GROUNDWATER MONITORING REPORT
MARCH 1994 SAMPLING EVENT

BP SERVICE STATION No. 11060

4580 Fauntleroy Way SW
Seattle, Washington

Prepared for

BP Oil Company

11-09410-06

April, 1993

RZA AGRA, Inc.
Engineering & Environmental Services

AGRA
Earth & Environmental Group

RZA AGRA, Inc.
(formerly Rittenhouse Zeman & Associates, Inc.)
Engineering & Environmental Services

11335 NE 122nd Way
Suite 100
Kirkland, WA 98034-6918
(206) 820-4669
FAX (206) 821-3914

20 April 1994

11-09410-06

BP Oil Company
Northwest Division
295 Southwest 41st Street
Building 13, Suite N
Renton, Washington 98055

DEPARTMENT OF ECOLOGY
NWRO/TCP TANK UNIT
5R 7/29/94 CM
U186

INTERIM CLEANUP REPORT	☒
SITE CHARACTERIZATION	☐
FINAL CLEANUP REPORT	☐
OTHER	☐
AFFECTED MEDIA: SOIL	☒
OTHER GW	☒

INSPECTOR (INIT.) GBF DATE 7-14-94

Attention: Mr. Peter J. DeSantis

Subject: Groundwater Monitoring Report
March 1994
BP Service Station No. 11060
4580 Fauntleroy Way SW
Seattle, Washington
Contract Number G239007

Mr. DeSantis:

RZA AGRA, Inc. (RZA AGRA) is pleased to present this letter report presenting the results of groundwater monitoring and sampling conducted at the subject site on 4 March 1994 (Figure 1). Groundwater samples were collected from monitoring wells MW-1, MW-2, MW-3, and MW-5 during this sampling event.

Measurements of groundwater temperature, conductivity, and pH were collected to verify that groundwater representative of the formation was being sampled. The readings and the amount of groundwater purged are recorded for each well on the attached Groundwater Monitoring and Sampling Form(s). Fluid level measurements collected at the subject site to date are summarized in Table 1. Figure 2 presents an isopleth map based on the fluid level data collected during this monitoring event. A groundwater remediation system has not been installed at the subject site. Groundwater samples collected during this sampling event were submitted to Analytical Technologies Inc. (ATI), of Renton, Washington for analysis.

The results of analyses performed on groundwater samples collected during this sampling event are summarized along with historical results in Table 2. Analytical results for this sampling event are also presented graphically on Figure 2. A copy of the ATI report and chain-of-custody documentation are attached.

We appreciate this opportunity to be of service to BP Oil Company. Please contact us if you have questions regarding this report or other aspects of this project.

Respectfully submitted,
RZA AGRA, Inc.

Robert P. Czaja
Project Environmental Geologist

K.V. Lew, P. Eng.
Senior Technical Engineer

RPC/SRTS/lad

Enclosures: Table 1 - Summary of Fluid Level Measurements
Table 2 - Summary of Analytical Results: Groundwater
Figure 1 - Site Vicinity Map
Figure 2 - Groundwater Surface Elevation Contour Map
RZA AGRA Groundwater Monitoring and Sampling Field Form(s)
ATI Report Number 9403-045 and Chain-of-Custody Document
Appendix A: Field Procedures

Table 1: Summary of Fluid Level Measurements
BP Service Station No. 11060
4580 Fauntleroy Way SW
Seattle, Washington
RZA AGRA, Inc. Project No. 11-09410-06

Well Number/ Top of Casing Elevation (ft)	Date Collected	Product Thickness (ft)	Depth to Water (ft)	Groundwater Elevation (ft)*
MW-1/ 99.89	11-May-93	0	23.02	76.87
	04-Mar-94	0	24.32	75.57
MW-2/ 99.05	11-May-93	0	22.98	76.07
	04-Mar-94	0	24.30	74.75
MW-3/ 98.53	07-Jun-93	0	22.28	76.25
	04-Mar-94	0	23.62	74.91
MW-4/ 100.26	11-May-93	0	23.03	77.23
	04-Mar-94	4.00	26.83	76.63
MW-5/ 100.88	11-May-93	0	22.97	77.91
	04-Mar-94	0	24.35	76.53

Notes:

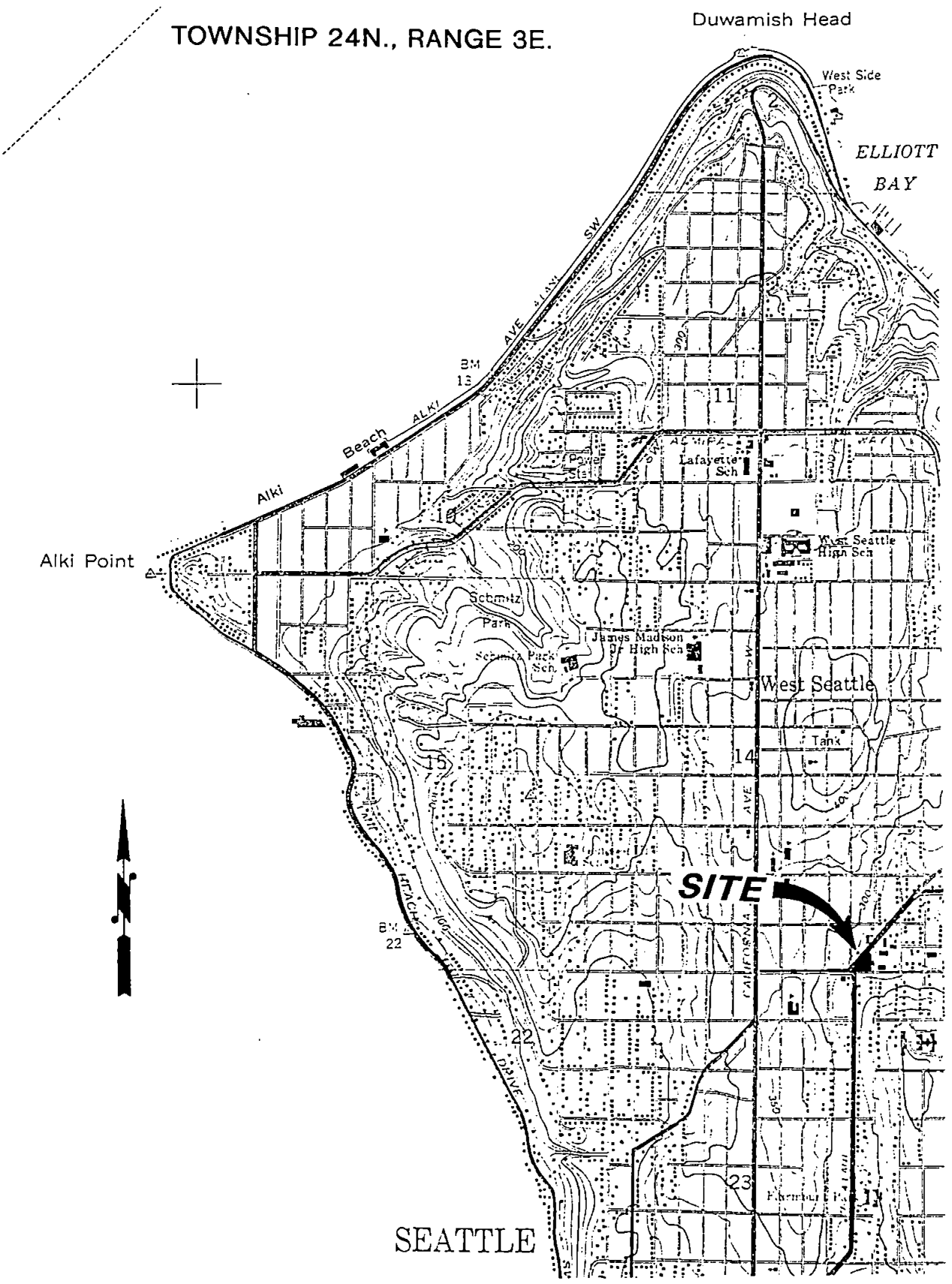
Groundwater elevation established relative to an arbitrary datum of 100.00 feet.
* = Groundwater elevation is corrected for the effects of LPH using the following formula: TOC - [DTW - (PT)(0.80)] were TOC=Top of Casing, DTW=Depth to Water, PT=Product Thickness, and 0.80=Typical Specfic Gravity for Gasoline.
** = Groundwater elevation was not measured on this date.

Table 2: Summary of Analytical Results: Groundwater
BP Service Station No. 11060
4580 Fauntleroy Way SW
Seattle, Washington
RZA AGRA, Inc. Project No. 11-09410-06

Well Number	Date Collected	WTPH-G (ppb)	WTPH-D (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl Benzene (ppb)	Total Xylenes (ppb)	Total Lead (ppb)	Dissolved Lead (ppb)	Turbidity (NTU)
MW-1	13-May-93	3,300	NT	82	11	7.8	14	NT	NT	NT
	04-Mar-94	830	580	5.6	2.8	2.7	11	38	<3	550
MW-2	13-May-93	17,000	NT	2,500	48	100	240	NT	NT	NT
	04-Mar-94	4,300	1,300	1,500	20	130	180	4.9	<3	250
MW-3	07-Jun-93	2,200	NT	140	7.4	13	14	NT	NT	NT
	04-Mar-94	1,200	590	99	2.4	11	10	4.3	<3	80
MW-4	13-May-93	31,000	NT	8,700	4,000	57	3,200	NT	NT	NT
	04-Mar-94	4.0 feet of Liquid Petroleum Hydrocarbons present. Well was not sampled on this date.								
MW-5	13-May-93	1,800	NT	130	25	23	22	NT	NT	NT
	04-Mar-94	710	420	26	5.6	11	7.6	27	<3	180

Notes:

WTPH-G = total petroleum hydrocarbons - gasoline, by Ecology Method WTPH-G.
WTPH-D = total petroleum hydrocarbons - diesel, by Ecology Method WTPH-D.
Benzene, Toluene, Ethyl Benzene and Total Xylenes (BTEX) were analyzed by EPA Method 8020.
Total and dissolved lead by EPA Method 7421.
NT = Not tested.
All concentrations are expressed in parts per billion (ppb).
Concentrations preceded by a "<" are laboratory method detection limits. The method detection limit may vary depending on the laboratory used and sample characteristics.

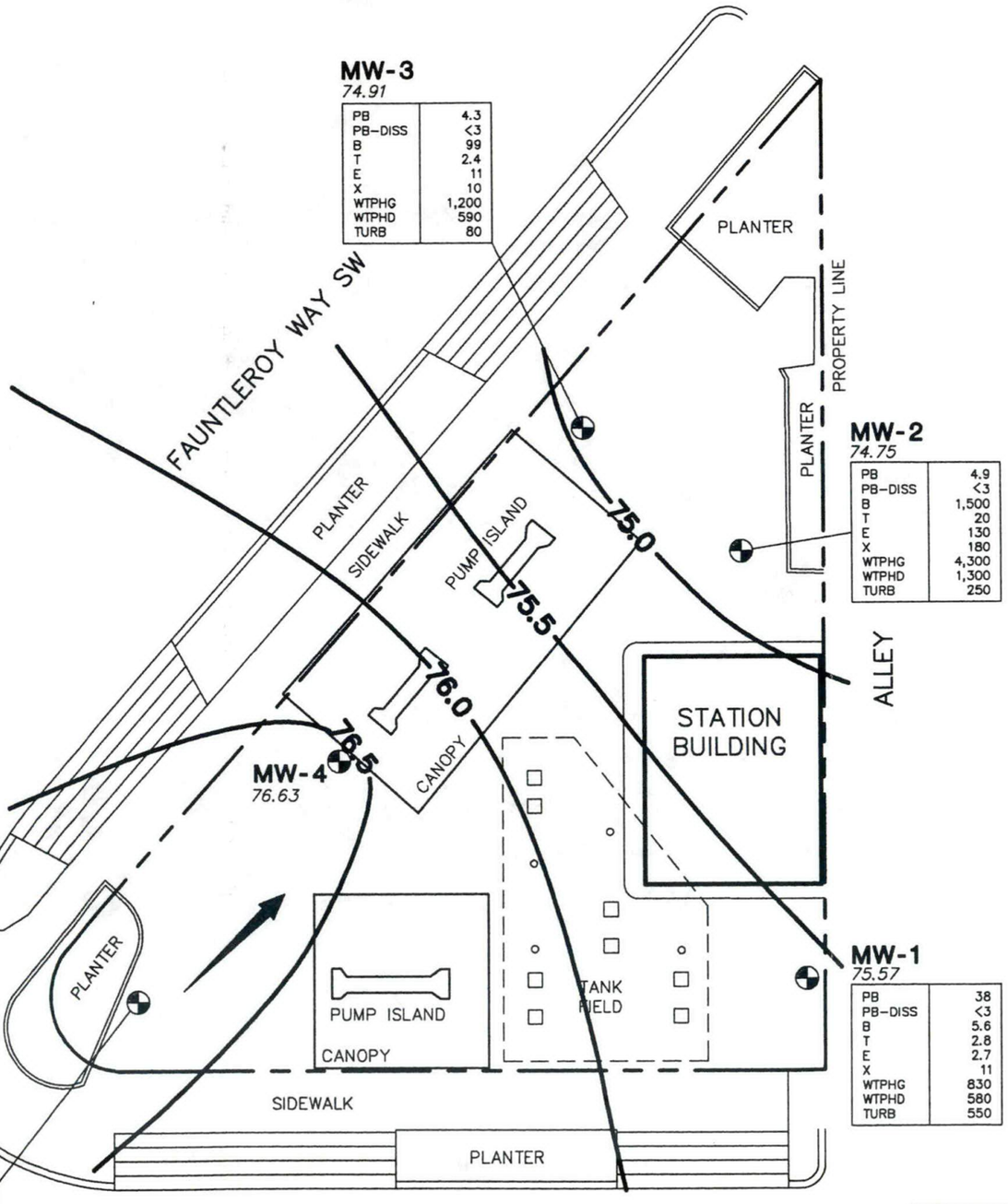


RZA-AGRA	W.O. W-8783-1
ENGINEERING & ENVIRONMENTAL SERVICES	DESIGN JC
11335 N.E. 122nd Way	DRAWN MJF
Suite 100	DATE MAY 1993
Kirkland, Washington	SCALE N.T.S.
98034-6918	

