



BP OIL

BP Oil Company
Environmental Resources Management
Building 13, Suite N
295 SW 41st Street
Renton, Washington 98055-4931
(206) 251-0667

April 11, 1995

MR TOM TODD
WASHINGTON DEPT OF ECOLOGY
PO BOX 47775
OLYMPIA WA 98504

RECEIVED

'95 APR 12 10:15

RE: BP OIL FACILITY #11085
728 Meridian Street East
Puyallup, WA

Attached please find our GROUNDWATER MONITORING AND SAMPLING REPORT FOURTH QUARTER 1994 for the above referenced facility.

If you should have any questions regarding this site, I may be reached at (206) 251-0689.

Respectfully,

Peter J. DeSantis
Peter J. DeSantis
Environmental Resources Management

PJD:mu MSWORDERM11085

'95 APR 12 10:15

RECEIVED

cc: Cynthia Wanless, Tacoma -Pierce County Dept of Health, 3629 South D Street, Tacoma
WA 98408

Charles A Gove & Associates Inc, PO Box 3963, Bellevue WA 98009-3963

Mr. Larry Silva, TOSCO, 601 Union Street, Suite 2500, Seattle, WA 98101

Site File

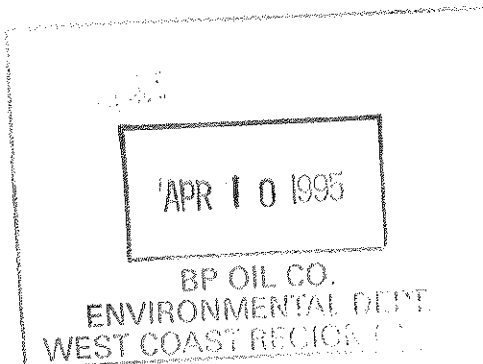


Charles A. Gove & Associates, Inc.
Consulting Engineers
11-105th Ave S.E., Suite 8, Bellevue, WA 98004
P.O. Box 3963, Bellevue, WA 98009-3963
PH. (206) 451-1212 FAX. (206) 451-8856

3 March 1995

BP Oil Company
295 SW 41st Street
Building 13, Suite N
Renton, Washington 98055

Attention: Mr. Peter DeSantis



**Subject: Groundwater Monitoring and Sampling Report
4th Quarter 1994**

BP Service Station No. 11085

728 Meridian Street East
Puyallup, Washington

This report presents the results of groundwater monitoring and sampling activities performed on 11 January 1995 at the above site.

Introduction

The property is an operating service station, located on the northwest corner of the intersection of 8th Street and Meridian Street North in Puyallup, Washington (Figure 1).

Presently, the following groundwater wells exist on site:

- Three four-inch inside diameter (ID) groundwater monitoring wells;
- One two-inch ID groundwater monitoring wells.

The approximate site boundaries, locations of existing buildings and underground storage tanks, approximate locations of existing monitoring wells, and other pertinent site information are presented on the Site and Exploration Plan, Figure 2.

Groundwater Monitoring

Fluid level measurements in each monitoring well were completed with an interface probe to indicate thickness of liquid petroleum hydrocarbons (LPH), if present, and depth to groundwater relative to the top of the well casings (TOC). Groundwater measurements in the

site wells ranged from 4 to 6 feet below ground surface, relative elevations are based on an arbitrary datum (Table 1). The inferred groundwater migration direction is to the south-southwest, similar to last quarter. This determination is based upon groundwater measurements from the monitoring wells at the time of our visit.

A film of phase separated liquid petroleum hydrocarbons (LPH) was measured in MW-2. A passive product recovery skimmer was installed 5 August 1994. Approximately 3 pints of LPH was emptied from the skimmer during this visit and the skimmer reset.

Dissolved oxygen levels were measured directly in the well using a cable-mounted polarographic probe, correcting for temperature and salinity (Table 2).

