

UST # 361347
Q-LUBE, U-Village
King Co / Seattle
RECEIVED
AUG 10 1995
DEPT. OF ECOLOGY

University Village Q Lube UST Closure Site Assessment

June 20, 1995



NOWICKI
& ASSOCIATES

ENERGY & ENVIRONMENTAL MANAGEMENT

33516 9th Avenue South, Bldg. 6
Federal Way, WA 98003-6322
(206) 927-5233

**UNIVERSITY VILLAGE Q LUBE
UNDERGROUND STORAGE TANK CLOSURE
SITE ASSESSMENT**

Site: **Quaker State Q Lube**
 4902 25th NE
 Seattle, WA
 Contact: Hans Kunst, Store Manager
 (206) 524-1909

Site Owner: **Q Lube**
 1385 West 2200 South
 Salt Lake City, UT 84119
 Contact: Ron Witzel, Director of Construction
 (801) 975-4718

DEPARTMENT OF ECOLOGY NWRO/TCP TANK UNIT	
INTERIM CLEANUP REPORT	<input checked="" type="checkbox"/>
SITE CHARACTERIZATION	<input checked="" 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.) _____	DATE <u>1-2-96</u>

This report is written in accordance with Washington State Department of Ecology's (DOE) "Guidance for Underground Storage Tanks Site Checks and Site Assessments" and Washington Model Toxics Control Act WAC 173-340. Included with the report are copies of laboratory data as well as site map and sketches indicating tank and sample locations. Also attached is DOE's Site Check/Site Assessment Checklist.

Executive Summary:

One 3,000 gallon new oil underground storage tank was removed from the above site on March 29th, 1995 by APS Services. Another 500 gallon used oil UST was closed in place with concrete slurry fill. There was no soil contamination associated with the removed 3,000 gallon tank. Soil contamination exceeding MTCA Method A clean-up level for oil of 200 ppm was discovered in the soil borings by the 500 gallon used oil tank. Presence of gasoline and solvent range hydrocarbons was identified in the boring soil samples. Soil contamination is believed to originate from the concrete sump floor drain located approximately 5' south of the used oil tank.

Site Background:

The site is located within the City Limits of Seattle adjacent to the University Village Shopping Center. The building is a split-level structure. The main level is on 25th Avenue NE and consists of the oil change facility including the customer waiting area. The service pit, which is approximately 5' below grade, connects to a storage room approximately 4' below the service pit. The back door of the storage room opens to ground level and into a parking lot. The storage room is located between the two rooms occupied by La Escuelita Bilingual School/Day Care.

The new oil tank was located at the northwest corner of the site and the used oil tank is located down in the service pit. UST removal was part of the upgrade of the tank system to aboveground system for both new motor oil and used oil storage.

Tank Removal:

Ground cover include 9" asphalt concrete. Brown sandy fill was found around the tank. Native soil in the top approximately 3' is brown gravelly sand corresponding to the Unified Soil Classification Designation of "GM". From 3' to about 9' below grade, soil becomes clayey gravelly sand, corresponding to "GC". There was no evidence of soil contamination during tank removal. Five soils samples; one collected below the tank, two from excavation sidewalls, and two from the excavated stockpile (approximately 30 cubic yards); were collected for laboratory analysis by method WTPH-D Extended. Laboratory results were all non-detect except for SP1 stockpile sample, which was detected with only 78 ppm oil (below MTCA Method A level of 200 ppm).

The removed tank measured 6-1/2' in diameter and 13' in length and was brought to Washington Wrecking Company for cleaning and recycling. The excavation was backfilled with the clean excavated soil and new materials.

Tank Close In-place:

The 500 gallon used oil UST was closed in-place because its location does not allow access for removal. Concrete slurry was used to fill the tank. Two soil borings were initially placed at tank mid-length (SB1) and at tank south end (SB2). The tank was assumed running north/south. There is a concrete sump floor drain, located approximately 4' east of SB1. The drain is covered with a piece of ply-wood and assumed connected to the sewer line. Strong petroleum and sour odors were noted from the sump drain when it was uncovered. The same odors were also noted in the cored soil from SB1, below the concrete down to 4'. The soil sample collected from SB1 at 4' was detected with 7,900 ppm oil hydrocarbons. Laboratory chromatogram from WTPH-D Extended analysis indicates presence of hydrocarbons other than oil. In particular gasoline and solvent range hydrocarbons (approx. C5-C9) were detected. Gas chromatograms are attached with the report. No specific analysis was performed for gasoline range hydrocarbons.

Due to the presence of large rocks and concrete chunks used as backfill, the extents of hand coring were limited. At SB2, refusal was encountered at about 2-1/2' deep. The soil sample taken at 2-1/2' at SB2 was detected with 370 ppm oil and no associated strong odors.

Because of the limited shallow depths of SB1 and in particular SB2, three additional soil borings were attempted. SB3 was placed southeast of the sump drain, SB4 was 2' south of SB2, and SB5 was located down in the storage room, approximately 6' southwest of SB4 (see attached sketch #3). Again, due to the presence of large rocks and likely unsuitable fill materials consisting partially of broken concrete backfill, maximum soil coring depths obtained were 2'. Soil samples were collected at the bottom of the borings for laboratory analysis. Samples from SB4 and SB5 contained very low concentrations of oil hydrocarbons, 90 ppm and 99 ppm, respectively. Sample from SB3 at 2' deep was detected with 2,400 ppm oil. Again, the resulting chromatogram showed the presence of light end hydrocarbons.

Laboratory Analysis & Results of Soil Samples:

All soil samples were collected into pre-cleaned glass jars with teflon lids and delivered to the laboratory on the same day. All appropriate DOE's sampling protocols were followed. Soil samples were lab-analyzed for oil TPHs using Method WTPH-D Extended by CCI laboratory located at 3229 Pine Street in Everett.

New Oil UST:

Sample ID	Description	Oil TPHs ppm
SP1	Excavated stockpiled soil	78
SP2	Excavated stockpiled soil	nd
BOT	Below tank, center, 9-1/2' below grade	nd
EW	East excavation sidewall, 5'	nd
SW	South excavation sidewall, 5'	nd
-	Method Detection Limit	50
-	MTCA Method A level	200

Note: nd = not detected at method detection limit

Used Oil UST:

Sample ID	Description	Oil TPHs ppm
SB1-4'	From SB1 at 4' deep	7,900
SB2-30"	From SB2 at 30" deep	370
SB3-24"	From SB3 at 24" deep	2,400
SB4-24"	From SB4 at 24" deep	90
SB5-22"	From SB5 at 22" deep	99
-	Method Detection Limit	50
-	MTCA Method A level	200

Conclusions:

The 3,000 gallon new oil tank was closed with no associated soil contamination.

Soil contamination exceeding MTCA Method A for oil was confirmed in the soil samples in the vicinity of the concrete floor drain located near the used oil tank. Gasoline and solvent range hydrocarbons were also present in the soils collected from the borings, suggesting the floor drain as the likely source of contamination.



Michael Q. Lam
IFCI Washington State Registered Site Assessor

6-20-95

Date



UNDERGROUND STORAGE TANK Site Check/Site Assessment Checklist

For Office Use Only

Owner #

Site #

6808

INSTRUCTIONS:

When a release has **not** been confirmed and reported, this Site Check/Site Assessment Checklist must be completed and signed by a person registered with Ecology. **The results of the site check or site assessment must be included with this checklist.** This form must be submitted to Ecology at the address shown below within 30 days after completion of the site check/site assessment.

SITE INFORMATION: Include the Ecology site ID number if the tanks are registered with Ecology. This number may be found on the tank owner's invoice or tank permit.

TANK INFORMATION: Please list all tanks for which the site check or site assessment is being conducted. Use the owner's tank ID numbers if available, and indicate tank capacity and substance stored.

REASON FOR CONDUCTING SITE CHECK/SITE ASSESSMENT: Please check the appropriate item.

CHECKLIST: Please initial each item in the appropriate box.

