

**Altamont Landfill**  
10840 Altamont Pass Road  
Livermore, California 94550  
510/449-6349 • FAX: 510/447-7543



A Waste Management Company

February 10, 1995

Ms. Amy Leech  
Alameda County Health Care Services  
1131 Harbor Bay Pkwy, #250  
Alameda, California 94502-6577

RE: Potential Groundwater Contamination Caused by Leaking Underground  
Storage Tanks at 10840 Altamont Pass Road, Livermore, California 94550.

Dear Ms. Leech:

Altamont Landfill and Resource Recovery Facility (ALRRF) received your letter dated January 17, 1995 on January 25, 1995. Please find the information you requested within fifteen working days of the date of your letter. The information we are able to provide to you at this time includes: 1) shipping manifests, 2) an Underground Storage Tank Unauthorized Release form, 3) the boring log and well construction log for piezometer P-1 (approximately 250 feet downgradient of the former underground storage tank (UST) locations), 4) a groundwater gradient map and geologic cross sections for the ALRRF Toe Area where the former USTs were located, and 5) construction details for the Groundwater Interception Barrier (GWIB).

ALRRF received verbal closure for the UST excavation on April 16, 1990 from Mr. Lowell Miller of Alameda County Health. Mr. Lowell promised a letter which would state "no further work is required at this time". Unfortunately no letter from Mr. Lowell was ever received. However, based on Mr. Lowell's analysis and judgement, and the analytical results of soil samples collected from the UST excavation, all of the contaminated soil was excavated. The soil was disposed at two locations; 50 yards of Class II soil was disposed at the Kettleman Hills Facility and 30 yards of Class III (<100 parts per million [ppm] total petroleum hydrocarbon [TPH]) soil was disposed at ALRRF. Please see the attached manifests for soil disposed at the Kettleman Hills Facility.

There is no information regarding the depth to groundwater in the UST file at ALRRF or in the ENSCO Environmental Services, Inc. (1990) report. However, ALRRF monitors groundwater quality in the valley that the former USTs were located in accordance with the Waste Discharge Requirements established by the Central Valley Regional Water Quality Control Board. In the 1990 1st quarter monitoring report groundwater levels were measured between 15 to 20 feet below ground surface (bgs) in the ALRRF Toe Area. The water sample was collected ~~from soil sample location #1 according to the chain-of-custody.~~ The water sampled may not have been groundwater, rather rain water that collected in the excavation while it was left open during the rainy season months (i.e. January). Despite this possibility, ALRRF understands Alameda County's position that the case will not be closed until the potential impacts to groundwater have been assessed.

Piezometer P-1 is located approximately 250 feet downgradient of the former UST excavation. Based on the groundwater velocities calculated in the ALRRF Toe Area, groundwater moves approximately 180 feet per year. It has been five years since the USTs were removed, suggesting any potential contamination from the UST excavation would have travelled approximately 900 feet. Therefore, the most appropriate location to look for potential contamination from the former UST location would be at least as far away as piezometer P-1.

ALRRF has been pumping and treating contaminated groundwater from the ALRRF Toe Area since 1988. Approximately 150 feet further downgradient from P-1 is ALRRF's GWIB. The GWIB is a 40-foot deep trench constructed to intercept groundwater migrating through the Toe Area. The trench was installed in 1988 and is still operating today. From 1988 to 1992 the groundwater was pumped to a leachate pond for treatment. From 1992 to 1994 the groundwater was treated

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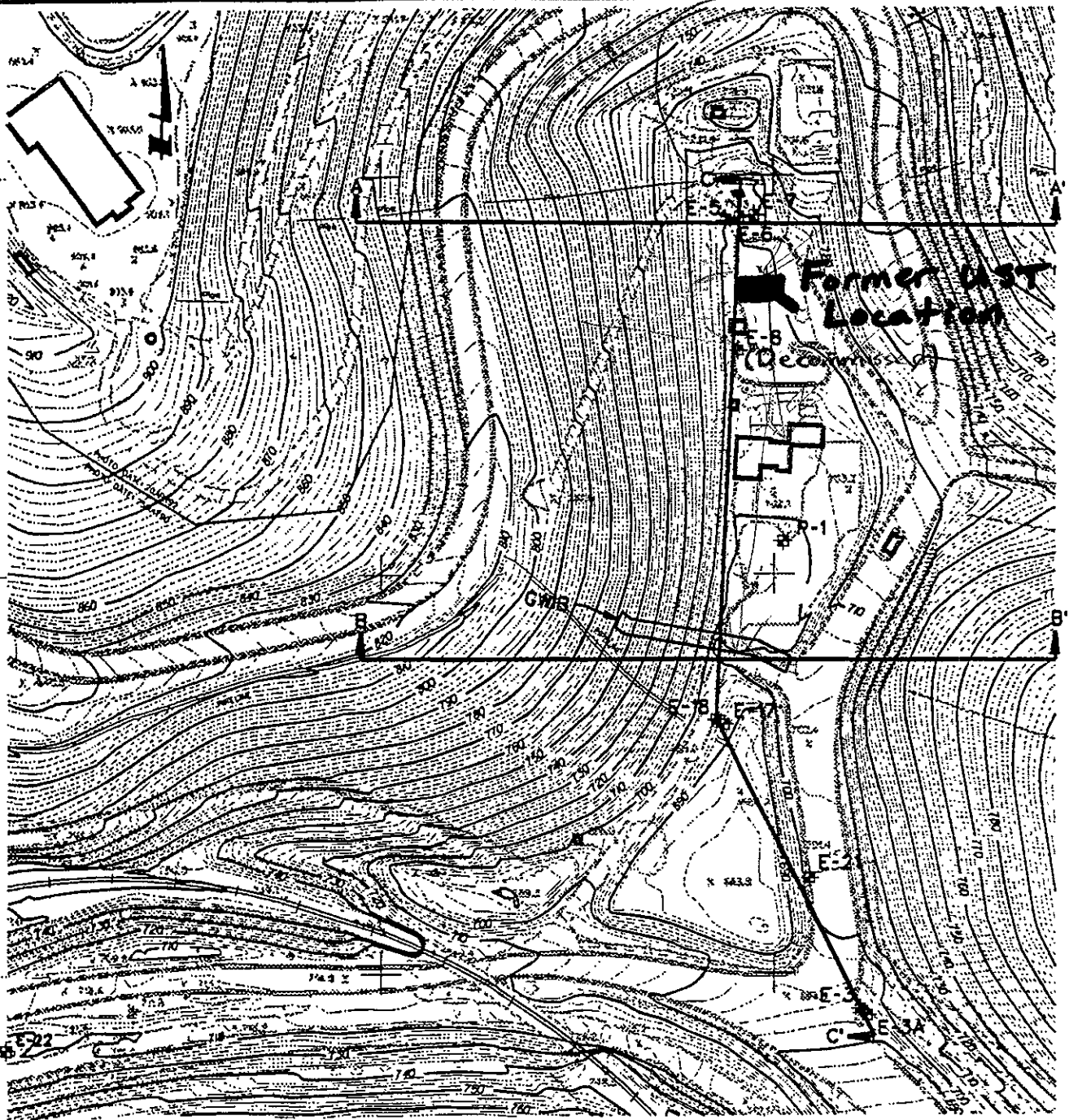
either in a fixed film bioreactor or the leachate pond. From August 1994 to date, the groundwater from the GWIB has been treated at the ALRRF Waste Water Treatment Plant (WWTP). The WWTP treats up to 140,000 gallons per day of leachate, aqueous phase condensate and groundwater.

