GW - 33

MONITORING REPORTS

DATE:

1988 - 1986

SCIENTIFIC LABORATORY DIVISION
ORGANIC ANALYSIS REQUEST FORM
Organic Section - Phone: 841-2570

754 wp4

88-2106C.

REPORT TO: DAVID BOYER
N.M. OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, NM 87504-2088

S.L.D. No. OR-
DATE REC. 12/21/88
PRIORITY
PHONE(S): 827-5812

COLLECTION CITY: ; COUNTY:

COLLECTION DATE/TIME CODE: (Year-Month-Day-Hour-Minute) |8|8|/|2|/|5|1|4|0|0|

LOCATION CODE: (Township-Range-Section-Tracts) |2|9|N+|1|5|W+|0|1|+| | | |(10N06E24342)

USER CODE: |8|2|2|3|5| SUBMITTER: David Boyer CODE: |2|6|0|

SAMPLE TYPE: WATER |X|, SOIL | |, FOOD | |, OTHER:

This form accompanies 2 Septum Vials, ____ Glass Jugs, and/or ____ ____

Samples were preserved as follows:

- [ ] NP: No Preservation; Sample stored at room temperature.
- [X] P-Ice Sample stored in an ice bath (Not Frozen).
- [ ] P-AA Sample Preserved with Ascorbic Acid to remove chlorine residual.
- [X] P-HCl Sample Preserved with Hydrochloric Acid (2 drops/40 ml)

RECEIVED
MAR 1 5 1989
OIL CONSERVATION DIVISION
SANTA FE

ANALYSES REQUESTED: Please check the appropriate box(es) below to indicate the type of analytical screens required. Whenever possible list specific compounds suspected or required.

PURGEABLE SCREENS

- [ ] (753) Aliphatic Headspace (1-5 Carbons)
- [X] (754) Aromatic & Halogenated Purgeables
- [ ] (765) Mass Spectrometer Purgeables
- [ ] (766) Trihalomethanes
- [ ] (774) SDWA VOC's I (8 Regulated +)
- [ ] (775) SDWA VOC's II (EDB & DBCP)

Other Specific Compounds or Classes

- [ ] _____
- [ ] _____

EXTRACTABLE SCREENS

- [ ] (751) Aliphatic Hydrocarbons
- [ ] (755) Base/Neutral Extractables
- [ ] (758) Herbicides, Chlorophenoxy acid
- [ ] (759) Herbicides, Triazines
- [ ] (760) Organochlorine Pesticides
- [ ] (761) Organophosphate Pesticides
- [ ] (767) Polychlorinated Biphenyls (PCB's)
- [ ] (764) Polynuclear Aromatic Hydrocarbons
- [ ] (762) SDWA Pesticides & Herbicides

Remarks: _____

FIELD DATA:

pH= 8 ; Conductivity= 6200 umho/cm at 7 °C; Chlorine Residual= ____ mg/l

Dissolved Oxygen= ____ mg/l; Alkalinity= ____ mg/l; Flow Rate ____ ____/____

Depth to water ____ ft.; Depth of well ____ ft.; Perforation Interval ____ - ____ ft.; Casing: ____

Sampling Location, Methods and Remarks (i.e. odors, etc.)

EPNG Contract Pond - San Juan Plant

I certify that the results in this block accurately reflect the results of my field analyses, observations and activities.(signature collector): Roger Anderson Method of Shipment to the Lab: Hand

CHAIN OF CUSTODY

I certify that this sample was transferred from ____ to ____

at (location) ____ on ____/____/____ - ____:____ and that

the statements in this block are correct. Evidentiary Seals: Not Sealed [ ] OR Seals Intact: Yes [ ] No [ ]

Signatures ____ ____

For OCD use: Date owner notified: ____ Phone or Letter? Initials ____

ANALYSES PERFORMED LAB. No.: OR-

THIS PAGE FOR LABORATORY RESULTS ONLY

This sample was tested using the analytical screening method(s) checked below:

PURGEABLE SCREENS

- ☐ (753) Aliphatic Headspace (1-5 Carbons)
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- ☐ _____

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- ☐ (759) Herbicides, Triazines
- ☐ (760) Organochlorine Pesticides
- ☐ (761) Organophosphate Pesticides
- ☐ (767) Polychlorinated Biphenyls (PCB's)
- ☐ (764) Polynuclear Aromatic Hydrocarbons
- ☐ (762) SDWA Pesticides & Herbicides

ANALYTICAL RESULTS

COMPOUND(S) DETECTED	CONC. [PPB]	COMPOUND(S) DETECTED	CONC. [PPB]
* DETECTION LIMIT *	*	+ DETECTION LIMIT +	+

ABBREVIATIONS USED:

N D = NONE DETECTED AT OR ABOVE THE STATED DETECTION LIMIT

T R = DETECTED AT A LEVEL BELOW THE STATED DETECTION LIMIT (NOT CONFIRMED)

[RESULTS IN BRACKETS] ARE UNCONFIRMED AND/OR WITH APPROXIMATE QUANTITATION

LABORATORY REMARKS: _____

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Not Sealed ☐ 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 on this page accurately reflect the analytical results for this sample.

Date(s) of analysis: _____. Analyst's signature: _____

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block.

Reviewers signature: _____

STATE OF NEW MEXICO HEALTH AND ENVIRONMENT DEPARTMENT
SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud, NE
Albuquerque, NM 87106 [505]-841-2500
ORGANIC CHEMISTRY SECTION [505]-841-2570

March 9, 1989

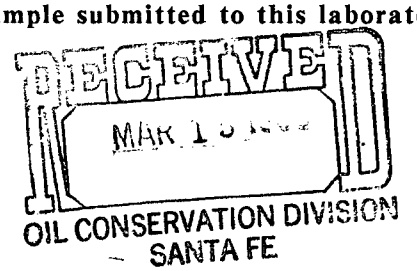
ANALYTICAL REPORT
SLD Accession No. OR-88-2106

Distribution
(■) User
(※) Submitter
(※) Client
(※) SLD Files

To: OIL CONSERVATION DIV
State Land Office Bldg.
P. O. Box 2088
Santa Fe, NM 87504-2088

From: Organic Chemistry Section
Scientific Laboratory Div.
700 Camino de Salud, NE
Albuquerque, NM 87106

Re: **A purgeable water sample submitted to this laboratory on December 21, 1988**



Submitter:
NM Oil Consv. Div.
State Land Office Bldg.
P. O. Box 2088
Santa Fe, NM 87504-2088

DEMOGRAPHIC DATA

COLLECTION		*LOCATION*	
On: 15-Dec-88	*By:* Boy . . .	*Township:* 29N	*Section:* 01
At: 14:00 hrs.	*In/Near:* Bloomfield	*Range:* 15W	*Tract:*

ANALYTICAL RESULTS: Aromatic & Halogenated Purgeable Screen

Parameter	Value	Note	MDL	Units
Benzene	100.00		50.00	ppb
Toluene	400.00		50.00	ppb
p- & m-Xylene	400.00		50.00	ppb
1,2-Dimethylbenzene	100.00		50.00	ppb
Halogenated Purgeables (33)	0.00	N	0.50	ppb
Ethylbenzene	0.00	T	50.00	ppb

See Laboratory Remarks for Additional Information

Notations & Comments:

MDL = Minimal Detectable Level.

A = Approximate Value; N = None Detected above Detection Limit; P = Compound Present, but not quantified;
T = Trace (<Detection Limit); U = Compound Identity Not Confirmed.

Seals: Not Sealed [X]; Intact: No [ ], Yes [ ] & Broken By: _____ Date: _____

Laboratory Remarks: San Juan Plant
Three unknown unsaturated compounds at 50-150 ppb were detected.

Analyst: Michael J. Owen — *Analyst, Organic Chemistry*
12-22-88 — Analysis Date
Reviewed By: R Meyerhein — Richard F. Meyerhein 01/23/89 — *Supervisor, Organic Chemistry Section*

SCIENTIFIC LABORATORY DIVISION
ORGANIC ANALYSIS REQUEST FORM
Organic Section - Phone: 841-2570

2300

REPORT TO: DAVID BOYER
N.M. OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, NM 87504-2088

S.L.D. No. OR-_____
DATE REC. _____
PRIORITY _____
PHONE(S): 827-5812

COLLECTION CITY: _____; COUNTY: _____

COLLECTION DATE/TIME CODE: (Year-Month-Day-Hour-Minute) |8|8|1|2|1|5|1|4|1|0|0|

LOCATION CODE: (Township-Range-Section-Tracts) |__|__|+|__|__|+|__|+|__|__|__| (10N06E24342)

USER CODE: |~~8~~|~~2~~|~~2~~|~~3~~|5| SUBMITTER: David Boyer CODE: |~~2~~|~~6~~|0|

SAMPLE TYPE: WATER |X|, SOIL |_|, FOOD |_|, OTHER: _____

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pH= 8 ; Conductivity= 6200 umho/cm at 7 °C; Chlorine Residual=_____mg/l

Dissolved Oxygen=_____mg/l; Alkalinity=_____mg/l; Flow Rate_____ _____/_____

Depth to water _____ft.; Depth of well_____ft.; Perforation Interval _____-_____ft.; Casing: _____

Sampling Location, Methods and Remarks (i.e. odors, etc.)

EPNG CONTACT WASTEWATER POND

I certify that the results in this block accurately reflect the results of my field analyses, observations and activities.(signature collector): Roger Anderson Method of Shipment to the Lab: Hand

CHAIN OF CUSTODY

I certify that this sample was transferred from _____ to _____

at (location) _____ on ____/____/____ - ____:____ and that

the statements in this block are correct. Evidentiary Seals: Not Sealed [ ] OR Seals Intact: Yes [ ] No [ ]

Signatures _____ _____

For OCD use: Date owner notified:_____ Phone or Letter? Initials_____

ANALYSES PERFORMED LAB. ID.: OR-

THIS PAGE FOR LABORATORY RESULTS ONLY

This sample was tested using the analytical screening method(s) checked below:

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COMPOUND(S) DETECTED	CONC. [PPB]	COMPOUND(S) DETECTED	CONC. [PPB]
* DETECTION LIMIT * ✱		+ DETECTION LIMIT + +	

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[RESULTS IN BRACKETS] ARE UNCONFIRMED AND/OR WITH APPROXIMATE QUANTITATION

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CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Not Sealed ☐ Intact: Yes ☐ No ☐. Seal(s) broken by: _____ date: _____

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Date(s) of analysis: _____. Analyst's signature: _____

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block.

Reviewers signature: _____

Report Date: 12/30/88

Client: New Mexico OCD

Sample ID:	8812151400	Date Sampled:	12/15/88
Laboratory Number:	F2300	Date Received:	12/15/88
Analysis Requested:	Purgable Aromatics	Date Extracte:	NA
Sample Matrix:	Water	Date Analyzed:	12/28/88

	Parameter	Concentration		Units
	BENZENE	490	(20.0)	ug/l
	ETHYLBENZENE	100	(20.0)	ug/l
	TOLUENE	1250	(20.0)	ug/l
*	m,p-XYLENE	870	(20.0)	ug/l
	o-XYLENE	300	(20.0)	ug/l

Method: 8020 Aromatic Volatile Organics, SW-846, USEPA (1982)
602 Purgable Aromatics, 40 CFR Part 136, USEPA (1984)

(Detection limit in parenthesis.)
ND - Parameter not detected at the stated detection limit.

* Meta and para xylene coelute on the capilary system.

Jack M. Morgan
Senior Organic Chemist

Report Date: 12/30/88

Client: New Mexico OCD

Sample ID: 881215140
Laboratory Number: F2300
Analysis Requested: Purgable Halocarbons
Sample Matrix: Water

Date Sampled: 12/15/88
Date Received: 12/15/88
Date Extracted: N/A
Date Analyzed: 12/29/88

Parameter	Concentration		Units
CHLOROMETHANE	ND	(0.5)	ug/l
BROMOMETHANE	ND	(0.5)	ug/l
VINYL CHLORIDE	ND	(0.5)	ug/l
CHLOROETHANE	ND	(0.5)	ug/l
METHYLENE CHLORIDE	ND	(0.5)	ug/l
TRICHLOROFLUOROMETHANE	ND	(0.5)	ug/l
1,1 DICHLOROETHENE	ND	(0.5)	ug/l
1,1 DICHLOROETHANE	ND	(0.5)	ug/l
CHLOROFORM	ND	(0.5)	ug/l
1,2 DICHLOROETHANE	ND	(0.5)	ug/l
1,1,1 TRICHLOROETHANE	ND	(0.5)	ug/l
CARBONTETRACHLORIDE	ND	(0.5)	ug/l
TRICHLOROETHENE	ND	(0.5)	ug/l
TRANS 1,2 DICHLOROETHENE	ND	(0.5)	ug/l
TRANS 1,3 DICHLOROPROPENE	ND	(0.5)	ug/l
CIS 1,3 DICHLOROPROPENE	ND	(0.5)	ug/l
DIBROMO CHLOROMETHANE	ND	(0.5)	ug/l
BROMOFORM	ND	(0.5)	ug/l
1,1,2 TRICHLOROETHANE	ND	(0.5)	ug/l
1,1,2,2 TETRACHLOROETHANE	ND	(0.5)	ug/l
TETRACHLOROETHENE	ND	(0.5)	ug/l
CHLOROBENZENE	ND	(0.5)	ug/l
BROMODICHLOROMETHANE	ND	(0.5)	ug/l
1,2- DICHLOROBENZENE	ND	(0.5)	ug/l
1,3- DICHLOROBENZENE	ND	(0.5)	ug/l
1,4- DICHLOROBENZENE	ND	(0.5)	ug/l
DICHLORODIFLUOROMETHANE	ND	(0.5)	ug/l
1,1- DICHLOROETHANE	ND	(0.5)	ug/l
1,2- DICHLOROPROPANE	ND	(0.5)	ug/l

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

(Detection limit in parenthesis.)
ND - Parameter not detected at the stated detection limit.

Jack M. Morgan
Senior Organic Chemist

** Duplicate Analysis

Report Date: 12/30/88

Client: New Mexico OCD

Sample ID:	8812151400	Date Sampled:	12/15/88
Laboratory Number:	F2300	Date Received:	12/15/88
Analysis Requested:	Purgable Halocarbons	Date Extracted:	NA
Sample Matrix:	Water	Date Analyzed:	12/29/88

Parameter	Concentration	Units
CHLOROMETHANE	ND (0.5)	ug/l
BROMOMETHANE	ND (0.5)	ug/l
VINYL CHLORIDE	ND (0.5)	ug/l
CHLOROETHANE	ND (0.5)	ug/l
METHYLENE CHLORIDE	ND (0.5)	ug/l
TRICHLOROFLUOROMETHANE	ND (0.5)	ug/l
1,1 DICHLOROETHENE	ND (0.5)	ug/l
1,1 DICHLOROETHANE	ND (0.5)	ug/l
CHLOROFORM	ND (0.5)	ug/l
1,2 DICHLOROETHANE	ND (0.5)	ug/l
1,1,1 TRICHLOROETHANE	ND (0.5)	ug/l
CARBONTETRACHLORIDE	ND (0.5)	ug/l
TRICHLOROETHENE	ND (0.5)	ug/l
TRANS 1,2 DICHLOROETHENE	ND (0.5)	ug/l
TRANS 1,3 DICHLOROPROPENE	ND (0.5)	ug/l
CIS 1,3 DICHLOROPROPENE	ND (0.5)	ug/l
DIBROMO CHLOROMETHANE	ND (0.5)	ug/l
BROMOFORM	ND (0.5)	ug/l
1,1,2 TRICHLOROETHANE	ND (0.5)	ug/l
1,1,2,2 TETRACHLOROETHANE	ND (0.5)	ug/l
TETRACHLOROETHENE	ND (0.5)	ug/l
CHLOROBENZENE	ND (0.5)	ug/l
BROMODICHLOROMETHANE	ND (0.5)	ug/l
1,2- DICHLOROBENZENE	ND (0.5)	ug/l
1,3- DICHLOROBENZENE	ND (0.5)	ug/l
1,4- DICHLOROBENZENE	ND (0.5)	ug/l
DICHLORODIFLUOROMETHANE	ND (0.5)	ug/l
1,1- DICHLOROETHANE	ND (0.5)	ug/l
1,2- DICHLOROPROPANE	ND (0.5)	ug/l

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

(Detection limit in parenthesis.)
ND - Parameter not detected at the stated detection limit.

Jack M. Morgan
Senior Organic Chemist

New Mexico Health and Environment Department
SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 — (505) 841-2555

859
WNW

GENERAL WATER CHEMISTRY and NITROGEN ANALYSIS

DATE RECEIVED 12 21 88	LAB NO. WC-4939	USER CODE ☐ 59300 ☐ 59600 ☒ OTHER: 82235	
Collection DATE 8812175	SITE INFORM-ATION ►	Sample location EPNG - SAN JUAN	
Collection TIME 1400		Collection site description CONTACT WASTEWATER POND	
Collected by — Person/Agency ANDERSON /OCD			

SEND FINAL REPORT TO ►

ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg, PO Box 2088
Santa Fe, NM 87504-2088

Attn: David Boyer

Phone: 827-5812

Station/ well code

Owner

SAMPLING CONDITIONS

☐ Bailed ☐ Pump ☒ Dipped ☐ Tap	Water level	Discharge	Sample type GRAB
pH (00400) 8	Conductivity (Uncorrected) 6200 µmho	Water Temp. (00010) 7 °C	Conductivity at 25°C (00094) µmho

Field comments

SAMPLE FIELD TREATMENT — *Check proper boxes*

No. of samples submitted

☒ NF: Whole sample (Non-filtered) ☐ F: Filtered in field with 0.45 µmembrane filter ☐ A: 2 ml H_2SO_4/L added

☒ NA: No acid added ☐ Other-*specify:* ☐ A: 5ml conc. HNO_3 added ☐ A: 4ml fuming HNO_3 added

ANALYTICAL RESULTS from SAMPLES

NA		Units	Date analyzed
☒ Conductivity (Corrected) 25°C (00095)	15,391	µmho	1/10/89
☐ Total non-filterable residue (suspended) (00530)		mg/l	
☒ Other: Lab pH	6.99		1/3
☐ Other:			
☐ Other:			

A-H_2SO_4			
☐ Nitrate-N +, Nitrate-N total (00630)		mg/l	
☐ Ammonia-N total (00610)		mg/l	
☐ Total Kjeldahl-N ( )		mg/l	
☐ Chemical oxygen demand (00340)		mg/l	
☐ Total organic carbon ( )		mg/l	
☐ Other:			
☐ Other:			

From UF, NA Sample:

			Date Analyzed
☒ Calcium	332	mg/l	12/21
☒ Potassium	48	mg/l	12/28
☒ Magnesium	116	mg/l	12/21
☒ Sodium	3036	mg/l	1/26
☒ Bicarbonate	452	mg/l	1/3
☒ Chloride	4750	mg/l	1/4
☒ Sulfate	388	mg/l	1/4
☒ Total Solids	10956	mg/l	1-4
☒ CO_3	0		1/3
☐			
☒ Cation/Anion Balance			

Analyst | Date Reported 1 27 89 | Reviewed by

Laboratory remarks

FOR OCD USE -- Date Owner Notified _____ Phone or Letter? _____ Initals _____

CATIONS				ANIONS			
ANALYTE	MEQ.	PPM	DET. LIMIT	ANALYTE	MEQ.	PPM	DET. LIMIT
Ca	16.57	332.00	<3.0	HC03	7.41	452.00	<1.0
Mg	9.53	116.00	<0.3	SO4	8.08	388.00	<10.0
Na	132.06	3036.00	<10.0	CL	133.99	4750.00	<5.0
K	1.23	48.00	<0.3				
Mn	0.00	0.00		NO3	0.00	0.00	< 0.
Fe	0.00	0.00		C03	0.00	0.00	< 1.
				NH3	0.00	0.00	< 0.
				PO4	0.00	0.00	< 0.
SUMS	159.38	3532.00			149.48	5590.00	

Total Dissolved Solids= 10956
Ion Balance = 106.62%

WC No. = 8804939
Date out/By 1/30

New Mexico Health and Environment Department
SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 — [illegible]) 841-2555

2300

GENERAL WATER CHEMISTRY and NITROGEN ANALYSIS

DATE RECEIVED	LAB NO.	USER CODE ☐ 59300 ☐ 59600 ☒ OTHER: 82235	
Collection DATE 88/12/15	SITE INFORM-ATION ►	Sample location EPNG - SAN JUAN PLANT	
Collection TIME 1400		Collection site description CONTACT WASTEWATER POND	
Collected by — Person/Agency HANDERSON /OCD			

SEND FINAL REPORT TO ►

ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg, PO Box 2088
Santa Fe, NM 87504-2088

Attn: David Boyer

Phone: 827-5812

Station/ well code

Owner

SAMPLING CONDITIONS

☐ Bailed ☒ Dipped ☐ Pump ☐ Tap	Water level	Discharge	Sample type GRAB
pH (00400) 8	Conductivity (Uncorrected) 6200 µmho	Water Temp. (00010) 7 °C	Conductivity at 25°C (00094) µmho

Field comments

SAMPLE FIELD TREATMENT — *Check proper boxes*

No. of samples submitted 1

☒ NF: Whole sample (Non-filtered) ☐ F: Filtered in field with 0.45 µmembrane filter ☐ A: 2 ml H_2SO_4/L added

☒ NA: No acid added ☐ Other-*specify:* ☐ A: 5ml conc. HNO_3 added ☐ A: 4ml fuming HNO_3 added

ANALYTICAL RESULTS from SAMPLES

NA	Units	Date analyzed
☐ Conductivity (Corrected) 25°C (00095)	µmho	
☐ Total non-filterable residue (suspended) (00530)	mg/l	
☐ Other:		
☐ Other:		
☐ Other:		

A-H_2SO_4	Units	Date analyzed
☐ Nitrate-N +, Nitrate-N total (00630)	mg/l	
☐ Ammonia-N total (00610)	mg/l	
☐ Total Kjeldahl-N ( )	mg/l	
☐ Chemical oxygen demand (00340)	mg/l	
☐ Total organic carbon ( )	mg/l	
☐ Other:		
☐ Other:		

From UF, NA Sample:

	Units	Date Analyzed
☒ Calcium	mg/l	
☒ Potassium	mg/l	
☒ Magnesium	mg/l	
☒ Sodium	mg/l	
☒ Bicarbonate	mg/l	
☒ Chloride	mg/l	
☒ Sulfate	mg/l	
☒ Total Solids	mg/l	
☒ CO_3		
☐		
☒ Cation/Anion Balance		

Analyst	Date Reported	Reviewed by

Laboratory remarks

FOR OCD USE -- Date Owner Notified _____ Phone or Letter? _____ Initals _____

Inter·Mountain
Laboratories, Inc.

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

CLIENT: Oil Conservation Division

Sample Id: 8812151400
Lab Id: F2300
Date Collected: 12/15/88
Date Received: 12/15/88
Date Reported: 01/03/89

		Date Analyzed
Total Dissolved Solids (180), mg/l	10100	12/19
Total Dissolved Solids (calc), mg/l	9270	
Sodium Adsorption Ratio	39.3	
Total Alkalinity as CaCO3, mg/l	313	12/19
Total Hardness as CaCO3, mg/l	1190	12/19

	mg/l	meq/l	
Acidity as CaCo3	<1	<0.01	12/19
Bicarbonate as HCO3	381	6.25	12/19
Carbonate as CO3	0	0.00	12/19
Chloride	5000	141.12	12/21
Sulfate	480	9.90	12/21
Calcium	387	19.32	12/21
Magnesium	54	4.44	12/21
Potassium	49	1.26	12/21
Sodium	3120	135.60	12/21
Major Cations		160.62	
Major Anions		157.27	
Cation/Anion Difference		1.05	%

El Paso
Natural Gas Company

P. O. BOX 1492
EL PASO, TEXAS 79978
PHONE: 915-541-2600

July 22, 1987

Mr. Bill Olsen
Hydrogeologist
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501-2088

Re: San Juan River Plant/Local Private Water Wells

Dear Mr. Olsen:

Enclosed are the analytical results for the local private water wells sampled by you and Mr. Sidney H. Johnson of K. W. Brown & Associates last month. Mr. Johnson prepared a table (enclosed) summarizing the data. He indicated that the water quality in the two wells just below the golf course is considerably better than the water quality in the remaining wells. The improved quality of this water has been attributed to local recharge from the raw water pond and the irrigation at the golf course at the San Juan River Plant.

Please note that the Raba-Kistner results do not show pH and EC values. These values were measured in the field and have been reported on the summary spread sheet.

Very truly yours,

Henry Van, Ph.D.
Sr. Environmental Engineer
Environmental and Safety
Affairs Department

ka

Enclosure

FILE NAME: EPNGLGWW.WK1 15-Jul-87

Table 1. Analytical Results for Groundwater from Local Wells.

Parameters	Units	John Kennedy SJ-2071	Dan Booth SJ-2081	Joe Lester SJ-1136	Paul Hansen SJ-1407	J. T. Isham SJ-1343	Dale Dailey unknown	Upgrad* Avg	Downgrad* Avg	Total * Avg
		Well Owner								
CATIONS										
Sodium	mg/l	500	110	440	500	820	1,000	773	305	562
Calcium	mg/l	66	63	31	130	190	280	200	65	127
Magnesium	mg/l	17	15	13	44	57	66	56	16	35
Potasium	mg/l	1.2	1.3	3.1	5.6	6.3	3.5	5.1	1.3	3.5
ANIONS										
Chloride	mg/l	29	29	110	400	400	450	417	29	236
Sulfate	mg/l	290	300	780	790	1,800	2,470	1,687	295	1,072
Bicarbonate	mg/l	210	200	320	230	150	91	157	205	200
Carbonate	mg/l	< 5	< 5	< 5	< 5	< 5	< 5	<5	<5	<5
NITROGEN										
Nitrate	mg/l	< 0.1	< 0.1	< 0.1	5.6	5	3.9	4.8	0.1	2.5
Ammonia	mg/l	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	0.4	0.4	0.4
Total K Nitrogen	mg/l	< 0.4	0.4	0.4	< 0.4	0.5	0.4	0.4	0.4	0.4
INDICATORS										
pH	s.u.	7.69	7.78	7.11	7.28	7.58	7.01	7.29	7.74	7.41
EC	umhos	910	950	5,200	2,950	2,950	4,800	3,567	930	2,960
TDS	mg/l	600	610	1,400	2,000	3,400	4,300	3,233	605	2,052
Volatile Scan	mg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cl Organic Scan	mg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND

* Values reported below detection limit are averaged at the detection level.

K. W. Brown & Associates, Inc.

Report of Chemical Analysis

Consulting Geotechnical, Materials and Environmental Engineers
Geologists, Scientists and Chemists

Raba-Kistner
Consultants, Inc.