SITE ASSESSOR INFORMATION: This form must be signed by the registered site assessor who is responsible for conducting the site check/site assessment.

Underground Storage Tank Section
Department of Ecology
P. O. Box 47655
Olympia, WA 98504-7655

SITE INFORMATION

Site ID Number (on invoice or available from Ecology if the tanks are registered):

Site/Business Name: Q LUBE (FORMER MINIT-LUBE)

Site Address: 4902 25TH NE

Telephone: (206) 524-1909

Street
SEATTLE
City

WA
State

ZIP-Code

TANK INFORMATION

Tank ID No.	Tank Capacity	Substance Stored
<u>-</u>	<u>3,000 GAL</u>	<u>NEW MOTOR OIL</u>
<u>-</u>	<u>500 GAL</u>	<u>USED MOTOR OIL</u>

REASON FOR CONDUCTING SITE CHECK/SITE ASSESSMENT

Check one:

- ☐ Investigate suspected release due to on-site environmental contamination
- ☐ Investigate suspected release due to off-site environmental contamination.
- ☐ Extend temporary closure of UST system for more than 12 months.
- ☐ UST system undergoing change-in-service.
- ☒ UST system permanently closed-in-place. - 500 GAL
- ☒ UST system permanently closed with tank removed. - 3,000 GAL
- ☐ Abandoned tank containing product.
- ☐ Required by Ecology or delegated agency for UST system closed before 12/22/88.
- ☐ Other (describe):

CHECKLIST

Each item of the following checklist shall be initialed by the person registered with the Department of Ecology whose signature appears below.

	YES	NO
1. The location of the UST site is shown on a vicinity map.	ML	
2. A brief summary of information obtained during the site inspection is provided. (see Section 3.2 in site assessment guidance)	ML	
3. A summary of UST system data is provided. (see Section 3.1)	ML	
4. The soils characteristics at the UST site are described. (see Section 5.2)	ML	
5. Is there any apparent groundwater in the tank excavation?		ML
6. A brief description of the surrounding land use is provided. (see Section 3.1)	ML	
7. Information has been provided indicating the number and types of samples collected, methods used to collect and analyze the samples, and the name and address of the laboratory used to perform the analyses.	ML	
8. A sketch or sketches showing the following items is provided:		
- location and ID number for all field samples collected	ML	
- groundwater samples distinguished from soil samples (if applicable) N.A.	ML	
- samples collected from stockpiled excavated soil	ML	
- tank and piping locations and limits of excavation pit	ML	
- adjacent structures and streets	ML	
- approximate locations of any on-site and nearby utilities	ML	
9. If sampling procedures different from those specified in the guidance were used, has justification for using these alternative sampling procedures been provided? (see Section 3.4) N.A.	ML	
10. A table is provided showing laboratory results for each sample collected including; sample ID number, constituents analyzed for and corresponding concentration, analytical method and detection limit for that method.	ML	
11. Any factors that may have compromised the quality of the data or validity of the results are described. N.A.	ML	
12. The results of this site check/site assessment indicate that a confirmed release of a regulated substance has occurred.	ML	

SITE ASSESSOR INFORMATION

MICHAEL LAM NOWICKI & ASSOC, INC.
 Person registered with Ecology Firm Affiliated with
 Business Address: 33516 9TH AVE S. BLDG 6 Telephone: (206) 927-5233
 FEDERAL WAY WA 98003
 City State ZIP+Code

I hereby certify that I have been in responsible charge of performing the site check/site assessment described above. Persons submitting false information are subject to penalties under Chapter 173.360 WAC.

