

Encinal Terminals

(510) 523-8800 FAX (510) 521-5814 1521 BUENA VISTA AVENUE P.O. BOX 2453 ALAMEDA, CA 94501-0251

January 8, 1996

Ms. Madhlla Logan Alameda County Health Care Agency Department of Environmental Health Hazardous Materials Division 1131 Harbour Bay Parkway Second Floor Alameda, CA 94502

Re. The work performed at 2020 Sherman Street, Alameda

Dear Ms. Logan:

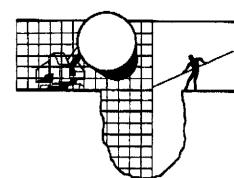
In reference to the captioned matter, please find the enclosed reports from Blaine Tech Services, Inc. for both October 1995 and January, 1996 for your information and review. We are anxious to meet you for the discussion. If there is any questions you may be concerned regarding to the captioned matter, please do let us know. Thank you very much for your assistance and cooperation.

Very truly yours,

Wang Chenkben

Encl: The above-referenced documents

Alameda.Logan/wcb



BLAINE TECH SERVICES INC.

985 TIMOTHY DRIVE SAN JOSE, CA 95133 (408) 995-5535 FAX (408) 293-8773

January 9, 1996

Encinal Terminals P.O. Box 2453 Alameda, CA 94501

ATTN: Peter Wang

Fourth Quarter 1995 Groundwater Monitoring at Encinal Terminals 2020 Sherman Avenue Alameda, California

Monitoring Performed on December 18, 1995

Groundwater Sampling Report 951218-V-3

This report covers the monitoring of groundwater wells at the Encinal Terminals. Blaine Tech Services, Inc.'s work at the site includes inspection, gauging, evacuation, purgewater containment, sample collection and sample handling in accordance with standard procedures that conform to Regional Water Quality Control Board requirements.

Routine field data collection includes depth to water, total well depth, thickness of any separate immiscible layer, water column volume, calculated volume of a three-case volume purge, elapsed evacuation time, total volume of water removed, and standard water parameter instrument readings. Sample material is collected, contained, stored in 55 gallon steel drums.

Basic field information is presented alongside analytical values excerpted from the laboratory report in the cumulative table of WELL DATA AND ANALYTICAL RESULTS. The full analytical report for the most recent samples is located in the Analytical Appendix. The table also contains a groundwater elevation contour map located in the Professional Engineering Appendix.

At a minimum, Blaine Tech Services, Inc. field personnel are certified upon completion of a forty-hour Hazardous Materials and Emergency Response training course per 29 CFR 1910.120. Field personnel are also enrolled in annual eight hour refresher courses.

Blaine Tech Services, Inc. Report No. 951218-V-3

4th Q -1995 Monitoring at Encinal Terminels

Blaine Tech Services, Inc. conducts sampling and documentation assignments of this type as an independent third party. In order to avoid compromising the objectivity necessary for the proper and disinterested performance of this work, Blaine Tech Services, Inc. concentrates on objective data collection and does not participate in the interpretation of analytical results, the definition of geological or hydrological conditions, the formulation of recommendations, or the marketing of remedial systems.

Blaine Tech Services, Inc. employs the services of outside professional firms to conduct independent reviews of our methodologies. Independent Professional Reviews by a certified engineering geologist are directed to the evaluating the efficacy of procedures and equipment employed by Blaine Tech Services, Inc. personnel in the conduct of our technical assignments. Independent Professional Reviews are intentionally limited in scope and do not extend to characterizing environmental conditions at the site or making recommendations.

Please call if you have any questions.

Yours truly,

James Keller Vice-President

Blaine Tech Services, Inc.

John K. Hofer, CEG

Engineering Geologist EG-1065

Geoconsultants, Inc.