If there was any residual groundwater contaminated with diesel, it would have been intercepted, pumped and treated. Since the source of soil contamination was removed, no diesel contamination from the former UST excavation should be present. To confirm the lack of diesel contamination from the former UST excavation, ALRRF proposes the following plan of action. ALRRF proposes sampling piezometer P-1 and the GWIB (located on the enclosed groundwater gradient map and geologic cross sections) for TPH as diesel and benzene, toluene, ethylbenzene and total xylene isomers (BTEX). ALRRF also proposes to collect one grab groundwater sample from a boring or hydropunch within 10 feet of the location of contamination in former UST excavation. The grab groundwater sample will be collected from a location in the down gradient direction from the former UST excavation. ALRRF will analyze the groundwater sample for TPH as diesel and BTEX.

Please call me at (510) 449-6349 if you have any questions regarding the information stated above.

Sincerely,

William Gilmour  
Senior Environmental Engineer



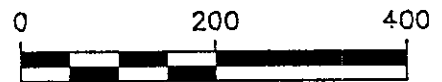
**LEGEND**

SCALE 1"=200'

 E-7 GROUNDWATER MONITORING WELL

 CROSS SECTION LINE

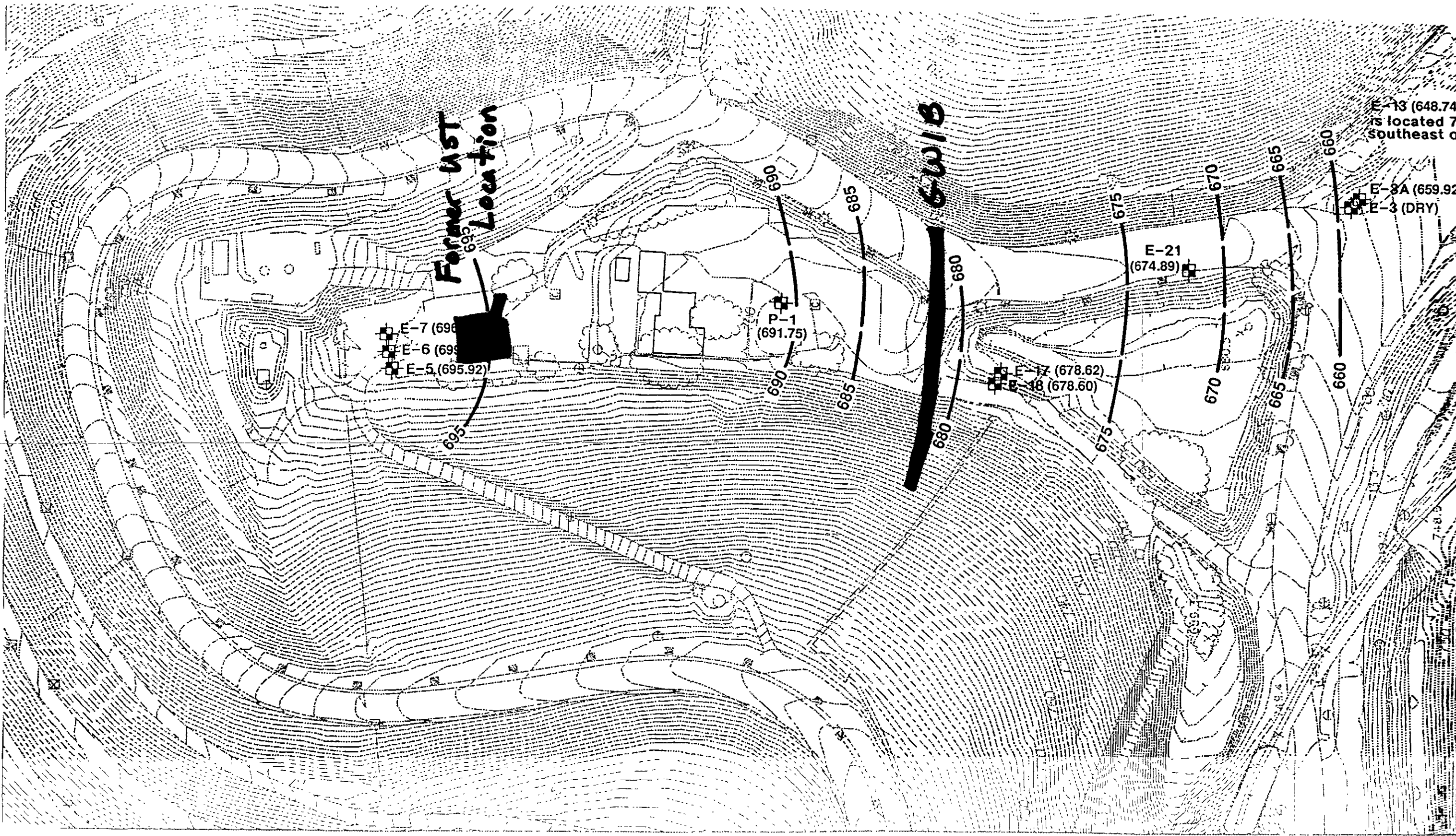
 GROUND WATER INTERCEPTION BARRIER



**RUST** ENVIRONMENT & INFRASTRUCTURE

**GEOLOGIC CROSS SECTION  
LOCATION MAP**  
ALTAMONT LANDFILL AND RECYCLING FACILITY  
LIVERMORE, CALIFORNIA

PROJECT NO.  
32156.500  
DATE  
JANUARY 1995  
FIGURE NO.  
3



E-13 (648.74)  
is located 700 feet  
southeast of E-3

E-3A (659.92)  
E-3 (DRY)

E-21  
(674.89)

P-1  
(691.75)

E-17 (678.62)  
E-18 (678.60)

E-7 (695.92)  
E-6 (695.92)  
E-5 (695.92)

Former WST  
Location

6W1B



SCALE 1"=100'



