

MONITORING REPORTS

YEAR(S): 1990-1984

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

Analytical Chemistry • Waste Treatment & Disposal • Equipment Sales REFERENCE ON DIVISION

THE COMPLETE SERVICE LAB 5

10/09/90

RECE VED '90 OCT 16 AM 8 47

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

Sample Identification: #9008011125 MH-12 Collected By: Anderson/Olson Date & Time Taken: 08/01/90 1125 On Site Data: Loco Hills Disposal Other:

Water from Monitor Well MH-12. App. 6 ft. H2O on Hole Bailed 6 Gal. before sampling. Well went dry. Did not recover. Clean water. pH 7 Water Temp. 25oC Cond. 16000

Lab Sample Number: 170086 Received:

08/03/90

Client: SNM1

PARAMETER	RESULTS	UNITS	TIME	DATE	METHOD	BY
Alkalinity	95	mg/l	0930	08/14/90	EPA Method 310.1	DG
Cation-Anion Balance	365.77/ 365.86	meq/meq	1600	08/21/90		NT
Carbonate	<.05	mg/l	1200	08/20/90	APHA Method 263	DG
Chloride	12000	mg/l	1030	08/14/90	EPA Method 325.3	SW
Specific Conductance	25,000	Micromhos	1600	08/07/90	EPA Method 120.1	GS
Bicarbonate	90	mg∕l	1200	08/20/90	APHA Method 263	DG
Sulfate	1040	mg/l	1100	08/16/90	EPA Method 375.4	DG
Total Dissolved Solids	20,000 ***	mg∕l	1100	10/09/90	EPA Method 160.1	WJP
рH	6.8	SU	1407	08/10/90	EPA Method 150.1	LW
Dissolved Calcium	3700	mg/l	1815	08/13/90	EPA Method 215.1	GK
Dissolved Iron	<.05	mg/l	2145	08/09/90	EPA Method 236.1	GK
Dissolved Potassium	30	mg/l	1500	08/13/90	EPA Method 258.1	CD
Dissolved Magnesium	1400	mg/l	1700	08/13/90	EPA Method 242.1	GK
Dissolved Sodium	1500	mg/l	2245	08/09/90	EPA Method 273.1	GK
Acrolein	<100	ug/l	1703	09/24/90	EPA Method 8240	РМ

Continued





Analytical Chemistry • Waste Treatment & Disposal • Equipment Sales

170086 Continued

Page 2

PARAMETER	RESULTS	UNITS	TIME	DATE	METHOD	BY
Acrylonitrile	<100	ug/l	1703	09/24/90	EPA Method 8240	PM
Benzene	49	ug/l	1703	09/24/90	EPA Method 8240	PM
Bromoform	<5	ug/l	1703	09/24/90	EPA Method 8240	PM
Bromomethane	<10	ug/l	1703	09/24/90	EPA Method 8240	РМ
Carbon Tetrachloride	<5	ug/l	1703	09/24/90	EPA Method 8240	РМ
Chlorobenzene	<5	ug/l	1703	09/24/90	EPA Method 8240	РМ
Chloroethane	<10	ug/l	1703	09/24/90	EPA Method 8240	PM
2-Chloroethylvinyl ether	<10	ug/l	1703	09/24/90	EPA Method 8240	PM
Chloroform	<5	ug/l	1703	09/24/90	EPA Method 8240	PM
Chloromethane	<10	ug/l	1703	09/24/90	EPA Method 8240	РМ
Dibromochloromethane	<5	ug/l	1703	09/24/90	EPA Method 8240	PM
Bromodichloromethane	<5	ug/l	1703	09/24/90	EPA Method 8240	PM
1,1-Dichloroethane	<5	ug/l	1703	09/24/90	EPA Method 8240	PM
1,2-Dichloroethane	<5	ug/l	1703	09/24/90	EPA Method 8240	РМ
1,1-Dichloroethene	<5	ug/l	1703	09/24/90	EPA Method 8240	PM
trans-1,2-Dichloroethene	<5	ug/l	1703	09/24/90	EPA Method 8240	PM
1,2-Dichloropropane	<5	ug/l	1703	09/24/90	EPA Method 8240	PM
cis-1,3-Dichloropropene	<5	ug/l	1703	09/24/90	EPA Method 8240	PM
Ethyl benzenø	<5	ug/l	1703	09/24/90	EPA Method 8240	PM
Methylene Chloride	<5	ug/l	1703	09/24/90	EPA Method 8240	РМ
1,1,2,2-Tetrachloroethane	<5	ug/l	1703	09/24/90	EPA Method 8240	PM

Continued



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

Analytical Chemistry • Waste Treatment & Disposal • Equipment Sales

THE COMPLETE SERVICE LAB		170086 0	Continued		Page 3	
PARAMETER	RESULTS	UNITS	TIME	DATE	METHOD	ВУ
Tetrachloroethene	<5	ug/l	1703	09/24/90	EPA Method 8240	PM
Toluene	<5	ug/l	1703	09/24/90	EPA Method 8240	PM
1,1,1-Trichloroethane	<5	ug/l	1703	09/24/90	EPA Method 8240	РМ
1,1,2-Trichloroethane	<5	ug/l	1703	09/24/90	EPA Method 8240	РМ
Trichloroethene	<5 ·	ug/l	1703	09/24/90	EPA Method 8240	PM
Vinyl Chloride	<10	ug/l	1703	09/24/90	EPA Method 8240	PM
trans-1,3-Dichloropropene	<5	ug/l	1703	09/24/90	EPA Method 8240	PM
Xylenes	<5	ug/l	1703	09/24/90	EPA Method 8240	РМ

*** Calculated Value

President Whiteside, Ph.D., C. н.

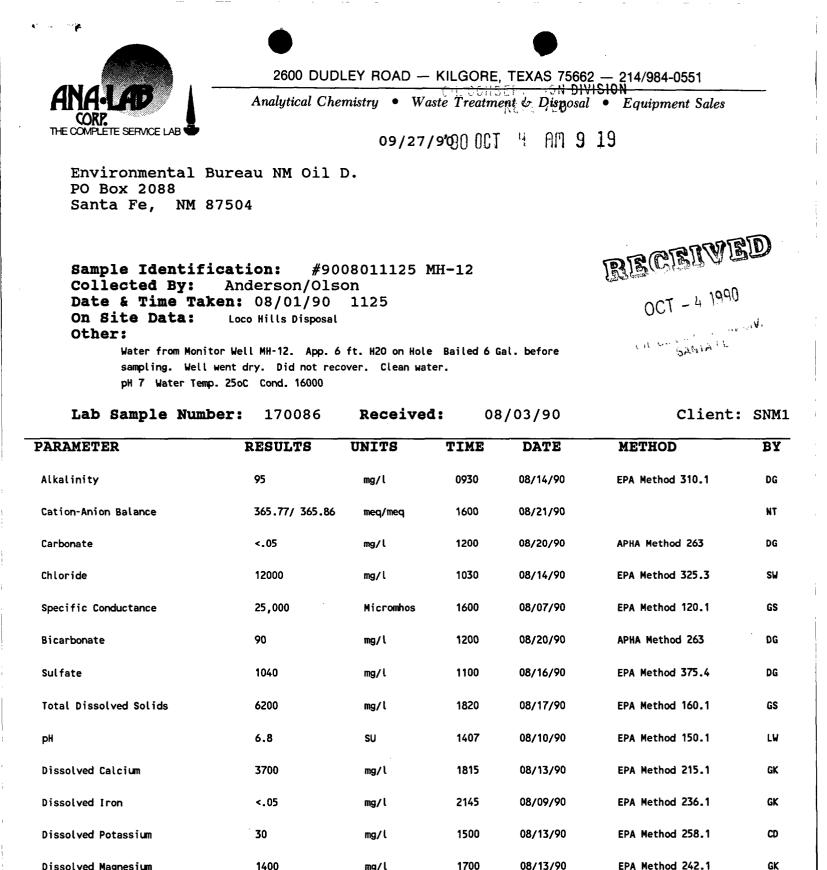


2600 DUDLEY ROAD - KILGORE, TEXAS 75662 - 214/984-0551

Analytical Chemistry • Waste Treatment & Disposal • Equipment Sales

Ana-Lab Corporation Laboratory Balance for Sample 170086 #9008011125 MH-12

Test Name Result	(mg/l)	Cation (meg/l)	Anion (meq/1)
Cl- Chloride	12000		338.40900
HCO3 Bicarbonate	90		1.47500
SO4 Sulfate	1040		25.98100
*CaD Dissolved Calcium	3700	184.63100	
*FeD Dissolved Iron	<.05	.00000	
*KD Dissolved Potassium	30	.76700	-
*MqD Dissolved Magnesium	1400	115.13200	
*NaD Dissolved Sodium	1500	65.24600	
		365.775	365.865
Cation/Anion % Difference Calculated TDS is 19760.00 Analyzed TDS is 26200.00 % Difference is			



Continued

mg/l

1500

Dissolved Sodium

2245

08/09/90

EPA Method 273.1

GK



~

γ

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

Analytical Chemistry • Waste Treatment & Disposal • Equipment Sales

170086 Continued

Page 2

PARAMETER	RESULTS	UNITS	TIME	DATE	METHOD	вч
Acrolein	<100	ug/l	1703	09/24/90	EPA Method 8240	PM
Acrylonitrile	<100	ug/l	1703	09/24/90	EPA Method 8240	PM
Benzene	49	ug/l	1703	09/24/90	EPA Method 8240	PM
Bromoform	<5	ug/l	1703	09/24/90	EPA Method 8240	PM
Bromomethane	<10	ug/l	1703	09/24/90	EPA Method 8240	PM
Carbon Tetrachloride	<5	ug/l	1703	09/24/90	EPA Method 8240	PM
Chlorobenzene	<5	ug/l	1703	09/24/90	EPA Method 8240	РМ
Chloroethane	<10	ug/l	1703	09/24/90	EPA Method 8240	PM
2-Chloroethylvinyl ether	<10	ug/l	1703	09/24/90	EPA Method 8240	PM
Chloroform	<5	ug/l	1703	09/24/90	EPA Method 8240	PM
Chloromethane	<10	ug/l	1703	09/24/90	EPA Method 8240	PM
Dibromochloromethane	<5	ug/l	1703	09/24/90	EPA Method 8240	PM
Bromodichloromethane	<5	ug/l	1703	09/24/90	EPA Method 8240	PM
1,1-Dichloroethane	<5	ug/l	1703	09/24/90	EPA Method 8240	PM
1,2-Dichloroethane	<5	ug/l	1703	09/24/90	EPA Method 8240	PM
1,1-Dichloroethene	<5	ug/l	1703	09/24/90	EPA Method 8240	PM
trans-1,2-Dichloroethene	<5	ug/l	1703	09/24/90	EPA Method 8240	PM
1,2-Dichloropropane	<5	ug/l	1703	09/24/90	EPA Method 8240	PM
cis-1,3-Dichloropropene	<5	ug/l	1703	09/24/90	EPA Method 8240	PM
Ethyl benzene	<5	ug/l	1703	09/24/90	EPA Method 8240	PM
Methylene Chloride	<5	ug/l	1703	09/24/90	EPA Method 8240	РМ

Continued



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

Analytical Chemistry • Waste Treatment & Disposal • Equipment Sales

Page 3

Continued

PARAMETER RESULTS UNITS TIME DATE METHOD BY 1,1,2,2-Tetrachloroethane <5 ug/l 1703 09/24/90 EPA Method 8240 PM <5 1703 EPA Method 8240 Tetrachloroethene ug/l 09/24/90 PM 1703 EPA Method 8240 Toluene <5 ug/l 09/24/90 PM 1703 <5 09/24/90 EPA Method 8240 1,1,1-Trichloroethane ug/l PM

1,1,2-Trichloroethane	<5	ug/l	1703	09/24/90	EPA Method 8240	PM
Trichloroethene	<5	ug/l	1703	09/24/90	EPA Method 8240	PM
Vinyl Chloride	<10	ug/l	1703	09/24/90	EPA Method 8240	PM
trans-1,3-Dichloropropene	<5	ug/l	1703	09/24/90	EPA Method 8240	PM

Quality Assurance for the SET with Sample 170086

170086

Sample #	Description	Result	Units	Dup/Std Value	Spk Conc.	Percent	Time	Date	Ву
				Alkali	nity				
	Standard	110	mg∕l	2358	-		0930	08/14/90	DG
			-	Chlor	ide				
	Standard	72	mg∕l	71		101	1030	08/14/90	SW
170373	Duplicate	27	mg∕l	27		100	1030	08/14/90	SW
170373	Spike		mg/l		100	104	1030	08/14/90	SW
	·			Sulfa	te				
	Standard	95	mg∕i	100		105	1100	08/16/90	DG
168771	Duplicate	240	mg/l	220		109	1100	08/16/90	DG
169932	Duplicate	12	mg∕l	11		109	1100	08/16/90	DG
169932	Spike		mg/l		100	97	1100	08/16/90	DG
	·			tal Dissol	ved Soli	ds			
	Standard	1120	mg∕l	1000		111	1820	08/17/90	GS
169181	Duplicate	480	mg/l	490		102	1820	08/17/90	GS
	·			рН					
	Standard	Calibrate	SU	7.0			1407	08/10/90	LW
	Standard	Calibrate	su	4.0			1407	08/10/90	LW
	Standard	6.0	SU	6.0	•	100	1407	08/10/90	LW
				Dissolved	Calcium				
	Blank	. 14	mg/l				1815	08/13/90	GK
	Blank	.12	mg/l				1815	08/13/90	GK
	Blank	.09	mg/l				1815	08/13/90	GK



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

Analytical Chemistry • Waste Treatment & Disposal • Equipment Sales

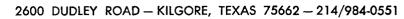
Quality Assurance for the SET with Sample 170086

Sample #	Description	Result	Units	Dup/Std Value	Spk Conc.	Percent	Time	Date	Ву
	Standard	.48	mg∕l	.50		104	1815	08/13/90	GK
169183	Duplicate	15	mg/l	15		100	1815	08/13/90	GK
170077	Duplicate	1.4	mg/l	1.5		107	1815	08/13/90	GK
170088	Duplicate	400	mg/l	380		105	1815	08/13/90	GK
170077	Spike		mg∕l		.80	94	1815	08/13/90	GK
				Dissolve	l Iron				
	Standard	1.8	mg/l	1.7		106	2145	08/09/90	GK
170088	Duplicate	<.05	mg/l	<.05		100	2145	08/09/90	GK
170088	Spike		mg∕l		.98	104	2145	08/09/90	GK
			D	issolved P	otassium	Ļ			
	Blank	.09	mg/l				1500	08/13/90	CD
	Blank	.10	mg∕l				1500	08/13/90	CD
	Standard	.99	mg∕l	1.00		101	1500	08/13/90	CD
170088	Duplicate	6.2	mg∕l	6.1		102	1500	08/13/90	CD
			D	issolved Ma	agnesium	L			
	Blank	.043	mg∕l				1700	08/13/90	GK
	Blank	.034	mg/l				1700	08/13/90	GK
	Blank	.038	mg/l				1700	08/13/90	GK
	Standard	. 194	mg/l	.200		103	1700	08/13/90	GK
169183	Duplicate	2.2	mg/l	2.3		104	1700	08/13/90	GK
170077	Duplicate	1.2	mg/l	1.2		100	1700	08/13/90	GK
170088	Duplicate	193	mg∕l	188		103	1700	08/13/90	GK
170088	Spike		mg/l		.100	94	1700	08/13/90	GK
				Dissolved	Sodium				
	Blank	<4	mg/l				2245	08/09/90	GK
	Standard	10	mg/l	10		100	2245	08/09/90	GK
170088	Duplicate	1000	mg/l	1000		100	2245	08/09/90	GK
170088	Spike		mg/l		10	100	2245	08/09/90	GK

N. H. Multubert H. Whiteside, Ph.D., President c.

Benzene104,000ppb080008/22/90EPFTHE FOLLOWING ANALYSES WERE PERFORMED ON THE EXTRACT OBTAINED USING THE NEW TCLPEP TOXICITYEXTRACT 0Silver<.03pps141508/14/90EPFArsenic<.005pps0015<08/14/90EPF	• Equipment	Sales
WHE COMPLETE SERVICE LAB 08/27/90 Environmental Bureau NM Oil D. PO Box 2088 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. Dily Sludge (Parafins) Lab Sample Number: 170085 Received: 08/23/90 PARAMETER RESULTS Benzene 104,000 ppb 0800 08/22/90 EP4 THE FOLLOWING ANALYSES WERE PERFORMED ON THE EXTRACT OBTAINED USING THE NEW TCLP EP TOXICITY EXTRACTI Silver (.03 pps 1415 08/14/90 EP4 Arsenic (.005 pps 0015 00114/90 EP4		
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 PARAMETER RESULTS UNITS TIME DATE ME Benzene 104,000 ppb 0800 08/22/90 EPA THE FOLLOWING ANALYSES WERE PERFORMED ON THE EXTRACT OBTAINED USING THE NEW TOLP EP TOXICITY EXTRACTI Silver (.03 ppm 1415 08/14/90 EPA Arsenic (.005 ppm 0015 08/14/90 EPA		
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 PARAMETER RESULTS UNITS TIME DATE ME Benzene 104,000 ppb 0800 08/22/90 EPA THE FOLLOWING ANALYSES WERE PERFORMED ON THE EXTRACT OBTAINED USING THE NEW TCLP EP TOXICITY EXTRACTI Silver (.03 pps 1415 08/14/90 EPA Arsenic (.005 pps 0015 08/14/90 EPA		
PARAMETER RESULTS UNITS TIME DATE ME Benzene 104,000 ppb 0800 08/22/90 EPA THE FOLLOWING ANALYSES WERE PERFORMED ON THE EXTRACT OBTAINED USING THE NEW TOLP EP TOXICITY EXTRACTI Silver (.03 pps 1415 08/14/90 EPA Arsenic (.005 pps 0015 08/14/90 EPA		
Benzene 104,000 ppb 0800 08/22/90 EPF THE FOLLOWING ANALYSES WERE PERFORMED ON THE EXTRACT OBTAINED USING THE NEW TCLP EP TOXICITY EXTRACTION Silver (.03 ppm 1415 08/14/90 EPF Arsenic (.005 ppm 0015 08/14/90 EPF	Cli	ient: SNM1
THE FOLLOWING ANALYSES WERE PERFORMED ON THE EXTRACT OBTAINED USING THE NEW TCLP EP TOXICITY EXTRACTI Silver <.03	ETHOD	BY
Silver (.03 ppm 1415 08/14/90 EPA Arsenic (.005 ppm 0015 08/14/90 EPA	A Method 8020	KB
Arsenic (.005 ppm 0015 08/14/90 EPF	ION PROCEDURE.	
	A Method 7760	CD
Barium (.5 ppm 2300 08/13/90 EPA	A Method 7060	GK
	A Method 7080	E K
Cadmium ,01 ppm 1300 08/17/90 EPA	A Method 7130	CD
Chromium (.05 ppm 1100 08/16/90 EP	A Method 7190	CD
Mercury (.001 ppm 1800 08/23/90 EPA	A Method 7470	6K
Lead (.2 ppm 1400 08/16/90 EP	A Method 7420	CD
Selenium (.005 ppm 0730 08/14/90 EPF	A Method 7740	6DG
Quality Assurance for the SET with Sample 170085	5	
Sample # Description Result Units Dup/Std Value Spk Conc. Percent Time	Date	Ву
Benzene		
Blank (5 ppb 0800 Standard 58 ppb 50 115 0800 170859 Duplicate (5 ppb 100 0800 170859 Spike ppb 50 112 0800	08/22/90 08/22/90 08/22/90 08/22/90	KB KB KB KB

Silver



Analytical Chemistry • Waste Treatment & Disposal • Equipment Sales



ī

Quality Assurance for the SET with Sample 170085

Sample #	Description	Result	Units	Dup/Std Value	Spk Conc.	Percent	Time	Date	By
	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
170085	Duplicate	(.03	рри рри	(.03		100	1415	<u>88/14/90</u>	CD
			11		_				
	Blank	(.005	рри	Arse	nic		0015	88/14/90	GK
	Standard	.091	рря	. 100		109	8015	08/14/90	GK
70085	Duplicate	(.005	рри	(.005		100	0015	@8/14/90	GK
68970	Duplicate	(.005	mg/1	< . 005		100	0015	08/14/90	6K
70085	Spike		pps		. 100	99	8015	88/14/90	GK
	·				•				
	Blank	(.5	ррм	Bar	ium		2300	88/13/90	GK
	Standard	1.0	ppm	1.0		100	2300	08/13/90	GK
70085	Duplicate	(.5	ppm	(.5		100	2300	@8/13/90	GK
170085	Spike		pp®		4.0	110	2300	08/13/90	GK
				-	•				
	Blank	(.01	mg/1	Cadm	li um		1300	08/17/90	CD
	Blank	(.01	mg/1				1300	88/17/90	CD
	Blank	(.01	mg/l				1300	08/17/90	CD
	Blank	.4	mg/1				1309	88/17/90	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/1	. 44		100	1300	08/17/90	CD
	Standard	1.1	мg/1	1.0		110	1300	08/17/90	CD
70085	Duplicate	.01	рри	.01		100	1300	88/17/90	CD
170331	Duplicate	22	ppm	22		100	1300	08/17/90	CD
70479	Duplicate	.01	рра	.02		167	1300	@8/17/90	CD
70554	Duplicate	.01	ppm	.01		100	1300	08/17/90	CD
70613	Duplicate	4.0	рри	1.3		202	1300	0 8/17/90	CD
70480	Duplicate	.01	mg/l	.01		100	1300	08/17/90	CD
70613	Spike		ppm		.97	96	1300	08/17/90	CD
70480	Spike		mg/l		. 40	90	1300	08/17/90	CD
70085	Spike		mg/l		. 48	110	1300	@8/17/90	CD
170479	Spike		mg/l		.40	99	1300	08/17/90	CD
70554	Spike		mg/l		. 40	102	1300	88/17/90	CD
	·		-	06					
	Blank	(.05	mg/1	Unro	mium		1100	@8/16/90	CD
	Blank	(.05	mg/1				1100	08/16/90	CD
	Blank	(.05	mg/l				1100	08/16/90	CD
	Standard	1.0	ag/1	1.0		100	1100	08/16/90	CD
	Standard	.53	mg/1	. 50		105	1100	08/16/90	CD
170479	Duplicate	(.05	рря	(.05		100	1100	08/16/90	CC

.



Analytical Chemistry • Waste Treatment & Disposal • Equipment Sales

ANA-LAD CORP. THE COMPLETE SERVICE LAB

ç

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	(.0 5		100	1100	08/16/90	CD
170085	Buplicate	(.05	рри	(.05		100	1100	08/16/90	CD
170085	Spike		mg/1		. 80	101	1100	08/16/90	CD
170480	Spike		mg/1		. 80	92	1100	@8/16/90	CD
170479	Spike		mg/1		. 80	104	1100	08/16/90	CD
				Merc	ury				
	Blank	.005	ppa		-		1800	08/23/90	GK
	Blank	. 894	рри				1800	88/23/90	GK
	Blank	.003	ppa				1800	08/23/90	6K
	Standard	.010	рри	. 010		100	1800	08/23/90	GK
	Standard	.004	ppm	.005		122	1800	08/23/90	6K
170085	Duplicate	(.001	рри	(.001		100	1800	08/23/90	GK
170554	Duplicate	(.001	ppm	< . 001		100	1800	08/23/90	GK
170480	Duplicate	(.05	mg/1	(.05		100	1800	@8/23/90	GK
170085	Spike		ppm		.010	106	1800	08/23/90	GK
170554	Spike		mg/l		.010	84	1800	08/23/90	6K
				Le	ad				
	Blank	(.2	рри				1400	@8/16/90	CD
	Blank	۲.>	ppm				1400	08/16/90	CD
	Standard	1.1	рри	1.1		100	1420	08/16/90	CD
	Standard	2.1	ppæ	2.0		105	1400	08/16/90	CD
170085	Duplicate	(.2	ppa	(.2		100	1400	@8/16/90	CD
170479	Duplicate	۲.۷	ppm	(. 2		100	1400	08/16/90	CD
170480	Duplicate	(.2	ppm	(.2		100	1400	&8/16/90	CD
170085	Spike		ppm		2.0	105	1400	08/16/90	CD
170479	Spike		рри		2.0	108	1400	88/16/90	CD
170480	Spike		ppm		2.0	104	1400	08/16/90	CD
				Sele	nium				
	Blank	(.005	ppm				0730	08/14/90	GDG
	Standard	. 101	рри	. 100		101	0730	88/14/90	SDS
170085	Duplicate	(.005	ppm	(.005		100	0730	08/14/90	GDG
170085	Spike		рри		. 109	110	8730	88/14/98	6D6

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

REPORT TO:	DAVID BOYER	Sample No. 89033108
	N.M. OIL CONSERVATION DIVIS	
	P.O. Box 2088	PRIORITY
	Santa Fe, NM 87504-2088	PHONE(S):
COLLECTION	TTY: HOCD Hills	; COUNTY: Eddy
COLLECTION	ATE/TIME CODE: (Vers-Month-Day-Hour-Minut	18191013131/101812151
	DE: (Township-Range-Section-Tracts)	
	SUBMITTER: Day	
SAMPLE TYPE		······································
	npanies Septum Vials, Glass Jugs,	and/or
NP:	eserved as follows: No Preservation; Sample stored at room tempe	rature.
<u>,</u>	Sample stored in an ice bath (Not Frosen).	
	Sample Preserved with Ascorbic Acid to remov	
P-HCI	Sample Preserved with Hydrochloric Acid (2 of UESTED: Please check the appropriate box(es)	
•	ver possible list specific compounds suspented or	
 :	PURGEABLE SCREENS	EXTRACTABLE SCREENS
	atic Headspace (1-5 Carbons)	(751) Aliphatic Hydrocarbons
	atic & Halogenated Purgeables Spectrometer Purgeables	[755] Base/Neutral Extractables (758) Herbicides, Chlorophenoxy acid
(766) Triha		(759) Herbicides, Triasines
(774) SDW.	VOC's I (8 Regulated +)	(760) Organochlorine Pesticides
	VOC's II (EDB & DBCP)	(761) Organophosphate Pesticides
Othe	r Specific Compounds or Classes	(767) Polychlorinated Biphenyls (PCB's) (764) Polynuclear Aromatic Hydrocarbons
		(762) SDWA Pesticides & Herbicides
Remarke:		
FIELD DATA:	~ 50,000	
	onductivity=umho/cm atC; Chi	
Dissolved Oxyger	n=mg/l; Alkalinity=mg/l; Flow R	ste/
Depth to water	ft.; Depth of wellft.; Perforation	Intervalft.; Casing:
Sampling Location	n, Methods and Remarks (i.e. odors, etc.)	
hoco h	113 College Warte)	isposal)
WE	Corner sit #1	/
		FReight
I certify that the sectivities (signatu	re collector): X (1775 A XM)	ults of my field analyses, observations and FReyht Method of Shipment to the Lab: EXARCH
CHAIN OF CU	STODY	
I certify that th	is sample was transferred from	to
at (location)	HLK	on 4589- (2:25 and that
the statements i	n this block are correct. Evidentiary Seals: Not	Sealed OR Seals Intact: Yes ON O
Signatures	Cause A Malanel	

;

May 9, 1989 Page 13 of 18 Accu-Labs Research, Inc.

MECSIVED

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

MAY_1 7 1989

OIL CONSERVATION DIV. SANTA FE

REPORT OF ANALYSIS

ALR Designation Sponsor Designation	9649-29859-20-13 8903290910 <u>3-29-89</u>	9649-29859-20-14 8903311035 <u>3-31-89</u>	9649-29859-20-15 8903310825 <u>3-31-89</u>
GC/MS VOLATILE ORGANICS, $\boldsymbol{\mu}$	g/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
1,1,2,2-Tetrachloroethane	<1000 µg/kg		<50
Tetrachloroethene	<1000 µg/kg		<50

ung/kg

May 9, 1989 Page 14 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

Accu-Labs Research, Inc.

RECEIVED

MAY 1 7 1989

OIL CONSERVATION DIV. SANTA FE

REPORT OF ANALYSIS

ALR Designation Sponsor Designation	9649-29859-20-13 8903290910 <u>3-29-89</u>	9649-29859-20-14 8903311035 <u>3-31-89</u>	9649-29859-20-15 8903310825 3-31-89
Determination: µg/L			
Toluene Chlorobenzene Ethyl benzene Total Dichlorobenzenes Total Xylenes	3500 μg/kg <1000 μg/kg 2600 μg/kg <1000 μg/kg 5000 μg/kg	700 μg/kg <50 μg/kg 140 μg/kg <50 μg/kg 580 μg/kg	1500 <50 270 <50 410

REPORT TO:	DAVID BOYER		Sample	No. <u>8903311</u>
	N.M. OIL CONSERV	ATION DIVISIO		
	P.O. Box 2088		PRIORITY	
	Santa Fe, NM 87	504-2088		927-5912
				haves
COLLECTION C	ITY:			
	ATE/TIME CODE: (Year-Mon			
LOCATION COD	E: (Township-Range-Section-Tr			(10N06E243
			Boyer	
SAMPLE TYPE:	WATER X, SOIL ., FO	DD [], OTHER:		
This form accom	panies Septum Vials,	Glass Jugs, and	/or	
Samples were pre	eserved as follows:	<u>.</u>		
D NP: P-lee	No Preservation; Sample stor Sample stored in an ice bat.	•	₹.	
	Sample Preserved with Asco	•	lorine residual.	
	Sample Preserved with Hydr			
	UESTED: Please check the ap er possible list specific compo-	•••	••	analytical screens
•	PURGEABLE SCREENS	ma mekanar ar rada	EXTEACTABLE	SCREENS
	tic Headspace (1-6 Carbons)	•	(751) Aliphatic Hyd	
	tic & Halogenated Purgeables		(755) Base/Neutral	
[] (765) Mass : [] (766) Tribald	Spectrometer Purgeables	•	(758) Herbicides, Ch (759) Herbicides, Tr	· ·
	VOC's I (8 Regulated +)		(760) Organochiorine	
	VOC's II (EDB & DBCP)		(761) Organophospha	
Other	Specific Compounds or Classe	۲.	(767) Polychlorinated	
└┤			(764) Polynuclear And (762) SDWA Pestici	romatie Hydrocarbons
· · ·	<u> </u>	·····	L (104) JUWA FORIC	1469 45 2,6701634 65
Remarks:				·····
FIELD DATA:	NN 50,00	0		
pH=; Co	aductivity=umho/cm a	s°C; Chlorine	Residual=mg/l	
Dissolved Oxygen:	=mg/l; Alkaliaity=	mg/l; Flow Rate		
Depth to water		ft.; Perforation Inte	nval n.; Ca	ning:
Sampling Location	n, Methods and Remarks (i.e.	odern, etc.)	· · ·	
BROKE	Tank (CROSby	Solt Jako	- Sample	From the
	of like at W			
10				
certify that the	e results in this block sceures	ely reflect the regults	of my field analyses, obse	eventions and There
activities.(nignatur	e collector): Xayax	14 Boy	Method of Shipment t	o the Lab: <u>CAPUE</u>
CHAIN OF CUS	TODY			
certify that thi	is sample was transferred from	DB	to	Tm
at (location)	Λιρ		415189.	12:25 and the
	a this block are correct. Evide			
Signatures	11 r 11		e find Auf seams russes:	
31 FT SELLERS	VINN HT	INIANUR		

Accu-Labs Research, Inc.

May 9, 1989 Page 15 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 1 7 1989

OIL CONSERVATION DIV. SANTA FE

REPORT OF ANALYSIS

ALR Designation Sponsor Designation	9649-29859-20-16 8903301440 3-30-89	9649-29859-20-17 8903311255 3-31-89	9649-29859-20-18 8904032115 Trip Blank <u>4-3-89</u>
GC/MS VOLATILE ORGANICS, µg	g/L:		
Chloromethane	<10	<10	<10
Bromomethane	<10	<10	<10
Vinyl chloride	<10	<10	<10
Chloroethane	<10	<10	<10
Methylene chloride	<5	<5	<5
1,1-Dichloroethene	<5	<5	<5
1,1-Dichloroethane	<5	<5	<5
Total 1,2-Dichloroethene	<5	<5	<5
Chloroform	<5	<5	<5
1,2-Dichloroethane	<5	<5	<5
1,1,1-Trichloroethane	<5	<5	<5
Carbon tetrachloride	<5	<5	<5
Bromodichloromethane	<5	<5	<5
1,2-Dichloropropane	<5	<5	<5
c-1,3-Dichloropropene	<5	<5	<5
Trichloroethene	<5	<5	<5
Benzene	<5	<5	<5
Dibromochloromethane	<5	<5	<5
1,1,2-Trichloroethane	<5	<5	<5
t-1,3-Dichloropropene	<5	<5	<5
2-Chloroethylvinyl ether	<5	<5	<5
Bromoform	<5	<5	<5
1,1,2,2-Tetrachloroethane	<5	<5	<5
Tetrachloroethene	<5	<5	<5

May 9, 1989 Page 16 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

Accu-Labs Research, Inc.