BP SERVICE STATION No. 11060
SEATTLE, WASHINGTON

LOCATION MAP

FIGURE 1



LEGEND

MW-5 — MONITORING WELL NUMBER AND LOCATION (INSTALLED 6 & 7 MAY 1993)

– 76.5 – — INFERRED GROUNDWATER SURFACE ELEVATION CONTOUR IN FEET

76.53 — SPOT GROUNDWATER SURFACE ELEVATION IN FEET

← — INFERRED DIRECTION OF GROUNDWATER MIGRATION

GROUND WATER TEST RESULTS
4 MARCH 1994

CONCENTRATIONS IN PARTS PER BILLION (PPB)

ND	NOT DETECTED, BELOW METHOD DETECTION LIMIT
PB	TOTAL LEAD BY EPA METHOD 7421
PB–DISS	DISSOLVED LEAD BY EPA METHOD 7421
B	BENZENE BY EPA METHOD 8020
T	TOLUENE BY EPA METHOD 8020
E	ETHYLBENZENE BY EPA METHOD 8020
X	XYLENES BY EPA METHOD 8020
WTPHG	WASHINGTON TOTAL PETROLEUM HYDROCARBONS FOR GASOLINE (EPA METHOD 8015)
WTPHD	WASHINGTON TOTAL PETROLEUM HYDROCARBONS FOR DIESEL (EPA METHOD 8015)
TURB	TURBIDITY IN NTU's

COMPOUNDS	CONCENTRATIONS IN PPB
PB	ND
PB–DISS	ND
B	ND
T	ND
E	ND
X	ND
WTPHG	ND
WTPHD	ND
TURB	N/A

N

0 20 40

SCALE IN FEET

RZA AGRA, INC.
Engineering & Environmental Services
11335 N.E. 122nd Way
Suite 100
Kirkland, Washington 98034-6918

W.O.	11-09410-06
DESIGN	RPC
DRAWN	BDT
DATE	APR 1994
SCALE	1"=20'

BP SERVICE STATION No. 11060
SEATTLE, WASHINGTON

GROUNDWATER SURFACE ELEVATION CONTOUR MAP FOR 4 MARCH 1994

FIGURE 2

DRAWING NO. \9A\09410-06\GW-03-94.DWG

11335 NE 122nd Way
Suite 100
Kirkland, WA 98034-6918
(206) 820-4669
FAX (206) 821-3914

RZA AGRA, Inc.
Engineering & Environmental Services

GROUNDWATER MONITORING AND SAMPLING

PROJECT NAME: BP Service Station No. 1060 FIELD REPORT No.: JK1 PAGE 1 OF 1

SAMPLER: Jeff Kaspar/Scott Overdick DATE SAMPLED: 4 March 1994 PROJECT No.: 11-9410-06

METHOD OF COLLECTION: Single Check Valve Disposable Plastic Bailers WEATHER: Sunny, 50's

PURGE WATER DISPOSITION: RZA AGRA, INC. TREATMENT ☑ DRUMMED ON-SITE ☐ OTHER (SPECIFY) _____ DRUM COUNT _____

PRODUCT DISPOSITION: DRUMMED ON-SITE ☐ DRUM COUNT _____ OTHER (SPECIFY) _____

1 WELL VOLUME = (COLUMN HEIGHT)(WELL VOLUME CONSTANT)

WELL VOLUME CONSTANTS: 1"ID...0.041 gal/ft · 1.5"ID...0.092 gal/ft 2"ID...0.163 gal/ft 4"ID...0.653 gal/ft 6"ID...1.469 gal/ft

SAMPLE / WELL DIAMETER	LAB I.D.	DEPTH TO PRODUCT (ft)	DEPTH TO WATER (ft)	PRODUCT THICKNESS (ft)	DEPTH TO BOTTOM (ft)	COLUMN HEIGHT (ft) / 1 WELL VOLUME	VOLUME PURGED / BAILED DRY (Y/N)	TIME SAMPLED	CONDUCTIVITY (uMHOS)	DISSOLVED O_2 % / (mg/L)	TEMP. (C)	pH
MW-1 / 4"	CFE-06	none detected	24.32	—	26.10	1.78 / 1.16	3 / Y	12:00	975	43 / 4.6	15.2	6.22
MW-1						/	/		978	41 / 4.4	15.3	6.27
MW-1						/	/		976	40 / 4.4	15.3	6.25
MW-2 / 4"	CFD-06	none detected	24.30	—	27.60	3.50 / 2.29	6 / X	12:30	865	56 / 5.8	15.0	6.87
MW-2						/	/		862	54 / 5.6	15.0	6.85
MW-2						/	/		865	53 / 5.6	15.1	6.84
MW-3 / 4"	CFC-06	none detected	23.62	—	33.50	9.88 / 6.5	15 / Y	12:15	815	67 / 7.9	14.7	7.07
MW-3						/	/		812	65 / 7.6	14.7	7.10
MW-3						/	/		811	64 / 7.6	14.8	7.11

TOTAL PURGED (Project): 28 gallons

KWF 0403 (REV. 2/94)

1 WELL VOLUME = (COLUMN HEIGHT)(WELL VOLUME CONSTANT)

WELL VOLUME CONSTANTS: 1"ID...0.041 gal/ft 1.5"ID...0.092 gal/ft 2"ID...0.163 gal/ft 4"ID...0.653 gal/ft 6"ID...1.469 gal/ft

SAMPLE # / WELL DIAMETER	LAB I.D.	DEPTH TO PRODUCT (ft)	DEPTH TO WATER (ft)	PRODUCT THICKNESS (ft)	DEPTH TO BOTTOM (ft)	COLUMN HEIGHT (ft) / 1 WELL VOLUME	VOLUME PURGED / BAILED DRY (Y/N)	TIME SAMPLED	CONDUCTIVITY (uMHOS)	DISSOLVED O_2 % / (mg/L)	TEMP. (C)	pH
MW-1 4"	CFB-06	22.83	22.83	4.00	27.15	0.28 / 0.18	X					
MW-4												
MW-2												
MW-5 4"	CFA-06		24.35		27.15	2.80 / 1.83	4 / DRY	11:45	1142	29 / 3.4	15.6	6.73
MW-5									1145	27 / 3.2	15.1	6.69
MW-3									1143	27 / 3.3	15.1	6.72
						TOTAL PURGED	4 gallons					

REMARKS: MW-1 - Brown, turbid, petroleum odor/no sheen
MW-2 - Brown, turbid, petroleum odor/no sheen
MW-3 - Brown, turbid, petroleum odor/ no sheen
MW-4 - Product found upon bailing, purged bulk into well. Measured fluid levels prior to departing the site
MW-5, Brown, turbid, petroleum odor/ no sheen

Analytical Technologies, Inc.
560 Naches Avenue, S.W., Suite 101, Renton, WA 98055 (206) 228-8335
Karen L. Mixon, Laboratory Manager

ATI I.D. # 9403-045

March 16, 1994

RZA AGRA, Inc.
11335 N.E. 122nd Way
Suite 100
Kirkland WA 98034-6918

Attention : Bob Czaja

Project Number : BP #11060

Project Name : BP #11060/Fauntleroy 11-09410-06

Dear Mr. Czaja:

On March 4, 1994, Analytical Technologies, Inc. (ATI), received five 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.

Sincerely,

Diana Spence

Diana Spence
Project Manager

DS/hal/mrj

Enclosure

Analytical Technologies, Inc.

ATI I.D. # 9403-045

SAMPLE CROSS REFERENCE SHEET

CLIENT : RZA AGRA, INC.
PROJECT # : BP #11060
PROJECT NAME : BP #11060/FAUNTLEROY 11-09410-06

ATI #	CLIENT DESCRIPTION	DATE SAMPLED	MATRIX
9403-045-1	CFA-06	03/04/94	WATER
9403-045-2	CFC-06	03/04/94	WATER
9403-045-3	CFD-06	03/04/94	WATER
9403-045-4	CFE-06	03/04/94	WATER
9403-045-5	TRIP BLANK	N/A	WATER

----- TOTALS -----

MATRIX	# SAMPLES
WATER	5

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 Technologies, Inc.

ATI I.D. # 9403-045

ANALYTICAL SCHEDULE

CLIENT : RZA AGRA, INC.
PROJECT # : BP #11060
PROJECT NAME : BP #11060/FAUNTLEROY 11-09410-06

ANALYSIS	TECHNIQUE	REFERENCE	LAB
BETX	GC/PID	EPA 8020	R
TOTAL PETROLEUM HYDROCARBONS	GC/FID	WA DOE WTPH-G	R
TOTAL PETROLEUM HYDROCARBONS	GC/FID	WA DOE WTPH-D	R
LEAD	AA/GF	EPA 7421	R
TURBIDITY	NEPHELOMETRIC	EPA 180.1	R

R = ATI - Renton
SD = ATI - San Diego
PHX = ATI - Phoenix
PNR = ATI - Pensacola
FC = ATI - Fort Collins
SUB = Subcontract

Analytical Technologies, Inc.

ATI I.D. # 9403-045

BETX - GASOLINE
DATA SUMMARY

CLIENT	: RZA AGRA, INC.	DATE SAMPLED	: N/A
PROJECT #	: BP #11060	DATE RECEIVED	: N/A
PROJECT NAME	: BP #11060/FAUNTLEROY 11-09410-06	DATE EXTRACTED	: N/A
CLIENT I.D.	: METHOD BLANK	DATE ANALYZED	: 03/07/94
SAMPLE MATRIX	: WATER	UNITS	: ug/L
METHOD	: WA DOE WTPH-G/8020(BETX)	DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
BENZENE	<0.5
ETHYLBENZENE	<0.5
TOLUENE	<0.5
TOTAL XYLENES	<0.5
FUEL HYDROCARBONS	<100
HYDROCARBON RANGE	TOLUENE TO DODECANE
HYDROCARBON QUANTITATION USING	GASOLINE

SURROGATE PERCENT RECOVERY		LIMITS
BROMOFLUOROBENZENE	105	76 - 120
TRIFLUOROTOLUENE	102	50 - 150

Analytical Technologies, Inc.

ATI I.D. # 9403-045

BETX - GASOLINE
DATA SUMMARY

CLIENT	: RZA AGRA, INC.	DATE SAMPLED	: N/A
PROJECT #	: BP #11060	DATE RECEIVED	: N/A
PROJECT NAME	: BP #11060/FAUNTLEROY 11-09410-06	DATE EXTRACTED	: N/A
CLIENT I.D.	: METHOD BLANK	DATE ANALYZED	: 03/08/94
SAMPLE MATRIX	: WATER	UNITS	: ug/L
METHOD	: WA DOE WTPH-G/8020(BETX)	DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
BENZENE	<0.5
ETHYLBENZENE	<0.5
TOLUENE	<0.5
TOTAL XYLENES	<0.5
FUEL HYDROCARBONS	<100
HYDROCARBON RANGE	TOLUENE TO DODECANE
HYDROCARBON QUANTITATION USING	GASOLINE

SURROGATE PERCENT RECOVERY		LIMITS
BROMOFLUOROBENZENE	108	76 - 120
TRIFLUOROTOLUENE	101	50 - 150

Analytical Technologies, Inc.

ATI I.D. # 9403-045-1

BETX - GASOLINE
DATA SUMMARY

CLIENT	: RZA AGRA, INC.	DATE SAMPLED	: 03/04/94
PROJECT #	: BP #11060	DATE RECEIVED	: 03/04/94
PROJECT NAME	: BP #11060/FAUNTLEROY 11-09410-06	DATE EXTRACTED	: N/A
CLIENT I.D.	: CFA-06	DATE ANALYZED	: 03/08/94
SAMPLE MATRIX	: WATER	UNITS	: ug/L
METHOD	: WA DOE WTPH-G/8020(BETX)	DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
BENZENE	26
ETHYLBENZENE	11
TOLUENE	5.6
TOTAL XYLENES	7.6
FUEL HYDROCARBONS	710
HYDROCARBON RANGE	TOLUENE TO DODECANE
HYDROCARBON QUANTITATION USING	GASOLINE

SURROGATE PERCENT RECOVERY		LIMITS
BROMOFLUOROBENZENE	106	76 - 120
TRIFLUOROTOLUENE	104	50 - 150

Analytical Technologies, Inc.

ATI I.D. # 9403-045-2

BETX - GASOLINE
DATA SUMMARY

CLIENT	: RZA AGRA, INC.	DATE SAMPLED	: 03/04/94
PROJECT #	: BP #11060	DATE RECEIVED	: 03/04/94
PROJECT NAME	: BP #11060/FAUNTLEROY 11-09410-06	DATE EXTRACTED	: N/A
CLIENT I.D.	: CFC-06	DATE ANALYZED	: 03/08/94
SAMPLE MATRIX	: WATER	UNITS	: ug/L
METHOD	: WA DOE WTPH-G/8020(BETX)	DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
BENZENE	99
ETHYLBENZENE	11
TOLUENE	2.4
TOTAL XYLENES	10
FUEL HYDROCARBONS	1200
HYDROCARBON RANGE	TOLUENE TO DODECANE
HYDROCARBON QUANTITATION USING	GASOLINE

SURROGATE PERCENT RECOVERY		LIMITS
BROMOFLUOROBENZENE	105	76 - 120
TRIFLUOROTOLUENE	106	50 - 150

Analytical Technologies, Inc.

ATI I.D. # 9403-045-3

BETX - GASOLINE
DATA SUMMARY

CLIENT	: RZA AGRA, INC.	DATE SAMPLED	: 03/04/94
PROJECT #	: BP #11060	DATE RECEIVED	: 03/04/94
PROJECT NAME	: BP #11060/FAUNTLEROY 11-09410-06	DATE EXTRACTED	: N/A
CLIENT I.D.	: CFD-06	DATE ANALYZED	: 03/08/94
SAMPLE MATRIX	: WATER	UNITS	: ug/L
METHOD	: WA DOE WTPH-G/8020(BETX)	DILUTION FACTOR	: 20

COMPOUNDS	RESULTS
BENZENE	1500
ETHYLBENZENE	130
TOLUENE	20
TOTAL XYLENES	180
FUEL HYDROCARBONS	4300
HYDROCARBON RANGE	TOLUENE TO DODECANE
HYDROCARBON QUANTITATION USING	GASOLINE

SURROGATE PERCENT RECOVERY		LIMITS
BROMOFLUOROBENZENE	104	76 - 120
TRIFLUOROTOLUENE	102	50 - 150

AnalyticalTechnologies, Inc.