P.O. Box 690287, San Antonio, TX 78269-0287
12821 W. Golden Lane, San Antonio, TX 78249
(512) 699-9090

To: El Paso Natural Gas Company
P.O. Box 4990
Farmington, New Mexico 87499

Attn: Mr. Kenneth E. Beasley

Project No.: SA0687-0003-008
Assignment No.: 6-11077
Date: 7/02/87

Subject: Water Analysis

Test Results:

	Method	#1 John Kennedy 6-11077-1	#2 Dan Booth 6-11077-2)	#3 Joe Lester 6-11077-3
I. Metals:				
Calcium, mg/L	215.1	66	63	31
Magnesium, mg/L	242.1	17	15	13
Potassium, mg/L	258.1	1.2	1.3	3.1
Sodium, mg/L	272.3	100	110	440

		#4 Paul Hansen 6-11077-4	#5 J.T. Isham 6-11077-5	#6 Dale Dailey 6-11077-6
Calcium, mg/L	215.1	130	190	280
Magnesium, mg/L	242.1	44	57	66
Potassium, mg/L	258.1	5.6	6.3	3.5
Sodium, mg/L	272.3	500	820	1,000

Raba-Kistner Consultants, Inc.

by _____

Frank B. Schweitzer
Vice-President, Chemistry

Project No.: SA0687-0003-008
Assignment No.: 6-11077
Date: 7/02/87

	Method	#1 John Kennedy 6-11077-1	#2 Dan Booth 6-11077-2)	#3 Joe Lester 6-11077-3
II. General Parameters:				
Ammonia-N, mg/L	350.2	<0.4	<0.4	<0.4
Bicarbonate, mg/L as $CaCO_3$	310.1	210	200	320
Carbonate, mg/L as $CaCO_3$	310.1	<5	<5	<5
Chloride, mg/L	300.0	29	29	110
Nitrate-N, mg/L	300.0	<0.1	<0.1	<0.1
Sulfate, mg/L	300.0	290	300	780
Total Kjeldahl-N, mg/L	351.3	<0.4	<0.4	0.4
Total Dissolved Solids, mg/L	160.1	600	610	1,400
Anion/Cation Blance, meq./meq.		10.3/9.1	10.3/9.2	24.6/21.8

	Method	#4 Paul Harmen 6-11077-4	#5 J.T. Isham 6-11077-5	#6 Dale Daily 6-11077-6
Ammonia-N, mg/L	350.2	<0.4	<0.4	<0.4
Bicarbonate, mg/L	310.1	230	150	91
Carbonate, mg/L	310.1	<5	<5	<5
Chloride, mg/L	300.0	400	400	450
Nitrate-N, mg/L	300.0	5.6	5.0	3.9
Sulfate, mg/L	300.0	790	1,800	2,470
Total Kjeldahl-N, mg/L	351.3	<0.4	0.5	0.4
Total Dissolved Solids, mg/L	160.1	2,000	3,400	4,300
Anion/Cation Blance, meq./meq.		37.7/32.0	51.6/50.1	65.9/63.1

< = Less than

Project No.: SA0687-0003-008
Assignment No.: John Kennedy (6-11077-1)

(PURGEABLES)
(EPA Method 624)

Compound	Concentration (ug/L)	Method Detection Limits (ug/L)
Chloromethane	N.D.	5.0
Bromomethane	N.D.	5.0
Vinyl Chloride	N.D.	10.0
Chloroethane	N.D.	5.0
Methylene Chloride	N.D.	2.8
Trichlorofluoromethane	N.D.	5.0
1,1-Dichloroethene	N.D	2.8
1,1-Dichloroethane	N.D.	4.7
Trans-1,2-Dichloroethene	N.D.	1.6
Chloroform	N.D.	1.6
1,2-Dichloroethane	N.D.	2.8
1,1,1-Trichloroethane	N.D.	3.8
Carbon Tetrachloride	N.D.	2.8
Bromodichloromethane	N.D.	2.2
1,2-Dichloropropane	N.D.	6.0
Trans-1,3-Dichloropropene	N.D.	5.0
Trichloroethene	N.D	1.9
Dibromochloromethane	N.D.	3.1
1,1,2-Trichloroethane	N.D	5.0
cis-1,3-Dichloropropene	N.D.	5.0
Benzene	N.D.	4.4
2-Chloroethylvinyl Ether	N.D.	5.0
Bromoform	N.D.	4.7
1,1,2,2-Tetrachloroethane	N.D.	6.9
Tetrachloroethene	N.D	4.1
Toluene	N.D.	6.0
Chlorobenzene	N.D.	6.0
Ethylbenzene	N.D.	7.2

N.D.= Not Detected

Project No.: SA0687-0003-008
Assignment No.: Dan Booth (6-11077-2)

(PURGEABLES)
(EPA Method 624)

Compound	Concentration (ug/L)	Method Detection Limits (ug/L)
Chloromethane	N.D.	5.0
Bromomethane	N.D.	5.0
Vinyl Chloride	N.D.	10.0
Chloroethane	N.D.	5.0
Methylene Chloride	N.D.	2.8
Trichlorofluoromethane	N.D.	5.0
1,1-Dichloroethene	N.D	2.8
1,1-Dichloroethane	N.D.	4.7
Trans-1,2-Dichloroethene	N.D.	1.6
Chloroform	N.D.	1.6
1,2-Dichloroethane	N.D.	2.8
1,1,1-Trichloroethane	N.D.	3.8
Carbon Tetrachloride	N.D.	2.8
Bromodichloromethane	N.D.	2.2
1,2-Dichloropropane	N.D.	6.0
Trans-1,3-Dichloropropene	N.D.	5.0
Trichloroethene	N.D	1.9
Dibromochloromethane	N.D.	3.1
1,1,2-Trichloroethane	N.D	5.0
cis-1,3-Dichloropropene	N.D.	5.0
Benzene	N.D.	4.4
2-Chloroethylvinyl Ether	N.D.	5.0
Bromoform	N.D.	4.7
1,1,2,2-Tetrachloroethane	N.D.	6.9
Tetrachloroethene	N.D	4.1
Toluene	N.D.	6.0
Chlorobenzene	N.D.	6.0
Ethylbenzene	N.D.	7.2

N.D.= Not Detected

Project No.: SA0687-0003-008
Assignment No.: Joe Lester (6-11077-3)

(PURGEABLES)
(EPA Method 624)

Compound	Concentration (ug/L)	Method Detection Limits (ug/L)
Chloromethane	N.D.	5.0
Bromomethane	N.D.	5.0
Vinyl Chloride	N.D.	10.0
Chloroethane	N.D.	5.0
Methylene Chloride	N.D.	2.8
Trichlorofluoromethane	N.D.	5.0
1,1-Dichloroethene	N.D	2.8
1,1-Dichloroethane	N.D.	4.7
Trans-1,2-Dichloroethene	N.D.	1.6
Chloroform	N.D.	1.6
1,2-Dichloroethane	N.D.	2.8
1,1,1-Trichloroethane	N.D.	3.8
Carbon Tetrachloride	N.D.	2.8
Bromodichloromethane	N.D.	2.2
1,2-Dichloropropane	N.D.	6.0
Trans-1,3-Dichloropropene	N.D.	5.0
Trichloroethene	N.D	1.9
Dibromochloromethane	N.D.	3.1
1,1,2-Trichloroethane	N.D	5.0
cis-1,3-Dichloropropene	N.D.	5.0
Benzene	N.D.	4.4
2-Chloroethylvinyl Ether	N.D.	5.0
Bromoform	N.D.	4.7
1,1,2,2-Tetrachloroethane	N.D.	6.9
Tetrachloroethene	N.D	4.1
Toluene	N.D.	6.0
Chlorobenzene	N.D.	6.0
Ethylbenzene	N.D.	7.2

N.D.= Not Detected

Project No.: SA0687-0003-008
Assignment No.: Paul Hansen (6-11077-4)

(PURGEABLES)
(EPA Method 624)

Compound	Concentration (ug/L)	Method Detection Limits (ug/L)
Chloromethane	N.D.	5.0
Bromomethane	N.D.	5.0
Vinyl Chloride	N.D.	10.0
Chloroethane	N.D.	5.0
Methylene Chloride	N.D.	2.8
Trichlorofluoromethane	N.D.	5.0
1,1-Dichloroethene	N.D	2.8
1,1-Dichloroethane	N.D.	4.7
Trans-1,2-Dichloroethene	N.D.	1.6
Chloroform	N.D.	1.6
1,2-Dichloroethane	N.D.	2.8
1,1,1-Trichloroethane	N.D.	3.8
Carbon Tetrachloride	N.D.	2.8
Bromodichloromethane	N.D.	2.2
1,2-Dichloropropane	N.D.	6.0
Trans-1,3-Dichloropropene	N.D.	5.0
Trichloroethene	N.D	1.9
Dibromochloromethane	N.D.	3.1
1,1,2-Trichloroethane	N.D	5.0
cis-1,3-Dichloropropene	N.D.	5.0
Benzene	N.D.	4.4
2-Chloroethylvinyl Ether	N.D.	5.0
Bromoform	N.D.	4.7
1,1,2,2-Tetrachloroethane	N.D.	6.9
Tetrachloroethene	N.D	4.1
Toluene	N.D.	6.0
Chlorobenzene	N.D.	6.0
Ethylbenzene	N.D.	7.2

N.D.= Not Detected

Project No.: SA0687-0003-008
Assignment No.: J.T. Isham (6-11077-5)

(PURGEABLES)
(EPA Method 624)

Compound	Concentration (ug/L)	Method Detection Limits (ug/L)
Chloromethane	N.D.	5.0
Bromomethane	N.D.	5.0
Vinyl Chloride	N.D.	10.0
Chloroethane	N.D.	5.0
Methylene Chloride	N.D.	2.8
Trichlorofluoromethane	N.D.	5.0
1,1-Dichloroethene	N.D	2.8
1,1-Dichloroethane	N.D.	4.7
Trans-1,2-Dichloroethene	N.D.	1.6
Chloroform	N.D.	1.6
1,2-Dichloroethane	N.D.	2.8
1,1,1-Trichloroethane	N.D.	3.8
Carbon Tetrachloride	N.D.	2.8
Bromodichloromethane	N.D.	2.2
1,2-Dichloropropane	N.D.	6.0
Trans-1,3-Dichloropropene	N.D.	5.0
Trichloroethene	N.D	1.9
Dibromochloromethane	N.D.	3.1
1,1,2-Trichloroethane	N.D	5.0
cis-1,3-Dichloropropene	N.D.	5.0
Benzene	N.D.	4.4
2-Chloroethylvinyl Ether	N.D.	5.0
Bromoform	N.D.	4.7
1,1,2,2-Tetrachloroethane	N.D.	6.9
Tetrachloroethene	N.D	4.1
Toluene	N.D.	6.0
Chlorobenzene	N.D.	6.0
Ethylbenzene	N.D.	7.2

N.D.= Not Detected

Project No.: SA0687-0003-008
Assignment No.: Dale Dailey (6-11077-6)

(PURGEABLES)
(EPA Method 624)

Compound	Concentration (ug/L)	Method Detection Limits (ug/L)
Chloromethane	N.D.	5.0
Bromomethane	N.D.	5.0
Vinyl Chloride	N.D.	10.0
Chloroethane	N.D.	5.0
Methylene Chloride	N.D.	2.8
Trichlorofluoromethane	N.D.	5.0
1,1-Dichloroethene	N.D	2.8
1,1-Dichloroethane	N.D.	4.7
Trans-1,2-Dichloroethene	N.D.	1.6
Chloroform	N.D.	1.6
1,2-Dichloroethane	N.D.	2.8
1,1,1-Trichloroethane	N.D.	3.8
Carbon Tetrachloride	N.D.	2.8
Bromodichloromethane	N.D.	2.2
1,2-Dichloropropane	N.D.	6.0
Trans-1,3-Dichloropropene	N.D.	5.0
Trichloroethene	N.D	1.9
Dibromochloromethane	N.D.	3.1
1,1,2-Trichloroethane	N.D	5.0
cis-1,3-Dichloropropene	N.D.	5.0
Benzene	N.D.	4.4
2-Chloroethylvinyl Ether	N.D.	5.0
Bromoform	N.D.	4.7
1,1,2,2-Tetrachloroethane	N.D.	6.9
Tetrachloroethene	N.D	4.1
Toluene	N.D.	6.0
Chlorobenzene	N.D.	6.0
Ethylbenzene	N.D.	7.2

N.D.= Not Detected

754
3

STATE OF NEW MEXICO
ENVIRONMENT

SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 841-2570

86- 0592-C

REPORT TO: DAVID G. BOYER
PLEASE PRINT
NEW MEXICO OIL CONSERVATION DIV.
P.O. BOX 2088
SANTA FE, NM 87504-2088
PHONE(S): 827-5812

S.L.D. No.: OR- 592-A,B
DATE REC. : 5/22/86
SLD PRIORITY #:

USER CODE: 8 2 2 3 5

SUBMITTER: DAVID BOYER
SUBMITTER CODE:

SAMPLE TYPE: WATER ☒, SOIL ☐, OTHER
SAMPLE TYPE CODE:

COLLECTED: 5/20/86 - 16:05 BY DB
DATE TIME INITIALS
CODE: 8 6 0 5 2 0 1 6 0 5 AB
Y Y M M D D H H M M I I I

SOURCE: SUMP DRAIN
CODE: AQUIFER DEPTH

NEAREST CITY: KIRTLAND
CODE:

LOCATION: EP SAN JUAN PLANT
CODE: 2 9 N 1 5 W 0 1
TOWNSHIP RANGE SECTION TRACTS

pH= 7.5 ; Conductivity= 1300 umho/cm at 22.5 °C; Chlorine Residual=
Dissolved Oxygen= mg/l; Alkalinity= ; Flow Rate=
Sampling Location, Methods and Remarks (i.e. odors, etc.)

SOURCE: COOLER BACKWASH ; GRAVITY DRAIN TO FLARE PIT
SUMP 24" DEEP
BLACK SUSPENDED SOLIDS

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Tami Bailey
Method of shipment to the Laboratory Hand carried
This form accompanies 2 Septum Vials, Glass Jugs,
Containers are marked as follows to indicate preservation:
☐ NP: No preservation; sample stored at room temperature.
☒ P-Ice Sample stored in an ice bath (not frozen).
☐ P-$Na_2S_2O_3$; Sample preserved with $Na_2S_2O_3$ to remove chlorine residual.

I (we) certify that this sample was transferred from
to at (location) on
/ / - : and that the statements in this block are correct.
DATE AND TIME
Evidentiary Seals: Not Sealed ☐ Seals Intact: Yes ☐ No ☐
Signatures

(we) certify that this sample was transferred from
to at (location) on
/ / - : and that the statements in this block are correct.
DATE AND TIME
Evidentiary Seals: Not Sealed ☐ Seals Intact: Yes ☐ No ☐
Signatures

ANALYSES REQUESTED

LAB. No.: ORG- 592

PLEASE CHECK THE APPROPRIATE BOXES BELOW TO INDICATE THE TYPE OF ANALYTICAL SCREENS REQUIRED. WHENEVER POSSIBLE LIST SPECIFIC COMPOUNDS SUSPECTED OR REQUIRED.

QUALITATIVE	QUANTITATIVE	PURGEABLE SCREENS	QUALITATIVE	QUANTITATIVE	EXTRACTABLE SCREENS
		ALIPHATIC HYDROCARBON SCREEN			ALIPHATIC HYDROCARBONS
X	X	AROMATIC HYDROCARBON SCREEN			CHLORINATED HYDROCARBON PESTICIDES
X	X	HALOGENATED HYDROCARBON SCREEN			CHLOROPHENOXY ACID HERBICIDES
		GAS CHROMATOGRAPH/MASS SPECTROMETER			HYDROCARBON FUEL SCREEN
					ORGANOPHOSPHATE PESTICIDES
					POLYCHLORINATED BIPHENYLS (PCB's)
					POLYNUCLEAR AROMATIC HYDROCARBONS
					TRIAZINE HERBICIDES
		SPECIFIC COMPOUNDS			SPECIFIC COMPOUNDS

REMARKS:

ANALYTICAL RESULTS

COMPOUND	[PPB]	COMPOUND	[PPB]
Halogenated purgeables	none detected		
benzene	83		
toluene	37		
ethylbenzene	none detected		
p-xylene	none detected		
m-xylene	11		
o-xylene	none detected		
		* DETECTION LIMIT	10 ug/L

REMARKS:

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes___ NO X. Seal(s) broken by:_____ date:_____

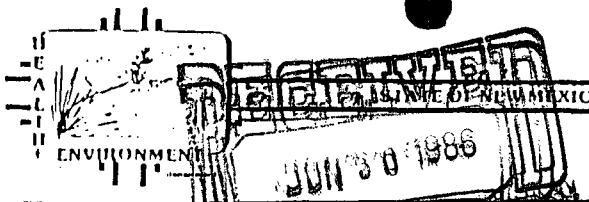
I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements in this block and the analytical data on this page accurately reflect the analytical results for this sample.

Date(s) of analysis: 10 June 86. Analyst's signature: [signature]

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewers signature: [signature]

FOR OCD USE -- Date Owner Notified_____ Phone or letter?_____ Initials_____

754
3



SCIENTIFIC LABORATORY DIVISION

700 Camino de Salud NE
Albuquerque, NM 87106 841-2570

86- 0598-C

REPORT TO: DAVID BOYER
PLEASE PRINT
NEW MEXICO OIL CONSERVATION DIV.
P.O. BOX 2088
SANTA FE, NM 87504-2088
PHONE(S): 827-5812

S.L.D. No.: OR- 598-H B
DATE REC. : 5/22/86
SLD PRIORITY #:

USER CODE: 8 2 2 3 5

SUBMITTER: DAVID BOYER
SUBMITTER CODE:

SAMPLE TYPE: WATER ☑, SOIL ☐, OTHER
SAMPLE TYPE CODE:

COLLECTED: 5/20/86 - 14:40 BY DB
DATE TIME INITIALS
CODE: 8 6 0 5 2 0 1 4 4 0 DM
Y Y M M D D H H M M I I I

SOURCE: P-2
CODE:
AQUIFER DEPTH

NEAREST CITY: KIRTLAND
CODE:

LOCATION: EP SAN JUAN PLANT
CODE: 2 9 N 1 5 W 0 1
TOWNSHIP RANGE SECTION TRACTS

pH= 7.5 ; Conductivity= 11900 umho/cm at 18.5 °C; Chlorine Residual=
Dissolved Oxygen= mg/l; Alkalinity= ; Flow Rate=
Sampling Location, Methods and Remarks (i.e. odors, etc.)

BAILED 5 TIMES
BETWEEN POND 1 + POND 3

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Dave Boyer
Method of shipment to the Laboratory Hand carried
This form accompanies 2 Septum Vials, Glass Jugs,
Containers are marked as follows to indicate preservation:

- ☐ NP: No preservation; sample stored at room temperature.
- ☒ P-Ice Sample stored in an ice bath (not frozen).
- ☐ P-$Na_2S_2O_3$; Sample preserved with $Na_2S_2O_3$ to remove chlorine residual.

I (we) certify that this sample was transferred from
to at (location) on
__/__/__ - __:__ and that the statements in this block are correct.
DATE AND TIME
Evidentiary Seals: Not Sealed ☐ Seals Intact: Yes ☐ No ☐
Signatures

(we) certify that this sample was transferred from
to at (location) on
__/__/__ - __:__ and that the statements in this block are correct.
DATE AND TIME
Evidentiary Seals: Not Sealed ☐ Seals Intact: Yes ☐ No ☐
Signatures

ANALYSES REQUESTED

LAB. No.: ORG- 598

PLEASE CHECK THE APPROPRIATE BOXES BELOW TO INDICATE THE TYPE OF ANALYTICAL SCREENS REQUIRED. WHENEVER POSSIBLE LIST SPECIFIC COMPOUNDS SUSPECTED OR REQUIRED.

QUALITATIVE	QUANTITATIVE	PURGEABLE SCREENS	QUALITATIVE	QUANTITATIVE	EXTRACTABLE SCREENS
		ALIPHATIC HYDROCARBON SCREEN			ALIPHATIC HYDROCARBONS
X	X	AROMATIC HYDROCARBON SCREEN			CHLORINATED HYDROCARBON PESTICIDES
X	X	HALOGENATED HYDROCARBON SCREEN			CHLOROPHENOXY ACID HERBICIDES
		GAS CHROMATOGRAPH/MASS SPECTROMETER			HYDROCARBON FUEL SCREEN
					ORGANOPHOSPHATE PESTICIDES
					POLYCHLORINATED BIPHENYLS (PCB's)
					POLYNUCLEAR AROMATIC HYDROCARBONS
					TRIAZINE HERBICIDES
		SPECIFIC COMPOUNDS			SPECIFIC COMPOUNDS

REMARKS:

ANALYTICAL RESULTS

COMPOUND	[PPB]	COMPOUND	[PPB]
aromatic purgeables	none detected		
halogenated purgeables	none detected		
		* DETECTION LIMIT	5 ug/l

REMARKS:

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes___ NO X. 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 analytical data on this page accurately reflect the analytical results for this sample.

Date(s) of analysis: 10 June 86. Analyst's signature: J. Tierney

I certify that I have reviewed and concur with the analytical results for ~~this~~ sample and with the statements in this block. Reviewers signature: K. Meyerhen

FOR OCD USE -- Date Owner Notified_____ Phone or letter?_____ Initials_____

ENVIRONMENT

86- 0594-C

STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 841-2570

754
3

RECEIVED

REPORT TO: DAVID G. BOYER
PLEASE PRINT
NEW MEXICO OIL CONSERVATION DIV.
P.O. BOX 2088
SANTA FE, NM 87504-2088
PHONE(S): 827-5812

S.L.D. No.: OR- 594-17.B
DATE REC. : 5/22/86
SLD PRIORITY #:

USER CODE: 8|2|2|3|5|

SUBMITTER: DAVID BOYER
SUBMITTER CODE: | | | |

SAMPLE TYPE: WATER [X], SOIL [ ], OTHER
SAMPLE TYPE CODE: | |

COLLECTED: 5/20/86 - 11:27 BY DB
DATE TIME INITIALS
CODE: 8|6|0|5|2|0|1|1|2|7|-|-|-|
Y Y M M D D H H M M I I I

SOURCE: SEEP POND - EP SAN JUAN PLANT
CODE: | | | + | | | + | | | | | |
AQUIFER DEPTH

NEAREST CITY: KIRTLAND
CODE: | | | | | |

LOCATION:
CODE: T|2|9|N|R|1|5|W| | | (SEC 1)
TOWNSHIP RANGE SECTION TRACTS

pH= 8.5 ; Conductivity= 15,400 umho/cm at 22.5 °C; Chlorine Residual=
Dissolved Oxygen= mg/l; Alkalinity= ; Flow Rate=
Sampling Location, Methods and Remarks (i.e. odors, etc.)

MOSQUITO INFESTED. SALT SEEPS OUT DITCH FR. POND

N OF FRESH WATER POND

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Jami Bailey
Method of shipment to the Laboratory Hand carried
This form accompanies 2 Septum Vials, Glass Jugs,
Containers are marked as follows to indicate preservation:
[ ] NP: No preservation; sample stored at room temperature.
[X] P-Ice Sample stored in an ice bath (not frozen).
[ ] P-$Na_2S_2O_3$; Sample preserved with $Na_2S_2O_3$ to remove chlorine residual.

I (we) certify that this sample was transferred from
to at (location) on
__/__/__ - __:__ and that the statements in this block are correct.
DATE AND TIME
Evidentiary Seals: Not Sealed [ ] Seals Intact: Yes [ ] No [ ]
Signatures

(we) certify that this sample was transferred from
to at (location) on
__/__/__ - __:__ and that the statements in this block are correct.
DATE AND TIME
Evidentiary Seals: Not Sealed [ ] Seals Intact: Yes [ ] No [ ]
Signatures

ANALYSES REQUESTED

LAB. No.: ORG- 594

PLEASE CHECK THE APPROPRIATE BOXES BELOW TO INDICATE THE TYPE OF ANALYTICAL SCREENS REQUIRED. WHENEVER POSSIBLE LIST SPECIFIC COMPOUNDS SUSPECTED OR REQUIRED.

QUALITATIVE	QUANTITATIVE	PURGEABLE SCREENS	QUALITATIVE	QUANTITATIVE	EXTRACTABLE SCREENS
X	X	ALIPHATIC HYDROCARBON SCREEN			ALIPHATIC HYDROCARBONS
X	X	AROMATIC HYDROCARBON SCREEN			CHLORINATED HYDROCARBON PESTICIDES
X	X	HALOGENATED HYDROCARBON SCREEN			CHLOROPHENOXY ACID HERBICIDES
		GAS CHROMATOGRAPH/MASS SPECTROMETER			HYDROCARBON FUEL SCREEN
					ORGANOPHOSPHATE PESTICIDES
					POLYCHLORINATED BIPHENYLS (PCB's)
					POLYNUCLEAR AROMATIC HYDROCARBONS
					TRIAZINE HERBICIDES
		SPECIFIC COMPOUNDS			SPECIFIC COMPOUNDS

REMARKS:

ANALYTICAL RESULTS

COMPOUND	[PPB]	COMPOUND	[PPB]
aromatic purgeables	none detected		
halogenated purgeables	none detected		
		* DETECTION LIMIT	5 ug/l

REMARKS:

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes___ NO X. 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 analytical data on this page accurately reflect the analytical results for this sample.

