GW - 1

MONITORING REPORTS

DATE: 1992-1981

Bloomfield Refining Company
A Gary Energy Corporation Subsidiary

CONSERVATION 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,

Chris Hawley
Environmental Manager

CH/jm

Enclosure

BLOOMFIELD REFINING COMPANY

Monthly Report of Water Discharged
to the Solar Evaporation Ponds

Month	Water Discharged (Gallons)
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

Month	Water Discharged (Gallons)
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	3,106,600
TOTAL 1992	34,750,600

BLOOMFIELD REFINING COMPANY

Monthly Report of Water Discharged to the Solar Evaporation Ponds

Month	Water Discharged (Gallons)
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	3,122,600
Total 1991	35,682,200

BLOOMFIELD REFINING COMPANY

Monthly Report of Water Discharged to the Solar Evaporation Ponds

Month	Water Discharged (Gallons)
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	2,831,000
Total 1990	34,129,000
Acre-Feet	104.7

BLOOMFIELD REFINING COMPANY

Monthly Report of Water Discharged
to the Solar Evaporation Ponds

Month	Water Discharged (Gallons)
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

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

September 8, 1989

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

MONTH	WATER DISCHARGE (Gallons)
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	2,969,500
1988 TOTAL	35,668,000

MONTHLY REPORT OF WATER DISCHARGED
TO THE SOLAR EVAPORATION PONDS

BLOOMFIELD REFINING COMPANY

MONTH	WATER DISCHARGE
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	2,405,300
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 [signature]

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

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

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, 19 86, was 3,841,300 gallons

Signature

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, 19 86, was 3,436,900 gallons

Signature

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 , 19 86 , was 3,690,000 gallons

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

Signature

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 , 19 86 , was 3,473,100 gallons

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

Signature

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

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

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

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, 19 86, was 3,305,200 gallons

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

Signature

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 , 19 86 , was 2,824,100 gallons

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

Signature

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, 19 85, was 3,836,000 gallons

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

Signature

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

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

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

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

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

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

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

RECEIVED
MAY 22 1985
OIL CONSERVATION DIVISION
SANTA FE

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 Clark King

RECEIVED
APR 15 1985
OIL CONSERVATION DIVISION
SANTA FE

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 Chad 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

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, 19 85, was 3,407,900 gallons

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

Signature

MONTHLY REPORT OF WATER DISCHARGED
TO THE SOLAR EVAPORATION PONDS

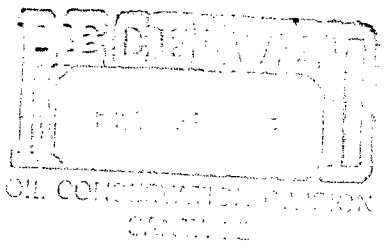
BLOOMFIELD REFINING COMPANY DATE February 21, 1985

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 Neal King



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 Chad 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, 19 84, 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, 19 84, 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, 19 84, was 2,644,400 Gallons

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

Signature Dwight J. Stockham

RECEIVED
AUG 10 1984
OIL CONSERVATION DIVISION
SANTA FE

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, 19 84, 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, 19 84, was 2,376,000 gallons

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

Signature Dwight J. Stockham

Bloomfield Refining Company
A Gary Energy Corporation Subsidiary

OIL CONSERVATION DIVISION
RECEIVED
'91 DEC 13 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 GRW-1-A

MW-1

PARAMETER	UNIT	NOM DET LIM	NMWQ STANDARD	CURRENT RESULT	PREVIOUS RESULT	BASELINE RESULTS
DATE OF SAMPLE				11/07/91	6/18/91	1984/1985
ARSENIC	mg/l	0.005	0.100	0.000	0.000	0.016
BARIUM	mg/l	0.500	1.000	0.000	0.000	0.250
CADMIUM	mg/l	0.002	0.010	0.000	0.000	0.010
CHROMIUM	mg/l	0.020	0.050	0.020	0.000	0.018
LEAD	mg/l	0.020	0.050	0.000	0.000	0.086
BORON	mg/l	0.010	0.750	0.350	0.320	0.268
IRON	mg/l	0.050	1.000	0.000	0.000	46.268
MANGANESE	mg/l	0.020	0.200	2.790	1.040	0.943
TOTAL DISSOLVED SOLIDS	mg/l	1.000	1000.000	3540.000	3200.000	3516.000
CHLORIDE	mg/l	1.000	250.000	1190.000	1060.000	1070.500
SULFATE	mg/l	1.000	600.000	684.000	1070.000	815.500
PHENOLS	mg/l	0.005	0.005	0.000	0.022	0.055
CYANIDE	mg/l	0.010	0.200	0.000	0.000	0.000
NITRATE, NITRITE AS N	mg/l	0.100	10.000	20.600	2.540	5.725
AMMONIA	mg/l	0.100		0.070	0.050	
TOTAL KELDAHL NITROGEN	mg/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.O.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.O.W.	ft	0.01		5498.42	5499.74	5499.58

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

MW-5

PARAMETER	UNIT	NDM DET LIM	NMWQ 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.O.W.	ft	0.01		5501.75	5502.07	5503.25

Inter·Mountain Laboratories, Inc.

2506 W. Main Street
Farmington, New Mexico 87401

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

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

	mg/L	meq/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

Inter·Mountain
Laboratories, Inc.

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

VOLATILE AROMATIC HYDROCARBONS

Client: Bloomfield Refining Co.
Sample ID: MW-1
Laboratory Number: 7627
Analysis Requested: BTEX
Sample Matrix: Water
Condition: Cool & Intact

Report Date: 12-05-91
Date Sampled: 11-07-91
Date Received: 11-07-91
Date Analyzed: 12-03-91
Preservative: Cool

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

Inter-Mountain Laboratories, Inc.

2506 W. Main Street
Farmington, New Mexico 87401

CLIENT:	Bloomfield Refinery	DATE REPORTED:	12/11/91
ID:	1100		
SITE:	MW -5	DATE RECEIVED:	11/07/91
LAB NO:	F7626	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

Inter·Mountain
Laboratories, Inc.

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

VOLATILE AROMATIC HYDROCARBONS

Client: Bloomfield Refining Co.
Sample ID: MW-5
Laboratory Number: 7626
Analysis Requested: BTEX
Sample Matrix: Water
Condition: Cool & Intact

Report Date: 12-05-91
Date Sampled: 11-07-91
Date Received: 11-07-91
Date Analyzed: 12-03-91
Preservative: Cool

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

inl
Inter- Mountain Laboratories, Inc.

CHAIN OF CUSTODY RECORD

Client/Project Name	Project Location
BRC	BLOOMFIELD NM

Sampler: (Signature)	Chain of Custody Tape No.
CLAUDIA Atkinson	

Sample No./ Identification	Date	Time	Lab Number	Matrix	No. of Containers	BTEX	CN	CHLORIDE, SO4, Na, FLUORIDE, TDS	NITRATE, TKN, NH3	As, Ba, Pb, Cr, Ag, Hg, Mn	PHENOLS	Remarks
MW-5	11-7-91	11:00a		WATER	8	2	1	1	1	1	2	
MW-1	11-7-91	12:00a		WATER	8	2	1	1	1	1	2	

ANALYSES / PARAMETERS

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Claudia Atkinson	11-7-91	4:00P			
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by laboratory: (Signature)	Date	Time
				11-07-91	1610

Inter-Mountain Laboratories, Inc.

☐ 1533 Terra Avenue, Sheridan, Wyoming 82801, Telephone (307) 672-8945

☐ 1714 Phillips Circle, Gillette, Wyoming 82716, Telephone (307) 682-8945

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

☐ 910 Technology Blvd. Suite B, Bozeman, Montana 59715, Telephone (406) 586-8450

☐ Route 3, Box 256, College Station, TX 77845, Telephone (409) 776-8945

☐ 3304 Longmire Drive, College Station, TX 77845, Telephone (409) 774-4999

04486

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,

Chris Hawley
Environmental Manager

CH/mc

Enclosure

cc: John Goodrich
Dave Roderick
Joe Warr

OIL CONSERV[illegible]ON DIVISION
RE[illegible]ED

'91 JUL 3 AM 8 41

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

MW-1

PARAMETER	UNIT	NDM DET LIM	NMWQ STANDARD	CURRENT RESULT	PREVIOUS RESULT	BASELINE RESULTS
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	3516.0000
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

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

MW-5

PARAMETER	UNIT	NOM DET LIM	NMWQ STANDARD	CURRENT RESULT	PREVIOUS RESULT	BASELINE 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.O.W.	FT	0.010		5501.3000	5502.0700	5503.2500

NEARLY
DRY AT THIS LEVEL

OIL CONSERVATION DIVISION
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Inter·Mountain Laboratories, Inc.

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

Inter-Mountain Laboratories, Inc.

3304 Longmire
College Station, Texas 77845

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:

Wanda M Rogers
Analyst

Mary Higginbotham
Review

'91 JUL 3 AM 8 42

OIL CONSERVATION DIVISION
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3304 Longmire
College Station, Texas 77845

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:

Wenda M Rogers
Analyst

Mary Higginbotham
Review

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Inter·Mountain Laboratories, Inc.

3304 Longmire
College Station, Texas 77845

** 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:

Wanda M Rogers
Analyst

Mary Higginbotham
Review

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Inter·Mountain Laboratories, Inc

3304 Longmire
College Station, Texas 77845

** 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:

Wanda M Rogers
Analyst

Mary Higginbotham
Review

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Inter-Mountain Laboratories, Inc

3304 Longmire
College Station, Texas 77845

** 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:

Analyst

Reviewed

'91 JUL 3 PM 8 42

OIL CONSERVATION DIVISION
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Inter- Mountain Laboratories, Inc.

CHAIN OF CUSTODY RECORD

Client/Project Name	Project Location	ANALYSES / PARAMETERS
BRC	BLOOMFIELD NM	
Sampler: (Signature)	**Chain of Custody Tape No.**	
[signature]		

Sample No./ Identification	Date	Time	Lab Number	Matrix	No. of Containers	Remarks
NOWP-DISCHARGE	6-5-91	1:30P	6372	BTEX	2	
MW-1	6-5-91	2P	6373	CN-	1	
MW-1	6-5-91	2P		BTEX	2	
MW-1	6-5-91	2P		NUTRIENTS	1	
MW-1	6-5-91	2P		1.892 LITER	1	
MW-1	6-5-91	2P		METALS	1	
MW-1	6-5-91	2P		PHENOLS	1	

OIL CONSERVATION DIVISION
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Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	6-5-91	4:45P			
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by laboratory: (Signature)	Date	Time
			Darlene F. Linzy	6-5-91	4:45

Inter-Mountain Laboratories, Inc.

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☐ 1714 Phillips Circle, Gillette, Wyoming 82716, Telephone (307) 682-8945
☐ 2506 West Main Street, Farmington, NM 87401, Telephone (505) 326-4737
☐ 910 Technology Blvd. Suite B, Bozeman, Montana 59715, Telephone (406) 586-8450
☐ Route 3, Box 256, College Station, TX 77845, Telephone (409) 776-8945
☐ 3304 Longmire Drive, College Station, TX 77845, Telephone (409) 774-4999

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inl
Inter- Mountain
Laboratories, Inc.

CHAIN OF CUSTODY RECORD

FILE COPY

Client/Project Name	Project Location	ANALYSES / PARAMETERS
BKC	Bloomfield Ref.	
Sampler: (Signature)	**Chain of Custody Tape No.**	**Remarks**
Chris Hanley	-	

Sample No./ Identification	Date	Time	Lab Number	Matrix	No. of Containers	BTEX					Remarks
Now Disch.	6-5-91		6372/C	Water	2	X					Results by 6-18-91 Please.
MW-1	↓		6373/C	↓	2	X					
Trip Blank	↓		-/C	↓	1	X					

OIL CONSERVATION DIVISION
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'91 JUL 8 AM 8 42

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	6/7/91	1000			
Relinquished by: (Signature)	**Date**	**Time**	**Received by: (Signature)**	**Date**	**Time**
Relinquished by: (Signature)	**Date**	**Time**	**Received by laboratory: (Signature)**	**Date**	**Time**
			Kevin Condrey	6/7/91	1300

Inter-Mountain Laboratories, Inc.

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Telephone (406) 586-8450

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

☐ 3304 Longmire Drive
College Station, TX 77845
Telephone (409) 774-4999

00125

Bloomfield Refining Company
A Gary Energy Corporation Subsidiary

N DIVISION
D
'90 DEC 11 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,

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.O.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.O.W.	FT	0.010		5498.1700	5501.7400	5499.5800

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

MW-5

PARAMETER	UNIT	NDM 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	0.0000	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
CHLORIDE	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

Inter·Mountain
Laboratories, Inc.

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

	mg/l	meq/l
Chloride	1170	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

Inter·Mountain Laboratories, Inc.

3304 Longmire
College Station, TX 77845

VOLATILE AROMATIC HYDROCARBONS

Client: IML Farmington

Report Date: 11-26-90

Sample ID: F5423
Laboratory Number: C1892
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	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:

Jack M. Mayo Jr.
Analyst

Mary Higginbotham
Reviewer

Inter-Mountain Laboratories, Inc.

3304 Longmire
College Station, TX 77845

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

Inter·Mountain Laboratories, Inc.

3304 Longmire
College Station, TX 77845

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:

Jack M. May Jr.
Analyst

Mary Higginbotham
Review

Inter-Mountain Laboratories, Inc.

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

CLIENT: BRC
ID: N/A
SITE: MW-5
LAB NO: F5424

DATE REPORTED: 11/20/90
DATE RECEIVED: 11/14/90
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

Inter·Mountain Laboratories, Inc.

3304 Longmire
College Station, TX 77845

VOLATILE AROMATIC HYDROCARBONS

Client: IML Farmington

Report Date: 11-26-90

Sample ID: F5424
Laboratory Number: C1893
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:

Jack M. Magruder Jr.
Analyst

Mary Higginbotham
Review

Inter-Mountain Laboratories, Inc

3304 Longmire
College Station, TX 77845

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

Inter·Mountain Laboratories, Inc

3304 Longmire
College Station, TX 77845

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:

Jack M. Morgan Jr.
Analyst

Mary Higginbotham
Review

Inter·Mountain Laboratories, Inc.

3304 Longmire
College Station, TX 77845

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:

Jack M Moya Jr.
Analyst

Mary Higginbotham
Review

Inter-Mountain Laboratories, Inc
3304 Longmire
College Station, TX 77845

** QUALITY ASSURANCE REPORT
MATRIX SPIKE

Laboratory Number: C1883
Analysis: 8020
Sample Matrix: Water
Preservative: None
Temperature: Cool

Date Sampled: 11-13-90
Date Analyzed: 11-20-90

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

Inter·Mountain Laboratories, Inc
3304 Longmire
College Station, TX 77845

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

Inter·Mountain Laboratories, Inc.

3304 Longmire
College Station, TX 77845

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:

Jack M. Moya Jr.
Analyst

Mary Higginbotham
Review

ANA-LAB CORP.
THE COMPLETE SERVICE LAB

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 #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

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SANTA FE

Lab Sample Number: 163716 Continued

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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SANTA FE

Lab Sample Number: 163716 Continued

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	GDG
Copper	<.05	mg/l	0930	04/19/90	EPA Method 220.1	GDG
Iron	5.3	mg/l	0815	04/25/90	EPA Method 236.1	GDG
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	GDG
Manganese	.14	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	1100	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

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Lab Sample Number: 163716 Continued

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

W. H. Whiteside, Ph.D., President

RECEIVED
AUG 03 1990
OIL CONSERVATION DIV.
SANTA FE

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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

ANA-LAB CORP.
THE COMPLETE SERVICE LAB

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

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

ANA-LAB CORP.
THE COMPLETE SERVICE LAB

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

Analytical Chemistry • Waste Treatment & Disposal • Equipment Sales

RECEIVED
AUG 03 1990
OIL CONSERVATION DIV.
SANTA FE

Lab Sample Number: 163715 Continued

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

ANA-LAB CORP.
THE COMPLETE SERVICE LAB

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

Analytical Chemistry • Waste Treatment & Disposal • Equipment Sales

Lab Sample Number: 163715 Continued

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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STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT 16375
OIL CONSERVATION DIVISION

ANALYSIS REQUEST FORM

Contract Lab ANA LABS Contract No. 78-521.07-013

OCD Sample No. 900409135~~5~~

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

SITE INFORMATION

Sample location BLOOMFIELD REFINERY

Collection Site Description

NEW LINED POND

Township, Range, Section, Tract: | | | + | | + | + | |

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

SAMPLING CONDITIONS

☐ Bailed ☐ Pump
☒ Dipped ☐ Tap

pH(00400)

Water Temp. (00010) 14 °C

Water level

Discharge

Sample type GRAB

Conductivity (Uncorrected) [redacted] 2400 µmho

Conductivity at 25° C [redacted] µmho

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 µ membrane filter
☐ **PF:** Pre-filtered w/45 µ membrane filter

4+1 ☒ **NA:** No acid added
☐ **A:** HCL
☐ **A:** 2ml H_2SO_4/L added
☐ **A:** 5ml conc. HNO_3 added
1 ☒ **A:** [redacted] HNO_3 added

FIELD COMMENTS:

LAB ANALYSIS REQUESTED:

ITEM	DESC	METHOD	ITEM	DESC	METHOD	ITEM	DESC	METHOD
☒ 001	VOA	8020	☐ 013	PHENOL	604	☐ 026	Cd	7130
☐ 002	VOA	602	☐ 014	VOC	8240	☐ 027	Pb	7421
☒ 003	VOH	8010	☐ 015	VOC	624	☐ 028	Hg(L)	7470
☐ 004	VOH	601	☐ 016	SVOC	8250	☐ 031	Se	7740
☐ 005	SUITE	8010-8020	☐ 017	SVOC	625	☒ 032	ICAP	6010
☐ 006	SUITE	601-602	☐ 018	VOC	8260	☒ 033	CATIONS/ANIONS	
☐ 007	HEADSPACE		☐ 019	SVOC	8270	☐ 034	N SUITE	
☐ 008	PAH	8100	☐ 020	O&G	9070	☐ 035	NITRATE	
☐ 009	PAH	610	☐ 022	AS	7060	☐ 036	NITRITE	
☐ 010	PCB	8080	☐ 023	Ba	7080	☐ 037	AMMONIA	
☐ 011	PCB	608	☐ 024	Cr	7190	☐ 038	TKN	
☐ 012	PHENOL	8040	☐ 025	Cr6	7198	☐	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
4/9/90	1350	ANDERSON/OLSON /OCD

SITE INFORMATION

Sample location: BLOOMFIELD REFINERY

Collection Site Description: MW-5

Township, Range, Section, Tract: | | | + | | + | + | | |

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

SAMPLING CONDITIONS

- [X] Bailed [ ] Pump
- [ ] Dipped [ ] Tap

pH(00400)

Water Temp. (00010): 16 °C

Water level

Discharge

Sample type: GRAB

Conductivity (Uncorrected): 3000 µmho

Conductivity at 25° C: µmho

SAMPLE FIELD TREATMENT — *Check proper boxes*

No. of samples submitted: 4 VIALS + 2

- [X] **NF:** Whole sample (Non-filtered)
- [ ] **F:** Filtered in field with 0.45 µ membrane filter
- [ ] **PF:** Pre-filtered w/45 µ membrane filter

2 √ 1 [X] **NA:** No acid added
2 √ [X] **A:** HCL
[ ] **A:** 2ml H_2SO_4/L added
[ ] **A:** 5ml conc. HNO_3 added
1 [X] **A:** ~~4 ml 1:1~~ g HNO_3 added

FIELD COMMENTS:

LAB ANALYSIS REQUESTED:

ITEM	DESC	METHOD	ITEM	DESC	METHOD	ITEM	DESC	METHOD
[X] 001	VOA	8020	[ ] 013	PHENOL	604	[ ] 026	Cd	7130
[ ] 002	VOA	602	[ ] 014	VOC	8240	[ ] 027	Pb	7421
[X] 003	VOH	8010	[ ] 015	VOC	624	[ ] 028	Hg(L)	7470
[ ] 004	VOH	601	[ ] 016	SVOC	8250	[ ] 031	Se	7740
[ ] 005	SUITE	8010-8020	[ ] 017	SVOC	625	[X] 032	ICAP	6010
[ ] 006	SUITE	601-602	[ ] 018	VOC	8260	[X] 033	CATIONS/ANIONS	
[ ] 007	HEADSPACE		[ ] 019	SVOC	8270	[ ] 034	N SUITE	
[ ] 008	PAH	8100	[ ] 020	O&G	9070	[ ] 035	NITRATE	
[ ] 009	PAH	610	[ ] 022	AS	7060	[ ] 036	NITRITE	
[ ] 010	PCB	8080	[ ] 023	Ba	7080	[ ] 037	AMMONIA	
[ ] 011	PCB	608	[ ] 024	Cr	7190	[ ] 038	TKN	
[ ] 012	PHENOL	8040	[ ] 025	Cr6	7198	[ ]	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
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 DET LIM	NMWQ 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	0.0092	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	NDM DET LIM	NMWQ 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

Inter·Mountain
Laboratories, Inc.

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

Inter·Mountain
Laboratories, Inc.

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

Inter·Mountain
Laboratories, Inc.

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

Inter·Mountain
Laboratories, Inc.

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

C. Neal Schaeffer
Lab Director

Inter-Mountain
Laboratories, Inc.

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

Inter·Mountain
Laboratories, Inc.

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

'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
Environmental Engineer

CH/jm

Enclosure

cc: Joe Warr
Richard Traylor
Mike Macy
Craig West

Inter·Mountain
Laboratories, Inc.

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.

C. Neal Schaeffer
Senior Chemist

Bloomfield Refining Company
A Gary Energy Corporation Subsidiary

OIL CONSERVATION DIVISION
RECEIVED
'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,

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

Parameter	Units	WQCCR Std. 3-103.A	Average From Sample Pts. 4, 5, 7 9/21/89	Trench Sample 3/9/90
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

Inter-Mountain
Laboratories, Inc.

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

CLIENT: BRC
ID:
SITE: Salmon
LAB NO: F3986
DATE REPORTED: 03/13/90
DATE ANALYZED: 03/12/90
DATE RECEIVED: 03/09/90
DATE COLLECTED: 03/09/90

Analysis Requested: Purgeable aromatics in water.

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.

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
Environmental Engineer

CH/jm

Enclosure

cc: Richard Traylor
Mike Macy
Joe Warr

National 45-606 Eye-Ease 45-706 20/20 Buff Made in USA

BLOOMFIELD REFINING COMPANY
SAMPLE DATE: 12/1/89, CLEAR 45°F.

	PARAMETER	UNITS	2 NOMINAL DETECTION LIMITS	3 NM WQ STANDARD	4 MONITORING WELL 1	5 MONITORING WELL 5
1	Arsenic	mg/l	0.005	0.1	0.0005	0.0006
2	Barium	"	0.5	1.0	ND	ND
3	Cadmium	"	0.002	0.01	0.0073	0.0039
4	Chromium	"	0.02	0.05	ND	ND
5	Lead	"	0.02	0.05	ND	0.044
6	Boron	"	0.01	0.75	0.28	0.58
7	Iron	"	0.05	1.0	ND	ND
8	Manganese	"	0.02	0.2	1.17	ND
9	TDS	"	1.	1000.	3120.	4594.
10	Chloride	"	1.	250.	1142.85	1715.62
11	Sulfate	"	1.	600.	515.61	946.45
12	Phenols	"	0.001	0.005	0.151	0.006
13	Cyanide	"	0.005	0.2	<0.005	<0.005
14	Nitrate as N	"	0.1	10.	2.04	24.85
15	Nitrite as N	"	0.1	–	<0.10	<0.10
16	Ammonia	"	0.1	–	<0.10	0.165
17	Total Keldahl Nitrogen	"	0.1	–	1.48	3.39
18	Benzene	µg/l	0.2	10.	ND	10.8
19	Toluene	µg/l	0.2	750.	3.75	92.
20	Ethyl Benzene	µg/l	0.2	750.	ND	9.8
21	Xylenes (Total)	µg/l	0.2	620.	ND	22.3
22						
23						
24	1,1,1 Trichloroethane	µg/l	1.0	60.	ND	ND
25	1,2 Dichloroethane	µg/l	1.0	0.01	ND	ND
26	trans-1,2 Dichloroethene	µg/l	1.0	–	ND	169.8
27						
28						
29	pH	s.u.	0.01	6 TO 9	7.22	7.24
30	Depth to water	Ft	0.01	–	18.53	42.57
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						

Inter-Mountain
Laboratories, Inc.

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

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

SITE: MW-1 — DATE RECEIVED: 12/01/89
LAB NO: F3587 — 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

	mg/l	meq/l
Chloride	1142.85	32.24
Sulfate	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
Senior Chemist

Inter·Mountain
Laboratories, Inc.

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

CLIENT: Bloomfield Refinery
SITE: MW-1
LAB NO: F3587
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	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
o-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.

C. Neal Schaefer
Senior Chemist

Inter-Mountain
Laboratories, Inc.

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

CLIENT: Bloomfield Refinery
SITE: MW-1
LAB NO: F3587
DATE REPORTED: 01/29/90
DATE ANALYZED: 12/08/90
DATE RECEIVED: 12/01/90
DATE COLLECTED: 12/01/90
Analysis Requested: Purgeable halocarbons in water.

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

Inter-Mountain
Laboratories, Inc.

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

	mg/l	meq/l
Chloride	1715.62	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

Inter·Mountain
Laboratories, Inc.

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

CLIENT: Bloomfield Refinery
ID:
SITE: MW-5
LAB NO: F3586
DATE REPORTED: 01/29/90
DATE ANALYZED: 12/08/90
DATE RECEIVED: 12/01/90
DATE COLLECTED: 12/01/90

Analysis Requested: Purgeable aromatics in water.

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

Inter-Mountain
Laboratories, Inc.

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

CLIENT: Bloomfield Refinery
SITE: MW-5
LAB NO: F3586
DATE REPORTED: 01/29/90
DATE ANALYZED: 12/08/90
DATE RECEIVED: 12/01/90
DATE COLLECTED: 12/01/90
Analysis Requested: Purgeable halocarbons in water.

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.

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, 1989

	1	2	3	4	5	6
PARAMETER	UNITS	NOMINAL DETECTION LIMITS	NMWQ STANDARD	MONITORING WELL 1	MONITORING WELL 4	MONITORING WELL 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	µg/l	0.2	10.	ND	9200.	ND
Toluene	µg/l	0.2	750.	ND	9300.	ND
Ethylbenzene	µg/l	0.2	750.	ND	1100.	ND
m,p-Xylene	µg/l	0.2	620.	ND	8500.	ND
o-Xylene	µg/l	0.2		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

© WILSON JONES COMPANY G7206 GREEN 7206 BUFF MADE IN U.S.A.

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

BLOOMFIELD REFINING COMPANY

GROUNDWATER ELEVATIONS

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 AT 5501.63	5499.29
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		
5/25/89	5500.24			5499.86	5503.03		

Inter·Mountain
Laboratories, Inc.

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 601 analysis (purgeable halocarbons). Please accept my apology for this inconvenience.

Sincerely,

C. Neal Schaeffer
Senior Organic Chemist

iml
Inter-Mountain
Laboratories, Inc.

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

iml
Inter·Mountain
Laboratories, Inc.

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 0
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

Inter-Mountain
Laboratories, Inc.

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

Inter·Mountain
Laboratories, Inc.

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

imL
Inter-Mountain
Laboratories, Inc.

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,

April V. Gil

April V. Gil
Senior Geologist
Laboratory Director

Enclosures

imL

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

April V. Gil
Senior Geologist
Laboratory Director

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

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	Sulfate meq/l
1431	MW-1	0.14	0.561	0.02	1.59	0.214	<0.005	3308	653.46	13.61
1433	MW-5	0.1	21.04	0.049	1.24	0.362	<0.005	4196	781.03	16.27
1434	MW-4	<0.1	<0.1	0.058	1.52	0.250	<0.005	1454	7.41	0.154

Reviewed by: April V. Gil

April V. Gil
Senior Geologist
Laboratory Director

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
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

April V. Gil
Senior Geologist
Laboratory Director

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

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	Sulfate meq/l
1432	Salmon	0.109	<0.1	0.044	<1.0	0.579	<0.005	2668	16.46	0.343
1432A	Duplicate Analysis	0.109	<0.1	0.037	<1.0	0.240	<0.005	2660	12.35	0.257

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
Sante Fe, New Mexico 87501

Dear Dave,

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

Sincerely,

Chris Hawley
Environmental Engineer

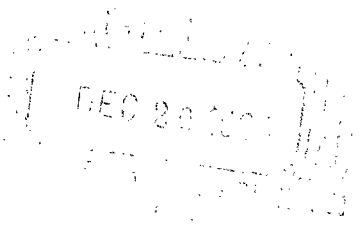
RECEIVED
MAY 15 1989
OIL CONSERVATION DIV.
SANTA FE

CH/cp

GROUNDWATER MONITORING WELL DATA

WELL NUMBER	ELEVATION T.O.P.	STICKUP T.O.P	ELEVATION GRADE
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



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,

Chris Hawley
Environmental Engineer

CH/jm

Enclosure

cc: Richard Traylor
Mike Macy
Joe Warr

National Brand 45-606 Eye-Ease 45-706 20/20 Bulf Made in USA

BLOOMFIELD REFINING COMPANY

SAMPLE DATE: NOVEMBER 18, 1988

	1	2	3	4	5	6
PARAMETER	UNITS	NOMINAL DETECTION LIMITS	NMWQ STANDARD	MONITORING WELL P1	MONITORING WELL P4	MONITORING WELL P5
Arsenic	mg/L	0.005	0.1	<0.005	<0.005	<0.005
Barium	"	0.5	1.0	<0.5	1.8	<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	0.07
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	<0.01	<0.01	<0.01
Iron	"	0.05	1.0	<0.05	5.95	<0.05
Manganese	"	0.02	0.2	2.11	3.73	<0.02
Zinc	"	0.01	10.0	<0.01	<0.01	<0.01
Uranium	"	—	5.0	—	—	—
Chloride	"	1	250.	1140.	490.	1480.
Sulfate	"	1	600.	665.	<1.	777.
PCB	"	—	0.001	—	—	—
Phenols	"	0.001	0.005	0.05	0.101	0.16
Cyanide	"	0.01	0.2	<0.01	<0.01	<0.01
Nitrate as N	"	0.02	10.	4.03	0.09	27.8
Aluminum	"	0.1	5.	<0.1	<0.1	<0.1
Boron	"	0.01	0.75	0.32	0.57	0.45
Cobalt	"	0.02	0.05	<0.02	<0.02	<0.01
Molybdenum	"	0.02	1.0	<0.02	<0.02	<0.02
Nickel	"	0.01	0.2	<0.01	<0.01	<0.01
Fluoride	"	0.01	1.6	0.92	0.30	0.35
TDS	"	1	1000.	3480.	1830.	4080.
Benzene	"	0.0002	0.01	0.00075	11.130	ND
Toluene	"	0.0002	0.75	0.00268	8.916	0.00186
Carbon Tetrachloride	"	0.0005	0.01	ND	ND	ND
1,2-Dichloroethane	"	0.0005	0.01	ND	ND	ND
1,1-Dichloroethylene	"	0.0005	0.005	ND	ND	ND
1,1,2,2-Tetrachloroethylene	"	0.0005	0.02	ND	ND	ND
1,1,2-Trichloroethylene	"	0.0005	0.01	ND	ND	ND
pH	S.U.	0.1	6 TO 9	7.0	6.7	6.9

ND = NOT DETECTED

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

BLOOMFIELD REFINING COMPANY
GROUNDWATER ELEVATIONS

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 AT 5501.63	5499.29
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		

imL
Inter-Mountain
Laboratories, Inc.

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,

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 of Muicipal 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

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
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 of Muicipal 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
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 of Muicipal 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-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 of Muicipal 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
A Gary Energy Corporation Subsidiary

RECEIVED
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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 LIMIT	NEW MEXICO STANDARDS 3-103 (A)	63-88 MW-4	9-9-88 RW-2	9-9-88 P-2
2	Benzene	mg/L	0.0002	0.01	8.9	11.000	4.800
4	Ethylbenzene	mg/L	0.0002	0.75	–	2.900	0.900
6	Toluene	mg/L	0.0002	0.75	0.93	10.200	1.430
8	m-Xylene	mg/L	0.0002		–	17.700	4.500
10	O-Xylene	mg/L	0.0002	0.62	–	4.900	1.460
12	P-Xylene	mg/L	0.0002		–	6.200	1.570
14	1,2 Dichloroethane	mg/L	0.001	0.01	–	0.0016	ND
16	Trans 1,2 Dichloroethene	mg/L	0.001	–	–	ND	ND
18	Nitrate as N	mg/L	0.01	10.0	0.14	<0.01	–
20	Phenol	mg/L	0.001	0.005	0.069	0.13	–
22	Sulfate	mg/L	1	600.	3	<1	–
24	TDS	mg/L	10	1000	1820	1980	–

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BOOMFIELD REFINING COMPANY

	PARAMETER	RW-3	P-3	RW-1	P-1	MW-11	MW-13
1							
2	Benzene	12.000	19.400	6.400	102.200	44.400	0.00023
3							
4	Ethylbenzene	0.00286	ND	0.540	0.00143	0.063	0.00029
5							
6	Toluene	0.062	0.00435	0.070	0.034	0.840	0.00024
7							
8	m-Xylene	3.500	22.800	4.800	0.483	2.600	0.00065
9							
10	O-Xylene	0.103	3.600	8.300	0.061	0.061	0.00056
11							
12	P-Xylene	1.800	8.700	1.700	0.322	0.745	0.00035
13							
14	1,2 Dichloroethane	ND	ND	ND	ND	0.0022	0.0156
15							
16	Trans 1,2 Dichloroethene	ND	ND	ND	0.0015	ND	ND
17							
18	Nitrate as N	<0.01	–	<0.01	–	0.06	13.1
19							
20	Phenol	0.05	–	0.34	–	0.06	0.03
21							
22	Sulfate	9.5	–	4.5	–	30.	728.
23							
24	TDS	3250	–	3130	–	1900	3220
25							
26							
27							
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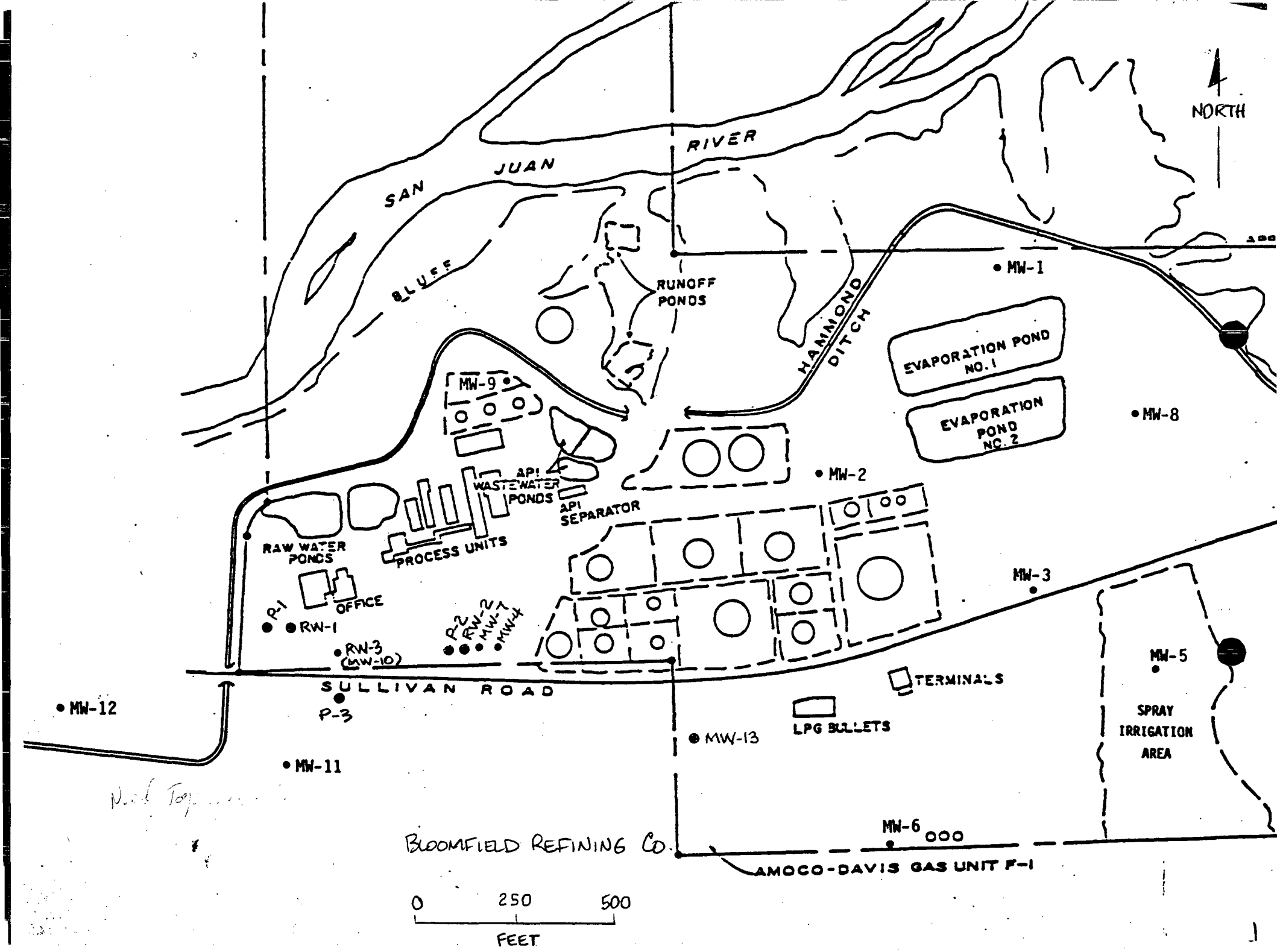


BLOOMFIELD REFINING CO.

Inter·Mountain
Laboratories, Inc.

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,

Ron R. Richardson

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

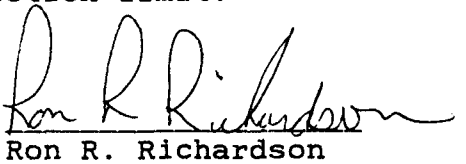
Client: BLOOMFIELD REFINING CO.

Sample ID:	RW-1	Date Sampled:	09/09/88
Laboratory Number:	F1872	Date Received:	09/09/88
Analysis Requested::	Purgeable Aromatics	Date Extracted:	09/16/88
Sample Matrix:	Water	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
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-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	Date Sampled:	09/09/88
Laboratory Number:	F1873	Date Received:	09/09/88
Analysis Requested::	Purgeable Aromatics	Date Extracted:	09/16/88
Sample Matrix:	Water	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
Laboratory Number: F1873
Analysis Requested: Purgeable Aromatics
Sample Matrix: Water

Date Sampled: 09/09/88
Date Received: 09/09/88
Date Extracted: 09/22/88
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	Date Sampled:	09/09/88
Laboratory Number:	F1874	Date Received:	09/09/88
Analysis Requested::	Purgeable Aromatics	Date Extracted:	09/20/88
Sample Matrix:	Water	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
Laboratory Number: F1874
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

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	Date Sampled:	09/09/88
Laboratory Number:	F1875	Date Received:	09/09/88
Analysis Requested::	Purgeable Aromatics	Date Extracted:	09/20/88
Sample Matrix:	Water	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
Laboratory Number: F1875
Analysis Requested: Purgeable Aromatics
Sample Matrix: Water

Date Sampled: 09/09/88
Date Received: 09/09/88
Date Extracted: 09/22/88
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
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: 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	Date Sampled:	09/09/88
Laboratory Number:	F1876	Date Received:	09/09/88
Analysis Requested::	Purgeable Aromatics	Date Extracted:	09/19/88
Sample Matrix:	Water	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

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
Laboratory Number: F1877
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	1.5	(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-2	Date Sampled:	09/09/88
Laboratory Number:	F1878	Date Received:	09/09/88
Analysis Requested::	Purgeable Aromatics	Date Extracted:	09/21/88
Sample Matrix:	Water	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
Laboratory Number: F1878
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

Ron R. Richardson
Laboratory Director

Report Date: 09/26/88

Client: BLOOMFIELD REFINING CO.

Sample ID:	P-3	Date Sampled:	09/09/88
Laboratory Number:	F1879	Date Received:	09/09/88
Analysis Requested::	Purgeable Aromatics	Date Extracted:	09/21/88
Sample Matrix:	Water	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

imi
Inter·Mountain
Laboratories, Inc.

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,

Ron R. Richardson
Lab Director

enclosures:

GROUNDWATER MONITORING WELL DATA

WELL NUMBER	ELEVATION T.O.P.	STICKUP T.O.P	ELEVATION GRADE
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

National 45-604 Eye-Ease 45-704 20-20 Bulb Made in USA

WELLFIELD REFINING COMPANY
GROUNDWATER ELEVATIONS
9-9-1988

	WELL DESIGNATION	1 T.O.P. ELEVATION (FT)	2 TOTAL DEPTH OF WELL FROM T.O.P. (FT)	3 DEPTH TO WATER FROM T.O.P. (FT)	ELEVATION OF TOP OF WATER (FT)	Nacieneate Top el
	MW-1	5515.77	22.84	15.52	5500.25	5492.07
	MW-2	5519.45	26.67	18.31	5501.14	5492.95
	MW-3	5535.85	36.90	33.44	5502.41	5494.85
	MW-5	5545.10	44.40	42.17	5502.93	5494.10
	MW-6	5551.23	49.60	DRY	DRY	5501.28
	MW-7	5524.09	62.10	24.37	5499.22	5490.99
	MW-8	5531.12	34.94	29.33	5501.79	5496.12
	MW-9	5519.70	33.90	19.89	5499.81	5493.00
	MW-13	5538.42	53.00	37.91	3500.51	5490.12
	MW-4	5524.30	31.44	24.10	5500.20	5490.80
	RW-2	5523.48	38.03	23.37	5500.11	5490.98
	P-2	5523.73	38.33	23.67	5500.06	5491.43
Mapped at 5486 ✓	RW-3 (MW-10)	5516.86	33.92	17.80	5499.06	5492.46
	P-3	5507.20	22.80	8.31	5498.89	5482.4
	RW-1	5525.92	40.98	26.69	5499.23	5490.52
	P-1	5524.62	39.17	25.53	5499.09	5487.32
✓	MW-11	5506.83	24.73	9.24	5497.59	5493.23
	MW-12	5498.36	14.22	8.18	5490.18	5486.86
	HAMMOND AT SULLIVAN RD.	5504.82	–	6.62	5498.20	
	HAMMOND NEAR MW-9	5522.95	–	22.99	5499.96	

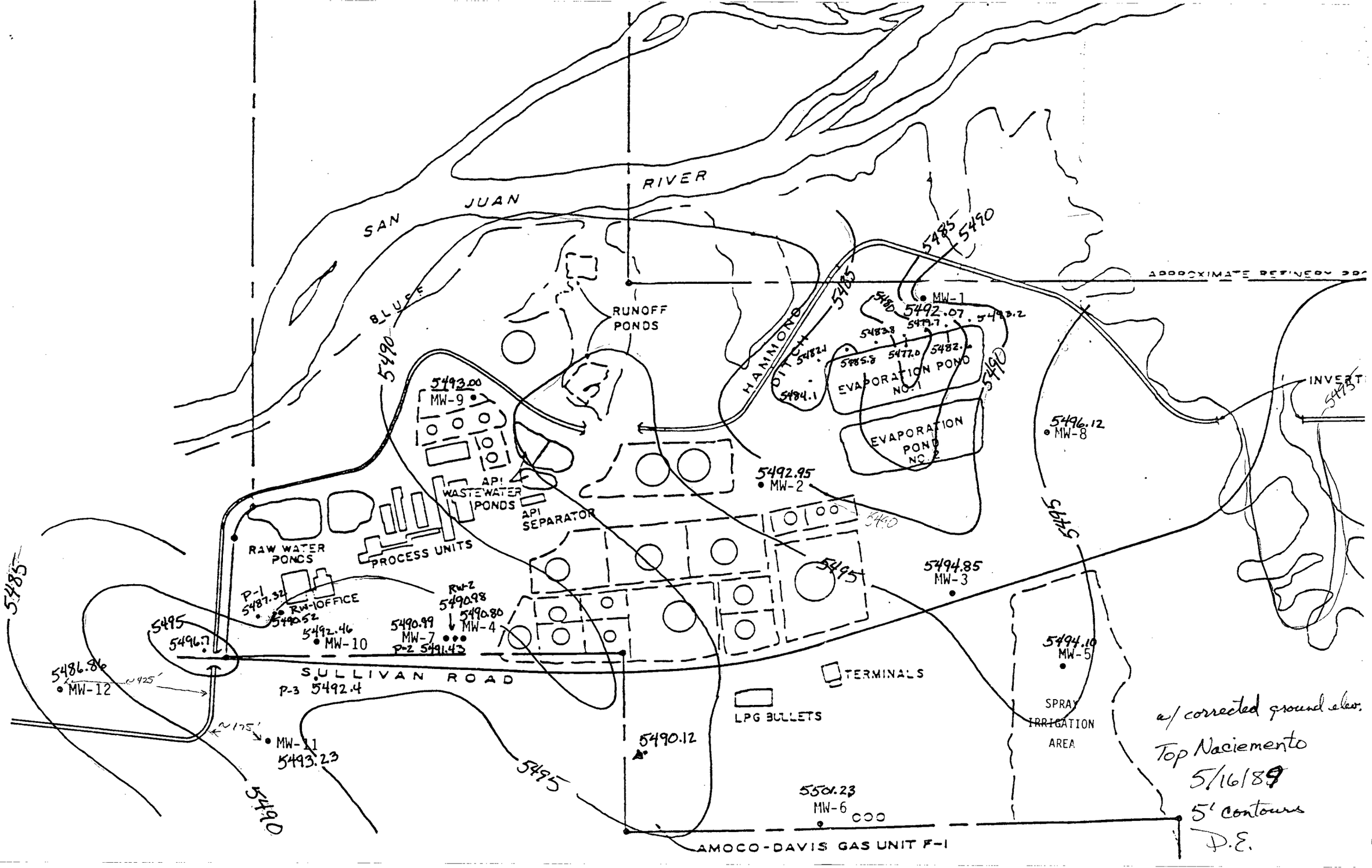
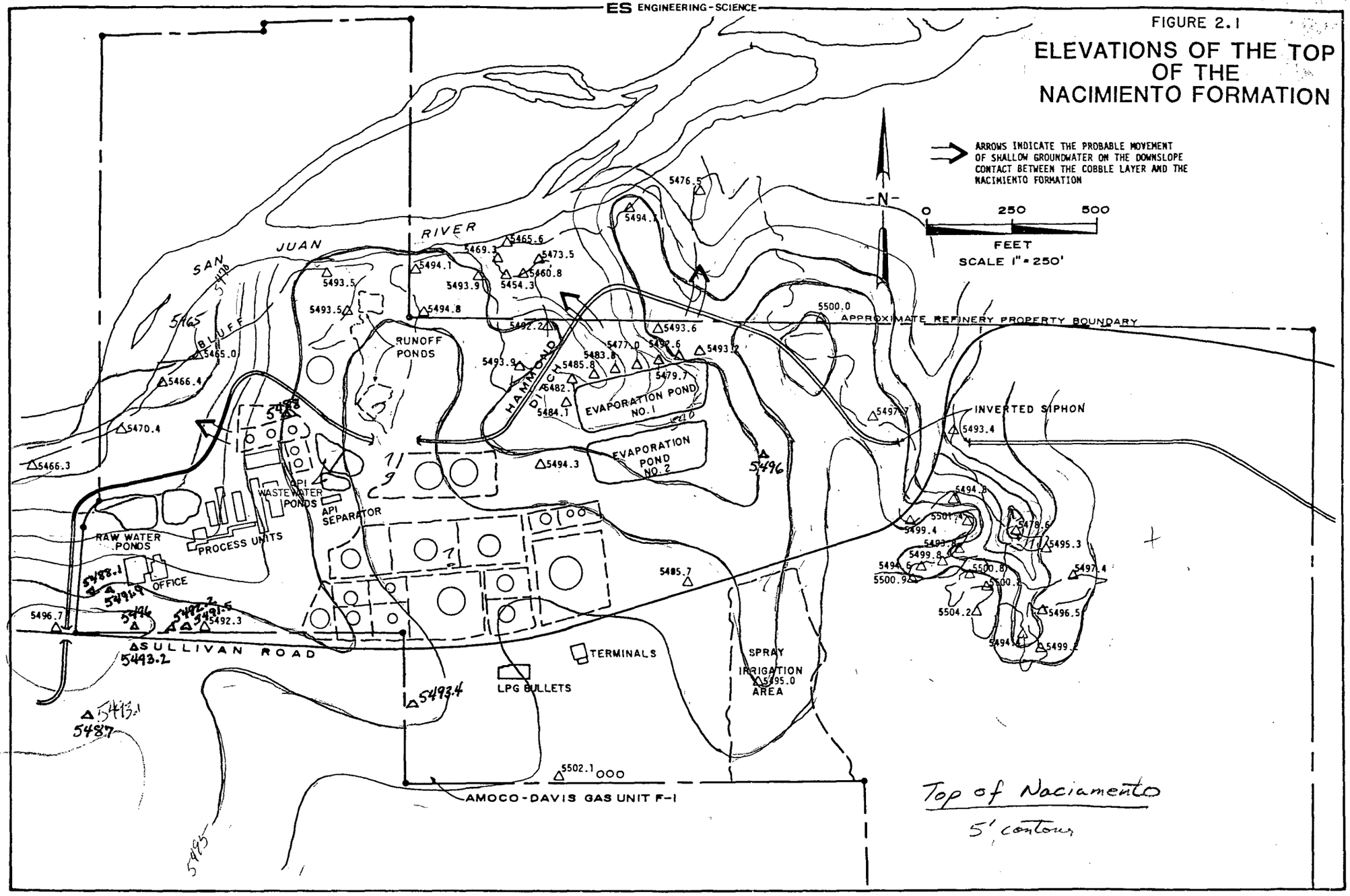

SAN JUAN RIVER
BLUFF
RUNOFF PONDS
HAMMOND DITCH
APPROXIMATE REFINERY PROPERTY LINE
MW-1
5492.07
5493.2
5488
5488.8
5477.7
5485.8
5477.0
5482.6
5482.1
5484.1
EVAPORATION POND NO. 1
EVAPORATION POND NO. 2
5496.12
MW-8
INVERT
5493.00
MW-9
5492.95
MW-2
API WASTEWATER PONDS
API SEPARATOR
RAW WATER PONDS
PROCESS UNITS
P-1 5487.32
RW-1 OFFICE
5490.52
RW-2 5490.98
5490.80
MW-4
5492.46
MW-10
5490.99
MW-7
P-2 5491.43
5496.7
5494.85
MW-3
5494.10
MW-5
SULLIVAN ROAD
P-3 5492.4
5486.86
MW-12
~925'
~175'
MW-11
5493.23
5490.12
TERMINALS
LPG BULLETS
SPRAY IRRIGATION AREA
5501.23
MW-6
AMOCO-DAVIS GAS UNIT F-1
5485
5490
5495
w/ corrected ground elev.
Top Naciemento
5/16/89
5' contours
D.E.

FIGURE 2.1

ELEVATIONS OF THE TOP OF THE NACIMIENTO FORMATION



Water Sat. Isopach

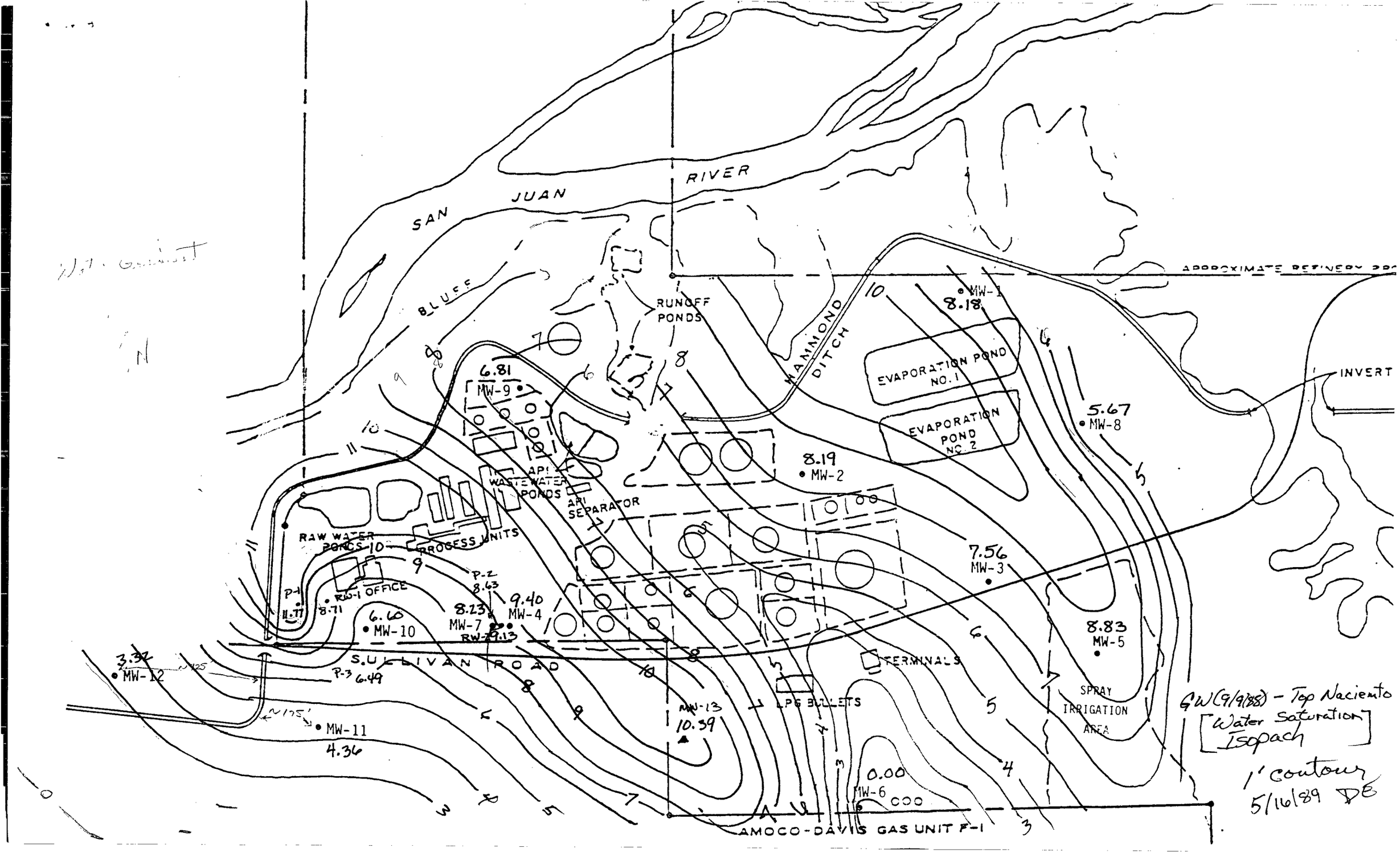
National 45-804 Eye-Ease 45-704 20-20 Bull Made in USA

LEMFIELD REFINING COMPANY

GROUNDWATER ELEVATIONS

9-9-1988

WELL DESIGNATION	1 T.O.P. ELEVATION (FT)	2 TOTAL DEPTH OF WELL FROM T.O.P. (FT)	3 DEPTH TO WATER FROM T.O.P. (FT)	4 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	24.87	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	3500.51
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	5499.23
P-1	5524.62	39.17	25.53	5499.09
MW-11	5506.83	24.73	9.24	5497.59
MW-12	5498.36	14.22	8.18	5490.18
HAMMOND AT SULLIVAN RD.	5504.82	-	6.62	5498.20
HAMMOND NEAR MW-9	5522.95	-	22.99	5499.96


SAN JUAN RIVER
BLUFF
RUNOFF PONDS
MANNIONO DITCH
APPROXIMATE REFINERY PROPERTY
INVERT
EVAPORATION POND NO. 1
EVAPORATION POND NO. 2
MW-1
8.18
MW-8
5.67
MW-2
8.19
MW-3
7.56
MW-5
8.83
MW-9
6.81
MW-10
6.60
MW-7
8.23
RW-2
9.13
MW-4
9.40
P-2
8.63
P-1
11.77
RW-1
8.71
OFFICE
RAW WATER PONDS 10
PROCESS UNITS
API WASTEWATER PONDS
API SEPARATOR
TERMINALS
LPG BULLETS
SPRAY IRRIGATION AREA
SULLIVAN ROAD
MW-12
3.32
P-3
6.49
MW-11
4.36
MW-13
10.39
MW-6
0.00
AMOCO-DAVIS GAS UNIT F-1
GW (9/9/88) - Top Naciemto
[Water Saturation Isopach]
1' contours
5/16/89 DE

Bloomfield Refining Company
A Gary Energy Corporation Subsidiary

JUL 5 1988

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 chloronated hydrocarbons. Please note that chloronated 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, 198[illegible]

	PARAMETER	UNITS	NOMINAL DETECTION LIMITS	NMWQ STANDARD	MONITORING WELL P1	MONITORING WELL P4	MONITORING WELL P5
2	Arsenic	mg/l	0.005	0.1	<0.005	<0.005	<0.005
3	Barium	"	0.5	1.0	<0.5	1.4	<0.5
4	Cadmium	"	0.002	0.01	<0.002	<0.002	<0.002
5	Chromium	"	0.02	0.05	<0.02	<0.02	<0.02
6	Lead	"	0.02	0.05	<0.02	<0.02	<0.02
7	Mercury	"	0.001	0.002	<0.001	<0.001	<0.001
8	Selenium	"	0.005	0.05	<0.005	<0.005	<0.005
9	Silver	"	0.01	0.05	<0.01	<0.01	<0.01
10	Copper	"	0.01	1.0	0.02	<0.01	<0.01
11	Iron	"	0.05	1.0	<0.05	6.44	<0.05
12	Manganese	"	0.05	0.2	0.85	3.51	1.45
13	Zinc	"	0.01	10.0	0.03	0.01	<0.01
14	Uranium	"	—	5.0	—	—	—
15	Chloride	"	1	250.	1040.	401.	1300.
16	Sulfate	"	1	600.	851.	3.	1000.
17	PCB	"	—	0.001	—	—	—
18	Phenols	"	0.001	0.005	0.021	0.069	0.064
19	Cyanide	"	0.005	0.2	0.022	<0.005	0.030
20	Nitrate as N	"	0.02	10.	3.22	0.14	32.9
21	Aluminum	"	0.1	5.	<0.1	<0.1	<0.1
22	Boron	"	0.01	0.75	0.25	0.47	0.48
23	Cobalt	"	0.02	0.05	<0.02	<0.02	<0.02
24	Molybdenum	"	0.02	1.0	0.21	<0.02	<0.02
25	Nickel	"	0.02	0.2	0.03	0.02	0.04
26	Fluoride	"	0.01	1.6	0.60	0.28	0.22
27	TDS	"	1	1000.	3500.	1820.	4200.
28	Benzene		0.001	0.01	ND	8.9	ND
29	Toluene		0.001	0.75	ND	0.93	ND
30	Carbon Tetrachloride		0.001	0.01	ND	ND	ND
31	1,2-Dichloroethane		0.001	0.01	ND	ND	ND
32	1,1-Dichloroethylene		0.001	0.005	ND	ND	ND
33	1,1,2,2-Tetrachloroethylene		0.001	0.02	ND	ND	ND
34	1,1,2-Trichloroethylene		0.001	0.01	ND	ND	ND
35	pH	s.u.	0.1	6 TO 9	7.3	6.8	7

© WILSON JONES COMPANY G7206 GREEN 7206 BUFF MADE IN U.S.A.

45-708 20/20 Buff
Made in USA

BLOOMFIELD REFINING COMPANY
GROUNDWATER ELEVATION

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 AT 5501.63	5499.29
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

45-708 20/20 Buff
Made in USA

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 SULLIVAN	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
			INSTALLED 8/1/87 +				
5501.65	5499.16	5498.66	5497.10	5489.03	5497.75	5499.13	10/8/87
			DITCH WATER OFF 10/16/87, DIKED 10/26/87				
-	-	5498.46	5496.95	5488.94	5497.45	-	10/27/87
-	-	-	-	-	-	-	11/17/87
-	-	-	5497.43	5490.57	-	-	6/3/88

Inter-Mountain
Laboratories, Inc.

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,

Ron R. Richardson

Ron R. Richardson
Lab Director

enclosures:

iml
Inter-Mountain
Laboratories, Inc.

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
Cadimum	-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

Inter-Mountain
Laboratories, Inc.

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

---

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
Cadimum	-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

iml
Inter-Mountain
Laboratories, Inc.

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

---

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
Cadimum	-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

Inter·Mountain
Laboratories, Inc.

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 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

Inter·Mountain
Laboratories, Inc.

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

Inter·Mountain
Laboratories, Inc.

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

Inter-Mountain
Laboratories, Inc.

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 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

Inter-Mountain
Laboratories, Inc.

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

Inter·Mountain
Laboratories, Inc.

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
Cadimum	-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

Inter-Mountain
Laboratories, Inc.

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

---

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
Cadimum	-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

Inter-Mountain Laboratories, Inc.

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 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

Inter-Mountain Laboratories, Inc.

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

Inter-Mountain Laboratories, Inc.

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

Inter·Mountain
Laboratories, Inc.

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 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

Inter-Mountain Laboratories, Inc.