LEGEND

□ E-7

GROUND-WATER MONITORING WELL;  
WATER ELEVATION IN FEET - MSL

— 695

ALLUVIAL GROUND-WATER CONTOUR,  
SHOWING ELEVATION IN FEET - MSL

**RUST** ENVIRONMENT &  
INFRASTRUCTURE

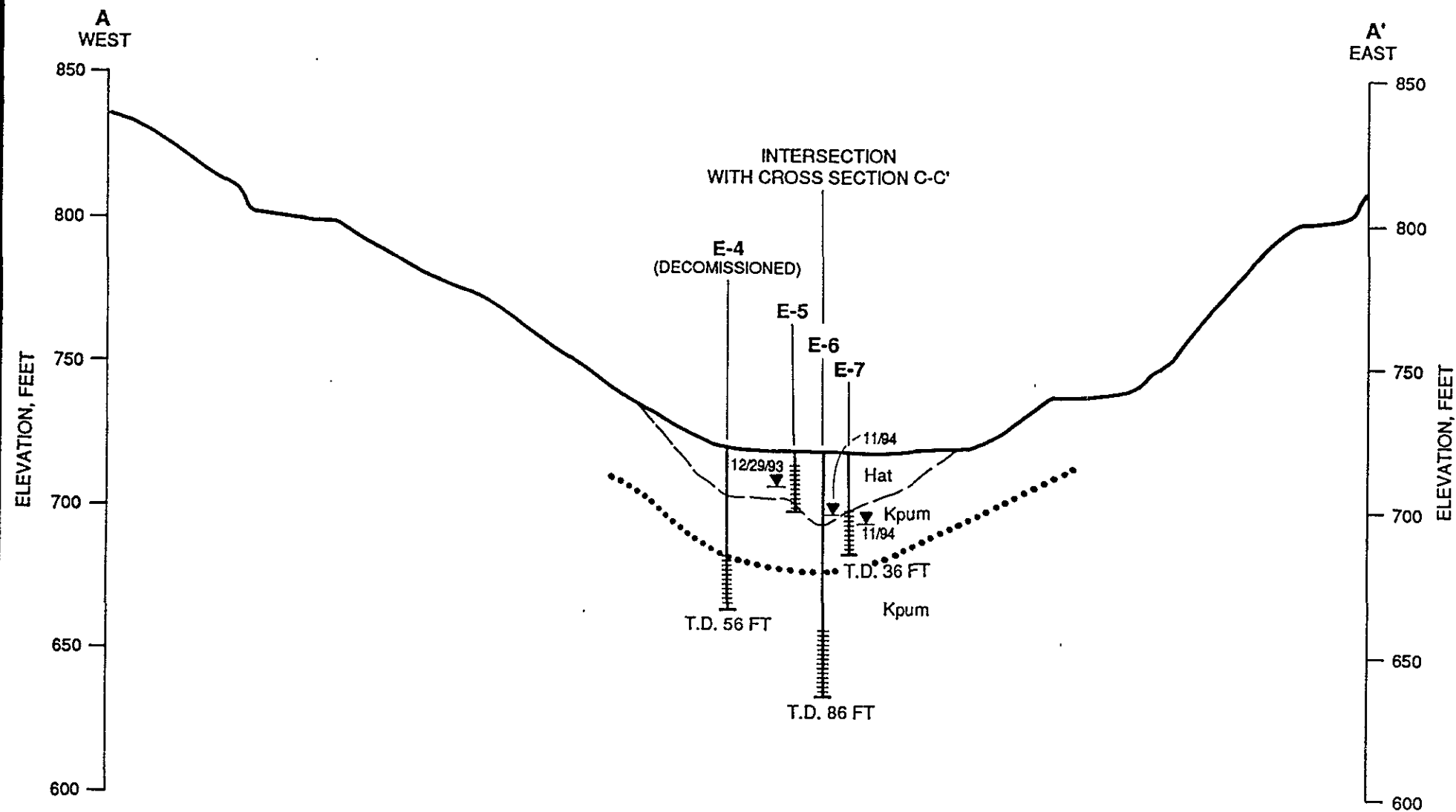
San Jose, California

ALTAMONT LANDFILL &  
RESOURCE RECOVERY FACILITY  
ALAMEDA COUNTY, CALIFORNIA

GROUND-WATER CONTOUR MAP

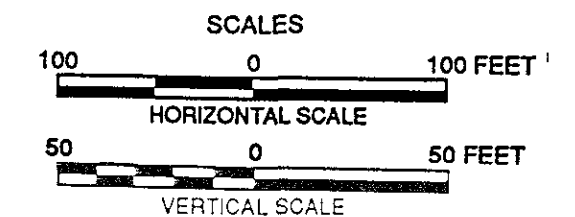
3

4th Qtr '94



**EXPLANATION**

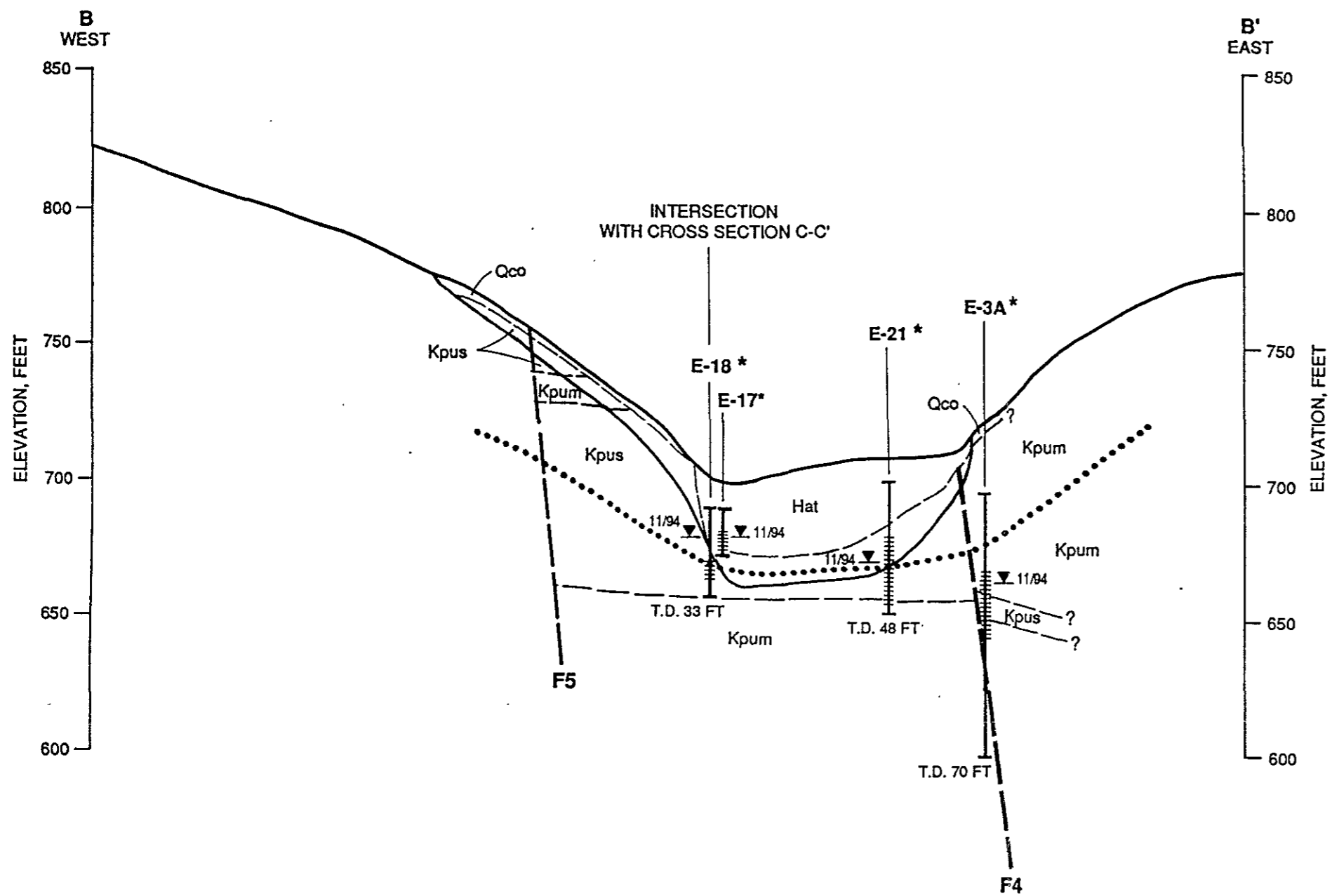
- Hat HOLOCENE ALLUVIAL CHANNEL
- Kpum CRETACEOUS PANOCHÉ GROUP, ULHADE(?) FORMATION, MUDSTONE MEMBER
- E-7 GROUNDWATER MONITORING WELL WITH SCREENED INTERVAL
- CONTACT BETWEEN WEATHERED BEDROCK AND FRESH BEDROCK
- 12/29/93 STATIC GROUNDWATER LEVEL COLLECTED AT DATE SHOWN