Date(s) of analysis: 10 June 86. Analyst's signature: [signature]

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewers signature: [signature]

FOR OCD USE -- Date Owner Notified_____ Phone or letter?_____ Initials_____

New Mexico Health and Environment Department
SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 — (505) 841-2555

2
850

GENERAL WATER CHEMISTRY and NITROGEN ANALYSIS

DATE RECEIVED 5 22 86	LAB NO. WC 2231	USER CODE ☐ 59300 ☐ 59600 ☒ OTHER: 82235	
Collection DATE 5 20 86	WC 2232 SITE INFORM-ATION ►	Sample location SEEP POND	
Collection TIME 1127		Collection site description EP SAN JUAN PLANT	
Collected by — Person/Agency BOYER / OCD		See 1 T29N R15W	

SEND FINAL REPORT TO ►
ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg, PO Box 2088
Santa Fe, NM 87504-2088
Attn: David Boyer
Phone: 827-5812

Station/ well code
Owner

SAMPLING CONDITIONS

☐ Bailed ☒ Dipped ☐ Pump ☐ Tap	Water level	Discharge	Sample type GRAB
pH (00400) 8.5	Conductivity (Uncorrected) 15400 µmho	Water Temp. (00010) 22.5 °C	Conductivity at 25°C (00094) µmho

Field comments: MOSQUITO INFESTED, SALT SEEPS OUT DITCH FROM POND

SAMPLE FIELD TREATMENT — *Check proper boxes*

No. of samples submitted 1

☐ NF: Whole sample (Non-filtered) ☒ F: Filtered in field with 0.45 µmembrane filter ☐ A: 2 ml H_2SO_4/L added

☒ NA: No acid added ☐ Other-specify: ☐ A: 5ml conc. HNO_3 added ☐ A: 4ml fuming HNO_3 added

ANALYTICAL RESULTS from SAMPLES

NF, NA		Units	Date analyzed
☐ Conductivity (Corrected) 25°C (00095)		µmho	
☐ Total non-filterable residue (suspended) (00530)		mg/l	
☐ Other:			
☐ Other:			
☐ Other:			

F, NA		Units	Date analyzed
☒ Calcium (00915)	332	mg/l	6-2
☒ Magnesium (00925)	290.4	mg/l	"
☒ Sodium (00930)	6210	mg/l	"
☒ Potassium (00935)	14.8	mg/l	"
☒ Bicarbonate (00440)	482	mg/l	5/26
☒ Chloride (00940)	1625	mg/l	6/5
☒ Sulfate (00945)	12167	mg/l	6/2
☒ Total filterable residue (dissolved) (70300)	18,410	mg/l	5/28
☒ Other: CO_3	0		5/26

NF, A-H_2SO_4			
☐ Nitrate-N +, Nitrate-N total (00630)		mg/l	
☐ Ammonia-N total (00610)		mg/l	
☐ Total Kjeldahl-N ( )		mg/l	
☐ Chemical oxygen demand (00340)		mg/l	
☐ Total organic carbon ( )		mg/l	
☐ Other:			
☐ Other:			

F, A-H_2SO_4			
☐ Nitrate-N +, Nitrate-N dissolved (00631)		mg/l	
☐ Ammonia-N dissolved (00608)		mg/l	
☐ Total Kjeldahl-N ( )		mg/l	
☐ Other:			

Analyst	Date Reported	Reviewed by
	6 11 86	CN

Laboratory remarks

SLD 726 (12/84)

FOR OCD USE -- Date Owner Notified _____ Phone or letter? _____ Initials _____

101

754
3

STATE OF NEW MEXICO
ENVIRONMENT

SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 841-2570

86-0597-C

REPORT TO: DAVID G. BOYER
PLEASE PRINT
NEW MEXICO OIL CONSERVATION DIV.
P.O. BOX 2088
SANTA FE, NM 87504-2088
PHONE(S): 827-5812

S.L.D. No.: OR-597-A.B
DATE REC. : 5/22/86
SLD PRIORITY #:

USER CODE: 8 2 2 3 5

SUBMITTER: DAVID BOYER
SUBMITTER CODE:

SAMPLE TYPE: WATER [X], SOIL [ ], OTHER
SAMPLE TYPE CODE:

COLLECTED: 5/20/86 - 15:00 BY DB
DATE TIME INITIALS
CODE: 8 6 0 5 2 0 1 5 0 0 D B
Y Y M M D D H H M M I I I

SOURCE: POND 1
CODE:
AQUIFER DEPTH

NEAREST CITY: KIRTLAND
CODE:

LOCATION: EP SAN JUAN PLANT
CODE: 2 9 N 1 5 W 0 1
TOWNSHIP RANGE SECTION TRACTS

pH= 6.7 ; Conductivity= 5500 umho/cm at 30 °C; Chlorine Residual=
Dissolved Oxygen= mg/l; Alkalinity= ; Flow Rate=
Sampling Location, Methods and Remarks (i.e. odors, etc.)
SOURCES of FLUIDS: 6" + 8" PLANT DRAINS; 6" BLOWDOWN; 1 TOILET

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. [signature]
Method of shipment to the Laboratory Hand carried
This form accompanies 2 Septum Vials, Glass Jugs,
Containers are marked as follows to indicate preservation:
[ ] NP: No preservation; sample stored at room temperature.
[X] P-Ice Sample stored in an ice bath (not frozen).
[ ] P-$Na_2S_2O_3$; Sample preserved with $Na_2S_2O_3$ to remove chlorine residual.

I (we) certify that this sample was transferred from
to at (location) on
/ / - : and that the statements in this block are correct.
DATE AND TIME
Evidentiary Seals: Not Sealed [ ] Seals Intact: Yes [ ] No [ ]
Signatures

(we) certify that this sample was transferred from
to at (location) on
/ / - : and that the statements in this block are correct.
DATE AND TIME
Evidentiary Seals: Not Sealed [ ] Seals Intact: Yes [ ] No [ ]
Signatures

ANALYSES REQUESTED

LAB. No.: ORG- 597

PLEASE CHECK THE APPROPRIATE BOXES BELOW TO INDICATE THE TYPE OF ANALYTICAL SCREENS REQUIRED. WHENEVER POSSIBLE LIST SPECIFIC COMPOUNDS SUSPECTED OR REQUIRED.

QUALITATIVE	QUANTITATIVE	PURGEABLE SCREENS	QUALITATIVE	QUANTITATIVE	EXTRACTABLE SCREENS
		ALIPHATIC HYDROCARBON SCREEN			ALIPHATIC HYDROCARBONS
X	X	AROMATIC HYDROCARBON SCREEN			CHLORINATED HYDROCARBON PESTICIDES
X	X	HALOGENATED HYDROCARBON SCREEN			CHLOROPHENOXY ACID HERBICIDES
		GAS CHROMATOGRAPH/MASS SPECTROMETER			HYDROCARBON FUEL SCREEN
					ORGANOPHOSPHATE PESTICIDES
					POLYCHLORINATED BIPHENYLS (PCB's)
					POLYNUCLEAR AROMATIC HYDROCARBONS
					TRIAZINE HERBICIDES
		SPECIFIC COMPOUNDS			SPECIFIC COMPOUNDS

REMARKS:

ANALYTICAL RESULTS

COMPOUND	[PPB]	COMPOUND	[PPB]
halogenated purgeables	none detected		
benzene	74		
toluene	22		
ethylbenzene	none detected		
p-xylene	none detected		
m-xylene	none detected		
o-xylene	none detected		
		* DETECTION LIMIT	5 ugm/l

REMARKS:

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes___ NO X. 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 analytical data on this page accurately reflect the analytical results for this sample.

Date(s) of analysis: 10 June 86. Analyst's signature: J. Tinney

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewers signature: K Meyerhen

FOR OCD USE -- Date Owner Notified_____ Phone or letter?_____ Initials_____

964
3

STATE OF NEW MEXICO ENVIRONMENT

86-0602-B

SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 841-2570

REPORT TO: DAVID G. BOYER
PLEASE PRINT
NEW MEXICO OIL CONSERVATION DIV.
P.O. BOX 2088
SANTA FE, NM 87504-2088

PHONE(S): 827-5812

S.L.D. No.: OR-602-17
DATE REC. : 5/22/86
SLD PRIORITY #:

USER CODE: 8 2 2 3 5

SUBMITTER: DAVE BOYER

SUBMITTER CODE:

SAMPLE TYPE: WATER [X], SOIL [ ], OTHER _____

SAMPLE TYPE CODE:

COLLECTED: 86/05/20 - 13:00 BY DB
DATE TIME INITIALS

CODE: 8 6 0 5 2 0 1 5 0 0 D B
Y Y M M D D H H M M I I I

SOURCE: POND 1

CODE: AQUIFER DEPTH

NEAREST CITY: ~~FARA~~ ~~HOSA~~ KIRTLAND

CODE:

LOCATION: EP SAN JUAN PLANT

CODE: 29N 15W 01
TOWNSHIP RANGE SECTION TRACTS

pH=_____; Conductivity=_____umho/cm at _____°C; Chlorine Residual=_____

Dissolved Oxygen=_____mg/l; Alkalinity=_____; Flow Rate=_____

Sampling Location, Methods and Remarks (i.e. odors, etc.)

Between inlet + outlet HC Sheen

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Jamie Bailey

Method of shipment to the Laboratory Hand carried

This form accompanies ___ Septum Vials, 1 Glass Jugs, ___ _____

Containers are marked as follows to indicate preservation:

[ ] NP: No preservation; sample stored at room temperature.
[X] P-Ice Sample stored in an ice bath (not frozen).
[ ] P-$Na_2S_2O_3$; Sample preserved with $Na_2S_2O_3$ to remove chlorine residual.

I (we) certify that this sample was transferred from _____

to _____ at (location) _____ on

__/__/__ - __:__ and that the statements in this block are correct.
DATE AND TIME

Evidentiary Seals: Not Sealed [ ] Seals Intact: Yes [ ] No [ ]

Signatures _____ _____

(we) certify that this sample was transferred from _____

to _____ at (location) _____ on

__/__/__ - __:__ and that the statements in this block are correct.
DATE AND TIME

Evidentiary Seals: Not Sealed [ ] Seals Intact: Yes [ ] No [ ]

Signatures _____ _____

ANALYSES REQUESTED

LAB. No.: ORG-602

PLEASE CHECK THE APPROPRIATE BOXES BELOW TO INDICATE THE TYPE OF ANALYTICAL SCREENS REQUIRED. WHENEVER POSSIBLE LIST SPECIFIC COMPOUNDS SUSPECTED OR REQUIRED.

QUALITATIVE	QUANTITATIVE	PURGEABLE SCREENS	QUALITATIVE	QUANTITATIVE	EXTRACTABLE SCREENS
		ALIPHATIC HYDROCARBON SCREEN			ALIPHATIC HYDROCARBONS
		AROMATIC HYDROCARBON SCREEN			CHLORINATED HYDROCARBON PESTICIDES
		HALOGENATED HYDROCARBON SCREEN			CHLOROPHENOXY ACID HERBICIDES
		GAS CHROMATOGRAPH/MASS SPECTROMETER			HYDROCARBON FUEL SCREEN
					ORGANOPHOSPHATE PESTICIDES
					POLYCHLORINATED BIPHENYLS (PCB's)
			X	X	POLYNUCLEAR AROMATIC HYDROCARBONS
					TRIAZINE HERBICIDES
		SPECIFIC COMPOUNDS			SPECIFIC COMPOUNDS
					Naphthalene, Benzo a pyrene

REMARKS:

ANALYTICAL RESULTS

COMPOUND	[PPB]	COMPOUND	[PPB]
PNA's*	< MDL		
		* DETECTION LIMIT	

REMARKS:

MDL = * ALL PNA's < 5 ppb except dibenz(a,h) anthracene which is < 10 ppm

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 analytical data on this page accurately reflect the analytical results for this sample.

Date(s) of analysis: 7/9/86. Analyst's signature: C S Barney

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewers signature: K Meyerhoff

FOR OCD USE -- Date Owner Notified_____ Phone or letter?_____ Initials_____

New Mexico Health and Environment Department
SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 — (505) 841-2555

2
859

GENERAL WATER CHEMISTRY and NITROGEN ANALYSIS

DATE RECEIVED 5 22 86	LAB NO. WC 2229	USER CODE ☐ 59300 ☐ 59600 ☒ OTHER: 82235	
Collection DATE 5 20 86	2230 SITE INFORM-ATION	Sample location POND 1	
Collection TIME 1500		Collection site description EP SAN JUAN PLANT	
Collected by — Person/Agency BOYER / OCD		SEC 1 T29N R15W	

SEND FINAL REPORT TO ►

ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg, PO Box 2088
Santa Fe, NM 87504-2088

Attn: David Boyer

Phone: 827-5812

Station/ well code

Owner

SAMPLING CONDITIONS

☐ Bailed ☒ Dipped ☐ Pump ☐ Tap	Water level	Discharge	Sample type GRAB
pH (00400) 6.7	Conductivity (Uncorrected) 5500 µmho	Water Temp. (00010) 30 °C	Conductivity at 25°C (00094) µmho

Field comments SAMPLED MIDWAY BETWEEN INLETS & PUMP. SOURCES OF FLUIDS: 6" & 8" PLANT DRAINS & 6" BLOWDOWN. TOILET DRAINS TO 6" PLANT DRAIN

SAMPLE FIELD TREATMENT — *Check proper boxes*

No. of samples submitted 1

☐ NF: Whole sample (Non-filtered) ☒ F: Filtered in field with 0.45 µmembrane filter ☐ A: 2 ml H_2SO_4/L added

☒ NA: No acid added ☐ Other-*specify:* ☐ A: 5ml conc. HNO_3 added ☐ A: 4ml fuming HNO_3 added

ANALYTICAL RESULTS from SAMPLES

NF, NA		Units	Date analyzed
☐ Conductivity (Corrected) 25°C (00095)		µmho	
☐ Total non-filterable residue (suspended) (00530)		mg/l	
☐ Other:			
☐ Other:			
☐ Other:			

F, NA		Units	Date analyzed
☒ Calcium (00915)	52.0	mg/l	6-2
☒ Magnesium (00925)	18.6	mg/l	"
☒ Sodium (00930)	966	mg/l	"
☒ Potassium (00935)	2.02	mg/l	"
☒ Bicarbonate (00440)	140	mg/l	5/26
☒ Chloride (00940)	1478	mg/l	6/5
☒ Sulfate (00945)	164	mg/l	6/2
☒ Total filterable residue (dissolved) (70300)	2785	mg/l	5/28
☒ Other: CO_3	0		5/26

NF, A-H_2SO_4			
☐ Nitrate-N +, Nitrate-N total (00630)		mg/l	
☐ Ammonia-N total (00610)		mg/l	
☐ Total Kjeldahl-N ( )		mg/l	
☐ Chemical oxygen demand (00340)		mg/l	
☐ Total organic carbon ( )		mg/l	
☐ Other:			
☐ Other:			

F, A-H_2SO_4			
☐ Nitrate-N +, Nitrate-N dissolved (00631)		mg/l	
☐ Ammonia-N dissolved (00608)		mg/l	
☐ Total Kjeldahl-N ( )		mg/l	
☐ Other:			

Analyst	Date Reported	Reviewed by
	6 11 86	CO

Laboratory remarks

SLD 726 (12/84)

97

FOR OCD USE -- Date Owner Notified _____ Phone or letter? _____ Initials _____

New Mexico Health and E[illegible]ment Department
SCIENTIFIC LABORATOR[illegible]VISION
700 Camino de Salud NE
Albuquerque, NM 87106 — (505) 841-2555

857
1

GENERAL WATER CHEMISTRY and NITROGEN ANALYSIS

DATE RECEIVED 5 22 86	LAB NO. 2235	USER CODE ☐ 59300 ☐ 59600 ☒ OTHER: 82235	
Collection DATE 5 20 86	SITE INFORM-ATION ►	Sample location POND 1	
Collection TIME 1500		Collection site description EP SAN JUAN PLANT	
Collected by — Person/Agency BOYER / OCD		Sec 1 T29N R15W	

SEND FINAL REPORT TO ►

ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg, PO Box 2088
Santa Fe, NM 87504-2088

Attn: David Boyer

Phone: 827-5812

[illegible] CONSERVATION DIVISION [illegible]

Station/ well code

Owner

SAMPLING CONDITIONS

☐ Bailed ☐ Pump ☒ Dipped ☐ Tap	Water level	Discharge	Sample type GRAB
pH (00400) 6.7	Conductivity (Uncorrected) 5500 µmho	Water Temp. (00010) 30 °C	Conductivity at 25°C (00094) µmho

Field comments SAMPLED MIDWAY BETWEEN INLETS & PUMP. SOURCES of FLUIDS: PLANT DRAINS. 1 TOILET DRAINS TO 6" PLANT DRAIN

SAMPLE FIELD TREATMENT — *Check proper boxes*

No. of samples submitted 1

☐ NF: Whole sample (Non-filtered) ☒ F: Filtered in field with 0.45 µmembrane filter ☒ A: 2 ml H_2SO_4/L added

☐ NA: No acid added ☐ Other-*specify:* ☐ A: 5ml conc. HNO_3 added ☐ A: 4ml fuming HNO_3 added

ANALYTICAL RESULTS from SAMPLES

NF, NA	Units	Date analyzed	F, NA	Units	Date analyzed
☐ Conductivity (Corrected) 25°C (00095)	µmho		☐ Calcium (00915)	mg/l	
☐ Total non-filterable residue (suspended) (00530)	mg/l		☐ Magnesium (00925)	mg/l	
☐ Other:			☐ Sodium (00930)	mg/l	
☐ Other:			☐ Potassium (00935)	mg/l	
☐ Other:			☐ Bicarbonate (00440)	mg/l	
			☐ Chloride (00940)	mg/l	
			☐ Sulfate (00945)	mg/l	
			☐ Total filterable residue (dissolved) (70300)	mg/l	
			☐ Other:		

NF, A-H_2SO_4	Units	Date analyzed	F, A-H_2SO_4	Units	Date analyzed
☐ Nitrate-N +, Nitrate-N total (00630)	mg/l		☒ Nitrate-N +, Nitrate-N dissolved (00631) 0.04	mg/l	6/2
☐ Ammonia-N total (00610)	mg/l		☒ Ammonia-N dissolved (00608) 5.0	mg/l	6-10
☐ Total Kjeldahl-N ( )	mg/l		☒ Total Kjeldahl-N ( ) 15.6	mg/l	6-10
☐ Chemical oxygen demand (00340)	mg/l		☐ Other:		
☐ Total organic carbon ( )	mg/l				
☐ Other:					
☐ Other:					

Analyst | Date Reported 6 11 86 | Reviewed by

Laboratory remarks

SLD 726 (12/84)

FOR OCD USE -- Date Owner Notified _____ Phone or letter? _____ Initials _____

New Mexico Health and Environment Department
SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 — (505) 841-2555

HEAVY METALS

GENERAL WATER CHEMISTRY and NITROGEN ANALYSIS

DATE RECEIVED 5 22 86	LAB NO. [illegible]	USER CODE ☐ 59300 ☐ 59600 ☒ OTHER: 82235	
Collection DATE 5 20 86	SITE INFORMATION ►	Sample location POND 1	
Collection TIME 1500		Collection site description EP SAN JUAN PLANT	
Collected by — Person/Agency BOYER/OCD		Sec 1 T29N R15W	

SEND FINAL REPORT TO ►

ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg, PO Box 2088
Santa Fe, NM 87504-2088

Attn: David Boyer

Phone: 827-5812

Station/ well code

Owner

SAMPLING CONDITIONS

☐ Bailed ☒ Dipped ☐ Pump ☐ Tap	Water level	Discharge	Sample type GRAB
pH (00400) 6.7	Conductivity (Uncorrected) 5500 µmho	Water Temp. (00010) 30 °C	Conductivity at 25°C (00094) µmho

Field comments SAMPLED MIDWAY BETWEEN INLETS + PUMP. SOURCES OF FLUIDS: PLANT DRAINS + BLOWDOWN. TOILET DRAINS TO 6" DRAIN

SAMPLE FIELD TREATMENT — *Check proper boxes*

No. of samples submitted 1	☐ NF: Whole sample (Non-filtered)	☒ F: Filtered in field with 0.45 µmembrane filter	☐ A: 2 ml H_2SO_4/L added
☐ NA: No acid added ☐ Other-*specify:*	☒ A: 5ml conc. HNO_3 added	☒ A: 4ml fuming HNO_3 added	

ANALYTICAL RESULTS from SAMPLES

~~NF, NA~~ F, NA	Units	Date analyzed	F, NA	Units	Date analyzed
☐ Conductivity (Corrected) 25°C (00095)	µmho		☐ Calcium (00915)	mg/l	
☐ Total non-filterable residue (suspended) (00530)	mg/l		☐ Magnesium (00925)	mg/l	
☒ Other: ICAP SCAN			☐ Sodium (00930)	mg/l	
☒ Other: AS			☐ Potassium (00935)	mg/l	
☒ Other: Se			☐ Bicarbonate (00440)	mg/l	
			☐ Chloride (00940)	mg/l	
			☐ Sulfate (00945)	mg/l	
			☐ Total filterable residue (dissolved) (70300)	mg/l	
			☐ Other:		

NF, A-H_2SO_4			F, A-H_2SO_4		
☐ Nitrate-N +, Nitrate-N total (00630)	mg/l		☐ Nitrate-N +, Nitrate-N dissolved (00631)	mg/l	
☐ Ammonia-N total (00610)	mg/l		☐ Ammonia-N dissolved (00608)	mg/l	
☐ Total Kjeldahl-N ( )	mg/l		☐ Total Kjeldahl-N ( )	mg/l	
☐ Chemical oxygen demand (00340)	mg/l		☐ Other:		
☐ Total organic carbon ( )	mg/l				
☐ Other:					
☐ Other:					

Analyst | Date Reported 7 23 86 | Reviewed by Jim Ashley

Laboratory remarks

SLD 726 (12/84)

FOR OCD USE -- Date Owner Notified _____ Phone or letter? _____ Initials _____

Lab Number: #[redacted]997

Sample [redacted]e: Pond 1 E Plant San Juan Plant

Date Submitted: 5/22/86

Date Analyzed: 5/28/86

By: Boyer

Reviewed By: Jim Ashby

Date Reported: 7/23/86

Element	ICAP VALUE(MG/L)	AA VALUE(MG/L)
Aluminum	<0.1	
Barium	0.1	
Berylium	<0.1	
Boron	<0.1	
Cadmium	<0.1	
Calcium	70.	
Chromium	<0.1	
Cobalt	<0.1	
Copper	<0.1	
Iron	0.1	
Lead	<0.1	
Magnesium	14.	
Manganese	0.07	
Molybdenum	<0.1	
Nickel	<0.1	
Silicon	<0.1	
Silver	<0.1	
Strontium	1.0	
Tin	<0.1	
Vanadium	<0.1	
Zinc	<0.1	
Arsenic		<0.005
Selenium		<0.01
Mercury		

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3

STATE OF NEW MEXICO
ENVIRONMENT

86-0584-C

SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 841-2570

REPORT TO: DAVID G. BOYER
PLEASE PRINT
NEW MEXICO OIL CONSERVATION DIV.
P.O. BOX 2088
SANTA FE, NM 87504-2088
PHONE(S): 827-5812

RECEIVED
JUN 30 1986
OIL CONSERVATION DIVISION
SANTA FE

S.L.D. No.: OR- 584-HB
DATE REC. : 5/22/86
SLD PRIORITY #:

USER CODE: 8 2 2 3 5

SUBMITTER: DAVID
SUBMITTER CODE:

SAMPLE TYPE: WATER [X], SOIL [ ], OTHER
SAMPLE TYPE CODE:

COLLECTED: 5/21/86 - 10:10 BY DB
DATE TIME INITIALS
CODE: 8 6 0 5 2 1 1 0 1 0 DB
Y Y M M D D H H M M I I I

SOURCE: P4
CODE:
AQUIFER DEPTH

NEAREST CITY: KIRTLAND
CODE:

LOCATION: EP SAN JUAN PLANT
CODE: 2 9 N 1 5 W 1 0 1
TOWNSHIP RANGE SECTION TRACTS

pH= 7.5 ; Conductivity= 30500 umho/cm at 20.5 °C; Chlorine Residual=
Dissolved Oxygen= mg/l; Alkalinity= ; Flow Rate=
Sampling Location, Methods and Remarks (i.e. odors, etc.)

Vacuum pump evacuated well. BAILED for VOA
Sampled recharge water

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. DB
Method of shipment to the Laboratory Hand carried
This form accompanies 25 Septum Vials, Glass Jugs,
Containers are marked as follows to indicate preservation:

- [ ] NP: No preservation; sample stored at room temperature.
- [X] P-Ice Sample stored in an ice bath (not frozen).
- [ ] P-$Na_2S_2O_3$; Sample preserved with $Na_2S_2O_3$ to remove chlorine residual.

I (we) certify that this sample was transferred from
to at (location) on
/ / - : and that the statements in this block are correct.
DATE AND TIME
Evidentiary Seals: Not Sealed [ ] Seals Intact: Yes [ ] No [ ]
Signatures

(we) certify that this sample was transferred from
to at (location) on
/ / - : and that the statements in this block are correct.
DATE AND TIME
Evidentiary Seals: Not Sealed [ ] Seals Intact: Yes [ ] No [ ]
Signatures

ANALYSES REQUESTED

LAB. No.: ORG- 584

PLEASE CHECK THE APPROPRIATE BOXES BELOW TO INDICATE THE TYPE OF ANALYTICAL SCREENS REQUIRED. WHENEVER POSSIBLE LIST SPECIFIC COMPOUNDS SUSPECTED OR REQUIRED.

QUALITATIVE	QUANTITATIVE	PURGEABLE SCREENS	QUALITATIVE	QUANTITATIVE	EXTRACTABLE SCREENS
		ALIPHATIC HYDROCARBON SCREEN			ALIPHATIC HYDROCARBONS
X	X	AROMATIC HYDROCARBON SCREEN			CHLORINATED HYDROCARBON PESTICIDES
X	X	HALOGENATED HYDROCARBON SCREEN			CHLOROPHENOXY ACID HERBICIDES
		GAS CHROMATOGRAPH/MASS SPECTROMETER			HYDROCARBON FUEL SCREEN
					ORGANOPHOSPHATE PESTICIDES
					POLYCHLORINATED BIPHENYLS (PCB's)
					POLYNUCLEAR AROMATIC HYDROCARBONS
					TRIAZINE HERBICIDES
		SPECIFIC COMPOUNDS			SPECIFIC COMPOUNDS

REMARKS:

ANALYTICAL RESULTS

COMPOUND	[PPB]	COMPOUND	[PPB]
aromatic purgeables	none detected		
halogenated purgeables	none detected		
		* DETECTION LIMIT	10 ug/L

REMARKS:

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes___ NO X. 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 analytical data on this page accurately reflect the analytical results for this sample.

