Well No. [illegible]

Boring No. X-Ref: B-2

MONITOR WELL CONSTRUCTION SUMMARY

Survey Coords: _____ Elevation Ground Level _____

Top of Casing _____

Drilling Summary:

Total Depth 286

Borehole Diameter 9 7/8"

Casing Stick-up Height: _____

Driller Howard Pump, Inc.
Barstow, California 92311

Rig Howard Turner (D-1)

Bit(s) 9 7/8" Button Bit

Drilling Fluid 0-285 = clean water and Bentonite

Protective Casing Annodized Aluminum

Construction Time Log:

Task	Start Date	Start Time	Finish Date	Finish Time
Drilling Button Bit	9/26	0900	9/30	1200
Geophys. Logging:				
Casing:				
C1	10/3	1430	10/3	1500
S1	10/3	1400	10/3	1430
Filter Placement:	10/3	1500	10/3	1800
Cementing:	10/4	0900	10/4	0950
Development:	10/18	0800	10/19	1420

Well Design & Specifications

Basis: Geologic Log X Geophysical Log ____

Casing String (s): C = Casing S = Screen.

Depth	String(s)	Elevation
- 175	C1	-
175 - 280	S1	-
-		-
-		-
-		-

Casing: C1 4½" diameter Sch 40 pvc, flush threaded

C2 _____

Screen: S1 4½ diameter Sch 40 pvc, flush threaded

S2 _____

Filter Pack: 280-285; 170-280 Mont. Sand #3; 168-170 #40 Sand; 60-163 Monterey Sand #3

Grout Seal: 0-60', 5:1 Portland type I & II cement plus Aquagel Gold Seal (Bentonite)

Bentonite Seal: 163-168 Aquagel Gold Seal (Bentonite)

Well Development:

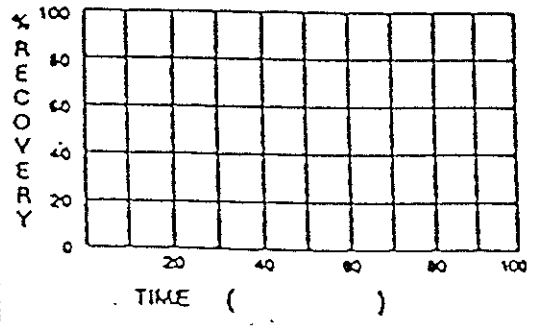
10/18 0800-0940 Bail
10/18 1000-1110 SWAB
10/18 1121-1154 Bail
10-19 1150-1420 Submersible Pump
Total gallons removed: 850 gallons

Stabilization Test Data:

Time	pH	Spec. Cond.	Temp (C)
1155	8.13	498	24.36
1239	8.10	503	22.44
1331	8.07	509	22.66
1400	8.04	512	23.37
1420	8.06	505	22.66

Recovery Data:

Q= S_o=



Comments: (1) All dates are 1988

SITE NAME Bradley Landfill

LOCATION Sun Valley, CA

WC 01121

SUPERVISED BY Kurt Easthouse

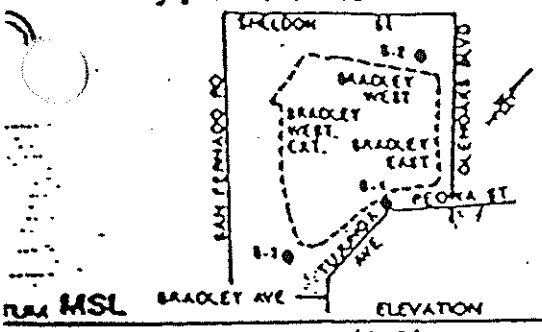
DATE 10/25/88

D. 285

SOIL BOREHOLE LOG

4915C

NAME AND LOCATION: Bradley Landfill, un Valley, California



DRILLING METHOD: Mud Rotary

SAMPLING METHOD: Bag (B)

BORING NO. B-2

SHEET 1 OF 8

DRILLING	START	FINISH
TIME	0900	1200
DATE	8/26/88	9/30/88

WATER LEVEL				
TIME				
DATE				
CASING DEPTH				

DATUM MSL

DRILLING CONTR. Howard Pump, Inc.