**RUST** ENVIRONMENT & INFRASTRUCTURE

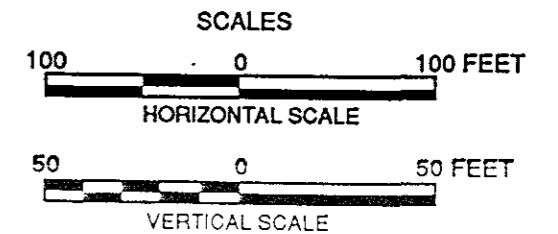
GEOLOGIC CROSS SECTION A-A'  
 ALTAMONT LANDFILL AND RECYCLING FACILITY  
 LIVERMORE, CALIFORNIA

PROJECT NO.  
 32156.500  
 DATE  
 JANUARY 1995  
 FIGURE NO.  
 4



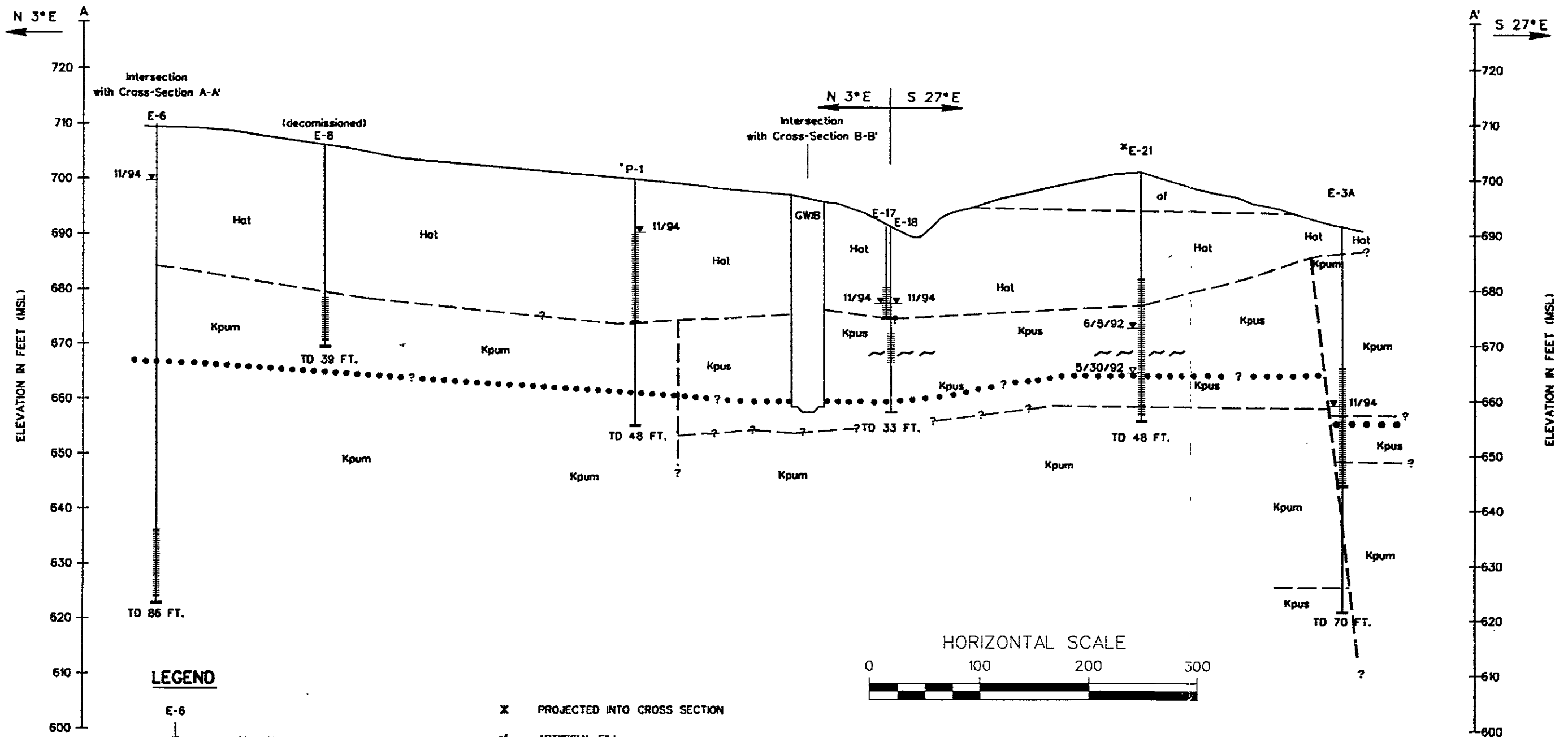
**EXPLANATION**

- Hat HOLOCENE ALLUVIAL CHANNEL
- Qco HOLOCENE AND PLEISTOCENE COLLUVIUM
- Kpus CRETACEOUS PANOCHÉ GROUP, ULHADE (?) FORMATION, SANDSTONE MEMBER
- Kpum CRETACEOUS PANOCHÉ GROUP, ULHADE (?) FORMATION, MUDSTONE MEMBER
- GROUNDWATER INTERCEPTOR BARRIER
- - - FAULT
- E-18 GROUNDWATER MONITORING WELL WITH SCREENED INTERVAL
- - - CONTACT BETWEEN GEOLOGIC UNITS
- ..... CONTACT BETWEEN WEATHERED BEDROCK AND FRESH BEDROCK
- \* GROUNDWATER WELL PROJECTED INTO CROSS SECTION
- ▼ STATIC GROUNDWATER LEVEL COLLECTED AT DATE SHOWN
- F4 FAULT WITH UNKNOWN DISPLACEMENT