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

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
Environmental Engineer

CH/jm

Enclosure

cc: Joe Warr
Mike Macy
Richard Traylor

(8709111600)

(335)

ASSAIGAI ANALYTICAL LABORATORIES

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

DATE: 30 September 1987
1498

ANALYTE	SAMPLE ID/ANALYTICAL RESULTS MW-12 8709111600	MW-11 8709111630	NOMINAL DETECTION LIMIT
Phenols	<0.01 mg/l	<0.01 mg/l	0.01 mg/l
Oil & Grease	0.691 mg/l	1.3 mg/l	0.01 mg/l
As	<0.05 mg/l	<0.05 mg/l	0.05 mg/l
Ba	<1.0 mg/l	6.72 mg/l	1.0 mg/l
Cd	<0.01 mg/l	0.018 mg/l	0.01 mg/l
Cr	0.064 mg/l	0.200 mg/l	0.05 mg/l
Pb	0.120 mg/l	0.320 mg/l	0.05 mg/l
Hg	<0.002 mg/l	<0.002 mg/l	0.002 mg/l
Se	0.022 mg/l	0.040 mg/l	0.002 mg/l
Ag.	<0.05 mg/l	<0.05 mg/l	0.05 mg/l
Cu	0.048 mg/l	0.060 mg/l	0.02 mg/l
Fe	8.20 mg/l	32.0 mg/l	0.05 mg/l
Mn	0.380 mg/l	4.71 mg/l	0.05 mg/l
Zn	0.106 mg/l	0.728 mg/l	0.004 mg/l
Uranium	<5 mg/l	<5 mg/l	5 mg/l
Cl	7.9 mg/l	337.5 mg/l	1.0 mg/l
SO 4	248 mg/l	181 mg/l	1.0 mg/l
PCB	<0.05 ug/l	<0.05 ug/l	0.05 ug/l
CN	<0.005 mg/l	<0.005 mg/l	0.005 mg/l
NO 3 as N	0.181 mg/l	0.389 mg/l	0.01 mg/l
Al	9.50 mg/l	33.80 mg/l	0.05 mg/l
B	<0.1 mg/l	<0.1 mg/l	0.1 mg/l
Co	0.140 mg/l	0.256 mg/l	0.003 mg/l
Mo	<0.5 mg/l	<0.5 mg/l	0.5 mg/l
Ni	0.145 mg/l	0.213 mg/l	0.05 mg/l
F	9.7 mg/l	0.93 mg/l	0.001 mg/l
TDS	658 mg/l	1910 mg/l	1 mg/l
pH	7.50	7.04	0.01
Benzene	<0.001 mg/l	5.4 mg/l	0.001 mg/l
Toluene	<0.001 mg/l	<0.025 mg/l	0.001 mg/l
Carbon Tetrachloride	<0.005 mg/l	12 mg/l	0.005 mg/l
		13.5 mg/l	duplicate
1,2-Dichloroethane	<0.001 mg/l	0.003 mg/l	0.001 mg/l
1,1-Dichloroethylene	<0.001 mg/l	<0.001 mg/l	0.001 mg/l
1,1,2,2-Tetrachloro-ethylene	<0.001 mg/l	0.070 mg/l	0.001 mg/l
1,1,2-Trichloro-ethylene	<0.001 mg/l	0.225 mg/l	0.001 mg/l

7300 Jefferson, N.E. • Albuquerque, New Mexico 87109 • (505) 345-8964

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

LOCATION MAP:

__1/4 __1/4 __1/4 __1/4 S__ T__ R__

SITE ID: BRC LOCATION ID: MW-11

SITE COORDINATES (FT.):

N _____ E _____

GROUND ELEVATION (FT. MSL): _____

STATE: NEW MEXICO COUNTY: SAN JUAN

DRILLING METHOD: AIR CASING DRIVER ROTARY

DRILLING CONTR.: DEEMAN

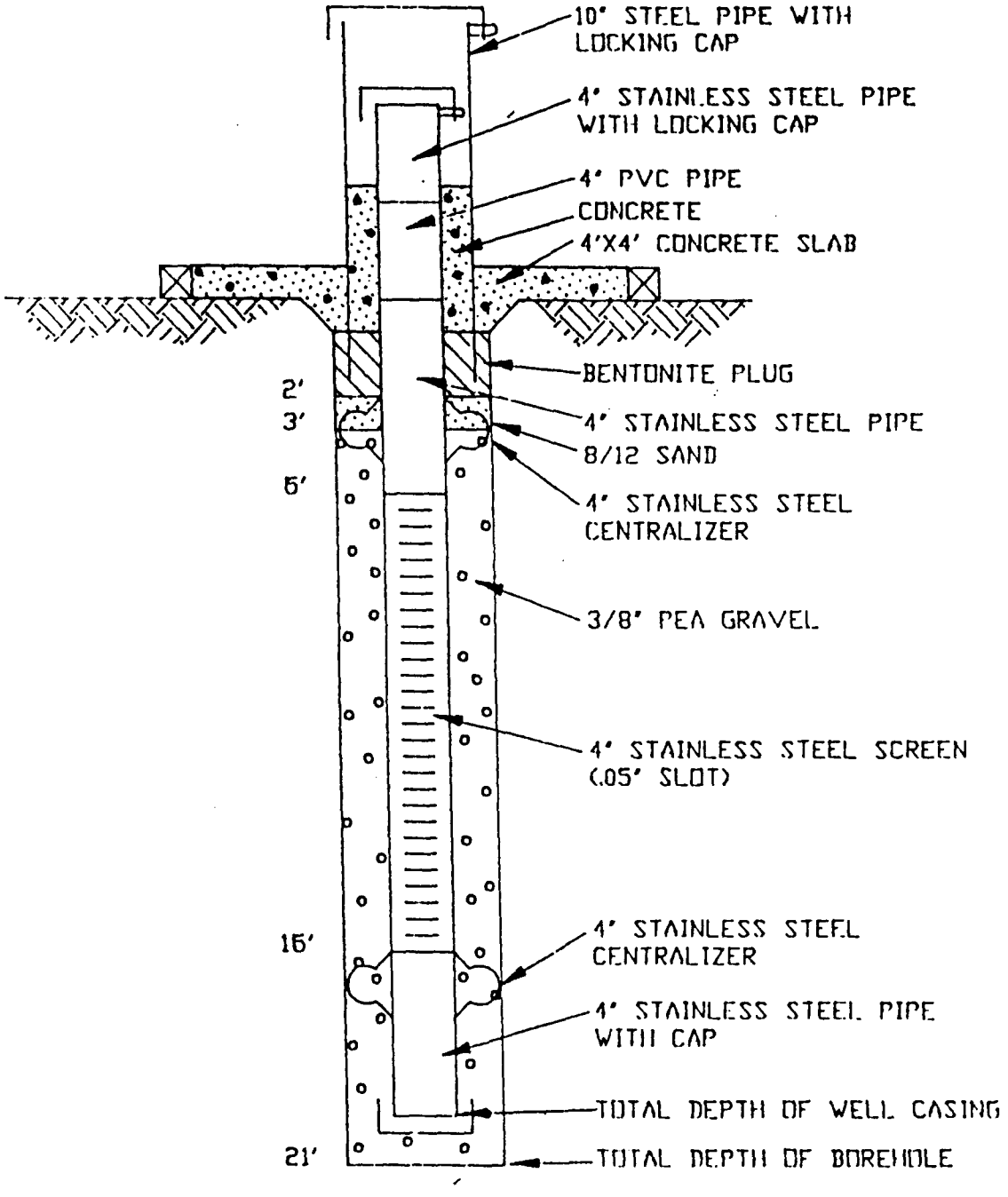
DATE STARTED: 7-31-87 DATE COMPLETED: 7-31-87

FIELD REP.: KASZUBA/SELKE

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

LOCATION DESCRIPTION: ID 21'

Depth	Visual %	Lith	Drilling Time Scale:	Sample Type and Interval	Lithologic Description
5				0- 5'	0 - 5' SAND, mod yelsh brn (10YR5/4), fine to med. gr. sand w/minor crs gr. sand and pebble gravel (up to 1"). Unconsolidated, moderately well sorted, subrounded, no odor.
10				5-10'	5 -10' GRAVELLY SAND, olive gray (5Y4/1), fine to med. gr. sand w/minor crs gr. sand unconsolidated, mod. well sorted, subrounded, gravel clasts (¼" to 2") subrounded. Moderate degradation odor.
15				10-12½'	10 -12.½' SANDY CLAY, lt. olive gray (5Y5/2), fine to med. gr. sand in clay matrix no odor.
20				12½-15' 15-21'	12½-15' SANDY CLAY, as above. 15 -21' SANDY CLAY, yelsh gray (5Y7/2), fine gr. sand in clay matrix, clay chips up to 1½" from moderately consolidated clay (or weathered shale).
25					NOTE: Saturation from ~7-8' to ~12½'
30					
35					
40					
45					
50					



MONITOR WELL MW-11

LITHOLOGIC LOG

LOCATION MAP:

__1/4 __1/4 __1/4 __1/4 S___ T___ R___

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.: BEEMAN BROTHERS

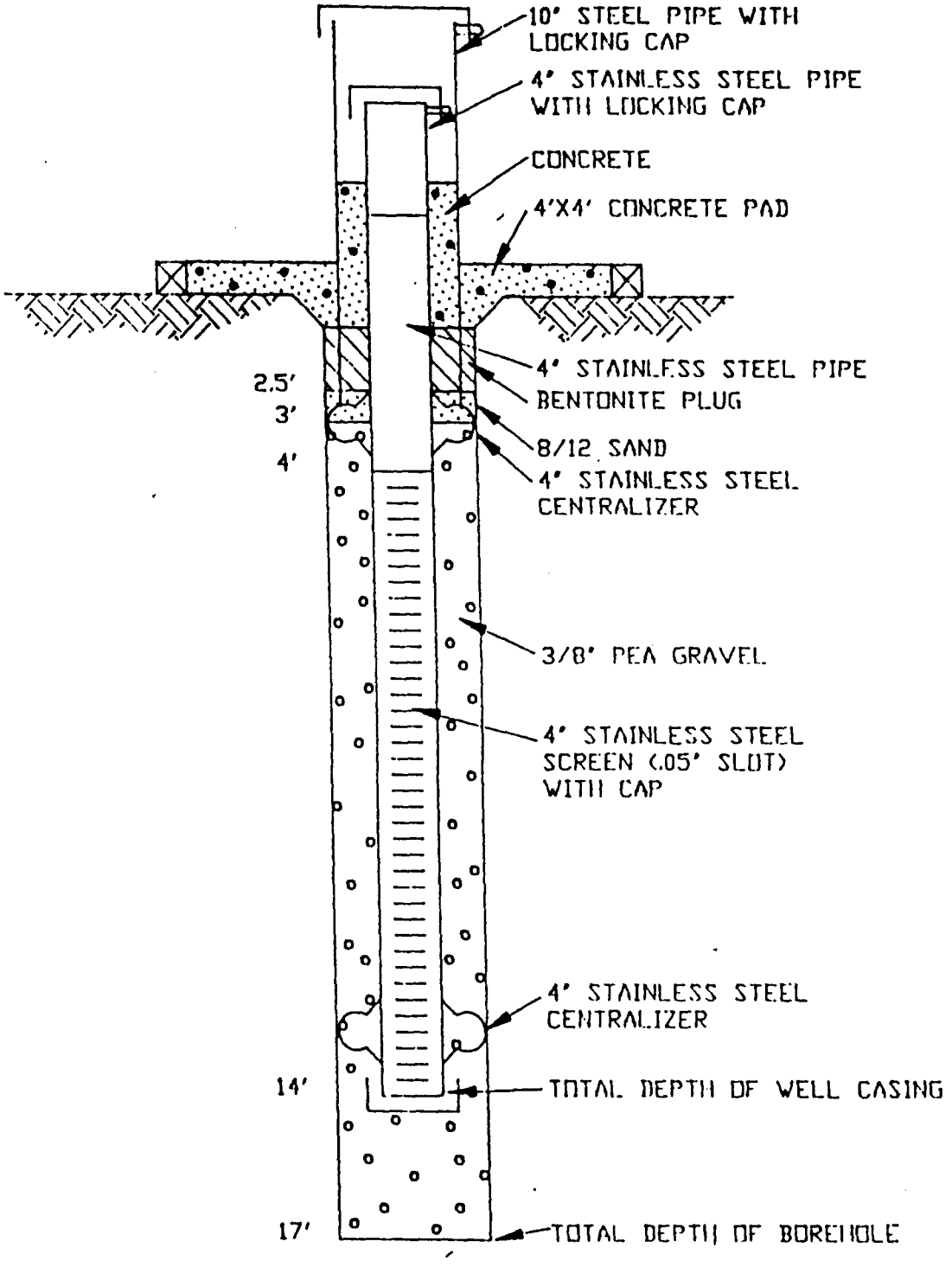
DATE STARTED: 8-1-87 DATE COMPLETED: 8-1-87

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				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				5- 9'	5- 9' SAND, as above. Saturated. Gravelly sand @ 9'. 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				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 ½" (moderately consolidated clay or weathered shale). Contains <10% gypsum. No HC odor.
20				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

RECEIVED
DEC 11 1987
OIL CONSERVATION DIVISION
SANTA FE

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

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

CH/jm

Enclosures

cc: Richard Traylor
Mike Macy
Joe Warr

BLOOMFIELD REFINING COMPANY
SAMPLE DATE: NOV. 17, 1987

	1	2	3	4	5	6
PARAMETER	UNITS	NOMINAL DETECTION LIMITS	NMWQ STANDARD	MONITORING WELL P1	MONITORING WELL P4	MONITORING WELL P5
Arsenic	mg/l	0.005	0.1	<0.005	<0.005	<0.005
Barium	"	0.5	1.0	<0.5	1.8	<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	<0.01	<0.01	0.01
Iron	"	0.05	1.0	<0.05	4.59	<0.05
Manganese	"	0.02	0.2	1.45	4.77	<0.02
Zinc	"	0.01	10.0	<0.01	<0.01	<0.01
Uranium	"	—	5.0	—	—	—
Chloride	"	1	250.	910.	588.	1310.
Sulfate	"	1	600.	655.	<1	1060.
PCB	"	—	0.001	—	—	—
Phenols	"	0.005	0.005	0.02	0.73	<0.005
Cyanide	"	0.005	0.2	<0.005	0.005	0.016
Nitrate as N	"	0.01	10.	5.66	0.03	36.4
Aluminum	"	0.1	5.	<0.1	<0.1	<0.1
Boron	"	0.1	0.75	0.32	0.59	0.54
Cobolt	"	0.02	0.05	<0.02	<0.02	<0.02
Molybdenum	"	0.02	1.0	<0.02	0.03	<0.02
Nickel	"	0.01	0.2	<0.01	<0.01	<0.01
Fluoride	"	0.1	1.6	0.76	0.19	0.24
TDS	"	1	1000.	3050.	2050.	4300.
Benzene	"	0.001	0.01	ND	8.5	ND
Toluene	"	0.001	0.75	ND	0.023	ND
Carbon Tetrachbride	"	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	S.U.	0.1	6 TO 9	7.0	6.5	6.9

© WILSON JONES COMPANY G7206 GREEN 7206 BUFF MADE IN U.S.A.

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

[redacted]OMFIELD REFINING COMPA[redacted]Y

GROUNDWATER ELEVATIONS

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 AT 5501.63	5499.29
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	-	-

CHAIN OF CUSTODY RECORD

PROJECT NO.	PROJECT NAME
NOV '87	BLOOMFIELD REFINING CO

SAMPLERS (Signatures): [signature]

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	RAW	NUTRIENTS	TRACE METALS	CYANIDE	PHENOLS	ORGANICS	REMARKS
1	11-17-87	10A		X	MW-5	9	1	1	1	2	2	2	WATER / ABOUT 70°F /
2	"	11A		X	MW-1	9	1	1	1	2	2	2	SAMPLES KEPT CHILLED.
3	"	1P		X	MW-4	9	1	1	1	2	2	2	TRACE METAL SAMPLE FILTERED IN BRC LAB AT 0.45 µm

	MW-5	MW-1	MW-4
DEPTH TO H_2O	41.93	17.31	24.36
TOTAL DEPTH	44.72	23.14	32.25
WELL VOL. BAILED	3.5	5.0	4.0

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature) [signature]	Date/Time 11/17/87 4:1	Received for lab. by: (Signature) [signature]	Date/Time 11/17/87 4:1	Remarks	

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,

R W Traylor

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

National 45-604 Eye-Ease 45-704 20/20 Buff Made in USA

SAN JUAN RIVER — 7-24-87 — CA

SUMMARY OF RESULTS (mg/L) — DAM RELEASE: 1070CFS

	NOMINAL DETECTION LIMIT	HWY 44 BRIDGE NEARSIDE	HWY 44 BRIDGE MIDDLE	HWY 44 BRIDGE FARSIDE	UPSTREAM
		1	2	3	4
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
SO4	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-chloroethyl)ether	ND
Bis(2-chloroisopropyl)ether	ND
Bis(2-ethylhexyl)phthalate	ND
4-Bromophenyl phenyl ether	ND
Butylbenzyl phthalate	ND
2-Chloronapthalene	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 9A.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

7300 Jefferson, N.E. • Albuquerque, New Mexico 87109 • (505) 345-8964

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-chlroroethyl)ether	ND
Bis(2-chloroisopropyl)ether	ND
Bis(2-ethylhexyl)phthalate	ND
4-Bromophenyl phenyl ether	ND
Butylbenzyl phthalate	ND
2-Chloronapthalene	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 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

7300 Jefferson, N.E. • Albuquerque, New Mexico 87109 • (505) 345-8964

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-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-chlroroethyl)ether	ND
Bis(2-chloroisopropyl)ether	ND
Bis(2-ethylhexyl)phthalate	ND
4-Bromophenyl phenyl ether	ND
Butylbenzyl phthalate	ND
2-Chloronapthalene	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-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 10:30 A.M.
~1/2 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 4	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

7300 Jefferson, N.E. • Albuquerque, New Mexico 87109 • (505) 345-8964

ASSAIGAI ANALYTICAL LABORATORIES

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

DATE: 25 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-chloroethyl)ether	ND
Bis(2-chloroisopropyl)ether	ND
Bis(2-ethylhexyl)phthalate	ND
4-Bromophenyl phenyl ether	ND
Butylbenzyl phthalate	ND
2-Chloronapthalene	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-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

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		DIVERSION TO	EVAP	INFLOW
				POWER	OTHER	NIIP		
JUL 87	FEET	ACRE-FT	ACRE-FT	CFS	CFS	CFS	CFS	CFS
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	550	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	6,045.83	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	3,180	600	60	1,570
22	6,042.61	1,138,100		0	1,750	600	60	1,200
23	6,042.49	1,136,800		0	1,020	550	60	980
24	6,042.40	1,135,800	SAMPLE DATE	0	1,010	580	60	1,140
25	6,042.32	1,134,900		0	1,010	580	60	1,190
26	6,042.24	1,134,100		0	1,010	580	60	1,240
27	6,042.19	1,133,500		0	1,010	580	60	1,340
28	6,042.09	1,132,400		0	1,010	590	60	1,100
29	6,042.05	1,132,000		0	760	580	60	1,200
30	6,042.05	1,132,000		0	760	550	60	1,380
31	6,042.01	1,131,500		0	710	280	60	790
TOTALS				ACRE-FT	ACRE-FT 226,230	ACRE-FT 33,240	ACRE-FT 3,980	ACRE-FT 122,960
MEANS				CFS	CFS 3,679	CFS 540	CFS	CFS 1,999

NOTES: ADD DEAD STORAGE OF 12,612 ACRE-FT TO GET TOTAL STORAGE
SUBTRACT INACTIVE STORAGE OF 659,900 ACRE-FT TO GET ACTIVE STORAGE
LIVE STORAGE VALUES MAY DIFFER SLIGHTLY FROM PUBLISHED TABLES
NWS ELEV = 6085 FT, CONTENT = 1695900 ACFT

Inter-Mountain
Laboratories, Inc.

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,

Ron R Richardson

Ron R. Richardson
Lab Director

enclosures:

Inter-Mountain
Laboratories, Inc.

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
Cadimum	-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

Inter-Mountain
Laboratories, Inc.

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
Cadimum	-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

Inter-Mountain
Laboratories, Inc.

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
Cadimum	-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

Inter·Mountain
Laboratories, Inc.

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

Inter-Mountain
Laboratories, Inc.

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

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 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

Inter-Mountain
Laboratories, Inc.

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 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

Bloomfield Refining Company
A Gary Energy Corporation Subsidiary

RECEIVED
JUL - 1 1987
OIL CONSERVATION DIVISION
SANTA FE

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

National 45-706 Side-Ease 45-706 Desk Suit Made in USA

BLOOMFIELD REFINING COMPANY

SAMPLE DATE: May 28, 19[illegible]7

	PARAMETER	UNITS	NOMINAL DETECTION LIMITS	NMWQ STANDARD	MONITORING WELL P1	MONITORING WELL P4	MONITORING WELL P5
1							
2	Arsenic	mg/l	0.05	0.1	<0.05	<0.05	<0.05
3	Barium	"	1.0	1.0	<1.0	9.88	<1.0
4	Cadmium	"	0.01	0.01	0.023	0.018	0.026
5	Chromium	"	0.05	0.05	<0.05	<0.05	<0.05
6	Lead	"	0.05	0.05	0.20	0.14	0.20
7	Mercury	"	0.002	0.002	<0.002	<0.002	<0.002
8	Seknium	"	0.01	0.05	0.10	0.08	0.14
9	Silver	"	0.05	0.05	<0.05	<0.05	<0.05
10	Copper	"	0.01	1.0	0.013	0.010	<0.01
11	Iron	"	0.04	1.0	0.14	0.17	0.19
12	Manganese	"	0.01	0.2	1.51	5.29	0.09
13	Zinc	"	0.004	10.0	0.024	0.022	0.024
14	Uranium	"	—	5.0	—	—	—
15	Chloride	"	0.1	250.	794	635.	1112.
16	Sulfate	"	1.0	600.	827.6	4.8	772.4
17	PCB	"	—	0.001	—	—	—
18	Phenols	"	0.01	0.005	0.123	0.278	0.334
19	Cyanide	"	0.005	0.2	0.0056	<0.005	<0.005
20	Nitrate as N	"	0.01	10.	12.9	0.035	27.01
21	Aluminum	"	0.1	5.	<0.1	<0.1	<0.1
22	Boron	"	0.1	0.75	0.70	0.97	0.24
23	Cobolt	"	0.01	0.05	0.07	0.04	0.06
24	Molybdenum	"	0.05	1.0	0.79	0.13	<0.05
25	Nickel	"	0.06	0.2	0.12	0.12	0.25
26	Fluoride	"	0.01	1.6	0.0353	<0.01	0.0156
27	TDS	"	1	1000.	3272.	2038.	3902.
28	Benzene	"	0.001	0.01	<0.001	10.7	<0.001
29	Toluene	"	0.001	0.75	<0.001	0.71	<0.001
30	Carbon Tetrachloride	"	0.08	0.01	<0.08	<0.08	<0.08
31	1,2-Dichloroethane	"	0.001	0.01	<0.001	<0.001	0.72
32	1,1-Dichloroethylene	"	0.001	0.005	<0.001	<0.001	<0.001
33	1,1,2,2-Tetrachloroethylene	"	0.001	0.02	<0.001	<0.001	<0.001
34	1,1,2-Trichloroethylene	"	0.001	0.01	<0.001	<0.001	<0.001
35	pH	S.U.	0.1	6 TO 9	—	—	—
36							
37							
38							
39							
40							

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
SO4	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 3 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
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

7300 Jefferson, N.E. • Albuquerque, New Mexico 87109 • (505) 345-8964

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

7300 Jefferson, N.E. • Albuquerque, New Mexico 87109 • (505) 345-8964

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
SO4	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 3 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
CCl4	<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

7300 Jefferson, N.E. • Albuquerque, New Mexico 87109 • (505) 345-8964

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

GROUNDWATER SAMPLING

DATE	TIME	MW NO	WATER LEVEL	TOTAL DEPTH	FT. OF H2O	GALS. H2O	BAILS R'Q'D	ACT. 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 x h = gal
radius of wells 10 & 9 = 0.25' ; 1.468 x h = gal

5/27/87		8	29.17	34.87	NOT BAILED
"		7	24.47	-	"

GROUNDWATER ELEVATIONS

	DATE	MW-7	MW-8	MW-9	MW-10	HAMMOND AT SALMON	HAMMOND AT WALKWAY
	T.O.P. →	5524.09	5531.12	5529.70	5526.86	5504.32	5502.95
	3/ /86	5498.02	5501.95	5498.15	5497.65	–	–
SAMPLE	3/26/86	5498.02	5501.97	5498.20	5497.66	–	–
DIKE REMOVED	4/ 4/86	5498.77	5501.86	5498.22	5497.60	5496.50	5498.24
	4/18/86	5497.92	5501.82	5497.90	5497.69	–	5496.85
WATER ON 4/21	5/ 5/86	5497.28	5501.79	5498.62	5497.83	5498.08	5499.03
	5/21/86	5498.86	5501.83	5499.00	5498.05	5498.25	5499.42
	6/ 4/86	5498.85	5501.89	5499.17	5498.15	5498.23	5499.63
SAMPLE	6/23/86	–	5502.04	5499.47	5498.11	–	–
	7/ 8/86	5497.87	5502.22	5499.50	5498.17	5497.89	5499.95
	8/ 4/86	5498.77	5502.12	5499.40	5498.37	5497.84	5499.67
	9/ 2/86	5498.95	5502.21	5499.55	5498.53	5498.24	5500.15
SAMPLE	9/18/86	–	5502.12	5499.57	5498.75	–	–
	10/ 8/86	5498.96	5501.97	5499.42	5498.69	5497.00	5498.93
WATER OFF 10/15	11/ 7/86	5499.26	5501.90	5499.56	5499.05	5497.00	5498.83
DIKED	12/ 8/86	5499.40	5502.10	5499.14	5499.28	5498.72	5498.73
SAMPLE	12/16/86	5499.41	5502.10	5499.15	5499.30	–	–
	1/27/87	5499.29	5501.85	5498.98	5499.09	5498.59	5498.60
REMOVE DIKES 4/3/87 IRRIGATION 4/13/87	4/ 2/87	5499.59	5502.12	5498.92	5499.33	5498.55	5498.55
	4/23/87	5499.55	5502.03	5498.29	5499.07	5497.55	5497.92
	5/27/87	5499.62	5501.95	5498.73	5499.04	5498.09	5498.61

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BUDINE ... REFINING COMPANY
FLOWING WELL ELEVATIONS

	DATE	T.O.P. →	MW-1 5513.77	MW-2 5511.45	MW-3 5535.85	MW-4 5524.30	MW-5 5545.10	MW-6 5551.23
	2/24/84		5498.91	5500.44	5501.74	5499.46	5502.26	DRY
	2/[illegible]/85		5499.07	5500.55	5502.15	5499.30	5502.75	DRY
	3/[illegible]/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	
	6/17/85		5499.80	5500.99	5502.63	5499.80	5503.40	
	6/[illegible]/85		5499.94	5500.98	5502.49	5499.73	5503.24	
	7/[illegible]/85		5500.20	5500.99	5502.45	5499.30	5503.30	
	9/2/85		5501.00	5501.25	5502.43	5499.78	5503.67	
	9/17/85		5500.34	5501.05	5502.25	5499.60	5503.00	
WATER OFF	10/[illegible]/85		5500.03	5500.87	5502.42	5499.70	5503.30	
	10/24/85		5499.23	5500.43	5502.28	5499.54	5503.10	
	11/8/85		5498.72	5500.05	5502.20	5499.60	5503.[illegible]	
	12/17/85		5498.35	5499.85	5501.85	5499.40	5502.30	↓
	1/8/86		5498.59	5500.08	5501.[illegible]	5499.35	5502.77	DRY
	1/24/86		5498.75	5500.22	5502.04	5499.[illegible]	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.[illegible]	5504.23	"
SAMPLE	3/26/86		5499.07	5500.65	5502.91	5499.31	5504.24	"
	4/4/86		5499.07	5500.57	5502.98	5499.21	5504.57	"
DIKE REMOVED 4/5 WATER ON 4/4	4/18/86		5498.85	5500.43	5502.98	5499.42	5504.42	"
	5/5/86		5499.43	5500.57	5502.92	5499.32	5504.27	"
	5/21/86		5500.05	5500.82	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	5499.78	5503.58	"
SAMPLE	9/18/86		5500.03	5501.22	5502.77	5499.98	5503.52	"
	10/8/86		5499.83	5501.07	5502.68	5500.13	5503.46	"
WATER OFF 10/15	11/7/86		5499.45	5500.82	5502.72	5500.19	5503.43	"
DRILL	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
	4/2/87		5499.76	5501.20	5502.86	5500.37	5503.77	"
REMOVE DIKES 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	"

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45-708 20/20 Buff
Made in USA

BLOOMFIELD REFINING COMPANY
GROUNDWATER ELEVATIONS

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 AT 5501.63	5499.29
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		

National 45-608 Eye-Ease 45-708 20-20 Buff Made in USA

BLOOMFIELD REFINING COMPANY
GROUNDWATER ELEVATIONS

1	2	3	4	5	6	7	8
MW-8	MW-9	RW-3 MW-10	MW-11	MW-12	HAMMOND AT SULLIVAN	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
			INSTALLED 8/1/87 ±				
5501.65	5499.16	5498.66	5497.10	5489.03	5497.75	5499.13	10/8/87
			DITCH WATER OFF 10/16/87, DIKED 10/26/87				
-	-	5498.46	5496.95	5488.94	5497.45	-	10/27/87
-	-	-	-	-	-	-	11/17/87
-	-	-	5497.43	5490.57	-	-	6/3/88

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

National 45-506 Pen-Stripe 45-706

BLOOMFIELD REFINING COMPANY
SAMPLE DATE: DEC. 18, 1986

PARAMETER	UNITS	NOMINAL DETECTION LIMITS	NMWQ STANDARD	MONITORING WELL P1	MONITORING WELL P4	MONITORING WELL P5
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	"	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
1,1,2,2-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	7.28

BLOOMFIELD REFINING COMPANY
GROUNDWATER ELEVATIONS

	DATE	T.O.P. →	MW-1 5515.77	MW-2 5519.45	MW-3 5535.85	MW-4 5524.30	MW-5 5545.10	MW-6 5551.23
	2/24/84		5498.91	5500.44	5501.74	5499.46	5502.26	DRY
	2/28/85		5499.07	5500.55	5502.15	5499.30	5502.75	DRY
	3/18/85		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	5502.48	5499.80	5503.30	"
	9/2/85		5501.00	5501.25	5502.48	5499.73	5503.37	"
	9/17/85		5500.34	5501.05	5502.25	5499.80	5503.00	"
	10/9/85		5500.03	5500.87	5502.42	5499.70	5503.30	"
WATER OFF	10/24/85		5499.23	5500.43	5502.28	5499.54	5503.10	"
	11/8/85		5498.72	5500.05	5502.20	5499.60	5503.09	"
	12/17/85		5498.35	5499.85	5501.85	5499.40	5502.90	"
	1/8/86		5498.59	5500.08	5501.85	5499.35	5502.77	DRY
	1/24/86		5498.75	5500.22	5502.04	5499.36	5502.76	"
	2/20/86		5498.93	5500.62	5502.43	5499.35	5503.30	"
	3/21/86		5499.10	5500.65	5502.89	5499.30	5504.23	"
SAMPLE	3/26/86		5499.07	5500.65	5502.91	5499.31	5504.24	"
	4/4/86		5499.07	5500.57	5502.98	5499.21	5504.57	"
DIKE REMOVED 4/15	4/18/86		5498.85	5500.43	5502.98	5499.42	5504.42	"
WATER ON 4/24	5/5/86		5499.43	5500.57	5502.92	5499.32	5504.27	"
	5/21/86		5500.05	5500.82	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	"
	10/8/86		5499.83	5501.07	5502.68	5500.13	5503.46	"
WATER OFF 10/15	11/7/86		5499.45	5500.82	5502.72	5500.19	5503.48	"
	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	"

© WILSON JONES COMPANY G7506 GREEN MADE IN U.S.A.

Bloomfield Refining Company
A Gary Energy Corporation Subsidiary

December 8, 1986

DEC - 9 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

National Brand 45-606 Eye-Ease 45-706 20/20 Buff Made in USA

BLOOMFIELD REFINING COMPANY
SAMPLE DATE: SEP. 18, 1986

	1	2	3	4	5	6
PARAMETER	UNITS	NOMINAL DETECTION LIMITS	NM WQ STANDARD	MONITORING WELL P1	MONITORING WELL P4	MONITORING WELL P5
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	—
1,1,2,2-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

	DATE	MW-1 5515.77	MW-2 5519.45	MW-3 5535.85	MW-4 5524.30	MW-5 5545.10	MW-6 5551.23
	2/24/84	5498.91	5500.44	5501.74	5499.46	5502.26	DRY
	2/28/85	5499.07	5500.55	5502.15	5499.30	5502.75	DRY
	3/18/85	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	5500.87	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	
	7/10/85	5500.20	5500.99	5502.48	5499.80	5503.30	
	8/2/85	5501.00	5501.25	5502.48	5499.78	5503.37	
	9/17/85	5500.34	5501.05	5502.25	5499.80	5503.00	
	10/9/85	5500.08	5500.87	5502.42	5499.70	5503.30	
WATER OFF	10/24/85	5499.23	5500.43	5502.28	5499.54	5503.10	
	11/8/85	5498.72	5500.05	5502.20	5499.60	5503.09	
	12/17/85	5498.35	5499.85	5501.85	5499.40	5502.90	"
	1/8/86	5498.59	5500.08	5501.85	5499.35	5502.77	DRY
	1/24/86	5498.75	5500.22	5502.04	5499.36	5502.76	"
	2/20/86	5498.93	5500.62	5502.43	5499.35	5503.30	"
	3/21/86	5499.10	5500.65	5502.89	5499.30	5504.23	"
SAMPLE	3/26/86	5499.07	5500.65	5502.91	5499.31	5504.24	"
	4/4/86	5499.07	5500.57	5502.98	5499.21	5504.57	"
DIKE REMOVED 4/15	4/18/86	5498.85	5500.43	5502.98	5499.42	5504.42	"
WATER ON 4/21	5/5/86	5499.43	5500.57	5502.92	5499.32	5504.27	"
	5/21/86	5500.05	5500.82	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	5499.78	5503.58	"
SAMPLE	9/18/86	5500.03	5501.22	5502.77	5499.98	5503.52	"
	10/8/86	5499.83	5501.07	5502.68	5500.13	5503.46	"
WATER OFF 10/15	11/7/86	5499.45	5500.82	5502.72	5500.19	5503.48	"

© WILSON JONES COMPANY G7506 GREEN MADE IN U.S.A.

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

	Units	Nominal Detection Limits	NMWQ Standard	Monitoring Well P1	Monitoring Well P4	Monitoring Well P5
Arsenic	mg/L	0.05	0.1	0.077	0.070	0.087
Barium	"	0.01	1.0	BDL	3.54	BDL
Cadium	"	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
Cobolt	"	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	S.U.	0.01	6 TO 9	7.25	6.85	7.18

BDL = Below Detection Limit

ND = Not Detected

BLOOMFIELD REFINING COMPANY
GROUNDWATER ELEVATIONS

	DATE	MW-1 5515.77	MW-2 5519.45	MW-3 5535.85	MW-4 5524.30	MW-5 5545.10	MW-6 5551.23
	2/24/84	5498.91	5500.44	5501.74	5499.46	5502.26	DRY
	2/28/85	5499.07	5500.55	5502.15	5499.30	5502.75	DRY
	3/18/85	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	
	7/10/85	5500.20	5500.99	5502.48	5499.80	5503.30	
	8/2/85	5501.00	5501.25	5502.48	5499.78	5503.37	
	9/17/85	5500.34	5501.05	5502.25	5499.80	5503.00	
	10/9/85	5500.08	5500.87	5502.42	5499.70	5503.30	
WATER OFF	10/24/85	5499.23	5500.43	5502.28	5499.54	5503.10	
	11/8/85	5498.72	5500.05	5502.20	5499.60	5503.09	
	12/17/85	5498.35	5499.85	5501.85	5499.40	5502.90	"
	1/8/86	5498.59	5500.08	5501.85	5499.35	5502.77	DRY
	1/24/86	5498.75	5500.22	5502.04	5499.36	5502.76	"
	2/20/86	5498.93	5500.62	5502.43	5499.35	5503.30	"
	3/21/86	5499.10	5500.65	5502.89	5499.30	5504.23	"
	3/26/86	5499.07	5500.65	5502.91	5499.31	5504.24	"
	4/4/86	5499.07	5500.57	5502.98	5499.21	5504.57	"
DIKE REMOVED 4/15	4/18/86	5498.85	5500.43	5502.98	5499.42	5504.42	"
WATER ON 4/21	5/5/86	5499.43	5500.57	5502.92	5499.32	5504.27	"
	5/21/86	5500.05	5500.82	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	

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 CH 6/23/86
pH 7.25
Conductivity 4600

7300 Jefferson, N.E. • Albuquerque, New Mexico 87109 • (505) 345-8964

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 4	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 CH 6/23/86

pH 7.17

Conductivity 5400

7300 Jefferson, N.E. • Albuquerque, New Mexico 87109 • (505) 345-8964

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
Cl	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 Cli 6/23/86

pH 7.10

Conductivity 6900

7300 Jefferson, N.E. • Albuquerque, New Mexico 87109 • (505) 345-8964

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 4	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
Volatiles	
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 Clt 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-chlroroethyl)ether	ND
Bis(2-chloroisopropyl)ether	ND
Bis(2-ethylhexyl)phthalate	ND
4-Bromophenyl phenyl ether	ND
Butylbenzyl phthalate	ND
2-Chloronapthalene	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 3 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 CA 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 8100

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-chlroroethyl)ether	ND
Bis(2-chloroisopropyl)ether	ND
Bis(2-ethylhexyl)phthalate	ND
4-Bromophenyl phenyl ether	ND
Butylbenzyl phthalate	ND
2-Chloronapthalene	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
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 - 8

ANALYTE	ANALYTICAL RESULTS
CN	<0.01 mg/l
TDS	2910 mg/l
Cl	839.7 mg/l
SO 4	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
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 CLT 6/23/86

pH 7.26
Conductivity 4400

7300 Jefferson, N.E. • Albuquerque, New Mexico 87109 • (505) 345-8964

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-chlroroethyl)ether	ND
Bis(2-chloroisopropyl)ether	ND
Bis(2-ethylhexyl)phthalate	ND
4-Bromophenyl phenyl ether	ND
Butylbenzyl phthalate	ND
2-Chloronapthalene	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
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 - 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 CAT 6/24/86

pH 6.98

Conductivity 2500

7300 Jefferson, N.E. • Albuquerque, New Mexico 87109 • (505) 345-8964

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-chlroroethyl)ether	ND
Bis(2-chloroisopropyl)ether	ND
Bis(2-ethylhexyl)phthalate	ND
4-Bromophenyl phenyl ether	ND
Butylbenzyl phthalate	ND
2-Chloronapthalene	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 4	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 CH 6/24/86

pH 7.08

Conductivity 4400

7300 Jefferson, N.E. • Albuquerque, New Mexico 87109 • (505) 345-8964

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-chlroroethyl)ether	ND
Bis(2-chloroisopropyl)ether	ND
Bis(2-ethylhexyl)phthalate	ND
4-Bromophenyl phenyl ether	ND
Butylbenzyl phthalate	ND
2-Chloronapthalene	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
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

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 Evaluting 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

Bloomfield Refining Company
A Gary Energy Corporation Subsidiary

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,

David J. Younggren
Vice President Finance
and Administration

enclosures

DJY:dam

115 Inverness Drive East • Englewood, Colorado 80112-5116 • 303/799-3800 • TWX 910-935-0791

ASSAIGAI ANALYTICAL LABORATORIES

HAMMOND DITCH

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

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

ANALYTE	SAMPLE ID/ ANALYTICAL RESULTS	
	HSRD 5	HAPI 5
Methyl Bromide	ND	ND
Methyl Chloride	ND	ND
Methylene Chloride	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND
Tetrachloroethylene	ND	ND
Toluene	0.003 mg/l	Nd
1,2-Transdichloroethylne	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-chloronaphtalene	ND	ND
4-chlorophenyl phenyl ether	ND	ND
Chrysene	0.005 mg/l	ND

TO: Bloomfield Refinery

0660 completed

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-nitrosodie-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

ASSAIGAI 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	D4
	NEAR API WASTE PONDS	NEAR SULLIVAN ROAD
Phenols	0.003 mg/l	0.002 mg/l
	U6A	D6A
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		
Acenapthene	ND	ND
Acenphthylene	ND	ND
Anthracene	ND	ND
Benzidine	ND	ND

TO: Bloomfield Refinery

0695

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-chloronaphtalene	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

NOMINAL DETECTION LIMITS

Phenols	0.002 mg/l
Benzene	0.001 mg/l
Toluene	0.001 mg/l

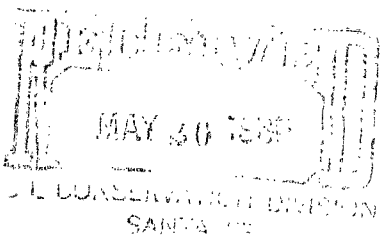
Detection limits for Volatiles, and Base/Neutrals are all 0.001 mg/l.

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

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
Environmental Engineer

CH/jm

Enclosure

Cc: Richard Traylor
Mike Macy
Dave Younggren
George Gerson

Bloomfield Refining Company

SAMPLE DATE: 3/26/86; LABORATORY: ASSAIGAI

	Parameter	Units	NMWQ standard	Nominal Detection Limits	Monitoring Well P1	Monitoring Well P4	Monitoring Well P5
2	Arsenic	mg/l	0.1	0.050	<0.050	<0.050	<0.050
3	Barium	"	1.0	—	—	—	—
4	Cadmium	"	0.01	0.002	0.050	0.060	0.10
5	Chromium	"	0.05	0.050	<0.050	<0.050	<0.050
6	Lead	"	0.05	0.001	0.085	0.074	0.16
7	Mercury	"	0.002	0.002	<0.002	0.002	<0.002
8	Selenium	"	0.05	0.010	<0.010	<0.010	<0.010
9	Silver	"	0.05	0.050	<0.050	<0.050	<0.050
10	Copper	"	1.0	0.03	<0.03	<0.03	<0.03
11	Iron	"	1.0	—	—	—	—
12	Manganese	"	0.2	—	—	—	—
13	Zinc	"	10.0	0.01	<0.01	0.012	0.012
14	Uranium	"	5.0	—	—	—	—
15	Chloride	"	250.	1	750.	500.	1100.
16	Sulfate	"	600.	1	7.5	0.3	14.
17	PCB	"	0.001	—	—	—	—
18	Phenols	"	0.005	0.001	0.009	0.633	0.006
19	Cyanide	"	0.2	0.01	<0.01	<0.01	<0.01
20	Nitrate as N	"	10.0	—	—	—	—
21	Aluminum	"	5.0	—	—	—	—
22	Boron	"	0.75	—	—	—	—
23	Cobalt	"	0.05	—	—	—	—
24	Molybdenum	"	1.0	—	—	—	—
25	Nickel	"	0.2	0.01	0.08	0.08	0.10
26	Fluoride	"	1.6	—	—	—	—
27	TDS	"	1000.	1	2936.	1868.	3840.
28	Benzene	"	0.01	0.001	ND	11.8	ND
29	Toluene	"	0.75	0.001	ND	7.5	ND
30	Carbon Tetrachloride	"	0.01	0.001	—	ND	—
31	1,2-Dichloroethane	"	0.01	0.001	—	ND	—
32	1,1-Dichloroethylene	"	0.005	0.001	—	ND	—
33	1,1,2,2-Tetrachloroethylene	"	0.02	0.001	—	ND	—
34	1,1,2-Trichloroethylene	"	0.1	0.001	—	ND	—
35	pH	S.U.	6 To 9	±0.01	7.30	6.84	7.23

© WILSON JONES COMPANY G7506 GREEN

MADE IN U.S.A.

BLOOMFIELD REFINING COMPANY
GROUNDWATER ELEVATIONS

	DATE	MW-1 5515.77	MW-2 5519.45	MW-3 5535.85	MW-4 5524.30	MW-5 5545.10	MW-6 5551.23
	2/24/84	5498.91	5500.44	5501.74	5499.46	5502.26	DRY
	2/28/85	5499.07	5500.55	5502.15	5499.30	5502.75	DRY
	3/18/85	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	
	7/10/85	5500.20	5500.99	5502.48	5499.80	5503.30	
	8/ 2/85	5501.00	5501.25	5502.48	5499.78	5503.37	
	9/17/85	5500.34	5501.05	5502.25	5499.80	5503.00	
	10/ 9/85	5500.08	5500.87	5502.42	5499.70	5503.30	
WATER OFF	10/24/85	5499.23	5500.43	5502.28	5499.54	5503.10	
	11/ 8/85	5498.72	5500.05	5502.20	5499.60	5503.09	
	12/17/85	5498.35	5499.85	5501.85	5499.40	5502.90	▽
	1/ 8/86	5498.59	5500.08	5501.85	5499.35	5502.77	DRY
	1/24/86	5498.75	5500.22	5502.04	5499.36	5502.76	"
	2/20/86	5498.93	5500.62	5502.43	5499.35	5503.30	"
	3/21/86	5499.10	5500.65	5502.89	5499.30	5504.23	"
	3/26/86	5499.07	5500.65	5502.91	5499.31	5504.24	"
	4/ 4/86	5499.07	5500.57	5502.98	5499.21	5504.57	"
DIKE REMOVED 4/15	4/18/86	5498.85	5500.43	5502.98	5499.42	5504.42	"
WATER ON 4/24	5/ 5/86	5499.43	5500.57	5502.92	5499.32	5504.27	"

© WILSON JONES COMPANY G7506 GREEN MADE IN U.S.A.

ASSAIGAI
ANALYTICAL
LABORATORIES

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

DATE: 14 May 1986
0502

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

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 4	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

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-Transdichloroethylne	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-chloronaphtalene	ND		ND
4-chlorophenyl phenyl ether	ND		ND
Chrysene	ND		ND

TO: Bloomfield Refinery

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

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

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-Transdichloroethylne	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-benzofluoranthene	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-chloronaphtalene	ND	ND	ND
4-chlorophenyl phenyl ether	ND	ND	ND
Chrysene	ND	ND	ND

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.

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

Bloomfield Refining Company
A Gary Energy Corporation Subsidiary

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,

Chris Hawley
Environmental Engineer

CH/jm

Enclosures

Cc: Richard Traylor
Dave Younggren

ASSAIGAI ANALYTICAL LABORATORIES

SAMPLE DATE: 8 NOV 85

TO: Bloomfield Refinery Co.
P.O. Box 159
Bloomfield, NM 87413

DATE: 6 December 1985
1641

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 4	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 3 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

1641

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 4	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 3 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

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 4	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 3 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

GROUNDWATER ELEVATIONS

DATE	BENCH-MARK →	MW-1 5515.64	MW-2 5519.38	MW-3 5535.74	MW-4 5524.30	MW-5 5545.01	MW-6 5555.13
2/24/84	–	5498.78	5500.37	5501.63	5499.46	5502.17	DRY
2/28/85	–	5498.94	*5500.48	5502.04	5499.30	5502.66	DRY
3/18/85	–	5499.01	5500.75	5502.44	5499.32	5503.41	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

22-608 AMPAD

WELL DEPTH DATA

1	2	3	4	5	6	7	8
		5515.64	5519.38	5535.74	5524.30	5545.01	5555.13
DATE	FROM RIM	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. (FT3)	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	—	14.77	18.20	33.37	24.52	41.73	DRY
9/17/85	—	15.43	18.40	33.60	24.50	42.10	DRY
10/9/85	—	15.69	18.58	33.43	24.60	41.80	DRY
10/24/85	—	16.54	19.02	33.57	24.76	42.0	DRY
11/8/85	—	17.05	19.4	33.65	24.70	42.01	DRY
12/17/85	—	17.42	19.60	34.00	24.90	42.20	DRY

22-608 AMPAD

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

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
SO4	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
NO3 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

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

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
SO4	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
NO3 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

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

Jennifer V. Smith, Ph.D.
Laboratory Director

MW-1

	STD	PARAMETER	UNITS	1st Qtr September 1984	2nd Qtr December 1984	3rd Qtr March 1985	4th Qtr June 1985
				1	2	DEC 13, 984 3	MARCH 21, 1985 4	JULY 10, 1985 5
1	0.1	Arsenic	mg/l	ND	0.054	0.010	ND
2	1.0	Barium		1.0	ND	ND	ND
3	0.01	Cadmium		0.014	ND	0.027	ND
4	0.05	Chromium		ND	0.070	ND	ND
5	0.05	Lead		0.125	0.18	0.040	ND
6	0.002	Mercury		ND	ND	ND	ND
7	0.05	Selenium		0.35	0.120	0.022	0.026
8	0.05	Silver		ND	ND	0.024	ND
*	1.0	Copper		0.10	0.11	ND	ND
*	1.0	Iron		57.0	128.0	0.07	ND
*	0.2	Manganese		1.70	1.05	0.50	0.52
*	10.0	Zinc		0.30	0.36	0.08	ND
13	5.0	Uranium		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
*	600.0	Sulfate	mg/l	825.0	700.0	855.0	882.0
17	0.001	PCB	ppm	ND	ND	ND	ND
*	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		ND	ND	ND	ND
21	10.0	Nitrate as N		7.2	ND	0.3	15.4
** 22	5.0	Aluminum		2.0	3.68	ND	ND
* 23	0.75	Boron		ND	0.25	0.69	0.13
* 24	0.05	Cobolt		0.08	0.20	0.32	ND
** 25	1.0	Molybdenum		ND	ND	0.41	0.28
* 26	0.2	Nickel		0.3	ND	0.13	ND
27	1.6	Fluoride		0.284	0.56	0.657	0.65
*	1000.0	TDS		3582.0	3512.0	3726.0	3246.0
29	0.01	Benzene		ND	0.015	ND	ND
30	15.0	Toluene		ND	ND	ND	ND
31	0.01	Carbon Tetrachloride		ND	ND	ND	ND
32	0.02	1,2-Dichloroethane		ND	ND	ND	ND
33	0.005	1,1-Dichloroethylene		ND	ND	ND	ND
34	0.02	1,1,2,2-Tetrachloroethylene		ND	ND	ND	ND
35	0.1	1,1,2-Trichloroethylene		ND	ND	ND	ND
36		DEPTH TO STATIC WATER (Rim)	FT	—	17' 7"	16.63'	15.57'
37		DEPTH OF WELL FROM RIM	FT	—	24' 5"		
38		STICKUP	FT	—	1' 10"		
39		ND = < NOMINAL DETECTION LIMITS					
40							

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MW-4

DEC 13, 1984 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	0.118	0.005	ND	1
2	1.0	Barium ✓		4.0	7.0	2.5	ND	2
3	0.01	Cadmium		ND	ND	ND	ND	3
4	0.05	Chromium ✓		0.10	0.28	ND	ND	4
5	0.05	Lead ✓		0.088	0.22	0.015	ND	5
6	0.002	Mercury		ND	ND	ND	ND	6
7	0.05	Selenium ✓		0.40	0.42	0.008	0.026	7
8	0.05	Silver		ND	ND	0.004	ND	8
*9	1.0	Copper		0.03	0.35	ND	ND	9
*10	1.0	Iron		43.7	132.0	6.8	12.0	10
*11	0.2	Manganese		7.8	25.4	5.2	5.0	11
*12	10.0	Zinc		0.18	0.38	0.03	ND	12
13	5.0	Uranium		ND	ND	ND	ND	13
14	30.0	Radium 226 & 228	pCi/l	ND	ND	—	—	14
*15	250.0	Chloride	mg/l	410.0	481.0	466.0	556.0	15
*16	600.0	Sulfate	mg/l	10.0	4.0	9.0	3.0	16
17	0.001	PCB	ppm	ND	ND	ND	ND	17
*	6-9	pH	s.u.	7.1	6.9	7.01	7.4	18
*	0.005	Phenols ✓	mg/l	0.55	0.120	0.005	0.08	19
20	0.2	Cyanide		ND	ND	ND	ND	20
21	10.0	Nitrate as N		0.02	ND	ND	ND	21
**22	5.0	Aluminum		ND	4.49	ND	ND	22
**23	0.75	Boron		ND	0.32	0.89	0.05	23
**24	0.05	Cobalt ✓		ND	0.15	0.14	ND	24
**25	1.0	Molybdenum		ND	ND	0.18	ND	25
**26	0.2	Nickel		0.2	ND	0.16	ND	26
27	1.6	Fluoride		0.597	0.29	0.254	0.23	27
*	1000.0	TDS		1860.0	2408.0	1860.0	2004.0	28
29	0.01	Benzene ✓		0.419	3.64	14.81	8.64	29
30	15.0	Toluene		0.296	4.47	1.92	1.74	30
31	0.01	Carbon Tetrachloride		ND	ND	ND	ND	31
32	0.02	1,2-Dichloroethane		ND	ND	ND	ND	32
33	0.005	1,1-Dichloroethylene		ND	ND	ND	ND	33
34	0.02	1,1,2,2-Tetrachloroethylene		ND	ND	ND	ND	34
35	0.1	1,1,2-Trichloroethylene		ND	ND	ND	ND	35
36		DEPTH TO STATIC WATER FROM RIM	FT	—	24'5"	24.98'	24.50	36
37		DEPTH OF WELL FROM RIM	FT	—	31'2"			37
38		STICKUP			19"			38
39		ND = < NOMINAL DETECTION LIMITS						39
40								40

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MADE IN U.S.A.

MW-5

	STD	PARAMETER	UNITS	1ST Qtr September 1984	2nd Qtr December 1984	3rd Qtr March 1985 (MAR 21 1985)	4th Qtr June 1985 (JUN 10 1985)
1	0.1	Arsenic	mg/l			0.011	ND
2	1.0	Barium				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	Cobalt				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	1,1,2,2-Tetrachloroethylene				ND	ND
35	0.1	1,1,2-Trichloroethylene				ND	ND
36		DEPTH TO STATIC WATER				41.60	41.80
37							
38							
39							
40							

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GROUNDWATER ELEVATIONS

DATE	BENCH-MARK →	MW-1 5515.64	MW-2 5519.38	MW-3 5535.74	MW-4 5524.30	MW-5 5545.01	MW-6 5555.13
2/24/84	–	5498.78	5500.37	5501.63	5499.46	5502.17	DRY
2/28/85	–	5498.94	5500.48	5502.04	5499.30	5502.66	DRY
3/18/85	–	5499.01	5500.75	5502.44	5499.32	5503.41	DRY
4/11/85	–	5498.86	5500.55	5502.62	5499.30	5503.58	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

22-608 AMPAD

Bloomfield Refining Company
A Gary Energy Corporation Subsidiary

RECEIVED
APR 17 1985
OIL CONSERVATION DIVISION
SANTA FE

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 µg 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

F.W. LISCOM

TO: Bloomfield Refinery Co.
Attn: Chris Hawley
P.O. BOX 159
Bllomfield 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_4	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_3 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.

ANALYTE	SAMPLE ID/ ANALYTICAL RESULTS	NOMINAL 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_4	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_3 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

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 5515.64	MW-2 5519.38	MW-3 5535.74	MW-4 5524.30	MW-5 5545.01	MW-6 5555.13
2/24/84	–	5498.78	5500.37	5501.63	5499.46	5502.17	DRY
2/28/85	–	5498.94	5500.48	5502.04	5499.30	5502.66	DRY
3/18/85	–	5499.01	5500.75	5502.44	5499.32	5503.41	DRY
4/11/85	–	5498.86	5500.55	5502.62	5499.30	5503.58	DRY

22-608 AMPAD

WELL DEPTH DATA

DATE	FROM RIM	5515.64 MW-1	5519.38 MW-2	5535.74 MW-3	5524.30 MW-4	5545.01 MW-5	5555.13 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. (FT3)	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

RECEIVED
JAN 28 1985
OIL CONSERVATION DIVISION
SANTA FE

January 23, 1985

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

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_4	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_3 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 Tetrchloride	<0.01 mg/l	<0.01 mg/l
1,2-Dichloroehtane	<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

7300 Jefferson, N.E. • Albuquerque, New Mexico 87109 • (505) 345-8964

TO: Bloomfield Refinery

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_4	1.0 mg/l
PCB	0.01 ppm
pH	0.01
Phenols	0.01 mg/l
CN	0.01 mg/l
NO_3 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 Tetrchloride	0.01 mg/l
1,2-Dichloroehtane	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

1ST Qtr - September, 1984

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

DATE: 9 January 1985
0952 Revised

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_4	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_3 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 Tetrchloride	<0.01 mg/l	<0.01 mg/l
1,2-Dichloroehtane	<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

7300 Jefferson, N.E. • Albuquerque, New Mexico 87109 • (505) 345-8964

TO: Bloomfield Refinery

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_4	1.0 mg/l
PCB	0.01 ppm
pH	0.01
Phenols	0.01 mg/l
CN	0.01 mg/l
NO_3 as N	0.1 mg/l
Al^3	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 Tetrchloride	0.01 mg/l
1,2-Dichloroehtane	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

RECEIVED
DEC - 6 1984
OIL CONSERVATION DIVISION
SANTA FE

December 3, 1984

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

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

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_4	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_3 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-Tetrachloroehtylene	<0.02 mg/l	<0.02 mg/l
1,1,2-Trichloroethylene	<0.1 mg/l	<0.1 mg/l

→7300 Jefferson, N.E. → Albuquerque, New Mexico 87109 →

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_4	1.0 mg/l
PCB	0.01 mg/l
pH	0.01
Phenols	0.01 mg/l
CN	0.01 mg/l
NO_3 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-Tetrachloroehtylene	0.02 mg/l
1,1,2-Trichloroethylene	0.1 mg/l

REFERENCES: 1."Standard Methods for the Examination of the Water and Wastewater", 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

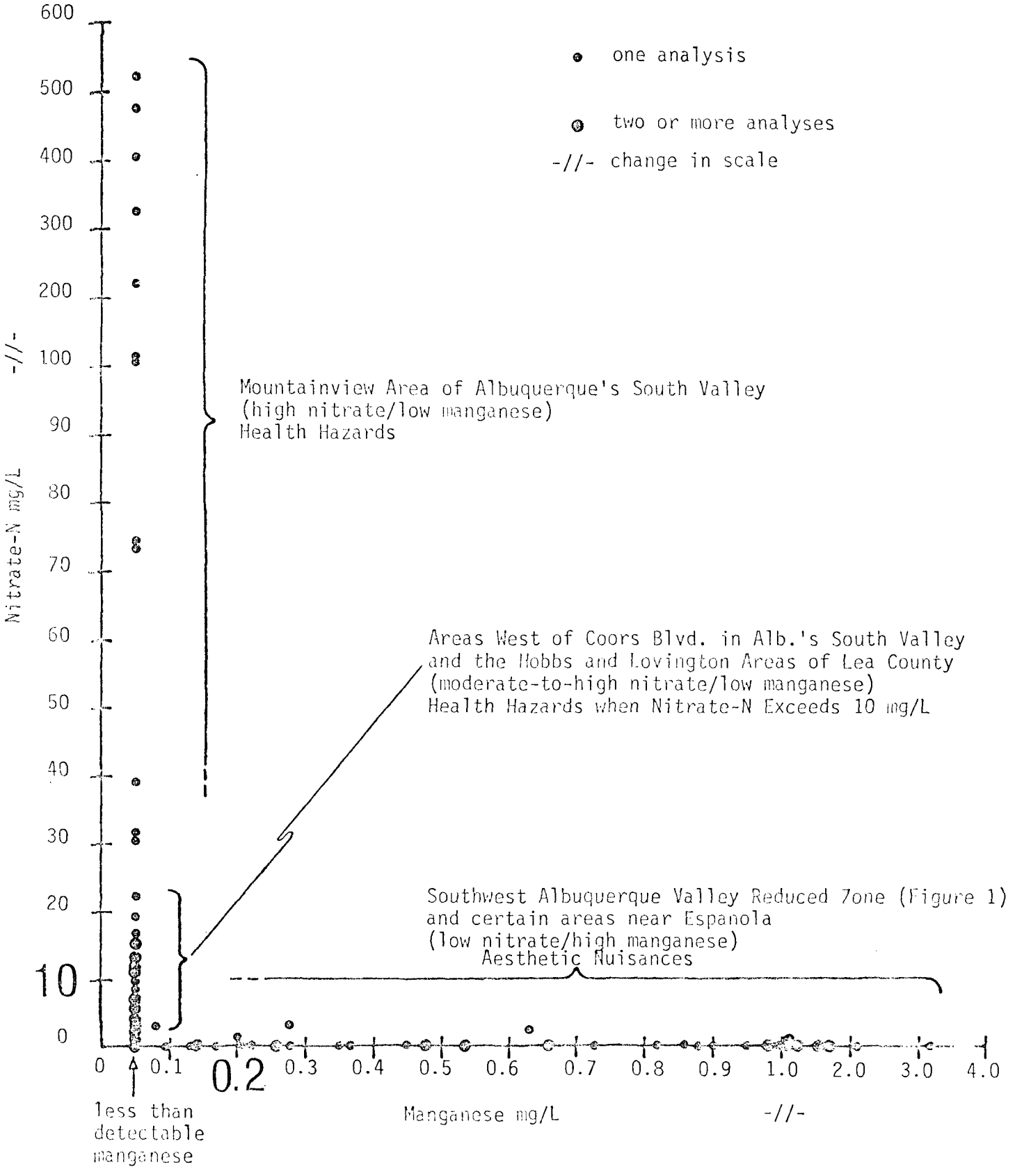
Sincerely,

Jennifer V. Smith

Jennifer V. Smith, Ph.D.
Laboratory Director

Figure 2. Typical Nitrate-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: Plateau Mon. Well #1 (Station #29) FIT

LOCATION: North of Solar Evap Ponds

Parameter/Date-Time	3/22/84 FIT of E&E Inc	2/9/84	2/15/84	5/84 Hauser	5/84 CEP	9/84 ASSAGAI	12/84 ASSAGAI
Water Level from MP Ft							
Water Level Elevation Ft	Static 16.8'	16.56	17.01				
Staff Gage Ft							
pH						7.2	7.2
Temp °C							
Uncorrected N. Phenols / Field Cond. ~~umhos~~				1.2 / <0.015	0.05 / 0.13	7.2 / 0.024	<0.01 / 0.065
As .100 mg/l	—					<0.002	0.054
Ba 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					~~<0.002~~ 0.35	<0.002 0.12
Ag .050 mg/l	—					<0.003	<0.03
Zn 10.000 mg/l	0.06					0.30	0.36
Al 5.000 mg/l	11.6					2.0	3.68
B .750 mg/l	—					<0.004	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	—			<0.5	0.24	<0.005	<0.005
Ni .200 mg/l	0.08					0.3	<0.06
Ca — mg/l							
K — mg/l							
Na — mg/l							
HCO_3 — mg/l							
Cl 250 mg/l				1040	1000	1059	1135
SO_4 600 mg/l				240	520	825	700
TFR 1000 mg/l				3038	3050	3582	3512
F. ~~Lab Cond. 25°C umhos~~				0.62	0.54	0.284	0.56
Benzene 0.01 mg/l	ND					<0.01	0.015
Toluene 15.0 mg/l	ND					<0.01	<0.01

Metals were not detected above QA/QC in comparison samples

STATION NAME: Pleasant Mon well #4 (Fit Station 22)

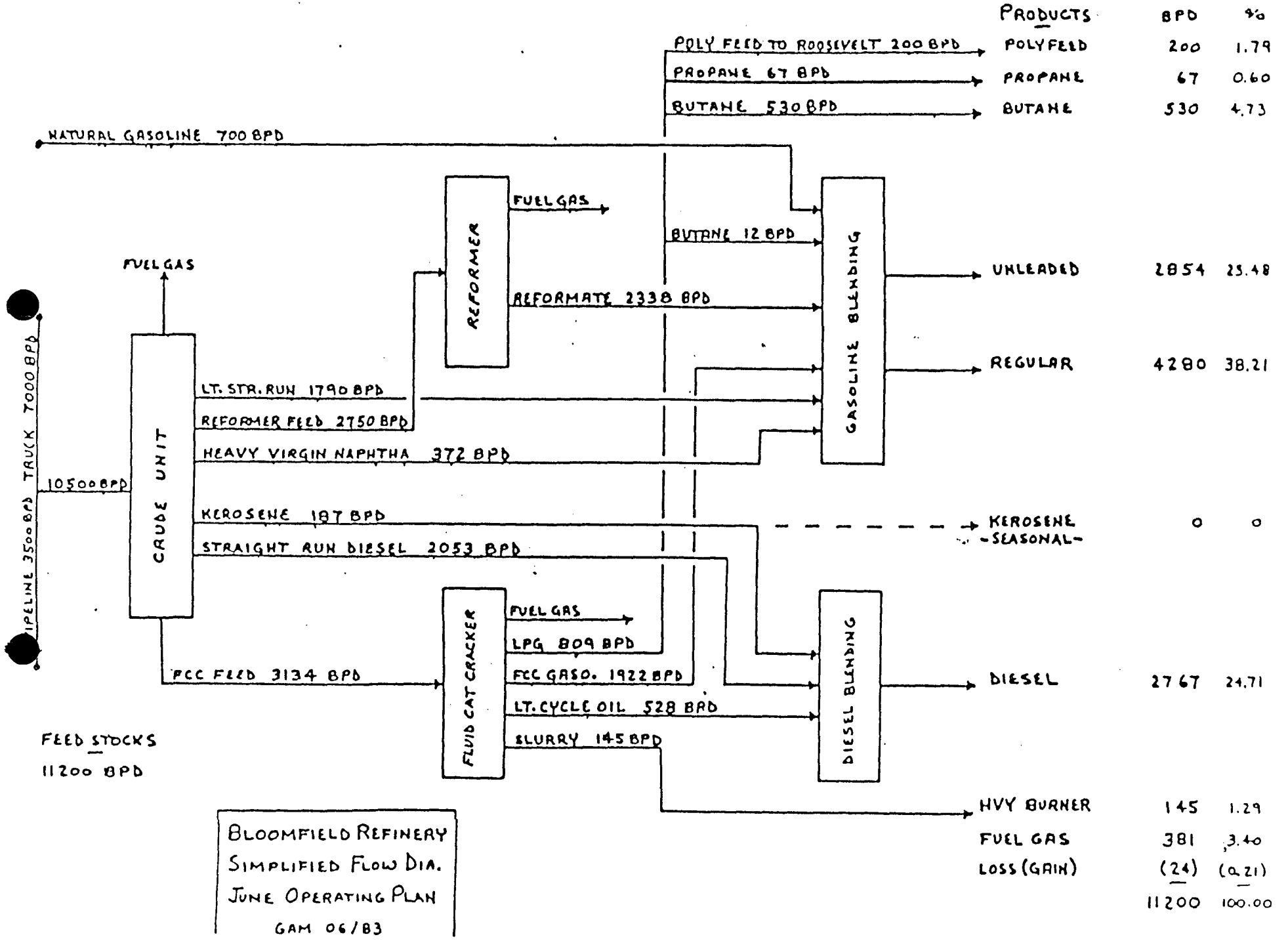
LOCATION: In gravel parking area near main entrance

Parameter/Date-Time	3/22/84 FIT of E&E, Inc	2/9/84	2/15/84	5/84 Hausey	5/84 CEP	9/84 ASSAGAI	12/84 ASSAGAI
Water Level from MP Ft							
Water Level Elevation Ft	Static 24.91'	24.54	24.97				
Staff Gage Ft							
pH						7.1	6.9
Temp °C							
~~Uncorrected~~ N	~~Hg 0.0004~~			1.3	0.002	0.02	<0.01
Phenols ~~Field Cond. mmhos~~				0.19	0.05	0.55	0.12
As .100 mg/l	0.018					<0.002	0.118
Ba 1.000 mg/l	1.8					4.	7.0
Cd .010 mg/l	0.003					<0.002	<0.01
Cr .050 mg/l	0.04					0.1	0.28
Pb .050 mg/l	0.042					0.088	0.22
Se .050 mg/l	~~Hg 0.0004~~					~~Hg <.002~~ 0.4	<0.002 0.42
Ag .050 mg/l	—					<0.003	<0.03
~~Zn~~ 10.000 mg/l	0.18					0.18	0.38
Al 5.000 mg/l	31.8					<0.05	4.49
B .750 mg/l	—					<0.004	0.32
Co .050 mg/l	—					<0.003	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	<0.005	<0.005
Ni .200 mg/l	Listed metals not elevated above levels in comparison samples					0.2	<0.06
Ca — mg/l							
K — mg/l							
Na — mg/l							
HCO_3 — mg/l						-	
Cl 250 mg/l				1600	1780	410	481
SO_4 600 mg/l				<10	<1	10	4.0
TFR 1000 mg/l				1600	1780	1860	2408
~~F~~ ~~LED Conc. -25°C~~				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	LT						
Total Xylenes	10,000						

STATION NAME: Plateau Mon Well #5 (FIT #28)

LOCATION: In spray irrigation area

Parameter/Date-Time	3/22/84 FIT & E&E Inc	2/9/84	2/15/84				
Water Level from MP Ft							
? Water Level Elevation Ft	Static 2.61	Static 42.67'	43.78'				
Staff Gage Ft							
pH							
Temp °C							
Uncorrected Field Cond. umhos							
As .100 mg/l							
Ba 1.000 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 1.000 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	unlisted metals not detected below levels in comparison monitoring.						
K — mg/l							
Na — mg/l							
HCO_3 — mg/l							
Cl 250 mg/l							
SO_4 600 mg/l							
TFR 1000 mg/l							
Lab Cond. -25°C umho							
Benzene 0.01 mg/l	—						
Toluene 15.0 mg/l	—						
ETHYL Benzene	31						
Total Xylenes	6						



Products	BPD	%
POLYFEED	200	1.79
PROPANE	67	0.60
BUTANE	530	4.73
UNLEADED	2854	25.48
REGULAR	4280	38.21
KEROSENE -SEASONAL-	0	0
DIESEL	2767	24.71
HVY BURNER	145	1.29
FUEL GAS	381	3.40
LOSS (GAIN)	(24)	(0.21)
	11200	100.00

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
Sante 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 occurrances 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

ASSAIGAI
ANALYTICAL LABORATORIES, INC.