Sampling Procedures and Analyses

Groundwater samples were collected from the site monitoring wells on 11 January 1995 for analytical laboratory testing. To obtain a sample representative of the surrounding formation, each well was purged of at least three well volumes of groundwater prior to sampling. A new disposable bailer for each well was used to obtain discrete and representative groundwater samples. The samples were then decanted into laboratory prepared containers, labeled, and immediately placed into a chilled cooler for transport to Analytical Technologies, Inc. (Renton, WA). Chain-of-custody procedures were followed to track sample possession from the time of collection until receipt by the analytical laboratory.

The following analyses were performed on select samples:

- Washington Total Petroleum Hydrocarbons-Gasoline range with Benzene, Toluene, Ethylbenzene, and total Xylenes distinction using Washington Department of Ecology (Ecology) test method WTPH-G/BTEX;

Analytical Laboratory Results

In general, sample concentrations ranged from below method detection limits, up to 540 ug/l for benzene.

MW-2 was not sampled due to the presence of LPH.

A summary of the results of analytical tests performed on groundwater samples collected at the subject site to date are presented in Table 2. The analytical results for this sampling event are presented on Figure 2. The ATI report and complete Chain of Custody form are also attached.

GROUNDWATER MONITORING REPORT
BP SERVICE STATION NO. 11085
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Summary

A LPH film was measured in MW-2 (NE of the pump islands), similar to last quarter. A passive product recovery skimmer was subsequently installed in this well on August 5th. Dissolved TPH and BTEX concentrations show an increasing trend.

We appreciate this opportunity to be of service to BP Oil Company. If you have any questions or comments regarding this letter report or other aspects of this project, please do not hesitate to call at your earliest convenience.

Respectfully submitted,

Charles A. Gove & Associates



David G. Cooper, P.G.
Environmental Geologist

Enclosures: Table 1 - Summary of Fluid Level Measurements
Table 2 - Summary of Analytical Results: Groundwater
Figure 1 - Location Map
Figure 2 - Site and Exploration Plan
CAG Groundwater Sampling/Monitoring Field Form
ATI Report and Chain of Custody

GROUNDWATER MONITORING REPORT
BP SERVICE STATION NO. 11085
3 MAR 95
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Table 1: **Summary of Fluid Level Measurements**
BP Service Station No. 11085
728 Meridian Street East
Puyallup, Washington

Well Number	Top of Casing Elevation (ft)	Date Collected	Product Thickness (ft)	Depth to Water (ft)	Groundwater Elevation (ft)*
MW-1	350.90	2-Apr-92	0	4.84	346.06
		7-May-92	0	4.75	346.15
		9-Jun-92	0	5.25	345.65
		20-Jul-94	0	5.65	345.25
		1-Nov-94	0	6.46	344.44
		11-Jan-95	0	4.96	345.94
MW-2	352.23	2-Apr-92	0	5.12	347.11
		7-May-92	0	5.11	347.12
		9-Jun-92	0	5.59	346.64
		20-Jul-94	0.08	6.05	346.24
		1-Nov-94	0.1	8.01	344.30
		11-Jan-95	Sheen	5.19	347.04
MW-3	350.50	2-Apr-92	0	6.31	344.19
		7-May-92	0	6.20	344.30
		9-Jun-92	0	6.56	343.94
		20-Jul-94	0	6.73	343.77
		1-Nov-94	0	7.12	343.38
		11-Jan-95	0	6.34	344.16
TW-6	349.69	15-Apr-94	0	5.07	
		20-Jul-94	0	5.76	
		1-Nov-94	0	6.12	343.57
		11-Jan-95	0	5.49	344.20

Notes:

Groundwater elevation based on survey datum set by Geraghty & Miller.

* = Groundwater elevation is corrected for the effects of LPH using the following formula:

$TOC - [DTW \cdot (PT)(0.80)]$ where TOC=Top of Casing, DTW=Depth to Water,
PT=Product Thickness, and 0.80=Typical Specific Gravity for Gasoline.

