

Aztec



50 Road 4990
P.O. Box 159
Bloomfield, New Mexico 87413

505
632-8013

April 21, 1998

Roger Anderson
Environmental Bureau Chief
New Mexico OCD
2040 South Pacheco
Santa Fe, New Mexico 87505

Denny Foust
Deputy Oil & Gas Inspector
New Mexico OCD
1000 Rio Brazos Road
Aztec, New Mexico 87410

Re: **Monthly Water Effluent Report**

Dear Sirs:

Attached is the March, 1998 waste water effluent (GW-001) and injection well (GW-130) report for Giant Refining Company's Bloomfield Refinery. Also included are copies of the quarterly sample analyses for the injection well.

If you require additional information, please do not hesitate to contact me at (505) 632 8013.

Sincerely:

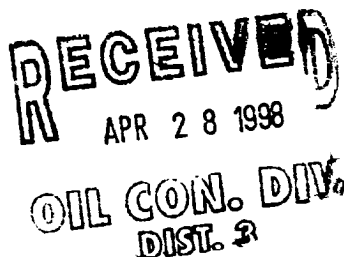
A handwritten signature in cursive script that reads "Lynn Shelton".

Lynn Shelton
Environmental Manager
Giant Refining Company - Bloomfield

TLS/tls

Enclosure

cc: John Stokes
Ron Weaver
Chad King



GIANT REFINING COMPANY - BLOOMFIELD

P.O. BOX 159

BLOOMFIELD, NEW MEXICO 87413

MONTHLY INJECTION WELL REPORT

DISCHARGE PLAN GW-130 EXP. DATE 11/4/98

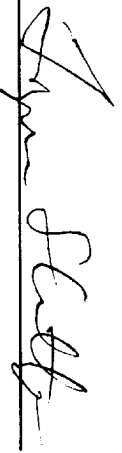
NE 1/4 SE 1/4 SECTION 27, T29N, R11W

NMPM, SAN JUAN COUNTY, NEW MEXICO

RECEIVED
APR 28 1998
OIL CON. DIV.
DIST. 3

PERIOD 1998	AMOUNT OF WATER FROM RIVER (GALLONS)	AMOUNT TO SOLAR EVAP PONDS (GALLONS)	TOTALIZER AMOUNT INJECTED (GALLONS)	CALCULATED AMOUNT INJECTED (GALLONS)	DOWN- TIME (HRS)	INJECTION PRESSURE			ANNULAR PRESSURE			ON-LINE FLOW RATES		
						MAX (PSIA)	MIN (PSIA)	AVG (PSIA)	MAX (PSIA)	MIN (PSIA)	AVG (PSIA)	MAX (GPM)	MIN (GPM)	AVG (GPM)
JAN	10,000,000	4,441,900	3,744,600	5,449,651	72	1009	935.2	981.02	169.8	98	149.69	155.8	120.3	135.16
FEB	8,736,000	3,558,900	4,318,400	5,378,688	0	1047	951.1	994.54	150.4	135.6	137.99	190.3	106.3	133.34
MAR	8,908,000	4,332,500	4,187,300	5,026,464	0	1006	899.7	988.72	177.6	126.6	148.9	131.5	96.2	112.76
APR														
MAY														
JUN														
JUL														
AUG														
SEP														
OCT														
NOV														
DEC														

CERTIFICATION:



DATE:

4/21/98

TLS 4/98

TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9
4725 Ripley Avenue, Suite A

Lubbock, Texas 79424 800•378•1296
El Paso, Texas 79922 888•588•3443
E-Mail: lab@traceanalysis.com

806•794•1296 FAX 806•794•1298
915•585•3443 FAX 915•585•4944

ANALYTICAL RESULTS FOR GIANT REFINING COMPANY

Attention: Lynn Shelton
P. O. Box 159
Bloomfield, NM 87413

RECEIVED
APR 29 1998

PAGE 1 of 2

March 20, 1998
Receiving Date: 03/11/98
Sample Type: Water
Project No: NA
Project Location: NA
TA #: T93285/980903
FIELD CODE: Qtr Inj Well

