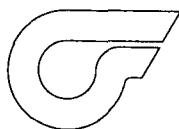


**GW -** 1

# **MONITORING REPORTS**

**DATE:  
1992-1981**



Bloomfield Refining  
Company

A Gary Energy Corporation Subsidiary

ENVIRONMENTAL DIVISION

RECEIVED

'92 NOV 9 AM 9 08

November 5, 1992

Mr. Roger Anderson  
Environmental Bureau  
New Mexico OCD  
P. O. Box 2088  
Santa Fe, New Mexico 87504-2088

RE: Monthly Water Effluent Report

Dear Mr. Anderson:

Please find attached our October 1992 wastewater effluent report. If you have any questions, please call me.

Sincerely,

A handwritten signature in black ink, appearing to read "Chris Hawley".

Chris Hawley  
Environmental Manager

CH/jm

Enclosure

BLOOMFIELD REFINING COMPANY

Monthly Report of Water Discharged  
to the Solar Evaporation Ponds

<u>Month</u>	<u>Water Discharged (Gallons)</u>
January 1992	2,786,000
February 1992	2,687,600
March 1992	2,820,100
April 1992	2,813,200
May 1992	3,266,400
June 1992	2,456,100
July 1992	2,780,000
August 1992	2,784,800
September 1992	2,663,600
October 1992	3,345,700

BLOOMFIELD REFINING COMPANY

Monthly Report of Water Discharged  
to the Solar Evaporation Ponds

<u>Month</u>	<u>Water Discharged (Gallons)</u>
January 1992	2,786,000
February 1992	2,687,600
March 1992	2,820,100
April 1992	2,813,200
May 1992	3,266,400
June 1992	2,456,100
July 1992	2,780,000
August 1992	2,784,800
September 1992	2,663,600
October 1992	3,345,700
November 1992	3,240,500
December 1992	<u>3,106,600</u>
<b>TOTAL 1992</b>	<b><u>34,750,600</u></b>

**BLOOMFIELD REFINING COMPANY**

**Monthly Report of Water Discharged  
to the Solar Evaporation Ponds**

<u>Month</u>	<u>Water Discharged (Gallons)</u>
January 1991	3,574,500
February 1991	3,294,800
March 1991	3,256,200
April 1991	2,421,200
May 1991	2,807,400
June 1991	2,815,200
July 1991	2,641,400
August 1991	2,710,200
September 1991	2,927,600
October 1991	3,037,500
November 1991	3,073,600
December 1991	<u>3,122,600</u>
Total 1991	35,682,200

BLOOMFIELD REFINING COMPANY

Monthly Report of Water Discharged  
to the Solar Evaporation Ponds

<u>Month</u>	<u>Water Discharged (Gallons)</u>
January 1990	2,832,300
February 1990	2,864,300
March 1990	3,695,100
April 1990	2,752,400
May 1990	3,004,100
June 1990	2,411,600
July 1990	2,503,700
August 1990	2,361,600
September 1990	2,770,700
October 1990	3,007,300
November 1990	3,094,900
December 1990	<u>2,831,000</u>
Total 1990	<u>34,129,000</u>

Acre-Feet                                    104.7

BLOOMFIELD REFINING COMPANY

Monthly Report of Water Discharged  
to the Solar Evaporation Ponds

<u>Month</u>	<u>Water Discharged (Gallons)</u>
January, 1989	3,052,100
February, 1989	3,052,100
March, 1989	3,207,600
April, 1989	2,939,800*
May, 1989	3,705,600
June, 1989	2,799,300
July, 1989	3,284,400
August, 1989	3,025,400
September, 1989	2,659,800
October, 1989	2,188,700
November, 1989	3,163,600

\*Includes approximately 500,000 gallons from Hammond Ditch



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

GARREY CARRUTHERS  
GOVERNOR

September 8, 1989

POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87504  
(505) 827-5800

Mr. Chris Hawley  
Bloomfield Refining Company  
P. O. Box 159  
Bloomfield, New Mexico 87413

**RE: Monthly Water Effluent Report**

Dear Mr. Hawley:

Please change the address to which you send the monthly effluent report to:

Environmental Bureau  
NM Oil Conservation Division  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

Thank you for your attention to this matter.

Sincerely,

David G. Boyer, Hydrogeologist  
Environmental Bureau Chief

DGB/sl

BLOOMFIELD REFINING COMPANY

Monthly Report of Water Discharged  
To The Solar Evaporation Ponds

<u>MONTH</u>	<u>WATER DISCHARGE (Gallons)</u>
January, 1988	2,608,500
February, 1988	2,360,800
March, 1988	4,315,000
April, 1988	3,701,800
May, 1988	2,963,400
June, 1988	2,807,500
July, 1988	3,012,900
August, 1988	2,836,100
September, 1988	2,625,300
October, 1988	2,700,000
November, 1988	2,767,200
December, 1988	<u>2,969,500</u>
1988 TOTAL	<u>35,668,000</u>

MONTHLY REPORT OF WATER DISCHARGED  
TO THE SOLAR EVAPORATION PONDS

BLOOMFIELD REFINING COMPANY

<u>MONTH</u>	<u>WATER DISCHARGE</u>
January, 1987	3,074,700
February, 1987	3,689,700
March, 1987	3,036,600
April, 1987	2,856,700
May, 1987	3,139,300
June, 1987	2,752,000
July, 1987	2,245,900
August, 1987	4,000,500
September, 1987	3,024,000
October, 1987	2,601,400
November, 1987	2,464,200
December, 1987	<u>2,405,300</u>
TOTAL	35,290,300

MONTHLY REPORT OF WATER DISCHARGED  
TO THE SOLAR EVAPORATION PONDS

BLOOMFIELD REFINING COMPANY

DATE January 5, 1987

The discharge of water to the Solar Evaporation Ponds for the month of  
December, 1986, was 2,446,000 gallons

Signature *John Harvey*

MONTHLY REPORT OF WATER DISCHARGED  
TO THE SOLAR EVAPORATION PONDS

BLOOMFIELD REFINING COMPANY

DATE December 8, 1986

The discharge of water to the Solar Evaporation Ponds for the month of  
November, 1986, was 3,101,000 gallons

Signature Chris Tracy

MONTHLY REPORT OF WATER DISCHARGED  
TO THE SOLAR EVAPORATION PONDS

BLOOMFIELD REFINING COMPANY

DATE November 4, 1986

The discharge of water to the Solar Evaporation Ponds for the month of  
October, 1986, was 3,189,300 gallons

Signature *John H. Tracy*

MONTHLY REPORT OF WATER DISCHARGED  
TO THE SOLAR EVAPORATION PONDS

BLOOMFIELD REFINING COMPANY

DATE October 9, 1986

The discharge of water to the Solar Evaporation Ponds for the month of  
September, 1986, was 3,841,300 gallons

Signature John H. Tracy

MONTHLY REPORT OF WATER DISCHARGED  
TO THE SOLAR EVAPORATION PONDS

BLOOMFIELD REFINING COMPANY

DATE September 4, 1986

The discharge of water to the Solar Evaporation Ponds for the month of  
August, 1986, was 3,436,900 gallons

Signature John H. Tracy

MONTHLY REPORT OF WATER DISCHARGED  
TO THE SOLAR EVAPORATION PONDS

BLOOMFIELD REFINING COMPANY

DATE August 4, 1986

The discharge of water to the Solar Evaporation Ponds for the month of

July, 1986, was 3,690,000 gallons  
(acre feet, cubic feet, gallons, etc.)

Signature Chris Hwang

MONTHLY REPORT OF WATER DISCHARGED  
TO THE SOLAR EVAPORATION PONDS

BLOOMFIELD REFINING COMPANY

DATE July 2, 1986

The discharge of water to the Solar Evaporation Ponds for the month of  
June, 1986, was 3,473,100 gallons  
(acre feet, cubic feet, gallons, etc.)

Signature John H. Tracy

MONTHLY REPORT OF WATER DISCHARGED  
TO THE SOLAR EVAPORATION PONDS

BLOOMFIELD REFINING COMPANY

DATE June 10, 1986

The discharge of water to the Solar Evaporation Ponds for the month of  
May, 1986, was 3,667,100 gallons  
(acre feet, cubic feet, gallons, etc.)

Signature John H. Murphy

MONTHLY REPORT OF WATER DISCHARGED  
TO THE SOLAR EVAPORATION PONDS

BLOOMFIELD REFINING COMPANY

DATE May 2, 1986

The discharge of water to the Solar Evaporation Ponds for the month of

April, 19 86, was 3,242,600 gallons  
(acre feet, cubic feet, gallons, etc.)

Signature John H. Whitney

MONTHLY REPORT OF WATER DISCHARGED  
TO THE SOLAR EVAPORATION PONDS

BLOOMFIELD REFINING COMPANY

DATE April 9, 1986

The discharge of water to the Solar Evaporation Ponds for the month of  
March, 1986, was 3,804,900 gallons  
(acre feet, cubic feet, gallons, etc.)

Signature Chris Hawley

MONTHLY REPORT OF WATER DISCHARGED  
TO THE SOLAR EVAPORATION PONDS

BLOOMFIELD REFINING COMPANY

DATE March 7, 1986

The discharge of water to the Solar Evaporation Ponds for the month of  
February, 1986, was 3,305,200 gallons  
(acre feet, cubic feet, gallons, etc.)

Signature C. M. Whitney

MONTHLY REPORT OF WATER DISCHARGED  
TO THE SOLAR EVAPORATION PONDS

BLOOMFIELD REFINING COMPANY

DATE February 10, 1986

The discharge of water to the Solar Evaporation Ponds for the month of  
January, 1986, was 2,824,100 gallons  
(acre feet, cubic feet, gallons, etc.)

Signature John Whitney

MONTHLY REPORT OF WATER DISCHARGED  
TO THE SOLAR EVAPORATION PONDS

BLOOMFIELD REFINING COMPANY

DATE January 10, 1986

The discharge of water to the Solar Evaporation Ponds for the month of  
December, 1985, was 3,836,000 gallons  
(acre feet, cubic feet, gallons, etc.)

Signature Chris Hawryluk

MONTHLY REPORT OF WATER DISCHARGED  
TO THE SOLAR EVAPORATION PONDS

BLOOMFIELD REFINING COMPANY

DATE December 10, 1985

The discharge of water to the Solar Evaporation Ponds for the month of  
November, 1985, was 2,413,800 gallons  
(acre feet, cubic feet, gallons, etc.)

Signature Amithway

MONTHLY REPORT OF WATER DISCHARGED  
TO THE SOLAR EVAPORATION PONDS

BLOOMFIELD REFINING COMPANY

DATE November 10, 1985

The discharge of water to the Solar Evaporation Ponds for the month of  
October, 1985, was 1,218,300 gallons  
(acre feet, cubic feet, gallons, etc.)

Signature Amithway

MONTHLY REPORT OF WATER DISCHARGED  
TO THE SOLAR EVAPORATION PONDS

BLOOMFIELD REFINING COMPANY

DATE October 10, 1985

The discharge of water to the Solar Evaporation Ponds for the month of  
September, 1985, was 3,668,000 gallons  
(acre feet, cubic feet, gallons, etc.)

Signature Chris Hwang

MONTHLY REPORT OF WATER DISCHARGED  
TO THE SOLAR EVAPORATION PONDS

BLOOMFIELD REFINING COMPANY

DATE September 10, 1985

The discharge of water to the Solar Evaporation Ponds for the month of  
August, 1985, was 3,365,800 gallons  
(acre feet, cubic feet, gallons, etc.)

Signature John H. Tracy

MONTHLY REPORT OF WATER DISCHARGED  
TO THE SOLAR EVAPORATION PONDS

BLOOMFIELD REFINING COMPANY

DATE August 10, 1985

The discharge of water to the Solar Evaporation Ponds for the month of  
July, 1985, was 3,203,760 gallons  
(acre feet, cubic feet, gallons, etc.)

Signature Chris Hawry

MONTHLY REPORT OF WATER DISCHARGED  
TO THE SOLAR EVAPORATION PONDS

BLOOMFIELD REFINING COMPANY

DATE July 10, 1985

The discharge of water to the Solar Evaporation Ponds for the month of  
June, 1985, was 2,832,100 gallons  
(acre feet, cubic feet, gallons, etc.)

Signature Christenbury

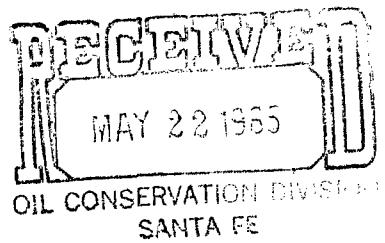
MONTHLY REPORT OF WATER DISCHARGED  
TO THE SOLAR EVAPORATION PONDS

BLOOMFIELD REFINING COMPANY

DATE June 10, 1985

The discharge of water to the Solar Evaporation Ponds for the month of  
May, 1985, was 3,194,000 gallons  
(acre feet, cubic feet, gallons, etc.)

Signature John H. Tracy



MONTHLY REPORT OF WATER DISCHARGED  
TO THE SOLAR EVAPORATION PONDS

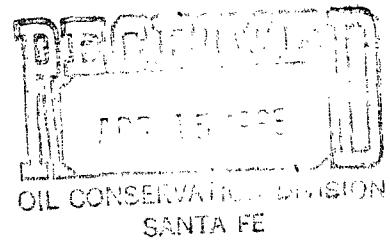
BLOOMFIELD REFINING COMPANY

DATE May 12, 1985

The discharge of water to the Solar Evaporation Ponds for the month of  
April, 1985, was 3,423,900 gallons  
(acre feet, cubic feet, gallons, etc.)

Signature

*Clad King*



MONTHLY REPORT OF WATER DISCHARGED  
TO THE SOLAR EVAPORATION PONDS

BLOOMFIELD REFINING COMPANY

DATE April 10, 1985

The discharge of water to the Solar Evaporation Ponds for the month of  
March, 1985, was 3,006,100 gallons  
(acre feet, cubic feet, gallons, etc.)

Signature

A handwritten signature in cursive ink that appears to read "Glad King".

MONTHLY REPORT OF WATER DISCHARGED  
TO THE SOLAR EVAPORATION PONDS

BLOOMFIELD REFINING COMPANY

DATE March 10, 1985 (RESUBMITTED)

The discharge of water to the Solar Evaporation Ponds for the month of  
February, 1985, was 2,814,900 gallons  
(acre feet, cubic feet, gallons, etc.)

Signature Chris Hawry

MONTHLY REPORT OF WATER DISCHARGED  
TO THE SOLAR EVAPORATION PONDS

BLOOMFIELD REFINING COMPANY

DATE February 10, 1985 (RESUBMITTED)

The discharge of water to the Solar Evaporation Ponds for the month of  
January, 1985, was 3,407,900 gallons  
(acre feet, cubic feet, gallons, etc.)

Signature John H. Tracy

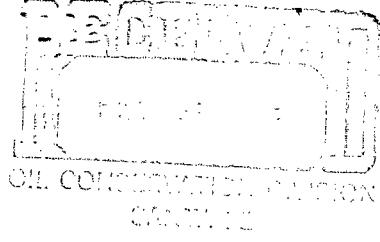
MONTHLY REPORT OF WATER DISCHARGED  
TO THE SOLAR EVAPORATION PONDS

BLOOMFIELD REFINING COMPANY

DATE February 21, 1985

The discharge of water to the Solar Evaporation Ponds for the month of  
January, 1985, was 3,407,100 gallons (87 gpm)  
(acre feet, cubic feet, gallons, etc.)

Signature



MONTHLY REPORT OF WATER DISCHARGED  
TO THE SOLAR EVAPORATION PONDS

BLOOMFIELD REFINING COMPANY

DATE Jan. 7, 1985

The discharge of water to the Solar Evaporation Ponds for the month of

Nov. & Dec., 1984, was 5,768,100 gallons (69 gpm)  
(acre feet, cubic feet, gallons, etc.)

Signature

Cleod King

MONTHLY REPORT OF WATER DISCHARGED  
TO THE SOLAR EVAPORATION PONDS

PLATEAU, INC.

DATE: November 2, 1984

The discharge of water to the Solar Evaporation Ponds for the month of

October, 1984, was 2,396,800 Gallons  
(acre feet, cubic feet, gallons, etc.)

Signature

Dwight J. Stockham

MONTHLY REPORT OF WATER DISCHARGED  
TO THE SOLAR EVAPORATION PONDS

PLATEAU, INC.

DATE: October 2, 1984

The discharge of water to the Solar Evaporation Ponds for the month of

September, 1984, was 2,662,600 Gallons  
(acre feet, cubic feet, gallons, etc.)

Signature

Dwight J. Stockham

MONTHLY REPORT OF WATER DISCHARGED  
TO THE SOLAR EVAPORATION PONDS

PLATEAU, INC.

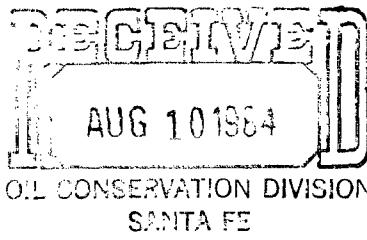
DATE: 9/10/84

The discharge of water to the Solar Evaporation Ponds for the month of

September, 1984, was 2,644,400 Gallons

(acre feet, cubic feet, gallons, etc.)

Signature Dwight J. Stockham



MONTHLY REPORT OF WATER DISCHARGED  
TO THE SOLAR EVAPORATION PONDS

PLATEAU, INC.

DATE: 8-07-84

The discharge of water to the Solar Evaporation Ponds for the month of

July, 1984, was 2,544,480 gallons

(acre feet, cubic feet, gallons, etc.)

Signature

Dwight J. Stockham

MONTHLY REPORT OF WATER DISCHARGED  
TO THE SOLAR EVAPORATION PONDS

PLATEAU, INC.

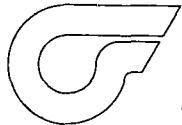
DATE: July 2, 1984

The discharge of water to the Solar Evaporation Ponds for the month of

June, 1984, was 2,376,000 gallons  
(acre feet, cubic feet, gallons, etc.)

Signature

Dwight J. Stockham



Bloomfield Refining  
Company

A Gary Energy Corporation Subsidiary

RE: DISCHARGE PLAN DIVISION

REF ID: A9

'91 DE 12 AM 8 50

December 11, 1991

Mr. Roger Anderson  
State of New Mexico  
Oil Conservation Division  
P. O. Box 2088  
Land Office Building  
Santa Fe, New Mexico 87501

RE: Discharge Plan GRW-1

Dear Mr. Anderson:

Analytical results, applicable to our discharge plan for Wells #1 and #5, that were obtained on November 7, 1991, are enclosed.

Please call me if there are any questions.

Sincerely yours,

Chris Hawley  
Environmental Manager

CH/jm

Enclosure

cc: John Goodrich  
Dave Roderick  
Joe Warr

BLOOMFIELD REFINING COMPANY  
MONITORING UNDER DISCHARGE PLAN SRW-1-A

MW-1

PARAMETER	UNIT	DET LIM	NMWD STANDARD	CURRENT RESULT	PREVIOUS RESULT	BASELINE RESULTS
DATE OF SAMPLE				11/07/91	6/18/91	1984/1985
ARSENIC	ug/l	0.005	0.100	0.000	0.000	0.016
BARIUM	ug/l	0.500	1.000	0.000	0.000	0.250
CADMIUM	ug/l	0.002	0.010	0.000	0.000	0.010
CHROMIUM	ug/l	0.020	0.050	0.020	0.000	0.018
LEAD	ug/l	0.020	0.050	0.000	0.000	0.086
BORON	ug/l	0.010	0.750	0.350	0.320	0.268
IRON	ug/l	0.050	1.000	0.000	0.000	46.268
MANGANESE	ug/l	0.020	0.200	2.790	1.040	0.943
TOTAL DISSOLVED SOLIDS	ug/l	1.000	1000.000	3540.000	3200.000	3516.000
CHLORIDE	ug/l	1.000	250.000	1180.000	1060.000	1070.500
SULFATE	ug/l	1.000	600.000	584.000	1070.000	815.500
PHENOLS	ug/l	0.005	0.005	0.000	0.022	0.055
CYANIDE	ug/l	0.010	0.200	0.000	0.000	0.000
NITRATE, NITRITE AS N	ug/l	0.100	10.000	20.600	2.540	5.725
AMMONIA	ug/l	0.100		0.070	0.050	
TOTAL KELDAHL NITROGEN	ug/l	0.100		1.630	1.270	
BENZENE	ug/l	0.200	10.000	0.000	0.000	0.000
TOLUENE	ug/l	0.200	750.000	0.000	0.000	0.000
ETHYL BENZENE	ug/l	0.200	750.000	0.000	0.000	0.000
XYLENES (TOTAL)	ug/l	0.200	620.000	0.000	0.000	0.000
pH	s.u.	0.01	6 to 9	7.50	7.19	7.31
ELEVATION AT T.D.P.	ft	0.01		5515.77	5515.77	5515.77
DEPTH TO WATER	ft	0.01		17.35	16.03	16.19
ELEVATION AT T.D.W.	ft	0.01		5498.42	5499.74	5499.58

BLOOMFIELD REFINING COMPANY  
MONITORING UNDER DISCHARGE PLAN BRW-1-A

MW-5

PARAMETER	UNIT	DET LIM	NMNLQ STANDARD	CURRENT RESULT	PREVIOUS RESULT	BASELINE RESULTS
DATE OF SAMPLE				11/07/91	11/14/90	1984/1985
ARSENIC	mg/l	0.005	0.100	0.000	0.000	0.004
BARIUM	mg/l	0.500	1.000	0.000	0.000	0.000
CADMIUM	mg/l	0.002	0.010	0.000	0.000	0.015
CHROMIUM	mg/l	0.020	0.050	0.030	0.000	0.000
LEAD	mg/l	0.020	0.050	0.000	0.000	0.015
BORON	mg/l	0.010	0.750	0.480	0.000	0.480
IRON	mg/l	0.050	1.000	0.000	0.000	0.061
MANGANESE	mg/l	0.020	0.200	0.120	0.000	0.128
TOTAL DISSOLVED SOLIDS	mg/l	1.000	1000.000	5390.000	4930.000	4746.000
CHLORIDE	mg/l	1.000	250.000	1770.000	1640.000	1402.000
SULFATE	mg/l	1.000	600.000	1370.000	1110.000	1299.000
PHENOLS	mg/l	0.001	0.005	0.002	0.030	0.008
CYANIDE	mg/l	0.010	0.200	0.000	0.010	0.013
NITRATE, NITRITE AS N	mg/l	0.100	10.000	24.100	23.100	24.000
AMMONIA	mg/l	0.100		0.110	0.140	
TOTAL KELDAHL NITROGEN	mg/l	0.100		0.750	1.690	
BENZENE	ug/l	0.200	10.000	0.000	0.000	0.000
TOLUENE	ug/l	0.200	750.000	0.000	0.000	0.000
ETHYL BENZENE	ug/l	0.200	750.000	0.000	0.000	0.000
XYLENES (TOTAL)	ug/l	0.200	620.000	0.000	0.000	0.000
pH	s.u.	0.01	6 to 9	7.50	7.19	7.41
ELEVATION AT T.O.P.	ft	0.01		5545.10	5545.10	5545.10
DEPTH TO WATER	ft	0.01		43.35	43.03	41.85
ELEVATION AT T.D.W.	ft	0.01		5501.75	5502.07	5503.25

CLIENT: Bloomfield Refinery                            DATE REPORTED: 12/11/91  
ID: 1200    DATE RECEIVED: 11/07/91  
SITE: MW -1    DATE COLLECTED: 11/07/91  
LAB NO: F7627

Total dissolved solids (180), mg/L...	3540
Total nitrate and nitrite, mg/L.....	20.6
Total Kjeldahl nitrogen, mg/L.....	1.63
Ammonia, mg/L.....	0.07
Cyanide, mg/L.....	<0.01
Phenols, mg/L.....	<0.005

Chloride.....	mg/L	meg/L
Chloride.....	1190	33.7
Sulfate.....	684	14.2

Trace metals by AA (dissolved concentration), mg/L

	Analytical Result:	Detection Limit:
Arsenic (As).....	ND	<0.005
Cadmium (Cd).....	ND	<0.002
Lead (Pb).....	ND	<0.02

Trace metals by ICAP (dissolved concentration), mg/L

	Analytical Result:	Detection Limit:
Boron (B).....	0.35	<0.01
Barium (Ba).....	ND	<0.5
Chromium (Cr).....	0.02	<0.02
Iron (Fe).....	ND	<0.05
Manganese (Mn).....	2.79	<0.02

ND - Analyte "not detected" at the stated detection limit.

  
Mary Stepp  
Lab Director

  
Wanda Orso  
Water Lab Supervisor



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

### VOLATILE AROMATIC HYDROCARBONS

Client: Bloomfield Refining Co. Report Date: 12-05-91  
Sample ID: MW-1 Date Sampled: 11-07-91  
Laboratory Number: 7627 Date Received: 11-07-91  
Analysis Requested: BTEX Date Analyzed: 12-03-91  
Sample Matrix: Water Preservative: Cool  
Condition: Cool & Intact

Parameter	Concentration (ug/L)	Det. Limit (ug/L)
Benzene	ND	0.2
Toluene	ND	0.2
Ethylbenzene	ND	0.2
p,m-Xylene	ND	0.2
o-Xylene	ND	0.2

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Bromfluorobenzene	88.8 %

Method: Method 8020, Aromatic Volatile Organics, SW-846,  
USEPA, (Sept. 1986).

ND - Parameter not detected at the stated detection limit.

Comments:

Tony Tristano  
Analyst

Mary Stepp  
Review

CLIENT: Bloomfield Refinery  
ID: 1100  
SITE: MW -5  
LAB NO: F7626

DATE REPORTED: 12/11/91  
DATE RECEIVED: 11/07/91  
DATE COLLECTED: 11/07/91

Total dissolved solids (180), mg/L... 5390  
Total nitrate and nitrite, mg/L.... 24.1  
Total Kjeldahl nitrogen, mg/L..... 0.75  
Ammonia, mg/L..... 0.11  
Cyanide, mg/L..... <0.01  
Phenols, mg/L..... 0.002

	mg/L	meq/L
Chloride.....	1770	50
Sulfate.....	1370	28.5

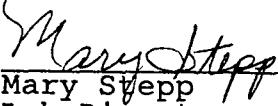
Trace metals by AA (dissolved concentration), mg/L

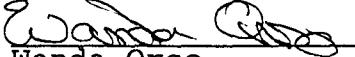
	Analytical Result:	Detection Limit:
Arsenic (As).....	ND	<0.005
Cadmium (Cd).....	ND	<0.002
Lead (Pb).....	ND	<0.02

Trace metals by ICAP (dissolved concentration), mg/L

	Analytical Result:	Detection Limit:
Boron (B).....	0.48	<0.01
Barium (Ba).....	ND	<0.5
Chromium (Cr).....	0.03	<0.02
Iron (Fe).....	ND	<0.05
Manganese (Mn).....	0.12	<0.02

ND - Analyte "not detected" at the stated detection limit.

  
Mary Stepp  
Lab Director

  
Wanda Orso  
Water Lab Supervisor



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

VOLATILE AROMATIC HYDROCARBONS

Client: Bloomfield Refining Co. Report Date: 12-05-91  
Sample ID: MW-5 Date Sampled: 11-07-91  
Laboratory Number: 7626 Date Received: 11-07-91  
Analysis Requested: BTEX Date Analyzed: 12-03-91  
Sample Matrix: Water Preservative: Cool  
Condition: Cool & Intact

Parameter	Concentration (ug/L)	Det. Limit (ug/L)
Benzene	ND	0.2
Toluene	ND	0.2
Ethylbenzene	ND	0.2
p,m-Xylene	ND	0.2
o-Xylene	ND	0.2

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Bromfluorobenzene	92.8 %

Method: Method 8020, Aromatic Volatile Organics, SW-846,  
USEPA, (Sept. 1986).

ND - Parameter not detected at the stated detection limit.

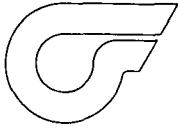
Comments:

Tony Tristano  
Analyst

Mary Stepp  
Review



**CHAIN OF CUSTODY RECORD**



Bloomfield Refining  
Company

A Gary Energy Corporation Subsidiary

OIL CONSERVATION DIVISION  
RECEIVED

'91 JUL 3 AM 8 41

July 1, 1991

Mr. David G. Boyer  
State of New Mexico  
Oil Conservation Division  
P.O. Box 2088  
Land Office Building  
Santa Fe, New Mexico 87501

RE: Discharge Plan GRW-1

Dear Mr. Boyer:

Analytical results, applicable to our discharge plan for wells 1 and 5, that were obtained on June 5, 1991 are enclosed.

We were unable to sample MW-5 because of a combination of a lower water table and a build up of silt. We are planning to wash the silt out of the well with clean water to reopen the well.

Please call me if there are any questions.

Sincerely yours,

A handwritten signature in black ink.

Chris Hawley  
Environmental Manager

CH/mc

Enclosure

cc: John Goodrich  
Dave Roderick  
Joe Warr

## OIL CONSERVATION DIVISION

RECEIVED

'91 JUL 13 AM 8 41

BLOOMFIELD REFINING COMPANY  
MONITORING UNDER DISCHARGE PLAN GRW-1-A

MW-1

PARAMETER	UNIT	NOM		CURRENT RESULT	PREVIOUS RESULT	BASELINE RESULTS
		DET LIM	NMWD STANDARD			
DATE OF SAMPLE				6/18/91	11/14/90	9/84 TO 7/85
ARSENIC	MG/L	0.005	0.100	0.0000	0.0008	0.0160
BARIUM	MG/L	0.500	1.000	0.0000	0.0000	0.2500
CADMIUM	MG/L	0.002	0.010	0.0000	0.0000	0.0103
CHROMIUM	MG/L	0.020	0.050	0.0000	0.0000	0.0175
LEAD	MG/L	0.020	0.050	0.0000	0.0000	0.0862
BORON	MG/L	0.010	0.750	0.3200	0.0000	0.2675
IRON	MG/L	0.050	1.000	0.0000	0.0000	46.2675
MANGANESE	MG/L	0.020	0.200	1.0400	2.3000	0.9425
TOTAL DISSOLVED SOLIDS	MG/L	1.000	1000.000	3200.0000	3440.0000	3518.0000
CHLORIDE	MG/L	1.000	250.000	1060.0000	1170.0000	1070.5000
SULFATE	MG/L	1.000	600.000	1070.0000	539.0000	815.5000
PHENOLS	MG/L	0.001	0.005	0.0220	0.5000	0.0548
CYANIDE	MG/L	0.005	0.200	0.0000	0.0000	0.0000
NITRATE, NITRITE AS N	MG/L	0.100	10.000	2.5400	17.0000	5.7250
AMMONIA	MG/L	0.100		0.0500	0.2700	
TOTAL KELDAHL NITROGEN	MG/L	0.100		1.2700	3.9800	
BENZENE	UG/L	0.200	10.000	0.0000	0.0000	0.0000
TOLUENE	UG/L	0.200	750.000	0.0000	0.0000	0.0000
ETHYL BENZENE	UG/L	0.200	750.000	0.0000	0.0000	0.0000
XYLENES (TOTAL)	UG/L	0.200	620.000	0.0000	1.1000	0.0000
pH		0.010	6 TO 9	7.1900	7.1900	7.3100
ELEVATION AT T.O.P.	S.U.	0.010		5515.7700	5515.7700	5515.7700
DEPTH TO WATER	FT	0.010		16.0300	17.6000	16.1900
ELEVATION AT T.O.W.	FT	0.010		5499.7400	5498.1700	5499.5800

## OIL CONSERVATION DIVISION

RECEIVED

91 JUL 3 AM 8 42

BLOOMFIELD REFINING COMPANY  
MONITORING UNDER DISCHARGE PLAN GRW-1-A

MW-5

PARAMETER	UNIT	NOM	DET LIM	NMWD STANDARD	CURRENT	PREVIOUS	BASELINE
					RESULT	RESULT	RESULTS
DATE OF SAMPLE					6/05/91	11/14/90	9/84 TO 7/85
ARSENIC	MG/L	0.005	0.100	0.0000	0.0000	0.0040	
BARIUM	MG/L	0.500	1.000	0.0000	0.0000	0.0000	
CADMIUM	MG/L	0.002	0.010	0.0000	0.0000	0.0153	
CHROMIUM	MG/L	0.020	0.050	0.0000	0.0000	0.0000	
LEAD	MG/L	0.020	0.050	0.0000	0.0000	0.0153	
BORON	MG/L	0.010	0.750	0.0000	0.0000	0.4800	
IRON	MG/L	0.050	1.000	0.0000	0.0000	0.0613	
MANGANESE	MG/L	0.020	0.200	0.0000	0.0000	0.1277	
TOTAL DISSOLVED SOLIDS	MG/L	1.000	1000.000	0.0000	4930.0000	4746.0000	
CHLORIDE	MG/L	1.000	250.000	0.0000	1640.0000	1402.0000	
SULFATE	MG/L	1.000	600.000	0.0000	1110.0000	1299.0000	
PHENOLS	MG/L	0.001	0.005	0.0000	0.0300	0.0080	
CYANIDE	MG/L	0.005	0.200	0.0000	0.0100	0.0133	
NITRATE, NITRITE AS N	MG/L	0.100	10.000	0.0000	23.1000	24.0000	
AMMONIA	MG/L	0.100		0.0000	0.1400		
TOTAL KELDAHL NITROGEN	MG/L	0.100		0.0000	1.6900		
BENZENE	UG/L	0.200	10.000	0.0000	0.0000	0.0000	
TOLUENE	UG/L	0.200	750.000	0.0000	0.0000	0.0000	
ETHYL BENZENE	UG/L	0.200	750.000	0.0000	0.0000	0.0000	
XYLENES (TOTAL)	UG/L	0.200	620.000	0.0000	0.0000	0.0000	
pH		0.010	6 TO 9	0.0000	7.1900	7.4100	
ELEVATION AT T.O.P.	S.U.	0.010		5545.1000	5545.1000	5545.1000	
DEPTH TO WATER	FT	0.010		43.8000	43.0300	41.8500	
ELEVATION AT T.D.W.	FT	0.010		5501.3000	5502.0700	5503.2500	

NEARLY  
DRY AT THIS LEVEL

OIL CONSERVATION DIVISION  
RECEIVED

'91 JUL 3 AM 8 42

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

CLIENT: Bloomfield Refinery	DATE REPORTED:	06/21/91
ID: 1400		
SITE: MW-1	DATE RECEIVED:	06/05/91
LAB NO: F6373	DATE COLLECTED:	06/05/91

Total dissolved solids (180), mg/l..	3200
Nitrate, mg/l.....	2.54
Nitrite, mg/l.....	<0.04
Total Keldahl nitrogen, mg/l.....	1.27
Ammonia, mg/l.....	0.05
Cyanide, mg/l.....	<0.005
Phenols, mg/l.....	0.022

	mg/l	meq/l
Chloride.....	1060	29.8
Sulfate.....	1070	22.3

## Trace metals by AA (dissolved concentration), mg/l

	Analytical Result:	Detection Limit:
Cadmium (Cd).....	ND	<0.002
Lead (Pb).....	ND	<0.02

## Trace metals by ICAP (dissolved concentration), mg/l

	Analytical Result:	Detection Limit:
Arsenic (As).....	ND	<0.005
Boron (B).....	0.32	<0.01
Barium (Ba).....	ND	<0.5
Chromium (Cr).....	ND	<0.02
Iron (Fe).....	ND	<0.05
Manganese (Mn).....	1.04	<0.02

ND - Analyte "not detected" at the stated detection limit.

  
Mary Stepp  
Lab Manager

## VOLATILE AROMATIC HYDROCARBONS

Client: Bloomfield Refinery Company Report Date: 06-18-91  
Sample ID: MW-1 Date Sampled: 06-05-91  
Laboratory Number: F6373/C3199 Date Received: 06-07-91  
Analysis Requested: BTEX Date Analyzed: 06-11-91  
Sample Matrix: Water Preservative: HCl  
Condition: Intact

Parameter	Concentration (ug/L)	Det. Limit (ug/L)
Benzene	ND	0.4
Toluene	ND	0.4
Ethylbenzene	ND	0.4
p,m-Xylene	ND	0.4
o-Xylene	ND	0.4

ND - Parameter not detected at the stated detection limit.

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Fluorobenzene	82.9 %

Method: Method 8020, Aromatic Volatile Organics, SW-846,  
USEPA, (Sept. 1986).

Comments:

Wonda M. Rogan  
Analyst

Mary Higinbotham  
Review

24 8 AM 3 JUL 16.  
REC: 150  
OIL CONSERV. DIVISION

## VOLATILE AROMATIC HYDROCARBONS

Client: Bloomfield Refinery Company Report Date: 06-18-91  
Project Name: Mission Dorado Date Sampled: N/A  
Sample ID: Travel Blank Date Received: 06-07-91  
Laboratory Number: C3200TB Date Analyzed: 06-12-91  
Analysis Requested: BTEX Preservative: HCl  
Sample Matrix: Water  
Condition: Intact

Parameter	Concentration (ug/L)	Det. Limit (ug/L)
Benzene	ND	0.4
Toluene	ND	0.4
Ethylbenzene	ND	0.4
p,m-Xylene	ND	0.4
o-Xylene	ND	0.4
Methyl tert-Butyl Ether	ND	0.4

ND - Parameter not detected at the stated detection limit.

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Fluorobenzene	93.6 %

Method: Method 8020, Aromatic Volatile Organics, SW-846,  
USEPA, (Sept. 1986).

Comments:

Wendy M. Logue  
Analyst

Many Higginbotham  
Review

24 8 AM 3 JUL 91  
RECD: 7/20  
OIL CONSERVATION DIVISION

\*\* QUALITY ASSURANCE REPORT  
MATRIX SPIKE - VOLATILE AROMATIC HYDROCARBONS

Laboratory Number: C3149SPK  
Analysis: BTEX  
Sample Matrix: Water  
Condition: Intact

Date Sampled: 05-28-91  
Date Analyzed: 06-11-91  
Preservative: Cool

Parameter	Spike Added (ug/L)	Sample Result (ug/L)	Spiked Sample Result (ug/L)	Percent Recovery
Benzene	20.0	ND	24.3	121.5
Toluene	20.0	ND	19.9	99.5
Ethylbenzene	20.0	ND	22.1	110.5

ND - Parameter not detected at the stated detection limit.

QA ACCEPTANCE CRITERIA:	Parameter	Acceptance Range (%)
	Benzene	39 - 150
	Toluene	46 - 148
	Ethylbenzene	32 - 160

SURROGATE RECOVERY:	Parameter	% Recovery
	Fluorobenzene	96.2

**Method:** Method 8020, Aromatic Volatile Organics, SW-846, USEPA (Sept. 1986).

**Comments:**

Monde M. Foy  
Analyst

Mary Higginbotham  
Review

24 8 AM 3 JUL 16.

RECD 1/20  
OIL CONSERV. DIVISION

\*\* QUALITY ASSURANCE REPORT  
 MATRIX SPIKE DUPLICATE - VOLATILE AROMATIC HYDROCARBONS

Laboratory Number: C3149SPKDUP      Date Sampled: 05-28-91  
 Analysis: BTEX      Date Analyzed: 06-11-91  
 Sample Matrix: Water      Preservative: Cool  
 Condition: Intact

Parameter	Sample Spike Recovery (%)	Duplicate Spike Recovery (%)	Percent Difference
Benzene	121.5	120.2	1.1
Toluene	99.5	100.4	0.9
Ethylbenzene	110.5	111.1	0.5

ND - Parameter not detected at the stated detection limit.

QA ACCEPTANCE CRITERIA:	Parameter	Acceptance Range (%)
	Benzene	39 - 150
	Toluene	46 - 148
	Ethylbenzene	32 - 160

SURROGATE RECOVERY:	Parameter	Duplicate % Recovery
	Fluorobenzene	101.1

Method: Method 8020, Aromatic Volatile Organics, SW-846, USEPA (Sept. 1986).

Comments:

Monica M. Rogers  
Analyst

Mary Higginbotham  
Review

24 8 AM 3 JULY 96.

RECD: JED  
OIL CONSERVATION DIVISION

**\*\* QUALITY ASSURANCE REPORT**  
**METHOD BLANK - VOLATILE AROMATIC HYDROCARBONS**

Laboratory Number: MB061191V2      Date Analyzed: 06-11-91  
Analysis: BTEX  
Sample Matrix: Water

Parameter	Concentration (ug/L)	Detection Limit (ug/L)
Benzene	ND	0.4
Toluene	ND	0.4
Ethylbenzene	ND	0.4
p,m-Xylene	ND	0.4
o-Xylene	ND	0.4

ND - Parameter not detected at the stated detection limit.

SURROGATE RECOVERY:	Parameter	% Recovery
	Fluorobenzene	94.7

Method: Method 8020, Aromatic Volatile Organics, SW-846, USEPA  
(Sept. 1986).

Comments:

Monica M. May  
Analyst

May Higginbotham  
Review

24 8 AM 8 JUL 91.

RECEIVED  
OIL CONSERVATION DIVISION



**CHAIN OF CUSTODY RECORD**

Client/Project Name BEC	Project Location Bloomfield NM		ANALYSES / PARAMETERS					
	Chain of Custody Tape No.						Remarks	
Sample No./ Identification	Date	Time	Lab Number	Matrix		Containers No. of		
MW-0-DISCHARGE	6-5-91	11:30P	6372	BTEX		2		
MW-1	6-5-91	2P	6373	CJ -		1		
MW-1	6-5-91	2P		BTEX		2		
MW-1	6-5-91	2P		NUTRIENTS		1		
MW-1	6-5-91	2P		1.8924 TERN		1		
MW-1	6-5-91	2P		METALS		1		
MW-1	6-5-91	2P		PHTHALOCS		1		
				AM		8 DIVISION		
				PM		42		
Relinquished by: (Signature) <i>John K. Brown</i>			Date 6-5-91		Time 4:45P	Received by: (Signature)		
Relinquished by: (Signature)			Date		Time	Received by: (Signature)		
Relinquished by: (Signature)			Date		Time	Received by laboratory: (Signature)		
Inter-Mountain Laboratories, Inc.								
<input type="checkbox"/> 1633 Terra Avenue Sheridan, Wyoming 82801 Telephone (307) 672-8945	<input type="checkbox"/> 1714 Phillips Circle Gillette, Wyoming 82716 Telephone (307) 682-8945	<input type="checkbox"/> 910 Technology Blvd, Suite B Bozeman, Montana 59715 Telephone (406) 586-8450	<input type="checkbox"/> Route 3, Box 256 College Station, TX 77845 Telephone (409) 774-4999					
<input type="checkbox"/>	<input type="checkbox"/> 3304 Longmire Drive College Station, TX 77845 Telephone (409) 774-4999	<input type="checkbox"/> 3304 Longmire Drive College Station, TX 77845 Telephone (409) 774-4999	<input type="checkbox"/> 01001					



Inter-Mountain  
Laboratories, Inc.

## CHAIN OF CUSTODY RECORD

**FILE COPY**

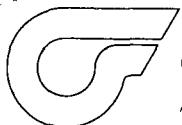
## Project Location

Blawatice Act.

Chain of Custody Tape No.

## **ANALYSES / PARAMETERS**

Democracy



Bloomfield Refining  
Company

A Gary Energy Corporation Subsidiary

ENVIRONMENTAL DIVISION

ED

90 DEC 10 AM 8 47

December 10, 1990

Mr. David G. Boyer  
State of New Mexico  
Oil Conservation Division  
P. O. Box 2088  
Land Office Building  
Santa Fe, New Mexico 87501

RE: Discharge Plan GRW-1

Dear Mr. Boyer:

Analytical results, applicable to our discharge plan for wells 1 and 5, that were obtained on November 14, 1990 are enclosed.

Please call me if there are any questions.

Sincerely yours,

A handwritten signature in black ink.

Chris Hawley  
Environmental Engineer

CH/jm

Enclosure

cc: John Goodrich  
Richard Traylor  
Joe Warr

BLOOMFIELD REFINING COMPANY  
MONITORING UNDER DISCHARGE PLAN GRW-1-A

MW-1

PARAMETER	UNIT	NOM DET LIM	NMWQ STANDARD	CURRENT RESULT	PREVIOUS RESULT	BASELINE RESULTS
DATE OF SAMPLE				11/14/90	6/19/90	9/84 TO 7/85
ARSENIC	MG/L	0.005	0.100	0.0008	0.0092	0.0160
BARIUM	MG/L	0.500	1.000	0.0000	0.0000	0.2500
CADMIUM	MG/L	0.002	0.010	0.0000	0.0000	0.0103
CHROMIUM	MG/L	0.020	0.050	0.0000	0.0000	0.0175
LEAD	MG/L	0.020	0.050	0.0000	0.0070	0.0862
BORON	MG/L	0.010	0.750	0.0000	0.3100	0.2675
IRON	MG/L	0.050	1.000	0.0000	14.3800	46.2675
MANGANESE	MG/L	0.020	0.200	2.3000	0.5900	0.9425
TOTAL DISSOLVED SOLIDS	MG/L	1.000	1000.000	3440.0000	2952.0000	3516.0000
CHLORIDE	MG/L	1.000	250.000	1170.0000	1269.1000	1070.5000
SULFATE	MG/L	1.000	600.000	539.0000	491.3000	815.5000
PHENOLS	MG/L	0.001	0.005	0.5000	0.2310	0.0548
CYANIDE	MG/L	0.005	0.200	0.0000	0.0000	0.0000
NITRATE, NITRITE AS N	MG/L	0.100	10.000	17.0000	6.4700	5.7250
AMMONIA	MG/L	0.100		0.2700	0.1700	
TOTAL KELDAHL NITROGEN	MG/L	0.100		3.9800	1.1700	
BENZENE	UG/L	0.200	10.000	0.0000	0.0000	0.0000
TOLUENE	UG/L	0.200	750.000	0.0000	0.0000	0.0000
ETHYL BENZENE	UG/L	0.200	750.000	0.0000	0.0000	0.0000
XYLENES (TOTAL)	UG/L	0.200	620.000	1.1000	0.0000	0.0000
pH		0.010	6 TO 9	7.1900	7.5700	7.3100
ELEVATION AT T.D.P.	S.U.	0.010		5515.7700	5515.7700	5515.7700
DEPTH TO WATER	FT	0.010		17.6000	14.0300	16.1900
ELEVATION AT T.D.W.	FT	0.010		5498.1700	5501.7400	5499.5800

BLOOMFIELD REFINING COMPANY  
MONITORING UNIT DISCHARGE PLAN SRW-1-A

MW-5

PARAMETER	UNIT	NOM		CURRENT RESULT	PREVIOUS RESULT	BASELINE RESULTS
		DET LIM	NMNO STANDARD			
DATE OF SAMPLE				11/14/90	6/19/90	9/84 TO 7/85
ARSENIC	MG/L	0.005	0.100	0.0000	0.0126	0.0040
BARIUM	MG/L	0.500	1.000	0.0000	0.0000	0.0000
CADMIUM	MG/L	0.002	0.010	0.0000	0.0000	0.0153
CHROMIUM	MG/L	0.020	0.050	0.0000	0.0000	0.0000
LEAD	MG/L	0.020	0.050	0.0000	0.0050	0.0153
BORON	MG/L	0.010	0.750	0.0000	0.0600	0.4800
IRON	MG/L	0.050	1.000	0.0000	0.0000	0.0613
MANGANESE	MG/L	0.020	0.200	0.0000	0.0000	0.1277
TOTAL DISSOLVED SOLIDS	MG/L	1.000	1000.000	4930.0000	4918.0000	4746.0000
CHLDRIDE	MG/L	1.000	250.000	1640.0000	1751.4000	1402.0000
SULFATE	MG/L	1.000	600.000	1110.0000	1131.6000	1299.0000
PHENOLS	MG/L	0.001	0.005	0.0300	0.1020	0.0080
CYANIDE	MG/L	0.005	0.200	0.0100	0.0000	0.0133
NITRATE, NITRITE AS N	MG/L	0.100	10.000	23.1000	16.7500	24.0000
AMMONIA	MG/L	0.100		0.1400	0.1700	
TOTAL KELDAHL NITROGEN	MG/L	0.100		1.6900	1.8400	
BENZENE	UG/L	0.200	10.000	0.0000	0.0000	0.0000
TOLUENE	UG/L	0.200	750.000	0.0000	0.0000	0.0000
ETHYL BENZENE	UG/L	0.200	750.000	0.0000	0.0000	0.0000
XYLENES (TOTAL)	UG/L	0.200	620.000	0.0000	0.0000	0.0000
pH		0.010	6 TO 9	7.1900	7.4200	7.4100
ELEVATION AT T.O.P.	S.U.	0.010		5545.1000	5545.1000	5545.1000
DEPTH TO WATER	FT	0.010		43.0300	42.3000	41.8500
ELEVATION AT T.O.W.	FT	0.010		5502.0700	5502.8000	5503.2500



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

CLIENT: BRC  
ID: N/A  
SITE: MW-1  
LAB NO: F5423

DATE REPORTED: 11/29/90  
DATE RECEIVED: 11/14/90  
DATE COLLECTED: 11/14/90

Lab pH (s.u.).....	7.19	
Lab conductivity, umhos/cm.....	5970	
Lab resistivity, ohm-m.....	1.68	
Total dissolved solids (180), mg/l..	3440	
Total nitrate and nitrite, mg/l....	17	
Total Keldahl nitrogen, mg/l.....	3.98	
Ammonia, mg/l.....	0.27	
Cyanide, mg/l.....	<0.005	
Phenols, mg/l.....	0.50	
Total organic carbon, mg/l.....	12.8	
Chloride.....	mg/l 1170	meq/l 32.9
Sulfate.....	539	11.2

Trace metals by AA (dissolved concentration), mg/l

	Analytical Result:	Detection Limit:
Arsenic (As).....	0.0008	<0.0003
Cadmium (Cd).....	ND	<0.0002
Lead (Pb).....	ND	<0.004

Trace metals by ICAP (dissolved concentration), mg/l

	Analytical Result:	Detection Limit:
Boron (B).....	ND	<0.01
Barium (Ba).....	ND	<0.05
Chromium (Cr).....	ND	<0.02
Iron (Fe).....	ND	<0.05
Manganese (Mn).....	2.30	<0.02

ND - Analyte "not detected" at the stated detection limit.

C. Neal Schaeffer  
Lab Director

## VOLATILE AROMATIC HYDROCARBONS

Client: IML Farmington

Report Date: 11-26-90

Sample ID: F5423

Date Sampled: 11-14-90

Laboratory Number: C1892

Date Received: 11-16-90

Analysis Requested: 8020

Date Analyzed: 11-20-90

Sample Matrix: Water

Preservative: HCl

Temperature: 25 C

Parameter	Concentration (ug/L)	Det. Limit (ug/L)
Benzene	ND	0.2
Toluene	ND	0.2
Chlorobenzene	ND	0.2
Ethylbenzene	ND	0.2
p,m-Xylene	1.1	0.2
o-Xylene	ND	0.2
1,3-Dichlorobenzene	ND	0.4
1,4-Dichlorobenzene	ND	0.3
1,2-Dichlorobenzene	ND	0.4

Method: Method 8020, Aromatic Volatile Organics, SW-846,  
USEPA, (Sept. 1986).

ND - Parameter not detected at the stated detection limit.

Comments:

  
Analyst  
Review

## HALOGENATED VOLATILE ORGANICS

Client: IML Farmington Report Date: 11-26-90  
 Sample ID: F5423 Date Sampled: 11-14-90  
 Laboratory Number: C1892 Date Received: 11-16-90  
 Analysis Requested: 8010 Date Analyzed: 11-20-90  
 Sample Matrix: Water Page 1/2  
 Preservative: None  
 Temperature: 25 C

Parameter	Concentration	Det. Limit	Units
Chloromethane	ND	1.0	ug/L
Bromomethane	ND	1.0	ug/L
Dichlorodifluoromethane	ND	1.0	ug/L
Vinyl Chloride	ND	1.0	ug/L
Chloroethane	ND	1.0	ug/L
Methylene Chloride	ND	1.0	ug/L
Trichlorofluoromethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
Dibromethane	ND	1.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon Tetrachloride	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Trichloroethene (TCE)	ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
1,2-Dibromoethane (EDB)	ND	1.0	ug/L
2-Chloroethylvinyl ether	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene (PCE)	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L

Client: IML Farmington Report Date: 11-26-90

Sample ID: F5423 Date Sampled: 11-14-90  
Laboratory Number: C1892 Date Received: 11-16-90  
Analysis Requested: 8010 Date Analyzed: 11-20-90  
Sample Matrix: Water Page 2/2  
Preservative: None  
Condition: 25 C

Parameter	Concentration	Det. Limit	Units
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L

Method: Method 8010, Halogenated Volatile Organics, SW-846, USEPA  
(Sept. 1986).

ND - Parameter not detected at the stated detection limit.

Comments:

\_\_\_\_\_  
Analyst

\_\_\_\_\_  
Review



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

CLIENT: BRC	DATE REPORTED:	11/20/90
ID: N/A		
SITE: MW-5	DATE RECEIVED:	11/14/90
LAB NO: F5424	DATE COLLECTED:	11/14/90

Lab pH (s.u.).....	7.19
Lab conductivity, umhos/cm.....	8080
Lab resistivity, ohm-m.....	1.24
Total dissolved solids (180), mg/l..	4930
Total nitrate and nitrite, mg/l.....	23.1
Total Keldahl nitrogen, mg/l.....	1.69
Ammonia, mg/l.....	0.14
Cyanide, mg/l.....	0.01
Phenols, mg/l.....	0.03
Total organic carbon, mg/l.....	8.60

	mg/l	meq/l
Chloride.....	1640	46.4
Sulfate.....	1110	23.1

Trace metals by AA (dissolved concentration), mg/l

	Analytical Result:	Detection Limit:
Arsenic (As).....	ND	<0.0003
Cadmium (Cd).....	ND	<0.0002
Lead (Pb).....	ND	<0.004

Trace metals by ICAP (dissolved concentration), mg/l

	Analytical Result:	Detection Limit:
Boron (B).....	ND	<0.01
Barium (Ba).....	ND	<0.05
Chromium (Cr).....	ND	<0.02
Iron (Fe).....	ND	<0.05
Manganese (Mn).....	ND	<0.02

ND - Analyte "not detected" at the stated detection limit.

C. Neal Schaeffer  
Lab Director

## VOLATILE AROMATIC HYDROCARBONS

Client: IML Farmington

Report Date: 11-26-90

Sample ID: F5424  
Laboratory Number: CL893  
Analysis Requested: 8020  
Sample Matrix: Water  
Preservative: HCl  
Temperature: 25 C

Date Sampled: 11-14-90  
Date Received: 11-16-90  
Date Analyzed: 11-20-90

Parameter	Concentration (ug/L)	Det. Limit (ug/L)
Benzene	ND	0.2
Toluene	ND	0.2
Chlorobenzene	ND	0.2
Ethylbenzene	ND	0.2
p,m-Xylene	ND	0.2
o-Xylene	ND	0.2
1,3-Dichlorobenzene	ND	0.4
1,4-Dichlorobenzene	ND	0.3
1,2-Dichlorobenzene	ND	0.4

Method: Method 8020, Aromatic Volatile Organics, SW-846,  
USEPA, (Sept. 1986).

ND - Parameter not detected at the stated detection limit.

Comments:

Analyst

Review

## HALOGENATED VOLATILE ORGANICS

Client:	IML Farmington	Report Date:	11-26-90
Sample ID:	F5424	Date Sampled:	11-14-90
Laboratory Number:	C1893	Date Received:	11-16-90
Analysis Requested:	8010	Date Analyzed:	11-20-90
Sample Matrix:	Water	Page 1/2	
Preservative:	None		
Temperature:	25 C		

Parameter	Concentration	Det. Limit	Units
Chloromethane	ND	1.0	ug/L
Bromomethane	ND	1.0	ug/L
Dichlorodifluoromethane	ND	1.0	ug/L
Vinyl Chloride	ND	1.0	ug/L
Chloroethane	ND	1.0	ug/L
Methylene Chloride	ND	1.0	ug/L
Trichlorofluoromethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
Dibromethane	ND	1.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon Tetrachloride	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Trichloroethene (TCE)	ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
1,2-Dibromoethane (EDB)	ND	1.0	ug/L
2-Chloroethylvinyl ether	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene (PCE)	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L

Client: IML Farmington Report Date: 11-26-90  
Sample ID: F5424 Date Sampled: 11-14-90  
Laboratory Number: C1893 Date Received: 11-16-90  
Analysis Requested: 8010 Date Analyzed: 11-20-90  
Sample Matrix: Water Page 2/2  
Preservative: None  
Condition: 25 C

Parameter	Concentration	Det.	Limit	Units
-----	-----	-----	-----	-----
1,2-Dibromo-3-chloropropane	ND	1.0		ug/L
Bromobenzene	ND	1.0		ug/L
2-Chlorotoluene	ND	1.0		ug/L
1,3-Dichlorobenzene	ND	1.0		ug/L
1,2-Dichlorobenzene	ND	1.0		ug/L
1,4-Dichlorobenzene	ND	1.0		ug/L

Method: Method 8010, Halogenated Volatile Organics, SW-846, USEPA (Sept. 1986).

ND - Parameter not detected at the stated detection limit.

Comments:

\_\_\_\_\_  
Analyst

\_\_\_\_\_  
Review

## VOLATILE AROMATIC HYDROCARBONS

Client: IML Farmington

Report Date: 11-26-90

Sample ID: Daily Blank  
Laboratory Number: NA  
Analysis Requested: 8020  
Sample Matrix: Water  
Preservative: NA  
Temperature: NA

Date Sampled: NA  
Date Received: NA  
Date Analyzed: 11-20-90

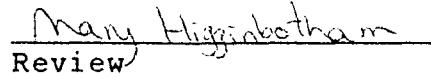
Parameter	Concentration (ug/L)	Det. Limit (ug/L)
Benzene	ND	0.2
Toluene	ND	0.2
Chlorobenzene	ND	0.2
Ethylbenzene	ND	0.2
p,m-Xylene	ND	0.2
o-Xylene	ND	0.2
1,3-Dichlorobenzene	ND	0.4
1,4-Dichlorobenzene	ND	0.3
1,2-Dichlorobenzene	ND	0.4

Method: Method 8020, Aromatic Volatile Organics, SW-846,  
USEPA, (Sept. 1986).

ND - Parameter not detected at the stated detection limit.

Comments:

  
\_\_\_\_\_  
Analyst

  
\_\_\_\_\_  
Review

**\*\* QUALITY ASSURANCE REPORT  
MATRIX SPIKE**

Laboratory Number: C1883                      Date Sampled: 11-13-90  
Analysis: 8020                                  Date Analyzed: 11-20-90  
Sample Matrix: Water  
Preservative: None  
Temperature: Cool

Parameter	Spike Added (ug/L)	Sample Result (ug/L)	Spiked Sample Result (ug/L)	Percent Recovery
Benzene	20.0	33.1	40.4	36.3
Toluene	20.0	ND	18.8	93.8
Ethylbenzene	20.0	ND	17.6	88.0
p,m-Xylene	20.0	ND	21.2	105.9

Method: Method 8020, Aromatic Volatile Organics, SW-846, USEPA  
(Sept. 1986).

ND - Parameter not detected at the stated detection limit.

Comments:

\_\_\_\_\_  
Analyst

\_\_\_\_\_  
Review

## HALOGENATED VOLATILE ORGANICS

Client: IML Farmington Report Date: 11-26-90

Sample ID: Daily Blank Date Sampled: NA  
 Laboratory Number: NA Date Received: NA  
 Analysis Requested: 8010 Date Analyzed: 11-20-90  
 Sample Matrix: Water Page 1/2  
 Preservative: NA  
 Temperature: NA

Parameter	Concentration	Det. Limit	Units
Chloromethane	ND	1.0	ug/L
Bromomethane	ND	1.0	ug/L
Dichlorodifluoromethane	ND	1.0	ug/L
Vinyl Chloride	ND	1.0	ug/L
Chloroethane	ND	1.0	ug/L
Methylene Chloride	ND	1.0	ug/L
Trichlorofluoromethane	ND	1.0	ug/L
1,1-Dichloroethene	ND	1.0	ug/L
Bromochloromethane	ND	1.0	ug/L
1,1-Dichloroethane	ND	1.0	ug/L
trans-1,2-Dichloroethene	ND	1.0	ug/L
cis-1,2-Dichloroethene	ND	1.0	ug/L
Chloroform	ND	1.0	ug/L
1,2-Dichloroethane	ND	1.0	ug/L
Dibromethane	ND	1.0	ug/L
1,1,1-Trichloroethane	ND	1.0	ug/L
Carbon Tetrachloride	ND	1.0	ug/L
Bromodichloromethane	ND	1.0	ug/L
1,2-Dichloropropane	ND	1.0	ug/L
1,1-Dichloropropene	ND	1.0	ug/L
Trichloroethene (TCE)	ND	1.0	ug/L
1,3-Dichloropropane	ND	1.0	ug/L
Dibromochloromethane	ND	1.0	ug/L
1,1,2-Trichloroethane	ND	1.0	ug/L
1,2-Dibromoethane (EDB)	ND	1.0	ug/L
2-Chloroethylvinyl ether	ND	1.0	ug/L
Bromoform	ND	1.0	ug/L
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L
1,2,3-Trichloropropane	ND	1.0	ug/L
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L
Tetrachloroethene (PCE)	ND	1.0	ug/L
Chlorobenzene	ND	1.0	ug/L

Client: IML Farmington Report Date: 11-26-90  
Sample ID: Daily Blank Date Sampled: NA  
Laboratory Number: NA Date Received: NA  
Analysis Requested: 8010 Date Analyzed: 11-20-90  
Sample Matrix: Water Page 2/2  
Preservative: NA  
Condition: NA

Parameter	Concentration	Det. Limit	Units
-----	-----	-----	-----
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L
Bromobenzene	ND	1.0	ug/L
2-Chlorotoluene	ND	1.0	ug/L
1,3-Dichlorobenzene	ND	1.0	ug/L
1,2-Dichlorobenzene	ND	1.0	ug/L
1,4-Dichlorobenzene	ND	1.0	ug/L

Method: Method 8010, Halogenated Volatile Organics, SW-846, USEPA  
(Sept. 1986).

ND - Parameter not detected at the stated detection limit.

Comments:

\_\_\_\_\_  
Analyst

\_\_\_\_\_  
Review



2600 DUDLEY ROAD — KILGORE, TEXAS 75662 — 214/984-0551

Analytical Chemistry • Waste Treatment &amp; Disposal • Equipment Sales

07/23/90

Environmental Bureau NM Oil D.  
PO Box 2088  
Santa Fe, NM 87504

**RECEIVED**

AUG 03 1990

OIL CONSERVATION DIV.  
SANTA FE

Sample Identification: Sample #9004091350  
Collected By: Anderson/Olson  
Date & Time Taken: 04/09/90 1350  
On Site Data: Bloomfield Refinery MW-5

Lab Sample Number: 163716      Received: 04/16/90      Client: SNM1

PARAMETER	RESULTS	UNITS	TIME	DATE	METHOD	BY
Acrolein	<100	ug/l	0437	04/21/90	EPA Method 8240	PM
Acrylonitrile	<100	ug/l	0437	04/21/90	EPA Method 8240	PM
Benzene	<5	ug/l	0437	04/21/90	EPA Method 8240	PM
Bromoform	<5	ug/l	0437	04/21/90	EPA Method 8240	PM
Bromomethane	<10	ug/l	0437	04/21/90	EPA Method 8240	PM
Carbon Tetrachloride	<5	ug/l	0437	04/21/90	EPA Method 8240	PM
Chlorobenzene	<5	ug/l	0437	04/21/90	EPA Method 8240	PM
Chloroethane	<10	ug/l	0437	04/21/90	EPA Method 8240	PM
2-Chloroethylvinyl ether	<10	ug/l	0437	04/21/90	EPA Method 8240	PM
Chloroform	<5	ug/l	0437	04/21/90	EPA Method 8240	PM
Chloromethane	<10	ug/l	0437	04/21/90	EPA Method 8240	PM
Dibromochloromethane	<5	ug/l	0437	04/21/90	EPA Method 8240	PM
Bromodichloromethane	<5	ug/l	0437	04/21/90	EPA Method 8240	PM
1,1-Dichloroethane	<5	ug/l	0437	04/21/90	EPA Method 8240	PM
1,2-Dichloroethane	<5	ug/l	0437	04/21/90	EPA Method 8240	PM
1,1-Dichloroethene	<5	ug/l	0437	04/21/90	EPA Method 8240	PM

continued



RECEIVED

Lab Sample Number:	163716	Continued	OIL CONSERVATION DIV. SANTA FE	AUG 03 1990	Page 2	
PARAMETER	RESULTS	UNITS	TIME	DATE	METHOD	BY
trans-1,2-Dichloroethene	(5	ug/l	0437	04/21/90	EPA Method 8240	PM
1,2-Dichloropropane	(5	ug/l	0437	04/21/90	EPA Method 8240	PM
cis-1,3-Dichloropropene	(5	ug/l	0437	04/21/90	EPA Method 8240	PM
Ethyl benzene	(5	ug/l	0437	04/21/90	EPA Method 8240	PM
Methylene Chloride	(5	ug/l	0437	04/21/90	EPA Method 8240	PM
1,1,2,2-Tetrachloroethane	(5	ug/l	0437	04/21/90	EPA Method 8240	PM
Tetrachloroethene	(5	ug/l	0437	04/21/90	EPA Method 8240	PM
Toluene	(5	ug/l	0437	04/21/90	EPA Method 8240	PM
1,1,1-Trichloroethane	(5	ug/l	0437	04/21/90	EPA Method 8240	PM
1,1,2-Trichloroethane	(5	ug/l	0437	04/21/90	EPA Method 8240	PM
Trichloroethene	(5	ug/l	0437	04/21/90	EPA Method 8240	PM
Vinyl Chloride	(10	ug/l	0437	04/21/90	EPA Method 8240	PM
trans-1,3-Dichloropropene	(5	ug/l	0437	04/21/90	EPA Method 8240	PM
Alkalinity	470	mg/l	1400	04/26/90	EPA Method 310.1	DFK
Boron	1.9	mg/l	2100	05/09/90	EPA Method 212.3	DFK
Cation-Anion Balance	1.51	%	1100	05/31/90	ference	NT
Carbonate	.5	mg/l	1500	04/26/90	APHA Method 263	DFK
Chloride	1900	mg/l	1110	04/18/90	EPA Method 325.3	SW
Specific Conductance	7300	Micromhos	2200	04/17/90	EPA Method 120.1	KLM
Bicarbonate	440	mg/l	1500	04/26/90	APHA Method 263	DFK
Sulfate	1000	mg/l	1500	04/19/90	EPA Method 375.4	DFK

continued



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Lab Sample Number:	163716	Continued	OIL CONSERVATION DIV. SANTA FE	Page 3		
PARAMETER	RESULTS	UNITS	TIME	DATE	METHOD	BY
Total Dissolved Solids	4670	mg/l	0800	05/24/90	EPA Method 160.1	MLR
pH	7.1	SU	1630	04/17/90	EPA Method 150.1	LB
Silver	<.03	mg/l	1700	04/19/90	EPA Method 272.1	GK
Aluminum	.5	mg/l	1730	04/20/90	EPA Method 202.1	GK
Arsenic	<.005	mg/l	2215	04/23/90	EPA Method 206.2	GK
Barium	<.5	mg/l	1845	04/20/90	EPA Method 208.1	GK
Beryllium	<.01	mg/l	2100	05/22/90	EPA Method 210.2	GK
Calcium	370	mg/l	1700	04/26/90	EPA Method 215.1	GK
Cadmium	<.001	mg/l	1845	04/26/90	EPA Method 213.2	GK
Cobalt	<.5	mg/l	1845	04/19/90	EPA Method 219.2	GK
Chromium	<.05	mg/l	1530	04/19/90	EPA Method 218.1	GD6
Copper	<.05	mg/l	0930	04/19/90	EPA Method 220.1	GD6
Iron	5.3	mg/l	0815	04/25/90	EPA Method 236.1	GD6
Potassium	9	mg/l	1730	05/22/90	EPA Method 258.1	GK
Magnesium	165	mg/l	1730	04/25/90	EPA Method 242.1	GD6
Manganese	.14	mg/l	1540	04/23/90	EPA Method 243.1	GD6
Molybdenum	<.5	mg/l	1845	04/19/90	EPA Method 246.2	GK
Sodium	1100	mg/l	2130	04/24/90	EPA Method 273.1	GK
Nickel	<.1	mg/l	1610	04/19/90	EPA Method 249.1	GD6
Lead	<.001	mg/l	2200	04/26/90	EPA Method 239.2	GK
Antimony	<.2	mg/l	1815	05/22/90	EPA Method 204.2	GK

continued



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Lab Sample Number:

163716 Continued

Page 4

PARAMETER	RESULTS	UNITS	TIME	DATE	METHOD	BY
Selenium	<.005	mg/l	2315	04/19/90	EPA Method 270.2	GK
Silicon (as Silica)	14	mg/l	1615	04/20/90	APHA Method 303C	GK
Thallium	<.005	mg/l	1445	05/07/90	EPA Method 279.2	GDG
Vanadium	<2	mg/l	2200	04/19/90	EPA Method 286.2	GK
Zinc	<.01	mg/l	0900	04/19/90	EPA Method 289.1	GDG

A handwritten signature in black ink, appearing to read "Bill Reely".  
Dr. H. Whiteside, Ph.D., President

RECEIVED

AUG 03 1990

OIL CONSERVATION DIV.  
SANTA FE



2600 DUDLEY ROAD – KILGORE, TEXAS 75662 – 214/984-0551  
Analytical Chemistry • Waste Treatment & Disposal • Equipment Sales

07/23/90

Environmental Bureau NM Oil D.  
PO Box 2088  
Santa Fe, NM 87504

**RECEIVED**

AUG 03 1990

OIL CONSERVATION DIV.  
SANTA FE

Sample Identification: Sample #9004091325

Collected By: Anderson/Olson

Date & Time Taken: 04/09/90 1325

Other:

Bloomfield Refinery New Lined Pond

Lab Sample Number: 163715 Received: 04/16/90 Client: SNM1

PARAMETER	RESULTS	UNITS	TIME	DATE	METHOD	BY
Acrolein	<100	ug/l	0322	04/21/90	EPA Method 8240	PM
Acrylonitrile	<100	ug/l	0322	04/21/90	EPA Method 8240	PM
Benzene	<5	ug/l	0322	04/21/90	EPA Method 8240	PM
Bromoform	<5	ug/l	0322	04/21/90	EPA Method 8240	PM
Bromomethane	<10	ug/l	0322	04/21/90	EPA Method 8240	PM
Carbon Tetrachloride	<5	ug/l	0322	04/21/90	EPA Method 8240	PM
Chlorobenzene	<5	ug/l	0322	04/21/90	EPA Method 8240	PM
Chloroethane	<10	ug/l	0322	04/21/90	EPA Method 8240	PM
2-Chloroethylvinyl ether	<10	ug/l	0322	04/21/90	EPA Method 8240	PM
Chloroform	<5	ug/l	0322	04/21/90	EPA Method 8240	PM
Chloromethane	<10	ug/l	0322	04/21/90	EPA Method 8240	PM
Dibromochloromethane	<5	ug/l	0322	04/21/90	EPA Method 8240	PM
Bromodichloromethane	<5	ug/l	0322	04/21/90	EPA Method 8240	PM
1,1-Dichloroethane	<5	ug/l	0322	04/21/90	EPA Method 8240	PM
1,2-Dichloroethane	<5	ug/l	0322	04/21/90	EPA Method 8240	PM
1,1-Dichloroethene	<5	ug/l	0322	04/21/90	EPA Method 8240	PM

continued



AUG 03 1990

Lab Sample Number:	163715	Continued	OIL CONSERVATION DIV. SANTA FE	Page 2		
PARAMETER	RESULTS	UNITS	TIME	DATE	METHOD	BY
trans-1,2-Dichloroethene	(5	ug/l	0322	04/21/90	EPA Method 8240	PM
1,2-Dichloropropane	(5	ug/l	0322	04/21/90	EPA Method 8240	PM
cis-1,3-Dichloropropene	(5	ug/l	0322	04/21/90	EPA Method 8240	PM
Ethyl benzene	(5	ug/l	0322	04/21/90	EPA Method 8240	PM
Methylene Chloride	(5	ug/l	0322	04/21/90	EPA Method 8240	PM
1,1,2,2-Tetrachloroethane	(5	ug/l	0322	04/21/90	EPA Method 8240	PM
Tetrachloroethene	(5	ug/l	0322	04/21/90	EPA Method 8240	PM
Toluene	(5	ug/l	0322	04/21/90	EPA Method 8240	PM
1,1,1-Trichloroethane	(5	ug/l	0322	04/21/90	EPA Method 8240	PM
1,1,2-Trichloroethane	(5	ug/l	0322	04/21/90	EPA Method 8240	PM
Trichloroethene	(5	ug/l	0322	04/21/90	EPA Method 8240	PM
Vinyl Chloride	(10	ug/l	0322	04/21/90	EPA Method 8240	PM
trans-1,3-Dichloropropene	(5	ug/l	0322	04/21/90	EPA Method 8240	PM
Alkalinity	160	mg/l	1400	04/26/90	EPA Method 310.1	DFK
Boron	1.1	mg/l	2100	05/09/90	EPA Method 212.3	DFK
Cation-Anion Balance	1.99	%	1100	05/31/90	ference	NT
Carbonate	.5	mg/l	1500	04/26/90	APHA Method 263	DFK
Chloride	1400	mg/l	1110	04/18/90	EPA Method 325.3	SW
Specific Conductance	5200	Micromhos	2200	04/17/90	EPA Method 120.1	KLM
Bicarbonate	150	mg/l	1500	04/26/90	APHA Method 263	DFK
Sulfate	570	mg/l	1500	04/19/90	EPA Method 375.4	DFK

continued



2600 DUDLEY ROAD — KILGORE, TEXAS 75662 — 214/984-0551  
Analytical Chemistry • Waste Treatment & Disposal • Equipment Sales

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Lab Sample Number: 163715 Continued OIL CONSERVATION DIV.  
SANTA FE Page 3

PARAMETER	RESULTS	UNITS	TIME	DATE	METHOD	BY
Total Dissolved Solids	3300	mg/l	0800	05/24/90	EPA Method 160.1	MLR
pH	9.4	SU	1630	04/17/90	EPA Method 150.1	LB
Silver	<.03	mg/l	1700	04/19/90	EPA Method 272.1	GK
Aluminum	.5	mg/l	1730	04/20/90	EPA Method 202.1	GK
Arsenic	.021	mg/l	2215	04/23/90	EPA Method 206.2	GK
Barium	.5	mg/l	1845	04/20/90	EPA Method 208.1	GK
Beryllium	<.01	mg/l	2100	05/22/90	EPA Method 210.2	GK
Calcium	150	mg/l	1700	04/26/90	EPA Method 215.1	GK
Cadmium	<.001	mg/l	1845	04/26/90	EPA Method 213.2	GK
Cobalt	.5	mg/l	1845	04/19/90	EPA Method 219.2	GK
Chromium	<.05	mg/l	1530	04/19/90	EPA Method 218.1	GDG
Copper	<.05	mg/l	0930	04/19/90	EPA Method 220.1	GDG
Iron	.2	mg/l	0815	04/25/90	EPA Method 236.1	GDG
Potassium	24	mg/l	1730	05/22/90	EPA Method 258.1	GK
Magnesium	40	mg/l	1730	04/25/90	EPA Method 242.1	GDG
Manganese	.26	mg/l	1540	04/23/90	EPA Method 243.1	GDG
Molybdenum	.5	mg/l	1845	04/19/90	EPA Method 246.2	GK
Sodium	1000	mg/l	2130	04/24/90	EPA Method 273.1	GK
Nickel	<.1	mg/l	1610	04/19/90	EPA Method 249.1	GDG
Lead	<.001	mg/l	2200	04/26/90	EPA Method 239.2	GK
Antimony	<.2	mg/l	1815	05/22/90	EPA Method 204.2	GK

continued



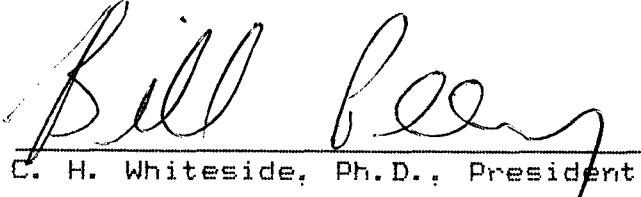
2600 DUDLEY ROAD — KILGORE, TEXAS 75662 — 214/984-0551  
Analytical Chemistry • Waste Treatment & Disposal • Equipment Sales

Lab Sample Number:

163715 Continued

Page 4

PARAMETER	RESULTS	UNITS	TIME	DATE	METHOD	BY
Selenium	<.005	mg/l	2315	04/19/90	EPA Method 270.2	GK
Silicon (as Silica)	12	mg/l	1615	04/20/90	APHA Method 303C	GK
Thallium	<.005	mg/l	1445	05/07/90	EPA Method 279.2	GDG
Vanadium	<2	mg/l	2200	04/19/90	EPA Method 286.2	GK
Zinc	.02	mg/l	0900	04/19/90	EPA Method 289.1	GDG

  
\_\_\_\_\_  
C. H. Whiteside, Ph.D., President

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AUG 03 1990

OIL CONSERVATION DIV.  
SANTA FE



STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

163715

**ANALYSIS REQUEST FORM**

Contract Lab ANA-LABS

Contract No. 78-521.07-013

OCD Sample No. 9004091328

Collection Date	Collection Time	Collected by—Person/Agency	OCD
4/9/90	1325	ANDERSON/OLSON	

**SITE INFORMATION**

Sample location BROOMFIELD REFINERY

Collection Site Description

NEW LINES POND

Township, Range, Section, Tract:

+ + + + +

SEND  
FINAL  
REPORT  
TO  
ENVIRONMENTAL BUREAU  
NM OIL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

**SAMPLE FIELD TREATMENT — Check proper boxes**

No. of samples submitted: 4 VIALS + 2

**NF:** Whole sample (Non-filtered)

**F:** Filtered in field with 0.45  $\mu$  membrane filter

**PF:** Pre-filtered w/45  $\mu$  membrane filter

**NA:** No acid added

**A:** HCL

**A:** 2ml H<sub>2</sub>SO<sub>4</sub>/L added

**A:** 5ml conc. HNO<sub>3</sub> added

**A:** 4ml conc. HNO<sub>3</sub> added

SAMPLING CONDITIONS		Water level
<input type="checkbox"/> Bailed	<input type="checkbox"/> Pump	Discharge
<input checked="" type="checkbox"/> Dipped	<input type="checkbox"/> Tap	
pH(00400)		Sample type <u>GRAB</u>
Water Temp. (00010)		Conductivity (Uncorrected) <u>240.6 mho</u>
<u>14.5°C</u>		Conductivity at 25°C <u>16 mho</u>

FIELD COMMENTS:

**LAB ANALYSIS REQUESTED:**

ITEM	DESC	METHOD	ITEM	DESC	METHOD	ITEM	DESC	METHOD
<input checked="" type="checkbox"/> 001	VOA	8020	<input type="checkbox"/> 013	PHENOL	604	<input type="checkbox"/> 026	Cd	7130
<input type="checkbox"/> 002	VOA	602	<input type="checkbox"/> 014	VOC	8240	<input type="checkbox"/> 027	Pb	7421
<input checked="" type="checkbox"/> 003	VOH	8010	<input type="checkbox"/> 015	VOC	624	<input type="checkbox"/> 028	Hg(L)	7470
<input type="checkbox"/> 004	VOH	601	<input type="checkbox"/> 016	SVOC	8250	<input type="checkbox"/> 031	Se	7740
<input type="checkbox"/> 005	SUITE	8010-8020	<input type="checkbox"/> 017	SVOC	625	<input checked="" type="checkbox"/> 032	ICAP	601C
<input type="checkbox"/> 006	SUITE	601-602	<input type="checkbox"/> 018	VOC	8260	<input checked="" type="checkbox"/> 033	CATIONS/ANIONS	
<input type="checkbox"/> 007	HEADSPACE		<input type="checkbox"/> 019	SVOC	8270	<input type="checkbox"/> 034	N SUITE	
<input type="checkbox"/> 008	PAH	8100	<input type="checkbox"/> 020	O&G	9070	<input type="checkbox"/> 035	NITRATE	
<input type="checkbox"/> 009	PAH	610	<input type="checkbox"/> 022	AS	7060	<input type="checkbox"/> 036	NITRITE	
<input type="checkbox"/> 010	PCB	8080	<input type="checkbox"/> 023	Ba	7080	<input type="checkbox"/> 037	AMMONIA	
<input type="checkbox"/> 011	PCB	608	<input type="checkbox"/> 024	Cr	7190	<input type="checkbox"/> 038	TKN	
<input type="checkbox"/> 012	PHENOL	8040	<input type="checkbox"/> 025	Cr6	7198	<input type="checkbox"/>	OTHER	



STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

163716

**ANALYSIS REQUEST FORM**

Contract Lab ANA-LABS

Contract No. 78-521-07-013

OCD Sample No. 9004091350

Collection Date	Collection Time	Collected by—Person/Agency	OCD
1/9/90	13:50	ANDERSON/OLSON	

**SITE INFORMATION**

Sample location

BLOOMFIELD REFINERY

Collection Site Description

MU-5

Township, Range, Section, Tract:

SEND  
FINAL  
REPORT  
TO  
ENVIRONMENTAL BUREAU  
NM OIL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

**SAMPLE FIELD TREATMENT— Check proper boxes**

No. of samples submitted: 4 VIALS + 2

**NF:** Whole sample (Non-filtered)

**F:** Filtered in field with 0.45  $\mu$  membrane filter

**PF:** Pre-filtered w/45  $\mu$  membrane filter

2vr  **NA:** No acid added

**A:** 5ml conc. HNO<sub>3</sub> added

2v  **A:** HCl

**A:** ~~4ml~~ HNO<sub>3</sub> added

**A:** 2ml H<sub>2</sub>SO<sub>4</sub>/L added

SAMPLING CONDITIONS		Water level	FIELD COMMENTS:	
<input checked="" type="checkbox"/> Bailed	<input type="checkbox"/> Pump	Discharge		
<input type="checkbox"/> Dipped	<input type="checkbox"/> Tap			
pH(00400)		Sample type <u>GRA13</u>	2vr <input checked="" type="checkbox"/> <b>NA:</b> No acid added	<input type="checkbox"/> <b>A:</b> 5ml conc. HNO <sub>3</sub> added
Water Temp. (00010)		Conductivity (Uncorrected) <u>3000</u> "mho	2v <input checked="" type="checkbox"/> <b>A:</b> HCl	<input checked="" type="checkbox"/> <b>A:</b> <del>4ml</del> HNO <sub>3</sub> added
		Conductivity at 25°C <u>16</u> "mho	<input type="checkbox"/> <b>A:</b> 2ml H <sub>2</sub> SO <sub>4</sub> /L added	

**LAB ANALYSIS REQUESTED:**

ITEM	DESC	METHOD	ITEM	DESC	METHOD	ITEM	DESC	METHOD
<input checked="" type="checkbox"/> 001	VOA	8020	<input type="checkbox"/> 013	PHENOL	604	<input type="checkbox"/> 026	Cd	7130
<input type="checkbox"/> 002	VOA	602	<input type="checkbox"/> 014	VOC	8240	<input type="checkbox"/> 027	Pb	7421
<input checked="" type="checkbox"/> 003	VOH	8010	<input type="checkbox"/> 015	VOC	624	<input type="checkbox"/> 028	Hg(L)	7470
<input type="checkbox"/> 004	VOH	601	<input type="checkbox"/> 016	SVOC	8250	<input type="checkbox"/> 031	Se	7740
<input type="checkbox"/> 005	SUITE	8010-8020	<input type="checkbox"/> 017	SVOC	625	<input checked="" type="checkbox"/> 032	ICAP	6010
<input type="checkbox"/> 006	SUITE	601-602	<input type="checkbox"/> 018	VOC	8260	<input checked="" type="checkbox"/> 033	CATIONS/ANIONS	
<input type="checkbox"/> 007	HEADSPACE		<input type="checkbox"/> 019	SVOC	8270	<input checked="" type="checkbox"/> 034	N SUITE	
<input type="checkbox"/> 008	PAH	8100	<input type="checkbox"/> 020	O&G	9070	<input type="checkbox"/> 035	NITRATE	
<input type="checkbox"/> 009	PAH	610	<input type="checkbox"/> 022	AS	7060	<input type="checkbox"/> 036	NITRITE	
<input type="checkbox"/> 010	PCB	8080	<input type="checkbox"/> 023	Ba	7080	<input type="checkbox"/> 037	AMMONIA	
<input type="checkbox"/> 011	PCB	608	<input type="checkbox"/> 024	Cr	7190	<input type="checkbox"/> 038	TKN	
<input type="checkbox"/> 012	PHENOL	8040	<input type="checkbox"/> 025	Cr6	7198	<input type="checkbox"/>	OTHER	



Bloomfield Refining  
Company

A Gary Energy Corporation Subsidiary

OIL CONSERVATION DIVISION  
RECEIVED

'90 JUL 24 AM 9 09

July 23, 1990

Mr. David G. Boyer  
State of New Mexico  
Oil Conservation Division  
P. O. Box 2088  
Land Office Building  
Santa Fe, New Mexico 87501

RE: Discharge Plan GRW-1

Dear Mr. Boyer:

Analytical results, applicable to our discharge plan for wells 1 and 5, that were obtained on June 19, 1990 are enclosed.

Please call me if there are any questions.

Sincerely yours,

*Chris Hawley*

Chris Hawley  
Environmental Engineer

CH/jm

Enclosure

cc: Mike Macy  
Richard Traylor  
Joe Warr

BLOOMFIELD REFINING COMPANY  
MONITORING UNDER DISCHARGE PLAN GRW-1-A

MW-1

PARAMETER	UNIT	NOM		CURRENT RESULT	PREVIOUS RESULT	BASELINE RESULTS
		DET LIM	NMWQ STANDARD			
DATE OF SAMPLE				6/19/90	12/01/89	9/84 TO 7/85
ARSENIC	MG/L	0.005	0.100	0.0092	0.0005	0.0160
BARIUM	MG/L	0.500	1.000	0.0000	0.0000	0.2500
CADMIUM	MG/L	0.002	0.010	0.0000	0.0073	0.0103
CHROMIUM	MG/L	0.020	0.050	0.0000	0.0000	0.0175
LEAD	MG/L	0.020	0.050	0.0070	0.0000	0.0862
BORON	MG/L	0.010	0.750	0.3100	0.2800	0.2675
IRON	MG/L	0.050	1.000	14.3800	0.0000	46.2675
MANGANESE	MG/L	0.020	0.200	0.5900	1.1700	0.9425
TOTAL DISSOLVED SOLIDS	MG/L	1.000	1000.000	2952.0000	3120.0000	3516.0000
CHLORIDE	MG/L	1.000	250.000	1269.1000	1142.8500	1070.5000
SULFATE	MG/L	1.000	600.000	491.3000	515.6100	815.5000
PHENOLS	MG/L	0.001	0.005	0.2310	0.1510	0.0548
CYANIDE	MG/L	0.005	0.200	0.0000	0.0000	0.0000
NITRATE, NITRITE AS N	MG/L	0.100	10.000	6.4700	2.0400	5.7250
AMMONIA	MG/L	0.100		0.1700	0.0000	
TOTAL KELDAHL NITROGEN	MG/L	0.100		1.1700	1.4800	
BENZENE	UG/L	0.200	10.000	0.0000	0.0000	0.0000
TOLUENE	UG/L	0.200	750.000	0.0000	3.7500	0.0000
ETHYL BENZENE	UG/L	0.200	750.000	0.0000	0.0000	0.0000
XYLENES (TOTAL)	UG/L	0.200	620.000	0.0000	0.0000	0.0000
pH		0.010	6 TO 9	7.5700	7.2200	7.3100
ELEVATION AT T.O.P.	S.U.	0.010		5515.7700	5515.7700	5515.7700
DEPTH TO WATER	FT	0.010		14.0300	18.5300	16.1900
ELEVATION AT T.O.W.	FT	0.010		5501.7400	5497.2400	5499.5800

BLOOMFIELD REFINING COMPANY  
MONITORING UNDER DISCHARGE PLAN GRW-1-A

MW-5

PARAMETER	UNIT	DET LIM	NMWD STANDARD	CURRENT RESULT	PREVIOUS RESULT	BASELINE RESULTS
DATE OF SAMPLE				6/19/90	12/01/89	9/84 TO 7/85
ARSENIC	MG/L	0.005	0.100	0.0126	0.0006	0.0040
BARIUM	MG/L	0.500	1.000	0.0000	0.0000	0.0000
CADMIUM	MG/L	0.002	0.010	0.0000	0.0039	0.0153
CHROMIUM	MG/L	0.020	0.050	0.0000	0.0000	0.0000
LEAD	MG/L	0.020	0.050	0.0050	0.0440	0.0153
BORON	MG/L	0.010	0.750	0.0600	0.5800	0.4800
IRON	MG/L	0.050	1.000	0.0000	0.0000	0.0613
MANGANESE	MG/L	0.020	0.200	0.0000	0.0000	0.1277
TOTAL DISSOLVED SOLIDS	MG/L	1.000	1000.000	4918.0000	4594.0000	4746.0000
CHLORIDE	MG/L	1.000	250.000	1751.4000	1715.6200	1402.0000
SULFATE	MG/L	1.000	600.000	1131.6000	946.4500	1299.0000
PHENOLS	MG/L	0.001	0.005	0.1020	0.0060	0.0080
CYANIDE	MG/L	0.005	0.200	0.0000	0.0000	0.0133
NITRATE, NITRITE AS N	MG/L	0.100	10.000	16.7500	24.8500	24.0000
AMMONIA	MG/L	0.100		0.1700	0.1650	
TOTAL KELDAHL NITROGEN	MG/L	0.100		1.8400	3.3900	
BENZENE	UG/L	0.200	10.000	0.0000	10.8000	0.0000
TOLUENE	UG/L	0.200	750.000	0.0000	92.0000	0.0000
ETHYL BENZENE	UG/L	0.200	750.000	0.0000	9.8000	0.0000
XYLENES (TOTAL)	UG/L	0.200	620.000	0.0000	22.3000	0.0000
pH		0.010	6 TO 9	7.4200	7.2400	7.4100
ELEVATION AT T.O.P.	S.U.	0.010		5545.1000	5545.1000	5545.1000
DEPTH TO WATER	FT	0.010		42.3000	42.5700	41.8500
ELEVATION AT T.O.W.	FT	0.010		5502.8000	5502.5300	5503.2500



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

CLIENT: Bloomfield Refinery  
ID: MW-1  
SITE: N/A  
LAB NO: F4468

DATE REPORTED: 07/11/90  
DATE RECEIVED: 06/19/90  
DATE COLLECTED: 06/19/90

Lab pH (s.u.).....	7.57
Lab conductivity, umhos/cm.....	5121
Lab resistivity, ohm-m.....	1.9527
Total dissolved solids (180), mg/l..	2952
Total nitrate and nitrite, mg/l....	6.47
Total Keldahl nitrogen, mg/l.....	1.17
Ammonia, mg/l.....	0.17
Cyanide, mg/l.....	<0.005
Phenols, mg/l.....	0.231
Total organic carbon, mg/l.....	11.30
	mg/l      meq/l
Chloride.....	1269.1      35.80
Sulfate.....	491.3      10.24

Trace metals by AA (total concentration), mg/l

	Analytical Result:	Detection Limit:
Arsenic (As).....	0.0092	<0.0003
Cadmium (Cd).....	ND	<0.0002
Lead (Pb).....	0.007	<0.004

Trace metals by ICAP (total concentration), mg/l

	Analytical Result:	Detection Limit:
Boron (B).....	0.31	<0.01
Barium (Ba).....	ND	<0.5
Chromium (Cr).....	ND	<0.02
Iron (Fe).....	14.38	<0.05
Manganese (Mn).....	0.59	<0.02

  
C. Neal Schaeffer  
Lab Director



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

CLIENT:	Bloomfield Refinery	DATE REPORTED:	07/02/90
ID:	MW-1	DATE ANALYZED:	06/26/90
SITE:	N/A	DATE RECEIVED:	06/19/90
LAB NO:	F4468	DATE COLLECTED:	06/19/90

Analysis Requested: Purgeable aromatics in water.

Parameter	Concentration	Units
Benzene	ND (0.2)	ug/l
Toluene	ND (0.2)	ug/l
Ethylbenzene	ND (0.2)	ug/l
m/p-Xylene	ND (0.2)	ug/l
o-Xylene	ND (0.2)	ug/l
1,4-Dichlorobenzene	ND (0.3)	ug/l
1,3-Dichlorobenzene	ND (0.4)	ug/l
1,2-Dichlorobenzene	ND (0.4)	ug/l
Chlorobenzene	ND (0.2)	ug/l

Method:

8020 Aromatic Volatile Organics, SW-846, USEPA (1982).  
602 Purgeable Aromatics, 40 CFR, Part 136.

(Detection limit in parenthesis.)

ND - Parameter not detected at the stated detection limit.

C. Neal Schaeffer  
Senior Chemist



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

CLIENT: Bloomfield Refinery  
ID: MW-1  
SITE: N/A  
LAB NO: F4468

DATE REPORTED: 07/02/90  
DATE ANALYZED: 06/26/90  
DATE RECEIVED: 06/19/90  
DATE COLLECTED: 06/19/90

Analysis Requested: Purgeable halocarbons in water.

Parameter	Concentration
Chloromethane, ug/l.....	ND (10.0)
Bromomethane, ug/l.....	ND (10.0)
Dichlorodifluoromethane, ug/l.....	ND (10.0)
Vinyl chloride, ug/l.....	ND (10.0)
Chloroethane, ug/l.....	ND (1.0)
Dichloromethane, ug/l.....	ND (1.0)
Trichlorofluoromethane, ug/l.....	ND (1.0)
1,1-dichloroethene, ug/l.....	ND (1.0)
1,1-dichloroethane, ug/l.....	ND (1.0)
trans-1,2-dichloroethene, ug/l.....	ND (1.0)
Chloroform, ug/l.....	ND (1.0)
1,2-dichloroethane, ug/l.....	ND (1.0)
1,1,1-trichloroethane, ug/l.....	ND (1.0)
Carbon tetrachloride, ug/l.....	ND (1.0)
Bromodichloromethane, ug/l.....	ND (1.0)
1,2-dichloropropane, ug/l.....	ND (1.0)
Trichloroethene, ug/l.....	ND (1.0)
Dibromochloromethane, ug/l.....	ND (1.0)
1,1,2-trichloroethane, ug/l.....	ND (1.0)
2-chloroethyl vinyl ether, ug/l.....	ND (10.0)
Bromoform, ug/l.....	ND (1.0)
1,1,2,2-tetrachloroethane, ug/l.....	ND (1.0)
Tetrachloroethene, ug/l.....	ND (1.0)
Chlorobenzene, ug/l.....	ND (1.0)
1,3-dichlorobenzene, ug/l.....	ND (1.0)
1,2-dichlorobenzene, ug/l.....	ND (1.0)
1,4-dichlorobenzene, ug/l.....	ND (1.0)
Bromobenzene, ug/l.....	ND (1.0)
2-chlorotoluene, ug/l.....	ND (1.0)
Dibromomethane, ug/l.....	ND (1.0)
1,1,1,2-tetrachloroethane, ug/l.....	ND (1.0)
1,2,3-trichloropropane, ug/l.....	ND (1.0)
Bromochloromethane, ug/l.....	ND (1.0)
cis-1,2-dichloroethene, ug/l.....	ND (1.0)
1,1-dichloropropene, ug/l.....	ND (1.0)
1,3-dichloropropane, ug/l.....	ND (1.0)
1,2-dibromoethane, ug/l.....	ND (1.0)
1,2-dibromo-3-chloropropane, ug/l...	ND (1.0)

Method:

8010 Halogenated Volatile Organics, SW-846, USEPA (1982).  
(Detection limit in parenthesis.)

ND - Parameter not detected at the stated detection limit.

C. Neal Schaeffer  
Senior Chemist



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

CLIENT: Bloomfield Refinery  
ID: MW-5  
SITE: N/A  
LAB NO: F4469

DATE REPORTED: 07/11/90  
DATE RECEIVED: 06/19/90  
DATE COLLECTED: 06/19/90

Lab pH (s.u.).....	7.42
Lab conductivity, umhos/cm.....	8005
Lab resistivity, ohm-m.....	1.2492
Total dissolved solids (180), mg/l..	4918
Total nitrate and nitrite, mg/l....	16.75
Total Keldahl nitrogen, mg/l.....	1.84
Ammonia, mg/l.....	0.17
Cyanide, mg/l.....	<0.005
Phenols, mg/l.....	0.102
Total organic carbon, mg/l.....	7.40
mg/l      meq/l	
Chloride.....	1751.4      49.40
Sulfate.....	1131.6      23.58

Trace metals by AA (total concentration), mg/l

	Analytical Result:	Detection Limit:
Arsenic (As).....	0.0126	<0.0003
Cadmium (Cd).....	ND	<0.0002
Lead (Pb).....	0.005	<0.004

Trace metals by ICAP (total concentration), mg/l

	Analytical Result:	Detection Limit:
Boron (B).....	0.06	<0.01
Barium (Ba).....	ND	<0.5
Chromium (Cr).....	ND	<0.02
Iron (Fe).....	ND	<0.05
Manganese (Mn).....	ND	<0.02

A handwritten signature in black ink, appearing to read 'C. Neal Schaeffer'.

C. Neal Schaeffer  
Lab Director



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

CLIENT:	Bloomfield Refinery	DATE REPORTED:	07/02/90
ID:	MW-5	DATE ANALYZED:	06/26/90
SITE:	N/A	DATE RECEIVED:	06/19/90
LAB NO:	F4469	DATE COLLECTED:	06/19/90

Analysis Requested: Purgeable aromatics in water.

Parameter	Concentration	Units
Benzene	ND (0.2)	ug/l
Toluene	ND (0.2)	ug/l
Ethylbenzene	ND (0.2)	ug/l
m/p-Xylene	ND (0.2)	ug/l
o-Xylene	ND (0.2)	ug/l
1,4-Dichlorobenzene	ND (0.3)	ug/l
1,3-Dichlorobenzene	ND (0.4)	ug/l
1,2-Dichlorobenzene	ND (0.4)	ug/l
Chlorobenzene	ND (0.2)	ug/l

Method:

8020 Aromatic Volatile Organics, SW-846, USEPA (1982).  
602 Purgeable Aromatics, 40 CFR, Part 136.

(Detection limit in parenthesis.)

ND - Parameter not detected at the stated detection limit.

C. Neal Schaeffer  
Senior Chemist



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

CLIENT: Bloomfield Refinery  
ID: MW-5  
SITE: N/A  
LAB NO: F4469

DATE REPORTED: 07/02/90  
DATE ANALYZED: 06/25/90  
DATE RECEIVED: 06/19/90  
DATE COLLECTED: 06/19/90

Analysis Requested: Purgeable halocarbons in water.

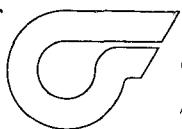
Parameter	Concentration
Chloromethane, ug/l.....	ND (10.0)
Bromomethane, ug/l.....	ND (10.0)
Dichlorodifluoromethane, ug/l.....	ND (10.0)
Vinyl chloride, ug/l.....	ND (10.0)
Chloroethane, ug/l.....	ND (1.0)
Dichloromethane, ug/l.....	ND (1.0)
Trichlorofluoromethane, ug/l.....	ND (1.0)
1,1-dichloroethene, ug/l.....	ND (1.0)
1,1-dichloroethane, ug/l.....	ND (1.0)
trans-1,2-dichloroethene, ug/l.....	ND (1.0)
Chloroform, ug/l.....	ND (1.0)
1,2-dichloroethane, ug/l.....	ND (1.0)
1,1,1-trichloroethane, ug/l.....	ND (1.0)
Carbon tetrachloride, ug/l.....	ND (1.0)
Bromodichloromethane, ug/l.....	ND (1.0)
1,2-dichloropropane, ug/l.....	ND (1.0)
Trichloroethene, ug/l.....	ND (1.0)
Dibromochloromethane, ug/l.....	ND (1.0)
1,1,2-trichloroethane, ug/l.....	ND (1.0)
2-chloroethyl vinyl ether, ug/l.....	ND (10.0)
Bromoform, ug/l.....	ND (1.0)
1,1,2,2-tetrachloroethane, ug/l.....	ND (1.0)
Tetrachloroethene, ug/l.....	ND (1.0)
Chlorobenzene, ug/l.....	ND (1.0)
1,3-dichlorobenzene, ug/l.....	ND (1.0)
1,2-dichlorobenzene, ug/l.....	ND (1.0)
1,4-dichlorobenzene, ug/l.....	ND (1.0)
Bromobenzene, ug/l.....	ND (1.0)
2-chlorotoluene, ug/l.....	ND (1.0)
Dibromomethane, ug/l.....	ND (1.0)
1,1,1,2-tetrachloroethane, ug/l.....	ND (1.0)
1,2,3-trichloropropane, ug/l.....	ND (1.0)
Bromochloromethane, ug/l.....	ND (1.0)
cis-1,2-dichloroethene, ug/l.....	ND (1.0)
1,1-dichloropropene, ug/l.....	ND (1.0)
1,3-dichloropropane, ug/l.....	ND (1.0)
1,2-dibromoethane, ug/l.....	ND (1.0)
1,2-dibromo-3-chloropropane, ug/l...	ND (1.0)

Method:

8010 Halogenated Volatile Organics, SW-846, USEPA (1982).  
(Detection limit in parenthesis.)

ND - Parameter not detected at the stated detection limit.

C. Neal Schaeffer  
Senior Chemist



Bloomfield Refining  
Company

A Gary Energy Corporation Subsidiary

Enclosure  
- 24/25

'90 May 9 AM 8 43

May 7, 1990

Mr. David G. Boyer  
N.M. OCD  
P.O. Box 2088  
State Land Office Building  
Santa Fe, New Mexico 87504-2088

RE: Sullivan Road to Highway 44 Remediation

Dear Mr. Boyer:

Attached please find the results of a sample from the trench on Avis Salmon's property that was taken on April 26, 1990.

Sincerely,

*Chris Hawley*

Chris Hawley  
Environmental Engineer

CH/jm

Enclosure

cc: Joe Warr  
Richard Traylor  
Mike Macy  
Craig West



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

CLIENT: BRC  
ID:  
SITE: SALMON  
LAB NO: F4182

DATE REPORTED: 04/30/90  
DATE ANALYZED: 04/30/90  
DATE RECEIVED: 04/26/90  
DATE COLLECTED: 04/26/90

Analysis Requested: Purgeable aromatics in water; TCLP benzene.\*

Parameter	Concentration	Units
Benzene	ND (1.0)	ug/l
Toluene	ND (1.0)	ug/l
Ethylbenzene	ND (1.0)	ug/l
m/p-Xylene	ND (1.0)	ug/l
o-Xylene	ND (1.0)	ug/l

Method:

8020 Aromatic Volatile Organics, SW-846, USEPA (1982).

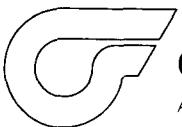
\* This sample was <0.5% solids.

(Detection limit in parenthesis.)

ND - Parameter not detected at the stated detection limit.

A handwritten signature in black ink, appearing to read "C. Neal Schaeffer".

C. Neal Schaeffer  
Senior Chemist



Bloomfield Refining  
Company  
A Gary Energy Corporation Subsidiary

1520 S. BROADWAY DIVISION

RECORDED

90 MAR 19 AM 9 06

March 15, 1990

Mr. David G. Boyer  
New Mexico Oil Conservation Division  
P. O. Box 2088  
State Land Office Building  
Santa Fe, New Mexico 87504-2088

RE: Sullivan Road to Highway 44 Remediation

Dear Mr. Boyer:

In our letter of November 28, 1989, we proposed remediation activities to be done on Mrs. Avis Salmon's property in the vicinity of sample points 4, 5, and 7. We proposed to do this work during the summer of 1990, anticipating in part a long lead time to obtain access. However, Mr. Bob McCoy, the caretaker of the property, accepted authority for doing the trench installation as called for in our letter. We, therefore, were able to get the trench installed in the vicinity of sample points 4, 5, and 7 on February 27, 1990.

Based on our observations of the water in the trench and confirmed with sampling results, we submit that the contamination in this area was minimal. We had proposed some in-situ aeration, but believe now that natural evaporation from the trench and aeration caused during the trench installation was adequate to reduce the concentrations of the contaminants of concern into conformance with the standards of Section 3-103 of the New Mexico Water Quality Control Commission Regulations (see attached analytical report).

We invite you to inspect the site at your earliest convenience for concurrence so that we may repair the damage done to the property during the trench installation as soon as possible.

Please call me for any additional information you may require.

Sincerely,

A handwritten signature in black ink that appears to read "Chris Hawley".

Chris Hawley  
Environmental Engineer

CH/jm

Enclosure

cc: Joe Warr  
Richard Traylor  
Mike Macy  
Craig West

**BLOOMFIELD REFINING COMPANY**

**Avis Salmon Property  
Remediation at Sample Points 4, 5, & 7**

<u>Parameter</u>	<u>Units</u>	<u>WQCCR Std. 3-103.A</u>	<u>Average From Sample Pts. 4, 5, 7 9/21/89</u>	<u>Trench Sample 3/9/90</u>
Benzene	ug/l	10	262	ND
Toluene	ug/l	750	ND	ND
Ethylbenzene	ug/l	750	ND	9
Total Xylene	ug/l	620	939	79

Detection Limits: 9/21/89, 6 ug/l  
3/09/90, 1 ug/l



CLIENT: BRC DATE REPORTED: 03/13/90  
ID: DATE ANALYZED: 03/12/90  
SITE: Salmon DATE RECEIVED: 03/09/90  
LAB NO: F3986 DATE COLLECTED: 03/09/90  
Analysis Requested: Purgeable aromatics in water.

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

Parameter	Concentration	Units
Benzene	ND (1.0)	ug/l
Toluene	ND (1.0)	ug/l
Ethylbenzene	9.1 (1.0)	ug/l
m/p-Xylene	54.4 (1.0)	ug/l
o-Xylene	24.2 (1.0)	ug/l
1,4-Dichlorobenzene	ND (1.0)	ug/l
1,3-Dichlorobenzene	ND (1.0)	ug/l
1,2-Dichlorobenzene	ND (1.0)	ug/l
Chlorobenzene	ND (1.0)	ug/l

### Method:

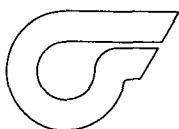
8020 Aromatic Volatile Organics, SW-846, USEPA (1982).  
602 Purgeable Aromatics, 40 CFR, Part 136.

(Detection limit in parenthesis.)

ND - Parameter not detected at the stated detection limit.

Charles Schaffner

C. Neal Schaeffer  
Senior Chemist



Bloomfield Refining  
Company

A Gary Energy Corporation Subsidiary

OIL CONSERVATION DIVISION  
RECEIVED

90 FEB 7 AM 8 52

February 2, 1990

Mr. David G. Boyer  
State of New Mexico  
Oil Conservation Division  
P. O. Box 2088  
Land Office Building  
Santa Fe, New Mexico 87501

RE: Discharge Plan GRW-1

Dear Mr. Boyer:

Analytical results applicable to the discharge plan for wells 1 and 5 that were obtained on December 1, 1989 are enclosed. Please note that MW-5 showed the presence of some organics that had not previously been detected. The turnaround time on these samples was very long, and at these detection levels, sample contamination or some other problem will need to be ruled out before accepting the data. I plan to resample the wells for organic analyses.

Please call me if there are any questions.

Sincerely yours,

*Chris Hawley*

Chris Hawley  
Environmental Engineer

CH/jm

Enclosure

cc: Richard Traylor  
Mike Macy  
Joe Warr

## BLOOMFIELD REFINING COMPANY

SAMPLE DATE: 12/1/89, CLEAR 45°F.

PARAMETER	UNITS	1	2	3	4	5	6
		NOMINAL DETECTION LIMITS	NM WQ STANDARD	MONITORING WELL	MONITORING WELL		
Arsenic	mg/l	0.005	0.1	0.0005	0.0006		
Barium	"	0.5	1.0	ND	ND		
Cadmium	"	0.002	0.01	0.0073	0.0039		
Chromium	"	0.02	0.05	ND	ND		
Lead	"	0.02	0.05	ND	0.044		
Boron	"	0.01	0.75	0.28	0.58		
IRON	"	0.05	1.0	ND	ND		
Manganese	"	0.02	0.2	1.17	ND		
TDS	"	1.	1000.	3120.	4594.		
Chloride	"	1.	250.	1142.85	1715.62		
Sulfate	"	1.	600.	515.61	946.45		
Phenols	"	0.001	0.005	0.151	0.006		
Cyanide	"	0.005	0.2	<0.005	<0.005		
Nitrate as N	"	0.1	10.	2.04	24.85		
Nitrite as N	"	0.1	-	<0.10	<0.10		
Ammonia	"	0.1	-	<0.10	0.165		
Total Kjeldahl Nitrogen	"	0.1	-	1.48	3.39		
Benzene	ug/l	0.2	10.	ND	10.8		
Toluene	ug/l	0.2	750.	3.75	92.		
Ethyl Benzene	ug/l	0.2	750.	ND	9.8		
Xylenes (Total)	ug/l	0.2	620.	ND	22.3		
1,1,1 Trichloroethane	ug/l	1.0	60.	ND	ND		
1,2 Dichloroethane	ug/l	1.0	0.01	ND	ND		
trans,1,2 Dichloroethene	ug/l	1.0	-	ND	169.8		
pH	S.U.	0.01	6 TO 9	7.22	7.24		
Depth to water	Ft	0.01	-	18.53	42.57		



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

CLIENT: Bloomfield Refinery

DATE REPORTED: 12/27/89

SITE: MW-1  
LAB NO: F3587

DATE RECEIVED: 12/01/89  
DATE COLLECTED: 12/01/89

Lab pH (s.u.).....	7.22
Total Dissolved Solids (180), mg/l..	3120
Nitrate, mg/l.....	2.04
Nitrite, mg/l.....	<0.10
Total Keldahl Nitrogen.....	1.48
Ammonia, mg/l.....	<0.10
Cyanide, mg/l.....	<0.005
Phenols, mg/l.....	0.151
Chloride.....	mg/l
.....	1142.85
Sulfate.....	meq/l
.....	515.61
.....	10.74

Trace metals by AA (Dissolved Concentration), mg/l

	Analytical Result:	Detection Limit:
Arsenic (As).....	0.0005	<0.005
Cadmium (Cd).....	0.0073	<0.002
Lead (Pb).....	ND	<0.02
Selenium (Se).....	0.0011	<0.005

Trace metals by ICAP (Dissolved Concentration), mg/l

	Analytical Result:	Detection Limit:
Boron (B).....	0.28	<0.01
Barium (Ba).....	ND	<0.5
Chromium (Cr).....	ND	<0.02
Iron (Fe).....	ND	<0.05
Manganese (Mn).....	1.17	<0.02

C. Neal Schaeffer  
C. Neal Schaeffer  
Senior Chemist



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

CLIENT: Bloomfield Refinery

DATE REPORTED: 01/29/90

SITE: MW-1

DATE ANALYZED: 12/08/90

LAB NO: F3587

DATE RECEIVED: 12/01/90

Analysis Requested: Purgeable aromatics in water.

DATE COLLECTED: 12/01/90

Parameter	Concentration	Units
Benzene	ND (0.2)	ug/l
Toluene	3.75 (0.2)	ug/l
Ethylbenzene	ND (0.2)	ug/l
m/p-Xylene	ND (0.2)	ug/l
$\alpha$ -Xylene	ND (0.2)	ug/l
1,4-Dichlorobenzene	ND (0.2)	ug/l
1,3-Dichlorobenzene	ND (0.2)	ug/l
1,2-Dichlorobenzene	ND (0.2)	ug/l
Chlorobenzene	ND (0.2)	ug/l

Method:

8020 Aromatic Volatile Organics, SW-846, USEPA (1982).

602 Purgeable Aromatics, 40 CFR, Part 136.

(Detection limit in parenthesis.)

ND - Parameter not detected at the stated detection limit.

A handwritten signature in black ink that reads "C. Neal Schaeffer".

C. Neal Schaeffer  
Senior Chemist



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

CLIENT: Bloomfield Refinery

DATE REPORTED: 01/29/90

SITE: MW-1

DATE ANALYZED: 12/08/90

LAB NO: F3587

DATE RECEIVED: 12/01/90

Analysis Requested: Purgeable halocarbons in water.

DATE COLLECTED: 12/01/90

Parameter	Concentration	Units
Bromobenzene	ND (1.0)	ug/l
Bromodichloromethane	ND (1.0)	ug/l
Bromoform	ND (1.0)	ug/l
Carbon Tetrachloride	ND (1.0)	ug/l
Chlorobenzene	ND (1.0)	ug/l
Chloroethane	ND (1.0)	ug/l
Chloroform	ND (1.0)	ug/l
Chloromethane	* ND (1.0)	ug/l
Dibromochloromethane	ND (1.0)	ug/l
Dibromomethane	ND (1.0)	ug/l
1,2-Dichlorobenzene	ND (1.0)	ug/l
1,3-Dichlorobenzene	ND (1.0)	ug/l
1,4-Dichlorobenzene	ND (1.0)	ug/l
Dichlorodifluoromethane	ND (1.0)	ug/l
1,1-Dichloroethane	ND (1.0)	ug/l
1,2-Dichloroethane	ND (1.0)	ug/l
1,1-Dichloroethene	ND (1.0)	ug/l
trans-1,2-Dichloroethene	ND (1.0)	ug/l
1,2-Dichloropropane	ND (1.0)	ug/l
1,3-Dichloropropylene	ND (1.0)	ug/l
2,2-Dichloropropane	ND (1.0)	ug/l
Dichloromethane	ND (1.0)	ug/l
1,1,1,2-Tetrachloroethane	ND (1.0)	ug/l
1,1,2,2-Tetrachloroethane	ND (1.0)	ug/l
Tetrachloroethene	ND (1.0)	ug/l
1,1,1-Trichloroethane	ND (1.0)	ug/l
1,1,2-Trichloroethane	ND (1.0)	ug/l
Trichloroethene	ND (1.0)	ug/l
Trichlorofluoromethane	ND (1.0)	ug/l
1,2,3-Trichloropropane	ND (1.0)	ug/l

\* Low level present but also present in reagent water.

Method:

601 Purgeable Halocarbons, 40 CFR Part 136, USEPA (1984).  
8010 Halogenated Volatile Organics, SW-846, USEPA (1982).

(Detection limit in parenthesis.)

ND - Parameter not detected at the stated detection limit.

C. Neal Schaeffer  
Senior Chemist



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

CLIENT: Bloomfield Refinery DATE REPORTED: 12/27/89

SITE: MW-5 DATE RECEIVED: 12/01/89  
LAB NO: F3586 DATE COLLECTED: 12/01/89

Lab pH (s.u.).....	7.24	
Total Dissolved Solids (180), mg/l..	4594	
Nitrate, mg/l.....	24.85	
Nitrite, mg/l.....	<0.10	
Total Keldahl Nitrogen.....	3.39	
Ammonia, mg/l.....	0.165	
Cyanide, mg/l.....	<0.005	
Phenols, mg/l.....	0.006	
Chloride.....	mg/l 1715.62	meq/l 48.40
Sulfate.....	946.45	19.72

Trace metals by AA (Dissolved Concentration), mg/l

	Analytical Result:	Detection Limit:
Arsenic (As).....	0.0006	<0.005
Cadmium (Cd).....	0.0039	<0.002
Lead (Pb).....	0.044	<0.02
Selenium (Se).....	0.0003	<0.005

Trace metals by ICAP (Dissolved Concentration), mg/l

	Analytical Result:	Detection Limit:
Boron (B).....	0.58	<0.01
Barium (Ba).....	ND	<0.5
Chromium (Cr).....	ND	<0.02
Iron (Fe).....	ND	<0.05
Manganese (Mn).....	ND	<0.02

C. Neal Schaeffer  
Senior Chemist



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

CLIENT: Bloomfield Refinery  
ID:  
SITE: MW-5  
LAB NO: F3586  
Analysis Requested: Purgeable aromatics in water.

DATE REPORTED: 01/29/90  
DATE ANALYZED: 12/08/90  
DATE RECEIVED: 12/01/90  
DATE COLLECTED: 12/01/90

Parameter	Concentration	Units
Benzene	10.8 (0.2)	ug/l
Toluene	92 (0.2)	ug/l
Ethylbenzene	9.8 (0.2)	ug/l
m/p-Xylene	11.5 (0.2)	ug/l
o-Xylene	10.8 (0.2)	ug/l
1,4-Dichlorobenzene	ND (0.2)	ug/l
1,3-Dichlorobenzene	ND (0.2)	ug/l
1,2-Dichlorobenzene	2.6 (0.2)	ug/l
Chlorobenzene	0.7 (0.2)	ug/l

Method:

8020 Aromatic Volatile Organics, SW-846, USEPA (1982).  
602 Purgeable Aromatics, 40 CFR, Part 136.

(Detection limit in parenthesis.)

ND - Parameter not detected at the stated detection limit.

C. Neal Schaeffer  
Senior Chemist



CLIENT: Bloomfield Refinery

2506 West Main Street  
Farmington, New Mexico 87401

Tel. (505) 326-4737

SITE: MW-5

LAB NO: F3586

Analysis Requested: Purgeable halocarbons in water.

DATE REPORTED: 01/29/90  
DATE ANALYZED: 12/08/90  
DATE RECEIVED: 12/01/90  
DATE COLLECTED: 12/01/90

Parameter	Concentration	Units
Bromobenzene	ND (1.0)	ug/l
Bromodichloromethane	ND (1.0)	ug/l
Bromoform	ND (1.0)	ug/l
Carbon Tetrachloride	ND (1.0)	ug/l
Chlorobenzene	ND (1.0)	ug/l
Chloroethane	ND (1.0)	ug/l
Chloroform	ND (1.0)	ug/l
Chloromethane	* ND (1.0)	ug/l
Dibromochloromethane	ND (1.0)	ug/l
Dibromomethane	ND (1.0)	ug/l
1,2-Dichlorobenzene	ND (1.0)	ug/l
1,3-Dichlorobenzene	ND (1.0)	ug/l
1,4-Dichlorobenzene	ND (1.0)	ug/l
Dichlorodifluoromethane	ND (1.0)	ug/l
1,1-Dichloroethane	ND (1.0)	ug/l
1,2-Dichloroethane	ND (1.0)	ug/l
1,1-Dichloroethene	ND (1.0)	ug/l
trans-1,2-Dichloroethene	169.8 (1.0)	ug/l
1,2-Dichloropropane	ND (1.0)	ug/l
1,3-Dichloropropylene	ND (1.0)	ug/l
2,2-Dichloropropane	ND (1.0)	ug/l
Dichloromethane	ND (1.0)	ug/l
1,1,1,2-Tetrachloroethane	ND (1.0)	ug/l
1,1,2,2-Tetrachloroethane	ND (1.0)	ug/l
Tetrachloroethene	ND (1.0)	ug/l
1,1,1-Trichloroethane	ND (1.0)	ug/l
1,1,2-Trichloroethane	ND (1.0)	ug/l
Trichloroethene	ND (1.0)	ug/l
Trichlorofluoromethane	ND (1.0)	ug/l
1,2,3-Trichloropropane	ND (1.0)	ug/l

\* Low level present but also present in reagent water.

## Method:

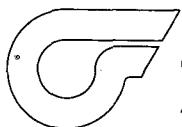
601 Purgeable Halocarbons, 40 CFR Part 136, USEPA (1984).  
8010 Halogenated Volatile Organics, SW-846, USEPA (1982).

(Detection limit in parenthesis.)

ND - Parameter not detected at the stated detection limit.

A handwritten signature in black ink that reads "C. Neal Schaeffer".

C. Neal Schaeffer  
Senior Chemist



Bloomfield Refining  
Company

A Gary Energy Corporation Subsidiary

July 10, 1989

Mr. David G. Boyer  
State of New Mexico  
Oil Conservation Division  
P. O. Box 2088  
Land Office Building  
Santa Fe, New Mexico 87501

RE: Discharge Plan GRW-1-A, Bloomfield Refining Company

Dear Mr. Boyer:

Analytical results applicable to the discharge plan for wells 1, 4, and 5 that were obtained from samples taken on May 25, 1989 are enclosed.

Please call me if there are any questions.

Sincerely yours,

Chris Hawley  
Environmental Engineer

CH/jm

Enclosure

cc: Richard Traylor  
Mike Macy  
Joe Warr

**RECEIVED**

JUL 11 1989

OIL CONSERVATION DIV.  
SANTA FE

BLOOMFIELD REFINING COMPANY  
SAMPLE DATE: MAY 25, 1939

NOMINAL DETECTION LIMITS	MONITORING NMWR	MONITORING WELL	MONITORING WELL	MONITORING WELL
STANDARD	1	+	5	

Arsenic	mg/l	0.005	0.1	<0.005	<0.005	<0.005
Barium	"	0.5	1.0	<0.5	1.4	<0.5
Boron	"	0.01	0.75	0.03	0.50	0.41
Cadmium	"	0.002	0.01	<0.002	<0.002	<0.002
Chromium	"	0.02	0.05	<0.02	<0.02	<0.02
Iron	"	0.05	1.0	0.68	0.92	<0.05
Lead	"	0.02	0.05	0.05	<0.03	0.06
Manganese	"	0.02	0.2	<0.02	3.59	<0.02
Ammonia	"	0.1	-	0.14	<0.1	0.1
Nitrate	"	0.1	10.	0.561	<0.1	21.04
Nitrite	"	0.01	-	0.02	0.058	0.049
T.Kjeldahl Nitrogen	"	0.1	-	1.59	1.52	1.24
Phenol	"	0.001	0.005	0.214	0.250	0.362
Cyanide	"	0.005	0.2	<0.005	<0.005	<0.005
TDS	"	1.	1000.	3308.	1454.	4196.
Sulfate	"	1.	600.	653.46	7.41	781.03
Benzene	mg/l	0.2	10.	ND	9200.	ND
Toluene	mg/l	0.2	750.	ND	9300.	ND
Ethylbenzene	mg/l	0.2	750.	ND	1100.	ND
m,p-Xylene	mg/l	0.2	2620.	ND	2500.	ND
O-Xylene	mg/l	0.2	5	ND	2200.	ND
Purgeable Halocarbons				NOT TESTED	.....	
pH	S.U.	0.1	6 TO 9	7.2	7.1	7.4
Depth to Water	ft	0.01	-	15.56	24.44	42.07



45-608 Eye-Ease®  
45-708 20/20 Buff  
Made in USA

LOOMFIELD REFINING COMPANY  
GROUNDWATER ELEVATIONS

1	2	3	4	5	6	7	8
DATE	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7
T.O.P.	5515.77	5519.45	5535.85	5524.30	5545.10	5551.23	5524.09
1/27/87	5499.44	5500.92	5502.60	5500.22	5503.10	DRY	5499.29
4/2/87	5499.76	5501.20	5502.86	5500.37	5503.77	"	5499.59
-	DAMES REMOVED 4/3/87	IRRIGATION	STARTED	4/13/87			
4/23/87	5499.33	5500.71	5502.94	5500.32	5504.01	DRY	5499.55
5/27/87	5499.71	5500.83	5502.94	5500.22	5503.95	"	5499.62
10/8/87	5499.63	5500.82	5502.63	5500.03	5503.54	"	5499.20
11/17/87	5498.46			5499.94	5503.17	-	-
6/3/88	5499.85		5502.52	5499.74	5503.03	"	5499.34
11/18/88	5498.27			5499.95	5502.90		
5/25/89	5500.21			5499.86	5503.03		
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2506 West Main Street  
Farmington, New Mexico 87401  
Tel. (505) 326-4737

31 May 1989

Bloomfield Refining Company  
POB 159  
Bloomfield, NM 87413

Chris Hawley,

This letter is to document the lost samples I reported to you by telephone. Due to failure of our laboratory equipment (a refrigerator) the following samples were lost: Salmon, MW-1, MW-4, and MW-5. These were received at the lab on 24 May 1989 for 60<sup>1</sup> analysis (purgeable halocarbons). Please accept my apology for this inconvenience.

Sincerely,

A handwritten signature in black ink, appearing to read "Neal Schaeffer".

C. Neal Schaeffer  
Senior Organic Chemist



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

Date: 05/31/89

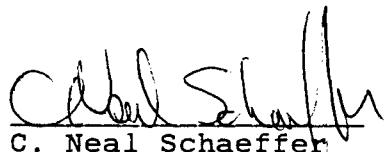
Client: Bloomfield Refinery  
Sample Site: MW-4  
IML Sample No: F89181 O  
Analysis Requested: Purgeable Aromatics  
Sample Matrix: Water

Date Sampled: 05/24/89  
Date Received: 05/24/89  
Date Extracted: N/A  
Date Analyzed: 05/26/89

Parameter	Concentration	Units
BENZENE	9200 (10)	ug/l
TOLUENE	9800 (10)	ug/l
ETHYLBENZENE	1100 (10)	ug/l
m,p-XYLENE	8500 (10)	ug/l
o-XYLENE	2200 (10)	ug/l

Method: 8020 Aromatic Volatile Organics, SW-846, USEPA (1982)  
602 Purgeable Aromatics, 40 CFR, Part 136

Note: Method Detection Limit (MDL) is given in parenthesis.  
ND means analyte was not detected.



C. Neal Schaeffer  
Senior Organic Chemist



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

Date: 05/31/89

Client: Bloomfield Refinery  
Sample Site: MW-1  
IML Sample No: F89182 O  
Analysis Requested: Purgeable Aromatics  
Sample Matrix: Water

Date Sampled: 05/24/89  
Date Received: 05/24/89  
Date Extracted: N/A  
Date Analyzed: 05/26/89

Parameter	Concentration	Units
BENZENE	ND (0.2)	ug/l
TOLUENE	ND (0.2)	ug/l
ETHYLBENZENE	ND (0.2)	ug/l
m,p-XYLENE	ND (0.2)	ug/l
o-XYLENE	ND (0.2)	ug/l

Method: 8020 Aromatic Volatile Organics, SW-846, USEPA (1982)  
602 Purgeable Aromatics, 40 CFR, Part 136

Note: Method Detection Limit (MDL) is given in parenthesis.  
ND means analyte was not detected.

A handwritten signature in black ink, appearing to read "C. Neal Schaeffer".

C. Neal Schaeffer  
Senior Organic Chemist



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

Date: 05/31/89

Client: Bloomfield Refinery  
Sample Site: MW-5  
IML Sample No: F89183 O  
Analysis Requested: Purgeable Aromatics  
Sample Matrix: Water

Date Sampled: 05/24/89  
Date Received: 05/24/89  
Date Extracted: N/A  
Date Analyzed: 05/26/89

Parameter	Concentration	Units
BENZENE	ND (0.2)	ug/l
TOLUENE	ND (0.2)	ug/l
ETHYLBENZENE	ND (0.2)	ug/l
m,p-XYLENE	ND (0.2)	ug/l
o-XYLENE	ND (0.2)	ug/l

Method: 8020 Aromatic Volatile Organics, SW-846, USEPA (1982)  
602 Purgeable Aromatics, 40 CFR, Part 136

Note: Method Detection Limit (MDL) is given in parenthesis.  
ND means analyte was not detected.

C. Neal Schaeffer  
Senior Organic Chemist



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

Date: 05/31/89

Client: Bloomfield Refinery  
Sample Site: Salmon  
IML Sample No: F89180 O  
Analysis Requested: Purgeable Aromatics  
Sample Matrix: Water

Date Sampled: 05/24/89  
Date Received: 05/24/89  
Date Extracted: N/A  
Date Analyzed: 05/26/89

Parameter	Concentration	Units
BENZENE	1400 (10)	ug/l
TOLUENE	13 (10)	ug/l
ETHYLBENZENE	130 (10)	ug/l
m,p-XYLENE	1400 (10)	ug/l
o-XYLENE	ND (10)	ug/l

Method: 8020 Aromatic Volatile Organics, SW-846, USEPA (1982)  
602 Purgeable Aromatics, 40 CFR, Part 136

Note: Method Detection Limit (MDL) is given in parenthesis.  
ND means analyte was not detected.

C. Neal Schaeffer  
Senior Organic Chemist



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

Chris Hawley  
Environmental Engineer  
Bloomfield Refining Company  
P.O. Box 159  
Bloomfield, NM 87413

June 21, 1989

Dear Mr. Hawley:

Enclosed please find the results of the water analysis on the four samples we received May 25. The analysis was done according to 40CFR, "Standard Methods for the Treatment of Water and Wastewater," 16th Edition, 1985 for the requested parameters. Please contact us if you have any questions or if we can be of further service.

Sincerely,

A handwritten signature in black ink that reads "April V. Gil".

April V. Gil  
Senior Geologist  
Laboratory Director

Enclosures



Inter-Mountain Laboratories, Inc.

2506 West Main Street

Farmington, New Mexico 87401

Tel. (505) 326-4737

Bloomfield Refining Company  
P.O. Box 159, Bloomfield, NM 87413

Trace Metal Analysis  
Dissolved Concentrations, mg/l

June 20, 1989

Lab Number	Sample Identification	Arsenic	Barium	Boron	Cadmium	Chromium	Iron	Lead	Manganese
------------	-----------------------	---------	--------	-------	---------	----------	------	------	-----------

1431	MW-1	<0.005	<0.5	0.03	<0.002	<0.02	0.68	0.05	<0.02
1433	MW-5	<0.005	<0.5	0.41	<0.002	<0.02	<0.05	0.06	<0.02
1434	MW-4	<0.005	1.4	0.50	<0.002	<0.02	0.92	0.03	3.59
Detection Limit:		0.005	0.5	0.01	0.002	0.02	0.05	0.02	0.02

Reviewed by:

April V. Gil  
Senior Geologist  
Laboratory Director

**im**

2506 West Main Street

**Inter-Mountain Laboratories, Inc.**  
Farmington, New Mexico 87401

Tel. (505) 326-4737

Bloomfield Refining Company  
P.O. Box 159, Bloomfield, NM 87413

Water Analysis

June 20, 1989

Lab Number	Sample Identification	Ammonia (mg/l)	Nitrate (mg/l)	Nitrite (mg/l)	TKN (mg/l)	Phenol (mg/l)	Cyanide (mg/l)	TDS (mg/l)	Sulfate (mg/l)
1431	MW-1	0.14	0.561	0.02	1.59	0.214	<0.005	3308	653.46
1433	MW-5	0.1	21.04	0.049	1.24	0.362	<0.005	4196	781.03
1434	MW-4	<0.1	<0.1	0.058	1.52	0.250	<0.005	1454	7.41

Reviewed by:

April V. Gil

April V. Gil  
Senior Geologist  
Laboratory Director



## Inter-Mountain Laboratories, Inc.

2506 West Main Street

Farmington, New Mexico 87401

Bloomfield Refining Company  
P.O. Box 159, Bloomfield, NM 87413Trace Metal Analysis  
Dissolved Concentrations, mg/l

June 20, 1989

Lab Number	Sample Identification	Arsenic	Barium	Boron	Cadmium	Chromium	Iron	Lead	Manganese
------------	-----------------------	---------	--------	-------	---------	----------	------	------	-----------

1432	Salmon	<0.005	<0.5	0.32	<0.002	<0.02	0.11	0.05	0.09
1432A	Duplicate Analysis	<0.005	<0.5	0.40	<0.002	<0.02	0.10	0.06	0.08
Detection Limit:		0.005	0.5	0.01	0.002	0.02	0.05	0.02	0.02

Reviewed by:

April V. Gil  
Senior Geologist  
Laboratory Director



2506 West Main Street

Inter-Mountain Laboratories, Inc.

Farmington, New Mexico 87401

Tel. (505) 326-4737

Bloomfield Refining Company  
P.O. Box 159, Bloomfield, NM 87413

Water Analysis

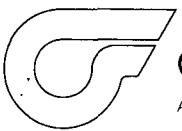
June 20, 1989

Lab Number	Sample Identification	Ammonia (mg/l)	Nitrate (mg/l)	Nitrite (mg/l)	TKN (mg/l)	Phenol (mg/l)	Cyanide (mg/l)	TDS (mg/l)	Sulfate (meq/l)
1432	Salmon	0.109	<0.1	0.044	<1.0	0.579	<0.005	2668	16.46
1432A	Duplicate Analysis	0.109	<0.1	0.037	<1.0	0.240	<0.005	2660	12.35

Reviewed by:

*April V. Gil*

April V. Gil  
Senior Geologist  
Laboratory Director



Bloomfield Refining  
Company  
A Gary Energy Corporation Subsidiary

May 11, 1989

Mr. David G. Boyer  
N.M. Oil Conservation Division  
P.O. Box 2088  
Land Office Building  
Santa Fe, New Mexico 87501

Dear Dave,

Please find enclosed a copy of the monitoring well elevation data you requested.