** = Groundwater elevation was not measured on this date.

GROUNDWATER MONITORING REPORT
BP SERVICE STATION NO. 11085
3 MAR 95
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Table 2: Summary of Analytical Results: Groundwater
BP Service Station No. 11085
728 Meridian Street East
Puyallup, Washington

Well Number	Date Collected	WTPH-D (ug/l)	WTPH-G (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethyl-Benzene (ug/l)	Total Xylenes (ug/l)	Total Lead (ug/l)	Dissolved Oxygen (%)
MW-1	2-Apr-92	269	190	4.5	<1.0	<1.0	<1.0	2.8	
	20-Jul-94	<250	<100	16	<0.5	<0.5	<0.5	NT	7
	1-Nov-94	NT	130	100	1.4	2.1	6.2	NT	9
MW-2	2-Apr-92	340	1700	100	260	30	230	3.6	
	20-Jul-94	Not sampled. LPH present.							
	1-Nov-94	Not sampled. LPH present.							
MW-3	2-Apr-94	450	870	190	8	74	100	2.4	
	20-Jul-94	730	1400	200	9.1	130	120	NT	18
	1-Nov-94	NT	1800	160	6.9	150	100	NT	23
TW-6	15-Apr-94	61	15	1.3	<0.5	<0.5	<0.5	NT	
	20-Jul-94	<250	<100	<0.5	<0.5	<0.5	<0.5	NT	23
	1-Nov-94	NT	<100	<0.5	<0.5	<0.5	<0.5	NT	8

Notes:

WTPH-D = Total Petroleum Hydrocarbons, diesel range, by Ecology Method WTPH-D.

WTPH-G = Total Petroleum Hydrocarbons, gasoline range, by Ecology Method WTPH-G.

Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTX), by EPA Method 8020.

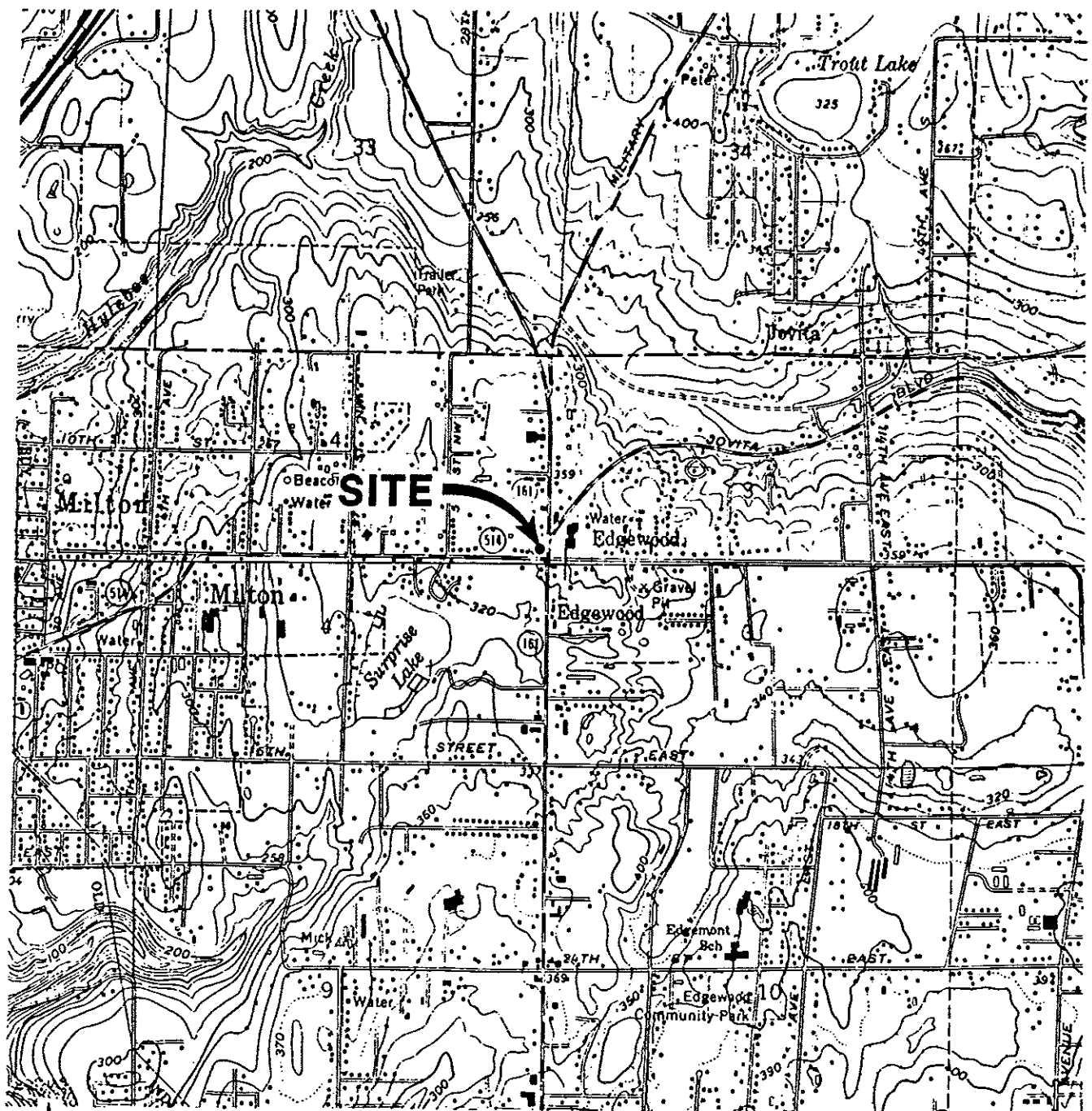
Total lead by EPA Method 7421.