MAY 1 7 1989 OIL CONSERVATION DIV. SANTA FE

REPORT OF ANALYSIS

ALR Designation Sponsor Designation	9649-29859-20-16 8903301440 3-30-89	9649-29859-20-17 8903311255 3-31-89	9649-29859-20-18 8904032115 Trip Blank 4-3-89
Determination: µg/L			
Toluene Chlorobenzene Ethyl benzene Total Dichlorobenzenes	<5 <5 <5 <5	<5 <5 <5 <5	<5 <5 <5 - <5
Total Xylenes	<5	<5	<5

at a sta			754
	SCIENTIFIC LABOR ORGANIC ANALYSIS Organic Section -	5 REQUEST FORM	754 wpw - 89-41 C-
REPORT TO:	DAVID BOYER	S.L.D. No. (OR
	N.M. OIL CONSERVATION DIV	ISION DATE REC.	1-19-89
	P.O. Box 2088	PRIORITY	-3
	Santa Fe, NM 87504-2088		827-5812
COLLECTION C		; COUNTY:	
	DATE/TIME CODE: (Year-Month-Day-Hour-M DE: (Township-Range-Section-Tracts)		1/13/4/5/ 1/3///(10N06E24342)
USER CODE:			CODE: 2 6 0
SAMPLE TYPE	: WATER $[\lambda]$, SOIL [], FOOD [], OTHE	R:	
	npanies Septum Vials, Glass Ju reserved as follows:	gs, and/or	eceived
NP:	No Preservation; Sample stored at room te	-	APR 2 7 1989
P-Ice	Sample stored in an ice bath (Not Frozen) Sample Preserved with Ascorbic Acid to re	move chlorine residual.	
P-HCI	Sample Preserved with Hydrochloric Acid		L CONSERVATION DIV.
	QUESTED: Please check the appropriate box(ver possible list specific compounds suspected		analy@001 Screens
	PURGEABLE SCREENS	EXTRACTABLE	
	atic Headspace (1-5 Carbons) atic & Halogenated Purgeables	(751) Aliphatic Hydr (755) Base/Neutral I	
2	Spectrometer Purgeables	(758) Herbicides, Chl	
(766) Triha		(759) Herbicides, Tri	azines
	A VOC's I (8 Regulated +) A VOC's II (EDB & DBCP)	(760) Organochlorine (761) Organophosphat	
	er Specific Compounds or Classes	(767) Polychlorinated	1
<u> </u>		(764) Polynuclear Ar	-
	11/2 1000	(762) SDWA Pesticio	
Remarks:	Halogenated 10pp	601 Jess [7]	
FIELD DATA:	48,000 5		
pH=; C	$\frac{2}{2} \int \frac{1}{2} \int \frac{1}$	Chlorine Residual=mg/l	
Dissolved Oxyge	n=mg/l; Alkalinity=mg/l; Flor	v Rate//	
Depth _, to water	ft.; Depth of wellft.; Perfora	tion Intervalft.; Cas	sing:
Sampling Location	on, Methods and Remarks (i.e. odors, etc.)		2 Parala VH
<u> </u>	Hills Disposal - Sa re orl on Wiend	MALE SAM NE	- Comer pir */
I certify that the activities.(signatu	he results in this block accurately reflect the are collector: Allyn Hono	results of my field analyses, obse	or the Lab: State Car
CHAIN OF CU	STODY		/
I certify that tl	his sample was transferred from	/ to	
at (location)		on//	: and that
the statements i	in this block are correct. Evidentiary Seals: I	lot Sealed 🔲 OR Seals Intact:	Yes No
Signatures			
For OCD	use: Date owner notified:	6/19/07 Phone or	Letter? Initials MK

ANALYSES PERFORMED		LAB. No.: OR-	
THIS PA	GE FOR LABO	RATORY RESULTS ONLY	
This sample was tested using the analytical scr	eening method(s)	checked below:	
PURCEABLE 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	
<u>A</u>		L RESULTS	
COMPOUND(S) DETECTED	CONC. [PPB]	COMPOUND(S) DETECTED	CONC. [PPB]
		· ·	
		· · · · · · · · · · · · · · · · · · ·	
······································			
• DETECTION LIMIT • 🗡		+ DETECTION LIMIT + $+$	
	W THE STATE	D DETECTION LIMIT D DETECTION LIMIT (NOT CONFIRMED) OR WITH APPROXIMATE QUANTITATION	
LABORATORY REMARKS:			·····
,			
		TICAL PERSONNEL	
	lures on handlin	by: date: g and analysis of this sample unless otherwise noted esults for this sample.	
Date(s) of analysis: Analyst's	-		
		ts for this sample and with the statements in this	block.

Reviewers signature:

STATE OF NEW MEXICO

NM Oil Consv. Div.

P. O. Box 2088

Santa Fe, NM

State Land Office Bldg.

BEALTH AND VIRONMENT DEPARTMENT

700 Camino de Salud, NE Albuquerque, NM 87106 [505]-841-2500 ORGANIC CHEMISTRY SECTION [505]-841-2570

February 1, 1989

A 11

To:

ANALYTICAL REPORT SLD Accession No. OR-89-0041

Distribution (■) Submitter (※) SLD Files

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

Re: A purgeable water sample submitted to this laboratory on January 19, 1989

User:

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

87504-2088

DEMOGRAPHIC DATA

C(DLLECTION	1	LOCATION	
On: 13-Jan-89	By: Boy	Township: 17S	Section: 16	
At: 13:45 hrs.	In/Near: Loco Hills	Range: 30E	Tract: 331	

ANALYTICAL RESULTS: Aromatic & Halogenated Purgeable Screen

Parameter	Value	Note	MDL	Units
Halogenated Purgeables (33)	0.00	N	100.00	ppb
Benzene	1400.00		100.00	dqq
Toluene	970.00		100.00	ppb
Ethylbenzene	130.00		100.00	dqq
p- & m-Xylene	260.00		100.00	ppb
1,2-Dimethylbenzene	0.00	т	100.00	ppb

Notations & Comments:

MDL = Minimal Detectable Level.

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

Seals: Not Sealed 4, Intact: No, Yes & Broken By: _____ Date: _____

Laboratory Remarks: Loco Hills Disposal

Analyst: **Reviewed By:** Richard F. Meyerhein 02/01/89 Supervisor, Organic Chemistry Section Gary C. Eden Analysis Analyst, Organic Chemistry Date

4 58 				859 WAN		
	SCIENTIFIC LAE 700 Camino de S	alth and Environment BORATORY DIVISIO Salud NE M 87106 — (505) 841-	N	w ⁿ '		NATER CHEMISTRY OGEN ANALYSIS
DATE RECEIVED /	1/9189	ABUR - 94	USER CODE 🗆 59300	59600 [XX OTHER: 82	235
Collection DATE	3	SITE INFORM-►		coHills	DISDas	\sim
Collegion TIME		ATION	Collection site description			
Collected by - Person		2 /OCD		NECO	ner, pr	ZTEANDAT
SEND FINAL REPORT TO ► Attn	State Land	SERVATION DI Office Bldg NM 87504-208	, PO Box 208	8		FER 23 1983
Pho SAMPLING CO	one: 827-58	312			Station/ well code /) Owner	5-30E-16,331
Bailed	🗆 Pump	Water level		Discharge	1	Sample type
52 Dipped pH (00400)	🗆 Тар	Conductivity (Unco	prrected)	Water Temp. (00010)		Conductivity at 25°C (00094)
	7	48,8	900 µmho		5 °C	μmh
Field comments	Oil o	n Wer	T sike	Zpit		
SAMPLE FIEL	D TREATMEN	T — Check prope	er boxes			······
No. of samples submitted) XNI	F: Whole sample (Non-filtered)	F: Filtered in 0.45 μme	field with Drane filter	: 2 ml H₂SO₄/	'L added
NA: No ac	cid added 🗆 (5ml conc. HNO.	added 🗖	A: 4ml fuming HNO ₃ adde
ANALYTICAL					-	<u> </u>
NALT TICAL	RESULTS IION	I SAMPLES	Units Date analyze		, NA Sample	e: Date
Conductivity (25°C (00095) Total non-filte residue (susp (00530) Other: Other: Other: A-H ₂ SO ₄	rable bended)	13526 6.65	µmho <u>1/27</u> mg/l	Calcium Potassiu Magnesiu Sodium Bicarbor	4000 m 143 m 153 428 nate 33	$\frac{\text{Analyzed}}{25 \text{ mg/l}} = \frac{1/26/89}{1/24}$ $\frac{75 \text{ mg/l}}{30 \text{ mg/l}} = \frac{1/24}{1/24}$ $\frac{30 \text{ mg/l}}{31 \text{ mg/l}} = \frac{1/24}{1/23}$
□ Nitrate-N + , N	Nitrate-N	<u> </u>		- X Chloride		
total (00630)			mg/l	_ Sulfate	23	<u>75 mg/1 z/2</u> 0 ^{.5} mg/1 <u>z/9</u>
Ammonia-N to Total Kjeldahl			mg/i	- X Total So		<u>6 µg/l 2/07</u>
()			mg/l	- X BR	6	
demand (003	40)	<u> </u>	mg/l		3	<u> </u>
Total organic (mg/l	- Cation	Anion Ba	lance
 Other: Other: 				Analyst	Date R	Reviewed by
Laboratory remar	ks				2	16 89 Calen
83600						
FOR OCD US	E Date () Wher Notifie	ed	Phone or L	etter?	Initals

ANALYT:	CATIONS E MEQ.	PPM	DET. LIMIT	ANALYTE	ANIONS MEQ.	PPM	DET. LIMIT
Ca Mg Na K	199.60 125.67 1861.68 37.72	4000.00 1530.00 42800.00 1475.00	<3.0 <0.3 <10.0 <0.3	HC03 SO4 CL	5.42 49.48 2087.45	331.00 2375.00 74000.00	
Mn Fe	0.00 0.00	0.00 0.00		NO3 C03 NH3 PO4	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	
SUMS	2224.67	49805.00			2142.35	76706.00	
	Dissolve lance =	d Solids= / 103.84%				= 8800094	

VE DERCE FEB 23 1983 CIL CONSERVATION DIVISION OIL CONSERVATION DIVISION SANTA FE

• *

, ¢

.

:,

Interview New Macroscope Base and Several Severa		-			
The provide in the product of the p		SCIENTIFIC LABORATORY			
Date //9/87 Lab User Secsived //9/87 Lab Code M 82235 Other: COLLECTION DATE & TIME: EX 2011 13 13 43 COLLECTOR BY: COLLECTOR BY: COLLECTOR BY: COLLECTOR BY: COLLECTED BY: BOYCP Mark and the part COLLECTOR BY: COLLECTOR BY: COLLECTOR BY: COLLECTED BY: BOYCP Mark and the part COLLECTOR BY: COLLECTOR BY: COLLECTOR BY: COLLECTED BY: BOYCP Mark and the part COLLECTOR BY: STE LOCATION: COLLECTOR BY: STE LOCATION: COLLECTOR BY: STE LOCATION: COLLECTOR BY: STE LOCATION: STE LOCATION: COLLECTOR BY: STE LOCATION: COLLECTOR BY: STE LOCATION: COLLECTOR BY: STE LOCATION: COLLECTOR BY: COLECTOR BY:					
Baceived ///2015/00.2012 Code X 82235 Cother: COLLECTION DATE & TIME: XX 87 91 dd h3 43 Collection SITE DESCRIPTION SOLLECTED BY: XX 87 91 dd h3 43 Collection SITE DESCRIPTION COLLECTED BY: XX 87 91 dd h3 43 Collection SITE DESCRIPTION Collection XX 87 92 XX 87 92 XX 87 92 Collection XX 87 92 XX 87 92 XX 87 92 Collection XX 87 92 XX 87 92 XX 87 92 Collection XX 87 92 XX 87 92 XX 87 92 ENVIRONMENTAL BUREAU MAR 1 (15-10) County: 2000 County: 2000 SANTA FC, NM 87504-2088 Township, Rage, Sector Tray: (1000624540) XX 87 92 ATTN: Bailed Pump Water Level: Discharge: Sample Type: (1000624540) SAMPLING CONDITIONS: LATITUDE, LONCITUDE:		·····	****		
COLLECTION DATE & TIME: EVENT MADE STATE COLLECTION SITE DESCRIPTION COLLECTED BY: BOYCH Made State ASD 134 COLLECTED BY: BOYCH Made State ASD 243 ENVIRONMENTAL BUREAU MARK 1:100 STATE LOCATION: State Land Office Bldg: FO BOX 2088 SANTA FZ, NM 87504-2088 SANTA FZ, NM 87504-2088 Township, Range, Section, Trad; (1000622450) ATTIN: - BOYCH MADE State Dipped Tap Water Level: Discharge: SAMPLE FIELD TONS:: IATITUDE, LONGITUDE: IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII				X1 82235	- Other:
COLLECTED BY: Bayer Mandarsen Carlow CO: MARK 1 (1997) ENVIRONMENTAL BUREAU MARK 1 (1997) State Land Office Bldg: / DP Box 2088 SANTA FF, NM 87504-2088 SANTA FF, NM 87504-2088 Testeley Top Box 2088 ATTN: - Regression Tradition Traditradition Tradition Tradition Tradition Tradition Tradition Tradit			XX mm dd hh m		
Bayer Mark 1: 100 ENVIRONMENTAL BUREAU MAK 1: 100 MAK 1: 100 ENVIRONMENTAL BUREAU MM OIL CONSERVATION DIVISIONS MATION DIVISIONS FRANTION WELL CODE: SITE LOCATION: COUNTY: ATTN: A.G.G.A. Bailed Fump Bailed Fump Water Level: Discharge: Sampling Conductivity (Uncorr.) Water Temp. (00010) Conduct			89 01 15 13 4.	\underline{s} <u>Loc</u>	Offills Lispesal
ENVIRONMENTAL BUREAU MAR 17 19-7 State Land Office Bldg: TO BOX 2088 SITE LOCATION: SANTA FE, NM 87504-2088 Township, Range Section Tray: (IONOSE24540) ATTN: ATTN: Bailed Pump Water Level: Discharge: Sample Type: Monorphile Filtered Discharge: Sample Type: Discharge: Sample Type: Ouductivity (Uncorr.) Water Level: Dipped Tap Telephone Soc With Yater Mark box next to metal if AA Non-Filtered Silver Sample Filtered Silver Silver Silver Sample Filtered Silver Sample Filtered Silver Sample Filtered Silver Silver Silver Silver Silver	OFFECLE	BAR ROUCR	Andorson OS	the the	Concer DITEL
ENVIRONMENTAL BUREAU MAR 1 1 1977 STEL LOCATION: SITE LOCATION: STEL LONDERVATION DIVISIONERVATION DIVISIONERVATIONERVATIONERVATION DIVISIONERVATION DIVISIONERVATION DIVISIONERVATION DIVISIONERVATION DIVISIONERVATION DIVISIONERVATION DIVISIONERVATION DIVISIONERVATIO			VIJESTESTESTEN	jenn	
ENVIRONMENTAL BUREAU IIII NM OIL CONSERVATION DIVISION ENVATION DIVISION County:CU	:0:				
NN OIL CONSERVATION DIVISION ENVATION DIVISION County: <u>PRAV4</u> State Land Office Bldg., PO Box 2088 Township, Rase, Section Trad; (10N08224342) SANTA FE, NM 87504-2088 Township, Rase, Section Trad; (10N08224342) ATTN:			MAK 1 .	· · · · · · · · · · · · · · · · · · ·	
State Land Office Bldg ¹¹ , P0 Box 2088 Township, Rage, Section, Test; (IDNOE224362) ATTN: A. RAPE, NM 87504-2088 Township, Rage, Section, Test; (IDNOE224362) ATTN: A. RAPE, Section, Test; (IDNOE224362) [/1215+3]2[2]4+[6+3]3[/] TELEPRONE: 827-96812 STATION/ WELL CODE: [/1215+3]2[2]4+[6+3]3[/] SAMPLING CONDITIONS: IATITUDE, LONGITUDE: [/1215+3]2[2]4+[6+3]3[/] SAMPLE OCOMMENTS: Discharge: Sample Type: Attrive Conductivity (Uncorr.) Water Level: Discharge: Conductivity at 25°C (00094) TeleD COMMENTS:					
SANTA FE, NM 87504-2088 Townhip, Range, Section Track: (10NOE24342) ATTN:	NM U Stat	e Land Office H	lldg. PO Box 208	Budder County	Eddy
ATTN: C. KOLAR TELEPRONE: 827-\$812 IATITODE, IONCITUDE: IATITUDE, IONCITUDE: IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII				Township,	Range, Section, Tract: (10N06E24342)
TELEPHONE: 27-9812 STATION/ WELL CODE: 111111111111111111111111111111111111	እ ጥጥ እ	. A Roupe	Q		715+31012+4 16+3131/1
IATITUDE, LONGITUDE:			STATIO	N/ WELL CODE:	
AMPLING CONDITIONS: Discharge: Sample Type: Bailed Pump Water Level: Discharge: Sample Type: X Dipped Tap Addentity Conductivity (Uncorr.) Water Temp. (00010) Conductivity at 25°C Y AB, Doc) µmho 5 °c (00094) YTELD COMMENTS: IAB ANALYSIS REQUESTED: (00094) Check proper boxes: X IAB ANALYSIS REQUESTED: Check proper boxes: X ICAP Scan Marchaddit Silver ICAP VALUE Strontium ICAP Analyst IA VALUE Strontium I.0 IAA VALUE					
Bailed Pump Water Level: Discharge: Sample Type: Kd O 4000 Conductivity(Uncorr.) Water Temp. (00010) Conductivity at 25°C 7 AB, BOD µmho 5 °C (00094) 7 AB, BOD µmho 5 °C µmho 7 Yetter Xeter Yetter 7 Preserved w/HNO3 Preserved w/HNO3 Preserved w/HNO3 8 Preserved w/HNO3 Preserved w/HNO3 Mark box next to metal if AA 10minum AA VALUE Silicon 12. 11minum AA VALUE Silicon 12. 12 AA VALUE Silicon 12. 12 AA VALUE Silver 1.0 12 Yet Yet Xet 13 AGO SH MA Silver 1.0		CONDITIONS:	LATITUDE, LONGI		
Witcould (00400) Conductivity (Uncorr.) Water Temp. (00010) Conductivity at 25°C T 10,000 pmho 5°C (00094) Preserved w/HNO3 IAB ANALYSIS REQUESTED: pmho pmho SAMPLE FIELD TREATMENT IAB ANALYSIS REQUESTED: mark box next to metal if AA Check proper boxes: MPF: Water Mark box next to metal if AA Non-Filtered Filtered Siltcon 12. Statement ICAP VALUE AA VALUE Siltcon 12. Statement ICAP VALUE AA VALUE Silter	🗍 Ва	iled 🗌 Pump	Water Level:	Discharge:	
7 48,000 µmho 5 °c (00094) PTELD COMMENTS: IAB ANALYSIS REQUESTED: Check proper boxes: IAB ANALYSIS REQUESTED: Check proper boxes: IAB ANALYSIS REQUESTED: MPN: Water Imple: WPF: Water Preserved w/HNO3 Preserved w/HNO3 Non-Filtered Filtered ANALYTICAL RESULTS (MG/L) CLEMENT ICAP VALUE Silicon 12. Identinum 4.0 Silver 5.0 Coron 5.5 Coron 5.5 Coron 5.5 Coron 5.5 Coron 5.5 Coron 5.5 <td></td> <td></td> <td>(lincorr) Mator</td> <td></td> <td>Reb</td>			(lincorr) Mator		Reb
TIELD COMMENTS:			(UNCOLL.) Water		(00094)
AMPLE FIELD TREATMENT IAB ANALYSIS REQUESTED: Check proper boxes: ICAP Scan MEN: Water Preserved w/HNO3 Mark box next to metal if AA Non-Filtered Filtered is required. ANALYTICAL RESULTS (MG/L) ANALYTICAL RESULTS (MG/L) ILEMENT ICAP VALUE AA VALUE Iluminum Af <		18,00	Po µmho	<u> </u>	
Check proper boxes: ICAP Scan MPN: Water Preserved w/HNO3 Mark box next to metal if AA Non-Filtered Filtered Mark box next to metal if AA Non-Filtered Filtered Mark box next to metal if AA Strengthered ANALYTICAL RESULTS (MG/L) ANALYTICAL RESULTS (MG/L) AA VALUE Strengthered Silicon Strengthered Silicon Strengthered Silver Strontium AA VALUE Strontium Strontium Strontium Ico Strontium Strontium Strontium Strontium <td>IELD CC</td> <td>DMMENTS:</td> <td>/ </td> <td></td> <td>,</td>	IELD CC	DMMENTS:	/ 		,
Check proper boxes: ICAP Scan MPN: Water Preserved w/HNO3 Mark box next to metal if AA Non-Filtered Filtered Mark box next to metal if AA Non-Filtered Filtered Mark box next to metal if AA Strength AA VALUE ELEMENT ICAP VALUE AA VALUE Aluminum AA VALUE AA VALUE Silicon I2. Barium C.O. MA Silver Silver Baryllium C.O. Strontium Ioo. IOO. Baryllium C.O. Strontium Ioo. Ioo. Cadmium C.O. Strontium Ioo. Ioo. Chromium Stool Zinc Coo. Coo. Copper C.O. Mercury Xoo. Coo. Colydenum C.O. Coo.		· · · · · · · · · · · · · · · · · · ·		······································	
WPN: Water WPF: Water X ICAP Scan Preserved w/HNO3 Filtered Mark box next to metal if AA Non-Filtered ANALYTICAL RESULTS (MG/L) ANALYTICAL RESULTS (MG/L) AA VALUE Strent AA VALUE Aluminum AA VALUE Aarum Silicon Soron 28. Chronium A.O Chronium A.O Aluminum Strontium Jo Cath AA Soron 28. Chronium A.O Chronium A.O Aluminum Strontium Arsenic Scoro Solat Solat Solat				LAB ANALYSIS	REQUESTED:
Non-Filtered Filtered is required. ANALYTICAL RESULTS (MG/L) Strement ICAP VALUE AA VALUE ELEMENT ICAP VALUE AA VALUE Silicon I2. Silicon I2. Barium Control of the bar of the	WPN	I: Water	WPF: Water	ICAP Sca	a
ANALYTICAL RESULTS (MG/L) BLEMENT ICAP VALUE AA VALUE ELEMENT ICAP VALUE AA VALUE Sarium A.O AA Silicon 12.	Preserv	ed w/HNO3 Pre			
CLEMENT ICAP VALUE AA VALUE ELEMENT ICAP VALUE AA VALUE Aluminum Ad Silicon 12. Barium I.0 ICAP / A Silicon 12. Beryllium I.0 ICAP / A Silicon 12. Beryllium I.0 ICAP / A Silicon ICAP / A Barium I.0 ICAP / A Silicon ICAP / A Beryllium I.0 ICAP / A Strontium IOO. Cadmium I.0 ICAP / A Strontium IOO. Calcium 3360 ICAP / A Arsenic ICAP / O Cobalt ICAP / A ICAP / A ICAP / A ICAP / A Copper ICAP / A ICAP / A ICAP / A ICAP / A Copper ICAP / A Icagnesium //480. ICAP / A Ickel ICAP / A	Non-Fil	tered F1.	tered	is required	•
Iuminum Af Silicon 12. Barium A.0 AA Silver Beryllium <1.0					
Barium I.0 IA Silver I.0 Beryllium I.0 IA Silver I.0 Boron 28. IA Strontium I.00. Cadmium I.0 IA Strontium I.00. Cadmium I.0 III III IIII IIII Cadmium IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII			AA VALUE		
Beryllium 21.0 4944 4 Tin 100. Cadmium 41.0 4944 7 Vanadium 100. Calcium 3360 Vanadium 41.0 400 Vanadium 41.0 400 Vanadium 41.0 40.5 Vanadium 41.0 40.5 Vanadium 40.5 Va					
Cadmium Cl.0 Calcium 3360 Chromium Cl.0 Cobalt Co.5 Copper Co.5 Conn Selenium Mercury Co.co.2 Mercury Co.co.2 Mercury Co.co.2 Conn Co.co.2 <td>-</td> <td>1m <1.0 < +++ 1</td> <td>A</td> <td>Strontium</td> <td>100.</td>	-	1m <1.0 < +++ 1	A	Strontium	100.
alcium 3360 arromium 1.0 sobalt \$0.5 sopper \$1.0 \$1.0 \$1.0 agnesium 1420. anganese 1.5 olybdenum \$1.0 tickel \$1.0 ************************************			Δ 🖂 🔤		
chromium <1.0					
opper Mercury <td>hromium</td> <td>n <1.0 <<!--</td--><td></td><td>Arsenic</td><td></td></td>	hromium	n <1.0 < </td <td></td> <td>Arsenic</td> <td></td>		Arsenic	
ron 5.5 lagnesium //480. lagnesium //480. langanese /.5 solybdenum <1.0					
dead .0</td lagnesium /480. langanese /.5 olybdenum olybdenum ickel AB COMMENTS: Or OCD Use: ate Owner Notified: ICAP Analyst Phone or Letter?		5.5		Mercury	
anganese 1.5 olybdenum <1.0		<1.0			
colybdenum <1.0					H
AB COMMENTS: Or OCD Use: Date Owner Notified: Phone or Letter?	lolybder	1.0	······································		ă
Phone or Letter?	lickel	<1.0			
Phone or Letter?	AB COM	CENTS:			AIGEST
Date Owner Notified: ICAP Analyst AA Reviewer Aug. Mg					
Phone or Letter?			TCAD Ana	lyst MA	Reviewer Mun Mu
Initials: Date Analyzed 2/27/89 Date Reveived 3/13/8		e or Letter?			
		Initials:	Date Ana	lyzed 2/27/89	Date Reveived 5/13/6
5			:		

STATE OF NEW MEXICO



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

GARREY CARRUTHERS

November 3, 1987

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

Mr. Ray Westall Loco Hills Water Disposal Co, P. O. Box 68 Loco Hills, New Mexico 88255

Dear Mr. Westall:

Enclosed are the lab analyses of samples taken from Ponds #1 and #2 on August 28, 1987. The reports show typical values for purgeable aromatics and no detectable halogenated hydrocarbons in the samples. These analyses indicate that acceptable wastes are being disposed of at your facility. If you have any questions, please contact me at (505) 827-5884.

Sincerely,

Balle Jami Bailey

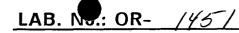
Geologist

xc: OCD-Artesia

JB:sl

۵ سه ۱۹۵۰ میلیون که داند و دانده کور میکند و در میشوند. ۲		
	SCIENFIC LABORATO 700 Camino de Sal Albuquerque, NM 87106	lud NE
<u></u>		wpw
REPORT TO:	David Boyer	S.L.D. No. OR- 1451 A4B
	N.M. Oil Conservation Division	DATE REC. $9 - 2 - 87$
	P. O. Box 2088	
	Santa Fe, N.M. 87504-2088	PRIORITY
PHONE(S):	827-5812	USER CODE: $ \frac{3}{2} ^2 \frac{3}{5} ^5$
SUBMITTER:	David Boyer	CODE: 12 6 0
SAMPLE COLLE	ECTION CODE: (YYMMDDHHMMIII) 8710	18281/1/2012181
SAMPLE. TYPE:	WATER K, SOIL , FOOD , OTHER:	CODE:
COUNTY:	dry; CITY: Locobie	
LOCATION COD	DE: (Township-Range-Section-Tracts)	-3 0 E+1 6+3 3 1 (10N06E24342)
ANALYSES REC	QUESTED: Please check the appropriate box(es) bel	ow to indicate the type of analytical screens
required. Whenew	ver possible list specific compounds suspected or rec	
(753) Alipha	PURGEABLE SCREENS atic Purgeables (1-3 Carbons)	EXTRACTABLE SCREENS (751) Aliphatic Hydrocarbons
	atic & Halogenated Purgeables	(760) Organochlorine Pesticides
(765) Mass	Spectrometer Purgeables	(755) Base/Neutral Extractables
[] (766) Trihal	omethanes	(758) Herbicides, Chlorophenoxy acid
Other	r Specific Compounds or Classes	(759) Herbicides, Triazines
<u> </u>		(760) Organochlorine Pesticides (761) Organophosphate Pesticides
		(767) Polychlorinated Biphenyls (PCB's)
······································		(764) Polynuclear Aromatic Hydrocarbons
		🔲 (762) SDWA Pesticides & Herbicides 🧹 🤇
Remarks:	ease make detection	limit For halogenated
Q.S	Towas possible, tow	unomatic delection himit
FIELD DATA:	Not as important.	
pH=; C	onductivity=umho/cm at°C; Chlor	ine Residual=mg/l
Dissolved Oxyger	m=mg/l; Alkalinity=mg/l; Flow Rat	e /
Depth to water	ft.; Depth of wellft.; Perforation I	ntervalft.; Casing:
Sampling Location	on, Methods and Remarks (i.e. odors, etc.) #1 (NW Wates Pond)	Loco Hills Disposal facility
Son	re oil on pont. Som	new Srom North Sinle, menstentes
activities.(signatu	ire collector): K K KOM	Method of Shipment to the Lab: <u>and</u> <u>Hand Couries</u>
	npanies Septum Vials, / Glass Jugs, an reserved as follows:	na/or
NP:	No Prefervation; Sample stored at room tempera	ture.
	Sample stored in an ice bath (Not Frozen).	
P-Na SO	Sample Preserved with Sodium Thiosulfate to rem STODY	nove chlorine residual.
	his sample was transferred from	
at (location)		
the statements i	in this block are correct. Evidentiary Seals: Not Se	aled Seals Intact: Yes No
Signatures		
For OCD L	Jse: Date Owner Notified 11/3/87	Phone or Letter? Initials

ANALYSES PERFORMED



THIS PAGE FOR LABORATORY RESULTS ONLY

This sample was tested using the analytical screer	ning method(s)	checked below:	
PURGEABLE SCREENS		EXTRACTABLE SCREENS	
(753) Aliphatic Purgeables (1-3 Carbons)		(751) Aliphatic Hydrocarbons	
(1754) Aromatic & Halogenated Purgeables		(760) Organochlorine Pesticides	
(765) Mass Spectrometer Purgeables		(755) Base/Neutral Extractables	
[] (766) Trihalomethanes		(758) Herbicides, Chlorophenoxy acid	
Other Specific Compounds or Classes		(759) Herbicides, Triazines	
		[] (760) Organochlorine Pesticides	
	· · · · · · · · · · · · · · · · · · ·	(761) Organophosphate Pesticides	
		(767) Polychlorinated Biphenyls (PCB's)	
		(764) Polynuclear Aromatic Hydrocarbons	
		(762) SDWA Pesticides & Herbicides	
		L RESULTS	
<u>et """</u>			
COMPOUND(S) DETECTED	CONC.	COMPOUND(S) DETECTED	CONC. [PPB]
A. M.		In An In H	
aromatic purquebles *	·	halogenated purgeables +	N.D.
Benzenel	4.40		
Taliene	425	1	
ethythensene	55		
engenengene			
pt xyline	20		
m-xyline	70		
a- xuline	36		
	1		
	ł		
			
* DETECTION LIMIT * *	10-48/2	+ DETECTION LIMIT + +	1-49/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 UNCONF	IRMED AND/	OR WITH APPROXIMATE QUANTITATION	
LABORATORY REMARKS:	- <u>ing</u>	······································	
		<u> </u>	<u> </u>
		, and a gap and a gap the symptotic sector of the sector o	
	,	TICAL PERSONNEL	
Seal(s) Intact: Yes No Seal(s) broken by		Acales date:	
I certify that I followed standard laboratory procedu			d and
that the statements on this page accurately reflect t		in all	
Date(s) of analysis: 9/16/37		1	
I certify that I have reviewed and concur with the	analytical resul	to for this sample and with the statements in thi	s block.
Reviewers signature: _ R Meyer Lein			
<u>_</u>			