Sincerely,

*Chris Hawley*  
Chris Hawley  
Environmental Engineer

**RECEIVED**

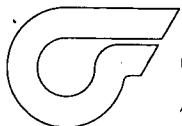
**MAY 15 1989**

**OIL CONSERVATION DIV.  
SANTA FE**

CH/cp

## GROUNDWATER MONITORING WELL DATA

<u>WELL NUMBER</u>	ELEVATION <u>T.O.P.</u>	STICKUP <u>I.O.P.</u>	ELEVATION <u>GRADE</u>
MW-1	5515.77	1.7	5514.07
MW-2	5519.45	1.5	5517.95
MW-3	5535.85	1.0	5534.85
MW-4	5524.30	1.5	5522.80
MW-5	5545.10	1.0	5544.10
MW-6	5551.23	1.0	5550.23
MW-7	5524.09	1.1	5522.99
MW-8	5531.12	1.0	5530.12
MW-9	5519.70	1.7	5518.00
MW-10 (RW-3)	5516.86	1.4	5515.46
MW-11	5506.83	3.6	5503.23
MW-12	5498.36	2.5	5495.86
MW-13	5538.42	3.3	5535.12
RW-2	5523.48	0.5	5522.98
P-2	5523.73	0.8	5522.93
P-3	5507.20	0.8	5506.40
RW-1	5525.92	1.4	5524.52
P-1	5524.62	0.8	5523.82



Bloomfield Refining  
Company

A Gary Energy Corporation Subsidiary

REC'D BY

DEC 20 1988

December 27, 1988

Mr. David G. Boyer  
State of New Mexico  
Oil Conservation Division  
P. O. Box 2088  
Land Office Building  
Santa Fe, New Mexico 87501

RE: Discharge Plan GRW-1-A, Bloomfield Refining Company

Dear Mr. Boyer:

Analytical results applicable to the discharge plan for the wells P1, P4, and P5 that were obtained from samples taken on November 18, 1988 are enclosed.

Please call me if there are any questions.

Sincerely yours,

A handwritten signature in black ink.

Chris Hawley  
Environmental Engineer

CH/jm

Enclosure

cc: Richard Traylor  
Mike Macy  
Joe Warr

BLOOMFIELD REFINING COMPANY  
SAMPLE DATE: NOVEMBER 18, 1988

PARAMETER	UNITS	DETECTION LIMITS	NOMINAL	NMWL STANDARD	MONITORING WELL P1	MONITORING WELL P4	MONITORING WELL P5
Arsenic	mg/L	0.005	0.1	<0.005	<0.005	<0.005	<0.005
Barium	"	0.5	1.0	<0.5	1.8	<0.5	<0.5
Cadmium	"	0.002	0.01	<0.002	<0.002	<0.002	<0.002
Chromium	"	0.02	0.05	<0.02	<0.02	<0.02	<0.02
Lead	"	0.02	0.05	<0.02	<0.02	<0.02	0.07
Mercury	"	0.001	0.002	<0.001	<0.001	<0.001	<0.001
Selenium	"	0.005	0.05	<0.005	<0.005	<0.005	<0.005
Silver	"	0.01	0.05	<0.01	<0.01	<0.01	<0.01
Copper	"	0.01	1.0	<0.01	<0.01	<0.01	<0.01
Iron	"	0.05	1.0	<0.05	5.95	<0.05	<0.05
Manganese	"	0.02	0.2	2.11	3.73	<0.02	<0.02
Zinc	"	0.01	10.0	<0.01	<0.01	<0.01	<0.01
Uranium	"	-	5.0	-	-	-	-
Chloride	"	1	250.	1140.	490.	1480.	1480.
Sulfate	"	1	600.	665.	<1.	777.	777.
PCB	"	-	0.001	-	-	-	-
Phenols	"	0.001	0.005	0.05	0.101	0.16	0.16
Cyanide	"	0.01	0.2	<0.01	<0.01	<0.01	<0.01
Nitrate as N	"	0.02	10.	4.03	0.09	27.8	27.8
Aluminum	"	0.1	5.	<0.1	<0.1	<0.1	<0.1
Boron	"	0.01	0.75	0.32	0.57	0.45	0.45
Cobalt	"	0.02	0.05	<0.02	<0.02	<0.02	<0.02
Molybdenum	"	0.02	1.0	<0.02	<0.02	<0.02	<0.02
Nickel	"	0.01	0.2	<0.01	<0.01	<0.01	<0.01
Fluoride	"	0.01	1.6	0.92	0.30	0.35	0.35
TDS	"	1	1000.	3480.	1830.	4080.	4080.
Benzene	"	0.0002	0.01	0.00075	11.130	ND	ND
Toluene	"	0.0002	0.75	0.00268	8.916	0.00186	0.00186
Carbon Tetrachloride	"	0.0005	0.01	ND	ND	ND	ND
1,2-Dichloroethane	"	0.0005	0.01	ND	ND	ND	ND
1,1-Dichloroethylene	"	0.0005	0.005	ND	ND	ND	ND
1,2-Dichloroethylene	"	0.0005	0.02	ND	ND	ND	ND
1,1,2-Trichloroethylene	"	0.0005	0.01	ND	ND	ND	ND
pH	S.U.	0.1	6 TO 9	7.0	6.7	6.9	6.9

ND = NOT DETECTED

COMFIELD REFINING COMPANY  
GROUNDWATER ELEVATIONS

1	2	3	4	5	6	7	8
DATE	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7
T.O.P.	5515.77	5519.45	5535.85	5524.30	5545.10	5551.23	5524.09
1 1/27/87	5499.44	5500.92	5502.60	5500.22	5503.10	DRY	5499.29
2						AT 5501.63	
4 2/1/87	5499.76	5501.20	5502.86	5500.37	5503.77	"	5499.59
5	-	DAMES REMOVED 4/3/87	IRRIGATION STARTED	4/13/87			
8 4/23/87	5499.33	5500.71	5502.94	5500.32	5504.01	DRY	5499.55
9							
10 5/27/87	5499.71	5500.83	5502.94	5500.22	5503.95	"	5499.62
11							
12 10/1/87	5499.63	5500.82	5502.63	5500.03	5503.54	"	5499.20
13							
14 11/17/87	5498.46			5499.94	5503.17	-	-
15							
16 6/3/88	5499.85		5502.52	5499.74	5503.03	"	5499.34
17							
18 11/18/88	5498.27			5499.95	5502.90		
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2506 West Main Street  
Farmington, New Mexico 87401  
Tel. (505) 326-4737

**BLOOMFIELD REFINING COMPANY**

Attn: Chris Hawley  
P.O. Box 159  
Bloomfield, NM 87413

December 23, 1988

Dear Chris:

On November 18, 1988, our laboratory received three (3) water samples for analysis. Samples were analyzed for inorganics, trace metals, and organics.

Samples were analyzed according to 40 CFR 136, "Guidelines Establishing Test Procedures for Analysis", as amended.

Enclosed are the results of the analyses performed. If you have any questions, please don't hesitate to call.

Sincerely,

A handwritten signature in black ink, appearing to read "Ron R. Richardson".

Ron R. Richardson  
Lab Director

BLOOMFIELD REFINING COMPANY  
Attn: Chris Hawley  
P.O. Box 159  
Bloomfield, NM 87413

December 15, 1988

Re: Water Analysis:

Sample Site: MW-1  
Lab No: F2141  
Date Sampled: 11/18/88 @ 1000  
Date Received: 11/18/88

Parameter

pH, (s.u.).....	7.0
Chloride, mg/l.....	1140
Fluoride, mg/l.....	0.92
Nitrate + Nitrite as "N", mg/l.....	4.03
Sulfate, mg/l.....	665
Total Dissolved Solids @ (180C), mg/l.	3430
Phenol, mg/l.....	0.05
Cyanide, mg/l.....	<0.01

Trace Metals (Dissolved Concentrations), mg/l

Aluminum.....	<0.1	Iron.....	<0.05
Arsenic.....	<0.005	Lead.....	<0.02
Barium.....	<0.5	Manganese.....	2.11
Boron.....	0.32	Mercury.....	<0.001
Cadmium.....	<0.002	Molybdenum.....	<0.02
Chromium.....	<0.02	Nickel.....	<0.01
Cobalt.....	<0.02	Selenium.....	<0.005
Copper.....	<0.01	Silver.....	<0.01
		Zinc.....	<0.01

Client: Bloomfield Refining Company

Sample ID: MW-1  
Laboratory Number: F2141  
Analysis Requested: Method 602, 8010  
Sample Matrix: Water  
Date Sampled: 11/18/88  
Date Received: 11/18/88

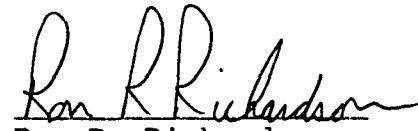
Parameter	Method	Concentration	Units
BENZENE	602	0.75 (0.2)	ug/l
TOLUENE	602	2.68 (0.2)	ug/l
CARBONTETRACHLORIDE	8010	ND (0.5)	ug/l
1,2-DICHLOROETHANE	8010	ND (0.5)	ug/l
1,1-DICHLOROETHYLENE	8010	ND (0.5)	ug/l
1,1,2,2-TETRACHLOROETHYLENE	8010	ND (0.5)	ug/l
1,1,2-TRICHLOROETHYLENE	8010	ND (0.5)	ug/l

Method: 602, Purgeable Aromatics, Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater, USEPA (1984).

Method: 8010, Halogenated Volatile Organics, SW-846, USEPA (1982).

(Detection limit in Parenthesis)

ND - Parameter not detected at the stated detection limit.



Ron R. Richardson  
Ron R. Richardson  
Laboratory Director

Client: Bloomfield Refining Company

Sample ID: MW-1 field split  
Laboratory Number: F2141  
Analysis Requested: Method 602, 8010  
Sample Matrix: Water  
Date Sampled: 11/18/88  
Date Received: 11/18/88

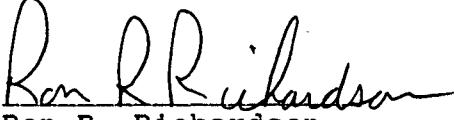
Parameter	Method	Concentration	Units
BENZENE	602	0.55	(0.2) ug/l
TOLUENE	602	1.15	(0.2) ug/l
CARBON TETRACHLORIDE	8010	ND	(0.5) ug/l
1,2-DICHLOROETHENE	8010	ND	(0.5) ug/l
1,1-DICHLOROETHYLENE	8010	ND	(0.5) ug/l
1,1,2,2-TETRACHLOROETHYLENE	8010	ND	(0.5) ug/l
1,1,2-TRICHLOROETHYLENE	8010	ND	(0.5) ug/l

Method: 602, Purgeable Aromatics, Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater, USEPA (1984).

Method: 8010, Halogenated Volatile Organics, SW-846, USEPA (1982).

(Detection limit in Parenthesis)

ND - Parameter not detected at the stated detection limit.

  
Ron R. Richardson  
Laboratory Director

BLOOMFIELD REFINING COMPANY  
Attn: Chris Hawley  
P.O. Box 159  
Bloomfield, NM 87413

December 15, 1988

Re: Water Analysis:

Sample Site: MW-4  
Lab No: F2142  
Date Sampled: 11/18/88 @ 1200  
Date Received: 11/18/88

Parameter

pH, (s.u.).....	6.7
Chloride, mg/l.....	490
Fluoride, mg/l.....	0.30
Nitrate + Nitrite as "N", mg/l.....	0.09
Sulfate, mg/l.....	<1
Total Dissolved Solids @ (180C), mg/l.	1830
Phenol, mg/l.....	0.101
Cyanide, mg/l.....	<0.01

Trace Metals (Dissolved Concentrations), mg/l

Aluminum.....	<0.1	Iron.....	5.95
Arsenic.....	<0.005	Lead.....	<0.02
Barium.....	1.8	Manganese.....	3.73
Boron.....	0.57	Mercury.....	<0.001
Cadmium.....	<0.002	Molybdenum.....	<0.02
Chromium.....	<0.02	Nickel.....	<0.01
Cobalt.....	<0.02	Selenium.....	<0.005
Copper.....	<0.01	Silver.....	<0.01
		Zinc.....	<0.01

Client: Bloomfield Refining Company

Sample ID: MW-4  
Laboratory Number: F2142  
Analysis Requested: Method 602, 8010  
Sample Matrix: Water  
Date Sampled: 11/18/88  
Date Received: 11/18/88

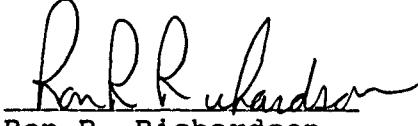
Parameter	Method	Concentration	Units
BENZENE	602	11130	(0.2) ug/l
TOLUENE	602	8916	(0.2) ug/l
CARBON TETRACHLORIDE	8010	ND	(0.5) ug/l
1,2-DICHLOROETHENE	8010	ND	(0.5) ug/l
1,1-DICHLOROETHYLENE	8010	ND	(0.5) ug/l
1,1,2,2-TETRACHLOROETHYLENE	8010	ND	(0.5) ug/l
1,1,2-TRICHLOROETHYLENE	8010	ND	(0.5) ug/l

Method: 602, Purgeable Aromatics, Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater, USEPA (1984).

Method: 8010, Halogenated Volatile Organics, SW-846, USEPA (1982).

(Detection limit in Parenthesis)

ND - Parameter not detected at the stated detection limit.

  
Ron R. Richardson  
Ron R. Richardson  
Laboratory Director

BLOOMFIELD REFINING COMPANY  
Attn: Chris Hawley  
P.O. Box 159  
Bloomfield, NM 87413

December 15, 1988

Re: Water Analysis:

Sample Site: MW-5  
Lab No: F2143  
Date Sampled: 11/18/88 @ 1100  
Date Received: 11/18/88

---

Parameter

pH, (s.u.).....	6.9
Chloride, mg/l.....	1480
Fluoride, mg/l.....	0.35
Nitrate + Nitrite as "N", mg/l.....	27.8
Sulfate, mg/l.....	777
Total Dissolved Solids @ (180C), mg/l.	4080
Phenol, mg/l.....	0.16
Cyanide, mg/l.....	<0.01

Trace Metals (Dissolved Concentrations), mg/l

Aluminum.....	<0.1	Iron.....	<0.05
Arsenic.....	<0.005	Lead.....	0.07
Barium.....	<0.5	Manganese.....	<0.02
Boron.....	0.45	Mercury.....	<0.001
Cadmium.....	<0.002	Molybdenum.....	<0.02
Chromium.....	<0.02	Nickel.....	<0.01
Cobalt.....	<0.01	Selenium.....	<0.005
Copper.....	<0.01	Silver.....	<0.01
		Zinc.....	<0.01

Client: Bloomfield Refining Company

Sample ID: MW-5  
Laboratory Number: F2143  
Analysis Requested: Method 602, 8010  
Sample Matrix: Water  
Date Sampled: 11/18/88  
Date Received: 11/18/88

Parameter	Method	Concentration	Units
BENZENE	602	ND (0.2)	ug/l
TOLUENE	602	1.86 (0.2)	ug/l
CARBONTETRACHLORIDE	8010	ND (0.5)	ug/l
1,2-DICHLOROETHENE	8010	ND (0.5)	ug/l
1,1-DICHLOROETHYLENE	8010	ND (0.5)	ug/l
1,1,2,2-TETRACHLOROETHYLENE	8010	ND (0.5)	ug/l
1,1,2-TRICHLOROETHYLENE	8010	ND (0.5)	ug/l

Method: 602, Purgeable Aromatics, Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater, USEPA (1984).

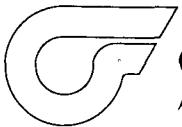
Method: 8010, Halogenated Volatile Organics, SW-846, USEPA (1982).

(Detection limit in Parenthesis)

ND - Parameter not detected at the stated detection limit.



Ron R. Richardson  
Ron R. Richardson  
Laboratory Director



Bloomfield Refining  
Company

A Gary Energy Corporation Subsidiary

RECEIVED  
SEP 28 1988

September 28, 1988

Mr. David Boyer  
Energy, Minerals, & Natural Resources Department  
Oil Conservation Division  
P. O. Box 2088  
Santa Fe, New Mexico 87504-2088

RE: Groundwater Analytical Results

Dear Dave:

Enclosed are the analytical results that I obtained from samples taken June 3 and September 9, 1988 from groundwater monitoring wells located on BRC and BLM property. As you can see from the results and as you concurred from your samples of June 7, 1988, halogenated hydrocarbons (with the possible exception of dichloroethane) are not of any concern in the groundwater remediation program that we are implementing. Dichloroethane was detected in some of the samples, but had very low concentrations generally below the New Mexico Human Health Standard.

Please feel free to call me if there are any questions.

Sincerely yours,

Chris Hawley  
Environmental Engineer

CH/jm

Enclosures

cc: Joe Warr  
Mike Macy  
Richard Traylor  
Ron Fellows, U.S. Department of the Interior  
Randy Hicks, Geoscience Consultants

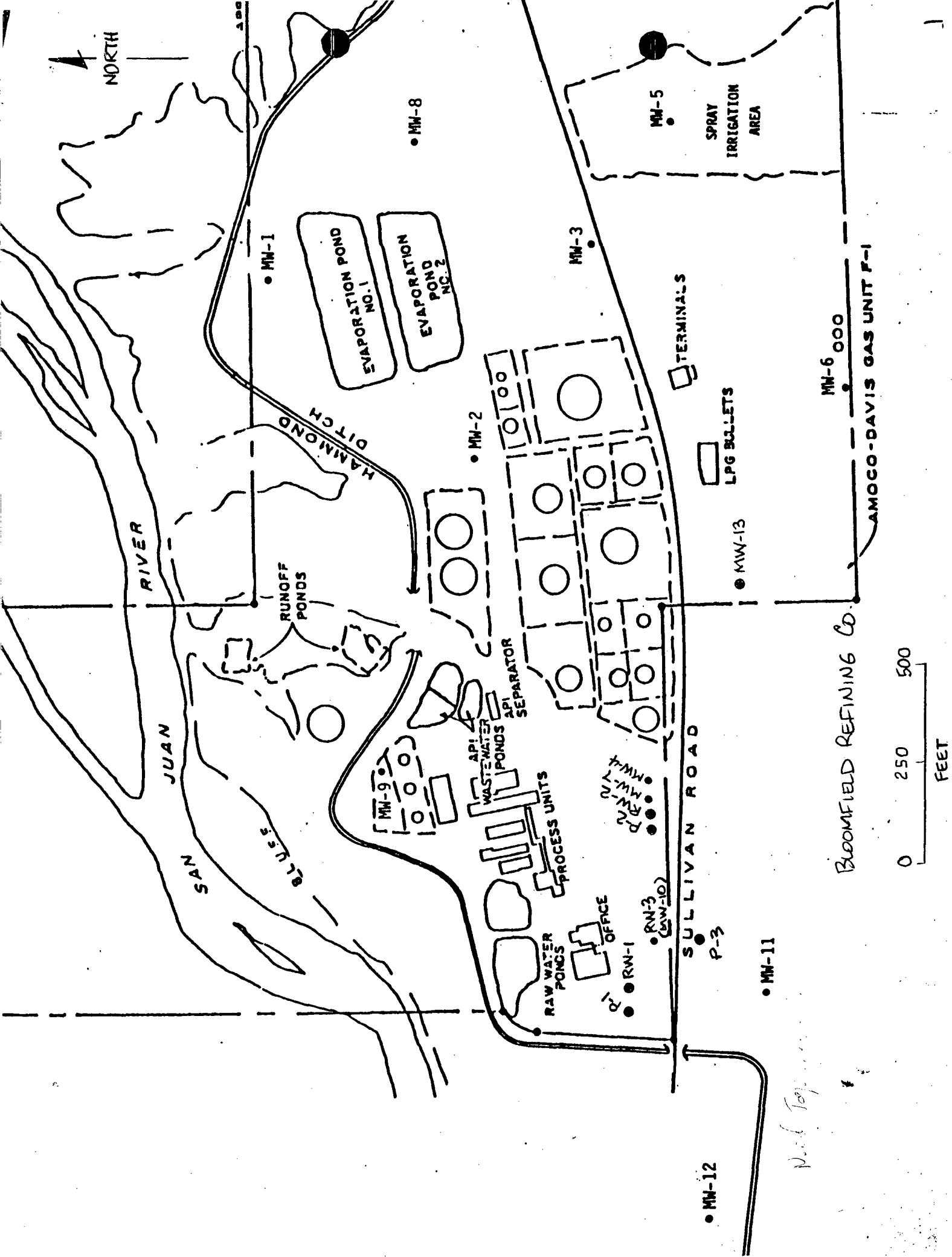
# BLOOMFIELD REFINING COMPANY

## GROUNDWATER MONITORING SUMMARY OF DETECTED PARAMETERS

PARAMETER	UNITS	DETECTION STANDARDS		NEW MEXICO		9-9-88	9-9-88
		LIMIT	3-103 (A)	MW-4	RW-2		
Benzene	mg/l	0.0002	0.01	8.9	11.000	4.800	
Ethylbenzene	mg/l	0.0002	0.75	-	2.900	0.900	
Toluene	mg/l	0.0002	0.75	0.93	10.200	1.430	
m-Xylene	mg/l	0.0002	0.62	-	17.700	4.500	
O-Xylene	mg/l	0.0002		-	4.900	1.460	
P-Xylene	mg/l	0.0002	0.14	-	6.200	1.570	
1,2 Dichloroethane	mg/l	0.001	0.01	-	0.0016	ND	
Trans 1,2 Dichloroethene	mg/l	0.001	-	-	ND	ND	
Nitrate as N	mg/l	0.01	10.0	0.14	<0.01	-	
Phenol	mg/l	0.001	0.005	0.069	0.13	-	
Sulfate	mg/l	1	600.	3	<1	-	
TDS	mg/l	10	1000	1820	1980	-	

## PENOMFIELD REFINING COMPANY

PARAMETER	RW-3	P-3	RW-1	P-1	MW-11	MW-13
Benzene	12.000	19.400	6.400	102.200	44.400	0.00023
Ethylbenzene	0.00286	ND	0.540	0.00143	0.063	0.00029
Toluene	0.062	0.00435	0.070	0.034	0.840	0.00024
m-Xylene	3.500	22.800	4.800	0.483	2.600	0.00065
O-Xylene	0.103	3.600	8.300	0.061	0.061	0.00056
P-Xylene	1.800	8.700	1.700	0.322	0.745	0.00035
1,2 Dichloroethane	ND	ND	ND	ND	0.0022	0.0156
Trans,2 Dichloroethene	ND	ND	ND	0.0015	ND	ND
Nitrate as N	<0.01	-	<0.01	-	0.06	13.1
Phenol	0.05	-	0.34	-	0.06	0.03
Sulfate	9.5	-	4.5	-	30.	728.
TDS	3250	-	3130	-	1900	3220





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

BLOOMFIELD REFINING COMPANY  
Attn: Chris Hawley  
P.O. Box 159  
Bloomfield, NM 87413

September 27, 1988

Dear Chris:

On September 09, 1988, our laboratory received eight (8) water samples for analysis. Samples were analyzed for parameters requested.

Samples were analyzed according to 40 136, "Guidelines Establishing Test Procedures for Analysis", as amended.

Enclosed are the results of the analyses performed. If you have any questions, please don't hesitate to call.

Sincerely,

A handwritten signature in black ink. The signature reads "Ron R. Richardson". The "R" in "Ron" and the "R" in "Richardson" are capitalized and stylized.

Ron R. Richardson  
Lab Director

BLOOMFIELD REFINING COMPANY  
Attn: Chris Hawley  
P.O. Box 159  
Bloomfield, NM 87413

September 26, 1988

RE: Environmental Analysis:

Sample Site: RW-1  
Lab No: F1872  
Date Sampled: 09/09/88 @ 1245  
Date Received: 09/09/88

---

Parameter

Nitrate + Nitrite as "N", mg/l.....	<0.01
Phenol, mg/l.....	0.34
Sulfate, mg/l.....	4.5
Total Dissolved Solids @ (180C), mg/l.	3130

Report Date: 09/26/88

Client: BLOOMFIELD REFINING CO.

Sample ID: RW-1  
Laboratory Number: F1872  
Analysis Requested: Purgeable Aromatics  
Sample Matrix: Water

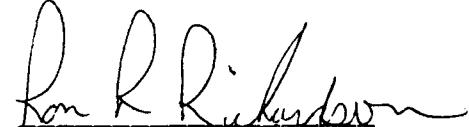
Date Sampled: 09/09/88  
Date Received: 09/09/88  
Date Extracted: 09/16/88  
Date Analyzed: 09/16/88

Parameter	Concentration	Units
BENZENE	6400	(0.2) ug/l
ETHYLBENZENE	540	(0.2) ug/l
TOLUENE	70	(0.2) ug/l
M-XYLENE	4800	(0.2) ug/l
O-XYLENE	8300	(0.2) ug/l
P-XYLENE	1700	(0.2) ug/l
1,2-DICHLOROBENZENE	ND	(0.2) ug/l
1,3-DICHLOROBENZENE	ND	(0.2) ug/l
1,4-DICHLOROBENZENE	ND	(0.2) ug/l
CHLOROBENZENE	ND	(0.2) ug/l

Method 8020: Aromatic Volatile Organics, SW-846, USEPA, (1982).

(Detection limit in parenthesis.)

ND - Parameter not detected at the stated detection limit.

  
Ron R. Richardson  
Laboratory Director

Report Date: 09/26/88

Client: BLOOMFIELD REFINING CO.

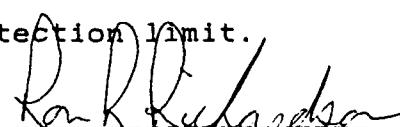
Sample ID:	RW-1	Date Sampled:	09/09/88
Laboratory Number:	F1872	Date Received:	09/09/88
Analysis Requested:	Purgeable Aromatics	Date Extracted:	09/22/88
Sample Matrix:	Water	Date Analyzed:	09/22/88

Parameter	Concentration	Units
CHLOROMETHANE	ND (1.0)	ug/l
BROMOMETHANE	ND (1.0)	ug/l
VINYL CHLORIDE	ND (1.0)	ug/l
CHLOROETHANE	ND (1.0)	ug/l
METHYLENE CHLORIDE	ND (1.0)	ug/l
TRICHLOROFLUOROMETHANE	ND (1.0)	ug/l
1,1 DICHLOROETHENE	ND (1.0)	ug/l
BROMOCHLOROMETHANE	ND (1.0)	ug/l
1,1 DICHLOROETHANE	ND (1.0)	ug/l
CHLOROFORM	ND (1.0)	ug/l
1,2 DICHLOROETHANE	ND (1.0)	ug/l
1,1,1 TRICHLOROETHANE	ND (1.0)	ug/l
CARBONTETRACHLORIDE	ND (1.0)	ug/l
1,2 DICHLOROPROPANE	ND (1.0)	ug/l
TRICHLOROETHENE	ND (1.0)	ug/l
TRANS 1,2 DICHLOROETHENE	ND (1.0)	ug/l
2 CHLOROETHYL VINYL ETHER	ND (1.0)	ug/l
TRANS 1,3 DICHLOROPROPENE	ND (1.0)	ug/l
CIS 1,3 DICHLOROPROPENE	ND (1.0)	ug/l
DIBROMO CHLOROMETHANE	ND (1.0)	ug/l
BROMOFORM	ND (1.0)	ug/l
1,1,2 TRICHLOROETHANE	ND (1.0)	ug/l
1,1,2,2 TETRACHLOROETHANE	ND (1.0)	ug/l
TETRACHLOROETHENE	ND (1.0)	ug/l
CHLORBENZENE	ND (1.0)	ug/l

Method 8010: Halogenated Volatile Organics, SW-846, USEPA, (1982).

(Detection limit in parenthesis.)

ND - Parameter not detected at the stated detection limit.



Ron R. Richardson  
Laboratory Director

BLOOMFIELD REFINING COMPANY  
Attn: Chris Hawley  
P.O. Box 159  
Bloomfield, NM 87413

September 26, 1988

RE: Environmental Analysis:

Sample Site: RW-2  
Lab No: F1873  
Date Sampled: 09/09/88 @ 1330  
Date Received: 09/09/88

---

Parameter

Nitrate + Nitrite as "N", mg/l.....	<0.01
Phenol, mg/l.....	0.13
Sulfate, mg/l.....	<1
Total Dissolved Solids @ (180C), mg/l.	1980

Report Date: 09/26/88

Client: BLOOMFIELD REFINING CO.

Sample ID: RW-2  
Laboratory Number: F1873  
Analysis Requested: Purgeable Aromatics  
Sample Matrix: Water

Date Sampled: 09/09/88  
Date Received: 09/09/88  
Date Extracted: 09/16/88  
Date Analyzed: 09/16/88

Parameter	Concentration	Units
BENZENE	11000 (0.2)	ug/l
ETHYLBENZENE	2900 (0.2)	ug/l
TOLUENE	10200 (0.2)	ug/l
M-XYLENE	17700 (0.2)	ug/l
O-XYLENE	4900 (0.2)	ug/l
P-XYLENE	6200 (0.2)	ug/l
1,2-DICHLOROBENZENE	ND (0.2)	ug/l
1,3-DICHLOROBENZENE	ND (0.2)	ug/l
1,4-DICHLOROBENZENE	ND (0.2)	ug/l
CHLOROBENZENE	ND (0.2)	ug/l

Method 8020: Aromatic Volatile Organics, SW-846, USEPA, (1982).

(Detection limit in parenthesis.)

ND - Parameter not detected at the stated detection limit.

  
Ron R. Richardson  
Laboratory Director

Report Date: 09/26/88

Client: BLOOMFIELD REFINING CO.

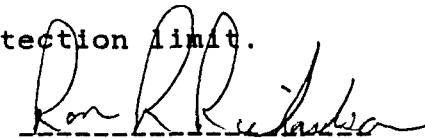
Sample ID:	RW-2	Date Sampled:	09/09/88
Laboratory Number:	F1873	Date Received:	09/09/88
Analysis Requested:	Purgeable Aromatics	Date Extracted:	09/22/88
Sample Matrix:	Water	Date Analyzed:	09/22/88

Parameter	Concentration	Units
CHLOROMETHANE	ND (1.0)	ug/l
BROMOMETHANE	ND (1.0)	ug/l
VINYL CHLORIDE	ND (1.0)	ug/l
CHLOROETHANE	ND (1.0)	ug/l
METHYLENE CHLORIDE	ND (1.0)	ug/l
TRICHLOROFLUOROMETHANE	ND (1.0)	ug/l
1,1 DICHLOROETHENE	ND (1.0)	ug/l
BROMOCHLOROMETHANE	ND (1.0)	ug/l
1,1 DICHLOROETHANE	ND (1.0)	ug/l
CHLOROFORM	ND (1.0)	ug/l
1,2 DICHLOROETHANE	1.6 (1.0)	ug/l
1,1,1 TRICHLOROETHANE	ND (1.0)	ug/l
CARBONTETRACHLORIDE	ND (1.0)	ug/l
1,2 DICHLOROPROPANE	ND (1.0)	ug/l
TRICHLOROETHENE	ND (1.0)	ug/l
TRANS 1,2 DICHLOROETHENE	ND (1.0)	ug/l
2 CHLOROETHYL VINYL ETHER	ND (1.0)	ug/l
TRANS 1,3 DICHLOROPROPENE	ND (1.0)	ug/l
CIS 1,3 DICHLOROPROPENE	ND (1.0)	ug/l
DIBROMO CHLOROMETHANE	ND (1.0)	ug/l
BROMOFORM	ND (1.0)	ug/l
1,1,2 TRICHLOROETHANE	ND (1.0)	ug/l
1,1,2,2 TETRACHLOROETHANE	ND (1.0)	ug/l
TETRACHLOROETHENE	ND (1.0)	ug/l
CHLOROBENZENE	ND (1.0)	ug/l

Method 8010: Halogenated Volatile Organics, SW-846, USEPA, (1982).

(Detection limit in parenthesis.)

ND - Parameter not detected at the stated detection limit.



Ron R. Richardson  
Laboratory Director

BLOOMFIELD REFINING COMPANY  
Attn: Chris Hawley  
P.O. Box 159  
Bloomfield, NM 87413

September 26, 1988

RE: Environmental Analysis:

Sample Site: RW-3  
Lab No: F1874  
Date Sampled: 09/09/88 @ 1415  
Date Received: 09/09/88

---

Parameter

Nitrate + Nitrite as "N", mg/l.....	<0.01
Phenol, mg/l.....	0.05
Sulfate, mg/l.....	9.5
Total Dissolved Solids @ (180C), mg/l.	3250

Report Date: 09/26/88

Client: BLOOMFIELD REFINING CO.

Sample ID: RW-3  
Laboratory Number: F1874  
Analysis Requested: Purgeable Aromatics  
Sample Matrix: Water

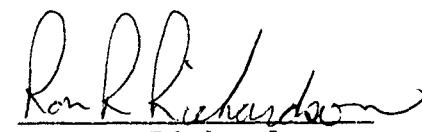
Date Sampled: 09/09/88  
Date Received: 09/09/88  
Date Extracted: 09/20/88  
Date Analyzed: 09/20/88

Parameter	Concentration	Units
BENZENE	12000	(0.2) ug/l
ETHYLBENZENE	2.86	(0.2) ug/l
TOLUENE	62.	(0.2) ug/l
M-XYLENE	3500	(0.2) ug/l
O-XYLENE	103	(0.2) ug/l
P-XYLENE	1800	(0.2) ug/l
1,2-DICHLOROBENZENE	ND	(0.2) ug/l
1,3-DICHLOROBENZENE	ND	(0.2) ug/l
1,4-DICHLOROBENZENE	ND	(0.2) ug/l
CHLOROBENZENE	ND	(0.2) ug/l

Method 8020: Aromatic Volatile Organics, SW-846, USEPA, (1982).

(Detection limit in parenthesis.)

ND - Parameter not detected at the stated detection limit.

  
Ron R. Richardson  
Laboratory Director

Report Date: 09/26/88

Client: BLOOMFIELD REFINING CO.

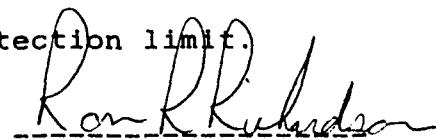
Sample ID:	RW-3	Date Sampled:	09/09/88
Laboratory Number:	F1874	Date Received:	09/09/88
Analysis Requested:	Purgeable Aromatics	Date Extracted:	09/23/88
Sample Matrix:	Water	Date Analyzed:	09/23/88

Parameter	Concentration	Units
CHLOROMETHANE	ND	(1.0) ug/l
BROMOMETHANE	ND	(1.0) ug/l
VINYL CHLORIDE	ND	(1.0) ug/l
CHLOROETHANE	ND	(1.0) ug/l
METHYLENE CHLORIDE	ND	(1.0) ug/l
TRICHLOROFLUOROMETHANE	ND	(1.0) ug/l
1,1 DICHLOROETHENE	ND	(1.0) ug/l
BROMOCHLOROMETHANE	ND	(1.0) ug/l
1,1 DICHLOROETHANE	ND	(1.0) ug/l
CHLOROFORM	ND	(1.0) ug/l
1,2 DICHLOROETHANE	ND	(1.0) ug/l
1,1,1 TRICHLOROETHANE	ND	(1.0) ug/l
CARBON TETRACHLORIDE	ND	(1.0) ug/l
1,2 DICHLOROPROPANE	ND	(1.0) ug/l
TRICHLOROETHENE	ND	(1.0) ug/l
TRANS 1,2 DICHLOROETHENE	ND	(1.0) ug/l
2 CHLOROETHYL VINYL ETHER	ND	(1.0) ug/l
TRANS 1,3 DICHLOROPROPENE	ND	(1.0) ug/l
CIS 1,3 DICHLOROPROPENE	ND	(1.0) ug/l
DIBROMO CHLOROMETHANE	ND	(1.0) ug/l
BROMOFORM	ND	(1.0) ug/l
1,1,2 TRICHLOROETHANE	ND	(1.0) ug/l
1,1,2,2 TETRACHLOROETHANE	ND	(1.0) ug/l
TETRACHLOROETHENE	ND	(1.0) ug/l
CHLOROBENZENE	ND	(1.0) ug/l

Method 8010: Halogenated Volatile Organics, SW-846, USEPA, (1982).

(Detection limit in parenthesis.)

ND - Parameter not detected at the stated detection limit.



Ron R. Richardson  
Laboratory Director

BLOOMFIELD REFINING COMPANY  
Attn: Chris Hawley  
P.O. Box 159  
Bloomfield, NM 87413

September 26, 1988

RE: Environmental Analysis:

Sample Site: MW-11  
Lab No: F1875  
Date Sampled: 09/09/88 @ 1445  
Date Received: 09/09/88

---

Parameter

Nitrate + Nitrite as "N", mg/l.....	0.06
Phenol, mg/l.....	0.06
Sulfate, mg/l.....	30
Total Dissolved Solids @ (180C), mg/l.	1900

Report Date: 09/26/88

Client: BLOOMFIELD REFINING CO.

Sample ID: MW-11  
Laboratory Number: F1875  
Analysis Requested: Purgeable Aromatics  
Sample Matrix: Water

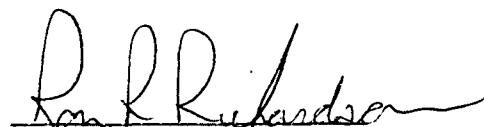
Date Sampled: 09/09/88  
Date Received: 09/09/88  
Date Extracted: 09/20/88  
Date Analyzed: 09/20/88

Parameter	Concentration	Units
BENZENE	44400	(0.2) ug/l
ETHYLBENZENE	63.	(0.2) ug/l
TOLUENE	840	(0.2) ug/l
M-XYLENE	2600	(0.2) ug/l
O-XYLENE	61.	(0.2) ug/l
P-XYLENE	745	(0.2) ug/l
1,2-DICHLOROBENZENE	ND	(0.2) ug/l
1,3-DICHLOROBENZENE	ND	(0.2) ug/l
1,4-DICHLOROBENZENE	ND	(0.2) ug/l
CHLOROBENZENE	ND	(0.2) ug/l

Method 8020: Aromatic Volatile Organics, SW-846, USEPA, (1982).

(Detection limit in parenthesis.)

ND - Parameter not detected at the stated detection limit.

  
Ron R. Richardson  
Laboratory Director

Report Date: 09/26/88

Client: BLOOMFIELD REFINING CO.

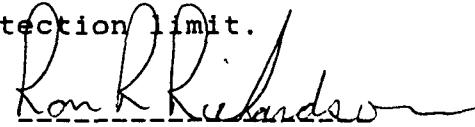
Sample ID:	MW-11	Date Sampled:	09/09/88
Laboratory Number:	F1875	Date Received:	09/09/88
Analysis Requested:	Purgeable Aromatics	Date Extracted:	09/22/88
Sample Matrix:	Water	Date Analyzed:	09/22/88

Parameter	Concentration	Units
CHLOROMETHANE	ND	(1.0) ug/l
BROMOMETHANE	ND	(1.0) ug/l
VINYL CHLORIDE	ND	(1.0) ug/l
CHLOROETHANE	ND	(1.0) ug/l
METHYLENE CHLORIDE	ND	(1.0) ug/l
TRICHLOROFLUOROMETHANE	ND	(1.0) ug/l
1,1 DICHLOROETHENE	ND	(1.0) ug/l
BROMOCHLOROMETHANE	ND	(1.0) ug/l
1,1 DICHLOROETHANE	ND	(1.0) ug/l
CHLOROFORM	ND	(1.0) ug/l
1,2 DICHLOROETHANE	2.2	(1.0) ug/l
1,1,1 TRICHLOROETHANE	ND	(1.0) ug/l
CARBONETRACHLORIDE	ND	(1.0) ug/l
1,2 DICHLOROPROPANE	ND	(1.0) ug/l
TRICHLOROETHENE	ND	(1.0) ug/l
TRANS 1,2 DICHLOROETHENE	ND	(1.0) ug/l
2 CHLOROETHYL VINYL ETHER	ND	(1.0) ug/l
TRANS 1,3 DICHLOROPROPENE	ND	(1.0) ug/l
CIS 1,3 DICHLOROPROPENE	ND	(1.0) ug/l
DIBROMO CHLOROMETHANE	ND	(1.0) ug/l
BROMOFORM	ND	(1.0) ug/l
1,1,2 TRICHLOROETHANE	ND	(1.0) ug/l
1,1,2,2 TETRACHLOROETHANE	ND	(1.0) ug/l
TETRACHLOROETHENE	ND	(1.0) ug/l
CHLOROBENZENE	ND	(1.0) ug/l

Method 8010: Halogenated Volatile Organics, SW-846, USEPA, (1982).

(Detection limit in parenthesis.)

ND - Parameter not detected at the stated detection limit.



Ron R. Richardson  
Laboratory Director

BLOOMFIELD REFINING COMPANY  
Attn: Chris Hawley  
P.O. Box 159  
Bloomfield, NM 87413

September 26, 1988

RE: Environmental Analysis:

Sample Site: MW-13  
Lab No: F1876  
Date Sampled: 09/09/88 @ 1145  
Date Received: 09/09/88

---

Parameter

Nitrate + Nitrite as "N", mg/l.....	13.1
Phenol, mg/l.....	0.03
Sulfate, mg/l.....	728
Total Dissolved Solids @ (180C), mg/l.	3220

Report Date: 09/26/88

Client: BLOOMFIELD REFINING CO.

Sample ID: MW-13  
Laboratory Number: F1876  
Analysis Requested: Purgeable Aromatics  
Sample Matrix: Water

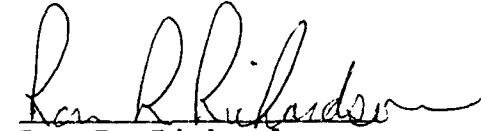
Date Sampled: 09/09/88  
Date Received: 09/09/88  
Date Extracted: 09/19/88  
Date Analyzed: 09/19/88

Parameter	Concentration	Units
BENZENE	0.23 (0.2)	ug/l
ETHYLBENZENE	0.29 (0.2)	ug/l
TOLUENE	0.24 (0.2)	ug/l
M-XYLENE	0.65 (0.2)	ug/l
O-XYLENE	0.56 (0.2)	ug/l
P-XYLENE	0.35 (0.2)	ug/l
1,2-DICHLOROBENZENE	ND (0.2)	ug/l
1,3-DICHLOROBENZENE	ND (0.2)	ug/l
1,4-DICHLOROBENZENE	ND (0.2)	ug/l
CHLOROBENZENE	ND (0.2)	ug/l

Method 8020: Aromatic Volatile Organics, SW-846, USEPA, (1982).

(Detection limit in parenthesis.)

ND - Parameter not detected at the stated detection limit.

  
Ron R. Richardson  
Laboratory Director

Report Date: 09/26/88

Client: BLOOMFIELD REFINING CO.

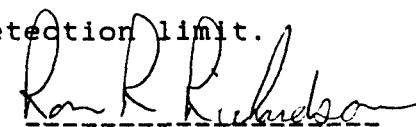
Sample ID:	MW-13	Date Sampled:	09/09/88
Laboratory Number:	F1876	Date Received:	09/09/88
Analysis Requested:	Purgeable Aromatics	Date Extracted:	09/23/88
Sample Matrix:	Water	Date Analyzed:	09/23/88

Parameter	Concentration	Units
CHLOROMETHANE	ND	(1.0) ug/l
BROMOMETHANE	ND	(1.0) ug/l
VINYL CHLORIDE	ND	(1.0) ug/l
CHLOROETHANE	ND	(1.0) ug/l
METHYLENE CHLORIDE	ND	(1.0) ug/l
TRICHLOROFLUOROMETHANE	ND	(1.0) ug/l
1,1 DICHLOROETHENE	ND	(1.0) ug/l
BROMOCHLOROMETHANE	ND	(1.0) ug/l
1,1 DICHLOROETHANE	ND	(1.0) ug/l
CHLOROFORM	ND	(1.0) ug/l
1,2 DICHLOROETHANE	15.6	(1.0) ug/l
1,1,1 TRICHLOROETHANE	ND	(1.0) ug/l
CARBONTETRACHLORIDE	ND	(1.0) ug/l
1,2 DICHLOROPROPANE	ND	(1.0) ug/l
TRICHLOROETHENE	ND	(1.0) ug/l
TRANS 1,2 DICHLOROETHENE	ND	(1.0) ug/l
2 CHLOROETHYL VINYL ETHER	ND	(1.0) ug/l
TRANS 1,3 DICHLOROPROPENE	ND	(1.0) ug/l
CIS 1,3 DICHLOROPROPENE	ND	(1.0) ug/l
DIBROMO CHLOROMETHANE	ND	(1.0) ug/l
BROMOFORM	ND	(1.0) ug/l
1,1,2 TRICHLOROETHANE	ND	(1.0) ug/l
1,1,2,2 TETRACHLOROETHANE	ND	(1.0) ug/l
TETRACHLOROETHENE	ND	(1.0) ug/l
CHLOROBENZENE	ND	(1.0) ug/l

Method 8010: Halogenated Volatile Organics, SW-846, USEPA, (1982).

(Detection limit in parenthesis.)

ND - Parameter not detected at the stated detection limit.



Ron R. Richardson  
Laboratory Director

Report Date: 09/26/88

Client: BLOOMFIELD REFINING CO.

Sample ID: P-1  
Laboratory Number: F1877  
Analysis Requested: Purgeable Aromatics  
Sample Matrix: Water

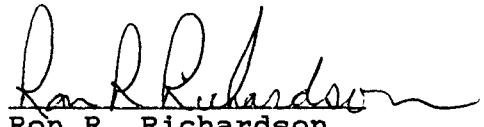
Date Sampled: 09/09/88  
Date Received: 09/09/88  
Date Extracted: 09/20/88  
Date Analyzed: 09/20/88

Parameter	Concentration	Units
BENZENE	102200 (0.2)	ug/l
ETHYLBENZENE	1.43 (0.2)	ug/l
TOLUENE	34. (0.2)	ug/l
M-XYLENE	483 (0.2)	ug/l
O-XYLENE	61 (0.2)	ug/l
P-XYLENE	322 (0.2)	ug/l
1,2-DICHLOROBENZENE	ND (0.2)	ug/l
1,3-DICHLOROBENZENE	ND (0.2)	ug/l
1,4-DICHLOROBENZENE	ND (0.2)	ug/l
CHLOROBENZENE	ND (0.2)	ug/l

Method 8020: Aromatic Volatile Organics, SW-846, USEPA, (1982).

(Detection limit in parenthesis.)

ND - Parameter not detected at the stated detection limit.



Ron R. Richardson  
Laboratory Director

Report Date: 09/26/88

Client: BLOOMFIELD REFINING CO.

Sample ID:	P-1	Date Sampled:	09/09/88
Laboratory Number:	F1877	Date Received:	09/09/88
Analysis Requested:	Purgeable Aromatics	Date Extracted:	09/23/88
Sample Matrix:	Water	Date Analyzed:	09/23/88

Parameter	Concentration	Units
CHLOROMETHANE	ND	(ug/l)
BROMOMETHANE	ND	(ug/l)
VINYL CHLORIDE	ND	(ug/l)
CHLOROETHANE	ND	(ug/l)
METHYLENE CHLORIDE	ND	(ug/l)
TRICHLOROFLUOROMETHANE	ND	(ug/l)
1,1 DICHLOROETHENE	ND	(ug/l)
BROMOCHLOROMETHANE	ND	(ug/l)
1,1 DICHLOROETHANE	ND	(ug/l)
CHLOROFORM	ND	(ug/l)
1,2 DICHLOROETHANE	ND	(ug/l)
1,1,1 TRICHLOROETHANE	ND	(ug/l)
CARBONTETRACHLORIDE	ND	(ug/l)
1,2 DICHLOROPROPANE	ND	(ug/l)
TRICHLOROETHENE	ND	(ug/l)
TRANS 1,2 DICHLOROETHENE	1.5	(ug/l)
2 CHLOROETHYL VINYL ETHER	ND	(ug/l)
TRANS 1,3 DICHLOROPROPENE	ND	(ug/l)
CIS 1,3 DICHLOROPROPENE	ND	(ug/l)
DIBROMO CHLOROMETHANE	ND	(ug/l)
BROMOFORM	ND	(ug/l)
1,1,2 TRICHLOROETHANE	ND	(ug/l)
1,1,2,2 TETRACHLOROETHANE	ND	(ug/l)
TETRACHLOROETHENE	ND	(ug/l)
CHLOROBENZENE	ND	(ug/l)

Method 8010: Halogenated Volatile Organics, SW-846, USEPA, (1982).

(Detection limit in parenthesis.)

ND - Parameter not detected at the stated detection limit.



Ron R. Richardson  
Laboratory Director

Report Date: 09/26/88

Client: BLOOMFIELD REFINING CO.

Sample ID: P-2  
Laboratory Number: F1878  
Analysis Requested: Purgeable Aromatics  
Sample Matrix: Water

Date Sampled: 09/09/88  
Date Received: 09/09/88  
Date Extracted: 09/21/88  
Date Analyzed: 09/21/88

Parameter	Concentration	Units
BENZENE	4800	(0.2) ug/l
ETHYLBENZENE	900	(0.2) ug/l
TOLUENE	1430	(0.2) ug/l
M-XYLENE	4500	(0.2) ug/l
O-XYLENE	1460	(0.2) ug/l
P-XYLENE	1570	(0.2) ug/l
1,2-DICHLOROBENZENE	ND	(0.2) ug/l
1,3-DICHLOROBENZENE	ND	(0.2) ug/l
1,4-DICHLOROBENZENE	ND	(0.2) ug/l
CHLOROBENZENE	ND	(0.2) ug/l

Method 8020: Aromatic Volatile Organics, SW-846, USEPA, (1982).

(Detection limit in parenthesis.)

ND - Parameter not detected at the stated detection limit.

  
Ron R. Richardson  
Laboratory Director

Report Date: 09/26/88

Client: BLOOMFIELD REFINING CO.

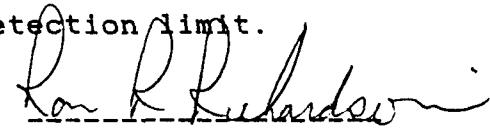
Sample ID:	P-2	Date Sampled:	09/09/88
Laboratory Number:	F1878	Date Received:	09/09/88
Analysis Requested:	Purgeable Aromatics	Date Extracted:	09/23/88
Sample Matrix:	Water	Date Analyzed:	09/23/88

Parameter	Concentration	Units
CHLOROMETHANE	ND (1.0)	ug/l
BROMOMETHANE	ND (1.0)	ug/l
VINYL CHLORIDE	ND (1.0)	ug/l
CHLOROETHANE	ND (1.0)	ug/l
METHYLENE CHLORIDE	ND (1.0)	ug/l
TRICHLOROFLUOROMETHANE	ND (1.0)	ug/l
1,1 DICHLOROETHENE	ND (1.0)	ug/l
BROMOCHLOROMETHANE	ND (1.0)	ug/l
1,1 DICHLOROETHANE	ND (1.0)	ug/l
CHLOROFORM	ND (1.0)	ug/l
1,2 DICHLOROETHANE	ND (1.0)	ug/l
1,1,1 TRICHLOROETHANE	ND (1.0)	ug/l
CARBONTETRACHLORIDE	ND (1.0)	ug/l
1,2 DICHLOROPROPANE	ND (1.0)	ug/l
TRICHLOROETHENE	ND (1.0)	ug/l
TRANS 1,2 DICHLOROETHENE	ND (1.0)	ug/l
2 CHLOROETHYL VINYL ETHER	ND (1.0)	ug/l
TRANS 1,3 DICHLOROPROPENE	ND (1.0)	ug/l
CIS 1,3 DICHLOROPROPENE	ND (1.0)	ug/l
DIBROMO CHLOROMETHANE	ND (1.0)	ug/l
BROMOFORM	ND (1.0)	ug/l
1,1,2 TRICHLOROETHANE	ND (1.0)	ug/l
1,1,2,2 TETRACHLOROETHANE	ND (1.0)	ug/l
TETRACHLOROETHENE	ND (1.0)	ug/l
CHLOROBENZENE	ND (1.0)	ug/l

Method 8010: Halogenated Volatile Organics, SW-846, USEPA, (1982).

(Detection limit in parenthesis.)

ND - Parameter not detected at the stated detection limit.



Ron R. Richardson  
Laboratory Director

Report Date: 09/26/88

Client: BLOOMFIELD REFINING CO.

Sample ID: P-3  
Laboratory Number: F1879  
Analysis Requested: Purgeable Aromatics  
Sample Matrix: Water

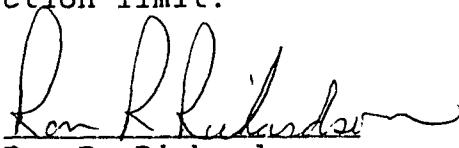
Date Sampled: 09/09/88  
Date Received: 09/09/88  
Date Extracted: 09/21/88  
Date Analyzed: 09/21/88

Parameter	Concentration	Units
BENZENE	19400	(0.2) ug/l
ETHYLBENZENE	ND	(0.2) ug/l
TOLUENE	4.35	(0.2) ug/l
M-XYLENE	22800	(0.2) ug/l
O-XYLENE	3600	(0.2) ug/l
P-XYLENE	8700	(0.2) ug/l
1,2-DICHLOROBENZENE	ND	(0.2) ug/l
1,3-DICHLOROBENZENE	ND	(0.2) ug/l
1,4-DICHLOROBENZENE	ND	(0.2) ug/l
CHLOROBENZENE	ND	(0.2) ug/l

Method 8020: Aromatic Volatile Organics, SW-846, USEPA, (1982).

(Detection limit in parenthesis.)

ND - Parameter not detected at the stated detection limit.

  
Ron R. Richardson  
Laboratory Director

Report Date: 09/26/88

Client: BLOOMFIELD REFINING CO.

Sample ID: P-3  
 Laboratory Number: F1879  
 Analysis Requested: Purgeable Aromatics  
 Sample Matrix: Water

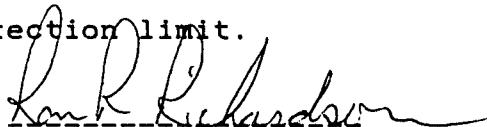
Date Sampled: 09/09/88  
 Date Received: 09/09/88  
 Date Extracted: 09/23/88  
 Date Analyzed: 09/23/88

Parameter	Concentration	Units
CHLOROMETHANE	ND (1.0)	ug/l
BROMOMETHANE	ND (1.0)	ug/l
VINYL CHLORIDE	ND (1.0)	ug/l
CHLOROETHANE	ND (1.0)	ug/l
METHYLENE CHLORIDE	ND (1.0)	ug/l
TRICHLOROFLUOROMETHANE	ND (1.0)	ug/l
1,1 DICHLOROETHENE	ND (1.0)	ug/l
BROMOCHLOROMETHANE	ND (1.0)	ug/l
1,1 DICHLOROETHANE	ND (1.0)	ug/l
CHLOROFORM	ND (1.0)	ug/l
1,2 DICHLOROETHANE	ND (1.0)	ug/l
1,1,1 TRICHLOROETHANE	ND (1.0)	ug/l
CARBONTETRACHLORIDE	ND (1.0)	ug/l
1,2 DICHLOROPROPANE	ND (1.0)	ug/l
TRICHLOROETHENE	ND (1.0)	ug/l
TRANS 1,2 DICHLOROETHENE	ND (1.0)	ug/l
2 CHLOROETHYL VINYL ETHER	ND (1.0)	ug/l
TRANS 1,3 DICHLOROPROPENE	ND (1.0)	ug/l
CIS 1,3 DICHLOROPROPENE	ND (1.0)	ug/l
DIBROMO CHLOROMETHANE	ND (1.0)	ug/l
BROMOFORM	ND (1.0)	ug/l
1,1,2 TRICHLOROETHANE	ND (1.0)	ug/l
1,1,2,2 TETRACHLOROETHANE	ND (1.0)	ug/l
TETRACHLOROETHENE	ND (1.0)	ug/l
CHLOROBENZENE	ND (1.0)	ug/l

Method 8010: Halogenated Volatile Organics, SW-846, USEPA, (1982).

(Detection limit in parenthesis.)

ND - Parameter not detected at the stated detection limit.



Ron R. Richardson  
 Laboratory Director



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

June 24, 1988

Bloomfield Refining Company  
Attn.: Chris Hawley  
Environmental Engineer  
P.O. Box 159  
Bloomfield, NM 87413

Dear Mr. Hawley:

On June 06, 1988, our laboratory received five (5) water samples for analysis. Samples were analyzed for parameters requested.

Of the five samples received, sample MW4 and MW11 were the only two that had the presence of anything. Benzene and Toluene was found in both of these samples. As per conversation, MW11 was to have had Carbontetrachloride in the past and when analyzed this time there was no presence of it.

Methods referenced on the enclosed reports.

Enclosed are the results of the analyses performed. If you have any questions, please don't hesitate to call.

Sincerely,

A handwritten signature in black ink that reads "Ron R. Richardson".

Ron R. Richardson  
Lab Director

enclosures:

GROUNDWATER MONITORING WELL DATA

<u>WELL NUMBER</u>	EL ELEVATION <u>T.O.P.</u>	STICKUP <u>T.O.P.</u>	EL ELEVATION <u>GRADE</u>
MW-1	5515.77	1.7	5514.07
MW-2	5519.45	1.5	5517.95
MW-3	5535.85	1.0	5534.85
MW-4	5524.30	1.5	5522.80
MW-5	5545.10	1.0	5544.10
MW-6	5551.23	1.0	5550.23
MW-7	5524.09	1.1	5522.99
MW-8	5531.12	1.0	5530.12
MW-9	5519.70	1.7	5518.00
MW-10 (RW-3)	5516.86	1.4	5515.46
MW-11	5506.83	3.6	5503.23
MW-12	5498.36	2.5	5495.86
MW-13	5538.42	3.3	5535.12
RW-2	5523.48	0.5	5522.98
P-2	5523.73	0.8	5522.93
P-3	5507.20	0.8	5506.40
RW-1	5525.92	1.4	5524.52
P-1	5524.62	0.8	5523.82

MUMFIELD REFINING COMPANY  
GROUNDWATER ELEVATIONS  
9-9-1988

-25-

WELL DESIGNATION	T.O.P. ELEVATION (FT)	TOTAL DEPTH OF WELL FROM T.O.P. (FT)	DEPTH TO WATER FROM T.O.P. (FT)	ELEVATION OF TOP OF WATER (FT)
MW- 1	5515.77	22.84	15.52	5500.25
MW- 2	5519.45	26.67	18.31	5501.14
MW- 3	5535.85	36.90	33.44	5502.41
MW- 5	5545.10	44.40	42.17	5502.93
MW- 6	5551.23	49.60	DRY	DRY
MW- 7	5524.09	62.10	24.37	5499.22
MW- 8	5531.12	34.94	29.33	5501.79
MW- 9	5519.70	33.90	19.89	5499.81
MW- 13	5538.42	53.00	37.91	5500.51
MW- 4	5524.30	31.44	24.10	5500.20
RW- 2	5523.48	38.03	23.37	5500.11
P- 2	5523.73	38.33	23.67	5500.06
RW- 3 (mw-10)	5516.86	33.92	17.80	5499.06
P- 3	5507.20	22.80	8.31	5498.89
RW- 1	5525.92	40.98	26.69	5499.73
P- 1	5524.62	39.17	25.53	5499.09
MW- 11	5506.83	24.73	9.24	5497.59
MW- 12	5498.36	14.27	8.18	5490.18
HAMMOND AT SULLIVAN RD.	5504.82	-	6.62	5498.20
HAMMOND NEAR MW-9	5522.95	-	22.99	5499.96

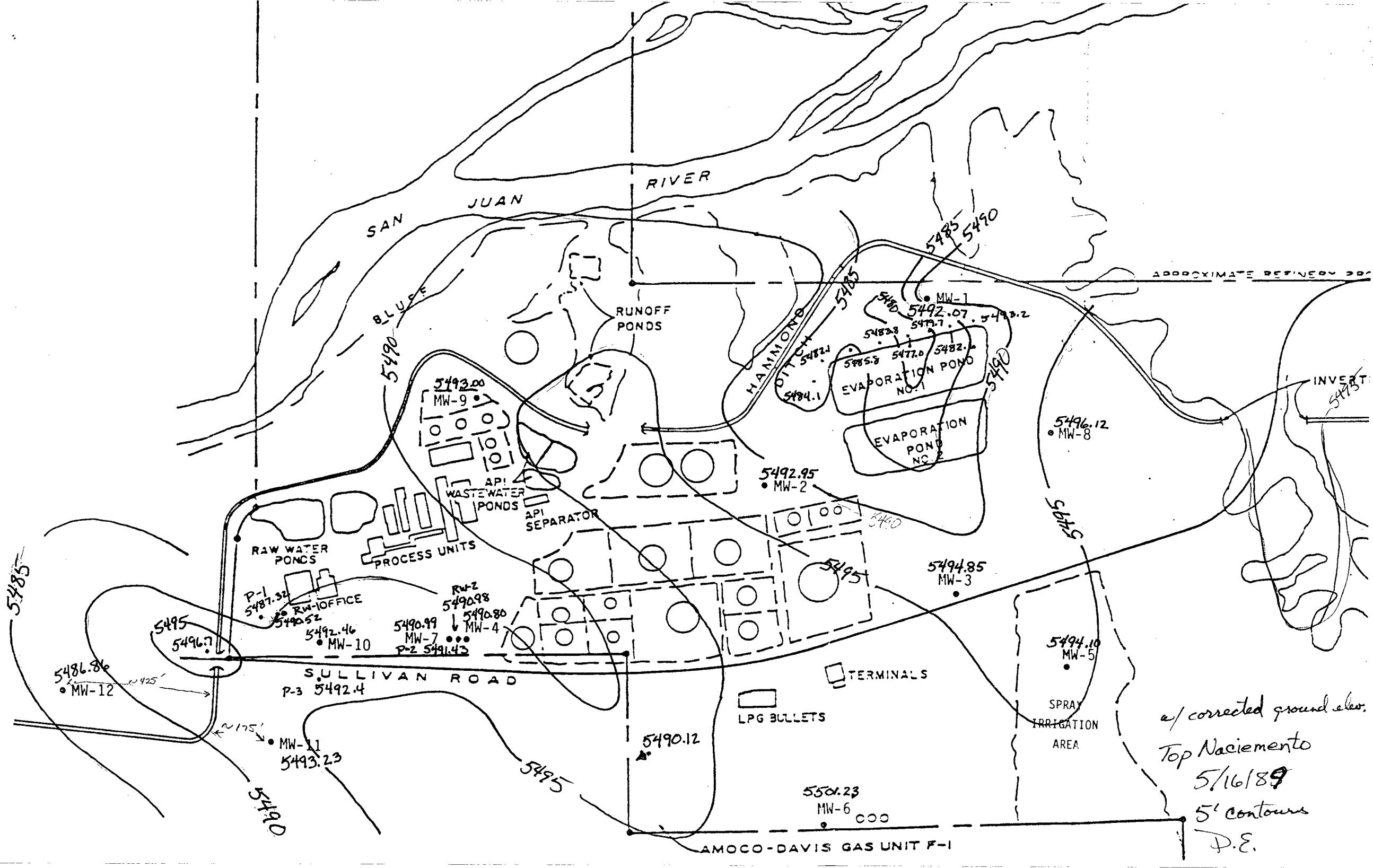
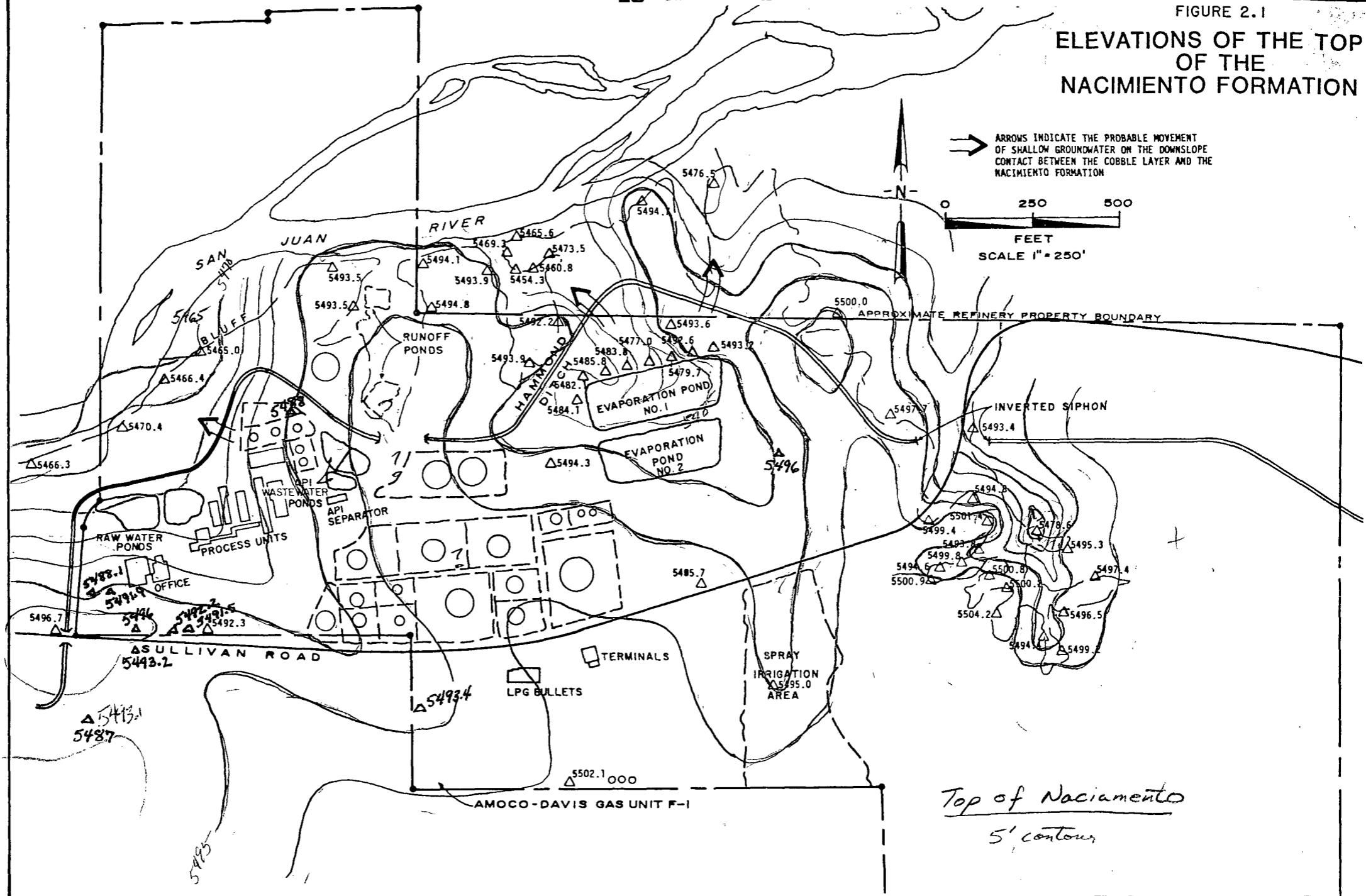


FIGURE 2.1

# ELEVATIONS OF THE TOP OF THE NACIMIENTO FORMATION



## Water Sat. Isopach

National  
45-804 Eye-Ease®  
45-704 70-70 Bull  
Made in USA

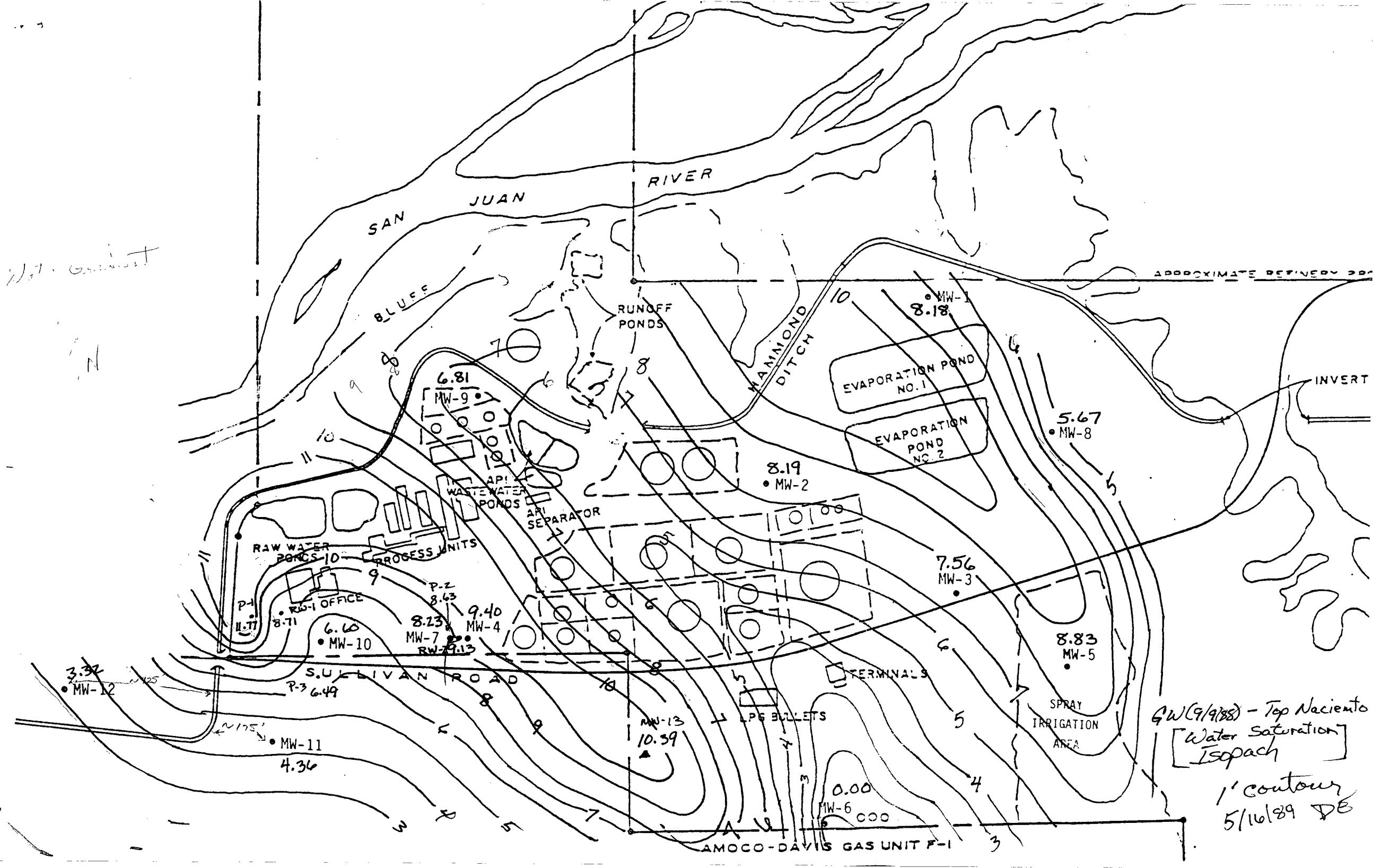
WILMFIELD REFINING COMPANY

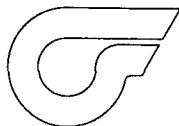
27

GROUNDWATER ELEVATIONS

9-9-1988

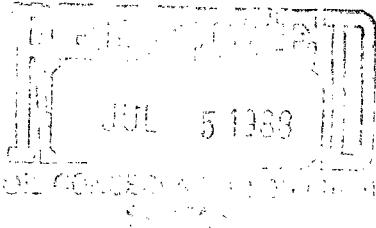
		T.O.P. ELEVATION (FT)	TOTAL DEPTH OF WELL FROM T.O.P. (FT)	DEPTH TO WATER FROM T.O.P. (FT)	ELEVATION OF TOP OF WATER (FT)
1	1	1	1	1	1
2	2	MW- 1	5515.77	22.84	5500.25
3	3	MW- 2	5519.45	26.67	5501.14
4	4	MW- 3	5535.85	36.90	5502.41
5	5	MW- 5	5545.10	44.40	5502.93
6	6	MW- 6	5551.23	49.60	DRY
7	7	MW- 7	5524.09	62.10	5499.22
8	8	MW- 8	5531.12	34.94	5501.79
9	9	MW- 9	5519.70	33.90	5499.81
10	10	MW- 13	5538.42	53.00	5500.51
11	11	MW- 4	5524.30	31.44	5500.20
12	12	RW- 2	5523.48	38.03	5500.11
13	13	P- 2	5523.73	38.33	5500.06
14	14	RW- 3 (mw-10)	5516.86	33.92	5499.06
15	15	P- 3	5507.20	22.80	5498.89
16	16	RW- 1	5525.92	40.98	5499.23
17	17	P- 1	5524.62	39.17	5499.09
18	18	MW- 11	5506.83	24.73	5497.99
19	19	MW- 12	5498.36	14.22	5490.18
20	20	HAMMOND AT SULLIVAN RD.	5504.82	-	5498.20
21	21	HAMMOND NEAR MW-9	5522.95	-	5499.96
22	22				
23	23				
24	24				
25	25				
26	26				
27	27				
28	28				
29	29				
30	30				
31	31				
32	32				
33	33				
34	34				
35	35				
36	36				
37	37				
38	38				
39	39				
40	40				





Bloomfield Refining  
Company

A Gary Energy Corporation Subsidiary



July 1, 1988

Mr. David G. Boyer  
State of New Mexico  
Oil Conservation Division  
P. O. Box 2088  
Land Office Building  
Santa Fe, New Mexico 87501

RE: Discharge Plan GRW-1-A, Bloomfield Refining Company

Dear Mr. Boyer:

Analytical results applicable to the discharge plan for the wells P1, P4, and P5 that were obtained from samples taken on June 3, 1988 are enclosed. I have also enclosed the results of my most recent samples of MW11 and MW12 for chlorinated hydrocarbons. Please note that chlorinated hydrocarbons were not detected in these samples.

Please call me if there are any questions.

Sincerely yours,

Chris Hawley  
Environmental Engineer

CH/jm

Enclosure

cc: Richard Traylor  
Mike Macy  
Joe Warr

BLOOMFIELD REFINING COMPANY  
SAMPLE DATE: JUNE 3, 1981

PARAMETER	UNITS	NOMINAL DETECTION LIMITS	STANDARD NMWQ	MONITORING		
				WELL	P1	P4
Arsenic	mg/l	0.005	0.1	<0.005	<0.005	<0.005
Barium	"	0.5	1.0	<0.5	1.4	<0.5
Cadmium	"	0.002	0.01	<0.002	<0.002	<0.002
Chromium	"	0.02	0.05	<0.02	<0.02	<0.02
Lead	"	0.02	0.05	<0.02	<0.02	<0.02
Mercury	"	0.001	0.002	<0.001	<0.001	<0.001
Selenium	"	0.005	0.05	<0.005	<0.005	<0.005
Silver	"	0.01	0.05	<0.01	<0.01	<0.01
Copper	"	0.01	1.0	0.02	<0.01	<0.01
Iron	"	0.05	1.0	<0.05	6.44	<0.05
Manganese	"	0.05	0.2	0.05	3.51	1.45
Zinc	"	0.01	10.0	0.03	0.01	<0.01
Uranium	"	-	5.0	-	-	-
Chloride	"	1	250.	1040.	401.	1300.
Sulfate	"	1	600.	951.	3.	1000.
PCB	"	-	0.001	-	-	-
Phenols	"	0.001	0.005	0.021	0.069	0.064
Cyanide	"	0.005	0.2	0.022	<0.005	0.030
Nitrate as N	"	0.02	10.	3.22	0.14	32.9
Aluminum	"	0.1	5.	<0.1	<0.1	<0.1
Boron	"	0.01	0.75	0.25	0.47	0.48
Cobalt	"	0.02	0.05	<0.02	<0.02	<0.02
Molybdenum	"	0.02	1.0	0.21	<0.02	<0.02
Nickel	"	0.02	0.2	0.03	0.02	0.04
Fluoride	"	0.01	1.6	0.60	0.28	0.22
TDS	"	1	1000.	3500.	1820.	4200.
Benzene		0.001	0.01	ND	8.9	ND
Toluene		0.001	0.75	ND	0.93	ND
Carbon Tetrachloride		0.001	0.01	ND	ND	ND
1,2-Dichloroethane		0.001	0.01	ND	ND	ND
1,1-Dichloroethylene		0.001	0.005	ND	ND	ND
1,1,2,2-Tetrachloroethylene		0.001	0.02	ND	ND	ND
1,1,2-Trichloroethylene		0.001	0.01	ND	ND	ND
pH	3.pH.	0.1	6 TO 9	7.3	6.8	?

BLOOMFIELD REFINING COMPANY  
1 GROUNDWATER ELEVATION 1

1	2	3	4	5	6	7	8
DATE	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7
T.O.P.	5515.77	5519.45	5535.85	5524.30	5545.10	5551.23	5524.09
1/27/87	5499.44	5500.92	5502.60	5500.22	5503.10	DRY	5499.29
						AT 5501.63	
4/2/87	5499.76	5501.20	5502.86	5500.37	5503.77	"	5499.59
-	DAMES REMOVED 4/3/87	IRRIGATION STARTED				4/13/87	
4/23/87	5499.33	5500.71	5502.94	5500.32	5504.01	DRY	5499.55
5/27/87	5499.71	5500.83	5502.94	5500.22	5503.95	"	5499.62
10/18/87	5499.63	5500.82	5502.63	5500.03	5503.54	"	5499.20
11/17/87	5498.46			5499.94	5503.17	-	-
6/3/88	5499.85		5502.52	5499.74	5503.03	"	5499.34
1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32
33	34	35	36	37	38	39	40

BLOOMFIELD REFINING COMPANY  
GROUNDWATER ELEVATIONS

1	2	3	4	5	6	7	8
MW-8	MW-9	MW-10	MW-11	MW-12	HAMMOND AT SULLIAN	HAMMOND NEAR MW-9	DATE
5531.12	5519.70	5516.86	5506.83	5498.36	5504.82	5522.95	← T.O.P.
5501.85	5498.98	5499.09	-	-	5498.59	5498.60	1/27/87
5502.12	5498.92	5499.33	-	-	5498.55	5498.55	4/2/87
DIKES REMOVED 4/3/87, IRRIGATION STARTED 4/13/87							
5502.03	5498.29	5499.07	-	-	5497.55	5497.92	4/23/87
5501.95	5498.73	5499.04	-	-	5498.09	5498.61	5/27/87
5501.65	5499.16	5498.66	5497.10	5489.03	5497.75	5499.13	10/18/87
-	-	5498.46	5496.95	5488.94	5497.45	-	10/27/87
-	-	-	-	-	-	-	11/17/87
-	-	-	5497.43	5490.57	-	-	6/3/88
1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32
33	34	35	36	37	38	39	40



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

June 24, 1988

Bloomfield Refining Company  
Attn.: Chris Hawley  
Environmental Engineer  
P.O. Box 159  
Bloomfield, NM 87413

Dear Mr. Hawley:

On June 06, 1988, our laboratory received five (5) water samples for analysis. Samples were analyzed for parameters requested.

Of the five samples received, sample MW4 and MW11 were the only two that had the presence of anything. Benzene and Toluene was found in both of these samples. As per conversation, MW11 was to have had Carbontetrachloride in the past and when analyzed this time there was no presence of it.

Methods referenced on the enclosed reports.

Enclosed are the results of the analyses performed. If you have any questions, please don't hesitate to call.

Sincerely,

A handwritten signature in black ink, appearing to read "Ron R. Richardson".  
Ron R. Richardson  
Lab Director

enclosures:



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

Bloomfield Refining Company  
Attn: Chris Hawley  
Environmental Engineer  
PO Box 159  
Bloomfield, NM 87413

22 June, 1988

**Re: Water Analysis**

Sample Site: MW1  
IML Lab No: F1448  
Date Sampled: 06/03/88  
Date Received: 06/06/88

pH, (s.u.).....	7.3
Chloride, mg/l.....	1040
Fluoride, mg/l.....	0.60
Nitrate + Nitrite as "N", mg/l.....	3.22
Sulfate, mg/l.....	851
Total Dissolved Solids (180), mg/l...	3500
Phenol, mg/l.....	0.021
Cyanide, mg/l.....	0.022

**Trace Metals (Dissolved Concentrations), mg/l**

Aluminum.....	-0.1	Iron.....	-0.05
Arsenic.....	-0.005	Lead.....	-0.02
Barium.....	-0.5	Manganese.....	0.85
Boron.....	0.25	Mercury.....	-0.001
Cadmium.....	-0.002	Molybdenum.....	0.21
Chromium.....	-0.02	Nickel.....	0.03
Cobalt.....	-0.02	Selenium.....	-0.005
Copper.....	0.02	Silver.....	-0.01
		Zinc.....	0.03



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

Bloomfield Refining Company  
Attn: Chris Hawley  
Environmental Engineer  
PO Box 159  
Bloomfield, NM 87413

22 June, 1988

Re: Water Analysis

Sample Site: MW4  
IML Lab No: F1449  
Date Sampled: 06/03/88  
Date Received: 06/06/88

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pH, (s.u.).....	6.8
Chloride, mg/l.....	401
Fluoride, mg/l.....	0.28
Nitrate + Nitrite as "N", mg/l.....	0.14
Sulfate, mg/l.....	3
Total Dissolved Solids (180), mg/l...	1820
Phenol, mg/l.....	0.069
Cyanide, mg/l.....	-0.005

Trace Metals (Dissolved Concentrations, mg/l)

Aluminum.....	-0.1	Iron.....	6.44
Arsenic.....	-0.005	Lead.....	-0.02
Barium.....	1.4	Manganese.....	3.51
Boron.....	0.47	Mercury.....	-0.001
Cadmium.....	-0.002	Molybdenum.....	-0.02
Chromium.....	-0.02	Nickel.....	0.02
Cobalt.....	-0.02	Selenium.....	-0.005
Copper.....	-0.01	Silver.....	-0.01
		Zinc.....	0.01



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

Bloomfield Refining Company  
Attn: Chris Hawley  
Environmental Engineer  
PO Box 159  
Bloomfield, NM 87413

22 June, 1988

**Re: Water Analysis**

Sample Site: MW5  
IML Lab No: F1450  
Date Sampled: 06/03/88  
Date Received: 06/06/88

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pH, (s.u.).....	
Chloride, mg/l.....	1300
Fluoride, mg/l.....	0.22
Nitrate + Nitrite as "N", mg/l.....	32.9
Sulfate, mg/l.....	1000
Total Dissolved Solids (180), mg/l...	4200
Phenol, mg/l.....	0.064
Cyanide, mg/l.....	0.030

**Trace Metals (Dissolved Concentrations, mg/l)**

Aluminum.....	-0.1	Iron.....	-0.05
Arsenic.....	-0.005	Lead.....	-0.02
Barium.....	-0.5	Manganese.....	1.45
Boron.....	0.48	Mercury.....	-0.001
Cadmium.....	-0.002	Molybdenum.....	-0.02
Chromium.....	-0.02	Nickel.....	0.04
Cobalt.....	-0.02	Selenium.....	-0.005
Copper.....	-0.01	Silver.....	-0.01
		Zinc.....	-0.01



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

Client: Bloomfield Refining Company

Sample ID: MW1  
Laboratory Number: F1448  
Analysis Requested: Method 602, 8010  
Sample Matrix: Water  
Date Sampled: 06/03/88  
Date Received: 06/06/88

Parameter	Method	Concentration	Units
BENZENE	602	ND (0.001)	mg/l
TOLUENE	602	ND (0.001)	mg/l
CARBON TETRACHLORIDE	8010	ND (0.001)	mg/l
1,2-DICHLOROETHENE	8010	ND (0.001)	mg/l
1,1-DICHLOROETHYLENE	8010	ND (0.001)	mg/l
1,1,2,2-TETRAHALOETHYLENE	8010	ND (0.001)	mg/l
1,1,2-TRICHLOROETHYLENE	8010	ND (0.001)	mg/l

Method: 602, Purgeable Aromatics, Methods for Organic Chemical Analysis of  
of Municipal and Industrial Wastewater, USEPA (1984).

Method: 8010, Halogenated Volatile Organics, SW-846, USEPA (1982).

(Detection limit in Parenthesis)

ND - Parameter not detected at the stated detection limit.

Ron R. Richardson  
Lab. Director



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

Client: Bloomfield Refining Company

Sample ID: MW4  
Laboratory Number: F1449  
Analysis Requested: Method 602, 8010  
Sample Matrix: Water  
Date Sampled: 06/03/88  
Date Received: 06/06/88

Parameter	Method	Concentration	Units
BENZENE	602	8.9 (0.001)	mg/l
TOLUENE	602	0.93 (0.001)	mg/l
CARBONTETRACHLORIDE	8010	ND (0.001)	mg/l
1,2-DICHLOROETHENE	8010	ND (0.001)	mg/l
1,1-DICHLOROETHYLENE	8010	ND (0.001)	mg/l
1,1,2,2-TETRACHLOROETHYLENE	8010	ND (0.001)	mg/l
1,1,2-TRICHLOROETHYLENE	8010	ND (0.001)	mg/l

Method: 602, Purgeable Aromatics, Methods for Organic Chemical Analysis of  
of Muicipal and Industrial Wasrewater, USEPA (1984).

Method: 8010, Halogenated Volatile Organics, SW-846, USEPA (1982).

(Detection limit in Parenthesis)

ND - Parameter not detected at the stated detection limit.

Ron R. Richardson  
Lab. Director



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

Client: Bloomfield Refining Company

Sample ID: MW5  
Laboratory Number: F1450  
Analysis Requested: Method 602, 8010  
Sample Matrix: Water  
Date Sampled: 06/03/88  
Date Received: 06/06/88

Parameter	Method	Concentration	Units
BENZENE	602	ND	(0.001) mg/l
TOLUENE	602	ND	(0.001) mg/l
CARBONTETRACHLORIDE	8010	ND	(0.001) mg/l
1,2-DICHLOROETHENE	8010	ND	(0.001) mg/l
1,1-DICHLOROETHYLENE	8010	ND	(0.001) mg/l
1,1,2,2-TETRACHLOROETHYLENE	8010	ND	(0.001) mg/l
1,1,2-TRICHLOROETHYLENE	8010	ND	(0.001) mg/l

Method: 602, Purgeable Aromatics, Methods for Organic Chemical Analysis of  
of Muicipal and Industrial Wasrewater, USEPA (1984).

Method: 8010, Halogenated Volatile Organics, SW-846, USEPA (1982).

(Detection limit in Parenthesis)

ND - Parameter not detected at the stated detection limit.

Ron R. Richardson  
Lab. Director



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

Client: Bloomfield Refining Company

Sample ID: MW11  
Laboratory Number: F1528  
Analysis Requested: Method 602, 8010  
Sample Matrix: Water  
Date Sampled: 06/03/88  
Date Received: 06/06/88

Parameter	Method	Concentration	Units
BENZENE	602	3.0	(0.001) mg/l
TOLUENE	602	0.46	(0.001) mg/l
CARBONTETRACHLORIDE	8010	ND	(0.001) mg/l
1,2-DICHLOROETHENE	8010	ND	(0.001) mg/l
1,1-DICHLOROETHYLENE	8010	ND	(0.001) mg/l
1,1,2,2-TETRACHLOROETHYLENE	8010	ND	(0.001) mg/l
1,1,2-TRICHLOROETHYLENE	8010	ND	(0.001) mg/l

Method: 602, Purgeable Aromatics, Methods for Organic Chemical Analysis of  
of Municipal and Industrial Wastewater, USEPA (1984).

Method: 8010, Halogenated Volatile Organics, SW-846, USEPA (1982).

(Detection limit in Parenthesis)

ND - Parameter not detected at the stated detection limit.

Ron R. Richardson  
Lab. Director



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

Client: Bloomfield Refining Company

Sample ID: MW12  
Laboratory Number: F1529  
Analysis Requested: Method 602, 8010  
Sample Matrix: Water  
Date Sampled: 06/03/88  
Date Received: 06/06/88

Parameter	Method	Concentration	Units
BENZENE	602	ND	(0.001) mg/l
TOLUENE	602	ND	(0.001) mg/l
CARBONTETRACHLORIDE	8010	ND	(0.001) mg/l
1,2-DICHLOROETHENE	8010	ND	(0.001) mg/l
1,1-DICHLOROETHYLENE	8010	ND	(0.001) mg/l
1,1,2,2-TETRACHLOROETHYLENE	8010	ND	(0.001) mg/l
1,1,2-TRICHLOROETHYLENE	8010	ND	(0.001) mg/l

Method: 602, Purgeable Aromatics, Methods for Organic Chemical Analysis of  
of Muicipal and Industrial Wasrewater, USEPA (1984).

Method: 8010, Halogenated Volatile Organics, SW-846, USEPA (1982).

(Detection limit in Parenthesis)

ND - Parameter not detected at the stated detection limit.

Ron R. Richardson  
Lab. Director



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

Bloomfield Refining Company  
Attn: Chris Hawley  
Environmental Engineer  
PO Box 159  
Bloomfield, NM 87413

22 June, 1988

Re: Water Analysis

Sample Site: MW1  
IML Lab No: F1448  
Date Sampled: 06/03/88  
Date Received: 06/06/88

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pH, (s.u.).....	7.3
Chloride, mg/l.....	1040
Fluoride, mg/l.....	0.60
Nitrate + Nitrite as "N", mg/l.....	3.22
Sulfate, mg/l.....	851
Total Dissolved Solids (180), mg/l...	3500
Phenol, mg/l.....	0.021
Cyanide, mg/l.....	0.022

Trace Metals (Dissolved Concentrations), mg/l

Aluminum.....	-0.1	Iron.....	-0.05
Arsenic.....	-0.005	Lead.....	-0.02
Barium.....	-0.5	Manganese.....	0.85
Boron.....	0.25	Mercury.....	-0.001
Cadmium.....	-0.002	Molybdenum.....	0.21
Chromium.....	-0.02	Nickel.....	0.03
Cobalt.....	-0.02	Selenium.....	-0.005
Copper.....	0.02	Silver.....	-0.01
		Zinc.....	0.03



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

Bloomfield Refining Company  
Attn: Chris Hawley  
Environmental Engineer  
PO Box 159  
Bloomfield, NM 87413

22 June, 1988

Re: Water Analysis

Sample Site: MW4  
IML Lab No: F1449  
Date Sampled: 06/03/88  
Date Received: 06/06/88

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pH, (s.u.).....	6.8
Chloride, mg/l.....	401
Fluoride, mg/l.....	0.28
Nitrate + Nitrite as "N", mg/l.....	0.14
Sulfate, mg/l.....	3
Total Dissolved Solids (180), mg/l...	1820
Phenol, mg/l.....	0.069
Cyanide, mg/l.....	-0.005

Trace Metals (Dissolved Concentrations, mg/l)

Aluminum.....	-0.1	Iron.....	6.44
Arsenic.....	-0.005	Lead.....	-0.02
Barium.....	1.4	Manganese.....	3.51
Boron.....	0.47	Mercury.....	-0.001
Cadmium.....	-0.002	Molybdenum.....	-0.02
Chromium.....	-0.02	Nickel.....	0.02
Cobalt.....	-0.02	Selenium.....	-0.005
Copper.....	-0.01	Silver.....	-0.01
		Zinc.....	0.01



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

Client: Bloomfield Refining Company

Sample ID: MW1  
Laboratory Number: F1448  
Analysis Requested: Method 602, 8010  
Sample Matrix: Water  
Date Sampled: 06/03/88  
Date Received: 06/06/88

Parameter	Method	Concentration	Units
BENZENE	602	ND	(0.001) mg/l
TOLUENE	602	ND	(0.001) mg/l
CARBONTETRACHLORIDE	8010	ND	(0.001) mg/l
1,2-DICHLOROETHENE	8010	ND	(0.001) mg/l
1,1-DICHLOROETHYLENE	8010	ND	(0.001) mg/l
1,1,2,2-TETRACHLOROETHYLENE	8010	ND	(0.001) mg/l
1,1,2-TRICHLOROETHYLENE	8010	ND	(0.001) mg/l

Method: 602, Purgeable Aromatics, Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater, USEPA (1984).

Method: 8010, Halogenated Volatile Organics, SW-846, USEPA (1982).

(Detection limit in Parenthesis)

ND - Parameter not detected at the stated detection limit.

Ron R. Richardson  
Lab. Director



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

Client: Bloomfield Refining Company

Sample ID: MW4  
Laboratory Number: F1449  
Analysis Requested: Method 602, 8010  
Sample Matrix: Water  
Date Sampled: 06/03/88  
Date Received: 06/06/88

Parameter	Method	Concentration	Units
BENZENE	602	8.9 (0.001)	mg/l
TOLUENE	602	0.93 (0.001)	mg/l
CARBONTETRACHLORIDE	8010	ND (0.001)	mg/l
1,2-DICHLOROETHENE	8010	ND (0.001)	mg/l
1,1-DICHLOROETHYLENE	8010	ND (0.001)	mg/l
1,1,2,2-TETRACHLOROETHYLENE	8010	ND (0.001)	mg/l
1,1,2-TRICHLOROETHYLENE	8010	ND (0.001)	mg/l

Method: 602, Purgeable Aromatics, Methods for Organic Chemical Analysis of  
of Municipal and Industrial Wastewater, USEPA (1984).

Method: 8010, Halogenated Volatile Organics, SW-846, USEPA (1982).

(Detection limit in Parenthesis)

ND - Parameter not detected at the stated detection limit.

A handwritten signature in black ink, appearing to read "Ron R. Richardson". The signature is written in a cursive style with some variations in letter height and thickness.

Ron R. Richardson  
Lab. Director



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

Client: Bloomfield Refining Company

Sample ID: MW5  
Laboratory Number: F1450  
Analysis Requested: Method 602, 8010  
Sample Matrix: Water  
Date Sampled: 06/03/88  
Date Received: 06/06/88

Parameter	Method	Concentration	Units
BENZENE	602	ND	(0.001) mg/l
TOLUENE	602	ND	(0.001) mg/l
CARBONTETRACHLORIDE	8010	ND	(0.001) mg/l
1,2-DICHLOROETHENE	8010	ND	(0.001) mg/l
1,1-DICHLOROETHYLENE	8010	ND	(0.001) mg/l
1,1,2,2-TETRACHLOROETHYLENE	8010	ND	(0.001) mg/l
1,1,2-TRICHLOROETHYLENE	8010	ND	(0.001) mg/l

Method: 602, Purgeable Aromatics, Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater, USEPA (1984).

Method: 8010, Halogenated Volatile Organics, SW-846, USEPA (1982).

(Detection limit in Parenthesis)

ND - Parameter not detected at the stated detection limit.

Ron R. Richardson  
Lab. Director



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

Client: Bloomfield Refining Company

Sample ID: MW11  
Laboratory Number: F1528  
Analysis Requested: Method 602, 8010  
Sample Matrix: Water  
Date Sampled: 06/03/88  
Date Received: 06/06/88

Parameter	Method	Concentration	Units
BENZENE	602	3.0	(0.001) mg/l
TOLUENE	602	0.46	(0.001) mg/l
CARBONTETRACHLORIDE	8010	ND	(0.001) mg/l
1,2-DICHLOROETHENE	8010	ND	(0.001) mg/l
1,1-DICHLOROETHYLENE	8010	ND	(0.001) mg/l
1,1,2,2-TETRACHLOROETHYLENE	8010	ND	(0.001) mg/l
1,1,2-TRICHLOROETHYLENE	8010	ND	(0.001) mg/l

Method: 602, Purgeable Aromatics, Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater, USEPA (1984).

Method: 8010, Halogenated Volatile Organics, SW-846, USEPA (1982).

(Detection limit in Parenthesis)

ND - Parameter not detected at the stated detection limit.

A handwritten signature in black ink, appearing to read "Ron R. Richardson".

Ron R. Richardson  
Lab. Director



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

Client: Bloomfield Refining Company

Sample ID: MW12  
Laboratory Number: F1529  
Analysis Requested: Method 602, 8010  
Sample Matrix: Water  
Date Sampled: 06/03/88  
Date Received: 06/06/88

Parameter	Method	Concentration	Units
BENZENE	602	ND	(0.001) mg/l
TOLUENE	602	ND	(0.001) mg/l
CARBONTETRACHLORIDE	8010	ND	(0.001) mg/l
1,2-DICHLOROETHENE	8010	ND	(0.001) mg/l
1,1-DICHLOROETHYLENE	8010	ND	(0.001) mg/l
1,1,2,2-TETRACHLOROETHYLENE	8010	ND	(0.001) mg/l
1,1,2-TRICHLOROETHYLENE	8010	ND	(0.001) mg/l

Method: 602, Purgeable Aromatics, Methods for Organic Chemical Analysis of  
of Municipal and Industrial Wastewater, USEPA (1984).

Method: 8010, Halogenated Volatile Organics, SW-846, USEPA (1982).

(Detection limit in Parenthesis)

ND - Parameter not detected at the stated detection limit.

Ron R. Richardson  
Lab. Director



Bloomfield Refining  
Company

A Gary Energy Corporation Subsidiary

May 16, 1988

Mr. David G. Boyer  
State of New Mexico  
Oil Conservation Division  
P. O. Box 2088  
Land Office Building  
Santa Fe, New Mexico 87504

Mr. Guy L. Tidmore  
EPA Region VI  
Hazardous Waste Management Division  
Allied Bank Tower  
1445 Ross Avenue  
Dallas, Texas 75202-2733

RE: Groundwater Remedial Action at Bloomfield Refining Company

Gentlemen:

Enclosed please find copies of the Assaigai analyses "Appendix A" in the report "Site Investigation and Remedial Action Conceptual Design for the Bloomfield Refining Company" that were unreadable.

We apologize for any inconvenience this may have caused you.

Sincerely yours,

*Chris Hawley*  
Chris Hawley  
Environmental Engineer

CH/jm

Enclosure

cc: Joe Warr  
Mike Macy  
Richard Traylor



ASSAIGAI  
ANALYTICAL  
LABORATORIES

(8709111600)

(335)

TO: Geoscience Consultants  
ATTN: Mike Selke  
500 Copper NW Suite 200  
Albuquerque, NM 87102

DATE: 30 September 1987  
1498

ANALYTE	SAMPLE ID/ANALYTICAL RESULTS <i>MW-1Z</i> 8709111600	NOMINAL DETECTION LIMIT <i>MW-1I</i> 8709111630
Phenols	<0.01 mg/l	<0.01 mg/l
Oil & Grease	0.691 mg/l	1.3 mg/l
As	<0.05 mg/l	<0.05 mg/l
Ba	<1.0 mg/l	6.72 mg/l
Cd	<0.01 mg/l	0.018 mg/l
Cr	0.064 mg/l	0.200 mg/l
Pb	0.120 mg/l	0.320 mg/l
Hg	<0.002 mg/l	<0.002 mg/l
Se	0.022 mg/l	0.040 mg/l
Ag	<0.05 mg/l	<0.05 mg/l
Cu	0.048 mg/l	0.060 mg/l
Fe	8.20 mg/l	32.0 mg/l
Mn	0.380 mg/l	4.71 mg/l
Zn	0.106 mg/l	0.728 mg/l
Uranium	<5 mg/l	<5 mg/l
Cl	7.9 mg/l	337.5 mg/l
SO <sub>4</sub>	248 mg/l	181 mg/l
PCB	<0.05 ug/l	<0.05 ug/l
CN	<0.005 mg/l	<0.005 mg/l
NO <sub>3</sub> as N	0.181 mg/l	0.389 mg/l
Al	9.50 mg/l	33.80 mg/l
B	<0.1 mg/l	<0.1 mg/l
Co	0.140 mg/l	0.256 mg/l
Mo	<0.5 mg/l	<0.5 mg/l
Ni	0.145 mg/l	0.213 mg/l
F	9.7 mg/l	0.93 mg/l
TDS	658 mg/l	1910 mg/l
pH	7.50	7.04
Benzene	<0.001 mg/l	5.4 mg/l
Toluene	<0.001 mg/l	<0.025 mg/l
Carbon Tetrachloride	<0.005 mg/l	12 mg/l
		13.5 mg/l duplicate
1,2-Dichloroethane	<0.001 mg/l	0.003 mg/l
1,1-Dichloroethylene	<0.001 mg/l	<0.001 mg/l
1,1,2,2-Tetrachloro- ethylene	<0.001 mg/l	0.070 mg/l
1,1,2-Trichloro- ethylene	<0.001 mg/l	0.225 mg/l
		0.001 mg/l

(335)8709111635

-2-

SAMPLE ID: TRIP BLANK

ANALYTE

ANALYTICAL RESULTS

Benzene	<0.001 mg/l
Toluene	<0.001 mg/l
Carbon Tetrachloride	<0.005 mg/l
1,2-Dichloroethane	<0.001 mg/l
1,1-Dichloroethylene	<0.001 mg/l
1,1,2,2-Tetrachloroethylene	<0.001 mg/l
1,1,2-Trichloroethylene	<0.001 mg/l

REFERENCE: "Standard Methods for the Examination of Water and Wastewater", 16th Edition, APHA, N.Y., 1985.

An invoice for services is enclosed. Thank you for contacting Assaigai Laboratories.

Sincerely,

*Jennifer V. Smith*  
Jennifer V. Smith, Ph.D.  
Laboratory Director

## LITHOLOGIC LOG

Page 1 of 1

### **LOCATION MAP:**

SITE ID: BRG LOCATION ID: MW-11

**SITE COORDINATES (FL.):**

N \_\_\_\_\_ E \_\_\_\_\_

GROUND ELEVATION (ft. MSI): \_\_\_\_\_

STATE: NEW MEXICO COUNTY: SAN JUAN

DRILLING METHOD: AIR CASING DRIVER ROTARY

DRILLING CONTR.: BEECHMAN

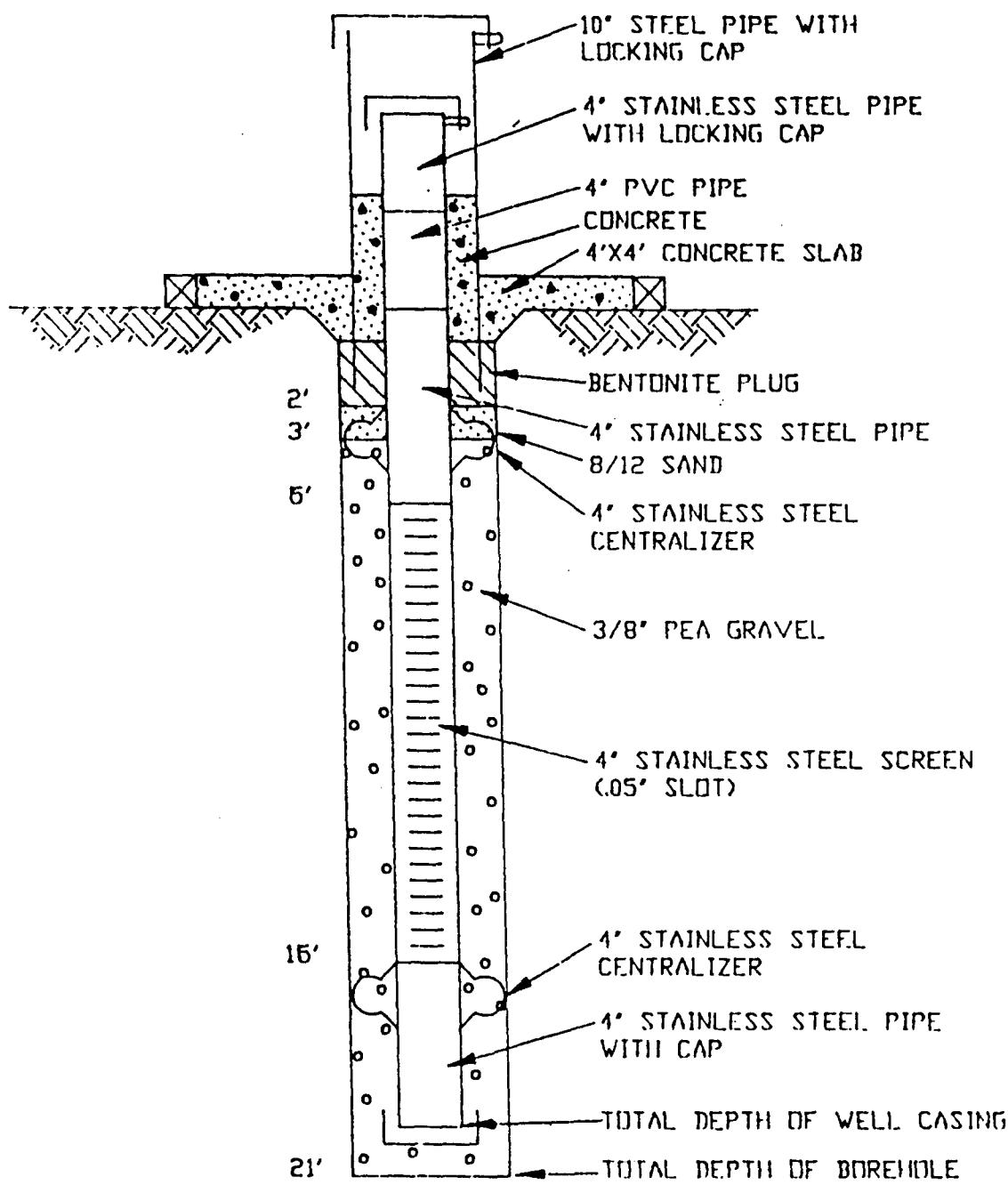
DATE STARTED: 7-31-87 DATE COMPLETED: 7-31-87

FIELD REP.: RASZUBA/SELKE

COMMENTS: STEAM CLEANED RIG AND ALL TOOLS PRIOR TO DRILLING.

---

LOCATION DESCRIPTION: TD 21'



MONITOR WELL MW-11

## LITHOLOGIC LOG

Page 1 of 1

LOCATION MAP:

SITE ID: BRC LOCATION ID: MW-12

SITE COORDINATES (ft.):

N \_\_\_\_\_ E \_\_\_\_\_

GROUND ELEVATION (ft. MSL): \_\_\_\_\_

STATE: NEW MEXICO COUNTY: SAN JUAN

DRILLING METHOD: AIR CASING DRIVER ROTARY

DRILLING CONTR.: DEEMAN BROTHERS

DATE STARTED: 8-1-87 DATE COMPLETED: 8-1-87

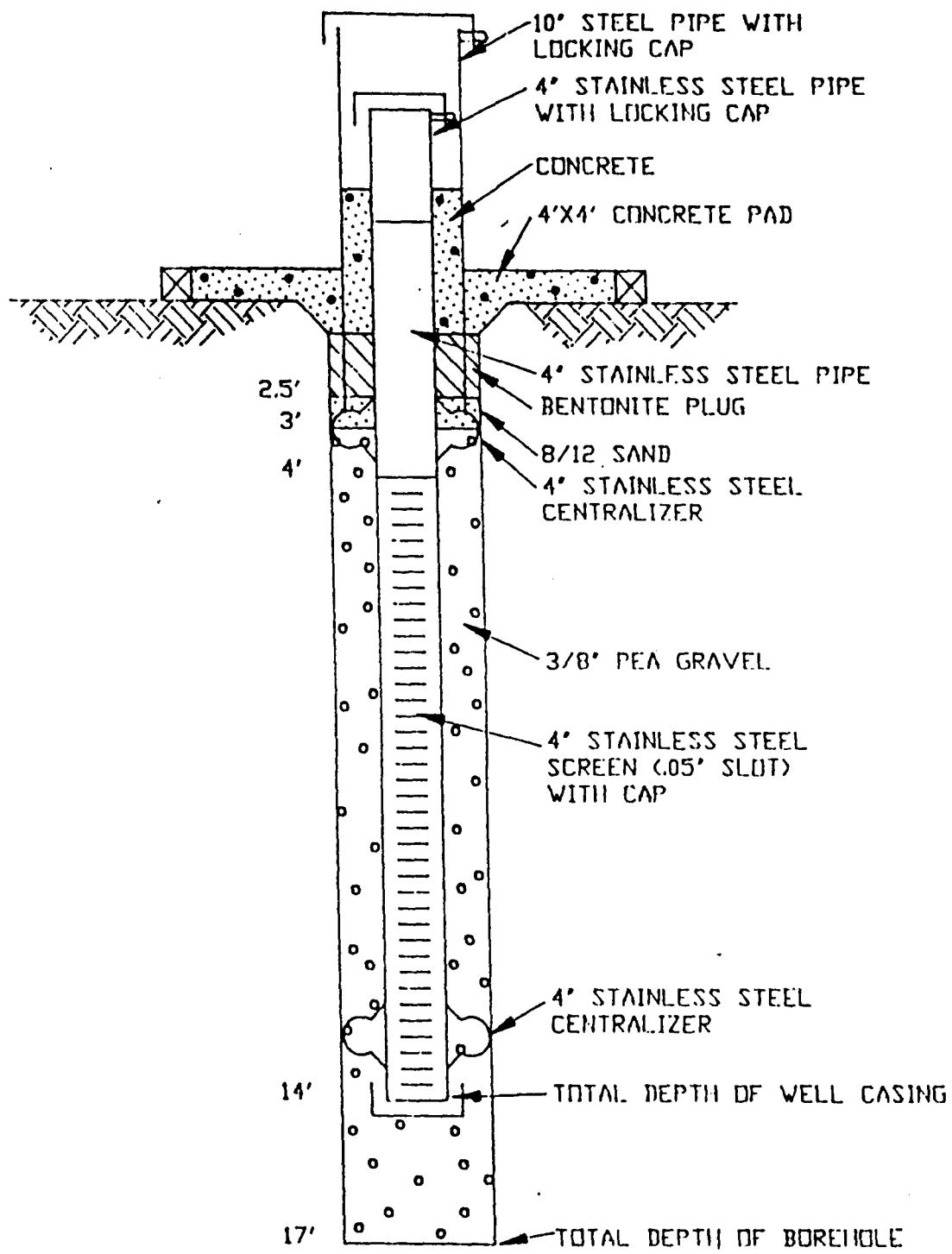
FIELD REP.: KASZUBA

COMMENTS: SATURATED FROM -5'--12'. TD-17'.

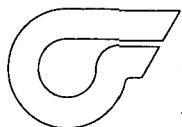
STEAM-CLEANED ALL TOOLS PRIOR TO DRILLING.

LOCATION DESCRIPTION:

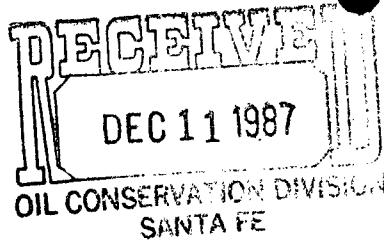
Depth	Visual %	Lith	Drilling Time Scale:	Sample Type and Interval	Lithologic Description
5	••••••••••••••	A S		0- 5'	0- 5' SAND, mod yellowish brwn (10YR5/4), fine-to med-grained sand, unconsolidated, well-sorted, subrounded. No HC odor. Saturated @ -5'.
10	••••••••••••••	S		5- 9'	5- 9' SAND, as above. Saturated. Gravelly sand @ S. Subrounded gravel, 2" dia.
				9-10'	9-10' SANDY CLAY, dusky yellow (5Y6/4), fine-to med-gr sand in clay matrix. No HC odor. Saturated.
15	••••••••••••••	S		10-15'	10-15' SANDY CLAY, as above. Minor chips of clay (shale), ~10%. Saturated to -12'.
				15-16'	15-16' SANDY CLAY, as above. Clay chips up to 5" (moderately consolidated clay or weathered shale). Contains <10% gypsum. No HC odor.
20	••••••••••••••	S		16-17'	16-17' CLAYEY SAND, dusky yellow (5Y6/4), sand is fine grained, well-sorted, No HC odor.
25					
30					
35					
40					
45					
50					



MONITOR WELL MW-12



Bloomfield Refining  
Company  
A Gary Energy Corporation Subsidiary



December 9, 1987

Mr. David G. Boyer  
State of New Mexico  
Oil Conservation Division  
P. O. Box 2088  
Land Office Building  
Santa Fe, New Mexico 87501

RE: Discharge Plan GRW-1-A, Bloomfield Refining Company

Dear Mr. Boyer:

Analytical results required by the discharge plan for groundwater monitoring wells P1, P4, and P5 are enclosed. The wells were sampled on November 17, 1987.

Please contact me if there are any questions.

Sincerely,

Chris Hawley  
Environmental Engineer

CH/jm

Enclosures

cc: Richard Traylor  
Mike Macy  
Joe Warr

Well Sampled  
for 1,2-dichloroethane  
analyzed for  
1,2-dichloroethene  
by Lab

BLOOMFIELD REFINING COMPANY  
SAMPLE DATE: NOV. 17, 1987

PARAMETER	UNITS	LIMITS	STANDARD	MONITORING			
				DETECTION	NMWWQ	WELL	WELL
Arsenic	mg/l	0.005	0.1	<0.005	0.005	<0.005	2
Barium	"	0.5	1.0	<0.5	1.8	<0.5	3
Cadmium	"	0.002	0.01	<0.002	<0.002	<0.002	4
Chromium	"	0.02	0.05	<0.02	<0.02	<0.02	5
Lead	"	0.02	0.05	<0.02	<0.02	<0.02	6
Mercury	"	0.001	0.002	<0.001	0.001	<0.001	7
Selenium	"	0.005	0.05	<0.005	<0.005	<0.005	8
Silver	"	0.01	0.05	<0.01	0.01	<0.01	9
Copper	"	0.01	1.0	<0.01	<0.01	0.01	10
Iron	"	0.05	1.0	<0.05	4.59	<0.05	11
Manganese	"	0.02	0.2	1.45	4.77	<0.02	12
Zinc	"	0.01	10.0	<0.01	<0.01	<0.01	13
Uranium	"	-	5.0	-	-	-	14
Chloride	"	1	250.	910.	588.	1310.	15
Sulfate	"	1	600.	655.	<1	1060.	16
PCB	"	-	0.001	-	-	-	17
Phenols	"	0.005	0.005	0.02	0.73	<0.005	18
Cyanide	"	0.005	0.2	<0.005	0.005	0.016	19
Nitrate as N	"	0.01	10.	5.66	0.03	36.4	20
Aluminum	"	0.1	5.	<0.1	<0.1	<0.1	21
Boron	"	0.1	0.75	0.32	0.59	0.54	22
Cobalt	"	0.02	0.05	<0.02	<0.02	<0.02	23
Molybdenum	"	0.02	1.0	<0.02	0.03	<0.02	24
Nickel	"	0.01	0.2	<0.01	<0.01	<0.01	25
Fluoride	"	0.1	1.6	0.76	0.19	0.24	26
TDS	"	1	1000.	3050.	2050.	4300.	27
Benzene	"	0.001	0.01	ND	8.5	ND	28
Toluene	"	0.001	0.75	ND	0.023	ND	29
Carbon Tetrachloride	"	0.001	0.01	ND	ND	ND	30
1,2-Dichloroethane	"	0.001	0.01	ND	ND	ND	31
1,1-Dichloroethylene	"	0.001	0.005	ND	ND	ND	32
1,1,2,2-Tetrachloroethylene	"	0.001	0.02	ND	ND	ND	33
1,1,2-Trichloroethylene	"	0.001	0.01	ND	ND	ND	34
pH	5. N.	0.1	6 TO 9	7.0	6.5	6.9	35



45-608 Eye-Ease®  
45-708 20/20 Buff  
Made in USA

FOOMFIELD REFINING COMPANY  
GROUNDWATER ELEVATIONS

1	2	3	4	5	6	7	8
DATE	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7
T.O.P. →	5515.77	5519.45	5535.85	5524.30	5545.10	5551.23	5524.09
1/27/87	5499.44	5500.92	5502.60	5500.22	5503.10	DRY	5499.29
4/2/87	5499.76	5501.20	5502.86	5500.37	5503.77	"	5499.59
-	DIAES REMOVED 4/3/87	IRRIGATION	STARTED	4/13/87			
4/23/87	5499.33	5500.71	5502.94	5500.32	5504.01	DRY	5499.55
5/27/87	5499.71	5500.83	5502.94	5500.22	5503.95	"	5499.62
10/8/87	5499.63	5500.82	5502.63	5500.03	5503.54	"	5499.20
11/17/87	5498.46			5499.94	5503.17	-	-
12							
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**CHAIN OF CUSTODY RECORD**

PROJECT NO.	PROJECT NAME
NOV 87	BLOOMFIELD OFF FINALS CO
AMPLIFIERS (Signatures)	
<i>John Crowley</i>	

**SAMPLERS (Signatures)**



Bloomfield Refining  
Company

A Gary Energy Corporation Subsidiary

September 14, 1987

SEP 16 1987

Mr. William H. Taylor, Jr.  
Chief, Enforcement Section (SA-HE)  
U. S. Environmental Protection Agency  
Region VI  
1201 Elm Street  
Dallas, Texas 75270

RE: Administrative Order (AO)  
Docket No. RCRA-3013-00-185

Dear Mr. Taylor:

Enclosed are the sampling results obtained from the San Juan River during a low-flow condition on July 24, 1987. The samples were taken as stipulated in the approved work plan. We trust that the attached data submitted as an Amendment to the Final Report fulfills the requirements of the subject Administrative Order.

Again, the data submitted herewith was done in fulfillment of a unilaterally issued Administrative Order. It should not be construed, for any purpose, as an admission of liability under any governmental statute or rule or an admission of any question of law. Furthermore, given the complexity of the investigation, Bloomfield Refining Company reserves the right to further interpret or modify any statements or data contained here, if appropriate, in the future.

Sincerely,

Richard Traylor  
Refinery Manager

RT/jm

Attachment

cc: Mr. Jack Ellvinger  
New Mexico Environmental Improvement Division  
Mr. David G. Boyer  
New Mexico Oil Conservation Division

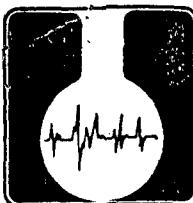
SAN JUAN RIVER  
SUMMARY OF RESULTS  
(mg/L)

7-24-87

27

DAM RELEASE : 1070 CFS

	NOMINAL DETECTION LIMIT	Hwy 44 BRIDGE NEAR SIDE	Hwy 44 BRIDGE MIDDLE	Hwy 44 BRIDGE FAR SIDE	UPSTREAM
CN	0.005	0.066	0.038	0.053	0.044
Phenols	0.001	0.018	<0.001	0.013	0.018
TDS	1	238	228	248	232
Cl	1.0	4.96	4.96	4.96	4.46
SO <sub>4</sub>	1.0	64.5	75.0	64.9	62.4
TOC	1	5	5	6	5
As	0.05	<0.05	<0.05	<0.05	<0.05
Ba	1.0	<1.0	<1.0	<1.0	<1.0
Cd	0.01	<0.01	<0.01	<0.01	<0.01
Cr	0.05	<0.05	<0.05	<0.05	<0.05
Pb	0.05	0.061	0.054	<0.05	<0.05
Hg	0.002	<0.002	<0.002	<0.002	<0.002
Se	0.01	<0.01	<0.01	<0.01	<0.01
Ag	0.05	<0.05	<0.05	<0.05	<0.05
Volatiles	0.001	ND	ND	ND	ND
Acid Compounds + Base Neutrals	0.01	ND	ND	ND	ND



# ASSAIGAI ANALYTICAL LABORATORIES

TO: Bloomfield Refinery  
Attn: Chris Hawley  
PO Box 159  
Bloomfield, NM 87413

DATE: 28 August 1987  
1174

SAMPLE ID: Plant 1

ANALYTE	ANALYTICAL RESULTS
---------	--------------------

VOLATILES

Acrolein	ND
Acrylonitrile	ND
Benzene	ND
Bromoform	ND
Carbon Tetrachloride	ND
Chlorobenzene	ND
Chlorodibromomethane	ND
Chloroethane	ND
2-Chloroethylvinyl ether	ND
Chloroform	ND
Dichlorobromomethane	ND
1,1-Dichloroethane	ND
1,2-Dichloroethane	ND
1,1-Dichloroethylene	ND
1,2-Dichloropropane	ND
1,2-Dichloropropylene	ND
Ethylbenzene	ND
Methyl Bromide	ND
Methyl Chloride	ND
Methylene Chloride	ND
1,1,2,2-Tetrachloroethane	ND
Tetrachloroethylene	ND
Toluene	ND
1,2-Transdichloroethylene	ND
1,1,1-Trichloroethane	ND
1,1,2-Trichloroethane	ND
Trichloroethylene	ND
Vinyl Chloride	ND

NOMINAL DETECTION LIMIT: 0.001 mg/l

ACID COMPOUNDS & BASE NEUTRALS

2-Chlorophenol	ND
2,4-Dichlorophenol	ND
2,4-Dimethylphenol	ND
4,6-Dinitro-o-cresol	ND
2,4-Dinitrophenol	ND
2-Nitrophenol	ND
4-Nitrophenol	ND
P-chloro-m-cresol	ND

pentachlorophenol	ND
Phenol	ND
2,4,6-Trichlorophenol	ND
Acenaphthylene	ND
Anthracene	ND
Benzidine	ND
Benzo(a)anthracene	ND
Benzo(a)pyrene	ND
3,4-Benzofluoranthene	ND
Benzo(g,h,i)perylene	ND
Benzo(k)fluoranthene	ND
Bis(2-chloroethoxy)methane	ND
Bis(2-chlororoethyl)ether	ND
Bis(2-chloroisopropyl)ether	ND
Bis(2-ethylhexyl)phthalate	ND
4-Bromophenyl phenyl ether	ND
Butylbenzyl phthalate	ND
2-Chloronaphthalene	ND
4-Chlorophenyl phenyl ether	ND
Chrysene	ND
Dibenz(a,h)anthracene	ND
1,2-Dichlorobenzene	ND
1,3-Dichlorobenzene	ND
1,4-Dichlorobenzene	ND
3,3-Dichlorobenzidine	ND
Diethyl phthalate	ND
Dimethyl phthalate	ND
Din-n-butyl phthalate	ND
2,4-Dinitrotoluene	ND
2,6-Dinitrotoluene	ND
Di-n-octyl phthalate	ND
1,2-Diphenylhydrazine	ND
Fluoranthene	ND
Fluorene	ND
Hexachlorobenzene	ND
Hexachlorobutadiene	ND
Hexachlorocyclopentadiene	ND
Hexachloroethane	ND
Indeno(1,2,3-cd)pyrene	ND
Isophorone	ND
Naphthalene	ND
Nitrobenzene	ND
N-nitrosodimethylamine	ND
N-nitrosodi-n-propylamine	ND
N-nitrosodiphenylamine	ND
Phenanthrene	ND
Pyrene	ND
1,2,4-Trichlorobenzene	ND

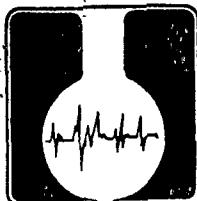
NOMINAL DETECTION LIMIT: 0.01 mg/l

REFERENCES: "Test Methods for Evaluating Solid Waste.-Physical/Chemical Methods", USEPA, SW 846, 3rd Edition.

An invoice for services is included. Thank you for contacting Assaigai Laboratories.

Sincerely,

Jennifer V. Smith  
Jennifer V. Smith, Ph.D.  
Laboratory Director



ASSAIGAI  
ANALYTICAL  
LABORATORIES

SAMPLE DATE: 7-24-87 9 A.M.

HIGHWAY 44 BRIDGE

MIDDLE OF RIVER (TOTAL WIDTH=230')

TO: Bloomfield Refining  
ATTN: Chris Hawley  
PO Box 159  
Bloomfield, NM 87413

DATE: 28 August 1987  
1174

SAMPLE ID: Plant 2

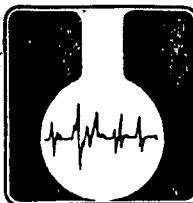
ANALYTE	ANALYTICAL RESULTS	NOMINAL DETECTION LIMITS
CN	0.038 mg/l	0.005 mg/l
Phenols	<0.001 mg/l	0.001 mg/l
TDS	228 mg/l	1 mg/l
Cl	4.96 mg/l	1.0 mg/l
SO 4	75.0 mg/l	1.0 mg/l
TOC	5 mg/l	1 mg/l
As	<0.05 mg/l	0.05 mg/l
Ba	<1.0 mg/l	1.0 mg/l
Cd	<0.01 mg/l	0.01 mg/l
Cr	<0.05 mg/l	0.05 mg/l
Pb	0.054 mg/l	0.05 mg/l
Hg	<0.002 mg/l	0.002 mg/l
Se	<0.01 mg/l	0.01 mg/l
Ag	<0.05 mg/l	0.05 mg/l

REFERENCE: "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", USEPA, SW 846, EMSL-Cincinnati, 1982.

An invoice for services is enclosed. Thank you for contacting Assaigai Laboratories.

Sincerely,

*Jennifer V. Smith*  
Jennifer V. Smith, Ph.D.  
Laboratory Director



# ASSAIGAI ANALYTICAL LABORATORIES



TO: Bloomfield Refinery  
ATTN: Chris Hawley  
PO Box 159  
Bloomfield, NM 87413

DATE: August 28, 1987  
1174



SAMPLE ID: Plant 2

## ACID COMPOUNDS & BASE NEUTRALS

2-Chlorophenol	ND
2,4-Dichlorophenol	ND
2,4-Dimethylphenol	ND
4,6-Dinitro-o-cresol	ND
2,4-Dinitrophenol	ND
2-Nitrophenol	ND
4-Nitrophenol	ND
P-chloro-m-cresol	ND
pentachlorophenol	ND
Phenol	ND
2,4,6-Trichlorophenol	ND
Acenaphthylene	ND
Anthracene	ND
Benzidine	ND
Benzo(a)anthracene	ND
Benzo(a)pyrene	ND
3,4-Benzofluoranthene	ND
Benzo(g,h,i)perylene	ND
Benzo(k)fluoranthene	ND
Bis(2-chloroethoxy)methane	ND
Bis(2-chlororoethyl)ether	ND
Bis(2-chloroisopropyl)ether	ND
Bis(2-ethylhexyl)phthalate	ND
4-Bromophenyl phenyl ether	ND
Butylbenzyl phthalate	ND
2-Chloronaphthalene	ND
4-Chlorophenyl phenyl ether	ND
Chrysene	ND
Dibenzo(a,h)anthracene	ND
1,2-Dichlorobenzene	ND
1,3-Dichlorobenzene	ND
1,4-Dichlorobenzene	ND
3,3-Dichlorobenzidine	ND
Diethyl phthalate	ND
Dimethyl phthalate	ND
Di-n-butyl phthalate	ND
2,4-Dinitrotoluene	ND
2,6-Dinitrotoluene	ND
Di-n-octyl phthalate	ND
1,2-Diphenylhydrazine	ND
Fluoranthene	ND
Fluorene	ND

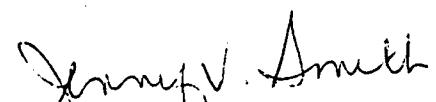
Hexachlorobenzene	ND
Hexachlorobutadiene	ND
Hexachlorocyclopentadiene	ND
Hexachloroethane	ND
Indeno(1,2,3-cd)pyrene	ND
Isophorone	ND
Naphthalene	ND
Nitrobenzene	ND
N-nitrosodimethylamine	ND
N-nitrosodi-e-n-propylamine	ND
N-nitrosodiphenylamine	ND
Phenanthrene	ND
Pyrene	ND
1,2,4-Trichlorobenzene	ND

NOMINAL DETECTION LIMIT: 0.01 mg/l

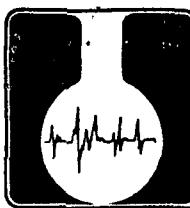
REFERENCES: "Test Methods for Evaluating Solid Waste,-Physical/Chemical Methods", USEPA, SW 846, 3rd Edition.

An invoice for services is included. Thank you for contacting Assaigai Laboratories.

Sincerely,



Jennifer V. Smith, Ph.D.  
Laboratory Director



# ASSAIGAI ANALYTICAL LABORATORIES

SAMPLE DATE 7-24-87 9:30 AM  
HIGHWAY 44 BRIDGE  
20 FEET FROM BLOOMFIELD SIDE OF  
RIVER

TO: Bloomfield Refining  
ATTN: Chris Hawley  
PO Box 159  
Bloomfield, NM 87413

DATE: 28 August 1987  
1174

SAMPLE ID: Plant 3

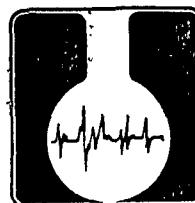
ANALYTE	ANALYTICAL RESULTS	NOMINAL DETECTION LIMITS
CN	0.053 mg/l	0.005 mg/l
Phenols	0.013 mg/l	0.001 mg/l
TDS	248 mg/l	1 mg/l
Cl	4.96 mg/l	1.0 mg/l
SO 4	64.9 mg/l	1.0 mg/l
TOC	6 mg/l	1 mg/l
As	<0.05 mg/l	0.05 mg/l
Ba	<1.0 mg/l	1.0 mg/l
Cd	<0.01 mg/l	0.01 mg/l
Cr	<0.05 mg/l	0.05 mg/l
Pb	<0.05 mg/l	0.05 mg/l
Hg	<0.002 mg/l	0.002 mg/l
Se	<0.01 mg/l	0.01 mg/l
Ag	<0.05 mg/l	0.05 mg/l

REFERENCE: "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", USEPA, SW 846, EMSL-Cincinnati, 1982.

An invoice for services is enclosed. Thank you for contacting Assaigai Laboratories.

Sincerely,

*Jennifer V. Smith*  
Jennifer V. Smith, Ph.D.  
Laboratory Director



# ASSAIGAI ANALYTICAL LABORATORIES

TO: Bloomfield Refinery  
ATTN: Chris Hawley  
PO Box 159  
Bloomfield, NM 87413

DATE: August 28, 1987  
1174

SAMPLE ID: Plant 3

## ACID COMPOUNDS & BASE NEUTRALS

2-Chlorophenol	ND
2,4-Dichlorophenol	ND
2,4-Dimethyphenol	ND
4,6-Dinitro-o-cresol	ND
2,4-Dinitrophenol	ND
2-Nitrophenol	ND
4-Nitrophenol	ND
P-chloro-m-cresol	ND
pentachlorophenol	ND
Phenol	ND
2,4,6-Trichlorophenol	ND
Acenaphthylene	ND
Anthracene	ND
Benzidine	ND
Benzo(a)anthracene	ND
Benzo(a)pyrene	ND
3,4-Benzofluoranthene	ND
Benzo(g,h,i)perylene	ND
Benzo(k)fluoranthene	ND
Bis(2-chloroethoxy)methane	ND
Bis(2-chlororoethyl)ether	ND
Bis(2-chloroisopropyl)ether	ND
Bis(2-ethylhexyl)phthalate	ND
4-Bromophenyl phenyl ether	ND
Butylbenzyl phthalate	ND
2-Chloronaphthalene	ND
4-Chlorophenyl phenyl ether	ND
Chrysene	ND
Dibenzo(a,h)anthracene	ND
1,2-Dichlorobenzene	ND
1,3-Dichlorobenzene	ND
1,4-Dichlorobenzene	ND
3,3-Dichlorobenzidine	ND
Diethyl phthalate	ND
Dimethyl phthalate	ND
Din-n-butyl phthalate	ND
2,4-Dinitrotoluene	ND
2,6-Dinitrotoluene	ND
Di-n-octyl phthalate	ND
1,2-Diphenylhydrazine	ND
Fluoranthene	ND
Fluorene	ND

Hexachlorobenzene	ND
Hexachlorobutadiene	ND
Hexachlorocyclopentadiene	ND
Hexachloroethane	ND
Indeno(1,2,3-cd)pyrene	ND
Isophorone	ND
Naphthalene	ND
Nitrobenzene	ND
N-nitrosodimethylamine	ND
N-nitrosodie-n-propylamine	ND
N-nitrosodiphenylamine	ND
Phenanthrene	ND
Pyrene	ND
1,2,4-Trichlorobenzene	ND

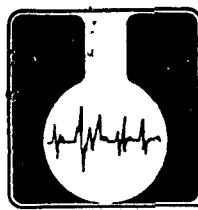
NOMINAL DETECTION LIMIT: 0.01 mg/l

REFERENCES: "Test Methods for Evaluating Solid Waste,-Physical/Chemical Methods", USEPA, SW 846, 3rd Edition.

An invoice for services is included. Thank you for contacting Assaigai Laboratories.

Sincerely,

*Jennifer V. Smith*  
Jennifer V. Smith, Ph.D.  
Laboratory Director



# ASSAIGAI ANALYTICAL LABORATORIES

SAMPLE DATE: 7-24-87 10:30 A.M.  
~½ MILE UPSTREAM FROM REFINERY  
FROM BANK ON REFINERY SIDE.

TO: Bloomfield Refining  
ATTN: Chris Hawley  
PO Box 159  
Bloomfield, NM 87413

DATE: 28 August 1987  
1174

SAMPLE ID: Plant 4

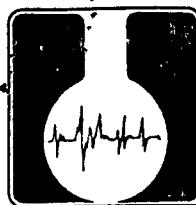
ANALYTE	ANALYTICAL RESULTS	NOMINAL DETECTION LIMITS
CN	0.044 mg/l	0.005 mg/l
Phenols	0.018 mg/l	0.001 mg/l
TDS	232 mg/l	1 mg/l
Cl	4.46 mg/l	1.0 mg/l
SO <sub>4</sub>	62.6 mg/l	1.0 mg/l
TOC	5 mg/l	1 mg/l
As	<0.05 mg/l	0.05 mg/l
Ba	<1.0 mg/l	1.0 mg/l
Cd	<0.01 mg/l	0.01 mg/l
Cr	<0.05 mg/l	0.05 mg/l
Pb	<0.05 mg/l	0.05 mg/l
Hg	<0.002 mg/l	0.002 mg/l
Se	<0.01 mg/l	0.01 mg/l
Ag	<0.05 mg/l	0.05 mg/l

REFERENCE: "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", USEPA, SW 846, EMSL-Cincinnati, 1982.

An invoice for services is enclosed. Thank you for contacting Assaigai Laboratories.