NT = Not tested.

All concentration are expressed in micrograms/liter (ug/l).

Concentrations preceded by a "<" are laboratory method detection limits.

The method detection limit may vary depending on the laboratory used and sample characteristics.



Charles A. Gove & Associates, Inc.
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LOCATION MAP — FIGURE 1
BP SITE #11085
PUYALLUP, WASHINGTON

Date	8/22/94	Scale	NTS	FILE:	JOB#: 94088
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LEGEND

- MW-2 MONITORING WELL LOCATION
- 20.10 SPOT GROUNDWATER SURFACE ELEVATION IN FEET
- 18.56 INFERRED GROUNDWATER SURFACE ELEVATION CONTOUR IN FEET
- INFERRED DIRECTION OF GROUNDWATER FLOW

GROUND WATER TEST RESULTS

11 JAN 95
CONCENTRATIONS IN PARTS PER BILLION (PPB)
(OR METHOD DETECTION LIMIT IF PRECEDED BY "<")

B
T
E
X
WTPH-G
WTPH-D
DO
N/T

BENZENE BY EPA METHOD 8020
TOLUENE BY EPA METHOD 8020
ETHYLBENZENE BY EPA METHOD 8020
XYLENES BY EPA METHOD 8020
WASHINGTON TOTAL PETROLEUM HYDROCARBONS
FOR GASOLINE (EPA METHOD WTPH-G)
WASHINGTON TOTAL PETROLEUM HYDROCARBONS
FOR DIESEL (EPA METHOD WTPH-D)
DISSOLVED OXYGEN (%)
NOT TESTED