	SCINTIF	IC LABORAT	IURY DI	V HON 🚎 🖉 87- 1452 -C 🏧
		700 Camino de S		76/1452-0
	Albu	querque, NM 871	06 841-257	
REPORT TO:	David Boyer			S.L.D. No. OR- 1452 A+1
•	N.M. Oil Conserva	tion Division		DATE REC. 9-2-87
	P. O. Box 2088	******		· · · · · · · · · · · · · · · · · · ·
	Santa Fe, N.M. 87	504-2088	······	PRIORITY
HONE(S):	327-5812		USER	CODE: 8 2 2 3 5
UBMITTER:	David Boyer			CODE: 12 16 10 1
	CTION CODE: (YYMMDD)	HHMMIII) 1 8171	0121215	
	WATER X, SOIL .			
	foly; o			
				$\frac{1}{2} + \frac{1}{7} + \frac{4}{7} + \frac{1}{1} $ (10N06E24342)
	UESTED: Please check the er possible list specific com	•••••		ate the type of analytical screens
	PURGEABLE SCREENS		•	CTRACTABLE SCREENS
	tic Purgeables (1-3 Carbon	•		Aliphatic Hydrocarbons
	tic & Halogenated Purgeabl	les		Organochlorine Pesticides
(765) Mass (766) Trihal	Spectrometer Purgeables		· · · · ·	Base/Neutral Extractables Herbicides, Chlorophenoxy acid
	Specific Compounds or Cl			Herbicides, Triazines
Q III CI		24404	(759)	
٦		28865		
] 		28965	(760)	Organochlorine Pesticides Organophosphate Pesticides
		24525	(760) (761)	Organochlorine Pesticides
	· · · · · · · · · · · · · · · · · · ·	28865	(760) (761) (767) (767) (764)	Organochlorine Pesticides Organophosphate Pesticides Polychlorinated Biphenyls (PCB's) Polynuclear Aromatic Hydrocarbons
			(760) (761) (767) (767) (764)	Organochlorine Pesticides Organophosphate Pesticides Polychlorinated Biphenyls (PCB's)
			(760) (761) (767) (767) (764)	Organochlorine Pesticides Organophosphate Pesticides Polychlorinated Biphenyls (PCB's) Polynuclear Aromatic Hydrocarbons
			(760) (761) (767) (767) (764)	Organochlorine Pesticides Organophosphate Pesticides Polychlorinated Biphenyls (PCB's) Polynuclear Aromatic Hydrocarbons
		28865	(760) (761) (767) (767) (764)	Organochlorine Pesticides Organophosphate Pesticides Polychlorinated Biphenyls (PCB's) Polynuclear Aromatic Hydrocarbons
TELD DATA:	onductivity=umho/cr		(760) (761) (761) (767) (764) (762)	Organochlorine Pesticides Organophosphate Pesticides Polychlorinated Biphenyls (PCB's) Polynuclear Aromatic Hydrocarbons SDWA Pesticides & Herbicides
PIELD DATA:		m at°C; Ch	(760) (761) (761) (767) (764) (762)	Organochlorine Pesticides Organophosphate Pesticides Polychlorinated Biphenyls (PCB's) Polynuclear Aromatic Hydrocarbons SDWA Pesticides & Herbicides
PIELD DATA: DH=; Co Dissolved Oxyger	onductivity=umho/cr =mg/l; Alkalinity=	m at°C; Chl mg/l; Flow R	(760) (761) (767) (764) (764) (762) lorine Residual:	Organochlorine Pesticides Organophosphate Pesticides Polychlorinated Biphenyls (PCB's) Polynuclear Aromatic Hydrocarbons SDWA Pesticides & Herbicides mg/l
FIELD DATA: DH=; Co Dissolved Oxygen Depth to water	onductivity=umho/cr =mg/l; Alkalinity= ft.; Depth of well_	m at°C; Chl mg/l; Flow R ft.; Perforation	(760) (761) (767) (764) (764) (762) lorine Residual:	Organochlorine Pesticides Organophosphate Pesticides Polychlorinated Biphenyls (PCB's) Polynuclear Aromatic Hydrocarbons SDWA Pesticides & Herbicides
FIELD DATA: DH=; Ca Dissolved Oxygen Depth to water Sampling Locatio	onductivity=umho/cr =mg/l; Alkalinity= ft.; Depth of well n, Methods and Remarks (m at ^o C; Chl mg/l; Flow R ft.; Perforation i.e. odors, etc.)	(760) (761) (767) (764) (762) (762) (762) (762) (762) (762) (762) (764) (764) (766) (767) (764) (762) (Organochlorine Pesticides Organophosphate Pesticides Polychlorinated Biphenyls (PCB's) Polynuclear Aromatic Hydrocarbons SDWA Pesticides & Herbicides mg/l ft.; Casing:
PIELD DATA: DH=; Co Dissolved Oxygen Depth to water Sampling Locatio	onductivity=umho/cr =mg/l; Alkalinity= ft.; Depth of well n, Methods and Remarks (m at ^o C; Chl mg/l; Flow R ft.; Perforation i.e. odors, etc.)	(760) (761) (767) (764) (762) (762) (762) (762) (762) (762) (762) (764) (764) (766) (767) (764) (762) (Organochlorine Pesticides Organophosphate Pesticides Polychlorinated Biphenyls (PCB's) Polynuclear Aromatic Hydrocarbons SDWA Pesticides & Herbicides mg/l ft.; Casing:
FIELD DATA: pH=; Ca Dissolved Oxygen Depth to water Sampling Locatio	onductivity=umho/cr =mg/l; Alkalinity= ft.; Depth of well n, Methods and Remarks (m at ^o C; Chl mg/l; Flow R ft.; Perforation i.e. odors, etc.)	(760) (761) (767) (764) (762) (762) (762) (762) (762) (762) (762) (764) (764) (766) (767) (764) (762) (Organochlorine Pesticides Organophosphate Pesticides Polychlorinated Biphenyls (PCB's) Polynuclear Aromatic Hydrocarbons SDWA Pesticides & Herbicides mg/l
FIELD DATA: pH=; Ca Dissolved Oxygen Depth to water Sampling Location Omb	onductivity=umho/cr =mg/l; Alkalinity= ft.; Depth of well n, Methods and Remarks (Walth Service	m at°C; Chl mg/l; Flow R ft.; Perforation i.e. odors, etc.)	(760) (761) (767) (764) (762) (762) (762) (762) (762) (762) (762) (764) (764) (764) (764) (764) (764) (764) (764) (765) (764) (764) (765) (764) (765) (764) (764) (765) (764) (765) (764) (765) (764) (765) (765) (764) (765) (765) (765) (764) (765) (765) (765) (765) (765) (765) (766) (Organochlorine Pesticides Organophosphate Pesticides Polychlorinated Biphenyls (PCB's) Polynuclear Aromatic Hydrocarbons SDWA Pesticides & Herbicides mg/1 ft.; Casing:
FIELD DATA: DH=; Cd Dissolved Oxygen Depth to water Sampling Location Depth Location Control (1) Certify that the control (1) Certify the control (1) Ce	onductivity=umho/cr =mg/l; Alkalinity= ft.; Depth of well n, Methods and Remarks (Watth Summer e results in this block acc	m at°C; Chl ft.; Perforation i.e. odors, etc.) <u>`@ct.</u> urately reflect the res	(760) (761) (767) (764) (762) (762) (762) (762) (762) (762) (762) (762) (764) (764) (766) (767) (767) (767) (767) (767) (764) (762) (764) (762) (Organochlorine Pesticides Organophosphate Pesticides Polychlorinated Biphenyls (PCB's) Polynuclear Aromatic Hydrocarbons SDWA Pesticides & Herbicides mg/l ft.; Casing: ft.; Casing: ft.; casing:
PIELD DATA: DH=; Co Dissolved Oxygen Depth to water Sampling Location Control Control Control Control Control Control Control Control Control Control Control Control Control Control Cont	e results in this block acc e collector):	m at°C; Chl mg/l; Flow R ft.; Perforation i.e. odors, etc.) 20) - O(L) urately reflect the res	(760) (761) (767) (764) (762) (762) (762) (762) (762) (762) (762) (764) (766) (767) (764) (762) (Organochlorine Pesticides Organophosphate Pesticides Polychlorinated Biphenyls (PCB's) Polynuclear Aromatic Hydrocarbons SDWA Pesticides & Herbicides mg/1 ft.; Casing:
PIELD DATA: DH=; Co Dissolved Oxygen Depth to water Sampling Location Control	e results in this block acc e collector):	m at°C; Chl mg/l; Flow R ft.; Perforation i.e. odors, etc.) 20) - O(L) urately reflect the res	(760) (761) (767) (764) (762) (762) (762) (762) (762) (762) (762) (764) (766) (767) (764) (762) (Organochlorine Pesticides Organophosphate Pesticides Polychlorinated Biphenyls (PCB's) Polynuclear Aromatic Hydrocarbons SDWA Pesticides & Herbicides mg/l ft.; Casing: ft.; Casing: d analyses, observations and d of Shipment to the Lab: <u>Hard Carme</u>
FIELD DATA: DH=; Co Dissolved Oxygen Depth to water Sampling Location Control C	e results in this block acc main according to the second panies	m at°C; Chi mg/l; Flow R ft.; Perforation i.e. odors, etc.) <u>0</u> Q urately reflect the res <u>5</u> Glass Jugs, stored at room tempe	(760) (761) (761) (767) (764) (762) (762) (762) (762) (762) (762) (762) (764) (764) (764) (764) (765) (764) (764) (767) (764) (764) (767) (764) (767) (764) (762) (7	Organochlorine Pesticides Organophosphate Pesticides Polychlorinated Biphenyls (PCB's) Polynuclear Aromatic Hydrocarbons SDWA Pesticides & Herbicides mg/l ft.; Casing: ft.; Casing: ft.; Casing: d analyses, observations and d of Shipment to the Lab: <u>Hand Came</u>
PIELD DATA: DH=; Co Dissolved Oxygen Depth to water Sampling Location Certify that the certify the certify the certify the certify the certify the certify the certify the certify the certify the certify	e results in this block acc mainsSeptum Vialueserved as follows: No Preservation; Sample Sample stored in an ice	m at°C; Chi g/l; Flow R ft.; Perforation i.e. odors, etc.) <u>o</u> urately reflect the res <u>b</u> <u>C</u> <u>C</u> <u>C</u> urately reflect the res <u>c</u> <u>C</u> <u>C</u> <u>C</u> <u>C</u> <u>C</u> urately reflect the res <u>c</u> <u>C</u>	(760) (761) (761) (767) (764) (762) (762) (762) (762) (762) (762) (762) (762) (764) (764) (767) (764) (767) (764) (767) (764) (767) (764) (767) (764) (762) (772) (772) (772) (772) (772) (772) (772) (772) (7	Organochlorine Pesticides Organophosphate Pesticides Polychlorinated Biphenyls (PCB's) Polynuclear Aromatic Hydrocarbons SDWA Pesticides & Herbicides mg/l ft.; Casing: ft.; Casing:
PIELD DATA: DH=; Co Dissolved Oxygen Depth to water Sampling Location Control C	e results in this block acc main ductor): 	m at°C; Chi g/l; Flow R ft.; Perforation i.e. odors, etc.) <u>o</u> urately reflect the res <u>back</u> s, Glass Jugs, stored at room tempe bath (Not Frozen).	(760) (761) (761) (767) (764) (762) (762) (762) (762) (762) (762) (762) (762) (764) (764) (767) (764) (767) (764) (767) (764) (767) (764) (767) (764) (762) (772) (772) (772) (772) (772) (772) (772) (772) (7	Organochlorine Pesticides Organophosphate Pesticides Polychlorinated Biphenyls (PCB's) Polynuclear Aromatic Hydrocarbons SDWA Pesticides & Herbicides mg/l ft.; Casing: ft.; Casing:
PIELD DATA: DH=; Co Dissolved Oxygen Depth to water Sampling Location Control Control Control Control Control Control Control Control Chain OF CONTROL CHAIN OF CONTROL CONTROL CONTROL CHAIN OF CONTROL CON	e results in this block acc work and Remarks (<u>work and Remarks</u>) e results in this block acc e collector): panies Depting Viality eserved as follows: No Preservation; Sample Sample stored in an ice Sample Preserved with So STOD Y	m at°C; Chl gl; Flow R ft.; Perforation i.e. odors, etc.) urately reflect the res urately reflect the res s,Glass Jugs, stored at room tempe bath (Not Frozen). odium Thiosulfate to	Interval Methoc and/or mature. remove chloring (760) (761) (761) (761) (761) (762) (762) (762) (762) (762) (764) (762) (764) (767) (764) (767) (764) (767) (764) (762) (762) (764) (762) (772) (772) (772) (772) (772) (772) (772) (772)	Organochlorine Pesticides Organophosphate Pesticides Polychlorinated Biphenyls (PCB's) Polynuclear Aromatic Hydrocarbons SDWA Pesticides & Herbicides =mg/l ft.; Casing: ft.; Casing: ft.; Casing: ft.; Casing: ft.; Casing: ft.; Casing: ft.; Casing: d analyses, observations and l of Shipment to the Lab: <u>How Comm</u> e residual.
PIELD DATA: DH=; Co Dissolved Oxygen Depth to water Depth to water Sampling Location Depth to water Construction Construction Construction Depth to water Depth	e results in this block acc mains	m atC; Chi fl; Flow R ft.; Perforation i.e. odors, etc.) <u>O</u> urately reflect the res <u>D</u> s,Glass Jugs, stored at room tempe bath (Not Frozen). odium Thiosulfate to from	lorine Residual: .ate Interval ults of my fiel Methoc and/or remove chlorine	Organochlorine Pesticides Organophosphate Pesticides Polychlorinated Biphenyls (PCB's) Polynuclear Aromatic Hydrocarbons SDWA Pesticides & Herbicides mg/l ft.; Casing: ft.; Casing: ft.; Casing: ft.; Casing: ft.; Casing: ft.; Casing: ft.; Casing: ft.; Casing: ft.; Casing: ft.; Casing: ft.; Casing:
FIELD DATA: pH=; Co Dissolved Oxygen Depth to water Sampling Location Depth to water Sampling Location Contained to the second Samples were proposed NP: P-Ice P-Na S O CHAIN OP CU	e results in this block acc work and Remarks (<u>work and Remarks</u>) e results in this block acc e collector): panies Definition panies Sample stored in an ice Sample Preserved with So STOD Y	m atC; Chi fl; Flow R ft.; Perforation i.e. odors, etc.) <u>O</u> urately reflect the res <u>D</u> s,Glass Jugs, stored at room tempe bath (Not Frozen). odium Thiosulfate to from	lorine Residual: .ate Interval ults of my fiel Methoc and/or remove chlorine	Organochlorine Pesticides Organophosphate Pesticides Polychlorinated Biphenyls (PCB's) Polynuclear Aromatic Hydrocarbons SDWA Pesticides & Herbicides mg/l ft.; Casing: ft.; Casing: ft.; Casing: ft.; Casing: ft.; Casing: ft.; Casing: ft.; Casing: ft.; Casing: ft.; Casing: ft.; Casing: ft.; Casing:
FIELD DATA: pH=; Co Dissolved Oxygen Depth to water Sampling Location I certify that the activities.(signatu This form accom Samples were pr NP: P-Ice P-Na S O CHAIN OF CU: I certify that the at (location)	e results in this block acc mains	m atC; Chl G; Flow R ft.; Perforation i.e. odors, etc.) <u></u> urately reflect the res <u></u> s,Glass Jugs, stored at room tempe bath (Not Frozen). odium Thiosulfate to from	(760) (761) (761) (767) (764) (762) (762) (762) (762) (762) (762) (762) (762) (762) (764) (767) (764) (767) (764) (767) (767) (764) (767) (767) (764) (767) (764) (762) (772) (772) (772) (772) (772) (772) (772) (772) (7	Organochlorine Pesticides Organophosphate Pesticides Polychlorinated Biphenyls (PCB's) Polynuclear Aromatic Hydrocarbons SDWA Pesticides & Herbicides mg/l ft.; Casing: ft.; Casing: ft.; Casing: ft.; Casing: ft.; Casing: ft.; Casing: ft.; Casing: ft.; Casing: ft.; Casing: ft.; Casing: ft.; Casing:
FIELD DATA: pH=; Ca Dissolved Oxygen Depth to water Sampling Location	e results in this block acc mains	m at°C; Chi g(; Flow R ft.; Perforation i.e. odors, etc.) urately reflect the res s,Glass Jugs, stored at room tempe bath (Not Frozen). odium Thiosulfate to from widentiary Seals: Not	lorine Residual ate Interval ults of my fiel Methoc and/or rature. remove chloring Sealed Sealed	Organochlorine Pesticides Organophosphate Pesticides Polychlorinated Biphenyls (PCB's) Polynuclear Aromatic Hydrocarbons SDWA Pesticides & Herbicides

ى د مۇرىرى يېرىكى بېرىكى مەرىيە بەر بىرىغان بىرىغان بىرىغان بىرىغان بىرىغان بىرى يېرى يېرى يېرىكى بىرىكى بىرىك ب

ANALYSES PERFORMED

LAB. No .: OR- 1452

THIS PAGE FOR LABORATORY RESULTS ONLY This sample was tested using the analytical screening method(s) checked below: EXTRACTABLE SCREENS PURGEABLE SCREENS [] (753) Aliphatic Purgeables (1-3 Carbons) (751) Aliphatic Hydrocarbons (760) Organochlorine Pesticides (754) Aromatic & Halogenated Purgeables (755) Base/Neutral Extractables (765) Mass Spectrometer Purgeables (758) Herbicides, Chlorophenoxy acid [] (766) Trihalomethanes Other Specific Compounds or Classes (759) Herbicides, Triazines (760) Organochlorine Pesticides (761) Organophosphate Pesticides [] (767) Polychlorinated Biphenyls (PCB's) (764) Polynuclear Aromatic Hydrocarbons (762) SDWA Pesticides & Herbicides ANALYTICAL RESULTS CONC. COMPOUND(S) DETECTED CONC. COMPOUND(S) DETECTED [PPB] [PPB] alogenated suracables + 1.11. Ausalatter 38 52 T.R. alme T. R. TIR * 2.5-49/2 25-18/2 * DETECTION LIMIT * + DETECTION LIMIT ABBREVIATIONS USED: N D = NONE DETECTED AT OR ABOVE THE STATED DETECTION LIMIT T R = DETECTED AT A LEVEL BELOW THE STATED DETECTION LIMIT (NOT CONFIRMED) [RESULTS IN BRACKETS] ARE~UNCONFIRMED AND/OR WITH APPROXIMATE QUANTITATION LABORATORY REMARKS: CERTIFICATE OF ANALYTICAL PERSONNEL Seal(s) Intact: Yes No Q. 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: 9/16/87____. Analyst's signature: I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. nemo. ein Reviewers signature:

		TORY DIVION - 87- 1453 -C .
• • • • • • • • • • • • • • • • • • •	700 Camino de Albuquerque, NM 8	Salud NE
REPORT TO:	David Boyer	S.L.D. No. OR- 14.53 A4B
•	N.M. Oil Conservation Division	
•	P. O. Box 2088	
·	Santa Fe, N.M. 87504-2088	PRIORITY
PHONE(S):	327-5812	USER CODE: $\begin{vmatrix} 8 & 2 & 3 & 5 \end{vmatrix}$
SUBMITTER:	David Boyer	CODE: 12 6 0
SAMPLE COLLE	ection code: (Yymmddhhmmiii) <u>8 </u> 7	101812181/1315151 KB
SAMPLE TYPE:	WATER XI, SOIL , FOOD , OTHER	: CODE: /
	dez; CITY:; CITY:;	
LOCATION COL	DE: (Township-Range-Section-Tracts)	5 + 2 5 E + 17 + 4 1 (10N06E24342)
		below to indicate the type of analytical screens
required. Wheney	ver possible list specific compounds suspected of <u>PURGEABLE SCREENS</u>	r required. EXTRACTABLE SCREENS
	atic Purgeables (1-3 Carbons)	(751) Aliphatic Hydrocarbons
<u> </u>	atic & Halogenated Purgeables Spectrometer Purgeables	(760) Organochlorine Pesticides (755) Base/Neutral Extractables
(766) Trihal		(758) Herbicides, Chlorophenoxy acid
	r Specific Compounds or Classes	(759) Herbicides, Triazines
□		(760) Organochlorine Pesticides
	1	(761) Organophosphate Pesticides
H	······	(767) Polychlorinated Biphenyls (PCB's) (764) Polynuclear Aromatic Hydrocarbons
		(762) SDWA Pesticides & Herbicides
Remarks:		
FIELD DATA:		
pH=; C	onductivity= $3/80$ umho/cm at 24.9 °C; (Chlorine Residual=mg/l
Dissolved Oxyger	n=mg/l; Alkalinity=mg/l; Flow	Rate/
Depth to water	ft.; Depth' of wellft.; Perforation	on Intervalft.; Casing:
	on, Methods and Remarks (i.e. odors, etc.)	
Amo (Water Service - Below of	ade tank pecenes truck, wash.
_ water		
-	he results in this block accurately reflect the	
		Method of Shipment to the Lab: Hond Carries
	npanies Septum Vials, Glass Jug reserved as follows:	s, and/or
	No Preservation; Sample stored at room ten	perature.
	Sample stored in an ice bath (Not Frozen).	
	Sample Preserved with Sodium Thiosulfate t	o remove chlorine residual.
1		to
1		on/; and that
		t Sealed Seals Intact: Yes No
}	in this block are correct. Differinary Seals. In	
For OCD U	Jse: Date Owner Notified	Phone or Letter? Initials

արարելարը է արա է եք է հերջությունների է արժերությունների է արժերի հա

ANALYSES PERFORMED

LAB. No.: OR- 1453

THIS PAGE FOR LABORATORY RESULTS ONLY

This sample was tested using the analytical screen	ing method(s)	checked below:	
PURGEABLE SCREENS		EXTRACTABLE SCREENS	
(753) Aliphatic Purgeables (1-3 Carbons)		(751) Aliphatic Hydrocarbons	
(754) Aromatic & Halogenated Purgeables		(760) Organochlorine Pesticides	
[] (765) Mass Spectrometer Purgeables		(755) Base/Neutral Extractables	
(766) Trihalomethanes		(758) Herbicides, Chlorophenoxy acid	
Other Specific Compounds or Classes		(759) Herbicides, Triazines	
		[] (760) Organochlorine Pesticides	
· · · · · · · · · · · · · · · · · · ·		(761) Organophosphate Pesticides	
		(767) Polychlorinated Biphenyls (PCB's)	
		(764) Polynuclear Aromatic Hydrocarbons (762) SDWA Pesticides & Herbicides	
	······	[(102) SDWA Pessicides & Heloicides	×
ANA	LYTICA	L RESULTS	
COMPOUND(S) DETECTED	CONC.	COMPOUND(S) DETECTED	CONC.
	[PPB]		[PPB]
aromatic surgeables *		halogenated surgiables t	N.D.
other here and	TIR.		
m- reftens	10		
12 - Jackene	20		
· · · · · · · · · · · · · · · · · · ·			
· · · · · · · · · · · · · · · · · · ·			
*			1. 1.0.1
• DETECTION LIMIT • 米	10-49/2	+ DETECTION LIMIT +	1:48h
ABBREVIATIONS USED:			
N D = NONE DETECTED AT OR ABOVE	THE STATED	DETECTION LIMIT	
T R = DETECTED AT A LEVEL BELOW			
[RESULTS IN BRACKETS] ARE WNCONFI			
	,-		
		······································	
LABORATORY REMARKS:			
		· · · · · · · · · · · · · · · · · · ·	
·			
CERTIFICAT	E OF ANALY	TICAL PERSONNEL	
Seal(s) Intact: Yes No Y. Seal(s) broken by		t scaled date:	
I certify that I followed standard laboratory procedur	-		and
that the statements on this page accurately reflect th	ne analytical re	sults for this sample.	
Date(s) of analysis: 9/16/87	nature:	Tany C. Elen	
I certify that I have reviewed and concur with the			block.
Reviewers signature: K Meyerher			
<u>(</u>			

SUBMITTER: David Boyer CODE: 2 6 10 1 SAMPLE COLLECTION CODE: (YYMMDDHHMMIII) BIZDIBBC161111445 SAMPLE TYPE: WATER ES, SOIL POOD SAMPLE TYPE: WATER ES, SOIL POOD OTHER: CODE:		SCIENFIC LABOR 700 Camino d Albuquerque, NM	
P. O. Box 2088 Santa Fe, N.H. 27504-2038 PHONE(S): 327-5812 USER CODE: 3 2 2 3 5 SAMPLE COLLECTION CODE: (YYMMDDHHMMIII) BARDE COLLECTION CODE: (YYMMDDH) COUNTY: COUNTY COUNTY	EPORT TO:	David Boyer	S.L.D. No. OR- 14,54 A4B
Santa Fe, N.M. 87504-2088 PRIORITY PHONE(S): 327-5812 USER CODE: [8] 2 [2] 3 [5] SUBMITTER: David Boyer CODE: [2] [6] 0] SAMPLE COLLECTION CODE: (YYMMDDHHMMIII) [8] 7 [0] [2] [2] [2] [1] [1] [2] [2] [2] [1] [1] [2] [2] [2] [1] [1] [2] [2] [2] [1] [1] [2] [2] [2] [1] [1] [2] [2] [2] [1] [1] [2] [2] [2] [2] [2] [2] [2] [2] [2] [2		N.M. Oil Conservation Division	DATE REC. $9 - 2 - 87$
PHONE(S): 327-5812 USER CODE: 8 2 2 3 5 SUBMITTER: David Boyer CODE: 2 6 0 SAMPLE COLLECTION CODE: (YYMMDDHHMMIII) B 2 2 3 5 CODE: I 1 3 5 4 7 5 SAMPLE COLLECTION CODE: (YYMMDDHHMMIII) B 2 2 3 5 CODE: I 1 3 5 4 7 5 4 7 5 4 7 5 4 7 7 5 4 7 7 5 4 7 7 5 6 5 1 1 1 3 5 4 7 7 5 6 1 1 1 3 5 4 7 7 5 6 1 1 1 3 5 4 7 7 5 6 1 1 1 3 5 4 7 7 5 7 7	•	P. 0. Box 2088	
PHORE(S):		Santa Fe, N.M. 87504-2088	PRIORITY
SUBMITTER: David Boyer CODE: 2 6 10 1 SAMPLE COLLECTION CODE: (YYMMDDHHMMIII) BIZDIBBC/BIZBC/11/145/44/24 SAMPLE TYPE: WATER D. SOIL , FOOD , OTHER: CODE:	PHONE(S):	827-5812	USER CODE: 8 2 2 3 5
SAMPLE COLLECTION CODE: (YYMMDDHHMMIII) [8] 7[0] 8] 2] 8] 11] 24 5] 41] 5 SAMPLE TYPE: WATCH & SOIL [], FOOD], OTHER:CODE: [] COUNTY:CODE: []CODE: []] COUNTY:CODE: []CODE: []] LOCATION CODE: (Township-Range-Section-Tracts) [] 2] 5+ 3] 0] 0] 5+ 3] 0] 0] 5+ 3] 0] 0] 5+ 3] 0] 0] 0] 0]		David Boyer	CODE: 12 16 10 1
SAMPLE TYPE: WATER S. SOIL [], FOOD [], OTHER:CODE:		CTION CODE: (YYMMDDHHMMIII)	7,0,8,2,8,1,1,2,5,4,4,1,8
COUNTY: CDUMY; CODE: 1 LOCATION CODE: (Township-Range-Section-Tracts) 1 1 5 1 1 1 5 1 1 1 1 5 1 1 1 1 5 1 1 1 1 5 1 <td< td=""><td></td><td></td><td></td></td<>			
LOCATION CODE: (Township-Range-Section-Tracts)	6		
ANALYSES REQUESTED: Please check the appropriate box(es) below to indicate the type of analytical screens required. Whenever possible list specific compounds auspected or required. UTRCEASTED: SCREENS (753) Aliphatic Purgeables (1-3 Carbons) [751] Aliphatic Hydrocarbons [753] Mass Spectrometer Purgeables [766] Organochhorine Pesticides [765] Mass Spectrometer Purgeables [767] (769) Organochhorine Pesticides [768] Mass Spectrometer Purgeables [768] Organochhorine Pesticides [769] Organochhorine Pesticides [769] Organochhorine Pesticides [769] Organochhorine Pesticides [769] Organochhorine Pesticides [760] Organochhorine Pesticides [760] Organochhorine Pesticides [760] Organochhorine Pesticides [761] Aliphatic Hydrocarbons [760] Organochhorine Pesticides [760] Organochhorine Pesticides [760] Organochhorine Pesticides [761] Organochorine Pesticides [762] SDWA Pastickes & Hopkicides [762] (761) Organochorine Pesticides [763] Mass Catter Mathe ClaterLifen [: 7m] SDA Hal Organack as [out AS [out AS DOSSILF - LOUD ArDMANC ClaterLIPIN [: 1m] T DOT as [mpp] [mp] Disolved Oxygen=mg/I; Alkalinity=mg/I; Flow Rate			(> > (/ > > 1
EXTRACTABLE SCREENS EXTRACTABLE SCREENS (753) Aliphatic Hydrocarbons [753] Aliphatic Purgeables [751] Aliphatic Hydrocarbons [753] Maiss Spectrometer Purgeables [755] Marbides (1-5 Gradens) [755] Mass Spectrometer Purgeables [755] Marbides (1-5 Gradens) [755] Other Specific Compounds or Classes [755] Herbicides, Chicophenoxy acid [756] Other Specific Compounds or Classes [759] Herbicides, Triasines [750] Other Specific Compounds or Classes [760] Organochlorine Pesticides [750] Other Specific Compounds or Classes [761] Other Specific Compounds or Classes [760] Organochlorine Pesticides [761] Organophosphate Pesticides [761] Other Specific Compounds or Classes [762] Organophosphate Pesticides [763] Marchard Purgeable [764] Polychlorinated Biphenyls (POB's) [764] Polychlorinated Biphenyls (POB's) [764] Polychlorinated Biphenyls (POB's) [765] DATA: [765] Polychlorinated Europhylic Black & Happicides [765] DATA: [765] Polychlorinated Europhylic Black & Happicides [764] Polychlorinated Signet at componet at the second of			
(753) Aliphatic Purgeables (1-3 Carbons) (753) Aliphatic Purgeables (751) Aliphatic Hydrocarbons (754) Aromatic & Halogenated Purgeables (760) Organochlorine Pesticides (765) Trihalometar Purgeables (758) Base/Neutral Extractables (758) Aliphatic Purgeables (758) Base/Neutral Extractables (759) Trihalometar Purgeables (758) Herbicides, Triasines (750) Organochlorine Pesticides (761) Organochlorine Pesticides (761) Organochlorine Pesticides (761) Organochlorine Pesticides (762) SDWA Pesticides & Horbicides (762) SDWA Pesticides & Horbicides (762) SDWA Pesticides (762) SDWA Pesticides Remarks: VICAAC Maho Classes 0 (762) SDWA Pesticides (762) SDWA Pesticides Remarks: VICAAC Maho Classes 0 (762) SDWA Pesticides (762) SDWA Pesticides Remarks: VICAAC Maho Classes 0 (762) SDWA Pesticides (763) Impost PHELD DATA: 0 0 pH=: Conductivity= mg/l; Flow Rate mg/l Dissolved Oxygen=mg/l; Alkalinity=mg/l; Flow Rate mg/l fi.; Casing:			or required.
Image: Test Aromatic & Halogenated Purgeables [760] Organochlorine Pesticides [765] Mass Spectrometer Purgeables [760] Crisb Mass Spectrometer Purgeables [766] Trihalomethanes [759] Harbicides, Chlorophenoxy acid [760] Organochlorine Pesticides [759] Harbicides, Triazines [760] Organochlorine Pesticides [760] Organochlorine Pesticides [760] Organochlorine Pesticides [760] Organochlorine Pesticides [760] Organochlorine Pesticides [760] Organochlorine Pesticides [761] Organochlorine Pesticides [760] Organochlorine Pesticides [762] SDWA Pesticides & Horbicides [760] Organochlorine Pesticides [763] Harbicides, Thiazines [760] Organochlorine Pesticides [764] Polynclear Aromatic Hydrocarbons [762] SDWA Pesticides & Horbicides [765] DSJOLZ LOUD ONDMUX Clear [197] [197			
[765] Mass Spectrometer Purgeables [765] Mass Spectrometer Purgeables [766] Trihalomethanes [768] Mass Spectrometer Purgeables [768] Trihalomethanes [768] Mass Spectrometer Purgeables [768] Trihalomethanes [769] Trihalomethanes [760] Other Specific Compounds or Classes [760] Organochtorine Pesticides [760] Organochtorine Pesticides [761] Organochtorine Pesticides [762] Mass Spectrometer Purgeables [763] Mass Spectrometer Purgeables [766] Trihalomethanes [766] Trihalomethanes [767] Polycholronated Biphenyls (PCB's) [767] Polycholronated Biphenyls (PCB's) [768] Trihalomethanes [768] Trihalomethanes [767] Polycholronated Biphenyls (PCB's) [767] Tolycholronated Biphenyls (PCB's) [768] Trihalomethanes [768] Trihalomethanes [767] Polycholronated Biphenyls (PCB's) [760] Organochtorine Pesticides [767] Polycholronated Biphenyls (PCB's) [768] Tolychole Activity [767] Polycholronated Biphenyls (PCB's) [768] Tolychole Activity [767] Polycholronated Biphenyls (PCB's) [769] Tolycholronated Biphenyls (PCB's) [760] Organochtorine Pesticides [760] Organochtorine Pesticides [761] Organochtorine Pesticides [762] SDWA Pesticides & Hoppicides Remarks: [762] DOLLAL ACTIVE [762] SDWA Pesticides [762] DOLLAL ACTIVE [761] Discleter Activity [762] Conductivity [762] Mass Spectrometer [762] Polycholic Activity [762] Tolycholic Activity [763] Polycholic Activity [764] Polycholic Activity [764] Polycholic Activity [765] DATA [776] Po			
Other Specific Compounds or Classes [759] Herbicides, Triasines [760] Organochlorine Pesticides [761] Organophosphate Pesticides [762] SDWA Pesticides & Herbicides [763] Organophosphate Pesticides [764] Polynuclear Aromatic Hydrocarbons [765] DSSIDE _ LOW ONDMAIL Letter [767] Polycholinated Biphenyls (PCB's) [762] SDWA Pesticides & Herbicides [763] Organophosphate Pesticides [764] Polynuclear Aromatic Hydrocarbons [765] DSSIDE _ LOW ONDMAIL Letter [767] For Hall Organate & Stock [762] SDWA Pesticides & Herbicides [763] DSSIDE _ LOW ONDMAIL Letter [767] For Hall Organate & Stock [764] Polynuclear Aromatic Hydrocarbons [765] DSSIDE _ LOW ONDMAIL Letter [767] For Hall Organate & Stock [765] DSSIDE _ LOW ONDMAIL Letter [767] For Hall Organate & Stock [765] Polynuclear Aromatic Hydrocarbons [766] DATA: [767] Polynuclear Aromatic Hydrocarbon [767] Polynuclear Aromatic Hydrocarbon [767] DSSIDE _ LOW ONDMAIL Letter [767] For Hall Organate & Stock [767] Data _ Mall Organate & Stock [768] Polynuclear Aromatic Hydrocarbon [767] Polynuclear Aromatic Hydrocarbon [767] Data _ Mall Organate & Stock [767] Aromate _ Mall Organate & Stock </td <td></td> <td></td> <td>(755) Base/Neutral Extractables</td>			(755) Base/Neutral Extractables
☐ (760) Organochlorine Pesticides ☐ (761) Organophophate Pesticides ☐ (761) Organophophate Pesticides ☐ (761) Polychlorinated Biphenyls (PCB's) ☐ (762) SDWA Pesticides & Hepbicides ☐ (762) SDWA Pesticides & Hepbicides Remarks: ☐ (761) Polychlorinated Biphenyls (PCB's) ☐ (762) SDWA Pesticides & Hepbicides Remarks: ☐ (761) Polychlorinated Biphenyls (PCB's) ☐ (762) SDWA Pesticides & Hepbicides Remarks: ☐ (762) SDWA Pesticides & Hepbicides A S DOSSIDIS: ↓ DOW DYNMIX: Let CT 1977 /13 mit 7 mol 7 as 1 mpost FIELD DATA: pH=: Conductivity=umho/cm at°C; Chlorine Residual=mg/l Pls Conductivity=umho/cm at°C; Chlorine Residual=mg/l Dissolved Oxygen=mg/l; Alkalinity=mg/l; Flow Rate	· · ·		
Image: contrast of the state of the sta	Othe:	r Specific Compounds or Classes	
Image: standard s	=		
☐ (762) SDWA Pesticides & Hopkicides Remarks: VCOAC MAD Catellion 1/3mit SDA Hal Ogenatic as low A S DOSSIELE LOW and Mail de extrapril for the point of the	Ξ		(767) Polychlorinated Biphenyls (PCB's)
Remarks: Very Cateria is init for halogenaich as low AS DOSSIDE LOW aromatic delection is init for as imported as low AS DOSSIDE LOW aromatic delection is init for as imported as low FIELD DATA: pH=	글 —		
A.S. DOSSIDLE - LOLD WITHING LeterTIPH limit NOT as Import FIELD DATA: pH=	- 107	I DI DI TI	[] (762) SUWA Pesticides & Herbicides
FIELD DATA: pH=; Conductivity=mg/l; Alkalinity=mg/l; Flow Rate Dissolved Oxygen=mg/l; Alkalinity=mg/l; Flow Rate Depth to waterft.; Depth of wellft.; Perforation Intervalft.; Casing: Sampling Location, Methods and Remarks (i.e. odors, etc.)	Remarks: 140	of mane dereinen "	mil YOR Hai Of march as 1000
FIELD DATA: pH=; Conductivity=mg/l; Alkalinity=mg/l; Flow Rate Dissolved Oxygen=mg/l; Alkalinity=mg/l; Flow Rate Depth to waterft.; Depth of wellft.; Perforation Intervalft.; Casing: Sampling Location, Methods and Remarks (i.e. odors, etc.)	<u>as poss.</u>	1017 Low anomaliz a	le ect 19 11m 1 no 1 as 1mportor
Dissolved Oxygen=mg/l; Alkalinity=mg/l; Flow Rate	FIELD DATA:		,
Depth to waterft.; Depth of wellft.; Perforation Intervalft.; Casing: Sampling Location, Methods and Remarks (i.e. odors, etc.) LocoHills D. SPOSal On D. North Scile, Mear Conter (North Center Waller On D L.TTLE of On pond, Sample Clear I certify that the results in this block accurately cellect the results of my field analyses, observations and activities.(signature collector):Method of Shipment to the Lab:	рН=; С	onductivity=umho/cm atC;	Chlorine Residual=mg/l
Sampling Location, Methods and Remarks (i.e. odors, etc.) LacoHills Disposed On D / North Sile, mear Conten- (North Canter Water On A / Little oil On pone, Sample clear I certify that the results in this block accurately ceffect the results of my field analyses, observations and activities.(signature collector): This form accompanies Septum Vials, Glass Jugs, and/or Samples were preserved as follows: NP: No Preservation; Sample stored at room temperature. NP: No Preservation; Sample stored at room temperature. NP-Ice Sample Preserved with Sodium Thiosulfate to remove chlorine residual. CHAIN OF CUSTODY I certify that this sample was transferred from on to and that	Dissolved Oxygei	m=mg/l; Alkalinity=mg/l; Flor	w Rate/
LocoHills Disposel, On D D North Selle, Menr Conleg (North Center ivaler On D Lottle of D pond, Sample clear I certify that the results in this block accurately ceflect the results of my field analyses, observations and activities.(signature collector):	Depth to water	ft.; Depth of wellft.; Perform	tion Intervalft.; Casing:
(North Canter Water Ond) /L.TTL= oil On pond. Somple Clear is the results of my field analyses, observations and activities.(signature collector): I certify that the results in this block accurately peffect the results of my field analyses, observations and activities.(signature collector): Method of Shipment to the Lab: This form accompanies Septum Vials, Glass Jugs, and/or Method of Shipment to the Lab: Samples were preserved as follows: Glass Jugs, and/or	Sampling Location	on, Methods and Remarks (i.e. odors, etc.)	2 North Sile mean Conten
activities.(signature collector): Weight for the form accompanies form the form accompanies form the form accompanies form the form accompanies form the fo	<i>, , ,</i>		
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-Na S O Sample Preserved with Sodium Thiosulfate to remove chlorine residual. CHAIN OF CUSTODY I certify that this sample was transferred from on to and that	activities.(signatu	ire collector): Ref Rout	Method of Shipment to the Lab: (a), Hand Cab
NP: No Preservation; Sample stored at room temperature. NP: Sample stored in an ice bath (Not Frozen). P-Ice Sample preserved with Sodium Thiosulfate to remove chlorine residual. CHAIN OF CUSTODY I certify that this sample was transferred from to to and that at (location) on and that	This form accon	npanies Septum Vials, Glass J	ugs, and/or
Image: Chain of the state is a constrained from			emperature.
CHAIN OF CUSTODY I certify that this sample was transferred from to to at (location) on and that	P-Ice	Sample stored in an ice bath (Not Frozen).
I certify that this sample was transferred from to to and that	223	-	to remove chlorine residual.
at (location) on/; and that			to
the statements in this block are correct Buildentian Calls Not Calls III Call Taken Mr. (1)			
the statements in this block are correct. Evidentiary Seals: Not Sealed 🗌 Seals Intact: Yes 🥅 No 🥅 Signatures			No Deals Infact: Yes No

ANALYSES PERFORMED

LAB. N.: OR- 1454

THIS PAGE FOR LABORATORY RESULTS ONLY

This sample was tested using the analytical screen	ing method(s)	checked below:	
PURGEABLE SCREENS		EXTRACTABLE SCREENS	
		(751) Aliphatic Hydrocarbons	
(753) Aliphatic Purgeables (1-3 Carbons)			
(754) Aromatic & Halogenated Purgeables		(760) Organochlorine Pesticides	
(765) Mass Spectrometer Purgeables		(755) Base/Neutral Extractables	
(766) Trihalomethanes		(758) Herbicides, Chlorophenoxy acid	
Other Specific Compounds or Classes		(759) Herbicides, Triazines	
		[] (760) Organochlorine Pesticides	
		(761) Organophosphate Pesticides	
<u> </u>		[] (767) Polychlorinated Biphenyls (PCB's)	
<u> </u>	·	(764) Polynuclear Aromatic Hydrocarbons	
· · · · · · · · · · · · · · · · · · ·	<u> </u>	🔲 (762) SDWA Pesticides & Herbicides	
ANA		L RESULTS	
COMPOUND (S) DETECTED	CONC.	COMPOUND(S) DETECTED	CONC.
	[PPB]		[PPB]
au mater and		hales I am DR	
aromatic purquelles		halogenated purgeables	N.D.
benzene	234		
Telucone.	2187		
ethylbensene	26		
langere			
p-xyline	T.R.	· · · · · · · · · · · · · · · · · · ·	
m-Lxylene	31		
o-milene	20		
- coperce			
			·
* DETECTION LIMIT * 🗡	10-19/2	+ DETECTION LIMIT + +	178/2
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 UNCONFI	RMED AND	OR WITH APPROXIMATE QUANTITATION	
· ·	•		
LABORATORY REMARKS:			
			······
		بىرى يىسى بىرى بىرى بىرى بىرى بىرى بىرى بىرى ب	·
CERTIFICAT	E OF ANALY	TICAL PERSONNEL	
	-0	- 11	
Seal(s) Intact: Yes No Y. Seal(s) broken by I certify that I followed standard laboratory procedur		date: date:	
that the statements on this page accurately reflect th			
_			
Date(s) of analysis: 9/16/87 Analyst's sig			
I certify that I have reviewed and concur with the	analytical resu	ts for this sample and with the statements in this	block.
Reviewers signature: K Meyenheen	J		

STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION



GARREY CARRUTHERS GOVERNOR POST OFFICE BOX 2008 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87501 (505) 827-5800

June 29, 1987

Mr. Ray Westall Loco Hills Water Disposal Co. P.O. BOx 68 Loco Hills, NM 88255

Dear Mr. Westall:

Enclosed are copies of hydrocarbon analyses for samples taken your facility on May 1, 1987. Although halogenated at hydrocarbons (solvents) were not detected in Pond 1, the laboratory detection limit was by necessity set at 200 parts This detection limit was per billion. higher than the concentration of solvents found in the previous sampling of the pond, so additional sampling will be performed by OCD to You will determine the continued presence of those compounds. be contacted when dates for sampling can be scheduled. I am the delay in reporting sorry about this, but funding constraints limit us to using the state scientific laboratory which has a long turn-around time for reporting out the sample results.