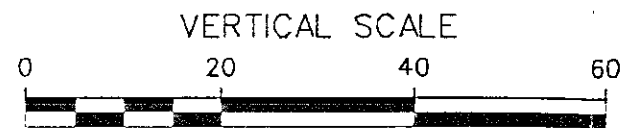
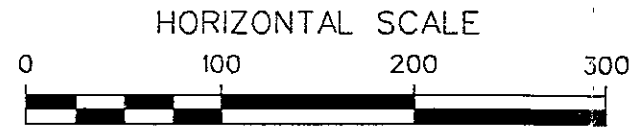
	GEOLOGIC CROSS SECTION B-B'	
	ALTAMONT LANDFILL AND RECYCLING FACILITY LIVERMORE, CALIFORNIA	
	PROJECT NO. 32156.500	DATE JANUARY 1995
	FIGURE NO. 5	

# GEOLOGIC CROSS SECTION C-C'

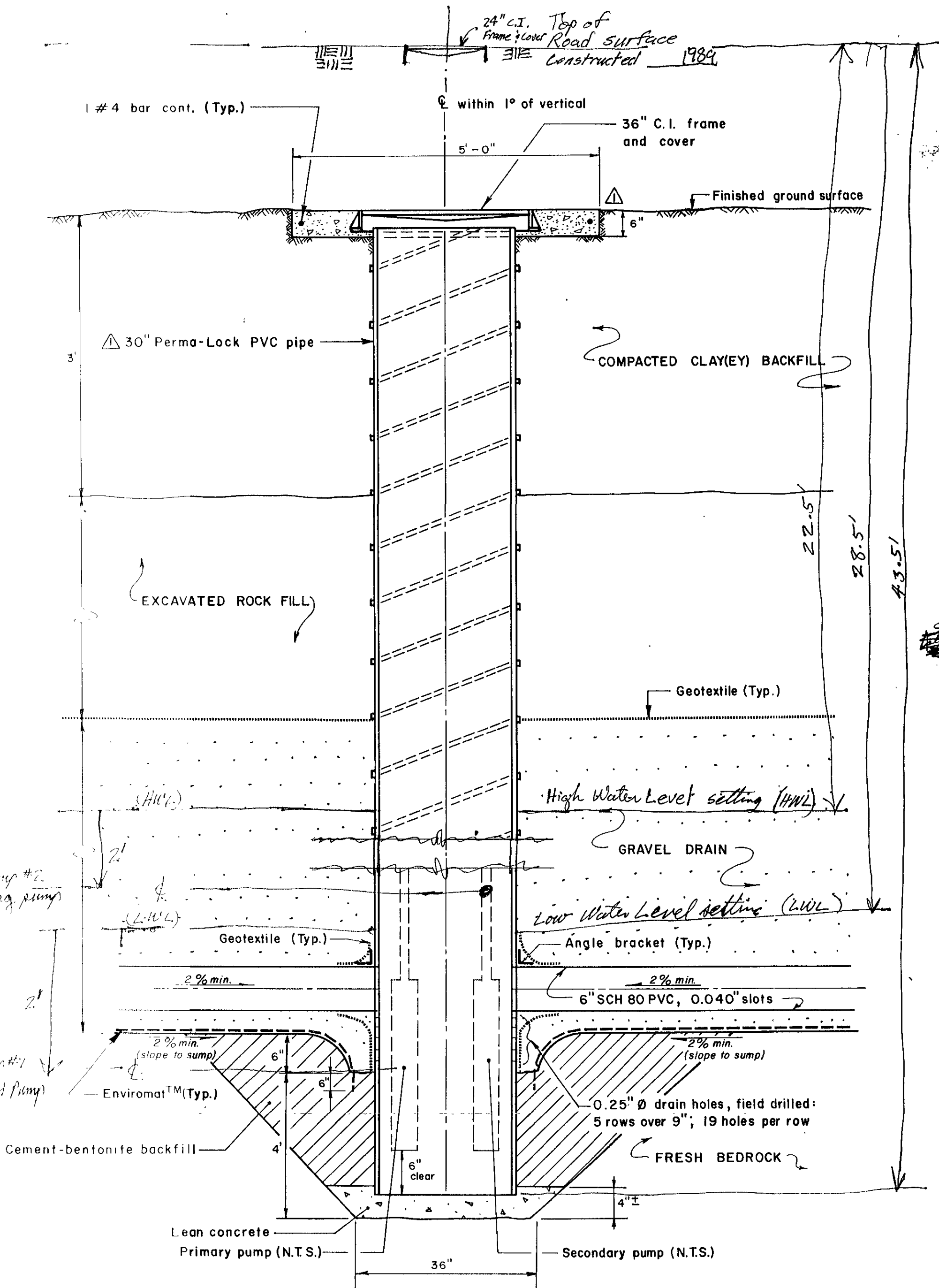


### LEGEND

- |  |  |   |
|--|--|---|
| <ul style="list-style-type: none"> <li> E-6</li> <li> 5-5-92</li> <li> 11/94</li> <li></li> <li></li> <li> GWIB</li> <li></li> </ul> | <ul style="list-style-type: none"> <li>MONITORING WELL AND SCREEN INTERVAL</li> <li>FIRST ENCOUNTERED GROUNDWATER ELEVATION</li> <li>STATIC GROUNDWATER ELEVATION AND DATE MEASURED</li> <li>INFERRED CONTACT BETWEEN GEOLOGIC UNITS</li> <li>QUESTIONABLE CONTACT</li> <li>GROUNDWATER INTERCEPTION BARRIER</li> <li>FAULT</li> </ul> | <ul style="list-style-type: none"> <li> PROJECTED INTO CROSS SECTION</li> <li> ARTIFICIAL FILL</li> <li> HOLOCENE ALLUVIAL CHANNEL</li> <li> HOLOCENE AND PLEISTOCENE COLLUVIUM</li> <li> CRETACEOUS PANOCHÉ GROUP, ULHADE(?) FORMATION, SANDSTONE MEMBER</li> <li> CRETACEOUS PANOCHÉ GROUP, ULHADE(?) FORMATION, MUDSTONE MEMBER</li> <li> WEATHERED / UNWEATHERED INTERFACE</li> <li> BRECCIATED ZONE</li> </ul> |
|--|--|---|