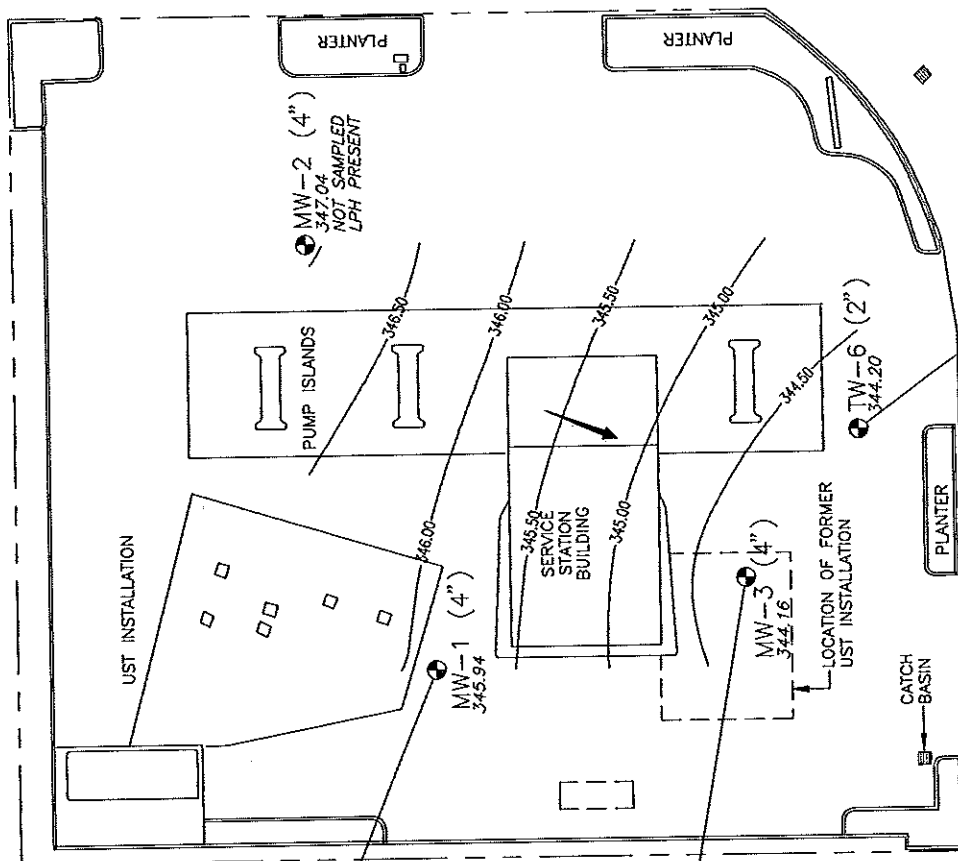
B	<0.5
T	<0.5
E	<0.5
X	<0.5
WTPH-G	<100
WTPH-D	N/T
DO	35

COMPOUNDS
CONCENTRATIONS OR
DETECTION LIMITS

MERIDIAN STREET NORTH



0 20 40
SCALE IN FEET



B	400
T	5.9
E	8
X	16
WTPH-G	540
WTPH-D	NT
DO	3

B	410
T	70
E	390
X	450
WTPH-G	5500
WTPH-D	NT
DO	48

B	20
T	2.5
E	7.5
X	600
WTPH-G	NT
WTPH-D	13
DO	

8TH STREET (65TH AVE. N.W.)

SOURCE OF BASE MAP:- GERAGHTY & MILLER, INC.

SITE & EXPLORATION PLAN FIGURE - 2
BP SITE #11085
PUYALLUP, WASHINGTON

Charles A. Gove & Associates, Inc.
Consulting Engineers
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P.O. Box 3453, Renton, WA 98054
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Drawn	Scale	1"=20'-0"
Approved	Date	3/3/95
		SHEETS - SHEET
		CAD FILE: 11085 JOB: 04011



Location BP 11085, 8th & MERIDIAN, MILTON. JOB # 94088
Method of Collection DISP BAILER Weather 47°F Page 1 of 1
Sampled By: BRUCE COMER RAM. Date 10th Jan '95

[illegible]

**TOTAL
PURGED**

52

MW2 - APPROX 3PTS PRODUCT REMOVED FROM PASSIVE BAILER. BAILER RESET
MW2 - PRODUCT SHEEN ONLY ON SURFACE

3 WELL VOLUMES:

2" ID = 0.5 gal/ft

4" ID = 2.0 gal/ft

6" ID = 4.4 gal/ft



Analytical**Technologies**, Inc.