Sincerely,

Amin Balley

Jami Bailey Geologist

JB/ag

Enc.

xc: OCD - Artesia

9770- В	SCIEI TOO Camino de Albuquerque, NM &	e Salud NE
EPORT TO:	David Boyer	S.L.D. No. OR- 770 - A
	N.M. Oil Conservation Division	DATE REC. 5/5/87
	P. O. Box 2088	······································
	Santa Fe, N.M. 87504-2088	PRIORITY
HONE(S):	827-5812	USER CODE: 8 2 2 3 5
UBMITTER:	David Boyer	CODE: 12 16 10 4
AMPLE COLLI	ECTION CODE: (YYMMDDHHMMIII)	
AMPLE TYPE:	WATER X, SOIL , FOOD , OTHE	R: CODE:
COUNTY:	ddy; CITY:	0 / / / S CODE:
OCATION COL	DE: (Township-Range-Section-Tracts)	<u>+ + + (10N06E24342)</u>
NALYSES REA	UESTED: Please check the appropriate box(e	s) below to indicate the type of analytical screens
equired. Whene	ver possible list specific compounds suspected	
] (753) Alipha	PURGEABLE SCREENS atic Purgeables (1-3 Carbons)	EXTRACTABLE SCREENS (751) Aliphatic Hydrocarbons
X (754) Arom	atic & Halogenated Purgeables	(760) Organochlorine Pesticides
	Spectrometer Purgeables	(755) Base/Neutral Extractables
[] (766) Trihal Othe	omethanes Specific Compounds or Classes	 (758) Herbicides, Chlorophenoxy acid (759) Herbicides, Triazines
	a specific Compounds or Classes	(760) Organochlorine Pesticides
		(761) Organophosphate Pesticides
		(767) Polychlorinated Biphenyls (PCB's)
⊒		(764) Polynuclear Aromatic Hydrocarbons
		(762) SDWA Pesticides & Herbicides
Remarks: <u>7</u>	70.B Broken at lac -	
	at acculant	
FIELD DATA:		
он=; с	onductivity=umho/cm atC;	Chlorine Residual=mg/l
Dissolved Oxyge	m=mg/l; Alkalinity=mg/l; Flow	v Rate/
Depth to water	ft.; Depth of wellft.; Perfora	tion Interval - ft.; Casing:
	Don, Methods and Remarks (i.e. odors, etc.) 11/15 Disposed Failing -	
	111- Diane OF ility-	- Alla composition Devel #1
HOLD F	III Dispostor Jack	A C C C C C C C C C C C C C C C C C C C
	Hydrixcarloon sheep, o	1X on pond
certify that t	he results in this block accurately reflect the	results of my field analyses, observations and
activities.(signatu	re collector): 12 LA KAM	Method of Shipment to the Lab: State Car
	npanies Septum Vials, Glass Ju	ngs, and/or
• •	reserved as follows: No Preservation; Sample stored at room te	maaatura
y	Sample stored in an ice bath (Not Frozen)	
	Sample Preserved with Sodium Thiosulfate	
CHAIN OF CU		
certify that t	his sample was transferred from	to
A (lasation)		on/ and that
at (location)		lat Saalad T Saala Interate Vice T No. T
	n this block are correct. Evidentiary Seals: N	tot Sealed Seals Intact: I es No
he statements	n this block are correct. Evidentiary Seals: N	ot Sealed [Seale Intact: I es [No []

į.

ANALYSES PERFORMED

LAB. No.: OR- 770

THIS PAGE	E FOR LABO	RATORY RESULTS ONLY	
This sample was tested using the analytical screer	ning method(s)	checked below:	
PURGEABLE SCREENS (753) Aliphatic Purgeables (1-3 Carbons) (754) Aromatic & Halogenated Furgeables (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 (761) Organophosphate Pesticides (762) SDWA Pesticides & Herbicides (762) SDWA Pesticides & Herbicides	
COMPOUND(S) DETECTED	CONC.	COMPOUND(S) DETECTED	CONC.
Aromatic surreables	see		
lange nk	1400		
toluene	9000		
ethylbensene	300		
m-xylene	246		
0 - suline	TR.		
halogenated surgeables	<i>N</i> , <i>D</i> ,		
• DETECTION LIMIT • *	200-48/2	+ DETECTION LIMIT + +	
LABORATORY REMARKS: <u>Six compour</u> <u>screen region detected s</u> <u>identified</u> . <u>One compose</u> <u>sengene region detected</u> <u>mot identified</u>	THE STATED FIRMED AND/O and (at by the by the		spratis t sot substitutes 2. but
Seal(s) Intact: Yes No A. Seal(s) broken by I certify that I followed standard laboratory procedu that the statements on this page accurately reflect t Date(s) of analysis: Analysis: Analysis	tres on handling	esults for this sample.	d and
I certify that I have reviewed and concur with the		Y	s block.
Reviewers signature: <u>K, Cherry R</u>	s RM.	JUN + 1 -1987	

	SCIEDIFIC LABORATORY DI 700 Camino de Salud NE Albuquerque, NM 87106 841-257	
REPORT TO:	David Boyer N.M. Oil Conservation Division P. O. Box 2088	S.L.D. No. OR- <u>739-A-B</u> DATE REC. <u>5/5/87</u>
PHONE(S): SUBMITTER:	Santa Fe, N.M. 87504-2088 827-5812 David Boyer	PRIORITY CODE: $\begin{vmatrix} 8 & 2 & 2 & 3 & 5 \\ 2 & 6 & 0 & 1 \\ 0 & 0 & 0 \\ 0 & 0 & 0 \\ 0 & 0 & 0 \\ 0 & 0 &$
SAMPLE COLLE SAMPLE TYPE: COUNTY: LOCATION COD ANALYSES REQ required. Whenev (753) Aliphan (754) Aroman	CTION CODE: (YYMMDDHHMMIII) WATER , SOIL , FOOD , OTHER: WATER , SOIL , FOOD , OTHER: CUPY ; CITY: We contract of the second seco	CODE: CODE: CODE: + + ate the type of analytical screens CTRACTABLE SCREENS Aliphatic Hydrocarbons Organochlorine Pesticides
(766) Trihalo	Immethanes (758) Specific Compounds or Classes (759) (760) (761) (767) (764)	Base/Neutral Extractables Herbicides, Chlorophenoxy acid Herbicides, Triazines Organochlorine Pesticides Organophosphate Pesticides Polychlorinated Biphenyls (PCB's) Polynuclear Aromatic Hydrocarbons SDWA Pesticides & Herbicides
Dissolved Oxygen	onductivity=umho/cm at ^o C; Chlorine Residual= mg/l; Alkalinity=mg/l; Flow Rate	
Sampling Location	t.; Depth of wellft.; Perforation Interval n, Methods and Remarks (i.e. odors, etc.) Hills Display Power #2 North normalized Sheen (reryblack c e results in this block accurately reflect the results of my fiel re collector): Method panies Septum Vials, Glass Jugs, and/or eserved as follows: No Preservation; Sample stored at room temperature. Sample stored in an ice bath (Not Frozen). Sample Preserved with Sodium Thiosulfate to remove chlorine	d analyses, observations and of Shipment to the Lab: State Car
at (location)	is sample was transferred from on on	/ and that
· · · · · · · · · · · · · · · · · · ·	se: Date Owner Notified <u>929</u> Phone o	r Letter? Initials



THIS PAGE FOR LABORATORY RESULTS ONLY

This sample was tested using the analytical screening method(s) checked below: PURGEABLE SCREENS EXTRACTABLE SCREENS (751) Aliphatic Hydrocarbons (753) Aliphatic Purgeables (1-3 Carbons) (760) Organochlorine Pesticides (754) Aromatic & Halogenated Furgeables (765) Mass Spectrometer Purgeables (755) Base/Neutral Extractables (758) Herbicides, Chlorophenoxy acid [] (766) Trihalomethanes Other Specific Compounds or Classes (759) Herbicides, Triazines (760) Organochlorine Pesticides (761) Organophosphate Pesticides (767) Polychlorinated Biphenyis (PCB's) (764) Polynuclear Aromatic Hydrocarbons (762) SDWA Pesticides & Herbicides ANALYTICAL RESULTS COMPOUND(S) DETECTED CONC. COMPOUND(S) DETECTED CONC. [PPB] [PPB] suscentles ANAMA. 30 37 R 7 TIR alnates N.D Ж 47/2 * DETECTION LIMIT * + DETECTION LIMIT + ABBREVIATIONS USED: N D = NONE DETECTED AT OR ABOVE THE STATED DETECTION LIMIT T R = DETECTED AT A LEVEL BELOW THE STATED DETECTION LIMIT (NOT CONFIRMED) [RESULTS IN BRACKETS] ARE UNCONFIRMED AND/OR WITH APPROXIMATE QUANTITATION LABORATORY REMARKS: CERTIFICATE OF ANALYTICAL PERSONNEL Seal(s) Intact: Yes No - Seal(s) broken by: _______ ____ date:_____ I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements on this page accurately reflect the analytical results for this sample. Date(s) of analysis: 5/28/87 ... Analyst's signature: Jary C. Valen I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewers signature: <u>K. Shorred</u> <u>JUN 1 1987</u>

STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION



February 11, 1987

GARREY CARRUTHERS

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

Mr. Ray Westall Loco Hills Water Disposal Co. P. O. Box 68 Loco Hills, New Mexico 88255

Dear Mr. Westall:

Enclosed is a copy of the amended lab analysis for heavy metals for monitor hole #12, sampled on November 25, 1986. This lab report replaces the one for monitor hole #12 that was sent to you on January 19, 1987.

Following a phone request by James Jennings, I will be sending him a copy of EPA-RCRA controlled hazardous waste solvents. We do not have a list of trade names for solvents which contain these substances, however, all solvents should have labels which list the active ingredients.

If you have any questions, please contact me at 827-5884 or David Boyer at 827-5812.

Sincerely,

Come tentes

JAMI BAILEY Field Representative

JB:dp

Enc.

cc: OCD-Artesia

S A	ew Mexico Hea CIENTIFIC LAE X0 Camino de S Ibuquerque, NM	BORATORY .ISION	Department N 2555	L REPORT		4 Metal	TRY
DATE RECEIVED //	26 86 M	o. HM 2414	USER CODE 59300 Sample location) 🗌 59600 🕅	OTHER: 82		
		SITE INFORM- > ATION		1200	Hills	Dispose/	()
1150 Collected by - Person/Age	incy (72		Collection site description		MHO-1	·	
	Nor	IER /OCD			<u> </u>		
SEND NI FINAL S REPORT S TO S Attn: _	1 OIL CONS tate Land		, PO Box 208	3 	Station/ well code		
SAMPLING CON	DITIONS				Owner		•
] Pump] Tap	Water level		Discharge		Sample type	
рН (00400)		Conductivity (Unco	prrected) μmho	Water Temp. (00010)	· •C	Conductivity at 25°	C (00094) µmho
submitted		(Non-filtered) Other-specify:		mbrane filter 5ml conc. HNO3	$2 \text{ ml H}_2 \text{SO}_4 /$ added $\mathbf{Z}_4 / \mathbf{Z}_4 / \mathbf{Z}_4$		g HNO ₃ added
NF. NA			Units Date analyze	F, NA		Units	Date analyzed
Conductivity (Co 25°C (00095)	rrected)		umbo	Calcium (00915)		mg/l	
🗆 Total non-filterab				Sodium (00930)		mg/i mg/i	
residue (suspen (00530)				Potassium (00935 Bicarbonate (004		mg/i	
Z Other: ICA	$\rho \equiv$		mg/i	Chloride (00940)		mg/l	
Conter: AS				 Sulfate (00945) Total filterable resid 	due	mg/i	
C Other:				 (dissolved) (70300 Other: 	D)	mg/l	
NF, A-H2SO4				F, A-H2 SO4			
Nitrate-N + , Nitr total (00630)	ate-N		mg/l	- Distrate-N+, Nitra	to N		- / 1
 Ammonia-N tota Total Kjeldahi-N 	(00610)		mg/l	dissolved (00631)		mg/l	
()				Ammonia-N disso (00608)	olved	mg/l	
Chemical oxyge demand (00340)			mg/l	- Total Kjeldahl-N		mg/l	
Total organic car	bon		mg/l	Other:		······································	
 Other: Other: 				Analyst	Date A	eported Review	ed by
Laboratory remarks	l	ple dig	+1			<u>13 87 </u>	achery
	Damal	per alg	ested		·		
·	<u>X)a</u> Mai	Dwner Notifie		Phone or Let		Initals	

7

ICAP SCAN

SLD Lab No. HM 2414	Reviewed by: Jim ashly
Analyst_B	Date Reported: 1/23/87
Analyst B Date Analyzed 1/22/87	Revised Report.

ELEMENT

ICAP VALUE(mg/1) AA VALUE(mg/1)

•

	•		
Aluminum	<u> </u>		
Barium	<u> </u>		<u></u>
Beryllium	<0.		
Boron	<0.]		. <u></u>
Cadmium	<u> </u>		
Calcium	7460.		
Chromium	<0,/		- <u></u>
Cobalt	< 0.1		
Copper	< 0,		
Iron	<0.1		
Lead	0.2		· · ·
Magnesium	4060.		
Manganèse	<0.05		
Molybdenum	<0.1	···-	
Nickel	<0.1		
Silicon	8.5		
Silver	<0.1		· <u></u>
Strontium	230		
Tin	<0,1		
Vanadium	<0.1	•	
Zinc	<0,1		
Arsenic			0.030
Selenium			
Mercury			-:
neroury			<u> </u>
······			
······································			
- <u></u>			- <u></u>

STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

-

January 19, 1987

GARREY CARRUTHERS

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

Mr. Ray Westall Loco Hills Water Disposal Co. P. O. Box 68 Loco Hills, New Mexico 88255

Dear Mr. Westall:

Enclosed are laboratory analyses of water samples taken from pits and monitor wells at the Loco Hills disposal facility. These partial results were discussed yesterday with your consultant, Hugh Robotham of Reed and Associates. Additional results are expected in the future.

The concentration of halogenated hydrocarbons (solvents) in pond #1 indicates substantial amounts of these cleaning compounds have been disposed of in the pit. We highly stress that these chemicals cannot be received by a facility that is not permitted under RCRA regulations as a hazardous waste disposal facility. You may want to consider sending your clients letters indicating what types of fluids will be accepted, and what will not. If you do send such a letter, please forward a copy to this office.

The following procedure should be used for purging the monitor wells that contain fluid:

- (a) Water levels should be recorded in each well.
- (b) To prevent cross contamination and the introduction of contaminants in the wells, only clean equipment should be used to bail or pump fluids from the monitor wells and to record water levels. The equipment should be thoroughly cleaned and rinsed to remove all traces of oil or grease prior to purging each well. You may wish to work with your consultant to determine the most expeditious way to accomplish this.
- (c) Fluids removed from the monitor wells should be discharged to holding tanks and then removed to the pits.
- (d) If the wells show any fluids within 24 hours, water levels should be recorded and the wells purged within the week.
- (e) If the wells again fill with fluid, we must be notified so that samples can be taken for analyses.

Please send the following information to this office:

1. Previous water level measurements recorded since last fall.

Page 2

مر<u>نم</u>

- 2. Water levels in the monitor wells prior to purging the first time and if necessary, the second time.
- 3. Dates of purging wells.
- 4. Status of monitor wells one week after first or second purging.
- 5. Any notice to clients as to acceptable fluids for disposal.

Order No. R-6811-A requires "That if disposed salt water is detected in any monitor well, Case 7329 will be reopened, within 90 days, to permit the applicant to appear and show cause why the disposal authority granted by this order should not be rescinded." It is our intention to work closely with you and your consultant to determine whether the hydrocarbons and salts found in the monitor well fluids can be traced to the disposal pits and if the case must be reopened.

If you have any questions, please contact me at 827-5884 or David Boyer at 827-5812.

Sincerely,

5 Kalze

JAMI BAILEY Field Representative

JB:dp

cc: Reed & Associates, Inc. OCD-Artesia

			-E
6- 1374-C	700 0	ABORATORY D amino de Salud NE ue, NM 87106 841-2:	
REPORT TO:	David Boyer		S.L.D. No. OR- 1374 AB
	N.M. Oil Conservation	Division ?	DATE REC. 11-26-82
	P. O. Box 2088		33.71
	Santa Fe, N.M. 87504-2	088	PRIORITY
PHONE(S):	827-5812	USE	$\mathbf{R}_{\text{CODE:}} 8 2 2 3 5 $
SUBMITTER:	David Boyer		CODE: 12 6 0
SAMPLE COLLE	CTION CODE: (YYMMDDHHMMI	m 181611112	5114200018
	WATER (X, SOIL), FOOD		
COUNTY: EC	CITY:	Loco Hills	
LOCATION COL	E: (Township-Range-Section-Tracts	111715+3101	$\overline{E} + 1 + 3 + 3 + 3 + 1 + (10N06E24342)$
			icate the type of analytical screens
	er possible list specific compounds		
[] (759) Alipha	PURGEABLE SCREENS tic Purgeables (1-3 Carbons)		EXTRACTABLE SCREENS 1) Aliphatic Hydrocarbons
	tic & Halogenated Purgeables		0) Organochlorine Pesticides
	Spectrometer Purgeables		i) Base/Neutral Extractables
[] (766) Trihale			B) Herbicides, Chlorophenoxy acid
Other	Specific Compounds or Classes		0) Herbicides, Triazines
H —	······································		0) Organochlorine Pesticides 1) Organophosphate Pesticides
			7) Polychlorinated Biphenyls (PCB's)
<u> </u>		[76]	1) Polynuclear Aromatic Hydrocarbons
II			2) SDWA Pesticides & Herbicides
Remarks:			
	· · · · · · · · · · · · · · · · · · ·		
FIELD DATA:			2) SDWA Pesticides & Herbicides
FIELD DATA : pH=; Co	onductivity=umho/cm_at	(76 C; Chlorine Residua	2) SDWA Pesticides & Herbicides
FIELD DATA : pH=; Co	onductivity=umho/cm_at =mg/l; Alkalinity=	(76 C; Chlorine Residua	2) SDWA Pesticides & Herbicides
FIELD DATA: pH=; Co Dissolved Oxygen		(76 C; Chlorine Residua The state	2) SDWA Pesticides & Herbicides
FIELD DATA: pH=; Co Dissolved Oxygen Depth to water Sampling Locatio	mg/l; Alkalinity=ft.; Depth of welln, Methods and Remarks (i.e. odd	C; Chlorine Residua C; Chlorine Residua ft.; Perforation Interval rs, etc.)	2) SDWA Pesticides & Herbicides mg/l ft.; Casing:
FIELD DATA: pH=; Co Dissolved Oxygen Depth to water Sampling Locatio	mg/l; Alkalinity=ft.; Depth of welln, Methods and Remarks (i.e. odd	C; Chlorine Residua C; Chlorine Residua ft.; Perforation Interval rs, etc.)	2) SDWA Pesticides & Herbicides mg/l ft.; Casing:
FIELD DATA: pH=; Co Dissolved Oxygen Depth to water Sampling Locatio	=mg/l; Alkalinity= ft.; Depth of well	C; Chlorine Residua C; Chlorine Residua fl; Flow Rate ft.; Perforation Interval rs, etc.) C	2) SDWA Pesticides & Herbicides mg/l ft.; Casing:
FIELD DATA: pH=; Ca Dissolved Oxygen Depth to water Sampling Location PONC	=mg/l; Alkalinity=ft.; Depth of welln, Methods and Remarks (i.e. odd #) $MW, CMMs= Hi/ls Hisple(a) + H$	C; Chlorine Residua mg/l; Flow Rate ft.; Perforation Interval rs, etc.) C - C - c - c - c - c - c - c - c - c	2) SDWA Pesticides & Herbicides
FIELD DATA: pH=; Ca Dissolved Oxygen Depth to water Sampling Location PMC I certify that the activities.(signatu	$=mg/l; Alkalinity=ft.; Depth of welln, Methods and Remarks (i.e. odd =) M_{1/2} M_{2} M_{1/2} M_{2}$	C; Chlorine Residua mg/l; Flow Rate ft.; Perforation Interval rs, etc.) 	2) SDWA Pesticides & Herbicides mg/l ft.; Casing: KMM eld analyses, observations and od of Shipment to the Lab: Here Correct
FIELD DATA: pH=; Cd Dissolved Oxygen Depth to water Sampling Location PMD I certify that the activities.(signatu This form accorr	mg/l; Alkalinity=ft.; Depth of well ft.; Depth of well m, Methods and Remarks (i.e. odo ft.; Depth of well mathematical for the second	C; Chlorine Residua mg/l; Flow Rate ft.; Perforation Interval rs, etc.) 	2) SDWA Pesticides & Herbicides mg/l ft.; Casing: KMM eld analyses, observations and od of Shipment to the Lab: Here Correct
FIELD DATA: pH=; Cd Dissolved Oxygen Depth to water Sampling Location PMP I certify that the activities.(signatu This form accorr Samples were pr	mg/l; Alkalinity=ft.; Depth of well ft.; Depth of well m, Methods and Remarks (i.e. odo ft.; Depth of well mathematical fields and Remarks (i.e. odo ft.; Depth of well mathematical fields and Remarks (i.e. odo ft.; Depth of well ft.; Depth of well	C; Chlorine Residua mg/l; Flow Rate ft.; Perforation Interval rs, etc.) C C C C ft.; Perforation Interval rs, etc.) C C C C C C C C C C C C C	2) SDWA Pesticides & Herbicides mg/l ft.; Casing: KMM eld analyses, observations and od of Shipment to the Lab: Here Correct
FIELD DATA: pH=; Cd Dissolved Oxygen Depth to water Sampling Location PMC I certify that the activities.(signatu This form accorrest Samples were properties of the second	mg/l; Alkalinity=ft.; Depth of well ft.; Depth of well m, Methods and Remarks (i.e. odo ft.; Depth of well mathematical for the second	C; Chlorine Residua C; Chlorine Residua ft.; Perforation Interval rs, etc.) cflect the results of my fr Glass Jugs, and/or at room temperature.	2) SDWA Pesticides & Herbicides mg/l ft.; Casing: KMM eld analyses, observations and od of Shipment to the Lab: Here Correct
FIELD DATA: pH=; Ca Dissolved Oxygen Depth to water Sampling Locatio I certify that th activities.(signatu This form accorr Samples were pr NP: NP: P-Ice P-Na \$ 0 2 \$ 2 \$ 3 \$	mg/l; Alkalinity=ft.; Depth of well m, Methods and Remarks (i.e. odd m, Methods and Remarks	C; Chlorine Residua mg/l; Flow Rate ft.; Perforation Interval rs, etc.) C cflect the results of my ff Glass Jugs, and/or at room temperature. Not Frozen).	2) SDWA Pesticides & Herbicides d=mg/l ft.; Casing: ?K.M eld analyses, observations and for Correct
FIELD DATA: pH=; Ca Dissolved Oxygen Depth to water Sampling Locatio I certify that th activities.(signatu This form accorr Samples were pr NP: NP: P-Ice P-Na \$ 0 CHAIN OF CU:	mg/l; Alkalinity=	C; Chlorine Residua mg/l; Flow Rate ft.; Perforation Interval rs, etc.) Continue continue continue ft.; Perforation Interval reflect the results of my ff Meth Glass Jugs, and/or at room temperature. Not Frozen). Thiosulfate to remove chlori	2) SDWA Pesticides & Herbicides d=mg/l ft.; Casing: ?K.M eld analyses, observations and for Correct od of Shipment to the Lab: Herbicides
FIELD DATA: pH=; Ca Dissolved Oxygen Depth to water Sampling Locatio I certify that the activities.(signatu This form accorr Samples were pr NP: NP: P-Ice P-Na 5 0 CHAIN OF CU: I certify that the	mg/l; Alkalinity=ft.; Depth of well m, Methods and Remarks (i.e. odd m, Methods and Remarks	C; Chlorine Residua C; Chlorine Residua ft.; Perforation Interval rs, etc.) ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	2) SDWA Pesticides & Herbicides d=mg/l ft.; Casing: Rum eld analyses, observations and od of Shipment to the Lab: Herry Correct ne residual. to Mary C. Edga
FIELD DATA: pH=; Ca Dissolved Oxygen Depth to water Sampling Location PMC I certify that the activities.(signatu This form accorr Samples were pr NP: NP: P-Ice P-Na 5 O CHAIN OF CU: I certify that the at (location)	=mg/l; Alkalinity=ft.; Depth of wellft.; Depth of	C; Chlorine Residua mg/l; Flow Rate ft.; Perforation Interval rs, etc.) i 	2) SDWA Pesticides & Herbicides d=mg/l ft.; Casing: ?Kum eld analyses, observations and for Correct od of Shipment to the Lab: Herbicides ne residual. toC. Elen J_26 J_36Y: 03PM and that
FIELD DATA: pH=; Ca Dissolved Oxygen Depth to water Sampling Location PMC I certify that the activities.(signatu This form accorr Samples were pr NP: NP: P-Ice P-Na 5 O CHAIN OF CU: I certify that the at (location)	mg/l; Alkalinity=ft.; Depth of well m, Methods and Remarks (i.e. odd m, Methods and Remarks	C; Chlorine Residua mg/l; Flow Rate ft.; Perforation Interval rs, etc.) C C C C C C C C C C C C C	2) SDWA Pesticides & Herbicides mg/l ft.; Casing: RUM eld analyses, observations and od of Shipment to the Lab: How Correct ne residual. toKasy C. Elen toKasy C. Elen
FIELD DATA: pH=; Cd Dissolved Oxygen Depth to water Sampling Location PMC I certify that the activities.(signatu This form accorr Samples were pr NP: P-Ice P-Na 5 0 CHAIN OF CU I certify that the at (location) the statements in	=mg/l; Alkalinity=ft.; Depth of wellft.; Depth of	C; Chlorine Residua mg/l; Flow Rate ft.; Perforation Interval rs, etc.) C C C C C C C C C C C C C	2) SDWA Pesticides & Herbicides d=mg/l ft.; Casing: ?K.M eld analyses, observations and for Connuc od of Shipment to the Lab: How Connuc ne residual. toC. Elen J_26 J_36Y:03PM and that

1

I

١,

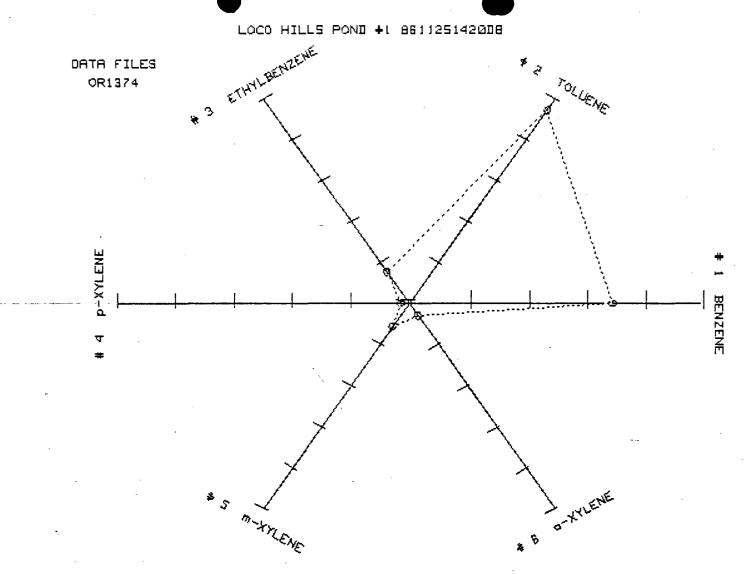
LAB. No.: OR- 1374

THIS PAGE FOR LABORATORY RESULTS ONLY					
This sample was tested using the analytical screening method(s) checked below:					
PURG EABLE 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 Other Specific Compounds or Classes 		EXTRACTABLE SCREENS			
COMPOUND(S) DETECTED	CONC. [PPB]	COMPOUND(S) DETECTED	CONC. [PPB]		
bennene tolniene ethylbengene p-xylene Mylene O-xylene 1/1-dichloroethane 1/1-trichloroethane * DETECTION LIMIT * X ABBREVIATIONS USED: N D = NONE DETECTED AT OR ABOVE T R = DETECTED AT A LEVEL BELOW ' [RESULTS IN BRACKETS] ARE UNCONFI	2000 2700 440 81 330 170 9 33 170 70 70 70 70 70 70 70 70 70 70 70 70 7	DETECTION LIMIT (NOT CONFIRMED)			
[RESULTS IN BRACKETS] ARE UNCONFIRMED AND/OR WITH APPROXIMATE QUANTITATION LABORATORY REMARKS: Juclue other Compounds were detected by The aromatic screen that were not identified. Zrace amounts of several other halogenated compounds were detected but not identified. CERTIFICATE OF ANALYTICAL PERSONNEL Seal(s) Intact: Yes X No . Seal(s) broken by: <u>WE</u> I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and					
I certify that I followed standard laboratory procedury that the statements on this page accurately reflect th Date(s) of analysis: 4 ± 10 Dec 86. Analyst's sign I certify that I have reviewed and concur with the a Reviewers signature: $Mayerhery$	ne analytical rem nature:	sults for this sample. There is a sample of the same sample of the same same same same same same same sam			

SCIENTIFIC LABORATORY DIVISION 700 Camino de Salud, NE Albuquerque, NM 87106 [505]-841-2500 Organic Chemistry Section ******* ANALYTICAL REPORT 4 SLD Accession #: OR-86-1374 To: Organic Chemistry Section A Water, Purgeable sample. Scientific Lab. Div. 700 Camino de Salud, NE Albuquerque, NM 87106 Submitted: November 26, 1986 Attn: Section Files Submitter: User: _____ NM Oil Consv. Div. OIL CONSERVATION DIV DEMOGRAPHIC DATA: Collected On: 25-Nov-86 Location Township: 17S At: 1420 hrs. Range: 30E By: Boy Section: 16 In/Near: Loco Hills Tracts: 331 ANALYTICAL RESULTS for Aromatic/Halo. Purg. Screen: Value Note D. Lmt Units Analysis _____ ------10.00ppb10.00ppb10.00ppb10.00ppb10.00ppb10.00ppb10.00ppb10.00ppb10.00ppb10.00ppb 2000.00 -Benzene 2700.00 -Toluene 440.00 -Ethylbenzene 170.00 😕 1,2-Dimethylbenzene 330.00 < 1,3-Dimethylbenzene 81.00-1,4-Dimethylbenzene 1,1,1-Trichloroethane 33.00-14.00 See Report: Additional Data LABORATORY REMARKS: Pond #1 NW corner-oil skim 1,1 - Dichloro ethano 93; Trichloro ethane Tr 12 other compounds were detected by PiD but not identife Trace amounts of screed other hologeneated compounds were detected but not identifies A=Approximate Value; N=None Detected above Detection Limit; P=Compound Present but not quantified; T=Trace (<Detection Limit); U=Compound Identity Not Confirmed

Analyst: _____ Reviewed: _______ J. Finney Analysis Date R. Meyerhein, Supervisor Date