ATI I.D. # 9403-045-4

BETX - GASOLINE
DATA SUMMARY

CLIENT	: RZA AGRA, INC.	DATE SAMPLED	: 03/04/94
PROJECT #	: BP #11060	DATE RECEIVED	: 03/04/94
PROJECT NAME	: BP #11060/FAUNTLEROY 11-09410-06	DATE EXTRACTED	: N/A
CLIENT I.D.	: CFE-06	DATE ANALYZED	: 03/08/94
SAMPLE MATRIX	: WATER	UNITS	: ug/L
METHOD	: WA DOE WTPH-G/8020(BETX)	DILUTION FACTOR	: 5

COMPOUNDS	RESULTS
BENZENE	5.6
ETHYLBENZENE	2.7
TOLUENE	2.8
TOTAL XYLENES	11
FUEL HYDROCARBONS	830
HYDROCARBON RANGE	TOLUENE TO DODECANE
HYDROCARBON QUANTITATION USING	GASOLINE

SURROGATE PERCENT RECOVERY		LIMITS
BROMOFLUOROBENZENE	105	76 - 120
TRIFLUOROTOLUENE	101	50 - 150

Analytical Technologies, Inc.

ATI I.D. # 9403-045-5

BETX - GASOLINE
DATA SUMMARY

CLIENT	: RZA AGRA, INC.	DATE SAMPLED	: N/A
PROJECT #	: BP #11060	DATE RECEIVED	: 03/04/94
PROJECT NAME	: BP #11060/FAUNTLEROY 11-09410-06	DATE EXTRACTED	: N/A
CLIENT I.D.	: TRIP BLANK	DATE ANALYZED	: 03/08/94
SAMPLE MATRIX	: WATER	UNITS	: ug/L
METHOD	: WA DOE WTPH-G/8020(BETX)	DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
BENZENE	<0.5
ETHYLBENZENE	<0.5
TOLUENE	<0.5
TOTAL XYLENES	<0.5
FUEL HYDROCARBONS	<100
HYDROCARBON RANGE	TOLUENE TO DODECANE
HYDROCARBON QUANTITATION USING	GASOLINE

SURROGATE PERCENT RECOVERY		LIMITS
BROMOFLUOROBENZENE	103	76 - 120
TRIFLUOROTOLUENE	101	50 - 150

Analytical Technologies, Inc.

ATI I.D. # 9403-045

BETX - GASOLINE
QUALITY CONTROL DATA

CLIENT	: RZA AGRA, INC.	SAMPLE I.D. #	: BLANK
PROJECT #	: BP #11060	DATE EXTRACTED	: N/A
PROJECT NAME	: BP #11060/FAUNTLEROY 11-09410-06	DATE ANALYZED	: 03/07/94
SAMPLE MATRIX	: WATER	UNITS	: ug/L
METHOD	: WA DOE WTPH-G/8020(BETX)		

COMPOUNDS	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
BENZENE	<0.500	20.0	19.5	98	N/A	N/A	N/A
TOLUENE	<0.500	20.0	19.6	98	N/A	N/A	N/A
TOTAL XYLENES	<0.500	40.0	39.2	98	N/A	N/A	N/A
GASOLINE	<100	1000	866	87	N/A	N/A	N/A

CONTROL LIMITS	% REC.	RPD
BENZENE	89 - 110	10
TOLUENE	89 - 113	10
TOTAL XYLENES	89 - 111	10
GASOLINE	78 - 116	20

SURROGATE RECOVERIES	SPIKE	DUP. SPIKE	LIMITS
BROMOFLUOROBENZENE	106	N/A	76 - 120
TRIFLUOROTOLUENE	99	N/A	50 - 150

Analytical Technologies, Inc.

ATI I.D. # 9403-045

BETX - GASOLINE
QUALITY CONTROL DATA

CLIENT	: RZA AGRA, INC.	SAMPLE I.D. #	: BLANK
PROJECT #	: BP #11060	DATE EXTRACTED	: N/A
PROJECT NAME	: BP #11060/FAUNTLEROY 11-09410-06	DATE ANALYZED	: 03/08/94
SAMPLE MATRIX	: WATER	UNITS	: ug/L
METHOD	: WA DOE WTPH-G/8020(BETX)		

COMPOUNDS	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
BENZENE	<0.500	20.0	19.3	97	N/A	N/A	N/A
TOLUENE	<0.500	20.0	19.7	99	N/A	N/A	N/A
TOTAL XYLENES	<0.500	40.0	39.0	98	N/A	N/A	N/A
GASOLINE	<100	1000	934	93	N/A	N/A	N/A

CONTROL LIMITS	% REC.	RPD
BENZENE	89 - 110	10
TOLUENE	89 - 113	10
TOTAL XYLENES	89 - 111	10
GASOLINE	78 - 116	20

SURROGATE RECOVERIES	SPIKE	DUP. SPIKE	LIMITS
BROMOFLUOROBENZENE	107	N/A	76 - 120
TRIFLUOROTOLUENE	103	N/A	50 - 150

Analytical Technologies, Inc.

ATI I.D. # 9403-045

BETX - GASOLINE
QUALITY CONTROL DATA

CLIENT	: RZA AGRA, INC.	SAMPLE I.D. #	: 9403-077-1
PROJECT #	: BP #11060	DATE EXTRACTED	: N/A
PROJECT NAME	: BP #11060/FAUNTLEROY 11-09410-06	DATE ANALYZED	: 03/08/94
SAMPLE MATRIX	: WATER	UNITS	: ug/L
METHOD	: WA DOE WTPH-G/8020(BETX)		

COMPOUNDS	SAMPLE RESULT	SAMPLE DUP. RESULT	RPD	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
GASOLINE	<100	<100	NC	N/A	N/A	N/A	N/A	N/A	N/A

CONTROL LIMITS	% REC.	RPD
GASOLINE	N/A	20

SURROGATE RECOVERIES	SAMPLE	SAMPLE DUP.	LIMITS
TRIFLUOROTOLUENE	101	101	50 - 150

Analytical Technologies, Inc.

ATI I.D. # 9403-045

BETX - GASOLINE
QUALITY CONTROL DATA

CLIENT : RZA AGRA, INC.
PROJECT # : BP #11060
PROJECT NAME : BP #11060/FAUNTLEROY 11-09410-06
SAMPLE MATRIX : WATER
METHOD : WA DOE WTPH-G/8020(BETX)

SAMPLE I.D. # : 9403-068-4
DATE EXTRACTED : N/A
DATE ANALYZED : 03/08/94
UNITS : ug/L

COMPOUNDS	SAMPLE RESULT	SAMPLE DUP. RESULT	RPD	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
BENZENE	<0.500	N/A	N/A	20.0	20.0	100	19.9	100	1
TOLUENE	<0.500	N/A	N/A	20.0	19.7	99	19.8	99	1
TOTAL XYLENES	<0.500	N/A	N/A	40.0	38.8	97	38.8	97	0
GASOLINE	<100	<100	NC	1000	947	95	950	95	0

CONTROL LIMITS	% REC.	RPD
BENZENE	86 - 113	10
TOLUENE	87 - 114	10
TOTAL XYLENES	85 - 113	10
GASOLINE	80 - 113	20

SURROGATE RECOVERIES	SPIKE	DUP. SPIKE	LIMITS
BROMOFLUOROBENZENE	104	102	76 - 120
TRIFLUOROTOLUENE	102	103	50 - 150

NC = Not Calculable.

Analytical**Technologies,**Inc.

ATI I.D. # 9403-045

TOTAL PETROLEUM HYDROCARBONS
DATA SUMMARY

CLIENT	: RZA AGRA, INC.	DATE SAMPLED	: N/A
PROJECT #	: BP #11060	DATE RECEIVED	: N/A
PROJECT NAME	: BP #11060/FAUNTLEROY 11-09410-06	DATE EXTRACTED	: 03/04/94
CLIENT I.D.	: METHOD BLANK	DATE ANALYZED	: 03/04/94
SAMPLE MATRIX	: WATER	UNITS	: mg/L
METHOD	: WA DOE WTPH-D	DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
FUEL HYDROCARBONS	<0.25
HYDROCARBON RANGE	C12 - C24
HYDROCARBON QUANTITATION USING	DIESEL

SURROGATE PERCENT RECOVERY		LIMITS
O-TERPHENYL	95	50 - 150

Analytical Technologies, Inc.

ATI I.D. # 9403-045-1

TOTAL PETROLEUM HYDROCARBONS
DATA SUMMARY

CLIENT	: RZA AGRA, INC.	DATE SAMPLED	: 03/04/94
PROJECT #	: BP #11060	DATE RECEIVED	: 03/04/94
PROJECT NAME	: BP #11060/FAUNTLEROY 11-09410-06	DATE EXTRACTED	: 03/04/94
CLIENT I.D.	: CFA-06	DATE ANALYZED	: 03/05/94
SAMPLE MATRIX	: WATER	UNITS	: mg/L
METHOD	: WA DOE WTPH-D	DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
FUEL HYDROCARBONS	0.42
HYDROCARBON RANGE	C12 - C24
HYDROCARBON QUANTITATION USING	DIESEL

SURROGATE PERCENT RECOVERY		LIMITS
O-TERPHENYL	101	50 - 150

Analytical Technologies, Inc.

ATI I.D. # 9403-045-2

TOTAL PETROLEUM HYDROCARBONS
DATA SUMMARY

CLIENT	: RZA AGRA, INC.	DATE SAMPLED	: 03/04/94
PROJECT #	: BP #11060	DATE RECEIVED	: 03/04/94
PROJECT NAME	: BP #11060/FAUNTLEROY 11-09410-06	DATE EXTRACTED	: 03/04/94
CLIENT I.D.	: CFC-06	DATE ANALYZED	: 03/05/94
SAMPLE MATRIX	: WATER	UNITS	: mg/L
METHOD	: WA DOE WTPH-D	DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
FUEL HYDROCARBONS	0.59
HYDROCARBON RANGE	C12 - C24
HYDROCARBON QUANTITATION USING	DIESEL

SURROGATE PERCENT RECOVERY		LIMITS
O-TERPHENYL	106	50 - 150

Analytical Technologies, Inc.

ATI I.D. # 9403-045-3

TOTAL PETROLEUM HYDROCARBONS
DATA SUMMARY

CLIENT	: RZA AGRA, INC.	DATE SAMPLED	: 03/04/94
PROJECT #	: BP #11060	DATE RECEIVED	: 03/04/94
PROJECT NAME	: BP #11060/FAUNTLEROY 11-09410-06	DATE EXTRACTED	: 03/04/94
CLIENT I.D.	: CFD-06	DATE ANALYZED	: 03/05/94
SAMPLE MATRIX	: WATER	UNITS	: mg/L
METHOD	: WA DOE WTPH-D	DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
FUEL HYDROCARBONS	1.3
HYDROCARBON RANGE	C12 - C24
HYDROCARBON QUANTITATION USING	DIESEL

SURROGATE PERCENT RECOVERY		LIMITS
O-TERPHENYL	110	50 - 150

Analytical Technologies, Inc.

ATI I.D. # 9403-045-4

TOTAL PETROLEUM HYDROCARBONS
DATA SUMMARY

CLIENT	: RZA AGRA, INC.	DATE SAMPLED	: 03/04/94
PROJECT #	: BP #11060	DATE RECEIVED	: 03/04/94
PROJECT NAME	: BP #11060/FAUNTLEROY 11-09410-06	DATE EXTRACTED	: 03/04/94
CLIENT I.D.	: CFE-06	DATE ANALYZED	: 03/05/94
SAMPLE MATRIX	: WATER	UNITS	: mg/L
METHOD	: WA DOE WTPH-D	DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
FUEL HYDROCARBONS	0.58
HYDROCARBON RANGE	C12 - C24
HYDROCARBON QUANTITATION USING	DIESEL

SURROGATE PERCENT RECOVERY		LIMITS
O-TERPHENYL	106	50 - 150

Analytical Technologies, Inc.

ATI I.D. # 9403-045

TOTAL PETROLEUM HYDROCARBONS
QUALITY CONTROL DATA

CLIENT	: RZA AGRA, INC.	SAMPLE I.D. #	: BLANK
PROJECT #	: BP #11060	DATE EXTRACTED	: 03/04/94
PROJECT NAME	: BP #11060/FAUNTLEROY 11-09410-06	DATE ANALYZED	: 03/04/94
SAMPLE MATRIX	: WATER	UNITS	: mg/L
METHOD	: WA DOE WTPH-D		

COMPOUNDS	SAMPLE RESULT	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
DIESEL	<0.250	2.50	2.29	92	2.58	103	12

CONTROL LIMITS	% REC.	RPD
DIESEL	70 - 114	20

SURROGATE RECOVERIES	SPIKE	DUP. SPIKE	LIMITS
O-TERPHENYL	90	103	50 - 150

Analytical Technologies, Inc.

ATI I.D. # 9403-045

METALS ANALYSIS

CLIENT : RZA AGRA, INC. MATRIX : WATER
PROJECT # : BP #11060
PROJECT NAME : BP #11060/FAUNTLEROY 11-09410-06

ELEMENT	DATE PREPARED	DATE ANALYZED
LEAD (SAMPLES -1T, -2T -3T, -1D THROUGH -4D)	03/08/94	03/10/94
LEAD (SAMPLE -4T)	03/08/94	03/11/94

Analytical Technologies, Inc.