Sincerely,

Jennifer V. Smith  
Jennifer V. Smith, Ph.D.  
Laboratory Director



# ASSAIGAI ANALYTICAL LABORATORIES

TO: Bloomfield Refinery  
Attn: Chris Hawley  
PO Box 159  
Bloomfield, NM 87413

DATE: 26 August 1987  
1174

SAMPLE ID: Plant 4

ANALYTE	ANALYTICAL RESULTS
---------	--------------------

VOLATILES

Acrolein	ND
Acrylonitrile	ND
Benzene	ND
Bromoform	ND
Carbon Tetrachloride	ND
Chlorobenzene	ND
Chlorodibromomethane	ND
Chloroethane	ND
2-Chloroethylvinyl ether	ND
Chloroform	ND
Dichlorobromomethane	ND
1,1-Dichloroethane	ND
1,2-Dichloroethane	ND
1,1-Dichloroethylene	ND
1,2-Dichloropropane	ND
1,2-Dichloropropylene	ND
Ethylbenzene	ND
Methyl Bromide	ND
Methyl Chloride	ND
Methylene Chloride	ND
1,1,2,2-Tetrachloroethane	ND
Tetrachloroethylene	ND
Toluene	ND
1,2-Transdichloroethylene	ND
1,1,1-Trichloroethane	ND
1,1,2-Trichloroethane	ND
Trichloroethylene	ND
Vinyl Chloride	ND

NOMINAL DETECTION LIMIT: 0.001 mg/l

ACID COMPOUNDS & BASE NEUTRALS

2-Chlorophenol	ND
2,4-Dichlorophenol	ND
2,4-Dimethylphenol	ND
4,6-Dinitro-o-cresol	ND
2,4-Dinitrophenol	ND
2-Nitrophenol	ND
4-Nitrophenol	ND
P-chloro-m-cresol	ND

pentachlorophenol	ND
Phenol	ND
2,4,6-Trichlorophenol	ND
Acenaphthylene	ND
Anthracene	ND
Benzidine	ND
Benzo(a)anthracene	ND
Benzo(a)pyrene	ND
3,4-Benzofluoranthene	ND
Benzo(g,h,i)perylene	ND
Benzo(k)fluoranthene	ND
Bis(2-chloroethoxy)methane	ND
Bis(2-chlororoethyl)ether	ND
Bis(2-chloroisopropyl)ether	ND
Bis(2-ethylhexyl)phthalate	ND
4-Bromophenyl phenyl ether	ND
Butylbenzyl phthalate	ND
2-Chloronaphthalene	ND
4-Chlorophenyl phenyl ether	ND
Chrysene	ND
Dibenzo(a,h)anthracene	ND
1,2-Dichlorobenzene	ND
1,3-Dichlorobenzene	ND
1,4-Dichlorobenzene	ND
3,3-Dichlorobenzidine	ND
Diethyl phthalate	ND
Dimethyl phthalate	ND
Di-n-butyl phthalate	ND
2,4-Dinitrotoluene	ND
2,6-Dinitrotoluene	ND
Di-n-octyl phthalate	ND
1,2-Diphenylhydrazine	ND
Fluoranthene	ND
Fluorene	ND
Hexachlorobenzene	ND
Hexachlorobutadiene	ND
Hexachlorocyclopentadiene	ND
Hexachloroethane	ND
Indeno(1,2,3-cd)pyrene	ND
Isophorone	ND
Naphthalene	ND
Nitrobenzene	ND
N-nitrosodimethylamine	ND
N-nitrosodi-n-propylamine	ND
N-nitrosodiphenylamine	ND
Phenanthrene	ND
Pyrene	ND
1,2,4-Trichlorobenzene	ND

NOMINAL DETECTION LIMIT: 0.01 mg/l

REFERENCES: "Test Methods for Evaluating Solid Waste, -Physical/Chemical Methods", USEPA, SW 846, 3rd Edition.

An invoice for services is included. Thank you for contacting Assaigai Laboratories.

Sincerely,

Jennifer V. Smith  
Jennifer V. Smith, Ph.D.  
Laboratory Director

STATUS OF RESERVOIRS PROCESSED ON: 03 AUG 87

## COLORADO RIVER STORAGE PROJECT

NAVAJO		RESERVOIR BEHIND			NAVAJO			DAM	
DATE	SURFACE ELEVATION	LIVE STORAGE	BANK STORAGE	RELEASE POWER	RELEASE OTHER	DIVERSION TO	EVAP	INFLOW	
JUL 87	FEET	ACRE-FT	ACRE-FT	CF8	CF8	CF8	CF8	CF8	CF8
1	6,053.91	1,268,500		0	5,040	580	70	3,930	
2	6,053.52	1,263,800		0	5,040	580	70	3,330	
3	6,053.13	1,259,100		0	5,040	500	70	3,250	
4	6,052.77	1,254,800		0	5,040	330	70	3,270	
5	6,052.47	1,251,200		0	5,040	330	70	3,620	
6	6,052.06	1,246,300		0	5,040	500	70	3,150	
7	6,051.54	1,240,100		0	5,040	500	70	2,540	
8	6,050.98	1,233,500		0	5,040	550	70	2,340	
9	6,050.45	1,227,300		0	5,040	550	70	2,540	
10	6,049.85	1,220,200		0	5,040	550	70	2,090	
11	6,049.24	1,213,100		0	5,040	550	70	2,090	
12	6,048.63	1,206,000		0	5,040	550	70	2,090	
13	6,047.92	1,197,800		0	5,040	600	70	1,580	
14	6,047.28	1,190,500		0	5,040	480	70	1,910	
15	6,046.56	1,182,300		0	5,040	600	70	1,580	
16	6,045.81	1,174,000		0	5,040	600	70	1,530	
17	6,045.23	1,167,300		0	5,040	550	70	2,280	
18	6,044.68	1,161,100		0	5,040	550	70	2,540	
19	6,043.90	1,152,400		0	5,040	550	60	1,270	
20	6,043.23	1,145,000		0	5,040	550	60	1,930	
21	6,042.83	1,140,500		0	5,040	3,180	60	1,570	
22	6,042.61	1,138,100		0	5,040	1,750	60	1,200	
23	6,042.49	1,136,800		0	5,020	550	60	980	
24	6,042.40	1,135,800	Sample DATE	0	5,010	580	60	1,140	
25	6,042.32	1,134,900		0	5,010	580	60	1,190	
26	6,042.24	1,134,100		0	5,010	580	60	1,240	
27	6,042.19	1,133,500		0	5,010	580	60	1,340	
28	6,042.09	1,132,400		0	5,010	590	60	1,100	
29	6,042.05	1,132,000		0	5,010	580	60	1,200	
30	6,042.05	1,132,000		0	5,010	760	60	1,380	
31	6,042.01	1,131,500		0	5,010	760	60	790	

TOTALS

	ACRE-FT	ACRE-FT	ACRE-FT	ACRE-FT
TOTALS	226,230	33,240	3,980	122,960
	CFS	CFS	CFS	CFS

MEANS	3,679	540	1,999
NOTES : ADD DEAD STORAGE OF SUBTRACT INACTIVE STORAGE OF LIVE STORAGE VALUES MAY DIFFER NIN FEET 6,045 FT CONTENT 5 1695900 ACRE-FT	12,612 659,900 1695900 ACRE-FT TO GET ACTIVE STORAGE TO GET TOTAL STORAGE FROM PUBLISHED TABLES		



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

December 08, 1987

Bloomfield Refining Company  
Attn: Chris Hawley  
Environmental Engineer  
P.O. Box 159  
Bloomfield, NM 87413

Dear Mr. Hawley:

On November 17, 1987, our laboratory received (3) three water samples for analysis. Sample was analyzed for inorganics, trace metals, and organics.

Of the three samples received, sample MW4 was the only one to show any organics. MW4 had 8.5 mg/l Benzene, and 0.023 mg/l Toluene.

Tests were conducted according to 40 CFR 136, "Guidelines Establishing Test Procedures for Analysis", as amended.

Enclosed are the results of the analyses performed. If you have any questions, please don't hesitate to call.

Sincerely,

A handwritten signature in black ink, appearing to read "Ron R. Richardson".

Ron R. Richardson  
Lab Director

enclosures:



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

Bloomfield Refining Company  
Attn: Chris Hawley  
Environmental Engineer  
PO Box 159  
Bloomfield, NM 87413

08 December, 1987

Re: Water Analysis

Sample Site: MW1  
IML Lab No: F5744  
Date Sampled: 11/17/87  
Date Received: 11/17/87

---

pH, (s.u.).....	7.0
Chloride, mg/l.....	910
Fluoride, mg/l.....	0.76
Nitrate + Nitrite as "N", mg/l.....	5.66
Sulfate, mg/l.....	655
Total Dissolved Solids (180), mg/l...	3050
Phenol, mg/l.....	0.02
Cyanide, mg/l.....	-0.005

Trace Metals (Dissolved Concentrations, mg/l)

Aluminum.....	-0.1	Iron.....	-0.05
Arsenic.....	-0.005	Lead.....	-0.02
Barium.....	-0.5	Manganese.....	1.45
Boron.....	0.32	Mercury.....	-0.001
Cadmium.....	-0.002	Molybdenum.....	-0.02
Chromium.....	-0.02	Nickel.....	-0.01
Cobalt.....	-0.02	Selenium.....	-0.005
Copper.....	-0.01	Silver.....	-0.01
		Zinc.....	-0.01



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

Bloomfield Refining Company  
Attn: Chris Hawley  
Environmental Engineer  
PO Box 159  
Bloomfield, NM 87413

08 December, 1987

Re: Water Analysis

Sample Site: MW4  
IML Lab No: F5745  
Date Sampled: 11/17/87  
Date Received: 11/17/87

---

pH, (s.u.).....	6.5
Chloride, mg/l.....	588
Fluoride, mg/l.....	0.19
Nitrate + Nitrite as "N", mg/l.....	0.03
Sulfate, mg/l.....	-1
Total Dissolved Solids (180), mg/l...	2050
Phenol, mg/l.....	0.73
Cyanide, mg/l.....	0.005

Trace Metals (Dissolved Concentrations, mg/l)

Aluminum.....	-0.1	Iron.....	4.59
Arsenic.....	-0.005	Lead.....	-0.02
Barium.....	1.8	Manganese.....	4.77
Boron.....	0.59	Mercury.....	-0.001
Cadmium.....	-0.002	Molybdenum.....	0.03
Chromium.....	-0.02	Nickel.....	-0.01
Cobalt.....	-0.02	Selenium.....	-0.005
Copper.....	-0.01	Silver.....	-0.01
		Zinc.....	-0.01



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

Bloomfield Refining Company  
Attn: Chris Hawley  
Environmental Engineer  
PO Box 159  
Bloomfield, NM 87413

08 December, 1987

Re: Water Analysis

Sample Site: MW5  
IML Lab No: F5746  
Date Sampled: 11/17/87  
Date Received: 11/17/87

---

pH, (s.u.).....	6.9
Chloride, mg/l.....	1310
Fluoride, mg/l.....	0.24
Nitrate + Nitrite as "N", mg/l.....	36.4
Sulfate, mg/l.....	1060
Total Dissolved Solids (180), mg/l...	4300
Phenol, mg/l.....	-0.005
Cyanide, mg/l.....	0.016

Trace Metals (Dissolved Concentrations, mg/l)

Aluminum.....	-0.1	Iron.....	-0.05
Arsenic.....	-0.005	Lead.....	-0.02
Barium.....	-0.5	Manganese.....	-0.02
Boron.....	0.54	Mercury.....	-0.001
Cadmium.....	-0.002	Molybdenum.....	-0.02
Chromium.....	-0.02	Nickel.....	-0.01
Cobalt.....	-0.02	Selenium.....	-0.005
Copper.....	0.01	Silver.....	-0.01
		Zinc.....	-0.01



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

Client: Bloomfield Refining Company

Sample ID: MW1  
Laboratory Number: F5744  
Analysis Requested: Method 602, 8010  
Sample Matrix: Water  
Date Sampled: 11/17/87  
Date Received: 11/17/87

Parameter	Method	Concentration	Units
BENZENE	602	ND	(0.001) mg/l
TOLUENE	602	ND	(0.001) mg/l
CARBONTETRACHLORIDE	8010	ND	(0.001) mg/l
1,2-DICHLOROETHENE	8010	ND	(0.001) mg/l
1,1-DICHLOROETHYLENE	8010	ND	(0.001) mg/l
1,1,2,2-TETRACHLOROETHYLENE	8010	ND	(0.001) mg/l
1,1,2-TRICHLOROETHYLENE	8010	ND	(0.001) mg/l

Method: 602, Purgeable Aromatics, Methods for Organic Chemical Analysis of  
of Muicipal and Industrial Wasrewater, USEPA (1984).

Method: 8010, Halogenated Volatile Organics, SW-846, USEPA (1982).

(Detection limit in Parenthesis)

ND - Parameter not detected at the stated detection limit.

---

Ron R. Richardson  
Lab. Director



2506 West Main Street  
Farmington, New Mexico 87401  
Tel. (505) 326-1737

Client: Bloomfield Refining Company

Sample ID: MW4  
Laboratory Number: F5745  
Analysis Requested: Method 602, 8010  
Sample Matrix: Water  
Date Sampled: 11/17/87  
Date Received: 11/17/87

Parameter	Method	Concentration	Units
BENZENE	602	8.5	(0.001) mg/l
TOLUENE	602	0.023	(0.001) mg/l
CARBONTETRACHLORIDE	8010	ND	(0.001) mg/l
1,2-DICHLOROETHENE	8010	ND	(0.001) mg/l
1,1-DICHLOROETHYLENE	8010	ND	(0.001) mg/l
1,1,2,2-TETRACHLOROETHYLENE	8010	ND	(0.001) mg/l
1,1,2-TRICHLOROETHYLENE	8010	ND	(0.001) mg/l

Method: 602, Purgeable Aromatics, Methods for Organic Chemical Analysis of  
of Municipal and Industrial Wastewater, USEPA (1984).

Method: 8010, Halogenated Volatile Organics, SW-846, USEPA (1982).

(Detection limit in Parenthesis)

ND - Parameter not detected at the stated detection limit.

---

Ron R. Richardson  
Lab. Director



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

Client: Bloomfield Refining Company

Sample ID: MW5  
Laboratory Number: F5746  
Analysis Requested: Method 602, 8010  
Sample Matrix: Water  
Date Sampled: 11/17/87  
Date Received: 11/17/87

Parameter	Method	Concentration	Units
BENZENE	602	ND	(0.001) mg/l
TOLUENE	602	ND	(0.001) mg/l
CARBONTETRACHLORIDE	8010	ND	(0.001) mg/l
1,2-DICHLOROETHENE	8010	ND	(0.001) mg/l
1,1-DICHLOROETHYLENE	8010	ND	(0.001) mg/l
1,1,2,2-TETRACHLOROETHYLENE	8010	ND	(0.001) mg/l
1,1,2-TRICHLOROETHYLENE	8010	ND	(0.001) mg/l

Method: 602, Purgeable Aromatics, Methods for Organic Chemical Analysis of  
of Municipal and Industrial Wastewater, USEPA (1984).

Method: 8010, Halogenated Volatile Organics, SW-846, USEPA (1982).

(Detection limit in Parenthesis)

ND - Parameter not detected at the stated detection limit.

---

Ron R. Richardson  
Lab. Director



Bloomfield Refining  
Company

A Gary Energy Corporation Subsidiary



June 30, 1987

Mr. David G. Boyer  
State of New Mexico  
Oil Conservation Division  
P. O. Box 2088  
Land Office Building  
Santa Fe, New Mexico 87501

RE: Discharge Plan GRW-1-A, Bloomfield Refining Company

Dear Mr. Boyer:

Analytical results applicable to the discharge plan for the wells P1, P4, and P5 that were obtained from samples taken on May 28, 1987 are enclosed. The 1, 2-dichloroethane detected in P5 is a questionable result and is being reviewed by the laboratory.

Please feel free to contact me if there are any questions.

Sincerely,

Chris Hawley  
Environmental Engineer

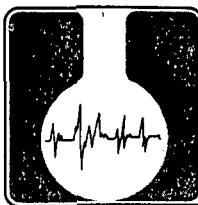
CH/jm

Enclosure

CC: Richard Traylor  
Mike Macy  
Joe Warr

BLOOMFIELD REFINING COMPANY  
SAMPLE DATE: May 28, 1987

PARAMETER	UNITS	NOMINAL	NMWQ STANDARD	MONITORING	MONITORING	MONITORING
		DETECTION LIMITS		WELL P1	WELL P4	WELL P5
Arsenite	mg/l	0.05	0.1	<0.05	<0.05	<0.05
Barium	"	1.0	1.0	<1.0	9.88	<1.0
Cadmium	"	0.01	0.01	0.023	0.018	0.026
Chromium	"	0.05	0.05	<0.05	<0.05	<0.05
Lead	"	0.05	0.05	0.20	0.14	0.20
Mercury	"	0.002	0.002	<0.002	<0.002	<0.002
Selenium	"	0.01	0.05	0.10	0.08	0.14
Silver	"	0.05	0.05	<0.05	<0.05	<0.05
Copper	"	0.01	1.0	0.013	0.010	<0.01
Iron	"	0.04	1.0	0.14	0.17	0.19
Manganese	"	0.01	0.2	1.51	5.29	0.09
Zinc	"	0.004	10.0	0.024	0.022	0.024
Uranium	"	-	5.0	-	-	-
Chloride	"	0.1	250.	794	635.	1112.
Sulfate	"	1.0	600.	827.6	4.8	772.4
PCB	"	-	0.001	-	-	-
Phenols	"	0.01	0.005	0.123	0.278	0.334
Cyanide	"	0.005	0.2	0.0056	<0.005	<0.005
Nitrate as N	"	0.01	10.	12.9	0.035	27.01
Aluminum	"	0.1	5.	<0.1	<0.1	<0.1
Boron	"	0.1	0.75	0.70	0.97	0.24
Cobalt	"	0.01	0.05	0.07	0.04	0.06
Molybdenum	"	0.05	1.0	0.79	0.13	<0.05
Nickel	"	0.06	0.2	0.12	0.12	0.25
Fluoride	"	0.01	1.6	0.0353	<0.01	0.0156
TDS	"	1	1000.	3272.	2038.	3902.
Benzene	"	0.001	0.01	<0.001	10.7	<0.001
Toluene	"	0.001	0.75	<0.001	0.71	<0.001
Carbon Tetrachloride	"	0.08	0.01	<0.08	<0.08	<0.08
1,2-Dichloroethane	"	0.001	0.01	<0.001	<0.001	0.72
1,1-Dichloroethylene	"	0.001	0.005	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethylene	"	0.001	0.02	<0.001	<0.001	<0.001
1,1,2-Trichloroethylene	"	0.001	0.01	<0.001	<0.001	<0.001
pH	3. N.	0.1	6 TO 9	-	-	-



# ASSAIGAI ANALYTICAL LABORATORIES

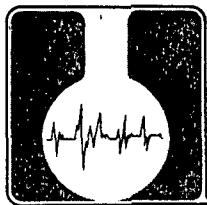


TO: Bloomfield Refining  
ATTN: Chris Hawley  
PO Box 156  
Bloomfield, NM 87413

DATE: 22 June 1987  
0856

SAMPLE ID: MW-1

ANALYTE	ANALYTICAL RESULTS	NOMINAL DETECTION LIMITS
As	<0.05 mg/l	0.05 mg/l
Cd	0.023 mg/l	0.01 mg/l
Cr	<0.05 mg/l	0.05 mg/l
Pb	0.20 mg/l	0.05 mg/l
Hg	<0.002 mg/l	0.002 mg/l
Se	0.10 mg/l	0.01 mg/l
Ag	<0.05 mg/l	0.05 mg/l
Ba	<1.0 mg/l	1.0 mg/l
Cu	0.013 mg/l	0.01 mg/l
Fe	0.14 mg/l	0.04 mg/l
Mn	1.51 mg/l	0.01 mg/l
Zn	0.024 mg/l	0.004 mg/l
Cl	794 mg/l	0.1 mg/l
SO <sub>4</sub>	827.6 mg/l	1.0 mg/l
Phenols	0.123 mg/l	0.01 mg/l
CN	0.0056 mg/l	0.005 mg/l
NO <sub>3</sub> as N	12.9 mg/l	0.01 mg/l
Al	<0.1 mg/l	0.1 mg/l
B	0.70 mg/l	0.1 mg/l
Co	0.07 mg/l	0.01 mg/l
Mo	0.79 mg/l	0.05 mg/l
Ni	0.12 mg/l	0.06 mg/l
F	0.0353 mg/l	0.01 mg/l
TDS	3272 mg/l	1 mg/l
Benzene	<0.001 mg/l	0.001 mg/l
Toluene	<0.001 mg/l	0.001 mg/l
CCl <sub>4</sub>	<0.08 mg/l	0.08 mg/l
1,2-Dichloroethane	<0.001 mg/l	0.001 mg/l
1,1-Dichloroethylene	<0.001 mg/l	0.001 mg/l
Trichloroethylene	<0.001 mg/l	0.001 mg/l
Tetrachloroethylene	<0.001 mg/l	0.001 mg/l



ASSAIGAI  
ANALYTICAL  
LABORATORIES

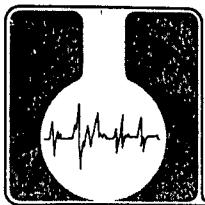


TO: Bloomfield Refining  
ATTN: Chris Hawley  
PO Box 156  
Bloomfield, NM 87413

DATE: 22 June 1987  
0856

SAMPLE ID: MW-4

ANALYTE	ANALYTICAL RESULTS	NOMINAL DETECTION LIMITS
As	<0.05 mg/l	0.05 mg/l
Cd	0.018 mg/l	0.01 mg/l
Cr	<0.05 mg/l	0.05 mg/l
Pb	0.14 mg/l	0.05 mg/l
Hg	<0.002 mg/l	0.002 mg/l
Se	0.08 mg/l	0.01 mg/l
Ag	<0.05 mg/l	0.05 mg/l
Ba	9.88 mg/l	1.0 mg/l
Cu	0.010 mg/l	0.01 mg/l
Fe	0.17 mg/l	0.04 mg/l
Mn	5.29 mg/l	0.01 mg/l
Zn	0.022 mg/l	0.004 mg/l
Cl	635 mg/l	0.1 mg/l
SO4	4.8 mg/l	1.0 mg/l
Phenols	0.278 mg/l	0.01 mg/l
CN	<0.005 mg/l	0.005 mg/l
NO 3 as N	0.035 mg/l	0.01 mg/l
Al	<0.1 mg/l	0.1 mg/l
B	0.97 mg/l	0.1 mg/l
Co	0.04 mg/l	0.01 mg/l
Mo	0.13 mg/l	0.05 mg/l
Ni	0.12 mg/l	0.06 mg/l
F	<0.01 mg/l	0.01 mg/l
TDS	2038 mg/l	1 mg/l
Benzene	10.7 mg/l	0.001 mg/l
Toluene	0.71 mg/l	0.001 mg/l
CCl4	<0.08 mg/l	0.08 mg/l
1,2-Dichloroethane	<0.001 mg/l	0.001 mg/l
1,1-Dichloroethylene	<0.001 mg/l	0.001 mg/l
Trichloroethylene	<0.001 mg/l	0.001 mg/l
Tetrachloroethylene	<0.001 mg/l	0.001 mg/l



ASSAIGAI  
ANALYTICAL  
LABORATORIES

TO: Bloomfield Refining  
ATTN: Chris Hawley  
PO Box 156  
Bloomfield, NM 87413

DATE: 22 June 1987  
0856

SAMPLE ID: MW-5

ANALYTE	ANALYTICAL RESULTS	NOMINAL DETECTION LIMITS
As	<0.05 mg/l	0.05 mg/l
Cd	0.026 mg/l	0.01 mg/l
Cr	<0.05 mg/l	0.05 mg/l
Pb	0.20 mg/l	0.05 mg/l
Hg	<0.002 mg/l	0.002 mg/l
Se	0.14 mg/l	0.01 mg/l
Ag	<0.05 mg/l	0.05 mg/l
Ba	<1.0 mg/l	1.0 mg/l
Cu	<0.01 mg/l	0.01 mg/l
Fe	0.19 mg/l	0.04 mg/l
Mn	0.09 mg/l	0.01 mg/l
Zn	0.024 mg/l	0.004 mg/l
Cl	1112 mg/l	0.1 mg/l
SO <sub>4</sub>	772.4 mg/l	1.0 mg/l
Phenols	0.334 mg/l	0.01 mg/l
CN	<0.005 mg/l	0.005 mg/l
NO <sub>3</sub> as N	27.01 mg/l	0.01 mg/l
Al	<0.1 mg/l	0.1 mg/l
B	0.24 mg/l	0.1 mg/l
Co	0.06 mg/l	0.01 mg/l
Mo	<0.05 mg/l	0.05 mg/l
Ni	0.25 mg/l	0.06 mg/l
F	0.0156 mg/l	0.01 mg/l
TDS	3902 mg/l	1 mg/l
Benzene	<0.001 mg/l	0.001 mg/l
Toluene	<0.001 mg/l	0.001 mg/l
CCl <sub>4</sub>	<0.08 mg/l	0.08 mg/l
1,2-Dichloroethane	0.72 mg/l	0.001 mg/l
1,1-Dichloroethylene	<0.001 mg/l	0.001 mg/l
Trichloroethylene	<0.001 mg/l	0.001 mg/l
Tetrachloroethylene	<0.001 mg/l	0.001 mg/l

REFERENCE: "Test Methods for Evaluating Solid Waste,-Physical/  
Chemical Methods:, USEPA, SW 846, EMSL-Cincinnati, 1982.

An invoice for services is enclosed. Thank you for  
contacting Assaigai Laboratories.

Sincerely,

Jennifer V. Smith  
Jennifer V. Smith, Ph.D.  
Laboratory Director

## GROUNDWATER SAMPLING

<u>DATE</u>	<u>TIME</u>	<u>NO</u>	<u>MW</u>	<u>WATER LEVEL</u>	<u>TOTAL DEPTH</u>	<u>FT. OF H<sub>2</sub>O</u>	<u>GALS.</u>	<u>BAILS</u>	<u>ACT. BAILS</u>
5/27/87	9:00a	3	32.91	37.08	4.17	4.17	4.3	9	15
"	10:00a	2	18.62	27.07	8.45	8.45	8.8	18	20
"	11:00a	1	16.06	23.35	7.29	7.29	7.6	16	20
"	12:30p	5	41.15	45.08	3.93	3.93	4.1	9	12
"	1:00p	10	17.82	33.77	15.95	15.95	23.4	47	50
"	2:00p	9	20.97	33.78	12.81	12.81	18.8	38	40
"	3:00p	4	24.08	33.22	9.14	9.14	9.5	19	25

radius of wells 3, 2, 1, 5, & 4 = 0.21';  $1.036 \times h = \text{gal}$   
 radius of wells 10 & 9 = 0.25';  $1.468 \times h = \text{gal}$

5/27/87                    8      29.17      34.87                    NOT BAILED

"                            7      24.47      -                            "

## GROUNDWATER ELEVATIONS

HAMMOND HAMMARD

DATE	T.O.P. →	MU-7	MU-8	MU-9	MU-10	AT S1	JAN AT WALKAWAY
		<u>5524.09</u>	<u>5531.12</u>	<u>5533.70</u>	<u>5536.86</u>	<u>5541.32</u>	<u>5532.75</u>

1	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-
17	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-
19	-	-	-	-	-	-	-
20	3/26/86	5498.02	5501.95	5498.15	5497.65	-	-
21	SAMPLE	3/26/86	5498.02	5501.97	5498.20	5497.66	-
22	DIKE REMOVED	4/4/86	5498.77	5501.86	5498.22	5497.60	5496.50 5498.24
23	WATER ON	4/19/86	5497.92	5501.82	5497.90	5497.69	- 5496.85
24	4/21	5/5/86	5497.28	5501.79	5498.62	5497.83	5498.08 5499.03
25		5/21/86	5493.86	5501.83	5499.00	5498.05	5499.25 5499.42
26		6/4/86	5498.85	5501.89	5499.17	5498.15	5498.23 5499.63
27	SAMPLE	6/23/86	-	5502.04	5499.47	5498.11	-
28		7/8/86	5497.87	5502.22	5499.50	5498.17	5497.89 5499.95
29		8/4/86	5498.77	5502.12	5499.40	5498.37	5497.84 5499.67
30		9/2/86	5498.95	5502.21	5499.55	5498.53	5498.24 5500.15
31	SAMPLE	9/18/86	-	5502.12	5499.57	5498.75	-
32	WATER OFF	10/8/86	5498.96	5501.97	5499.42	5498.69	5497.00 5493.93
33	10/15	11/7/86	5499.26	5501.90	5499.56	5499.05	5497.00 5498.83
34	DIKED	12/8/86	5499.40	5502.10	5499.14	5499.28	5498.72 5498.73
35	SAMPLE	12/16/86	5499.41	5502.10	5499.15	5499.30	-
36	REMOVED DIKES	1/27/87	5499.29	5501.85	5498.98	5499.09	5498.59 5498.60
37	IRRIGATION	4/2/87	5499.59	5502.12	5498.92	5499.33	5498.55 5498.55
38	4/13/87	4/23/87	5499.55	5502.03	5498.29	5499.07	5497.55 5497.92
39		5/27/87	5499.62	5501.95	5498.73	5499.04	5498.09 5498.61
40							

BLOOMFIELD, CO., COMPANY  
EQUITY ELEVEN

		MW-1	MW-2	MW-3	MW-4	MW-5	MW-6		
DATE T.O.P.	→	5515.77	5513.45	5535.85	5524.37	5545.10	5551.23		
2/24/84		5498.91	5500.44	5501.74	5499.46	5502.26	DRY		
2/23/85		5499.07	5500.55	5502.15	5499.30	5502.75	DRY		
3/13/85		5499.14	5500.82	5502.55	5499.32	5503.50			
WATER ON	4/11/85	5498.99	5500.62	5502.73	5499.30	5503.67			
	5/31/85	5499.67	5500.97	5502.74	5499.80	5503.64			
	6/14/85	5499.80	5500.99	5502.63	5499.80	5503.40			
	6/26/85	5499.94	5500.98	5502.49	5499.73	5503.24			
	7/12/85	5500.20	5500.99	5502.43	5499.30	5503.32			
	8/2/85	5501.00	5501.25	5502.43	5499.73	5503.67			
	9/17/85	5500.34	5501.05	5502.25	5499.50	5503.07			
WATER OFF	10/3/85	5500.03	5500.87	5502.42	5499.70	5503.32			
	10/24/85	5499.23	5500.43	5502.38	5499.54	5503.10			
	11/3/85	5498.72	5500.05	5502.20	5499.60	5503.9			
	12/17/85	5498.35	5499.85	5501.85	5499.40	5502.30			
SAMPLE	1/8/86	5498.59	5500.08	5501.35	5499.35	5502.77	DRY		
	1/24/86	5493.75	5500.22	5502.04	5497.32	5502.76	"		
	2/20/86	5498.93	5500.62	5502.43	5499.35	5503.30	"		
	3/21/86	5499.10	5500.65	5502.39	5499.31	5504.23	"		
SAMPLE	3/26/86	5499.07	5500.65	5502.91	5499.31	5504.24	"		
DIKE REMOVED	4/4/86	5499.07	5500.57	5502.98	5499.21	5504.57	"		
	4/5	4/18/86	5498.85	5500.43	5502.98	5499.42	5504.42	"	
WATER ON	4/4	5/5/86	5499.43	5500.57	5502.92	5499.32	5504.27	"	
	5/21/86	5500.05	5500.92	5502.85	5499.40	5504.35	"		
	6/4/86	5500.41	5500.93	5502.95	5499.40	5504.17	"		
SAMPLE	6/23/86	5501.21	5501.18	5503.05	5499.45	5504.13	"		
	7/8/86	5501.34	5501.27	5502.96	5499.44	5503.87	"		
	8/4/86	5500.25	5501.13	5502.92	5499.67	5503.77	"		
	9/2/86	5500.23	5501.32	5502.94	5499.73	5503.58	"		
SAMPLE	9/18/86	5500.03	5501.22	5502.77	5499.98	5503.52	"		
WATER OFF	10/8/86	5499.93	5501.07	5502.68	5500.13	5503.46	"		
	10/15	11/7/86	5499.45	5500.82	5502.72	5500.19	5503.43	"	
DIKE	12/8/86	5499.45	5501.01	5502.78	5500.28	5503.43	"		
SAMPLE	12/16/86	5499.45	5501.05	5502.80	5500.28	5503.41	"		
	1/27/87	5499.44	5500.92	5502.60	5500.22	5503.10 DRY AT 5501.63			
REMOVE DIKES	4/2/87	5499.76	5501.20	5502.86	5500.37	5503.77	"		
	4/3/87	4/23/87	5499.33	5500.71	5502.94	5500.32	5504.01	"	
IRRIGATION	4/13/87	5/27/87	5499.71	5500.83	5502.94	5500.22	5503.95	"	

BLOOMFIELD REFINING COMPANY  
GROUNDWATER ELEVATIONS

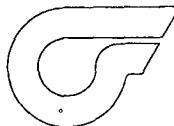
20

DATE	MW-1 T.O.P. → 5515.77	MW-2 5519.45	MW-3 5535.85	MW-4 5524.30	MW-5 5545.10	MW-6 5551.23	MW-7 5524.09
1/27/87	5499.44	5500.92	5502.60	5500.22	5503.10	DRY	5499.29
						AT 5501.63	
4/2/87	5499.76	5501.20	5502.86	5500.37	5503.77	"	5499.59
-	DIKES REMOVED 4/3/87	IRRIGATION STARTED	4/13/87				
4/23/87	5499.33	5500.71	5502.94	5500.32	5504.01	DRY	5499.55
5/27/87	5499.71	5500.83	5502.94	5500.22	5503.95	"	5499.62
10/8/87	5499.63	5500.82	5502.63	5500.03	5503.54	"	5499.20
11/17/87	5498.46			5499.94	5503.17	-	-
6/3/88	5499.85		5502.52	5499.74	5503.03	"	5499.34
11/18/88	5498.27			5499.95	5502.90		
21							
22							
23							
24							
25							
26							
27							
28							
29							
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31							
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40							

BLOOMFIELD REFINING COMPANY  
GROUNDWATER ELEVATIONS

29

1	2	3	4	5	6	7	8
MW-8	MW-9	RW-3	MW-10	MW-11	MW-12	HAMMOND AT SULLIVAN NEAR MW-9	HAMMOND DATE
5531.12	5519.70		5516.86	5506.83	5498.36	5504.82	5522.95 ← T.O.P.
5501.85	5498.98	5499.09	-	-	5498.59	5498.60	1/27/87
5502.12	5498.92	5499.33	-	-	5498.55	5498.55	4/2/87
Dikes removed 4/3/87, Irrigation started 4/13/87							
5502.03	5498.29	5499.07	-	-	5497.55	5497.92	4/23/87
5501.95	5498.73	5499.04	-	-	5498.09	5498.61	5/27/87
INSTALLED 8/1/87 +							
5501.65	5499.16	5498.66	5497.10	5489.03	5497.75	5499.13	10/19/87
-	-	5498.46	5496.95	5488.94	5497.45	-	10/27/87
-	-	-	5497.43	5490.57	-	-	11/17/87
-	-	-	-	-	-	-	6/3/88
20	21	22	23	24	25	26	27
28	29	30	31	32	33	34	35
36	37	38	39	40			



Bloomfield Refining  
Company

A Gary Energy Corporation Subsidiary

January 22, 1987

Mr. David G. Boyer  
State of New Mexico  
Oil Conservation Division  
P. O. Box 2088  
Land Office Building  
Santa Fe, New Mexico 87501

RE: Discharge Plan GRW-1-A, Bloomfield Refining Company

Dear Mr. Boyer:

Analytical results applicable to the discharge plan for the wells P1, P4, and P5 that were obtained from samples taken on December 16, 1986 are enclosed.

Please feel free to contact me if there are any questions.

Sincerely,

Chris Hawley  
Environmental Engineer

CH/jm

Enclosure

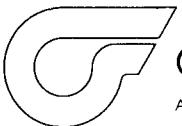
cc: Richard Traylor  
Mike Macy  
Joe Warr

BLOOMFIELD REFINING COMPANY  
SAMPLE DATE: DEC. 15, 1986

PARAMETER	UNITS	NOMINAL	NMWQ	MONITORING		MONITORING
		DETECTION LIMITS		STANDARD	WELL P1	WELL P4
Arsenic	mg/l	0.05	0.1	<0.05	<0.05	<0.05
Barium	"	0.005	1.0	0.055	2.3	0.010
Cadmium	"	0.01	0.01	<0.01	<0.01	0.01
Chromium	"	0.05	0.05	<0.05	<0.05	<0.05
Lead	"	0.05	0.05	<0.05	<0.05	<0.05
Mercury	"	0.002	0.002	<0.002	<0.002	<0.002
Selenium	"	0.002	0.05	0.03	0.03	0.03
Silver	"	0.05	0.05	<0.05	<0.05	<0.05
Copper	"	0.03	1.0	<0.03	<0.03	<0.03
Iron	"	0.3	1.0	<0.3	18.6	<0.3
Manganese	"	0.005	0.2	1.11	5.70	<0.005
Zinc	"	0.001	10.0	0.012	0.040	0.016
Uranium	"	-	5.0	-	-	-
Chloride	"	1	250.	774.	675.	1118.
Sulfate	"	1	600.	579.	<0.01	1132.
PCB	"	-	0.001	-	-	-
Phenols	"	0.001	0.005	0.012	0.096	0.021
Cyanide	"	0.01	0.2	<0.01	<0.01	<0.01
Nitrate as N	"	0.1	10.	2.9	<0.01	36.
Aluminum	"	0.05	5.	4.54	3.8	4.34
Boron	"	0.004	0.75	0.27	0.7	0.24
Cobalt	"	0.05	0.05	<0.05	<0.05	<0.05
Molybdenum	"	0.01	1.0	0.17	<0.01	0.08
Nickel	"	0.06	0.2	0.06	<0.06	0.07
Fluoride	"	0.01	1.6	0.960	0.410	0.580
TDS	"	1	1000.	2498.	2128.	3788.
Benzene	#	0.001	0.01	<0.001	1.91	<0.001
Toluene	#	0.001	0.75	<0.001	1.78	<0.001
Carbon Tetrachloride	ppm	0.001	0.01	<0.001	<0.001	<0.001
1,2-Dichloroethane	"	0.001	0.01	0.002	<0.001	<0.001
1,1-Dichloroethylene	"	0.001	0.005	<0.001	<0.001	<0.001
1,1,2-Tetrachloroethylene	"	0.001	0.02	<0.001	<0.001	<0.001
1,1,2-Trichloroethylene	"	0.001	0.01	<0.001	<0.001	<0.001
pH	S. U.	0.01	6 TO 9	7.19	6.73	7.23

BLOOMFIELD REFINING COMPANY  
GROUP 1 WATER ELEVATIONS

		MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
DATE	T.O.P.	5515.77	5519.45	5535.85	5524.32	5545.10	5551.23
1	2/24/84	5498.91	5500.44	5501.74	5499.46	5502.26	DRY
2	2/28/85	5499.07	5500.55	5502.15	5499.30	5502.75	DRY
3	3/13/85	5499.14	5500.82	5502.55	5499.32	5503.50	
4	WATER ON	4/11/85	5498.99	5500.62	5502.73	5499.30	5503.67
5	5/31/85	5499.67	5500.37	5502.74	5499.30	5503.64	
6	6/14/85	5499.80	5500.99	5502.63	5499.30	5503.40	
7	6/26/85	5499.94	5500.98	5502.49	5499.73	5503.24	
8	7/12/85	5500.20	5500.99	5502.48	5499.30	5503.30	
9	9/2/85	5501.00	5501.25	5502.48	5499.73	5503.37	
10	3/17/85	5500.34	5501.05	5502.25	5499.80	5503.00	
11	10/9/85	5500.03	5500.87	5502.42	5499.70	5503.30	
12	WATER OFF	10/24/85	5499.23	5500.43	5502.28	5499.54	5503.10
13	11/8/85	5498.72	5500.05	5502.20	5499.60	5503.09	
14	12/17/85	5498.35	5499.85	5501.85	5499.40	5502.30	
15							
16							
17	1/8/86	5498.59	5500.08	5501.25	5499.35	5502.77	DRY
18	1/24/86	5498.75	5500.22	5502.04	5499.36	5502.76	"
19	2/20/86	5498.93	5500.62	5502.43	5499.35	5503.30	"
20	3/21/86	5499.10	5500.65	5502.89	5499.30	5504.23	"
21	SAMPLE	3/26/86	5499.07	5500.65	5502.91	5499.31	5504.24
22	DIKE REMOVED	4/4/86	5499.07	5500.57	5502.98	5499.21	5504.57
23	4/15	4/18/86	5498.85	5500.43	5502.98	5499.42	5504.42
24	WATER ON	4/4	5/5/86	5499.43	5500.57	5502.92	5499.32
25		5/21/86	5500.05	5500.82	5502.85	5499.40	5504.35
26		6/4/86	5500.41	5500.93	5502.95	5499.40	5504.17
27	SAMPLE	6/23/86	5501.21	5501.18	5503.05	5499.45	5504.13
28		7/8/86	5501.34	5501.27	5502.96	5499.44	5503.87
29		8/4/86	5500.25	5501.13	5502.92	5499.67	5503.77
30		9/2/86	5500.23	5501.32	5502.94	5499.73	5503.58
31	SAMPLE	9/18/86	5500.03	5501.22	5502.77	5499.98	5503.52
32	WATER OFF	10/8/86	5499.33	5501.07	5502.68	5500.13	5503.46
33	10/15	11/7/86	5499.45	5500.82	5502.72	5500.19	5503.48
34		12/8/86	5499.45	5501.01	5502.78	5500.28	5503.43
35	SAMPLE	12/16/86	5499.45	5501.05	5502.80	5500.28	5503.41
36							
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Bloomfield Refining  
Company

A Gary Energy Corporation Subsidiary

DISCHARGE PLAN  
GRW-1-A  
OCTOBER 1986

December 8, 1986

Mr. David G. Boyer  
State of New Mexico  
Oil Conservation Division  
P. O. Box 2088  
Land Office Building  
Santa Fe, New Mexico 87501

RE: Discharge Plan GRW-1-A, Bloomfield Refining Company

Dear Mr. Boyer:

Analytical results applicable to the discharge plan for the wells P1, P4 and P5 that were obtained from samples taken on September 18, 1986 are enclosed.

Please feel free to contact me if there are any questions.

Sincerely,

Chris Hawley  
Environmental Engineer

CH/jm

Enclosures

Cc: Richard Traylor  
Mike Macy  
Dave Younggren  
George Gerson

## BLOOMFIELD REFINING COMPANY

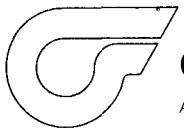
SAMPLE DATE: SEP. 18, 1980

PARAMETER	UNITS	NOMINAL	MONITORING WELL	MONITORING WELL	MONITORING WELL	
		DETECTION LIMITS				
Arsenic	mg/l	0.002	0.1	0.05	0.08	0.07
Barium	"	-	1.0	-	-	-
Cadmium	"	0.01	0.01	<0.01	<0.01	<0.01
Chromium	"	0.05	0.05	<0.05	<0.05	<0.05
Lead	"	0.05	0.05	0.15	<0.05	<0.05
Mercury	"	0.002	0.002	<0.002	<0.002	<0.002
Selenium	"	0.01	0.05	0.033	0.063	0.030
Silver	"	0.05	0.05	<0.05	<0.05	<0.05
Copper	"	0.03	1.0	<0.03	<0.03	<0.03
Iron	"	-	1.0	-	-	-
Manganese	"	-	0.2	-	-	-
Zinc	"	0.008	10.0	0.04	<0.008	0.02
Uranium	"	-	5.0	-	-	-
Chloride	"	1	250.	814	754	1151.
Sulfate	"	0.01	600.	673	<0.01	1237.
PCB	"	-	0.001	-	-	-
Phenols	"	0.001	0.005	0.19	0.085	0.034
Cyanide	"	0.01	0.2	0.07	<0.01	0.24
Nitrate as N	"	-	10.	-	-	-
Aluminum	"	-	5.	-	-	-
Boron	"	-	0.75	-	-	-
Cobalt	"	-	0.05	-	-	-
Molybdenum	"	-	1.0	-	-	-
Nickel	"	0.01	0.2	0.07	0.12	0.09
Fluoride	"	-	1.6	-	-	-
TDS	"	1	1000.	2866.	2308.	3184.
Benzene	"	0.001	0.01	ND	6.65	ND
Toluene	"	0.001	0.75	ND	0.407	ND
Carbon Tetrachloride	"	0.001	0.01	-	ND	-
1,2-Dichloroethane	"	0.001	0.01	-	ND	-
1,1-Dichloroethylene	"	0.001	0.005	-	ND	-
1,1,2-Tetrachloroethylene	"	0.001	0.02	-	ND	-
1,1,2-Trichloroethylene	"	0.001	0.01	-	ND	-
pH	S.U.	0.01	6 TO 9	7.27	6.70	7.19

BLOOMFIELD REFINING COMPANY  
GROUNDWATER ELEVATIONS

COLUMN - WRITE ©

		1	2	3	4	5	6
		MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
DATE		5515.77	5519.45	5535.85	5524.30	5545.10	5551.23
1	2/24/84	5498.91	5500.44	5501.74	5499.46	5502.26	DRY
2							
3	2/28/85	5499.07	5500.55	5502.15	5499.30	5502.75	DRY
4	3/13/85	5499.14	5500.82	5502.55	5499.32	5503.50	
5	WATER ON	4/11/85	5498.99	5500.62	5502.73	5499.30	5503.67
6		5/31/85	5499.67	5500.97	5502.74	5499.80	5503.64
7		6/14/85	5499.80	5500.99	5502.63	5499.80	5503.40
8		6/26/85	5499.94	5500.98	5502.49	5499.73	5503.24
9		7/10/85	5500.20	5500.99	5502.48	5499.80	5503.30
10		9/2/85	5501.00	5501.25	5502.48	5499.78	5503.37
11		9/17/85	5500.34	5501.05	5502.25	5499.80	5503.00
12	WATER OFF	10/9/85	5500.08	5500.87	5502.42	5499.70	5503.30
13		10/24/85	5499.23	5500.43	5502.28	5499.54	5503.10
14		11/8/85	5498.72	5500.05	5502.20	5499.60	5503.09
15		12/17/85	5498.35	5499.85	5501.85	5499.40	5502.90
16							
17		1/8/86	5498.59	5500.08	5501.85	5499.35	5502.77
18		1/24/86	5498.75	5500.22	5502.04	5499.36	5502.76
19		2/20/86	5498.93	5500.62	5502.43	5499.35	5503.30
20		3/21/86	5499.10	5500.65	5502.89	5499.30	5504.23
21	SAMPLE	3/26/86	5499.07	5500.65	5502.91	5499.31	5504.24
22	DIKE REMOVED	4/4/86	5499.07	5500.57	5502.98	5499.21	5504.57
23		4/15/86	5498.85	5500.43	5502.98	5499.42	5504.42
24	WATER ON	4/21/86	5499.43	5500.57	5502.92	5499.32	5504.27
25		5/5/86	5500.05	5500.82	5502.85	5499.40	5504.35
26		5/21/86	5500.41	5500.93	5502.95	5499.40	5504.17
27	SAMPLE	6/23/86	5501.21	5501.18	5503.05	5499.45	5504.13
28		7/8/86	5501.34	5501.27	5502.96	5499.44	5503.87
29		8/4/86	5500.25	5501.13	5502.92	5499.67	5503.77
30		9/2/86	5500.23	5501.32	5502.94	5499.78	5503.58
31	SAMPLE	9/18/86	5500.03	5501.22	5502.77	5499.98	5503.52
32	WATER OFF	10/8/86	5499.33	5501.07	5502.68	5500.13	5503.46
33		10/15/86	5499.45	5500.82	5502.72	5500.19	5503.48
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Bloomfield Refining  
Company

A Gary Energy Corporation Subsidiary

July 25, 1986

Mr. David G. Boyer  
State of New Mexico  
Oil Conservation Division  
P. O. Box 2088  
Land Office Building  
Santa Fe, New Mexico 87501

RE: Discharge Plan GRW-1-A, Bloomfield Refining Company

Dear Mr. Boyer:

Analytical results applicable to the discharge plan for the wells P1, P4, and P5 that were obtained from samples taken on June 23 and 24, 1986, are enclosed.

Please feel free to contact me if there are any questions.

Sincerely,

Chris Hawley  
Environmental Engineer

CH/jm

Enclosures

Cc: Richard Traylor  
Mike Macy  
Dave Younggren  
George Gerson

Bloomfield Refining Company  
Sample Date: June 23-24, 1986 ; Laboratory: Assaigai

COLUMN - WRITE ®

Parameter	Units	Nominal	NMWQ	Well Standard	Monitoring	Monitoring	Monitoring
		Detection Limits			P1	Well P4	Well P5
Arsenic	mg/L	0.05	0.1	0.077	0.070	0.087	
Barium	"	0.01	1.0	BDL	3.54	BDL	
Cadmium	"	0.010	0.01	BDL	BDL	BDL	
Chromium	"	0.050	0.05	BDL	BDL	BDL	
Lead	"	0.050	0.05	0.065	0.066	0.055	
Mercury	"	0.002	0.002	BDL	BDL	BDL	
Selenium	"	0.010	0.05	0.035	0.080	0.071	
Silver	"	0.050	0.05	BDL	BDL	BDL	
Copper	"	0.03	1.0	BDL	BDL	BDL	
Iron	"	0.04	1.0	BDL	12.0	0.05	
Manganese	"	0.005	0.2	0.25	3.5	0.025	
Zinc	"	0.01	10.0	0.020	0.019	0.02	
Uranium	"	-	5.0	-	-	-	
Chloride	"	1.0	250.	994.7	989.7	1339.6	
Sulfate	"	1.0	600.	630.	12.5	1800-	
PCB	"	0.001	0.001	-	-	-	
Phenols	"	0.002	0.005	0.017	0.430	0.007	
Cyanide	"	0.01	0.2	0.1	0.5	0.2	
Nitrate as N	"	0.01	10.0	0.1	BDL	12.5	
Aluminum	"	0.05	5.0	2.07	1.93	2.75	
Boron	"	0.01	0.75	BDL	BDL	BDL	
Cobalt	"	0.05	0.05	BDL	BDL	BDL	
Molybdenum	"	0.01	1.0	BDL	BDL	BDL	
Nickel	"	0.06	0.2	BDL	BDL	BDL	
Fluoride	"	0.1	1.6	0.54	0.21	0.30	
TDS	"	1	1000.	2960.	2266.	3778.	
Benzene	"	0.001	0.01	ND	3.1	ND	
Toluene	"	0.001	0.75	ND	0.290	ND	
Carbon Tetrachloride	"	0.001	0.01	-	ND	-	
1,2-Dichloroethane	"	0.001	0.01	ND	ND	ND	
1,1-Dichloroethylene	"	0.001	0.005	ND	ND	ND	
1,1,2,2-Tetrachloroethylene	"	0.001	0.02	ND	ND	ND	
1,1,2-Trichloroethylene	"	0.001	0.01	ND	ND	ND	
pH	3. u.	0.01	6 to 9	7.25	6.85	7.18	

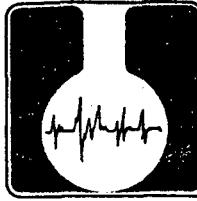
BDL = Below Detection Limit

ND = Not detected

BLOOMFIELD REFINING COMPANY  
GROUNDWATER ELEVATIONS

COLUMN - WRITE ®

		1	2	3	4	5	6
		MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
	DATE	5515.77	5519.45	5535.85	5524.30	5545.10	5551.23
1	2/24/84	5498.91	5500.44	5501.74	5499.46	5502.26	DRY
2							
3	2/28/85	5499.07	5500.55	5502.15	5499.30	5502.75	DRY
4	3/13/85	5499.14	5500.82	5502.55	5499.32	5503.50	
5	WATER ON 4/11/85	5498.99	5500.62	5502.73	5499.30	5503.67	
6	5/31/85	5499.67	5500.97	5502.74	5499.80	5503.64	
7	6/14/85	5499.80	5500.99	5502.63	5499.80	5503.40	
8	6/26/85	5499.94	5500.98	5502.49	5499.73	5503.24	
9	7/10/85	5500.20	5500.99	5502.48	5499.80	5503.30	
10	8/2/85	5501.00	5501.25	5502.48	5499.78	5503.37	
11	9/17/85	5500.34	5501.05	5502.25	5499.80	5503.00	
12	WATER OFF 10/9/85	5500.08	5500.87	5502.42	5499.70	5503.30	
13	10/24/85	5499.23	5500.43	5502.28	5499.54	5503.10	
14	11/8/85	5498.72	5500.05	5502.20	5499.60	5503.09	
15	12/17/85	5498.35	5499.85	5501.89	5499.40	5502.90	▼
16							
17	1/8/86	5498.59	5500.08	5501.85	5499.35	5502.77	DRY
18	1/24/86	5498.75	5500.22	5502.04	5499.36	5502.76	"
19	2/20/86	5498.93	5500.62	5502.43	5499.35	5503.30	"
20	3/21/86	5499.10	5500.65	5502.89	5499.30	5504.23	"
21	3/26/86	5499.07	5500.65	5502.91	5499.31	5504.24	"
22	DIKE REMOVED 4/14/86	5499.07	5500.57	5502.98	5499.21	5504.57	"
23	4/15 WATER ON 4/18/86	5498.85	5500.43	5502.98	5499.42	5504.42	"
24	4/24 5/5/86	5499.43	5500.57	5502.92	5499.32	5504.27	"
25	5/21/86	5500.05	5500.82	5502.85	5499.40	5504.35	"
26	6/4/86	5500.41	5500.93	5502.95	5499.40	5504.17	"
27	SAMPLE 6/23/86	5501.21	5501.18	5503.05	5499.45	5504.13	
28	7/8/86	5501.34	5501.27	5502.96	5499.44	5503.87	
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ASSAIGAI  
ANALYTICAL  
LABORATORIES

TO: Bloomfield Refinery  
Attn: Chris Hawley  
PO Box 159  
Bloomfield, NM 87413

DATE: 23 July 1986  
1030

SAMPLE ID: MW - 1

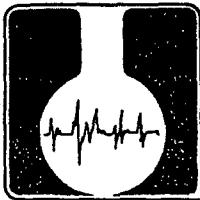
ANALYTE

ANALYTICAL RESULTS

CN	0.1 mg/l
TDS	2960 mg/l
Cl	994.7 mg/l
SO 4	630 mg/l
Phenols	0.017 mg/l
TOC	24 mg/l
Sb	<0.01 mg/l
As	0.077 mg/l
Be	<0.01 mg/l
Cd	<0.010 mg/l
Cr	<0.050 mg/l
	<0.050 mg/l duplicate
Cu	<0.03 mg/l
Pb	0.065 mg/l
Hg	<0.002 mg/l
Ni	<0.06 mg/l
Se	0.035 mg/l
Ag	<0.050 mg/l
Tl	<0.01 mg/l
Zn	0.020 mg/l
Benzene	ND
Toluene	ND
Xylenes	ND
Ethylbenzene	ND
Ba	<0.01 mg/l
Fe	<0.04 mg/l
Mn	0.25 mg/l
Al	2.07 mg/l
B	<0.01 mg/l
Co	<0.05 mg/l
Mo	<0.01 mg/l
F	0.54 mg/l
No 3 as N	0.1 mg/l
1,2-DCE	ND
1,1-DCE	ND
1,1,2,2-TCE	ND
1,1,2-TCE	ND

Field by C.H. 6/23/86

pH 7.25  
Conductivity 4600



# ASSAIGAI ANALYTICAL LABORATORIES

TO: Bloomfield Refinery  
Attn: Chris Hawley  
PO Box 159  
Bloomfield, NM 87413

DATE: 23 July 1986  
1030

SAMPLE ID: MW - 2

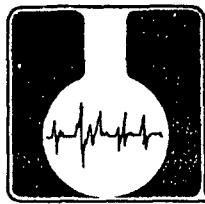
## ANALYTE

## ANALYTICAL RESULTS

CN	0.1 mg/l
TDS	3650 mg/l
Cl	1204.6 mg/l
SO <sub>4</sub>	1750 mg/l
Phenols	0.023 mg/l
TOC	27 mg/l
Sb	<0.01 mg/l
As	0.094 mg/l
Be	<0.01 mg/l
Cd	<0.010 mg/l
Cr	<0.050 mg/l
Cu	<0.03 mg/l
Pb	<0.05 mg/l
Hg	<0.002 mg/l
Ni	<0.06 mg/l
Se	0.070 mg/l
Ag	<0.050 mg/l
Tl	<0.01 mg/l
Zn	0.020 mg/l
Benzene	ND
Toluene	ND
Xylenes	ND
Ethylbenzene	ND

Field by cut 6/23/86

pH 7.17  
Conductivity 5400



# ASSAIGAI ANALYTICAL LABORATORIES

TO: Bloomfield Refinery  
Attn: Chris Hawley  
PO Box 159  
Bloomfield, NM 87413

DATE: 23 July 1986  
1030

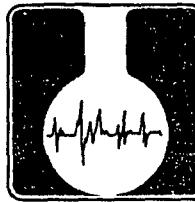
SAMPLE ID: MW - 3

ANALYTE	ANALYTICAL RESULTS
CN	0.25 mg/l
TDS	5362 mg/l
C1	1584 mg/l
SO 4	1950 mg/l
Phenols	0.006 mg/l
TOC	17 mg/l
Sb	<0.01 mg/l
As	0.15 mg/l
Be	<0.01 mg/l
Cd	0.015 mg/l
Cr	<0.050 mg/l
Cu	<0.03 mg/l
Pb	0.070 mg/l
Hg	<0.002 mg/l
Ni	0.08 mg/l
Se	0.10 mg/l
Ag	<0.050 mg/l
Tl	<0.01 mg/l
Zn	0.018 mg/l
Benzene	ND
Toluene	0.003 mg/l
Xylenes	0.030 mg/l
Ethylbenzene	ND

Field by C.H. 6/23/86

pH 7.10

Conductivity 6900



# ASSAIGAI ANALYTICAL LABORATORIES

TO: Bloomfield Refinery  
Attn: Chris Hawley  
PO Box 159  
Bloomfield, NM 87413

DATE: 23 July 1986  
1030

SAMPLE ID: MW - 4

## ANALYTE

## ANALYTICAL RESULTS

CN	0.5	mg/l
TDS	2266	mg/l
Cl	989.7	mg/l
SO <sub>4</sub>	12.5	mg/l
Phenols	0.430	mg/l
TOC	130	mg/l
Sb	<0.10	mg/l
As	0.070	mg/l
Be	<0.1	mg/l
Cd	<0.010	mg/l
Cr	<0.050	mg/l
Cu	<0.03	mg/l
Pb	0.066	mg/l
Hg	<0.002	mg/l
Ni	<0.06	mg/l
Se	0.080	mg/l
Ag	<0.050	mg/l
Tl	<0.1	mg/l
Zn	0.019	mg/l
<b>Volatiles</b>		
Acrolein	ND	
Acrylonitrile	ND	
Benzene	3.1	mg/l
Bromoform	ND	
Carbon Tetrachloride	ND	
Chlorobenzene	ND	
Chlorodibromomethane	ND	
Chloroethane	ND	
2-Chloroethylvinyl ether	ND	
Chloroform	ND	
Dichlorobromomethane	ND	
1,1-Dichloroethane	ND	
1,2-Dichloroethane	ND	
1,1-Dichloroethylene	ND	
1,2-Dichloropropane	ND	
1,2-Dichloropropylene	ND	
Ethylbenzene	0.070	mg/l

Field by C.H. 6/24/86

pH 6.85

Conductivity 3800

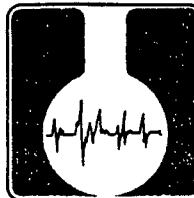
SAMPLE ID: MW - 4

ANALYTE	ANALYTICAL RESULTS
Methyl Bromide	ND
Methyl Chloride	ND
Methylene Chloride	ND
1,1,2,2-Tetrachloroethane	ND
Tetrachloroethylene	ND
Toluene	0.290 mg/l
1,2-Transdichloroethylene	ND
1,1,1-Trichloroethane	ND
1,1,2-Trichloroethane	ND
Trichloroethylene	ND
Vinyl Chloride	ND
Acid Compounds	
2-Chlorophenol	ND
2,4-Dichlorophenol	ND
2,4-Dimethylphenol	0.058 mg/l
4,6-Dinitro-o-cresol	ND
2,4-Dinitrophenol	ND
2-Nitrophenol	0.108 mg/l
4-Nitrophenol	0.302 mg/l
P-chloro-m-cresol	ND
pentachlorophenol	ND
Phenol	ND
2,4,6-Trichlorophenol	ND
Base Neutrals	
Acenaphthene	ND
Acenaphthylene	ND
Anthracene	ND
Benzidine	ND
Benzo(a)anthracene	0.016 mg/l
Benzo(a)pyrene	ND
3,4-Benzofluoranthene	ND
Benzo(g,h,i)perylene	ND
Benzo(k)fluoranthene	ND
Bis(2-chloroethoxy)methane	ND
Bis(2-chloroethyl)ether	ND
Bis(2-chloroisopropyl)ether	ND
Bis(2-ethylhexyl)phthalate	ND
4-Bromophenyl phenyl ether	ND
Butylbenzyl phthalate	ND
2-Chloronaphthalene	ND
4-Chlorophenyl phenyl ether	ND
Chrysene	0.023 mg/l

SAMPLE ID: MW - 4

ANALYTE	ANALYTICAL RESULTS
Dibenzo(a,h)anthracene	ND
1,2-Dichlorobenzene	ND
1,3-Dichlorobenzene	ND
1,4-Dichlorobenzene	ND
3,3-Dichlorobenzidine	ND
Diethyl phthalate	ND
Dimethyl phthalate	ND
Din-n-butyl phthalate	ND
2,4-Dinitrotoluene	ND
2,6-Dinitrotoluene	ND
Di-n-octyl phthalate	ND
1,2-Diphenylhydrazine	ND
Fluoranthene	ND
Fluorene	ND
Hexachlorobenzene	ND
Hexachlorobutadiene	ND
Hexachlorocyclopentadiene	ND
Hexachloroethane	ND
Indeno(1,2,3-cd)pyrene	ND
Isophorone	ND
Naphthalene	0.019 mg/l
Nitrobenzene	ND
N-nitrosodimethylamine	ND
N-nitrosodie-n-propylamine	ND
N-nitrosodiphenylamine	ND
Phenanthrene	ND
Pyrene	ND
1,2,4-Trichlorobenzene	ND
Ba	3.54 mg/l
Fe	12.0 mg/l
Mn	3.5 mg/l
Al	1.93 mg/l
B	<0.01 mg/l
Co	<0.05 mg/l
Mo	<0.01 mg/l
F	0.21 mg/l
NO <sub>3</sub> as N	<0.01 mg/l

ND = None Detected



ASSAIGAI  
ANALYTICAL  
LABORATORIES

TO: Bloomfield Refinery  
Attn: Chris Hawley  
PO Box 159  
Bloomfield, NM 87413

DATE: 23 July 1986  
1030

SAMPLE ID: MW - 5

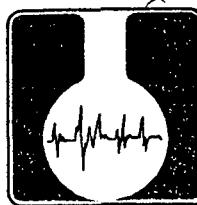
ANALYTE

ANALYTICAL RESULTS

CN	0.2 mg/l
TDS	3778 mg/l
Cl	1339.6 mg/l
SO 4	1800 mg/l
Phenols	0.007 mg/l
TOC	21 mg/l
Sb	<0.01 mg/l
As	0.087 mg/l
Be	<0.01 mg/l
Cd	<0.010 mg/l
Cr	<0.050 mg/l
Cu	<0.03 mg/l
Pb	0.055 mg/l
Hg	<0.002 mg/l
Ni	<0.06 mg/l
Se	0.071 mg/l
Ag	<0.050 mg/l
Tl	<0.01 mg/l
Zn	0.02 mg/l
Benzene	ND
Toluene	ND
Xylenes	ND
Ethylbenzene	ND
Ba	<0.01 mg/l
Fe	0.05 mg/l
Mn	0.025 mg/l
Al	2.75 mg/l
B	<0.01 mg/l
Co	<0.05 mg/l
Mo	<0.01 mg/l
F	0.30 mg/l
No 3 as N	12.5 mg/l
1,2-DCE	ND
1,1-DCE	ND
1,1,2,2-TCE	ND
1,1,2-TCE	ND

*Field by C4 6/23/86*

*pH 7.18*  
*Conductivity 5400*



ASSAIGAI  
ANALYTICAL  
LABORATORIES

TO: Bloomfield Refinery  
Attn: Chris Hawley  
PO Box 159  
Bloomfield, NM 87413

DATE: 23 July 1986  
1030

SAMPLE ID: MW - 7

ANALYTE	ANALYTICAL RESULTS
CN	0.25 mg/l
TDS	6406 mg/l
Cl	79.9 mg/l
SO 4	2400 mg/l
Phenols	0.006 mg/l
TOC	4 mg/l
Sb	<0.01 mg/l
As	0.36 mg/l
Be	<0.01 mg/l
Cd	0.030 mg/l
Cr	0.052 mg/l
Cu	<0.03 mg/l
Pb	0.24 mg/l
Hg	<0.002 mg/l
Ni	0.07 mg/l
Se	0.65 mg/l
Ag	0.060 mg/l
Tl	<0.01 mg/l
Zn	0.016 mg/l
Volatiles	
Acrolein	ND
Acrylonitrile	ND
Benzene	ND
Bromoform	ND
Carbon Tetrachloride	ND
Chlorobenzene	ND
Chlorodibromomethane	ND
Chloroethane	ND
2-Chloroethylvinyl ether	ND
Chloroform	ND
Dichlorobromomethane	ND
1,1-Dichloroethane	ND
1,2-Dichloroethane	ND
1,1-Dichloroethylene	ND
1,2-Dichloropropane	ND
1,2-Dichloropropylene	ND
Ethylbenzene	ND

Field by CLA 6/25/86

pH 11.08

Conductivity 3100

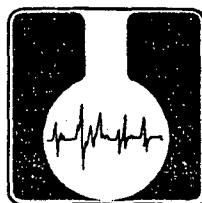
SAMPLE ID: MW - 7

ANALYTE	ANALYTICAL RESULTS
Methyl Bromide	ND
Methyl Chloride	ND
Methylene Chloride	ND
1,1,2,2-Tetrachloroethane	ND
Tetrachloroethylene	ND
Toluene	ND
1,2-Transdichloroethylene	ND
1,1,1-Trichloroethane	ND
1,1,2-Trichloroethane	ND
Trichloroethylene	ND
Vinyl Chloride	ND
Acid Compounds	
2-Chlorophenol	ND
2,4-Dichlorophenol	ND
2,4-Dimethylphenol	ND
4,6-Dinitro-o-cresol	ND
2,4-Dinitrophenol	ND
2-Nitrophenol	ND
4-Nitrophenol	ND
P-chloro-m-cresol	ND
pentachlorophenol	ND
Phenol	ND
2,4,6-Trichlorophenol	ND
Base Neutrals	
Acenaphthene	ND
Acenaphthylene	ND
Anthracene	ND
Benzidine	ND
Benzo(a)anthracene	0.001 mg/l
Benzo(a)pyrene	ND
3,4-Benzofluoranthene	ND
Benzo(g,h,i)perylene	ND
Benzo(k)fluoranthene	ND
Bis(2-chloroethoxy)methane	ND
Bis(2-chlororoethyl)ether	ND
Bis(2-chloroisopropyl)ether	ND
Bis(2-ethylhexyl)phthalate	ND
4-Bromophenyl phenyl ether	ND
Butylbenzyl phthalate	ND
2-Chloronaphthalene	ND
4-Chlorophenyl phenyl ether	ND
Chrysene	0.002 mg/l

SAMPLE ID: MW - 7

ANALYTE	ANALYTICAL RESULTS
Dibenzo(a,h)anthracene	ND
1,2-Dichlorobenzene	ND
1,3-Dichlorobenzene	ND
1,4-Dichlorobenzene	ND
3,3-Dichlorobenzidine	ND
Diethyl phthalate	ND
Dimethyl phthalate	ND
Di-n-butyl phthalate	ND
2,4-Dinitrotoluene	ND
2,6-Dinitrotoluene	ND
Di-n-octyl phthalate	ND
1,2-Diphenylhydrazine	ND
Fluoranthene	ND
Fluorene	ND
Hexachlorobenzene	ND
Hexachlorobutadiene	ND
Hexachlorocyclopentadiene	ND
Hexachloroethane	ND
Indeno(1,2,3-cd)pyrene	ND
Isophorone	ND
Naphthalene	ND
Nitrobenzene	ND
N-nitrosodimethylamine	ND
N-nitrosodi-n-propylamine	ND
N-nitrosodiphenylamine	ND
Phenanthrene	ND
Pyrene	ND
1,2,4-Trichlorobenzene	ND

ND = None Detected



# ASSAIGAI ANALYTICAL LABORATORIES

TO: Bloomfield Refinery  
Attn: Chris Hawley  
PO Box 159  
Bloomfield, NM 87413

DATE: 23 July 1986  
1030

SAMPLE ID: MW - 8

## ANALYTE

## ANALYTICAL RESULTS

CN	<0.01 mg/l
TDS	2910 mg/l
Cl	839.7 mg/l
SO <sub>4</sub>	1500 mg/l
Phenols	0.005 mg/l
TOC	13 mg/l
Sb	<0.01 mg/l
As	0.072 mg/l
Be	<0.01 mg/l
Cd	<0.010 mg/l
Cr	<0.050 mg/l
Cu	<0.03 mg/l
Pb	0.055 mg/l
Hg	<0.002 mg/l
Ni	0.86 mg/l
Se	0.21 mg/l
Ag	<0.050 mg/l
Tl	<0.01 mg/l
Zn	0.020 mg/l
Volatile	
Acrolein	ND
Acrylonitrile	ND
Benzene	ND
Bromoform	ND
Carbon Tetrachloride	ND
Chlorobenzene	ND
Chlorodibromomethane	ND
Chloroethane	ND
2-Chloroethylvinyl ether	ND
Chloroform	ND
Dichlorobromomethane	ND
1,1-Dichloroethane	ND
1,2-Dichloroethane	ND
1,1-Dichloroethylene	ND
1,2-Dichloropropane	ND
1,2-Dichloropropylene	ND
Ethylbenzene	ND

Field by CLT 6/23/86

pH 7.26  
Conductivity 4400

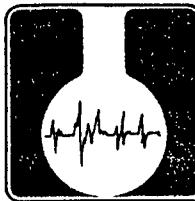
SAMPLE ID: MW - 8

ANALYTE	ANALYTICAL RESULTS
Methyl Bromide	ND
Methyl Chloride	ND
Methylene Chloride	ND
1,1,2,2-Tetrachloroethane	ND
Tetrachloroethylene	ND
Toluene	ND
1,2-Transdichloroethylene	ND
1,1,1-Trichloroethane	ND
1,1,2-Trichloroethane	ND
Trichloroethylene	ND
Vinyl Chloride	ND
Acid Compounds	
2-Chlorophenol	ND
2,4-Dichlorophenol	ND
2,4-Dimethylphenol	ND
4,6-Dinitro-o-cresol	ND
2,4-Dinitrophenol	ND
2-Nitrophenol	ND
4-Nitrophenol	ND
P-chloro-m-cresol	ND
pentachlorophenol	ND
Phenol	ND
2,4,6-Trichlorophenol	ND
Base Neutrals	
Acenaphthene	ND
Acenaphthylene	ND
Anthracene	ND
Benzidine	ND
Benzo(a)anthracene	ND
Benzo(a)pyrene	ND
3,4-Benzofluoranthene	ND
Benzo(g,h,i)perylene	ND
Benzo(k)fluoranthene	ND
Bis(2-chloroethoxy)methane	ND
Bis(2-chloroethyl)ether	ND
Bis(2-chloroisopropyl)ether	ND
Bis(2-ethylhexyl)phthalate	ND
4-Bromophenyl phenyl ether	ND
Butylbenzyl phthalate	ND
2-Chloronaphthalene	ND
4-Chlorophenyl phenyl ether	ND
Chrysene	ND

SAMPLE ID: MW - 8

ANALYTE	ANALYTICAL RESULTS
Dibenzo(a,h)anthracene	ND
1,2-Dichlorobenzene	ND
1,3-Dichlorobenzene	ND
1,4-Dichlorobenzene	ND
3,3-Dichlorobenzidine	ND
Diethyl phthalate	ND
Dimethyl phthalate	ND
Di-n-butyl phthalate	ND
2,4-Dinitrotoluene	ND
2,6-Dinitrotoluene	ND
Di-n-octyl phthalate	ND
1,2-Diphenylhydrazine	ND
Fluoranthene	ND
Fluorene	ND
Hexachlorobenzene	ND
Hexachlorobutadiene	ND
Hexachlorocyclopentadiene	ND
Hexachloroethane	ND
Indeno(1,2,3-cd)pyrene	ND
Isophorone	ND
Naphthalene	ND
Nitrobenzene	ND
N-nitrosodimethylamine	ND
N-nitrosodie-n-propylamine	ND
N-nitrosodiphenylamine	ND
Phenanthrene	ND
Pyrene	ND
1,2,4-Trichlorobenzene	ND

ND = None Detected



# ASSAIGAI ANALYTICAL LABORATORIES

TO: Bloomfield Refinery  
Attn: Chris Hawley  
PO Box 159  
Bloomfield, NM 87413

DATE: 23 July 1986  
1030

SAMPLE ID: MW - 9

ANALYTE	ANALYTICAL RESULTS
CN	0.4 mg/l
TDS	1718 mg/l
Cl	1009.7 mg/l
SO 4	114 mg/l
Phenols	0.372 mg/l
TOC	180 mg/l
Sb	<0.01 mg/l
As	<0.05 mg/l
Be	<0.01 mg/l
Cd	<0.010 mg/l
Cr	<0.050 mg/l
Cu	<0.03 mg/l
Pb	0.059 mg/l
Hg	<0.002 mg/l
Ni	0.25 mg/l
Se	0.040 mg/l
Ag	<0.050 mg/l
Tl	<0.01 mg/l
Zn	0.015 mg/l
Volatiles	
Acrolein	ND
Acrylonitrile	ND
Benzene	4 mg/l
Bromoform	ND
Carbon Tetrachloride	ND
Chlorobenzene	ND
Chlorodibromomethane	ND
Chloroethane	ND
2-Chloroethylvinyl ether	ND
Chloroform	ND
Dichlorobromomethane	ND
1,1-Dichloroethane	ND
1,2-Dichloroethane	ND
1,1-Dichloroethylene	ND
1,2-Dichloropropane	ND
1,2-Dichloropropylene	ND
Ethylbenzene	0.71 mg/l

*Field by CLT 6/24/86*

*pH 6.98*  
*Conductivity 2500*

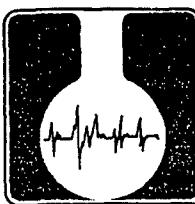
SAMPLE ID: MW - 9

ANALYTE	ANALYTICAL RESULTS
Methyl Bromide	ND
Methyl Chloride	ND
Methylene Chloride	ND
1,1,2,2-Tetrachloroethane	ND
Tetrachloroethylene	ND
Toluene	1.7 mg/l
1,2-Transdichloroethylene	ND
1,1,1-Trichloroethane	ND
1,1,2-Trichloroethane	ND
Trichloroethylene	ND
Vinyl Chloride	ND
Acid Compounds	
2-Chlorophenol	ND
2,4-Dichlorophenol	ND
2,4-Dimethylphenol	0.150 mg/l
4,6-Dinitro-o-cresol	ND
2,4-Dinitrophenol	ND
2-Nitrophenol	ND
4-Nitrophenol	ND
P-chloro-m-cresol	ND
pentachlorophenol	ND
Phenol	0.170 mg/l
2,4,6-Trichlorophenol	ND
Base Neutrals	
Acenaphthene	ND
Acenaphthylene	ND
Anthracene	ND
Benzidine	ND
Benzo(a)anthracene	ND
Benzo(a)pyrene	ND
3,4-Benzofluoranthene	ND
Benzo(g,h,i)perylene	ND
Benzo(k)fluoranthene	ND
Bis(2-chloroethoxy)methane	ND
Bis(2-chlororoethyl)ether	ND
Bis(2-chloroisopropyl)ether	ND
Bis(2-ethylhexyl)phthalate	ND
4-Bromophenyl phenyl ether	ND
Butylbenzyl phthalate	ND
2-Chloronaphthalene	ND
4-Chlorophenyl phenyl ether	ND
Chrysene	ND

SAMPLE ID: MW - 9

ANALYTE	ANALYTICAL RESULTS
Dibenzo(a,h)anthracene	ND
1,2-Dichlorobenzene	ND
1,3-Dichlorobenzene	ND
1,4-Dichlorobenzene	ND
3,3-Dichlorobenzidine	ND
Diethyl phthalate	ND
Dimethyl phthalate	ND
Din-n-butyl phthalate	ND
2,4-Dinitrotoluene	ND
2,6-Dinitrotoluene	ND
Di-n-octyl phthalate	ND
1,2-Diphenylhydrazine	ND
Fluoranthene	ND
Fluorene	ND
Hexachlorobenzene	ND
Hexachlorobutadiene	ND
Hexachlorocyclopentadiene	ND
Hexachloroethane	ND
Indeno(1,2,3-cd)pyrene	ND
Isophorone	ND
Naphthalene	ND
Nitrobenzene	ND
N-nitrosodimethylamine	ND
N-nitrosodie-n-propylamine	ND
N-nitrosodiphenylamine	ND
Phenanthrene	ND
Pyrene	ND
1,2,4-Trichlorobenzene	ND

ND = None Detected,



# ASSAIGAI ANALYTICAL LABORATORIES

TO: Bloomfield Refinery  
Attn: Chris Hawley  
PO Box 159  
Bloomfield, NM 87413

DATE: 23 July 1986  
1030

SAMPLE ID: MW - 10

ANALYTE	ANALYTICAL RESULTS
CN	<0.01 mg/l
TDS	2820 mg/l
Cl	569.8 mg/l
SO <sub>4</sub>	165 mg/l
Phenols	0.186 mg/l
TOC	76 mg/l
Sb	<0.01 mg/l
As	0.053 mg/l
Be	<0.01 mg/l
Cd	<0.010 mg/l
Cr	<0.050 mg/l
Cu	<0.03 mg/l
Pb	0.059 mg/l
Hg	<0.002 mg/l
Ni	<0.25 mg/l
Se	0.040 mg/l
Ag	<0.050 mg/l
Tl	<0.01 mg/l
Zn	0.015 mg/l
Volatiles	
Acrolein	ND
Acrylonitrile	ND
Benzene	ND
Bromoform	ND
Carbon Tetrachloride	ND
Chlorobenzene	ND
Chlorodibromomethane	ND
Chloroethane	ND
2-Chloroethylvinyl ether	ND
Chloroform	ND
Dichlorobromomethane	ND
1,1-Dichloroethane	ND
1,2-Dichloroethane	ND
1,1-Dichloroethylene	ND
1,2-Dichloropropane	ND
1,2-Dichloropropylene	ND
Ethylbenzene	ND

Field by C4 6/24/86

pH 7.08

Conductivity 4400

SAMPLE ID: MW - 10

ANALYTE	ANALYTICAL RESULTS
Methyl Bromide	ND
Methyl Chloride	ND
Methylene Chloride	ND
1,1,2,2-Tetrachloroethane	ND
Tetrachloroethylene	ND
Toluene	ND
1,2-Transdichloroethylene	ND
1,1,1-Trichloroethane	ND
1,1,2-Trichloroethane	ND
Trichloroethylene	ND
Vinyl Chloride	ND
Acid Compounds	
2-Chlorophenol	ND
2,4-Dichlorophenol	ND
2,4-Dimethylphenol	ND
4,6-Dinitro-o-cresol	ND
2,4-Dinitrophenol	ND
2-Nitrophenol	ND
4-Nitrophenol	ND
P-chloro-m-cresol	ND
pentachlorophenol	ND
Phenol	ND
2,4,6-Trichlorophenol	ND
Base Neutrals	
Acenaphthene	ND
Acenaphthylene	ND
Anthracene	ND
Benzidine	ND
Benzo(a)anthracene	ND
Benzo(a)pyrene	ND
3,4-Benzofluoranthene	ND
Benzo(g,h,i)perylene	ND
Benzo(k)fluoranthene	ND
Bis(2-chloroethoxy)methane	ND
Bis(2-chloroethyl)ether	ND
Bis(2-chloroisopropyl)ether	ND
Bis(2-ethylhexyl)phthalate	ND
4-Bromophenyl phenyl ether	ND
Butylbenzyl phthalate	ND
2-Chloronaphthalene	ND
4-Chlorophenyl phenyl ether	ND
Chrysene	ND

SAMPLE ID: MW - 10

ANALYTE	ANALYTICAL RESULTS
Dibenzo(a,h)anthracene	ND
1,2-Dichlorobenzene	ND
1,3-Dichlorobenzene	ND
1,4-Dichlorobenzene	ND
3,3-Dichlorobenzidine	ND
Diethyl phthalate	ND
Dimethyl phthalate	ND
Di-n-butyl phthalate	ND
2,4-Dinitrotoluene	ND
2,6-Dinitrotoluene	ND
Di-n-octyl phthalate	ND
1,2-Diphenylhydrazine	ND
Fluoranthene	ND
Fluorene	ND
Hexachlorobenzene	ND
Hexachlorobutadiene	ND
Hexachlorocyclopentadiene	ND
Hexachloroethane	ND
Indeno(1,2,3-cd)pyrene	ND
Isophorone	ND
Naphthalene	ND
Nitrobenzene	ND
N-nitrosodimethylamine	ND
N-nitrosodie-n-propylamine	ND
N-nitrosodiphenylamine	ND
Phanthrene	ND
Pyrene	ND
1,2,4-Trichlorobenzene	ND

ND = None Detected

TO: Bloomfield Refinery  
Attn: Chris Hawley  
PO Box 159  
Bloomfield, NM 87413

DATE: 23 July 1986  
1030

NOMINAL DETECTION LIMITS

ANALYTE

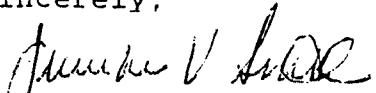
CN	0.01 mg/l
TDS	1 mg/l
Cl	1.0 mg/l
SO 4	1.0 mg/l
Phenols	0.002 mg/l
TOC	0.1 mg/l
Sb	0.01 mg/l
As	0.05 mg/l
Be	0.01 mg/l
Cd	0.010 mg/l
Cr	0.050 mg/l
Cu	0.03 mg/l
Pb	0.050 mg/l
Hg	0.002 mg/l
Ni	0.06 mg/l
Se	0.010 mg/l
Ag	0.050 mg/l
Tl	0.01 mg/l
Zn	0.01 mg/l
Benzene	0.001 mg/l
Toluene	0.001 mg/l
Xylenes	0.001 mg/l
Ethylbenzene	0.001 mg/l
Ba	0.01 mg/l
Fe	0.04 mg/l
Mn	0.005 mg/l
Al	0.05 mg/l
B	0.01 mg/l
Co	0.05 mg/l
Mo	0.01 mg/l
F	0.1 mg/l
No 3 as N	0.01 mg/l
1,2-DCE	0.001 mg/l
1,1-DCE	0.001 mg/l
1,1,2,2-TCE	0.001 mg/l
1,1,2-TCE	0.001 mg/l

Dectection limits for Volatiles, Base/Neutrals and Acid Compounds all 0.001 mg/l

REFERENCE: "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", USEPA, SW 846, EMSL-Cincinnati, 1982.

An invoice for services is enclosed. Thank you for contacting Assaigai Laboratories.

Sincerely,



Jennifer V. Smith, Ph.D.  
Laboratory Director



June 2, 1986

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

Mr. R. L. Stamets  
Director  
Energy & Minerals Department  
Oil Conservation Division  
State of New Mexico  
State Land Office Building  
P. O. Box 2088  
Santa Fe, NM 87501

Dear Mr. Stamets:

In response to your letter of March 4, 1986, to Mr. Chris Hawley, we have had our consultant, Engineering Science, prepare the enclosed "Report on Subsurface Hydrocarbon Data at the Bloomfield Refinery" for OCD's review. Also enclosed are final analytical results for the April 22, 1986, Hammond Ditch samples (taken within 24 hours of the start of the irrigation season), and a subsequent set of Hammond Ditch samples taken on April 28, 1986. You will note that the results for the second set of samples show that the small amounts of hydrocarbons found in the initial samples are no longer present.

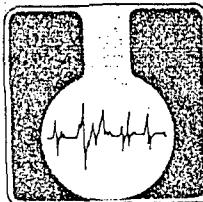
We are using this information to develop a plan for installation of recovery wells. As requested in your letter, this plan will be submitted to OCD no later than July 1, 1986.

Sincerely,

A handwritten signature in black ink, appearing to read "David J. Younggren".  
David J. Younggren  
Vice President Finance  
and Administration

enclosures

DJY:dam



# ASSAIGA ANALYTICAL LABORATORIES

TO: Bloomfield Refinery  
Attn: Chris Hawley  
P.O. Box 159  
Bloomfield NM 87413

## HAMMOND DITCH

DATE: 22 May 1986

0660 completed

Page 1 of 4

SAMPLE DATE: 4/22/86

### ANALYTE

### SAMPLE ID/ ANALYTICAL RESULTS

NEAR SULLIVAN ROAD  
HSRD 5

NEAR API PONDS  
HAPI 5

CN	<0.01 mg/l	<0.01 mg/l
Phenols	0.002 mg/l	0.002 mg/l
Sb	<0.2 mg/l	<0.2 mg/l
As	<0.050 mg/l	<0.050 mg/l
Be	<0.01 mg/l	<0.01 mg/l
Cd	<0.010 mg/l	<0.010 mg/l
Cr	<0.050 mg/l	<0.050 mg/l
Cu	<0.03 mg/l	<0.03 mg/l
Pb	<0.050 mg/l	<0.050 mg/l
Hg	<0.002 mg/l	<0.002 mg/l
Ni	<0.06 mg/l	<0.06 mg/l
Se	<0.010 mg/l	<0.010 mg/l
Ag	<0.050 mg/l	<0.050 mg/l
Tl	<0.01 mg/l	<0.01 mg/l
Zn	<0.01 mg/l	<0.01 mg/l
Acrolein	ND	ND
Acrylonitrile	ND	ND
Benzene	0.006 mg/l	ND
Bromoform	ND	ND
Carbon Tetrachloride	ND	ND
Chlorobenzene	ND	ND
Chlorodibromomethane	ND	ND
Chloroethane	ND	ND
2-Chloroethylvinyl Ether	ND	ND
Chloroform	ND	ND
Dichlorogromomethane	ND	ND
1,1-Dichloroethane	ND	ND
1,2-Dichloroethane	ND	ND
1,1-Dichloroethylene	ND	ND
1,2-Dichloropropane	ND	ND
1,2-Dichloropropylene	ND	ND
Ethylbenzene	ND	ND

TO: Bloomfield Refinery

0660

Page 2 of 4

## ANALYTE

## SAMPLE ID/ ANALYTICAL RESULTS

HSRD 5

HAPI 5

Methyl Bromide	ND	ND
Methyl Chloride	ND	ND
Methylené Chloride	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND
Tetrachloroethylene	ND	ND
Toluene	0.003 mg/l	nd
1,2-Transdichloroethylene	ND	ND
1,1,1-Trichloroethane	ND	ND
1,1,2-Trichloroethane	ND	ND
Trichloroethylene	ND	ND
Vinyl Chloride	ND	ND
Acid Compounds		
2-chlorophenol	ND	ND
2,4-dichlorophenol	ND	ND
2,4-dimethylphenol	ND	ND
4,6-dinitro-o-cresol	ND	ND
2,4-dinitrophenol	ND	ND
2-nitrophenol	ND	ND
4-nitrophenol	ND	ND
p-chloro-m-cresol	ND	ND
pentachlorophenol	ND	ND
Phenol	ND	ND
2,4,6-trichlorophenol	ND	ND
Base Neutrals		
Acenaphthene	ND	ND
Acenaphthylene	ND	ND
Anthracene	0.006 mg/l	ND
Benzidine	ND	ND
Benzo(a)anthracene	0.003 mg/l	ND
Benzo(a)pyrene	ND	ND
3,4-benzofluoranthene	ND	ND
Benzo(ghi)perylene	ND	ND
Benzo(k)fluoranthene	ND	ND
Bis(2-chloroethoxy)methane	ND	ND
Bis(2-chloroethyl)ether	ND	ND
Bis(2-chloroisopropyl)ether	ND	ND
Bis(2-ethylhexyl)phthalate	ND	ND
4-bromophenyl phenyl ether	ND	ND
Butylbenzyl phthalate	ND	ND
2-chloronaphthalene	ND	ND
4-chlorophenyl phenyl ether	ND	ND
Chrysene	0.005 mg/l	ND

TO: Bloomfield Refinery

0660 completed

Page 3 of 4

ANALYTE

SAMPLE ID/ ANALYTICAL RESULTS

HSRD 5

HAPI 5

Dibenzo(a,h)anthracene	ND	ND
1,2-Dichlorobenzene	ND	ND
1,3-Dichlorobenzene	ND	ND
1,4-Dichlorobenzene	ND	ND
3,3-Dichlorobenzidine	ND	ND
Diethyl phthalate	ND	ND
Dimethyl phthalate	ND	ND
Din-n-butyl phthalate	ND	ND
2,4-dinitrotoluene	ND	ND
2,6-dinitrotoluene	ND	ND
Di-n-octyl phthalate	ND	ND
1,2-diphenylhydrazine	ND	ND
Fluoranthene	ND	0.001 mg/l
Fluorene	ND	ND
Hexachlorobenzene	ND	ND
Hexachlorobutadiene	ND	ND
Hexachlorocyclopentadiene	ND	ND
Hexachloroethane	ND	ND
Indeno(1,2,3-cd)pyrene	ND	ND
Isophorone	ND	ND
Naphthalene	0.013 mg/l	ND
Nitrobenzene	ND	ND
N-nitrosodimethylamine	ND	ND
N-nitrosodi-n-propylamine	ND	ND
N-nitrosodiphenylamine	ND	ND
Phenanthrene	0.007 mg/l	ND
Pyrene	0.008 mg/l	ND
1,2,4-trichlorobenzene	ND	ND

ND = None Detected

REFERENCE: "Test Methods for Evaluating Solid Waste Chemical/Physical Methods", USEPA, SW 846, EMSL-Cincinnati, 1982.

TO: Bloomfield Refinery

0660 completed  
Page 4 of 4

NOMINAL DETECTION LIMITS

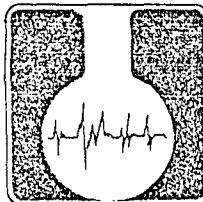
CN	0.01 mg/l
Phenols	0.002 mg/l
Benzene	0.001 mg/l
Toluene	0.001 mg/l
Xylenes	0.001 mg/l
Ethylbenzene	0.001 mg/l
Sb	0.2 mg/l
As	0.050 mg/l
Be	0.010 mg/l
Cd	0.010 mg/l
Cr	0.050 mg/l
Cu	0.03 mg/l
Pb	0.050 mg/l
Hg	0.002 mg/l
Ni	0.06 mg/l
Se	0.010 mg/l
Ag	0.050 mg/l
Tl	0.01 mg/l
Zn	0.01 mg/l

Detection limits for Volatiles, Acid Compounds, and Base/Neutrals are all 0.001 mg/l

An invoice for services is enclosed. Thank you for contacting Assaigai Laboratories.

Sincerely,

  
Jennifer V. Smith, Ph.D.  
Laboratory Director



# ASSAIGA ANALYTICAL LABORATORIES

TO: Bloomfield Refinery  
Attn: Chris Hawley  
P.O. Box 159  
Bloomfield NM 87413

DATE: 22 May 1986  
0695

Page 1 of 3

SAMPLE DATE: 4/28/86

HAMMOND DITCH

## ANALYTE

## SAMPLE ID/ ANALYTICAL RESULTS

	U4 NEAR API WASTE PONDS 0.003 mg/l	D4 NEAR SULLIVAN ROAD 0.002 mg/l
	U6A	D6A
Phenols		
Acrolein	ND	ND
Acrylonitrile	ND	ND
Benzene	ND	ND
Bromoform	ND	ND
Carbon Tetrachloride	ND	ND
Chlorobenzene	ND	ND
Chlorodibromomethane	ND	ND
Chloroethane	ND	ND
2-Chloroethylvinyl Ether	ND	ND
Chloroform	ND	ND
Dichlorogromomethane	ND	ND
1,1-Dichloroethane	ND	ND
1,2-Dichloroethane	ND	ND
1,1-Dichloroethylene	ND	ND
1,2-Dichloropropane	ND	ND
1,2-Dichloropropylene	ND	ND
Ethylbenzene	ND	ND
Methyl Bromide	ND	ND
Methyl Chloride	ND	ND
Methylene Chloride	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND
Tetrachloroethylene	ND	ND
Toluene	ND	ND
1,2-Transdichloroethylene	ND	ND
1,1,1-Trichloroethane	ND	ND
1,1,2-Trichloroethane	ND	ND
Trichloroethylene	ND	ND
Vinly Chloride	ND	ND
Base Neutrals		
Acenaphthene	ND	ND
Acenphthylene	ND	ND
Anthracene	ND	ND
Benzidine	ND	ND

TO: Bloomfield Refinery

0695  
Page 2 of 3

## ANALYTE

## SAMPLE ID/ ANALYTICAL RESULTS

	U6A	D6A
Benzo(a)anthracene	ND	ND
Benzo(a)pyrene	ND	ND
3,4-benzofluoranthene	ND	ND
Benzo(ghi)perylene	ND	ND
Benzo(k)fluoranthene	ND	ND
Bis(2-chloroethoxy)methane	ND	ND
Bis(2-chloroethyl)ether	ND	ND
Bis(2-chloroisopropyl)ether	ND	ND
Bis(2-ethylhexyl)phthalate	ND	ND
4-bromophenyl phenyl ether	ND	ND
Butylbenzyl phthalate	ND	ND
2-chloronaphthalene	ND	ND
4-chlorophenyl phenyl ether	ND	ND
Chrysene	ND	ND
Dibenzo(a,h)anthracene	ND	ND
1,2-Dichlorobenzene	ND	ND
1,3-Dichlorobenzene	ND	ND
1,4-Dichlorobenzene	ND	ND
3,3-Dichlorobenzidine	ND	ND
Diethyl phthalate	ND	ND
Dimethyl phthalate	ND	ND
Din-n-butyl phthalate	ND	ND
2,4-dinitrotoluene	ND	ND
2,6-dinitrotoluene	ND	ND
Di-n-octyl phthalate	ND	ND
1,2-diphenylhydrazine	ND	ND
Fluoranthene	ND	ND
Fluorene	ND	ND
Hexachlorobenzene	ND	ND
Hexachlorobutadiene	ND	ND
Hexachlorocyclopentadiene	ND	ND
Hexachloroethane	ND	ND
Indeno(1,2,3-cd)pyrene	ND	ND
Isophorone	ND	ND
Naphthalene	ND	ND
Nitrobenzene	ND	ND
N-nitrosodimethylamine	ND	ND
N-nitrosodie-n-propylamine	ND	ND
N-nitrosodiphenylamine	ND	ND
Phenanthrene	ND	ND
Pyrene	ND	ND
1,2,4-trichlorobenzene	ND	ND

ND = None Detected

REFERENCE: "Test Methods for Evaluating Solid Waste Chemical/Physical Methods", USEPA, SW 846, EMSL-Cincinnati, 1982

TO: Bloomfield Refinery

0695

Page 3 of 3

NOMINAL DETECTION LIMITS

Phenols	0.002 mg/l
Benzene	0.001 mg/l
Toluene	0.001 mg/l

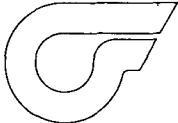
Detection limits for Volatiles, and Base/Neutrals are  
all 0.001 mg/l.

An invoice for services is enclosed. Thank you for contacting Assaigai  
Laboratories.

Sincerely,



Jennifer V. Smith, Ph.D.  
Laboratory Director



Bloomfield Refining  
Company

A Gary Energy Corporation Subsidiary

May 19, 1986

DISCHARGE PLAN  
MAY 19, 1986  
LUDS AVENUE, NEW MEXICO  
SANTA FE

Mr. David G. Boyer  
State of New Mexico  
Oil Conservation Division  
P. O. Box 2088  
Land Office Building  
Santa Fe, New Mexico 87501

RE: Discharge Plan GRW-1-A, Bloomfield Refining Company

Dear Mr. Boyer:

Analytical results applicable to the discharge plan for the wells P1, P4, and P5 that were obtained from samples taken on March 26, 1986, are enclosed. Our discharge plan has a sampling schedule of May and November of each year for wells P1, P4, and P5. However, this year we are sampling in March, June, September, and December for an extensive list of parameters from all our wells that include most of the discharge plan parameters.

As we discussed today, I will expand the parameter lists as necessary for wells P1, P4, and P5 for the June, September, and December sampling campaigns and submit that data (and today's data) to meet the requirements of the discharge plan.

If this is not acceptable to you, please call me.

Sincerely,

*Chris Hawley*  
Chris Hawley  
Environmental Engineer

CH/jm

Enclosure

Cc: Richard Traylor  
Mike Macy  
Dave Younggren  
George Gerson

Bloomfield Refining Company

SAMPLE DATE: 3/26/86 ; LABORATORY : ASSAIGAI

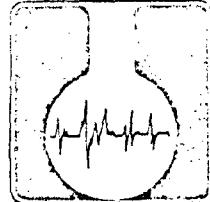
COLUMN - WRITE @

			1	2	3	4	5	6
	Parameter	Units	NOMINAL STANDARD	DETECTION LIMITS	Monitoring Well PI	Monitoring Well P4	Monitoring Well P5	
1	Arsenic	mg/l	0.1	0.050	<0.050	<0.050	<0.050	1
2	Barium	"	1.0	-	-	-	-	2
3	Cadmium	"	0.01	0.002	0.050	0.060	0.10	3
4	Chromium	"	0.05	0.050	<0.050	<0.050	<0.050	4
5	Lead	"	0.05	0.001	0.085	0.074	0.16	5
6	Mercury	"	0.002	0.002	<0.002	0.002	<0.002	6
7	Selenium	"	0.05	0.010	<0.010	<0.010	<0.010	7
8	Silver	"	0.05	0.050	<0.050	<0.050	<0.050	8
9	Copper	"	1.0	0.03	<0.03	<0.03	<0.03	9
10	Iron	"	1.0	-	-	-	-	10
11	Manganese	"	0.2	-	-	-	-	11
12	Zinc	"	10.0	0.01	<0.01	0.012	0.012	12
13	Uranium	"	5.0	-	-	-	-	13
14	Chloride	"	250.	1	750.	500.	1100.	14
15	Sulfate	"	600.	1	7.5	0.3	14.	15
16	PCB	"	0.001	-	-	-	-	16
17	Phenols	"	0.005	0.001	0.009	0.633	0.006	17
18	Cyanide	"	0.2	0.01	<0.01	<0.01	<0.01	18
19	Nitrate as N	"	10.0	-	-	-	-	19
20	Aluminum	"	5.0	-	-	-	-	20
21	Boron	"	0.75	-	-	-	-	21
22	Cobalt	"	0.05	-	-	-	-	22
23	Molybdenum	"	1.0	-	-	-	-	23
24	Nickel	"	0.2	0.01	0.08	0.08	0.10	24
25	Fluoride	"	1.6	-	-	-	-	25
26	TDS	"	1000.	1	2936.	1868.	3840.	26
27	Benzene	"	0.01	0.001	ND	11.8	ND	27
28	Toluene	"	0.75	0.001	ND	7.5	ND	28
29	Carbon Tetrachbride	"	0.01	0.001	-	ND	-	29
30	1,2-Dichloroethane	"	0.01	0.001	-	ND	-	30
31	1,1-Dichloroethylene	"	0.005	0.001	-	ND	-	31
32	1,1,2-Tetrachloroethylene	"	0.02	0.001	-	ND	-	32
33	1,1,2-Trichloroethylene	"	0.1	0.001	-	ND	-	33
34	pH	S.U.	6 TO 9	10.01	7.30	6.84	7.23	34
35								35
36								36
37								37
38								38
39								39
40								40

BLOOMFIELD REFINING COMPANY  
GROUP WATER ELEVATIONS

COLUMN - WRITE ®

		1	2	3	4	5	6
		MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
	DATE	5515.77	5519.45	5535.85	5524.30	5545.10	5551.23
1	2/24/84	5498.91	5500.44	5501.74	5499.46	5502.26	DRY
2							
3	2/28/85	5499.07	5500.55	5502.15	5499.30	5502.75	DRY
4	3/18/85	5499.14	5500.82	5502.55	5499.32	5503.50	
5	WATER ON	4/11/85	5498.99	5500.62	5502.73	5499.30	5503.67
6		5/31/85	5499.67	5500.97	5502.74	5499.80	5503.64
7		6/14/85	5499.80	5500.99	5502.63	5499.80	5503.40
8		6/26/85	5499.94	5500.98	5502.49	5499.73	5503.24
9		7/10/85	5500.20	5500.99	5502.48	5499.80	5503.30
10		8/2/85	5501.00	5501.25	5502.48	5499.78	5503.37
11		9/17/85	5500.34	5501.05	5502.25	5499.80	5503.00
12	WATER OFF	10/9/85	5500.03	5500.87	5502.42	5499.70	5503.30
13		10/24/85	5499.23	5500.43	5502.28	5499.54	5503.10
14		11/8/85	5498.72	5500.05	5502.20	5499.60	5503.09
15		12/17/85	5498.35	5499.85	5501.85	5499.40	5502.90
16							
17		1/8/86	5498.59	5500.08	5501.85	5499.35	5502.77
18		1/24/86	5498.75	5500.22	5502.04	5499.36	5502.76
19		2/20/86	5498.93	5500.62	5502.43	5499.35	5503.30
20		3/21/86	5499.10	5500.65	5502.89	5499.30	5504.23
21		3/26/86	5499.07	5500.65	5502.91	5499.31	5504.24
22	DIKE REMOVED	4/4/86	5499.07	5500.57	5502.98	5499.21	5504.57
23	4/15	4/18/86	5498.85	5500.43	5502.98	5499.42	5504.42
24	WATER ON	4/21	5/5/86	5499.43	5500.57	5502.92	5499.32
25							
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40							



# ASSAIGAI ANALYTICAL LABORATORIES

TO: Bloomfield Refinery  
Attn: Chris Hawley  
P.O. Box 159  
Bloomfield, NM 87413

DATE: 14 May 1986

0502

Page 1 of 8

## ANALYTE

## SAMPLE ID/ ANALYTICAL RESULTS

	MW 1	MW 2	MW 3
CN	<0.01 mg/l	<0.01 mg/l	<0.10 mg/l
Phenols	0.009 mg/l	0.063 mg/l	0.006 mg/l
TOC	18 mg/l	18 mg/l	29 mg/l
TDS	2936 mg/l	2796 mg/l	4836 mg/l
Cl	750 mg/l	200 mg/l	1500 mg/l
SO 4	7.5 mg/l	11.0 mg/l	29.5 mg/l
Benzene	ND	ND	ND
Toluene	ND	ND	ND
Xylenes	ND	ND	ND
Ethylbenzene	ND	ND	ND
Sb	<0.01 mg/l	<0.01 mg/l	<0.01 mg/l
As	<0.050 mg/l	<0.050 mg/l	<0.050 mg/l
Be	<0.01 mg/l	<0.01 mg/l	<0.01 mg/l
Cd	0.050 mg/l	0.060 mg/l	0.12 mg/l
Cr	<0.050 mg/l	<0.050 mg/l	<0.050 mg/l
Cu	<0.03 mg/l	<0.03 mg/l	<0.03 mg/l
Pb	0.085 mg/l	0.12 mg/l	0.14 mg/l
Hg	<0.002 mg/l	0.003 mg/l	0.004 mg/l
Ni	0.08 mg/l	0.07 mg/l	0.08 mg/l
Se	<0.010 mg/l	<0.010 mg/l	<0.010 mg/l
Ag	<0.050 mg/l	<0.050 mg/l	<0.050 mg/l
Tl	<0.01 mg/l	<0.01 mg/l	<0.01 mg/l
Zn	<0.01 mg/l	<0.01 mg/l	<0.01 mg/l

TO: Bloomfield Refinery

0502

Page 2 of 8

## ANALYTE

## SAMPLE ID/ ANALYTICAL RESULTS

	MW 4	MW 5	MW 7
CN	<0.01 mg/l	<0.01 mg/l	<0.10 mg/l
Phenols	0.633 mg/l	0.006 mg/l	<0.001 mg/l
TOC	110 mg/l	14 mg/l	11 mg/l
TDS	1868 mg/l	3840 mg/l	6076 mg/l
Cl	500 mg/l	1100 mg/l	30 mg/l
SO <sub>4</sub>	0.3 mg/l	14.0 mg/l	5.5 mg/l
Benzene	11.8 mg/l	ND	0.015 mg/l
Toluene	7.5 mg/l	ND	0.053 mg/l
Xylenes	ND	ND	ND
Ethylbenzene	0.107 mg/l	ND	0.007 mg/l
Sb	<0.01 mg/l	<0.01 mg/l	<0.01 mg/l
As	<0.050 mg/l	<0.050 mg/l	<0.050 mg/l
Be	<0.01 mg/l	<0.01 mg/l	<0.01 mg/l
Cd	0.060 mg/l	0.10 mg/l	0.050 mg/l
Cr	<0.050 mg/l	<0.050 mg/l	0.050 mg/l
Cu	<0.03 mg/l	<0.03 mg/l	<0.03 mg/l
Pb	0.074 mg/l	0.16 mg/l	<0.050 mg/l
Hg	0.002 mg/l	<0.002 mg/l	<0.002 mg/l
Ni	0.08 mg/l	0.10 mg/l	0.08 mg/l
Se	<0.010 mg/l	<0.010 mg/l	<0.010 mg/l
Ag	<0.050 mg/l	<0.050 mg/l	<0.050 mg/l
Tl	<0.01 mg/l	<0.01 mg/l	<0.01 mg/l
Zn	0.012 mg/l	0.012 mg/l	0.018 mg/l
Acrolein	ND		ND
Acrylonitrile	ND		ND
Bromoform	ND		ND
Carbon Tetrachloride	ND		ND
Chlorobenzene	ND		ND
Chlorodibromomethane	ND		ND
Chloroethane	ND		ND
2-Chloroethylvinyl Ether	ND		ND
Chloroform	ND		ND
Dichlorogromomethane	ND		ND
1,1-Dichloroethane	ND		ND
1,2-Dichloroethane	ND		ND
1,1-Dichloroethylene	ND		ND
1,2-Dichloropropane	ND		ND
1,3-Dichloropropylene	ND		ND

TO: Bloomfield Refinery

0502

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## ANALYTE

## SAMPLE ID/ ANALYTICAL RESULTS

MW 4

MW 5

MW 7

Methyl Bromide	ND	ND
Methyl Chloride	ND	ND
Methylene Chloride	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND
Tetrachloroethylene	ND	ND
1,2-Transdichloroethylene	ND	ND
1,1,1-Trichloroethane	ND	ND
1,1,2-Trichloroethane	ND	ND
Trichloroethylene	ND	ND
Vinyl Chloride	ND	ND
Acid Compounds		
2-chlorophenol	ND	ND
2,4-dichlorophenol	0.200 mg/l	ND
2,4-dimethylphenol	ND	ND
4,6-dinitro-o-cresol	0.100 mg/l	0.013 mg/l
2,4-dinitrophenol	0.050 mg/l	ND
2-nitrophenol	ND	ND
4-nitrophenol	0.090 mg/l	ND
p-chloro-m-cresol	ND	ND
pentachlorophenol	ND	ND
Phenol	0.202 mg/l	ND
2,4,6-trichlorophenol	ND	ND
Base Neutrals		
Acenaphthene	0.044 mg/l	ND
Acenaphthylene	ND	ND
Anthracene	ND	ND
Benzidine	ND	ND
Benzo(a)anthracene	ND	ND
Benzo(a)pyrene	ND	ND
3,4-benzofluoranthene	ND	ND
Benzo(ghi)perylene	ND	ND
Benzo(k)fluoranthene	ND	ND
Bis(2-chloroethoxy)methane	ND	ND
Bis(2-chloroethyl)ether	ND	ND
Bis(2-chloroisopropyl)ether	ND	ND
Bis(2-ethylhexyl)phthalate	ND	ND
4-bromophenyl phenyl ether	ND	ND
Butylbenzyl phthalate	ND	ND
2-chloronaphthalene	ND	ND
4-chlorophenyl phenyl ether	ND	ND
Chrysene	ND	ND

TO: Bloomfield Refinery

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Page 4 of 8

ANALYTE

SAMPLE ID/ ANALYTICAL RESULTS

MW 4

MW 5

MW 7

Dibenzo(a,h)anthracene	ND	ND
1,2-Dichlorobenzene	ND	ND
1,3-Dichlorobenzene	ND	ND
1,4-Dichlorobenzene	ND	ND
3,3-Dichlorobenzidine	ND	ND
Diethyl phthalate	ND	ND
Dimethyl phthalate	ND	ND
Din-n-butyl phthalate	ND	ND
2,4-dinitrotoluene	ND	ND
2,6-dinitrotoluene	ND	ND
Di-n-octyl phthalate	ND	ND
1,2-diphenylhydrazine	ND	ND
Fluoranthene	ND	ND
Fluorene	0.150 mg/l	ND
Hexachlorobenzene	ND	ND
Hexachlorobutadiene	ND	ND
Hexachlorocyclopentadiene	ND	ND
Hexachloroethane	ND	ND
Indeno(1,2,3-cd)pyrene	ND	ND
Isophorone	ND	ND
Naphthalene	0.036 mg/l	ND
Nitrobenzene	ND	ND
N-nitrosodimethylamine	ND	ND
N-nitrosodie-n-propylamine	ND	ND
N-nitrosodiphenylamine	ND	ND
Phenanthrene	ND	ND
Pyrene	0.166 mg/l	ND
1,2,4-trichlorobenzene	ND	ND

TO: Bloomfield Refinery

DATE: 0502

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## ANALYTE

## SAMPLE ID/ ANALYTICAL RESULTS

## MW 8

## MW 9

## MW 10

CN	<0.01 mg/l	<0.01 mg/l	<0.10 mg/l
Phenols	<0.001 mg/l	0.304 mg/l	0.147 mg/l
TOC	5 mg/l	143 mg/l	34 mg/l
TDS	806 mg/l	2360 mg/l	1546 mg/l
Cl	160 mg/l	149 mg/l	245 mg/l
SO 4	4.0 mg/l	13.0 mg/l	5.3 mg/l
Benzene	ND	7.4 mg/l	0.093 mg/l
Toluene	ND	6.3 mg/l	ND
Xylenes	ND	ND	ND
Ethylbenzene	0.107 mg/l	3.2 mg/l	ND
Sb	<0.01 mg/l	<0.01 mg/l	<0.01 mg/l
As	<0.050 mg/l	<0.050 mg/l	<0.050 mg/l
Be	<0.01 mg/l	<0.01 mg/l	<0.01 mg/l
Cd	0.010 mg/l	0.010 mg/l	0.020 mg/l
Cr	<0.050 mg/l	<0.050 mg/l	<0.050 mg/l
Cu	<0.03 mg/l	<0.03 mg/l	<0.03 mg/l
Pb	<0.050 mg/l	<0.050 mg/l	<0.050 mg/l
Hg	<0.002 mg/l	<0.002 mg/l	<0.002 mg/l
Ni	<0.06 mg/l	0.30 mg/l	0.08 mg/l
Se	<0.010 mg/l	<0.010 mg/l	<0.010 mg/l
Ag	<0.050 mg/l	<0.050 mg/l	<0.050 mg/l
Tl	<0.01 mg/l	<0.01 mg/l	<0.01 mg/l
Zn	<0.01 mg/l	0.012 mg/l	<0.01 mg/l
Acrolein	ND	ND	ND
Acrylonitrile	ND	ND	ND
Bromoform	ND	ND	ND
Carbon Tetrachloride	ND	ND	ND
Chlorobenzene	ND	ND	ND
Chlorodibromomethane	ND	ND	ND
Chloroethane	ND	ND	ND
2-Chloroethylvinyl Ether	ND	ND	ND
Chloroform	ND	ND	ND
Dichlorogromomethane	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND
1,1-Dichloroethylene	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND
1,3-Dichloropropylene	ND	ND	ND

TO: Bloomfield Refinery

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Page 6 of 8

## ANALYTE

## SAMPLE ID/ ANALYTICAL RESULTS

	MW 8	MW 9	MW 10
Methyl Bromide	ND	ND	ND
Methyl Chloride	ND	ND	ND
Methylene Chloride	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND
Tetrachloroethylene	ND	ND	ND
1,2-Transdichloroethylene	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND
Trichloroethylene	ND	ND	ND
Vinyl Chloride	ND	ND	ND
Acid Compounds			
2-chlorophenol	ND	ND	ND
2,4-dichlorophenol	ND	ND	ND
2,4-dimethylphenol	ND	0.160 mg/l	0.025 mg/l
4,6-dinitro-o-cresol	ND	ND	0.020 mg/l
2,4-dinitrophenol	ND	ND	ND
2-nitrophenol	ND	ND	ND
4-nitrophenol	ND	ND	ND
p-chloro-m-cresol	ND	ND	ND
pentachlorophenol	ND	ND	ND
Phenol	ND	0.149 mg/l	0.090 mg/l
2,4,6-trichlorophenol	ND	ND	ND
Base Neutrals			
Acenaphthene	ND	ND	ND
Acenaphthylene	ND	ND	ND
Anthracene	ND	ND	0.039 mg/l
Benzidine	ND	ND	ND
Benzo(a)anthracene	ND	ND	ND
Benzo(a)pyrene	ND	ND	ND
3,4-benzoefluoranthene	ND	ND	ND
Benzo(ghi)perylene	ND	ND	ND
Benzo(k)fluoranthene	ND	ND	ND
Bis(2-chloroethoxy)methane	ND	ND	ND
Bis(2-chloroethyl)ether	ND	ND	ND
Bis(2-chloroisopropyl)ether	ND	ND	ND
Bis(2-ethylhexyl)phthalate	ND	ND	ND
4-bromophenyl phenyl ether	ND	ND	ND
Butylbenzyl phthalate	ND	ND	ND
2-chloronaphthalene	ND	ND	ND
4-chlorophenyl phenyl ether	ND	ND	ND
Chrysene	ND	ND	ND

TO: Bloomfield Refinery

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ANALYTE

SAMPLE ID/ ANALYTICAL RESULTS

	MW 8	MW 9	MW 10
Dibenzo(a,h)anthracene	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND
3,3-Dichlorobenzidine	ND	ND	ND
Diethyl phthalate	ND	ND	ND
Dimethyl phthalate	ND	ND	ND
Din-n-butyl phthalate	ND	ND	ND
2,4-dinitrotoluene	ND	ND	ND
2,6-dinitrotoluene	ND	ND	ND
Di-n-octyl phthalate	ND	ND	ND
1,2-diphenylhydrazine	ND	ND	ND
Fluoranthene	ND	ND	0.034 mg/l
Fluorene	ND	0.012 mg/l	0.033 mg/l
Hexachlorobenzene	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND
Hexachlorocyclopentadiene	ND	ND	ND
Hexachloroethane	ND	ND	ND
Indeno(1,2,3-cd)pyrene	ND	ND	ND
Isophorone	ND	ND	ND
Naphthalene	ND	ND	ND
Nitrobenzene	ND	ND	ND
N-nitrosodimethylamine	ND	ND	ND
N-nitrosodie-n-propylamine	ND	ND	ND
N-nitrosodiphenylamine	ND	ND	ND
Phenanthrene	ND	ND	ND
Pyrene	ND	ND	0.030 mg/l
1,2,4-trichlorobenzene	ND	ND	ND

ND = None Detected

REFERENCE: "Test Methods for Evaluating Solid Waste, Physical/ Chemical Methods, USEPA, SW 846, EMSL-Cincinnati, 1982.

TO: Bloomfield Refinery

0502

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NOMINAL DETECTION LIMITS

CN	0.01 mg/l
Phenols	0.001 mg/l
TOC	0.1 mg/l
TDS	1 mg/l
Cl	1.0 mg/l
SO 4	1.0 mg/l
Benzene	5 mg/l
Toluene	5 mg/l
Xylenes	5 mg/l
Ethylbenzene	5 mg/l
Sb	0.01 mg/l
As	0.050 mg/l
Be	0.01 mg/l
Cd	0.002 mg/l
Cr	0.050 mg/l
Cu	0.03 mg/l
Pb	0.001 mg/l
Hg	0.002 mg/l
Ni	0.01 mg/l
Se	0.010 mg/l
Ag	0.050 mg/l
Tl	0.01 mg/l
Zn	0.01 mg/l

Detection limits for Volatiles, Acid Compounds, and Base/Neutrals are  
all 0.001 mg/l

An invoice for services is enclosed. Thank you for contacting Assaigai  
Laboratories.

Sincerely,

Jennifer V. Smith  
Jennifer V. Smith, Ph.D.  
Laboratory Director



December 17, 1985

Mr. David G. Boyer  
State of New Mexico  
Oil Conservation Division  
P. O. Box 2088  
Land Office Building  
Santa Fe, New Mexico 87501

RE: Discharge Plan GRW-1-A, Bloomfield Refining Company

Dear Mr. Boyer:

Analytical results for the wells P1, P4, and P5, obtained from the November 8, 1985 samples are enclosed. Our next sampling campaign, as per the discharge plan, will be in May, 1986.

Please feel free to contact me if there are any questions.

Very truly yours,

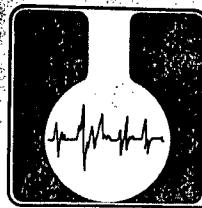
A handwritten signature in black ink, appearing to read "Chris Hawley".

Chris Hawley  
Environmental Engineer

CH/jm

Enclosures

Cc: Richard Traylor  
Dave Younggren



# ASSAIGAI ANALYTICAL LABORATORIES

SAMPLE DATE: 3 Nov 85

TO: Bloomfield Refinery Co.  
P.O. Box 159  
Bloomfield, NM 87413

DATE: 6 December 1985  
1641  
Page 1 of 3

SAMPLE ID: MW-1

ANALYTE	ANALYTICAL RESULTS	NOMINAL DETECTION LIMITS
As	<0.050 mg/l	0.050 mg/l
Ba	<1.0 mg/l	1.0 mg/l
Cd	<0.010 mg/l	0.010 mg/l
Cr	<0.050 mg/l	0.050 mg/l
Pb	<0.050 mg/l	0.050 mg/l
Hg	<0.002 mg/l	0.002 mg/l
Se	0.010 mg/l	0.002 mg/l
Ag	<0.050 mg/l	0.050 mg/l
Cu	0.032 mg/l	0.002 mg/l
Fe	0.080 mg/l	0.05 mg/l
Mn	0.33 mg/l	0.005 mg/l
Zn	0.030 mg/l	0.004 mg/l
U	<1.0 mg/l	1.0 mg/l
Cl	973.0 mg/l	1.0 mg/l
SO <sub>4</sub>	920.0 mg/l	1.0 mg/l
PCB	<0.001 ppm	0.001 ppm
pH	7.9	0.01
CN	0.04 mg/l	0.01 mg/l
NO <sub>3</sub> as N	2.0 mg/l	0.01 mg/l
Al	<0.05 mg/l	0.05 mg/l
B	0.10 mg/l	0.004 mg/l
Co	0.065 mg/l	0.01 mg/l
Mo	<0.005 mg/l	0.005 mg/l
Ni	0.25 mg/l	0.01 mg/l
F	0.890 mg/l	0.1 mg/l
TDS	3120.0 mg/l	1 mg/l
Phenols	0.096 mg/l	0.01 mg/l
Benzene	<0.001 mg/l	0.001 mg/l
Toluene	<0.001 mg/l	0.001 mg/l
Carbon Tetrachloride	<0.01 mg/l	0.01 mg/l
1,2-Dichloroethane	<0.02 mg/l	0.02 mg/l
1,1-Dichloroethylene	<0.005 mg/l	0.005 mg/l
Tetrachloroethylene	<0.02 mg/l	0.02 mg/l
Trichloroethylene	<0.1 mg/l	<0.1 mg/l

SAMPLE DATE: 8 NOV 85

TO: Bloomfield Refinery

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SAMPLE ID: MW-5

ANALYTE	ANALYTICAL RESULTS	NOMINAL DETECTION LIMITS
As	<0.050 mg/l	0.050 mg/l
Ba	<1.0 mg/l	1.0 mg/l
Cd	<0.010 mg/l	0.010 mg/l
Cr	<0.050 mg/l	0.050 mg/l
Pb	<0.050 mg/l	0.050 mg/l
Hg	<0.002 mg/l	0.002 mg/l
Se	0.011 mg/l	0.002 mg/l
Ag	<0.050 mg/l	0.050 mg/l
Cu	0.019 mg/l	0.002 mg/l
Fe	0.089 mg/l	0.05 mg/l
Mn	0.045 mg/l	0.005 mg/l
Zn	0.025 mg/l	0.004 mg/l
U	<1.0 mg/l	1.0 mg/l
Cl	1588.0 mg/l	1.0 mg/l
SO <sub>4</sub>	1540.0 mg/l	1.0 mg/l
PCB	<0.001 ppm	0.001 ppm
pH	7.7	0.01
CN	0.04 mg/l	0.01 mg/l
NO <sub>3</sub> as N	8.0 mg/l	0.01 mg/l
Al	0.1 mg/l	0.05 mg/l
B	<0.01 mg/l	0.01 mg/l
Co	0.071 mg/l	0.01 mg/l
Mo	<0.005 mg/l	0.005 mg/l
Ni	0.37 mg/l	0.01 mg/l
F	0.332 mg/l	0.1 mg/l
TDS	4734.0 mg/l	1 mg/l
Phenols	0.02 mg/l	0.01 mg/l
Benzene	<0.001 mg/l	0.001 mg/l
Toluene	<0.001 mg/l	0.001 mg/l
Carbon Tetrachloride	<0.01 mg/l	0.01 mg/l
1,2-Dichloroethane	<0.02 mg/l	0.02 mg/l
1,1-Dichloroethylene	<0.005 mg/l	0.005 mg/l
Tetrachloroethylene	<0.02 mg/l	0.02 mg/l
Trichloroethylene	<0.1 mg/l	<0.1 mg/l

- REFERENCES: 1. "Standard Methods for the Examination of Water and Wastewater", 15th Edition, APHA, N.Y., 1980.  
2. EPA Method 608

An invoice for services is enclosed. Thank you for contacting Assaigai Laboratories.

Sincerely,

Jennifer V. Smith  
Jennifer V. Smith, Ph.D.  
Laboratory Director

SAMPLE DATE : 8 NOV 85

TO:Bloomfield Refinery Co.

1641

Page 2 of 3

SAMPLE ID: MW-4

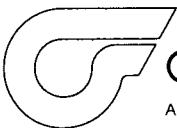
ANALYTE	ANALYTICAL RESULTS	NOMINAL DETECTION LIMITS
As	<0.050 mg/l	0.050 mg/l
Ba	1.5 mg/l	1.0 mg/l
Cd	<0.010 mg/l	0.010 mg/l
Cr	<0.050 mg/l	0.050 mg/l
Pb	<0.050 mg/l	0.050 mg/l
Hg	<0.002 mg/l	0.002 mg/l
Se	<0.010 mg/l	0.010 mg/l
Ag	<0.050 mg/l	0.050 mg/l
Cu	0.008 mg/l	0.002 mg/l
Fe	0.34 mg/l	0.05 mg/l
Mn	2.8 mg/l	0.005 mg/l
Zn	0.024 mg/l	0.004 mg/l
U	<1.0 mg/l	1.0 mg/l
Cl	675.0 mg/l	1.0 mg/l
SO <sub>4</sub>	3.0 mg/l	1.0 mg/l
PCB	<0.001 ppm	0.001 ppm
pH	7.7	0.01
CN	0.03 mg/l	0.01 mg/l
NO <sub>3</sub> as N	<0.01 mg/l	0.01 mg/l
Al	1.72 mg/l	0.05 mg/l
B	<0.01 mg/l	0.01 mg/l
Co	0.047 mg/l	0.01 mg/l
Mo	<0.005 mg/l	0.005 mg/l
Ni	0.21 mg/l	0.01 mg/l
F	0.559 mg/l	0.1 mg/l
TDS	2060.0 mg/l	1 mg/l
Phenols	0.037 mg/l	0.01 mg/l
Benzene	7.46 mg/l	0.001 mg/l
Toluene	2.00 mg/l	0.001 mg/l
Carbon Tetrachloride	<0.01 mg/l	0.01 mg/l
1,2-Dichloroethane	<0.02 mg/l	0.02 mg/l
1,1-Dichloroethylene	<0.005 mg/l	0.005 mg/l
Tetrachloroethylene	<0.02 mg/l	0.02 mg/l
Trichloroethylene	<0.1 mg/l	<0.1 mg/l

## GROUP WATER ELEVATIONS

1	2	3	4	5	6	7	8
DATE	BENCH-MARK →	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
2/24/84	-	5515.64	5519.38	5535.74	5524.30	5545.01	5555.13
2/28/85	-	5498.78	5500.37	5501.63	5499.46	5502.17	DRY
3/18/85	-	5498.94	5500.48	5502.04	5499.30	5502.66	DRY
4/11/85	-	5498.86	5500.55	5502.62	5499.30	5503.58	DRY
WATER ON							
5/31/85	-	5499.54	5500.90	5502.63	5499.80	5503.55	DRY
6/14/85	-	5499.67	5500.92	5502.52	5499.80	5503.31	DRY
6/26/85	-	5499.81	5500.91	5502.38	5499.73	5503.15	DRY
7/10/85	-	5500.07	5500.92	5502.37	5499.80	5503.21	DRY
8/2/85	-	5500.87	5501.18	5502.37	5499.78	5503.28	DRY
9/17/85	-	5500.21	5500.98	5502.14	5499.80	5502.91	DRY
10/9/85	-	5499.95	5500.80	5502.31	5499.70	5503.21	DRY
WATER OFF							
10/24/85	-	5499.10	5500.36	5502.17	5499.54	5503.01	DRY
11/8/85	-	5498.59	5499.98	5502.09	5499.60	5503.00	DRY
12/17/85	-	5498.22	5499.78	5501.74	5499.40	5502.81	DRY
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							

WIL DEPT DATA

DATE	FROM RIM	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
	5515.64	5519.38	5535.74	5524.30	5545.01	5555.13	
2/28/85	DEPTH OF WELL	24.15	27.40	38.60	31.20	46.43	49.60
	DEPTH TO H2O	16.70	18.90	33.70	25.00	42.35	DRY
3/18/85	DEPTH TO H2O	16.63	18.63	33.30	24.98	41.60	DRY
3/18/85	F T OF H2O	7.52	8.77	5.30	6.22	4.83	—
	WELL VOL. (FT <sup>3</sup> )	0.94	1.10	0.67	0.78	0.61	—
	WELL VOL. (Gal.)	7.07	8.24	4.98	5.84	4.54	—
4/11/85	DEPTH TO H2O	16.78	18.83	33.12	25.00	41.43	DRY
5/31/85	DEPTH TO H2O	16.10	18.48	33.11	24.50	41.46	DRY
6/14/85	DEPTH TO H2O	15.97	18.46	33.22	24.50	41.70	DRY
6/26/85	DEPTH TO H2O	15.83	18.47	33.36	24.57	41.86	DRY
7/10/85	DEPTH TO H2O	15.57	18.46	33.37	24.5	41.80	DRY
8/2/85	—v	14.77	18.20	33.37	24.52	41.73	DRY
9/17/85	—a	15.43	18.40	33.60	24.50	42.10	DRY
10/9/85	—n	15.69	18.58	33.43	24.60	41.80	DRY
10/24/85	—a	16.54	19.02	33.57	24.76	42.0	DRY
11/8/85	—a	17.05	19.4	33.65	24.70	42.01	DRY
12/17/85	—n	17.42	19.60	34.00	24.90	42.20	DRY



Bloomfield Refining  
Company

A Gary Energy Corporation Subsidiary

August 19, 1985

Mr. David G. Boyer  
State of New Mexico  
Oil Conservation Division  
P. O. Box 2088, Land Office Building  
Santa Fe, New Mexico 87501

RE: Discharge Plan GRW-1-A, Bloomfield Refining Company

Dear Mr. Boyer:

Analytical results for the wells P1, P4, and P5, obtained from the July 10, 1985 samples, are enclosed. This concludes the quarterly sampling required during the first year as a condition of our discharge plan. Our next sampling campaign, as per the discharge plan, will be in November, 1985.

Please feel free to contact me if there are any questions.

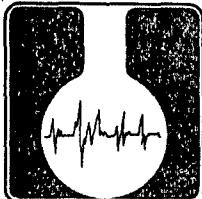
Very truly yours,

Chris Hawley  
Environmental Engineer

CH/jm

Enclosures

Cc: Paul Liscom  
Dave Younggren



# ASSAIGAI ANALYTICAL LABORATORIES

TO: Bloomfield Refinery Co.  
P.O. Box 159  
Bloomfield, NM 87413

DATE: 31 July 1985  
0955  
Page 1 of 4

SAMPLE ID: MW-1

ANALYTE	ANALYTICAL RESULTS	NOMINAL DETECTION LIMITS
As	<0.050 mg/l	0.050 mg/l
Ba	<1.0 mg/l	1.0 mg/l
Cd	<0.01 mg/l	0.01 mg/l
Cr	<0.05 mg/l	0.05 mg/l
Pb	<0.05 mg/l	0.05 mg/l
Hg	<0.002 mg/l	0.002 mg/l
Se	0.026 mg/l	0.010 mg/l
Ag	<0.050 mg/l	0.050 mg/l
Cu	<0.002 mg/l	0.002 mg/l
Fe	<0.3 mg/l	0.3 mg/l
Mn	0.52 mg/l	0.005 mg/l
Zn	<0.01 mg/l	0.01 mg/l
U	<0.1 mg/l	0.1 mg/l
Cl	953.0 mg/l	1.0 mg/l
SO <sub>4</sub>	882.0 mg/l	1.0 mg/l
PCB	<0.001 ppm	0.001 ppm
pH	7.5	0.01
CN	<0.01 mg/l	0.01 mg/l
NO <sub>3</sub> as N	15.4 mg/l	0.01 mg/l
Al	<0.05 mg/l	0.05 mg/l
B	0.13 mg/l	0.004 mg/l
Co	<0.01 mg/l	0.01 mg/l
Mo	0.28 mg/l	0.005 mg/l
Ni	<0.06 mg/l	0.06 mg/l
F	0.65 mg/l	0.1 mg/l
TDS	3246.0 mg/l	1 mg/l
Phenols	<0.01 mg/l	0.01 mg/l
Benzene	<0.001 mg/l	0.001 mg/l
Toluene	<0.001 mg/l	0.001 mg/l
Carbon Tetrachloride	<0.01 mg/l	0.01 mg/l
1,2-Dichloroethane	<0.02 mg/l	0.02 mg/l
1,1-Dichloroethylene	<0.005 mg/l	0.005 mg/l
Tetrachloroethylene	<0.02 mg/l	0.02 mg/l
Trichloroethylene	<0.1 mg/l	<0.1 mg/l

TO:Bloomfield Refinery Co.  
P.O. Box 159  
Bloomfield, NM 87413

DATE: 31 July 1985  
0955  
Page 2 of 4

SAMPLE ID: MW-4

ANALYTE	ANALYTICAL RESULTS	NOMINAL DETECTION LIMITS
As	<0.050 mg/l	0.050 mg/l
Ba	<1.0 mg/l	1.0 mg/l
Cd	<0.01 mg/l	0.01 mg/l
Cr	<0.05 mg/l	0.05 mg/l
Pb	<0.05 mg/l	0.05 mg/l
Hg	<0.002 mg/l	0.002 mg/l
Se	0.026 mg/l	0.010 mg/l
Ag	<0.050 mg/l	0.050 mg/l
Cu	<0.002 mg/l	0.002 mg/l
Fe	12.0 mg/l	0.3 mg/l
Mn	5.0 mg/l	0.005 mg/l
Zn	<0.01 mg/l	0.01 mg/l
U	<0.1 mg/l	0.1 mg/l
Cl	556.0 mg/l	1.0 mg/l
SO4	3.0 mg/l	1.0 mg/l
PCB	<0.001 ppm	0.001 ppm
pH	7.4	0.01
CN	<0.01 mg/l	0.01 mg/l
NO3 as N	<0.01 mg/l	0.01 mg/l
Al	<0.05 mg/l	0.05 mg/l
B	0.05 mg/l	0.004 mg/l
Co	<0.01 mg/l	0.01 mg/l
Mo	<0.005 mg/l	0.005 mg/l
Ni	<0.06 mg/l	0.06 mg/l
F	0.23 mg/l	0.1 mg/l
TDS	2004.0 mg/l	1 mg/l
Phenols	0.08 mg/l	0.01 mg/l
Benzene	8.64 mg/l	0.001 mg/l
Toluene	1.74 mg/l	0.001 mg/l
Carbon Tetrachloride	<0.01 mg/l	0.01 mg/l
1,2-Dichloroethane	<0.02 mg/l	0.02 mg/l
1,1-Dichloroethylene	<0.005 mg/l	0.005 mg/l
Tetrachloroethylene	<0.02 mg/l	0.02 mg/l
Trichloroethylene	<0.1 mg/l	<0.1 mg/l

TO:Bloomfield Refinery Co.  
P.O. Box 159  
Bloomfield, NM 87413

DATE: 31 July 1985  
0955  
Page 3 of 4

SAMPLE ID: MW-5

ANALYTE	ANALYTICAL RESULTS	NOMINAL DETECTION LIMITS
As	<0.050 mg/l	0.050 mg/l
Ba	<1.0 mg/l	1.0 mg/l
Cd	<0.01 mg/l	0.01 mg/l
Cr	<0.05 mg/l	0.05 mg/l
Pb	<0.05 mg/l	0.05 mg/l
Hg	<0.002 mg/l	0.002 mg/l
Se	0.026 mg/l	0.010 mg/l
Ag	<0.050 mg/l	0.050 mg/l
Cu	<0.002 mg/l	0.002 mg/l
Fe	<0.3 mg/l	0.3 mg/l
Mn	0.24 mg/l	0.005 mg/l
Zn	<0.01 mg/l	0.01 mg/l
U	<0.1 mg/l	0.1 mg/l
Cl	1360.0 mg/l	1.0 mg/l
SO <sub>4</sub>	1200.0 mg/l	1.0 mg/l
PCB	<0.001 ppm	0.001 ppm
pH	7.6	0.01
CN	<0.01 mg/l	0.01 mg/l
NO <sub>3</sub> as N	35.0 mg/l	0.01 mg/l
Al	0.78 mg/l	0.05 mg/l
B	0.15 mg/l	0.004 mg/l
Co	0.04 mg/l	0.01 mg/l
Mo	<0.005 mg/l	0.005 mg/l
Ni	<0.06 mg/l	0.06 mg/l
F	0.37 mg/l	0.1 mg/l
TDS	4746.0 mg/l	1 mg/l
Phenols	<0.01 mg/l	0.01 mg/l
Benzene	<0.001 mg/l	0.001 mg/l
Toluene	<0.001 mg/l	0.001 mg/l
Carbon Tetrachloride	<0.01 mg/l	0.01 mg/l
1,2-Dichloroethane	<0.02 mg/l	0.02 mg/l
1,1-Dichloroethylene	<0.005 mg/l	0.005 mg/l
Tetrachloroethylene	<0.02 mg/l	0.02 mg/l
Trichloroethylene	<0.1 mg/l	<0.1 mg/l

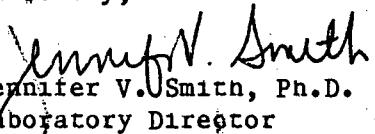
TO:Bloomfield Refinery Co.  
P.O. Box 159  
Bloomfield, NM 87413

DATE: 31 July 1985  
0955  
Page 4 of 4

REFERENCES: 1. "Standard Methods for the Examination of Water and Wastewater",  
15th Edition, APHA, N.Y., 1980.  
2. EPA Method 608

An invoice for services enclosed. Thank you for contacting Assaigai  
Laboratories.

