

SEATTLE
TACOMA
PORTLAND
STOCKTON
RENO
RICHMOND
LOS ANGELES



009060
100 Belfrage
PHONE 206-2400
CABLE ADDRESS: TIME
(FAX) 206-263-8936
TIME OIL CO. # 01-176

2737 WEST COMMODORE WAY
P.O. BOX 24447

SEATTLE, WA 98199-1233

DEPARTMENT OF ECOLOGY	
NWRO/TCP TANK UNIT	
# 2299 July 8, 1991	
INTERIM CLEANUP REPORT	<input checked="" type="checkbox"/>
SITE CHARACTERIZATION	<input type="checkbox"/>
FINAL CLEANUP REPORT	<input type="checkbox"/>
OTHER _____	<input type="checkbox"/>
AFFECTED MEDIA: SOIL	<input checked="" type="checkbox"/>
OTHER _____ GW	<input type="checkbox"/>
INSPECTOR (INIT.) <u>ll</u>	DATE <u>12-21-92</u>

Mr. Thom Lufkin
Underground Storage Tank Section
Washington State Department of Ecology
Mail Stop PV-11
Olympia, Washington 98504-8711

RE: Underground Storage Tank Removal
24205 - 56th Avenue West, Mountlake Terrace, Seattle, WA
Property No. 01-284

Dear Mr. Lufkin:

This letter report has been prepared to provide you with information regarding the removal of underground storage tanks at 24025 - 56th Avenue West, Mountlake Terrace, Washington. A verbal report regarding site conditions was provided to Ms. Christine Madden of the Washington State Department of Ecology on June 14, 1991.

On June 14 and June 17, 1991, three gasoline tanks were removed from the above-referenced site. An 8,000 gallon tank and a 6,000 gallon tank were removed from one excavation while another 6,000 gallon tank was removed from a separate excavation. Although some areas of surface corrosion were present, it did not appear that any of the tanks had leaked. The location of the tanks is provided on Attachment 1 - Site Plan.

Backfill within the excavations consisted of fine to medium sand and appeared to be contaminated, particularly beneath the tanks. Native soil at the site consisted of dense silty sand. Discolored soil was visible on the sidewalls of both excavations, however, heavy staining indicated that majority of the contamination had migrated downward. No groundwater was encountered to a depth of 15 feet.

Soil samples collected from the sidewalls of the excavations and beneath each end of the former tanks were analyzed for total petroleum hydrocarbons (TPH) as gasoline by EPA Method 8015 and benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8020. TPH concentrations ranging from 230 ppm to 2,000 ppm and benzene concentrations ranging from 0.72 ppm to 49 ppm were present in samples collected from the bottoms of the excavations. Analyses indicated that contamination was also present at elevated levels on the west sidewalls of both excavations: 130 ppm TPH was found in the sample collected from the large excavation and 1,300 ppm TPH was found in the sample collected from the small excavation. Contaminant levels were not present above the current cleanup guideline in samples collected from the north and east sidewalls of both excavations and the south sidewall of the large excavation. Samples of the fill

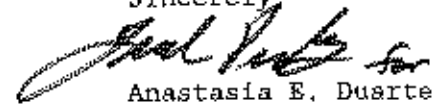
indicated TPH at concentrations ranging from 26 ppm to 550 ppm TPH and benzene at 0.028 ppm to 0.76 ppm. Attachment 2 summarizes the analytical results and laboratory reports are provided as Attachment 3.

Due to space limitations, the contaminated fill could not be stockpiled on the site and was used to backfill the excavation. Approximately 100 feet of perforated piping was placed into the excavations at a depths of 7 to 8 feet for the purpose of future in-situ remediation by vapor extraction.

A site assessment will be performed to determine the vertical and lateral extent of contamination in the area of the former tanks. Once the extent of contamination is defined, a work plan will be developed for site remediation.

As required, completed Site Check/Site Assessment Checklists have been included for each tank (Attachment 4). If you have any further questions, please do not hesitate to phone me at (206) 286-4495. If I am not available, Fred Proby may be able to answer any questions that you may have.

Sincerely,



Anastasia E. Duarte
Environmental Specialist

Attachments

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Andrew John Friedman
James E. Bruya, Ph.D.
(206) 285-8282

3008-B 16th Avenue West
Seattle, WA 98119
FAX: (206) 283-5044

June 21, 1991

Anne Duarte, Project Leader
Time Oil Company
2737 West Commodore Way
Seattle, WA 98199

Dear Ms Duarte:

Enclosed are the results of the analyses of the samples
submitted on June 17, 1991 from Project 01-167, 24025-56th
Ave. W., PO# 19627.