ATI I.D. # 9403-045

METALS ANALYSIS
DATA SUMMARY

CLIENT : RZA AGRA, INC. MATRIX : WATER
PROJECT # : BP #11060
PROJECT NAME : BP #11060/FAUNTLEROY 11-09410-06 UNITS : mg/L

ATI I.D. #	CLIENT I.D.	LEAD (TOTAL)	LEAD (DISSOLVED)
9403-045-1	CFA-06	0.027	<0.0030
9403-045-2	CFC-06	0.0043	<0.0030
9403-045-3	CFD-06	0.0049	<0.0030
9403-045-4	CFE-06	0.038	<0.0030
METHOD BLANK	-	<0.0030	<0.0030

AnalyticalTechnologies,Inc.

ATI I.D. # 9403-045

METALS ANALYSIS
QUALITY CONTROL DATA

CLIENT : RZA AGRA, INC. MATRIX : WATER
PROJECT # : BP #11060
PROJECT NAME : BP #11060/FAUNTLEROY 11-09410-06 UNITS : mg/L

ELEMENT	ATI I.D.	SAMPLE RESULT	DUP RESULT	RPD	SPIKED RESULT	SPIKE ADDED	% REC
LEAD	BLANK	<0.0030	N/A	N/A	0.0233	0.0250	93
LEAD	9403-045-1D	<0.0030	<0.0030	NC	N/A	N/A	N/A
LEAD	9403-045-2D	<0.0030	N/A	N/A	0.0240	0.0250	96

NC = Not Calculable.

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Sample Result} - \text{Duplicate Result})|}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

ATI I.D. # 9403-045

GENERAL CHEMISTRY ANALYSIS

CLIENT : RZA AGRA, INC. MATRIX : WATER
PROJECT # : BP #11060
PROJECT NAME : BP #11060/FAUNTLEROY 11-09410-06

PARAMETER	DATE ANALYZED
TURBIDITY	03/04/94

Analytical Technologies, Inc.

ATI I.D. # 9403-045

GENERAL CHEMISTRY ANALYSIS
DATA SUMMARY

CLIENT : RZA AGRA, INC. MATRIX : WATER
PROJECT # : BP #11060
PROJECT NAME : BP #11060/FAUNTLEROY 11-09410-06 UNITS : NTU

ATI I.D. #	CLIENT I.D.	TURBIDITY
9403-045-1	CFA-06	180
9403-045-2	CFC-06	80
9403-045-3	CFD-06	250
9403-045-4	CFE-06	550
METHOD BLANK	-	<1

Analytical Technologies, Inc.

ATI I.D. # 9403-045

GENERAL CHEMISTRY ANALYSIS
QUALITY CONTROL DATA

CLIENT : RZA AGRA, INC. MATRIX : WATER
PROJECT # : BP #11060
PROJECT NAME : BP #11060/FAUNTLEROY 11-09410-06 UNITS : NTU

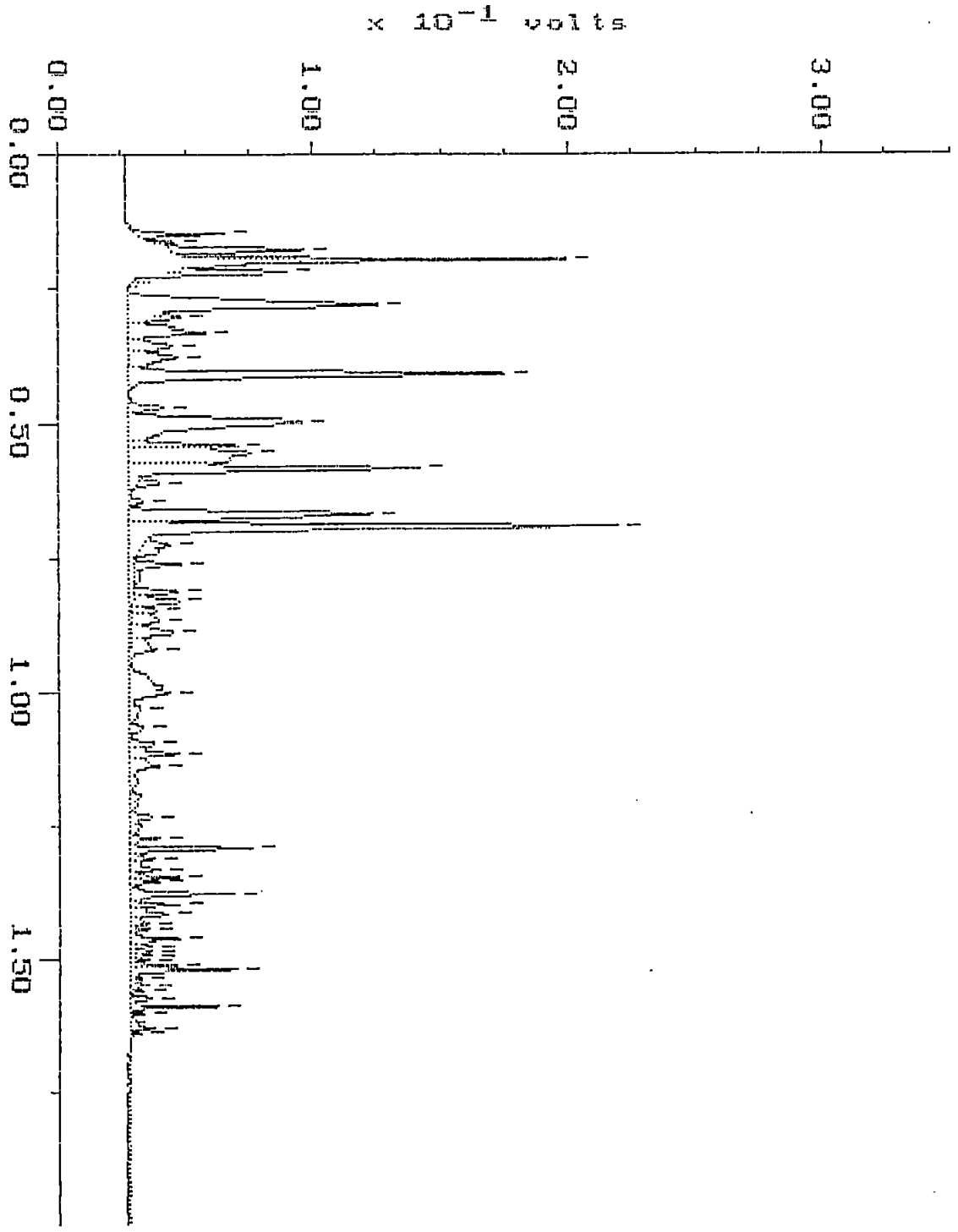
PARAMETER	ATI I.D.	SAMPLE RESULT	DUP RESULT	RPD	SPIKED RESULT	SPIKE ADDED	% REC
TURBIDITY	9403-039-1	600	590	2	N/A	N/A	N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{|(\text{Sample Result} - \text{Duplicate Result})|}{\text{Average Result}} \times 100$$

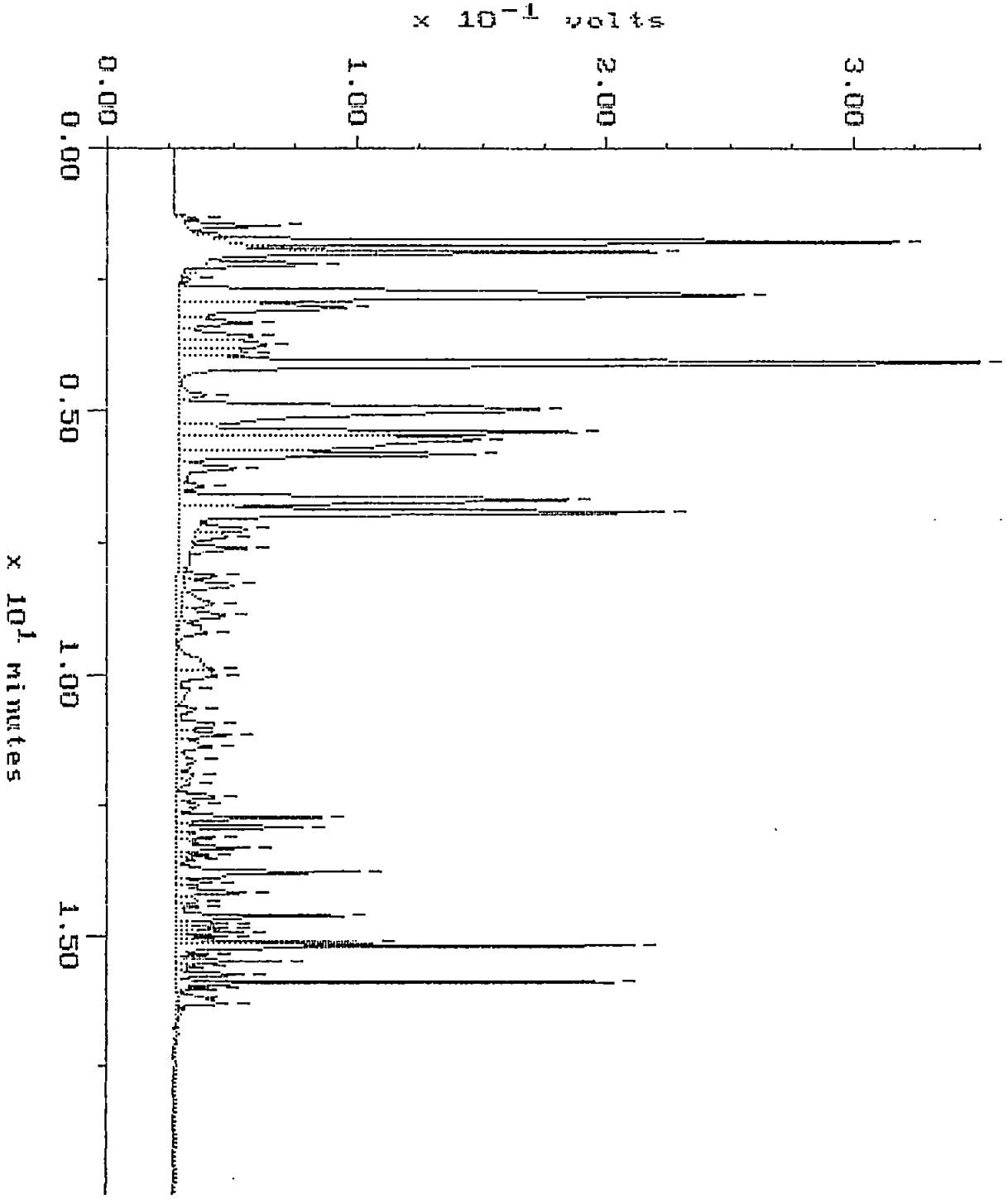
WA DOE WTPH-G

Sample: 9403-045-1 Channel: FID Filename: R3089P20
Acquired: 08-MAR-94 18:36 Method: F:\BRO2\MAXDATA\PICARD\030894PC Operator: ATI
Comments: ATI FUELS: A MISSION OF EXCELLENCE IN ANALYTICAL CHROMATOGRAPHY.



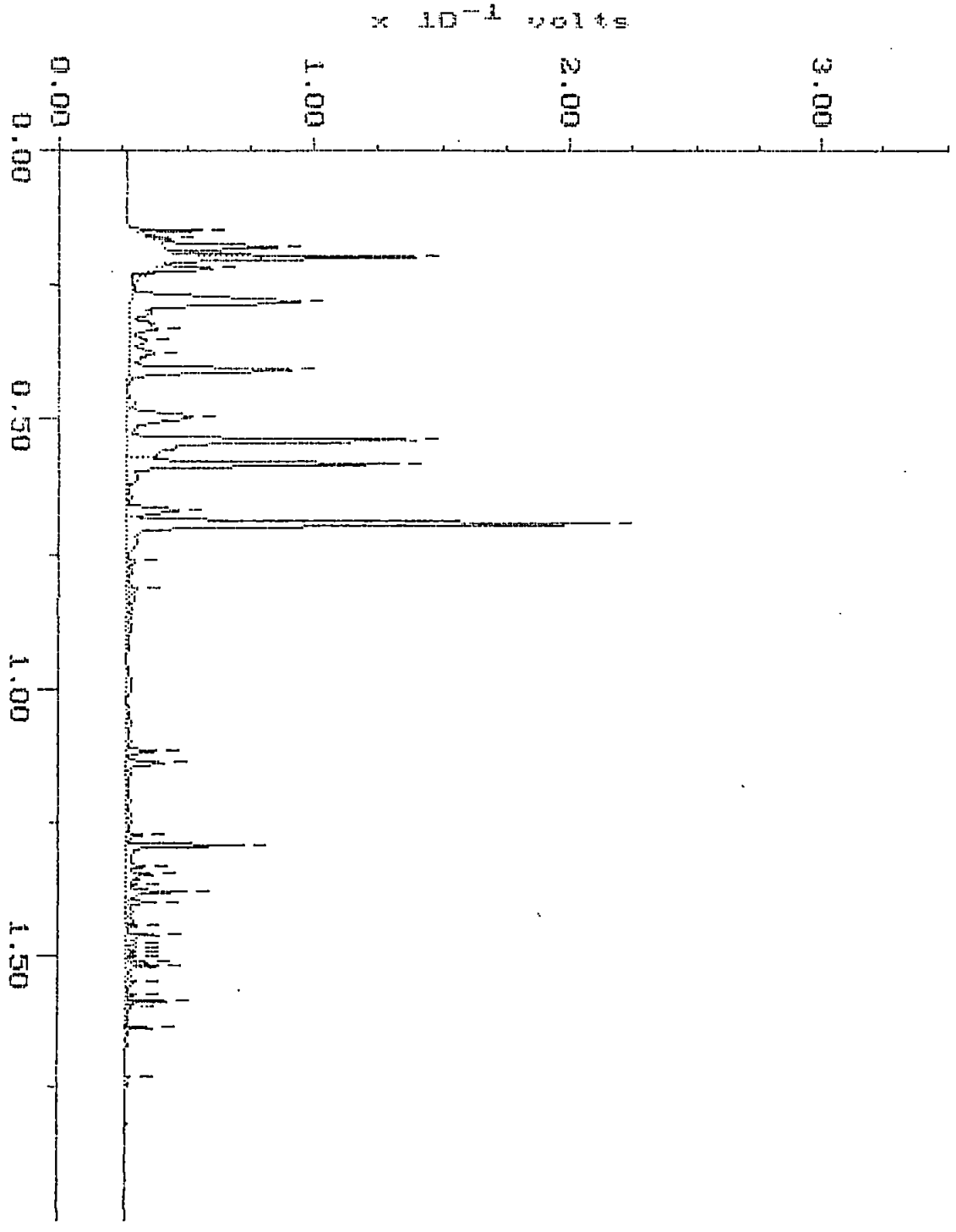
WA DOE WTPH-G

Sample: 9403-045-2 Channel: FID Filename: R3089P19
Acquired: 08-MAR-94 18:06 Method: F:\BRG2\MAXDATA\PICARD\030894PC Operator: ATI
Comments: ATI FUELS: A MISSION OF EXCELLENCE IN ANALYTICAL CHROMATOGRAPHY.