Sincerely,

  
Jennifer V. Smith, Ph.D.  
Laboratory Director

MW-1

DR 13 984 MARCH 21, 1985 JULY 10, 1985

STD	PARAMETER	UNITS	1ST QTR September 1984	2nd QTR December 1984	3rd QTR March 1985	4th QTR June 1985
1	0.1 Arsenic	mg/l	ND	0.054	0.010	ND
2	1.0 Barium	mg/l	1.0	ND	ND	ND
3	0.01 Cadmium	mg/l	0.014	ND	0.027	ND
4	0.05 Chromium	mg/l	ND	0.070	ND	ND
5	0.05 Lead	mg/l	0.125	0.18	0.040	ND
6	0.002 Mercury	mg/l	ND	ND	ND	ND
7	0.05 Selenium	mg/l	0.35	0.120	0.022	0.026
8	0.05 Silver	mg/l	ND	ND	0.024	ND
*	1.0 Copper	mg/l	0.10	0.11	ND	ND
*	1.0 Iron	mg/l	57.0	128.0	0.07	ND
*	0.2 Manganese	mg/l	1.70	1.05	0.50	0.52
*	10.0 Zinc	mg/l	0.30	0.36	0.08	ND
13	5.0 Uranium	ppm	ND	ND	ND	ND
14	30.0 Radium 226 & 228	pCi/l	ND	ND	-	-
*15	250.0 Chloride	mg/l	1059.0	1135.0	1135.0	953.0
#16	600.0 Sulfate	mg/l	825.0	700.0	855.0	882.0
17	0.001 PCB	ppm	ND	ND	ND	ND
18	6-9 pH	s.u.	7.2	7.2	7.35	7.5
*	0.005 Phenols	mg/l	0.024	0.065	0.13	ND
20	0.2 Cyanide	mg/l	ND	ND	ND	ND
21	10.0 Nitrate as N	mg/l	7.2	ND	0.3	15.4
22	5.0 Aluminum	mg/l	2.0	3.68	ND	ND
23	0.75 Boron	mg/l	ND	0.25	0.69	0.13
24	0.05 Cobalt	mg/l	0.08	0.20	0.32	ND
25	1.0 Molybdenum	mg/l	ND	ND	0.41	0.28
26	0.2 Nickel	mg/l	0.3	ND	0.13	ND
27	1.6 Fluoride	mg/l	0.284	0.56	0.657	0.65
28	1000.0 TDS	mg/l	3582.0	3512.0	3726.0	3246.0
29	0.01 Benzene	mg/l	ND	0.015	ND	ND
30	15.0 Toluene	mg/l	ND	ND	ND	ND
31	0.01 Carbon Tetrachloride	mg/l	ND	ND	ND	ND
32	0.02 1,2-Dichloroethane	mg/l	ND	ND	ND	ND
33	0.005 1,1-Dichloroethylene	mg/l	ND	ND	ND	ND
34	0.02 1,1,2,2-Tetrachloroethane	mg/l	ND	ND	ND	ND
35	0.1 1,1,2-Trichloroethylene	mg/l	ND	ND	ND	ND
36	DEPTH TO STANCA WATER (ft)	FT	-	17' 7"	16.63'	15.57'
37	DEPTH OF WELL FROM RIM (ft)	FT	-	24' 5"		
38	STICKUP (ft)	FT	-	1' 10"		
39	ND = < NOMINAL DETECTION LIMITS	UNITS				
40						

MW-4

DEC 13, 1984 MARCH 21, 1985 JUNE 10, 1985

STD	PARAMETER	UNITS	1ST QTR September 1984	2nd QTR December 1984	3rd QTR March 1985	4th QTR June 1985
1	0.1 Arsenic	mg/l	ND	0.118	0.005	ND
2	1.0 Boron	v	4.0	7.0	2.5	ND
3	0.01 Cadmium	v	ND	ND	ND	ND
4	0.05 Chromium	v	0.10	0.28	ND	ND
5	0.05 Lead	v	0.088	0.22	0.015	ND
6	0.002 Mercury	v	ND	ND	ND	ND
7	0.05 Selenium	v	0.40	0.42	0.008	0.026
8	0.05 Silver	v	ND	ND	0.004	ND
*9	1.0 Copper	v	0.03	0.35	ND	ND
*10	1.0 Iron	v	43.7	132.0	6.8	12.0
*11	0.2 Manganese	v	7.8	25.4	5.2	5.0
*12	10.0 Zinc	v	0.18	0.38	0.03	ND
13	5.0 Uranium	v	ND	ND	ND	ND
14	30.0 Radium 226 & 228	pCi/l	ND	ND	-	-
*15	250.0 Chloride	mg/l	410.0	481.0	466.0	556.0
*16	600.0 Sulfate	mg/l	10.0	4.0	9.0	3.0
17	0.001 PCB	ppm	ND	ND	ND	ND
*18	6-9 pH	s.u.	7.1	6.9	7.01	7.4
*19	0.005 Phenols	v	0.55	0.120	0.005	0.08
20	0.2 Cyanide	v	ND	ND	ND	ND
21	10.0 Nitrate as N	v	0.02	ND	ND	ND
*22	5.0 Aluminum	v	ND	4.49	ND	ND
*23	0.75 Boron	v	ND	0.32	0.89	0.05
*24	0.05 Cobalt	v	ND	0.15	0.14	ND
*25	1.0 Molybdenum	v	ND	ND	0.18	ND
*26	0.2 Nickel	v	0.2	ND	0.16	ND
27	1.6 Fluoride	v	0.597	0.29	0.254	0.23
*28	1000.0 TDS	v	1860.0	2408.0	1860.0	2004.0
29	0.01 Benzene	v	0.419	3.64	14.81	8.64
30	15.0 Toluene	v	0.296	4.47	1.92	1.74
31	0.01 Carbon Tetrachloride	v	ND	ND	ND	ND
32	0.02 1,2-Dichloroethane	v	ND	ND	ND	ND
33	0.005 1,1-Dichloroethylene	v	ND	ND	ND	ND
34	0.02 1,1,2,2-Tetrachloroethylene	v	ND	ND	ND	ND
35	0.1 1,1,2-Trichloroethylene	v	ND	ND	ND	ND
36	DEPTH TO STATIC WATER FROM RIM FT	v	-	24'5"	24.98'	24.50
37	DEPTH OF WELL FROM RIM FT	v	-	31'2"	19"	
38	STICKUP	v				
39	ND = < NOMINAL DETECTION LIMITS	v				
40		v				

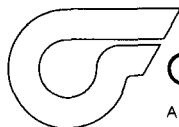
MW-5

MAR 21 1985 JUN 10 1985

<u>STD</u>	<u>PARAMETER</u>	<u>UNITS</u>	1ST QTR September 1984	2nd Qtr December 1984	3rd Qtr March 1985	4th Qtr June 1985
1	0.1 Arsenic	mg/l			0.011	ND
2	1.0 Borium				ND	ND
3	0.01 Cadmium				0.046	ND
4	0.05 Chromium				ND	ND
5	0.05 Lead				0.046	ND
6	0.002 Mercury				ND	ND
7	0.05 Selenium				0.022	0.026
8	0.05 Silver				0.037	ND
9	1.0 Copper				ND	ND
10	1.0 Iron				0.095	ND
11	0.2 Manganese				0.098	0.24
12	10.0 Zinc				0.060	ND
13	5.0 Uranium				ND	ND
14	30.0 Radium 226 & 228	pCi/l			—	—
15	250.0 Chloride	mg/l			1257.0	1360.0
16	600.0 Sulfate	mg/l			1158.0	1200.0
17	0.001 PCB	ppm			ND	ND
18	6 to 9 pH	S.U.			7.22	7.6
19	0.005 Phenols	mg/l			0.004	ND
20	0.2 Cyanide				ND	ND
21	10.0 Nitrate as N				29.0	35.0
22	5.0 Aluminum				ND	0.78
23	0.75 Boron				1.29	0.15
24	0.05 Cobolt				0.15	0.04
25	1.0 Molybdenum				ND	ND
26	0.2 Nickel				0.19	ND
27	1.6 Fluoride				0.391	0.37
28	1000.0 TDS				4758.0	4746.0
29	0.01 Benzene				ND	ND
30	15.0 Toluene				ND	ND
31	0.01 Carbon Tetrachloride				ND	ND
32	0.02 1,2-Dichloroethane				ND	ND
33	0.005 1,1-Dichloroethylene				ND	ND
34	0.02 1,1,2-Trichloroethylene				ND	ND
35	0.1 1,2-Trichloroethane				ND	ND
36	DEPTH TO STATIC WATER				41.60	41.80
37						
38						
39						
40						

## GROUP WATER ELEVATIONS

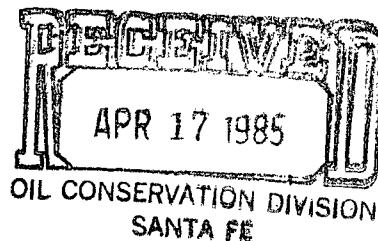
1	2	3	4	5	6	7	8
DATE	BENCH-MARK →	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
2/24/84	-	5515.64	5519.38	5535.74	5524.30	5545.01	5555.13
2/28/85	-	5498.78	5500.37	5501.63	5499.46	5502.17	DRY
3/18/85	-	5498.94	5500.48	5502.04	5499.30	5502.66	DRY
4/11/85	-	5499.01	5500.75	5502.44	5499.32	5503.41	DRY
5/31/85	-	5499.54	5500.90	5502.63	5499.80	5503.55	DRY
6/14/85	-	5499.67	5500.92	5502.52	5499.80	5503.31	DRY
6/26/85	-	5499.81	5500.91	5502.38	5499.73	5503.15	DRY
7/10/85	-	5500.07	5500.92	5502.37	5499.80	5503.21	DRY
8/2/85	-	5500.87	5501.18	5502.37	5499.78	5503.28	DRY
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Bloomfield Refining  
Company

A Gary Energy Corporation Subsidiary

April 15, 1985



Mr. David G. Boyer  
State of New Mexico  
Oil Conservation Division  
P. O. Box 2088, Land Office Building  
Santa Fe, NM 87501

Dear Mr. Boyer:

Re: Discharge Plan GRW-1-A, Bloomfield Refining Co.

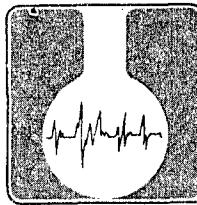
Analytical results for the wells P1, P4, and P5 obtained from the March, 1985 samples are enclosed. We will be sampling for the fourth quarter in June, 1985.

Samples requiring filtering were filtered with 0.45  $\mu$ g filters prior to shipment to the laboratory. This was not done for the previous two quarters. Please feel free to call me at 303-858-9811 if there are any questions.

Very truly yours,

Chris Hawley  
Environmental Engineer

CH/bf  
Attachments  
cc: Dave Younggren  
Paul Liscom



ASSAIGAI  
ANALYTICAL  
LABORATORIES

RECEIVED

cc: C. Hawley

P.W. LISCOM

TO: Bloomfield Refinery Co.  
Attn: Chris Hawley  
P.O. BOX 159  
Bloomfield NM 87413

DATE: 3 April 1985

0331

Page 1 of 3

ANALYTE

SAMPLE ID/ANALYTICAL RESULTS

	MW-1	MW-4
As	0.010 mg/l	0.005 mg/l
Ba	<1.0 mg/l	2.5 mg/l
Cd	0.027 mg/l	<0.010 mg/l
Cr	<0.05 mg/l	<0.05 mg/l
Pb	0.040 mg/l	0.015 mg/l
Hg	<0.002 mg/l	<0.002 mg/l
Se	0.022 mg/l	0.008 mg/l
Ag	0.024 mg/l	0.004 mg/l
Cu	<0.02 mg/l	<0.02 mg/l
Fe	0.07 mg/l	6.8 mg/l
Mn	0.50 mg/l	5.2 mg/l
Zn	0.08 mg/l	0.03 mg/l
U	<0.1 mg/l	<0.1 mg/l
Cl	1135.0 mg/l	426.0 mg/l
		506.0 mg/l duplicate
SO <sub>4</sub>	855.0 mg/l	9.0 mg/l
PCB	<0.001 mg/l	<0.001 mg/l
pH	7.35	7.01
CN	<0.02 mg/l	<0.02 mg/l
NO <sub>3</sub> as N	0.3 mg/l	<0.01 mg/l
Al	<0.05 mg/l	<0.05 mg/l
B	0.69 mg/l	0.89 mg/l
Co	0.32 mg/l	0.14 mg/l
Mo	0.41 mg/l	0.18 mg/l
Ni	0.13 mg/l	0.16 mg/l
F	0.657 mg/l	0.254 mg/l
TDS	3726.0 mg/l	1860.0 mg/l
Phenols	0.13 mg/l	0.005 mg/l
Benzene	<0.001 mg/l	14.81 mg/l
Toluene	<0.01 mg/l	1.92 mg/l
Carbon Tetrachloride	<0.01 mg/l	<0.01 mg/l
1,2-Dichloroethane	<0.02 mg/l	<0.02 mg/l
1,1-Dichloroethylene	<0.005 mg/l	<0.005 mg/l
1,1,2,2-Tetrachloroethylene	<0.02 mg/l	<0.02 mg/l
1,1,2-Trichloroethylene	<0.1 mg/l	<0.1 mg/l

TO:Bloomfield Refinery Co.

0331  
Page 2 of 3

## ANALYTE

SAMPLE ID/  
ANALYTICAL RESULTSNOMINAL DETECTION  
LIMITS

MW-5

As	0.011 mg/l	0.002 mg/l
Ba	<1.0 mg/l	1.0 mg/l
Cd	0.046 mg/l	0.010 mg/l
Cr	<0.05 mg/l	0.05 mg/l
Pb	0.046 mg/l	0.001 mg/l
Hg	<0.002 mg/l	0.002 mg/l
Se	0.022 mg/l	0.002 mg/l
Ag	0.037 mg/l	0.03 mg/l
Cu	<0.02 mg/l	0.02 mg/l
Fe	0.095 mg/l	0.05 mg/l
Mn	0.098 mg/l	0.005 mg/l
Zn	0.060 mg/l	0.004 mg/l
U	<0.1 mg/l	0.1 mg/l
Cl	1257.0 mg/l	0.1 mg/l
SO <sub>4</sub>	1158.0 mg/l	1.0 mg/l
PCB	<0.001 mg/l	0.001 mg/l
pH	7.22	0.01
CN	<0.02 mg/l	0.02 mg/l
NO <sub>3</sub> as N	29.0 mg/l	0.01 mg/l
Al	<0.05 mg/l	0.05 mg/l
B	1.29 mg/l	0.004 mg/l
Co	0.15 mg/l	0.003 mg/l
Mo	<0.01 mg/l	0.01 mg/l
Ni	0.19 mg/l	0.06 mg/l
F	0.391 mg/l	0.01 mg/l
TDS	4758.0 mg/l	1.0 mg/l
Phenols	0.004 mg/l	0.01 mg/l
Benzene	<0.001 mg/l	0.001 mg/l
Toluene	<0.01 mg/l	0.01 mg/l
Carbon Tetrachloride	<0.01 mg/l	0.01 mg/l
1,2-Dichloroethane	<0.02 mg/l	0.02 mg/l
1,1-Dichloroethylene	<0.005 mg/l	0.005 mg/l
1,1,2,2-Tetrachloroethylene	<0.02 mg/l	0.02 mg/l
1,1,2-Trichloroethylene	<0.1 mg/l	0.1 mg/l

REFERENCES: 1" Standard Methods for the Examination of Water and Wastewater",  
15th Edition, APHA, N.Y., 1980.  
2 EPA Method 608

TO:Bloomfield Refinery Co.

0331

Page 3 of 3

An invoice for services is enclosed. Thank you for contacting Assaigai Laboratories.

Sincerely,

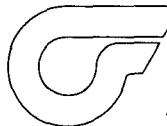
Jennifer V. Smith  
Jennifer V. Smith  
Laboratory Director

## GROUNDWATER ELEVATIONS

DATE	BENCH- MARK →	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
		5515.64	5519.38	5535.74	5524.30	5545.01	5555.13

## WELL DEPTHT DATA

		FROM RIM	5515.64	5519.38	5535.74	5524.30	5545.01	5555.13
DATE			MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
2/28/85	DEPTH OF WELL		24.15	27.40	38.60	31.20	46.43	49.60
	DEPTH TO H2O		16.70	18.90	33.70	25.00	42.35	DRY
3/18/85	DEPTH TO H2O		16.63	18.63	33.30	24.98	41.60	DRY
3/18/85	FT OF H2O		7.52	8.77	5.30	6.22	4.83	-
	WELL VOL. (FT <sup>3</sup> )		0.94	1.10	0.67	0.78	0.61	-
	WELL VOL. (GAL)		7.07	8.24	4.98	5.84	4.54	-
4/11/85	DEPTH TO H2O		16.78	18.83	33.12	25.00	41.43	DRY



Bloomfield Refining  
Company

A Gary Energy Corporation Subsidiary



January 23, 1985

Mr. David G. Boyer  
State of New Mexico  
Oil Conservation Division  
P.O. Box 2088, Land Office Building  
Santa Fe, NM 87501

Dear Mr. Boyer:

Re: Discharge Plan GRW-1-A, Bloomfield Refining Company

Analytical results for the wells P1 and P4 obtained from the December, 1984, samples are enclosed. We will be sampling for the third quarter in March, 1985. Also, enclosed are revised results from the first quarter. The units for phenols were incorrect.

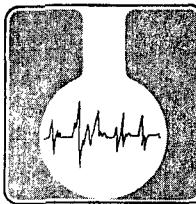
Please feel free to contact me if there are any questions.

Very truly yours,

*Chris Hawley*  
Chris Hawley  
Environmental Engineer

:bka

cc: Jim Everson  
Paul Liscom



ASSAIGAI  
ANALYTICAL  
LABORATORIES

2nd Qtr - December, 1984 →

TO: Bloomfield Refinery  
Attn: Chris Hawley  
P.O. Box 159  
Bloomfield, NM 87413

DATE: 9 January 1985  
1203  
Page 1 of 2

ANALYTE

SAMPLE ID/ANALYTICAL RESULTS

	MW-1 12/13/84	MW-4 12/13/84
As	0.054 mg/l	0.118 mg/l
Ba	<1.0 mg/l	7.0 mg/l
Cd	<0.01 mg/l	<0.01 mg/l
Cr	0.070 mg/l	0.28 mg/l
Pb	0.18 mg/l	0.22 mg/l
Hg	<0.002 mg/l	<0.002 mg/l
Se	0.120 mg/l	0.42 mg/l
Ag	<0.03 mg/l	<0.03 mg/l
Cu	0.11 mg/l	0.35 mg/l
Fe	128.0 mg/l	132.0 mg/l
Mn	1.05 mg/l	25.4 mg/l
Zn	0.36 mg/l	0.38 mg/l
U	<0.1 mg/l	<0.1 mg/l
Ra 226 & 228	<5.0 pCi/l	<5.0 pCi/l
Cl	1135.0 mg/l	481.0 mg/l
SO <sub>4</sub>	700.0 mg/l	4.0 mg/l
PCB	<0.01 ppm	<0.01 ppm
pH	7.2	6.9
Phenols	0.065 mg/l	0.120 mg/l
CN	<0.01 mg/l	<0.01 mg/l
NO <sub>3</sub> as N	<0.01 mg/l	<0.01 mg/l
Al	3.68 mg/l	4.49 mg/l
B	0.25 mg/l	0.32 mg/l
Co	0.20 mg/l	0.15 mg/l
Mo	<0.005 mg/l	<0.005 mg/l
Ni	<0.06 mg/l	<0.06 mg/l
F	0.56 mg/l	0.29 mg/l
TDS	3512.0 mg/l	2408.0 mg/l
Benzene	0.015 mg/l	3.64 mg/l
Toluene	<0.01 mg/l	4.47 mg/l
Carbon Tetrachloride	<0.01 mg/l	<0.01 mg/l
1,2-Dichloroethane	<0.02 mg/l	<0.02 mg/l
1,1-Dichloroethylene	<0.005 mg/l	<0.005 mg/l
1,1,2,2-Tetrachloroethylene	<0.02 mg/l	<0.02 mg/l
1,1,2-Trichloroethylene	<0.1 mg/l	<0.1 mg/l

TO: Bloomfield Refinery

1203

Page 2 of 2

NOMINAL DETECTION LIMIT:

As	0.002 mg/l
Ba	1.0 mg/l
Cd	0.01 mg/l
Cr	0.005 mg/l
Pb	0.001 mg/l
Hg	0.002 mg/l
Se	0.002 mg/l
Ag	0.03 mg/l
Cu	0.002 mg/l
Fe	0.05 mg/l
Mn	0.005 mg/l
Zn	0.004 mg/l
U	0.1 mg/l
Ra 226 & 228	5.0 pCi/l
Cl	0.1 mg/l
SO <sub>4</sub>	1.0 mg/l
PCB	0.01 ppm
pH	0.01
Phenols	0.01 mg/l
CN	0.01 mg/l
NO <sub>3</sub> as N	0.01 mg/l
Al	0.05 mg/l
B	0.004 mg/l
Co	0.003 mg/l
Mo	0.005 mg/l
Ni	0.06 mg/l
F	0.01 mg/l
TDS	1.0 mg/l
Benzene	0.01 mg/l
Toluene	0.01 mg/l
Carbon Tetrachloride	0.01 mg/l
1,2-Dichloroethane	0.02 mg/l
1,1-Dichloroethylene	0.005 mg/l
1,1,2,2-Tetrachloroethylene	0.02 mg/l
1,1,2-Trichloroethylene	0.1 mg/l

REFERENCES: 1."Standard Methods for the Examination of Water and Wastewater",  
15th Edition, APHA, N.Y., 1980.  
2. EPA Method 604

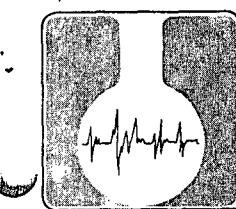
TO: Bloomfield Refinery

1203

An invoice for services is enclosed. Thank you for contacting Assaigai Laboratories.

Sincerely,

Jennifer V. Smith, Ph.D.  
Laboratory Director



ASSAIGAI  
ANALYTICAL  
LABORATORIES

1<sup>ST</sup> Qtr - September, 1984 →

TO: Bloomfield Refinery  
Attn: Chris Hawley  
P.O. Box 159  
Bloomfield, NM 87413

DATE: 9 January 1985  
0952 Revised  
Page 1 of 2

ANALYTE

SAMPLE ID/ANALYTICAL RESULTS

	MW-1	MW-4
As	<0.002 mg/l	<0.002 mg/l
Ba	1.0 mg/l	4.0 mg/l
Cd	0.014 mg/l	<0.002 mg/l
Cr	<0.005 mg/l	0.10 mg/l
Pb	0.125 mg/l	0.088 mg/l
Hg	<0.002 mg/l	<0.002 mg/l
Se	0.35 mg/l	0.40 mg/l
Ag	<0.003 mg/l	<0.003 mg/l
Cu	0.10 mg/l	0.03 mg/l
Fe	57.0 mg/l	43.7 mg/l
Mn	1.70 mg/l	7.8 mg/l
Zn	0.30 mg/l	0.18 mg/l
U	<0.1 mg/l	<0.1 mg/l
Ra 226 & 228	<5.0 pCi/l	<5.0 pCi/l
Cl	1059.0 mg/l	410.0 mg/l
SO <sub>4</sub>	825.0 mg/l	10.0 mg/l
PCB	<0.01 ppm	<0.01 ppm
pH	7.2	7.1
Phenols	0.024 mg/l	0.55 mg/l
CN	<0.01 mg/l	<0.01 mg/l
NO <sub>3</sub> as N	7.2 mg/l	0.02 mg/l
Al	2.0 mg/l	<0.05 mg/l
B	<0.004 mg/l	<0.004 mg/l
Co	0.08 mg/l	<0.003 mg/l
Mo	<0.005 mg/l	<0.005 mg/l
Ni	0.3 mg/l	0.2 mg/l
F	0.284 mg/l	0.597 mg/l
TDS	3582.0 mg/l	1860.0 mg/l
Benzene	<0.01 mg/l	0.419 mg/l
Toluene	<0.01 mg/l	0.296 mg/l
Carbon Tetrachloride	<0.01 mg/l	<0.01 mg/l
1,2-Dichloroethane	<0.02 mg/l	<0.02 mg/l
1,1-Dichloroethylene	<0.005 mg/l	<0.005 mg/l
1,1,2,2-Tetrachloroethylene	<0.02 mg/l	<0.02 mg/l
1,1,2-Trichloroethylene	<0.1 mg/l	<0.1 mg/l

TO: Bloomfield Refinery

0952 Revised  
Page 2 of 2

NOMINAL DETECTION LIMIT:

As	0.002 mg/l
Ba	0.005 mg/l
Cd	0.002 mg/l
Cr	0.005 mg/l
Pb	0.001 mg/l
Hg	0.002 mg/l
Se	0.002 mg/l
Ag	0.003 mg/l
Cu	0.002 mg/l
Fe	0.05 mg/l
Mn	0.005 mg/l
Zn	0.004 mg/l
U	0.1 mg/l
Ra 226 & 228	5.0 pCi/l
Cl	0.1 mg/l
SO <sub>4</sub>	1.0 mg/l
PCB	0.01 ppm
pH	0.01
Phenols	0.01 mg/l
CN	0.01 mg/l
NO <sub>3</sub> as N	0.1 mg/l
Al	0.05 mg/l
B	0.004 mg/l
Co	0.003 mg/l
Mo	0.005 mg/l
Ni	0.01 mg/l
F	0.01 mg/l
TDS	1.0 mg/l
Benzene	0.01 mg/l
Toluene	0.01 mg/l
Carbon Tetrachloride	0.01 mg/l
1,2-Dichloroethane	0.02 mg/l
1,1-Dichloroethylene	0.005 mg/l
1,1,2,2-Tetrachloroethylene	0.02 mg/l
1,1,2-Trichloroethylene	0.1 mg/l

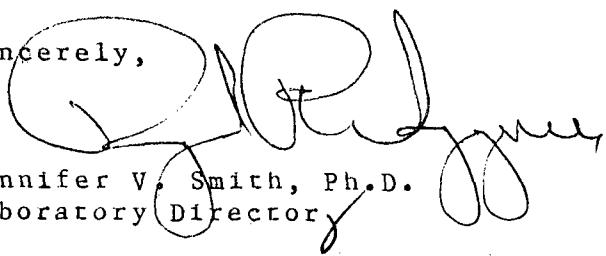
REFERENCES: 1."Standard Methods for the Examination of Water and Wa  
15th Edition, APHA, N.Y., 1980.  
2. EPA Method 604

TO: Bloomfield Refinery

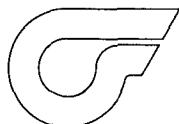
0952 Revised

An invoice for services is enclosed. Thank you for contacting Assaigai Laboratories.

Sincerely,

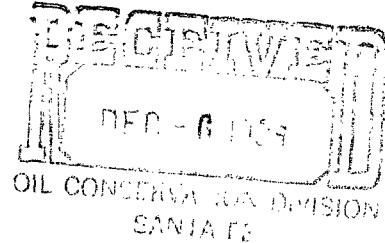


Jennifer V. Smith, Ph.D.  
Laboratory Director



**Gary Refining  
Company**

A Gary Energy Corporation Subsidiary



December 3, 1984

Mr. David G. Boyer  
State of New Mexico  
Oil Conservation Division  
P.O. Box 2088, Land Office Building  
Santa Fe, NM 87501

Dear Mr. Boyer:

Re: Discharge Plan GRW-1-A, Bloomfield Refining Co.

Analytical results for the wells P1 and P4 obtained from the September, 1984, samples are enclosed. We will be sampling for the second quarter in December, 1984.

After reviewing the analytical data obtained by the EPA on March 19, 1984, and the data we obtained from the September samples, it is apparent that the existing water quality in the refinery area has not been established. We have no reason to believe that occurrences have happened since March, 1984, to statistically affect water quality, yet the analytical results indicate numerous differences.

We feel that it is inappropriate to base background on a one time sampling campaign. With this in mind, we would like to propose that we use our quarterly sampling for those constituents listed in Section 3-103A, B, and C of the Water Quality Control Commission Regulations as a basis of establishing existing water quality. This would result in a better data base to determine significant changes.

We hope you will consider our proposal favorably. As new owners, we would like to develop a data base that we are comfortable with. Please feel free to call me at (303) 858-9811.

Very truly yours,

Chris Hawley  
Environmental Engineer

:bka

cc: Jim Everson, Mike Leger, Paul Liscom  
Gary Community Rural Station • Fruita, Colorado 81521 • 303/858-9811

~~ASSAIGAI~~

ANALYTICAL LABORATORIES, INC.

OCT 16 1984

TO: Plateau Inc.  
Attn; Dwight Stockham  
P.O. Box 159  
Bloomfield, NM 87413

DATE: 15 October 1984  
0952  
Page 1 of 2

ANALYTE

SAMPLE ID/ANALYTICAL RESULTS

	MW 1	MW 4
As	<0.002 mg/l	<0.002 mg/l
Ba	1.0 mg/l	4.0 mg/l
Cd	0.014 mg/l	<0.002 mg/l
Cr	<0.005 mg/l	0.10 mg/l
Pb	0.125 mg/l	0.088 mg/l
Hg	<0.002 mg/l	<0.002 mg/l
Se	0.35 mg/l	0.40 mg/l
Ag	<0.003 mg/l	<0.003 mg/l
Cu	0.10 mg/l	0.03 mg/l
Fe	57.0 mg/l	43.7 mg/l
Mn	1.70 mg/l	7.8 mg/l
Zn	0.30 mg/l	0.18 mg/l
U	<0.1 mg/l	<0.1 mg/l
Ra 226 & 228	<5 pCi/l	<5 pCi/l
Cl	1059.0 mg/l	410.0 mg/l
SO <sub>4</sub>	825.0 mg/l	10.0 mg/l
PCB	<0.01 mg/l	<0.01 mg/l
pH	7.2	7.1
Phenols	24.0 mg/l	552.0 mg/l
CN	<0.01 mg/l	<0.01 mg/l
NO <sub>3</sub> as N	7.2 mg/l	0.02 mg/l
Al	2.0 mg/l	<0.05 mg/l
B	<0.004 mg/l	<0.004 mg/l
Co	0.08 mg/l	<0.003 mg/l
Mo	<0.005 mg/l	<0.005 mg/l
Ni	0.3 mg/l	0.2 mg/l
F	0.284 mg/l	0.597 mg/l
TDS	3582.0 mg/l	1860.0 mg/l
Benzene	<0.01 mg/l	0.419 mg/l
Toluene	<0.01 mg/l	0.296 mg/l
Carbon Tetrachloride	<0.01 mg/l	<0.01 mg/l
1,2 Dichloroethane	<0.02 mg/l	<0.02 mg/l
1,1 Dichloroethylene	<0.005 mg/l	<0.005 mg/l
1,1,2,2-Tetrachloroethylene	<0.02 mg/l	<0.02 mg/l
1,1,2-Trichloroethylene	<0.1 mg/l	<0.1 mg/l

TO: Plateau Inc.

0952

NOMINAL DETECTION LIMIT:

As	0.002 mg/l
Ba	0.005 mg/l
Cd	0.002 mg/l
Cr	0.005 mg/l
Pb	0.001 mg/l
Hg	0.002 mg/l
Se	0.002 mg/l
Ag	0.003 mg/l
Cu	0.002 mg/l
Fe	0.05 mg/l
Mn	0.005 mg/l
Zn	0.004 mg/l
U	<0.1 mg/l
Ra 226 & 228	5 pCi/l
Cl	0.1 mg/l
SO <sub>4</sub>	1.0 mg/l
PCB	0.01 mg/l
pH	0.01
Phenols	0.01 mg/l
CN	0.01 mg/l
NO <sub>3</sub> as N	0.1 mg/l
Al	0.05 mg/l
B	0.004 mg/l
Co	0.003 mg/l
Mo	0.005 mg/l
Ni	0.01 mg/l
F	0.01 mg/l
TDS	1.0 mg/l
Benzene	0.01 mg/l
Toluene	0.01 mg/l
Carbon Tetrachloride	0.01 mg/l
1,2 Dichloroethane	0.02 mg/l
1,1 Dichloroethylene	0.005 mg/l
1,1,2,2-Tetrachloroethylene	0.02 mg/l
1,1,2-Trichloroethylene	0.1 mg/l

REFERENCES: 1."Standard Methods for the Examination of the Water and Waste-water", 15th Edition, APHA, N.Y., 1980.  
2.EPA Method 604

An invoice for services is enclosed. Thank you for contacting Assaigai Laboratories.

TO: Plateau Inc.

0952

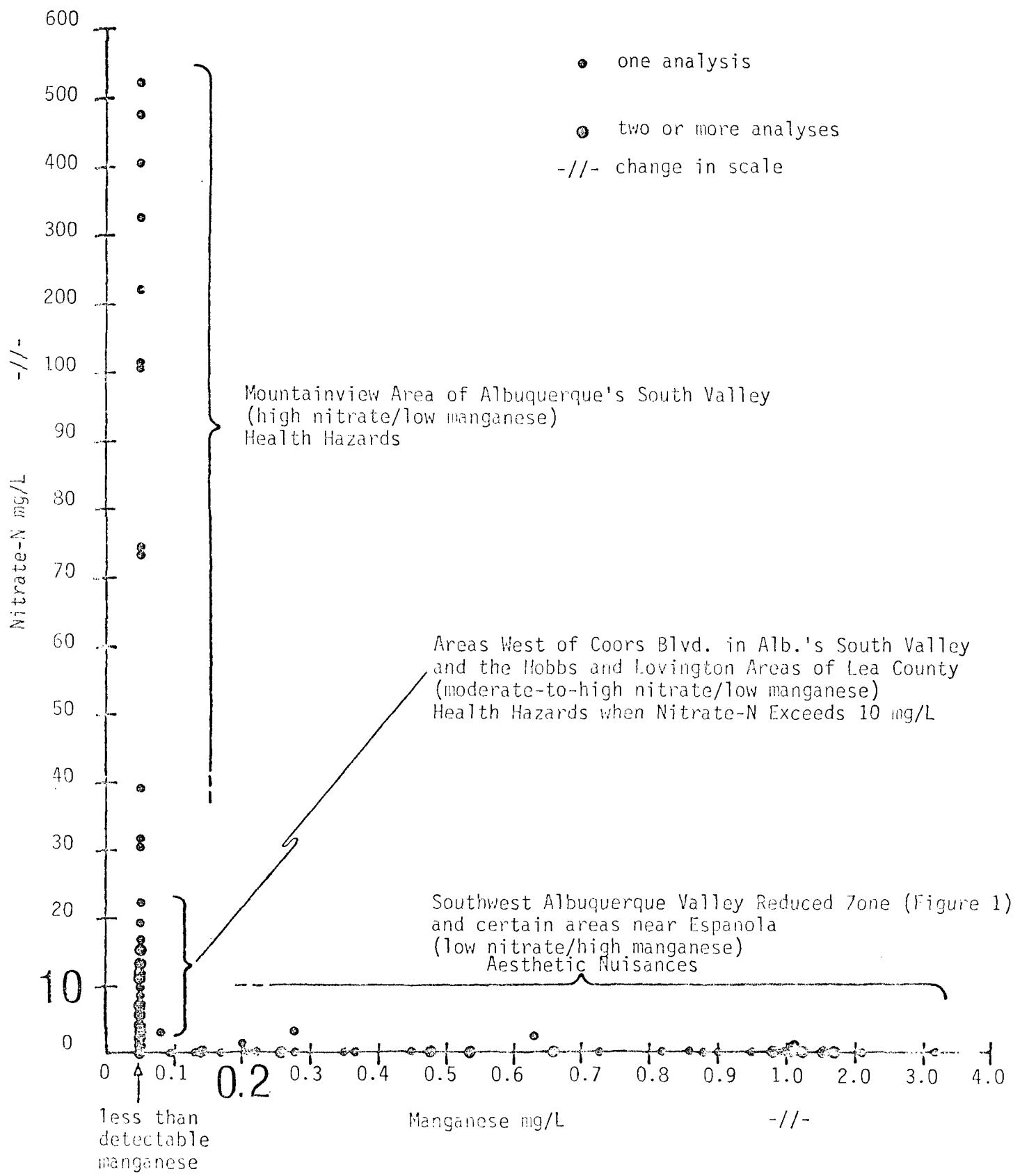
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Sincerely,

Jennifer V. Smith  
Jennifer V. Smith, Ph.D.  
Laboratory Director

Figure 2. Typical Nitrate-N-Manganese "Fingerprints" for South Valley Ground Waters compared with Ground Waters in Lea and Rio Arriba Counties.

Note the changes in scale at 100 mg/L nitrate-N and at 1.0 mg/L manganese. The New Mexico Water Quality Control Commission ground-water standards are 10 mg/L nitrate-N (based upon health hazards) and 0.2 mg/L manganese (based upon aesthetic concerns).



STATION NAME: PLATTE RIVER MON. WELL #1 (Station <sup>FIT</sup> #29)

LOCATION: North of Solar Evap Ponds

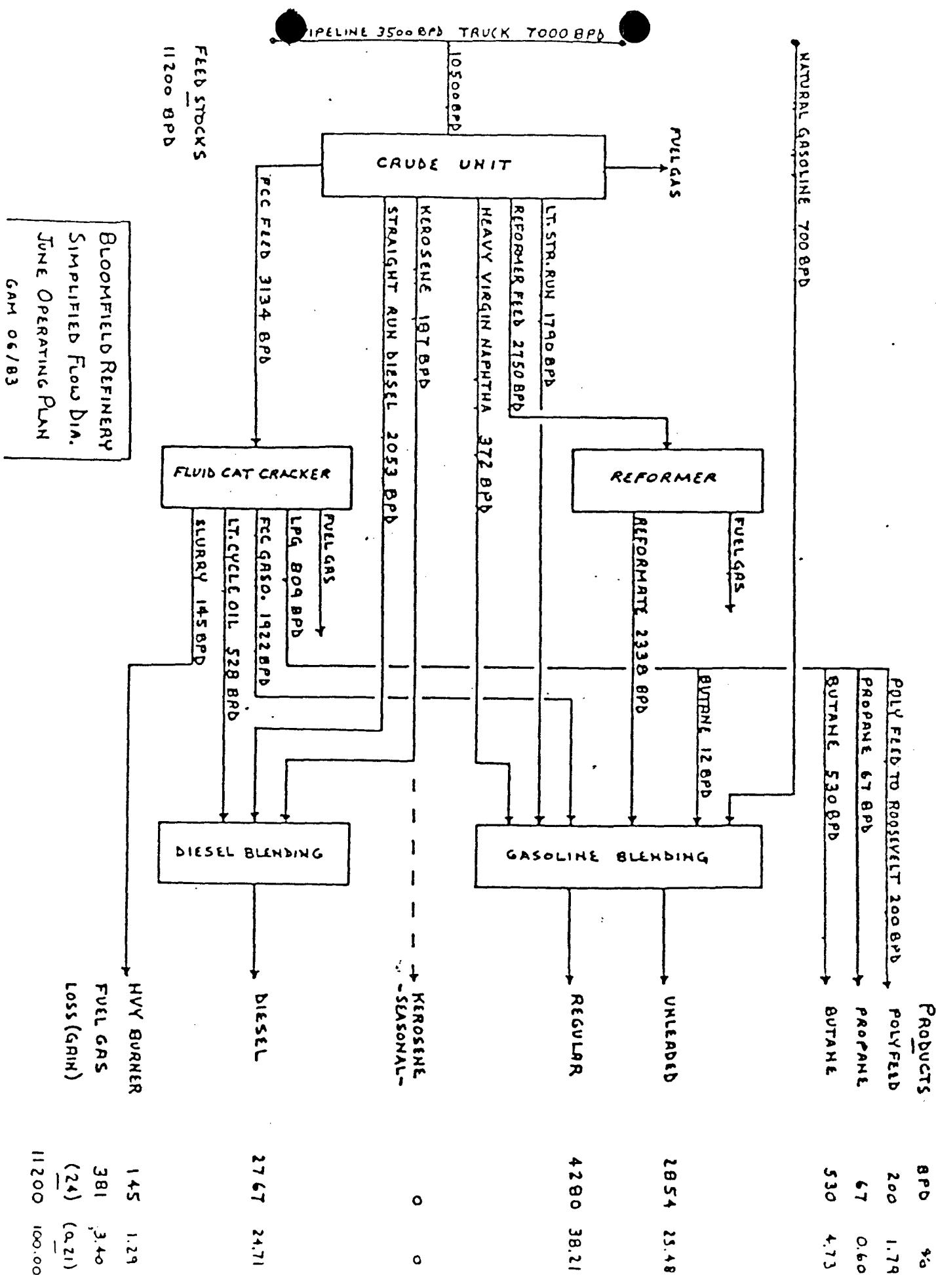
Parameter/Date-Time	3/22/84	2/9/84	2/15/84	5/84	5/84	9/84	12/84
Water Level from MP		FIT of E&E Inc		Hauser	CEP	ASSAGRI	ASSAGRI
Water Level Elevation	Ft	Static 16.8"	16.56	17.01			
Staff Gage	Ft						
pH						7.2	7.2
Temp °C							
Uncorrected N.				1.2	0.05	7.2	10.01
Phenols Field Cond. X1000				10.015	0.13	0.024	0.065
A <sub>1</sub> .100 mg/l	—					10.002	0.054
B <sub>2</sub> 1.000 mg/l	0.2					1.0	1.0
Cd .010 mg/l	0.003					0.014	≤ 0.01
Cr .050 mg/l	0.01					≤ 0.005	0.07
Pb .050 mg/l	—					0.125	0.18
Se .050 mg/l	0.003					10.002	0.002
Ag .050 mg/l	—					0.35	0.12
Zn 10.000 mg/l	0.06					10.003	≤ 0.03
Al 5.000 mg/l	11.6					2.0	3.68
B .750 mg/l	—					10.004	0.25
Co .050 mg/l	0.1					0.08	0.2
Cu 1.000 mg/l	—					0.10	0.11
Fe 1.000 mg/l	20.9					57	128
Mn .200 mg/l	1.38					1.7	1.05
Mo 1.000 mg/l	—			10.5	0.24	10.005	≤ 0.005
Ni .200 mg/l	0.08					0.3	10.06
Ca — mg/l							
K — mg/l							
Na — mg/l							
HCO <sub>3</sub> — mg/l							
Cl 250 mg/l	1070	1000	1057	1135			
SO <sub>4</sub> 600 mg/l	240	520	825	700			
TFR 1.000 mg/l	3038	3050	3582	3512			
Lab Cond. 25°C	0.62	0.54	0.284	0.56			
Benzene 0.01 mg/l	ND					10.01	0.015
Toluene 15.0 mg/l	ND					10.01	10.01

STATION NAME: Pleasant Mon Well #4 (Fit Station 2)LOCATION: In gravel parking area near main entrance

Parameter/Date-Time	3/22/84	2/9/84	2/15/84	5/84	5/84	9/84	12/84
Water Level from MP	Fit of E & Env			Hausen	CEP	ASSAGAI	ASSAGAI
Water Level Elevation Ft	STATIC 24.91	24.54	24.97				
Staff Gage Ft							
pH						7.1	6.9
Temp °C							
Uncorrected N	<u>Hg0.0004</u>			1.3	0.002	0.02	10.01
Phenols Field Cond. mhos				0.19	0.05	0.55	0.12
As .100 mg/l	0.018					10.002	0.118
Ba 1.000 mg/l	1.8					4.	7.0
Cd .010 mg/l	0.003					10.002	10.01
Cr .250 mg/l	0.04					0.1	0.28
Pb .050 mg/l	0.042					0.088	0.22
Se .050 mg/l	<u>Hg0.0004</u>					10.002 0.4	0.002 0.42
Ag .050 mg/l	—					10.003	10.03
Zn 10.000 mg/l	0.18					0.18	0.38
Al 5.000 mg/l	31.8					10.05	4.49
B .750 mg/l	—					10.004	0.32
Co .050 mg/l	—					10.003	0.15
Cu 1.000 mg/l	0.05					0.03	0.35
Fe 1.000 mg/l	57.7					43.7	132
Mn .200 mg/l	7.62					7.8	25.4
Mo 1.000 mg/l	—			0.05	0.005	10.005	10.005
Ni .200 mg/l	—					0.2	10.06
Ca — mg/l							
K — mg/l							
Na — mg/l							
HCO <sub>3</sub> — mg/l							
Cl 250 mg/l				1600	1780	410	481
SO <sub>4</sub> 600 mg/l				410	41	10	4.0
TFR 1.020 mg/l				1600	1780	1860	2408
Lead conc -25°C (mg/l)				0.32	0.33	0.597	0.29
Benzene 0.01 mg/l	9.000					0.419	3.64
Toluene 15.0 mg/l	—					0.296	4.47
Ethyl Benzene	WT						
Total Xylenes	10.000						

STATION NAME: Platteau Mon Well #5 (FIT #28)LOCATION: In spray irrigation area

Parameter/Date-Time	3/2/84 FIT #	2/9/84 EE Inc	2/15/84			
Water Level from MP	Ft	EE Inc				
? Water Level Elevation	Ft	Static 2.6'	Static 42.67'	43.78'		
Staff Gage	Ft					
pH						
Temp °C						
Uncorrected Field Cond. mhos						
As .100 mg/l						
Ba .1000 mg/l	0.3					
Cd .010 mg/l						
Cr .050 mg/l	0.04					
Pb .050 mg/l	0.02					
Se .050 mg/l	0.002					
Ag .050 mg/l						
Zn 10,000 mg/l	0.12					
Al 5,000 mg/l	76.0					
B .750 mg/l						
Co .050 mg/l						
Cu 1000 mg/l	0.1					
Fe 1,000 mg/l	70.6					
Mn .200 mg/l	0.915					
Mo 1,000 mg/l						
Ni .200 mg/l	0.04					
Ca — mg/l						
K — mg/l						
Na — mg/l						
HCO <sub>3</sub> — mg/l						
Cl 250 mg/l						
SO <sub>4</sub> 600 mg/l						
TFR 1,000 mg/l						
Lab Cond. -25°C mhos						
Benzene 0.01 mg/l	-					
Toluene 15.0 mg/l	-					
ETHYL Benzene	31					
Total xylenes	5					





December 3, 1984

Mr. David G. Boyer  
State of New Mexico  
Oil Conservation Division  
P.O. Box 2088, Land Office Building  
Santa Fe, NM 87501

Dear Mr. Boyer:

Re: Discharge Plan GRW-1-A, Bloomfield Refining Co.

Analytical results for the wells P1 and P4 obtained from the September, 1984, samples are enclosed. We will be sampling for the second quarter in December, 1984.

After reviewing the analytical data obtained by the EPA on March 19, 1984, and the data we obtained from the September samples, it is apparent that the existing water quality in the refinery area has not been established. We have no reason to believe that occurrences have happened since March, 1984, to statistically affect water quality, yet the analytical results indicate numerous differences.

We feel that it is inappropriate to base background on a one time sampling campaign. With this in mind, we would like to propose that we use our quarterly sampling for those constituents listed in Section 3-103A, B, and C of the Water Quality Control Commission Regulations as a basis of establishing existing water quality. This would result in a better data base to determine significant changes.

We hope you will consider our proposal favorably. As new owners, we would like to develop a data base that we are comfortable with. Please feel free to call me at (303) 858-9811.

Very truly yours,

A handwritten signature in black ink, appearing to read "Chris Hawley".

Chris Hawley  
Environmental Engineer

:bka

cc: Jim Everson, Mike Leger, Paul Liscom  
Gary Community Rural Station • Fruita, Colorado 81521 • 303/858-9811

OCT 16 1984

TO: Plateau Inc.  
 Attn; Dwight Stockham  
 P.O. Box 159  
 Bloomfield, NM 87413

DATE: 15 October 1984  
 0952  
 Page 1 of 2

## ANALYTE

## SAMPLE ID/ANALYTICAL RESULTS

## MW 1

## MW 4

As	<0.002 mg/l	<0.002 mg/l
Ba	1.0 mg/l	4.0 mg/l
Cd	0.014 mg/l	<0.002 mg/l
Cr	<0.005 mg/l	0.10 mg/l
Pb	0.125 mg/l	0.088 mg/l
Hg	<0.002 mg/l	<0.002 mg/l
Se	0.35 mg/l	0.40 mg/l
Ag	<0.003 mg/l	<0.003 mg/l
Cu	0.10 mg/l	0.03 mg/l
Fe	57.0 mg/l	43.7 mg/l
Mn	1.70 mg/l	7.8 mg/l
Zn	0.30 mg/l	0.18 mg/l
U	<0.1 mg/l	<0.1 mg/l
Ra 226 & 228	<5 pCi/l	<5 pCi/l
Cl	1059.0 mg/l	410.0 mg/l
SO <sub>4</sub>	825.0 mg/l	10.0 mg/l
PCB	<0.01 mg/l	<0.01 mg/l
pH	7.2	7.1
Phenols	24.0 mg/l	552.0 mg/l
CN	<0.01 mg/l	<0.01 mg/l
NO <sub>3</sub> as N	7.2 mg/l	0.02 mg/l
Al	2.0 mg/l	<0.05 mg/l
B	<0.004 mg/l	<0.004 mg/l
Co	0.08 mg/l	<0.003 mg/l
Mo	<0.005 mg/l	<0.005 mg/l
Ni	0.3 mg/l	0.2 mg/l
F	0.284 mg/l	0.597 mg/l
TDS	3582.0 mg/l	1860.0 mg/l
Benzene	<0.01 mg/l	0.419 mg/l
Toluene	<0.01 mg/l	0.296 mg/l
Carbon Tetrachloride	<0.01 mg/l	<0.01 mg/l
1,2 Dichloroethane	<0.02 mg/l	<0.02 mg/l
1,1 Dichloroethylene	<0.005 mg/l	<0.005 mg/l
1,1,2,2-Tetrachloroethylene	<0.02 mg/l	<0.02 mg/l
1,1,2-Trichloroethylene	<0.1 mg/l	<0.1 mg/l

Incorrect units  
 (Mg/l correct)

TO: Plateau Inc.

0952

NOMINAL DETECTION LIMIT:

As	0.002 mg/l
Ba	0.005 mg/l
Cd	0.002 mg/l
Cr	0.005 mg/l
Pb	0.001 mg/l
Hg	0.002 mg/l
Se	0.002 mg/l
Ag	0.003 mg/l
Cu	0.002 mg/l
Fe	0.05 mg/l
Mn	0.005 mg/l
Zn	0.004 mg/l
U	<0.1 mg/l
Ra 226 & 228	5 pCi/l
Cl	0.1 mg/l
SO <sub>4</sub>	1.0 mg/l
PCB	0.01 mg/l
pH	0.01
Phenols	0.01 mg/l
CN	0.01 mg/l
NO <sub>3</sub> as N	0.1 mg/l
Al	0.05 mg/l
B	0.004 mg/l
Co	0.003 mg/l
Mo	0.005 mg/l
Ni	0.01 mg/l
F	0.01 mg/l
TDS	1.0 mg/l
Benzene	0.01 mg/l
Toluene	0.01 mg/l
Carbon Tetrachloride	0.01 mg/l
1,2 Dichloroethane	0.02 mg/l
1,1 Dichloroethylene	0.005 mg/l
1,1,2,2-Tetrachloroethylene	0.02 mg/l
1,1,2-Trichloroethylene	0.1 mg/l

REFERENCES: 1."Standard Methods for the Examination of the Water and Waste-water", 15th Edition, APHA, N.Y., 1980.  
2.EPA Method 604

An invoice for services is enclosed. Thank you for contacting Assaigai Laboratories.

TO: Plateau Inc.

0952

Sincerely,

Jennifer V. Smith  
Jennifer V. Smith, Ph.D.  
Laboratory Director

# BRUCE S. GARBER

ATTORNEY AT LAW

200 WEST MARCY, SUITE 129  
SANTA FE, NEW MEXICO 87504

P.O. BOX 8933  
(505) 983-3233

May 24, 1984

Mr. Joe D. Ramey  
Director of Energy and Minerals  
Department  
Oil Conservation Division  
P.O. Box 2088  
State Land Office Building  
Santa Fe, New Mexico 87501

Dear Mr. Ramey:

Sampling results for Plateau wells #1 and #4 for the constituents you requested are set forth below. For the most part, the results of Hauser Laboratory and CEP laboratory for these constituents are fairly consistent. All concentrations are in mg/l.

	WELL #1		WELL #4	
	Hauser	CEP	Hauser	CEP
Chloride	1,040	1,000	1,600	1,780
Fluoride	0.62	0.54	0.32	0.33
Molybdenum	<0.5	0.24	0.05	0.005
Nitrate	1.2	0.05	1.3	0.02
Phenols	< 0.015	0.13	0.19	0.05
Sulfate	240	520	< 10.0	< 1.0
TDS	3038	3050	1600	1780

These analysis results should serve to establish the existing concentrations of those constituents for Wells #1 and #4. Any further existing concentration information which might be required to implement the discharge will become available upon the first ground water sampling and analysis by Plateau under the proposed plan.

Thank you for your continuing assistance.

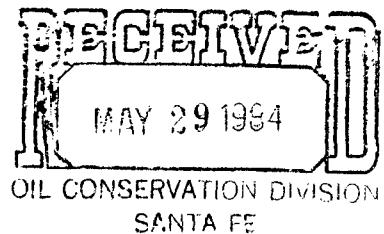
Sincerely,



Bruce S. Garber

2 38  
760  
6  
16

BSG/dm  
cc: Gregory S. Smith  
Dwight S. Stockham  
Paul W. Liscom



# BRUCE S. GARBER

ATTORNEY AT LAW

200 WEST MARCY, SUITE 129  
SANTA FE, NEW MEXICO 87504

P.O. BOX 8933  
(505) 983-3233

May 15, 1984

Mr. Joe D. Ramey  
Director, Energy & Minerals Department  
Oil Conservation Division  
State Land Office Building  
Santa Fe, New Mexico 87501

HAND DELIVERED

Re: Plateau, Inc.

Dear Mr. Ramey:

Enclosed are the U. S. Environmental Protection Agency's analytical results for samples taken the week of March 19, 1984 from monitoring wells 1, 4, and 5 at Plateau, Inc.'s Bloomfield, New Mexico refinery. The location of these wells is indicated on Plate 1 of the March, 1984, Discharge Plan. The wells are designated on that Plate as P 1, P 4 and P 5. As stated in previous correspondence and at meetings between O.C.D. and Plateau representatives, these analytical results should serve to establish existing water quality in the refinery area for purposes of Plateau's Discharge Plan.

Also enclosed is an April 26, 1982 report from Hauser Laboratories. This report contains analytical results for water samples from the North Solar Evaporation Pond. The water discharged to the land application area is taken from the North Solar Evaporation Pond.

Additionally, you have indicated a concern about the frequency of ground water monitoring under the Discharge Plan. Plateau will monitor ground water quarterly for the first year of operations under the plan and semiannually thereafter. I trust that this information is responsive to O.C.D.'s remaining questions on Plateau's Discharge Plan.

Finally, Plateau hereby requests an extension of time to discharge without an approved discharge plan until July 1, 1984. This extension should allow the O.C.D. sufficient time to complete its review of the Discharge Plan.

Thank you for your continuing assistance.

Sincerely yours,

*Bruce S. Garber*  
Bruce S. Garber

BSG/mp

cc: G. S. Smith  
D. S. Stockham  
P. W. Liscom

EPA ANALYSIS OF ~~AU'S~~ BLOOMFIELD REFINERY MO~~U~~NG WELLS  
SAMPLED THE WEEK OF MARCH 19, 1984

	<u>WQCC STANDARDS</u>	<u>WELL #1</u>	<u>WELL #4</u>	<u>WELL #5</u>
<u>INORGANICS</u> (ppm)				
Aluminum	5.0 (C)	11.6	31.8	76.0
Antimony	---	< 0.02	< 0.02	< 0.02
Arsenic	0.1 (A)	< 0.01	0.018	< 0.01
Barium	1.0 (A)	0.2	1.8	0.3
Beryllium	---	< .005	< .005	< .005
Cadmium	0.01 (A)	0.003	< 0.003	< 0.001
Calcium	---	NR	NR	NR
Chromium	0.05 (A)	0.01	< 0.04	0.04
Colbalt	0.05 (C)	0.1	.05	< 0.05
Copper	1.0 (B)	< 0.05	0.05	0.1
Iron	1.0 (B)	20.9	57.7	70.6
Lead	0.05 (A)	< 0.01	.042	.02
Cyanide	0.2 (A)	NR	NR	NR
Magnesium	---	NR	NR	NR
Manganese	0.2 (B)	1.38	7.62	.915
Mercury	0.002(A)	< 0.0002	0.0004	< 0.002
Nickel	0.2 (C)	0.08	< 0.04	0.04
Potassium	---	NR	NR	NR
Selenium	0.05 (A)	0.003	< 0.002	0.002
Silver	0.05 (A)	< 0.01	< 0.01	< 0.01
Sodium	---	NR	NR	NR
Thallium	---	< 0.01	< 0.01	< 0.01
Tin	---	ND	ND	ND
Vanadium	---	< 0.20	< 0.20	< 0.20
Zinc	10 (B)	0.06	0.18	0.12

NR - Present but below quantification limits

ND - No detection

No  
 Fluoride  
 Nitrate  
 Uranium  
 Chloride  
 Molybdenum  
 Sulfates  
 TDS  
 Phenols

Note:  
 Hauser Report  
 Anal. File  
 04/20/84

WELL #1WELL #2WELL #3

Unknown	0.20
Alkane	0.28
Alkane or Benzene Derivative	0.25
Alkane or Benzene Derivative	0.57
Butyl Cyclo Hexane	0.086
Unknown	0.180
Alkane or Benzene Derivative	0.120
Unknown	0.240
Methylpropyl Benzene	0.150
Unknown	0.340
Unknown	0.069
Unknown	0.120
Undecane	0.420
Unknown	0.088
Dodecane	0.160
Dimethylbenzoicacid	0.200
Dimethylbenzoicacid	0.120

Volatile Organic

Dimethyl Cyclohexane	12.0
----------------------	------

LT - Present but below quantification limits

WELL #1WELL #4WELL #5ORGANICSAcid, Base Neutral

Benzenedimethyl	98.0
2-Methyl Napthalene	0.07

Volatile Organics

Benzene	9.0
Ethyl Benzene	LT
Xylene	10.0
Cyclohexane Methyl	23.0
Cyclo Hexane Dimethyl	20.0

Acid, Base, Neutral

Napthalene	0.20
------------	------

Volatile Organics

2-Methyl Hexane	10.0
2-Methyl Heptane	22.0
Octane	45.0
Unknown	25.0

Acid, Base, Neutral

Pentachlorophenol	LT
-------------------	----

Volatile Organics

2-Methyl Butane	14.0
Pentane	12.0
Cyclohexane	18.0
Methyl Cyclo Pentane	7.1
Dimethyl Octanol	18.0
Ethylmethycyclo Pentane	31.0

Acid, Base, Neutral

Cycloheptatriene	0.110
Octane	0.06
2-Methyloctane	0.92
Dimethyl Benzene	0.61
Unknown	0.22
Nonane	0.22
Propylcyclohexane	0.10
Dimethyl Octane	0.14
Methylnonane	0.17
Unknown	0.27
Trimethyl Benzene	0.15
Unknwon	0.13
Unknown	0.078

BLOOMFIELD REFINING COMPANY  
GROUNDWATER ELEVATIONS

© 1984 WILSON JONES COMPANY

		MW-1	MW-2	MW-3	MW-4	MW-5	MW-6			
	DATE T.O.P.	5515.77	5519.45	5535.85	5524.32	5545.10	5551.23			
1	2/24/84	5498.91	5500.44	5501.74	5499.46	5502.26	DRY	1		
2	2/23/85	5499.07	5500.55	5502.15	5499.30	5502.75	DRY	2		
3	3/13/85	5499.14	5500.82	5502.55	5499.32	5503.50		3		
4	WATER ON	4/11/85	5498.99	5500.62	5502.73	5499.30	5503.67	4		
5		5/31/85	5499.67	5500.97	5502.74	5499.80	5503.64	5		
6		6/14/85	5499.80	5500.99	5502.63	5499.80	5503.40	6		
7		6/26/85	5499.94	5500.98	5502.49	5499.73	5503.24	7		
8		7/12/85	5500.20	5500.99	5502.48	5499.80	5503.30	8		
9		8/2/85	5501.00	5501.25	5502.48	5499.78	5503.37	9		
10		9/17/85	5500.34	5501.05	5502.25	5499.80	5503.00	10		
11	WATER OFF	10/9/85	5500.08	5500.87	5502.42	5499.70	5503.30	11		
12		10/24/85	5499.23	5500.43	5502.28	5499.54	5503.10	12		
13		11/8/85	5498.72	5500.05	5502.20	5499.60	5503.09	13		
14		12/17/85	5498.35	5499.85	5501.85	5499.40	5502.90	14		
15								15		
16								16		
17		1/8/86	5498.59	5500.08	5501.23	5499.35	5502.77	DRY	17	
18		1/24/86	5498.75	5500.22	5502.04	5499.36	5502.76	"	18	
19		2/20/86	5498.93	5500.62	5502.43	5499.35	5503.30	"	19	
20		3/21/86	5499.10	5500.65	5502.89	5499.32	5504.23	"	20	
21	SAMPLE	3/26/86	5499.07	5500.65	5502.91	5499.31	5504.24	"	21	
22	DIKE REMOVED	4/4/86	5499.07	5500.57	5502.98	5499.21	5504.57	"	22	
23	WATER ON	4/5	4/18/86	5498.85	5500.43	5502.98	5499.42	5504.42	"	23
24		4/4	5/5/86	5499.43	5500.57	5502.92	5499.32	5504.27	"	24
25		5/21/86	5500.05	5500.82	5502.85	5499.40	5504.35	"	25	
26		6/4/86	5500.41	5500.93	5502.95	5499.40	5504.17	"	26	
27	SAMPLE	6/23/86	5501.21	5501.18	5503.05	5499.45	5504.13	"	27	
28		7/8/86	5501.34	5501.27	5502.96	5499.44	5503.87	"	28	
29		8/4/86	5500.25	5501.13	5502.92	5499.67	5503.77	"	29	
30		9/2/86	5500.23	5501.32	5502.94	5499.78	5503.58	"	30	
31	SAMPLE	9/18/86	5500.03	5501.22	5502.77	5499.98	5503.52	"	31	
32	WATER OFF	10/8/86	5499.83	5501.07	5502.68	5500.13	5503.46	"	32	
33	10/15	11/7/86	5499.45	5500.82	5502.72	5500.19	5503.48	"	33	
34	DIKE	12/8/86	5499.45	5501.01	5502.78	5500.28	5503.43	"	34	
35	SAMPLE	12/16/86	5499.45	5501.05	5502.80	5500.28	5503.41	"	35	
36		1/27/87	5499.44	5500.92	5502.60	5500.22	5503.10 DRY AT 5501.63		36	
37		4/2/87	5499.76	5501.20	5502.86	5500.37	5503.77	"	37	
38									38	
39									39	
40									40	

## GROUNDWATER ELEVATIONS

COLUMN 1 WHITE ⑧  
COLUM 2 BLACK

HAMMOND Hammond

	MW-7	MW-8	MW-9	MW-10	AT SULLIVAN	AT WALKWAY	
DATE	T.O.P.	5524.09	5531.12	5539.70	5516.86	5504.32	5522.95

1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20	3/21/86	5498.02	5501.95	5498.15	5497.65	-	-
21	SAMPLE	3/26/86	5498.02	5501.97	5498.20	5497.66	-
22	DIKE REMOVED	4/4/86	5498.77	5501.86	5498.22	5497.60	5496.50 5498.24
23	" "	4/18/86	5497.92	5501.82	5497.90	5497.69	- 5496.85
24	WATER ON	4/21	5/1/86	5497.28	5501.79	5498.62	5497.83 5498.08 5499.03
25		5/21/86	5498.86	5501.83	5499.00	5498.05	5498.25 5499.42
26		6/4/86	5498.85	5501.89	5499.17	5498.15	5498.23 5499.63
27	SAMPLE	6/23/86	-	5502.04	5499.47	5498.11	-
28		7/8/86	5497.87	5502.22	5499.50	5498.17	5497.89 5499.95
29		8/4/86	5498.77	5502.12	5499.40	5498.37	5497.84 5499.67
30		9/2/86	5498.95	5502.21	5499.55	5498.53	5498.24 5500.15
31	SAMPLE	9/18/86	-	5502.12	5499.57	5498.75	-
32	WATER OFF	10/8/86	5498.96	5501.97	5499.42	5498.69	5497.00 5498.93
33	10/15	11/7/86	5499.26	5501.90	5499.56	5499.05	5497.00 5498.83
34	DIKED	12/8/86	5499.40	5502.10	5499.14	5499.28	5498.72 5498.73
35	SAMPLE	12/16/86	5499.41	5502.10	5499.15	5499.30	-
36		1/27/87	5499.29	5501.85	5498.98	5499.09	5498.59 5498.60
37		4/2/87	5499.59	5502.12	5498.92	5499.33	5498.55 5498.55
38							
39							
40							

## MONITORING WELLS MW1 THRU MW-6

Six monitoring wells were drilled by Earl and Sons Inc. of Cedar Crest, New Mexico at the Plateau refinery located at Bloomfield, New Mexico. The wells are numbered in accordance with the numbering system used at the refinery such that the northwestern-most well is P-1. The wells are located on Plate 1. The order of drilling and the drilling dates are shown in Table 1.

Table 1. Monitoring wells at Plateau's Bloomfield refinery shown in order drilled with drilling dates and approximate yields and depth at which water was first encountered.

WELL	DRILLING BEGAN	DRILLING FINISHED	DEPTH		YIELD
			TO WATER (ft)	(gpm)	
5	2/6/84	2/6/84	42	1	
6	2/7/84	2/7/84	dry		
2	2/7/84	2/8/84	23	3-4	
1	2/8/84	2/8/84	19	1	
3	2/8/84	2/9/84	35	<1	
4	2/9/84	2/9/84	26	2	

The wells were drilled with an Ingersol-Rand TH-60 rig with casing hammer using air rotary methods and a down-the-hole air hammer. No drilling mud was used in the drilling process. The hole was drilled to the cobble bed at which point six-inch black steel casing was set. As drilling continued through the cobble bed, the casing was driven simultaneously. Some water was required while drilling through the cobble bed, but the drillers used as little water as possible. The drilling water was obtained from the San Juan River. The drill bits were washed between holes with methanol or acetone. Upgradient wells were drilled first to minimize contamination from one well to the next. That is, the wells were drilled in the order of expected increase in contaminated ground water.

Drilling stopped when certain determination of the Nacimiento Formation was obtained from the drill cuttings. The holes were developed with air. Drill samples were collected every five (5) feet and described at the site. Casing lengths were measured to the nearest tenth (10th) of foot before they went down the hole. The first casing section of approximately 20 feet was slotted every four inches with an oxy-acetylene torch. A slit cut with the torch in the top of the set casing serves as a measuring point for water levels.

Water levels were taken on February 9, 1984 in all holes. These data are presented in Table 2. Well 6 was dry.

Hydrocarbons were encountered during drilling in hole 4, the last hole drilled, as evidenced by smell, oil slicks in water coming up the hole and appearance and smell of the drill cuttings.

Temporary caps were placed on all wells. At the time of this writing permanent locked caps have been placed on all monitoring wells.

Table 2. Depth to water and total well depth in Plateau monitoring wells on February 9, 1984.

WELL	TIME	TOTAL DEPTH (ft)	DEPTH TO WATER (ft)
5	1:00	51.61	42.67
6	1:30	49.63	dry
2	3:43	25.90	19.11
1	4:10	24.65	16.55
3	4:30	39.35	34.06
4	4:50	32.5	24.94

On February 14 and 15, 1984 water levels were again measured in the new monitoring wells and in the neutron-probe holes (NP) holes along the northern evaporation pond. These data are presented in Table 3.

Table 3. Water-level data in neutron-probe holes and monitoring wells.

WELL	DATE	DEPTH TO WATER (ft)
5	2-14-84	43.73
3	2-14-84	34.26
2	2-15-84	19.90
1	2-15-84	17.01
4	2-15-84	24.97
NP-8	2-15-84	23.91*
NP-7	2-15-84	24.44
NP-5	2-15-84	23.71
NP-5	2-15-84	23.19
NP-3	2-15-84	23.09
NP-2	2-15-84	31.00*
NP-1	2-15-84	39.04
NP-9	2-15-84	22.72

\* No temperature probe tube. All other NP holes have tubes along their total length. Water levels were measured with the temperature probe tubes in the holes.

The four down-gradient wells (P-1,P-2,P-3,P-4) were sampled on the afternoon of February 15, 1984. Samples were collected with a bailer. Repeated attempts to pump the wells with two different pumps failed because of sand-lock. The wells in which the worst quality water was suspected were sampled last in order to minimize contamination of samples by the bailer in the event the bailer cleaning was ineffective. The sampling order was therefore P-3, P-2, P-1, P-4. The bailer was thoroughly washed with methanol between samples. The samples were collected according to instructions supplied by each of two labs, Hauser Labs of Boulder, Colorado, and Controls for Environmental Pollution of Santa Fe, New Mexico. Each lab was sent a complete sample from each well. The samples were shipped via UPS to the labs and approved chain of custody procedures were followed.

Lithologic logs for each of the monitoring wells drilled by Earl and Sons, Inc. are given hereafter.

MW-1

WELL NUMBER: 1  
DATE: 8 February 1984  
LOCATION: 29.11.27.24221

DEPTH IN FEET	DESCRIPTION
0-5	Light brown clayey sand, coarse, poorly sorted, quartzose and slightly calcareous
5-10	Yellowish gray sandy pebbles and cobbles, poorly sorted, rounded to subrounded
10-12	Yellowish gray pebbly sand, very coarse, poorly sorted, feldspathic and noncalcareous
12-22	Dark gray pebbly and sandy cobbles, some quartz pebbles, most are volcanic, subrounded cobbles and pebbles, some clay, a little water at about 18 feet
22-25	Gray-green clayey sand becoming light yellow clayey sandstone and sandy claystone

MW-2

WELL NUMBER: 2  
DATE: 7 February 1984  
LOCATION: 29.11.27.24321

DEPTH IN FEET	DESCRIPTION
0-5	Light yellow brown silty sandy clay, very calcareous
5-10	Light yellow brown clayey sand, subrounded to subangular, moderately to poorly sorted, very calcareous
10-15	Light brown pebbly sand, clayey, very calcareous, cobbles at 15 feet
15-20	Gray sandy pebbles, poorly sorted coarse quartzose sand, pebbles are dark gray and volcanic
20-25	Dark gray cobbles, some quartz pebbles, mostly volcanic, some sand
25-26	Yellow gray clayey sandstone and sandy claystone

687 55 NOE  
691

MW-3

WELL NUMBER: 3  
DATE: 8 February 1984  
LOCATION: 29.11.27.24442

DEPTH IN FEET	DESCRIPTION
0-5	Yellow brown sandy silt and clay, very calcareous quartzose
5-10	yellow brown sand, calcareous, silty and clayey, quartzose
10-15	Yellow brown sand, silty and clayey, fine-grained, very calcareous, quartzose
15-27	Light brown clay, sandy, very calcareous, becoming pebbly with depth
27-35	Gray yellow brown cobbley sand, coarse, poorly sorted, silty and clayey, volcanic pebbles small amount of water at about 35 feet
35-40	Gray cobbles, pebbly and sandy, coarse sand, yellow gray clayey sandstone at about 40 feet

4D

MW-4

WELL NUMBER: 4  
DATE: 9 February 1984  
LOCATION: 29.11.27.23344

DEPTH IN FEET	DESCRIPTION
0-5	Yellow gray-brown sandy silt and clay, calcareous
5-10	Yellow brown silty sandy clay and clayey silt, very slightly calcareous
10-15	Reddish yellow-brown clayey sandy silt, silty clay, fine-grained quartzose sand, noncalcareous
15-19	Light brown coarse sand with clay and pebbles, calcareous
19-25	Gray cobbly sand, very coarse, poorly sorted, some clay and silt, subrounded to subangular, quartzose, pebbles rounded, slightly calcareous
25-30	Gray cobbles and pebbles, subrounded to rounded, volcanic; at about 25 feet, hydrocarbon smell and color
30-32	Gray cobbly sand, with hydrocarbon smell and color, coarse grained, sand is quartzose and feldspathic, subrounded and subangular quartz grains are clear
32	Yellow gray clayey sandstone

MW-5

WELL NUMBER: 5  
DATE: 6 February 1934  
LOCATION: 29.11.26.31112

DEPTH IN FEET	DESCRIPTION
0-5	Pale yellow brown clay, silty, some sand, calcareous
5-10	Pale yellow brown clayey sand and quartzose silt, poorly sorted, calcareous
10-15	Yellow brown sand, subrounded quartzose sand slightly calcareous
15-20	Yellow brown sand, clayey, moderately coarse grained, very slightly calcareous
20-25	Yellow brown sand, clayey, silty, fine to medium grained, moderately sorted, noncalcareous
25-35	Yellow brown sand, silty and slightly clayey, fine-to-medium grained, well sorted, subangular, noncalcareous, becoming more clayey with depth
35-37	Yellow brown pebbly and cobbley sand, clayey, calcareous
37-47	Dark gray sandy and clayey cobbles and pebbles, water at 42 feet
47-50	Dark gray cobbles with greenish clay
50-54	Green-gray pebbly clay

60' - 100'

MW-6

WELL NUMBER: 6  
DATE: 7 February 1984  
LOCATION: 29.11.27.42144 or 42233

DEPTH IN FEET	DESCRIPTION
0-15	Pale yellow brown sand, clayey and silty, subangular, poorly sorted, quartzose, very calcareous, becoming more clayey with depth
15-20	Pale yellow brown silt, sandy and clayey, silt is coarse, sand is very fine, moderate sorting, quartzose and calcareous
20-25	Pale yellow sand, slightly clayey, subrounded, well sorted, quartzose, noncalcareous
25-35	Pale yellow sand, coarse to medium grained, quartzose, noncalcareous
35-41	Pale yellow sand, clayey, fine grained, silty, quartzose, slightly calcareous
41-49	Gray-black cobbles and pebbles, volcanic
49-52	Gray-green clayey sandstone and sandy claystone

TABLE 3.1  
WELL LOG FOR MONITORING WELL NUMBER 7

Drilling Date: February 25

<u>Depth in Feet</u>	<u>Description</u>
0-1	Gravel fill
1-5	Brown sandy silt and clay with small gravels
5-10	Brown sandy silt and clay, more firm and sticky
10-15	Lighter brown sandy silt and sticky clay
15-20	Lighter brown sandy silt and clay, larger cobbles and pebbles
20-25	Sand with cobbles and pebbles
25-30	Sand
30-35	Greenish clay with pebbles, top of Nacimiento estimated at 32 feet
35-40	Greenish clay, few pebbles
40-45	Green to gray clay, smooth drilling
45-50	Green to gray clay, smooth drilling
50-65	Sticky gray to green clay

Elevation of Top of Pipe: 5524.09 feet

Total Depth of Casing: 62.11 feet

Description of Casing: Bottom of casing has a 2 foot stainless steel blank section for a silt trap, followed by a 10 foot section of 6" I.D. stainless steel screen, in turn followed by 6" I.D. schedule 40 PVC casing to the top of pipe. Sand was added to 45 feet below grade, bentonite to 41 feet below grade, and grout to the surface.

**TABLE 3.2**  
**WELL LOG FOR MONITORING WELL NUMBER 8**

Drilling Date: February 28, 1986

<u>Depth in Feet</u>	<u>Description</u>
0-20	Light brown sandy clay, similar to that found on the ground surface
20-34	Cobbles and pebbles
34	Green-gray clay and sandstone, intermixed with small pebbles and sand. Top of Nacimiento.

Elevation of Top of Casing: 5531.12 feet

Total Depth of Casing: 34.94 feet

Description of Casing: Bottom of casing has a 2 foot stainless steel blank section for a silt trap, followed by 20 feet of 6" I.D. stainless steel screen, followed by 6" I.D. schedule 40 PVC to the surface. The screened section of the hole was sanded to within 7 feet of the surface, a bentonite seal (1/2 bucket) was added and concrete was used for a surface seal.

TABLE 3.3  
WELL LOG FOR MONITORING WELL NUMBER 9

Drilling Date: March 3, 1986

<u>Depth in Feet</u>	<u>Description</u>
0-5	Fill material, some rock
5-10	Sticky reddish brown silty clay
10-15	Lighter color silty clay, some pebbles
15-20	Lighter color silty clay, some pebbles
20-25	Cobbles, pebbles, sand
25-30	Cobbles, greenish clay, top of Nacimiento

Elevation of Top of Casing: 5519.70 feet

Total Depth of Casing: 33.99 feet

Description of Casing: Bottom of casing has a 2 foot stainless steel blank section for a silt trap followed by 20 feet of 6" I.D. stainless steel screen, followed by 6" I.D. schedule 40 PVC to the surface. The screened section of the hole was sanded to within 7 feet of the surface, a bentonite seal (1/2 bucket) was added and concrete was used for a surface seal.



TABLE 3.4  
WELL LOG FOR MONITORING WELL NUMBER 10

Drilling Date: March 4, 1986

<u>Depth in Feet</u>	<u>Description</u>
0-5	Topsoil, roadbase, reddish brown sandy clay
5-10	Reddish brown silty, sandy clay
10-15	Cobbles, pebbles
15-20	Gravel, cobbles, pebbles
20-25	Greenish clay at 23 feet, top of Nacimiento
25-30	Greenish clay, Nacimiento
30-35	Nacimiento, color changed from yellow-green to blue-gray

Elevation of Top of Casing: 5516.86 feet

Total Depth of Casing: 33.93 feet

Description of Casing: Bottom of casing has a 2 foot stainless steel blank section for a silt trap, followed by 20 feet of 6" I.D. stainless steel screen, followed by 6" I.D. schedule 40 PVC to the surface. The screened section of the hole was sanded to within 7 feet of the surface, a bentonite seal (1/2 bucket) was added and concrete was used for a surface seal.

G-# 5516.86  
23.93 ft  
549

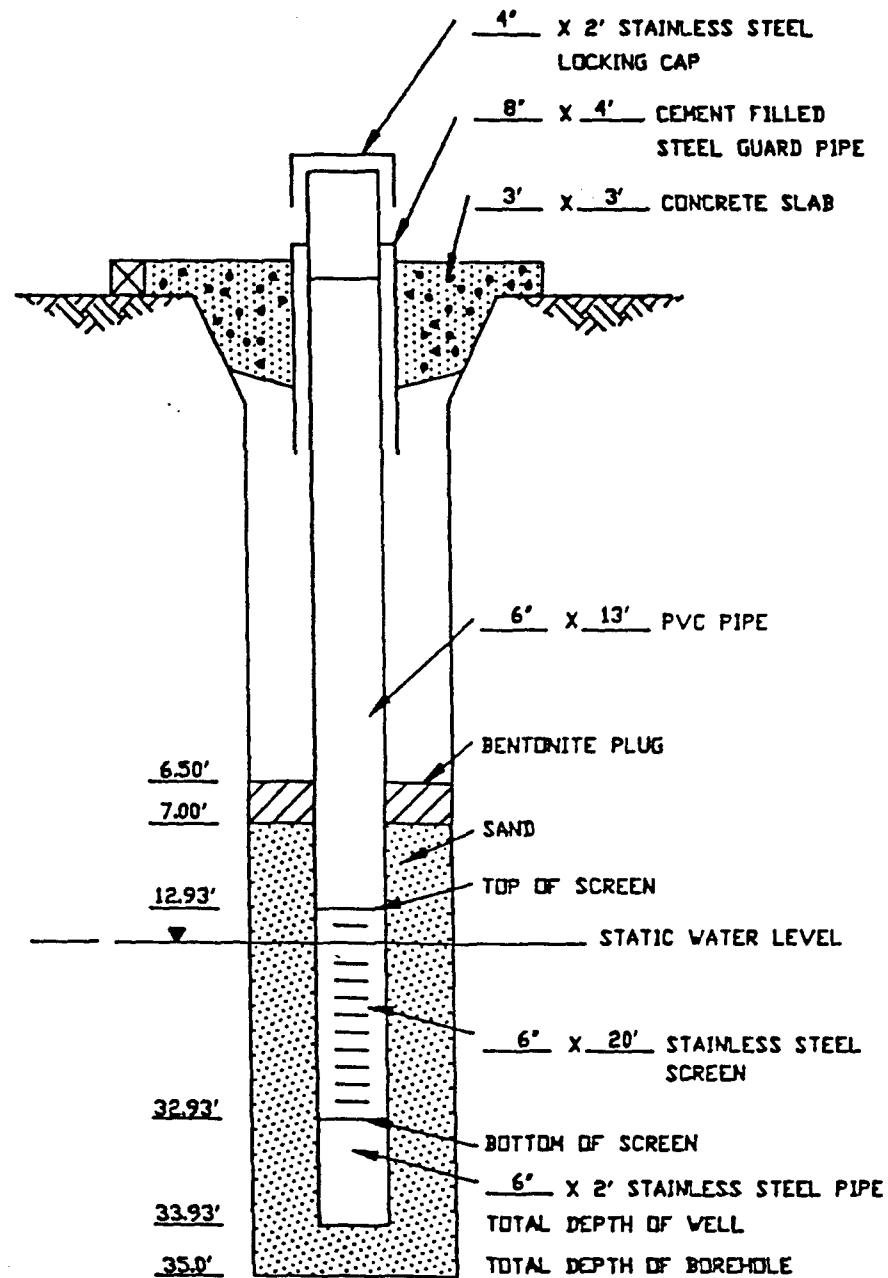
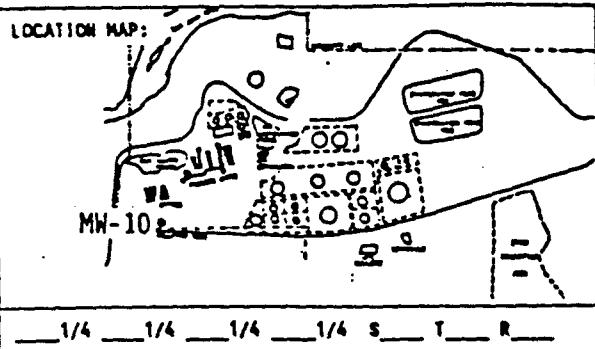


FIGURE B-3

COMPLETION DIAGRAM  
RECOVERY WELL HV-10 (RV-3)  
(RECONSTRUCTED FROM VERBAL DESCRIPTION  
SUPPLIED BY ENGINEERING-SCIENCE, 1987)

**FIGURE B-10**  
**LITHOLOGIC LOG (SOIL)**  
**RECOVERY WELL MW-10 (RW-3)**

Page 1 of 1



SITE ID: BRC LOCATION ID: MW-10 (RW-3)  
 SITE COORDINATES (ft.): N E  
 GROUND ELEVATION (ft. MSL): -5516  
 STATE: New Mexico COUNTY: San Juan  
 DRILLING METHOD: Auger  
 DRILLING CONTRA.: Earl & Sons, Inc.  
 DATE STARTED: 6 March 1986 DATE COMPLETED: 6 March 1986  
 FIELD REP.: Engineering-Science, Inc.  
 COMMENTS:

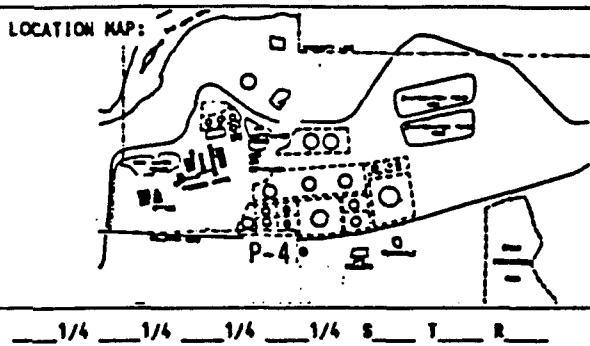
LOCATION DESCRIPTION:

Depth	Visual %	Lith	Drilling Time Scale:	Sample Type and Interval	Lithologic Description
5					0'-5' <u>Topsoil, Roadbase, Sandy Clay</u>
10					5'-10' <u>Silty, Sandy Clay</u>
15					10'-15' <u>Cobbles and Pebbles</u>
20					15'-20' <u>Gravel, Cobbles, and Pebbles</u>
25					20'-30' <u>Green Clay; Nacimiento Formation</u>
30					30'-35' <u>Nacimiento Formation - Yellow-green to blue-gray.</u>
35		T.D. 35'			
40					
45					
50					

FIGURE B-14

## LITHOLOGIC LOG (SOIL)

## PIEZOMETER P-4

Page 1 of 1

SITE ID: BRC LOCATION ID: P-4 (MW-13)  
 SITE COORDINATES (ft.): N E  
 GROUND ELEVATION (ft. MSL): 5538.42 T.O.P.  
 STATE: New Mexico COUNTY: San Juan  
 DRILLING METHOD: Casing Driver  
 DRILLING CONTR.: Beeman Brothers  
 DATE STARTED: 2 September 1988 DATE COMPLETED: 3 September 1988  
 FIELD REP.: W.S. Dubyk  
 COMMENTS: Static on September 9, 1988; 37.91' from TOC.

## LOCATION DESCRIPTION:

Depth	Visual %	Lith	Drilling Time Scale:	Sample Type and Interval	Lithologic Description
5					0'-27' <u>Silt and Clay</u> - Moderate brown (5 YR 4/4) to light brown (5 YR 5/6).
10					
15					
20					
25			1233		27'-30' <u>Sand</u> - Very pale orange (5 YR 8/2) fine to coarse grained, angular to subangular predominantly quartz.
30					30'-40' <u>Gravel and Sand</u> - Light gray (N7). Sand is medium to coarse grained, subrounded to rounded. Gravel is subangular to rounded, up to 3" diameter.
35					
40			1415		41'-43' <u>Clay</u> - Pale olive (10 Y 6/2), plastic.
45					43'-45' <u>Gravel and Sand</u> - As above.
50			1420		45'-51' <u>Sand</u> ; <u>Nacimiento Formation</u> - light bluish grey (5B7/1) Fine grained, silty.
		T.D. 51'	1455		

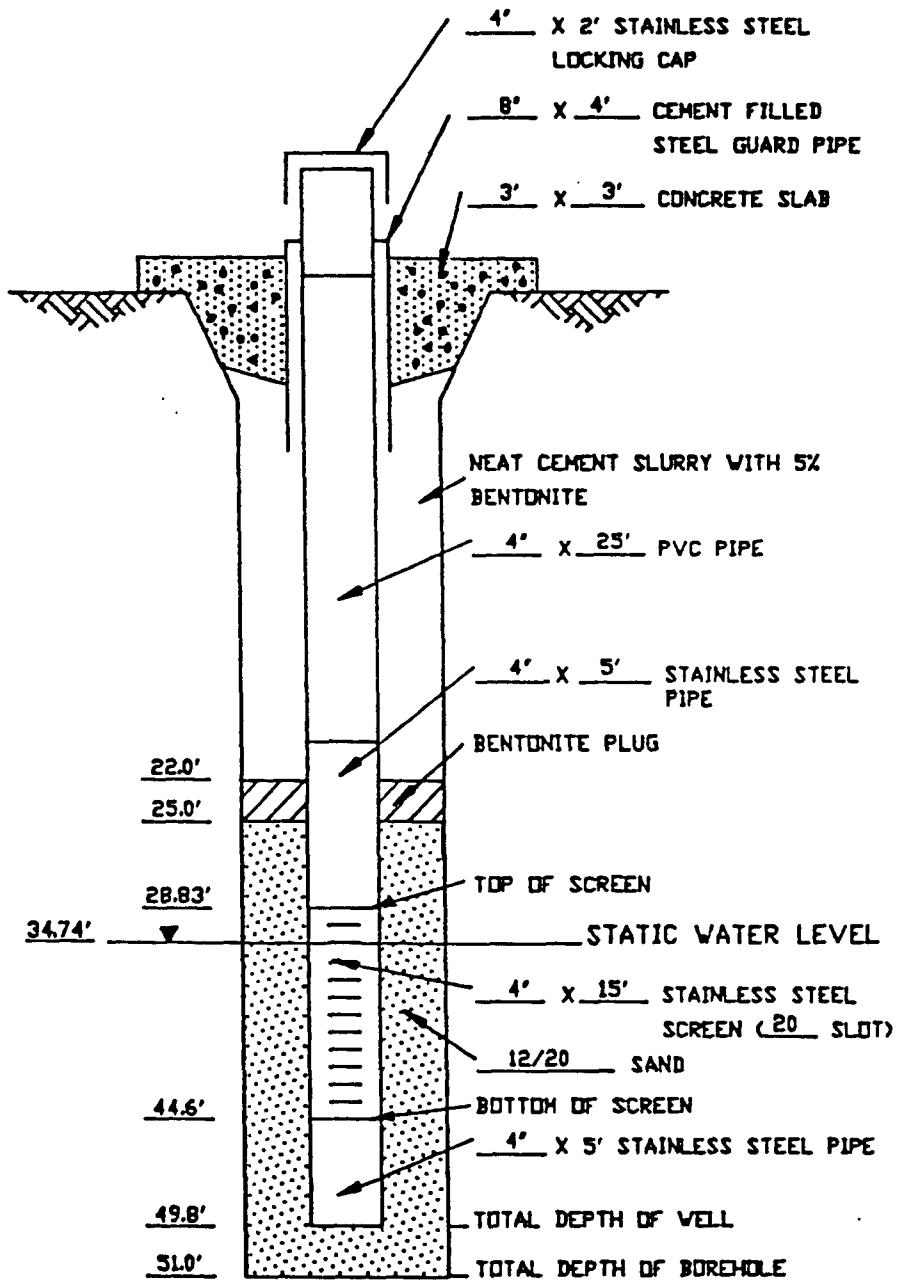


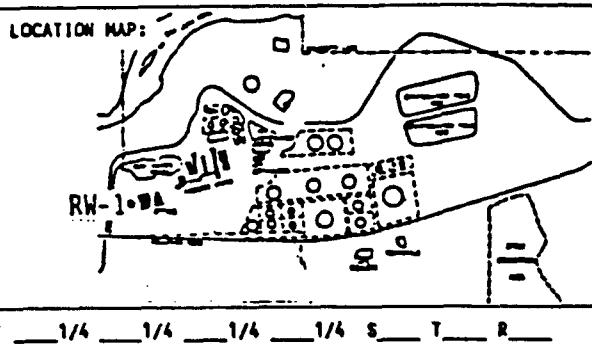
FIGURE B-7  
COMPLETION DIAGRAM  
PIEZOMETER P-4

(MW-13)

FIGURE B-8

## LITHOLOGIC LOG (SOIL)

## RECOVERY WELL RW-1

Page 1 of 1

SITE ID: BRC LOCATION ID: RW-1  
 SITE COORDINATES (ft.): \_\_\_\_\_  
 N \_\_\_\_\_ E \_\_\_\_\_  
 GROUND ELEVATION (ft. MSL): 5525.92  
 STATE: New Mexico COUNTY: San Juan  
 DRILLING METHOD: Casing Driver  
 DRILLING CONTR.: Beeman Brothers  
 DATE STARTED: 30 August 1988 DATE COMPLETED: 31 August 1988  
 FIELD REP.: U.S. Dubyk  
 COMMENTS: Static on September 2, 1988; 26.65 from TOC.

## LOCATION DESCRIPTION: \_\_\_\_\_

Depth	Visual %	Lith	Drilling Time Scale:	Sample Type and Interval	Lithologic Description
5			1642		0'-18' <u>Silt and Sand</u> - Dark yellowish brown (10 YR 4/2) to grayish brown (5 YR 3/2). Minor to strong hydrocarbon odor.
10			1646		
15			1710		
20			1720		18'-34' <u>Sand and Gravel</u> - Medium dark gray (N4). Sand is medium to very coarse grained, subangular to subrounded. Gravel is subrounded to well rounded, to 2" diameter. Strong hydrocarbon odor.
25			1725		
30			1730		
35			1738		34'-41' <u>Shale - Macimiento Formation</u> - Dusty yellow (5 YR 6/4) to light olive gray (5 Y 6/1) shale.
40			1758		
45					
50		T.D. 41'			

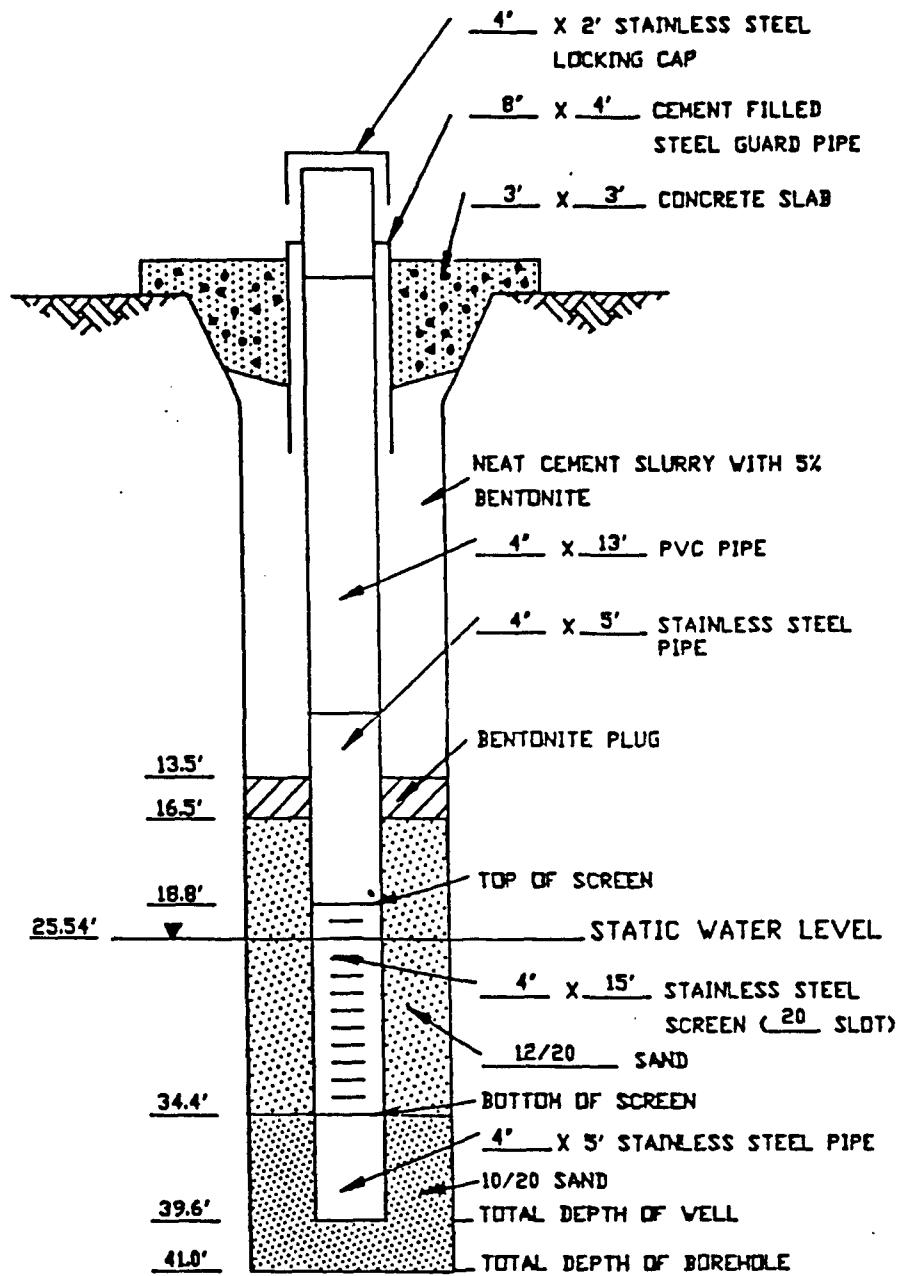
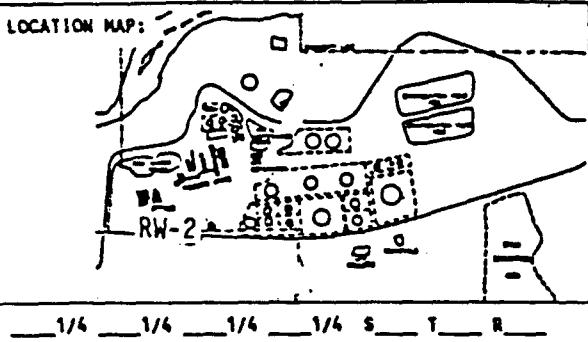


FIGURE B-1  
COMPLETION DIAGRAM  
RECOVERY WELL RV-1

**FIGURE B-9**  
**LITHOLOGIC LOG (SOIL)**

**RECOVERY WELL RW-2**

Page 1 of 1



SITE ID: BRC LOCATION ID: RW-2  
 SITE COORDINATES (ft.): \_\_\_\_\_  
 N \_\_\_\_\_ E \_\_\_\_\_  
 GROUND ELEVATION (ft. MSL): 5523.48  
 STATE: New Mexico COUNTY: San Juan  
 DRILLING METHOD: Casing Driver  
 DRILLING CONTR.: Beeman Brothers  
 DATE STARTED: 29 August 1988 DATE COMPLETED: 29 August 1988  
 FIELD REP.: U.S. Dubyk  
 COMMENTS: Static on September 2, 1988; 23.42 from TOC.

LOCATION DESCRIPTION:

Depth	Visual %	Lith	Drilling Time Scale:	Sample Type and Interval	Lithologic Description
5			0948		0'-10' <u>Silt and Clay</u> - Medium dark gray (5 YR 4/4) to brownish gray (5 YR 4/1). Slightly effervescent in HCl. Faint hydrocarbon odor.
10			0953		10'-15' <u>Sand and Silt</u> - Moderate brown (5 YR 4/4), very fine grained and well sorted.
15			0958		15'-32' <u>Sand and Gravel</u> - Olive gray (5 Y 4/1) to brownish gray (5 YR 4/1). Sand is medium to very coarse grained, subangular to subrounded. Gravel is subangular to well rounded, to 2" diameter. Noticeable hydrocarbon odor below 25'.
20			1024		
25			1029		
30			1033		32'-41.2' <u>Shale - Macimiento Formation</u> - Dusky yellow (5 Y 6/4) to olive gray (5 Y 3/2).
35			1050		
40			1100		
41.2'		T.D.			
45					
50					

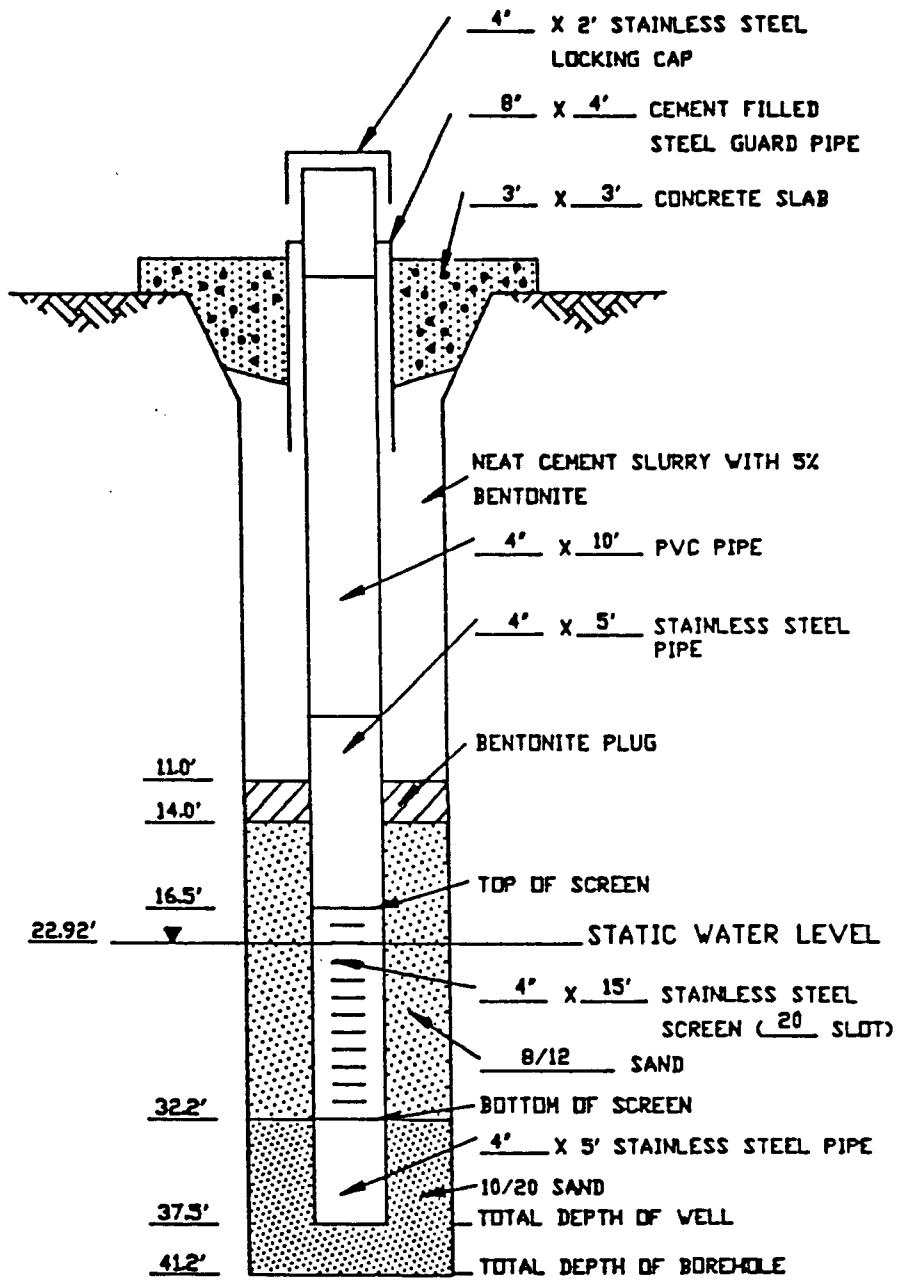


FIGURE B-2  
COMPLETION DIAGRAM  
RECOVERY WELL RV-2

TABLE 3.4  
WELL LOG FOR MONITORING WELL NUMBER 10 (RW-3)

Drilling Date: March 4, 1986

<u>Depth in Feet</u>	<u>Description</u>
0-5	Topsoil, roadbase, reddish brown sandy clay
5-10	Reddish brown silty, sandy clay
10-15	Cobbles, pebbles
15-20	Gravel, cobbles, pebbles
20-25	Greenish clay at 23 feet, top of Nacimiento
25-30	Greenish clay, Nacimiento
30-35	Nacimiento, color changed from yellow-green to blue-gray

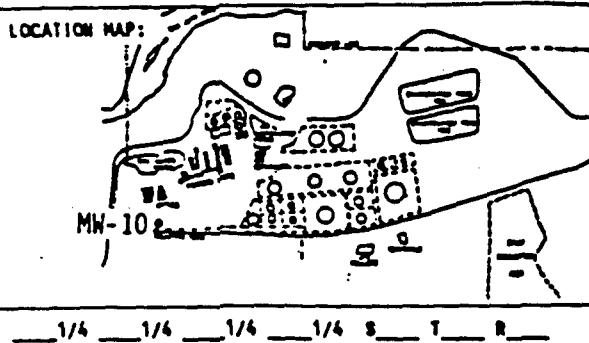
Elevation of Top of Casing: 5516.86 feet

Total Depth of Casing: 33.93 feet

Description of Casing: Bottom of casing has a 2 foot stainless steel blank section for a silt trap, followed by 20 feet of 6" I.D. stainless steel screen, followed by 6" I.D. schedule 40 PVC to the surface. The screened section of the hole was sanded to within 7 feet of the surface, a bentonite seal (1/2 bucket) was added and concrete was used for a surface seal.

FIGURE B-10

LITHOLOGIC LOG (SOIL)  
RECOVERY WELL MW-10 (RW-3)

Page 1 of 1

SITE ID: BRC LOCATION ID: MW-10 (RW-3)  
 SITE COORDINATES (ft.): N E  
 GROUND ELEVATION (ft. MSL): -5516  
 STATE: New Mexico COUNTY: San Juan  
 DRILLING METHOD: Auger  
 DRILLING CONTR.: Earl & Sons, Inc.  
 DATE STARTED: 4 March 1986 DATE COMPLETED: 4 March 1986  
 FIELD REP.: Engineering-Science, Inc.  
 COMMENTS:

LOCATION DESCRIPTION:

Depth	Visual %	Lith	Drilling Time Scales	Sample Type and Interval	Lithologic Description
5					0'-5' <u>Topsill, Readbase, Sandy Clay</u>
10					5'-10' <u>Silty, Sandy Clay</u>
15					10'-15' <u>Cobbles and Pebbles</u>
20					15'-20' <u>Gravel, Cobbles, and Pebbles</u>
25					20'-30' <u>Green Clay; Nacimiento Formation</u>
30					30'-35' <u>Nacimiento Formation - Yellow-green to blue-gray.</u>
35					
40					
45					
50					
		T.D. 35'			

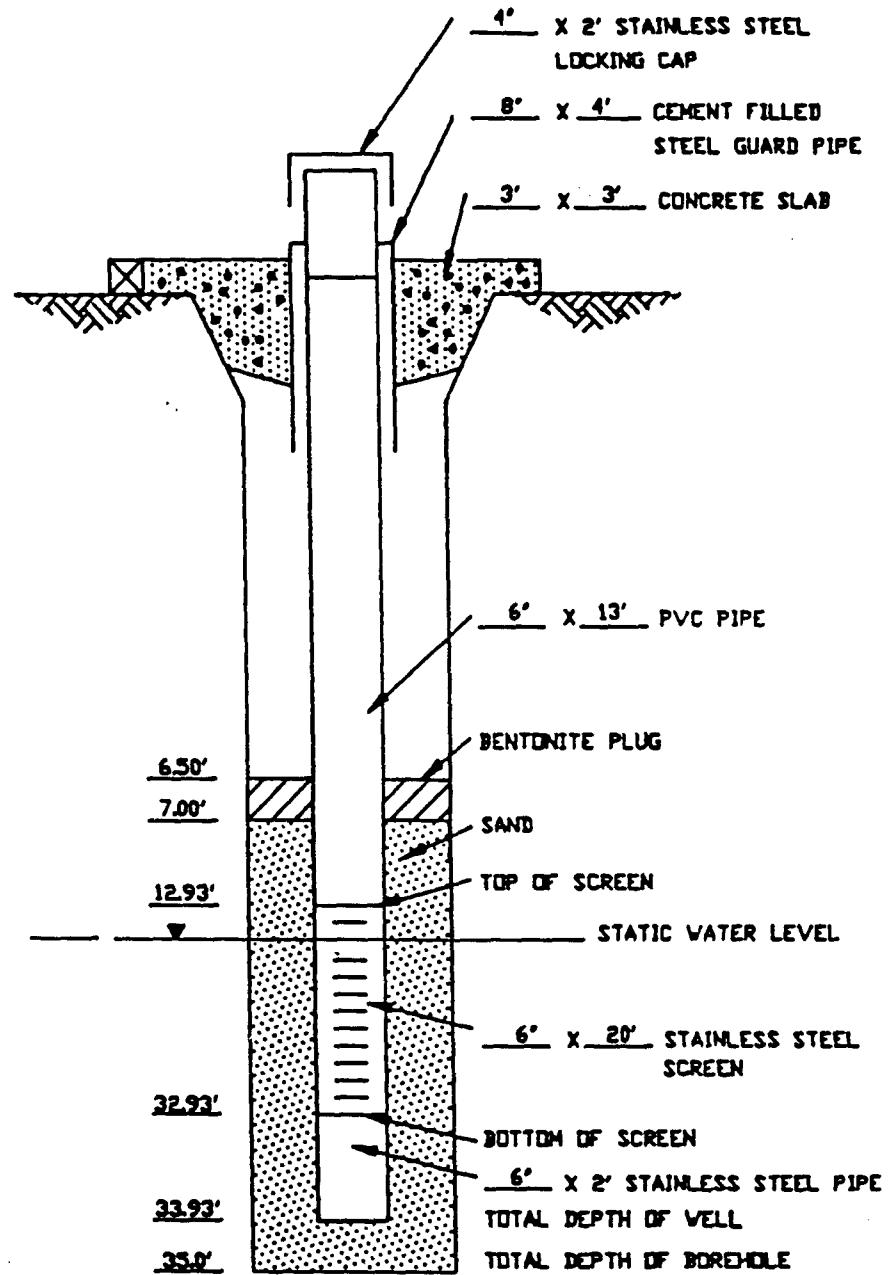


FIGURE B-3

COMPLETION DIAGRAM  
RECOVERY WELL HV-10 (RV-3)  
RECONSTRUCTED FROM VERBAL DESCRIPTION  
SUPPLIED BY ENGINEERING-SCIENCE, 1987)

Same Sampling

EPA Hause CEP Assoc. Assoc. Assoc. Assoc. Assoc. Assoc.

M W - I  
Oct/84 Assoc. Assoc. Assoc. Assoc. Assoc. Assoc.

Assoc. Assoc. Assoc. Assoc. Assoc. Assoc.

	1 3/22/84	2 5/04	3 5/04	4 9/04	5 12/04	6 3/05	7 3/05	8 7/05	9 11/05	10 3/06	11 6/06	12 9/06	13 12/06
Na	1												
K	2												
Ca	3												
Mg	4												
Cl	5												
SO <sub>4</sub>	6												
HCO <sub>3</sub>	7												
TDS	8												
NO <sub>3</sub> -N	9												
Al	10	11.6											
As	11	<											
Ba	12	0.2											
Br	13	<											
Cd	14	0.003											
Cn	15	0.01											
Fe	16	20.5											
Pb	17	<											
Mn	18	1.38											
Mo	19	<											
Ni	20	0.08											
Se	21	0.003											
Sn	22	-											
Zn	23	0.06											
Benz	24	ND											
Total	25	ND											
EB	26	-											
p-x	27	-											
m-x	28	-											
O-X	29	-											
F	30	0.62	0.54	0.284	0.56	0.46	0.657	0.65	0.890	0.54	0.54	0.96	E&=0.002
CN	31	-	10.01	10.01	-	10.02	10.01	10.01	10.01	10.01	10.01	10.01	10.01
Phenols													
NH <sub>3</sub> -N/TKN													
* Lab error		0.024	0.005	0.44/0.05	0.13	10.01	0.096	0.009	0.017	0.19	0.012		

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MW - 5

## EPA oCBLD Passage Assay Passage Assay Passage Assay Passage Assay

	<sup>1</sup> 7/22/84	<sup>2</sup> 3/85	<sup>3</sup> 3/85	<sup>4</sup> 7/85	<sup>5</sup> 11/85	<sup>6</sup> 3/86	<sup>7</sup> 6/86	<sup>8</sup> 9/86	<sup>9</sup> 12/86	<sup>10</sup>	<sup>11</sup>	<sup>12</sup>	<sup>13</sup>
Na	1												
K	2												
Ca	3												
Mg	4												
Cl	5												
SO <sub>4</sub>	6												
HCO <sub>3</sub>	7												
TDS	8												
N	9												
Al	10	76	<0.1	0.005	0.011	<0.050	0.050	0.087	0.07	2.75	3.6	4.34	5.05
As	11	<0.3	<0.1	<0.05	<0.050	<0.050	<0.050	<0.05	<0.05	0.010	0.01	0.01	0.01
Ba	12	-	-	-	-	-	-	-	-	-	-	-	-
B	13	-	0.80	1.29	0.15	<0.01	0.10	0.01	<0.01	0.24	0.24	0.24	0.24
Cd	14	<0.04	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	0.05	0.05	0.05
Cr	15	0.046	<0.1	0.046	0.046	<0.01	0.10	0.01	<0.01	0.01	0.01	0.01	0.01
Fe	16	70.6	<0.1	0.095	0.095	<0.03	0.089	0.16	0.05	0.05	0.05	0.05	0.05
Pb	17	0.02	<0.1	0.046	0.046	<0.05	0.045	0.045	0.025	0.025	0.025	0.025	0.025
Mn	18	0.915	<0.14	0.098	0.098	<0.24	0.24	<0.005	<0.01	0.01	0.01	0.01	0.01
Mo	19	<0.04	<0.1	0.15	0.15	<0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Ni	20	0.04	<0.1	0.15	0.15	<0.06	0.06	0.10	0.06	0.06	0.06	0.06	0.06
Se	21	0.002	<0.005	0.022	0.022	<0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.01
Sr	22	-	0.12	<0.1	<0.1	-	-	-	-	-	-	-	-
Zn	23	-	-	ND(0.00)	ND(0.00)	ND(0.00)	ND(0.00)	ND(0.00)	ND(0.00)	ND(0.00)	ND(0.00)	ND(0.00)	ND(0.00)
Ben	24	-	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total	25	-	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EB	26	31	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
P-X	27	-	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m-X	28	6	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
O-X	29	-	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
F	30	-	-	0.32	0.391	0.37	0.332	0.04	0.21	0.30	0.58	0.24	0.01
CN	31	-	-	-	-	-	-	-	-	-	-	-	-
Phenols	-	-	-	0.24/12.4	0.004	0.001	0.02	0.006	0.007	0.034	0.021	-	-
No <sub>3</sub> -N/TKN	-	-	-	-	-	-	-	-	-	-	-	-	-

\* Lab error

M W 7

## Assamai Assaiga'i Assaiga'i Assamai

	1	2	3	4	5	6	7	8	9	10	11	12	13
Na	1.3/86	6/86	9/86	12/86									
K													
Ca													
Mg													
C <sub>18</sub>													
S <sub>04</sub>	30 *	79.9	20	29									
HCO <sub>3</sub>	5.5 *	2400	5802	3630									
NO <sub>3</sub>	6076	6406	6348	6940									
Al	10												
R <sub>d</sub>	11	<0.050	0.36	0.22	<0.05								
R <sub>a</sub>	12												
B	13	0.050	0.030	0.01	0.02								
Cl	14	0.050	0.052	0.05	0.08								
Co	15												
Fe	16												
Pb	17	<0.050	0.24	0.05	0.26								
Mn	18												
Mo	19												
Nr	20	0.08	0.07	0.08	0.07								
Se	21	<0.010	0.65	0.36	0.09								
Sr	22												
Zn	23	0.018	0.016	0.02	0.017								
B <sub>en</sub>	24	0.015	ND	0.058	0.009								
T <sub>ol</sub>	25	0.053	ND	0.006	ND(0.001)								
EB	26	0.007	ND	0.004	ND	"							
T. Xyloids <sup>27</sup>	ND	-	-	-	ND	"							
F	28												
C/N	29												
Phenols	30	0.010	0.25	0.10	<0.01								
	31	0.001	0.006	0.036	0.025								

\* Lab error

mws

Assarai Assarai Assarai Assarai

ASSANGE ASSANGE ASSANGE ASSANGE

	1	2	3	4	5	6	7	8	9	10	11	12	13
	Na	K	Ca	Mg	Cl	S	Ca	Na	K	Ca	Mg	Cl	S
Al	1												
A <sub>1</sub>	10												
Ba	11												
B	12												
C <sub>2</sub>	13												
Cn	14	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Fe	15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Pb	16	0.05	0.059	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Mn	17												
Ni	18												
Sc	19	0.3	0.25	0.13	0.16	0.13	0.16	0.13	0.16	0.13	0.16	0.13	0.16
Si	20	<0.01	0.04	0.01	0.03	0.01	0.03	0.01	0.03	0.01	0.03	0.01	0.03
Zn	21	0.012	0.015	0.05	0.011	0.012	0.015	0.05	0.011	0.012	0.015	0.05	0.011
Be <sub>1</sub>	22	7.4	4	17.7	1.49	7.4	4	17.7	1.49	7.4	4	17.7	1.49
Tol	23	6.3	1.7	10.6	0.254	6.3	1.7	10.6	0.254	6.3	1.7	10.6	0.254
EB	24	3.2	0.71	0.015	0.504	3.2	0.71	0.015	0.504	3.2	0.71	0.015	0.504
1. Xyloes <sup>27</sup>	25												
N <sub>D</sub>	26												
2. Phenols	27												
Phenols	28	0.304	0.4	0.01	0.01	0.372	0.17	0.01	0.01	0.304	0.4	0.01	0.01
F	29												
SCN	30												
Phenols	31	0.304	0.4	0.01	0.01	0.372	0.17	0.01	0.01	0.304	0.4	0.01	0.01

\* Lab exercise

MW 1D

## Assay 1 Assay 2 Assay 3 Assay 4 Assay 5

Na

K

Ca

Mg

Cl

SO<sub>4</sub>HCO<sub>3</sub>

TS

N

Al

A1

Ba

Bz

Cl

Co

Fe

Pb

Mn

Mo

Ni

Se

Sr

Tb

E. B.

E. R.

Nb

L. Ryders

27

28

29

30

31

C/N

F

CN

Phenols

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

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19

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21

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29

30

31

Na	K	Ca	Mg	Cl	SO <sub>4</sub>	HCO <sub>3</sub>	TS	N	Al	A1	Ba	Bz	Cl	Co	Fe	Pb	Mn	Mo	Ni	Se	Sr	Tb	E. B.	E. R.	Nb	L. Ryders	27	28	29	30	31	C/N	F	CN	Phenols
1.3/86	6/86	9/86	12/86																																
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31					
1.3/86	6/86	9/86	12/86																																
1.3/86	6/86	9/86	12/86																																
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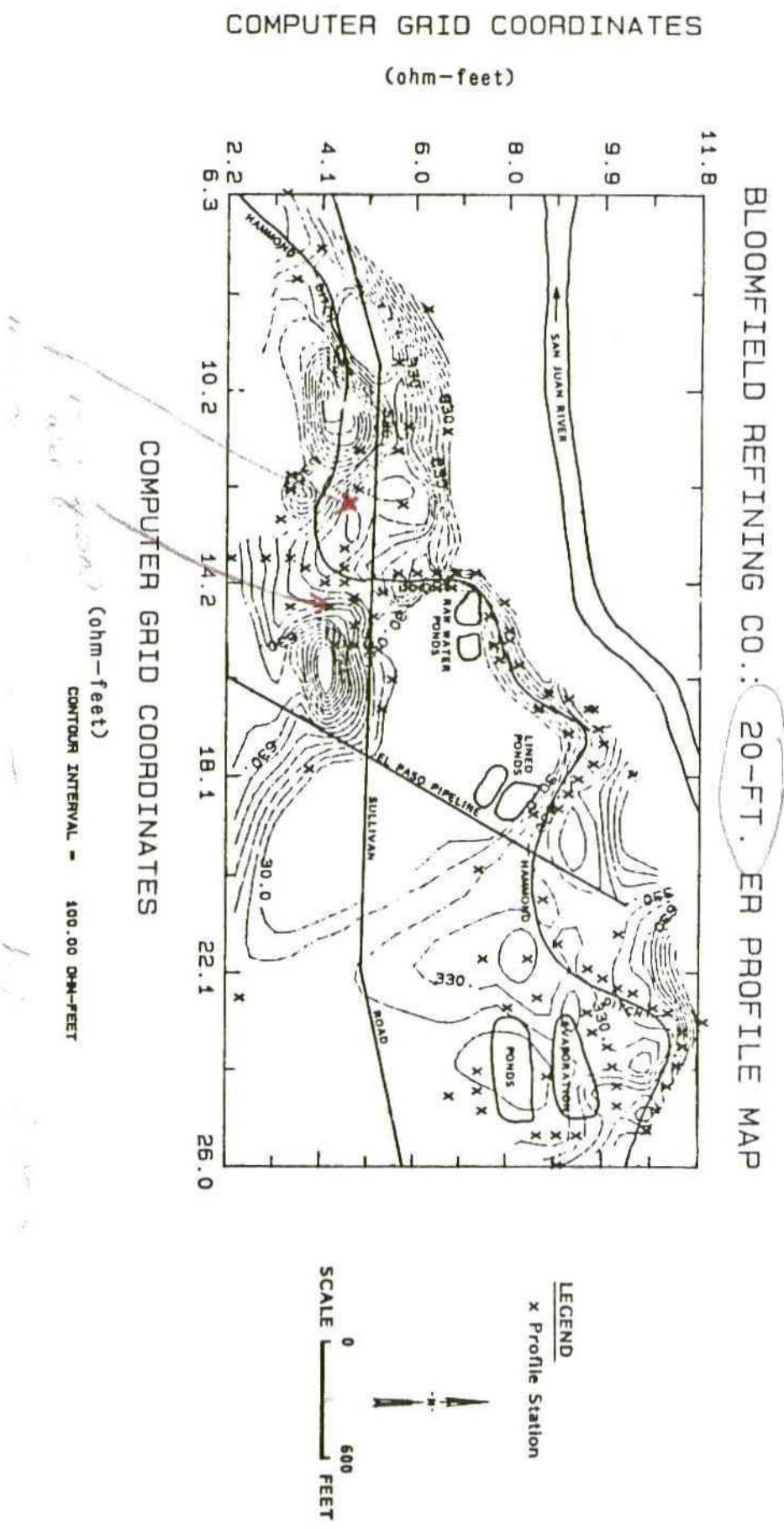


EECENCY LINE NO 9999

PonQ, (N.Ever ponQ)

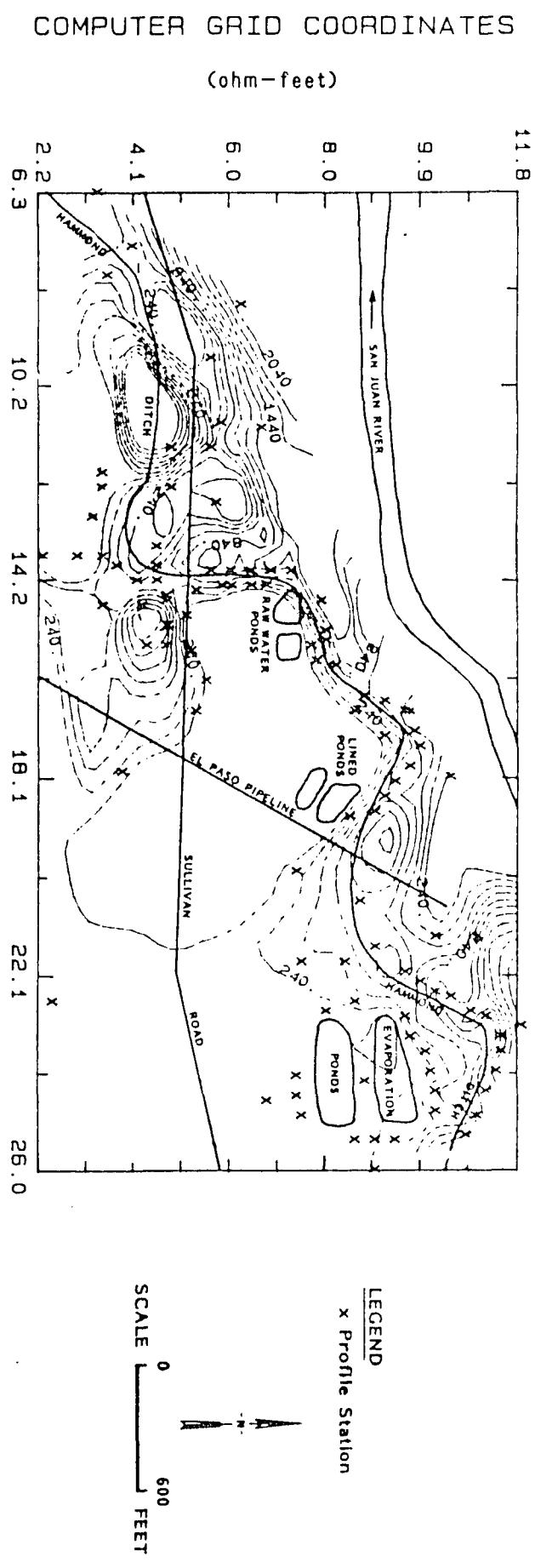
ocp/sls

**FIGURE 2.3**



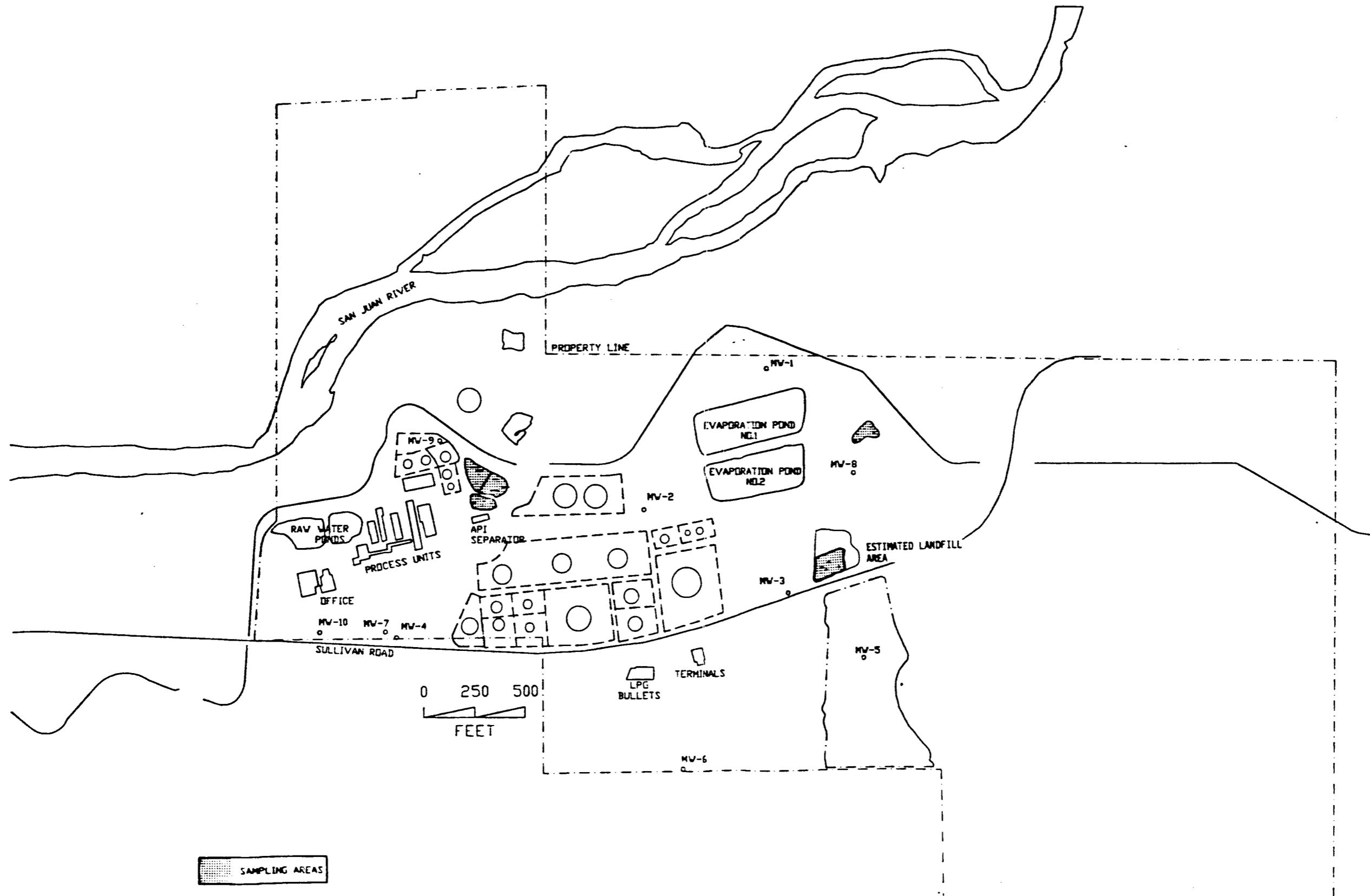
**FIGURE 2.2**

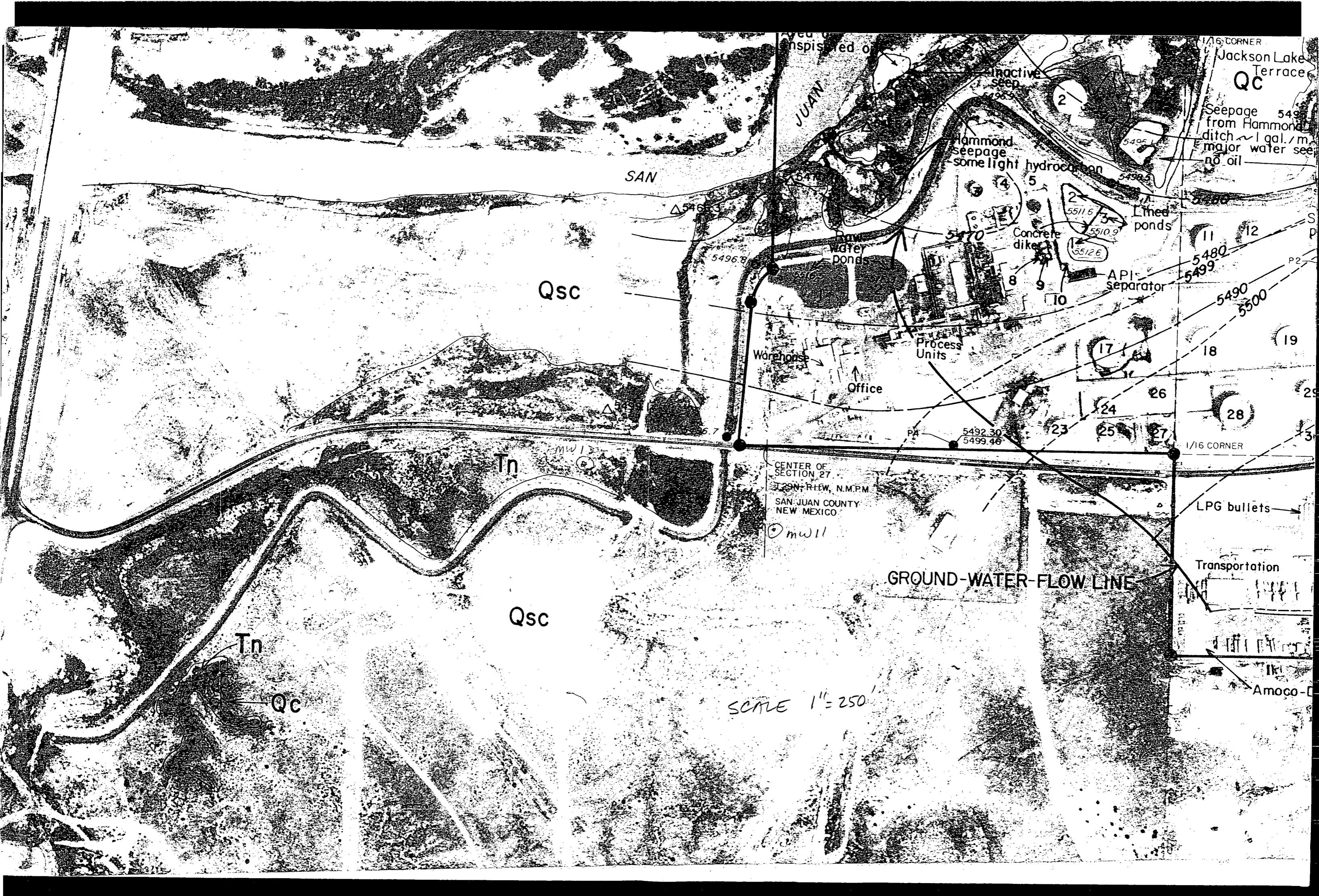
BLOOMFIELD REFINING CO.: 10-FT. ER PROFILE MAP