JPK/Ip

attachments: Cumulative Table of Well Data and Analytical Results

Analytical Appendix

Professional Engineering Appendix

Table of Well Data and Analytical Results

Bialne Tech Services, Inc. Report No. 951218-V-3

4th Q -1995 Monitoring at Encine Terminals

Cumulative Table of Well Data and Analytical Results

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes		1,1-DCA			1,1,1-TCA	TCE	PCE	Vinyl-	TDS
MW-2							······································					chloride	·—·
01/20/94	9.97	8.23	1.74										
01/24/94	9.97	9.67	0.30			-		-		_	_		-
03/29/94	9.97	9.24	0.73	_	•				-			_	
04/08/94	9.97	9.08	0.89	_		_			**	••			-
04/08/94	9.97	9.17	0.80	-	_		_	-	_				_
03/20/95	9.97		~	inaccessible	-			-		_		-	_
06/29/95	9.97	••						***			_		_
09/08/95	9.97	8.26	1.73	Inaccessible	***	**		**	4=		_	_	
	5. 57	0.20	1.73	-		_	-	••		**			
MW-4													
01/20/94	14.14	9.15	4.99	-									
01/24/94	14.14	9.62	4.52	- -	***	_						••	
03/29/94	14.14	9.74	4.40		_		-		-		**		
04/08/94	14.14	9.69	4.45	-		•-			-			••	
04/08/94	14.14	9.74	4.40		-			_		-			
03/20/95	14.14	10.71	3.43						••		**		_
06/29/95	14.14	10.16	3.94	••						_	_	-	~-
09/08/95	14.14	9.31	4.83	_		**				_	_	_	
2/18/95	14.14	9.94	4.20			-			_				
.2	17,17	3.94	420	**	_	••	_	-	-			-	
MW-5													
11/20/94	13.51	9.91	3.60			_							
1/24/94	13.51	10.98	2.53		_	-		-	_	-		-	
3/29/94	13.51	10.65	2.86		_				-			-	_
14/08/94	13.51	10.35	3.16						**	_	••		
14/08/94	13.51	10.41	3.10					_	-		•-		
3/20/95	13.51	_	••	_	-			•-	**		_	_	•-
6/29/95	13.51	10.56	3.15	-	-	-	••					_	
9.08/95	13.51	9.73	3.78		-		_		-				
2/18/95	13.51	11.73	1.78	-				_		_	-		
			.,				**	-		••			_

Cumulative Table of Welf Data and Analytical Results

	Well	Ground	Depth			ical results a		Control (Photo)					-
DATE	Head Elev.	Water Elev.	To Water	Notes	1,1-DCE	1,1-DCA	1,2-DCE	1,2-DCA 1	1,1,1-TCA	TCE	PCE	Vinyl	TDS
MW-8												chloride	(ppm)
01/20/94	13.11	9.55	3.56	••									
01/24/94	13.11	12.71	0.40	_			-		_				
03/29/94	13.11	10,56	2.55	_	**	-	_	_			_	-	
04/08/94	13.11	10.18	2.93	_ ~							••		_
04/08/94	13.11	10.16	2.95	**				_	***	-		-	_
03/20/95	13.11	12.66	0.45			_	-	-	_		-		-
06/29/95	13.11	10.47	2.40			_	_	-	_		_	_	
09/08/95	13.11	9.70	3.41		-	**		**		+-			
12/18/95	13.11	11,24	1.87	_			-			-	_		
10100	10.11	11,24	1.07	6-8	••			••		-	•-	••	-
MW-10													
03/20/95	11.92	9.20	2.72										
06/29/95	11.92	6.85	4.67		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	MO	3600
09/08/95	11.92	6.64	5.28		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND	1800
12/18/95	11.92	5.29	6.63		<0.5	ح0.5	<0.5	<0.5	<0.5	<0.5	<0.5	_	
	11.52	J.ES	0.03	••	< 0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		••
EB				٠									
X9/08/95													
					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
2/18/95					⊲ 0.5	<0.5	d 0.5	€0.5	<0.5	<0.5	<0.5	€0.5	

Note: Blaine Tech Services, Inc. began routine monitoring of the groundwater wells at this site on September 8, 1995. Earlier field data and analytical results are drawn from the August 28, 1995 Geomatrix Consultants, Inc. report.