Prep Date: 03/17/98
Analysis Date: 03/17/98
Sampling Date: 03/10/98
Sample Condition: Intact & Cool
Sample Received by: WW
Project Name: NA

OIL CON. DIV.
DIST. 3

	Reporting Limit	Concentration (ug/L)	QC	RPD	EA	IA
8260 Compounds						
Dichlorodifluoromethane	1	ND				
Chloromethane	1	ND				
Vinyl chloride	2	ND	119			119
Bromomethane	5	ND				
Chloroethane	1	ND				
Trichlorofluoromethane	1	ND				
1,1-Dichloroethene	1	ND	110	5	115	110
Methylene chloride	5	ND				
trans-1,2-Dichloroethene	1	ND				
1,1-Dichloroethane	1	ND				
Chloroform	1	ND	96			96
1,2-Dichloroethane	1	ND				
1,1,1-Trichloroethane	1	ND				
Carbon Tetrachloride	1	ND				
Benzene	1	ND		5	111	
1,2-Dichloropropane	1	ND	102			102
Trichloroethene	1	ND		6	114	
cis-1,3-Dichloropropene	1	ND				
trans-1,3-Dichloropropene	1	ND				
Toluene	1	ND	107	7	114	107
1,1,2-Trichloroethane	1	ND				
2-chloroethyl Vinyl Ether	1	ND				
Dibromochloromethane	1	ND				
Tetrachloroethene	1	ND				
Chlorobenzene	1	ND	105	5	110	105
1,1,1,2-Tetrachloroethane	1	ND				
Ethylbenzene	1	ND	108			108
Bromoform	1	ND				
1,1,2,2-Tetrachloroethane	1	ND				
1,4-Dichlorobenzene	1	ND				
1,3-Dichlorobenzene	1	ND				
1,2-Dichlorobenzene	1	ND				

% Recovery

Dibromofluoromethane 98
Toluene-d8 99
4-Bromofluorobenzene 99

METHODS: EPA SW 846-5030, 8260.
Chemist: AG

BS

3-20-98

Director, Dr. Blair Leftwich

Date

TRACE ANALYSIS, INC.

ANALYTICAL REPORT

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296
 4725 Riple Avenue, Suite A El Paso, Texas 79922 888•588•3443
CLIENT GIANT REFINING COMPANY
P.O. BOX 159
BLOOMFIELD, NM 87413
 E-Mail: lab@traceanalysis.com

806•794•1296 FAX 806•794•1298
 915•585•3443 FAX 915•585•4944
SAMPLE NO. : 980903
INVOICE NO.: 22101796
REPORT DATE: 03-25-98
REVIEWED BY: NA7
PAGE : 1 OF 2

CLIENT SAMPLE ID : QTR INJ WELL
SAMPLE TYPE: Water
SAMPLED BY: LS
SUBMITTED BY: LS
SAMPLE SOURCE: --
ANALYST: K. Costa

AUTHORIZED BY : L. SHELTON
CLIENT P.O. : --
SAMPLE DATE ...: 03-10-98
SUBMITTAL DATE : 03-11-98
EXTRACTION DATE: --
ANALYSIS DATE ..: 03-23-98

REMARKS -

Sample received with headspace.

Petroleum Contaminants by 8020A

D A T A T A B L E			
Parameter	Result	Unit	Detection Limit
Benzene	<0.20	ug/L	0.20
Toluene	.29	ug/L	0.20
Ethylbenzene	<0.20	ug/L	0.20
Total Xylenes	1.9	ug/L	0.20

ANALYTICAL RESULT(S) REPORTED HEREIN APPLY ONLY TO THE SAMPLE(S) TESTED. FURTHERMORE, THIS REPORT CAN ONLY BE COPIED IN ITS ENTIRETY.