COMPUTER GRID COORDINATES  
(ohm-feet)  
CONTOUR INTERVAL = 200.00 OHM-FEET

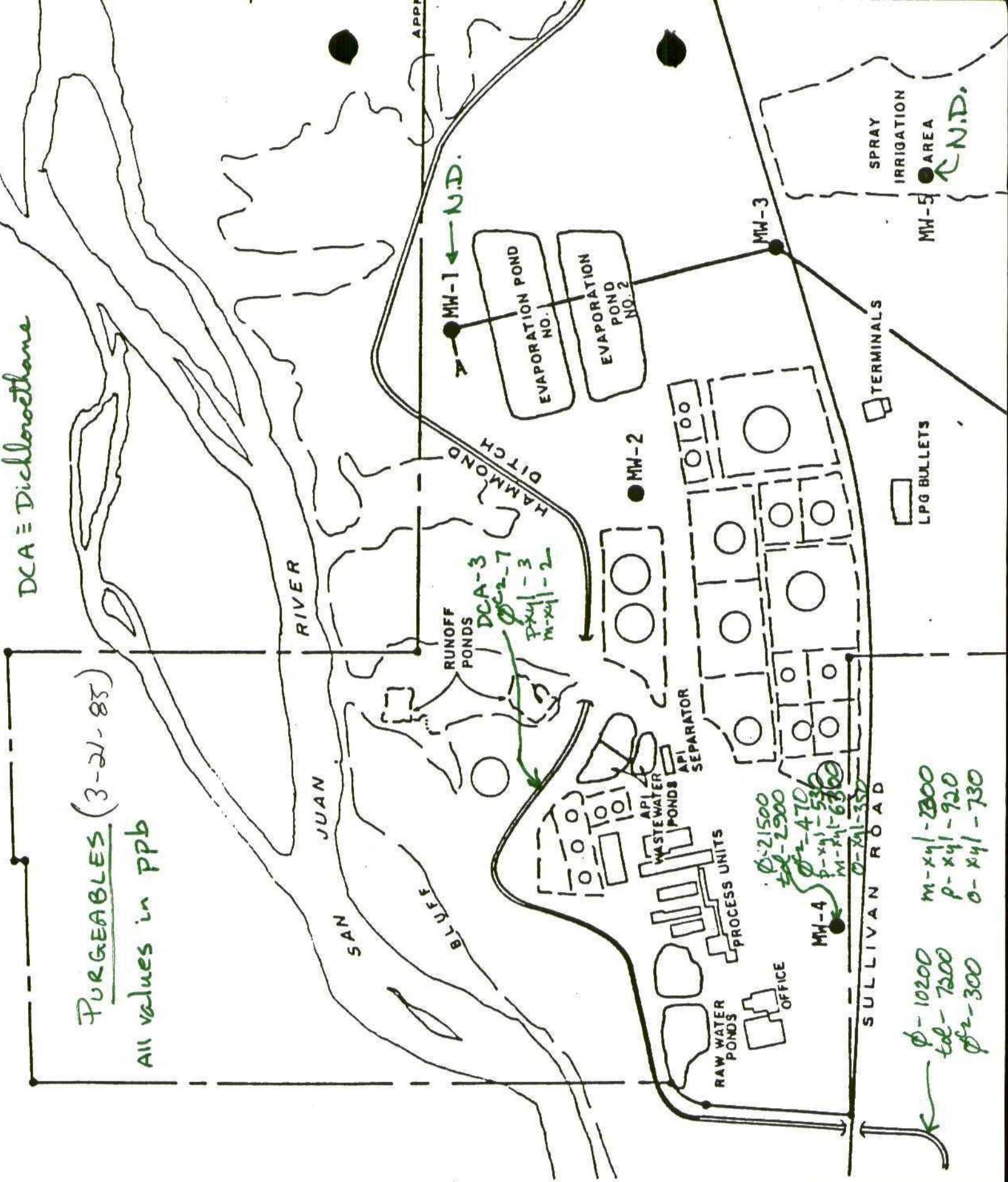
FIGURE 1  
BLOOMFIELD REFINERY FACILITY MAP

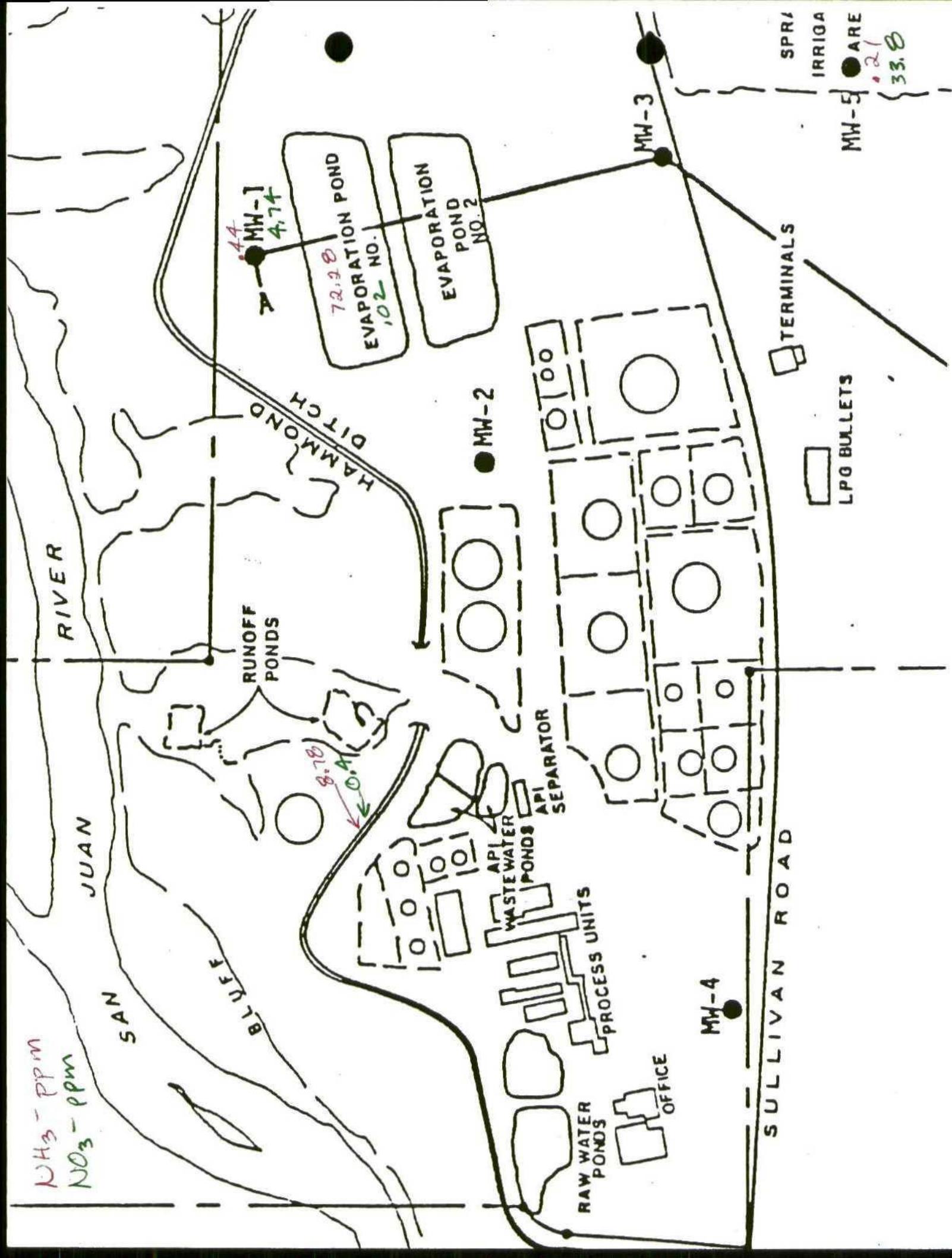


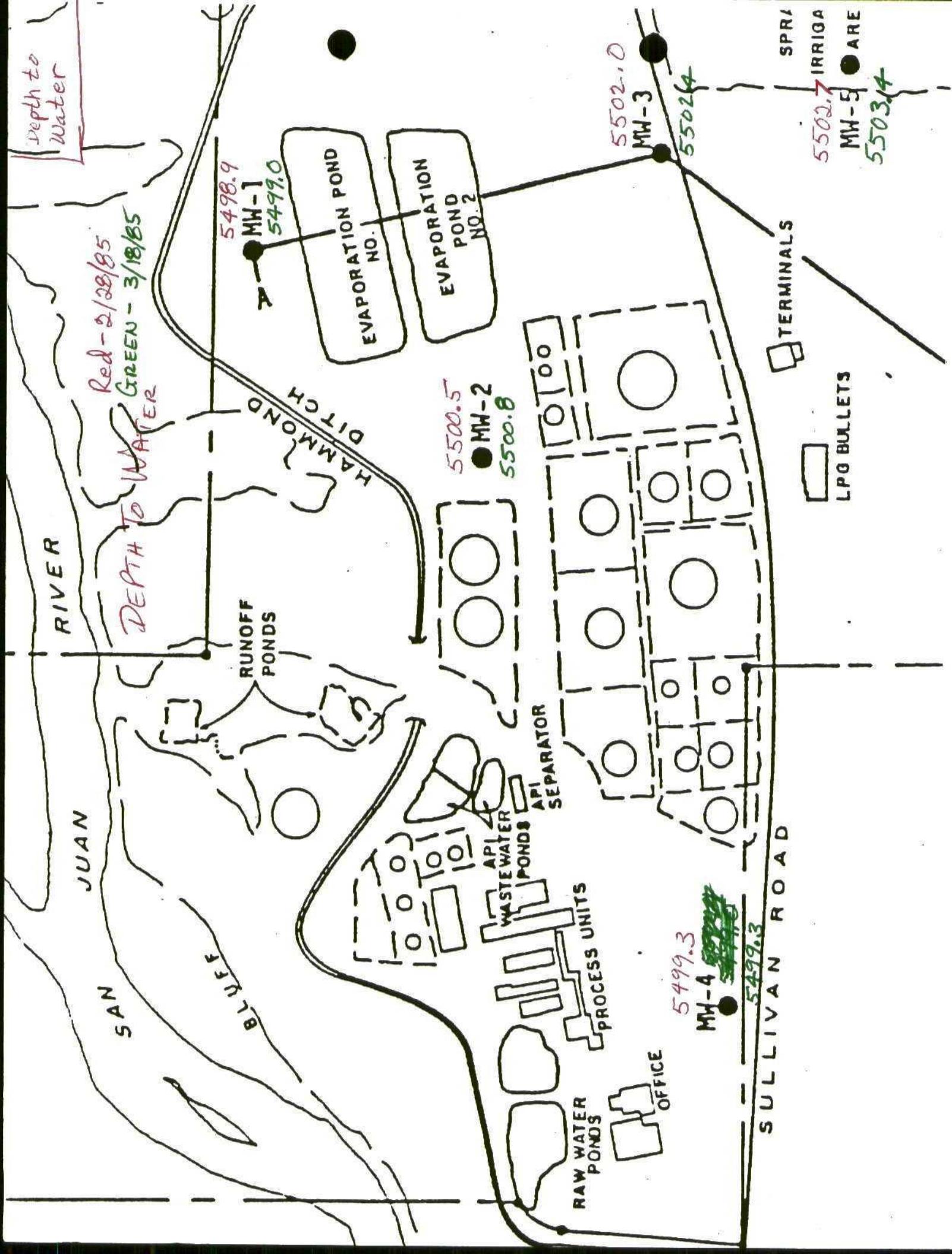


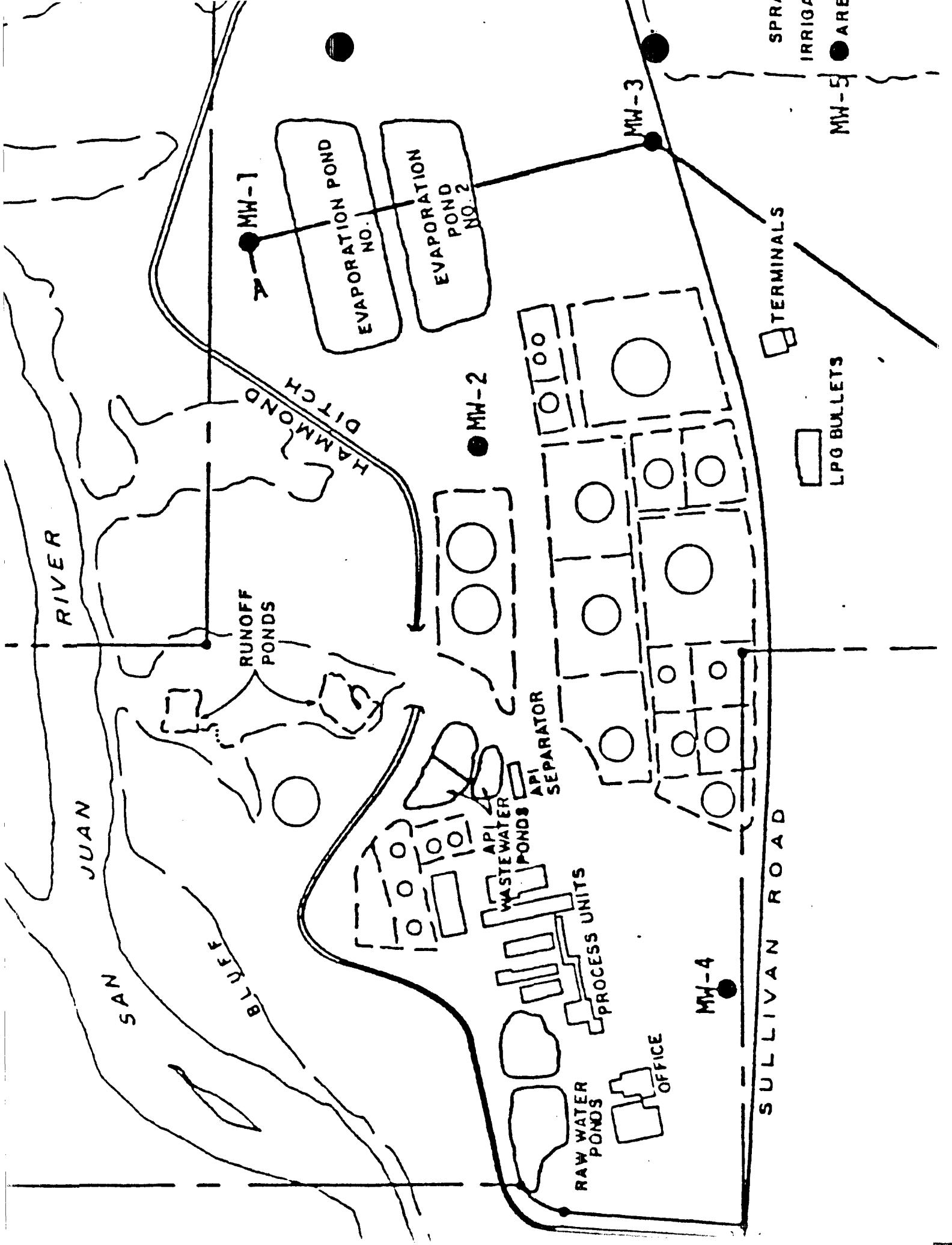
DCA ≡ Dichloroethane

PURGEABLES (3-21-85)  
All values in ppb









GROUNDWATER SAMPLING

<u>DATE</u>	<u>TIME</u>	<u>MW</u>	<u>WATER LEVEL</u>	<u>TOTAL DEPTH</u>	<u>FT. OF H<sub>2</sub>O</u>	<u>GALS.</u>	<u>BAILS</u>	<u>ACT.</u>
					H <sub>2</sub> O	H <sub>2</sub> O	R'Q'D	BAILS
5/27/87	9:00a	3	32.91	37.08	4.17	4.3	9	15
"	10:00a	2	18.62	27.07	8.45	8.8	18	20
"	11:00a	1	16.06	23.35	7.29	7.6	16	20
"	12:30p	5	41.15	45.08	3.93	4.1	9	12
"	1:00p	10	17.82	33.77	15.95	23.4	47	50
"	2:00p	9	20.97	33.78	12.81	18.8	38	40
"	3:00p	4	24.08	33.22	9.14	9.5	19	25

radius of wells 3, 2, 1, 5, & 4 = 0.21';  $1.036 \times h = \text{gal}$   
 radius of wells 10 & 9 = 0.25';  $1.468 \times h = \text{gal}$

5/27/87 8 29.17 34.87 NOT BAILED

" 7 24.47 - "

# GROUNDWATER ELEVATIONS

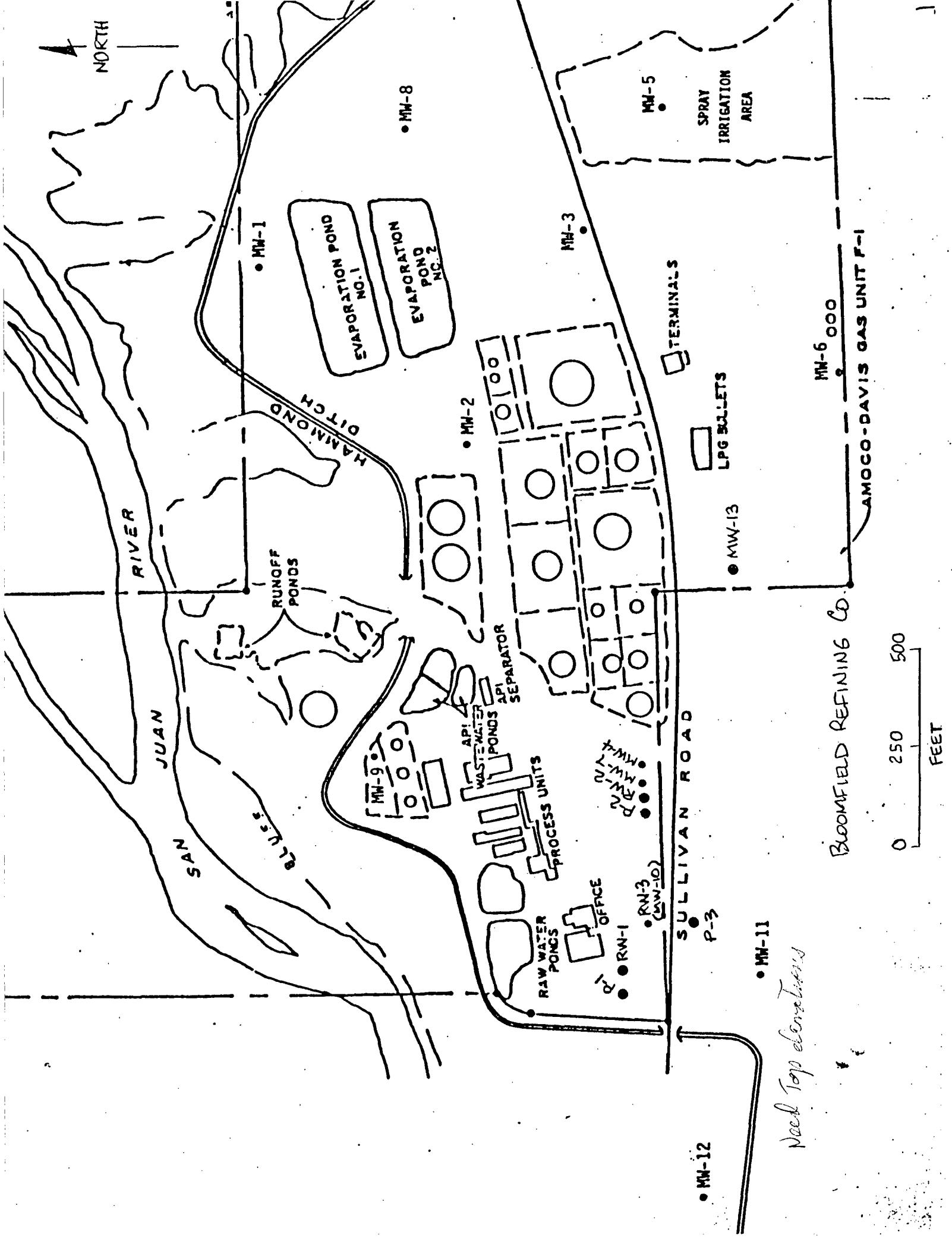
HAMMOND Hammond

DATE	T.O.P. →	MW-7	MW-8	MW-9	MW-10	AT SAWMILL	AT WALKUNG
		<u>5524.09</u>	<u>5531.12</u>	<u>5533.70</u>	<u>5516.86</u>	<u>5504.82</u>	<u>5522.95</u>

1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20	3/1/86	5498.02	5501.25	5498.15	5497.65	-	
21	SAMPLE	3/126/86	5498.02	5501.97	5498.20	5497.66	-
22	DIKE REMOVED	4/1/86	5498.77	5501.86	5498.22	5497.60	5496.50 5498.24
23	" "	4/13/86	5497.92	5501.82	5497.90	5497.69	- 5496.35
24	WATER ON	4/21	5/1/86	5497.23	5501.79	5498.62	5497.83 5498.08 5499.03
25		5/21/86	5498.86	5501.83	5499.00	5498.05	5498.25 5499.42
26		6/1/86	5498.85	5501.89	5499.17	5498.15	5498.23 5499.63
27	SAMPLE	6/123/86	-	5502.04	5499.47	5498.11	- -
28		7/1/86	5497.87	5502.22	5499.50	5498.17	5497.89 5499.95
29		8/1/86	5498.77	5502.12	5499.40	5498.37	5497.84 5499.67
30		9/1/86	5498.95	5502.21	5499.55	5498.53	5498.24 5500.15
31	SAMPLE	9/18/86	-	5502.12	5499.57	5498.75	- -
32	WATER OFF	10/1/86	5498.96	5501.97	5499.42	5498.69	5497.00 5498.53
33	10/15	11/1/86	5499.26	5501.90	5499.56	5499.05	5497.00 5498.83
34	DIKED	12/1/86	5499.40	5502.10	5499.14	5499.28	5498.72 5498.73
35	SAMPLE	12/16/86	5499.41	5502.10	5499.15	5499.30	- -
36	REMOVED DIKES	1/27/87	5499.29	5501.85	5498.98	5499.09	5498.59 5498.60
37	4/3/87	4/2/87	5499.59	5502.12	5498.92	5499.33	5498.55 5498.55
38	IRRIGATION	4/13/87	4/23/87	5499.55	5502.03	5498.29	5499.07 5497.55 5497.92
39		5/127/87	5499.62	5501.95	5498.73	5499.04	5498.09 5498.61
40							

BUDWEISER BEER COMPANY  
SICOURI WATER ELEVATIONS

		MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
DATE	T.O.P.	5515.77	5519.45	5535.85	5524.30	5545.10	5551.23
3/24/34		5498.91	5500.44	5501.74	5499.46	5502.26	DRY
2/23/35		5499.07	5500.55	5502.15	5499.30	5502.75	DRY
3/13/35		5499.14	5500.82	5502.55	5499.32	5503.50	
WATER ON	4/11/35	5498.99	5500.62	5502.73	5499.30	5503.67	
	5/31/35	5499.67	5500.97	5502.74	5499.80	5503.64	
	6/14/35	5499.80	5500.99	5502.63	5499.90	5503.40	
	6/26/35	5499.94	5500.93	5502.49	5499.73	5503.24	
	7/2/35	5500.20	5500.99	5502.45	5499.30	5503.30	
	7/21/35	5501.00	5501.25	5502.43	5499.73	5503.37	
	9/17/35	5500.34	5501.05	5502.25	5499.80	5503.07	
WATER OFF	10/3/35	5500.03	5500.87	5502.42	5499.70	5503.30	
	10/24/35	5499.23	5500.43	5502.28	5499.54	5503.10	
	11/3/35	5498.72	5500.05	5502.20	5499.60	5503.00	
	12/17/35	5498.35	5499.85	5501.35	5499.40	5502.30	
SAMPLE	1/8/36	5498.59	5500.08	5501.25	5499.35	5502.77	DRY
	1/14/36	5493.75	5500.22	5502.04	5499.26	5502.76	"
	2/20/36	5498.93	5500.62	5502.43	5499.35	5503.30	
	3/21/36	5499.10	5500.65	5502.39	5499.3	5504.23	
SAMPLE	3/26/36	5499.07	5500.65	5502.91	5499.31	5504.24	"
DIKE REMOVED	4/4/36	5499.07	5500.57	5502.98	5499.21	5504.57	"
WATER ON	4/18/36	5498.85	5500.43	5502.98	5499.42	5504.42	"
4/21	5/5/36	5499.43	5500.57	5502.92	5499.32	5504.27	"
	5/21/36	5500.05	5500.82	5502.85	5499.40	5504.35	"
	6/4/36	5500.41	5500.93	5502.95	5499.40	5504.17	"
SAMPLE	6/23/36	5501.21	5501.18	5503.05	5499.45	5504.13	"
	7/8/36	5501.34	5501.27	5502.96	5499.44	5503.87	"
	8/4/36	5500.25	5501.13	5502.92	5499.67	5503.77	"
	9/2/36	5500.23	5501.32	5502.94	5499.78	5503.58	"
SAMPLE	9/18/36	5500.03	5501.22	5502.77	5499.98	5503.52	"
WATER OFF	10/8/36	5499.93	5501.07	5502.68	5500.13	5503.46	"
10/15	11/7/36	5499.45	5500.82	5502.72	5500.19	5503.48	"
DIKE	12/8/36	5499.45	5501.01	5502.78	5500.28	5503.43	"
SAMPLE	12/16/36	5499.45	5501.05	5502.80	5500.28	5503.41	"
	1/27/37	5499.44	5500.92	5502.60	5500.22	5503.10 DRY AT 5501.63	
REMOVE DIKES	4/2/37	5499.76	5501.20	5502.86	5500.37	5503.77	"
4/3/37	4/23/37	5499.33	5500.71	5502.94	5500.32	5504.01	"
IRRIGATION	4/13/37	5499.71	5500.83	5502.94	5500.22	5503.95	"





STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)  
700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240Biological, Chemical and Physical  
ANALYSES of WASTEWATER

DATE RECEIVED

7/29/82

LAB NO. WC 317

USER CODE

Collection date	City or Location			
Collected by	County			Region
Owner	FIELD DETERMINED PARAMETERS			
Send Final Report to:	By			
<i>OIL CONSERVATION DIV P.O. BOX 7088 SANTA FE NM 87501</i>	<input type="checkbox"/> pH	<input type="checkbox"/> Dissolved Oxygen mg/l		
	<input type="checkbox"/> Water Temperature, °C	<input type="checkbox"/> Chlorine Residual, mg/l		
	<input type="checkbox"/> Settleable Solids, ml/l	<input type="checkbox"/>		
	OTHER INFORMATION			
	<i>1 gal Brown glass SAMPLE CA NF-A-1g CUSO4 10M L H3PO4</i>			

STORET NO.:	RIVER BASIN	OWNERSHIP	LOCATION
<b>Source</b> <input type="checkbox"/> Wastewater Treatment Plant <input type="checkbox"/> LAGOON <input type="checkbox"/> Other: <input type="checkbox"/> Other:	<input type="checkbox"/> Rio Grande <input type="checkbox"/> Canadian <input type="checkbox"/> Little Colorado <input type="checkbox"/> Other - specify: <hr/>	<input type="checkbox"/> Pecos <input type="checkbox"/> Gila <input type="checkbox"/> San Juan <hr/>	<input type="checkbox"/> Municipal <input type="checkbox"/> MDSWA <input type="checkbox"/> Private <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Other: <hr/>
	<input type="checkbox"/> DRAIN	<input type="checkbox"/> LAKE	<input type="checkbox"/> Influent
	<input type="checkbox"/> STREAM	<input type="checkbox"/> STREAM	<input type="checkbox"/> Primary
			<input type="checkbox"/> Secondary
			<input type="checkbox"/> Effluent
		<input type="checkbox"/> Digester	
		<input type="checkbox"/> Trickling Filter	

ORGANIC PARAMETERS	NUTRIENTS		PHYSICAL PARAMETERS		OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	
<input type="checkbox"/> BOD - 5 DAY 20 °C	<input type="checkbox"/> Phosphate (As P)		<input type="checkbox"/> Residue Total Non-Filterable (Suspended)		<input type="checkbox"/> Surfactants (As LAS), mg/l		<input type="checkbox"/>	
<input type="checkbox"/> COD	<input type="checkbox"/> Nitrogen, Nitrate (As N)		<input type="checkbox"/> Residue Total Filterable (Dissolved)		<input type="checkbox"/> Conductance Micromhos 25 °C		<input type="checkbox"/>	
<input type="checkbox"/> TOC	<input type="checkbox"/> Nitrogen Ammonia (As N)		<input type="checkbox"/> Residue Total		<input type="checkbox"/> Color Units		<input type="checkbox"/>	
<input type="checkbox"/> DOC	<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)		<input type="checkbox"/> Residue Total Fixed Solids		<input type="checkbox"/> Turbidity Jackson Units Supernatant		<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/> Residue Volatile		<input type="checkbox"/> Turbidity Jackson Units Total		<input type="checkbox"/>	
<i>kg/l</i> <i>Brown</i> <i>12.8</i>	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
SAMPLE TREATMENT <input type="checkbox"/> None	<input type="checkbox"/> Refrigerate		<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2ml/l		<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)		<input type="checkbox"/>	

REMARKS	<input type="checkbox"/>
	<input type="checkbox"/>

Reviewed by  
*John Michael*  
 Date reported  
*8/2/82*



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

**Biological, Chemical and Physical  
ANALYSES of WASTEWATER**

DATE RECEIVED

7/29/82

LAB NO. WC 318

USER CODE

Collection date	7-28-82 - 3:00PM	City or Location			
Collected by	Sim PSO 4	County		Region	
Owner		FIELD DETERMINED PARAMETERS		By	
Send Final Report to:	<input type="checkbox"/> pH <input type="checkbox"/> Dissolved Oxygen mg/l <input type="checkbox"/> Water Temperature, °C <input type="checkbox"/> Chlorine Residual, mg/l <input type="checkbox"/> Settleable Solids, ml/l <input type="checkbox"/>				
OIL COMPANY LTD D.V. P.O. BOX 2088 SANTA FE N.M 87501	OTHER INFORMATION		SAMPLE DA 1-4-82 CUSO 4 ICED DOWN SINCE COLLECTION OIL H3704		

STORET NO.:	RIVER BASIN			OWNERSHIP	LOCATION	
Source	<input type="checkbox"/> Wastewater Treatment Plant <input type="checkbox"/> LAGOON <input type="checkbox"/> Other: <input type="checkbox"/> Other:	<input type="checkbox"/> DRAIN <input type="checkbox"/> LAKE <input type="checkbox"/> STREAM	<input type="checkbox"/> Rio Grande <input type="checkbox"/> Canadian <input type="checkbox"/> Little Colorado <input type="checkbox"/> Other - specify:	<input type="checkbox"/> Pecos <input type="checkbox"/> Gila <input type="checkbox"/> San Juan	<input type="checkbox"/> Municipal <input type="checkbox"/> MDSWA <input type="checkbox"/> Private <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Other:	<input type="checkbox"/> Influent <input type="checkbox"/> Primary <input type="checkbox"/> Secondary <input type="checkbox"/> Effluent <input type="checkbox"/> Digester <input type="checkbox"/> Trickling Filter

ORGANIC PARAMETERS	NUTRIENTS		PHYSICAL PARAMETERS		OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	
<input type="checkbox"/> BOD - 5 DAY 20 °C	<input type="checkbox"/> Phosphate (As P)		<input type="checkbox"/> Residue Total Non-Filterable (Suspended)		<input type="checkbox"/> Surfactants (As LAS), mg/l		<input type="checkbox"/>	
<input type="checkbox"/> COD	<input type="checkbox"/> Nitrogen, Nitrate (As N)		<input type="checkbox"/> Residue Total Filterable (Dissolved)		<input type="checkbox"/> Conductance Micromhos 25 °C		<input type="checkbox"/>	
<input type="checkbox"/> TOC	<input type="checkbox"/> Nitrogen Ammonia (As N)		<input type="checkbox"/> Residue Total		<input type="checkbox"/> Color Units		<input type="checkbox"/>	
<input type="checkbox"/> DOC	<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)		<input type="checkbox"/> Residue Total Fixed Solids		<input type="checkbox"/> Turbidity Jackson Units Supernatant		<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/> Residue Volatile		<input type="checkbox"/> Turbidity Jackson Units Total		<input type="checkbox"/>	
<input checked="" type="checkbox"/> PHENOLS 37049	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
SAMPLE TREATMENT <input type="checkbox"/> None	<input type="checkbox"/> Refrigerate		<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2ml/l		<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)		<input type="checkbox"/>	

REMARKS	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>

Date	<input type="checkbox"/>
Analyst	<input type="checkbox"/>
Reviewed by	<input type="checkbox"/>
Date reported	8/2/82 ✓



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

# Biological, Chemical and Physical ANALYSES of WASTEWATER

DATE RECEIVED	7/29/82	LAB NO. WC-319	USER CODE
Collection date	City or Location		
Collected by	SJ	Region	
Owner	By		
Send Final Report to:			
OIL CONSERVATION DIV P.O. BOX 2088 SANTA FE N.M. 87501 PH 827 2534	<b>FIELD DETERMINED PARAMETERS</b> <input type="checkbox"/> pH <input type="checkbox"/> Dissolved Oxygen mg/l <input type="checkbox"/> Water Temperature, °C <input type="checkbox"/> Chlorine Residual, mg/l <input type="checkbox"/> Settleable Solids, ml/l <input type="checkbox"/> <b>OTHER INFORMATION</b> <i>SAMPLE TA NF-A-1g CUSO4+H3PO4 Bran glass gallon jar</i>		

STORET NO.:	RIVER BASIN				OWNERSHIP	LOCATION
	<input type="checkbox"/> Rio Grande	<input type="checkbox"/> Pecos	<input type="checkbox"/> Municipal	<input type="checkbox"/> Influent		
Source	<input type="checkbox"/> Canadian	<input type="checkbox"/> Gila	<input type="checkbox"/> MDSWA	<input type="checkbox"/> Primary		
<input type="checkbox"/> Wastewater Treatment Plant	<input type="checkbox"/> Little Colorado	<input type="checkbox"/> San Juan	<input type="checkbox"/> Private	<input type="checkbox"/> Secondary		
<input type="checkbox"/> LAGOON	<input type="checkbox"/> Other - specify:		<input type="checkbox"/> Industrial	<input type="checkbox"/> Effluent		
<input type="checkbox"/> Other:			<input type="checkbox"/> Commercial	<input type="checkbox"/> Digester		
<input type="checkbox"/> Other:			<input type="checkbox"/> Other:	<input type="checkbox"/> Trickling Filter		
	<input type="checkbox"/> DRAIN					
	<input type="checkbox"/> LAKE					
	<input type="checkbox"/> STREAM					

ORGANIC PARAMETERS	NUTRIENTS		PHYSICAL PARAMETERS		OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
	mg/l	mg/l	mg/l	mg/l				
<input type="checkbox"/> BOD - 5 DAY 20 °C		<input type="checkbox"/> Phosphate (As P)		<input type="checkbox"/> Residue Total Non-Filterable (Suspended)		<input type="checkbox"/> Surfactants (As LAS), mg/l		
<input type="checkbox"/> COD		<input type="checkbox"/> Nitrogen, Nitrate (As N)		<input type="checkbox"/> Residue Total Filterable (Dissolved)		<input type="checkbox"/> Conductance Micromhos 25 °C		
<input type="checkbox"/> TOC		<input type="checkbox"/> Nitrogen Ammonia (As N)		<input type="checkbox"/> Residue Total		<input type="checkbox"/> Color Units		
<input type="checkbox"/> DOC		<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)		<input type="checkbox"/> Residue Total Fixed Solids		<input type="checkbox"/> Turbidity Jackson Units Supernatant		
				<input type="checkbox"/> Residue Volatile		<input type="checkbox"/> Turbidity Jackson Units Total		
<input checked="" type="checkbox"/> PHENOLS ug/l 191								
SAMPLE TREATMENT	<input type="checkbox"/> Refrigerate		<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2ml/l		<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)		<input type="checkbox"/>	
<input type="checkbox"/> None								

REMARKS		Date
		Analyst
		Reviewed by
		<i>Alvarez</i>
		Date reported
		<i>8/2/82</i>



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

Biological, Chemical and Physical  
ANALYSES of WASTEWATER

DATE RECEIVED	7/29/82	LAB NO.	WC 322	USER CODE
Collection date	7-28-82 6:00PM	City or Location		
Collected by	Simpson	County		Region
Owner	OCD	FIELD DETERMINED PARAMETERS		
Send Final Report to:	<input type="checkbox"/> pH <input type="checkbox"/> Dissolved Oxygen mg/l <input type="checkbox"/> Water Temperature, °C <input type="checkbox"/> Chlorine Residual mg/l <input type="checkbox"/> Settleable Solids, mg/l <input type="checkbox"/>			
<i>OIL CONSERVATION ID: 0 P.O. Box 2088 SANTA FE NM 87501</i> <b>OTHER INFORMATION:</b> SAMPLE CA NF-A - 10ML <i>iced down since collection. NaOH</i>				

STORE NO.:	RIVER BASIN			OWNERSHIP	LOCATION
Source	<input type="checkbox"/> Rio Grande <input type="checkbox"/> Canadian <input type="checkbox"/> Little Colorado <input type="checkbox"/> Other - specify:	<input type="checkbox"/> Pecos <input type="checkbox"/> Gila <input type="checkbox"/> San Juan	<input type="checkbox"/> Municipal <input type="checkbox"/> MDSWA <input type="checkbox"/> Private <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Other:	<input type="checkbox"/> Influent <input type="checkbox"/> Primary <input type="checkbox"/> Secondary <input type="checkbox"/> Effluent <input type="checkbox"/> Digester <input type="checkbox"/> Trickling Filter	
<input type="checkbox"/> Wastewater Treatment Plant <input type="checkbox"/> LAGOON: <input type="checkbox"/> Other: <input type="checkbox"/> Other:	<input type="checkbox"/> DRAIN <input type="checkbox"/> LAKE <input type="checkbox"/> STREAM				

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS	mg/l	HEAVY METAL and TOXIC CHEMICAL PARAMETERS
<input type="checkbox"/> BOD - 5 DAY 20 °C		<input type="checkbox"/> Phosphate (As P)		<input type="checkbox"/> Residue Total Non-Filterable (Suspended)		<input type="checkbox"/> Surfactants (As LAS), mg/l		<input type="checkbox"/>
<input type="checkbox"/> COD		<input type="checkbox"/> Nitrogen-Nitrate (As N)		<input type="checkbox"/> Residue Total Filterable (Dissolved)		<input type="checkbox"/> Conductance Micromhos 25 °C		<input type="checkbox"/>
<input type="checkbox"/> TOC		<input type="checkbox"/> Nitrogen-Ammonia (As N)		<input type="checkbox"/> Residue Total		<input type="checkbox"/> Color Units		<input type="checkbox"/>
<input type="checkbox"/> DOC		<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)		<input type="checkbox"/> Residue Total Fixed Solids		<input type="checkbox"/> Turbidity Jackson Units Supernatant		<input type="checkbox"/>
				<input type="checkbox"/> Residue Volatile		<input type="checkbox"/> Turbidity Jackson Units Total		<input type="checkbox"/>
<input checked="" type="checkbox"/> Cyanide				<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
SAMPLE TREATMENT	<input type="checkbox"/> Refrigerate <input type="checkbox"/> None			<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> 2m/l		<input type="checkbox"/> HNO <sub>3</sub> 3-5m/l (for metals)		<input type="checkbox"/>

REMARKS	<i>Possible High Sulfates</i>	Date	8-5-82
	<i>0.002 mg/l. Cyanide</i>	Analyst	<i>CB Collier</i>
		Reviewed by	<i>John Gibson</i>
		Date reported	8/5/82



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

**Biological, Chemical and Physical  
ANALYSES of WASTEWATER**

DATE RECEIVED	7/29/82	LAB NO.	WC 323	USER CODE
Collection date	City or Location			
Collected by	SIMPSON	County	SJ	
Owner	OCD	FIELD DETERMINED PARAMETERS		By
Send Final Report to:	<input type="checkbox"/> pH <input type="checkbox"/> Dissolved Oxygen mg/l <input type="checkbox"/> Water Temperature, °C <input type="checkbox"/> Chlorine Residual mg/l <input type="checkbox"/> Settleable Solids, ml/l <input type="checkbox"/>			
<b>OTHER INFORMATION</b> SAMPLE DA - NF-A - 10 ML I CED DOWN SINCE COLLECTION      NAOH				

STORET NO.:	RIVER BASIN:		OWNERSHIP	LOCATION
Source:	<input type="checkbox"/> Rio Grande <input type="checkbox"/> Pecos <input type="checkbox"/> Canadian <input type="checkbox"/> Gila <input type="checkbox"/> Little Colorado <input type="checkbox"/> San Juan <input type="checkbox"/> Other - specify:	<input type="checkbox"/> Municipal <input type="checkbox"/> MDSWA <input type="checkbox"/> Private <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Other:	<input type="checkbox"/> Influent <input type="checkbox"/> Primary <input type="checkbox"/> Secondary <input type="checkbox"/> Effluent <input type="checkbox"/> Digester <input type="checkbox"/> Trickling Filter	
<input type="checkbox"/> Wastewater Treatment Plant <input type="checkbox"/> LAGOON <input type="checkbox"/> Other: <input type="checkbox"/> Other:	<input type="checkbox"/> DRAIN <input type="checkbox"/> LAKE <input type="checkbox"/> STREAM			

ORGANIC PARAMETERS	NUTRIENTS	PHYSICAL PARAMETERS	OTHER PARAMETERS	HEAVY METAL and TOXIC CHEMICAL PARAMETERS
mg/l	mg/l	mg/l	mg/l	
<input type="checkbox"/> BOD - 5 DAY, 20 °C	<input type="checkbox"/> Phosphate (As P)	<input type="checkbox"/> Residue Total Non-Filterable (Suspended)	<input type="checkbox"/> Surfactants (As LAS), mg/l	<input type="checkbox"/>
<input type="checkbox"/> COD	<input type="checkbox"/> Nitrogen, Nitrate (As N)	<input type="checkbox"/> Residue Total Filterable (Dissolved)	<input type="checkbox"/> Conductance Micromhos 25 °C	<input type="checkbox"/>
<input type="checkbox"/> TOC	<input type="checkbox"/> Nitrogen Ammonia (As N)	<input type="checkbox"/> Residue Total	<input type="checkbox"/> Color Units	<input type="checkbox"/>
<input type="checkbox"/> DOC	<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)	<input type="checkbox"/> Residue Total Fixed Solids	<input type="checkbox"/> Turbidity Jackson Units Supematant	<input type="checkbox"/>
		<input type="checkbox"/> Residue Volatile	<input type="checkbox"/> Turbidity Jackson Units Total	<input type="checkbox"/>
<input checked="" type="checkbox"/> CYANIDE		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SAMPLE TREATMENT <input type="checkbox"/> None	<input type="checkbox"/> Refrigerate	<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2ml/l	<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)	<input type="checkbox"/>
				<input type="checkbox"/>

REMARKS	Possibly light SULFATES
0.006 mg/l. cyanide	
pH = 9 NOTE	

Date 8-5-82  
 Analyst CB Coleman  
 Reviewed by LM Meitzen  
 Date Reported 8/5/82



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

# Biological, Chemical and Physical ANALYSES of WASTEWATER

DATE RECEIVED 7/29/82LAB NO. WC 324

USER CODE

Collection date <u>7-28-82</u> - 4:00PM	City or Location			
Collected by <u>OSCAR SIMPSON</u>	County <u>SAN JUAN</u>		Region	
Owner <u>OCD</u>	FIELD DETERMINED PARAMETERS		By	
Send Final Report to: <b>OIL CONSERVATION DIV.</b> P.O. BOX 2088 SANTA FE N.M. 87501 PH 227 2534 ATT OSCAR SIMPSON	<input type="checkbox"/> pH	<input type="checkbox"/> Dissolved Oxygen mg/l		
	<input type="checkbox"/> Water Temperature, °C.	<input type="checkbox"/> Chlorine Residual, mg/l		
	<input type="checkbox"/> Settleable Solids, ml/l	<input type="checkbox"/>		
OTHER INFORMATION				
<u>NOTE: HIGH SULFATES PRESENT. DR COLEMAN</u> <u>SAMPLE IA NF-A-10ML NAOH</u>				

STORED NO:	RIVER BASIN		OWNERSHIP	LOCATION
Source	<input type="checkbox"/> Rio Grande	<input type="checkbox"/> Pecos	<input type="checkbox"/> Municipal	<input type="checkbox"/> Influent
<input type="checkbox"/> Wastewater Treatment Plant	<input type="checkbox"/> Canadian	<input type="checkbox"/> Gila	<input type="checkbox"/> MDSWA	<input type="checkbox"/> Primary
<input type="checkbox"/> LAGOON	<input type="checkbox"/> Little Colorado	<input type="checkbox"/> San Juan	<input type="checkbox"/> Private	<input type="checkbox"/> Secondary
<input type="checkbox"/> Other:	<input type="checkbox"/> Other - specify:		<input type="checkbox"/> Industrial	<input type="checkbox"/> Effluent
<input type="checkbox"/> Other:			<input type="checkbox"/> Commercial	<input type="checkbox"/> Digester
			<input type="checkbox"/> Other:	<input type="checkbox"/> Trickling Filter

ORGANIC PARAMETERS	NUTRIENTS	PHYSICAL PARAMETERS	OTHER PARAMETERS	HEAVY METAL and TOXIC CHEMICAL PARAMETERS
mg/l	mg/l	mg/l	mg/l	
<input type="checkbox"/> BOD - 5 DAY 20 °C	<input type="checkbox"/> Phosphate (As-P)	<input type="checkbox"/> Residue Total Non-Filterable (Suspended)	<input type="checkbox"/> Surfactants (As LAS), mg/l	<input type="checkbox"/>
<input type="checkbox"/> COD	<input type="checkbox"/> Nitrogen, Nitrate (As-N)	<input type="checkbox"/> Residue Total Filterable (Dissolved)	<input type="checkbox"/> Conductance Micromhos 25 °C	<input type="checkbox"/>
<input type="checkbox"/> TOC	<input type="checkbox"/> Nitrogen Ammonia (As N)	<input type="checkbox"/> Residue Total	<input type="checkbox"/> Color Units	<input type="checkbox"/>
<input type="checkbox"/> DOC	<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)	<input type="checkbox"/> Residue Total Fixed Solids	<input type="checkbox"/> Turbidity Jackson Units Supernatant	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Residue Volatile	<input type="checkbox"/> Turbidity Jackson Units Total	<input type="checkbox"/>
<input checked="" type="checkbox"/> CYANIDE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SAMPLE TREATMENT <input type="checkbox"/> None	<input type="checkbox"/> Refrigerate	<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2ml/l	<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)	<input type="checkbox"/>

REMARKS

Negative Cyanide  
KOKE

pH of sample was 1 - 2 rather than  
12

Date <u>8-5-82</u>
Analyst <u>CB Coleman</u>
Reviewed by <u>M. Heitman</u>
Date reported <u>8/5/82</u>

## CONSULT SLD Lab Annex L for proper presentation of samples! TYPE OR PRINT with Ball Point Pen

CHEMICAL ANALYSES: Check individual items for analysis [Mark appropriate boxes]

INTERIM PRIMARY PARAMETER GROUP

TYPE OF CHEMICAL ANALYSIS

Complete Secondary

ORGANIC

TREATED WATER

RAW WATER

Radiological

Check one:

Report to

DISCONSERVATION DIV

Address

P.O. Box 2288

SPRINGFIELD, NM 87501

Date received

Lab No.

SLD user code No.

Water Supply System Name

Collection Date

Collection Time

Collection Point

Water Supply System Code No.

City or Location

County

LAT.

LONG.

Collected By

System

Owner

Organization

NAME

ACCT.

SOURCE

Spring

Lake

Well-Depth

Other (Specify)

Long

TYPE OF SYSTEM (Check One)

PRIVATE

PUBLC

Community Supply

Non-Community

Drain

Stream

Pool

Other (Specify)

Long

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL	HEAVY METALS	mg/l	PARAMETER	mg/l	ORGANIC	mg/l
00930 Sodium (as Na)	0.000	00940 Chloride (as Cl)	0.000	00360 Total Dissolved Solids	mg/l	01000 Arsenic	ppm	39390 Endrin	ppm	
00935 Potassium (as K)	0.000	00950 Fluoride (as F)	0.000	38260 Foaming Agents (as Las)	ppm	00000 Barium & Lead Acetate	ppm	39732 Lindane	ppm	
00900 Tot.Hardness (as CaCO <sub>3</sub> )	0.000	00620 Nitrate (as N)	0.000	00093 Conductance 25°C	ppm	01025 Cadmium	ppm	38270 Methoxychlor	ppm	
00915 Calcium (as Ca)	0.000	00630 Alkalinity (as CaCO <sub>3</sub> )	0.000	00400 Chromium	ppm	01040 Radionuclides (PCN)	ppm	39400 Toxaphene	ppm	
00925 Magnesium (as Mg)	0.000	00440 Bicarbonate (as HCO <sub>3</sub> )	0.000	01330 Odor	ppm	011501 Gross Alpha	cpm	39730 Dieldrin	ppm	
01045 Iron-Total (as Fe)	0.000	00448 Carbonate (as CO <sub>3</sub> )	0.000	01419 Lead	ppm	03561 Gross Beta	cpm	2,4-D	ppm	
01056 Manganese (as Mn)	0.000	00455 Sulphate (as SO <sub>4</sub> )	0.000	00088 Color	mg/l	01180 Mercury	ppm	39740 2,4,5-TP (Siloxex)	ppm	
						09501 Ruthenium 225	ppm			
						11601 Radium 226	ppm			
						01675 Silver	ppm			
						11241 Silver Bromide	ppm			

LABORATORY REMARKS:

No Traceable Salts Present

Cyanide

Laboratory Remarks:

8.00 mg/l Cyanide

Reviewed by  
John Smith  
Date reported  
8/15/82





STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

**Biological, Chemical and Physical  
ANALYSES of WASTEWATER**

DATE RECEIVED *7/29/82*LAB NO. *WC 327*

USER CODE

Collection date	7-28-82 6:00PM	City or Location			
Collected by	<i>Simpson</i>	County	<i>SOT</i>		Region
Owner	<i>OCD</i>	FIELD DETERMINED PARAMETERS			By
Send Final Report to:	<i>O-L CONSERVATION D.V. P.O. BOX 2088 SANTA FE N.M. 87501</i>	<input type="checkbox"/> pH		<input type="checkbox"/> Dissolved Oxygen mg/l	
		<input type="checkbox"/> Water Temperature, °C		<input type="checkbox"/> Chlorine Residual, mg/l	
		<input type="checkbox"/> Settleable Solids, ml/l		<input type="checkbox"/>	
		OTHER INFORMATION			<i>SAMPLE CA NF-A-10ml H2SO4</i>

STORET NO.:	RIVER BASIN			OWNERSHIP	LOCATION
Source	<input type="checkbox"/> Wastewater Treatment Plant	<input type="checkbox"/> DRAIN	<input type="checkbox"/> Rio Grande	<input type="checkbox"/> Municipal	<input type="checkbox"/> Influent
	<input type="checkbox"/> LAGOON	<input type="checkbox"/> LAKE	<input type="checkbox"/> Canadian	<input type="checkbox"/> MDSWA	<input type="checkbox"/> Primary
Other:	<input type="checkbox"/> Other:	<input type="checkbox"/> STREAM	<input type="checkbox"/> Little Colorado	<input type="checkbox"/> Private	<input type="checkbox"/> Secondary
		<input type="checkbox"/> Other - specify: _____	<input type="checkbox"/> San Juan	<input type="checkbox"/> Industrial	<input type="checkbox"/> Effluent
				<input type="checkbox"/> Commercial	<input type="checkbox"/> Digester
				<input type="checkbox"/> Other:	<input type="checkbox"/> Trickling Filter

ORGANIC PARAMETERS	NUTRIENTS		PHYSICAL PARAMETERS		OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
	mg/l	mg/l		mg/l				
<input type="checkbox"/> BOD - 5 DAY 20 °C	<input type="checkbox"/> Phosphate (As P)		<input type="checkbox"/> Residue Total Non-Filterable (Suspended)		<input type="checkbox"/> Surfactants (As LAS), mg/l		<input type="checkbox"/>	
<input type="checkbox"/> COD	<input type="checkbox"/> Nitrogen, Nitrate (As N)		<input type="checkbox"/> Residue Total Filterable (Dissolved)		<input type="checkbox"/> Conductance Micromhos 25 °C		<input type="checkbox"/>	
<input checked="" type="checkbox"/> TDC <i>5.4</i>	<input type="checkbox"/> Nitrogen Ammonia (As N)		<input type="checkbox"/> Residue Total		<input type="checkbox"/> Color Units		<input type="checkbox"/>	
<input type="checkbox"/> DOC	<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)		<input type="checkbox"/> Residue Total Fixed Solids		<input type="checkbox"/> Turbidity Jackson Units Supernatant		<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/> Residue Volatile		<input type="checkbox"/> Turbidity Jackson Units Total		<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
SAMPLE TREATMENT <input type="checkbox"/> None	<input type="checkbox"/> Refrigerate		<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2ml/l		<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)		<input type="checkbox"/>	

REMARKS	<input type="checkbox"/>
	<input type="checkbox"/>

Date	<i>8/1/82</i>
Analyst	<i>Ollie Meibohm</i>
Reviewed by	<i>Ollie Meibohm</i>
Date reported	<i>8/1/82</i>



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

**Biological, Chemical and Physical  
ANALYSES of WASTEWATER**

DATE RECEIVED

7/29/82

LAB NO. WC 326

USER CODE

Collection date	City or Location		
Collected by	County	Region	
Owner	FIELD DETERMINED PARAMETERS		
Send Final Report to:	By		
<i>OIL CONSERVATION DIV P.O. BOX 2088 SANTA FE NM 87501 PH 8272574</i>	<input type="checkbox"/> pH	<input type="checkbox"/> Dissolved Oxygen mg/l	
	<input type="checkbox"/> Water Temperature; °C	<input type="checkbox"/> Chlorine Residual mg/l	
	<input type="checkbox"/> Settleable Solids, ml/l	<input type="checkbox"/>	
OTHER INFORMATION: <i>SAMPLE DA NF-A-10ML H<sub>2</sub>SO<sub>4</sub> ICED DOWN SINCE COLLECTION</i>			

STORET NO.:	RIVER BASIN			OWNERSHIP	LOCATION
Source	<input type="checkbox"/> Rio Grande	<input type="checkbox"/> Pecos	<input type="checkbox"/> Municipal	<input type="checkbox"/> Influent	
<input type="checkbox"/> Wastewater Treatment Plant	<input type="checkbox"/> Canadian	<input type="checkbox"/> Gila	<input type="checkbox"/> MDSWA	<input type="checkbox"/> Primary	
<input type="checkbox"/> LAGOON	<input type="checkbox"/> Little Colorado	<input type="checkbox"/> San Juan	<input type="checkbox"/> Private	<input type="checkbox"/> Secondary	
<input type="checkbox"/> Other:	<input type="checkbox"/> Other - specify:		<input type="checkbox"/> Industrial	<input type="checkbox"/> Effluent	
<input type="checkbox"/> Other:			<input type="checkbox"/> Commercial	<input type="checkbox"/> Digester	
			<input type="checkbox"/> Other:	<input type="checkbox"/> Trickling Filter	

ORGANIC PARAMETERS	NUTRIENTS	PHYSICAL PARAMETERS	OTHER PARAMETERS	HEAVY METAL and TOXIC CHEMICAL PARAMETERS
mg/l	mg/l	mg/l	mg/l	
<input type="checkbox"/> BOD - 5 DAY 20 °C	<input type="checkbox"/> Phosphate (As P)	<input type="checkbox"/> Residue Total Non-Filterable (Suspended)	<input type="checkbox"/> Surfactants (As LAS), mg/l	<input type="checkbox"/>
<input type="checkbox"/> COD	<input type="checkbox"/> Nitrogen, Nitrate (As N)	<input type="checkbox"/> Residue Total Filterable (Dissolved)	<input type="checkbox"/> Conductance Micromhos 25 °C	<input type="checkbox"/>
<input checked="" type="checkbox"/> TOC <i>4/18</i>	<input type="checkbox"/> Nitrogen Ammonia (As N)	<input type="checkbox"/> Residue Total	<input type="checkbox"/> Color Units	<input type="checkbox"/>
<input type="checkbox"/> DOC	<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)	<input type="checkbox"/> Residue Total Fixed Solids	<input type="checkbox"/> Turbidity Jackson Units Supernatant	<input type="checkbox"/>
		<input type="checkbox"/> Residue Volatile	<input type="checkbox"/> Turbidity Jackson Units Total	<input type="checkbox"/>
				<input type="checkbox"/>
SAMPLE TREATMENT <input type="checkbox"/> None	<input type="checkbox"/> Refrigerate	<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2ml/l	<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)	<input type="checkbox"/>
				<input type="checkbox"/>

REMARKS	Date
	Analyst
	Reviewed by <i>Alvinston</i>
	Date reported <i>8/9/82</i>



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

# Biological, Chemical and Physical ANALYSES of WASTEWATER

DATE RECEIVED

7/29/82

LAB NO. WC 325

USER CODE

Collection date	City or Location				
Collected by	County			Region	
Owner	FIELD DETERMINED PARAMETERS				
Send Final Report to:	By:				
OIL CONSERVATION DIV P.O BOX 2088 SANTA FE N.M 87501 PH 827 2534		pH		Dissolved Oxygen mg/l	
		Water Temperature, °C		Chlorine Residual, mg/l	
		Settleable Solids, ml/l			
OTHER INFORMATION SAMPLE IA NF-A-10 mL H <sub>2</sub> SO <sub>4</sub>					

STORET NO.:	RIVER BASIN	OWNERSHIP	LOCATION
<b>Source</b> <input type="checkbox"/> Wastewater Treatment Plant <input type="checkbox"/> LAGOON <input type="checkbox"/> Other: <input type="checkbox"/> Other:	<input type="checkbox"/> Rio Grande <input type="checkbox"/> Canadian <input type="checkbox"/> Little Colorado <input type="checkbox"/> Other - specify:	<input type="checkbox"/> Pecos <input type="checkbox"/> Gila <input type="checkbox"/> San Juan	<input type="checkbox"/> Municipal <input type="checkbox"/> MDSWA <input type="checkbox"/> Private <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Other:
<input type="checkbox"/> DRAIN <input type="checkbox"/> LAKE <input type="checkbox"/> STREAM			<input type="checkbox"/> Influent <input type="checkbox"/> Primary <input type="checkbox"/> Secondary <input type="checkbox"/> Effluent <input type="checkbox"/> Digester <input type="checkbox"/> Trickling Filter

ORGANIC PARAMETERS	NUTRIENTS	PHYSICAL PARAMETERS	OTHER PARAMETERS	HEAVY METAL and TOXIC CHEMICAL PARAMETERS
mg/l	mg/l	mg/l	mg/l	
<input type="checkbox"/> BOD - 5 DAY 20 °C	<input type="checkbox"/> Phosphate (As P)	<input type="checkbox"/> Residue Total Non-Filterable (Suspended)	<input type="checkbox"/> Surfactants (As LAS), mg/l	
<input type="checkbox"/> COD	<input type="checkbox"/> Nitrogen, Nitrate (As N)	<input type="checkbox"/> Residue Total Filterable (Dissolved)	<input type="checkbox"/> Conductance Micromhos 25 °C	
<input checked="" type="checkbox"/> TOC <i>4.6</i>	<input type="checkbox"/> Nitrogen Ammonia (As N)	<input type="checkbox"/> Residue Total	<input type="checkbox"/> Color Units	
<input type="checkbox"/> DOC	<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)	<input type="checkbox"/> Residue Total Fixed Solids	<input type="checkbox"/> Turbidity Jackson Units Supernatant	
<input checked="" type="checkbox"/> SULFATES	<input type="checkbox"/>	<input type="checkbox"/> Residue Volatile	<input type="checkbox"/> Turbidity Jackson Units Total	
SAMPLE TREATMENT <input type="checkbox"/> None	<input type="checkbox"/> Refrigerate	<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2m/l	<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)	

REMARKS
<hr/>

Date

Analyst

Reviewed by

*A. Meierhofer*  
8/19/82

Date reported



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

**Biological, Chemical and Physi  
ANALYSES of WASTEWATER**

DATE RECEIVED

7/29/82

LAB NO. WC 328

USER CODE

Collection date	7-28-82 6:30	City or Location:			
Collected by	SIMPSON	County	SJ	Region	
Owner	OCD	FIELD DETERMINED PARAMETERS			By:
Send Final Report to:	O'L CONSERVATION DIV P.O. BOX 2088 SANTA FE, NM 87501				
	<input type="checkbox"/> pH	<input type="checkbox"/> Water Temperature, °C	<input type="checkbox"/> Settleable Solids, ml/l	<input type="checkbox"/> Dissolved Oxygen mg/l	<input type="checkbox"/> Chlorine Residual, mg/l
	OTHER INFORMATION: SAMPLE JA NF-A-10ML H <sub>2</sub> SO <sub>4</sub>				

STORET NO.:	RIVER BASIN			OWNERSHIP	LOCATION
Source:	<input type="checkbox"/> Wastewater Treatment Plant	<input type="checkbox"/> DRAIN	<input type="checkbox"/> Rio Grande	<input type="checkbox"/> Pecos	<input type="checkbox"/> Influent
	<input type="checkbox"/> LAGOON	<input type="checkbox"/> LAKE	<input type="checkbox"/> Canadian	<input type="checkbox"/> Gila	<input type="checkbox"/> Primary
	<input type="checkbox"/> Other:	<input type="checkbox"/> STREAM	<input type="checkbox"/> Little Colorado	<input type="checkbox"/> San Juan	<input type="checkbox"/> Secondary
	<input type="checkbox"/> Other:		<input type="checkbox"/> Other - specify:		<input type="checkbox"/> Industrial
					<input type="checkbox"/> Commercial
					<input type="checkbox"/> Other:

ORGANIC PARAMETERS	NUTRIENTS	PHYSICAL PARAMETERS	OTHER PARAMETERS	HEAVY METAL and TOXIC CHEMICAL PARAMETERS
mg/l	mg/l	mg/l	mg/l	
<input type="checkbox"/> BOD - 5 DAY 20 °C	<input type="checkbox"/> Phosphate (As P)	<input type="checkbox"/> Residue Total Non-Filterable (Suspended)	<input type="checkbox"/> Surfactants (As LAS), mg/l	<input type="checkbox"/>
<input type="checkbox"/> COD	<input type="checkbox"/> Nitrogen; Nitrate (As N)	<input type="checkbox"/> Residue Total Filterable (Dissolved)	<input type="checkbox"/> Conductance Micromhos 25 °C	<input type="checkbox"/>
<input checked="" type="checkbox"/> TOC 98	<input type="checkbox"/> Nitrogen Ammonia (As N)	<input type="checkbox"/> Residue Total	<input type="checkbox"/> Color Units	<input type="checkbox"/>
<input type="checkbox"/> DOC	<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)	<input type="checkbox"/> Residue Total Fixed Solids	<input type="checkbox"/> Turbidity Jackson Units Supernatant	<input type="checkbox"/>
		<input type="checkbox"/> Residue Volatile	<input type="checkbox"/> Turbidity Jackson Units Total	<input type="checkbox"/>
				<input type="checkbox"/>
SAMPLE TREATMENT <input type="checkbox"/> None	<input type="checkbox"/> Refrigerate	<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2ml/l	<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)	<input type="checkbox"/>
				<input type="checkbox"/>
				<input type="checkbox"/>

REMARKS	

Date	
Analyst	
Reviewed by	All Meibohm
Date reported	8/9/82



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

**Biological, Chemical and Physical  
ANALYSES of WASTEWATER**

DATE RECEIVED

7/29/82

LAB NO. WC 336

USER CODE

Collection date	City or Location		
Collected by	County	Region	
Owner	FIELD DETERMINED PARAMETERS		
Send Final Report to:	By		
<i>DIC CONSERVATION DIV P.O. BOX 2088 SANTA FE NM 87501</i>	pH	Dissolved Oxygen mg/l	
	Water Temperature, °C	Chlorine Residual, mg/l	
	Settleable Solids, ml/l		
OTHER INFORMATION		<i>SAMPLE KA (NF-A) NM 12504</i>	

STORET NO.:	RIVER BASIN	OWNERSHIP	LOCATION
Source	<input type="checkbox"/> Rio Grande <input type="checkbox"/> Pecos <input type="checkbox"/> Canadian <input type="checkbox"/> Gila <input type="checkbox"/> Little Colorado <input type="checkbox"/> San Juan <input type="checkbox"/> Other - specify:	<input type="checkbox"/> Municipal <input type="checkbox"/> MDSWA <input type="checkbox"/> Private <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Other:	<input type="checkbox"/> Influent <input type="checkbox"/> Primary <input type="checkbox"/> Secondary <input type="checkbox"/> Effluent <input type="checkbox"/> Digester <input type="checkbox"/> Trickling Filter
<input type="checkbox"/> Wastewater Treatment Plant <input type="checkbox"/> LAGOON <input type="checkbox"/> Other: <input type="checkbox"/> Other:	<input type="checkbox"/> DRAIN <input type="checkbox"/> LAKE <input type="checkbox"/> STREAM		

ORGANIC PARAMETERS	NUTRIENTS	PHYSICAL PARAMETERS	OTHER PARAMETERS	HEAVY METAL and TOXIC CHEMICAL PARAMETERS
mg/l	mg/l	mg/l	mg/l	
<input type="checkbox"/> BOD - 5 DAY 20 °C	<input type="checkbox"/> Phosphate (As P)	<input type="checkbox"/> Residue Total Non-Filterable (Suspended)	<input type="checkbox"/> Surfactants (As LAS), mg/l	
<input type="checkbox"/> COD	<input type="checkbox"/> Nitrogen, Nitrate (As N)	<input type="checkbox"/> Residue Total Filterable (Dissolved)	<input type="checkbox"/> Conductance Micromhos 25 °C	
<input checked="" type="checkbox"/> TOC <i>9.6</i>	<input type="checkbox"/> Nitrogen Ammonia (As N)	<input type="checkbox"/> Residue Total	<input type="checkbox"/> Color Units	
<input type="checkbox"/> DOC	<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)	<input type="checkbox"/> Residue Total Fixed Solids	<input type="checkbox"/> Turbidity Jackson Units Supernatant	
		<input type="checkbox"/> Residue Volatile	<input type="checkbox"/> Turbidity Jackson Units Total	
SAMPLE TREATMENT <input type="checkbox"/> None	<input type="checkbox"/> Refrigerate	<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2ml/l	<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)	

REMARKS	Date
	Analyst
	Reviewed by
	<i>Al Metzger</i>
	Date reported <i>8/9/82</i>



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

# Biological, Chemical and Physical ANALYSES of WASTEWATER

DATE RECEIVED

7/29/82

LAB NO.

USER CODE

Collection date:	7-28-82 7:00PM	City or Location:			
Collected by:	SIMPSON	County:			Region
Owner:	OCD	FIELD DETERMINED PARAMETERS			By
Send Final Report to:	<input type="checkbox"/> pH <input type="checkbox"/> Dissolved Oxygen mg/l <input type="checkbox"/> Water Temperature, °C <input type="checkbox"/> Chlorine Residual, mg/l <input type="checkbox"/> Settleable Solids, ml/l <input type="checkbox"/>				
<b>OTHER INFORMATION</b> <i>OIL CONSERVATION DIV P.O BOX 2088 SANTA FE N.M. 87501</i> <i>SAMPLE, LA NF-A-10ML 142504</i>					

STORED NO.:	RIVER BASIN:	OWNERSHIP:	LOCATION:
<b>Source</b> <input type="checkbox"/> Wastewater Treatment Plant <input type="checkbox"/> LAGOON <input type="checkbox"/> Other: <input type="checkbox"/> Other:	<input type="checkbox"/> Rio Grande <input type="checkbox"/> Pecos <input type="checkbox"/> Canadian <input type="checkbox"/> Gila <input type="checkbox"/> Little Colorado <input type="checkbox"/> San Juan <input type="checkbox"/> Other - specify:	<input type="checkbox"/> Municipal <input type="checkbox"/> MDSWA <input type="checkbox"/> Private <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Other:	<input type="checkbox"/> Influent <input type="checkbox"/> Primary <input type="checkbox"/> Secondary <input type="checkbox"/> Effluent <input type="checkbox"/> Digester <input type="checkbox"/> Trickling Filter
<b>DRAIN</b> <input type="checkbox"/> LAKE <input type="checkbox"/> STREAM			

ORGANIC PARAMETERS	NUTRIENTS	PHYSICAL PARAMETERS	OTHER PARAMETERS	HEAVY METAL and TOXIC CHEMICAL PARAMETERS
mg/l	mg/l	mg/l	mg/l	
<input type="checkbox"/> BOD - 5 DAY 20 °C	<input type="checkbox"/> Phosphate (As P)	<input type="checkbox"/> Residue Total Non-Filterable (Suspended)	<input type="checkbox"/> Surfactants (As LAS), mg/l	<input type="checkbox"/>
<input type="checkbox"/> COD	<input type="checkbox"/> Nitrogen, Nitrate (As N)	<input type="checkbox"/> Residue Total Filterable (Dissolved)	<input type="checkbox"/> Conductance Micromhos 25 °C	<input type="checkbox"/>
<input checked="" type="checkbox"/> TOC	<input type="checkbox"/> Nitrogen Ammonia (As N)	<input type="checkbox"/> Residue Total	<input type="checkbox"/> Color Units	<input type="checkbox"/>
<input type="checkbox"/> DOC	<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)	<input type="checkbox"/> Residue Total Fixed Solids	<input type="checkbox"/> Turbidity Jackson Units Supernatant	<input type="checkbox"/>
		<input type="checkbox"/> Residue Volatile	<input type="checkbox"/> Turbidity Jackson Units Total	<input type="checkbox"/>
SAMPLE TREATMENT	<input type="checkbox"/> Refrigerate	<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2ml/l	<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)	<input type="checkbox"/>
<input type="checkbox"/> None				

REMARKS	

<input type="checkbox"/>	
Date	
Analyst	
Reviewed by	<i>Albuquerque</i>
Date reported	8/9/82



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

Biological, Chemical and Physical  
ANALYSES of WASTEWATER

DATE RECEIVED

7/29/82

LAB NO. WC-332

USER CODE

Collection date	7-28-82 - 6:00	City or Location			
Collected by	SIMPSON	County			Region
Owner	OCD	FIELD DETERMINED PARAMETERS		By	
Send Final Report to:	<input type="checkbox"/> pH <input type="checkbox"/> Dissolved Oxygen mg/l <input type="checkbox"/> Water Temperature, °C <input type="checkbox"/> Chlorine Residual mg/l <input type="checkbox"/> Settleable Solids, mg/l <input type="checkbox"/>				
<b>OTHER INFORMATION:</b> SAMPLE CANADA - ICED DOWN					

STORE NO.:	RIVER BASIN	OWNERSHIP	LOCATION
Source: <input type="checkbox"/> Wastewater Treatment Plant <input type="checkbox"/> LAGOON <input type="checkbox"/> Other: <input type="checkbox"/> Other:	<input type="checkbox"/> Rio Grande <input type="checkbox"/> Canadian <input type="checkbox"/> Little Colorado <input type="checkbox"/> Other - specify:	<input type="checkbox"/> Pecos <input type="checkbox"/> Gila <input type="checkbox"/> San Juan	<input type="checkbox"/> Municipal <input type="checkbox"/> MDSWA <input type="checkbox"/> Private <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Other:
	<input type="checkbox"/> DRAIN	<input type="checkbox"/> LAKE	<input type="checkbox"/> Influent
	<input type="checkbox"/> STREAM	<input type="checkbox"/> STREAM	<input type="checkbox"/> Primary
			<input type="checkbox"/> Secondary
			<input type="checkbox"/> Effluent

ORGANIC PARAMETERS	NUTRIENTS	PHYSICAL PARAMETERS	OTHER PARAMETERS	HEAVY METAL and TOXIC CHEMICAL PARAMETERS
mg/l	mg/l	mg/l		
<input type="checkbox"/> BOD - 5 DAY 20 °C	<input type="checkbox"/> Phosphate (As P)	<input type="checkbox"/> Residue Total Non-Filterable (Suspended)	<input type="checkbox"/> Surfactants (As LAS), mg/l	<input type="checkbox"/>
<input type="checkbox"/> COD	<input type="checkbox"/> Nitrogen, Nitrate (As N)	<input checked="" type="checkbox"/> Residue Total Filterable (Dissolved) 186	<input type="checkbox"/> Conductance Micromhos 25 °C	<input type="checkbox"/>
<input type="checkbox"/> TOC	<input type="checkbox"/> Nitrogen Ammonia (As N)	<input type="checkbox"/> Residue Total	<input type="checkbox"/> Color Units	<input type="checkbox"/>
<input type="checkbox"/> DOC	<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)	<input type="checkbox"/> Residue Total Fixed Solids	<input type="checkbox"/> Turbidity Jackson Units Supernatant	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Residue Volatile	<input type="checkbox"/> Turbidity Jackson Units Total	<input type="checkbox"/>
<input checked="" type="checkbox"/> SO <sub>4</sub> 56.7	<input checked="" type="checkbox"/> BORON 0.07	<input checked="" type="checkbox"/> CHLORIDES 65	<input type="checkbox"/>	<input type="checkbox"/>
SAMPLE TREATMENT <input type="checkbox"/> None	<input type="checkbox"/> Refrigerate	<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2ml/l	<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)	<input type="checkbox"/>

REMARKS	<input type="checkbox"/>
	Date
	Analyst
	Reviewed by <i>Alvarez</i>
	Date reported <i>8/9/82</i>



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

**Biological, Chemical and Physical  
ANALYSES of WASTEWATER**

DATE RECEIVED

7/29/82

LAB NO. WC 331

USER CODE

Collection date	City or Location		
Collected by	County	SJ	Region
Owner	FIELD DETERMINED PARAMETERS		
Sent Final Report to:	pH	Dissolved Oxygen mg/l	
OIL CONSERVATION D.Y. P.O. BOX 2088 SANTA FE NM 87501	Water Temperature, °C	Chlorine Residual mg/l	
	Settleable Solids, mg/l		
OTHER INFORMATION: SAMPLE DA NF-NA ICED DOWN SINCE COLLECTED			

STORE NO.:	RIVER BASIN:	OWNERSHIP	LOCATION
Source	<input type="checkbox"/> Rio Grande <input type="checkbox"/> Pecos <input type="checkbox"/> Canadian <input type="checkbox"/> Gila <input type="checkbox"/> Little Colorado <input type="checkbox"/> San Juan <input type="checkbox"/> Other - specify: _____	<input type="checkbox"/> Municipal <input type="checkbox"/> MDSWA <input type="checkbox"/> Private <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Other: _____	<input type="checkbox"/> Influent <input type="checkbox"/> Primary <input type="checkbox"/> Secondary <input type="checkbox"/> Effluent <input type="checkbox"/> Digester <input type="checkbox"/> Trickling Filter
<input type="checkbox"/> Wastewater Treatment Plant <input type="checkbox"/> LAGOON <input type="checkbox"/> Other: <input type="checkbox"/> Other:	<input type="checkbox"/> DRAIN <input type="checkbox"/> LAKE <input type="checkbox"/> STREAM		

ORGANIC PARAMETERS	NUTRIENTS	PHYSICAL PARAMETERS	OTHER PARAMETERS	HEAVY METAL and TOXIC CHEMICAL PARAMETERS
mg/l	mg/l	mg/l		
<input type="checkbox"/> BOD <sub>5</sub> - 5 DAY 20 °C	<input type="checkbox"/> Phosphate (As P)	<input type="checkbox"/> Residue Total Non-Filterable (Suspended)	<input type="checkbox"/> Surfactants (As LAS), mg/l	
<input type="checkbox"/> COD	<input type="checkbox"/> Nitrogen, Nitrate (As N)	<input checked="" type="checkbox"/> Residue Total Filterable (Dissolved) 26.76	<input type="checkbox"/> Conductance Micromhos 25 °C	
<input type="checkbox"/> TOC	<input type="checkbox"/> Nitrogen Ammonia (As N)	<input type="checkbox"/> Residue Total	<input type="checkbox"/> Color Units	
<input type="checkbox"/> DOC	<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)	<input type="checkbox"/> Residue Total Fixed Solids	<input type="checkbox"/> Turbidity Jackson Units Supernatant	
		<input type="checkbox"/> Residue Volatile	<input type="checkbox"/> Turbidity Jackson Units Total	
<input checked="" type="checkbox"/> BORON (B) 0.35	<input checked="" type="checkbox"/> CL 1504	<input checked="" type="checkbox"/> SO <sub>4</sub> 454.2		
SAMPLE TREATMENT <input type="checkbox"/> None	<input type="checkbox"/> Refrigerate	<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2m/l	<input type="checkbox"/> HNO <sub>3</sub> , 3-5m/l (for metals)	

REMARKS	

Date	
Analyst	
Reviewed by	<i>Al Maitland</i>
Date reported	8/9/82



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone 843-9240

**Biological, Chemical and Physical  
ANALYSES of WASTEWATER**

DATE RECEIVED

7/29/82

LAB NO.

WC 330

USER CODE

Collection date	City or Location		
7-28-82			
Collected by	County _____ Region _____		
Owner	By _____		
Send Final Report to:			
Oil Conservation Div. P. O BOX 2088 SANTA FE N.M. 87501 PA 8272534			
<b>FIELD DETERMINED PARAMETERS</b> <input type="checkbox"/> pH <input type="checkbox"/> Dissolved Oxygen mg/l <input type="checkbox"/> Water Temperature, °C <input type="checkbox"/> Chlorine Residual, mg/l <input type="checkbox"/> Settleable Solids, mV/l			
<b>OTHER INFORMATION</b> SAMPLE IA NF-NA			

STORET NO.:	RIVER BASIN	OWNERSHIP	LOCATION
Source <input type="checkbox"/> Wastewater Treatment Plant <input type="checkbox"/> LAGOON <input type="checkbox"/> Other: <input type="checkbox"/> Other:	<input type="checkbox"/> Rio Grande <input type="checkbox"/> Canadian <input type="checkbox"/> Little Colorado <input type="checkbox"/> Other - specify:	<input type="checkbox"/> Pecos <input type="checkbox"/> Gila <input type="checkbox"/> San Juan	<input type="checkbox"/> Municipal <input type="checkbox"/> MDSWA <input type="checkbox"/> Private <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Other:
DRAIN			<input type="checkbox"/> Influent <input type="checkbox"/> Primary <input type="checkbox"/> Secondary <input type="checkbox"/> Effluent <input type="checkbox"/> Digester <input type="checkbox"/> Trickling Filter
LAKE			
STREAM			

ORGANIC PARAMETERS	NUTRIENTS	PHYSICAL PARAMETERS	OTHER PARAMETERS	HEAVY METAL and TOXIC CHEMICAL PARAMETERS
mg/l	mg/l	mg/l	mg/l	
<input type="checkbox"/> BOD - 5 DAY 20 °C	<input type="checkbox"/> Phosphate (As P)	<input type="checkbox"/> Residue: Total Non-Filterable (Suspended)	<input type="checkbox"/> Surfactants: (As LAS), mg/l	
<input type="checkbox"/> COD	<input type="checkbox"/> Nitrogen, Nitrate: (As N)	<input checked="" type="checkbox"/> Residue: Total Filterable (Dissolved) 184	<input type="checkbox"/> Conductance: Micromhos 25 °C	
<input type="checkbox"/> TOC	<input type="checkbox"/> Nitrogen Ammonia: (As N)	<input type="checkbox"/> Residue: Total	<input type="checkbox"/> Color Units	
<input type="checkbox"/> DOC	<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)	<input type="checkbox"/> Residue: Total Fixed Solids	<input type="checkbox"/> Turbidity: Jackson Units Supernatant	
	<input type="checkbox"/>	<input type="checkbox"/> Residue: Volatile	<input type="checkbox"/> Turbidity: Jackson Units Total	
<input checked="" type="checkbox"/> SO <sub>4</sub> = 57.3	<input checked="" type="checkbox"/> Brown 0.03	<input checked="" type="checkbox"/> CHLORIDE 3.9		
SAMPLE TREATMENT <input type="checkbox"/> None	<input type="checkbox"/> Refrigerate	<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2mV/l	<input type="checkbox"/> HNO <sub>3</sub> , 3-5mV/l (for metals)	

REMARKS

Date

Analyst

Reviewed by

Date reported

8/9/82



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

# Biological, Chemical and Physical ANALYSES of WASTEWATER

DATE RECEIVED		7/29/82		LAB NO.	WL 333	USER CODE
Collection date		7-28-82 - 5:30PM		City or Location		
Collected by		Simpson		County	SJ	Region
Owner		OCO		FIELD DETERMINED PARAMETERS		
Send Final Report to:				By		
Oil Conservation Div P.O.BOX 2088 SANTA FE NM 87501				<input type="checkbox"/> pH	<input type="checkbox"/> Dissolved Oxygen mg/l	
				<input type="checkbox"/> Water Temperature, °C	<input type="checkbox"/> Chlorine Residual, mg/l	
				<input type="checkbox"/> Settleable Solids, mg/l	<input type="checkbox"/>	
				OTHER INFORMATION		
				SAMPLE OA (NFHA) [REDACTED]		

STORED NO.:	RIVER BASIN:	OWNERSHIP:	LOCATION:
Source			
<input type="checkbox"/> Wastewater Treatment Plant	<input type="checkbox"/> Rio Grande	<input type="checkbox"/> Municipal	<input type="checkbox"/> Influent
<input type="checkbox"/> LAGOON	<input type="checkbox"/> Canadian	<input type="checkbox"/> MDSWA	<input type="checkbox"/> Primary
<input type="checkbox"/> Other:	<input type="checkbox"/> Little Colorado	<input type="checkbox"/> Private	<input type="checkbox"/> Secondary
<input type="checkbox"/> Other:	<input type="checkbox"/> Other - specify: [REDACTED]	<input type="checkbox"/> Industrial	<input type="checkbox"/> Effluent
	<input type="checkbox"/> DRAIN	<input type="checkbox"/> Commercial	<input type="checkbox"/> Digester
	<input type="checkbox"/> LAKE	<input type="checkbox"/> Other	<input type="checkbox"/> Trickling Filter
	<input type="checkbox"/> STREAM		

ORGANIC PARAMETERS	NUTRIENTS	PHYSICAL PARAMETERS	OTHER PARAMETERS	HEAVY METAL and TOXIC CHEMICAL PARAMETERS
mg/l	mg/l	mg/l	mg/l	
<input type="checkbox"/> BOD - 5 DAY 20 °C	<input type="checkbox"/> Phosphate (As P)	<input type="checkbox"/> Residue Total Non-Filterable (Suspended)	<input type="checkbox"/> Surfactants (As LAS), mg/l	
<input type="checkbox"/> COD	<input type="checkbox"/> Nitrogen, Nitrate (As N)	<input checked="" type="checkbox"/> Residue Total Filterable (Dissolved) 1549	<input type="checkbox"/> Conductance Micromhos 25 °C	
<input type="checkbox"/> TOC	<input type="checkbox"/> Nitrogen Ammonia (As N)	<input type="checkbox"/> Residue Total	<input type="checkbox"/> Color Units	
<input type="checkbox"/> DOC	<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)	<input type="checkbox"/> Residue Total Fixed Solids	<input type="checkbox"/> Turbidity Jackson Units Supematant	
		<input type="checkbox"/> Residue Volatile	<input type="checkbox"/> Turbidity Jackson Units Total	
<input checked="" type="checkbox"/> SO <sub>4</sub> 151.8	<input checked="" type="checkbox"/> BORON 0.84	<input checked="" type="checkbox"/> CL 203.5	<input type="checkbox"/>	
SAMPLE TREATMENT	<input type="checkbox"/> Refrigerate	<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2m/l	<input type="checkbox"/> HNO <sub>3</sub> , 3-5m/l (for metals)	
<input type="checkbox"/> None				

REMARKS	Date
	Analyst
	Reviewed by
	Date reported



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

# Biological, Chemical and Physical ANALYSES of WASTEWATER

DATE RECEIVED:

7/29/82

LAB NO. WC 335

USER CODE

Collection date	7-28-82 5:00PM	City or Location			
Collected by	SIMPSON	County	SAN JUAN		Region
Owner	OCD	FIELD DETERMINED PARAMETERS			
Send Final Report to:	D-E CONSERVATION D.V. P.O. BOX 2088 SANTA FE NM 87501	<input type="checkbox"/> pH	<input type="checkbox"/> Dissolved Oxygen mg/l		
		<input type="checkbox"/> Water Temperature, °C	<input type="checkbox"/> Chlorine Residual, mg/l		
		<input type="checkbox"/> Settleable Solids, mg/l	<input type="checkbox"/>		
		OTHER INFORMATION SAMPLE KA NF-NA			

STORE NO.:	RIVER BASIN				OWNERSHIP	LOCATION
Source:	<input type="checkbox"/> Wastewater Treatment Plant	<input type="checkbox"/> DRAIN	<input type="checkbox"/> Rio Grande	<input type="checkbox"/> Pecos	<input type="checkbox"/> Municipal	<input type="checkbox"/> Influent
	<input type="checkbox"/> LAGOON	<input type="checkbox"/> LAKE	<input type="checkbox"/> Canadian	<input type="checkbox"/> Gila	<input type="checkbox"/> MDSWA	<input type="checkbox"/> Primary
Other:	<input type="checkbox"/> Other:	<input type="checkbox"/> STREAM	<input type="checkbox"/> Little Colorado	<input type="checkbox"/> San Juan	<input type="checkbox"/> Private	<input type="checkbox"/> Secondary
			<input type="checkbox"/> Other - specify:		<input type="checkbox"/> Industrial	<input type="checkbox"/> Effluent
					<input type="checkbox"/> Commercial	<input type="checkbox"/> Digester
					<input type="checkbox"/> Other:	<input type="checkbox"/> Trickling Filter

ORGANIC PARAMETERS	NUTRIENTS	PHYSICAL PARAMETERS	OTHER PARAMETERS	HEAVY METAL and TOXIC CHEMICAL PARAMETERS
mg/l	mg/l	mg/l	mg/l	
<input type="checkbox"/> BOD - 5 DAY 20 °C	<input type="checkbox"/> Phosphate (As P)	<input type="checkbox"/> Residue Total Non-Filterable (Suspended)	<input type="checkbox"/> Surfactants (As LAS), mg/l	<input type="checkbox"/>
<input type="checkbox"/> COD	<input type="checkbox"/> Nitrogen, Nitrate (As N)	<input checked="" type="checkbox"/> Residue Total Filterable (Dissolved) 10.48	<input type="checkbox"/> Conductance Micromhos 25 °C	<input type="checkbox"/>
<input type="checkbox"/> TOC	<input type="checkbox"/> Nitrogen Ammonia (As N)	<input type="checkbox"/> Residue Total	<input type="checkbox"/> Color Units	<input type="checkbox"/>
<input type="checkbox"/> DOC	<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)	<input type="checkbox"/> Residue Total Fixed Solids	<input type="checkbox"/> Turbidity Jackson Units Supernatant	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/> Residue Volatile	<input type="checkbox"/> Turbidity Jackson Units Total	<input type="checkbox"/>
<input checked="" type="checkbox"/> SO <sub>4</sub> 6977	<input checked="" type="checkbox"/> CL 18.1	<input checked="" type="checkbox"/> 130704 0.66	<input type="checkbox"/>	<input type="checkbox"/>
SAMPLE TREATMENT <input type="checkbox"/> None	<input type="checkbox"/> Refrigerate	<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2m/l	<input type="checkbox"/> HNO <sub>3</sub> , 3-5m/l (for metals)	<input type="checkbox"/>

REMARKS	<input type="checkbox"/>
	<input type="checkbox"/>

Date	<input type="checkbox"/>
Analyst	<input type="checkbox"/>
Reviewed by	<input type="checkbox"/>
Date reported	8/9/82



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

Biological, Chemical and Physical  
ANALYSES of WASTEWATER

DATE RECEIVED	7/29/82	LAB NO.	NC 334	USER CODE
Collection date	7-28-82 7:00 PM	City or Location		
Collected by	SIMPSON	County	Region	
Owner	OCD	FIELD DETERMINED PARAMETERS		
Send Final Report to:	<input type="checkbox"/> pH <input type="checkbox"/> Dissolved Oxygen mg/l <input type="checkbox"/> Water Temperature, °C <input type="checkbox"/> Chlorine Residual mg/l <input type="checkbox"/> Settleable Solids, mg/l <input type="checkbox"/>			
<i>OIL CONSERVATION D.V. P.O. BOX 2088 SANTA FE NM 87501</i>		OTHER INFORMATION: SAMPLE LA NF-NA		

STORE NO.:	RIVER BASIN:	OWNERSHIP:	LOCATION:	
Source <input type="checkbox"/> Wastewater Treatment Plant <input type="checkbox"/> LAGOON <input type="checkbox"/> Other: <input type="checkbox"/> Other:	<input type="checkbox"/> Rio Grande <input type="checkbox"/> Canadian <input type="checkbox"/> Little Colorado <input type="checkbox"/> Other - specify:	<input type="checkbox"/> Pecos <input type="checkbox"/> Gila <input type="checkbox"/> San Juan	<input type="checkbox"/> Municipal <input type="checkbox"/> MDSWA <input type="checkbox"/> Private <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Other:	<input type="checkbox"/> Influent <input type="checkbox"/> Primary <input type="checkbox"/> Secondary <input type="checkbox"/> Effluent <input type="checkbox"/> Digester <input type="checkbox"/> Trickling Filter

ORGANIC PARAMETERS	NUTRIENTS	PHYSICAL PARAMETERS	OTHER PARAMETERS	HEAVY METAL and TOXIC CHEMICAL PARAMETERS
mg/l	mg/l	mg/l		
<input type="checkbox"/> BOD - 5 DAY 20 °C	<input type="checkbox"/> Phosphate (As P)	<input type="checkbox"/> Residue Total Non-Filterable (Suspended)	<input type="checkbox"/> Surfactants (As LAS), mg/l	
<input type="checkbox"/> COD	<input type="checkbox"/> Nitrogen Nitrate (As N)	<input checked="" type="checkbox"/> Residue Total Filterable (Dissolved) 906	<input type="checkbox"/> Conductance Micromhos 25 °C	
<input type="checkbox"/> TOC	<input type="checkbox"/> Nitrogen Ammonia (As N)	<input type="checkbox"/> Residue Total	<input type="checkbox"/> Color Units	
<input type="checkbox"/> DOC	<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)	<input type="checkbox"/> Residue Total Fixed Solids	<input type="checkbox"/> Turbidity Jackson Units Supernatant	
<input checked="" type="checkbox"/> SO <sub>4</sub> 417.2	<input type="checkbox"/> Residue Volatile		<input type="checkbox"/> Turbidity Jackson Units Total	
<input checked="" type="checkbox"/> CL 38.2	<input checked="" type="checkbox"/> BORON 0.29			
SAMPLE TREATMENT <input type="checkbox"/> None	<input type="checkbox"/> Refrigerate	<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2m/l	<input type="checkbox"/> HNO <sub>3</sub> , 3-5m/l (for metals)	

REMARKS

Date

Analyst

Reviewed by

Date reported

8/9/82

# Hauser Laboratories

August 19, 1982  
Test Report No. 82-1420

CLIENT: Plateau Inc.  
P. O. Box 26251  
Albuquerque, NM 87125  
Attention: Dwight Stockham

AUG 26 1982  
P. O. No. B028899

MATERIAL: Water and soil samples obtained by the Oil and Conservation Division as listed in Table 1.

TESTING: Determination of inorganic and organic content of the water and soil samples following applicable EPA procedures as follows:

Water Testing	Source 1	Source 2
Sulfate	375.4	
Chloride	325.3	
Fluoride	340.1	
Oil and Grease	413.2	
Phenols	420.1	
Total Organic Carbon	415.1	
Total Dissolved Solids	160.1	
Cyanides	335.2	
Benzene		8.24
Toluene		8.24
Xylenes		8.24
Ethyl Benzene		8.24
O, M-cresol		8.25
Phenol		8.25
Aromatics/Aliphatics		8.25

Source 1: METHODS FOR CHEMICAL ANALYSIS OF WATER AND WASTES, EPA publication PB-297686.

Source 2: TEST METHODS FOR EVALUATING SOLID WASTES, EPA publication SW-846.

August 19, 1982

RESULTS: Results for the analyses are listed in Tables 2, 3 and 4.

Tests Conducted By:

Doyce T. Blair

Doyce T. Blair, Analytical Chemist/  
Lab Supervisor

TABLE 1

Plateau no.	Description	date	Hauser no.
1	Hammond ditch water southwest of refinery	7-14	82-1151
2	No soil sample		
2	Water from pit south of refinery across Sullivan Road	7-14	82-1152
3	No soil sample		
3	Water from pit west of refinery across Hammond ditch	7-14	82-1153
4	API separator effluent	7-14	82-1154
5	Seep north of refinery below cliff at river	7-14	82-1155
6	Seep north of refinery below cliff	7-15	82-1156
7	Soil from bank of Hammond ditch below API ponds	7-15	82-1157
7 8	Water from pit in wash <sup>EAST</sup> <del>south</del> of refinery	7-15	82-1158

TABLE 2

Hauser no.	sulfate mg/liter	chloride mg/liter	fluoride mg/liter	oil and grease mg/liter	phenols mg/liter
82-1151	30	40	0.2	0.8	<0.1
82-1152	65	205	0.5	---	---
82-1153	210	370	0.7	---	---
82-1154	230	260	0.9	8.0	1.4
82-1155	175	320	1.1	60	0.2
82-1156	85	215	0.2	---	---
82-1157*	125	109	0.6	---	---
82-1158	4750	1170	8.0	---	---

\* A soil sample of 250grams was extracted with 100mls deionized water and the resultant extract analyzed for the required parameters. Results were reported on a per total weight basis.

TABLE 3

Hauser no.	TOC mg/liter	TDS mg/liter	cyanides mg/liter
82-1151	18	5494	4
82-1152	---	----	---
82-1153	---	----	---
82-1154	149	1710	300
82-1155	90	5376	80
82-1156	---	----	---
82-1157*	---	----	---
82-1158	---	----	---

\* A soil sample of 250grams was extracted with 100mls deionized water and the resultant extract analyzed for the required parameters. Results were reported on a per total weight basis.

TABLE 4

Hauser no.	benzene mg/liter	toluene mg/liter	xylenes mg/liter	ethyl benzene mg/liter
82-1151	0.2	1.3	0.8	0.09
API	82-1154	5.3	3.7	0.3
SEEP	82-1155	70.6	100.0	150.3
SEEP	82-1156	ND	0.2	ND

Hauser no.	<i>o,m-cresol</i> mg/liter	phenol mg/liter	aromatics/aliphatics mg/liter
82-1151	ND	ND	ND
API	82-1154	0.4	0.2
SEEP	82-1155	ND	ND
SEEP	82-1156	ND	ND
H.D.TCM SO:L	82-1157	---	15800

CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES

Date received  
**7/29/82**

Lab No.  
**NM-014**

SLD user code No.

CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen

CHEMICAL ANALYSES: Check individual items for analysis

(Mark appropriate box(es))

1

2

3

Complete Secondary

Organic

Radiological

Water Supply System Name

Collection Date

Collection Time

Collected By

Sample

Type of SYSTEM (Check one)

PRIVATE

PUBLIC:

Community

Non-community

INTERIM PRIMARY PARAMETER GROUP

1

2

3

City or Location

Collector's remarks

County

TREATED WATER

RAW WATER

Check one:

Address

Report to

*PL CONSTRUCTION D*

*P.O. BOX 2088 SANTA FE*

*87501*

LAT.

°

1

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LONG.

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**SJ**

SOURCE:

Spring

Lake

Well Depth.....

Stream

Pool

Other (specify).....

CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES

Date received **7/29/82** Lab No. **HM-0113** SLD user code No.



Water Supply System Name  
**SIMPSON DA**

Collection Date **> 28-82** Collection Time **3:00 PM** Collection Point **SIMPSON DA**  
Collected By **Simpson** Owner **DCD**

INTERIM PRIMARY PARAMETER GROUP  
 1  2  3  
TYPE of CHEMICAL ANALYSIS  
 Organic  Radiological  
 Complete Secondary

Collector's remarks **SKIMPF DA**  
**AKF - A - 10 ml HNO3**  
Report to **Oil Conservation Div.**  
Address **P.O. Box 2088 Santa Fe 87501**

Check one:  
 TREATED WATER  RAW WATER  
Lat. **° 1' 1''** Long. **° 1' 1''**

TYPE of SYSTEM (Check one)  
 PRIVATE  COMMUNITY  NON-COMMUNITY

SOURCE:  Spring  Lake  Well-Depth .....  
 Drain  Stream  Pool  Other (specify) .....  
Lat. **° 1' 1''** Long. **° 1' 1''**

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL	mg/l	HEAVY METALS	mg/l	PARAMETER	ORGANIC	mg/l
00930 Sodium (as Na)		00940 Chloride (as Cl)		70300 Total Filterable Residue	mg/l	01000 Arsenic			39390 Endrin	
00935 Potassium (as K)	•	00950 Fluoride (as F)		38260 Foaming Agents (as Las)		01005 Barium			39732 Lindeane	
00900 Tot-Hardness (as CaCO <sub>3</sub> )		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium			38270	
00915 Calcium (as Ca)	•	00430 Alkalinity (as CaCO <sub>3</sub> )		00400 pH		01030 Chromium		RADIOLOGICAL PCIN 01501 Gross Alpha	39400 Toxaphene	
00925 Magnesium (as Mg)	•	00440 Bicarbonate (as HCO <sub>3</sub> )		01330 Odor		X 01049 Lead	0.20	03501 Gross Beta	39730 2,4-D	
01045 Iron-Total (as Fe)	•	00445 Carbonate (as CO <sub>3</sub> )		00080 Color	mg/l	07180 Mercury		09501 Radium-226		
01056 Manganese (as Mn)	•	00945 Sulfate (as SO <sub>4</sub> )		00070 Turbidity		01145 Selenium		11501 Radium-228		
						X 0.05		01075 Silver	39740 2,4,5-TP (Silvex)	

ABORATORY REMARKS:

Reviewed by **D. J. G.**

Date reported **8/27/82**



CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES

Date received **7/29/82** Lab No. **HY - 015** SED user code No.

CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen

CHEMICAL ANALYSES:  
(Mark appropriate box(es))

1  
 2  
 3

Complete Secondary

Organic  
 Radiological

TREATED WATER  
 RAW WATER

Check one:

**Oil Conservation Div**

Address **PO BOX 2088 SANTA FE NM**

**N. 11 87501**

LAT.  
**°     °     '     '     "**

LONG  
**LONG     °     '     '     "**

Water Supply System Name  
**SIMPSON STA**

Collection Date  
**7-28-82**

Collection Time  
**5:30 PM**

Collection Point  
**SIMPSON STA**

Owner  
**OCB**

Collector's remarks  
**1/5A-10M. Holes**

Report to  
**Oil Conservation Div**

Address  
**PO BOX 2088 SANTA FE NM**

**N. 11 87501**

LAT.  
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LONG  
**LONG     °     '     '     "**

**39390 Endin**

**39732 Lindane**

**38270**

**Methoxychlor**

**39900 Toxaphene**

**39730**

**2,4-D**

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State of New Mexico  
HEALTH and ENVIRONMENT DEPARTMENT

SCIENTIFIC  
LABORATORY DIVISION

# CHEMICAL and PHYSICAL ANALYSES for WATER SAMPLES

Date received  
**7/29/82**

Lab No.  
**HM 0117**

SLD user code No.  
**0117**

CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen

CHEMICAL ANALYSES: *(Mark appropriate box(es))*

1       2       3

TYPE of CHEMICAL ANALYSIS

Organic

Radiological

Water Supply System Name  
**J.P. MURKIN**

Water Supply System Code No.

Collector's Remarks  
**SAMPLE KIT**

Report to  
**DICCONSTRUT. IN D.C.**

Collection Date  
**7-28-82**

Collection Time  
**5:30 P.M.**

Address  
**P. O. BOX 2088  
SANTA FE NM 87501**

Collected By  
**Owner**

Collection Point  
**SAMPLE KIT**

Collector's Remarks  
**N/ - A - 1 P.M. 7/28/82**

TYPE of SYSTEM *(Check one)*

PRIVATE

PUBLIC:  Community

Non-community

SOURCE:  Spring

Drain

Stream

Pool

Well-Depth

LAT.  
LONG.

°      '      "      °      '      "

Other (specify).....

INTERIM PRIMARY PARAMETER GROUP

1

2

3

Complete Secondary

Check one:

TREATED WATER

RAW WATER

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL	mg/l	HEAVY METALS	mg/l	PARAMETER	ORGANIC	mg/l
00930 Sodium (as Na)	•	00940 Chloride (as Cl)	•	70300 Total Filterable Residue	mg/l	01000 Arsenic	•		39390 Endrin	
00935 Potassium (as K)	•	00950 Fluoride (as F)	•	38260 Foaming Agents (as Las)	mg/l	01005 Barium	•		39732 Lindane	
00960 Tot.Hardness (as CaCO <sub>3</sub> )	•	00620 Nitrate (as N)	•	00995 Conductance Micromhos 25°C	mg/l	01025 Cadmium	•		38270 Methoxychlor	
00915 Calcium (as Ca)	•	00430 Alkalinity (as CaCO <sub>3</sub> )	•	00400 pH	mg/l	01030 Chromium	•		39400 Toxaphene	
00925 Magnesium (as Mg)	•	00440 Bicarbonate (as HCO <sub>3</sub> )	•	01330 Odor	-	01049 Lead	0.38	03501 Gross Beta	39730 2,4-D	
01045 Iron-Total (as Fe)	•	00445 Carbonate (as CO <sub>3</sub> )	•	00080 Color	mg/l	07180 Mercury	•	0501 Radium-226	39740 2,4,5-TP (Silvex)	
01056 Manganese (as Mn)	0.13	00945 Sulfate (as SO <sub>4</sub> )	•	60070 Turbidity	mg/l	01145 Selenium	•	11501 Radium-228	0.075 Silver	
<i>Cobalt</i>	<i>0.069</i>									

LABORATORY REMARKS:

Reviewed by *J. M. J.*

Date reported *8/27/82*



State of New Mexico  
HEALTH AND ENVIRONMENT DEPARTMENT

SCIENTIFIC  
LABORATORY DIVISION

CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES

Date received **7/29/82** Lab No. **44-0116**

SLD user code No.

CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen

CHEMICAL ANALYSES: Check individual items for analysis  
(Mark appropriate box(es))

1  2  3

Complete Secondary

TYPE of CHEMICAL ANALYSIS

Organic

Radiological

Water Supply System Name **SIMPSON**  
Collection Date **7-28-82** Collection Time **7:00 P.M.** Collection Point **SIMPSON LAKE**  
Collected By **SIMPSON** Owner

INTERIM PRIMARY PARAMETER GROUP  
 1  2  3

Collector's remarks: **SIMPSON LAKE - 10 MILE NORTH**

Report to **OK CONSOLIDATED**  
Address **P.O. BOX 2088 SANTA FE NM**

SOURCE:  Spring  Lake  Well-Depth  
 Drain  Stream  Pool  Other (specify) **87501**

LAT. **°** **'** **"**  
LONG. **°** **'** **"**

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL	mg/l	HEAVY METALS	mg/l	PARAMETER	mg/l	ORGANIC	mg/l
00930 Sodium (as Na)		00940 Chloride (as Cl)		70300 Total Filterable Residue	mg/l	01000 Arsenic		39390 Endrin			
00935 Potassium (as K)	•	00950 Fluoride (as F)		38260 Foaming Agents (as Las)		01005 Barium		39732 Lindane			
00900 Tot.Hardness (as CaCO <sub>3</sub> )		00620 Nitrate (as N)		00995 Conductance Micromhos 25°C		01025 Cadmium		38270 Methoxychlor			
00915 Calcium (as Ca)	•	00430 Alkalinity (as CaCO <sub>3</sub> )		00400 pH		01030 Chromium		39400 Toxaphene			
00925 Magnesium (as Mg)	•	00440 Bicarbonate (as HCO <sub>3</sub> )		01330 Odor		01049 Lead	0.005	03501 Gross Beta	pc/ln	39730 2,4-D	
01045 Iron-Total (as Fe)	•	00449 Carbonate (as CO <sub>3</sub> )		00080 Color	mg/l	07180 Mercury		09501 Radium-226	pc/ln	39740 2,4,5-TP (Sludge)	
01056 Manganese (as Mn)	•	00945 Sulfate (as SO <sub>4</sub> )		00070 Turbidity		01145 Selenium		11501 Radium-228	pc/ln		
<i>Color</i>						01075 Silver					
<i>L.0.05</i>											

LABORATORY REMARKS:

Reviewed by *M.J.*

Date reported **8/24/82**



State of New Mexico  
HEALTH and ENVIRONMENT DEPARTMENT

SCIENTIFIC  
LABORATORY DIVISION

**CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES**

CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen

Date received **7/29/82** Lab No. **HM 0112** SLD user code No.

**CHEMICAL ANALYSES:** Check individual items for analysis  INTERIM PRIMARY PARAMETER GROUP  1  2  3 **TYPE of CHEMICAL ANALYSIS**  Organic  Radiological

Water Supply System Name **SAMPLE TA** Water Supply System Code No. **5T** City or Location **NF-A - ROMA, NM** County **SAN JUAN N.M. 82501** Collector's remarks **SAMPLE TA** Report to **O.K. CONSERVATION DIV** Address **P.O. BOX 2088**  Complete Secondary

Collected By **D. SIMPSON** Owner SOURCE:  Spring  Lake  Well-Depth  Other (specify)  Drain  Stream  Pool  Non-community LAT. **36° 45' N** LONG. **106° 45' W**

**TYPE of SYSTEM** (Check one)

PRIVATE

PUBLIC:  Community  Non-community





State of New Mexico  
HEALTH and ENVIRON

# CHEMICAL and PHYSICAL ANALYSES for WATER SAMPLES

הַמִּזְבֵּחַ וְהַמִּזְבֵּחַ הַנִּזְבֵּחַ

Date received  
7/28/85  
Lab No.  
44-3114  
SLD user code No.

<b>CHEMICAL ANALYSES:</b> <i>(Mark appropriate box(es))</i>		Check individual items for analysis	
		<input type="checkbox"/> 1	<input type="checkbox"/> 2
		<input type="checkbox"/> 3	<input type="checkbox"/> Complete Secondary
Water Supply System Name		Water Supply System Code No.	City or Location
Collection Date 7-28-48	Collection Time 6:00 PM	Collection Point SAMPLE Point CA	County SJV
Collected By S. M. R. S. A.	Owner OCD	Collector's remarks SAMPLE Cont NE - A - 10 in L. H. N. O. 3	Report to D. C. CONSTRUCTION CO. Address P.O. Box 2088 SAN JUAN RIVER
TYPE of SYSTEM <i>(Check one)</i>		SOURCE: <input type="checkbox"/> Spring <input type="checkbox"/> Lake <input type="checkbox"/> Well-Depth _____ <input type="checkbox"/> Drain <input type="checkbox"/> Stream <input type="checkbox"/> Pool <input type="checkbox"/> Other (specify) _____	LAT. LONG. °     '     "     °     '     "
<input type="checkbox"/> PRIVATE		PUBLIC: <input type="checkbox"/> Community <input type="checkbox"/> Non-community	

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL		HEAVY METALS	mg/l	PARAMETER		ORGANIC	mg/l
00930 Sodium (as Na)		00940 Chloride (as Cl)		70300 Total Filterable Residue	mg/l	01000 Arsenic				39390 Endrin	
00935 Potassium (as K)	•	00950 Fluoride (as F)		38260 Foaming Agents (as Las)	mg/l	01005 Barium				39732 Lindane	
00940 Tot.Hardness (as CaCO <sub>3</sub> )		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C	mg/l	01025 Cadmium				38270	
00915 Calcium (as Ca)	•	00430 Alkalinity (as CaCO <sub>3</sub> )		00400 pH	mg/l	01030 Chromium				Methoxychlor	
00925 Magnesium (as Mg)	•	00440 Bicarbonate (as HCO <sub>3</sub> )		01330 Odor		01049 Lead	0,005	RADIOLOGICAL pCi/l		39400 Toxaphene	
01045 Iron-Total (as Fe)	•	00445 Carbonate (as CO <sub>3</sub> )		00080 Color	mg/l	03501 Gross Alpha		01501 Gross Alpha		39730 2,4-D	
01056 Manganese (as Mn)	•	00945 Sulfate (as SO <sub>4</sub> )		00070 Turbidity	mg/l	07180 Mercury		09501 Radium-226		39740 2,4,5-TP (Silvex)	
COLDT	10.05					01145 Selenium		11501 Radium-228		pCi/l	
						01075 Silver					

**LABORATORY REMARKS**

**SLD 702** Form Revised 4/78



State of New Mexico  
HEALTH and ENVIRONMENT DEPARTMENT

**CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES**

CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen

Date received **7/29/82** Lab No. **HM - 015** SLD user code No.

CHEMICAL ANALYSES: <i>(Mark appropriate box(es))</i>		INTERIM PRIMARY PARAMETER GROUP <input type="checkbox"/> 1	TYPE of CHEMICAL ANALYSIS <input type="checkbox"/> Organic
Water Supply System Name <b>SAMPCTA</b>	Collection Date <b>7-28-82</b>	Collection Time <b>5:30 PM</b>	Collection Point <b>SAMPCTA</b>
Collected By <b>SIMPSON</b>	Water Supply System Code No. <b>0CD</b>	City or Location .....	Collector's remarks <b>SAMPLE TA</b> ..... .....
		Source: <input type="checkbox"/> Drain <input type="checkbox"/> Stream <input type="checkbox"/> Pool <input type="checkbox"/> Other (specify) .....	Report to <b>DISCONSERVATION DIV</b> Address <b>1030 X 2088 SAN JUAN FIE N. NM 87501</b>

TYPE of SYSTEM <input type="checkbox"/> PRIVATE	PUBLIC: <input type="checkbox"/> Community <input type="checkbox"/> Non-community
SOURCE: <input type="checkbox"/> Spring <input type="checkbox"/> Lake <input type="checkbox"/> Well-Depth <input type="checkbox"/> Other (specify) .....	
LAT. °     °     '     "	
LONG. °     '     "	

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL		HEAVY METALS	mg/l	PARAMETER		ORGANIC	mg/l
00930 Sodium (as Na)	.....	00940 Chloride (as Cl)	70300 mg/l Total Filterable Residue	01000 Arsenic	39390 Enarin						
00935 Potassium (as K)	.....	00950 Fluoride (as F)	38260 mg/l Foaming Agents (as Las)	01005 Barium	39732 Lindane						
00900 Tot. Hardness (as CaCO <sub>3</sub> )	.....	00620 Nitrate (as N)	0095 Conductance Micromhos 25°C	01025 Cadmium	38270 Methoxychlor						
00915 Calcium (as Ca)	.....	00430 Alkalinity (as CaCO <sub>3</sub> )	00400 mg/l pH	01030 Chromium	39400 Toxaphene						
00925 Magnesium (as Mg)	.....	00440 Bicarbonate (as HCO <sub>3</sub> )	01330 mg/l Odor	01049 Lead	01501 Gross Alpha						
01045 Iron-Total (as Fe)	.....	00445 Carbonate (as CO <sub>3</sub> )	00080 mg/l Color	0.26	03501 pCi/l	39730 2,4-D					
01056 Manganese (as Mn)	0.92	00945 Sulfate (as SO <sub>4</sub> )	00070 Turbidity	07180 Mercury	09501 pCi/l Radium-226	39740 2,4,5-TP (Silver)					
				01145 Selenium	11501 pCi/l Radium-228						
				01075 Silver							

LABORATORY REMARKS:

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Reviewed **JM** **J**

Date reported **8/27/82**



State of New Mexico  
HEALTH and ENVIRONMENT DEPARTMENT  
SCIENTIFIC  
LABORATORY DIVISION

**CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES**

Date received **7/29/82** Lab No. **444 - 0116** SLD user code No.

CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen

**CHEMICAL  
ANALYSES:**

*[Mark appropriate box(es)]*

Water Supply System Name **SIMPSON**

Water Supply System Code No. **SPARKE L A**

City or Location **...**

Collector's remarks **STAND EKA**

Address **P.O. BOX 2088 SAN JUAN N.M.**

Lat. **37° 50'**

Long. **106° 00'**

County **...**

Treated water

Raw water

Organic

Radiological

Check one:

INTERIM PRIMARY PARAMETER GROUP

1

2

3

Complete Secondary

Type of CHEMICAL ANALYSIS

Organic

Radiological

Collection Date **7-28-82**

Collection Time **7:00 PM**

Collection Point **SPARKE LA**

Owner **...**

Source:  Spring

Lake

Well-Depth

Other (specify) **...**

Drain

Stream

Pool

Other (specify) **...**

Long. **...**

Lat. **...**

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State of New Mexico  
**HEALTH AND ENVIRONMENT DEPARTMENT**

# CHEMICAL and PHYSICAL ANALYSES for WATER SAMPLES

**CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen**

CHEMICAL ANALYSES: <i>[Mark appropriate box(es)]</i>		INTERIM PRIMARY PARAMETER GROUP		TYPE of CHEMICAL ANALYSIS			
		<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> Complete Secondary		
Water Supply System Name <i>SANTA FE RIVER</i>	Collection Date <i>7-28-82</i>	Water Supply System Code No. <i>SANTA FE RIVER</i>	Collection Point <i>SANTA FE RIVER</i>	City or Location <i>M-A - 10 mi N H.A. 3</i>	County <i>SANTA FE NM 87501</i>		
Collected By <i>JFK</i>	Collection Time <i>5:20 PM</i>	Owner <i>SANTA FE RIVER</i>	Collector's remarks <i>SANTA FE RIVER</i>	Report to <i>DICKINS SANITATION D.V.</i>	<input type="checkbox"/> TREATED WATER		
TYPE of SYSTEM (Check one) <input type="checkbox"/> PRIVATE <input type="checkbox"/> PUBLIC: <input type="checkbox"/> Community <input type="checkbox"/> Non-community		SOURCE: <input type="checkbox"/> Drain <input type="checkbox"/> Stream <input checked="" type="checkbox"/> Pool <input type="checkbox"/> Other (specify) _____		Address <i>P BOX 2008</i>	<input type="checkbox"/> RAW WATER		
CATIONS	mg/l	ANIONS	mg/l	PHYSICAL	HEAVY METALS	PARAMETER	ORGANIC
00930 Sodium (as Na)		00940 Chloride (as Cl)		70300 Total Filterable Residue	mg/l	01000 Arsenic	mg/l
00935 Potassium (as K)	•	00950 Fluoride (as F)		38260 Foaming Agents (as Las)		01005 Barium	39390 Endrin
00990 Tot.Hardness (as CaCO <sub>3</sub> )		00620 Nitrate (as N)		00995 Conductance Micromhos/25°C		01025 Cadmium	39732 Lindane
00915 Calcium (as Ca)	•	00430 Alkalinity (as CaCO <sub>3</sub> )		00400 pH		01030 Chromium	38270 Methoxychlor
00925 Magnesium (as Mg)	•	00440 Bicarbonate (as HCO <sub>3</sub> )		01330 Odor		01049 Lead	39400 Toxaphene
01045 Iron-Total (as Fe)		00080 Color	mg/l		03501 Gross Beta	pCi/l	39730 2,4-D
01056 Manganese (as Mn)	0.13	00945 Sulfate (as SO <sub>4</sub> )		00070 Turbidity	07180 Mercury	09501 Radium-226	pCi/l
<i>Cobalt</i>	<i>0.069</i>				01145 Selenium	11501 Radium-228	39740 2, 4, 5-TP (Silvex)
					01075 Silver		
LABORATORY REMARKS:							
Reviewed by <i>JFK</i>		Date reported <i>8/27/82</i>					

REPORT TO:

P.O. BOX 2088  
SANTA FE NM 87501

LABORATORY

LAB NUMBER

82-0166-6

ATTENTION: Sensision 8272574  
BUREAU:

SLD Users Code No.

ALL CONTAINERS WHICH THIS FORM ACCOMPANIES ARE COLLECTIVELY REFERRED TO AS "SAMPLE".

## CERTIFICATE OF FIELD PERSONNEL

Sample Type: Water  Soil  OtherWater Supply and/or Code No. Sample KACity & County SonoranCollected (date & time) 7-28-82 5:00PM By (name) Sensision

pH= \_\_\_\_\_; Conductivity= \_\_\_\_\_ umho/cm at \_\_\_\_\_ °C; Chlorine Residual= \_\_\_\_\_

Dissolved Oxygen= \_\_\_\_\_ mg/l; Alkalinity= \_\_\_\_\_ ; Flow Rate= \_\_\_\_\_

Sampling Location, Methods &amp; Remarks (i.e. odors etc.)

Sample KA - 2-40 ml vials with teflon seals of some sample  
of Ground water set down since collection

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Signed \_\_\_\_\_

I certify that I witnessed these field analyses, observations and activities and concur with the statements in this block. Signed \_\_\_\_\_

Method of Shipment to Laboratory \_\_\_\_\_

THIS FORM ACCOMPANIES \_\_\_\_\_ septum vials with teflon-lined discs identified as: specimen \_\_\_\_\_; duplicate \_\_\_\_\_; triplicate \_\_\_\_\_; blank(s) \_\_\_\_\_, and \_\_\_\_\_ amber glass jug(s) with teflon-lined cap(s) identified as \_\_\_\_\_, and \_\_\_\_\_ other container(s) (describe) \_\_\_\_\_ identified as \_\_\_\_\_.

Containers are marked as follows to indicate preservation (circle):

NP: No preservation; sample stored at room temperature (~20°C).

P-ICE: Sample stored in an ice bath.

P-Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>: Sample preserved with 3 mg Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>/40 ml and stored at room temperature.

## CERTIFICATE(S) OF SAMPLE RECEIPT

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date &amp; time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ Seal(s) Intact: Yes  No 

Signature(s) \_\_\_\_\_

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date &amp; time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ Seal(s) Intact: Yes  No 

Signature(s) \_\_\_\_\_

## CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes  No  . Seal(s) broken by \_\_\_\_\_ date \_\_\_\_\_

I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements in this block and the data on page two of this form accurately reflect the analytical results for this sample.

Date(s) of Analysis 8-27-82. Analyst's Signature Ja Lee YooI certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewer's Signature R Meyerlein

REMARKS \_\_\_\_\_

Sample KA 7-28-82

STORED CODE	CONTAMINANT	AL CONTAINERS WHICH THIS FORM ACCOMPLISHES
34235	<input type="checkbox"/> Benzene	ug/l
34481	<input type="checkbox"/> Toluene	ug/l
34372	<input type="checkbox"/> Ethylbenzene	ug/l
34302	<input type="checkbox"/> Chlorobenzene	ug/l
	METHANE	
34414	<input type="checkbox"/> Bromo-	ug/l
34419	<input type="checkbox"/> Chloro-	ug/l
34424	<input type="checkbox"/> Dichloro-	ug/l
34307	<input type="checkbox"/> Chlorodibromo-	ug/l
34328	<input type="checkbox"/> Dichlorobromo-	ug/l
34288	<input type="checkbox"/> Tribromo-	ug/l
34316	<input type="checkbox"/> Trichloro-	ug/l
82080	<input type="checkbox"/> Total THM	ug/l
34489	<input type="checkbox"/> Trichlorofluoro-	ug/l
34332	<input type="checkbox"/> Dichlorodifluoro-	ug/l
34297	<input type="checkbox"/> Tetrachloro-	ug/l
	ETHANE	
34312	<input type="checkbox"/> Chloro- isopropyl or ethyl	ug/l
34497	<input type="checkbox"/> 1,1-Dichloro-	ug/l
34532	<input type="checkbox"/> 1,1,2-Dichloro-	ug/l
34507	<input type="checkbox"/> 1,1,1-Trichloro-	ug/l
34512	<input type="checkbox"/> 1,1,2-Trichloro-	ug/l
34517	<input type="checkbox"/> 1,1,2,2-Tetrachloro-	ug/l
	ETHENE	
34493	<input type="checkbox"/> Chloro-	ug/l
34502	<input type="checkbox"/> 1,1-Dichloro-	ug/l
34547	<input type="checkbox"/> 1,2-trans-Dichloro-	ug/l
34485	<input type="checkbox"/> Trichloro-	ug/l
34476	<input type="checkbox"/> Tetrachloro-	ug/l
34542	<input type="checkbox"/> 1,2-Dichloropropane	ug/l
34562	<input type="checkbox"/> 1,3-Dichloropropene	ug/l
<input checked="" type="checkbox"/> ND	OTHERS	Aliphatic Hydrocarbons Aromatic Hydrocarbons
		m-Xylene
		1 ng/l

Aliphatic hydrocarbon Screen

Negative

Ga Lee Yoo 8-26-82

Detection limit: 1 ug/ml

OIL CONSERVATION DIVISION  
REPORT TO: P.O. BOX 2088  
SANTA FE NM 87501

LABORATORY \_\_\_\_\_  
LAB NUMBER \_\_\_\_\_

82-0165-D

ATTENTION: \_\_\_\_\_  
BUREAU: \_\_\_\_\_  
ALL CONTAINERS WHICH THIS FORM ACCOMPANIES ARE COLLECTIVELY REFERRED TO AS "SAMPLE".

CERTIFICATE OF FIELD PERSONNEL

Sample Type: Water  Soil  Other \_\_\_\_\_

Water Supply and/or Code No. SAMPLE LA

City & County SJ

Collected (date & time) 7-28-82 7:00PM By (name) SIMPSON

pH= \_\_\_\_\_; Conductivity= \_\_\_\_\_ umho/cm at \_\_\_\_\_ °C; Chlorine Residual= \_\_\_\_\_

Dissolved Oxygen= \_\_\_\_\_ mg/l; Alkalinity= \_\_\_\_\_ ; Flow Rate= \_\_\_\_\_

Sampling Location, Methods & Remarks (i.e. odors etc.)

SAMPLE LA = 3-40 mL VIALS with teflon seals - NT-NA  
need ground surface collection  
from water well

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Signed \_\_\_\_\_

I certify that I witnessed these field analyses, observations and activities and concur with the statements in this block. Signed \_\_\_\_\_

Method of Shipment to Laboratory \_\_\_\_\_

THIS FORM ACCOMPANIES \_\_\_\_\_ septum vials with teflon-lined discs identified as: specimen \_\_\_\_\_; duplicate \_\_\_\_\_; triplicate \_\_\_\_\_; blank(s) \_\_\_\_\_, and \_\_\_\_\_ amber glass jug(s) with teflon-lined cap(s) identified as \_\_\_\_\_, and \_\_\_\_\_ other container(s) (describe) \_\_\_\_\_ identified as \_\_\_\_\_.

Containers are marked as follows to indicate preservation (circle):

NP: No preservation; sample stored at room temperature (~20 °C).

P-ICE: Sample stored in an ice bath.

P-Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>: Sample preserved with 3 mg Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>/40 mL and stored at room temperature.

CERTIFICATE(S) OF SAMPLE RECEIPT

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date & time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ Seal(s) Intact: Yes  No

Signature(s) \_\_\_\_\_

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date & time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ Seal(s) Intact: Yes  No

Signature(s) \_\_\_\_\_

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes  No  . Seal(s) broken by \_\_\_\_\_ date \_\_\_\_\_.

I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements in this block and the data on page two of this form accurately reflect the analytical results for this sample.

Date(s) of Analysis 8-27-82 Analyst's Signature J. Lee Yip

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewer's Signature K. Meyerhen

REMARKS \_\_\_\_\_

SAMPLE La 7-28-82

STORED CODE	CONTAMINANT	
34235	<input type="checkbox"/> Benzene	< 1 ug/l
34481	<input type="checkbox"/> Toluene	< 1 ug/l
34372	<input type="checkbox"/> Ethylbenzene	< 1 ug/l
34302	<input type="checkbox"/> Chlorobenzene	< 1 ug/l
	METHANE	
34414	<input type="checkbox"/> Bromo-	< 1 ug/l
34419	<input type="checkbox"/> Chlоро-	< 1 ug/l
34424	<input type="checkbox"/> Dichloro-	< 1 ug/l
34307	<input type="checkbox"/> Chlorodibromo-	< 1 ug/l
34328	<input type="checkbox"/> Dichlorobromo-	< 1 ug/l
34288	<input type="checkbox"/> Tribromo-	< 1 ug/l
34316	<input type="checkbox"/> Trichloro-	< 1 ug/l
82080	<input type="checkbox"/> Total THM	< 1 ug/l
34489	<input type="checkbox"/> Trichlorofluoro-	< 1 ug/l
34332	<input type="checkbox"/> Dichlorodifluoro-	< 1 ug/l
34297	<input type="checkbox"/> Tetrachloro-	< 1 ug/l
	ETHANE	
34312	<input type="checkbox"/> Chlоро-	< 1 ug/l
34497	<input type="checkbox"/> 1,1-Dichloro-	< 1 ug/l
34532	<input type="checkbox"/> 1,2-Dichloro-	< 1 ug/l
34507	<input type="checkbox"/> 1,1,1-Trichloro-	< 1 ug/l
34512	<input type="checkbox"/> 1,1,2-Trichloro-	< 1 ug/l
34517	<input type="checkbox"/> 1,1,2,2-Tetrachloro-	< 1 ug/l
	ETHENE	
34493	<input type="checkbox"/> Chlоро-	< 1 ug/l
34502	<input type="checkbox"/> 1,1-Dichloro-	< 1 ug/l
34547	<input type="checkbox"/> 1,2-trans-Dichloro-	< 1 ug/l
34485	<input type="checkbox"/> Trichloro-	< 1 ug/l
34476	<input type="checkbox"/> Tetrachloro-	< 1 ug/l
34542	<input type="checkbox"/> 1,2-Dichloropropane	< 1 ug/l
34562	<input type="checkbox"/> 1,3-Dichloropropene	< 1 ug/l
<input checked="" type="checkbox"/> OTHERS	Aliphatic hydrocarbons Aromatic hydrocarbons m-xylene	< 1 ug/l

NT - NOT TESTED FOR

P - PRESENT ( NO QUANTITATION)

ND - NONE DETECTED

Aliphatic hydrocarbon Screen: Negative

By 8-26-82

Detection limit = 1 ug/ml

REPORT TO: P.O. BOX 2088  
SANTA FE NM 87501

LABORATORY

LAB NUMBER

82-0164-0

ATTENTION: OSCAR SIMPSON T-827-2534  
BUREAU: OCD IN SANTA FE

SLD Users Code No.

ALL CONTAINERS WHICH THIS FORM ACCOMPANIES ARE COLLECTIVELY REFERRED TO AS "SAMPLE".

CERTIFICATE OF FIELD PERSONNEL

Sample Type: Water  Soil  Other

Water Supply and/or Code No. SAMPLE IA

City & County SAN JUAN

Collected (date & time) 7-28-82 4:00PM By (name) Oscar Simpson

pH= ; Conductivity= umho/cm at °C; Chlorine Residual=

Dissolved Oxygen= mg/l; Alkalinity= ; Flow Rate=

Sampling Location, Methods & Remarks (i.e. odors etc.)

SAMPLE IA = 3-40mL GLASS VIALS WITH TEFLON SEALS  
Irrigation ditch NO PRESENT ICE FROZEN DOWN SINCE COLLECTION

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Signed

I certify that I witnessed these field analyses, observations and activities and concur with the statements in this block. Signed

Method of Shipment to Laboratory

THIS FORM ACCOMPANIES septum vials with teflon-lined discs identified as:

specimen ; duplicate ; triplicate ; blank(s) ,  
and amber glass jug(s) with teflon-lined cap(s) identified as ,  
and other container(s) (describe) identified as .

Containers are marked as follows to indicate preservation (circle):

NP: No preservation; sample stored at room temperature (~20°C).

P-ICE: Sample stored in an ice bath.

P-Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>: Sample preserved with 3 mg Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>/40 mL and stored at room temperature.

CERTIFICATE(S) OF SAMPLE RECEIPT

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date & time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ Seal(s) Intact: Yes  No

Signature(s) \_\_\_\_\_

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date & time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ Seal(s) Intact: Yes  No

Signature(s) \_\_\_\_\_

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes  No  . Seal(s) broken by \_\_\_\_\_ date \_\_\_\_\_

I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements in this block and the data on page two of this form accurately reflect the analytical results for this sample.

Date(s) of Analysis 8-27-82 Analyst's Signature *J. Lee Yd*

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewer's Signature *L. Mayerhen*

REMARKS \_\_\_\_\_

## SAMPLE IA 7-28-82

STORE CODE	CONTAMINANT	
34235	<input checked="" type="checkbox"/> Benzene	< 1 ug/l
34481	<input checked="" type="checkbox"/> Toluene	< 1 ug/l
34372	<input checked="" type="checkbox"/> Ethylbenzene	< 1 ug/l
34302	<input type="checkbox"/> Chlorobenzene	ug/l
	METHANE	
34414	<input type="checkbox"/> Bromo-	ug/l
34419	<input type="checkbox"/> Chlоро-	ug/l
34424	<input type="checkbox"/> Dichloro-	ug/l
34307	<input type="checkbox"/> Chlorodibromo-	ug/l
34328	<input type="checkbox"/> Dichlorobromo-	ug/l
34288	<input type="checkbox"/> Tribromo-	ug/l
34316	<input type="checkbox"/> Trichloro-	ug/l
82080	<input type="checkbox"/> Total THM	ug/l
34489	<input type="checkbox"/> Trichlorofluoro-	ug/l
34332	<input type="checkbox"/> Dichlorodifluoro-	ug/l
34297	<input type="checkbox"/> Tetrachloro-	ug/l
	ETHANE	
34312	<input type="checkbox"/> Chlоро-	ug/l
34497	<input type="checkbox"/> 1,1-Dichloro-	ug/l
34532	<input type="checkbox"/> 1,1,2-Dichloro-	ug/l
34507	<input type="checkbox"/> 1,1,1-Trichloro-	ug/l
34512	<input type="checkbox"/> 1,1,2-Trichloro-	ug/l
34517	<input type="checkbox"/> 1,1,2,2-Tetrachloro-	ug/l
	ETHENE	
34493	<input type="checkbox"/> Chlоро-	ug/l
34502	<input type="checkbox"/> 1,1-Dichloro-	ug/l
34547	<input type="checkbox"/> 1,2-trans-Dichloro-	ug/l
34485	<input type="checkbox"/> Trichloro-	ug/l
34476	<input type="checkbox"/> Tetrachloro-	ug/l
34542	<input type="checkbox"/> 1,2-Dichloropropane	ug/l
34562	<input type="checkbox"/> 1,3-Dichloropropene	ug/l
	<input type="checkbox"/> OTHERS M=XYLENE	< 1 ug/l

ALL ALIPHATIC HYDROCARBONSNOTE: Call Oscar Simpson for results+ if further identification is needed1-8272534 Santa FeAliphatic hydrocarbon Screen - NegativeJay 8-26-82Detection limit : 1 ug/ml

REPORT TO:

P.O. BOX 2088  
SANTA FE NM 87501

LABORATORY

LAB NUMBER

82-0167-D

ATTENTION: Oscar Simpson Jr.  
BUREAU: OCO

CALL 8272534

SLD Users Code No.

ALL CONTAINERS WHICH THIS FORM ACCOMPANIES ARE COLLECTIVELY REFERRED TO AS "SAMPLE".

## CERTIFICATE OF FIELD PERSONNEL

Sample Type: Water  Soil  OtherWater Supply and/or Code No. SAMPLE DACity & County STCollected (date & time) 7-28-82 3:00PM By (name) Simpson

pH= \_\_\_\_\_; Conductivity= \_\_\_\_\_ umho/cm at \_\_\_\_\_ °C; Chlorine Residual= \_\_\_\_\_

Dissolved Oxygen= \_\_\_\_\_ mg/l; Alkalinity= \_\_\_\_\_ ; Flow Rate= \_\_\_\_\_

Sampling Location, Methods & Remarks (i.e. odors etc.)  
SAMPLE DA = 3-40 ml viles with teflon seals. NOT NF-NA-AP. refine sep. ICED DOWN SINCE COLLECTION.

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Signed \_\_\_\_\_

I certify that I witnessed these field analyses, observations and activities and concur with the statements in this block. Signed \_\_\_\_\_

## Method of Shipment to Laboratory

THIS FORM ACCOMPANIES \_\_\_\_\_ septum vials with teflon-lined discs identified as:

specimen \_\_\_\_\_; duplicate \_\_\_\_\_; triplicate \_\_\_\_\_; blank(s) \_\_\_\_\_,  
and \_\_\_\_\_ amber glass jug(s) with teflon-lined cap(s) identified as \_\_\_\_\_,  
and \_\_\_\_\_ other container(s) (describe) \_\_\_\_\_ identified as \_\_\_\_\_.