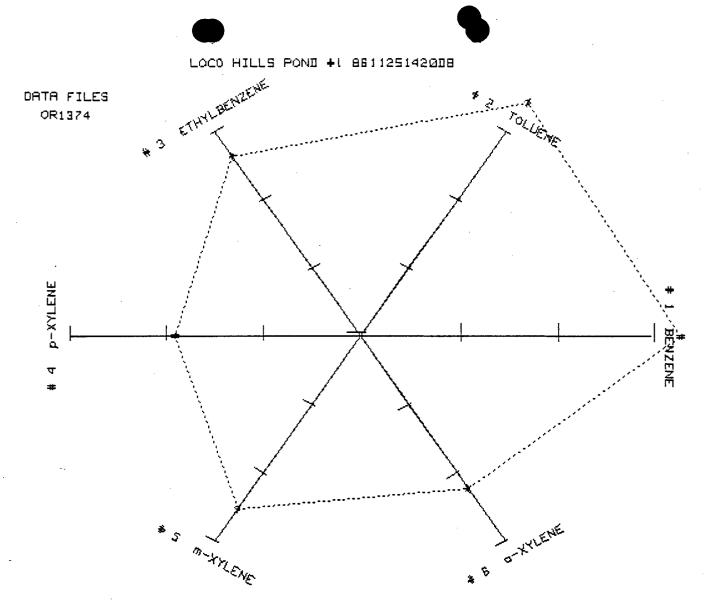
Distribution: [] User, [] Submitter, [] Report To, [*] SLD-Section



PERCENT OF TOTAL (0-50%)

DATA FILE: OR1374 LOCO HILLS POND #1 8611251420DB

No.	NAME	VALUE	% OF TOTAL	MINIMUM	MAXIMUM	STEP
1	BENZENE	2000.00	34.96	0.00	10000.00	1000.00
2	TOLUENE	2700.00	47.19	0.00	10000.00	1000.00
3	ETHYLBENZENE	440.00	7.69	0.00	10000.00	1000.00
4	p-XYLENE	81.00	1.42	0.00	10000.00	1000.00
5	m-XYLENE	330.00	5.77	0.00	10000.00	1000.00
6	O-XYLENE	170.00	2.97	0.00	10000.00	1000.00
	TOTAL	5721.00	100.00	0.00	2700.00	



LOG PLOT (SCALE 0-1000)

DATA FILE: OR1374

LOCO HILLS POND #1 8611251420DB

No.	NAME	VALUE	% OF TOTAL	MINIMUM	MAXIMUM	STEP
1	BENZENE	2000.00	34.96	0.00	10000.00	1000.00
2	TOLUENE	2700.00	47.19	0.00	10000.00	1000.00
3	ETHYLBENZENE	440.00	7.69	0.00	10000.00	1000.00
4	p-XYLENE	81.00	1.42	0.00	10000.00	1000.00
5	m-XYLENE	330.00	5.77	0.00	10000.00	1000.00
6	0-XYLENE	170.00	2.97	0.00	10000.00	1000.00
	TOTAL	5721.00	100.00	0.00	2700.00	

	New Mexico Heal SCIENTIFIC LAB 700 Camino de S Albuquerque, NM	ORATORY DIVISI alud NE	ON \$1-2555	nt	859-wrtge		NATER C OGEN A	HEMISTRY	
DATE RECEIVED //(Collection DATE Collection TIME	26 86 M	AB WC 544 SITE INFORM- ATION	Sample locat	59300	<u>59600</u> × 0	THER: 82	235 Sæl	(0.	
Collected by - Person/	Agency BOY	IER / OCD	Collection sit		Pon	£1,	NW	come)
SEND FINAL REPORT TO ► Attn Pho		SERVATION D Office Bld NM 87504-20 Ver	lg, PO Bo)x 2088		Station/ well code			
SAMPLING CC	·····	·····				• . • .			
Bailed Dipped	Pump Tap	Water level			Discharge		Sample typ	be	
pH (00400)		Conductivity (Ur	ncorrected)	µmho	Water Temp. (00010)	°C	Conductivi	ty at 25°C (00094)	μ mho
submitted	cid added	· · · · · · · · · · · · · · · · · · ·			nbrane filter CA Z 5ml conc. HNO ₃ add	ded 🗖	A: 4m1	fuming HNO3	added
NF, NA			Units Date	analyzec	I F, NA			Units Date and	alyzed
Conductivity (25°C (00095) Total non-filter residue (susp (00530) Other:		6.96	µmho mg/l 	12/14 12/2	 Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00940) Sulfate (00945) Total filterable residue (dissolved) (70300) 	<u>58</u> <u>3</u> <u>7</u> <u>7</u>	500	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	6
NF, A-H2SO4					Di Other: CO3	6	2	12/8	
 Nitrate-N + , N total (00630) Ammonia-N to Total Kjeldahl- () Chemical oxy demand (003- () 	otal (00610) -N gen 40)		mg/l mg/l mg/l mg/l mg/l		K BA F, A-H2 SO4 Nitrate-N + , Nitrate-N dissolved (00631) Ammonia-N dissolve (00608) Total Kjeldahl-N () Other:	N	0.2	mg/I mg/I mg/I	<i>e</i>
 Other: Other: 					Analyst	1 1	eported	Reviewed by	
						12	16 86	00	

ļ

ţ

|

SCIENTIFIC LAR 700 Camino de S		partition		GEN-INAL	MATER CHEMIC	
	M 87106 (505) 841-255					
·····································		SER ODE 5930) <u> </u>	KX OTHER: 82	235	
261//125	SITE INFORM-	mple location	Loco	Hills	Dispose/	().
Silection TIME	ATION	lection site description		- D - H -		omen_
illected by - Person/Agency	UER /OCD -		P∂.	n K #/	, <i>NW</i> C	omez_
NAL State Land	SERVATION DIVI Office Bldg, NM 87504-2088 yer	SION PO Box 208	3	Station/ well code		
AMPLING CONDITIONS		_		C WILLIE		
□ Bailed □ Pump □ Dipped □ Tap	Water level		Discharge		Sample type	
oH (00400)	Conductivity (Uncorre	cted) µmho	Water Temp. (00010)	°C	Conductivity at 25 °C	C (00094) µmho
AMPLE FIELD TREATMEN No. of samples submitted		DOXES F: Filtered in 0.45 μme		2 ml H ₂ SO ₄ ,	/L added	
	n SAMPLES	□A:	5ml conc. HNO ₃			
NALYTICAL RESULTS from NF, NA	n SAMPLES		5ml conc. HNO ₃	added 🏹	A: 4ml fuming Units	3 HNO ₃ added
NALYTICAL RESULTS from NF, NA	n SAMPLES	A:	5m1 conc. HNO ₃	added 🛛	A: 4ml fuming Units 	
NALYTICAL RESULTS from NF, NA Conductivity (Corrected) 25 °C (00095)	m SAMPLES Un	A:	5m1 conc. HNO3 d F, NA Calcium (00915 Magnesium (00 Sodium (00930)	added 74	A: 4ml fuming Units	
NALYTICAL RESULTS from NF, NA Conductivity (Corrected) 25°C (00095)	m SAMPLES Un	A:	5m1 conc. HNO3 d F, NA Calcium (00915; Magnesium (00 Sodium (00930) Potassium (00930)	added 74	A: 4ml fuming Units 	Date analyzed
NALYTICAL RESULTS from NF, NA Conductivity (Corrected) 25 °C (00095) Total non-filterable residue (suspended) (00530)	n SAMPLES Un	A:	5m1 conc. HNO3 d F, NA Calcium (00915; Magnesium (00 Sodium (00930) Potassium (00930) Bicarbonate (00030)	added 74	A: 4ml fuming Units mg/l mg/l mg/l mg/l	Date analyzed
NALYTICAL RESULTS from NF, NA Conductivity (Corrected) 25 °C (00095) Total non-filterable residue (suspended) (00530) Other:	n SAMPLES Un	A:	5m1 conc. HNO3 6 F, NA Image: Calcium (00915) Image: Calcium (00930) Image: Calcium (00030) Image: Calcium (0030)	added 74	A: 4ml fuming Units mg/l mg/l mg/l mg/l mg/l	Date analyzed
NALYTICAL RESULTS from NF, NA Conductivity (Corrected) 25°C (00095) Total non-filterable residue (suspended) (00530) Other: Cother: AS	n SAMPLES Un	A:	5m1 conc. HNO3 d F, NA Calcium (00915; Magnesium (00 Sodium (00930) Potassium (00930) Bicarbonate (00030)	added 74	A: 4ml fuming Units mg/l mg/l mg/l mg/l mg/l	Date analyzed
NALYTICAL RESULTS from NF, NA Conductivity (Corrected) 25°C (00095) Total non-filterable residue (suspended) (00530) Other: Cother: AS	n SAMPLES Un	A:	5m1 conc. HNO3 5m1 conc. HNO3 Calcium (00915) Magnesium (00 Sodium (00930) Potassium (00930) Bicarbonate (00 Chloride (00940) Sulfate (00945) Total filterable re (dissolved) (703	added 24	A: 4ml fuming Units mg/l mg/l mg/l mg/l mg/l mg/l	Date analyzed
NALYTICAL RESULTS from NF, NA Conductivity (Corrected) 25°C (00095) Total non-filterable residue (suspended) (00530) Other: Cother: AS Other: Other:	n SAMPLES Un	A:	5m1 conc. HNO3 5m1 conc. HNO3 Calcium (00915) Magnesium (00 Sodium (00930) Potassium (00930) Bicarbonate (00 Chloride (00940) Sulfate (00945) Total filterable re	added 24	A: 4ml fuming Units mg/lmg/l mg/l mg/l mg/l mg/l	Date analyzed
NALYTICAL RESULTS from NF, NA Conductivity (Corrected) 25°C (00095) Total non-filterable residue (suspended) (00530) Other: A Other: A Other: Ditter: IF, A-H ₂ SO ₄ Nitrate-N + , Nitrate-N	<u>n SAMPLES</u> <u>Un</u> μm	A: its Date analyze ho g/l	5m1 conc. HNO3 5m1 conc. HNO3 Calcium (00915) Magnesium (00 Sodium (00930) Potassium (00930) Bicarbonate (00 Chloride (00940) Sulfate (00945) Total filterable re (dissolved) (703	added 24	A: 4ml fuming Units mg/lmg/l mg/l mg/l mg/l mg/l	Date analyzed
NALYTICAL RESULTS from NF, NA Conductivity (Corrected) 25 °C (00095) Total non-filterable residue (suspended) (00530) Other: A Other: A Other: A Other: IF, A-H ₂ SO ₄ Nitrate-N + Nitrate-N total (00630)	<u>n SAMPLES</u> <u>Un</u> μm m	A: its Date analyze ho g/l g/l g/l	5m1 conc. HNO3 5m1 conc. HNO3 Calcium (00915 Magnesium (00 Sodium (00930) Potassium (00930) Bicarbonate (00940) Chloride (00945) Othariae (00945) Total filterable re (dissolved) (703) Other:	added 74	A: 4ml fuming Units mg/lmg/l mg/l mg/l mg/l mg/l	Date analyzed
NALYTICAL RESULTS from NF, NA Conductivity (Corrected) 25 °C (00095) Total non-filterable residue (suspended) (00530) Other: J. Ammonia-N total (00610)	<u>n SAMPLES</u> <u>Un</u> μm	A: its Date analyze ho g/l g/l g/l	5m1 conc. HNO3 5m1 conc. HNO3 Calcium (00915 Magnesium (00 Sodium (00930) Potassium (00940) Bicarbonate (00940) Chloride (00945) Otal filterable re (dissolved) (703 Other: F, A-H2 SO4 Nitrate-N + Nitt dissolved (0063	added 74	A: 4ml fuming Units mg/lmg/l mg/l mg/l mg/l mg/l	Date analyzed
NALYTICAL RESULTS from NF, NA Conductivity (Corrected) 25 °C (00095) Total non-filterable residue (suspended) (00530) Other: J. Ammonia-N total (00610)	<u>n SAMPLES</u> <u>Un</u> μm m	A: its Date analyze ho g/l g/l g/l	5m1 conc. HNO3 5m1 conc. HNO3 Calcium (00915) Magnesium (00 Sodium (00930) Potassium (00930) Potassium (00940) Bicarbonate (00940) Chloride (00945) Total filterable re (dissolved) (703) Other: F, A-H2 SO4 Nitrate-N +, Nitt dissolved (0063) Ammonia-N dis	added 74	A: 4m1 fuming <u>Units</u> mg/lmg/l mg/lmg/l mg/lmg/l mg/lmg/l mg/lmg/l	Date analyzed
NALYTICAL RESULTS from NF, NA Conductivity (Corrected) 25°C (00095) Total non-filterable residue (suspended) (00530) Other: A Other: A Other: A Other: Image: Strate St	<u>n SAMPLES</u> <u>Un</u> μm m	A: A: A: A:	5m1 conc. HNO3 5m1 conc. HNO3 Calcium (00915 Magnesium (00 Sodium (00930) Potassium (00940) Bicarbonate (00940) Chloride (00945) Otal filterable re (dissolved) (703 Other: F, A-H2 SO4 Nitrate-N + Nitt dissolved (0063	added 74	A: 4m1 fuming	Date analyzed
NALYTICAL RESULTS from NF, NA Conductivity (Corrected) 25 °C (00095) Total non-filterable residue (suspended) (00530) Other: Cother: Other: MF, A-H2SO4 Nitrate-N + , Nitrate-N total (00630) Ammonia-N total (00610) Total Kjeldahl-N (Chemical oxygen demand (00340).	<u>n SAMPLES</u> <u>Un</u> μm m	A: its Date analyze ho g/l g/l g/l	5m1 conc. HNO3 5m1 conc. HNO3 Calcium (00915 Magnesium (00 Sodium (00930) Potassium (00930) Potassium (00940) Bicarbonate (00940) Chloride (00945) Other: F, A-H2 SO4 Nitrate-N +, Nitt dissolved (0063) Ammonia-N dis (00608) Total Kjeldahl-N ()	added 74	A: 4m1 fuming <u>Units</u> mg/lmg/l mg/lmg/l mg/lmg/l mg/lmg/l mg/lmg/l	Date analyzed
NALYTICAL RESULTS from NF, NA Conductivity (Corrected) 25°C (00095) Total non-filterable residue (suspended) (00530) Other: Cother: Other: MF, A-H2SO4 Nitrate-N + Nitrate-N total (00630) Ammonia-N total (00610) Total Kjeldahl-N (Chemical oxygen	<u>n SAMPLES</u> <u>Un</u> μm m m m	A: A: A: A:	5m1 conc. HNO3 5m1 conc. HNO3 Calcium (00915 Magnesium (00 Sodium (00930) Potassium (00930) Potassium (00940) Bicarbonate (00940) Chloride (00945) Other: F, A-H2 SO4 Nitrate-N +, Nitt dissolved (0063) Ammonia-N dis (00608)	added 74	A: 4m1 fuming Units mg/l	Date analyzed
NALYTICAL RESULTS from NF, NA Conductivity (Corrected) 25°C (00095) Total non-filterable residue (suspended) (00530) Other: Cother: Other: MF, A-H2SO4 Nitrate-N + Nitrate-N total (00630) Ammonia-N total (00610) Total Kjeldahl-N (Chemical oxygen demand (00340). Total organic carbon	<u>n SAMPLES</u> <u>Un</u> μm m m m	A: A:	5m1 conc. HNO3 5m1 conc. HNO3 Calcium (00915 Magnesium (00 Sodium (00930) Potassium (00930) Potassium (00940) Bicarbonate (00940) Chloride (00945) Other: F, A-H2 SO4 Nitrate-N +, Nitt dissolved (0063) Ammonia-N dis (00608) Total Kjeldahl-N ()	added 7	A: 4m1 fuming	Date analyzed
NALYTICAL RESULTS from NF, NA Conductivity (Corrected) 25 °C (00095) Total non-filterable residue (suspended) (00530) Other: Cother: Other: Other: NF, A-H2SO4 Nitrate-N + , Nitrate-N total (00630) Ammonia-N total (00610) Total Kjeldahl-N () Chemical oxygen demand (00340). Total organic carbon (Other:	m SAMPLES Un μm μm 	A: A:	5m1 conc. HNO3 5m1 conc. HNO3 Calcium (00915 Magnesium (00 Sodium (00930) Potassium (00930) Potassium (00940) Bicarbonate (00940) Chloride (00945) Other: F, A-H2 SO4 Nitrate-N + , Nitr dissolved (0063) Ammonia-N dis (00608) Total Kjeldahl-N () Other:	added 7	A: 4m1 fuming Units mg/l	Date analyzed
NALYTICAL RESULTS from NF, NA Conductivity (Corrected) 25 °C (00095) Total non-filterable residue (suspended) (00530) Other: Cother: Other: Other: NF, A-H2SO4 Nitrate-N + , Nitrate-N total (00630) Ammonia-N total (00610) Total Kjeldahl-N () Chemical oxygen demand (00340). Total organic carbon (Other:	m SAMPLES Un μm μm 	A: A:	5m1 conc. HNO3 5m1 conc. HNO3 Calcium (00915 Magnesium (00 Sodium (00930) Potassium (00930) Potassium (00940) Bicarbonate (00940) Chloride (00945) Other: F, A-H2 SO4 Nitrate-N + , Nitr dissolved (0063) Ammonia-N dis (00608) Total Kjeldahl-N () Other:	added 74	A: 4m1 fuming	Date analyzed
NALYTICAL RESULTS from NF, NA Conductivity (Corrected) 25 °C (00095) Total non-filterable residue (suspended) (00530) Other: J. Other:	<u>n SAMPLES</u> <u>Un</u> μm m m m	A: A:	F , NA Calcium (00915) Magnesium (00 Sodium (00930) Potassium (00930) Potassium (00930) Bicarbonate (00940) Chloride (00940) Sulfate (00945) Total filterable re (dissolved) (703) Other: F , A -H ₂ SO ₄ Nitrate-N +, Nitt dissolved (0063) Total Kjeldahl-N (Other: Analyst	added 74	A: 4m1 fuming	Date analyzed

ICAP SCAN

SLD Lab No. <u>+</u>	HM 2411
Analyst <u>B</u>	
Date Analyzed_	12/10/86

Johly Reviewed by: Date Reported:

ELEMENT I	CAP VALUE(mg/1)	AA VALUE(mg/l)
Aluminum	20.1	
Barium	0.3	
Beryllium	<0.1	
Boron	23.	
Cadmium	20.1	
Calcium	2800.	
Chromium	40.1	
Cobalt	40.1	
Copper	۷۰.۱	
Iron	0.5	
Lead	40.1	
Magnesium	1190.	
Manganese	0.63	
Molybdenum	<0.1	
Nickel	<0.1	
Silicon	7.2	
Silver	<6.1	· · · · · · · · · · · · · · · · · · ·
Strontium	83.	
Tin	20.1	
Vanadium	40.1	
Zinc	<0.1	
Arsenic		0.27
Selenium		
Mercury		
·		
<u></u>		

- 1380-C	SCIEDIFIC LABOR 700 Camino d Albuquerque, NM	le Salud NE	
	David Payon	$\overline{1}$	SLD. No. OR- 1380 AM
REPORT TO:	David Boyer N.M. Oil Conservation Divisio	n 7	
,	P. 0. Box 2088		DATE REC26
	Santa Fe, N.M. 87504-2088-		
			PRIORITY
PHONE(S):	<u>327-5812</u>	USER	
SUBMITTER:	David Boyer	······································	CODE: $\begin{vmatrix} 2 & 6 & 0 \end{vmatrix}$
SAMPLE COLLE	CTION CODE: (YYMMDDHHMMIII)	6111213	145016101
SAMPLE TYPE:	WATER XI, SOIL , FOOD , OTH	ER:	CODE:
COUNTY: E	<u>kau</u> ; city: <u>Lac</u>	O HIB	CODE:
LOCATION COL	E: (Township-Range-Section-Tracts)	15+310 E	+1 6+3 3 (10N06E24342)
	UESTED: Please check the appropriate box(e the type of analytical screens
required. Whenev	er possible list specific compounds suspected PURGEABLE SCREENS		TRACTABLE SCREENS
(753) Alipha	tic Purgeables (1-3 Carbons)		Aliphatic Hydrocarbons
	tic & Halogenated Purgeables	·· · ·	Organochlorine Pesticides
	Spectrometer Purgeables		Base/Neutral Extractables
(766) Trihal Other	ometnanes Specific Compounds or Classes		Herbicides, Chlorophenoxy acid Herbicides, Triazines
			Organochlorine Pesticides
□			Organophosphate Pesticides
			Polychlorinated Biphenyls (PCB's)
		(764)	Polychlorinated Biphenyls (PCB's) Polynuclear Aromatic Hydrocarbons SDWA Pesticides & Herbicides
Image:		(764)	Polynuclear Aromatic Hydrocarbons
Remarks:		(764)	Polynuclear Aromatic Hydrocarbons
FIELD DATA:		(764) (762)	Polynuclear Aromatic Hydrocarbons SDWA Pesticides & Herbicides
FIELD DATA:	onductivity=umho/cm_at°C;	(764) (762)	Polynuclear Aromatic Hydrocarbons SDWA Pesticides & Herbicides
FIELD DATA : pH=; C	onductivity=umho/cm at°C; n=mg/l; Alkalinity=mg/l; Flo	Chlorine Residual=	Polynuclear Aromatic Hydrocarbons SDWA Pesticides & Herbicides mg/l
FIELD DATA: pH=; C Dissolved Oxyger		(764) 1 (762) 2 Chlorine Residual= w Rate	Polynuclear Aromatic Hydrocarbons SDWA Pesticides & Herbicides mg/l
FIELD DATA: pH=; C Dissolved Oxygen Depth to water	m=mg/l; Alkalinity=mg/l; Flo	(764) 1 (762) 2 Chlorine Residual= w Rate	Polynuclear Aromatic Hydrocarbons SDWA Pesticides & Herbicides mg/l
FIELD DATA: pH=; C Dissolved Oxyger Depth to water Sampling Locatio	mg/l; Alkalinity=mg/l; Flo ft.; Depth of wellft.; Perform m, Methods and Remarks (i.e. odors, etc.)	(764) 1 (762) 2 	Polynuclear Aromatic Hydrocarbons SDWA Pesticides & Herbicides mg/l ft.; Casing:
FIELD DATA: pH=; C Dissolved Oxyger Depth to water Sampling Locatio	n=mg/1; Alkalinity=mg/1; Flo ft.; Depth of wellft.; Perform on, Methods and Remarks (i.e. odors, etc.) NPMQ - RayWate, Q	Chlorine Residual= w Rate ation Interval	Polynuclear Aromatic Hydrocarbons SDWA Pesticides & Herbicides mg/l ft.; Casing: IDM Wett Side
FIELD DATA: pH=; C Dissolved Oxyger Depth to water Sampling Location South	n=mg/1; Alkalinity=mg/1; Flo ft.; Depth of wellft.; Perform on, Methods and Remarks (i.e. odors, etc.) NonD-RayUate, a with Sample 1000	Chlorine Residual=_ w Rate ation Interval	Polynuclear Aromatic Hydrocarbons SDWA Pesticides & Herbicides mg/l ft.; Casing: IDM, WetTside PDSol CD.
FIELD DATA: pH=; C Dissolved Oxyger Depth to water Sampling Location South Location South Location Loca	n=mg/l; Alkalinity=mg/l; Flo ft.; Depth of wellft.; Perform on, Methods and Remarks (i.e. odors, etc.) NOND-Ray Wate, O Men Lample 1000 ne results in this Dock, accurately reflect the	Chlorine Residual=_ w Rate ation Interval CCUMULA	Polynuclear Aromatic Hydrocarbons SDWA Pesticides & Herbicides mg/l ft.; Casing: IDM, West Side DSOL CO. analyses, observations and 16
FIELD DATA: pH=; C Dissolved Oxyger Depth to water Sampling Location Sampling Location Sampling Location Location Sampling Location Location Sampling Location Lo	n=mg/l; Alkalinity=mg/l; Flo ft.; Depth of wellft.; Perform on, Methods and Remarks (i.e. odors, etc.) NOND-Ray Wate, O Men Lample 1000 ne results in this Dock, accurately reflect the	(764) (762) (762) Chlorine Residual=_ w Rate ation Interval CCUM Ula Hills bis results of my field Method	Polynuclear Aromatic Hydrocarbons SDWA Pesticides & Herbicides mg/l ft.; Casing: ft.; Casing: IDM_WeltSide DSol CD. analyses, observations and for the Lab: Home Connected of Shipment to the Lab: Home Connected
FIELD DATA: pH=; C Dissolved Oxygen Depth to water Sampling Location Sampling Location Location Samples were pro- Samples were pro- S	m=mg/l; Alkalinity=mg/l; Flo ft.; Depth of wellft.; Perform on, Methods and Remarks (i.e. odors, etc.) <u>NOND - Ray Wale</u> <u>OND - Ray Wale</u> <u>OND - Ray Wale</u> <u>OND - Ray Wale</u> <u>ODD</u> ne results in this block, accurately reflect the re collector):Septum Vials,Glass J reserved as follows:	Chlorine Residual=_ w Rate ation Interval CCUMULE Hills bis results of my field wethod ugs, and/or	Polynuclear Aromatic Hydrocarbons SDWA Pesticides & Herbicides mg/l ft.; Casing: ft.; Casing: IDM_WeltSide DSol CD. analyses, observations and for the Lab: Home Connected of Shipment to the Lab: Home Connected
FIELD DATA: pH=; C Dissolved Oxyger Depth to water Sampling Location Sampling Location Countries I certify that the activities.(signatur This form accoms Samples were pro- NP:	m=mg/l; Alkalinity=mg/l; Flo ft.; Depth of wellft.; Perform on, Methods and Remarks (i.e. odors, etc.) <u>how - Ray Wale</u> <u>how - Ray Wale</u> <u>how</u>	(764) 1 (762) 2 (762) 2 (762) 2 (762) 2 (762) 2 (762) 2 (762) 2 (762) 2 (762) 2 (762) 2 (762) 2 (762) 2 (762) 2 (762) 2 (762) 2 (764) 2 (764)	Polynuclear Aromatic Hydrocarbons SDWA Pesticides & Herbicides mg/l ft.; Casing: ft.; Casing: IDM_WeltSide DSol CD. analyses, observations and for the Lab: Home Connected of Shipment to the Lab: Home Connected
FIELD DATA: pH=; C Dissolved Oxygen Depth to water Sampling Location Sampling Location I certify that the activities.(signatur This form accons Samples were pro- NP: P-Ice	m=mg/l; Alkalinity=mg/l; Flo ft.; Depth of wellft.; Perfor- on, Methods and Remarks (i.e. odors, etc.) DOMD - Ray Undley Of Market Angle DOD he results in this Dock, accurately reflect the re collector):Septum Vials,Glass J reserved as follows: No Preservation; Sample stored at room to Sample stored in an ice bath (Not Frozen	Chlorine Residual=_ w Rate ation Interval CCUMULE Hills Sisse results of my field ugs, and/or emperature.).	Polynuclear Aromatic Hydrocarbons SDWA Pesticides & Herbicides mg/l ft.; Casing: IDM, Wett Side poscol CD. analyses, observations and Monte Connected of Shipment to the Lab: Monte Connected
FIELD DATA: pH=; C Dissolved Oxygen Depth to water Sampling Location Sampling Location I certify that the activities.(signatur This form accons Samples were pro- NP: P-Ice	memg/l; Alkalinity=mg/l; Flo ft.; Depth of wellft.; Perform on, Methods and Remarks (i.e. odors, etc.) <u>how - RainWate</u> , O <u>how - RainWate</u> , O how - Rainwate, Nature,	(764) 1 (762) 2 Chlorine Residual=_ w Rate ation Interval CCUM Ule Hill bic results of my field Method ugs, and/or to remove chlorine	Polynuclear Aromatic Hydrocarbons SDWA Pesticides & Herbicides mg/l ft.; Casing: IDM_WellSide DScl CD. analyses, observations and Home Connect post CD. analyses, observations and Home Connect post CD. analyses, observations and Home Connect post CD.
FIELD DATA: pH=; C Dissolved Oxyger Depth to water Sampling Location Sampling Location Countries I certify that the activities.(signatur This form accoms Samples were pro- NP: P-Ice P-Na_SO_ CHAIN OF CU	memg/l; Alkalinity=mg/l; Flo ft.; Depth of wellft.; Perform on, Methods and Remarks (i.e. odors, etc.) <u>how - RainWate</u> , O <u>how - RainWate</u> , O how - Rainwate, Nature,	(764) 1 (762) 2 Chlorine Residual=_ w Rate ation Interval CCUMULE Hills bis results of my field Method ugs, and/or to remove chlorine	Polynuclear Aromatic Hydrocarbons SDWA Pesticides & Herbicides mg/l ft.; Casing: IDM, Wett Side poscol CD. analyses, observations and Monte Connected of Shipment to the Lab: Monte Connected
FIELD DATA: pH=; C Dissolved Oxyger Depth to water Sampling Location Sampling Location Location I certify that the activities.(signatur This form accom Samples were proposed NP: P-Ice P-Na S O CHAIN OF CU I certify that the	memg/l; Alkalinity=mg/l; Flo ft.; Depth of wellft.; Perform on, Methods and Remarks (i.e. odors, etc.) Depth - ReinWate, Or me results in this Dock accurately reflect the re collector):	Chlorine Residual= (762) 1 (762) 1 (76	Polynuclear Aromatic Hydrocarbons SDWA Pesticides & Herbicides mg/l ft.; Casing: <i>IDM_WestScile</i> <i>IDM_WestScile</i> <i>ADSOLCO</i> - analyses, observations and <i>HomPConne</i> of Shipment to the Lab: <i>HomPConne</i> residual.
FIELD DATA: pH=; C Dissolved Oxyger Depth to water Sampling Location Sampling Location Countries I certify that the activities.(signatur This form accons Samples were pro- NP: P-Ice P-Na S O CHAIN OF CU I certify that the at (location)	$m_{e} = mg/l; Alkalinity = mg/l; Flo ft.; Depth of well ft.; Perform on, Methods and Remarks (i.e. odors, etc.) m_{e} = Pain Walter of the pain $	Chlorine Residual=_ w Rate ation Interval CCUMULA Hill bi results of my field ugs, and/or emperature.). to remove chlorine on	Polynuclear Aromatic Hydrocarbons SDWA Pesticides & Herbicides mg/l ft.; Casing: IDM_WestSide posol Co analyses, observations and for a shipment to the Lab: f
FIELD DATA: pH=; C Dissolved Oxyger Depth to water Sampling Location Sampling Location Countries I certify that the activities.(signatur This form accons Samples were pro- NP: P-Ice P-Na S O CHAIN OF CU I certify that the at (location)	memg/l; Alkalinity=mg/l; Flo ft.; Depth of wellft.; Perform on, Methods and Remarks (i.e. odors, etc.) Depth - ReinWate, Or me results in this Dock accurately reflect the re collector):	Chlorine Residual=_ w Rate ation Interval CCUMULA Hill bi results of my field ugs, and/or emperature.). to remove chlorine on	Polynuclear Aromatic Hydrocarbons SDWA Pesticides & Herbicides mg/l ft.; Casing: IBM Wattside possel CD. analyses, observations and if Man Carrier possel CD. analyses, observations and if Man Carrier analyses, observations and if Man Carrier possel CD. analyses, observations and if Man Carrier possel CD. analys

i.