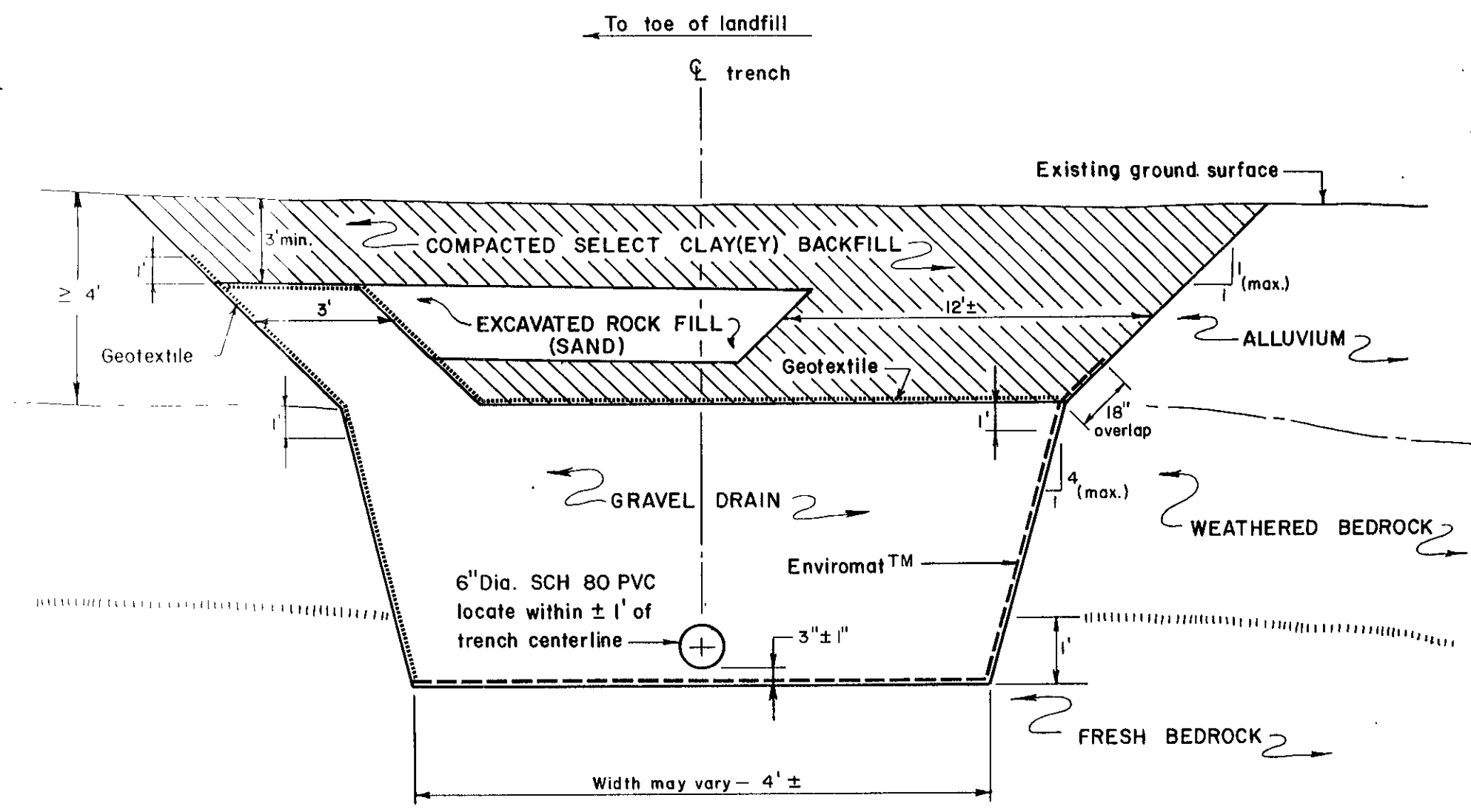
	GEOLOGIC CROSS SECTION C-C'	PROJECT NO. 32156.500
	ALTAMONT LANDFILL AND RECYCLING FACILITY LIVERMORE, CALIFORNIA	DATE JANUARY 1995
		FIGURE NO. 6