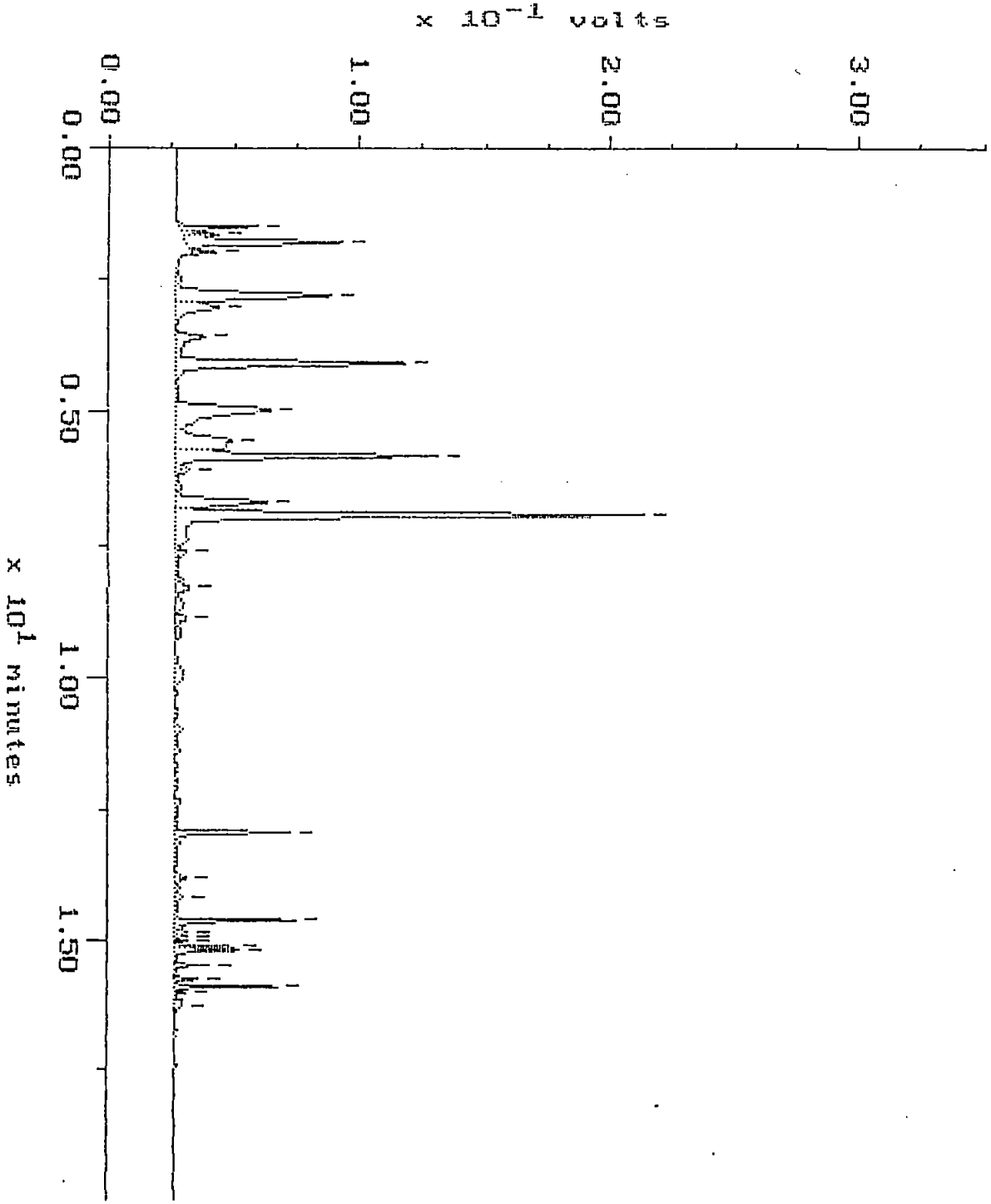
WA DOE WTPH-G

Sample: 9403-045-3 DIL Channel: FID Filename: R3079P37
Acquired: 08-MAR-94 4:13 Method: F:\BRO2\MAXDATA\PICARD\0307949C Operator: ATI
Dilution: 1 : 20.000
Comments: ATI FUELS: A MISSION OF EXCELLENCE IN ANALYTICAL CHROMATOGRAPHY.



WA DOE WTPH-G

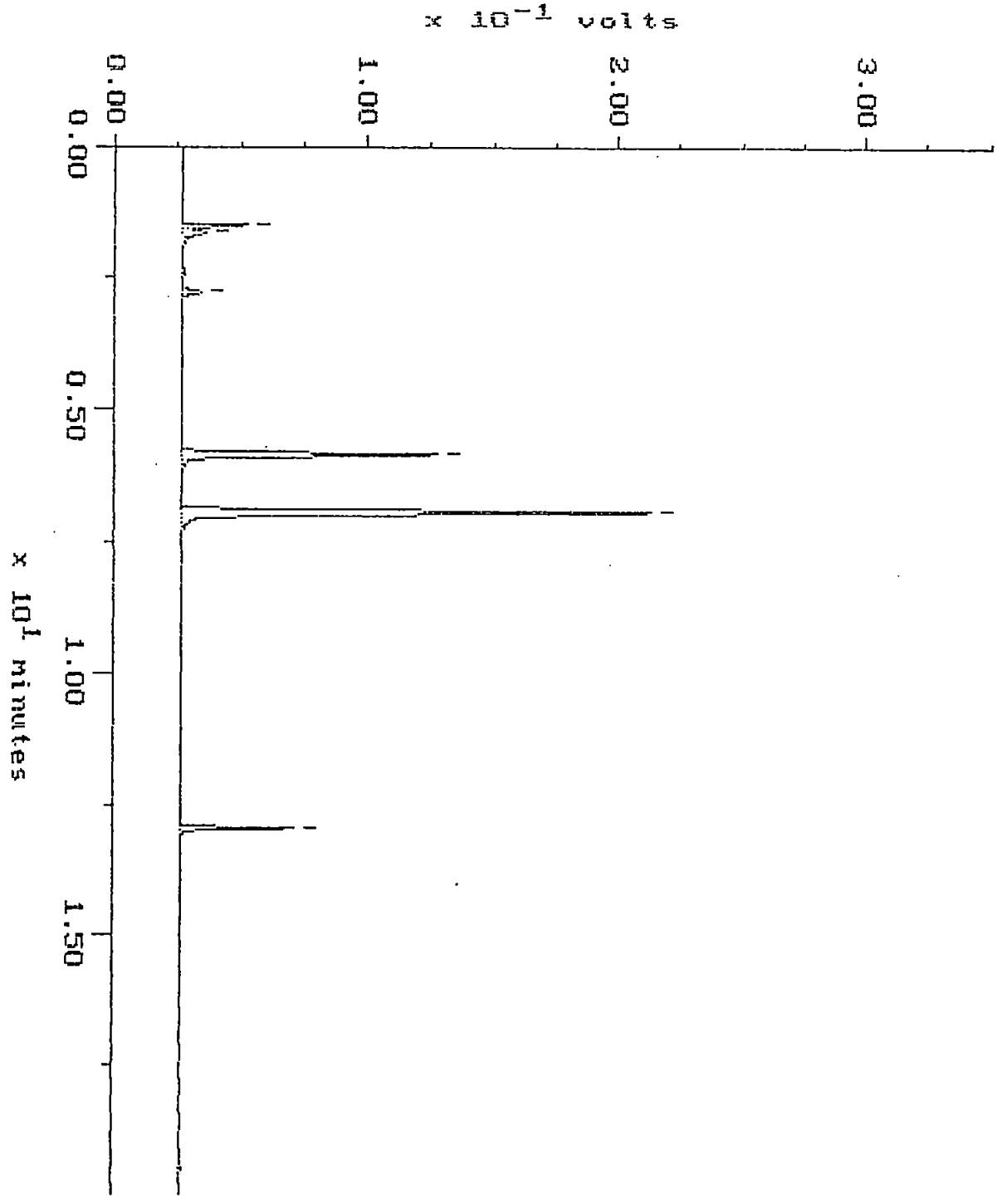
Sample: 9403-045-4 DIL Channel: FID Filename: R3089P18
Acquired: 08-MAR-94 17:36 Method: F:\BRO2\MAXDATA\PICARD\030894PC Operator: ATI
Dilution: 1 : 5.000
Comments: ATI FUELS: A MISSION OF EXCELLENCE IN ANALYTICAL CHROMATOGRAPHY.



WA DOE WTPH-G

Blank

Sample: WRB 3-7 Channel: FID Filename: R3079P03
Acquired: 07-MAR-94 9:58 Method: F:\BRO2\MAXDATA\PICARD\030794PC Operator: ATI
Comments: ATI FUELS: A MISSION OF EXCELLENCE IN ANALYTICAL CHROMATOGRAPHY.

