HYDRO ENVIRONMENTAL TECHNOLOGIES, INC.

Reviewed on 5/10/95 by A Beech - See notes to file

ENVIRONMENTAL PROTECTION

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QUARTERLY MONITORING REPORT

Tharco Corporation
2222 Grant Avenue
San Lorenzo, California

Sampling Date: December 29, 1994

Prepared for:

THARCO CORPORATION
2222 Grant Avenue
San Lorenzo, California 94850-8600

Prepared by:

HYDRO-ENVIRONMENTAL TECHNOLOGIES, INC.
2363 Mariner Square Drive, Suite 243
Alameda, California 94501
HETI Job No. 7-282

March 7, 1995

THARCO®

DEPENDABILITY • QUALITY • SERVICE

April 21, 1995

Ms. Juliet Shin
Alameda County Department of
Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502

Dear Ms. Shin:

Enclosed is the fourth monitoring report by Hydro Environmental Technologies, Inc. on our site.

Sincerely,

Jim Burress
Project Manager

JB:py

Enc.

cc: Jim A. Steve N.
Tom A. Jim R.

2222 GRANT AVENUE • SAN LORENZO, CA 94580-1892 • (510) 276-8600 • FAX (510) 276-4862

HYDRO ENVIRONMENTAL TECHNOLOGIES, INC.

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1.0 INTRODUCTION

This report presents the results of fourth quarter ground water sampling conducted by Hydro-Environmental Technologies, Inc. (HETI) at the Tharco facility in San Lorenzo (Figure 1). Sampling was performed on December 29, 1994.

2.0 BACKGROUND

An underground diesel fuel storage tank was excavated and removed from the site in July, 1993. Ground water in the tank excavation was observed to stabilize at approximately seven to eight feet below ground surface. Laboratory analysis was performed on soil and ground water samples collected from the excavation during tank removal activities. Low to medium boiling point hydrocarbons, and benzene, toluene, ethylbenzene and total xylenes (BTEX) were detected in these samples.

HETI was retained by Tharco in early 1994 to conduct a preliminary subsurface investigation. HETI installed three ground water monitoring wells at the site in March, 1994. Petroleum hydrocarbons were detected in soil samples collected during the drilling of two of the three wells. Petroleum hydrocarbons were detected in water samples collected from all three wells. The depth to ground water was measured to be five feet below grade. The ground water flow direction was estimated to be to the south. Results of the investigation were presented in HETI's *Subsurface Investigation Report* dated July 7, 1994.

3.0 FIELD ACTIVITIES

On December 29, 1994, the depth to first encountered ground water in each of the wells was gauged to the nearest hundredth of a foot using an electronic depth sounder. Gauging data is included in Table 1. Following gauging, the wells were purged of three well casing volumes, while recording field readings of temperature and electrical conductivity. Purging and sampling data is included in Appendix A.

After purging and recovery of the water level in the wells, ground water samples were collected with dedicated polyethylene bailers. The samples were transferred to appropriate sample containers provided by the laboratory. Sample containers were documented, labeled and placed in a cooler. A chain of custody was prepared and accompanied the samples to the laboratory; a copy is included in Appendix B.

All sampling was performed according to HETI standard protocol, using methods which are consistent with guidelines established by the lead regulatory agencies. A copy of HETI's Drilling, Well Construction and Sampling Protocols was previously included in HETI's *Subsurface Investigation Report* dated July 7, 1994. Ground water sample analysis was performed by PACE Incorporated, a state DHS-certified

laboratory located in Novato, California. The samples were analyzed for total petroleum hydrocarbons as diesel (TPHd) by EPA Method 8015 (modified) and total petroleum hydrocarbons as gasoline (TPHg) and BTEX using the California Leaking Underground Fuel Tank (LUFT) Manual protocols.

4.0 RESULTS

4.1 Ground Water Data

The depth to ground water in the wells was measured to be from 4.97 to 5.13 feet below grade. No separate-phase petroleum was observed on the purge water from any of the wells. The depth to water measurements were combined with wellhead elevation data previously collected by HETI to calculate ground water elevations. The ground water elevations are shown on Figure 3, the Ground Water Contour Map.

The ground water flow direction is calculated to be towards the northwest at a gradient of 0.7%. The ground water flow directon at this site has previously ranged from southeast to southwest. The change in flow direction is not unusual as the ground water gradient is quite flat and may be tidally influenced or affected by variations in recharge. As shown on Table 1, ground water elevations have increased by more than one foot since the last sampling event in September, 1994.

4.2 Laboratory Analytical Results

Petroleum hydrocarbons were detected in ground water samples collected from monitoring well MW-1 at concentrations of 1,100 micrograms per liter (µg/L) TPHd and 71 µg/L TPHg. Neither TPHd nor TPHg was detected in concentrations exceeding the indicated laboratory method detection limits in ground water samples collected from wells MW-2 and MW-3.

Benzene was detected in ground water samples collected from monitoring wells MW-1 and MW-2 at concentrations of 9.3 µg/L and 1.2 µg/L, respectively. Benzene was not detected in a concentration exceeding the indicated laboratory method detection limit in the ground water sample collected from well MW-3

Cumulative analytical results are presented in Table 1, and are graphically illustrated on Figure 4, the Hydrocarbon Concentration Map. A copy of the laboratory report is attached as Appendix B.

5.0 CERTIFICATION

This report was prepared under the supervision of a professional engineer. All statements, conclusions and recommendations are based solely upon field observations and analytical analyses performed by a state-certified laboratory related to the work performed by Hydro-Environmental Technologies, Inc.