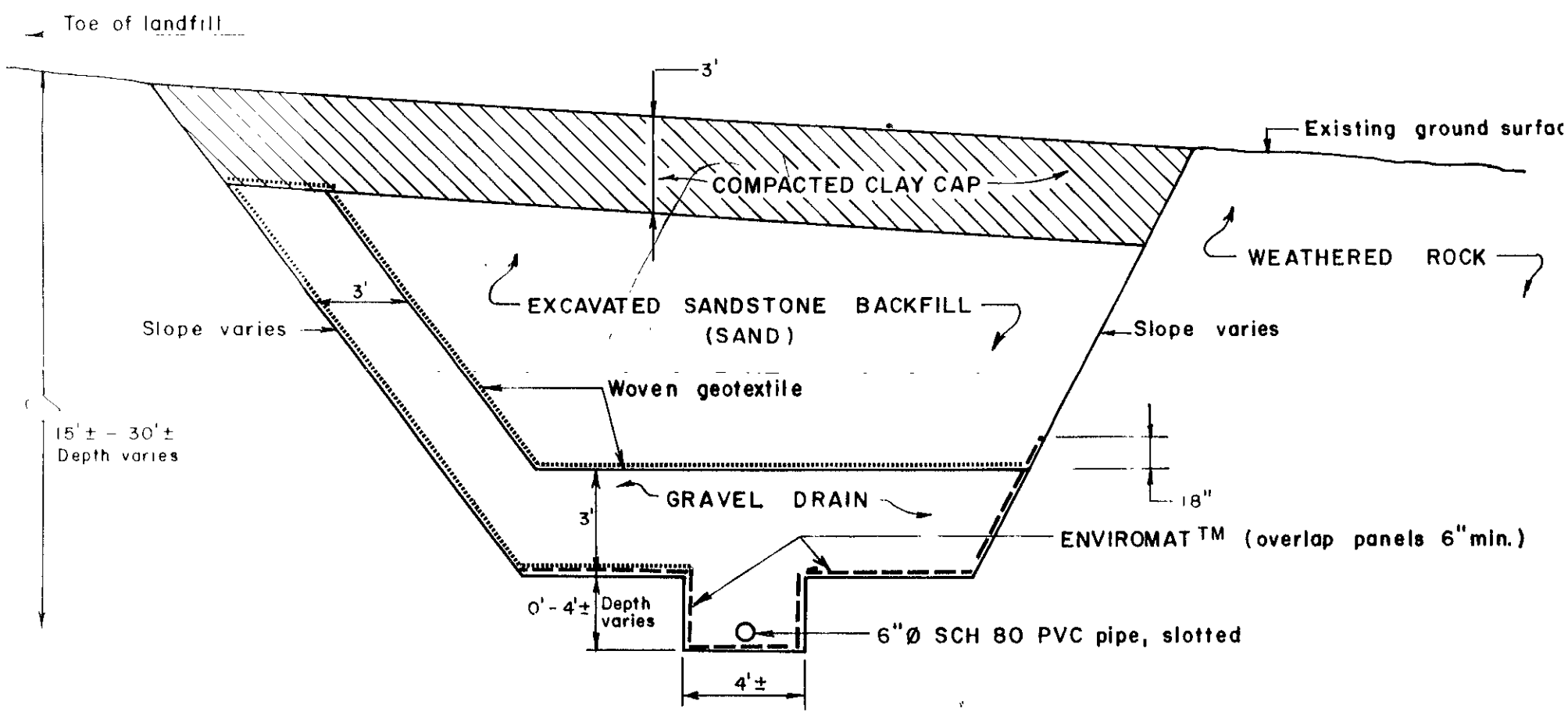
GW1B

SUMP AND RISER PIPE DETAIL





**COLLECTOR PIPE BEDDING AND BACKFILL  
ALLUVIUM AND WEATHERED BEDROCK EXCAVATION  
DETAIL 2**  
N.T.S.



GWIB

**COLLECTOR PIPE BEDDING AND BACKFILL - WEATHERED BEDROCK EXCAVATION**

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No. C A D 9 8 1 3 8 2 7 3 2		Manifest Document No. 0 0 0 0 0 0	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address Oakland Scavenger Company Altamont Landfill, 10840 Altamont Pass Road, Livermore					A. State Manifest Document Number 88584317		
4. Generator's Phone ( 415) 449-6349					B. State Generator's ID H S H Q 3 6 - 0 1 5 6 8		
5. Transporter 1 Company Name Chemical Waste Management			6. US EPA ID Number C A D 0 0 3 9 8 6 7 1 8		C. State Transporter's ID 1 1 2 - 1 0 8		
7. Transporter 2 Company Name					8. US EPA ID Number		
9. Designated Facility Name and Site Address Chemical Waste Management 35251 Old Skyline Road Kettleman City, CA 94239					10. US EPA ID Number C A T 0 0 0 6 4 6 1 1 7		G. State Facility's ID C A T 0 0 0 6 4 6 1 1 7
					H. Facility's Phone (209) 386-9711		
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)				12. Containers No.	13. Total Quantity	14. Unit Wt/Vol	L Waste No.
a. Non RCRA Hazardous Waste Solid (California Regulated Waste Only)				0 0 1	DT 0 0 0 2 0	Y	State 611 EPA/Other N/A
b.							State EPA/Other
c.							State EPA/Other
d.							State EPA/Other
J. Additional Descriptions for Materials Listed Above					K. Handling Codes for Wastes Listed Above		
					a. b. c. d.		
15. Special Handling Instructions and Additional Information SFO K0940							
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.							
Printed/Typed Name Michael Grosatti				Signature <i>Michael Grosatti</i>		Month Day Year 0 4 1 9 9 0	
17. Transporter 1 Acknowledgement of Receipt of Materials							
Printed/Typed Name SERUANDO CADENA				Signature <i>Servando Cadena</i>		Month Day Year 0 5 1 0 3 9 0	
18. Transporter 2 Acknowledgement of Receipt of Materials							
Printed/Typed Name				Signature		Month Day Year	
19. Discrepancy Indication-Space							
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.							
Printed/Typed Name				Signature		Month Day Year	

IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA CALL 1-800-862-7650

GENERATOR

TRANSPORTER

FACILITY

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No. <b>CAD9811382732</b>		Manifest Document No.		2. Page 1 of information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address <b>OAKLAND SCAVENGER CO. ALTAMONT LANDFILL 10840 ALTAMONT PASS RD. LIVERMORE CA</b>				A. State Manifest Document Number: <b>88143072</b>			
4. Generator's Phone <b>(415) 449-6349</b>				B. State Generator's ID: <b>HSHQ36-01568</b>			
5. Transporter 1 Company Name <b>CHEMICAL WASTE MANAGEMENT</b>				6. US EPA ID Number <b>CAD003986718</b>		C. State Transporter's ID:	
7. Transporter 2 Company Name				8. US EPA ID Number		D. Transporter's Phone <b>(209) 386-0752</b>	
9. Designated Facility Name and Site Address <b>CHEMICAL WASTE MANAGEMENT 35251 OLD SKYLINE RD. KETTLEMAN CITY, CA 94239</b>				10. US EPA ID Number <b>CATO00646117</b>		G. State Facility's ID: <b>CATO00646117</b>	
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) <b>NON RCRA HAZARDOUS WASTE SOLID CALIFORNIA REGULATED WASTE ONLY</b>				12. Containers No. Type <b>1 CM010020 Y</b>		13. Total Quantity	
						14. Unit Wt/Vol	
						Waste No. State <b>611</b>	
						EPA/Other <b>N/A</b>	
						State	
						EPA/Other	
						State	
						EPA/Other	
						State	
						EPA/Other	
J. Additional Descriptions for Materials Listed Above				K. Handling Codes for Wastes Listed Above			
15. Special Handling Instructions and Additional Information <b>PROF # SFO K00140</b>							
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.  If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.							
Printed/Typed Name <b>MICHAEL CROSETTI</b>				Signature <i>Henry R. Pate</i>		Month Day Year <b>05 10 39 10</b>	
17. Transporter 1 Acknowledgement of Receipt of Materials							
Printed/Typed Name				Signature		Month Day Year	
18. Transporter 2 Acknowledgement of Receipt of Materials							
Printed/Typed Name				Signature		Month Day Year	
19. Discrepancy Indication Space							
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.							
Printed/Typed Name				Signature		Month Day Year	

GENERATOR

TRANSPORTER

FACILITY

Please print or type. (Form designed for use on elite (12-) typewriter).

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. <b>CAD981382732</b>		Manifest Document No.		- Page 1 of 1		Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address <b>OAKLAND SLAVENGER COMPANY ALTAMONT LANDFILL 10840 ALTAMONT PASS RD LIVERMORE CA</b>				A. State Manifest Document Number <b>88642922</b>					
4. Generator's Phone <b>415 449-6349</b>		5. Transporter 1 Company Name <b>CHEMICAL WASTE MANAGMT CAD003986718</b>		6. US EPA ID Number <b>CAD003986718</b>		B. State Generator's ID <b>HSHQ36-01568</b>		C. State Transporter's ID <b>112109</b>	
7. Transporter 2 Company Name		8. US EPA ID Number		E. State Transporter's ID		D. Transporter's Phone <b>(209) 386-0152</b>		F. Transporter's Phone	
9. Designated Facility Name and Site Address <b>CHEMICAL WASTE MANAGEMENT 35251 OLD SKYLINE RD. KETTLEMAN CITY, CA 94239</b>				10. US EPA ID Number <b>CAT000646117</b>		G. State Facility's ID <b>CAT000646117</b>		H. Facility's Phone <b>(209) 386-9711</b>	
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) <b>a. NON RCRA HAZARDOUS WASTE SOLID (CALIFORNIA REGULATED WASTE ONLY)</b>						12. Containers No. <b>0010</b> Type <b>T</b>	13. Total Quantity <b>00010 Y</b>	14. Unit Wt/Vol	I. Waste No. State <b>611</b> EPA/Other <b>N/A</b>
b.									State EPA/Other
c.									State EPA/Other
d.									State EPA/Other
J. Additional Descriptions for Materials Listed Above						K. Handling Codes for Wastes Listed Above a. _____ b. _____ c. _____ d. _____			
15. Special Handling Instructions and Additional Information <b>PROF # SFO K00140</b>									
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.  If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.									
Printed/Typed Name <b>HENRY R. RATCLIFFE</b>				Signature <i>Henry R. Ratcliffe</i>		Month Day Year <b>050490</b>			
17. Transporter 1 Acknowledgement of Receipt of Materials									
Printed/Typed Name <b>ED WHITWORTH</b>				Signature <i>E. Whitworth</i>		Month Day Year <b>050490</b>			
18. Transporter 2 Acknowledgement of Receipt of Materials									
Printed/Typed Name				Signature		Month Day Year			
19. Discrepancy Indication Space									
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.									
Printed/Typed Name				Signature		Month Day Year			

