

Chevron U.S.A. Products Company 20500 Richmond Beach Drive NW Seattle, WA 98177 Phone 206 542 9720

OCTOBER 4, 1993

RE: STAGE II VAPOR RECOVERY SYSTEM INSTALLATION 1018 PLUM STREET OLYMPIA, WASHINGTON

MR. THOMAS TODD
WASHINGTON DEPARTMENT OF ECOLOGY
7272 CLEANWATER LANE
MAIL STOP LU-11
OLYMPIA, WASHINGTON 98504-6811

Dear Mr. Todd,

Enclosed in an August 4, 1993, Pacific Environmental Group Inc., report describing environmental related issues associated with installation of Stage II Vapor Recovery equipment at the above referenced site.

Should you have any questions regarding this project please contact E.K. (Keith) Kringlen at (206) 546-0530.

Sincerely:

E.K. (Kéith) Kringlen Senior Project Manager

Enclosure





45/6

August 4, 1993 Project 520-25.24

Mr. Keith Kringlen Chevron U.S.A. Products Company 20500 Richmond Beach Dr. NW Seattle, WA 98177

Re: Stage II Vapor Recovery System Installation Chevron Service Station No. 9-5311 1018 Plum Street Olympia, Washington

Dear Mr. Kringlen:

This letter presents the results of an environmental investigation conducted by Pacific Environmental Group, Inc. (PACIFIC) at Chevron U.S.A. Service Station 9-5311, located at 1018 Plum Street in Olympia, Washington (Figure 1). The purpose of this investigation was to assess and document soil quality with respect to petroleum hydrocarbons at the site during Stage II vapor recovery equipment retrofit. Services were provided by PACIFIC under Chevron Contract No. P16CNW01819X, Release No. 9462730.

The scope of work for the environmental investigation consisted of the following tasks:

- o Field screening and segregation of soils stockpiled from the trenching operations using a photolonization detector (PID).
- o Collecting soil samples from trench locations where PID screening concentrations exceeded background levels.
- o Collect stockpile samples in accordance, with Washington State Department of Ecology requirements.
- o Submitting soil samples and appropriate documentation to a Chevron approved laboratory for analysis.
- o Preparation of this letter report.

Site Description

The Chevron site is situated on the northeast corner at the intersection of Plum Street and Union Avenue in the city of Olympia (Figure 1). Three 10,000-gallon underground storage tanks (USTs) are located in the eastern portion of the service station property and store regular leaded, regular unleaded, and supreme unleaded gasoline.

Stage II Vapor Recovery Retrofit

During the week of May 24, 1993, SME Corporation (SME) performed a Stage II vapor recovery retrofit. The scope of work performed by SME included vapor recovery line-trenching, system installation, line-testing, and backfilling.

Trench Excavation

Trenches for vapor recovery lines were excavated along each pump island and extended to join the USTs in an excavation uncovering a portion of the tank complex (Figure 1). The trenching was approximately three feet wide and depths ranged from approximately two to three feet deep. Approximately 36 cubic yards of soil and pea-gravel were excavated from the trenches and tank complex and stockpiled on-site.

Excavated soils from the trenches consisted of silty gravelly sand. The fill around the USTs consisted of pea-gravel.

Soil Screening and Sampling

Following excavation of the trenches, soils in the trenches were screened for the presence of volatile organic compounds (VOCs) using a Thermo Environmental Instruments Inc. Model 580B photo-ionization detector. Soil sampling and PID field screening methodology is presented in Attachment A.

Soils with PID readings above background levels were identified at four areas within the trenches. The areas were adjacent to three of the fuel dispensers, the northernmost section of trenching, and at the fill areas of the three USTs (Figure 1). Soil sample T-1 was collected between the southernmost fuel dispensers. Samples T-2 and T-3 were collected approximately 3 feet west and 3 feet east of Sample T-1, respectively. Samples T-2 and T-3 were taken as confirmation samples to verify the lateral extent of the VOCs identified near Sample T-1. Sample T-7 was collected directly beneath the central pump island fuel dispensers. Samples T-11 was collected directly beneath the northwest pump island dispensers. Samples T-8 and T-9 were collected in the trenching adjacent to the northern pump island. Samples T-4 and T-6 were collected from the trenching south of the sales building. Samples T-10 and T-5 were collected from the

trenching north of the station building. All of the trench samples were collected from an approximate depth of 2 feet.

Approximately 36 cubic yards (CY) of soil in two stockpiles (SP1 and SP2) excavated from the Stage II trench operations were field screened with a PID. Stockpile SP2 was not sampled as it consisted solely of pea-gravel. Three samples were collected from Stockpile SP1 (SP1-A, SP1-B, and SP1-C).

The trenches were backfilled with clean imported material and surfaced with asphalt or concrete.

