

NM1 - 3

MONITORING REPORTS

YEAR(S):
1987-1990

09/21/90

1214 984 5914

AB

02



PARADOX ROAD

KILGORE, TEXAS 75043

214/584-0354

Analytical Chemistry • Waste Treatment & Disposal • Equipment Sales

09/21/90

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

Sample Identification: #9007301600 Parabo Disposal
Collected By: Anderson/Olson
Date & Time Taken: 07/30/90 1600
Other:

Water phase from treating Tank 211. Water phase will separate from iron
sulfides. Analysis of water phase only.

Lab Sample Number: 170081

Received: 08/03/90

Client: SNMC

PARAMETER	RESULTS	UNITS	TIME	DATE	METHOD	BY
Acetone	<100000	ug/l	2141	08/17/90	EPA Method 8240	PM
Acrylonitrile	<100000	ug/l	2141	08/17/90	EPA Method 8240	PM
Benzene	90000	ug/l	2141	08/17/90	EPA Method 8240	PM
Bromoform	<5000	ug/l	2141	08/17/90	EPA Method 8240	PM
Bromomethane	<10000	ug/l	2141	08/17/90	EPA Method 8240	PM
Carbon Tetrachloride	<5000	ug/l	2141	08/17/90	EPA Method 8240	PM
Chlorobenzene	<5000	ug/l	2141	08/17/90	EPA Method 8240	PM
Chloroethane	<10000	ug/l	2141	08/17/90	EPA Method 8240	PM
2-Chloroethylvinyl ether	<10000	ug/l	2141	08/17/90	EPA Method 8240	PM
Chloroform	<5000	ug/l	2141	08/17/90	EPA Method 8240	PM
Chloromethane	<10000	ug/l	2141	08/17/90	EPA Method 8240	PM
Dibromochloromethane	<5000	ug/l	2141	08/17/90	EPA Method 8240	PM
Bromodichloromethane	<5000	ug/l	2141	08/17/90	EPA Method 8240	PM
1,1-Dichloroethane	<5000	ug/l	2141	08/17/90	EPA Method 8240	PM
1,2-Dichloroethane	<5000	ug/l	2141	08/17/90	EPA Method 8240	PM

Continued



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

Analytical Chemistry • Waste Treatment & Disposal • Equipment Sales

170081 Continued

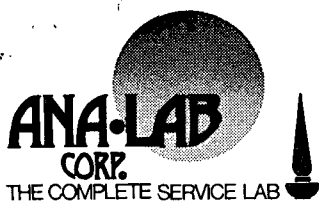
Page 2

PARAMETER	RESULTS	UNITS	TIME	DATE	METHOD	BY
1,1-Dichloroethene	<5000	ug/l	2141	08/17/90	EPA Method 8240	PM
trans-1,2-Dichloroethene	<5000	ug/l	2141	08/17/90	EPA Method 8240	PM
1,2-Dichloropropane	<5000	ug/l	2141	08/17/90	EPA Method 8240	PM
cis-1,3-Dichloropropene	<5000	ug/l	2141	08/17/90	EPA Method 8240	PM
Ethyl benzene	480000	ug/l	2141	08/17/90	EPA Method 8240	PM
Methylene Chloride	<5000	ug/l	2141	08/17/90	EPA Method 8240	PM
1,1,2,2-Tetrachloroethane	<5000	ug/l	2141	08/17/90	EPA Method 8240	PM
Tetrachloroethane	<5000	ug/l	2141	08/17/90	EPA Method 8240	PM
Toluene	850000	ug/l	2141	08/17/90	EPA Method 8240	PM
1,1,1-Trichloroethane	<5000	ug/l	2141	08/17/90	EPA Method 8240	PM
1,1,2-Trichloroethane	<5000	ug/l	2141	08/17/90	EPA Method 8240	PM
Trichloroethene	<5000	ug/l	2141	08/17/90	EPA Method 8240	PM
Vinyl Chloride	<10000	ug/l	2141	08/17/90	EPA Method 8240	PM
trans-1,3-Dichloropropene	<5000	ug/l	2141	08/17/90	EPA Method 8240	PM
1,1,2-Trichloro 1,2,2 TFC	<5000	ug/l	2141	08/17/90	EPA Method 8240	PM
Xylenes	6600000	ug/l	2141	08/17/90	EPA Method 8240	PM

Quality Assurance for the SET with Sample 170081

Sample #	Description	Result	Units	Dup/Std Value	Spk Conc.	Percent	Time	Date	By
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C. H. Whiteside, Ph.D., President



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

Analytical Chemistry • Waste Treatment & Disposal • Equipment Sales

08/27/90

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

Sample Identification: #9007311045 Parabo Disposal
Collected By: Anderson/Olson
Date & Time Taken: 07/31/90 1045
Other:

Liquid Sludge from bottom of treating tank No 210. Oily sludge.

Lab Sample Number: 170083 Received: 08/03/90 Client: SNM1

PARAMETER	RESULTS	UNITS	TIME	DATE	METHOD	BY
Benzene	900,000	ppb	0800	08/22/90	EPA Method 8020	KB

THE FOLLOWING ANALYSES WERE PERFORMED ON THE EXTRACT OBTAINED USING THE NEW TCLP EP TOXICITY EXTRACTION PROCEDURE.

Silver	.21	ppm	1415	08/14/90	EPA Method 7760	CD
Arsenic	.15	ppm	0015	08/14/90	EPA Method 7060	GK
Barium	1.7	ppm	2300	08/13/90	EPA Method 7080	GK
Cadmium	.28	ppm	1300	08/17/90	EPA Method 7130	CD
Chromium	.16	ppm	1100	08/16/90	EPA Method 7190	CD
Mercury	.004	ppm	1800	08/23/90	EPA Method 7470	GK
Lead	.9	ppm	1400	08/16/90	EPA Method 7420	CD
Selenium	.005	ppm	0730	08/14/90	EPA Method 7740	G06

Quality Assurance for the SET with Sample 170083

Sample #	Description	Result	Units	Dup/Std Value	Spk Conc.	Percent	Time	Date	By
Benzene									
	Blank	15	ppb				0800	08/22/90	KB
	Standard	58	ppb	50		115	0800	08/22/90	KB
170859	Duplicate	15	ppb	15		100	0800	08/22/90	KB
170859	Spike		ppb		50	112	0800	08/22/90	KB
Silver									
	Blank	.03	ppm				1415	08/14/90	CD



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

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Quality Assurance for the SET with Sample 170083

Sample #	Description	Result	Units	Dup/Std Value	Spk Conc.	Percent	Time	Date	By
170085	Standard	.19	ppm	.20		105	1415	08/14/90	CD
	Standard	.54	ppm	.50		108	1415	08/14/90	CD
	Duplicate	(.03	ppm	(.03		100	1415	08/14/90	CD
Arsenic									
170085	Blank	(.005	ppm				0015	08/14/90	GK
	Standard	.091	ppm	.100		109	0015	08/14/90	GK
	Duplicate	(.005	ppm	(.005		100	0015	08/14/90	GK
168970	Duplicate	(.005	mg/l	(.005		100	0015	08/14/90	GK
170085	Spike		ppm		.100	99	0015	08/14/90	GK
Barium									
170085	Blank	(.5	ppm				2300	08/13/90	GK
	Standard	1.0	ppm	1.0		100	2300	08/13/90	GK
	Duplicate	(.5	ppm	(.5		100	2300	08/13/90	GK
170085	Spike		ppm		4.0	110	2300	08/13/90	GK
Cadmium									
170085	Blank	(.01	mg/l				1300	08/17/90	CD
	Blank	(.01	mg/l				1300	08/17/90	CD
	Blank	(.01	mg/l				1300	08/17/90	CD
	Blank	.4	mg/l				1300	08/17/90	CD
	Blank	(.01	mg/l				1300	08/17/90	CD
	Blank	(.01	mg/l				1300	08/17/90	CD
	Standard	.10	mg/l	.10		100	1300	08/17/90	CD
	Standard	.44	mg/l	.44		100	1300	08/17/90	CD
	Standard	1.1	mg/l	1.0		110	1300	08/17/90	CD
	Duplicate	.01	ppm	.01		100	1300	08/17/90	CD
170331	Duplicate	22	ppm	22		100	1300	08/17/90	CD
170479	Duplicate	.01	ppm	.02		167	1300	08/17/90	CD
170554	Duplicate	.01	ppm	.01		100	1300	08/17/90	CD
170613	Duplicate	4.0	ppm	1.3		202	1300	08/17/90	CD
170480	Duplicate	.01	mg/l	.01		100	1300	08/17/90	CD
170613	Spike		ppm		.97	96	1300	08/17/90	CD
170480	Spike		mg/l		.40	90	1300	08/17/90	CD
170085	Spike		mg/l		.40	110	1300	08/17/90	CD
170479	Spike		mg/l		.40	99	1300	08/17/90	CD
170554	Spike		mg/l		.40	102	1300	08/17/90	CD
Chromium									
170479	Blank	(.05	mg/l				1100	08/16/90	CD
	Blank	(.05	mg/l				1100	08/16/90	CD
	Blank	(.05	mg/l				1100	08/16/90	CD
	Standard	1.0	mg/l	1.0		100	1100	08/16/90	CD
	Standard	.53	mg/l	.50		106	1100	08/16/90	CD
	Duplicate	(.05	ppm	(.05		100	1100	08/16/90	CD
170480	Duplicate	(.05	ppm	(.05		100	1100	08/16/90	CD

ANA-LAB**CORP.**

THE COMPLETE SERVICE LAB

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Quality Assurance for the SET with Sample 170083

Sample #	Description	Result	Units	Dup/Std Value	Spk Conc.	Percent	Time	Date	By
170085	Duplicate	(.05	ppm	(.05		100	1100	08/16/90	CD
170085	Spike		mg/l		.80	101	1100	08/16/90	CD
170480	Spike		mg/l		.80	92	1100	08/16/90	CD
170479	Spike		mg/l		.80	104	1100	08/16/90	CD

Mercury

	Blank	.005	ppm				1800	08/23/90	GK
	Blank	.004	ppm				1800	08/23/90	GK
	Blank	.003	ppm				1800	08/23/90	GK
	Standard	.010	ppm	.010		100	1800	08/23/90	GK
	Standard	.004	ppm	.005		122	1800	08/23/90	GK
170085	Duplicate	(.001	ppm	(.001		100	1800	08/23/90	GK
170554	Duplicate	(.001	ppm	(.001		100	1800	08/23/90	GK
170480	Duplicate	(.05	mg/l	(.05		100	1800	08/23/90	GK
170085	Spike		ppm		.010	106	1800	08/23/90	GK
170554	Spike		mg/l		.010	84	1800	08/23/90	GK

Lead

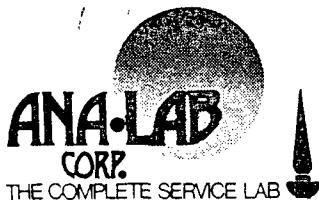
	Blank	(.2	ppm				1400	08/16/90	CD
	Blank	(.2	ppm				1400	08/16/90	CD
	Standard	1.1	ppm	1.1		100	1400	08/16/90	CD
	Standard	2.1	ppm	2.0		105	1400	08/16/90	CD
170085	Duplicate	(.2	ppm	(.2		100	1400	08/16/90	CD
170479	Duplicate	(.2	ppm	(.2		100	1400	08/16/90	CD
170480	Duplicate	(.2	ppm	(.2		100	1400	08/16/90	CD
170085	Spike		ppm		2.0	106	1400	08/16/90	CD
170479	Spike		ppm		2.0	108	1400	08/16/90	CD
170480	Spike		ppm		2.0	104	1400	08/16/90	CD

Selenium

	Blank	(.005	ppm				0730	08/14/90	GDG
	Standard	.101	ppm	.100		101	0730	08/14/90	GDG
170085	Duplicate	(.005	ppm	(.005		100	0730	08/14/90	GDG
170085	Spike		ppm		.100	110	0730	08/14/90	GDG



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



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Analytical Chemistry • Waste Treatment & Disposal • Equipment Sales

08/27/90

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

Sample Identification: #9007311045 Parabo Disposal
Collected By: Anderson/Olson
Date & Time Taken: 07/31/90 1045
Other:

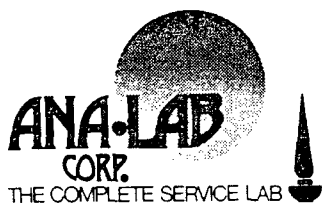
Liquid Sludge from bottom of treating tank No 210. Dily sludge.

Lab Sample Number: 170083 Received: 08/03/90 Client: SNM1

PARAMETER	RESULTS	UNITS	TIME	DATE	METHOD	BY
Benzene	900,000	ppb	0800	08/22/90	EPA Method 8020	KB
THE FOLLOWING ANALYSES WERE PERFORMED ON THE EXTRACT OBTAINED USING THE NEW TCLP EP TOXICITY EXTRACTION PROCEDURE.						
Silver	.21	ppm	1415	08/14/90	EPA Method 7760	CD
Arsenic	.15	ppm	0015	08/14/90	EPA Method 7060	BK
Barium	1.7	ppm	2300	08/13/90	EPA Method 7080	BK
Cadmium	.28	ppm	1300	08/17/90	EPA Method 7130	CD
Chromium	.16	ppm	1100	08/16/90	EPA Method 7190	CD
Mercury	.004	ppm	1800	08/23/90	EPA Method 7470	BK
Lead	.9	ppm	1400	08/16/90	EPA Method 7420	CD
Selenium	(.005	ppm	0730	08/14/90	EPA Method 7740	BDG

Quality Assurance for the SET with Sample 170083

Sample #	Description	Result	Units	Dup/Std Value	Spk Conc.	Percent	Time	Date	By
Benzene									
	Blank	<5	ppb				0800	08/22/90	KB
	Standard	58	ppb	50		115	0800	08/22/90	KB
170859	Duplicate	<5	ppb	<5		100	0800	08/22/90	KB
170859	Spike		ppb		50	112	0800	08/22/90	KB
Silver									
	Blank	(.03	ppm				1415	08/14/90	CD

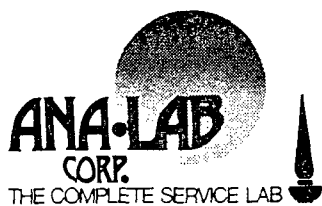


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Quality Assurance for the SET with Sample 170083

Sample #	Description	Result	Units	Dup/Std Value	Spk Conc.	Percent	Time	Date	By
170085	Standard	.19	ppm	.20		105	1415	08/14/90	CD
	Standard	.54	ppm	.50		108	1415	08/14/90	CD
	Duplicate	(.03	ppm	(.03		100	1415	08/14/90	CD
Arsenic									
170085	Blank	(.005	ppm				0015	08/14/90	GK
	Standard	.091	ppm	.100		109	0015	08/14/90	GK
	Duplicate	(.005	ppm	(.005		100	0015	08/14/90	GK
168970	Duplicate	(.005	mg/l	(.005		100	0015	08/14/90	GK
170085	Spike		ppm		.100	99	0015	08/14/90	GK
Barium									
170085	Blank	(.5	ppm				2300	08/13/90	GK
	Standard	1.0	ppm	1.0		100	2300	08/13/90	GK
	Duplicate	(.5	ppm	(.5		100	2300	08/13/90	GK
170085	Spike		ppm		4.0	110	2300	08/13/90	GK
Cadmium									
170085	Blank	(.01	mg/l				1300	08/17/90	CD
	Blank	(.01	mg/l				1300	08/17/90	CD
	Blank	(.01	mg/l				1300	08/17/90	CD
	Blank	.4	mg/l				1300	08/17/90	CD
	Blank	(.01	mg/l				1300	08/17/90	CD
	Blank	(.01	mg/l				1300	08/17/90	CD
	Standard	.10	mg/l	.10		100	1300	08/17/90	CD
	Standard	.44	mg/l	.44		100	1300	08/17/90	CD
	Standard	1.1	mg/l	1.0		110	1300	08/17/90	CD
	Duplicate	.01	ppm	.01		100	1300	08/17/90	CD
170331	Duplicate	22	ppm	22		100	1300	08/17/90	CD
170479	Duplicate	.01	ppm	.02		167	1300	08/17/90	CD
170554	Duplicate	.01	ppm	.01		100	1300	08/17/90	CD
170613	Duplicate	4.0	ppm	1.3		202	1300	08/17/90	CD
170480	Duplicate	.01	mg/l	.01		100	1300	08/17/90	CD
170613	Spike		ppm		.97	96	1300	08/17/90	CD
170480	Spike		mg/l		.40	90	1300	08/17/90	CD
170085	Spike		mg/l		.40	110	1300	08/17/90	CD
170479	Spike		mg/l		.40	99	1300	08/17/90	CD
170554	Spike		mg/l		.40	102	1300	08/17/90	CD
Chromium									
170479	Blank	(.05	mg/l				1100	08/16/90	CD
	Blank	(.05	mg/l				1100	08/16/90	CD
	Blank	(.05	mg/l				1100	08/16/90	CD
	Standard	1.0	mg/l	1.0		100	1100	08/16/90	CD
	Standard	.53	mg/l	.50		106	1100	08/16/90	CD
	Duplicate	(.05	ppm	(.05		100	1100	08/16/90	CD
170480	Duplicate	(.05	ppm	(.05		100	1100	08/16/90	CD



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

Analytical Chemistry • Waste Treatment & Disposal • Equipment Sales

Quality Assurance for the SET with Sample 170083

Sample #	Description	Result	Units	Dup/Std Value	Spk Conc.	Percent	Time	Date	By
170085	Duplicate	.05	ppm	.05		100	1100	08/16/90	CD
170085	Spike		mg/l		.80	101	1100	08/16/90	CD
170480	Spike		mg/l		.80	92	1100	08/16/90	CD
170479	Spike		mg/l		.80	104	1100	08/16/90	CD

Mercury

	Blank	.005	ppm				1800	08/23/90	BK
	Blank	.004	ppm				1800	08/23/90	BK
	Blank	.003	ppm				1800	08/23/90	BK
	Standard	.010	ppm	.010		100	1800	08/23/90	BK
	Standard	.004	ppm	.005		122	1800	08/23/90	BK
170085	Duplicate	.001	ppm	.001		100	1800	08/23/90	BK
170554	Duplicate	.001	ppm	.001		100	1800	08/23/90	BK
170480	Duplicate	.05	mg/l	.05		100	1800	08/23/90	BK
170085	Spike		ppm		.010	106	1800	08/23/90	BK
170554	Spike		mg/l		.010	84	1800	08/23/90	BK

Lead

	Blank	.2	ppm				1400	08/16/90	CD
	Blank	.2	ppm				1400	08/16/90	CD
	Standard	1.1	ppm	1.1		100	1400	08/16/90	CD
	Standard	2.1	ppm	2.0		105	1400	08/16/90	CD
170085	Duplicate	.2	ppm	.2		100	1400	08/16/90	CD
170479	Duplicate	.2	ppm	.2		100	1400	08/16/90	CD
170480	Duplicate	.2	ppm	.2		100	1400	08/16/90	CD
170085	Spike		ppm		2.0	106	1400	08/16/90	CD
170479	Spike		ppm		2.0	108	1400	08/16/90	CD
170480	Spike		ppm		2.0	104	1400	08/16/90	CD

Selenium

	Blank	.005	ppm				0730	08/14/90	GDG
	Standard	.101	ppm	.100		101	0730	08/14/90	GDG
170085	Duplicate	.005	ppm	.005		100	0730	08/14/90	GDG
170085	Spike		ppm		.100	110	0730	08/14/90	GDG

C. H. Whiteside

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



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

Analytical Chemistry • Waste Treatment & Disposal • Equipment Sales

'90 OCT 1 AM 9 56
09/21/90

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

Sample Identification: #9007301600 Parabo Disposal
Collected By: Anderson/Olson
Date & Time Taken: 07/30/90 1600
Other:

Water phase from treating Tank 211. Water phase will separate from iron sulfides. Analysis of water phase only.