Tony Villanueva

DRILL RIG: Howard Turner (D-1)

SURFACE CONDITIONS: Level open area in north corner of landfill

ANGLE: vertical BEARING: --

SAMPLE HAMMER TORQUE: -- FT.-LBS

ELEVATION	BLOWS/6 IN ON SAMPLER (RECOVERY)	SYMBOL	SAMPLE NUMBER AND DESCRIPTION OF MATERIAL	SAMPLER AND BIT	CASING TYPE	BLOWS/FOOT ON CASING	TEST RESULTS: WATER CONTENT %	LIQUID LIMIT %	PLASTIC LIMIT %	SPECIFIC GRAVITY	OTHER TESTS
			Light yellowish brown (2.5Y 6/4) SAND, trace fines; fine to coarse grained; angular quartz, feldspar, and lithic fragments (SP-SW)	B BB							
5			@5.5-10': Boulders								
10			Light yellowish brown (2.5Y 6/4) SAND, fine to coarse grained; angular lithic fragments (SW)								
			@15': angular to sub-angular quartz, feldspar, and lithic fragments								
15			@15-20': Boulders								
20			@20': Light yellowish brown (2.5Y 6/4) to light brownish gray (2.5Y 6/2)								
			@25': 5-10% fine gravel								
25			@30': 15% fine gravel; rare sub-rounded grains								
			@35': 5-10% fine gravel								

SL 00305

LOGGED BY Kurt Easthouse

DATE 10/25/88 CHK'D BY KE

NAME AND LOCATION

DRILLING METHOD: Mud Rotary

SAMPLING METHOD: Bag (B)

BORING NO. B-2

SHEET 2 OF 8

WATER LEVEL				
TIME				
DATE				
CASING DEPTH				

DRILLING: START TIME DATE; FINISH TIME DATE

M MSL ELEVATION

RIG Howard Turner (D-1)

E vertical BEARING --

LE HAMMER TORQUE -- FT.-LBS

SURFACE CONDITIONS Level open area in north corner of landfill

DRILLING CONTR Howard Pump, Inc.

Tony Villanueva

BLOWS/6 IN OR RUN LENGTH (RECOVERY)	SYMBOL	SAMPLE NUMBER AND DESCRIPTION OF MATERIAL	SAMPLER AND INT	CASING TYPE	BLOWS/FOOT ON CASING	TEST RESULTS: WATER CONTENT %	LIQUID LIMIT %	PLASTIC LIMIT %	SPECIFIC GRAVITY	PINTA TESTS
		Light yellowish brown (2.5Y 6/4) to light brownish gray (2.5Y 6/2) SAND (SW) (continued)	B 88							
		@40': 40-45% fine gravel								
		@42-44': Boulders and cobbles								
		@45': 30% fine gravel								
		@46-48': Boulders and cobbles								
		@50': 25-30% fine gravel; angular to sub-angular quartz, feldspar and lithic fragments								
		@53-55': Boulders and cobbles								
		@55': dark grayish brown (2.5Y 4/2); 15% fine gravel; quartz, feldspar mica, and lithic fragments								
		@60': trace to 5% coarse gravel								
		@65': 5-10% fine gravel								
		@70': 40-45% fine to coarse gravel								
		@75': 35-40% fine to coarse gravel								

SL 00306

LOGGED BY Kurt Easthouse

DATE 10/25/88 CHK'D BY KE

SOIL BOREHOLE LOG

NAME AND LOCATION

DRILLING METHOD: Mud Rotary

SAMPLING METHOD: Bag (B)

BORING NO. B-2

SHEET 3 of 8

WATER LEVEL				
TIME				
DATE				
CASING DEPTH				

DRILLING: START TIME DATE; FINISH TIME DATE

ELEVATION KSL

RIG Howard Turner (D-1)

BEARING vertical

HAMMER TORQUE -- FT.-LBS

SURFACE CONDITIONS Level open area in north corner of landfill

BLOWS/6 IN OR RAMPLE (RECOVERY)	SYMBOL	SAMPLE NUMBER AND DESCRIPTION OF MATERIAL	SAMPLER AND BIT	CASING TYPE	BLOWS/FOOT ON CASING	TEST RESULTS: WATER CONTENT %	LIQUID LIMIT %	PLASTIC LIMIT %	SPECIFIC GRAVITY	OTHER TESTS
		dark grayish brown (2.5Y 4/2) SAND (SW) (continued)	B BB							
		@80': 20% fine gravel								
		@85': 45-50% fine gravel								
		@85-86.6': Boulder								
		@90': 15% fine gravel								
		@95': trace to 5% fines; 25-30% fine gravel								
		@100': dark grayish brown (2.5Y 4/2) to olive brown (2.5Y 4/4); 20% fine gravel								
		@105': 40% fine to coarse gravel								
		@110': 25% fine to coarse gravel								

DRILLING CONTR. Howard Pump, Inc.