Analytical Parameters

Based on field PID readings and discussions with Chevron, PACIFIC submitted 11 samples (T-1, T-3, T-4, T-6 through T-9, T-11, and SP1-A through SP1-C) for analysis by a state certified laboratory. Soil samples were analyzed for the following parameters:

PARAMETER	METHOD
Total Petroleum Hydrocarbons as gasoline (TPH-gasoline)	Washington Method WTPH-G
Benzene, toluene, ethylbenzene and xylenes (BTEX compounds)	EPA Method 8020
Total Lead	EPA Method 7420

The soil samples were analyzed by Analytical Technologies, Inc. of Renton, Washington.

Soil Analytical Results

Soil sample analytical results are presented in Table 1. Laboratory methods, analytical reports, and chain-of-custody documentation are contained in Attachment B.

Conclusions

Analytical results for trench Samples T-1, T-8, T-9 and T-11 indicated that TPH-gasoline concentrations were above Washington State Model Toxics Control Act (MTCA) Method A cleanup levels.

While analytical results for trench sample T-1 indicate a xylenes concentration above the MTCA Method A cleanup level, results of BTEX analyses for all remaining trench samples (T-3, T-4, T-6 through T-9, and T-11) were below MTCA Method A cleanup levels.

Project 520-25.24 August 4, 1993 Page 4

The results for Samples T-3, T-4, T-6, and T-10 suggests the affected hydrocarbon soils are localized around the pump islands.

Results of lead analyses for all trench samples analyzed (T-1, T-3, T-4, T-6 through T-9, and T-11) were below MTCA Method A cleanup levels.

Stockpile samples (SP1-A through SP1-C) were below MTCA Method A cleanup levels for TPH-gasoline, BTEX and lead.

PACIFIC appreciates this opportunity to be of continuing service. If you have any questions regarding the contents of this report, please call.

Sincerely,

Pacific Environmental Group, Inc.

Les Brewer Staff Geologist

John Johnson Project Manager

Attachments:

Table 1

Figure 1 Attachments A and B

١, 41 CHEVRON AUTO CARE (GARGAGE) AREA OF TRENCHING FOR STAGE II INSTALLATION SAMPLE DESIGNATION AND LOCATION **EXPLANATION** --- UNDERGROUND FUEL STORAGE TANKS PUMP ISLANDS (TYP) SALES BUILDING CANOPY T-10 T-7, , 1 1-1-1

PLUM STREET

NOT TO SCALE

PROJECT: 520-25.24

FIGURE:

CHEVRON SERVICE STATION #9-5311 1018 Plum Street Olympia, Washington

UNION AVENUE

SITE MAP

PACIFIC ENVIRONMENTAL GROUP, INC.



TABLE 1 SOIL ANALYTICAL RESULTS CHEVRON U.S.A. SERVICE STATION 9-5311

TPH as Gasoline - Washington Method WTPH-G BTEX Compounds - EPA Method 8020

Total Lead - EPA Method 7420 Concentrations in mg/kg (ppm)

						PARAMETER	CTER		
			Depth _	TPH-			Ethyl		Total
Sample I.D.	Location	Date	(feet) G	Gasoline	Вепzепе	Toluene	Benzene	Xylenes	Lead
T-1	Southern Pump Island Trench	5/27/93	2 feet	1,700	N.D.	N.D.	N.D.	84.0	N.D.
T-3	Southern Pump Island Trench	5/27/93	2 feet	N.D.	N.D.	N.D.	N.D.	N.D.	8.6
1 <u>1</u>	Trench South of Station Bldg.	5/27/93	2 feet	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
T-6	Trench South of Station Bldg.	5/27/93	2 feet	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
T-7	Central Pump Island	5/27/93	2 feet	N.D.	N.D.	0.047	N.D.	0.03	N.D.
T-8	Northern Pump Island Trench	5/27/93	2 feet	180	0.039	0.12	1.7	6.9	46.0
T-9	Northern Pump Island Trench	5/27/93	2 feet	210	N.D.	0.047	0.1	6.5	86.0
T-11	Northwest Pump Island	5/27/93	2 feet	210	0.039	0.047	0.11	5.0	0.09
SP1-A	Stockpile SP1	5/27/93	2 feet	N.D.	N.D.	N.D.	N.D.	N.D.	8.9
SPI-B	Stockpile SP1	5/27/93	2 feet	N.D.	N.D.	N.D.	N.D.	N.D	N.D.
SP1-C	Stockpile SP1	5/27/93	2 feet	N.D.	N.D.	N.D.	N.D.	N.D.	0.6
Detection Limits:	:5 3			5-6	0.25-0.28	0.25-0.28	0.25-0.28	0.25-0.28	5.0-5.7

NOTES: N.D. - Not detected

Sample locations are shown on Figure 2. Certified Analytical Results are attached

ATTACHMENT A INVESTIGATIVE PROCEDURES

Soil Sampling Procedures

Soil samples for chemical analysis were collected by scraping aside approximately three inches of soil and then collecting a sample to place in a stainless steel liner. The liners were capped with Teflon squares and plastic end caps, labeled, and sealed in ziplock bags. Samples were placed on ice for transport to the laboratory accompanied by chain-of-custody documentation.