Lab Sample Number: 170081 **Received:** 08/03/90 **Client:** SNM1

PARAMETER	RESULTS	UNITS	TIME	DATE	METHOD	BY
Acrolein	<100000	ug/l	2141	08/17/90	EPA Method 8240	PM
Acrylonitrile	<100000	ug/l	2141	08/17/90	EPA Method 8240	PM
Benzene	90000	ug/l	2141	08/17/90	EPA Method 8240	PM
Bromoform	<5000	ug/l	2141	08/17/90	EPA Method 8240	PM
Bromomethane	<10000	ug/l	2141	08/17/90	EPA Method 8240	PM
Carbon Tetrachloride	<5000	ug/l	2141	08/17/90	EPA Method 8240	PM
Chlorobenzene	<5000	ug/l	2141	08/17/90	EPA Method 8240	PM
Chloroethane	<10000	ug/l	2141	08/17/90	EPA Method 8240	PM
2-Chloroethylvinyl ether	<10000	ug/l	2141	08/17/90	EPA Method 8240	PM
Chloroform	<5000	ug/l	2141	08/17/90	EPA Method 8240	PM
Chloromethane	<10000	ug/l	2141	08/17/90	EPA Method 8240	PM
Dibromochloromethane	<5000	ug/l	2141	08/17/90	EPA Method 8240	PM
Bromodichloromethane	<5000	ug/l	2141	08/17/90	EPA Method 8240	PM
1,1-Dichloroethane	<5000	ug/l	2141	08/17/90	EPA Method 8240	PM
1,2-Dichloroethane	<5000	ug/l	2141	08/17/90	EPA Method 8240	PM

Continued



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

Analytical Chemistry • Waste Treatment & Disposal • Equipment Sales

170081 Continued

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PARAMETER	RESULTS	UNITS	TIME	DATE	METHOD	BY
1,1-Dichloroethene	<5000	ug/l	2141	08/17/90	EPA Method 8240	PM
trans-1,2-Dichloroethene	<5000	ug/l	2141	08/17/90	EPA Method 8240	PM
1,2-Dichloropropane	<5000	ug/l	2141	08/17/90	EPA Method 8240	PM
cis-1,3-Dichloropropene	<5000	ug/l	2141	08/17/90	EPA Method 8240	PM
Ethyl benzene	480000	ug/l	2141	08/17/90	EPA Method 8240	PM
Methylene Chloride	<5000	ug/l	2141	08/17/90	EPA Method 8240	PM
1,1,2,2-Tetrachloroethane	<5000	ug/l	2141	08/17/90	EPA Method 8240	PM
Tetrachloroethene	<5000	ug/l	2141	08/17/90	EPA Method 8240	PM
Toluene	850000	ug/l	2141	08/17/90	EPA Method 8240	PM
1,1,1-Trichloroethane	<5000	ug/l	2141	08/17/90	EPA Method 8240	PM
1,1,2-Trichloroethane	<5000	ug/l	2141	08/17/90	EPA Method 8240	PM
Trichloroethene	<5000	ug/l	2141	08/17/90	EPA Method 8240	PM
Vinyl Chloride	<10000	ug/l	2141	08/17/90	EPA Method 8240	PM
trans-1,3-Dichloropropene	<5000	ug/l	2141	08/17/90	EPA Method 8240	PM
1,1,2-Trichloro 1,2,2 TFC	<5000	ug/l	2141	08/17/90	EPA Method 8240	PM
Xylenes	6600000	ug/l	2141	08/17/90	EPA Method 8240	PM


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

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

Analytical Chemistry • Waste Treatment & Disposal • Equipment Sales

90 OCT 1 AM 11 14

09/21/90

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

Sample Identification: #9007310800 AA Final Tank
Collected By: Anderson/Olson
Date & Time Taken: 07/31/90 0800
Other:

Water phase from N.E. low 500 BBL Tank

Lab Sample Number: 170084

Received: 08/03/90

Client: SNM1

PARAMETER	RESULTS	UNITS	TIME	DATE	METHOD	BY
Acrolein	<100	ug/l	1842	08/15/90	EPA Method 8240	PM
Acrylonitrile	<100	ug/l	1842	08/15/90	EPA Method 8240	PM
Benzene	860	ug/l	1842	08/15/90	EPA Method 8240	PM
Bromoform	<5	ug/l	1842	08/15/90	EPA Method 8240	PM
Bromomethane	<10	ug/l	1842	08/15/90	EPA Method 8240	PM
Carbon Tetrachloride	<5	ug/l	1842	08/15/90	EPA Method 8240	PM
Chlorobenzene	<5	ug/l	1842	08/15/90	EPA Method 8240	PM
Chloroethane	<10	ug/l	1842	08/15/90	EPA Method 8240	PM
2-Chloroethylvinyl ether	<10	ug/l	1842	08/15/90	EPA Method 8240	PM
Chloroform	<5	ug/l	1842	08/15/90	EPA Method 8240	PM
Chloromethane	<10	ug/l	1842	08/15/90	EPA Method 8240	PM
Dibromochloromethane	<5	ug/l	1842	08/15/90	EPA Method 8240	PM
Bromodichloromethane	<5	ug/l	1842	08/15/90	EPA Method 8240	PM
1,1-Dichloroethane	<5	ug/l	1842	08/15/90	EPA Method 8240	PM
1,2-Dichloroethane	<5	ug/l	1842	08/15/90	EPA Method 8240	PM
1,1-Dichloroethene	<5	ug/l	1842	08/15/90	EPA Method 8240	PM

Continued



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

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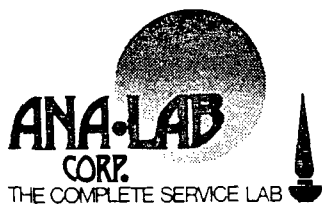
170084 Continued

Page 2

PARAMETER	RESULTS	UNITS	TIME	DATE	METHOD	BY
trans-1,2-Dichloroethene	<5	ug/l	1842	08/15/90	EPA Method 8240	PM
1,2-Dichloropropane	<5	ug/l	1842	08/15/90	EPA Method 8240	PM
cis-1,3-Dichloropropene	<5	ug/l	1842	08/15/90	EPA Method 8240	PM
Ethyl benzene	85	ug/l	1842	08/15/90	EPA Method 8240	PM
Methylene Chloride	<5	ug/l	1842	08/15/90	EPA Method 8240	PM
1,1,2,2-Tetrachloroethane	<5	ug/l	1842	08/15/90	EPA Method 8240	PM
Tetrachloroethene	<5	ug/l	1842	08/15/90	EPA Method 8240	PM
Toluene	805	ug/l	1842	08/15/90	EPA Method 8240	PM
1,1,1-Trichloroethane	<5	ug/l	1842	08/15/90	EPA Method 8240	PM
1,1,2-Trichloroethane	<5	ug/l	1842	08/15/90	EPA Method 8240	PM
Trichloroethene	<5	ug/l	1842	08/15/90	EPA Method 8240	PM
Vinyl Chloride	<10	ug/l	1842	08/15/90	EPA Method 8240	PM
trans-1,3-Dichloropropene	<5	ug/l	1842	08/15/90	EPA Method 8240	PM
1,1,2-Trichloro 1,2,2 TFC	<5	ug/l	1842	08/15/90	EPA Method 8240	PM
Xylenes	670	ug/l	1842	08/15/90	EPA Method 8240	PM

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

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

Analytical Chemistry • Waste Treatment & Disposal • Equipment Sales

08/27/90

RECEIVED

'90 SEP 4 AM 10 10

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

Sample Identification: #9007301445
Collected By: Anderson/Olson
Date & Time Taken: 07/30/90 1445
On Site Data: AM- Bett Treating Plant
Other:

Thief sample of sludge from bottom of third tank of 4 Tank Battery (30 from North) No water available

Lab Sample Number: 170082

Received: 08/03/90

Client: SNM1

PARAMETER	RESULTS	UNITS	TIME	DATE	METHOD	BY
Benzene	1,400,000	ppb	0800	08/22/90	EPA Method 8020	KB

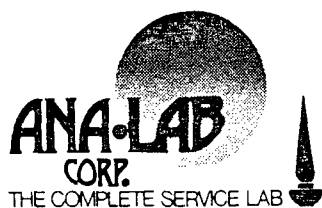
THE FOLLOWING ANALYSES WERE PERFORMED ON THE EXTRACT OBTAINED USING THE NEW TCLP EP TOXICITY EXTRACTION PROCEDURE.

Silver	(.4	ppm	2115	08/21/90	EPA Method 7760	GK
Arsenic	(.06	ppm	1645	08/17/90	EPA Method 7060	GK
Barium	(6	ppm	1715	08/20/90	EPA Method 7000	GK
Cadmium	(.1	ppm	1300	08/17/90	EPA Method 7130	CD
Chromium	.1	ppm	0845	08/17/90	EPA Method 7190	CD
Mercury	(.05	ppm	1800	08/23/90	EPA Method 7470	GK
Lead	(2	ppm	1830	08/21/90	EPA Method 7420	GK
Selenium	(.06	ppm	2230	08/17/90	EPA Method 7740	GK

Quality Assurance for the SET with Sample 170082

Sample #	Description	Result	Units	Dup/Std Value	Spk Conc.	Percent	Time	Date	By
Benzene									
	Blank	(5	ppb				0800	08/22/90	KB
	Standard	58	ppb	50		115	0800	08/22/90	KB
170059	Duplicate	(5	ppb	(5		100	0800	08/22/90	KB
170059	Spike		ppb		50	112	0800	08/22/90	KB

Silver

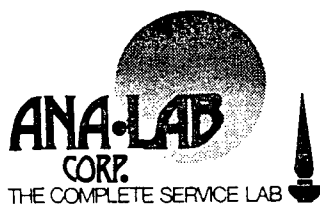


2600 DUDLEY ROAD — KILGORE, TEXAS 75662 — 214/984-0551

Analytical Chemistry • Waste Treatment & Disposal • Equipment Sales

Quality Assurance for the SET with Sample 170082

Sample #	Description	Result	Units	Dup/Std Value	Spk Conc.	Percent	Time	Date	By
	Blank	.4	mg/l				2115	08/21/90	OK
	Blank	.03	mg/l				2115	08/21/90	OK
	Standard	.20	mg/l	.20		100	2115	08/21/90	OK
170554	Duplicate	.03	ppm	.03		100	2115	08/21/90	OK
Arsenic									
	Blank	.06	mg/l				1645	08/17/90	OK
	Blank	.005	mg/l				1645	08/17/90	OK
	Standard	.101	mg/l	.100		101	1645	08/17/90	OK
170554	Duplicate	.005	ppm	.005		100	1645	08/17/90	OK
170554	Spike		ppm		.100	95	1645	08/17/90	OK
170481	Spike		mg/l		.100	92	1645	08/17/90	OK
170553	Spike		mg/l		.100	87	1645	08/17/90	OK
170557	Spike		mg/l		.100	87	1645	08/17/90	OK
Barium									
	Blank	.5	ppm				1715	08/20/90	OK
	Blank	.6	ppm				1715	08/20/90	OK
	Standard	5.0	ppm	5.0		100	1715	08/20/90	OK
170554	Duplicate	2.2	ppm	3.4		143	1715	08/20/90	OK
170767	Duplicate	1.3	ppm	1.7		127	1715	08/20/90	OK
170767	Spike		ppm		4.0	94	1715	08/20/90	OK
Cadmium									
	Blank	.01	mg/l				1300	08/17/90	CD
	Blank	.01	mg/l				1300	08/17/90	CD
	Blank	.01	mg/l				1300	08/17/90	CD
	Blank	.4	mg/l				1300	08/17/90	CD
	Blank	.01	mg/l				1300	08/17/90	CD
	Blank	.01	mg/l				1300	08/17/90	CD
	Standard	.10	mg/l	.10		100	1300	08/17/90	CD
	Standard	.44	mg/l	.44		100	1300	08/17/90	CD
	Standard	1.1	mg/l	1.0		110	1300	08/17/90	CD
170085	Duplicate	.01	ppm	.01		100	1300	08/17/90	CD
170331	Duplicate	22	ppm	22		100	1300	08/17/90	CD
170479	Duplicate	.01	ppm	.02		167	1300	08/17/90	CD
170554	Duplicate	.01	ppm	.01		100	1300	08/17/90	CD
170613	Duplicate	4.0	ppm	1.3		202	1300	08/17/90	CD
170480	Duplicate	.01	mg/l	.01		100	1300	08/17/90	CD
170613	Spike		ppm		.97	96	1300	08/17/90	CD
170480	Spike		mg/l		.40	90	1300	08/17/90	CD
170085	Spike		mg/l		.40	110	1300	08/17/90	CD
170479	Spike		mg/l		.40	99	1300	08/17/90	CD
170554	Spike		mg/l		.40	102	1300	08/17/90	CD
Chromium									
	Blank	.6	ppm				0845	08/17/90	CD



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Quality Assurance for the SET with Sample 170082

Sample #	Description	Result	Units	Dup/Std Value	Spk Conc.	Percent	Time	Date	By
	Blank	.05	mg/l				0845	08/17/90	CD
	Standard	1.0	ppm	1.0		100	0845	08/17/90	CD
	Standard	.49	ppm	.50		102	0845	08/17/90	CD
170554	Duplicate	.05	ppm	.05		100	0845	08/17/90	CD
170613	Duplicate	6.0	ppm	7.2		118	0845	08/17/90	CD
170554	Spike		mg/l		.80	109	0845	08/17/90	CD

Mercury

	Blank	.005	ppm				1800	08/23/90	SK
	Blank	.004	ppm				1800	08/23/90	SK
	Blank	.003	ppm				1800	08/23/90	SK
	Standard	.010	ppm	.010		100	1800	08/23/90	SK
	Standard	.004	ppm	.005		122	1800	08/23/90	SK
170085	Duplicate	.001	ppm	.001		100	1800	08/23/90	SK
170554	Duplicate	.001	ppm	.001		100	1800	08/23/90	SK
170480	Duplicate	.05	mg/l	.05		100	1800	08/23/90	SK
170085	Spike		ppm		.010	106	1800	08/23/90	SK
170554	Spike		mg/l		.010	84	1800	08/23/90	SK

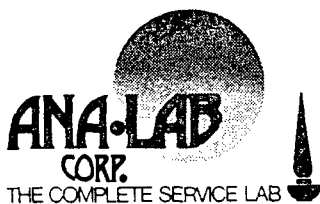
Lead

	Blank	.2	ppm				1830	08/21/90	SK
	Blank	.2	ppm				1830	08/21/90	SK
	Standard	3.1	ppm	2.8		110	1830	08/21/90	SK
	Standard	2.2	ppm	2.0		110	1830	08/21/90	SK
170767	Duplicate	.2	ppm	.2		100	1830	08/21/90	SK
170767	Spike		ppm		2.0	110	1830	08/21/90	SK

Selenium

	Blank	.005	ppm				2230	08/17/90	SK
	Blank	.06	ppm				2230	08/17/90	SK
	Standard	.106	ppm	.100		106	2230	08/17/90	SK
170554	Duplicate	.005	ppm	.005		100	2230	08/17/90	SK
170553	Spike		mg/l		.100	108	2230	08/17/90	SK
170557	Spike		mg/l		.100	107	2230	08/17/90	SK

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



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

Analytical Chemistry • Waste Treatment & Disposal • Equipment Sales

08/27/90

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

Sample Identification: #9007311400 Skim Pond
Collected By: Anderson/Olson
Date & Time Taken: 07/31/90 1400
On Site Data: Loco Hills Treating Plant
Other:

Sludge sample from North Separator Pit. Oily Sludge (Parafins)

Lab Sample Number: 170085 Received: 08/03/90 Client: SNM1

PARAMETER	RESULTS	UNITS	TIME	DATE	METHOD	BY
Benzene	104,000	ppb	0800	08/22/90	EPA Method 8020	KB

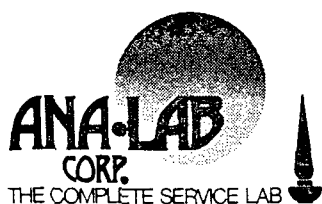
THE FOLLOWING ANALYSES WERE PERFORMED ON THE EXTRACT OBTAINED USING THE NEW TCLP EP TOXICITY EXTRACTION PROCEDURE.