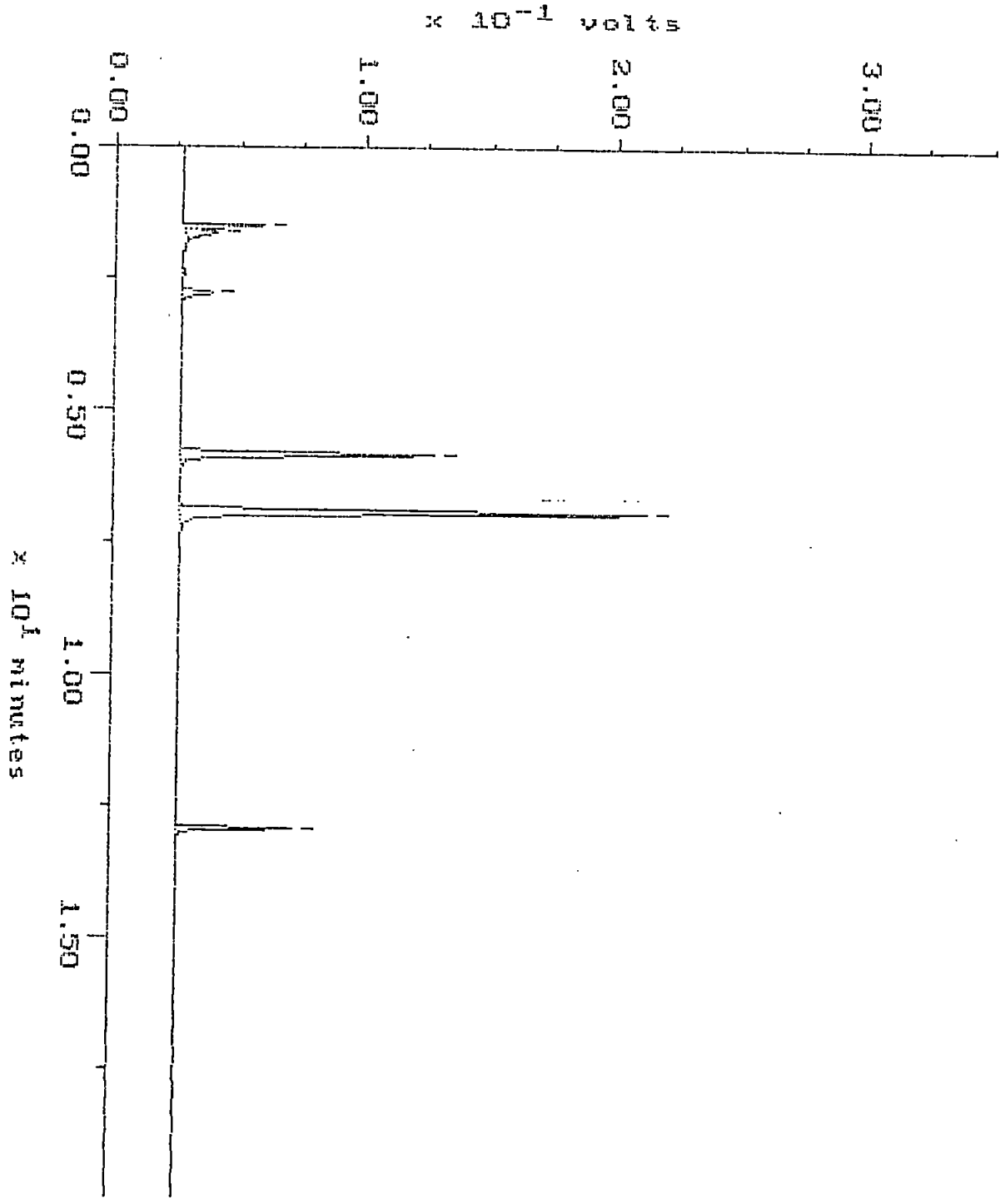


Blank

WA DOE WTPH-G

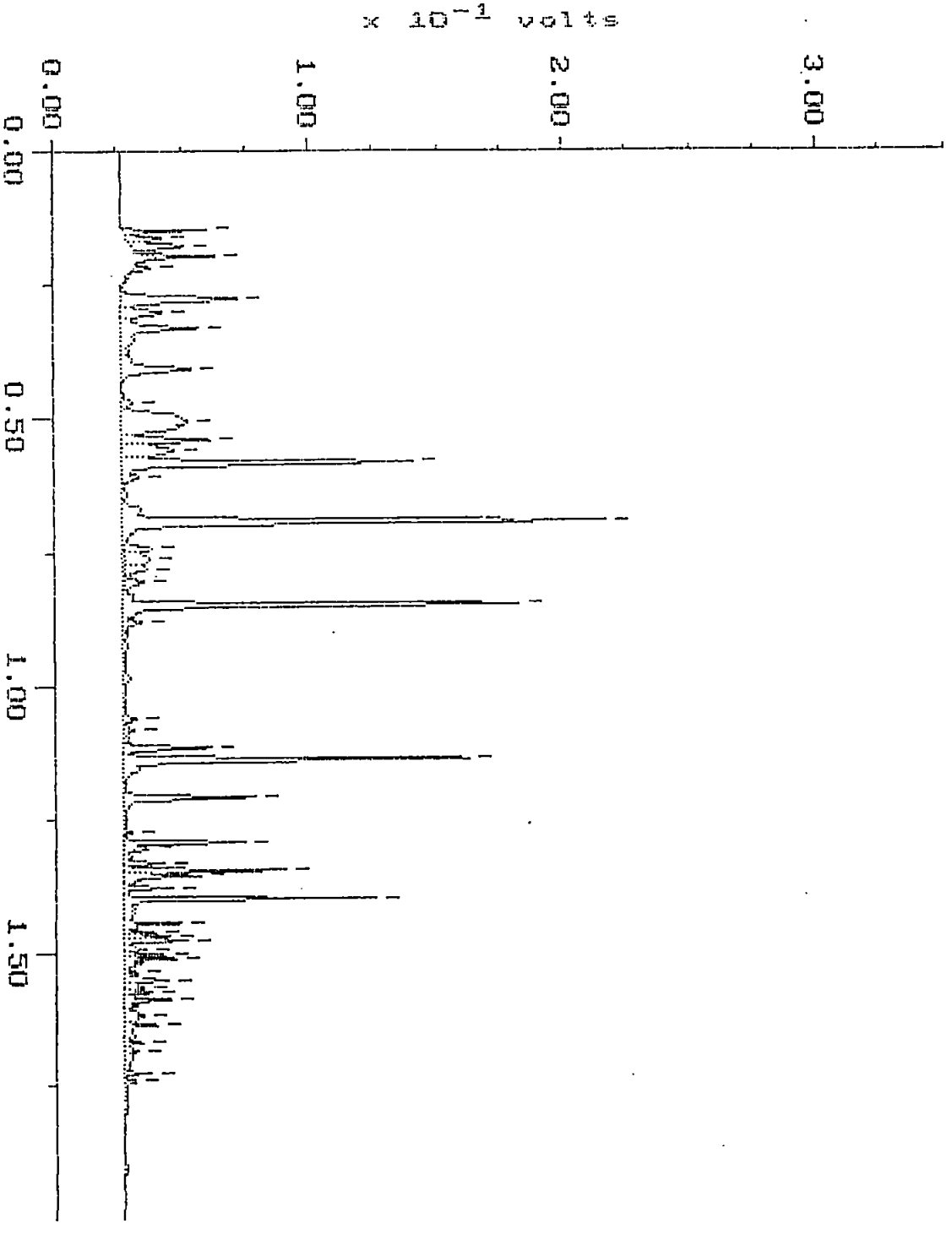
Sample: WRB 3-8 Channel: FID
Acquired: 08-MAR-94 8:34 Method: F:\2RD2\MAXDATA\PICARD\030894PC
Comments: ATI FUELS: A MISSION OF EXCELLENCE IN ANALYTICAL CHROMATOGRAPHY.

Filename: R3089P01
Operator: ATI



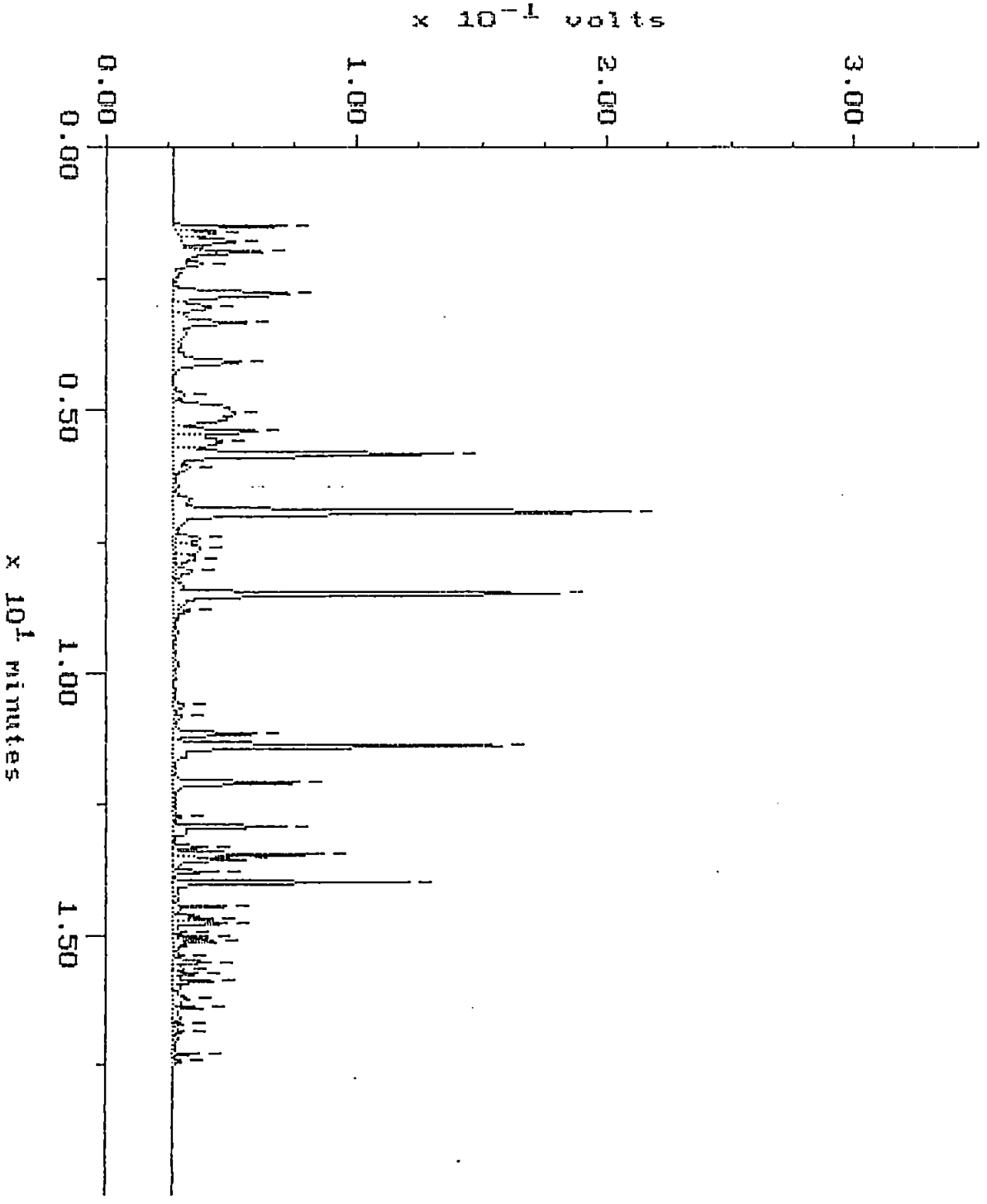
Continuing Calibration

Sample: STD-C G Channel: FID Filename: R3079P01
Acquired: 07-MAR-94 8:33 Method: F:\BR02\MAXDATA\PICARD\030794PC Operator: ATI
Comments: ATI FUELS: A MISSION OF EXCELLENCE IN ANALYTICAL CHROMATOGRAPHY.



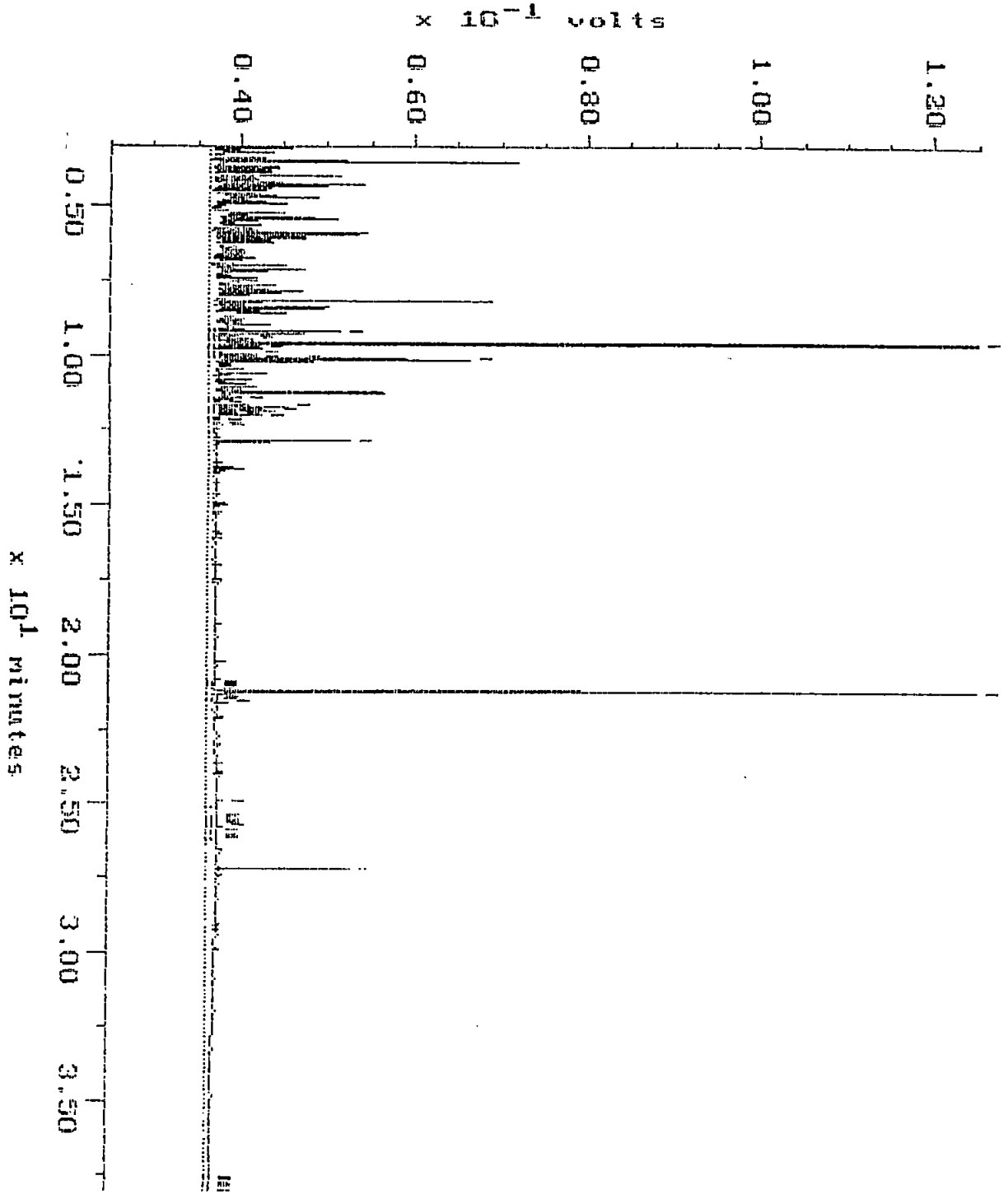
Continuing Calibration

Sample: STD C G Channel: FID Filename: R3089P15
Acquired: 08-MAR-94 16:06 Method: F:\BRO2\MAXDATA\PICARD\030894PC Operator: ATI
Comments: ATI FUELS: A MISSION OF EXCELLENCE IN ANALYTICAL CHROMATOGRAPHY.



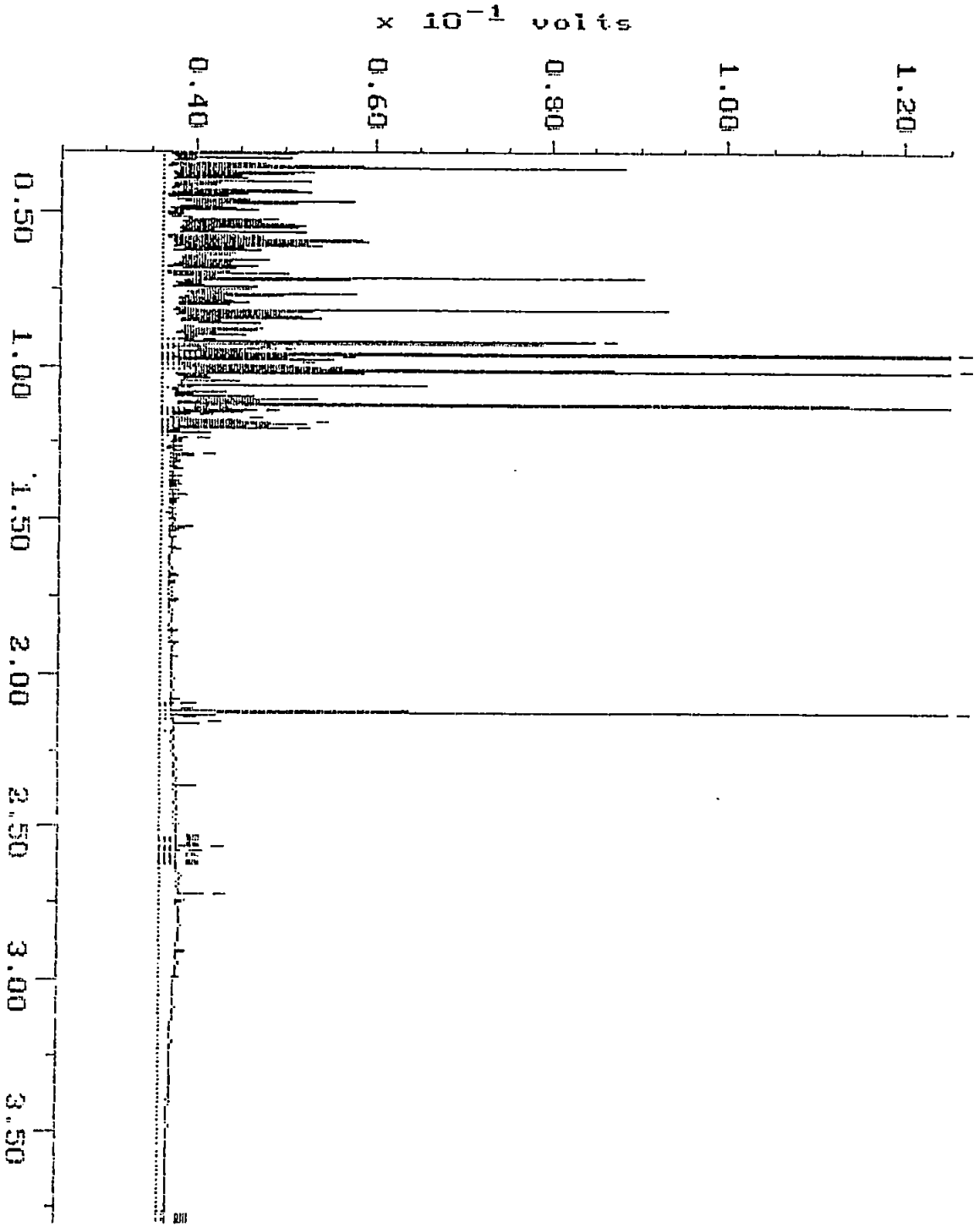
WALDE WTPH-D

Sample: 9403-045-1 Channel: DEMITRI Filename: R3048D13
Acquired: 05-MAR-94 0:54 Method: F:\BRO2\MAXDATA\SERGE-D\FUEL0304 Operator: ATI
Comments: ATI RUSH FUELS: A MISSION OF EXCELLENCE IN ANALYTICAL CHROMATOGRAPHY



