-0.233	0.233
0.2133	-0.227	0.227
0.2166	-0.221	0.221
0.22	-0.214	0.214
0.2233	-0.214	0.214
0.2266	-0.208	0.208
0.23	-0.202	0.202
0.2333	-0.202	0.202
0.2366	-0.195	0.195
0.24	-0.195	0.195
0.2433	-0.189	0.189
0.2466	-0.183	0.183
0.25	-0.183	0.183
0.2533	-0.176	0.176
0.2566	-0.176	0.176
0.26	-0.17	0.17
0.2633	-0.164	0.164
0.2666	-0.164	0.164
0.27	-0.164	0.164
0.2733	-0.157	0.157
0.2766	-0.157	0.157
0.28	-0.157	0.157
0.2833	-0.151	0.151
0.2866	-0.151	0.151
0.29	-0.151	0.151
0.2933	-0.145	0.145
0.2966	-0.145	0.145
0.3	-0.138	0.138

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.3033	-0.138	0.138
0.3066	-0.138	0.138
0.31	-0.132	0.132
0.3133	-0.132	0.132
0.3166	-0.132	0.132
0.32	-0.126	0.126
0.3233	-0.126	0.126
0.3266	-0.126	0.126
0.33	-0.126	0.126
0.3333	-0.119	0.119
0.35	-0.113	0.113
0.3666	-0.107	0.107
0.3833	-0.101	0.101
0.4	-0.094	0.094
0.4166	-0.088	0.088
0.4333	-0.082	0.082
0.45	-0.082	0.082
0.4666	-0.075	0.075
0.4833	-0.075	0.075
0.5	-0.069	0.069
0.5166	-0.069	0.069
0.5333	-0.063	0.063
0.55	-0.063	0.063
0.5666	-0.056	0.056
0.5833	-0.056	0.056
0.6	-0.056	0.056
0.6166	-0.05	0.05
0.6333	-0.05	0.05
0.65	-0.05	0.05
0.6666	-0.044	0.044
0.6833	-0.044	0.044
0.7	-0.044	0.044
0.7166	-0.044	0.044
0.7333	-0.044	0.044
0.75	-0.037	0.037
0.7666	-0.037	0.037
0.7833	-0.037	0.037
0.8	-0.037	0.037
0.8166	-0.037	0.037
0.8333	-0.037	0.037
0.85	-0.037	0.037
0.8666	-0.031	0.031
0.8833	-0.031	0.031
0.9	-0.031	0.031
0.9166	-0.031	0.031
0.9333	-0.031	0.031
0.95	-0.031	0.031

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.9666	-0.031	0.031
0.9833	-0.031	0.031
1	-0.031	0.031
1.2	-0.025	0.025
1.4	-0.018	0.018
1.6	-0.018	0.018
1.8	-0.012	0.012
2	-0.012	0.012
2.2	-0.012	0.012
2.4	-0.012	0.012
2.6	-0.012	0.012
2.8	-0.006	0.006

G6M-96-23B FALLING HEAD PERMEABILITY TEST



G6M-96-23B FALLING HEAD TEST		
Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0	0	0
0.0033	0.006	0.006
0.0066	0.006	0.006
0.01	0.006	0.006
0.0133	0	0
0.0166	0	0
0.02	0	0
0.0233	0.012	0.012
0.0266	0	0
0.03	0	0
0.0333	0.006	0.006
0.0366	0.296	0.296
0.04	0.498	0.498
0.0433	0.896	0.896
0.0466	0.77	0.77
0.05	0.991	0.991
0.0533	1.243	1.243
0.0566	1.325	1.325
0.06	1.508	1.508
0.0633	1.717	1.717
0.0666	1.818	1.818
0.07	1.963	1.963
0.0733	1.957	1.957
0.0766	2.196	2.196
0.08	2.215	2.215
0.0833	2.626	2.626
0.0866	2.512	2.512
0.09	2.765	2.765
0.0933	2.853	2.853
0.0966	2.941	2.941
0.1	2.708	2.708
0.1033	2.986	2.986
0.1066	2.765	2.765
0.11	3.011	3.011
0.1133	2.891	2.891
0.1166	2.979	2.979
0.12	2.664	2.664
0.1233	3.08	3.08
0.1266	3.282	3.282
0.13	2.878	2.878
0.1333	3.308	3.308
0.1366	3.15	3.15
0.14	2.885	2.885
0.1433	3.339	3.339

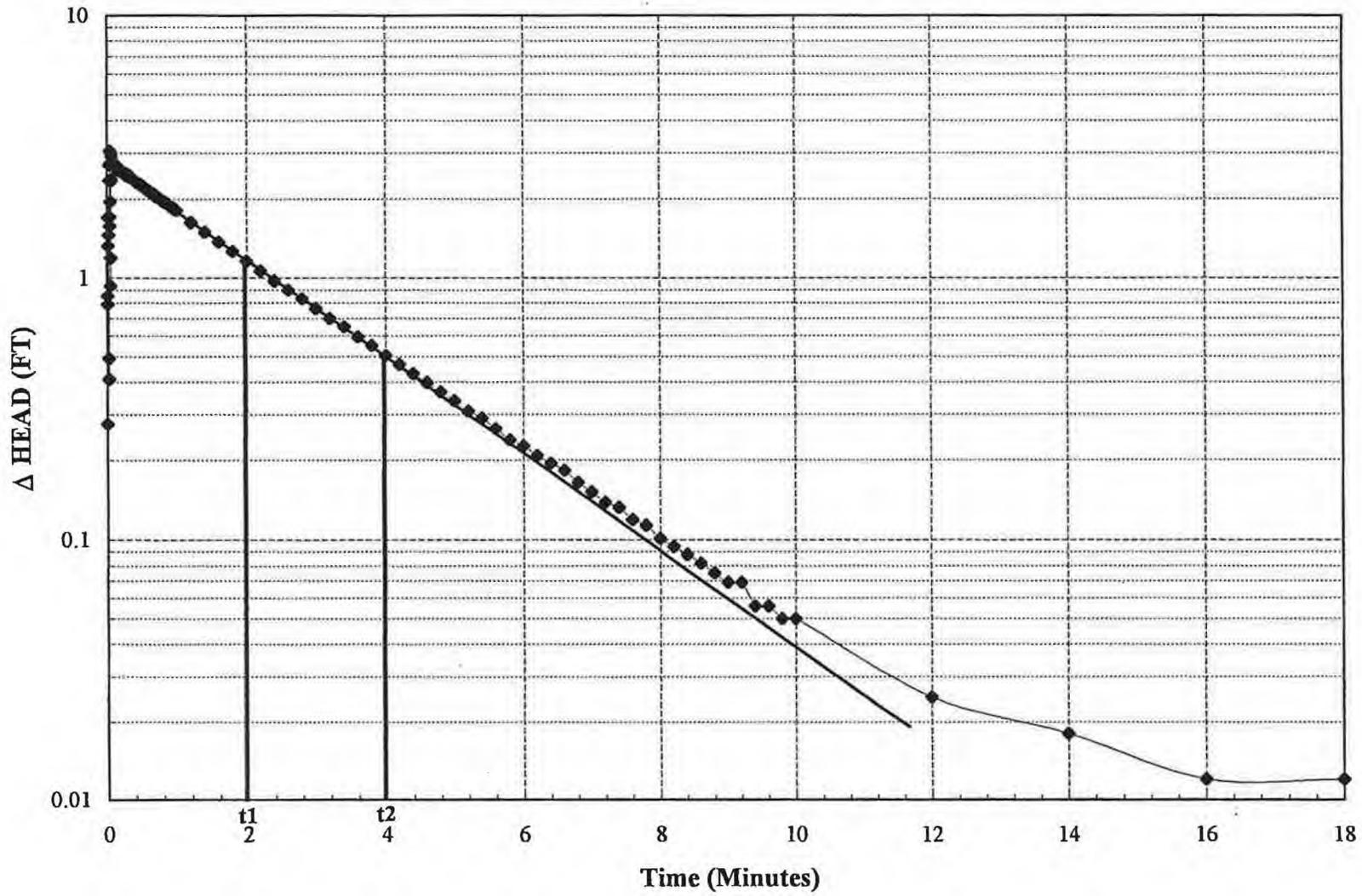
Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.1466	3.017	3.017
0.15	3.042	3.042
0.1533	3.03	3.03
0.1566	3.099	3.099
0.16	3.32	3.32
0.1633	3.907	3.907
0.1666	3.396	3.396
0.17	3.143	3.143
0.1733	3.118	3.118
0.1766	3.15	3.15
0.18	3.124	3.124
0.1833	3.036	3.036
0.1866	2.954	2.954
0.19	3.036	3.036
0.1933	2.834	2.834
0.1966	3.055	3.055
0.2	3.061	3.061
0.2033	3.181	3.181
0.2066	2.916	2.916
0.21	3.137	3.137
0.2133	2.897	2.897
0.2166	3.03	3.03
0.22	2.525	2.525
0.2233	2.638	2.638
0.2266	2.417	2.417
0.23	1.761	1.761
0.2333	2.209	2.209
0.2366	2.064	2.064
0.24	2.304	2.304
0.2433	2.436	2.436
0.2466	2.127	2.127
0.25	2.159	2.159
0.2533	2.563	2.563
0.2566	2.891	2.891
0.26	1.988	1.988
0.2633	2.752	2.752
0.2666	1.603	1.603
0.27	2.922	2.922
0.2733	3.005	3.005
0.2766	1.073	1.073
0.28	2.803	2.803
0.2833	2.613	2.613
0.2866	1.685	1.685
0.29	2.67	2.67
0.2933	2.159	2.159
0.2966	2.417	2.417
0.3	2.424	2.424

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.3033	2.215	2.215
0.3066	2.417	2.417
0.31	2.26	2.26
0.3133	2.354	2.354
0.3166	2.304	2.304
0.32	2.323	2.323
0.3233	2.31	2.31
0.3266	2.31	2.31
0.33	2.304	2.304
0.3333	2.304	2.304
0.35	2.278	2.278
0.3666	2.266	2.266
0.3833	2.253	2.253
0.4	2.234	2.234
0.4166	2.215	2.215
0.4333	2.203	2.203
0.45	2.184	2.184
0.4666	2.165	2.165
0.4833	2.152	2.152
0.5	2.133	2.133
0.5166	2.114	2.114
0.5333	2.095	2.095
0.55	2.077	2.077
0.5666	2.058	2.058
0.5833	2.039	2.039
0.6	2.026	2.026
0.6166	2.007	2.007
0.6333	1.994	1.994
0.65	1.976	1.976
0.6666	1.963	1.963
0.6833	1.944	1.944
0.7	1.931	1.931
0.7166	1.912	1.912
0.7333	1.9	1.9
0.75	1.887	1.887
0.7666	1.868	1.868
0.7833	1.856	1.856
0.8	1.843	1.843
0.8166	1.824	1.824
0.8333	1.811	1.811
0.85	1.799	1.799
0.8666	1.786	1.786
0.8833	1.774	1.774
0.9	1.761	1.761
0.9166	1.742	1.742
0.9333	1.729	1.729
0.95	1.717	1.717

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.9666	1.704	1.704
0.9833	1.691	1.691
1	1.679	1.679
1.2	1.489	1.489
1.4	1.363	1.363
1.6	1.237	1.237
1.8	1.136	1.136
2	1.035	1.035
2.2	0.94	0.94
2.4	0.858	0.858
2.6	0.789	0.789
2.8	0.713	0.713
3	0.656	0.656
3.2	0.599	0.599
3.4	0.549	0.549
3.6	0.498	0.498
3.8	0.454	0.454
4	0.423	0.423
4.2	0.385	0.385
4.4	0.353	0.353
4.6	0.328	0.328
4.8	0.296	0.296
5	0.271	0.271
5.2	0.252	0.252
5.4	0.227	0.227
5.6	0.208	0.208
5.8	0.189	0.189
6	0.176	0.176
6.2	0.164	0.164
6.4	0.145	0.145
6.6	0.138	0.138
6.8	0.126	0.126
7	0.113	0.113
7.2	0.107	0.107
7.4	0.094	0.094
7.6	0.088	0.088
7.8	0.082	0.082
8	0.075	0.075
8.2	0.063	0.063
8.4	0.063	0.063
8.6	0.056	0.056
8.8	0.056	0.056
9	0.05	0.05
9.2	0.044	0.044
9.4	0.044	0.044
9.6	0.037	0.037
9.8	0.037	0.037

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
10	0.031	0.031
12	0.006	0.006

G6M-96-23B RISING HEAD PERMEABILITY TEST



G6M-96-23B RISING HEAD TEST		
Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0	-0.037	0.037
0.0033	-0.277	0.277
0.0066	-0.852	0.852
0.01	-0.795	0.795
0.0133	-1.332	1.332
0.0166	-1.704	1.704
0.02	-0.492	0.492
0.0233	0.41	0.41
0.0266	-1.47	1.47
0.03	-2.354	2.354
0.0333	-2.708	2.708
0.0366	-3.055	3.055
0.04	-1.584	1.584
0.0433	-1.717	1.717
0.0466	-0.934	0.934
0.05	-1.957	1.957
0.0533	-1.199	1.199
0.0566	-2.348	2.348
0.06	-2.38	2.38
0.0633	-2.916	2.916
0.0666	-2.986	2.986
0.07	-2.79	2.79
0.0733	-2.739	2.739
0.0766	-2.79	2.79
0.08	-2.796	2.796
0.0833	-2.758	2.758
0.0866	-2.746	2.746
0.09	-2.758	2.758
0.0933	-2.746	2.746
0.0966	-2.733	2.733
0.1	-2.708	2.708
0.1033	-2.72	2.72
0.1066	-2.72	2.72
0.11	-2.708	2.708
0.1133	-2.701	2.701
0.1166	-2.727	2.727
0.12	-2.683	2.683
0.1233	-2.683	2.683
0.1266	-2.683	2.683
0.13	-2.683	2.683
0.1333	-2.67	2.67
0.1366	-2.67	2.67
0.14	-2.664	2.664
0.1433	-2.664	2.664

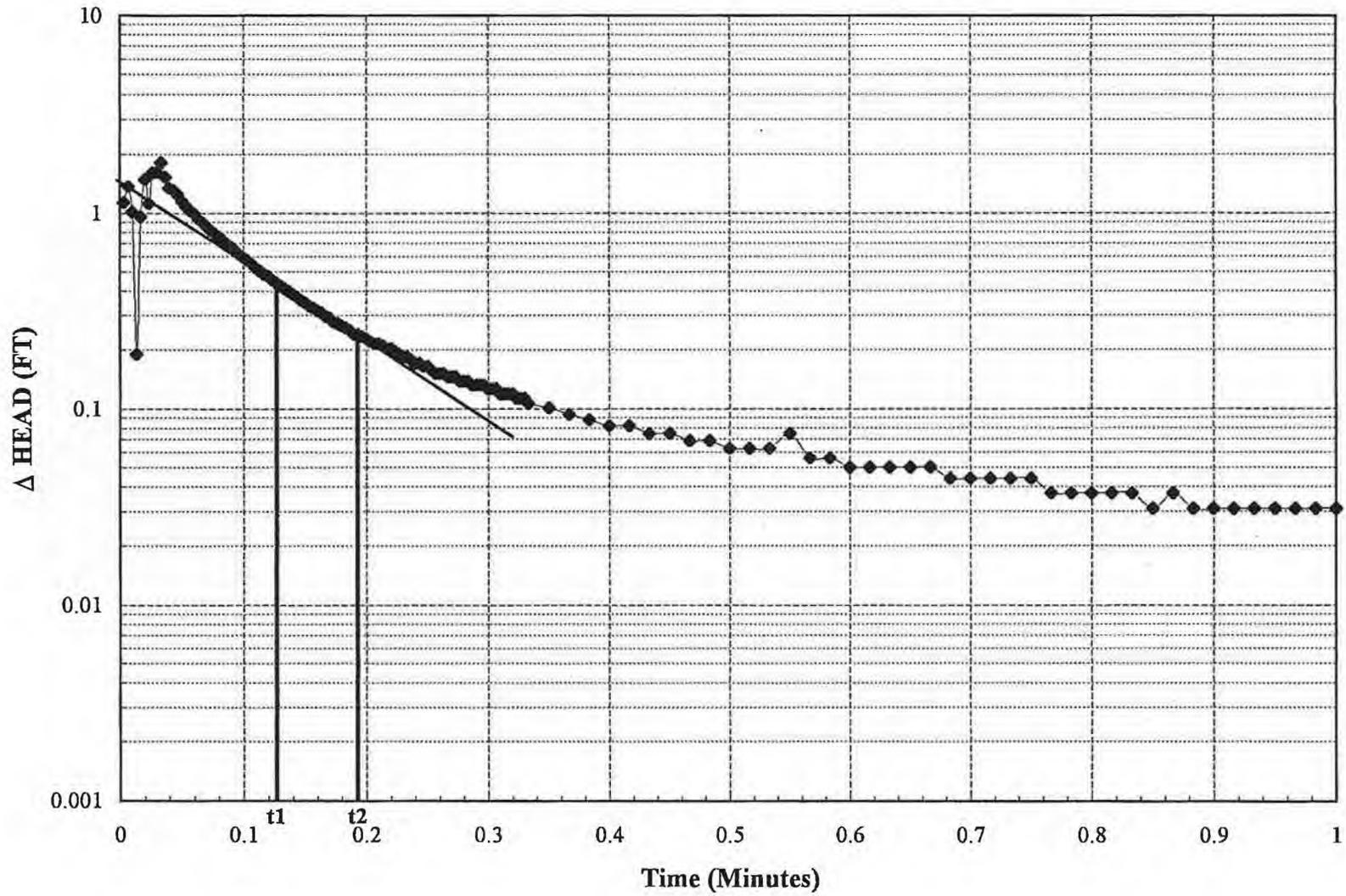
Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.1466	-2.651	2.651
0.15	-2.651	2.651
0.1533	-2.645	2.645
0.1566	-2.632	2.632
0.16	-2.588	2.588
0.1633	-2.619	2.619
0.1666	-2.645	2.645
0.17	-2.619	2.619
0.1733	-2.613	2.613
0.1766	-2.607	2.607
0.18	-2.6	2.6
0.1833	-2.563	2.563
0.1866	-2.594	2.594
0.19	-2.588	2.588
0.1933	-2.582	2.582
0.1966	-2.582	2.582
0.2	-2.582	2.582
0.2033	-2.575	2.575
0.2066	-2.569	2.569
0.21	-2.563	2.563
0.2133	-2.569	2.569
0.2166	-2.556	2.556
0.22	-2.55	2.55
0.2233	-2.544	2.544
0.2266	-2.544	2.544
0.23	-2.531	2.531
0.2333	-2.537	2.537
0.2366	-2.537	2.537
0.24	-2.531	2.531
0.2433	-2.531	2.531
0.2466	-2.518	2.518
0.25	-2.518	2.518
0.2533	-2.512	2.512
0.2566	-2.512	2.512
0.26	-2.506	2.506
0.2633	-2.499	2.499
0.2666	-2.499	2.499
0.27	-2.481	2.481
0.2733	-2.462	2.462
0.2766	-2.487	2.487
0.28	-2.512	2.512
0.2833	-2.481	2.481
0.2866	-2.474	2.474
0.29	-2.449	2.449
0.2933	-2.455	2.455
0.2966	-2.468	2.468
0.3	-2.462	2.462

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.3033	-2.455	2.455
0.3066	-2.449	2.449
0.31	-2.449	2.449
0.3133	-2.449	2.449
0.3166	-2.474	2.474
0.32	-2.443	2.443
0.3233	-2.436	2.436
0.3266	-2.443	2.443
0.33	-2.424	2.424
0.3333	-2.424	2.424
0.35	-2.411	2.411
0.3666	-2.386	2.386
0.3833	-2.367	2.367
0.4	-2.354	2.354
0.4166	-2.335	2.335
0.4333	-2.316	2.316
0.45	-2.304	2.304
0.4666	-2.291	2.291
0.4833	-2.266	2.266
0.5	-2.247	2.247
0.5166	-2.241	2.241
0.5333	-2.222	2.222
0.55	-2.203	2.203
0.5666	-2.184	2.184
0.5833	-2.171	2.171
0.6	-2.152	2.152
0.6166	-2.14	2.14
0.6333	-2.121	2.121
0.65	-2.102	2.102
0.6666	-2.095	2.095
0.6833	-2.076	2.076
0.7	-2.051	2.051
0.7166	-2.051	2.051
0.7333	-2.032	2.032
0.75	-2.02	2.02
0.7666	-2.007	2.007
0.7833	-1.988	1.988
0.8	-1.975	1.975
0.8166	-1.963	1.963
0.8333	-1.95	1.95
0.85	-1.931	1.931
0.8666	-1.919	1.919
0.8833	-1.912	1.912
0.9	-1.9	1.9
0.9166	-1.881	1.881
0.9333	-1.868	1.868
0.95	-1.856	1.856

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.9666	-1.837	1.837
0.9833	-1.83	1.83
1	-1.811	1.811
1.2	-1.635	1.635
1.4	-1.502	1.502
1.6	-1.376	1.376
1.8	-1.268	1.268
2	-1.161	1.161
2.2	-1.066	1.066
2.4	-0.978	0.978
2.6	-0.902	0.902
2.8	-0.833	0.833
3	-0.763	0.763
3.2	-0.7	0.7
3.4	-0.65	0.65
3.6	-0.593	0.593
3.8	-0.549	0.549
4	-0.505	0.505
4.2	-0.467	0.467
4.4	-0.429	0.429
4.6	-0.397	0.397
4.8	-0.366	0.366
5	-0.34	0.34
5.2	-0.309	0.309
5.4	-0.29	0.29
5.6	-0.265	0.265
5.8	-0.239	0.239
6	-0.227	0.227
6.2	-0.208	0.208
6.4	-0.195	0.195
6.6	-0.183	0.183
6.8	-0.164	0.164
7	-0.151	0.151
7.2	-0.138	0.138
7.4	-0.132	0.132
7.6	-0.119	0.119
7.8	-0.113	0.113
8	-0.101	0.101
8.2	-0.094	0.094
8.4	-0.088	0.088
8.6	-0.082	0.082
8.8	-0.075	0.075
9	-0.069	0.069
9.2	-0.069	0.069
9.4	-0.056	0.056
9.6	-0.056	0.056
9.8	-0.05	0.05

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
10	-0.05	0.05
12	-0.025	0.025
14	-0.018	0.018
16	-0.012	0.012
18	-0.012	0.012

G6M-96-24A RISING HEAD PERMEABILITY TEST No. 1



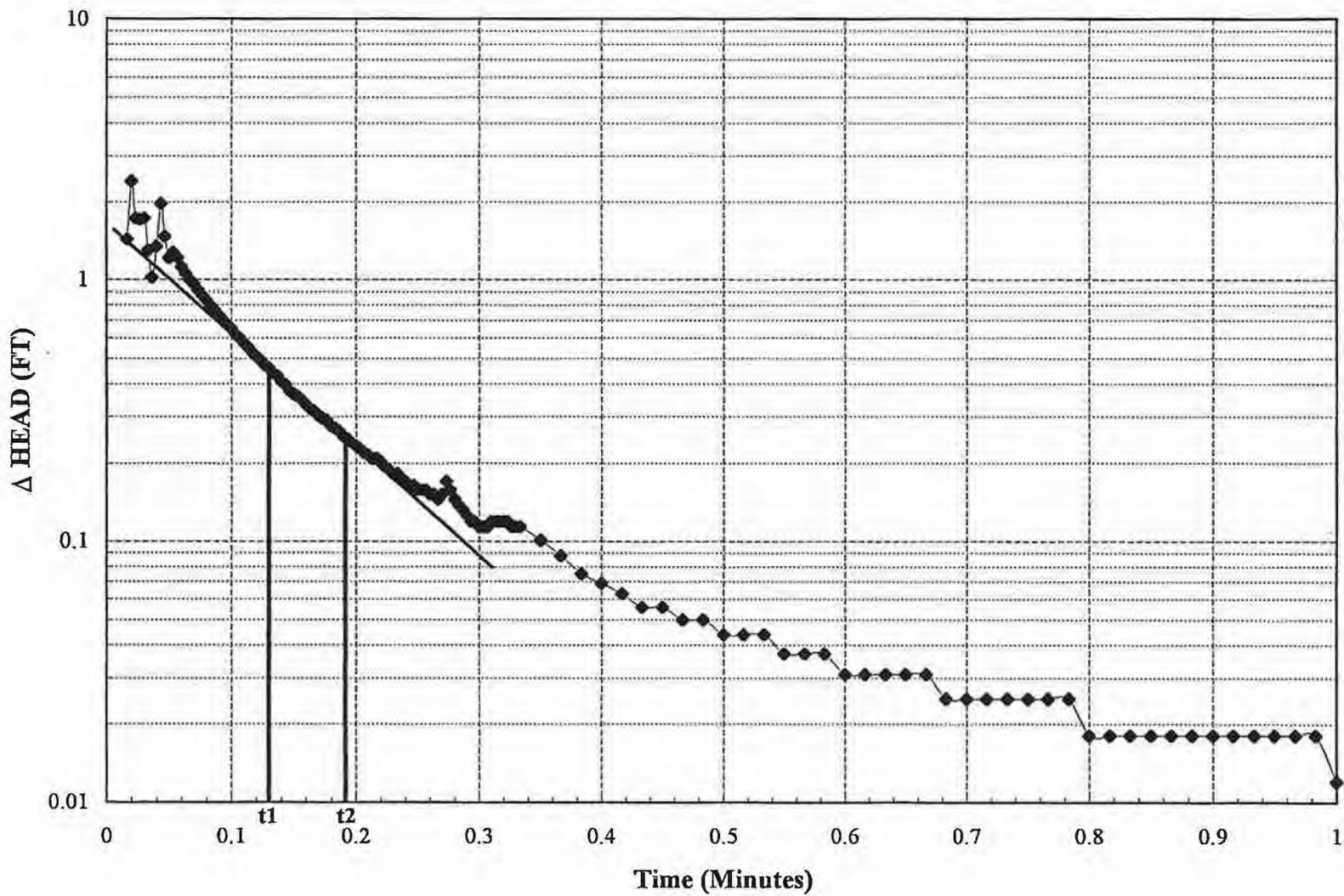
G6M-96-24A		
RISING HEAD TEST 1		
Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0	-0.782	0.782
0.0033	-1.136	1.136
0.0066	-1.369	1.369
0.01	-1.022	1.022
0.0133	-0.189	0.189
0.0166	-0.959	0.959
0.02	-1.496	1.496
0.0233	-1.123	1.123
0.0266	-1.609	1.609
0.03	-1.622	1.622
0.0333	-1.805	1.805
0.0366	-1.527	1.527
0.04	-1.344	1.344
0.0433	-1.3	1.3
0.0466	-1.249	1.249
0.05	-1.155	1.155
0.0533	-1.085	1.085
0.0566	-1.035	1.035
0.06	-0.991	0.991
0.0633	-0.94	0.94
0.0666	-0.896	0.896
0.07	-0.858	0.858
0.0733	-0.82	0.82
0.0766	-0.789	0.789
0.08	-0.757	0.757
0.0833	-0.725	0.725
0.0866	-0.694	0.694
0.09	-0.669	0.669
0.0933	-0.643	0.643
0.0966	-0.618	0.618
0.1	-0.593	0.593
0.1033	-0.574	0.574
0.1066	-0.549	0.549
0.11	-0.523	0.523
0.1133	-0.505	0.505
0.1166	-0.486	0.486
0.12	-0.473	0.473
0.1233	-0.454	0.454
0.1266	-0.441	0.441
0.13	-0.423	0.423
0.1333	-0.41	0.41
0.1366	-0.397	0.397
0.14	-0.385	0.385
0.1433	-0.372	0.372

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.1466	-0.359	0.359
0.15	-0.347	0.347
0.1533	-0.334	0.334
0.1566	-0.328	0.328
0.16	-0.315	0.315
0.1633	-0.309	0.309
0.1666	-0.296	0.296
0.17	-0.29	0.29
0.1733	-0.277	0.277
0.1766	-0.271	0.271
0.18	-0.265	0.265
0.1833	-0.258	0.258
0.1866	-0.252	0.252
0.19	-0.239	0.239
0.1933	-0.239	0.239
0.1966	-0.233	0.233
0.2	-0.227	0.227
0.2033	-0.22	0.22
0.2066	-0.214	0.214
0.21	-0.214	0.214
0.2133	-0.208	0.208
0.2166	-0.202	0.202
0.22	-0.202	0.202
0.2233	-0.195	0.195
0.2266	-0.189	0.189
0.23	-0.183	0.183
0.2333	-0.183	0.183
0.2366	-0.176	0.176
0.24	-0.17	0.17
0.2433	-0.17	0.17
0.2466	-0.164	0.164
0.25	-0.164	0.164
0.2533	-0.157	0.157
0.2566	-0.151	0.151
0.26	-0.151	0.151
0.2633	-0.151	0.151
0.2666	-0.145	0.145
0.27	-0.145	0.145
0.2733	-0.145	0.145
0.2766	-0.138	0.138
0.28	-0.138	0.138
0.2833	-0.138	0.138
0.2866	-0.132	0.132
0.29	-0.132	0.132
0.2933	-0.132	0.132
0.2966	-0.132	0.132
0.3	-0.126	0.126

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.3033	-0.126	0.126
0.3066	-0.126	0.126
0.31	-0.119	0.119
0.3133	-0.119	0.119
0.3166	-0.119	0.119
0.32	-0.119	0.119
0.3233	-0.113	0.113
0.3266	-0.113	0.113
0.33	-0.113	0.113
0.3333	-0.107	0.107
0.35	-0.101	0.101
0.3666	-0.094	0.094
0.3833	-0.088	0.088
0.4	-0.082	0.082
0.4166	-0.082	0.082
0.4333	-0.075	0.075
0.45	-0.075	0.075
0.4666	-0.069	0.069
0.4833	-0.069	0.069
0.5	-0.063	0.063
0.5166	-0.063	0.063
0.5333	-0.063	0.063
0.55	-0.075	0.075
0.5666	-0.056	0.056
0.5833	-0.056	0.056
0.6	-0.05	0.05
0.6166	-0.05	0.05
0.6333	-0.05	0.05
0.65	-0.05	0.05
0.6666	-0.05	0.05
0.6833	-0.044	0.044
0.7	-0.044	0.044
0.7166	-0.044	0.044
0.7333	-0.044	0.044
0.75	-0.044	0.044
0.7666	-0.037	0.037
0.7833	-0.037	0.037
0.8	-0.037	0.037
0.8166	-0.037	0.037
0.8333	-0.037	0.037
0.85	-0.031	0.031
0.8666	-0.037	0.037
0.8833	-0.031	0.031
0.9	-0.031	0.031
0.9166	-0.031	0.031
0.9333	-0.031	0.031
0.95	-0.031	0.031

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.9666	-0.031	0.031
0.9833	-0.031	0.031
1	-0.031	0.031
1.2	-0.018	0.018
1.4	-0.012	0.012
1.6	-0.006	0.006
1.8	-0.006	0.006
2	-0.006	0.006
2.2	0	0
2.4	-0.006	0.006
2.6	0	0
2.8	0	0
3	0	0
3.2	0	0
3.4	0.006	0.006
3.6	0.006	0.006
3.8	0.006	0.006

G6M-96-24A RISING HEAD PERMEABILITY TEST No. 2



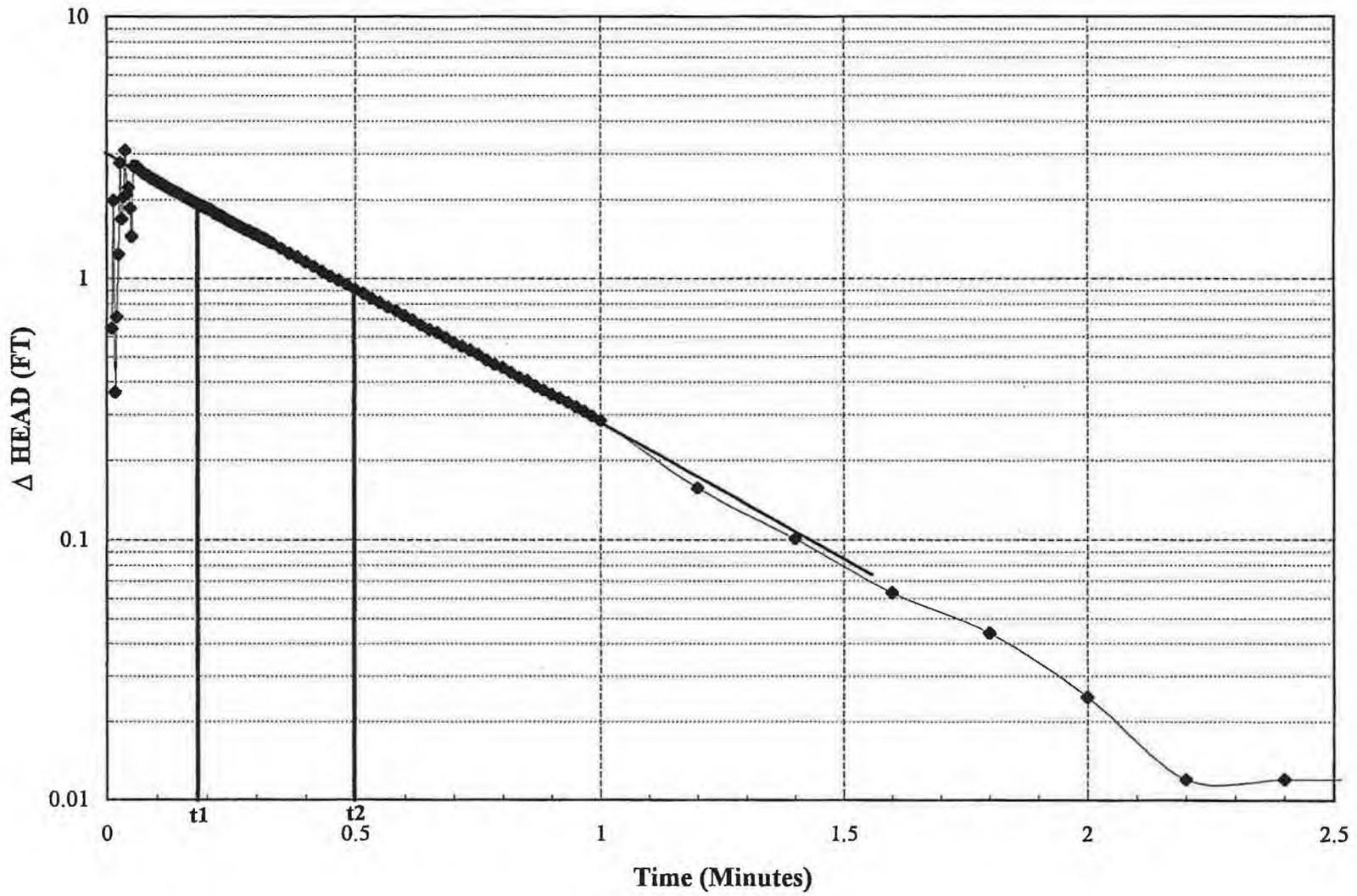
G6M-96-24A		
RISING HEAD TEST 2		
Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0	0.006	0.006
0.0033	-0.012	0.012
0.0066	-0.031	0.031
0.01	-0.107	0.107
0.0133	-0.707	0.707
0.0166	-1.433	1.433
0.02	-2.398	2.398
0.0233	-1.729	1.729
0.0266	-1.717	1.717
0.03	-1.729	1.729
0.0333	-1.3	1.3
0.0366	-1.022	1.022
0.04	-1.344	1.344
0.0433	-1.969	1.969
0.0466	-1.464	1.464
0.05	-1.218	1.218
0.0533	-1.275	1.275
0.0566	-1.224	1.224
0.06	-1.123	1.123
0.0633	-1.054	1.054
0.0666	-1.003	1.003
0.07	-0.959	0.959
0.0733	-0.915	0.915
0.0766	-0.871	0.871
0.08	-0.833	0.833
0.0833	-0.795	0.795
0.0866	-0.763	0.763
0.09	-0.732	0.732
0.0933	-0.7	0.7
0.0966	-0.675	0.675
0.1	-0.65	0.65
0.1033	-0.618	0.618
0.1066	-0.599	0.599
0.11	-0.574	0.574
0.1133	-0.555	0.555
0.1166	-0.53	0.53
0.12	-0.511	0.511
0.1233	-0.492	0.492
0.1266	-0.473	0.473
0.13	-0.46	0.46
0.1333	-0.441	0.441
0.1366	-0.429	0.429
0.14	-0.41	0.41
0.1433	-0.397	0.397

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.1466	-0.378	0.378
0.15	-0.366	0.366
0.1533	-0.359	0.359
0.1566	-0.347	0.347
0.16	-0.334	0.334
0.1633	-0.321	0.321
0.1666	-0.315	0.315
0.17	-0.303	0.303
0.1733	-0.296	0.296
0.1766	-0.29	0.29
0.18	-0.277	0.277
0.1833	-0.271	0.271
0.1866	-0.265	0.265
0.19	-0.252	0.252
0.1933	-0.246	0.246
0.1966	-0.239	0.239
0.2	-0.233	0.233
0.2033	-0.227	0.227
0.2066	-0.22	0.22
0.21	-0.214	0.214
0.2133	-0.208	0.208
0.2166	-0.208	0.208
0.22	-0.202	0.202
0.2233	-0.195	0.195
0.2266	-0.189	0.189
0.23	-0.183	0.183
0.2333	-0.183	0.183
0.2366	-0.176	0.176
0.24	-0.17	0.17
0.2433	-0.164	0.164
0.2466	-0.164	0.164
0.25	-0.157	0.157
0.2533	-0.157	0.157
0.2566	-0.157	0.157
0.26	-0.151	0.151
0.2633	-0.151	0.151
0.2666	-0.145	0.145
0.27	-0.151	0.151
0.2733	-0.17	0.17
0.2766	-0.157	0.157
0.28	-0.145	0.145
0.2833	-0.138	0.138
0.2866	-0.132	0.132
0.29	-0.126	0.126
0.2933	-0.119	0.119
0.2966	-0.119	0.119
0.3	-0.113	0.113

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.3033	-0.113	0.113
0.3066	-0.113	0.113
0.31	-0.119	0.119
0.3133	-0.119	0.119
0.3166	-0.119	0.119
0.32	-0.119	0.119
0.3233	-0.119	0.119
0.3266	-0.113	0.113
0.33	-0.113	0.113
0.3333	-0.113	0.113
0.35	-0.101	0.101
0.3666	-0.088	0.088
0.3833	-0.075	0.075
0.4	-0.069	0.069
0.4166	-0.063	0.063
0.4333	-0.056	0.056
0.45	-0.056	0.056
0.4666	-0.05	0.05
0.4833	-0.05	0.05
0.5	-0.044	0.044
0.5166	-0.044	0.044
0.5333	-0.044	0.044
0.55	-0.037	0.037
0.5666	-0.037	0.037
0.5833	-0.037	0.037
0.6	-0.031	0.031
0.6166	-0.031	0.031
0.6333	-0.031	0.031
0.65	-0.031	0.031
0.6666	-0.031	0.031
0.6833	-0.025	0.025
0.7	-0.025	0.025
0.7166	-0.025	0.025
0.7333	-0.025	0.025
0.75	-0.025	0.025
0.7666	-0.025	0.025
0.7833	-0.025	0.025
0.8	-0.018	0.018
0.8166	-0.018	0.018
0.8333	-0.018	0.018
0.85	-0.018	0.018
0.8666	-0.018	0.018
0.8833	-0.018	0.018
0.9	-0.018	0.018
0.9166	-0.018	0.018
0.9333	-0.018	0.018
0.95	-0.018	0.018

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.9666	-0.018	0.018
0.9833	-0.018	0.018
1	-0.012	0.012
1.2	-0.006	0.006
1.4	0	0
1.6	0.006	0.006
1.8	0.012	0.012
2	0.018	0.018
2.2	0.018	0.018

G6M-96-24B RISING HEAD PERMEABILITY TEST



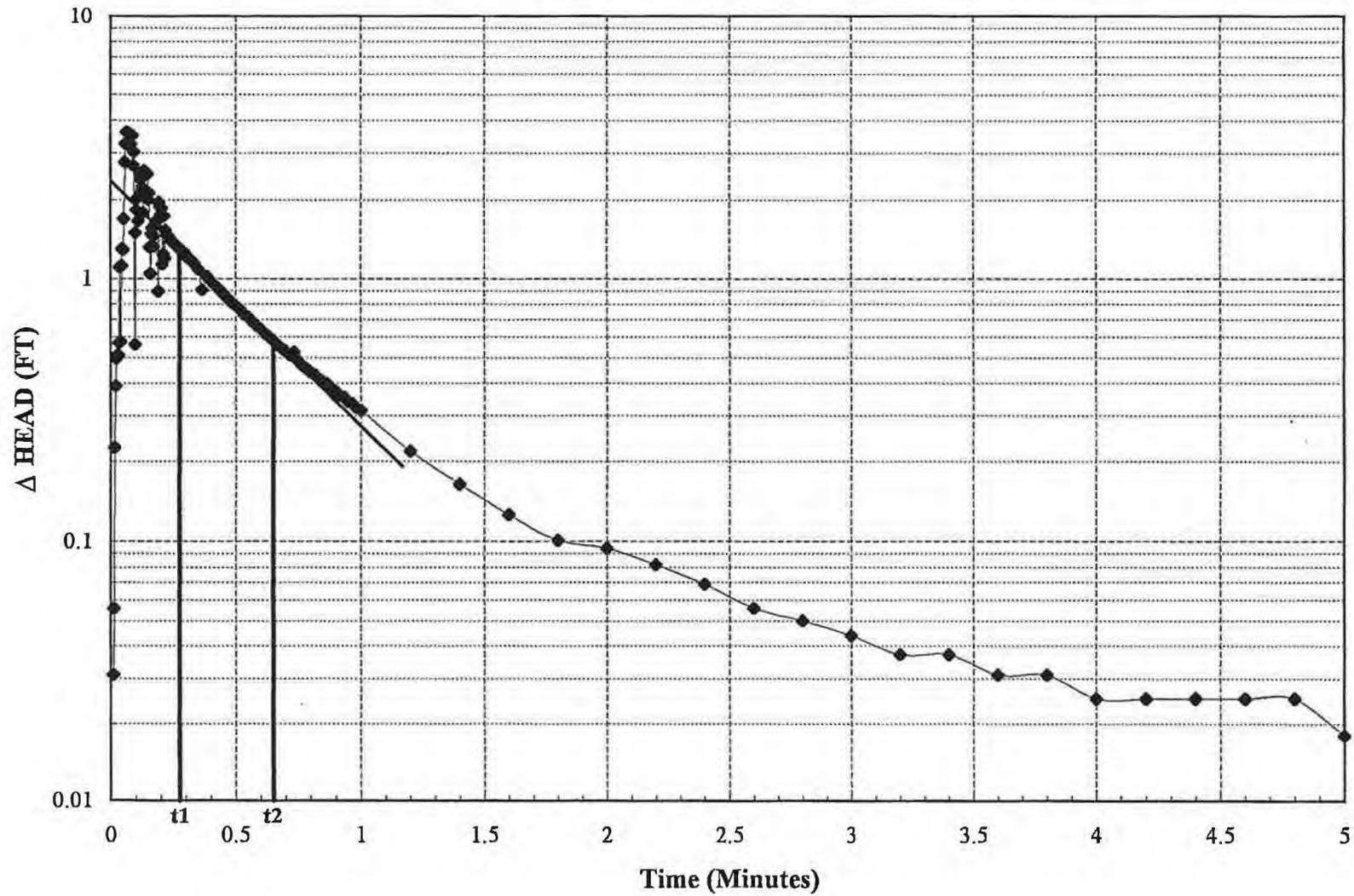
G6M-96-24B RISING HEAD TEST		
Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0	0	0
0.0033	0.006	0.006
0.0066	0.018	0.018
0.01	-0.643	0.643
0.0133	-1.988	1.988
0.0166	0.366	0.366
0.02	0.713	0.713
0.0233	-1.237	1.237
0.0266	-2.771	2.771
0.03	-1.698	1.698
0.0333	-2.045	2.045
0.0366	-3.093	3.093
0.04	-2.095	2.095
0.0433	-2.234	2.234
0.0466	-1.856	1.856
0.05	-1.452	1.452
0.0533	-2.701	2.701
0.0566	-2.651	2.651
0.06	-2.689	2.689
0.0633	-2.651	2.651
0.0666	-2.594	2.594
0.07	-2.569	2.569
0.0733	-2.537	2.537
0.0766	-2.512	2.512
0.08	-2.499	2.499
0.0833	-2.474	2.474
0.0866	-2.436	2.436
0.09	-2.417	2.417
0.0933	-2.405	2.405
0.0966	-2.38	2.38
0.1	-2.361	2.361
0.1033	-2.335	2.335
0.1066	-2.316	2.316
0.11	-2.297	2.297
0.1133	-2.279	2.279
0.1166	-2.26	2.26
0.12	-2.241	2.241
0.1233	-2.222	2.222
0.1266	-2.203	2.203
0.13	-2.184	2.184
0.1333	-2.171	2.171
0.1366	-2.152	2.152
0.14	-2.133	2.133
0.1433	-2.114	2.114

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.1466	-2.102	2.102
0.15	-2.083	2.083
0.1533	-2.064	2.064
0.1566	-2.051	2.051
0.16	-2.032	2.032
0.1633	-2.02	2.02
0.1666	-2.001	2.001
0.17	-1.988	1.988
0.1733	-1.969	1.969
0.1766	-1.95	1.95
0.18	-1.938	1.938
0.1833	-1.925	1.925
0.1866	-1.912	1.912
0.19	-1.893	1.893
0.1933	-1.881	1.881
0.1966	-1.868	1.868
0.2	-1.856	1.856
0.2033	-1.849	1.849
0.2066	-1.837	1.837
0.21	-1.824	1.824
0.2133	-1.805	1.805
0.2166	-1.78	1.78
0.22	-1.767	1.767
0.2233	-1.755	1.755
0.2266	-1.742	1.742
0.23	-1.736	1.736
0.2333	-1.717	1.717
0.2366	-1.704	1.704
0.24	-1.685	1.685
0.2433	-1.672	1.672
0.2466	-1.654	1.654
0.25	-1.647	1.647
0.2533	-1.635	1.635
0.2566	-1.622	1.622
0.26	-1.609	1.609
0.2633	-1.597	1.597
0.2666	-1.584	1.584
0.27	-1.571	1.571
0.2733	-1.559	1.559
0.2766	-1.546	1.546
0.28	-1.534	1.534
0.2833	-1.527	1.527
0.2866	-1.521	1.521
0.29	-1.508	1.508
0.2933	-1.496	1.496
0.2966	-1.483	1.483
0.3	-1.477	1.477

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.3033	-1.464	1.464
0.3066	-1.452	1.452
0.31	-1.439	1.439
0.3133	-1.426	1.426
0.3166	-1.426	1.426
0.32	-1.407	1.407
0.3233	-1.395	1.395
0.3266	-1.382	1.382
0.33	-1.369	1.369
0.3333	-1.363	1.363
0.35	-1.306	1.306
0.3666	-1.25	1.25
0.3833	-1.205	1.205
0.4	-1.155	1.155
0.4166	-1.111	1.111
0.4333	-1.066	1.066
0.45	-1.022	1.022
0.4666	-0.984	0.984
0.4833	-0.947	0.947
0.5	-0.909	0.909
0.5166	-0.877	0.877
0.5333	-0.839	0.839
0.55	-0.808	0.808
0.5666	-0.776	0.776
0.5833	-0.751	0.751
0.6	-0.719	0.719
0.6166	-0.694	0.694
0.6333	-0.662	0.662
0.65	-0.637	0.637
0.6666	-0.618	0.618
0.6833	-0.593	0.593
0.7	-0.568	0.568
0.7166	-0.549	0.549
0.7333	-0.53	0.53
0.75	-0.511	0.511
0.7666	-0.486	0.486
0.7833	-0.467	0.467
0.8	-0.454	0.454
0.8166	-0.435	0.435
0.8333	-0.416	0.416
0.85	-0.404	0.404
0.8666	-0.385	0.385
0.8833	-0.372	0.372
0.9	-0.359	0.359
0.9166	-0.347	0.347
0.9333	-0.334	0.334
0.95	-0.321	0.321

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.9666	-0.309	0.309
0.9833	-0.296	0.296
1	-0.284	0.284
1.2	-0.157	0.157
1.4	-0.101	0.101
1.6	-0.063	0.063
1.8	-0.044	0.044
2	-0.025	0.025
2.2	-0.012	0.012
2.4	-0.012	0.012
2.6	-0.012	0.012
2.8	-0.012	0.012
3	-0.018	0.018
3.2	-0.018	0.018
3.4	-0.012	0.012
3.6	-0.012	0.012
3.8	-0.012	0.012
4	-0.012	0.012
4.2	-0.006	0.006
4.4	-0.006	0.006
4.6	-0.006	0.006
4.8	0	0

G6M-96-24B FALLING HEAD PERMEABILITY TEST



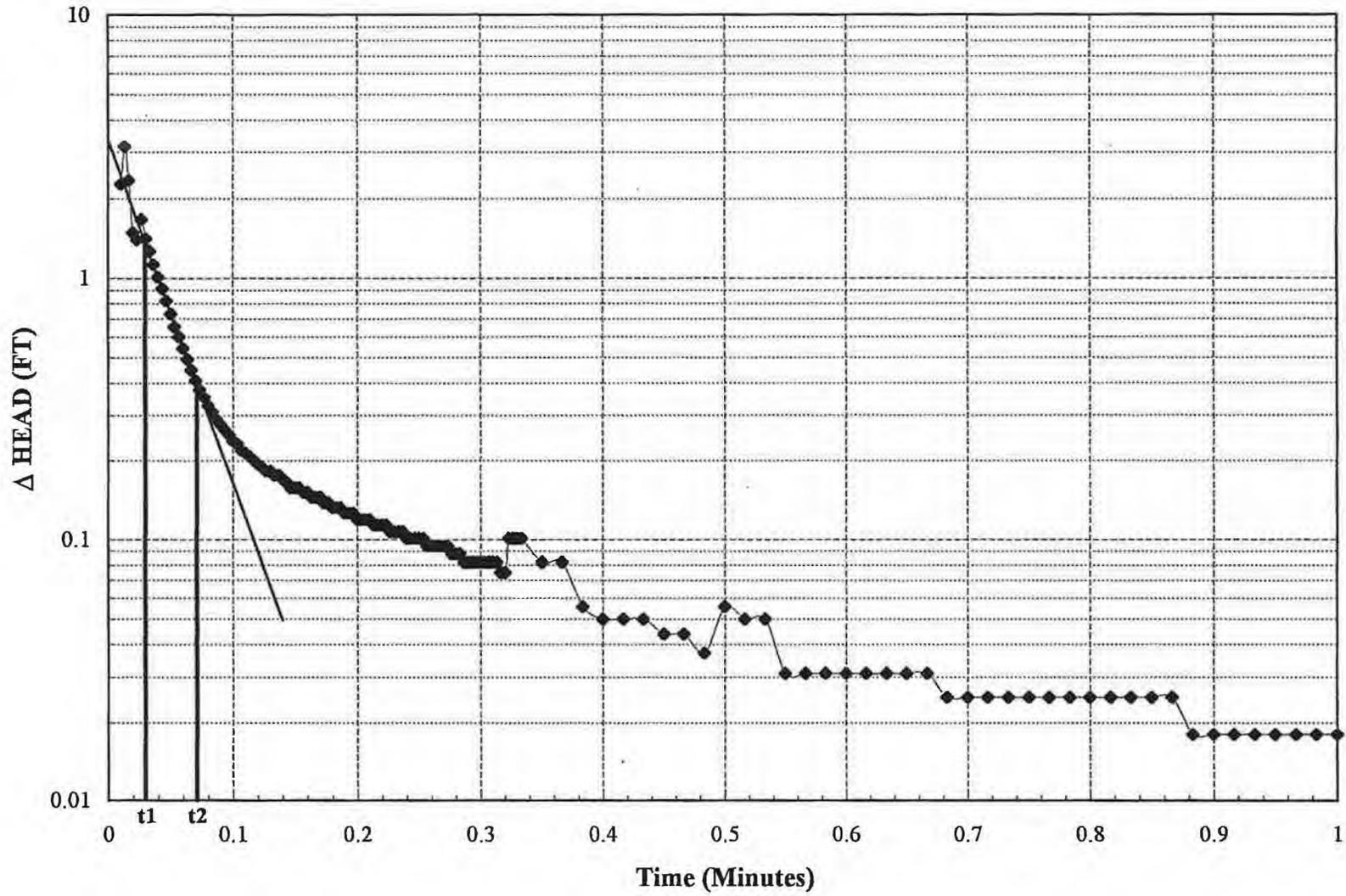
G6M-96-24B FALLING HEAD TEST		
Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0	0.037	0.037
0.0033	0.037	0.037
0.0066	0.037	0.037
0.01	0.031	0.031
0.0133	0.056	0.056
0.0166	0.227	0.227
0.02	0.391	0.391
0.0233	0.498	0.498
0.0266	0.511	0.511
0.03	0.511	0.511
0.0333	0.568	0.568
0.0366	1.111	1.111
0.04	0.574	0.574
0.0433	1.123	1.123
0.0466	1.3	1.3
0.05	1.294	1.294
0.0533	1.698	1.698
0.0566	2.771	2.771
0.06	3.251	3.251
0.0633	3.61	3.61
0.0666	3.276	3.276
0.07	3.213	3.213
0.0733	3.573	3.573
0.0766	3.497	3.497
0.08	3.244	3.244
0.0833	3.472	3.472
0.0866	3.503	3.503
0.09	2.701	2.701
0.0933	3.036	3.036
0.0966	0.561	0.561
0.1	1.502	1.502
0.1033	1.837	1.837
0.1066	2.026	2.026
0.11	1.66	1.66
0.1133	2.045	2.045
0.1166	2.506	2.506
0.12	2.379	2.379
0.1233	2.152	2.152
0.1266	2.234	2.234
0.13	1.792	1.792
0.1333	2.569	2.569
0.1366	2.525	2.525
0.14	2.55	2.55
0.1433	2.525	2.525