Containers are marked as follows to indicate preservation (circle):

NP: No preservation; sample stored at room temperature (~20 °C).

P-ICE: Sample stored in an ice bath.

P-Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>: Sample preserved with 3 mg Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>/40 ml and stored at room temperature.

## CERTIFICATE(S) OF SAMPLE RECEIPT

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date &amp; time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ Seal(s) Intact: Yes  No 

Signature(s) \_\_\_\_\_

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date &amp; time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ Seal(s) Intact: Yes  No 

Signature(s) \_\_\_\_\_

## CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes  No  . Seal(s) broken by \_\_\_\_\_ date \_\_\_\_\_.

I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements in this block and the data on page two of this form accurately reflect the analytical results for this sample.

Date(s) of Analysis 8-27-82. Analyst's Signature G. Lee Jr.I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewer's Signature L. Meyerhen

REMARKS \_\_\_\_\_

SAMPLE DA 7-28-82

STORET CODE	CONTAMINANT	ug/l
34235 <input checked="" type="checkbox"/>	Benzene	17100 ug/l
34481 <input checked="" type="checkbox"/>	Toluene	16500 ug/l
34372 <input checked="" type="checkbox"/>	Ethylbenzene	3600 ug/l
34302 <input type="checkbox"/>	Chlorobenzene	ug/l
	METHANE	
34414 <input type="checkbox"/>	Bromo-	ug/l
34419 <input type="checkbox"/>	Chloro-	ug/l
34424 <input type="checkbox"/>	Dichloro-	ug/l
34307 <input type="checkbox"/>	Chlorodibromo-	ug/l
34328 <input type="checkbox"/>	Dichlorobromo-	ug/l
34288 <input type="checkbox"/>	Tribromo-	ug/l
34316 <input type="checkbox"/>	Trichloro-	ug/l
82080 <input type="checkbox"/>	Total THM	ug/l
34489 <input type="checkbox"/>	Trichlorofluoro-	ug/l
34332 <input type="checkbox"/>	Dichlorodifluoro-	ug/l
34297 <input type="checkbox"/>	Tetrachloro-	ug/l
	ETHANE	
34312 <input type="checkbox"/>	Chloro-	ug/l
34497 <input type="checkbox"/>	1,1-Dichloro-	ug/l
34532 <input type="checkbox"/>	1,2-Dichloro-	ug/l
34507 <input type="checkbox"/>	1,1,1-Trichloro-	ug/l
34512 <input type="checkbox"/>	1,1,2-Trichloro-	ug/l
34517 <input type="checkbox"/>	1,1,2,2-Tetrachloro-	ug/l
	ETHENE	
34493 <input type="checkbox"/>	Chloro-	ug/l
34502 <input type="checkbox"/>	1,1-Dichloro-	ug/l
34547 <input type="checkbox"/>	1,2-trans-Dichloro-	ug/l
34485 <input type="checkbox"/>	Trichloro-	ug/l
34476 <input type="checkbox"/>	Tetrachloro-	ug/l
34542 <input type="checkbox"/>	1,2-Dichloropropane	ug/l
34562 <input type="checkbox"/>	1,3-Dichloropropene	ug/l
<input type="checkbox"/>	OTHERS <u>m-EXYENIE</u>	3000 ug/l

ALIPHATIC HYDROCARBONS

NOTE CALL OR RESULTS MAY NEED  
FURTHER ANALYSIS 1-827 2534

Aliphatic hydrocarbon Screen

Has hydrocarbon peaks evenly distributed in the C<sub>8</sub>-C<sub>12</sub> region

Detection limit : 1 ug/ml

Jug 8-26-82

NT - NOT TESTED FOR

P - PRESENT ( NO QUANTITATION )

ND - NONE DETECTED

82-0162-D

ATTENTION: SIMPSON 8272574  
BUREAU: CAC

SLD Users Code No.

ALL CONTAINERS WHICH THIS FORM ACCOMPANIES ARE COLLECTIVELY REFERRED TO AS "SAMPLE".

CERTIFICATE OF FIELD PERSONNEL

Sample Type: Water  Soil  Other

Water Supply and/or Code No. SAMPLE CA

City & County ST

Collected (date & time) 7-28-82 6:00 pm By (name) SIMPSON

pH= \_\_\_\_\_; Conductivity= \_\_\_\_\_ umho/cm at \_\_\_\_\_ °C; Chlorine Residual= \_\_\_\_\_

Dissolved Oxygen= \_\_\_\_\_ mg/l; Alkalinity= \_\_\_\_\_ ; Flow Rate= \_\_\_\_\_

Sampling Location, Methods & Remarks (i.e. odors etc.)

3-40 ml glass vials with teflon seals of some sample  
Irrigation ditch

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Signed \_\_\_\_\_

I certify that I witnessed these field analyses, observations and activities and concur with the statements in this block. Signed \_\_\_\_\_

Method of Shipment to Laboratory

THIS FORM ACCOMPANIES \_\_\_\_\_ septum vials with teflon-lined discs identified as:

specimen \_\_\_\_\_; duplicate \_\_\_\_\_; triplicate \_\_\_\_\_; blank(s) \_\_\_\_\_,  
and \_\_\_\_\_ amber glass jug(s) with teflon-lined cap(s) identified as \_\_\_\_\_,  
and \_\_\_\_\_ other container(s) (describe) \_\_\_\_\_ identified as \_\_\_\_\_.

Containers are marked as follows to indicate preservation (circle):

NP: No preservation; sample stored at room temperature (~20 °C).

P-ICE: Sample stored in an ice bath.

P-Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>: Sample preserved with 3 mg Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>/40 ml and stored at room temperature.

CERTIFICATE(S) OF SAMPLE RECEIPT

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date & time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ Seal(s) Intact: Yes  No

Signature(s) \_\_\_\_\_

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date & time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ Seal(s) Intact: Yes  No

Signature(s) \_\_\_\_\_

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes  No  Seal(s) broken by \_\_\_\_\_ date \_\_\_\_\_

I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements in this block and the data on page two of this form accurately reflect the analytical results for this sample.

Date(s) of Analysis 8-27-82. Analyst's Signature Ga Lee Yis

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewer's Signature J. M. Meyer

REMARKS \_\_\_\_\_

Sample Ca 7-28-82

STORED CODE	CONTAMINANT	ALL CONTAMINANTS WHICH THIS FORM ACCOMPLISHES ARE LISTED IN THE STORED CODES AS FOLLOWS:
34235 <input checked="" type="checkbox"/> Benzene	< 1 ug/l	
34481 <input checked="" type="checkbox"/> Toluene	< 1 ug/l	
34372 <input checked="" type="checkbox"/> Ethylbenzene	< 1 ug/l	
34302 <input type="checkbox"/> Chlorobenzene	< 1 ug/l	
	METHANE	
34414 <input type="checkbox"/> Bromo-	< 1 ug/l	
34419 <input type="checkbox"/> Chloro-	< 1 ug/l	
34424 <input type="checkbox"/> Dichloro-	< 1 ug/l	
34307 { <input type="checkbox"/> Chlorodibromo-	< 1 ug/l	
34328 { <input type="checkbox"/> Dichlorobromo-	< 1 ug/l	
34288 { <input type="checkbox"/> Tribromo-	< 1 ug/l	
34316 { <input type="checkbox"/> Trichloro-	< 1 ug/l	
82080 <input type="checkbox"/> Total THM	< 1 ug/l	
34489 <input type="checkbox"/> Trichlorofluoro-	< 1 ug/l	
34332 <input type="checkbox"/> Dichlorodifluoro-	< 1 ug/l	
34297 <input type="checkbox"/> Tetrachloro-	< 1 ug/l	
	ETHANE	
34312 <input type="checkbox"/> Chloro-	< 1 ug/l	
34497 <input type="checkbox"/> 1,1-Dichloro-	< 1 ug/l	
34532 <input type="checkbox"/> 1,2-Dichloro-	< 1 ug/l	
34507 <input type="checkbox"/> 1,1,1-Trichloro-	< 1 ug/l	
34512 <input type="checkbox"/> 1,1,2-Trichloro-	< 1 ug/l	
34517 <input type="checkbox"/> 1,1,2,2-Tetrachloro-	< 1 ug/l	
	ETHENE	
34493 <input type="checkbox"/> Chloro-	< 1 ug/l	
34502 <input type="checkbox"/> 1,1-Dichloro-	< 1 ug/l	
34547 <input type="checkbox"/> 1,2-trans-Dichloro-	< 1 ug/l	
34485 <input type="checkbox"/> Trichloro-	< 1 ug/l	
34476 <input type="checkbox"/> Tetrachloro-	< 1 ug/l	
34542 <input type="checkbox"/> 1,2-Dichloropropane	< 1 ug/l	
34562 <input type="checkbox"/> 1,3-Dichloropropene	< 1 ug/l	
<input type="checkbox"/> OTHERS m-xylene < 1 ug/l		

Aliphatic hydrocarbons

all in results of determinations

if further tests are needed 1-807-2534

Aliphatic hydrocarbon Screen: Negative

Detection limit = 1 ug/ml

8-26-82

REPORT TO:

P.O. BOX 2088  
SANTA FE NM 87501

LABORATORY

LAB NUMBER

82-0161-D

ATTENTION:

BUREAU:

SLD Users Code No.

ALL CONTAINERS WHICH THIS FORM ACCOMPANIES ARE COLLECTIVELY REFERRED TO AS "SAMPLE".

## CERTIFICATE OF FIELD PERSONNEL

Sample Type: Water  Soil  Other

Water Supply and/or Code No. Sample JA

City &amp; County SJ

Collected (date &amp; time) 7-28-82 5:30pm By (name)

pH= ; Conductivity= umho/cm at °C; Chlorine Residual=

Dissolved Oxygen= mg/l; Alkalinity= ; Flow Rate=

Sampling Location, Methods &amp; Remarks (i.e. odors etc.)

Sample JA = 340 mL glass vials with teflon seals NF-NR  
(Spring). Cried down since collection

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Signed

I certify that I witnessed these field analyses, observations and activities and concur with the statements in this block. Signed

Method of Shipment to Laboratory

THIS FORM ACCOMPANIES septum vials with teflon-lined discs identified as:

specimen ; duplicate ; triplicate ; blank(s) ,  
and amber glass jug(s) with teflon-lined cap(s) identified as ,  
and other container(s) (describe) identified as .

Containers are marked as follows to indicate preservation (circle):

NP: No preservation; sample stored at room temperature (~20°C).

P-ICE: Sample stored in an ice bath.

P-Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>: Sample preserved with 3 mg Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>/40 ml and stored at room temperature.

## CERTIFICATE(S) OF SAMPLE RECEIPT

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date &amp; time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ Seal(s) Intact: Yes  No 

Signature(s) \_\_\_\_\_

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date &amp; time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ Seal(s) Intact: Yes  No 

Signature(s) \_\_\_\_\_

## CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes  No  Seal(s) broken by \_\_\_\_\_ date \_\_\_\_\_

I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements in this block and the data on page two of this form accurately reflect the analytical results for this sample.

Date(s) of Analysis 8-27-82 Analyst's Signature Ja Lee Ynd

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewer's Signature K. Meyer

REMARKS

SAMPLE TA 7-28-82

STORET  
CODE      CONTAMINANT34235  Benzene      < 1 ug/l34481  Toluene      < 1 ug/l34372  Ethylbenzene      < 1 ug/l34302  Chlorobenzene      ug/l

## METHANE

34414  Bromo-      ug/l34419  Chlоро-      ug/l34424  Dichloro-      ug/l34307 {  Chlorodibromo-      ug/l34328 {  Dichlorobromo-      ug/l34288 {  Tribromo-      ug/l34316 {  Trichloro-      ug/l82080  Total THM      ug/l34489  Trichlorofluoro-      ug/l34332  Dichlorodifluoro-      ug/l34297  Tetrachloro-      ug/l

## ETHANE

34312  Chlоро-      ug/l34497  1,1-Dichloro-      ug/l34532  1,2-Dichloro-      ug/l34507  1,1,1-Trichloro-      ug/l34512  1,1,2-Trichloro-      ug/l34517  1,1,2,2-Tetrachloro-      ug/l

## ETHENE

34493  Chlоро-      ug/l34502  1,1-Dichloro-      ug/l34547  1,2-trans-Dichloro-      ug/l34485  Trichloro-      ug/l34476  Tetrachloro-      ug/l34542  1,2-Dichloropropane      ug/l34562  1,3-Dichloropropene      ug/l OTHERS methylene < 1 ug/lAliphatic HydrocarbonsNote: call results inTo see if further tests are needed

827 2534

NT - NOT TESTED FOR

P - PRESENT ( NO QUANTITATION)

ND - NONE DETECTED

Aliphatic hydrocarbon screen: Negative

Jy 8-26-82

Detection limit: 1 ug/ml

**CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES**

Date received  
**7-16-82** Lab No.  
**H11-78** SLD user code No.

CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen

CHEMICAL ANALYSES: *Check individual items for analysis  
(Mark appropriate box(es))*

1

2

3

Complete Secondary

Organic

Radiological

Water Supply System Name  
**PLATEAU REFINERY**

Collection Date  
**7-12-82**

Collection Time  
**6:45 PM**

Collection Point  
**LOCATION A**

Owner  
**SIMPSON**

Water Supply System Code No.

CITY or Location  
**NEAR BLOOMFIELD**

Collector's remarks  
**SAMPLE A5**

1-LITER CONTAINER

NE-A-2MS Holes

SANTA FE MOUNTAINS

SOURCE:  Spring

Lake

Well-Depth

Other (specify) **TEST HOLE**

LAT.  
°  
0

LONG.  
°  
0

TREATED WATER

RAW WATER

Report to  
**DIL CONSENTRIES DIV.**

Address  
**P.O. BOX 2088**

**SANTA FE NM 87501**

TYPE of SYSTEM (Check one)  
 PRIVATE

PUBLIC:

Community

Non-community

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL	mg/l	HEAVY METALS	mg/l	PARAMETER	ORGANIC	mg/l
00930 Sodium (as Na)		00940 Chloride (as Cl)		70300 Total Filterable Residue	mg/l	01000 Arsenic		<del>Boron</del>		39390 Endrin
00935 Potassium (as K)		00950 Fluoride (as F)		38260 Foaming Agents (as Las)		01005 Barium		<del>COBALT</del>	0.05	39732 Lindane
00900 Tot. Hardness (as CaCO <sub>3</sub> )		00620 Nitrate (as N)		00955 Conductance Microhos 25°C		01025 Cadmium		<del>NICKEL</del>	0.13	38270 Methoxychlor
00915 Calcium (as Ca)		00430 Alkalinity (as CaCO <sub>3</sub> )		00400 pH		01030 Chromium		<del>RADIOLOGICAL</del>	0.013	39400 Toxaphene
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO <sub>3</sub> )		01330 Odor		01049 Lead		01501 Gross Alpha		39730 2,4-D
01045 Iron-Total (as Fe)		00445 Carbonate (as CO <sub>3</sub> )		00080 Color	mg/l	01130 Mercury	0	03501 Gross Beta		
01056 Manganese (as Mn)		00945 Sulfate (as SO <sub>4</sub> )		00070 Turbidity		01145 Selenium		09501 Radium-226		39740 2,4,5-TP (Silver)
						011501 Radium-228				
						01175 Silver				

LABORATORY REMARKS:

.....

.....

Reviewed by **M. J.**

Date reported **8/24/82**

CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES

Date received 7-16-82 Lab No. 1111-777 SLD user code No.

CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen

CHEMICAL ANALYSES: Check individual items for analysis /Mark appropriate box(es) INTERIM PRIMARY PARAMETER GROUP TYPE of CHEMICAL ANALYSIS

1  2  3  Complete Secondary  Organic  Radiological

Water Supply System Name PEAK RECOVERY Collection Date 7-12-82 Collection Time 8:10pm Water Supply System Code No. SINTERED TEST HELE Collected By Owner ECD - PRACTICAL

SOURCE:  Spring  Lake  Well-Depth  Other (specify) ...  Drain  Stream  Pool

TYPE of SYSTEM (Check one) PRIVATE  Community  Non-community

Report to LICENSEE/CONTRACTOR Address P.O.BOX 2088 ALBUQUERQUE NM 87501

Collector's Remarks SA MRK BS /INTERCESSION CONTRACTOR /K-TERCESSION CONTRACTOR SOURCE:  Spring  Lake  Well-Depth  Other (specify) ...  Drain  Stream  Pool

Check one:  TREATED WATER  RAW WATER LAT. ° 1' 1" LONG. ° 1' 1"

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL		HEAVY METALS	mg/l	PARAMETER		ORGANIC	mg/l
00930 Sodium (as Na)		00940 Chloride (as Cl)		70300 Total Filterable Residue	mg/l	01000 Arsenic		X Boron		39390 Endrin	
00935 Potassium (as K)		00950 Fluoride (as F)		38260 Foaming Agents (as Las)		01005 Barium		X color T	0.05	39732 Lindane	
00900 Tot-Hardness (as CaCO <sub>3</sub> )		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium		X Nickel	<0.05	38270	
00915 Calcium (as Ca)		00430 Alkalinity (as CaCO <sub>3</sub> )		00400 pH		01030 Chromium		X RADIOLOGICAL pcI/l	0.008	39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO <sub>3</sub> )		01330 Odor		01049 Lead		01501 Gross Alpha		39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO <sub>3</sub> )		00080 Color	mg/l	07180 Mercury		03501 Gross Beta		39740 2, 4, 5-TIP (Silvex)	
01056 Manganese (as Mn)		00945 Sulfate (as SO <sub>4</sub> )		00070 Turbidity		01145 Selenium		09501 Radium-226		11501 Radium-228	pcI/l
						01075 Silver					

LABORATORY REMARKS:

Reviewed by J.M.J. Date reported 8/27/82



State of New Mexico  
HEALTH and ENVIRONMENT DEPARTMENT  
SCIENTIFIC  
LABORATORY DIVISION

**CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES**

Date received **7-16-82** Lab No. **74** SLD user code No **74**

CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen

**CHEMICAL  
ANALYSES:**

Check individual items for analysis

1

2

3

Water Supply System Name

**JULIA RIVER**

Collection Date

**7-14-82**

Collection Time

**1:45 PM**

Water Supply System Code No.

**OC D - RIVER**

Collection Point Location

**C**

Collector's Remarks

**SAMPLE SITE  
1-1/2 MILE PLASTIC PIPE**

Owner

**A - RIVER INC.**

City or Location

**MOUNTAIN FIELD SPRINGS**

County

**BLAINE**

Report to

**P.O. BOX 2088**

Address

**SANTA FE N.M. 87501**

TYPE of SYSTEM (Check one)

PRIVATE

PUBLIC:

Community

Non-community

Source

Spring

Lake

Well-Depth

Stream

Pool

Other (specify)

LAT.

°

'

LONG.

°

'

ORGANIC

mg/l

Heavy Metals

mg/l

Parameter

mg/l

CATIONS

mg/l

Anions

mg/l

Physical

mg/l

00930 Sodium (as Na)		00940 Chloride (as Cl)		70300 Total Filterable Residue		01000 Arsenic		X 0.0357 < 0.05		39390 Endrin	
00935 Potassium (as K)		00950 Fluoride (as F)		38260 Foaming Agents (as Las)		01005 Barium		X 0.0520 < 0.05		39732 Lindane	
00900 Tot. Hardness (as CaCO <sub>3</sub> )		00620 Nitrate (as N)		00995 Conductance Micromhos 25°C		01025 Cadmium		0.001		38270	
00915 Calcium (as Ca)		00430 Alkalinity (as CaCO <sub>3</sub> )		00400 pH		X 01030 < 0.005		0.005		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO <sub>3</sub> )		01330 Odor		X 01049 < 0.005		0.005		39730 2,4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO <sub>3</sub> )		00080 Color		07180 Mercury		10.0005		03501 Gross Beta	
01056 Manganese (as Mn)		00945 Sulfate (as SO <sub>4</sub> )		00070 Turbidity		01145 Selenium		0.0051		39740 2,4,5-TP (Silvex)	
						11501 Radium-226		0.0051		0.0051	
						0.0075 Silver		0.0075		0.0075	

**LABORATORY REMARKS:**

Reviewed by **M.J.P.**  
Date reported **8/27/82**



CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES

Date received 7-16-82 Lab No. HJM-81 SLD user code No.

CONSULT SLD Lab Annex L for proper presentation of sample(s) TYPE or PRINT with Ball Point Pen

CHEMICAL ANALYSES:		<input type="checkbox"/> Check individual items for analysis <input checked="" type="checkbox"/> [Mark appropriate box(es)]	INTERIM PRIMARY PARAMETER GROUP <input type="checkbox"/> 1	TYPE of CHEMICAL ANALYSIS <input type="checkbox"/> 2 <input type="checkbox"/> Complete Secondary	<input type="checkbox"/> Organic <input type="checkbox"/> Radiological
Water Supply System Name <i>PLATEAU TEE FINGER</i>	Water Supply System Code No. <i>S-1</i>	City or Location <i>BLOOMFIELD</i>	County <i>SJ</i>	Report to <input type="checkbox"/> TREATED WATER <input type="checkbox"/> RAW WATER	
Collection Date <i>7-16-82</i>	Collection Time <i>4:15 PM</i>	Collection Point Location <i>Sierra County</i>	Collector's Remarks <i>E-1</i>	Address <i>P.O. BOX 20554 N.M.</i>	
Collected By <i>R. M. SCOTT</i>	Owner <i>CDP PLATEAU</i>	SOURCE: <input type="checkbox"/> Spring <input type="checkbox"/> Lake <input type="checkbox"/> Well-Depth <input type="checkbox"/> Drain <input type="checkbox"/> Stream <input type="checkbox"/> Pool <input type="checkbox"/> Other (specify) <i>✓ 1/17 87501</i>	LAT. <i>39° 39' 00"</i>	LONG. <i>107° 00' 00"</i>	
TYPE of SYSTEM (Check one) <input type="checkbox"/> PRIVATE <input type="checkbox"/> PUBLIC: <input type="checkbox"/> Community <input type="checkbox"/> Non-community					

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL	HEAVY METALS	mg/l	PARAMETER	ORGANIC	mg/l
00930 Sodium (as Na)		00940 Chloride (as Cl)		70300 Total Filterable Residue	01000 Arsenic	0.57	39390 Endrin		
00935 Potassium (as K)		00950 Fluoride (as F)		38260 Foaming Agents (as Las)	01005 Barium	0.80	39732 Lindane		
00900 Tot. Hardness (as CaCO <sub>3</sub> )		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C	01025 Cadmium	0.04	38270 Methoxychlor		
00915 Calcium (as Ca)		00430 Alkalinity (as CaCO <sub>3</sub> )		00400 pH	01030 Chromium	0.62	39400 Toxaphene		
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO <sub>3</sub> )		01330 Odor	01049 Lead	18.17	01501 Gross Alpha		
01045 Iron-Total (as Fe)		00445 Carbonate (as CO <sub>3</sub> )		00080 Color	07180 Mercury	0.0005	03501 Gross Beta	39730 2,4-D	
01056 Manganese (as Mn)		00945 Sulfate (as SO <sub>4</sub> )		00070 Turbidity	01145 Selenium	09501 Radium-226	01501 Radium-228	39740 2,4,5-TP (Silvex)	
					01075 Silver				

LABORATORY REMARKS:

Reviewed by *M.J.*  
Date reported *8/27/82*



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

# Biological, Chemical and Physical ANALYSES of WASTEWATER

DATE RECEIVED	7/16/82	LAB NO. NC 113	USER CODE
Collection date	City or Location <i>NEAR BLOOMFIELD</i>		
Collected by	County <i>SAN JUAN</i> Region		
Owner	FIELD DETERMINED PARAMETERS By		
Send Final Report to: <i>OIL CONSERVATION DIV. P.O. BOX SANTA FE NM 87501</i>	<input type="checkbox"/> pH	<input type="checkbox"/> Dissolved Oxygen mg/l	
	<input type="checkbox"/> Water Temperature, °C	<input type="checkbox"/> Chlorine Residual, mg/l	
	<input type="checkbox"/> Settleable Solids, ml/l	<input type="checkbox"/>	
	OTHER INFORMATION <i>C-6</i>		

STORED NO.:	RIVER BASIN	OWNERSHIP	LOCATION
<b>Source</b> <input type="checkbox"/> Wastewater Treatment Plant <input type="checkbox"/> LAGOON <input type="checkbox"/> Other: <input type="checkbox"/> Other:	<input type="checkbox"/> Rio Grande <input type="checkbox"/> Pecos <input type="checkbox"/> Canadian <input type="checkbox"/> Gila <input type="checkbox"/> Little Colorado <input type="checkbox"/> San Juan <input type="checkbox"/> Other - specify:	<input type="checkbox"/> Municipal <input type="checkbox"/> MDSWA <input type="checkbox"/> Private <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Other:	<input type="checkbox"/> Influent <input type="checkbox"/> Primary <input type="checkbox"/> Secondary <input type="checkbox"/> Effluent <input type="checkbox"/> Digester <input type="checkbox"/> Trickling Filter
<input type="checkbox"/> DRAIN <input type="checkbox"/> LAKE <input type="checkbox"/> STREAM			

ORGANIC PARAMETERS	NUTRIENTS		PHYSICAL PARAMETERS	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS
	mg/l	mg/l		mg/l	mg/l	
<input type="checkbox"/> BOD - 5 DAY 20 °C	<input type="checkbox"/> Phosphate (As P)		<input type="checkbox"/> Residue Total Non-Filter- able (Suspended)	<input type="checkbox"/> Surfactants (As LAS), mg/l		<input type="checkbox"/>
<input type="checkbox"/> COD	<input type="checkbox"/> Nitrogen, Nitrate (As N)		<input type="checkbox"/> Residue Total Filterable (Dissolved)	<input type="checkbox"/> Conductance Micromhos 25 °C		<input type="checkbox"/>
<input checked="" type="checkbox"/> TOC	<input type="checkbox"/> Nitrogen Ammonia (As N)		<input type="checkbox"/> Residue Total	<input type="checkbox"/> Color Units		<input type="checkbox"/>
<input type="checkbox"/> DOC	<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)		<input type="checkbox"/> Residue Total Fixed Solids	<input type="checkbox"/> Turbidity Jackson Units Supernatant		<input type="checkbox"/>
<input checked="" type="checkbox"/> Phenol <i>29.5 ug/l</i>			<input type="checkbox"/> Residue Volatile	<input type="checkbox"/> Turbidity Jackson Units Total		<input type="checkbox"/>
<input checked="" type="checkbox"/> Oil & Grease	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
SAMPLE TREATMENT <input type="checkbox"/> None	<input type="checkbox"/> Refrigerate		<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2ml/l	<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)		<input type="checkbox"/>

<b>REMARKS</b> <hr/> <hr/> <hr/> <hr/>	<input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>
Date <i>7/19/82</i> Analyst <i>LL</i> Reviewed by <i>LL</i> Date Reported <i>7/19/82</i>	



STATE OF NEW MEXICO

**SCIENTIFIC LABORATORY DIVISION (HEP)**

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

## **Biological, Chemical and Physical ANALYSES of WASTEWATER**

DATE RECEIVED	7/16/82	LAB NO. WC 114	USER CODE			
Collection date	7-14-82 1:45PM	City or Location				
Collected by	SIMPSON	County	Region			
Owner	OCD - PLATEAU	FIELD DETERMINED PARAMETERS				
Send Final Report to:	OIL CONSERVATION DIV. P.O. BOX 2088 SANTA FE N.M. 87501	<input type="checkbox"/> pH	<input type="checkbox"/> Dissolved Oxygen mg/l			
		<input type="checkbox"/> Water Temperature, °C	<input type="checkbox"/> Chlorine Residual, mg/l			
		<input type="checkbox"/> Settleable Solids, ml/l	<input type="checkbox"/>			
		OTHER INFORMATION				
		D-6				
STORET NO.:		RIVER BASIN	OWNERSHIP	LOCATION		
<b>Source</b> <input type="checkbox"/> Wastewater Treatment Plant <input type="checkbox"/> LAGOON <input type="checkbox"/> Other: <input type="checkbox"/> Other		<input type="checkbox"/> Rio Grande <input type="checkbox"/> Canadian <input type="checkbox"/> Little Colorado <input type="checkbox"/> Other - specify:	<input type="checkbox"/> Pecos <input type="checkbox"/> Gila <input type="checkbox"/> San Juan	<input type="checkbox"/> Municipal <input type="checkbox"/> MDSWA <input type="checkbox"/> Private <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Other:		
		<input type="checkbox"/> DRAIN <input type="checkbox"/> LAKE <input type="checkbox"/> STREAM		<input type="checkbox"/> Influent <input type="checkbox"/> Primary <input type="checkbox"/> Secondary <input type="checkbox"/> Effluent <input type="checkbox"/> Digester <input type="checkbox"/> Trickling Filter		
ORGANIC PARAMETERS	NUTRIENTS		PHYSICAL PARAMETERS	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS
	mg/l	mg/l		mg/l	mg/l	
<input type="checkbox"/> BOD - 5 DAY 20 °C	<input type="checkbox"/> Phosphate (As P)		<input type="checkbox"/> Residue Total Non-Filterable (Suspended)	<input type="checkbox"/> Surfactants (As LAS), mg/l	<input type="checkbox"/>	
<input type="checkbox"/> COD	<input type="checkbox"/> Nitrogen, Nitrate (As N)		<input type="checkbox"/> Residue Total Filterable (Dissolved)	<input type="checkbox"/> Conductance Micromhos 25 °C	<input type="checkbox"/>	
<input checked="" type="checkbox"/> TOC	<input type="checkbox"/> Nitrogen Ammonia (As N)		<input type="checkbox"/> Residue Total	<input type="checkbox"/> Color Units	<input type="checkbox"/>	
<input type="checkbox"/> DOC	<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)		<input type="checkbox"/> Residue Total Fixed Solids	<input type="checkbox"/> Turbidity Jackson Units Supernatant	<input type="checkbox"/>	
<input checked="" type="checkbox"/> Phenol (21338 ug/l)			<input type="checkbox"/> Residue Volatile	<input type="checkbox"/> Turbidity Jackson Units Total	<input type="checkbox"/>	
<input checked="" type="checkbox"/> Oil/Grease	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
SAMPLE TREATMENT <input type="checkbox"/> None	<input type="checkbox"/> Refrigerate		<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2ml/l	<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)	<input type="checkbox"/>	
REMARKS						
Date						
Analyst						
Reviewed by						



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

# Biological, Chemical and Physical ANALYSES of WASTEWATER

DATE RECEIVED	7/16/82	LAB NO.	Wc 115
Collection date	City or Location		
Collected by	County		
Owner	Region		
Send Final Report to:	By		
<p><i>OIL CONSERVATION DIV. P.O BOX 2088 SANTA FE NM 87501</i></p>			
FIELD DETERMINED PARAMETERS			
<input type="checkbox"/> pH <input type="checkbox"/> Dissolved Oxygen mg/l <input type="checkbox"/> Water <input type="checkbox"/> Chlorine Residual mg/l <input type="checkbox"/> Temperature, °C <input type="checkbox"/> Settleable Solids, ml/l			
OTHER INFORMATION			
<i>E - 6</i>			

STORET NO.:	RIVER BASIN				OWNERSHIP	LOCATION
	<input type="checkbox"/> Rio Grande	<input type="checkbox"/> Pecos	<input type="checkbox"/> Municipal	<input type="checkbox"/> Influent		
Source	<input type="checkbox"/> Canadian	<input type="checkbox"/> Gila	<input type="checkbox"/> MDSWA	<input type="checkbox"/> Primary		
<input type="checkbox"/> Wastewater Treatment Plant	<input type="checkbox"/> Little Colorado	<input type="checkbox"/> San Juan	<input type="checkbox"/> Private	<input type="checkbox"/> Secondary		
<input type="checkbox"/> LAGOON	<input type="checkbox"/> Other - specify:		<input type="checkbox"/> Industrial	<input type="checkbox"/> Effluent		
<input type="checkbox"/> Other:			<input type="checkbox"/> Commercial	<input type="checkbox"/> Digester		
<input type="checkbox"/> Other:			<input type="checkbox"/> Other:	<input type="checkbox"/> Trickling Filter		
	<input type="checkbox"/> DRAIN					
	<input type="checkbox"/> LAKE					
	<input type="checkbox"/> STREAM					

ORGANIC PARAMETERS	NUTRIENTS		PHYSICAL PARAMETERS	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS
	mg/l	mg/l		mg/l		
<input type="checkbox"/> BOD - 5 DAY 20 °C	<input type="checkbox"/> Phosphate (As P)		<input type="checkbox"/> Residue Total Non-Filterable (Suspended)	<input type="checkbox"/> Surfactants (As LAS), mg/l	<input type="checkbox"/>	
<input type="checkbox"/> COD	<input type="checkbox"/> Nitrogen, Nitrate (As N)		<input type="checkbox"/> Residue Total Filterable (Dissolved)	<input type="checkbox"/> Conductance Micromhos 25 °C	<input type="checkbox"/>	
<input checked="" type="checkbox"/> TOC	<input type="checkbox"/> Nitrogen Ammonia (As N)		<input type="checkbox"/> Residue Total	<input type="checkbox"/> Color Units	<input type="checkbox"/>	
<input type="checkbox"/> DOC	<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)		<input type="checkbox"/> Residue Total Fixed Solids	<input type="checkbox"/> Turbidity Jackson Units Supernatant	<input type="checkbox"/>	
<input checked="" type="checkbox"/> Phenol 1012ug/l	<input type="checkbox"/>		<input type="checkbox"/> Residue Volatile	<input type="checkbox"/> Turbidity Jackson Units Total	<input type="checkbox"/>	
<input checked="" type="checkbox"/> filter break	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
SAMPLE TREATMENT <input type="checkbox"/> None	<input type="checkbox"/> Refrigerate		<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2ml/l	<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)		<input type="checkbox"/>

REMARKS		<input type="checkbox"/>
		Date
		Analyst
		Reviewed by <i>A. Meibohm</i>
		Date reported <i>7/19/82</i>



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

# Biological, Chemical and Physical ANALYSES of WASTEWATER

DATE RECEIVED	7/16/82	LAB NO. WC 116	USER CODE
Collection date	City or Location <i>NEAR BLOOMFIELD</i>		
Collected by	County <i>SAN JUAN</i>		
Owner	Region		
Send Final Report to: <i>OIL CONSERVATION DIV P.O. BOX SAN TA FE NM 87501</i>	FIELD DETERMINED PARAMETERS		
	<input type="checkbox"/> pH	<input type="checkbox"/> Dissolved Oxygen mg/l	
	<input type="checkbox"/> Water Temperature, °C	<input type="checkbox"/> Chlorine Residual, mg/l	
	<input type="checkbox"/> Settleable Solids, ml/l	<input type="checkbox"/>	
	OTHER INFORMATION <i>C-5</i>		

STORET NO.:	RIVER BASIN				OWNERSHIP	LOCATION
	<input type="checkbox"/> Rio Grande	<input type="checkbox"/> Pecos	<input type="checkbox"/> Municipal	<input type="checkbox"/> Influent		
Source	<input type="checkbox"/> Canadian	<input type="checkbox"/> Gila	<input type="checkbox"/> MDSWA	<input type="checkbox"/> Primary		
<input type="checkbox"/> Wastewater Treatment Plant	<input type="checkbox"/> Little Colorado	<input type="checkbox"/> San Juan	<input type="checkbox"/> Private	<input type="checkbox"/> Secondary		
<input type="checkbox"/> LAGOON	<input type="checkbox"/> Other - specify:		<input type="checkbox"/> Industrial	<input type="checkbox"/> Effluent		
<input type="checkbox"/> Other:			<input type="checkbox"/> Commercial	<input type="checkbox"/> Digester		
<input type="checkbox"/> Other:			<input type="checkbox"/> Other:	<input type="checkbox"/> Trickling Filter		
	<input type="checkbox"/> DRAIN					
	<input type="checkbox"/> LAKE					
	<input type="checkbox"/> STREAM					

ORGANIC PARAMETERS	NUTRIENTS		PHYSICAL PARAMETERS	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS
	mg/l	mg/l		mg/l	mg/l	
<input type="checkbox"/> BOD - 5 DAY 20 °C	<input type="checkbox"/> Phosphate (As P)		<input type="checkbox"/> Residue Total Non-Filterable (Suspended)	<input type="checkbox"/> Surfactants (As LAS), mg/l	<input type="checkbox"/>	
<input type="checkbox"/> COD	<input type="checkbox"/> Nitrogen, Nitrate (As N)		<input type="checkbox"/> Residue Total Filterable (Dissolved)	<input type="checkbox"/> Conductance Micromhos 25 °C	<input type="checkbox"/>	
<input checked="" type="checkbox"/> TOC	<input type="checkbox"/> Nitrogen Ammonia (As N)		<input type="checkbox"/> Residue Total	<input type="checkbox"/> Color Units	<input type="checkbox"/>	
<input type="checkbox"/> DOC	<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)		<input type="checkbox"/> Residue Total Fixed Solids	<input type="checkbox"/> Turbidity Jackson Units Supernatant	<input type="checkbox"/>	
<input checked="" type="checkbox"/> Phenol <i>15%</i>	<input type="checkbox"/>		<input type="checkbox"/> Residue Volatile	<input type="checkbox"/> Turbidity Jackson Units Total	<input type="checkbox"/>	
<input checked="" type="checkbox"/> Oil & Grease <i>15% 2 AW</i>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
SAMPLE TREATMENT <input type="checkbox"/> None	<input type="checkbox"/> Refrigerate		<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2ml/l	<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)		<input type="checkbox"/>

REMARKS	<input type="checkbox"/>
	<input type="checkbox"/>

Date	<i>7/16/82</i>
Analyst	<i>Alvarez</i>
Reviewed by	<i>Alvarez</i>
Date reported	<i>7/16/82</i>



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

Biological, Chemical and Physical  
ANALYSES of WASTEWATER

DATE RECEIVED	7/16/82	LAB NO.	WC 117	USER CODE
Collection date	7-14-82 1:45PM	City or Location		
Collected by	SIMPSON	County		Region
Owner	OCD - PLATEAU	FIELD DETERMINED PARAMETERS		
Send Final Report to:	OIL CONSERVATION DIV. P.O. BOX 2088 SANTA FE NM 87501	pH	Dissolved Oxygen mg/l	
	Water Temperature, °C		Chlorine Residual, mg/l	
	Settleable Solids, ml/l			
	OTHER INFORMATION			D-5

STORET NO.:	RIVER BASIN			OWNERSHIP	LOCATION
Source	<input type="checkbox"/> Rio Grande	<input type="checkbox"/> Pecos	<input type="checkbox"/> Municipal	<input type="checkbox"/> Influent	
<input type="checkbox"/> Wastewater Treatment Plant	<input type="checkbox"/> Canadian	<input type="checkbox"/> Gila	<input type="checkbox"/> MDSWA	<input type="checkbox"/> Primary	
<input type="checkbox"/> LAGOON	<input type="checkbox"/> Little Colorado	<input type="checkbox"/> San Juan	<input type="checkbox"/> Private	<input type="checkbox"/> Secondary	
<input type="checkbox"/> Other:	<input type="checkbox"/> Other - specify:		<input type="checkbox"/> Industrial	<input type="checkbox"/> Effluent	
<input type="checkbox"/> Other:			<input type="checkbox"/> Commercial	<input type="checkbox"/> Digester	
			<input type="checkbox"/> Other:	<input type="checkbox"/> Trickling Filter	

ORGANIC PARAMETERS	NUTRIENTS		PHYSICAL PARAMETERS	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS
	mg/l	mg/l		mg/l		
<input type="checkbox"/> BOD - 5 DAY 20 °C	<input type="checkbox"/> Phosphate (As P)		<input type="checkbox"/> Residue Total Non-Filterable (Suspended)	<input type="checkbox"/> Surfactants (As LAS), mg/l	<input type="checkbox"/>	
<input type="checkbox"/> COD	<input type="checkbox"/> Nitrogen, Nitrate (As N)		<input type="checkbox"/> Residue Total Filterable (Dissolved)	<input type="checkbox"/> Conductance Micromhos 25 °C	<input type="checkbox"/>	
<input checked="" type="checkbox"/> TOC	<input type="checkbox"/> Nitrogen Ammonia (As N)		<input type="checkbox"/> Residue Total	<input type="checkbox"/> Color Units	<input type="checkbox"/>	
<input type="checkbox"/> DOC	<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)		<input type="checkbox"/> Residue Total Fixed Solids	<input type="checkbox"/> Turbidity Jackson Units Supernatant	<input type="checkbox"/>	
<input checked="" type="checkbox"/> Phenol	<input type="checkbox"/>		<input type="checkbox"/> Residue Volatile	<input type="checkbox"/> Turbidity Jackson Units Total	<input type="checkbox"/>	
<input checked="" type="checkbox"/> Oil & Grease	<input type="checkbox"/> 15.7 g/l		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
SAMPLE TREATMENT <input type="checkbox"/> None	<input type="checkbox"/> Refrigerate		<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2ml/l	<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)		<input type="checkbox"/>

REMARKS	<input type="checkbox"/>
	Date
	Analyst
	Reviewed by
	<i>John McIntosh</i>
	Date reported
	<i>7/16/82</i>



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

**Biological, Chemical and Physical  
ANALYSES of WASTEWATER**

DATE RECEIVED	7/16/82	LAB NO.	WC 118	USER CODE
Collection date	7-14-82 4:45PM	City or Location		
Collected by	SIMPSON	County		Region
Owner	OCD - PLATEAU	FIELD DETERMINED PARAMETERS		
Send Final Report to:	OIL CONSERVATION DIV P.O. BOX 2088 SANTA FE NM 87501	By		
	<input type="checkbox"/> pH		<input type="checkbox"/> Dissolved Oxygen mg/l	
	<input type="checkbox"/> Water Temperature, °C		<input type="checkbox"/> Chlorine Residual, mg/l	
	<input type="checkbox"/> Settleable Solids, ml/l		<input type="checkbox"/>	
	OTHER INFORMATION			E-5

STORE NO.:	RIVER BASIN	OWNERSHIP	LOCATION
<b>Source</b> <input type="checkbox"/> Wastewater Treatment Plant <input type="checkbox"/> LAGOON <input type="checkbox"/> Other: <input type="checkbox"/> Other:	<input type="checkbox"/> Rio Grande <input type="checkbox"/> Canadian <input type="checkbox"/> Little Colorado <input type="checkbox"/> Other - specify:	<input type="checkbox"/> Pecos <input type="checkbox"/> Gila <input type="checkbox"/> San Juan	<input type="checkbox"/> Municipal <input type="checkbox"/> MDSWA <input type="checkbox"/> Private <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Other:
	<input type="checkbox"/> DRAIN <input type="checkbox"/> LAKE <input type="checkbox"/> STREAM		

ORGANIC PARAMETERS		NUTRIENTS		PHYSICAL PARAMETERS		OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
	mg/l		mg/l		mg/l		mg/l		
<input type="checkbox"/> BOD - 5 DAY 20 °C		<input type="checkbox"/> Phosphate (As P)		<input type="checkbox"/> Residue Total Non-Filterable (Suspended)		<input type="checkbox"/> Surfactants (As LAS), mg/l		<input type="checkbox"/>	
<input type="checkbox"/> COD		<input type="checkbox"/> Nitrogen, Nitrate (As N)		<input type="checkbox"/> Residue Total Filterable (Dissolved)		<input type="checkbox"/> Conductance Micromhos 25 °C		<input type="checkbox"/>	
<input checked="" type="checkbox"/> TOC		<input type="checkbox"/> Nitrogen Ammonia (As N)		<input type="checkbox"/> Residue Total		<input type="checkbox"/> Color Units		<input type="checkbox"/>	
<input type="checkbox"/> DOC		<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)		<input type="checkbox"/> Residue Total Fixed Solids		<input type="checkbox"/> Turbidity Jackson Units Supernatant		<input type="checkbox"/>	
<input checked="" type="checkbox"/> Phenol		<input type="checkbox"/>		<input type="checkbox"/> Residue Volatile		<input type="checkbox"/> Turbidity Jackson Units Total		<input type="checkbox"/>	
<input checked="" type="checkbox"/> Oil & Grease 296.7		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
SAMPLE TREATMENT		<input type="checkbox"/> Refrigerate		<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2ml/l		<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)		<input type="checkbox"/>	
<input type="checkbox"/> None									

REMARKS	<input type="checkbox"/>
	<input type="checkbox"/>
	Date
	Analyst
	Reviewed by
	<i>Allmeibohm</i>
	Date reported
	7/16/82

STATE OF NEW MEXICO

## SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

Biological, Chemical and Physical  
ANALYSES of WASTEWATER

DATE RECEIVED

7/16/82

LAB NO. WC 119

USER CODE

Collection date	City or Location		
7-14-82	NEAR BLOOMFIELD		
Collected by	County	Region	
SIMPSON	SAN JUAN		
Owner	FIELD DETERMINED PARAMETERS		
OCCD - PLATEAU	pH	Dissolved Oxygen mg/l	
Send Final Report to:	WATER	Chlorine Residual mg/l	
NEW CONSERVATION DIV. P.O. BOX SAN TA FE NM 87501	Temperature °C		
	Sedimentable Solids mg/l		
	OTHER INFORMATION		
	C-3		

STORET NO.	RIVER BASIN	OWNERSHIP	LOCATION
<b>Source</b>	<input type="checkbox"/> Rio Grande <input type="checkbox"/> Canadian <input type="checkbox"/> Little Colorado <input type="checkbox"/> Other - specify:	<input type="checkbox"/> Pecos <input type="checkbox"/> Gila <input type="checkbox"/> San Juan	<input type="checkbox"/> Municipal <input type="checkbox"/> MOSWA <input type="checkbox"/> Private <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Other
<input type="checkbox"/> Wastewater Treatment Plant <input type="checkbox"/> LAGOON <input type="checkbox"/> Other: <input type="checkbox"/> Other	<input type="checkbox"/> DRAIN <input type="checkbox"/> LAKE <input type="checkbox"/> STREAM		<input type="checkbox"/> Influent <input type="checkbox"/> Primary <input type="checkbox"/> Secondary <input type="checkbox"/> Effluent <input type="checkbox"/> Digester <input type="checkbox"/> Trickling Filter

ORGANIC PARAMETERS	NUTRIENTS	PHYSICAL PARAMETERS	OTHER PARAMETERS	HEAVY METAL and TOXIC CHEMICAL PARAMETERS
mg/l	mg/l	mg/l	mg/l	
<input type="checkbox"/> BOD - 5 DAY 20 °C	<input type="checkbox"/> Phosphate (As P)	<input type="checkbox"/> Residue Total Non-Filtrable (Suspended)	<input type="checkbox"/> Surfactants (As LAS), mg/l	
<input type="checkbox"/> COD	<input type="checkbox"/> Nitrogen Nitrate (As N)	<input type="checkbox"/> Residue Total Enterable (Dissolved)	<input type="checkbox"/> Conductance Micromhos 25 °C	
<input checked="" type="checkbox"/> DOC 3.6	<input type="checkbox"/> Nitrogen Ammonia (As N)	<input type="checkbox"/> Residue Total	<input type="checkbox"/> Color Units	
<input type="checkbox"/> DOC	<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)	<input type="checkbox"/> Residue Total Fixed Solids	<input type="checkbox"/> Turbidity Jackson Units Supernatant	
<input checked="" type="checkbox"/> Phenol	<input type="checkbox"/>	<input type="checkbox"/> Residue Volatile	<input type="checkbox"/> Turbidity Jackson Units Total	
<input checked="" type="checkbox"/> Oil & Grease	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
SAMPLE TREATMENT	<input type="checkbox"/> Refrigerate <input type="checkbox"/> None	<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2ml/l	<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)	

REMARKS	
	Date
	Analyst
	Reviewed by



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

**Biological, Chemical and Physical  
ANALYSES of WASTEWATER**

DATE RECEIVED	7/16/82	LAB NO.	WCR 130	USER CODE
Collection date	7-14-82 1:45PM	City or Location		
Collected by	SIMPSON	County	Region	
Owner	OSO PLATERO	FIELD DETERMINED PARAMETERS		
Send Final Report to:	OIL CONSERVATION DIV. P.O. BOX 2088 SANTA FE N.M. 87501	<input type="checkbox"/> pH	<input type="checkbox"/> Dissolved Oxygen mg/l	
		<input type="checkbox"/> Water Temperature, °C	<input type="checkbox"/> Chlorine Residual, mg/l	
		<input type="checkbox"/> Settleable Solids, ml/l	<input type="checkbox"/>	
		OTHER INFORMATION		
		D-3		

STORE NO.	RIVER BASIN	OWNERSHIP	LOCATION
<b>Source</b> <input type="checkbox"/> Wastewater Treatment Plant <input type="checkbox"/> LAGOON <input type="checkbox"/> Other <input type="checkbox"/> Other	<input type="checkbox"/> Rio Grande	<input type="checkbox"/> Pecos	<input type="checkbox"/> Influent
	<input type="checkbox"/> Canadian	<input type="checkbox"/> Gila	<input type="checkbox"/> Primary
	<input type="checkbox"/> Little Colorado	<input type="checkbox"/> San Juan	<input type="checkbox"/> Secondary
	<input type="checkbox"/> Other - specify:		<input type="checkbox"/> Industrial
			<input type="checkbox"/> Commercial
		<input type="checkbox"/> Other	
<input type="checkbox"/> DRAIN		<input type="checkbox"/> Effluent	
<input type="checkbox"/> LAKE		<input type="checkbox"/> Digester	
<input type="checkbox"/> STREAM		<input type="checkbox"/> Trickling Filter	

ORGANIC PARAMETERS	NUTRIENTS		PHYSICAL PARAMETERS	OTHER PARAMETERS	HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
	mg/l	mg/l			mg/l	mg/l
<input type="checkbox"/> BOD - 5 DAY 20 °C	<input type="checkbox"/> Phosphate (As P)		<input type="checkbox"/> Residue Total Non-Filterable (Suspended)	<input type="checkbox"/> Surfactants (As LAS), mg/l	<input type="checkbox"/>	
<input type="checkbox"/> COD	<input type="checkbox"/> Nitrogen Nitrate (As N)		<input type="checkbox"/> Residue Total Filterable (Dissolved)	<input type="checkbox"/> Conductance Micromhos 25 °C	<input type="checkbox"/>	
<input checked="" type="checkbox"/> TOC <i>323</i>	<input type="checkbox"/> Nitrogen Ammonia (As N)		<input type="checkbox"/> Residue Total	<input type="checkbox"/> Color Units	<input type="checkbox"/>	
<input type="checkbox"/> DOC	<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)		<input type="checkbox"/> Residue Total Fixed Solids	<input type="checkbox"/> Turbidity Jackson Units Supernatant	<input type="checkbox"/>	
<input checked="" type="checkbox"/> Phenol	<input type="checkbox"/>		<input type="checkbox"/> Residue Volatile	<input type="checkbox"/> Turbidity Jackson Units Total	<input type="checkbox"/>	
<input checked="" type="checkbox"/> Oil & Grease	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
SAMPLE TREATMENT <input type="checkbox"/> None	<input type="checkbox"/> Refrigerate		<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2ml/l	<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)	<input type="checkbox"/>	

REMARKS	
<i>None</i>	
Date	
Analyst	
Reviewed by	<i>John J. Simpson</i>
Last reported	

RECEIVED

**Biological, Chemical and Physical  
ANALYSES of WASTEWATER**

STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

DATE RECEIVED

7/14/82

LAB NO.

121

MATERIAL CODE

Collection date	7-14-82 4:05PM	City or Location	Region
Collected by	SIMPSON	County	Region
Owner	OCD - PLATEAU	FIELD DETERMINED PARAMETERS	
Send Final Report to:	OIL CONSERVATION D.V. P.O. BOX 2088 SANTA FE NM 87501	<input type="checkbox"/> pH	<input type="checkbox"/> Dissolved Oxygen mg/l
		<input type="checkbox"/> Water Temperature, °C	<input type="checkbox"/> Chlorine Residual, mg/l
		<input type="checkbox"/> Settleable Solids, ml/l	<input type="checkbox"/>
OTHER INFORMATION		By	
		E-3	

STORET NO.	RIVER BASIN	OWNERSHIP	LOCATION
Source <input type="checkbox"/> Wastewater Treatment Plant <input type="checkbox"/> LAGOON <input type="checkbox"/> Other: <input type="checkbox"/> Other:	<input type="checkbox"/> Rio Grande <input type="checkbox"/> Canadian <input type="checkbox"/> Little Colorado <input type="checkbox"/> Other - specify:	<input type="checkbox"/> Pecos <input type="checkbox"/> Gila <input type="checkbox"/> San Juan	<input type="checkbox"/> Municipal <input type="checkbox"/> MDSWA <input type="checkbox"/> Private <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Other:
<input type="checkbox"/> DRAIN <input type="checkbox"/> LAKE <input type="checkbox"/> STREAM			<input type="checkbox"/> Influent <input type="checkbox"/> Primary <input type="checkbox"/> Secondary <input type="checkbox"/> Effluent <input type="checkbox"/> Digester <input type="checkbox"/> Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS	HEAVY METAL AND TOXIC CHEMICAL PARAMETERS	
<input type="checkbox"/> BOD - 5 DAY 20 °C		<input type="checkbox"/> Phosphate (As P)		<input type="checkbox"/> Residue Total Non-Filtrable (Suspended)		<input type="checkbox"/> Surfactants (As LAS), mg/l	<input type="checkbox"/>	
<input type="checkbox"/> COD		<input type="checkbox"/> Nitrogen, Nitrate (As N)		<input type="checkbox"/> Residue Total Filtrable (Dissolved)		<input type="checkbox"/> Conductance Micromhos 25 °C	<input type="checkbox"/>	
<input checked="" type="checkbox"/> TDC <i>860</i>		<input type="checkbox"/> Nitrogen Ammonia (As N)		<input type="checkbox"/> Residue Total		<input type="checkbox"/> Color Units	<input type="checkbox"/>	
<input type="checkbox"/> DOC		<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)		<input type="checkbox"/> Residue Total Fixed Solids		<input type="checkbox"/> Turbidity Jackson Units Supernatant	<input type="checkbox"/>	
<input checked="" type="checkbox"/> Phenol <i>Phenol</i>		<input type="checkbox"/>		<input type="checkbox"/> Residue Volatile		<input type="checkbox"/> Turbidity Jackson Units Total	<input type="checkbox"/>	
<input checked="" type="checkbox"/> Oil & Grease <i>Oil &amp; Grease</i>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	
SAMPLE TREATMENT	<input type="checkbox"/> None	<input type="checkbox"/> Refrigerate		<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2ml/l		<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)	<input type="checkbox"/>	

REMARKS

<input type="checkbox"/>	Date
<input type="checkbox"/>	Analyst
<input type="checkbox"/>	Reviewed by
<input type="checkbox"/>	Date



**State of New Mexico  
HEALTH and ENVIRONMENT DEPARTMENT  
SCIENTIFIC  
LABORATORY DIVISION**

## CHEMICAL and PHYSICAL ANALYSES for WATER SAMPLES

CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen							
for WATER SAMPLES							
CHEMICAL ANALYSES:		Check individual items for analysis [Mark appropriate box(es)]		INTERIM PRIMARY PARAMETER GROUP			
Water Supply System Name <i>Bluff Creek Fintry</i>		Collection Time 6:45 PM		Collection Point Soil Test A			
Collected By <i>S. J. Scanlan</i>		Owner CDB - Bluff Creek		Water Supply System Code No.			
TYPE of SYSTEM <input checked="" type="checkbox"/> PRIVATE		PUBLIC: <input type="checkbox"/> Community		Non-community <input type="checkbox"/>			
Collector's remarks <i>Sample A</i> <i>1-17-78 CDA</i>							
Report to <i>C. D. CONSTRUCTION DIV</i> Address <i>P.O. BOX 2083 SANTA FE NM 87501</i>							
Check one: <input type="checkbox"/> TREATED WATER		<input type="checkbox"/> RAW WATER					
<input type="checkbox"/> Organic		<input type="checkbox"/> Radio logical					
TYPE OF CHEMICAL ANALYSIS							
3 ...				<input type="checkbox"/> Complete Secondary			
City or Location				County			
SOURCE: <input type="checkbox"/> Spring <input type="checkbox"/> Lake <input type="checkbox"/> Well-Depth <input type="checkbox"/> Drain <input type="checkbox"/> Stream <input type="checkbox"/> Pool <input type="checkbox"/> Other (specify) <i>Hole</i>							
LAT:    °    LONG:    °							
ORGANIC mg/l							
HEAVY METALS mg/l							
PARAMETER mg/l							
CATIONS	mg/l	ANIONS	mg/l	PHYSICAL	mg/l	HEAVY METALS	mg/l
00930 Sodium (as Na)		X 00940 Chloride (as Cl)		70300 Total Filterable Residue	mg/l	01000 Arsenic	
00935 Potassium (as K)		X 00950 Fluoride (as F)		38260 Foaming Agents (as Las)	mg/l	01005 Barium	
00900 Tot. Hardness (as CaCO <sub>3</sub> )		00620 Nitrate (as N)		0095 Conductance Micromhos 25°C	mg/l	01025 Cadmium	
00915 Calcium (as Ca)		00430 Alkalinity (as CaCO <sub>3</sub> )		00400 pH	mg/l	01030 Chromium	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO <sub>3</sub> )		01330 Odor	mg/l	01049 Lead	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO <sub>3</sub> )		00080 Color	mg/l	07180 Mercury	
01056 Manganese (as Mn)		X 00945 Sulfate (as SO <sub>4</sub> )		00070 Turbidity	mg/l	01145 Selenium	
		1466				01075 Silver	
		775				0152	
						11501 Radium-228	
						09501 Radium-226	pCi/l
						39740 2, 4, 5-TP (Silvex)	
						39730 2, 4-D	
LABORATORY REMARKS:							
Reviewed by <i>J. J. Scanlan</i> Date reported <i>1/22/78</i>							
SLD user code No. <i>WC 122</i>							
Date received <i>1/18/78</i>							





**CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES**

SCIENTIFIC  
LABORATORY DIVISION

CONSULT SLD Lab Annex L for proper presentation of sample(s), TYPE or PRINT with Ball Point Pen

**CHEMICAL ANALYSES:**  Individual items for analysis     Mark appropriate box(es)

**TYPE of SYSTEM** (Check one)  
 PRIVATE     PUBLIC:  Community     Non-community

Date received **7/16/82**    Lab No. **WC 124**    SLD user code No.

Water Supply System Name <b>PLATEAU MOUNTAIN</b>		Water Supply System Code No.	INTERIM PRIMARY PARAMETER GROUP <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 ...	City or Location <b>PLATEAU FIELD SAN JUAN</b>	TYPE of CHEMICAL ANALYSIS <input type="checkbox"/> Complete Secondary <input type="checkbox"/> Organic <input type="checkbox"/> Radiological
Collection Date <b>7-16-82</b>	Collection Time <b>1:45 PM</b>	Collection Point <b>LAKE ON DITCH</b>	Collector's remarks <b>LAKER PLASTIC NO. 24</b>	County <b>SAN JUAN</b>	Check one: <input type="checkbox"/> TREATED WATER <input type="checkbox"/> RAW WATER
Collected By <b>SCIENTIST</b>					Report to <b>614 CONSERVATION DIV.</b> Address <b>P.O. BOX 2288 SAN JUAN, NM 87501</b>
		SOURCE: <input type="checkbox"/> Spring <input type="checkbox"/> Lake <input type="checkbox"/> Drain <input type="checkbox"/> Well-Depth <input type="checkbox"/> Stream <input type="checkbox"/> Pool <input type="checkbox"/> Other (specify) ....	LAT. <b>°</b> LONG. <b>°</b>		

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL		HEAVY METALS	mg/l	PARAMETER	ORGANIC	mg/l
				mg/l	mg/l					
00930 Sodium (as Na)		00940 Chloride (as Cl)		X 70300 Total Filterable Residue	41180	01000 Arsenic			39390 Endrin	
00935 Potassium (as K)		00950 Fluoride (as F)		38260 Foaming Agents (as Las)		01005 Barium			39732 Lindane	
00900 Tot. Hardness (as CaCO <sub>3</sub> )		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium			38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as CaCO <sub>3</sub> )		00400 pH		01030 Chromium			39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO <sub>3</sub> )		01330 Odor		01049 Lead			39730 2,4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO <sub>3</sub> )		00080 mg/l Color		07180 Mercury			09501 Radium-226	
01056 Manganese (as Mn)		00945 Sulfate (as SO <sub>4</sub> )		00070 Turbidity		01145 Selenium			11501 Radium-228	
						01075 Silver				

LABORATORY REMARKS:

Reviewed by <b>J. P. J.</b>
Date reported <b>7/16/82</b>



State of New Mexico  
HEALTH and ENVIRONMENT DEPARTMENT  
SCIENTIFIC  
LABORATORY DIVISION

## CHEMICAL and PHYSICAL ANALYSES for WATER SAMPLES

### CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen

#### CHEMICAL ANALYSES: Check individual items for analysis (Mark appropriate box(es))

Water Supply System Name **PLATTAU TREATMENT**

Collection Date **7/16/82**

Collection Time **8:15 AM**

Owner **Locate Treatment**

Collected By **Synthetix**

Type of SYSTEM (Check one)

PRIVATE       PUBLIC:       Community

Non-community

#### INTERIM PRIMARY PARAMETER GROUP

1       2       3       Complete Secondary

#### CITY OR LOCATION

**El Paso, Texas**

#### Collector's remarks

**D-2**

**PLATTAU TREATMENT**

**7/16/82**

**Locate Treatment**

**Synthetix**

**Community**

Non-community

#### TYPE of CHEMICAL ANALYSIS

Organic

Radiological

#### REPORT TO

**EL PASO CONSOLIDATED TREATMENT**

**Address P.O. BOX 2088**

**SANITAET M.M. 87501**

**11**

**Check one:**

TREATED WATER

RAW WATER

#### SOURCE:

Spring

Lake

Well-Depth

Pool

Other (specify) \_\_\_\_\_

Drain

Stream

Other (specify) \_\_\_\_\_

LAT.

LONG.

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#### HEAVY METALS

#### PARAMETER

#### ORGANIC

#### mg/l

**1499.5**

**X**

**00940**

**Chloride (as Cl)**

**●**

**00950**

**Fluoride (as F)**

**X**

**00950**

**Agents (as Las)**

**●**

**00950**

**Foaming**

**●**

**00950**

**Conductance**

**●**

**00950**

**Micromhos 25°C.**

**●**

**00400**

**pH**

**●**

**01025**

**Cadmium**

**●**

**01030**

**Chromium**

**●**

**01049**

**Lead**

**●**

**01330**

**Odor**

**●**

**00080**

**Color**

**●**

**07180**

**Mercury**

**●**

**03501**

**Gross Beta**

**●**

**09501**

**Radium-226**

**●**

**03730**

**2,4-D**

**●**

**39740**

**2,4,5-TP (Silvex)**

**●**

#### PHYSICAL

#### ANIONS

#### mg/l

**1499.5**

**X**

**00940**

**Chloride (as Cl)**

**●**

**00950**

**Fluoride (as F)**

**X**

**00950**

**Agents (as Las)**

**●**

**00950**

**Foaming**

**●**

**00950**

**Conductance**

**●**

**00950**

**Micromhos 25°C.**

**●**

**00400**

**pH**

**●**

**01025**

**Cadmium**

**●**

**01049**

**Lead**

**●**

**01330**

**Odor**

**●**

**00080**

**Color**

**●**

**07180**

**Mercury**

**●**

**03501**

**Gross Beta**

**●**

**09501**

**Radium-226**

**●**

**03730**

**2,4-D**

**●**

**39740**

**2,4,5-TP (Silvex)**

**●**

**03945**

**Sulfate (as SO<sub>4</sub>)**

**●**

#### CATIONS

#### mg/l

**00930**

**Sodium (as Na)**

**●**

**00935**

**Potassium (as K)**

**●**

**00900**

**Tot. Hardness (as CaCO<sub>3</sub>)**

**●**

**00915**

**Calcium (as Ca)**

**●**

**00925**

**Magnesium (as Mg)**

**●**

**01045**

**Iron-Tot (as Fe)**

**●**

**01056**

**Manganese (as Mn)**

**●**

**00445**

**Carbonate (as CO<sub>3</sub>)**

**●**

**00945**

**Sulfate (as SO<sub>4</sub>)**

**X**

**03945**

**Turbidity**

**●**

**01145**

**Selenium**

**●**

**01075**

**Silver**

**●**

**01150**

**Radium-228**

**●**

**01075**

**Silver**

**●**

**01150**

**Radium-228**

**●**

**01075**

**Silver**

**●**

**01075**

**Silver**

**●**

**01075**

**Silver**

**●**

**01075**

LABORATORY REMARKS:

Reviewed by \_\_\_\_\_  
Date reported \_\_\_\_\_

Report to \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_  
State \_\_\_\_\_  
Zip \_\_\_\_\_



**CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES**

State of New Mexico  
HEALTH and ENVIRONMENT DEPARTMENT  
SCIENTIFIC  
LABORATORY DIVISION

**CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen**

**CHEMICAL ANALYSES:**  Check individual items for analysis       Mark appropriate box(es)

**TYPE of SYSTEM (Check one)**

PRIVATE       PUBLIC:  Community       Non-community

**INTERIM PRIMARY PARAMETER GROUP**

1       2       3       Complete Secondary

**TYPE of CHEMICAL ANALYSIS**

Organic       Radiological

**CITY OR LOCATION**

City or Location       Collector's remarks

**COUNTY**

County       Check one:

TREATED WATER       RAW WATER

**REPORT TO**

P. O. Box 2058  
Santa Fe NM 87501

**ADDRESS**

716 1/2

**LAT.**

°

**LONG.**

°

**SOURCE:**

Spring       Lake  
 Drain       Well-Depth  
 Stream       Pool  
 Other (specify) \_\_\_\_\_

**COLLECTOR'S REMARKS**

F-2

**TESTED**

**TESTED</**



**CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES**

SCIENTIFIC  
LABORATORY DIVISION

CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen  
CHEMICAL ANALYSIS:  Check individual items for analysis  INTERIM PRIMARY PARAMETER GROUP  1  2  3  Complete Secondary  
 Mark appropriate box(es) /  Organic  Radiological

ANALYSES:  *7-16-82*

Date received **7/16/82** Lab No. **WC 127** SLD user code No.

Water Supply System Name <b>PLATEAU FARM</b>	Collection Time <b>1:45 PM</b>	Collection Point <b>LO CAT. 24 C</b>	Water Supply System Code No.	City or Location	Collector's remarks <b>C-4</b>
Collection Date <b>7/16/82</b>	Owner <b>SIMCO</b>	Collected By <b>SOED - PLATEAU</b>			
TYPE OF SYSTEM <input type="checkbox"/> PUBLIC: <input type="checkbox"/> Community <input type="checkbox"/> PRIVATE			SOURCE: <input type="checkbox"/> Spring <input type="checkbox"/> Lake <input type="checkbox"/> Well-Depth <input type="checkbox"/> Other (specify) <b>" "</b>	LAT. <b>°</b>	LONG. <b>°</b>
			<input type="checkbox"/> Drain <input type="checkbox"/> Stream <input type="checkbox"/> Pool		

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL		HEAVY METALS	mg/l	PARAMETER	ORGANIC	mg/l
				Total Chloride (as Cl)	Filterable Residue					
00930 Sodium (as Na)	00940			70300	mg/l	01000 Arsenic			39390 Endrin	
00935 Potassium (as K)	00950	Fluoride (as F)		38260	Foaming Agents (as Las)	01005 Barium			39732 Lindane	
00900 Tot. Hardness (as CaCO <sub>3</sub> )	00620	Nitrate (as N)		00095	Conductance Micromhos 25°C	01025 Cadmium			38270 Methoxychlor	
00915 Calcium (as Ca)	00430	Alkalinity (as CaCO <sub>3</sub> )		00400	pH pH	01030 Chromium			39400 Toxaphene	
00925 Magnesium (as Mg)	00440	Bicarbonate (as HCO <sub>3</sub> )		01330 Odor		01049 Lead			39730 2,4-D	
01045 Iron-Total (as Fe)	00445	Carbonate (as CO <sub>3</sub> )		00080	mg/l Color	07180 Mercury			03501 Gross Beta	
01056 Manganese (as Mn)	00945	Sulfate (as SO <sub>4</sub> )		00070	Turbidity	01145 Selenium			09501 Radium-226	
						01075 Silver			09501 Radium-228	

LABORATORY REMARKS:  
*negative Cyanide*

*On Coleman*  
*7-16-82*

Reviewed by *John Johnson*  
Date reported *7/16/82*

52999



## HEALTH and ENVIRONMENT DEPARTMENT

SCIENTIFIC  
LABORATORY DIVISIONCHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLESCONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen  
CHEMICAL ANALYSES:  Individual items for analysis  Mark appropriate box(es) /INTERIM PRIMARY PARAMETER GROUP  
 1  2  3TYPE of CHEMICAL ANALYSIS  
 Complete Secondary  Organic  RadiologicalDate received **7/16/82** Lab No. **WC 128** SLD user code No.

Water Supply System Name <b>PLATEAU FINEYER</b>	Water Supply System Code No.	City or Location <b>OCO - PLATEAU</b>	Collector's remarks <b>D-4</b>
Collection Date <b>7-14-82</b>	Collection Time <b>3:15 PM</b>	Collection Point <b>LOCATION D</b>	Report to <b>Dr. C. CONSTRUCTION D</b>
Collected By <b>S. M. BOSEK</b>	Owner	Address <b>P.O. BOX 2088 SANTA FE N.M. 87501</b>	Check one: <input type="checkbox"/> TREATED WATER <input type="checkbox"/> RAW WATER
TYPE of SYSTEM (check one) <input type="checkbox"/> PRIVATE <input type="checkbox"/> PUBLIC: <input type="checkbox"/> Community <input type="checkbox"/> Non-community		SOURCE: <input type="checkbox"/> Spring <input type="checkbox"/> Lake <input type="checkbox"/> Well-Depth <input type="checkbox"/> Other (specify) <b>Drain</b>	LAT. <b>°</b> LONG. <b>°</b>

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL		HEAVY METALS	mg/l	PARAMETER	ORGANIC	mg/l
				Total Chloride (as Cl)	Filterable Residue					
00930 Sodium (as Na)	0.0940	00940 Chloride (as Cl)	70300 mg/l	01000 Arsenic	01005 Barium	39390 Endrin				
00935 Potassium (as K)	0.0950	00950 Fluoride (as F)	38260 mg/l	01025 Cadmium	39732 Lindane					
00900 Tot. Hardness (as CaCO <sub>3</sub> )	0.0620	00620 Nitrate (as N)	00095 Conductance Micromhos 25°C	01025 Chromium	38270 Methoxychlor					
00915 Calcium (as Ca)	0.0430	00430 Alkalinity (as CaCO <sub>3</sub> )	00400 pH	01030 Gross Alpha	39400 Toxiphene					
00925 Magnesium (as Mg)	0.0440	00440 Bicarbonate (as HCO <sub>3</sub> )	01330 Odor	01049 Lead	01501 Gross Beta					
01045 Iron-Total (as Fe)	0.0445	00445 Carbonate (as CO <sub>3</sub> )	00080 mg/l	07180 Mercury	09501 Radium-226					
01056 Manganese (as Mn)	0.0945	00945 Sulfate (as SO <sub>4</sub> )	00070 Turbidity	01145 Selenium	11501 Radium-228					
				01075 Silver						

## LABORATORY REMARKS:

**CB Column**  
**Between 0.19 and 0.32 mg/l Cr/Hg, extremely high sulfide content precludes a more accurate analysis.**

**Reviewed by**  
**John Meister**  
**Date reported 7/16/82**



**CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES**

CONSULT SLD Lab Annex L for proper presentation of sample(s); TYPE or PRINT with Ball Point Pen  
Check individual items for analysis  
(Mark appropriate box(es))

**ANALYSES:**  Interim  Primary  Secondary

**Water Supply System Name:** *PLATEAU REFINERY*

**Collection Date:** *7/14/82*

**Collection Time:** *4:15 PM*

**Owner:** *SIMPSON*

**Collected By:** *E - 4*

**TYPE of SYSTEM (Check one):**  PUBLIC:  Community  Non-community

PRIVATE

**Collection Point:** *200' CAT. 011 E*

**Water Supply System Code No.:** *E - 4*

**Collector's remarks:** *BLUFF IN FIELD*

**City or Location:** *E - 4*

**County:** *SJ*

**Check one:**  TREATED WATER  RAW WATER

**Report to:** *DIK CONSOLIDATION D. U.*

**Address:** *P.O. BOX 7088  
SUITE 500  
M. D. 75011*

**Report date:** *7/16/82*

**Date received:** *7/16/82*

**Lab No.:** *WC 129*

**SLD user code No.:** *52999*

**TYPE or PRINT with Ball Point Pen**

**INTERIM PRIMARY PARAMETER GROUP**

1

2

3

Complete Secondary

Organic

Radiological

**TYPE of CHEMICAL ANALYSIS**

1

2

3

Complete Secondary

Organic

Radiological

**City or Location:** *E - 4*

**Collector's remarks:** *BLUFF IN FIELD*

**County:** *SJ*

**Check one:**  TREATED WATER  RAW WATER

**Report to:** *DIK CONSOLIDATION D. U.*

**Address:** *P.O. BOX 7088  
SUITE 500  
M. D. 75011*

**Report date:** *7/16/82*

**Date received:** *7/16/82*

**Lab No.:** *WC 129*

**SLD user code No.:** *52999*

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL		HEAVY METALS	mg/l	PARAMETER	ORGANIC mg/l
				Total Chloride (as Cl)	Filterable Residue				
00930 Sodium (as Na)	●	00940 Chloride (as Cl)	●	70300 mg/l	●	01000 Arsenic	●	●	39390 Endrin
00935 Potassium (as K)	●	00950 Fluoride (as F)	●	38260 Foaming	●	01005 Barium	●	●	39732 Lindane
00900 Tot. Hardness (as CaCO <sub>3</sub> )	●	00620 Nitrate (as N)	●	00095 Conductance Micromhos/25°C	●	01025 Cadmium	●	●	38270 Methoxychlor
00915 Calcium (as Ca)	●	00430 Alkalinity (as CaCO <sub>3</sub> )	●	00400 pH	●	01030 Chromium	●	●	RADIOLOGICAL pCi/l
00925 Magnesium (as Mg)	●	00440 Bicarbonate (as HCO <sub>3</sub> )	●	01330 Odor	●	01049 Lead	●	●	39400 Toxaphene
01045 Iron-Total (as Fe)	●	00445 Carbonate (as CO <sub>3</sub> )	●	00080 Color	●	07180 Mercury	●	●	01501 Gross Alpha
01056 Manganese (as Mn)	●	00945 Sulfate (as SO <sub>4</sub> )	●	00070 Turbidity	●	01145 Selenium	●	●	09501 Radium-226
X Cyanide	●					01075 Silver	●	●	11501 Radium-228

**LABORATORY REMARKS:**

*0.0036 mg CN/liter*

*3 Column 7-16-82*

**Reviewed by:**

*John W. Johnson*

**Date reported:**

*7/16/82*



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

# Biological, Chemical and Physical ANALYSES of WASTEWATER

DATE RECEIVED	<u>7/29/82</u>	LAB NO. WC 317	USER CODE
Collection date	City or Location		
Collected by	County	Region	
Owner	FIELD DETERMINED PARAMETERS		
Send Final Report to: <i>Oil Conservation Div P.O. Box 2088 Santa Fe N.M. 87501</i>	pH	Dissolved Oxygen mg/l	
	Water Temperature, °C	Chlorine Residual, mg/l	
	Settleable Solids, ml/l		
	OTHER INFORMATION		
	<i>SAMPLE CA NF-A-1g CUSO4 1 gal Brown glass 10 mL H3PO4</i>		

STORED NO.:	RIVER BASIN			OWNERSHIP		LOCATION	
Source	Rio Grande	Pecos	Municipal	Influent			
<input type="checkbox"/> Wastewater Treatment Plant	<input type="checkbox"/> Canadian	<input type="checkbox"/> Gila	<input type="checkbox"/> MDSWA	Primary			
<input type="checkbox"/> LAGOON	<input type="checkbox"/> Little Colorado	<input type="checkbox"/> San Juan	<input type="checkbox"/> Private	Secondary			
<input type="checkbox"/> Other:	<input type="checkbox"/> Other - specify:		<input type="checkbox"/> Industrial	Effluent			
<input checked="" type="checkbox"/> Other:			<input type="checkbox"/> Commercial	Digester			
			<input type="checkbox"/> Other:	Trickling Filter			

ORGANIC PARAMETERS	NUTRIENTS	PHYSICAL PARAMETERS	OTHER PARAMETERS	HEAVY METAL and TOXIC CHEMICAL PARAMETERS
mg/l	mg/l	mg/l	mg/l	
<input type="checkbox"/> BOD - 5 DAY 20 °C	<input type="checkbox"/> Phosphate (As P)	<input type="checkbox"/> Residue Total Non-Filterable (Suspended)	<input type="checkbox"/> Surfactants (As LAS), mg/l	<input type="checkbox"/>
<input type="checkbox"/> COD	<input type="checkbox"/> Nitrogen, Nitrate (As N)	<input type="checkbox"/> Residue Total Filterable (Dissolved)	<input type="checkbox"/> Conductance Micromhos 25 °C	<input type="checkbox"/>
<input type="checkbox"/> TOC	<input type="checkbox"/> Nitrogen Ammonia (As N)	<input type="checkbox"/> Residue Total	<input type="checkbox"/> Color Units	<input type="checkbox"/>
<input type="checkbox"/> DOC	<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)	<input type="checkbox"/> Residue Total-Fixed Solids	<input type="checkbox"/> Turbidity Jackson Units Supernatant	<input type="checkbox"/>
		<input type="checkbox"/> Residue Volatile	<input type="checkbox"/> Turbidity Jackson Units Total	<input type="checkbox"/>
<input checked="" type="checkbox"/> <i>ug/l</i> <i>Resonell</i> 12.8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SAMPLE TREATMENT <input type="checkbox"/> None	<input type="checkbox"/> Refrigerate	<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2ml/l	<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)	<input type="checkbox"/>

REMARKS	
	<input type="checkbox"/>
	Date
	Analyst
	Reviewed by <i>Al Meibohm</i>
	Date reported <i>8/2/82</i>



STATE OF NEW MEXICO

**SCIENTIFIC LABORATORY DIVISION (HED)**

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

# **Biological, Chemical and Physical ANALYSES of WASTEWATER**

DATE RECEIVED		7/29/82	LAB NO.	NC 318	USER CODE
Collection date	City or Location				
Collected by	County				Region
Owner			FIELD DETERMINED PARAMETERS		
Send Final Report to:			By		
<p><i>OIL CONSERVAT'ION</i></p> <p>D.V.</p> <p>P.O. BOX 2088 SANTA FE</p> <p>N.M 87501</p>			<input type="checkbox"/> pH <input type="checkbox"/> Dissolved Oxygen mg/l <input type="checkbox"/> Water Temperature, °C <input type="checkbox"/> Chlorine Residual, mg/l <input type="checkbox"/> Settleable Solids, ml/l <input type="checkbox"/>		
OTHER INFORMATION			SAMPLE DA NF-A-1g C0504 ICED DOWN SINCE COLLECTION 10ML H <sub>3</sub> PO <sub>4</sub>		

ORGANIC PARAMETERS	NUTRIENTS		PHYSICAL PARAMETERS	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS
	mg/l	mg/l		mg/l		
<input type="checkbox"/> BOD - 5 DAY 20 °C		<input type="checkbox"/> Phosphate (As P)	<input type="checkbox"/> Residue Total Non-Filter- able (Suspended)	<input type="checkbox"/> Surfactants (As LAS), mg/l		
<input type="checkbox"/> COD		<input type="checkbox"/> Nitrogen, Nitrate (As N)	<input type="checkbox"/> Residue Total Filterable (Dissolved)	<input type="checkbox"/> Conductance Micromhos 25 °C		
<input type="checkbox"/> TOC		<input type="checkbox"/> Nitrogen Ammonia (As N)	<input type="checkbox"/> Residue Total	<input type="checkbox"/> Color Units		
<input type="checkbox"/> DOC		<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)	<input type="checkbox"/> Residue Total Fixed Solids	<input type="checkbox"/> Turbidity Jackson Units Supernatant		
		<input type="checkbox"/>	<input type="checkbox"/> Residue Volatile	<input type="checkbox"/> Turbidity Jackson Units Total		
<input checked="" type="checkbox"/> <i>ug/l</i> <i>PHENOLS</i> <i>37049</i>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
SAMPLE TREATMENT	<input type="checkbox"/> Refrigerate		<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2ml/l	<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)		<input type="checkbox"/>
<input type="checkbox"/> None						

**REMARKS**

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Date

Analyst

**Reviewed by**

Reviewed by  
Allison Johnson  
Date reported  
8/28/18



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

# Biological, Chemical and Physical ANALYSES of WASTEWATER

DATE RECEIVED	7/29/82	LAB NO. WDC 319	USER CODE
Collection date	City or Location		
7-28-82			
Collected by	County SJ		
Owner	Region		
Oscar Simpson OCO			
Send Final Report to:	FIELD DETERMINED PARAMETERS		
OIL CONSERVATION DIV P.O. BOX 2088 SANTA FE, NM 87501 PH 827 2534	<input type="checkbox"/> pH		<input type="checkbox"/> Dissolved Oxygen mg/l
	<input type="checkbox"/> Water Temperature, °C		<input type="checkbox"/> Chlorine Residual, mg/l
	<input type="checkbox"/> Settleable Solids, ml/l		<input type="checkbox"/>
OTHER INFORMATION			
<i>SAMPLE IA</i> <i>NE-A-18 C0504TIONAL H3PO4</i> <i>Brown glass gallon jar</i>			

STORET NO.:	RIVER BASIN				OWNERSHIP	LOCATION
	<input type="checkbox"/> Rio Grande	<input type="checkbox"/> Pecos	<input type="checkbox"/> Municipal	<input type="checkbox"/> Influent		
<input type="checkbox"/> Canadian	<input type="checkbox"/> Gila	<input type="checkbox"/> MDSWA	<input type="checkbox"/> Primary			
<input type="checkbox"/> Little Colorado	<input type="checkbox"/> San Juan	<input type="checkbox"/> Private	<input type="checkbox"/> Secondary			
<input type="checkbox"/> Other - specify:				<input type="checkbox"/> Industrial	<input type="checkbox"/> Effluent	
				<input type="checkbox"/> Commercial	<input type="checkbox"/> Digester	
				<input type="checkbox"/> Other:	<input type="checkbox"/> Trickling Filter	
<input type="checkbox"/> Source	<input type="checkbox"/> DRAIN	<input type="checkbox"/> LAKE	<input type="checkbox"/> STREAM			
<input type="checkbox"/> Wastewater Treatment Plant						
<input type="checkbox"/> LAGOON						
<input type="checkbox"/> Other:						
<input type="checkbox"/> Other:						

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
						<input type="checkbox"/> Residue Total Non-Filterable (Suspended)	<input type="checkbox"/> Surfactants (As LAS), mg/l	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> BOD - 5 DAY 20 °C		<input type="checkbox"/> Phosphate (As P)		<input type="checkbox"/> Residue Total Non-Filterable (Suspended)		<input type="checkbox"/> Surfactants (As LAS), mg/l		<input type="checkbox"/>	
<input type="checkbox"/> COD		<input type="checkbox"/> Nitrogen, Nitrate (As N)		<input type="checkbox"/> Residue Total Filterable (Dissolved)		<input type="checkbox"/> Conductance Micromhos 25 °C		<input type="checkbox"/>	
<input type="checkbox"/> TOC		<input type="checkbox"/> Nitrogen Ammonia (As N)		<input type="checkbox"/> Residue Total		<input type="checkbox"/> Color Units		<input type="checkbox"/>	
<input type="checkbox"/> DOC		<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)		<input type="checkbox"/> Residue Total Fixed Solids		<input type="checkbox"/> Turbidity Jackson Units Supernatant		<input type="checkbox"/>	
		<input type="checkbox"/>		<input type="checkbox"/> Residue Volatile		<input type="checkbox"/> Turbidity Jackson Units Total		<input type="checkbox"/>	
<input checked="" type="checkbox"/> PHENOLS ug/l 191		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
SAMPLE TREATMENT		<input type="checkbox"/> Refrigerate		<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2ml/l		<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)		<input type="checkbox"/>	
<input type="checkbox"/> None									

REMARKS	<input type="checkbox"/>	
	Date	
	Analyst	
	Reviewed by	
	<i>All Meibohm</i>	
	Date reported	
	<i>8/2/82</i>	



State of New Mexico  
HEALTH AND ENVIRONMENT DEPARTMENT  
SCIENTIFIC  
LABORATORY DIVISION

CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES

CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen  
CHEMICAL ANALYSES: Check individual items for analysis /Mark appropriate box(es)/

INTERIM PRIMARY PARAMETER GROUP  
 1     2     3

ANALYSES: /Mark appropriate box(es)/

PUBLIC:  Community     Non-community

PRIVATE

TYPE of CHEMICAL ANALYSIS

Complete Secondary

Organic

Treated Water

Raw Water

Radiological

INTERIM PRIMARY PARAMETER GROUP

1

2

3

Spring

Lake

Well-Depth

Other (specify) \_\_\_\_\_

City or Location

Collector's remarks

SAMPLE LA

NE-A-1000 NORTH

Report to

Address

LAT.

LONG.

Water Supply System Name

Collection Point

Sample LA

Owner

O C P

Water Supply System Code No.

Collection Time

7:00 AM

Reported

7/18/82

Water Supply System Name

Collection Point

Sample LA

Owner

Sam Brown

Water Supply System Code No.

Collection Time

7:00 AM

Reported

7/18/82

Water Supply System Name

Collection Point

Sample LA

Owner

Sam Brown

Water Supply System Code No.

Collection Time

7:00 AM

Reported

7/18/82

Water Supply System Name

Collection Point

Sample LA

Owner

Sam Brown

Water Supply System Code No.

Collection Time

7:00 AM

Reported

7/18/82

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL		HEAVY METALS	mg/l	PARAMETER	ORGANIC	mg/l
				mg/l	Total Filterable Residue					
00930 Sodium (as Na)		00940 Chloride (as Cl)		70300 mg/l		01000 Arsenic			39390 Endrin	
00935 Potassium (as K)		00950 Fluoride (as F)		38260 mg/l		01005 Barium			39732 Lindane	
00900 Tot.Hardness (as CaCO <sub>3</sub> )		00620 Nitrate (as N)		00095 Conductance		01025 Cadmium			38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as CaCO <sub>3</sub> )		00400 pH		01030 Chromium			RADIOLOGICAL PCI/ Toxaphene	39400
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO <sub>3</sub> )		01330 Odor		01501 Gross Alpha			pcI/l	39730
01045 Iron-Total (as Fe)		00445 Carbonate (as CO <sub>3</sub> )		00080 Color		01049 Lead			2,4-D	
01056 Manganese (as Mn)		00945 Sulfate (as SO <sub>4</sub> )		00070 Turbidity		09501 Radium-226			pcI/l	39740
						01145 Selenite			pcI/l	2,4,5-TP (Silvex)
						11501 Radium-228				
						01075 Silver				

LABORATORY REMARKS:

Note: may have big soft water

Negative Cyanide

Reviewed by

John Brown  
Date reported 8/18/82



**CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES**

WC-321

Date received 7/29/82 Lab No. WC 921

SLD user code No.

SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen

Check individual items for analysis

(Mark appropriate box(es))

INTERIM PRIMARY PARAMETER GROUP

1

2

3

Complete Secondary

Organic

Radiological

TYPE of CHEMICAL ANALYSIS

TREATED WATER

RAW WATER

Check one:

TREATED WATER

RAW WATER

Report to

CONSERVATION D.V.

20.30 X 2088

SAN JUAN 87501

Address

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LAT.

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LONG.

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Collector's remarks

SAINT JAMES

A/C - COMM & NON-COMM

SOCorro

Owner

TYPE of SYSTEM (Check one)

PUBLIC

COMMUNITY

Non-community

Water Supply System Name

Collection Point

Collection Time

5:10 PM

Collector By

SC-901

TYPE of SYSTEM (Check one)

PRIVATE

COMMUNITY

Non-community

Water Supply System Code No.

City or Location

Collector's remarks

SAINT JAMES

A/C - COMM & NON-COMM

SOCorro

Owner

TYPE of SYSTEM (Check one)

PUBLIC

COMMUNITY

Non-community

Water Supply System Name

Collection Point

Collection Time

5:10 PM

Collector By

SC-901

TYPE of SYSTEM (Check one)

PRIVATE

COMMUNITY

Non-community

Water Supply System Code No.

City or Location

Collector's remarks

SAINT JAMES

A/C - COMM & NON-COMM

SOCorro

Owner

TYPE of SYSTEM (Check one)

PUBLIC

COMMUNITY

Non-community

Water Supply System Name

Collection Point

Collection Time

5:10 PM

Collector By

SC-901

TYPE of SYSTEM (Check one)

PRIVATE

COMMUNITY

Non-community

Water Supply System Code No.

City or Location

Collector's remarks

SAINT JAMES

A/C - COMM & NON-COMM

SOCorro

Owner

TYPE of SYSTEM (Check one)

PUBLIC

COMMUNITY

Non-community

Water Supply System Name

Collection Point

Collection Time

5:10 PM

Collector By

SC-901

TYPE of SYSTEM (Check one)

PRIVATE

COMMUNITY

Non-community

Water Supply System Code No.

City or Location

Collector's remarks

SAINT JAMES

A/C - COMM & NON-COMM

SOCorro

Owner

TYPE of SYSTEM (Check one)

PUBLIC

COMMUNITY

Non-community

Water Supply System Name

Collection Point

Collection Time

5:10 PM

Collector By

SC-901

TYPE of SYSTEM (Check one)

PRIVATE

COMMUNITY

Non-community

Water Supply System Code No.

City or Location

Collector's remarks

SAINT JAMES

A/C - COMM & NON-COMM

SOCorro

Owner

TYPE of SYSTEM (Check one)

PUBLIC

COMMUNITY

Non-community

Water Supply System Name

Collection Point

Collection Time

5:10 PM

Collector By

SC-901

TYPE of SYSTEM (Check one)

PRIVATE

COMMUNITY

Non-community

Water Supply System Code No.

City or Location

Collector's remarks

SAINT JAMES

A/C - COMM & NON-COMM

SOCorro

Owner

TYPE of SYSTEM (Check one)

PUBLIC

COMMUNITY

Non-community

Water Supply System Name

Collection Point

Collection Time

5:10 PM

Collector By

SC-901

TYPE of SYSTEM (Check one)

PRIVATE

COMMUNITY

Non-community

Water Supply System Code No.

City or Location

Collector's remarks

SAINT JAMES

A/C - COMM & NON-COMM

SOCorro

Owner

TYPE of SYSTEM (Check one)

PUBLIC

COMMUNITY

Non-community

Water Supply System Name

Collection Point

Collection Time

5:10 PM

Collector By

SC-901

TYPE of SYSTEM (Check one)

PRIVATE

COMMUNITY

Non-community

Water Supply System Code No.

City or Location

Collector's remarks

SAINT JAMES

A/C - COMM & NON-COMM

SOCorro

Owner

TYPE of SYSTEM (Check one)

PUBLIC

COMMUNITY

Non-community

Water Supply System Name

Collection Point

Collection Time

5:10 PM

Collector By

SC-901

TYPE of SYSTEM (Check one)

PRIVATE

COMMUNITY

Non-community

Water Supply System Code No.

City or Location

Collector's remarks

SAINT JAMES

A/C - COMM & NON-COMM

SOCorro

Owner

TYPE of SYSTEM (Check one)

PUBLIC

COMMUNITY

Non-community

Water Supply System Name

Collection Point

Collection Time

5:10 PM

Collector By

SC-901

TYPE of SYSTEM (Check one)

PRIVATE

COMMUNITY

Non-community

Water Supply System Code No.

City or Location

Collector's remarks

SAINT JAMES

A/C - COMM & NON-COMM

SOCorro

Owner



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

# Biological, Chemical and Physical ANALYSES of WASTEWATER

DATE RECEIVED	7/29/82	LAB NO.	WC 322
Collection date	City or Location		
Collected by	County		
Owner	Region		
Send Final Report to:			
<i>OIL CONSERVATION D.O. P.O. Box 2088 SANTA FE NM 87501</i>	<b>FIELD DETERMINED PARAMETERS</b> <input type="checkbox"/> pH <input type="checkbox"/> Dissolved Oxygen mg/l <input type="checkbox"/> Water Temperature, °C <input type="checkbox"/> Chlorine Residual, mg/l <input type="checkbox"/> Settleable Solids, ml/l <input type="checkbox"/> <b>OTHER INFORMATION</b> <i>SAMPLE CA NF-A-10ML iced down since collection. NAOT</i>		

STORE NO.:	RIVER BASIN				OWNERSHIP	LOCATION
	<input type="checkbox"/> Rio Grande	<input type="checkbox"/> Pecos	<input type="checkbox"/> Municipal	<input type="checkbox"/> Influent		
Source	<input type="checkbox"/> Canadian	<input type="checkbox"/> Gila	<input type="checkbox"/> MDSWA	<input type="checkbox"/> Primary		
<input type="checkbox"/> Wastewater Treatment Plant	<input type="checkbox"/> Little Colorado	<input type="checkbox"/> San Juan	<input type="checkbox"/> Secondary			
<input type="checkbox"/> LAGOON	<input type="checkbox"/> Other - specify:				<input type="checkbox"/> Industrial	<input type="checkbox"/> Effluent
<input type="checkbox"/> Other:				<input type="checkbox"/> Commercial	<input type="checkbox"/> Digester	
<input type="checkbox"/> Other:				<input type="checkbox"/> Other:	<input type="checkbox"/> Trickling Filter	
	<input type="checkbox"/> DRAIN	<input type="checkbox"/> LAKE	<input type="checkbox"/> STREAM			

ORGANIC PARAMETERS	NUTRIENTS		PHYSICAL PARAMETERS		OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
<input type="checkbox"/> BOD - 5 DAY 20 °C	<input type="checkbox"/> Phosphate (As P)		<input type="checkbox"/> Residue Total Non-Filterable (Suspended)		<input type="checkbox"/> Surfactants (As LAS), mg/l		<input type="checkbox"/>	
<input type="checkbox"/> COD	<input type="checkbox"/> Nitrogen, Nitrate (As N)		<input type="checkbox"/> Residue Total Filterable (Dissolved)		<input type="checkbox"/> Conductance Micromhos 25 °C		<input type="checkbox"/>	
<input type="checkbox"/> TOC	<input type="checkbox"/> Nitrogen Ammonia (As N)		<input type="checkbox"/> Residue Total		<input type="checkbox"/> Color Units		<input type="checkbox"/>	
<input type="checkbox"/> DOC	<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)		<input type="checkbox"/> Residue Total Fixed Solids		<input type="checkbox"/> Turbidity Jackson Units Supernatant		<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/> Residue Volatile		<input type="checkbox"/> Turbidity Jackson Units Total		<input type="checkbox"/>	
<input checked="" type="checkbox"/> <i>Cyanide</i>	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
SAMPLE TREATMENT <input type="checkbox"/> None	<input type="checkbox"/> Refrigerate	<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2ml/l		<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)		<input type="checkbox"/>		

REMARKS	
<i>Possible High Sulfates</i>	
<i>0.002 mg/l. Cyanide</i>	

Date *8-5-82*  
Analyst *CB Coloma*  
Reviewed by *W. Neibohm*  
Date reported *8/5/82*



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

**Biological, Chemical and Physical  
ANALYSES of WASTEWATER**

DATE RECEIVED	7/29/82		LAB NO.	WC 323	USER CODE
Collection date	7-28-48 3:00PM		City or Location		
Collected by	SIMPSON		County	SJ	
Owner	OCP		FIELD DETERMINED PARAMETERS		By
Send Final Report to:			<input type="checkbox"/> pH	<input type="checkbox"/> Dissolved Oxygen mg/l	
OIL CONSERVANT & CO. Div P. O. BOX 2088 SANTA FE 87501 PH 8272534			<input type="checkbox"/> Water Temperature, °C	<input type="checkbox"/> Chlorine Residual, mg/l	
		<input type="checkbox"/> Settleable Solids, ml/l	<input type="checkbox"/>		
		OTHER INFORMATION		SAMPLE DA NF-A -10 ml ICED DOWN SINCE COLLECTION NAOH	
STORET NO.:		RIVER BASIN		OWNERSHIP	
Source		<input type="checkbox"/> Rio Grande	<input type="checkbox"/> Pecos	<input type="checkbox"/> Municipal	<input type="checkbox"/> Influent
<input type="checkbox"/> Wastewater Treatment Plant		<input type="checkbox"/> Canadian	<input type="checkbox"/> Gila	<input type="checkbox"/> MDSWA	<input type="checkbox"/> Primary
<input type="checkbox"/> LAGOON		<input type="checkbox"/> Little Colorado	<input type="checkbox"/> San Juan	<input type="checkbox"/> Private	<input type="checkbox"/> Secondary
<input type="checkbox"/> Other:		<input type="checkbox"/> Other - specify:		<input type="checkbox"/> Industrial	<input type="checkbox"/> Effluent
<input type="checkbox"/> Other:				<input type="checkbox"/> Commercial	<input type="checkbox"/> Digester
				<input type="checkbox"/> Other:	<input type="checkbox"/> Trickling Filter
ORGANIC PARAMETERS		NUTRIENTS	PHYSICAL PARAMETERS	OTHER PARAMETERS	HEAVY METAL and TOXIC CHEMICAL PARAMETERS
		mg/l	mg/l	mg/l	
<input type="checkbox"/> BOD - 5 DAY 20 °C		<input type="checkbox"/> Phosphate (As P)	<input type="checkbox"/> Residue Total Non-Filterable (Suspended)	<input type="checkbox"/> Surfactants (As LAS), mg/l	<input type="checkbox"/>
<input type="checkbox"/> COD		<input type="checkbox"/> Nitrogen, Nitrate (As N)	<input type="checkbox"/> Residue Total Filterable (Dissolved)	<input type="checkbox"/> Conductance Micromhos 25 °C	<input type="checkbox"/>
<input type="checkbox"/> TOC		<input type="checkbox"/> Nitrogen Ammonia (As N)	<input type="checkbox"/> Residue Total	<input type="checkbox"/> Color Units	<input type="checkbox"/>
<input type="checkbox"/> DOC		<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)	<input type="checkbox"/> Residue Total Fixed Solids	<input type="checkbox"/> Turbidity Jackson Units Supernatant	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/> Residue Volatile	<input type="checkbox"/> Turbidity Jackson Units Total	<input type="checkbox"/>
<input checked="" type="checkbox"/> CYANIDE		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SAMPLE TREATMENT		<input type="checkbox"/> Refrigerate	<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2ml/l	<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)	<input type="checkbox"/>
<input type="checkbox"/> None					
REMARKS <u>POSSIBLE HIGH SULFATES</u>					
<u>0.006 mg/l e. cyanide</u>					
<u>pH - 9 NOTE</u>					
Date <u>8-5-82</u> Analyst <u>CB Coleman</u> Reviewed by <u>Alt. metzker</u> Date Reported <u>8/5/82</u>					



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

**Biological, Chemical and Physical  
ANALYSES of WASTEWATER**

DATE RECEIVED		7/29/82		LAB NO. WC 324	USER CODE
Collection date	7-28-82 - 4:00PM	City or Location			
Collected by	OSCAR SIMPSON	County		Region	
Owner	OCD	FIELD DETERMINED PARAMETERS			
Send Final Report to:	OIL CONSERVATION D.V. P.O. BOX 2088 SANTA FE N.M. 87501 PH 8272534 ATT OSCAR SIMPSON		By		
	<input type="checkbox"/> pH	<input type="checkbox"/> Dissolved Oxygen mg/l			
	<input type="checkbox"/> Water Temperature, °C	<input type="checkbox"/> Chlorine Residual, mg/l			
	<input type="checkbox"/> Settleable Solids, ml/l	<input type="checkbox"/>			
	OTHER INFORMATION				
	<u>NOTE: HIGH SULFATES PRESENT. DIR COLEMAN</u> <u>SAMPLE IA NF-A-10ML NAOH</u>				
STORET NO.:		RIVER BASIN		OWNERSHIP	LOCATION
<b>Source</b> <input type="checkbox"/> Wastewater Treatment Plant <input type="checkbox"/> LAGOON <input type="checkbox"/> Other: <input type="checkbox"/> Other:		<input type="checkbox"/> Rio Grande <input type="checkbox"/> Canadian <input type="checkbox"/> Little Colorado <input type="checkbox"/> Other - specify:	<input type="checkbox"/> Pecos <input type="checkbox"/> Gila <input type="checkbox"/> San Juan	<input type="checkbox"/> Municipal <input type="checkbox"/> MDSWA <input type="checkbox"/> Private <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Other:	<input type="checkbox"/> Influent <input type="checkbox"/> Primary <input type="checkbox"/> Secondary <input type="checkbox"/> Effluent <input type="checkbox"/> Digester <input type="checkbox"/> Trickling Filter
ORGANIC PARAMETERS	NUTRIENTS		PHYSICAL PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS
	mg/l	mg/l	mg/l	mg/l	
<input type="checkbox"/> BOD - 5 DAY 20 °C	<input type="checkbox"/> Phosphate (As P)		<input type="checkbox"/> Residue Total Non-Filterable (Suspended)		<input type="checkbox"/> Surfactants (As LAS), mg/l
<input type="checkbox"/> COD	<input type="checkbox"/> Nitrogen, Nitrate (As N)		<input type="checkbox"/> Residue Total Filterable (Dissolved)		<input type="checkbox"/> Conductance Micromhos 25 °C
<input type="checkbox"/> TOC	<input type="checkbox"/> Nitrogen Ammonia (As N)		<input type="checkbox"/> Residue Total		<input type="checkbox"/> Color Units
<input type="checkbox"/> DOC	<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)		<input type="checkbox"/> Residue Total Fixed Solids		<input type="checkbox"/> Turbidity Jackson Units Supernatant
<input type="checkbox"/>	<input type="checkbox"/> Residue Volatile		<input type="checkbox"/> Residue Volatile		<input type="checkbox"/> Turbidity Jackson Units Total
<input checked="" type="checkbox"/> CYANIDE	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SAMPLE TREATMENT		<input type="checkbox"/> Refrigerate	<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2ml/l	<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)	<input type="checkbox"/>
None					
REMARKS					
Negative cyanide <u>NOTE</u> <u>pH of sample was 1-2 rather than 12</u>					
Date 8-5-82 Analyst CB Coleman Reviewed by J. Meibohm Date reported 8/5/82					



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)  
700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240Biological, Chemical and Physical  
ANALYSES of WASTEWATER

DATE RECEIVED	7/29/82	LAB NO. WC 325	USER CODE
Collection date	City or Location		
Collected by	S J	Region	
Owner	By		
Send Final Report to:			
OIL CONSERVATION DIV P.O BOX 2088 SANTA FE NM 87501 PH 827 2534	pH	Dissolved Oxygen mg/l	
	Water Temperature, °C	Chlorine Residual, mg/l	
	Settleable Solids, ml/l		
	OTHER INFORMATION SAMPLE IA NF-A-10 mL H <sub>2</sub> SO <sub>4</sub>		

STORET NO.:	RIVER BASIN		OWNERSHIP	LOCATION
	<input type="checkbox"/> Rio Grande	<input type="checkbox"/> Pecos		
<input type="checkbox"/> Canadian	<input type="checkbox"/> Gila	<input type="checkbox"/> MDSWA	<input type="checkbox"/> Primary	
<input type="checkbox"/> Little Colorado	<input type="checkbox"/> San Juan	<input type="checkbox"/> Private	<input type="checkbox"/> Secondary	
<input type="checkbox"/> Other - specify: _____		<input type="checkbox"/> Industrial	<input type="checkbox"/> Effluent	
		<input type="checkbox"/> Commercial	<input type="checkbox"/> Digester	
		<input type="checkbox"/> Other:	<input type="checkbox"/> Trickling Filter	
Source	<input type="checkbox"/> Wastewater Treatment Plant	<input type="checkbox"/> DRAIN		
<input type="checkbox"/> LAGOON	<input type="checkbox"/> LAKE			
<input type="checkbox"/> Other:	<input type="checkbox"/> STREAM			

ORGANIC PARAMETERS	NUTRIENTS		PHYSICAL PARAMETERS		OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
	mg/l	mg/l		mg/l				
<input type="checkbox"/> BOD - 5 DAY 20 °C		<input type="checkbox"/> Phosphate (As P)		<input type="checkbox"/> Residue Total Non-Filterable (Suspended)		<input type="checkbox"/> Surfactants (As LAS), mg/l		
<input type="checkbox"/> COD		<input type="checkbox"/> Nitrogen, Nitrate (As N)		<input type="checkbox"/> Residue Total Filterable (Dissolved)		<input type="checkbox"/> Conductance Micromhos 25 °C		
<input checked="" type="checkbox"/> TOC <i>4.6</i>		<input type="checkbox"/> Nitrogen Ammonia (As N)		<input type="checkbox"/> Residue Total		<input type="checkbox"/> Color Units		
<input type="checkbox"/> DOC		<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)		<input type="checkbox"/> Residue Total Fixed Solids		<input type="checkbox"/> Turbidity Jackson Units Supernatant		
<input checked="" type="checkbox"/> SULFATES		<input type="checkbox"/>		<input type="checkbox"/> Residue Volatile		<input type="checkbox"/> Turbidity Jackson Units Total		
				<input type="checkbox"/>		<input type="checkbox"/>		
SAMPLE TREATMENT <input type="checkbox"/> None	<input type="checkbox"/> Refrigerate		<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2ml/l		<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)		<input type="checkbox"/>	

REMARKS	

<input type="checkbox"/>	Date
<input type="checkbox"/>	Analyst
<input type="checkbox"/>	Reviewed by <i>Alvarez</i>
<input type="checkbox"/>	Date reported <i>8/19/82</i>



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

**Biological, Chemical and Physical  
ANALYSES of WASTEWATER**

DATE RECEIVED	7/29/82	LAB NO.	WC 326	USER CODE
Collection date	7-28-82 - 3:00 PM	City or Location		
Collected by	SIMPSON	County	Region	
Owner	OCD	FIELD DETERMINED PARAMETERS		
Send Final Report to:	DIX CONSERVATION D.V. P.O. BOX 2088 SANTA FE NM 87501 1H8272574	pH	Dissolved Oxygen mg/l	
		Water Temperature, °C	Chlorine Residual, mg/l	
		Settleable Solids, ml/l		
		OTHER INFORMATION SAMPLE DA NF-A-10 mL H <sub>2</sub> SO <sub>4</sub> ICED DOWN SINCE COLLECTION		

STORET NO.:	RIVER BASIN	OWNERSHIP	LOCATION	
<b>Source</b> <input type="checkbox"/> Wastewater Treatment Plant <input type="checkbox"/> LAGOON <input type="checkbox"/> Other: <input type="checkbox"/> Other:	<input type="checkbox"/> Rio Grande <input type="checkbox"/> Canadian <input type="checkbox"/> Little Colorado <input type="checkbox"/> Other - specify:	<input type="checkbox"/> Pecos <input type="checkbox"/> Gila <input type="checkbox"/> San Juan	<input type="checkbox"/> Municipal <input type="checkbox"/> MDSWA <input type="checkbox"/> Private <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Other:	<input type="checkbox"/> Influent <input type="checkbox"/> Primary <input type="checkbox"/> Secondary <input type="checkbox"/> Effluent <input type="checkbox"/> Digester <input type="checkbox"/> Trickling Filter

ORGANIC PARAMETERS	NUTRIENTS		PHYSICAL PARAMETERS	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS
	mg/l	mg/l		mg/l		
<input type="checkbox"/> BOD - 5 DAY 20 °C		<input type="checkbox"/> Phosphate (As P)	<input type="checkbox"/> Residue Total Non-Filterable (Suspended)	<input type="checkbox"/> Surfactants (As LAS), mg/l	<input type="checkbox"/>	
<input type="checkbox"/> COD		<input type="checkbox"/> Nitrogen, Nitrate (As N)	<input type="checkbox"/> Residue Total Filterable (Dissolved)	<input type="checkbox"/> Conductance Micromhos 25 °C	<input type="checkbox"/>	
<input checked="" type="checkbox"/> TOC <i>4/8</i>		<input type="checkbox"/> Nitrogen Ammonia (As N)	<input type="checkbox"/> Residue Total	<input type="checkbox"/> Color Units	<input type="checkbox"/>	
<input type="checkbox"/> DOC		<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)	<input type="checkbox"/> Residue Total Fixed Solids	<input type="checkbox"/> Turbidity Jackson Units Supernatant	<input type="checkbox"/>	
			<input type="checkbox"/> Residue Volatile	<input type="checkbox"/> Turbidity Jackson Units Total	<input type="checkbox"/>	
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
SAMPLE TREATMENT <input type="checkbox"/> None	<input type="checkbox"/> Refrigerate		<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2ml/l	<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)	<input type="checkbox"/>	

REMARKS	<input type="checkbox"/>
	Date
	Analyst
	Reviewed by <i>Alvarez</i>
	Date reported <i>8/9/82</i>



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

# Biological, Chemical and Physical ANALYSES of WASTEWATER

DATE RECEIVED <i>7/29/82</i>		LAB NO. <i>WC 327</i>		USER CODE	
Collection date	7-28-82 6:00 PM	City or Location			
Collected by	<i>Simpson</i>	County	<i>SOT</i>	Region	
Owner	<i>OCD</i>	FIELD DETERMINED PARAMETERS		By	
Send Final Report to:	<i>O.L. CONSERVATION Div. P.O.BOX 2088 SANTA FE N.M. 87501</i>	<input type="checkbox"/> pH		<input type="checkbox"/> Dissolved Oxygen mg/l	
		<input type="checkbox"/> Water Temperature, °C		<input type="checkbox"/> Chlorine Residual, mg/l	
		<input type="checkbox"/> Settleable Solids, ml/l		<input type="checkbox"/>	
		OTHER INFORMATION <i>SAMPLE CA NF-A-10ml H2SO4</i>			
STORET NO.:		RIVER BASIN		OWNERSHIP	LOCATION
<b>Source</b> <input type="checkbox"/> Wastewater Treatment Plant <input type="checkbox"/> LAGOON <input type="checkbox"/> Other: <input type="checkbox"/> Other:		<input type="checkbox"/> Rio Grande <input type="checkbox"/> Canadian <input type="checkbox"/> Little Colorado <input type="checkbox"/> Other - specify:	<input type="checkbox"/> Pecos <input type="checkbox"/> Gila <input type="checkbox"/> San Juan	<input type="checkbox"/> Municipal <input type="checkbox"/> MDSWA <input type="checkbox"/> Private <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Other:	<input type="checkbox"/> Influent <input type="checkbox"/> Primary <input type="checkbox"/> Secondary <input type="checkbox"/> Effluent <input type="checkbox"/> Digester <input type="checkbox"/> Trickling Filter
<b>ORGANIC PARAMETERS</b> <input type="checkbox"/> mg/l		<b>NUTRIENTS</b> <input type="checkbox"/> mg/l	<b>PHYSICAL PARAMETERS</b> <input type="checkbox"/> mg/l	<b>OTHER PARAMETERS</b>	<b>HEAVY METAL and TOXIC CHEMICAL PARAMETERS</b>
<input type="checkbox"/> BOD - 5 DAY 20 °C		<input type="checkbox"/> Phosphate (As P)	<input type="checkbox"/> Residue Total Non-Filterable (Suspended)	<input type="checkbox"/> Surfactants (As LAS), mg/l	<input type="checkbox"/>
<input type="checkbox"/> COD		<input type="checkbox"/> Nitrogen, Nitrate (As N)	<input type="checkbox"/> Residue Total Filterable (Dissolved)	<input type="checkbox"/> Conductance Micromhos 25 °C	<input type="checkbox"/>
<input checked="" type="checkbox"/> TOC <i>5.4</i>		<input type="checkbox"/> Nitrogen Ammonia (As N)	<input type="checkbox"/> Residue Total	<input type="checkbox"/> Color Units	<input type="checkbox"/>
<input type="checkbox"/> DOC		<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)	<input type="checkbox"/> Residue Total Fixed Solids	<input type="checkbox"/> Turbidity Jackson Units Supernatant	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/> Residue Volatile	<input type="checkbox"/> Turbidity Jackson Units Total	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SAMPLE TREATMENT <input type="checkbox"/> None		<input type="checkbox"/> Refrigerate	<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2ml/l	<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)	<input type="checkbox"/>
REMARKS					<input type="checkbox"/>
					Date <i>8/19/82</i>
					Analyst <i>Alvarez</i>
					Reviewed by <i>Alvarez</i> Date reported <i>8/19/82</i>



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

# Biological, Chemical and Physical ANALYSES of WASTEWATER

DATE RECEIVED	<u>7/29/82</u>	LAB NO. <u>WL 328</u>	USER CODE
Collection date	City or Location		
Collected by	County <u>SJ</u>	Region	
Owner <u>OCD</u>	FIELD DETERMINED PARAMETERS		
Send Final Report to:  <u>O.L. CONSERVATION D.V.</u> <u>P.O. BOX 2088</u> <u>SANTA FE NM 87501</u>	<input type="checkbox"/> pH	<input type="checkbox"/> Dissolved Oxygen mg/l	
	<input type="checkbox"/> Water Temperature, °C	<input type="checkbox"/> Chlorine Residual, mg/l	
	<input type="checkbox"/> Settleable Solids, ml/l	<input type="checkbox"/>	
OTHER INFORMATION SAMPLE <u>JA NF-A-10ML H2SO4</u>			

STORE NO.:	RIVER BASIN			OWNERSHIP	LOCATION
	<input type="checkbox"/> Rio Grande	<input type="checkbox"/> Pecos	<input type="checkbox"/> Municipal		
Source  <input type="checkbox"/> Wastewater Treatment Plant <input type="checkbox"/> LAGOON <input type="checkbox"/> Other: <input type="checkbox"/> Other:	<input type="checkbox"/> Canadian	<input type="checkbox"/> Gila	<input type="checkbox"/> MDSWA		
	<input type="checkbox"/> Little Colorado	<input type="checkbox"/> San Juan	<input type="checkbox"/> Private		
	<input type="checkbox"/> Other specify:				
	<input type="checkbox"/>				

ORGANIC PARAMETERS	NUTRIENTS		PHYSICAL PARAMETERS		OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	
<input type="checkbox"/> BOD - 5 DAY 20 °C	<input type="checkbox"/> Phosphate (As P)		<input type="checkbox"/> Residue Total Non-Filterable (Suspended)		<input type="checkbox"/> Surfactants (As LAS), mg/l		<input type="checkbox"/>	
<input type="checkbox"/> COD	<input type="checkbox"/> Nitrogen, Nitrate (As N)		<input type="checkbox"/> Residue Total Filterable (Dissolved)		<input type="checkbox"/> Conductance Micromhos 25 °C		<input type="checkbox"/>	
<input checked="" type="checkbox"/> TOC <u>98</u>	<input type="checkbox"/> Nitrogen Ammonia (As N)		<input type="checkbox"/> Residue Total		<input type="checkbox"/> Color Units		<input type="checkbox"/>	
<input type="checkbox"/> DOC	<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)		<input type="checkbox"/> Residue Total Fixed Solids		<input type="checkbox"/> Turbidity Jackson Units Supernatant		<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/> Residue Volatile		<input type="checkbox"/> Turbidity Jackson Units Total		<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
SAMPLE TREATMENT <input type="checkbox"/> None	<input type="checkbox"/> Refrigerate		<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2ml/l		<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)		<input type="checkbox"/>	

REMARKS		Date
		Analyst
		Reviewed by <u>All Meibohm</u>
		Date reported <u>8/9/82</u>



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

# Biological, Chemical and Physical ANALYSES of WASTEWATER

DATE RECEIVED	<u>7/29/82</u>	LAB NO. <u>WC 329</u>	USER CODE
Collection date	City or Location		
Collected by	County		
Owner	Region		
<b>FIELD DETERMINED PARAMETERS</b>			
Send Final Report to:  <i>OIL CONSERVATION DIV P.O BOX 2088 SANTA FE N.M. 87501</i>	<input type="checkbox"/> pH	<input type="checkbox"/> Dissolved Oxygen mg/l	
	<input type="checkbox"/> Water Temperature, °C	<input type="checkbox"/> Chlorine Residual, mg/l	
	<input type="checkbox"/> Settleable Solids, ml/l	<input type="checkbox"/>	
OTHER INFORMATION <i>SAMPLE LA NF-A-10ML H<sub>2</sub>SO<sub>4</sub></i>			

STORET NO.:	RIVER BASIN			OWNERSHIP	LOCATION
	<input type="checkbox"/> Rio Grande	<input type="checkbox"/> Pecos	<input type="checkbox"/> Municipal		
Source  <input type="checkbox"/> Wastewater Treatment Plant <input type="checkbox"/> LAGOON <input type="checkbox"/> Other: <input type="checkbox"/> Other:	<input type="checkbox"/> Canadian	<input type="checkbox"/> Gila	<input type="checkbox"/> MDSWA	<input type="checkbox"/> Primary	
	<input type="checkbox"/> Little Colorado	<input type="checkbox"/> San Juan	<input type="checkbox"/> Private	<input type="checkbox"/> Secondary	
	<input type="checkbox"/> Other - specify:		<input type="checkbox"/> Industrial	<input type="checkbox"/> Effluent	
			<input type="checkbox"/> Commercial	<input type="checkbox"/> Digester	
		<input type="checkbox"/> Other:	<input type="checkbox"/> Trickling Filter		

ORGANIC PARAMETERS	NUTRIENTS		PHYSICAL PARAMETERS		OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
	mg/l	mg/l	mg/l	mg/l				
<input type="checkbox"/> BOD - 5 DAY 20 °C	<input type="checkbox"/> Phosphate (As P)	<input type="checkbox"/> Residue Total Non-Filterable (Suspended)	<input type="checkbox"/> Surfactants (As LAS), mg/l	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> COD	<input type="checkbox"/> Nitrogen, Nitrate (As N)	<input type="checkbox"/> Residue Total Filterable (Dissolved)	<input type="checkbox"/> Conductance Micromhos 25 °C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/> TOC	<input type="checkbox"/> Nitrogen Ammonia (As N)	<input type="checkbox"/> Residue Total	<input type="checkbox"/> Color Units	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> DOC	<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)	<input type="checkbox"/> Residue Total Fixed Solids	<input type="checkbox"/> Turbidity Jackson Units Supernatant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Residue Volatile	<input type="checkbox"/> Turbidity Jackson Units Total	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
SAMPLE TREATMENT <input type="checkbox"/> None	<input type="checkbox"/> Refrigerate		<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2ml/l	<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)		<input type="checkbox"/>	<input type="checkbox"/>	

REMARKS	<input type="checkbox"/>	<input type="checkbox"/>
	Date	
	Analyst	
	Reviewed by <i>John McElroy</i>	
Date reported <i>8/9/82</i>		



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

# Biological, Chemical and Physical ANALYSES of WASTEWATER

DATE RECEIVED	7/29/82	LAB NO. WC 330	USER CODE						
Collection date	City or Location								
Collected by	County Region								
Owner	FIELD DETERMINED PARAMETERS By								
Send Final Report to:  Oil CONSERVATION Div. P.O BOX 2088 SANTA FE N.M. 87501 NM 8272534	<input type="checkbox"/>	pH	<input type="checkbox"/> Dissolved Oxygen mg/l						
	<input type="checkbox"/>	Water Temperature, °C	<input type="checkbox"/> Chlorine Residual, mg/l						
	<input type="checkbox"/>	Settleable Solids, ml/l	<input type="checkbox"/>						
OTHER INFORMATION		SAMPLE IA NF-NA							
STORET NO.:		RIVER BASIN							
Source		<input type="checkbox"/> Rio Grande <input type="checkbox"/> Pecos <input type="checkbox"/> Canadian <input type="checkbox"/> Gila <input type="checkbox"/> Little Colorado <input type="checkbox"/> San Juan <input type="checkbox"/> Other - specify:	<input type="checkbox"/> Municipal <input type="checkbox"/> MDSWA <input type="checkbox"/> Private <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Other:						
<input type="checkbox"/> Wastewater Treatment Plant <input type="checkbox"/> LAGOON <input type="checkbox"/> Other: <input type="checkbox"/> Other:		<input type="checkbox"/> DRAIN <input type="checkbox"/> LAKE <input type="checkbox"/> STREAM	<input type="checkbox"/> Influent <input type="checkbox"/> Primary <input type="checkbox"/> Secondary <input type="checkbox"/> Effluent <input type="checkbox"/> Digester <input type="checkbox"/> Trickling Filter						
ORGANIC PARAMETERS		NUTRIENTS		PHYSICAL PARAMETERS		OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
		mg/l	mg/l		mg/l				
<input type="checkbox"/> BOD - 5 DAY 20 °C			<input type="checkbox"/> Phosphate (As P)	<input type="checkbox"/> Residue Total Non-Filterable (Suspended)		<input type="checkbox"/> Surfactants (As LAS), mg/l		<input type="checkbox"/>	
<input type="checkbox"/> COD			<input type="checkbox"/> Nitrogen, Nitrate (As N)	<input checked="" type="checkbox"/> Residue Total Filterable (Dissolved) 184		<input type="checkbox"/> Conductance Micromhos 25 °C		<input type="checkbox"/>	
<input type="checkbox"/> TOC			<input type="checkbox"/> Nitrogen Ammonia (As N)	<input type="checkbox"/> Residue Total		<input type="checkbox"/> Color Units		<input type="checkbox"/>	
<input type="checkbox"/> DOC			<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)	<input type="checkbox"/> Residue Total Fixed Solids		<input type="checkbox"/> Turbidity Jackson Units Supernatant		<input type="checkbox"/>	
<input type="checkbox"/>			<input type="checkbox"/> Nitrogen Volatile	<input type="checkbox"/> Residue Volatile		<input type="checkbox"/> Turbidity Jackson Units Total		<input type="checkbox"/>	
<input checked="" type="checkbox"/> SO <sub>4</sub> = 57.3		<input checked="" type="checkbox"/> Boron 0.03	<input checked="" type="checkbox"/> CHLORIDES 3.9					<input type="checkbox"/>	
SAMPLE TREATMENT		<input type="checkbox"/> Refrigerate	<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2ml/l		<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)			<input type="checkbox"/>	
REMARKS								<input type="checkbox"/>	
								Date	
								Analyst	
								Reviewed by	<i>Ollie Neibohm</i>
								Date reported	8/9/82



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

**Biological, Chemical and Physical  
ANALYSES of WASTEWATER**

DATE RECEIVED	7/29/82	LAB NO. WC 331	USER CODE
Collection date	7-28-82 - 3:00PM	City or Location	
Collected by	SIMPSON	County	ST
Owner	OCD	FIELD DETERMINED PARAMETERS	
Send Final Report to:	Oil Conservation Div. P.O. BOX 2088 SANTA FE NM 87501		
	<input type="checkbox"/> pH <input type="checkbox"/> Water Temperature, °C <input type="checkbox"/> Settleable Solids, ml/l	<input type="checkbox"/> Dissolved Oxygen mg/l <input type="checkbox"/> Chlorine Residual, mg/l <input type="checkbox"/>	
	OTHER INFORMATION SAMPLE DA NF-NA ICED DOWN SINCE COLLECTED		

STORE NO.:	RIVER BASIN	OWNERSHIP	LOCATION
<b>Source</b> <input type="checkbox"/> Wastewater Treatment Plant <input type="checkbox"/> LAGOON <input type="checkbox"/> Other: <input type="checkbox"/> Other:	<input type="checkbox"/> Rio Grande <input type="checkbox"/> Canadian <input type="checkbox"/> Little Colorado <input type="checkbox"/> Other - specify:	<input type="checkbox"/> Pecos <input type="checkbox"/> Gila <input type="checkbox"/> San Juan	<input type="checkbox"/> Municipal <input type="checkbox"/> MDSWA <input type="checkbox"/> Private <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Other:
	<input type="checkbox"/> DRAIN <input type="checkbox"/> LAKE <input type="checkbox"/> STREAM		<input type="checkbox"/> Influent <input type="checkbox"/> Primary <input type="checkbox"/> Secondary <input type="checkbox"/> Effluent <input type="checkbox"/> Digester <input type="checkbox"/> Trickling Filter

ORGANIC PARAMETERS	NUTRIENTS		PHYSICAL PARAMETERS		OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	
BOD - 5 DAY 20 °C	<input type="checkbox"/>	Phosphate (As P)	<input type="checkbox"/>	Residue Total Non-Filterable (Suspended)	<input type="checkbox"/>	Surfactants (As LAS), mg/l	<input type="checkbox"/>	
COD	<input type="checkbox"/>	Nitrogen, Nitrate (As N)	<input checked="" type="checkbox"/>	Residue Total Filterable (Dissolved) 26.76	<input type="checkbox"/>	Conductance Micromhos 25 °C	<input type="checkbox"/>	
TOC	<input type="checkbox"/>	Nitrogen Ammonia (As N)	<input type="checkbox"/>	Residue Total	<input type="checkbox"/>	Color Units	<input type="checkbox"/>	
DOC	<input type="checkbox"/>	Nitrogen Total Kjeldahl (As N)	<input type="checkbox"/>	Residue Total Fixed Solids	<input type="checkbox"/>	Turbidity Jackson Units Supernatant	<input type="checkbox"/>	
	<input type="checkbox"/>		<input type="checkbox"/>	Residue Volatile	<input type="checkbox"/>	Turbidity Jackson Units Total	<input type="checkbox"/>	
BORON(B) 0.35 CL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	150+ 504	454.2	<input type="checkbox"/>		<input type="checkbox"/>	
SAMPLE TREATMENT <input type="checkbox"/> None	<input type="checkbox"/> Refrigerate		<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2ml/l		<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)		<input type="checkbox"/>	

REMARKS	

<input type="checkbox"/>	Date
<input type="checkbox"/>	Analyst
<input type="checkbox"/>	Reviewed by <i>W. Meister</i>
<input type="checkbox"/>	Date reported 8/9/82



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

**Biological, Chemical and Physical  
ANALYSES of WASTEWATER**

DATE RECEIVED	7/29/82	LAB NO.	WC 532	USER CODE
Collection date	7-28-82 - 6:0	City or Location		
Collected by	SIMPSON	County	Region	
Owner	OCD	FIELD DETERMINED PARAMETERS		
Send Final Report to:	OIL CONSERVATION DIV P.O. BOX 2088 SANTA FE NM 87501			
	<input type="checkbox"/> pH <input type="checkbox"/> Dissolved Oxygen mg/l <input type="checkbox"/> Water Temperature, °C <input type="checkbox"/> Chlorine Residual, mg/l <input type="checkbox"/> Settleable Solids, ml/l <input type="checkbox"/>			
	OTHER INFORMATION: SAMPLE CANARY - ICED DOWN			

STORE NO.:	RIVER BASIN	OWNERSHIP	LOCATION
<b>Source</b> <input type="checkbox"/> Wastewater Treatment Plant <input type="checkbox"/> LAGOON <input type="checkbox"/> Other: <input type="checkbox"/> Other:	<input type="checkbox"/> Rio Grande <input type="checkbox"/> Pecos <input type="checkbox"/> Canadian <input type="checkbox"/> Gila <input type="checkbox"/> Little Colorado <input type="checkbox"/> San Juan <input type="checkbox"/> Other - specify:	<input type="checkbox"/> Municipal <input type="checkbox"/> MDSWA <input type="checkbox"/> Private <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Other:	<input type="checkbox"/> Influent <input type="checkbox"/> Primary <input type="checkbox"/> Secondary <input type="checkbox"/> Effluent <input type="checkbox"/> Digester <input type="checkbox"/> Trickling Filter

ORGANIC PARAMETERS	NUTRIENTS		PHYSICAL PARAMETERS		OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	
<input type="checkbox"/> BOD - 5 DAY 20 °C		<input type="checkbox"/> Phosphate (As P)		<input type="checkbox"/> Residue Total Non-Filterable (Suspended)		<input type="checkbox"/> Surfactants (As LAS), mg/l		<input type="checkbox"/>
<input type="checkbox"/> COD		<input type="checkbox"/> Nitrogen, Nitrate (As N)		<input checked="" type="checkbox"/> Residue Total Filterable (Dissolved) 186		<input type="checkbox"/> Conductance Micromhos 25 °C		<input type="checkbox"/>
<input type="checkbox"/> TOC		<input type="checkbox"/> Nitrogen Ammonia (As N)		<input type="checkbox"/> Residue Total		<input type="checkbox"/> Color Units		<input type="checkbox"/>
<input type="checkbox"/> DOC		<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)		<input type="checkbox"/> Residue Total Fixed Solids		<input type="checkbox"/> Turbidity Jackson Units Supernatant		<input type="checkbox"/>
<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/> Residue Volatile		<input type="checkbox"/> Turbidity Jackson Units Total		<input type="checkbox"/>
<input checked="" type="checkbox"/> SO <sub>4</sub> 56.7	<input checked="" type="checkbox"/> BORON 0.07	<input checked="" type="checkbox"/> CHLORIDES 6.5						<input type="checkbox"/>
SAMPLE TREATMENT <input type="checkbox"/> None	<input type="checkbox"/> Refrigerate		<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2ml/l		<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)		<input type="checkbox"/>	

REMARKS	<input type="checkbox"/>
	Date
	Analyst
	Reviewed by <i>Al Smith</i>
	Date reported 8/9/82



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)  
700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240Biological, Chemical and Physical  
ANALYSES of WASTEWATER

DATE RECEIVED	7/29/82	LAB NO.	W-333	USER CODE
Collection date	City or Location			
Collected by	SIMPSON	County	SJ	
Owner	OCD	FIELD DETERMINED PARAMETERS		By
Send Final Report to: <i>RIO CONSERVATION &amp; DIV. P.O BOX 2088 SANTA FE NM 87501</i>	<input type="checkbox"/> pH		<input type="checkbox"/> Dissolved Oxygen mg/l	
	<input type="checkbox"/> Water Temperature, °C		<input type="checkbox"/> Chlorine Residual, mg/l	
	<input type="checkbox"/> Settleable Solids, ml/l		<input type="checkbox"/>	
OTHER INFORMATION		SAMPLE OA (NFAA) <del>██████████</del>		

STORE NO.:	RIVER BASIN	OWNERSHIP	LOCATION
<b>Source</b> <input type="checkbox"/> Wastewater Treatment Plant <input type="checkbox"/> LAGOON <input type="checkbox"/> Other: <input type="checkbox"/> Other:	<input type="checkbox"/> Rio Grande <input type="checkbox"/> Canadian <input type="checkbox"/> Little Colorado <input type="checkbox"/> Other - specify:	<input type="checkbox"/> Pecos <input type="checkbox"/> Gila <input type="checkbox"/> San Juan	<input type="checkbox"/> Municipal <input type="checkbox"/> MDSWA <input type="checkbox"/> Private <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Other:
	<input type="checkbox"/> Influent <input type="checkbox"/> Primary <input type="checkbox"/> Secondary <input type="checkbox"/> Effluent <input type="checkbox"/> Digester <input type="checkbox"/> Trickling Filter		

ORGANIC PARAMETERS		NUTRIENTS		PHYSICAL PARAMETERS		OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
	mg/l		mg/l		mg/l		mg/l		
<input type="checkbox"/> BOD - 5 DAY 20 °C		<input type="checkbox"/> Phosphate (As P)		<input type="checkbox"/> Residue Total Non-Filterable (Suspended)		<input type="checkbox"/> Surfactants (As LAS), mg/l		<input type="checkbox"/>	
<input type="checkbox"/> COD		<input type="checkbox"/> Nitrogen, Nitrate (As N)		<input checked="" type="checkbox"/> Residue Total Filterable (Dissolved)	1549	<input type="checkbox"/> Conductance Micromhos 25 °C		<input type="checkbox"/>	
<input type="checkbox"/> TOC		<input type="checkbox"/> Nitrogen Ammonia (As N)		<input type="checkbox"/> Residue Total		<input type="checkbox"/> Color Units		<input type="checkbox"/>	
<input type="checkbox"/> DOC		<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)		<input type="checkbox"/> Residue Total Fixed Solids		<input type="checkbox"/> Turbidity Jackson Units Supernatant		<input type="checkbox"/>	
<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/> Residue Volatile		<input type="checkbox"/> Turbidity Jackson Units Total		<input type="checkbox"/>	
<input checked="" type="checkbox"/> SO <sub>4</sub>	151.8	<input checked="" type="checkbox"/> BORON	0.84	<input checked="" type="checkbox"/> CL	203.5	<input type="checkbox"/>		<input type="checkbox"/>	
SAMPLE TREATMENT <input type="checkbox"/> None		<input type="checkbox"/> Refrigerate		<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2ml/l		<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)		<input type="checkbox"/>	

REMARKS		<input type="checkbox"/>
		Date
		Analyst
		Reviewed by <i>John</i>
		Date reported 8/9/82