Silver	(.03	ppm	1415	08/14/90	EPA Method 7760	CD
Arsenic	(.005	ppm	0015	08/14/90	EPA Method 7060	BK
Barium	(.5	ppm	2300	08/13/90	EPA Method 7000	BK
Cadmium	.01	ppm	1300	08/17/90	EPA Method 7130	CD
Chromium	(.05	ppm	1100	08/16/90	EPA Method 7190	CD
Mercury	(.001	ppm	1800	08/23/90	EPA Method 7470	BK
Lead	(.2	ppm	1400	08/16/90	EPA Method 7420	CD
Selenium	(.005	ppm	0730	08/14/90	EPA Method 7740	BDS

Quality Assurance for the SET with Sample 170085

Sample #	Description	Result	Units	Dup/Std Value	Spk Conc.	Percent	Time	Date	By
Benzene									
	Blank	(5	ppb				0800	08/22/90	KB
	Standard	58	ppb	50		115	0800	08/22/90	KB
170085	Duplicate	(5	ppb	(5		100	0800	08/22/90	KB
170085	Spike		ppb		50	112	0800	08/22/90	KB

Silver



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Quality Assurance for the SET with Sample 170085

Sample #	Description	Result	Units	Dup/Std Value	Spk Conc.	Percent	Time	Date	By
170085	Blank	.03	ppm				1415	08/14/90	CD
	Standard	.19	ppm	.20		105	1415	08/14/90	CD
	Standard	.54	ppm	.50		108	1415	08/14/90	CD
	Duplicate	.03	ppm	.03		100	1415	08/14/90	CD
Arsenic									
170085	Blank	.005	ppm				0015	08/14/90	GK
	Standard	.091	ppm	.100		109	0015	08/14/90	GK
	Duplicate	.005	ppm	.005		100	0015	08/14/90	GK
168970	Duplicate	.005	mg/l	.005		100	0015	08/14/90	GK
170085	Spike		ppm		.100	99	0015	08/14/90	GK
Barium									
170085	Blank	.5	ppm				2300	08/13/90	GK
	Standard	1.0	ppm	1.0		100	2300	08/13/90	GK
	Duplicate	.5	ppm	.5		100	2300	08/13/90	GK
170085	Spike		ppm		4.0	110	2300	08/13/90	GK
Cadmium									
170085	Blank	.01	mg/l				1300	08/17/90	CD
	Blank	.01	mg/l				1300	08/17/90	CD
	Blank	.01	mg/l				1300	08/17/90	CD
	Blank	.4	mg/l				1300	08/17/90	CD
	Blank	.01	mg/l				1300	08/17/90	CD
	Blank	.01	mg/l				1300	08/17/90	CD
	Standard	.10	mg/l	.10		100	1300	08/17/90	CD
	Standard	.44	mg/l	.44		100	1300	08/17/90	CD
	Standard	1.1	mg/l	1.0		110	1300	08/17/90	CD
	Duplicate	.01	ppm	.01		100	1300	08/17/90	CD
170331	Duplicate	22	ppm	22		100	1300	08/17/90	CD
170479	Duplicate	.01	ppm	.02		167	1300	08/17/90	CD
170554	Duplicate	.01	ppm	.01		100	1300	08/17/90	CD
170613	Duplicate	4.0	ppm	1.3		202	1300	08/17/90	CD
170480	Duplicate	.01	mg/l	.01		100	1300	08/17/90	CD
170613	Spike		ppm		.97	96	1300	08/17/90	CD
170480	Spike		mg/l		.40	90	1300	08/17/90	CD
170085	Spike		mg/l		.40	110	1300	08/17/90	CD
170479	Spike		mg/l		.40	99	1300	08/17/90	CD
170554	Spike		mg/l		.40	102	1300	08/17/90	CD
Chromium									
170479	Blank	.05	mg/l				1100	08/16/90	CD
	Blank	.05	mg/l				1100	08/16/90	CD
	Blank	.05	mg/l				1100	08/16/90	CD
	Standard	1.0	mg/l	1.0		100	1100	08/16/90	CD
	Standard	.53	mg/l	.50		106	1100	08/16/90	CD
	Duplicate	.05	ppm	.05		100	1100	08/16/90	CD



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

Analytical Chemistry • Waste Treatment & Disposal • Equipment Sales

Quality Assurance for the SET with Sample 170085

Sample #	Description	Result	Units	Dup/Std Value	Spk Conc.	Percent	Time	Date	By
170480	Duplicate	.05	ppm	.05		100	1100	08/16/90	CD
170085	Duplicate	.05	ppm	.05		100	1100	08/16/90	CD
170085	Spike		mg/l		.80	101	1100	08/16/90	CD
170480	Spike		mg/l		.80	92	1100	08/16/90	CD
170479	Spike		mg/l		.80	104	1100	08/16/90	CD

Mercury

	Blank	.005	ppm				1800	08/23/90	SK
	Blank	.004	ppm				1800	08/23/90	SK
	Blank	.003	ppm				1800	08/23/90	SK
	Standard	.010	ppm	.010		100	1800	08/23/90	SK
	Standard	.004	ppm	.005		122	1800	08/23/90	SK
170085	Duplicate	.001	ppm	.001		100	1800	08/23/90	SK
170554	Duplicate	.001	ppm	.001		100	1800	08/23/90	SK
170480	Duplicate	.05	mg/l	.05		100	1800	08/23/90	SK
170085	Spike		ppm		.010	106	1800	08/23/90	SK
170554	Spike		mg/l		.010	84	1800	08/23/90	SK

Lead

	Blank	.2	ppm				1400	08/16/90	CD
	Blank	.2	ppm				1400	08/16/90	CD
	Standard	1.1	ppm	1.1		100	1400	08/16/90	CD
	Standard	2.1	ppm	2.0		105	1400	08/16/90	CD
170085	Duplicate	.2	ppm	.2		100	1400	08/16/90	CD
170479	Duplicate	.2	ppm	.2		100	1400	08/16/90	CD
170480	Duplicate	.2	ppm	.2		100	1400	08/16/90	CD
170085	Spike		ppm		2.0	106	1400	08/16/90	CD
170479	Spike		ppm		2.0	108	1400	08/16/90	CD
170480	Spike		ppm		2.0	104	1400	08/16/90	CD

Selenium

	Blank	.005	ppm				0730	08/14/90	BDG
	Standard	.101	ppm	.100		101	0730	08/14/90	BDG
170085	Duplicate	.005	ppm	.005		100	0730	08/14/90	BDG
170085	Spike		ppm		.100	110	0730	08/14/90	BDG


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

PARABO, INC.

P. O. Box 1737
EUNICE, NEW MEXICO 88231

August 3, 1989

RECEIVED

Kathryn Packard
Environmental Scientist
State of New Mexico
Environmental Improvement Division
Occupational Health and Safety Bureau
1190 St. Francis Drive
Santa Fe, New Mexico 87503

AUG 8 1989

OIL CONSERVATION DIV.
SANTA FE

SUBJECT: PARABO, INC. INSPECTION ON 7-19-89

Dear Ms. Packard,

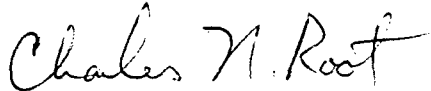
Enclosed is a copy of the Oil Conservation Division chemical analysis of the Parabo disposal facility. An excellent source for answers to any questions would be David Boyer, Environmental Bureau Chief of the OCD.

Also, enclosed is a copy of the material safety data sheet for the solvent used in the cleaning of the sample containers for crude oil.

With regard to any analysis of material in an area where there was an alleged incident of eye irritation to an employee at the facility, no complaint was filed with management and therefore, no analysis was made at that time.

Sincerely,

PARABO, INC.



Charles N. Root
Regulatory Affairs Manager

CNR:pm

Enclosures



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

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

RECEIVED

AUG 8 1989

OIL CONSERVATION DIV.
SANTA FE

June 23, 1989

Mr. Wayne Price
UNICHEM INTERNATIONAL
P. O. Box 1499
Hobbs, New Mexico 88240

RE: PARABO DISPOSAL

Dear Mr. Price:

Enclosed are copies of the chemical analyses for your facility taken during our last sampling trip. Also enclosed is a listing of state and federal water quality standards. The listing is provided for information and comparison purposes only; specific limitations for your facility, if any, are provided in your discharge permit.

If you have any questions, please contact me at 827-5812.

Sincerely,

David Engle for David Boyer

David G. Boyer, Hydrogeologist
Environmental Bureau Chief

DGB/sl

Enclosures

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

Sample No. 8903291055
DATE REC. _____
PRIORITY _____
PHONE(S): 827-5812

COLLECTION CITY: Lunice; COUNTY: Lea
COLLECTION DATE/TIME CODE: (Year-Month-Day-Hour-Minute) 8/9/89 13:29:10.55
LOCATION CODE: (Township-Range-Section-Tracts) _____ (10N06E24S42)

SUBMITTER: David Boyer

SAMPLE TYPE: WATER ☒ 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.
☒ P-ice Sample stored in an ice bath (Not Frozen).
☐ P-AA Sample Preserved with Ascorbic Acid to remove chlorine residual.
☒ P-HCl Sample Preserved with Hydrochloric Acid (2 drops/40 ml)

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 (1-6 Carbons)
☒ (754) Aromatic & Halogenated Purgeables
☐ (768) Mass Spectrometer Purgeables
☐ (766) Trihalomethanes
☐ (774) SDWA VOC's I (8 Regulated +)
☐ (773) 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= _____; Conductivity= _____ umho/cm at _____ °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. odor, etc.)

Sample from Pit #1, Payabo produced water disposal
Flushing oil on surface

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

CHAIN OF CUSTODY

I certify that this sample was transferred from DB to DM
at (location) ALR on 4/5/89 12:25 and that
the statements in this block are correct. Evidentiary Seal: Not Sealed ☐ OR Seals Intact: Yes ☒ No ☐
Signatures: David H. Boyer

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

Contract Lab ACC-LABS
Contract No. 77-52107-123

GENERAL WATER CHEMISTRY
and NITROGEN ANALYSIS

DATE RECEIVED <u>890329</u>	LAB NO. <u>10CD</u>	Sample No. <u>8903291055</u>
Collection DATE <u>1055</u>	SITE INFORMATION <u>Paralel Eumel</u>	Sample location <u>Disposal pit #1</u>
Collection TIME <u>1055</u>	Collection site description <u>Disposal pit #1</u>	
Collected by <u>Boyer/Anderson</u>	Person/Agency <u>10CD</u>	

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: 827-5312

SAMPLING CONDITIONS

☐ Bailed ☒ Dipped	☐ Pump ☐ Tap	Water level	Discharge	Sample type <u>Gravel</u>
pH (00400)	Conductivity (Uncorrected) <u> </u> μmho	Water Temp. (00010) <u> </u> °C	Conductivity at 25°C (00094) <u> </u> μmho	

Field comments floating oil on surface, oil field waste disposal

SAMPLE FIELD TREATMENT — Check proper boxes

No. of samples submitted <u>1</u>	☒ NF: Whole sample (Non-filtered)	☐ F: Filtered in field with 0.45 μm membrane filter	☐ A: 2 ml $\text{H}_2\text{SO}_4/\text{L}$ added
☒ NA: No acid added		☐ Other-specify: <u> </u>	☐ A: 5ml conc. HNO_3 added ☐ A: 4ml fuming HNO_3 added

ANALYTICAL RESULTS from SAMPLES

NA	Units	Date analyzed	From <u>WF</u> NA Sample:	Date Analyzed
☒ Conductivity (Corrected) 25°C (00095)	μmho		☒ Calcium	mg/l
☐ Total non-filterable residue (suspended) (00530)	mg/l		☒ Potassium	mg/l
☒ Other: <u>Lab pH</u>			☒ Magnesium	mg/l
☐ Other:			☒ Sodium	mg/l
☐ Other:			☒ Bicarbonate	mg/l
A-H₂SO₄			☒ Chloride	mg/l
☐ Nitrate-N + Nitrite-N total (00630)	mg/l		☒ Sulfate	mg/l
☐ Ammonia-N total (00610)	mg/l		☒ Total Solids	mg/l
☐ Total Kjeldahl-N ()	mg/l		☒ <u>CO₂</u>	
☐ Chemical oxygen demand (00340)	mg/l		☒ <u>P₂</u>	
☐ Total organic carbon ()	mg/l		☒ Cation/Anion Balance	
☐ Other:			Analyst	Date Reported
☐ Other:				Reviewed by

Laboratory remarks

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

Contract Lab ACC-LABS
Contract No. 77-521.07-123

HEAVY METAL ANALYSIS FORM

Date Received	Lab No.	Sample No.
<u>890329</u>	<u>1055</u>	<u>8903291055</u>
COLLECTION DATE & TIME: <u>yy mm dd hh mm</u>		COLLECTION SITE DESCRIPTION
<u>89 03 29 10 55</u>		<u>Paradise Disposal</u>
COLLECTED BY: <u>Boyer/Anderson</u>		<u>pit #1</u>

TO:

OWNER:

ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg., PO Box 2088
SANTA FE, NM 87504-2088

SITE LOCATION:

County: Lea

Township, Range, Section, Tract: (10N06E24342)

ATTN: D. Boyer
TELEPHONE: 827-5812

STATION/ WELL CODE:

LATITUDE, LONGITUDE:

SAMPLING CONDITIONS:

☐ Bailed	☐ Pump	Water Level:	Discharge:	Sample Type:
☒ Dipped	☐ Tap			<u>Gravel</u>
pH(00400)	Conductivity(Uncorr.)	Water Temp.(00010)	Conductivity at 25°C	
<u>-</u>	<u>-</u> μmho	<u>-</u> °C	<u>(00094)</u> μmho	

FIELD COMMENTS:

Floating oil, oil field waste disposal

SAMPLE FIELD TREATMENT

Check proper boxes:

☒ WPN: Water Preserved w/HNO ₃ Non-Filtered	☐ WPF: Water Preserved w/HNO ₃ Filtered
---	--

LAB ANALYSIS REQUESTED:

☐ ICAP Scan
Mark box next to metal if AA is required.

ANALYTICAL RESULTS (MG/L)

ELEMENT	ICAP VALUE	AA VALUE	ELEMENT	ICAP VALUE	AA VALUE
Aluminum	☒	☐	Silicon	☐	☐
Barium	☒	☐	Silver	☒	☐
Beryllium	☐	☐	Strontium	☒	☐
Boron	☒	☐	Tin	☐	☐
Cadmium	☒	☐	Vanadium	☐	☐
Calcium	☐	☐	Zinc	☒	☐
Chromium	☐	☒	Arsenic	☐	☒
Cobalt	☒	☐	Selenium	☐	☒
Copper	☒	☐	Mercury	☐	☒
Iron	☒	☐		☐	☐
Lead	☐	☒		☐	☐
Magnesium	☐	☐		☐	☐
Manganese	☒	☐		☐	☐
Molybdenum	☒	☐		☐	☐
Nickel	☒	☐		☐	☐

LAB COMMENTS:

For OCD Use:

Date Owner Notified:

Phone or Letter?

Initials:

ICAP Analyst

Reviewer

Date Analyzed

Date Received

May 9, 1989
Page 4 of 18

Accu-Labs Research, Inc.

RECEIVED

Mr. David Boyer
NM Oil Conservation Division

MAY 17 1989

RE: 9649-29859-20
Date Samples Rec'd: 4-5-89
P.O. No. 77-521.07-123

OIL CONSERVATION DIV.
SANTA FE

REPORT OF ANALYSIS

ALR Designation	9649-29859-20-4	9649-29859-20-5	9649-29859-20-6
Sponsor Designation	8903291055	8903301230	8903291630
	3-29-89	3-30-89	3-29-89

GC/MS VOLATILE ORGANICS, µg/L:

Chloromethane	<10	<100	<10
Bromomethane	<10	<100	<10
Vinyl chloride	<10	<100	<10
Chloroethane	<10	<100	<10
Methylene chloride	<5	<50	<5
1,1-Dichloroethene	<5	<50	<5
1,1-Dichloroethane	<5	<50	<5
Total 1,2-Dichloroethene	<5	<50	<5
Chloroform	<5	<50	<5
1,2-Dichloroethane	<5	<50	<5
1,1,1-Trichloroethane	<5	<50	<5
Carbon tetrachloride	<5	<50	<5
Bromodichloromethane	<5	<50	<5
1,2-Dichloropropane	<5	<50	<5
c-1,3-Dichloropropene	<5	<50	<5
Trichloroethene	<5	<50	<5
Benzene	75	2200	<5
Dibromochloromethane	<5	<50	<5
1,1,2-Trichloroethane	<5	<50	<5
t-1,3-Dichloropropene	<5	<50	<5
2-Chloroethylvinyl ether	<5	<50	<5
Bromoform	<5	<50	<5
1,1,2,2-Tetrachloroethane	<5	<50	<5
Tetrachloroethene	<5	<50	<5

May 9, 1989
Page 5 of 18

Accu-Labs Research, Inc.

