

ENTERED



50 Road 4990
P.O. Box 159
Bloomfield, New Mexico 87413
505
632-8013

April 17, 1997

Mr. Roger Anderson
Environmental Bureau Chief
New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

Re: Bi-Weekly Report Giant Refining Company - Bloomfield
GW-001



Dear Mr. Anderson:

Giant Refining Company - Bloomfield submits the bi-weekly report on activities associated with the river terrace at this facility.

Enclosed with this report are copies of the analytical from the first two sampling events from the river (within the boomed area). As expected, the results are negative for hydrocarbon. The river level has dropped to the 1000 cfs level, down from a peak of 1600 cfs. Recovery of hydrocarbon from the culvert at the river has not been possible due to the absence of hydrocarbon. Giant continues to monitor this situation daily and recovery operations will begin when hydrocarbon is again present in the culvert.

The absence of hydrocarbon during periods of normal or high flow reinforces Giant's contention that the San Juan river is acting as a hydraulic barrier against migration of hydrocarbon to the west or north.

Giant is expecting to receive a complete report from Precision Engineering, Inc. that includes a three dimension rendering of the subsurface geology in the river terrace area and the vertical and horizontal extent of hydrocarbon contamination of the river terrace area.

Sincerely:

A handwritten signature in cursive script that reads "Lynn Shelton".

Lynn Shelton
Environmental Manager
Giant Refining Company - Bloomfield

TLS/tls

Enclosure

cc: John Stokes, Refinery Manager
Kathleen O'Leary, Regulatory Affairs Coordinator
Greg Lyssy, Region VI USEPA
Steve Pullen, NMED / HRMB



2506 West Main Street
Farmington, New Mexico 87401
Tel. (505) 326-4737

Lynn Shelton
Giant Refining Company
P.O. Box 159
Bloomfield, NM 87413

8 April 1997



Mr. Shelton:

Enclosed please find the reports for the samples received by our laboratory for analysis on April 1, 1997.

If you have any questions about the results of these analyses, please don't hesitate to call at your convenience.

Sincerely,

Sharon Williams
Organic Analyst

Enclosures

xc: File

Giant Refining Company

Case Narrative

On April 1, 1997, two soil and two water samples were submitted to Inter-Mountain Laboratories - Farmington for analysis. The samples were received intact. Analysis for Benzene-Toluene-Ethylbenzene-Xylenes (BTEX); Total Petroleum Hydrocarbons (TPH) were performed on the samples as per the accompanying Chain of Custody # 46336.

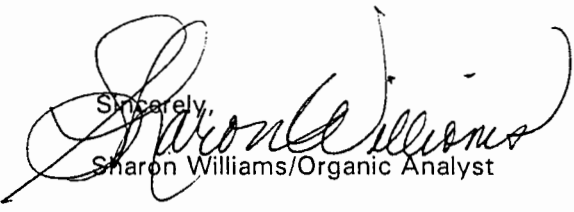
BTEX analysis on the samples were performed by EPA Method 5030, Purge and Trap, and EPA Method 8020, Aromatic Volatile Hydrocarbons, using an OI Analytical 4560 Purge and Trap and a Hewlett-Packard 5890 Gas Chromatograph, equipped with a photoionization detector. Detectable levels of BTEX analytes were found in the soil samples as indicated in the enclosed reports.

TPH samples were extracted by Method 3550, "Ultrasonic Extraction of Non-Volatile and Semi-Volatile Organic Compounds from Solids", with 1,1,2-trichloro 1,2,2-trifluoroethane (Freon) as the extraction solvent. Analysis was by Method 418.1, "Total Recoverable Petroleum Hydrocarbons", using a Buck Scientific Infrared Spectrophotometer. Petroleum Hydrocarbons were detected in the soil samples as indicated in the enclosed reports.

It is the policy of this laboratory to employ, whenever possible, preparatory and analytical methods which have been approved by regulatory agencies. The methods used in the analyses of the samples reported herein are found in Test Methods for Evaluation of Solid Waste, SW-846, USEPA, 1986 and Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, USEPA, 1983.

Quality control reports appear at the end of the analytical package and may be identified by title. If there are questions regarding the information presented in this package, please feel free to contact me at your convenience.