560 Naches Avenue, S.W., Suite 101, Renton, WA 98055 (206) 228-8335

Karen L. Mixon, Laboratory Manager

ATI I.D. # 501050

January 26, 1995

Charles A. Gove & Associates
11 105th Ave. S.E.
Suite 8
Bellevue WA 98008

Attention : Dave Cooper

Project Number : BP# 11085/G342759

Project Name : BP# 11085/8th & Meridian

Dear Mr. Cooper:

On January 12, 1995, Analytical Technologies, Inc. (ATI), received four 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
Project Manager

DS/hal/mrj

Enclosure



SAMPLE CROSS REFERENCE SHEET

CLIENT : CHARLES A. GOVE & ASSOCIATES
PROJECT # : BP# 11085/G342759
PROJECT NAME : BP# 11085/8TH & MERIDIAN

ATI #	CLIENT DESCRIPTION	DATE SAMPLED	MATRIX
501050-1	MW1	01/11/95	WATER
501050-2	MW3	01/11/95	WATER
501050-3	TW6	01/11/95	WATER
501050-4	TRIP BLANK	N/A	WATER

----- TOTALS -----

MATRIX	# SAMPLES
WATER	4

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 : CHARLES A. GOVE & ASSOCIATES
PROJECT # : BP# 11085/G342759
PROJECT NAME : BP# 11085/8TH & MERIDIAN

ANALYSIS	TECHNIQUE	REFERENCE	LAB
BETX	GC/PID	EPA 8020	R
TOTAL PETROLEUM HYDROCARBONS	GC/FID	WA DOE WTPH-G	R

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

ATI I.D. # 501050

BETX - GASOLINE
DATA SUMMARY

CLIENT : CHARLES A. GOVE & ASSOCIATES	DATE SAMPLED : N/A
PROJECT # : BP# 11085/G342759	DATE RECEIVED : N/A
PROJECT NAME : BP# 11085/8TH & MERIDIAN	DATE EXTRACTED : N/A
CLIENT I.D. : METHOD BLANK	DATE ANALYZED : 01/11/95
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	92	50 - 150



ATI I.D. # 501050

BETX - GASOLINE
DATA SUMMARY

CLIENT	: CHARLES A. GOVE & ASSOCIATES	DATE SAMPLED	: N/A
PROJECT #	: BP# 11085/G342759	DATE RECEIVED	: N/A
PROJECT NAME	: BP# 11085/8TH & MERIDIAN	DATE EXTRACTED	: N/A
CLIENT I.D.	: METHOD BLANK	DATE ANALYZED	: 01/12/95
SAMPLE MATRIX	: WATER	UNITS	: ug/L
METHOD	: WA DOE WTPH-G/8020 (BETX)	DILUTION FACTOR	: 1

COMPOUNDSRESULTS

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	92	50 - 150



Analytical Technologies, Inc.

ATI I.D. # 501050

BETX - GASOLINE
DATA SUMMARY

CLIENT : CHARLES A. GOVE & ASSOCIATES	DATE SAMPLED : N/A
PROJECT # : BP# 11085/G342759	DATE RECEIVED : N/A
PROJECT NAME : BP# 11085/8TH & MERIDIAN	DATE EXTRACTED : N/A
CLIENT I.D. : METHOD BLANK	DATE ANALYZED : 01/13/95
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	102	76 - 120
TRIFLUOROTOLUENE	95	50 - 150



ATI I.D. # 501050

BETX - GASOLINE
DATA SUMMARY

CLIENT	: CHARLES A. GOVE & ASSOCIATES	DATE SAMPLED	: N/A
PROJECT #	: BP# 11085/G342759	DATE RECEIVED	: N/A
PROJECT NAME	: BP# 11085/8TH & MERIDIAN	DATE EXTRACTED	: N/A
CLIENT I.D.	: METHOD BLANK	DATE ANALYZED	: 01/17/95
SAMPLE MATRIX	: WATER	UNITS	: ug/L
METHOD	: WA DOE WTPH-G/8020 (BETX)	DILUTION FACTOR	: 1

COMPOUNDSRESULTS

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	101	76 - 120
TRIFLUOROTOLUENE	93	50 - 150