Mr. David Boyer
NM Oil Conservation Division

RE: 9649-29859-20
Date Samples Rec'd: 4-5-89
P.O. No. 77-521.07-123

RECEIVED

MAY 17 1989

OIL CONSERVATION DIV.
SANTA FE

REPORT OF ANALYSIS

ALR Designation
Sponsor Designation

9649-29859-20-4	9649-29859-20-5	9649-29859-20-6
8903291055	8903301230	8903291630
3-29-89	3-30-89	3-29-89

Determination: µg/L

Toluene	100	1300	<5
Chlorobenzene	<5	<50	<5
Ethyl benzene	64	170	<5
Total Dichlorobenzenes	<5	<50	<5
Total Xylenes	130	370	<5

Determination: mg/L

Aluminum, total	<1*	<1*	<0.1
Barium, total	1.4	0.4	0.10
Boron, total	60	49	0.2
Cadmium, total	<0.05*	<0.05*	<0.005
Calcium, total	4300	4400	110
Chromium, total	<0.05*	<0.05*	<0.005
Cobalt, total	<0.05*	<0.05*	<0.005
Copper, total	<0.05*	<0.05*	0.032
Iron, total	2.2	0.9	1.4
Magnesium, total	6200	700	22
Manganese, total	4.5	0.22	0.21
Mercury, total	<0.001*	<0.001*	<0.001*
Molybdenum, total	<0.05*	<0.05	<0.005
Nickel, total	<0.1*	<0.1*	<0.01
Potassium, total	320	250	5.4
Silver, total	<0.005	0.018	<0.005
Sodium, total	72,000	43,000	120
Strontium, total	100	460	1.0
Zinc, total	<0.05*	<0.05*	<0.005
Total Alkalinity, (as CaCO ₃ to pH 4.5)	580	300	170

May 9, 1989
Page 6 of 18

Accu-Labs Research, Inc.

Mr. David Boyer
NM Oil Conservation Division

RECEIVED

RE: 9649-29859-20
Date Samples Rec'd: 4-5-89
P.O. No. 77-521.07-123

MAY 17 1989

OIL CONSERVATION DIV.
SANTA FE

REPORT OF ANALYSIS

ALR Designation
Sponsor Designation

9649-29859-20-4	9649-29859-20-5	9649-29859-20-6
8903291055	8903301230	8903291630
3-29-89	3-30-89	3-29-89

Determination: mg/L

Carbonate (as CO ₃)	<5	<5	<5
Bicarbonate (as HCO ₃)	700	360	200
pH	7.2	6.9	7.6
Specific Conductance, µmhos/cm	390,000	230,000	1400
Arsenic, total	0.51	<0.005	<0.005
Lead, total	0.008	0.050	<0.005
Selenium, total	<0.25*	<0.10*	<0.005
Total Solids	210,000	120,000	750
Bromide	270	<80*	<5*
Chloride	130,000	70,000	250
Sulfate (as SO ₄)	4100	1400	110
Ion Balance	102	107	100

13
Lab
No.

ACCU-LABS

77-52107-12

ORGANIC ANALYSIS REQUEST FORM

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

Sample No. 8903290910
DATE REC. _____
PRIORITY _____
PHONE(S): 827-5812

COLLECTION CITY: ELUNICA; COUNTY: LEA
COLLECTION DATE/TIME CODE: (Year-Month-Day-Hour-Minute) 89103129109110
LOCATION CODE: (Township-Range-Section-Tracts) _____ (10N06E24S42)

SUBMITTER: David Boyer

SAMPLE TYPE: WATER ☒ 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.
☒ P-Ice: Sample stored in an ice bath (Not Frozen).
☐ P-AA: Sample Preserved with Ascorbic Acid to remove chlorine residual.
☒ P-HCl: Sample Preserved with Hydrochloric Acid (2 drops/40 ml)

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

- ☐ (733) Aliphatic Headspace (1-6 Carbons)
☒ (734) Aromatic & Halogenated Purgeables
☐ (735) Mass Spectrometer Purgeables
☐ (736) Trihalomethanes
☐ (774) SDWA VOC's I (8 Regulated +)
☐ (773) SDWA VOC's II (EDB & DBCP)
Other Specific Compounds or Classes _____

EXTRACTABLE SCREENS

- ☐ (781) Aliphatic Hydrocarbons
☐ (738) Base/Neutral Extractables
☐ (738) Herbicides, Chlorophenoxy acid
☐ (739) Herbicides, Triazines
☐ (760) Organochlorine Pesticides
☐ (761) Organophosphate Pesticides
☐ (767) Polychlorinated Biphenyls (PCB's)
☐ (764) Polynuclear Aromatic Hydrocarbons
☐ (762) SDWA Pesticides & Herbicides

Remarks: PARABO B54W PIT #4

FIELD DATA:

pH= _____; Conductivity= _____ umho/cm at _____ °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.)

PARABO B54W PIT #4

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

EXPRESS

CHAIN OF CUSTODY

I certify that this sample was transferred from DB to Dm
at (location) HLR on 4.5.89. 12:25 and that
the statements in this block are correct. Evidentiary Seals: Not Sealed ☐ OR Seals Intact: Yes ☒ No ☐
Signatures: L. Davis, A. Mulek

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

May 9, 1989
Page 13 of 18

Accu-Labs Research, Inc.

RECEIVED

Mr. David Boyer
NM Oil Conservation Division

MAY 17 1989

RE: 9649-29859-20
Date Samples Rec'd: 4-5-89
P.O. No. 77-521.07-123

OIL CONSERVATION DIV.
SANTA FE

REPORT OF ANALYSIS

ALR Designation	9649-29859-20-13	9649-29859-20-14	9649-29859-20-15
Sponsor Designation	8903290910	8903311035	8903310825
	3-29-89	3-31-89	3-31-89

GC/MS VOLATILE ORGANICS, µg/L:

Chloromethane	<2000 µg/kg	<100 µg/kg	<100
Bromomethane	<2000 µg/kg	<100 µg/kg	<100
Vinyl chloride	<2000 µg/kg	<100 µg/kg	<100
Chloroethane	<2000 µg/kg	<100 µg/kg	<100
Methylene chloride	<1000 µg/kg	<50 µg/kg	<50
1,1-Dichloroethene	<1000 µg/kg	<50 µg/kg	<50
1,1-Dichloroethane	<1000 µg/kg	<50 µg/kg	<50
Total 1,2-Dichloroethene	<1000 µg/kg	<50 µg/kg	<50
Chloroform	<1000 µg/kg	<50 µg/kg	<50
1,2-Dichloroethane	<1000 µg/kg	<50 µg/kg	<50
1,1,1-Trichloroethane	<1000 µg/kg	<50 µg/kg	<50
Carbon tetrachloride	<1000 µg/kg	<50 µg/kg	<50
Bromodichloromethane	<1000 µg/kg	<50 µg/kg	<50
1,2-Dichloropropane	<1000 µg/kg	<50 µg/kg	<50
c-1,3-Dichloropropene	<1000 µg/kg	<50 µg/kg	<50
Trichloroethene	<1000 µg/kg	<50 µg/kg	<50
Benzene	2300 µg/kg	<50 µg/kg	2800
Dibromochloromethane	<1000 µg/kg	<50 µg/kg	<50
1,1,2-Trichloroethane	<1000 µg/kg	<50 µg/kg	<50
t-1,3-Dichloropropene	<1000 µg/kg	<50 µg/kg	<50
2-Chloroethylvinyl ether	<1000 µg/kg	<50 µg/kg	<50
Bromoform	<1000 µg/kg	<50 µg/kg	<50
1,1,2,2-Tetrachloroethane	<1000 µg/kg	<50 µg/kg	<50
Tetrachloroethene	<1000 µg/kg	<50 µg/kg	<50

May 9, 1989
Page 14 of 18

Accu-Labs Research, Inc.

Mr. David Boyer
NM Oil Conservation Division

RE: 9649-29859-20
Date Samples Rec'd: 4-5-89
P.O. No. 77-521.07-123

RECEIVED

MAY 17 1989
OIL CONSERVATION DIV.
SANTA FE

REPORT OF ANALYSIS

ALR Designation
Sponsor Designation

9649-29859-20-13	9649-29859-20-14	9649-29859-20-15
8903290910	8903311035	8903310825
3-29-89	3-31-89	3-31-89

Determination: µg/L

Toluene	3500 µg/kg	700 µg/kg	1500
Chlorobenzene	<1000 µg/kg	<50 µg/kg	<50
Ethyl benzene	2600 µg/kg	140 µg/kg	270
Total Dichlorobenzenes	<1000 µg/kg	<50 µg/kg	<50
Total Xylenes	5000 µg/kg	580 µg/kg	410

REPORT TO: DAVID BOYER Sample No. 8903291000
N.M. OIL CONSERVATION DIVISION DATE REC. _____
P.O. Box 2088 PRIORITY _____
Santa Fe, NM 87504-2088 PHONE(S): 827-5812

COLLECTION CITY: Eunice; COUNTY: Lea
COLLECTION DATE/TIME CODE: (Year-Month-Day-Hour-Minute) 89103129110100
LOCATION CODE: (Township-Range-Section-Tracts) _____ (10N06E24S42)

SUBMITTER: David Boyer

SAMPLE TYPE: WATER ☒, 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.
☒ P-Ice: Sample stored in an ice bath (Not Frozen).
☐ P-AA: Sample Preserved with Ascorbic Acid to remove chlorine residual.
☒ P-HCl: Sample Preserved with Hydrochloric Acid (3 drops/40 ml)

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 (1-6 Carbons)
☒ (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

- ☐ (761) Aliphatic Hydrocarbons
☐ (768) Base/Neutral Extractables
☐ (768) Herbicides, Chlorophenoxy acid
☐ (769) 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= _____; Conductivity= >50,000 umho/cm at _____ °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.)

Sample from Salt Water Evaporation Pit #7
Paralejo disposal (oil field water disposal)

I certify that the results in this block accurately reflect the results of my field analyses, observations and activities. (signature collector): David H Boyer Method of Shipment to the Lab: Freight Express

CHAIN OF CUSTODY

I certify that this sample was transferred from LLB to 10MM
at (location) HLR on 4/5/89 - 12:25 and that
the statements in this block are correct. Evidentiary Seals: Not Sealed ☐ OR Seals Intact: Yes ☒ No ☐
Signatures: David H Boyer

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

2

Contract Lab ACCU - LABS
 Contract No. 77-521.07-123

**GENERAL WATER CHEMISTRY
and NITROGEN ANALYSIS**

DATE RECEIVED <u>09103129</u>	LAB NO.	Sample No. <u>8903291000</u>
Collection DATE <u>1000</u>	SITE INFORMATION	Sample location <u>Paralel Disposal Ecnile</u>
Collection TIME		Collection site description <u>Evap pit #7</u>
Collected by -- Person/Agency <u>Boyer / Anderson 10CD</u>		

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: 827-5312

SAMPLING CONDITIONS

☐ Bailed ☒ Dipped	☐ Pump ☐ Tap	Water level	Discharge	Sample type <u>Gravel</u>
pH (00400) <u>—</u>	Conductivity (Uncorrected) <u>> 50,000</u> μ mho	Water Temp. (00010) $^{\circ}$ C	Conductivity at 25 $^{\circ}$ C (00094) μ mho	
Field comments <u>oil field waste disposal</u>				

SAMPLE FIELD TREATMENT — Check proper boxes

No. of samples submitted <u>1</u>	☒ NF: Whole sample (Non-filtered)	☐ F: Filtered in field with 0.45 μ m membrane filter	☐ A: 2 ml H ₂ SO 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	From <u>NF</u> , NA Sample:	Date Analyzed
☒ Conductivity (Corrected) 25 $^{\circ}$ C (00095)	μ mho		☒ Calcium	mg/l
☐ Total non-filterable residue (suspended) (00530)	mg/l		☒ Potassium	mg/l
☒ Other: <u>Lab pH</u>			☒ Magnesium	mg/l
☐ Other:			☒ Sodium	mg/l
☐ Other:			☒ Bicarbonate	mg/l
A-H₂SO₄			☒ Chloride	mg/l
☐ Nitrate-N + Nitrate-N total (00630)	mg/l		☒ Sulfate	mg/l
☐ Ammonia-N total (00610)	mg/l		☒ Total Solids	mg/l
☐ Total Kjeldahl-N ()	mg/l		☒ CO ₂	
☐ Chemical oxygen demand (00340)	mg/l		☒ B ₅	
☐ Total organic carbon ()	mg/l		☒ Cation/Anion Balance	
☐ Other:			Analyst	Date Reported
☐ Other:				Reviewed by

Laboratory remarks

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

Contract Lab ACOM-LABS
Contract No. 77-52607-123

HEAVY METAL ANALYSIS FORM

Date Received	Lab No.	Sample No. <u>8903291000</u>
COLLECTION DATE & TIME: <u>yy mm dd hh mm</u> <u>89 03 29 10 00</u>		COLLECTION SITE DESCRIPTION <u>Paralel Surber</u> <u>Soft White, E. Trip</u> <u>Pit #5</u>
COLLECTED BY: <u>Boyer/Anderson</u>		OWNER: _____

TO:

ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg., PO Box 2088
SANTA FE, NM 87504-2088

SITE LOCATION:
County: Lea

Township, Range, Section, Tract: (10N06E24342)

ATTN: D. Boyer
TELEPHONE: 827-5812

STATION/ WELL CODE: _____

LATITUDE, LONGITUDE: _____

SAMPLING CONDITIONS:

☐ Bailed	☐ Pump	Water Level:	Discharge:	Sample Type: <u>Grab</u>
☒ Dipped	☐ Tap			
pH(00400) <u>-</u>	Conductivity(Uncorr.) <u>> 50,000</u> μmho	Water Temp.(00010) <u>0</u> $^{\circ}\text{C}$	Conductivity at 25 $^{\circ}\text{C}$ (00094) _____ μmho	

FIELD COMMENTS: oil field waste disposal site

SAMPLE FIELD TREATMENT

Check proper boxes:

☒ WPN: Water Preserved w/HNO ₃ Non-Filtered	☐ WPF: Water Preserved w/HNO ₃ Filtered
--	---

LAB ANALYSIS REQUESTED:

☐ ICAP Scan
Mark box next to metal if AA is required.

ANALYTICAL RESULTS (MG/L)

ELEMENT	ICAP VALUE	AA VALUE	ELEMENT	ICAP VALUE	AA VALUE
Aluminum	☒	☐	Silicon	☐	☐
Barium	☒	☐	Silver	☒	☐
Beryllium	☐	☐	Strontium	☒	☐
Boron	☒	☐	Tin	☐	☐
Cadmium	☒	☐	Vanadium	☐	☐
Calcium	☐	☐	Zinc	☒	☐
Chromium	☐	☒	Arsenic	☐	☒
Cobalt	☒	☐	Selenium	☐	☒
Copper	☒	☐	Mercury	☐	☒
Iron	☒	☐		☐	☐
Lead	☐	☒		☐	☐
Magnesium	☐	☐		☐	☐
Manganese	☒	☐		☐	☐
Molybdenum	☒	☐		☐	☐
Nickel	☒	☐		☐	☐

LAB COMMENTS: _____

For OCD Use:

Date Owner Notified: _____
Phone or Letter? _____
Initials: _____

ICAP Analyst _____ Reviewer _____

Date Analyzed _____ Date Received _____



Accu-Labs Research, Inc.

11485 W. 48th Avenue Wheat Ridge, Colorado 80033 (303) 423-2766

May 9, 1989
Page 1 of 18

Mr. David Boyer
NM Oil Conservation Division
State Land Office Bldg.
P.O. Box 2088
Santa Fe, NM 87504-2088

RE: 9649-29859-20
Date Samples Rec'd: 4-5-89
P.O. No. 77-521.07-123

RECEIVED
MAY 17 1989
OIL CONSERVATION DIV.
SANTA FE

REPORT OF ANALYSIS

ALR Designation	9649-29859-20-1	9649-29859-20-2	9649-29859-20-3
Sponsor Designation	8903201105	8903291000	8903291400
	3-30-89	3-29-89	3-29-89

GC/MS VOLATILE ORGANICS, µg/L:

Chloromethane	<10	<10	<100
Bromomethane	<10	<10	<100
Vinyl chloride	<10	<10	<100
Chloroethane	<10	<10	<100
Methylene chloride	<5	<5	<50
1,1-Dichloroethene	<5	<5	<50
1,1-Dichloroethane	<5	<5	<50
Total 1,2-Dichloroethene	<5	<5	<50
Chloroform	<5	<5	<50
1,2-Dichloroethane	<5	<5	<50
1,1,1-Trichloroethane	<5	<5	<50
Carbon tetrachloride	<5	<5	<50
Bromodichloromethane	<5	<5	<50
1,2-Dichloropropane	<5	<5	<50
c-1,3-Dichloropropene	<5	<5	<50
Trichloroethene	<5	<5	<50
Benzene	<5	<5	2200
Dibromochloromethane	<5	<5	<50
1,1,2-Trichloroethane	<5	<5	<50
t-1,3-Dichloropropene	<5	<5	<50
2-Chloroethylvinyl ether	<5	<5	<50
Bromoform	<5	<5	<50
1,1,2,2-Tetrachloroethane	<5	<5	<50
Tetrachloroethene	<5	<5	<50

May 9, 1989
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Accu-Labs Research, Inc.