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.1466	2.493	2.493
0.15	2.013	2.013
0.1533	2.114	2.114
0.1566	1.319	1.319
0.16	1.047	1.047
0.1633	1.489	1.489
0.1666	1.571	1.571
0.17	1.451	1.451
0.1733	1.325	1.325
0.1766	1.59	1.59
0.18	1.616	1.616
0.1833	1.672	1.672
0.1866	1.66	1.66
0.19	0.896	0.896
0.1933	1.95	1.95
0.1966	1.881	1.881
0.2	1.754	1.754
0.2033	1.856	1.856
0.2066	1.136	1.136
0.21	1.243	1.243
0.2133	1.742	1.742
0.2166	1.199	1.199
0.22	1.534	1.534
0.2233	1.464	1.464
0.2266	1.47	1.47
0.23	1.458	1.458
0.2333	1.439	1.439
0.2366	1.426	1.426
0.24	1.407	1.407
0.2433	1.395	1.395
0.2466	1.382	1.382
0.25	1.376	1.376
0.2533	1.363	1.363
0.2566	1.357	1.357
0.26	1.344	1.344
0.2633	1.338	1.338
0.2666	1.325	1.325
0.27	1.319	1.319
0.2733	1.306	1.306
0.2766	1.3	1.3
0.28	1.287	1.287
0.2833	1.281	1.281
0.2866	1.268	1.268
0.292	1.262	1.262
0.2933	1.249	1.249
0.2966	1.243	1.243
0.3	1.231	1.231

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.3033	1.224	1.224
0.3066	1.212	1.212
0.31	1.205	1.205
0.3133	1.199	1.199
0.3166	1.186	1.186
0.32	1.18	1.18
0.3233	1.174	1.174
0.3266	1.161	1.161
0.33	1.155	1.155
0.3333	1.148	1.148
0.35	1.085	1.085
0.3666	0.909	0.909
0.3833	1.022	1.022
0.4	0.984	0.984
0.4166	0.946	0.946
0.4333	0.915	0.915
0.45	0.877	0.877
0.4666	0.845	0.845
0.4833	0.814	0.814
0.5	0.789	0.789
0.5166	0.763	0.763
0.5333	0.732	0.732
0.55	0.713	0.713
0.5666	0.688	0.688
0.5833	0.662	0.662
0.6	0.643	0.643
0.6166	0.618	0.618
0.6333	0.599	0.599
0.65	0.58	0.58
0.6666	0.561	0.561
0.6833	0.542	0.542
0.7	0.53	0.53
0.7166	0.511	0.511
0.7333	0.523	0.523
0.75	0.486	0.486
0.7666	0.467	0.467
0.7833	0.454	0.454
0.8	0.441	0.441
0.8166	0.429	0.429
0.8333	0.416	0.416
0.85	0.404	0.404
0.8666	0.397	0.397
0.8833	0.385	0.385
0.9	0.372	0.372
0.9166	0.359	0.359
0.9333	0.353	0.353
0.95	0.34	0.34

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.9666	0.334	0.334
0.9833	0.321	0.321
1	0.315	0.315
1.2	0.22	0.22
1.4	0.164	0.164
1.6	0.126	0.126
1.8	0.101	0.101
2	0.094	0.094
2.2	0.082	0.082
2.4	0.069	0.069
2.6	0.056	0.056
2.8	0.05	0.05
3	0.044	0.044
3.2	0.037	0.037
3.4	0.037	0.037
3.6	0.031	0.031
3.8	0.031	0.031
4	0.025	0.025
4.2	0.025	0.025
4.4	0.025	0.025
4.6	0.025	0.025
4.8	0.025	0.025
5	0.018	0.018
5.2	0.018	0.018
5.4	0.018	0.018
5.6	0.018	0.018
5.8	0.025	0.025
6	0.025	0.025
6.2	0.018	0.018
6.4	0.018	0.018
6.6	0.018	0.018
6.8	0.018	0.018

G6M-96-25A RISING HEAD PERMEABILITY TEST No. 1



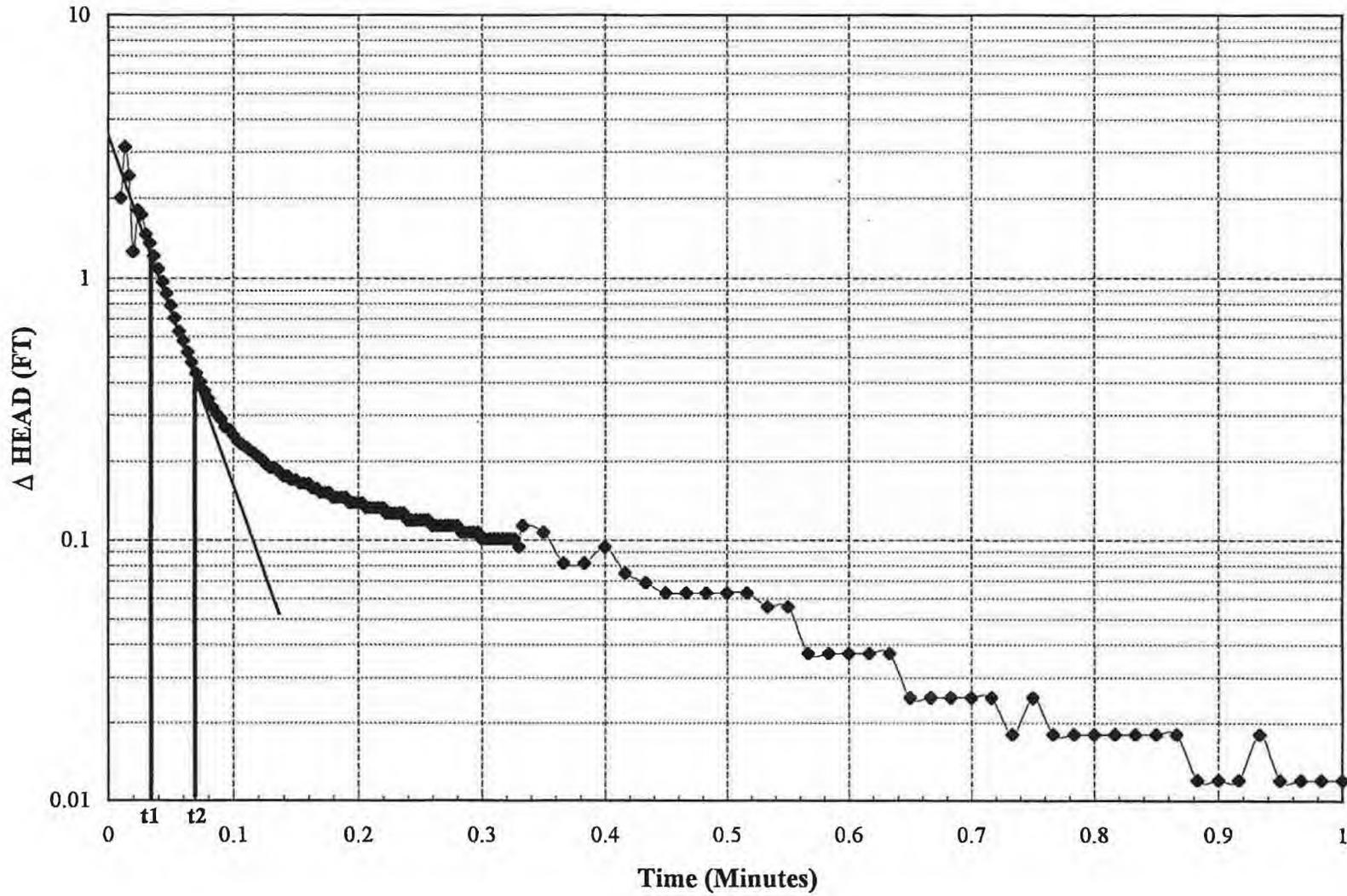
G6M-96-25A		
RISING HEAD TEST 1		
Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0	0	0
0.0033	-0.006	0.006
0.0066	-0.479	0.479
0.01	-2.266	2.266
0.0133	-3.156	3.156
0.0166	-2.348	2.348
0.02	-1.489	1.489
0.0233	-1.407	1.407
0.0266	-1.672	1.672
0.03	-1.414	1.414
0.0333	-1.268	1.268
0.0366	-1.13	1.13
0.04	-1.01	1.01
0.0433	-0.915	0.915
0.0466	-0.82	0.82
0.05	-0.732	0.732
0.0533	-0.656	0.656
0.0566	-0.599	0.599
0.06	-0.542	0.542
0.0633	-0.492	0.492
0.0666	-0.448	0.448
0.07	-0.41	0.41
0.0733	-0.378	0.378
0.0766	-0.353	0.353
0.08	-0.328	0.328
0.0833	-0.309	0.309
0.0866	-0.29	0.29
0.09	-0.277	0.277
0.0933	-0.265	0.265
0.0966	-0.252	0.252
0.1	-0.239	0.239
0.1033	-0.233	0.233
0.1066	-0.22	0.22
0.11	-0.214	0.214
0.1133	-0.208	0.208
0.1166	-0.201	0.201
0.12	-0.195	0.195
0.1233	-0.189	0.189
0.1266	-0.183	0.183
0.13	-0.183	0.183
0.1333	-0.176	0.176
0.1366	-0.176	0.176
0.14	-0.17	0.17
0.1433	-0.164	0.164

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.1466	-0.157	0.157
0.15	-0.157	0.157
0.1533	-0.157	0.157
0.1566	-0.151	0.151
0.16	-0.151	0.151
0.1633	-0.145	0.145
0.1666	-0.145	0.145
0.17	-0.145	0.145
0.1733	-0.138	0.138
0.1766	-0.138	0.138
0.18	-0.132	0.132
0.1833	-0.132	0.132
0.1866	-0.132	0.132
0.19	-0.126	0.126
0.1933	-0.126	0.126
0.1966	-0.126	0.126
0.2	-0.119	0.119
0.2033	-0.119	0.119
0.2066	-0.119	0.119
0.21	-0.119	0.119
0.2133	-0.113	0.113
0.2166	-0.113	0.113
0.22	-0.113	0.113
0.2233	-0.113	0.113
0.2266	-0.107	0.107
0.23	-0.107	0.107
0.2333	-0.107	0.107
0.2366	-0.107	0.107
0.24	-0.101	0.101
0.2433	-0.101	0.101
0.2466	-0.101	0.101
0.25	-0.101	0.101
0.2533	-0.101	0.101
0.2566	-0.094	0.094
0.26	-0.094	0.094
0.2633	-0.094	0.094
0.2666	-0.094	0.094
0.27	-0.094	0.094
0.2733	-0.094	0.094
0.2766	-0.088	0.088
0.28	-0.088	0.088
0.2833	-0.088	0.088
0.2866	-0.082	0.082
0.29	-0.082	0.082
0.2933	-0.082	0.082
0.2966	-0.082	0.082
0.3	-0.082	0.082

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.3033	-0.082	0.082
0.3066	-0.082	0.082
0.31	-0.082	0.082
0.3133	-0.082	0.082
0.3166	-0.075	0.075
0.32	-0.075	0.075
0.3233	-0.101	0.101
0.3266	-0.101	0.101
0.33	-0.101	0.101
0.3333	-0.101	0.101
0.35	-0.082	0.082
0.3666	-0.082	0.082
0.3833	-0.056	0.056
0.4	-0.05	0.05
0.4166	-0.05	0.05
0.4333	-0.05	0.05
0.45	-0.044	0.044
0.4666	-0.044	0.044
0.4833	-0.037	0.037
0.5	-0.056	0.056
0.5166	-0.05	0.05
0.5333	-0.05	0.05
0.55	-0.031	0.031
0.5666	-0.031	0.031
0.5833	-0.031	0.031
0.6	-0.031	0.031
0.6166	-0.031	0.031
0.6333	-0.031	0.031
0.65	-0.031	0.031
0.6666	-0.031	0.031
0.6833	-0.025	0.025
0.7	-0.025	0.025
0.7166	-0.025	0.025
0.7333	-0.025	0.025
0.75	-0.025	0.025
0.7666	-0.025	0.025
0.7833	-0.025	0.025
0.8	-0.025	0.025
0.8166	-0.025	0.025
0.8333	-0.025	0.025
0.85	-0.025	0.025
0.8666	-0.025	0.025
0.8833	-0.018	0.018
0.9	-0.018	0.018
0.9166	-0.018	0.018
0.9333	-0.018	0.018
0.95	-0.018	0.018

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.9666	-0.018	0.018
0.9833	-0.018	0.018
1	-0.018	0.018
1.2	-0.006	0.006
1.4	-0.006	0.006
1.6	-0.006	0.006
1.8	-0.006	0.006
2	-0.006	0.006
2.2	-0.006	0.006
2.4	0	0
2.6	0	0
2.8	0	0
3	0	0
3.2	0	0
3.4	0	0
3.6	0	0
3.8	0	0
4	0	0
4.2	0	0
4.4	0	0
4.6	0	0
4.8	0	0

G6M-96-25A RISING HEAD PERMEABILITY TEST No. 2



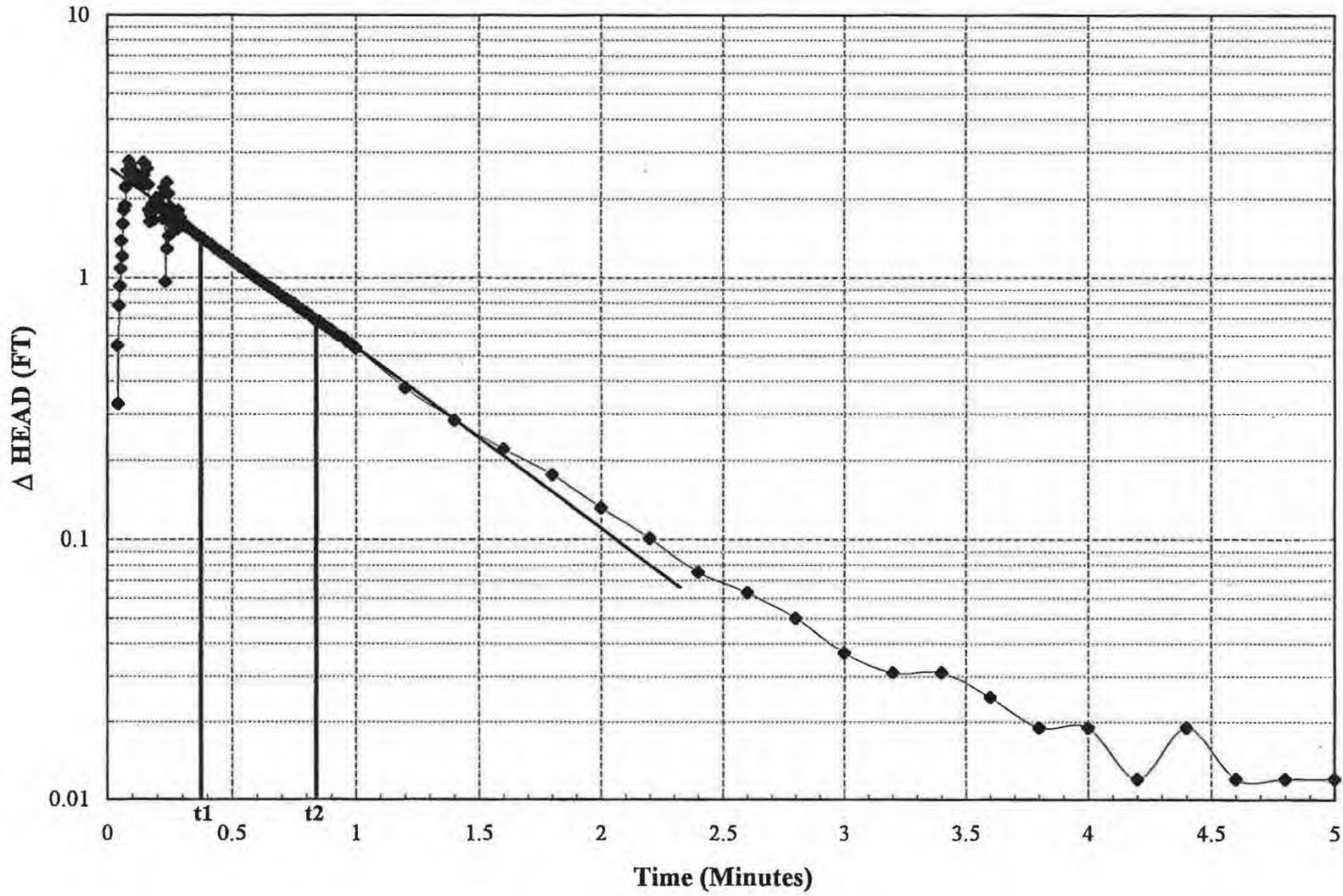
G6M-96-25A RISING HEAD TEST 2		
Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0	0	0
0.0033	-0.006	0.006
0.0066	0.012	0.012
0.01	-2.013	2.013
0.0133	-3.131	3.131
0.0166	-2.436	2.436
0.02	-1.262	1.262
0.0233	-1.805	1.805
0.0266	-1.742	1.742
0.03	-1.47	1.47
0.0333	-1.357	1.357
0.0366	-1.218	1.218
0.04	-1.085	1.085
0.0433	-0.972	0.972
0.0466	-0.877	0.877
0.05	-0.789	0.789
0.0533	-0.707	0.707
0.0566	-0.631	0.631
0.06	-0.58	0.58
0.0633	-0.524	0.524
0.0666	-0.479	0.479
0.07	-0.435	0.435
0.0733	-0.404	0.404
0.0766	-0.372	0.372
0.08	-0.347	0.347
0.0833	-0.321	0.321
0.0866	-0.303	0.303
0.09	-0.29	0.29
0.0933	-0.271	0.271
0.0966	-0.265	0.265
0.1	-0.252	0.252
0.1033	-0.239	0.239
0.1066	-0.233	0.233
0.11	-0.227	0.227
0.1133	-0.221	0.221
0.1166	-0.214	0.214
0.12	-0.208	0.208
0.1233	-0.202	0.202
0.1266	-0.195	0.195
0.13	-0.189	0.189
0.1333	-0.189	0.189
0.1366	-0.183	0.183
0.14	-0.176	0.176
0.1433	-0.176	0.176

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.1466	-0.17	0.17
0.15	-0.17	0.17
0.1533	-0.164	0.164
0.1566	-0.164	0.164
0.16	-0.164	0.164
0.1633	-0.157	0.157
0.1666	-0.157	0.157
0.17	-0.151	0.151
0.1733	-0.151	0.151
0.1766	-0.151	0.151
0.18	-0.145	0.145
0.1833	-0.145	0.145
0.1866	-0.145	0.145
0.19	-0.145	0.145
0.1933	-0.138	0.138
0.1966	-0.138	0.138
0.2	-0.138	0.138
0.2033	-0.138	0.138
0.2066	-0.132	0.132
0.21	-0.132	0.132
0.2133	-0.132	0.132
0.2166	-0.132	0.132
0.22	-0.132	0.132
0.2233	-0.126	0.126
0.2266	-0.126	0.126
0.23	-0.126	0.126
0.2333	-0.126	0.126
0.2366	-0.126	0.126
0.24	-0.119	0.119
0.2433	-0.119	0.119
0.2466	-0.119	0.119
0.25	-0.119	0.119
0.2533	-0.119	0.119
0.2566	-0.119	0.119
0.26	-0.113	0.113
0.2633	-0.113	0.113
0.2666	-0.113	0.113
0.27	-0.113	0.113
0.2733	-0.113	0.113
0.2766	-0.113	0.113
0.28	-0.113	0.113
0.2833	-0.107	0.107
0.2866	-0.107	0.107
0.29	-0.107	0.107
0.2933	-0.107	0.107
0.2966	-0.107	0.107
0.3	-0.101	0.101

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.3033	-0.101	0.101
0.3066	-0.101	0.101
0.31	-0.101	0.101
0.3133	-0.101	0.101
0.3166	-0.101	0.101
0.32	-0.101	0.101
0.3233	-0.101	0.101
0.3266	-0.101	0.101
0.33	-0.094	0.094
0.3333	-0.113	0.113
0.35	-0.107	0.107
0.3666	-0.082	0.082
0.3833	-0.082	0.082
0.4	-0.094	0.094
0.4166	-0.075	0.075
0.4333	-0.069	0.069
0.45	-0.063	0.063
0.4666	-0.063	0.063
0.4833	-0.063	0.063
0.5	-0.063	0.063
0.5166	-0.063	0.063
0.5333	-0.056	0.056
0.55	-0.056	0.056
0.5666	-0.037	0.037
0.5833	-0.037	0.037
0.6	-0.037	0.037
0.6166	-0.037	0.037
0.6333	-0.037	0.037
0.65	-0.025	0.025
0.6666	-0.025	0.025
0.6833	-0.025	0.025
0.7	-0.025	0.025
0.7166	-0.025	0.025
0.7333	-0.018	0.018
0.75	-0.025	0.025
0.7666	-0.018	0.018
0.7833	-0.018	0.018
0.8	-0.018	0.018
0.8166	-0.018	0.018
0.8333	-0.018	0.018
0.85	-0.018	0.018
0.8666	-0.018	0.018
0.8833	-0.012	0.012
0.9	-0.012	0.012
0.9166	-0.012	0.012
0.9333	-0.018	0.018
0.95	-0.012	0.012

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.9666	-0.012	0.012
0.9833	-0.012	0.012
1	-0.012	0.012
1.2	-0.006	0.006
1.4	-0.006	0.006
1.6	-0.006	0.006
1.8	-0.006	0.006
2	-0.006	0.006
2.2	-0.006	0.006
2.4	-0.006	0.006
2.6	-0.006	0.006
2.8	-0.006	0.006
3	-0.006	0.006
3.2	0.012	0.012

G6M-96-25B FALLING HEAD PERMEABILITY TEST



G6M-96-25B		
FALLING HEAD TEST		
Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0	-0.018	0.018
0.0033	-0.012	0.012
0.0066	-0.018	0.018
0.01	-0.012	0.012
0.0133	-0.018	0.018
0.0166	-0.012	0.012
0.02	-0.012	0.012
0.0233	-0.018	0.018
0.0266	-0.012	0.012
0.03	-0.018	0.018
0.0333	-0.018	0.018
0.0366	-0.025	0.025
0.04	0.549	0.549
0.0433	0.328	0.328
0.0466	0.782	0.782
0.05	0.928	0.928
0.0533	1.085	1.085
0.0566	1.382	1.382
0.06	1.205	1.205
0.0633	1.603	1.603
0.0666	1.811	1.811
0.07	1.887	1.887
0.0733	2.203	2.203
0.0766	2.247	2.247
0.08	2.55	2.55
0.0833	2.537	2.537
0.0866	2.771	2.771
0.09	2.43	2.43
0.0933	2.695	2.695
0.0966	2.594	2.594
0.1	2.544	2.544
0.1033	2.556	2.556
0.1066	2.392	2.392
0.11	2.417	2.417
0.1133	2.405	2.405
0.1166	2.304	2.304
0.12	2.342	2.342
0.1233	2.31	2.31
0.1266	2.38	2.38
0.13	2.348	2.348
0.1333	2.285	2.285
0.1366	2.43	2.43
0.14	2.455	2.455
0.1433	2.752	2.752

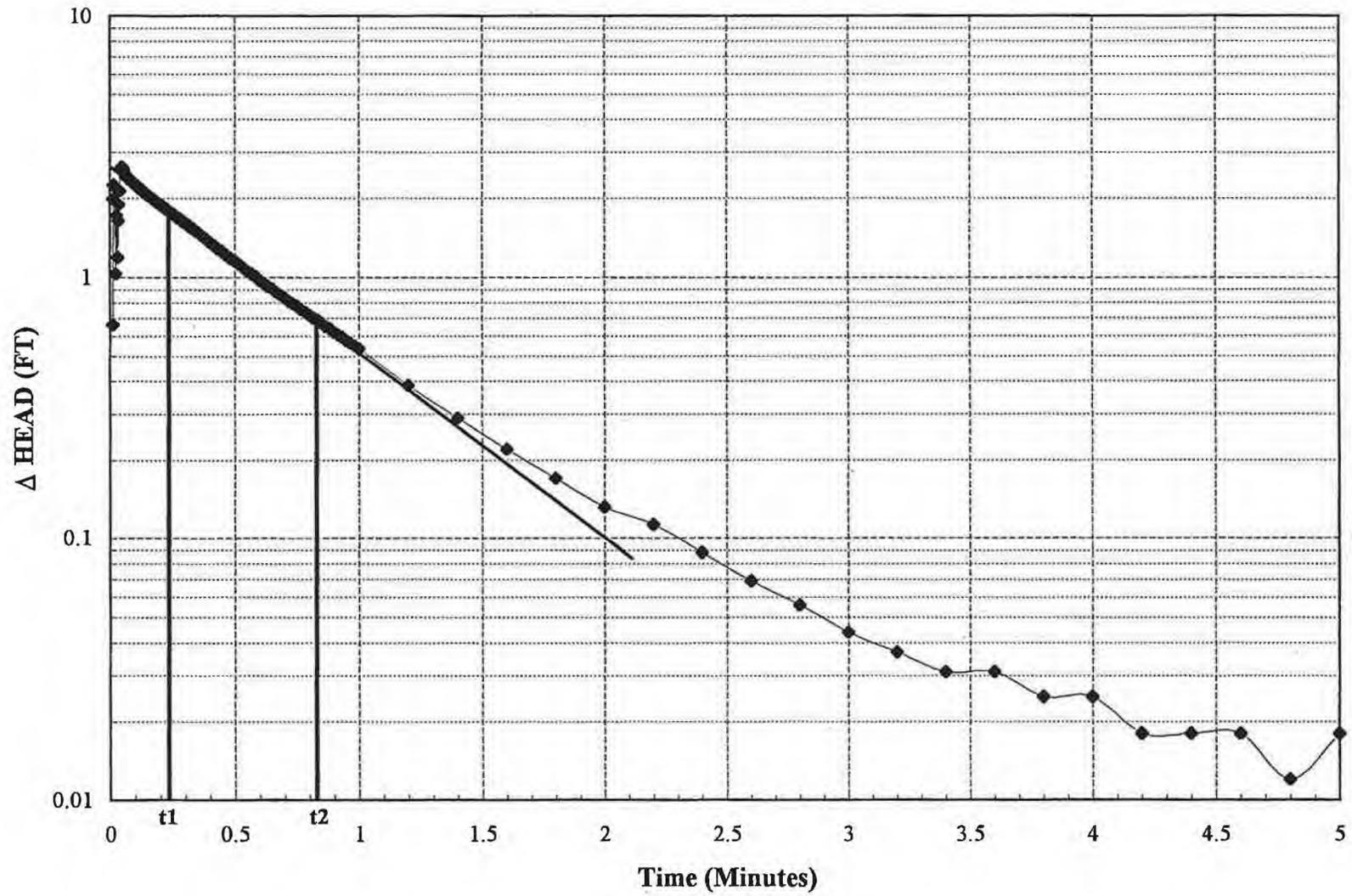
Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.1466	2.468	2.468
0.15	2.708	2.708
0.1533	2.266	2.266
0.1566	2.6	2.6
0.16	2.279	2.279
0.1633	2.26	2.26
0.1666	1.811	1.811
0.17	1.641	1.641
0.1733	1.748	1.748
0.1766	1.868	1.868
0.18	1.9	1.9
0.1833	1.824	1.824
0.1866	1.66	1.66
0.19	1.811	1.811
0.1933	1.9	1.9
0.1966	2.007	2.007
0.2	1.931	1.931
0.2033	1.938	1.938
0.2066	1.919	1.919
0.21	1.887	1.887
0.2133	1.837	1.837
0.2166	1.849	1.849
0.22	1.818	1.818
0.2233	1.679	1.679
0.2266	2.196	2.196
0.23	2.108	2.108
0.2333	0.965	0.965
0.2366	2.304	2.304
0.24	1.294	1.294
0.2433	2.089	2.089
0.2466	1.445	1.445
0.25	1.868	1.868
0.2533	1.654	1.654
0.2566	1.641	1.641
0.26	1.761	1.761
0.2633	1.698	1.698
0.2666	1.685	1.685
0.27	1.622	1.622
0.2733	1.71	1.71
0.2766	1.767	1.767
0.28	1.527	1.527
0.2833	1.805	1.805
0.2866	1.628	1.628
0.29	1.559	1.559
0.2933	1.698	1.698
0.2966	1.578	1.578
0.3	1.59	1.59

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.3033	1.584	1.584
0.3066	1.584	1.584
0.31	1.584	1.584
0.3133	1.565	1.565
0.3166	1.571	1.571
0.32	1.565	1.565
0.3233	1.553	1.553
0.3266	1.546	1.546
0.33	1.54	1.54
0.3333	1.527	1.527
0.35	1.483	1.483
0.3666	1.445	1.445
0.3833	1.407	1.407
0.4	1.369	1.369
0.4166	1.338	1.338
0.4333	1.294	1.294
0.45	1.262	1.262
0.4666	1.231	1.231
0.4833	1.199	1.199
0.5	1.167	1.167
0.5166	1.136	1.136
0.5333	1.104	1.104
0.55	1.079	1.079
0.5666	1.048	1.048
0.5833	1.022	1.022
0.6	0.997	0.997
0.6166	0.972	0.972
0.6333	0.947	0.947
0.65	0.921	0.921
0.6666	0.902	0.902
0.6833	0.877	0.877
0.7	0.852	0.852
0.7166	0.833	0.833
0.7333	0.814	0.814
0.75	0.795	0.795
0.7666	0.77	0.77
0.7833	0.751	0.751
0.8	0.732	0.732
0.8166	0.713	0.713
0.8333	0.694	0.694
0.85	0.681	0.681
0.8666	0.662	0.662
0.8833	0.644	0.644
0.9	0.631	0.631
0.9166	0.612	0.612
0.9333	0.599	0.599
0.95	0.587	0.587

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.9666	0.568	0.568
0.9833	0.555	0.555
1	0.536	0.536
1.2	0.378	0.378
1.4	0.284	0.284
1.6	0.221	0.221
1.8	0.176	0.176
2	0.132	0.132
2.2	0.101	0.101
2.4	0.075	0.075
2.6	0.063	0.063
2.8	0.05	0.05
3	0.037	0.037
3.2	0.031	0.031
3.4	0.031	0.031
3.6	0.025	0.025
3.8	0.019	0.019
4	0.019	0.019
4.2	0.012	0.012
4.4	0.019	0.019
4.6	0.012	0.012
4.8	0.012	0.012
5	0.012	0.012
5.2	0.012	0.012
5.4	0.006	0.006
5.6	0	0
5.8	-0.006	0.006
6	-0.006	0.006
6.2	-0.006	0.006
6.4	-0.012	0.012
6.6	-0.012	0.012
6.8	-0.012	0.012
7	-0.012	0.012
7.2	-0.012	0.012
7.4	-0.012	0.012
7.6	-0.012	0.012
7.8	-0.006	0.006
8	-0.006	0.006
8.2	-0.006	0.006
8.4	-0.012	0.012
8.6	-0.012	0.012
8.8	-0.012	0.012
9	-0.012	0.012
9.2	-0.012	0.012
9.4	-0.012	0.012
9.6	-0.012	0.012
9.8	-0.012	0.012

Time (min)	ΔH (ft)	Absolute
		Value ΔH (ft)
10	-0.012	0.012

G6M-96-25B RISING HEAD PERMEABILITY TEST



G6M-96-25B RISING HEAD TEST		
Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0	-0.012	0.012
0.0033	-0.303	0.303
0.0066	-0.732	0.732
0.01	-0.662	0.662
0.0133	-1.988	1.988
0.0166	-2.259	2.259
0.02	-2.222	2.222
0.0233	-1.035	1.035
0.0266	-1.723	1.723
0.03	-1.193	1.193
0.0333	-1.635	1.635
0.0366	-1.893	1.893
0.04	-2.133	2.133
0.0433	-2.594	2.594
0.0466	-2.632	2.632
0.05	-2.619	2.619
0.0533	-2.6	2.6
0.0566	-2.556	2.556
0.06	-2.499	2.499
0.0633	-2.449	2.449
0.0666	-2.436	2.436
0.07	-2.417	2.417
0.0733	-2.373	2.373
0.0766	-2.386	2.386
0.08	-2.361	2.361
0.0833	-2.354	2.354
0.0866	-2.342	2.342
0.09	-2.316	2.316
0.0933	-2.304	2.304
0.0966	-2.291	2.291
0.1	-2.278	2.278
0.1033	-2.253	2.253
0.1066	-2.247	2.247
0.11	-2.234	2.234
0.1133	-2.215	2.215
0.1166	-2.203	2.203
0.12	-2.184	2.184
0.1233	-2.177	2.177
0.1266	-2.152	2.152
0.13	-2.146	2.146
0.1333	-2.133	2.133
0.1366	-2.114	2.114
0.14	-2.108	2.108
0.1433	-2.095	2.095

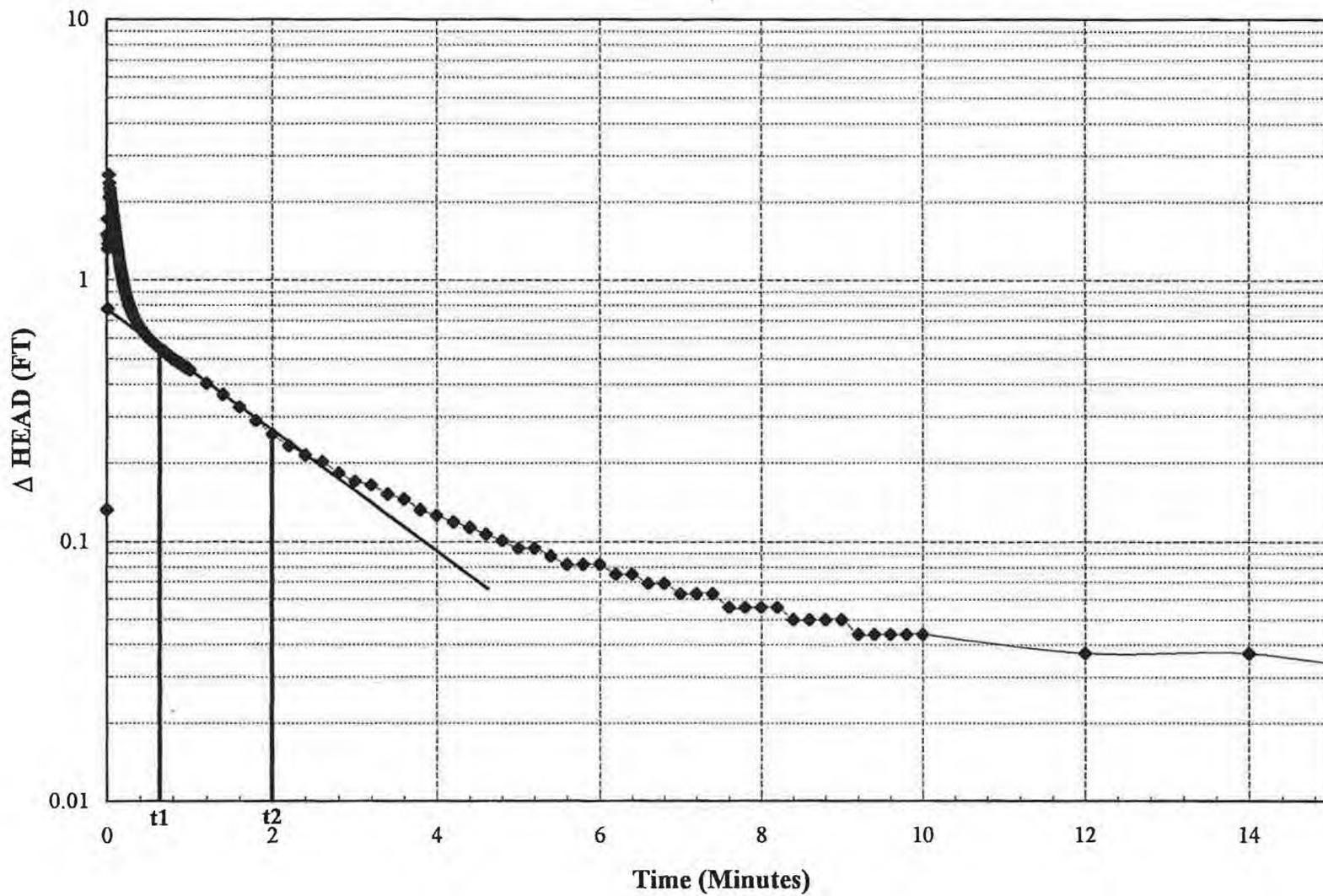
Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.1466	-2.076	2.076
0.15	-2.07	2.07
0.1533	-2.051	2.051
0.1566	-2.045	2.045
0.16	-2.032	2.032
0.1633	-2.02	2.02
0.1666	-2.007	2.007
0.17	-1.994	1.994
0.1733	-1.982	1.982
0.1766	-1.969	1.969
0.18	-1.963	1.963
0.1833	-1.95	1.95
0.1866	-1.938	1.938
0.19	-1.925	1.925
0.1933	-1.919	1.919
0.1966	-1.906	1.906
0.2	-1.893	1.893
0.2033	-1.881	1.881
0.2066	-1.874	1.874
0.21	-1.862	1.862
0.2133	-1.855	1.855
0.2166	-1.843	1.843
0.22	-1.83	1.83
0.2233	-1.824	1.824
0.2266	-1.811	1.811
0.23	-1.805	1.805
0.2333	-1.792	1.792
0.2366	-1.78	1.78
0.24	-1.773	1.773
0.2433	-1.761	1.761
0.2466	-1.754	1.754
0.25	-1.742	1.742
0.2533	-1.736	1.736
0.2566	-1.723	1.723
0.26	-1.717	1.717
0.2633	-1.704	1.704
0.2666	-1.698	1.698
0.27	-1.685	1.685
0.2733	-1.679	1.679
0.2766	-1.666	1.666
0.28	-1.66	1.66
0.2833	-1.653	1.653
0.2866	-1.641	1.641
0.29	-1.635	1.635
0.2933	-1.622	1.622
0.2966	-1.616	1.616
0.3	-1.609	1.609

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.3033	-1.597	1.597
0.3066	-1.59	1.59
0.31	-1.584	1.584
0.3133	-1.571	1.571
0.3166	-1.565	1.565
0.32	-1.552	1.552
0.3233	-1.546	1.546
0.3266	-1.54	1.54
0.33	-1.527	1.527
0.3333	-1.521	1.521
0.35	-1.477	1.477
0.3666	-1.439	1.439
0.3833	-1.395	1.395
0.4	-1.357	1.357
0.4166	-1.319	1.319
0.4333	-1.281	1.281
0.45	-1.249	1.249
0.4666	-1.212	1.212
0.4833	-1.18	1.18
0.5	-1.155	1.155
0.5166	-1.117	1.117
0.5333	-1.092	1.092
0.55	-1.054	1.054
0.5666	-1.035	1.035
0.5833	-1.01	1.01
0.6	-0.978	0.978
0.6166	-0.953	0.953
0.6333	-0.927	0.927
0.65	-0.909	0.909
0.6666	-0.883	0.883
0.6833	-0.858	0.858
0.7	-0.839	0.839
0.7166	-0.814	0.814
0.7333	-0.795	0.795
0.75	-0.776	0.776
0.7666	-0.757	0.757
0.7833	-0.738	0.738
0.8	-0.719	0.719
0.8166	-0.7	0.7
0.8333	-0.688	0.688
0.85	-0.669	0.669
0.8666	-0.65	0.65
0.8833	-0.637	0.637
0.9	-0.618	0.618
0.9166	-0.606	0.606
0.9333	-0.593	0.593
0.95	-0.574	0.574

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.9666	-0.561	0.561
0.9833	-0.549	0.549
1	-0.536	0.536
1.2	-0.385	0.385
1.4	-0.29	0.29
1.6	-0.22	0.22
1.8	-0.17	0.17
2	-0.132	0.132
2.2	-0.113	0.113
2.4	-0.088	0.088
2.6	-0.069	0.069
2.8	-0.056	0.056
3	-0.044	0.044
3.2	-0.037	0.037
3.4	-0.031	0.031
3.6	-0.031	0.031
3.8	-0.025	0.025
4	-0.025	0.025
4.2	-0.018	0.018
4.4	-0.018	0.018
4.6	-0.018	0.018
4.8	-0.012	0.012
5	-0.018	0.018
5.2	-0.012	0.012
5.4	-0.012	0.012
5.6	-0.012	0.012
5.8	-0.012	0.012
6	-0.012	0.012
6.2	-0.012	0.012
6.4	-0.012	0.012
6.6	-0.012	0.012
6.8	-0.012	0.012
7	-0.012	0.012
7.2	-0.012	0.012
7.4	-0.012	0.012
7.6	-0.006	0.006
7.8	-0.006	0.006
8	-0.006	0.006
8.2	-0.006	0.006
8.4	-0.012	0.012
8.6	-0.018	0.018
8.8	-0.018	0.018
9	-0.018	0.018
9.2	-0.018	0.018
9.4	-0.018	0.018
9.6	-0.025	0.025
9.8	-0.025	0.025

Time (min)	ΔH (ft)	Absolute
		Value ΔH (ft)
10	-0.025	0.025

G6M-96-26A RISING HEAD PERMEABILITY TEST No. 1



G6M-96-26A		
RISING HEAD 1		
Time (min)	ΔH (ft)	Absolute
		Value ΔH (ft)
0	-0.246	0.246
0.0033	-0.132	0.132
0.0066	-1.496	1.496
0.01	-1.71	1.71
0.0133	-1.319	1.319
0.0166	-0.776	0.776
0.02	-1.376	1.376
0.0233	-1.439	1.439
0.0266	-2.531	2.531
0.03	-2.076	2.076
0.0333	-2.354	2.354
0.0366	-2.241	2.241
0.04	-2.228	2.228
0.0433	-2.165	2.165
0.0466	-2.102	2.102
0.05	-2.083	2.083
0.0533	-2.039	2.039
0.0566	-2.001	2.001
0.06	-1.95	1.95
0.0633	-1.925	1.925
0.0666	-1.906	1.906
0.07	-1.855	1.855
0.0733	-1.824	1.824
0.0766	-1.78	1.78
0.08	-1.748	1.748
0.0833	-1.754	1.754
0.0866	-1.691	1.691
0.09	-1.641	1.641
0.0933	-1.622	1.622
0.0966	-1.597	1.597
0.1	-1.559	1.559
0.1033	-1.534	1.534
0.1066	-1.508	1.508
0.11	-1.477	1.477
0.1133	-1.451	1.451
0.1166	-1.42	1.42
0.12	-1.401	1.401
0.1233	-1.376	1.376
0.1266	-1.344	1.344
0.13	-1.325	1.325
0.1333	-1.3	1.3
0.1366	-1.281	1.281
0.14	-1.256	1.256
0.1433	-1.237	1.237

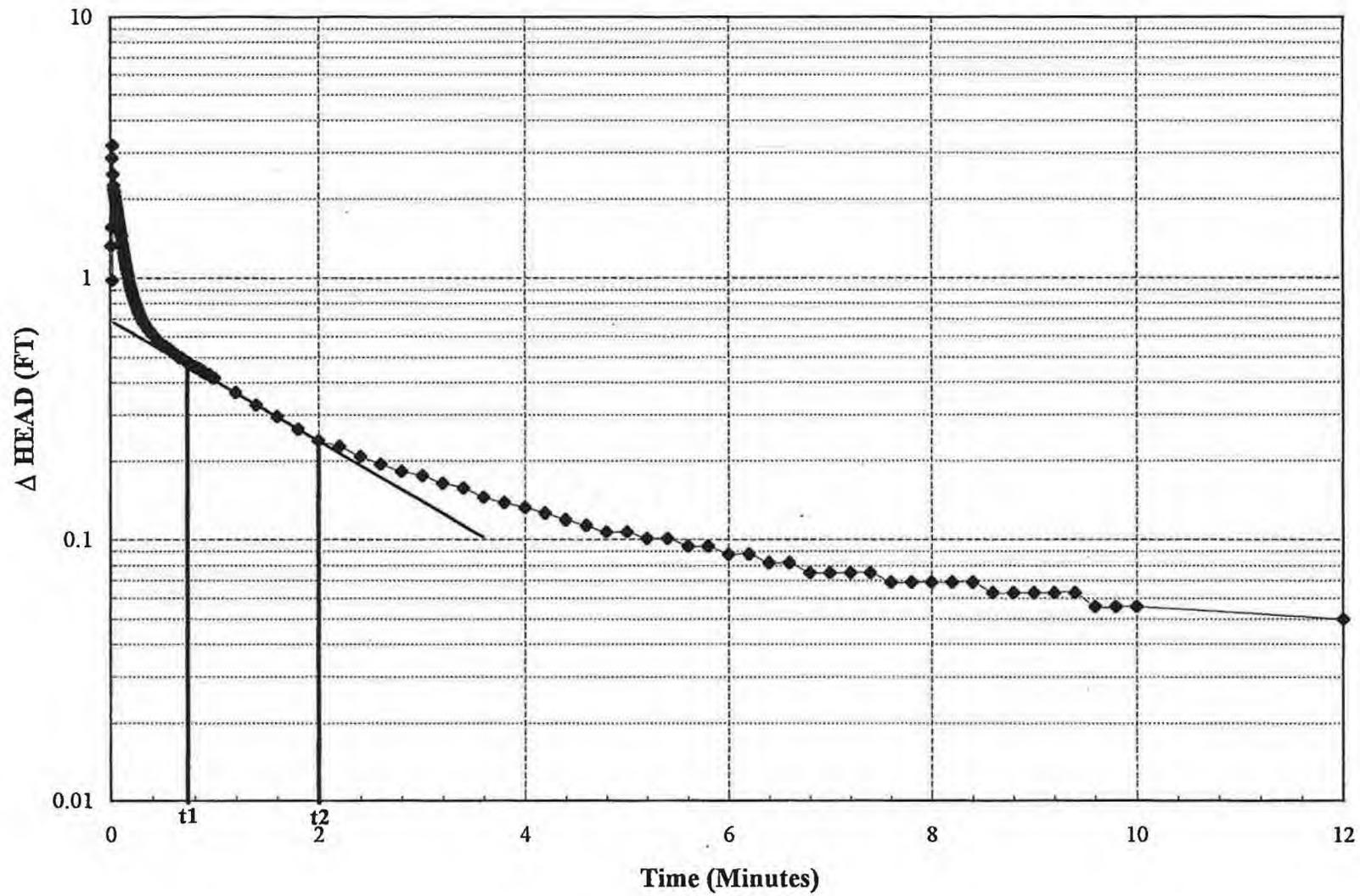
Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.1466	-1.218	1.218
0.15	-1.199	1.199
0.1533	-1.18	1.18
0.1566	-1.161	1.161
0.16	-1.142	1.142
0.1633	-1.123	1.123
0.1666	-1.111	1.111
0.17	-1.092	1.092
0.1733	-1.079	1.079
0.1766	-1.066	1.066
0.18	-1.054	1.054
0.1833	-1.041	1.041
0.1866	-1.029	1.029
0.19	-1.01	1.01
0.1933	-0.997	0.997
0.1966	-0.984	0.984
0.2	-0.978	0.978
0.2033	-0.965	0.965
0.2066	-0.953	0.953
0.21	-0.94	0.94
0.2133	-0.934	0.934
0.2166	-0.921	0.921
0.22	-0.915	0.915
0.2233	-0.902	0.902
0.2266	-0.896	0.896
0.23	-0.89	0.89
0.2333	-0.877	0.877
0.2366	-0.871	0.871
0.24	-0.864	0.864
0.2433	-0.852	0.852
0.2466	-0.845	0.845
0.25	-0.839	0.839
0.2533	-0.833	0.833
0.2566	-0.826	0.826
0.26	-0.82	0.82
0.2633	-0.814	0.814
0.2666	-0.808	0.808
0.27	-0.801	0.801
0.2733	-0.795	0.795
0.2766	-0.795	0.795
0.28	-0.789	0.789
0.2833	-0.782	0.782
0.2866	-0.776	0.776
0.29	-0.776	0.776
0.2933	-0.77	0.77
0.2966	-0.763	0.763
0.3	-0.757	0.757

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.3033	-0.757	0.757
0.3066	-0.751	0.751
0.31	-0.744	0.744
0.3133	-0.744	0.744
0.3166	-0.738	0.738
0.32	-0.732	0.732
0.3233	-0.732	0.732
0.3266	-0.725	0.725
0.33	-0.725	0.725
0.3333	-0.719	0.719
0.35	-0.7	0.7
0.3666	-0.688	0.688
0.3833	-0.675	0.675
0.4	-0.662	0.662
0.4166	-0.65	0.65
0.4333	-0.637	0.637
0.45	-0.631	0.631
0.4666	-0.618	0.618
0.4833	-0.612	0.612
0.5	-0.606	0.606
0.5166	-0.593	0.593
0.5333	-0.587	0.587
0.55	-0.58	0.58
0.5666	-0.574	0.574
0.5833	-0.568	0.568
0.6	-0.561	0.561
0.6166	-0.555	0.555
0.6333	-0.549	0.549
0.65	-0.542	0.542
0.6666	-0.536	0.536
0.6833	-0.536	0.536
0.7	-0.53	0.53
0.7166	-0.523	0.523
0.7333	-0.517	0.517
0.75	-0.511	0.511
0.7666	-0.511	0.511
0.7833	-0.505	0.505
0.8	-0.498	0.498
0.8166	-0.498	0.498
0.8333	-0.492	0.492
0.85	-0.486	0.486
0.8666	-0.486	0.486
0.8833	-0.479	0.479
0.9	-0.479	0.479
0.9166	-0.473	0.473
0.9333	-0.467	0.467
0.95	-0.467	0.467

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.9666	-0.46	0.46
0.9833	-0.46	0.46
1	-0.454	0.454
1.2	-0.404	0.404
1.4	-0.366	0.366
1.6	-0.328	0.328
1.8	-0.29	0.29
2	-0.258	0.258
2.2	-0.233	0.233
2.4	-0.214	0.214
2.6	-0.202	0.202
2.8	-0.183	0.183
3	-0.17	0.17
3.2	-0.164	0.164
3.4	-0.151	0.151
3.6	-0.145	0.145
3.8	-0.132	0.132
4	-0.126	0.126
4.2	-0.119	0.119
4.4	-0.113	0.113
4.6	-0.107	0.107
4.8	-0.101	0.101
5	-0.094	0.094
5.2	-0.094	0.094
5.4	-0.088	0.088
5.6	-0.082	0.082
5.8	-0.082	0.082
6	-0.082	0.082
6.2	-0.075	0.075
6.4	-0.075	0.075
6.6	-0.069	0.069
6.8	-0.069	0.069
7	-0.063	0.063
7.2	-0.063	0.063
7.4	-0.063	0.063
7.6	-0.056	0.056
7.8	-0.056	0.056
8	-0.056	0.056
8.2	-0.056	0.056
8.4	-0.05	0.05
8.6	-0.05	0.05
8.8	-0.05	0.05
9	-0.05	0.05
9.2	-0.044	0.044
9.4	-0.044	0.044
9.6	-0.044	0.044
9.8	-0.044	0.044

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
10	-0.044	0.044
12	-0.037	0.037
14	-0.037	0.037
16	-0.031	0.031
18	-0.031	0.031
20	-0.031	0.031
22	-0.025	0.025
24	-0.025	0.025
26	-0.018	0.018

G6M-96-26A RISING HEAD PERMEABILITY TEST No. 2



G6M-96-26A		
RISING HEAD TEST 2		
Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0	-1.388	1.388
0.0033	-0.568	0.568
0.0066	-0.568	0.568
0.01	-1.325	1.325
0.0133	-1.565	1.565
0.0166	-2.853	2.853
0.02	-0.984	0.984
0.0233	-3.188	3.188
0.0266	-2.487	2.487
0.03	-2.171	2.171
0.0333	-2.253	2.253
0.0366	-2.152	2.152
0.04	-2.14	2.14
0.0433	-2.077	2.077
0.0466	-2.039	2.039
0.05	-1.994	1.994
0.0533	-1.969	1.969
0.0566	-1.912	1.912
0.06	-1.881	1.881
0.0633	-1.849	1.849
0.0666	-1.811	1.811
0.07	-1.773	1.773
0.0733	-1.742	1.742
0.0766	-1.704	1.704
0.08	-1.672	1.672
0.0833	-1.641	1.641
0.0866	-1.603	1.603
0.09	-1.578	1.578
0.0933	-1.54	1.54
0.0966	-1.515	1.515
0.1	-1.483	1.483
0.1033	-1.452	1.452
0.1066	-1.433	1.433
0.11	-1.452	1.452
0.1133	-1.382	1.382
0.1166	-1.35	1.35
0.12	-1.325	1.325
0.1233	-1.306	1.306
0.1266	-1.275	1.275
0.13	-1.256	1.256
0.1333	-1.237	1.237
0.1366	-1.212	1.212
0.14	-1.186	1.186
0.1433	-1.167	1.167