We appreciate this opportunity to be of service to you on
this project. If you have any questions regarding this
material, or if you just want to discuss any aspect of your
projects, please do not hesitate to contact me.

Sincerely,



Elaine K. Zamora, Chemist

EKZ/sao

Enclosures

FRIEDMAN & BRUYA, INC

ENVIRONMENTAL CHEMISTS

Date of Report: June 21, 1991
 Date Submitted: June 17, 1991
 Project: 01-167, 24025-56th Ave. W., PO# 19627

RESULTS OF ANALYSES OF THE SOIL SAMPLES
 FOR BENZENE, TOLUENE, ETHYLBENZENE,
 XYLENES AND GASOLINE
 USING EPA METHODS 5030 COUPLED TO 8020 and 8015
 Results Reported as mg/kg (ppm)

Sample #	Benzene	Toluene	Et-Benzene	Xylenes	Gasoline
1167-0617-T10	0.72	0.28	3.6	250 ^a	1,900 ^a
1167-0617-T11	0.72	0.73	82 ^a	270 ^a	2,000 ^a
1167-0617-T12	0.6	1.6	41 ^a	41 ^a	1,100 ^a
1167-0617-T13	0.54	2.8	31 ^a	250 ^a	1,300 ^a
1167-0617-T14	<0.002	0.22	0.012	0.024	17
1167-0617-T15	<0.002	0.39	<0.93 ^b	1.5	26

Quality Assurance

Method Blank	<0.002	<0.002	<0.002	<0.004	<2
1167-0617-T15 (Duplicate)	<0.002	0.34	<0.94 ^b	1.6	25
1167-0617-T15 (Matrix Spike) Percent Recovery	150%	120%	57%	98%	95%
1167-0617-T15 (Matrix Spike Duplicate) Percent Recovery	140%	120%	47%	110%	110%
Sample Spiked at 1,000	1,000	1,000	1,000	1,000	100

^a - Value reported exceeded the calibration range established for the sample.

^b - Interferences were present which prevented the identification and quantitation of the analyte at the established detection limit.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: June 21, 1991
 Date Submitted: June 17, 1991
 Project: 01-167, 24025-56th Ave. W., PO# 19627

RESULTS OF ANALYSES OF THE SOIL SAMPLES
 FOR BENZENE, TOLUENE, ETHYLBENZENE,
 XYLENES AND GASOLINE
 USING EPA METHODS 5030 COUPLED TO 8020 and 8015
 Results Reported as mg/kg (ppm)

Sample #	Benzene	Toluene	Et-Benzene	Xylenes	Gasoline
1167-0614-T1	49 ^a	190 ^a	11	120 ^a	1,700 ^a
1167-0614-T2	6	25 ^a	18	33 ^a	570 ^a
1167-0614-T3	<0.002	<0.002	<0.002	1.1	21
1167-0614-T4	1	11	18	34 ^a	320 ^a
1167-0614-T5	3.4	8.8	2.1	10	230 ^a
1167-0614-T6	<0.002	<0.002	<0.002	0.11	5
1167-0614-T7	<0.002	0.019	0.012	0.53	4
1167-0614-T8	0.22	1.5	2.8	5.6	130
1167-0614-T9	23 ^a	3.6	17	69 ^a	66 ^a
1167-0614-F1	0.76	1.9	6.2	62 ^a	550 ^a
1167-0614-F2	0.35	0.62	<2 ^b	5.5	180
1167-0614-F3	0.45	3.2	<1.8 ^b	4.8	680 ^a
1167-0617-F4	0.42	0.54	<0.78 ^b	1.8	120
1167-0617-F5	0.028	<0.002	0.013	0.4	26

^a - Value reported exceeded the calibration range established for the sample.

^b - Interferences were present which prevented the identification and quantitation of the analyte at the established detection limit.