Ì

LAB. N. OR- (380

THIS PAGE FOR LABORATORY RESULTS ONLY

	·		
This sample was tested using the analytical screen	ung mernod(s)	CHECKED DEIOW:	ļ
PURGEABLE SCREENS		EXTRACTABLE SCREENS	1
[] (753) Aliphatic Purgeables (1-3 Carbons)		(751) Aliphatic Hydrocarbons	
(754) Aromatic & Halogenated Purgeables		(760) Organochlorine Pesticides	1
(765) Mass Spectrometer Purgeables		(755) Base/Neutral Extractables	
[] (766) Trihalomethanes		(758) Herbicides, Chlorophenoxy acid	
Other Specific Compounds or Classes		(759) Herbicides, Triazines	
		(760) Organochlorine Pesticides	
		(761) Organophosphate Pesticides	1
		(767) Polychlorinated Biphenyls (PCB's)	
	<u> </u>	(764) Polynuclear Aromatic Hydrocarbons	
		🔲 (762) SDWA Pesticides & Herbicides	
<u>AN</u>	ALYTICA	AL RESULTS	
COMPOUND(S) DETECTED	CONC.	COMPOUND(S) DETECTED	CONC.
	[PPB]		[PPB]
t'A alle	1/h	1	
aromatic purgeables	NP		
holocomoted purperhles	ND		
prangermanes por quer as			
	{ }		
······································	[[· · · · · · · · · · · · · · · · · · ·	
	1		
	i	· · · · · · · · · · · · · · · · · · ·	
	1		
	i		
* DETECTION LIMIT • 🗡	11		
DETECTION LIMIT	1 ppp	+ DETECTION LIMIT +	·
ABBREVIATIONS USED:	/ /		
N D = NONE DETECTED AT OR ABOVE	THE STATE	D DETECTION LIMIT	
T R = DETECTED AT A LEVEL BELOW	THE STATE	D DETECTION LIMIT (NOT CONFIRMED)	1
[RESULTS IN BRACKETS] ARE UNCONF		•	
	,	•	
······			
LABORATORY REMARKS:		<u> </u>	
		···	<u></u>
	<u> </u>		
CERTIFICA	TE OF ANAL	YTICAL PERSONNEL	
Seal(s) Intact: Yes 🔀 No 🗔. Seal(s) broken by	, 01-7-	data: 12-11-0	ζ Ι
I certify that I followed standard laboratory procedu		$\frac{1}{\sqrt{-7}}$	<u>v</u>
	-		
that the statements on this page accurately reflect t $\frac{1}{2}$	~		
Date(s) of analysis: 4 Dec 86. Analyst's sig	gnature: <u></u>	Funcy	
I certify that I have reviewed and concur with the	19		block
			Siven.
Reviewers signature: I Meyercher			
			l
-			

SCIENTIF	TIC LABORATORY DIVISION
•	Camino de Salud, NE
Albuquerque,	NM 87106 [505]-841-2500
Organ	nic Chemistry Section
******	****
	ANALYTICAL REPORT *
	cession #: OR-86-1380 *
Organic Chemistry Section Scientific Lab. Div.	A Water, Purgeable sample.
700 Camino de Salud, NE	
Albuquerque, NM 87106	Submitted: November 26, 1986
Attn: Section Files	
Submitter:	User:
NM Oil Consv. Div.	OIL CONSERVATION DIV
DEMOGRAPHIC DATA:	
Collected On: 25-Nov-86	Location Township: 17S
At: 1430 hrs.	Range: 30E
By: Boy In/Near: Loco Hills	Section: 16 Tracts: 331
ANALYTICAL RESULTS for Aromatic/H	Halo. Purg. Screen:
Analysis	Value Note D. Lmt Units
Aromatic Purgeables (6) Halogenated Purgeables (33)	0.00 N 1.00 ppb 0.00 N 1.00 ppb
halogenated fulgeantes (33)	0.00 N 1.00 ppb
LABORATORY REMARKS: S Pond Rainwa	ater accumulation
A-Approvimate Value: N-None Deter	cted above Detection Limit; P=Compound
Present but not quantified; T=Tra Identity Not Confirmed	ace (<detection limit);="" u="Compound</td"></detection>
Analvst:	Reviewed:
J. Finney Analysis	Reviewed:

Distribution: [] User, [] Submitter, [] Report To, [*] SLD-Section

SC 700 Alb	ENTIFIC LAE Camino de S uquerque, NM	A 87106 — (5 5	ION 41-2555	359 wit GI	NITR	WATER CHE	
Collection DATE BGL// 125 Collection TIME 30		AB WC SYS SITE INFORM- ATION	Sample location	oco Hills	bispo.		Ø
Collected by - Person/Agen	" BO	VER /OCD		Sould P	ona j	Unit	ek
SEND NM FINAL St REPORT Sa	OIL CON ate Land nta Fe, David Bo	NM 87504-20 yer	ig, PO Box 20 088	88 July - 5 1027			
SAMPLING CONE)12			Owner		
Bailed	Pump	Water level		Discharge	I	Sample type	
Dipped pH (00400)	Тар	Conductivity (U		Water Temp. (00010)		Conductivity a	t 25°C (00094)
Field comments		<u> </u>	µmhc	<u> </u>	°C	I	μmho
SAMPLE FIELD T No. of samples submitted NR. No acid a ANALYTICAL RES NF, NA Conductivity (Corr 25°C (00095) Total non-filterable residue (suspende (00530) Cother: Other:	added C (SULTS from rected)	F: Whole sample (Non-filtered) Other- <i>specify</i> :	B STE. Filtered	5ml conc. HNO ₃ ad		A: 4ml fur Un 20 mg 87 mg 24 mg	$\begin{array}{c c} & & & & & \\ & & & & & \\ p \\ p \\ p \\ p \\$
NF, A-H₂SO₄			<u></u>	- A VR	<	: 0,2	12/10
 Nitrate-N + , Nitrattotal (00630) Arnmonia-N total (Total Kjeldahl-N (Chemical oxygen demand (00340) Total organic carb () 	(00610)		mg/l mg/l mg/l mg/l mg/l	F, A-H₂ SO₄ □ Nitrate-N + , Nitrate-dissolved (00631) □ Ammonia-N dissolv (00608) □ Total Kjeldahl-N () □ Other:		mç mç mç	g/l
 Other: Other: 		······································		Analyst	1 1	· · ·	eviewed by
Laboratory remarks	Sodiu	m not nu	n 12-4 -	RHR Srom C	3 1	16 86	US-
FOR OCD USE ·	Date	Owner Notif	ied 1/19/8	1 Phone or Lett	er?	Init	als R

RECEIVED 11 26 80	NO HM 24/8 USER 5	9300 🗆 59600 🕅	OTHER: 82	235	
	SITE INFORM- ► ATION	Laco ,	Hills	Disposal (2).
Collected by - Person/Agency	Collection site description	ription	uth Bo	nd, unu	şe
SEND NM OIL CO FINAL State Lan	•		Station/ well code		
SAMPLING CONDITIONS	1		Owner		
Bailed Pump Dipped Tap	Water level	Discharge		Sample type	
pH (00400)	Conductivity (Uncorrected)	Water Temp. (00010) ho	°C	Conductivity at 25 °C (000	094)
No. of samples submitted NA: No acid added	Whole sample (Non-filtered) KF: Filtered 0.45 µ Other-specify: □ A		2 ml H ₂ SO ₄ / added [74]	Ladded A: 4ml fuming HN	0 ₃
Submitted	Whole sample (Non-filtered) KF: Filtered 0.45 µ Other-specify: □ A	: 5ml conc. HNO ₃ a		A: 4ml fuming HN	0 ₃ a
No. of samples submitted III NA: No acid added III ANALYTICAL RESULTS fro NF, NA	NF: Whole sample (Non-filtered) Other-specify: MA	: 5ml conc. HNO ₃ a Iyzed F, NA Calcium (00915) Magnesium (0092	added Z	A: 4m1 fuming HN Units Date mg/l	e ana
No. of samples submitted I NA: No acid added I ANALYTICAL RESULTS from NF, NA I Conductivity (Corrected) 25 °C (00095) I Total non-filterable I	NF: Whole sample (Non-filtered) Other-specify: A SAMPLES Units Date anal	: 5m1 conc. HNO ₃ a iyzed F, NA □ Calcium (00915) □ Magnesium (0092 □ Sodium (00930) □ Potassium (00935)	added 7 24 (1) 15)	A: 4ml fuming HN	e ana
No. of samples submitted I Image: NA: No acid added Image: NA: No acid added ANALYTICAL RESULTS from the second structure of the second struc	NF: Whole sample (Non-filtered) Other-specify: A SAMPLES Units Date anal	Sml conc. HNO3 a Iyzed F, NA □ Calcium (00915) □ Magnesium (0092 □ Sodium (00930) □ Potassium (00935) □ Bicarbonate (0044)	added 744	A: 4m1 fuming HN Units Date mg/l mg/l mg/l mg/l	e ana
No. of samples submitted I Image: NA: No acid added Image: NA: No acid added ANALYTICAL RESULTS from NF, NA Image: Conductivity (Corrected) 25°C (00095) Image: Conductivity (Corrected) 25°C	NF: Whole sample (Non-filtered)	Sml conc. HNO3 a Iyzed F, NA NA Calcium (00915) Magnesium (00922) Sodium (00930) Potassium (00930) Bicarbonate (00444) Chloride (00940) Sulfate (00945) Sulfate (00945)	added 724	A: 4ml fuming HN	e ana
No. of samples submitted I Image: NA: No acid added Image: NA: No acid added ANALYTICAL RESULTS from the second structure of the second struc	NF: Whole sample (Non-filtered)	Sml conc. HNO3 a Iyzed F, NA 	added 724	A: 4m1 fuming HN	e ana
No. of samples submitted □ □ NA: No acid added □ ANALYTICAL RESULTS from NF, NA □ □ Conductivity (Corrected) 25 °C (00095) □ Total non-filterable residue (suspended) (00530)	NF: Whole sample (Non-filtered)	Sml conc. HNO3 a Iyzed F, NA □ Calcium (00915) □ Magnesium (00920) □ Sodium (00930) □ Potassium (00935) □ Bicarbonate (00444) □ Chloride (00945) □ Total filterable reside	added 724	A: 4ml fuming HN Units Date mg/l	e ana
No. of samples submitted I Image: NA: No acid added Image: NA: No acid added ANALYTICAL RESULTS from the second added Image: NF, NA Image: Conductivity (Corrected) 25°C (00095) Image: NF, NA Image: Conductivity (Corrected) 25°C (00095) Image: NF, NA Image: Total non-filterable residue (suspended) (00530) Image: Nitrate-N Image: Conductivity (Corrected) Image: Nitrate-N Image: Conductivity (Corrected) Image: Conductivity (Corrected) Image: Conductity (Corrected) Image: Condu	NF: Whole sample (Non-filtered)	: 5ml conc. HNO ₃ a iyzed F, NA Calcium (00915) Magnesium (00920) Sodium (00930) Potassium (00930) Bicarbonate (00444) Chloride (00940) Sulfate (00945) Total filterable resid (dissolved) (70300	added 724	A: 4ml fuming HN Units Date mg/l	e ana
No. of samples submitted I Image: NA: No acid added Image: NA: No acid added ANALYTICAL RESULTS from the second added Image: NF, NA Image: Conductivity (Corrected) 25°C (00095) Image: NF, NA Image: Conductivity (Corrected) 25°C (00095) Image: NF, NA Image: Total non-filterable residue (suspended) (00530) Image: NF, A-H_2SO_4 Image: Nitrate-N + total (00630) Image: Nitrate-N + total (00630)	NF: Whole sample (Non-filtered) Other-specify: MARCES MARCES Marceleteeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeee	: 5ml conc. HNO ₃ a iyzed F, NA Calcium (00915) Magnesium (0092) Sodium (00930) Potassium (00935) Bicarbonate (0044) Chloride (00945) Chloride (00945) Total filterable resid (dissolved) (70300 Other: F, A-H ₂ SO ₄ Nitrate-N + , Nitrate	added (24)	A: 4m1 fuming HN	e ana
No. of samples submitted I Image: NA: No acid added Image: NA: No acid added ANALYTICAL RESULTS from the second added Image: NF, NA Image: Conductivity (Corrected) 25 °C (00095) Image: Conductivity (Corre	NF: Whole sample (Non-filtered) Other-specify: MARCES MARCES Marceleteeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeee	: 5ml conc. HNO ₃ a iyzed F, NA Calcium (00915) Magnesium (0092) Sodium (00930) Potassium (00935) Bicarbonate (0044) Chloride (00945) Chloride (00945) Total filterable resid (dissolved) (70300 Other: F, A-H ₂ SO ₄ Nitrate-N + , Nitrate dissolved (00631)	added (24)	A: 4m1 fuming HN Units Date mg/l	e ana
No. of samples submitted I Image: NA: No acid added Image: NA: No acid added ANALYTICAL RESULTS from the second structure of the second struc	NF: Whole sample (Non-filtered) Other-specify: MARCES MARCES Marceleteeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeee	: 5ml conc. HNO ₃ a iyzed F, NA Calcium (00915) Magnesium (0092) Sodium (00930) Potassium (00935) Bicarbonate (0044) Chloride (00945) Sulfate (00945) Total filterable resid (dissolved) (70300 Other: F, A-H ₂ SO ₄ Nitrate-N + , Nitrate	added (24)	A: 4m1 fuming HN	e ana
No. of samples submitted I Image: NA: No acid added Image: NA: No acid added ANALYTICAL RESULTS from the second added Image: NF, NA Image: Conductivity (Corrected) 25 °C (00095) Image: Conductivity (Corre	NF: Whole sample (Non-filtered) Other-specify: MARCES Units Date ana	: 5ml conc. HNO3 a Iyzed F, NA □ Calcium (00915) □ Magnesium (0092 □ Sodium (00930) □ Potassium (00935) □ Bicarbonate (0044) □ Chloride (00945) □ Total filterable resid (dissolved) (70300 □ Other: F, A-H₂ SO4 □ Nitrate-N +, Nitrate dissolved (00631) □ Ammonia-N dissol	added (24)	A: 4m1 fuming HN Units Date mg/l	
No. of samples submitted I Image: NA: No acid added Image: NA: No acid added ANALYTICAL RESULTS from the second added Image: NF, NA Image: Conductivity (Corrected) 25°C (00095) Image: NF, NA Image: Conductivity (Corrected) 25°C (00095) Image: NF, NA Image: Total non-filterable residue (suspended) (00530) Image: NF, A-H2SO4 Image: NF, A-H2SO4 Image: Nitrate-N total (00630) Image: Nitrate-N total (00610) Image: Notal Kjeldahl-N (Image: Notal (00610) Image: Notal (00610) Image: Chemical oxygen Image: Notal	NF: Whole sample (Non-filtered) I Other-specify: I A Om SAMPLES Units Date ana	: 5ml conc. HNO3 a Iyzed F, NA □ Calcium (00915) □ Magnesium (0092 □ Sodium (00930) □ Potassium (00935) □ Bicarbonate (0044) □ Chloride (00945) □ Total filterable resid (dissolved) (70300 □ Other: F, A-H₂ SO4 □ Nitrate-N +, Nitrate dissolved (00631) □ Ammonia-N dissol (00608)	added (24)	A: 4m1 fuming HN Units Date mg/l	
No. of samples submitted I Image: NA: No acid added Image: NA: No acid added ANALYTICAL RESULTS from the second structure of the second struc	NF: Whole sample (Non-filtered) Other-specify: MARCES Units Date ana 	: 5ml conc. HNO3 a Iyzed F, NA □ Calcium (00915) □ Magnesium (0092 □ Sodium (00930) □ Potassium (00935) □ Bicarbonate (00444 □ Chloride (00945) □ Total filterable resid (dissolved) (70300 □ Other: F, A-H₂ SO4 □ Nitrate-N +, Nitratt dissolved (00631) □ Ammonia-N dissol (00608) □ Total Kjeldahl-N ()	added (24)	A: 4m1 fuming HN Units Date mg/l	

à

ICAP SCAN

SLD Lab No	HM	2418
Analyst 🕥	3	
∥ Date Analyze		12/10/86

Cally Reviewed by: Date Reported: 1/13/8

ICAP VALUE(mg/l) AA VALUE (mg/l) ELEMENT <D.(Aluminum Barium <0.1 Beryllium 1.01 0.2 Boron 40.1 Cadmium a5. Calcium <0.1 Chromium Cobalt <01 40.1 Copper 0.7 Iron Lead 40.1 2.9 Magnesium <0.05 Manganese 40.1 Molybdenum 10.1 Nickel Silicon 2.7 <0.) Silver 0.2 Strontium Tin <0. Vanadium 20. 10.1 Zinc < 0.005 Arsenic Selenium Mercury

137 <u>9</u> -C	SCIE UTIFIC LABOR 700 Camino o Albuquerque, NM	E ENVIRONMENT
EPORT TO:	David Boyer	S.L.D. No. OR- 1379 BV
	N.M. Oil Conservation Divisio	n DATE REC. 86-11-26
	P. 0. Box 2088	
	Santa Fe, N.M. 87504-2088	PRIORITY
HONE(S):	827-5812	USER CODE: 18 2 2 3 5
UBMITTER:	David Boyer	CODE: 12 1610_1
	ECTION CODE: (YYMMDDHHMMIII)	A HIT D CHE GO DAD
	water \mathbf{K}_{i} , soil \square , food \square , oth	\sim
OUNTY: EC		
	DE: (Township-Range-Section-Tracts)	$\frac{1}{5} + \frac{3}{0} + \frac{1}{6} + \frac{1}{6} + \frac{3}{3} + \frac{1}{5} + \frac{1}$
		······································
	UESTED: Please check the appropriate box ver possible list specific compounds suspected	(es) below to indicate the type of analytical screens or required.
	PURGEABLE SCREENS	EXTRACTABLE SCREENS
	atic Purgeables (1-3 Carbons) atic & Halogenated Purgeables	(751) Aliphatic Hydrocarbons (760) Organochlorine Pesticides
	Spectrometer Purgeables	(755) Base/Neutral Extractables
] (766) Trihal	omethanes	(758) Herbicides, Chlorophenoxy acid
Othe	r Specific Compounds or Classes	(759) Herbicides, Triazines
		(760) Organochlorine Pesticides (761) Organophosphate Pesticides
	······································	(767) Polychlorinated Biphenyls (PCB's)
		(764) Polynuclear Aromatic Hydrocarbons
]		(762) SDWA Pesticides & Herbicides
emarks:	· · · · · · · · · · · · · · · · · · ·	
IELD DATA:		
H=; C	onductivity=umho/cm atC	; Chlorine Residual=mg/l
issolved · Oxyger	m=mg/l; Alkalinity=mg/l; Flo	ow Rate/
epth to water	ft.; Depth of wellft.; Perfor	ation Intervalft.; Casing:
ampling Locatio	on, Methods and Remarks (i.e. odors, etc.) $7 \rightarrow H \rightarrow e^{\pm}$, $L \rightarrow e^{\pm}$	Hill- Kinop OFinite
(Spprox3ST HSD	DISPUTAN SACTORY
certify that the the the the the the termination of te	ne results in this block accurately reflect the re collector) 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	e results of my field analyses, observations and Method of Shipment to the Lab: Handcarry
	npanies Z Septum Vials, / Glass J reserved as follows:	Jugs, and/or
] NP:	No Preservation; Sample stored at room t	emperature.
	Sample stored in an ice bath (Not Frozer	n).
P-Na S O THAIN OF CU	Sample Preserved with Sodium Thiosulfate	to remove chlorine residual.
		- Ozen to Sary C. Clen
t (location)	HED/SLD	on <u>11 26 86 4:00 PM</u> and that
ne statements i	/	Not Sealed Seals Intact: Yes - No
ignatures <u> </u>		_ Mary C. Edler

-

)

Y

1

|

; ;)

ł

•



THIS PAGE FOR LABORATORY RESULTS ONLY

This sample was tested using the analytical scre	ening method(s)	checked below:	
PURGEABLE SCREENS	,	EXTRACTABLE SCREENS	
[] (753) Aliphatic Purgeables (1-3 Carbons)		(751) Aliphatic Hydrocarbons	
(754) Aromatic & Halogenated Purgeables		(760) Organochlorine Pesticides	
(765) Mass Spectrometer Purgeables		(755) Base/Neutral Extractables	
(766) Trihalomethanes		[(758) Herbicides, Chlorophenoxy acid	
		(108) Herbicides, Oniotophenoxy actu	
Other Specific Compounds or Classes			
		(760) Organochlorine Pesticides	
		(761) Organophosphate Pesticides	
	<u> </u>	(767) Polychlorinated Biphenyls (PCB's)	
		 (764) Polynuclear Aromatic Hydrocarbons (762) SDWA Pesticides & Herbicides 	
		[_] (162) SDWA Pesticides & herbicides	
AN	JALYTICA	L RESULTS	
COMPOUND(S) DETECTED	CONC.	COMPOUND(S) DETECTED	CONC.
COMPOUND(S) DETECTED	[PPB]	COMPOUND(S) DETECTED	[PPB]
		[[[]]]]]
aromatic purgoables	ND		
halve tod Aurolles	IND		
Mangenerur purgrapus			·
<u> </u>			
······································			
	╺╂╼╍╼╾┨╵		
* DETECTION LIMIT * *	Spob	+ DETECTION LIMIT +	
ABBREVIATIONS USED:			
		DEFECTION IN UT	
N D = NONE DETECTED AT OR ABOVT R = DETECTED AT A LEVEL DELOY			
T R = DETECTED AT A LEVEL BELOW			
RESOLIS IN BRACKEIS ARE UNCON	FIRMED AND/C	OR WITH APPROXIMATE QUANTITATION	
I ADODATODY DEMADUR.			
LABORATORY REMARKS:			
			· · · ·
			[
CERTIFIC.	ATE OF ANALY	TICAL PERSONNEL	4
Seal(s) Intact: Yes 🔀 No 🗔. Seal(s) broken	hr OFZ	date: <u>2-4-</u>	el 1
I certify that I followed standard laboratory proceed	lure on handling	and analysis of this sample unless otherwise note	d and
that the statements on this page accurately reflect	*		a and
r/h r/h			
Date(s) of analysis: <u>4 Dec 86</u> . Analyst's	signature: <u> </u>	Juney	
I certify that I have reviewed and concur with the	e analytical resul	ts for this sample and with the statements in thi	s block.
Reviewers signature: <u>A Meyerhein</u>			
V			

	FIC LABORA Camino de , NM 87106	Salud,	NE	00
Orga	nic Chemis	try Se	ction	
******	* * * * * * * * * *	* * * * * *	****	* * *
	ANALYTICAL cession #: *****	OR-8	6-1379	* * * * *
Organic Chemistry Section Scientific Lab. Div. 700 Camino de Salud, NE		·	-	-
Albuquerque, NM 87106	Sub	mitted	: Novembei	r 26, 1986
Attn: Section Files				
Submitter:	Use	r: 	• • • • • • • • • • • • •	
NM Oil Consv. Div.	OIL	CONSE	RVATION D	ĽV
DEMOGRAPHIC DATA:				
Collected On: 25-Nov-86 At: 1345 hrs. By: Boy In/Near: Loco Hills	Loc	ation	Township: Range: Section: Tracts:	30E 16
ANALYTICAL RESULTS for Aromatic/	Halo. Purg	. Scre	en:	
Analysis	Value	Note	D. Lmt	Units
Aromatic Purgeables (6) Halogenated Purgeables (33)	0.00	N N		ppb ppb
LABORATORY REMARKS: Monitor hole	: #1			
	· · · · · · · · · · · · · · · · · · ·			
	<u></u>			
A=Approximate Value; N=None Dete Present but not quantified; T=Tr Identity Not Confirmed				
Analyst: J. Finney Analysi	Revi	ewed:	rhein Su	pervisor Date
o				

Ì.

1

. | |

Distribution: [] User, [] Submitter, [] Report To, [*] SLD-Section

I.

SCIENTIF 700 Camir Albuquerq	co Health and Environme IC LABORATORY to de Salud NE Jue, NM 87106 — (505) 84	ON 11-2555	859 - WM Ge a	RAL WATER	RCHEMISTRY
DATE RECEIVED 11 26 8	LAB WC 545			HER: 82235	
Sellinction DATE	SITE	Sample location	co Hills D	isposal	Co.
Collection TIME	ATION	Collection site description	.	4-1	
Collected by Person/Agency	ROVER / OCD		/Y/	H = I	
SEND NM OIL FINAL State 1	NMENTAL BUREAU CONSERVATION D Land Office B1d Fe, NM 87504-20	g, PO Box 208	8		
Phone: 82	7-5012			Station/	
SAMPLING CONDITION				Dwner	
Bailed D Pump			Discharge	Sample	e tvoo
Dipped Tap			Discillarge		
рН (00400)	Conductivity (Un	icorrected) µmho	Water Temp. (00010)	°C Condu	ctivity at 25°C (00094) µmho
Field comments					
SAMPLE FIELD TREAT	MENT - Check pro	perboxes Pne	Gilteray on	lin	
No. of samples J	Whole sample (Non-filtered)	F. Filtered in	field with A: 2 m	nl H₂SO₄/L adde	ed
NA: No acid added					
			5ml conc. HNO, add	ed 🗂 A: 41	al fuming HNO, added
			5ml conc. HNO3 add	ed 🖾 A: 41	nl fuming HNO ₃ added
ANALYTICAL RESULTS				ed 🖾 A: 4n	
NF, NA	S from SAMPLES	Units Date analyze		ed 🔲 A: 4n	Units Date analyzed
NF, NA			d F, NA Calcium (00915) Magnesium (00925)	<u> </u>	Units Date analyzed mg/i?~/ mg/i?~/
NF, NA Conductivity (Corrected) 25°C (00095)	S from SAMPLES	Units Date analyze	d F, NA Calcium (00915) Magnesium (00925) Sodium (00930)	364	Units Date analyzed mg/I?~/ mg/I?~/ mg/I?~/
NF, NA Conductivity (Corrected) 25°C (00095) Total non-filterable residue (suspended)	S from SAMPLES	Units Date analyze µmho <i>1?./1L</i>	d F, NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440)		Units Date analyzed mg/I?~/ mg/I?~/ mg/I?~/ mg/I?~/ mg/I?~/ mg/I?~/ mg/I?~/ mg/I?~/ mg/I?~/ mg/I?~/
NF, NA Conductivity (Corrected) 25°C (00095)	S from SAMPLES	Units Date analyze	d F, NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00940)	364 302 446 17.1 107 7972	Units Date analyzed mg/I
NF, NA Conductivity (Corrected) 25°C (00095) Total non-filterable residue (suspended) (00530) Cother:	5 from SAMPLES	Units Date analyze 	d F, NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440)	364 302 446 17.1 107 7972 420	Units Date analyzed mg/i _/?-/ mg/i _/?-/ mg/i _/?-/ mg/i _/?-/ mg/i _/?-/ mg/i _/?-/ mg/i _/?-/ mg/i _/?-/ mg/i _/?-/ 12//2
NF, NA Conductivity (Corrected) 25°C (00095) Total non-filterable residue (suspended) (00530) COther: p H	5 from SAMPLES	Units Date analyze 	 F, NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00940) Sulfate (00945) Total filterable residue (dissolved) (70300) 	364 302 446 17.1 107 7972 420 1758	Units Date analyzed mg/l $/?-/$ mg/l $/?/$ mg/l $/?/$ mg/l $/?/$ mg/l $/?/$ mg/l $/?/$
NF, NA Conductivity (Corrected) 25°C (00095) Total non-filterable residue (suspended) (00530) Cother:	5 from SAMPLES	Units Date analyze 	 F, NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00940) Sulfate (00945) Total filterable residue 	302 302 446 17.1 107 7972 420 1758	Units Date analyzed mg/l /2~/ mg/l /2/5 mg/l /2/5 mg/l /2/5 mg/l /2/5
NF, NA Conductivity (Corrected) 25°C (00095) Total non-filterable residue (suspended) (00530) Cother: Other: Other:	5 from SAMPLES	Units Date analyze 	 F. NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00940) Sulfate (00945) Total filterable residue (dissolved) (70300) Other: 	364 302 446 17.1 107 7972 420 1758	Units Date analyzed mg/l /?~/ mg/l /?/
NF, NA Conductivity (Corrected) 25°C (00095) □ Total non-filterable residue (suspended) (00530) C Other: □ Other: □ Other: NF, A-H ₂ SO ₄ □ Nitrate-N + , Nitrate-N total (00630)	5 from SAMPLES ;856/ 7 .15	Units Date analyze	 F, NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00940) Sulfate (00945) Total filterable residue (dissolved) (70300) Other: 	302 446 17.1 107 7972 420 1758 0 20	Units Date analyzed mg/l /?~/ mg/l /?/
NF, NA Conductivity (Corrected) 25°C (00095) □ Total non-filterable residue (suspended) (00530) COther: □ Other: □ Other: NF, A-H ₂ SO ₄ □ Nitrate-N ⁺ , Nitrate-N total (00630) □ Ammonia-N total (00610)	5 from SAMPLES ;856/ 7 .15	Units Date analyze 	 F, NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00940) Sulfate (00945) Total filterable residue (dissolved) (70300) Other: G F, A-H₂ SO₄ Nitrate-N + , Nitrate-N dissolved (00631) 	302 446 17.1 107 79.72 420 17.58 0 20	Units Date analyzed mg/l /?~/ mg/l /?/
NF, NA Conductivity (Corrected) 25°C (00095) Total non-filterable residue (suspended) (00530) C+Other: Other: Other: NF, A-H₂SO. Nitrate-N +, Nitrate-N total (00630) Ammonia-N total (00610) Total Kjeldahl-N ()	5 from SAMPLES ;856/ 7 .15	Units Date analyze	d F, NA A Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00940) Chloride (00945) Total filterable residue (dissolved) (70300) Other: F, A-H2 SO4 Nitrate-N + , Nitrate-N dissolved (00631) Armmonia-N dissolved	302 446 17.1 107 79.72 420 17.58 0 20	Units Date analyzed mg/l 12^{-1} 2^{-1} 12^{-1} mg/l 12^{-1} 12^{-1} 12^{-1} mg/l 12^{-1} 12^{-1} 12^{-1} mg/l 12^{-1} mg/l 12^{-1} mg/l 12^{-1}
NF, NA Conductivity (Corrected) 25°C (00095) □ Total non-filterable residue (suspended) (00530) COther: □ Other: □ Other: NF, A-H ₂ SO ₄ □ Nitrate-N +, Nitrate-N total (00630) □ Ammonia-N total (00610) □ Total Kjeldahl-N () □ Chemical oxygen	5 from SAMPLES ;856/ 7 .15	Units Date analyze	 F, NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00940) Sulfate (00945) Total filterable residue (dissolved) (70300) Other: G F, A-H₂ SO₄ Nitrate-N + , Nitrate-N dissolved (00631) 	302 446 17.1 107 79.72 420 17.58 0 20	Units Date analyzed mg/l $/?-/$ mg/l $/?/$
NF, NA Conductivity (Corrected) 25°C (00095) Total non-filterable residue (suspended) (00530) C→Other: Other: Other: NF, A-H ₂ SO. Nitrate-N +, Nitrate-N total (00630) Ammonia-N total (00610) Total Kjeldahl-N ()	5 from SAMPLES ;856/ 7 .15	Units Date analyze mho??.///. mg/1 mg/1 mg/1 mg/1	d F, NA A Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) A Chloride (00940) Chloride (00945) Total filterable residue (dissolved) (70300) Other: F, A-H2 SO4 Nitrate-N + , Nitrate-N dissolved (00631) Ammonia-N dissolved Total Kjeldahl-N (()	302 446 17.1 107 79.72 420 17.58 0 20	Units Date analyzed mg/l 12^{-1} 2^{-1} 12^{-1} mg/l 12^{-1} 12^{-1} 12^{-1} mg/l 12^{-1} 12^{-1} 12^{-1} mg/l 12^{-1} mg/l 12^{-1} mg/l 12^{-1}
NF, NA Conductivity (Corrected) 25°C (00095) □ Total non-filterable residue (suspended) (00530) C Other: □ Other: □ Other: NF, A-H ₂ SO ₄ □ Nitrate-N +, Nitrate-N total (00630) □ Ammonia-N total (00610) □ Total Kjeldahl-N () □ Chemical oxygen demand (00340) □ Total organic carbon ()	5 from SAMPLES ;856/ 7 .15	Units Date analyze	d F, NA A Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) A Chloride (00940) Chloride (00945) Total filterable residue (dissolved) (70300) Other: F, A-H2 SO4 Initrate-N + , Nitrate-N dissolved (00631) Armonia-N dissolved (00608) Initrate-N + Initrate-N	302 446 17.1 107 79.72 420 17.58 0 20	Units Date analyzed mg/l $/?-/$ mg/l $/?/$
NF, NA Conductivity (Corrected) 25°C (00095) Total non-filterable residue (suspended) (00530) C+Other: Other: Other: NF, A-H₂SO₄ Nitrate-N +, Nitrate-N total (00630) Ammonia-N total (00610) Total Kjeldahl-N () Chemical oxygen demand (00340)	5 from SAMPLES ;856/ 7 .15	Units Date analyze mho??.///. mg/1 mg/1 mg/1 mg/1	d F, NA A Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) A Chloride (00940) Chloride (00945) Total filterable residue (dissolved) (70300) Other: F, A-H2 SO4 Nitrate-N + , Nitrate-N dissolved (00631) Ammonia-N dissolved Total Kjeldahl-N (()	<u>364</u> <u>302</u> <u>446</u> <u>171</u> <u>107</u> <u>7972</u> <u>420</u> <u>1758</u> <u>С</u> <u>20</u>	Units Date analyzed mg/l /?~/ mg/l /?//? mg/l /?/? mg/l /?/? mg/l /?
NF, NA Conductivity (Corrected) 25°C (00095) □ Total non-filterable residue (suspended) (00530) C Other: □ Other: □ Other: NF, A-H ₂ SO ₄ □ Nitrate-N +, Nitrate-N total (00630) □ Ammonia-N total (00610) □ Total Kjeldahl-N () □ Chemical oxygen demand (00340) □ Total organic carbon () □ Other: □ Other:	5 from SAMPLES 	Units Date analyze mho??.///. mg/1 mg/1 mg/1 mg/1	d F, NA Q Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Q Chloride (00940) Q Sulfate (00945) Total filterable residue (dissolved) (70300) Q Other: Q F, A-H2 SO4 I Nitrate-N + , Nitrate-N dissolved (00631) I Ammonia-N dissolved (00608) I Total Kjeldahl-N (() Other: Analyst	364 302 446 17.1 107 7972 420 1758 0 20 1758 0 20	Units Date analyzed mg/l /?~/ mg/l /?//? mg/l /?/? mg/l /?/? mg/l /?
NF, NA Conductivity (Corrected) 25°C (00095) □ Total non-filterable residue (suspended) (00530) COther: □ Other: NF, A-H ₂ SO ₄ □ Nitrate-N +, Nitrate-N total (00630) □ Ammonia-N total (00610) □ Total Kjeldahl-N () □ Chemical oxygen demand (00340) □ Total organic carbon () □ Other: □ Other:	5 from SAMPLES i856/ 7.15 berepeed b	Units Date analyze	d F, NA Q Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Q Chloride (00940) Q Sulfate (00945) Total filterable residue (dissolved) (70300) Q Other: Q F, A-H2 SO4 I Nitrate-N + , Nitrate-N dissolved (00631) I Ammonia-N dissolved (00608) I Total KjeldahI-N (() Other: Analyst	<u>364</u> <u>302</u> <u>446</u> <u>171</u> <u>107</u> <u>7972</u> <u>420</u> <u>1758</u> <u>С</u> <u>20</u>	Units Date analyzed mg/l /?-/ <

SCIENTIFI 700 Camin Albuquerqu	o Health and Environment Departme C LABORATORY DIVISION o de Salud NE ue, NM 87106 — (599841-2555	959-	GENERAL WATER CHEMISTRY NITROGEN ANALYSIS
DATE AECEIVED // 26/80 pluction DATE 56 // 125 ollection_IME / 345	SITE INFORM- ► ATION	59300 59600 tion Loco H.H.	S Sisposal Co.
ENVIRON NM OIL NAL State L	BOYER /OCD MENTAL BUREAU CONSERVATION DIVISION and Office Bldg, PO B e, NM 87504-2088		
Phone: 82 AMPLING CONDITION	7-5812 IS		Station/ well code Owner
Bailed Pump Dipped Tap	Water level	Discharge	Sample type
pH (00400) Field comments	Conductivity (Uncorrected)	Water Temp. (0001 µmho	0) Conductivity at 25°C (00094) μmh
Submitted	G from SAMPLES	Filtered in field with 0.45 µmombrane filter A: 5ml conc. HNC e analyzed F, NA	O ₃ added □A: 4ml fuming HNO ₃ adde Units Date analyzed
Conductivity (Corrected) 25°C (00095)	i856/μmho	12/1L A Calcium (009) X Magnesium (009) X Sodium (009)	115) <u>364</u> mg/l <u>12-1</u> 100925) <u>302</u> mg/l <u>12-1</u>
□ Total non-filterable residue (suspended) (00530) ♥ Other: p H □ Other:		Potassium (00 Bicarbonate (12/2 Sulfate (0094	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
□ Other: NF, A-H₂SO4		Total filterable (dissolved) (7)	7300 758 mail (2/9)
Nitrate-N + , Nitrate-N total (00630)	mg/l mg/l	F, A-H ₂ SO ₄	Nitrate-N
 Arnmonia-N total (00610) Total Kjeldahl-N () Chemical oxygen demand (00340) Total organic carbon	mg/l mg/l mg/l	Ammonia-N (00608) (00608) Total Kjeldahl () Other:	dissolved mg/l
 Arnmonia-N total (00610) Total Kjeldahl-N Total cygen Chemical oxygen demand (00340) Total organic carbon 	mg/l	□ Ammonia-N c (00608) □ Total Kjeldahl ()	dissolved mg/i I-N

. I

SCIEN 700 Ca Albuq	TIFIC LAE Imino de S Jerque, NM	ORATORY SIO alud NE 1 87106 — (505) 841-	2555	G		y Metal VATER OHEMI OGEN ANALY	STRY SID
DATE RECEIVED // 26 Callection DATE Sollection TME / 545 Collected by - Person/Agency	186 H	SITE INFORM- ► ATION	USER 59300 Sample location	Laco 1	отнея: 822 V/1/3 1 W - 4	235 Drspose/ MH-1	().
END NM O INAL Stat	IL CONS e Land a Fe, I	VM 87504-208 /er	, PO Box 208		Station/ weil code		
Bailed D Pu	_	Motor lovel		Disabarra		Completion	
Bailed Pu Dipped Ta		Water level		Discharge		Sample type	
pH (00400)		Conductivity (Unc	prrected) µmho	Water Temp. (00010)	°C	Conductivity at 25	°C (00094) µmhc
No. of samples submitted		(Non-filtered)	□A:	mbrane filter A: 5ml conc. HNO ₃ a	$2 \text{ ml H}_2 \text{SO}_4 /$): 4ml fumin	g HNO ₃ added
NF, NA			Units Date analyze	1		Units	Date analyzed
25°C (00095) ☐ Total non-filterable residue (suspended) (00530) ✓ Other: ↓ ✓ Other: ↓ ☐ Other: ↓ MF, A-H ₂ SO ₄			µmho mg/l 	 Calcium (00915) Magnesium (00923) Sodium (00930) Potassium (00935) Bicarbonate (00444 Chloride (00940) Sulfate (00945) Total filterable resid (dissolved) (70300) Other: 	0)		
Nitrate-N + , Nitrate-N				F, A-H₂ SO₄			
totał (00630) Ammonia-N totał (006 Totał Kjeldahl-N () Chemicał oxygen demand (00340) Total organic carbon ())			mg/l mg/l mg/l mg/l mg/l	 Nitrate-N + , Nitrate dissolved (00631) Ammonia-N dissol (00608) Total Kjeldahl-N () Other: 		mg/l _ mg/l _ mg/l _	
Other: Other: Laboratofy remarks				Analyst		eported Review	ashby
Sample	dy	jested					
FOR OCD USE	Date C	wner Notifie	ed_ <u>1/19/8</u> -	Phone or Lett	en?	Inital	s B