6/19/95

Date

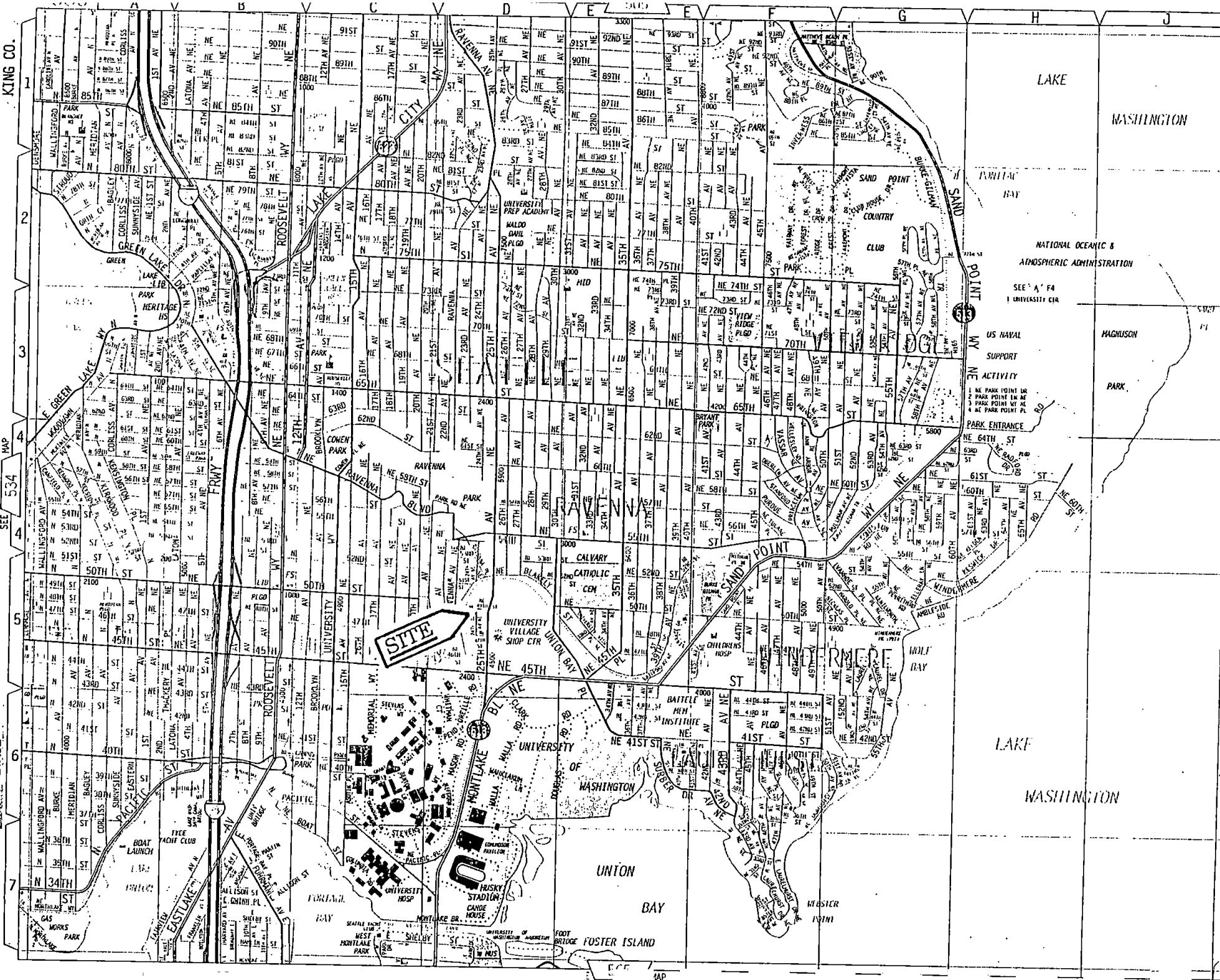
Michael Lam

Signature of Person Registered with Ecology

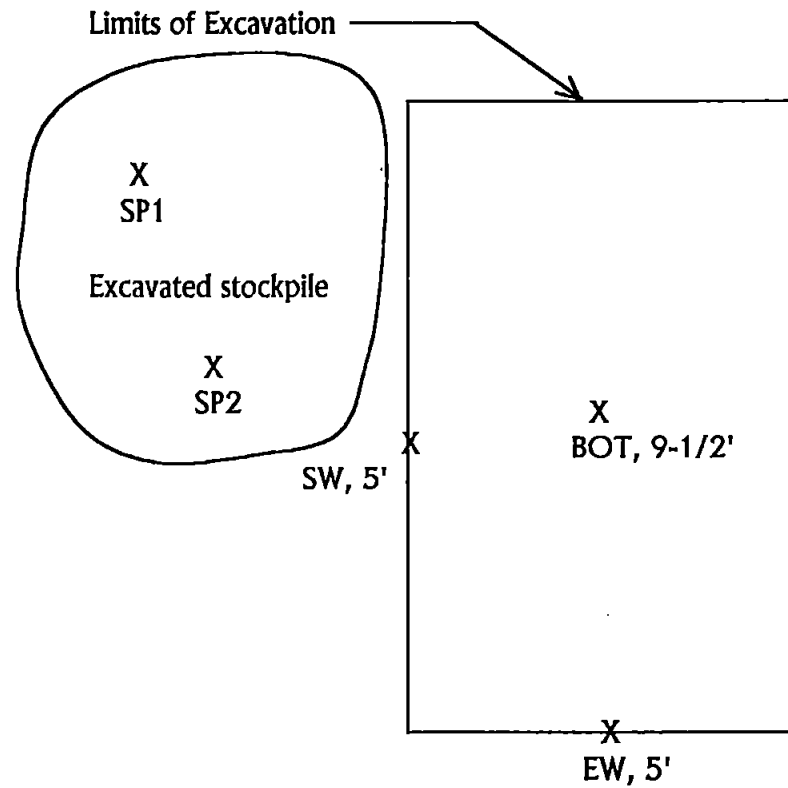
KING CO.

SEE MAP 534

DETAIL



Underground Storage Tank Removal
Quaker State
University Village-Seattle

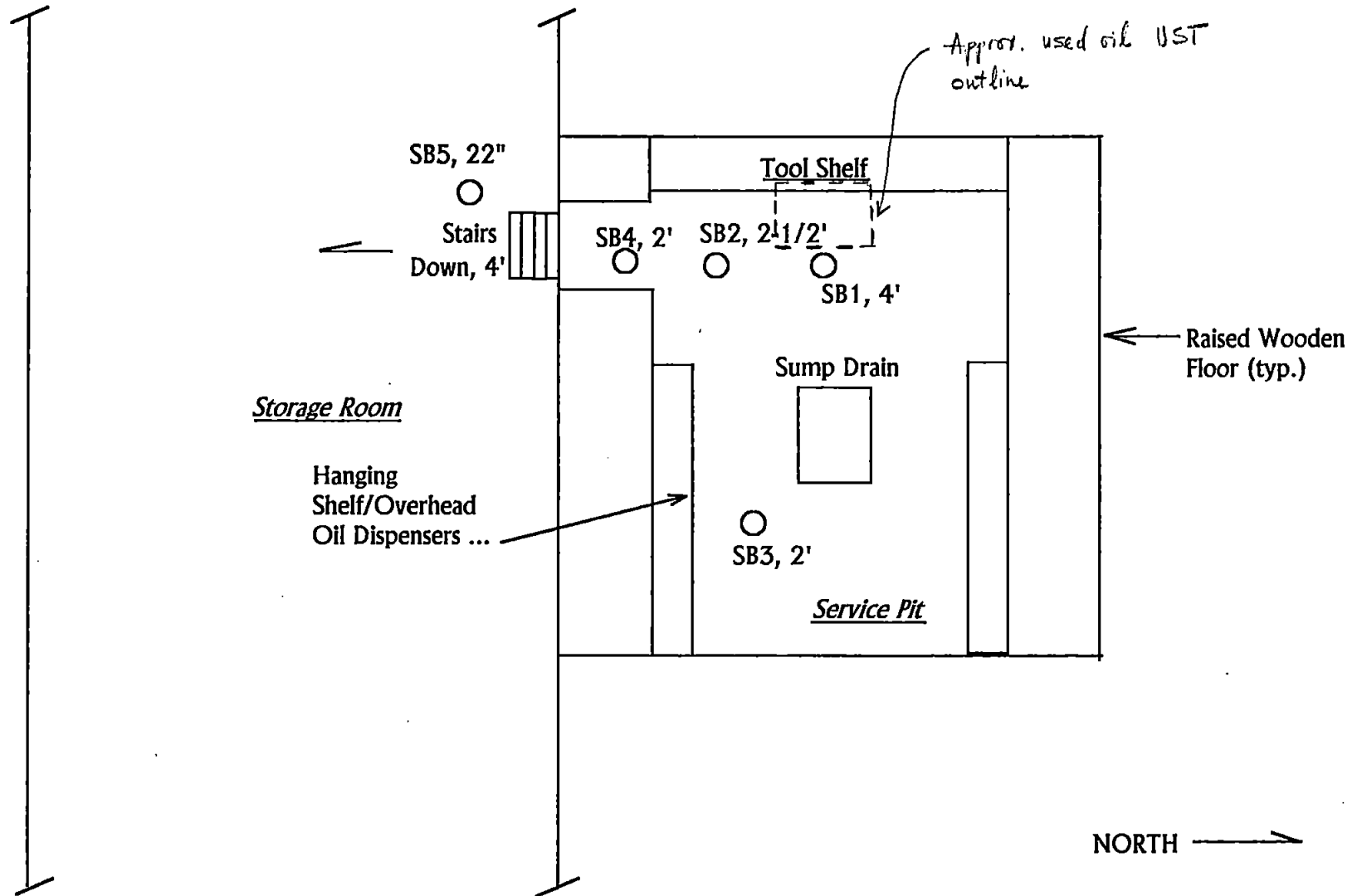


X ... Soil sample location(s) with sample I.D. and depth in feet

NORTH →

4-7-95	NAI	Scale: 1" = 5'
Sketch #2. Soil Sample Locations		

Used Oil Underground Storage Tank Closure In-Place
Q Lube
University Village-Seattle



○ ... denotes soil boring location(s), and depth in feet

6-16-95	NAI
Approx. Scale: 1" = 5'	
Sketch #3. Soil Boring Locations.	

WASHINGTON WRECKING Co.

General Contractors
(206) 772-6837
STATE LIC. # WASHIWC135J2

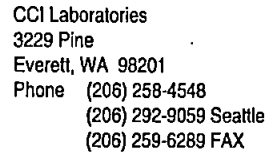
TANK DUMP S.1P

DATE: 3/29/95 TIME: 1:40 PM
COMPANY NAME: APS
JOB NAME: Q Lube - Seattle w/w
TANK SIZE(S): 3,000 - New Oil Tank
DELIVERED BY: Kari Case

HAS TANKS BEEN CLEANED AND PAPERS DELIVERED? ☒ YES ☐ NO

13001 EMPIRE WAY S.

SEATTLE, WA 98178



Date 4/28/15 Page 1 Of 1

[illegible]

SPECIAL INSTRUCTIONS _____

POSSIBLE SAMPLE HAZARDS

SIGNATURES (Name, Company, Date, and Time):

1. Relinquished By: [Signature] NMI 8/29/95 1⁴⁵ PM

Received By: [Signature] CCI 30/09/17

2. Relinquished By: _____

Received By: _____

3. Relinquished By: _____

Received By: _____

4. Relinquished By: _____

Received By: _____



Laboratories

Serving the Environmental, Aerospace and Defense Industries

CERTIFICATE OF ANALYSIS

CLIENT: NOWICKI AND ASSOCIATES
33516 9TH AVE S, BLDG #6
FEDERAL WAY, WA 98003

DATE: 3/30/95
CCIL JOB #: 503054
CCIL SAMPLE #: 1
DATE RECEIVED: 3/29/95
WDOE ACCREDITATION #: C142

CLIENT CONTACT: MICHAEL LAM

CLIENT PROJECT ID: Q LUBE UNIVERSITY VILLAGE
CLIENT SAMPLE ID: SP1 3/29/95

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ACTION LEVEL***	ANALYSIS DATE	ANALYSIS BY
TPH-DIESEL RANGE	WTPH-D EXT	ND(<25)	MG/KG	200MG/KG	3/30/95	SJB
TPH-OIL RANGE	WTPH-D EXT	78	MG/KG	200MG/KG	3/30/95	SJB