RECEIVED

MAY 17 1989

OIL CONSERVATION DIV
SANTA FE

Mr. David Boyer
NM Oil Conservation Division

RE: 9649-29859-20
Date Samples Rec'd: 4-5-89
P.O. No. 77-521.07-123

REPORT OF ANALYSIS

ALR Designation
Sponsor Designation

9649-29859-20-1	9649-29859-20-2	9649-29859-20-3
8903301105	8903291000	8903291400
3-30-89	3-29-89	3-29-89

Determination: µg/L

Toluene	<5	<5	2000
Chlorobenzene	<5	<5	<50
Ethyl benzene	<5	<5	500
Total Dichlorobenzenes	<5	<5	<50
Total Xylenes	<5	<5	1300

Determination: mg/L

Aluminum, total	0.9	<1*	0.3
Barium, total	0.12	2.9	0.31
Boron, total	0.7	110	2.7
Cadmium, total	<0.005	<0.05*	<0.005
Calcium, total	2600	15,000	900
Chromium, total	<0.005	<0.05*	0.043
Cobalt, total	<0.005	<0.05*	<0.005
Copper, total	0.026	<0.05*	0.076
Iron, total	0.96	5.1	44
Magnesium, total	610	8900	230
Manganese, total	0.16	19	0.54
Mercury, total	0.002	<0.002*	0.006
Molybdenum, total	<0.005	<0.05*	0.007
Nickel, total	<0.01	<0.1*	0.05
Potassium, total	35	3900	110
Silver, total	<0.005	<0.005	<0.005
Sodium, total	6500	81,000	4300
Strontium, total	30	350	45
Zinc, total	0.026	0.06	0.16
Total Alkalinity, (as CaCO ₃ to pH 4.5)	290	220	350

May 9, 1989
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Accu-Labs Research, Inc.

Mr. David Boyer
NM Oil Conservation Division

RE: 9649-29859-20
Date Samples Rec'd: 4-5-89
P.O. No. 77-521.07-123

RECEIVED

MAY 17 1989

OIL CONSERVATION DIV.
SANTA FE

REPORT OF ANALYSIS

ALR Designation
Sponsor Designation

9649-29859-20-1 8903301105 <u>3-30-89</u>	9649-29859-20-2 8903291000 <u>3-29-89</u>	9649-29859-20-3 8903291400 <u>3-29-89</u>
--	--	--

Determination: mg/L

Carbonate (as CO ₃)	<5	<5	37
Bicarbonate (as HCO ₃)	350	270	350
pH	7.0	6.9	8.6
Specific Conductance, µmhos/cm	47,000	600,000	28,000
Arsenic, total	0.005	0.60	0.032
Lead, total	0.023	0.084	0.017
Selenium, total	<0.005	<0.25*	0.017
Total Solids	29,000	350,000	16,000
Bromide	16	830	<40*
Chloride	15,000	190,000	8100
Sulfate (as SO ₄)	1600	2300	890
Ion Balance	100	94	99

**COMPARISON OF N.M.WQCC GROUND-WATER STANDARDS AND U.S.EPA
DRINKING-WATER STANDARDS & HEALTH ADVISORIES, OCTOBER 1988.**

All units are mg/L unless otherwise specified. All standards listed are based upon health concerns except for the parameters followed by (a) aesthetic standard or (i) irrigation standard.

PARAMETER	N.M.WQCC	U.S.EPA Existing MCL	U.S.EPA MCLG	U.S.EPA Lifetime HA or Risk Level*
Inorganics				
Aluminum (i)	5.0			
Arsenic	0.1	0.05		0.05
Barium	1.0	1.0	1.5	1.5
Boron (i)	0.75			
Cadmium	0.01	0.01	0.005	0.005
Chloride (a)	250.	250.		
Chromium	0.05	0.05	0.12	0.12
Cobalt (i)	0.05			
Copper (a)	1.0	1.0	1.3	
Fluoride	1.6	4.0		
Gross Alpha (pCi/L)		15.		
Gross Beta (pCi/L)		50.		
Iron (a)	1.0	0.3		
Lead	0.05	0.05	0.02	0.02
Manganese (a)	0.2	0.05		
Mercury	0.002	0.002	0.003	0.003
Molybdenum (i)	1.0			
Nickel (i)	0.2			0.15
Nitrate-N	10.0	10.		10.0
Nitrite-N			1.0	1.0
pH (units) (a)	6-9	6.5-8.5		
Radium (226 & 228; pCi/L)	30.0	5.		
Selenium	0.05	0.01	0.045	
Silver	0.05	0.05		
Sulfate (a)	600.	250.		
TDS (a)	1000.	500.		
Uranium	5.0			
Zinc (a)	10.0	5.		
Benzenes				
Benzene	0.01	0.005		0.007*
Toluene	0.75		2.0	2.0
Ethylbenzene	0.75		0.68	0.68
Xylenes	0.62		0.44	0.44
Styrene			0.14	0.14*
Chlorobenzene			0.06	0.6
o-Dichlorobenzene			0.62	0.62
m-Dichlorobenzene				0.62
p-Dichlorobenzene		0.075		0.75
Hexachlorobenzene				0.0002*
Pentachlorophenol			0.22	0.22
Phenols (a)	0.005			

NOTE: 1 ppb = 1 ug/l = 1 microgram per liter (ppb = part per billion)
1000 ug/l = 1 mg/l = 1 ppm (ppm = part per million)

PARAMETER	N.M.WQCC	U.S.EPA Existing MCL	U.S.EPA MCLG	U.S.EPA Lifetime HA or Risk Level*
Other Pesticides continued				
Ammonium Sulfamate				1.5
Atrazine				0.003
Baygon				0.003
Bentazon				0.0175
Bromacil				0.08
Butylate				0.05
Carbaryl				0.7
Carbofuran			0.036	0.036
Carboxin				0.7
Chloramben				0.105
Chlordane			Zero	0.00027*
Chlorothalonil				0.015*
Cyanazine				0.009
2,4-D		0.1	0.07	0.07
Dacthal				3.5
Dalapon				0.56
Diazinon				0.00063
Dicamba				0.009
1,3-Dichloropropene				0.002*
Dieldrin				0.0000219
Dimethrin				2.1
Dinoseb				0.007
"Dioxin"				0.0000000022
Diphenamid				0.2
Disulfoton				0.0003
Diuron				0.014
Endothall				0.14
Endrin		0.0002		0.0002
Ethylene Thiourea				0.0024*
Fenamiphos				0.0018
Fluometuron				0.09
Fonofos				0.014
Glyphosate				0.7
Heptachlor			Zero	0.00076*
Heptachlor Epoxide			Zero	0.00038*
Hexazinone				0.21
Lindane		0.004	0.0002	0.002
Maleic Hydrazide				3.5
MCPA				0.0036
Methomyl				0.175
Methoxychlor		0.1	0.34	0.34
Methyl Parathion				0.002
Metolachlor				0.01
Metribuzin				0.175
Oxamyl				0.175
Paraquat				0.003
Picloram				0.49
Prometon				0.1
Pronamide				0.052
Propachlor				0.092

Use and Applicability of Standards

All N.M.WQCC standards are enforceable, including aesthetic and irrigation standards. The aesthetic standards of U.S.EPA are merely recommended limits.

U.S.EPA's MCLGs are set at levels that would result in no known or anticipated adverse health effects with an adequate margin of safety. MCLGs do not take treatment costs into consideration and are not enforceable. Final MCLs are enforceable. In addition to having set MCLGs for presently unregulated contaminants, the U.S. EPA has proposed to modify several existing MCLs.

U.S. EPA's HAs serve as informal technical guidance to assist Federal, State and local officials responsible for protecting public health when emergency spills or contamination situations occur. They are not to be construed as legally enforceable Federal standards and are subject to change as new information becomes available. HAs are developed for one-day, ten-day, 7-year and lifetime exposures. All HAs listed above are for lifetime exposure unless otherwise indicated. Lifetime HAs are not recommended by U.S. EPA for known or potential carcinogens. Instead, chemical concentrations are correlated with hypothetical excess lifetime cancer risks. See footnote (*) above.

Compiled by Dennis McQuillan
N.M. Health & Environment Dept.
Environmental Improvement Division
Ground Water Bureau
Santa Fe, NM 87503

Lab
No.

ACCU-LABS
77-521.07-123

ORGANIC ANALYSIS REQUEST FORM

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

Sample No. 8903291055
DATE REC. _____
PRIORITY _____
PHONE(S): 827-5812

COLLECTION CITY: Esunice; COUNTY: Lea
COLLECTION DATE/TIME CODE: (Year-Month-Day-Hour-Minute) 8/9/89 13:29:10:55
LOCATION CODE: (Township-Range-Section-Tracts) _____ (10N06E24S42)

SUBMITTER: David Boyer

SAMPLE TYPE: WATER ☒ 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.
☒ P-Ice: Sample stored in an ice bath (Not Frozen).
☐ P-AA: Sample Preserved with Ascorbic Acid to remove chlorine residual.
☒ P-HCl: Sample Preserved with Hydrochloric Acid (2 drops/40 ml)

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)
☒ (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= _____; Conductivity= _____ umho/cm at _____ °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.)

Sample from Pit #1, Parab 0 produced water disposal
Flouting oil on surface

I certify that the results in this block accurately reflect the results of my field analyses, observations and freight activities. (signature collector): David H. Boyer Method of Shipment to the Lab: Express

CHAIN OF CUSTODY

I certify that this sample was transferred from DB to DM
at (location) ALR on 4/5/89-12:28 and that
the statements in this block are correct. Evidentiary Seal: Not Sealed ☐ OR Seals Intact: Yes ☒ No ☐
Signatures: David H. Boyer

For OCD use: Date owner notified: 6/19/89 Phone or Letter? Letter Initials: DB

Contract Lab ACCU LABS
Contract No. 77-521.07-123

GENERAL WATER CHEMISTRY
and NITROGEN ANALYSIS

DATE RECEIVED <u>890329</u>	LAB NO.	Sample No. <u>8903291055</u>
Collection DATE <u>1055</u>	SITE INFORMATION	Sample location <u>Parabola Eunice</u>
Collection TIME <u>1055</u>		Collection site description <u>Disposal pit #1</u>
Collected by Person/Agency <u>Boyer/Anderson</u>	10CD	

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: 827-5312

SAMPLING CONDITIONS

☐ Bailed ☒ Dipped	☐ Pump ☐ Tap	Water level	Discharge	Sample type <u>Grabs</u>
pH (00400) <u>-</u>	Conductivity (Uncorrected) <u>-</u> μ mho	Water Temp. (00010) <u>-</u> °C	Conductivity at 25°C (00094) <u>-</u> μ mho	
Field comments <u>Floating oil on surface, oil field waste disposal</u>				

SAMPLE FIELD TREATMENT — Check proper boxes

No. of samples submitted <u>1</u>	☒ NF: Whole sample (Non-filtered)	☐ F: Filtered in field with 0.45 μ m membrane filter	☐ A: 2 ml H ₂ SO 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	From <u>WF</u> , NA Sample:	Date Analyzed
☒ Conductivity (Corrected) 25°C (00095)	μ mho		☒ Calcium	mg/l
☐ Total non-filterable residue (suspended) (00530)	mg/l		☒ Potassium	mg/l
☒ Other: <u>Lab pH</u>			☒ Magnesium	mg/l
☐ Other:			☒ Sodium	mg/l
☐ Other:			☒ Bicarbonate	mg/l
A-H₂SO₄			☒ Chloride	mg/l
☐ Nitrate-N + Nitrate-N total (00630)	mg/l		☒ Sulfate	mg/l
☐ Ammonia-N total (00610)	mg/l		☒ Total Solids	mg/l
☐ Total Kjeldahl-N ()	mg/l		☒ <u>CO₂</u>	
☐ Chemical oxygen demand (00340)	mg/l		☒ <u>R₇</u>	
☐ Total organic carbon ()	mg/l		☒ Cation/Anion Balance	
☐ Other:			Analyst	Date Reported
☐ Other:				Reviewed by

Laboratory remarks

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

Contract No. 77-52107-123

Date Received		Lab No.	Sample No. 8903291055	
COLLECTION DATE & TIME:		yy mm dd	hh mm	COLLECTION SITE DESCRIPTION
		89 03 29	10 55	Parabola Disposal pit #1
COLLECTED BY:				
Boyer/Anderson OCA				

TO:

OWNER:

ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg., PO Box 2088
SANTA FE, NM 87504-2088

SITE LOCATION:

County: Lex

Township, Range, Section, Tract: (10N06E24342)

ATTN: D. Boyer
TELEPHONE: 827-5812

STATION/ WELL CODE: | | | | | | | | | |

LATITUDE, LONGITUDE: | | | | | | | | | | - | | |

SAMPLING CONDITIONS:

☐ Bailed	☐ Pump	Water Level:	Discharge:	Sample Type:
☒ Dipped	☐ Tap			<i>Gravel</i>
pH(00400)	Conductivity(Uncorr.)	Water Temp.(00010)	Conductivity at 25°C	
	μmho	°C	(00094) μmho	

FIELD COMMENTS:

Floating oil, oil field waste disposal

SAMPLE FIELD TREATMENT

Check proper boxes:

☒ WPN: Water Preserved w/HNO ₃ Non-Filtered	☐ WPF: Water Preserved w/HNO ₃ Filtered	☐ ICAP Scan Mark box next to metal if AA is required.
--	---	---

LAB ANALYSIS REQUESTED:

ANALYTICAL RESULTS (MG/L)

ELEMENT	ICAP VALUE	AA VALUE	ELEMENT	ICAP VALUE	AA VALUE
Aluminum	☒	☐	Silicon	☐	☐
Barium	☒	☐	Silver	☒	☐
Beryllium	☐	☐	Strontium	☒	☐
Boron	☒	☐	Tin	☐	☐
Cadmium	☒	☐	Vanadium	☐	☐
Calcium	☐	☐	Zinc	☒	☐
Chromium	☐	☒	Arsenic		☒
Cobalt	☒	☐	Selenium		☒
Copper	☒	☐	Mercury		☒
Iron	☒	☐		☐	☐
Lead	☐	☒		☐	☐
Magnesium	☐	☐		☐	☐
Manganese	☒	☐		☐	☐
Molybdenum	☒	☐		☐	☐
Nickel	☒	☐		☐	☐

LAB COMMENTS:

For OCD Use:		
Date Owner Notified: _____	ICAP Analyst _____	Reviewer _____
Phone or Letter? _____		
Initials: _____	Date Analyzed _____	Date Reveled _____

May 9, 1989
Page 4 of 18

Accu-Labs Research, Inc.

RECEIVED

Mr. David Boyer
NM Oil Conservation Division

MAY 17 1989

RE: 9649-29859-20
Date Samples Rec'd: 4-5-89
P.O. No. 77-521.07-123

OIL CONSERVATION DIV.
SANTA FE

REPORT OF ANALYSIS

ALR Designation	9649-29859-20-4	9649-29859-20-5	9649-29859-20-6
Sponsor Designation	8903291055	8903301230	8903291630
	3-29-89	3-30-89	3-29-89

GC/MS VOLATILE ORGANICS, µg/L:

Chloromethane	<10	<100	<10
Bromomethane	<10	<100	<10
Vinyl chloride	<10	<100	<10
Chloroethane	<10	<100	<10
Methylene chloride	<5	<50	<5
1,1-Dichloroethene	<5	<50	<5
1,1-Dichloroethane	<5	<50	<5
Total 1,2-Dichloroethene	<5	<50	<5
Chloroform	<5	<50	<5
1,2-Dichloroethane	<5	<50	<5
1,1,1-Trichloroethane	<5	<50	<5
Carbon tetrachloride	<5	<50	<5
Bromodichloromethane	<5	<50	<5
1,2-Dichloropropane	<5	<50	<5
c-1,3-Dichloropropene	<5	<50	<5
Trichloroethene	<5	<50	<5
Benzene	75	2200	<5
Dibromochloromethane	<5	<50	<5
1,1,2-Trichloroethane	<5	<50	<5
t-1,3-Dichloropropene	<5	<50	<5
2-Chloroethylvinyl ether	<5	<50	<5
Bromoform	<5	<50	<5
1,1,2,2-Tetrachloroethane	<5	<50	<5
Tetrachloroethene	<5	<50	<5

May 9, 1989
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Accu-Labs Research, Inc.

Mr. David Boyer
NM Oil Conservation Division

RECEIVED

MAY 17 1989

RE: 9649-29859-20
Date Samples Rec'd: 4-5-89
P.O. No. 77-521.07-123

OIL CONSERVATION DIV.
SANTA FE

REPORT OF ANALYSIS

ALR Designation	9649-29859-20-4	9649-29859-20-5	9649-29859-20-6
Sponsor Designation	8903291055	8903301230	8903291630
	3-29-89	3-30-89	3-29-89

Determination: µg/L

Toluene	100	1300	<5
Chlorobenzene	<5	<50	<5
Ethyl benzene	64	170	<5
Total Dichlorobenzenes	<5	<50	<5
Total Xylenes	130	370	<5

Determination: mg/L

Aluminum, total	<1*	<1*	<0.1
Barium, total	1.4	0.4	0.10
Boron, total	60	49	0.2
Cadmium, total	<0.05*	<0.05*	<0.005
Calcium, total	4300	4400	110
Chromium, total	<0.05*	<0.05*	<0.005
Cobalt, total	<0.05*	<0.05*	<0.005
Copper, total	<0.05*	<0.05*	0.032
Iron, total	2.2	0.9	1.4
Magnesium, total	6200	700	22
Manganese, total	4.5	0.22	0.21
Mercury, total	<0.001*	<0.001*	<0.001*
Molybdenum, total	<0.05*	<0.05	<0.005
Nickel, total	<0.1*	<0.1*	<0.01
Potassium, total	320	250	5.4
Silver, total	<0.005	0.018	<0.005
Sodium, total	72,000	43,000	120
Strontium, total	100	460	1.0
Zinc, total	<0.05*	<0.05*	<0.005
Total Alkalinity, (as CaCO ₃ to pH 4.5)	580	300	170

May 9, 1989
Page 6 of 18

Accu-Labs Research, Inc.