It is possible that variations in the soil or groundwater conditions exist beyond the points explored in this investigation. Also, site conditions are subject to change at some time in the future due to variations in rainfall, temperature, regional water usage, or other factors.

The service performed by Hydro-Environmental Technologies, Inc. has been conducted in a manner consistent with the level of care and skill ordinarily exercised by members of our profession currently practicing under similar conditions in the area of the site. No other warranty, expressed or implied, is made.

Hydro-Environmental Technologies, Inc. includes in this report chemical analytical data from a state-certified laboratory. These analyses are performed according to procedures suggested by the U.S. EPA and the State of California. Hydro-Environmental Technologies, Inc. is not responsible for laboratory errors in procedure or result reporting.

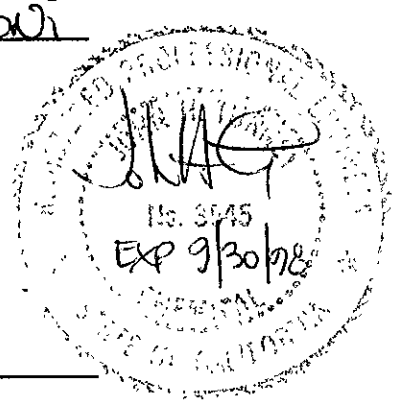
HYDRO-ENVIRONMENTAL TECHNOLOGIES, INC.

Prepared by:

FRANCES MARONI

Frances Maroni
Staff Engineer

Reviewed by:



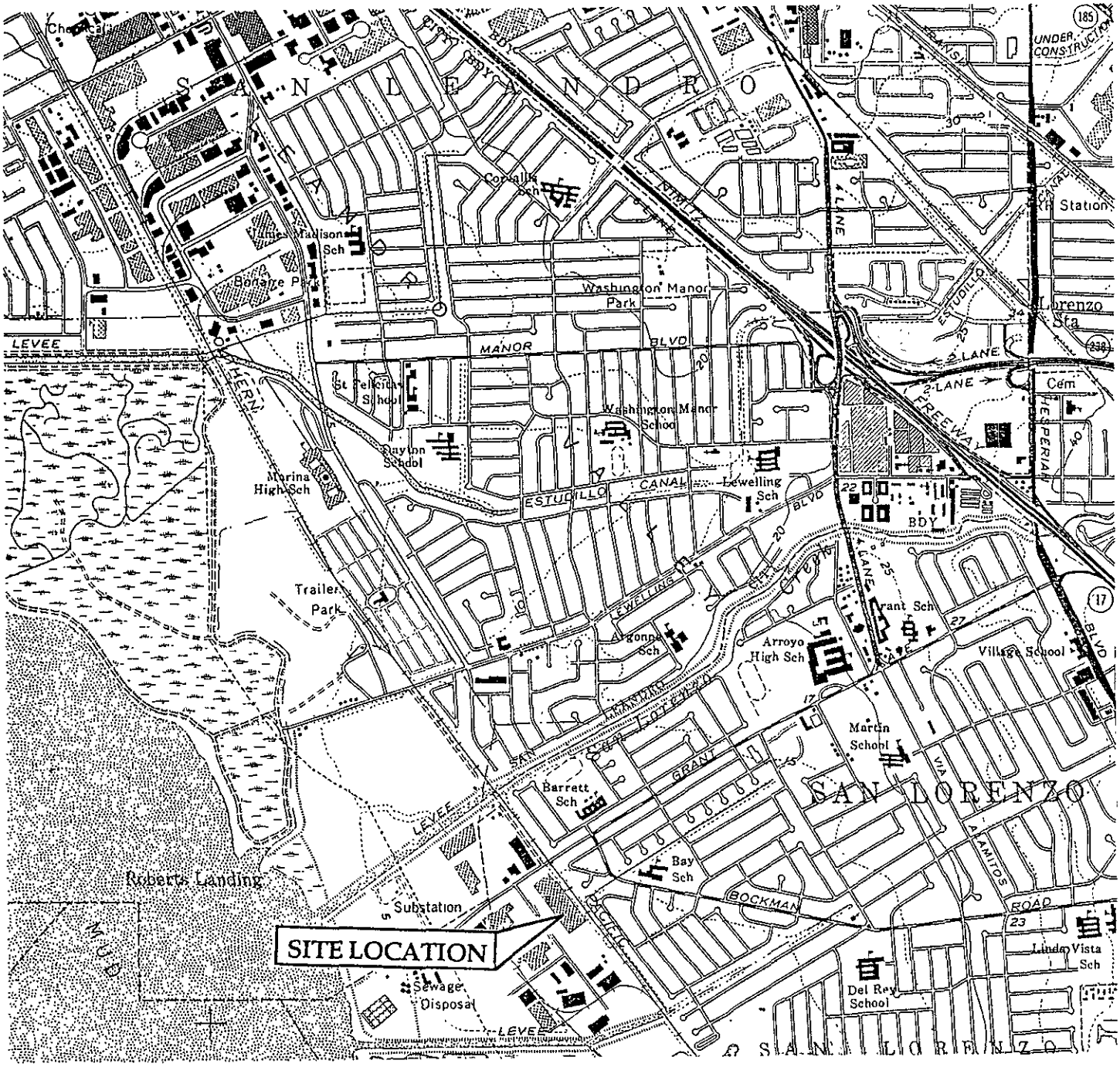
John H. Turney, P. E.
Senior Engineer

Table 1
GROUND WATER ELEVATIONS AND SAMPLE ANALYTICAL RESULTS
Tharco
2222 Grant Avenue
San Lorenzo, CA