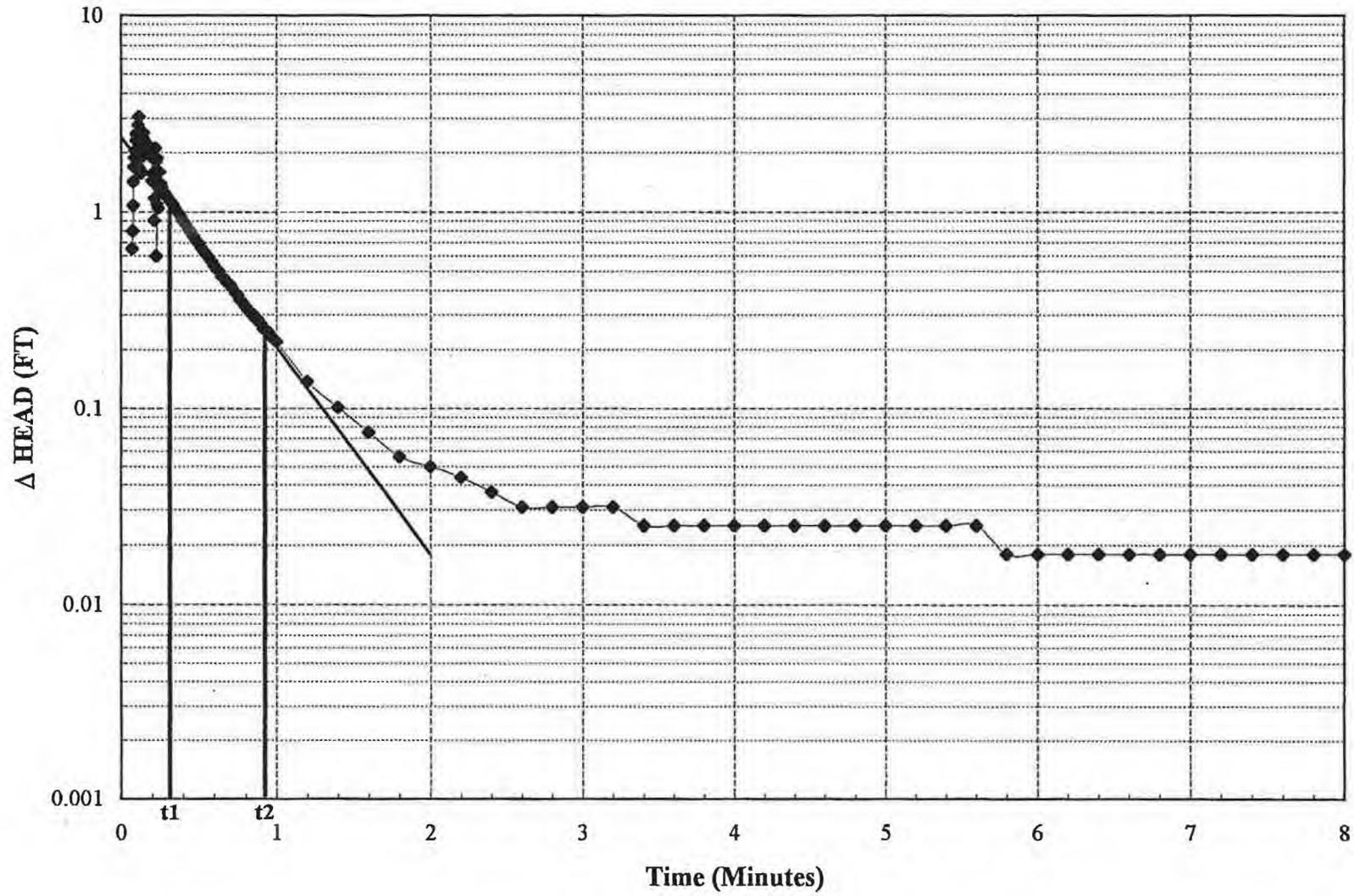
Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.1466	-1.155	1.155
0.15	-1.13	1.13
0.1533	-1.117	1.117
0.1566	-1.098	1.098
0.16	-1.079	1.079
0.1633	-1.066	1.066
0.1666	-1.041	1.041
0.17	-1.035	1.035
0.1733	-1.016	1.016
0.1766	-1.003	1.003
0.18	-0.984	0.984
0.1833	-0.972	0.972
0.1866	-0.959	0.959
0.19	-0.946	0.946
0.1933	-0.934	0.934
0.1966	-0.928	0.928
0.2	-0.915	0.915
0.2033	-0.902	0.902
0.2066	-0.89	0.89
0.21	-0.883	0.883
0.2133	-0.871	0.871
0.2166	-0.864	0.864
0.22	-0.852	0.852
0.2233	-0.845	0.845
0.2266	-0.833	0.833
0.23	-0.827	0.827
0.2333	-0.82	0.82
0.2366	-0.808	0.808
0.24	-0.801	0.801
0.2433	-0.795	0.795
0.2466	-0.789	0.789
0.25	-0.782	0.782
0.2533	-0.782	0.782
0.2566	-0.776	0.776
0.26	-0.763	0.763
0.2633	-0.763	0.763
0.2666	-0.751	0.751
0.27	-0.751	0.751
0.2733	-0.744	0.744
0.2766	-0.732	0.732
0.28	-0.732	0.732
0.2833	-0.732	0.732
0.2866	-0.725	0.725
0.29	-0.719	0.719
0.2933	-0.713	0.713
0.2966	-0.707	0.707
0.3	-0.707	0.707

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.3033	-0.7	0.7
0.3066	-0.694	0.694
0.31	-0.694	0.694
0.3133	-0.688	0.688
0.3166	-0.688	0.688
0.32	-0.681	0.681
0.3233	-0.681	0.681
0.3266	-0.675	0.675
0.33	-0.675	0.675
0.3333	-0.669	0.669
0.35	-0.65	0.65
0.3666	-0.637	0.637
0.3833	-0.631	0.631
0.4	-0.612	0.612
0.4166	-0.606	0.606
0.4333	-0.593	0.593
0.45	-0.58	0.58
0.4666	-0.574	0.574
0.4833	-0.568	0.568
0.5	-0.555	0.555
0.5166	-0.549	0.549
0.5333	-0.549	0.549
0.55	-0.542	0.542
0.5666	-0.536	0.536
0.5833	-0.53	0.53
0.6	-0.524	0.524
0.6166	-0.517	0.517
0.6333	-0.511	0.511
0.65	-0.505	0.505
0.6666	-0.498	0.498
0.6833	-0.498	0.498
0.7	-0.492	0.492
0.7166	-0.486	0.486
0.7333	-0.479	0.479
0.75	-0.479	0.479
0.7666	-0.473	0.473
0.7833	-0.467	0.467
0.8	-0.46	0.46
0.8166	-0.46	0.46
0.8333	-0.454	0.454
0.85	-0.454	0.454
0.8666	-0.448	0.448
0.8833	-0.441	0.441
0.9	-0.441	0.441
0.9166	-0.435	0.435
0.9333	-0.429	0.429
0.95	-0.429	0.429

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.9666	-0.422	0.422
0.9833	-0.416	0.416
1	-0.416	0.416
1.2	-0.366	0.366
1.4	-0.328	0.328
1.6	-0.296	0.296
1.8	-0.265	0.265
2	-0.239	0.239
2.2	-0.227	0.227
2.4	-0.208	0.208
2.6	-0.195	0.195
2.8	-0.183	0.183
3	-0.176	0.176
3.2	-0.164	0.164
3.4	-0.157	0.157
3.6	-0.145	0.145
3.8	-0.138	0.138
4	-0.132	0.132
4.2	-0.126	0.126
4.4	-0.119	0.119
4.6	-0.113	0.113
4.8	-0.107	0.107
5	-0.107	0.107
5.2	-0.101	0.101
5.4	-0.101	0.101
5.6	-0.094	0.094
5.8	-0.094	0.094
6	-0.088	0.088
6.2	-0.088	0.088
6.4	-0.082	0.082
6.6	-0.082	0.082
6.8	-0.075	0.075
7	-0.075	0.075
7.2	-0.075	0.075
7.4	-0.075	0.075
7.6	-0.069	0.069
7.8	-0.069	0.069
8	-0.069	0.069
8.2	-0.069	0.069
8.4	-0.069	0.069
8.6	-0.063	0.063
8.8	-0.063	0.063
9	-0.063	0.063
9.2	-0.063	0.063
9.4	-0.063	0.063
9.6	-0.056	0.056
9.8	-0.056	0.056

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
10	-0.056	0.056
12	-0.05	0.05

G6M-96-26B FALLING HEAD PERMEABILITY TEST



G6M-96-26B		
FALLING HEAD TEST		
Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0	0.025	0.025
0.0033	0.025	0.025
0.0066	0.025	0.025
0.01	0.018	0.018
0.0133	0.012	0.012
0.0166	0.018	0.018
0.02	0.025	0.025
0.0233	0.018	0.018
0.0266	0.025	0.025
0.03	0.018	0.018
0.0333	0.018	0.018
0.0366	0.025	0.025
0.04	0.018	0.018
0.0433	0.018	0.018
0.0466	0.018	0.018
0.05	0.018	0.018
0.0533	0.037	0.037
0.0566	0.018	0.018
0.06	0.025	0.025
0.0633	0.031	0.031
0.0666	0.372	0.372
0.07	0.65	0.65
0.0733	0.801	0.801
0.0766	1.079	1.079
0.08	1.42	1.42
0.0833	1.691	1.691
0.0866	1.887	1.887
0.09	2.051	2.051
0.0933	2.076	2.076
0.0966	2.31	2.31
0.1	2.499	2.499
0.1033	2.424	2.424
0.1066	2.544	2.544
0.11	2.771	2.771
0.1133	3.049	3.049
0.1166	2.537	2.537
0.12	2.171	2.171
0.1233	1.868	1.868
0.1266	1.571	1.571
0.13	2.032	2.032
0.1333	2.272	2.272
0.1366	2.455	2.455
0.14	2.398	2.398
0.1433	2.525	2.525

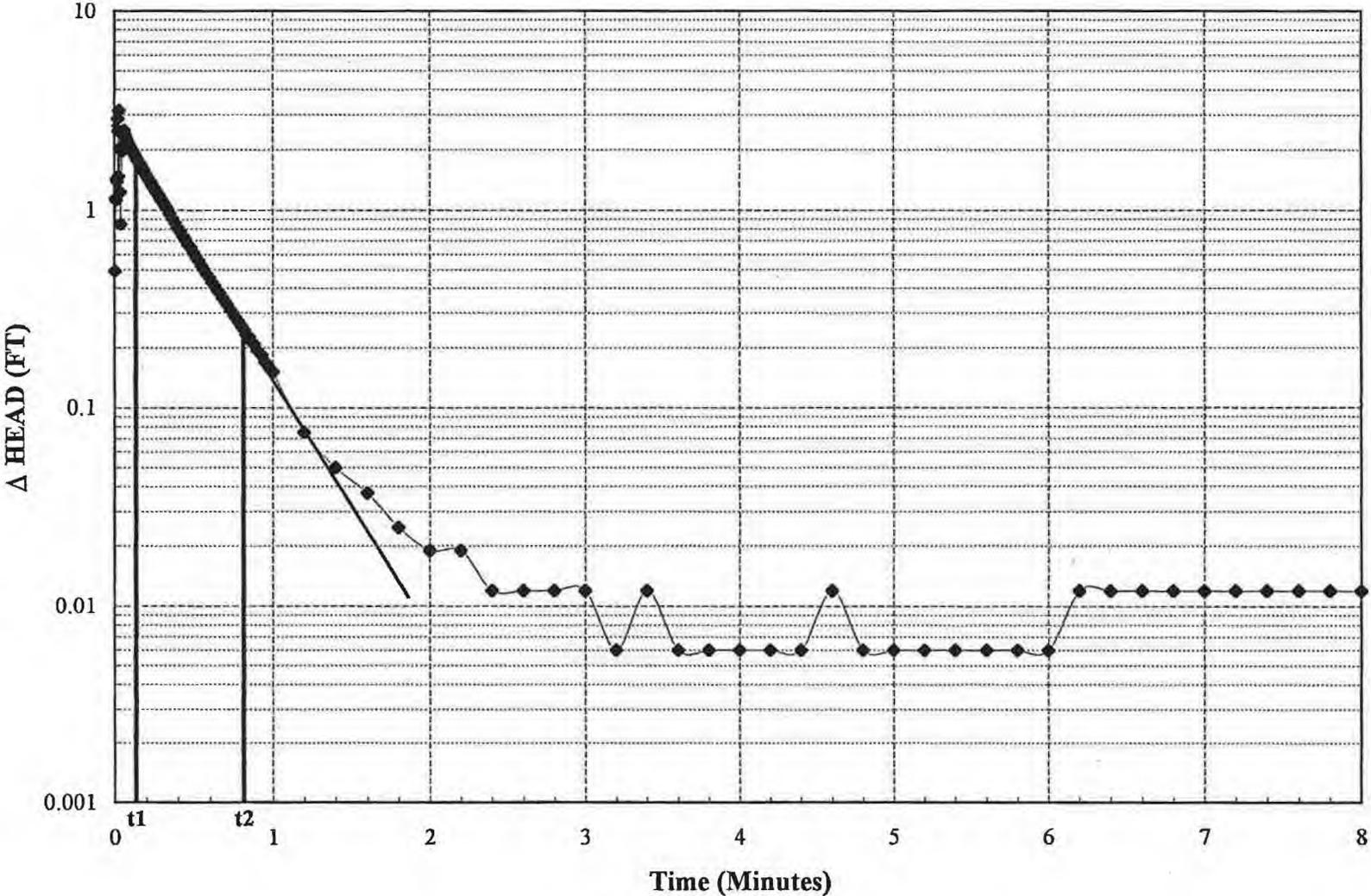
Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.1466	2.279	2.279
0.15	2.31	2.31
0.1533	2.108	2.108
0.1566	2.184	2.184
0.16	2.108	2.108
0.1633	2.089	2.089
0.1666	2.032	2.032
0.17	2.114	2.114
0.1733	2.184	2.184
0.1766	2.007	2.007
0.18	2.026	2.026
0.1833	2.146	2.146
0.1866	2.152	2.152
0.19	2.114	2.114
0.1933	2.089	2.089
0.1966	1.9	1.9
0.2	1.439	1.439
0.2033	1.565	1.565
0.2066	1.546	1.546
0.21	1.553	1.553
0.2133	0.909	0.909
0.2166	1.174	1.174
0.22	2.108	2.108
0.2233	1.805	1.805
0.2266	0.599	0.599
0.23	1.092	1.092
0.2333	1.874	1.874
0.2366	1.59	1.59
0.24	1.047	1.047
0.2433	1.325	1.325
0.2466	1.597	1.597
0.25	1.35	1.35
0.2533	1.249	1.249
0.2566	1.388	1.388
0.26	1.338	1.338
0.2633	1.275	1.275
0.2666	1.287	1.287
0.27	1.275	1.275
0.2733	1.268	1.268
0.2766	1.256	1.256
0.28	1.243	1.243
0.2833	1.237	1.237
0.2866	1.224	1.224
0.29	1.218	1.218
0.2933	1.205	1.205
0.2966	1.193	1.193
0.3	1.186	1.186

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.3033	1.174	1.174
0.3066	1.161	1.161
0.31	1.148	1.148
0.3133	1.142	1.142
0.3166	1.13	1.13
0.32	1.123	1.123
0.3233	1.111	1.111
0.3266	1.104	1.104
0.33	1.092	1.092
0.3333	1.085	1.085
0.35	1.035	1.035
0.3666	0.991	0.991
0.3833	0.946	0.946
0.4	0.902	0.902
0.4166	0.864	0.864
0.4333	0.82	0.82
0.45	0.789	0.789
0.4666	0.757	0.757
0.4833	0.719	0.719
0.5	0.694	0.694
0.5166	0.662	0.662
0.5333	0.631	0.631
0.55	0.612	0.612
0.5666	0.587	0.587
0.5833	0.561	0.561
0.6	0.536	0.536
0.6166	0.517	0.517
0.6333	0.498	0.498
0.65	0.473	0.473
0.6666	0.46	0.46
0.6833	0.441	0.441
0.7	0.429	0.429
0.7166	0.41	0.41
0.7333	0.391	0.391
0.75	0.378	0.378
0.7666	0.359	0.359
0.7833	0.347	0.347
0.8	0.334	0.334
0.8166	0.321	0.321
0.8333	0.309	0.309
0.85	0.303	0.303
0.8666	0.29	0.29
0.8833	0.284	0.284
0.9	0.271	0.271
0.9166	0.258	0.258
0.9333	0.252	0.252
0.95	0.246	0.246

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.9666	0.233	0.233
0.9833	0.227	0.227
1	0.221	0.221
1.2	0.138	0.138
1.4	0.101	0.101
1.6	0.075	0.075
1.8	0.056	0.056
2	0.05	0.05
2.2	0.044	0.044
2.4	0.037	0.037
2.6	0.031	0.031
2.8	0.031	0.031
3	0.031	0.031
3.2	0.031	0.031
3.4	0.025	0.025
3.6	0.025	0.025
3.8	0.025	0.025
4	0.025	0.025
4.2	0.025	0.025
4.4	0.025	0.025
4.6	0.025	0.025
4.8	0.025	0.025
5	0.025	0.025
5.2	0.025	0.025
5.4	0.025	0.025
5.6	0.025	0.025
5.8	0.018	0.018
6	0.018	0.018
6.2	0.018	0.018
6.4	0.018	0.018
6.6	0.018	0.018
6.8	0.018	0.018
7	0.018	0.018
7.2	0.018	0.018
7.4	0.018	0.018
7.6	0.018	0.018
7.8	0.018	0.018
8	0.018	0.018
8.2	0.018	0.018
8.4	0.012	0.012
8.6	0.012	0.012
8.8	0.012	0.012
9	0.012	0.012
9.2	0.018	0.018
9.4	0.012	0.012
9.6	0.012	0.012
9.8	0.012	0.012

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
10	0.012	0.012
12	0.006	0.006
14	0.006	0.006

G6M-96-26B RISING HEAD PERMEABILITY TEST



G6M-96-26B		
RISING HEAD TEST		
Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0	-0.063	0.063
0.0033	-0.492	0.492
0.0066	-1.142	1.142
0.01	-1.123	1.123
0.0133	-1.433	1.433
0.0166	-1.388	1.388
0.02	-2.853	2.853
0.0233	-2.481	2.481
0.0266	-1.477	1.477
0.03	-3.131	3.131
0.0333	-2.026	2.026
0.0366	-1.231	1.231
0.04	-0.852	0.852
0.0433	-2.013	2.013
0.0466	-1.963	1.963
0.05	-2.468	2.468
0.0533	-2.468	2.468
0.0566	-2.443	2.443
0.06	-2.493	2.493
0.0633	-2.417	2.417
0.0666	-2.354	2.354
0.07	-2.304	2.304
0.0733	-2.26	2.26
0.0766	-2.228	2.228
0.08	-2.209	2.209
0.0833	-2.203	2.203
0.0866	-2.152	2.152
0.09	-2.14	2.14
0.0933	-2.121	2.121
0.0966	-2.076	2.076
0.1	-2.064	2.064
0.1033	-2.039	2.039
0.1066	-2.02	2.02
0.11	-1.994	1.994
0.1133	-1.944	1.944
0.1166	-1.957	1.957
0.12	-1.944	1.944
0.1233	-1.9	1.9
0.1266	-1.887	1.887
0.13	-1.868	1.868
0.1333	-1.868	1.868
0.1366	-1.837	1.837
0.14	-1.811	1.811
0.1433	-1.792	1.792

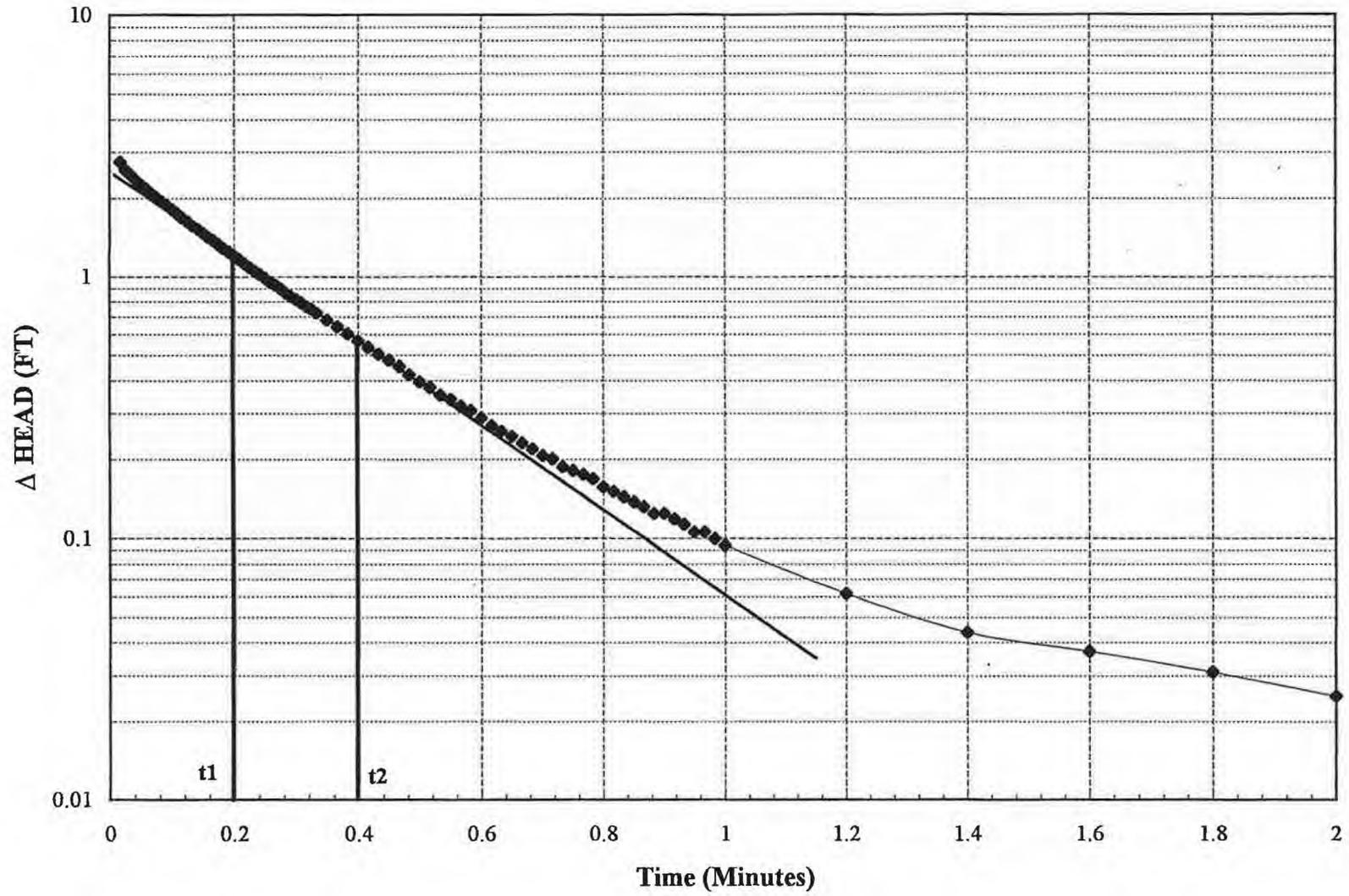
Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.1466	-1.773	1.773
0.15	-1.755	1.755
0.1533	-1.736	1.736
0.1566	-1.723	1.723
0.16	-1.704	1.704
0.1633	-1.685	1.685
0.1666	-1.666	1.666
0.17	-1.647	1.647
0.1733	-1.628	1.628
0.1766	-1.616	1.616
0.18	-1.597	1.597
0.1833	-1.578	1.578
0.1866	-1.559	1.559
0.19	-1.546	1.546
0.1933	-1.534	1.534
0.1966	-1.515	1.515
0.2	-1.502	1.502
0.2033	-1.483	1.483
0.2066	-1.47	1.47
0.21	-1.458	1.458
0.2133	-1.445	1.445
0.2166	-1.426	1.426
0.22	-1.414	1.414
0.2233	-1.401	1.401
0.2266	-1.388	1.388
0.23	-1.369	1.369
0.2333	-1.357	1.357
0.2366	-1.344	1.344
0.24	-1.332	1.332
0.2433	-1.319	1.319
0.2466	-1.306	1.306
0.25	-1.294	1.294
0.2533	-1.281	1.281
0.2566	-1.268	1.268
0.26	-1.25	1.25
0.2633	-1.243	1.243
0.2666	-1.231	1.231
0.27	-1.218	1.218
0.2733	-1.205	1.205
0.2766	-1.193	1.193
0.28	-1.18	1.18
0.2833	-1.167	1.167
0.2866	-1.155	1.155
0.29	-1.149	1.149
0.2933	-1.136	1.136
0.2966	-1.123	1.123
0.3	-1.117	1.117

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.3033	-1.104	1.104
0.3066	-1.098	1.098
0.31	-1.085	1.085
0.3133	-1.073	1.073
0.3166	-1.066	1.066
0.32	-1.054	1.054
0.3233	-1.041	1.041
0.3266	-1.035	1.035
0.33	-1.022	1.022
0.3333	-1.01	1.01
0.35	-0.959	0.959
0.3666	-0.909	0.909
0.3833	-0.864	0.864
0.4	-0.82	0.82
0.4166	-0.782	0.782
0.4333	-0.738	0.738
0.45	-0.707	0.707
0.4666	-0.669	0.669
0.4833	-0.643	0.643
0.5	-0.606	0.606
0.5166	-0.58	0.58
0.5333	-0.555	0.555
0.55	-0.524	0.524
0.5666	-0.498	0.498
0.5833	-0.473	0.473
0.6	-0.454	0.454
0.6166	-0.429	0.429
0.6333	-0.41	0.41
0.65	-0.391	0.391
0.6666	-0.378	0.378
0.6833	-0.359	0.359
0.7	-0.34	0.34
0.7166	-0.328	0.328
0.7333	-0.309	0.309
0.75	-0.296	0.296
0.7666	-0.284	0.284
0.7833	-0.271	0.271
0.8	-0.258	0.258
0.82	-0.246	0.246
0.8333	-0.233	0.233
0.85	-0.227	0.227
0.8666	-0.214	0.214
0.8833	-0.208	0.208
0.9	-0.195	0.195
0.9166	-0.189	0.189
0.9333	-0.183	0.183
0.95	-0.17	0.17

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.9666	-0.164	0.164
0.9833	-0.157	0.157
1	-0.151	0.151
1.2	-0.075	0.075
1.4	-0.05	0.05
1.6	-0.037	0.037
1.8	-0.025	0.025
2	-0.019	0.019
2.2	-0.019	0.019
2.4	-0.012	0.012
2.6	-0.012	0.012
2.8	-0.012	0.012
3	-0.012	0.012
3.2	-0.006	0.006
3.4	-0.012	0.012
3.6	-0.006	0.006
3.8	-0.006	0.006
4	-0.006	0.006
4.2	-0.006	0.006
4.4	-0.006	0.006
4.6	-0.012	0.012
4.8	-0.006	0.006
5	-0.006	0.006
5.2	-0.006	0.006
5.4	-0.006	0.006
5.6	-0.006	0.006
5.8	-0.006	0.006
6	-0.006	0.006
6.2	-0.012	0.012
6.4	-0.012	0.012
6.6	-0.012	0.012
6.8	-0.012	0.012
7	-0.012	0.012
7.2	-0.012	0.012
7.4	-0.012	0.012
7.6	-0.012	0.012
7.8	-0.012	0.012
8	-0.012	0.012
8.2	-0.012	0.012
8.4	-0.012	0.012
8.6	-0.012	0.012
8.8	-0.012	0.012
9	-0.012	0.012
9.2	-0.012	0.012
9.4	-0.012	0.012
9.6	-0.012	0.012
9.8	-0.012	0.012

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
10	-0.012	0.012
12	-0.012	0.012

G6M-97-27X RISING HEAD PERMEABILITY TEST

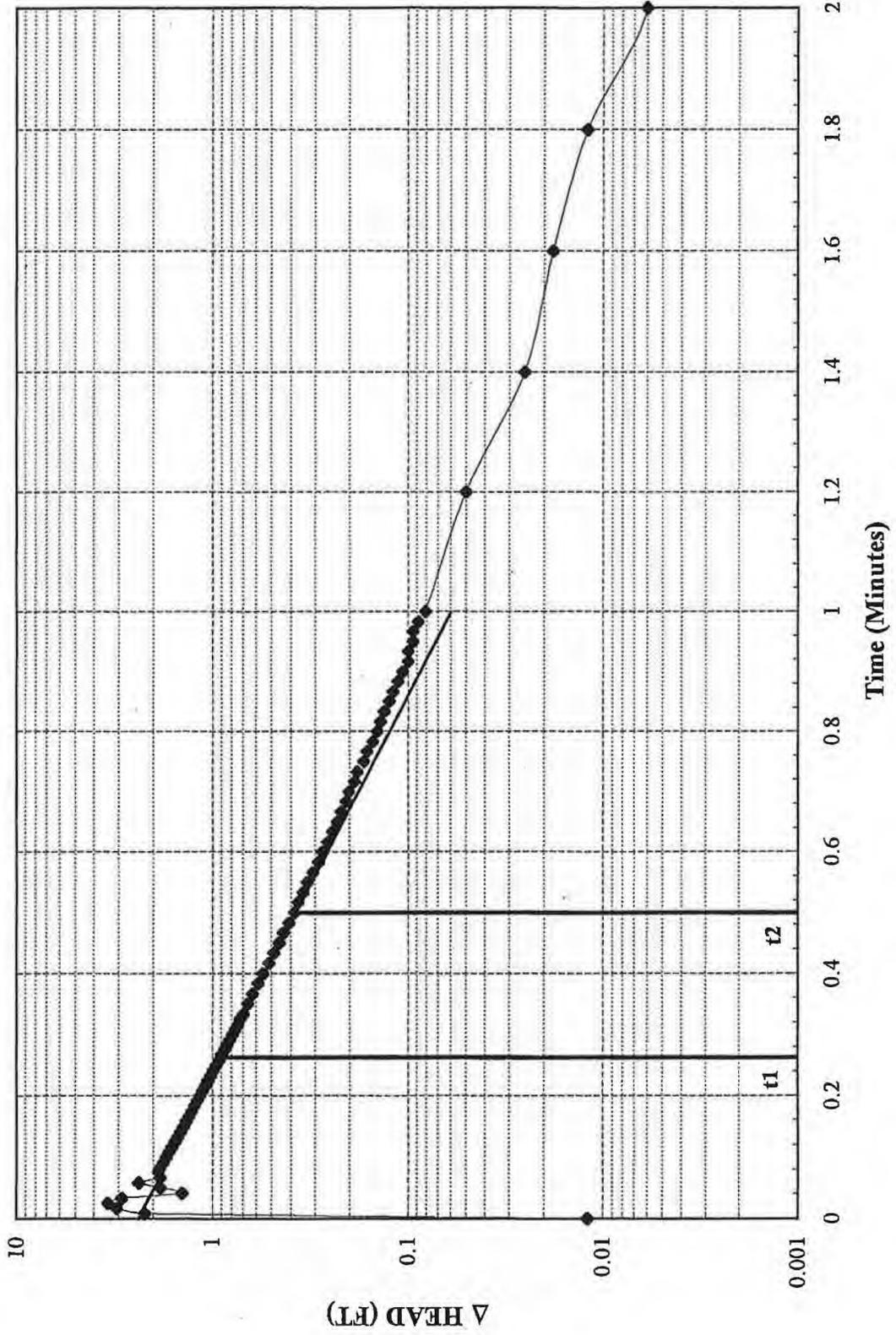


G6M-97-27X RISING HEAD TEST		
Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0	1.095	1.095
0.0083	1.441	1.441
0.0166	2.750	2.750
0.025	2.574	2.574
0.0333	2.460	2.460
0.0416	2.360	2.360
0.05	2.265	2.265
0.0583	2.183	2.183
0.0666	2.095	2.095
0.075	2.020	2.020
0.0833	1.944	1.944
0.0916	1.888	1.888
0.1	1.812	1.812
0.1083	1.755	1.755
0.1166	1.692	1.692
0.125	1.636	1.636
0.1333	1.573	1.573
0.1416	1.523	1.523
0.15	1.472	1.472
0.1583	1.422	1.422
0.1666	1.378	1.378
0.175	1.327	1.327
0.1833	1.283	1.283
0.1916	1.246	1.246
0.2	1.202	1.202
0.2083	1.164	1.164
0.2166	1.126	1.126
0.225	1.088	1.088
0.2333	1.051	1.051
0.2416	1.019	1.019
0.25	0.988	0.988
0.2583	0.956	0.956
0.2666	0.931	0.931
0.275	0.899	0.899
0.2833	0.868	0.868
0.2916	0.843	0.843
0.3	0.818	0.818
0.3083	0.793	0.793
0.3166	0.767	0.767
0.325	0.748	0.748
0.3333	0.723	0.723
0.35	0.679	0.679
0.3666	0.641	0.641
0.3833	0.604	0.604

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.4	0.566	0.566
0.4166	0.534	0.534
0.4333	0.503	0.503
0.45	0.478	0.478
0.4666	0.453	0.453
0.4833	0.421	0.421
0.5	0.396	0.396
0.5166	0.377	0.377
0.5333	0.352	0.352
0.55	0.339	0.339
0.5666	0.320	0.320
0.5833	0.308	0.308
0.6	0.289	0.289
0.6166	0.270	0.270
0.6333	0.258	0.258
0.65	0.245	0.245
0.6666	0.232	0.232
0.6833	0.220	0.220
0.7	0.207	0.207
0.7166	0.201	0.201
0.7333	0.188	0.188
0.75	0.182	0.182
0.7666	0.176	0.176
0.7833	0.169	0.169
0.8	0.157	0.157
0.8166	0.151	0.151
0.8333	0.144	0.144
0.85	0.138	0.138
0.8666	0.132	0.132
0.8833	0.125	0.125
0.9	0.125	0.125
0.9166	0.119	0.119
0.9333	0.113	0.113
0.95	0.106	0.106
0.9666	0.106	0.106
0.9833	0.100	0.100
1	0.094	0.094
1.2	0.062	0.062
1.4	0.044	0.044
1.6	0.037	0.037
1.8	0.031	0.031
2	0.025	0.025
2.2	0.025	0.025
2.4	0.018	0.018
2.6	0.018	0.018
2.8	0.018	0.018
3	0.018	0.018

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
3.2	0.018	0.018
3.4	0.018	0.018
3.6	0.018	0.018
3.8	0.018	0.018
4	0.012	0.012
4.2	0.012	0.012
4.4	0.012	0.012
4.6	0.012	0.012
4.8	0.012	0.012
5	0.012	0.012
5.2	0.012	0.012
5.4	0.012	0.012
5.6	0.012	0.012
5.8	0.012	0.012
6	0.012	0.012
6.2	0.012	0.012
6.4	0.012	0.012
6.6	0.012	0.012
6.8	0.006	0.006
7	0.006	0.006
7.2	0.006	0.006
7.4	0.006	0.006
7.6	0.012	0.012
7.8	0.012	0.012
8	0.012	0.012
8.2	0.012	0.012
8.4	0.006	0.006
8.6	0.006	0.006
8.8	0.006	0.006
9	0.006	0.006
9.2	0.006	0.006
9.4	0.006	0.006
9.6	0.006	0.006
9.8	0.006	0.006
10	0.006	0.006

G6M-97-27X FALLING HEAD PERMEABILITY TEST

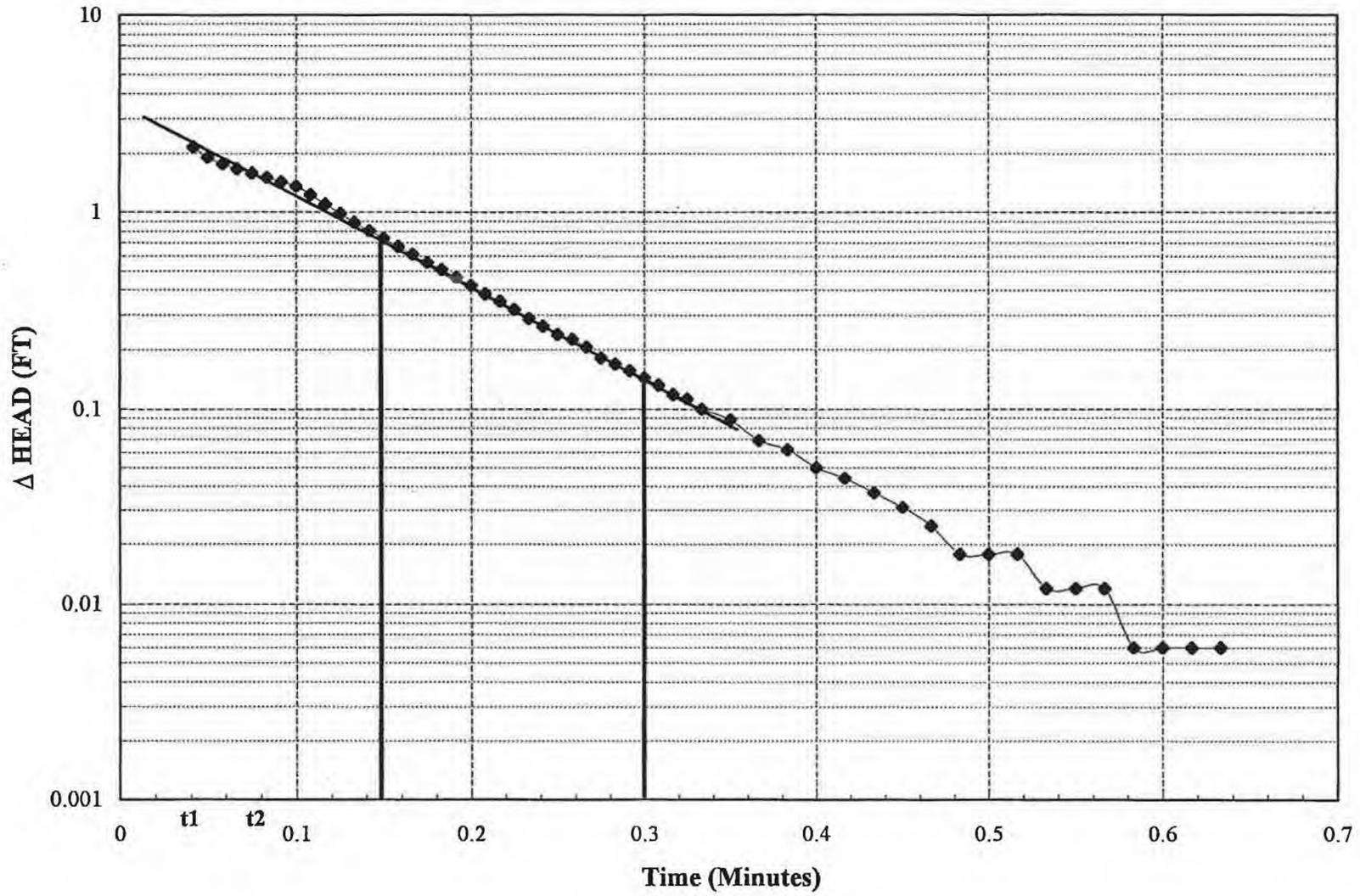


G6M-97-27X FALLING HEAD TEST		
Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0	-0.012	0.012
0.0083	-2.202	2.202
0.0166	-3.058	3.058
0.025	-3.398	3.398
0.0333	-2.882	2.882
0.0416	-1.428	1.428
0.05	-1.837	1.837
0.0583	-2.366	2.366
0.0666	-1.844	1.844
0.075	-1.875	1.875
0.0833	-1.844	1.844
0.0916	-1.768	1.768
0.1	-1.718	1.718
0.1083	-1.655	1.655
0.1166	-1.604	1.604
0.125	-1.548	1.548
0.1333	-1.497	1.497
0.1416	-1.447	1.447
0.15	-1.403	1.403
0.1583	-1.359	1.359
0.1666	-1.315	1.315
0.175	-1.271	1.271
0.1833	-1.233	1.233
0.1916	-1.195	1.195
0.2	-1.158	1.158
0.2083	-1.12	1.12
0.2166	-1.082	1.082
0.225	-1.051	1.051
0.2333	-1.019	1.019
0.2416	-0.988	0.988
0.25	-0.956	0.956
0.2583	-0.925	0.925
0.2666	-0.9	0.9
0.275	-0.868	0.868
0.2833	-0.843	0.843
0.2916	-0.818	0.818
0.3	-0.793	0.793
0.3083	-0.767	0.767
0.3166	-0.742	0.742
0.325	-0.723	0.723
0.3333	-0.698	0.698
0.35	-0.66	0.66
0.3666	-0.623	0.623
0.3833	-0.585	0.585

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.4	-0.553	0.553
0.4166	-0.516	0.516
0.4333	-0.484	0.484
0.45	-0.459	0.459
0.4666	-0.434	0.434
0.4833	-0.409	0.409
0.5	-0.383	0.383
0.5166	-0.365	0.365
0.5333	-0.346	0.346
0.55	-0.327	0.327
0.5666	-0.308	0.308
0.5833	-0.289	0.289
0.6	-0.276	0.276
0.6166	-0.258	0.258
0.6333	-0.245	0.245
0.65	-0.232	0.232
0.6666	-0.22	0.22
0.6833	-0.207	0.207
0.7	-0.201	0.201
0.7166	-0.188	0.188
0.7333	-0.182	0.182
0.75	-0.169	0.169
0.7666	-0.163	0.163
0.7833	-0.151	0.151
0.8	-0.144	0.144
0.8166	-0.138	0.138
0.8333	-0.132	0.132
0.85	-0.125	0.125
0.8666	-0.119	0.119
0.8833	-0.113	0.113
0.9	-0.106	0.106
0.9166	-0.1	0.1
0.9333	-0.1	0.1
0.95	-0.094	0.094
0.9666	-0.094	0.094
0.9833	-0.088	0.088
1	-0.081	0.081
1.2	-0.05	0.05
1.4	-0.025	0.025
1.6	-0.018	0.018
1.8	-0.012	0.012
2	-0.006	0.006
2.2	-0.006	0.006
2.4	-0.006	0.006
2.6	-0.006	0.006
2.8	0	0
3	0	0

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
3.2	0	0
3.4	0	0
3.6	0	0
3.8	0	0
4	0	0
4.2	0.006	-0.006
4.4	0.006	-0.006
4.6	0.006	-0.006
4.8	0.006	-0.006
5	0.006	-0.006
5.2	0.006	-0.006
5.4	0.006	-0.006
5.6	0.006	-0.006
5.8	0.006	-0.006
6	0.006	-0.006
6.2	0.006	-0.006
6.4	0.006	-0.006
6.6	0.006	-0.006
6.8	0.006	-0.006
7	0.006	-0.006
7.2	0.006	-0.006
7.4	0.006	-0.006
7.6	0.006	-0.006
7.8	0.006	-0.006
8	0.006	-0.006
8.2	0.006	-0.006
8.4	0.006	-0.006
8.6	0.006	-0.006
8.8	0	0
9	0.006	-0.006
9.2	0.006	-0.006
9.4	0.006	-0.006
9.6	0.006	-0.006
9.8	0.006	-0.006
10	0.006	-0.006

G6M-97-28X FALLING HEAD PERMEABILITY TEST No. 1

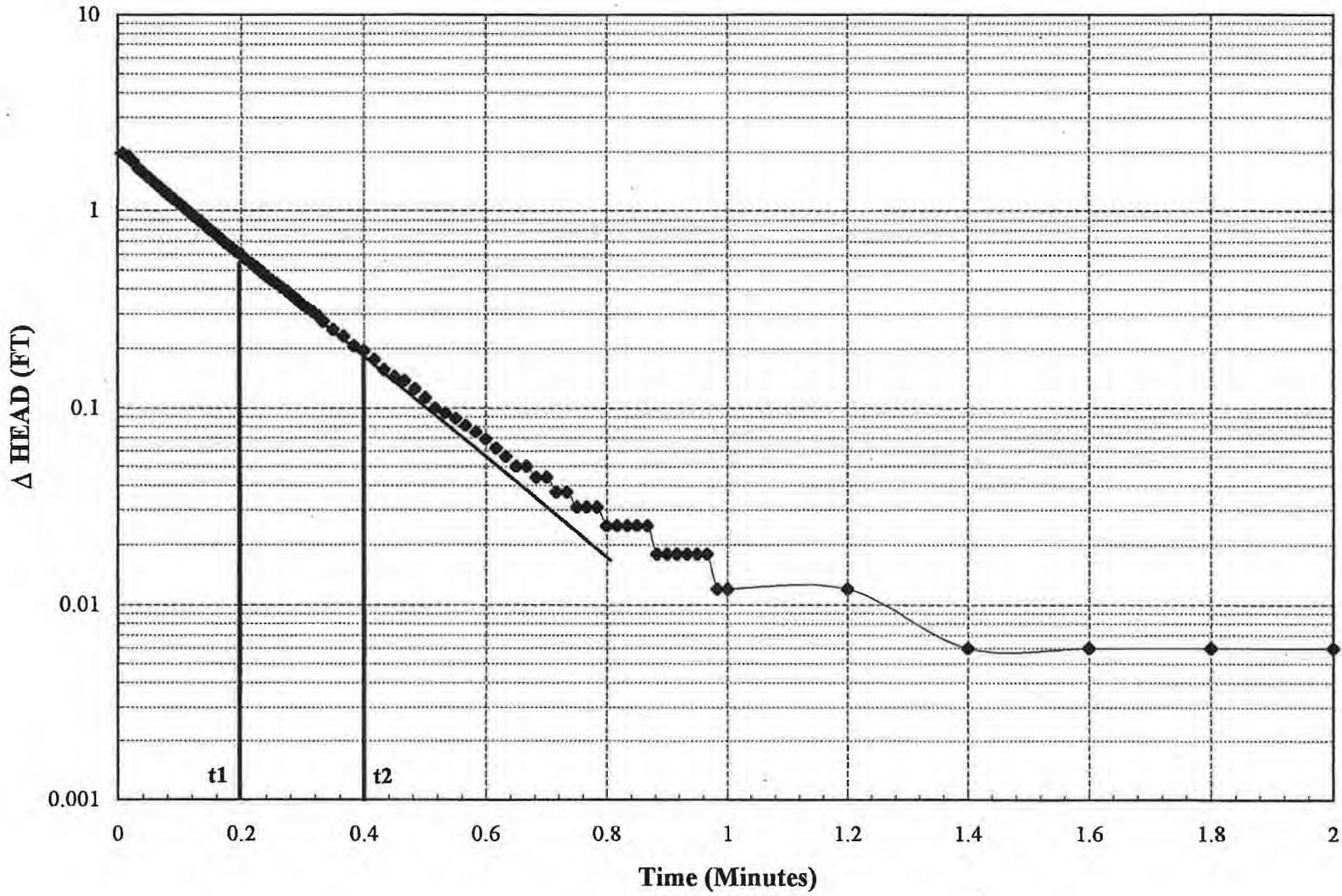


G6M-97-28X FALLING HEAD TEST		
Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0	-0.572	0.572
0.0083	-2.171	2.171
0.0166	-2.58	2.58
0.025	-2.8	2.8
0.0333	-0.717	0.717
0.0416	-2.152	2.152
0.05	-1.906	1.906
0.0583	-1.768	1.768
0.0666	-1.667	1.667
0.075	-1.586	1.586
0.0833	-1.504	1.504
0.0916	-1.428	1.428
0.1	-1.353	1.353
0.1083	-1.22	1.22
0.1166	-1.095	1.095
0.125	-0.981	0.981
0.1333	-0.887	0.887
0.1416	-0.805	0.805
0.15	-0.736	0.736
0.1583	-0.667	0.667
0.1666	-0.61	0.61
0.175	-0.553	0.553
0.1833	-0.509	0.509
0.1916	-0.465	0.465
0.2	-0.421	0.421
0.2083	-0.383	0.383
0.2166	-0.352	0.352
0.225	-0.32	0.32
0.2333	-0.289	0.289
0.2416	-0.264	0.264
0.25	-0.239	0.239
0.2583	-0.226	0.226
0.2666	-0.207	0.207
0.275	-0.182	0.182
0.2833	-0.169	0.169
0.2916	-0.157	0.157
0.3	-0.144	0.144
0.3083	-0.132	0.132
0.3166	-0.119	0.119
0.325	-0.113	0.113
0.3333	-0.1	0.1
0.35	-0.088	0.088
0.3666	-0.069	0.069
0.3833	-0.062	0.062

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.4	-0.05	0.05
0.4166	-0.044	0.044
0.4333	-0.037	0.037
0.45	-0.031	0.031
0.4666	-0.025	0.025
0.4833	-0.018	0.018
0.5	-0.018	0.018
0.5166	-0.018	0.018
0.5333	-0.012	0.012
0.55	-0.012	0.012
0.5666	-0.012	0.012
0.5833	-0.006	0.006
0.6	-0.006	0.006
0.6166	-0.006	0.006
0.6333	-0.006	0.006
0.65	0	0
0.6666	-0.006	0.006
0.6833	0	0
0.7	0	0
0.7166	0	0
0.7333	0	0
0.75	0	0
0.7666	-0.006	0.006
0.7833	0	0
0.8	0	0
0.8166	0	0
0.8333	0	0
0.85	0	0
0.8666	0	0
0.8833	0	0
0.9	0	0
0.9166	0	0
0.9333	0	0
0.95	0	0
0.9666	0.006	0.006
0.9833	0.006	0.006
1	0	0
1.2	0	0
1.4	0.006	0.006
1.6	0.006	0.006
1.8	0.006	0.006
2	0.006	0.006
2.2	0.006	0.006
2.4	0.006	0.006
2.6	0.006	0.006
2.8	0.006	0.006
3	0.006	0.006

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
3.2	0.006	0.006
3.4	0.006	0.006
3.6	0.006	0.006
3.8	0.006	0.006
4	0.006	0.006
4.2	0.006	0.006
4.4	0.006	0.006
4.6	0.006	0.006
4.8	0.006	0.006
5	0.006	0.006
5.2	0.006	0.006
5.4	0.006	0.006
5.6	0.006	0.006
5.8	0.006	0.006
6	0.006	0.006
6.2	0.006	0.006
6.4	0.006	0.006
6.6	0.006	0.006
6.8	0.006	0.006
7	0.006	0.006
7.2	0.006	0.006