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

**BIOLOGICAL, CHEMICAL AND PHYSICAL  
ANALYSES OF WASTEWATER**

DATE RECEIVED	7/29/82	LAB NO.	WNC 334	USER CODE
Collection date	7-28-82 7:00 PM	City or Location		
Collected by	SIMPSON	County	SJ	
Owner	OCO	FIELD DETERMINED PARAMETERS		By
Send Final Report to:	OIL CONSERVATION D. V P.O. BOX 2088 SANTA FE NM 87501			
	<input type="checkbox"/> pH	<input type="checkbox"/> Dissolved Oxygen mg/l		
	<input type="checkbox"/> Water Temperature, °C	<input type="checkbox"/> Chlorine Residual, mg/l		
	<input type="checkbox"/> Settleable Solids, ml/l	<input type="checkbox"/>		
	OTHER INFORMATION SAMPLE LA NF-NA			

STORE NO.:	RIVER BASIN	OWNERSHIP	LOCATION
<b>Source</b> <input type="checkbox"/> Wastewater Treatment Plant <input type="checkbox"/> LAGOON <input type="checkbox"/> Other: <input type="checkbox"/> Other:	<input type="checkbox"/> Rio Grande <input type="checkbox"/> Canadian <input type="checkbox"/> Little Colorado <input type="checkbox"/> Other - specify:	<input type="checkbox"/> Pecos <input type="checkbox"/> Gila <input type="checkbox"/> San Juan	<input type="checkbox"/> Municipal <input type="checkbox"/> MDSWA <input type="checkbox"/> Private <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Other:
			<input type="checkbox"/> Influent <input type="checkbox"/> Primary <input type="checkbox"/> Secondary <input type="checkbox"/> Effluent <input type="checkbox"/> Digester <input type="checkbox"/> Trickling Filter

ORGANIC PARAMETERS	NUTRIENTS	PHYSICAL PARAMETERS	OTHER PARAMETERS	HEAVY METAL and TOXIC CHEMICAL PARAMETERS
mg/l	mg/l	mg/l	mg/l	
<input type="checkbox"/> BOD - 5 DAY 20 °C	<input type="checkbox"/> Phosphate (As P)	<input type="checkbox"/> Residue Total Non-Filterable (Suspended)	<input type="checkbox"/> Surfactants (As LAS), mg/l	<input type="checkbox"/>
<input type="checkbox"/> COD	<input type="checkbox"/> Nitrogen, Nitrate (As N)	<input checked="" type="checkbox"/> Residue Total Filterable (Dissolved) 906	<input type="checkbox"/> Conductance Micromhos 25 °C	<input type="checkbox"/>
<input type="checkbox"/> TOC	<input type="checkbox"/> Nitrogen Ammonia (As N)	<input type="checkbox"/> Residue Total	<input type="checkbox"/> Color Units	<input type="checkbox"/>
<input type="checkbox"/> DOC	<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)	<input type="checkbox"/> Residue Total Fixed Solids	<input type="checkbox"/> Turbidity Jackson Units Supernatant	<input type="checkbox"/>
<input checked="" type="checkbox"/> SO <sub>4</sub> 417.1	<input type="checkbox"/>	<input type="checkbox"/> Residue Volatile	<input type="checkbox"/> Turbidity Jackson Units Total	<input type="checkbox"/>
<input checked="" type="checkbox"/> CL 38.2	<input checked="" type="checkbox"/> BORON 0.29	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SAMPLE TREATMENT <input type="checkbox"/> None	<input type="checkbox"/> Refrigerate	<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2ml/l	<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)	<input type="checkbox"/>

REMARKS	<input type="checkbox"/>
	Date
	Analyst
	Reviewed by
	Date reported
	8/9/82



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

**Biological, Chemical and Physical  
ANALYSES of WASTEWATER**

DATE RECEIVED	7/29/82	LAB NO. WC 335	USER CODE
Collection date	City or Location		
Collected by	SIMOSOAY	County	Region
Owner	OCD	FIELD DETERMINED PARAMETERS	
Send Final Report to:	<input type="checkbox"/> pH <input type="checkbox"/> Dissolved Oxygen mg/l <input type="checkbox"/> Water Temperature, °C <input type="checkbox"/> Chlorine Residual, mg/l <input type="checkbox"/> Settleable Solids, ml/l <input type="checkbox"/>		
<i>D-L CONSERVATION DIV P.O. BOX 2088 SANTA FE N.M. 87501</i>		OTHER INFORMATION SAMPLE KA NF-NA	

STORE NO.:	RIVER BASIN	OWNERSHIP	LOCATION
<b>Source</b> <input type="checkbox"/> Wastewater Treatment Plant <input type="checkbox"/> LAGOON <input type="checkbox"/> Other: <input type="checkbox"/> Other:	<input type="checkbox"/> Rio Grande <input type="checkbox"/> Canadian <input type="checkbox"/> Little Colorado <input type="checkbox"/> Other - specify:	<input type="checkbox"/> Pecos <input type="checkbox"/> Gila <input type="checkbox"/> San Juan	<input type="checkbox"/> Municipal <input type="checkbox"/> MDSWA <input type="checkbox"/> Private <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Other:
	<input type="checkbox"/> DRAIN <input type="checkbox"/> LAKE <input type="checkbox"/> STREAM		
	<hr/>		

ORGANIC PARAMETERS	NUTRIENTS		PHYSICAL PARAMETERS	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS
	mg/l	mg/l		mg/l	mg/l	
<input type="checkbox"/> BOD - 5 DAY 20 °C		<input type="checkbox"/> Phosphate (As P)	<input type="checkbox"/> Residue Total Non-Filterable (Suspended)	<input type="checkbox"/> Surfactants (As LAS), mg/l	<input type="checkbox"/>	
<input type="checkbox"/> COD		<input type="checkbox"/> Nitrogen, Nitrate (As N)	<input checked="" type="checkbox"/> Residue Total Filterable (Dissolved) <i>10987</i>	<input type="checkbox"/> Conductance Micromhos 25 °C	<input type="checkbox"/>	
<input type="checkbox"/> TOC		<input type="checkbox"/> Nitrogen Ammonia (As N)	<input type="checkbox"/> Residue Total	<input type="checkbox"/> Color Units	<input type="checkbox"/>	
<input type="checkbox"/> DOC		<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)	<input type="checkbox"/> Residue Total Fixed Solids	<input type="checkbox"/> Turbidity Jackson Units Supernatant	<input type="checkbox"/>	
<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/> Residue Volatile	<input type="checkbox"/> Turbidity Jackson Units Total	<input type="checkbox"/>	
<input checked="" type="checkbox"/> SO <sub>4</sub> <i>6977</i>	<input checked="" type="checkbox"/> CL <i>18.3</i>	<input checked="" type="checkbox"/> <i>13.0204</i>	<input type="checkbox"/> <i>0.66</i>	<input type="checkbox"/>	<input type="checkbox"/>	
SAMPLE TREATMENT <input type="checkbox"/> None	<input type="checkbox"/> Refrigerate		<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2ml/l	<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)	<input type="checkbox"/>	

REMARKS	<input type="checkbox"/>
	Date
	Analyst
	Reviewed by <i>John Meibom</i>
	Date reported <i>8/8/82</i>



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

# Biological, Chemical and Physical ANALYSES of WASTEWATER

DATE RECEIVED	7/29/82	LAB NO. WC 336	USER CODE
Collection date	City or Location		
Collected by	County		
Owner	Region		
<b>FIELD DETERMINED PARAMETERS</b>			
Send Final Report to:  DIX CONSERVATION DIV P.O. BOX 2088 SANTA FE NM 87501	<input type="checkbox"/> pH	<input type="checkbox"/> Dissolved Oxygen mg/l	
	<input type="checkbox"/> Water Temperature, °C	<input type="checkbox"/> Chlorine Residual, mg/l	
	<input type="checkbox"/> Settleable Solids, ml/l	<input type="checkbox"/>	
<b>OTHER INFORMATION</b>			
SAMPLE KA (NF-A) 10 AM H2504			

STORET NO.:	RIVER BASIN			OWNERSHIP	LOCATION
	<input type="checkbox"/> Rio Grande	<input type="checkbox"/> Pecos	<input type="checkbox"/> Municipal		
Source  <input type="checkbox"/> Wastewater Treatment Plant <input type="checkbox"/> LAGOON <input type="checkbox"/> Other: <input type="checkbox"/> Other:	<input type="checkbox"/> Canadian	<input type="checkbox"/> Gila	<input type="checkbox"/> MDSWA	<input type="checkbox"/> Primary	
	<input type="checkbox"/> Little Colorado	<input type="checkbox"/> San Juan	<input type="checkbox"/> Private	<input type="checkbox"/> Secondary	
	<input type="checkbox"/> Other - specify:		<input type="checkbox"/> Industrial	<input type="checkbox"/> Effluent	
			<input type="checkbox"/> Commercial	<input type="checkbox"/> Digester	
		<input type="checkbox"/> Other:	<input type="checkbox"/> Trickling Filter		

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS		mg/l	OTHER PARAMETERS	HEAVY METAL and TOXIC CHEMICAL PARAMETERS
<input type="checkbox"/> BOD - 5 DAY 20 °C		<input type="checkbox"/> Phosphate (As P)		<input type="checkbox"/> Residue Total Non-Filterable (Suspended)			<input type="checkbox"/> Surfactants (As LAS), mg/l	
<input type="checkbox"/> COD		<input type="checkbox"/> Nitrogen, Nitrate (As N)		<input type="checkbox"/> Residue Total Filterable (Dissolved)			<input type="checkbox"/> Conductance Micromhos 25 °C	
<input checked="" type="checkbox"/> TOC	9.6	<input type="checkbox"/> Nitrogen Ammonia (As N)		<input type="checkbox"/> Residue Total			<input type="checkbox"/> Color Units	
<input type="checkbox"/> DOC		<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)		<input type="checkbox"/> Residue Total Fixed Solids			<input type="checkbox"/> Turbidity Jackson Units Supernatant	
		<input type="checkbox"/>		<input type="checkbox"/> Residue Volatile			<input type="checkbox"/> Turbidity Jackson Units Total	
		<input type="checkbox"/>		<input type="checkbox"/>			<input type="checkbox"/>	
SAMPLE TREATMENT	<input type="checkbox"/> None	<input type="checkbox"/> Refrigerate		<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2ml/l			<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)	

REMARKS		<input type="checkbox"/>
		<input type="checkbox"/>
		Date
		Analyst
		Reviewed by
		<i>M. McRobbin</i>
		Date reported
		<i>879/82</i>



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

# Biological, Chemical and Physical ANALYSES of WASTEWATER

DATE RECEIVED	7/16/82	LAB NO. WC 116	USER CODE
Collection date	City or Location <i>NEAR BLOOMFIELD</i>		
Collected by	SIMSON	County	<i>SAN JUAN</i>
Owner	OCD - PLATEAU	FIELD DETERMINED PARAMETERS	
Send Final Report to:			
<i>EPA CONSENTRATION DIV P.O. BOX SANTA FE NM 87501</i>	<input type="checkbox"/> pH	<input type="checkbox"/> Dissolved Oxygen mg/l	
	<input type="checkbox"/> Water Temperature, °C	<input type="checkbox"/> Chlorine Residual, mg/l	
	<input type="checkbox"/> Settleable Solids, ml/l	<input type="checkbox"/>	
	OTHER INFORMATION <i>C-5</i>		

STORET NO.:  Source	RIVER BASIN		OWNERSHIP	LOCATION
	<input type="checkbox"/> Rio Grande	<input type="checkbox"/> Pecos		
<input type="checkbox"/> Canadian	<input type="checkbox"/> Gila	<input type="checkbox"/> MDSWA	<input type="checkbox"/> Primary	
<input type="checkbox"/> Little Colorado	<input type="checkbox"/> San Juan	<input type="checkbox"/> Private	<input type="checkbox"/> Secondary	
<input type="checkbox"/> Other - specify:		<input type="checkbox"/> Industrial	<input type="checkbox"/> Effluent	
<input type="checkbox"/> Wastewater Treatment Plant	<input type="checkbox"/> DRAIN	<input type="checkbox"/> Commercial	<input type="checkbox"/> Digester	
<input type="checkbox"/> LAGOON	<input type="checkbox"/> LAKE	<input type="checkbox"/> Other:	<input type="checkbox"/> Trickling Filter	
<input type="checkbox"/> Other:	<input type="checkbox"/> STREAM			

ORGANIC PARAMETERS	NUTRIENTS		PHYSICAL PARAMETERS		OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	
<input type="checkbox"/> BOD - 5 DAY 20 °C		<input type="checkbox"/> Phosphate (As P)		<input type="checkbox"/> Residue Total Non-Filter- able (Suspended)		<input type="checkbox"/> Surfactants (As LAS), mg/l		
<input type="checkbox"/> COD		<input type="checkbox"/> Nitrogen, Nitrate (As N)		<input type="checkbox"/> Residue Total Filterable (Dissolved)		<input type="checkbox"/> Conductance Micromhos 25 °C		
<input checked="" type="checkbox"/> TOC		<input type="checkbox"/> Nitrogen Ammonia (As N)		<input type="checkbox"/> Residue Total		<input type="checkbox"/> Color Units		
<input type="checkbox"/> DOC		<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)		<input type="checkbox"/> Residue Total Fixed Solids		<input type="checkbox"/> Turbidity Jackson Units Supernatant		
<input checked="" type="checkbox"/> Phenol	<i>157</i>	<input type="checkbox"/>		<input type="checkbox"/> Residue Volatile		<input type="checkbox"/> Turbidity Jackson Units Total		
<input checked="" type="checkbox"/> Oil & Grease	<i>15.7</i>	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
SAMPLE TREATMENT	<input type="checkbox"/> Refrigerate		<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2ml/l		<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)		<input type="checkbox"/>	
<input type="checkbox"/> None								

**RECEIVED**

JUL 22 1982

EID: WATER  
 POLLUTION CONTROL



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

**Biological, Chemical and Physical  
ANALYSES of WASTEWATER**

DATE RECEIVED	7/16/82	LAB NO.	WC 117	USER CODE
Collection date	7-14-82 1:45PM	City or Location		
Collected by	S. M. SISON	County	Region	
Owner	OCD - PLATEAU	FIELD DETERMINED PARAMETERS		By
Send Final Report to:	OIL CONSERVATION DIV. P.O. BOX 2088 SANTA FE NM 87501	<input type="checkbox"/> pH	<input type="checkbox"/> Dissolved Oxygen mg/l	
		<input type="checkbox"/> Water Temperature, °C	<input type="checkbox"/> Chlorine Residual, mg/l	
		<input type="checkbox"/> Settleable Solids, ml/l	<input type="checkbox"/>	
		OTHER INFORMATION		D-5

STORET NO.:	RIVER BASIN			OWNERSHIP :	LOCATION
Source	<input type="checkbox"/> Rio Grande	<input type="checkbox"/> Pecos	<input type="checkbox"/> Municipal	<input type="checkbox"/> Influent	
<input type="checkbox"/> Wastewater Treatment Plant	<input type="checkbox"/> Canadian	<input type="checkbox"/> Gila	<input type="checkbox"/> MDSWA	<input type="checkbox"/> Primary	
<input type="checkbox"/> LAGOON	<input type="checkbox"/> Little Colorado	<input type="checkbox"/> San Juan	<input type="checkbox"/> Private	<input type="checkbox"/> Secondary	
<input type="checkbox"/> Other:	<input type="checkbox"/> Other - specify:		<input type="checkbox"/> Industrial	<input type="checkbox"/> Effluent	
<input type="checkbox"/> Other:			<input type="checkbox"/> Commercial	<input type="checkbox"/> Digester	
			<input type="checkbox"/> Other:	<input type="checkbox"/> Trickling Filter	

ORGANIC PARAMETERS	mg/l	NUTRIENTS		PHYSICAL PARAMETERS		OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
		mg/l	mg/l	mg/l	mg/l	mg/l	mg/l		
<input type="checkbox"/> BOD - 5 DAY 20 °C		<input type="checkbox"/> Phosphate (As P)		<input type="checkbox"/> Residue Total Non-Filterable (Suspended)		<input type="checkbox"/> Surfactants (As LAS), mg/l		<input type="checkbox"/>	
<input type="checkbox"/> COD		<input type="checkbox"/> Nitrogen, Nitrate (As N)		<input type="checkbox"/> Residue Total Filterable (Dissolved)		<input type="checkbox"/> Conductance Micromhos 25 °C		<input type="checkbox"/>	
<input checked="" type="checkbox"/> TOC		<input type="checkbox"/> Nitrogen Ammonia (As N)		<input type="checkbox"/> Residue Total		<input type="checkbox"/> Color Units		<input type="checkbox"/>	
<input type="checkbox"/> DOC		<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)		<input type="checkbox"/> Residue Total Fixed Solids		<input type="checkbox"/> Turbidity Jackson Units Supernatant		<input type="checkbox"/>	
<input checked="" type="checkbox"/> Phenol		<input type="checkbox"/>		<input type="checkbox"/> Residue Volatile		<input type="checkbox"/> Turbidity Jackson Units Total		<input type="checkbox"/>	
<input checked="" type="checkbox"/> Oil/Grease 1.2		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
SAMPLE TREATMENT	<input type="checkbox"/> None	<input type="checkbox"/> Refrigerate		<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2ml/l		<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)		<input type="checkbox"/>	

REMARKS	RECEIVED	
	JUL 22 1982	
	EID: WATER POLLUTION CONTROL	
Reviewed by <i>Alvarez</i>		
Date reported 7/16/82		



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION (HED)

700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

**Biological, Chemical and Physical  
ANALYSES of WASTEWATER**

DATE RECEIVED	7/16/82	LAB NO.	WC 118	USER CODE
Collection date	7-14-82 4:05PM	City or Location		
Collected by	SIMPSON	County	Region	
Owner	OCD - PLATEAU	FIELD DETERMINED PARAMETERS		
Send Final Report to:	OIL CONSERVATION DIV P.O. BOX 2088 SANTA FE NM 87501	By		
	<input type="checkbox"/> pH	<input type="checkbox"/> Dissolved Oxygen mg/l		
	<input type="checkbox"/> Water Temperature, °C	<input type="checkbox"/> Chlorine Residual, mg/l		
	<input type="checkbox"/> Settleable Solids, ml/l	<input type="checkbox"/>		
	OTHER INFORMATION			E-5

STORET NO.:	RIVER BASIN	OWNERSHIP	LOCATION
Source	<input type="checkbox"/> Rio Grande <input type="checkbox"/> Canadian <input type="checkbox"/> Little Colorado <input type="checkbox"/> Other - specify:	<input type="checkbox"/> Pecos <input type="checkbox"/> Gila <input type="checkbox"/> San Juan	<input type="checkbox"/> Municipal <input type="checkbox"/> MDSWA <input type="checkbox"/> Private <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Other:
<input type="checkbox"/> Wastewater Treatment Plant <input type="checkbox"/> LAGOON <input type="checkbox"/> Other: <input type="checkbox"/> Other:	<input type="checkbox"/> DRAIN <input type="checkbox"/> LAKE <input type="checkbox"/> STREAM		<input type="checkbox"/> Influent <input type="checkbox"/> Primary <input type="checkbox"/> Secondary <input type="checkbox"/> Effluent <input type="checkbox"/> Digester <input type="checkbox"/> Trickling Filter

ORGANIC PARAMETERS	NUTRIENTS		PHYSICAL PARAMETERS		OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	
<input type="checkbox"/> BOD - 5 DAY 20 °C	<input type="checkbox"/> Phosphate (As P)		<input type="checkbox"/> Residue Total Non-Filterable (Suspended)		<input type="checkbox"/> Surfactants (As LAS), mg/l		<input type="checkbox"/>	
<input type="checkbox"/> COD	<input type="checkbox"/> Nitrogen, Nitrate (As N)		<input type="checkbox"/> Residue Total Filterable (Dissolved)		<input type="checkbox"/> Conductance Micromhos 25 °C		<input type="checkbox"/>	
<input checked="" type="checkbox"/> TOC	<input type="checkbox"/> Nitrogen Ammonia (As N)		<input type="checkbox"/> Residue Total		<input type="checkbox"/> Color Units		<input type="checkbox"/>	
<input type="checkbox"/> DOC	<input type="checkbox"/> Nitrogen Total Kjeldahl (As N)		<input type="checkbox"/> Residue Total Fixed Solids		<input type="checkbox"/> Turbidity Jackson Units Supernatant		<input type="checkbox"/>	
<input checked="" type="checkbox"/> Phenol	<input type="checkbox"/>		<input type="checkbox"/> Residue Volatile		<input type="checkbox"/> Turbidity Jackson Units Total		<input type="checkbox"/>	
<input checked="" type="checkbox"/> Total Grease 296.7	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
SAMPLE TREATMENT <input type="checkbox"/> None	<input type="checkbox"/> Refrigerate		<input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> , 2ml/l		<input type="checkbox"/> HNO <sub>3</sub> , 3-5ml/l (for metals)		<input type="checkbox"/>	

REMARKS	RECEIVED	
	JUL 22 1982	
	EID: WATER POLLUTION CONTROL	

Date
Analyst
Reviewed by
Date reported



State of New Mexico  
HEALTH and ENVIRONMENT DEPARTMENT

SCIENTIFIC  
LABORATORY DIVISION

**CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES**

CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen

Date received 7/16/82 Lab No. INC 127 SLD user code No.

CHEMICAL ANALYSES: <i>(Mark appropriate box(es))</i>		INTERIM PRIMARY PARAMETER GROUP	TYPE of CHEMICAL ANALYSIS
		<input type="checkbox"/> 1	<input type="checkbox"/> Organic
		<input type="checkbox"/> 2	<input type="checkbox"/> Radiological
		<input type="checkbox"/> 3	<input type="checkbox"/> Complete Secondary

Water Supply System Name <u>124TH &amp; 14TH AVENUE</u>	Water Supply System Code No. <u>00000000000000000000000000000000</u>	City or Location <u>ALBUQUERQUE, NM 87501</u>
Collection Date <u>7/16/82</u>	Collection Time <u>145 PM</u>	Collection Point <u>124TH &amp; 14TH</u>
Collected By <u>S. M. B.</u>	Owner <u>ED - 124TH AV</u>	Collector's remarks <u>C - 4 JUL 07 1982</u>

TYPE of SYSTEM <i>(Check one)</i>	
<input type="checkbox"/> PRIVATE	PUBLIC: <input type="checkbox"/> Community <input type="checkbox"/> Non-community
<input type="checkbox"/> Drain	<input type="checkbox"/> Lake <input type="checkbox"/> Stream <input type="checkbox"/> Pool

**RECEIVED** *July 16, 1982*  
Report to *Office of Conservation Division*  
Address *P.O. Box 2088  
Santa Fe, NM 87501*

**POLLUTION CONTROL**  
**WELL-WATER**  
**ENVIRONMENTAL**  
LAT. 36° 15' N LONG. 106° 05' W

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL	HEAVY METALS	mg/l	PARAMETER	ORGANIC	mg/l
00930 Sodium (as Na)		00940 Chloride (as Cl)		70300 Total Filterable Residue	mg/l	01000 Arsenic		39390 Endrin	
00935 Potassium (as K)		00950 Fluoride (as F)		38260 Foaming Agents (as Las)		01005 Barium		39732 Lindane	
00900 Tot. Hardness (as CaCO <sub>3</sub> )		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium		38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as CaCO <sub>3</sub> )		00400 pH		01030 Chromium		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO <sub>3</sub> )		01330 Odor		01501 Gross Alpha		39730 2,4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO <sub>3</sub> )		00080 Color	mg/l	01049 Lead		39740 2,4,5-TP (Silvex)	
01056 Manganese (as Mn)		00945 Sulfate (as SO <sub>4</sub> )		00070 Turbidity		07180 Mercury		09501 Radium-226	pCi/l
								11501 Radium-228	
								01145 Selenium	
								01075 Silver	

LABORATORY REMARKS:

Negative Cyanide in solution

7-16-82

Reviewed by *J. M. B.*

Date reported *7/16/82*



**CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES**

CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen

CHEMICAL ANALYSES: Check individual items for analysis [Mark appropriate box(es)]

INTERIM PRIMARY PARAMETER GROUP

TYPE of CHEMICAL ANALYSIS

COLLECTOR'S NAME

COLLECTOR'S ADDRESS

COLLECTOR'S PHONE NUMBER

COLLECTOR'S CITY OR STATE

COLLECTOR'S ZIP CODE

COLLECTOR'S COUNTY

COLLECTOR'S COMMENTS

COLLECTOR'S DATE

COLLECTOR'S TIME

COLLECTOR'S POINT

COLLECTOR'S OWNER

COLLECTOR'S SOURCE

COLLECTOR'S DRINKING

COLLECTOR'S STREAM

COLLECTOR'S POOL

COLLECTOR'S OTHER (SPECIFY)

COLLECTOR'S LATITUDE

COLLECTOR'S LONGITUDE

COLLECTOR'S REPORT TO

COLLECTOR'S CHECK ONE:

COLLECTOR'S TREATED WATER

COLLECTOR'S RAW WATER

COLLECTOR'S RADIOPHYSICAL

COLLECTOR'S ORGANIC

COLLECTOR'S INORGANIC

COLLECTOR'S TOTAL

COLLECTOR'S ARSENIC

COLLECTOR'S ENDRIN

COLLECTOR'S 39390

COLLECTOR'S 39732

COLLECTOR'S LINDANE

COLLECTOR'S 38270

COLLECTOR'S METHOXYCHLOR

COLLECTOR'S 39400

COLLECTOR'S TOXAPHENE

COLLECTOR'S 39730

COLLECTOR'S 2,4-D

COLLECTOR'S 03501

COLLECTOR'S GROSS ALPHA

COLLECTOR'S 01501

COLLECTOR'S CHROMIUM

COLLECTOR'S 01030

COLLECTOR'S CADMIUM

COLLECTOR'S 01025

COLLECTOR'S BARIUM

COLLECTOR'S 38260

COLLECTOR'S FOAMING

COLLECTOR'S FLUORIDE

COLLECTOR'S 00950

COLLECTOR'S AGENTS (AS LAS)

COLLECTOR'S 00620

COLLECTOR'S NITRATE

COLLECTOR'S 00940

COLLECTOR'S CHLORIDE

COLLECTOR'S 00940

COLLECTOR'S TOTAL

COLLECTOR'S FILTERABLE RESIDUE

COLLECTOR'S 01000

COLLECTOR'S ARSENIC

COLLECTOR'S 00930

COLLECTOR'S SODIUM (AS NA)

COLLECTOR'S 00915

COLLECTOR'S CALCIUM (AS CA)

COLLECTOR'S 00925

COLLECTOR'S MAGNESIUM (AS MG)

COLLECTOR'S 01045

COLLECTOR'S IRON-TOTAL (AS FE)

COLLECTOR'S 01056

COLLECTOR'S MANGANESE (AS MN)

COLLECTOR'S 00445

COLLECTOR'S BICARBONATE (AS CO<sub>3</sub>)

COLLECTOR'S 00080

COLLECTOR'S COLOR

COLLECTOR'S 0070

COLLECTOR'S TURBIDITY

COLLECTOR'S 01145

COLLECTOR'S SELENIUM

COLLECTOR'S 11501

COLLECTOR'S RADIUM-228

COLLECTOR'S 01075

COLLECTOR'S SILVER

COLLECTOR'S REMARKS

COLLECTOR'S SIGNATURE

COLLECTOR'S DATE

COLLECTOR'S APPROVAL

COLLECTOR'S SIGNATURE

COLLECTOR'S DATE

COLLECTOR'S APPROVAL

COLLECTOR'S SIGNATURE

COLLECTOR'S DATE

COLLECTOR'S APPROVAL

BETWEEN 0.19 AND 0.32 mg/L TOTAL IRON, HIGH SULFIDE CONTENT PRECLUDES A MORE ACCURATE ANALYSIS.

SLD 702 Form Revised 4/78

Date received 7/16/82 Lab No. MC 128 SLD user code No.

Reviewed by J. C. Johnson Date reported 7/16/82

RECEIVED

Organic

Radiological

TREATED WATER

Raw Water

2,4-D

PCP

PCP/2,4-TP

Silvex

PCP/11501

Radium-228

PCP/09501

Radium-226

PCP/01145

Selenium

PCP/11501

Radium-228

PCP/01075

Silver

PCP/07180

Mercury

PCP/00080

Color

PCP/00445

Carbonate

PCP/00945

Sulfate

PCP/00940

Chloride

PCP/00930

Sodium

PCP/00915

Calcium

PCP/00925

Magnesium

PCP/01045

Iron-Total



State of New Mexico  
HEALTH and ENVIRONMENT DEPARTMENT

**CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES**

CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen

Date received **7-16-82** Lab No. **HM-77** SLD user code No. **-**

**CHEMICAL ANALYSES:** Check individual items for analysis [Mark appropriate box(es)]

INTERIM PRIMARY PARAMETER GROUP  
 1       2       3       Complete Secondary

TYPE of CHEMICAL ANALYSIS  
 Organic       -Radiological

Water Supply System Name **EL PASO CITY WATER DEPT.**

Collector's remarks **COLLECTOR B**  
**BOLIVIA**

Check one:  
 TREATED WATER       RAW WATER

Collected By **EL PASO CITY WATER DEPT.**

Report to **EL PASO CITY WATER DEPT.**

Address **200 S. 2nd St.**

City or Location **SANTA FE NM 87501**

Owner **EL PASO CITY WATER DEPT.**

LAT. **31° 45' N**

LONG. **106° 10' W**

TYPE of SYSTEM (Check one)

SOURCE:  Spring       Lake       Well-Depth       Other (specify) **Drain**

Drain       Stream       Pool

Other (specify) **Other (specify)**

PUBLIC:  Community       Non-community

Other (specify) **Other (specify)**

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL		HEAVY METALS	mg/l	PARAMETER		ORGANIC	mg/l
00930 Sodium (as Na)		00940 Chloride (as Cl)		70300 Total Filterable Residue	mg/l	01000 Arsenic				39390 Endrin	
00935 Potassium (as K)		00950 Fluoride (as F)		38260 Foaming Agents (as Las)		01005 Barium				39732 Lindane	
00900 Tot.Hardness (as CaCO <sub>3</sub> )		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methylenechlor	
00915 Calcium (as Ca)		00430 Alkalinity (as CaCO <sub>3</sub> )		00400 pH		01030 Chromium				39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO <sub>3</sub> )		01330 Odor		01501 Gross Alpha				39730 2,4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO <sub>3</sub> )		00080 Color	mg/l	01049 Lead				09501 Radium-226	
01056 Manganese (as Mn)		00945 Sulfate (as SO <sub>4</sub> )		00070 Turbidity		07180 Mercury				39740 2,4,5-TP (Silvex)	
						00005				11501 Radium-228	
						01145 Selenium				pcI/l	
						01075 Silver				39740 2,4,5-TP (Silvex)	

LABORATORY REMARKS:

Reviewed by **JM**

Date reported **8/27/82**



State of New Mexico  
HEALTH AND ENVIRONMENT DEPARTMENT

SCIENTIFIC LABORATORY DIVISION

# CHEMICAL and PHYSICAL ANALYSES for WATER SAMPLES

CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen

**CHEMICAL ANALYSES:** *[Check individual items for analysis / Mark appropriate box(es)]*

INTERIM PRIMARY PARAMETER GROUP      **TYPE of CHEMICAL ANALYSIS**

1       2       3...       Complete Secondary

Organic       Radiological

Check one:

TREATED WATER       RAW WATER

Report to *Lab CONSTRUCTION Div.*

Address *P.O. BOX 2058*

Signature *J. R. H. 7-30-82*

Date received *7-16-82*

Lab No. *HIV-78*

SLD user code No.

Water Supply System Name  
*NEW JERSEY CITY WATER DEPT.*

Collection Date *7-12-82*

Collection Time *6:30 AM*

Collected By *SIMPSON*

Owner *DCD - METAL*

**TYPE of SYSTEM** *(Check one)*

PRIVATE

PUBLIC:  Community

Non-community

Drain

Stream

Pool

Other (specify) *TEST WATER*

LAT.

LONG.

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State of New Mexico  
HEALTH and ENVIRONMENTAL  
SCIENTIFIC

# CHEMICAL and PHYSICAL ANALYSES for WATER SAMPLES

**CONSULT SLB Lab Annex L** for proper presentation of sample(s). TYPE or PRINT with **E**

CHEMICAL and PHYSICAL ANALYSES for WATER SAMPLES									
CHEMICAL ANALYSES: Check individual items for analysis [Mark appropriate boxes]			INTERIM PRIMARY PARAMETER GROUP			TYPE of CHEMICAL ANALYSIS			
			<input type="checkbox"/> 1			<input type="checkbox"/> Organic			
Water Supply System Name <i>J. H. T. P. A. U. R. F. N. E. R. Y.</i>			Water Supply System Code No. <i>J. H. S. P. A. I.</i>			<input type="checkbox"/> 2			
Collection Date <i>7-16-82</i>			Collection Time <i>1:45 P.M.</i>			<input type="checkbox"/> 3			
Collected By <i>S. M. S. C. O.</i>			Collection Point <i>HANOVER SITE II</i>			<input type="checkbox"/> Complete Secondary			
Owner <i>O.C.D. - JUNIOR</i>			City or Location <i>HANOVER, NH</i>			<input type="checkbox"/> TREATED WATER			
Collector's remarks <i>NO PLASTIC CONT.</i>			County <i>MERRIMACK CO.</i>			<input type="checkbox"/> RAW WATER			
Address <i>P.O. BOX 2088 SAINT HANOVER, NH 03750</i>									
TYPE of SYSTEM (Check one)		SOURCE: <input type="checkbox"/> Drain <input type="checkbox"/> Stream <input type="checkbox"/> Pool <input type="checkbox"/> Other (specify) _____		LAT. LONG.					
<input type="checkbox"/> PRIVATE		<input type="checkbox"/> Community <input type="checkbox"/> Non-community							
CATIONS	mg/l	ANIONS	mg/l	PHYSICAL	mg/l	HEAVY METALS	mg/l	PARAMETER	ORGANIC
00930 Sodium (as Na)		00940 Chloride (as Cl)		70300 Total Filterable Residue	mg/l	01000 Arsenic		<input checked="" type="checkbox"/> Cobalt < 0.05	mg/l
00935 Potassium (as K)		00950 Fluoride (as F)		38260 Foaming Agents (as Las)		01005 Barium		<input checked="" type="checkbox"/> Nickel 0.05	39390 Endrin
00900 Tot.Hardness (as CaCO <sub>3</sub> )		00620 Nitrate (as N)		00995 Conductance Micromhos 25°C		01025 Cadmium			39732 Lindane
00915 Calcium (as Ca)		00430 Alkalinity (as CaCO <sub>3</sub> )		00400 pH		01030 Chromium	< 0.005		38270
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO <sub>3</sub> )		01330 Odor		01049 Lead	< 0.005	<input checked="" type="checkbox"/> RADIOLOGICAL pcI/l	39400 Toxaphene
01045 Iron-Total (as Fe)		00445 Carbonate (as CO <sub>3</sub> )		00080 Color	mg/l	07180 Mercury	< 0.0005	<input checked="" type="checkbox"/> Gross Alpha	01501
01056 Manganese (as Mn)		00945 Sulfate (as SO <sub>4</sub> )		00070 Turbidity		09501 Radium-226		<input checked="" type="checkbox"/> pcI/l	39730 2,4-D
						01145 Selenium		<input checked="" type="checkbox"/> 39740 2,4,5-TP (Silvex)	
						11501 Radium-228		<input checked="" type="checkbox"/> pcI/l	
						01075 Silver			
LABORATORY REMARKS:									
Reviewed by <i>J. H. T. P. A. U. R. F. N. E. R. Y.</i>									
Date reported <i>8/27/82</i>									
Date received <i>7-16-82</i>	Lab No. <i>H.M. - 14</i>	SLD user code No. <i></i>							

#### LABORATORY REMARKS



State of New Mexico  
HEALTH and ENVIRONMENT

## CHEMICAL and PHYSICAL ANALYSES

CONSULT SLD Lab Annex L for proper

**CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen**

Date received	Lab No.	SLD user code No.
7-16-82	H-80	

<b>CHEMICAL ANALYSES:</b> <i>[Mark appropriate box(es)]</i>		Check individual items for analysis	
		<input type="checkbox"/> 1	<input type="checkbox"/> 2
		<input type="checkbox"/> 3	<input type="checkbox"/> Complete Secondary
Water Supply System Name <i>Smithville, N.Y.</i>		Water Supply System Code No. <i>S-1572</i>	City or Location <i>Smithville, N.Y.</i>
Collection Date <i>3-15-1971</i>		Collection Time <i>5:30 A.M.</i>	County <i>Oneida</i>
Collector's remarks <i>Owner</i>		Report to <i>City Conservation Dept.</i>	
Collected By <i>OCB - Smithville</i>		Address <i>P.O. Box 2088</i>	
TYPE of SYSTEM (Check one) <input type="checkbox"/> PRIVATE <input type="checkbox"/> PUBLIC: <input type="checkbox"/> Community <input type="checkbox"/> Non-community		SOURCE: <input type="checkbox"/> Spring <input type="checkbox"/> Lake <input type="checkbox"/> Well-Depth <input type="checkbox"/> Drain <input type="checkbox"/> Stream <input type="checkbox"/> Pool <input type="checkbox"/> Other (specify) _____	
		LAT. <input type="checkbox"/> LONG.	° <input type="checkbox"/> ° ' <input type="checkbox"/> ' " <input type="checkbox"/> "

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL		HEAVY METALS	mg/l	PARAMETER		ORGANIC	mg/l
00930 Sodium (as Na)		00940 Chloride (as Cl)		70300 Total Filterable Residue	mg/l	01000 Arsenic		✓ Cobalt	0.069	39390 Endrin	
00935 Potassium (as K)		00950 Fluoride (as F)		38260 Foaming Agents (as Las)	mg/l	01005 Barium		✓ Nickel	0.08	39732 Lindane	
00940 Tot.Hardness (as CaCO <sub>3</sub> )		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C	mg/l	01025 Cadmium				38270	
00915 Calcium (as Ca)		00430 Alkalinity (as CaCO <sub>3</sub> )		00400 pH	mg/l	✓ 01030 Chromium	0.041	RADIOLOGICAL pCi/l	39400	Methoxychlor	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO <sub>3</sub> )		01330 Odor		✓ 01049 Lead	0.12	01501 Gross Alpha	39730	Toxaphene	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO <sub>3</sub> )		00080 Color	mg/l	✓ 07180 Mercury	<0.0005	03501 Gross Beta	2,4-D		
01056 Manganese (as Mn)		00945 Sulfate (as SO <sub>4</sub> )		00070 Turbidity		✓ 01145 Selenium		09501 Radium-226	39740		
						✓ 01075 Silver		11501 Radium-228	2,4,5-TP (Silvex)		

**LABORATORY REMARKS:**

SI 2003 EDITION PRINTED 1/13/2014

**DISTRIBUTION:** White - Water Supply Regulation, SF • Canary - WS System • Pink - EIA Regional Office • Goldenrod - SLD Lat.

**CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES**

Date received 7-16-82 Lab No. HJM-81 SLD user code No.

CHEMICAL ANALYSES: Check individual items for analysis /Mark appropriate box(es)

INTERIM PRIMARY PARAMETER GROUP

Water Supply System Name

Collection Date

Collection Time

Collection Point

City or Location

Collector's remarks

Report to

Address

TYPE of CHEMICAL ANALYSIS

Check one:

TREATED WATER

RAW WATER

ORGANIC

Radiological

Complete Secondary

Check one:

SOURCE:  Spring  Lake  Well-Depth  Other (specify) NM 875c1

□ Drain  Stream  Pool  Other (specify)

LAT. 36° 1' 1"

LONG. 106° 5' 11"

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL		HEAVY METALS	mg/l	PARAMETER		ORGANIC	mg/l
00930 Sodium (as Na)		00940 Chloride (as Cl)		70300 Total Filterable Residue		01000 Arsenic		✓ 0.57 Cadmium		39390 Endrin	
00935 Potassium (as K)		00950 Fluoride (as F)		38260 Foaming Agents (as Las)		01005 Barium		✓ 0.80 Chromium		39732 Lindane	
00900 Tot-Hardness (as CaCO <sub>3</sub> )		00620 Nitrate (as N)		0095 Conductance Micromhos 25°C		01025 Cadmium		✓ 0.04 Lead		38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as CaCO <sub>3</sub> )		00400 pH		01030 Chromium		✓ 0.62 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO <sub>3</sub> )		01330 Odor		01049 Lead		03501 Gross Beta		39730 2, 4-D	
01045 Iron-Total (as Fe)		0045 Carbonate (as CO <sub>3</sub> )		00080 Color	mg/l	✓ 0.0180 Mercury		0.0005 Radium-226	pcCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		00945 Sulfate (as SO <sub>4</sub> )		00070 Turbidity		01145 Selenium		09501 Radium-226	pcCi/l	11501 Radium-228	
						01075 Silver					

LABORATORY REMARKS:

Reviewed by MJ

Date reported 8/27/82



State of New Mexico  
HEALTH AND ENVIRONMENT DEPARTMENT  
SCIENTIFIC  
LABORATORY DIVISION

**CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES**

Date received **7/15/82** Lab No. **449 5112** SLD user code No.

**CHEMICAL  
ANALYSES:**

*Check individual items for analysis  
[Mark appropriate box(es)]*

1       2       3

Complete Secondary

Water Supply System Name <b>S. M. 2500</b>	Water Supply System Code No. <b>S. M. 2500</b>	Collection Point Owner <b>S. M. 2500</b>	City or Location <b>S. M. 2500</b>	County <b>S. M. 2500</b>
Collection Date <b>7/15/82</b>	Collection Time <b>10:30 AM</b>	Collector's remarks <b>NE - S. M. 2500</b>	Collector's remarks <b>NE - S. M. 2500</b>	Report to <b>SLD - Canby</b>
Collected By <b>S. M. 2500</b>	Water Supply System Code No. <b>S. M. 2500</b>	Address <b>SLD - Canby</b>	Address <b>SLD - Canby</b>	Check one: <input type="checkbox"/> TREATED WATER <input type="checkbox"/> RAW WATER
TYPE of SYSTEM (Check one)		SOURCE: <input type="checkbox"/> Spring <input type="checkbox"/> Drain <input type="checkbox"/> Stream <input type="checkbox"/> Pool <input type="checkbox"/> Other (specify) <b>WELL</b>	LAT. <b>° 39' 50"</b> LONG. <b>° 105' 50"</b>	Check one: <input type="checkbox"/> Organic <input type="checkbox"/> Radiological
<input type="checkbox"/> PRIVATE		PUBLIC: <input type="checkbox"/> Community <input type="checkbox"/> Non-community		

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL	mg/l	HEAVY METALS	mg/l	PARAMETER	mg/l	ORGANIC	mg/l
00930 Sodium (as Na)		00940 Chloride (as Cl)		70300 Total Residue	mg/l	01000 Arsenic				39390 Endrin	
00935 Potassium (as K)		00950 Fluoride (as F)		38260 Foaming Agents (as Las)		01005 Barium				39732 Lindane	
00960 Tot. Hardness (as CaCO <sub>3</sub> )		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as CaCO <sub>3</sub> )		00400 pH		01030 Chromium				39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO <sub>3</sub> )		01330 Odor		01049 Lead		03501 Gross Beta	pcCi/l	39730 2,4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO <sub>3</sub> )		00080 Color	mg/l	07180 Mercury		09501 Radium-226	pcCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		00945 Sulfate (as SO <sub>4</sub> )		00070 Turbidity		01145 Selenium		11501 Radium-228	pcCi/l		
						01075 Silver					

LABORATORY REMARKS:

*Sample taken from well at lot 3*

Reviewed by *MJ*

Date reported *8/27/82*



State of New Mexico  
HEALTH and ENVIRONMENTAL  
SCIENCE

# CHEMICAL and PHYSICAL ANALYSES for WATER SAMPLES

**CONSULT SLD Lab Annex L for proper presentation of sample(s), TYPE or PRINT with Ball Point Pen**

<b>CHEMICAL ANALYSES:</b> <i>[Mark appropriate box(es)]</i>		INTERIM PRIMARY PARAMETER GROUP		TYPE of CHEMICAL ANALYSIS	
		<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> Complete Secondary
Water Supply System Name <i>D.A.</i>	Water Supply System Code No.	City or Location		County	<input type="checkbox"/> Organic
Collection Date <i>7-28-72</i>	Collection Time <i>5:20 P.M.</i>	Collection Point <i>SANIT. D.A.</i>	Collector's remarks <i>NF-A-102A-HNO3</i>		<input type="checkbox"/> TREATED WATER
Collected BY <i>John R. Gandy</i>	Owner <i>D.C.D.</i>	Address <i>P.O. Box 378</i>		<input type="checkbox"/> RAW WATER	
<b>TYPE of SYSTEM</b> <i>(Check one)</i>		<b>SOURCE:</b>			
<input type="checkbox"/> PRIVATE		<input type="checkbox"/> Community	<input type="checkbox"/> Non-community	<input type="checkbox"/> Spring	<input type="checkbox"/> Lake
				<input type="checkbox"/> Well-Depth	
				<input type="checkbox"/> Drain	<input type="checkbox"/> Stream
				<input type="checkbox"/> Pool	<input type="checkbox"/> Other (specify) <i>Sanit. 87501</i>
		LAT. ° °	1 1 1	1 1 1	" "
		LONG. ° °	1 1 1	1 1 1	" "

**LABORATORY REMARKS:**



**State of New Mexico  
HEALTH and ENVIRONMENTAL  
SCIENTIFIC INSTITUTE**

# CHEMICAL and PHYSICAL ANALYSES for WATER SAMPLES

CONSULT SLD Lab Annex L for proper presentation of sample(s), TYPE or PRINT with Ball Point Pen						
<b>CHEMICAL ANALYSES:</b> [Mark appropriate box(es)]		INTERIM PRIMARY PARAMETER GROUP		TYPE of CHEMICAL ANALYSIS		
		<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> Complete Secondary	<input type="checkbox"/> Organic
Water Supply System Name		Water Supply System Code No.		City or Location	County	
Collection Date <i>7-13-84</i>	Collection Time <i>12:00 PM</i>	Collection Point <i>SUMMERDALE CA</i>	Collector's remarks <i>AT - A - IN THE HILLS</i>	<input type="checkbox"/> Check one: <input checked="" type="checkbox"/> TREATED WATER <input type="checkbox"/> RAW WATER		
Collected By <i>J. P. C.</i>	Owner <i>CDC</i>			Report to <i>WATER SUPPLY DEPT.</i>	Address <i>P.O. BOX 2088 SUMMERTIME</i>	
<b>TYPE of SYSTEM</b> (Check one)		<b>SOURCE:</b>		<input type="checkbox"/> Spring <input type="checkbox"/> Lake <input type="checkbox"/> Well-Depth <input type="checkbox"/> Drain <input type="checkbox"/> Stream <input type="checkbox"/> Pool <input type="checkbox"/> Other (specify) <i>8750 ft</i>		
<input type="checkbox"/> PRIVATE <input type="checkbox"/> PUBLIC: <input type="checkbox"/> Community <input type="checkbox"/> Non-community		LAT. LONG.	° °	' '	" "	

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL		HEAVY METALS	mg/l	PARAMETER		ORGANIC	mg/l
00930 Sodium (as Na)		00940 Chloride (as Cl)		70300 Total Filterable Residue	mg/l	01000 Arsenic				39390 Endrin	
00935 Potassium (as K)		00950 Fluoride (as F)		38260 Foaming Agents (as Las)		01005 Barium				39732 Lindane	
00900 Tot.Hardness (as CaCO <sub>3</sub> )		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as CaCO <sub>3</sub> )		00400 pH		01030 Chromium				39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO <sub>3</sub> )		01330 Odor		01049 Lead	0,005	01501 Gross Alpha		39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO <sub>3</sub> )		00080 Color	mg/l	07180 Mercury		09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silver)	
01056 Manganese (as Mn)	10.05	00945 Sulfate (as SO <sub>4</sub> )		00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
						01075 Silver					

LABORATORY REMARKS.

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State of New Mexico  
HEALTH and ENVIRONMENT DEPARTMENT  
LABORATORY DIVISION

**CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES**

CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen

Date received	Lab No.	SLD user code No.
7/11/82	141	0115

**CHEMICAL ANALYSES:** Check individual items for analysis /Mark appropriate box(es)/

INTERIM

PRIMARY

PARAMETER

GROUP

3

Complete

Secondary

County

TREATED

WATER

RAW

WATER

ORGANIC

Radiological

Water Supply System Name  Water Supply System Code No. City or Location

Collection Date  Collection Time  Collection Point

Collector's remarks

Report to

Address

Collected By  Owner

SOURCE:  Spring  Lake  Well-Depth  Other (specify) \_\_\_\_\_

LAT. ° \_\_\_\_\_

LONG. ° \_\_\_\_\_

PRIVATE PUBLIC:  Community  Non-community

Drain  Stream  Pool  Other (specify) \_\_\_\_\_

LONG. ° \_\_\_\_\_

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL	mg/l	HEAVY METALS	mg/l	PARAMETER	mg/l	ORGANIC	mg/l
00930 Sodium (as Na)		00940 Chloride (as Cl)		70300 Total Filterable Residue	mg/l	01000 Arsenic				39390 Endrin	
00935 Potassium (as K)		00950 Fluoride (as F)		38260 Foaming Agents (as Las)		01005 Barium				39732 Lindane	
00900 Tot-Hardness (as CaCO <sub>3</sub> )		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as CaCO <sub>3</sub> )		00400 pH		01030 Chromium				39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO <sub>3</sub> )		01330 Odor		01049 Lead				RADIOLOGICAL pCi/l	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO <sub>3</sub> )		00080 Color	mg/l	07180 Mercury		03501 Gross Beta	pCi/l	39730 2,4-D	
01056 Manganese (as Mn)	0.92	00945 Sulfate (as SO <sub>4</sub> )		00070 Turbidity		01145 Selenium		09501 Radium-226	pCi/l	39740 2,4,5-TP (Silver)	
	10.05							11501 Radium-228	pCi/l		

LABORATORY REMARKS:

Reviewed by *JM*

Date reported *6/27/82*



State of New Mexico  
HEALTH and ENVIRONMENT DEPARTMENT  
SCIENTIFIC  
LABORATORY DIVISION

**CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES**

CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen

**CHEMICAL ANALYSES:** Check individual items for analysis

[Mark appropriate box(es)]

INTERIM PRIMARY PARAMETER GROUP

1

TYPE of CHEMICAL ANALYSIS

2

Complete Secondary

3

County

Organic

Radiological

Water Supply System Name  
*7000 ft. E. 2nd St.*

Collection Date  
*7/14/82*

Collection Time  
*7:00 AM*

Water Supply System Code No.  
*LA*

Collection Point  
*Surface Water*

City or Location  
*NE - A - 7000 ft. E. 2nd St.*

Collector's remarks  
*None*

Owner  
*None*

Treated Water

Raw Water

Check one:

TREATED WATER

**CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES**

CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen

**CHEMICAL ANALYSES:** Check individual items for analysis  
[Mark appropriate box(es)]

INTERIM PRIMARY PARAMETER GROUP  
□ 1 □ 2 □ 3 □ Complete Secondary

TYPE of CHEMICAL ANALYSIS  
□ Organic □ Radiological

Water Supply System Name *Santa Fe KF* Water Supply System Code No.

Collector's remarks *11-1 - 10 mi N of SF*

Report to *Licensee #P.M. 7-16*

Address *P.O. Box 20588*

*SANTA FE NM 87501*

Collection Date *7-26-87* Collection Time *5:30 P.M.* Collection Point *Santa Fe KF*

County *M - A - 10 mi N of SF*

Check one:  
□ TREATED WATER □ RAW WATER

Date reported *8/27/87*

Collected By *Owner*

LAT. *36° 15' 00"*

LONG. *105° 45' 00"*

**TYPE of SYSTEM** (Check one)  
□ PRIVATE PUBLIC: □ Community □ Non-community

SOURCE: □ Spring □ Lake □ Well-Depth  
□ Drain □ Stream □ Pool □ Other (specify) *.....*

ORGANIC mg/l

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL	HEAVY METALS	PARAMETER	ORGANIC
00930 Sodium (as Na)		00940 Chloride (as Cl)	70300 Total Filterable Residue	mg/l	01000 Arsenic		39390 Endrin
00935 Potassium (as K)		00950 Fluoride (as F)	38260 Foaming Agent's (as Las)		01005 Barium		39732 Lindane
00900 Tot-Hardness (as CaCO <sub>3</sub> )		00620 Nitrate (as N)	00095 Conductance Micromhos 25°C		01025 Cadmium		38270 Methoxychlor
00915 Calcium (as Ca)		00430 Alkalinity (as CaCO <sub>3</sub> )	00400 pH		01030 Chromium		39400 Toxaphene
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO <sub>3</sub> )	01330 Odor		01049 Lead	0.38	0.39730 Gross Alpha
01045 Iron-Total (as Fe)		00445 Carbonate (as CO <sub>3</sub> )	00080 Color	mg/l	03501 Gross Beta	0.03501	2, 4-D
01056 Manganese (as Mn)	0.13	00945 Sulfate (as SO <sub>4</sub> )	00070 Turbidity	Mercury	07180 Radium-226	0.07180	39740 2, 4, 5-TP (Silver)
Total	0.069				09501 Radium-228	0.09501	11501 (Silver)
					01145 Selenium	0.01145	
					01075 Silver	0.01075	

LABORATORY REMARKS:

Reviewed by *JW*

Date reported *8/27/87*

**CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES**

CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen

Date received	Lab No.	SLD user code No.
---------------	---------	-------------------

CHEMICAL ANALYSES: Check individual items for analysis [Mark appropriate box(es)]

INTERIM PRIMARY PARAMETER GROUP

TYPE of CHEMICAL ANALYSIS

Organic

Radiological

1  2  3  Complete Secondary

Water Supply System Name

City or Location

County

Check one:

Water Supply System Code No.

Report to

TREATED WATER

RAW WATER

Collection Date

Collector's remarks

Address

Collection Time

ACID-ALKALI TEST

P.O. BOX 2089 SANTA FE NM

Collection Point

Lindane

LONG.

Collected By

MICROBIAL TEST

LAT.

Source:

39390 Endrin

LONG.

Type of System (Check one)

38270

LAT.

PRIVATE

39400 Toxaphene

LONG.

2,4,5-TP (Silvex)

PUBLIC:

39740

LAT.

(Silver)

Community

0.010

LONG.

(Sodium)

Non-community

0.009

LAT.

(Arsenic)

0.008

LONG.

(Copper)

0.007

LAT.

(Lead)

0.006

LONG.

(Chromium)

0.005

LAT.

(Gross Alpha)

0.004

LONG.

(Mercury)

0.003

LAT.

(Radium-226)

0.002

LONG.

(Selenium)

0.001

LAT.

(Sulfur)

0.000

LONG.

(Turbidity)

0.000

LAT.

(Color)

0.000

LONG.

(Odor)

0.000

LAT.

(Ph)

0.000

LONG.

(Alkalinity)

0.000

LAT.

(Nitrate)

0.000

LONG.

(Barium)

0.000

LAT.

(Agents)

0.000

LONG.

(Fluoride)

0.000

LAT.

(Chloride)

0.000

LONG.

(Sodium)

0.000

LAT.

(As Na)

0.000

LONG.

(Potassium)

0.000

LAT.

(As K)

0.000

LONG.

(Total Hardness)

0.000

LAT.

(Calcium)

0.000

LONG.

(Magnesium)

0.000

LAT.

(Iron-Total)

0.000

LONG.

(As Fe)

0.000

LAT.

(Manganese)

0.000

LONG.

(As Mn)

0.000

LAT.

(Manganese)

0.000

LONG.

(Manganese)

0.000

LAT.

(Manganese)



**State of New Mexico**

# CHEMICAL and PHYSICAL ANALYSES for WATER SAMPLES

TYPE OF PRINT WITH Ball Point Pen

HEALTH and ENVIRONMENT DEPARTMENT		CHEMICAL and PHYSICAL ANALYSIS for WATER SAMPLES			
SCIENTIFIC LABORATORY DIVISION					
CONSULT SLD Lab Annex L for proper presentation of sample(s), TYPE or PRINT with Ball Point Pen					
<b>CHEMICAL ANALYSES:</b> <i>[Mark appropriate box(es)]</i>		INTERIM PRIMARY PARAMETER GROUP <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> Complete Secondary			
Water Supply System Name <i>City of St. Paul, Minnesota</i>		Water Supply System Code No. <i>01000000000000000000000000000000</i>			
Collection Date <i>Sept 15, 1975</i>		Collection Time <i>10:00 AM</i>			
Collected By <i>Sgt. J. G. Miller</i>		Owner <i>City of St. Paul, Minnesota</i>			
<b>TYPE of SYSTEM</b> <i>(Check one)</i> <input checked="" type="checkbox"/> PRIVATE <input type="checkbox"/> PUBLIC: <input type="checkbox"/> Community <input type="checkbox"/> Non-community		SOURCE: <input type="checkbox"/> Spring <input type="checkbox"/> Lake <input type="checkbox"/> Well-Depth _____ <input type="checkbox"/> Drain <input type="checkbox"/> Stream <input type="checkbox"/> Pool <input type="checkbox"/> Other (specify) _____			
		LAT.	°	'	"
		LONG.	°	'	"
Date received <i>Sept 15, 1975</i>					
Lab No. <i>SLD 10000000000000000000000000000000</i>					
SLD user code No. <i></i>					
<input type="checkbox"/> Organic <input type="checkbox"/> Radiological <input type="checkbox"/> TREATED WATER <input type="checkbox"/> RAW WATER					
Collector's remarks <i>Sample collected at City Treatment Plant - Raw water</i>					
Report to <i>Environmental Health Division</i>					
Address <i>100 University Street, Seattle, Washington 98101</i>					

#### LABORATORY REMARKS:

State of New Mexico  
HEALTH and ENVIRONMENT DEPARTMENT  
SCIENTIFIC  
LABORATORY DIVISION

**CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES**

CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen

**CHEMICAL ANALYSES:** Check individual items for analysis  
[Mark appropriate box(es)]

**INTERIM PRIMARY PARAMETER GROUP**

**TYPE of CHEMICAL ANALYSIS**

Organic

Radiological

Water Supply System Name

Water Supply System Code No.

City or Location

County

TREATED WATER

RAW WATER

Collection Date

Collection Time

Collection Point

Collector's Remarks

Report to

Address

Date received

Lab No.

SLD user code No.

Collected By

Owner

SOURCE:

Spring

11/27/78

Lake

Well-Depth

100'

Drain

Stream

100'

Pool

Other (specify)

100'

**TYPE of SYSTEM (Check one)**

PRIVATE

PUBLIC:

Community

Non-community

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL	mg/l	HEAVY METALS	mg/l	PARAMETER	mg/l	ORGANIC	mg/l
00930 Sodium (as Na)		00940 Chloride (as Cl)		7030 Total Filterable Residue	mg/l	X	01000 Arsenic	20.005	20.005	39390 Endrin	
00935 Potassium (as K)		00950 Fluoride (as F)		38260 Foaming Agents (as Las)		X	01005 Barium	<0.10	X	39732 Lindane	
00900 Tot.Hardness (as CaCO <sub>3</sub> )		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		X	01025 Cadmium	<0.001	X	38270	
00915 Calcium (as Ca)		00430 Alkalinity (as CaCO <sub>3</sub> )		00400 pH		X	01030 Chromium	<0.005	RADIOPHICAL PCU/I	39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO <sub>3</sub> )		01330 Odor		X	01049 Lead	.050	01501 Gross Alpha	39730 2,4-D	
01045 Iron-Total (as Fe)	<10	00445 Carbonate (as CO <sub>3</sub> )		00080 Color	mg/l	X	01049 Lead	<0.005	03501 Gross Beta	39740 2,4,5-TP (Silvex)	
01056 Manganese (as Mn)		00945 Sulfate (as SO <sub>4</sub> )		00070 Turbidity		X	01145 Selenium	<0.005	09501 Radium-226	11501 pCi/l	
01057 Nitrate (N)	<0.010	Molybdate (Mo)	<0.010	01075 Silver	mg/l	X	01075 Silver	<0.001			
01058	1.0		0.05	.05							

LABORATORY REMARKS:

Reviewed by

11/27/78

Date reported

11/27/78

OIL CONSERVATION DIVISION  
REPORT TO: P.O. BOX 2088  
SANTA FE NM 87501

82-0135-D

LABORATORY

LAB NUMBER ORG-135-A, B, C

ATTENTION: SIMPSON CALL # 827-2534  
BUREAU:

7-15-82

SLD Users Code No.

ALL CONTAINERS WHICH THIS FORM ACCOMPANIES ARE COLLECTIVELY REFERRED TO AS "SAMPLE".

CERTIFICATE OF FIELD PERSONNEL

Sample Type: Water  Soil  Other \_\_\_\_\_

Water Supply and/or Code No. PLATEAU REFINERY LOCATION A

City & County NEAR BLOOMFIELD SAN JUAN

Collected (date & time) 7-12-82 By (name) SIMPSON

pH= \_\_\_\_; Conductivity= \_\_\_\_ umho/cm at \_\_\_\_ °C; Chlorine Residual= \_\_\_\_

Dissolved Oxygen= \_\_\_\_ mg/l; Alkalinity= \_\_\_\_ ; Flow Rate= \_\_\_\_

Sampling Location, Methods & Remarks (i.e. odors etc.) TEST HOLE A 3' DEEP

3-HOM GLASS VIALS WITH TEFLON SEALS MARKED AS (A, A<sub>2</sub>, A<sub>3</sub>) NOT PRESERVED

1-A - 135/A 3-A - 135-C  
2-A - 135/B

SAMPLE A

WATER

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Signed \_\_\_\_\_

I certify that I witnessed these field analyses, observations and activities and concur with the statements in this block. Signed \_\_\_\_\_

Method of Shipment to Laboratory \_\_\_\_\_

THIS FORM ACCOMPANIES \_\_\_\_\_ septum vials with teflon-lined discs identified as:

specimen \_\_\_\_\_; duplicate \_\_\_\_\_; triplicate \_\_\_\_\_; blank(s) \_\_\_\_\_,  
and \_\_\_\_\_ amber glass jug(s) with teflon-lined cap(s) identified as \_\_\_\_\_,

and \_\_\_\_\_ other container(s) (describe) \_\_\_\_\_ identified as \_\_\_\_\_.

Containers are marked as follows to indicate preservation (circle):

NP: No preservation; sample stored at room temperature (~20°C).

P-ICE: Sample stored in an ice bath.

P-Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>: Sample preserved with 3 mg Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>/40 ml and stored at room temperature.

CERTIFICATE(S) OF SAMPLE RECEIPT

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date & time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ Seal(s) Intact: Yes  No

Signature(s) \_\_\_\_\_

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date & time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ Seal(s) Intact: Yes  No

Signature(s) \_\_\_\_\_

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes  No  . Seal(s) broken by \_\_\_\_\_ date \_\_\_\_\_

I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements in this block and the data on page two of this form accurately reflect the analytical results for this sample.

Date(s) of Analysis 8-27-82. Analyst's Signature Jn Lee Y

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewer's Signature R Meyers

REMARKS \_\_\_\_\_

SAMPLE A WATER

STORET CODE	CONTAMINANT	
34235	<input checked="" type="checkbox"/> Benzene	<1 ug/l
34481	<input checked="" type="checkbox"/> Toluene	<1 ug/l
34372	<input checked="" type="checkbox"/> Ethylbenzene	<1 ug/l
34302	<input type="checkbox"/> Chlorobenzene	ug/l
	METHANE	
34414	<input type="checkbox"/> Bromo-	ug/l
34419	<input type="checkbox"/> Chloro-	ug/l
34424	<input type="checkbox"/> Dichloro-	ug/l
34307	{ <input type="checkbox"/> Chlorodibromo-	ug/l
34328	{ <input type="checkbox"/> Dichlorobromo-	ug/l
34288	{ <input type="checkbox"/> Tribromo-	ug/l
34316	{ <input type="checkbox"/> Trichloro-	ug/l
82080	<input type="checkbox"/> Total THM	ug/l
34489	<input type="checkbox"/> Trichlorofluoro-	ug/l
34332	<input type="checkbox"/> Dichlorodifluoro-	ug/l
34297	<input type="checkbox"/> Tetrachloro-	ug/l
	ETHANE	
34312	<input type="checkbox"/> Chloro-	ug/l
34497	<input type="checkbox"/> 1,1-Dichloro-	ug/l
34532	<input type="checkbox"/> 1,2-Dichloro-	ug/l
34507	<input type="checkbox"/> 1,1,1-Trichloro-	ug/l
34512	<input type="checkbox"/> 1,1,2-Trichloro-	ug/l
34517	<input type="checkbox"/> 1,1,2,2-Tetrachloro-	ug/l
	ETHENE	
34493	<input type="checkbox"/> Chloro-	ug/l
34502	<input type="checkbox"/> 1,1-Dichloro-	ug/l
34547	<input type="checkbox"/> 1,2-trans-Dichloro-	ug/l
34485	<input type="checkbox"/> Trichloro-	ug/l
34476	<input type="checkbox"/> Tetrachloro-	ug/l
34542	<input type="checkbox"/> 1,2-Dichloropropane	ug/l
34562	<input type="checkbox"/> 1,3-Dichloropropene	ug/l
	<input type="checkbox"/> OTHERS m-Xylene <+ mg/l	
	<input type="checkbox"/> OTHERS AROMATIC HYDROCARBONS	

ALIPHATIC HYDROCARBONS

~~Naphthalene~~

SEE ATTACHED LIST WITH

CIRCLED TOXIC POLLUTENTS ONLY if needed

Aliphatic Hydrocarbon Screen: negative

Jy 8-26-82

Detection limit: 1 ug/ml

NT - NOT TESTED FOR

P + PRESENT ( NO QUANTITATION)

ND - NONE DETECTED

OIL CONSERVATION DIVISION  
REPORT TO: P.O. BOX 2088  
SANTA FE NM 87501

82-0136-D

LAB NUMBER ORG-136-A, B, C

ATTENTION: SIMPSON 8272534 CALL  
BUREAU:

7-15-82

SLD Users Code No.

ALL CONTAINERS WHICH THIS FORM ACCOMPANIES ARE COLLECTIVELY REFERRED TO AS "SAMPLE".

CERTIFICATE OF FIELD PERSONNEL

Sample Type: Water  Soil  Other

Water Supply and/or Code No. PLATEAU REFINERY

City & County BLOOMFIELD SAN JUAN

Collected (date & time) 7-12-82 6:45PM By (name) SIMPSON

pH= ; Conductivity= umho/cm at °C; Chlorine Residual=

Dissolved Oxygen= mg/l; Alkalinity= ; Flow Rate= SAMPLE

Sampling Location, Methods & Remarks (i.e. odors etc.)

SAMPLE A4 SOIL SAMPLE 40ML VILE NOT PRESERVED - ORG-136-A

SOIL

A4A SOIL SAMPLE 250ML PVC BOTTLE NOT PRESERVED - 136-B

A4B SOIL SAMPLE 1 PINT GLASS JAR WITH ALUMINUM FOIL SEAL NOT PRESERVED - 136-C

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Signed SIMPSON

I certify that I witnessed these field analyses, observations and activities and concur with the statements in this block. Signed

Method of Shipment to Laboratory

THIS FORM ACCOMPANIES septum vials with teflon-lined discs identified as:

specimen ; duplicate ; triplicate ; blank(s) ,  
and amber glass jug(s) with teflon-lined cap(s) identified as ,

and other container(s) (describe) identified as .

Containers are marked as follows to indicate preservation (circle):

NP: No preservation; sample stored at room temperature (~20°C).

P-ICE: Sample stored in an ice bath.

P-Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>: Sample preserved with 3 mg Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>/40 ml and stored at room temperature.

CERTIFICATE(S) OF SAMPLE RECEIPT

I (we) certify that this sample was transferred from to  
at (location) on

(date & time) and that the statements in this block are correct.

Disposition of Sample . Seal(s) Intact: Yes  No

Signature(s)

I (we) certify that this sample was transferred from to  
at (location) on

(date & time) and that the statements in this block are correct.

Disposition of Sample . Seal(s) Intact: Yes  No

Signature(s)

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes  No  . Seal(s) broken by date .

I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements in this block and the data on page two of this form accurately reflect the analytical results for this sample.

Date(s) of Analysis 8-27-82 Analyst's Signature Ga Lee G

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewer's Signature K Meyerhen

REMARKS

Sample A Soil 7-14-82

STORED CODE	CONTAMINANT	
34235	<input checked="" type="checkbox"/> Benzene	<u>&lt;1 ug/gm ug/l</u>
34481	<input checked="" type="checkbox"/> Toluene	<u>&lt;1 ug/gm ug/l</u>
34372	<input type="checkbox"/> Ethylbenzene	<u>ug/l</u>
34302	<input type="checkbox"/> Chlorobenzene	<u>ug/l</u>
	METHANE	
34414	<input type="checkbox"/> Bromo-	<u>ug/l</u>
34419	<input type="checkbox"/> Chloro-	<u>ug/l</u>
34424	<input type="checkbox"/> Dichloro-	<u>ug/l</u>
34307	<input type="checkbox"/> Chlorodibromo-	<u>ug/l</u>
34328	<input type="checkbox"/> Dichlorobromo-	<u>ug/l</u>
34288	<input type="checkbox"/> Tribromo-	<u>ug/l</u>
34315	<input type="checkbox"/> Trichloro-	<u>ug/l</u>
82080	<input type="checkbox"/> Total THM	<u>ug/l</u>
34489	<input type="checkbox"/> Trichlorofluoro-	<u>ug/l</u>
34332	<input type="checkbox"/> Dichlorodifluoro-	<u>ug/l</u>
34297	<input checked="" type="checkbox"/> Tetrachloro- <i>CARBON</i>	<u>NT ug/l</u>
	ETHANE	
34312	<input type="checkbox"/> Chloro-	<u>ug/l</u>
34497	<input type="checkbox"/> 1,1-Dichloro-	<u>ug/l</u>
34532	<input type="checkbox"/> 1,2-Dichloro-	<u>ug/l</u>
34507	<input checked="" type="checkbox"/> 1,1,1-Trichloro-	<u>NT ug/l</u>
34512	<input checked="" type="checkbox"/> 1,1,2-Trichloro-	<u>NT ug/l</u>
34517	<input type="checkbox"/> 1,1,2,2-Tetrachloro-	<u>ug/l</u>
	ETHENE	
34493	<input type="checkbox"/> Chloro-	<u>ug/l</u>
34502	<input type="checkbox"/> 1,1-Dichloro-	<u>ug/l</u>
34547	<input type="checkbox"/> 1,2-trans-Dichloro-	<u>ug/l</u>
34485	<input type="checkbox"/> Trichloro-	<u>ug/l</u>
34476	<input type="checkbox"/> Tetrachloro-	<u>ug/l</u>
34542	<input type="checkbox"/> 1,2-Dichloropropane	<u>ug/l</u>
34562	<input type="checkbox"/> 1,3-Dichloropropene	<u>ug/l</u>
	<input type="checkbox"/> OTHERS	
	<i>PIM XYLEMES</i>	<u>&lt;1 ug/gm</u>
	<i>ALIPHATIC HYDROCARBONS</i>	
	<i>ALIPHATIC HYDROCARBONS</i>	
	<i>PLUS: DISOPROPYL ETHER</i>	
	<i>METHYLENE CHLORIDE</i>	
	<i>PCBs POLYCHLORINATED BIPHENYLS</i>	

SEE ATTACHED LIST ~~WITH~~ circled

TOXIC POLLUTENTS ONLY if needed

Aliphatic hydrocarbon Screen : Negative *Dg 8-26-82*

Detection limit : 1 ug/gm

OIL CONSERVATION DIVISION  
REPORT TO: P.O. BOX 2088  
SANTA FE NM 87501

82-0137-D

LAB

LAB NUMBER ORG-137-A, B, C

ATTENTION: SIMPSON CALL  
BUREAU:

SLD Users Code No.

ALL CONTAINERS WHICH THIS FORM ACCOMPANIES ARE COLLECTIVELY REFERRED TO AS "SAMPLE".

CERTIFICATE OF FIELD PERSONNEL

Sample Type: Water  Soil  Other

Water Supply and/or Code No. PLATEAU REFINERY LOCATION B

City & County NEAR BLOOMFIELD NM SAN JUAN

Collected (date & time) 7-12-82 By (name)

pH= \_\_\_\_\_; Conductivity= \_\_\_\_\_ umho/cm at \_\_\_\_\_ °C; Chlorine Residual= \_\_\_\_\_

Dissolved Oxygen= \_\_\_\_\_ mg/l; Alkalinity= \_\_\_\_\_ ; Flow Rate= \_\_\_\_\_

Sampling Location, Methods & Remarks (i.e. odors etc.)  
3-40ML VIALS WITH TEFLON SEALS NOT PRESERVED ICED DOWN SINCE COLLECTION

SAMPLES B<sub>1</sub>, B<sub>2</sub>, B<sub>3</sub>  
ORG-137-A, B, C

SAMPLE B  
WATER

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Signed

I certify that I witnessed these field analyses, observations and activities and concur with the statements in this block. Signed

Method of Shipment to Laboratory

THIS FORM ACCOMPANIES \_\_\_\_\_ septum vials with teflon-lined discs identified as:  
specimen \_\_\_\_\_; duplicate \_\_\_\_\_; triplicate \_\_\_\_\_; blank(s) \_\_\_\_\_,  
and \_\_\_\_\_ amber glass jug(s) with teflon-lined cap(s) identified as \_\_\_\_\_,  
and \_\_\_\_\_ other container(s) (describe) \_\_\_\_\_ identified as \_\_\_\_\_.

Containers are marked as follows to indicate preservation (circle):

NP: No preservation; sample stored at room temperature (~20°C).

P-ICE: Sample stored in an ice bath.

P-Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>: Sample preserved with 3 mg Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>/40 ml and stored at room temperature.

CERTIFICATE(S) OF SAMPLE RECEIPT

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date & time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ Seal(s) Intact: Yes  No

Signature(s) \_\_\_\_\_

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date & time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ Seal(s) Intact: Yes  No

Signature(s) \_\_\_\_\_

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes  No  . Seal(s) broken by \_\_\_\_\_ date \_\_\_\_\_.

I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements in this block and the data on page two of this form accurately reflect the analytical results for this sample.

Date(s) of Analysis 8-27-82. Analyst's Signature J. Lee Yd

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewer's Signature R. Meyers

REMARKS \_\_\_\_\_

## SAMPLE B 7-12-82

STORET CODE	CONTAMINANT	
34235 <input checked="" type="checkbox"/>	Benzene	< 1 ug/l
34481 <input checked="" type="checkbox"/>	Toluene	< 1 ug/l
34372 <input type="checkbox"/>	Ethylbenzene	ug/l
34302 <input type="checkbox"/>	Chlorobenzene	ug/l
	METHANE	
34414 <input type="checkbox"/>	Bromo-	ug/l
34419 <input type="checkbox"/>	Chloro-	ug/l
34424 <input type="checkbox"/>	Dichloro-	ug/l
34307 <input type="checkbox"/>	{ Chlorodibromo-	ug/l
34328 <input type="checkbox"/>	{ Dichlorobromo-	ug/l
34288 <input type="checkbox"/>	{ Tribromo-	ug/l
34316 <input type="checkbox"/>	{ Trichloro-	ug/l
82080 <input type="checkbox"/>	Total THM	ug/l
34489 <input type="checkbox"/>	Trichlorofluoro-	ug/l
34332 <input type="checkbox"/>	Dichlorodifluoro-	ug/l
34297 <input type="checkbox"/>	Tetrachloro-	ug/l
	ETHANE	
34312 <input type="checkbox"/>	Chloro-	ug/l
34497 <input type="checkbox"/>	1,1-Dichloro-	ug/l
34532 <input type="checkbox"/>	1,2-Dichloro-	ug/l
34507 <input type="checkbox"/>	1,1,1-Trichloro-	ug/l
34512 <input type="checkbox"/>	1,1,2-Trichloro-	ug/l
34517 <input type="checkbox"/>	1,1,2,2-Tetrachloro-	ug/l
	ETHENE	
34493 <input type="checkbox"/>	Chloro-	ug/l
34502 <input type="checkbox"/>	1,1-Dichloro-	ug/l
34547 <input type="checkbox"/>	1,2-trans-Dichloro-	ug/l
34485 <input type="checkbox"/>	Trichloro-	ug/l
34476 <input type="checkbox"/>	Tetrachloro-	ug/l
34542 <input type="checkbox"/>	1,2-Dichloropropane	ug/l
34562 <input type="checkbox"/>	1,3-Dichloropropene	ug/l
<input type="checkbox"/>	OTHERS	m-Xylenes < 1 mg/l
		<del>Aromatic Hydrocarbons</del>
		ALIPHATIC HYDROCARBONS
		PLUS ATTACHED LIST <del>ATTACHED</del> CIRCLED
		TOXIC POLLUTENTS ONLY

NT - NOT TESTED FOR

P = PRESENT ( NO QUANTITATION )

ND - NONE DETECTED

Aliphatic hydrocarbon Screen : Negative Jy 8-26-82

Detection limit : 1 ug/ml

OIL CONSERVATION DIVISION  
REPORT TO: P.O. BOX 2088  
SANTA FE NM 87501

82-0138-D

LAB NUMBER ORG-138-17-B-C

CALL

ATTENTION: SIMPSON 827-2534

7-15-82

BUREAU:

SLD Users Code No.

ALL CONTAINERS WHICH THIS FORM ACCOMPANIES ARE COLLECTIVELY REFERRED TO AS "SAMPLE".

CERTIFICATE OF FIELD PERSONNEL

Sample Type: Water  Soil  Other \_\_\_\_\_

Water Supply and/or Code No. PLATEAU REFINERY

City & County NEAR BLOOMFIELD NM SAN JUAN

Collected (date & time) 7-15-82 3:20PM By (name) \_\_\_\_\_

pH= \_\_\_\_\_; Conductivity= \_\_\_\_\_ umho/cm at \_\_\_\_\_ °C; Chlorine Residual= \_\_\_\_\_

Dissolved Oxygen= \_\_\_\_\_ mg/l; Alkalinity= \_\_\_\_\_ ; Flow Rate= \_\_\_\_\_

Sampling Location, Methods & Remarks (i.e. odors etc.)

SAMPLES B4 1-40ML VILE SOIL SAMPLE NOT PRESERVED - ORG-138-17

SAMPLE

B

B4A 1-250ML PLASTIC BOTTLE SOIL SAMPLE NOT PRESERVED 138-B

B4B 1-PT GLASS MASON JAR W/ THALUMINUM FOIL SEAL NOT PRESERVED 138-C

SOIL

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Signed \_\_\_\_\_

I certify that I witnessed these field analyses, observations and activities and concur with the statements in this block. Signed \_\_\_\_\_

Method of Shipment to Laboratory

THIS FORM ACCOMPANIES \_\_\_\_\_ septum vials with teflon-lined discs identified as:

specimen \_\_\_\_\_; duplicate \_\_\_\_\_; triplicate \_\_\_\_\_; blank(s) \_\_\_\_\_,  
and \_\_\_\_\_ amber glass jug(s) with teflon-lined cap(s) identified as \_\_\_\_\_,  
and \_\_\_\_\_ other container(s) (describe) \_\_\_\_\_ identified as \_\_\_\_\_.

Containers are marked as follows to indicate preservation (circle):

NP: No preservation; sample stored at room temperature (~20°C).

P-ICE: Sample stored in an ice bath.

P-Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>: Sample preserved with 3 mg Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>/40 ml and stored at room temperature.

CERTIFICATE(S) OF SAMPLE RECEIPT

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date & time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ Seal(s) Intact: Yes  No

Signature(s) \_\_\_\_\_

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date & time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ Seal(s) Intact: Yes  No

Signature(s) \_\_\_\_\_

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes  No  . Seal(s) broken by \_\_\_\_\_ date \_\_\_\_\_

I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements in this block and the data on page two of this form accurately reflect the analytical results for this sample.

Date(s) of Analysis 8-27-82. Analyst's Signature Ja Lee Yip

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewer's Signature R Meyerhen

REMARKS \_\_\_\_\_

SAMPLE B  
7-14-82  
8012

STORET CODE	CONTAMINANT	
34235	<input checked="" type="checkbox"/> Benzene	<1 ug/gm pptt
34481	<input checked="" type="checkbox"/> Toluene	<1 ug/gm pptt
34372	<input checked="" type="checkbox"/> Ethylbenzene	<1 ug/gm pptt
34302	<input type="checkbox"/> Chlorobenzene	ug/l
	METHANE	
34414	<input type="checkbox"/> Bromo-	ug/l
34419	<input type="checkbox"/> Chloro-	ug/l
34424	<input type="checkbox"/> Dichloro-	ug/l
34307	<input type="checkbox"/> Chlorodibromo-	ug/l
34328	<input type="checkbox"/> Dichlorobromo-	ug/l
34288	<input type="checkbox"/> Tribromo-	ug/l
34316	<input type="checkbox"/> Trichloro-	ug/l
82080	<input type="checkbox"/> Total THM	ug/l
34489	<input type="checkbox"/> Trichlorofluoro-	ug/l
34332	<input type="checkbox"/> Dichlorodifluoro-	ug/l
34297	<input type="checkbox"/> Tetrachloro-	ug/l
	ETHANE	
34312	<input type="checkbox"/> Chloro-	ug/l
34497	<input type="checkbox"/> 1,1-Dichloro-	ug/l
34532	<input type="checkbox"/> 1,2-Dichloro-	ug/l
34507	<input type="checkbox"/> 1,1,1-Trichloro-	ug/l
34512	<input type="checkbox"/> 1,1,2-Trichloro-	ug/l
34517	<input type="checkbox"/> 1,1,2,2-Tetrachloro-	ug/l
	ETHENE	
34493	<input type="checkbox"/> Chloro-	ug/l
34502	<input type="checkbox"/> 1,1-Dichloro-	ug/l
34547	<input type="checkbox"/> 1,2-trans-Dichloro-	ug/l
34485	<input type="checkbox"/> Trichloro-	ug/l
34476	<input type="checkbox"/> Tetrachloro-	ug/l
34542	<input type="checkbox"/> 1,2-Dichloropropane	ug/l
34562	<input type="checkbox"/> 1,3-Dichloropropene	ug/l
	OTHERS <i>p+m-Xylenes &lt;1 mg/gm</i>	
	<i>AROMATIC HYDROCARBONS</i>	
	ALL ALIPHATIC HYDROCARBONS	
	PLUS CIRCLED ITEMS OR ATTACHED TOXIC POLLUTANTS LIST if needed	

NT - NOT TESTED FOR  
P = PRESENT ( NO QUANTITATION )  
ND - NONE DETECTED

Aliphatic hydrocarbon Screen : Negative

Jy 8-26-82

Detection limit : 1 ug/ml

OIL CONSERVATION DIVISION  
REPORT TO: P.O. BOX 2088  
SANTA FE NM 87501

LABORATORY

82-0139-D

LAB NUMBER ORG - 139-H, B, C

ATTENTION: SIMPSON CALL 8272534  
BUREAU:

7-15-82

SLD Users Code No.

ALL CONTAINERS WHICH THIS FORM ACCOMPANIES ARE COLLECTIVELY REFERRED TO AS "SAMPLE".

CERTIFICATE OF FIELD PERSONNEL

Sample Type: Water  Soil  Other

Water Supply and/or Code No. PLATEAU REFINERY LOCATION C HAMMOND IRRIGATION WATER

City & County NEAR BLOOMFIELD SAN JUAN

Collected (date & time) 7-14-82 1:45 PM By (name) SIMPSON

pH= ; Conductivity= umho/cm at °C; Chlorine Residual=

Dissolved Oxygen= mg/l; Alkalinity= ; Flow Rate=

Sampling Location, Methods & Remarks (i.e. odors etc.)

SAMPLE C<sub>7</sub> C<sub>8</sub>, C<sub>9</sub> 3-40ML GLASS VIALS WITH TEFLON SEALS  
C<sub>1</sub>=139-H C<sub>3</sub>=139-C NOT PRESERVED ICED DOWN FROM TIME OF  
C<sub>2</sub>=139-B COLLECTION SAMPLE C  
WATER

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Signed

I certify that I witnessed these field analyses, observations and activities and concur with the statements in this block. Signed

Method of Shipment to Laboratory

THIS FORM ACCOMPANIES \_\_\_\_\_ septum vials with teflon-lined discs identified as: specimen \_\_\_\_\_; duplicate \_\_\_\_\_; triplicate \_\_\_\_\_; blank(s) \_\_\_\_\_, and \_\_\_\_\_ amber glass jug(s) with teflon-lined cap(s) identified as \_\_\_\_\_, and \_\_\_\_\_ other container(s) (describe) \_\_\_\_\_ identified as \_\_\_\_\_.

Containers are marked as follows to indicate preservation (circle):

NP: No preservation; sample stored at room temperature (~20°C).

P-ICE: Sample stored in an ice bath.

P-Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>: Sample preserved with 3 mg Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>/40 ml and stored at room temperature.

CERTIFICATE(S) OF SAMPLE RECEIPT

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date & time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ Seal(s) Intact: Yes  No

Signature(s) \_\_\_\_\_

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date & time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ Seal(s) Intact: Yes  No

Signature(s) \_\_\_\_\_

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes  No  . Seal(s) broken by \_\_\_\_\_ date \_\_\_\_\_.

I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements in this block and the data on page two of this form accurately reflect the analytical results for this sample.

Date(s) of Analysis 8-27-82. Analyst's Signature *Ga Lee Yeo*

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewer's Signature *R. Meyerhen*

REMARKS \_\_\_\_\_

SAMPLE C 7-14-82

STORED CODE	CONTAMINANT	
34235 <input checked="" type="checkbox"/>	Benzene	<1 ug/l
34481 <input checked="" type="checkbox"/>	Toluene	<1 ug/l
34372 <input checked="" type="checkbox"/>	Ethylbenzene	<1 ug/l
34302 <input type="checkbox"/>	Chlorobenzene	_____ ug/l
	METHANE	
34414 <input type="checkbox"/>	Bromo-	_____ ug/l
34419 <input type="checkbox"/>	Chloro-	_____ ug/l
34424 <input type="checkbox"/>	Dichloro-	_____ ug/l
34307 <input type="checkbox"/>	{ Chlorodibromo-	_____ ug/l
34328 <input type="checkbox"/>	{ Dichlorobromo-	_____ ug/l
34288 <input type="checkbox"/>	{ Tribromo-	_____ ug/l
34316 <input type="checkbox"/>	{ Trichloro-	_____ ug/l
82080 <input type="checkbox"/>	Total THM	_____ ug/l
34489 <input type="checkbox"/>	Trichlorofluoro-	_____ ug/l
34332 <input type="checkbox"/>	Dichlorodifluoro-	_____ ug/l
34297 <input type="checkbox"/>	Tetrachloro-	_____ ug/l
	ETHANE	
34312 <input type="checkbox"/>	Chloro-	_____ ug/l
34497 <input type="checkbox"/>	1,1-Dichloro-	_____ ug/l
34532 <input type="checkbox"/>	1,2-Dichloro-	_____ ug/l
34507 <input type="checkbox"/>	1,1,1-Trichloro-	_____ ug/l
34512 <input type="checkbox"/>	1,1,2-Trichloro-	_____ ug/l
34517 <input type="checkbox"/>	1,1,2,2-Tetrachloro-	_____ ug/l
	ETHENE	
34493 <input type="checkbox"/>	Chloro-	_____ ug/l
34502 <input type="checkbox"/>	1,1-Dichloro-	_____ ug/l
34547 <input type="checkbox"/>	1,2-trans-Dichloro-	_____ ug/l
34485 <input type="checkbox"/>	Trichloro-	_____ ug/l
34476 <input type="checkbox"/>	Tetrachloro-	_____ ug/l
34542 <input type="checkbox"/>	1,2-Dichloropropane	_____ ug/l
34562 <input type="checkbox"/>	1,3-Dichloropropene	_____ ug/l
<input type="checkbox"/>	OTHERS <i>m-Xylenes</i> <i>1 mg/l</i>	
	<del>AROMATIC HYDROCARBONS</del>	

ALKYLIC HYDROCARBONS  
PLUS CIRCLED ITEMS OF ATTACHED  
TOXIC POLLUTENTS LIST IF NEEDED

Aliphatic hydrocarbon Screen : Negative *by 8-26-82*

Detection limit : 1 mg/ml

NT - NOT TESTED FOR

P = PRESENT ( NO QUANTITATION )

ND - NONE DETECTED

OIL CONSERVATION DIVISION  
REPORT TO: P.O. BOX 2088  
SANTA FE NM 87501

82-0140-D

LABO

LAB NUMBER ORG-140-#, B.C.

ATTENTION: SIMPSON CALL 8272534  
BUREAU:

SLD Users Code No.

ALL CONTAINERS WHICH THIS FORM ACCOMPANIES ARE COLLECTIVELY REFERRED TO AS "SAMPLE".

CERTIFICATE OF FIELD PERSONNEL

Sample Type: Water  Soil  Other \_\_\_\_\_

Water Supply and/or Code No. \_\_\_\_\_

City & County NEAR BLOOMFIELD

Collected (date & time) 7-14-82 1:45 PM By (name) SIMPSON

pH= \_\_\_\_\_; Conductivity= \_\_\_\_\_ umho/cm at \_\_\_\_\_ °C; Chlorine Residual= \_\_\_\_\_

Dissolved Oxygen= \_\_\_\_\_ mg/l; Alkalinity= \_\_\_\_\_ ; Flow Rate= \_\_\_\_\_

Sampling Location, Methods & Remarks (i.e. odors etc.)

SAMPLE D<sub>7</sub> D<sub>8</sub> D<sub>9</sub> 3-40 ml GLASS VIALS WITH TEFON SEALS  
ORG-140-# - B - C NOT PRESERVED

SAMPLE P WATER

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Signed \_\_\_\_\_

I certify that I witnessed these field analyses, observations and activities and concur with the statements in this block. Signed \_\_\_\_\_

Method of Shipment to Laboratory

THIS FORM ACCOMPANIES \_\_\_\_\_ septum vials with teflon-lined discs identified as:

specimen \_\_\_\_\_; duplicate \_\_\_\_\_; triplicate \_\_\_\_\_; blank(s) \_\_\_\_\_,  
and \_\_\_\_\_ amber glass jug(s) with teflon-lined cap(s) identified as \_\_\_\_\_,  
and \_\_\_\_\_ other container(s) (describe) \_\_\_\_\_ identified as \_\_\_\_\_.

Containers are marked as follows to indicate preservation (circle):

NP: No preservation; sample stored at room temperature (~20°C).

P-ICE: Sample stored in an ice bath.

P-Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>: Sample preserved with 3 mg Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>/40 ml and stored at room temperature.

CERTIFICATE(S) OF SAMPLE RECEIPT

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date & time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ Seal(s) Intact: Yes  No

Signature(s) \_\_\_\_\_

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date & time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ Seal(s) Intact: Yes  No

Signature(s) \_\_\_\_\_

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes  No  . Seal(s) broken by \_\_\_\_\_ date \_\_\_\_\_

I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements in this block and the data on page two of this form accurately reflect the analytical results for this sample.

Date(s) of Analysis 8-27-82 Analyst's Signature J. Lee J. J.

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewer's Signature K. Meyerhenne

REMARKS \_\_\_\_\_

SAMPLE D  
7-14-82

STORET CODE	CONTAMINANT	
34235	<input checked="" type="checkbox"/> Benzene	21130 ug/l
34481	<input checked="" type="checkbox"/> Toluene	21080 ug/l
34372	<input checked="" type="checkbox"/> Ethylbenzene	<1 ug/l
34302	<input type="checkbox"/> Chlorobenzene	ug/l
	METHANE	
34414	<input type="checkbox"/> Bromo-	ug/l
34419	<input type="checkbox"/> Chloro-	ug/l
34424	<input type="checkbox"/> Dichloro-	ug/l
34307	<input type="checkbox"/> Chlorodibromo-	ug/l
34328	<input type="checkbox"/> Dichlorobromo-	ug/l
34288	<input type="checkbox"/> Tribromo-	ug/l
34316	<input type="checkbox"/> Trichloro-	ug/l
82080	<input type="checkbox"/> Total THM	ug/l
34489	<input type="checkbox"/> Trichlorofluoro-	ug/l
34332	<input type="checkbox"/> Dichlorodifluoro-	ug/l
34297	<input type="checkbox"/> Tetrachloro-	ug/l
	ETHANE	
34312	<input type="checkbox"/> Chloro-	ug/l
34497	<input type="checkbox"/> 1,1-Dichloro-	ug/l
34532	<input type="checkbox"/> 1,2-Dichloro-	ug/l
34507	<input type="checkbox"/> 1,1,1-Trichloro-	ug/l
34512	<input type="checkbox"/> 1,1,2-Trichloro-	ug/l
34517	<input type="checkbox"/> 1,1,2,2-Tetrachloro-	ug/l
	ETHENE	
34493	<input type="checkbox"/> Chloro-	ug/l
34502	<input type="checkbox"/> 1,1-Dichloro-	ug/l
34547	<input type="checkbox"/> 1,2-trans-Dichloro-	ug/l
34485	<input type="checkbox"/> Trichloro-	ug/l
34476	<input type="checkbox"/> Tetrachloro-	ug/l
34542	<input type="checkbox"/> 1,2-Dichloropropane	ug/l
34562	<input type="checkbox"/> 1,3-Dichloropropene <i>m-XYLENE</i>	ug/l
	<input type="checkbox"/> OTHERS	1270 ug/l

ALL ITALIC'S HYDROCARBONS

ALL CIRCLED ITEMS OR ATTACHED LIST  
IF NEEDED

Aliphatic hydrocarbon Screen :

Has hydrocarbon peaks in the C<sub>8</sub> - C<sub>24</sub> region

maximum at C<sub>9</sub> - C<sub>11</sub>

Jy 8-26-82

Detection limit : 1 mg/ml

DIVISION OF ENVIRONMENTAL PROTECTION  
P.O. BOX 2088 SANTA FE, NM 87501

82-0141-D

LABORATORY

LAB NUMBER ORG-141-H, B,C



REPORT TO: Environmental Improvement Division  
Health & Environment Department  
P.O. Box 968 - Crown Building  
Santa Fe, New Mexico 87504-0968  
ATTENTION: S. JIPSON - 8272534 CALL  
BUREAU:

7-15-82

SLD Users Code No.

ALL CONTAINERS WHICH THIS FORM ACCOMPANIES ARE COLLECTIVELY REFERRED TO AS "SAMPLE".

CERTIFICATE OF FIELD PERSONNEL

Sample Type: Water  Soil  Other \_\_\_\_\_

Water Supply and/or Code No. PLATEAU PRECIPITY

City & County NEAR BLOOMFIELD

Collected (date & time) 7-14-82 4:15PM By (name) S. JIPSON

pH= \_\_\_\_\_; Conductivity= \_\_\_\_\_ umho/cm at \_\_\_\_\_ °C; Chlorine Residual= \_\_\_\_\_

Dissolved Oxygen= \_\_\_\_\_ mg/l; Alkalinity= \_\_\_\_\_ ; Flow Rate= \_\_\_\_\_

Sampling Location, Methods & Remarks (i.e. odors etc.)

SAMPLE

*E7-141-A 3-40 ml glass vials with teflon seals NOT PRESERVED  
E8 141-B ICED DOWN SINCE COLLECTION  
E9 141-C*

SAMPLE E

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Signed \_\_\_\_\_

I certify that I witnessed these field analyses, observations and activities and concur with the statements in this block. Signed \_\_\_\_\_

Method of Shipment to Laboratory \_\_\_\_\_

THIS FORM ACCOMPANIES \_\_\_\_\_ septum vials with teflon-lined discs identified as:

specimen \_\_\_\_\_; duplicate \_\_\_\_\_; triplicate \_\_\_\_\_; blank(s) \_\_\_\_\_,  
and \_\_\_\_\_ amber glass jug(s) with teflon-lined cap(s) identified as \_\_\_\_\_,  
and \_\_\_\_\_ other container(s) (describe) \_\_\_\_\_ identified as \_\_\_\_\_.

Containers are marked as follows to indicate preservation (circle):

NP: No preservation; sample stored at room temperature (~20°C).

P-ICE: Sample stored in an ice bath.

P-Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>: Sample preserved with 3 mg Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>/40 ml and stored at room temperature.

CERTIFICATE(S) OF SAMPLE RECEIPT

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date & time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ . Seal(s) Intact: Yes  No  .

Signature(s) \_\_\_\_\_

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date & time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ . Seal(s) Intact: Yes  No  .

Signature(s) \_\_\_\_\_

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes  No  . Seal(s) broken by \_\_\_\_\_ date \_\_\_\_\_.

I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements in this block and the data on page two of this form accurately reflect the analytical results for this sample.

Date(s) of Analysis 8-27-82. Analyst's Signature Jn Lee Yia

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewer's Signature R. M. Eggers

REMARKS \_\_\_\_\_

Sample E 7-11-82  
WATER

STORED CODE	CONTAMINANT	
34235	<input checked="" type="checkbox"/> Benzene	15660 ug/l
34481	<input checked="" type="checkbox"/> Toluene	44600 ug/l
34372	<input checked="" type="checkbox"/> Ethylbenzene	4030 ug/l
34302	<input type="checkbox"/> Chlorobenzene	ug/l
	METHANE	
34414	<input type="checkbox"/> Bromo-	ug/l
34419	<input type="checkbox"/> Chlоро-	ug/l
34424	<input type="checkbox"/> Dichloro-	ug/l
34307	{ <input type="checkbox"/> Chlorodibromo-	ug/l
34328	{ <input type="checkbox"/> Dichlorobromo-	ug/l
34288	{ <input type="checkbox"/> Tribromo-	ug/l
34316	{ <input type="checkbox"/> Trichloro-	ug/l
82080	<input type="checkbox"/> Total THM	ug/l
34489	<input type="checkbox"/> Trichlorofluoro-	ug/l
34332	<input type="checkbox"/> Dichlorodifluoro-	ug/l
34297	<input type="checkbox"/> Tetrachloro-	ug/l
	ETHANE	
34312	<input type="checkbox"/> Chlоро-	ug/l
34497	<input type="checkbox"/> 1,1-Dichloro-	ug/l
34532	<input type="checkbox"/> 1,2-Dichloro-	ug/l
34507	<input type="checkbox"/> 1,1,1-Trichloro-	ug/l
34512	<input type="checkbox"/> 1,1,2-Trichloro-	ug/l
34517	<input type="checkbox"/> 1,1,2,2-Tetrachloro-	ug/l
	ETHENE	
34493	<input type="checkbox"/> Chlоро-	ug/l
34502	<input type="checkbox"/> 1,1-Dichloro-	ug/l
34547	<input type="checkbox"/> 1,2-trans-Dichloro-	ug/l
34485	<input type="checkbox"/> Trichloro-	ug/l
34476	<input type="checkbox"/> Tetrachloro-	ug/l
34542	<input type="checkbox"/> 1,2-Dichloropropane	ug/l
34562	<input type="checkbox"/> 1,3-Dichloropropene	ug/l
	OTHERS <sup>MT</sup> XYLENE	16300 ug/l

ALL ALIPHATIC HYDROCARBONS  
ALL ITEMS CIRCLED ON ATTACHED LIST  
IF REQUIRED CALL 827-2534

Aliphatic hydrocarbon screen:

Has hydrocarbon peaks in the C<sub>8</sub> - C<sub>14</sub> region

maximum at C<sub>9</sub> - C<sub>10</sub>

Jy 8-26-82

Detection limit: 1 ug/ml

NT - NOT TESTED FOR  
P - PRESENT ( NO QUANTITATION)  
ND - NONE DETECTED

OIL CONSERVATION DIVISION  
REPORT TO: P.O. BOX 2088  
SANTA FE NM 87501

82-0142-B

LAB NUMBER ORG - ~~142-A~~ 142-A

7-15-82

ATTENTION: SIMPSON - CALL 8272534

BUREAU:

SLD Users Code No.

ALL CONTAINERS WHICH THIS FORM ACCOMPANIES ARE COLLECTIVELY REFERRED TO AS "SAMPLE".

CERTIFICATE OF FIELD PERSONNEL

Sample Type: Water  Soil  Other

Water Supply and/or Code No. PLATEAU REFINERY LOCATION E GROUND WATER

City & County NEAR BLOOMFIELD NM SAN JUAN

Collected (date & time) 7-14-82 4:15 PM By (name) SIMPSON

pH= ; Conductivity= umho/cm at °C; Chlorine Residual=

Dissolved Oxygen= mg/l; Alkalinity= ; Flow Rate=

Sampling Location, Methods & Remarks (i.e. odors etc.)

1-glass PINT MASON JAR WITH ALUMINUM FOIL SEAL NOT PRESERVED

SAMPLE E/O - 142-A

Soil

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Signed

I certify that I witnessed these field analyses, observations and activities and concur with the statements in this block. Signed

Method of Shipment to Laboratory

THIS FORM ACCOMPANIES septum vials with teflon-lined discs identified as:

specimen ; duplicate ; triplicate ; blank(s) ,  
and amber glass jug(s) with teflon-lined cap(s) identified as ,  
and other container(s) (describe) identified as .

Containers are marked as follows to indicate preservation (circle):

NP: No preservation; sample stored at room temperature (~20°C).

P-ICE: Sample stored in an ice bath.

P-Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>: Sample preserved with 3 mg Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>/40 ml and stored at room temperature.

CERTIFICATE(S) OF SAMPLE RECEIPT

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date & time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ Seal(s) Intact: Yes  No

Signature(s) \_\_\_\_\_

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date & time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ Seal(s) Intact: Yes  No

Signature(s) \_\_\_\_\_

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes  No  . Seal(s) broken by \_\_\_\_\_ date \_\_\_\_\_

I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements in this block and the data on page two of this form accurately reflect the analytical results for this sample.

Date(s) of Analysis 8-27-82 Analyst's Signature *J. Lee Jr.*

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewer's Signature *R. Meyerhen*

REMARKS

SAMPORE E

7-14-82

SOIL

STORET CODE	CONTAMINANT	
34235	<input checked="" type="checkbox"/> Benzene	< 1 ug/gm <del>ug/1</del>
34481	<input checked="" type="checkbox"/> Toluene	111.5 ug/gm <del>ug/1</del>
34372	<input checked="" type="checkbox"/> Ethylbenzene	43.5 ug/gm <del>ug/1</del>
34302	<input type="checkbox"/> Chlorobenzene	_____ ug/1
	METHANE	
34414	<input type="checkbox"/> Bromo-	_____ ug/1
34419	<input type="checkbox"/> Chlоро-	_____ ug/1
34424	<input type="checkbox"/> Dichloro-	_____ ug/1
34307	{ <input type="checkbox"/> Chlorodibromo-	_____ ug/1
34328	{ <input type="checkbox"/> Dichlorobromo-	_____ ug/1
34288	{ <input type="checkbox"/> Tribromo-	_____ ug/1
34316	{ <input type="checkbox"/> Trichloro-	_____ ug/1
82080	<input type="checkbox"/> Total THM	_____ ug/1
34489	<input type="checkbox"/> Trichlorofluoro-	_____ ug/1
34332	<input type="checkbox"/> Dichlorodifluoro-	_____ ug/1
34297	<input type="checkbox"/> Tetrachloro-	_____ ug/1
	ETHANE	
34312	<input type="checkbox"/> Chlоро-	_____ ug/1
34497	<input type="checkbox"/> 1,1-Dichloro-	_____ ug/1
34532	<input type="checkbox"/> 1,2-Dichloro-	_____ ug/1
34507	<input type="checkbox"/> 1,1,1-Trichloro-	_____ ug/1
34512	<input type="checkbox"/> 1,1,2-Trichloro-	_____ ug/1
34517	<input type="checkbox"/> 1,1,2,2-Tetrachloro-	_____ ug/1
	ETHENE	
34493	<input type="checkbox"/> Chlоро-	_____ ug/1
34502	<input type="checkbox"/> 1,1-Dichloro-	_____ ug/1
34547	<input type="checkbox"/> 1,2-trans-Dichloro-	_____ ug/1
34485	<input type="checkbox"/> Trichloro-	_____ ug/1
34476	<input type="checkbox"/> Tetrachloro-	_____ ug/1
34542	<input type="checkbox"/> 1,2-Dichloropropane	_____ ug/1
34562	<input type="checkbox"/> 1,3-Dichloropropene	_____ ug/1
	<input type="checkbox"/> OTHERS <del>XYLENE</del> <sup>O-P+m-</sup>	123.5 mg/gm

ALL ALIPHATIC HYDROCARBONS

ALL CIRCLED ITEMS ON ATTACHED LIST  
IF REQUIRED CALL 827-2534

Aliphatic hydrocarbon Screen:

Has hydrocarbon peaks concentrated in the C<sub>8</sub>-C<sub>14</sub> region

maximum at C<sub>10</sub>

Jy 8-26-82

Detection limit: 1 ug/gm

OIL CONSERVATION DIVISION  
REPORT TO: P.O. BOX 2088  
SANTA FE NM 87501

LABORATORY

82-0143-C

LAB NUMBER ORG-143-F,B

ATTENTION: SIMPSON CALL 8277534  
BUREAU:

7-15-82

SLD Users Code No.

ALL CONTAINERS WHICH THIS FORM ACCOMPANIES ARE COLLECTIVELY REFERRED TO AS "SAMPLE".

CERTIFICATE OF FIELD PERSONNEL

Sample Type: Water  Soil  Other

Water Supply and/or Code No. PLATEAU BREWERY LOCATION F SEEP

City & County NEAR BLOOMFIELD

Collected (date & time) 7-14-82 6:00PM By (name) SIMPSON

pH= ; Conductivity= umho/cm at °C; Chlorine Residual=

Dissolved Oxygen= mg/l; Alkalinity= ; Flow Rate=

Sampling Location, Methods & Remarks (i.e. odors etc.)

SAMPLES  
143-A → F<sub>2</sub>  
143-B → F<sub>3</sub>

2-40 ml GLASS VIALS WITH TEFON SEALS NOT PRESERVED

SAMPLE WATER

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Signed

I certify that I witnessed these field analyses, observations and activities and concur with the statements in this block. Signed

Method of Shipment to Laboratory

THIS FORM ACCOMPANIES septum vials with teflon-lined discs identified as:

specimen ; duplicate ; triplicate ; blank(s) ,  
and amber glass jug(s) with teflon-lined cap(s) identified as ,  
and other container(s) (describe) identified as

Containers are marked as follows to indicate preservation (circle):

NP: No preservation; sample stored at room temperature (~20°C).

P-ICE: Sample stored in an ice bath.

P-Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>: Sample preserved with 3 mg Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>/40 ml and stored at room temperature.

CERTIFICATE(S) OF SAMPLE RECEIPT

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date & time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ Seal(s) Intact: Yes  No

Signature(s) \_\_\_\_\_

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date & time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ Seal(s) Intact: Yes  No

Signature(s) \_\_\_\_\_

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes  No  . Seal(s) broken by \_\_\_\_\_ date \_\_\_\_\_

I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements in this block and the data on page two of this form accurately reflect the analytical results for this sample.

Date(s) of Analysis 8-27-82 Analyst's Signature Jn Lee Yd

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewer's Signature R Meyerhen

REMARKS

SAMPLE F  
WATER  
7-14-82

STORED CODE	CONTAMINANT	ug/l
34235	<input checked="" type="checkbox"/> Benzene	< 1 ug/l
34481	<input checked="" type="checkbox"/> Toluene	7430 ug/l
34372	<input checked="" type="checkbox"/> Ethylbenzene	< 1 ug/l
34302	<input type="checkbox"/> Chlorobenzene	ug/l
	METHANE	
34414	<input type="checkbox"/> Bromo-	ug/l
34419	<input type="checkbox"/> Chloro-	ug/l
34424	<input type="checkbox"/> Dichloro-	ug/l
34307	<input type="checkbox"/> Chlorodibromo-	ug/l
34328	<input type="checkbox"/> Dichlorobromo-	ug/l
34288	{ <input type="checkbox"/> Tribromo-	ug/l
34316	<input type="checkbox"/> Trichloro-	ug/l
82080	<input type="checkbox"/> Total THM	ug/l
34489	<input type="checkbox"/> Trichlorofluoro-	ug/l
34332	<input type="checkbox"/> Dichlorodifluoro-	ug/l
34297	<input type="checkbox"/> Tetrachloro-	ug/l
	ETHANE	
34312	<input type="checkbox"/> Chloro-	ug/l
34497	<input type="checkbox"/> 1,1-Dichloro-	ug/l
34532	<input type="checkbox"/> 1,2-Dichloro-	ug/l
34507	<input type="checkbox"/> 1,1,1-Trichloro-	ug/l
34512	<input type="checkbox"/> 1,1,2-Trichloro-	ug/l
34517	<input type="checkbox"/> 1,1,2,2-Tetrachloro-	ug/l
	ETHENE	
34493	<input type="checkbox"/> Chloro-	ug/l
34502	<input type="checkbox"/> 1,1-Dichloro-	ug/l
34547	<input type="checkbox"/> 1,2-trans-Dichloro-	ug/l
34485	<input type="checkbox"/> Trichloro-	ug/l
34476	<input type="checkbox"/> Tetrachloro-	ug/l
34542	<input type="checkbox"/> 1,2-Dichloropropane	ug/l
34562	<input type="checkbox"/> 1,3-Dichloropropene	ug/l
	<input type="checkbox"/> OTHERS m-XYLENE	< 1 ug/l

ALIPHATIC HYDROCARBONS

ALL CIRCLED ITEMS ON ATTACHED LIST  
IF REQUIRED CALL 8772534

Aliphatic hydrocarbon Screen : Negative

Jy 8-26-82

Detection limit = 1 ug/ml

NT - NOT TESTED FOR  
P - PRESENT ( NO QUANTITATION)  
ND - NONE DETECTED

OIL CONSERVATION DIVISION  
REPORT TO: P.O. BOX 2088  
SANTA FE NM 87501

82-0144-B

LABORATORY

LAB NUMBER ORG - 144-<sup>F</sup>

7-15-82

ATTENTION: \_\_\_\_\_  
BUREAU: \_\_\_\_\_

SLD Users Code No.

ALL CONTAINERS WHICH THIS FORM ACCOMPANIES ARE COLLECTIVELY REFERRED TO AS "SAMPLE".

CERTIFICATE OF FIELD PERSONNEL

Sample Type: Water  Soil  Other \_\_\_\_\_

Water Supply and/or Code No. PLATEAU REFINERY LOCATION 6 NEAR DURANGO

City & County NEW BLOOMFIELD SAN JUAN

Collected (date & time) 7-14-82 6:45 PM By (name) SIMPSON

pH= \_\_\_\_\_; Conductivity= \_\_\_\_\_ umho/cm at \_\_\_\_\_ °C; Chlorine Residual= \_\_\_\_\_

Dissolved Oxygen= \_\_\_\_\_ mg/l; Alkalinity= \_\_\_\_\_ ; Flow Rate= \_\_\_\_\_

Sampling Location, Methods & Remarks (i.e. odors etc.)

1 glass point mason jar with aluminum foil seal SAMPLE G, soil  
not preserved SAMPLE G soil

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Signed \_\_\_\_\_

I certify that I witnessed these field analyses, observations and activities and concur with the statements in this block. Signed \_\_\_\_\_

Method of Shipment to Laboratory

THIS FORM ACCOMPANIES \_\_\_\_\_ septum vials with teflon-lined discs identified as:

specimen \_\_\_\_\_; duplicate \_\_\_\_\_; triplicate \_\_\_\_\_; blank(s) \_\_\_\_\_;

and \_\_\_\_\_ amber glass jug(s) with teflon-lined cap(s) identified as \_\_\_\_\_;

and \_\_\_\_\_ other container(s) (describe) \_\_\_\_\_ identified as \_\_\_\_\_.

Containers are marked as follows to indicate preservation (circle):

NP: No preservation; sample stored at room temperature (~20°C).

P-ICE: Sample stored in an ice bath.

P-Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>: Sample preserved with 3 mg Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>/40 ml and stored at room temperature.

CERTIFICATE(S) OF SAMPLE RECEIPT

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_

at (location) \_\_\_\_\_ on \_\_\_\_\_

(date & time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ Seal(s) Intact: Yes  No  .

Signature(s) \_\_\_\_\_

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_

at (location) \_\_\_\_\_ on \_\_\_\_\_

(date & time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ Seal(s) Intact: Yes  No  .

Signature(s) \_\_\_\_\_

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes  No  . Seal(s) broken by \_\_\_\_\_ date \_\_\_\_\_.

I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements in this block and the data on page two of this form accurately reflect the analytical results for this sample.

Date(s) of Analysis 8-27-82 Analyst's Signature Jan Lee Yiu

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewer's Signature R Meyerhen

REMARKS

SAMPLE G-7-14-82

Soil

STORET CODE	CONTAMINANT	
34235	<input checked="" type="checkbox"/> Benzene	89 ug/gm <sup>+97</sup>
34481	<input checked="" type="checkbox"/> Toluene	158.2 ug/gm <sup>+97</sup>
34372	<input checked="" type="checkbox"/> Ethylbenzene	55.9 ug/gm <sup>+97</sup>
34302	<input type="checkbox"/> Chlorobenzene	ug/l
	METHANE	
34414	<input type="checkbox"/> Bromo-	ug/l
34419	<input type="checkbox"/> Chloro-	ug/l
34424	<input type="checkbox"/> Dichloro-	ug/l
34307	<input type="checkbox"/> Chlorodibromo-	ug/l
34328	<input type="checkbox"/> Dichlorobromo-	ug/l
34288	<input type="checkbox"/> Tribromo-	ug/l
34316	<input type="checkbox"/> Trichloro-	ug/l
82080	<input type="checkbox"/> Total THM	ug/l
34489	<input type="checkbox"/> Trichlorofluoro-	ug/l
34332	<input type="checkbox"/> Dichlorodifluoro-	ug/l
34297	<input type="checkbox"/> Tetrachloro-	ug/l
	ETHANE	
34312	<input type="checkbox"/> Chloro-	ug/l
34497	<input type="checkbox"/> 1,1-Dichloro-	ug/l
34532	<input type="checkbox"/> 1,2-Dichloro-	ug/l
34507	<input type="checkbox"/> 1,1,1-Trichloro-	ug/l
34512	<input type="checkbox"/> 1,1,2-Trichloro-	ug/l
34517	<input type="checkbox"/> 1,1,2,2-Tetrachloro-	ug/l
	ETHENE	
34493	<input type="checkbox"/> Chloro-	ug/l
34502	<input type="checkbox"/> 1,1-Dichloro-	ug/l
34547	<input type="checkbox"/> 1,2-trans-Dichloro-	ug/l
34485	<input type="checkbox"/> Trichloro-	ug/l
34476	<input type="checkbox"/> Tetrachloro-	ug/l
34542	<input type="checkbox"/> 1,2-Dichloropropane	ug/l
34562	<input type="checkbox"/> 1,3-Dichloropropene	ug/l
	<input type="checkbox"/> OTHERS <sup>PTM</sup> XYLENE	229.06 mg/gm

ALL ALIPHATIC HYDROCARBONSALL ITEMS CIRCLED ON ATTACHED LISTIF NEEDED CALL 827-2574Aliphatic hydrocarbon screen:Has hydrocarbon peaks in the C<sub>8</sub>-C<sub>14</sub> regionMaximum at C<sub>10</sub>Jy 8-26-82Detection limit: 1 ug/gm

OIL CONSERVATION DIVISION  
P.O. BOX 2088  
SANTA FE NM 87501

REPORT TO: LABORATORY

LAB NUMBER

82-0161-D

ATTENTION: \_\_\_\_\_  
BUREAU: \_\_\_\_\_

SLD Users Code No.

ALL CONTAINERS WHICH THIS FORM ACCOMPANIES ARE COLLECTIVELY REFERRED TO AS "SAMPLE".

CERTIFICATE OF FIELD PERSONNEL

Sample Type: Water  Soil  Other \_\_\_\_\_

Water Supply and/or Code No. Sample JA

City & County SJ

Collected (date & time) 7-28-82 5:30pm By (name)

pH= \_\_\_\_\_; Conductivity= \_\_\_\_\_ umho/cm at \_\_\_\_\_ °C; Chlorine Residual= \_\_\_\_\_

Dissolved Oxygen= \_\_\_\_\_ mg/l; Alkalinity= \_\_\_\_\_ ; Flow Rate= \_\_\_\_\_

Sampling Location, Methods & Remarks (i.e. odors etc.)

Sample JA = 340 ml glass vials with teflon seals NF-NA  
(Spring). Cried down since collection.

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Signed \_\_\_\_\_

I certify that I witnessed these field analyses, observations and activities and concur with the statements in this block. Signed \_\_\_\_\_

Method of Shipment to Laboratory \_\_\_\_\_

THIS FORM ACCOMPANIES \_\_\_\_\_ septum vials with teflon-lined discs identified as: specimen \_\_\_\_\_; duplicate \_\_\_\_\_; triplicate \_\_\_\_\_; blank(s) \_\_\_\_\_, and \_\_\_\_\_ amber glass jug(s) with teflon-lined cap(s) identified as \_\_\_\_\_, and \_\_\_\_\_ other container(s) (describe) \_\_\_\_\_ identified as \_\_\_\_\_.

Containers are marked as follows to indicate preservation (circle):

NP: No preservation; sample stored at room temperature (~20°C).

P-ICE: Sample stored in an ice bath.

P-Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>: Sample preserved with 3 mg Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>/40 ml and stored at room temperature.

CERTIFICATE(S) OF SAMPLE RECEIPT

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date & time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ Seal(s) Intact: Yes  No

Signature(s) \_\_\_\_\_

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date & time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ Seal(s) Intact: Yes  No

Signature(s) \_\_\_\_\_

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes  No  . Seal(s) broken by \_\_\_\_\_ date \_\_\_\_\_.

I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements in this block and the data on page two of this form accurately reflect the analytical results for this sample.

Date(s) of Analysis 8-27-82 Analyst's Signature Ja Lee Yn

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewer's Signature R Meyerhen

REMARKS

SAMPLE JA 7-28-82

STORET CODE	CONTAMINANT	
34235	<input checked="" type="checkbox"/> Benzene	<1 ug/l
34481	<input checked="" type="checkbox"/> Toluene	<1 ug/l
34372	<input checked="" type="checkbox"/> Ethylbenzene	<1 ug/l
34302	<input type="checkbox"/> Chlorobenzene	ug/l
	METHANE	
34414	<input type="checkbox"/> Bromo-	ug/l
34419	<input type="checkbox"/> Chloro-	ug/l
34424	<input type="checkbox"/> Dichloro-	ug/l
34307	<input type="checkbox"/> Chlorodibromo-	ug/l
34328	<input type="checkbox"/> Dichlorobromo-	ug/l
34288	{ <input type="checkbox"/> Tribromo-	ug/l
34316	<input type="checkbox"/> Trichloro-	ug/l
82080	<input type="checkbox"/> Total THM	ug/l
34489	<input type="checkbox"/> Trichlorofluoro-	ug/l
34332	<input type="checkbox"/> Dichlorodifluoro-	ug/l
34297	<input type="checkbox"/> Tetrachloro-	ug/l
	ETHANE	
34312	<input type="checkbox"/> Chloro-	ug/l
34497	<input type="checkbox"/> 1,1-Dichloro-	ug/l
34532	<input type="checkbox"/> 1,2-Dichloro-	ug/l
34507	<input type="checkbox"/> 1,1,1-Trichloro-	ug/l
34512	<input type="checkbox"/> 1,1,2-Trichloro-	ug/l
34517	<input type="checkbox"/> 1,1,2,2-Tetrachloro-	ug/l
	ETHENE	
34493	<input type="checkbox"/> Chloro-	ug/l
34502	<input type="checkbox"/> 1,1-Dichloro-	ug/l
34547	<input type="checkbox"/> 1,2-trans-Dichloro-	ug/l
34485	<input type="checkbox"/> Trichloro-	ug/l
34476	<input type="checkbox"/> Tetrachloro-	ug/l
34542	<input type="checkbox"/> 1,2-Dichloropropane	ug/l
34562	<input type="checkbox"/> 1,3-Dichloropropene	ug/l
	<input type="checkbox"/> OTHERS m-ethylene	<1 ug/l

NT - NOT TESTED FOR

P = PRESENT ( NO QUANTITATION )

ND = NONE DETECTED

All other hydrocarbons

Note: call results in

To see if further test are needed

8272534

Aliphatic hydrocarbon screen: Negative

Jy 8-26-82

Detection limit: 1 ug/ml

OIL CONSERVATION DIVISION  
REPORT TO: P.O. BOX 2088  
SANTA FE NM 87501

LABORATORY \_\_\_\_\_

LAB NUMBER \_\_\_\_\_

ATTENTION: SIMPSON 8272534  
BUREAU: \_\_\_\_\_

82- 0162 -D

SLD Users Code No. \_\_\_\_\_

ALL CONTAINERS WHICH THIS FORM ACCOMPANIES ARE COLLECTIVELY REFERRED TO AS "SAMPLE".

CERTIFICATE OF FIELD PERSONNEL

Sample Type: Water  Soil  Other \_\_\_\_\_

Water Supply and/or Code No. Sample C

City & County SJ

Collected (date & time) 7-28-82 6:00 PM By (name) SIMPSON

pH= \_\_\_\_\_; Conductivity= \_\_\_\_\_ umho/cm at \_\_\_\_\_ °C; Chlorine Residual= \_\_\_\_\_

Dissolved Oxygen= \_\_\_\_\_ mg/l; Alkalinity= \_\_\_\_\_ ; Flow Rate= \_\_\_\_\_

Sampling Location, Methods & Remarks (i.e. odors etc.)

*3-40 ml glass vials with teflon seals of some sample liquid in each*

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Signed \_\_\_\_\_

I certify that I witnessed these field analyses, observations and activities and concur with the statements in this block. Signed \_\_\_\_\_

Method of Shipment to Laboratory \_\_\_\_\_

THIS FORM ACCOMPANIES \_\_\_\_\_ septum vials with teflon-lined discs identified as: specimen \_\_\_\_\_; duplicate \_\_\_\_\_; triplicate \_\_\_\_\_; blank(s) \_\_\_\_\_, and \_\_\_\_\_ amber glass jug(s) with teflon-lined cap(s) identified as \_\_\_\_\_, and \_\_\_\_\_ other container(s) (describe) \_\_\_\_\_ identified as \_\_\_\_\_.

Containers are marked as follows to indicate preservation (circle):

NP: No preservation; sample stored at room temperature (~20°C).

P-ICE: Sample stored in an ice bath.

P-Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>: Sample preserved with 3 mg Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>/40 ml and stored at room temperature.

CERTIFICATE(S) OF SAMPLE RECEIPT

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date & time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ Seal(s) Intact: Yes  No

Signature(s) \_\_\_\_\_

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date & time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ Seal(s) Intact: Yes  No

Signature(s) \_\_\_\_\_

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes  No  . Seal(s) broken by \_\_\_\_\_ date \_\_\_\_\_.

I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements in this block and the data on page two of this form accurately reflect the analytical results for this sample.

Date(s) of Analysis 8-27-82. Analyst's Signature J. Lee Yeo

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewer's Signature R. Meyerhen

REMARKS \_\_\_\_\_

Sample Ca 7-28-82

STORED CODE	CONTAMINANT	CONCENTRATION
34235	<input checked="" type="checkbox"/> Benzene	< 1 ug/l
34481	<input checked="" type="checkbox"/> Toluene	< 1 ug/l
34372	<input checked="" type="checkbox"/> Ethylbenzene	< 1 ug/l
34302	<input type="checkbox"/> Chlorobenzene	ug/l
	METHANE	ug/l
34414	<input type="checkbox"/> Bromo-	ug/l
34419	<input type="checkbox"/> Chloro-	ug/l
34424	<input type="checkbox"/> Dichloro-	ug/l
34307	<input type="checkbox"/> Chlorodibromo-	ug/l
34328	<input type="checkbox"/> Dichlorobromo-	ug/l
34288	<input type="checkbox"/> Tribromo-	ug/l
34316	<input type="checkbox"/> Trichloro-	ug/l
82080	<input type="checkbox"/> Total THM	ug/l
34489	<input type="checkbox"/> Trichlorofluoro-	ug/l
34332	<input type="checkbox"/> Dichlorodifluoro-	ug/l
34297	<input type="checkbox"/> Tetrachloro-	ug/l
	ETHANE	ug/l
34312	<input type="checkbox"/> Chloro-	ug/l
34497	<input type="checkbox"/> 1,1-Dichloro-	ug/l
34532	<input type="checkbox"/> 1,2-Dichloro-	ug/l
34507	<input type="checkbox"/> 1,1,1-Trichloro-	ug/l
34512	<input type="checkbox"/> 1,1,2-Trichloro-	ug/l
34517	<input type="checkbox"/> 1,1,2,2-Tetrachloro-	ug/l
	ETHENE	ug/l
34493	<input type="checkbox"/> Chloro-	ug/l
34502	<input type="checkbox"/> 1,1-Dichloro-	ug/l
34547	<input type="checkbox"/> 1,2-trans-Dichloro-	ug/l
34485	<input type="checkbox"/> Trichloro-	ug/l
34476	<input type="checkbox"/> Tetrachloro-	ug/l
34542	<input type="checkbox"/> 1,2-Dichloropropene	ug/l
34562	<input type="checkbox"/> 1,3-Dichloropropene	ug/l
	<input type="checkbox"/> OTHERS m-xylene < 1 ug/l	

aliphatic hydrocarbons

all in results of determinations

if further tests are needed 1-827-2534

Aliphatic hydrocarbon Screen: Negative 8/26/82

Detection limit: 1 ug/ml

TESTED FOR  
P = PRESENT ( NO QUANTITATION)  
ND = NONE DETECTED

OIL CONSERVATION DIVISION  
REPORT TO: P.O. BOX 2088  
SANTA FE NM 87501

LABORATORY

LAB NUMBER

82-0163-D

ATTENTION: Oscar Simpson <sup>CALL</sup> 8272534  
BUREAU: OCD

SLD Users Code No.

ALL CONTAINERS WHICH THIS FORM ACCOMPANIES ARE COLLECTIVELY REFERRED TO AS "SAMPLE".

CERTIFICATE OF FIELD PERSONNEL

Sample Type: Water  Soil  Other

Water Supply and/or Code No. SAMPLE DA

City & County SJ

Collected (date & time) 7-28-88 By (name) Simpson

pH= ; Conductivity= umho/cm at °C; Chlorine Residual=

Dissolved Oxygen= mg/l; Alkalinity= ; Flow Rate=

Sampling Location, Methods & Remarks (i.e. odors etc.)

SAMPLE DA = 3-40 ml VILES WITH TEFLOON SEALS ~~NOT~~ NF-NA-  
P.P.L. refus. exp. ICE DOWN SINCE COLLECTION

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Signed

I certify that I witnessed these field analyses, observations and activities and concur with the statements in this block. Signed

Method of Shipment to Laboratory

THIS FORM ACCOMPANIES \_\_\_\_\_ septum vials with teflon-lined discs identified as:  
specimen \_\_\_\_\_; duplicate \_\_\_\_\_; triplicate \_\_\_\_\_; blank(s) \_\_\_\_\_,  
and \_\_\_\_\_ amber glass jug(s) with teflon-lined cap(s) identified as \_\_\_\_\_,  
and \_\_\_\_\_ other container(s) (describe) \_\_\_\_\_ identified as \_\_\_\_\_.

Containers are marked as follows to indicate preservation (circle):

NP: No preservation; sample stored at room temperature (~20°C).

P-ICE: Sample stored in an ice bath.

P-Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>: Sample preserved with 3 mg Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>/40 ml and stored at room temperature.

CERTIFICATE(S) OF SAMPLE RECEIPT

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date & time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ Seal(s) Intact: Yes  No

Signature(s) \_\_\_\_\_

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date & time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ Seal(s) Intact: Yes  No

Signature(s) \_\_\_\_\_

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes  No  . Seal(s) broken by \_\_\_\_\_ date \_\_\_\_\_

I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements in this block and the data on page two of this form accurately reflect the analytical results for this sample.

Date(s) of Analysis 8-27-82. Analyst's Signature J. Lee Jr.

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewer's Signature K. Meyerhen

REMARKS

SAMPLE DA 7-28-82

STORET CODE	CONTAMINANT	
34235	<input checked="" type="checkbox"/> Benzene	17100 ug/l
34481	<input checked="" type="checkbox"/> Toluene	16500 ug/l
34372	<input checked="" type="checkbox"/> Ethylbenzene	3600 ug/l
34302	<input type="checkbox"/> Chlorobenzene	ug/l
	METHANE	
34414	<input type="checkbox"/> Bromo-	ug/l
34419	<input type="checkbox"/> Chloro-	ug/l
34424	<input type="checkbox"/> Dichloro-	ug/l
34307	<input type="checkbox"/> Chloredibromo-	ug/l
34328	<input type="checkbox"/> Dichlorobromo-	ug/l
34288	<input type="checkbox"/> Tribromo-	ug/l
34316	<input type="checkbox"/> Trichloro-	ug/l
82080	<input type="checkbox"/> Total THM	ug/l
34489	<input type="checkbox"/> Trichlorofluoro-	ug/l
34332	<input type="checkbox"/> Dichlorodifluoro-	ug/l
34297	<input type="checkbox"/> Tetrachloro-	ug/l
	ETHANE	
34312	<input type="checkbox"/> Chloro-	ug/l
34497	<input type="checkbox"/> 1,1-Dichloro-	ug/l
34532	<input type="checkbox"/> 1,2-Dichloro-	ug/l
34507	<input type="checkbox"/> 1,1,1-Trichloro-	ug/l
34512	<input type="checkbox"/> 1,1,2-Trichloro-	ug/l
34517	<input type="checkbox"/> 1,1,2,2-Tetrachloro-	ug/l
	ETHENE	
34493	<input type="checkbox"/> Chloro-	ug/l
34502	<input type="checkbox"/> 1,1-Dichloro-	ug/l
34547	<input type="checkbox"/> 1,2-trans-Dichloro-	ug/l
34485	<input type="checkbox"/> Trichloro-	ug/l
34476	<input type="checkbox"/> Tetrachloro-	ug/l
34542	<input type="checkbox"/> 1,2-Dichloropropane	ug/l
34562	<input type="checkbox"/> 1,3-Dichloropropene	ug/l
	<input type="checkbox"/> OTHERS <u>m-XYLENE</u>	3000 ug/l

ALIPHATIC HYDROCARBONS

NOTE CALL OR RESULTS MAY NEED  
FURTHER ANALYSIS 1-8272534

NT - NOT TESTED FOR

P - PRESENT ( NO QUANTITATION)

ND - NONE DETECTED

Aliphatic hydrocarbon Screen:

Has hydrocarbon peaks evenly distributed in the C<sub>8</sub> - C<sub>12</sub> region

Jy 8-26-82

Detection limit: 1 ug/ml

OIL CONSERVATION DIVISION  
REPORT TO: P.O. BOX 2088  
SANTA FE NM 87501

LABORATORY

LAB NUMBER

82-0164-D

ATTENTION: OSCAR SIMPSON CALL 1-827-2534  
BUREAU: OCD IN SANTA FE

SLD Users Code No.

ALL CONTAINERS WHICH THIS FORM ACCOMPANIES ARE COLLECTIVELY REFERRED TO AS "SAMPLE".

CERTIFICATE OF FIELD PERSONNEL

Sample Type: Water  Soil  Other

Water Supply and/or Code No. SAMPLE TA

City & County SAN JUAN

Collected (date & time) 8-28-82 4:00PM By (name) Oscar Simpson

pH= ; Conductivity= umho/cm at °C; Chlorine Residual=

Dissolved Oxygen= mg/l; Alkalinity= ; Flow Rate=

Sampling Location, Methods & Remarks (i.e. odors etc.)

SAMPLE TA = 3-40ML GLASS VIALS WITH TEFILON SEALS  
NO PLASTIC LINED JUGS PRESENT. ICE FED DOWN SINCE COLLECTION

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Signed

I certify that I witnessed these field analyses, observations and activities and concur with the statements in this block. Signed

Method of Shipment to Laboratory

THIS FORM ACCOMPANIES \_\_\_\_\_ septum vials with teflon-lined discs identified as:  
specimen \_\_\_\_\_; duplicate \_\_\_\_\_; triplicate \_\_\_\_\_; blank(s) \_\_\_\_\_,  
and \_\_\_\_\_ amber glass jug(s) with teflon-lined cap(s) identified as \_\_\_\_\_,  
and \_\_\_\_\_ other container(s) (describe) \_\_\_\_\_ identified as \_\_\_\_\_.

Containers are marked as follows to indicate preservation (circle):

NP: No preservation; sample stored at room temperature (~20°C).

P-ICE: Sample stored in an ice bath.

P-Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>: Sample preserved with 3 mg Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>/40 ml and stored at room temperature.

CERTIFICATE(S) OF SAMPLE RECEIPT

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date & time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ Seal(s) Intact: Yes  No

Signature(s) \_\_\_\_\_

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date & time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ Seal(s) Intact: Yes  No

Signature(s) \_\_\_\_\_

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes  No  . Seal(s) broken by \_\_\_\_\_ date \_\_\_\_\_

I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements in this block and the data on page two of this form accurately reflect the analytical results for this sample.