Sample I.D. #	Sampling Date	TOC (feet)	DTW (feet)	GWE (feet)	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW-1	3/29/94	109.93	5.41	104.52	50	ND<50	2.4	ND<0.5	ND<0.5	0.6
	7/8/94	109.93	5.93	104.00	100	120	37	ND<0.5	ND<0.5	0.6
	9/29/94	109.93	6.46	103.47	100	180	1.2	0.7	1.4	0.5
	12/29/94	109.93	5.02	104.91	1,100	71	9.3	ND<0.5	ND<0.5	ND<1.0
MW-2	3/29/94 (1)	109.68	4.81	104.87	1,000 (2)	460	8.4	0.6	3.4	1.6
	7/8/94	109.68	5.28	104.40	670	110	1.1	ND<0.5	ND<0.5	ND<0.5
	9/29/94	109.68	6.06	103.62	950	ND<50	1.2	ND<0.5	ND<0.5	2.3
	12/29/94	109.68	4.97	104.71	ND<50	ND<50	1.2	ND<0.5	ND<0.5	ND<1.0
MW-3	3/29/94	109.88	5.34	104.54	80	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	7/8/94	109.88	5.74	104.14	270 (3)	ND<50	0.8	ND<0.5	ND<0.5	ND<0.5
	9/29/94	109.88	6.24	103.64	420	ND<50	0.6	0.5	ND<0.5	3.6
	12/29/94	109.88	5.13	104.75	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0

Notes:

TOC: Top of casing elevation.
DTW: Depth to water.
GWE: Ground water elevation.
TPHd: Total petroleum hydrocarbons as diesel by EPA Method 3510/8015 (DHS-modified).
TPHg: Total petroleum hydrocarbons as gasoline by EPA Method 8015 (DHS-modified) or by CA LUFT Manual protocol.
BTEX: Benzene, toluene, ethylbenzene and total xylenes by EPA Method 8020 (DHS-modified) or by CA LUFT Manual protocol.
µg/L: Micrograms per liter.
(1) MW-2 resampled for TPHd on 4/12/94: original 3/29/94 sample lost by laboratory.
(2) High boiling point hydrocarbons beyond range of diesel standard were present in sample.
(3) Hydrocarbons present do not match the standard diesel pattern.



SCALE 1:24000

1 0 1/2 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 5 0 1 KILOMETER

CONTOUR INTERVAL 20 FEET

CALIF

QUADRANGLE LOCATION

SOURCE: USGS 7.5 MINUTE SERIES TOPOGRAPHIC MAP
ENTITLED: SAN LEANDRO, CALIF. QUADRANGLE
PHOTOREVISED: 1979

NORTH

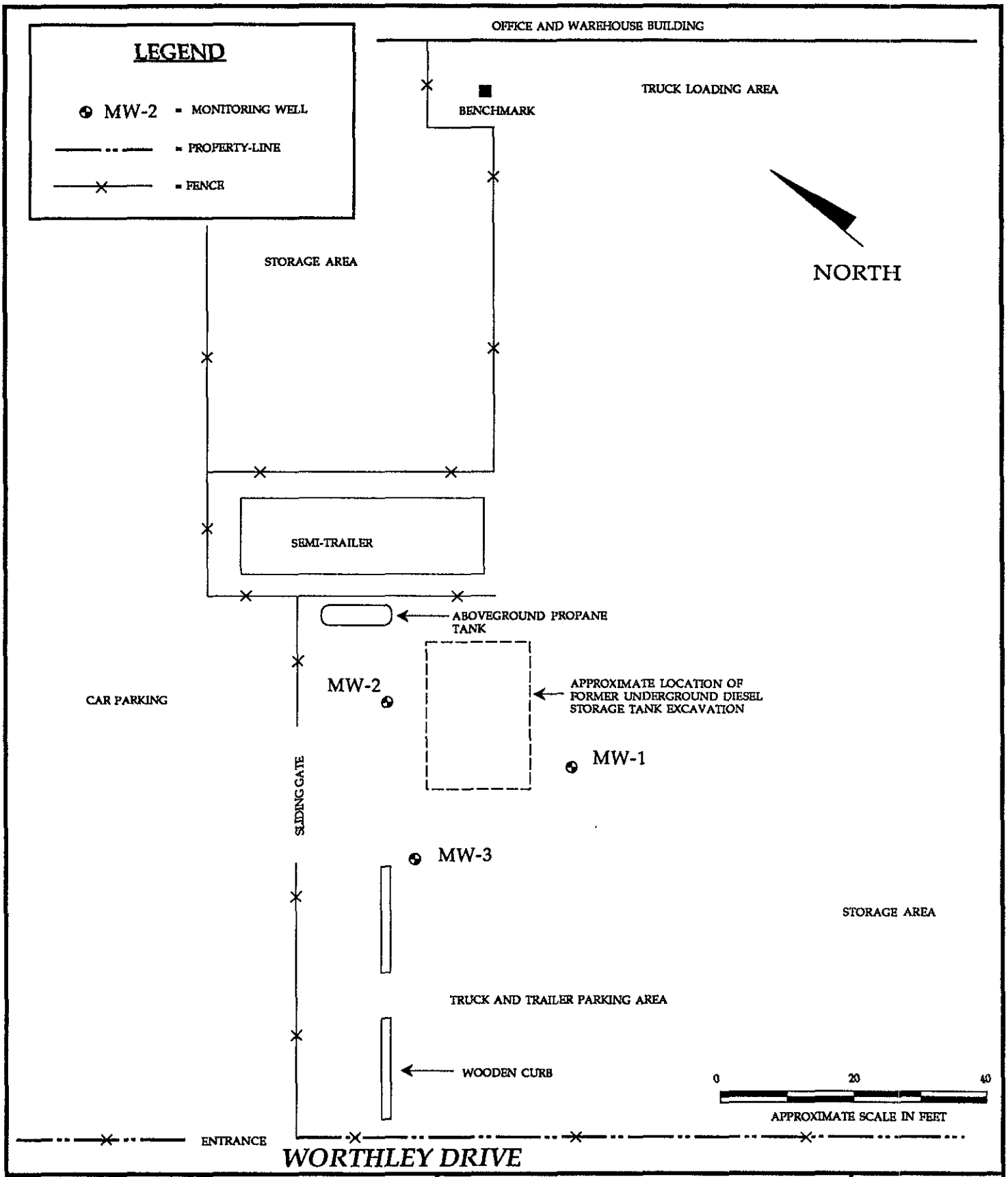
HYDRO-ENVIRONMENTAL TECHNOLOGIES, INC.