GENERATOR

TRANSPORTER

FACILITY

Do Not Write Below This Line

Copied from QMR's on file w/Solid Waste Management

ALTAMONT LANDFILL AND RESOURCE RECOVERY FACILITY

TABLE 6


SUMMARY OF GROUNDWATER MONITORING NETWORK

MONITORING POINT	TOP OF CASING ELEVATION (feet - msl)	SCREENED INTERVAL (feet)	ZONE MONITORED
E-03	692.49	12-32	FARTHEST POINT OF REMEDIATED CONTAMINATION
E-3A	692.07	32-46.5	WEATHERED AND FRESH BEDROCK, ZONE BELOW E-3A
E-05	709.17	8-18	ALLUVIUM - LANDFILL TOE
E-06	709.09	74-84	FRESH BEDROCK - LANDFILL TOE
E-07	710.72	26-36	WEATHERED BEDROCK - LANDFILL TOE
E-13	655.94	9-16	636 ft. DOWNGRAIENT E-03, ALLUVIUM, UNCONTAMINATED
E-17	689.97	10-17.5	ALLUVIUM - DOWNGRAIENT INTERCEPTION BARRIER
E-18	690.50	19.5-22.5	WEATHERED BEDROCK - DOWNGRAIENT INTERCEPTION BARRIER
E-20	894.80	122-172	FRESH BEDROCK - EAST SIDE OF FILL AREA 1
20J1	760.00	NA	BACKGROUND, WEST OF THE LANDFILL, OFFSITE
GWIB	NA	NA	GROUNDWATER INTERCEPTION BARRIER
LS	NA	NA	LEACHATE COLLECTION SUMP
VLV DRN	NA	NA	VALLEY DENDRITIC DRAIN

NA - Not available

Well 20J1 has not been surveyed.

*This table works for Altamont*

PARAMETER	FILTRATION	METHOD	
		ENSECO-Cal	EML 
PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS	NO	EPA 624	EPA 624 (8240)
CADMIUM, TOTAL	NO	EPA 200.7	EPA 200.7
COPPER, TOTAL	NO	EPA 200.7	EPA 200.7
IRON, DISSOLVED	YES	EPA 200.7	EPA 200.7
LEAD, TOTAL	NO	EPA 200.7	EPA 239.2
ZINC, TOTAL	NO	EPA 200.7	EPA 200.7
AMMONIA	YES	EPA 350.1	EPA 350.1
CHLORIDE	YES	EPA 300.0	EPA 325.1
NITRATE - NITROGEN	YES	EPA 300.0	EPA 353.1
SULFIDES, TOTAL	NO	EPA 376.2	NA
CHEMICAL OXYGEN DEMAND	YES	EPA 410.4	EPA 410.4
TOTAL KJELDAHL NITROGEN	YES	EPA 351.3	EPA 351.1
pH	NO	EPA 150.1	EPA 150.1
ELECTRICAL CONDUCTIVITY	NO	EPA 120.1	EPA 120.1

NA = Not applicable

Method Detection Limits and Practical Quantitation Limits  
for EML 1991 Calibration Data  
Volatile Organic Data in µg/l

Constituent	MDL	PQL
ACETONE	8.819	437.792
BENZENE	.883	6.484
BROMOBENZENE	1.320	7.966
BROMOCHLOROMETHANE	.982	6.656
BROMODICHLOROMETHANE	1.059	7.500
4-BROMOFLUOROBENZENE	1.424	12.567
BROMOFORM	1.353	7.711
BROMOMETHANE	2.543	29.853
2-BUTANONE	4.972	135.426
N-BUTYL BENZENE	1.263	6.834
SEC-BUTYL BENZENE	3.072	60.628
TERT-BUTYL BENZENE	1.572	10.693
CARBON DISULFIDE	1.640	10.977
CARBON TETRACHLORIDE	1.280	6.478
CHLOROBENZENE	1.031	7.950
CHLOROETHANE	1.368	9.934
2-CHLOROETHYL VINYL ETHER	3.896	119.308
CHLOROFORM	1.267	9.718
CHLOROMETHANE	2.304	23.742
3-CHLOROPROPENE	1.566	16.063
2-CHLOROTOLUENE	1.363	8.840
4-CHLOROTOLUENE	1.285	10.435
DIBROMOCHLOROMETHANE	1.259	6.682
1,2-DIBROMO-3-CHLOROPROPANE	.850	10.762
1,2-DIBROMOETHANE	1.050	6.308
DIBROMOMETHANE	1.170	10.983
1,2-DICHLORO BENZENE	1.171	9.870
1,3-DICHLORO BENZENE	1.239	8.389
1,4-DICHLORO BENZENE	1.303	9.695
CIS-1,4-DICHLORO-2-BUTENE	1.398	10.077
TRANS-1,4-DICHLORO-2-BUTENE	1.752	12.652
DICHLORODIFLUOROMETHANE	.993	7.111
1,1-DICHLOROETHANE	1.166	7.820
1,2-DICHLOROETHANE	1.067	10.753
1,1-DICHLOROETHENE	.921	9.061
CIS-1,2-DICHLOROETHENE	.939	6.802
TRANS-1,2-DICHLOROETHENE	1.094	7.022
DICHLOROFUOROMETHANE	1.250	8.535
1,2-DICHLOROPROPANE	.975	6.839
1,3-DICHLOROPROPANE	1.020	8.644
2,2-DICHLOROPROPANE	2.162	20.488
1,1-DICHLOROPROPENE	.848	5.379
CIS-1,3-DICHLOROPROPENE	.972	6.428
TRANS-1,3-DICHLOROPROPENE	1.269	6.572
DIETHYL ETHER	3.858	58.546
ETHYL ACETATE	113.385	17764.573
ETHYL BENZENE	1.032	9.515
2-HEXANONE	11.091	555.533
IODOMETHANE	1.954	20.728
ISOPROPYL BENZENE	1.108	10.108
P-ISOPROPYLTOLUENE	1.406	9.908
METHYLENE CHLORIDE	1.037	7.998
4-METHYL-2-PENTANONE	4.699	90.953
NAPHTHALENE	1.877	11.116
N-PROPYL BENZENE	1.687	12.478
STYRENE	1.141	9.587
1,1,1,2-TETRACHLOROETHANE	1.160	10.220
1,1,2,2-TETRACHLOROETHANE	1.520	9.502
TETRACHLOROETHENE	1.811	17.604
TETRAHYDROFURAN	3.225	36.067
TOLUENE	.955	7.323
1,2,3-TRICHLORO BENZENE	2.106	19.164
1,2,4-TRICHLORO BENZENE	1.528	8.931
1,1,1-TRICHLOROETHANE	.817	5.761
1,1,2-TRICHLOROETHANE	1.065	8.162
TRICHLOROETHENE	.991	9.020
TRICHLOROFUOROMETHANE	2.456	31.487
1,2,3-TRICHLOROPROPANE	1.289	9.332
TRICHLOROTRIFLUOROETHANE	.900	7.139
1,2,4-TRIMETHYL BENZENE	1.372	8.807
1,3,5-TRIMETHYL BENZENE	1.322	9.184
VINYL ACETATE	8.219	246.470
VINYL CHLORIDE	1.396	8.838
M- & P-XYLENE	3.622	61.037
O-XYLENE	1.040	10.676