Organic Vapor Screening

Soil samples were screened in the field for ionizable organic compounds using a Thermo Environmental Instruments Inc. Model 580B photo-ionization detector with a 10.0 eV lamp. The test procedure involved collecting a discrete soil sample from the trenches or stockpiles, and placing it in a zip-lock bag. The bag was allowed to warm to ambient temperature for approximately twenty minutes, then the bag was pierced and the head-space within the bag was tested for total organic vapor, measured in parts per million, (ppm;volume/volume). The instrument was previously calibrated using a 100 ppm isobutylene standard (in air) and a sensitivity factor of 0.56, which relates the photo-ionization sensitivity of benzene to the sensitivity of isobutylene. The detection limit of the instrument ranges from 0.1 ppm to 2,000 ppm. It should be noted that the PID measurements are considered semi-quantitative data since the instrument detects all organic compounds with ionization potentials less than 10 electron volts (eV).

ATTACHMENT B LABORATORY ANALYTICAL MENTHODS AND REPORTS CHAIN-OF-CUSTODY DOCUMENTATION

Laboratory Analytical Methods

Analysis for TPH-gasoline was performed according to WTPH-G. Benzene, toluene, ethylbenzene, and xylenes analysis was performed in accordance with EPA Method 8020. A methanol solvent extraction was used for the TPH analysis with final detection by gas chromatography using a flame-ionization detector. A headspace or purge and trap technique was utilized for BTEX analysis. Final detection was by gas chromatography using a photoionization detector.

Samples were tested for Total Lead using modified EPA Method 7420.



June 16, 1993

Pacific Environmental Group 4020 148th Avenue N.E. Suite B Redmond WA 98052

Attention: John Johnson

Project Number: 520-25.24

Project Name: Chevron-Plum Street, Olympia

Dear Mr. Johnson:

On May 28, 1993, Analytical Technologies, Inc. (ATI), received 11 samples for analysis. The samples were analyzed with EPA methodology or equivalent methods as specified in the attached analytical schedule. The results, sample cross reference, and quality control data are enclosed.

Please note that this report has a summary report for the fuels analyses. If you have any questions, please call.

Sincerely,

Donna M. McKinney Senior Project Manager

DMM/hal/ff

Enclosure



SAMPLE CROSS REFERENCE SHEET

CLIENT : PACIFIC ENVIRONMENTAL GROUP PROJECT # : 520-25.24

PROJECT NAME : CHEVRON-PLUM STREET, OLYMPIA

ATI #	CLIENT DESCRIPTION	DATE SAMPLED	MATRIX
9305-292-1	T-1	05/27/93	SOIL
9305-292-2	T-3	05/27/93	SOIL
9305-292-3	T-4	05/27/93 .	SOIL
9305-292-4	T-6	05/27/93	SOIL
9305-292-5	T-7	05/27/93	SOIL
9305-292-6	T-8	05/27/93	SOIL
9305-292 -7	T-9	05/27/93	SOIL
9305-292-8	T-11	05/27/93	SOIL
9305-292-9	SP1-A	05/27/93	SOIL
9305-292-10	SP1-B	05/27/93	SOIL
9305-292-11	SP1-C	05/27/93	SOIL

---- TOTALS ----

MATRIX # SAMPLES -----------SOIL 11

ATI STANDARD DISPOSAL PRACTICE ______

The samples from this project will be disposed of in thirty (30) days from the date of the report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.



ANALYTICAL SCHEDULE

CLIENT : PACIFIC ENVIRONMENTAL GROUP

PROJECT # : 520-25.24

PROJECT NAME : CHEVRON-PLUM STREET, OLYMPIA

ANALYSIS	TECHNIQUE	REFERENCE	LAB
BETX	GC/PID	EPA 8020	R
TOTAL PETROLEUM HYDROCARBONS	GC/FID	WA DOE WTPH-G	R
LEAD	AA/F	EPA 7420	R
MOISTURE	GRAVIMETRIC	CLP SOW ILM01.0	R

R = ATI - Renton SD = ATI - San Diego PHX = ATI - PhoenixPNR = ATI - Pensacola

PNR = ATI - Pensacola FC = ATI - Fort Collins

SUB = Subcontract



METALS ANALYSIS

CLIENT : PACIFIC ENVIRONMENTAL GROUP MATRIX : SOIL

PROJECT # : 520-25.24

PROJECT NAME : CHEVRON-PLUM STREET, OLYMPIA

ELEMENT	- -			DATE PREPARED	DATE ANALYZED
LEAD (SAMPLES	- 9	THROUGH	-11)	06/01/93	06/01/93
LEAD (SAMPLES	- 1	THROUGH	-8)	06/07/93	06/08/93



METHOD BLANK

METHOD BLANK

ATI I.D. # 9305-292

METALS ANALYSIS DATA SUMMARY

CLIENT : PACIFIC ENVIRONMENTAL GROUP MATRIX : SOIL PROJECT # : 520-25.24
PROJECT NAME : CHEVRON-PLUM STREET, OLYMPIA UNITS : mg/Kg RESULTS ARE CORRECTED FOR MOISTURE CONTENT ______ ATI I.D. # CLIENT I.D. LEAD 9305-292-1 T-1 <5.4 9305-292-2 **T**-3 8.6 9305-292-3 <5.7 T-4 9305-292-4 <5.6 T-6 9305-292-5 T-7 <5.3 9305-292-6 T-8 46 9305-292-7 T-9 86 9305-292-8 T-11 60 9305-292-9 SP1-A 8.9 9305-292-10 <5.3 SP1-B 9305-292-11 SP1-C 9.0