Mr. David Boyer
NM Oil Conservation Division

RECEIVED

RE: 9649-29859-20
Date Samples Rec'd: 4-5-89
P.O. No. 77-521.07-123

MAY 17 1989

OIL CONSERVATION DIV.
SANTA FE

REPORT OF ANALYSIS

	9649-29859-20-4	9649-29859-20-5	9649-29859-20-6
ALR Designation	8903291055	8903301230	8903291630
Sponsor Designation	3-29-89	3-30-89	3-29-89
Determination: mg/L			
Carbonate (as CO ₃)	<5	<5	<5
Bicarbonate (as HCO ₃)	700	360	200
pH	7.2	6.9	7.6
Specific Conductance, µmhos/cm	390,000	230,000	1400
Arsenic, total	0.51	<0.005	<0.005
Lead, total	0.008	0.050	<0.005
Selenium, total	<0.25*	<0.10*	<0.005
Total Solids	210,000	120,000	750
Bromide	270	<80*	<5*
Chloride	130,000	70,000	250
Sulfate (as SO ₄)	4100	1400	110
Ion Balance	102	107	100

Lab
No.

ACCU-LABS

77-521.07-123

ORGANIC ANALYSIS REQUEST FORM

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

Sample No. 8903291000
DATE REC. _____
PRIORITY _____
PHONE(S): 827-5812

COLLECTION CITY: Eunice; COUNTY: Lea
COLLECTION DATE/TIME CODE: (Year-Month-Day-Hour-Minute) 89103129110100
LOCATION CODE: (Township-Range-Section-Tracts) _____ (10N06E24S42)

SUBMITTER: David Boyer

SAMPLE TYPE: WATER ☒ 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.
☒ P-Ice: Sample stored in an ice bath (Not Frozen).
☐ P-AA: Sample Preserved with Ascorbic Acid to remove chlorine residual.
☒ P-HCl: Sample Preserved with Hydrochloric Acid (2 drops/40 ml)

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)
☒ (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= _____; Conductivity= >50,000 umho/cm at _____ °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.)

Sample from Salt Water Evaporation Pit #7
Paralejo Dupirel (oilfield waste disposal)

I certify that the results in this block accurately reflect the results of my field analyses, observations and activities. (signature collector): David H. Boyer Method of Shipment to the Lab: Freight Express

CHAIN OF CUSTODY

I certify that this sample was transferred from LB to 10MM

at (location) ALR on 4/5/89 - 12:25 and that

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

Signatures: David H. Boyer

For OCD use: Date owner notified: 6/19/89 Phone or Letter: Letter Initials: DB

Contract Lab ACC LABS
Contract No. 77-521.07-123

GENERAL WATER CHEMISTRY
and NITROGEN ANALYSIS

DATE RECEIVED	LAB NO.	Sample No. <u>8903291000</u>
Collection DATE <u>09/23/29</u>	SITE INFORMATION	Sample location <u>Paralelo Disposal Eumile</u>
Collection TIME <u>1000</u>		Collection site description <u>Evap pit #7</u>
Collected by -- Person/Agency <u>Boyer/Anderson /OCD</u>		

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: 827-5312

Station/
well code
Owner

SAMPLING CONDITIONS

☐ Bailed ☒ Dipped	☐ Pump ☐ Tap	Water level	Discharge	Sample type <u>Grab</u>
pH (00400) <u>—</u>	Conductivity (Uncorrected) <u>> 50,000</u> μmho	Water Temp. (00010) $^{\circ}\text{C}$	Conductivity at 25 $^{\circ}\text{C}$ (00094) μmho	
Field comments <u>oil field waste disposal</u>				

SAMPLE FIELD TREATMENT — Check proper boxes

No. of samples submitted <u>1</u>	☒ NF: Whole sample (Non-filtered)	☐ F: Filtered in field with 0.45 μm membrane filter	☐ A: 2 ml $\text{H}_2\text{SO}_4/\text{L}$ 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	From <u>NF</u> , NA Sample:	Date Analyzed
☒ Conductivity (Corrected) 25 $^{\circ}\text{C}$ (00095)	μmho		☒ Calcium	mg/l
☐ Total non-filterable residue (suspended) (00530)	mg/l		☒ Potassium	mg/l
☒ Other: <u>Lab pH</u>			☒ Magnesium	mg/l
☐ Other:			☒ Sodium	mg/l
☐ Other:			☒ Bicarbonate	mg/l
A-H₂SO₄			☒ Chloride	mg/l
☐ Nitrate-N +, Nitrate-N total (00630)	mg/l		☒ Sulfate	mg/l
☐ Ammonia-N total (00610)	mg/l		☒ Total Solids	mg/l
☐ Total Kjeldahl-N ()	mg/l		☒ <u>CO₃</u>	
☐ Chemical oxygen demand (00340)	mg/l		☒ <u>Br</u>	
☐ Total organic carbon ()	mg/l		☒ Cation/Anion Balance	
☐ Other:			Analyst	Date Reported
☐ Other:				Reviewed by
Laboratory remarks				

FOR OCD USE -- Date Owner Notified 6/19/09

Phone or Letter? Letter

Initials DB

Contract Lab ACCU-LABS
Contract No. 77-521.07-123

HEAVY METAL ANALYSIS FORM

Date Received	Lab No.	Sample No. <u>8903291000</u>
COLLECTION DATE & TIME: <u>890329</u> <u>1000</u>		COLLECTION SITE DESCRIPTION <u>Paralel Eumise</u> <u>Soft Water Evap.</u> <u>Pit #3</u>
COLLECTED BY: <u>Boyer/Anderson</u>		

TO:

OWNER:

ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg., PO Box 2088
SANTA FE, NM 87504-2088

SITE LOCATION:

County: Lea

Township, Range, Section, Tract: (10N08E24S42)

ATTN: D. Boyer
TELEPHONE: 827-5812

STATION/ WELL CODE:

LATITUDE, LONGITUDE: -

SAMPLING CONDITIONS:

☐ Bailed	☐ Pump	Water Level:	Discharge:	Sample Type: <u>Gravel</u>
☒ Dipped	☐ Tap			
pH(00400)	Conductivity(Uncorr.)	Water Temp.(00010)	Conductivity at 25°C (00094)	
<u>-</u>	<u>> 50,000</u> μmho	<u> </u> °C	<u> </u> μmho	

FIELD COMMENTS: oil field waste disposal site

SAMPLE FIELD TREATMENT

Check proper boxes:

☒ WPN: Water Preserved w/HNO ₃ Non-Filtered	☐ WPF: Water Preserved w/HNO ₃ Filtered
---	--

LAB ANALYSIS REQUESTED:

☐ ICAP Scan
Mark box next to metal if AA is required.

ANALYTICAL RESULTS (MG/L)

ELEMENT	ICAP VALUE	AA VALUE	ELEMENT	ICAP VALUE	AA VALUE
Aluminum	☒	☐	Silicon	☐	☐
Barium	☒	☐	Silver	☒	☐
Beryllium	☒	☐	Strontium	☒	☐
Boron	☒	☐	Tin	☐	☐
Cadmium	☒	☐	Vanadium	☐	☐
Calcium	☒	☐	Zinc	☒	☐
Chromium	☒	☒	Arsenic	☒	☒
Cobalt	☒	☐	Selenium	☒	☒
Copper	☒	☐	Mercury	☒	☒
Iron	☒	☐		☐	☐
Lead	☐	☒		☐	☐
Magnesium	☐	☐		☐	☐
Manganese	☒	☐		☐	☐
Molybdenum	☒	☐		☐	☐
Nickel	☒	☐		☐	☐

LAB COMMENTS:

For OCD Use:

Date Owner Notified:
Phone or Letter?
Initials:

ICAP Analyst Reviewer
Date Analyzed Date Reveived



Accu-Labs Research, Inc.

11485 W. 48th Avenue Wheat Ridge, Colorado 80033 (303) 423-2766

May 9, 1989
Page 1 of 18

Mr. David Boyer
NM Oil Conservation Division
State Land Office Bldg.
P.O. Box 2088
Santa Fe, NM 87504-2088

RECEIVED
MAY 17 1989
OIL CONSERVATION DIV.
SANTA FE

RE: 9649-29859-20
Date Samples Rec'd: 4-5-89
P.O. No. 77-521.07-123

REPORT OF ANALYSIS

ALR Designation	9649-29859-20-1	9649-29859-20-2	9649-29859-20-3
Sponsor Designation	8903301105	8903291000	8903291400
	3-30-89	3-29-89	3-29-89

GC/MS VOLATILE ORGANICS, µg/L:

Chloromethane	<10	<10	<100
Bromomethane	<10	<10	<100
Vinyl chloride	<10	<10	<100
Chloroethane	<10	<10	<100
Methylene chloride	<5	<5	<50
1,1-Dichloroethene	<5	<5	<50
1,1-Dichloroethane	<5	<5	<50
Total 1,2-Dichloroethene	<5	<5	<50
Chloroform	<5	<5	<50
1,2-Dichloroethane	<5	<5	<50
1,1,1-Trichloroethane	<5	<5	<50
Carbon tetrachloride	<5	<5	<50
Bromodichloromethane	<5	<5	<50
1,2-Dichloropropane	<5	<5	<50
c-1,3-Dichloropropene	<5	<5	<50
Trichloroethene	<5	<5	<50
Benzene	<5	<5	2200
Dibromochloromethane	<5	<5	<50
1,1,2-Trichloroethane	<5	<5	<50
t-1,3-Dichloropropene	<5	<5	<50
2-Chloroethylvinyl ether	<5	<5	<50
Bromoform	<5	<5	<50
1,1,2,2-Tetrachloroethane	<5	<5	<50
Tetrachloroethene	<5	<5	<50

May 9, 1989
Page 2 of 18

RECEIVED

MAY 17 1989

**OIL CONSERVATION DIV.
SANTA FE**

Mr. David Boyer
NM Oil Conservation Division

RE: 9649-29859-20
Date Samples Rec'd: 4-5-89
P.O. No. 77-521.07-123

REPORT OF ANALYSIS

ALR Designation	9649-29859-20-1	9649-29859-20-2	9649-29859-20-3
Sponsor Designation	8903301105	8903291000	8903291400
	3-30-89	3-29-89	3-29-89

Determination: µg/L

Toluene	<5	<5	2000
Chlorobenzene	<5	<5	<50
Ethyl benzene	<5	<5	500
Total Dichlorobenzenes	<5	<5	<50
Total Xylenes	<5	<5	1300

Determination: mg/L

Aluminum, total	0.9	<1*	0.3
Barium, total	0.12	2.9	0.31
Boron, total	0.7	110	2.7
Cadmium, total	<0.005	<0.05*	<0.005
Calcium, total	2600	15,000	900
Chromium, total	<0.005	<0.05*	0.043
Cobalt, total	<0.005	<0.05*	<0.005
Copper, total	0.026	<0.05*	0.076
Iron, total	0.96	5.1	44
Magnesium, total	610	8900	230
Manganese, total	0.16	19	0.54
Mercury, total	0.002	<0.002*	0.006
Molybdenum, total	<0.005	<0.05*	0.007
Nickel, total	<0.01	<0.1*	0.05
Potassium, total	35	3900	110
Silver, total	<0.005	<0.005	<0.005
Sodium, total	6500	81,000	4300
Strontium, total	30	350	45
Zinc, total	0.026	0.06	0.16
Total Alkalinity, (as CaCO ₃ to pH 4.5)	290	220	350

May 9, 1989
Page 3 of 18

Mr. David Boyer
NM Oil Conservation Division

RE: 9649-29859-20
Date Samples Rec'd: 4-5-89
P.O. No. 77-521.07-123

RECEIVED

MAY 17 1989

OIL CONSERVATION DIV.
SANTA FE

REPORT OF ANALYSIS

	9649-29859-20-1	9649-29859-20-2	9649-29859-20-3
ALR Designation	8903301105	8903291000	8903291400
Sponsor Designation	3-30-89	3-29-89	3-29-89

Determination: mg/L

Carbonate (as CO ₃)	<5	<5	37
Bicarbonate (as HCO ₃)	350	270	350
pH	7.0	6.9	8.6
Specific Conductance, µmhos/cm	47,000	600,000	28,000
Arsenic, total	0.005	0.60	0.032
Lead, total	0.023	0.084	0.017
Selenium, total	<0.005	<0.25*	0.017
Total Solids	29,000	350,000	16,000
Bromide	16	830	<40*
Chloride	15,000	190,000	8100
Sulfate (as SO ₄)	1600	2300	890
Ion Balance	100	94	99

REPORT TO: DAVID BOYER Sample No. 8903290910
N.M. OIL CONSERVATION DIVISION DATE REC. _____
P.O. Box 2088 PRIORITY _____
Santa Fe, NM 87504-2088 PHONE(S): 827-5812

COLLECTION CITY: BUNICK; COUNTY: LAR
 COLLECTION DATE/TIME CODE: (Year-Month-Day-Hour-Minute) 89103290910
 LOCATION CODE: (Township-Range-Section-Tracts) (10N06E24342)

SUBMITTER: David Boyer

SAMPLE TYPE: WATER ☒, 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.
☒ P-ice Sample stored in an ice bath (Not Frozen).
☐ P-AA Sample Preserved with Ascorbic Acid to remove chlorine residual.
☒ P-HCl Sample Preserved with Hydrochloric Acid (2 drops/40 ml)

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)
☒ (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: PARABO B54W PIT #4

FIELD DATA:

pH= _____; Conductivity= _____ umho/cm at _____ °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.)

PARABO B54W PIT #4

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

Express

CHAIN OF CUSTODY

I certify that this sample was transferred from DB to Dmm
 at (location) HLR on 4/5/89 and that
 the statements in this block are correct. Evidentiary Seals: Not Sealed ☐ OR Seals Intact: Yes ☒ No ☐
 Signatures: LL James A. M. Lank

For OCD use: Date owner notified: 6/19/89 Phone or Letter: Initials: DB

May 9, 1989
Page 13 of 18

Accu-Labs Research, Inc.

RECEIVED

Mr. David Boyer
NM Oil Conservation Division

MAY 17 1989

RE: 9649-29859-20
Date Samples Rec'd: 4-5-89
P.O. No. 77-521.07-123

OIL CONSERVATION DIV.
SANTA FE

REPORT OF ANALYSIS

ALR Designation	9649-29859-20-13	9649-29859-20-14	9649-29859-20-15
Sponsor Designation	8903290910	8903311035	8903310825
	3-29-89	3-31-89	3-31-89

GC/MS VOLATILE ORGANICS, µg/L:

Chloromethane	<2000 µg/kg	<100 µg/kg	<100
Bromomethane	<2000 µg/kg	<100 µg/kg	<100
Vinyl chloride	<2000 µg/kg	<100 µg/kg	<100
Chloroethane	<2000 µg/kg	<100 µg/kg	<100
Methylene chloride	<1000 µg/kg	<50 µg/kg	<50
1,1-Dichloroethene	<1000 µg/kg	<50 µg/kg	<50
1,1-Dichloroethane	<1000 µg/kg	<50 µg/kg	<50
Total 1,2-Dichloroethene	<1000 µg/kg	<50 µg/kg	<50
Chloroform	<1000 µg/kg	<50 µg/kg	<50
1,2-Dichloroethane	<1000 µg/kg	<50 µg/kg	<50
1,1,1-Trichloroethane	<1000 µg/kg	<50 µg/kg	<50
Carbon tetrachloride	<1000 µg/kg	<50 µg/kg	<50
Bromodichloromethane	<1000 µg/kg	<50 µg/kg	<50
1,2-Dichloropropane	<1000 µg/kg	<50 µg/kg	<50
c-1,3-Dichloropropene	<1000 µg/kg	<50 µg/kg	<50
Trichloroethene	<1000 µg/kg	<50 µg/kg	<50
Benzene	2300 µg/kg	<50 µg/kg	2800
Dibromochloromethane	<1000 µg/kg	<50 µg/kg	<50
1,1,2-Trichloroethane	<1000 µg/kg	<50 µg/kg	<50
t-1,3-Dichloropropene	<1000 µg/kg	<50 µg/kg	<50
2-Chloroethylvinyl ether	<1000 µg/kg	<50 µg/kg	<50
Bromoform	<1000 µg/kg	<50 µg/kg	<50
1,1,2,2-Tetrachloroethane	<1000 µg/kg	<50 µg/kg	<50
Tetrachloroethene	<1000 µg/kg	<50 µg/kg	<50

May 9, 1989
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Accu-Labs Research, Inc.

Mr. David Boyer
NM Oil Conservation Division

RE: 9649-29859-20
Date Samples Rec'd: 4-5-89
P.O. No. 77-521.07-123

RECEIVED

MAY 17 1989
OIL CONSERVATION DIV.
SANTA FE

REPORT OF ANALYSIS

ALR Designation	9649-29859-20-13	9649-29859-20-14	9649-29859-20-15
Sponsor Designation	8903290910	8903311035	8903310825
	<u>3-29-89</u>	<u>3-31-89</u>	<u>3-31-89</u>

Determination: µg/L

Toluene	3500 µg/kg	700 µg/kg	1500
Chlorobenzene	<1000 µg/kg	<50 µg/kg	<50
Ethyl benzene	2600 µg/kg	140 µg/kg	270
Total Dichlorobenzenes	<1000 µg/kg	<50 µg/kg	<50
Total Xylenes	5000 µg/kg	580 µg/kg	410

STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION



GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-5800

April 27, 1987

Mr. Don McLean
Parabo, Inc.
P.O. Box 1737
Eunice, New Mexico 88231

Dear Mr. McLean:

Enclosed are copies of laboratory analyses from the sampling performed at your facility on January 28, 1987. No hydrocarbon or heavy metal contamination was found in MW-79. If you have any questions concerning these analyses, feel free to call me in Santa Fe at 827-5884.