(1) Copy to Client

M. Hamilton
 MANAGING DIRECTOR

TRACEANALYSIS, INC.

SAMPLE NO. : 980903
 INVOICE NO. : 22101796
 REPORT DATE: 03-25-98
 REVIEWED BY: *mgj*
 PAGE : 2 OF 2

(1) Copy to Client

TRACE ANALYSIS, INC.

ANALYTICAL REPORT

CLIENT GIANT REFINING COMPANY
P.O. BOX 159
BLOOMFIELD, NM 87413

6701 Aberdeen Avenue, Suite 9
4725 Bialon Avenue, Suite A

Lubbock, Texas 79424 800-378-1296
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SAMPLE NO.: 980903
INVOICE NO.: 22101796
REPORT DATE: 03-25-98
REVIEWED BY: *h*
PAGE : 1 OF 1

CLIENT SAMPLE ID : QTR INJ WELL
SAMPLE TYPE: Water
SAMPLED BY: LS
SUBMITTED BY: LS
SAMPLE SOURCE: --

AUTHORIZED BY : L. SHELTON
CLIENT P.O. : --
SAMPLE DATE: 03-10-98
SUBMITTAL DATE : 03-11-98
EXTRACTION DATE: --

Inorganic Chemistry - Total Metals

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date	Test Method	Analyst
Total Arsenic	0.014	mg/L	0.005	03-22-98	SM 3113B	N. Munir
Total Barium	<1.0	mg/L	1.0	03-17-98	SM 3111D	N. Munir
Total Cadmium	<0.05	mg/L	0.05	03-17-98	SM 3111B	N. Munir
Total Calcium	120	mg/L	1.0	03-17-98	SM 3111D	N. Munir
Total Chromium	<0.10	mg/L	0.10	03-17-98	SM 3111B	N. Munir
Total Lead	<0.15	mg/L	0.15	03-17-98	SM 3111B	N. Munir
Total Magnesium	39.	mg/L	1.0	03-17-98	SM 3111B	N. Munir
Total Mercury	<0.001	mg/L	0.001	03-16-98	SM 3112B	N. Munir
Total Potassium	27.	mg/L	1.0	03-17-98	SM 3111B	N. Munir
Total Selenium	<0.005	mg/L	0.005	03-17-98	SM 3113B	N. Munir
Total Silver	<0.002	mg/L	0.002	03-17-98	SM 3113B	N. Munir
Total Sodium	920	mg/L	1.0	03-17-98	SM 3111B	N. Munir

ANALYTICAL RESULTS REPORTED HEREIN APPLY ONLY TO THE SAMPLE(S) TESTED. FURTHERMORE, THIS REPORT CAN ONLY BE COPIED IN ITS ENTIRETY.

(1) Copy to Client

M. Munir

ANALYTICAL REPORT

TRACE ANALYSIS, INC.

CLIENT GIANT REFINING COMPANY
P.O. BOX 159
BLOOMFIELD, NM 87413

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El Paso, Texas 79922

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FAX 915•585•3443

SAMPLE NO.: 980903
INVOICE NO.: 22101796
REPORT DATE: 03-25-98
REVIEWED BY: *lhr*
PAGE: 1 OF 1

CLIENT SAMPLE ID: QTR INJ WELL
SAMPLE TYPE: Water
SAMPLED BY: LS
SUBMITTED BY: LS
SAMPLE SOURCE: --

AUTHORIZED BY: L. SHELTON
CLIENT P.O.: --
SAMPLE DATE: 03-10-98
SUBMITTAL DATE: 03-11-98
EXTRACTION DATE: --

Inorganic Non-Metals

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date	Test Method	Analyst
Bicarbonate	330	mg/L	5.0	03-23-98	STD METH 2320 B	A. Donohue
Carbonate	<5.0	mg/L	5.0	03-23-98	STD METH 2320 B	A. Donohue
Chloride	1200	mg/L	5.0	03-20-98	EPA 300.0	A. Donohue
Electrical Conductivity	6700	umhos/cm		03-12-98	STD METH 2510 B	A. Donohue
pH	7.7	S.U.		03-11-98	STD METH 4500-H+	A. Donohue
Sulfate	400	mg/L	5.0	03-20-98	EPA 300.0	A. Donohue
Total Dissolved Solids	3500	mg/L	50.	03-16-98	STD METH 2540 C	A. Donohue