OCT 1 6 1984

TO: Plateau Inc.
Attn; Dwight Stockham
P.O. Box 159
Bloomfield, NM 87413

DATE: 15 October 1984
0952

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_4	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_3 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-Tetrachloroehtylene	<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)

→7300 Jefferson, N.E. → Albuquerque, New Mexico 87109 →

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_4	1.0 mg/l
PCB	0.01 mg/l
pH	0.01
Phenols	0.01 mg/l
CN	0.01 mg/l
NO_3 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-Tetrachloroehtylene	0.02 mg/l
1,1,2-Trichloroethylene	0.1 mg/l

REFERENCES: 1."Standard Methods for the Examination of the Water and Wastewater", 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

Bruce S. Garber

38
2 | 760
6
16

BSG/dm
cc: Gregory S. Smith
Dwight S. Stockham
Paul W. Liscom

RECEIVED
MAY 29 1984
OIL CONSERVATION DIVISION
SANTA FE

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 [redacted]AU'S BLOOMFIELD REFINERY MO[redacted]NG WELLS
SAMPLED THE WEEK OF MARCH 19, 1984

	WQCC STANDARDS	WELL #1	WELL #4	WELL #5
INORGANICS (ppm)				
Aluminum	5.0 (C)	11.6	31.8	76.0
Altimony	---	< 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
Maganese	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
Flouride
Nitrate
Uranium
Chloride
Molybdenum
Sulfates
TDS
Phenols

Note:
Hauser Report in
Anal. Files.
D. Boyer 7/11/84

	WELL #1	WELL #2	WELL #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 #1	WELL #4	WELL #5
ORGANICS			
Acid, 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	
Unknown		0.13	
Unknown		0.078	

BLOOMFIELD REFINING COMPANY

GROUNDWATER ELEVATIONS

	DATE	T.O.P. →	MW-1 5515.77	MW-2 5519.45	MW-3 5535.85	MW-4 5524.30	MW-5 5545.10	MW-6 5551.23
	2/24/84		5498.91	5500.44	5501.74	5499.46	5502.26	DRY
	2/13/85		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/ 2/85		5500.20	5500.99	5502.48	5499.80	5503.30	
	8/ 2/85		5501.00	5501.25	5502.48	5499.78	5503.37	
	9/17/85		5500.34	5501.05	5502.25	5499.80	5503.00	
WATER OFF	10/ 9/85		5500.08	5500.87	5502.42	5499.70	5503.30	
	10/24/85		5499.23	5500.43	5502.28	5499.54	5503.10	
	11/ 8/85		5498.72	5500.05	5502.20	5499.60	5503.09	
	12/17/85		5498.35	5499.85	5501.85	5499.40	5502.90	"
	1/ 8/86		5498.59	5500.08	5501.85	5499.35	5502.77	DRY
	1/24/86		5498.75	5500.22	5502.04	5499.36	5502.76	"
	2/20/86		5498.93	5500.62	5502.43	5499.35	5503.30	"
	3/21/86		5499.10	5500.65	5502.89	5499.30	5504.23	"
SAMPLE	3/26/86		5499.07	5500.65	5502.91	5499.31	5504.24	"
	4/ 4/86		5499.07	5500.57	5502.98	5499.21	5504.57	"
DIKE REMOVED 4/5 WATER ON 4/21	4/18/86		5498.85	5500.43	5502.98	5499.42	5504.42	"
	5/ 5/86		5499.43	5500.57	5502.92	5499.32	5504.27	"
	5/21/86		5500.05	5500.82	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	5499.72	5503.58	"
SAMPLE	9/18/86		5500.03	5501.22	5502.77	5499.98	5503.52	"
	10/ 8/86		5499.83	5501.07	5502.68	5500.13	5503.46	"
WATER OFF 10/15	11/ 7/86		5499.45	5500.82	5502.72	5500.19	5503.48	"
DIKED	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
	4/ 2/87		5499.76	5501.20	5502.86	5500.37	5503.77	"

© WILSON JONES COMPANY G7506 GREEN

MADE IN U.S.A.

GROUNDWATER ELEVATIONS

	DATE	T.O.P. →	MW-7 5524.09	MW-8 5531.12	MW-9 559.70	MW-10 5516.86	HAMMOND AT SULLIVAN 5504.82	HAMMOND AT WALKWAY 5522.95
	3/21/86		5498.02	5501.95	5498.15	5497.65	–	–
SAMPLE	3/26/86		5498.02	5501.97	5498.20	5497.66	–	–
DIKE REMOVED 4/ 4	4/ 4/86		5498.77	5501.86	5498.22	5497.60	5496.50	5498.24
	4/18/86		5497.92	5501.82	5497.90	5497.69	–	5496.85
WATER ON 4/21	5/ 5/86		5497.28	5501.79	5498.62	5497.83	5498.08	5499.03
	5/21/86		5498.86	5501.83	5499.00	5498.05	5498.25	5499.42
	6/ 4/86		5498.85	5501.89	5499.17	5498.15	5498.23	5499.63
SAMPLE	6/23/86		–	5502.04	5499.47	5498.11	–	–
	7/ 8/86		5497.87	5502.22	5499.50	5498.17	5497.89	5499.95
	8/ 4/86		5498.77	5502.12	5499.40	5498.37	5497.84	5499.67
	9/ 2/86		5498.95	5502.21	5499.55	5498.53	5498.24	5500.15
SAMPLE	9/18/86		–	5502.12	5499.57	5498.75	–	–
	10/ 8/86		5498.96	5501.97	5499.42	5498.69	5497.00	5498.93
WATER OFF 10/15	11/ 7/86		5499.26	5501.90	5499.56	5499.05	5497.00	5498.83
DIKED	12/ 8/86		5499.40	5502.10	5499.14	5499.28	5498.72	5498.73
SAMPLE	12/16/86		5499.41	5502.10	5499.15	5499.30	–	–
	1/27/87		5499.29	5501.85	5498.98	5499.09	5498.59	5498.60
	4/ 2/87		5499.59	5502.12	5498.92	5499.33	5498.55	5498.55

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MONITORING WELLS MW 1 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 TO WATER (ft)	YIELD (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	18	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	26.90	19.11
1	4:10	24.65	16.56
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-6	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 15 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

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 cobbly 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

40

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 pebbly 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 28 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 cobbly 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

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

Depth in Feet	Description
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

Depth in Feet	Description
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

Depth in Feet	Description
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

Depth in Feet	Description
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.

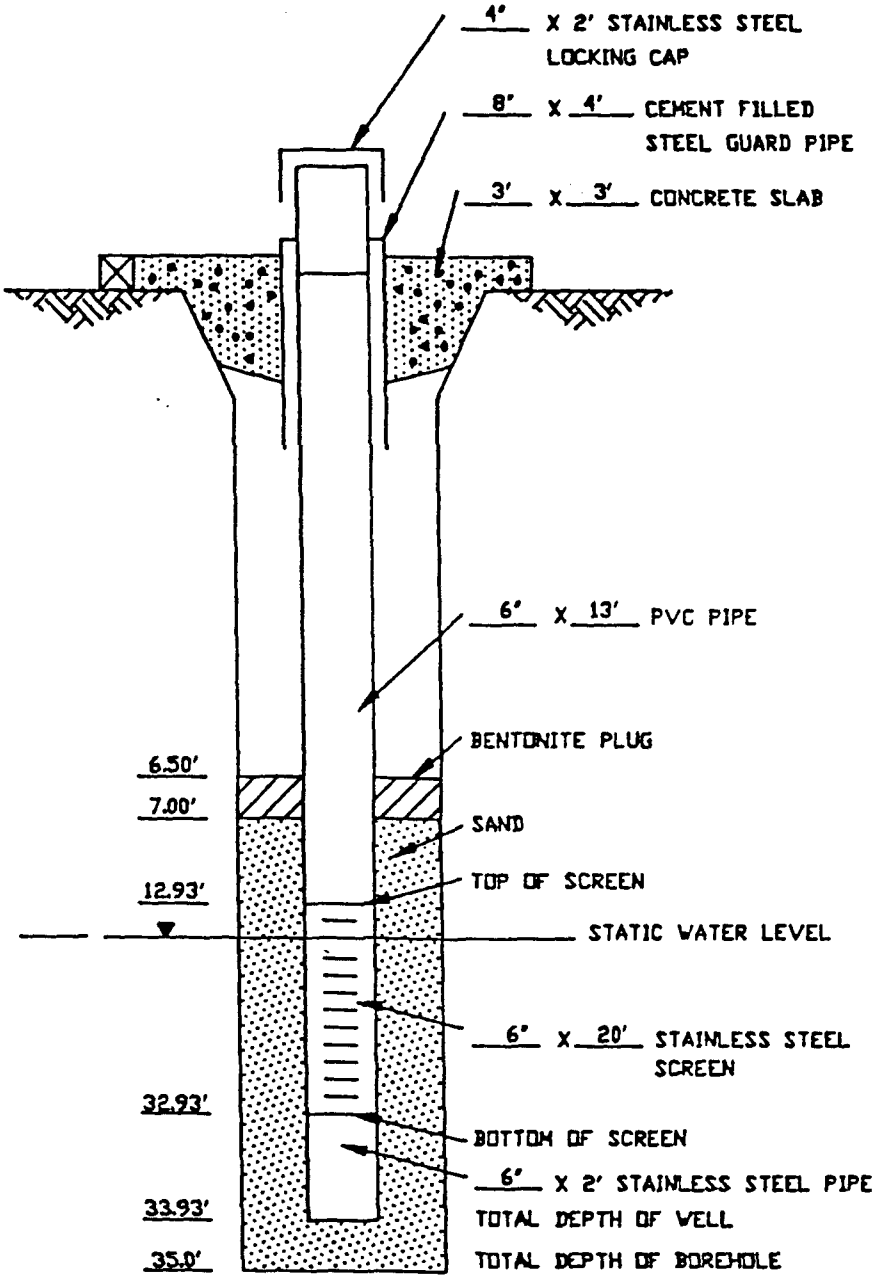


FIGURE B-3

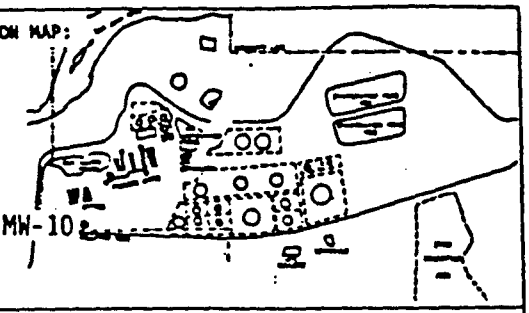
COMPLETION DIAGRAM
RECOVERY WELL MW-10 (RW-3)
(RECONSTRUCTED FROM VERBAL DESCRIPTION
SUPPLIED BY ENGINEERING-SCIENCE, 1987)

FIGURE B-10

LITHOLOGIC LOG (SOIL)

RECOVERY WELL MW-10 (RW-3)

LOCATION MAP:



___1/4 ___1/4 ___1/4 ___1/4 S___ T___ R___

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 F. Sons, Inc.
DATE STARTED: 4 March 1986 DATE COMPLETED: 4 March 1986
FIELD REP.: Engineering-Science, Inc.
COMMENTS:

LOCATION DESCRIPTION:

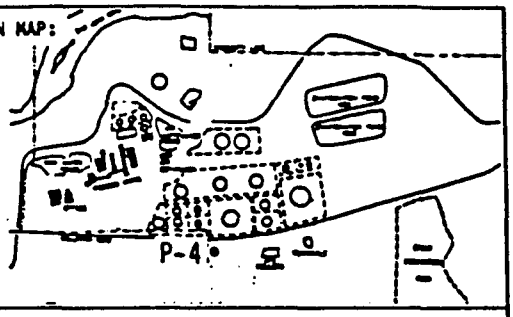
Depth	Visual %	Lith	Drilling Time Scale:	Sample Type and Interval	Lithologic Description
0					0'-5' Topsoil, Roadbase, Sandy Clay
5					5'-10' Silty, Sandy Clay
10					10'-15' Cobbles and Pebbles
15					15'-20' Gravel, Cobbles, and Pebbles
20					20'-30' Green Clay; Nacimiento Formation
25					30'-35' Nacimiento Formation - Yellow-green to blue-gray.
30					
35		T.D. 35'			
40					
45					
50					

FIGURE B-14

LITHOLOGIC LOG (SOIL)

PIEZOMETER P-4

LOCATION MAP:



___1/4 ___1/4 ___1/4 ___1/4 S___ T___ R___

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' Silt and Clay - Moderate brown (5 YR 4/4) to light brown (5 YR 5/6).
10					
15					
20					
25			1233		27'-30' Sand - Very pale or (5 YR 8/2) fine to coarse grained, angular to subangular predominantly quartz.
30					30'-40' Gravel and Sand - 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' Clay - Pale olive (10 Y 6/2), plastic.
					43'-45' Gravel and Sand - As above.
45			1420		45'-51' Sand; Nacimiento Formation -light bluish grey (5B7/1) Fine grained, silty.
50		T.D. 51'	1455		

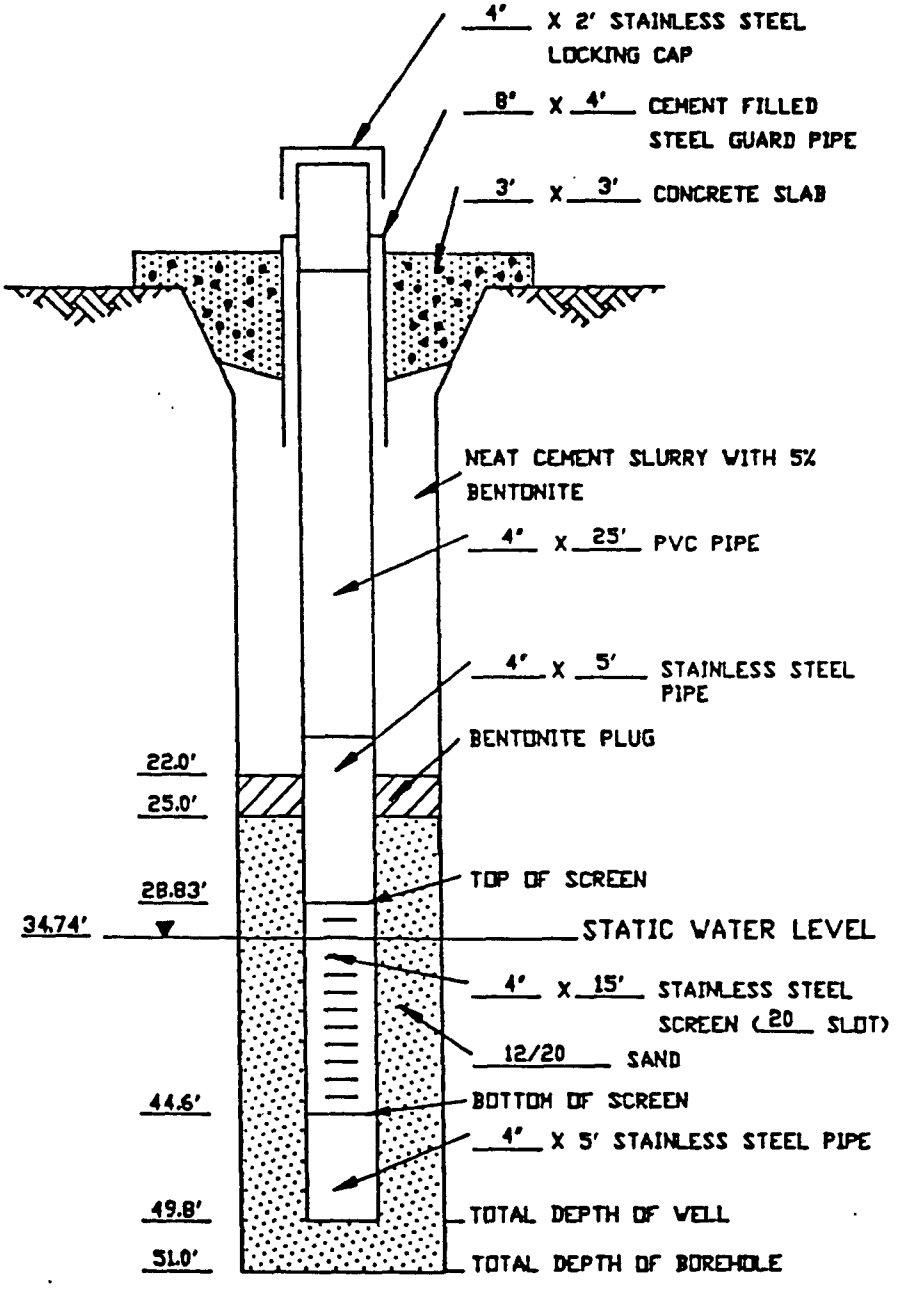


FIGURE B-7

COMPLETION DIAGRAM
PIEZOMETER P-4

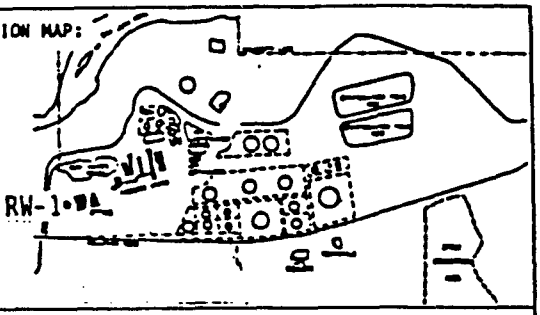
(MW-13)

FIGURE B-8

LITHOLOGIC LOG (SOIL)

RECOVERY WELL RW-1

LOCATION MAP:



___1/4 ___1/4 ___1/4 ___1/4 S___ T___ R___

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.: W.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' Silt and Sand - 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' Sand and Gravel - 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' Shale - Nacimiento Formation - Dusky yellow (5 YR 6/4) to light olive gray (5 Y 6/1) shale.
40			1758		
		T.D. 41'			
45					
50					

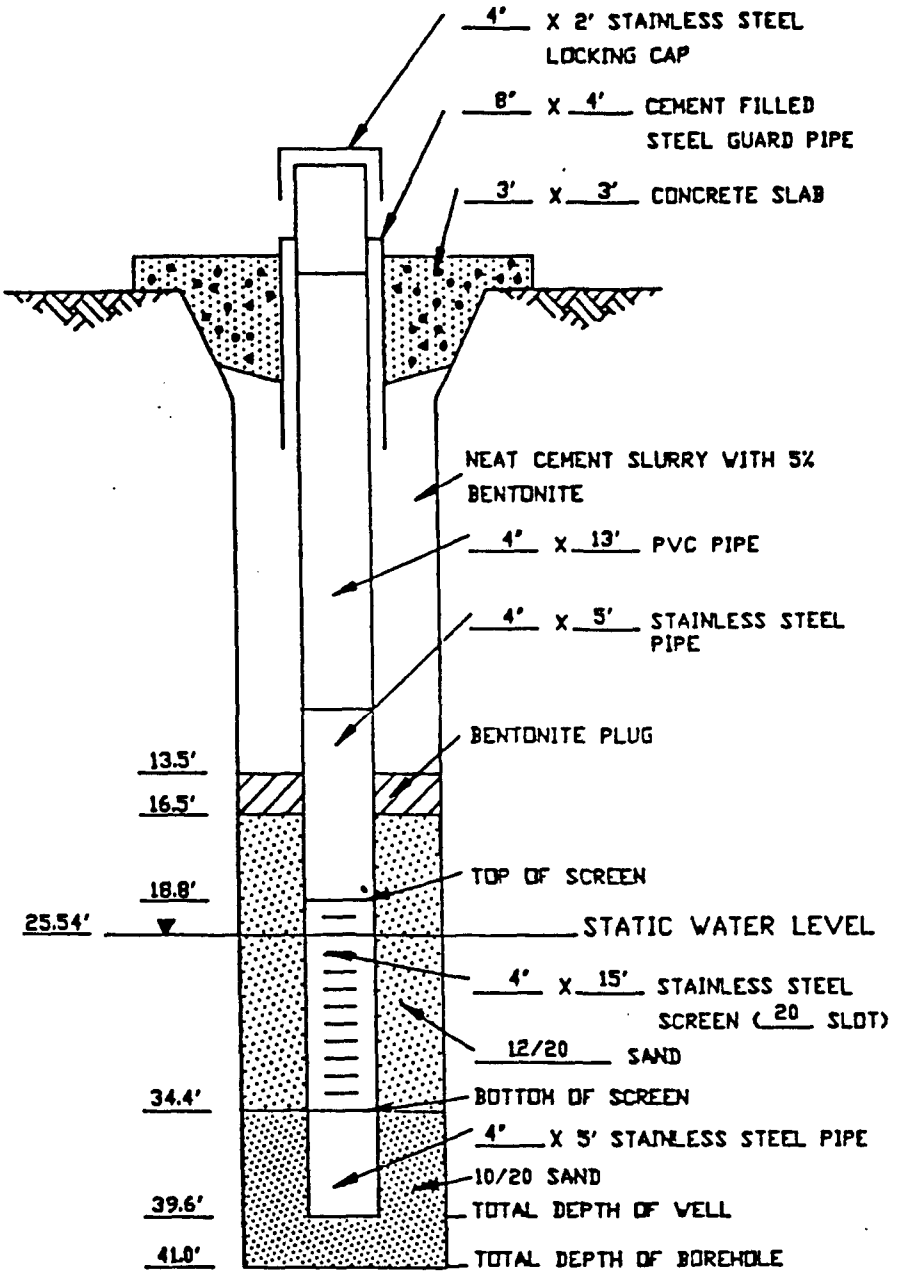


FIGURE B-1

COMPLETION DIAGRAM

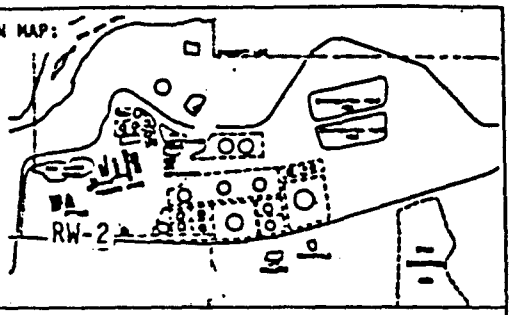
RECOVERY WELL RW-1

FIGURE B-9

LITHOLOGIC LOG (SOIL)

RECOVERY WELL RW-2

LOCATION MAP:



___1/4 ___1/4 ___1/4 ___1/4 S___ T___ R___

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.: W.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' Silt and Clay - Medium dark gray (N4) to brownish gray (5 YR 4/1). Slightly effervescent in HCl. Faint hydrocarbon odor.
10			0953		10'-15' Sand and Silt - Moderate brown (5 YR 4/4), very fine grained and well sorted.
15			0958		15'-32' Sand and Gravel - Olive gray (5 Y 4/1) to brownish gry (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' Shale - Nacimiento Formation - Dusky yellow (5 Y 6/4) to olive gray (5 Y 3/2).
35			1050		
40		T.D. 41.2'	1100		
45					
50					

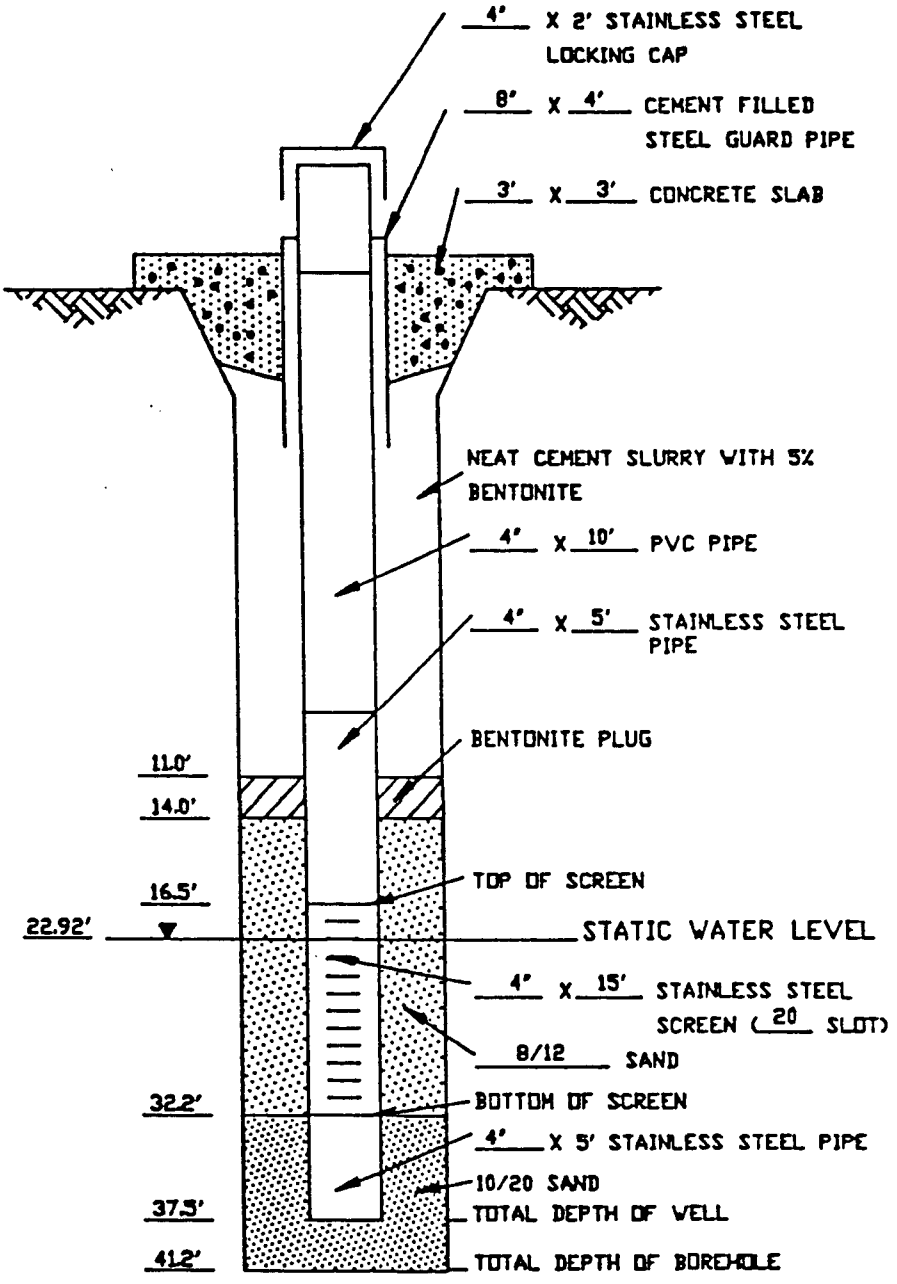


FIGURE B-2

COMPLETION DIAGRAM

RECOVERY WELL RW-2

TABLE 3.4

WELL LOG FOR MONITORING WELL NUMBER 10 (RW-3)

Drilling Date: March 4, 1986

Depth in Feet	Description
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

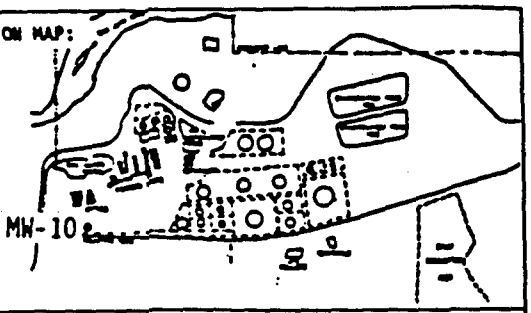
Description of Casing: Bottom of casing has a 2 foot stainless steel blank section for a silt trap, followed by 20 feet of 6" I.D. stainless steel screen, followed by 6" I.D. schedule 40 PVC to the surface. The screened section of the hole was sanded to within 7 feet of the surface, a bentonite seal (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)

LOCATION MAP:



___1/4 ___1/4 ___1/4 ___1/4 S___ T___ R___

SITE ID: BHC 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 F. 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 Scale:	Sample Type and Interval	Lithologic Description
0					0'-5' Topsoil, Roadbase, Sandy Clay
5					5'-10' Silty, Sandy Clay
10					10'-15' Cobbles and Pebbles
15					15'-20' Gravel, Cobbles, and Pebbles
20					20'-30' Green Clay; Nacimiento Formation
25					30'-35' Nacimiento Formation - Yellow-green to blue-gray.
30					
35		T.D. 35'			
40					
45					
50					

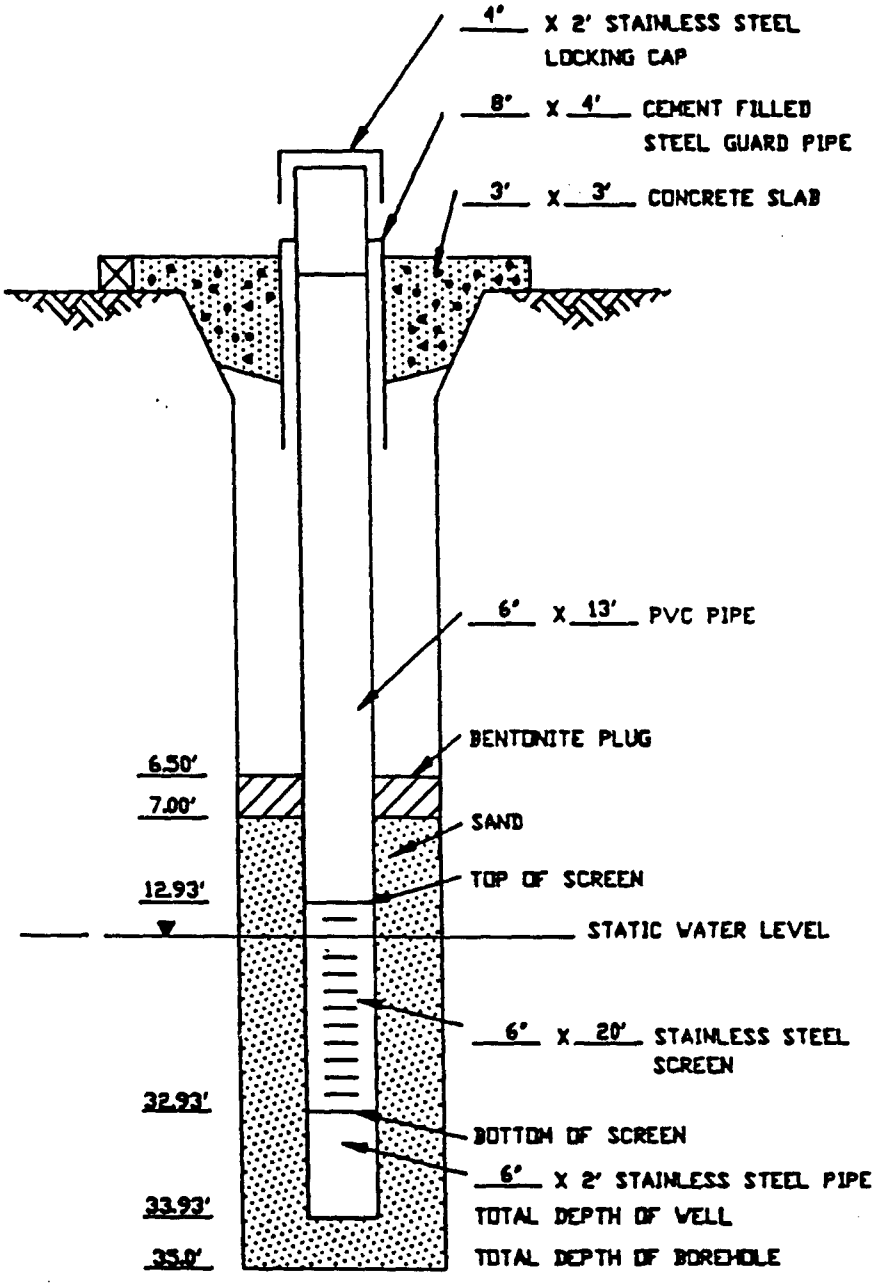


FIGURE B-3

COMPLETION DIAGRAM
RECOVERY WELL HV-10 (RV-3)
(RECONSTRUCTED FROM VERBAL DESCRIPTION
SUPPLIED BY ENGINEERING-SCIENCE, 1987)

AMPAD EFFICIENCY, LINE NO. 6636

MW-1

	EPA	Same Sampling Hauser	CEP	Assaqi	Assaqi	OCD/SLO	Assaqi	Assaigai	Assaigai	Assaigai	Assaigai	Assaigai
	[1] 3/22/84	[2] 5/84	[3] 5/84	[4] 9/84	[5] 12/84	[6] 3/85	[7] 3/85	[8] 7/85	[9] 11/85	[10] 3/86	[11] 6/86	[12] 9/86	[13] 12/86
Na [1]						798							
K [2]						6.63							
Ca [3]						289/470							
Mg [4]						97.3/95							
Cl [5]		1040	1000	1059	1135	1253.4	1135.0	953.0	973	750*	994.7	814	774
SO_4 [6]		240	520	825	700	966.9	855.0	882.0	920	7.5*	630	673	579
HCO_3 [7]						203.8							
TDS [8]		3038	3050	3582	3512	3593	3726	3246	3120	2936	2960	2866	2498
NO_3-N [9]		1.2	0.05	7.2	<0.01	4.74	0.3	15.4	2.0		0.1		2.9
Al [10]	11.6			2.0	3.68	<0.1	<0.05	<0.05	<0.05		2.07		4.54
As [11]	<			<0.002	0.054	0.006	0.010	<0.05	<0.05	<0.05	0.077	0.05	<0.05
Ba [12]	0.2			1.0	<1.0	<0.1	<1.0	<1.0	<1.0		<0.01		0.055
B [13]	<			<0.004	0.25	0.25	0.69	0.13	0.10		<0.01		0.27
Cd [14]	0.003			0.014	<0.01	<0.1	0.027	<0.01	<0.01	0.05	<0.01	<0.01	<0.01
Cn [15]	0.01			<0.005	0.07	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fe [16]	20.9			57	128	<0.1	0.07	<0.3	0.080		<0.04		<0.3
Pb [17]	<			0.125	0.18	<0.1	0.040	<0.05	<0.05	0.085	0.065	0.15	<0.05
Mn [18]	1.38			1.7	1.05	0.83	0.50	0.52	0.33		0.25		1.11
Mo [19]	<	<0.5	0.24	<0.005	<0.005	<0.1	0.41	0.28	<0.005		<0.01		0.17
Ni [20]	0.08			0.3	<0.06	<0.1	0.13	<0.06	0.25	0.08	<0.06	0.07	0.06
Se [21]	0.003			0.35	0.12	<0.005	0.022	0.026	0.010	<0.01	0.035	0.033	0.03
Sn [22]	—			—	—	7.9							
ZN [23]	0.06			0.30	0.36	<0.1	0.08	<0.01	0.030	<0.01	0.02	0.04	0.012
Benz [24]	ND			<0.01	0.015	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND 0.001	ND (0.001)	ND (0.001)
Tol [25]	ND			<0.01	<0.01	ND	<0.01	ND "	ND "	ND "	ND (0.001)	ND (0.001)	ND (0.001)
EB [26]						ND	—			ND "	ND "	ND "	ND "
p-x [27]						ND	—			ND "	ND "	ND "	ND "
m-x [28]						ND	—			ND "	ND "	ND "	ND "
o-x [29]						ND	—			ND "	ND "	ND "	ND "
F [30]		0.62	0.54	0.284	0.56	0.46	0.657	0.65	0.890		0.54		0.96
CN [31]				<0.01	<0.01	—	<0.02	<0.01	0.04	<0.01	0.1	0.07	<0.01
Phenols						—	0.13	<0.01	0.096	0.009	0.017	0.19	0.012
NH_3-N/TKN				0.024	0.065	0.44/1.05							EOC = 0.002

* Lab error

AMPAD EFFICIENCY LINE NO. 6636

MW-2

Assaigai Assaigai Assaigai Assaigai

	1 3/86	2 6/86	3 9/86	4 12/86	5	6	7	8	9	10	11	12	13
Na 1													
K 2													
Ca 3													
Mg 4													
Cl 5	200*	1204.6	993	1012									
SO4 6	11.0*	1750	1104	1372									
HCO3 7													
TDS 8	2796	3650	3598	3644									
N 9													
Al 10													
As 11	<0.05	0.094	0.08	<0.05									
Ba 12													
B 13													
Cd 14	0.060	<0.01	0.03	<0.01									
Cr 15	<0.05	<0.05	<0.05	<0.05									
Fe 16													
Pb 17	0.12	<0.05	0.08	<0.05									
Mn 18													
MO 19													
Ni 20	0.07	0.06	0.12	0.08									
Se 21	<0.010	0.07	0.104	0.04									
Sn 22													
Zn 23	<0.01	0.02	0.02	0.009									
Ben 24	ND(0.001)	ND	ND(0.001)	ND									
Tol 25	ND "	ND	ND	ND									
EB 26	ND "	ND	ND	ND									
Xylenes (Total) 27	ND "	ND	ND	ND									
28													
29													
F 30													
CN 31	<0.01	0.1	0.18	<0.01									
Phenols	0.063	0.023	0.17	0.110									

* Lab ERROR

AMPAD EFFICIENCY, LINE NO. 6636

MW-3

Assaigai Assaigai Assaigai Assaigai

	1 3/86	2 6/86	3 9/86	4 12/86	5	6	7	8	9	10	11	12	13
Na 1													
K 2													
Ca 3													
Mg 4													
CL 5	1500 *	1584	1290	1290									
SO4 6	29.5 *	1950	2056	2204									
HCO3 7													
TDS 8	4836	5362	5514	4860									
N 9													
Al 10													
As 11	<0.05	0,15	0,21	<0,05									
Ba 12													
B 13													
Cd 14	0,12	0.015	<0,01	0,11									
Cr 15	<0.050	<0,05	<0,05	<0,05									
Fe 16													
Pb 17	0.14	0.070	0.18	<0,05									
mn 18													
Mo 19													
Ni 20	0.08	0,08	0.14	0,10									
Se 21	<0.010	0,10	0.100	0,05									
Sn 22													
Zn 23	<0,01	0.018	0,02	0,10									
Ben 24	ND (0.001)	ND	ND (0.001)	ND (0.001)									
Tol 25	ND "	0.003	ND	ND									
EB 26	ND "	ND	ND	ND									
T. Xylenes 27	ND "	0.030	ND	ND									
28													
29													
F 30													
CN 31	<0.10	0.25	0,17	0,07									
Phenols	0.006	0,006	0,082	0.012									

* Lab error

AMPAD EFFICIENCY, LINE NO. 6636

MW-4

Same Sampling

	EPA	Houser	CEP	Assaigai	Assaigai	Assaigai	Assaigai	Assaigai	Assaigai	Assaigai	Assaigai	Assaigai	Assaigai
	[1] 3/22/84	[2] 5/84	[3] 5/84	[4] 9/84	[5] 12/84	[6] 3/85	[7] 3/85	[8] 7/85	[9] 11/85	[10] 3/86	[11] 6/86	[12] 9/86	[13] 12/86
Na 1						497							
K 2						4.29							
Ca 3						102/130							
Mg 4						58.7/47.							
Cl 5		1600*	1780*	410	481	608.1	426/506	556	675.0	500*	989.7	754	675
SO4 6		<10	<1	10	4.0	<1.0	9.0	3.0	3.0	0.3*	12.5	<0.01	<1
HCO3 7						694.3							
TDS 8		1600	1780	1860	2408	1623	1860	2004	2060	1868	2266	2308	2128
N 9	—	1.3	0.002	0.02	<0.01	0.06	<0.01	<0.01	<0.01		<0.01		<0.01
AL 10	31.8			<0.05	4,49	<0.1	<0.05	<0.05	1.72		1,93		3.8
AS 11	0.018			<0.002	0,118	<0.005	0.005	<0.05	<0.05	<0.05	0.070	0.08	<0.05
Ba 12	1.8			4,	7.0	1,2	2.5	<1.0	1.5		3,54		2,3
B 13	—			<0.004	0.32	0.50	0.89	0.05	<0.01		<0.01		0.7
Cd 14	0.003			<0.002	<0.01	<0,1	<0.01	<0.01	<0.01	0.06	<0.010	<0.01	<0,01
Cr 15	0.04			0.1	0.28	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0,05	<0.05
Fe 16	57.7			43.7	132	1.2	6.8	12.0	0.34		12.0		18.6
Pb 17	0.042			0.088	0.22	<0,1	0.015	<0.05	<0.05	0.074	0.066	<0.05	<0,05
Mn 18	7.62			7.8	25.4	5,2	5,2	5.0	2.8		3.5		5,7
Mo 19	<	0.05	0.005	<0.005	<0.005	<0.1	0.18	<0.005	<0.005		<0.01		<0.01
Ni 20	<			0,2	<0.06	<0.1	0,16	<0.06	0.21	0.08	<0.06	0,12	<0,06
Se 21	<			0.4	0.42	<0.005	0.008	<0.026	<0.010	<0.010	<0.080	0.063	0.03
Sn 22	<					5.3	—						
Zn 23	0,18			0.18	0.38	<0,1	0.03	<0.01	0.024	0.012	0.019	<0.008	0.040
Ben 24	9.0			0.419	3,64	21.5	14,81	8,64	7,46	11,8	3,1	6,65	1,98
Tol 25	—			0.296	4,47	2.9	1,92	1,74	2,00	7.5	0,290	0,407	1,78
EB 26	<					0.47				0.107	0.070	0.140	4.48
p-X 27	Total 10,000					0,53				Total ND (0.001)	—	—	
m-X 28						6.3					—	—	
o-X 29						0.35					—	—	
F 30		0.32	0.33	0.597	0.29	0.22	0.254	0.23	0.559		0.21		0.41
CN 31				<0.01	<0.01	—	<0.02	<0.01	0.03	<0.01	0.5	<0.01	<0.01
Phenols				0.55	0.120	0.18/0.49	0.005	0.08	0.037	0.633	0.430	0.085	0.096
NO3-N/TKN													

*Lab error.

AMPAD EFFICIENCY LINE NO. 6636

MW-5

	EPA	OCD/SLD	Assaqi	Assaqi	Assaqi	Assaqi	Assaigai	Assaigai	Assaigai				
	1 3/27/84	2 3/85	3 3/85	4 7/85	5 11/85	6 3/86	7 6/86	8 9/86	9 12/86	10	11	12	13
Na 1		863											
K 2		6.24											
Ca 3		428/600											
Mg 4		196/180											
Cl 5		1631.6	1257	1360	1588	1100*	1339.6	1151	1118				
SO4 6		1439	1158	1200	1540	14.0*	1800	1237	1132				
HCO3 7		195											
TDS 8		4705	4758	4746	4734	3840	3778	3184	3788				
N 9		33.8	29.0	35.0	8.0		12.5		36				
Al 10	76	<0.1	0.05	0.78	0.1		2.75		4.34				
As 11	<	0.005	0.011	<0.050	<0.050	<0.050	0.087	0.07	<0.05				
Ba 12	0.3	<0.1	<1.0	<1.0	<1.0		<0.01		0.010				
B 13	—	0.80	1.29	0.15	<0.01		<0.01		0.24				
Cd 14	<	<0.1	0.046	<0.01	<0.01	0.10	<0.01	<0.01	0.01				
Cr 15	0.04	<0.1	<0.05	<0.05	<0.05	<0.050	<0.05	<0.05	<0.05				
Fe 16	70.6	<0.1	0.095	<0.3	0.089		0.05		<0.3				
Pb 17	0.02	<0.1	0.046	<0.05	<0.05	0.16	0.055	<0.05	<0.05				
Mn 18	0.915	0.14	0.098	0.24	0.045		0.025		<0.05				
Mo 19	<	<0.1	<0.01	<0.005	<0.005		<0.01		0.08				
Ni 20	0.04	<0.1	0.19	<0.06	0.37	0.10	<0.06	0.09	0.07				
Se 21	0.002	<0.005	0.022	0.026	0.011	<0.010	0.071	0.030	0.03				
Sr 22	—	11	—	—	—								
Zn 23	0.12	<0.1	0.060	<0.01	0.025	0.012	0.02	0.02	0.016				
Ben 24	—	ND(0.001)	ND	ND(0.001)	ND(0.001)	ND(0.001)	ND	ND(0.001)	ND(0.001)				
Tol 25	—	ND	<0.01	ND "	ND "	"	ND	ND	ND				
EB 26	31	ND	—	—	—	"	ND	ND	ND				
p-X 27	Total	ND	—	—	—	"	ND	ND	ND				
m-X 28	6	ND	—	—	—	"	ND	ND	ND				
o-X 29		ND	—	—	—	"	ND	ND	ND				
F 30		0.32	0.391	0.37	0.332		0.30		0.58				
CN 31	—	—	<0.02	<0.01	0.04	<0.01	0.2	0.24	<0.01				
Phenols	—	—	0.004	<0.01	0.02	0.006	0.007	0.034	0.021				
NO3-N/TKN		0.21/12A											

* Lab error

AMPAD EFFICIENCY, LINE NO. 6636

MW7

		1 3/86	2 6/86	3 9/86	4 12/86	5	6	7	8	9	10	11	12	13
		Assaigai	Assaigai	Assaigai	Assaigai									
Na	1													
K	2													
Ca	3													
Mg	4													
Cl	5	30 *	79.9	20	29									
SO4	6	5.5 *	2400	5802	3630									
HCO3	7													
TDS	8	6076	6406	6348	6940									
N	9													
Al	10													
As	11	<0.050	0.36	0.22	<0.05									
Ba	12													
B	13													
Cd	14	0.050	0.030	<0.01	0.02									
Cr	15	0.050	0.052	<0.05	0.08									
Fe	16													
Pb	17	<0.050	0.24	0.05	0.26									
Mn	18													
Mo	19													
Ni	20	0.08	0.07	0.08	0.07									
Se	21	<0.010	0.65	0.36	0.09									
Sn	22													
Zn	23	0.018	0.016	0.02	0.017									
Ben	24	0.015	ND	0.058	0.009									
Tol	25	0.053	ND	0.006	ND(0.001)									
EB	26	0.007	ND	0.004	ND "									
T. Xylenes	27	ND	—	—	ND "									
	28													
	29													
F	30													
CN	31	<0.10	0.25	0.10	<0.01									
Phenols		<0.001	0.006	0.036	0.025									

* Lab error

AMPAD EFFICIENCY® LINE NO. 6636

MW 8

Assaigai Assaigai Assaigai Assaigai

	1 3/86	2 6/86	3 9/86	4 12/86	5	6	7	8	9	10	11	12	13
Na 1													
K 2													
Ca 3													
Mg 4													
Cl 5	160 *	839.7	576	913									
SO4 6	4.0 *	1500	586	1270									
HCO3 7													
TDS 8	806	2910	2284	3450									
N 9													
AL 10													
As 11	<0.05	0.072	0.03	<0.05									
Ba 12													
B 13													
Cd 14	0.01	<0.01	<0.01	<0.01									
Cr 15	<0.05	<0.05	<0.05	<0.05									
Fe 16													
Pb 17	<0.05	0.055	<0.05	<0.05									
Mn 18													
Mo 19													
Ni 20	<0.06	0.86	0.21	0.43									
Se 21	<0.01	0.21	<0.01	0.04									
Sn 22													
Zn 23	<0.01	0.020	0.02	0.016									
Benz 24	ND(0.001)	ND(0.001)	ND 0.001	ND(0.001)									
Tol 25	ND	ND	ND "	ND "									
E.B 26	0.107	ND	ND "	ND "									
T.Xylenes 27	ND	—	—	ND "									
28													
29													
F 30													
CN 31	<0.01	<0.01	<0.01	0.10									
Phenols	<0.001	0.005	0.097	0.042									

* Lab error

AMPAD EFFICIENCY, LINE NO. 6636

MW9

		Assaigai	Assaigai	Assaigai	Assaigai									
		1 3/86	2 6/86	3 9/86	4 12/86	5	6	7	8	9	10	11	12	13
Na	1													
K	2													
Ca	3													
Mg	4													
Cl	5	149 *	109.7	89	109									
SO_4	6	13 *	114	<0.01	20									
HCO_3	7													
TDS	8	2360	1718	1428	1684									
N	9													
Al	10													
As	11	<0.05	<0.05	0.02	<0.05									
Ba	12													
B	13													
Cd	14	0.01	<0.01	<0.01	<0.01									
Cr	15	<0.05	<0.05	<0.05	<0.05									
Fe	16													
Pb	17	<0.05	0.059	<0.05	<0.05									
Mn	18													
Mo	19													
Ni	20	0.3	0.25	0.13	0.16									
Se	21	<0.01	0.04	<0.01	0.03									
Sn	22													
Zn	23	0.012	0.015	0.05	0.011									
Ben	24	7.4	4	17.7	1.49									
Tol	25	6.3	1.7	10.6	0.754									
EB	26	3.2	0.71	0.015	0.504									
T. Xylenes	27	ND	—	—	ND(0.001)									
	28													
	29													
F	30													
CN	31	<0.01	0.4	<0.01	<0.01									
Phenols		0.304	0.372	0.17	0.160									

* Lab error

AMPAD EFFICIENCY, LINE NO. 6636

MW 10

Assaigai Assaigai Assaigai Assaigai

	1 3/86	2 6/86	3 9/86	4 12/86	5	6	7	8	9	10	11	12	13
Na 1													
K 2													
Ca 3													
Mg 4													
Cl 5	245*	569.8	587	457									
SO_4 6	5.3*	165	<0.01	10									
HCO_3 7													
TDS 8	1546	2820	2408	3272									
N 9													
Al 10													
As 11	<0.05	0.063	0.05	<0.05									
Ba 12													
B 13													
Cd 14	0.02	<0.010	<0.01	<0.01									
Cn 15	<0.05	<0.050	<0.05	<0.05									
Fe 16													
Pb 17	<0.05	0.059	0.05	<0.05									
Mn 18													
Mo 19													
Ni 20	0.08	<0.25	0.18	<0.06									
Se 21	<0.01	0.040	0.071	0.03									
Sn 22													
Zn 23	<0.01	0.015	0.16	0.010									
Benz 24	0.093	ND(0.001)	0.041	14.4									
Tol 25	ND	ND	0.054	7.4									
E.B 26	ND	ND	ND(0.001)	0.030									
T. Xylenes 27	ND	—	—	ND(0.001)									
28													
29													
F 30													
CN 31	<0.01	<0.01	0.050	<0.01									
Phenols	0.147	0.186	0.065	0.055									

* Lab error

AMPAD EFFICIENCY, LINE NO. 6636

	1	2	3	4	5	6	7	8	9	10	11	12	13
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													

AMPAD EFFICIENCY® LINE NO. 6636

	1	2	3	4	5	6	7	8	9	10	11	12	13
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
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30													
31													

AMPAD EFFICIENCY® LINE NO. 6636

	1	2	3	4	5	6	7	8	9	10	11	12	13
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
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27													
28													
29													
30													
31													

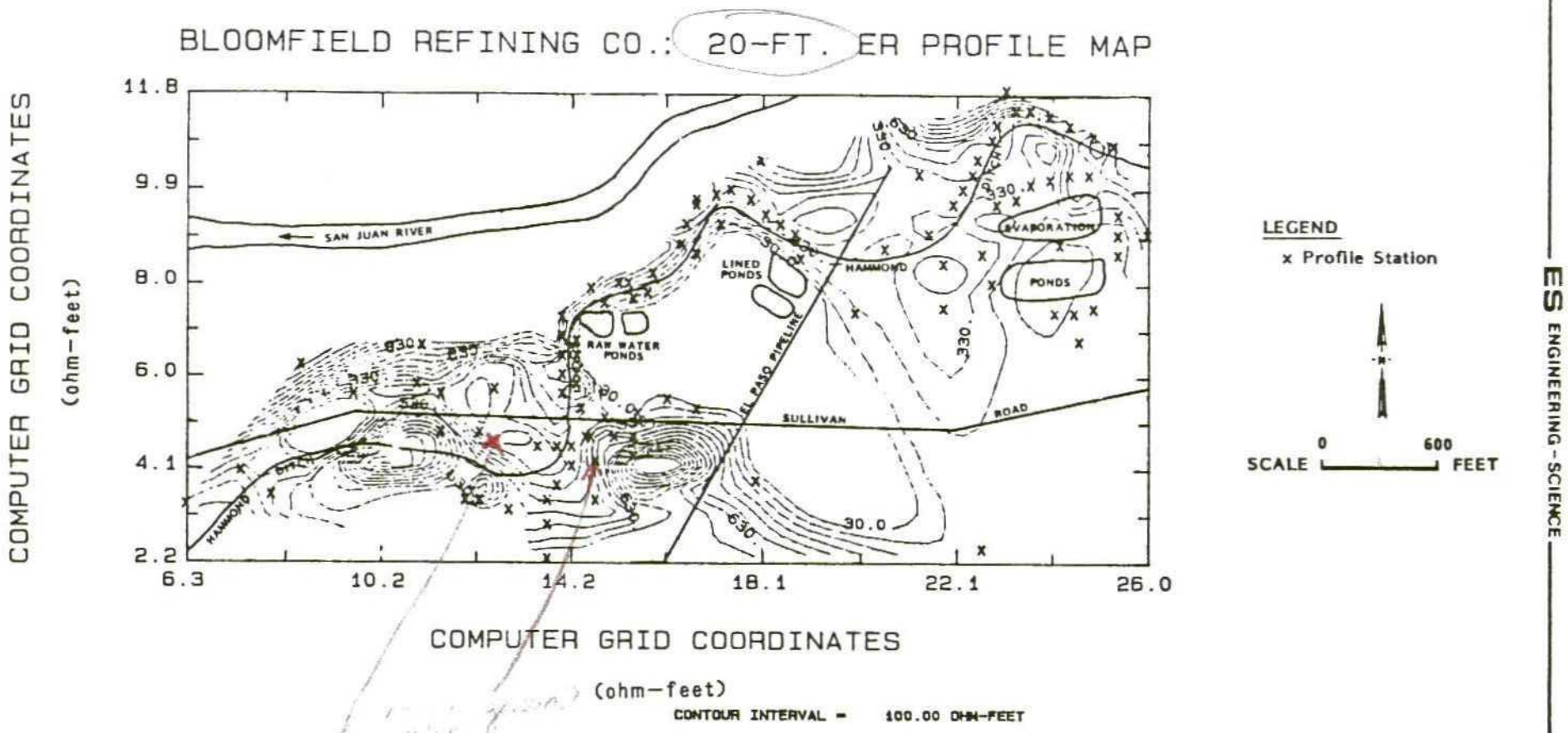
AMPAD EFFICIENCY, LINE NO. 6636

Pond 1 (N. Evap pond)

OCD/SLD

		1 3/85	2	3	4	5	6	7	8	9	10	11	12	13
Na	1	543												
K	2	22.2												
Ca	3	89.6/100												
Mg	4	17.5/16												
Cl	5	787.6												
SO_4	6	471.0												
HCO_3	7	300.9												
TDS	8	2028												
N	9	0.02												
Al	10	<0.1												
As	11	0.013												
Ba	12	0.17												
B	13	0.14												
Cd	14	<0.1												
Cr	15	<0.1												
Fe	16	0.24												
Pb	17	<0.1												
Mn	18	0.15												
Mo	19	<0.1												
Ni	20	<0.1												
Se	21	0.007												
Sr	22	1.4												
Zn	23	<0.1												
Ben	24	–												
Tol	25	–												
EB	26	–												
p-X	27	–												
m-X	28	–												
o-X	29	–												
F	30	0.49												
CN	31	–												
Phenols		–												
NO_3-N/TKN		72.3/86.5												

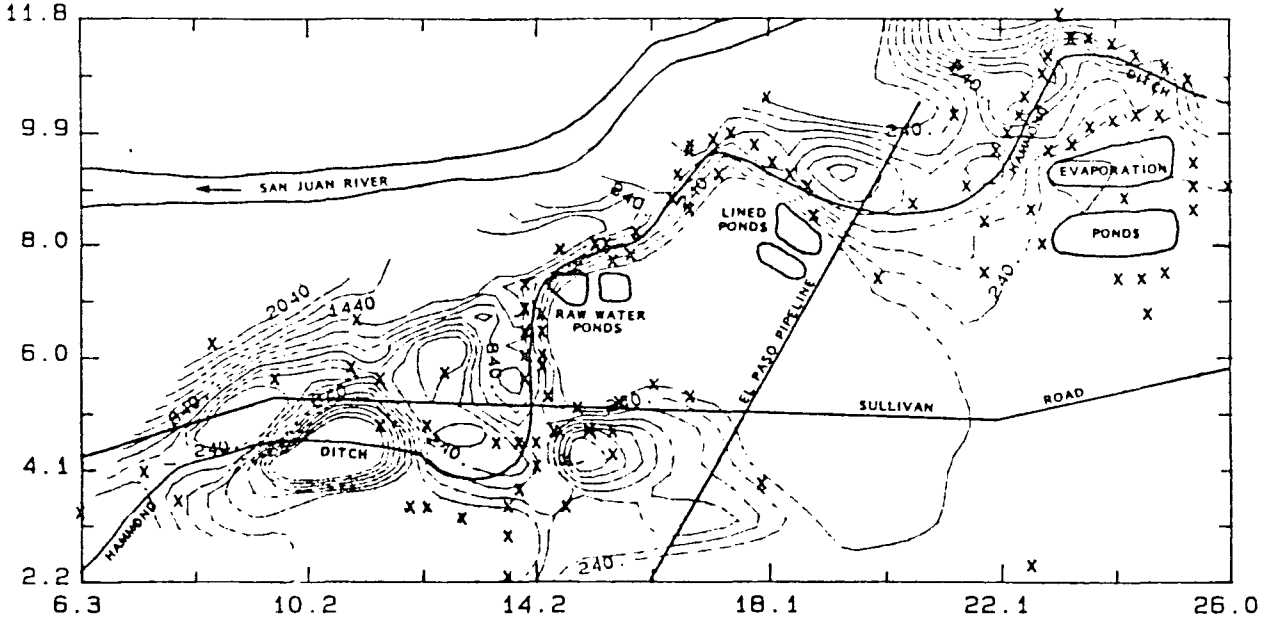
FIGURE 2.3



ES ENGINEERING-SCIENCE

FIGURE 2.2

BLOOMFIELD REFINING CO.: 10-FT. ER PROFILE MAP



LEGEND

x Profile Station

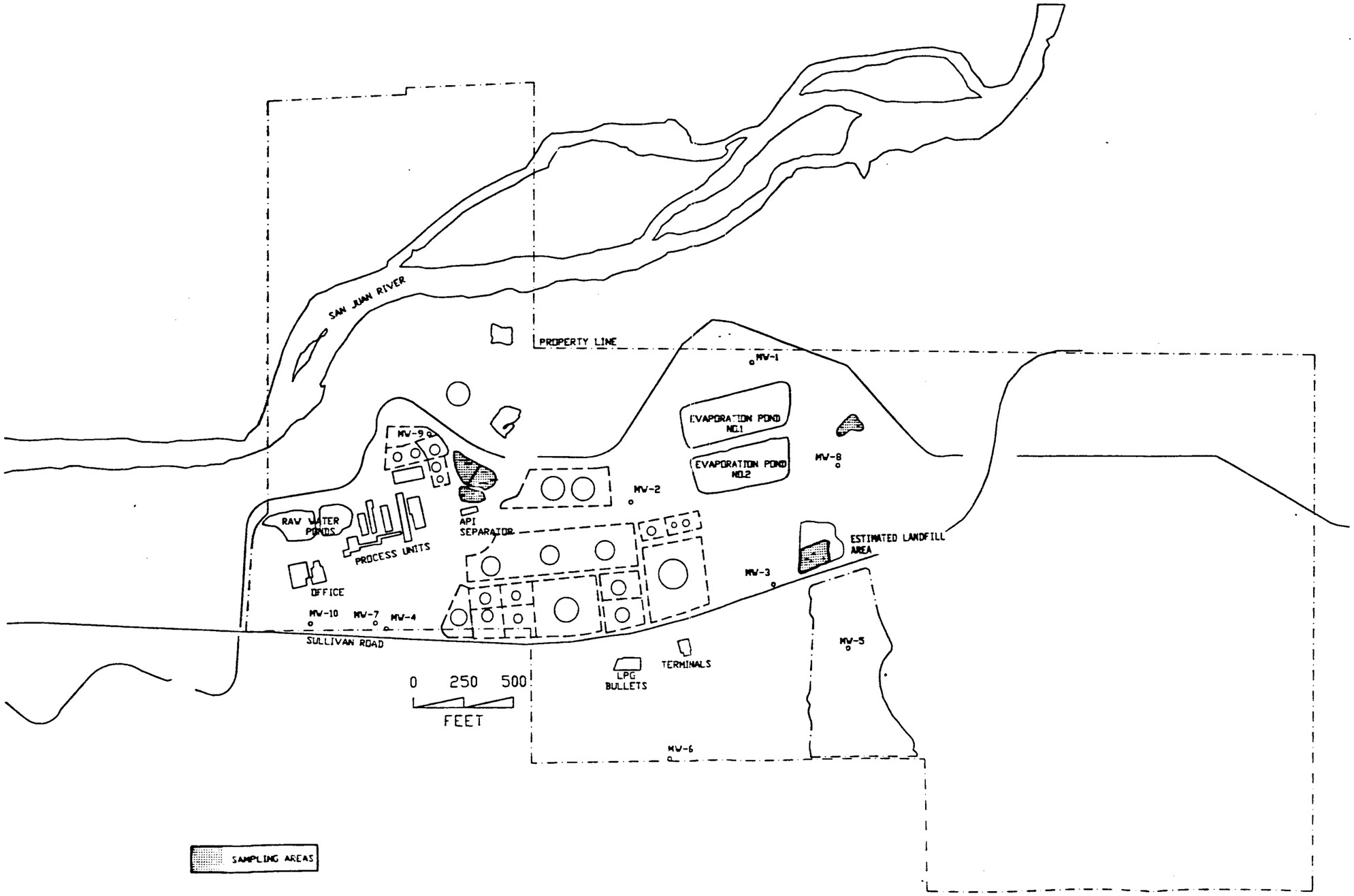
N

0 600

SCALE FEET

ES ENGINEERING-SCIENCE

FIGURE 1
BLOOMFIELD REFINERY FACILITY MAP



SAN JUAN

Qsc

Tn

Qc

Qsc

Tn

Qc

1/16 CORNER

Jackson Lake Terrace

Qc

Inactive seep

Seepage 549[illegible] from Hammond ditch ~1 gal./m[illegible] major water seep[illegible] no oil