Sincerely,

Jami Bailey
Field Representative

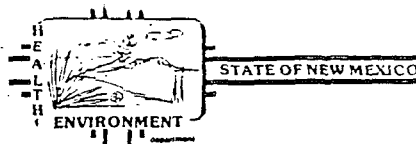
JB/cr

Encl.

xc: OCD-Hobbs

87-0145-C

SCIENTIFIC LABORATORY DIVISION

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

REPORT TO: David Boyer S.L.D. No. OR-87-0145 A.B
N.M. Oil Conservation Division DATE REC. 2-5-87
P. O. Box 2088
Santa Fe, N.M. 87504-2088 PRIORITY _____

PHONE(S): 827-5812 USER CODE: 8 2 2 3 5

SUBMITTER: David Boyer CODE: 2 6 0

SAMPLE COLLECTION CODE: (YYMMDDHHMMIII) 87 01 25 1 0130 98

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

COUNTY: LEA; CITY: EUNICE CODE:

LOCATION CODE: (Township-Range-Section-Tracts) 21 15 + 38 15 + 29 + 14 (10N06E24342)

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 Purgeables (1-3 Carbons)
☒ (754) Aromatic & Halogenated Purgeables
☐ (765) Mass Spectrometer Purgeables
☐ (766) Trihalomethanes
 Other Specific Compounds or Classes _____

☐ _____
☐ _____
☐ _____
☐ _____
☐ _____

EXTRACTABLE SCREENS

- ☐ (751) Aliphatic Hydrocarbons
☐ (760) Organochlorine Pesticides
☐ (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: PARADO MW 79

FIELD DATA:

pH= _____; Conductivity= 2450 umho/cm at 19 °C; Chlorine Residual= _____ mg/l

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

Depth to water 53.5 ft.; Depth of well _____ ft.; Perforation Interval _____ - _____ ft.; Casing: _____

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

No more bailing. Draw down ~1'.

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

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

Samples were preserved as follows:

- ☐ NP: No Preservation; Sample stored at room temperature.
☒ P-Ice Sample stored in an ice bath (Not Frozen).
☐ P-Na₂S₂O₃ Sample Preserved with Sodium Thiosulfate to remove chlorine residual.

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 ☐ Seals Intact: Yes ☐ No ☐

Signatures _____

For OCD Use: Date Owner Notified 4/27/87 Phone or Letter? _____ Initials AB

ANALYSES PERFORMED

LAB. No.: OR- 145

THIS PAGE FOR LABORATORY RESULTS ONLY

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

PURGEABLE SCREENS

- ☐ (753) Aliphatic Purgeables (1-3 Carbons)
☒ (754) Aromatic & Halogenated Purgeables
☐ (765) Mass Spectrometer Purgeables
☐ (766) Trihalomethanes
 Other Specific Compounds or Classes

☐
☐
☐
☐
☐

EXTRACTABLE SCREENS

- ☐ (751) Aliphatic Hydrocarbons
☐ (760) Organochlorine Pesticides
☐ (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

ANALYTICAL RESULTS

COMPOUND(S) DETECTED	CONC. [PPB]	COMPOUND(S) DETECTED	CONC. [PPB]
halogenated purgeables *	N.D.		
aromatic purgeables *	N.D.		
[acetone] +	[650]		
* DETECTION LIMIT *	* 1 ug/L	+ DETECTION LIMIT +	+ 100 ug/L

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) Intact: Yes ☐ No ☒ Seal(s) broken by: not sealed 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: 2/24/87 Analyst's signature: Gary C. Ealen

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. Meyer FEB 26 1987



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	2 5 87	LAB NO.	WC-334	USER CODE	☐ 59300 ☐ 59600 ☒ OTHER: 82235
Collection DATE	87 01 28	SITE INFORMATION	Sample location		
Collection TIME	10 30		PARABO		
Collected by — Person/Agency		Collection site description			
BAILEY ANDERSON /OCD		MW-79			

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
		53.5 ft		GRAB
pH (00400)	Conductivity (Uncorrected)	Water Temp. (00010)	Conductivity at 25°C (00094)	
	2450 µmho	19 °C		
Field comments				
NO PURGE - DRAW DOWN ~ 1 ft				

SAMPLE FIELD TREATMENT — Check proper boxes

No. of samples submitted	☐ NF: Whole sample (Non-filtered)	☒ F: Filtered in field with 0.45 µm membrane filter	☐ A: 2 ml H ₂ SO 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)	340 mg/l	2-83
☐ Total non-filterable residue (suspended) (00530)	mg/l		☒ Magnesium (00925)	41.5 mg/l	2-83
☐ Other:			☒ Sodium (00930)	279 mg/l	2-9
☐ Other:			☒ Potassium (00935)	7.8 mg/l	2-9
☐ Other:			☒ Bicarbonate (00440)	163 mg/l	2/10
			☒ Chloride (00940)	172.3 mg/l	2/19
			☒ Sulfate (00945)	359 mg/l	2/17
			☒ Total filterable residue (dissolved) (70300)	2386 mg/l	2/12
			☒ Other: CO ₃	0	2/10
NF, A-H ₂ SO ₄			F, A-H ₂ SO 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:					
Laboratory remarks			Analyst	Date Reported	Reviewed by
				2 23 87	CG

SLD 726 (12/84)

FOR OCD USE -- Date Owner Notified 4/27/87 Phone or Letter? Initials JB

Reviewed by: Jim Ashby

Date Reported: 02/9/87

ELEMENT	ICAP VALUE (mg/l)	AA VALUE (mg/l)
Aluminum	20.1	
Barium	20.1	
Beryllium	20.1	
Boron	0.7	
Cadmium	20.1	
Calcium	380.	
Chromium	20.1	
Cobalt	20.1	
Copper	20.1	
Iron	20.1	
Lead	20.1	
Magnesium	57.	
Manganese	20.05	
Molybdenum	20.1	
Nickel	20.1	
Silicon	21.	
Silver	20.1	
Strontium	3.0	
Tin	20.1	
Vanadium	20.1	
Zinc	20.1	
Arsenic		
Selenium		
Mercury		



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	2 5 87	LAB NO.	ICP-49	USER CODE	☐ 59300 ☐ 59600 ☒ OTHER: 82235	
Collection DATE	87 01 28	SITE INFORMATION	Sample location	PARABO		
Collection TIME	1030			Collection site description		
Collected by — Person/Agency	BAILEY / ANDERSON		161007	MW-79		
ENVIRONMENTAL BUREAU OF CONSERVATION DIVISION NM OIL CONSERVATION DIVISION State Land Office Bldg, PO Box 2088 Santa Fe, NM 87504-2088 SEND FINAL REPORT TO Attn: David Boyer Phone: 827-5812						Station/ well code
						Owner

SAMPLING CONDITIONS

☒ Bailed ☐ Dipped	☐ Pump ☐ Tap	Water level	53.5 ft	Discharge		Sample type	GRAB
pH (00400)		Conductivity (Uncorrected)	2450 μ mho	Water Temp. (00010)	19 °C	Conductivity at 25°C (00094)	μ mho
Field comments No PURGE - DRAWDOWN ~ 1 ft							

SAMPLE FIELD TREATMENT — Check proper boxes

No. of samples submitted	☐ NF: Whole sample (Non-filtered)	☒ F: Filtered in field with 0.45 μ m membrane filter	☐ A: 2 ml H ₂ SO ₄ /L added
☐ NA: No acid added ☐ Other-specify:		☐ A: 5ml conc. HNO ₃ added	☒ A: 4ml fuming HNO ₃ added

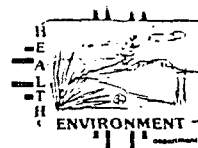
ANALYTICAL RESULTS from SAMPLES

NF, NA	Units	Date analyzed	F, NA	Units	Date analyzed
☒ Conductivity (Corrected) 25°C (00095)	μ mho		☐ Calcium (00915)	mg/l	
☐ Total non-filterable residue (suspended) (00530)	mg/l		☐ Magnesium (00925)	mg/l	
☒ Other: ICAP			☐ 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 ₂ SO ₄			F, A-H ₂ SO 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:			Analyst	Date Reported	Reviewed by
☐ Other:				2 9 87	Jim Ashby
Laboratory remarks					

SLD 726 (12/84)

FOR OCD USE -- Date Owner Notified 4/27/87 Phone or Letter? Initials JB

87-0139-C

754 WPU
SCIENTIFIC LABORATORY DIVISION700 Camino de Salud NE
Albuquerque, NM 87106 841-2570

STATE OF NEW MEXICO

REPORT TO: David Boyer
N.M. Oil Conservation Division
P. O. Box 2088
Santa Fe, N.M. 87504-2088

S.L.D. No. OR- 87-0139 A-B
DATE REC. 2-5-87

PHONE(S): 827-5812
SUBMITTER: David Boyer

PRIORITY
USER CODE: 8 2 2 3 5
CODE: 12 6 0

SAMPLE COLLECTION CODE: (YYMMDDHHMMIII) 870112811100 47B

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

COUNTY: LEA; CITY: EUNICE CODE: ☐ ☐ ☐

LOCATION CODE: (Township-Range-Section-Tracts) 21 15 + 38 E + 29 + 14 (10N06E24342)

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 Purgeables (1-3 Carbons)
☒ (754) Aromatic & Halogenated Purgeables
☐ (765) Mass Spectrometer Purgeables
☐ (766) Trihalomethanes

Other Specific Compounds or Classes

☐ _____
☐ _____
☐ _____
☐ _____
☐ _____

EXTRACTABLE SCREENS

- ☐ (751) Aliphatic Hydrocarbons
☐ (760) Organochlorine Pesticides
☐ (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: PARABO PIT 25

FIELD DATA:

pH= _____; Conductivity= 7500 umho/cm at 11 °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.)

Fluid from Pit 25 + 2W goes to Pit 3

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

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

Samples were preserved as follows:

- ☐ NP: No Preservation; Sample stored at room temperature.
☒ P-Ice Sample stored in an ice bath (Not Frozen).
☐ P-Na₂S₂O₃ Sample Preserved with Sodium Thiosulfate to remove chlorine residual.

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 ☐ Seals Intact: Yes ☐ No ☐

Signatures _____

For OCD Use: Date Owner Notified 4/27/87 Phone or Letter? _____ Initials AB

ANALYSES PERFORMED

LAB. No.: OR- 139

THIS PAGE FOR LABORATORY RESULTS ONLY

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

PURGEABLE SCREENS

- ☐ (753) Aliphatic Purgeables (1-3 Carbons)
☒ (754) Aromatic & Halogenated Purgeables
☐ (765) Mass Spectrometer Purgeables
☐ (766) Trihalomethanes
 Other Specific Compounds or Classes

☐ _____
☐ _____
☐ _____
☐ _____
☐ _____

EXTRACTABLE SCREENS

- ☐ (751) Aliphatic Hydrocarbons
☐ (760) Organochlorine Pesticides
☐ (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

ANALYTICAL RESULTS

COMPOUND(S) DETECTED	CONC. [PPB]	COMPOUND(S) DETECTED	CONC. [PPB]
<i>aromatic purgeables</i>	<i>N.D.</i>		
<i>halogenated purgeables</i>	<i>N.D.</i>		
* DETECTION LIMIT *	* <i>25-45/L</i>	+ 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:

sample was found when purged.

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes ☐ No ☒ Seal(s) broken by: *not sealed* 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: *2/23/86* Analyst's signature: *Harry C. Edson*

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

Reviewers signature: *Richard Meyerlein* FEB 27 1987



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	2/5/87	LAB NO.	WC-332	USER CODE	☐ 59300 ☐ 59600 ☒ OTHER: 82235
Collection DATE	1/28/87	SITE INFORMATION	Sample location		
Collection TIME	1100		PARABO PIT 2E		
Collected by — Person/Agency		Collection site description			
ANDERSON, BAILEY		10CD			

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
				GRAB
pH (00400)	Conductivity (Uncorrected)	μmho	Water Temp. (00010)	°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 ₂ SO 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)	5700 mg/l	2-23
☐ Total non-filterable residue (suspended) (00530)	mg/l		☒ Magnesium (00925)	4500 mg/l	2-23
☐ Other:			☒ Sodium (00930)	25000 mg/l	2-9
☐ Other:			☒ Potassium (00935)	1900 mg/l	2-9
☐ Other:			☒ Bicarbonate (00440)	362 mg/l	2/10
			☒ Chloride (00940)	8384.3 mg/l	2/11
			☒ Sulfate (00945)	81 mg/l	2/17
			☒ Total filterable residue (dissolved) (70300)	152,216 mg/l	2/12
			☒ Other: CD3	0	2/10
NF, A-H ₂ SO ₄			F, A-H ₂ SO 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:					
Laboratory remarks			Analyst	Date Reported	Reviewed by
				2/23/87	CO

SLD 726 (12/84)

FOR OCD USE -- Date Owner Notified 4/27/87 Phone or letter? Initials JB



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	2 5 87	LAB NO.	ICP-50	USER CODE	☐ 59300 ☐ 59600 ☒ OTHER: 82235
Collection DATE	7 28 87	SITE INFORMATION	Sample location		
Collection TIME	1100		PARADO PIT 2E		
Collected by — Person/Agency				Collection site description	
ANDERSON, BAILEY /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

SAMPLING CONDITIONS

☐ Bailed ☒ Dipped	☐ Pump ☐ Tap	Water level	Discharge	Sample type
				GRAB
pH (00400)	Conductivity (Uncorrected)	μ mho	Water Temp. (00010)	Conductivity at 25°C (00094)
			°C	μ mho
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 μ m membrane filter	☐ A: 2 ml H ₂ SO 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)		μ mho		☐ Calcium (00915)		mg/l	
☐ Total non-filterable residue (suspended) (00530)		mg/l		☐ Magnesium (00925)		mg/l	
☒ Other: ICP				☐ 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 ₂ SO ₄				F, A-H ₂ SO 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:							
Laboratory remarks				Analyst	Date Reported	Reviewed by	
					3 16 87	J. Bailey	

SLD 726 (12/84)

FOR OCD USE -- Date Owner Notified 4/27/87 Phone or letter? Initials JB

ICAP SCAN

SLD Lab No. ICP 50

Analyst JB 2/26/87

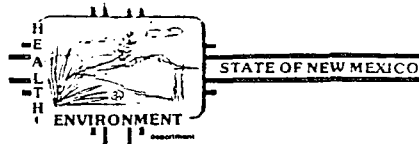
Reviewed by:

Date Reported:

ELEMENT	ICAP VALUE (mg/l)	AA VALUE (mg/l)
Aluminum	40.1	
Barium	0.8	
Beryllium	40.1	
Boron	46.	
Cadmium	40.1	
Calcium	5300.	
Chromium	40.1	
Cobalt	40.1	
Copper	40.1	
Iron	40.1	
Lead	40.1	
Magnesium	4270.	
Manganese	2.6	
Molybdenum	40.1	
Nickel	40.1	
Silicon	8.3	
Silver	40.1	
Strontium	130.	
Tin	40.1	
Vanadium	0.3	
Zinc	20.1	
Arsenic		
Selenium		
Mercury		

87-0141-C

SCIENTIFIC LABORATORY DIVISION

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

REPORT TO: David Boyer S.L.D. No. OR- 87-0141 A-B
N.M. Oil Conservation Division DATE REC. 2-5-87
P. O. Box 2088
Santa Fe, N.M. 87504-2088 PRIORITY _____
 PHONE(S): 827-5812 USER CODE: 8 2 2 3 5
 SUBMITTER: David Boyer CODE: 2 6 0
 SAMPLE COLLECTION CODE: (YYMMDDHHMMIII) 8701281115 AB
 SAMPLE TYPE: WATER ☒, SOIL ☐, FOOD ☐, OTHER: _____ CODE: _____
 COUNTY: LEA; CITY: EUNICE CODE: _____
 LOCATION CODE: (Township-Range-Section-Tracts) 2115+38E+29+14 (10N06E24342)

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 Purgeables (1-3 Carbons)
☒ (754) Aromatic & Halogenated Purgeables
☐ (765) Mass Spectrometer Purgeables
☐ (766) Trihalomethanes
 Other Specific Compounds or Classes _____

EXTRACTABLE SCREENS

- ☐ (751) Aliphatic Hydrocarbons
☐ (760) Organochlorine Pesticides
☐ (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: PARABO PIT 6**FIELD DATA:**pH= _____; Conductivity= 250,000 umho/cm at 11 °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.)

East side of pit

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

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

Samples were preserved as follows:

- ☐ NP: No Preservation; Sample stored at room temperature.
☒ P-Ice Sample stored in an ice bath (Not Frozen).
☐ P-Na₂S₂O₃ Sample Preserved with Sodium Thiosulfate to remove chlorine residual.