ANALYTICAL RESULTS REPORTED HEREIN APPLY ONLY TO THE SAMPLE(S)
TESTED. FURTHERMORE, THIS REPORT CAN ONLY BE COPIED IN ITS ENTIRETY.

(1) Copy to Client

M. Shelton

QUALITY CONTROL REPORT

QC IDENTIFIER: 31-032398-1
REFERENCE NOTEBOOK :
REFERENCE PAGE:

INSTRUMENT : HEWLETT PACKARD GC5890 PID/ELCD
ANALYZED BY : K. Costa
ANALYZED ON : 03-23-98

TEST DESCRIPTION ...: Petroleum Contaminants by 8020A

SAMPLES IN THIS RUN: 980903 980907

CALIBRATION CHECK -

PARAMETER	UNIT	TRUE VALUE	FOUND VALUE	%RECOVERY
Benzene	ug/L	10	9.57	95.7
Toluene	ug/L	10	9.71	97.1
Ethylbenzene	ug/L	10	9.73	97.3
Total Xylenes	ug/L	30	29.0	96.7
Benzene	ug/L	10	9.63	96.3
Toluene	ug/L	10	9.72	97.2
Ethylbenzene	ug/L	10	9.44	94.4
Total Xylenes	ug/L	30	28.6	95.3
Benzene	ug/L	10	9.70	97.0
Toluene	ug/L	10	9.95	99.5
Ethylbenzene	ug/L	10	9.81	98.1
Total Xylenes	ug/L	30	29.4	98.0

BLANK SPIKES

PARAMETER	UNIT	SAMPLE RESULT	SPIKE CONC.	[- SAMPLE AND SPIKE -] RESULT 1 RESULT 2		% REC1	% REC2	RPD
Benzene	ug/L	<0.20	10.	9.99		99.9		
Toluene	ug/L	<0.20	10.	10.3		103.0		
Ethylbenzene	ug/L	<0.20	10.	10.0		100.0		
Total Xylenes	ug/L	<0.20	30.	30.2		100.7		

METHOD BLANKS -

PARAMETER	UNIT	RESULT
Benzene	ug/L	<0.20
Toluene	ug/L	<0.20
Ethylbenzene	ug/L	<0.20
Total Xylenes	ug/L	<0.20

QUALITY CONTROL REPORT

QC IDENTIFIER: 31-032398-1
REFERENCE NOTEBOOK :
REFERENCE PAGE:

INSTRUMENT : HEWLETT PACKARD GC5890 PID/ELCD
ANALYZED BY : K. Costa
ANALYZED ON : 03-23-98

NOTE -

- 1) NC: Not Calculable because result is < 5 times the MDL
- 2) NP: Not Practical because sample result is 4 times or more greater than spike added.
- 3) Percent Recovery is:

$$\frac{\text{Sample+Spike Result} - \text{Sample Result}}{\text{Spike Amount}} \times 100$$

- 4) Relative Percent Difference (RPD) is:

$$\frac{\text{Sample Result} - \text{Replicate Result}}{(\text{Sample Result} + \text{Replicate Result})/2} \times 100$$

6701 Aberdeen Avenue, Ste. 9 Lubbock, Texas 79424
Tel (806) 794 1296 Fax (806) 794 1298
1 (800) 378 1296

Page / of /

Phone #: 708-231-1111

Fax #:

Project Name:

Sampler Signature: 

Intact <u>Y</u> / N Headspace <u>Y</u> / N Temp _____ ° Log-in Review _____	LAB USE ONLY	REMARKS:	MTBE 8020/602
			BTEX 8020/602
			TPH
			PAH 8270
			Total Metals Ag A
			TCLP Metals Ag
			TCLP Volatiles
			TCLP Semi Volatiles
			RCI
			GC/MS Vol. 8240
			GC/MS Semi. Volatiles
			PCB's 8080/608
			Pest. 8080/608
			BOD, TSS, PH
			X GIANT
			Turn Around Time
			Hold

LAB Order ID #

ANALYSIS REQUEST
 Circle or Specify Method No.)