Sincerely,


Sharon Williams/Organic Analyst

VOLATILE AROMATIC HYDROCARBONS

Giant Refining Company

Project ID:	Bloomfield	Report Date:	04/07/97
Sample ID:	River-B	Date Sampled:	03/20/97
Lab ID:	0397G00478	Date Received:	04/01/97
Sample Matrix:	water	Date Extracted:	NA
Condition:	Cool/Intact	Date Analyzed:	04/02/97

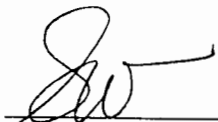
Target Analyte	Concentration (ppb)	Detection Limit (ppb)
Benzene	ND	0.2
Toluene	ND	0.2
Ethylbenzene	ND	0.2
m,p-Xylenes	ND	0.2
o-Xylene	ND	0.2

ND - Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Bromofluorobenzene	124%	70%-130%

Reference: Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, September 1986.

Comments:



Analyst



Review

VOLATILE AROMATIC HYDROCARBONS

Giant Refining Company

Project ID: Bloomfield
 Sample ID: River-B
 Lab ID: 0397G00481
 Sample Matrix: water
 Condition: Cool/Intact

Report Date: 04/07/97
 Date Sampled: 03/31/97
 Date Received: 04/01/97
 Date Extracted: NA
 Date Analyzed: 04/02/97

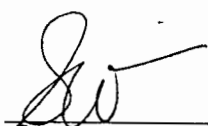
Target Analyte	Concentration (ppb)	Detection Limit (ppb)
Benzene	ND	0.2
Toluene	ND	0.2
Ethylbenzene	ND	0.2
m,p-Xylenes	ND	0.2
o-Xylene	ND	0.2

ND - Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Bromofluorobenzene	97%	70%-130%

Reference: Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, September 1986.

Comments:



Analyst



Review

VOLATILE AROMATIC HYDROCARBONS QUALITY CONTROL REPORT

Duplicate Analysis

Lab ID: 0397G00478
Sample Matrix: water
Condition: Cool/Intact

Report Date: 04/02/97
Date Analyzed: 04/02/97

Target Analyte	Duplicate Concentration (ppb)	Original Concentration (ppb)	% Difference
Benzene	ND	ND	NA
Toluene	ND	ND	NA
Ethylbenzene	ND	ND	NA
m,p-Xylenes	ND	ND	NA
o-Xylene	ND	ND	NA


ND - Analyte not detected at the stated detection limit.

NA - Not applicable or not calculated.

Quality Control:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Bromofluorobenzene	81%	70 -130%

Reference: Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, September 1986.

Comments:



Analyst



Review

VOLATILE AROMATIC HYDROCARBONS QUALITY CONTROL REPORT

Matrix Spike Analysis

Lab ID: MB
Sample Matrix: water
Condition: Cool/Intact

Report Date: 04/02/97
Date Analyzed: 04/02/97


Target Analyte	Spiked Sample Result in ng	Sample result in ng	Spike Added (ng)	% Recovery	Acceptance Limits (%)
Benzene	20.93	0.32	20.0	103%	70-130
Toluene	21.30	0.11	20.0	106%	70-130
Ethylbenzene	20.25	0.00	20.0	101%	70-130
m,p-Xylenes	38.78	0.13	40.0	97%	70-130
o-Xylene	21.43	0.00	20.0	107%	70-130

ND - Analyte not detected at the stated detection limit.
NA - Not applicable or not calculated.

Quality Control:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Bromofluorobenzene	113%	70 -130%

Reference: Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, September 1986.

Comments:



Analyst



Review

VOLATILE AROMATIC HYDROCARBONS
QUALITY CONTROL REPORTMethod Blank AnalysisSample Matrix: Water
Lab ID: MBReport Date: 04/02/97
Date Analyzed: 04/02/97

Target Analyte	Concentration (ppb)	Detection Limit (ppb)
Benzene	ND	0.2
Toluene	ND	0.2
Ethylbenzene	ND	0.2
m,p-Xylenes	ND	0.2
o-Xylene	ND	0.2

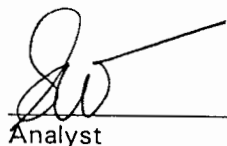
ND - Analyte not detected at the stated detection limit.

Quality Control: Surrogate Percent Recovery Acceptance Limits

Bromofluorobenzene 119% 70-130%

Reference: Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, September 1986.