Hammond seepage some light hydrocarbon

5498.2

5495

5496.8

5496.7

5510.9

5512.6

Lined ponds

Concrete dike

Raw water ponds

API separator

Process Units

Warehouse

Office

5492.30
5499.46

PA

CENTER OF SECTION 27
T29N, R11W, N.M.P.M.
SAN JUAN COUNTY
NEW MEXICO

mw11

1/16 CORNER

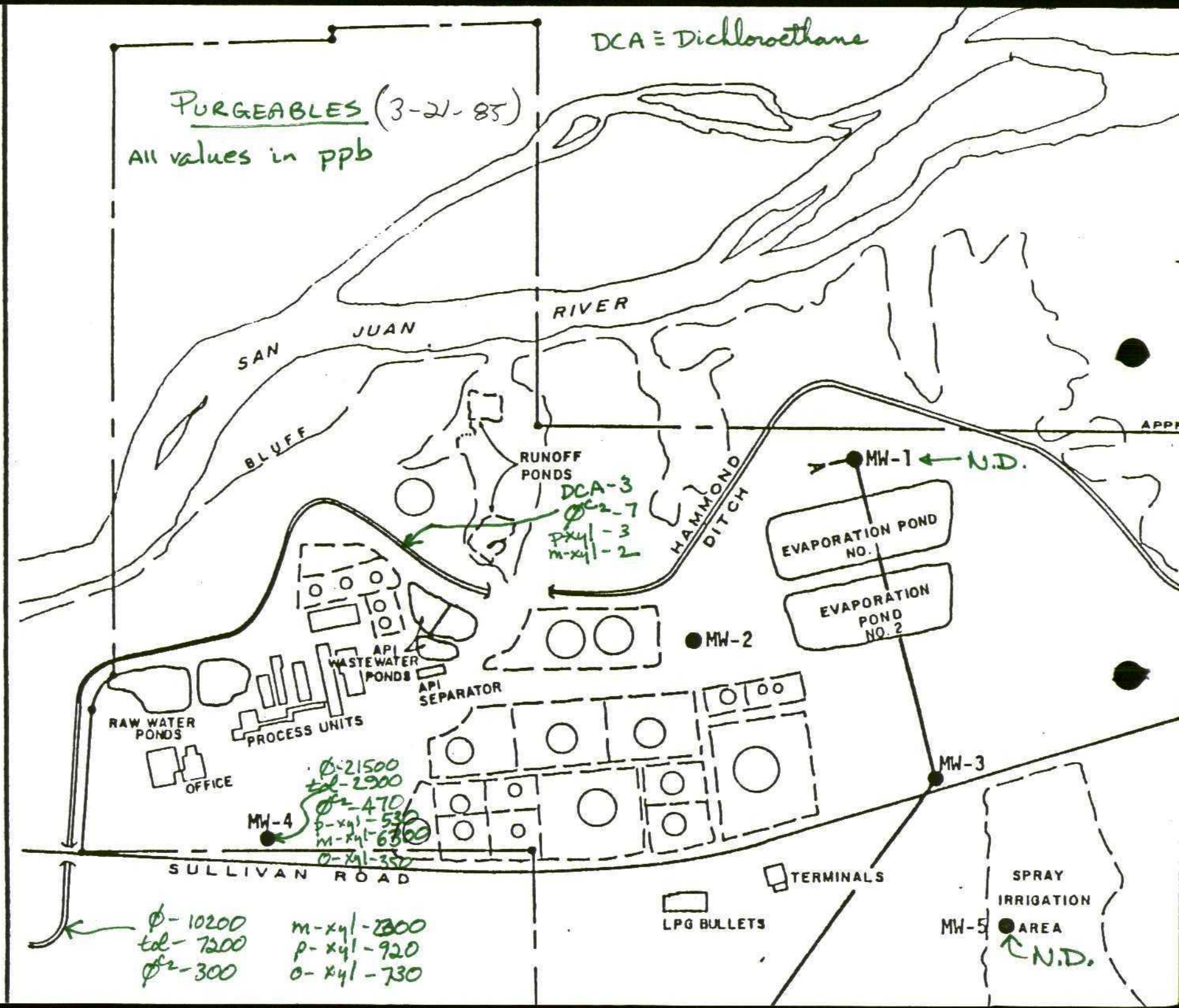
LPG bullets

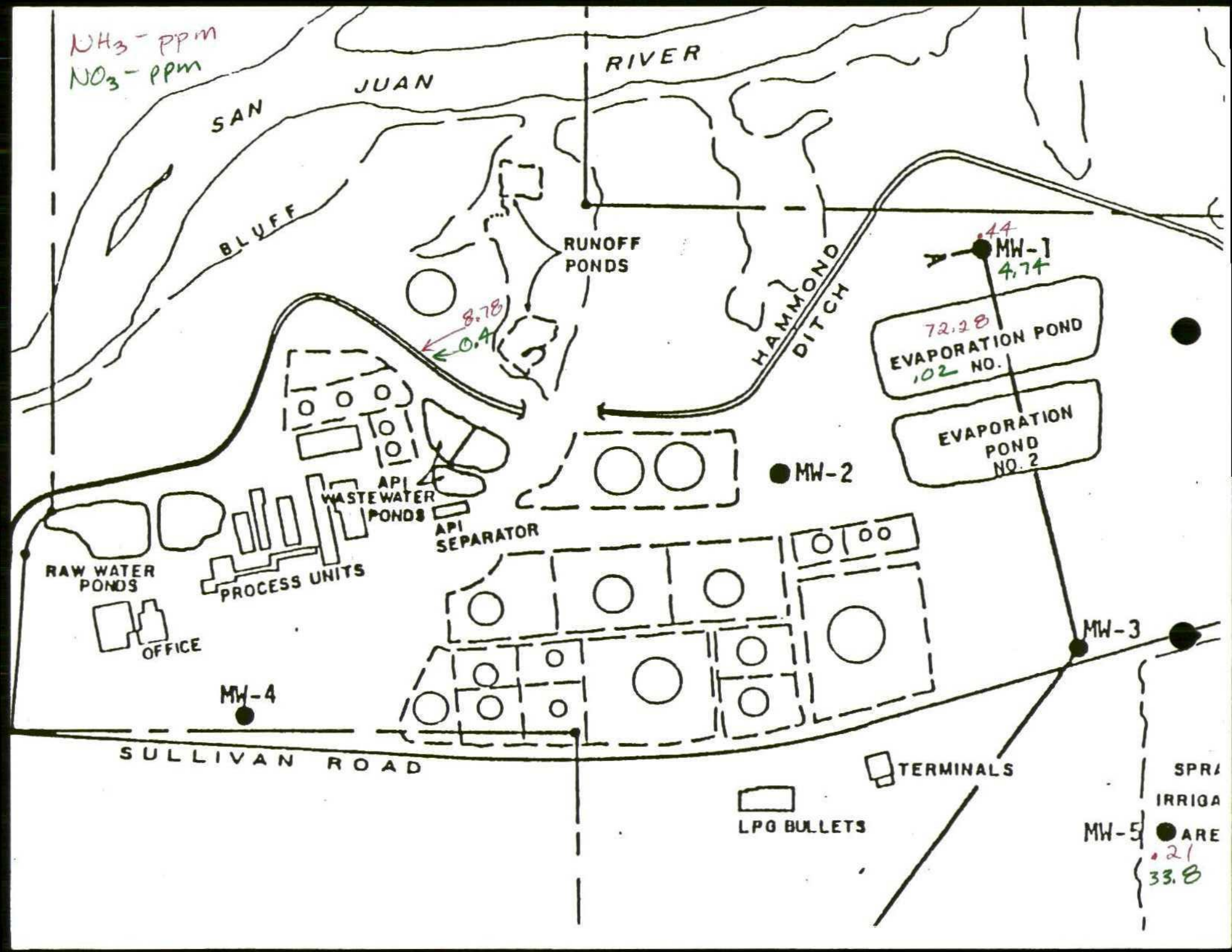
Transportation

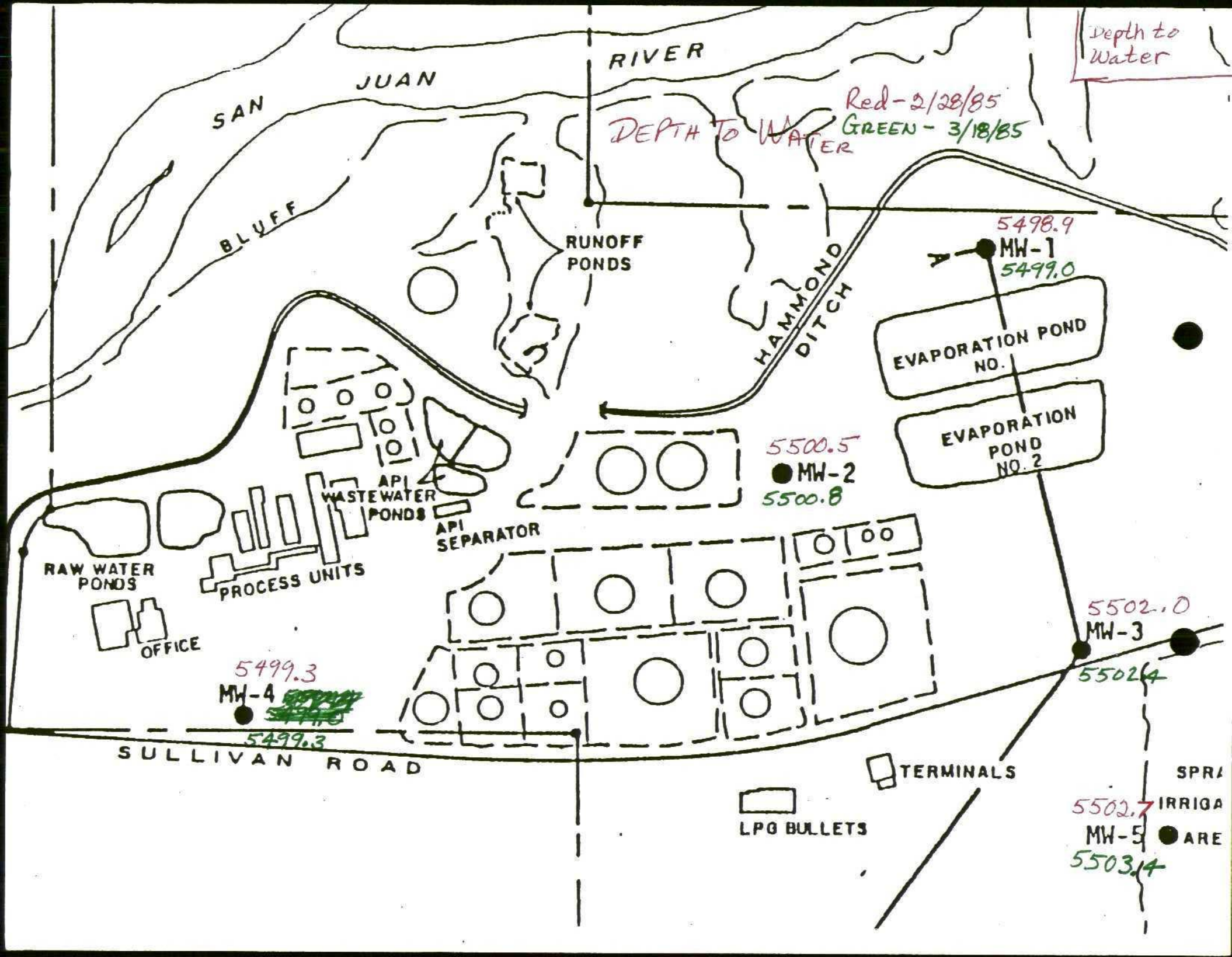
GROUND-WATER-FLOW LINE

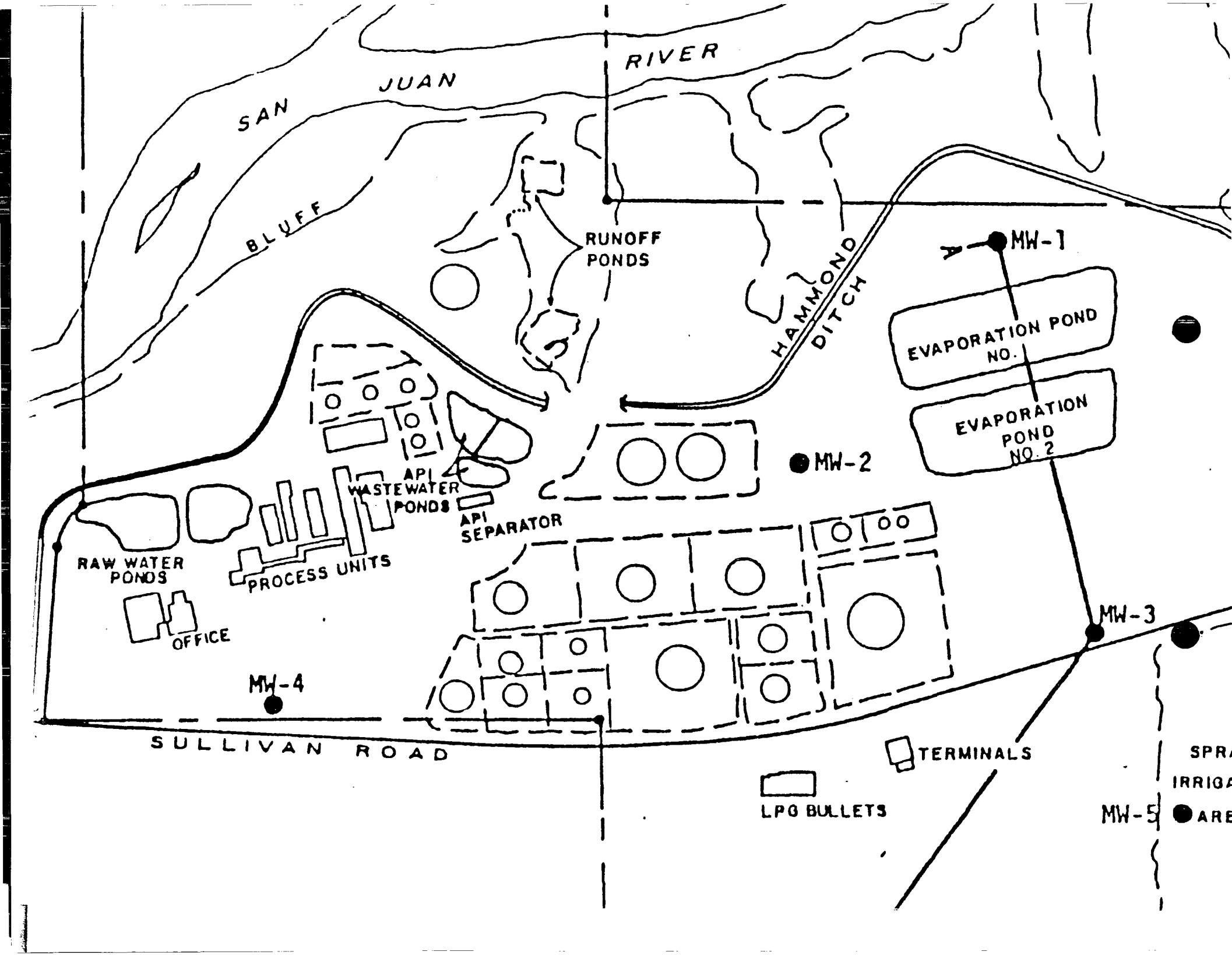
Amoco-[illegible]

SCALE 1" = 250'


DCA ≡ Dichloroethane
PURGEABLES (3-21-85)
All values in ppb
SAN JUAN RIVER
BLUFF
RUNOFF PONDS
DCA-3
ø-2-7
p-xyl-3
m-xyl-2
HAMMOND DITCH
MW-1 ← N.D.
EVAPORATION POND NO. 1
EVAPORATION POND NO. 2
MW-2
API WASTEWATER PONDS
API SEPARATOR
RAW WATER PONDS
PROCESS UNITS
OFFICE
MW-4
ø-21500
tol-2900
ø-2-470
p-xyl-530
m-xyl-6300
o-xyl-350
MW-3
SULLIVAN ROAD
TERMINALS
LPG BULLETS
SPRAY IRRIGATION AREA
MW-5 ← N.D.
ø-10200
tol-7200
ø-2-300
m-xyl-2800
p-xyl-920
o-xyl-730


NH_3 - ppm
NO_3 - ppm
SAN JUAN RIVER
BLUFF
RUNOFF PONDS
HAMMOND DITCH
.44
MW-1
4.74
72.28
EVAPORATION POND NO. 2
EVAPORATION POND NO. 1
8.78
0.4
MW-2
API WASTEWATER PONDS
API SEPARATOR
RAW WATER PONDS
PROCESS UNITS
OFFICE
MW-3
MW-4
SULLIVAN ROAD
TERMINALS
LPG BULLETS
SPRA
IRRIGA
ARE
MW-5
.21
33.8


Depth to Water
SAN JUAN RIVER
BLUFF
DEPTH TO WATER
Red - 2/28/85
GREEN - 3/18/85
RUNOFF PONDS
HAMMOND DITCH
5498.9
MW-1
5499.0
EVAPORATION POND NO.
EVAPORATION POND NO. 2
5500.5
MW-2
5500.8
API WASTEWATER PONDS
API SEPARATOR
RAW WATER PONDS
PROCESS UNITS
OFFICE
5502.0
MW-3
5502.4
5499.3
MW-4
5499.3
SULLIVAN ROAD
TERMINALS
LPG BULLETS
5502.7
MW-5
5503.4
SPRA
IRRIGA
ARE


SAN JUAN RIVER
BLUFF
RUNOFF PONDS
HAMMOND DITCH
MW-1
EVAPORATION POND NO.
EVAPORATION POND NO. 2
MW-2
API WASTEWATER PONDS
API SEPARATOR
RAW WATER PONDS
PROCESS UNITS
OFFICE
MW-3
MW-4
SULLIVAN ROAD
TERMINALS
LPG BULLETS
MW-5

GROUNDWATER SAMPLING

DATE	TIME	MW NO	WATER LEVEL	TOTAL DEPTH	FT. OF H2O	GALS. H2O	BAILS R'Q'D	ACT. 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 x h = gal
radius of wells 10 & 9 = 0.25' ; 1.468 x h = gal

5/27/87		8	29.17	34.87	NOT BAILED
"		7	24.47	-	"

GROUNDWATER ELEVATIONS

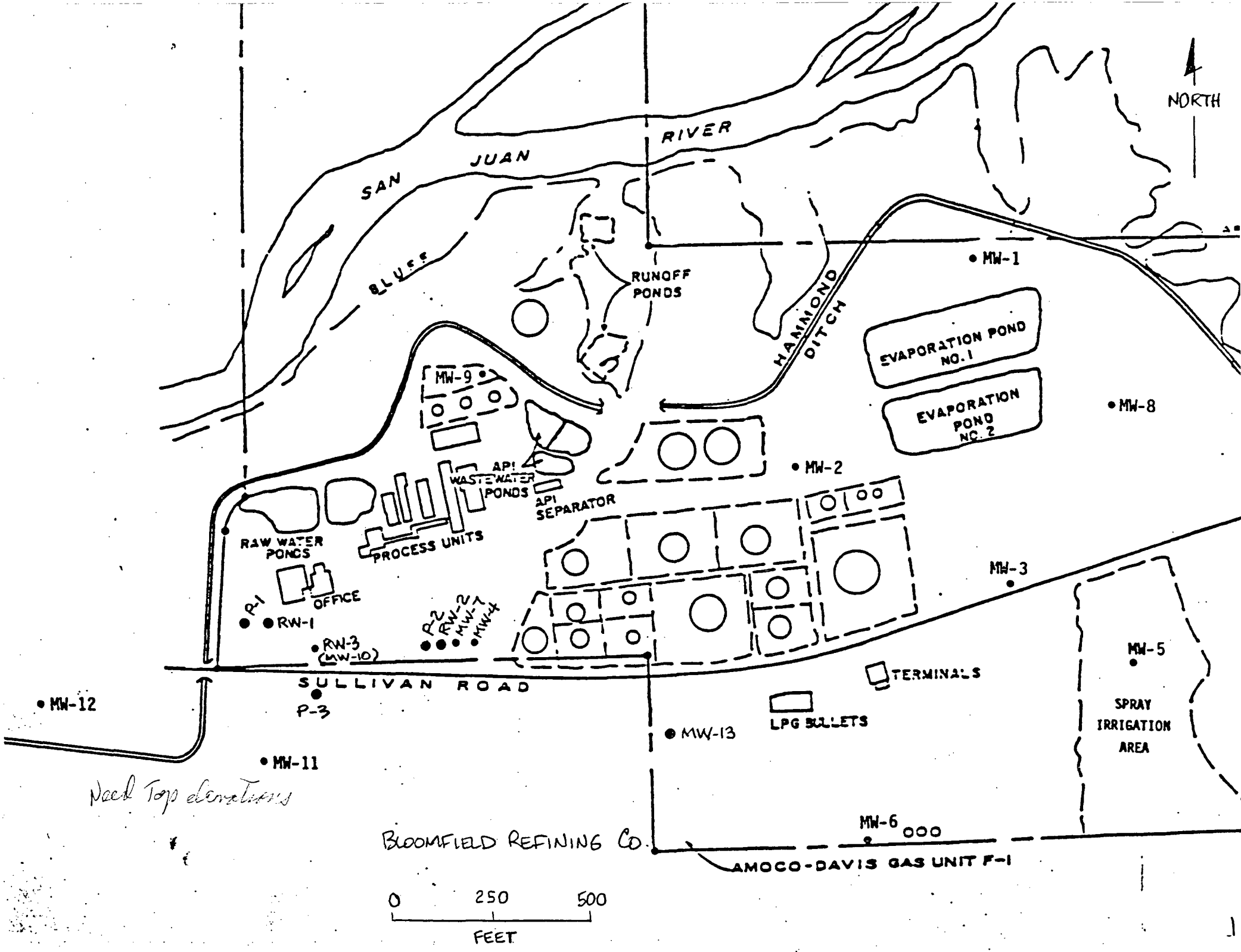
	DATE	MW-7	MW-8	MW-9	MW-10	HAMMOND AT SALMON	HAMMOND AT WALKWAY
	T.O.P. →	5524.09	5531.12	5519.70	5516.86	5504.82	5522.95
	3/-/86	5498.02	5501.95	5498.15	5497.65	-	-
SAMPLE	3/26/86	5498.02	5501.97	5498.20	5497.66	-	-
DIKE REMOVED	4/4/86	5498.77	5501.86	5498.22	5497.60	5496.50	5498.24
	4/18/86	5497.92	5501.82	5497.90	5497.69	-	5496.35
WATER ON 4/21	5/5/86	5497.28	5501.79	5498.62	5497.83	5498.08	5499.03
	5/21/86	5498.86	5501.83	5499.00	5498.05	5498.25	5499.42
	6/4/86	5498.85	5501.89	5499.17	5498.15	5498.23	5499.63
SAMPLE	6/23/86	-	5502.04	5499.47	5498.11	-	-
	7/8/86	5497.87	5502.22	5499.50	5498.17	5497.89	5499.95
	8/4/86	5498.77	5502.12	5499.40	5498.37	5497.84	5499.67
	9/2/86	5498.95	5502.21	5499.55	5498.53	5498.24	5500.15
SAMPLE	9/18/86	-	5502.12	5499.57	5498.75	-	-
	10/8/86	5498.96	5501.97	5499.42	5498.69	5497.00	5498.93
WATER OFF 10/15	11/7/86	5499.26	5501.90	5499.56	5499.05	5497.00	5498.83
DIKED	12/8/86	5499.40	5502.10	5499.14	5499.28	5498.72	5498.73
SAMPLE	12/16/86	5499.41	5502.10	5499.15	5499.30	-	-
	1/27/87	5499.29	5501.85	5498.98	5499.09	5498.59	5498.60
REMOVE DIKES 4/3/87	4/2/87	5499.59	5502.12	5498.92	5499.33	5498.55	5498.55
IRRIGATION 4/13/87	4/23/87	5499.55	5502.03	5498.29	5499.07	5497.55	5497.92
	5/27/87	5499.62	5501.95	5498.73	5499.04	5498.09	5498.61

© WILSON JONES COMPANY G7506 GREEN MADE IN U.S.A.

BUDINE [illegible] COMPANY
GROUND WATER ELEVATIONS

	DATE	T.O.P. →	MW-1 5515.77	MW-2 5511.45	MW-3 5535.85	MW-4 5524.30	MW-5 5545.10	MW-6 5551.23
	2/24/84		5498.91	5500.44	5501.74	5499.46	5502.26	DRY
	2/[illegible]/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/[illegible]/85		5499.94	5500.98	5502.49	5499.73	5503.24	"
	7/ 2/85		5500.20	5500.99	5502.45	5499.80	5503.30	"
	9/ 5/85		5501.00	5501.25	5502.43	5499.78	5503.37	"
	9/17/85		5500.34	5501.05	5502.25	5499.80	5503.07	"
WATER OFF	10/ 3/85		5500.03	5500.87	5502.42	5499.70	5503.30	"
	10/24/85		5499.23	5500.43	5502.28	5499.54	5503.10	"
	11/ 8/85		5498.72	5500.05	5502.20	5499.60	5503.[illegible]	"
	12/17/85		5498.35	5499.85	5501.85	5499.40	5502.30	"
	1/ 8/86		5498.59	5500.08	5501.[illegible]	5499.35	5502.77	DRY
	1/24/86		5498.75	5500.22	5502.04	5499.36	5502.76	"
	2/20/86		5498.93	5500.62	5502.43	5499.35	5503.30	"
	3/21/86		5499.10	5500.65	5502.39	5499.3[illegible]	5504.23	"
SAMPLE	3/26/86		5499.07	5500.65	5502.91	5499.31	5504.24	"
	4/ 7/86		5499.07	5500.57	5502.98	5499.21	5504.57	"
DIKE REMOVED 4/5 WATER ON 4/4	4/18/86		5498.85	5500.43	5502.98	5499.42	5504.42	"
	5/ 5/86		5499.43	5500.57	5502.92	5499.32	5504.27	"
	5/21/86		5500.05	5500.82	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	5499.72	5503.58	"
SAMPLE	9/18/86		5500.03	5501.22	5502.77	5499.98	5503.52	"
	10/ 8/86		5499.83	5501.07	5502.65	5500.13	5503.46	"
WATER OFF 10/15	11/ 7/86		5499.45	5500.82	5502.72	5500.19	5503.48	"
DRIED	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 4/3/87	4/ 2/87		5499.76	5501.20	5502.86	5500.37	5503.77	"
IRRIGATION 4/13/87	4/23/87		5499.33	5500.71	5502.94	5500.32	5504.01	"
	5/27/87		5499.71	5500.83	5502.94	5500.22	5503.95	"

© WILSON JONES COMPANY G7506 GREEN MADE IN U.S.A.



Need Top elevations

BLOOMFIELD REFINING CO.

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	LAB NO.	USER CODE
7/29/82	WC 317	

Collection date: 7-28-82-6.00 PM
Collected by: Simpson
Owner: OCD
Send Final Report to: OIL CONSERVATION DIV P.O. BOX 2088 SANTA FE N.M. 87501

City or Location:
County: Region:

FIELD DETERMINED PARAMETERS By

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature, °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids, ml/l		☐	

OTHER INFORMATION: SAMPLE CA NF-A-1g CUSO4 10 mL H_3PO_4 1 gal Brown glass

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ Other:
- ☐ Other:
- ☐ DRAIN
- ☐ LAKE
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Canadian
- ☐ Little Colorado
- ☐ Other - specify:
- ☐ Pecos
- ☐ Gila
- ☐ San Juan

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☐ Residue Total Filterable (Dissolved)		☐ Conductance Micromhos 25 °C		☐	
☐ TOC		☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☐		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☒ ug/l Benzo(a)	12.8	☐		☐		☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS

Date

Analyst

Reviewed by

Date reported 8/2/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)

WHITE—*Originator* PINK—*EID Field Office*
CANARY—*EID Program Office* GOLDENROD—*SLD File Copy*

STATE OF NEW MEXICO
ENVIRONMENT
SCIENTIFIC LABORATORY DIVISION (HED)
700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

Biological, Chemical and Physical ANALYSES of WASTEWATER

DATE RECEIVED	LAB NO.	USER CODE
7/29/82	WC 318	

Collection date: 7-28-82 - 3:00 PM
Collected by: Sim Pson
Owner:
Send Final Report to:
OIL CONSERVATION
D.V
P.O. BOX 2088 SANTA FE
N.M 87501

City or Location:
County: Region:

FIELD DETERMINED PARAMETERS By

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature, °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids, ml/l		☐	

OTHER INFORMATION: SAMPLE DA 1:1-A-Mg CuSO4
ICED DO WINSTANCE COLLECTION .0ML H3PO4

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ Other:
- ☐ Other:
- ☐ DRAIN
- ☐ LAKE
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Canadian
- ☐ Little Colorado
- ☐ Other - specify:
- ☐ Pecos
- ☐ Gila
- ☐ San Juan

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☐ Residue Total Filterable (Dissolved)		☐ Conductance Micromhos 25 °C		☐	
☐ TOC		☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☐		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☒ ug/l PHENOLS 37049		☐		☐		☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS

Date:
Analyst:
Reviewed by:
Date reported: 8/2/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)

WHITE—*Originator* PINK—*EID Field Office*
CANARY—*EID Program Office* GOLDENROD—*SLD File Copy*

STATE OF NEW MEXICO
HEALTH ENVIRONMENT
SCIENTIFIC LABORATORY DIVISION (HED)
700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

Biological, Chemical and Physical ANALYSES of WASTEWATER

DATE RECEIVED	LAB NO.	USER CODE
7/29/82	WC 319	

Collection date: 7-28-82
Collected by: OSCAR SIMPSON
Owner: OCD
Send Final Report to:
OIL CONSERVATION DIV
P.O. BOX 2088
SANTA FE N.M. 87501
PH 827 2534

City or Location:
County: SJ
Region:

FIELD DETERMINED PARAMETERS By

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature, °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids, ml/l		☐	

OTHER INFORMATION: SAMPLE IA — 3 gm Hg Cl per gallon for NF-A-18 CUSO4 + 10 ml L H3PO4

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ DRAIN
- ☐ Other:
- ☐ LAKE
- ☐ Other:
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Pecos
- ☐ Canadian
- ☐ Gila
- ☐ Little Colorado
- ☐ San Juan
- ☐ Other - specify:

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☐ Residue Total Filterable (Dissolved)		☐ Conductance Micromhos 25 °C		☐	
☐ TOC		☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☐		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☒ ug/l PHENOLS	191	☐		☐		☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS

Date:
Analyst:
Reviewed by: A.L. Meibohm
Date reported: 8/2/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)

WHITE—*Originator* PINK—*EID Field Office*
CANARY—*EID Program Office* GOLDENROD—*SLD File Copy*

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	LAB NO. WC 322	USER CODE
7/29/82		

Collection date 7-28-82 6:00 PM
City or Location
Collected by Simpson
County Region
Owner OCD

Send Final Report to:
OIL CONSERVATION D.'O
P.O. Box 2088
SANTA FE N.M. 87501

FIELD DETERMINED PARAMETERS By

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature, °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids, ml/l		☐	

OTHER INFORMATION SAMPLE CA NF-A-10 ML
Lead donor ions collection. NAOH

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ Other:
- ☐ Other:
- ☐ DRAIN
- ☐ LAKE
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Canadian
- ☐ Little Colorado
- ☐ Other - specify:
- ☐ Pecos
- ☐ Gila
- ☐ San Juan

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☐ Residue Total Filterable (Dissolved)		☐ Conductance Micromhos 25 °C		☐	
☐ TOC		☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☐		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☒ Cyanide		☐		☐		☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS
POSSIBLE High SULFATES
0.002 mg/l. Cyanide

Date 8-5-82
Analyst CB Coleman
Reviewed by
Date reported 8/5/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)
WHITE—*Originator* PINK—*EID Field Office*
CANARY—*EID Program Office* GOLDENROD—*SLD File Copy*

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	LAB NO.	USER CODE
7-29-82	WC 323	

Collection date: 7-28-48 3:00PM
City or Location:
Collected by: SIMPSON
County: SJ
Region:
Owner: OCD
FIELD DETERMINED PARAMETERS — By:

Send Final Report to:
OIL CONSERVATION
DIV
P.O. BOX 2088 SANTA FE
87501 PH 8272534

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature, °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids, ml/l		☐	

OTHER INFORMATION: SAMPLE DA NF-A -10 ML NAOH
ICED DOWN SINCE COLLECTION

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ Other:
- ☐ Other:
- ☐ DRAIN
- ☐ LAKE
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Canadian
- ☐ Little Colorado
- ☐ Other - specify:
- ☐ Pecos
- ☐ Gila
- ☐ San Juan

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☐ Residue Total Filterable (Dissolved)		☐ Conductance Micromhos 25 °C		☐	
☐ TOC		☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☐		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☒ CYNAIDE		☐		☐		☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS: ~~FLUORIDE~~ High SULFATES
0.006 mg/l. Cyanide
pH - 9 NOTE

Date: 8-5-82
Analyst: CB Coleman
Reviewed by:
Date reported: 8/5/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)
WHITE—*Originator* PINK—*EID Field Office*
CANARY—*EID Program Office* GOLDENROD—*SLD File Copy*

STATE OF NEW MEXICO
ENVIRONMENT
SCIENTIFIC LABORATORY DIVISION (HED)
700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

Biological, Chemical and Physical ANALYSES of WASTEWATER

DATE RECEIVED	LAB NO.	USER CODE
7/29/82	WC 324	

Collection date: 7-28-82 - 4:00PM
Collected by: OSCAR SIMPSON
Owner: OCD
Send Final Report to:
OIL CONSERVATION D.V.
P.O. BOX 2088
SANTA FE N.M.
87501
PH 827 2534
ATT OSCAR SIMPSON

City or Location:
County: SAN JUAN
Region:

FIELD DETERMINED PARAMETERS — By

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature, °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids, ml/l		☐	

OTHER INFORMATION
NOTE: High SOLFATES PRESENT. DR COLEMAN
SAMPLE IA — HF-A-10ML NAOH

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ DRAIN
- ☐ Other:
- ☐ LAKE
- ☐ Other:
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Pecos
- ☐ Canadian
- ☐ Gila
- ☐ Little Colorado
- ☐ San Juan
- ☐ Other - specify:

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☐ Residue Total Filterable (Dissolved)		☐ Conductance Micromhos 25 °C		☐	
☐ TOC		☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☐		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☒ CYANIDE		☐		☐		☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS: Negative Cyanide
NOTE
pH of sample was 1-2 rather than 12

Date: 8-5-82
Analyst: CB Coleman
Reviewed by: [signature]
Date reported: 8/5/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)

WHITE—Originator PINK—EID Field Office
CANARY—EID Program Office GOLDENROD—SLD File Copy

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.: WC 921 | 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

TYPE of CHEMICAL ANALYSIS: ☐ Complete Secondary ☐ 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	Report to
7-28-82	5:30 pm	SAMPLE JA	NEAR TOWN MARSH	OIL CONSERVATION DIV

Collected By	Owner	Address
SIMSON	OCD	P.O. BOX 2088 SANTA FE, N.M. 87501

TYPE of SYSTEM *(Check one)*: ☐ PRIVATE ☐ PUBLIC: ☒ Community ☒ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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 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 $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		01030 Chromium		RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		01049 Lead		03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	07180 Mercury		09501 Radium-226	0 pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)	1	00945 Sulfate (as SO_4)		00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
☒ Cyanide						01075 Silver					

LABORATORY REMARKS: NOTE HIGH SULFATES PRESENT
< 0.001 mg/l. CB Coleman 8-5-82
cyanide.

Reviewed by: Clell Meibohm
Date reported: 8/5/82

SLD 702 Form Revised 4/79

DISTRIBUTION: White - Water Supply Regulation, SF • Canary - WS System • Pink - EIA Regional Office • Goldenrod - SLD Lab

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. WC 320 | 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 | **TYPE of CHEMICAL ANALYSIS** ☐ Complete Secondary ☐ Organic ☐ Radiological

Water Supply System Name: Sample LA | Water Supply System Code No. | City or Location | County | Check one: ☐ TREATED WATER ☐ RAW WATER

Collection Date: 7-28-82 | Collection Time: 7:00 PM | Collection Point: SAMPLE LA

Collector's remarks: SAMPLE LA NF A = 10 ml NaOH | Report to | Address

Collected By: SIMPSON | Owner: OCD

TYPE of SYSTEM *(Check one)*: ☒ PRIVATE ☐ PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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 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 $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		01030 Chromium		RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		01049 Lead		03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	07180 Mercury		09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		00945 Sulfate (as SO_4)		00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
☒ Cyanide						01075 Silver					

LABORATORY REMARKS: Note: May have high sulfate
Negative Cyanide

B Coleman 8-5-82

Reviewed by: A W Smith
Date reported: 8/5/82

SLD 702 Form Revised 4/78

DISTRIBUTION: White - Water Supply Regulation, SF • Canary - WS System • Pink - EIA Regional Office • Goldenrod - SLD Lab

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	LAB NO.	USER CODE
7/29/82	WC 327	

Collection date: 7-28-82 6:00PM
Collected by: Simpson
Owner: OCD
Send Final Report to: O.C. CONSERVATION D.V. P.O. BOX 2088 SANTA FE N.M. 87501

City or Location:
County: SJ
Region:

FIELD DETERMINED PARAMETERS By

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature, °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids, ml/l		☐	

OTHER INFORMATION: SAMPLE CA NF-A-10 mL H_2SO_4

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ Other:
- ☐ Other:
- ☐ DRAIN
- ☐ LAKE
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Canadian
- ☐ Little Colorado
- ☐ Other - specify:
- ☐ Pecos
- ☐ Gila
- ☐ San Juan

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☐ Residue Total Filterable (Dissolved)		☐ Conductance Micromhos 25 °C		☐	
☒ TOC	5.4	☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☐		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☐		☐		☐		☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS

Date:
Analyst:
Reviewed by: Ollie Meibohm
Date reported: 8/9/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)

WHITE—*Originator* PINK—*EID Field Office*
CANARY—*EID Program Office* GOLDENROD—*SLD File Copy*

STATE OF NEW MEXICO
ENVIRONMENT
SCIENTIFIC LABORATORY DIVISION (HED)
700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

Biological, Chemical and Physical ANALYSES of WASTEWATER

DATE RECEIVED	LAB NO.	USER CODE
7/29/82	WC 326	

Collection date: 7-28-82 - 3:00 PM
Collected by: SIMPSON
Owner: OCD
Send Final Report to: OIL CONSERVATION D.V
P.O. BOX 2088
SANTA FE NM
87501 PH 827-2574

City or Location:
County: Region:

FIELD DETERMINED PARAMETERS By

☐ 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_2SO_4
ICED DOWN SINCE COLLECTION

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ Other:
- ☐ Other:
- ☐ DRAIN
- ☐ LAKE
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Canadian
- ☐ Little Colorado
- ☐ Other - specify:
- ☐ Pecos
- ☐ Gila
- ☐ San Juan

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☐ Residue Total Filterable (Dissolved)		☐ Conductance Micromhos 25 °C		☐	
☒ TOC	418	☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☐		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☐		☐		☐		☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS

Date:
Analyst:
Reviewed by: Al Weitbrecht
Date reported: 8/9/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)

WHITE—*Originator* PINK—*EID Field Office*
CANARY—*EID Program Office* GOLDENROD—*SLD File Copy*

STATE OF NEW MEXICO
ENVIRONMENT
SCIENTIFIC LABORATORY DIVISION (HED)
700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

Biological, Chemical and Physical ANALYSES of WASTEWATER

DATE RECEIVED	LAB NO.	USER CODE
7/29/82	WC 325	

Collection date: 7-28-82 - 4:00PM
Collected by: OSCAR SIMPSON
Owner: OCD
Send Final Report to:
OIL CONSERVATION DIV
P.O BOX 2088
SANTA FE N.M 87501
PH 827 2534

City or Location:
County: SJ
Region:

FIELD DETERMINED PARAMETERS By:

☐ 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_2SO_4

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ Other:
- ☐ Other:
- ☐ DRAIN
- ☐ LAKE
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Canadian
- ☐ Little Colorado
- ☐ Other - specify:
- ☐ Pecos
- ☐ Gila
- ☐ San Juan

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☐ Residue Total Filterable (Dissolved)		☐ Conductance Micromhos 25 °C		☐	
☒ TOC	4.6	☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☒ SULFATES		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☐		☐		☐		☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS

Date:
Analyst:
Reviewed by: [signature]
Date reported: 8/9/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)

WHITE—*Originator* PINK—*EID Field Office*
CANARY—*EID Program Office* GOLDENROD—*SLD File Copy*

STATE OF NEW MEXICO
ENVIRONMENT
SCIENTIFIC LABORATORY DIVISION (HED)
700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

Biological, Chemical and Physi ANALYSES of WASTEWATE

DATE RECEIVED	LAB NO.	USER CODE
7/29/82	WC-328	

Collection date 7-28-82 5:30	City or Location		
Collected by SIMPSON	County SJ		Region
Owner OCD	FIELD DETERMINED PARAMETERS	By	
Send Final Report to: O.C. CONSERVATION D.V P.O. BOX 2088 SANTA FE N.M 87501	☐ pH	☐ Dissolved Oxygen mg/l	
	☐ Water Temperature, °C	☐ Chlorine Residual, mg/l	
	☐ Settleable Solids, ml/l	☐	
	OTHER INFORMATION SAMPLE JA NF-A-10ML H_2SO_4		

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ DRAIN
- ☐ Other:
- ☐ LAKE
- ☐ Other:
- ☐ STREAM

RIVER BASIN		OWNERSHIP	LOCATION
☐ Rio Grande	☐ Pecos	☐ Municipal	☐ Influent
☐ Canadian	☐ Gila	☐ MDSWA	☐ Primary
☐ Little Colorado	☐ San Juan	☐ Private	☐ Secondary
☐ Other - specify:		☐ Industrial	☐ Effluent
		☐ Commercial	☐ Digester
		☐ Other:	☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☐ Residue Total Filterable (Dissolved)		☐ Conductance Micromhos 25 °C		☐	
☒ TOC	98	☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☐		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☐		☐		☐		☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS

Date

Analyst

Reviewed by

Date reported 8/9/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)

WHITE—*Originator* PINK—*EID Field Office*
CANARY—*EID Program Office* GOLDENROD—*SLD File Copy*

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	LAB NO.	USER CODE
7 29 82	WC 336	

Collection date: 7-28-82 - 5.00PM
Collected by: SIMPSON
Owner: OCD
Send Final Report to: OIL CONSERVATION DIV, P.O. BOX 2088, SANTA FE N. MEX 87501
City or Location:
County: Region:

FIELD DETERMINED PARAMETERS By

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature, °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids, ml/l		☐	

OTHER INFORMATION: SAMPLE KA (NF-A) ON H_2SO_4

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ Other:
- ☐ Other:
- ☐ DRAIN
- ☐ LAKE
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Canadian
- ☐ Little Colorado
- ☐ Other - specify:
- ☐ Pecos
- ☐ Gila
- ☐ San Juan

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☐ Residue Total Filterable (Dissolved)		☐ Conductance Micromhos 25 °C		☐	
☒ TOC	9.6	☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☐		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☐		☐		☐		☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS

Date:
Analyst:
Reviewed by:
Date reported: 8/9/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)

WHITE—*Originator* PINK—*EID Field Office*
CANARY—*EID Program Office* GOLDENROD—*SLD File Copy*

STATE OF NEW MEXICO
ENVIRONMENT

SCIENTIFIC LABORATORY DIVISION (HED)
700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

Biological, Chemical and Physical ANALYSES of WASTEWATER

DATE RECEIVED	LAB NO.	USER CODE
7/29/82	WC 329	

Collection date: 7-28-82 7:00PM
Collected by: SIMPSON
Owner: OCD
Send Final Report to: OIL CONSERVATION DIV P.O BOX 2088 SANTA FE N.M. 87501

City or Location:
County: Region:

FIELD DETERMINED PARAMETERS By:

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature, °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids, ml/l		☐	

OTHER INFORMATION: SAMPLE, LA NF-A-10 ML H_2SO_4

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ Other:
- ☐ Other:
- ☐ DRAIN
- ☐ LAKE
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Canadian
- ☐ Little Colorado
- ☐ Other - specify:
- ☐ Pecos
- ☐ Gila
- ☐ San Juan

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☐ Residue Total Filterable (Dissolved)		☐ Conductance Micromhos 25 °C		☐	
☒ TOC	1.5	☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☐		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☐		☐		☐		☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS

Date:
Analyst:
Reviewed by:
Date reported: 8/9/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)

WHITE—*Originator* PINK—*EID Field Office*
CANARY—*EID Program Office* GOLDENROD—*SLD File Copy*

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	LAB NO.	USER CODE
7/29/82	WC 332	

Collection date: 7-28-82 - 6:10
Collected by: SIMPSON
Owner: OCD
Send Final Report to: OIL CONSERVATION DIV P.O. BOX 2088 SANTA FE N.M. 87501

City or Location:
County: Region:

FIELD DETERMINED PARAMETERS By

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature, °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids, ml/l		☐	

OTHER INFORMATION: SAMPLE CANNA - ICED DOWN

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ Other:
- ☐ Other:
- ☐ DRAIN
- ☐ LAKE
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Canadian
- ☐ Little Colorado
- ☐ Other - specify:
- ☐ Pecos
- ☐ Gila
- ☐ San Juan

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☒ Residue Total Filterable (Dissolved)	186	☐ Conductance Micromhos 25 °C		☐	
☐ TOC		☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☐		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☒ SO4	56.7	☒ BORON	0.07	☒ CLORIDES	65	☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS

Date:
Analyst:
Reviewed by:
Date reported: 8/9/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)

WHITE—*Originator* PINK—*EID Field Office*
CANARY—*EID Program Office* GOLDENROD—*SLD File Copy*

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	LAB NO.	USER CODE
7/29/82	WC 331	

Collection date: 7-28-82 - 3:00PM
City or Location:
Collected by: Simpson
County: SJ
Region:
Owner: OCD
FIELD DETERMINED PARAMETERS — By:
Send Final Report to: OIL CONSERVATION D.V. P.O. BOX 2088 SANTA FE N.M. 87501

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature, °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids, ml/l		☐	

OTHER INFORMATION: SAMPLE @ DA NF-NA ICED DOWN SINCE COLLECTED

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ DRAIN
- ☐ Other:
- ☐ LAKE
- ☐ Other:
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Pecos
- ☐ Canadian
- ☐ Gila
- ☐ Little Colorado
- ☐ San Juan
- ☐ Other - specify:

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☒ Residue Total Filterable (Dissolved)	2676	☐ Conductance Micromhos 25 °C		☐	
☐ TOC		☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☐		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☒ BORON (B)	0.35	☒ CL	1504	☒ SO4	454.2	☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS

Date:
Analyst:
Reviewed by: [signature]
Date reported: 8/9/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)

WHITE—*Originator* PINK—*EID Field Office*
CANARY—*EID Program Office* GOLDENROD—*SLD File Copy*

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	LAB NO.	USER CODE
7/29/82	WC 330	

Collection date: 7-28-82
City or Location:
Collected by: OSCAR SIMPSON
County: Region:
Owner: OCD
FIELD DETERMINED PARAMETERS — By:

Send Final Report to:
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-NA

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ DRAIN
- ☐ Other:
- ☐ LAKE
- ☐ Other:
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Pecos
- ☐ Canadian
- ☐ Gila
- ☐ Little Colorado
- ☐ San Juan
- ☐ Other - specify:

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☒ Residue Total Filterable (Dissolved)	184	☐ Conductance Micromhos 25 °C		☐	
☐ TOC		☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☐		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☒ $SO_4^=$	57.3	☒ Boron	0.03	☒ CHLORIDES	3.9	☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS

Date:
Analyst:
Reviewed by:
Date reported: 8/9/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)
WHITE—Originator PINK—EID Field Office
CANARY—EID Program Office GOLDENROD—SLD File Copy

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	LAB NO.	USER CODE
7/29/82	WC 333	

Collection date: 7-28-82 - 5:30PM
City or Location:
Collected by: Simpson
County: SJ
Region:
Owner: OCD
FIELD DETERMINED PARAMETERS — By:

Send Final Report to:
Oil Conservation Div.
P.O. Box 2088
Santa Fe, N.M.
87501

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature, °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids, ml/l		☐	

OTHER INFORMATION: SAMPLE TO (NFMA) [redacted]

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ Other:
- ☐ Other:
- ☐ DRAIN
- ☐ LAKE
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Canadian
- ☐ Little Colorado
- ☐ Other - specify:
- ☐ Pecos
- ☐ Gila
- ☐ San Juan

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☒ Residue Total Filterable (Dissolved)	1549	☐ Conductance Micromhos 25 °C		☐	
☐ TOC		☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☐		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☒ SO4	151.8	☒ BORON	0.84	☒ CL	203.5	☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS

Date:
Analyst:
Reviewed by:
Date reported: 8/9/82

LD 710 Form Revised 5/78 (Replaces EIA 008)

WHITE—*Originator* PINK—*EID Field Office*
CANARY—*EID Program Office* GOLDENROD—*SLD File Copy*

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	LAB NO.	USER CODE
7/29/82	WC 335	

Collection date: 7-28-82 5:00PM
City or Location:
Collected by: SIMPSON
County: SAN JUAN
Region:
Owner: OCD
FIELD DETERMINED PARAMETERS — By:
Send Final Report to: OIL CONSERVATION DIV P.O. BOX 2088 SANTA FE N.M. 87501

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature, °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids, ml/l		☐	

OTHER INFORMATION: SAMPLE KA NF-NA

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ Other:
- ☐ Other:
- ☐ DRAIN
- ☐ LAKE
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Canadian
- ☐ Little Colorado
- ☐ Other - specify:
- ☐ Pecos
- ☐ Gila
- ☐ San Juan

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☒ Residue Total Filterable (Dissolved)	1087	☐ Conductance Micromhos 25 °C		☐	
☐ TOC		☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☐		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☒ SO4	6977	☒ CL	78.2	☒ ISOTOPE	066	☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS

Date:
Analyst:
Reviewed by: [signature]
Date reported: 8/9/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)

WHITE—*Originator* PINK—*EID Field Office*
CANARY—*EID Program Office* GOLDENROD—*SLD File Copy*

STATE OF NEW MEXICO
ENVIRONMENT
SCIENTIFIC LABORATORY DIVISION (HED)
700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

Biological, Chemical and Physi ANALYSES of WASTEWATE

DATE RECEIVED	LAB NO.	USER CODE
7/29/82	NC 334	

Collection date: 7-28-82 7:00 PM
Collected by: SIMPSON
Owner: OCD
Send Final Report to: OIL CONSERVATION D. V
P.O. BOX 2088
SANTA FE N. M
87501

City or Location:
County: SJ
Region:

FIELD DETERMINED PARAMETERS — By

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature, °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids, ml/l		☐	

OTHER INFORMATION: SAMPLE @ LA NF-NA

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ DRAIN
- ☐ Other:
- ☐ LAKE
- ☐ Other:
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Pecos
- ☐ Canadian
- ☐ Gila
- ☐ Little Colorado
- ☒ San Juan
- ☐ Other - specify:

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☒ Residue Total Filterable (Dissolved)	906	☐ Conductance Micromhos 25 °C		☐	
☐ TOC		☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☒ SO4	417.2	☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☒ CL	38.2	☒ BORON	0.29	☐		☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4 2ml/l		☐ HNO_3 3-5ml/l (for metals)		☐	
								☐	

REMARKS

Date:
Analyst:
Reviewed by:
Date reported: 8/9/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)

WHITE—*Originator* PINK—*EID Field Office*
CANARY—*EID Program Office* GOLDENROD—*SLD File Copy*

Hauser Laboratories

August 19, 1982
Test Report No. 82-1420

AUG 26 1982

CLIENT: Plateau Inc.
P. O. Box 26251
Albuquerque, NM 87125
Attention: Dwight Stockham

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.

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
? 8	Water from pit in wash ~~west~~ EAST of refinery	7-15	82-1158

TABLE 2

Hauser no.	sulfate mg/liter	chloride mg/liter	flouride 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 anlyzed 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 anlyzed 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
H.D.TCH WATER				
82-1151	0.2	1.3	0.8	0.09
API 82-1154	5.3	3.7	0.3	0.03
Seep 82-1155	70.6	100.0	150.3	19.9
Seep 82-1156	ND	0.2	ND	ND

Hauser no.	o,m-cresol mg/liter	phenol mg/liter	aromatics/aliphatics mg/liter
82-1151	ND	ND	ND
API 82-1154	0.4	0.2	28
SEEP 82-1155	ND	ND	ND
SEEP 82-1156	ND	ND	ND
82-1157	---	---	15800

H.D.TCH SOIL

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.
7/29/82	HM-0114	

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 ☐ Complete Secondary ☐ Organic ☐ Radiological

Water Supply System Name	Water Supply System Code No.	City or Location	County	Check one:
			SJ	☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
7-28-48	6:00 PM	SAMPLE POINT CA	SAMPLE CA NF-A-10ml HNO3	O.C. CONSERVATION D.
Collected By	**Owner**			**Address** P.O. BOX 2088 SANTA FE 87501
SIMPSON	OCD			

TYPE of SYSTEM *(Check one)* ☐ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ Other *(specify)*

LAT. ° ' "
LONG ° ' "

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		☐ 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 $CaCO_3$)		☐ 00620 Nitrate (as N)		☐ 00095 Conductance Micromhos 25°C		☐ 01025 Cadmium				☐ 38270 Methoxychlor	
☐ 00915 Calcium (as Ca)		☐ 00430 Alkalinity (as $CaCO_3$)		☐ 00400 pH		☐ 01030 Chromium		RADIOLOGICAL pCi/l ☐ 01501 Gross Alpha		☐ 39400 Toxaphene	
☐ 00925 Magnesium (as Mg)		☐ 00440 Bicarbonate (as HCO_3)		☐ 01330 Odor		☒ 01049 Lead	<0.005	☐ 03501 Gross Beta	pCi/l	☐ 39730 2, 4-D	
☐ 01045 Iron-Total (as Fe)		☐ 00445 Carbonate (as CO_3)		☐ 00080 Color	mg/l	☐ 07180 Mercury		☐ 09501 Radium-226	pCi/l	☐ 39740 2, 4, 5-TP (Silvex)	
☒ 01056 Manganese (as Mn)	<0.05	☐ 00945 Sulfate (as SO_4)		☐ 00070 Turbidity		☐ 01145 Selenium		☐ 11501 Radium-228	pCi/l		
☒ COBALT	<0.05					☐ 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	Lab No.	SLD user code No.
7/29/82	HM-0113	

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 ☐ Complete Secondary ☐ Organic ☐ Radiological

Water Supply System Name	Water Supply System Code No.	City or Location	County	Check one:
SAMPLE DA				☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
7-28-82	3:00 PM	SAMPLE DA	SAMPLE DA NF-A-10 ML HNO3	OIL CONSERVATION DIV
Collected By	**Owner**			**Address**
SIMPSON	OCD			P.O. BOX 2088 SANTA FE 87501

TYPE of SYSTEM *(Check one)*
☐ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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 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 $CaCO_3$)		☐ 00620 Nitrate (as N)		☐ 00095 Conductance Micromhos 25°C		☐ 01025 Cadmium				☐ 38270 Methoxychlor	
☐ 00915 Calcium (as Ca)		☐ 00430 Alkalinity (as $CaCO_3$)		☐ 00400 pH		☐ 01030 Chromium		RADIOLOGICAL pCi/l ☐ 01501 Gross Alpha		☐ 39400 Toxaphene	
☐ 00925 Magnesium (as Mg)		☐ 00440 Bicarbonate (as HCO_3)		☐ 01330 Odor		☒ 01049 Lead	0.20	☐ 03501 Gross Beta	pCi/l	☐ 39730 2, 4-D	
☐ 01045 Iron-Total (as Fe)		☐ 00445 Carbonate (as CO_3)		☐ 00080 Color	mg/l	☐ 07180 Mercury	COMBINED	☒ 09501 Radium-226	pCi/l	☐ 39740 2, 4, 5-TP (Silvex)	
☒ 01056 Manganese (as Mn)	0.11	☐ 00945 Sulfate (as SO_4)		☐ 00070 Turbidity		☐ 01145 Selenium		☒ 11501 Radium-228	pCi/l		
☒ COBALT (C)	<0.05			☒ URANIUM	<0.005	☐ 01075 Silver					

LABORATORY REMARKS:

Reviewed by: DMP

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	Lab No.	SLD user code No.
7/29/82	HM 0112	

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: ☐ Complete Secondary ☐ Organic ☐ Radiological

Water Supply System Name	Water Supply System Code No.	City or Location	County	Check one:
SAMPLE IA		SJ		☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
7-28-82	4:00 PM	SAMPLE IA	SAMPLE IA NE-A - 10 mL HNO_3	O.C.D.

Collected By	Owner	Address
O. SIMPSON		P.O. BOX 2088 SANTA FE N.M. 87501

TYPE of SYSTEM *(Check one)*: ☐ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ Other *(specify)*

LAT. ° ' "
LONG ° ' "

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		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 $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		01030 Chromium		RADIOLOGICAL pCi/l		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		X 01049 Lead	<0.005	03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	07180 Mercury		09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
X 01056 Manganese (as Mn)	<0.05	00945 Sulfate (as SO_4)		00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
X BORON (B)		X COBALT (Co)	<0.05			01075 Silver					

LABORATORY REMARKS:

5 mL AR grade HNO_3 added at lab
(Sample un-preserved 7/29/82)

Reviewed by: M

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	Lab No.	SLD user code No.
7/29/82	HM-0115	

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 ☐ Complete Secondary ☐ Organic ☐ Radiological

Water Supply System Name	Water Supply System Code No.	City or Location	County	Check one:
SAMPLE JA			SJ	☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
7-28-82	5:30 PM	SAMPLE JA	SAMPLE JA NFA-10 ML HNO3	OIL CONSERVATION DIV

Collected By	Owner	Address
SIMPSON	OCD	P.O. BOX 2088 SANTA FE N.M. 87501

TYPE of SYSTEM *(Check one)* ☐ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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 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 $CaCO_3$)		☐ 00620 Nitrate (as N)		☐ 00095 Conductance Micromhos 25°C		☐ 01025 Cadmium				☐ 38270 Methoxychlor	
☐ 00915 Calcium (as Ca)		☐ 00430 Alkalinity (as $CaCO_3$)		☐ 00400 pH		☐ 01030 Chromium		RADIOLOGICAL pCi/l		☐ 39400 Toxaphene	
☐ 00925 Magnesium (as Mg)		☐ 00440 Bicarbonate (as HCO_3)		☐ 01330 Odor		☒ 01049 Lead	0.26	☐ 03501 Gross Beta	pCi/l	☐ 39730 2, 4-D	
☐ 01045 Iron-Total (as Fe)		☐ 00445 Carbonate (as CO_3)		☐ 00080 Color	mg/l	☐ 07180 Mercury		☐ 09501 Radium-226	0 pCi/l	☐ 39740 2, 4, 5-TP (Silvex)	
☒ 01056 Manganese (as Mn)	0.92	☐ 00945 Sulfate (as SO_4)		☐ 00070 Turbidity		☐ 01145 Selenium		☐ 11501 Radium-228	pCi/l		
☒ Cobalt	<0.05					☐ 01075 Silver					

LABORATORY REMARKS:

Reviewed by MF

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	Lab No.	SLD user code No.
7/29/82	HM 0117	

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 ☐ Complete Secondary ☐ Organic ☐ Radiological

Water Supply System Name	Water Supply System Code No.	City or Location	County	Check one:
SAMPLE KA				☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
7-28-82	5:30 PM	SAMPLE KA	SAMPLE KA NE-A-10 ML HNO3	OIL CONSERVATION D.V

Collected By: | Owner: | Address: P.O BOX 2088 SANTA FE, N.M. 87501

TYPE of SYSTEM *(Check one)* ☐ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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 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 $CaCO_3$)		☐ 00620 Nitrate (as N)		☐ 00095 Conductance Micromhos 25°C		☐ 01025 Cadmium				☐ 38270 Methoxychlor	
☐ 00915 Calcium (as Ca)		☐ 00430 Alkalinity (as $CaCO_3$)		☐ 00400 pH		☐ 01030 Chromium		RADIOLOGICAL pCi/l		☐ 39400 Toxaphene	
☐ 00925 Magnesium (as Mg)		☐ 00440 Bicarbonate (as HCO_3)		☐ 01330 Odor		☒ 01049 Lead	0,38	☐ 01501 Gross Alpha		☐ 39730 2, 4-D	
☐ 01045 Iron-Total (as Fe)		☐ 00445 Carbonate (as CO_3)		☐ 00080 Color	mg/l	☐ 07180 Mercury		☐ 03501 Gross Beta	pCi/l	☐ 39740 2, 4, 5-TP (Silvex)	
☒ 01056 Manganese (as Mn)	0,13	☐ 00945 Sulfate (as SO_4)		☐ 00070 Turbidity		☐ 01145 Selenium		☐ 09501 Radium-226	pCi/l		
☒ COBOLT	0.069					☐ 01075 Silver		☐ 11501 Radium-228	pCi/l		

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	Lab No.	SLD user code No.
7/29/82	HM-0116	

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	Check one:
				☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
7-28-82	7:00 PM	SAMPLE LA	SAMPLE LA NF-A-10ML HNO3	OIL CONSERVATION DIV
Collected By		**Owner**		**Address** P.O. BOX 2088 SANTA FE N. 87501
SIMPSON				

TYPE of SYSTEM *(Check one)* ☐ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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 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 $CaCO_3$)		☐ 00620 Nitrate (as N)		☐ 00095 Conductance Micromhos 25°C		☐ 01025 Cadmium				☐ 38270 Methoxychlor	
☐ 00915 Calcium (as Ca)		☐ 00430 Alkalinity (as $CaCO_3$)		☐ 00400 pH		☐ 01030 Chromium		RADIOLOGICAL pCi/l ☐ 01501 Gross Alpha		☐ 39400 Toxaphene	
☐ 00925 Magnesium (as Mg)		☐ 00440 Bicarbonate (as HCO_3)		☐ 01330 Odor		☒ 01049 Lead	<0.005	☐ 03501 Gross Beta	pCi/l	☐ 39730 2, 4-D	
☐ 01045 Iron-Total (as Fe)		☐ 00445 Carbonate (as CO_3)		☐ 00080 Color	mg/l	☐ 07180 Mercury		☐ 09501 Radium-226	pCi/l	☐ 39740 2, 4, 5-TP (Silvex)	
☒ 01056 Manganese (as Mn)	0.36	☐ 00945 Sulfate (as SO_4)		☐ 00070 Turbidity		☐ 01145 Selenium		☐ 11501 Radium-228	pCi/l		
☒ Cobalt	<0.05					☐ 01075 Silver					

LABORATORY REMARKS:

Reviewed by: MN

Date reported: 8/27/82

SLD 702 DISTRIBUTION: White - Water Supply Owner; Canary - Water Supply Owner; Pink - SLD

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.
7/29/82	HM 0112	

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 ☐ Complete Secondary ☐ Organic ☐ Radiological

Water Supply System Name	Water Supply System Code No.	City or Location	County	Check one:
SAMPLE I A		SJ		☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
7-28-82	4:00 PM	SAMPLE I A	SAMPLE I A NF-A - 10 mL HNO_3	O.C. CONSERVATION DIV

Collected By	Owner	Address
O. SIMPSON		P.O. BOX 2088 SANTA FE N.M. 87501

TYPE of SYSTEM *(Check one)* ☐ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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 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 $CaCO_3$)		☐ 00620 Nitrate (as N)		☐ 00095 Conductance Micromhos 25°C		☐ 01025 Cadmium				☐ 38270 Methoxychlor	
☐ 00915 Calcium (as Ca)		☐ 00430 Alkalinity (as $CaCO_3$)		☐ 00400 pH		☐ 01030 Chromium		RADIOLOGICAL pCi/l ☐ 01501 Gross Alpha		☐ 39400 Toxaphene	
☐ 00925 Magnesium (as Mg)		☐ 00440 Bicarbonate (as HCO_3)		☐ 01330 Odor		☒ 01049 Lead	< 0.005	☐ 03501 Gross Beta	pCi/l	☐ 39730 2, 4-D	
☐ 01045 Iron-Total (as Fe)		☐ 00445 Carbonate (as CO_3)		☐ 00080 Color	mg/l	☐ 07180 Mercury		☐ 09501 Radium-226	pCi/l	☐ 39740 2, 4, 5-TP (Silvex)	
☒ 01056 Manganese (as Mn)	< 0.05	☐ 00945 Sulfate (as SO_4)		☐ 00070 Turbidity		☐ 01145 Selenium		☐ 11501 Radium-228	pCi/l		
☒ ~~BORON (B)~~		☒ COBALT (C)	< 0.05			☐ 01075 Silver					

LABORATORY REMARKS:

5 ml AR grade HNO_3 added at lab
(Sample in preserved) 7/30/82

Reviewed by MJ

Date reported 8/27/82

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

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.
7/29/82	HM-0113	

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 ☐ Complete Secondary ☐ Organic ☐ Radiological

Water Supply System Name	Water Supply System Code No.	City or Location	County	Check one:
SAMPLE DA				☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
7-28-82	3:00 PM	SAMPLE DA	NF-A-10 ML HNO3	OIL CONSERVATION DIV
Collected By	**Owner**			**Address**
Simpson	OCD			P.O. BOX 2088 SANTA FE 87501

TYPE of SYSTEM *(Check one)* ☐ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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 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 $CaCO_3$)		☐ 00620 Nitrate (as N)		☐ 00095 Conductance Micromhos 25°C		☐ 01025 Cadmium				☐ 38270 Methoxychlor	
☐ 00915 Calcium (as Ca)		☐ 00430 Alkalinity (as $CaCO_3$)		☐ 00400 pH		☐ 01030 Chromium		RADIOLOGICAL pCi/l ☐ 01501 Gross Alpha		☐ 39400 Toxaphene	
☐ 00925 Magnesium (as Mg)		☐ 00440 Bicarbonate (as HCO_3)		☐ 01330 Odor		☒ 01049 Lead	0.20	☐ 03501 Gross Beta	pCi/l	☐ 39730 2, 4-D	
☐ 01045 Iron-Total (as Fe)		☐ 00445 Carbonate (as CO_3)		☐ 00080 Color	mg/l	☐ 07180 Mercury	COMBINED	☒ 09501 Radium-226	pCi/l	☐ 39740 2, 4, 5-TP (Silvex)	
☒ 01056 Manganese (as Mn)	0.11	☐ 00945 Sulfate (as SO_4)		☐ 00070 Turbidity		☐ 01145 Selenium		☒ 11501 Radium-228	pCi/l	☐	
☒ COBALT (C)	<0.05	☐		☒ URANIUM	<0.005	☐ 01075 Silver		☐		☐	

LABORATORY REMARKS:

Reviewed by: MP

Date reported: 8/27/82

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

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.
7/29/82	HM-0114	

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 ☐ Complete Secondary ☐ Organic ☐ Radiological

Water Supply System Name	Water Supply System Code No.	City or Location	County	Check one:
			SJ	☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
7-28-82	6:00 PM	SAMPLE POINT CA	SAMPLE CA N.F.-A- 10 ml HNO3	O.C. CONSERVATION DIV.
Collected By	**Owner**			**Address** P.O. BOX 2088 SANTA FE 87501
SIMPSON	OCD			

TYPE of SYSTEM *(Check one)* ☐ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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 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 $CaCO_3$)		☐ 00620 Nitrate (as N)		☐ 00095 Conductance Micromhos 25°C		☐ 01025 Cadmium				☐ 38270 Methoxychlor	
☐ 00915 Calcium (as Ca)		☐ 00430 Alkalinity (as $CaCO_3$)		☐ 00400 pH		☐ 01030 Chromium		RADIOLOGICAL	pCi/l	☐ 39400 Toxaphene	
☐ 00925 Magnesium (as Mg)		☐ 00440 Bicarbonate (as HCO_3)		☐ 01330 Odor		☒ 01049 Lead	<0.005	☐ 01501 Gross Alpha		☐ 39730 2, 4-D	
☐ 01045 Iron-Total (as Fe)		☐ 00445 Carbonate (as CO_3)		☐ 00080 Color	mg/l	☐ 07180 Mercury		☐ 03501 Gross Beta	pCi/l	☐ 39740 2, 4, 5-TP (Silvex)	
☒ 01056 Manganese (as Mn)	<0.05	☐ 00945 Sulfate (as SO_4)		☐ 00070 Turbidity		☐ 01145 Selenium		☐ 09501 Radium-226	pCi/l		
☒ COBALT	<0.05					☐ 01075 Silver		☐ 11501 Radium-228	pCi/l		

LABORATORY REMARKS:

Reviewed by M.J.