ATI I.D. # 501050-1

BETX - GASOLINE
DATA SUMMARY

CLIENT	: CHARLES A. GOVE & ASSOCIATES	DATE SAMPLED	: 01/11/95
PROJECT #	: BP# 11085/G342759	DATE RECEIVED	: 01/12/95
PROJECT NAME	: BP# 11085/8TH & MERIDIAN	DATE EXTRACTED	: N/A
CLIENT I.D.	: MW1	DATE ANALYZED	: 01/13/95
SAMPLE MATRIX	: WATER	UNITS	: ug/L
METHOD	: WA DOE WTPH-G/8020 (BETX)	DILUTION FACTOR	: 1

COMPOUNDSRESULTS

BENZENE	400	D3
ETHYLBENZENE	8.0	
TOLUENE	5.9	
TOTAL XYLENES	16	
FUEL HYDROCARBONS	540	
HYDROCARBON RANGE	TOLUENE TO DODECANE	
HYDROCARBON QUANTITATION USING	GASOLINE	

SURROGATE PERCENT RECOVERY

LIMITS

BROMOFLUOROBENZENE	100	76 - 120
TRIFLUOROTOLUENE	96	50 - 150

D3 = Value from a five fold diluted analysis.



ATI I.D. # 501050-2

BETX - GASOLINE
DATA SUMMARY

CLIENT	: CHARLES A. GOVE & ASSOCIATES	DATE SAMPLED	: 01/11/95
PROJECT #	: BP# 11085/G342759	DATE RECEIVED	: 01/12/95
PROJECT NAME	: BP# 11085/8TH & MERIDIAN	DATE EXTRACTED	: N/A
CLIENT I.D.	: MW3	DATE ANALYZED	: 01/13/95
SAMPLE MATRIX	: WATER	UNITS	: ug/L
METHOD	: WA DOE WTPH-G/8020 (BETX)	DILUTION FACTOR	: 20

COMPOUNDSRESULTS

BENZENE	410
ETHYLBENZENE	390
TOLUENE	71
TOTAL XYLENES	450
FUEL HYDROCARBONS	5500
HYDROCARBON RANGE	TOLUENE TO DODECANE
HYDROCARBON QUANTITATION USING	GASOLINE

SURROGATE PERCENT RECOVERY

LIMITS

BROMOFLUOROBENZENE	104	76 - 120
TRIFLUOROTOLUENE	93	50 - 150



ATI I.D. # 501050-3

BETX - GASOLINE
DATA SUMMARY

CLIENT	: CHARLES A. GOVE & ASSOCIATES	DATE SAMPLED	: 01/11/95
PROJECT #	: BP# 11085/G342759	DATE RECEIVED	: 01/12/95
PROJECT NAME	: BP# 11085/8TH & MERIDIAN	DATE EXTRACTED	: N/A
CLIENT I.D.	: TW6	DATE ANALYZED	: 01/13/95
SAMPLE MATRIX	: WATER	UNITS	: ug/L
METHOD	: WA DOE WTPH-G/8020 (BETX)	DILUTION FACTOR	: 1

COMPOUNDSRESULTS

BENZENE	20
ETHYLBENZENE	0.7
TOLUENE	2.5
TOTAL XYLENES	2.5
FUEL HYDROCARBONS	600
HYDROCARBON RANGE	TOLUENE TO DODECANE
HYDROCARBON QUANTITATION USING	GASOLINE

SURROGATE PERCENT RECOVERY

LIMITS

BROMOFLUOROBENZENE	103	76 - 120
TRIFLUOROTOLUENE	99	50 - 150



ATI I.D. # 501050-4

BETX - GASOLINE
DATA SUMMARY

CLIENT	: CHARLES A. GOVE & ASSOCIATES	DATE SAMPLED	: N/A
PROJECT #	: BP# 11085/G342759	DATE RECEIVED	: 01/12/95
PROJECT NAME	: BP# 11085/8TH & MERIDIAN	DATE EXTRACTED	: N/A
CLIENT I.D.	: TRIP BLANK	DATE ANALYZED	: 01/13/95
SAMPLE MATRIX	: WATER	UNITS	: ug/L
METHOD	: WA DOE WTPH-G/8020 (BETX)	DILUTION FACTOR	: 1