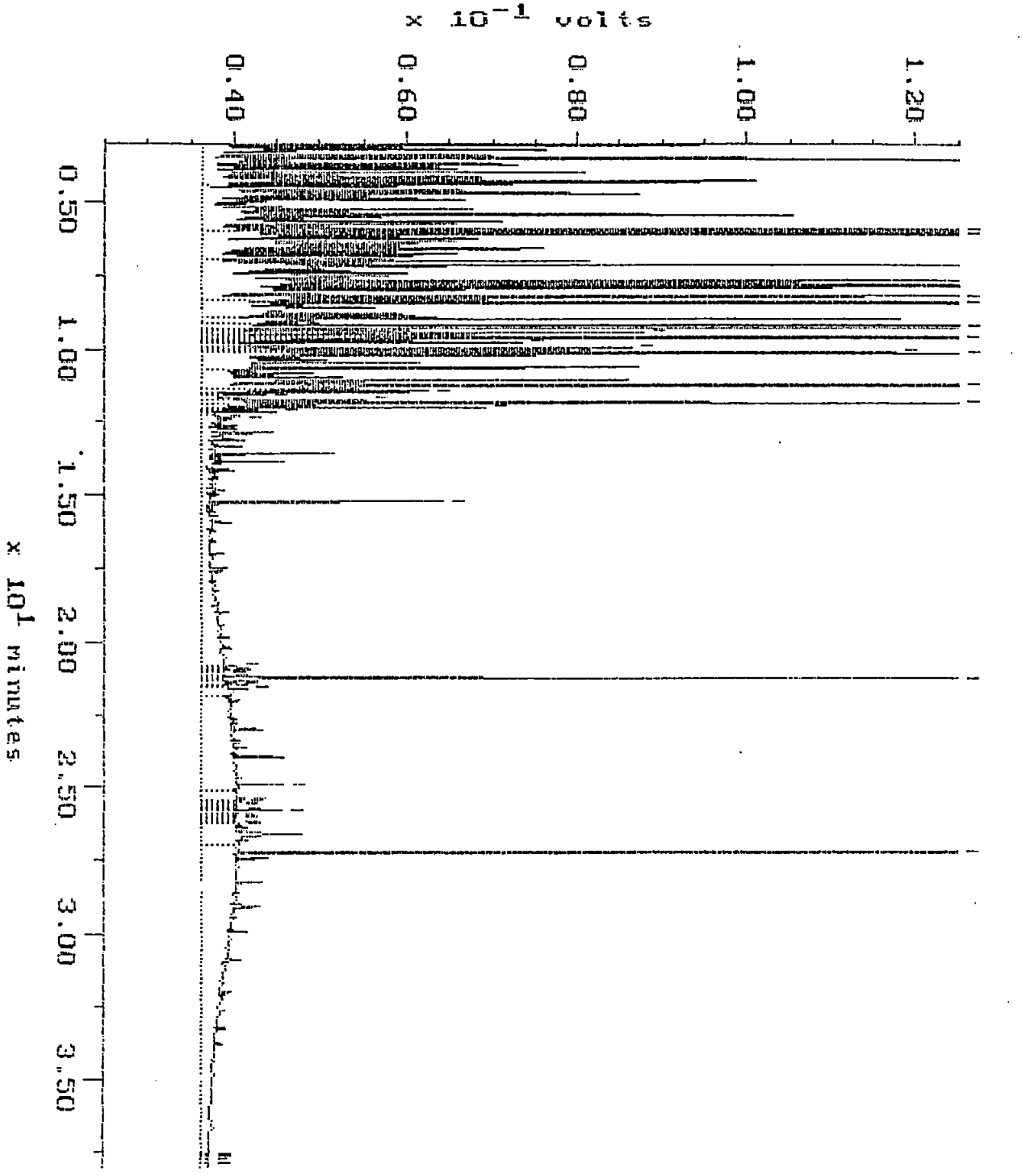
WALDEMATH-D

Sample: 9403-045-2 Channel: DEMITRI Filename: R3048517
Acquired: 05-MAR-94 4:00 Method: F:\BRO2\MAXDATA\SERGE-D\FUEL0304 Operator: ATI
Comments: ATI RUSH FUELS: A MISSION OF EXCELLENCE IN ANALYTICAL CHROMATOGRAPHY

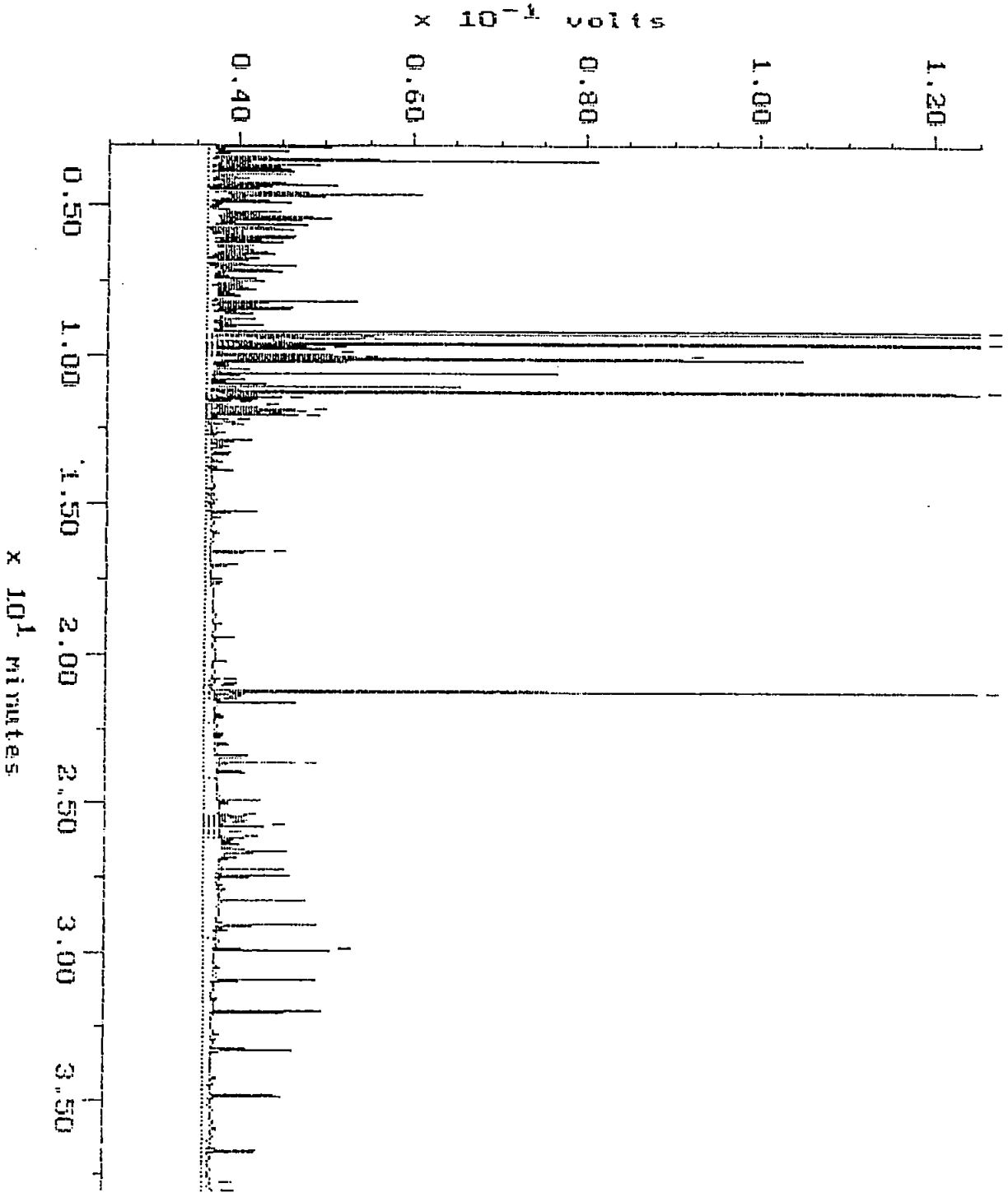


VALIDATED-D

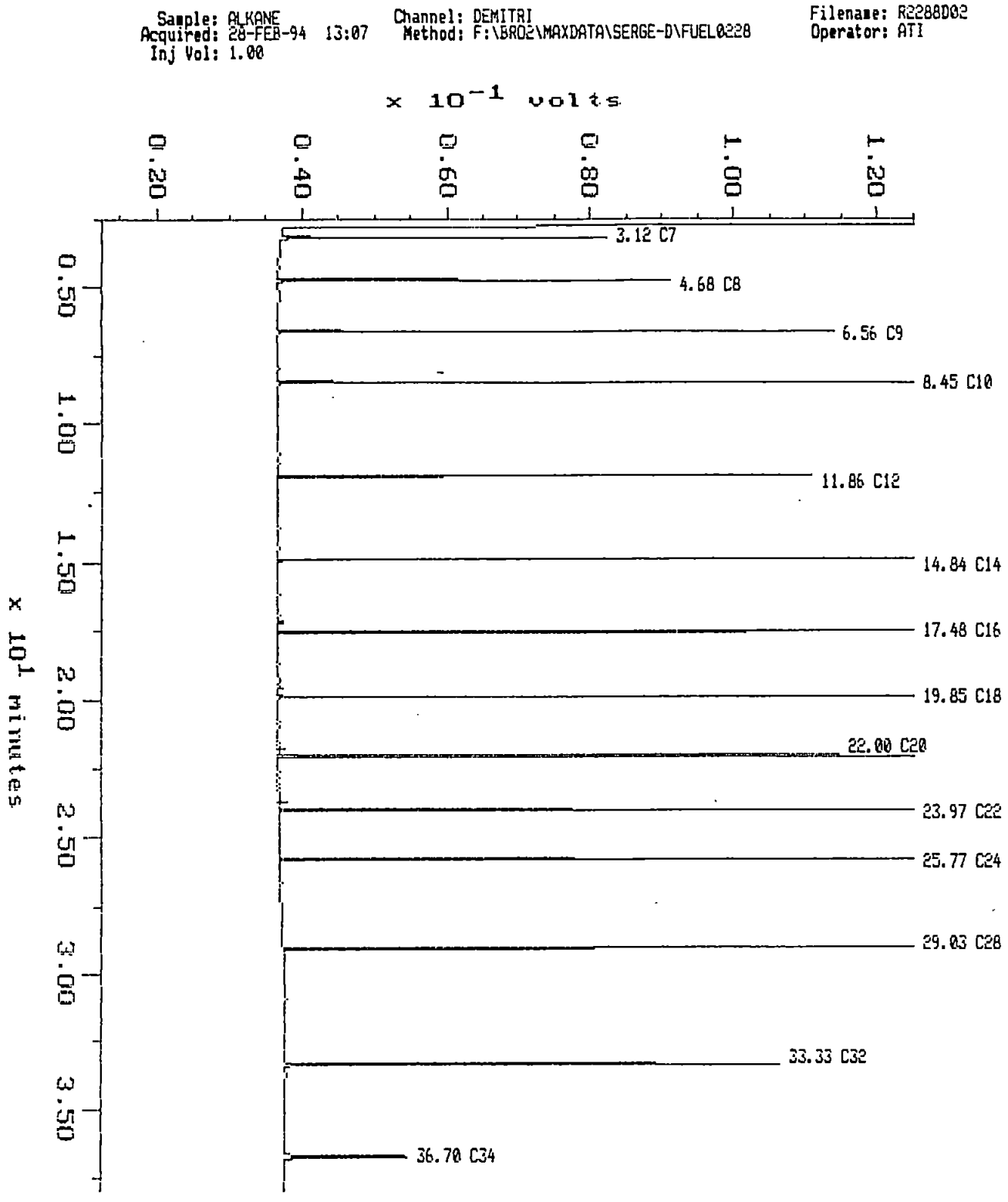
Sample: 9403-045-3 Channel: DEMITRI Filename: R3048D21
Acquired: 05-MAR-94 7:06 Method: F:\BR02\MAXDATA\SERGE-D\FUEL0304 Operator: ATI
Comments: ATI RUSH FUELS: A MISSION OF EXCELLENCE IN ANALYTICAL CHROMATOGRAPHY



Sample: 9403-045-4 Channel: DEMITRI Filename: R3048D22
Acquired: 05-MAR-94 7:53 Method: F:\BRO2\MAXDATA\SERGE-D\FUEL0304 Operator: ATI
Comments: ATI RUSH FUELS: A MISSION OF EXCELLENCE IN ANALYTICAL CHROMATOGRAPHY