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 ☐ Seals Intact: Yes ☐ No ☐

Signatures _____

For OCD Use: Date Owner Notified 4/27/87 Phone or Letter? _____ Initials AB

ANALYSES PERFORMED

LAB. No.: OR- 141

THIS PAGE FOR LABORATORY RESULTS ONLY

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

PURGEABLE SCREENS

- ☐ (753) Aliphatic Purgeables (1-3 Carbons)
☒ (754) Aromatic & Halogenated Purgeables
☐ (765) Mass Spectrometer Purgeables
☐ (766) Trihalomethanes

Other Specific Compounds or Classes

EXTRACTABLE SCREENS

- | | |
|--------------------------|---|
| ☐ | (751) Aliphatic Hydrocarbons |
| ☐ | (760) Organochlorine Pesticides |
| ☐ | (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 |

ANALYTICAL RESULTS

COMPOUND(S) DETECTED		CONC. [PPB]	COMPOUND(S) DETECTED		CONC. [PPB]
aromatic surzeables		N.D.			
halogenated surzeables		N.D.			
* DETECTION LIMIT *		25-49/L	+ 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:

sample was foamy when purged

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes ☐ No ☒ Seal(s) broken by: not sealed 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: 2/23/87 . Analyst's signature: Harry C. Eden

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

Reviewers signature: Richard Mervin FEB 27 1987



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

858 wpa
wuf

GENERAL WATER CHEMISTRY and NITROGEN ANALYSIS

DATE RECEIVED	2 5 87	LAB NO. WC-331	USER CODE ☐ 59300 ☐ 59600 ☒ OTHER: 82235
Collection DATE	87 01 28	SITE INFORMATION	Sample location
Collection TIME	1115		PARABO (bs Hobbs)
Collected by — Person/Agency	DAILEY / ANDERSON		Collection site description
	/OCD		PIT 6

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
				GRAB
pH (00400)	Conductivity (Uncorrected)	Water Temp. (00010)	Conductivity at 25°C (00094)	
	>50,000 μ mho	11 °C		
Field comments				
PRE FILTERED				

SAMPLE FIELD TREATMENT — Check proper boxes

No. of samples submitted	☐ NF: Whole sample (Non-filtered)	☒ F: Filtered in field with 0.45 μ m membrane filter	☐ A: 2 ml H ₂ SO 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)	μ mho		☒ Calcium (00915)	12000 mg/l	2/23
☐ Total non-filterable residue (suspended) (00530)	mg/l		☒ Magnesium (00925)	10000 mg/l	2/23
☐ Other:			☒ Sodium (00930)	43000 mg/l	2/23
☐ Other:			☒ Potassium (00935)	3400 mg/l	2/23
☐ Other:			☒ Bicarbonate (00440)	284 mg/l	2/10
			☒ Chloride (00940)	162661 mg/l	2/19
			☒ Sulfate (00945)	82 mg/l	2/17
			☒ Total filterable residue (dissolved) (70300)	315,740 mg/l	2/12
			☒ Other: CO ₃	0	2/10
NF, A-H ₂ SO ₄			F, A-H ₂ SO 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:					
Laboratory remarks			Analyst	Date Reported	Reviewed by
				3 9 87	CD

SLD 726 (12/84)

FOR OCD USE -- Date Owner Notified 4/27/87 Phone or letter? Initials JB



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

MAR 16 1987

HEAVY METALS
GENERAL WATER CHEMISTRY
and NITROGEN ANALYSIS

DATE RECEIVED	2 5 87	LAB NO.	ICP-481	USER CODE	☐ 59300 ☐ 59600 ☒ OTHER: 82235
Collection DATE	87 01 28	SITE INFORMATION	Sample location: SANTA FE PARABO		
Collection TIME	1115		Collection site description: PIT 6		
Collected by — Person/Agency: DAILEY/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: 827-5312

SAMPLING CONDITIONS

☐ Bailed ☒ Dipped	☐ Pump ☐ Tap	Water level	Discharge	Sample type GRAB
pH (00400)	Conductivity (Uncorrected) 250,000 μ mho	Water Temp. (00010) 11 $^{\circ}$ C	Conductivity at 25 $^{\circ}$ C (00094) μ mho	
Field comments				

SAMPLE FIELD TREATMENT — Check proper boxes

No. of samples submitted	☐ NF: Whole sample (Non-filtered)	☒ F: Filtered in field with 0.45 μ m membrane filter	☐ A: 2 ml H ₂ SO 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 $^{\circ}$ C (00095)	μ mho		☐ Calcium (00915)	mg/l	
☐ Total non-filterable residue (suspended) (00530)	mg/l		☐ Magnesium (00925)	mg/l	
☒ Other: I CAP			☐ 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 ₂ SO ₄			F, A-H ₂ SO 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:			Analyst	Date Reported	Reviewed by
☐ Other:				3 9 87	Jim Ashby
Laboratory remarks					

SLD 726 (12/84)

FOR OCD USE -- Date Owner Notified 4/27/87 Phone or Letter? Initials JB

Reviewed by: Jim Ashby

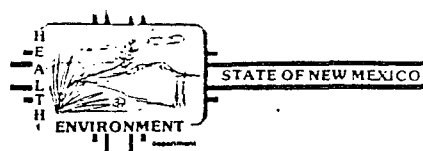
Date Reported: 3/9/87

Date Analyzed 2/26/87

<u>ELEMENT</u>	<u>ICAP VALUE (mg/l)</u>	<u>AA VALUE (mg/l)</u>
Aluminum	<u>20.1</u>	<u> </u>
Barium	<u>1.6</u>	<u> </u>
Beryllium	<u>20.1</u>	<u> </u>
Boron	<u>107.</u>	<u> </u>
Cadmium	<u>20.1</u>	<u> </u>
Calcium	<u>11,800.</u>	<u> </u>
Chromium	<u>20.1</u>	<u> </u>
Cobalt	<u>20.1</u>	<u> </u>
Copper	<u>20.1</u>	<u> </u>
Iron	<u>20.1</u>	<u> </u>
Lead	<u>20.1</u>	<u> </u>
Magnesium	<u>9590.</u>	<u> </u>
Manganese	<u>11.</u>	<u> </u>
Molybdenum	<u>20.1</u>	<u> </u>
Nickel	<u>20.1</u>	<u> </u>
Silicon	<u>11.</u>	<u> </u>
Silver	<u>20.1</u>	<u> </u>
Strontium	<u>380.</u>	<u> </u>
Tin	<u>20.1</u>	<u> </u>
Vanadium	<u>20.1</u>	<u> </u>
Zinc	<u>20.1</u>	<u> </u>
Arsenic	<u> </u>	<u> </u>
Selenium	<u> </u>	<u> </u>
Mercury	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>

87-0140-C

SCIENTIFIC LABORATORY DIVISION

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

REPORT TO: David Boyer
N.M. Oil Conservation Division
P. O. Box 2088
Santa Fe, N.M. 87504-2088

S.L.D. No. OR- 87-0140 A-B
DATE REC. 2-5-87

PHONE(S): 827-5812

PRIORITY
USER CODE: 8 2 2 3 5

SUBMITTER: David Boyer

CODE: 2 6 0SAMPLE COLLECTION CODE: (YYMMDDHHMMIII) 8 7 0 1 2 8 1 0 1 5 4 3SAMPLE TYPE: WATER ☒, SOIL ☐, FOOD ☐, OTHER: _____ CODE: COUNTY: LEA; CITY: EUNICE CODE: LOCATION CODE: (Township-Range-Section-Tracts) 2 1 5 + 3 8 E + 2 9 + 1 4 (10N06E24342)

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 Purgeables (1-3 Carbons)
☒ (754) Aromatic & Halogenated Purgeables
☐ (765) Mass Spectrometer Purgeables
☐ (766) Trihalomethanes
 Other Specific Compounds or Classes

☐ _____
☐ _____
☐ _____
☐ _____
☐ _____

EXTRACTABLE SCREENS

- ☐ (751) Aliphatic Hydrocarbons
☐ (760) Organochlorine Pesticides
☐ (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: PARADO PIT 7 SOUTH Receives decant from mud pit
Pit 7E + 7S not connected

FIELD DATA:

pH= _____; Conductivity= _____ umho/cm at _____ °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.) _____

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

This form accompanies ☒ Septum Vials, _____ Glass Jugs, and/or _____

Samples were preserved as follows:

- ☐ NP: No Preservation; Sample stored at room temperature.
☒ P-Ice Sample stored in an ice bath (Not Frozen).
☐ P-Na₂S₂O₃ Sample Preserved with Sodium Thiosulfate to remove chlorine residual.

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 ☐ Seals Intact: Yes ☐ No ☐

Signatures _____

For OCD Use: Date Owner Notified 4/27/87 Phone or Letter? Initials JB

ANALYSES PERFORMED

LAB. No.: OR- 140

THIS PAGE FOR LABORATORY RESULTS ONLY

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

PURGEABLE SCREENS

- ☐ (753) Aliphatic Purgeables (1-3 Carbons)
☒ (754) Aromatic & Halogenated Purgeables
☐ (765) Mass Spectrometer Purgeables
☐ (766) Trihalomethanes
 Other Specific Compounds or Classes

☐ _____
☐ _____
☐ _____
☐ _____
☐ _____

EXTRACTABLE SCREENS

- ☐ (751) Aliphatic Hydrocarbons
☐ (760) Organochlorine Pesticides
☐ (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

ANALYTICAL RESULTS

COMPOUND(S) DETECTED	CONC. [PPB]	COMPOUND(S) DETECTED	CONC. [PPB]
<i>aromatic purgeables</i>	<i>N.D.</i>		
<i>halogenated purgeables</i>	<i>N.D.</i>		
* DETECTION LIMIT *	* <i>25 ug/L</i>	+ 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: *sample was foamy when purged.*

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes ☐ No ☒ Seal(s) broken by: *not sealed* 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: *2/25/86* Analyst's signature: *Mary C. Edens*

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. Meyerheim* FEB 27 1987

DATE RECEIVED	2 5 87	LAB NO.	WC-333	USER CODE	☐ 59300	☐ 59600	☒ OTHER: 82235
Collection DATE	1 28 87	SITE INFORMATION ▶	Sample location	PARABO PIT 7 SOUTH			
Collection TIME	1015		Collection site description				
Collected by — Person/Agency		ANDERSON, RALFEY		10CD			

**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 <i>GRAB</i>
pH (00400)	Conductivity (Uncorrected) μmho	Water Temp. (00010) $^{\circ}\text{C}$	Conductivity at 25 $^{\circ}\text{C}$ (00094) μmho	
Field comments <i>Receives secont from mud pit</i>				

SAMPLE FIELD TREATMENT — *Check proper boxes*

No. of samples submitted	☐ NF: Whole sample (Non-filtered)	☒ F: Filtered in field with 0.45 μ m membrane filter	☐ A: 2 ml H ₂ SO 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:	_____		
NF, A-H₂SO₄			
☐ 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, NA			
☒ 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	_____		_____
F, A-H₂SO₄			
☐ 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
		3/9/87	CD
Laboratory remarks			

SLD 726 (12/84)

FOR OCD USE -- Date Owner Notified 4/27/87 Phone or letter Initials AB



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	2 5 87	LAB. NO.	16RF-52	USER CODE	☐ 59300 ☐ 59600 ☒ OTHER: 82235
Collection DATE	11 28 87	SITE INFORMATION	Sample location		
Collection TIME	1015		PARADO PIT 7 SOUTH		
Collected by — Person/Agency		Collection site description			
ANDERSON, BAILEY		10CD			

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	☐ Pump	Water level	Discharge	Sample type
☒ Dipped	☐ Tap			GRAB
pH (00400)	Conductivity (Uncorrected)	μmho	Water Temp. (00010)	°C
			Conductivity at 25°C (00094)	μmho
Field comments				
Receives decant from mud pit				
pit 7E + 7S not connected				

SAMPLE FIELD TREATMENT — Check proper boxes

No. of samples submitted	1	☐ NF: Whole sample (Non-filtered)	☒ F: Filtered in field with 0.45 μm membrane filter	☒ A: 2 ml H ₂ SO 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: CAP SEAN			☐ 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 ₂ SO ₄			F, A-H ₂ SO 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:			Analyst	Date Reported	Reviewed by
☐ Other:				3 9 87	Jim Ahlby
Laboratory remarks					

SLD 726 (12/84)

FOR OCD USE -- Date Owner Notified 4/27/87 Phone or letter? Initials JB

Reviewed by:

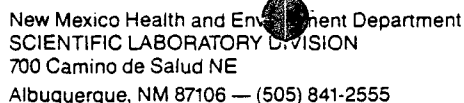
JB

Date Reported:

2/26/87

Date Reported:

<u>ELEMENT</u>	<u>ICAP VALUE (mg/l)</u>	<u>AA VALUE (mg/l)</u>
Aluminum	20.1	
Barium	1.4	
Beryllium	20.1	
Boron	41.	
Cadmium	20.1	
Calcium	6690.	
Chromium	20.1	
Cobalt	20.1	
Copper	20.1	
Iron	20.1	
Lead	20.1	
Magnesium	3930.	
Manganese	12.	
Molybdenum	20.1	
Nickel	20.1	
Silicon	10.	
Silver	20.1	
Strontium	130.	
Tin	20.1	
Vanadium	20.1	
Zinc	20.1	
Arsenic		
Selenium		
Mercury		



GENERAL WATER CHEMISTRY and NITROGEN ANALYSIS

SEND
FINAL
REPORT
TO

Attn: David Boyer

Phone: 827-5812

SAMPLING CONDITIONS

SAMPLE FIELD TREATMENT — *Check proper boxes*

No. of samples submitted	☐ NF: Whole sample (Non-filtered)	☒ F: Filtered in field with 0.45 μ m membrane filter	☐ A: 2 ml H ₂ SO 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

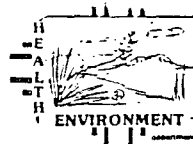
NF, NA		Units	Date analyzed	F, NA		Units	Date analyzed
☐ Conductivity (Corrected) 25°C (00095)	_____ μ mho _____			☒ Calcium (00915)	6700	mg/l	2-23
☐ Total non-filterable residue (suspended) (00530)	_____ mg/l _____			☒ Magnesium (00925)	3900	mg/l	2-23
☐ Other: _____	_____			☒ Sodium (00930)	74800	mg/l	2-9
☐ Other: _____	_____			☒ Potassium (00935)	1900	mg/l	2-9
☐ Other: _____	_____			☒ Bicarbonate (00440)	190	mg/l	2/10
				☒ Chloride (00940)	83512	mg/l	2/14
				☒ Sulfate (00945)	21	mg/l	2/17
				☒ Total filterable residue (dissolved) (70300)	154,656	mg/l	2/12
				☒ Other: CO ₃	0		2/10
NF, A-H₂SO₄				F, A-H₂SO₄			
☐ 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: _____	_____						
Laboratory remarks				Analyst		Date Reported	Reviewed by
						2/23/87	CO

SLD 726 (12/84)

FOR OCD USE -- Date Owner Notified 4/27/87 Phone or letter Initials JB

87-0144-C

SCIENTIFIC LABORATORY DIVISION

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

STATE OF NEW MEXICO

REPORT TO: David Boyer S.L.D. No. OR- 87-0144 A-B
N.M. Oil Conservation Division DATE REC. 2-5-87
P. O. Box 2088
Santa Fe, N.M. 87504-2088 PRIORITY _____
PHONE(S): 827-5812 USER CODE: 8 2 2 3 5
SUBMITTER: David Boyer CODE: 2 6 0
SAMPLE COLLECTION CODE: (YYMMDDHHMMIII) 8 7 0 1 2 8 1 0 0 0 43
SAMPLE TYPE: WATER ☒, SOIL ☐, FOOD ☐, OTHER: _____ CODE: _____
COUNTY: LEA; CITY: EUNICE CODE: _____
LOCATION CODE: (Township-Range-Section-Tracts) 2 1 5 + 3 8 E + 2 9 + 1 4 (10N06E24342)

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 Purgeables (1-3 Carbons)
☒ (754) Aromatic & Halogenated Purgeables
☐ (765) Mass Spectrometer Purgeables
☐ (766) Trihalomethanes
Other Specific Compounds or Classes _____

EXTRACTABLE SCREENS

- ☐ (751) Aliphatic Hydrocarbons
☐ (760) Organochlorine Pesticides
☐ (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: PIT 7 E Actually North Part of Pit 7. Recover
fluid from Pits #1 + #5 PARADO

FIELD DATA:

pH= _____; Conductivity= > 50000 umho/cm at 10 °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.)
Supped

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

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

Samples were preserved as follows:

- ☐ NP: No Preservation; Sample stored at room temperature.
☒ P-Ice Sample stored in an ice bath (Not Frozen).
☐ P-Na₂S₂O₃ Sample Preserved with Sodium Thiosulfate to remove chlorine residual.

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 ☐ Seals Intact: Yes ☐ No ☐

Signatures _____

For OCD Use: Date Owner Notified 4/27/87 Phone or Letter? _____ Initials 43

ANALYSES PERFORMED

LAB. No.: OR- 144

THIS PAGE FOR LABORATORY RESULTS ONLY

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

PURGEABLE SCREENS

- ☐ (753) Aliphatic Purgeables (1-3 Carbons)
☒ (754) Aromatic & Halogenated Purgeables
☐ (765) Mass Spectrometer Purgeables
☐ (766) Trihalomethanes
 Other Specific Compounds or Classes

Other Specific Compounds or Classes

EXTRACTABLE SCREENS

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

ANALYTICAL RESULTS

[illegible]

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: Sample was foamy when purged.

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes ☐ No ☒ Seal(s) broken by: not sealed

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: 2/24/87. Analyst's signature: Harry C. Eden

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

Reviewers signature:

FEB 26 1987



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	2/5/87	LAB NO.	ICP-51	USER CODE	59300	59600	XX OTHER:	82235
Collection DATE	87/01/28	SITE INFORMATION	Sample location					
Collection TIME	1000		PARABO					
Collected by — Person/Agency			Collection site description					
BAILEY/ANDERSON /OCD			PIT 7E - NORTH PART OF PIT 7 RECEIVES FLUIDS FROM PIT 1 & 5					

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
				GRAB
pH (00400)	Conductivity (Uncorrected)	Water Temp. (00010)	Conductivity at 25°C (00094)	
	> 50,000 µmho	10 °C	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 µm membrane filter	☐ A: 2 ml H ₂ SO 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			☐ 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 ₂ SO ₄			F, A-H ₂ SO 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:					
Laboratory remarks			Analyst	Date Reported	Reviewed by
				3/9/87	Jim Ashley

SLD 726 (12/84)

FOR OCD USE -- Date Owner Notified 4/27/87 Phone or letter Initials JB

SLD Lab No. ICP 51

Reviewed by:

Analyst

Date Reported:

Date Analyzed

ELEMENT	ICAP VALUE (mg/l)	AA VALUE (mg/l)
Aluminum	40.1	
Barium	2.1	
Beryllium	40.1	
Boron	38.	
Cadmium	40.1	
Calcium	6630.	
Chromium	40.1	
Cobalt	40.1	
Copper	40.1	
Iron	40.1	
Lead	40.1	
Magnesium	4110.	
Manganese	5.3	
Molybdenum	40.1	
Nickel	40.1	
Silicon	12.	
Silver	40.1	
Strontium	110.	
Tin	40.1	
Vanadium	40.1	
Zinc	40.1	
Arsenic		
Selenium		
Mercury		