Date reported 8/27/82

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

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.
7/29/82	HM - 0115	

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: ☐ Complete Secondary ☐ Organic ☐ Radiological

Water Supply System Name	Water Supply System Code No.	City or Location	County	Check one:
SAMPLE JA			SJ	☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
7-28-82	5:30 PM	SAMPLE JA	SAMPLE JA NEA-10 ML HNO3	OIL CONSERVATION DIV

Collected By	Owner	Address
SIMPSON	OCD	P. O. BOX 2088 SANTA FE N.M. 87501

TYPE of SYSTEM *(Check one)*: ☐ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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 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 $CaCO_3$)		☐ 00620 Nitrate (as N)		☐ 00095 Conductance Micromhos 25°C		☐ 01025 Cadmium				☐ 38270 Methoxychlor	
☐ 00915 Calcium (as Ca)		☐ 00430 Alkalinity (as $CaCO_3$)		☐ 00400 pH		☐ 01030 Chromium		RADIOLOGICAL pCi/l		☐ 39400 Toxaphene	
☐ 00925 Magnesium (as Mg)		☐ 00440 Bicarbonate (as HCO_3)		☐ 01330 Odor		☒ 01049 Lead	0.26	☐ 01501 Gross Alpha		☐ 39730 2, 4-D	
☐ 01045 Iron-Total (as Fe)		☐ 00445 Carbonate (as CO_3)		☐ 00080 Color	mg/l	☐ 07180 Mercury		☐ 03501 Gross Beta	pCi/l	☐ 39740 2, 4, 5-TP (Silvex)	
☒ 01056 Manganese (as Mn)	0.92	☐ 00945 Sulfate (as SO_4)		☐ 00070 Turbidity		☐ 01145 Selenium		☐ 09501 Radium-226	pCi/l	☐	
☒ COBALT	<0.05	☐		☐		☐ 01075 Silver		☐ 11501 Radium-228	pCi/l	☐	

LABORATORY REMARKS:

Reviewed by: MP

Date reported: 8/27/82

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

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.
7/29/82	H14-0116	

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 ☐ Complete Secondary ☐ 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	Report to
7-28-82	7:00 PM	SAMPLE LA	SAMPLE LA NF-A-10ML HNO3	OIL CONSERVATION DIV

Collected By	Owner	Address
SIMPSON		P.O. BOX 2088 SANTA FE N.M. 87501

TYPE of SYSTEM *(Check one)* ☐ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ Other *(specify)*

LAT. ° ' "

LONG ° ' "

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		☐ 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 $CaCO_3$)		☐ 00620 Nitrate (as N)		☐ 00095 Conductance Micromhos 25°C		☐ 01025 Cadmium				☐ 38270 Methoxychlor	
☐ 00915 Calcium (as Ca)		☐ 00430 Alkalinity (as $CaCO_3$)		☐ 00400 pH		☐ 01030 Chromium		RADIOLOGICAL pCi/l ☐ 01501 Gross Alpha		☐ 39400 Toxaphene	
☐ 00925 Magnesium (as Mg)		☐ 00440 Bicarbonate (as HCO_3)		☐ 01330 Odor		☒ 01049 Lead	<0.005	☐ 03501 Gross Beta	pCi/l	☐ 39730 2, 4-D	
☐ 01045 Iron-Total (as Fe)		☐ 00445 Carbonate (as CO_3)		☐ 00080 Color	mg/l	☐ 07180 Mercury		☐ 09501 Radium-226	pCi/l	☐ 39740 2, 4, 5-TP (Silvex)	
☒ 01056 Manganese (as Mn)	0.36	☐ 00945 Sulfate (as SO_4)		☐ 00070 Turbidity		☐ 01145 Selenium		☐ 11501 Radium-228	pCi/l		
☒ Cobalt	<0.05					☐ 01075 Silver					

LABORATORY REMARKS:

Reviewed by

Date reported 8/27/82

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

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.
7/29/82	HM 0117	

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: ☐ Complete Secondary ☐ Organic ☐ Radiological

Water Supply System Name	Water Supply System Code No.	City or Location	County	Check one:
SAMPLE KA				☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
7-28-82	5:30 PM	SAMPLE KA	SAMPLE KA NF-A - 10 ML HNO3	OIL CONSERVATION D.V
Collected By		Owner		Address P O BOX 2088 SANTA FE, N.M. 87501

TYPE of SYSTEM *(Check one)*: ☐ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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 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 $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		01030 Chromium		RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		X 01049 Lead	0,38	03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	07180 Mercury		09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
X 01056 Manganese (as Mn)	0,13	00945 Sulfate (as SO_4)		00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
X Cobalt	0.069					01075 Silver					

LABORATORY REMARKS:

Reviewed by

Date reported 8/27/82

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

REPORT TO: P.O. BOX 2088
SANTA FE NM 87501

LABORATORY _____

LAB NUMBER 82-0166-C

ATTENTION: Sempson 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 ☐ Other _____

Water Supply and/or Code No. Sample KA

City & County San Juan

Collected (date & time) 7-28-82 5:00PM By (name) Sempson

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 collected from wellhead of Groundwater

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-$Na_2O_3S_2$: Sample preserved with 3 mg $Na_2O_3S_2$/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 Jo Lee Yps

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 Meyerhein

REMARKS _____

Sample Ka 7-28-82

STORET CODE		CONTAMINANT	
34235	☐	Benzene	< 1 ug/l
34481	☐	Toluene	< 1 ug/l
34372	☐	Ethylbenzene	ug/l
34302	☐	Chlorobenzene	ug/l
		METHANE	
34414	☐	Bromo-	ug/l
34419	☐	Chloro-	ug/l
34424	☐	Dichloro-	ug/l
34307	☐	Chlorodibromo-	ug/l
34328	☐	Dichlorobromo-	ug/l
34288	☐	Tribromo-	ug/l
34316	☐	Trichloro-	ug/l
82080	☐	Total THM	ug/l
34489	☐	Trichlorofluoro-	ug/l
34332	☐	Dichlorodifluoro-	ug/l
34297	☐	Tetrachloro-	ug/l
		ETHANE	
34312	☐	Chloro-	ug/l
34497	☐	1,1-Dichloro-	ug/l
34532	☐	1,2-Dichloro-	ug/l
34507	☐	1,1,1-Trichloro-	ug/l
34512	☐	1,1,2-Trichloro-	ug/l
34517	☐	1,1,2,2-Tetrachloro-	ug/l
		ETHENE	
34493	☐	Chloro-	ug/l
34502	☐	1,1-Dichloro-	ug/l
34547	☐	1,2-trans-Dichloro-	ug/l
34485	☐	Trichloro-	ug/l
34476	☐	Tetrachloro-	ug/l
34542	☐	1,2-Dichloropropane	ug/l
34562	☐	1,3-Dichloropropene	ug/l
	☒	OTHERS Alcoholic Hydrocarbons	
		Aromatic Hydrocarbons	
		m-Xylene < 1 ug/l	

P - PRESENT (NO QUANTITATION)
ND - NONE DETECTED

Aliphatic Hydrocarbon Screen: Negative Ja 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:

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 7:00PM 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 NF-NA
acid dound and collected
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-$Na_2O_3S_2$: Sample preserved with 3 mg $Na_2O_3S_2$/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 Jo Lee Yio

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 La 7-28-82

STORET CODE		CONTAMINANT		
34235	☐	Benzene	< 1	ug/l
34481	☐	Toluene	< 1	ug/l
34372	☐	Ethylbenzene		ug/l
34302	☐	Chlorobenzene		ug/l
		METHANE		
34414	☐	Bromo-		ug/l
34419	☐	Chloro-		ug/l
34424	☐	Dichloro-		ug/l
34307	☐	Chlorodibromo-		ug/l
34328	☐	Dichlorobromo-		ug/l
34288	☐	Tribromo-		ug/l
34316	☐	Trichloro-		ug/l
82080	☐	Total THM		ug/l
34489	☐	Trichlorofluoro-		ug/l
34332	☐	Dichlorodifluoro-		ug/l
34297	☐	Tetrachloro-		ug/l
		ETHANE		
34312	☐	Chloro-		ug/l
34497	☐	1,1-Dichloro-		ug/l
34532	☐	1,2-Dichloro-		ug/l
34507	☐	1,1,1-Trichloro-		ug/l
34512	☐	1,1,2-Trichloro-		ug/l
34517	☐	1,1,2,2-Tetrachloro-		ug/l
		ETHENE		
34493	☐	Chloro-		ug/l
34502	☐	1,1-Dichloro-		ug/l
34547	☐	1,2-trans-Dichloro-		ug/l
34485	☐	Trichloro-		ug/l
34476	☐	Tetrachloro-		ug/l
34542	☐	1,2-Dichloropropane		ug/l
34562	☐	1,3-Dichloropropene		ug/l
	☒	OTHERS Allothatic hydrocarbons		
		Aromatic Hydrocarbons		
		m-xylenes < 1 ug/l		

NT - NOT TESTED FOR
P - PRESENT (NO QUANTITATION)
ND - NONE DETECTED

Aliphatic hydrocarbon Screen: Negative JJ 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 IA

City & County SAN JOAN

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 VILES WITH TEFLON SEALS
Irigation ditch NO PRESERTICE 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-$Na_2O_3S_2$: Sample preserved with 3 mg $Na_2O_3S_2$/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 Yo
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 C Meyerhen

REMARKS

SAMPLE I_A 7-28-82

STORET CODE		CONTAMINANT		
34235	☒	Benzene	< 1	ug/l
34481	☒	Toluene	< 1	ug/l
34372	☒	Ethylbenzene	< 1	ug/l
34302	☐	Chlorobenzene		ug/l
		METHANE		
34414	☐	Bromo-		ug/l
34419	☐	Chloro-		ug/l
34424	☐	Dichloro-		ug/l
34307	☐	Chlorodibromo-		ug/l
34328	☐	Dichlorobromo-		ug/l
34288	☐	Tribromo-		ug/l
34316	☐	Trichloro-		ug/l
82080	☐	Total THM		ug/l
34489	☐	Trichlorofluoro-		ug/l
34332	☐	Dichlorodifluoro-		ug/l
34297	☐	Tetrachloro-		ug/l
		ETHANE		
34312	☐	Chloro-		ug/l
34497	☐	1,1-Dichloro-		ug/l
34532	☐	1,2-Dichloro-		ug/l
34507	☐	1,1,1-Trichloro-		ug/l
34512	☐	1,1,2-Trichloro-		ug/l
34517	☐	1,1,2,2-Tetrachloro-		ug/l
		ETHENE		
34493	☐	Chloro-		ug/l
34502	☐	1,1-Dichloro-		ug/l
34547	☐	1,2-trans-Dichloro-		ug/l
34485	☐	Trichloro-		ug/l
34476	☐	Tetrachloro-		ug/l
34542	☐	1,2-Dichloropropane		ug/l
34562	☐	1,3-Dichloropropene		ug/l
	☐	OTHERS m-EXYLENE	< 1	ug/l

ALL ALLOTHATIC HYDROCARBONS

NT - NOT TESTED FOR
P - PRESENT (NO QUANTITATION)
ND - NONE DETECTED

NOTE: Call Oscar Sampson 984 results
+ if further identification is needed
1-827-2534 Santa Fe

Aliphatic hydrocarbon Screen — Negative gg 8-26-82
Detection limit : 1 ug/ml

REPORT TO: P.O. BOX 2088
SANTA FE NM 87501

LABORATORY

LAB NUMBER 82-0163-D

ATTENTION: Oscar Simpson III CALL 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) ~~Simpson~~ 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 ~~OT~~ NF-NA-API. 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-$Na_2O_3S_2$: Sample preserved with 3 mg $Na_2O_3S_2$/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 Jo Lee Yu

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 Meyerhoff

REMARKS

SAMPLE DA 7-28-82

STORET CODE		CONTAMINANT	
34235	☒	Benzene	17100 ug/l
34481	☒	Toluene	16500 ug/l
34372	☒	Ethylbenzene	3600 ug/l
34302	☐	Chlorobenzene	ug/l
		METHANE	
34414	☐	Bromo-	ug/l
34419	☐	Chloro-	ug/l
34424	☐	Dichloro-	ug/l
34307	☐	Chlorodibromo-	ug/l
34328	☐	Dichlorobromo-	ug/l
34288	☐	Tribromo-	ug/l
34316	☐	Trichloro-	ug/l
82080	☐	Total THM	ug/l
34489	☐	Trichlorofluoro-	ug/l
34332	☐	Dichlorodifluoro-	ug/l
34297	☐	Tetrachloro-	ug/l
		ETHANE	
34312	☐	Chloro-	ug/l
34497	☐	1,1-Dichloro-	ug/l
34532	☐	1,2-Dichloro-	ug/l
34507	☐	1,1,1-Trichloro-	ug/l
34512	☐	1,1,2-Trichloro-	ug/l
34517	☐	1,1,2,2-Tetrachloro-	ug/l
		ETHENE	
34493	☐	Chloro-	ug/l
34502	☐	1,1-Dichloro-	ug/l
34547	☐	1,2-trans-Dichloro-	ug/l
34485	☐	Trichloro-	ug/l
34476	☐	Tetrachloro-	ug/l
34542	☐	1,2-Dichloropropane	ug/l
34562	☐	1,3-Dichloropropene	ug/l
	☐	OTHERS m-Ex XLENE 3000 ug/l	

ALLOTHATIC HYDROCARBONS

NOTE CALL RESULTS MAY NEED FURTHER ANALYSIS 1-827 2574

NT - NOT TESTED FOR
P - PRESENT (NO QUANTITATION)
ND - NONE DETECTED

Aliphatic hydrocarbon Screen :

Has hydrocarbon peaks evenly distributed in the $C_8 - C_{12}$ region.

JJ 8-26-82

Detection limit : 1 ug/ml

OIL CONSERVATION DIVISION
REPORT TO: P.O. BOX 2088
SANTA FE NM 87501

LABORATORY

LAB NUMBER 82-0162-D

CALL
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 CA

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
Irigation 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-$Na_2O_3S_2$: Sample preserved with 3 mg $Na_2O_3S_2$/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 Jo Lee Yes
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

STORET CODE		CONTAMINANT		
34235	☒	Benzene	< 1	ug/l
34481	☒	Toluene	< 1	ug/l
34372	☒	Ethylbenzene	< 1	ug/l
34302	☐	Chlorobenzene		ug/l
		METHANE		
34414	☐	Bromo-		ug/l
34419	☐	Chloro-		ug/l
34424	☐	Dichloro-		ug/l
34307	☐	Chlorodibromo-		ug/l
34328	☐	Dichlorobromo-		ug/l
34288	☐	Tribromo-		ug/l
34316	☐	Trichloro-		ug/l
82080	☐	Total THM		ug/l
34489	☐	Trichlorofluoro-		ug/l
34332	☐	Dichlorodifluoro-		ug/l
34297	☐	Tetrachloro-		ug/l
		ETHANE		
34312	☐	Chloro-		ug/l
34497	☐	1,1-Dichloro-		ug/l
34532	☐	1,2-Dichloro-		ug/l
34507	☐	1,1,1-Trichloro-		ug/l
34512	☐	1,1,2-Trichloro-		ug/l
34517	☐	1,1,2,2-Tetrachloro-		ug/l
		ETHENE		
34493	☐	Chloro-		ug/l
34502	☐	1,1-Dichloro-		ug/l
34547	☐	1,2-trans-Dichloro-		ug/l
34485	☐	Trichloro-		ug/l
34476	☐	Tetrachloro-		ug/l
34542	☐	1,2-Dichloropropane		ug/l
34562	☐	1,3-Dichloropropene		ug/l
	☐	OTHERS m-xylene < 1 ug/l		

P - PRESENT (NO QUANTITATION)
ND - NONE DETECTED

Aliphatic hydrocarbons
Cold is result is determined
if further tests are needed 1-827-2534

Aliphatic hydrocarbon Screen: Negative gj 8-26-82

Detection limit - 1 ug/ml

REPORT TO: OIL CONSERVATION DIVISION
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 & County SJ ~~San~~

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) 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-$Na_2O_3S_2$: Sample preserved with 3 mg $Na_2O_3S_2$/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 Jo Lee Yon

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 Meyerhoff

REMARKS _____

SAMPLE JA 7-28-82

STORET CODE		CONTAMINANT	
34235	☒	Benzene	< 1 ug/l
34481	☒	Toluene	< 1 ug/l
34372	☒	Ethylbenzene	< 1 ug/l
34302	☐	Chlorobenzene	ug/l
		METHANE	
34414	☐	Bromo-	ug/l
34419	☐	Chloro-	ug/l
34424	☐	Dichloro-	ug/l
34307	☐	Chlorodibromo-	ug/l
34328	☐	Dichlorobromo-	ug/l
34288	☐	Tribromo-	ug/l
34316	☐	Trichloro-	ug/l
82080	☐	Total THM	ug/l
34489	☐	Trichlorofluoro-	ug/l
34332	☐	Dichlorodifluoro-	ug/l
34297	☐	Tetrachloro-	ug/l
		ETHANE	
34312	☐	Chloro-	ug/l
34497	☐	1,1-Dichloro-	ug/l
34532	☐	1,2-Dichloro-	ug/l
34507	☐	1,1,1-Trichloro-	ug/l
34512	☐	1,1,2-Trichloro-	ug/l
34517	☐	1,1,2,2-Tetrachloro-	ug/l
		ETHENE	
34493	☐	Chloro-	ug/l
34502	☐	1,1-Dichloro-	ug/l
34547	☐	1,2-trans-Dichloro-	ug/l
34485	☐	Trichloro-	ug/l
34476	☐	Tetrachloro-	ug/l
34542	☐	1,2-Dichloropropane	ug/l
34562	☐	1,3-Dichloropropene	ug/l
	☐	OTHERS m-xylene	< 1 ug/l

NT - NOT TESTED FOR
P - PRESENT (NO QUANTITATION)
ND - NONE DETECTED

allothatic Hydrocarbons
note: call results in.
to see if further tests are needed

827 2534

Aliphatic hydrocarbon Screen: Negative gy 8-26-82

Detection limit: 1 ug/ml

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.: HM-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)]*

INTERIM PRIMARY PARAMETER GROUP: ☐ 1 ☐ 2 ☐ 3

TYPE of CHEMICAL ANALYSIS: ☐ Complete Secondary ☐ Organic ☐ Radiological

Water Supply System Name	Water Supply System Code No.	City or Location	County	Check one:
PLATEAU REFINERY		NEAR BLOOMFIELD	SAN JUAN	☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
7-12-82	6:45PM	LOCATION A	SAMPLE # A5 1-LITER COBACONTAINER NF-A- 7ML HNO3	OIL CONSERVATION DIV.

Collected By	Owner	Address
SIMPSON	OCD-PLATEAU	P.O. BOX 2088 SANTA FE, N.M. 87501

TYPE of SYSTEM *(Check one)*: ☒ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ Other *(specify)* TEST HOLE

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		☒ BORON		39390 Endrin	
00935 Potassium (as K)		00950 Fluoride (as F)		38260 Foaming Agents (as Las)		01005 Barium		☒ COBALT	0.05	39732 Lindane	
00900 Tot. Hardness (as $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		☒ 01025 Cadmium	0.002	☒ NICKEL	0.13	38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		☒ 01030 Chromium	0.013	RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		☒ 01049 Lead	013	03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	☒ 07180 Mercury	0.0014	09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		00945 Sulfate (as SO_4)		00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
						01075 Silver					

LABORATORY REMARKS:

Reviewed by: MJ

Date reported: 8/27/82

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

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.: HM-77 | 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

TYPE of CHEMICAL ANALYSIS: ☐ Complete Secondary ☐ Organic ☐ Radiological

Water Supply System Name	Water Supply System Code No.	City or Location	County	Check one:
PLATEAU REFINERY				☐ TREATED WATER ☐ RAW WATE

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
7-12-82	8:16PM	~~Simpson~~ TEST HOLE	SAMPLE B5	OIL CONSERVATION DIV
		LOCATION B	1-LITER CUBA CONTAINER	Address P.O BOX 2088
			N.E-A- 7ML HNO3	SANTA FE NM 87501

Collected By	Owner
SIMPSON	OCD - PLATEAU

TYPE of SYSTEM *(Check one)*: ☐ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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 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 COBALT	0.05	39732 Lindane	
00900 Tot. Hardness (as $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		X 01025 Cadmium	0.001	X NICKEL	<0.05	38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		X 01030 Chromium	0.008	RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		X 01049 Lead	0.10	03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	X 07180 Mercury	<0.0005	09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		00945 Sulfate (as SO_4)		00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
						01075 Silver					

LABORATORY REMARKS:

Reviewed by: MJ

Date reported: 8/27/82

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

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
7-16-82	HM-79	

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 ☐ Complete Secondary ☐ Organic ☐ Radiological

Water Supply System Name	Water Supply System Code No.	City or Location	County	Check one:
PLATEAU REFINERY		NEAR BLOOMFIELD	SAN JUAN	☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
7-14-82	1:45 PM	HAMMOND DITCH	SAMPLE C1 1-LITER PLASTIC NF A-10ML HNO3	OIL CONSERVATION DI
Collected By	**Owner**			**Address** P.O. BOX 2088 SANTA FE N.M. 87501
SIMPSON	OCD - PLATEAU			

TYPE of SYSTEM *(Check one)* ☐ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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 Total Filterable Residue	mg/l	01000 Arsenic		X COBALT	<0.05	39390 Endrin	
00935 Potassium (as K)		00950 Fluoride (as F)		38260 Foaming Agents (as Las)		01005 Barium		X NICKEL	<0.05	39732 Lindane	
00900 Tot. Hardness (as $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		X 01025 Cadmium	<0.001			38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		X 01030 Chromium	<0.005	RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		X 01049 Lead	<0.005	03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	X 07180 Mercury	<0.0005	09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		00945 Sulfate (as SO_4)		00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
						01075 Silver					

LABORATORY REMARKS:

Reviewed by M.J.

Date reported 8/27/82

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

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
7-16-82	HM-80	

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 ☐ Complete Secondary ☐ Organic ☐ Radiological

Water Supply System Name	Water Supply System Code No.	City or Location	County	Check one:
PLATEAU REFINERY	SAMPLE D LOCATION	NEAR BLOOMFIELD	SAN JUAN	☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
7-14-82	3:15PM	SIMPSON	D-1	OIL CONSERVATION DIV
Collected By	Owner			Address P.O. BOX 2088 SANTA FE, N.M. 87501
	OCD - PLATEAU			

TYPE of SYSTEM *(Check one)* ☐ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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 Total Filterable Residue	mg/l	01000 Arsenic		X Cobalt	0.069	39390 Endrin	
00935 Potassium (as K)		00950 Fluoride (as F)		38260 Foaming Agents (as Las)		01005 Barium		X Nickel	0.08	39732 Lindane	
00900 Tot. Hardness (as $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		X 01025 Cadmium	0.001			38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		X 01030 Chromium	0.041	RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		X 01049 Lead	0.12	03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	X 07180 Mercury	<0.0005	09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		00945 Sulfate (as SO_4)		00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
						01075 Silver					

LABORATORY REMARKS:

Reviewed by M T

Date reported 8/27/82

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

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
7-16-82	HM-81	

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	Check one:
PLATEAU REFINERY		BLOOMFIELD	SJ	☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
7-14-82	4:15 PM	LOCATION E ~~Simpson~~	E-1	OIL CONSERVATION D.

Collected By	Owner	Address
E. SIMPSON	OCD PLATEAU	P. O. BOX 2088 SANTA FE NM 87501

TYPE of SYSTEM *(Check one)* ☐ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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 Total Filterable Residue	mg/l	01000 Arsenic		Y Cobalt	0.57	39390 Endrin	
00935 Potassium (as K)		00950 Fluoride (as F)		38260 Foaming Agents (as Las)		01005 Barium		X Nickel	0.80	39732 Lindane	
00900 Tot. Hardness (as $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		Y 01025 Cadmium	0.04			38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		Y 01030 Chromium	0.62	RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		Y 01049 Lead	18.17	03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	Y 07180 Mercury	<0.0005	09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		00945 Sulfate (as SO_4)		00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
						01075 Silver					

LABORATORY REMARKS:

Reviewed by MF

Date reported 8/27/82

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

STATE OF NEW MEXICO
ENVIRONMENT
SCIENTIFIC LABORATORY DIVISION (HED)
700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

Biological, Chemical and Physical ANALYSES of WASTEWATER

DATE RECEIVED	LAB NO.	USER CODE
7/16/82	WC 113	

Collection date: 7-14-82
City or Location: NEAR BLOOMFIELD
Collected by: SIMPSON
County: SAN JUAN
Region:
Owner: OCD - PLATEAU
Send Final Report to: OIL CONSERVATION DIV P.O. BOX SANTA FE N.M. 87501

FIELD DETERMINED PARAMETERS — By

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature, °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids, ml/l		☐	

OTHER INFORMATION: C-6

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ Other:
- ☐ Other:
- ☐ DRAIN
- ☐ LAKE
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Canadian
- ☐ Little Colorado
- ☐ Other - specify:
- ☐ Pecos
- ☐ Gila
- ☐ San Juan

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☐ Residue Total Filterable (Dissolved)		☐ Conductance Micromhos 25 °C		☐	
☒ TOC		☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☒ Phenol	29.5 ug/l	☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☒ Oil & Grease		☐		☐		☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS

Date:
Analyst:
Reviewed by: [signature]
Date reported: 7/19/82

SLD 710 Form Revised 5/78 (Replaces EIA 008) WHITE—Originator PINK—EID Field Office CANARY—EID Program Office GOLDENROD—SLD File Copy

HEALTH ENVIRONMENT — 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	LAB NO.	USER CODE
7/16/82	WC 114	

Collection date: 7-14-82 1:45PM
Collected by: SIMPSON
Owner: OCD - PLATEAU
Send Final Report to: OIL CONSERVATION DIV. P.O. BOX 2088 SANTA FE N.M. 87501

City or Location:
County: Region:

FIELD DETERMINED PARAMETERS — By:

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature, °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids, ml/l		☐	

OTHER INFORMATION: D-6

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ Other:
- ☐ Other
- ☐ DRAIN
- ☐ LAKE
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Canadian
- ☐ Little Colorado
- ☐ Other - specify:
- ☐ Pecos
- ☐ Gila
- ☐ San Juan

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☐ Residue Total Filterable (Dissolved)		☐ Conductance Micromhos 25 °C		☐	
☒ TOC		☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☒ Phenol 21338		☐ ug/l		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☒ Oil & Grease		☐		☐		☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS

Date:
Analyst:
Reviewed by:
Date reported: 7/19/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)

WHITE—*Originator* PINK—*EID Field Office*
CANARY—*EID Program Office* GOLDENROD SLD File Copy

STATE OF NEW MEXICO
HEALTH ENVIRONMENT
SCIENTIFIC LABORATORY DIVISION (HED)
700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

Biological, Chemical and Physical ANALYSES of WASTEWATER

DATE RECEIVED	LAB NO.	USER CODE
7/16/82	WC 115	

Collection date: 7-14-82 4:45PM
City or Location:
Collected by: SIMPSON
County: Region:
Owner: OCD - PLATEAU
FIELD DETERMINED PARAMETERS By:

Send Final Report to:
OIL CONSERVATION DIV
P.O BOX 2088
SANTA FE N.M.
87501

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature, °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids, ml/l		☐	

OTHER INFORMATION: E-6

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ Other:
- ☐ Other:
- ☐ DRAIN
- ☐ LAKE
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Canadian
- ☐ Little Colorado
- ☐ Other - specify:
- ☐ Pecos
- ☐ Gila
- ☐ San Juan

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☐ Residue Total Filterable (Dissolved)		☐ Conductance Micromhos 25 °C		☐	
☒ TOC		☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☒ Phenol 10.12 mg/l		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☒ Filt Grease		☐		☐		☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS

Date:
Analyst:
Reviewed by: [signature]
Date reported: 7/19/82

SLD 710 Form Revised 5/78 (Replaces EIA 008) WHITE—Originator PINK—EID Field Office CANARY—EID Program Office GOLDENROD—S.L.D. File Copy

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	LAB NO.	USER CODE
7/16/82	WC 116	

Collection date: 7-14-82
City or Location: NEAR BLOOMFIELD
Collected by: SIMPSON
County: SAN JUAN
Region:
Owner: OCD - PLATEAU
Send Final Report to: OIL CONSERVATION DIV P. O. BOX SANTA FE N.M 87501

FIELD DETERMINED PARAMETERS — By

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature, °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids, ml/l		☐	

OTHER INFORMATION: C-5

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ DRAIN
- ☐ Other:
- ☐ LAKE
- ☐ Other:
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Pecos
- ☐ Canadian
- ☐ Gila
- ☐ Little Colorado
- ☐ San Juan
- ☐ Other - specify:

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☐ Residue Total Filterable (Dissolved)		☐ Conductance Micromhos 25 °C		☐	
☒ TOC		☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☒ Phenol	~~15~~ 57	☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☒ Oil & Grease	13.7	☐		☐		☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS

Date:
Analyst:
Reviewed by:
Date reported: 7/16/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)

WHITE—*Originator* PINK—*EID Field Office*
CANARY—*EID Program Office* GOLDENROD—*SLD File Copy*

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	LAB NO.	USER CODE
7/16/82	WC 117	

Collection date: 7-14-82 1:45PM
Collected by: SIMPSON
Owner: OCD - PLATEAU
Send Final Report to: OIL CONSERVATION DIV. P.O. BOX 2088 SANTA FE N.M. 87501

City or Location:
County: Region:

FIELD DETERMINED PARAMETERS By

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature, °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids, ml/l		☐	

OTHER INFORMATION: D-5

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ Other:
- ☐ Other:
- ☐ DRAIN
- ☐ LAKE
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Canadian
- ☐ Little Colorado
- ☐ Other - specify:
- ☐ Pecos
- ☐ Gila
- ☐ San Juan

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☐ Residue Total Filterable (Dissolved)		☐ Conductance Micromhos 25 °C		☐	
☒ TOC		☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☒ Phenol		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☒ Oil & Grease	15.7	☐		☐		☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS

Date:
Analyst:
Reviewed by: Allen Meibohm
Date reported: 7/16/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)

WHITE—*Originator* PINK—*EID Field Office*
CANARY—*EID Program Office* GOLDENROD—*SLD File Copy*

STATE OF NEW MEXICO
HEALTH ENVIRONMENT
SCIENTIFIC LABORATORY DIVISION (HED)
700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

Biological, Chemical and Physical ANALYSES of WASTEWATER

DATE RECEIVED	LAB NO.	USER CODE
7/16/82	WC 118	

Collection date: 7-14-82 4:45PM
City or Location:
Collected by: SIMPSON
County: Region:
Owner: OCD - PLATEAU
FIELD DETERMINED PARAMETERS — By:

Send Final Report to:
OIL CONSERVATION DIV
P.O. BOX 2088
SANTA FE N.M.
87501

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature, °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids, ml/l		☐	

OTHER INFORMATION: E-5

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ DRAIN
- ☐ Other:
- ☐ LAKE
- ☐ Other:
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Pecos
- ☐ Canadian
- ☐ Gila
- ☐ Little Colorado
- ☐ San Juan
- ☐ Other - specify:

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☐ Residue Total Filterable (Dissolved)		☐ Conductance Micromhos 25 °C		☐	
☒ TOC		☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☒ Phenol		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☒ Oil + Grease 296.7		☐		☐		☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS

Date:
Analyst:
Reviewed by: Allmaier
Date reported: 7/16/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)

WHITE—*Originator* PINK—*EID Field Office*
CANARY—*EID Program Office* GOLDENROD—*SLD File Copy*

STATE OF NEW MEXICO
ENVIRONMENT
SCIENTIFIC LABORATORY DIVISION (HED)
700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

Biological, Chemical and Physical ANALYSES of WASTEWATER

DATE RECEIVED	LAB NO.	USER CODE
7/16/82	WC 119	

Collection date: 7-14-82
Collected by: SIMPSON
Owner: OCD - PLATEAU
Send Final Report to: OIL CONSERVATION DIV. P.O. BOX SANTA FE NM 87501

City or Location: AZTEC BLOOM FIELD
County: SAN JUAN
Region:

FIELD DETERMINED PARAMETERS — By

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids ml/l		☐	

OTHER INFORMATION: C-3

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ DRAIN
- ☐ Other:
- ☐ LAKE
- ☐ Other
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Pecos
- ☐ Canadian
- ☐ Gila
- ☐ Little Colorado
- ☐ San Juan
- ☐ Other - specify:

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen Nitrate (As N)		☐ Residue Total Filterable (Dissolved)		☐ Conductance Micromhos 25 °C		☐	
☒ TOC	3.6	☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☒ Phenol		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☒ Oil & Grease		☐		☐		☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS

Date

Analyst

Reviewed by

SLD 710 Form Revised 5/78 (Replaces EIA 008) WHITE – Originator PINK – EID Field Office

STATE OF NEW MEXICO
ENVIRONMENT DEPARTMENT
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 1320 | **USER CODE**

Collection date: 7-14-82 1:45PM
City or Location:
Collected by: SIMPSON
County: Region:
Owner: OCD - FARMTEAD
FIELD DETERMINED PARAMETERS By:

Send Final Report to:
OIL CONSERVATION DIV.
P.O. BOX 2088
SANTA FE N.M.
87501

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature, °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids, ml/l		☐	

OTHER INFORMATION: D-3

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ Other
- ☐ Other:
- ☐ DRAIN
- ☐ LAKE
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Canadian
- ☐ Little Colorado
- ☐ Other - specify:
- ☐ Pecos
- ☐ Gila
- ☐ San Juan

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☐ Residue Total Filterable (Dissolved)		☐ Conductance Micromhos 25 °C		☐	
☒ TOC	323	☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☒ Phenol		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☒ Oil & Grease		☐		☐		☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS

Date:
Analyst:
Reviewed by:
Date reviewed:

SLD 710 Form Revised 5/78 (Replaces E/A 008) WHITE--Originator PINK--EID Field Office

STATE OF NEW MEXICO
ENVIRONMENT

SCIENTIFIC LABORATORY DIVISION (HED)
700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

RECEIVED

Biological, Chemical and Physical ANALYSES of WASTEWATER

DATE RECEIVED 7/16/82 | LAB NO. WC-1221 | USGR CODE

Collection date 7-14-82 4:15PM
City or Location
Collected by SIMPSON
County
Region
Owner OCD - PLATEAU
Send Final Report to: OIL CONSERVATION D.V. P.O. BOX 2088 SANTA FE N.M. 87501

FIELD DETERMINED PARAMETERS | By

- ☐ pH
- ☐ Water Temperature, °C
- ☐ Settleable Solids, ml/l
- ☐ Dissolved Oxygen mg/l
- ☐ Chlorine Residual, mg/l
- ☐

OTHER INFORMATION: E-3

STORET NO.

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ Other:
- ☐ Other:
- ☐ DRAIN
- ☐ LAKE
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Canadian
- ☐ Little Colorado
- ☐ Other - specify:
- ☐ Pecos
- ☐ Gila
- ☐ San Juan

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☐ Residue Total Filterable (Dissolved)		☐ Conductance Micromhos 25 °C		☐	
☒ TOC	860	☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☒ Phenol		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☒ Oil & Grease		☐		☐		☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	

REMARKS

Date

Analyst

Reviewed by

Date received

SLD 710 Form Revised 5/78 (Replaces EIA 202) WHITE—Originator PINK—EID Field Office

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.
7/16/82	WC 122	

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 ☐ Complete Secondary ☐ Organic ☐ Radiological

Water Supply System Name	Water Supply System Code No.	City or Location	County	Check one:
PLATEAU REFINERY				☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
7-12-82	6:45 PM	LOCATION A	SAMPLE AS 1-LITER CUBITAINER N F - N/A	OIL CONSERVATION DIV
Collected By	**Owner**			**Address** P.O. BOX 2088 SANTA FE, N.M. 87501
SIMPSON	OCD - PLATEAU			

TYPE of SYSTEM *(Check one)* ☒ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ Other *(specify)* TEST HOLE

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)	3655	☒ 70300 Total Filterable Residue	mg/l 1963	01000 Arsenic				39390 Endrin	
00935 Potassium (as K)		☒ 00950 Fluoride (as F)	0.49	38260 Foaming Agents (as Las)		01005 Barium				39732 Lindane	
00900 Tot. Hardness (as $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		01030 Chromium		RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		01049 Lead		03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	07180 Mercury		09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		☒ 00945 Sulfate (as SO_4)	1466	00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
		(TDS) TDS		☒ Brom	0.52	01075 Silver					

LABORATORY REMARKS:

Reviewed by

Date reported 7-23-82

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

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.
7/16/82	WC 123	

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	Check one:
PLATEAU REFINERY		NEAR BLOOMFIELD	SAN JUAN	☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
7-12-82	8:15 PM	LOCATION B TEST HOLE	SAMPLE BC 1-LITER COBALT CONTAINER NF - NA	OIL CONSERVATION DIV

Collected By	Owner	Address
SIMPSON	OCD - PLATEAU	REDUCED SANTA FE NM 87501

TYPE of SYSTEM *(Check one)*
☒ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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)	3853	☒ 70300 Total Filterable Residue	mg/l 1733	01000 Arsenic				39390 Endrin	
00935 Potassium (as K)		☒ 00950 Fluoride (as F)	038	38260 Foaming Agents (as Las)		01005 Barium				39732 Lindane	
00900 Tot. Hardness (as $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		01030 Chromium		RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		01049 Lead		03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	07180 Mercury		09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		☒ 00945 Sulfate (as SO_4)	122	00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
		☒ [illegible]		X Piron	0.44	01075 Silver					

LABORATORY REMARKS:

Reviewed by

Date reported

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

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.
7/16/82	WC 124	

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	Check one:
PLATEAU REFINERY		NIRAA BLOOMFIELD	SAN JUAN	☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
7-14-82	1:45 PM	LOCATION C HAMMOND DITCH	SAMPLE C2 1-LITER PLASTIC NE NA	OIL CONSERVATION DIV.
Collected By	**Owner**			**Address**
SIMPSON	OCD - PLATEAU			PO. BOX 2088 SANTA FE NM 87501

TYPE of SYSTEM *(Check one)* ☐ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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)	50	☒ 70300 Total Filterable Residue	mg/l 4180	☐ 01000 Arsenic				☐ 39390 Endrin	
☐ 00935 Potassium (as K)		☒ 00950 Fluoride (as F)	0.22	☐ 38260 Foaming Agents (as Las)		☐ 01005 Barium				☐ 39732 Lindane	
☐ 00900 Tot.Hardness (as $CaCO_3$)		☐ 00620 Nitrate (as N)		☐ 00095 Conductance Micromhos 25°C		☐ 01025 Cadmium				☐ 38270 Methoxychlor	
☐ 00915 Calcium (as Ca)		☐ 00430 Alkalinity (as $CaCO_3$)		☐ 00400 pH		☐ 01030 Chromium		RADIOLOGICAL pCi/l ☐ 01501 Gross Alpha		☐ 39400 Toxaphene	
☐ 00925 Magnesium (as Mg)		☐ 00440 Bicarbonate (as HCO_3)		☐ 01330 Odor		☐ 01049 Lead		☐ 03501 Gross Beta	pCi/l	☐ 39730 2, 4-D	
☐ 01045 Iron-Total (as Fe)		☐ 00445 Carbonate (as CO_3)		☐ 00080 Color	mg/l	☐ 07180 Mercury		☐ 09501 Radium-226	pCi/l	☐ 39740 2, 4, 5-TP (Silvex)	
☐ 01056 Manganese (as Mn)		☒ 00945 Sulfate (as SO_4)	510	☐ 00070 Turbidity		☐ 01145 Selenium		☐ 11501 Radium-228	pCi/l		
				☒ Boron	0.13	☐ 01075 Silver					

LABORATORY REMARKS:

Reviewed by

Date reported

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

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.
7/16/82	WC 125	

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	Check one:
PLATEAU REFINERY		Bloomfield Cal	SJ	☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
7-14-82	8:15 PM	LOCATION D	D-2	OIL CONSERVATION DIV

Collected By	Owner	Address
Simpson	O-C-D. PLATEAU	P.O. Box 2088 SANTA FE N.M. 87501

TYPE of SYSTEM *(Check one)* ☐ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ Other *(specify)*

LAT. ° ' "

LONG ° ' "

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL		HEAVY METALS	mg/l	PARAMETER		ORGANIC	mg/l
00930 Sodium (as Na)		X 00940 Chloride (as Cl)	14995	X 70300 Total Filterable Residue	mg/l 2170	01000 Arsenic				39390 Endrin	
00935 Potassium (as K)		X 00950 Fluoride (as F)	0.38	38260 Foaming Agents (as Las)		01005 Barium				39732 Lindane	
00900 Tot. Hardness (as $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		01030 Chromium		RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		01049 Lead		03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	07180 Mercury		09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		X 00945 Sulfate (as SO_4)	2397	00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
				X Boron	2.7	01075 Silver					

LABORATORY REMARKS:

Reviewed by

Date reported

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

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.
7/16/82	WC 12k	

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	Check one:
Plateau Refinery		BLOOMFIELD	SJ	☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
7-14-82	4:15PM	LOCATION E	E-2	OIL CONSERVATION DIV

Collected By	Owner	Address
SIMPSON	OCD - PLATEAU	P.O. BOX 2088 SANTA FE, N.M. 87501

TYPE of SYSTEM *(Check one)* ☐ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ Other *(specify)*

LAT. ° ' "

LONG ° ' "

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL		HEAVY METALS	mg/l	PARAMETER		ORGANIC	mg/l
00930 Sodium (as Na)		X 00940 Chloride (as Cl)	5545	X 70300 Total Filterable Residue	mg/l 4830	01000 Arsenic				39390 Endrin	
00935 Potassium (as K)		X 00950 Fluoride (as F)	0.43	38260 Foaming Agents (as Las)		01005 Barium				39732 Lindane	
00900 Tot. Hardness (as $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		01030 Chromium		RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		01049 Lead		03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	07180 Mercury		09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		X 00945 Sulfate (as SO_4)	1420	00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
				X Boron	1.5	01075 Silver					

LABORATORY REMARKS:

Reviewed by

Date reported

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

S2999

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.
7/16/82	WC 127	

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 ☐ Complete Secondary ☐ Organic ☐ Radiological

Water Supply System Name	Water Supply System Code No.	City or Location	County	Check one:
PLATEAU REFINERY				☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
7-14-82	1:45 PM	LOCAT. #4 C	C-4	OIL CONSERVATION DIV

Collected By	Owner	Address
SIMPSON	OED - PLATEAU	P.O. BOX 2088 SANTA FE N.M. 87501

TYPE of SYSTEM *(Check one)* ☐ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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 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 $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		01030 Chromium		RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		01049 Lead		03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	07180 Mercury		09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		00945 Sulfate (as SO_4)		00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
Cyanide						01075 Silver					

LABORATORY REMARKS: Negative Cyanide. CB Coleman 7-16-82

Reviewed by
Date reported 7/16/82

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

52999

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.
7/16/82	WC 128	

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 ☐ Complete Secondary ☐ Organic ☐ Radiological

Water Supply System Name	Water Supply System Code No.	City or Location	County	Check one:
PLATEAU REFINERY				☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
7-14-82	3:15 PM	LOCATION D	D-4	OIL CONSERVATION DIV
Collected By	**Owner**			**Address** P.O. BOX 2088 SANTA FE N.M. 87501
SIMPSON	OCD-PLATEAU			

TYPE of SYSTEM *(Check one)* ☐ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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 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 $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		01030 Chromium		RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		01049 Lead		03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	07180 Mercury		09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		00945 Sulfate (as SO_4)		00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
X Cyanide						01075 Silver					

LABORATORY REMARKS: [redacted] CB Coleman 7-16-82

Between 0.19 and 0.32 mg/CN/liter. Extremely high sulfide content precludes a more accurate analysis.

Reviewed by: [signature]
Date reported: 7/16/82

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

52999

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.
7/16/82	WC 129	

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 ☐ Complete Secondary ☐ Organic ☐ Radiological

Water Supply System Name	Water Supply System Code No.	City or Location	County	Check one:
PLATEAU REFINERY		BLOOMFIELD	SJ	☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
7-14-82	4:15 PM	LOCATION E	E-4	OIL CONSERVATION D. V

Collected By	Owner	Address
SIMPSON	OCD - PLATEAU	P.O BOX 2088 SANTA FE N. M. 87501

TYPE of SYSTEM *(Check one)* ☐ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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 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 $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		01030 Chromium		RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		01049 Lead		03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	07180 Mercury		09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		00945 Sulfate (as SO_4)		00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
X Cyanide						01075 Silver					

LABORATORY REMARKS: 0.0036 mg CN^-/liter

O.J. Coleman 7-16-82

Reviewed by: [signature]

Date reported: 7/16/82

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

STATE OF NEW MEXICO
HEALTH ENVIRONMENT
SCIENTIFIC LABORATORY DIVISION (HED)
700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

Biological, Chemical and Physical ANALYSES of WASTEWATER

DATE RECEIVED	LAB NO.	USER CODE
7/29/82	WC 317	

Collection date: 7-28-82-6:00PM
Collected by: Simpson
Owner: OCD
Send Final Report to: OIL CONSERVATION DIV P.O. BOX 2088 SANTA FE N.M. 87501

City or Location:
County: Region:

FIELD DETERMINED PARAMETERS By:

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature, °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids, ml/l		☐	

OTHER INFORMATION: SAMPLE CA NF-A-1g CO504 10 mL H_3PO_4
1gal Brown glass

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ Other:
- ☒ Other:
- ☐ DRAIN
- ☐ LAKE
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Canadian
- ☐ Little Colorado
- ☐ Other - specify:
- ☐ Pecos
- ☐ Gila
- ☐ San Juan

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☐ Residue Total Filterable (Dissolved)		☐ Conductance Micromhos 25 °C		☐	
☐ TOC		☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☐		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☒ ug/l Bromide	12.8	☐		☐		☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS

Date:
Analyst:
Reviewed by: Alb Meibohm
Date reported: 8/2/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)
WHITE—*Originator* PINK—*EID Field Office* CANARY—*EID Program Office* GOLDENROD—*SLD File Copy*

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	LAB NO.	USER CODE
7/29/82	WC 318	

Collection date: 7-28-82 - 3:00PM
Collected by: Sim Pson
Owner:
Send Final Report to: OIL CONSERVATION D.V P.O. BOX 2088 SANTA FE N.M 87501

City or Location:
County: Region:

FIELD DETERMINED PARAMETERS By

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature, °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids, ml/l		☐	

OTHER INFORMATION: SAMPLE DA NF-A-Hg CUSO4 ICED DOWN SINCE COLLECTION 10ML H_2SO_4

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☒ LAGOON
- ☐ Other:
- ☐ Other:
- ☐ DRAIN
- ☐ LAKE
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Canadian
- ☐ Little Colorado
- ☐ Other - specify:
- ☐ Pecos
- ☒ Gila
- ☐ San Juan

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☒ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☐ Residue Total Filterable (Dissolved)		☐ Conductance Micromhos 25 °C		☐	
☐ TOC		☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☐		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☒ mg/l PHENOLS 37049		☐		☐		☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS

Date:
Analyst:
Reviewed by:
Date reported: 8/2/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)

WHITE—*Originator* PINK—*EID Field Office* CANARY—*EID Program Office* GOLDENROD—*SLD File Copy*

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	LAB NO.	USER CODE
7/29/82	WC 319	

Collection date: 7-28-82
Collected by: Oscar Simpson
Owner: OCD
Send Final Report to:
OIL CONSERVATION DIV
P.O. BOX 2088
SANTA FE N.M 87501
PH 827 2534

City or Location:
County: SJ
Region:

FIELD DETERMINED PARAMETERS By

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature, °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids, ml/l		☐	

OTHER INFORMATION: SAMPLE IA Brown Gloss Salton Jar
NF-A- 1g CUSO4 10ml < H3PO4

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ DRAIN
- ☐ Other:
- ☐ LAKE
- ☐ Other:
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Pecos
- ☐ Canadian
- ☐ Gila
- ☐ Little Colorado
- ☐ San Juan
- ☐ Other - specify:

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☐ Residue Total Filterable (Dissolved)		☐ Conductance Micromhos 25 °C		☐	
☐ TOC		☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☐		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☒ PHENOLS	ug/l 191	☐		☐		☐		☐	
SAMPLE TREATMENT ☒ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS

Date:
Analyst:
Reviewed by: A.L. Meibohm
Date reported: 8/2/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)

WHITE—*Originator* PINK—*EID Field Office*
CANARY—*EID Program Office* GOLDENROD—*SLD File Copy*

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. WC 320 | 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 ☐ Radiological

Water Supply System Name	Water Supply System Code No.	City or Location	County	Check one:
Sample LA				☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
7-28-82	7:00 PM	SAMPLE LA	NF-A-10ML NAOH	

Collected By	Owner	Address
SIMPSON	OCD	

TYPE of SYSTEM *(Check one)*: ☒ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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 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 $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		01030 Chromium		RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		01049 Lead		03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	07180 Mercury		09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		00945 Sulfate (as SO_4)		00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
☒ Cyanide						01075 Silver					

LABORATORY REMARKS: Note: May have high sulfates

Negative cyanide

B Coleman 8-5-82

Reviewed by

Date reported 8/5/82

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

State of New Mexico
HEALTH and ENVIRONMENT DEPARTMENT
SCIENTIFIC
LABORATORY DIVISION

CHEMICAL and PHYSICAL ANALYSES for WATER SAMPLES

WC-321

Date received	Lab No.	SLD user code No.
7/29/82	WC 321	

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 ☐ Complete Secondary ☐ 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	Report to
7-28-82	5:30 PM	SAMPLE JA	NF-A - 10ML NAOH	OIL CONSERVATION D.V

Collected By	Owner	Address
SIMSON	OCD	P.O. BOX 2088 SANTA FE N.M. 87501

TYPE of SYSTEM *(Check one)*
☐ PRIVATE PUBLIC: ☐ Community ☒ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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 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 $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		01030 Chromium		RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		01049 Lead		03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	07180 Mercury		09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		00945 Sulfate (as SO_4)		00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
☒ Cyanide						01075 Silver					

LABORATORY REMARKS: NOTE High SULFATES PRESENT
< 0.001 mg/l. CB Coleman 8-5-82
Cyanide

Reviewed by Bill Meibohm
Date reported 8/5/82

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

STATE OF NEW MEXICO
HEALTH & ENVIRONMENT Department
SCIENTIFIC LABORATORY DIVISION (HED)
700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

Biological, Chemical and Physical ANALYSES of WASTEWATER

DATE RECEIVED	LAB NO. WC 322	USER CODE
7/29/82		

Collection date 7-28-82 6:00PM
Collected by Simpson
Owner OCD
Send Final Report to:
O.C. CONSERVATION D.
P.O. Box 2088
SANTA FE N.M. 87501

City or Location
County Region

FIELD DETERMINED PARAMETERS By

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature, °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids, ml/l		☐	

OTHER INFORMATION SAMPLE CA NF-A - 10 ML iced down sent collection. NAOH

STORET NO.:

Source
☐ Wastewater Treatment Plant
☐ LAGOON ☐ DRAIN
☐ Other: ☐ LAKE
☐ Other: ☐ STREAM

RIVER BASIN
☐ Rio Grande ☐ Pecos
☐ Canadian ☐ Gila
☐ Little Colorado ☐ San Juan
☐ Other - specify:

OWNERSHIP
☐ Municipal
☐ MDSWA
☐ Private
☐ Industrial
☐ Commercial
☐ Other:

LOCATION
☐ Influent
☐ Primary
☐ Secondary
☐ Effluent
☐ Digester
☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☐ Residue Total Filterable (Dissolved)		☐ Conductance Micromhos 25 °C		☐	
☐ TOC		☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☐		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☒ Cyanide		☐		☐		☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS
POSSIBLE High SULFATES
0.002 mg/l, Cyanide

Date 8-5-82
Analyst CB Coleman
Reviewed by
Date reported 8/5/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)
WHITE—*Originator* PINK—*EID Field Office*
CANARY—*EID Program Office* GOLDENROD—*SLD File Copy*

STATE OF NEW MEXICO
HEALTH & ENVIRONMENT
SCIENTIFIC LABORATORY DIVISION (HED)
700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

Biological, Chemical and Physical ANALYSES of WASTEWATER

DATE RECEIVED	LAB NO.	USER CODE
7-29-82	WC 323	

Collection date: 7-28-48 3:00PM
City or Location:
Collected by: SIMPSON
County: SJ
Region:
Owner: OCD
FIELD DETERMINED PARAMETERS — By:

Send Final Report to:
OIL CONSERVATION DIV.
P.O. BOX 2088 SANTA FE
87501 PH 8272534

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature, °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids, ml/l		☐	

OTHER INFORMATION: SAMPLE DA NF-A -10 ML NAOH
ICED DOWN SINCE COLLECTION

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ DRAIN
- ☐ Other:
- ☐ LAKE
- ☐ Other:
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Pecos
- ☐ Canadian
- ☐ Gila
- ☐ Little Colorado
- ☐ San Juan
- ☐ Other - specify:

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☐ Residue Total Filterable (Dissolved)		☐ Conductance Micromhos 25 °C		☐	
☐ TOC		☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☐		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☒ CYNAIDE		☐		☐		☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS: ~~FLUORIDE~~ High SULFATES
0.006 mg/l. Cyanide
pH - 9 NOTE

Date: 8-5-82
Analyst: CB Coleman
Reviewed by:
Date Reported: 8/5/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)
WHITE—*Originator* PINK—*EID Field Office*
CANARY—*EID Program Office* GOLDENROD—*SLD File Copy*

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	LAB NO.	USER CODE
7/29/82	WC 324	

Collection date: 7-28-~~82~~ 82 - 4:00PM
City or Location:
Collected by: OSCAR SIMPSON
County: SAN JUAN
Region:
Owner: OCD

Send Final Report to:
OIL CONSERVATION D.V.
P.O. BOX 2088
SANTA FE N.M
87501
PH 827 2534
ATT OSCAR SIMPSON

FIELD DETERMINED PARAMETERS — By

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature, °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids, ml/l		☐	

OTHER INFORMATION
NOTE: HIGH SULFATES PRESENT. DR COLEMAN
SAMPLE IA — NF-A-10 ML NAOH

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ DRAIN
- ☐ Other:
- ☐ LAKE
- ☐ Other:
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Pecos
- ☐ Canadian
- ☐ Gila
- ☐ Little Colorado
- ☐ San Juan
- ☐ Other - specify:

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☐ Residue Total Filterable (Dissolved)		☐ Conductance Micromhos 25 °C		☐	
☐ TOC		☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☐		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☒ CYANIDE		☐		☐		☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS
Negative cyanide
NOTE
pH of sample was 1-2 rather than
12

Date: 8-5-82
Analyst: CB Coleman
Reviewed by: [signature]
Date reported: 8/5/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)
WHITE—*Originator* PINK—*EID Field Office*
CANARY—*EID Program Office* GOLDENROD—*SLD File Copy*

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	LAB NO.	USER CODE
7/29/82	WC 325	

Collection date: 7-28-82 - 4:00PM
Collected by: OSCAR SIMPSON
Owner: OCD
Send Final Report to:
OIL CONSERVATION DIV
P.O BOX 2088
SANTA FE N.M 87501
PH 827 2534

City or Location:
County: S J
Region:

FIELD DETERMINED PARAMETERS — By

☐ 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_2SO_4

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON ☐ DRAIN
- ☐ Other: ☐ LAKE
- ☐ Other: ☐ STREAM

RIVER BASIN
- ☐ Rio Grande ☐ Pecos
- ☐ Canadian ☐ Gila
- ☐ Little Colorado ☐ San Juan
- ☐ Other - specify:

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☐ Residue Total Filterable (Dissolved)		☐ Conductance Micromhos 25 °C		☐	
☒ TOC	4.6	☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☒ SULFATES		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☐		☐		☐		☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS

Date:
Analyst:
Reviewed by: [signature]
Date Reported: 8/9/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)

WHITE—*Originator* PINK—*EID Field Office*
CANARY—*EID Program Office* GOLDENROD—*SLD File Copy*

STATE OF NEW MEXICO
ENVIRONMENT DEPARTMENT
SCIENTIFIC LABORATORY DIVISION (HED)
700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

Biological, Chemical and Physical ANALYSES of WASTEWATER

DATE RECEIVED	LAB NO.	USER CODE
7/29/82	WC 326	

Collection date 7-28-82 - 3:00PM
Collected by SIMPSON
Owner OCD
Send Final Report to:
O.C. CONSERVATION D.V
P.O. BOX 2088
SANTA FE NM
87501 ph 827-2574

City or Location
County
Region

FIELD DETERMINED PARAMETERS By

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature, °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids, ml/l		☐	

OTHER INFORMATION SAMPLE DA NF-A-10 ml $L H_2SO_4$
ICED DOWN SINCE COLLECTION

STORET NO.:

Source
☐ Wastewater Treatment Plant
☐ LAGOON ☐ DRAIN
☐ Other: ☐ LAKE
☐ Other: ☐ STREAM

RIVER BASIN
☐ Rio Grande ☐ Pecos
☐ Canadian ☐ Gila
☐ Little Colorado ☐ San Juan
☐ Other - specify:

OWNERSHIP
☐ Municipal
☐ MDSWA
☐ Private
☐ Industrial
☐ Commercial
☐ Other:

LOCATION
☐ Influent
☐ Primary
☐ Secondary
☐ Effluent
☐ Digester
☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☐ Residue Total Filterable (Dissolved)		☐ Conductance Micromhos 25 °C		☐	
☒ TOC	418	☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☐		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☐		☐		☐		☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS

Date
Analyst
Reviewed by
Date reported 8/9/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)
WHITE—*Originator* PINK—*EID Field Office*
CANARY—*EID Program Office* GOLDENROD—*SLD File Copy*

STATE OF NEW MEXICO
ENVIRONMENT
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
Collected by: Simpson
Owner: OCD
Send Final Report to:
O.C. CONSERVATION
D.V.
P.O. BOX 2088
SANTA FE N.M.
87501

City or Location:
County: SJ
Region:

FIELD DETERMINED PARAMETERS — By

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature, °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids, ml/l		☐	

OTHER INFORMATION: SAMPLE CA NF-A-10 ml H_2SO_4

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ Other:
- ☐ Other:
- ☐ DRAIN
- ☐ LAKE
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Canadian
- ☐ Little Colorado
- ☐ Other - specify:
- ☐ Pecos
- ☐ Gila
- ☐ San Juan

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☐ Residue Total Filterable (Dissolved)		☐ Conductance Micromhos 25 °C		☐	
☒ TOC	5.4	☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☐		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☐		☐		☐		☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS

Date:
Analyst:
Reviewed by: Ollie Meiboom
Date reported: 8/9/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)

WHITE—*Originator* PINK—*EID Field Office*
CANARY—*EID Program Office* GOLDENROD—*SLD File Copy*

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	LAB NO.	USER CODE
7/29/82	WC 328	

Collection date 7-28-82 5:30
Collected by SIMPSON
Owner OCD
Send Final Report to:
O.C.D. CONSERVATION DIV
P.O. BOX 2088
SANTA FE N.M.
87501

City or Location
County SJ
Region

FIELD DETERMINED PARAMETERS By

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature, °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids, ml/l		☐	

OTHER INFORMATION SAMPLE IN NF-A-10ML H_2SO_4

STORET NO.:

Source
☐ Wastewater Treatment Plant
☐ LAGOON ☐ DRAIN
☐ Other: ☐ LAKE
☐ Other: ☐ STREAM

RIVER BASIN
☐ Rio Grande ☐ Pecos
☐ Canadian ☐ Gila
☐ Little Colorado ☐ San Juan
☐ Other - specify:

OWNERSHIP
☐ Municipal
☐ MDSWA
☐ Private
☐ Industrial
☐ Commercial
☐ Other:

LOCATION
☐ Influent
☐ Primary
☐ Secondary
☐ Effluent
☐ Digester
☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☐ Residue Total Filterable (Dissolved)		☐ Conductance Micromhos 25 °C		☐	
☒ TOC	98	☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☐		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☐		☐		☐		☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS

Date
Analyst
Reviewed by A.W. Meibohm
Date reported 8/9/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)

WHITE—*Originator* PINK—*EID Field Office*
CANARY—*EID Program Office* GOLDENROD—*SLD File Copy*

STATE OF NEW MEXICO
HEALTH ENVIRONMENT
SCIENTIFIC LABORATORY DIVISION (HED)
700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

Biological, Chemical and Physical ANALYSES of WASTEWATER

DATE RECEIVED	LAB NO.	USER CODE
7/29/82	WC 329	

Collection date: 7-28-82 7:00PM
City or Location:
Collected by: SIMPSON
County: Region:
Owner: OCD

Send Final Report to:
OIL CONSERVATION DIV
P.O BOX 2088 SANTA FE
N.M. 87501

FIELD DETERMINED PARAMETERS By

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature, °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids, ml/l		☐	

OTHER INFORMATION: SAMPLE, LA NF-A-10 ML H_2SO_4

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ Other:
- ☐ Other:
- ☐ DRAIN
- ☐ LAKE
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Canadian
- ☐ Little Colorado
- ☐ Other - specify:
- ☐ Pecos
- ☐ Gila
- ☐ San Juan

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☐ Residue Total Filterable (Dissolved)		☐ Conductance Micromhos 25 °C		☐	
☒ TOC	1.5	☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☐		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☐		☐		☐		☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS

Date:
Analyst:
Reviewed by:
Date reported: 8/9/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)

WHITE—*Originator* PINK—*EID Field Office*
CANARY—*EID Program Office* GOLDENROD—*SLD File Copy*

STATE OF NEW MEXICO
HEALTH & ENVIRONMENT
SCIENTIFIC LABORATORY DIVISION (HED)
700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

Biological, Chemical and Physical ANALYSES of WASTEWATER

DATE RECEIVED	LAB NO.	USER CODE
7/29/82	WC 330	

Collection date: 7-28-82
Collected by: OSCAR SIMPSON
Owner: OCD
Send Final Report to:
OIL CONSERVATION DIV.
P.O BOX 2088
SANTA FE N.M
87501
AA 8272534

City or Location:
County: Region:

FIELD DETERMINED PARAMETERS By

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature, °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids, ml/l		☐	

OTHER INFORMATION: SAMPLE IA NF-NA

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ Other:
- ☐ Other:
- ☐ DRAIN
- ☐ LAKE
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Canadian
- ☐ Little Colorado
- ☐ Other - specify:
- ☐ Pecos
- ☐ Gila
- ☐ San Juan

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☒ Residue Total Filterable (Dissolved)	184	☐ Conductance Micromhos 25 °C		☐	
☐ TOC		☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☐		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☒ $SO_4^=$	57.3	☒ Boron	0.03	☒ CHLORIDES	3.9	☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS

Date:
Analyst:
Reviewed by:
Date reported: 8/9/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)

WHITE—*Originator* PINK—*EID Field Office*
CANARY—*EID Program Office* GOLDENROD—*SLD File Copy*

STATE OF NEW MEXICO
ENVIRONMENT DEPARTMENT
SCIENTIFIC LABORATORY DIVISION (HED)
700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

Biological, Chemical and Physical ANALYSES of WASTEWATER

DATE RECEIVED	LAB NO.	USER CODE
7/29/82	WC 331	

Collection date: 7-28-82 - 3:00PM
City or Location:
Collected by: SIMPSON
County: SJ
Region:
Owner: OCD

Send Final Report to:
OIL CONSERVATION D.V
P.O. BOX 2088
SANTA FE N.M
87501

FIELD DETERMINED PARAMETERS By

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature, °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids, ml/l		☐	

OTHER INFORMATION: SAMPLE @ DA NF-NA ICED DOWN SINCE COLLECTED

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ Other:
- ☐ DRAIN
- ☐ LAKE
- ☐ STREAM
- ☐ Other:

RIVER BASIN
- ☐ Rio Grande
- ☐ Canadian
- ☐ Little Colorado
- ☐ Other - specify:
- ☐ Pecos
- ☐ Gila
- ☐ San Juan

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☒ Residue Total Filterable (Dissolved)	2676	☐ Conductance Micromhos 25 °C		☐	
☐ TOC		☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☐		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☒ BORON (B)	0.35	☒ CL	15041	☒ SO4	454.2	☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS

Date:
Analyst:
Reviewed by: [signature]
Date reported: 8/9/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)

WHITE—*Originator* PINK—*EID Field Office*
CANARY—*EID Program Office* GOLDENROD—*SLD File Copy*

STATE OF NEW MEXICO
HEALTH ENVIRONMENT
SCIENTIFIC LABORATORY DIVISION (HED)
700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