Date(s) of analysis: 6 & 10 June 86. Analyst's signature: J. C. Tinney

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewers signature: K. Meyerhoff

FOR OCD USE -- Date Owner Notified_____ Phone or letter?_____ Initials_____

New Mexico Health and Environment Department
SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 — (505) 841-2555

859
3

GENERAL WATER CHEMISTRY and NITROGEN ANALYSIS

DATE RECEIVED 5 22 86	LAB NO. WC-2244	USER CODE ☐ 59300 ☐ 59600 ☒ OTHER: 82235	
Collection DATE 5 21 86	CO3 WC2245 SITE INFORM-ATION ►	Sample location P4	
Collection TIME 1010		Collection site description EPNG SAN JUAN PLANT	
Collected by — Person/Agency BOYER/OCD			

RECEIVED JUL OIL CONSERVATION DIVISION

SEND FINAL REPORT TO ►
ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg, PO Box 2088
Santa Fe, NM 87504-2088

Attn: David Boyer

Phone: 827-5812

Sec 1 T29N R15W

Station/ well code

Owner

SAMPLING CONDITIONS

☒ Bailed ☐ Dipped ☐ Pump ☐ Tap	Water level	Discharge	Sample type
pH (00400) 7.5	Conductivity (Uncorrected) 30,500 µmho	Water Temp. (00010) 20.5 °C	Conductivity at 25°C (00094) µmho

Field comments Steven Arroyo

SAMPLE FIELD TREATMENT — *Check proper boxes*

No. of samples submitted

☒ NF: Whole sample (Non-filtered) ☐ F: Filtered in field with 0.45 µmembrane filter ☐ A: 2 ml H_2SO_4/L added

☒ NA: No acid added ☐ Other-*specify:* ☐ A: 5ml conc. HNO_3 added ☒ A: 4ml fuming HNO_3 added

ANALYTICAL RESULTS from SAMPLES

NF, NA		Units	Date analyzed
☐ Conductivity (Corrected) 25°C (00095)		µmho	
☐ Total non-filterable residue (suspended) (00530)		mg/l	
☐ Other:			
☐ Other:			
☐ Other:			

F, NA		Units	Date analyzed
☒ Calcium (00915)	560.0	mg/l	6-2
☒ Magnesium (00925)	1000	mg/l	"
☒ Sodium (00930)	16000	mg/l	"
☒ Potassium (00935)	283	mg/l	"
☒ Bicarbonate (00440)	615	mg/l	5/26
☒ Chloride (00940)	3617	mg/l	6/5
☒ Sulfate (00945)	24199	mg/l	6/2
☒ Total filterable residue (dissolved) (70300)	42,680	mg/l	5/28
☒ Other: CO3	0		5/26

NF, A-H_2SO_4			
☐ Nitrate-N +, Nitrate-N total (00630)		mg/l	
☐ Ammonia-N total (00610)		mg/l	
☐ Total Kjeldahl-N ( )		mg/l	
☐ Chemical oxygen demand (00340)		mg/l	
☐ Total organic carbon ( )		mg/l	
☐ Other:			
☐ Other:			

F, A-H_2SO_4			
☐ Nitrate-N +, Nitrate-N dissolved (00631)		mg/l	
☐ Ammonia-N dissolved (00608)		mg/l	
☐ Total Kjeldahl-N ( )		mg/l	
☐ Other:			

Analyst	Date Reported	Reviewed by
	6 11 86	

Laboratory remarks

SLD 726 (12/84)

FOR OCD USE -- Date Owner Notified Phone or letter? Initials

New Mexico Health and Environment Department
SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 — (505) 841-2555

850
3

GENERAL WATER CHEMISTRY and NITROGEN ANALYSIS

DATE RECEIVED 5 22 86 | LAB NO WC-2245 | USER CODE ☐ 59300 ☐ 59600 ☒ OTHER: 82235

Collection DATE 5 21 86 | Collection TIME 1010 | SITE INFORMATION ► | Sample location P4

Collected by — Person/Agency BOYER / OCD | Collection site description EP SAN JUAN PLANT

SEND FINAL REPORT TO ►

ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg, PO Box 2088
Santa Fe, NM 87504-2088

Attn: David Boyer

Phone: 827-5812

Sec 1 T29N R15W

Station/ well code

Owner

SAMPLING CONDITIONS

☒ Bailed ☐ Dipped ☐ Pump ☐ Tap	Water level	Discharge	Sample type
pH (00400) 7.5	Conductivity (Uncorrected) 30,500 µmho	Water Temp. (00010) 20.5 °C	Conductivity at 25°C (00094) µmho

Field comments Stevens arroyo

SAMPLE FIELD TREATMENT — *Check proper boxes*

No. of samples submitted | ☒ NF: Whole sample (Non-filtered) | ☐ F: Filtered in field with 0.45 µmembrane filter | ☐ A: 2 ml H_2SO_4/L added

☒ NA: No acid added | ☐ Other-*specify:* | ☐ A: 5ml conc. HNO_3 added | ☒ A: 4ml fuming HNO_3 added

ANALYTICAL RESULTS from SAMPLES

NF, NA	Units	Date analyzed
☐ Conductivity (Corrected) 25°C (00095)	µmho	
☐ Total non-filterable residue (suspended) (00530)	mg/l	
☐ Other:		
☐ Other:		
☐ Other:		

F, NA	Units	Date analyzed
☒ Calcium (00915)	mg/l	
☒ Magnesium (00925)	mg/l	
☒ Sodium (00930)	mg/l	
☒ Potassium (00935)	mg/l	
☒ Bicarbonate (00440)	mg/l	
☒ Chloride (00940)	mg/l	
☒ Sulfate (00945)	mg/l	
☒ Total filterable residue (dissolved) (70300)	mg/l	
☒ Other: CO_3	0	5/26

NF, A-H_2SO_4	Units	Date analyzed
☐ Nitrate-N +, Nitrate-N total (00630)	mg/l	
☐ Ammonia-N total (00610)	mg/l	
☐ Total Kjeldahl-N ( )	mg/l	
☐ Chemical oxygen demand (00340)	mg/l	
☐ Total organic carbon ( )	mg/l	
☐ Other:		
☐ Other:		

F, A-H_2SO_4	Units	Date analyzed
☐ Nitrate-N +, Nitrate-N dissolved (00631)	mg/l	
☐ Ammonia-N dissolved (00608)	mg/l	
☐ Total Kjeldahl-N ( )	mg/l	
☐ Other:		

Analyst | Date Reported 6 11 86 | Reviewed by

Laboratory remarks

SLD 726 (12/84)

FOR OCD USE -- Date Owner Notified _____ Phone or letter? _____ Initials _____

New Mexico Health and Environment Department
SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 — (505) 841-2555

pW

HEAVY METALS

GENERAL WATER CHEMISTRY and NITROGEN ANALYSIS

DATE RECEIVED 5 22 86	LAB NO HM-941	USER CODE ☐ 59300 ☐ 59600 ☒ OTHER: 82235	
Collection DATE 5 21 86	SITE INFORM-ATION ►	Sample location P4	
Collection TIME 1010		Collection site description EP SAN JUAN PLANT	
Collected by — Person/Agency BAILEY/OCD			

RECEIVED
SEP 11 1986
OIL CONSERVATION DIVISION
SANTA FE

Sec 1 T29N R15W

SEND FINAL REPORT TO ►

ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg, PO Box 2088
Santa Fe, NM 87504-2088

Attn: David Boyer

Phone: 827-5812

Station/ well code

Owner

SAMPLING CONDITIONS

☐ Bailed ☐ Dipped ☐ Pump ☐ Tap	Water level	Discharge	Sample type
pH (00400) 7.5	Conductivity (Uncorrected) 30,500 µmho	Water Temp. (00010) 30.5 °C	Conductivity at 25°C (00094) µmho

Field comments Stevens arroyo

SAMPLE FIELD TREATMENT — *Check proper boxes*

No. of samples submitted

☒ **NF:** Whole sample (Non-filtered) ☐ **F:** Filtered in field with 0.45 µmembrane filter ☐ **A:** 2 ml H_2SO_4/L added

☐ **NA:** No acid added ☐ Other-*specify:* ☐ A: 5ml conc. HNO_3 added ☒ A: 4ml fuming HNO_3 added

ANALYTICAL RESULTS from SAMPLES

NF, NA	Units	Date analyzed
☐ Conductivity (Corrected) 25°C (00095)	µmho	
☐ Total non-filterable residue (suspended) (00530)	mg/l	
☒ Other: ICAP SCAN		
☒ Other: As		
☒ Other: Se Hg		

F, NA	Units	Date analyzed
☐ Calcium (00915)	mg/l	
☐ Magnesium (00925)	mg/l	
☐ Sodium (00930)	mg/l	
☐ Potassium (00935)	mg/l	
☐ Bicarbonate (00440)	mg/l	
☐ Chloride (00940)	mg/l	
☐ Sulfate (00945)	mg/l	
☐ Total filterable residue (dissolved) (70300)	mg/l	
☐ Other:		

NF, A-H_2SO_4	Units	Date analyzed
☐ Nitrate-N +, Nitrate-N total (00630)	mg/l	
☐ Ammonia-N total (00610)	mg/l	
☐ Total Kjeldahl-N ( )	mg/l	
☐ Chemical oxygen demand (00340)	mg/l	
☐ Total organic carbon ( )	mg/l	
☐ Other:		
☐ Other:		

F, A-H_2SO_4	Units	Date analyzed
☐ Nitrate-N +, Nitrate-N dissolved (00631)	mg/l	
☐ Ammonia-N dissolved (00608)	mg/l	
☐ Total Kjeldahl-N ( )	mg/l	
☐ Other:		

Analyst | Date Reported 8 29 86 | Reviewed by Jim Ashby

Laboratory remarks Digested

SLD 726 (12/84)

FOR OCD USE -- Date Owner Notified _____ Phone or letter? _____ Initials _____

Lab Number: #M991 Sample Code: P4 EP San Juan Plant

Date Submitted: 5/22/86 Date Analyzed: 5/26/86

By: Boyer/Bailey Reviewed By: Jim Bailey

Date Reported: 8/29/86

Element	ICAP VALUE(MG/L)	AA VALUE(MG/L)
Aluminum	2.2	
Barium	<0.1	
Berylium	<0.1	
Boron	0.6	
Cadmium	<0.1	
Calcium	440.	
Chromium	<0.1	
Cobalt	<0.1	
Copper	<0.1	
Iron	22.	
Lead	<0.1	
Magnesium	870.	
Manganese	1.8	
Molybdenum	<0.1	
Nickel	<0.1	
Silicon	6.9	
Silver	<0.1	
Strontium	7.3	
Tin	<0.1	
Vanadium	<0.1	
Zinc	21.	
Arsenic		<0.025
Selenium		0.23
Mercury		<0.0005

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STATE OF NEW MEXICO
ENVIRONMENT

86-0587-C

SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 841-2570

REPORT TO: DAVID G. BOYER
PLEASE PRINT
NEW MEXICO OIL CONSERVATION DIV.
P.O. BOX 2088
SANTA FE, NM 87504-2088

RECEIVED
MAY 27 1986
OIL CONSERVATION DIVISION
SANTA FE

S.L.D. No.: OR-587-A.B
DATE REC. : 5/22/86
SLD PRIORITY #:

PHONE(S): 827-5812

USER CODE: 8|2|2|3|5

SUBMITTER: DAVID BOYER

SUBMITTER CODE: | | | | |

SAMPLE TYPE: WATER [X], SOIL [ ], OTHER _____

SAMPLE TYPE CODE: | |

COLLECTED: 5/20/86 - 14:20 BY DB
DATE TIME INITIALS

CODE: 8|6|0|5|2|0|1|4|2|0|D|B|
Y Y M M D D H H M M I I I

SOURCE: P5

CODE: | | | + | | | | + | | | | |
AQUIFER DEPTH

NEAREST CITY: KIRTLAND

CODE: | | | | | |

LOCATION: EP SAN JUAN PLANT

CODE: 2|9|N|1|5|W|0|1| | | |
TOWNSHIP RANGE SECTION TRACTS

pH= 7.3; Conductivity= 11000 umho/cm at 18 °C; Chlorine Residual= _____

Dissolved Oxygen= _____ mg/l; Alkalinity= _____; Flow Rate= _____

Sampling Location, Methods and Remarks (i.e. odors, etc.)

DTW 13.3' ft TOC
BAILED 5 TIMES
N of STORAGE AREA

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. James Boyle

Method of shipment to the Laboratory Hand carried

This form accompanies 2 Septum Vials, ___ Glass Jugs, ___ _____
Containers are marked as follows to indicate preservation:

- [ ] NP: No preservation; sample stored at room temperature.
- [X] P-Ice Sample stored in an ice bath (not frozen).
- [ ] P-$Na_2S_2O_3$; Sample preserved with $Na_2S_2O_3$ to remove chlorine residual.

I (we) certify that this sample was transferred from _____
to _____ at (location) _____ on
___/___/___-___:___ and that the statements in this block are correct.
DATE AND TIME
Evidentiary Seals: Not Sealed [ ] Seals Intact: Yes [ ] No [ ]
Signatures _____ _____

(we) certify that this sample was transferred from _____
to _____ at (location) _____ on
___/___/___-___:___ and that the statements in this block are correct.
DATE AND TIME
Evidentiary Seals: Not Sealed [ ] Seals Intact: Yes [ ] No [ ]
Signatures _____ _____

ANALYSES REQUESTED

LAB. No.: ORG- ~~586~~ 587

PLEASE CHECK THE APPROPRIATE BOXES BELOW TO INDICATE THE TYPE OF ANALYTICAL SCREENS REQUIRED. WHENEVER POSSIBLE LIST SPECIFIC COMPOUNDS SUSPECTED OR REQUIRED.

QUALITATIVE	QUANTITATIVE	PURGEABLE SCREENS	QUALITATIVE	QUANTITATIVE	EXTRACTABLE SCREENS
		ALIPHATIC HYDROCARBON SCREEN			ALIPHATIC HYDROCARBONS
X	X	AROMATIC HYDROCARBON SCREEN			CHLORINATED HYDROCARBON PESTICIDES
X	X	HALOGENATED HYDROCARBON SCREEN			CHLOROPHENOXY ACID HERBICIDES
	X	GAS CHROMATOGRAPH/MASS SPECTROMETER			HYDROCARBON FUEL SCREEN
					ORGANOPHOSPHATE PESTICIDES
					POLYCHLORINATED BIPHENYLS (PCB's)
					POLYNUCLEAR AROMATIC HYDROCARBONS
					TRIAZINE HERBICIDES
		SPECIFIC COMPOUNDS			SPECIFIC COMPOUNDS

REMARKS:

ANALYTICAL RESULTS

COMPOUND	[PPB]	COMPOUND	[PPB]
aromatic purgeables	none detected		
halogenated purgeables	none detected		
		* DETECTION LIMIT	5 ug/L

REMARKS:

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes ___ NO X. 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 analytical data on this page accurately reflect the analytical results for this sample.

Date(s) of analysis: 6 Jun 86. Analyst's signature: [signature]

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewers signature: [signature]

FOR OCD USE -- Date Owner Notified _____ Phone or letter? _____ Initials _____

New Mexico Health and Environment Department
SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 — (505) 841-2555

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859

GENERAL WATER CHEMISTRY and NITROGEN ANALYSIS

DATE RECEIVED 5 22 86	LAB NO. WC 2217	USER CODE ☐ 59300 ☐ 59600 ☒ OTHER: 82235	
Collection DATE 5 20 86	WC 2218 SITE INFORMATION ►	Sample location P5	
Collection TIME 1420		Collection site description EP SAN JUAN PLANT	
Collected by — Person/Agency BOYER / OCD		SEC 1 T29N R15W	

SEND FINAL REPORT TO ►

ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg, PO Box 2088
Santa Fe, NM 87504-2088

Attn: David Boyer

Phone: 827-5812

Station/ well code

Owner

SAMPLING CONDITIONS

☒ Bailed ☐ Dipped ☐ Pump ☐ Tap	Water level 13.3' TOC	Discharge	Sample type
pH (00400) 7.3	Conductivity (Uncorrected) 11000 µmho	Water Temp. (00010) 18 °C	Conductivity at 25°C (00094) µmho

Field comments BAILED 5 TIMES

SAMPLE FIELD TREATMENT — *Check proper boxes*

No. of samples submitted 1

☐ NF: Whole sample (Non-filtered) ☒ F: Filtered in field with 0.45 µmembrane filter ☐ A: 2 ml H_2SO_4/L added

☒ NA: No acid added ☐ Other-*specify:* ☐ A: 5ml conc. HNO_3 added ☐ A: 4ml fuming HNO_3 added

ANALYTICAL RESULTS from SAMPLES

NF, NA		Units	Date analyzed
☐ Conductivity (Corrected) 25°C (00095)		µmho	
☐ Total non-filterable residue (suspended) (00530)		mg/l	
☐ Other:			
☐ Other:			
☐ Other:			

F, NA		Units	Date analyzed
☒ Calcium (00915)	644	mg/l	6-2
☒ Magnesium (00925)	158.6	mg/l	"
☒ Sodium (00930)	3238	mg/l	"
☒ Potassium (00935)	5.46	mg/l	"
☒ Bicarbonate (00440)	295	mg/l	5/26
☒ Chloride (00940)	4307	mg/l	6/5
☒ Sulfate (00945)	3428	mg/l	6/2
☒ Total filterable residue (dissolved) (70300)	11,480	mg/l	5/28
☒ Other: CO_3	0		5/26

NF, A-H_2SO_4			
☐ Nitrate-N +, Nitrate-N total (00630)		mg/l	
☐ Ammonia-N total (00610)		mg/l	
☐ Total Kjeldahl-N ( )		mg/l	
☐ Chemical oxygen demand (00340)		mg/l	
☐ Total organic carbon ( )		mg/l	
☐ Other:			
☐ Other:			

F, A-H_2SO_4			
☐ Nitrate-N +, Nitrate-N dissolved (00631)		mg/l	
☐ Ammonia-N dissolved (00608)		mg/l	
☐ Total Kjeldahl-N ( )		mg/l	
☐ Other:			

Analyst	Date Reported	Reviewed by
	6 11 86	

Laboratory remarks

SLD 726 (12/84)

93

FOR OCD USE -- Date Owner Notified _____ Phone or letter? _____ Initials _____

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3

STATE OF NEW MEXICO
ENVIRONMENT

SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 841-2570

86- 0593-C

REPORT TO: DAVID G. BOYER
PLEASE PRINT
NEW MEXICO OIL CONSERVATION DIV.
P.O. BOX 2088
SANTA FE, NM 87504-2088
PHONE(S): 827-5812

S.L.D. No.: OR- 593-H.B
DATE REC. : 5/22/86
SLD PRIORITY #:

USER CODE: 8 2 2 3 5

SUBMITTER: DAVID BOYER
SUBMITTER CODE:

SAMPLE TYPE: WATER [X], SOIL [ ], OTHER
SAMPLE TYPE CODE:

COLLECTED: 5/20/86 - 10:35 BY DB
DATE TIME INITIALS
CODE: 8 6 0 5 2 0 1 0 3 5 4PR
Y Y M M D D H H M M I I I

SOURCE: P 6
CODE:
AQUIFER DEPTH

NEAREST CITY: KIRTLAND
CODE:

LOCATION: EP SAN JUAN PLANT
CODE: 2 9 N 1 5 W 0 1
TOWNSHIP RANGE SECTION TRACTS

pH= 8 ; Conductivity= 16000 umho/cm at 14 °C; Chlorine Residual=
Dissolved Oxygen= mg/l; Alkalinity= ; Flow Rate=
Sampling Location, Methods and Remarks (i.e. odors, etc.)
ON BANK OF STEVENS ARROYO AT N BOUNDARY
SALT ENCRUSTED AREA

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. James Bailey
Method of shipment to the Laboratory Hand carried
This form accompanies 2 Septum Vials, Glass Jugs,
Containers are marked as follows to indicate preservation:
[ ] NP: No preservation; sample stored at room temperature.
[X] P-Ice Sample stored in an ice bath (not frozen).
[ ] P-$Na_2S_2O_3$; Sample preserved with $Na_2S_2O_3$ to remove chlorine residual.

I (we) certify that this sample was transferred from
to at (location) on
/ / - : and that the statements in this block are correct.
DATE AND TIME
Evidentiary Seals: Not Sealed [ ] Seals Intact: Yes [ ] No [ ]
Signatures

(we) certify that this sample was transferred from
to at (location) on
/ / - : and that the statements in this block are correct.
DATE AND TIME
Evidentiary Seals: Not Sealed [ ] Seals Intact: Yes [ ] No [ ]
Signatures

ANALYSES REQUESTED

LAB. No.: ORG- 593

PLEASE CHECK THE APPROPRIATE BOXES BELOW TO INDICATE THE TYPE OF ANALYTICAL SCREENS REQUIRED. WHENEVER POSSIBLE LIST SPECIFIC COMPOUNDS SUSPECTED OR REQUIRED.

QUALITATIVE	QUANTITATIVE	PURGEABLE SCREENS	QUALITATIVE	QUANTITATIVE	EXTRACTABLE SCREENS
		ALIPHATIC HYDROCARBON SCREEN			ALIPHATIC HYDROCARBONS
X	X	AROMATIC HYDROCARBON SCREEN			CHLORINATED HYDROCARBON PESTICIDES
X	X	HALOGENATED HYDROCARBON SCREEN			CHLOROPHENOXY ACID HERBICIDES
		GAS CHROMATOGRAPH/MASS SPECTROMETER			HYDROCARBON FUEL SCREEN
					ORGANOPHOSPHATE PESTICIDES
					POLYCHLORINATED BIPHENYLS (PCB's)
					POLYNUCLEAR AROMATIC HYDROCARBONS
					TRIAZINE HERBICIDES
		SPECIFIC COMPOUNDS			SPECIFIC COMPOUNDS

REMARKS:

ANALYTICAL RESULTS

COMPOUND	[PPB]	COMPOUND	[PPB]
Aromatic purgeables	none detected		
halogenated purgeables	none detected		
		* DETECTION LIMIT	5 ug/L

REMARKS:

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes___ NO X. 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 analytical data on this page accurately reflect the analytical results for this sample.

Date(s) of analysis: 10 June 86. Analyst's signature: [signature]

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewers signature: [signature]

FOR OCD USE -- Date Owner Notified_____ Phone or letter?_____ Initials_____

New Mexico Health and Environment Department
SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 — (505) 841-2555

2 859 1

GENERAL WATER CHEMISTRY and NITROGEN ANALYSIS

DATE RECEIVED 5 22 86	LAB NO. WC 2219	USER CODE ☐ 59300 ☐ 59600 ☒ OTHER: 82235	
Collection DATE 5 20 86	SITE INFORM-ATION	Sample location P6	
Collection TIME 1035		Collection site description EP SAN JUAN PLANT SEC 1 T29N R15W NEXT TO STEVENS ARROYO ON BOUNDARY;	
Collected by — Person/Agency BOYER / OCD			

RECEIVED JUN 23 1986 OIL CONSERVATION DIVISION SANTA FE

SEND FINAL REPORT TO ►
ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg, PO Box 2088
Santa Fe, NM 87504-2088
Attn: David Boyer
Phone: 827-5812

Station/well code
Owner

SAMPLING CONDITIONS

☒ Bailed ☐ Dipped ☐ Pump ☐ Tap	Water level	Discharge	Sample type
pH (00400) 8	Conductivity (Uncorrected) 16000 µmho	Water Temp. (00010) 14 °C	Conductivity at 25°C (00094) µmho
Field comments BAILED 5 TIMES WATER CHEMISTRY PREFILTERED ONLY			

SAMPLE FIELD TREATMENT — *Check proper boxes*

No. of samples submitted 1

☐ **NF:** Whole sample (Non-filtered) ☒ **F:** Filtered in field with 0.45 µmembrane filter ☐ **A:** 2 ml H_2SO_4/L added

☒ **NA:** No acid added ☐ Other-*specify:* ☐ A: 5ml conc. HNO_3 added ☐ A: 4ml fuming HNO_3 added

ANALYTICAL RESULTS from SAMPLES

NF, NA	Units	Date analyzed	F, NA		Units	Date analyzed
☐ Conductivity (Corrected) 25°C (00095)	µmho		☒ Calcium (00915)	400	mg/l	6-2
☐ Total non-filterable residue (suspended) (00530)	mg/l		☒ Magnesium (00925)	439	mg/l	"
☐ Other:			☒ Sodium (00930)	9160	mg/l	"
☐ Other:			☒ Potassium (00935)	203	mg/l	"
☐ Other:			☒ Bicarbonate (00440)	1083	mg/l	5/26
			☒ Chloride (00940)	1518	mg/l	6/5
			☒ Sulfate (00945)	16113	mg/l	6/2
			☒ Total filterable residue (dissolved) (70300)	24,010	mg/l	6/6
			☒ Other: CO_3	0		5/26

NF, A-H_2SO_4			F, A-H_2SO_4		
☐ Nitrate-N +, Nitrate-N total (00630)	mg/l		☐ Nitrate-N +, Nitrate-N dissolved (00631)	mg/l	
☐ Ammonia-N total (00610)	mg/l		☐ Ammonia-N dissolved (00608)	mg/l	
☐ Total Kjeldahl-N ( )	mg/l		☐ Total Kjeldahl-N ( )	mg/l	
☐ Chemical oxygen demand (00340)	mg/l		☐ Other:		
☐ Total organic carbon ( )	mg/l				
☐ Other:					
☐ Other:					

Analyst	Date Reported	Reviewed by
	6 11 86	

Laboratory remarks

SLD 726 (12/84)

FOR OCD USE -- Date Owner Notified _____ Phone or letter? _____ Initials _____

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New Mexico Health and Environment Department
SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE 2220
Albuquerque, NM 87106 — (505) 841-2555

GENERAL WATER CHEMISTRY and NITROGEN ANALYSIS

DATE RECEIVED 5 22 86	LAB NO. NC ~~2227~~	USER CODE ☐ 59300 ☐ 59600 ☒ OTHER: 82235	
Collection DATE 5 20 86	SITE INFORM-ATION ►	Sample location P6	
Collection TIME 1035		Collection site description EP SAN JUAN PLANT	
Collected by — Person/Agency BOYER / OCD		SEC 1 T29N R15W NEXT TO STEVENS ARROYO BOUNDARY;	

SEND FINAL REPORT TO ►

ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg, PO Box 2088
Santa Fe, NM 87504-2088

Attn: David Boyer

Phone: 827-5812

RECEIVED JUN 10 1986 OIL CONSERVATION DIVISION SANTA FE

Station/ well code

Owner

SAMPLING CONDITIONS

☒ Bailed ☐ Dipped ☐ Pump ☐ Tap	Water level	Discharge	Sample type
pH (00400) 8	Conductivity (Uncorrected) 16000 µmho	Water Temp. (00010) 14 °C	Conductivity at 25°C (00094) µmho

Field comments BAILED 5 TIMES

WATER CHEMISTRY PREFILTERED ONLY

SAMPLE FIELD TREATMENT — *Check proper boxes*

No. of samples submitted 1

☐ NF: Whole sample (Non-filtered) ☒ F: Filtered in field with 0.45 µmembrane filter ☐ A: 2 ml H_2SO_4/L added

☒ NA: No acid added ☐ Other-*specify:* ☐ A: 5ml conc. HNO_3 added ☐ A: 4ml fuming HNO_3 added

ANALYTICAL RESULTS from SAMPLES

NF, NA	Units	Date analyzed
☐ Conductivity (Corrected) 25°C (00095)	µmho	
☐ Total non-filterable residue (suspended) (00530)	mg/l	
☐ Other:		
☐ Other:		
☐ Other:		