< 5.0

<5.0



METALS ANALYSIS QUALITY CONTROL DATA

CLIENT : PACIFIC ENVIRONMENTAL GROUP MATRIX : SOIL

PROJECT # : 520-25.24

PROJECT NAME : CHEVRON-PLUM STREET, OLYMPIA UNITS : mg/Kg

ELEMENT	ATI I.D.	SAMPLE RESULT	DUP RESULT	RPD	SPIKED RESULT	SPIKE ADDED	% REC
LEAD	9305-292-1	<5.4	<5.3	NC	52.7	54.9	96
LEAD	9305-292-11	9.0	6.3	35	57.1	51.0	94
LEAD	BLANK	<5.0	N/A	N/A	48.5	50.0	97
LEAD	BLANK	<5.0	N/A	N/A	46.5	50.0	93

NC = Not Calculable.

% Recovery = (Spike Sample Result - Sample Result)

Spike Concentration

RPD (Relative % Difference) = (Sample Result - Duplicate Result)

Average Result



GENERAL CHEMISTRY ANALYSIS

CLIENT : PACIFIC ENVIRONMENTAL GROUP PROJECT # : 520-25.24

MATRIX : SOIL

PROJECT NAME : CHEVRON-PLUM STREET, OLYMPIA

DATE ANALYZED

MOISTURE

06/01/93



GENERAL CHEMISTRY ANALYSIS DATA SUMMARY

CLIENT : PACIFIC ENVIRONMENTAL GROUP MATRIX : SOIL

PROJECT # : 520-25.24

PROJECT NAME : CHEVRON-PLUM STREET. OLYMPIA UNITS : %

FROUBCI NAME :	CHEVRON-PHOM SIREEI,	OHIMPIA	UNIIS : 6
ATI I.D. #	CLIENT I.D.	MOISTURE	
9305-292-1	T-1	5.3	
9305-292-2	T-3	9.8	
9305-292-3	T-4	8.6	
9305-292-4	T -6	7.7	
9305-292-5	T-7	3.9	
9305-292-6	T-8	6.9	
9305-292-7	T- 9	7.2	
9305-292-8	T-11	5.2	
9305-292-9	SP1-A	4.4	
9305-292-10	SP1-B	4.6	
9305-292-11	SP1-C	5.3	



GENERAL CHEMISTRY ANALYSIS QUALITY CONTROL DATA

CLIENT : PACIFIC ENVIRONMENTAL GROUP MATRIX : SOIL

PROJECT # : 520-25.24

PROJECT NAME : CHEVRON-PLUM STREET, OLYMPIA UNITS : %

PARAMETER	ATI I.D.	SAMPLE RESULT	DUP RESULT	RPD	SPIKED RESULT	SPIKE ADDED	% REC
MOISTURE	9305-292-3	8.6	8.9	3	N/A	N/A	N/A
MOISTURE	9305-292-11	5.3	5.1	4	N/A	N/A	N/A

Analytical Summary Report

Client: Pacific Environmental Group

Project: Chevron-Plum Street, Olympia

A TOTAL TOTAL TO SOTTING	C 907/JETV		Matale SOII		Huller mar/Ka (Day Watcht Basis)	ic)	
3 444 5		•			3	A	n
All Sample #: Client ID:	Method Blank	급-		1-3	T- 4	9.1 1.4	Ĭ-7
Date Sampled:		05/27/93		05/27/93	05/27/93	05/27/93	05/27/93
Date Extracted:		05/29/93		05/29/93	05/29/93	05/29/93	05/29/93
Date Analyzed:		05/30/93		05/30/93	05/29/93	05/29/93	05/30/93
Benzene	<0.025	<0.26	D4	<0.028	<0.027	<0.027	<0.026
Ethylbenzene	<0.025	<0.26	D4	<0.028	<0.027	<0.027	<0.026
Toluene	<0.025	<0.26	D4	<0.028	<0.027	<0.027	0.047
2	<0.025	84	7.2	<0.028	<0.027	<0.027	0.U3U
ne (Toluene to Dodecane) <5	e) <)	1/00	<u> </u>	â	6	0	Ó
Surrogate Recoveries (%)							
Bromofluorobenzene	84	132	FD4	90	88	77	80
	Ţ						
ATI Sample #: Client ID:	8-1-8 1-8	7 7		8 T-11	9 SP1-A	10 SP1-В	SP1-C
Date Sampled:		05/27/93		05/27/93	05/27/93	05/27/93	05/27/93
Date Extracted: Date Analyzed:		05/29/93 05/30/93		05/29/93 05/30/93	05/29/93 05/29/93	05/29/93 05/30/93	05/29/93 05/30/93
Benzene Fthylhenzene	0.039	<0.027		0.039	<0.026 <0.026	<0.026 <0.026	<0.026 <0.026
Toluene	2	0.047		0.047	<0.026	<0.026	<0.026
6.9 Ger ⁻¹ine (Toluene to Dodecane) 180	6.9 D4 e)180	6.5 210		210 D4	<5 <5	<5 <5	<5 <5
Surrogate Recoveries (%)							
Bromofluorobenzene Trifluorotoluene	85 85	89 86		102 85	90 88	83 87	90 85 85 85
Surrogate Limits: (BFB:52-116 TFT:50-150 D4 Value from a ten fold diluted analysis.	6 TFT:50-150) ted analysis.						