G6M-97-28X RISING HEAD PERMEABILITY TEST

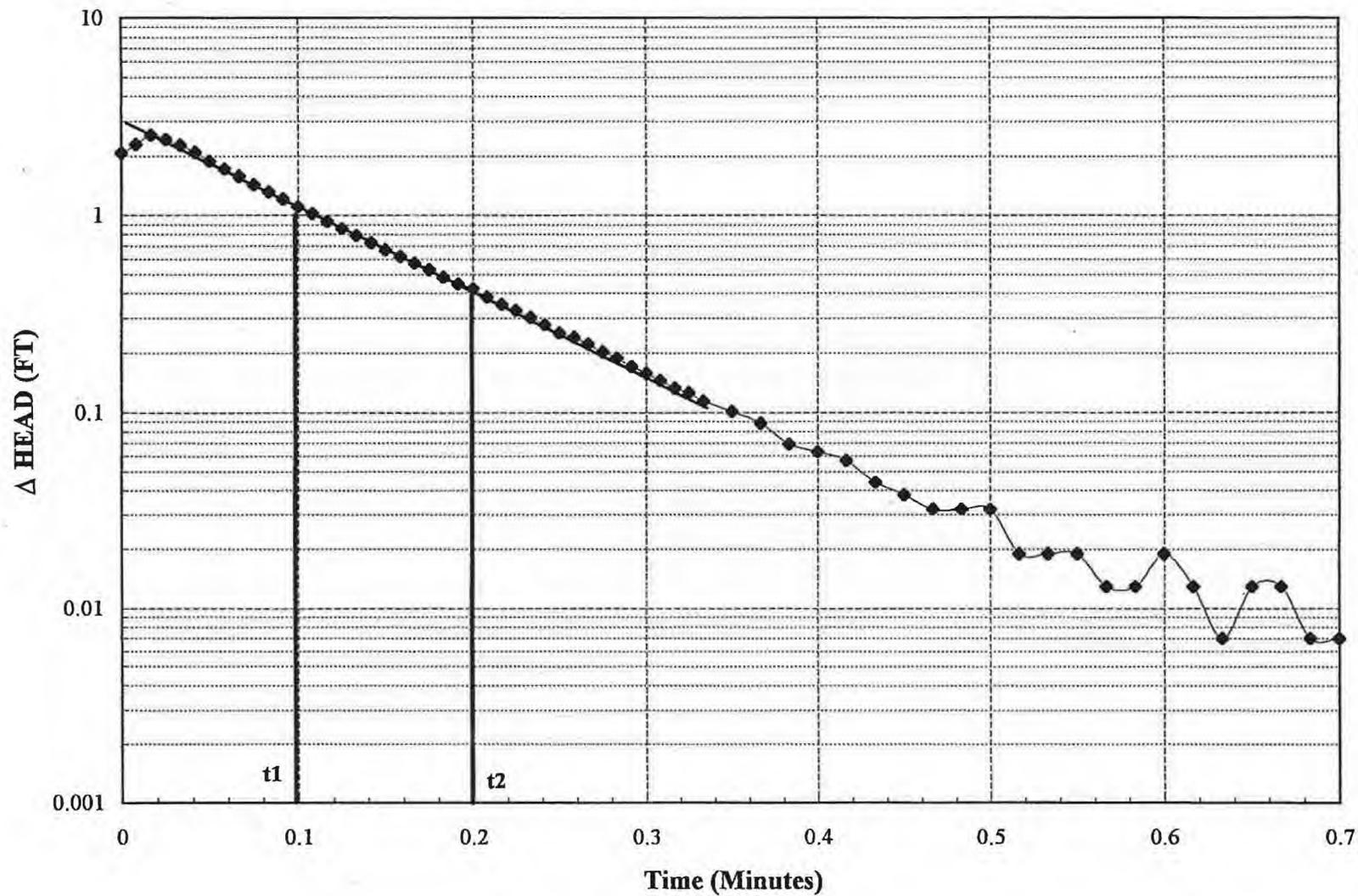


G6M-97-28X RISING HEAD TEST		
Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0	1.107	1.107
0.0083	1.963	1.963
0.0166	1.894	1.894
0.025	1.774	1.774
0.0333	1.648	1.648
0.0416	1.56	1.56
0.05	1.478	1.478
0.0583	1.403	1.403
0.0666	1.327	1.327
0.075	1.258	1.258
0.0833	1.195	1.195
0.0916	1.139	1.139
0.1	1.082	1.082
0.1083	1.025	1.025
0.1166	0.975	0.975
0.125	0.931	0.931
0.1333	0.887	0.887
0.1416	0.843	0.843
0.15	0.799	0.799
0.1583	0.761	0.761
0.1666	0.723	0.723
0.175	0.685	0.685
0.1833	0.654	0.654
0.1916	0.623	0.623
0.2	0.597	0.597
0.2083	0.566	0.566
0.2166	0.541	0.541
0.225	0.516	0.516
0.2333	0.49	0.49
0.2416	0.465	0.465
0.25	0.446	0.446
0.2583	0.427	0.427
0.2666	0.409	0.409
0.275	0.39	0.39
0.2833	0.371	0.371
0.2916	0.352	0.352
0.3	0.333	0.333
0.3083	0.32	0.32
0.3166	0.308	0.308
0.325	0.295	0.295
0.3333	0.276	0.276
0.35	0.251	0.251
0.3666	0.232	0.232
0.3833	0.207	0.207

0.4	0.195	0.195
0.4166	0.176	0.176
0.4333	0.157	0.157
0.45	0.144	0.144
0.4666	0.138	0.138
0.4833	0.125	0.125
0.5	0.113	0.113
0.5166	0.1	0.1
0.5333	0.094	0.094
0.55	0.088	0.088
0.5666	0.081	0.081
0.5833	0.075	0.075
0.6	0.069	0.069
0.6166	0.062	0.062
0.6333	0.056	0.056
0.65	0.05	0.05
0.6666	0.05	0.05
0.6833	0.044	0.044
0.7	0.044	0.044
0.7166	0.037	0.037
0.7333	0.037	0.037
0.75	0.031	0.031
0.7666	0.031	0.031
0.7833	0.031	0.031
0.8	0.025	0.025
0.8166	0.025	0.025
0.8333	0.025	0.025
0.85	0.025	0.025
0.8666	0.025	0.025
0.8833	0.018	0.018
0.9	0.018	0.018
0.9166	0.018	0.018
0.9333	0.018	0.018
0.95	0.018	0.018
0.9666	0.018	0.018
0.9833	0.012	0.012
1	0.012	0.012
1.2	0.012	0.012
1.4	0.006	0.006
1.6	0.006	0.006
1.8	0.006	0.006
2	0.006	0.006
2.2	0.006	0.006
2.4	0.012	0.012
2.6	0.006	0.006
2.8	0.006	0.006
3	0.006	0.006
3.2	0.006	0.006
3.4	0.006	0.006

3.6	0.006	0.006
3.8	0.006	0.006
4	0.006	0.006
4.2	0.006	0.006
4.4	0.006	0.006
4.6	0.006	0.006
4.8	0.006	0.006
5	0.006	0.006
5.2	0.006	0.006
5.4	0.006	0.006
5.6	0.006	0.006
5.8	0.006	0.006
6	0.006	0.006
6.2	0.006	0.006
6.4	0.006	0.006
6.6	0.006	0.006
6.8	0.006	0.006
7	0.006	0.006
7.2	0.006	0.006
7.4	0.006	0.006
7.6	0.006	0.006
7.8	0.006	0.006
8	0.006	0.006
8.2	0.006	0.006

G6M-97-29X RISING HEAD PERMEABILITY TEST

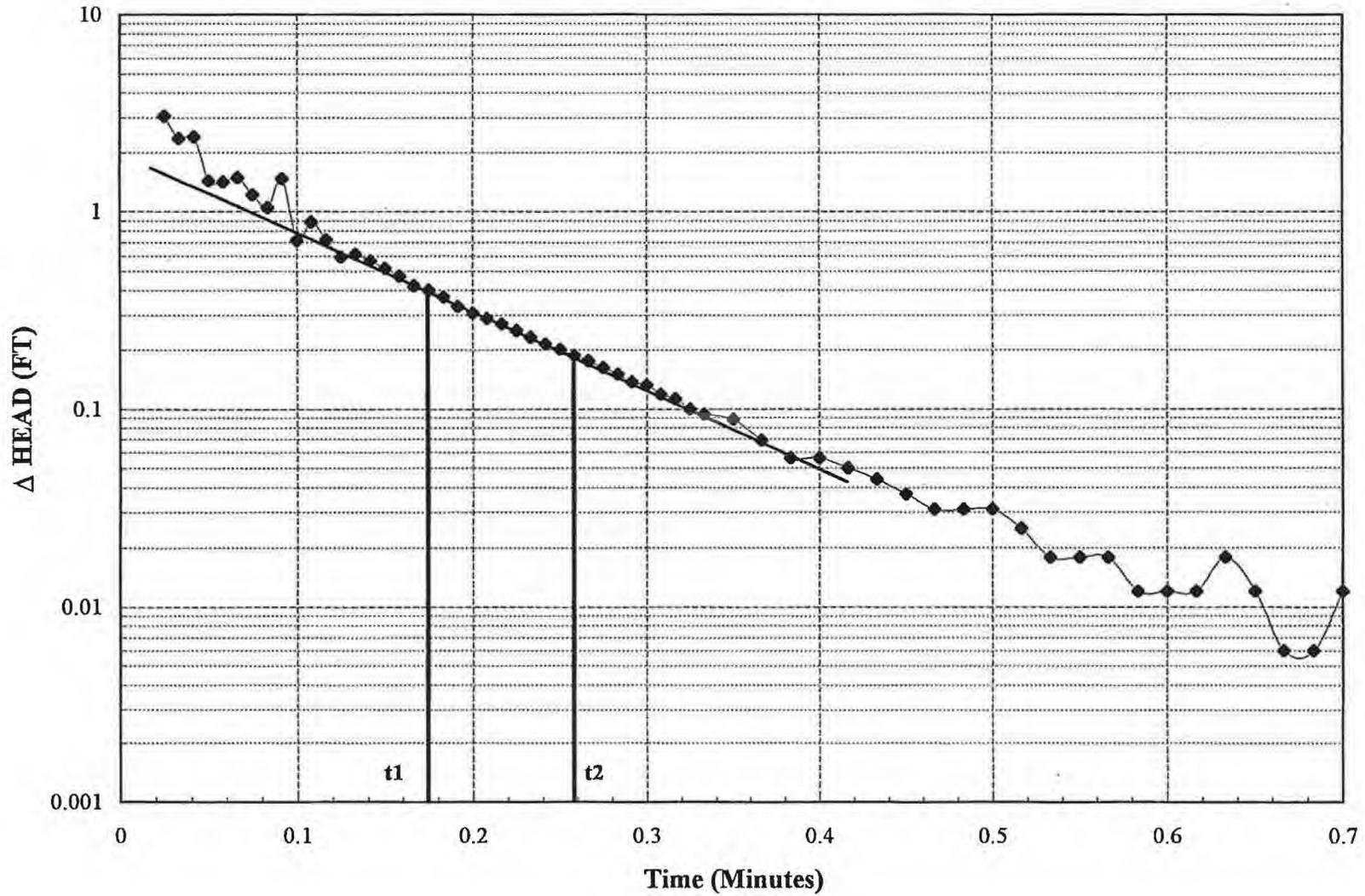


G6M-97-29X		
RISING HEAD TEST		
Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0	-4.223	2.077
0.0083	-4.009	2.291
0.0166	-3.744	2.556
0.025	-3.877	2.423
0.0333	-4.034	2.266
0.0416	-4.21	2.09
0.05	-4.418	1.882
0.0583	-4.581	1.719
0.0666	-4.72	1.58
0.075	-4.865	1.435
0.0833	-4.978	1.322
0.0916	-5.085	1.215
0.1	-5.192	1.108
0.1083	-5.28	1.02
0.1166	-5.368	0.932
0.125	-5.444	0.856
0.1333	-5.513	0.787
0.1416	-5.576	0.724
0.15	-5.633	0.667
0.1583	-5.683	0.617
0.1666	-5.727	0.573
0.175	-5.771	0.529
0.1833	-5.815	0.483
0.1916	-5.853	0.447
0.2	-5.878	0.422
0.2083	-5.916	0.384
0.2166	-5.947	0.353
0.225	-5.972	0.328
0.2333	-5.998	0.302
0.2416	-6.023	0.277
0.25	-6.048	0.252
0.2583	-6.061	0.239
0.2666	-6.079	0.221
0.275	-6.098	0.202
0.2833	-6.111	0.189
0.2916	-6.13	0.17
0.3	-6.142	0.158
0.3083	-6.155	0.145
0.3166	-6.168	0.132
0.325	-6.174	0.126
0.3333	-6.186	0.114
0.35	-6.199	0.101
0.3666	-6.212	0.088
0.3833	-6.231	0.069

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.4	-6.237	0.063
0.4166	-6.243	0.057
0.4333	-6.256	0.044
0.45	-6.262	0.038
0.4666	-6.268	0.032
0.4833	-6.268	0.032
0.5	-6.268	0.032
0.5166	-6.281	0.019
0.5333	-6.281	0.019
0.55	-6.281	0.019
0.5666	-6.287	0.013
0.5833	-6.287	0.013
0.6	-6.281	0.019
0.6166	-6.287	0.013
0.6333	-6.293	0.007
0.65	-6.287	0.013
0.6666	-6.287	0.013
0.6833	-6.293	0.007
0.7	-6.293	0.007
0.7166	-6.293	0.007
0.7333	-6.293	0.007
0.75	-6.287	0.013
0.7666	-6.293	0.007
0.7833	-6.3	0
0.8	-6.293	0.007
0.8166	-6.293	0.007
0.8333	-6.293	0.007
0.85	-6.293	0.007
0.8666	-6.293	0.007
0.8833	-6.293	0.007
0.9	-6.293	0.007
0.9166	-6.293	0.007
0.9333	-6.293	0.007
0.95	-6.3	0
0.9666	-6.3	0
0.9833	-6.3	0
1	-6.3	0
1.2	-6.3	0
1.4	-6.293	0.007
1.6	-6.293	0.007
1.8	-6.3	0
2	-6.3	0
2.2	-6.293	0.007
2.4	-6.3	0
2.6	-6.3	0
2.8	-6.293	0.007
3	-6.3	0

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
3.2	-6.3	0
3.4	-6.3	0
3.6	-6.3	0
3.8	-6.3	0
4	-6.306	-0.006
4.2	-6.3	0
4.4	-6.306	-0.006
4.6	-6.306	-0.006
4.8	-6.3	0
5	-6.306	-0.006
5.2	-6.306	-0.006
5.4	-6.312	-0.012
5.6	-6.306	-0.006
5.8	-6.3	0
6	-6.3	0
6.2	-6.3	0
6.4	-6.3	0
6.6	-6.3	0
6.8	-6.3	0
7	-6.3	0
7.2	-6.3	0
7.4	-6.3	0

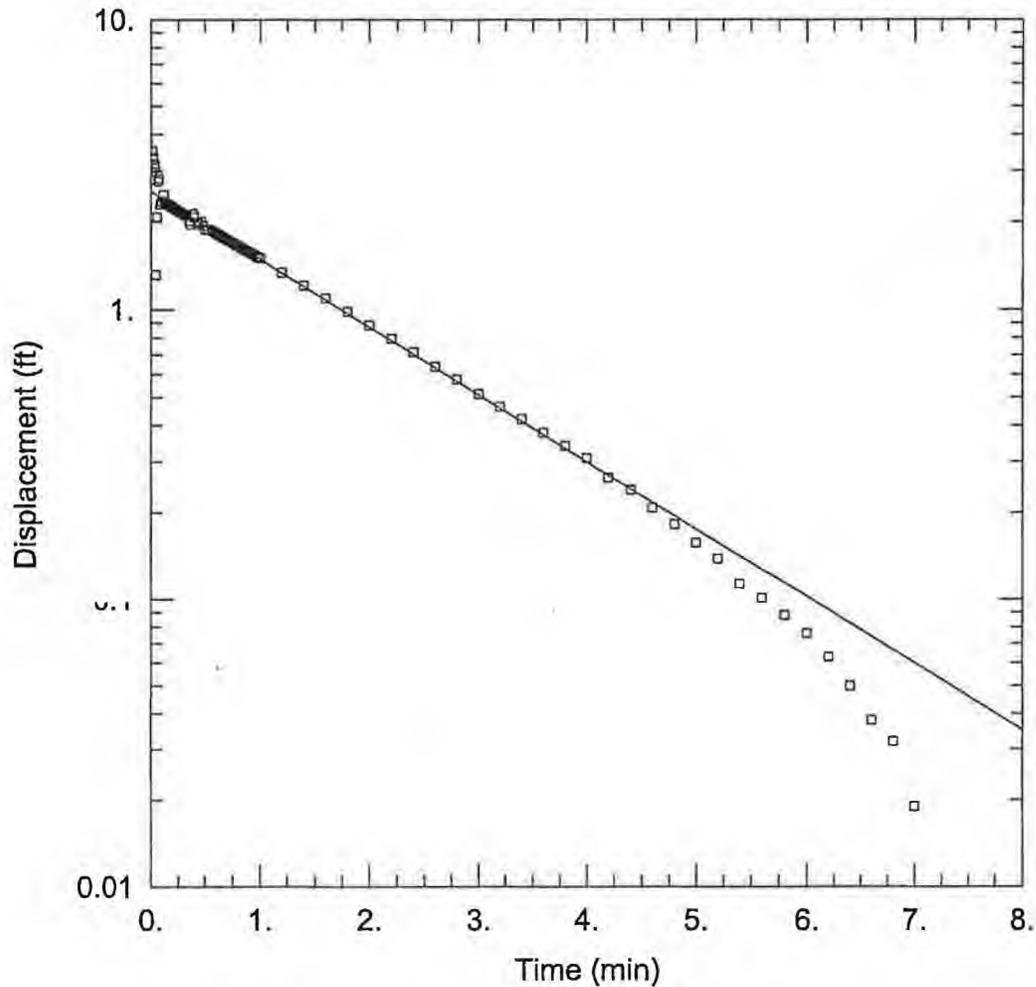
G6M-97-29X FALLING HEAD PERMEABILITY TEST



G6M-97-29X FALLING HEAD TEST		
Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0	-0.006	0.006
0.0083	-1.498	1.498
0.0166	-1.894	1.894
0.025	-3.052	3.052
0.0333	-2.354	2.354
0.0416	-2.41	2.41
0.05	-1.441	1.441
0.0583	-1.416	1.416
0.0666	-1.498	1.498
0.075	-1.214	1.214
0.0833	-1.051	1.051
0.0916	-1.479	1.479
0.1	-0.717	0.717
0.1083	-0.887	0.887
0.1166	-0.723	0.723
0.125	-0.591	0.591
0.1333	-0.61	0.61
0.1416	-0.566	0.566
0.15	-0.516	0.516
0.1583	-0.472	0.472
0.1666	-0.421	0.421
0.175	-0.402	0.402
0.1833	-0.371	0.371
0.1916	-0.333	0.333
0.2	-0.308	0.308
0.2083	-0.289	0.289
0.2166	-0.27	0.27
0.225	-0.251	0.251
0.2333	-0.232	0.232
0.2416	-0.214	0.214
0.25	-0.201	0.201
0.2583	-0.188	0.188
0.2666	-0.176	0.176
0.275	-0.163	0.163
0.2833	-0.151	0.151
0.2916	-0.138	0.138
0.3	-0.132	0.132
0.3083	-0.119	0.119
0.3166	-0.113	0.113
0.325	-0.1	0.1
0.3333	-0.094	0.094
0.35	-0.088	0.088
0.3666	-0.069	0.069
0.3833	-0.056	0.056

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
0.4	-0.056	0.056
0.4166	-0.05	0.05
0.4333	-0.044	0.044
0.45	-0.037	0.037
0.4666	-0.031	0.031
0.4833	-0.031	0.031
0.5	-0.031	0.031
0.5166	-0.025	0.025
0.5333	-0.018	0.018
0.55	-0.018	0.018
0.5666	-0.018	0.018
0.5833	-0.012	0.012
0.6	-0.012	0.012
0.6166	-0.012	0.012
0.6333	-0.018	0.018
0.65	-0.012	0.012
0.6666	-0.006	0.006
0.6833	-0.006	0.006
0.7	-0.012	0.012
0.7166	-0.006	0.006
0.7333	-0.012	0.012
0.75	-0.006	0.006
0.7666	0	0
0.7833	0	0
0.8	-0.006	0.006
0.8166	-0.012	0.012
0.8333	-0.012	0.012
0.85	-0.006	0.006
0.8666	-0.006	0.006
0.8833	-0.006	0.006
0.9	-0.012	0.012
0.9166	0	0
0.9333	-0.006	0.006
0.95	-0.006	0.006
0.9666	-0.006	0.006
0.9833	0	0
1	-0.006	0.006
1.2	-0.006	0.006
1.4	0	0
1.6	-0.006	0.006
1.8	0	0
2	-0.006	0.006
2.2	-0.006	0.006
2.4	0	0
2.6	-0.006	0.006
2.8	0	0
3	0	0

Time (min)	ΔH (ft)	Absolute Value ΔH (ft)
3.2	0.006	0.006
3.4	0	0
3.6	0	0
3.8	0	0
4	0	0
4.2	0	0
4.4	0	0
4.6	0	0
4.8	0	0
5	0	0
5.2	0	0
5.4	0	0
5.6	-0.006	0.006
5.8	0	0
6	0	0
6.2	0	0
6.4	0	0
6.6	0	0
6.8	0	0
7	0	0
7.2	-0.006	0.006
7.4	0	0
7.6	0	0
7.8	0.006	0.006
8	0	0
8.2	-0.018	0.018
8.4	0	0
8.6	0	0
8.8	0	0
9	-0.006	0.006
9.2	0	0
9.4	-0.006	0.006
9.6	0	0



WELL TEST ANALYSIS

Data Set: G:\Projects\DEVENS\AOC50\SLUGTEST\fht30xb+r.aqt
 Date: 11/10/99 Time: 13:20:33

PROJECT INFORMATION

Company: HLA
 Client: USACE
 Project: 44953
 Test Location: Devens, AOC 50
 Test Well: G6M-98-30X
 Test Date: 2/18/99

AQUIFER DATA

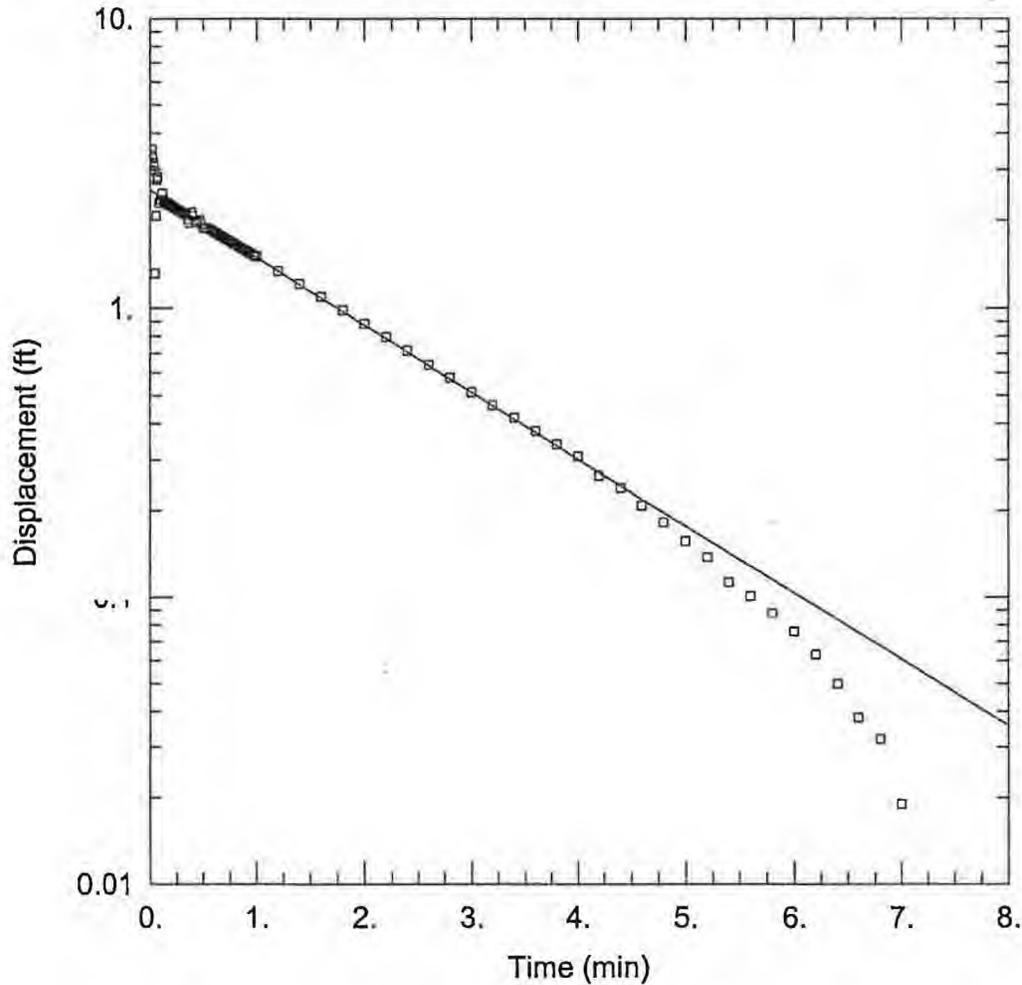
Saturated Thickness: 54. ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (G6M-98-30X)

Initial Displacement: 2.8 ft Water Column Height: 54. ft
 Casing Radius: 0.083 ft Wellbore Radius: 0.125 ft
 Screen Length: 5. ft Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined Solution Method: Hvorslev
 K = 0.001878 ft/min y0 = 2.544 ft



WELL TEST ANALYSIS

Data Set: G:\Projects\DEVENS\AOC50\SLUGTEST\fh30xb+r.aqt

Date: 11/10/99

Time: 13:19:17

PROJECT INFORMATION

Company: HLA

Client: USACE

Project: 44953

Test Location: Devens, AOC 50

Test Well: G6M-98-30X

Test Date: 2/18/99

AQUIFER DATA

Saturated Thickness: 54. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (G6M-98-30X)

Initial Displacement: 2.8 ft

Water Column Height: 54. ft

Casing Radius: 0.083 ft

Wellbore Radius: 0.125 ft

Screen Length: 5. ft

Gravel Pack Porosity: 0.3

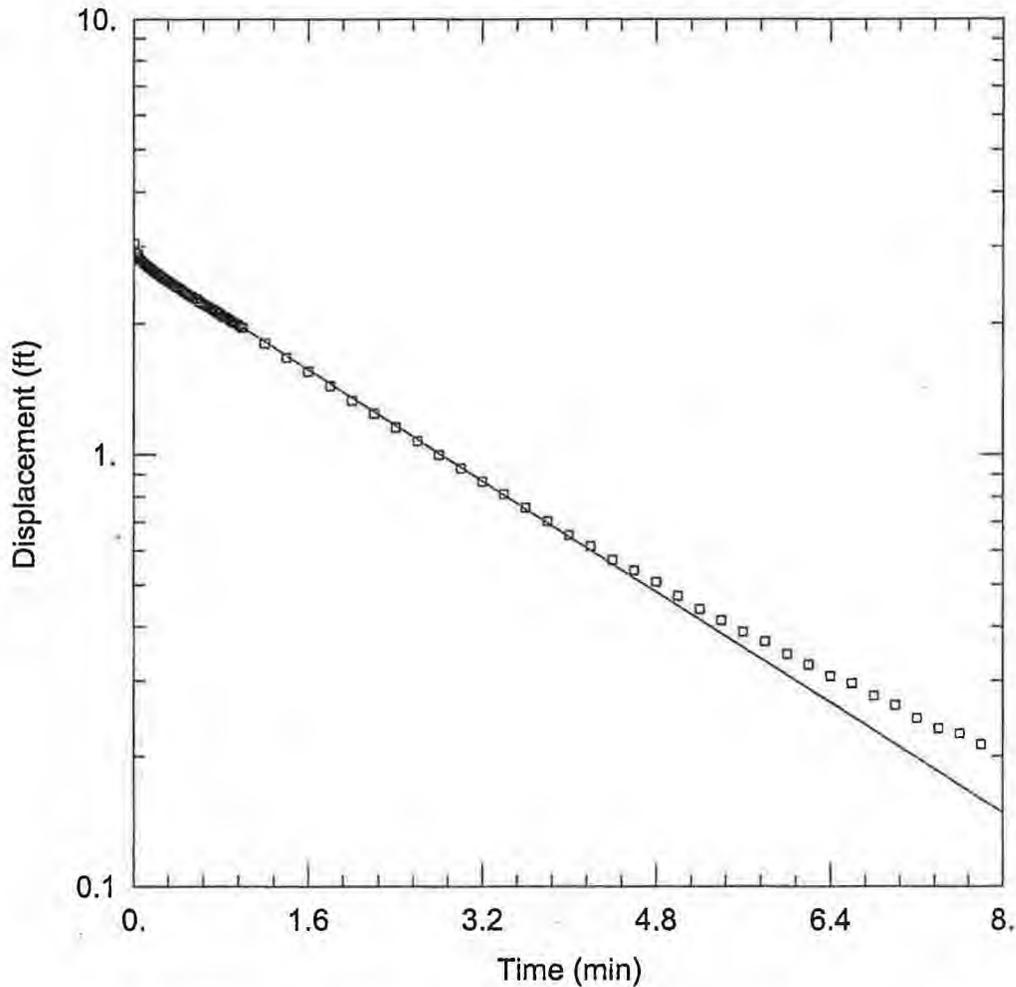
SOLUTION

Aquifer Model: Unconfined

Solution Method: Bower-Rice

K = 0.002125 ft/min

y0 = 2.544 ft



WELL TEST ANALYSIS

Data Set: G:\Projects\DEVENS\AOC50\SLUGTEST\rht30xb+r.aqt
 Date: 11/10/99 Time: 12:48:47

PROJECT INFORMATION

Company: HLA
 Client: USACE
 Project: 44953
 Test Location: Devens, AOC 50
 Test Well: G6M-98-30X
 Test Date: 2/18/99

AQUIFER DATA

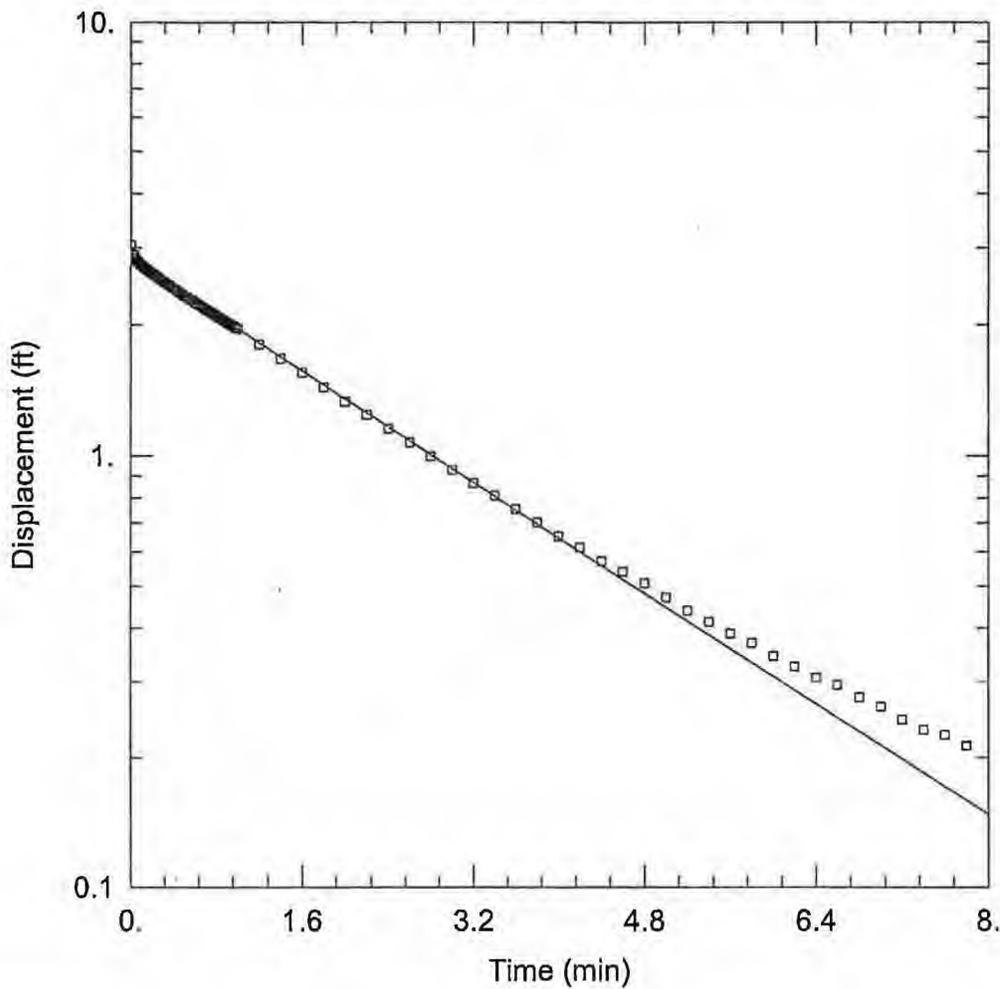
Saturated Thickness: 54. ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (G6M-98-30X)

Initial Displacement: 2.8 ft Water Column Height: 55. ft
 Casing Radius: 0.083 ft Wellbore Radius: 0.125 ft
 Screen Length: 5. ft Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined Solution Method: Hvorslev
 K = 0.001295 ft/min y0 = 2.832 ft



G6M-98-30X

Data Set: G:\Projects\DEVENS\AOC50\SLUGTEST\rht30xb+r.aqt

Date: 11/10/99

Time: 13:33:08

PROJECT INFORMATION

Company: HLA

Client: USACE

Project: 44953

Test Location: Devens, AOC 50

Test Well: G6M-98-30X

Test Date: 2/18/99

AQUIFER DATA

Saturated Thickness: 54. ft

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (G6M-98-30X)

Initial Displacement: 2.8 ft

Water Column Height: 55. ft

Casing Radius: 0.083 ft

Wellbore Radius: 0.125 ft

Screen Length: 5. ft

Gravel Pack Porosity: 0.3

SOLUTION

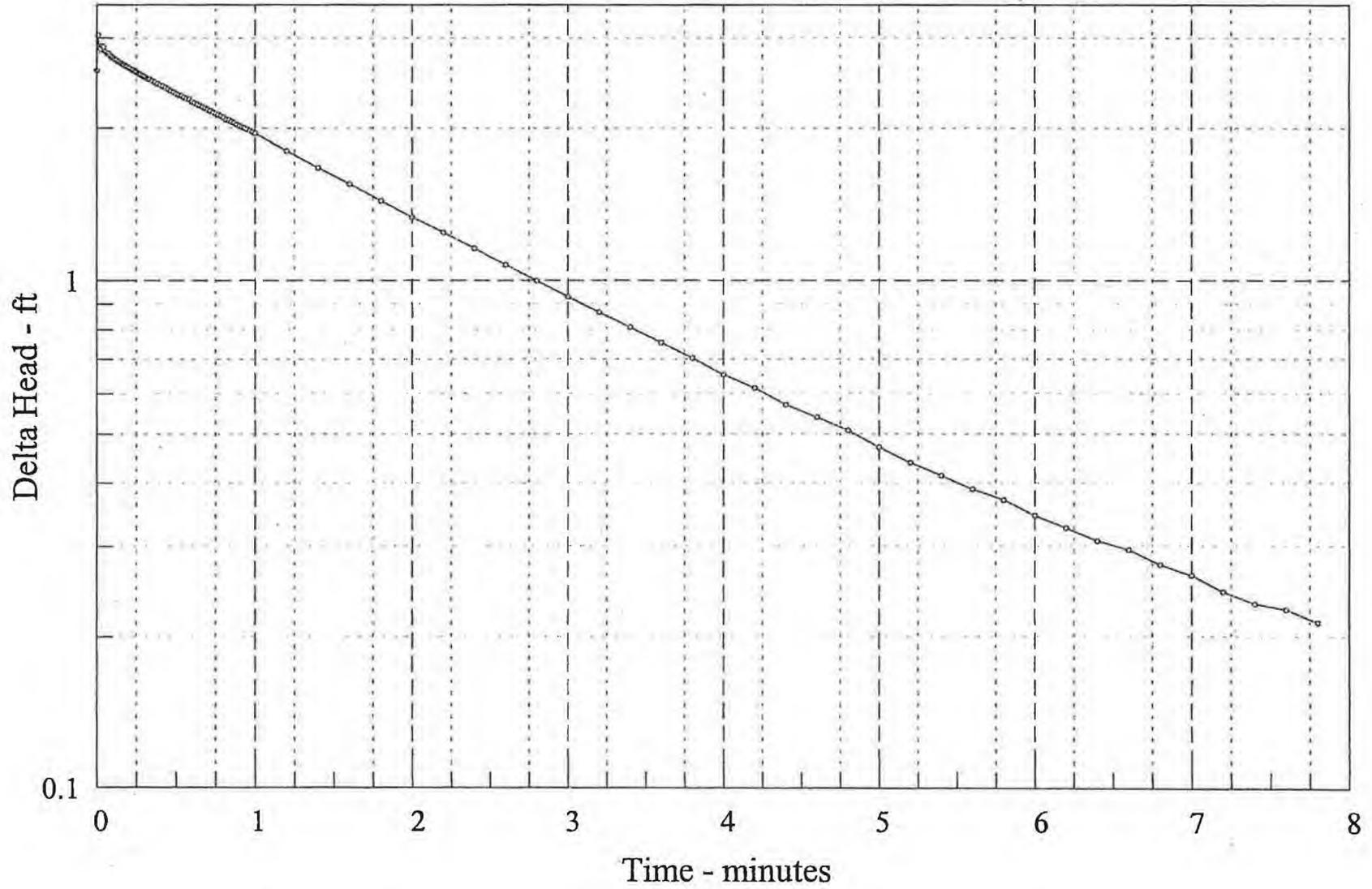
Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

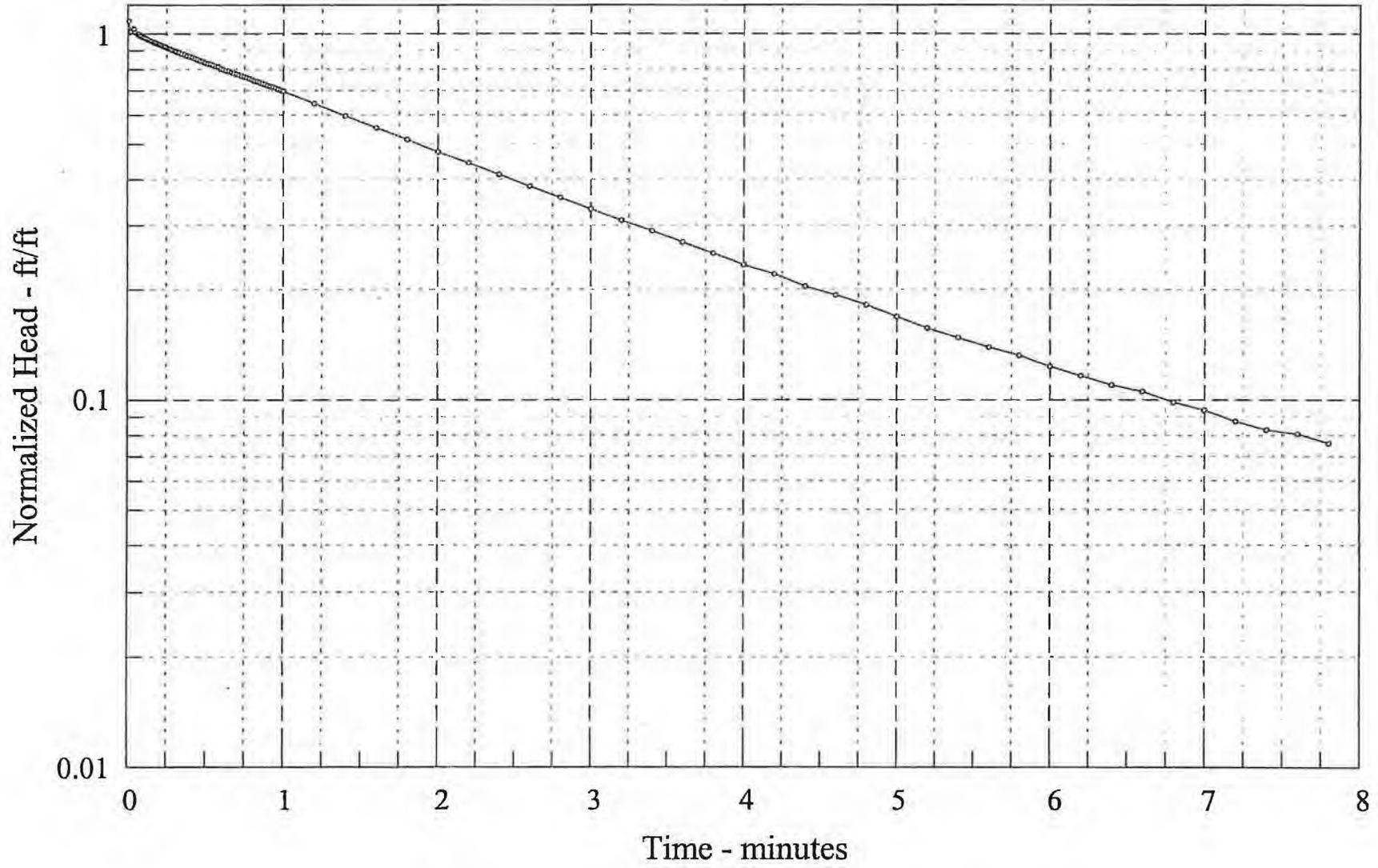
K = 0.001474 ft/min

y0 = 2.832 ft

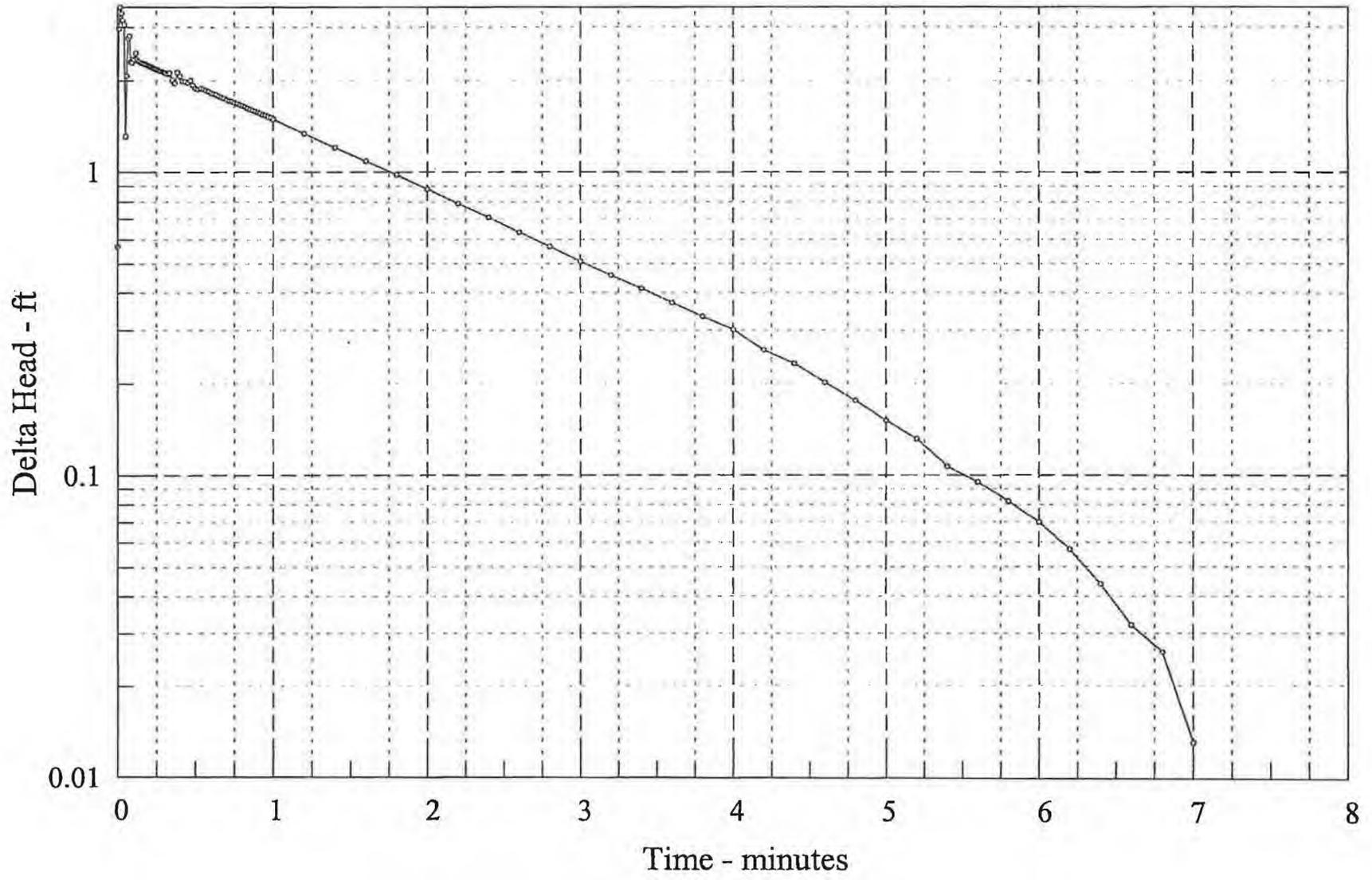
G6M-98-30X Rising Head Test 1 (raw data)



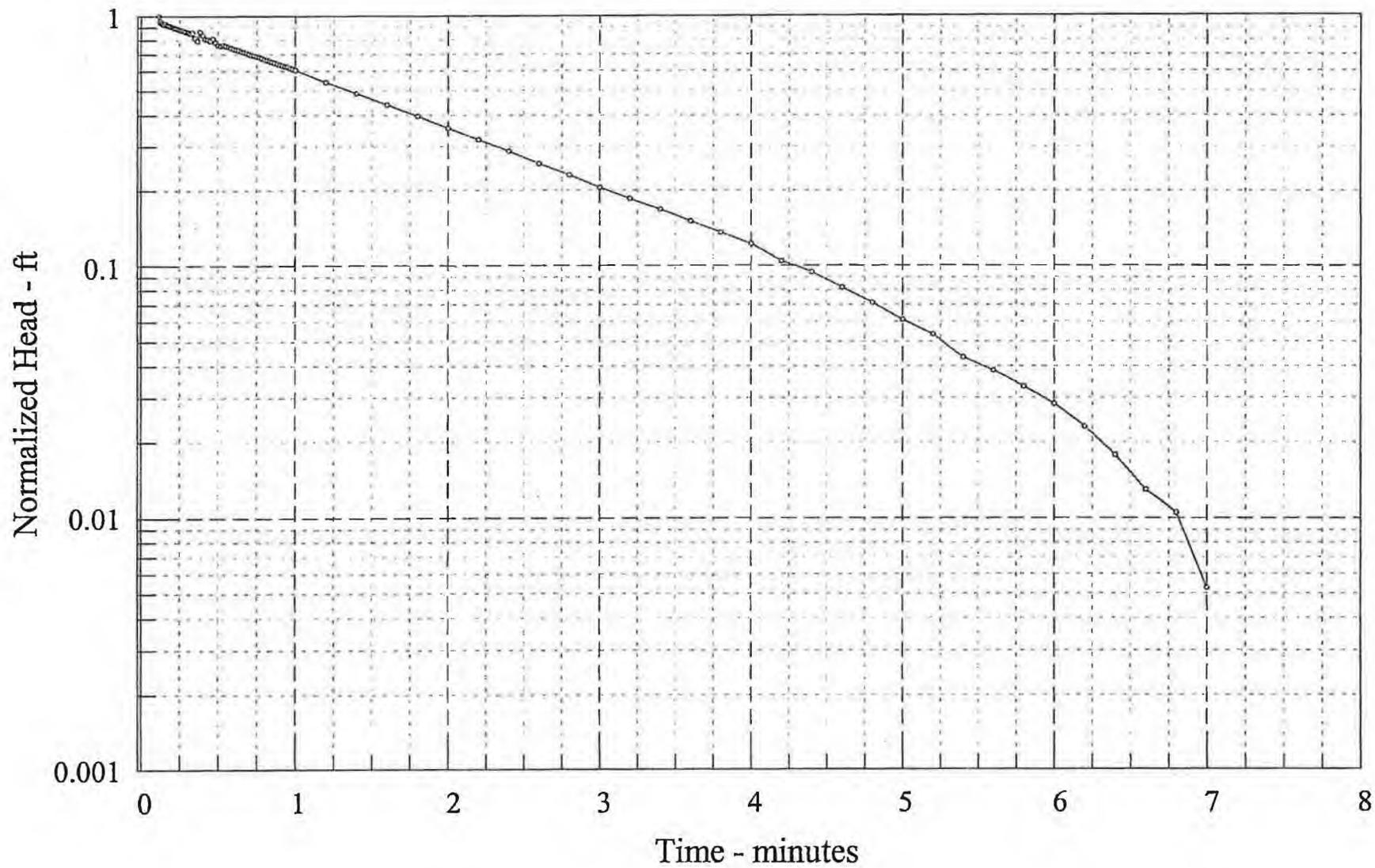
G6M-98-30X Rising Head Test (normalized data)



G6M-98-30X Falling Head Test 1 (raw data)



G6M-98-30X Falling Head Test 1 (normalized data)



FHT 30X

SE2000
Environmental Logger
02/19 14:07

Unit# H2K#1 Test 2

Setups: INPUT 1

Type Level (F)
Mode Surface
I.D.