* "ND" INDICATES ANALYTE NOT DETECTED. REPORTING LIMIT IS GIVEN IN PARENTHESES

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ACTIONS LEVELS ARE PROVIDED ONLY WHEN PARAMETER DATA IS USED FOR A GENERALLY
CONSISTENT APPLICATION. WHEN PROVIDED, THEY SHOULD BE USED AS GUIDELINES ONLY.
THE APPROPRIATE REGULATORY DOCUMENT SHOULD BE CONSULTED BEFORE MAKING ANY
DECISIONS BASED ON ANALYTICAL DATA

APPROVED BY: CRJ



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CLIENT: NOWICKI AND ASSOCIATES
33516 9TH AVE S, BLDG #6
FEDERAL WAY, WA 98003

DATE: 3/30/95
CCIL JOB #: 503054
CCIL SAMPLE #: 2
DATE RECEIVED: 3/29/95
WDOE ACCREDITATION #: C142

CLIENT CONTACT: MICHAEL LAM

CLIENT PROJECT ID: Q LUBE UNIVERSITY VILLAGE
CLIENT SAMPLE ID: SP2 3/29/95

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ACTION LEVEL***	ANALYSIS DATE	ANALYSIS BY
TPH-DIESEL RANGE	WTPH-D EXT	ND(<25)	MG/KG	200MG/KG	3/30/95	SJB
TPH-OIL RANGE	WTPH-D EXT	ND(<50)	MG/KG	200MG/KG	3/30/95	SJB

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APPROVED BY:



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CERTIFICATE OF ANALYSIS

CLIENT: NOWICKI AND ASSOCIATES
33516 9TH AVE S, BLDG #6
FEDERAL WAY, WA 98003

DATE: 3/30/95
CCIL JOB #: 503054
CCIL SAMPLE #: 4
DATE RECEIVED: 3/29/95
WDOE ACCREDITATION #: C142

CLIENT CONTACT: MICHAEL LAM

CLIENT PROJECT ID: Q LUBE UNIVERSITY VILLAGE
CLIENT SAMPLE ID: BOT 3/29/95

DATA RESULTS

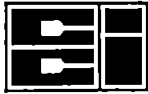
ANALYTE	METHOD	RESULTS*	UNITS**	ACTION LEVEL***	ANALYSIS DATE	ANALYSIS BY
TPH-DIESEL RANGE	WTPH-D EXT	ND(<25)	MG/KG	200MG/KG	3/30/95	SJB
TPH-OIL RANGE	WTPH-D EXT	ND(<50)	MG/KG	200MG/KG	3/30/95	SJB

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APPROVED BY:



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CERTIFICATE OF ANALYSIS

CLIENT: NOWICKI AND ASSOCIATES
33516 9TH AVE S, BLDG #6
FEDERAL WAY, WA 98003

DATE: 3/30/95
CCIL JOB #: 503054
CCIL SAMPLE #: 5
DATE RECEIVED: 3/29/95
WDOE ACCREDITATION #: C142

CLIENT CONTACT: MICHAEL LAM

CLIENT PROJECT ID: Q LUBE UNIVERSITY VILLAGE
CLIENT SAMPLE ID: EW 3/29/95

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ACTION LEVEL***	ANALYSIS DATE	ANALYSIS BY
TPH-DIESEL RANGE	WTPH-D EXT	ND(<25)	MG/KG	200MG/KG	3/30/95	SJB
TPH-OIL RANGE	WTPH-D EXT	ND(<50)	MG/KG	200MG/KG	3/30/95	SJB

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APPROVED BY: CRH



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33516 9TH AVE S, BLDG #6
FEDERAL WAY, WA 98003

DATE: 3/30/95
CCIL JOB #: 503054
CCIL SAMPLE #: 6
DATE RECEIVED: 3/29/95
WDOE ACCREDITATION #: C142

CLIENT CONTACT: MICHAEL LAM

CLIENT PROJECT ID: Q LUBE UNIVERSITY VILLAGE
CLIENT SAMPLE ID: SW 3/29/95

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ACTION LEVEL***	ANALYSIS DATE	ANALYSIS BY
TPH-DIESEL RANGE	WTPH-D EXT	ND(<25)	MG/KG	200MG/KG	3/30/95	SJB
TPH-OIL RANGE	WTPH-D EXT	ND(<50)	MG/KG	200MG/KG	3/30/95	SJB

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APPROVED BY: CRB



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CERTIFICATE OF ANALYSIS

CLIENT: NOWICKI AND ASSOCIATES
33516 9TH AVE S, BLDG #6
FEDERAL WAY, WA 98003

DATE: 3/30/95
CCIL JOB #: 503054

DATE RECEIVED: 3/29/95
WDOE ACCREDITATION #: C142

CLIENT CONTACT: MICHAEL LAM

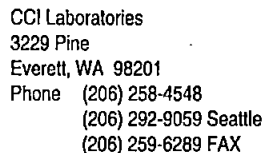
CLIENT PROJECT ID: Q LUBE UNIVERSITY VILLAGE

QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
503054-01	WTPH-D EXT	C25	88
503054-02	WTPH-D EXT	C25	83
503054-03	WTPH-D EXT	C25	99
503054-04	WTPH-D EXT	C25	91
503054-05	WTPH-D EXT	C25	83
503054-06	WTPH-D EXT	C25	79

APPROVED BY: CRD



Chain of Custody / Laboratory Analysis Request

Date 5/10/15 Page 1 Of 1

PROJECT Q Lake University Village # _____
PROJECT MANAGER Michael Lamm PH# 927 5233
REPORT/INVOICE MAILING ADDRESS _____

SAMPLER'S NAME M. L. PH# 927 5233

[illegible]

SPECIAL INSTRUCTIONS

POSSIBLE SAMPLE HAZARDS

SIGNATURES (Name, Company, Date, and Time):

1. Relinquished By: M. J. Hall (Signature) NAT 5/11/15 2⁰⁵ PM

Received By: CCM CCW 5/10/2 2:45 PM

2. Relinquished By: _____

Received By: _____

3. Relinquished By: _____

Received By: _____

4. Relinquished By: _____

Received By: _____



Laboratories

Serving the Environmental, Aerospace and Defense Industries

CERTIFICATE OF ANALYSIS

CLIENT: NOWICKI AND ASSOCIATES
33516 9TH AVE S, BLDG #6
FEDERAL WAY, WA 98003

DATE: 5/19/95
CCIL JOB #: 505031
CCIL SAMPLE #: 1
DATE RECEIVED: 5/11/95
WDOE ACCREDITATION #: C142

CLIENT CONTACT: MICHAEL LAM

CLIENT PROJECT ID: Q-LUBE UNIVERSITY VILLAGE
CLIENT SAMPLE ID: SB1-4' 5/10/95

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ACTION LEVEL***	ANALYSIS DATE	ANALYSIS BY
TPH-DIESEL RANGE	WTPH-D EXT	1600 ¹	MG/KG	200MG/KG	5/19/95	KLP
TPH-OIL RANGE	WTPH-D EXT	7900	MG/KG	200MG/KG	5/19/95	KLP

¹ DIESEL RESULT IS DUE TO END OF GASOLINE RANGE PRODUCT AND FRONT OF OIL RANGE PRODUCT ELUTING IN DIESEL RANGE.