Quality Control Summary Report

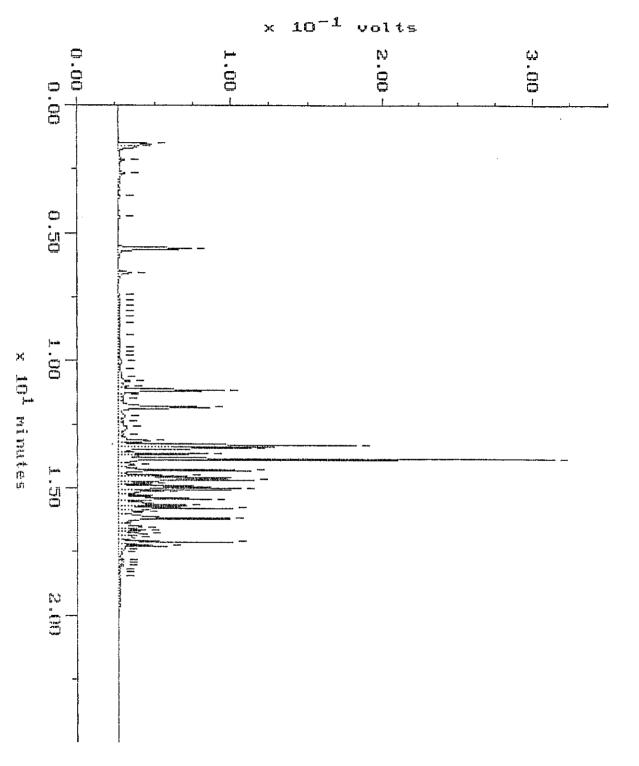
Project: Chevron-Plum Street, Olympia

BROMOFLUOROBENZENE TRIFLUOROTOLUENE	Compound	Quality Control Surrogate Recoveries (%)	BENZENE TOTAL XYLENES GASOLINE	Compound	Extracted: 05/29/93	Analysis: WA DOE WIPH	BROMOFLUOROBENZENE TR''' UOROTOLUENE	Compound	Quality Control Surrogate Recoveries (%)	BENZENE TOLUENE TOTAL XYLENES GASOLINE	Compound	Extracted: 05/29/93	Analysis:WA DOE WTPH-G	TRJOROTOLUENE	Сотроила	Quality Control Surrogate Recoveries (%)	GASOLINE	Compound	Extracted: 05/29/93	Analysis: WA DOE WIPH-G	
93 93	Sample	coveries (%)	<0.0250 <0.0250 <0.0250 <5.00	Sample Result	>	DOE WTPH-G - 8020(BLTX)	88 94	Sample	coveries (%)	<0.0250 <0.0250 <0.0250 <5.00	Sample Result		G - 8020(BETX)	87	Sample	coveries (%)	<5.00	Sample Result	Davi	G - 8020(BETX)	88
86 92	Spike		N/A N/A N/A	Duplicate Result	Analyzed: 05/29/93	TX)	80 67	Spike		N/A N/A N/A 5.00	Duplicate Result	Analyzed: 05/29/93	TX)	86	Sa		<5.00	Duplicate Result	Analyzed: 05/30/93	TX)	
•	ke		NNNN N/A N/A	RPD	9/93	×	_	ike		NNNN NNNN NNNN	RPD	9/93	M		Sample Dup.		N C	RPD	10/93	×	
N/A	Spik		1.00 1.00 2.00 50.0	Spike Added	(A	Matrix: SOIL	80 75	Spik		1.00 1.00 2.00 50.0	Spike Added	40	Matrix: SOIL	N/A	Spil		N/A	Spike Added	42	Matrix: SOIL	
	Spike Dup.		0.931 0.967 1.87 47.0	Spike Result	Sample ID: Blank	Units: m		Spike Dup.		0.864 0.921 1.82 46.5	Spike Result	Sample ID: 9305	Units: m		Spike Dup.		N/A	Spike Result	Sample ID: 9305	Units:	
52-116 50-150	Limits		93 97 94 94	Spike %Rec	몫	mg/Kg	52-116 50-150	Limits		86 92 91 93	Spike %Rec)5-292-3	mg/Kg	50-150	Limits		N/A	Spike %Rec	05-292-5	Units: mg/Kg	
			NNNN NAAA	Spike Dup. Result						0.865 0.909 1.76 48.4	Spike Dup. Result						N/A	Spike Dup. Result			
			NNNN NNNN NNNN NNNNN NNNNN NNNNNN NNNNNN	Spike Dup. %Rec		Blank Sp				87 91 97	Spike Dup. %Rec		Matrix Sp				N/A	Spike Dup. %Rec		Matrix Sp	
			NNNN NNNN NNNN NNNNNNNNNNNNNNNNNNNNNNN	P. RPD		ilke/Blan				0 4 & 4	P. RPD		ke/Matr				N/A	IP. RPD		ike/Matr	
			63-115 75-110 79-109 80-119	Limits %Rec		Blank Spike/Blank Spike Duplicate	-			35-113 43-107 46-114 50-112	Limits %Rec		Matrix Spike/Matrix Spike Duplicate				N/A	Limits %Rec		Matrix Spike/Matrix Spike Duplicate	
			20 20 20 20	Limits RPD		dicate				20 20 20 20	Limits RPD		officate				20	Limits RPD		plicate	