TIM. OIL CO. SAMPLE DG 60-EK2-B

Name: 24025-56th Av. W. Prop. No: 01-167 Address: 24025-56th Av. W.
 Sampler: Anne Dwan Date: MAR 17 1991
 Purpose: UST removal Method: Grab S.Spoon Bailer Pump
 Lab Name: Friedman and Bruya Preserved: ICB Acid None
 Lab Address: _____ Phone: 285-8282 PO No.: 19627

Sample #	Location/Description	Type	Analysis Instructions	FBI#	EPA Method
1167-0614-T1	E end 4000 G	(S)WPI	TPHG, BTEX 20301		816/8020
1167-0614-T2	E end 4000 G	(S)WPI	20302		
1167-0614-T3	N Sidewall - large	(S)WPI	20303		
1167-0614-T4	E end 8000 G	(S)WPI	20304		
1167-0614-T5	E end 8000 G	(S)WPI	20305		
1167-0614-T6	E Sidewall - large	(S)WPI	20306		
1167-0614-T7	S Sidewall - large	(S)WPI	20307		
1167-0614-T8	W Sidewall - large	(S)WPI	20308		
1167-0614-T9	floor - 14'	(S)WPI	20309		
1167-0614-F1	fill - large exc.	(S)WPI	20310		
1167-0614-F2		(S)WPI	20311		
1167-0614-F3		(S)WPI	20312		
1167-0614-F4	fill - small exc	(S)WPI	20313		✓
1167-0614-F5		(S)WPI	20314		
1167-0614-F10	E end - small exc.	(S)WPI	20315		
1167-0614-F11	fill end	(S)WPI	20316		
1167-0614-F12	S Sidewall	(S)WPI	20317		
1167-0614-F13	W Sidewall	(S)WPI	20318		
1167-0614-F14	E Sidewall	(S)WPI	20319		
1167-0614-F15	N Sidewall	(S)WPI	20320		✓
-		(S)WPI			
-		(S)WPI			

Other instructions:

Sample Count = _____ Check sample for count against Log! * S = Soil W = Water P = Product

CHAIN OF CUSTODY RECORD

Relinquished By:	Received By:	Date & Time
Relinquished By: <u>Anne Dwan</u>	Received For Lab By: <u>FRIEDMAN & BRUYA</u>	Date & Time: <u>6-17-91</u>

GENERAL LAB INSTRUCTIONS

Please provide the requested information

- Sample numbers assigned by Lab: 20301 to 20320 Date Analyzed: 6/17/81
- Person performing analysis: K. McMullen, E. Zamora Data Reviewer: Andrew Friedman
- Scheduled sample disposal date: 7-17-91 NOTIFY TIME OIL CO. BEFORE DISPOSAL
- Provide copies of ALL chromatograms, including QA/QC runs.

IMPORTANT: PLEASE RETURN A COPY OF THIS FORM WITH YOUR REPORT TO TIME OIL

Attn: Environmental Manager, PO Box 24447 Terminal Sta., Seattle, WA 98124 (206) 285-2400

Attachment 2
ANALYTICAL RESULTS (ppm)

Large Excavation:

<u>Sample No.</u>	<u>Depth (ft.)</u>	<u>TPH</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethylbenzene</u>	<u>Xylenes</u>
T1	11	1700	49	190	11	120
T2	11	570	6	25	18	33
T3	6	21	ND	ND	ND	1.1
T4	11	320	1	11	18	34
T5	11	230	3.4	8.8	2.1	10
T6	5	5	ND	ND	ND	0.11
T7	5	4	ND	0.019	ND	ND
T8	5	130	0.22	1.5	2.8	5.6
T9	14	66	23	3.6	17	69

Small Excavation:

<u>Sample No.</u>	<u>Depth (ft.)</u>	<u>TPH</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethylbenzene</u>	<u>Xylenes</u>
T10	15	1900	0.72	0.28	3.6	250
T11	15	2000	0.72	0.73	82	270
T12	6	1100	0.6	1.6	41	41
T13	6	1300	0.54	2.8	31	250
T14	6	17	ND	0.22	0.012	0.024
T15	6	26	ND	0.39	ND	1.5

Fill:

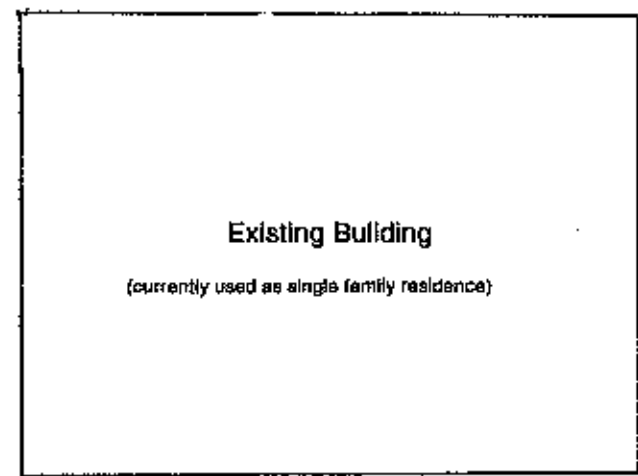
<u>Sample No.</u>	<u>TPH</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethylbenzene</u>	<u>Xylenes</u>
F1	550	0.76	1.9	6.2	62
F2	180	0.35	0.62	ND	5.5
F3	680	0.45	3.2	ND	4.8
F4	120	0.42	0.54	ND	1.8
F5	26	ND	ND	0.013	0.4



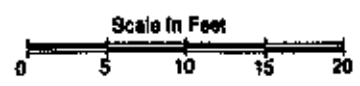
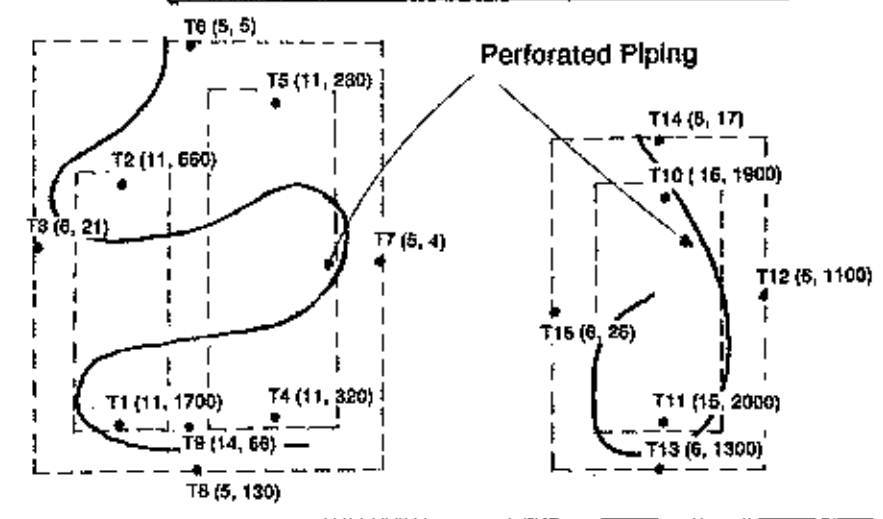
Explanations

• = Sampling Locations (Depth in feet, TPH in ppm)

242nd St. S.W.



Perforated Piping



56th Ave. W.

Time Oil Co. 2737 West Commodore Way, Seattle, WA 98199
Attachment 1 - Site Plan
Time Oil Co. 24205 West 56th Ave., Mountlake Terrace, WA Property No. 01-176

W

Department of Ecology
Northwest Regional Office, LUST Unit

Computer/File Update Information 2299

Site Name Time Oil Food Mart (01-167) ^{change} ~~01-167~~

Site Address 24205 56th W. Mountlake Terrace

Update Information to Add no groundwater seen. 2,000 ppm
TPH in bottom of excavation. May put VES in. May put
contaminated fill material back in for treatment. Full
extent of the contamination is not known.

From Ann Duarte, Time Oil 285-2400

UST db
= 176.

also: she reported this as sta # 01-176, and I
dont know which is correct.

Inspector J. Whelan Date 7-8-91

Department of Ecology-NWRO

Underground Storage Tank
Notice of Confirmed Release

✓✓

Notification received by C Madden Date 06/14/91
Reporter name Ann Duarte
address _____
phone no. 285-2400, ext. 339

004060
Invt# 2299

Site name Time Oil FoodMart#01-167 site phone no. closed site
address 24205- 56th Ave. W.
city Mountlake Terrace county King zip 98043-5505

Site owner Time Oil owner's phone _____
owner's address _____
city _____ zip _____

Consultant company In-house
name _____ phone no. _____

Other contact _____ phone no. _____
contact affiliation _____

Description of Incident

Material	# Tanks	Status/Date
gasoline.....	3	2UG, 1LG; 4, 6, 8K; rem 6/91
diesel		
waste oil		
heat fuel		
.....		
.....		
Total number tanks: <u>3</u>		Cleanup Status <u>Assessing</u>

Comments Visual evidence, aged gas odor; building, telephone cable
may impact remedial efforts.

Date inspected _____ Investigator _____ Referred to _____