Reference 0.000
SG 1.000
Linearity -0.002
Scale factor 19.915
Offset -0.053
Delay mSEC 100.000

Step 0 02/18 14:55:58

Elapsed Time INPUT 1

0.0000	0.194
0.0083	2.595
0.0166	3.123 —
0.0250	2.953
0.0333	2.783
0.0416	2.683
0.0500	0.936
0.0583	1.696
0.0666	2.381
0.0750	2.438
0.0833	1.922
0.0916	1.910
0.1000	1.973
0.1083	1.960
0.1166	2.092
0.1250	1.966
0.1333	1.935
0.1416	1.922
0.1500	1.903
0.1583	1.916
0.1666	1.897
0.1750	1.891
0.1833	1.878
0.1916	1.872
0.2000	1.860
0.2083	1.847
0.2166	1.841

Initial drawdown 3.123 feet
radius of well casing (r²) 0.083 feet
effective radius of (2r) 0.167 feet
sandpack

Sat. thickness of aquifer 100'

length of test well screen 5'

height of water column
under static cond. 20.1'

47.90 TOC
x 44.90 BGS

65 - 44.9 = 20.1
54.4

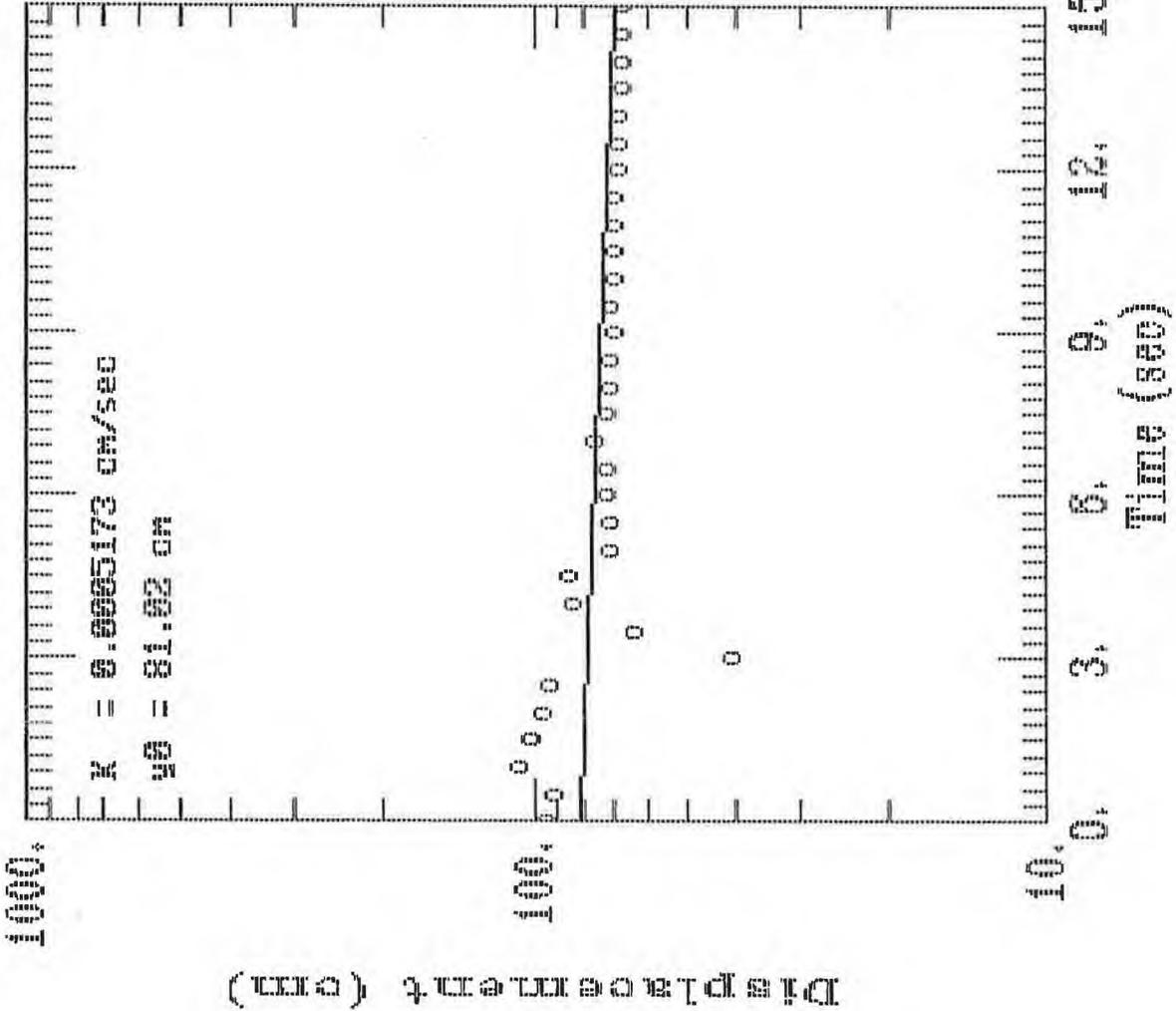
FHT30X

0.2250	1.828
0.2333	1.822
0.2416	1.809
0.2500	1.803
0.2583	1.790
0.2666	1.784
0.2750	1.772
0.2833	1.765
0.2916	1.759
0.3000	1.746
0.3083	1.746
0.3166	1.728
0.3250	1.721
0.3333	1.740
0.3500	1.633
0.3666	1.583
0.3833	1.753
0.4000	1.690
0.4166	1.614
0.4333	1.608
0.4500	1.589
0.4666	1.627
0.4833	1.558
0.5000	1.508
0.5166	1.495
0.5333	1.508
0.5500	1.495
0.5666	1.482
0.5833	1.464
0.6000	1.445
0.6166	1.432
0.6333	1.420
0.6500	1.401
0.6666	1.388
0.6833	1.376
0.7000	1.357
0.7166	1.344
0.7333	1.332
0.7500	1.319
0.7666	1.307
0.7833	1.288
0.8000	1.275
0.8166	1.263
0.8333	1.244
0.8500	1.231
0.8666	1.219
0.8833	1.206
0.9000	1.193
0.9166	1.181
0.9333	1.168
0.9500	1.162

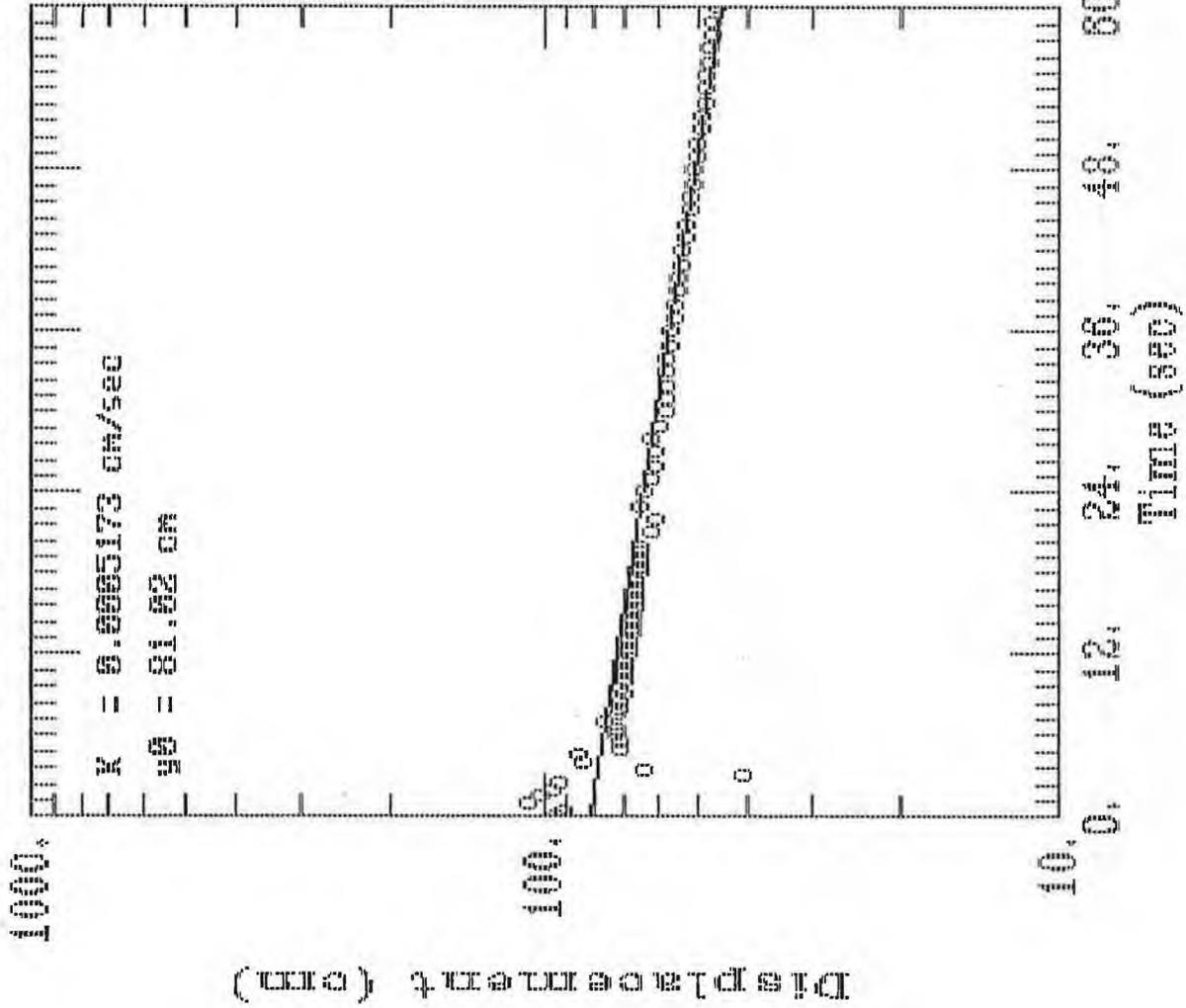
FHT30X

0.9666	1.143
0.9833	1.131
1.0000	1.118
1.2000	0.961
1.4000	0.829
1.6000	0.710
1.8000	0.603
2.0000	0.502
2.2000	0.414
2.4000	0.333
2.6000	0.257
2.8000	0.194
3.0000	0.131
3.2000	0.081
3.4000	0.037
3.6000	-0.006
3.8000	-0.043
4.0000	-0.075
4.2000	-0.119
4.4000	-0.144
4.6000	-0.175
4.8000	-0.201
5.0000	-0.226
5.2000	-0.245
5.4000	-0.270
5.6000	-0.282
5.8000	-0.295
6.0000	-0.307
6.2000	-0.320
6.4000	-0.333
6.6000	-0.345
6.8000	-0.351
7.0000	-0.364
7.2000	-0.377
7.4000	-0.383

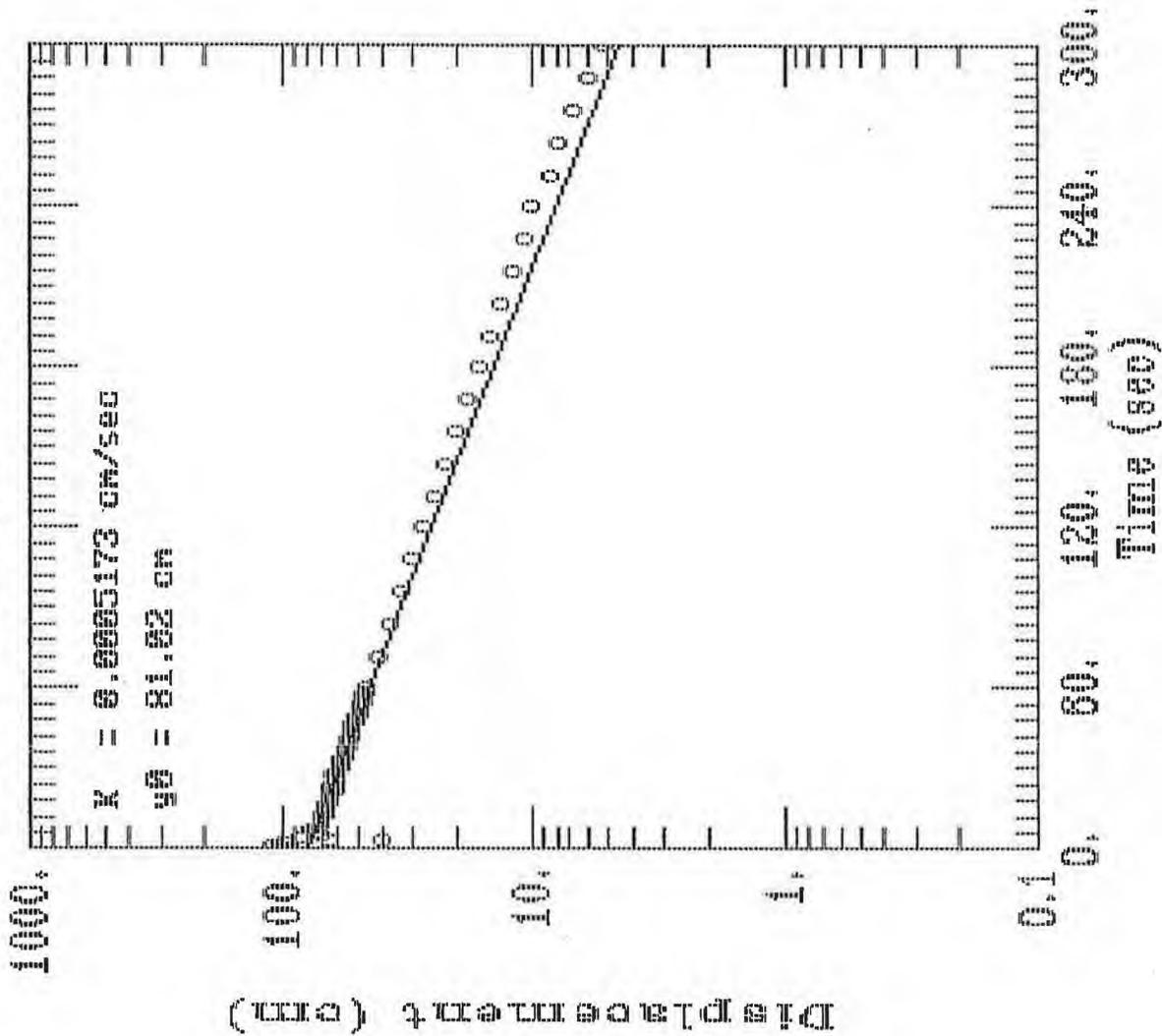
GOM-98-30X FALLING HEAD PPM TEST



GM-88-30X FALLING HEAD PPM TEST



GM-99-90X FALLING HEAD PERM TEST



RHT30X

SE2000
Environmental Logger
02/19 14:05

Unit# H2K#1 Test 3

Setups: INPUT 1

Type Level (F)
Mode Surface
I.D.

Reference 0.000
SG 1.000
Linearity -0.002
Scale factor 19.915
Offset -0.053
Delay mSEC 100.000

Step 0 02/18 15:04:47

Elapsed Time INPUT 1

0.0000 -2.588
0.0083 -3.041
0.0166 -2.827
0.0250 -2.852
0.0333 -2.896
0.0416 -2.878
0.0500 -2.827
0.0583 -2.815
0.0666 -2.790
0.0750 -2.790
0.0833 -2.764
0.0916 -2.752
0.1000 -2.739
0.1083 -2.733
0.1166 -2.720
0.1250 -2.708
0.1333 -2.695
0.1416 -2.689
0.1500 -2.676
0.1583 -2.670
0.1666 -2.658
0.1750 -2.651
0.1833 -2.639
0.1916 -2.632
0.2000 -2.620
0.2083 -2.614
0.2166 -2.607

3.041
0.053
0.167
100
5'
~~20~~ + 54.4

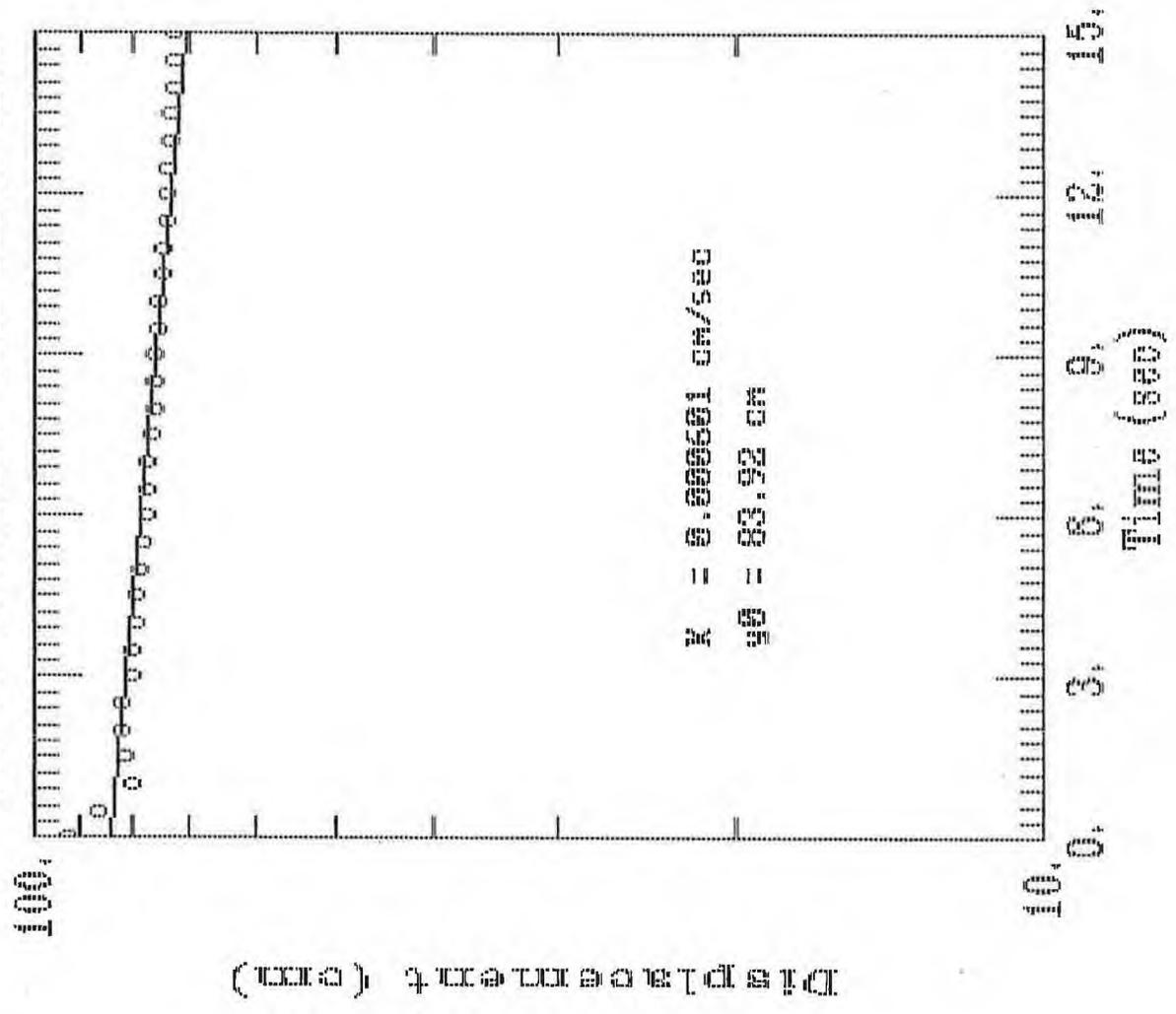
RHT30X

0.2250	-2.595
0.2333	-2.588
0.2416	-2.582
0.2500	-2.570
0.2583	-2.557
0.2666	-2.551
0.2750	-2.544
0.2833	-2.532
0.2916	-2.526
0.3000	-2.519
0.3083	-2.513
0.3166	-2.501
0.3250	-2.494
0.3333	-2.488
0.3500	-2.469
0.3666	-2.457
0.3833	-2.438
0.4000	-2.425
0.4166	-2.413
0.4333	-2.394
0.4500	-2.381
0.4666	-2.362
0.4833	-2.350
0.5000	-2.331
0.5166	-2.318
0.5333	-2.312
0.5500	-2.293
0.5666	-2.281
0.5833	-2.274
0.6000	-2.249
0.6166	-2.237
0.6333	-2.224
0.6500	-2.211
0.6666	-2.199
0.6833	-2.186
0.7000	-2.174
0.7166	-2.161
0.7333	-2.149
0.7500	-2.136
0.7666	-2.123
0.7833	-2.111
0.8000	-2.098
0.8166	-2.079
0.8333	-2.073
0.8500	-2.061
0.8666	-2.048
0.8833	-2.035
0.9000	-2.023
0.9166	-2.010
0.9333	-2.004
0.9500	-1.991

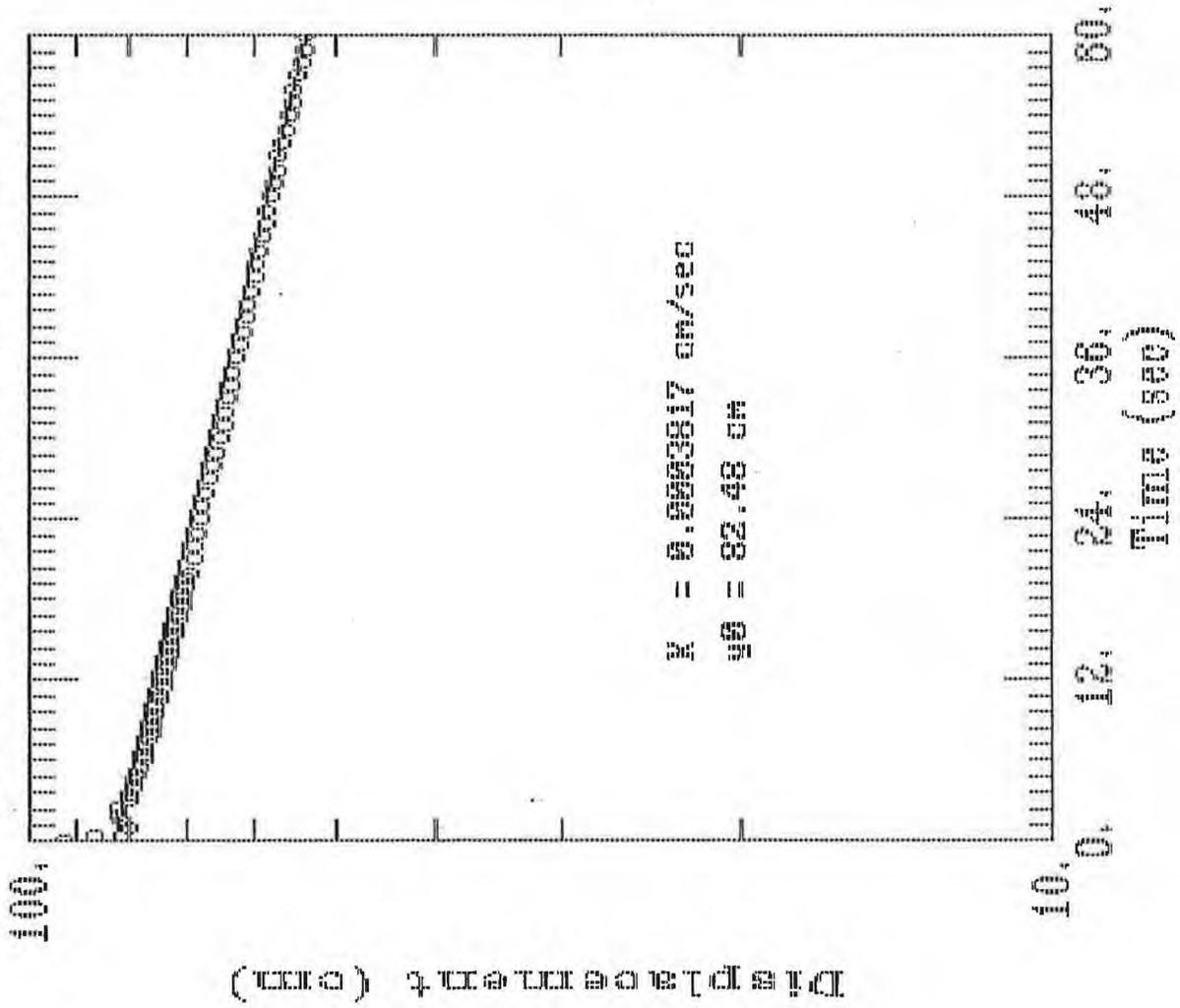
RHT30X

0.9666	-1.979
0.9833	-1.966
1.0000	-1.954
1.2000	-1.803
1.4000	-1.671
1.6000	-1.552
1.8000	-1.439
2.0000	-1.332
2.2000	-1.244
2.4000	-1.156
2.6000	-1.074
2.8000	-0.999
3.0000	-0.930
3.2000	-0.867
3.4000	-0.810
3.6000	-0.754
3.8000	-0.703
4.0000	-0.653
4.2000	-0.615
4.4000	-0.571
4.6000	-0.540
4.8000	-0.508
5.0000	-0.471
5.2000	-0.439
5.4000	-0.414
5.6000	-0.389
5.8000	-0.370
6.0000	-0.345
6.2000	-0.326
6.4000	-0.307
6.6000	-0.295
6.8000	-0.276
7.0000	-0.263
7.2000	-0.245
7.4000	-0.232
7.6000	-0.226
7.8000	-0.213

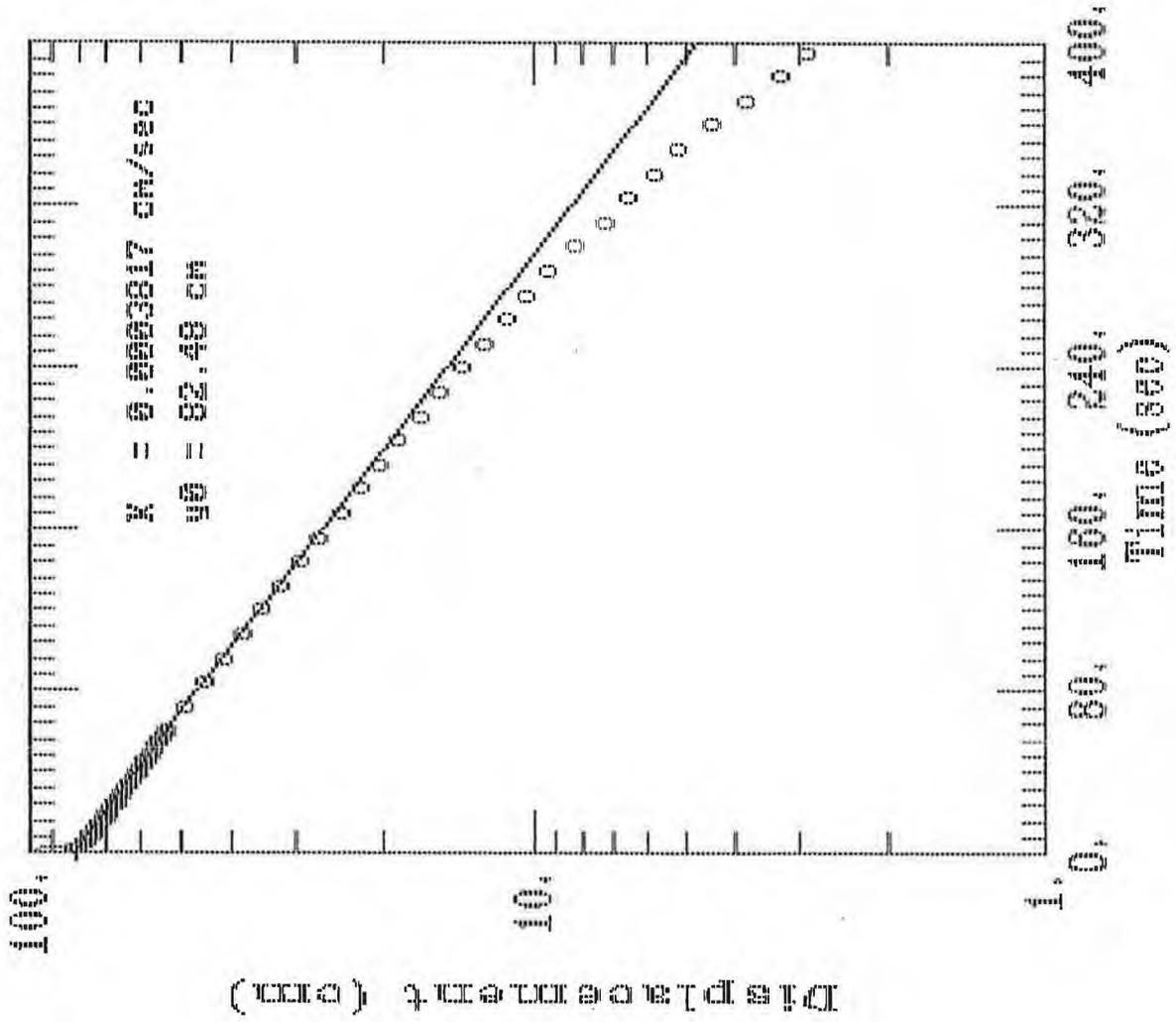
COM-99-90X DISK HEAD PERM. TEST



GOM-96-90X RISING HEAD PERM. TEST



GOM-98-30X RISING HEAD PERM. TEST



09 06/12/06

AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. _____

SETUP	DATE	BY WHOM
MONITORING WELL ID	2/18/99 G6M-98-30X ✓	—
DATE OF TEST	2/18/99	—
TYPE OF TEST	FHT	RHT
HERMIT TYPE/SERIAL#	SB2000/2K-121	—
TEST #	2 FHT30X.DAT	3 RHT30X.DAT
DATA COLLECTION RATE	LOG	—
TRANSDUCER		
SERIAL #	49436C	—
PSIG	20psi	—
SCALE FACTOR	19.9159	—
OFFSET	-0.0533	—
INPUT CHANNEL	1	—
TEST DATA		
INPUT MODE (TOC/SUR)	SUR	SUR
STATIC WATER LEVEL (FT./TOC)	10.69	10.69
WELL DEPTH (FT./TOC)		
XD DEPTH (FT.TOC)	1439 ≈ 25'	≈ 25'
INITIAL XD REFERENCE	14.39	14.39
SLUG DEPTH (FT./TOC)		
TIME OF SLUG PLACEMENT	≈ 1435	≈ 1451
TIME OF WL EQUILIBRATION	1-2 min	—
NEW XD REFERENCE	0	0
START TIME OF TEST	1433	1450
END TIME OF TEST	1446	1455
NOTES:		

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

10.97
FLK-2

AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. _____

SETUP	DATE	BY WHOM
	2/18/99	JLR/JCS
MONITORING WELL ID	GGM-98-31B	—
DATE OF TEST	2/18/99	—
TYPE OF TEST	Falling head	Rising head
HERMIT TYPE/SERIAL#	SG2000/212-121	—
TEST #	O F31B.DAT	1 R31B.DAT
DATA COLLECTION RATE	LOG	—
TRANSDUCER		
SERIAL #	49436C	—
PSIG	20psi	—
SCALE FACTOR	19.9159	—
OFFSET	-0.0533	—
INPUT CHANNEL	1	—
TEST DATA		
INPUT MODE (TOC/SUR)	SUR	SUR
STATIC WATER LEVEL (FT./TOC)	47.90	47.90
WELL DEPTH (FT./TOC)	96.3865 (≈ 99' TOC)	—
XD DEPTH (FT./TOC)	≈ 58'	≈ 58'
INITIAL XD REFERENCE	0	0
SLUG DEPTH (FT./TOC)		
TIME OF SLUG PLACEMENT	≈ 1020	≈ 1040
TIME OF WL EQUILIBRATION	≈ 2 min	1-2 min
NEW XD REFERENCE	0	0
START TIME OF TEST	0950	1035
END TIME OF TEST	(873) 1030 1030	1050
NOTES:		

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

F31B

SE2000
Environmental Logger
02/18 13:41

Unit# H2K#1 Test 0

Setups: INPUT 1

Type Level (F)
Mode Surface
I.D.

Reference 0.000
SG 1.000
Linearity -0.002
Scale factor 19.915
Offset -0.053
Delay mSEC 100.000

Step 0 02/18 10:39:03

Elapsed Time INPUT 1

0.0000	2.940
0.0083	0.684
0.0166	0.590
0.0250	0.383
0.0333	-0.333
0.0416	-0.917
0.0500	-1.137
0.0583	-0.974
0.0666	-0.571
0.0750	-0.037
0.0833	0.402
0.0916	0.634
0.1000	0.672
0.1083	0.678
0.1166	0.634
0.1250	0.552
0.1333	0.383
0.1416	0.069
0.1500	-0.150
0.1583	-0.301
0.1666	-0.320
0.1750	-0.219
0.1833	-0.056
0.1916	0.138
0.2000	0.295
0.2083	0.383

Inlt. del. - 2.94
 radius well casing 0.083
 effect. radius of well 0.167
 Sat. thick. 100
 length of well screen 5'
 Static height of water ~~20.1~~ 48.2

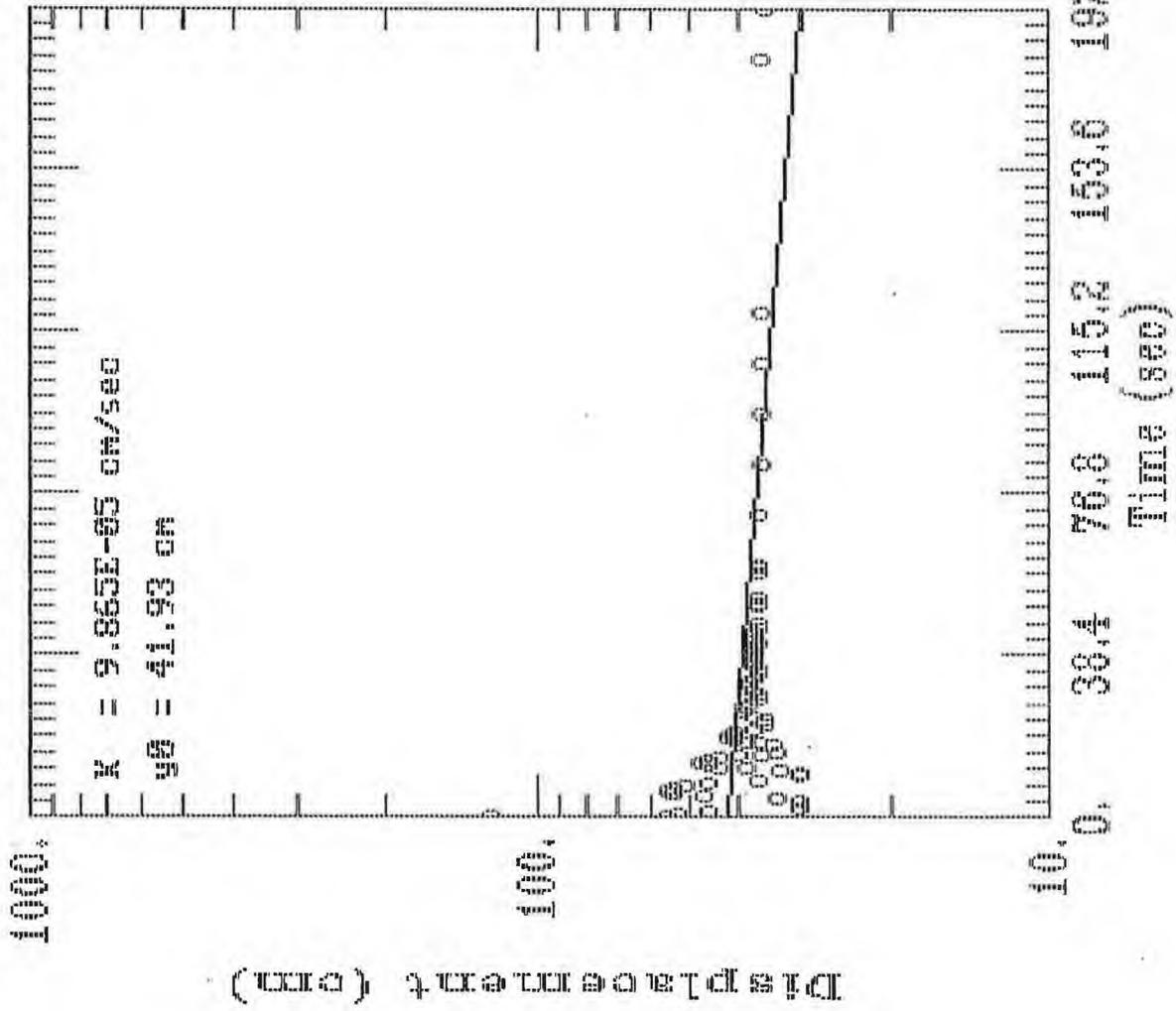
F31B

0.2166	0.414
0.2250	0.377
0.2333	0.289
0.2416	0.175
0.2500	0.056
0.2583	-0.031
0.2666	-0.069
0.2750	-0.062
0.2833	-0.006
0.2916	0.069
0.3000	0.138
0.3083	0.207
0.3166	0.238
0.3250	0.232
0.3333	0.201
0.3500	0.100
0.3666	0.031
0.3833	0.037
0.4000	0.100
0.4166	0.150
0.4333	0.150
0.4500	0.106
0.4666	0.069
0.4833	0.062
0.5000	0.087
0.5166	0.113
0.5333	0.113
0.5500	0.094
0.5666	0.075
0.5833	0.075
0.6000	0.081
0.6166	0.087
0.6333	0.087
0.6500	0.087
0.6666	0.081
0.6833	0.075
0.7000	0.081
0.7166	0.081
0.7333	0.081
0.7500	0.075
0.7666	0.075
0.7833	0.075
0.8000	0.075
0.8166	0.075
0.8333	0.075
0.8500	0.069
0.8666	0.069
0.8833	0.069
0.9000	0.069
0.9166	0.069
0.9333	0.069

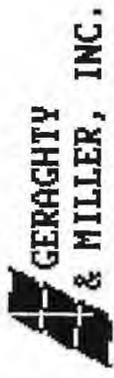
F31B

0.9500	0.069
0.9666	0.069
0.9833	0.069
1.0000	0.069
1.2000	0.062
1.4000	0.056
1.6000	0.050
1.8000	0.050
2.0000	0.043
2.2000	0.043
2.4000	0.043
2.6000	0.043
2.8000	0.043
3.0000	0.043
3.2000	0.037
3.4000	0.037
3.6000	0.037
3.8000	0.037
4.0000	0.037
4.2000	0.037
4.4000	0.037
4.6000	0.037
4.8000	0.037

COM-00-010 FALLING HEAD PPM TEST

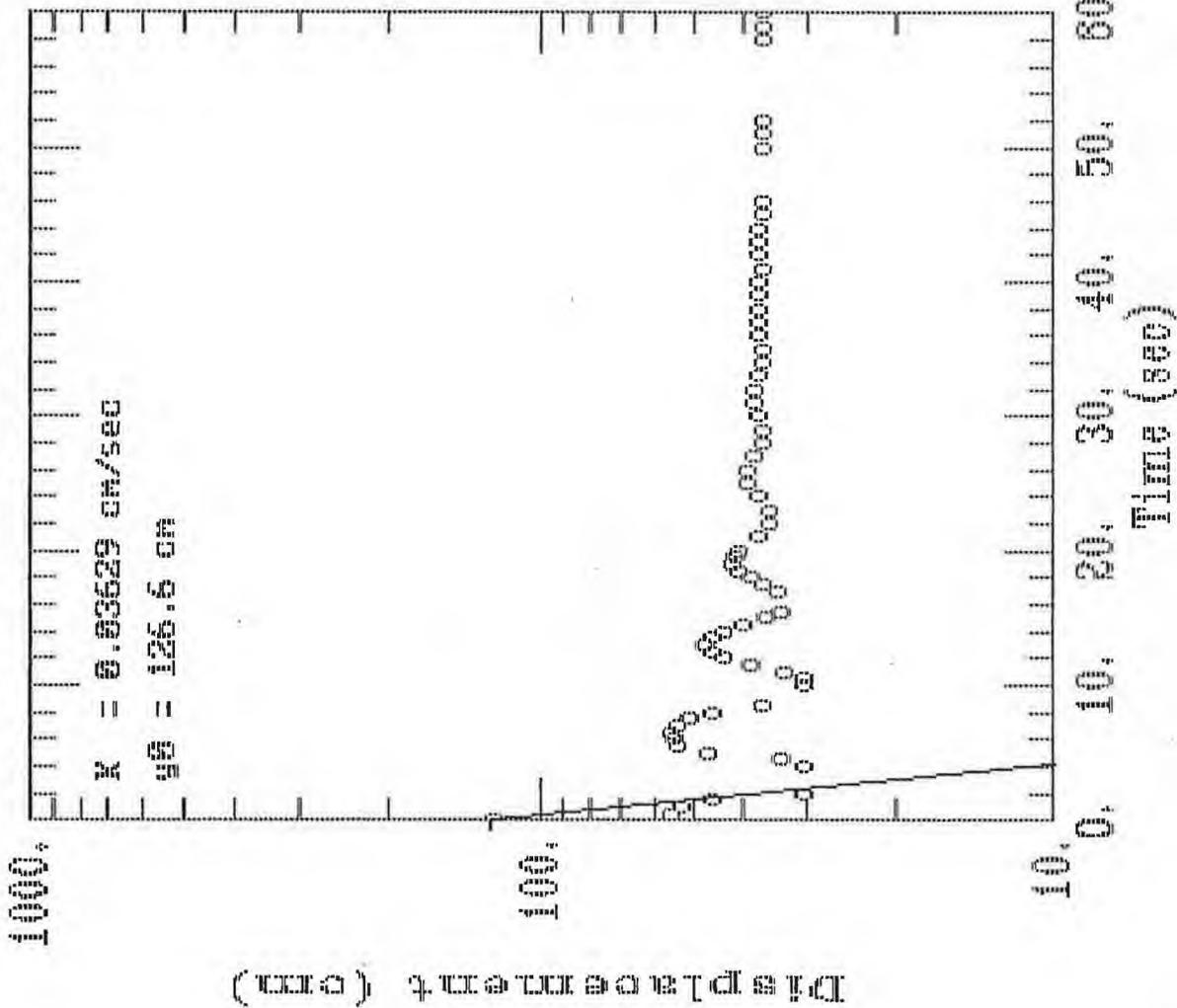


AQTESOLV

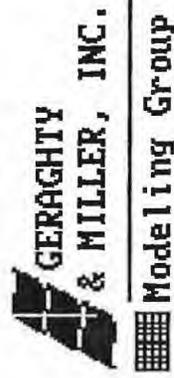


Modeling Group

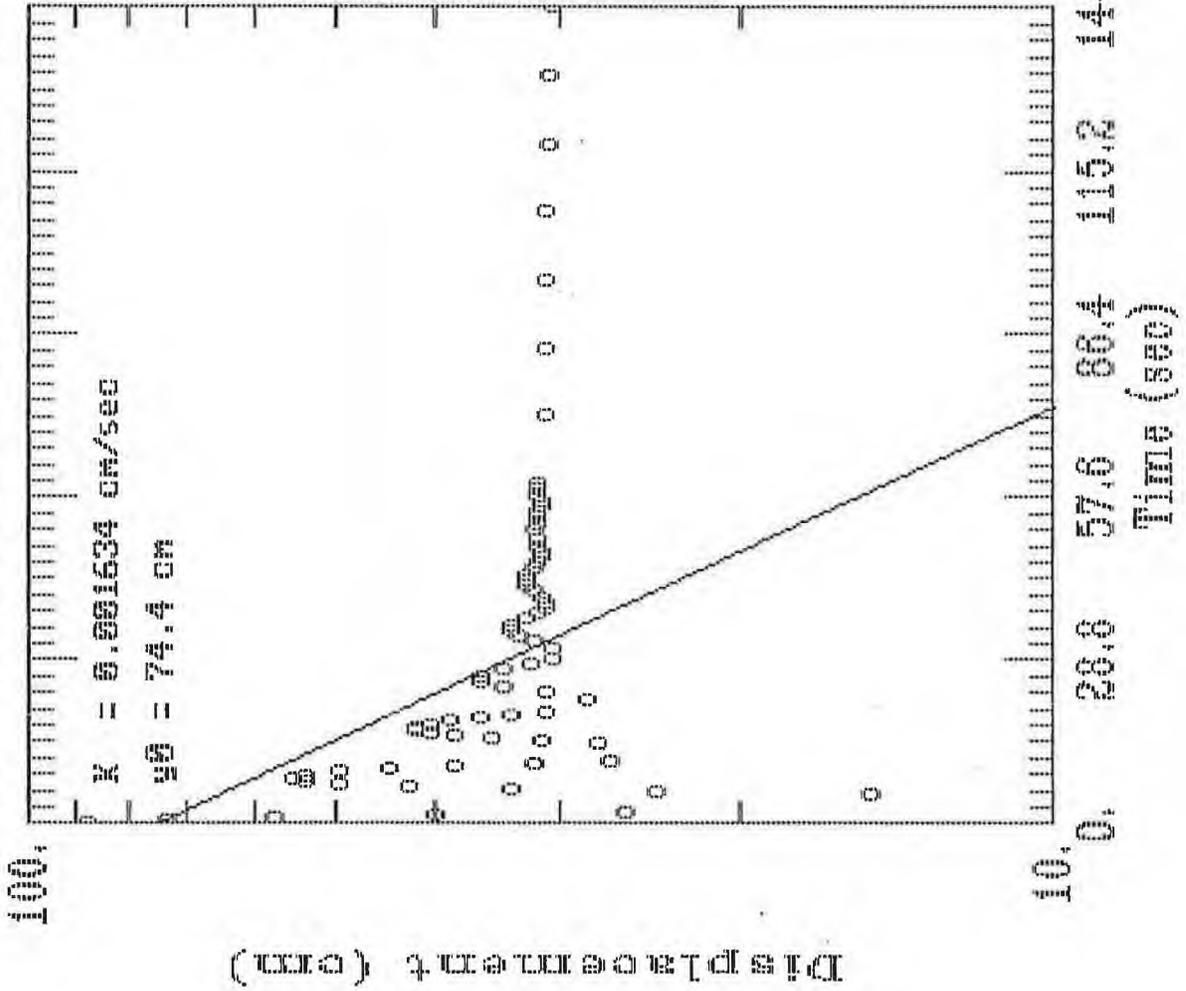
65M-98-31D FALLING HEAD PPM. TEST



AQTESOLV



COM-98-319 USING HEAD PERM. TEST

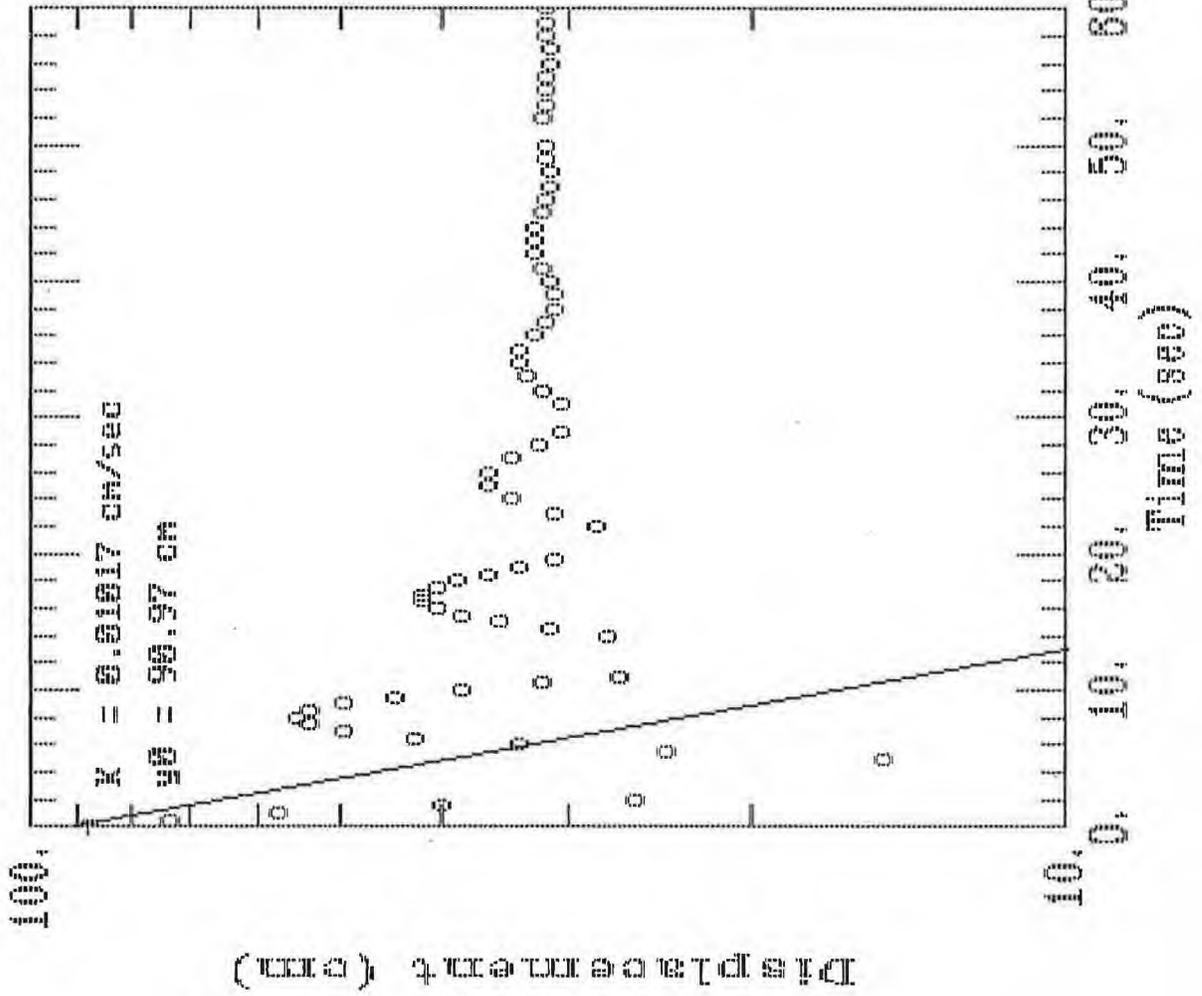


AQTESOLV

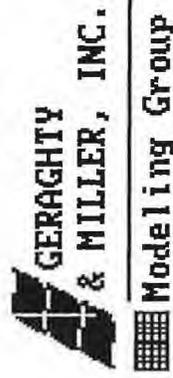
GERAGHTY
& MILLER, INC.

Modeling Group

GM-98-31B RISING HEAD PERM. TEST



AQTESOLV



R31B

SE2000
Environmental Logger
02/18 13:40

Unit# H2K#1 Test 1

Setups: INPUT 1

Type Level (F)
Mode Surface
I.D.

Reference 0.000
SG 1.000
Linearity -0.002
Scale factor 19.915
Offset -0.053
Delay mSEC 100.000

Step 0 02/18 10:45:04

Elapsed Time INPUT 1

2.87

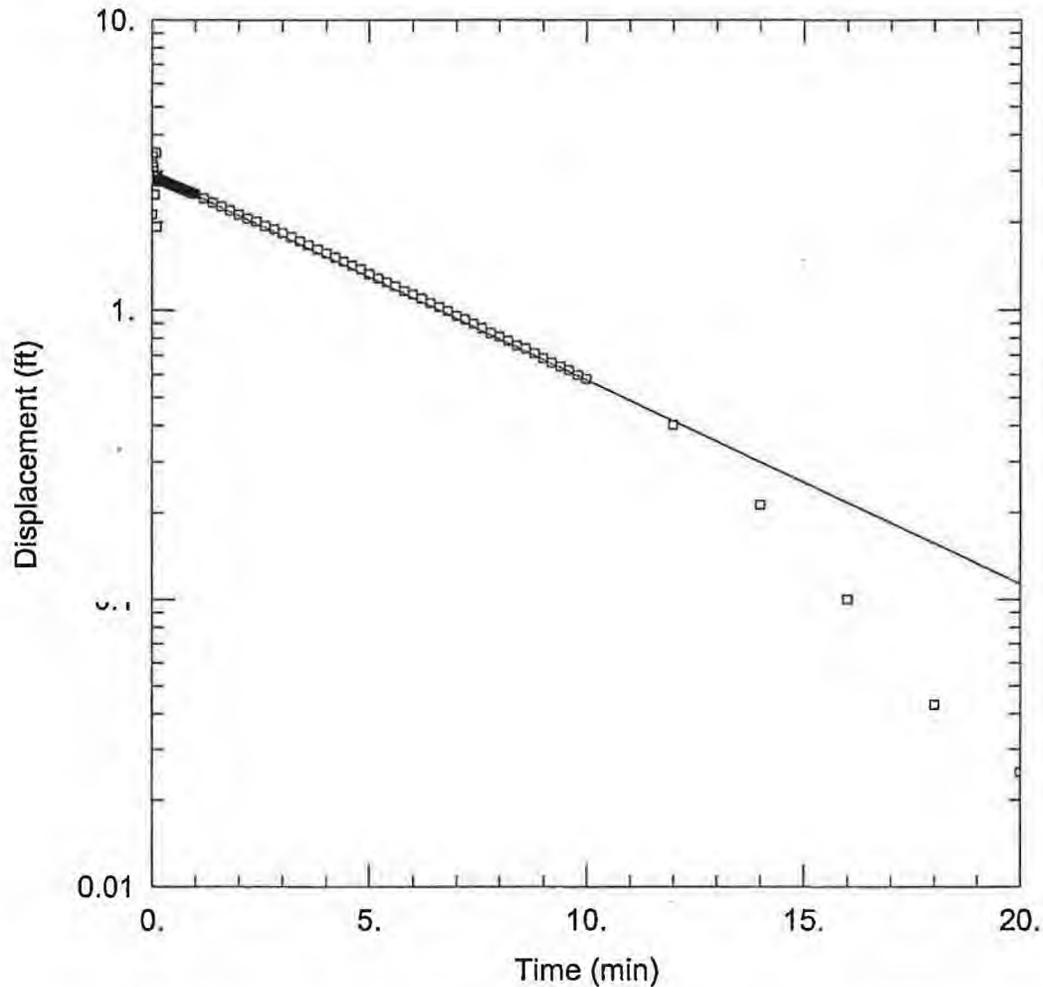
0.0000 -1.872
0.0083 -1.407
0.0166 -0.879
0.0250 -0.314
0.0333 0.150
0.0416 0.552
0.0500 0.810
0.0583 0.911
0.0666 0.886
0.0750 0.741
0.0833 0.509
0.0916 0.207
0.1000 -0.106
0.1083 -0.395
0.1166 -0.622
0.1250 -0.766
0.1333 -0.810
0.1416 -0.760
0.1500 -0.628
0.1583 -0.452
0.1666 -0.251
0.1750 -0.050
0.1833 0.119
0.1916 0.245
0.2000 0.320
0.2083 0.333

R31B

0.2166	0.289
0.2250	0.207
0.2333	0.094
0.2416	-0.031
0.2500	-0.150
0.2583	-0.257
0.2666	-0.326
0.2750	-0.364
0.2833	-0.364
0.2916	-0.326
0.3000	-0.263
0.3083	-0.182
0.3166	-0.100
0.3250	-0.025
0.3333	0.043
0.3500	0.100
0.3666	0.069
0.3833	-0.025
0.4000	-0.119
0.4166	-0.182
0.4333	-0.182
0.4500	-0.125
0.4666	-0.056
0.4833	0.000
0.5000	0.012
0.5166	-0.006
0.5333	-0.050
0.5500	-0.087
0.5666	-0.106
0.5833	-0.100
0.6000	-0.069
0.6166	-0.043
0.6333	-0.025
0.6500	-0.018
0.6666	-0.031
0.6833	-0.050
0.7000	-0.062
0.7166	-0.069
0.7333	-0.062
0.7500	-0.050
0.7666	-0.037
0.7833	-0.031
0.8000	-0.031
0.8166	-0.037
0.8333	-0.043
0.8500	-0.050
0.8666	-0.050
0.8833	-0.043
0.9000	-0.037
0.9166	-0.037
0.9333	-0.031

R31B

0.9500	-0.031
0.9666	-0.037
0.9833	-0.037
1.0000	-0.037
1.2000	-0.025
1.4000	-0.025
1.6000	-0.018
1.8000	-0.018
2.0000	-0.012
2.2000	-0.012
2.4000	-0.006



G6M-98-31C FALLING HEAD

Data Set: G:\Projects\DEVENS\AOC50\SLUGTEST\fh31cb+r.aqt
 Date: 11/10/99 Time: 14:25:12

PROJECT INFORMATION

Company: HLA
 Client: USACE
 Project: 44953
 Test Location: Devens AOC 50
 Test Well: G6M-98-31C
 Test Date: 2-18-99

AQUIFER DATA

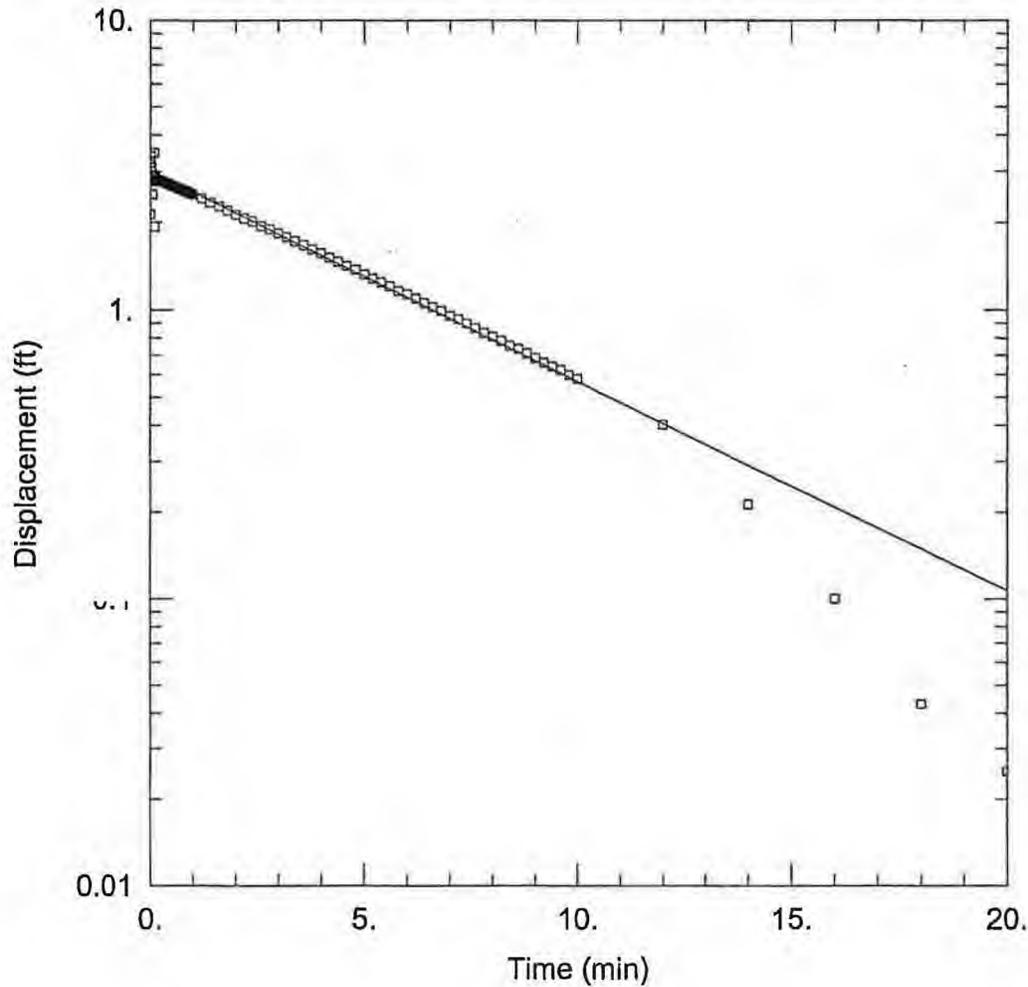
Saturated Thickness: 68. ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (G6M-98-31C)