SITE LOCATION MAP

Tharco
2222 Grant Avenue
San Lorenzo, California

Figure
1

7-282 3/94



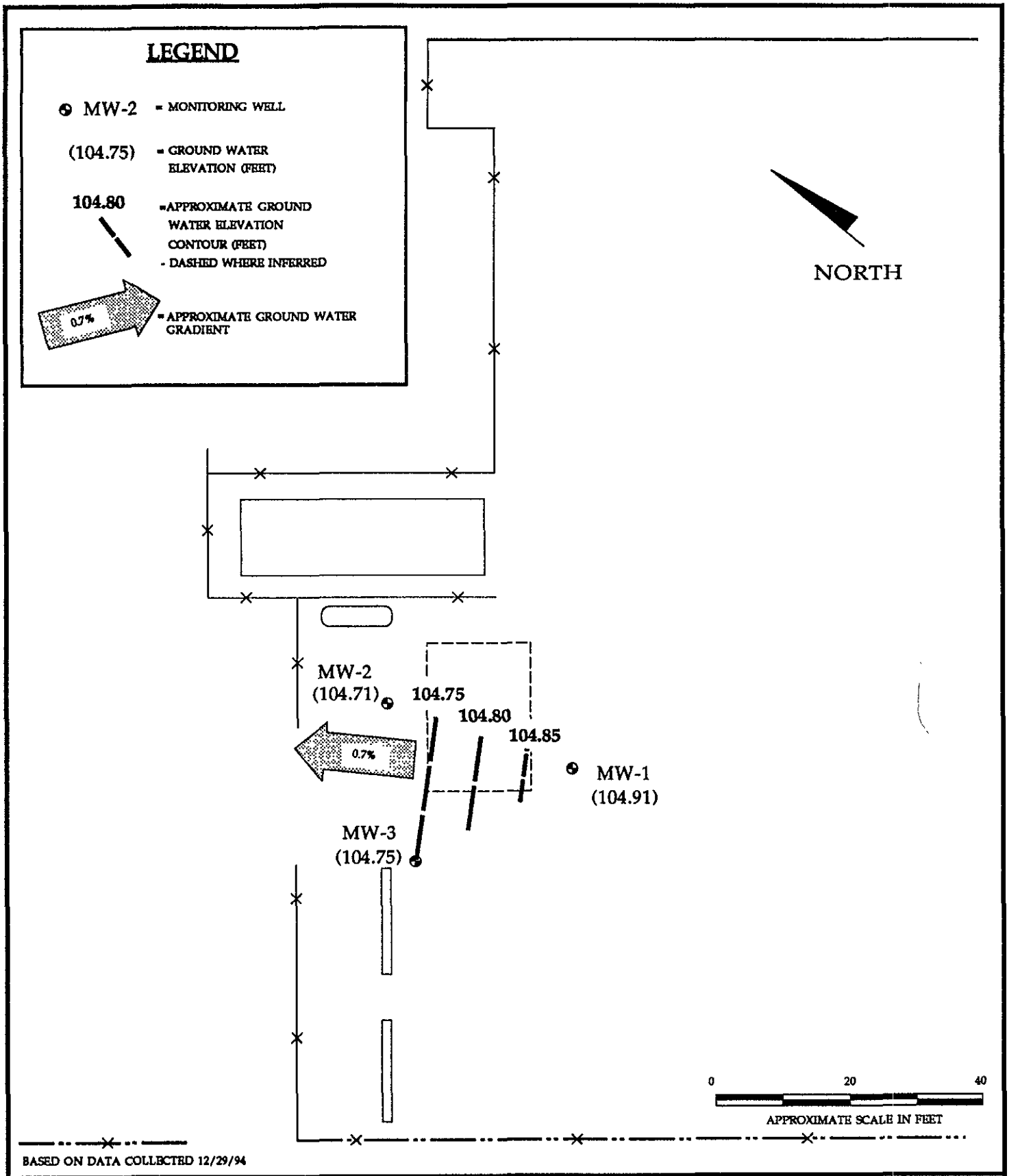
HYDR - ENVIR NMENTAL TECHN LOGIES, INC.