Tony Villanueva

SL 00307

LOGGED BY Kurt Easthouse

DATE 10/25/88 CHK'D BY KE

SOIL BOREHOLE LOG

NAME AND LOCATION	
DRILLING METHOD:	Mud Rotary
SAMPLING METHOD:	Bag (B)
BORING NO.	B-2
SHEET	4 of 8
DRILLING START TIME / DATE	
DRILLING FINISH TIME / DATE	
WATER LEVEL / TIME / DATE / CASING DEPTH	
ELEVATION	MSL
DRILLING CONTR.	Howard Pump, Inc.
DRILLER	Howard Turner (D-1)
BEARING	vertical --
HAMMER TORQUE	-- FT.-LBS
SURFACE CONDITIONS	Level open area in north corner of landfill
LOGGED BY	Kurt Easthouse
CHK'D BY	KE
DATE	10/25/88
	Tony Villanueva

BLOWS/6 IN OR SAMPLE (RECOVERY)	SYMBOL	SAMPLE NUMBER AND DESCRIPTION OF MATERIAL	SAMPLER AND BIT	CASING TYPE	BLOWS/FOOT ON CASING	TEST RESULTS: WATER CONTENT %	LIQUID LIMIT %	PLASTIC LIMIT %	SPECIFIC GRAVITY	% FINES
		dark grayish brown (2.5Y 4/2) to olive brown (2.5Y 4/4) SAND (SW) (continued)	B BB							
		@115': Light yellowish brown (2.5Y 6/4); trace fines; 15% fine gravel								
		@114-120': Boulders and cobbles								
		@120': 10-15% fine gravel								
		@125': 40-45% fine gravel								
		@125-130': Boulders and cobbles								
		@130': 10% fine gravel								
		@135': trace fines; 15-20% fine gravel								
		@135-139': Boulders and cobbles								
		@140': 15% fine gravel								
		@145': trace to 5% fines; 35% fine gravel								
		@150': 15 to 20% fine gravel								

SL 00308

SOIL BORING LOG

NAME AND LOCATION	DRILLING METHOD: Mud Rotary	BORING NO. 8-2
	SAMPLING METHOD: Bag (B)	SHEET 5 of 8
		DRILLING START / FINISH
	WATER LEVEL / TIME / DATE / CASING DEPTH	TIME / TIME / DATE / DATE

MSL ELEVATION

RIG: Howard Turner (D-1)

E: vertical BEARING: --

LE HAMMER TORQUE: -- FT.-LBS

SURFACE CONDITIONS: Level open area in north corner of landfill

DRILLING CONTR. Howard Pump, Inc.

Tony Villanueva

BLOWS/6 in OR RAM/FT RECOVERY	SYMBOL	SAMPLE NUMBER AND DESCRIPTION OF MATERIAL	SAMPLER AND BIT	CASING TYPE	BLOWS/FOOT ON CASING	TEST RESULTS: WATER CONTENT %	LIQUID LIMIT %	PLASTIC LIMIT %	SPECIFIC GRAVITY	OTHER TESTS
0		Light yellowish brown (2.5Y 6/4) SAND (SW) (continued)	B BB							
5		31 @155': 5% fines: angular quartz, feldspar, and lithic fragments								
		32 @160': 45-50% fine to coarse gravel: angular to sub-angular grains								
		@160-165': Boulders								
		33 @165': trace fine gravel								
		@170': trace fines								
		34								
		35 @175': 5% fine gravel								
		36 @180': 15% fine gravel								
		37								

SL 00309

LOGGED BY Kurt Easthouse

DATE 10/25/88 CHK'D BY KE

SOIL BOREHOLE LOG

NAME AND LOCATION	
DRILLING METHOD:	Mud Rotary
BORING NO.	B-2
SHEET	6 of 8
SAMPLING METHOD:	Bag (B)
DRILLING START TIME	
DRILLING FINISH TIME	
WATER LEVEL	
TIME	
DATE	
CASING DEPTH	
DRILLING START DATE	
DRILLING FINISH DATE	
ELEVATION	MSL
DRILLING CONTR.	Howard Turner (D-1)
BEARING	vertical --
HAMMER TORQUE	-- FT.-LBS
SURFACE CONDITIONS	Level open area in north corner of landfill