Initial Displacement: 2.8 ft Water Column Height: 59. ft
 Casing Radius: 0.0833 ft Wellbore Radius: 0.167 ft
 Screen Length: 5. ft Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined Solution Method: Hvorslev
 K = 0.0007307 ft/min y0 = 2.919 ft



G6M-98-31C FALLING HEAD

Data Set: G:\Projects\DEVENS\AOC50\SLUGTEST\fh31cb+r.aqt
 Date: 11/10/99 Time: 14:24:21

PROJECT INFORMATION

Company: HLA
 Client: USACE
 Project: 44953
 Test Location: Devens AOC 50
 Test Well: G6M-98-31C
 Test Date: 2-18-99

AQUIFER DATA

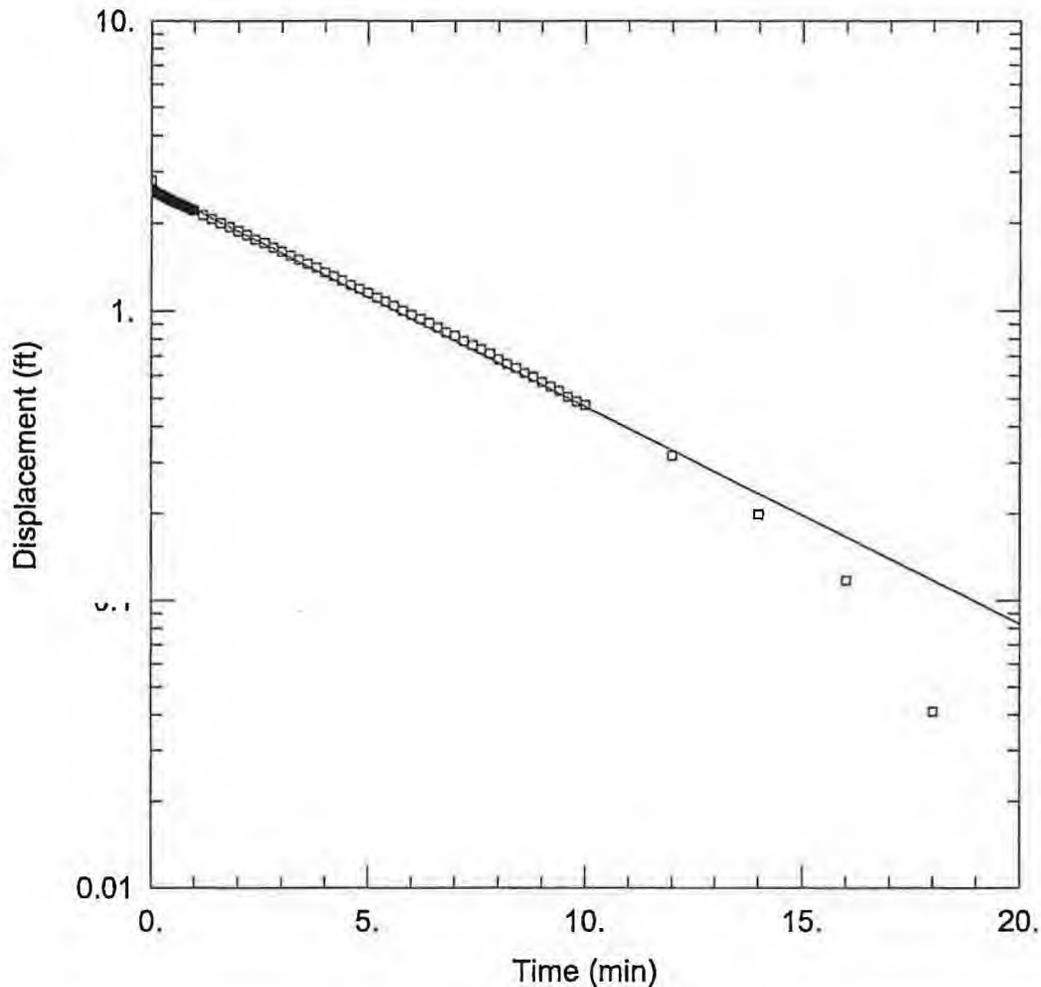
Saturated Thickness: 68. ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (G6M-98-31C)

Initial Displacement: 2.8 ft Water Column Height: 59. ft
 Casing Radius: 0.0833 ft Wellbore Radius: 0.167 ft
 Screen Length: 5. ft Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice
 K = 0.0006849 ft/min y0 = 3.003 ft



G6M-98-31C RISING HEAD

Data Set: G:\Projects\DEVENS\AOC50\SLUGTEST\rht31cb+r.aqt
 Date: 11/10/99 Time: 14:19:56

PROJECT INFORMATION

Company: HLA
 Client: USACE
 Project: 44953
 Test Location: Devens AOC 50
 Test Well: G6M-98-31C
 Test Date: 2-18-99

AQUIFER DATA

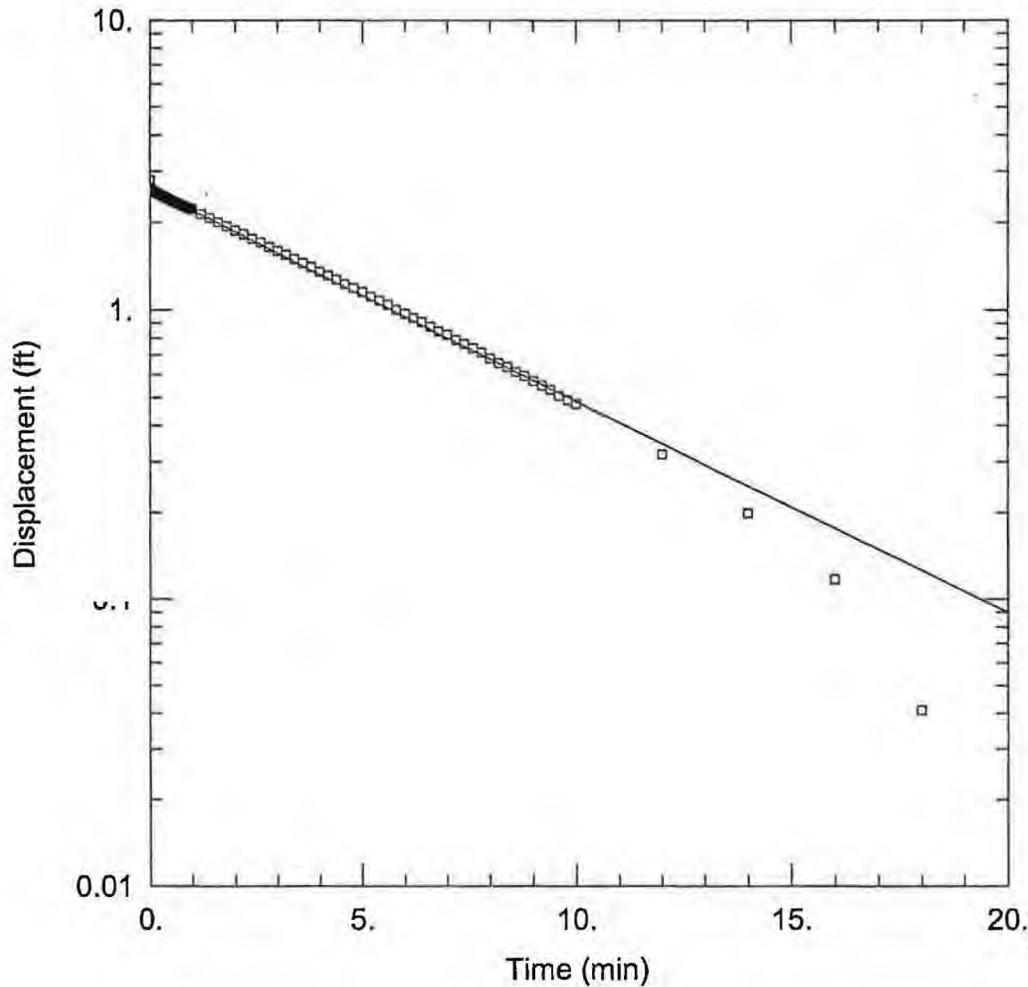
Saturated Thickness: 68 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (G6M-98-31C)

Initial Displacement: 2.8 ft Water Column Height: 59 ft
 Casing Radius: 0.0833 ft Wellbore Radius: 0.167 ft
 Screen Length: 5 ft Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined Solution Method: Hvorslev
 K = 0.0007789 ft/min y0 = 2.651 ft



G6M-98-31C RISING HEAD

Data Set: G:\Projects\DEVENS\AOC50\SLUGTEST\rht31cb+r.aqt
 Date: 11/10/99 Time: 14:17:11

PROJECT INFORMATION

Company: HLA
 Client: USACE
 Project: 44953
 Test Location: Devens AOC 50
 Test Well: G6M-98-31C
 Test Date: 2-18-99

AQUIFER DATA

Saturated Thickness: 68. ft Anisotropy Ratio (Kz/Kr): 1.

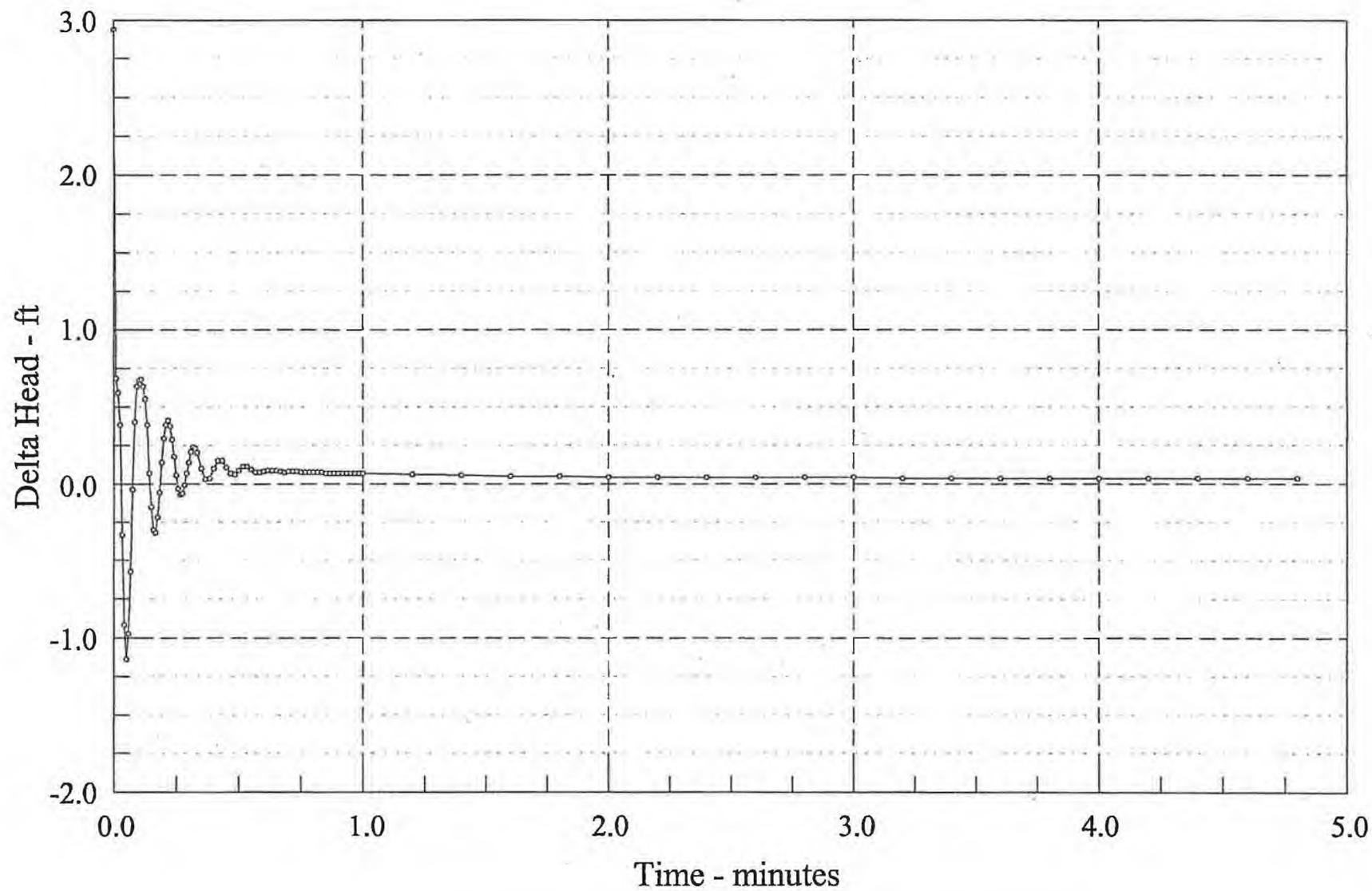
WELL DATA (G6M-98-31C)

Initial Displacement: 2.8 ft Water Column Height: 59. ft
 Casing Radius: 0.0833 ft Wellbore Radius: 0.167 ft
 Screen Length: 5. ft Gravel Pack Porosity: 0.3

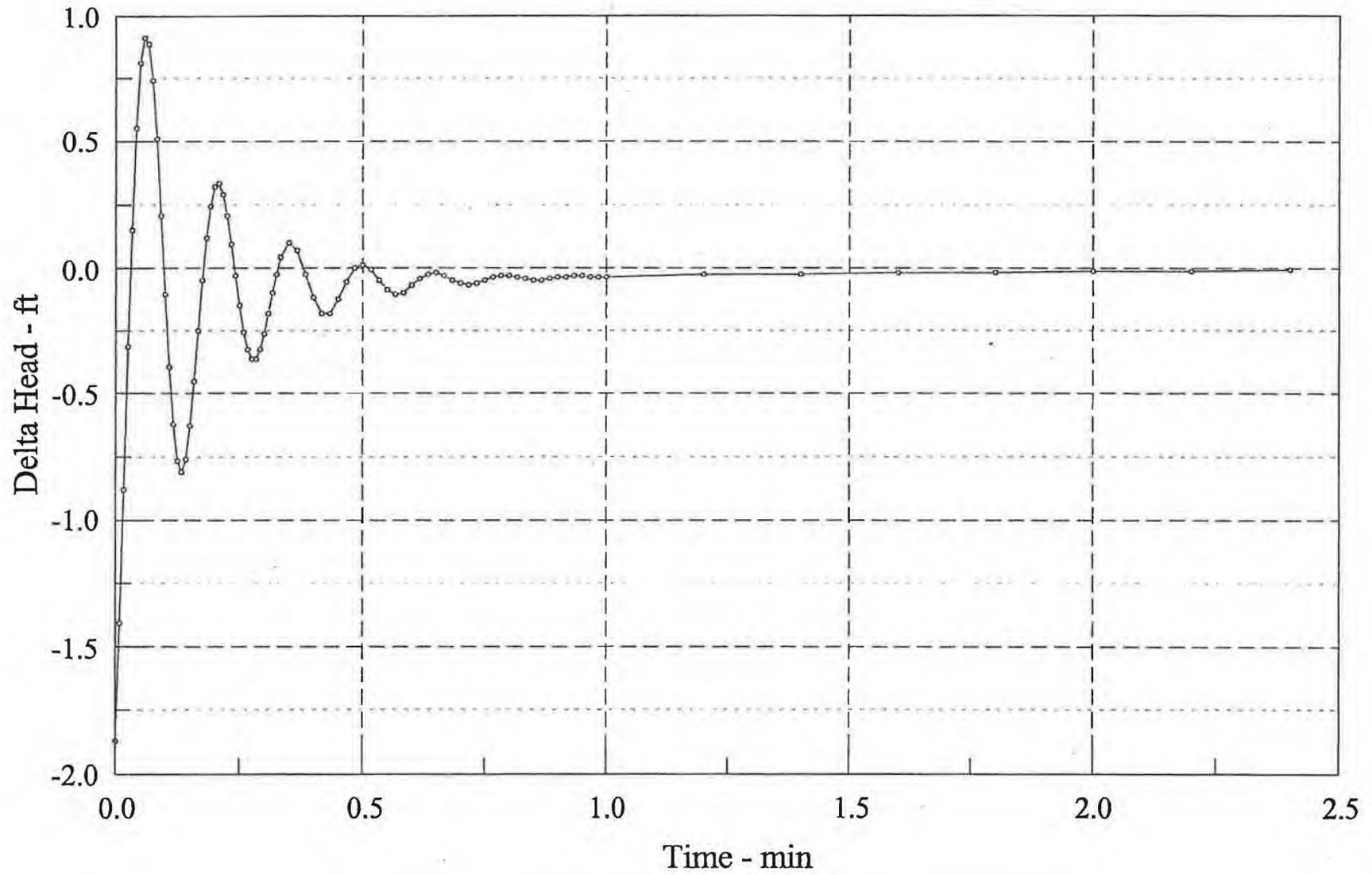
SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice
 K = 0.0006907 ft/min y0 = 2.6 ft

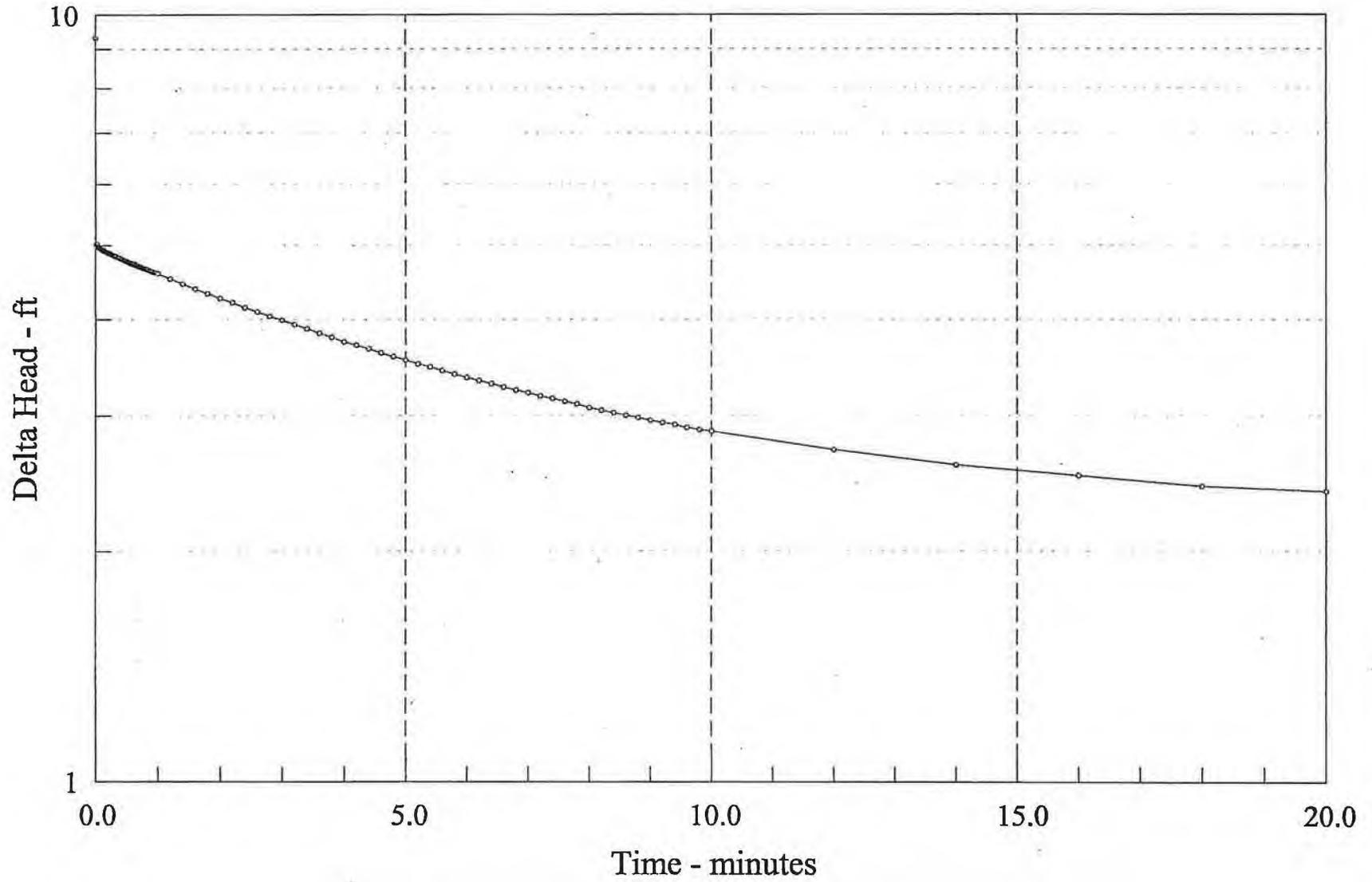
G6M-98-31B Falling Head Test 1 (raw data)



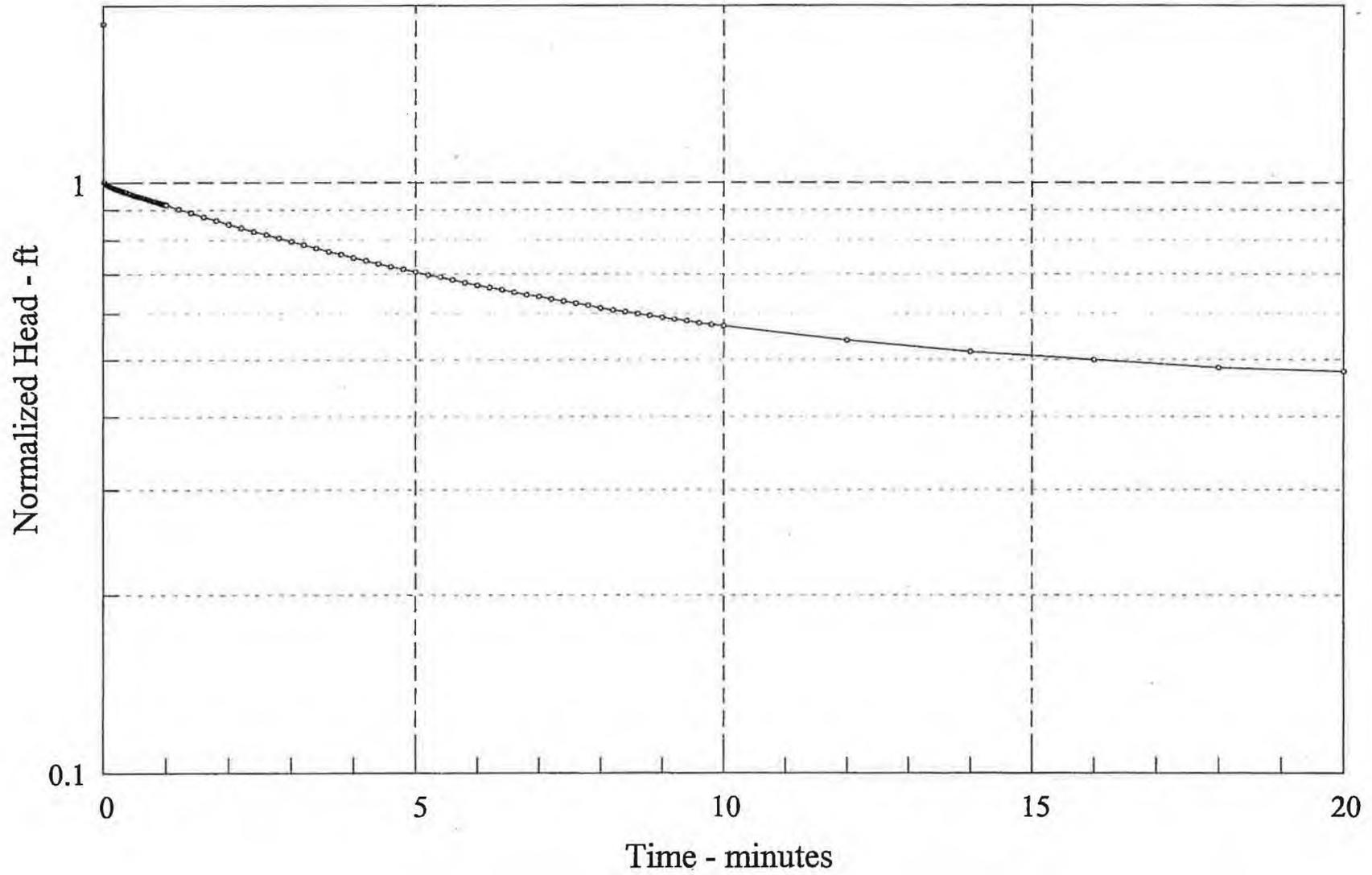
G6M-98-31B Rising Head Test (raw data)



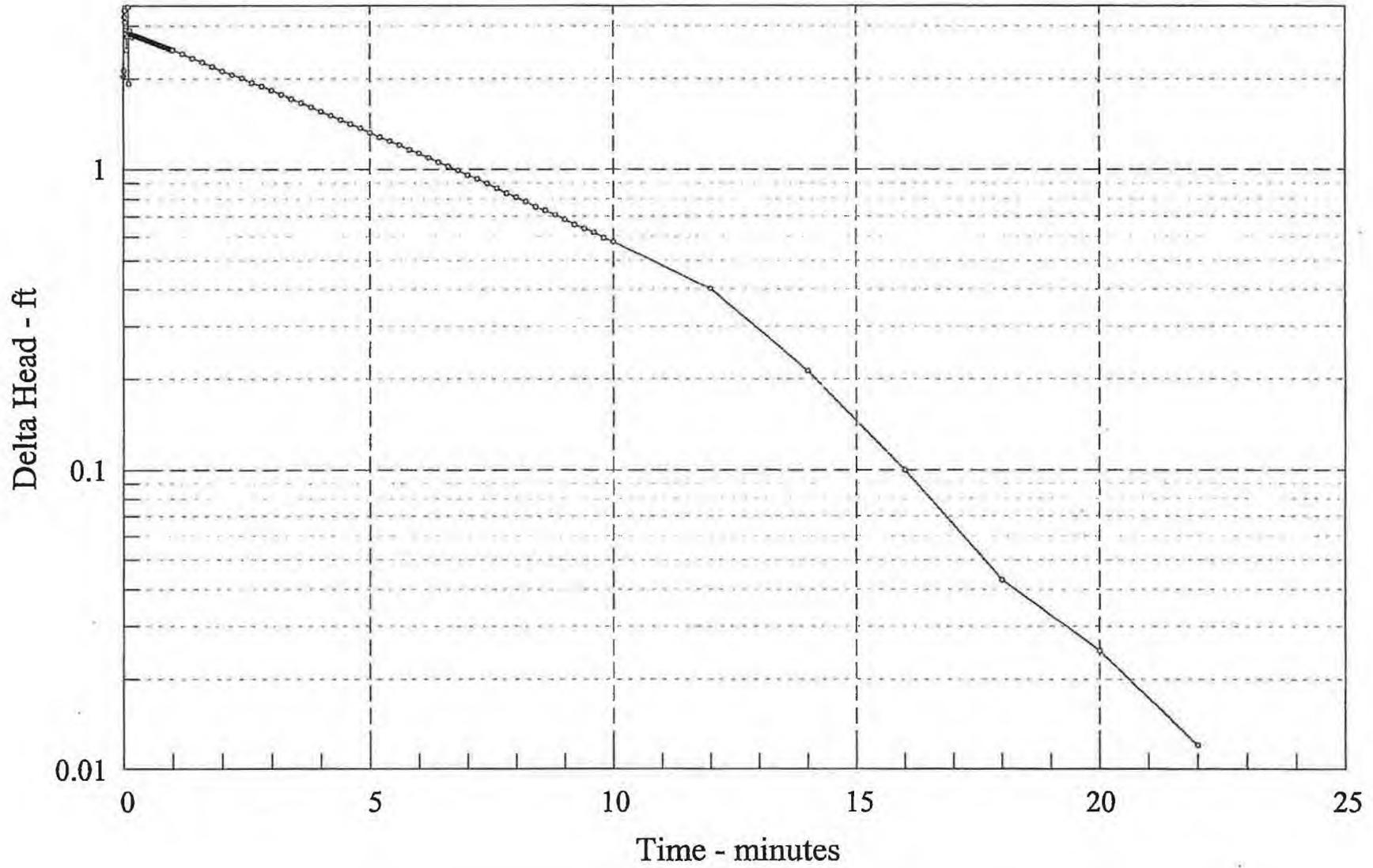
G6M-98-31C Rising Head Test 1 (raw data)



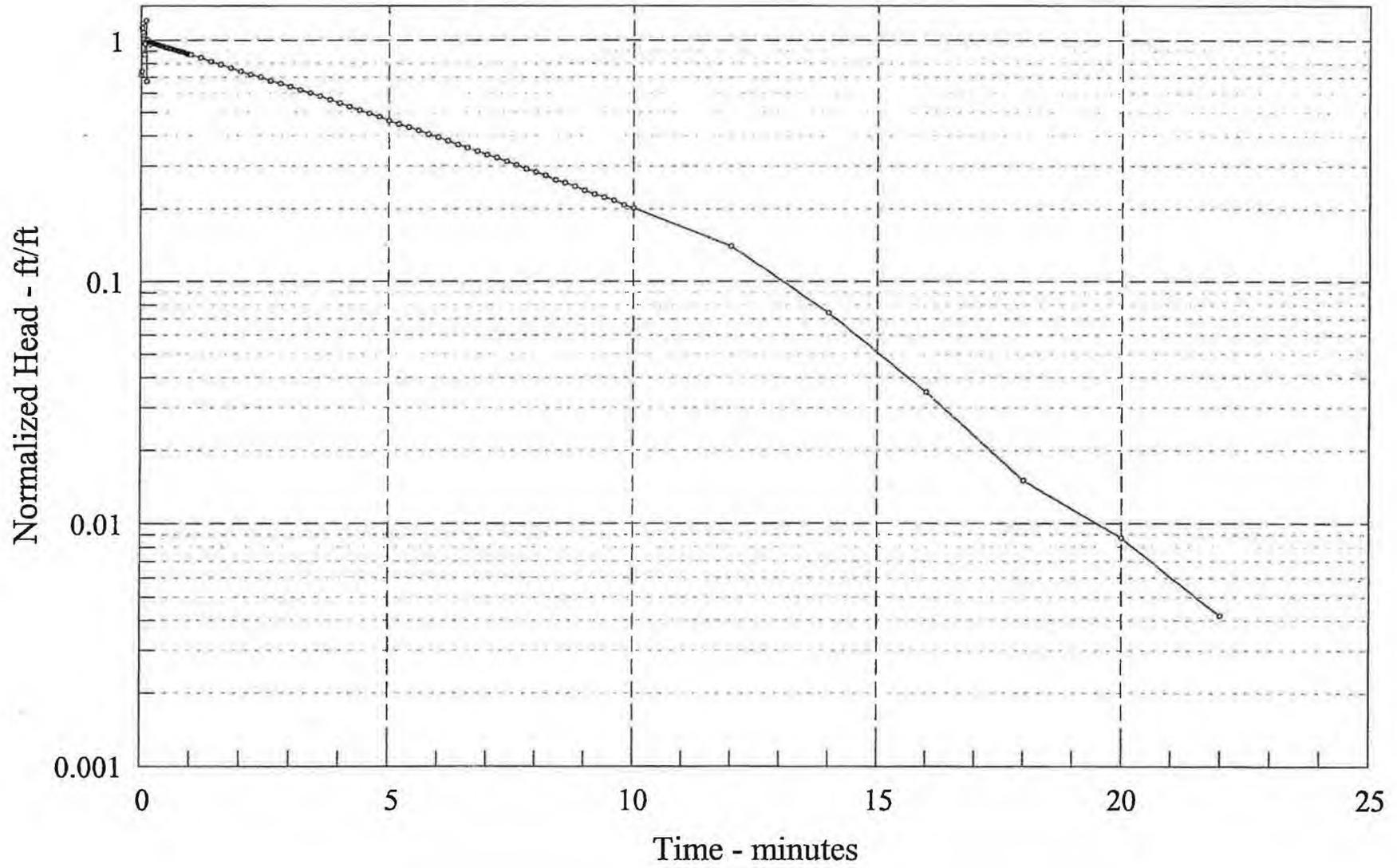
G6M-98-31C Rising Head Test 1 (normalized data)



G6M-98-31C Falling Head Test 1 (raw data)



G6M-98-31C Falling Head Test 1 (normalized data)



09 0611026

AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. _____

SETUP	DATE	BY WHOM
	2/18/99	JKR/JCS
MONITORING WELL ID	G6M-98-31C	11
DATE OF TEST	2/18/99	2/18/99
TYPE OF TEST	Falling head	Rising head
HERMIT TYPE/SERIAL#	SE2000/2K-121	—
TEST #	2 FBIC.DAT	3 R31C.DAT
DATA COLLECTION RATE	LOG	LOG
TRANSDUCER		
SERIAL #	49436C	—
PSIG	20psi	—
SCALE FACTOR	19.9159	—
OFFSET	-0.0533	—
INPUT CHANNEL	1	—
TEST DATA		
INPUT MODE (TOC/SUR)	SUR	—
STATIC WATER LEVEL (FT./TOC)	47.99	47.99
WELL DEPTH (FT./TOC)	≈ 58.4 TOC 116'865 (≈ 119' TOC)	
XD DEPTH (FT./TOC)	≈ 58.4 TOC	58.4 TOC
INITIAL XD REFERENCE		
SLUG DEPTH (FT./TOC)	10.41	≈ 10.5
TIME OF SLUG PLACEMENT	10:55	11:25
TIME OF WL EQUILIBRATION	≈ 20min	≈ 18-20min
NEW XD REFERENCE	0	0
START TIME OF TEST	1050	1120
END TIME OF TEST	1115	1145
NOTES:		

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

F31C

SE2000
Environmental Logger
02/18 13:37

Unit# H2K#1 Test 2

Setups: INPUT 1

Type Level (F)
Mode Surface
I.D.

Reference 0.000
SG 1.000
Linearity -0.002
Scale factor 19.915
Offset -0.053
Delay mSEC 100.000

Step 0 02/18 11:10:10

Elapsed Time INPUT 1

0.0000 2.042
0.0083 2.130
0.0166 3.223
0.0250 3.380
0.0333 3.104
0.0416 3.085
0.0500 2.991
0.0583 2.915
0.0666 2.494
0.0750 2.771
0.0833 2.771
0.0916 2.890
0.1000 3.468
0.1083 1.929
0.1166 2.815
0.1250 2.896
0.1333 2.865
0.1416 2.821
0.1500 2.815
0.1583 2.815
0.1666 2.808
0.1750 2.752
0.1833 2.802
0.1916 2.796
0.2000 2.796
0.2083 2.796
0.2166 2.790

initial del.

F31C

0.2250	2.783
0.2333	2.783
0.2416	2.783
0.2500	2.777
0.2583	2.771
0.2666	2.771
0.2750	2.771
0.2833	2.764
0.2916	2.758
0.3000	2.758
0.3083	2.752
0.3166	2.752
0.3250	2.746
0.3333	2.746
0.3500	2.733
0.3666	2.733
0.3833	2.727
0.4000	2.714
0.4166	2.714
0.4333	2.708
0.4500	2.695
0.4666	2.689
0.4833	2.683
0.5000	2.676
0.5166	2.670
0.5333	2.664
0.5500	2.658
0.5666	2.651
0.5833	2.645
0.6000	2.639
0.6166	2.632
0.6333	2.626
0.6500	2.620
0.6666	2.614
0.6833	2.607
0.7000	2.601
0.7166	2.595
0.7333	2.588
0.7500	2.582
0.7666	2.576
0.7833	2.576
0.8000	2.563
0.8166	2.563
0.8333	2.551
0.8500	2.551
0.8666	2.545
0.8833	2.538
0.9000	2.526
0.9166	2.519
0.9333	2.513
0.9500	2.507

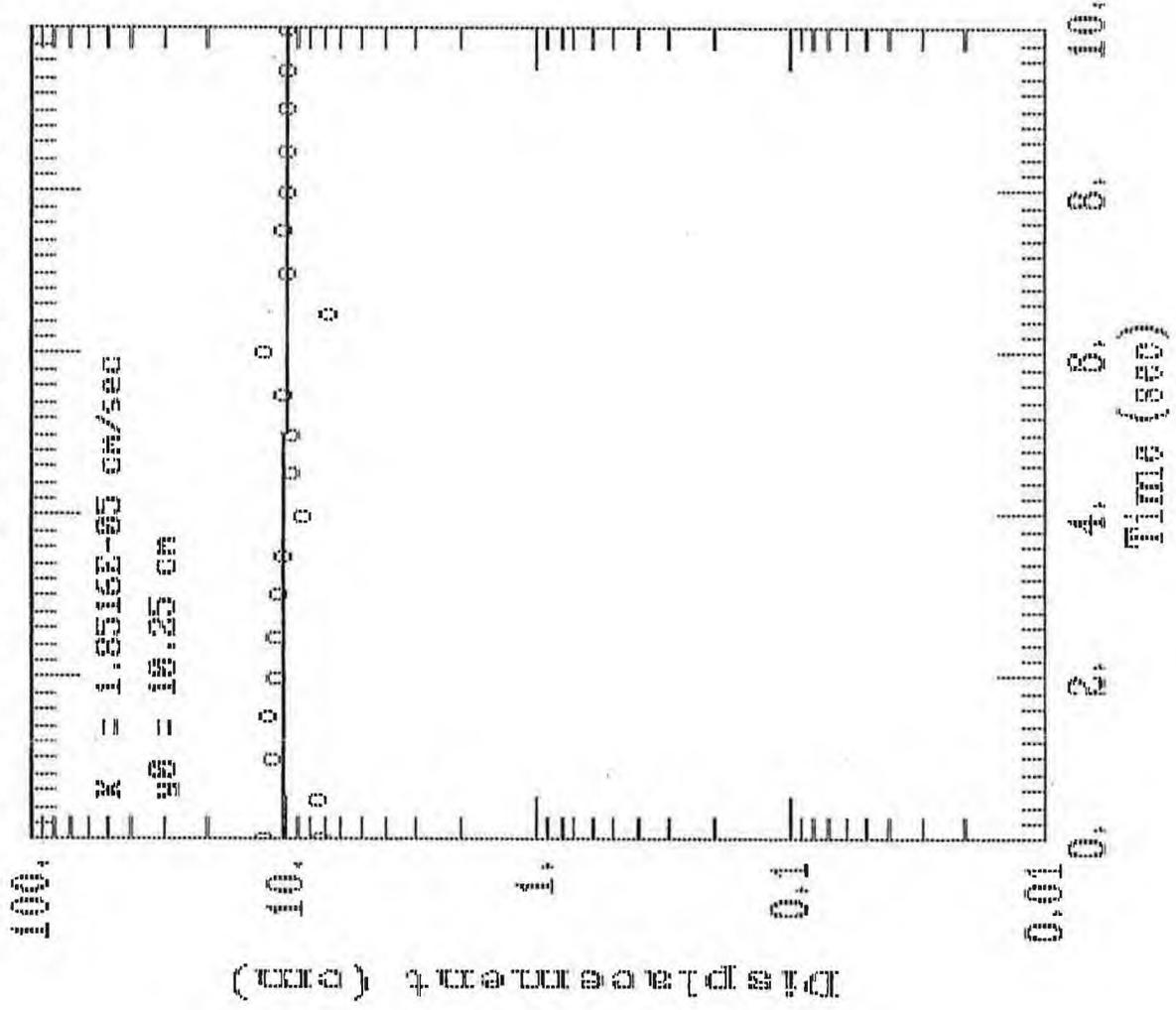
F31C

0.9666	2.507
0.9833	2.494
1.0000	2.494
1.2000	2.419
1.4000	2.337
1.6000	2.268
1.8000	2.193
2.0000	2.123
2.2000	2.061
2.4000	2.010
2.6000	1.941
2.8000	1.891
3.0000	1.834
3.2000	1.778
3.4000	1.721
3.6000	1.671
3.8000	1.614
4.0000	1.564
4.2000	1.514
4.4000	1.464
4.6000	1.420
4.8000	1.376
5.0000	1.325
5.2000	1.281
5.4000	1.244
5.6000	1.206
5.8000	1.162
6.0000	1.131
6.2000	1.093
6.4000	1.055
6.6000	1.024
6.8000	0.992
7.0000	0.955
7.2000	0.930
7.4000	0.898
7.6000	0.867
7.8000	0.835
8.0000	0.810
8.2000	0.785
8.4000	0.754
8.6000	0.735
8.8000	0.710
9.0000	0.684
9.2000	0.659
9.4000	0.640
9.6000	0.622
9.8000	0.596
10.0000	0.578
12.0000	0.402
14.0000	0.213
16.0000	0.100

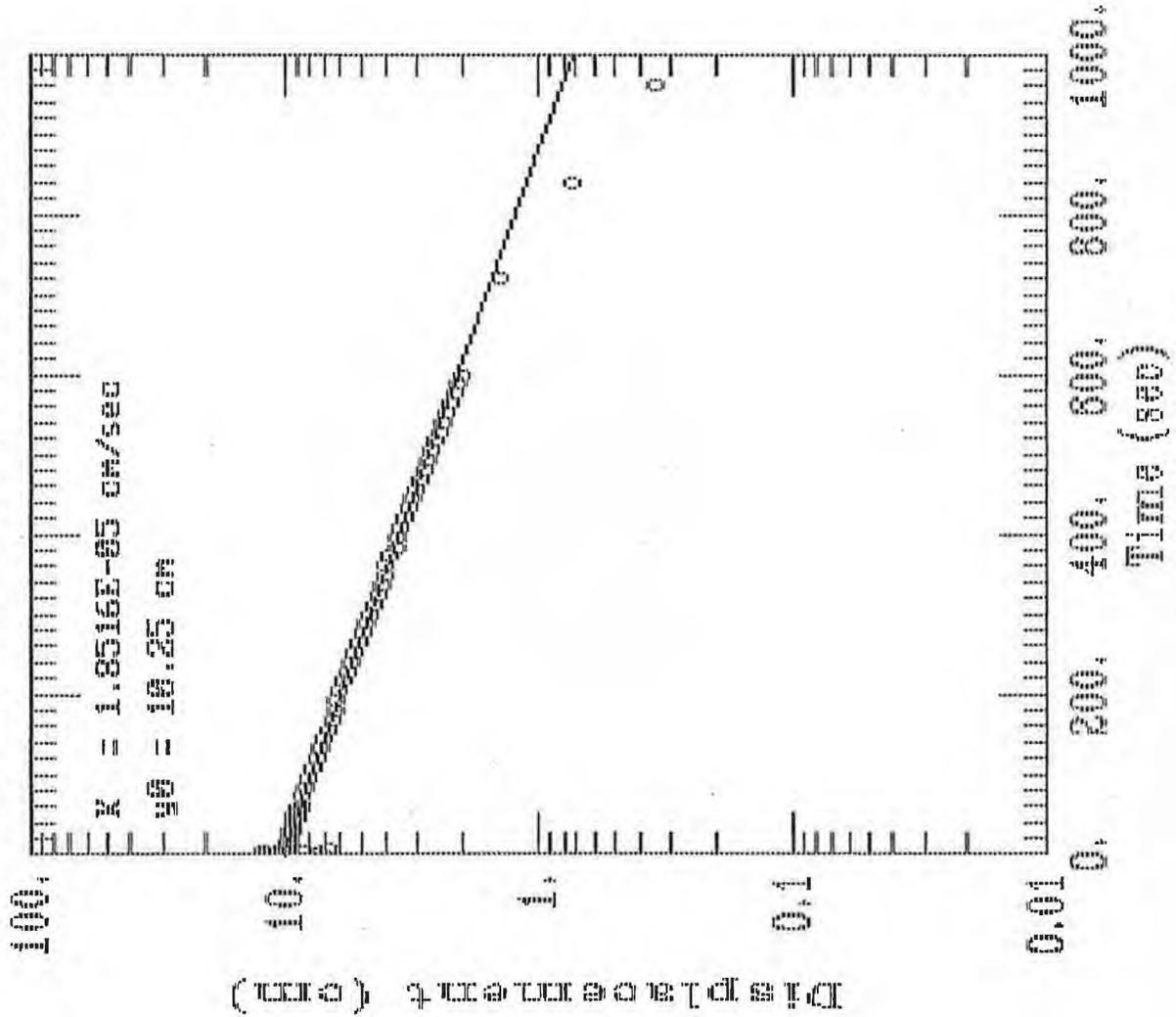
F31C

18.0000	0.043
20.0000	0.025
22.0000	0.012
24.0000	0.000

GM-90-310 FALLING HEAD PERM. TEST



COM-80-21C FALLING HEAD PERM. TEST



SE2000
Environmental Logger
02/18 13:33

Unit# H2K#1 Test 3

Setups: INPUT 1

Type Level (F)
Mode Surface
I.D.

Reference 0.000
SG 1.000
Linearity -0.002
Scale factor 19.915
Offset -0.053
Delay mSEC 100.000

Step 0 02/18 11:36:49

Elapsed Time INPUT 1

0.0000 -9.319
0.0083 -5.014
0.0166 -5.020
0.0250 -5.014
0.0333 -4.989
0.0416 -4.983
0.0500 -4.964
0.0583 -4.964
0.0666 -4.964
0.0750 -4.958
0.0833 -4.945
0.0916 -4.939
0.1000 -4.945
0.1083 -4.939
0.1166 -4.932
0.1250 -4.932
0.1333 -4.926
0.1416 -4.920
0.1500 -4.914
0.1583 -4.914
0.1666 -4.907
0.1750 -4.907
0.1833 -4.901
0.1916 -4.895
0.2000 -4.895
0.2083 -4.888
0.2166 -4.882

Initial d.d. 9.32
well radius 0.083
Sample radius 0.167
Sat thickness 100
screen height 5'
height of water
in well 61.8

0.2250	-4.888
0.2333	-4.882
0.2416	-4.876
0.2500	-4.870
0.2583	-4.870
0.2666	-4.863
0.2750	-4.863
0.2833	-4.857
0.2916	-4.857
0.3000	-4.851
0.3083	-4.844
0.3166	-4.844
0.3250	-4.838
0.3333	-4.838
0.3500	-4.826
0.3666	-4.826
0.3833	-4.819
0.4000	-4.807
0.4166	-4.800
0.4333	-4.800
0.4500	-4.788
0.4666	-4.782
0.4833	-4.775
0.5000	-4.769
0.5166	-4.763
0.5333	-4.757
0.5500	-4.750
0.5666	-4.744
0.5833	-4.738
0.6000	-4.731
0.6166	-4.731
0.6333	-4.725
0.6500	-4.719
0.6666	-4.713
0.6833	-4.706
0.7000	-4.700
0.7166	-4.694
0.7333	-4.687
0.7500	-4.681
0.7666	-4.675
0.7833	-4.669
0.8000	-4.662
0.8166	-4.662
0.8333	-4.656
0.8500	-4.650
0.8666	-4.643
0.8833	-4.637
0.9000	-4.631
0.9166	-4.625
0.9333	-4.618
0.9500	-4.618

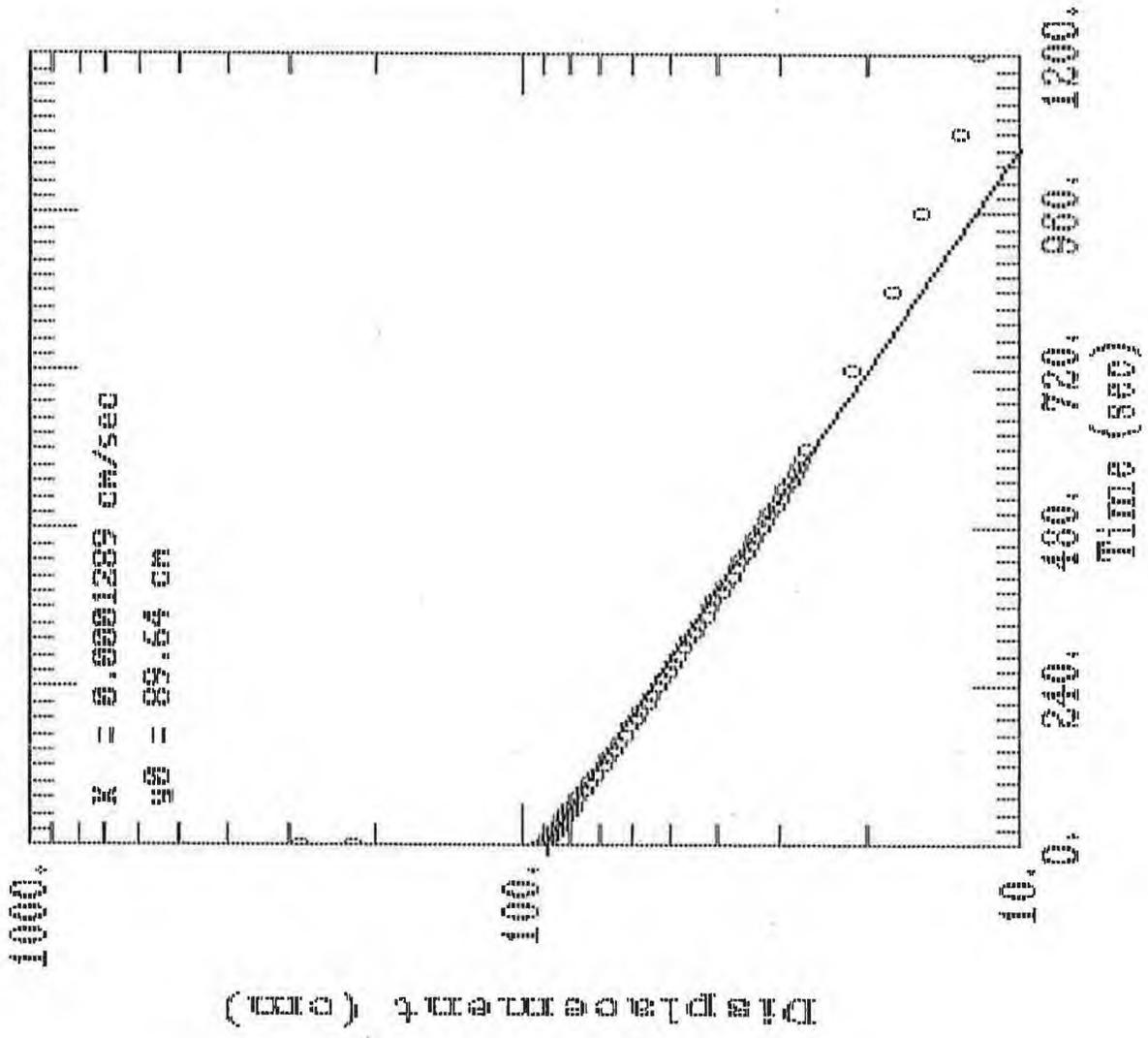
R31C

0.9666	-4.612
0.9833	-4.606
1.0000	-4.599
1.2000	-4.524
1.4000	-4.461
1.6000	-4.392
1.8000	-4.329
2.0000	-4.266
2.2000	-4.210
2.4000	-4.147
2.6000	-4.097
2.8000	-4.040
3.0000	-3.990
3.2000	-3.940
3.4000	-3.889
3.6000	-3.839
3.8000	-3.795
4.0000	-3.745
4.2000	-3.707
4.4000	-3.663
4.6000	-3.619
4.8000	-3.581
5.0000	-3.544
5.2000	-3.500
5.4000	-3.468
5.6000	-3.431
5.8000	-3.393
6.0000	-3.361
6.2000	-3.330
6.4000	-3.299
6.6000	-3.267
6.8000	-3.236
7.0000	-3.211
7.2000	-3.179
7.4000	-3.154
7.6000	-3.129
7.8000	-3.104
8.0000	-3.072
8.2000	-3.047
8.4000	-3.028
8.6000	-3.003
8.8000	-2.984
9.0000	-2.959
9.2000	-2.940
9.4000	-2.922
9.6000	-2.896
9.8000	-2.878
10.0000	-2.865
12.0000	-2.708
14.0000	-2.589
16.0000	-2.507