SITE PLAN

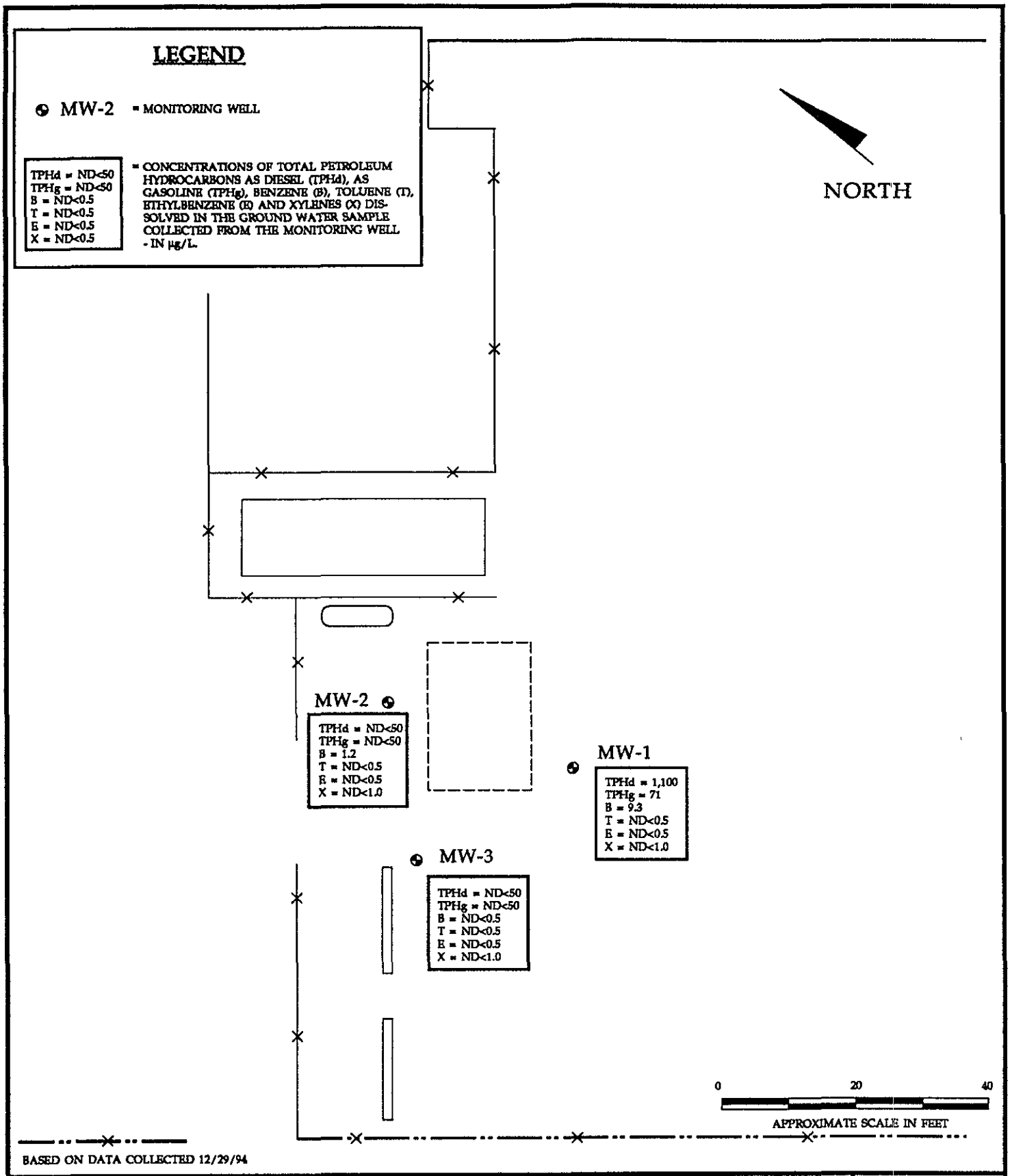
Tharco Corporation
2222 Grant Avenue
San Lorenzo, California

Figure 2

7-282 1/95



HYDR◆- ENVIR◆NMENTAL TECHN◆LOGIES, INC.	GROUND WATER CONTOUR MAP Tharco Corporation 2222 Grant Avenue San Lorenzo, California	Figure 3 7-282 1/95



HYDR◆-
ENVIR◆NMENTAL
TECHN◆LOGIES, INC.

HYDROCARBON CONCENTRATION MAP

Tharco Corporation
2222 Grant Avenue
San Lorenzo, California

Figure
4

7-282 1/95

PURGED/SAMPLED BY: HT DATE: 12/29/94

GAUGING DATA:

Depth to bottom: 18.06 ft.

Depth to water: 5.02 ft.

Saturated Thickness: 13.04 ft.

Conversion	
diam.	gals/ft.
2 in.	x 0.16
4 in.	x 0.65
6 in.	x 1.44

Well casing volume 2.1 gallons

volumes to purge x 3 vols.