* "ND" INDICATES ANALYTE NOT DETECTED. REPORTING LIMIT IS GIVEN IN PARENTHESES

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APPROVED BY: 



Laboratories

Serving the Environmental, Aerospace and Defense Industries

CERTIFICATE OF ANALYSIS

CLIENT: NOWICKI AND ASSOCIATES
33516 9TH AVE S, BLDG #6
FEDERAL WAY, WA 98003

DATE: 5/19/95
CCIL JOB #: 505031
CCIL SAMPLE #: 2
DATE RECEIVED: 5/11/95
WDOE ACCREDITATION #: C142

CLIENT CONTACT: MICHAEL LAM

CLIENT PROJECT ID: Q-LUBE UNIVERSITY VILLAGE
CLIENT SAMPLE ID: SB2-30" 5/10/95

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ACTION LEVEL***	ANALYSIS DATE	ANALYSIS BY
TPH-DIESEL RANGE	WTPH-D EXT	64 ¹	MG/KG	200MG/KG	5/19/95	KLP
TPH-OIL RANGE	WTPH-D EXT	370	MG/KG	200MG/KG	5/19/95	KLP

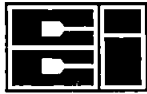
1 DIESEL RESULT IS DUE TO END OF GASOLINE RANGE PRODUCT AND FRONT OF OIL RANGE PRODUCT ELUTING IN DIESEL RANGE.

* "ND" INDICATES ANALYTE NOT DETECTED. REPORTING LIMIT IS GIVEN IN PARENTHESES

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APPROVED BY: CRH



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CERTIFICATE OF ANALYSIS

CLIENT: NOWICKI AND ASSOCIATES
33516 9TH AVE S, BLDG #6
FEDERAL WAY, WA 98003

DATE: 5/19/95
CCIL JOB #: 505031

DATE RECEIVED: 5/11/95
WDOE ACCREDITATION #: C142

CLIENT CONTACT: MICHAEL LAM

CLIENT PROJECT ID: Q-LUBE UNIVERSITY VILLAGE

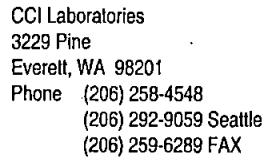
QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
505031-01	WTPH-D EXT	C25	*
505031-02	WTPH-D EXT	C25	122

* SURROGATE DILUTED OUT OF CALIBRATION RANGE

APPROVED BY:



Date 6/3/15 Page 1 Of 1

[illegible]

SPECIAL INSTRUCTIONS _____

POSSIBLE SAMPLE HAZARDS _____

SIGNATURES (Name, Company, Date, and Time):

1. Relinquished By: M. D. [Signature] DATE 6/5/95 7:30 AM

Received By: [Signature] CC Lab: 6/2/15 10:00

2. Relinquished By: _____

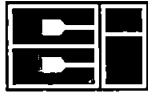
Received By: _____

3. Relinquished By: _____

Received By: _____

4. Relinquished By: _____

Received By: _____



Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

CLIENT: NOWICKI AND ASSOCIATES
33516 9TH AVE S, BLDG #6
FEDERAL WAY, WA 98003

DATE: 6/13/95
CCIL JOB #: 506011
CCIL SAMPLE #: 1
DATE RECEIVED: 6/7/95
WDOE ACCREDITATION #: C142

CLIENT CONTACT: MICHAEL LAM

CLIENT PROJECT ID: Q-LUBE UNIVERSITY VILLAGE
CLIENT SAMPLE ID: SB3-24" 5/31/95

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ACTION LEVEL***	ANALYSIS DATE	ANALYSIS BY
TPH-DIESEL RANGE	WTPH-D EXT	800 ¹	MG/KG	200MG/KG	6/9/95	ERM
TPH-OIL RANGE	WTPH-D EXT	2400	MG/KG	200MG/KG	6/9/95	ERM

¹ DIESEL RESULT IS DUE TO END OF GASOLINE RANGE PRODUCT AND FRONT OF OIL RANGE PRODUCT ELUTING IN DIESEL RANGE.

* "ND" INDICATES ANALYTE NOT DETECTED. REPORTING LIMIT IS GIVEN IN PARENTHESES

** UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

*** ACTIONS LEVELS ARE PROVIDED ONLY WHEN PARAMETER DATA IS USED FOR A GENERALLY
CONSISTENT APPLICATION. WHEN PROVIDED, THEY SHOULD BE USED AS GUIDELINES ONLY.
THE APPROPRIATE REGULATORY DOCUMENT SHOULD BE CONSULTED BEFORE MAKING ANY
DECISIONS BASED ON ANALYTICAL DATA

APPROVED BY: 



Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

CLIENT: NOWICKI AND ASSOCIATES
33516 9TH AVE S, BLDG #6
FEDERAL WAY, WA 98003

DATE: 6/13/95
CCIL JOB #: 506011
CCIL SAMPLE #: 2
DATE RECEIVED: 6/7/95
WDOE ACCREDITATION #: C142

CLIENT CONTACT: MICHAEL LAM

CLIENT PROJECT ID: Q-LUBE UNIVERSITY VILLAGE
CLIENT SAMPLE ID: SB4-24" 6/5/95

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ACTION LEVEL***	ANALYSIS DATE	ANALYSIS BY
TPH-DIESEL RANGE	WTPH-D EXT	34 ¹	MG/KG	200MG/KG	6/9/95	ERM
TPH-OIL RANGE	WTPH-D EXT	90	MG/KG	200MG/KG	6/9/95	ERM

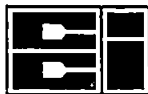
¹ DIESEL RESULT IS DUE TO FRONT OF OIL RANGE PRODUCT ELUTING IN DIESEL RANGE.

* "ND" INDICATES ANALYTE NOT DETECTED. REPORTING LIMIT IS GIVEN IN PARENTHESES

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DECISIONS BASED ON ANALYTICAL DATA

APPROVED BY: CRJ



Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

CLIENT: NOWICKI AND ASSOCIATES
33516 9TH AVE S, BLDG #6
FEDERAL WAY, WA 98003

DATE: 6/13/95
CCIL JOB #: 506011
CCIL SAMPLE #: 3
DATE RECEIVED: 6/7/95
WDOE ACCREDITATION #: C142

CLIENT CONTACT: MICHAEL LAM

CLIENT PROJECT ID: Q-LUBE UNIVERSITY VILLAGE
CLIENT SAMPLE ID: SB5-22" 6/5/95

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ACTION LEVEL***	ANALYSIS DATE	ANALYSIS BY
TPH-DIESEL RANGE	WTPH-D EXT	53 ¹	MG/KG	200MG/KG	6/12/95	ERM
TPH-OIL RANGE	WTPH-D EXT	99	MG/KG	200MG/KG	6/12/95	ERM

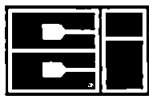
¹ DIESEL RESULT IS DUE TO END OF GASOLINE RANGE PRODUCT AND FRONT OF OIL RANGE PRODUCT ELUTING IN DIESEL RANGE.

* "ND" INDICATES ANALYTE NOT DETECTED. REPORTING LIMIT IS GIVEN IN PARENTHESES

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APPROVED BY: 



Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

CLIENT: NOWICKI AND ASSOCIATES
33516 9TH AVE S, BLDG #6
FEDERAL WAY, WA 98003

DATE: 6/13/95
CCIL JOB #: 506011

DATE RECEIVED: 6/7/95
WDOE ACCREDITATION #: C142

CLIENT CONTACT: MICHAEL LAM

CLIENT PROJECT ID: Q-LUBE UNIVERSITY VILLAGE

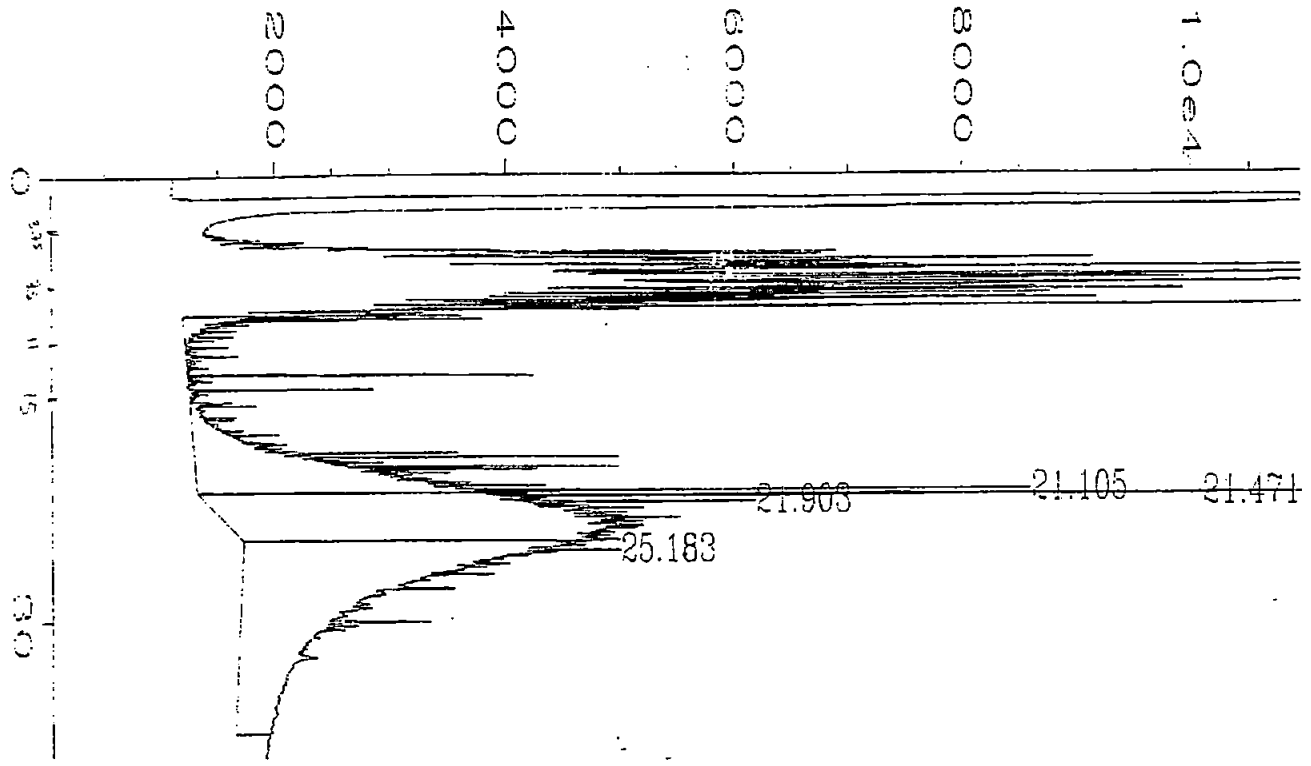
QUALITY CONTROL RESULTS

SURROGATE RECOVERY

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
506011-01	WTPH-D EXT	C25	*
506011-02	WTPH-D EXT	C25	67
506011-03	WTPH-D EXT	C25	81

* SURROGATE DILUTED OUT OF CALIBRATION RANGE

APPROVED BY: CRH



User modified

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External Standard Report

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Data File Name	: C:\HPCHEM\1\DATA\15051801\038F0601.D	Page Number	: 1
Operator	: Ken Pang	Vial Number	: 38
Instrument	: INSTRUMEN	Injection Number	: 1
Sample Name	: 505031-1 x20 (SB1-4)	Sequence Line	: 6
Run Time Bar Code:		Instrument Method	: TDM00201.MTH
Acquired on	: 19 May 95 04:19 AM	Analysis Method	: TDM00201.MTH
Report Created on	: 19 May 95 08:48 AM	Sample Amount	: 0
Last Recalib on	: 27 APR 93 09:56 AM	ISTD Amount	:
Multiplier	: 1		

Sig. 1 in C:\HPCHEM\1\DATA\15051801\038F0601.D

Ret Time	Area	Type	Width	Ref#	mg/L	Name
21.105	412965	MM	0.926	1	166.245	TPH-Dsl envelope
21.471	715002	MM R	0.192	1	1225.816	MOTOR OIL
21.903	5590	MM T	0.045	1-R	1.718	nC-25 surrogate
25.183	754794	MM	3.819	1	432.223	MOTOR OIL {2}

27.03

x = 627

Time Reference Peak	Expected RT	Actual RT	Difference
3	21.906	21.903	-0.0%

User Modified

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Discrep due to Gas: 21

CR

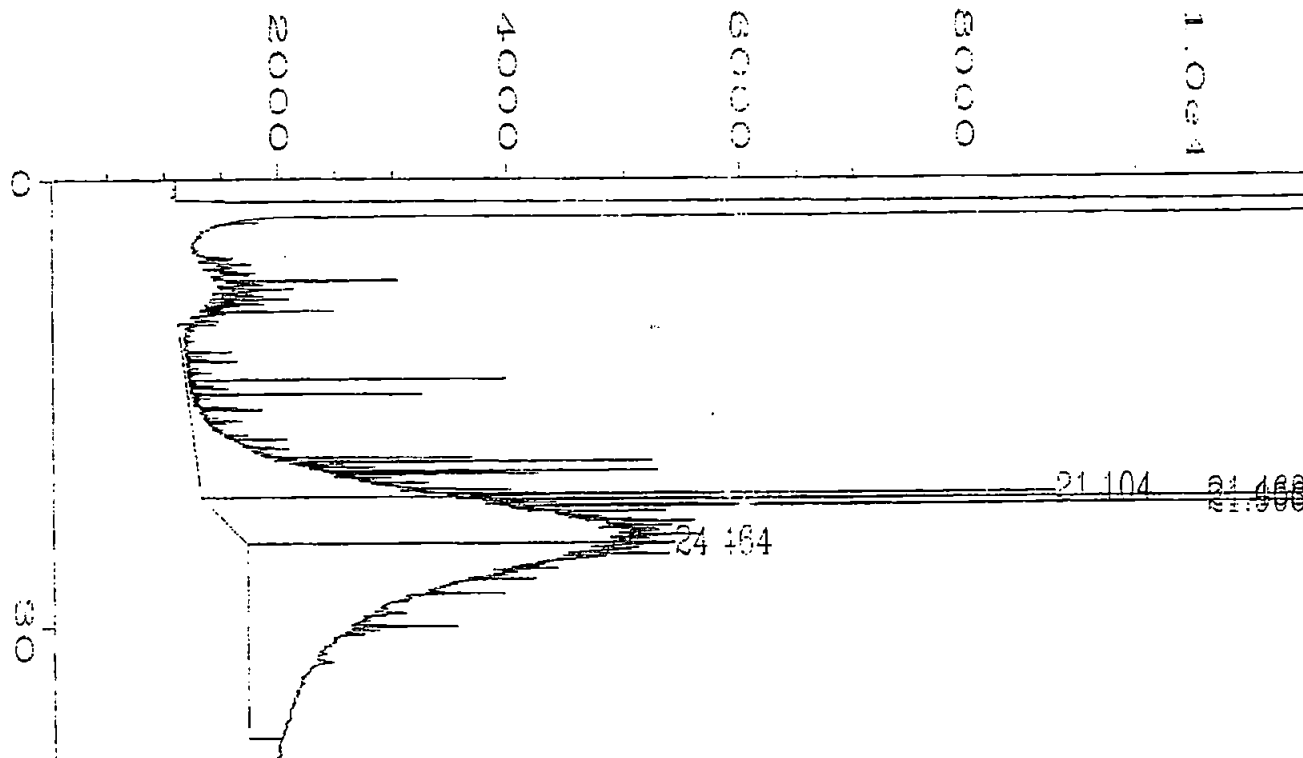
Dsl = $166 \text{ mg/L} \times \frac{10 \text{ ml}}{21.05 \text{ g}} \times 20 = 1600$

M.O. = $629 \text{ mg/L} \times \frac{10 \text{ ml}}{21.05 \text{ g}} \times 20 = 7900$

5.19.94

CR

15051801



user modified

External Standard Report

Data File Name : C:\HPCHEM\1\DATA\15051801\040F0801.D
 Operator : Ken Pang
 Instrument : INSTRUMEN
 Sample Name : 505031-2 SB2-30 22.53
 Run Time Bar Code :
 Acquired on : 19 May 95 07:17 AM
 Report Created on: 19 May 95 08:40 AM
 Last Recalib on : 27 APR 93 09:56 AM
 Multiplier : 1