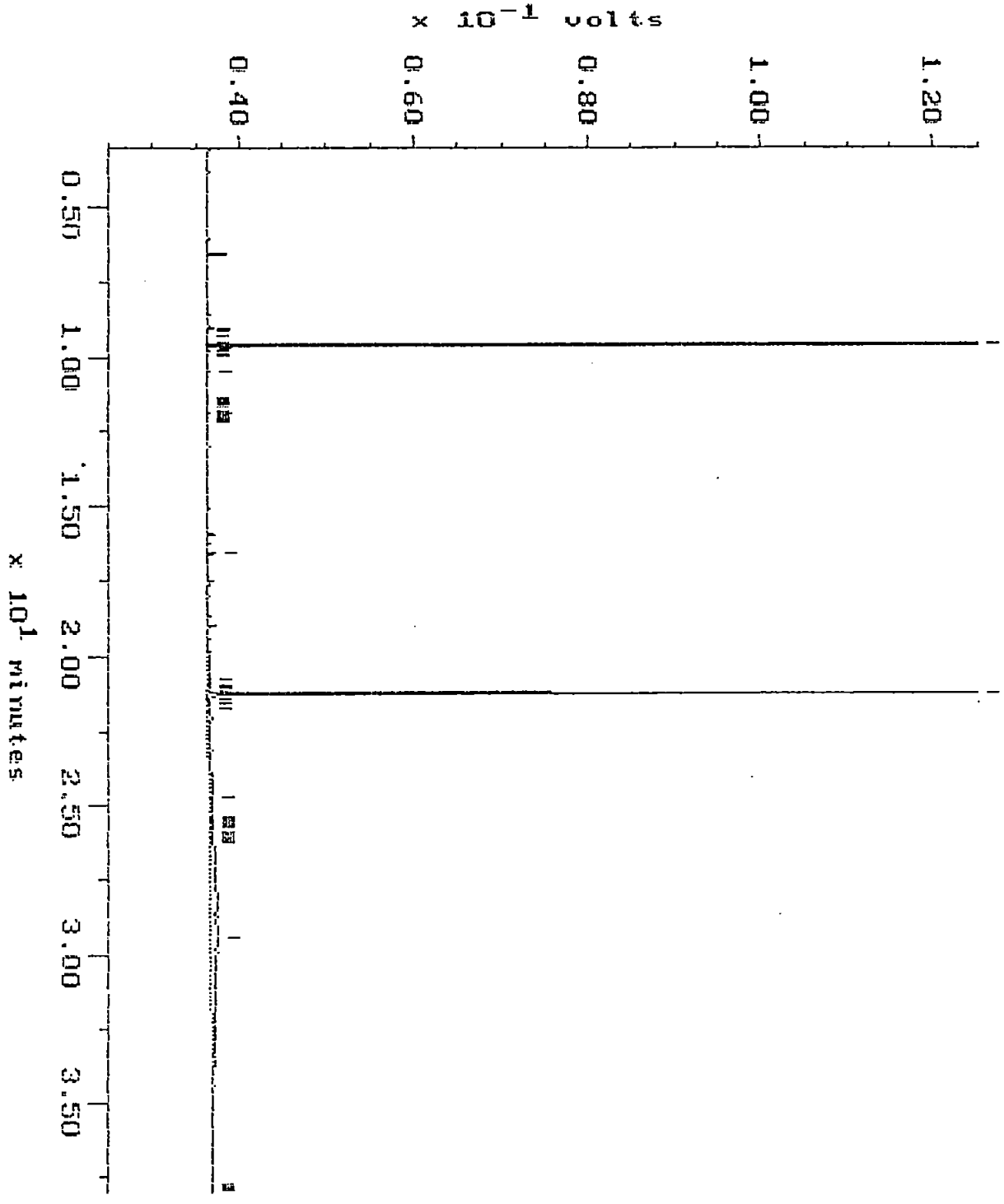
Alkane


Sample: ALKANE
Acquired: 28-FEB-94 13:07
Inj Vol: 1.00
Channel: DEMITRI
Method: F:\BRO2\MAXDATA\SERGE-D\FUEL0228
Filename: R2288D02
Operator: ATI
x 10⁻¹ volts
0.20
0.40
0.60
0.80
1.00
1.20
x 10¹ minutes
0.50
1.00
1.50
2.00
2.50
3.00
3.50
3.12 C7
4.68 C8
6.56 C9
8.45 C10
11.86 C12
14.84 C14
17.48 C16
19.85 C18
22.00 C20
23.97 C22
25.77 C24
29.03 C28
33.33 C32
36.70 C34

WATER WTPH-D

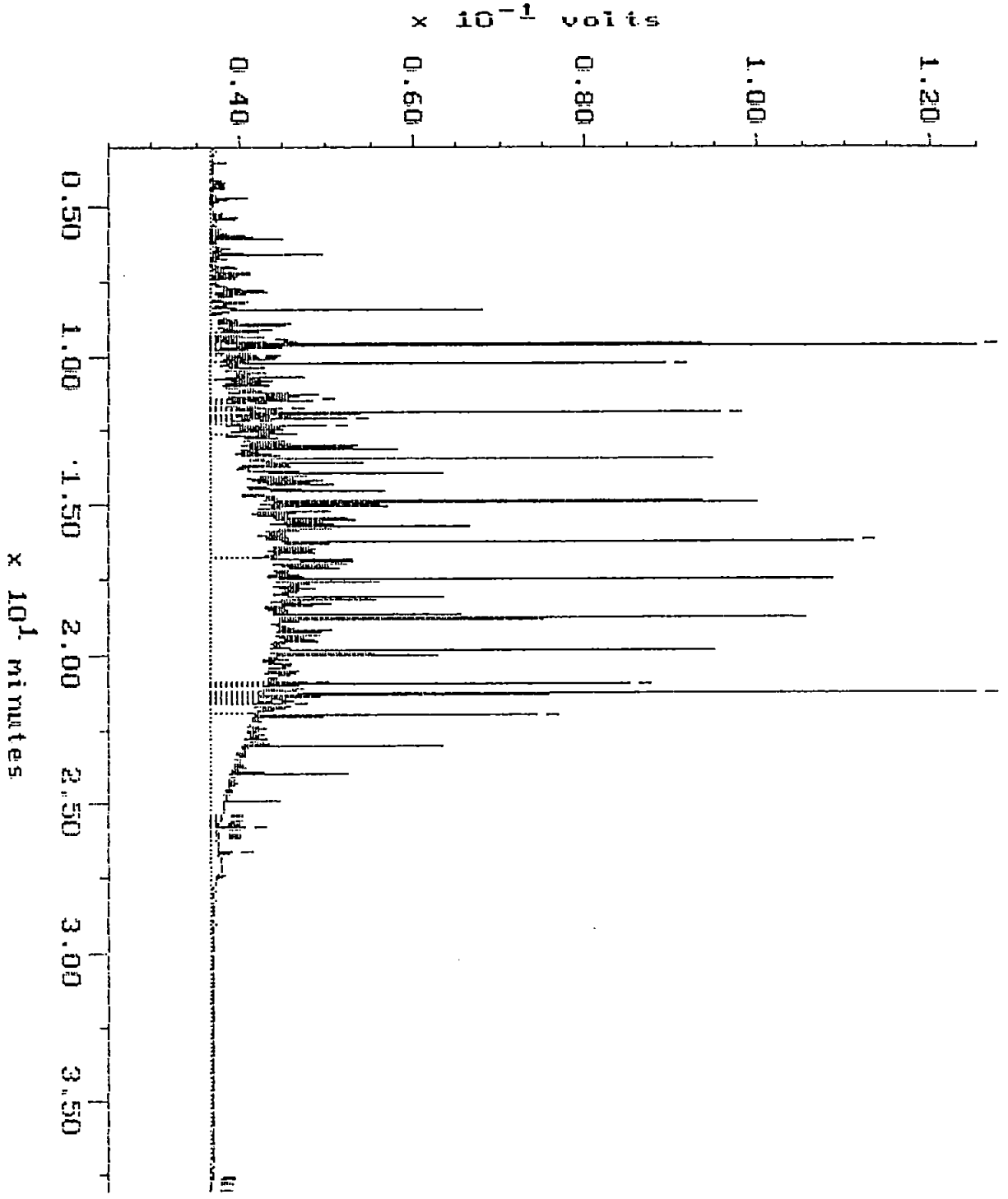
Blank

Sample: WRB 03-04 Channel: DEMITRI Filename: R3048D04
Acquired: 04-MAR-94 17:54 Method: F:\BRO2\MAXDATA\SERGE-D\FUEL0304 Operator: ATI
Comments: ATI RUSH FUELS: A MISSION OF EXCELLENCE IN ANALYTICAL CHROMATOGRAPHY



Continuing Calibration

Sample: D 500 **Channel:** DEMITRI **Filename:** R3048D02
Acquired: 04-MAR-94 16:20 **Method:** F:\BRO2\MAXDATA\SERGE-D\FUEL0304 **Operator:** ATI
Comments: ATI RUSH FUELS: A MISSION OF EXCELLENCE IN ANALYTICAL CHROMATOGRAPHY



9403.
~~9304~~.045

CHAIN OF CUSTODY

No. 053246

CONSULTANT'S NAME	ADDRESS	CITY	STATE	ZIP CODE
RZA AGRA	11335 NE 122nd Way, Suite 100,	Kirkland,	WA	98034

BP SITE NUMBER	BP CORNER ADDRESS/CITY	CONSULTANT PROJECT NUMBER
11060	4580 Fauntleroy Way SW, Seattle WA	11-9410-06

CONSULTANT PROJECT MANAGER	PHONE NUMBER	FAX NUMBER	CONSULTANT CONTRACT NUMBER
Bob Czaja	(206) 820-4669	(206) 821-3914	Per Pete De Santis

BP CONTACT	BP ADDRESS	PHONE NUMBER	FAX NO.
Pete De Santis	295 SW 41st St. Renton, WA	(206) 251-8209	(206) 251-0736

LAB CONTACT	LABORATORY ADDRESS	PHONE NUMBER	FAX NO.
Diane Sprue - ATI	560 Naches Ave SW, Renton, WA	(206) 228-8335	(206) 363-1742

SAMPLED BY (Please Print Name)	SAMPLED BY (Signature)	SHIPMENT DATE	SHIPMENT METHOD
Jeffrey Kasper	[signature]	3/4/94	

AIRBILL NUMBER:

*TAT: ☐ 24 Hours ☐ 48 Hours ☐ 1 Week ☐ Standard 2 Weeks

ANALYSIS REQUIRED

SAMPLE DESCRIPTION	COLLECTION DATE	COLLECTION TIME	MATRIX SOIL/WATER	CONTAINERS NO.	CONTAINERS TYPE (VOL.)	LAB SAMPLE #	HCl [illegible]	HNO3 Total Pb	None Dissolved Pb	None [illegible]	None [illegible]					COMMENTS
CFA-06	3/4/94	1:45	W	6	**	1	X	X	X	X	X					
CFC-06	3/4/94	2:15	W	6	**	2	X	X	X	X	X					
CFD-06	3/4/94	2:30	W	6	**	3	X	X	X	X	X					
CFE-06	3/4/94	2:00	W	6	**	4	X	X	X	X	X					
Trip Blank			W	2	40 ml VOA	5	X									

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
[signature] / RZA AGRA	3/4	1:10	K Sweeney	3/4/94	1310

ADDITIONAL COMMENTS
* TAT as per BP/ATI Contract
** 2, 40 ml VOAs; 3, 500 ml plastic; 1, 1 Liter glass
Filter and preserve dissolved lead samples upon receipt

CLV-16722

Distribution: White - Original (with Data), Yellow - BP, Pink - Lab, Blue - Consultant Field Staff

APPENDIX A

FIELD PROCEDURES

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(11-09410-06)

FIELD PROCEDURES

Groundwater Monitoring

Depth to water measurements are taken in all wells prior to purging and sampling in order of least impacted to most impacted when this data is available. Before taking depth to water measurements, well caps are removed to allow equalization of air pressure and stabilization of the groundwater surface. Measurements are made with an interface probe for wells with liquid petroleum hydrocarbons (LPH), or with a water analyzer for wells with no free product. All instruments are decontaminated with Alconox soap and rinsed with deionized water prior to measuring groundwater levels. If LPH is detected in the well, the instruments are decontaminated using isopropyl alcohol prior to scrubbing with the Liquinox solution. Measurements are made from a marked point at the top of the well casing. If no mark is identified, the measurement is made to the highest point on the well casing.

Groundwater Sampling

Casing volumes are calculated based on the amount of standing water in the well and the diameter of the well casing. Groundwater parameters (temperature, conductivity, pH) are then monitored until stable to verify that groundwater representative of the formation is being sampled. The groundwater parameters are considered to be stable when three successive measurements are made within the following ranges: Temperature: ± 0.5°C; Conductivity: ± 10% of scale range; and pH: ± 0.1 pH unit.

Prior to sampling the monitoring wells were purged of approximately three to five well casing volumes of groundwater using a stainless steel or PVC bailer. The bailer used for purging was decontaminated between each well by scrubbing with a stiff brush and a solution of Liquinox and potable water. After scrubbing, the bailer was rinsed with potable water followed by de-ionized water. If a sheen or LPH was observed on the purge water, the bailer was rinsed with isopropyl alcohol prior to scrubbing with the Liquinox solution. Purge water from this sampling event was transported to RZA AGRA's Kirkland, Washington facility for treatment and disposal.

A new disposable bailer was used to collect each groundwater sample. The samples were decanted from the bailers into laboratory prepared containers. Each container was labeled, placed into a chilled cooler, and transported to Analytical Technologies Inc. (ATI), of Renton, Washington to be analyzed for the following compounds:

- Benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Method 8020;
- Gasoline range petroleum hydrocarbons (C_7-C_{12}) by Ecology Method WTPH-G;
- Diesel range petroleum hydrocarbons ($C_{>12}$-C_{24}) by Ecology Method WTPH-D;
- Total and Dissolved lead by EPA Method 7421; and,
- Turbidity by EPA Method 180.1.