*Total volume to purge = 6.3 gallons

* unless chemical parameters do not stabilize

PURGING DATA:

Purge method: PVC bailer / Submersible pump/ Suction lift pump/ _____ (circle one)

Temp/Conductivity/pH Instrument: HydAc 1

13.1
16
786
1310
2096

Time	Volume (gallons)	Temp. (°F)	Conductivity (mS/cm)	pH
1000	0	—	—	—
↓	2	59.3	2.29	NM
↓	4	59.9	2.18	NM
1010	6.5	59.8	2.17	NM

Color: slight gray Turbidity: mod - high

Recharge: good SPP Ø ft. Sheen Ø

SAMPLING DATA:

Sampling method: Dedicated bailer / Disposable bailer

Sample for: (circle)

TPHg/BTEX	METALS	TOG	8010
TPHd	O-Pb	TEL	8020
TPH mo	Total Pb	EDB	8240
601	602	Nitrates	8260

Other: _____

HYDR-ENVIRONMENTAL TECHNOLOGIES, INC.

PURGE/SAMPLE DATA SHEET

WELL # MW-1

LOCATION: Tharco, San Lorenzo

Job No. 7-282

SHEET 1 of 1

PURGED/SAMPLED BY: HT DATE: 12/29/94

GAUGING DATA:

Depth to bottom: 17.17 ft.

Depth to water: 4.97 ft.

Saturated Thickness: 12.20 ft.

Conversion	
diam.	gals/ft.
2 in.	x 0.16
4 in.	x 0.65
6 in.	x 1.44

Well casing volume 2 gallons

volumes to purge x 3 vols.

*Total volume to purge = 6 gallons

* unless chemical parameters do not stabilize

PURGING DATA:

Purge method: PVC bailer / Submersible pump/ Suction lift pump/ _____ (circle one)

Temp/Conductivity/pH Instrument: hydac 1

12.2
.16
732
1220
1952

Time	Volume (gallons)	Temp. (°F)	Conductivity (mS/cm)	pH
1045	0	———	———	———
	2	65.2	10.91	NM
	4	66.1	10.53	NM
1055	6	66.5	10.41	NM

Color: olive Turbidity: low - mod

Recharge: good SPP Ø ft. Sheen Ø

SAMPLING DATA:

Sampling method: Dedicated bailer / Disposable bailer

Sample for: (circle)

TPHg/BTEX	METALS	TOG	8010
TPHd	O-Pb	TEL	8020
TPH mo	Total Pb	EDB	8240
601	602	Nitrates	8260

Other: _____

HYDR-ENVIRONMENTAL TECHNOLOGIES, INC.

PURGE/SAMPLE DATA SHEET

WELL # MW-2

LOCATION: Tharco, San Lorenzo

Job No. 7-282

SHEET 1 of 1

PURGED/SAMPLED BY: HT DATE: 12/29/94

GAUGING DATA:

Depth to bottom: 17.46 ft.

Depth to water: 5.13 ft.

Saturated Thickness: 12.33 ft.

Conversion	
diam.	gals/ft.
2 in.	x 0.16
4 in.	x 0.65
6 in.	x 1.44

Well casing volume 2 gallons

volumes to purge x 3 vols.

*Total volume to purge = 6 gallons

* unless chemical parameters do not stabilize

PURGING DATA:

Purge method: PVC bailer / Submersible pump/ Suction lift pump/ _____ (circle one)

Temp/Conductivity/pH Instrument: _____

2.4
16
744
240
984

Time	Volume (gallons)	Temp. (°F)	Conductivity (mS/cm)	pH
1025	0	———	———	———
	2	58.7	7.22	NM
	4	59.3	9.06	↓
1035	6	59.6	9.03	√

Color: cloudy Turbidity: low - mod

Recharge: good SPP Ø ft. Sheen Ø

SAMPLING DATA:

Sampling method: Dedicated bailer / Disposable bailer

Sample for: (circle)

TPHg/BTEX	METALS	TOG	8010
TPHd	O-Pb	TEL	8020
TPH mo	Total Pb	EDB	8240
601	602	Nitrates	8260

Other: _____

HYDRO-ENVIRONMENTAL TECHNOLOGIES, INC.

PURGE/SAMPLE DATA SHEET

WELL # MW-3

LOCATION: Tharco, San Lorenzo

Job No. 7-282

SHEET 1 of 1

PACE INCORPORATED
ENVIRONMENTAL LABORATORIES

REPORT OF LABORATORY ANALYSIS

DATE: 01/16/95
PAGE: 1

Hydro Environmental
2363 Mariner Square Drive
Suite 243
Alameda, CA 94501

Attn: Mr. Scott Kellstedt
Phone: (510)521-2684

PACE Project Number: 70209
Client Project ID: Tharco

PACE Sample No: 7014400
Client Sample ID: MW-1

Date Collected: 12/29/94
Date Received: 12/30/94

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
GC Volatiles								
GAS/BTEX by CA LUFT, Water								
Gasoline	71	ug/L	50	01/06/95	CA LUFT	LMD		
Benzene	9.3	ug/L	0.5	01/06/95	CA LUFT	LMD	71-43-2	
Toluene	ND	ug/L	0.5	01/06/95	CA LUFT	LMD	108-88-3	
Ethyl Benzene	ND	ug/L	0.5	01/06/95	CA LUFT	LMD	100-41-4	
Xylene (Total)	ND	ug/L	1	01/06/95	CA LUFT	LMD	1330-20-7	
a,a,a-Trifluorotoluene (S)	114	%		01/06/95	CA LUFT	LMD	2164-17-2	
4-Bromofluorobenzene (S)	113	%		01/06/95	CA LUFT	LMD	460-00-4	
GC								
8015 Fuel Fingerprint in Water								
Diesel Fuel	1.1	mg/L	0.05	01/10/95	TPH by EPA 8015M	JSB		
n-Pentacosane (S)	81	%		01/10/95	TPH by EPA 8015M	JSB	629-99-2	