F, NA	Units	Date analyzed
☒ Calcium (00915)	mg/l	
☒ Magnesium (00925)	mg/l	
☒ Sodium (00930)	mg/l	
☒ Potassium (00935)	mg/l	
☒ Bicarbonate (00440)	mg/l	
☒ Chloride (00940)	mg/l	
☒ Sulfate (00945)	mg/l	
☒ Total filterable residue (dissolved) (70300)	mg/l	
☒ Other: CO_3	0	5/26

NF, A-H_2SO_4	Units	Date analyzed
☐ Nitrate-N + , Nitrate-N total (00630)	mg/l	
☐ Ammonia-N total (00610)	mg/l	
☐ Total Kjeldahl-N ( )	mg/l	
☐ Chemical oxygen demand (00340)	mg/l	
☐ Total organic carbon ( )	mg/l	
☐ Other:		
☐ Other:		

F, A-H_2SO_4	Units	Date analyzed
☐ Nitrate-N + , Nitrate-N dissolved (00631)	mg/l	
☐ Ammonia-N dissolved (00608)	mg/l	
☐ Total Kjeldahl-N ( )	mg/l	
☐ Other:		

Analyst | Date Reported 6 11 86 | Reviewed by

Laboratory remarks

SLD 726 (12/84)

FOR OCD USE -- Date Owner Notified _____ Phone or letter? _____ Initials _____

New Mexico Health and Environment Department
SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 — (505) 841-2555

pf

HEAVY METALS

GENERAL WATER CHEMISTRY and NITROGEN ANALYSIS

DATE RECEIVED 5 22 86	LAB NO. HM-992	USER CODE ☐ 59300 ☐ 59600 ☒ OTHER: 82235	
Collection DATE 5 20 86	SITE INFORM-ATION ►	Sample location P6	
Collection TIME 1035		Collection site description EP SAN JUAN PLANT	
Collected by — Person/Agency BOYER/OCD		NEXT TO STEVENS ARROYO ON N BOUNDARY	

SEND FINAL REPORT TO ►
ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg, PO Box 2088
Santa Fe, NM 87504-2088
Attn: David Boyer
Phone: 827-5812

Station/ well code

Owner

SAMPLING CONDITIONS

☒ Bailed ☐ Dipped ☐ Pump ☐ Tap	Water level	Discharge	Sample type
pH (00400) 8	Conductivity (Uncorrected) 1600 µmho	Water Temp. (00010) 14 °C	Conductivity at 25°C (00094) µmho

Field comments: BAILED 5 TIMES

SAMPLE FIELD TREATMENT — *Check proper boxes*

No. of samples submitted 1

☐ NF: Whole sample (Non-filtered) ☒ F: Filtered in field with 0.45 µmembrane filter ☐ A: 2 ml H_2SO_4/L added

☐ NA: No acid added ☐ Other-*specify:* ☒ NA: 5ml conc. HNO_3 added ☒ A: 4ml fuming HNO_3 added

ANALYTICAL RESULTS from SAMPLES

NF, NA	Units	Date analyzed	F, NA	Units	Date analyzed
☐ Conductivity (Corrected) 25°C (00095)	µmho		☐ Calcium (00915)	mg/l	
☐ Total non-filterable residue (suspended) (00530)	mg/l		☐ Magnesium (00925)	mg/l	
☒ Other: ICAP SCAN			☐ Sodium (00930)	mg/l	
☒ Other: Sr			☐ Potassium (00935)	mg/l	
☒ Other: Ca			☐ Bicarbonate (00440)	mg/l	
			☐ Chloride (00940)	mg/l	
			☐ Sulfate (00945)	mg/l	
			☐ Total filterable residue (dissolved) (70300)	mg/l	
			☐ Other:		

NF, A-H_2SO_4	Units	Date analyzed	F, A-H_2SO_4	Units	Date analyzed
☐ Nitrate-N +, Nitrate-N total (00630)	mg/l		☐ Nitrate-N +, Nitrate-N dissolved (00631)	mg/l	
☐ Ammonia-N total (00610)	mg/l		☐ Ammonia-N dissolved (00608)	mg/l	
☐ Total Kjeldahl-N ( )	mg/l		☐ Total Kjeldahl-N ( )	mg/l	
☐ Chemical oxygen demand (00340)	mg/l		☐ Other:		
☐ Total organic carbon ( )	mg/l				
☐ Other:					
☐ Other:					

Analyst	Date Reported	Reviewed by
	7 23 86	Jim Ashley

Laboratory remarks

SLD 726 (12/84)

FOR OCD USE -- Date Owner Notified _____ Phone or letter? _____ Initials _____

Lab Number: HM992 Sample Code: Pb EP San Juan Plant

Date Submitted: 5/22/86 Date Analyzed: 5/26/86

By: Boyer Reviewed By: Jim Ashley

Date Reported: 7/23/86

Element	ICAP VALUE(MG/L)	AA VALUE(MG/L)
Aluminum	<0.1	
Barium	<0.1	
Berylium	<0.1	
Boron	0.6	
Cadmium	<0.1	
Calcium	420.	
Chromium	<0.1	
Cobalt	<0.1	
Copper	<0.1	
Iron	<0.1	
Lead	<0.1	
Magnesium	400.	
Manganese	1.1	
Molybdenum	<0.1	
Nickel	<0.1	
Silicon	33	
Silver	<0.1	
Strontium	8.6	
Tin	<0.1	
Vanadium	<0.1	
Zinc	<0.1	
Arsenic		0.085
Selenium		<0.01
Mercury		

ENVIRONMENT

STATE OF NEW M

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SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 841-2570

REPORT TO: DAVID G. BOYER
PLEASE PRINT
NEW MEXICO OIL CONSERVATION DIV.
P.O. BOX 2088
SANTA FE, NM 87504-2088
PHONE(S): 827-5812

RECEIVED
JUN 30 1986
OIL CONSERVATION DIVISION
SANTA FE

S.L.D. No.: OR- 589-A,B
DATE REC. : 5/22/86
SLD PRIORITY #:
USER CODE: 8 2 2 3 5

SUBMITTER: DAVID BOYER
SUBMITTER CODE:

SAMPLE TYPE: WATER ☒, SOIL ☐, OTHER
SAMPLE TYPE CODE:

COLLECTED: 5/20/86 - 11:53 BY DB
DATE TIME INITIALS
CODE: 8 6 0 5 2 0 1 1 5 3 0 K 1
Y Y M M D D H H M M I I I

SOURCE: P 7
CODE:
AQUIFER DEPTH

NEAREST CITY: KIRTLAND
CODE:

LOCATION: EP SAN JUAN PLANT
CODE: 2 9 W 1 5 W 0 1
TOWNSHIP RANGE SECTION TRACTS

pH= 7.8 ; Conductivity= 7900 umho/cm at 14 °C; Chlorine Residual=
Dissolved Oxygen= mg/l; Alkalinity= ; Flow Rate=
Sampling Location, Methods and Remarks (i.e. odors, etc.)

SOME HC ODOR
BAILED 5 TIMES
NEAR N BOUNDARY, VICINITY GAS LINE

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Jami Bailey
Method of shipment to the Laboratory Hand carried
This form accompanies 2 Septum Vials, Glass Jugs,
Containers are marked as follows to indicate preservation:

- ☐ NP: No preservation; sample stored at room temperature.
- ☒ P-Ice Sample stored in an ice bath (not frozen).
- ☐ P-$Na_2S_2O_3$; Sample preserved with $Na_2S_2O_3$ to remove chlorine residual.

I (we) certify that this sample was transferred from
to at (location) on
/ / - : and that the statements in this block are correct.
DATE AND TIME
Evidentiary Seals: Not Sealed ☐ Seals Intact: Yes ☐ No ☐
Signatures

(we) certify that this sample was transferred from
to at (location) on
/ / - : and that the statements in this block are correct.
DATE AND TIME
Evidentiary Seals: Not Sealed ☐ Seals Intact: Yes ☐ No ☐
Signatures

ANALYSES REQUESTED

LAB. No.: ORG- 589

PLEASE CHECK THE APPROPRIATE BOXES BELOW TO INDICATE THE TYPE OF ANALYTICAL SCREENS REQUIRED. WHENEVER POSSIBLE LIST SPECIFIC COMPOUNDS SUSPECTED OR REQUIRED.

QUALITATIVE	QUANTITATIVE	PURGEABLE SCREENS	QUALITATIVE	QUANTITATIVE	EXTRACTABLE SCREENS
		ALIPHATIC HYDROCARBON SCREEN			ALIPHATIC HYDROCARBONS
X	X	AROMATIC HYDROCARBON SCREEN			CHLORINATED HYDROCARBON PESTICIDES
X	X	HALOGENATED HYDROCARBON SCREEN			CHLOROPHENOXY ACID HERBICIDES
		GAS CHROMATOGRAPH/MASS SPECTROMETER			HYDROCARBON FUEL SCREEN
					ORGANOPHOSPHATE PESTICIDES
					POLYCHLORINATED BIPHENYLS (PCB's)
					POLYNUCLEAR AROMATIC HYDROCARBONS
					TRIAZINE HERBICIDES
		SPECIFIC COMPOUNDS			SPECIFIC COMPOUNDS

REMARKS:

ANALYTICAL RESULTS

COMPOUND	[PPB]	COMPOUND	[PPB]
aromatic purgeables	none detected		
halogenated purgeables	none detected		
		* DETECTION LIMIT	5 ug/L

REMARKS:

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes___ NO X. 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 analytical data on this page accurately reflect the analytical results for this sample.

Date(s) of analysis: 10 Jun 86. Analyst's signature: J Tierney

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewers signature: L Meyerhen

FOR OCD USE -- Date Owner Notified_____ Phone or letter?_____ Initials_____

New Mexico Health and E[illegible]ment Department
SCIENTIFIC LABORATOR[illegible]VISION
700 Camino de Salud NE
Albuquerque, NM 87106 — (505) 841-2555

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859

CO_3-WC 2228

GENERAL WATER CHEMISTRY and NITROGEN ANALYSIS

DATE RECEIVED 5 | 22 | 86	LAB NO. WC 2227	USER CODE ☐ 59300 ☐ 59600 ☒ OTHER: 82235	
Collection DATE 5 | 20 | 86	SITE INFORMATION ►	Sample location P 7	
Collection TIME ~~1210~~ Time 1153		Collection site description EP SAN JUAN PLANT	
Collected by — Person/Agency Boyer / OCD			

SEND FINAL REPORT TO ►

ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg, PO Box 2088
Santa Fe, NM 87504-2088

Attn: David Boyer

Phone: 827-5812

RECEIVED
CONSERVATION [illegible]

Sec 1 T29N R15W

Station/ well code

Owner

SAMPLING CONDITIONS

☐ Bailed ☐ Pump ☐ Dipped ☐ Tap	Water level	Discharge	Sample type
pH (00400) 7.8	Conductivity (Uncorrected) 7900 µmho	Water Temp. (00010) 14 °C	Conductivity at 25°C (00094) µmho

Field comments HC ODOR

SAMPLE FIELD TREATMENT — *Check proper boxes*

No. of samples submitted

☐ **NF:** Whole sample (Non-filtered) ☒ **F:** Filtered in field with 0.45 µmembrane filter ☐ **A:** 2 ml H_2SO_4/L added

☒ **NA:** No acid added ☐ Other-*specify:* ☐ A: 5ml conc. HNO_3 added ☐ A: 4ml fuming HNO_3 added

ANALYTICAL RESULTS from SAMPLES

NF, NA		Units	Date analyzed
☐ Conductivity (Corrected) 25°C (00095)		µmho	
☐ Total non-filterable residue (suspended) (00530)		mg/l	
☐ Other:			
☐ Other:			
☐ Other:			

F, NA		Units	Date analyzed
☒ Calcium (00915)	148.0	mg/l	6/2
☒ Magnesium (00925)	37.6	mg/l	4
☒ Sodium (00930)	3335	mg/l	"
☒ Potassium (00935)	7.02	mg/l	"
☒ Bicarbonate (00440)	795	mg/l	5/26
☒ Chloride (00940)	249	mg/l	6/5
☒ Sulfate (00945)	7416	mg/l	6/2
☒ Total filterable residue (dissolved) (70300)	11,330	mg/l	5/28
☒ Other: CO_3	0		5/26

NF, A-H_2SO_4			
☐ Nitrate-N +, Nitrate-N total (00630)		mg/l	
☐ Ammonia-N total (00610)		mg/l	
☐ Total Kjeldahl-N ( )		mg/l	
☐ Chemical oxygen demand (00340)		mg/l	
☐ Total organic carbon ( )		mg/l	
☐ Other:			
☐ Other:			

F, A-H_2SO_4			
☐ Nitrate-N +, Nitrate-N dissolved (00631)		mg/l	
☐ Ammonia-N dissolved (00608)		mg/l	
☐ Total Kjeldahl-N ( )		mg/l	
☐ Other:			

Analyst	Date Reported	Reviewed by
	6 | 11 | 86	CJ

Laboratory remarks

SLD 726 (12/84)

FOR OCD USE -- Date Owner Notified _____ Phone or letter? _____ Initials _____

New Mexico Health and Environment Department
SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 — (505) 841-2555

HEAVY METALS

GENERAL WATER CHEMISTRY and NITROGEN ANALYSIS

DATE RECEIVED 5 22 86	LAB NO. HM-493	USER CODE ☐ 59300 ☐ 59600 ☒ OTHER: 82235	
Collection DATE 5 20 86	SITE INFORMATION ►	Sample location P 7	
Collection TIME 1153		Collection site description EP SAN JUAN PLANT	
Collected by — Person/Agency BOYER/OCD		Sec 1 T29N R15W	
		N of P9; NW of Pond 1 NEAR PROPERTY FENCE	

SEND FINAL REPORT TO ►
ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg, PO Box 2088
Santa Fe, NM 87504-2088
Attn: David Boyer
Phone: 827-5812

Station/ well code

Owner

SAMPLING CONDITIONS

☒ Bailed ☐ Dipped ☐ Pump ☐ Tap	Water level	Discharge	Sample type
pH (00400) 7.8	Conductivity (Uncorrected) 7900 µmho	Water Temp. (00010) 14 °C	Conductivity at 25°C (00094) µmho

Field comments: BAILED 5 TIMES. HC ODOR

SAMPLE FIELD TREATMENT — *Check proper boxes*

No. of samples submitted 1

☐ **NF:** Whole sample (Non-filtered) ☒ **F:** Filtered in field with 0.45 µmembrane filter ☐ **A:** 2 ml H_2SO_4/L added

☐ **NA:** No acid added ☐ Other-*specify:* ☒ **A:** 5ml conc. HNO_3 added ☒ **A:** 4ml fuming HNO_3 added

ANALYTICAL RESULTS from SAMPLES

NF, NA F, A	Units	Date analyzed	F, NA	Units	Date analyzed
☐ Conductivity (Corrected) 25°C (00095)	µmho		☐ Calcium (00915)	mg/l	
☐ Total non-filterable residue (suspended) (00530)	mg/l		☐ Magnesium (00925)	mg/l	
☒ Other: ICAP SCAN			☐ Sodium (00930)	mg/l	
☒ Other: As			☐ Potassium (00935)	mg/l	
☒ Other: Se			☐ Bicarbonate (00440)	mg/l	
			☐ Chloride (00940)	mg/l	
			☐ Sulfate (00945)	mg/l	
			☐ Total filterable residue (dissolved) (70300)	mg/l	
			☐ Other:		

NF, A-H_2SO_4

☐ Nitrate-N +, Nitrate-N total (00630)	mg/l	
☐ Ammonia-N total (00610)	mg/l	
☐ Total Kjeldahl-N ( )	mg/l	
☐ Chemical oxygen demand (00340)	mg/l	
☐ Total organic carbon ( )	mg/l	
☐ Other:		
☐ Other:		

F, A-H_2SO_4

☐ Nitrate-N +, Nitrate-N dissolved (00631)	mg/l	
☐ Ammonia-N dissolved (00608)	mg/l	
☐ Total Kjeldahl-N ( )	mg/l	
☐ Other:		

Analyst	Date Reported	Reviewed by
	7 23 86	Jim Ashley

Laboratory remarks: Digested.

SLD 726 (12/84)

FOR OCD USE -- Date Owner Notified _____ Phone or letter? _____ Initials _____

Lab Number: [redacted]993

Sample Code: P7 EP San Juan Plant

Date Submitted: 5/22/86

Date Analyzed: 5/27/86

By: Boyer

Reviewed By: Jim Oakley

Date Reported: 7/23/86

Element	ICAP VALUE(MG/L)	AA VALUE(MG/L)
Aluminum	<0.1	
Barium	<0.1	
Berylium	<0.1	
Boron	0.4	
Cadmium	<0.1	
Calcium	390.	
Chromium	<0.1	
Cobalt	<0.1	
Copper	<0.1	
Iron	8.9	
Lead	<0.1	
Magnesium	130.	
Manganese	11.	
Molybdenum	<0.1	
Nickel	<0.1	
Silicon	3.8	
Silver	<0.1	
Strontium	1.3	
Tin	<0.1	
Vanadium	<0.1	
Zinc	<0.1	
Arsenic		0.022
Selenium		<0.01
Mercury		

754
3

STATE OF NEW MEXICO
ENVIRONMENT

RECEIVED
86-0596-C

OIL CONSERVATION DIVISION

SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 841-2570

REPORT TO: DAVID G. BOYER
PLEASE PRINT
NEW MEXICO OIL CONSERVATION DIV.
P.O. BOX 2088
SANTA FE, NM 87504-2088
PHONE(S): 827-5812

S.L.D. No.: OR-596-A.B
DATE REC. : 5/22/86
SLD PRIORITY #:

USER CODE: 8 2 2 3 5

SUBMITTER: DAVID BOYER
SUBMITTER CODE:

SAMPLE TYPE: WATER [X], SOIL [ ], OTHER
SAMPLE TYPE CODE:

COLLECTED: 5/20/86 (DATE) - 15:15 (TIME) BY DB (INITIALS)
CODE: 8 6 0 5 2 0 1 5 1 5 X X (Y Y M M D D H H M M I I)

SOURCE: P 8
CODE: (AQUIFER + DEPTH)

NEAREST CITY: KIRTLAND
CODE:

LOCATION: EP SAN JUAN PLANT
CODE: 2 9 N 1 5 W 0 1 (TOWNSHIP RANGE SECTION TRACTS)

pH= 7.0 ; Conductivity= 26000 umho/cm at 19 °C; Chlorine Residual=
Dissolved Oxygen= mg/l; Alkalinity= ; Flow Rate=
Sampling Location, Methods and Remarks (i.e. odors, etc.)

BAILED 5 TIMES
NE of POND 1

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Tami Bailey
Method of shipment to the Laboratory Hand carried
This form accompanies 2 Septum Vials, ___ Glass Jugs, ___
Containers are marked as follows to indicate preservation:
[ ] NP: No preservation; sample stored at room temperature.
[X] P-Ice Sample stored in an ice bath (not frozen).
[ ] P-$Na_2S_2O_3$; Sample preserved with $Na_2S_2O_3$ to remove chlorine residual.

I (we) certify that this sample was transferred from
to at (location) on
___/___/___-___:___ (DATE AND TIME) and that the statements in this block are correct.
Evidentiary Seals: Not Sealed [ ] Seals Intact: Yes [ ] No [ ]
Signatures

(we) certify that this sample was transferred from
to at (location) on
___/___/___-___:___ (DATE AND TIME) and that the statements in this block are correct.
Evidentiary Seals: Not Sealed [ ] Seals Intact: Yes [ ] No [ ]
Signatures

ANALYSES REQUESTED

LAB. No.: ORG- 596

PLEASE CHECK THE APPROPRIATE BOXES BELOW TO INDICATE THE TYPE OF ANALYTICAL SCREENS REQUIRED. WHENEVER POSSIBLE LIST SPECIFIC COMPOUNDS SUSPECTED OR REQUIRED.

QUALITATIVE	QUANTITATIVE	PURGEABLE SCREENS	QUALITATIVE	QUANTITATIVE	EXTRACTABLE SCREENS
		ALIPHATIC HYDROCARBON SCREEN			ALIPHATIC HYDROCARBONS
X	X	AROMATIC HYDROCARBON SCREEN			CHLORINATED HYDROCARBON PESTICIDES
X	X	HALOGENATED HYDROCARBON SCREEN			CHLOROPHENOXY ACID HERBICIDES
		GAS CHROMATOGRAPH/MASS SPECTROMETER			HYDROCARBON FUEL SCREEN
					ORGANOPHOSPHATE PESTICIDES
					POLYCHLORINATED BIPHENYLS (PCB's)
					POLYNUCLEAR AROMATIC HYDROCARBONS
					TRIAZINE HERBICIDES
		SPECIFIC COMPOUNDS			SPECIFIC COMPOUNDS

REMARKS:

ANALYTICAL RESULTS

COMPOUND	[PPB]	COMPOUND	[PPB]
aromatic purgeables	non detected		
halogenated purgeables	non detected		
		* DETECTION LIMIT	5 ug/L

REMARKS:

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes ___ NO X. 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 analytical data on this page accurately reflect the analytical results for this sample.

Date(s) of analysis: 10 June 96. Analyst's signature: M Finney

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewers signature: K Meyerhein

FOR OCD USE -- Date Owner Notified _____ Phone or letter? _____ Initials _____

New Mexico Health and Environment Department
SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 — (505) 841-2555

959
2

GENERAL WATER CHEMISTRY and NITROGEN ANALYSIS

DATE RECEIVED 5 22 86	LAB NO. WC-2238	USER CODE ☐ 59300 ☐ 59600 ☒ OTHER: 82235	
Collection DATE 5 20 86	SITE INFORMATION ►	Sample location P-8	
Collection TIME 1515		Collection site description EPNG SAN JUAN PLANT SEC 1 T29N R15W NE of POND 1	
Collected by — Person/Agency DHBoyer /OCD			

SEND FINAL REPORT TO ►
ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg, PO Box 2088
Santa Fe, NM 87504-2088

Attn: David Boyer

Phone: 827-5812

Station/ well code

Owner

SAMPLING CONDITIONS

☒ Bailed ☐ Dipped ☐ Pump ☐ Tap	Water level	Discharge	Sample type
pH (00400) 7.0	Conductivity (Uncorrected) 26,000 µmho	Water Temp. (00010) 19 °C	Conductivity at 25°C (00094) µmho

Field comments BAILED 5 TIMES

PREFILTERED ONLY

SAMPLE FIELD TREATMENT — *Check proper boxes*

No. of samples submitted 1

☐ NF: Whole sample (Non-filtered) ☒ F: Filtered in field with 0.45 µmembrane filter ☐ A: 2 ml H_2SO_4/L added

☒ NA: No acid added ☐ Other-*specify:* ☐ A: 5ml conc. HNO_3 added ☐ A: 4ml fuming HNO_3 added

ANALYTICAL RESULTS from SAMPLES

NF, NA		Units	Date analyzed
☐ Conductivity (Corrected) 25°C (00095)		µmho	
☐ Total non-filterable residue (suspended) (00530)		mg/l	
☐ Other:			
☐ Other:			
☐ Other:			

F, NA		Units	Date analyzed
☒ Calcium (00915)	484	mg/l	6-2
☒ Magnesium (00925)	314	mg/l	"
☒ Sodium (00930)	13900	mg/l	"
☒ Potassium (00935)	20.3	mg/l	"
☒ Bicarbonate (00440)	575	mg/l	5/26
☒ Chloride (00940)	7507	mg/l	6/5
☒ Sulfate (00945)	17427	mg/l	6/2
☒ Total filterable residue (dissolved) (70300)	32,280	mg/l	5/22
☒ Other: CO_3	0		5/26

NF, A-H_2SO_4			
☐ Nitrate-N +, Nitrate-N total (00630)		mg/l	
☐ Ammonia-N total (00610)		mg/l	
☐ Total Kjeldahl-N ( )		mg/l	
☐ Chemical oxygen demand (00340)		mg/l	
☐ Total organic carbon ( )		mg/l	
☐ Other:			
☐ Other:			

F, A-H_2SO_4			
☐ Nitrate-N +, Nitrate-N dissolved (00631)		mg/l	
☐ Ammonia-N dissolved (00608)		mg/l	
☐ Total Kjeldahl-N ( )		mg/l	
☐ Other:			

Analyst	Date Reported	Reviewed by
	6 11 86	CJ

Laboratory remarks

SLD 726 (12/84)

FOR OCD USE -- Date Owner Notified _____ Phone or letter? _____ Initials _____

New Mexico Health and Environment Department
SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 — (505) 841-2555

850
2

GENERAL WATER CHEMISTRY and NITROGEN ANALYSIS

DATE RECEIVED 5 22 86	LAB NO. WC-2239	USER CODE ☐ 59300 ☐ 59600 ☒ OTHER: 82235	
Collection DATE 5 20 86	SITE INFORMATION ►	Sample location P-8	
Collection TIME 1313		Collection site description EPNG SAN JUAN PLANT SEC 1 T29N R15W	
Collected by — Person/Agency D.L. Boyer / OCD		NE of Pond 1	

SEND FINAL REPORT TO ►
ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg, PO Box 2088
Santa Fe, NM 87504-2088
Attn: David Boyer
Phone: 827-5812

Station/ well code
Owner

SAMPLING CONDITIONS

☒ Bailed ☐ Pump ☐ Dipped ☐ Tap	Water level	Discharge	Sample type
pH (00400) 7.0	Conductivity (Uncorrected) 26,000 µmho	Water Temp. (00010) 19 °C	Conductivity at 25°C (00094) µmho

Field comments: BAILED 5 TIMES
PREFILTERED ONLY

SAMPLE FIELD TREATMENT — *Check proper boxes*

No. of samples submitted 1

☐ NF: Whole sample (Non-filtered) ☒ F: Filtered in field with 0.45 µmembrane filter ☐ A: 2 ml H_2SO_4/L added

☒ NA: No acid added ☐ Other-*specify:* ☐ A: 5ml conc. HNO_3 added ☐ A: 4ml fuming HNO_3 added

ANALYTICAL RESULTS from SAMPLES

NF, NA	Units	Date analyzed
☐ Conductivity (Corrected) 25°C (00095)	µmho	
☐ Total non-filterable residue (suspended) (00530)	mg/l	
☐ Other:		
☐ Other:		
☐ Other:		

F, NA	Units	Date analyzed
☒ Calcium (00915)	mg/l	
☒ Magnesium (00925)	mg/l	
☒ Sodium (00930)	mg/l	
☒ Potassium (00935)	mg/l	
☒ Bicarbonate (00440)	mg/l	
☒ Chloride (00940)	mg/l	
☒ Sulfate (00945)	mg/l	
☒ Total filterable residue (dissolved) (70300)	mg/l	
☒ Other: CO_3 0		5/26

NF, A-H_2SO_4	Units	Date analyzed
☐ Nitrate-N +, Nitrate-N total (00630)	mg/l	
☐ Ammonia-N total (00610)	mg/l	
☐ Total Kjeldahl-N ( )	mg/l	
☐ Chemical oxygen demand (00340)	mg/l	
☐ Total organic carbon ( )	mg/l	
☐ Other:		
☐ Other:		

F, A-H_2SO_4	Units	Date analyzed
☐ Nitrate-N +, Nitrate-N dissolved (00631)	mg/l	
☐ Ammonia-N dissolved (00608)	mg/l	
☐ Total Kjeldahl-N ( )	mg/l	
☐ Other:		

Analyst | Date Reported 6 11 86 | Reviewed by

Laboratory remarks

SLD 726 (12/84)

FOR OCD USE -- Date Owner Notified _____ Phone or letter? _____ Initials _____

New Mexico Health and Environment Department
SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 — (505) 841-2555

HEAVY METALS

GENERAL WATER CHEMISTRY and NITROGEN ANALYSIS

DATE RECEIVED 5 22 86	LAB NO. NM 994	USER CODE ☐ 59300 ☐ 59600 ☒ OTHER: 82235	
Collection DATE 5 20 86	SITE INFORMATION ►	Sample location P-8	
Collection TIME 1515		Collection site description EPNG SAN JUAN PLANT SEC 1 T29N R15W NE of POND 1	
Collected by — Person/Agency BOYER / OCD			

SEND FINAL REPORT TO ►
ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg, PO Box 2088
Santa Fe, NM 87504-2088
Attn: David Boyer
Phone: 827-5812

Station/ well code
Owner

SAMPLING CONDITIONS

☒ Bailed ☐ Dipped ☐ Pump ☐ Tap	Water level	Discharge	Sample type
pH (00400) 7.0	Conductivity (Uncorrected) 26,000 µmho	Water Temp. (00010) 19 °C	Conductivity at 25°C (00094) µmho

Field comments: BAILED 5 TIMES

SAMPLE FIELD TREATMENT — *Check proper boxes*

No. of samples submitted 1

☐ **NF:** Whole sample (Non-filtered) ☒ **F:** Filtered in field with 0.45 µmembrane filter ☐ **A:** 2 ml H_2SO_4/L added

☐ **NA:** No acid added ☐ Other-*specify:* ☐ A: 5ml conc. HNO_3 added ☒ A: 4ml fuming HNO_3 added

ANALYTICAL RESULTS from SAMPLES

NF, NA	Units	Date analyzed	F, NA	Units	Date analyzed
☐ Conductivity (Corrected) 25°C (00095)	µmho		☐ Calcium (00915)	mg/l	
☐ Total non-filterable residue (suspended) (00530)	mg/l		☐ Magnesium (00925)	mg/l	
☒ Other: ICAP SCAN			☐ Sodium (00930)	mg/l	
☒ Other: Se			☐ Potassium (00935)	mg/l	
☒ Other: As			☐ Bicarbonate (00440)	mg/l	
			☐ Chloride (00940)	mg/l	
			☐ Sulfate (00945)	mg/l	
			☐ Total filterable residue (dissolved) (70300)	mg/l	
			☐ Other:		

NF, A-H_2SO_4	Units	Date analyzed	F, A-H_2SO_4	Units	Date analyzed
☐ Nitrate-N +, Nitrate-N total (00630)	mg/l		☐ Nitrate-N +, Nitrate-N dissolved (00631)	mg/l	
☐ Ammonia-N total (00610)	mg/l		☐ Ammonia-N dissolved (00608)	mg/l	
☐ Total Kjeldahl-N ( )	mg/l		☐ Total Kjeldahl-N ( )	mg/l	
☐ Chemical oxygen demand (00340)	mg/l		☐ Other:		
☐ Total organic carbon ( )	mg/l				
☐ Other:					
☐ Other:					

Analyst	Date Reported	Reviewed by
	7 23 86	Jim Ashby

Laboratory remarks: Digested.