Page Number : 1
 Vial Number : 40
 Injection Number : 1
 Sequence Line : 8
 Instrument Method: TDM00201.MTH
 Analysis Method : TDM00201.MTH
 Sample Amount : 0
 ISTD Amount :

Sig. 1 in C:\HPCHEM\1\DATA\15051801\040F0801.D

Ret Time	Area	Type	Width	Ref#	mg/L	Name
21.104	356834	MM	0.768	1	145.064	TPH-Dsl envelope
21.468	669040	MM R	0.220	1	1143.576	MOTOR OIL
21.906	43138	MM T	0.028	1-R	12.299	nC-25 surrogate 10 = 122%
24.464	890583	MM	3.998	1	519.719	MOTOR OIL {2}

Time Reference Peak	Expected RT	Actual RT	Difference
3	21.906	21.906	0.0%

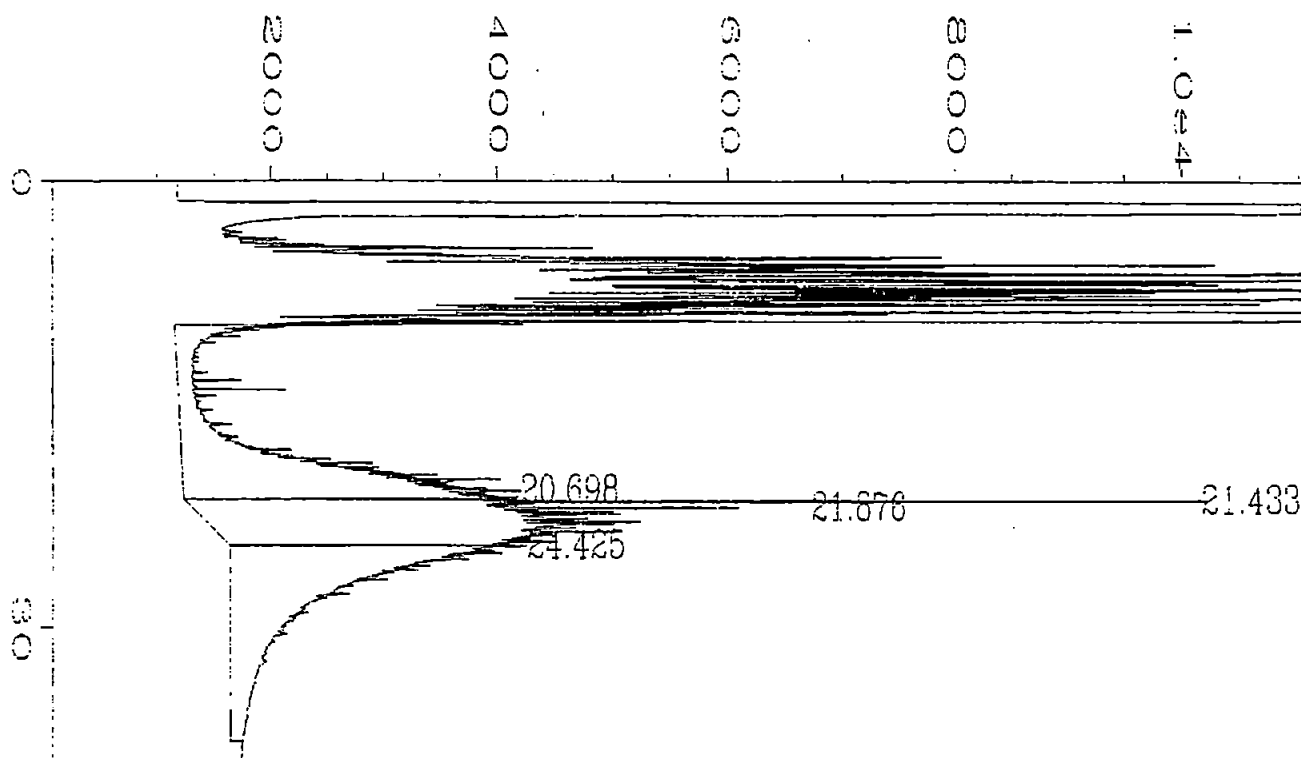
User Modified

DSI = $145 \text{ mg/L} \times \frac{10 \text{ ml}}{22.53} = 64 \text{ mg/kg}$

MO = $831 \text{ mg/L} \times \frac{10 \text{ ml}}{22.53} = 370 \text{ mg/kg}$

519.719 CR

DSI due to Gas Oil CR



user modified

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External Standard Report

=====

Data File Name : C:\HPCHEM\1\DATA\15060901\013F0501.D
 Operator : Beth Marks
 Instrument : INSTRUMEN
 Sample Name : 506011-1 DX 10x SB 3-24"
 Run Time Bar Code :
 Acquired on : 09 Jun 95 07:21 PM
 Report Created on: 12 Jun 95 09:42 AM
 Last Recalib on : 27 APR 93 09:56 AM
 Multiplier : 1

Page Number : 1
 Vial Number : 13
 Injection Number : 1
 Sequence Line : 5
 Instrument Method: TDMO0201.MTH
 Analysis Method : TDMO0201.MTH
 Sample Amount : 0
 ISTD Amount :

Sig. 1 in C:\HPCHEM\1\DATA\15060901\013F0501.D

Ret Time	Area	Type	Width	Ref#	mg/L	Name
20.698	488543	MM	2.727	1	194.765	TPH-Dsl envelope
21.433	546648	MM R	1.007	1	924.583	MOTOR OIL
21.876	6775	MM T	0.041	1-R	2.082	nC-25 surrogate
24.425	498469	MM	3.158	1	267.058	MOTOR OIL {2} mo \bar{x} = 596