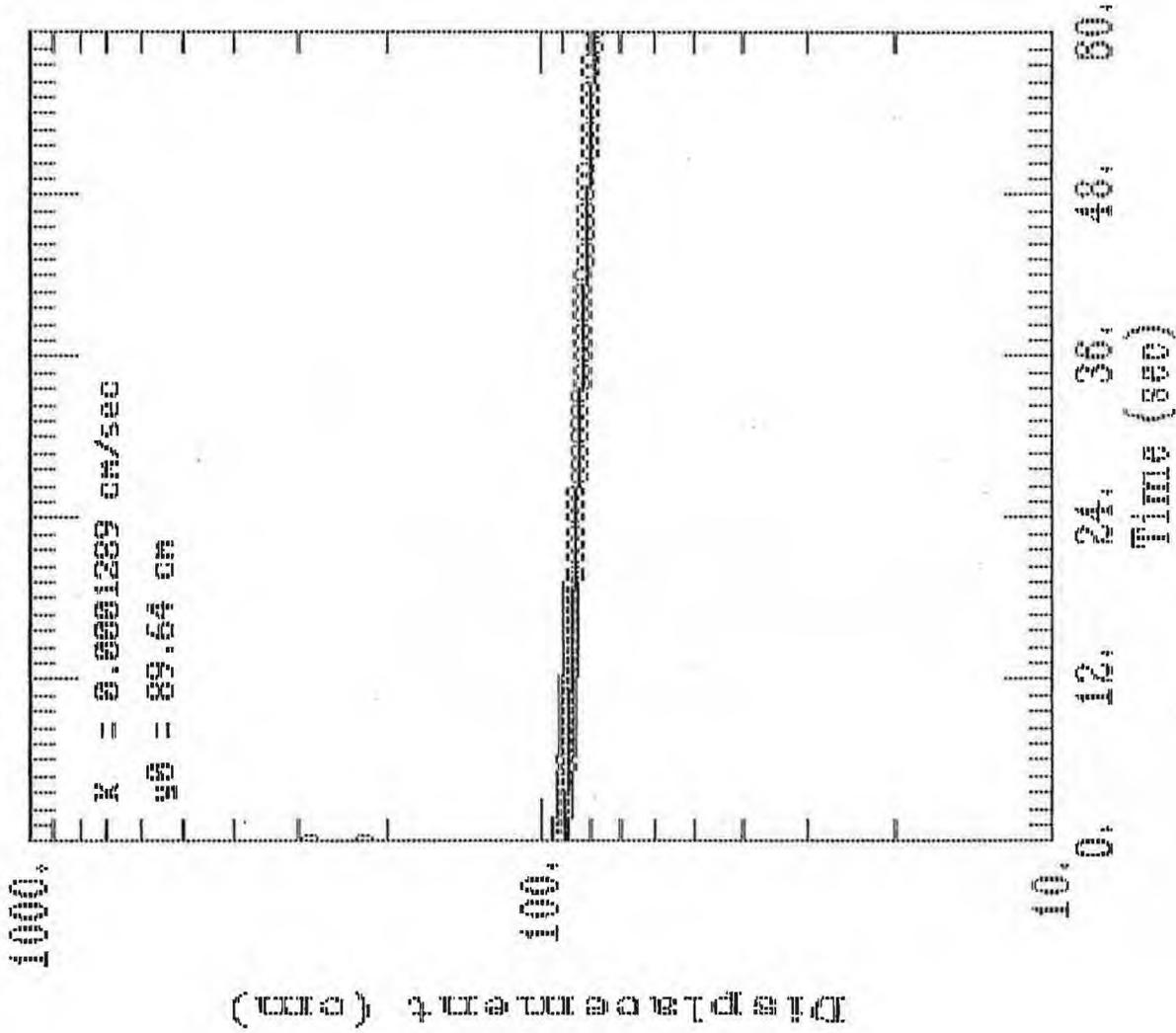
R31C

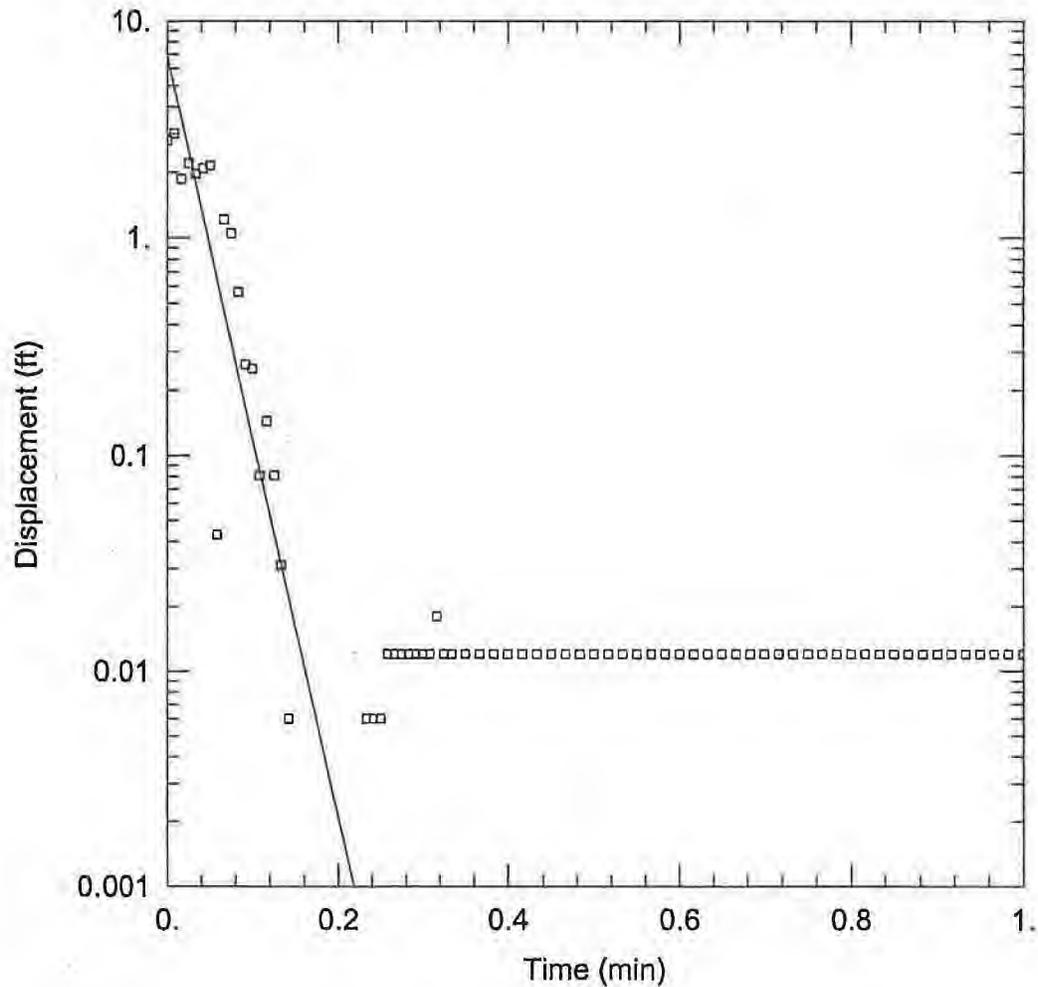
18.0000	-2.431
20.0000	-2.394

COM-88-91C DRINK HEAD TEST



GM-88-21C DRIVING HEAD PEAK TEST





G6M-98-32X FALLING HEAD

Data Set: G:\Projects\DEVENS\AOC50\SLUGTEST\rht32xb+r.aqt
 Date: 11/10/99 Time: 14:49:24

PROJECT INFORMATION

Company: HLA
 Client: USACE
 Project: 44953
 Test Location: Devens, AOC 50
 Test Well: G6M-98-32X
 Test Date: 2-18-99

AQUIFER DATA

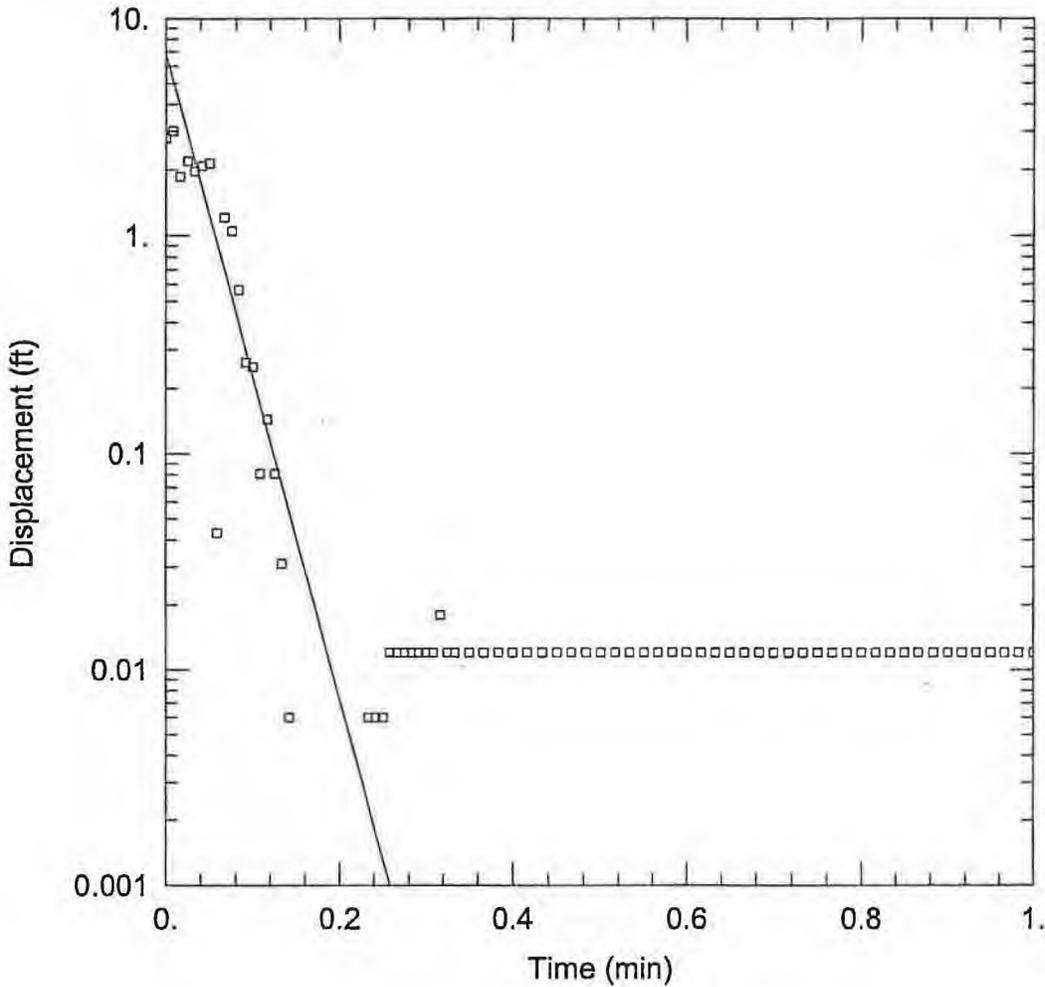
Saturated Thickness: 68. ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (G6M-98-32X)

Initial Displacement: 2.8 ft Water Column Height: 68. ft
 Casing Radius: 0.0833 ft Wellbore Radius: 0.167 ft
 Screen Length: 5. ft Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined Solution Method: Hvorslev
 K = 0.1821 ft/min y0 = 6.882 ft



G6M-98-32X FALLING HEAD

Data Set: G:\Projects\DEVENS\AOC50\SLUGTEST\rht32xb+r.aqt
 Date: 11/10/99 Time: 14:49:45

PROJECT INFORMATION

Company: HLA
 Client: USACE
 Project: 44953
 Test Location: Devens, AOC 50
 Test Well: G6M-98-32X
 Test Date: 2-18-99

AQUIFER DATA

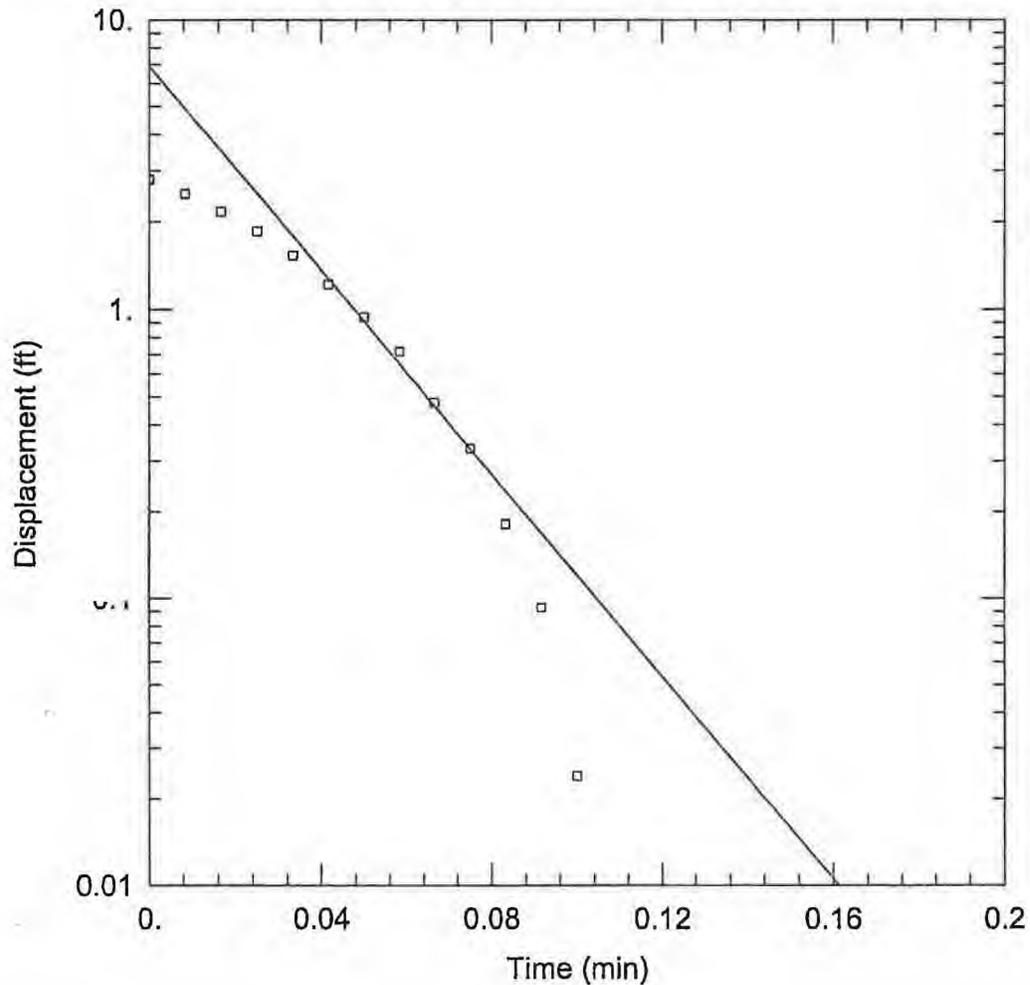
Saturated Thickness: 68. ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (G6M-98-32X)

Initial Displacement: 2.8 ft Water Column Height: 68. ft
 Casing Radius: 0.0833 ft Wellbore Radius: 0.167 ft
 Screen Length: 5. ft Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice
 K = 0.1821 ft/min y0 = 6.882 ft



G6M-98-32X RISING HEAD

Data Set: G:\Projects\DEVENS\AOC50\SLUGTEST\rht32xb+r.aqt
 Date: 11/10/99 Time: 14:45:58

PROJECT INFORMATION

Company: HLA
 Client: USACE
 Project: 44953
 Test Location: Devens, AOC 50
 Test Well: G6M-98-32X
 Test Date: 2-18-99

AQUIFER DATA

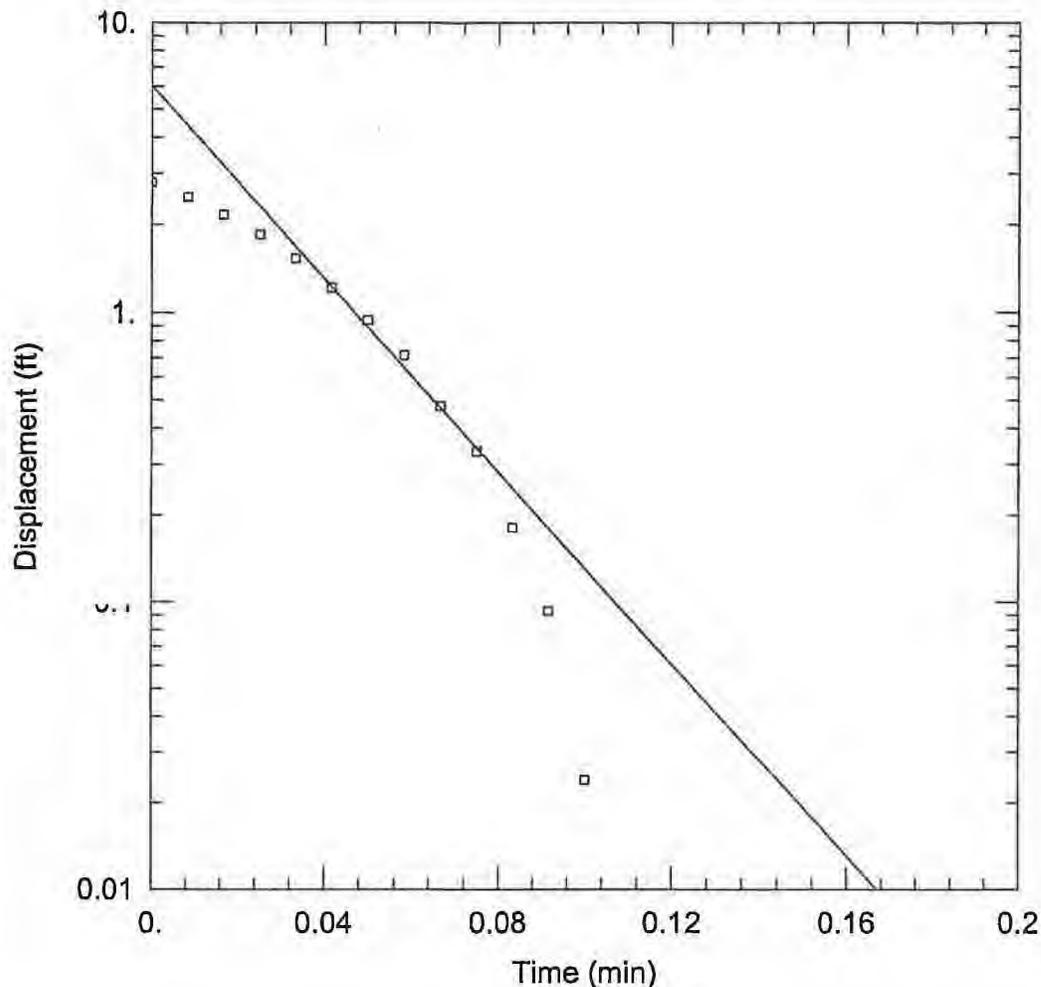
Saturated Thickness: 68. ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (G6M-98-32X)

Initial Displacement: 2.8 ft Water Column Height: 68. ft
 Casing Radius: 0.0833 ft Wellbore Radius: 0.167 ft
 Screen Length: 5. ft Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined Solution Method: Hvorslev
 K = 0.1821 ft/min y0 = 6.882 ft



G6M-98-32X RISING HEAD

Data Set: G:\Projects\DEVENS\AOC50\SLUGTEST\rht32xb+r.aqt

Date: 11/10/99

Time: 14:45:33

PROJECT INFORMATION

Company: HLA

Client: USACE

Project: 44953

Test Location: Devens, AOC 50

Test Well: G6M-98-32X

Test Date: 2-18-99

AQUIFER DATA

Saturated Thickness: 68. ft

Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (G6M-98-32X)

Initial Displacement: 2.8 ft

Water Column Height: 68. ft

Casing Radius: 0.0833 ft

Wellbore Radius: 0.167 ft

Screen Length: 5. ft

Gravel Pack Porosity: 0.3

SOLUTION

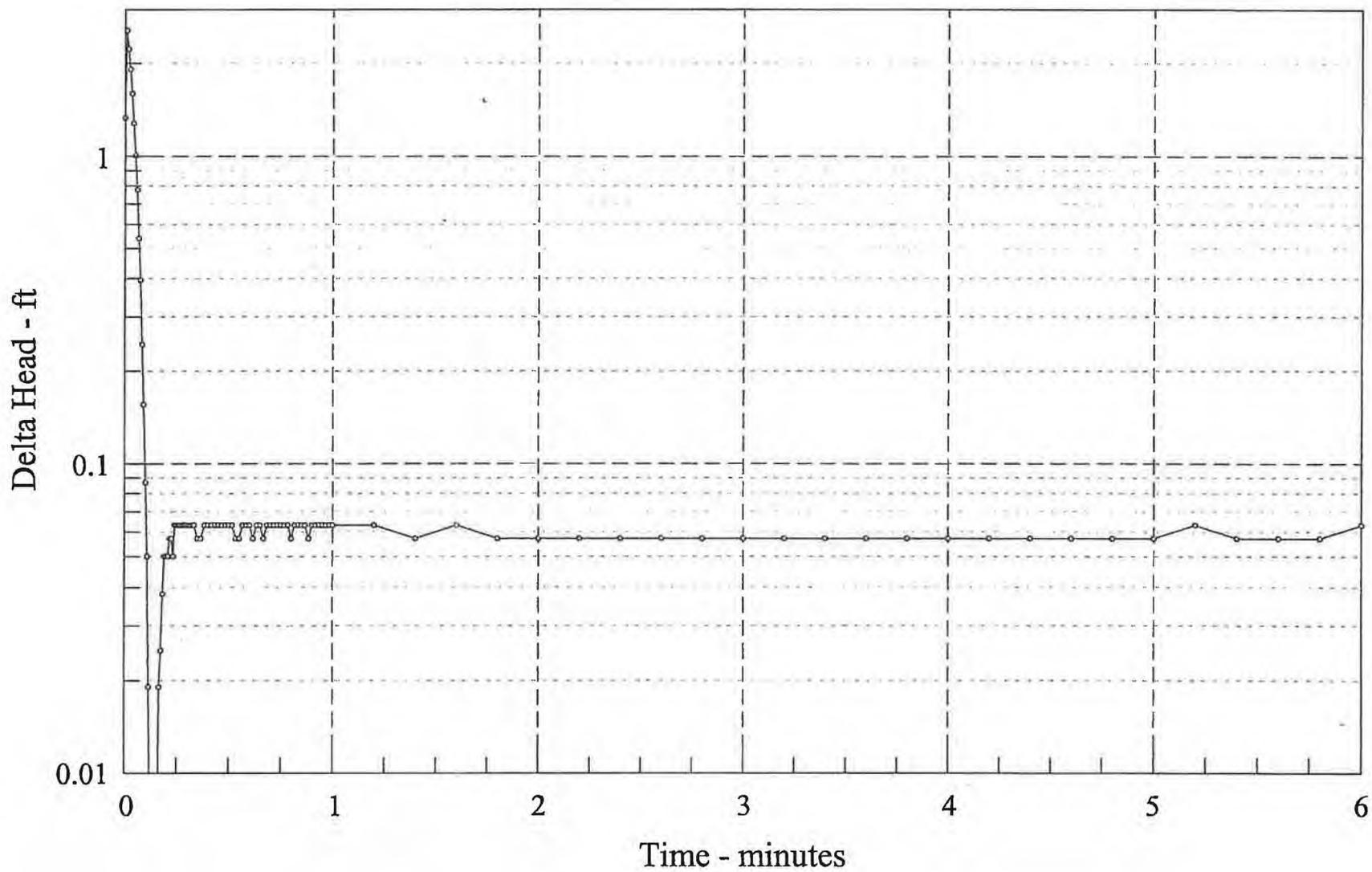
Aquifer Model: Unconfined

Solution Method: Bower-Rice

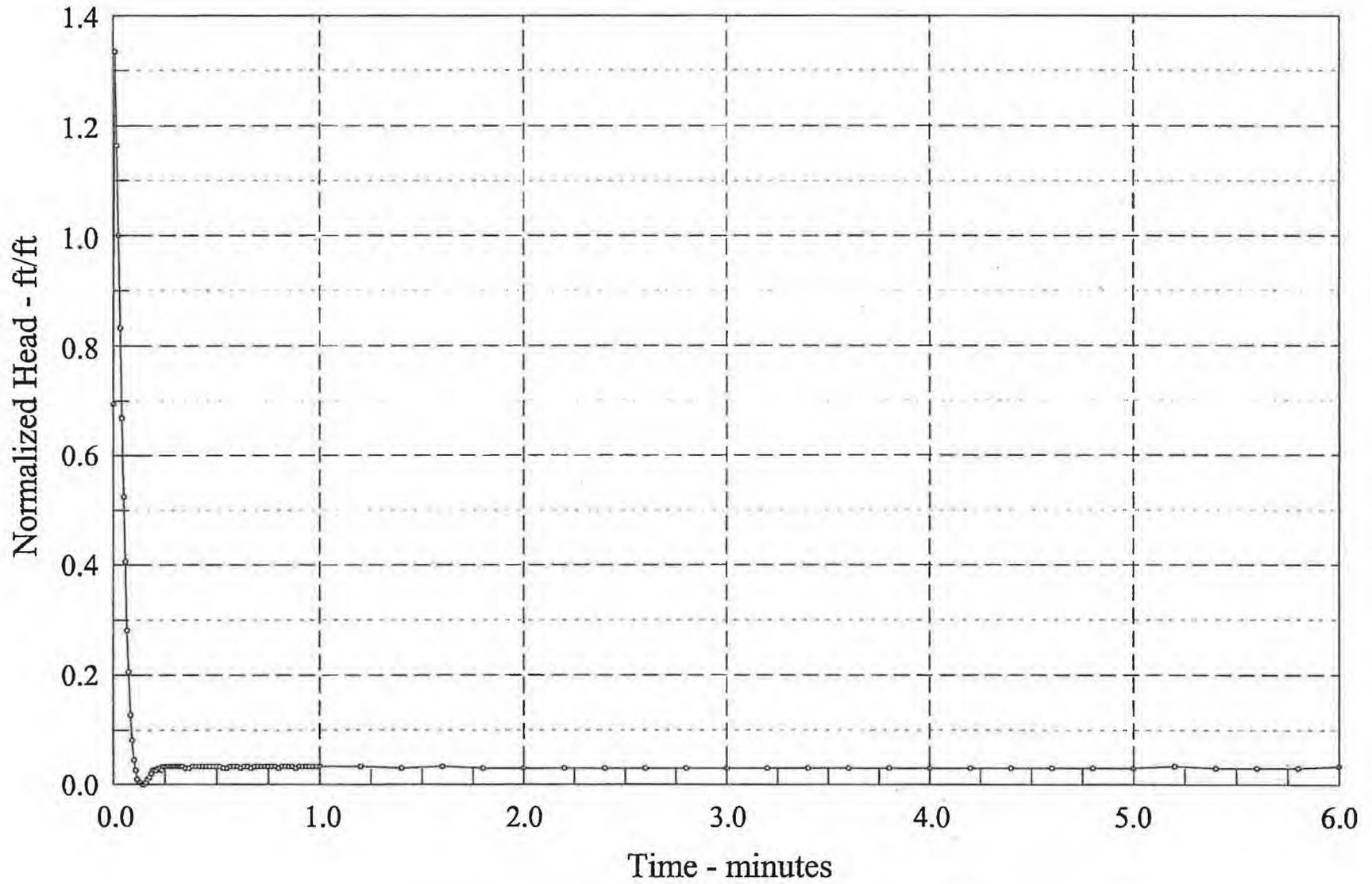
$K = 0.204$ ft/min

$y_0 = 6.05$ ft

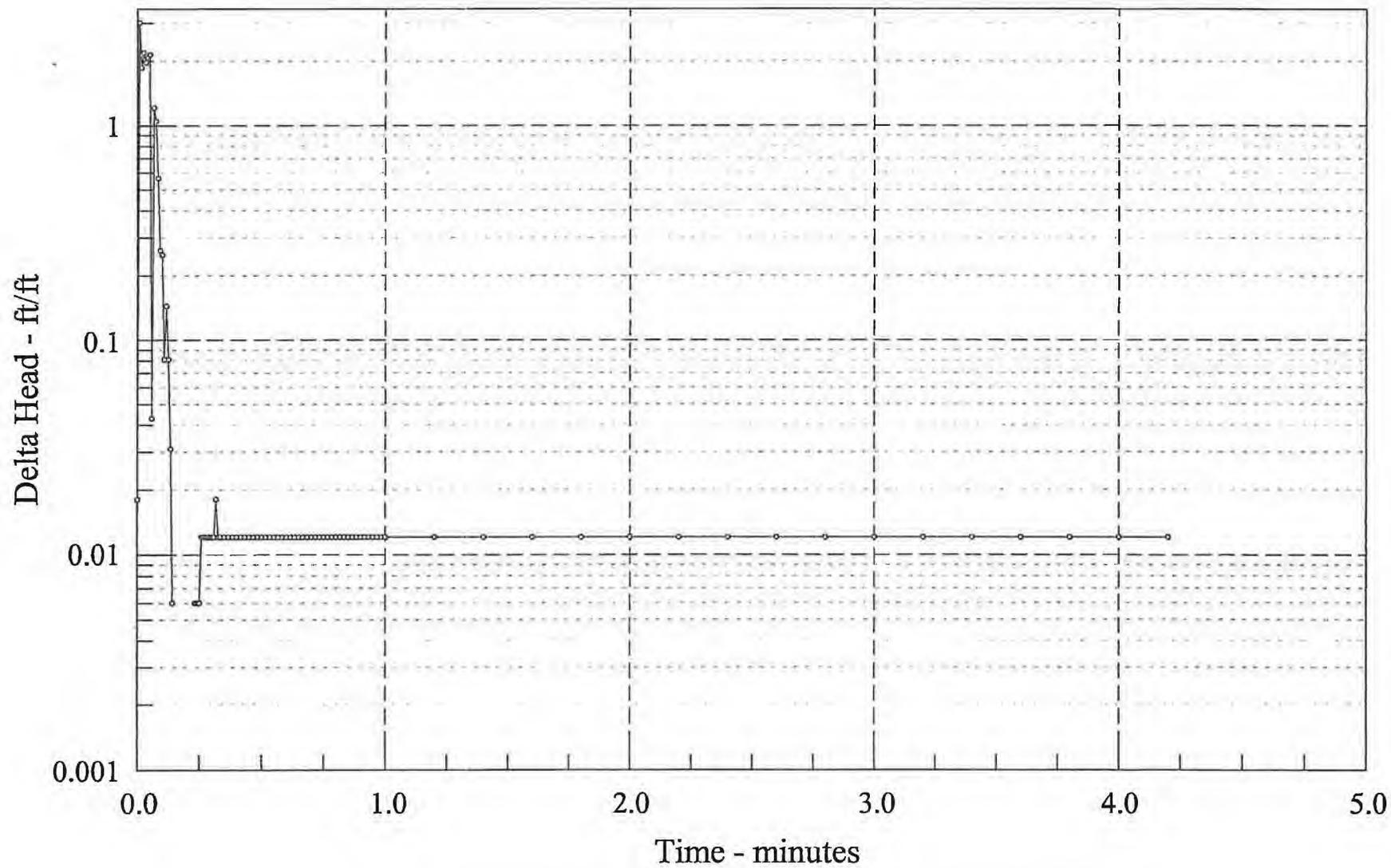
G6M-98-32X Rising Head Test 1 (raw data)



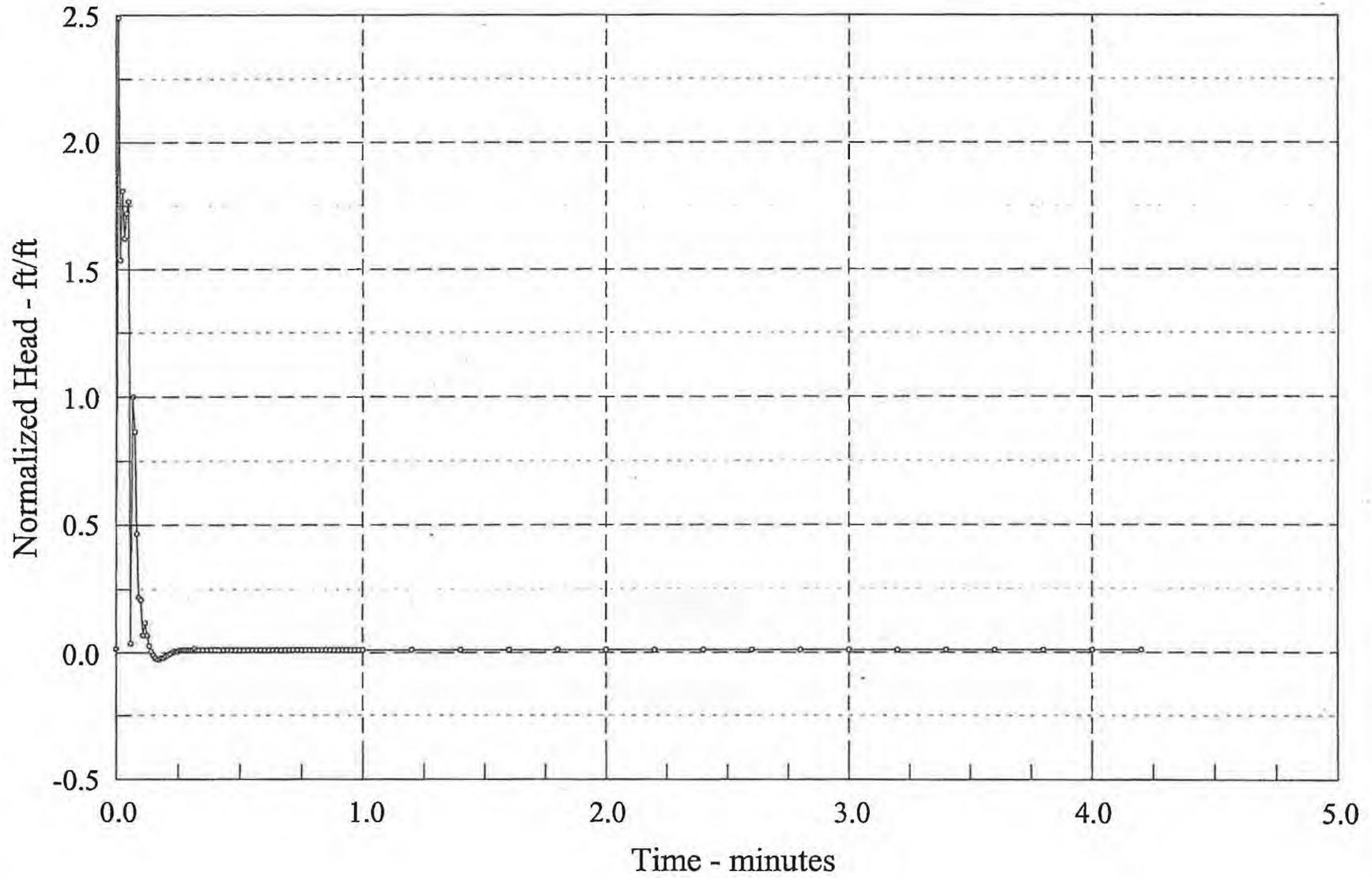
G6M-98-32X Rising Head Test 1 (normalized data)



G6M-98-32X Falling Head Test 1 (raw data)

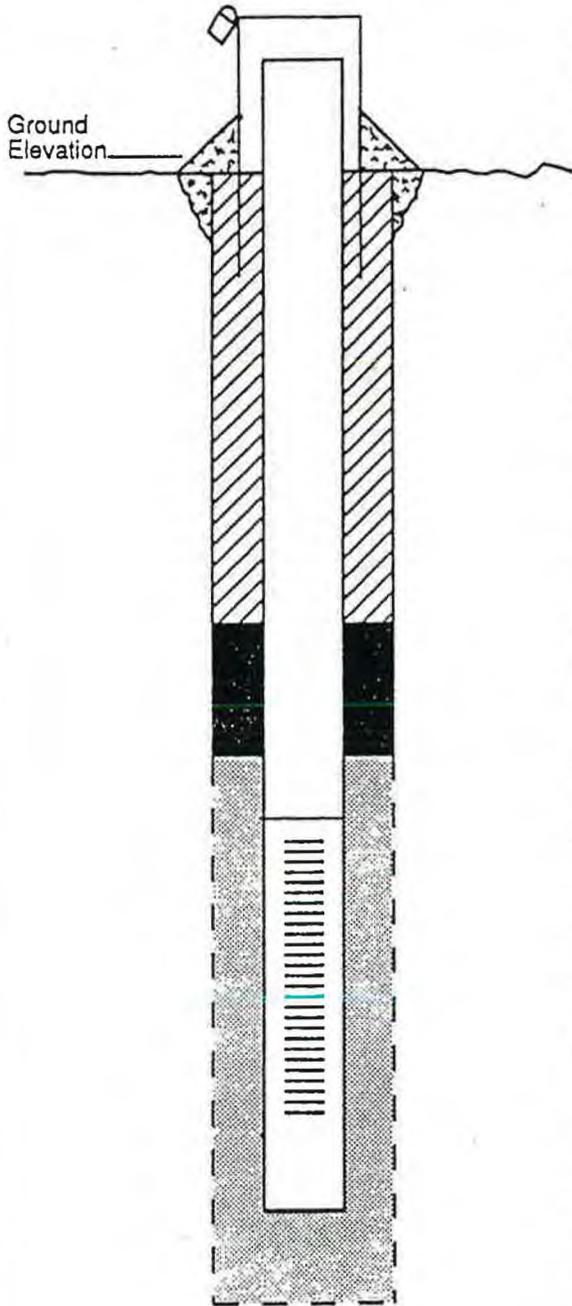


G6M-98-32X Falling Head Test 1 (normalized data)



MONITORING WELL CONSTRUCTION DIAGRAM

Project Devens - RFTA Study Area AOC 50 Driller D.L. Maher
 Project No. 8740-02 Boring No. GCM-98-32X Drilling Method Washed Pipe
 Date Installed 12/2/98 Development Method _____
 Field Geologist Gordon Hamilton



Stick-up of Casing Above Ground Surface: _____
 Type of Surface Seal/ Other Protection: concrete/grout
 Type of Surface Casing: 9
 ID of Surface Casing: 2"
 Diameter of Borehole: 6" to 45, 4" (45-135)
 Riser Pipe ID: 2"
 Type of Riser Pipe: Schedule 40 PVC
 Type of Backfill: Grout
 Depth of Top of Seal: 120
 Type of Seal: Bentonite chips
 Depth of Top of Sand: 125
 Depth of Top of Screen: 130
 Type of Screen: PVC Schedule 40
 Slot Size x Length: 0.010x10"
 ID of Screen: 2"
 Type of Sandpack: #4 silica sand
 Depth of Bottom of Screen: 135
 Depth of Sediment Sump with Plug: 135
 Depth of Bottom of Borehole: 136

AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. _____

SETUP	DATE	BY WHOM
	2/18/99	TKR/JCS
MONITORING WELL ID	G6M-98-32X	_____
DATE OF TEST	2/18/99	_____
TYPE OF TEST	Falling head	Rising head
HERMIT TYPE/SERIAL#	SE2000/2K-121	_____
TEST #	4 F32X.DAT	5 R32X.DAT
DATA COLLECTION RATE	106	_____
TRANSDUCER		
SERIAL #	419436C	_____
PSIG	20psi	_____
SCALE FACTOR	19.9159	_____
OFFSET	-0.0533	_____
INPUT CHANNEL	1	_____
TEST DATA		
INPUT MODE (TOC/ <u>SUR</u>)	SUR	_____
STATIC WATER LEVEL (FT./TOC)	62.98	62.98
WELL DEPTH (FT./TOC)	136' BGS (≈ 139' TOC)	
XD DEPTH (FT./TOC)	≈ 75'	≈ 75'
INITIAL XD REFERENCE	12.68	12.68
SLUG DEPTH (FT./TOC)		
TIME OF SLUG PLACEMENT	≈ 1201	≈ 1211
TIME OF WL EQUILIBRATION		
NEW XD REFERENCE	0	0
START TIME OF TEST	1200	1210
END TIME OF TEST	1209	1220
NOTES:		

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

32X
1309

F32X

SE2000
Environmental Logger
02/18 13:43

Unit# H2K#1 Test 4

Setups: INPUT 1

Type Level (F)
Mode Surface
I.D.

Reference 0.000
SG 1.000
Linearity -0.002
Scale factor 19.915
Offset -0.053
Delay mSEC 100.000

Step 0 02/18 12:20:59

Elapsed Time INPUT 1

0.0000 0.018
0.0083 3.016 -
0.0166 1.860
0.0250 2.193
0.0333 1.966
0.0416 2.086
0.0500 2.142
0.0583 0.043
0.0666 1.212
0.0750 1.049
0.0833 0.565
0.0916 0.263
0.1000 0.251
0.1083 0.081
0.1166 0.144
0.1250 0.081
0.1333 0.031
0.1416 0.006
0.1500 -0.012
0.1583 -0.025
0.1666 -0.031
0.1750 -0.031
0.1833 -0.025
0.1916 -0.025
0.2000 -0.018
0.2083 -0.012

Initial del. 3.016
0.083
-167
100
5'
75'

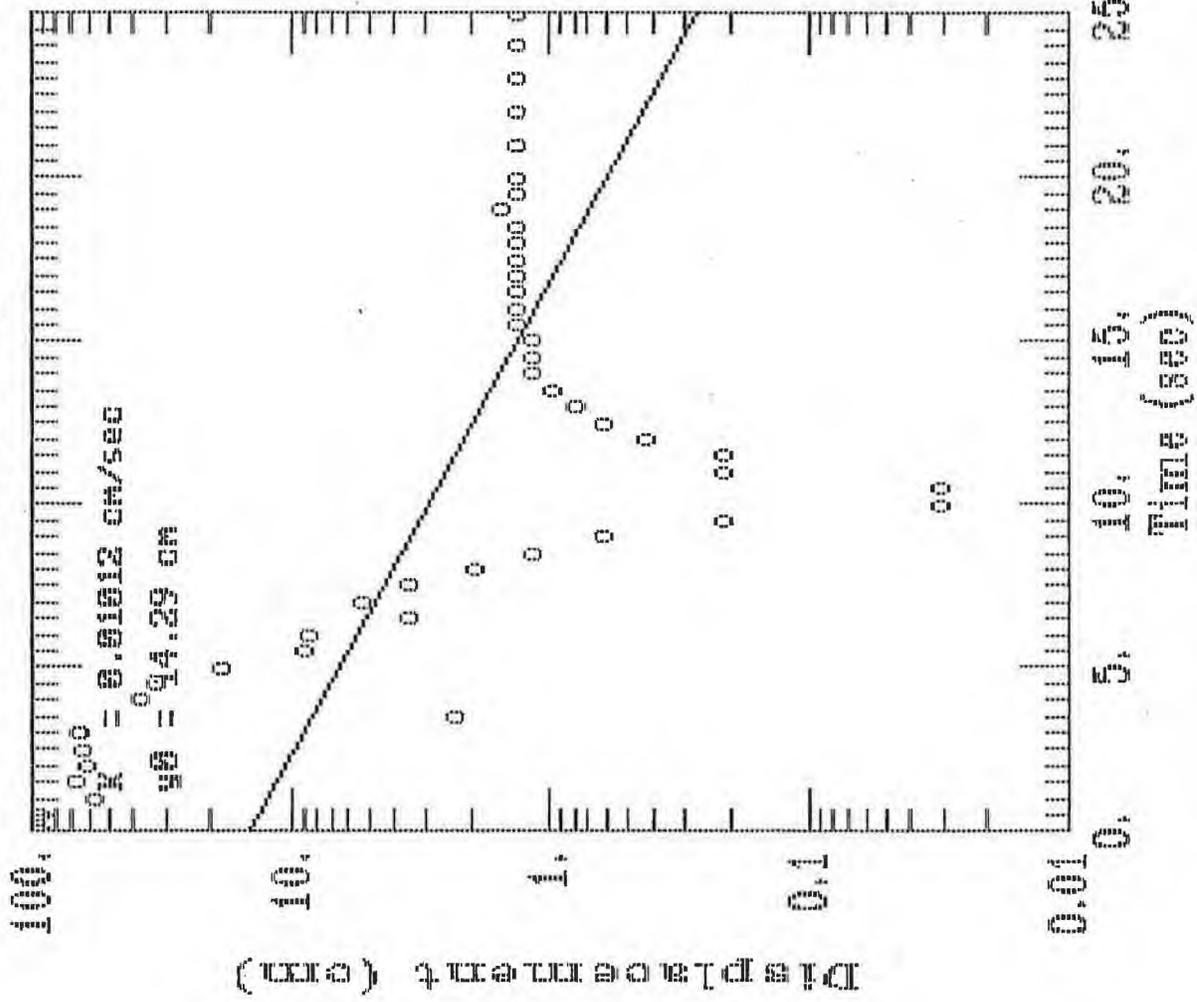
F32X

0.2166	-0.006
0.2250	0.000
0.2333	0.006
0.2416	0.006
0.2500	0.006
0.2583	0.012
0.2666	0.012
0.2750	0.012
0.2833	0.012
0.2916	0.012
0.3000	0.012
0.3083	0.012
0.3166	0.018
0.3250	0.012
0.3333	0.012
0.3500	0.012
0.3666	0.012
0.3833	0.012
0.4000	0.012
0.4166	0.012
0.4333	0.012
0.4500	0.012
0.4666	0.012
0.4833	0.012
0.5000	0.012
0.5166	0.012
0.5333	0.012
0.5500	0.012
0.5666	0.012
0.5833	0.012
0.6000	0.012
0.6166	0.012
0.6333	0.012
0.6500	0.012
0.6666	0.012
0.6833	0.012
0.7000	0.012
0.7166	0.012
0.7333	0.012
0.7500	0.012
0.7666	0.012
0.7833	0.012
0.8000	0.012
0.8166	0.012
0.8333	0.012
0.8500	0.012
0.8666	0.012
0.8833	0.012
0.9000	0.012
0.9166	0.012
0.9333	0.012

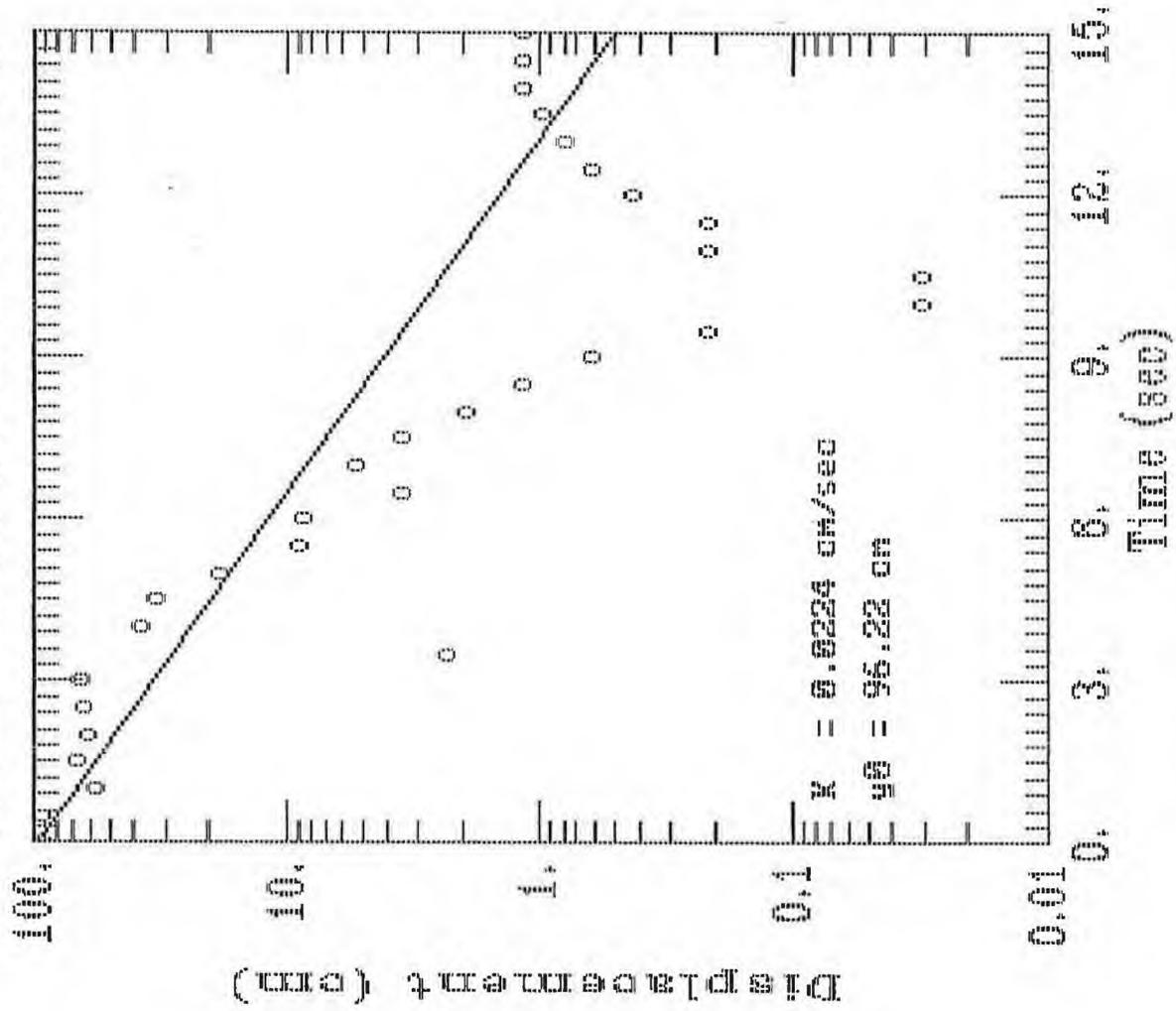
F32X

0.9500	0.012
0.9666	0.012
0.9833	0.012
1.0000	0.012
1.2000	0.012
1.4000	0.012
1.6000	0.012
1.8000	0.012
2.0000	0.012
2.2000	0.012
2.4000	0.012
2.6000	0.012
2.8000	0.012
3.0000	0.012
3.2000	0.012
3.4000	0.012
3.6000	0.012
3.8000	0.012
4.0000	0.012
4.2000	0.012

GM-90-30X FALLING HEAD TEST



COM-99-93X FALLING HEAD PERM. TEST



R32X

SE2000
Environmental Logger
02/18 13:09

Unit# H2K#1 Test 5

Setups: INPUT 1

Type Level (F)
Mode Surface
I.D.