SLD 726 (12/84)

FOR OCD USE -- Date Owner Notified _____ Phone or letter? _____ Initials _____

Lab Number: HM 994

Sample Code: P-8 EPNG San Juan Plant

Date Submitted: 5/22/86

Date Analyzed: 5/27/86

By: Boyer

Reviewed By: Jim Ashley

Date Reported: 7/23/86

Element	ICAP VALUE(MG/L)	AA VALUE(MG/L)
Aluminum	<0.1	
Barium	<0.1	
Berylium	<0.1	
Boron	0.3	
Cadmium	<0.1	
Calcium	470.	
Chromium	<0.1	
Cobalt	<0.1	
Copper	<0.1	
Iron	0.2	
Lead	<0.1	
Magnesium	260	
Manganese	0.20	
Molybdenum	<0.1	
Nickel	<0.1	
Silicon	4.6	
Silver	<0.1	
Strontium	5.6	
Tin	<0.1	
Vanadium	<0.1	
Zinc	<0.1	
Arsenic		<0.005
Selenium		0.03
Mercury		

Note: Detection Limit is ≃ 0.03mg/l.

754
3

STATE OF NEW MEXICO
ENVIRONMENT

SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 841-2570

86-0591-C

REPORT TO: DAVID G. BOYER
PLEASE PRINT
NEW MEXICO OIL CONSERVATION DIV.
P.O. BOX 2088
SANTA FE, NM 87504-2088
PHONE(S): 827-5812

RECEIVED
MAY 30 1986
OIL CONSERVATION DIVISION
SANTA FE

S.L.D. No.: OR- 591-H.B
DATE REC. : 5/22/86
SLD PRIORITY #:

USER CODE: 8|2|2|3|5

SUBMITTER: DAVID BOYER
SUBMITTER CODE:

SAMPLE TYPE: WATER [X], SOIL [ ], OTHER
SAMPLE TYPE CODE:

COLLECTED: 5/20/86 - 13:50 BY DB
DATE TIME INITIALS
CODE: 8|6|0|5|2|0|1|3|5|0 (Y Y M M D D H H M M I I I)

SOURCE: P-9
CODE: AQUIFER DEPTH

NEAREST CITY: KIRTLAND
CODE:

LOCATION: EP SAN JUAN PLANT
CODE: 2|9|N|1|5|W|0|1|1 (TOWNSHIP RANGE SECTION TRACTS)

pH= 7.8 ; Conductivity= 11500 umho/cm at 17 °C; Chlorine Residual=
Dissolved Oxygen= mg/l; Alkalinity= ; Flow Rate=
Sampling Location, Methods and Remarks (i.e. odors, etc.)

BAILED 5 TIMES
WEST OF POND 1

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. [signature]
Method of shipment to the Laboratory Hand carried
This form accompanies 2 Septum Vials, Glass Jugs,
Containers are marked as follows to indicate preservation:
[ ] NP: No preservation; sample stored at room temperature.
[X] P-Ice Sample stored in an ice bath (not frozen).
[ ] P-$Na_2S_2O_3$; Sample preserved with $Na_2S_2O_3$ to remove chlorine residual.

I (we) certify that this sample was transferred from
to at (location) on
/ / - : and that the statements in this block are correct.
DATE AND TIME
Evidentiary Seals: Not Sealed [ ] Seals Intact: Yes [ ] No [ ]
Signatures

(we) certify that this sample was transferred from
to at (location) on
/ / - : and that the statements in this block are correct.
DATE AND TIME
Evidentiary Seals: Not Sealed [ ] Seals Intact: Yes [ ] No [ ]
Signatures

ANALYSES REQUESTED

LAB. No.: ORG- 591

PLEASE CHECK THE APPROPRIATE BOXES BELOW TO INDICATE THE TYPE OF ANALYTICAL SCREENS REQUIRED. WHENEVER POSSIBLE LIST SPECIFIC COMPOUNDS SUSPECTED OR REQUIRED.

QUALITATIVE	QUANTITATIVE	PURGEABLE SCREENS	QUALITATIVE	QUANTITATIVE	EXTRACTABLE SCREENS
		ALIPHATIC HYDROCARBON SCREEN			ALIPHATIC HYDROCARBONS
X	X	AROMATIC HYDROCARBON SCREEN			CHLORINATED HYDROCARBON PESTICIDES
X	X	HALOGENATED HYDROCARBON SCREEN			CHLOROPHENOXY ACID HERBICIDES
		GAS CHROMATOGRAPH/MASS SPECTROMETER			HYDROCARBON FUEL SCREEN
					ORGANOPHOSPHATE PESTICIDES
					POLYCHLORINATED BIPHENYLS (PCB's)
					POLYNUCLEAR AROMATIC HYDROCARBONS
					TRIAZINE HERBICIDES
		SPECIFIC COMPOUNDS			SPECIFIC COMPOUNDS

REMARKS:

ANALYTICAL RESULTS

COMPOUND	[PPB]	COMPOUND	[PPB]
aromatic purgeables	none detected		
halogenated purgeables	none detected		
		* DETECTION LIMIT	5 ugm/l

REMARKS:

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes___ NO X. 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 analytical data on this page accurately reflect the analytical results for this sample.

Date(s) of analysis: 10 June 86. Analyst's signature: A. Tanner

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewers signature: L Meyerhen

FOR OCD USE -- Date Owner Notified_____ Phone or letter?_____ Initials_____

New Mexico Health and Environment Department
SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 — (505) 841-2555

859
2

GENERAL WATER CHEMISTRY and NITROGEN ANALYSIS

DATE RECEIVED 5 | 22 | 86	LAB NO. WC-2236	USER CODE ☐ 59300 ☐ 59600 ☒ OTHER: 82235	
Collection DATE 5 | 20 | 86	SITE INFORM-ATION ►	Sample location P-9	
Collection TIME 1350		Collection site description EPNG SAN JUAN PLANT SEC 1 T29N R15W W of POND 1	
Collected by — Person/Agency BOYER / OCD			

SEND FINAL REPORT TO ►
ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg, PO Box 2088
Santa Fe, NM 87504-2088

Attn: David Boyer

Phone: 827-5812

RECEIVED
JUN 20 1986
OIL CONSERVATION DIVISION
SANTA FE

Station/ well code

Owner

SAMPLING CONDITIONS

☒ Bailed ☐ Dipped ☐ Pump ☐ Tap	Water level	Discharge	Sample type
pH (00400) 7.8	Conductivity (Uncorrected) 11500 µmho	Water Temp. (00010) 17 °C	Conductivity at 25°C (00094) µmho

Field comments: BAILED 5 TIMES

SAMPLE FIELD TREATMENT — *Check proper boxes* WATER CHEMISTRY PREFILTERED ONLY

No. of samples submitted 1

☐ NF: Whole sample (Non-filtered) ☒ F: Filtered in field with 0.45 µmembrane filter ☐ A: 2 ml H_2SO_4/L added

☒ NA: No acid added ☐ Other-*specify:* ☐ A: 5ml conc. HNO_3 added ☐ A: 4ml fuming HNO_3 added

ANALYTICAL RESULTS from SAMPLES

NF, NA		Units	Date analyzed
☐ Conductivity (Corrected) 25°C (00095)		µmho	
☐ Total non-filterable residue (suspended) (00530)		mg/l	
☐ Other:			
☐ Other:			
☐ Other:			

F, NA		Units	Date analyzed
☒ Calcium (00915)	564	mg/l	6-11
☒ Magnesium (00925)	150	mg/l	6-11
☒ Sodium (00930)	4048	mg/l	11-5 [illegible]
☒ Potassium (00935)	18.7	mg/l	6-11
☒ Bicarbonate (00440)	581	mg/l	5/26
☒ Chloride (00940)	516	mg/l	6/5
☒ Sulfate (00945)	10034	mg/l	6/2
☒ Total filterable residue (dissolved) (70300)	15,730	mg/l	5/28
☒ Other: CO_3	0		5/26

NF, A-H_2SO_4			
☐ Nitrate-N +, Nitrate-N total (00630)		mg/l	
☐ Ammonia-N total (00610)		mg/l	
☐ Total Kjeldahl-N ( )		mg/l	
☐ Chemical oxygen demand (00340)		mg/l	
☐ Total organic carbon ( )		mg/l	
☐ Other:			
☐ Other:			

F, A-H_2SO_4			
☐ Nitrate-N +, Nitrate-N dissolved (00631)		mg/l	
☐ Ammonia-N dissolved (00608)		mg/l	
☐ Total Kjeldahl-N ( )		mg/l	
☐ Other:			

Analyst	Date Reported	Reviewed by
	6 | 20 | 86	CO

Laboratory remarks

SLD 726 (12/84)

FOR OCD USE -- Date Owner Notified _____ Phone or letter? _____ Initials _____

New Mexico Health and Environment Department
SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 — (505) 841-2555

950
2

GENERAL WATER CHEMISTRY and NITROGEN ANALYSIS

DATE RECEIVED 5 22 86	LAB NO. WC-2237	USER CODE ☐ 59300 ☐ 59600 ☒ OTHER: 82235	
Collection DATE 5 20 86	SITE INFORM-ATION ►	Sample location P-9	
Collection TIME 1350		Collection site description EPNG SAN JUAN PLANT	
Collected by — Person/Agency BOYER / OCD		SEC 1 T29N R15W	

SEND FINAL REPORT TO ►

ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg, PO Box 2088
Santa Fe, NM 87504-2088

Attn: David Boyer

Phone: 827-5812

RECEIVED
JUN 1986
OIL CONSERVATION DIVISION
SANTA FE

W of POND 1

Station/ well code

Owner

SAMPLING CONDITIONS

☒ Bailed ☐ Dipped ☐ Pump ☐ Tap	Water level	Discharge	Sample type
pH (00400) 7.8	Conductivity (Uncorrected) 11500 µmho	Water Temp. (00010) 17 °C	Conductivity at 25°C (00094) µmho

Field comments BAILED 5 TIMES

SAMPLE FIELD TREATMENT — *Check proper boxes* WATER CHEMISTRY PREFILTERED ONLY

No. of samples submitted 1

☐ NF: Whole sample (Non-filtered) ☒ F: Filtered in field with 0.45 µmembrane filter ☐ A: 2 ml H_2SO_4/L added

☒ NA: No acid added ☐ Other-*specify:* ☐ A: 5ml conc. HNO_3 added ☐ A: 4ml fuming HNO_3 added

ANALYTICAL RESULTS from SAMPLES

NF, NA	Units	Date analyzed
☐ Conductivity (Corrected) 25°C (00095)	µmho	
☐ Total non-filterable residue (suspended) (00530)	mg/l	
☐ Other:		
☐ Other:		
☐ Other:		

F, NA	Units	Date analyzed
☒ Calcium (00915)	mg/l	
☒ Magnesium (00925)	mg/l	
☒ Sodium (00930)	mg/l	
☒ Potassium (00935)	mg/l	
☒ Bicarbonate (00440)	mg/l	
☒ Chloride (00940)	mg/l	
☒ Sulfate (00945)	mg/l	
☒ Total filterable residue (dissolved) (70300)	mg/l	
☒ Other: CO3		

NF, A-H_2SO_4

☐ Nitrate-N +, Nitrate-N total (00630)	mg/l	
☐ Ammonia-N total (00610)	mg/l	
☐ Total Kjeldahl-N ( )	mg/l	
☐ Chemical oxygen demand (00340)	mg/l	
☐ Total organic carbon ( )	mg/l	
☐ Other:		
☐ Other:		

F, A-H_2SO_4

☐ Nitrate-N +, Nitrate-N dissolved (00631)	mg/l	
☐ Ammonia-N dissolved (00608)	mg/l	
☐ Total Kjeldahl-N ( )	mg/l	
☐ Other:		

Analyst	Date Reported	Reviewed by

Laboratory remarks

SLD 726 (12/84)

FOR OCD USE -- Date Owner Notified _____ Phone or letter? _____ Initials _____

New Mexico Health and Environment Department
SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 — (505) 841-2555

pf

HEAVY METALS

GENERAL WATER CHEMISTRY and NITROGEN ANALYSIS

DATE RECEIVED 5 22 86	LAB NO. NM-945	USER CODE ☐ 59300 ☐ 59600 ☒ OTHER: 82235	
Collection DATE 5 20 86	SITE INFORMATION ►	Sample location P9	
Collection TIME 1350		Collection site description EP SAN JUAN PLANT	
Collected by — Person/Agency BOYER/OCD		Sec 1 T29N R15W	
		W of POND 1	
		Station/ well code	
		Owner	

SEND FINAL REPORT TO ►
ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg, PO Box 2088
Santa Fe, NM 87504-2088
Attn: David Boyer
Phone: 827-5812

SAMPLING CONDITIONS

☒ Bailed ☐ Dipped ☐ Pump ☐ Tap	Water level	Discharge	Sample type
pH (00400) 7.8	Conductivity (Uncorrected) 11500 µmho	Water Temp. (00010) 17 °C	Conductivity at 25°C (00094) µmho
Field comments BAILED 5 TIMES			

SAMPLE FIELD TREATMENT — *Check proper boxes*

No. of samples submitted 1 | ☐ NF: Whole sample (Non-filtered) | ☒ F: Filtered in field with 0.45 µmembrane filter | ☐ A: 2 ml H_2SO_4/L added

☐ NA: No acid added ☐ Other-*specify:* | ☒ A: 5ml conc. HNO_3 added | ☒ A: 4ml fuming HNO_3 added

ANALYTICAL RESULTS from SAMPLES

~~NF, NA~~ F, A	Units	Date analyzed	F, NA	Units	Date analyzed
☐ Conductivity (Corrected) 25°C (00095)	µmho		☐ Calcium (00915)	mg/l	
☐ Total non-filterable residue (suspended) (00530)	mg/l		☐ Magnesium (00925)	mg/l	
☒ Other: ICAP SCAN			☐ Sodium (00930)	mg/l	
☒ Other: As			☐ Potassium (00935)	mg/l	
☒ Other: Se			☐ Bicarbonate (00440)	mg/l	
			☐ Chloride (00940)	mg/l	
			☐ Sulfate (00945)	mg/l	
			☐ Total filterable residue (dissolved) (70300)	mg/l	
			☐ Other:		

NF, A-H_2SO_4	Units	Date analyzed	F, A-H_2SO_4	Units	Date analyzed
☐ Nitrate-N +, Nitrate-N total (00630)	mg/l		☐ Nitrate-N +, Nitrate-N dissolved (00631)	mg/l	
☐ Ammonia-N total (00610)	mg/l		☐ Ammonia-N dissolved (00608)	mg/l	
☐ Total Kjeldahl-N ( )	mg/l		☐ Total Kjeldahl-N ( )	mg/l	
☐ Chemical oxygen demand (00340)	mg/l		☐ Other:		
☐ Total organic carbon ( )	mg/l				
☐ Other:					
☐ Other:					

Analyst	Date Reported	Reviewed by
	7 23 86	Jim Ashley

Laboratory remarks: Digested

SLD 726 (12/84)

FOR OCD USE -- Date Owner Notified _____ Phone or letter? _____ Initials _____

Lab Number: [redacted] 995

Sample [redacted]de: P9-EP San Juan Plant

Date Submitted: 5/22/86

Date Analyzed: 5/27/86

By: Boyer

Reviewed By: Jim Ashby

Date Reported: 7/23/86

Element	ICAP VALUE(MG/L)	AA VALUE(MG/L)
Aluminum	<0.1	
Barium	<0.1	
Berylium	<0.1	
Boron	0.6	
Cadmium	<0.1	
Calcium	450.	
Chromium	<0.1	
Cobalt	<0.1	
Copper	<0.1	
Iron	<0.1	
Lead	<0.1	
Magnesium	210.	
Manganese	6.4	
Molybdenum	<0.1	
Nickel	<0.1	
Silicon	5.3	
Silver	<0.1	
Strontium	5.0	
Tin	<0.1	
Vanadium	<0.1	
Zinc	<0.1	
Arsenic		0.034
Selenium		<0.01
Mercury		

86-0590-C

STATE OF NEW MEXICO
ENVIRONMENT

SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 841-2570

754

REPORT TO: DAVID G. BOYER
PLEASE PRINT
NEW MEXICO OIL CONSERVATION DIV.
P.O. BOX 2088
SANTA FE, NM 87504-2088
PHONE(S): 827-5812

S.L.D. No.: OR- 590-H.B
DATE REC. : 5/22/86
SLD PRIORITY #:

USER CODE: 8|2|2|3|5

SUBMITTER: DAVID BOYER
SUBMITTER CODE: | | | |

SAMPLE TYPE: WATER ☒, SOIL ☐, OTHER
SAMPLE TYPE CODE: | |

COLLECTED: 5/20/86 - 11:35 BY DAB
DATE TIME INITIALS
CODE: 8|6|0|5|2|0|1|1|3|5|DAB
Y Y M M D D H H M M I I I

SOURCE: P10
CODE: | | | + | | | + | | | | |
AQUIFER DEPTH

NEAREST CITY: KIRTLAND
CODE: | | | | | |

LOCATION: EP SAN JUAN PLANT
CODE: 29|N|1|5|W|0|1| | | |
TOWNSHIP RANGE SECTION TRACTS

pH= ; Conductivity= 8000 umho/cm at 20 °C; Chlorine Residual=
Dissolved Oxygen= mg/l; Alkalinity= ; Flow Rate=
Sampling Location, Methods and Remarks (i.e. odors, etc.)

HEAVY HC ODOR. BLACK COLOR, VERY THICK, LIKE CLAY WATER
BAILED 5 TIMES.
NEAR N BOUNDARY NEAR PIPE LINE

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Jami Bailey
Method of shipment to the Laboratory Hand carried
This form accompanies 2 Septum Vials, Glass Jugs,
Containers are marked as follows to indicate preservation:
☐ NP: No preservation; sample stored at room temperature.
☒ P-Ice Sample stored in an ice bath (not frozen).
☐ P-$Na_2S_2O_3$; Sample preserved with $Na_2S_2O_3$ to remove chlorine residual.

I (we) certify that this sample was transferred from
to at (location) on
__/__/__ - __:__ and that the statements in this block are correct.
DATE AND TIME
Evidentiary Seals: Not Sealed ☐ Seals Intact: Yes ☐ No ☐
Signatures

(we) certify that this sample was transferred from
to at (location) on
__/__/__ - __:__ and that the statements in this block are correct.
DATE AND TIME
Evidentiary Seals: Not Sealed ☐ Seals Intact: Yes ☐ No ☐
Signatures

ANALYSES REQUESTED

LAB. No.: ORG- 590

PLEASE CHECK THE APPROPRIATE BOXES BELOW TO INDICATE THE TYPE OF ANALYTICAL SCREENS REQUIRED. WHENEVER POSSIBLE LIST SPECIFIC COMPOUNDS SUSPECTED OR REQUIRED.

QUALITATIVE	QUANTITATIVE	PURGEABLE SCREENS	QUALITATIVE	QUANTITATIVE	EXTRACTABLE SCREENS
		ALIPHATIC HYDROCARBON SCREEN			ALIPHATIC HYDROCARBONS
X	X	AROMATIC HYDROCARBON SCREEN			CHLORINATED HYDROCARBON PESTICIDES
X	X	HALOGENATED HYDROCARBON SCREEN			CHLOROPHENOXY ACID HERBICIDES
		GAS CHROMATOGRAPH/MASS SPECTROMETER			HYDROCARBON FUEL SCREEN
					ORGANOPHOSPHATE PESTICIDES
					POLYCHLORINATED BIPHENYLS (PCB's)
					POLYNUCLEAR AROMATIC HYDROCARBONS
					TRIAZINE HERBICIDES
		SPECIFIC COMPOUNDS			SPECIFIC COMPOUNDS

REMARKS:

ANALYTICAL RESULTS

COMPOUND	[PPB]	COMPOUND	[PPB]
halogenated purgables	none detected		
benzene	310		
toluene	none detected		
ethylbenzene	71		
p-xylene	300		
m-xylene	160		
o-xylene	none detected		
		* DETECTION LIMIT	10 ug/m/L

REMARKS: Eight other compounds were detected by the aromatic screen that were not identified.

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes___ NO X. 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 analytical data on this page accurately reflect the analytical results for this sample.

Date(s) of analysis: 10 Jun 86. Analyst's signature: [signature]

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewers signature: [signature]

FOR OCD USE -- Date Owner Notified_____ Phone or letter?_____ Initials_____

754
3

STATE OF NEW MEXICO
ENVIRONMENT

SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 841-2570

86- 0588-C

REPORT TO: DAVID G. BOYER
PLEASE PRINT
NEW MEXICO OIL CONSERVATION DIV.
P.O. BOX 2088
SANTA FE, NM 87504-2088
PHONE(S): 827-5812

RECEIVED
MAY 22 1986
OIL CONSERVATION DIVISION
SANTA FE

S.L.D. No.: OR- 588-A,B
DATE REC. : 5/22/86
SLD PRIORITY #:
USER CODE: 8|2|2|3|5|

SUBMITTER: DAVID BOYER
SUBMITTER CODE: | | | | |

SAMPLE TYPE: WATER [X], SOIL [ ], OTHER _____
SAMPLE TYPE CODE: | | |

COLLECTED: 5/20/86 - 14:00 BY DB
DATE TIME INITIALS
CODE: |8|6|0|5|2|0|1|4|0|0| (YYMMDDHHMMII)

SOURCE: P-11
CODE: | | | | + | | | | + | | | | | (AQUIFER + DEPTH)

NEAREST CITY: KIRTLAND
CODE: | | | | | |

LOCATION: EP SAN JUAN PLANT
CODE: |2|9|N|1|5|W|0|1| | | (TOWNSHIP RANGE SECTION TRACTS)

pH= 7.5 ; Conductivity= 9600 umho/cm at 19 °C; Chlorine Residual= _____
Dissolved Oxygen= _____ mg/l; Alkalinity= _____ ; Flow Rate= _____
Sampling Location, Methods and Remarks (i.e. odors, etc.)

DTW 13.9' fr TOC
BAILED 5 TIMES
N of PROCESSING AREA; SW of POND 1

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. [signature]
Method of shipment to the Laboratory Hand carried
This form accompanies 2 Septum Vials, ___ Glass Jugs, ___ _____
Containers are marked as follows to indicate preservation:

- [ ] NP: No preservation; sample stored at room temperature.
- [X] P-Ice Sample stored in an ice bath (not frozen).
- [ ] P-$Na_2S_2O_3$; Sample preserved with $Na_2S_2O_3$ to remove chlorine residual.

I (we) certify that this sample was transferred from _____
to _____ at (location) _____ on
___/___/___ - ___:___ and that the statements in this block are correct.
DATE AND TIME
Evidentiary Seals: Not Sealed [ ] Seals Intact: Yes [ ] No [ ]
Signatures _____ _____

(we) certify that this sample was transferred from _____
to _____ at (location) _____ on
___/___/___ - ___:___ and that the statements in this block are correct.
DATE AND TIME
Evidentiary Seals: Not Sealed [ ] Seals Intact: Yes [ ] No [ ]
Signatures _____ _____

ANALYSES REQUESTED

LAB. No.: ORG- 588

PLEASE CHECK THE APPROPRIATE BOXES BELOW TO INDICATE THE TYPE OF ANALYTICAL SCREENS REQUIRED. WHENEVER POSSIBLE LIST SPECIFIC COMPOUNDS SUSPECTED OR REQUIRED.