Time Reference Peak	Expected RT	Actual RT	Difference
3	21.876	21.876	0.0%

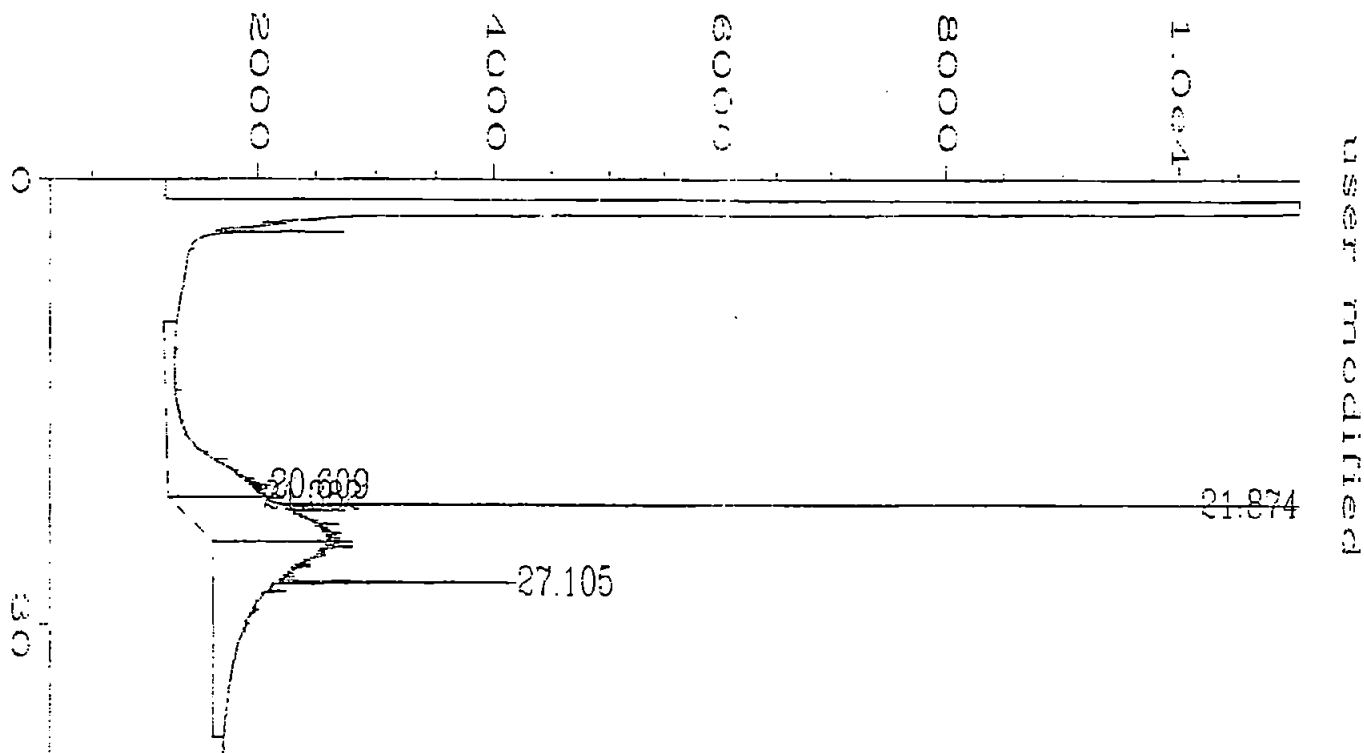
User Modified

REVIEWED BY
& DATE AK 6-13-95

Diesel Range = $195 \times \frac{10 \text{ mL}}{24.5} \times 10 = 800 \text{ mg/kg}$
 mo Range = $596 \times () = 2400 \text{ mg/kg}$

dm 06/12/95

Do not use M.I



External Standard Report

Data File Name : C:\HPCHEM\1\DATA\15060901\011F0501.D
 Operator : Beth Marks Page Number : 1
 Instrument : INSTRUMEN Vial Number : 11
 Sample Name : 506011-2 DX SB4-24" Injection Number : 1
 Run Time Bar Code: Sequence Line : 5
 Acquired on : 09 Jun 95 05:50 PM Instrument Method: TDM00201.MTH
 Report Created on: 12 Jun 95 09:30 AM Analysis Method : TDM00201.MTH
 Last Recalib on : 27 APR 93 09:56 AM Sample Amount : 0
 Multiplier : 1 ISTD Amount :

Sig. 1 in C:\HPCHEM\1\DATA\15060901\011F0501.D

Ret Time	Area	Type	Width	Ref#	mg/l	Name
20.609	178949	MM	3.279	1	77.938	TPH-Dsl envelope
21.382	185178	MM R	0.243	1	277.813	MOTOR OIL
21.874	22702	MM T	0.032	1-R	6.668	nC-25 surrogate /10 = 67.20R
27.105	287327	MM	1.842	1	131.008	MOTOR OIL {2} mo = 205

Time Reference Peak	Expected RT	Actual RT	Difference
3	21.874	21.874	0.0%

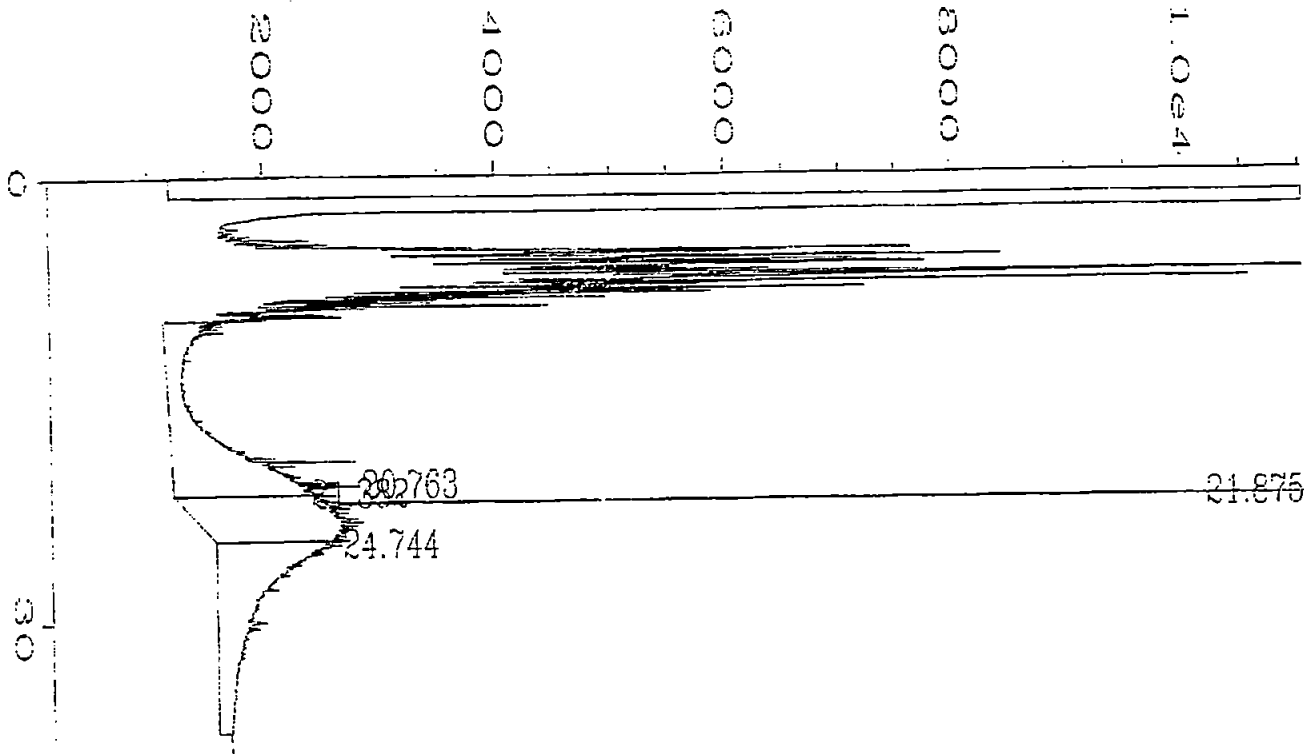
User Modified

$$\text{Diesel Range} = 78 \times \frac{10 \text{ mL}}{22.8} = 34 \text{ mg/kg}$$

Ann 04/12/95

$$\text{mo} = 205 \times \frac{10 \text{ mL}}{22.9} = 90 \text{ mg/kg}$$

REVIEWED BY
& DATE CR 6/3/95



user modified

External Standard Report

Data File Name : C:\HPCHEM\1\DATA\15061201\009F0301.D
 Operator : Beth Marks
 Instrument : INSTRUMEN
 Sample Name : 506011-3 x1 *SB5-22"*
 Run Time Bar Code:
 Acquired on : 12 Jun 95 02:34 PM
 Report Created on: 12 Jun 95 03:49 PM
 Last Recalib on : 27 APR 93 09:56 AM
 Multiplier : 1
 Page Number : 1
 Vial Number : 9
 Injection Number : 1
 Sequence Line : 3
 Instrument Method: TDM00201.MT
 Analysis Method : TDM00201.MT
 Sample Amount : 0
 ISTD Amount :

Sig. 1 in C:\HPCHEM\1\DATA\15061201\009F0301.D

Ret Time	Area	Type	Width	Ref#	mg/L	Name
20.763	298413	MM	3.067	1	123.018	TPH-Dsl envelope
21.382	225981	MM R	0.228	1	350.821	MOTOR OIL
21.875	27970	MM T	0.031	1-R	8.120	nC-25 surrogate
24.744	257683	MM	3.989	1	111.907	MOTOR OIL {2}

mm 04/12
8190 Rec
mo 7 = 231

Time Reference Peak
3

Expected RT
21.875

Actual RT
21.875

Difference
0.0%

User Modified

REVIEWED BY
& DATE *6-13-97*

Diesel Range = $123 \times \frac{10 \text{ ml}}{23.3} = 53 \text{ mg/kg}$

MO Range = $231 \times () = 99 \text{ mg/kg}$

Note: Front end of Oil in Diesel range + gasoline present



Removed 3,000 gallon UST in good condition.



UST excavation, no soil contamination.



Excavation pit north wall.



Service area. Used oil UST is located below.



Q Lube building, looking from the south. La Escuelita Day Care is below.



Building structure, viewed from the east. The storage room is at center (lower level), dividing the Day Care Center into two rooms with glass windows.