Channel: FID Method: F:\BR02\MAXDATA\GLAD\053093GS

Sample: 9305-292-1 DIL Channel: Fit Acquired: 30-MAY-93 21:53 Method: Fit Dilution: 1 : 10.000 Comments: ATI : A COMMITMENT TO DUALITY

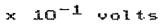
Filename: R5309G20 Operator: ATI

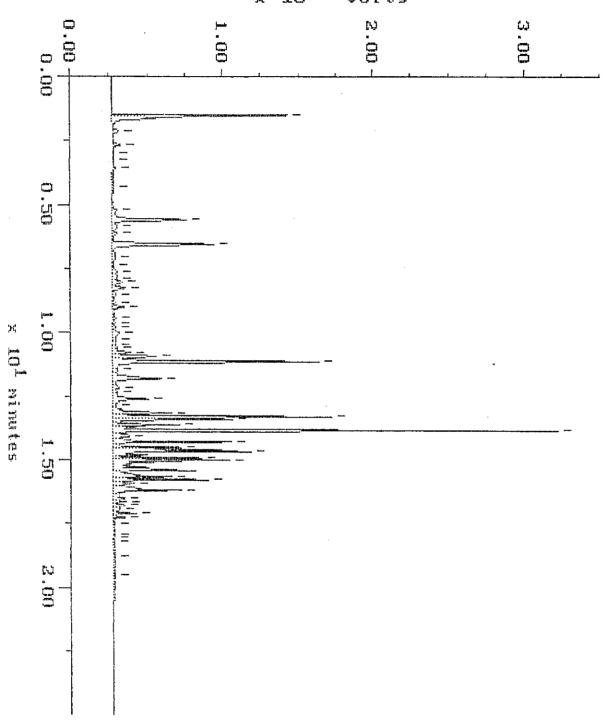


W' DOE WTPH-G

Sample: 9305-292-6 Channel: FID
Acquired: 30-MAY-93 20:27 Method: F:\BRO2\MAXDATA\GLAD\053093GS
Comments: AII: A COMMITMENT TO QUALITY

Filename: R5309G17 Operator: ATI



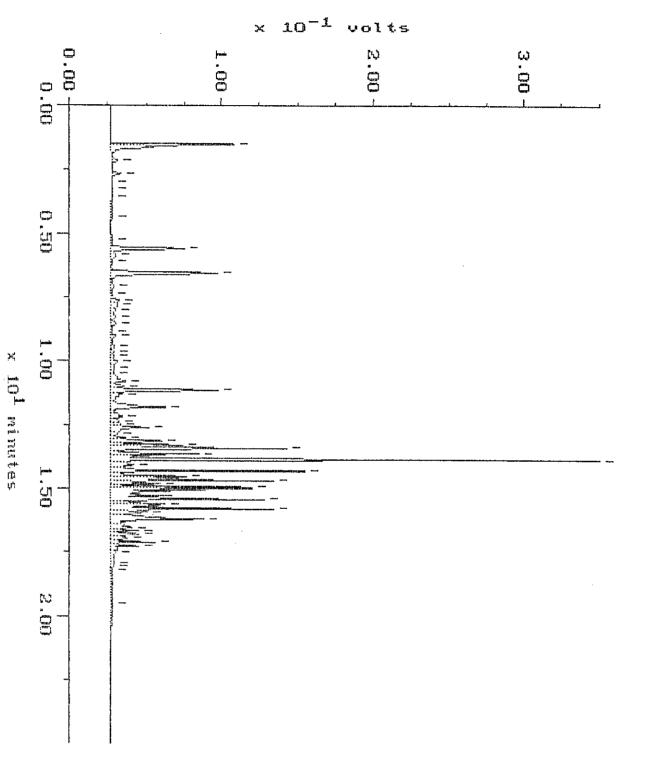


WA DOE WTPH-G

Sample: 9305-292-7 Channel: FID
Acquired: 30-MAY-93 20:55 Method: F:\BRO2\MAXDATA\GLAD\053093GS
Comments: ATI : A COMMITMENT TO QUALITY