ABBREVIATIONS:

1,1-DCE = 1,1-Dichloroethene	TCE = Trichloroethene
1,1-DCA = 1,1-Dichloroethane	PCE = Tetrachlorgethene
1,2-DCE = 1,2-Dichloroethene	TDS = Total Dissolved Solids
1,2-DCA = 1,2-Dichloroethane	ppm = parts per million
1.1.1-TCA = 1.1.1-Trichlomethane	blan a beauta her committee

Analytical Appendix

Bisine Tech Services, Inc. Report No. 951218-V-3

4th Q -1995 Monitoring at Encinal Terminals



Inchcape Testing Services Anametrix Laboratories

1961 Concourse Drive San Jose, CA 95151 Tel: 408-438-8192 Fex: 408-452-8198

MR. KENT BROWN BLAINE TECH SERVICES INC.

985 TIMOTHY STREET SAN JOSE, CA 95133

Workorder # Date Received : 12/19/95

: 9512212

Project ID : 951218-V-3

Project

Purchase Order: N/A

The following samples were received at Anametrix for analysis :

ANAMETRIX ID	CLIENT SAMPLE ID
9512212- 1	MW-4
9512212- 2	MW-5
9512212- 3	MW-8
9512212- 4	MW-10
9512212- 5	EB

This report is organized in sections according to the specific Anametrix laboratory group which performed the analysis(es) and generated the data.

The results contained within this report relate to only the sample(s) tested. Additionally, these data should be considered in their entirety and Anametrix cannot be responsible for the detachment, separation, or otherwise partial use of this report.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234.

If you have any further questions or comments on this report, please call your project manager as soon as possible. Thank you for using Inchcape Testing Services.

Laboratory Director

12-29-95

Date

This report consists of _

408 293 8773



GC VOA REPORT DESCRIPTION

Organic Analysis Data Sheets (OADS)

OADS forms contain tabulated results for target compounds. The OADS are grouped by method and, within each method, organized sequentially in order of increasing Inchcape Testing Services ID number.

Surrogate Recovery Summary (SRS)

SRS forms contain quality assurance data. An SRS form will be printed for each method, if the method requires surrogate compounds. They will list surrogate percent recoveries for all samples and any method blanks. Any surrogate recovery outside the established limits will be flagged with an "*", and the total number of surrogates outside the limits will be listed in the column labeled "Total Out."

Matrix Spike Recovery Form (MSR)

MSR forms contain quality assurance data. They summarize percent recovery and relative percent difference information for matrix spikes and matrix spike duplicates. This information is a statement of both accuracy and precision. Any percent recovery or relative percent difference outside established limits will be flagged with an "*", and the total number outside the limits will be listed at the bottom of the page. Not all reports will contain an MSR form.

Oualifiers

Inchcape Testing Services uses several data qualifiers (Q) in its report forms. These qualifiers give additional information on the compounds reported. They should help a data reviewer to verify the integrity of the analytical results. The following is a list of qualifiers and their meanings:

- U Indicates that the compound was analyzed for, but was not detected at or above the specified reporting limit.
- B Indicates that the compound was detected in the associated method blank.
- J Indicates that the compound was detected at an amount below the specified reporting limit. Consequently, the amount should be considered an approximate value. Tentatively identified compounds will always have a "J" qualifier because they are not included in the instrument calibration.
- E Indicates that the reported amount exceeded the linear range of the instrument calibration.
- D Indicates that the compound was detected in an analysis performed at a secondary dilution.

Absence of a qualifier indicates that the compound was detected at a concentration at or above the specified reporting limit.

REPORTING CONVENTIONS

- Due to a size limitation in our data processing step, only the first eight (8) characters of your project ID and sample ID will be printed on the report forms. However, the report cover letter and report summary pages display up to twenty (20) characters of your project and sample IDs.
- Amounts reported are gross values, i.e., not corrected for method blank contamination.