BLOWS/6" OR RAMMER (RECOVERY)	SYMBOL	SAMPLE NUMBER AND DESCRIPTION OF MATERIAL	SAMPLER AND BIT	CASING TYPE	BLOWS/FOOT ON CASING	TEST RESULTS: WATER CONTENT %	LIQUID LIMIT %	PLASTIC LIMIT %	SPECIFIC GRAVITY	OTHER TESTS
0	34	Light olive brown (2.5Y 5/4) SAND fine to coarse grained; 20% fine gravel (SW)	B BB							
		@190': 20% fine gravel; angular quartz and lithic fragments								
	38	@195': 10% fine gravel								
0	44	@200': 5% fines; 5-10% fine gravel								
		@205': 15 to 20% fine gravel								
5	41	@210': 25% fine gravel								
1	42	@215': 30 to 35% fine gravel								
	43	@220': 15% fine gravel								
		@222': Boulders								
	44	@225': 15 to 20% fine gravel								
	46									

DRILLING CONTR. Howard Pump, Inc.

Tony Villanueva

SL 00310

LOGGED BY Kurt Easthouse

DATE 10/25/88 CHK'D BY KE

BORE HOLE LOG

NAME AND LOCATION

DRILLING METHOD: Mud Rotary

SAMPLING METHOD: Bag (B)

BORING NO. B-2

SHEET 7 OF 8

						DRILLING START	DRILLING FINISH
WATER LEVEL						TIME	TIME
TIME							
DATE						DATE	DATE
CASING DEPTH							

MSL - ELEVATION

Howard Turner (D-1)

vertical BEARING --

HAMMER TORQUE -- FT.-LBS

SURFACE CONDITIONS Level open area in north corner of landfill

DRILLING CONTR. Howard Pump, Inc.

Tony Villanueva

BLOWS/6" OR SAMPLE LENGTH (RECOVERY)	SYMBOL	SAMPLE NUMBER AND DESCRIPTION OF MATERIAL	SAMPLER AND BKT	CASING TYPE	BLOWS/FOOT ON CASING	TEST RESULTS: WATER CONTENT %	LIQUID LIMIT %	PLASTIC LIMIT %	SPECIFIC GRAVITY	OTHER TESTS
		Light olive brown (2.5Y 5/4) SAND (SW) (continued)	B BB							
		@230': trace to 5% fine gravel								
		Light olive brown (2.5Y 5/4) SAND, trace fines; fine to coarse grained; angular to sub-angular quartz and lithic fragments (SW-SP)								
		Light olive brown (2.5Y 5/4) SAND, trace fines; fine to coarse grained; 15% fine gravel; angular quartz and lithic fragments (SW)								
		@245': 15-20% fine gravel								
		@250': 10-15% fine gravel								
		@255': trace to 5% fine gravel								
		@260': 5% fine gravel								

SL 00311

LOGGED BY Kurt Easthouse

DATE 10/25/88 CHK'D BY KE

NAME AND LOCATION

DRILLING METHOD: Mud Rotary

BORING NO. B-2

SHEET 8 OF 8

SAMPLING METHOD: Bag (B)

DRILLING START TIME DATE / FINISH TIME DATE

WATER LEVEL				
TIME				
DATE				
CASING DEPTH				

ELEVATION MSL

RIG Howard Turner (D-1)

BEARING vertical --

HAMMER TORQUE -- FT.-LBS

SURFACE CONDITIONS Level open area in north corner of landfill

DRILLING CONTR. Howard Pump, Inc.

Tony Villanueva

BLOWS/6 in SAMPLE (RECOVERY)	SYMBOL	SAMPLE NUMBER AND DESCRIPTION OF MATERIAL	SAMPLER AND BIT	CASING TYPE	BLOWS/FOOT ON CASING	TEST RESULTS: WATER CONTENT %	LIQUID LIMIT %	PLASTIC LIMIT %	SPECIFIC GRAVITY	OTHER TESTS
		Light olive brown (2.5Y 5/4) SAND (SW) (continued)	B BB							
		@265': Light brownish gray (2.5Y 6/2); 10% fine gravel								
		@270': trace to 5% fine gravel								
		@273': Boulders and cobbles								
		@275': 25-30% fine gravel								
		@280': 5-10% fine gravel								
		@285': 10% fine gravel								
		Total depth of exploratory boring: 285'								

SL 00312

LOGGED BY Kurt Easthouse

DATE 10/25/88 CHK'D BY KE

STICKS ON PROFILE SCALE