Filename: R5309618 Operator: ATI





WA DOE WTPH-G

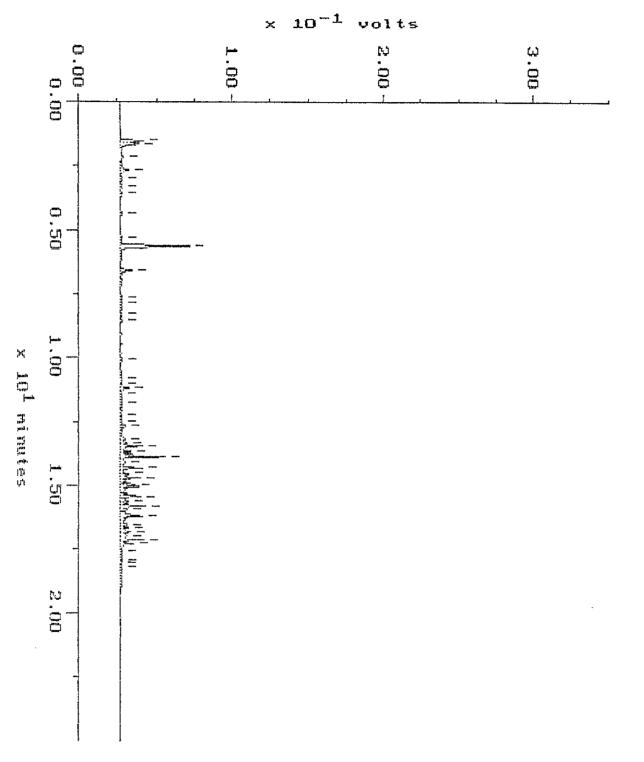
Channel: FID
Method: F:\BRO2\MAXDATA\GLAD\052993GS

Filename: R5299G27 Operator: ATI

Comment of the

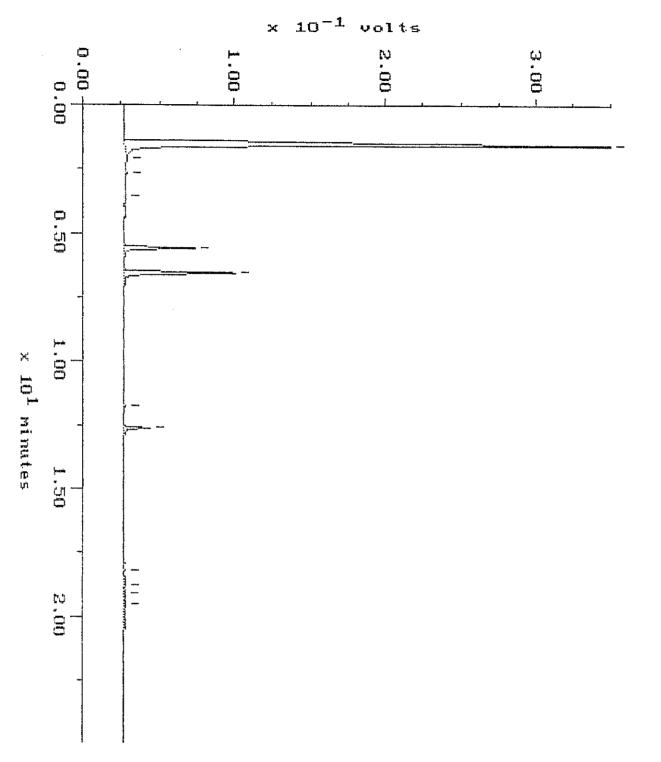
Sample: 9305-292-8 DIL Channel: Find Channel





Sample: SRB-B 5-29 Channel: FID
Acquired: 29-MAY-93 13:28 Method: F:\BRO2\MAXDATA\GLAD\052993GS
Comments: ATI: A COMMITMENT TO QUALITY

Filename: R5299606 Operator: ATI

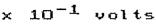


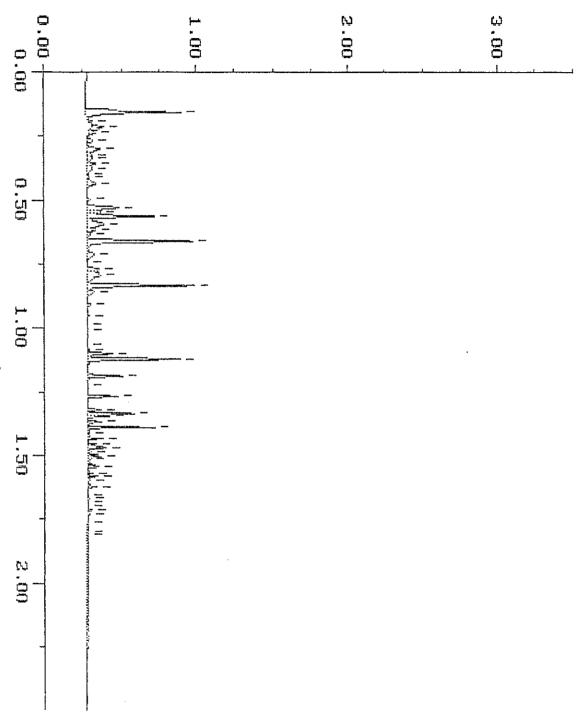
Continuing Calibration

x 101 minutes

Filename: R5299G01 Operator: ATI

Sample: STD C 6 Channel: FID
Acquired: 29-MAY-93 8:51 Method: F:\BRO2\MAXDATA\GLAD\0529936S
Comments: ATI : A COMMITMENT TO QUALITY