CVR-04/10/95

REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MR. KENT BROWN BLAINE TECH SERVICES INC. 985 TIMOTHY STREET SAN JOSE, CA 95133

Workorder # : 9512212
Date Received : 12/19/95
Project ID : 951218-V-3
Purchase Order: N/A
Department : GC
Sub-Department: VOA

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9512212- 4	MW-10	WATER	12/18/95	8010
9512212- 5	EB	WATER	12/18/95	8010

REPORT SUMMARY ANAMETRIX, INC. (408)432-8192

MR. KENT BROWN

BLAINE TECH SERVICES INC. 985 TIMOTHY STREET SAN JOSE, CA 95133

Workorder # : 9512212 Date Received: 12/19/95
Project ID: 951218-V-3
Purchase Order: N/A

Department : GC Sub-Department: VOA

QA/QC SUMMARY :

- All holding times have been met for the analyses reported in this section.

Kamel G. Kamel 12/27/195

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8010 ANAMETRIX, INC. (408) 432-8192

Project ID Sample ID Matrix : 951218-V Anametrix ID : 9512212-04 : MW-10

Analyst Supervisor : KK : WATER

Date Sampled Date Analyzed Instrument ID : 12/18/95 : 12/27/95 : AD15 Dilution Factor : Conc. Units : 1.0 : ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
75-71-8 74-87-3 75-01-4 74-83-9 75-00-3 75-69-4 76-13-1 75-35-4 75-09-2 156-60-5 75-34-3 156-59-2 67-66-3 71-55-6 56-23-5	Dichlorodifluoromethane Chloromethane Vinyl chloride Bromomethane Chloroethane Trichlorofluoromethane Trichlorotrifluoroethane 1,1-Dichloroethene Methylene chloride trans-1,2-Dichloroethene 1,1-Dichloroethane cis-1,2-Dichloroethene Chloroform 1,1,1-Trichloroethane Carbon tetrachloride 1,2-Dichloroethane	1.0 1.50 .50 .50 .50 .50 .50 .50 .50		ממממממממממם מממממממם
79-01-6 78-87-5 75-27-4 110-75-8 10061-01-5 10061-02-6 79-00-5 127-18-4 124-48-1 108-90-7 75-25-2 79-34-5 541-73-1 106-46-7 95-50-1	Trichloroethene 1,2-Dichloropropane Bromodichloromethane 2-Chloroethylvinylether cis-1,3-Dichloropropene trans-1,3-Dichloropropene 1,1,2-Trichloroethane Tetrachloroethene Dibromochloromethane Chlorobenzene Bromoform 1,1,2,2-Tetrachloroethane 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene	.50 .50 .50 .50 .50 .50 .50 .50 .50 .50	86868888888888888888888888888888888888	ממממממממממממ

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8010 ANAMETRIX, INC. (408)432-8192

Project ID Sample ID Matrix : 951218-V Anametrix ID : 9512212-05 : EB

Analyst Date Sampled :12/18/95
Date Analyzed :12/27/95
Instrument ID : AD15 : KK Supervisor ٠ کھ