COMPOUNDSRESULTS

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	95	50 - 150



ATTI I.D. # 501050

BETX - GASOLINE
QUALITY CONTROL DATA

CLIENT	: CHARLES A. GOVE & ASSOCIATES	SAMPLE I.D. #	: BLANK
PROJECT #	: BP# 11085/G342759	DATE EXTRACTED	: N/A
PROJECT NAME	: BP# 11085/8TH & MERIDIAN	DATE ANALYZED	: 01/11/95
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	20.6	103	N/A	N/A	N/A
TOLUENE	<0.500	20.0	21.0	105	N/A	N/A	N/A
TOTAL XYLENES	<0.500	40.0	41.9	105	N/A	N/A	N/A
GASOLINE	<100	1000	1030	103	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	105	N/A	76 - 120
TRIFLUOROTOLUENE	95	N/A	50 - 150



ATT I.D. # 501050

BETX - GASOLINE
QUALITY CONTROL DATA

CLIENT	: CHARLES A. GOVE & ASSOCIATES	SAMPLE I.D. #	: BLANK
PROJECT #	: BP# 11085/G342759	DATE EXTRACTED	: N/A
PROJECT NAME	: BP# 11085/8TH & MERIDIAN	DATE ANALYZED	: 01/12/95
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	20.8	104	N/A	N/A	N/A
TOLUENE	<0.500	20.0	20.9	105	N/A	N/A	N/A
TOTAL XYLENES	<0.500	40.0	41.3	103	N/A	N/A	N/A
GASOLINE	<100	1000	1020	102	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	102	N/A	76 - 120
TRIFLUOROTOLUENE	96	N/A	50 - 150



ATI I.D. # 501050

BETX - GASOLINE
QUALITY CONTROL DATA

CLIENT	: CHARLES A. GOVE & ASSOCIATES	SAMPLE I.D. #	: BLANK
PROJECT #	: BP# 11085/G342759	DATE EXTRACTED	: N/A
PROJECT NAME	: BP# 11085/8TH & MERIDIAN	DATE ANALYZED	: 01/13/95
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	20.8	104	N/A	N/A	N/A
TOLUENE	<0.500	20.0	21.1	106	N/A	N/A	N/A
TOTAL XYLENES	<0.500	40.0	41.6	104	N/A	N/A	N/A
GASOLINE	<100	1000	960	96	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	101	N/A	76 - 120
TRIFLUOROTOLUENE	92	N/A	50 - 150



ATI I.D. # 501050

BETX - GASOLINE
QUALITY CONTROL DATA

CLIENT	: CHARLES A. GOVE & ASSOCIATES	SAMPLE I.D. #	: BLANK
PROJECT #	: BP# 11085/G342759	DATE EXTRACTED	: N/A
PROJECT NAME	: BP# 11085/8TH & MERIDIAN	DATE ANALYZED	: 01/17/95
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	20.5	102	N/A	N/A	N/A
TOLUENE	<0.500	20.0	20.7	103	N/A	N/A	N/A
TOTAL XYLENES	<0.500	40.0	41.2	103	N/A	N/A	N/A
GASOLINE	<100	1000	988	99	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	102	N/A	76 - 120
TRIFLUOROTOLUENE	97	N/A	50 - 150

ATI I.D. # 501050

BETX - GASOLINE
QUALITY CONTROL DATA

CLIENT	: CHARLES A. GOVE & ASSOCIATES	SAMPLE I.D. #	: 501049-2
PROJECT #	: BP# 11085/G342759	DATE EXTRACTED	: N/A
PROJECT NAME	: BP# 11085/8TH & MERIDIAN	DATE ANALYZED	: 01/13/95
SAMPLE MATRIX	: WATER	UNITS	: ug/L
METHOD	: WA DOE WTPH-G/8020 (BETX)		

COMPOUND	SAMPLE RESULT	SAMPLE DUP. RESULT	RPD	SPIKE ADDED	SPIKED RESULT	% REC.	DUP. SPIKED RESULT	DUP. % REC.	RPD
GASOLINE	29600	33200	11	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				96	95		50 - 150		