Date(s) of Analysis 8-27-82 Analyst's Signature Ja Lee Yrd

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewer's Signature R Meyerheim

REMARKS \_\_\_\_\_

## SAMPLE IA 7-28-82

STORET CODE	CONTAMINANT	
34235 <input checked="" type="checkbox"/>	Benzene	<1 ug/l
34481 <input checked="" type="checkbox"/>	Toluene	<1 ug/l
34372 <input checked="" type="checkbox"/>	Ethylbenzene	<1 ug/l
34302 <input type="checkbox"/>	Chlorobenzene	ug/l
	METHANE	
34414 <input type="checkbox"/>	Bromo-	ug/l
34419 <input type="checkbox"/>	Chloro-	ug/l
34424 <input type="checkbox"/>	Dichloro-	ug/l
34307 <input type="checkbox"/>	{ Chlorodibromo-	ug/l
34328 <input type="checkbox"/>	{ Dichlorobromo-	ug/l
34288 <input type="checkbox"/>	{ Tribromo-	ug/l
34316 <input type="checkbox"/>	{ Trichloro-	ug/l
82080 <input type="checkbox"/>	Total THM	ug/l
34489 <input type="checkbox"/>	Trichlorofluoro-	ug/l
34332 <input type="checkbox"/>	Dichlorodifluoro-	ug/l
34297 <input type="checkbox"/>	Tetrachloro-	ug/l
	ETHANE	
34312 <input type="checkbox"/>	Chloro-	ug/l
34497 <input type="checkbox"/>	1,1-Dichloro-	ug/l
34532 <input type="checkbox"/>	1,2-Dichloro-	ug/l
34507 <input type="checkbox"/>	1,1,1-Trichloro-	ug/l
34512 <input type="checkbox"/>	1,1,2-Trichloro-	ug/l
34517 <input type="checkbox"/>	1,1,2,2-Tetrachloro-	ug/l
	ETHENE	
34493 <input type="checkbox"/>	Chloro-	ug/l
34502 <input type="checkbox"/>	1,1-Dichloro-	ug/l
34547 <input type="checkbox"/>	1,2-trans-Dichloro-	ug/l
34485 <input type="checkbox"/>	Trichloro-	ug/l
34476 <input type="checkbox"/>	Tetrachloro-	ug/l
34542 <input type="checkbox"/>	1,2-Dichloropropane	ug/l
34562 <input type="checkbox"/>	1,3-Dichloropropene	ug/l
<input type="checkbox"/>	OTHERS	<1 ug/l

ALL ALIPHATIC HYDROCARBONS

NOTE: Call Oscar Simpson for results

+ if further identification is needed

1-8272534 Santa Fe

Aliphatic hydrocarbon Screen - Negative

Jy 8-26-82

Detection limit : 1 ug/ml

OIL CONSERVATION DIVISION  
REPORT TO: P.O. BOX 2088  
SANTA FE NM 87501

LABORATORY

LAB NUMBER

82- 0165 -D

ATTENTION: \_\_\_\_\_  
BUREAU: \_\_\_\_\_

SLD Users Code No.

ALL CONTAINERS WHICH THIS FORM ACCOMPANIES ARE COLLECTIVELY REFERRED TO AS "SAMPLE".

CERTIFICATE OF FIELD PERSONNEL

Sample Type: Water  Soil  Other \_\_\_\_\_

Water Supply and/or Code No. SAMPLE LA

City & County SJ

Collected (date & time) 7-28-82 7:00AM By (name) Simpson

pH= \_\_\_\_\_; Conductivity= \_\_\_\_\_ umho/cm at \_\_\_\_\_ °C; Chlorine Residual= \_\_\_\_\_

Dissolved Oxygen= \_\_\_\_\_ mg/l; Alkalinity= \_\_\_\_\_ ; Flow Rate= \_\_\_\_\_

Sampling Location, Methods & Remarks (i.e. odors etc.)

SAMPLE LA = 3-40 ml vials with teflon seals NF-NA  
used downwind collector  
from water well

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Signed \_\_\_\_\_

I certify that I witnessed these field analyses, observations and activities and concur with the statements in this block. Signed \_\_\_\_\_

Method of Shipment to Laboratory

THIS FORM ACCOMPANIES \_\_\_\_\_ septum vials with teflon-lined discs identified as:

specimen \_\_\_\_\_; duplicate \_\_\_\_\_; triplicate \_\_\_\_\_; blank(s) \_\_\_\_\_,  
and \_\_\_\_\_ amber glass jug(s) with teflon-lined cap(s) identified as \_\_\_\_\_,  
and \_\_\_\_\_ other container(s) (describe) \_\_\_\_\_ identified as \_\_\_\_\_.

Containers are marked as follows to indicate preservation (circle):

NP: No preservation; sample stored at room temperature (~20°C).

P-ICE: Sample stored in an ice bath.

P-Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>: Sample preserved with 3 mg Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>/40 ml and stored at room temperature.

CERTIFICATE(S) OF SAMPLE RECEIPT

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date & time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ Seal(s) Intact: Yes  No

Signature(s) \_\_\_\_\_

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date & time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ Seal(s) Intact: Yes  No

Signature(s) \_\_\_\_\_

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes  No  . Seal(s) broken by \_\_\_\_\_ date \_\_\_\_\_.

I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements in this block and the data on page two of this form accurately reflect the analytical results for this sample.

Date(s) of Analysis 8-27-82 Analyst's Signature J. Lee Yip

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewer's Signature K. Meyerhen

REMARKS \_\_\_\_\_

Sample La 7-28-82

NT - NOT TESTED FOR  
P - PRESENT ( NO QUANTITATION)  
P+ - PRESENT ( NONE DETECTED)  
ND - ND

STORET CODE	CONTAMINANT	
34235	<input type="checkbox"/> Benzene	ug/l
34481	<input type="checkbox"/> Toluene	ug/l
34372	<input type="checkbox"/> Ethylbenzene	ug/l
34302	<input type="checkbox"/> Chlorobenzene	ug/l
	METHANE	
34414	<input type="checkbox"/> Bromo-	ug/l
34419	<input type="checkbox"/> Chloro-	ug/l
34424	<input type="checkbox"/> Dichloro-	ug/l
34307	<input type="checkbox"/> Chlorodibromo-	ug/l
34328	<input type="checkbox"/> Dichlorobromo-	ug/l
34288	<input type="checkbox"/> Tribromo-	ug/l
34316	<input type="checkbox"/> Trichloro-	ug/l
82080	<input type="checkbox"/> Total THM	ug/l
34489	<input type="checkbox"/> Trichlorofluoro-	ug/l
34332	<input type="checkbox"/> Dichlorodifluoro-	ug/l
34297	<input type="checkbox"/> Tetrachloro-	ug/l
	ETHANE	
34312	<input type="checkbox"/> Chloro-	ug/l
34497	<input type="checkbox"/> 1,1-Dichloro-	ug/l
34532	<input type="checkbox"/> 1,2-Dichloro-	ug/l
34507	<input type="checkbox"/> 1,1,1-Trichloro-	ug/l
34512	<input type="checkbox"/> 1,1,2-Trichloro-	ug/l
34517	<input type="checkbox"/> 1,1,2,2-Tetrachloro-	ug/l
	ETHENE	
34493	<input type="checkbox"/> Chloro-	ug/l
34502	<input type="checkbox"/> 1,1-Dichloro-	ug/l
34547	<input type="checkbox"/> 1,2-trans-Dichloro-	ug/l
34485	<input type="checkbox"/> Trichloro-	ug/l
34476	<input type="checkbox"/> Tetrachloro-	ug/l
34542	<input type="checkbox"/> 1,2-Dichloropropane	ug/l
34562	<input type="checkbox"/> 1,3-Dichloropropene	ug/l

OTHERS *Aliphatic hydrocarbons*  
*Aromatic Hydrocarbons*  
*m-xylene < 1 mg/l*

Aliphatic hydrocarbon Screen: Negative

Jy 8-26-82

Detection limit = 1 mg/ml

OIL CONSERVATION DIVISION  
REPORT TO: P.O. BOX 2088  
SANTA FE NM 87501

LABORATORY

LAB NUMBER

82-0166-C

ATTENTION: Simpson 8272534  
BUREAU:

SLD Users Code No.

ALL CONTAINERS WHICH THIS FORM ACCOMPANIES ARE COLLECTIVELY REFERRED TO AS "SAMPLE".

CERTIFICATE OF FIELD PERSONNEL

Sample Type: Water  Soil  Other \_\_\_\_\_

Water Supply and/or Code No. Sample KA

City & County San Juan

Collected (date & time) 7-28-82 5:00PM By (name) Simpson

pH= \_\_\_\_\_; Conductivity= \_\_\_\_\_ umho/cm at \_\_\_\_\_ °C; Chlorine Residual= \_\_\_\_\_

Dissolved Oxygen= \_\_\_\_\_ mg/l; Alkalinity= \_\_\_\_\_ ; Flow Rate= \_\_\_\_\_

Sampling Location, Methods & Remarks (i.e. odors etc.)

Sample KA - 2-40 ml vials with teflon seals of some sample  
of ground water laid down since collection

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Signed \_\_\_\_\_

I certify that I witnessed these field analyses, observations and activities and concur with the statements in this block. Signed \_\_\_\_\_

Method of Shipment to Laboratory

THIS FORM ACCOMPANIES \_\_\_\_\_ septum vials with teflon-lined discs identified as: specimen \_\_\_\_\_; duplicate \_\_\_\_\_; triplicate \_\_\_\_\_; blank(s) \_\_\_\_\_, and \_\_\_\_\_ amber glass jug(s) with teflon-lined cap(s) identified as \_\_\_\_\_, and \_\_\_\_\_ other container(s) (describe) \_\_\_\_\_ identified as \_\_\_\_\_.

Containers are marked as follows to indicate preservation (circle):

NP: No preservation; sample stored at room temperature (~20°C).

P-ICE: Sample stored in an ice bath.

P-Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>: Sample preserved with 3 mg Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>/40 ml and stored at room temperature.

CERTIFICATE(S) OF SAMPLE RECEIPT

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date & time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ . Seal(s) Intact: Yes  No

Signature(s) \_\_\_\_\_

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date & time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ . Seal(s) Intact: Yes  No

Signature(s) \_\_\_\_\_

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes  No  . Seal(s) broken by \_\_\_\_\_ date \_\_\_\_\_

I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements in this block and the data on page two of this form accurately reflect the analytical results for this sample.

Date(s) of Analysis 8-27-82 . Analyst's Signature Jin Lee Yeo

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewer's Signature R Meyerlein

REMARKS \_\_\_\_\_

Sample KA 7-28-82

STORET  
CODE

CONTAMINANT

34235	<input type="checkbox"/> Benzene	< 1	ug/l
34481	<input type="checkbox"/> Toluene	< 1	ug/l
34372	<input type="checkbox"/> Ethylbenzene	< 1	ug/l
34302	<input type="checkbox"/> Chlorobenzene	< 1	ug/l
	METHANE		
34414	<input type="checkbox"/> Bromo-	< 1	ug/l
34419	<input type="checkbox"/> Chloro-	< 1	ug/l
34424	<input type="checkbox"/> Dichloro-	< 1	ug/l
34307	<input type="checkbox"/> Chlorodibromo-	< 1	ug/l
34328	<input type="checkbox"/> Dichlorobromo-	< 1	ug/l
34288	<input type="checkbox"/> Tribromo-	< 1	ug/l
34316	<input type="checkbox"/> Trichloro-	< 1	ug/l
82080	<input type="checkbox"/> Total THM	< 1	ug/l
34489	<input type="checkbox"/> Trichlorofluoro-	< 1	ug/l
34332	<input type="checkbox"/> Dichlorodifluoro-	< 1	ug/l
34297	<input type="checkbox"/> Tetrachloro-	< 1	ug/l
	ETHANE		
34312	<input type="checkbox"/> Chloro-	< 1	ug/l
34497	<input type="checkbox"/> 1,1-Dichloro-	< 1	ug/l
34532	<input type="checkbox"/> 1,2-Dichloro-	< 1	ug/l
34507	<input type="checkbox"/> 1,1,1-Trichloro-	< 1	ug/l
34512	<input type="checkbox"/> 1,1,2-Trichloro-	< 1	ug/l
34517	<input type="checkbox"/> 1,1,2,2-Tetrachloro-	< 1	ug/l
	ETHENE		
34493	<input type="checkbox"/> Chloro-	< 1	ug/l
34502	<input type="checkbox"/> 1,1-Dichloro-	< 1	ug/l
34547	<input type="checkbox"/> 1,2-trans-Dichloro-	< 1	ug/l
34485	<input type="checkbox"/> Trichloro-	< 1	ug/l
34476	<input type="checkbox"/> Tetrachloro-	< 1	ug/l
34542	<input type="checkbox"/> 1,2-Dichloropropane	< 1	ug/l
34562	<input type="checkbox"/> 1,3-Dichloropropene	< 1	ug/l

OTHERS Aliphatic Hydrocarbons

Aromatic Hydrocarbons

m-xylene < 1 ug/l

P = PRESENT ( NO QUANTITATION)

ND = NONE DETECTED

Aliphatic hydrocarbon Screen : Negative

Ga Lee Yoo 8-26-82

Detection limit : 1 ug/ml

OIL CONSERVATION DIVISION  
REPORT TO: P.O. BOX 2088  
SANTA FE NM 87501

LABORATORY

LAB NUMBER

82-0167-B

DID NOT DO  
ATTENTION: Sampson 8272534  
BUREAU:

SLD Users Code No.

ALL CONTAINERS WHICH THIS FORM ACCOMPANIES ARE COLLECTIVELY REFERRED TO AS "SAMPLE".

CERTIFICATE OF FIELD PERSONNEL

Sample Type: Water  Soil  Other \_\_\_\_\_

Water Supply and/or Code No. Sample OA

City & County SAN JUAN

Collected (date & time) 7-28-82 - 5:30 PM By (name) Sampson

pH= \_\_\_\_\_; Conductivity= \_\_\_\_\_ umho/cm at \_\_\_\_\_ °C; Chlorine Residual= \_\_\_\_\_

Dissolved Oxygen= \_\_\_\_\_ mg/l; Alkalinity= \_\_\_\_\_ ; Flow Rate= \_\_\_\_\_

Sampling Location, Methods & Remarks (i.e. odors etc.)

Sampson OA 1 glass mason jar with aluminum foil seal  
ground water

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Signed

I certify that I witnessed these field analyses, observations and activities and concur with the statements in this block. Signed

Method of Shipment to Laboratory

THIS FORM ACCOMPANIES \_\_\_\_\_ septum vials with teflon-lined discs identified as: specimen \_\_\_\_\_; duplicate \_\_\_\_\_; triplicate \_\_\_\_\_; blank(s) \_\_\_\_\_, and \_\_\_\_\_ amber glass jug(s) with teflon-lined cap(s) identified as \_\_\_\_\_, and \_\_\_\_\_ other container(s) (describe) \_\_\_\_\_ identified as \_\_\_\_\_.

Containers are marked as follows to indicate preservation (circle):

NP: No preservation; sample stored at room temperature (~20 °C).

P-ICE: Sample stored in an ice bath.

P-Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>: Sample preserved with 3 mg Na<sub>2</sub>O<sub>3</sub>S<sub>2</sub>/40 ml and stored at room temperature.

CERTIFICATE(S) OF SAMPLE RECEIPT

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date & time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ Seal(s) Intact: Yes  No

Signature(s) \_\_\_\_\_

I (we) certify that this sample was transferred from \_\_\_\_\_ to \_\_\_\_\_  
at (location) \_\_\_\_\_ on \_\_\_\_\_

(date & time) \_\_\_\_\_ and that the statements in this block are correct.

Disposition of Sample \_\_\_\_\_ Seal(s) Intact: Yes  No

Signature(s) \_\_\_\_\_

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes  No  . Seal(s) broken by \_\_\_\_\_ date \_\_\_\_\_

I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements in this block and the data on page two of this form accurately reflect the analytical results for this sample.

Date(s) of Analysis 8-27-82 Analyst's Signature Ja Lee Yeo

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewer's Signature R Meyerhenne

REMARKS

DIDN'T DO

STORET  
CODE

## CONTAMINANT

STORET CODE	CONTAMINANT	CONCENTRATION ug/l
34235	<input checked="" type="checkbox"/> Benzene	NT*
34481	<input checked="" type="checkbox"/> Toluene	NT*
34372	<input checked="" type="checkbox"/> Ethylbenzene	NT*
34302	<input type="checkbox"/> Chlorobenzene	ug/l
	METHANE	
34414	<input type="checkbox"/> Bromo-	ug/l
34419	<input type="checkbox"/> Chloro-	ug/l
34424	<input type="checkbox"/> Dichloro-	ug/l
34307	<input type="checkbox"/> Chlorodibromo-	ug/l
34328	<input type="checkbox"/> Dichlorobromo-	ug/l
34288	<input type="checkbox"/> Tribromo-	ug/l
34316	<input type="checkbox"/> Trichloro-	ug/l
82080	<input type="checkbox"/> Total THM	ug/l
34489	<input type="checkbox"/> Trichlorofluoro-	ug/l
34332	<input type="checkbox"/> Dichlorodifluoro-	ug/l
34297	<input type="checkbox"/> Tetrachloro-	ug/l
	ETHANE	
34312	<input type="checkbox"/> Chloro-	ug/l
34497	<input type="checkbox"/> 1,1-Dichloro-	ug/l
34532	<input type="checkbox"/> 1,2-Dichloro-	ug/l
34507	<input type="checkbox"/> 1,1,1-Trichloro-	ug/l
34512	<input type="checkbox"/> 1,1,2-Trichloro-	ug/l
34517	<input type="checkbox"/> 1,1,2,2-Tetrachloro-	ug/l
	ETHENE	
34493	<input type="checkbox"/> Chloro-	ug/l
34502	<input type="checkbox"/> 1,1-Dichloro-	ug/l
34547	<input type="checkbox"/> 1,2-trans-Dichloro-	ug/l
34485	<input type="checkbox"/> Trichloro-	ug/l
34476	<input type="checkbox"/> Tetrachloro-	ug/l
34542	<input type="checkbox"/> 1,2-Dichloropropane	ug/l
34562	<input type="checkbox"/> 1,3-Dichloropropene	ug/l
	<input type="checkbox"/> OTHERS	
	<i>ethylene</i>	NT*
	<i>allothioacet hydrocarbon</i>	

NT = NOT TESTED FOR  
P = PRESENT ( NO QUANTITATION)  
ND = NONE DETECTED

Aliphatic hydrocarbon screen:

Has hydrocarbon peaks in the C<sub>8</sub> - C<sub>21</sub> region maximum at C<sub>9</sub> - C<sub>14</sub>

Detection limit: 1 ug/ml

Jy 8-26-82

\* Requested for Aliphatic Screen only

ASSAIGAI ANALYTICAL LABORATORIES, INC.  
Report of Analysis  
(revising report dated 7/16/82)

Page 1 of 1  
AAI Vendor #00015  
AAL #7070-001  
through -019

C :  
L : ENERGY & MINERALS DEPARTMENT  
I : P. O. BOX 2008  
E : SANTA FE NEW MEXICO 87501  
N :  
T : ATTN: OSCAR A. SIMPSON

RECEIVED  
JUL 22 1982

All results reported in mg/l unless otherwise noted

SAMPLE # ANALYSIS

	TOC	B	Co	Cr	Pb	Cl	F	TDS
1	3.75	<0.01	<0.01	<0.01	<0.01	10.0	.00266	220
2	3.75	0.32	<0.01	<0.01	<0.01	20.0	.00599	640
3	5.63	0.29	<0.01	<0.01	0.01	130.0	.00688	1679
4	3.75	0.36	<0.01	<0.01	0.01	150.0	.00922	1124
5	26.25	0.74	<0.01	<0.01	0.40	330.0	.01244	3127
6	3.75	0.54	<0.01	<0.01	0.10	760.0	.00922	4667
7	<1.88	0.19	<0.01	<0.01	0.02	440.0	.01622	2059
8	1.88	<0.01	<0.01	<0.01	0.07	960.0	.00188	2927
9	5.63	0.07	<0.01	<0.01	0.09	1130.0	.02811	3831
10	5.63	<0.01	<0.01	<0.01	0.04	420.0	.01155	1782
11	5.63	0.16	<0.01	<0.01	0.09	920.0	.01744	4289
12	7.50	0.46	0.01	<0.01	0.16	280.0	.00833	7875
14	3.75	<0.01	<0.01	<0.01	0.07	1180.0	.02988	3822
15	3.75	<0.01	0.01	<0.01	0.14	380.0	.01011	7209
16	3.75	<0.01	<0.01	<0.01	<0.01	10.0	.00400	208
17	11.25	<0.01	<0.01	<0.01	0.03	200.0	.02399	2098
18	11.25	<0.01	<0.01	<0.01	0.05	220.0	.00566	1713
19	1.88	<0.01	<0.01	<0.01	0.04	50.0	.01399	587
20	18.75	<0.01	<0.01	<0.01	0.09	820.0	.01077	3528

APPROVED: Joe A. Mariner  
JOE A. MARINER,  
VICE PRESIDENT/CHIEF CHEMIST

DATE: 7-22-82

ASSAIGAI ANALYTICAL LABORATORIES, INC.  
Report of Analysis  
(revising report dated 7/16/82)

Page 1 of 1  
AAI Vendor #00015  
AAL #7070-001  
through -019

C |  
L | ENERGY & MINERALS DEPARTMENT  
I | P. O. BOX 2008  
E | SANTA FE NEW MEXICO 87501  
N |  
T | ATTN: OSCAR A. SIMPSON

RECEIVED  
JUL 29 1982

All results reported in mg/l unless otherwise noted

SAMPLE # ANALYSIS

	TOC	B	Co	Cr	Pb	Cl	F	TDS
1	3.75	<0.01	<0.01	<0.01	<0.01	10.0	.00266	220
2	3.75	0.32	<0.01	<0.01	<0.01	20.0	.00599	640
3	5.63	0.29	<0.01	<0.01	0.01	130.0	.00688	1679
4	3.75	0.36	<0.01	<0.01	0.01	150.0	.00922	1124
5	26.25	0.74	<0.01	<0.01	0.40	330.0	.01244	3127
6	3.75	0.54	<0.01	<0.01	0.10	760.0	.00922	4667
7	<1.88	0.19	<0.01	<0.01	0.02	440.0	.01622	2059
8	1.88	<0.01	<0.01	<0.01	0.07	960.0	.00188	2927
9	5.63	0.07	<0.01	<0.01	0.09	1130.0	.02811	3831
10	5.63	<0.01	<0.01	<0.01	0.04	420.0	.01155	1782
11	5.63	0.16	<0.01	<0.01	0.09	920.0	.01744	4289
12	7.50	0.46	0.01	<0.01	0.16	280.0	.00833	7875
14	3.75	<0.01	<0.01	<0.01	0.07	1180.0	.02988	3822
15	3.75	<0.01	0.01	<0.01	0.14	380.0	.01011	7209
16	3.75	<0.01	<0.01	<0.01	<0.01	10.0	.00400	208
17	11.25	<0.01	<0.01	<0.01	0.03	200.0	.02399	2098
18	11.25	<0.01	<0.01	<0.01	0.05	220.0	.00566	1713
19	1.88	<0.01	<0.01	<0.01	0.04	60.0	.01399	587
20	18.75	<0.01	<0.01	<0.01	0.09	820.0	.01077	3528

APPROVED: Joe A. Mariner  
JOE A. MARINER,  
VICE PRESIDENT/CHIEF CHEMIST

DATE: 7-22-82

MEDICAL ANALYTICAL LABORATORY INC.  
Report No. 100013

Printed on  
10-10-1968  
#100013  
100013

TO: ENERGY & MINERALS DEPARTMENT  
P. O. BOX 2003  
SANTA FE NEW MEXICO 87501  
ATTN: OSCAR A. SIMPSON

All results expressed in mg-% unless otherwise noted.

SAMPLE #	TODAY	B	Co	Cr	.05	250	1.4	1000	ANALYSIS	
									PPM	PPM
1	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
2	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
3	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
4	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
5	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
6	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
7	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
8	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
9	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
10	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
11	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
12	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
13	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
14	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
15	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
16	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
17	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
18	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
19	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
20	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00

APPROVED: Joe A. Mariner  
JOE A. MARINER,  
VICE PRESIDENT/CHIEF CHEMIST

DATE: 10-10-68

REVISED  
COPY

ASSAIGAI ANALYTICAL LABORATORIES, INC.  
Report of Analysis  
(revising report dated 7/16/82)

Page 1 of 1  
AAI Vendor #00015  
AAL #7070-001  
through -019

C | ENERGY & MINERALS DEPARTMENT  
L | P. O. BOX 2008  
E | SANTA FE NEW MEXICO 87501  
N |  
T | ATTN: OSCAR A. SIMPSON

RECEIVED  
JUL 23 1982

All results reported in mg/l unless otherwise noted

SAMPLE # ANALYSIS

	TOC	B	Ca	Cr	Pb	Cl	F	TDS
1	3.75	<0.01	<0.01	<0.01	<0.01	10.0	.00266	220
2	3.75	0.32	<0.01	<0.01	<0.01	20.0	.00599	640
3	5.63	0.29	<0.01	<0.01	0.01	130.0	.00688	1679
4	3.75	0.36	<0.01	<0.01	0.01	150.0	.00922	1124
5	26.25	0.74	<0.01	<0.01	0.40	330.0	.01244	3127
6	3.75	0.54	<0.01	<0.01	0.10	760.0	.00922	4667
7	<1.88	0.19	<0.01	<0.01	0.02	440.0	.01622	2059
8	1.88	<0.01	<0.01	<0.01	0.07	960.0	.00188	2927
9	5.63	0.07	<0.01	<0.01	0.09	1130.0	.02811	3831
10	5.63	<0.01	<0.01	<0.01	0.04	420.0	.01155	1782
11	5.63	0.16	<0.01	<0.01	0.09	920.0	.01744	4289
12	7.50	0.46	0.01	<0.01	0.16	280.0	.00833	7875
14	3.75	<0.01	<0.01	<0.01	0.07	1180.0	.02988	3822
15	3.75	<0.01	0.01	<0.01	0.14	380.0	.01011	7209
16	3.75	<0.01	<0.01	<0.01	<0.01	10.0	.00400	208
17	11.25	<0.01	<0.01	<0.01	0.03	200.0	.02399	2098
18	11.25	<0.01	<0.01	<0.01	0.05	220.0	.00566	1713
19	1.88	<0.01	<0.01	<0.01	0.04	60.0	.01399	587
20	18.75	<0.01	<0.01	<0.01	0.09	820.0	.01077	3528

APPROVED:

*Joe A. Mariner*  
JOE A. MARINER,  
VICE-PRESIDENT/CHIEF CHEMIST

DATE: 7-22-82

DIAGRAM #6  
PLATEAU REFINERY WASTEWATER  
(REFER TO PLATE A FOR LOCATIONS)

<u>ELEMENT</u>	<u>STANDARD</u>	<u>API (OCD) #D(7-14-82)</u>	<u>API (OCD) #Da(7-28-82)</u>	<u>(AGMC) 1977 PLANT EFFLUENT</u>	<u>(AGMC) 1982 S. SOLAR POND #2</u>	<u>(OCD) SUMP SUMP #1(9-3-81)</u>	<u>(OCD) SUMP SUMP #8(7-6-82)</u>	<u>(OCD) N. POND #1 #2(9-3-81)</u>
LEAD(Pb)	0.05	0.12	0.20	NT	0.1	-	0.07	-
COBOLT(Co)	0.05	0.069	0.05	NT	2.2	-	-	-
OIL & GREASE (O&G)	None	296.2	NT	NT	NT	NT	NT	NT
CYANIDE (CN)	(0.2)	(0.19 to 0.39)	NT	NT	0.02	NT	NT	NT
PHENOLES	0.005	21.338	37.049	NT	0.0054	NT	NT	NT
CHLORIDES (CL)	250	554.5	1504	600	900	1102.2	960.0	997.8
SULFATES(SO <sub>4</sub> )	600	1420	-	113.9	-	-	NT	563.8
TDS	1000	2170	2676	4961.7	2401	NT	2927	NT
TOC	None	323	418	NT	148	NT	1.88	NT
BENZENE	0.01	21.130	17.1	NT	0.130	NT	NT	NT
TOLUENE	15.0	21.080	16.5	NT	0.190	NT	NT	NT
ETHYL-BENZENE	Not Determined	0.001	3.6	NT	ND	NT	NT	NT
M-XYLENE	Not Determined	1.270	3.0	NT	NT	NT	NT	NT
ALIPHATIC HYDROCARBON or SCREEN	POS. or NEG.	POS.	NT	NT	NT	NT	NT	NT
BORON(B)	0.75	-	NT	NT	0.50	1.20	-	NT
CADMIUM(Cd)	0.01	-	NT	NT	0.02	-	NT	-
CHROMIUM (Cr)	0.05	-	NT	NT	0.05	-	-	-
NICKEL(Ni)	0.2	-	NT	NT	0.2	-	NT	-
BIS(2-EthylHexyl) PHTHALATE	Undetermined	NT	NT	NT	0.012	NT	NT	NT
PHENOL	0.005	See Above	See Above	NT	1.950	NT	NT	NT
O & M CRESOL	None	NT	NT	NT	2.080	NT	NT	NT
FLORIDE	1.6	NT	NT	NT	NT	NT	NT	NT

\*NOTE: The following symbols mean: (NT) not tested, (ND) not detected, (-) below the standard

(Pos.) Positive (Neg.) Negative (<) less than - All results are mg/L.

(CONTINUED)

PLATEAU REFINERY WASTEWATER  
(REFER TO PLATE A FOR LOCATIONS)

DIAGRAM #6

<u>ELEMENT</u>	<u>STANDARD</u>	OCD N. POND #1 <u>#9 (7-6-82)</u>	OCD IRRIGATION AREA <u>#14 (7-6-82)</u>
LEAD(Pb)	0.05	0.09	0.07
COBOLT(Co)	0.05	-	0.01
OIL & GREASE (O&G)	None	NT	NT
CYANIDE (CN)	(0.2)	NT	NT
PHENOLS	0.005	NT	NT
CHLORIDES(CL)	250	1130.0	1180
SULFATES (SO <sub>4</sub> )	600	NT	NT
TDS	1000	3831	3822
TOC	None	5.63	7.50
BENZENE	0.01	NT	NT
TOLUENE	15.0	NT	NT
ETHYL-BENZENE	Not Determined	NT	NT
M-XYLENE	Not Determined	NT	NT
ALIPHATIC HYDROCARBON	POS. or NEG.	NT	NT
SCREEN	-	< 0.01	< 0.01
BORON(B)	0.75	NT	NT
CADIUM(Cd)	0.01	-	< 0.01
CHROMIUM (Cr)	0.05	NT	NT
NICKEL (Ni)	0.2	NT	NT
BIS (2-Ethyl Hexyl)	Undetermined	NT	NT
PHthalate	0.005	NT	NT
PHENOL	None	NT	NT
O & M GRESOL	1.6	NT	0.02988
FLORIDE			

\*NOTE: The following symbols  
mean:  
mean: (NT) not tested, (ND)  
not detected, (-) below the  
standard, (Pos.) Positive  
(Neg.) Negative, (<) less than -  
All results are mg/L.

**DIAGRAM #7**

SEEPS FROM GROUND SURFACE NORTH AND EAST OF REFINERY  
(REFER TO PLATE A FOR LOCATIONS)

DIAGRAM #7

## SEEPFS FROM GROUND SURFACE NORTH AND EAST OF REFINERY

ELEMENT	STANDARD	#2 (7-6-82)		#3 (7-6-82)		#20 (7-6-82)		#19 (7-6-82)		#F (7-14-82)		#J (7-28-82)		#18 (7-6-82)		#4 (7-6-82)	
		DRAW #2	DRAW #3	DRAW #2	DRAW #3	DRAW #4	DRAW #6	DRAW #4	DRAW #6	DRAW #6	DRAW #6	DRAW #6	DRAW #6	DRAW #6	DRAW #6	DRAW #6	DRAW #6
B BORON	0.75	0.32	0.29	<0.001	<0.001	NT	NT	NT	NT	NT	NT	0.84	<0.01	0.36	0.36		
MA MAGANESE	0.2	NT	NT	<0.01	<0.01	NT	NT	NT	NT	NT	NT	0.92	NT	NT	NT	NT	
CO COBOLT	0.05	<0.01	NT	NT	<0.01	NT	NT	NT	NT	NT	NT	0.05	<0.01	<0.01			
CN CYANIDE	0.2	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	0.001	NT	NT	NT	NT	
PHENOLS	0.005	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
SULFATE SO4	600	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	151.8	NT	NT	NT	NT	
FLORIDE	1.6	0.00599	0.00688	0.01077	0.01399	NT	NT	NT	NT	NT	NT	0.00566	0.00922				

ELEMENT	STANDARD	#6 (7-6-81)		#7 (7-6-82)		#6 (9-3-81)		#5 (9-3-81)		#4 (9-3-81)		#10 (7-6-82)		#11 (7-6-82)		#12 (7-6-82)	
		DRAW #7	DRAW #7	DRAW #7	DRAW #7	DRAW #8	DRAW #8	DRAW #9	DRAW #9	DRAW #12	DRAW #12	PIT #4	EAST ARROYO	RIVER	PIT #4	EAST ARROYO	RIVER
B BORON	0.75	0.54	0.19	NT	NT	0.28	NT	NT	NT	<0.01	0.16	0.46	<0.01				
MA MAGANESE	0.2	NT	NT	NT	NT	0.10	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
CO COBOLT	0.05	<0.01	<0.01	NT	NT	0.005	NT	NT	NT	<0.01	<0.01	0.01	0.01	0.01	0.01	0.01	
CN CYANIDE	0.2	NT	NT	NT	NT	NT	NT	NT									
PHENOLS	0.005	NT	NT	NT	NT	NT	NT	NT									
SULFATE SO4	600	NT	NT	1896	1896	1.118	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
FLORIDE	1.6	0.00922	0.01622	0.77	1.16	1.12	1.12	1.12	1.12	0.1155	0.01744	0.00833	0.00833	0.01011			

ELEMENT	STANDARD	#2 (7-6-82)		#3 (7-6-82)		#20 (7-6-82)		#19 (7-6-82)		#F (7-14-82)		#J (7-28-82)		#18 (7-6-82)		#4 (7-6-82)	
		DRAW #2	DRAW #3	DRAW #2	DRAW #3	DRAW #4	DRAW #6	DRAW #6	DRAW #6	DRAW #6	DRAW #6						
B BORON	0.75	0.32	0.29	<0.001	<0.001	NT	NT	NT	NT	NT	NT	0.84	<0.01	0.36	0.36	0.36	
MA MAGANESE	0.2	NT	NT	<0.01	<0.01	NT	NT	NT	NT	NT	NT	0.92	NT	NT	NT	NT	
CO COBOLT	0.05	<0.01	NT	NT	<0.01	NT	NT	NT	NT	NT	NT	0.05	<0.01	<0.01	<0.01	<0.01	
CN CYANIDE	0.2	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	0.001	NT	NT	NT	NT	
PHENOLS	0.005	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
SULFATE SO4	600	NT	NT	0.01622	0.01622	0.77	1.16	1.16	1.16	1.16	1.16	1.12	0.1155	0.01744	0.00833	0.01011	
FLORIDE	1.6	0.00922	0.01622	0.77	1.16	1.12	1.12	1.12	1.12	1.12	1.12	1.12	0.1155	0.01744	0.00833	0.01011	

## DIAGRAM #8

HAMMOND DITCH WATER AND GROUND WATER  
(REFER TO PLATE A FOR LOCATIONS OF SAMPLES)

	H. DITCH SIPHON	H. DITCH SIPHON	H. DITCH BRIDGE	H. DITCH S. of BRIDGE
<u>#3(9-3-81)</u>	<u>#1a(7-28-82)</u>	<u>#7(9-3-81)</u>	<u>#C(7-14-82)</u>	<u>#Ca(7-28-82)</u>

## ELEMENT

## STANDARD

FE	1.0	NT	0.10	NT
Mn	0.2	NT	0.05	0.10
Ni	0.2	NT	NT	0.010
Mo	1.0	NT	NT	0.010
Co	0.05	NT	0.005	0.005
Ar	0.1	NT	NT	0.005
Ba	1.0	NT	0.10	NT
Cd	0.01	NT	0.001	0.001
Cr	0.05	NT	0.005	0.005
Pb	0.05	NT	0.005	0.005
Hg	0.002	NT	0.0005	0.0005
Se	0.05	NT	0.005	NT
Ag	0.05	NT	0.001	NT
Zn	1.0	NT	0.10	NT
CU	1.0	NT	0.05	NT
AL	5.0	NT	0.10	NT
B	0.75	NT	0.03	0.04
CL	250	3.6	3.9	4.6
F	1.6	0.16	NT	0.15
SO4	600	46.3	57.3	46.5
TDS	1000	NT	184	NT
TOC	None	NT	4.6	3.6
PHENOLS	0.005	NT	0.191	0.0295
BENZENE	0.01	NT	0.001	0.001
TOLUENE	15.0	NT	0.001	0.001
M-XYLENES	Not Determined	NT	0.001	0.001
ETHYLBENZENE	Not Determined	NT	0.001	0.001
ALIPHATIC HYDROCARBON	POS.	NEG.	NEG.	NEG.
SCREEN	NEG.	NT	NT	0.002
CN	NT	NT	NT	1.2
OIL & GREASE (O&G)	NT	NT	NT	NT

\*NOTE: The following symbols mean: (NT) not tested, (ND) Not detected, (-) below standard, (Pos.) Positive, (Neg.) Negative, (<) less than - All results are mg/L.

CONTINUED

HAMMOND DITCH WATER AND GROUND WATER  
(REFER TO PLATE A FOR LOCATIONS AND SAMPLES)

ELEMENT	STANDARD	Groundwater #17 (7-9-82) HWY 44	Groundwater #A(7-12&14-82)	Groundwater #B(7-12&14-82)	Groundwater #K(7-28-82)	Groundwater #E(7-14-82)	API Separator	Groundwater #5(7-6-82)
FE	1.0	NT	NT	NT	NT	NT	NT	NT
Mn	0.2	NT	NT	NT	0.13	NT	0.11	NT
Ni	0.2	NT	NT	0.13	NT	0.80	NT	NT
Mo	1.0	NT	NT	NT	NT	NT	NT	NT
CO	0.05	< 0.01	0.05	0.05	0.69	0.57	0.05	< 0.01
Ar	0.1	NT	NT	NT	NT	NT	NT	NT
Ba	1.0	NT	NT	NT	NT	NT	NT	NT
Cd	0.01	NT	0.002	0.001	0.04	NT	NT	NT
Cr	0.05	0.01	0.013	0.008	0.62	NT	NT	< 0.01
Pb	0.05	0.03	0.13	0.10	18.17	0.20	0.40	0.40
Hg	0.002	NT	0.0014	< 0.005	0.005	NT	NT	NT
SE	0.05	NT	NT	NT	NT	NT	NT	NT
Ag	0.05	NT	NT	NT	NT	NT	NT	NT
Zn	1.0	NT	NT	NT	NT	NT	NT	NT
Cu	1.0	NT	NT	NT	NT	NT	NT	NT
AL	5.0	NT	NT	NT	NT	NT	NT	NT
B	0.75	< 0.01	0.53	0.49	0.66	0.38	0.35	0.74
CL	250	200.0	364.2	385.3	78.2	554.5	1504	330
F	1.6	0.02399	0.49	0.38	NT	0.43	NT	0.01244
SO4	600	NT	146.9	12.2	NT	1420	4542	NT
TDS	1000	1713	1963	1733	NT	4830	2676	3127
TOC	None	NT	NT	323	9.6	860	418	26.25
PHENOLS	0.005	NT	NT	NT	NT	1.012	37.049	NT
BENZENE	0.01	NT	0.001	< 0.001	NT	15.660	17.1	NT
TOLUENE	15.0	NT	< 0.001	< 0.001	NT	44.6	16.5	NT
M-XYLENES	Not Determined	NT	< 0.001	< 0.001	NT	16.30	3.00	NT
ETHYLBENZENE	Not Determined	NT	< 0.001	< 0.001	NT	4.03	3.6	NT
ALIPHATIC HYDROCARBON	POS.	NEG.	NEG.	NEG.	NT	POS.	POS.	NT
SCREEN	NEG.	NT	NT	NT	NT	0.0036	NT	NT
Cn	0.20	NT	NT	NT	NT	NT	NT	NT
Oil & Grease (O & G)	NT	NT	NT	NT	NT	296.2	NT	NT

# Hausser Laboratories

April 26, 1982  
Test Report No. 82-675

CLIENT: Plateau, Inc.  
P. O. Box 26251  
Albuquerque, NM 87125  
Attention: Dwight J. Stockham

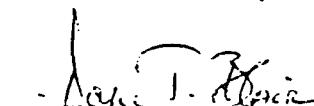
P. O. No. R035043

MATERIAL: NPDES sample collected 3-23-82 (HL #82-432).

TESTS: Pollutant Characterization as per Federal Register/Vol 44,  
No. 233/Methods 624, 625; Water testing, as per Methods  
for Chemical Analysis of Water and Wastes, PB-297686.

RESULTS: Testing evaluation completed on enclosed tables.

Tests Conducted By:



Doyce T. Blair, Analytical Chemist/  
Lab Supervisor

Metals, Cyanide, Total Phenols, and Misc.

<u>Pollutant</u>	<u>Concentration (mg/liter)</u>
1. Aluminum	< 0.7
2. Antimony	---
3. Arsenic	0.02
4. Barium	< 0.3
5. Beryllium	---
6. Boron	< 50
7. Cadmium	< 0.02
8. Chromium	< 0.05
9. Cobalt	2.2
10. Copper	< 0.06
11. Iron	0.4
12. Lead	0.1
13. Magnesium	21.4
14. Manganese	---
15. Mercury	< 0.001
16. Molybdenum	< 0.4
17. Nickel	< 0.2
18. Selenium	< 0.01
19. Silver	< 0.03
20. Thallium	---
21. Tin	---
22. Titanium	---
23. Zinc	0.3
24. Cyanide	0.02
25. Phenols	0.0054
26. Total Organic carbon	148
27. Total dissolved solids	2401
28. Total suspended solids	NA
29. Ammonia (as N)	NA
30. pH	7.12
31. Chloride	900
32. Fluoride	0.7
33. Nitrate (as N)	0.06
34. Nitrite (as N)	---
35. Total Organic Nitrogen (as N)	---
36. Oil and grease	---
37. Phosphorus	---
38. Sulfate	500
39. Sulfite	---

**GC/MS Fraction - Base/Neutral Compounds**

<u>Pollutant</u>	<u>Concentration (<math>\mu\text{g/liter}</math>)</u>
1. Acenaphthene	ND
2. Acenaphthylene	ND
3. Anthracene	ND
4. Benzidine	ND
5. Benzo (a) Anthracene	ND
6. Benzo (a) Pyrene	ND
7. 3,4-benzofluoranthene	ND
8. Benzo (ghi) Perylene	ND
9. Benzo (k) Fluoranthene	ND
10. Bis (2-chloroethoxy) methane	ND
11. Bis (2-chloroethyl) ether	ND
12. Bis (2-chloroisopropyl) ether	ND
13. Bis (2-ethylhexyl) phthalate	1.2
14. 4-bromophenyl phenyl ether	ND
15. Butyl benzyl phthalate	ND
16. 2-chloronaphthalene	ND
17. 4-chlorophenyl phenyl ether	ND
18. Chrysene	ND
19. Dibenzo (a,h) anthracene	ND
20. 1,2-dichlorobenzene	ND
21. 1,3-dichlorobenzene	ND
22. 1,4-dichlorobenzene	ND
23. 3,3-dichlorobenzidine	ND
24. Diethyl phthalate	ND
25. Dimethyl phthalate	ND
26. Di-n-butyl phthalate	ND
27. 2,4-dinitrotoluene	ND
28. 2,6-dinitrotoluene	ND
29. Di-n-octyl phthalate	ND
30. 1,2-diphenylhydrazine	ND
31. Fluoranthene	ND
32. Fluorene	ND
33. Hexachlorobenzene	ND
34. Hexachlorobutadiene	ND
35. Hexachlorocyclopentadiene	ND
36. Hexachloroethane	ND
37. Indeno (1,2,3-cd) pyrene	ND
38. Isophorone	ND
39. Naphthalene	ND
40. Nitrobenzene	ND
41. N-nitroso-dimethylamine	ND
42. N-nitroso-di-n-propylamine	ND
43. N-nitroso-diphenylamine	ND
44. Phenanthrene	ND
45. Pyrene	ND
46. 1,2,4-trichlorobenzene	ND

**GC/MS Fraction - Volatile Compounds**

<u>Pollutant</u>	<u>Concentration (ug/liter)</u>
1. Acrolein	ND
2. Acrylonitrile	ND
3. Benzene	130
4. Bis (Chloromethyl) ether	ND
5. Bromoform	ND
6. Carbon tetrachloride	ND
7. Chlorobenzene	ND
8. Chloro-dibromomethane	ND
9. Chloroethane	ND
10. 2-Chloroethylvinyl Ether	ND
11. Chloroform	ND
12. Dichlorobromoethane	ND
13. Dichloro-difluoromethane	ND
14. 1,1-dichloroethane	ND
15. 1,2-dichloroethane	ND
16. 1,1-dichloroethylene	ND
17. 1,2-dichloropropane	ND
18. 1,2-dichloropropylene	ND
19. Ethylbenzene	ND
20. Methyl Bromide	ND
21. Methyl Chloride	ND
22. Methylene Chloride	ND
23. 1,1,2,2-tetrachloroethane	ND
24. Tetrachloroethylene	ND
25. Toluene	190
26. 1,2-trans-dichloroethylene	ND
27. 1,1,1-trichloroethane	ND
28. 1,1,2-trichloroethane	ND
29. Trichloroethylene	ND
30. Trichlorofluoromethane	ND
31. Vinyl Chloride	ND

**GC/MS Fraction - Acid Compounds**

<u>Pollutant</u>	<u>Concentration (ug/liter)</u>
1. 2-chlorophenol	ND
2. 2,4-dichlorophenol	ND
3. 2,4-dimethylphenol	530
4. 4,6-dinitro-o-cresol	ND
5. 2,4-dintrophenol	ND
6. 2-nitrophenol	ND
7. 4-nitrophenol	ND
8. P-chloro-M-Cresol	ND
9. Pentachlorophenol	ND
10. Phenol	1950
11. 2,4,6-trichlorophenol	ND
12. O-&M-Cresol	2080

**GC/MS Fraction - Pesticides**

<u>Pollutant</u>	<u>Concentration ( ug/liter)</u>
1. Aldrin	ND
2. $\alpha$ -BHC	ND
3. $\beta$ -BHC	ND
4. $\gamma$ -BHC	ND
5. $\delta$ -BHC	ND
6. Chlordane	ND
7. 4,4'-DDT	ND
8. 4,4'-DDE	ND
9. 4,4'-DDD	ND
10. Dieldrin	ND
11. $\alpha$ -Endosulfan	ND
12. $\beta$ -Endosulfan	ND
13. Endosulfan Sulfate	ND
14. Endrin	ND
15. Endrin Aldehyde	ND
16. Heptachlor	ND
17. Heptachlor Epoxide	ND
18. PCB-1242	ND
19. PCB-1254	ND
20. PCB-1221	ND
21. PCB-1232	ND
22. PCB-1248	ND
23. PCB-1269	ND
24. PCB-1016	ND
25. Toxaphene	ND

PLATEAU - 978; ACID FRACTION  
SE 54 CAP; 40/3 @ 10 TO 300/30; GUL  
PX 1.0

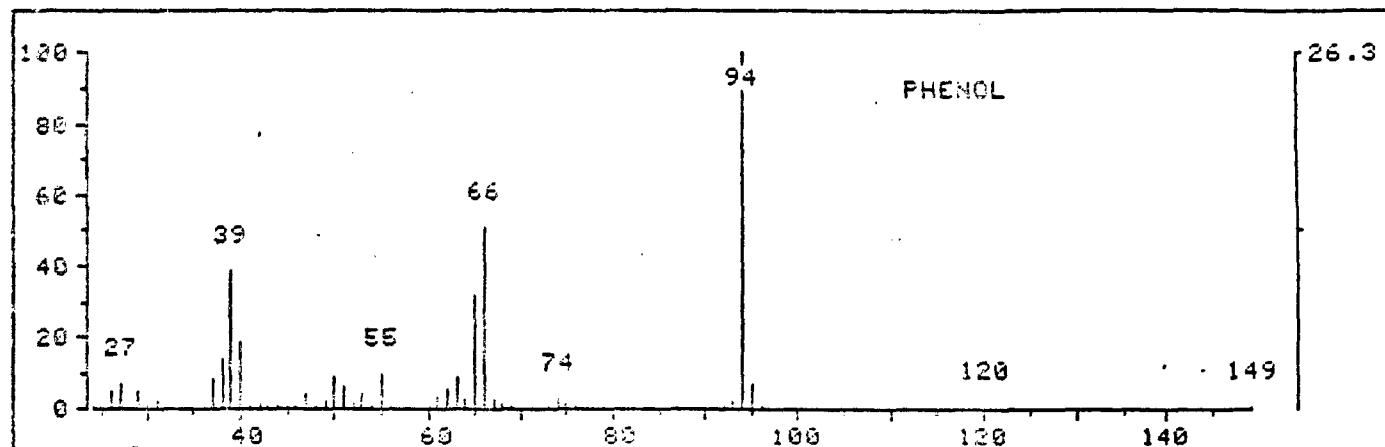
FRN 5016, CRN 101

1360 SCANS ( 281 SCANS, 12.02 MINS)

MASS RANGE: 19.0, 469.3 TOTAL ABUND= 2901983.

1 7 8 9 10 11 12 13 14 15 16 17  
MINS

AVERAGED SPECTRUM \* BASE PK/ABUND: 94.2/ 32000. -249 -256 + 253



PLATEAU - 978; ACID FRACTION  
SE 54 CAP; 40/3 @ 10 TO 300/30; GUL  
PX 1.0

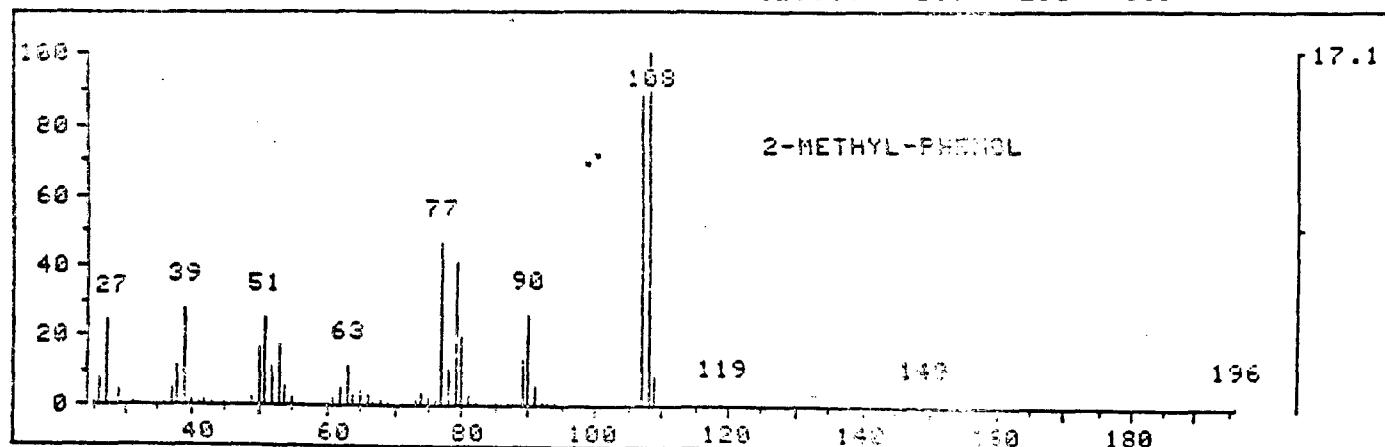
FRN 5016, CRN 101

1360 SCANS ( 281 SCANS, 12.02 MINS)

MASS RANGE: 19.0, 469.3 TOTAL ABUND= 2901983.

1 7 8 9 10 11 12 13 14 15 16 17  
MINS

AVERAGED SPECTRUM \* BASE PK/ABUND: 100.2/ 32000. -267 -288 + 285



NAME PLATEAU-978; BASE/NEUTRAL FRACTION  
MISC SES4 CAP; 40/3 @ 10 TO 300/30; 3UL

FRN 5015

21

148.6  
149.6

184363

BIS(ETHYL HEXYL) PHTHALATE

TI

3 6 9 12 15 18 21 24 27 30 33 36 39 42 45 48 51 54 57

FRN:

X = 1.00 Y = 1.00

BA

PLATEAU -978  
BASE/NEYTRAL FRACT&00

5015

148-  
149

BIS (2-ETHYL HEXYL)  
PHTHALATE

5014

148-  
149

TIME 26 27 28 29 30 31 32 33 34 35

NAME BASE/NEUTRAL STANDARDS - SUFELCO #4-8818,9,20,21  
MISC SES4 CAP; 40/3 @ 10 TO 300/30; 1UL EACH

FRN 5014

555

BIS (2-ETHYL HEXYL)  
PHTHALATE  
200NG INJECTED

148.7  
149.6

R=1046

6833

TI

30 31 32

NAME: PLATEAU-978; BASE/NEUTRAL FRACTION  
MISC: 3E54 CAP; 40/3 @ 10 TO 300/30; 3UL

FRN 5015

20

148.7  
149.6

2.9 ng/3ul = 1 ug/ml

REF 15

TOTAL VOLUME = 860mls

FINAL CONC: 1.2 ug/liter

2714

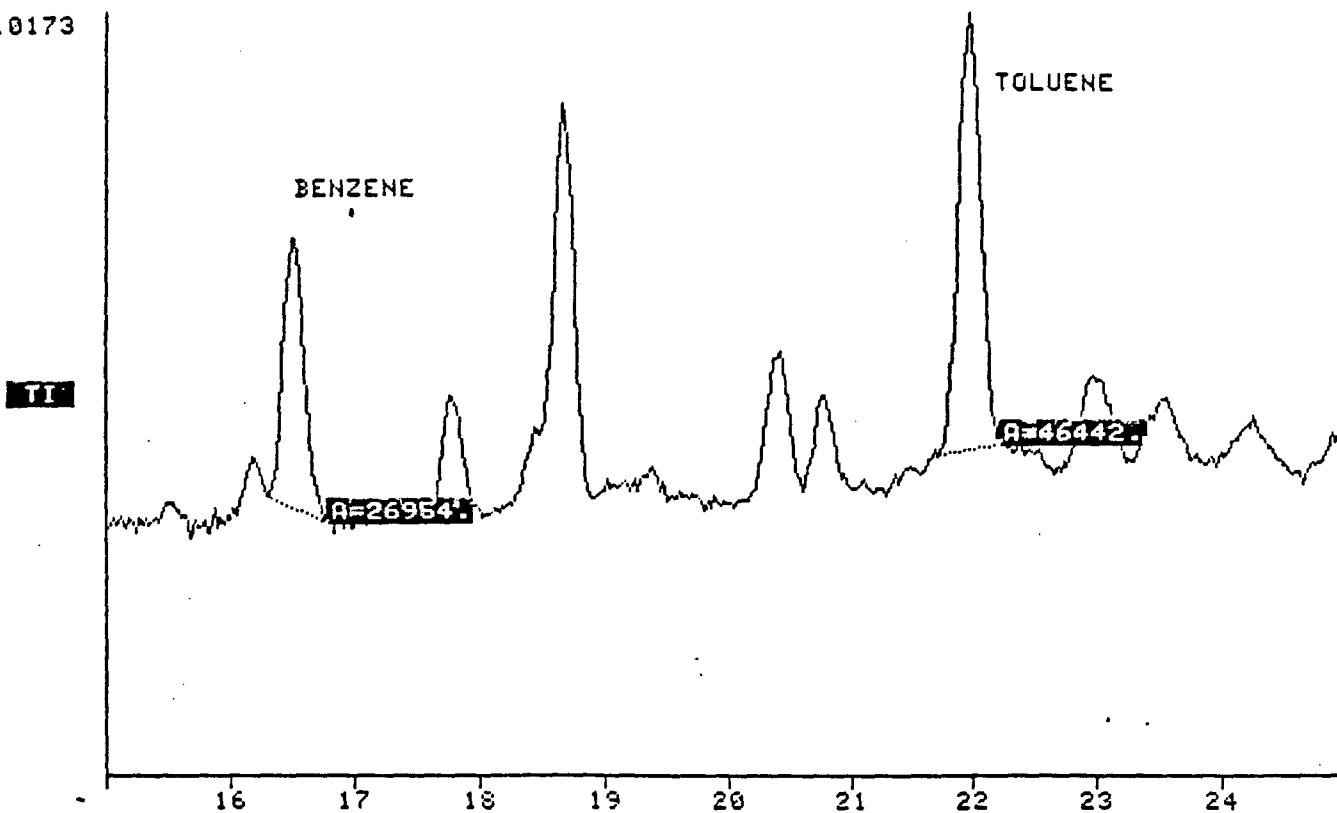
TI

30 31 32

NAME PLATEAU-978; PURGE AND TRAP; 10ML + 10UL STDS  
MISC 1%SP1000; 45/3 @ 10 TO 220/20

FRN 5013

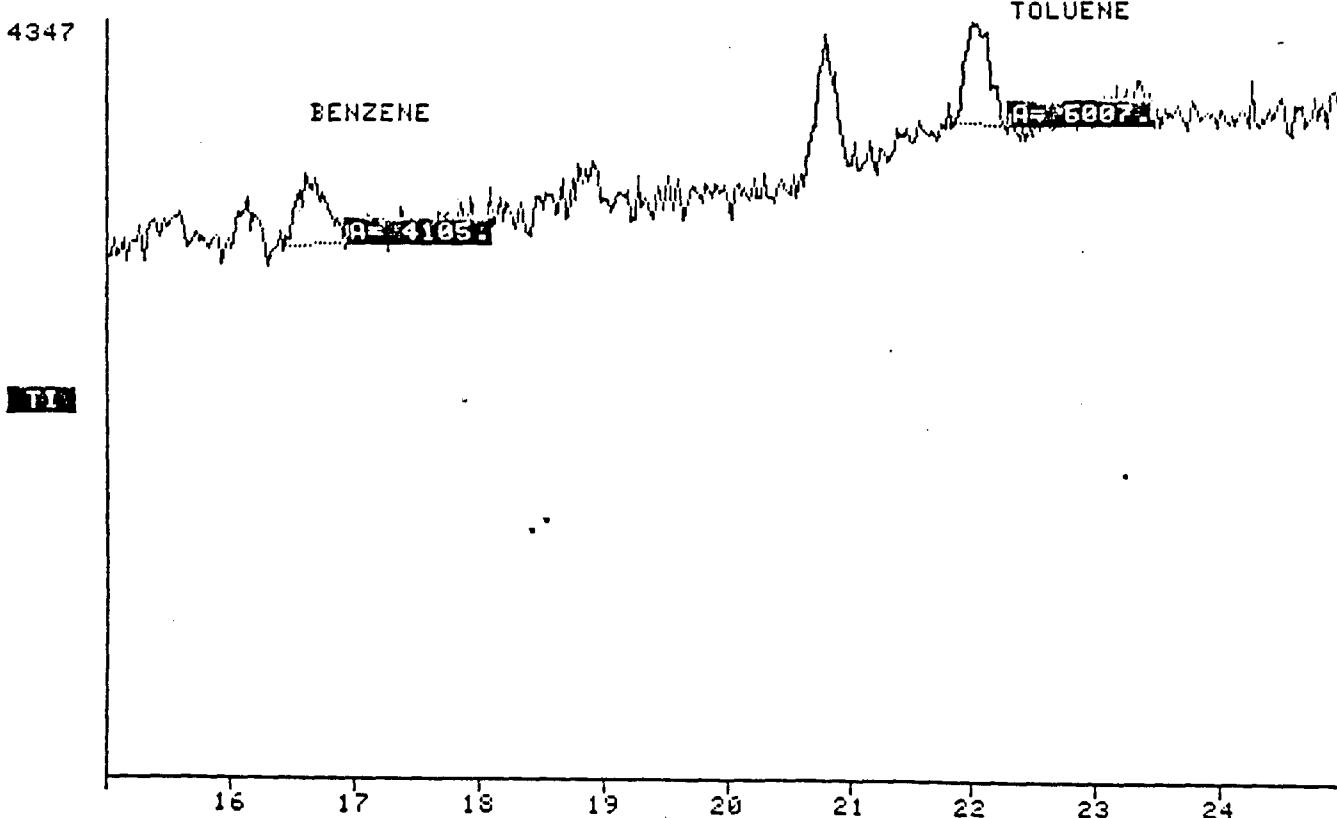
10173



NAME PURGE AND TRAP STANDARDS A, B, C  
MISC 1%SP1000; 45/3 @ 10 TO 220/20

FRN 5011

4347



NAME PLATEAU - 978; ACID FRACTION  
MISC SE 54 CAP; 40/3 @ 10 TO 300/30; 3UL

FRN 5016

10624

TI

PHENOL

M-CRESOL

O-CRESOL

R=22229.

7 8 9 10 11 12 13 14 15 16 17

NAME PHENOL STANDARDS; SUPELCO #4-8810  
MISC SE 54 CAP; 40/3 @ 10 TO 300/30; 1UL OF 20

FRN 5017

5073

TI

A=932.

PHENOL

2-CHLORO  
PHENOL

A=947.

2,4-DIMETHYL  
PHENOL

4-CHLORO,3-METHYL PHENOL

2,4-DICHLOROPHENOL A=74241.

2-NITROPHENOL

A=7943

7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

NAME: PLATEAU - 978; ACID FRACTION  
MISC: SE 54 CAP; 40/3 @ 10 TO 300/30; 3UL

FRN 5016

10624

R=23407: PHENOL = 1950  $\mu\text{g/liter}$

R=15651: M-CRESOL = 1302  $\mu\text{g/liter}$

R=9355: O-CRESOL = 778  $\mu\text{g/liter}$

TI

R=153301:

R=1545:

7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

NAME: PLATEAU - 978; ACID FRACTION  
MISC: SE 54 CAP; 40/3 @ 10 TO 300/30; 3UL

FRN 5016

3228

R=6476:

TI

DIMETHYL PHENOL ISOMERS < 530  $\mu\text{g/liter}$

13

14

15

ANALYTICAL RESULTS

Oil Conservation Division

December 29, 1981

WHITE LABEL (only)

Client's Sample I.D.: Plateau Refinery, emergency      AnaChem I.D.: 751  
run off Pond #1

<u>PARAMETER</u>	<u>CONCENTRATION</u>	<u>STANDARD</u>
C.O.D.	172 ppm	80 ppm

OFSEEP (SAME LOCATION AS SAMPLE #6 (7-6-82) ORANGE LABEL

Client's Sample I.D.: Light Oil-Sample A      AnaChem I.D.: 752  
Heavy Oil-Sample B

PARAMETER

API Gravity

Sample #A - 49.84°  
 Sample #B - 19.98°

25%A/75%B - 25.77°  
 75%A/25%B - 38.71°  
 50%A/50%B - 32.82°

Temp. 71.5°F - all samples run at this temp.



AnaChem Inc

Working for a better world through applied chemistry

**CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES**

Date received

Lab No.

SLD user code No.

CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen

CHEMICAL ANALYSES: Check individual items for analysis  
(Mark appropriate box(es))

INTERIM PRIMARY PARAMETER GROUP  
 1       2       3       Complete Secondary

TYPE of CHEMICAL ANALYSIS  
 Organic       Treated Water       Raw Water  
 Radiological

Water Supply System Name	Water Supply System Code No.	City or Location	County
PATRIOT SPRINGS /		BLOOMFIELD N.M. JUAN	
Collection Date	Collection Time	Collector's Remarks	
9-3-81	3:14 PM	COLLECTED WITH FILTERED + AS ID. FILED WITH 5-MIN-THERM	
Collected By	Owner	Address	
S. M. PERSON & FLEMISTER	OIL CONSENT UNION	R - GRANT CIRCUMANCIA MTS	
TYPE of SYSTEM (Check one)	SOURCE:		
[PRIVATE]	<input type="checkbox"/> Spring <input type="checkbox"/> Lake <input type="checkbox"/> Well-Depth <input type="checkbox"/> Community <input type="checkbox"/> Non-community <input type="checkbox"/> Other (Specify) _____		
	<input type="checkbox"/> Drain <input type="checkbox"/> Stream <input type="checkbox"/> Pool	LAT. °    °    ° LONG. °    °    °	

LABORATORY REMARKS:
Reviewed by <i>J. J.</i> <i>J.</i>
Date reported <i>9/24/81</i>

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL		HEAVY METALS	mg/l	PARAMETER	mg/l	ORGANIC	mg/l
00930 Sodium (as Na)		00940 Chloride (as Cl)		70300 Total Filterable Residue	mg/l	<input checked="" type="checkbox"/> 01000 Arsenic	0.046	<input checked="" type="checkbox"/> 2,4,5-TP (Cu)	<0.10	39390 Endrin	
00935 Potassium (as K)		00950 Fluoride (as F)		38260 Foaming Agents (as Las)	mg/l	<input checked="" type="checkbox"/> 01005 Barium	0.4	<input checked="" type="checkbox"/> Cadmium	0.061	39732 Lindane	
00900 Tot. Hardness (as CaCO <sub>3</sub> )		00620 Nitrate (as N)		00955 Conductance Micromhos 25°C	mg/l	<input checked="" type="checkbox"/> 01025 Chromium	<0.001	<input checked="" type="checkbox"/> Manganese	<0.10	38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as CaCO <sub>3</sub> )		00400 pH	mg/l	<input checked="" type="checkbox"/> 01030 Chromium	0.007	<input checked="" type="checkbox"/> RADIOLOGICAL PCII Gross Alpha	39400 Toxaphene		
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO <sub>3</sub> )		01330 Odor	mg/l	<input checked="" type="checkbox"/> 01049 Lead	<0.005	<input checked="" type="checkbox"/> 03501 Gross Beta	39730 2,4-D		
01045 Iron-Total (as Fe)	0.40	00445 Carbonate (as CO <sub>3</sub> )		00080 Color	mg/l	<input checked="" type="checkbox"/> 07180 Mercury	0.0005	<input checked="" type="checkbox"/> 09501 Radium-226	39740 2,4,5-TP (Silvex)		
01056 Manganese (as Mn)		00945 Sulfate (as SO <sub>4</sub> )		00070 Turbidity	mg/l	<input checked="" type="checkbox"/> 01145 Selenium	0.005	<input checked="" type="checkbox"/> 11501 Radium-228			
01057 Nickel (as Ni)	1.0	00446 Chloride (as Cl)		01075 Silver	mg/l	<input checked="" type="checkbox"/> 01075 Chloride (as Cl)	0.05	<input checked="" type="checkbox"/> 01075 Silver			



**CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES**

CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen

**CHEMICAL ANALYSES:** Check individual items for analysis  
**LABORATORY DIVISION**

[Mark appropriate box(es)]

Water Supply System Name

Water Supply System Code No.

City or Location

County

Check one:  
 TREATED WATER     RAW WATER

Organic     Radiological

TYPE of CHEMICAL ANALYSIS  
1     2     3.....     Complete Secondary

Collection Date

Collection Time

Collection Point

Owner

SOURCE:  Spring     Lake     Well-Depth.....  
 Drain     Stream     Pool     Other (specify).....

LAT. °    LONG °

Report to  
CITY CORPORATION DIV.  
Address  
P.O. Box 2088  
Albuquerque NM 87501

Collector's Remarks  
CONTAINER: PLASTIC BOTTLE  
CONTAMINANT: DUST  
CONTAMINANT: DUST

Collected By

TYPE of SYSTEM (Check one)  
 PRIVATE     COMMUNITY     NON-COMMUNITY

Date received

Lab No.

SLD user code No.

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL	mg/l	HEAVY METALS	mg/l	PARAMETER	mg/l	ORGANIC	mg/l
00930 Sodium (as Na)		X Chloride (as Cl)	70300	mg/l	01000	Arsenic		Total Filterable Residue		39390 Endrin	
00935 Potassium (as K)		X Fluoride (as F)	9978	mg/l	01005	Barium		38260 Foaming Agents (as Las)		39732 Lindane	
00900 Tot-Hardness (as CaCO <sub>3</sub> )		00620 Nitrate (as N)		00095 Conductance		01025 Cadmium		00430 Alkalinity (as CaCO <sub>3</sub> )		38270 Methoxychlor	
00915 Calcium (as Ca)				00400 pH		01030 Chromium		01040 Bicarbonate (as HCO <sub>3</sub> )		39400 Toxaphene	
00925 Magnesium (as Mg)				01330 Odor		01049 Lead		00440 Bicarbonate		03501 Gross Beta	
01045 Iron-Total (as Fe)						00080 mg/l		00445 Carbonate (as CO <sub>3</sub> )		39730 2,4-D	
01056 Manganese (as Mn)		X Sulfate (as SO <sub>4</sub> )	5633	00070 Turbidity		07180 Mercury		00945		09501 Radium-226	
										11501 Radium-228	39740 2,4,5-TP (Silvex)
										01145 Selenium	
										01075 Silver	

**LABORATORY REMARKS:**

Reviewed by *M. J. Smith*

Date reported *9/16/81*



State of New Mexico

**State of New Mexico  
HEALTH and ENVIRONMENT DEPARTMENT  
SCIENTIFIC  
LABORATORY DIVISION**

**CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES**

**CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen.**

CHEMICAL

### *Check individual items*

**ANALYSES:** [Mark appropriate box(es)]  1  2  3

Complete Secondary

HEALTH AND ENVIRONMENTAL DEPARTMENT		CIVILIAN and MILITARY ANALYTICAL SCIENTIFIC LABORATORY DIVISION	
CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen			
<b>CHEMICAL ANALYSES:</b> <i>[Check individual items for analysis (Mark appropriate box(es))</i>		<b>for WATER SAMPLES</b>	
		INTERIM PRIMARY PARAMETER GROUP	
		TYPE of CHEMICAL ANALYSIS	
		<input type="checkbox"/> 1	<input type="checkbox"/> 2
		<input type="checkbox"/> 3.....	<input type="checkbox"/> Complete Secondary
Water Supply System Name	Water Supply System Code No.	City or Location	County
42/41 P.D.A. S. 1000 ft. 43		Brents Field, N.W. 5th Street	
Collection Date	Collection Time	Collection Point	
19/3/51			
Collected By	Owner	Collector's remarks	Report to
S. M. P. S. C. E. D. & B. D. S. C. E. D.	O. I. Conservation Div.	1 - Filtered CONTAINER FILTED D.R.M.	Concentration Div.
<b>TYPE of SYSTEM</b> <i>(Check one)</i>	SOURCE: <input type="checkbox"/> Spring <input type="checkbox"/> Lake <input type="checkbox"/> Well-Depth <input type="checkbox"/> Drain <input type="checkbox"/> Stream <input type="checkbox"/> Pool <input type="checkbox"/> Other (specify) _____	Address	Date received
<input type="checkbox"/> PRIVATE	<input type="checkbox"/> Community <input type="checkbox"/> Non-community	P.O. Box 2088	Lab No. 1112 X 666
	LAT. ° ' "	LONG. ° ' "	SLD user code No.

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL	mg/l	HEAVY METALS	mg/l	PARAMETTER	ORGANIC	mg/l	
00930 Sodium (as Na)	250	00940 Chloride (as Cl)	306	70300 Total Filterable Residue	mg/l	01000 Arsenic		01005 Barium		39390 Endrin	
00935 Potassium (as K)	6	00950 Fluoride (as F)	016	38260 Foaming Agents (as Las)						39732 Lindane	
00900 Tot.Hardness (as CaCO <sub>3</sub> )		00960 Nitrate (as N)		00985 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00970 Conductance Micromhos 25°C		00400 pH		01030 Chromium					
00925 Magnesium (as Mg)		00430 Alkalinity (as CaCO <sub>3</sub> )		01330 Odor		01501 Gross Alpha				01049 Lead	01050 Gross Beta
01045 Iron-Total (as Fe)		00440 Bicarbonate (as HCO <sub>3</sub> )								03501 Gross Beta	pc/l
01056 Manganese (as Mn)		00445 Carbonate (as CO <sub>3</sub> )		00080 Color	mg/l	07180 Mercury				39730 2, 4-D	
										09501 Radium-226	pc/l
										39740 2, 4, 5-TCP (Silvex)	
										11501 Radium-228	pc/l
										01075 Silver	

#### LABORATORY REMARKS

Reviewed by

L'Amour

Anselm

**CHEMICAL and PHYSICAL ANALYSES**

Date received

Lab No. SLD user code No.



SCIENTIFIC  
LABORATORY DIVISION

CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen

**CHEMICAL ANALYSES:** Check individual items for analysis. INTERIM PRIMARY PARAMETER GROUP TYPE of CHEMICAL ANALYSIS  
[Mark appropriate box(es)]  
1  2  3  Complete Secondary

TREATED WATER  RAW WATER  Radiological

Water Supply System Name

Collection Date Collection Time Collection Point

Collector's remarks

Report to

Mr. Conservation Div.

Address

P.O. Box 2088

Santa Fe, NM 87501

Collected By

Owner

City or Location

County

Check one:

Organic  Non-community

NON-ORGANIC

TYPE of SYSTEM (Check one)  
 PRIVATE  COMMUNITY  NON-COMMUNITY

SOURCE:  Spring  Lake  Well-Depth  Other (Specify)  Drain  Stream  Pool  Other (Specify)

LAT. °    LONG. °

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL	mg/l	HEAVY METALS	mg/l	PARAMETER	mg/l	ORGANIC	mg/l
00930 Sodium (as Na)		X Chloride (as Cl)	00640	70300 Total Filterable Residue	mg/l	01000 Arsenic				39390 Endrin	
00935 Potassium (as K)		X Fluoride (as F)	00950	38260 Foaming Agents (as Las)		01005 Barium				39732 Lindane	
00900 Tot. Hardness (as CaCO <sub>3</sub> )		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as CaCO <sub>3</sub> )		00400 pH		01030 Chromium 0.1501		RADIOLOGICAL PCU Gross Alpha	pcu	39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO <sub>3</sub> )		01330 Odor		01049 Lead		0.3501 Gross Beta	pcu	39730 2,4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO <sub>3</sub> )	660	00080 Color	mg/l	07180 Mercury		0.9501 Radium-226	pcu	39740 2,4,5-TP (Silvex)	
01056 Manganese (as Mn)		00945 Sulfate (as SO <sub>4</sub> )	3143	00070 Turbidity		01145 Selenium		1.1501 Radium-228	pcu		
						01075 Silver					

LABORATORY REMARKS:

Reviewed by *M.M. Smith, Rm.*

Date reported *9/16/81*





State of New Mexico

# CHEMICAL and PHYSICAL ANALYSES for WATER SAMPLES

**LABORATORY DIVISION**

CHEMICAL  
ANALYSES:

**CHEMICAL ANALYSES:** *Check individual items for analysis  
(Mark appropriate box(es))*

**INTERIM PRIMARY PARAMETER GROUP**

## L ANALYSIS

banic

Radiological

**Water Supply System Name**

Name

Water Supply System Co.

**CITY OR LOCATION** *Bethelfield, Minn.*      **COUNTY** *San Juan*

**Check one:**  
 TREATED WATER       RAW WATER

Collection Date  
9/3/81

Col

On Point

Collector's remarks	2 - L.T.C.R. CONTAINERS - HELD	Report C.
Addressed		

<sup>10</sup> Conservation Dist.

**LABORATORY REMARKS:**

Reviewed by

Reviewed by

Reviewed by

**CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES**

CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen

CHEMICAL ANALYSES:  Check individual items for analysis  
 Mark appropriate box(es)

INTERIM PRIMARY PARAMETER GROUP

1

2

3...

Complete Secondary

TYPE of CHEMICAL ANALYSIS

Organic

TREATED WATER

RAW WATER

Date received **9-28-81**

Lab No. **111-8449**

SLD user code No.

Water Supply System Name **Simpson Ranch**  
Collection Date **9/28/81**  
Collection Time **2:00 P.M.**  
Collection Point **City or Location**

Collector's remarks **Bloomfield, NM**  
CONTAINER USED **Plastic**  
OWNER **City Conservation Dist.**

Address **P.O. Box 2088**  
TOWN **Globe, NM 87531**

SOURCE:  Spring  Lake  Well-Depth  
 Drain  Stream  Pool  Other (Specify)

CITY LAT. **39° 32' 10"**  
LONG. **105° 11' 00"**

Check one:  
 TREATED WATER  
 RAW WATER

Report to **City Conservation Dist.**

Address **P.O. Box 2088**

TOWN **Globe, NM 87531**

ORGANIC mg/l

39390 Endrin

39732 Lindane

38270 Methoxychlor

39400 Toxaphene

39730 2,4-D

39740 2,4,5-TP (Silvex)

CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES

**CHEMICAL ANALYSES:** Check individual items for analysis  
*(Mark appropriate box(es))*

**INTERIM PRIMARY PARAMETER GROUP**

**TYPE OF CHEMICAL ANALYSIS**

**TYPE OF CHEMICAL ANALYSIS**

**Water Supply System Name** *Bluemont Stream* **Water Supply System Code No.** *500-820* **City or Location** *Silver Team* **County** *San Juan*

**Collection Date** *9/15/81* **Collection Time** *5:30 PM* **Collection Point** *19' sub-surface* **Collector's remarks** *Fifteen feet below water surface*

**Report to** *Private Conservation, P.C.* **Address** *P.O. Box 2088*

**Collected By** *John C. Gandy* **Owner** *CJ Conservation, L.L.C.*

**SUPPLY SYSTEM** *Groundwater* **SOURCE:**  Spring  Lake  Well-Depth  Other *(Specify)*

**PRIVATE**  Community  Non-community

**PUBLIC:**  Community  Non-community

**Drain**  Stream  Pool  Other *(Specify)*

**LAT.** *37° 1' 1"* **LONG.** *107° 1' 11"*

**Check one:**

TREATED WATER  RAW WATER

Organic  Radiological

<b>CATIONS</b>	<b>mg/l</b>	<b>ANIONS</b>	<b>mg/l</b>	<b>PHYSICAL</b>	<b>HEAVY METALS</b>		<b>PARAMETER</b>	<b>ORGANIC</b>	<b>mg/l</b>
					<b>mg/l</b>	<b>mg/l</b>			
00930 Sodium (as Na)	X	00940 Chloride (as Cl)	70300 Total Filterable Residue	mg/l	01000 Arsenic	mg/l		39390 Endrin	mg/l
00935 Potassium (as K)	X	00950 Fluoride (as F)	1.6	38260 Foaming Agents (as LAS)	01005 Barium	mg/l		39322 Lindane	mg/l
00900 Tot. Hardness (as CaCO <sub>3</sub> )		00620 Nitrate (as N)		00005 Conductance Micromhos 25°C	01025 Cadmium	mg/l		38220 Methoxychlor	mg/l
00915 Calcium (as Ca)		00430 Alkalinity (as CaCO <sub>3</sub> )		00400 pH	01030 Chromium	mg/l	RADIOLOGICAL PC/M 0.1501 Gross Alpha	39400 Tokaphene	mg/l
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO <sub>3</sub> )		01330 Odor	01049 Lead	mg/l	03501 Gross Beta	39730 2,4-D	mg/l
01045 Iron-Tot. (as Fe)		00445 Carbonate (as CO <sub>3</sub> )		00080 Color	07180 Mercury	mg/l	09501 Radium-226	39740 2,4,5-TP (Silvex)	PC/M
01056 Manganese (as Mn)	X	00945 Sulfate (as SO <sub>4</sub> )	6.0	00070 Turbidity	01145 Selenium	mg/l	11501 Radium-228	PC/M	
75		0.04			0.075 Silver	mg/l			

## LABORATORY REMARKS:

Reviewed by *J. W. Martin, Jr., P.E.*

Date reported *9/16/81*

**CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES**

Date received	Lab No.	SLD user code No.
CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen		
CHEMICAL ANALYSES [Mark appropriate box(es)]		
INTERIM PRIMARY PARAMETER GROUP		
TYPE of CHEMICAL ANALYSIS		
<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3..... <input type="checkbox"/> Complete Secondary		
Water Supply System Name <i>Platte Sample</i>	Water Supply System Code No. <i>B-1000</i>	City or Location <i>Blomfield, NM San Juan</i>
Collection Date <i>9/3/81</i>	Collection Time <i>5:30 PM</i>	Collector's remarks <i>CONTAINERS CLEANED &amp; SCRUBBED WITH SOAP</i>
Collected By <i>Simpson, Ed mustard</i>	Owner <i>O'Conor Water Co.</i>	Report to <i>D/C Commission Office</i>
Address <i>P.O. Box 2088 Santa Fe, NM 87501</i>		

TYPE OF SYSTEM (Check one)	
<input checked="" type="checkbox"/> PRIVATE	<input type="checkbox"/> COMMUNITY
<input type="checkbox"/> PUBLIC	<input type="checkbox"/> Non-community
SOURCE: <input type="checkbox"/> Spring <input type="checkbox"/> Lake <input type="checkbox"/> Well Depth <input type="checkbox"/> Stream <input type="checkbox"/> Pool <input type="checkbox"/> Other (specify) <i>None</i>	
LAT. °     LONG. °	
TREATED WATER <input type="checkbox"/> ORGANIC mg/l	
RAW WATER <input type="checkbox"/> RADIOPHYSICAL mg/l	
RADIOPHYSICAL mg/l	
ORGANIC mg/l	
HEAVY METALS mg/l	
CATIONS mg/l	ANIONS mg/l
PHYSICAL mg/l	

00930 Sodium (as Na)	00940 Chloride (as Cl)	70300 Total Filterable Residue	mg/l	<input checked="" type="checkbox"/> Arsenic	0.000	<0.005	<input checked="" type="checkbox"/> 2 MC (Zn)	<0.10	39390 Endrin
00935 Potassium (as K)	00950 Fluoride (as F)	38260 Foaming Agents (as Las)	mg/l	<input checked="" type="checkbox"/> Barium	0.009	<0.10	<input checked="" type="checkbox"/> COPPER (Cu)	<0.05	39732 Lindane
00900 Tot.Hardness (as CaCO <sub>3</sub> )	00620 Nitrate (as N)	00955 Conductance Micromhos 25°C	mg/l	<input checked="" type="checkbox"/> Cadmium	0.025	<0.001	<input checked="" type="checkbox"/> ALUMINUM (Al)	0.10	38270 Methoxychlor
00915 Calcium (as Ca)	00430 Alkalinity (as CaCO <sub>3</sub> )	00400 pH	mg/l	<input checked="" type="checkbox"/> Chromium	0.030	<0.005	<input checked="" type="checkbox"/> RADIOPHYSICAL pcvi	0.1501	39409 Toxaphene
00925 Magnesium (as Mg)	00440 Bicarbonate (as HCO <sub>3</sub> )	01330 Odor	mg/l	<input checked="" type="checkbox"/> Lead	0.050	<0.005	<input checked="" type="checkbox"/> Gross Alpha	0.0501	39730 2,4-D
01045 Iron-Total (as Fe)	00445 Carbonate (as CO <sub>3</sub> )	00080 Color	mg/l	<input checked="" type="checkbox"/> Mercury	07180 <10.0005	0.9501	<input checked="" type="checkbox"/> pcvi	39740 2,4,5-TP (Silvex)	
01056 Manganese (as Mn)	00945 Sulfate (as SO <sub>4</sub> )	00070 Turbidity	mg/l	<input checked="" type="checkbox"/> Selenium	01145 <10.005	11501	<input checked="" type="checkbox"/> pcvi		
NICKEL (as Ni)	Molybdenum (Mo)	Color (Co)	mg/l	<input checked="" type="checkbox"/> Radium-226	0.005	Radium-228			
			mg/l	<input checked="" type="checkbox"/> Silver	01075 <0.001	0.001			
			mg/l		0.05	0.25			
			mg/l		1.0	1.0			

LABORATORY REMARKS:

Reviewed by *J.D.*

Date reported *9/27/81*

**CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES**

CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen

**CHEMICAL  
ANALYSES:**

[Mark appropriate box(es)]

INTERIM PRIMARY PARAMETER GROUP

TYPE of CHEMICAL ANALYSIS

Date received

Lab No.

SLD user code No.

**Water Supply System Name**

Water Supply System Code No.

Collector's remarks

Report to

Address

County

Check one:

Organic

TREATED WATER

Radiochemical

Raw Water

**Collection Date**

Collection Time

Collection Point

SOURCE:

Spring

Lake

Well-Depth

Stream

Pool

Other (specify)

Lat.

°

'

"

Long.

°

'

"

**Collected By**

Owner

Report to

Address

**TYPE of SYSTEM (Check one)**

PRIVATE

Community

Non-community

SOURCE:

Drain

Stream

Pool

Other (specify)

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL	mg/l	HEAVY METALS	mg/l	PARAMETER	mg/l	ORGANIC	mg/l
00930 Sodium (as Na)	✓	00940 Chloride (as Cl)	230	70300 Total Filterable Residue	mg/l	01000 Arsenic	•	39390 Endrin	•		
00935 Potassium (as K)	✗	00950 Fluoride (as F)	6	38260 Foaming Agents (as Las)	mg/l	01005 Barium	•	39732 Lindane	•		
00900 Tot-Hardness (as CaCO <sub>3</sub> )		00620 Nitrate (as N)		0095 Conductance Micromhos 25-C	mg/l	01025 Cadmium	•	38270 Methoxychlor	•		
00915 Calcium (as Ca)		00430 Alkalinity (as CaCO <sub>3</sub> )		00400 pH	mg/l	01030 Chromium	•	39400 Toxaphene	•		
00925 Magnesium (as Mg)	•	00440 Bicarbonate (as HCO <sub>3</sub> )		01330 Odor	mg/l	01049 Lead	•	03501 Gross Alpha	pcI/l	39730 2,4-D	•
01045 Iron-Total (as Fe)	•	00445 Carbonate (as CO <sub>3</sub> )	60	00080 Color	mg/l	07180 Mercury	•	09501 Radium-226	pcI/l	39740 2,4,5-TP (Silver)	•
01056 Manganese (as Mn)	•	00945 Sulfate (as SO <sub>4</sub> )	463	00070 Turbidity	mg/l	01145 Selenium	•	11501 Radium-228	pcI/l		
						01075 Silver	•				

**LABORATORY REMARKS:**

Reviewed by

Date reported



State of New Mexico  
HEALTH and ENVIRONMENT

# SCIENTIFIC RESEARCH AND DEVELOPMENT DEPARTMENT

# CHEMICAL and PHYSICAL ANALYSES FOR WATER SAMPLES

**CONSULT SBD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen**

CONSULT SLL Lab Annex L for proper presentation or sample(s). TYPE or PH/NH <sub>3</sub> with Ball Point Pen						
<b>CHEMICAL ANALYSES:</b> <i>[Mark appropriate box(es)]</i>		INTERIM PRIMARY PARAMETER GROUP		TYPE of CHEMICAL ANALYSIS		
		<input type="checkbox"/> 1		<input type="checkbox"/> 2		
				<input type="checkbox"/> 3		
				<input type="checkbox"/> Complete Secondary		
Water Supply System Name	Water Supply System Code No.		City or Location	County	<input type="checkbox"/> Organic <input type="checkbox"/> Radiological <input type="checkbox"/> Check one: <input checked="" type="checkbox"/> TREATED WATER <input type="checkbox"/> RAW WATER	
Collection Date	Collection Time	Collection Point	Collector's remarks	Report to		
4/13/81	10:00 AM	Owner	Collected at water treatment plant	Address		
Collected By			COLLECTOR'S SIGNATURE			
TYPE of SYSTEM <i>(Check one)</i>						
<input checked="" type="checkbox"/> PRIVATE <input type="checkbox"/> PUBLIC: <input type="checkbox"/> Community <input type="checkbox"/> Non-community						
SOURCE: <input type="checkbox"/> Spring <input type="checkbox"/> Lake <input type="checkbox"/> well-Depth _____						
<input type="checkbox"/> Drain <input type="checkbox"/> Stream <input type="checkbox"/> Pool <input type="checkbox"/> Other (specify)						
LAT.	°	'	"	LONG.	°	'

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL	mg/l	HEAVY METALS	mg/l	PARAMETER	mg/l	ORGANIC	mg/l
00930 Sodium (as Na)		X 00940 Chloride (as Cl)		70300 Total Filterable Residue	mg/l	01000 Arsenic				39390 Endrin	
00935 Potassium .. (as K)		X 00950 Fluoride (as F)		38260 Foaming Agents (as Las)	mg/l	01005 Barium				39732 Lindane	
00900 Tot.Hardness (as CaCO <sub>3</sub> )		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C	mg/l	01025 Cadmium				38270	
00915 Calcium (as Ca)		00430 Alkalinity (as CaCO <sub>3</sub> )		00400 pH		01030 Chromium		RADIOLOGICAL PCU		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO <sub>3</sub> )		01330 Odor		01049 Lead		01501 Gross Alpha		Methoxychlor	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO <sub>3</sub> )		00080 Color	mg/l	07180 Mercury		03501 Gross Beta		39730 2,4-D	
01056 Manganese (as Mn)		X 00945 Sulfate (as SO <sub>4</sub> )		00070 Turbidity		01145 Selenium		09501 Radium-226		39740 2,4,5-TP (Silvex)	
						01075 Silver		11501 Radium-228		pCi/l	

**LABORATORY REMARKS:**

Reviewed by

Date rapporter

**CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES**



CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen

**CHEMICAL ANALYSES:** Check individual items for analysis.  INTERIM PRIMARY PARAMETER GROUP  TYPE of CHEMICAL ANALYSIS  
 1  2  3  Organic  Radiological

Water Supply System Name

Water Supply System Code No.

City or Location

County

Collector's remarks

Report to

Address

COLLECTED BY

Owner

COLLECTED AT

COLLECTED DATE

COLLECTED TIME

COLLECTED POINT

SOURCE

Spring

Lake

Well-Depth

Drain

Stream

Pool

Other (specify)

LAT.

°

'

"

LONG

°

'

"

TREATED WATER

RAW WATER

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL	mg/l	HEAVY METALS	mg/l	PARAMETER	mg/l	ORGANIC	mg/l	
00930 Sodium (as Na)	X	00935 Potassium (as K)	X	00940 Chloride (as Cl)	2358	00945 Fluoride (as F)	38260	00950 Total Filterable Residue	01005 Barium Agents (as Las)	01025 Cadmium	03930 Endrin	39390 Endrin
00940 Chloride (as Cl)		00945 Fluoride (as F)		00950 Total Filterable Residue		00955 Barium Agents (as Las)		00960 Nitrate (as N)		00965 Conductance Micromhos 25°C		39732 Lindane
00950 Total Filterable Residue		00955 Barium Agents (as Las)		00960 Nitrate (as N)		00965 Conductance Micromhos 25°C		00970 Cadmium		00975 Chromium		38270 Lindane
00960 Nitrate (as N)		00970 Cadmium		00975 Chromium		00980 Lead		00985 Gross Beta		01030 Chromium		Methoxychlor
00970 Cadmium		00980 Lead		00985 Gross Beta		01040 pH		01049 Lead		01049 Lead		39400 Toxaphene
00980 Lead		01049 Lead		01049 Lead		01330 Odor		01049 Lead		01049 Lead		39730 2,4-D
01049 Lead		01330 Odor		01049 Lead		01049 Lead		01049 Lead		01049 Lead		39740 2,4,5-TP (Silvex)
01049 Lead		01049 Lead		01049 Lead		01049 Lead		01049 Lead		01049 Lead		39740 2,4,5-TP (Silvex)
01045 Carbonate (as CO <sub>3</sub> )	X	00445 Bicarbonate (as HCO <sub>3</sub> )	X	00080 Color	00080 Color	00080 Color	00080 Color	00080 Color	00080 Color	00080 Color	00080 Color	00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color		00080 Color		00080 Color		00080 Color
01045 Carbonate (as CO <sub>3</sub> )		00445 Bicarbonate (as HCO <sub>3</sub> )		00080 Color		00080 Color	</					

**CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES**

CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen.

**CHEMICAL ANALYSES:** Check individual items for analysis  
(Mark appropriate box(es))

INTERIM PRIMARY PARAMETER GROUP

1

2

3

Complete Secondary

TYPE of CHEMICAL ANALYSIS

Organic

Radiological

Water Supply System Name

Water Supply System Code No.

City or Location

County

Collector's remarks

Report to

Address

COLLECTED AT

LAT.

LONG.

TREATED WATER

RAW WATER

COLLECTED BY

Owner

COLLECTED DATE

SOURCE:

Spring

Lake

Well-Depth

Drain

Stream

Pool

Other (specify)

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL	mg/l	HEAVY METALS	mg/l	PARAMETER	mg/l	ORGANIC	mg/l
00930 Sodium (as Na)		X 00540 Chloride (as Cl)	6 9 6 8	70300 Total Filterable Residue	mg/l	01000 Arsenic				3930 Endrin	
00935 Potassium (as K)		X 00950 Fluoride (as F)	6 7 7	38260 Foaming Agents (as Las)		01005 Barium				39732 Lindane	
00900 Tot.Hardness (as CaCO <sub>3</sub> )		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270	
00915 Calcium (as Ca)		00430 Alkalinity (as CaCO <sub>3</sub> )		00400 pH		01030 Chromium				Methoxychlor	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO <sub>3</sub> )		01330 Odor		01049 Lead				39400 Toxaphene	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO <sub>3</sub> )		00080 Color	mg/l	07180 Mercury				03501 Gross Alpha	pCi/l
01056 Manganese (as Mn)		X 0045 Sulfate (as SO <sub>4</sub> )	1896	00070 Turbidity		09501 Radium-226				39730 2,4-D	
						01145 Selenium				11501 Radium-228	pCi/l
						01075 Silver				39740 2,4,5-TP (Silver)	

LABORATORY REMARKS:

Reviewed by

Date reported

**CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES**



CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen

CHEMICAL ANALYSES: Check individual items for analysis  
(Mark appropriate box(es))

INTERIM PRIMARY PARAMETER GROUP

1

2

3

TYPE of CHEMICAL ANALYSIS

Organic

Radiological

Water Supply System Name *Water Supply System Code No.*

City or Location

County

Check one:

TREATED WATER

RAW WATER

Collection Date Collection Time Collection Point

Collector's remarks

*1977-07-01 10:00 AM*

Address

Collected By Owner

*SLD 702*

LAT.

LONG.

TYPE of SYSTEM (Check one)

SOURCE:

Spring

Lake

Well-Depth

Other (specify)

PRIVATE PUBLIC:  Community  Non-community

SOURCE:

Drain

Stream

Pool

Other (specify)

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL		HEAVY METALS	mg/l	PARAMETER		ORGANIC	mg/l
00930 Sodium (as Na)		X Chloride (as Cl)	110.2	70300 Total Filterable Residue		01000 Arsenic				39390 Endrin	
00935 Potassium (as K)		X Fluoride (as F)	0.45	38260 Foaming Agents (as Las)		01005 Barium				39732 Lindane	
00900 Tot.Hardness (as CaCO <sub>3</sub> )				00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium		38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as CaCO <sub>3</sub> )		00400 pH		01030 Chromium		01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO <sub>3</sub> )		01330 Odor		01049 Lead		03501 Gross Beta		39730 2,4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO <sub>3</sub> )		00080 Color		07180 Mercury		09501 Radium-226		39740 2,4,5-TP (Silver)	
01056 Manganese (as Mn)		X Sulfate (as SO <sub>4</sub> )	3.552	00070 Turbidity		0.145 Selenium		11501 Radium-228			
	.75	1.20				0.1075 Silver					

LABORATORY REMARKS:

Reviewed by

Date reported

**CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES**

CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen  
CHEMICAL ANALYSES: Check individual items for analysis /Mark appropriate box(es)

Date received	Lab No.	SLD user code No.
<input type="checkbox"/> 1		<input type="checkbox"/> Organic
<input type="checkbox"/> 2		<input type="checkbox"/> Radiological
<input type="checkbox"/> 3		<input type="checkbox"/> Complete Secondary
<input type="checkbox"/> TREATED WATER		<input type="checkbox"/> RAW WATER

Water Supply System Name	Water Supply System Code No.	City or Location	County
Collection Date	Collection Time	Collection Point	Collector's remarks
Collected By		Owner	Report to Address

TYPE of SYSTEM (Check one)		SOURCE:	
<input type="checkbox"/> PRIVATE	<input type="checkbox"/> Community	<input type="checkbox"/> Spring	
<input type="checkbox"/> PUBLIC	<input type="checkbox"/> Non-community	<input type="checkbox"/> Lake	
		<input type="checkbox"/> Well-Depth	
		<input type="checkbox"/> Drain	
		<input type="checkbox"/> Stream	
		<input type="checkbox"/> Pool	
		<input type="checkbox"/> Other (specify) _____	
LAT.	°	LONG.	°
39390		39732	
Endrin		Lindane	

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL	mg/l	HEAVY METALS	mg/l	PARAMETER	mg/l	ORGANIC	mg/l
00930 Sodium (as Na)		00940 Chloride (as Cl)	70300 Total Filterable Residue	mg/l	01000 Arsenic					39390 Endrin	
00935 Potassium (as K)		00950 Fluoride...	38260 Foaming Agents (as Las)	mg/l	01005 Barium					39732 Lindane	
00900 Tot-Hardness (as CaCO <sub>3</sub> )		00620 Nitrate (as N)	00095 Conductance Micromhos 25°C	mg/l	01025 Cadmium					38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as CaCO <sub>3</sub> )	00400 pH	mg/l	01030 Chromium					39400 Toxphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO <sub>3</sub> )	01330 Odor	mg/l	01049 Lead					39730 2,4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO <sub>3</sub> )	00080 Color	mg/l	07180 Mercury					0501 Radium-226	pCi/l
01056 Manganese (as Mn)		00945 Sulfate (as SO <sub>4</sub> )	00070 Turbidity	mg/l	01145 Selenium					11501 Radium-228	pCi/l
					01075 Silver					39740 2,4,5-TP (Silvex)	

LABORATORY REMARKS:

Reviewed by

Date reported

**CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES**

CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen

**CHEMICAL ANALYSES:** Check individual items for analysis  
[Mark appropriate box(es)]

INTERIM PRIMARY PARAMETER GROUP

TYPE of CHEMICAL ANALYSIS

Organic

Radiological

Water Supply System Name \_\_\_\_\_ Water Supply System Code No. \_\_\_\_\_

City or Location \_\_\_\_\_ County \_\_\_\_\_

Check one:  
TREATED WATER

Collection Date \_\_\_\_\_ Collection Time \_\_\_\_\_ Collection Point \_\_\_\_\_

Collector's Remarks \_\_\_\_\_

Report to \_\_\_\_\_

Address \_\_\_\_\_

Collected By \_\_\_\_\_ Owner \_\_\_\_\_

Lat. \_\_\_\_\_ Long. \_\_\_\_\_

**TYPE of SYSTEM (Check one)**  PRIVATE  PUBLIC:  Community  Non-community

SOURCE:  Spring  Lake  Well-Depth  
 Drain  Stream  Pool  Other [specify] \_\_\_\_\_

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL	mg/l	HEAVY METALS	mg/l	PARAMETER	mg/l	ORGANIC	mg/l
00930 Sodium (as Na)	X	00940 Chloride (as Cl)	70300 Total Filterable Residue	mg/l	01000 Arsenic	39390 Endrin					
00935 Potassium (as K)	X	00950 Fluoride (as F)	38260 Foaming	mg/l	01005 Barium	39732 Lindane					
00900 Tot. Hardness (as CaCO <sub>3</sub> )			00620 Nitrate (as N)	mg/l	00095 Agents (as Las)	38270					
00915 Calcium (as Ca)		00430 Alkalinity (as CaCO <sub>3</sub> )	00400 pH	mg/l	01025 Cadmium						
00925 Magnesium (as Mg)	X	00440 Bicarbonate (as HCO <sub>3</sub> )	01330 Odor	mg/l	01030 Chromium	39400 Toxaphene					
01045 Iron-Total (as Fe)	X	00445 Carbonate (as CO <sub>3</sub> )	00080 Color	mg/l	01049 Lead	39730 2,4-D					
01056 Manganese (as Mn)	X	00945 Sulfate (as SO <sub>4</sub> )	00070 Turbidity	mg/l	07180 Mercury	03501 Gross Beta					
						09501 Radium-226	pCi/l	39740 2,4,5-TP (Silvex)			
						01145 Selenium		11501 Radium-228	pCi/l		
						01075 Silver					

LABORATORY REMARKS:

Reviewed by \_\_\_\_\_

Date reported \_\_\_\_\_



**State of New Mexico  
HEALTH and ENVIRONMENTAL  
SCIENTIFIC  
LABORATORY**

**CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES**

Date received 9/1 | Lab No. 311 | SLD user code No.

**CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen**

CHEMICAL ANALYSES:		INTERIM PRIMARY PARAMETER GROUP		TYPE of CHEMICAL ANALYSIS	
(Mark appropriate box(es))		<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> Complete Secondary
Water Supply System Name <b>P.L.T.F.U. SUPPLY</b>		Water Supply System Code No. <b>9-3-81</b>		City or Location <b>BLOOMFIELD N.M. SEDAN</b>	
Collection Date <b>9-3-81</b>	Collection Time <b>3:14 PM</b>	Collection Point <b>COLLECTED WITH 5 PT. HHO<sub>3</sub></b>		Country <b>U.S.A.</b>	
Collected By <b>S.H.P. &amp; F.M. CONSTRUCTION</b>		Collector's Remarks <b>2 - General Construction</b>		Check one: <input type="checkbox"/> TREATED WATER <input type="checkbox"/> RAW WATER	
TYPE of SYSTEM <b>PRIVATE</b>		Report to <b>SILVER CITY CONSTRUCTION</b>		Address <b>P.O. BOX 2088 SANTA FE N.M.</b>	
PUBLIC: <input checked="" type="checkbox"/> Community <input type="checkbox"/> Non-community		SOURCE: <input type="checkbox"/> Spring <input type="checkbox"/> Lake <input type="checkbox"/> Well-Depth <input type="checkbox"/> Drain <input type="checkbox"/> Stream <input type="checkbox"/> Pool <input type="checkbox"/> Other (specify) <b>Long.</b>		LAT. <b>31° 1' 11"</b>	LONG. <b>106° 1' 11"</b>

**LABORATORY REMARKS:**

FD-752 Form Revised 4/76



State of New Mexico  
HEALTH and ENVIRONMENT DEPARTMENT

SCIENTIFIC  
LABORATORY DIVISION

CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES

Date received

Lab No.

SLD user code No.

CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen

CHEMICAL  
ANALYSES:

(Mark appropriate box(es))

1

2

3

Complete Secondary

Organic

Radiological

Water Supply System Name

*PITTSBURGH SPRINGS PLANT*

Water Supply System Code No.

*1000N*

Collection Date

*9-3-81*

Collection Time

*3:44 P.M.*

Collection Point

*Leachate container outlet*

Collector's remarks

*FLUID ONLY*

Address

*19 MILE 1/2 RD*

City or Location

*P.O. Box 2088 SAN JUAN N.M.*

County

*Endrin*

Check one:

TREATED WATER

RAW WATER

Collected By

*Owner*

TYPE OF SYSTEM (Check one)

PRIVATE

PUBLIC:

Community

Non-community

SOURCE:

Drain

Spring

Lake

Well-Depth

Pool

Other (Specify)

REPORT TO

*D. L. CONNELL ET AL*

Report to

Check one:

TREATED WATER

RAW WATER

LAT.

°

'

"

LONG

°

'

"

COLLECTOR'S NAME

*John C. Baca, Owner, K.M.C.*

COLLECTOR'S ADDRESS

*19 MILE 1/2 RD*

COLLECTOR'S CITY OR LOCATION

*P.O. Box 2088 SAN JUAN N.M.*

COLLECTOR'S COUNTY

*Endrin*

COLLECTOR'S ZIP CODE

*88045*

COLLECTOR'S PHONE NUMBER

*397-3210*

COLLECTOR'S MOBILE NUMBER

*382-270*

COLLECTOR'S FAX NUMBER

*394-0010*

COLLECTOR'S E-MAIL ADDRESS

*Methoxychlor*

COLLECTOR'S MOBILE FAX NUMBER

*397-30*

COLLECTOR'S MOBILE E-MAIL ADDRESS

*2,4-D*

COLLECTOR'S MOBILE MOBILE NUMBER

*397-40*

COLLECTOR'S MOBILE MOBILE E-MAIL ADDRESS

*2,4,5-TP (Silvex)*

COLLECTOR'S MOBILE MOBILE MOBILE NUMBER

*11501*

COLLECTOR'S MOBILE MOBILE MOBILE E-MAIL ADDRESS

*Radium-228*

COLLECTOR'S MOBILE MOBILE MOBILE MOBILE NUMBER

*01075*

COLLECTOR'S MOBILE MOBILE MOBILE MOBILE E-MAIL ADDRESS

*Silver*

COLLECTOR'S MOBILE MOBILE MOBILE MOBILE MOBILE NUMBER

*01145*

COLLECTOR'S MOBILE MOBILE MOBILE MOBILE MOBILE E-MAIL ADDRESS

*Turbidity*

COLLECTOR'S MOBILE MOBILE MOBILE MOBILE MOBILE MOBILE NUMBER

*00080*

COLLECTOR'S MOBILE MOBILE MOBILE MOBILE MOBILE MOBILE E-MAIL ADDRESS

*Color*

COLLECTOR'S MOBILE MOBILE MOBILE MOBILE MOBILE MOBILE MOBILE NUMBER

*00445*

COLLECTOR'S MOBILE MOBILE MOBILE MOBILE MOBILE MOBILE MOBILE E-MAIL ADDRESS

*Carbonate*

COLLECTOR'S MOBILE MOBILE MOBILE MOBILE MOBILE MOBILE MOBILE MOBILE NUMBER

*00440*

COLLECTOR'S MOBILE MOBILE MOBILE MOBILE MOBILE MOBILE MOBILE MOBILE E-MAIL ADDRESS

*Bicarbonate*

COLLECTOR'S MOBILE MOBILE MOBILE MOBILE MOBILE MOBILE MOBILE MOBILE MOBILE NUMBER

*00925*

COLLECTOR'S MOBILE MOBILE MOBILE MOBILE MOBILE MOBILE MOBILE MOBILE MOBILE E-MAIL ADDRESS

*Magnesium*

COLLECTOR'S MOBILE NUMBER

*00915*

COLLECTOR'S MOBILE E-MAIL ADDRESS

*Calcium*

COLLECTOR'S MOBILE NUMBER

*00930*

COLLECTOR'S MOBILE NUMBER

*Sodium*

COLLECTOR'S MOBILE NUMBER

*00935*

COLLECTOR'S MOBILE NUMBER

*Potassium*

COLLECTOR'S MOBILE NUMBER

*(as K)*

COLLECTOR'S MOBILE NUMBER

*00900*

COLLECTOR'S MOBILE NUMBER

*Tot. Hardness*

COLLECTOR'S MOBILE NUMBER

*(as CaCO<sub>3</sub>)*

COLLECTOR'S MOBILE NUMBER

*00430*

COLLECTOR'S MOBILE NUMBER

*Alkalinity*

COLLECTOR'S MOBILE NUMBER

*(as CaCO<sub>3</sub>)*

COLLECTOR'S MOBILE NUMBER

*00440*

COLLECTOR'S MOBILE NUMBER

*Odor*

COLLECTOR'S MOBILE NUMBER

*01330*

COLLECTOR'S MOBILE NUMBER

*01049*

COLLECTOR'S MOBILE NUMBER

*Lead*

COLLECTOR'S MOBILE NUMBER

*03501*

COLLECTOR'S MOBILE NUMBER

*Gross Beta*

COLLECTOR'S MOBILE NUMBER

*Radium-226*

COLLECTOR'S MOBILE NUMBER

*39730*

COLLECTOR'S MOBILE NUMBER

*39730*

COLLECTOR'S MOBILE NUMBER

*2,4-D*

COLLECTOR'S MOBILE NUMBER

*39740*

COLLECTOR'S MOBILE NUMBER

*2,4,5-TP (Silvex)*

COLLECTOR'S MOBILE NUMBER

*11501*

COLLECTOR'S MOBILE NUMBER

*PCN/*

COLLECTOR'S MOBILE NUMBER

*39740*

COLLECTOR'S MOBILE NUMBER

*2,4,5-TP (Silvex)*

COLLECTOR'S MOBILE NUMBER

*09501*

COLLECTOR'S MOBILE NUMBER

*Selenium*

COLLECTOR'S MOBILE NUMBER

*11501*

COLLECTOR'S MOBILE NUMBER

*PCN/*

COLLECTOR'S MOBILE NUMBER

*2,4,5-TP (Silvex)*

COLLECTOR'S MOBILE NUMBER

*11501*

COLLECTOR'S MOBILE NUMBER

*PCN/*

COLLECTOR'S MOBILE NUMBER

*Radium-228*

COLLECTOR'S MOBILE NUMBER

*01075*

COLLECTOR'S MOBILE NUMBER

*Silver*

COLLECTOR'S MOBILE NUMBER

*01075*

COLLECTOR'S MOBILE NUMBER

*3552*

COLLECTOR'S MOBILE NUMBER

*3552*

COLLECTOR'S MOBILE NUMBER

*0070*

COLLECTOR'S MOBILE NUMBER

*0070*

COLLECTOR'S MOBILE NUMBER

*Turbidity*

COLLECTOR'S MOBILE NUMBER

*00080*

COLLECTOR'S MOBILE NUMBER

*00080*

COLLECTOR'S MOBILE NUMBER

*00080*

COLLECTOR'S MOBILE NUMBER

*00445*

COLLECTOR'S MOBILE NUMBER

*00445*

COLLECTOR'S MOBILE NUMBER

*Sulfate*

**CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES**

CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen

CHEMICAL ANALYSES:  Check individual items for analysis  
 (Mark appropriate box(es))

INTERIM PRIMARY PARAMETER GROUP

1

2

3

Complete Secondary

CITY OR TOWN

REPORTING STATE

CHECK ONE:

TREATED WATER

RAW WATER

ORGANIC

mg/l

INORGANIC

mg/l

HEAVY METALS

mg/l

ORGANIC

mg/l

RADIOLIGICAL

mg/l

RADON

mg/l

SLUDGE

mg/l

TOTAL SOLIDS

mg/l

OTHER SPECIFY

mg/l

TOTAL DISEGREGATION

mg/l

TOTAL COLIFORM

mg/l

TOTAL TURBIDITY

mg/l

TOTAL CHLORINE

mg/l

TOTAL IRON

mg/l

TOTAL MANGANESE

mg/l

TOTAL NITRATE

mg/l

TOTAL NITROGEN

mg/l

TOTAL NITROUS OXIDE

mg/l

TOTAL PHOSPHATE

mg/l

TOTAL SULFATE

mg/l

TOTAL THIOL

mg/l

TOTAL TIN

mg/l

TOTAL URIDYL

mg/l

CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES

Date received

Lab No.

SLD user code No.

CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen  
CHEMICAL ANALYSES:  Check individual items for analysis  Interim Primary Parameter Group  
 Analytical Method appropriate box(es)]  1  2  3  Complete Secondary

TYPE of CHEMICAL ANALYSIS  
 Organic  TREATED WATER  RAW WATER  
 Radiological

Water Supply System Name *Private* Water Supply System Code No. *0116581202* City or Location *Bitter Springs, NM, San Juan Co.* County *San Juan Co., NM*

Collection Date *9/3/81* Collection Time *10:15 AM* Collection Point *Blown Field* Collector's remarks *1 - 10' below ground surface*

Collected By *Owner* Owner's name *John C. Gandy* Collector's address *P.O. Box 2088, Silver City, NM 82331*

SOURCE:  Spring  Lake  Well-Depth  Other (specify) *Drain* LAT. *36° 30' N*  
 Stream  Pool  Other (specify) LONG. *106° 00' W*

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL	HEAVY METALS	mg/l	PARAMETER	ORGANIC	mg/l
00930 Sodium (as Na)	•	00940 Chloride (as Cl)	3.6	70300 Total Filterable Residue	mg/l	01000 Arsenic		39990 Endrin	
00935 Potassium (as K)	•	00950 Fluoride (as F)	0.16	38260 Foaming Agents (as Las)		01005 Beryllium		39732 Lindane	
00900 Tot. Hardness (as CaCO <sub>3</sub> )		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium		38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as CaCO <sub>3</sub> )		00400 pH		01030 Chromium		39400 Toxaphene	
00925 Magnesium (as Mg)	•	00440 Bicarbonate (as HCO <sub>3</sub> )		01330 Odor		01049 Lead		39730 2,4-D	
01045 Iron-Total (as Fe)	•	00080 mg/l Color		07180 Mercury	mg/l	03501 Gross Alpha	pc/m	39740 2,4,5-TP (Silver)	
01056 Manganese (as Mn)	•	00945 Sulfate (as SO <sub>4</sub> )	6.44	00070 Turbidity		01145 Selenium	pc/m	11501 Radium-226	
						01075 Silver			

LABORATORY REMARKS:

Reviewed by *J. M. H. - Pm*  
Date reported *9/16/81*

**CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES**

CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen

INTERIM PRIMARY PARAMETER GROUP

TYPE of CHEMICAL ANALYSIS

Organic

Radiological

1

2

3

Complete Secondary

Date received **1/15/81** Lab No. **111-848** SLD user code No.

Water Supply System Name  
**Blomfield, N.M.**

Collection Date  
**1/15/81**

Collection Time  
**10:00 A.M.**

Collection Point  
**Spring**

Collector's remarks  
**CONTAINER FILTERED**

Owner  
**CDL Construction Co.**

Address  
**P.O. Box 2155**

City or Location  
**Blomfield, N.M.**

County  
**Santa Fe, N.M.**

Report to  
**Office of Conservation D.C.**

Address  
**1000 Broadway**

Lat.  
**36° 32' 56"**

Long.  
**105° 42' 36"**

Collected By  
**John C. Thompson, D.P.**

Type of SYSTEM (Check one)

PRIVATE

PUBLIC:

Community

Non-community

SOURCE:  
 Spring  
 Stream  
 Lake  
 Well Depth  
 Pool  
 Other (specify) \_\_\_\_\_

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL		HEAVY METALS	mg/l	PARAMETER		ORGANIC	mg/l
00930 Sodium (as Na)		X 0070 Chloride (as Cl)		70300 Total Filterable Residue	mg/l	01000 Arsenic				39390 Endrin	
00935 Potassium (as K)		X 00950 Fluoride (as F)	1012	38260 Foaming Agents (as Las)		01005 Barium				39732 Lindane	
00940 Total Hardness (as CaCO <sub>3</sub> )		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as CaCO <sub>3</sub> )		00400 pH		01030 Chromium		RADIOLOGICAL PCU		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO <sub>3</sub> )		01330 Odor		01049 Lead		0101 Gross Alpha		39730 2,4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO <sub>3</sub> )		00080 Color	mg/l	07180 Mercury		03501 Gross Beta	pcu	39730 2,4-D	
01056 Manganese (as Mn)		X 00945 Sulfate (as SO <sub>4</sub> )	31403	00070 Turbidity		01145 Selenium		09501 Radium-226	pcu	39740 2, 4, 5-TP (Silvex)	
								11501 Radium-228	pcu		
								01075 Silver			

LABORATORY REMARKS:

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Reviewed by **J.W. Nichols, Jr.**

Date reported **1/16/81**



CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES

CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen

CHEMICAL ANALYSES: Check individual items for analysis

(Mark appropriate box(es))

INTERIM PRIMARY PARAMETER GROUP

TYPE of CHEMICAL ANALYSIS

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State of New Mexico  
HEALTH and ENVIRONMENTAL  
SCIENCE

# CHEMICAL and PHYSICAL ANALYSES for WATER SAMPLES

**CONSULT SLB Lab Annex L for proper presentation of samples; TYPE or PRINT with Ball Point Pen**

INTERIM PRIMARY PARAMETER GROUP						TYPE of CHEMICAL ANALYSIS					
Water Supply System Name <i>Blomfield, N.Y.</i>			Water Supply System Code No. <i>Bloomfield, N.Y.</i>			City or Location <i>Sac Jara</i>					
Collection Date <i>7/3/71</i>		Collection Time <i>5:30 AM</i>		Collection Point <i>Filterable Residue</i>		Collector's Remarks <i>Container w/ Td heat cont.</i>		Report to <i>C.W. Conservation Dist.</i>			
Collected By <i>G. Simpson</i>		Owner <i>C.W. Conservation Dist.</i>						Address <i>P.O. Box 2083</i>			
TYPE of SYSTEM (Check one) <input checked="" type="checkbox"/> PRIVATE			PUBLIC: <input type="checkbox"/> Community <input type="checkbox"/> Non-community			SOURCE: <input type="checkbox"/> Spring <input type="checkbox"/> Lake <input type="checkbox"/> Well-Depth ..... <input type="checkbox"/> Drain <input type="checkbox"/> Stream <input type="checkbox"/> Pool <input type="checkbox"/> Other (specify) ..... Lat. °      Long. °					
CATIONS	mg/l	ANIONS	mg/l	PHYSICAL	mg/l	HEAVY METALS	mg/l	PARAMETER	mg/l	ORGANIC	mg/l
00030 Sodium (as Na)		<input checked="" type="checkbox"/> Chloride (as Cl)	0.450	70300 Total Filterable Residue	mg/l	01000 Arsenic				39390 Endrin	
00035 Potassium (as K)		<input checked="" type="checkbox"/> Fluoride (as F)	0.968	38260 Foaming Agents (as Las)	mg/l	01005 Barium				39732 Lindane	
00040 Tot.Hardness (as CaCO <sub>3</sub> )			00620 Nitrate (as N)	0.77	00095 Conductance Micromhos 25°C	mg/l	01025 Cadmium			39270 Methoxychlor	
00015 Calcium (as Ca)			00430 Alkalinity (as CaCO <sub>3</sub> )	0.0400	01030 Chromium	mg/l	01501 Gross Alpha			39490 Toxaphene	
00025 Magnesium (as Mg)			00440 Bicarbonate (as HCO <sub>3</sub> )	0.1330	01049 Lead	mg/l	03501 Gross Beta			39730 2,4-D	
01045 Iron-Total (as Fe)			00045 Carbonate (as CO <sub>3</sub> )	0.0080	07180 Mercury	mg/l	09501 Radium-226			39740 2,4,5-TP (Silver)	
01056 Manganese (as Mn)		<input checked="" type="checkbox"/> Sulfate (as SO <sub>4</sub> )	1.876	00070 Turbidity	mg/l	01145 Selenium	pc/m	11501 Radium-228	pc/m		
						0.075 Silver					

LABORATORY REMARKS:

Reviewed by *G.W. Johnson*  
Date reported *7/16/71*

**CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES**

Date received **9-14-81** Lab No. **SLD 8522** SLD user code No.

CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen  
**CHEMICAL ANALYSES:** Check individual items for analysis  
(Mark appropriate box(es))

**INTERIM PRIMARY PARAMETER GROUP**  
 1  2  3...  Complete Secondary

Water Supply System Name

Collection Date

Collection Time

Collection Point

Owner

SOURCE:

Spring  Lake  Well-Depth.....

Drain  Stream  Pool  Other (specify).....

LAT.

LONG.

P.

W.

N.

S.

E.

Check one:  
 TREATED WATER  RAW WATER

Address

**Collector's Remarks**

**Report to**

**Conservation D.**

**Address**

**P.O. Box 2088**

**Santa Fe, New Mexico 87501**

**Check one:  
 Community  Non-community**

**TYPE of SYSTEM (Check one)**

**PRIVATE**

**PUBLIC:**  Community  Non-community

**Check one:  
 Organic  Radiological**

**CITY or Location**

**County**

**Check one:  
 Treated Water  Raw Water**

**Report to**

**Conservation D.**

**Address**

**P.O. Box 2088**

**Santa Fe, New Mexico 87501**

**Check one:  
 Organic  Radiological**

**CITY or Location**

**County**

**Check one:  
 Treated Water  Raw Water**

**Report to**

**Conservation D.**

**Address**

**P.O. Box 2088**

**Santa Fe, New Mexico 87501**

**Check one:  
 Organic  Radiological**

**CITY or Location**

**County**

**Check one:  
 Treated Water  Raw Water**

**Report to**

**Conservation D.**

**Address**

**P.O. Box 2088**

**Santa Fe, New Mexico 87501**

**Check one:  
 Organic  Radiological**

**CITY or Location**

**County**

**Check one:  
 Treated Water  Raw Water**

**Report to**

**Conservation D.**

**Address**

**P.O. Box 2088**

**Santa Fe, New Mexico 87501**

**Check one:  
 Organic  Radiological**

**CITY or Location**

**County**

**Check one:  
 Treated Water  Raw Water**

**Report to**

**Conservation D.**

**Address**

**P.O. Box 2088**

**Santa Fe, New Mexico 87501**

**Check one:  
 Organic  Radiological**

**CITY or Location**

**County**

**Check one:  
 Treated Water  Raw Water**

**Report to**

**Conservation D.**

**Address**

**P.O. Box 2088**

**Santa Fe, New Mexico 87501**

**Check one:  
 Organic  Radiological**

**CITY or Location**

**County**

**Check one:  
 Treated Water  Raw Water**

**Report to**

**Conservation D.**

**Address**

**P.O. Box 2088**

**Santa Fe, New Mexico 87501**

**Check one:  
 Organic  Radiological**

**CITY or Location**

**County**

**Check one:  
 Treated Water  Raw Water**

**Report to**

**Conservation D.**

**Address**

**P.O. Box 2088**

**Santa Fe, New Mexico 87501**

**Check one:  
 Organic  Radiological**

**CITY or Location**

**County**

**Check one:  
 Treated Water  Raw Water**

**Report to**

**Conservation D.**

**Address**

**P.O. Box 2088**

**Santa Fe, New Mexico 87501**

**Check one:  
 Organic  Radiological**

**CITY or Location**

**County**

**Check one:  
 Treated Water  Raw Water**

**Report to**

**Conservation D.**

**Address**

**P.O. Box 2088**

**Santa Fe, New Mexico 87501**

**Check one:  
 Organic  Radiological**

**CITY or Location**

**County**

**Check one:  
 Treated Water  Raw Water**

**Report to**

**Conservation D.**

**Address**

**P.O. Box 2088**

**Santa Fe, New Mexico 87501**

**Check one:  
 Organic  Radiological**

**CITY or Location**

**County**

**Check one:  
 Treated Water  Raw Water**

**Report to**

**Conservation D.**

**Address**

**P.O. Box 2088**

**Santa Fe, New Mexico 87501**

**Check one:  
 Organic  Radiological**

**CITY or Location**

**County**

**Check one:  
 Treated Water  Raw Water**

**Report to**

**Conservation D.**

**Address**

**P.O. Box 2088**

**Santa Fe, New Mexico 87501**

**Check one:  
 Organic  Radiological**

**CITY or Location**

**County**

**Check one:  
 Treated Water  Raw Water**

**Report to**

**Conservation D.**

**Address**

**P.O. Box 2088**

**Santa Fe, New Mexico 87501**

**Check one:  
 Organic  Radiological**

**CITY or Location**

**County**

**Check one:  
 Treated Water  Raw Water**

**Report to**

**Conservation D.**

**Address**

**P.O. Box 2088**

**Santa Fe, New Mexico 87501**

**Check one:  
 Organic  Radiological**

**CITY or Location**

**County**

**Check one:  
 Treated Water  Raw Water**

**Report to**

**Conservation D.**

**Address**

**P.O. Box 2088**

**Santa Fe, New Mexico 87501**

**Check one:  
 Organic  Radiological**

**CITY or Location**

**County**

**Check one:  
 Treated Water  Raw Water**

**Report to**

**Conservation D.**

**Address**

**P.O. Box 2088**

**Santa Fe, New Mexico 87501**

**Check one:  
 Organic  Radiological**

**CITY or Location**

**County**

**Check one:  
 Treated Water  Raw Water**

**Report to**

**Conservation D.**

**Address**

**P.O. Box 2088**

**Santa Fe, New Mexico 87501**

**Check one:  
 Organic  Radiological**

**CITY or Location**

**County**

**Check one:  
 Treated Water  Raw Water**

**Report to**

**Conservation D.**

**Address**

**P.O. Box 2088**

**Santa Fe, New Mexico 87501**

**Check one:  
 Organic  Radiological**

**CITY or Location**

**County**

**Check one:  
 Treated Water  Raw Water**

**Report to**

**Conservation D.**

**Address**

**P.O. Box 2088**

**Santa Fe, New Mexico 87501**

**Check one:  
 Organic  Radiological**

**CITY or Location**

**County**

**Check one:  
 Treated Water  Raw Water**

**Report to**

**Conservation D.**

**Address**

**P.O. Box 2088**

**Santa Fe, New Mexico 87501**

**Check one:  
 Organic  Radiological**

**CITY or Location**

**County**

**Check one:  
 Treated Water  Raw Water**

**Report to**

**Conservation D.**

**Address**

**P.O. Box 2088**

**Santa Fe, New Mexico 87501**

**Check one:  
 Organic  Radiological**

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**CHEMICAL and PHYSICAL ANALYSES  
for WATER SAMPLES**

CONSULT SLD Lab Annex I for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen

**CHEMICAL ANALYSES:** Check individual items for analysis  
(Mark appropriate box(es))

**INTERIM PRIMARY PARAMETER GROUP**  1  2  3  
**TYPE of CHEMICAL ANALYSIS**  Complete Secondary  Organic  TREATED WATER  RAW WATER  Radiological

Date received **9-9-81** Lab No. **H-11-368** SLD user code No.

Water Supply System Name <b>Patrall Spring</b>	Water Supply System Code No.	City or Location <b>Bloomfield, NM</b>	County <b>San Juan</b>
Collection Date <b>9/3/81</b>	Collection Time <b>5:30 PM</b>	Collection Point	Collector's remarks <b>2 - 14 T.C.P.A.</b>
Collected By <b>Sample Collector</b>	Owner <b>OJ Conservation</b>	SOURCE: <input type="checkbox"/> Spring <input type="checkbox"/> Lake <input type="checkbox"/> Well Depth ..... <input type="checkbox"/> Drain <input type="checkbox"/> Stream <input type="checkbox"/> Pool <input type="checkbox"/> Other (specify) .....	Report to <b>OJ Conservation Dir.</b>
TYPE of SYSTEM (Check one)	PUBLIC: <input type="checkbox"/> Community <input type="checkbox"/> Non-community	Address <b>P.O. Box 2088</b>	Address <b>Santa Fe, NM 87501</b>

PRIVATE

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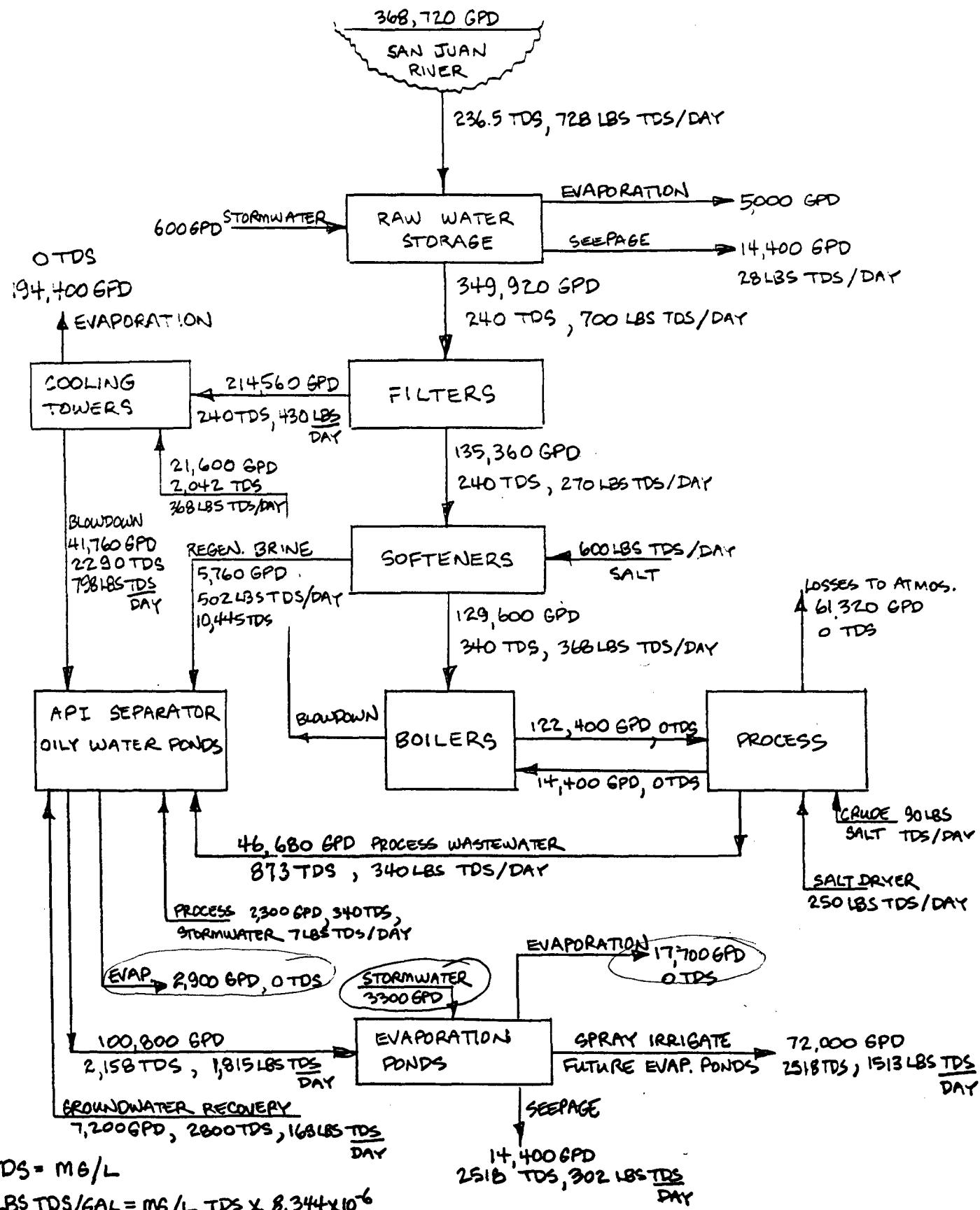
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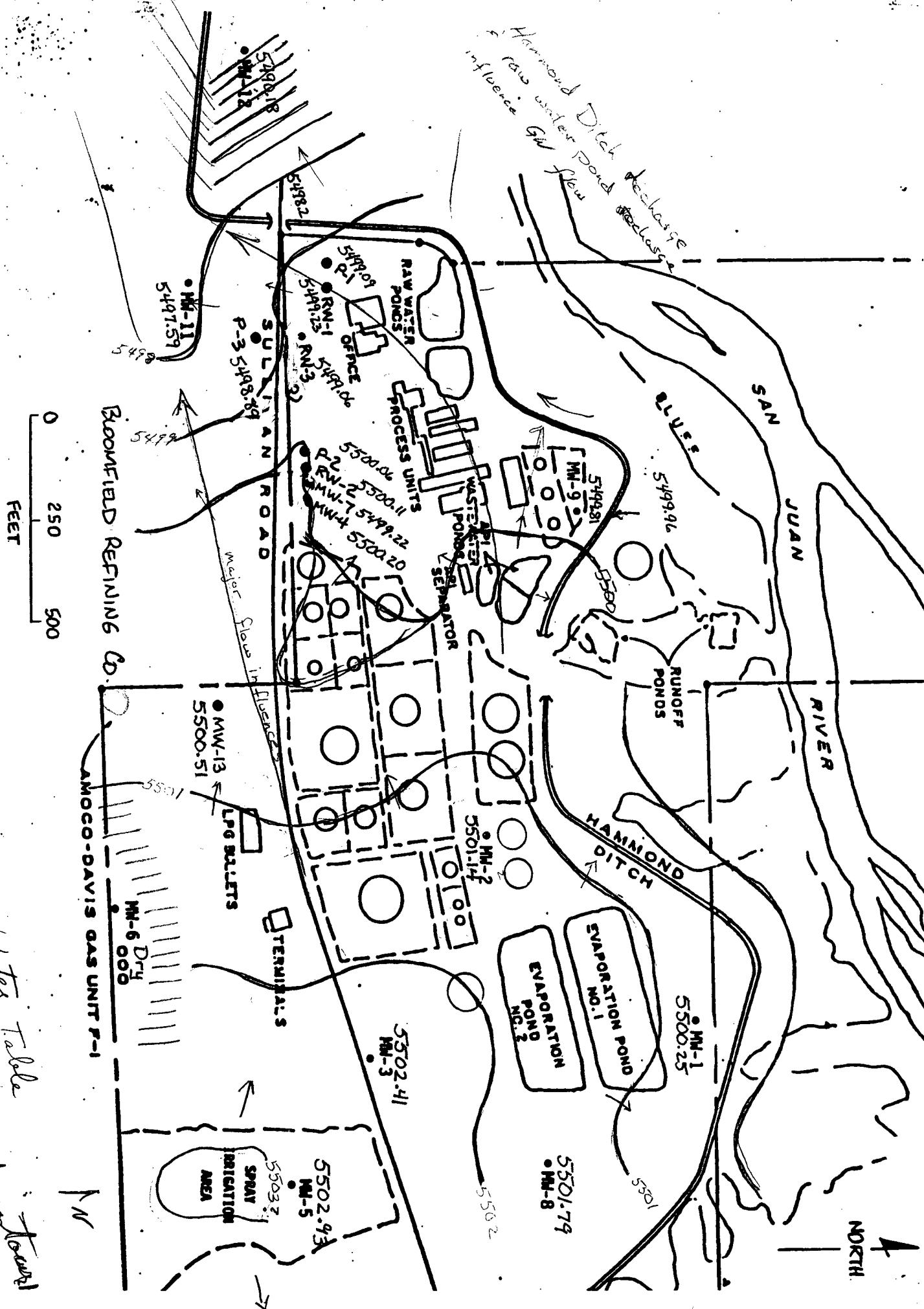
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Water Table  
 Q-9-88  
 DE  
 5/16/89

1' contours  
 1' contours