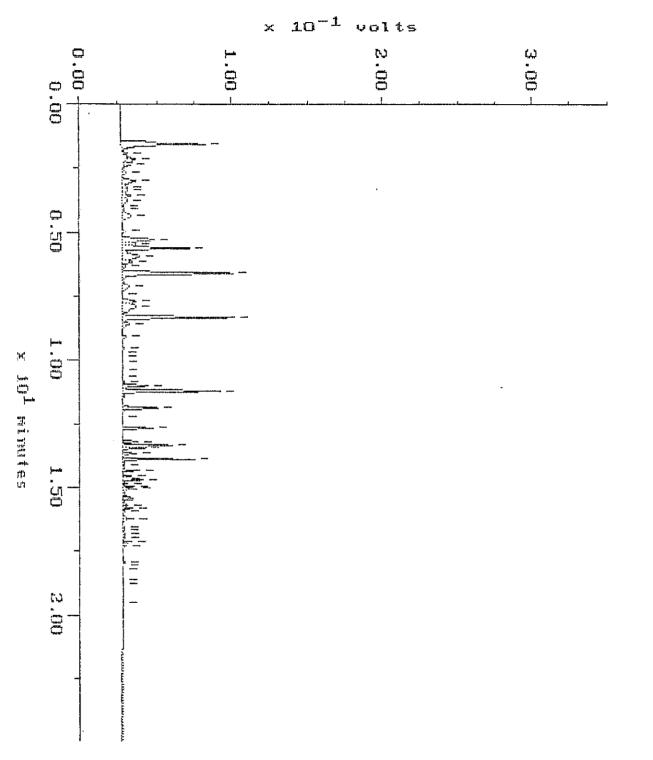




WA DOE WTPH-G

Sample: STD-C 6 Channel: F1D
Acquired: 30-MAY-93 11:44 Method: F:\BRO2\MAXDATA\GLAD\053093GS
Comments: ATI : A COMMITMENT TO QUALITY

Filename: R5309G01 Operator: ATI



Mary a Mary						,.								· · · · · · · · · · · · · · · · · · ·	<u></u>
	Condition of sample:	ΣPI-C	CPI-A	그	7	7-8	7-7	J-6	7-4	T-3	7-1 0	Sample I.D.	CLIENT engineer:	Facility no. Chevron	PROJECT No. 520
Sampler	nple:	= 10	٩	∞	7	6	Ŋ	4	ω	N	9305-292-	∟ab No.	でなった	#	10. 520
3 5												Container no.	l .	953	7- (
											Stain of	Container type/size	Kringlen	_	42.59
Date Date Date											NONE	Sample Preservation	PACIF	Facility	
(2) 1/23 (2)											5	Matrix S = Soil A = Air W = Water C = Charcoai	John Johnson	Facility Addréss:	
1 im 1 im 1 im											6	TYPE G = Grab C = Comp. D = Discrete	Contact:	1018	_
	Tempo										5-17-93	Sampling date		Plun	Chain of Custody
Received by Received by Received by laboratory	Temperature received				-							Sampling time		- 1	Sustody
iony 6	ed										\times	TPH-Gasoline/BTEX (WTPH-G/8015/8020)	Sampler:	Olyn	
) 7	1 (TPH Diesel (WTPH-D/Mod. EPA 8015)		pig	
Date Date	2005											TPH-418.1 (EPA 418.1)	er Bi		(A)
28/98 mg	729											Polychlorinated Biphenyls (EPA 8080)	Brewe		0.5.3
3 2 2 2	7											Hydrocarbon identification (TPH-HCID)	\		PACIFIC ENVIRONIMENTAL GIRCULP, INC
Time Y', 7 Time 10:08												Volatile Organics (EPA 624/8240)	Laboratory name	Billing rel	IAI.
7												Polynuclear Aromatics (PAHs-EPA 8100/610)	1\	Billing reference number 9462770	4020 148th Aver Redmond, WA (206) 869-5099
Rush 2 Business Expedited 5 Business Standard Re Busines 10 for 12 As Contrac	Priorly Rush 1 Business Da											Metals Dissolved Dissolved	47	mber 770	. ແລ⊃ ເ
Rush 2 Business Days 5 Business Days Standard Business Days 6 Business Days As Contracted	Priorly Rush 1 Business Day									,	X	Total Lead (EPA 7420/7421)	1	pes	ue N.E., Suite B 18052 FAX (206) 869 5639
S S S S S S S S S S S S S S S S S S S		X	\times		•							24 hr turnarand	:	J.J. 5/28/5	Hte B 869-5639
X												4		93	