Biological, Chemical and Physical ANALYSES of WASTEWATER

DATE RECEIVED	LAB NO.	USER CODE
7/29/82	WC 332	

Collection date: 7-28-82 - 6:10
Collected by: SIMPSON
Owner: OCD
Send Final Report to: OIL CONSERVATION DIV P.O BOX 2088 SANTA FE N.M 87501

City or Location:
County: Region:

FIELD DETERMINED PARAMETERS By

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature, °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids, ml/l		☐	

OTHER INFORMATION: SAMPLE CANNA - ICED DOWN

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ DRAIN
- ☐ Other:
- ☐ LAKE
- ☐ Other:
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Pecos
- ☐ Canadian
- ☐ Gila
- ☐ Little Colorado
- ☐ San Juan
- ☐ Other - specify:

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☒ Residue Total Filterable (Dissolved)	186	☐ Conductance Micromhos 25 °C		☐	
☐ TOC		☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☐		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☒ SO4	56.7	☒ BORON	0.07	☒ CHLORIDES	65	☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS

Date:
Analyst:
Reviewed by:
Date reported: 8/9/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)

WHITE—*Originator* PINK—*EID Field Office*
CANARY—*EID Program Office* GOLDENROD—*SLD File Copy*

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	LAB NO.	USER CODE
7/29/82	WC 333	

Collection date: 7-28-82 - 5:30PM
City or Location:
Collected by: SIMPSON
County: SJ
Region:
Owner: OCD
FIELD DETERMINED PARAMETERS — By:
Send Final Report to: OIL CONSERVATION D.IV, P.O. BOX 2088, SANTA FE, N.M. 87501

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature, °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids, ml/l		☐	

OTHER INFORMATION: SAMPLE TA (NFAA) [redacted]

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ Other:
- ☐ Other:
- ☐ DRAIN
- ☐ LAKE
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Canadian
- ☐ Little Colorado
- ☐ Other - specify:
- ☐ Pecos
- ☐ Gila
- ☐ San Juan

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☒ Residue Total Filterable (Dissolved)	1549	☐ Conductance Micromhos 25 °C		☐	
☐ TOC		☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☐		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☒ SO_4	151.8	☒ BORON	0.84	☒ CL	203.5	☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS

Date:
Analyst:
Reviewed by:
Date reported: 8/9/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)

WHITE—*Originator* PINK—*EID Field Office*
CANARY—*EID Program Office* GOLDENROD—*SLD File Copy*

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 WASTEWATEI

DATE RECEIVED	LAB NO.	USER CODE
7/29/82	WC 334	

Collection date: 7-28-82 7:00PM
Collected by: SIMPSON
Owner: OCD
Send Final Report to:
O.C. CONSERVATION D.V
P.O. BOX 2088
SANTA FE N.M
87501

City or Location:
County: SJ
Region:

FIELD DETERMINED PARAMETERS By

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature, °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids, ml/l		☐	

OTHER INFORMATION: SAMPLE @ LA NF-NA

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ Other:
- ☐ Other:
- ☐ DRAIN
- ☐ LAKE
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Canadian
- ☐ Little Colorado
- ☐ Other - specify:
- ☐ Pecos
- ☐ Gila
- ☐ San Juan

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☒ Residue Total Filterable (Dissolved)	906	☐ Conductance Micromhos 25 °C		☐	
☐ TOC		☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☒ SO4	417.2	☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☒ CL	38.2	☒ BORON	0.29	☐		☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS

Date

Analyst

Reviewed by

Date Reported 8/9/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)

WHITE—*Originator* PINK—*EID Field Office*
CANARY—*EID Program Office* GOLDENROD—*SLD File Copy*

STATE OF NEW MEXICO
ENVIRONMENT Department
SCIENTIFIC LABORATORY DIVISION (HED)
700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

Biological, Chemical and Physical ANALYSES of WASTEWATER

DATE RECEIVED	LAB NO.	USER CODE
7/29/82	WC 335	

Collection date: 7-28-82 5:00PM
Collected by: SIMPSON
Owner: OCD
Send Final Report to: OIL CONSERVATION DIV P.O. BOX 2088 SANTA FE N.M. 87501

City or Location:
County: SAN JUAN
Region:

FIELD DETERMINED PARAMETERS By

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature, °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids, ml/l		☐	

OTHER INFORMATION: SAMPLE KA NF-NA

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ DRAIN
- ☐ Other:
- ☐ LAKE
- ☐ Other:
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Pecos
- ☐ Canadian
- ☐ Gila
- ☐ Little Colorado
- ☐ San Juan
- ☐ Other - specify:

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☒ Residue Total Filterable (Dissolved)	1087	☐ Conductance Micromhos 25 °C		☐	
☐ TOC		☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☐		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☒ SO4	6977	☒ CL	78.2	☒ BORON	0.66	☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3,3-5ml/l (for metals)		☐	
								☐	

REMARKS

Date:
Analyst:
Reviewed by: [signature]
Date reported: 8/9/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)
WHITE—*Originator* PINK—*EID Field Office*
CANARY—*EID Program Office* GOLDENROD—*SLD File Copy*

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	LAB NO.	USER CODE
7/29/82	WC 336	

Collection date: 7-28-82 - 5.00PM
Collected by: SIMPSON
Owner: GW CP
Send Final Report to: OIL CONSERVATION DIV, P.O. BOX 2088, SANTA FE N. MEX 87501
City or Location:
County: Region:

FIELD DETERMINED PARAMETERS By

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature, °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids, ml/l		☐	

OTHER INFORMATION: SAMPLE KA (NF-A) pm H_2SO_4

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ Other:
- ☐ Other:
- ☐ DRAIN
- ☐ LAKE
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Canadian
- ☐ Little Colorado
- ☐ Other - specify:
- ☐ Pecos
- ☐ Gila
- ☐ San Juan

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☐ Residue Total Filterable (Dissolved)		☐ Conductance Micromhos 25 °C		☐	
☒ TOC	9.6	☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☐		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☐		☐		☐		☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS

Date:
Analyst:
Reviewed by:
Date reported: 8/9/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)

WHITE—*Originator* PINK—*EID Field Office*
CANARY—*EID Program Office* GOLDENROD—*SLD File Copy*

STATE OF NEW MEXICO
ENVIRONMENT
SCIENTIFIC LABORATORY DIVISION (HED)
700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

Biological, Chemical and Physical ANALYSES of WASTEWATER

DATE RECEIVED	LAB NO.	USER CODE
7/16/82	WC 116	

Collection date: 7-14-82
City or Location: NEAR BLOOMFIELD
Collected by: SIMPSON
County: SAN JUAN
Region:
Owner: OCD - PLATEAU
Send Final Report to: OIL CONSERVATION DIV P.O. BOX SANTA FE N.M. 87501

FIELD DETERMINED PARAMETERS — By

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature, °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids, ml/l		☐	

OTHER INFORMATION: C-5

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ DRAIN
- ☐ Other:
- ☐ LAKE
- ☐ Other:
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Pecos
- ☐ Canadian
- ☐ Gila
- ☐ Little Colorado
- ☐ San Juan
- ☐ Other - specify:

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☐ Residue Total Filterable (Dissolved)		☐ Conductance Micromhos 25 °C		☐	
☒ TOC		☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☒ Phenol	~~15.7~~	☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☒ Oil + Grease	15.7	☐		☐		☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

RECEIVED
JUL 22 1982
EID: WATER POLLUTION CONTROL

REMARKS

Date
Analyst
Reviewed by
Date reported 7/16/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)

WHITE—Originator PINK—EID Field Office
CANARY—EID Program Office GOLDENROD—SLD File Copy

STATE OF NEW MEXICO
ENVIRONMENT
SCIENTIFIC LABORATORY DIVISION (HED)
700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

Biological, Chemical and Physical ANALYSES of WASTEWATER

DATE RECEIVED	LAB NO.	USER CODE
7/16/82	WC 117	

Collection date: 7-14-82 1:45PM
Collected by: SIMPSON
Owner: OCD - PLATEAU
Send Final Report to:
OIL CONSERVATION DIV.
P.O. BOX 2088
SANTA FE N.M.
87501

City or Location:
County: Region:

FIELD DETERMINED PARAMETERS By

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature, °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids, ml/l		☐	

OTHER INFORMATION
D-5

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ DRAIN
- ☐ Other:
- ☐ LAKE
- ☐ Other:
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Pecos
- ☐ Canadian
- ☐ Gila
- ☐ Little Colorado
- ☐ San Juan
- ☐ Other - specify:

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☐ Residue Total Filterable (Dissolved)		☐ Conductance Micromhos 25 °C		☐	
☒ TOC		☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☒ Phenol		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☒ Oil + Grease	1.2	☐		☐		☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS

RECEIVED
JUL 22 1982
EID: WATER
POLLUTION CONTROL

Date
Analyst
Reviewed by
Date reported 7/16/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)
WHITE—*Originator* PINK—*EID Field Office*
CANARY—*EID Program Office* GOLDENROD—*SLD File Copy*

STATE OF NEW MEXICO
ENVIRONMENT DEPARTMENT
SCIENTIFIC LABORATORY DIVISION (HED)
700 Camino de Salud NE, Albuquerque, NM 87106 Phone: 843-9240

Biological, Chemical and Physical ANALYSES of WASTEWATER

DATE RECEIVED	LAB NO.	USER CODE
7/16/82	WC 118	

Collection date: 7-14-82 4:45PM
Collected by: SIMPSON
Owner: OCD - PLATEAU
Send Final Report to:
OIL CONSERVATION DIV
P.O. BOX 2088
SANTA FE N.M.
87501

City or Location:
County:
Region:

FIELD DETERMINED PARAMETERS By

☐ pH		☐ Dissolved Oxygen mg/l	
☐ Water Temperature, °C		☐ Chlorine Residual, mg/l	
☐ Settleable Solids, ml/l		☐	

OTHER INFORMATION: E-5

STORET NO.:

Source
- ☐ Wastewater Treatment Plant
- ☐ LAGOON
- ☐ DRAIN
- ☐ Other:
- ☐ LAKE
- ☐ Other:
- ☐ STREAM

RIVER BASIN
- ☐ Rio Grande
- ☐ Pecos
- ☐ Canadian
- ☐ Gila
- ☐ Little Colorado
- ☐ San Juan
- ☐ Other - specify:

OWNERSHIP
- ☐ Municipal
- ☐ MDSWA
- ☐ Private
- ☐ Industrial
- ☐ Commercial
- ☐ Other:

LOCATION
- ☐ Influent
- ☐ Primary
- ☐ Secondary
- ☐ Effluent
- ☐ Digester
- ☐ Trickling Filter

ORGANIC PARAMETERS	mg/l	NUTRIENTS	mg/l	PHYSICAL PARAMETERS	mg/l	OTHER PARAMETERS		HEAVY METAL and TOXIC CHEMICAL PARAMETERS	
☐ BOD - 5 DAY 20 °C		☐ Phosphate (As P)		☐ Residue Total Non-Filterable (Suspended)		☐ Surfactants (As LAS), mg/l		☐	
☐ COD		☐ Nitrogen, Nitrate (As N)		☐ Residue Total Filterable (Dissolved)		☐ Conductance Micromhos 25 °C		☐	
☑ TOC		☐ Nitrogen Ammonia (As N)		☐ Residue Total		☐ Color Units		☐	
☐ DOC		☐ Nitrogen Total Kjeldahl (As N)		☐ Residue Total Fixed Solids		☐ Turbidity Jackson Units Supernatant		☐	
☑ Phenol		☐		☐ Residue Volatile		☐ Turbidity Jackson Units Total		☐	
☑ Fecal Grease 296.1		☐		☐		☐		☐	
SAMPLE TREATMENT ☐ None		☐ Refrigerate		☐ H_2SO_4, 2ml/l		☐ HNO_3, 3-5ml/l (for metals)		☐	
								☐	

REMARKS

RECEIVED
JUL 22 1982
EID: WATER
POLLUTION CONTROL

Date
Analyst
Reviewed by
Date reported 7/16/82

SLD 710 Form Revised 5/78 (Replaces EIA 008)

WHITE—*Originator* PINK—*EID Field Office*
CANARY—*EID Program Office* GOLDENROD—*SLD File Copy*

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.
7/6/82	WC 127	

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	Check one:
PLATEAU REFINERY				☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
7-14-82	1:45 PM	LOCATION C	C-4	O.C. CONSERVATION DIV.

RECEIVED JUL 22 1982 ENV. WATER POLLUTION CONTROL

Collected By	Owner	Address
SIMPSON	OED-PLATEAU	P.O. BOX 2088 SANTA FE N.M. 87501

TYPE of SYSTEM *(Check one)* ☐ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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 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 $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		01030 Chromium		RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		01049 Lead		03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	07180 Mercury		09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		00945 Sulfate (as SO_4)		00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
Cyanide						01075 Silver					

LABORATORY REMARKS: Negative Cyanide. A B Coleman 7-16-82

Reviewed by

Date reported 7/16/82

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

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.
7/16/82	WC 129	

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	Check one:
PLATEAU REFINERY		BLOOMFIELD	SJ	☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
7-14-82	4:15 PM	LOCATION E	F-4	OIL CONSERVATION DIV

Collected By: SIMPSON
Owner: OCD - PLATEAU
Address: P.O BOX 2088 SANTA FE, N.M. 87501

TYPE of SYSTEM *(Check one)*
☐ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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 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 $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				39760 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		01030 Chromium		RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		01049 Lead		03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	07180 Mercury		09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		00945 Sulfate (as SO_4)		00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
X Cyanide						01075 Silver					

LABORATORY REMARKS: 0.0036 mg CN/liter
C Coleman 7-16-82

Reviewed by: [signature]
Date reported: 7/16/82

RECEIVED
JUL 19 2 1982
EID: WATER POLLUTION CONTROL

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

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.
7/16/82	WC 128	

CONSULT SLD Lab Annex L for proper presentation of sample(s). TYPE or PRINT with Ball Point Pen

RECEIVED
JUL 22 1982
EID: WATER POLLUTION CONTROL

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	Check one:
PLATEAU REFINERY				☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
7-14-82	3:15 PM	LOCATION D	D-4	OIL CONSERVATION DIV

Collected By	Owner	Address
SIMPSON	OCD - PLATEAU	P.O. BOX 2088 SANTA FE, N.M. 87501

TYPE of SYSTEM *(Check one)* ☐ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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 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 $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		01030 Chromium		RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		01049 Lead		03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	07180 Mercury		09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		00945 Sulfate (as SO_4)		00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
X F Cyanide						01075 Silver					

LABORATORY REMARKS: [redacted] CB Coleman 7-16-82

Between 0.19 and 0.32 mg/CN/liter. Extremely high Sulfide content precludes a more accurate analysis.

Reviewed by [signature]
Date reported 7/16/82

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

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.
7-16-82	HM-77	

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 ☐ Complete Secondary ☐ Organic ☐ Radiological

Water Supply System Name	Water Supply System Code No.	City or Location	County	Check one:
PLATEAU REFINERY				☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
7-13-82	9:15 PM	LOCATION 5 [illegible] TEST HOLE	CAMPBELL BS [illegible] ELECTRICAL BASEMENT NEAR MAIN MAIN	DIV CONSERVATION DIV

Collected By	Owner	Address
SIMPSON	OCD - PLATEAU	BOX 2088 SANTA FE NM 87501

TYPE of SYSTEM *(Check one)* ☐ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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 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 COBALT	0.05	39732 Lindane	
00900 Tot.Hardness (as $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		X 01025 Cadmium	0.001	X NICKEL	<0.05	38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		X 01030 Chromium	0.008	RADIOLOGICAL pCi/l		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		X 01049 Lead	0.10	03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	X 07180 Mercury	<0.0005	09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		00945 Sulfate (as SO_4)		00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
						01075 Silver					

LABORATORY REMARKS:

Reviewed by: [signature]

Date reported: 8/27/82

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

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.
7-16-82	HM-78	

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 ☐ Organic ☐ Radiological

Water Supply System Name	Water Supply System Code No.	City or Location	County	Check one:
PLATEAU REFINERY		NEAR BLOOMFIELD	SAN JUAN	☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
7-12-82	6:45PM	LOCATION A	SAMPLE @ A5 1-LITER CUBACONTAINER NF-A- 2ML HNO3	OIL CONSERVATION DIV.

Collected By: SIMPSON
Owner: OCD-PLATEAU
Address: P.O. BOX 2088 SANTA FE, NM 87501

TYPE of SYSTEM *(Check one)*: ☒ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ Other *(specify)* TEST HOLE

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		☒ BORON		39390 Endrin	
00935 Potassium (as K)		00950 Fluoride (as F)		38260 Foaming Agents (as Las)		01005 Barium		☒ COBALT	0.05	39732 Lindane	
00900 Tot.Hardness (as $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		☒ 01025 Cadmium	0.002	☒ NICKEL	0.13	38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		☒ 01030 Chromium	0.013	RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		☒ 01049 Lead	0.13	03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	☒ 07180 Mercury	0.0014	09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		00945 Sulfate (as SO_4)		00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
						01075 Silver					

LABORATORY REMARKS:

Reviewed by: MS
Date reported: 8/27/82

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

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.
7-16-82	HM-79	

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 ☐ Complete Secondary ☐ Organic ☐ Radiological

Water Supply System Name	Water Supply System Code No.	City or Location	County	Check one:
PLATEAU REFINERY		NEAR BLOOMFIELD	SAN JUAN	☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
7-14-82	1:45 PM	LOCATION C HARMON DITCH	SAMPLE C 1 1-LITER PLASTIC NE ACIDIFIED HNO3	OIL CONSERVATION DIV

Collected By: SIMPSON
Owner: OCD - PLATEAU
Address: P.O. BOX 2088 SANTA FE N.M. 87501

TYPE of SYSTEM *(Check one)* ☐ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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 Total Filterable Residue	mg/l	01000 Arsenic		X COBALT	<0.05	39390 Endrin	
00935 Potassium (as K)		00950 Fluoride (as F)		38260 Foaming Agents (as Las)		01005 Barium		X NICKEL	<0.05	39732 Lindane	
00900 Tot.Hardness (as $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		X 01025 Cadmium	<0.001			38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		X 01030 Chromium	<0.005	RADIOLOGICAL 01501 Gross Alpha	pCi/l	39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		X 01049 Lead	<0.005	03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	X 07180 Mercury	<0.0005	09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		00945 Sulfate (as SO_4)		00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
						01075 Silver					

LABORATORY REMARKS:

Reviewed by: DN

Date reported: 8/27/82

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

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.
7-16-82	HM-80	

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	Check one:
PLATEAU REFINERY	SAMPLE Location	NEAR BLOOMFIELD	SAN JUAN	☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
7-14-82	3:15 PM	SAMPLE	D-1	E.I.C. CONSERVATION DIV

Collected By	Owner	Address
	OCD - PLATEAU	P.O. BOX 2088 SANTA FE, NM 87501

TYPE of SYSTEM *(Check one)* ☐ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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 Total Filterable Residue	mg/l	01000 Arsenic		X Cobalt	0.064	39390 Endrin	
00935 Potassium (as K)		00950 Fluoride (as F)		38260 Foaming Agents (as Las)		01005 Barium		X Nickel	0.08	39732 Lindane	
00900 Tot.Hardness (as $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		X 01025 Cadmium	0.001			38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		X 01030 Chromium	0.041	RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		X 01049 Lead	0.12	03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	X 07180 Mercury	<0.0005	09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		00945 Sulfate (as SO_4)		00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
						01075 Silver					

LABORATORY REMARKS:

Reviewed by MJ

Date reported 8/27/82

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

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.
7-16-82	HM-81	

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	Check one:
PLATEAU REFINERY		BLOOMFIELD	ST	☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
7-14-82	4:15 PM	LOCATION E	F-1	OIL CONSERVATION DIV

Collected By	Owner	Address
S. MESON	OCD PLATEAU	P.O. BOX 2088 SANTA FE NM 87501

TYPE of SYSTEM *(Check one)* ☐ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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 Total Filterable Residue	mg/l	01000 Arsenic		Y Cobalt	0.57	39390 Endrin	
00935 Potassium (as K)		00950 Fluoride (as F)		38260 Foaming Agents (as Las)		01005 Barium		X Nickel	0.80	39732 Lindane	
00900 Tot. Hardness (as $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		Y 01025 Cadmium	0.04			38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		Y 01030 Chromium	0.62	RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		X 01049 Lead	18.17	03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	V 07180 Mercury	<0.0005	09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		00945 Sulfate (as SO_4)		00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
						01075 Silver					

LABORATORY REMARKS:

Reviewed by MJ

Date reported 8/27/82

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

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.
7/29/82	HM 0112	

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 ☐ Complete Secondary ☐ Organic ☐ Radiological

Water Supply System Name	Water Supply System Code No.	City or Location	County	Check one:
SAMPLE IA		SJ		☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
7-28-82	2:00 PM	SAMPLE IA	SAMPLE IA NF-2 - 10 ml HNO3	C.E. CONSERVATION DIV

Collected By	Owner	Address
J. SMYTH		P.O. BOX 2088 SANTA FE N.M. 87501

TYPE of SYSTEM *(Check one)* ☐ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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 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 $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		01030 Chromium		RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		X 01049 Lead	<0.005	03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	07180 Mercury		09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
X 01056 Manganese (as Mn)	<0.05	00945 Sulfate (as SO_4)		00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
X BORON (B)		X COBALT (C)	<0.05			01075 Silver					

LABORATORY REMARKS:

SAMPLE AR good HNO3 added at lab
(Sample Un Preserved) 7/30/82

Reviewed by MJ

Date reported 8/27/82

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

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.
7/19/82	HM-0113	

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 ☐ Complete Secondary ☐ Organic ☐ Radiological

Water Supply System Name	Water Supply System Code No.	City or Location	County	Check one:
SAMPLE DA				☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
7-28-82	3.00PM	SAMPLE DA	SAMPLE DA NF - A - 10 ML HNO3	NM Environmental Div

Collected By	Owner	Address
Smith	OCD	P.O. Box 2088 SANTA FE 87501

TYPE of SYSTEM *(Check one)*
☐ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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 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 $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		01030 Chromium		RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		X 01049 Lead	0.20	03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	07180 Mercury	COMBINE	X 09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
X 01056 Manganese (as Mn)	0.11	00945 Sulfate (as SO_4)		00070 Turbidity		01145 Selenium		X 11501 Radium-228	pCi/l		
X (COULTER)	<0.05			X URANIUM	<0.005	01075 Silver					

LABORATORY REMARKS:

Reviewed by: DMJ

Date reported: 8/27/82

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

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.
7-14-82	HM-2114	

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	Check one:
			SF	☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
7-13-82	12:00 PM	SAMPLE POINT CA	NE-A-10016 H2O2	C. CONSERVAT. DIV

Collected By	Owner	Address
SAMPLER	OCD	P.O. BOX 2088 SANTA FE 87501

TYPE of SYSTEM *(Check one)* ☐ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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 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 $CaCO_3$)		☐ 00620 Nitrate (as N)		☐ 00095 Conductance Micromhos 25°C		☐ 01025 Cadmium				☐ 38270 Methoxychlor	
☐ 00915 Calcium (as Ca)		☐ 00430 Alkalinity (as $CaCO_3$)		☐ 00400 pH		☐ 01030 Chromium		RADIOLOGICAL pCi/l ☐ 01501 Gross Alpha		☐ 39400 Toxaphene	
☐ 00925 Magnesium (as Mg)		☐ 00440 Bicarbonate (as HCO_3)		☐ 01330 Odor		☒ 01049 Lead	<0.005	☐ 03501 Gross Beta	pCi/l	☐ 39730 2, 4-D	
☐ 01045 Iron-Total (as Fe)		☐ 00445 Carbonate (as CO_3)		☐ 00080 Color	mg/l	☐ 07180 Mercury		☐ 09501 Radium-226	pCi/l	☐ 39740 2, 4, 5-TP (Silvex)	
☒ 01056 Manganese (as Mn)	<0.05	☐ 00945 Sulfate (as SO_4)		☐ 00070 Turbidity		☐ 01145 Selenium		☐ 11501 Radium-228	pCi/l		
☒ COLOR	<0.05					☐ 01075 Silver					

LABORATORY REMARKS:

Reviewed by MS

Date reported 8/27/82

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

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.
7/19/82	1411 015	

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	Check one:
SAMPLE TA			SJ	☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
7-28-82	5:10 PM	SAMPLE TA	AIEA - 10ML HNO3	OIL CONSERVATION DIV
Collected By	**Owner**			**Address** AZTEC NEW MEXICO 87401
SIMPSON	OCD			

TYPE of SYSTEM *(Check one)* ☐ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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 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 $CaCO_3$)		☐ 00620 Nitrate (as N)		☐ 00095 Conductance Micromhos 25°C		☐ 01025 Cadmium				☐ 38270 Methoxychlor	
☐ 00915 Calcium (as Ca)		☐ 00430 Alkalinity (as $CaCO_3$)		☐ 00400 pH		☐ 01030 Chromium		RADIOLOGICAL pCi/l ☐ 01501 Gross Alpha		☐ 39400 Toxaphene	
☐ 00925 Magnesium (as Mg)		☐ 00440 Bicarbonate (as HCO_3)		☐ 01330 Odor		☒ 01049 Lead	0.26	☐ 03501 Gross Beta	pCi/l	☐ 39730 2, 4-D	
☐ 01045 Iron-Total (as Fe)		☐ 00445 Carbonate (as CO_3)		☐ 00080 Color	mg/l	☐ 07180 Mercury		☐ 09501 Radium-226	pCi/l	☐ 39740 2, 4, 5-TP (Silvex)	
☒ 01056 Manganese (as Mn)	0.92	☐ 00945 Sulfate (as SO_4)		☐ 00070 Turbidity		☐ 01145 Selenium		☐ 11501 Radium-228	pCi/l		
☒ COBALT	<0.05					☐ 01075 Silver					

LABORATORY REMARKS:

Reviewed by: JM

Date reported: 8/27/82

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

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.
7/30/82	1414 016	

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 ☐ Complete Secondary ☐ 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	Report to
7-28-82	7:00 PM	DRINKING LA	NE-A MILL ANAG	D. CONSERVANCY DIST

Collected By	Owner	Address
S. MASON		P. BOX 2176 SANTA FE 87501

TYPE of SYSTEM *(Check one)* ☐ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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 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 $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		01030 Chromium		RADIOLOGICAL 01501 Gross Alpha	pCi/l	39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		X 01049 Lead	<0.005	03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	07180 Mercury		09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
X 01056 Manganese (as Mn)	0.36	00945 Sulfate (as SO_4)		00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
X Cadmium	<0.05					01075 Silver					

LABORATORY REMARKS:

Reviewed by: DMD

Date reported: 8/27/82

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

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.
7/29/82	HM 0117	

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 ☐ Complete Secondary ☐ Organic ☐ Radiological

Water Supply System Name	Water Supply System Code No.	City or Location	County	Check one:
SAMPLE KA				☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
7-20-82	5:30 PM	SAMPLE KA	SAMPLE KA NF-A - 10 ML HNO3	OIL CONSERVATION DIV
Collected By		**Owner**		**Address** P.O. BOX 2088 SANTA FE, NM 87501

TYPE of SYSTEM *(Check one)* ☐ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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 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 $CaCO_3$)		☐ 00620 Nitrate (as N)		☐ 00095 Conductance Micromhos 25°C		☐ 01025 Cadmium				☐ 38270 Methoxychlor	
☐ 00915 Calcium (as Ca)		☐ 00430 Alkalinity (as $CaCO_3$)		☐ 00400 pH		☐ 01030 Chromium		RADIOLOGICAL pCi/l ☐ 01501 Gross Alpha		☐ 39400 Toxaphene	
☐ 00925 Magnesium (as Mg)		☐ 00440 Bicarbonate (as HCO_3)		☐ 01330 Odor		☒ 01049 Lead	0.38	☐ 03501 Gross Beta	pCi/l	☐ 39730 2, 4-D	
☐ 01045 Iron-Total (as Fe)		☐ 00445 Carbonate (as CO_3)		☐ 00080 Color	mg/l	☐ 07180 Mercury		☐ 09501 Radium-226	pCi/l	☐ 39740 2, 4, 5-TP (Silvex)	
☒ 01056 Manganese (as Mn)	0.13	☐ 00945 Sulfate (as SO_4)		☐ 00070 Turbidity		☐ 01145 Selenium		☐ 11501 Radium-228	pCi/l		
☒ Cobalt	0.069					☐ 01075 Silver					

LABORATORY REMARKS:

Reviewed by: DMJ

Date reported: 8/27/82

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

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.
9-3-81	[illegible]	

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 ☐ Organic ☐ Radiological

Water Supply System Name	Water Supply System Code No.	City or Location	County	Check one:
PLATEAU SAMPLE # 1		FLORA VISTA N.M.	SAN JUAN	☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
9-3-81	3:40 P.M.		FILTERED & ACIDIFIED WITH 50/50-HNO3 2-liquor containers	OIL CONSERVATION

Collected By	Owner	Address
SIMPSON & FORRESTER	OIL CONSERVATION	P.O. BOX 2088 SANTA FE N.M.

TYPE of SYSTEM *(Check one)* ☒ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ Other *(specify)*

LAT. ° ' "
LONG ° ' "

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	☒ 01000 Arsenic .1	0.046	☒ ZINC (ZN) 10.0	<0.10	☐ 39390 Endrin	
☐ 00935 Potassium (as K)		☐ 00950 Fluoride (as F)		☐ 38260 Foaming Agents (as Las)		☒ 01005 Barium 1.0	0.4	☒ COPPER (CU) 1.0	0.061	☐ 39732 Lindane	
☐ 00900 Tot.Hardness (as $CaCO_3$)		☐ 00620 Nitrate (as N)		☐ 00095 Conductance Micromhos 25°C		☒ 01025 Cadmium .01	<0.001	☒ ALUMINUM AL 5.0	<0.10	☐ 38270 Methoxychlor	
☐ 00915 Calcium (as Ca)		☐ 00430 Alkalinity (as $CaCO_3$)		☐ 00400 pH		☒ 01030 Chromium .05	0.009	☐ RADIOLOGICAL pCi/l 01501 Gross Alpha		☐ 39400 Toxaphene	
☐ 00925 Magnesium (as Mg)		☐ 00440 Bicarbonate (as HCO_3)		☐ 01330 Odor		☒ 01049 Lead .05	<0.005	☐ 03501 Gross Beta	pCi/l	☐ 39730 2, 4-D	
1.0 ☒ 01045 Iron-Total (as Fe)	0.40	☐ 00445 Carbonate (as CO_3)		☐ 00080 Color	mg/l	☒ 07180 Mercury .002	<0.0005	☐ 09501 Radium-226	pCi/l	☐ 39740 2, 4, 5-TP (Silvex)	
.2 ☒ 01056 Manganese (as Mn)	<0.10	☐ 00945 Sulfate (as SO_4)		☐ 00070 Turbidity		☒ 01145 Selenium .05	<0.005	☐ 11501 Radium-228	pCi/l		
.2 ☒ NICKEL (NI)	.040	☒ MOLYBDENUM MO 1.0	<0.010	☒ COBALT (CO) .05	<0.005	☒ 01075 Silver .05	<0.001	☒ [illegible] 15			

LABORATORY REMARKS:

Reviewed by [signature]

Date reported 11/27/81

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

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.
9/13/89	WA 54 F	

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 ☐ Complete Secondary ☐ Organic ☐ Radiological

Water Supply System Name	Water Supply System Code No.	City or Location	County	Check one:
[illegible]		[illegible]	[illegible]	☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
9/6/89	11:45 AM		2 - 1.5 L CONTAINERS - FILTERED & ACIDIZED WITH 5 ML HNO3	[illegible]
Collected By	**Owner**			**Address**
[illegible]	[illegible]			[illegible]

TYPE of SYSTEM *(Check one)* ☑ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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 Total Filterable Residue	mg/l	☒ 01000 Arsenic .1	0.005	☒ ZINC (ZN)	<0.10	☐ 39390 Endrin	
☐ 00935 Potassium (as K)		☐ 00950 Fluoride (as F)		☐ 38260 Foaming Agents (as Las)		☒ 01005 Barium 1.0	0.4	☒ COPPER (CU)	<0.05	☐ 39732 Lindane	
☐ 00900 Tot.Hardness (as $CaCO_3$)		☐ 00620 Nitrate (as N)		☐ 00095 Conductance Micromhos 25°C		☒ 01025 Cadmium .01	<0.001	☒ ALUMINUM (AL)	0.24	☐ 38270 Methoxychlor	
☐ 00915 Calcium (as Ca)		☐ 00430 Alkalinity (as $CaCO_3$)		☐ 00400 pH		☒ 01030 Chromium .05	<0.005	☐ RADIOLOGICAL pCi/l 01501 Gross Alpha		☐ 39400 Toxaphene	
☐ 00925 Magnesium (as Mg)		☐ 00440 Bicarbonate (as HCO_3)		☐ 01330 Odor		☒ 01049 Lead .05	<0.005	☐ 03501 Gross Beta	pCi/l	☐ 39730 2, 4-D	
☒ 01045 Iron-Total (as Fe) 1.0	<0.10	☐ 00445 Carbonate (as CO_3)		☐ 00080 Color	mg/l	☒ 07180 Mercury .002	<0.0005	☐ 09501 Radium-226	pCi/l	☐ 39740 2, 4, 5-TP (Silvex)	
☒ 01056 Manganese (as Mn) .2	<0.10	☐ 00945 Sulfate (as SO_4)		☐ 00070 Turbidity		☒ 01145 Selenium .05	<0.005	☐ 11501 Radium-228	pCi/l		
☒ NICKEL (NI) .2	<0.010	☒ MOLYBDENUM (MO) 1.0	<0.010	☒ COPPER (CU) .05	<0.005	☒ 01075 Silver .05	<0.001	☒ [illegible]			

LABORATORY REMARKS:

Reviewed by [illegible]

Date reported 11/27/89

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

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: *Check individual items for analysis [Mark appropriate box(es)]*

INTERIM PRIMARY PARAMETER GROUP ☐ 1 ☐ 2 ☐ 3

TYPE of CHEMICAL ANALYSIS ☐ Complete Secondary ☐ 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	Report to
			2 - 1qt coda containers filtered & acidized w/ 1ml HNO_3	

Collected By	Owner	Address

TYPE of SYSTEM *(Check one)* ☒ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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 Total Filterable Residue	mg/l	☒ 01000 Arsenic .1	<0.005	☒ ZINC (ZN) 10	<0.10	☐ 39390 Endrin	
☐ 00935 Potassium (as K)		☐ 00950 Fluoride (as F)		☐ 38260 Foaming Agents (as Las)		☒ 01005 Barium 1.0	<0.10	☒ COPPER (CU) 1.0	<0.05	☐ 39732 Lindane	
☐ 00900 Tot.Hardness (as $CaCO_3$)		☐ 00620 Nitrate (as N)		☐ 00095 Conductance Micromhos 25°C		☒ 01025 Cadmium .01	<0.001	☒ ALUMINUM (AL) 5.0	0.10	☐ 38270 Methoxychlor	
☐ 00915 Calcium (as Ca)		☐ 00430 Alkalinity (as $CaCO_3$)		☐ 00400 pH		☒ 01030 Chromium .05	<0.005	☐ RADIOLOGICAL 01501 Gross Alpha	pCi/l	☐ 39400 Toxaphene	
☐ 00925 Magnesium (as Mg)		☐ 00440 Bicarbonate (as HCO_3)		☐ 01330 Odor		☒ 01049 Lead .050	<0.005	☐ 03501 Gross Beta	pCi/l	☐ 39730 2, 4-D	
☒ 01045 Iron-Total (as Fe) 1.0	<0.10	☐ 00445 Carbonate (as CO_3)		☐ 00080 Color	mg/l	☒ 07180 Mercury .002	<0.0005	☐ 09501 Radium-226	pCi/l	☐ 39740 2, 4, 5-TP (Silvex)	
☒ 01056 Manganese (as Mn) .2	<0.10	☐ 00945 Sulfate (as SO_4)		☐ 00070 Turbidity		☒ 01145 Selenium .05	<0.005	☐ 11501 Radium-228	pCi/l	☐	
☒ NICKEL (NI) .2	<0.010	☒ MOLYBDENUM (MO) 1.0	<0.010	☒ COBALT (CO) .05	<0.005	☒ 01075 Silver .05	<0.001	☒ BORON (B)		☐	

LABORATORY REMARKS:

Reviewed by

Date reported 11/27/89

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

REPORT TO: OIL CONSERVATION DIVISION
P.O. BOX 2088
SANTA FE NM 87501

82-0135-D

LABORATORY

LAB NUMBER ORG-135-A, B, C

ATTENTION: SIMPSON (CALL 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 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
3-40 ML GLASS VILES WITH TEFLON SEALS MARKED AS (A, A_2, A_3) NOT PRESERVED
1-A - 135A 3-A - 135-C
2-A - 135B
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-$Na_2O_3S_2$: Sample preserved with 3 mg $Na_2O_3S_2$/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 Jo Lee Yo
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 A WATER

STORET CODE		CONTAMINANT	
34235	☒	Benzene	< 1 ug/l
34481	☒	Toluene	< 1 ug/l
34372	☒	Ethylbenzene	< 1 ug/l
34302	☐	Chlorobenzene	ug/l
		METHANE	
34414	☐	Bromo-	ug/l
34419	☐	Chloro-	ug/l
34424	☐	Dichloro-	ug/l
34307	☐	Chlorodibromo-	ug/l
34328	☐	Dichlorobromo-	ug/l
34288	☐	Tribromo-	ug/l
34316	☐	Trichloro-	ug/l
82080	☐	Total THM	ug/l
34489	☐	Trichlorofluoro-	ug/l
34332	☐	Dichlorodifluoro-	ug/l
34297	☐	Tetrachloro-	ug/l
		ETHANE	
34312	☐	Chloro-	ug/l
34497	☐	1,1-Dichloro-	ug/l
34532	☐	1,2-Dichloro-	ug/l
34507	☐	1,1,1-Trichloro-	ug/l
34512	☐	1,1,2-Trichloro-	ug/l
34517	☐	1,1,2,2-Tetrachloro-	ug/l
		ETHENE	
34493	☐	Chloro-	ug/l
34502	☐	1,1-Dichloro-	ug/l
34547	☐	1,2-trans-Dichloro-	ug/l
34485	☐	Trichloro-	ug/l
34476	☐	Tetrachloro-	ug/l
34542	☐	1,2-Dichloropropane	ug/l
34562	☐	1,3-Dichloropropene	ug/l
	☐	OTHERS m-Xylenes < 1 mg/L	

~~AROMATIC HYDROCARBONS~~

ALIPHATIC HYDROCARBONS

~~Naphthalene~~

SEE ATTACHED LIST WITH CIRCLED TOXIC POLLUTENTS ONLY if needed

NT - NOT TESTED FOR

P - PRESENT (NO QUANTITATION)

ND - NONE DETECTED

Aliphatic hydrocarbon Screen : Negative JJ 8-26-82

Detection limit : 1 ug/ml

82- 0136 -D

REPORT TO: OIL CONSERVATION DIVISION
P.O. BOX 2088
SANTA FE NM 87501

LAB NUMBER ORG-136-A,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

City & County NEAR BLOOM FIELD 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 A-H SOIL SAMPLE 40 ML VIAL NOT PRESERVED - ORG-136-A SOIL
A-HA SOIL SAMPLE 250 ML PVC BOTTLE NOT PRESERVED " -136-B
A-HB 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-$Na_2O_3S_2$: Sample preserved with 3 mg $Na_2O_3S_2$/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 Yee
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

STORET CODE		CONTAMINANT	
34235	☒	Benzene	<1 ~~ug/l~~ mg/gm
34481	☒	Toluene	<1 ~~ug/l~~ mg/gm
34372	☐	Ethylbenzene	_____ ug/l
34302	☐	Chlorobenzene	_____ ug/l
		METHANE	
34414	☐	Bromo-	_____ ug/l
34419	☐	Chloro-	_____ ug/l
34424	☐	Dichloro-	_____ ug/l
34307	☐	Chlorodibromo-	_____ ug/l
34328	☐	Dichlorobromo-	_____ ug/l
34288	☐	Tribromo-	_____ ug/l
34316	☐	Trichloro-	_____ ug/l
82080	☐	Total THM	_____ ug/l
34489	☐	Trichlorofluoro-	_____ ug/l
34332	☐	Dichlorodifluoro-	_____ ug/l
34297	☒	Tetrachloro-~~i~~ CARBON DI	NT ug/l
		ETHANE	
34312	☐	Chloro-	_____ ug/l
34497	☐	1,1-Dichloro-	_____ ug/l
34532	☐	1,2-Dichloro-	_____ ug/l
34507	☒	1,1,1-Trichloro-	NT ug/l
34512	☒	1,1,2-Trichloro-	NT ug/l
34517	☐	1,1,2,2-Tetrachloro-	_____ ug/l
		ETHENE	
34493	☐	Chloro-	_____ ug/l
34502	☐	1,1-Dichloro-	_____ ug/l
34547	☐	1,2-trans-Dichloro-	_____ ug/l
34485	☐	Trichloro-	_____ ug/l
34476	☐	Tetrachloro-	_____ ug/l
34542	☐	1,2-Dichloropropane	_____ ug/l
34562	☐	1,3-Dichloropropene	_____ ug/l
	☐	OTHERS	

P+M XYLENES <1 mg/gm

~~AROMATIC~~ HYDROCARBONS

ALIPHATIC HYDROCARBONS

PLUS: ~~DIISOPROPYL ETHER~~

~~METHYLENE CHLORIDE~~

~~PCB's POLYCHLORINATED BIPHENYLS~~

SEE ATTACHED LIST ~~WITH~~ ENCLOSED

TOXIC POLLUTENTS ONLY if needed

Aliphatic hydrocarbon Screen: Negative gg 8-26-82

Detection limit: 1 mg/gm

NT - NOT TESTED FOR

P - PRESENT (NO QUANTITATION)

ND - NONE DETECTED

REPORT TO: OIL CONSERVATION DIVISION
P.O. BOX 2088
SANTA FE NM 87501

82-0137-D

LAB NUMBER ORG-137-A, 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 B

City & County NEAR BLOOMFIELD NM SANJUAN

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.)
3-40 ML VILES WITH TEFLON SEALS NOT PRESERVED ICED DOWN SINCE COLLECTION

SAMPLES B_1, B_2, B_3
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-$Na_2O_3S_2$: Sample preserved with 3 mg $Na_2O_3S_2$/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 Jo Lee Yo
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 B 7-12-82

STORET CODE		CONTAMINANT	
34235	☒	Benzene	< 1 ug/l
34481	☒	Toluene	< 1 ug/l
34372	☐	Ethylbenzene	ug/l
34302	☐	Chlorobenzene	ug/l
		METHANE	
34414	☐	Bromo-	ug/l
34419	☐	Chloro-	ug/l
34424	☐	Dichloro-	ug/l
34307	☐	Chlorodibromo-	ug/l
34328	☐	Dichlorobromo-	ug/l
34288	☐	Tribromo-	ug/l
34316	☐	Trichloro-	ug/l
82080	☐	Total THM	ug/l
34489	☐	Trichlorofluoro-	ug/l
34332	☐	Dichlorodifluoro-	ug/l
34297	☐	Tetrachloro-	ug/l
		ETHANE	
34312	☐	Chloro-	ug/l
34497	☐	1,1-Dichloro-	ug/l
34532	☐	1,2-Dichloro-	ug/l
34507	☐	1,1,1-Trichloro-	ug/l
34512	☐	1,1,2-Trichloro-	ug/l
34517	☐	1,1,2,2-Tetrachloro-	ug/l
		ETHENE	
34493	☐	Chloro-	ug/l
34502	☐	1,1-Dichloro-	ug/l
34547	☐	1,2-trans-Dichloro-	ug/l
34485	☐	Trichloro-	ug/l
34476	☐	Tetrachloro-	ug/l
34542	☐	1,2-Dichloropropane	ug/l
34562	☐	1,3-Dichloropropene	ug/l
	☐	OTHERS m-XYLENES < 1 ug/l ~~AROMATIC~~ HYDROCARBONS ALIPHATIC HYDROCARBONS PLUS ATTACHED LIST ~~WERE~~ CIRCLED TOXIC POLLUTENTS ONLY	

NT - NOT TESTED FOR
P - PRESENT (NO QUANTITATION)
ND - NONE DETECTED

Aliphatic hydrocarbon Screen : Negative JJ 8-26-82
Detection limit : 1 ug/ml

REPORT TO: OIL CONSERVATION DIVISION
P.O. BOX 2088
SANTA FE NM 87501

82-0138-D

LAB NUMBER ORG-138-17-B-C

CALL
ATTENTION: SIMPSON 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

City & County NEAR BLOOMFIELD NM SAN JUAN

Collected (date & time) 7-14-82 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-HOMEVILE SOILSAMPLE NOTPRESERVED -ORG-138-17 SAMPLE B SOIL

B4A 1-250 ML PLASTIC BOTTLE SOILSAMPLE NOTPRESERVED 138-B

B4B 1-PT GLASS MASONJAR WITHALUMNIUM FOIL SEAL NOTPRESERVED 138-C

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-$Na_2O_3S_2$: Sample preserved with 3 mg $Na_2O_3S_2$/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 Yee
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 B
7-14-82
8012

STORET CODE		CONTAMINANT	
34235	☒	Benzene	<1 ug/gm ~~ug/l~~
34481	☒	Toluene	<1 ug/gm ~~ug/l~~
34372	☒	Ethylbenzene	<1 ug/gm ~~ug/l~~
34302	☐	Chlorobenzene	_____ ug/l
		METHANE	
34414	☐	Bromo-	_____ ug/l
34419	☐	Chloro-	_____ ug/l
34424	☐	Dichloro-	_____ ug/l
34307	☐	Chlorodibromo-	_____ ug/l
34328	☐	Dichlorobromo-	_____ ug/l
34288	☐	Tribromo-	_____ ug/l
34316	☐	Trichloro-	_____ ug/l
82080	☐	Total THM	_____ ug/l
34489	☐	Trichlorofluoro-	_____ ug/l
34332	☐	Dichlorodifluoro-	_____ ug/l
34297	☐	Tetrachloro-	_____ ug/l
		ETHANE	
34312	☐	Chloro-	_____ ug/l
34497	☐	1,1-Dichloro-	_____ ug/l
34532	☐	1,2-Dichloro-	_____ ug/l
34507	☐	1,1,1-Trichloro-	_____ ug/l
34512	☐	1,1,2-Trichloro-	_____ ug/l
34517	☐	1,1,2,2-Tetrachloro-	_____ ug/l
		ETHENE	
34493	☐	Chloro-	_____ ug/l
34502	☐	1,1-Dichloro-	_____ ug/l
34547	☐	1,2-trans-Dichloro-	_____ ug/l
34485	☐	Trichloro-	_____ ug/l
34476	☐	Tetrachloro-	_____ ug/l
34542	☐	1,2-Dichloropropane	_____ ug/l
34562	☐	1,3-Dichloropropene	_____ ug/l
	☐	OTHERS	P+m- Xylenes <1 mg/gm

~~AROMATIC HYDROCARBONS~~
ALLITHATIC HYDROCARBONS
PLUS CIRCLED ITEMS OF ATTACHED TOXIC POLLUTENTS 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

REPORT TO: OIL CONSERVATION DIVISION
P.O. BOX 2088
SANTA FE NM 87501

LABORATORY 82-0139-D

LAB NUMBER ORG-139-A,B,C

ATTENTION: SIMPSON CALL 8272534 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 LOCATION C HAMMOND IRREGATION WATER

City & County NEAR BLOOMFIELD SAN JUAN

Collected (date & time) 7-14-82 1:45PM 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 C7 C8, C9 3-40 ML GLASS VILES WITH TEFLON SEALS NOT PRESERVED ICED DOWN FROM TIME OF COLLECTION SAMPLE C WATER

C1 = 139-A C3 = 139C
C2 = 139-B

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-$Na_2O_3S_2$: Sample preserved with 3 mg $Na_2O_3S_2$/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 Yoo

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

STORET CODE		CONTAMINANT	
34235	☒	Benzene	< 1 ug/l
34481	☒	Toluene	< 1 ug/l
34372	☒	Ethylbenzene	< 1 ug/l
34302	☐	Chlorobenzene	ug/l
		METHANE	
34414	☐	Bromo-	ug/l
34419	☐	Chloro-	ug/l
34424	☐	Dichloro-	ug/l
34307	☐	Chlorodibromo-	ug/l
34328	☐	Dichlorobromo-	ug/l
34288	☐	Tribromo-	ug/l
34316	☐	Trichloro-	ug/l
82080	☐	Total THM	ug/l
34489	☐	Trichlorofluoro-	ug/l
34332	☐	Dichlorodifluoro-	ug/l
34297	☐	Tetrachloro-	ug/l
		ETHANE	
34312	☐	Chloro-	ug/l
34497	☐	1,1-Dichloro-	ug/l
34532	☐	1,2-Dichloro-	ug/l
34507	☐	1,1,1-Trichloro-	ug/l
34512	☐	1,1,2-Trichloro-	ug/l
34517	☐	1,1,2,2-Tetrachloro-	ug/l
		ETHENE	
34493	☐	Chloro-	ug/l
34502	☐	1,1-Dichloro-	ug/l
34547	☐	1,2-trans-Dichloro-	ug/l
34485	☐	Trichloro-	ug/l
34476	☐	Tetrachloro-	ug/l
34542	☐	1,2-Dichloropropane	ug/l
34562	☐	1,3-Dichloropropene	ug/l
	☐	OTHERS m-XYLENES < 1 ug/l AROMATIC HYDROCARBONS ALIPHATIC HYDROCARBONS PLUS CIRCLED ITEMS OF ATTACHED TOXIC POLLUTENTS LIST IF NEEDED	

NT - NOT TESTED FOR
P - PRESENT (NO QUANTITATION)
ND - NONE DETECTED

Aliphatic hydrocarbon Screen : Negative gg 8-26-82

Detection limit : 1 ug/ml

REPORT TO: OIL CONSERVATION DIVISION
P.O. BOX 2088
SANTA FE NM 87501

82-0140-D

LABO

LAB NUMBER ORG-140-A, B, C.

ATTENTION: SIMPSON CALL 8272534 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.

City & County NEAR BLOOMFIELD

Collected (date & time) 7-14-82 1:45PM 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 D7 D8 D9 3-40 ML GLASS VILES WITH TEFLON SEALS
ORG-140-A -B -C NO TRR PRESERVED
SAMPLED 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-$Na_2O_3S_2$: Sample preserved with 3 mg $Na_2O_3S_2$/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 Jo Lee Ulis
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 Megenhen

REMARKS

SAMPLED 7-14-82

STORET CODE		CONTAMINANT		
34235	☒	Benzene	21130	ug/l
34481	☒	Toluene	21080	ug/l
34372	☒	Ethylbenzene	<1	ug/l
34302	☐	Chlorobenzene		ug/l
		METHANE		
34414	☐	Bromo-		ug/l
34419	☐	Chloro-		ug/l
34424	☐	Dichloro-		ug/l
34307	☐	Chlorodibromo-		ug/l
34328	☐	Dichlorobromo-		ug/l
34288	☐	Tribromo-		ug/l
34316	☐	Trichloro-		ug/l
82080	☐	Total THM		ug/l
34489	☐	Trichlorofluoro-		ug/l
34332	☐	Dichlorodifluoro-		ug/l
34297	☐	Tetrachloro-		ug/l
		ETHANE		
34312	☐	Chloro-		ug/l
34497	☐	1,1-Dichloro-		ug/l
34532	☐	1,2-Dichloro-		ug/l
34507	☐	1,1,1-Trichloro-		ug/l
34512	☐	1,1,2-Trichloro-		ug/l
34517	☐	1,1,2,2-Tetrachloro-		ug/l
		ETHENE		
34493	☐	Chloro-		ug/l
34502	☐	1,1-Dichloro-		ug/l
34547	☐	1,2-trans-Dichloro-		ug/l
34485	☐	Trichloro-		ug/l
34476	☐	Tetrachloro-		ug/l
34542	☐	1,2-Dichloropropane		ug/l
34562	☐	1,3-Dichloropropene		ug/l
	☐	OTHERS m-XYLENE	1270 ug/l	

ALLITHATIC HYDROCARBONS
ALL CIRCLED ITEMS ON ATTACHED LIST
IF NEEDED

NT - NOT TESTED FOR
P - PRESENT (NO QUANTITATION)
ND - NONE DETECTED

Aliphatic hydrocarbon Screen :
Has hydrocarbon peaks in the $C_8 - C_{24}$ region
maximum at $C_9 - C_{11}$ JJ 8-26-82
Detection limit : 1 ug/ml

DILCO OPERATIONS P.O.
P.O. BOX 2088 SANTA FE N.M. 87501

REPORT TO: Environmental Improvement Division
Health & Environment Department
P.O. Box 968 - Crown Building
Santa Fe, New Mexico 87504-0968
ATTENTION: SIMPSON - 8272534 CALL
BUREAU:

LABOR 82-0141-D

LAB NUMBER ORG-141-A,B,C

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 NEAR BLOOMFIELD

Collected (date & time) 7-14-82 4:15PM 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
E 7-141-A 3-40 ML GLASS VILES WITH TEFLON SEALS NOT PRESERVED
E 8 141-B ICED DOWN SINCE COLLECTION
E 9 141-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-$Na_2O_3S_2$: Sample preserved with 3 mg $Na_2O_3S_2$/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 Jo Lee Yau
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 Meyerhoff

REMARKS

Sample E 7-14-82

WATER

STORET CODE		CONTAMINANT	
34235	☒	Benzene	15660 ug/l
34481	☒	Toluene	44600 ug/l
34372	☒	Ethylbenzene	4030 ug/l
34302	☐	Chlorobenzene	____ ug/l
		METHANE	
34414	☐	Bromo-	____ ug/l
34419	☐	Chloro-	____ ug/l
34424	☐	Dichloro-	____ ug/l
34307	☐	Chlorodibromo-	____ ug/l
34328	☐	Dichlorobromo-	____ ug/l
34288	☐	Tribromo-	____ ug/l
34316	☐	Trichloro-	____ ug/l
82080	☐	Total THM	____ ug/l
34489	☐	Trichlorofluoro-	____ ug/l
34332	☐	Dichlorodifluoro-	____ ug/l
34297	☐	Tetrachloro-	____ ug/l
		ETHANE	
34312	☐	Chloro-	____ ug/l
34497	☐	1,1-Dichloro-	____ ug/l
34532	☐	1,2-Dichloro-	____ ug/l
34507	☐	1,1,1-Trichloro-	____ ug/l
34512	☐	1,1,2-Trichloro-	____ ug/l
34517	☐	1,1,2,2-Tetrachloro-	____ ug/l
		ETHENE	
34493	☐	Chloro-	____ ug/l
34502	☐	1,1-Dichloro-	____ ug/l
34547	☐	1,2-trans-Dichloro-	____ ug/l
34485	☐	Trichloro-	____ ug/l
34476	☐	Tetrachloro-	____ ug/l
34542	☐	1,2-Dichloropropane	____ ug/l
34562	☐	1,3-Dichloropropene	____ ug/l
	☐	OTHERS M XYLENE	16300 ug/l

NT - NOT TESTED FOR

P - PRESENT (NO QUANTITATION)

ND - NONE DETECTED

ALLITHATIC HYDROCARBONS

ALL ITEMS CIRCLED ON ATTACHED LIST

IF REQUIRED CALL 8272534

Aliphatic hydrocarbon screen:

Has hydrocarbon peaks in the $C_8 - C_{24}$ region

maximum at $C_9 - C_{10}$ JJ 8-26-82

Detection limit: 1 ug/ml

REPORT TO: OIL CONSERVATION DIVISION
P.O. BOX 2088
SANTA FE NM 87501

82- 0142 -B

LAB NUMBER ORG - # 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) 7-4-82 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-$Na_2O_3S_2$: Sample preserved with 3 mg $Na_2O_3S_2$/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 JoLee 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 Meyerhein

REMARKS _____

SAMPLE ⊗ E

7-14-82

SOIL

STORET CODE		CONTAMINANT	
34235	☒	Benzene	< 1 ug/gm ~~ug/l~~
34481	☒	Toluene	111.5 ug/gm ~~ug/l~~
34372	☒	Ethylbenzene	43.5 ug/gm ~~ug/l~~
34302	☐	Chlorobenzene	_____ ug/l
		METHANE	
34414	☐	Bromo-	_____ ug/l
34419	☐	Chloro-	_____ ug/l
34424	☐	Dichloro-	_____ ug/l
34307	☐	Chlorodibromo-	_____ ug/l
34328	☐	Dichlorobromo-	_____ ug/l
34288	☐	Tribromo-	_____ ug/l
34316	☐	Trichloro-	_____ ug/l
82080	☐	Total THM	_____ ug/l
34489	☐	Trichlorofluoro-	_____ ug/l
34332	☐	Dichlorodifluoro-	_____ ug/l
34297	☐	Tetrachloro-	_____ ug/l
		ETHANE	
34312	☐	Chloro-	_____ ug/l
34497	☐	1,1-Dichloro-	_____ ug/l
34532	☐	1,2-Dichloro-	_____ ug/l
34507	☐	1,1,1-Trichloro-	_____ ug/l
34512	☐	1,1,2-Trichloro-	_____ ug/l
34517	☐	1,1,2,2-Tetrachloro-	_____ ug/l
		ETHENE	
34493	☐	Chloro-	_____ ug/l
34502	☐	1,1-Dichloro-	_____ ug/l
34547	☐	1,2-trans-Dichloro-	_____ ug/l
34485	☐	Trichloro-	_____ ug/l
34476	☐	Tetrachloro-	_____ ug/l
34542	☐	1,2-Dichloropropane	_____ ug/l
34562	☐	1,3-Dichloropropene	_____ ug/l
	☐	OTHERS o-P&m-XYLENE ⊗	123.5 ug/gm

ALIPHATIC HYDROCARBONS

ALL CIRCLED ITEMS ON ATTACHED LIST

IF REQUIRED CALL 8272534

NT - NOT TESTED FOR

P - PRESENT (NO QUANTITATION)

ND - NONE DETECTED

Aliphatic hydrocarbon Screen:

Has hydrocarbon peaks concentrated in the C_8-C_{14} region

maximum at C_{10} JJ 8-26-82

Detection limit: 1 ug/gm

REPORT TO: OIL CONSERVATION DIVISION
P.O. BOX 2088
SANTA FE NM 87501

82-0143-C

LABORATORY

LAB NUMBER ORG-143-A,B

ATTENTION: SIMPSON CALL 8277574

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 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 → F2
143-B → F3

2-40 mL GLASS VILES WITH TEFLON SEALS NOT PRESERVED

SAMPLE F 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-$Na_2O_3S_2$: Sample preserved with 3 mg $Na_2O_3S_2$/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 Jo Lee Yps
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 Meyerhoff

REMARKS

SAMPLE F
WATER
7-14-82

STORET CODE		CONTAMINANT		
34235	☒	Benzene	< 1	ug/l
34481	☒	Toluene	7430	ug/l
34372	☒	Ethylbenzene	< 1	ug/l
34302	☐	Chlorobenzene		ug/l
		METHANE		
34414	☐	Bromo-		ug/l
34419	☐	Chloro-		ug/l
34424	☐	Dichloro-		ug/l
34307	☐	Chlorodibromo-		ug/l
34328	☐	Dichlorobromo-		ug/l
34288	☐	Tribromo-		ug/l
34316	☐	Trichloro-		ug/l
82080	☐	Total THM		ug/l
34489	☐	Trichlorofluoro-		ug/l
34332	☐	Dichlorodifluoro-		ug/l
34297	☐	Tetrachloro-		ug/l
		ETHANE		
34312	☐	Chloro-		ug/l
34497	☐	1,1-Dichloro-		ug/l
34532	☐	1,2-Dichloro-		ug/l
34507	☐	1,1,1-Trichloro-		ug/l
34512	☐	1,1,2-Trichloro-		ug/l
34517	☐	1,1,2,2-Tetrachloro-		ug/l
		ETHENE		
34493	☐	Chloro-		ug/l
34502	☐	1,1-Dichloro-		ug/l
34547	☐	1,2-trans-Dichloro-		ug/l
34485	☐	Trichloro-		ug/l
34476	☐	Tetrachloro-		ug/l
34542	☐	1,2-Dichloropropane		ug/l
34562	☐	1,3-Dichloropropene		ug/l
	☐	OTHERS M-XYLENE	< 1	ug/l

NT - NOT TESTED FOR
P - PRESENT (NO QUANTITATION)
ND - NONE DETECTED

ALL ALIPHATIC HYDROCARBONS
ALL CIRCLED ITEMS ON ATTACHED LIST
IF REQUIRED CALL 8272534

Aliphatic hydrocarbon screen : Negative Gy 8-26-82

Detection limit = 1 ug/ml

REPORT TO: OIL CONSERVATION DIVISION
P.O. BOX 2088
SANTA FE NM 87501

82-0144-B

LABORAT

LAB NUMBER ORG-144-A
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 BLOOMFIELD

City & County near Bloomfield San Juan

Collected (date & time) 7-14-82 6:45PM 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 paint mason jar with aluminum foil seal SAMPLE 6 SOIL
not preserved
SAMPLE 6 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-$Na_2O_3S_2$: Sample preserved with 3 mg $Na_2O_3S_2$/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 Yu
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 Meyerhoff

REMARKS _____

SAMPLE G-7-14-82
SOIL

STORET CODE		CONTAMINANT	
34235	☒	Benzene	8.9 ug/gm ~~ug/l~~
34481	☒	Toluene	158.2 ug/gm ~~ug/l~~
34372	☒	Ethylbenzene	55.9 ug/gm ~~ug/l~~
34302	☐	Chlorobenzene	ug/l
		METHANE	
34414	☐	Bromo-	ug/l
34419	☐	Chloro-	ug/l
34424	☐	Dichloro-	ug/l
34307	☐	Chlorodibromo-	ug/l
34328	☐	Dichlorobromo-	ug/l
34288	☐	Tribromo-	ug/l
34316	☐	Trichloro-	ug/l
82080	☐	Total THM	ug/l
34489	☐	Trichlorofluoro-	ug/l
34332	☐	Dichlorodifluoro-	ug/l
34297	☐	Tetrachloro-	ug/l
		ETHANE	
34312	☐	Chloro-	ug/l
34497	☐	1,1-Dichloro-	ug/l
34532	☐	1,2-Dichloro-	ug/l
34507	☐	1,1,1-Trichloro-	ug/l
34512	☐	1,1,2-Trichloro-	ug/l
34517	☐	1,1,2,2-Tetrachloro-	ug/l
		ETHENE	
34493	☐	Chloro-	ug/l
34502	☐	1,1-Dichloro-	ug/l
34547	☐	1,2-trans-Dichloro-	ug/l
34485	☐	Trichloro-	ug/l
34476	☐	Tetrachloro-	ug/l
34542	☐	1,2-Dichloropropane	ug/l
34562	☐	1,3-Dichloropropene	ug/l
	☐	OTHERS P+m-XYLENE	229.06 ug/gm

ALIPHATIC HYDROCARBONS
ALL ITEMS CIRCLED ON ATTACHED LIST
IF NEEDED CALL 827254

NT - NOT TESTED FOR
P - PRESENT (NO QUANTITATION)
ND - NONE DETECTED

Aliphatic hydrocarbon screen:
Has hydrocarbon peaks in the $C_8 - C_{24}$ region
Maximum at C_{10} JJ 8-26-82
Detection limit: 1 ug/gm

REPORT TO: OIL CONSERVATION DIVISION
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 & County SJ ~~San~~

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). 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-$Na_2O_3S_2$: Sample preserved with 3 mg $Na_2O_3S_2$/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 Jo Lee Yud

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 Meyerhoff

REMARKS _____

SAMPLE JA 7-28-82

STORET CODE		CONTAMINANT	
34235	☒	Benzene	< 1 ug/l
34481	☒	Toluene	< 1 ug/l
34372	☒	Ethylbenzene	< 1 ug/l
34302	☐	Chlorobenzene	ug/l
		METHANE	
34414	☐	Bromo-	ug/l
34419	☐	Chloro-	ug/l
34424	☐	Dichloro-	ug/l
34307	☐	Chlorodibromo-	ug/l
34328	☐	Dichlorobromo-	ug/l
34288	☐	Tribromo-	ug/l
34316	☐	Trichloro-	ug/l
82080	☐	Total THM	ug/l
34489	☐	Trichlorofluoro-	ug/l
34332	☐	Dichlorodifluoro-	ug/l
34297	☐	Tetrachloro-	ug/l
		ETHANE	
34312	☐	Chloro-	ug/l
34497	☐	1,1-Dichloro-	ug/l
34532	☐	1,2-Dichloro-	ug/l
34507	☐	1,1,1-Trichloro-	ug/l
34512	☐	1,1,2-Trichloro-	ug/l
34517	☐	1,1,2,2-Tetrachloro-	ug/l
		ETHENE	
34493	☐	Chloro-	ug/l
34502	☐	1,1-Dichloro-	ug/l
34547	☐	1,2-trans-Dichloro-	ug/l
34485	☐	Trichloro-	ug/l
34476	☐	Tetrachloro-	ug/l
34542	☐	1,2-Dichloropropane	ug/l
34562	☐	1,3-Dichloropropene	ug/l
	☐	OTHERS m-xylene < 1 ug/l	

NT - NOT TESTED FOR
P - PRESENT (NO QUANTITATION)
ND - NONE DETECTED

Allothatic Hydrocarbons
note: call results in
to see if further test are needed

827 2534

Aliphatic hydrocarbon screen: Negative Jg 8-26-82

Detection limit 1 ug/ml

REPORT TO: OIL CONSERVATION DIVISION
P.O. BOX 2088
SANTA FE NM 87501

LABORATORY

LAB NUMBER 82- 0162 -D

ATTENTION: SIMPSON CALL 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 ☐ Other