Reference 0.000
SG 1.000
Linearity -0.002
Scale factor 19.915
Offset -0.053
Delay mSEC 100.000

Step 0 02/18 12:25:45

Elapsed Time INPUT 1

0.0000 -1.256
0.0083 -2.482
0.0166 -2.155
0.0250 -1.841
0.0333 -1.520
0.0416 -1.206
0.0500 -0.930
0.0583 -0.703
0.0666 -0.465
0.0750 -0.320
0.0833 -0.169
0.0916 -0.081
0.1000 -0.012
0.1083 0.025
0.1166 0.056
0.1250 0.069
0.1333 0.069
0.1416 0.075
0.1500 0.075
0.1583 0.069
0.1666 0.056
0.1750 0.050
0.1833 0.037
0.1916 0.025
0.2000 0.025
0.2083 0.025
0.2166 0.018

2.482

.083

.167

100

5

75

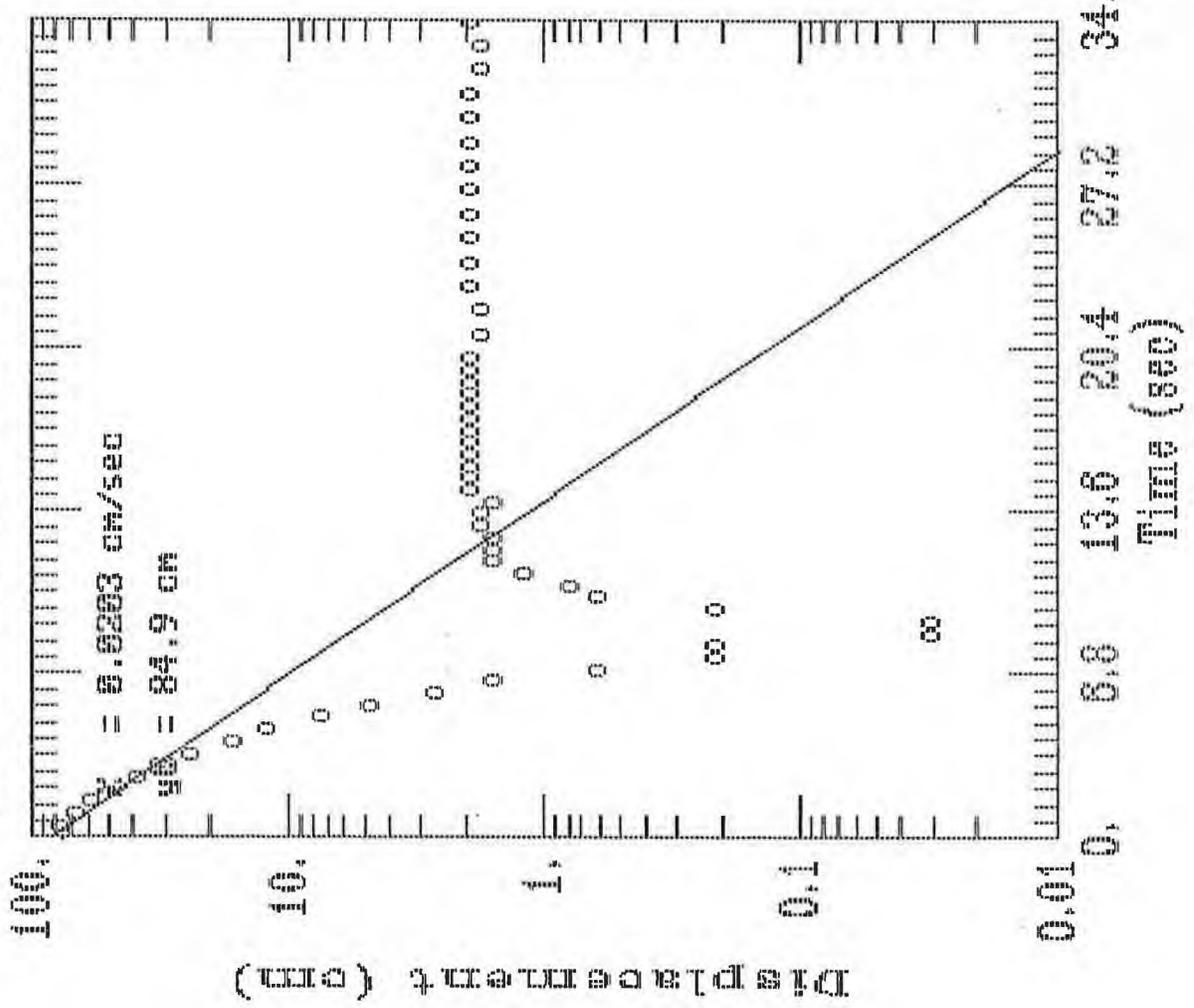
R32X

0.2250	0.018
0.2333	0.025
0.2416	0.012
0.2500	0.012
0.2583	0.012
0.2666	0.012
0.2750	0.012
0.2833	0.012
0.2916	0.012
0.3000	0.012
0.3083	0.012
0.3166	0.012
0.3250	0.012
0.3333	0.012
0.3500	0.018
0.3666	0.018
0.3833	0.012
0.4000	0.012
0.4166	0.012
0.4333	0.012
0.4500	0.012
0.4666	0.012
0.4833	0.012
0.5000	0.012
0.5166	0.012
0.5333	0.018
0.5500	0.018
0.5666	0.012
0.5833	0.012
0.6000	0.012
0.6166	0.018
0.6333	0.012
0.6500	0.012
0.6666	0.018
0.6833	0.012
0.7000	0.012
0.7166	0.012
0.7333	0.012
0.7500	0.012
0.7666	0.012
0.7833	0.012
0.8000	0.018
0.8166	0.012
0.8333	0.012
0.8500	0.012
0.8666	0.012
0.8833	0.018
0.9000	0.012
0.9166	0.012
0.9333	0.012
0.9500	0.012

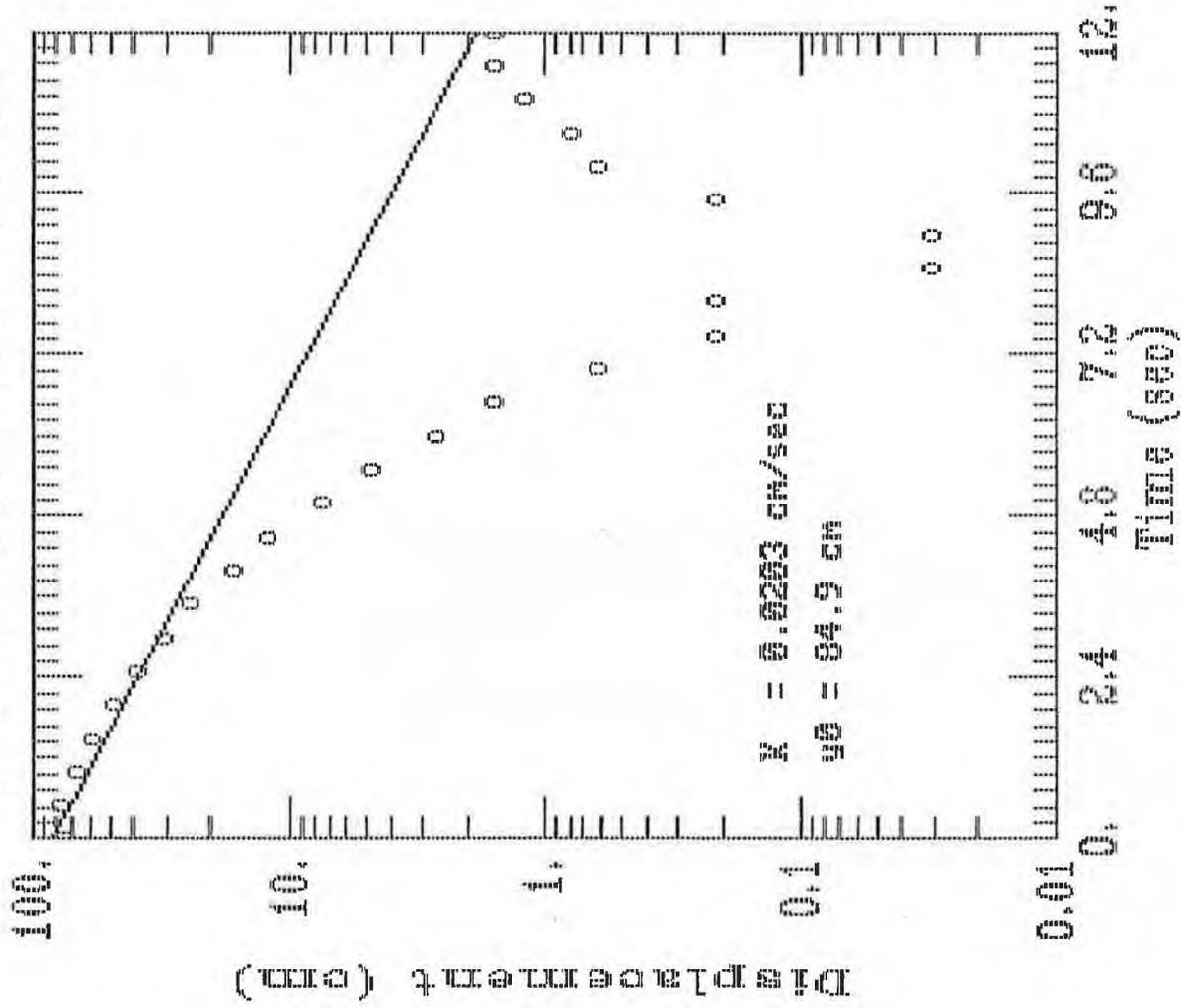
R32X

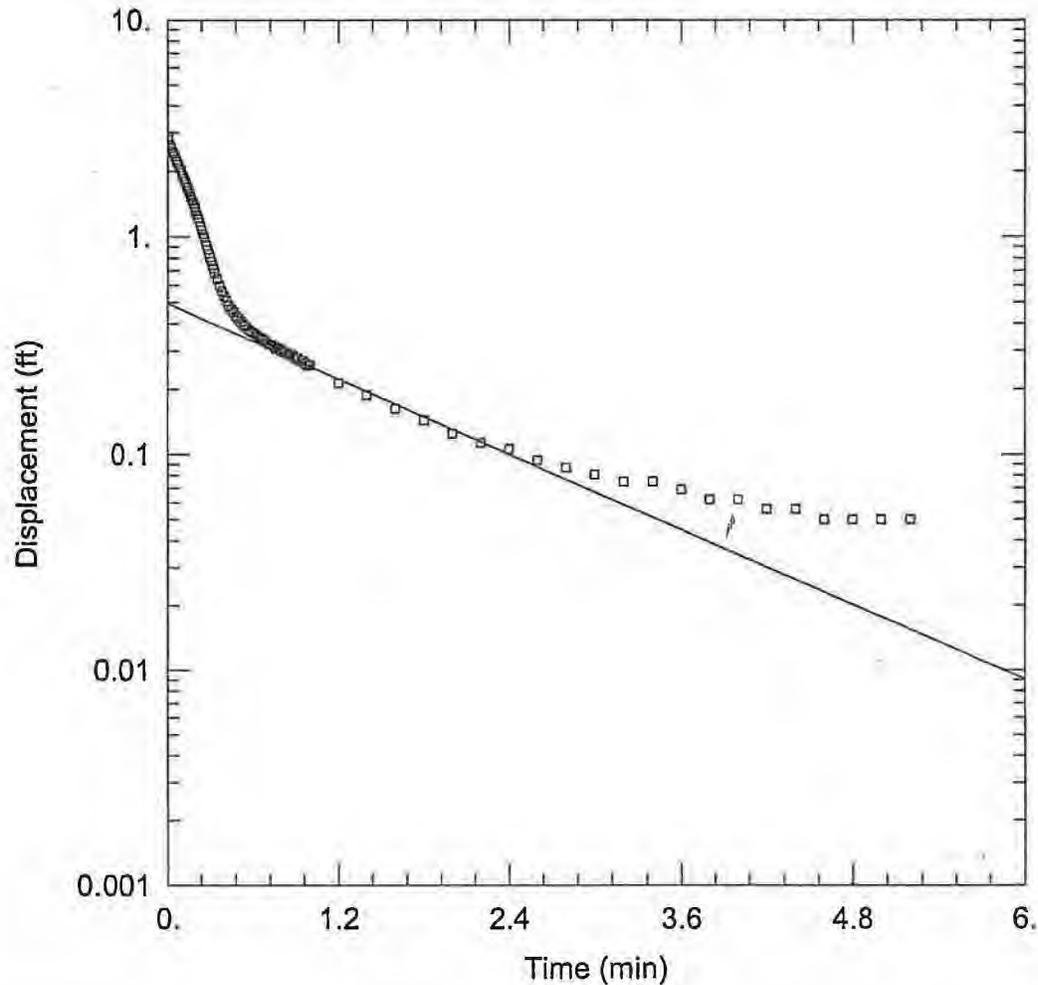
0.9666	0.012
0.9833	0.012
1.0000	0.012
1.2000	0.012
1.4000	0.018
1.6000	0.012
1.8000	0.018
2.0000	0.018
2.2000	0.018
2.4000	0.018
2.6000	0.018
2.8000	0.018
3.0000	0.018
3.2000	0.018
3.4000	0.018
3.6000	0.018
3.8000	0.018
4.0000	0.018
4.2000	0.018
4.4000	0.018
4.6000	0.018
4.8000	0.018
5.0000	0.018
5.2000	0.012
5.4000	0.018
5.6000	0.018
5.8000	0.018
6.0000	0.012

GM-90-92X USING HEAD PERM. TEST



COM-90-30X RISING HEAD PERM. TEST





G6M-98-33X RISING HEAD NO. 1

Data Set: G:\Projects\DEVENS\AOC50\SLUGTEST\rht33xb+r.aqt
 Date: 11/10/99 Time: 14:56:32

PROJECT INFORMATION

Company: HLA
 Client: USACE
 Project: 44953
 Test Location: Devens, AOC 50
 Test Well: G6M-98-33X
 Test Date: 2-18-99

AQUIFER DATA

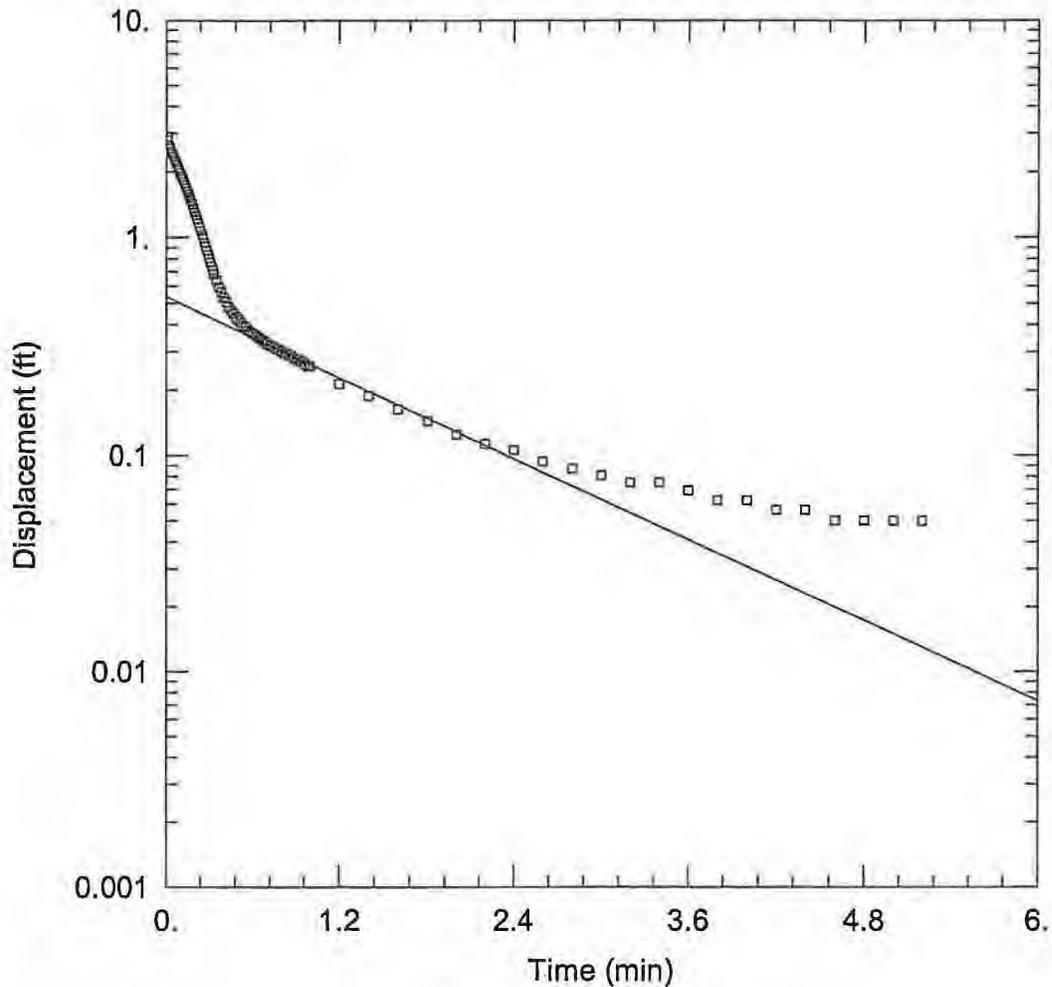
Saturated Thickness: 60. ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (G6M-98-32X)

Initial Displacement: 2.8 ft Water Column Height: 5. ft
 Casing Radius: 0.0833 ft Wellbore Radius: 0.167 ft
 Screen Length: 5. ft Gravel Pack Porosity: 0.3

SOLUTION

Aquifer Model: Unconfined Solution Method: Hvorslev
 K = 0.002998 ft/min y0 = 0.4954 ft



G6M-98-33X RISING HEAD NO. 1

Data Set: G:\Projects\DEVENS\AOC50\SLUGTEST\rht33xb+r.agt

Date: 11/10/99

Time: 14:55:10

PROJECT INFORMATION

Company: HLA

Client: USACE

Project: 44953

Test Location: Devens, AOC 50

Test Well: G6M-98-33X

Test Date: 2-18-99

AQUIFER DATA

Saturated Thickness: 60. ft

Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (G6M-98-32X)

Initial Displacement: 2.8 ft

Water Column Height: 5. ft

Casing Radius: 0.0833 ft

Wellbore Radius: 0.167 ft

Screen Length: 5. ft

Gravel Pack Porosity: 0.3

SOLUTION

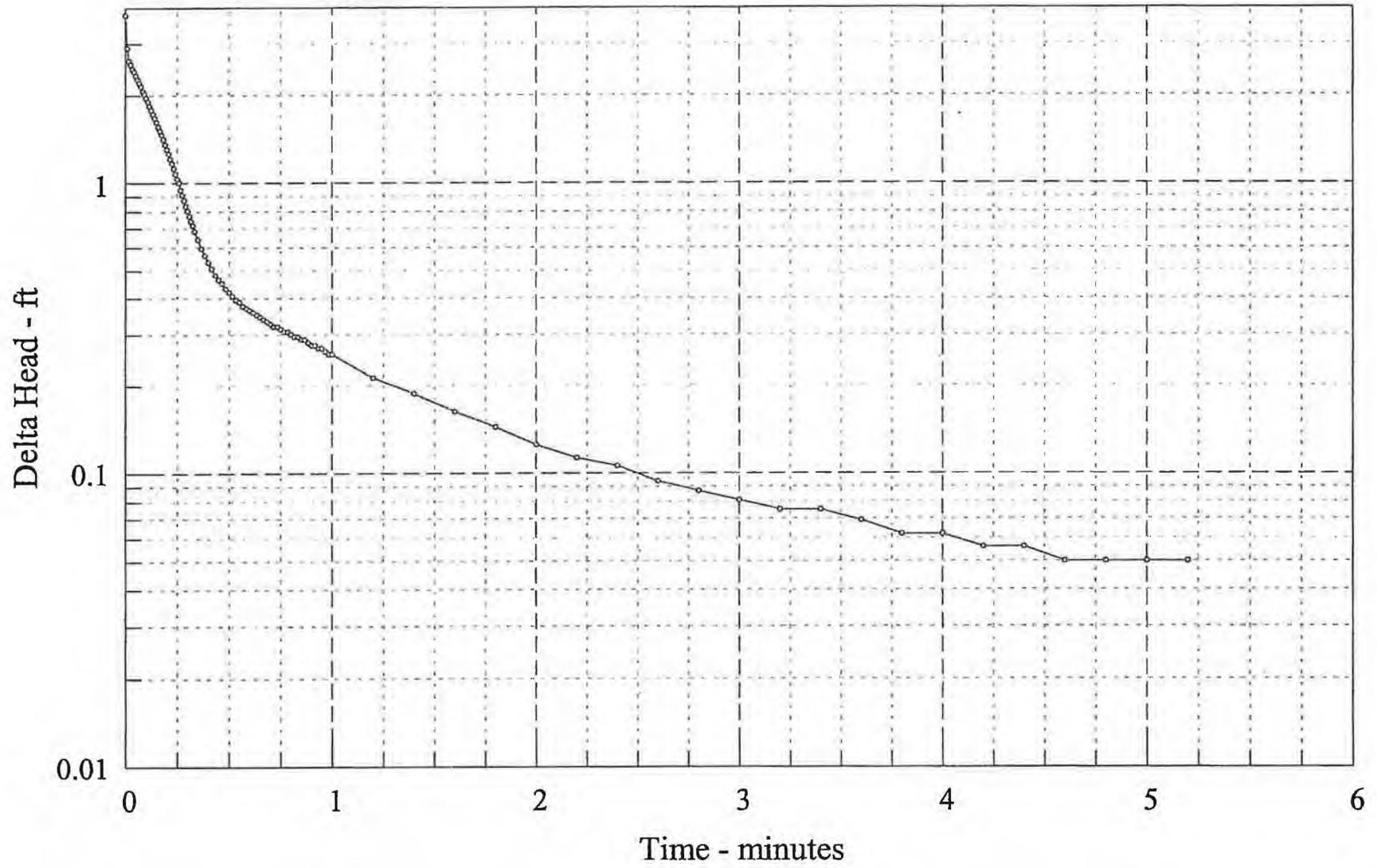
Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

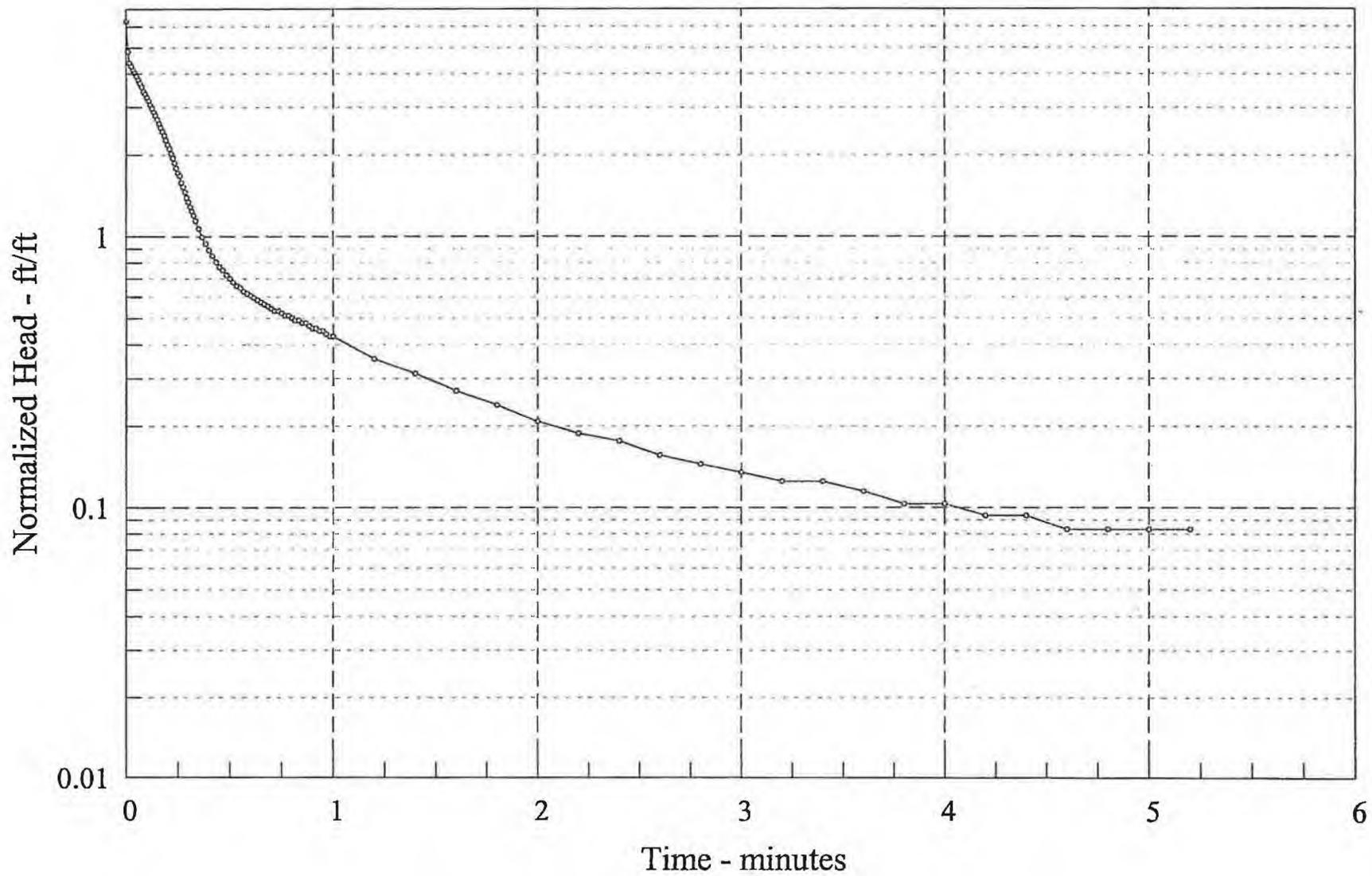
$K = 0.001963$ ft/min

$y_0 = 0.5368$ ft

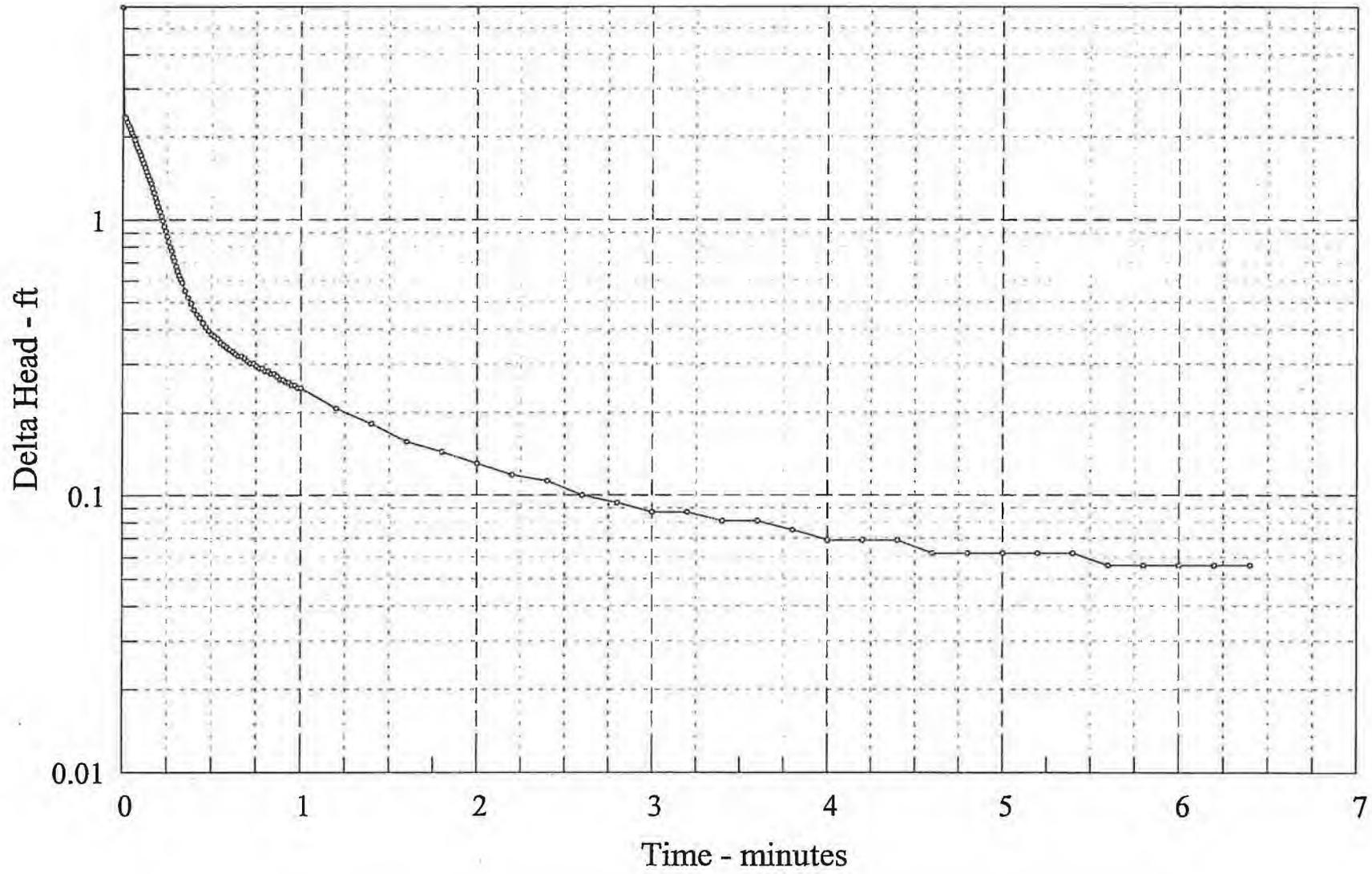
G6M-98-33X Rising Head Test 1 (raw data)



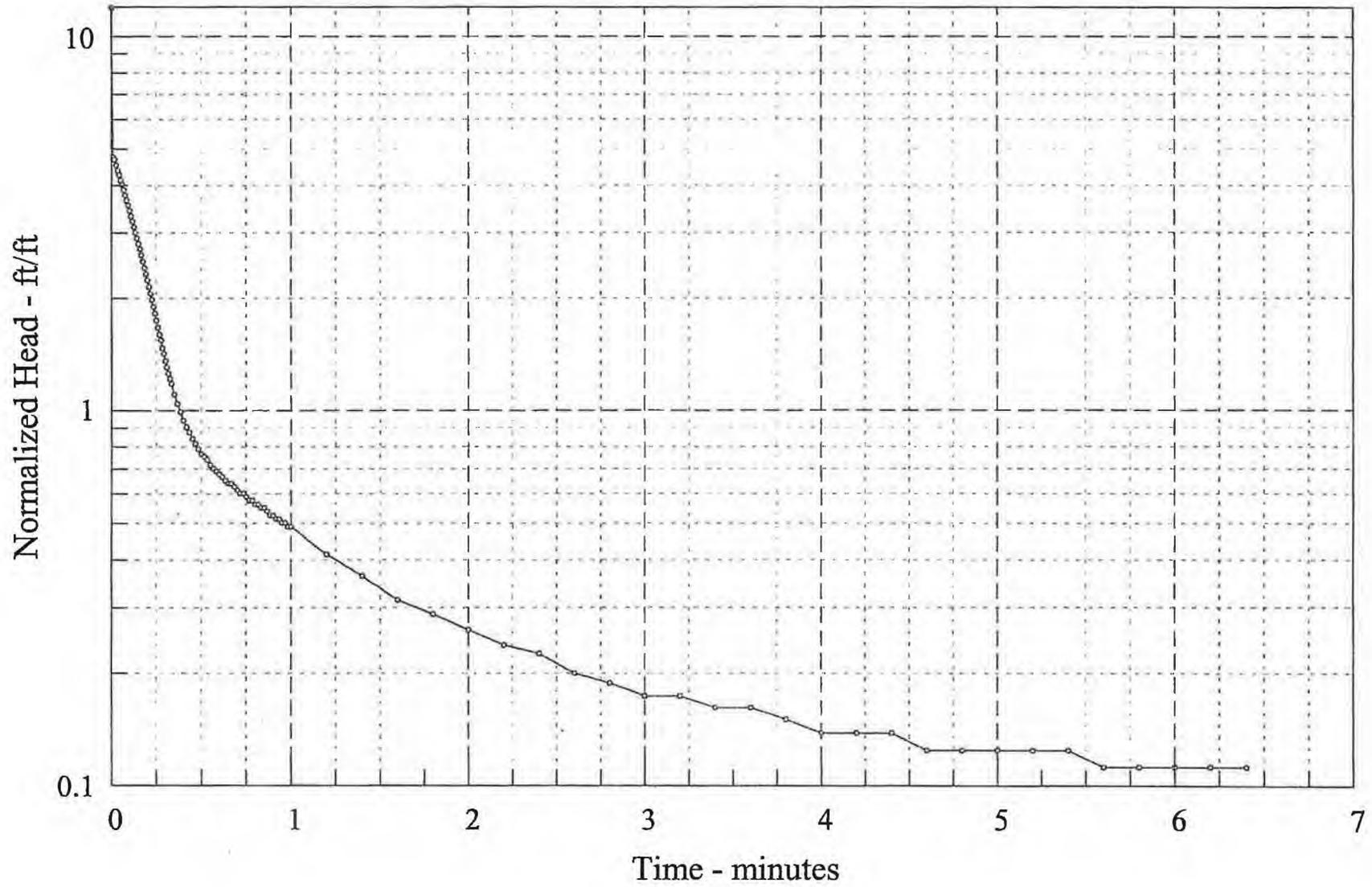
G6M-98-33X Rising Head Test 1 (normalized data)



G6M-98-33X Rising Head Test 2 (raw data)



G6M-98-33X Rising Head Test 2 (normalized data)



AQUIFER TESTING COMPLETION CHECKLIST

AQUIFER TEST NO. _____

SETUP	DATE	BY WHOM
	2/18/99	JKR/JCS
MONITORING WELL ID	66M-98-33X	66M-98-33X
DATE OF TEST	2/18/99	_____
TYPE OF TEST	Pressure Rising Head Test	R H T
HERMIT TYPE/SERIAL#	SE2000/2K-121	_____
TEST #	CRHT133X.DAT	/RHT133X.DAT
DATA COLLECTION RATE	Log	Log
TRANSDUCER		
SERIAL #	49436C	49436C
PSIG	20 psi	20 psi
SCALE FACTOR	19.9159	_____
OFFSET	-0.0533	_____
INPUT CHANNEL	1	_____
TEST DATA		
INPUT MODE (TOC/SUR)	SUR	SUR
STATIC WATER LEVEL (FT./TOC)	36.02	36.02
WELL DEPTH (FT./TOC)	36.02	36.02
XD DEPTH (FT./TOC)	≈ 42.5	_____
INITIAL XD REFERENCE	6.35	6.36
SLUG DEPTH (FT./TOC)	_____	_____
TIME OF SLUG PLACEMENT	≈ 1355	≈ 1414
TIME OF WL EQUILIBRATION		
NEW XD REFERENCE	0	0
START TIME OF TEST	1350	1412
END TIME OF TEST	1410	1422
NOTES:		

FIGURE 4-14
AQUIFER TEST COMPLETION CHECKLIST
PROJECT OPERATIONS PLAN
FORT DEVENS, MASSACHUSETTS
ABB Environmental Services, Inc.

RHT133X

SE2000
Environmental Logger
02/19 14:11

Unit# H2K#1 Test 0

Setups: INPUT 1

Type Level (F)
Mode Surface
I.D.

Reference 0.000
SG 1.000
Linearity -0.002
Scale factor 19.915
Offset -0.053
Delay mSEC 100.000

Step 0 02/18 14:20:39

Elapsed Time INPUT 1

0.0000	-3.764
0.0083	-2.903
0.0166	-2.626
0.0250	-2.557
0.0333	-2.463
0.0416	-2.413
0.0500	-2.344
0.0583	-2.274
0.0666	-2.212
0.0750	-2.149
0.0833	-2.067
0.0916	-2.023
0.1000	-1.960
0.1083	-1.904
0.1166	-1.841
0.1250	-1.784
0.1333	-1.728
0.1416	-1.677
0.1500	-1.621
0.1583	-1.564
0.1666	-1.514
0.1750	-1.464
0.1833	-1.413
0.1916	-1.357
0.2000	-1.307
0.2083	-1.263
0.2166	-1.212

Initial dist = 3.764
= 0.083

radius of
borehole 4" = 0.33

Seat thickness 100'

Screen 8'

height of water
column 8'

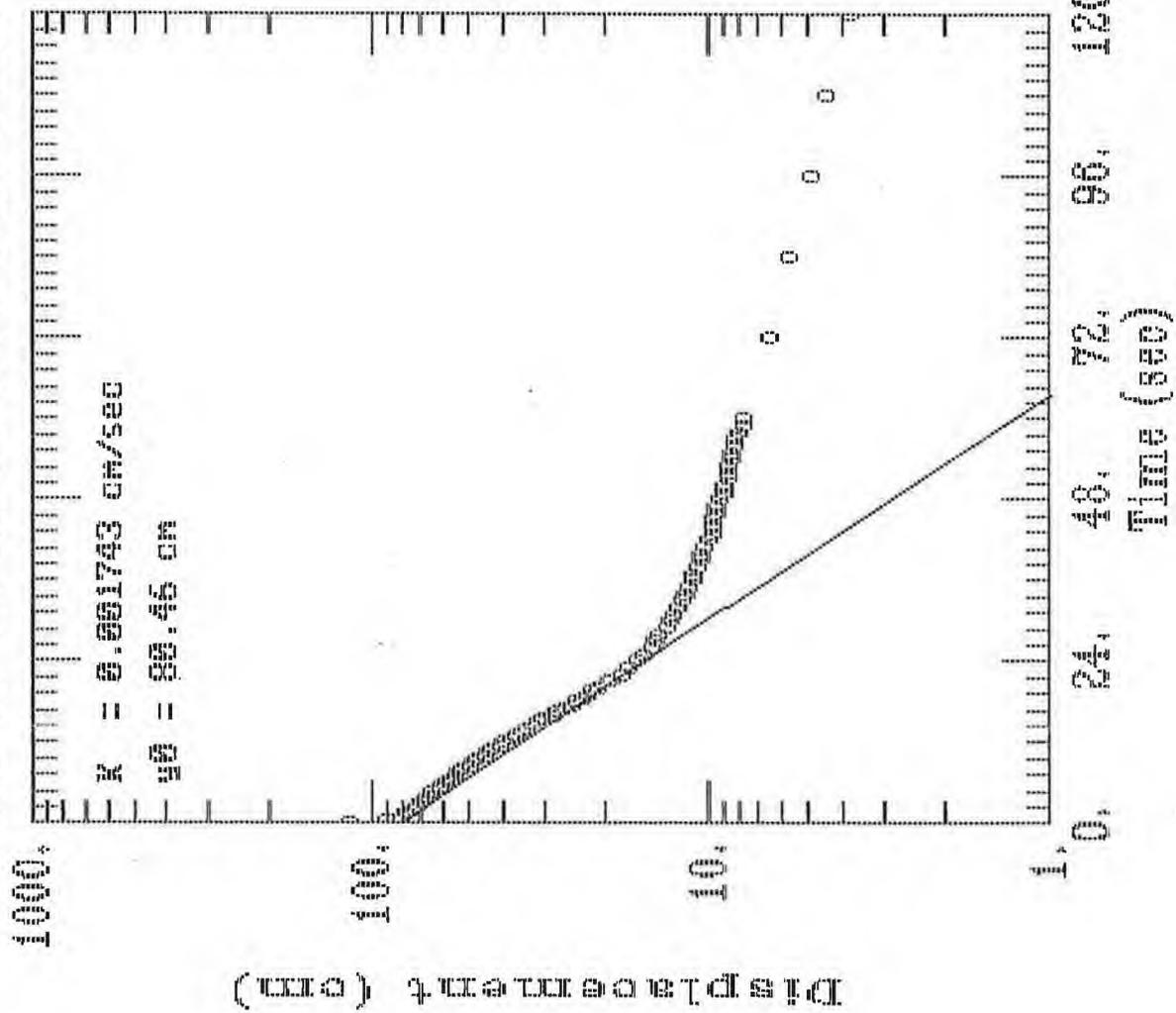
RHT133X

0.2250	-1.168
0.2333	-1.124
0.2416	-1.074
0.2500	-1.030
0.2583	-1.005
0.2666	-0.948
0.2750	-0.911
0.2833	-0.873
0.2916	-0.835
0.3000	-0.804
0.3083	-0.772
0.3166	-0.741
0.3250	-0.716
0.3333	-0.684
0.3500	-0.640
0.3666	-0.596
0.3833	-0.565
0.4000	-0.534
0.4166	-0.509
0.4333	-0.483
0.4500	-0.465
0.4666	-0.452
0.4833	-0.433
0.5000	-0.421
0.5166	-0.408
0.5333	-0.395
0.5500	-0.389
0.5666	-0.377
0.5833	-0.370
0.6000	-0.364
0.6166	-0.358
0.6333	-0.351
0.6500	-0.345
0.6666	-0.339
0.6833	-0.333
0.7000	-0.326
0.7166	-0.320
0.7333	-0.320
0.7500	-0.314
0.7666	-0.307
0.7833	-0.307
0.8000	-0.301
0.8166	-0.295
0.8333	-0.295
0.8500	-0.289
0.8666	-0.289
0.8833	-0.282
0.9000	-0.276
0.9166	-0.276
0.9333	-0.270
0.9500	-0.270

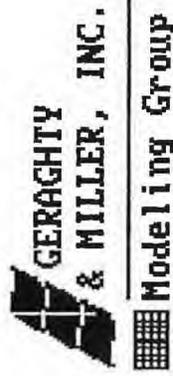
RHT133X

0.9666	-0.263
0.9833	-0.257
1.0000	-0.257
1.2000	-0.213
1.4000	-0.188
1.6000	-0.163
1.8000	-0.144
2.0000	-0.125
2.2000	-0.113
2.4000	-0.106
2.6000	-0.094
2.8000	-0.087
3.0000	-0.081
3.2000	-0.075
3.4000	-0.075
3.6000	-0.069
3.8000	-0.062
4.0000	-0.062
4.2000	-0.056
4.4000	-0.056
4.6000	-0.050
4.8000	-0.050
5.0000	-0.050
5.2000	-0.050

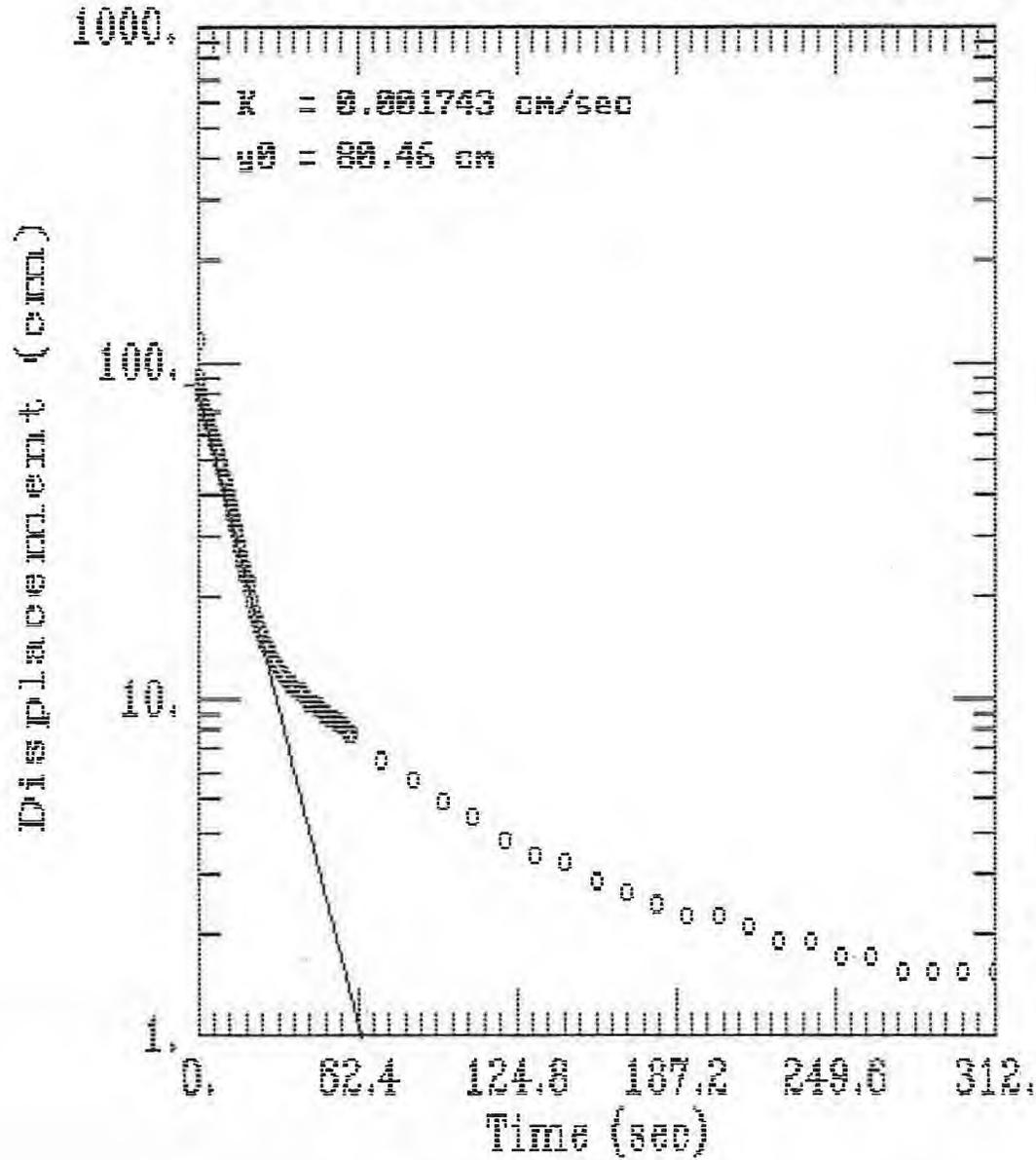
COM-99-99X MONG HEAD PERM. TEST 1



AQTESOLV



GOM-98-99X RISING HEAD PERM. TEST 1



AQTESOLV
GERAGHTY & MILLER, INC.
Modeling Group

RH2 33 X

SE2000
Environmental Logger
02/19 14:09

Unit# H2K#1 Test 1

Setups: INPUT 1

Type Level (F)
Mode Surface
I.D.

Reference 0.000
SG 1.000
Linearity -0.002
Scale factor 19.915
Offset -0.053
Delay mSEC 100.000

Step 0 02/18 14:30:50

Elapsed Time INPUT 1

0.0000 -5.970
0.0083 -2.369
0.0166 -2.344
0.0250 -2.262
0.0333 -2.193
0.0416 -2.136
0.0500 -2.067
0.0583 -2.010
0.0666 -1.948
0.0750 -1.885
0.0833 -1.828
0.0916 -1.772
0.1000 -1.715
0.1083 -1.659
0.1166 -1.608
0.1250 -1.552
0.1333 -1.501
0.1416 -1.451
0.1500 -1.401
0.1583 -1.357
0.1666 -1.307
0.1750 -1.256
0.1833 -1.206
0.1916 -1.162
0.2000 -1.118
0.2083 -1.074
0.2166 -1.030

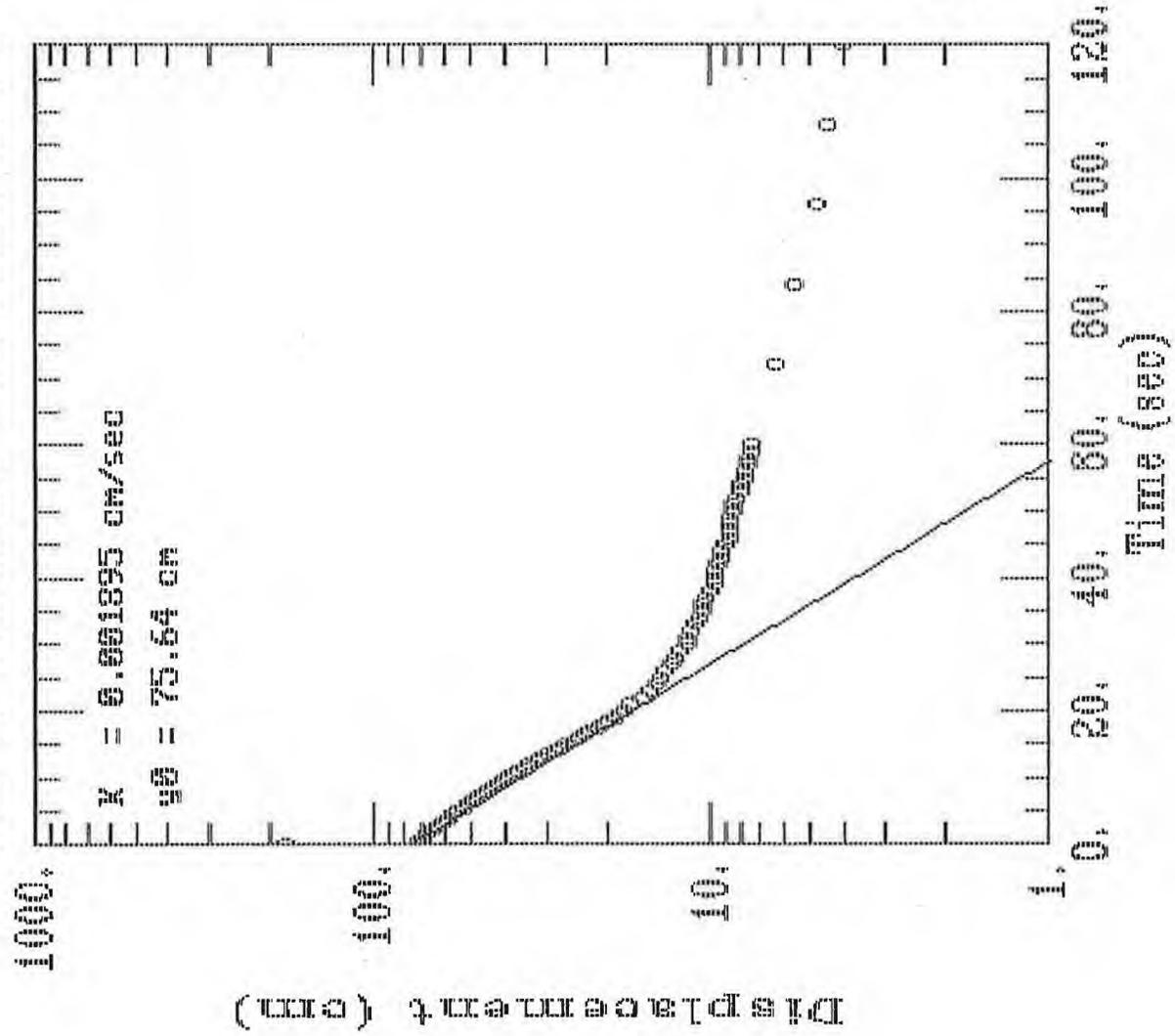
RH233X

0.2250	-0.992
0.2333	-0.948
0.2416	-0.911
0.2500	-0.873
0.2583	-0.835
0.2666	-0.798
0.2750	-0.772
0.2833	-0.735
0.2916	-0.710
0.3000	-0.678
0.3083	-0.653
0.3166	-0.628
0.3250	-0.609
0.3333	-0.590
0.3500	-0.553
0.3666	-0.521
0.3833	-0.496
0.4000	-0.471
0.4166	-0.452
0.4333	-0.439
0.4500	-0.421
0.4666	-0.408
0.4833	-0.395
0.5000	-0.383
0.5166	-0.377
0.5333	-0.370
0.5500	-0.358
0.5666	-0.351
0.5833	-0.345
0.6000	-0.339
0.6166	-0.333
0.6333	-0.326
0.6500	-0.320
0.6666	-0.320
0.6833	-0.314
0.7000	-0.307
0.7166	-0.301
0.7333	-0.301
0.7500	-0.295
0.7666	-0.289
0.7833	-0.289
0.8000	-0.282
0.8166	-0.282
0.8333	-0.276
0.8500	-0.276
0.8666	-0.270
0.8833	-0.263
0.9000	-0.263
0.9166	-0.257
0.9333	-0.257
0.9500	-0.251

RH233X

0.9666	-0.251
0.9833	-0.245
1.0000	-0.245
1.2000	-0.207
1.4000	-0.182
1.6000	-0.157
1.8000	-0.144
2.0000	-0.131
2.2000	-0.119
2.4000	-0.113
2.6000	-0.100
2.8000	-0.094
3.0000	-0.087
3.2000	-0.087
3.4000	-0.081
3.6000	-0.081
3.8000	-0.075
4.0000	-0.069
4.2000	-0.069
4.4000	-0.069
4.6000	-0.062
4.8000	-0.062
5.0000	-0.062
5.2000	-0.062
5.4000	-0.062
5.6000	-0.056
5.8000	-0.056
6.0000	-0.056
6.2000	-0.056
6.4000	-0.056

COM-80-89X RISING HEAD PERM. TEST 2

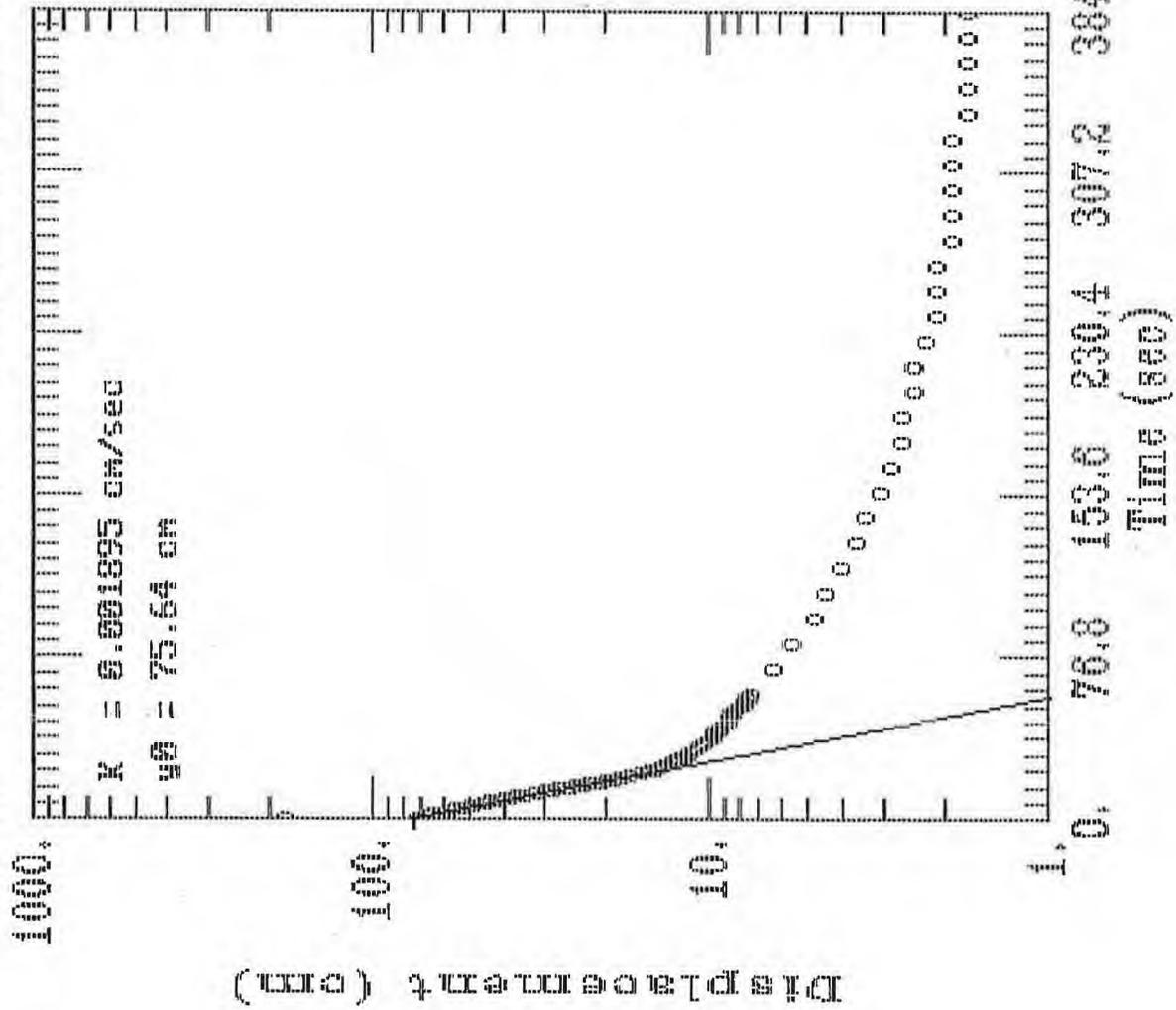


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Modeling Group

GM-98-387 RISING HEAD PERM. TEST 2



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