QUALITATIVE	QUANTITATIVE	PURGEABLE SCREENS	QUALITATIVE	QUANTITATIVE	EXTRACTABLE SCREENS
		ALIPHATIC HYDROCARBON SCREEN			ALIPHATIC HYDROCARBONS
X	X	AROMATIC HYDROCARBON SCREEN			CHLORINATED HYDROCARBON PESTICIDES
X	X	HALOGENATED HYDROCARBON SCREEN			CHLOROPHENOXY ACID HERBICIDES
		GAS CHROMATOGRAPH/MASS SPECTROMETER			HYDROCARBON FUEL SCREEN
					ORGANOPHOSPHATE PESTICIDES
					POLYCHLORINATED BIPHENYLS (PCB's)
					POLYNUCLEAR AROMATIC HYDROCARBONS
					TRIAZINE HERBICIDES
		SPECIFIC COMPOUNDS			SPECIFIC COMPOUNDS

REMARKS:

ANALYTICAL RESULTS

COMPOUND	[PPB]	COMPOUND	[PPB]
aromatic purgeables	none detected		
halogenated purgeables	none detected		
		* DETECTION LIMIT	5 ug/L

REMARKS:

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes ___ NO X. 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 analytical data on this page accurately reflect the analytical results for this sample.

Date(s) of analysis: 10 June 86. Analyst's signature: [signature]

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewers signature: [signature]

FOR OCD USE -- Date Owner Notified _____ Phone or letter? _____ Initials _____

New Mexico Health and Environment Department
SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 — (505) 841-2555

2
859

GENERAL WATER CHEMISTRY and NITROGEN ANALYSIS

DATE RECEIVED 5 22 86	LAB NO. WC 2291	USER CODE ☐ 59300 ☐ 59600 ☒ OTHER: 82235	
Collection DATE 5 20 86	2222 SITE INFORM-ATION ►	Sample location [illegible]	
Collection TIME 1400		Collection site description EPNG SAN JUAN PLANT	
Collected by — Person/Agency BOYER / OCD		SEC 1 T29N R15W	

SEND FINAL REPORT TO ►

ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg, PO Box 2088
Santa Fe, NM 87504-2088

Attn: David Boyer

Phone: 827-5812

N of PROCESSING PLANT
SW of POND 1

Station/ well code

Owner

SAMPLING CONDITIONS

☒ Bailed ☐ Dipped ☐ Pump ☐ Tap	Water level 13.9' TOC	Discharge	Sample type
pH (00400) 7.5	Conductivity (Uncorrected) 9600 µmho	Water Temp. (00010) 19 °C	Conductivity at 25°C (00094) µmho

Field comments: BAILED 5 TIMES

SAMPLE FIELD TREATMENT — *Check proper boxes*

No. of samples submitted 1

☐ NF: Whole sample (Non-filtered) ☒ F: Filtered in field with 0.45 µmembrane filter ☐ A: 2 ml H_2SO_4/L added

☒ NA: No acid added ☐ Other-*specify:* ☐ A: 5ml conc. HNO_3 added ☐ A: 4ml fuming HNO_3 added

ANALYTICAL RESULTS from SAMPLES

NF, NA	Units	Date analyzed	F, NA		Units	Date analyzed
☐ Conductivity (Corrected) 25°C (00095)	µmho		☒ Calcium (00915)	220	mg/l	6/2
☐ Total non-filterable residue (suspended) (00530)	mg/l		☒ Magnesium (00925)	78.1	mg/l	"
☐ Other:			☒ Sodium (00930)	3703	mg/l	"
☐ Other:			☒ Potassium (00935)	8.19	mg/l	"
☐ Other:			☒ Bicarbonate (00440)	750	mg/l	5/26
			☒ Chloride (00940)	298	mg/l	6/5
			☒ Sulfate (00945)	7467	mg/l	6/2
			☒ Total filterable residue (dissolved) (70300)	11,600	mg/l	5/28
			☒ Other: CO_3	0		5/26

NF, A-H_2SO_4			F, A-H_2SO_4		
☐ Nitrate-N +, Nitrate-N total (00630)	mg/l		☐ Nitrate-N +, Nitrate-N dissolved (00631)	mg/l	
☐ Ammonia-N total (00610)	mg/l		☐ Ammonia-N dissolved (00608)	mg/l	
☐ Total Kjeldahl-N ( )	mg/l		☐ Total Kjeldahl-N ( )	mg/l	
☐ Chemical oxygen demand (00340)	mg/l		☐ Other:		
☐ Total organic carbon ( )	mg/l				
☐ Other:					
☐ Other:					

Analyst	Date Reported	Reviewed by
	6 11 86	[signature]

Laboratory remarks

SLD 726 (12/84)

FOR OCD USE -- Date Owner Notified _____ Phone or letter? _____ Initials _____

101

754
3

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 841-2570

86-0586-C

REPORT TO: DAVID G. BOYER
PLEASE PRINT
NEW MEXICO OIL CONSERVATION DIV.
P.O. BOX 2088
SANTA FE, NM 87504-2088
PHONE(S): 827-5812

S.L.D. No.: OR-580-17-B
DATE REC. : 5/22/86
SLD PRIORITY #:

USER CODE: 8|2|2|3|5|

SUBMITTER: DAVID BOYER
SUBMITTER CODE: | | | | |

SAMPLE TYPE: WATER [X], SOIL [ ], OTHER _____
SAMPLE TYPE CODE: | | |

COLLECTED: 5/20/86 - 16:15 BY AB
DATE TIME INITIALS
CODE: 8|6|0|5|2|0|1|6|1|5|A|B|
Y Y M M D D H H M M I I I

SOURCE: P 12
CODE: | | | + | | | | + | | | | |
AQUIFER DEPTH

NEAREST CITY: KIRTLAND
CODE: | | | | | |

LOCATION: EP SAN JUAN PLANT
CODE: 2|9|N|1|5|W|2|1| | | |
TOWNSHIP RANGE SECTION TRACTS

pH= 7.5 ; Conductivity= 4820 umho/cm at 21 °C; Chlorine Residual= _____
Dissolved Oxygen= _____ mg/l; Alkalinity= _____; Flow Rate= _____
Sampling Location, Methods and Remarks (i.e. odors, etc.)
HEAVY HC/AMINE ODOR; GREEN IRIDESCENT COLOR
BAILED 5 TIMES
S of PROCESS PLANT; WSW of FLARE PIT

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Jamie Bailey
Method of shipment to the Laboratory hand carried
This form accompanies 2 Septum Vials, ___ Glass Jugs, ___ _____
Containers are marked as follows to indicate preservation:
[ ] NP: No preservation; sample stored at room temperature.
[X] P-Ice Sample stored in an ice bath (not frozen).
[ ] P-$Na_2S_2O_3$; Sample preserved with $Na_2S_2O_3$ to remove chlorine residual.

I (we) certify that this sample was transferred from _____
to _____ at (location) _____ on
___/___/___-___:___ and that the statements in this block are correct.
DATE AND TIME
Evidentiary Seals: Not Sealed [ ] Seals Intact: Yes [ ] No [ ]
Signatures _____ _____

(we) certify that this sample was transferred from _____
to _____ at (location) _____ on
___/___/___-___:___ and that the statements in this block are correct.
DATE AND TIME
Evidentiary Seals: Not Sealed [ ] Seals Intact: Yes [ ] No [ ]
Signatures _____ _____

ANALYSES REQUESTED

LAB. No.: ORG- 586

PLEASE CHECK THE APPROPRIATE BOXES BELOW TO INDICATE THE TYPE OF ANALYTICAL SCREENS REQUIRED. WHENEVER POSSIBLE LIST SPECIFIC COMPOUNDS SUSPECTED OR REQUIRED.

QUALITATIVE	QUANTITATIVE	PURGEABLE SCREENS	QUALITATIVE	QUANTITATIVE	EXTRACTABLE SCREENS
		ALIPHATIC HYDROCARBON SCREEN			ALIPHATIC HYDROCARBONS
X	X	AROMATIC HYDROCARBON SCREEN			CHLORINATED HYDROCARBON PESTICIDES
X	X	HALOGENATED HYDROCARBON SCREEN			CHLOROPHENOXY ACID HERBICIDES
		GAS CHROMATOGRAPH/MASS SPECTROMETER			HYDROCARBON FUEL SCREEN
					ORGANOPHOSPHATE PESTICIDES
					POLYCHLORINATED BIPHENYLS (PCB's)
					POLYNUCLEAR AROMATIC HYDROCARBONS
					TRIAZINE HERBICIDES
		SPECIFIC COMPOUNDS			SPECIFIC COMPOUNDS

REMARKS:

ANALYTICAL RESULTS

COMPOUND	[PPB]	COMPOUND	[PPB]
aromatic purgeables (A)	none detected		
halogenated purgeables	none detected		
		* DETECTION LIMIT	5 ppb

REMARKS: (A) Six compounds were detected by the aromatic screen that were not identified. (B) There is a possible trace of benzene < 1 ppb.

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes ___ NO X. 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 analytical data on this page accurately reflect the analytical results for this sample.

Date(s) of analysis: 6 Jun 86. Analyst's signature: J. Tinney

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewers signature: K Meyerhen

FOR OCD USE -- Date Owner Notified _____ Phone or letter? _____ Initials _____

964
3

86- 0601-B

STATE OF NEW MEXICO
ENVIRONMENT

SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 841-2570

REPORT TO: DAVID G. BOYER
PLEASE PRINT
NEW MEXICO OIL CONSERVATION DIV.
P.O. BOX 2088
SANTA FE, NM 87504-2088
PHONE(S): 827-5812

S.L.D. No.: OR- 601-17
DATE REC. : 5/22/86
SLD PRIORITY #:

USER CODE: 8|2|2|3|5|

SUBMITTER: D.G. BOYER
SUBMITTER CODE: | | | | |

SAMPLE TYPE: WATER [X], SOIL [ ], OTHER _____
SAMPLE TYPE CODE: | | |

COLLECTED: 86/05/20 - 16:45 BY DGB
DATE TIME INITIALS
CODE: |8|6|0|5|2|0|1|6|1|5|A|B|
Y Y M M D D H H M M I I I

SOURCE: ~~Well~~ P12
CODE: | | | | + | | | | + | | | | |
AQUIFER DEPTH

NEAREST CITY: ~~Shiprock~~ EP SAN JUAN
CODE: | | | | | | |

LOCATION: FARTLAND
CODE: ~~3|6|M|1|2|W|2|3|3|3|2|1~~ 29N 15W 01
TOWNSHIP RANGE SECTION TRACTS

pH=_____; Conductivity=_____umho/cm at _____°C; Chlorine Residual=_____
Dissolved Oxygen=_____mg/l; Alkalinity=_____; Flow Rate=_____
Sampling Location, Methods and Remarks (i.e. odors, etc.)
IRIDESCENT GREEN COLOR, HC/AMINE ODOR

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. D.G. Boyer
Method of shipment to the Laboratory Hand carried
This form accompanies ___ Septum Vials, 2 Glass Jugs, ___ _____
Containers are marked as follows to indicate preservation:
[ ] NP: No preservation; sample stored at room temperature.
[X] P-Ice Sample stored in an ice bath (not frozen).
[ ] P-$Na_2S_2O_3$; Sample preserved with $Na_2S_2O_3$ to remove chlorine residual.

I (we) certify that this sample was transferred from D.G. Boyer
to _____ at (location) SLD on
__/__/__ - __:__ and that the statements in this block are correct.
DATE AND TIME
Evidentiary Seals: Not Sealed [ ] Seals Intact: Yes [ ] No [ ]
Signatures _____ D.G. Boyer

(we) certify that this sample was transferred from _____
to _____ at (location) _____ on
__/__/__ - __:__ and that the statements in this block are correct.
DATE AND TIME
Evidentiary Seals: Not Sealed [ ] Seals Intact: Yes [ ] No [ ]
Signatures _____ _____

ANALYSES REQUESTED

LAB. No.: ORG- 601

PLEASE CHECK THE APPROPRIATE BOXES BELOW TO INDICATE THE TYPE OF ANALYTICAL SCREENS REQUIRED. WHENEVER POSSIBLE LIST SPECIFIC COMPOUNDS SUSPECTED OR REQUIRED.

QUALITATIVE	QUANTITATIVE	PURGEABLE SCREENS	QUALITATIVE	QUANTITATIVE	EXTRACTABLE SCREENS
		ALIPHATIC HYDROCARBON SCREEN			ALIPHATIC HYDROCARBONS
		AROMATIC HYDROCARBON SCREEN			CHLORINATED HYDROCARBON PESTICIDES
		HALOGENATED HYDROCARBON SCREEN			CHLOROPHENOXY ACID HERBICIDES
		GAS CHROMATOGRAPH/MASS SPECTROMETER			HYDROCARBON FUEL SCREEN
					ORGANOPHOSPHATE PESTICIDES
					POLYCHLORINATED BIPHENYLS (PCB's)
			X	X	POLYNUCLEAR AROMATIC HYDROCARBONS
					TRIAZINE HERBICIDES
		SPECIFIC COMPOUNDS			SPECIFIC COMPOUNDS
					Napthalenes, Benzopyrene

REMARKS:

ANALYTICAL RESULTS

COMPOUND	[PPB]	COMPOUND	[PPB]
NAPHTHALENE	< 5PPB		
2-METHYLNAPHTHALENE	< 5PPB		
1-METHYLNAPHTHALENE	<5 ~~5~~ PPB		
BENZO(a) PYRENE	< 5PPB		
		* DETECTION LIMIT	

REMARKS:

UNLISTED PNA's < 5ppm except Dibenzo(a,h)anthracene which is < 10 ppb

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 analytical data on this page accurately reflect the analytical results for this sample.

Date(s) of analysis: 7/9/86. Analyst's signature: A S Berrua

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewers signature: K Meyerhen

FOR OCD USE -- Date Owner Notified_____ Phone or letter?_____ Initials_____

New Mexico Health and E[illegible]ment Department
SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 — (505) 841-2555

2
859

GENERAL WATER CHEMISTRY and NITROGEN ANALYSIS

DATE RECEIVED 5 22 86	LAB NO. WC 2225	USER CODE ☐ 59300 ☐ 59600 ☒ OTHER: 82235	
Collection DATE 5 20 86	WC 2226 SITE INFORM-ATION	Sample location P12	
Collection TIME 1615		Collection site description EP — SAN JUAN PLANT	
Collected by — Person/Agency BOYER/OCD			

SEND FINAL REPORT TO ►

ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg, PO Box 2088
Santa Fe, NM 87504-2088

Attn: David Boyer

Phone: 827-5812

S01 T29N R15W

Station/ well code

Owner

SAMPLING CONDITIONS

☒ Bailed ☐ Pump ☐ Dipped ☐ Tap	Water level CSG 1.6' G.L. 22' TOC	Discharge	Sample type
pH (00400) 7.5	Conductivity (Uncorrected) 4820 µmho	Water Temp. (00010) 21 °C	Conductivity at 25°C (00094) µmho

Field comments HEAVY HC/AMINE ODOR - GREEN IRIDESCENT COLOR
BAILED 5 TIMES

SAMPLE FIELD TREATMENT — *Check proper boxes*

No. of samples submitted 1

☐ NF: Whole sample (Non-filtered) ☒ F: Filtered in field with 0.45 µmembrane filter ☐ A: 2 ml H_2SO_4/L added

☒ NA: No acid added ☐ Other-*specify:* ☐ A: 5ml conc. HNO_3 added ☐ A: 4ml fuming HNO_3 added

ANALYTICAL RESULTS from SAMPLES

NF, NA		Units	Date analyzed
☐ Conductivity (Corrected) 25°C (00095)		µmho	
☐ Total non-filterable residue (suspended) (00530)		mg/l	
☐ Other:			
☐ Other:			
☐ Other:			

F, NA		Units	Date analyzed
☒ Calcium (00915)	252	mg/l	6-2
☒ Magnesium (00925)	322	mg/l	"
☒ Sodium (00930)	726.8	mg/l	"
☒ Potassium (00935)	17.2	mg/l	"
☒ Bicarbonate (00440)	3322	mg/l	5/26
☒ Chloride (00940)	218	mg/l	6/5
☒ Sulfate (00945)	742	mg/l	6/2
☒ Total filterable residue (dissolved) (70300)	5210	mg/l	5/28
☒ Other: CO_3	0		5/26

NF, A-H_2SO_4			
☐ Nitrate-N +, Nitrate-N total (00630)		mg/l	
☐ Ammonia-N total (00610)		mg/l	
☐ Total Kjeldahl-N ( )		mg/l	
☐ Chemical oxygen demand (00340)		mg/l	
☐ Total organic carbon ( )		mg/l	
☐ Other:			
☐ Other:			

F, A-H_2SO_4			
☐ Nitrate-N +, Nitrate-N dissolved (00631)		mg/l	
☐ Ammonia-N dissolved (00608)		mg/l	
☐ Total Kjeldahl-N ( )		mg/l	
☐ Other:			

Analyst	Date Reported	Reviewed by
	6 11 86	CD

Laboratory remarks

SLD 726 (12/84)

93

FOR OCD USE -- Date Owner Notified _____ Phone or letter? _____ Initials _____

New Mexico Health and E[illegible]nment Department
SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 — (505) 841-2555

852 / 1

GENERAL WATER CHEMISTRY and NITROGEN ANALYSIS

DATE RECEIVED 5 22 86	LAB NO. 2233	USER CODE ☐ 59300 ☐ 59600 ☒ OTHER: 82235	
Collection DATE 5 20 86	SITE INFORM-ATION	Sample location P 12	
Collection TIME 1615		Collection site description EP SAN JUAN PLANT	
Collected by — Person/Agency ROYER/OCD			

SEND FINAL REPORT TO ►

ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg, PO Box 2088
Santa Fe, NM 87504-2088

Attn: David Boyer

Phone: 827-5812

RECEIVED
JUL CONSERVATION DIVISION
STATE

Station/ well code

Owner

SAMPLING CONDITIONS

☒ Bailed ☐ Dipped ☐ Pump ☐ Tap	Water level CSG 1.6'6.L. 22'TOC	Discharge	Sample type
pH (00400) 7.5	Conductivity (Uncorrected) 4820 µmho	Water Temp. (00010) 21 °C	Conductivity at 25°C (00094) µmho

Field comments HEAVY HC/AMINE ODOR - GREEN IRIDESCENT COLOR
BAILED 5 TIMES

SAMPLE FIELD TREATMENT — *Check proper boxes*

No. of samples submitted 1

☐ **NF:** Whole sample (Non-filtered) ☒ **F:** Filtered in field with 0.45 µmembrane filter ☒ **A:** 2 ml H_2SO_4/L added

☐ **NA:** No acid added ☐ Other-*specify:* ☐ A: 5ml conc. HNO_3 added ☐ A: 4ml fuming HNO_3 added

ANALYTICAL RESULTS from SAMPLES

NF, NA	Units	Date analyzed
☐ Conductivity (Corrected) 25°C (00095)	µmho	
☐ Total non-filterable residue (suspended) (00530)	mg/l	
☐ Other:		
☐ Other:		
☐ Other:		

F, NA	Units	Date analyzed
☐ Calcium (00915)	mg/l	
☐ Magnesium (00925)	mg/l	
☐ Sodium (00930)	mg/l	
☐ Potassium (00935)	mg/l	
☐ Bicarbonate (00440)	mg/l	
☐ Chloride (00940)	mg/l	
☐ Sulfate (00945)	mg/l	
☐ Total filterable residue (dissolved) (70300)	mg/l	
☐ Other:		

NF, A-H_2SO_4		
☐ Nitrate-N +, Nitrate-N total (00630)	mg/l	
☐ Ammonia-N total (00610)	mg/l	
☐ Total Kjeldahl-N ( )	mg/l	
☐ Chemical oxygen demand (00340)	mg/l	
☐ Total organic carbon ( )	mg/l	
☐ Other:		
☐ Other:		

F, A-H_2SO_4		
☒ Nitrate-N +, Nitrate-N dissolved (00631)	< 0.04 mg/l	6/2
☒ Ammonia-N dissolved (00608)	449 mg/l	6-29
☒ Total Kjeldahl-N ( )	1400 mg/l	6-10
☐ Other:		

Analyst | Date Reported 7 7 86 | Reviewed by

Laboratory remarks

SLD 726 (12/84)

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New Mexico Health and Environment Department
SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 — (505) 841-2555

HEAVY METALS

GENERAL WATER CHEMISTRY and NITROGEN ANALYSIS

DATE RECEIVED 5 22 86	LAB NO. NM-996	USER CODE ☐ 59300 ☐ 59600 ☒ OTHER: 82235	
Collection DATE 5 20 86	SITE INFORM-ATION	Sample location P12	
Collection TIME 1615		Collection site description EP SAN JUAN PLANT	
Collected by — Person/Agency BOYER/OCD			Sec 1 T29N R15W

SEND FINAL REPORT TO ►
ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg., PO Box 2088
Santa Fe, NM 87504-2088
Attn: David Boyer
Phone: 827-5812

Station/ well code
Owner

SAMPLING CONDITIONS

☒ Bailed ☐ Pump ☐ Dipped ☐ Tap	Water level 22' TOC (SG 1.66 g/L)	Discharge	Sample type
pH (00400) 7.5	Conductivity (Uncorrected) 4820 µmho	Water Temp. (00010) 21 °C	Conductivity at 25°C (00094) µmho

Field comments: HEAVY HC/AMINE ODOR - GREEN IRIDESCENT COLOR
BAILED 5 TIMES

SAMPLE FIELD TREATMENT — *Check proper boxes*

No. of samples submitted 1

☐ NF: Whole sample (Non-filtered) ☒ F: Filtered in field with 0.45 µmembrane filter ☐ A: 2 ml H_2SO_4/L added

☐ NA: No acid added ☐ Other-*specify:* ☐ A: 5ml conc. HNO_3 added ☒ A: 4ml fuming HNO_3 added

ANALYTICAL RESULTS from SAMPLES

~~NF, NA~~ F, A	Units	Date analyzed	F, NA	Units	Date analyzed
☐ Conductivity (Corrected) 25°C (00095)	µmho		☐ Calcium (00915)	mg/l	
☐ Total non-filterable residue (suspended) (00530)	mg/l		☐ Magnesium (00925)	mg/l	
☒ Other: ICAP SCAN			☐ Sodium (00930)	mg/l	
☒ Other: As			☐ Potassium (00935)	mg/l	
☒ Other: Se			☐ Bicarbonate (00440)	mg/l	
☒ Hg			☐ Chloride (00940)	mg/l	
			☐ Sulfate (00945)	mg/l	
			☐ Total filterable residue (dissolved) (70300)	mg/l	
			☐ Other:		

NF, A-H_2SO_4

☐ Nitrate-N +, Nitrate-N total (00630)	mg/l	
☐ Ammonia-N total (00610)	mg/l	
☐ Total Kjeldahl-N ( )	mg/l	
☐ Chemical oxygen demand (00340)	mg/l	
☐ Total organic carbon ( )	mg/l	
☐ Other:		
☐ Other:		

F, A-H_2SO_4

☐ Nitrate-N +, Nitrate-N dissolved (00631)	mg/l	
☐ Ammonia-N dissolved (00608)	mg/l	
☐ Total Kjeldahl-N ( )	mg/l	
☐ Other:		

Analyst	Date Reported	Reviewed by
	7 23 86	Jim Ashby

Laboratory remarks: Digested

SLD 726 (12/84)

FOR OCD USE -- Date Owner Notified _____ Phone or letter? _____ Initials _____

Lab Number: HM 996

Sample Code: P12 EP San Juan Plant

Date Submitted: 5/22/86

Date Analyzed: 5/27/86

By: Boyer

Reviewed By: Jim Ashby

Date Reported: 7/23/86

Element	ICAP VALUE(MG/L)	AA VALUE(MG/L)
Aluminum	<0.1	
Barium	0.1	
Berylium	<0.1	
Boron	0.9	
Cadmium	<0.1	
Calcium	130.	
Chromium	<0.1	
Cobalt	<0.1	
Copper	<0.1	
Iron	3.2	
Lead	<0.1	
Magnesium	170.	
Manganese	0.7	
Molybdenum	<0.1	
Nickel	0.2	
Silicon	4.7	
Silver	<0.1	
Strontium	6.5	
Tin	<0.1	
Vanadium	<0.1	
Zinc	<0.1	
Arsenic		0.035
Selenium		<0.01
Mercury		<0.0005

New Mexico Health and Environment Department
SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 — (505) 841-2555

959

GENERAL WATER CHEMISTRY and NITROGEN ANALYSIS

DATE RECEIVED	5 22 86	LAB NO.	HC-2242
Collection DATE	5 20 86	SITE INFORMATION ►	Q318
Collection TIME	1220		
Collected by — Person/Agency	BOYER/OCD		

USER CODE ☐ 59300 ☐ 59600 ☒ OTHER: 82235

Sample location: P7 - SURFACE SALTS

Collection site description: EP SAN JUAN PLANT

SEC 1 T29N R15W

N OF P9; NW OF POND 1

NEAR PROPERTY FENCE

SEND FINAL REPORT TO ►

ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg, PO Box 2088
Santa Fe, NM 87504-2088

Attn: David Boyer

Phone: 827-5812

RECEIVED
JUN 10 1986
OIL CONSERVATION DIVISION

Station/ well code

Owner

SAMPLING CONDITIONS

☒ Bailed ☐ Pump ☐ Dipped ☐ Tap

Water level

Discharge

Sample type

pH (00400) ~~NR~~ 7.8

Conductivity (Uncorrected) NR 21,500 ~~7900~~ µmho

Water Temp. (00010) NR 26°C ~~X~~ °C

Conductivity at 25°C (00094) µmho

Field comments: ~~BAILED 5 TIMES SOME HC ODOR~~ NR
100ml of unconsolidated salt w/deionized H_2O to 1000ml

SAMPLE FIELD TREATMENT — *Check proper boxes*

No. of samples submitted: 1

☐ NF: Whole sample (Non-filtered) ☒ F: Filtered in field with 0.45 µmembrane filter ☐ A: 2 ml H_2SO_4/L added

☒ NA: No acid added ☐ Other-*specify:* ☐ A: 5ml conc. HNO_3 added ☐ A: 4ml fuming HNO_3 added

ANALYTICAL RESULTS from SAMPLES

NF, NA	Units	Date analyzed
☐ Conductivity (Corrected) 25°C (00095)	µmho	
☐ Total non-filterable residue (suspended) (00530)	mg/l	
☐ Other:		
☐ Other:		
☐ Other:		

F, NA		Units	Date analyzed
☒ Calcium (00915)	180	mg/l	6-2
☒ Magnesium (00925)	195	mg/l	"
☒ Sodium (00930)	1058	mg/l	"
☒ Potassium (00935)	0.51	mg/l	"
☒ Bicarbonate (00440)	266	mg/l	5/26
☒ Chloride (00940)	957	mg/l	6/5
☒ Sulfate (00945)	18192	mg/l	6/2
☒ Total filterable residue (dissolved) (70300)	23,740	mg/l	5/28
☒ Other: CO_3	16.8		5/26

NF, A-H_2SO_4			
☐ Nitrate-N +, Nitrate-N total (00630)		mg/l	
☐ Ammonia-N total (00610)		mg/l	
☐ Total Kjeldahl-N ( )		mg/l	
☐ Chemical oxygen demand (00340)		mg/l	
☐ Total organic carbon ( )		mg/l	
☐ Other:			
☐ Other:			

F, A-H_2SO_4			
☐ Nitrate-N +, Nitrate-N dissolved (00631)		mg/l	
☐ Ammonia-N dissolved (00608)		mg/l	
☐ Total Kjeldahl-N ( )		mg/l	
☐ Other:			

Analyst	Date Reported	Reviewed by
	6 11 86	

Laboratory remarks

SLD 726 (12/84)

FOR OCD USE -- Date Owner Notified _____ Phone or letter? _____ Initials _____

New Mexico Health and Environment Department
SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 — (505) 841-2555

850
3

GENERAL WATER CHEMISTRY and NITROGEN ANALYSIS

DATE RECEIVED 5 22 86	LAB NO. WC 2243	USER CODE ☐ 59300 ☐ 59600 ☒ OTHER: 82235	
Collection DATE 5 20 86	SITE INFORMATION ► DJB	Sample location P7 - Surface Salts	
Collection TIME ~~1753~~ 1220		Collection site description DECEMBER SAN JUAN PLANT	
Collected by — Person/Agency BOYER/OCD		SEC 1 T29N R15W	
		N of P9; NW of POND 1	
		NEAR PROPERTY FENCE	

SEND FINAL REPORT TO ►
ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg, PO Box 2088
Santa Fe, NM 87504-2088
Attn: David Boyer
Phone: 827-5812

Station/ well code
Owner

SAMPLING CONDITIONS

☒ Bailed ☐ Dipped ☐ Pump ☐ Tap	Water level	Discharge	Sample type
pH (00400) DJB 7.8	Conductivity (Uncorrected) 21,500 ~~7900~~ µmho	Water Temp. (00010) 26°C ~~4~~ °C	Conductivity at 25°C (00094) µmho

Field comments ~~BAILED 5 TIMES SAME HC DOOR~~ DJB
100ml of unconsolidated salt w/ deionized H_2O to 100ml.