Water Supply and/or Code No. SAMPLE CA

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
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-$Na_2O_3S_2$: Sample preserved with 3 mg $Na_2O_3S_2$/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 Jo 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 Meyerhoff

REMARKS

Sample Ca 7-28-82

STORET CODE		CONTAMINANT		
34235	☒	Benzene	< 1	ug/l
34481	☒	Toluene	< 1	ug/l
34372	☒	Ethylbenzene	< 1	ug/l
34302	☐	Chlorobenzene		ug/l
		METHANE		
34414	☐	Bromo-		ug/l
34419	☐	Chloro-		ug/l
34424	☐	Dichloro-		ug/l
34307	☐	Chlorodibromo-		ug/l
34328	☐	Dichlorobromo-		ug/l
34288	☐	Tribromo-		ug/l
34316	☐	Trichloro-		ug/l
82080	☐	Total THM		ug/l
34489	☐	Trichlorofluoro-		ug/l
34332	☐	Dichlorodifluoro-		ug/l
34297	☐	Tetrachloro-		ug/l
		ETHANE		
34312	☐	Chloro-		ug/l
34497	☐	1,1-Dichloro-		ug/l
34532	☐	1,2-Dichloro-		ug/l
34507	☐	1,1,1-Trichloro-		ug/l
34512	☐	1,1,2-Trichloro-		ug/l
34517	☐	1,1,2,2-Tetrachloro-		ug/l
		ETHENE		
34493	☐	Chloro-		ug/l
34502	☐	1,1-Dichloro-		ug/l
34547	☐	1,2-trans-Dichloro-		ug/l
34485	☐	Trichloro-		ug/l
34476	☐	Tetrachloro-		ug/l
34542	☐	1,2-Dichloropropane		ug/l
34562	☐	1,3-Dichloropropene		ug/l
	☐	OTHERS m-xylene	< 1	ug/l

P - PRESENT (NO QUANTITATION)
ND - NONE DETECTED

Aliphatic hydrocarbons
Call us results if detected
if further tests are needed 1-827-2534

Aliphatic hydrocarbon Screen: Negative gj 8-26-82

Detection limit: 1 ug/ml

REPORT TO: OIL CONSERVATION DIVISION
P.O. BOX 2088
SANTA FE NM 87501

LABORATORY

LAB NUMBER 82-0163-D

ATTENTION: Oscar Simpson III CALL 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) ~~SIMPSON~~ 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 ~~OF~~ NF-NA-
NP. refrig. 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-$Na_2O_3S_2$: Sample preserved with 3 mg $Na_2O_3S_2$/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 Jo Lee Ybe
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 Meyerhoff

REMARKS

SAMPLE DA 7-28-82

STORET CODE		CONTAMINANT		
34235	☒	Benzene	17100	ug/l
34481	☒	Toluene	16500	ug/l
34372	☒	Ethylbenzene	3600	ug/l
34302	☐	Chlorobenzene		ug/l
		METHANE		
34414	☐	Bromo-		ug/l
34419	☐	Chloro-		ug/l
34424	☐	Dichloro-		ug/l
34307	☐	Chlorodibromo-		ug/l
34328	☐	Dichlorobromo-		ug/l
34288	☐	Tribromo-		ug/l
34316	☐	Trichloro-		ug/l
82080	☐	Total THM		ug/l
34489	☐	Trichlorofluoro-		ug/l
34332	☐	Dichlorodifluoro-		ug/l
34297	☐	Tetrachloro-		ug/l
		ETHANE		
34312	☐	Chloro-		ug/l
34497	☐	1,1-Dichloro-		ug/l
34532	☐	1,2-Dichloro-		ug/l
34507	☐	1,1,1-Trichloro-		ug/l
34512	☐	1,1,2-Trichloro-		ug/l
34517	☐	1,1,2,2-Tetrachloro-		ug/l
		ETHENE		
34493	☐	Chloro-		ug/l
34502	☐	1,1-Dichloro-		ug/l
34547	☐	1,2-trans-Dichloro-		ug/l
34485	☐	Trichloro-		ug/l
34476	☐	Tetrachloro-		ug/l
34542	☐	1,2-Dichloropropane		ug/l
34562	☐	1,3-Dichloropropene		ug/l
	☐	OTHERS m-Ex xLENE	3000	ug/l

ALLOTHATIC HYDROCARBONS
NOTE CALL IF RESULTS MAY NEED
FURTHER ANALYSIS 1-827 2534

NT - NOT TESTED FOR
P - PRESENT (NO QUANTITATION)
ND - NONE DETECTED

Aliphatic hydrocarbon Screen :
Has hydrocarbon peaks evenly distributed in the $C_8 - C_{12}$ region

Jg 8-26-82

Detection limit : 1 ug/ml

REPORT TO: OIL CONSERVATION DIVISION
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 I_A

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 I_A = 3-40 ml glass VILES WITH TEFLON SEALS
Injection well NO PRESERVATIVE 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-$Na_2O_3S_2$: Sample preserved with 3 mg $Na_2O_3S_2$/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 Yee

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 Meyerhein

REMARKS _____

SAMPLE I$_A$ 7-28-82

STORET CODE		CONTAMINANT	
34235	☒	Benzene	< 1 ug/l
34481	☒	Toluene	< 1 ug/l
34372	☒	Ethylbenzene	< 1 ug/l
34302	☐	Chlorobenzene	ug/l
		METHANE	
34414	☐	Bromo-	ug/l
34419	☐	Chloro-	ug/l
34424	☐	Dichloro-	ug/l
34307	☐	Chlorodibromo-	ug/l
34328	☐	Dichlorobromo-	ug/l
34288	☐	Tribromo-	ug/l
34316	☐	Trichloro-	ug/l
82080	☐	Total THM	ug/l
34489	☐	Trichlorofluoro-	ug/l
34332	☐	Dichlorodifluoro-	ug/l
34297	☐	Tetrachloro-	ug/l
		ETHANE	
34312	☐	Chloro-	ug/l
34497	☐	1,1-Dichloro-	ug/l
34532	☐	1,2-Dichloro-	ug/l
34507	☐	1,1,1-Trichloro-	ug/l
34512	☐	1,1,2-Trichloro-	ug/l
34517	☐	1,1,2,2-Tetrachloro-	ug/l
		ETHENE	
34493	☐	Chloro-	ug/l
34502	☐	1,1-Dichloro-	ug/l
34547	☐	1,2-trans-Dichloro-	ug/l
34485	☐	Trichloro-	ug/l
34476	☐	Tetrachloro-	ug/l
34542	☐	1,2-Dichloropropane	ug/l
34562	☐	1,3-Dichloropropene	ug/l
	☐	OTHERS M-EXYLENE	< 1 ug/l
		ALL ALLOTHATIC HYDROCARBONS	

NT - NOT TESTED FOR
P - PRESENT (NO QUANTITATION)
ND - NONE DETECTED

NOTE: Call Oscar Sampson OH Results
+ if further identification is needed
1-827-2534 Santa Fe

Aliphatic hydrocarbon Screen — Negative Jgj 8-26-82
Detection limit : 1 ug/ml

REPORT TO: OIL CONSERVATION DIVISION
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
and dound-end 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-$Na_2O_3S_2$: Sample preserved with 3 mg $Na_2O_3S_2$/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 Jo Lee Yio

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 La 7-28-82

STORET CODE		CONTAMINANT	
34235	☐	Benzene	< 1 ug/l
34481	☐	Toluene	< 1 ug/l
34372	☐	Ethylbenzene	____ ug/l
34302	☐	Chlorobenzene	____ ug/l
		METHANE	
34414	☐	Bromo-	____ ug/l
34419	☐	Chloro-	____ ug/l
34424	☐	Dichloro-	____ ug/l
34307	☐	Chlorodibromo-	____ ug/l
34328	☐	Dichlorobromo-	____ ug/l
34288	☐	Tribromo-	____ ug/l
34316	☐	Trichloro-	____ ug/l
82080	☐	Total THM	____ ug/l
34489	☐	Trichlorofluoro-	____ ug/l
34332	☐	Dichlorodifluoro-	____ ug/l
34297	☐	Tetrachloro-	____ ug/l
		ETHANE	
34312	☐	Chloro-	____ ug/l
34497	☐	1,1-Dichloro-	____ ug/l
34532	☐	1,2-Dichloro-	____ ug/l
34507	☐	1,1,1-Trichloro-	____ ug/l
34512	☐	1,1,2-Trichloro-	____ ug/l
34517	☐	1,1,2,2-Tetrachloro-	____ ug/l
		ETHENE	
34493	☐	Chloro-	____ ug/l
34502	☐	1,1-Dichloro-	____ ug/l
34547	☐	1,2-trans-Dichloro-	____ ug/l
34485	☐	Trichloro-	____ ug/l
34476	☐	Tetrachloro-	____ ug/l
34542	☐	1,2-Dichloropropane	____ ug/l
34562	☐	1,3-Dichloropropene	____ ug/l
	☒	OTHERS Allothetic hydrocarbons	
		Aromatic Hydrocarbons	
		m-xylenes < 1 ug/l	

NT - NOT TESTED FOR
P - PRESENT (NO QUANTITATION)
ND - NONE DETECTED

Aliphatic hydrocarbon Screen: Negative JJ 8-26-82
Detection limit = 1 ug/ml

REPORT TO: OIL CONSERVATION DIVISION
P.O. BOX 2088
SANTA FE NM 87501

LABORATORY

LAB NUMBER 82-0166-C

ATTENTION: Sampson 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 ☐ Other

Water Supply and/or Code No. Sample KA

City & County San Juan

Collected (date & time) 7-28-82 5:00PM 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.)
Sample KA - 2-40 mL vials with teflon seals of some sample
of Groundwater iced down upon 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-$Na_2O_3S_2$: Sample preserved with 3 mg $Na_2O_3S_2$/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 Jo Lee Yo
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 Meyerhein

REMARKS

Sample Ka 7-28-82

STORET CODE		CONTAMINANT	
34235	☐	Benzene	<1 ug/l
34481	☐	Toluene	<1 ug/l
34372	☐	Ethylbenzene	ug/l
34302	☐	Chlorobenzene	ug/l
		METHANE	
34414	☐	Bromo-	ug/l
34419	☐	Chloro-	ug/l
34424	☐	Dichloro-	ug/l
34307	☐	Chlorodibromo-	ug/l
34328	☐	Dichlorobromo-	ug/l
34288	☐	Tribromo-	ug/l
34316	☐	Trichloro-	ug/l
82080	☐	Total THM	ug/l
34489	☐	Trichlorofluoro-	ug/l
34332	☐	Dichlorodifluoro-	ug/l
34297	☐	Tetrachloro-	ug/l
		ETHANE	
34312	☐	Chloro-	ug/l
34497	☐	1,1-Dichloro-	ug/l
34532	☐	1,2-Dichloro-	ug/l
34507	☐	1,1,1-Trichloro-	ug/l
34512	☐	1,1,2-Trichloro-	ug/l
34517	☐	1,1,2,2-Tetrachloro-	ug/l
		ETHENE	
34493	☐	Chloro-	ug/l
34502	☐	1,1-Dichloro-	ug/l
34547	☐	1,2-trans-Dichloro-	ug/l
34485	☐	Trichloro-	ug/l
34476	☐	Tetrachloro-	ug/l
34542	☐	1,2-Dichloropropane	ug/l
34562	☐	1,3-Dichloropropene	ug/l
	☒	OTHERS Allothelic Hydrocarbons	
		Aromatic Hydrocarbons	
		m-xylene <1 ug/l	

NT - NOT TESTED FOR
P - PRESENT (NO QUANTITATION)
ND - NONE DETECTED

Aliphatic Hydrocarbon Screen: Negative Ga Lee Yip 8-26-82

Detection limit: 1 ug/ml

REPORT TO: OIL CONSERVATION DIVISION
P.O. BOX 2088
SANTA FE NM 87501

DIDN'T DO

LABORATORY

LAB NUMBER 82- 0167 -B

ATTENTION: Sempson 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 ☐ Other

Water Supply and/or Code No. Sample 01

City & County SAN JUAN

Collected (date & time) 7-28-82 - 5:30 PM By (name) Sempson

pH=_____; Conductivity=_____umho/cm at_____°C; Chlorine Residual=_____

Dissolved Oxygen=_____mg/l; Alkalinity=_____; Flow Rate=_____

Sampling Location, Methods & Remarks (i.e. odors etc.)

Sample 01 / 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-$Na_2O_3S_2$: Sample preserved with 3 mg $Na_2O_3S_2$/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 Jo Lee Yp
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

DIDNT DO

STORET CODE		CONTAMINANT	
34235	☒	Benzene	NT* ug/l
34481	☒	Toluene	NT* ug/l
34372	☒	Ethylbenzene	NT* ug/l
34302	☐	Chlorobenzene	ug/l
		METHANE	
34414	☐	Bromo-	ug/l
34419	☐	Chloro-	ug/l
34424	☐	Dichloro-	ug/l
34307	☐	Chlorodibromo-	ug/l
34328	☐	Dichlorobromo-	ug/l
34288	☐	Tribromo-	ug/l
34316	☐	Trichloro-	ug/l
82080	☐	Total THM	ug/l
34489	☐	Trichlorofluoro-	ug/l
34332	☐	Dichlorodifluoro-	ug/l
34297	☐	Tetrachloro-	ug/l
		ETHANE	
34312	☐	Chloro-	ug/l
34497	☐	1,1-Dichloro-	ug/l
34532	☐	1,2-Dichloro-	ug/l
34507	☐	1,1,1-Trichloro-	ug/l
34512	☐	1,1,2-Trichloro-	ug/l
34517	☐	1,1,2,2-Tetrachloro-	ug/l
		ETHENE	
34493	☐	Chloro-	ug/l
34502	☐	1,1-Dichloro-	ug/l
34547	☐	1,2-trans-Dichloro-	ug/l
34485	☐	Trichloro-	ug/l
34476	☐	Tetrachloro-	ug/l
34542	☐	1,2-Dichloropropane	ug/l
34562	☐	1,3-Dichloropropene	ug/l
	☐	OTHERS Xylene	NT* ug/l
		allothate hydrocarbon	

NT - NOT TESTED FOR
P - PRESENT (NO QUANTITATION)
ND - NONE DETECTED

Aliphatic hydrocarbon screen:

Has hydrocarbon peaks in the $C_8 - C_{21}$ region maximum at $C_9 - C_{14}$

Detection limit: 1 ug/ml

Qjz 8-26-82

* Requested for Aliphatic Screen only

ASSAIGAI ANALYTICAL LABORATORIES, INC.
Report of Analysis
(revising report dated 7/16/82)

AAI Vendor #00015
AAL #7070-001
through -019

CLIENT:
ENERGY & MINERALS DEPARTMENT
P. O. BOX 2008
SANTA FE NEW MEXICO 87501

ATTN: OSCAR A. SIMPSON

RECEIVED
JUL 23 1982

All results reported in mg/l unless otherwise noted

SAMPLE #	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)

AAI Vendor #00015
AAL #7070-001
through -019

CLIENT:
ENERGY & MINERALS DEPARTMENT
P. O. BOX 2008
SANTA FE NEW MEXICO 87501

ATTN: OSCAR A. SIMPSON

RECEIVED
JUL 23 1982

All results reported in mg/l unless otherwise noted

SAMPLE #	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

ABBAIGAI ANALYTICAL LABORATORIES, INC.
Report of Analysis

Page 1 of 1
AAI Order #00115
AAL #7070-001
Invoice #018

CLIENT:
ENERGY & MINERALS DEPARTMENT
P. O. BOX 2008
SANTA FE NEW MEXICO 87501

ATTN: OSCAR A. SIMPSON

All results reported in mg/l unless otherwise noted

SAMPLE #	TOC	B	Co	Cr	Fe	Ni	Se	TDS
					.05	250	1.6	.000
1	3.75	<0.01	<0.01	<0.01	<0.01	10.0	.00256	220
2	3.75	0.32	<0.01	<0.01	<0.01	10.0	.00533	641
3	5.63	0.23	<0.01	<0.01	0.01	150.0	.00533	1075 x
4	8.75	0.38	<0.01	<0.01	0.01	150.0	.00533	1124 x
5	26.25	0.74	<0.01	<0.01	+0.40	230.0	.0.244	812? x
6	2.75	0.54	0.01	<0.01	+0.10	760.0 +	.00533	4667 x
7	1.38	1.19	<0.01	<0.01	0.02	440.0 +	.015133	3108 x
8	1.88	<0.01	<0.01	<0.01	+0.07	860.0 +	.02.26	3827 x
9	3.53	0.07	<0.01	<0.01	+0.08	1160.0 +	.0256..	3531 x
10	5.63	<0.01	<0.01	<0.01	0.04	420.0	.01153	1782 x 1784
11	3.63	1.18	<0.01	<0.01	+0.09	930.0 +	.017744	~~2147 x~~ ?
12	7.50	0.46	0.01	<0.01	+0.15	280.0	.00853	~~1555~~ x 7875
14	3.75	<0.01	<0.01	0.01	+ 1.07	1180.0+	.028533	5821 x
15	3.75	<0.01	0.01	<0.01	+0.14	850.0	.01013	1218 x
16	3.75	<0.01	<0.01	<0.01	<0.01	<0.0	.001-10	108
17	11.25	<0.01	<0.01	<0.01	0.05	200.0	.02333	1733 x
18	1.25	<0.01	<0.01	<0.01	0.05	230.0	.00533	1713 x
19	1.88	<0.01	<0.01	<0.01	0.04	60.0	.01333	537
20	18.75	<0.01	<0.01	<0.01	+0.35	820.0 +	.01077	3523 x

APPROVED: Joe A. Mariner
JOE A. MARINER,
VICE PRESIDENT/CHIEF CHEMIST

DATE: 7-18-88

REVIZED COPY

ASSAIGAI ANALYTICAL LABORATORIES, INC.

Report of Analysis

(revising report dated 7/16/82)

AAI Vendor #00015
AAL #7070-001 through -019

CLIENT:
ENERGY & MINERALS DEPARTMENT
P. O. BOX 2008
SANTA FE NEW MEXICO 87501

ATTN: OSCAR A. SIMPSON

RECEIVED JUL 23 1982

All results reported in mg/l unless otherwise noted

SAMPLE #	TOC	B (.075)	Ca (.05)	Cr (.05)	Pb (.05)	Cl (250)	F (1.6)	TDS (1000)
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	1719
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)

ELEMENT	STANDARD	API (OCD) #D(7-14-82)	API (OCD) #Da(7-28-82)	(AGWC) 1977 PLANT EFFLUENT	(AGWC) 1982 S. SOLAR POND #2	(OCD) SUMP #1(9-3-81)	(OCD) SUMP #8(7-6-82)	(OCD) N. POND #1 #2(9-3-81)
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
PHENOLS	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(SO4)	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 SCREEN	POS. or. NEG.	POS.	POS.	NT	NT	NT	NT	NT
BORON(B)	0.75	-	-	NT	<50	1.20	-	NT
CADIUM(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	.0012	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)

DIAGRAM #6

PLATEAU REFINERY WASTEWATER

(REFER TO PLATE A FOR LOCATIONS)

ELEMENT	STANDARD	OCD N. POND #1 #9(7-6-82)	OCD IRRIGATION AREA #14(7-6-82)
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 (SO4)	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 SCREEN	POS. or NEG.	NT	NT
BORON(B)	0.75	-	< 0.01
CADIUM(Cd)	0.01	NT	NT
CHROMIUM (Cr)	0.05	-	< 0.01
NICKEL (Ni)	0.2	NT	NT
BIS (2-Ethyl Hexyl) PHTHALATE	Undetermined	NT	NT
PHENOL	0.005	NT	NT
O & M CRESOL	None	NT	NT
FLORIDE	1.6	NT	0.02988

*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.

DIAGRAM #7

SEEPS FROM GROUND SURFACE NORTH AND EAST OF REFINERY

(REFER TO PLATE A FOR LOCATIONS)

ELEMENT	STANDARD	#2(7-6-82) DRAW #2	#3(7-6-82) DRAW #3	#20(7-6-82) DRAW #4	#19(7-6-82) DRAW #6	#F(7-14-82) DRAW #6	#J(7-28-82) DRAW #6	#18(7-6-82) DRAW #6	#4(7-6-82) DRAW #6
Pb Lead	0.05	<0.01	0.01	0.09	0.04	NT	0.26	0.05	0.01
CL Chloride	250	20	130	820	60	NT	203.5	220	150
TDS	1000	640	1679	3528	587	NT	1549	1713	1124
TOC	None	3.75	5.63	18.75	1.88	NT	9.8	11.25	3.75
BENZENE	0.01	NT	NT	NT	NT	<0.001	0.001	NT	NT
TOLUENE	15.0	NT	NT	NT	NT	1.430	0.001	NT	NT
ETHYAL-BENZENE	Not Determined	NT	NT	NT	NT	<0.001	0.001	NT	NT
M-XYLENE	Not Determined	NT	NT	NT	NT	<0.001	0.001	NT	NT
ALLOPHATIC HYDROCARBON SCREEN	Pos. / Neg.	NT	NT	NT	NT	Neg.	Neg.	NT	NT

ELEMENT	STANDARD	#6(7-6-82) DRAW #7	#7(7-6-82) DRAW #7	#6(9-3-81) DRAW #7	#5(9-3-81) DRAW #8	#4(9-3-81) DRAW #9	#10(7-6-82) DRAW #12	#11(7-6-82) PIT #4	#12(7-6-82) EAST ARROYO	#15(7-6-82) NEAR S. J. RIVER
Pb Lead	0.05	0.10	0.02	NT	0.005	NT	0.04	0.09	0.10	0.14
CL Chloride	250	760	440	696.8	603.9	235.4	420	920.0	280.0	380.0
TDS	1000	4667	2059	NT	NT	NT	1782	4289	7875	7209
TOC	None	3.75	<1.88	NT	NT	NT	5.63	5.63	7.50	3.75
BENZENE	0.01	NT	NT	NT	NT	NT	NT	NT	NT	NT
TOLUENE	15.0	NT	NT	NT	NT	NT	NT	NT	NT	NT
ETHYAL-BENZENE	Not Determined	NT	NT	NT	NT	NT	NT	NT	NT	NT
M-XYLENE	Not Determined	NT	NT	NT	NT	NT	NT	NT	NT	NT
ALLOPHATIC HYDROCARBON SCREEN	Pos. / Neg.	NT	NT	NT	NT	NT	NT	NT	NT	NT

DIAGRAM #7

SEEPS FROM GROUND SURFACE NORTH AND EAST OF REFINERY

(REFER TO PLATE A FOR LOCATIONS)

ELEMENT	STANDARD	#2(7-6-82) DRAW #2	#3(7-6-82) DRAW #3	#20(7-6-82) DRAW #4	#19(7-6-82) DRAW #6	#F(7-14-82) DRAW #6	#J(7-28-82) DRAW #6	#18(7-6-82) DRAW #6	#4(7-6-82) DRAW #6
B BORON	0.75	0.32	0.29	< 0.001	< 0.001	NT	0.84	< 0.01	0.36
MA MAGANESE	0.2	NT	NT	NT	NT	NT	0.92	NT	NT
CO COBOLT	0.05	< 0.01	< 0.01	< 0.01	< 0.01	NT	0.05	< 0.01	< 0.01
CN CYANIDE	0.2	NT	NT	NT	NT	NT	0.001	NT	NT
PHENOLS	0.005	NT	NT	NT	NT	NT	NT	NT	NT
SULFATE SO4	600	NT	NT	NT	NT	NT	151.8	NT	NT
FLORIDE	1.6	0.00599	0.00688	0.01077	0.01399	NT	NT	0.00566	0.00922

ELEMENT	STANDARD	#6(7-6-81) DRAW #7	#7(7-6-82) DRAW #7	#6(9-3-81) DRAW #7	#5(9-3-81) DRAW #8	#4(9-3-81) DRAW #9	#10(7-6-82) DRAW #12	#11(7-6-82) PIT #4	#12(7-6-82) EAST ARROYO	#15(7-6-82) NEAR S. J. RIVER
B BORON	0.75	0.54	0.19	NT	0.28	NT	< 0.01	0.16	0.46	< 0.01
MA MAGANESE	0.2	NT	NT	NT	0.10	NT	NT	NT	NT	NT
CO COBOLT	0.05	< 0.01	< 0.01	NT	0.005	NT	< 0.01	< 0.01	0.01	0.01
CN CYANIDE	0.2	NT	NT	NT	NT	NT	NT	NT	NT	NT
PHENOLS	0.005	NT	NT	NT	NT	NT	NT	NT	NT	NT
SULFATE SO4	600	NT	NT	1896	1.118	314.2	NT	NT	NT	NT
FLORIDE	1.6	0.00922	0.01622	0.77	1.16	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)

*NOTE: The following symbols mean: (NT) not tested, (ND) Not detected, (-) below standard, (Pos.) Positive, (Neg.) Negative (<)less than - All results are mg/L.

ELEMENT	STANDARD	H. DITCH SIPHON #3(9-3-81)	H. DITCH SIPHON #Ia(7-28-82)	H. DITCH BRIDGE #7(9-3-81)	H. DITCH S. of BRIDGE #C(7-14-82)	H. DITCH S. of BRIDGE #Ca(7-28-82)
FE	1.0	NT	NT	0.10	NT	NT
Mn	0.2	NT	0.05	0.10	NT	0.05
Ni	0.2	NT	NT	0.010	<0.05	NT
MO	1.0	NT	NT	0.010	NT	NT
CO	0.05	NT	0.05	0.005	<0.05	0.05
Ar	0.1	NT	NT	0.005	NT	NT
Ba	1.0	NT	NT	0.10	NT	NT
Cd	0.01	NT	NT	0.001	<0.001	NT
Cr	0.05	NT	NT	0.005	0.005	NT
Pb	0.05	NT	<0.005	<0.005	<0.005	<0.005
Hg	0.002	NT	NT	0.0005	<0.0005	NT
SE	0.05	NT	NT	0.005	NT	NT
Ag	0.05	NT	NT	0.001	NT	NT
Zn	1.0	NT	NT	0.10	NT	NT
CU	1.0	NT	NT	0.05	NT	NT
AL	5.0	NT	NT	0.10	NT	NT
B	0.75	NT	0.03	0.04	0.03	0.07
CL	250	3.6	3.9	4.6	5.0	6.5
F	1.6	0.16	NT	0.15	0.22	NT
SO4	600	46.3	57.3	46.5	51.0	56.7
TDS	1000	NT	184	NT	4180	186
TOC	None	NT	4.6	NT	3.6	5.4
PHENOLS	0.005	NT	0.191	NT	0.0295	0.0128
BENZENE	0.01	NT	<0.001	NT	<0.001	0.001
TOLUENE	15.0	NT	<0.001	NT	<0.001	0.001
M-EXYLENES	Not Determined	NT	<0.001	NT	<0.001	0.001
ETHYLBENZENE	Not Determined	NT	<0.001	NT	NT	0.001
ALIPHATIC HYDROCARBON SCREEN	POS. NEG.	NT	NEG.	NT	NEG.	NEG.
CN		NT	NT	NT	NEG.	0.002
OIL & GREASE (O&G)		NT	NT	NT	1.2	NT

CONTINUED

DIAGRAM #8

HAMMOND DITCH WATER AND GROUND WATER

(REFER TO PLATE A FOR LOCATIONS AND SAMPLES)

ELEMENT	STANDARD	Groundwater HWY 44 #17 (7-6-82)	Groundwater #A(7-12&14-82)	Groundwater #B(7-12&14-82)	Groundwater #K(7-28-82)	Groundwater #E(7-14-82)	API Separator #D(7-28-82)	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	0.13	NT	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	NT	0.04	NT	NT
Cr	0.05	0.01	0.013	<0.008	NT	0.62	NT	<0.01
Pb	0.05	0.03	0.13	0.10	0.30	18.17	0.20	0.40
Hg	0.002	NT	0.0014	<0.005	NT	<0.005	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	NT	NT	16.30	3.00	NT
ETHYLBENZENE	Not Determined	NT	<0.001	<0.001	NT	4.03	3.6	NT
ALIPHATIC HYDROCARBON SCREEN	POS. NEG.	NT	NEG.	NEG.	NT	POS.	POS.	NT
Cn	0.20	NT	NT	NT	NT	0.0036	NT	NT
Oil & Grease (O & G)		NT	NT	NT	NT	296.2	NT	NT

Hauser 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 Phenolas, and Misc.

Pollutant	Concentration (mg/liter)
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

Pollutant	Concentration (µg/liter)
1. Acenaphthene	ND
2. Acenaphtylene	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-chloroethyoxy) 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. Hexaclorobenzene	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

Pollutant	Concentration (µg/liter)
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-tetreachloroethane	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

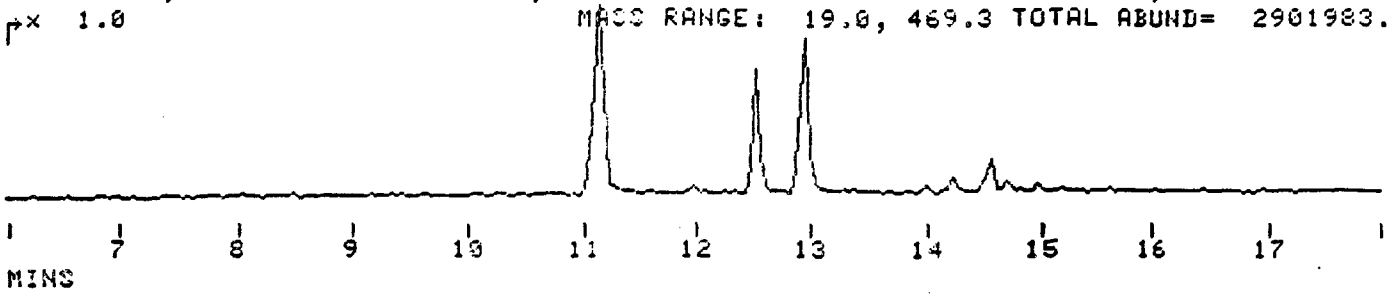
GC/MS Fraction - Acid Compounds

Pollutant	Concentration (µg/liter)
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

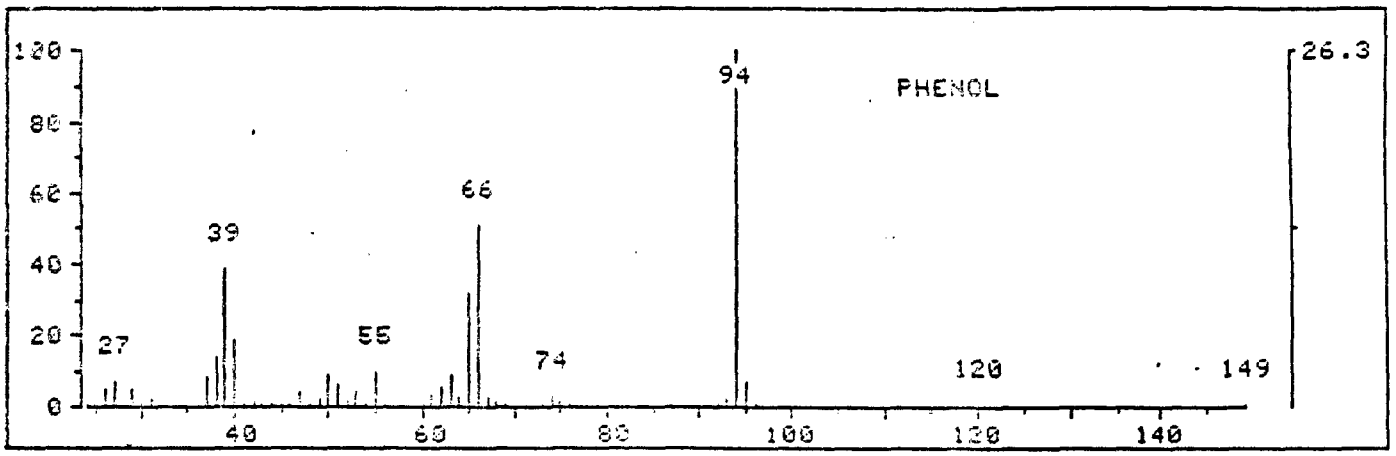
GC/MS Fraction - Pesticides

Pollutant	Concentration (ug/liter)
1. Aldrin	ND
2. α-BHC	ND
3. β-BHC	ND
4. γ-BHC	ND
5. δ-BHC	ND
6. Chlordane	ND
7. 4,4'-DDT	ND
8. 4,4'-DDE	ND
9. 4,4'-DDD	ND
10. Dieldrin	ND
11. α-Endosulfan	ND
12. β-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

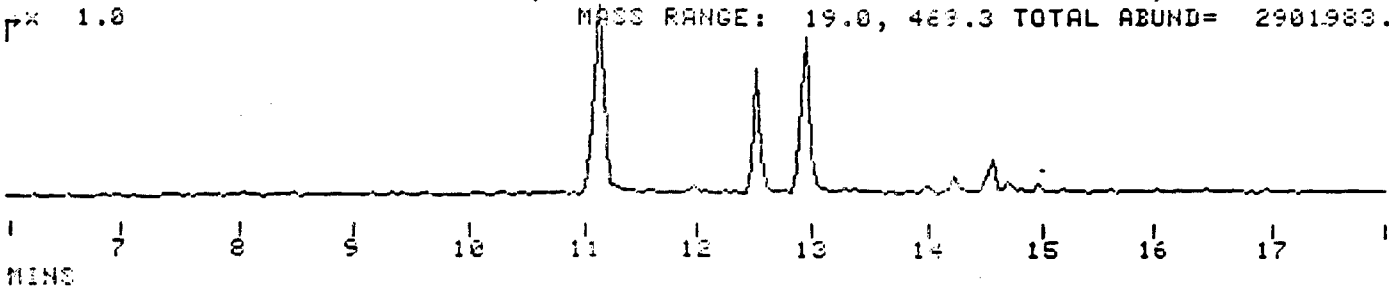
PLATEAU - 978; ACID FRACTION
SE 54 CAP; 40/3 @ 10 TO 300/30; 3UL
FRN 5016, CRN 101
1300 SCANS (281 SCANS, 12.02 MINS)
MASS RANGE: 19.0, 469.3 TOTAL ABUND= 2901983.



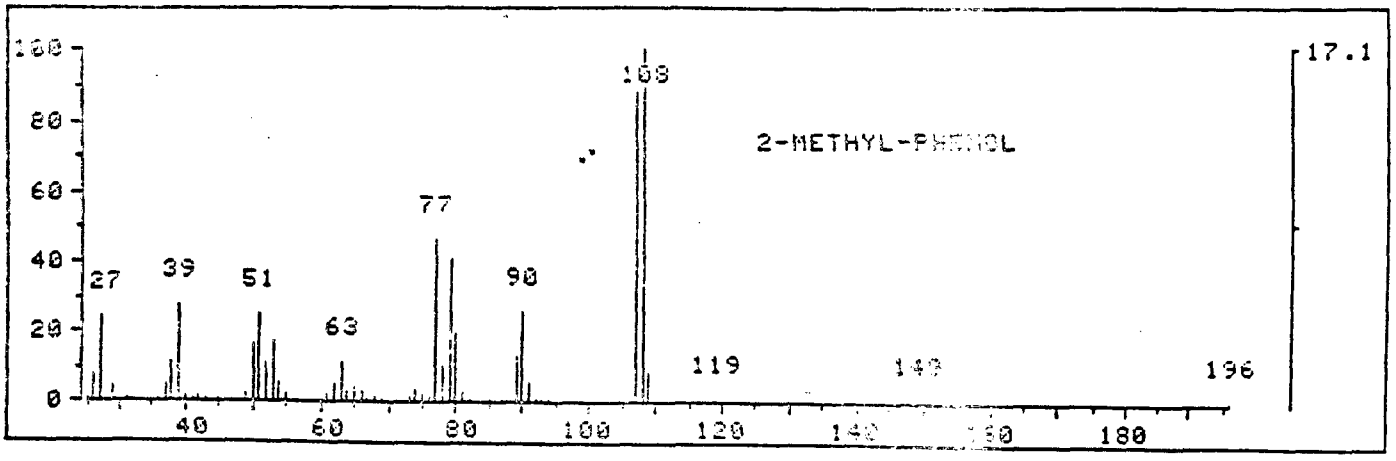
AVERAGED SPECTRUM * BASE PK/ABUND: 94.2/ 32000. -249 -256 + 253



PLATEAU - 978; ACID FRACTION
SE 54 CAP; 40/3 @ 10 TO 300/30; 3UL
FRN 5016, CRN 101
1300 SCANS (281 SCANS, 12.02 MINS)
MASS RANGE: 19.0, 469.3 TOTAL ABUND= 2901983.

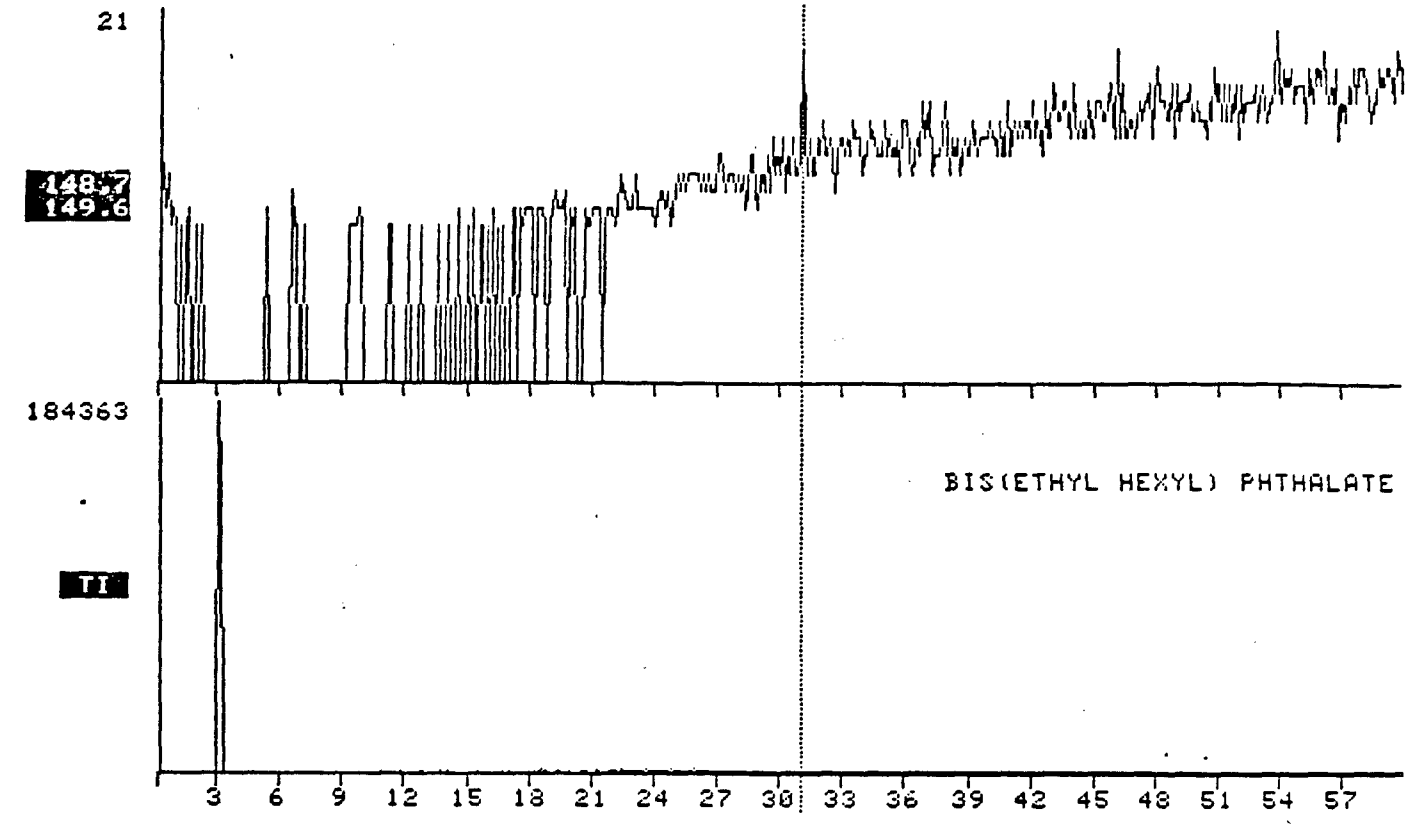


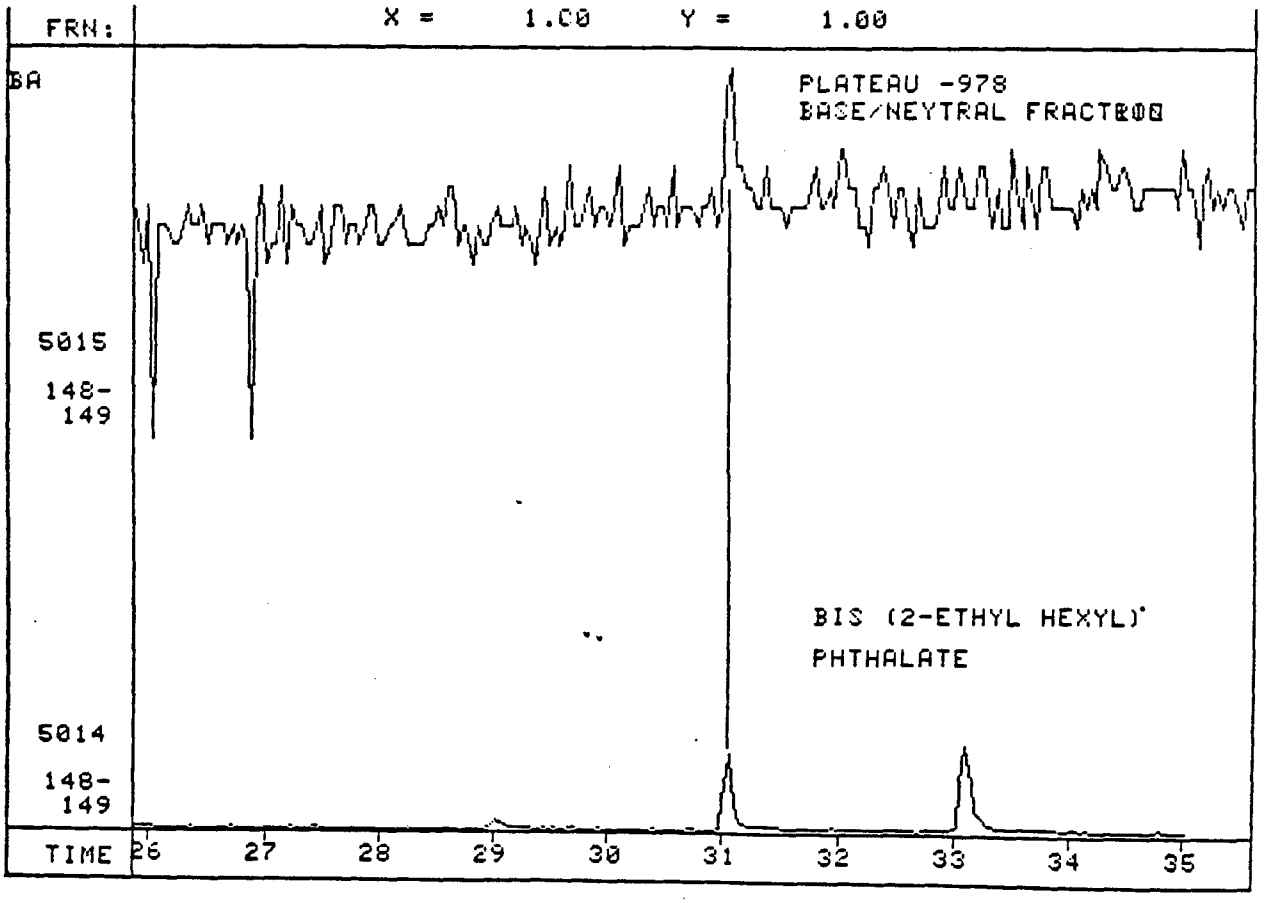
AVERAGED SPECTRUM * BASE PK/ABUND: 108.2/ 32000. -281 -288 + 285



NAME PLATEAU-978; BASE/NEUTRAL FRACTION
MISC SE54 CAP; 40/3 @ 10 TO 300/30; 3UL

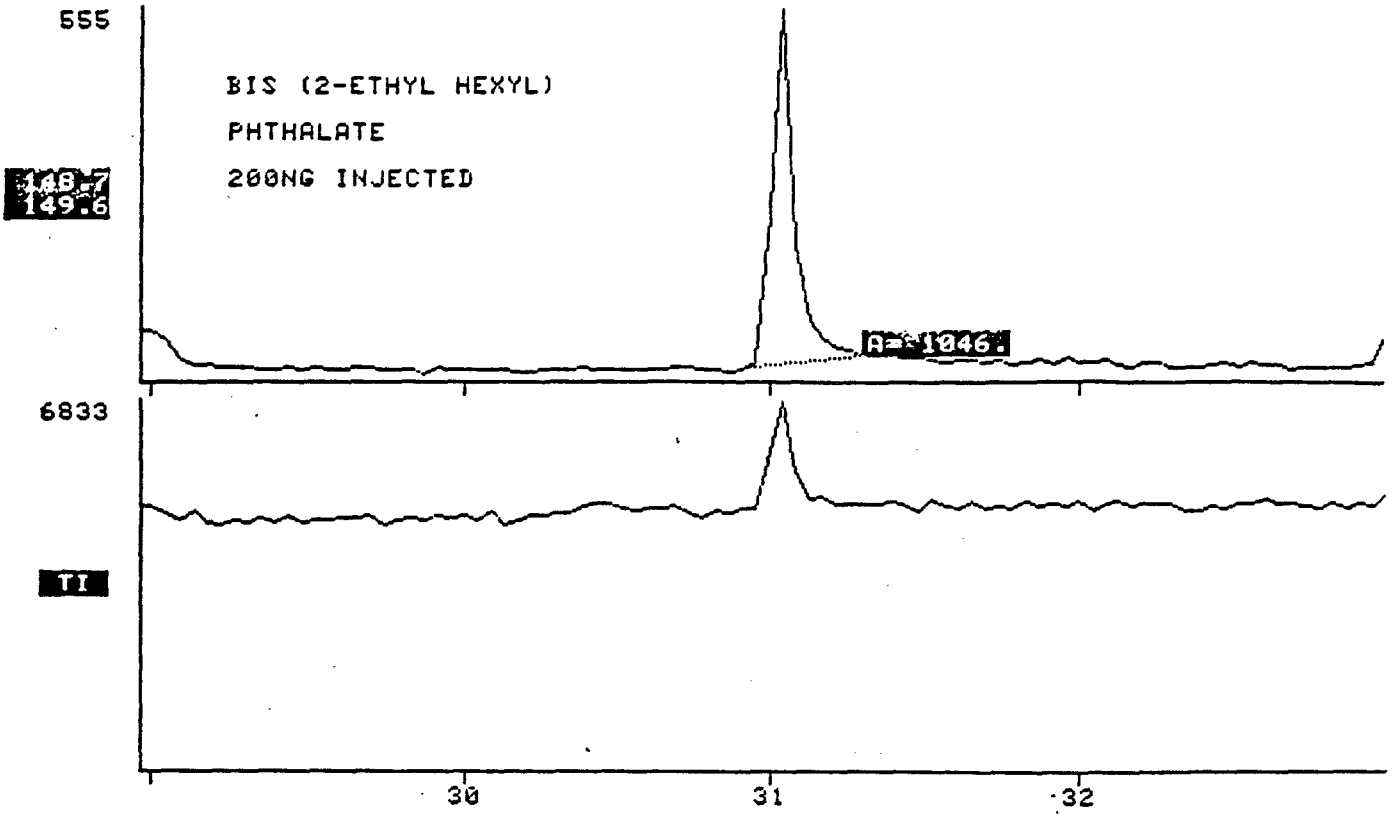
FRN 5015



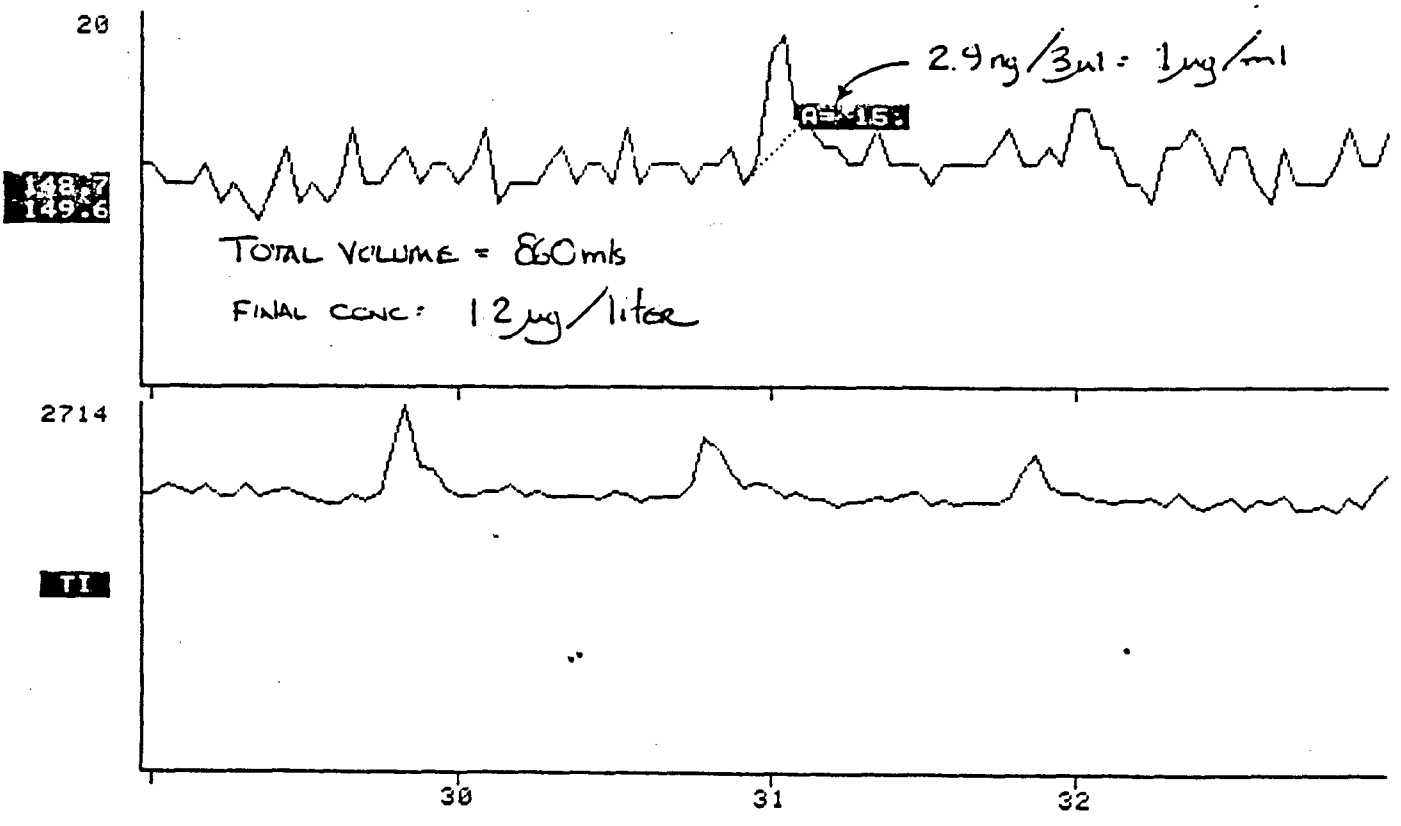


NAME BASE/NEUTRAL STANDARDS - SUPELCO #4-8818,9,20,21
MISC SE54 CAP; 40/3 @ 10 TO 300/30; 1UL EACH

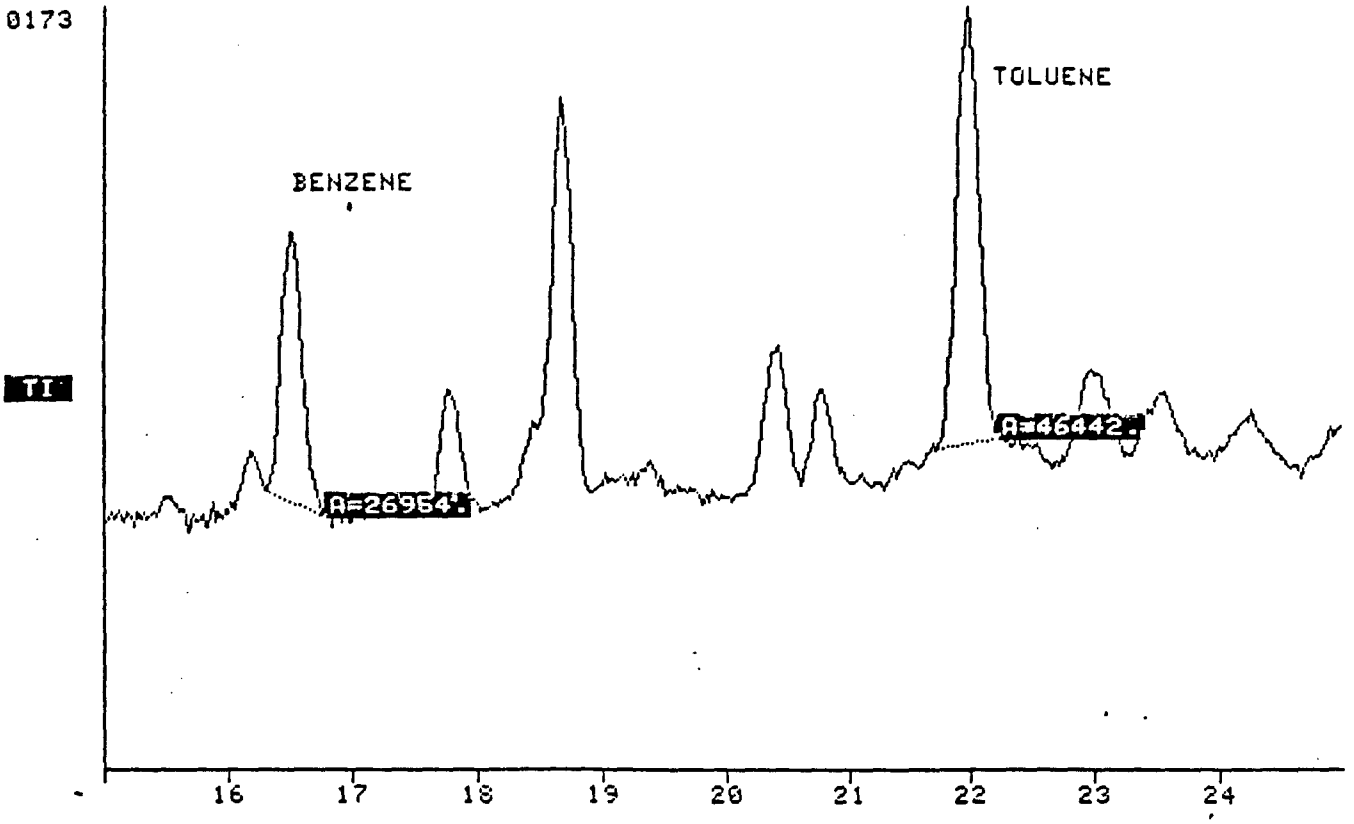
FRN 5014



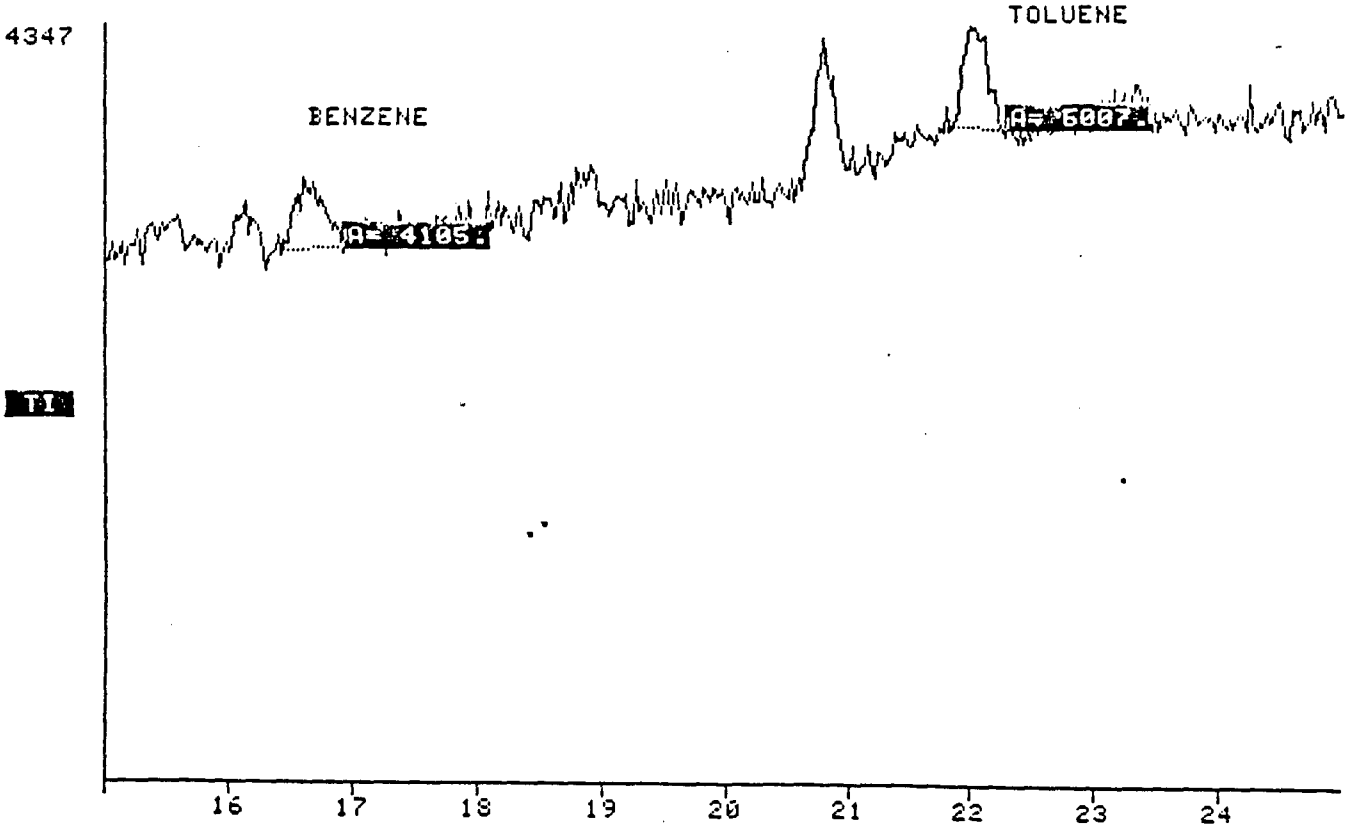
NAME PLATEAU-978; BASE/NEUTRAL FRACTION FRN 5015
MISC SE54 CAP; 40/3 @ 10 TO 300/30; 3UL



NAME PLATEAU-978; PURGE AND TRAP; 10ML + 10UL STDS FRN 5013
MISC 1%SP1000; 45/3 @ 10 TO 220/20

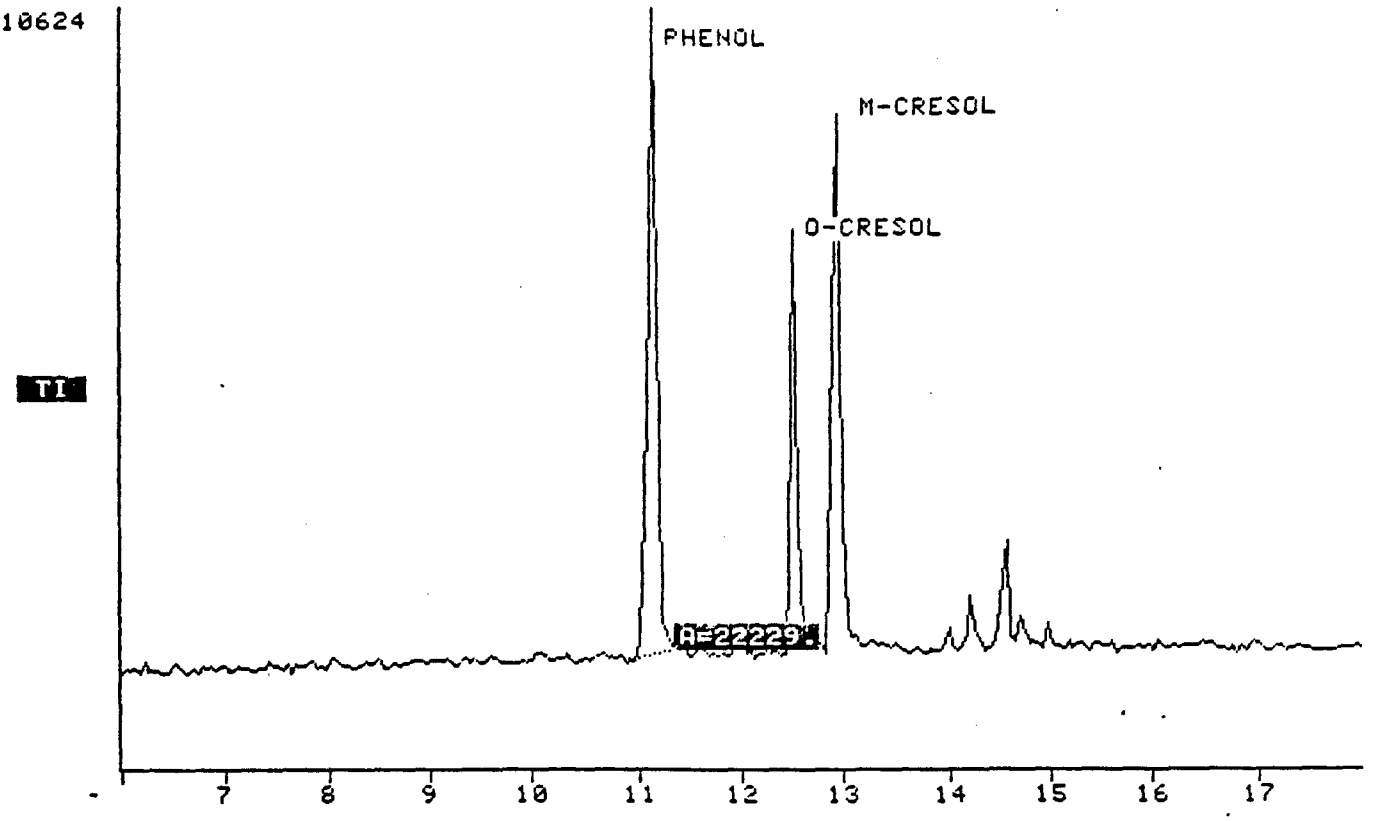


NAME PURGE AND TRAP STANDARDS A, B, C FRN 5011
MISC 1%SP1000; 45/3 @ 10 TO 220/20



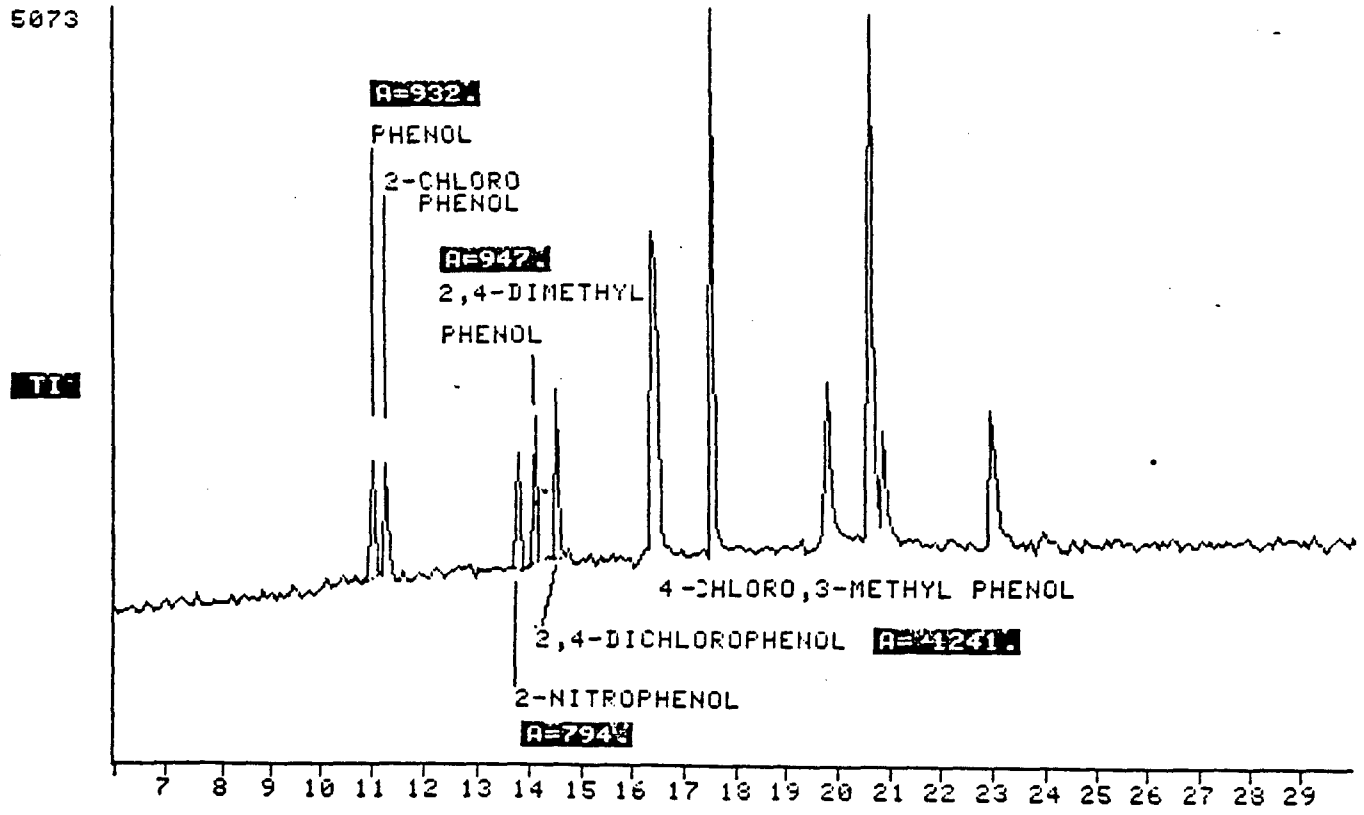
NAME PLATEAU - 978; ACID FRACTION
MISC SE 54 CAP; 40/3 @ 10 TO 300/30; 3UL

FRN 5016



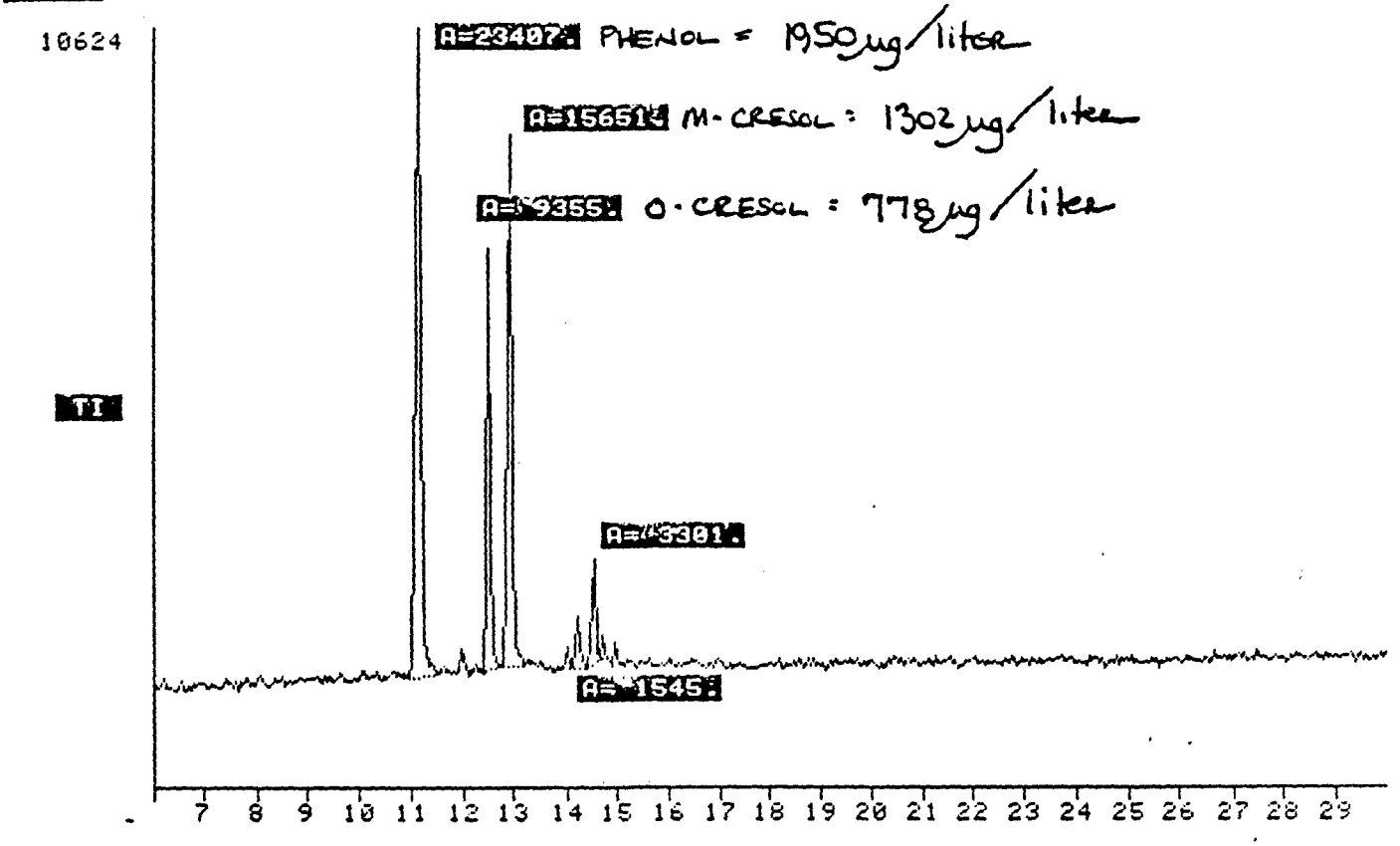
NAME PHENOL STANDARDS; SUPELCO #4-8810
MISC SE54 CAP; 40/3 @ 10 TO 300/30; 1UL OF 20

FRN 5017



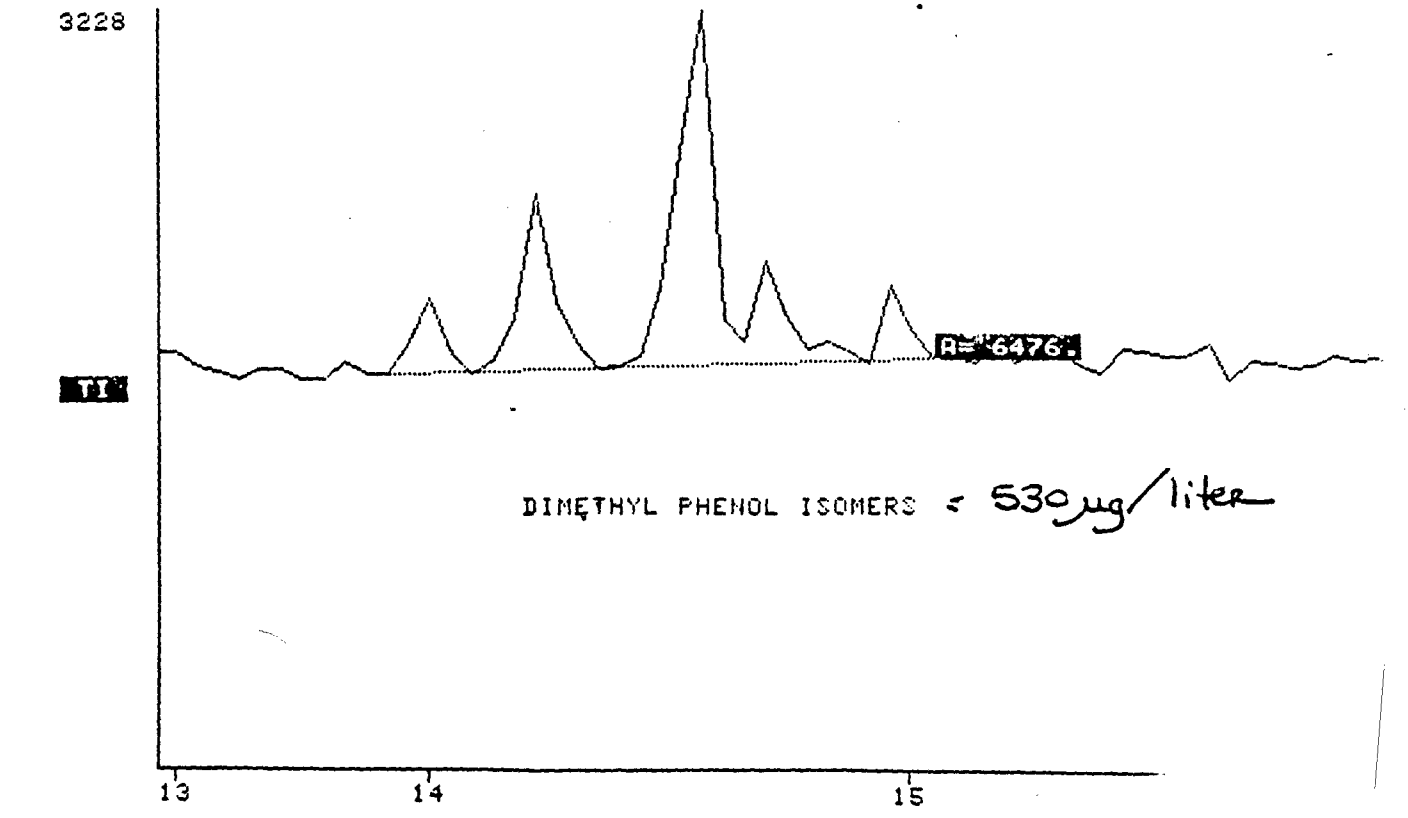
NAME: PLATEAU - 978; ACID FRACTION
MISC: SE 54 CAP; 40/3 @ 10 TO 300/30; 3UL

FRN 5016



NAME: PLATEAU - 978; ACID FRACTION
MISC: SE 54 CAP; 40/3 @ 10 TO 300/30; 3UL

FRN 5016



ANALYTICAL RESULTS

Oil Conservation Division

December 29, 1981

WHITE LABLE (1 ONLY)

Client's Sample I.D.: Plateu Refinery, emergency run off Pond #1 AnaChem I.D.: 751

PARAMETER	CONCENTRATION	STANDARD
C.O.D.	172 ppm	80 ppm

OFSEEP (SAME LOCATION AS SAMPLE #6 (7-6-82) ORANGE LABLE

Client's Sample I.D.: Light Oil-Sample A Heavy Oil-Sample B AnaChem I.D.: 752

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.