ICAP SCAN

SLD Lab No.	HM 2412
Analyst 🔗	
Date Analyzed	12/10/86

-

Reviewed by: 13/8 Date Reported:__ L

ELEMENT

ICAP VALUE(mg/l) AA VALUE(mg/l)

Aluminum	0.3	
Barium	4.5	
Beryllium	<0.1	
Boron	0.5	
Cadmium	٢٥.	
Calcium	2200.	
Chromium	<0.1	
Cobalt	46.1	
Copper	40.)	
Iron	3.0	
Lead	0.1	
Magnesium	/370.	
Manganese	2.3	
Molybdenum	20.1	
Nickel	And Oil interference	
Silicon	8.2	
Silver	<0.1	<u>na serie de la constance de la cons</u>
Strontium	71.	
Tin	40.1	
Vanadium	<0.1	
Zinc	0.3	
Arsenic		0.027
Selenium		
Mercury		
<u> </u>		
	<u> </u>	
	· · · · ·	

··· ··································	SCIENTIFIC LABORATORY DIVEDN
REPORT TO:	David Boyer S.L.D. No. OR- 1367 // N.M. Oil Conservation Division DATE REC. 11-26-8 P. O. Box 2088 FRIORITY PRIORITY
PHONE(S):	327-5812 USER CODE: 8 2 2 3 5
SUBMITTER:	David Boyer CODE: 12 16 10 1
SAMPLE COLLE	CTION CODE: (YYMMDDHHMMIII) 18/6/1/2/5/12/4/5/2018-
sample type: county: <u>E</u> location cod	WATER Δ , SOIL \square , FOOD \square , OTHER: CODE: \downarrow ; CITY: $_ Loco H///5$ CODE: E: (Township-Range-Section-Tracts) $ 1 7 5 - 3 0 E + 1 6 + 3 3 1 (10N06E243-$
	UESTED : Please check the appropriate box(es) below to indicate the type of analytical screens er possible list specific compounds suspected or required.
(754) Aroma (765) Mass (766) Trihal	Specific Compounds or Classes
	(767) Polychlorinated Biphenyls (PCB's) (764) Polynuclear Aromatic Hydrocarbons (762) SDWA Pesticides & Herbicides
FIELD DATA: pH=; Co Dissolved Oxygen Depth to water	[] (764) Polynuclear Aromatic Hydrocarbons
FIELD DATA: pH=; Co Dissolved Oxygen Depth to water Sampling Location I certify that the activities (signatu This form accom Samples were pr NP: DEP-Ice NP: DEP-Ice CHAIN OF CU: I certify that the at (location)	☐ (764) Polynuclear Aromatic Hydrocarbons ☐ (762) SDWA Pesticides & Herbicides ☐ (764) Pethods and Remarks (i.e. odors, etc.) ☐ (764) Herbicides ☐ (764) Pethods and Remarks (i.e. odors, etc.) ☐ (765) Herbicides

į



THIS PAGE FOR LABORATORY RESULTS ONLY

This sample was tested using the analytical screening method(s)	checked below:
PURGEABLE SCREENS	EXTRACTABLE SCREENS
(753) Aliphatic Purgeables (1-3 Carbons)	(751) Aliphatic Hydrocarbons
(754) Aromatic & Halogenated Purgeables	(760) Organochlorine Pesticides
(765) Mass Spectrometer Purgeables	(755) Base/Neutral Extractables
[766] Trihalomethanes	(758) Herbicides, Chlorophenoxy acid
Other Specific Compounds or Classes	(759) Herbicides, Triazines
	(760) Organochlorine Pesticides
	(761) Organophosphate Pesticides
	(767) Polychlorinated Biphenyls (PCB's)
	(764) Polynuclear Aromatic Hydrocarbons
	(762) SDWA Pesticides & Herbicides
ANALYTICA	AL RESULTS
COMPOUND(S) DETECTED CONC. [PPB]	COMPOUND(S) DETECTED CONC.
aromatic purgeables ND	
Elloroiodomethane Present	
dichloroiodomethane Present	
divolomethane Present	
Chlorodiodomethane Present	· [
× C /	
· DETECTION LIMIT · * 5 ph	+ DETECTION LIMIT +
ABBREVIATIONS USED:	
N D = NONE DETECTED AT OR ABOVE THE STATE:	D DETECTION LIMIT
T R = DETECTED AT A LEVEL BELOW THE STATES	
[RESULTS IN BRACKETS] ARE UNCONFIRMED AND/	
	·
	- 1 - 1-
LABORATORY REMARKS	nto of four other compounds
were detected by the balance	toldares that was
here alexed by he parogena	Ald to an than were vur
edentsfield.	
CERTIFICATE OF ANAL	YTICAL PERSONNEL
Seal(s) Intact: Yes XI No I. Seal(s) broken by:	date: 12-4-86
I certify that I followed standard laboratory procedures on handlin	
that the statements on this page accurately reflect the analytical r	
Date(s) of analysis: <u>4 Dec86</u> . Analyst's signature:	
I certify that I have reviewed and concur with the analytical resu	its for the statements in this block.
Reviewers signature: K. Mayerherm	
i	

	SCIENTIFIC LAN 700 Camino Albuquerque, NM 87	de Salud,	NE)
	Organic Che	_	-	
	*****		a alla alla alla alla alla alla alla a	L.1.
		ICAL REPORT		*
	* SLD Accession			*
то:	*****	*****	******	**
Organic Chemist Scientific Lab.	Div.	A Water,Pu	rgeable sa	ample.
700 Camino de S Albuquerque, NM		Submitted:	November	26, 1986
Attn: Section File	s			
Submitter:		User:		_
NM Oil Consv. D	iv.	OIL CONSER	VATION DIV	7
DEMOGRAPHIC DATA:				
zásznyfisicznymez	25-Nov-86	Location 1	ownship:	175
Collected On: At:	1245 hrs.	Location T	Range:	30E
Collected On: At: By:	1245 hrs. Boy		Range: Section:	30E 16
Collected On: At: By:	1245 hrs.		Range:	30E 16
Collected On: At: By: In/Near: ANALYTICAL RESULTS	1245 hrs. Boy Loco Hills MH #3 for Aromatic/Halo.		Range: Section: Tracts:	30E 16
Collected On: At: By: In/Near:	1245 hrs. Boy Loco Hills MH [#] 3 for Aromatic/Halo.		Range: Section: Tracts: en:	30E 16
Collected On: At: By: In/Near: ANALYTICAL RESULTS Analysis	1245 hrs. Boy Loco Hills MH [#] 3 for Aromatic/Halo.	Purg. Scree Note	Range: Section: Tracts: en: D. Lmt	30E 16 331

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

> Report Not Approved. Interim Results Only! Tuesday -- January 6, 1987 -- 14:05

Distribution: [] User, [] Submitter, [] Report To, [*] SLD-Section

SCII 700 Albu	ENTIFIC LAE Camino de S	Ith and Environment D BORATORY DUUSION Salud NE A 87106 — (5 341-25		859 wrf Gi		VATER CHEMI OGEN ANALY	
	6 86 1					235	
collection DATE		SITE	Sample location LC	co Hills	<u>bispo</u>	sal Co	▼
ollected by - Person/Agenc	× 17 0		Collection site description		MH-	3	
	ߨ	VER /OCD		-]	-	
END NM INAL Sta EPORT Sar	OIL CON te Land ta Fe, lavid Bo	-		F 1 3 1337	Station/ well code		
SAMPLING COND)1Z			Owner		···
Bailed D	Pump	Water level		Discharge	I	Sample type	·····
	Тар			Mana Tama (00010)		Openductivity at 051	C (0000 4)
рН (00400)		Conductivity (Uncor	rected) μmho	Water Temp. (00010)	°C	Conductivity at 25	-C (00094) μmho
Field comments			*****				
	REATMEN	T — Check proper	boxes				
No. of samples J		F: Whole sample (Non-filtered)	Filtered in 0.45 μme	field with DA: 2	ml H₂SO₄/	L added	
XINA: No acid a		· · ·		5ml conc. HNO ₃ ad	ded 🗖	A: 4ml fumin	g HNO ₃ added
NALYTICAL RES	ULTS from		Inits Date analyze			Units	Date analyzed
Conductivity (Corre	ected)	97760		Calcium (00915)	<u> </u>) mg/l _	12-1
25°C (00095) Total non-filterable residue (suspende (00530)	d)		ng/l	 Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00940) 	1800 780 1	€ mg/l	12-21 12-21 12-21 12-10 12/5
Other:		7.11		- Sulfate (00945) Total filterable residue	10	7 <u>54</u> mg/l	12/16
Other:				(dissolved) (70300)	97	7 <u>408</u> mg/l _	1214 12/8
NF, A-H₂SO₄	•			- X VR	0	,9	12/10
Nitrate-N + , Nitrate total (00630)	∋-N 		ng/l	F, A-H ₂ SO ₄			
Ammonia-N total (0	00610)		ng/l	dissolved (00631)		mg/l _	
Total Kjeldahl-N ()			mg/l	 Ammonia-N dissolve (00608) 	ed	mg/l _	
Chemical oxygen demand (00340)			mg/l	Total Kjeldahl-N		_	
Total organic carbo	n		mg/i	- () □ Other:		mg/l _	······
Other:			···g···	- Analyst	I Data D	eported Review	ved by
Other:				-	12		~ ·
Laboratory remarks				···			
		******			*****		-
			, Vialan	Dharra and Taking		T. 1 6 . 1	-AR-
FOR OCD USE -	- Date (Owner Notifie	1 <u>/19/87</u>	Phone or Lette	- <u></u>	Inital	5-4-)

-11		A 87106 — (505) 841					
	26186 N	8HM 2413		o □ 59600 🕅	OTHER: 822	235	
Hection DATE		SITE	Sample location	1000 1	Vills	Disposal ([] -
lection TIME		ATION	Collection site description	1	2011		
lected by Person/Age	ency Ro	IFR /OCD			/Y) + ``	-3	
ND NM	M OIL CON tate Land	TAL BUREAU SERVATION DI Office Bldg	, PO Box 208	8			
		NM 87504-208	88				
Attn:	David Bo	yer			•		
Phone	e: 827-58	212			Station/ well code		
)12			Owner		
Bailed C	Dump	Water level		Discharge		Sample type	
] Dipped [] H (00400)	Пар	Conductivity (Unc		Water Temp. (00010)		Conductivity at 25°C (00004)
H (00400)		Conductivity (One	μmho	· · ·	°C	Conductivity at 25 °C (μml
eid comments							
lo. of samples		T — Check prop F: Whole sample	F. Filtered in	field with A:	2 mi H₂SO₄/	Ladded	
No. of samples submitted NA: No acid IALYTICAL RE NF, NA Conductivity (Co 25 °C (00095) Total non-filterab residue (suspend	d added C (ESULTS from prrected)	F: Whole sample (Non-filtered) Other-specify:	KF: Filtered in 0.45 μme ΩA: Units Date analyze	5ml conc. HNO3 a d F, NA Calcium (00915) Magnesium (00923) Sodium (00930) Potassium (00935)	5)	•: 4ml fuming Units C mg/l mg/l mg/l	HNO ₃ add
No. of samples submitted NA: No acid IALYTICAL RE NF, NA Conductivity (Co 25°C (00095) Total non-filterab residue (suspend (00530)	d added C (ESULTS from prrected)	F: Whole sample (Non-filtered) Other-specify:	F: Filtered in 0.45 μme Δ A: Units Date analyze	5ml conc. HNO3 a 5ml conc. HNO3 a Calcium (00915) Magnesium (00920) Potassium (00930) Bicarbonate (0044) Chloride (00940)	5)	4ml fuming Units C mg/l	
No. of samples submitted NA: No acid IALYTICAL RE NF, NA Conductivity (Co 25°C (00095) Total non-filterab residue (suspend (00530) Other:	d added C (ESULTS from prrected)	F: Whole sample (Non-filtered) Other-specify:	KF: Filtered in 0.45 μme ΩA: Units Date analyze	5ml conc. HNO3 a 5ml conc. HNO3 a Calcium (00915) Magnesium (00920) Sodium (00930) Potassium (00935) Bicarbonate (00444) Chloride (00945)	5)	Let 4ml fuming 2 Units C mg/l mg/l mg/l mg/l mg/l	
No. of samples submitted NA: No acid ALYTICAL RE NF, NA Conductivity (Co 25°C (00095) Total non-filterab residue (suspend (00530) Other: Other: As	d added C (ESULTS from prrected)	F: Whole sample (Non-filtered) Other-specify:	KF: Filtered in 0.45 μme ΩA: Units Date analyze	5ml conc. HNO3 a 5ml conc. HNO3 a Calcium (00915) Magnesium (00920) Sodium (00930) Potassium (00930) Bicarbonate (00444) Chloride (00940) Sulfate (00945) Total filterable resid (dissolved) (70300)	5)	4ml fuming Units C mg/l	
No. of samples submitted NA: No acid ALYTICAL RE NF, NA Conductivity (Co 25°C (00095) Total non-filterab residue (suspend (00530) Other: Other: Other: Other:	d added C (ESULTS from prrected)	F: Whole sample (Non-filtered) Other-specify:	KF: Filtered in 0.45 μme ΩA: Units Date analyze	5ml conc. HNO3 a 5ml conc. HNO3 a Calcium (00915) Magnesium (00920) Sodium (00930) Potassium (00930) Bicarbonate (00444 Chloride (00940) Sulfate (00945) Total filterable resid (dissolved) (70300) Other:	5)	A: 4ml fuming Units C mg/l	
No. of samples submitted NA: No acid ALYTICAL RE NF, NA Conductivity (Co 25°C (00095) Total non-filterab residue (suspend (00530) Other: Other: AS Other: AS Other: AS Other: AS	A dded I (added I (ESULTS from prrected) ble ded) p p	F: Whole sample (Non-filtered) Other-specify:	K.F: Filtered in 0.45 μme Ω A: Units Date analyze	5ml conc. HNO3 a 5ml conc. HNO3 a Calcium (00915) Magnesium (00923) Sodium (00930) Potassium (00935) Bicarbonate (0044 Chloride (00940) Sulfate (00945) Total filterable resid (dissolved) (70300) Other: F, A-H2 SO4	5)	A: 4ml fuming Units C mg/l	
No. of samples submitted NA: No acid IALYTICAL RE NF, NA Conductivity (Co 25°C (00095) Total non-filterab residue (suspend (00530) Other: Other: A.S. Other: F, A-H₂SO₄ Nitrate-N + , Nitrato (00630)	A added I (added I (ESULTS from Directed) Die ded) Die rate-N	F: Whole sample (Non-filtered) Other-specify:	KF: Filtered in 0.45 μme ΩA: Units Date analyze	5ml conc. HNO3 a 5ml conc. HNO3 a Calcium (00915) Magnesium (00923) Sodium (00930) Potassium (00935) Bicarbonate (00444 Chloride (00945) Sulfate (00945) Total filterable resid (dissolved) (70300) Other: F, A-H2 SO4 Nitrate-N + , Nitrate	5)	Year Year <thyear< th=""> Year Year <thy< td=""><td></td></thy<></thyear<>	
No. of samples submitted NA: No acid IALYTICAL RE NF, NA Conductivity (Co 25°C (00095) Total non-filterab residue (suspend (00530) Other: Other: Other: F, A-H₂SO4 Nitrate-N + , Nitratotal (00630) Ammonia-N tota Total Kjeldahl-N	A added I (added I (ESULTS from Directed) Die ded) Die rate-N al (00610)	F: Whole sample (Non-filtered) Other-specify:	F: Filtered in 0.45 μme Outer A: Outer A:	5ml conc. HNO3 a 5ml conc. HNO3 a Calcium (00915) Magnesium (00923) Sodium (00930) Potassium (00935) Bicarbonate (0044 Chloride (00940) Sulfate (00945) Total filterable resid (dissolved) (70300) Other: F, A-H2 SO4	e-N	A: 4ml fuming Units C mg/l	
No. of samples submitted NA: No acid IALYTICAL RE NF, NA Conductivity (Co 25°C (00095) Total non-filterab residue (suspend (00530) Other: Other: F, A-H₂SO₄ Nitrate-N + , Nitratotal (00630) Ammonia-N tota Total Kjeldahl-N ()	A added I (added I (ESULTS from Difeence Ided) Difeence Ided) Difeence Ided) Difeence Ided) Difeence Ided) Difeence Ided	F: Whole sample (Non-filtered) Other-specify:	F: Filtered in 0.45 μme Δ	5ml conc. HNO3 a 5ml conc. HNO3 a Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (0044 Chloride (00940) Sulfate (00945) Total filterable resid (dissolved) (70300) Other: F, A-H2 SO4 Nitrate-N + , Nitrate dissolved (00631) Ammonia-N dissol (00608)	e-N	Year Year <thyear< th=""> Year Year <thy< td=""><td></td></thy<></thyear<>	
No. of samples submitted NA: No acid IALYTICAL RE NF, NA Conductivity (Co 25°C (00095) Total non-filterab residue (suspend (00530) Other: Other: F, A-H ₂ SO ₄ Nitrate-N + , Nitratoral total (00630) Ammonia-N tota Total Kjeldahl-N () Chemical oxygend demand (00340)	Image: style	F: Whole sample (Non-filtered) Other-specify:	F: Filtered in 0.45 μme Outer A: Outer A:	5ml conc. HNO3 a 5ml conc. HNO3 a Calcium (00915) Magnesium (00923) Sodium (00930) Potassium (00935) Bicarbonate (0044 Chloride (00940) Sulfate (00945) Total filterable resid (dissolved) (70300) Other: F, A-H2 SO4 Nitrate-N + , Nitrate dissolved (00631) Ammonia-N dissol	e-N	Yes 4ml fuming 1	
No. of samples submitted NA: No acid IALYTICAL RE NF, NA Conductivity (Co 25 °C (00095) Total non-filterab residue (suspend (00530) Other: Other: F, A-H ₂ SO ₄ Nitrate-N + , Nitratoral Total (00630) Ammonia-N tota Total Kjeldahl-N () Chemical oxygend demand (00340) Total organic car	Image: style	F: Whole sample (Non-filtered) Other- <i>specify:</i> n SAMPLES	φ F: Filtered in 0.45 μme 0.45 μme 0.45 μme Units Date analyze	5ml conc. HNO3 a 5ml conc. HNO3 a Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (0044 Chloride (00940) Sulfate (00945) Total filterable resid (dissolved) (70300) Other: F, A-H2 SO4 Nitrate-N + , Nitrate dissolved (00631) Ammonia-N dissol (00608)	e-N	Year Year <thyear< th=""> Year Year <thy< td=""><td></td></thy<></thyear<>	
No. of samples submitted NA: No acid NA: No acid NALYTICAL RE NF, NA Conductivity (Co 25°C (00095) Total non-filterab residue (suspend (00530) Other: F, A-H ₂ SO ₄ Nitrate-N + , Nitratotal (00630) Ammonia-N tota Total Kjeldahl-N () Chemical oxyge demand (00340) Total organic car () Other:	Image: style	F: Whole sample (Non-filtered) Other-specify:	φ F: Filtered in 0.45 μme 0.45 μme 0.45 μme Units Date analyze	5ml conc. HNO3 a 5ml conc. HNO3 a Calcium (00915) Magnesium (00923) Sodium (00930) Potassium (00930) Bicarbonate (0044 Chloride (00940) Sulfate (00945) Total filterable resid (dissolved) (70300) Other: F, A-H2 SO4 Nitrate-N + , Nitrate dissolved (00631) Ammonia-N dissol (00608) Total Kjeldahl-N ()	e-N	Yes 4ml fuming 1	Pate analyze
No. of samples submitted NA: No acid NALYTICAL RE NF, NA Conductivity (Co 25°C (00095) Total non-filterab residue (suspend (00530) Other: F, A-H ₂ SO ₄ Nitrate-N + , Nitratotal (00630) Ammonia-N tota Total Kjeldahl-N () Chemical oxygend demand (00340) Total organic car	Image: style	F: Whole sample (Non-filtered) Other- <i>specify:</i> n SAMPLES	φ F: Filtered in 0.45 μme 0.45 μme 0.45 μme Units Date analyze	5ml conc. HNO3 a 5ml conc. HNO3 a Calcium (00915) Magnesium (00923) Sodium (00930) Potassium (00930) Bicarbonate (0044 Chloride (00940) Sulfate (00945) Total filterable resid (dissolved) (70300) Other: F, A-H2 SO4 Nitrate-N + , Nitrate dissolved (00631) Ammonia-N dissol (00608) Total Kjeldahl-N () Other:	.dded	4ml fuming Units C mg/l mg/l	Pate analyze
No. of samples submitted NA: No acid IALYTICAL RE NF, NA Conductivity (Co 25 °C (00095) Total non-filterab residue (suspend (00530) Other: Other: F, A-H ₂ SO ₄ Nitrate-N + , Nitri- total (00630) Ammonia-N tota Total Kjeldahl-N () Chemical oxyget demand (00340) Total organic car () Other: Oth	Image: style	F: Whole sample (Non-filtered) Other- <i>specify:</i> n SAMPLES	F: Filtered in 0.45 μme 0.45 μme Units Date analyze μmho μmho mg/l mg/l mg/l mg/l mg/l mg/l mg/l	5ml conc. HNO3 a 5ml conc. HNO3 a Calcium (00915) Magnesium (00923) Sodium (00930) Potassium (00930) Bicarbonate (0044 Chloride (00940) Sulfate (00945) Total filterable resid (dissolved) (70300) Other: F, A-H2 SO4 Nitrate-N + , Nitrate dissolved (00631) Ammonia-N dissol (00608) Total Kjeldahl-N () Other:	.dded	Year Year <thyear< th=""> Year Year <thy< td=""><td>Pate analyze</td></thy<></thyear<>	Pate analyze
No. of samples submitted NA: No acid IALYTICAL RE NF, NA Conductivity (Co 25 °C (00095) Total non-filterab residue (suspend (00530) Other: Other: F, A-H ₂ SO ₄ Nitrate-N + , Nitratotal (00630) Ammonia-N tota Total Kjeldahl-N () Chemical oxyget demand (00340) Total organic car () Other: Other	Image: style	F: Whole sample (Non-filtered) Other- <i>specify:</i> n SAMPLES	F: Filtered in 0.45 μme 0.45 μme Units Date analyze μmho μmho mg/l mg/l mg/l mg/l mg/l mg/l mg/l	5ml conc. HNO3 a 5ml conc. HNO3 a Calcium (00915) Magnesium (00923) Sodium (00930) Potassium (00930) Bicarbonate (0044 Chloride (00940) Sulfate (00945) Total filterable resid (dissolved) (70300) Other: F, A-H2 SO4 Nitrate-N + , Nitrate dissolved (00631) Ammonia-N dissol (00608) Total Kjeldahl-N () Other:	.dded	4ml fuming Units C mg/l mg/l	Pate analyze

ICAP SCAN

SLD Lab No. $\#$	M 2413
Analyst VB	
Date Analyzed	12/10/86

14

Reviewed by: Date Reported:

ELEMENT

ICAP VALUE(mg/l) AA VALUE(mg/l)

7 7			
Aluminum	<u>0.2</u>		
Barium	0.6		
Beryllium			
Boron	0.8		
Cadmium			
Calcium	7700.		
Chromium <	<u>0.1</u>		
Cobalt			
Copper	20.1		
Iron	0,2		
Lead	0.3		
Magnesium	4050.		
Manganese	0,15		м.
Molybdenum	17A 40.1		
Nickel	0.1 interfore	~~e	
Silicon	6.3		
Silver	L0.1		
Strontium	230.	<u></u>	
Tin	40.1		
Vanadium	10.1		
Zinc	<0.1		
Arsenic		0.046	
Selenium		<u> </u>	
Mercury			
<u> </u>			
••••••			

86- 1357-C	SCIENTIFIC LABORATORY DIVEON 700 Camino de Salud NE Albuquerque, NM 87106 841-2570
EPORT TO:	David Boyer S.L.D. No. OR- 1337-APB
	N.M. Oil Conservation Division DATE REC. 11-26-52
	P. 0. Box 2088
	Santa Fe, N.M. 87504-2088 PRIORITY
HONE(S):	327-5812 USER CODE: 18 2 2 3 5
UBMITTER:	David Boyer CODE: 12 6 0
AMPLE COLLE	CTION CODE: (YYMMDDHHMMIII) 186112851111500484
SAMPLE TYPE:	WATER X, SOIL , FOOD , OTHER: CODE:
COUNTY: E	ly ; CITY: DOD HILS CODE:
OCATION COD	E: (Township-Range-Section-Tracts) $175+30E+16+331((10N06E24342))$
	UESTED: Please check the appropriate box(es) below to indicate the type of analytical screens
	er possible list specific compounds suspected or required. PURGEABLE SCREENS EXTRACTABLE SCREENS
(753) Aliphat	tic Purgeables (1-3 Carbons) [] (751) Aliphatic Hydrocarbons
	tic & Halogenated Purgeables (760) Organochlorine Pesticides Spectrometer Purgeables (755) Base/Neutral Extractables
(765) Mass 3	
	Specific Compounds or Classes (759) Herbicides, Triazines
2	(760) Organochlorine Pesticides
	(761) Organophosphate Pesticides
	(767) Polychlorinated Biphenyls (PCB's) (764) Polynuclear Aromatic Hydrocarbons
	(762) SDWA Pesticides & Herbicides
	ne bottle hat heable! [762] SDWA Pesticides & Herbicides
	re battle hat beable! [762] SDWA Pesticides & Herbicides
Remarks: On	12 bottle hot bebble! [762] SDWA Pesticides & Herbicides
TIELD DATA:	re bottle hat beable!
	nductivity=umho/cm at°C; Chlorine Residual=mg/l
TIELD DATA: DH=; Co	$\frac{bottle_bot}{bcbble!}$
FIELD DATA: DH=; Co Dissolved Oxygen Depth to water	enductivity=umho/cm at°C; Chlorine Residual=mg/l =mg/l; Alkalinity=mg/l; Flow Rate/ ft.; Depth of wellft.; Perforation Intervalft.; Casing:
FIELD DATA: DH=; Co Dissolved Oxygen Depth to water Sampling Location	$\frac{bottle_bot}{bcbble!}$
TIELD DATA: H=; Co Dissolved Oxygen Depth to water iampling Location Mgm? certify that th activities.(signatur Chis form accom	nductivity=umho/cm at°C; Chlorine Residual=mg/1 =mg/l; Alkalinity=mg/l; Flow Rate/ ft.; Depth of wellft.; Perforation Intervalft.; Casing: n, Methods and Remarks (i.e. odors, etc.) toright Hole - 12 Loco Hills Wales Dispose Co toright Hole - 12 Loco Hills Wales Dispose Co e results in this floch acgurately reflect the results of my field analyses, observations and Handcark re collector):KoetMethod of Shipment to the Lab: <u>Manalcark</u> paniesSeptum Vials,Gass Jugs, and/or
TIELD DATA: DH=; Co Dissolved Oxygen Depth to water Sampling Location Mgn; certify that th activities.(signatur This form accom Samples were pro-	ne bottle haf bebble! mductivity=umho/cm at°C; Chlorine Residual=mg/l =mg/l; Alkalinity=mg/l; Flow Rate/ ft.; Depth of wellft.; Perforation Intervalft.; Casing: n, Methods and Remarks (i.e. odors, etc.) towy Hole - 12 Loco Hills Wale Disposed to e results in this ploch accurately reflect the results of my field analyses, observations and then deather re collector):
TIELD DATA: H=; Co Dissolved Oxygen Depth to water Sampling Location Mgn; certify that th activities.(signatur This form accom Samples were pro- NP:	nductivity=umho/cm at°C; Chlorine Residual=mg/1 =mg/l; Alkalinity=mg/l; Flow Rate/ ft.; Depth of wellft.; Perforation Intervalft.; Casing: n, Methods and Remarks (i.e. odors, etc.) toright Hole - 12 Loco Hills Wales Dispose Co toright Hole - 12 Loco Hills Wales Dispose Co e results in this floch acgurately reflect the results of my field analyses, observations and Handcark re collector):KoetMethod of Shipment to the Lab: <u>Manalcark</u> paniesSeptum Vials,Gass Jugs, and/or
PIELD DATA: DH=; Co Dissolved Oxygen Depth to water Sampling Location Mgm; certify that th activities.(signatur This form accom Samples were pro- NP: P-Ice	nductivity=umho/cm at°C; Chlorine Residual=mg/1 =mg/1; Alkalinity=mg/1; Flow Rate/ ft.; Depth of wellft.; Perforation Intervalft.; Casing: n, Methods and Remarks (i.e. odors, etc.) toring Hole - 12 Loco Hills Wale Disposed to results in this floch acgurately reflect the results of my field analyses, observations and Handconte re collector):
PIELD DATA: DH=; Co Dissolved Oxygen Depth to water Sampling Location MAN certify that th activities.(signatur This form accom Samples were pro- NP: NP: P-Ice P-Na S 0 CHAIN OF CUS	and bottle had beable! mductivity=umho/cm at°C; Chlorine Residual=mg/1 =mg/1; Alkalinity=mg/1; Flow Rate/ ft.; Depth of wellft.; Perforation Intervalft.; Casing: n, Methods and Remarks (i.e. odors, etc.) towny Hole - 12 Loco Hills Wale Disposed (Second towny Hole - 12 Loco Hills Wale Disposed (Second e results in this block acgurately reflect the results of my field analyses, observations and implement to the Lab: Mande and paniesSeptum Vials,Gass Jugs, and/or eserved as follows: No Preservation; Sample stored at room temperature. Sample stored in an ice bath (Not Frozen). Sample Preserved with Sodium Thiosulfate to remove chlorine residual. STOD Y
PIELD DATA: DH=; Co Dissolved Oxygen Depth to water Sampling Location Mgy; Cartify that th activities.(signatur This form accom Samples were pro- NP: NP: P-Ice P-Na S 0 CHAIN OF CUS	and bottle had beable! mductivity=umho/cm at°C; Chlorine Residual=mg/1 =mg/1; Alkalinity=mg/1; Flow Rate/ ft.; Depth of wellft.; Perforation Intervalft.; Casing: n, Methods and Remarks (i.e. odors, etc.) towny Hole - 12 Loco Hills Wale Disposed (Second towny Hole - 12 Loco Hills Wale Disposed (Second e results in this block acgurately reflect the results of my field analyses, observations and implement to the Lab: Mande and paniesSeptum Vials,Gass Jugs, and/or eserved as follows: No Preservation; Sample stored at room temperature. Sample stored in an ice bath (Not Frozen). Sample Preserved with Sodium Thiosulfate to remove chlorine residual. STOD Y
TIELD DATA: OH=; Co Dissolved Oxygen Depth to water Sampling Location MAN certify that th activities.(signatur Chis form accom Samples were pro- NP: P-Ice P-Na S O CHAIN OF CUS certify that th	and bottle had beable! mductivity=umho/cm at°C; Chlorine Residual=mg/1 =mg/1; Alkalinity=mg/1; Flow Rate/ ft.; Depth of wellft.; Perforation Intervalft.; Casing: ft.; Depth of wellft.; Perforation Intervalft.; Casing: to view ft.; Depth of wellft.; Perforation Intervalft.; Casing: to view ft.; Depth of wellft.; Perforation IntervalMethod of Shipment to the Lab: <u>How Accert</u> No Preservation; Sample stored at room temperature. Sample stored in an ice bath (Not Frozen). Sample Preserved with Sodium Thiosulfate to remove chlorine residual. STOD Y
PIELD DATA: OH=; Co Dissolved Oxygen Depth to water Sampling Location MAN certify that th activities.(signatur This form accom Samples were pro- NP: P-Ice P-Na S 0 CHAIN OF CUS CERTIFY that th at (location)	ac bottle hay beable
PIELD DATA: OH=; Co Dissolved Oxygen Depth to water Sampling Location MAN certify that th activities.(signatur This form accom Samples were pro- NP: P-Ice P-Na S 0 CHAIN OF CUS CERTIFY that th at (location)	$\frac{he}{he} he $

Ì

!