Turn Around Time if different from standard

Hold

Submission of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.

Carrier # WPS N033 097 618 2

GIANT REFINING COMPANY - BLOOMFIELD
P.O. BOX 159
BLOOMFIELD, NEW MEXICO 87413

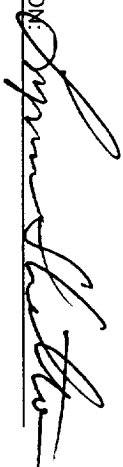
MONTHLY INJECTION WELL REPORT
DISCHARGE PLAN GW-130 EXP. DATE 11/4/98
NE 1/4 SE 1/4 SECTION 27, T29N, R11W
NMPM, SAN JUAN COUNTY, NEW MEXICO

RECEIVED
FEB - 5 1998

OIL CON. DIV.
DEPT. 3

PERIOD 1997	AMOUNT OF WATER FROM RIVER (GALLONS)	AMOUNT TO SOLAR EVAP PONDS (GALLONS)	TOTALIZER AMOUNT INJECTED (GALLONS)	CALCULATED AMOUNT INJECTED (GALLONS)	DOWN- TIME (HRS)	INJECTION PRESSURE			ANNUAL PRESSURE			ON-LINE FLOW RATES		
						MAX (PSIA)	MIN (PSIA)	AVG (PSIA)	MAX (PSIA)	MIN (PSIA)	AVG (PSIA)	MAX (GPM)	MIN (GPM)	AVG (GPM)
JAN	9,024,000	3,632,100	2,137,100	2,299,809	480	972.7	795.8	949.9	187.5	134.9	162.4	152	87.5	145.19
FEB	9,798,000	3,980,900	4,770,100	6,436,195	0	996.4	795.8	980.9	201.6	104.3	153.1	149.6	127.1	144.18
MAR	10,883,000	4,513,900	4,634,300	5,556,432	100	1035	763.0	988.73	500	98.1	167.0	150.5	55.1	143.8
APR	6,907,000	3,680,300	3,686,500	4,585,680	120	1012	763	986.16	500	174.1	182.6	136.8	103.2	127.38
MAY	11,797,000	3,595,900	4,970,600	6,119,251	0	1023	943.2	972.62	179.3	142.2	174.29	147.1	118.4	137.08
JUN	12,635,000	4,046,200	4,496,900	6,616,987	0	999.3	956.1	980.44	175.5	141.8	162.26	154	142.7	148.23
JUL	12,210,000	4,784,000	5,621,500	6,662,966	0	1010	976.3	975.27	165.8	161.9	164.17	160.9	138.7	149.26
AUG	13,540,000	3,831,700	4,984,700	6,171,600	4	1059	942.6	967.37	168.9	163.9	167.37	161.9	117.8	139
SEP	11,859,000	4,617,400	3,987,800	5,177,520	0	1018	946.5	988.11	171	167.4	168.85	141.6	99.2	119.85
OCT	10,070,000	4,515,500	3,860,500	4,854,175	156	1044	911.5	994.65	179.4	169.1	163.47	147.6	117	137.59
NOV	11,074,000	4,751,400	3,929,300	4,822,659	154	1084	835.5	984.76	220	155.8	175.12	158.6	90	142.01
DEC	10,164,000	4,297,900	4,756,200	6,042,655	5	1014	944.9	987.54	171.4	155.8	160.56	147.4	118.3	136.28

CERTIFICATION:



DATE:

1/30/98

TLS1/98