RECEIVED
DEC 30 1981
OIL CON. COM.
DIST. 3

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.
9-4-81	HM-3166	

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 ☐ Complete Secondary ☐ Organic ☐ Radiological

Water Supply System Name	Water Supply System Code No.	City or Location	County	Check one:
PLATEAU SAMPLE # 1		BLOOMFIELD N.M.	SAN JUAN	☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
9-3-81	3:14 PM		FILTERED + ACIDIFIED WITH 5 ML-HNO_3 2-1 quart CUBITAINERS	OIL CONSERVATION

Collected By	Owner	Address
SIMPSON & FOREMASTER	OIL CONSERVATION	P.O. BOX 2088 SANTA FE N.M.

TYPE of SYSTEM *(Check one)* ☒ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ Other *(specify)*

LAT. ° ' "
LONG ° ' "

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	☒ 01000 Arsenic .1	0.046	☒ ZINC (ZN) 10.0	<0.10	☐ 39390 Endrin	
☐ 00935 Potassium (as K)		☐ 00950 Fluoride (as F)		☐ 38260 Foaming Agents (as Las)		☒ 01005 Barium 1.0	0.4	☒ COPPER (CU) 1.0	0.061	☐ 39732 Lindane	
☐ 00900 Tot.Hardness (as $CaCO_3$)		☐ 00620 Nitrate (as N)		☐ 00095 Conductance Micromhos 25°C		☒ 01025 Cadmium .01	<0.001	☒ ALUMINUM AL 9.0	<0.10	☐ 38270 Methoxychlor	
☐ 00915 Calcium (as Ca)		☐ 00430 Alkalinity (as $CaCO_3$)		☐ 00400 pH		☒ 01030 Chromium .05	0.009	☐ RADIOLOGICAL pCi/l 01501 Gross Alpha		☐ 39400 Toxaphene	
☐ 00925 Magnesium (as Mg)		☐ 00440 Bicarbonate (as HCO_3)		☐ 01330 Odor		☒ 01049 Lead .05	<0.005	☐ 03501 Gross Beta	pCi/l	☐ 39730 2, 4-D	
☒ 01045 Iron-Total (as Fe)	0.40	☐ 00445 Carbonate (as CO_3)		☐ 00080 Color	mg/l	☒ 07180 Mercury .002	<0.0005	☐ 09501 Radium-226	pCi/l	☐ 39740 2, 4, 5-TP (Silvex)	
☒ 01056 Manganese (as Mn)	<0.10	☐ 00945 Sulfate (as SO_4)		☐ 00070 Turbidity		☒ 01145 Selenium .05	<0.005	☐ 11501 Radium-228	pCi/l		
☒ NICKEL (NI)	.040	☒ MOLYBDENUM MO 1.0	<0.010	☒ COBALT (CO) .05	<0.005	☒ 01075 Silver .05	<0.001	~~☐ Barium~~ B			

LABORATORY REMARKS:

Reviewed by

Date reported 11/27/81

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

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 ☐ Complete Secondary

TYPE of CHEMICAL ANALYSIS ☐ Organic ☐ Radiological

Date received 9-4-81 | Lab No. 111-850 | SLD user code No.

Water Supply System Name: PLATEAU SAMPLE #1 | Water Supply System Code No.:

Collection Date: 9-3-81 | Collection Time: 3:15 PM | Collection Point:

Collected By: SIMPSON/ED MINSTER | Owner:

City or Location: BLOOMFIELD N.M. | County:

Collector's remarks: FILTERED ONLY 1gal CUBE CONTAINER WITH 1g QUANTAQUA

Check one: ☐ TREATED WATER ☐ RAW WATER

Report to: OIL CONSERVATION

Address: P.O. BOX 2088 SANTA FE N.M.

TYPE of SYSTEM (Check one) ☐ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ Other (specify)

LAT. ° ' "
LONG ° ' "

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)	1102.2	70300 Total Filterable Residue		01000 Arsenic			39390 Endrin	
00935 Potassium (as K)		~~00950~~ 00956 Fluoride (as F)	045	38260 Foaming Agents (as Las)		01005 Barium			39732 Lindane	
00900 Tot.Hardness (as $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium			38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		01030 Chromium		RADIOLOGICAL pCi/l	39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		01049 Lead		01501 Gross Alpha		
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	07180 Mercury		03501 Gross Beta pCi/l	39730 2, 4-D	
01056 Manganese (as Mn)		~~00945~~ 00946 Sulfate (as SO_4)	3552	00070 Turbidity		01145 Selenium		09501 Radium-226 pCi/l	39740 2, 4, 5-TP (Silvex)	
X .75 BORON	1.20					01075 Silver		11501 Radium-228 pCi/l		

LABORATORY REMARKS:

Reviewed by: [signature]

Date reported: 9/16/81

SLD 702 Form Revised 4/78

DISTRIBUTION: White - Water Supply Regulation, SF • Canary - WS System • Pink - EIA Regional Office • Goldenrod - SLD Lab

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.
9-9-81	WR-847	

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 ☐ Complete Secondary ☐ Organic ☐ Radiological

Water Supply System Name	Water Supply System Code No.	City or Location	County	Check one:
Plateau Sample #2		Bloomfield, NM	San Juan	☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
9/3/81	3:25 PM		1-q uart cork container filtered @	Oil Conservation Div.

Collected By	Owner	Address
Simpson + Edmister	Oil Conservation Div.	P.O. Box 2088 Santa Fe NM 87501

TYPE of SYSTEM *(Check one)* ☑ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ Other *(specify)*

LAT. ° ' "
LONG ° ' "

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL		HEAVY METALS	mg/l	PARAMETER		ORGANIC	mg/l
00930 Sodium (as Na)		X 00940 Chloride (as Cl) 250	9978	70300 Total Filterable Residue	mg/l	01000 Arsenic				39390 Endrin	
00935 Potassium (as K)		X 00950 Fluoride (as F) 1.6	0.56	38260 Foaming Agents (as Las)		01005 Barium				39732 Lindane	
00900 Tot.Hardness (as $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		01030 Chromium		RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01350 Odor		01049 Lead		03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	07180 Mercury		09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		X 00945 Sulfate (as SO_4) 600	5633	00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
						01075 Silver					

LABORATORY REMARKS:

Reviewed by: A.L. Meibohm
Date reported: 9/16/81

SLD 702 Form Revised 4/78

DISTRIBUTION: White - Water Supply Regulation, SF • Canary - WS System • Pink - EIA Regional Office • Goldenrod - SLD Lab

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.
9-4-81	11[illegible] X46	

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	Check one:
Plateau Sample #3		Bloomfield, NM	San Juan	☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
9/3/81			1 - 1qt. COA CONTAINER FILTERED ONLY	Oil Conservation Div.

Collected By	Owner	Address
Simpson + Edmister	Oil Conservation Div.	P.O. Box 2088 Santa Fe, NM 87501

TYPE of SYSTEM *(Check one)* ☑ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ Other *(specify)*

LAT. ° ' "

LONG ° ' "

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL		HEAVY METALS	mg/l	PARAMETER		ORGANIC	mg/l
00930 Sodium (as Na)		X 00940 Chloride (as Cl) 250	316	70300 Total Filterable Residue	mg/l	01000 Arsenic				39390 Endrin	
00935 Potassium (as K)		X 00950 Fluoride (as F) 1.6	0.16	38260 Foaming Agents (as Las)		01005 Barium				39732 Lindane	
00900 Tot. Hardness (as $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		01030 Chromium		RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		01049 Lead		03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	07180 Mercury		09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		X 00945 Sulfate (as SO_4) 600	463	00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
						01075 Silver					

75

LABORATORY REMARKS:

Reviewed by [signature]

Date reported 9/16/81

SLD 702 Form Revised 4/78

DISTRIBUTION: White - Water Supply Regulation, SF • Canary - WS System • Pink - EIA Regional Office • Goldenrod - SLD Lab

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.
9-4-81	LL-848	

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 ☐ Complete Secondary ☐ Organic ☐ Radiological

Water Supply System Name	Water Supply System Code No.	City or Location	County	Check one:
Plateau Sample #4		Bloomfield, NM	San Juan	☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
9/3/81			1-1gt CURR CONTAINER FILTERED ONLY	Oil Conservation Div.

Collected By	Owner	Address
Simpson + Edmister	Oil Conservation Div.	P.O. Box 2088 Santa Fe, NM 87501

TYPE of SYSTEM *(Check one)* ☑ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ Other *(specify)*

LAT. ° ' "
LONG ° ' "

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL		HEAVY METALS	mg/l	PARAMETER		ORGANIC	mg/l
00930 Sodium (as Na)		X 00940 Chloride (as Cl)	2358 (250)	70300 Total Filterable Residue	mg/l	01000 Arsenic				39390 Endrin	
00935 Potassium (as K)		X 00950 Fluoride (as F)	1.2 (1.6)	38260 Foaming Agents (as Las)		01005 Barium				39732 Lindane	
00900 Tot.Hardness (as $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		01030 Chromium		RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		01049 Lead		03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	07180 Mercury		09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		X 00945 Sulfate (as SO_4)	3143 (600)	00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
						01075 Silver					

LABORATORY REMARKS:

Reviewed by: [signature]

Date reported: 9/16/81

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

State of New Mexico
HEALTH and ENVIRONMENT DEPARTMENT
SCIENTIFIC LABORATORY DIVISION

CHEMICAL and PHYSICAL ANALYSES for WATER SAMPLES

Morris Thompson

Date received	Lab No.	SLD user code No.
9-4-81	1112-851	

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 ☐ Complete Secondary ☐ Organic ☐ Radiological

Water Supply System Name	Water Supply System Code No.	City or Location	County	Check one:
Plateau Sample #5		Bloomfield, NM	San Juan	☐ TREATED WATER ☒ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
9/3/81	4:45 PM		Filtered Only	Oil Conservation Div.
Collected By	**Owner**		1 gal. Cubs Containers	**Address**
Simpson & Edmister	Oil Conservation Div.			P.O. Box 2088 Santa Fe, NM 87501

TYPE of SYSTEM *(Check one)* ☐ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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)	250 6039	☐ 70300 Total Filterable Residue	mg/l	☐ 01000 Arsenic				☐ 39390 Endrin	
☐ 00935 Potassium (as K)		☒ 00950 Fluoride (as F)	1.6 1116	☐ 38260 Foaming Agents (as Las)		☐ 01005 Barium				☐ 39732 Lindane	
☐ 00900 Tot.Hardness (as $CaCO_3$)		☐ 00620 Nitrate (as N)		☐ 00095 Conductance Micromhos 25°C		☐ 01025 Cadmium				☐ 38270 Methoxychlor	
☐ 00915 Calcium (as Ca)		☐ 00430 Alkalinity (as $CaCO_3$)		☐ 00400 pH		☐ 01030 Chromium		RADIOLOGICAL pCi/l		☐ 39400 Toxaphene	
☐ 00925 Magnesium (as Mg)		☐ 00440 Bicarbonate (as HCO_3)		☐ 01330 Odor		☐ 01049 Lead		☐ 03501 Gross Beta	pCi/l	☐ 39730 2, 4-D	
☐ 01045 Iron-Total (as Fe)		☐ 00445 Carbonate (as CO_3)		☐ 00080 Color	mg/l	☐ 07180 Mercury		☐ 09501 Radium-226	pCi/l	☐ 39740 2, 4, 5-TP (Silvex)	
☐ 01056 Manganese (as Mn)		☒ 00945 Sulfate (as SO_4)	600 1118	☐ 00070 Turbidity		☐ 01145 Selenium		☐ 11501 Radium-228	pCi/l		
☒ 01075 SILVER	0.28					☐ 01075 Silver					

LABORATORY REMARKS:

Reviewed by [signature]

Date reported 9/16/81

SLD 702 Form Revised 4/78

DISTRIBUTION: White - Water Supply Regulation, SF • Canary - WS System • Pink - EIA Regional Office • Goldenrod - SLD Lab

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.
9/9/81	HM367	

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 ☐ Complete Secondary ☐ Organic ☐ Radiological

Water Supply System Name	Water Supply System Code No.	City or Location	County	Check one:
Plateau Sample # 5		Bloomfield, NM	San Juan	☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
9/3/81	4:45 PM		2 - 1qt CLEAR CONTAINERS - FILTERED & ACIDIZED WITH 5 ML HNO3	Oil Conservation D.J.

Collected By	Owner	Address
Simpson & Edmister	Oil Conservation Div.	P.O. Box 2088 Santa Fe, NM 87501

TYPE of SYSTEM *(Check one)* ☑ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ Other *(specify)* LAT. ° ' " LONG ° ' "

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	☒ 01000 Arsenic .1	0.005	☒ ZINC (ZN)	<0.10	☐ 39390 Endrin	
☐ 00935 Potassium (as K)		☐ 00950 Fluoride (as F)		☐ 38260 Foaming Agents (as Las)		☒ 01005 Barium 1.0	0.4	☒ COPPER (CU)	<0.05	☐ 39732 Lindane	
☐ 00900 Tot. Hardness (as $CaCO_3$)		☐ 00620 Nitrate (as N)		☐ 00095 Conductance Micromhos 25°C		☒ 01025 Cadmium .01	<0.001	☒ ALUMINUM (AL)	0.24	☐ 38270 Methoxychlor	
☐ 00915 Calcium (as Ca)		☐ 00430 Alkalinity (as $CaCO_3$)		☐ 00400 pH		☒ 01030 Chromium .05	<0.005	☐ RADIOLOGICAL pCi/l 01501 Gross Alpha		☐ 39400 Toxaphene	
☐ 00925 Magnesium (as Mg)		☐ 00440 Bicarbonate (as HCO_3)		☐ 01330 Odor		☒ 01049 Lead .05	<0.005	☐ 03501 Gross Beta	pCi/l	☐ 39730 2, 4-D	
☒ 01045 Iron-Total (as Fe) 1.0	<0.10	☐ 00445 Carbonate (as CO_3)		☐ 00080 Color	mg/l	☒ 07180 Mercury .002	<0.0005	☐ 09501 Radium-226	pCi/l	☐ 39740 2, 4, 5-TP (Silvex)	
☒ 01056 Manganese (as Mn) .2	<0.10	☐ 00945 Sulfate (as SO_4)		☐ 00070 Turbidity		☒ 01145 Selenium .05	<0.005	☐ 11501 Radium-228	pCi/l		
☒ NICKEL (Ni) .2	<0.010	☒ MOLYBDENUM (MO) 1.0	<0.010	☒ COBALT (CO) .05	<0.005	☒ 01075 Silver .05	<0.001	☒ Gross Alpha			

LABORATORY REMARKS:

Reviewed by: MR

Date reported: 11/27/81

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

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.
9-9-81	WC-849	

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 ☐ Complete Secondary ☐ Organic ☐ Radiological

Water Supply System Name	Water Supply System Code No.	City or Location	County	Check one:
Plateau Sample #6		Bloomfield, NM	San Juan	☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
9/3/81			1-1gal. CORR. CONTAINER WITH HEAD LIQUID FILTERED ONLY	Oil Conservation Div.

Collected By	Owner	Address
Simpson + Edmister	Oil Conservation Div.	P.O. Box 2088 Santa Fe, NM 87501

TYPE of SYSTEM *(Check one)*: ☑ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ Other *(specify)*

LAT. ° ' "
LONG ° ' "

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL		HEAVY METALS	mg/l	PARAMETER		ORGANIC	mg/l
00930 Sodium (as Na)		X 00940 Chloride (as Cl)	6968	70300 Total Filterable Residue	mg/l	01000 Arsenic				39390 Endrin	
00935 Potassium (as K)		X 00950 Fluoride (as F)	0.77	38260 Foaming Agents (as Las)		01005 Barium				39732 Lindane	
00900 Tot.Hardness (as $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		01030 Chromium		RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		01049 Lead		03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	07180 Mercury		09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		X 00945 Sulfate (as SO_4)	1896	00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
						01075 Silver					

LABORATORY REMARKS:

Reviewed by: A.L. Mailbox
Date reported: 9/16/81

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

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.
9-4-81	WW-852	

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 ☐ Complete Secondary ☐ Organic ☐ Radiological

Water Supply System Name	Water Supply System Code No.	City or Location	County	Check one:
Plateau Sample #7		Bloomfield, NM	San Juan	☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
9/3/81	5:30 PM		Filtered Only 1qt CUBA CONTAINER	Oil Conservation Div.
Collected By	**Owner**			**Address**
Simpson + Edmister	Oil Conservation Div			P.O. Box 2088 Santa Fe, NM 87501

TYPE of SYSTEM *(Check one)* ☒ PRIVATE PUBLIC: ☒ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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) 250	46	70300 Total Filterable Residue	mg/l	01000 Arsenic				39390 Endrin	
00935 Potassium (as K)		☒ 00950 Fluoride (as F) 1.6	0.15	38260 Foaming Agents (as Las)		01005 Barium				39732 Lindane	
00900 Tot. Hardness (as $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		01030 Chromium		RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		01049 Lead		03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	07180 Mercury		09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		☒ 00945 Sulfate (as SO_4) 600	465	00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
☒ BARON	0.04					01075 Silver					

LABORATORY REMARKS:

Reviewed by: [signature]
Date reported: 9/16/81

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

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.
9-9-81	HM-368	

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	Check one:
Plateau Sample # 7		Bloomfield NM	San Juan	☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
9/3/81	5:30PM		2-1qt CORA CONTAINERS FILTERED & ACIDIZED WITH 5ML HNO_3	Oil Conservation Div.

Collected By	Owner	Address
Simpson + Edmister	Oil Conservation Div.	P.O. Box 2088 Santa Fe NM 87501

TYPE of SYSTEM (Check one) ☑ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ Other (specify)

LAT. ° ' "
LONG ° ' "

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	☒ 01000 Arsenic .1	<0.005	☒ ZINC (ZN) 10	<0.10	☐ 39390 Endrin	
☐ 00935 Potassium (as K)		☐ 00950 Fluoride (as F)		☐ 38260 Foaming Agents (as Las)		☒ 01005 Barium 1.0	<0.10	☒ COPPER (CU) 1.0	<0.05	☐ 39732 Lindane	
☐ 00900 Tot.Hardness (as $CaCO_3$)		☐ 00620 Nitrate (as N)		☐ 00095 Conductance Micromhos 25°C		☒ 01025 Cadmium .01	<0.001	☒ ALUMINUM (AL) 5.0	0.10	☐ 38270 Methoxychlor	
☐ 00915 Calcium (as Ca)		☐ 00430 Alkalinity (as $CaCO_3$)		☐ 00400 pH		☒ 01030 Chromium .05	<0.005	☐ RADIOLOGICAL pCi/l 01501 Gross Alpha		☐ 39400 Toxaphene	
☐ 00925 Magnesium (as Mg)		☐ 00440 Bicarbonate (as HCO_3)		☐ 01330 Odor		☒ 01049 Lead .050	<0.005	☐ 03501 Gross Beta	pCi/l	☐ 39730 2, 4-D	
☒ 01045 Iron-Total (as Fe) 1.0	<0.10	☐ 00445 Carbonate (as CO_3)		☐ 00080 Color	mg/l	☒ 07180 Mercury .002	<0.0005	☐ 09501 Radium-226	pCi/l	☐ 39740 2, 4, 5-TP (Silvex)	
☒ 01056 Manganese (as Mn) .2	<0.10	☐ 00945 Sulfate (as SO_4)		☐ 00070 Turbidity		☒ 01145 Selenium .05	<0.005	☐ 11501 Radium-228	pCi/l		
☒ NICKEL (NI) .2	<0.010	☒ MOLYBDENUM (MO) 1.0	<0.010	☒ COBALT (CO) .05	<0.005	☒ 01075 Silver .05	<0.001	☒ [illegible] (B)			

LABORATORY REMARKS:

Reviewed by [signature]

Date reported 11/27/81

SLD 702 Form Revised 4/78

DISTRIBUTION: White - Water Supply Regulation, SF • Canary - WS System • Pink - EIA Regional Office • Goldenrod - SLD Lab

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: *Check individual items for analysis [Mark appropriate box(es)]*

INTERIM PRIMARY PARAMETER GROUP ☐ 1 ☐ 2 ☐ 3

TYPE of CHEMICAL ANALYSIS ☐ Complete Secondary ☐ 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	Report to

Collected By	Owner	Address

TYPE of SYSTEM *(Check one)* ☒ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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) 250	36	70300 Total Filterable Residue	mg/l	01000 Arsenic				39390 Endrin	
00935 Potassium (as K)		☒ 00950 Fluoride (as F) 1-6	0.16	38260 Foaming Agents (as Las)		01005 Barium				39732 Lindane	
00900 Tot.Hardness (as $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		01030 Chromium		RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		01049 Lead		03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3) 600		00080 Color	mg/l	07180 Mercury		09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		☒ 00945 Sulfate (as SO_4)	463	00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
						01075 Silver					

LABORATORY REMARKS:

Reviewed by

Date reported

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

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: *Check individual items for analysis [Mark appropriate box(es)]*

INTERIM PRIMARY PARAMETER GROUP ☐ 1 ☐ 2 ☐ 3

TYPE of CHEMICAL ANALYSIS ☐ Complete Secondary ☐ 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	Report to
9/13/81	3:25 PM			

Collected By	Owner	Address

TYPE of SYSTEM *(Check one)*
☑ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ Other *(specify)*

LAT. ° ' "
LONG ° ' "

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL		HEAVY METALS	mg/l	PARAMETER		ORGANIC	mg/l
00930 Sodium (as Na)		X 00940 Chloride (as Cl)	250 9978	70300 Total Filterable Residue	mg/l	01000 Arsenic				39390 Endrin	
00935 Potassium (as K)		X 00950 Fluoride (as F)	1.6 0.56	38260 Foaming Agents (as Las)		01005 Barium				39732 Lindane	
00900 Tot.Hardness (as $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		01030 Chromium		RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		01049 Lead		03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	07180 Mercury		09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		X 00945 Sulfate (as SO_4)	600 5633	00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
						01075 Silver					

LABORATORY REMARKS:

Reviewed by

Date reported

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

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: *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	Check one:
			☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
				Address

Collected By / Owner

TYPE of SYSTEM *(Check one)*
☑ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ Other *(specify)*

LAT. ° ' "
LONG ° ' "

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL		HEAVY METALS	mg/l	PARAMETER		ORGANIC	mg/l
00930 Sodium (as Na)		X 00940 Chloride (as Cl)	250 / 2358	70300 Total Filterable Residue	mg/l	01000 Arsenic				39390 Endrin	
00935 Potassium (as K)		X 00950 Fluoride (as F)	1.6 / 1.2	38260 Foaming Agents (as Las)		01005 Barium				39732 Lindane	
00900 Tot. Hardness (as $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		01030 Chromium		RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		01049 Lead		03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	07180 Mercury		09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		X 600 00945 Sulfate (as SO_4)	314.3	00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
						01075 Silver					

LABORATORY REMARKS:

Reviewed by

Date reported

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

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: *Check individual items for analysis [Mark appropriate box(es)]*

INTERIM PRIMARY PARAMETER GROUP ☐ 1 ☐ 2 ☐ 3

TYPE of CHEMICAL ANALYSIS ☐ Complete Secondary ☐ 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	Report to
			Logal COBA CONTAINED WITH X-RAY LIQUID FILTERED DAILY	

Collected By	Owner	Address

TYPE of SYSTEM *(Check one)*
☑ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ Other *(specify)*

LAT. ° ' "
LONG ° ' "

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL		HEAVY METALS	mg/l	PARAMETER		ORGANIC	mg/l
00930 Sodium (as Na)		X 00940 Chloride (as Cl)	250 6968	70300 Total Filterable Residue	mg/l	01000 Arsenic				39390 Endrin	
00935 Potassium (as K)		X 00950 Fluoride (as F)	1.6 077	38260 Foaming Agents (as Las)		01005 Barium				39732 Lindane	
00900 Tot.Hardness (as $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		01030 Chromium		RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		01049 Lead		03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	07180 Mercury		09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		X 00945 Sulfate (as SO_4)	608 1896	00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
						01075 Silver					

LABORATORY REMARKS:

Reviewed by

Date reported

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

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: *Check individual items for analysis [Mark appropriate box(es)]*

INTERIM PRIMARY PARAMETER GROUP ☐ 1 ☐ 2 ☐ 3

TYPE of CHEMICAL ANALYSIS ☐ Complete Secondary ☐ Organic ☐ Radiological

Water Supply System Name	Water Supply System Code No.	City or Location	County	Check one:
PARTAN SAMPLE #1		SPRINGFIELD NM.		☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
4-3-81	3:30 PM		EXPIRED ONLY 1 GAL CONTAINER WITH 1 GAL LIQUID	[illegible]

Collected By	Owner	Address
SUPERINTENDENT		P.O. BOX [illegible] SPRINGFIELD NM

TYPE of SYSTEM *(Check one)* ☐ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ Other *(specify)*

LAT. ° ' "

LONG ° ' "

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL		HEAVY METALS	mg/l	PARAMETER		ORGANIC	mg/l
00930 Sodium (as Na)		~~00940~~ 950 Chloride (as Cl)	1102.2	70300 Total Filterable Residue	mg/l	01000 Arsenic				39390 Endrin	
00935 Potassium (as K)		~~00950~~ 6 Fluoride (as F)	0.45	38260 Foaming Agents (as Las)		01005 Barium				39732 Lindane	
00900 Tot.Hardness (as $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		01030 Chromium		RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		01049 Lead		03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	07180 Mercury		09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		~~00945~~ 600 Sulfate (as SO_4)	3552	00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
.75	1.20					01075 Silver					

LABORATORY REMARKS:

Reviewed by

Date reported

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

State of New Mexico
HEALTH and ENVIRONMENT DEPARTMENT
SCIENTIFIC
LABORATORY DIVISION

CHEMICAL and PHYSICAL ANALYSES for WATER SAMPLES

Morris Tarpon

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

TYPE of CHEMICAL ANALYSIS ☐ Complete Secondary ☐ 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	Report to
				Address

Collected By	Owner

TYPE of SYSTEM *(Check one)*
☐ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ Other *(specify)*

LAT. ° ' "
LONG ° ' "

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL		HEAVY METALS	mg/l	PARAMETER		ORGANIC	mg/l
00930 Sodium (as Na)		X 00940 Chloride (as Cl) 250	6029	70300 Total Filterable Residue	mg/l	01000 Arsenic				39390 Endrin	
00935 Potassium (as K)		X 00950 Fluoride (as F) 1.6	1.16	38260 Foaming Agents (as Las)		01005 Barium				39732 Lindane	
00900 Tot. Hardness (as $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		01030 Chromium		RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		01049 Lead		03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	07180 Mercury		09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		X 00945 Sulfate (as SO_4) 600	1118	00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
X .75	0.28					01075 Silver					

LABORATORY REMARKS:

Reviewed by

Date reported

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

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: *Check individual items for analysis [Mark appropriate box(es)]*

INTERIM PRIMARY PARAMETER GROUP ☐ 1 ☐ 2 ☐ 3

TYPE of CHEMICAL ANALYSIS ☐ Complete Secondary ☐ 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	Report to
			1 of 2 CUBE CONTAINER	

Collected By	Owner	Address

TYPE of SYSTEM *(Check one)* ☑ PRIVATE PUBLIC: ☒ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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)	250 46	☐ 70300 Total Filterable Residue	mg/l	☐ 01000 Arsenic				☐ 39390 Endrin	
☐ 00935 Potassium (as K)		☒ 00950 Fluoride (as F)	1.6 0.15	☐ 38260 Foaming Agents (as Las)		☐ 01005 Barium				☐ 39732 Lindane	
☐ 00900 Tot.Hardness (as $CaCO_3$)		☐ 00620 Nitrate (as N)		☐ 00095 Conductance Micromhos 25°C		☐ 01025 Cadmium				☐ 38270 Methoxychlor	
☐ 00915 Calcium (as Ca)		☐ 00430 Alkalinity (as $CaCO_3$)		☐ 00400 pH		☐ 01030 Chromium		RADIOLOGICAL pCi/l ☐ 01501 Gross Alpha		☐ 39400 Toxaphene	
☐ 00925 Magnesium (as Mg)		☐ 00440 Bicarbonate (as HCO_3)		☐ 01330 Odor		☐ 01049 Lead		☐ 03501 Gross Beta	pCi/l	☐ 39730 2, 4-D	
☐ 01045 Iron-Total (as Fe)		☐ 00445 Carbonate (as CO_3)		☐ 00080 Color	mg/l	☐ 07180 Mercury		☐ 09501 Radium-226	pCi/l	☐ 39740 2, 4, 5-TP (Silvex)	
☐ 01056 Manganese (as Mn)		☒ 00945 Sulfate (as SO_4)	600 465	☐ 00070 Turbidity		☐ 01145 Selenium		☐ 11501 Radium-228	pCi/l		
☒ 01090 Zinc (as Zn)	0.04					☐ 01075 Silver					

.75

LABORATORY REMARKS:

Reviewed by

Date reported

SLD 702 Form Revised 4/78

DISTRIBUTION: **White** - Water Supply Regulation, SF • **Canary** - WS System • **Pink** - EIA Regional Office • **Goldenrod** - SLD Lab

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.
9-9-81	HM-3160	

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	Check one:
PLATEAU SAMPLE # 1		BLOOMFIELD N.M.	SAN JUAN	☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
9-3-81	3:14 PM		FILTERED & ACIDIFIED WITH 5 ml-HNO_3 2-1 quart CUBACANTAINERS	OIL CONSERVATION

Collected By	Owner	Address
SIMPSON & FORMINSTER	OIL CONSERVATION	P.O. BOX 2088 SANTA FE N.M.

TYPE of SYSTEM (Check one) ☑ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ Other (specify)

LAT. ° ' "

LONG ° ' "

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	☒ 01000 Arsenic -1	0.046	☒ ZINC (ZN) 10.0	<0.10	☐ 39390 Endrin	
☐ 00935 Potassium (as K)		☐ 00950 Fluoride (as F)		☐ 38260 Foaming Agents (as Las)		☒ 01005 Barium 1.0	0.4	☒ COPPER (CU) 1.0	0.061	☐ 39732 Lindane	
☐ 00900 Tot. Hardness (as $CaCO_3$)		☐ 00620 Nitrate (as N)		☐ 00095 Conductance Micromhos 25°C		☒ 01025 Cadmium .01	<0.001	☒ ALUMINUM AL 9.0	<0.10	☐ 38270 Methoxychlor	
☐ 00915 Calcium (as Ca)		☐ 00430 Alkalinity (as $CaCO_3$)		☐ 00400 pH		☒ 01030 Chromium .05	0.009	RADIOLOGICAL pCi/l		☐ 39400 Toxaphene	
☐ 00925 Magnesium (as Mg)		☐ 00440 Bicarbonate (as HCO_3)		☐ 01330 Odor		☒ 01049 Lead .05	<0.005	☐ 01501 Gross Alpha		☐ 39730 2, 4-D	
☒ 01045 Iron-Total (as Fe)	0.40	☐ 00445 Carbonate (as CO_3)		☐ 00080 Color	mg/l	☒ 07180 Mercury .002	<0.0005	☐ 03501 Gross Beta	pCi/l	☐ 39740 2, 4, 5-TP (Silvex)	
☒ 01056 Manganese (as Mn)	<0.10	☐ 00945 Sulfate (as SO_4)		☐ 00070 Turbidity		☒ 01145 Selenium .05	<0.005	☐ 11501 Radium-228	pCi/l		
☒ NICKEL (Ni)	.040	☒ MOLYBDEM MO 1.0	<0.010	☒ COBALT (CO) .05	<0.005	☒ 01075 Silver .05	<0.001	☒ [illegible]			

LABORATORY REMARKS:

Reviewed by

Date reported 11/27/81

SLD 792 Form Revised 4/78

DISTRIBUTION: White - Water Supply Regulation, SF • Canary - WS System • Pink - EIA Regional Office • Goldenrod - SLD Lab

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.
9-9-81	WC-850	

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** ☐ Complete Secondary ☐ Organic ☐ Radiological

Water Supply System Name	Water Supply System Code No.	City or Location	County	Check one:
PLATEAU SAMPLE #1		BLOOMFIELD N.M.		☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
9-3-81	3:14 PM		FILTERED ONLY 1gal CORA CONTAINER WITH 1g UNACID	OIL CONSERVATION

Collected By	Owner	Address
SIMPSON & EDMINSTER		P.O. BOX 2088 SANTA FE N.M.

TYPE of SYSTEM *(Check one)* ☐ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ Other *(specify)*

LAT. ° ' "
LONG ° ' "

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL		HEAVY METALS	mg/l	PARAMETER		ORGANIC	mg/l
00930 Sodium (as Na)		~~00940~~ 00941 Chloride (as Cl)	1102.2	70300 Total Filterable Residue	mg/l	01000 Arsenic				39390 Endrin	
00935 Potassium (as K)		~~00950~~ 00951 Fluoride (as F)	045	38260 Foaming Agents (as Las)		01005 Barium				39732 Lindane	
00900 Tot. Hardness (as $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		01030 Chromium		RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		01049 Lead		03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	07180 Mercury		09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		~~00945~~ 00946 Sulfate (as SO_4)	3552	00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
X .075 Boron	1.20					01075 Silver					

LABORATORY REMARKS:

Reviewed by: C. L. Mirabal
Date reported: 9/16/81

SLD 792 Form Revised 4/78

DISTRIBUTION: White - Water Supply Regulation, SF • Canary - WS System • Pink - EIA Regional Office • Goldenrod - SLD Lab

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.
9-9-81	VLP-847	

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 ☐ Organic ☐ Radiological

Water Supply System Name	Water Supply System Code No.	City or Location	County	Check one:
Platoon Sample #2		Bloomfield, NM	San Juan	☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
9/3/81	3:25 PM		1-q WAT COOL CONTAINER FILTERED	Oil Conservation Div.

Collected By	Owner	Address
Simpson & Edmister	Oil Conservation Div.	P.O. Box 2088 Santa Fe NM 87501

TYPE of SYSTEM *(Check one)* ☑ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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)	9978	70300 Total Filterable Residue	mg/l	01000 Arsenic				39390 Endrin	
00935 Potassium (as K)		☒ 00950 Fluoride (as F)	0.56	38260 Foaming Agents (as Las)		01005 Barium				39732 Lindane	
00900 Tot. Hardness (as $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		01030 Chromium		RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		01049 Lead		03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	07180 Mercury		09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		☒ 00945 Sulfate (as SO_4)	5633	00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
						01075 Silver					

LABORATORY REMARKS:

Reviewed by: A.L. Mitchum

Date reported: 9/16/81

SLD 702 Form Revised 4/78

DISTRIBUTION: White - Water Supply Regulation, SF • Canary - WS System • Pink - EIA Regional Office • Goldenrod - SLD Lab

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.
9-9-81	W X 46	

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	Check one:
Platican Sample #3		Bloomfield, NM	San Juan	☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
9/3/81			1 - 1gt color container FILTERED only	Oil Conservation Div.

Collected By	Owner	Address
Simpson & Edwister	Oil Conservation Div.	P.O. Box 2088 Santa Fe, NM 87501

TYPE of SYSTEM (Check one) ☒ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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)	250 316	70300 Total Filterable Residue	mg/l	01000 Arsenic				39390 Endrin	
00935 Potassium (as K)		☒ 00950 Fluoride (as F)	1.6 0.16	38260 Foaming Agents (as Las)		01005 Barium				39732 Lindane	
00900 Tot. Hardness (as $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		01030 Chromium		RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		01049 Lead		03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	07180 Mercury		09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		☒ 00945 Sulfate (as SO_4)	600 463	00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
						01075 Silver					

LABORATORY REMARKS:

Reviewed by

Date reported 9/16/81

SLD 702 Form Revised 4/78

DISTRIBUTION: White - Water Supply Regulation, SF • Canary - WS System • Pink - EIA Regional Office • Goldenrod - SLD Lab

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.
9-9-81	WR-848	

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 ☐ Organic ☐ Radiological

Water Supply System Name	Water Supply System Code No.	City or Location	County	Check one:
Platoon Summit #4		Bloomfield, NM	San Juan	☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
9/3/81			1-1qt CUBE CONTAINER FILTERED ONLY	Oil Conservation Div.

Collected By	Owner	Address
Simcox + Edwister	Oil Conservation Div.	P.O. Box 2088 Santa Fe, NM 87501

TYPE of SYSTEM *(Check one)* ☑ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ Other *(specify)*

LAT. ° ' "
LONG ° ' "

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL		HEAVY METALS	mg/l	PARAMETER		ORGANIC	mg/l
00930 Sodium (as Na)		X 00940 Chloride (as Cl)	250 2358	70300 Total Filterable Residue	mg/l	01000 Arsenic				39390 Endrin	
00935 Potassium (as K)		X 00950 Fluoride (as F)	1.6 1.2	38260 Foaming Agents (as Las)		01005 Barium				39732 Lindane	
00900 Tot.Hardness (as $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		01030 Chromium		RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		01049 Lead		03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	07180 Mercury		09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		X 600 00945 Sulfate (as SO_4)	3143	00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
						01075 Silver					

LABORATORY REMARKS:

Reviewed by C.M. Smith-Rea

Date reported 9/16/81

SLD 702 Form Revised 4/78

DISTRIBUTION: White - Water Supply Regulation, SF • Canary - WS System • Pink - EIA Regional Office • Goldenrod - SLD Lab

State of New Mexico
HEALTH and ENVIRONMENT DEPARTMENT
SCIENTIFIC
LABORATORY DIVISION

CHEMICAL and PHYSICAL ANALYSES for WATER SAMPLES

Morris Thompson

Date received	Lab No.	SLD user code No.
9-4-81	111-851	

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	Check one:
Navajo Sanit. #5		Bloomfield, NM	San Juan	☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
9/3/81	4:45 PM		Filtered Only Lgt. Coke Container	Oil Conservation Div.

Collected By	Owner	Address
Simpson + Edmister	Oil Conservation Div.	P.O. Box 2088 Santa Fe, NM 87501

TYPE of SYSTEM *(Check one)*: ☐ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ Other *(specify)*

LAT. ° ' "

LONG ° ' "

CATIONS	mg/l	ANIONS	mg/l	PHYSICAL		HEAVY METALS	mg/l	PARAMETER		ORGANIC	mg/l
00930 Sodium (as Na)		X 00940 Chloride (as Cl)	250 6039	70300 Total Filterable Residue	mg/l	01000 Arsenic				39390 Endrin	
00935 Potassium (as K)		X 00950 Fluoride (as F)	1.6 1116	38260 Foaming Agents (as Las)		01005 Barium				39732 Lindane	
00900 Tot. Hardness (as $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		01030 Chromium		RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		01049 Lead		03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	07180 Mercury		09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		✓ 600 00945 Sulfate (as SO_4)	1118	00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
X 0.28 FARIN						01075 Silver					

LABORATORY REMARKS:

Reviewed by: [signature]

Date reported: 9/16/81

DISTRIBUTION: White - Water Supply Regulation, SF • Canary - WS System • Pink - EIA Regional Office • Goldenrod - SLD Lab

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.
9/9/81	WM367	

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	Check one:
Plateau Sample # 5		Bloomfield, NM	San Juan	☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
9/3/81	4:45 PM		2 - 1gt CUBA CONTAINERS - FILTERED & ACIDIZED WITH 5 ML HNO3	Oil Conservation D.J.

Collected By	Owner	Address
Simpson & Edmister	Oil Conservation Div.	P.O. Box 2088 Santa Fe, NM 87501

TYPE of SYSTEM (Check one) ☑ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ Other (specify)

LAT. ° ' "

LONG ° ' "

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	☒ 01000 Arsenic .1	0.005	☒ ZINC (ZN)	<0.10	39390 Endrin	
00935 Potassium (as K)		00950 Fluoride (as F)		38260 Foaming Agents (as Las)		☒ 01005 Barium 1.0	0.4	☒ COPPER (CU)	<0.05	39732 Lindane	
00900 Tot. Hardness (as $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		☒ 01025 Cadmium .01	<0.001	☒ ALUMINUM (AL)	0.24	38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		☒ 01030 Chromium .05	<0.005	RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		☒ 01049 Lead .05	<0.005	03501 Gross Beta	pCi/l	39730 2, 4-D	
☒ 01045 Iron-Total (as Fe)	<0.10	00445 Carbonate (as CO_3)		00080 Color	mg/l	☒ 07180 Mercury .002	<0.0005	09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
☒ 01056 Manganese (as Mn)	<0.10	00945 Sulfate (as SO_4)		00070 Turbidity		☒ 01145 Selenium .05	<0.005	11501 Radium-228	pCi/l		
☒ NICKEL (Ni)	<0.010	☒ MOLYBDEN (MO) 1.0	<0.010	☒ COBALT (CO) .05	<0.005	☒ 01075 Silver .05	<0.001	☒ [illegible]			

LABORATORY REMARKS:

Reviewed by

Date reported 11/27/81

SLD 702 Form Revised 4/78

DISTRIBUTION: White - Water Supply Regulation, SF • Canary - WS System • Pink - EIA Regional Office • Goldenrod - SLD Lab

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.
9-8-81	11[illegible]-849	

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	Check one:
Plateau Sample #6		Bloomfield, NM	San Juan	☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
9/3/81			1-gal CARA CONTAINER WITH 1 gal LIQUID FILTERED DAILY	Oil Conservation Div.

Collected By	Owner	Address
Simpson & Edmister	Oil Conservation Div.	P.O. Box 2088 Santa Fe, NM 87501

TYPE of SYSTEM (Check one) ☑ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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)	6968	70300 Total Filterable Residue	mg/l	01000 Arsenic				39390 Endrin	
00935 Potassium (as K)		☒ 00950 Fluoride (as F)	0.77	38260 Foaming Agents (as Las)		01005 Barium				39732 Lindane	
00900 Tot.Hardness (as $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		01030 Chromium		RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		01049 Lead		03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	07180 Mercury		09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		☒ 00945 Sulfate (as SO_4)	1896	00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
						01075 Silver					

LABORATORY REMARKS:

Reviewed by [signature]

Date reported 9/16/81

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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.
9-4-81	WR-852	

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 ☐ Organic ☐ Radiological

Water Supply System Name	Water Supply System Code No.	City or Location	County	Check one:
Plateau Sample #7		Bloomfield, NM	San Juan	☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
9/3/81	5:30 PM		Filtered Only 1qt cubcontainer	Oil Conservation Div.

Collected By	Owner	Address
Simpson + Edmister	Oil Conservation Div	P.O. Box 2088 Santa Fe, NM 87501

TYPE of SYSTEM (Check one) ☒ PRIVATE PUBLIC: ☒ Community ☐ Non-community

SOURCE: ☐ Spring ☐ Lake ☐ Well-Depth ☐ Drain ☐ Stream ☐ Pool ☐ 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) 250	46	70300 Total Filterable Residue	mg/l	01000 Arsenic				39390 Endrin	
00935 Potassium (as K)		☒ 00950 Fluoride (as F) 1.6	0.15	38260 Foaming Agents (as Las)		01005 Barium				39732 Lindane	
00900 Tot. Hardness (as $CaCO_3$)		00620 Nitrate (as N)		00095 Conductance Micromhos 25°C		01025 Cadmium				38270 Methoxychlor	
00915 Calcium (as Ca)		00430 Alkalinity (as $CaCO_3$)		00400 pH		01030 Chromium		RADIOLOGICAL pCi/l 01501 Gross Alpha		39400 Toxaphene	
00925 Magnesium (as Mg)		00440 Bicarbonate (as HCO_3)		01330 Odor		01049 Lead		03501 Gross Beta	pCi/l	39730 2, 4-D	
01045 Iron-Total (as Fe)		00445 Carbonate (as CO_3)		00080 Color	mg/l	07180 Mercury		09501 Radium-226	pCi/l	39740 2, 4, 5-TP (Silvex)	
01056 Manganese (as Mn)		☒ 00945 Sulfate (as SO_4) 600	465	00070 Turbidity		01145 Selenium		11501 Radium-228	pCi/l		
☒ BARIUM	0.04					01075 Silver					

LABORATORY REMARKS:

Reviewed by

Date reported 9/16/81

SLD 702 Form Revised 4/78

DISTRIBUTION: White - Water Supply Regulation, SF • Canary - WS System • Pink - EIA Regional Office • Goldenrod - SLD Lab

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.
9-9-81	HM-368	

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	Check one:
Plateau Sample # 7		Bloomfield, NM	San Juan	☐ TREATED WATER ☐ RAW WATER

Collection Date	Collection Time	Collection Point	Collector's remarks	Report to
9/3/81	5:30 PM		2 - 1gT CORA CONTAINERS FILTERED & ACIDIZED WITH 5 ML HNO3	Oil Conservation Div.

Collected By	Owner	Address
Simpson & Edmister	Oil Conservation Div.	P.O. Box 2088 Santa Fe, NM 87501

TYPE of SYSTEM (Check one) ☒ PRIVATE PUBLIC: ☐ Community ☐ Non-community

SOURCE: ☐ Drain ☐ Spring ☐ Stream ☐ Lake ☐ Pool ☐ Well-Depth ☐ Other (specify)

LAT. ° ' "
LONG ° ' "

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	☒ 01000 Arsenic .1	<0.005	☒ ZINC (ZN) 10	<0.10	☐ 39390 Endrin	
☐ 00935 Potassium (as K)		☐ 00950 Fluoride (as F)		☐ 38260 Foaming Agents (as Las)		☒ 01005 Barium 1.0	<0.10	☒ COPPER (CU) 1.0	<0.05	☐ 39732 Lindane	
☐ 00900 Tot. Hardness (as $CaCO_3$)		☐ 00620 Nitrate (as N)		☐ 00095 Conductance Micromhos 25°C		☒ 01025 Cadmium .01	<0.001	☒ ALUMINUM (AL) 5.0	0.10	☐ 38270 Methoxychlor	
☐ 00915 Calcium (as Ca)		☐ 00430 Alkalinity (as $CaCO_3$)		☐ 00400 pH		☒ 01030 Chromium .05	<0.005	☐ RADIOLOGICAL pCi/l 01501 Gross Alpha		☐ 39400 Toxaphene	
☐ 00925 Magnesium (as Mg)		☐ 00440 Bicarbonate (as HCO_3)		☐ 013_0 Odor		☒ 01049 Lead .050	<0.005	☐ 03501 Gross Beta	pCi/l	☐ 39730 2, 4-D	
☒ 01045 Iron-Total (as Fe)	<0.10	☐ 00445 Carbonate (as CO_3)		☐ 00080 Color	mg/l	☒ 07180 Mercury .002	<0.0005	☐ 09501 Radium-226	pCi/l	☐ 39740 2, 4, 5-TP (Silvex)	
☒ 01056 Manganese (as Mn)	<0.10	☐ 00945 Sulfate (as SO_4)		☐ 00070 Turbidity		☒ 01145 Selenium .05	<0.005	☐ 11501 Radium-228	pCi/l		
☒ NICKEL (Ni)	<0.010	☒ MOLYBDENUM (MO) 1.0	<0.010	☒ COBALT (CO) .05	<0.005	☒ 01075 Silver .05	<0.001	☒ BORON (B)			

LABORATORY REMARKS:

Reviewed by
Date reported 11/27/81

SLD 702 Form Revised 4/78

DISTRIBUTION: White - Water Supply Regulation, SF • Canary - WS System • Pink - EIA Regional Office • Goldenrod - SLD Lab

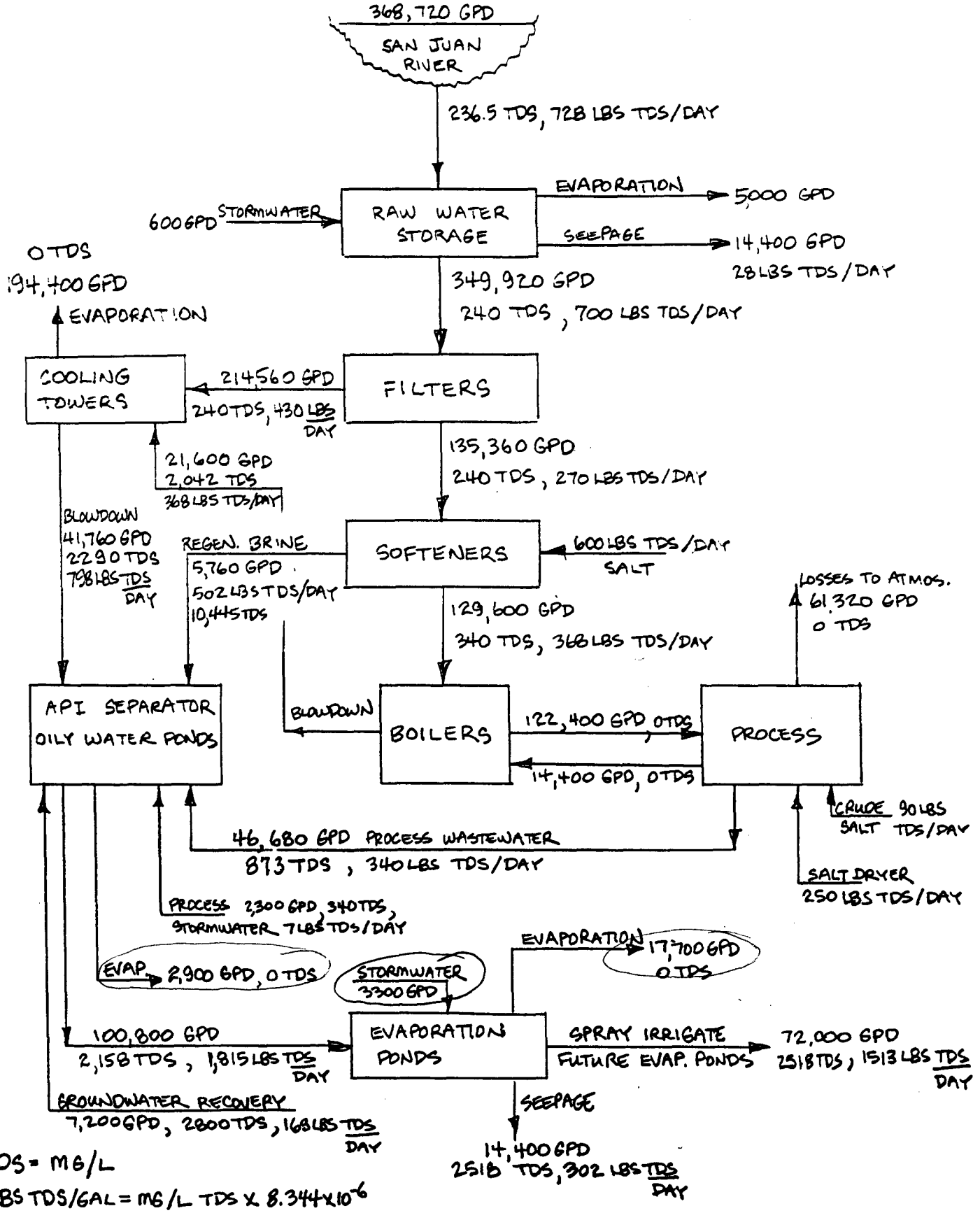
BLOOMFIELD REFINING CO. CALCULATIONS AND DESIGN DATA

PREPARED BY C. HAWLEY

SUBJECT WATER, WASTEWATER, TDS BALANCE

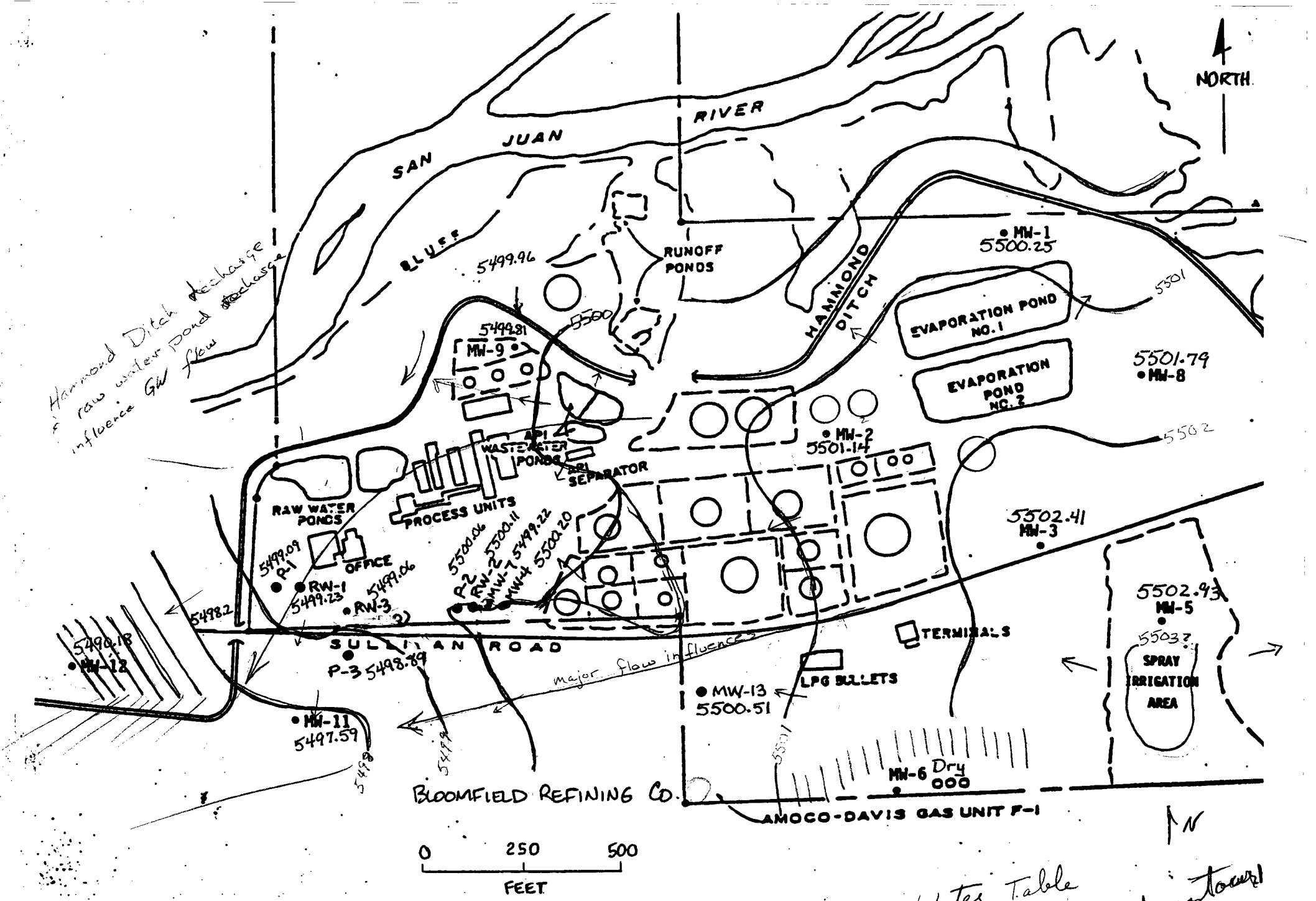
DATE 2-13-89

SHEET 1 OF 1



TDS = MG/L

LBS TDS/GAL = MG/L TDS X 8.344×10^{-6}


NORTH
SAN JUAN RIVER
BLUFF
RUNOFF PONDS
5499.96
5500
HAMMOND DITCH
MW-1
5500.25
EVAPORATION POND NO. 1
EVAPORATION POND NO. 2
5501
5501.79
MW-8
5499.81
MW-9
API WASTEWATER PONDS
API SEPARATOR
MW-2
5501.14
5502
RAW WATER PONDS
PROCESS UNITS
OFFICE
5499.09
P-1
RW-1
5499.23
RW-3
5499.06
5500.06
P-2
5500.11
RW-2
5499.22
MW-7
5500.20
MW-4
5502.41
MW-3
5498.2
5490.18
MW-12
SULLIVAN ROAD
P-3 5498.89
major flow influence
TERMINALS
LPG BULLETS
5502.93
MW-5
5503?
SPRAY IRRIGATION AREA
MW-13
5500.51
MW-11
5497.59
MW-6 Dry
BLOOMFIELD REFINING CO.
AMOCO-DAVIS GAS UNIT F-1
0
250
500
FEET
N
Hammond Ditch discharge
& raw water pond discharge
influence GW flow
Water Table
9-9-88
1' contours
DE
5/16/89