Dilution Factor : Conc. Units : 1.0 : ug/L

CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
75-71-8	Dichlorodifluoromethane	1.0	ND	U
74-87-3	Chloromethane	1.0	ND	Ū
75-01-4	Vinyl chloride	.50	ND	Ŭ
74-83-9	Bromomethane	.50	ND	Ü
75-00-3	Chloroethane	.50	ND	ΙŬ
75-69-4	Trichlorofluoromethane	.50	ND	Ū
76-13-1	Trichlorotrifluoroethane	.50	ND	Ū
75-35-4	1,1-Dichloroethene	.50	ND	Ü
75-09-2	Methylene chloride	1.0	ND	Ü
156-60-5	trans-1,2-Dichloroethene_	.50	ND	ľŬ
75-34-3	1,1-Dichloroethane	.50	ND	Ū
156-59-2	cis-1,2-Dichloroethene	.50	ND	Ŭ
67-66-3	Chloroform	.50	ND	Ŭ
71-55-6	1,1,1-Trichloroethane	.50	ND	Ŭ
56-23-5	Carbon tetrachloride	.50	ND	Ü
107-06-2	1,2-Dichloroethane	.50	ND	Ŭ
79-01-6	Trichloroethene	.50	ND	Ū
78-87-5	1,2-Dichloropropane	.50	ND	۱ŭ
75-27-4	Bromodichloromethane	50	ND	Ιŭ
110-75-8	2-Chloroethylvinylether	1.0	ND	Ü
L0061-01-5	! cis-1,3-Dichloropropene	.50	ND	บั
10061-02-6	trans-1,3-Dichloropropena	.50	ND	ប័
79-00-5	1,1,2-Trichloroethane	.50	ND	บั
127-18-4	Tetrachloroethene	.50	ND	Ŭ
124-48-1	Dibromochloromethane	.50	ND	Ŭ
108-90-7	Chlorobenzene	.50	ND	ប៊
75-25-2	Bromoform	.50	ХD	Ŭ
79-34-5	1,1,2,2-Tetrachloroethane	.50	ND	ŭ
541-73-1	1,3-Dichlorobenzene	.50	ND	ជ
106-46-7	1,4-Dichlorobenzene	.50	ND	บั
95-50-1	1,2-Dichlorobenzene	.50	ND	ប័

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 8010 ANAMETRIX, INC. (408)432-8192

Project ID : 951218
Sample ID : VBLKA1
Matrix : WATER
Date Sampled : 0/0/0
Date Analyzed :12/26/95
Instrument ID : AD15

Anametrix ID : BD2602I1
Analyst : Kk
Supervisor : kk

Dilution Factor : 1.0 Conc. Units : ug/L

10061 On C ND	CAS No.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	٥
1,1,2-Trichloroethane .50 ND	74-87-3 75-01-4 74-83-9 75-00-3 75-69-4 76-13-1 75-35-4 75-35-4 75-34-3 156-59-2 67-66-3 71-55-6 56-23-5 107-06-2 79-01-6 78-87-5 75-27-4 110-75-8 10061-01-5 10061-02-6 79-00-5 124-48-1 108-90-7 75-25-2 79-34-5 541-73-1	Dichlorodifluoromethane Chloromethane Vinyl chloride Bromomethane Chloroethane Trichlorofluoromethane Trichlorotrifluoroethane 1,1-Dichloroethene Methylene chloride trans-1,2-Dichloroethene 1,1-Dichloroethane cis-1,2-Dichloroethene Chloroform 1,1,1-Trichloroethane Carbon tetrachloride 1,2-Dichloroethane Trichloroethene 1,2-Dichloropropane Bromodichloromethane 2-Chloroethylvinylether cis-1,3-Dichloropropene trans-1,3-Dichloropropene 1,1,2-Trichloroethane Tetrachloroethene Dibromochloromethane Chlorobenzene Bromoform 1,1,2,2-Tetrachloroethane 1,3-Dichlorobenzene	1.0 1.50 1.50 1.50 1.50 1.50 1.50 1.50 1	88888888888888888888888888888888888888	ממממממממממממממממממממממממממ במממממ ב

SURROGATE RECOVERY SUMMARY -- EPA METHOD 8010 ANAMETRIX, INC. (408)432-8192

Project ID : 951218-V Matrix : LIQUID

Anametrix ID : 9512212 Analyst : KA Supervisor : X

	1			
	SAMPLE ID	SU1	SU2	SU3
1	VBLKA1 MW-10	78	85	79
3	EB EB	78 79 79	85 83 82	79 78
4 5		·	·	.
6				
é				
10				
11 12				
13				
15				
17				
18 19				
20				
123456789012345678				
24			<u> </u>	
25 26				
27 28				
29 30				
30				-

QC LIMITS

SU1 = Bromochloromethane (33-141) SU2 = 1-Chloro-2-fluorobenze (53-125) SU3 = 2-Bromochlorobenzene (60-118)

* Values outside of Anametrix QC limits

EPA METHOD 8010 INCHCAPE TESTING SERVICES - ANAMETRIX (408) 432-8192

LABORATORY CONTROL SAMPLE

Sample ID:

LAB CONTROL SAMPLE

Laboratory ID:

MD2601I1

Batch:

12212

Instrument ID:

AD15

Matrix:

WATER

Concentration Units:

ug/L

Date Analyzed: 12/26/95

Analyst: KK

Supervisor:

		Jup	ervisor. 18	
COMPOUND NAME	SPIKE	LCS	%REC	%RECOVERY
	AMOUNT	REC	LCS	LIMITS
Trichlorotrifluoroethane	10	10.3	103%	65-116
1,1-Dichloroethene	10	9.7	97%	64-125
trans-1,2-Dichloroethene	10	10.1	101%	77-113
1,1-Dichloroethane	10	10.4	104%	85-129
cis-1,2-Dichloroethene	10	10.4	104%	78-130
1,1,1-Trichloroethane	10	9,5	95%	83-125
Trichloroethene	10	10.4	104%	76-124
Tetrachloroethene	10	10.0	100%	80-118
Chlorobenzene	10	9.9	99%	81-130
1,3-Dichlorobenzene	10	9.8	98%	82-115
1,4-Dichlorobenzene	10	9.8	98%	85-122
1,2-Dichlorobenzene	10	10.4	104%	86-122

SURROGATE NAME	SPIKE AMT	SURR. REC	% REC	% REC LIMITS
Bromochloromethane	22,4	18.8	84%	33-141
l-Chloro-2-fluorobenzene	22.4	19.4	87%	53-125
2-Bromochlorobenzene	22,4	19.0	85%	60-118

GC/VOA - Page 7



SAMPLE RECEIVING CHECKLIST

WORKORDER NUMBER: 75722/2 CLIENT PROJECT ID:	751218-4-3		
COOLER			
Shipping slip (airbill, etc.) present?	YES	NO	NA
If YES, enter carrier name and airbill #:			<u> </u>
Custody Seal on the outside of cooler?	YES	NO	(N/A)
Condition: INTACT BROKEN			<u> </u>
Temperature of sample (s) within range?	YED	NO	N/A
List temperature of cooler (s): 2'C			
SAMPLES			
Chain of sustody seal present for each container?	YES	NO	N
Condition: INTACT BROKEN			
Samples arrived within holding time?	1	NO	N/A
Samples in proper containers for methods requested?	(EEV)	NO	
Condition of containers: INTACT BROKEN	•		
If NO, were samples transferred to proper container?			
Were VOA containers received with zero headspace?	YES	@	N/A
If NO, was it noted on the chain of custody?			
Were container labels complete? (ID, date, time preservative, etc.)	@	МФ	
Were samples preserved with the proper preservative?	YES	NO	
If NO, was the proper preservative added at time of receipt?			
pH check of samples required at time of receipt?	YES	6	
If YES, pH checked and recorded by:			
Sufficient amount of sample received for methods requested?	(13)	NO	
If NO, has the client or lab project manager been notified?			
Field blacks received with sample batch? # of Sets:	YES	NO	NA
Trip blanks received with sample batch? # of Sets:	YES	NO	(N/A)
CHAIN OF CUSTODY			
Chain of custody received with samples?	3	NO	
Has it been filled out completely and in ink?	(Y2)	NO	
Sample ID's on chain of custody agree with container labels?	(YES)	NO	
Number of containers indicated on chain of custody agree with number received?	(YES)	NO	
Analysis methods clearly specified?		NO	
Sampling date and time indicated?	YE	NO	
Proper signatures of sampler, courier, sample custodian in appropriate place? with time and d	ato?	NO	
Turnaround time? REGULAR RUSH			
Any NO response and/or any "BROKEN" that was checked must be detailed in	the Corrective Action Form	1.	
Sample Custodian: TP Date: 12/19/25 Project Manager:	W Date: 12/21	35	

Professional Engineering Appendix

Blaine Tech Services, Inc. Report No. 951218-V-3

4th Q -1995 Monitoring at Enginel Terminals