Comments:



Analyst

Review

VOLATILE AROMATIC HYDROCARBONS QUALITY CONTROL REPORT

Trip Blank Analysis

Sample Matrix:
Lab ID:

Water
Trip Blank

Report Date: 04/02/97
Date Analyzed 04/02/97

Target Analyte	Concentration (ppb)	Detection Limit (ppb)
Benzene	ND	0.2
Toluene	ND	0.2
Ethylbenzene	ND	0.2
m,p-Xylenes	ND	0.2
o-Xylene	ND	0.2

ND - Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Bromofluorobenzene	90%	70- 130%

Reference: Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, September 1986.

Comments:

JB

Review

Quality Control / Quality Assurance**Known Analysis****BTEX**Client: **Giant Refining Company**
Project: **Bloomfield**Date Reported: **04/02/97**
Date Analyzed: **04/02/97****Known Analysis**

Parameter	Found Concentration (ppb)	Known Concentration (ppb)	Percent Recovery	Acceptance Limits
Benzene	4.1	4.0	103%	70-130%
Toluene	4.2	4.0	104%	70-130%
Ethylbenzene	4.0	4.0	99%	70-130%
m + p-Xylene	7.7	8.0	96%	70-130%
o-Xylene	4.2	4.0	105%	70-130%

Quality Control:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Bromofluorobenzene	118%	75-125%

Reference: Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, September 1986.

Comments:

Analyst



Reviewed by



TOTAL PETROLEUM HYDROCARBONS
Quality Assurance/Quality Control

Client: **Giant Refining Company**
Project: Bloomfield
Matrix: soil/water
Condition: Intact/Cool

Date Reported: 04/04/97
Date Sampled: 3/20-3/31/97
Date Received: 04/01/97
Date Extracted: 04/04/97
Date Analyzed: 04/04/97

Duplicate Analysis

Lab ID	Sample Result	Duplicate Result	Units	%Difference
0397G00479	5.0	6.0	mg/Kg	18.2%

Method Blank Analysis

Lab ID	Result	Units	Detection Limit
Method Blank	ND	mg/L	1.0

Spike Analysis

Lab ID	Found Conc. mg/L	Sample Conc. mg/L	Spike Amount mg/L	Percent Recovery	Acceptance Limits
MB	57.8	ND	52.5	110%	70-130%

Known Analysis

Lab ID	Found Conc. mg/L	Known Conc. mg/L	Percent Recovery	Acceptance Limits
QC	25.0	25.2	99%	70-130%

Method 418.1: Petroleum Hydrocarbons, Total Recoverable, USEPA Chemical Analysis of water and waste, 1978.

Method 3550: Ultrasonic extraction of Non-Volatile and Semi-Volatile Organic Compounds from Solids, USEPA SW -846, rev.1, July 1992.

Reported By: _____

Reveiwed By: _____

CHAIN OF CUSTODY RECORD

Client/Project Name GIANT REFINING CO. - BLOOMFIELD			Project Location			ANALYSES / PARAMETERS				
Sampler: (Signature) <i>Lynn Shelton</i>			Chain of Custody Tape No.							
Sample No./ Identification	Date	Time	Lab Number	Matrix	No. of Containers	BTEX	TPH 418.1			
RIVER - B	3/20/97	1115		H ₂ O	2	X				
SB-6-397-7.5	3/20/97			SOIL	1	X	X			
SB-6-397-15.0	3/20/97	0930		SOIL	1	X	X			
RIVER - B	3/31/97	1105		H ₂ O	2	X	X			
										cool + intact
Relinquished by: (Signature) <i>Lynn Shelton</i>			Date	Time	Received by: (Signature) <i>Chris Rayner</i>			Date	Time	
Relinquished by: (Signature)			Date	Time	Received by: (Signature)			Date	Time	
Relinquished by: (Signature)			Date	Time	Received by laboratory: (Signature)			Date	Time	

Inter-Mountain Laboratories, Inc.

1633 Terra Avenue
Sheridan, Wyoming 82801
Telephone (307) 672-8945

1701 Phillips Circle
Gillette, Wyoming 82718
Telephone (307) 682-8945

2506 West Main Street
Farmington, NM 87401
Telephone (505) 326-4737

1160 Research Dr.
Bozeman, Montana 59715
Telephone (406) 586-8450

11183 SH 30
College Station, TX 77845
Telephone (409) 776-8945

46336