SAMPLE FIELD TREATMENT — *Check proper boxes*

No. of samples submitted 1	☐ NF: Whole sample (Non-filtered)	☒ F: Filtered in field with 0.45 µmembrane filter	☐ A: 2 ml H_2SO_4/L added
☒ NA: No acid added	☐ Other-specify:	☐ A: 5ml conc. HNO_3 added	☐ A: 4ml fuming HNO_3 added

ANALYTICAL RESULTS from SAMPLES

NF, NA	Units	Date analyzed
☐ Conductivity (Corrected) 25°C (00095)	µmho	
☐ Total non-filterable residue (suspended) (00530)	mg/l	
☐ Other:		
☐ Other:		
☐ Other:		

F, NA	Units	Date analyzed
☒ Calcium (00915)	mg/l	
☒ Magnesium (00925)	mg/l	
☒ Sodium (00930)	mg/l	
☒ Potassium (00935)	mg/l	
☒ Bicarbonate (00440)	mg/l	
☒ Chloride (00940)	mg/l	
☒ Sulfate (00945)	mg/l	
☒ Total filterable residue (dissolved) (70300)	mg/l	
☒ Other: CO_3	16.8	5/22

NF, A-H_2SO_4

☐ Nitrate-N +, Nitrate-N total (00630)	mg/l	
☐ Ammonia-N total (00610)	mg/l	
☐ Total Kjeldahl-N ( )	mg/l	
☐ Chemical oxygen demand (00340)	mg/l	
☐ Total organic carbon ( )	mg/l	
☐ Other:		
☐ Other:		

F, A-H_2SO_4

☐ Nitrate-N +, Nitrate-N dissolved (00631)	mg/l	
☐ Ammonia-N dissolved (00608)	mg/l	
☐ Total Kjeldahl-N ( )	mg/l	
☐ Other:		

Analyst	Date Reported	Reviewed by
	6 11 86	

Laboratory remarks

SLD 726 (12/84)

FOR OCD USE -- Date Owner Notified _____ Phone or letter? _____ Initials _____

0603-B

764 3

STATE OF NEW MEXICO
ENVIRONMENT

SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 841-2570

REPORT TO: DAVID G. BOYER
PLEASE PRINT
NEW MEXICO OIL CONSERVATION DIV.
P.O. BOX 2088
SANTA FE, NM 87504-2088
PHONE(S): 827-5812

S.L.D. No.: OR- 603-#
DATE REC. : 5/22/86
SLD PRIORITY #:

USER CODE: 8|2|2|3|5|

SUBMITTER: DAVE BOYER
SUBMITTER CODE: | | | | |

SAMPLE TYPE: WATER [ ], SOIL [ ], OTHER
SAMPLE TYPE CODE: | | |

COLLECTED: 86/05/20 (DATE) - 17:00 (TIME) BY DB (INITIALS)
CODE: 8|6|0|5|2|0|1|7|0|0|D|B| (Y Y M M D D H H M M I I I)

SOURCE: SEPTIC POND
CODE: | | | | + | | | | + | | | | | (AQUIFER DEPTH)

NEAREST CITY: KIRTLAND
CODE: | | | | | |

LOCATION: LANDFILL
CODE: 2|9|N|1|4|W|3|1| | | (TOWNSHIP RANGE SECTION TRACTS)

pH= 7.8 ; Conductivity= 1280 umho/cm at 24 °C; Chlorine Residual=
Dissolved Oxygen= mg/l; Alkalinity= ; Flow Rate=
Sampling Location, Methods and Remarks (i.e. odors, etc.)

~~GREEN FLUORESCENT~~ COLOR, HC SHEEN

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Jamie Bailey
Method of shipment to the Laboratory Hand carried
This form accompanies ___ Septum Vials, 1 Glass Jugs, ___ ___
Containers are marked as follows to indicate preservation:

- [ ] NP: No preservation; sample stored at room temperature.
- [x] P-Ice Sample stored in an ice bath (not frozen).
- [ ] P-$Na_2S_2O_3$; Sample preserved with $Na_2S_2O_3$ to remove chlorine residual.

I (we) certify that this sample was transferred from ___
to ___ at (location) ___ on
__/__/__ - __:__ (DATE AND TIME) and that the statements in this block are correct.
Evidentiary Seals: Not Sealed [ ] Seals Intact: Yes [ ] No [ ]
Signatures ___ ___

(we) certify that this sample was transferred from ___
to ___ at (location) ___ on
__/__/__ - __:__ (DATE AND TIME) and that the statements in this block are correct.
Evidentiary Seals: Not Sealed [ ] Seals Intact: Yes [ ] No [ ]
Signatures ___ ___

ANALYSES REQUESTED LAB. No.: ORG- 603

PLEASE CHECK THE APPROPRIATE BOXES BELOW TO INDICATE THE TYPE OF ANALYTICAL SCREENS REQUIRED. WHENEVER POSSIBLE LIST SPECIFIC COMPOUNDS SUSPECTED OR REQUIRED.

QUALITATIVE	QUANTITATIVE	PURGEABLE SCREENS	QUALITATIVE	QUANTITATIVE	EXTRACTABLE SCREENS
		ALIPHATIC HYDROCARBON SCREEN			ALIPHATIC HYDROCARBONS
		AROMATIC HYDROCARBON SCREEN			CHLORINATED HYDROCARBON PESTICIDES
		HALOGENATED HYDROCARBON SCREEN			CHLOROPHENOXY ACID HERBICIDES
		GAS CHROMATOGRAPH/MASS SPECTROMETER			HYDROCARBON FUEL SCREEN
					ORGANOPHOSPHATE PESTICIDES
					POLYCHLORINATED BIPHENYLS (PCB's)
			×	X	POLYNUCLEAR AROMATIC HYDROCARBONS
					TRIAZINE HERBICIDES
		SPECIFIC COMPOUNDS			SPECIFIC COMPOUNDS
					Napthalene, Benzo a pyrene

REMARKS:

ANALYTICAL RESULTS

COMPOUND	[PPB]	COMPOUND	[PPB]
Napthalene	<5		
2-Methylnapthalene	<5		
1-Methylnapthalene	<5		
Benzo(a) Pyrene	<5		
		* DETECTION LIMIT	

REMARKS:

Sample contain approximately 700ppb of methylphenol

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 analytical data on this page accurately reflect the analytical results for this sample.

Date(s) of analysis: 7/9/86. Analyst's signature: A Barney

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewers signature: R Meyerhoff

FOR OCD USE -- Date Owner Notified_____ Phone or letter?_____ Initials_____

New Mexico Health and Environment Department
SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 — (505) 841-2555

GENERAL WATER CHEMISTRY and NITROGEN ANALYSIS

DATE RECEIVED: 5 22 86	LAB NO. WC-3240	USER CODE ☐ 59300 ☐ 59600 ☒ OTHER: 82235	
Collection DATE: 5 20 86	SITE INFORM-ATION ►	Sample location: SEPTIC POND	
Collection TIME: 1700		Collection site description: LANDFILL WEST SIDE of POND	
Collected by — Person/Agency: /OCD			

SEND FINAL REPORT TO ►

ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg, PO Box 2088
Santa Fe, NM 87504-2088

Attn: David Boyer

Phone: 827-5812

Station/ well code:

Owner:

SAMPLING CONDITIONS

☐ Bailed ☒ Dipped ☐ Pump ☐ Tap	Water level	Discharge	Sample type: GRAB
pH (00400): 7.8	Conductivity (Uncorrected): 1280 µmho	Water Temp. (00010): 24 °C	Conductivity at 25°C (00094): µmh

Field comments: PEAGREEN COLOR HC SHEEN ON SURFACE

SAMPLE FIELD TREATMENT — *Check proper boxes* PREFILTERED ONLY

No. of samples submitted: 1

☐ NF: Whole sample (Non-filtered) ☒ F: Filtered in field with 0.45 µmembrane filter ☐ A: 2 ml H_2SO_4/L added

☒ NA: No acid added ☐ Other-*specify:* ☐ A: 5ml conc. HNO_3 added ☐ A: 4ml fuming HNO_3 adde

ANALYTICAL RESULTS from SAMPLES

NF, NA		Units	Date analyzed
☐ Conductivity (Corrected) 25°C (00095)		µmho	
☐ Total non-filterable residue (suspended) (00530)		mg/l	
☐ Other:			
☐ Other:			
☐ Other:			

F, NA		Units	Date analyzed
☒ Calcium (00915)	288	mg/l	6-2
☒ Magnesium (00925)	31.7	mg/l	"
☒ Sodium (00930)	237	mg/l	"
☒ Potassium (00935)	6.63	mg/l	"
☒ Bicarbonate (00440)	948	mg/l	5/26
☒ Chloride (00940)	217	mg/l	6/5
☒ Sulfate (00945)	167	mg/l	6/2
☒ Total filterable residue (dissolved) (70300)	1695	mg/l	5/28
☒ Other: CO_3	0		5/26

NF, A-H_2SO_4			
☐ Nitrate-N +, Nitrate-N total (00630)		mg/l	
☐ Ammonia-N total (00610)		mg/l	
☐ Total Kjeldahl-N ( )		mg/l	
☐ Chemical oxygen demand (00340)		mg/l	
☐ Total organic carbon ( )		mg/l	
☐ Other:			
☐ Other:			

F, A-H_2SO_4			
☐ Nitrate-N +, Nitrate-N dissolved (00631)		mg/l	
☐ Ammonia-N dissolved (00608)		mg/l	
☐ Total Kjeldahl-N ( )		mg/l	
☐ Other:			

Analyst	Date Reported	Reviewed by
	6 11 86	

Laboratory remarks:

SLD 726 (12/84)

FOR OCD USE -- Date Owner Notified | Phone or letter? | Initials

109

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3

STATE OF NEW MEXICO
ENVIRONMENT

86- 0595-C

SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 841-2570

REPORT TO: DAVID G. BOYER
PLEASE PRINT
NEW MEXICO OIL CONSERVATION DIV.
P.O. BOX 2088
SANTA FE, NM 87504-2088
PHONE(S): 827-5812

S.L.D. No.: OR- 595-A B
DATE REC. : 5/22/86
SLD PRIORITY #:

USER CODE: 8 2 2 3 5

SUBMITTER: DAVID BOYER
SUBMITTER CODE:

SAMPLE TYPE: WATER [X], SOIL [ ], OTHER
SAMPLE TYPE CODE:

COLLECTED: 5/20/86 - 1700 hr BY DB
DATE TIME INITIALS
CODE: 8 6 0 5 2 0 1 7 0 0 DB
Y Y M M D D H H M M I I I
1.7 km

SOURCE: SEPTIC POND
CODE: AQUIFER DEPTH

NEAREST CITY: KIRTLAND
CODE:

LOCATION: KIRTLAND LANDFILL
CODE: 3 0 N 1 4 W 3 1
TOWNSHIP RANGE SECTION TRACTS

pH= 7.8 ; Conductivity= 1280 umho/cm at 24 °C; Chlorine Residual=
Dissolved Oxygen= mg/l; Alkalinity= ; Flow Rate=
Sampling Location, Methods and Remarks (i.e. odors, etc.)
PEAGREEN COLOR; SEPTAGE SMELL; HC SHEEN ON SURFACE

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. [signature]
Method of shipment to the Laboratory Hand carried
This form accompanies 2 Septum Vials, Glass Jugs,
Containers are marked as follows to indicate preservation:
[ ] NP: No preservation; sample stored at room temperature.
[X] P-Ice Sample stored in an ice bath (not frozen).
[ ] P-$Na_2S_2O_3$; Sample preserved with $Na_2S_2O_3$ to remove chlorine residual.

I (we) certify that this sample was transferred from
to at (location) on
/ / - : and that the statements in this block are correct.
DATE AND TIME
Evidentiary Seals: Not Sealed [ ] Seals Intact: Yes [ ] No [ ]
Signatures

(we) certify that this sample was transferred from
to at (location) on
/ / - : and that the statements in this block are correct.
DATE AND TIME
Evidentiary Seals: Not Sealed [ ] Seals Intact: Yes [ ] No [ ]
Signatures

ANALYSES REQUESTED

LAB. No.: ORG- 595

PLEASE CHECK THE APPROPRIATE BOXES BELOW TO INDICATE THE TYPE OF ANALYTICAL SCREENS REQUIRED. WHENEVER POSSIBLE LIST SPECIFIC COMPOUNDS SUSPECTED OR REQUIRED.

QUALITATIVE	QUANTITATIVE	PURGEABLE SCREENS	QUALITATIVE	QUANTITATIVE	EXTRACTABLE SCREENS
		ALIPHATIC HYDROCARBON SCREEN			ALIPHATIC HYDROCARBONS
X	X	AROMATIC HYDROCARBON SCREEN			CHLORINATED HYDROCARBON PESTICIDES
X	X	HALOGENATED HYDROCARBON SCREEN			CHLOROPHENOXY ACID HERBICIDES
		GAS CHROMATOGRAPH/MASS SPECTROMETER			HYDROCARBON FUEL SCREEN
					ORGANOPHOSPHATE PESTICIDES
					POLYCHLORINATED BIPHENYLS (PCB's)
					POLYNUCLEAR AROMATIC HYDROCARBONS
					TRIAZINE HERBICIDES
		SPECIFIC COMPOUNDS			SPECIFIC COMPOUNDS

REMARKS:

ANALYTICAL RESULTS

COMPOUND	[PPB]	COMPOUND	[PPB]
aromatic purgeables	none detected		
halogenated purgeables	none detected		
		* DETECTION LIMIT	10 ugm/l

REMARKS: Two compounds were detected by the aromatic screen that were identified by GC/MS as CH_3-S-CH_3 and CH_3-S-S-CH_3. A trace amount of possibly p-dichlorobenzene was detected by the halogenated screen @ 10ppb.

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes ___ NO X. 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 analytical data on this page accurately reflect the analytical results for this sample.

Date(s) of analysis: 10 June 86. Analyst's signature: [signature]

I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewers signature: [signature]

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New Mexico Health and Environment Department
SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 — (505) 841-2555

GENERAL WATER CHEMISTRY and NITROGEN ANALYSIS

HEAVY METALS

DATE RECEIVED 5 22 86	LAB NO. HM-990	USER CODE ☐ 59300 ☐ 59600 ☒ OTHER: 82235	
Collection DATE 5 20 86	SITE INFORMATION ►	Sample location SEPTIC POND	
Collection TIME 1700		Collection site description KIRTLAND LANDFILL	
Collected by — Person/Agency BOYER/OCD		W SIDE OF POND	

SEND FINAL REPORT TO ►
ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg, PO Box 2088
Santa Fe, NM 87504-2088
Attn: David Boyer
Phone: 827-5812

Station/ well code
Owner

SAMPLING CONDITIONS

☐ Bailed ☒ Dipped ☐ Pump ☐ Tap	Water level	Discharge	Sample type GRAB
pH (00400) 7.8	Conductivity (Uncorrected) 1280 µmho	Water Temp. (00010) 24 °C	Conductivity at 25°C (00094) µmho
Field comments PEA GREEN COLOR			

SAMPLE FIELD TREATMENT — *Check proper boxes* ⇒ PREFILTERED ONLY

No. of samples submitted 1	☐ NF: Whole sample (Non-filtered)	☒ F: Filtered in field with 0.45 µmembrane filter	☐ A: 2 ml H_2SO_4/L added
☐ NA: No acid added ☐ Other-*specify:*	☒ A: 5ml conc. HNO_3 added	☒ A: 4ml fuming HNO_3 added	

ANALYTICAL RESULTS from SAMPLES

~~NF, NA~~ F, A	Units	Date analyzed	F, NA	Units	Date analyzed
☐ Conductivity (Corrected) 25°C (00095)	µmho		☐ Calcium (00915)	mg/l	
☐ Total non-filterable residue (suspended) (00530)	mg/l		☐ Magnesium (00925)	mg/l	
☒ Other: ICAP SCAN			☐ Sodium (00930)	mg/l	
☒ Other: As			☐ Potassium (00935)	mg/l	
☒ Other: Se			☐ Bicarbonate (00440)	mg/l	
			☐ Chloride (00940)	mg/l	
			☐ Sulfate (00945)	mg/l	
			☐ Total filterable residue (dissolved) (70300)	mg/l	
			☐ Other:		

NF, A-H_2SO_4			F, A-H_2SO_4		
☐ Nitrate-N +, Nitrate-N total (00630)	mg/l		☐ Nitrate-N +, Nitrate-N dissolved (00631)	mg/l	
☐ Ammonia-N total (00610)	mg/l		☐ Ammonia-N dissolved (00608)	mg/l	
☐ Total Kjeldahl-N ( )	mg/l		☐ Total Kjeldahl-N ( )	mg/l	
☐ Chemical oxygen demand (00340)	mg/l		☐ Other:		
☐ Total organic carbon ( )	mg/l				
☐ Other:					
☐ Other:					

Analyst	Date Reported	Reviewed by
	6 13 86	JJA

Laboratory remarks: Digested

RECEIVED
JUN 20 1986
OIL CONSERVATION DIVISION
SANTA FE

SLD 726 (12/84)

FOR OCD USE -- Date Owner Notified _____ Phone or letter? _____ Initials _____

Lab Number: HM 990

Sample Code: Septic Pond Kirtland landfill.

Date Submitted: 5/22/86

Date Analyzed: 5/26/86

By: Boyer

Reviewed By: Jim Ashley

Date Reported: 6/13/86

Element	ICAP VALUE(MG/L)	AA VALUE(MG/L)
Aluminum	0.2	
Barium	<0.1	
Berylium	<0.1	
Boron	1.5	
Cadmium	<0.1	
Calcium	110.	
Chromium	<0.1	
Cobalt	<0.1	
Copper	<0.1	
Iron	0.8	
Lead	<0.1	
Magnesium	22.	
Manganese	0.27	
Molybdenum	<0.1	
Nickel	<0.1	
Silicon	12.	
Silver	<0.1	
Strontium	1.0	
Tin	<0.1	
Vanadium	<0.1	
Zinc	<0.1	
Arsenic		0.007
Selenium		<0.005
Mercury		

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New Mexico Health and Environment Department
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700 Camino de Salud NE
Albuquerque, NM 87106 — (505) 841-2555

GENERAL WATER CHEMISTRY and NITROGEN ANALYSIS

DATE RECEIVED 5 22 86	LAB NO UC-2234	USER CODE ☐ 59300 ☐ 59600 ☒ OTHER: 82235	
Collection DATE 5 20 86	SITE INFORM-ATION ►	Sample location SEPTIC POND	
Collection TIME 1700		Collection site description KIRTLAND LANDFILL	
Collected by — Person/Agency BOYER/OCD		W SIDE of POND	

SEND FINAL REPORT TO ►

ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg, PO Box 2088
Santa Fe, NM 87504-2088

Attn: David Boyer

Phone: 827-5812

Station/ well code

Owner

SAMPLING CONDITIONS

☐ Bailed ☒ Dipped ☐ Pump ☐ Tap	Water level	Discharge	Sample type GRAB
pH (00400) 7.8	Conductivity (Uncorrected) 1280 µmho	Water Temp. (00010) 24 °C	Conductivity at 25°C (00094) µmho

Field comments GREEN COLOR HC SHEEN ON SURFACE

PREFILTERED ONLY

SAMPLE FIELD TREATMENT — *Check proper boxes*

No. of samples submitted 1

☐ NF: Whole sample (Non-filtered) ☒ F: Filtered in field with 0.45 µmembrane filter ☒ A: 2 ml H_2SO_4/L added

☐ NA: No acid added ☐ Other-*specify:* ☐ A: 5ml conc. HNO_3 added ☐ A: 4ml fuming HNO_3 added

ANALYTICAL RESULTS from SAMPLES

NF, NA	Units	Date analyzed
☐ Conductivity (Corrected) 25°C (00095)	µmho	
☐ Total non-filterable residue (suspended) (00530)	mg/l	
☐ Other:		
☐ Other:		
☐ Other:		

F, NA	Units	Date analyzed
☐ Calcium (00915)	mg/l	
☐ Magnesium (00925)	mg/l	
☐ Sodium (00930)	mg/l	
☐ Potassium (00935)	mg/l	
☐ Bicarbonate (00440)	mg/l	
☐ Chloride (00940)	mg/l	
☐ Sulfate (00945)	mg/l	
☐ Total filterable residue (dissolved) (70300)	mg/l	
☐ Other:		

NF, A-H_2SO_4	Units	Date analyzed
☐ Nitrate-N +, Nitrate-N total (00630)	mg/l	
☐ Ammonia-N total (00610)	mg/l	
☐ Total Kjeldahl-N ( )	mg/l	
☐ Chemical oxygen demand (00340)	mg/l	
☐ Total organic carbon ( )	mg/l	
☐ Other:		
☐ Other:		

F, A-H_2SO_4		Units	Date analyzed
☒ Nitrate-N +, Nitrate-N dissolved (00631)	<0.04	mg/l	6/2
☒ Ammonia-N dissolved (00608)	72.9	mg/l	7-18
☒ Total Kjeldahl-N ( )	217	mg/l	6-10
☐ Other:			

Analyst	Date Reported	Reviewed by
	7 25 86	

Laboratory remarks

SLD 726 (12/84)

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SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 — (505) 841-2555

GENERAL WATER CHEMISTRY and NITROGEN ANALYSIS

DATE RECEIVED 5/22/86	LAB NO. WC-224/	USER CODE ☐ 59300 ☐ 59600 ☒ OTHER: 82235	
Collection DATE 5/20/86	SITE INFORMATION ►	Sample location SEPTIC POND	
Collection TIME 1700		Collection site description KIRTLAND LANDFILL WEST SIDE of POND	
Collected by — Person/Agency /OCD			

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ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg, PO Box 2088
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Attn: David Boyer
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☐ Bailed ☒ Dipped ☐ Pump ☐ Tap	Water level	Discharge	Sample type GRAB
pH (00400) 7.8	Conductivity (Uncorrected) 1280 µmho	Water Temp. (00010) 24 °C	Conductivity at 25°C (00094) µmho

Field comments: PEAGREEN COLOR HC SHEEN ON SURFACE

SAMPLE FIELD TREATMENT — *Check proper boxes* PREFILTERED ONLY

No. of samples submitted 1	☐ NF: Whole sample (Non-filtered)	☒ F: Filtered in field with 0.45 µmembrane filter	☐ A: 2 ml H_2SO_4/L added
☒ NA: No acid added	☐ Other-*specify:*	☐ A: 5ml conc. HNO_3 added	☐ A: 4ml fuming HNO_3 added

ANALYTICAL RESULTS from SAMPLES

NF, NA		Units	Date analyzed
☐ Conductivity (Corrected) 25°C (00095)		µmho	
☐ Total non-filterable residue (suspended) (00530)		mg/l	
☐ Other:			
☐ Other:			
☐ Other:			

F, NA		Units	Date analyzed
☒ Calcium (00915)		mg/l	
☒ Magnesium (00925)		mg/l	
☒ Sodium (00930)		mg/l	
☒ Potassium (00935)		mg/l	
☒ Bicarbonate (00440)		mg/l	
☒ Chloride (00940)		mg/l	
☒ Sulfate (00945)		mg/l	
☒ Total filterable residue (dissolved) (70300)		mg/l	
☒ Other: CO_3	0		5/26

NF, A-H_2SO_4			
☐ Nitrate-N +, Nitrate-N total (00630)		mg/l	
☐ Ammonia-N total (00610)		mg/l	
☐ Total Kjeldahl-N ( )		mg/l	
☐ Chemical oxygen demand (00340)		mg/l	
☐ Total organic carbon ( )		mg/l	
☐ Other:			
☐ Other:			

F, A-H_2SO_4			
☐ Nitrate-N +, Nitrate-N dissolved (00631)		mg/l	
☐ Ammonia-N dissolved (00608)		mg/l	
☐ Total Kjeldahl-N ( )		mg/l	
☐ Other:			

Analyst	Date Reported	Reviewed by
	6 / 11 / 86	

Laboratory remarks

SLD 726 (12/84)

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