11 Digital Drive
Novato, CA 94949
TEL: 415-883-6100
FAX 415-883-2673

REPORT OF LABORATORY ANALYSIS

PACE Project Number: 70209
Client Project ID: Tharco

PAC Sample No: 7014418 Date Collected: 12/29/94
Client Sample ID: MW-2 Date Received: 12/30/94

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
GC -- Volatiles								
CA LUFT, Water								
Gasoline	ND	ug/L	50	01/06/95	CA LUFT	ADS		
Benzene	1.2	ug/L	0.5	01/06/95	CA LUFT	ADS	71-43-2	1
Toluene	ND	ug/L	0.5	01/06/95	CA LUFT	ADS	108-88-3	
Ethyl Benzene	ND	ug/L	0.5	01/06/95	CA LUFT	ADS	100-41-4	
Xylene (Total)	ND	ug/L	1	01/06/95	CA LUFT	ADS	1330-20-7	
a,a,a-Trifluorotoluene (S)	108	%		01/06/95	CA LUFT	ADS	2164-17-2	
4-Bromofluorobenzene (S)	88	%		01/06/95	CA LUFT	ADS	460-00-4	
GC								
8015 Fuel Fingerprint in Water								
Diesel Fuel	ND	mg/L	0.05	01/10/95	TPH by EPA 8015M	JSB		
n-Pentacosane (S)	81	%		01/10/95	TPH by EPA 8015M	JSB	629-99-2	

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Novato, CA 94949
TEL: 415-883-6100
FAX: 415-883-2673

PACE INCORPORATED
ENVIRONMENTAL LABORATORIES

REPORT OF LABORATORY ANALYSIS

PACE Project Number: 70209
Client Project ID: Tharco

PAC Sample No: 7014426 Date Collected: 12/29/94
Client Sample ID: MW-3 Date Received: 12/30/94

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
GC -- Volatiles								
CA LUFT, Water								
Gasoline	ND	ug/L	50	01/06/95	CA LUFT	ADS		
Benzene	ND	ug/L	0.5	01/06/95	CA LUFT	ADS	71-43-2	
Toluene	ND	ug/L	0.5	01/06/95	CA LUFT	ADS	108-88-3	
Ethyl Benzene	ND	ug/L	0.5	01/06/95	CA LUFT	ADS	100-41-4	
Xylene (Total)	ND	ug/L	1	01/06/95	CA LUFT	ADS	1330-20-7	
a,a,a-Trifluorotoluene (S)	108	%		01/06/95	CA LUFT	ADS	2164-17-2	
4-Bromofluorobenzene (S)	91	%		01/06/95	CA LUFT	ADS	460-00-4	
GC								
8015 Fuel Fingerprint in Water								
Diesel Fuel	ND	mg/L	0.05	01/10/95	TPH by EPA 8015M	JSB		
n-Pentacosane (S)	90	%		01/10/95	TPH by EPA 8015M	JSB	629-99-2	

11 Digital Drive
Novato, CA 94949
TEL: 415-883-6100
FAX: 415-883-2673

REPORT OF LABORATORY ANALYSIS

PACE Project Number: 70209
Client Project ID: Tharco

PARAMETER FOOTNOTES

ND	Not Detected
PRL	PACE Reporting Limit
(S)	Surrogate
[1]	Compound confirmed by secondary column.

11 Digital Drive
Novato, CA 94949
TEL: 415-883-6100
FAX: 415-883-2673

PACE INCORPORATED
ENVIRONMENTAL LABORATORIES

REPORT OF LABORATORY ANALYSIS

QUALITY CONTROL DATA

DATE: 01/16/95
PAGE: 5

Hydro Environmental
238 Mariner Square Drive
Suite 243
Alameda, CA 94501

PACE Project Number: 70209
Client Project ID: Tharco

Attn: Mr. Scott Kellstedt
Phone: (510)521-2684

QC Batch ID: 269
QC Batch Method: CA LUFT
Date of Batch: 12/31/94
Associated PACE Samples: 7014400

METHOD BLANK: 7015381
Associated PACE Samples:
7014400

Parameter	Units	Method Blank Result	PRL	Footnotes
Gasoline	ug/L	ND	50	
Benzene	ug/L	ND	0.5	
Toluene	ug/L	ND	0.5	
Ethyl Benzene	ug/L	ND	0.5	
Xylene (Total)	ug/L	ND	1	
a,a,a-Trifluorotoluene (S)	%	111		
4-Bromofluorobenzene (S)	%	108		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 7012933 7012941

Parameter	Units	7011877	Spike Conc.	Matrix Spike Result	Spike % Rec	Matrix Sp. Dup. Result	Spike Dup % Rec	RPD	Footnotes
Gasoline	ug/L	ND	1000	980	98	980	98	0	

LABORATORY CONTROL SAMPLE & LCSD: 7012958 7012966

Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	LCSD Result	Spike Dup % Rec	RPD	Footnotes
Gasoline	ug/L	1000	980	98	910	91	7	

11 Digital Drive
Novato, CA 94949
TEL: 415-883-6100
FAX. 415-883-2673

REPORT OF LABORATORY ANALYSIS

QUALITY CONTROL DATA

Hydro Environmental
23[redacted] Mariner Square Drive
Suite 243
Alameda, CA 94501

Attn: Mr. Scott Kellstedt
Phone: (510)521-2684

PACE Project Number: 70209
Client Project ID: Tharco

QC Batch ID: 282
QC Batch Method: EPA 3520
Date of Batch: 01/03/95
Associated PACE Samples: 7014400 7014418 7014426

METHOD BLANK: 7017924
Associated PACE Samples: 7014400 7014418 7014426

Parameter	Units	Method Blank Result	PRL	Footnotes
Diesel Fuel	mg/L	ND	0.05	
n-Pentacosane (S)	%	93		

LABORATORY CONTROL SAMPLE & LCSD: 7013311 7013329

Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	LCSD Result	Spike Dup % Rec	RPD	Footnotes
Diesel Fuel	mg/L	1	0.59	59	0.54	54	9	
n-Pentacosane (S)				99		92		

REPORT OF LABORATORY ANALYSIS

QUALITY CONTROL DATA

DATE: 01/16/95
PAGE: 7

Hydro Environmental
23[illegible] Mariner Square Drive
Suite 243
Alameda, CA 94501

PACE Project Number: 70209
Client Project ID: Tharco

Attn: Mr. Scott Kellstedt
Phone: (510)521-2684

QC Batch ID: 299
QC Batch Method: CA LUFT
Date of Batch: 01/05/95
Associated PACE Samples: 7014418 7014426

METHOD BLANK: 7015373
Associated PACE Samples:

Parameter	Units	7014418 7014426 Method Blank Result	PRL	Footnotes
Gasoline	ug/L	ND	50	
Benzene	ug/L	ND	0.5	
Toluene	ug/L	ND	0.5	
Ethyl Benzene	ug/L	ND	0.5	
Xylene (Total)	ug/L	ND	1	
a,a,a-Trifluorotoluene (S)	%	108		
4-Bromofluorobenzene (S)	%	89		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 7015779 7015787

Parameter	Units	7013899	Spike Conc.	Matrix Spike Result	Spike % Rec	Matrix Sp. Dup. Result	Spike Dup % Rec	RPD	Footnotes
Benzene	ug/L	380	100	420	40	420	41	2	
Toluene	ug/L	37	100	130	93	120	87	7	
Ethyl Benzene	ug/L	39	100	140	98	130	91	7	
Xylene (Total)	ug/L	34	300	340	103	320	94	9	
a,a,a-Trifluorotoluene (S)					128		129		
4-Bromofluorobenzene (S)					107		106		

REPORT OF LABORATORY ANALYSIS

QUALITY CONTROL DATA

DATE: 01/16/95
PAGE: 8

PACE Project Number: 70209
Client Project ID: Tharco

LABORATORY CONTROL SAMPLE & LCSD: 7014319 7014327

Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	LCSD Result	Spike Dup % Rec	RPD	Footnotes
Benzene	ug/L	100	99	99	100	100	1	
Toluene	ug/L	100	96	96	98	99	3	
Ethyl Benzene	ug/L	100	97	97	100	100	3	
Xylene (Total)	ug/L	300	290	97	300	100	3	
a,a,a-Trifluorotoluene (S)				100		101		
4-Bromofluorobenzene (S)				103		106		

11 Digital Drive
Novato, CA 94949
TEL: 415-883-6100
FAX. 415-883-2673

REPORT OF LABORATORY ANALYSIS

PACE Project Number: 70209
Client Project ID: Tharco

QUALITY CONTROL DATA PARAMETER FOOTNOTES

The Quality Control Sample Final Results listed above have been rounded to reflect an appropiate number of significant figures. Consistent with EPA guidelines unrounded concentrations have been used to calculate % Rec and RPD values.

ND Not Detected
PRL PACE Reporting Limit
RPD Relative Percent Difference
(S) Surrogate

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pace INCORPORATED
THE ASSURANCE OF QUALITY

70209

CHAIN-OF-CUSTODY RECORD
Analytical Request

Client: HETI
Address: 2363 Mariner Sq. Dr. #243
Alameda, CA 94501
Phone: (510) 521-2684

Report To: HETI (Scott Kellstedt)
Bill To: HETI
P.O. # / Billing Reference: 7-282
Project Name / No.: Tharco

Pace Client No.:
Pace Project Manager:
Pace Project No.:
*Requested Due Date:

Sampled By (PRINT): HOA C. TRINH
Sampler Signature:
Date Sampled: 12/29/94

ITEM NO.	SAMPLE DESCRIPTION	TIME	MATRIX	PACE NO.	NO. OF CONTAINERS	PRESERVATIVES: UNPRESERVED	H_2SO_4	HNO_3	VOA	ANALYSES REQUEST: TPH-G / BTEX	TPH-d	REMARKS
1	MW-1	10AM	H_2O	7014400	5	2			3	✓	✓	
2	MW-2	↓	↓	7014418	↓	↓			↓	✓	✓	
3	MW-3	↓	↓	7014426	↓	↓			↓	✓	✓	
4												
5												
6												
7												
8												

COOLER NOS.	BAILERS	SHIPMENT METHOD OUT / DATE	SHIPMENT METHOD RETURNED / DATE

ITEM NUMBER	RELINQUISHED BY / AFFILIATION	ACCEPTED BY / AFFILIATION	DATE	TIME
	HETI	HETI	12/30	930
	HETI		12/30	1345
			12/30	1600

Additional Comments
Chilled
12°C

10/1
C/1

ORIGINAL

SEE REVERSE SIDE FOR INSTRUCTIONS