ł

i

LAB. No OR- 1357

THIS PAGE FOR LABORATORY RESULTS ONLY

This sample was tested using the analytical screening m	thod(s) checked below:
PURGEABLE SCREENS	EXTRACTABLE SCREENS
[] (753) Aliphatic Purgeables (1-3 Carbons)	(751) Aliphatic Hydrocarbons
(754) Aromatic & Halogenated Purgeables	(760) Organochlorine Pesticides
(765) Mass Spectrometer Purgeables	(755) Base/Neutral Extractables
[] (766) Trihalomethanes	(758) Herbicides, Chlorophenoxy acid
Other Specific Compounds or Classes	(759) Herbicides, Triazines
	(760) Organochlorine Pesticides
	(761) Organophosphate Pesticides
	(767) Polychlorinated Biphenyls (PCB's)
· · · · · · · · · · · · · · · · · · ·	(764) Polynuclear Aromatic Hydrocarbons
	(762) SDWA Pesticides & Herbicides
ANALY	TICAL RESULTS
COMPOUND(S) DETECTED COI	
demane i	
toluene 7	R
0-Xyline It	$R \parallel 1 \parallel 1 \parallel$
chloroiodomethane Pres	
dichloroiodomethane Pres	
diodomethane Pres	
chlorodiodomethane Pres	
* DETECTION LIMIT * * //	+ DETECTION LIMIT +
ABBREVIATIONS USED:	
N D = NONE DETECTED AT OR ABOVE THE	STATED DETECTION LIMIT
T R = DETECTED AT A LEVEL BELOW THE	
	AND/OR WITH APPROXIMATE QUANTITATION
	to a production of the second se
LABORATORY REMARKS: have amoun	toof fourother compounds were
detected by the palogenate	I scheen that were not identified.
	and to take the the and this
Lucother gompounds (1)	ere actually the aromatic
Screen That were not id	interfed but appeared in frace
amounts.	
CERTIFICATE OF	ANALYTICAL PERSONNEL
	az 17-4-01
Seal(s) Intact: Yes No . Seal(s) broken by:	handling and analysis of this sample unless otherwise noted and
that the statements on this page accurately reflect the ani	
Date(s) of analysis: <u>Yper86</u> . Analysi's signature	
•	cal results for this sample and with the statements in this block.
Reviewers signature: _ Menchen	The results for one compre and with the provenients in this Diock.
1 in the second	

SCIENTIFIC LABORATORY DIVISION 700 Camino de Salud, NE Albuquerque, NM 87106 [505]-841-2500 Organic Chemistry Section ************************************* * ANALYTICAL REPORT SLD Accession #: OR-86-1357 * *********************************** To: Organic Chemistry Section A Water, Purgeable sample. Scientific Lab. Div. 700 Camino de Salud, NE Albuquerque, NM 87106 Submitted: November 26, 1986 Attn: Section Files Submitter: User: ******************** ________ NM Oil Consv. Div. OIL CONSERVATION DIV DEMOGRAPHIC DATA: _____ Collected On: 25-Nov-86 Location Township: 17S on: 25-Nov-86 At: 1150 hrs. MH-12 Range: 30E Section: 16 By: Boy In/Near: Loco Hills Tracts: 331 ANALYTICAL RESULTS for Aromatic/Halo. Purg. Screen: Value Note D. Lmt Units Analysis ------ ---- -----3.00 Benzene ppb 1.00 0.00 T Toluene 1.00 ppb 0.00 T 1,2-Dimethylbenzene 1.00 ppb LABORATORY REMARKS: Also appears to contain some indirated Trihab methanes we are still trying to identify. A=Approximate Value; N=None Detected above Detection Limit; P=Compound

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

> Report Not Approved. Interim Results Only! Tuesday -- January 6, 1987 -- 14:05

Distribution: [] User, [] Submitter, [] Report To, [*] SLD-Section

SCIENTIFIC L 700 Camino de	ealth and Environment ABORATORY DIVISION Salud NE NM 87106 — 841-2	ŀ	859 - wrf		NATER CHEM	
ATE AECEIVED 11 26 84 allegetion DATE SG 17 25 oillectionyTIME	LAB WC 5449 SITE INFORM-► ATION		nco Hills	_{πнея:} 82 δ <i>ι'sρo</i>	235 Sæl (D	
ollected by - Person/Agency	NYER / OCD	Collection site description	' M	H-,	12	
END NM OIL CO INAL State Lan Santa Fe, Attn: <u>David B</u> Phone: 827-	•	PO BOX 208	3 5 1. ¹	Station/ well code		
AMPLING CONDITIONS	- T					
Bailed Pump Dipped Tap	Water level		Discharge		Sample type	
pH (00400)	Conductivity (Unco	rrected) µmho	Water Temp. (00010)	°C	Conductivity at 25	5°C (00094) µmh
Submitted	m SAMPLES		mbrane filter 5m1 conc. HNO ₃ ad	lded 🔲	A: 4ml fumin	ng HNO ₃ adde Date analyzed
Conductivity (Corrected)		Units Date analyzed	Calcium (00915)	710		
 Conductivity (contected) 25°C (00095) Total non-filterable residue (suspended) (00530) 		umho <u>12/16</u>	 Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) 	<u> </u>	ØØ mg/l 200 mg/l 7 mg/l 6 mg/l	12-1 12/4 12/4 12/4 12/4
ry Other: pH _	7.05	12/8	Chloride (00940)		7/52_mg/l 140mg/l	12/5
□ Other: □ Other:			 Total filterable residue (dissolved) (70300) 		7806 mg/l	1214
NF, A-H₂SO₄			A Other: CO3		D, 5	12/8
 Nitrate-N +, Nitrate-N total (00630) Ammonia-N total (00610) Total Kjeldahl-N () Chemical oxygen demand (00340) Total organic carbon 		mg/l mg/l mg/l mg/l	F, A-H ₂ SO ₄	N	mg/l mg/l	
() □ Other: □ Other:		mg/i	Analyst		Reported Revie	wed by
Laboratory remarks FOR OCD USE Date	Owner Notifie	ed_ <u>1/19/87</u>	Phone or Lett	er.)/	Inita	15-3-

:

-- .

	CIENTIFIC LAB 00 Camino de S ibuquerque, NM	alud NE 1 87106 — (505) 841-2	2555	G		Y Metal MATER CHEMI OGEN ANALY	STRY
	26 86 1	Hm 2414		<u> </u>	THER: 82	235	
Allegation DATE		SITE	Sample location	Loco h	1:113	Disposal	().
collection TIME		ATION	Collection site description		NI		
collected by Person/Age	ancy Rou	ISR /OCD			[]] F0 -)	<i>d</i>	.!
END NI INAL S EPORT S	M OIL CONS tate Land	TAL BUREAU SERVATION DIN Office Bldg NM 87504-208	, PO Box 208	8			
Phone	e: 827-58	12			well code Owner		
AMPLING CON	DITIONS						
	□ Pump □ Tap	Water level		Discharge		Sample type	
pH (00400)		Conductivity (Unco	prrected) µmho	Water Temp. (00010)	· •C	Conductivity at 25	°C (00094) µmh
AMPLE FIELD No. of samples submitted		T — Check prope Whole sample (Non-filtered)	F. Filtered in	field with	2 ml H₂SO₄/	'L added	· · · ·
No. of samples submitted NA: No acid		Whole sample (Non-filtered) Other-specify:	F: Filtered in 0.45 μme	mbrane filter A . 2 5ml conc. HNO ₃ ac		A: 4ml fumin	
No. of samples submitted NA: No acid NALYTICAL RE	Added C	Whole sample (Non-filtered) Other-specify:	F: Filtered in 0.45 μme	mbrane filter 7 . 2 5m1 conc. HNO ₃ ac		4: 4ml fumin Units	ig HNO ₃ adde Date analyzed
No. of samples submitted NA: No acid NALYTICAL RE	Added C	Whole sample (Non-filtered) Other-specify:	F: Filtered in 0.45 μme	mbrane filter A . 2 5ml conc. HNO ₃ ac	ided 776	A: 4m1 fumin Units	
No. of samples submitted NA: No acid NALYTICAL RE NF, NA Conductivity (Co 25°C (00095)	Added C SULTS from prrected)	Whole sample (Non-filtered) Other-specify:	F: Filtered in 0.45 μme ΔΑ: Units Date analyzed	mbrane filter A. 2 5m1 conc. HNO ₃ ac d F, NA Calcium (00915) Magnesium (00925) Sodium (00930)	ided 7227	A: 4ml fumin Units mg/l mg/l	
No. of samples submitted NA: No acid NALYTICAL RE NF, NA Conductivity (Co 25°C (00095) Total non-filterab residue (suspen	I added C ESULTS from prrected)	Whole sample (Non-filtered) Other-specify:	CF: Filtered in 0.45 μmer ΔA: Units Date analyzed	mbrane filter A. 2 5m1 conc. HNO ₃ ac d F, NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935))	A: 4ml fumin Units mg/l mg/l mg/l	
No. of samples submitted NA: No acid NALYTICAL RE NF, NA Conductivity (Co 25°C (00095) Total non-filterab residue (suspen (00530)	I added C SULTS from Drrected) Drected)	Whole sample (Non-filtered) Other-specify:	CF: Filtered in 0.45 μmer ΔA: Units Date analyzed	mbrane filter A. A. A. 5m1 conc. HNO3 ac d F, NA ac Calcium (00915) ac Calcium (00915) ac Sodium (00930) ac Potassium (00930) ac Bicarbonate (00440) ac)	A: 4ml fumin Units mg/l mg/l mg/l mg/l mg/l mg/l mg/l	
No. of samples submitted NA: No acid NALYTICAL RE NF, NA Conductivity (Co 25°C (00095) Total non-filterab residue (suspen (00530) Other: As	I added C SULTS from Drrected) Drected)	Whole sample (Non-filtered) Other-specify:	CF: Filtered in 0.45 μmer ΔA: Units Date analyzed	mbrane filter A. 2 5m1 conc. HNO3 ac d F, NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00940) Sulfate (00945))	A: 4ml fumin Units mg/l mg/l mg/l mg/l mg/l	
No. of samples submitted NA: No acid NALYTICAL RE NF, NA Conductivity (Co 25°C (00095) Total non-filterab residue (suspen (00530) Other: TCA	I added C SULTS from Drrected) Drected)	Whole sample (Non-filtered) Other-specify:	CF: Filtered in 0.45 μmer ΔA: Units Date analyzed	mbrane filter A. A. A. 5m1 conc. HINO3 ac d F, NA ac)	A: 4ml fumin Units mg/l mg/l mg/l mg/l mg/l mg/l mg/l	Date analyzed
No. of samples submitted NA: No acid NALYTICAL RE NF, NA Conductivity (Co 25°C (00095) Total non-filterab residue (suspen (00530) Other: TCA 2-Other: A 5	I added C SULTS from Drrected) Drected)	Whole sample (Non-filtered) Other-specify:	CF: Filtered in 0.45 μmer ΔA: Units Date analyzed	mbrane filter A. A. 5m1 conc. HNO3 ac d F, NA ac)	A: 4ml fumin Units mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l	Date analyzed
No. of samples submitted NA: No acid NALYTICAL RE NF, NA Conductivity (Co 25°C (00095) Total non-filterab residue (suspen- (00530) Other: Cother: Cother: Other: IF, A-H ₂ SO ₄ Nitrate-N + , Nitr	I added C SULTS from Drrected) De ded) De C	Whole sample (Non-filtered) Other-specify:		mbrane filter A. A. A. 5m1 conc. HINO3 ac d F, NA ac)	A: 4ml fumin Units mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l	Date analyzed
No. of samples submitted NA: No acid NALYTICAL RE NF, NA Conductivity (Co 25°C (00095) Total non-filterab residue (suspen- (00530) Other: Other: Other: NF, A-H ₂ SO ₄ Nitrate-N + , Nitr total (00630)	Added D C	Whole sample (Non-filtered) Other-specify:	KF: Filtered in 0.45 µmer □ A: Units Date analyze µmho mg/l mg/l	mbrane filter A. 2 5ml conc. HNO3 ac d F, NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00930) Bicarbonate (00440) Chloride (00945) Sulfate (00945) Total filterable residu (dissolved) (70300) Other: F, A-H2 SO4 Nitrate-N + , Nitrate 	ided 722(2)	A: 4ml fumin Units mg/l mg/l mg/l mg/l mg/l mg/l mg/l	Date analyzed
No. of samples submitted NA: No acid NALYTICAL RE NF, NA Conductivity (Co 25°C (00095) Total non-filterab residue (suspen (00530) Other: Other: Other: NF, A-H ₂ SO ₄ Nitrate-N + , Nitr total (00630) Ammonia-N tota Total Kjeldahl-N	Added D C	Whole sample (Non-filtered) Other-specify:	KF: Filtered in 0.45 µmer □ A: Units Date analyzed umho mg/l mg/l	mbrane filter A. 2 5ml conc. HNO3 ac d F, NA Calcium (00915) ac Magnesium (00925) Sodium (00930) Potassium (00930) Bicarbonate (00440) Chloride (00940) Sulfate (00945) Total filterable residu (dissolved) (70300) Other: F, A-H2 SO4 F, A-H2 SO4	ided 722(2)	A: 4ml fumin Units mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l	Date analyzed
No. of samples submitted NA: No acid NALYTICAL RE NF, NA Conductivity (Co 25°C (00095) Total non-filterab residue (suspen- (00530) Other: Other: Other: NF, A-H ₂ SO ₄ Nitrate-N + , Nitr total (00630) Ammonia-N tota Total Kjeldahl-N ())	Added D C	Whole sample (Non-filtered) Other-specify:	KF: Filtered in 0.45 µmer □ A: Units Date analyze µmho mg/l mg/l	mbrane filter A. 2 5ml conc. HNO3 ac d F, NA Calcium (00915) ac Magnesium (00925) Sodium (00930) Potassium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00940) Chloride (00945) Total filterable residu (dissolved) (70300) Other: F, A-H2 SO4 Nitrate-N + , Nitrate- dissolved (00631) Ammonia-N dissolv (00608)	ided 722(2)	A: 4ml fumin Units mg/l mg/l mg/l mg/l mg/l mg/l mg/l	Date analyzed
No. of samples submitted NA: No acid NALYTICAL RE NF, NA Conductivity (Co 25°C (00095) Total non-filterab residue (suspen- (00530) Other: Other: Other: NF, A-H ₂ SO ₄ Nitrate-N + , Nitr total (00630) Ammonia-N tota Total Kjeldahl-N () Chemical oxyge demand (00340)	I added I or I or I or I or I or I or I or I or I or	Whole sample (Non-filtered) Other-specify: SAMPLES	KF: Filtered in 0.45 µmer □ A: Units Date analyzed umho mg/l mg/l	mbrane filter A. 2 5m1 conc. HINO3 ac G F, NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00945) Total filterable residu (dissolved) (70300) Other: F, A-H2 SO4 Nitrate-N + , Nitrate- dissolved (00631) Ammonia-N dissolv (00608) Total Kjeldahl-N	ided 722(2)	A: 4ml fumin Units mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l	Date analyzed
No. of samples submitted NA: No acid NALYTICAL RE NF, NA Conductivity (Co 25°C (00095) Total non-filterab residue (suspen- (00530) Other: Other: Other: NF, A-H ₂ SO ₄ Nitrate-N + , Nitr total (00630) Ammonia-N tota Total Kjeldahl-N () Chemical oxyge demand (00340) Total organic car	I added I or I or I or I or I or I or I or I or I or	Whole sample (Non-filtered) Other-specify: SAMPLES	φ(F: Filtered in 0.45 μmer 0.45 μmer □ A: Units Date analyze μmho μmho mg/l mg/l mg/l mg/l mg/l	mbrane filter A. 2 5ml conc. HNO3 ac d F, NA Calcium (00915) ac Magnesium (00925) Sodium (00930) Potassium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00940) Chloride (00945) Total filterable residu (dissolved) (70300) Other: F, A-H2 SO4 Nitrate-N + , Nitrate- dissolved (00631) Ammonia-N dissolv (00608)	ided 722(2)	A: 4ml fumin Units mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l	Date analyzed
No. of samples submitted NA: No acid NALYTICAL RE NF, NA Conductivity (Co 25°C (00095) Total non-filterab residue (suspen- (00530) Cother: Other: Other: NF, A-H ₂ SO ₄ Nitrate-N + , Nitr total (00630) Ammonia-N tota Total Kjeldahl-N () Chemical oxyge demand (00340) Total organic car	I added I or I or I or I or I or I or I or I or I or	Whole sample (Non-filtered) Other-specify: SAMPLES	KF: Filtered in 0.45 µmer □ A: Units Date analyzed umho mg/l mg/l mg/l	mbrane filter A. 2 5ml conc. HNO3 ac d F, NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00945) Total filterable residu (dissolved) (70300) Other: F, A-H2 SO4 Nitrate-N + , Nitrate- dissolved (00631) Ammonia-N dissolv (00608) Total Kjeldahl-N () Other:	Idded Image: Control of the second	A: 4ml fumin Units mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l	Date analyzed
No. of samples submitted NA: No acid NA: No acid NALYTICAL RE NF, NA Conductivity (Co 25°C (00095) Total non-filterab residue (suspen- (00530) Other: Other: Other: NF, A-H ₂ SO ₄ Nitrate-N + , Nitr total (00630) Ammonia-N tota Total Kjeldahl-N () Chemical oxyge demand (00340) Total organic car ()	I added I or I or I or I or I or I or I or I or I or	Whole sample (Non-filtered) Other-specify: SAMPLES	φ(F: Filtered in 0.45 μmer 0.45 μmer □ A: Units Date analyze μmho μmho mg/l mg/l mg/l mg/l mg/l	mbrane filter A. 2 5ml conc. HNO3 ac d F. NA Calcium (00915) ac Magnesium (00925) Sodium (00930) Potassium (00930) Potassium (00935) Bicarbonate (00440) Sulfate (00945) Chloride (00945) Total filterable residu (dissolved) (70300) Other: F. A-H2 SO4 Nitrate-N + , Nitrate- dissolved (00631) Armonia-N dissolv (00608) Total Kjeldahl-N () Total Kjeldahl-N	Idded Image: Control of the second	A: 4m1 fumin Units mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l	Date analyzed
No. of samples submitted NA: No acid NALYTICAL RE NF, NA Conductivity (Co 25°C (00095) Total non-filterab residue (suspen (00530) Other: Other: NF, A-H ₂ SO ₄ Nitrate-N + , Nitr total (00630) Ammonia-N tota Total Kjeldahl-N () Chemical oxyge demand (00340) Total organic car () Other:	I added I one I one I one	Whole sample (Non-filtered) Other-specify: SAMPLES	φ(F: Filtered in 0.45 μmer 0.45 μmer □ A: Units Date analyze μmho μmho mg/l mg/l mg/l mg/l mg/l	mbrane filter A. 2 5ml conc. HNO3 ac d F, NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00945) Total filterable residu (dissolved) (70300) Other: F, A-H2 SO4 Nitrate-N + , Nitrate- dissolved (00631) Ammonia-N dissolv (00608) Total Kjeldahl-N () Other:	Idded Image: Control of the second	A: 4ml fumin Units mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l	Date analyzed
No. of samples submitted NA: No acid NALYTICAL RE NF, NA Conductivity (Co 25°C (00095) Total non-filterab residue (suspen- (00530) Other: Other: Other: NF, A-H ₂ SO ₄ Nitrate-N + , Nitr total (00630) Ammonia-N tota Total Kjeldahl-N () Chemical oxyge demand (00340) Total organic car () Other: Other:	I added I one I one I one	Whole sample (Non-filtered) Other-specify: SAMPLES	K.F: Filtered in 0.45 µmer □ A: Units Date analyzed umho mg/l mg/l mg/l mg/l mg/l	mbrane filter A. 2 5ml conc. HNO3 ac d F, NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00945) Total filterable residu (dissolved) (70300) Other: F, A-H2 SO4 Nitrate-N + , Nitrate- dissolved (00631) Ammonia-N dissolv (00608) Total Kjeldahl-N () Other:	Idded Image: Control of the second	A: 4m1 fumin Units mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l	Date analyzed

ICAP	SCAN
------	------

SLD Lab No. HM 2414	Reviewed by: halfy
Analyst B	Date Reported: 1/13/87
Date Analyzed 12/10/86	See next sheet so rended report

ELEMENT

ICAP VALUE(mg/l) AA VALUE(mg/l)

Aluminum	0.4	
Barium	0.2	
Beryllium	40.1	
Boron	D.1	
Cadmium	<0.	. <u></u>
Calcium	48.	
Chromium	٢٥.١	
Cobalt	20.1	
Copper	40.1	
Iron	0.4	······································
Lead	<0.1	· · · · · · · · · · · · · · · · · · ·
Magnesium	1.3	
Manganese	20.05	
Molybdenum	20.1	
Nickel	<0.1	
Silicon	8.3	
Silver	20.1	
Strontium	40.1	
Tin	20.1	<u></u>
Vanadium	20.1	
Zinc	<0.1	
Arsenic		0.030
Selenium		
Mercury		
		·····
······		

ICAP SCAN

SLD Lab No. HM 2414	Reviewed by: Jim ashly
Analyst B	Date Reported: 1/23/87
Date Analyzed 1/22/87	Revised Report.

ELEMENT

ICAP VALUE(mg/l) AA VALUE(mg/l)

Aluminum	<0,1	
Barium	<u>_ [i]</u>	······
Beryllium	<0.1	
Boron	<u> </u>	
Cadmium	<0.1	·····
Calcium	7460.	
Chromium	<0,/	
Cobalt	< 0.1	
Copper	<0.1	
Iron	<0.1	
Lead	0.2	
Magnesium	4060.	
Manganese	<0.05	
Molybdenum	<0.1	
Nickel	<0.1	<u> - 1912 - 19</u>
Silicon	8,5	
Silver	<0.1	<u> </u>
Strontium	230	<u></u>
Tin	<0.1	
Vanadium	<0,1	
Zinc	<0,1	
Arsenic		0.030
Selenium		<u></u>
Mercury	· · ·	
-		
<u></u>	- <u></u>	
	. <u> </u>	<u></u>
	- <u></u>	
		- <u></u>



January 9, 1987 NONSION

Ms. Jami Bailey, Field Representative Oil Conservation Division Energy and Minerals Department P. O. Box 2088 Santa Fe, New Mexico 87501

Re: Water Analyses, Loco Hills Water Disposal System

Dear Ms. Bailey:

Enclosed please find the results of the chemical analyses for MW-1, MW-3, MW-12 and Pit No. 1 that were obtained on November 24, 1986 at the Loco Hills Water Disposal site. About one foot of water was found in MW-1 so I took a sample from it. I also sampled the sludge in the salt water pit.

The levels of organics found in the monitor wells occur in trace amounts and are below the New Mexico WQCC standards for these compounds. The pit had levels of benzene, toluene and xylene which are above the WQCC standards. However, only trace amounts of chlorinated organics were found and are in concentrations which are below the WQCC standards. The sludge in the bottom of the pit contained levels of organics which are above the WQCC standards. The fact that the sludge contains higher levels of these compounds than the pit water is not unexpected since these organics are quite heavy and tend to settle to the bottom.

Based on the levels of organics found in the pit water and in the sludge, it is our opinion that the presence of the chlorinated compounds is due to a bad load of water which was dumped at the site. We do not believe that the low levels of organics found in the monitor wells is of major concern at this time.

The next step in our investigation is to pump the water out of the monitor wells and observe the recovery of the water level. This should provide some clue as to the origin

1109 North Big Spring Midland, TX 79701 (915) 682-0556

of the water in these wells. Based on the chemical analyses, it appears that the pit water and the water in the monitor wells are of similar character.

We will keep you informed concerning the pumping of the monitor wells. If you have any questions regarding this matter, please do not hesitate to contact me.

Very truly yours,

1 ans

Hugh B. Robotham

REED & ASSOCIATES, INC.

Sw[

119904

Materials, environmental and geotechnical engineering, nondestructive, metallurgical and analytical services

1703 W. Industrial Avenue [915 - 683-3348] • P.O. Box 2150 • Midland, Texas 79701

		File No.	3485000
		Report No	38574
		Report Date _	12-10-86
Report of tests on:	Water	Date Received	11-25-86
Client:	Reed & Associates	Delivered By	R & A
Identification:	Eddy County, New Mexico, Loco Hills Water Disposal, MW-1, Sampled 11-24-86 by Hugh Robotham		
		mg/L	
	Calcium	1536	
	Magnesium	1180	
	Sodium	304	
	Potassium	17	
	Carbonate	None	
	Bicarbonate	188	
	Sulfate	488	
	Chloride	5780	
	Total Dissolved Solids @ 180° C	10140	
	Total Hardness (as Ca CO ₃)	8700	

pH ----- 6.62

Standard Methods, 16th Edition

Technician:

LYN,GMB

Copies 2 cc Reed & Associates

SOUTHWESTERN LABORATORIES

Our letters and reports are for the exclusive use of the client to whom they are addressed. The use of our name must receive our prior written approval. Our letters and reports apply only to the sample tested and/or inspected, and are not necessarily indicative of the quantities of apparently identical or similar products

Sw[

119904

Materials, environmental and geotechnical engineering, nondestructive, metallurgical and analytical services

1703 W. Industrial Avenue [915 - 683-3348] • P.O. Box 2150 • Midland, Texas 79701

		File	: No. <u>3</u> 2	85000
		Re	port No. 🔄	38574
		Re	port Date _	12-10-86
Report of tests o	n: Water	Da	te Received	11-25-86
Client:	Reed & Associates	De	livered By _	R & A
Identification:	Eddy County, New Mexico, Loco Hills Water Disposal MW-1, Sampled 11-24-86 by Hugh Robotham	,		
			PPM	
	Vinylidine Chloride	*	0.001	
	Dichloromethane		0.023	
	l,l-Dichloroethane	*	0.001	
	Chloroform	*	0.001	
	l,l,l-Trichloroethane	×	0.001	
	cis-1,2-Dichloropropene	*	0.001	
	Perchloroethylene	*	0.001	
	Chlorobenzene	*	0.001	
	Unknown, RT-33.31, Calculated as PCE	*	0.010	
	Unknown, RT-38.82, Calculated as PCE	*	0.010	
	* Denotes "less than"			
	Method: SW-846/5020			

Technician:

Copies 2 cc Reed & Associates

REL

SOUTHWESTERN LABORATORIES any

Our letters and reports are for the exclusive use of the client to whom they are addressed. The use of our name must receive our prior written approval. Our letters and reports apply only to the sample tested and/or inspected, and are not necessarily indicative of the quantities of apparently identical or similar products.

Sw[

Materials, environmental and geotechnical engineering, nondestructive, metallurgical and analytical services

119904

1703 W. Industrial Avenue (915 - 683-3348) • P.O. Box 2150 • Midland, Texas 79701

		File No.	3485000
		Report No.	38574
		Report Date	12-10-86
Report of tests on:	Water	Date Receive	d <u>11-25-86</u>
Client:	Reed & Associates	Delivered By	R & A
Identification:	Eddy County, New Mexico, Loco Hills Water Disposal, MW-1, Sampled 11-24-86 by Hugh Robotham		

 PPM

 Benzene
 0.01

 Toluene
 0.03

 Ethyl Benzene
 * 0.01

 Xylenes
 * 0.01

0ther	Petroleum	Hydrocarbons		1.8
-------	-----------	--------------	--	-----

* Denotes "less than"

Method: SW-846/5020

Technician: REL

Copies 2 cc Reed & Associates

SOUTHWESTERN BORATORIES

Our letters and reports are for the exclusive use of the client to whom they are addressed. The use of our name must receive our prior written approval. Our retters and reports apply only to the sample tested and/or inspected, and are not necessarily indicative of the quantities of apparently identical or similar products.

Sw[

Materials, environmental and geotechnical engineering, nondestructive, metallurgical and analytical services

1703 W. Industrial Avenue (915 - 683-3348) • P.O. Box 2150 • Midland, Texas 79701

		File No.	3485000
		Report No.	38575
		Report Date .	12-10-86
Report of tests on:	Water	Date Received	11-25-86
Client:	Reed & Associates	Delivered By	R & A

Identification:

Eddy County, New Mexico, Loco Hills Water Disposal, MW-3, Sampled 11-24-86 by Hugh Robotham

 7920
, , , , ,

mg/L

119904

Calcium	7920
Magnesium	4445
Sodium	19500
Potassium	63
Carbonate	None
Bicarbonate	143
Sulfate	1198
Chloride	56023
Total Dissolved Solids @ 180° C	9244 <u>0</u>
Total Hardness (as Ca CO3)	38100
pH 6.67	

Standard Methods, 16th Edition

Technician:

LYN,GMB

Copies 2 cc Reed & Associates

SOUTHWESTERN LABORATORIES

Sw[

Materials, environmental and geotechnical engineering, nondestructive, metallurgical and analytical services

1703 W. Industrial Avenue (915 - 683-3348) • P.O. Box 2150 • Midland, Texas 79701

		File No. 3485000
		Report No. <u>38575</u>
		Report Date <u>12-10-86</u>
Report of tests on:	Water	Date Received <u>11-25-86</u>
Client:	Reed & Associates	Delivered By <u>R & A</u>

Identification:

Eddy County, New Mexico,Loco Hills Water Disposal, MW-3, Sampled 11-24-86 by Hugh Robotham

PPM

119904

Vinylidine Chloride *	0.001
Dichloromethane	0.016
l,l-Dichloroethane *	0.001
Chloroform *	0.001
l,l,l-Trichloroethane *	0.001
cis-1,2-Dichloropropene	0.035
Perchloroethylene *	0.001
Chlorobenzene	0.004

Unknown,	RT-33.31,	Calculated	as	PCE	 0.024
Unknown,	RT-38.82,	Calculated	as	PCE	 0.111

* Denotes "less than"

Method: SW-846/5020

Technician:

Copies 2 cc Reed & Associates

REL

SOUTHWESTERN LABORATORIES in

Our letters and reports are for the exclusive use of the client to whom they are addressed. The use of our name must receive our prior written approval. Our letters and reports apply only to the sample tested and/or inspected, and are not necessarily indicative of the quantities of apparently identical or similar products.

Sw[

Materials, environmental and geotechnical engineering, nondestructive, metallurgical and analytical services

1703 W. Industrial Avenue (915 - 683-3348) • P.O. Box 2150 • Midland, Texas 79701

		File No3485000	
		Report No	38575
		Report Date _	12-10-86
Report of tests on:	Water	Date Received	11-25-86
Client:	Reed & Associates	Delivered By	R & A

Identification:

Eddy County, New Mexico, Loco Hills Water Disposal, MW-3, Sampled 11-24-86 by Hugh Robotham

PPM

119904

Benzene	0.07
Toluene	0.03
Ethyl Benzene *	0.01
Xylenes *	0.01

Other	Petroleum	Hydrocarbons		0.7
-------	-----------	--------------	--	-----

* Denotes "less than"

Method: SW-846/5020

Technician:

n: REL

Copies 2 cc Reed & Associates

SOUTHWESTERN LABORATORIES (X)

Sw[

Materials, environmental and geotechnical engineering, nondestructive, metallurgical and analytical services

119904

1703 W. Industrial Avenue (915 - 683-3348) • P.O. Box 2150 • Midland, Texas 79701

		File No.	3485000
		Report No.	38576
		Report Date	12-10-86
Report of tests on:	Water	Date Receive	d
Client:	Reed & Associates	Delivered By	R & A

Identification:

Eddy County, New Mexico, Loco Hills Water Disposal, MW-12, Sampled 11-24-86 by Hugh Robotham

	mg/L
Calcium	7280
Magnesium	4202
Sodium	13000
Potassium	48
Carbonate	None
Bicarbonate	134
Sulfate	673
Chloride	43967
Total Dissolved Solids @ 180° C	70990
Total Hardness (as Ca CO3)	35500
pH 6.92	

Standard Methods, 16th Edition

Technician:

LYN,GMB

Copies 2 cc Reed & Associates

SOUTHWESTERN LABORATORIES

Our letters and reports are for the exclusive use of the client to whom they are addressed. The use of our name must receive our prior written approval. Our letters and reports apply only to the sample tested and/or inspected, and are not necessarily indicative of the quantities of apparently identical or similar products

119904 SOUTHWESTERN LABORATORIES SwL Materials, environmental and geotechnical engineering, nondestructive, metallurgical and analytical services 1703 W. Industrial Avenue [915 - 683-3348] • P.O. Box 2150 • Midland, Texas 79701 3485000 File No. Report No. 38576 Date Received 11-25-86 Water Report of tests on: Delivered By _____ R & A Reed & Associates Client: Eddy County, New Mexico, Loco Hills Water Disposal, Identification: MW-12, Sampled 11-24-86 by Hugh Robotham PPM Vinylidine Chloride ----- * 0.001 Dichloromethane ----- * 0.010 1,1-Dichloroethane ----- * 0.001 Chloroform ----- * 0.001 1,1,1-Trichloroethane ----- * 0.001 cis-1,2-Dichloropropene -----0.098 Perchloroethylene ----- * 0.001 Chlorobenzene ------0.011 Unknown, RT-33.31, Calculated as PCE ------0.059 Unknown, RT-38.82, Calculated as PCE -----0.067 * Denotes "less than" Method: SW-846/5020 REL Technician: 2 cc Reed & Associates Copies

SOUTHWESTERNIABORATORIES

Our letters and reports are for the exclusive use of the client to whom they are addressed. The use of our name must receive our prior written approval. Our retters and reports apply only to the sample tested and/or inspected, and are not necessarily indicative of the quantities of apparently identical or similar products

Sw[

Materials, environmental and geotechnical engineering, nondestructive, metallurgical and analytical services

1703 W. Industrial Avenue (915 - 683-3348) • P.O. Box 2150 • Midland, Texas 79701 -

		File No	485000
		Report No	38576
		Report Date _	12-10-86
Report of tests on:	Water	Date Received	11-25-86
Client:	Reed & Associates	Delivered By _	R & A

Identification: Eddy County, New Mexico, Loco Hills Water Disposal, MW-12, Sampled 11-24-86 by Hugh Robotham

PPM

119904

Benzene		0.17
Toluene		0.04
Ethyl Benzene	*	0.01
Xylenes	*	0.01

Other	Petroleum	Hydrocarbons		1.	1
-------	-----------	--------------	--	----	---

* Denotes " less than"

Method: SW-846/5020

Technician:

Copies 2 cc Reed & Associates

REL

SOUTHWESTERN LABORATORIES any M. ur

Our letters and reports are for the exclusive use of the client to whom they are addressed. The use of our name must receive our prior written approval. Our letters and reports apply only to the sample tested and/or inspected, and are not necessarily indicative of the quantities of apparently identical or similar products.

Sw[

Materials, environmental and geotechnical engineering, nondestructive, metallurgical and analytical services

1703 W. Industrial Avenue (915 - 683-3348) • P.O. Box 2150 • Midland, Texas 79701

		File No.	3485000
		Report No	38577
		Report Date _	12-10-86
Report of tests on:	Water	Date Received	11-25-86
Client:	Reed & Associates	Delivered By	R & A

Identification: Eddy County, New Mexico, Loco Hills Water Disposal, Pit No.1, Sampled 11-24-86 by Hugh Robotham

mg/L

Calcium	2520
Magnesium	1239
Sodium	25500
Potassium	840
Carbonate	None
Bicarbonate	378
Sulfate	1916
Chloride	48931
Total Dissolved Solids @ 180° C	84210
Total Hardness (as Ca CO3)	11400
pH 7.98	

Standard Methods, 16th Edition

Technician:

Copies 2 cc Reed & Associates

LYN,GMB

SOUTHWESTERN LABORATORIES

un

Our letters and reports are for the exclusive use of the client to whom they are addressed. The use of our name must receive our prior written approval. Our letters and reports apply only to the sample it tested and/or inspected, and are not necessarily indicative of the quantities of apparently identical or similar products.

_ . . _ . . .

Sw[

Materials, environmental and geotechnical engineering, nondestructive, metallurgical and analytical services

1703 W. Industrial Avenue (915 - 683-3348) • P.O. Box 2150 • Midland, Texas 79701

		File No.	3485000
		Report No.	38577
		Report Date	12-10-86
Report of tests on:	Water	Date Received	11-25-86
Client:	Reed & Associates	Delivered By .	R & A

Identification: Eddy County, New Mexico, Loco Hills Water Disposal, Pit No.1, Sampled 11-24-86 by Hugh Robotham

PPM

119904

Vinylidine Chloride	*	0.001
Dichloromethane	*	0.010
l,l-Dichloroethane		0.005
Chloroform		0.021
l,l,l-Trichloroethane		0.022
cis-1,2-Dichloropropene	*	0.001
Perchloroethylene	*	0.001
Chlorobenzene	*	0.001

Unknown,	RT-33.31,	Calculated	as	PCE	 *	0.010
Unknown,	RT-38.82,	Calculated	as	PCE	 *	0.010

* Denotes "less than" Method: SW-846/5020

Technician:

Copies 2 cc Reed & Associates

REL

SOUTHWESTERN LABORATORIES

Our letters and reports are for the exclusive use of the client to whom they are addressed. The use of our name must receive our prior written approval. Our letters and reports apply only to the sample tested and/or inspected, and are not necessarily indicative of the quantities of apparently identical or similar products.

Sw[

119904

Materials, environmental and geotechnical engineering, nondestructive, metallurgical and analytical services

1703 W. Industrial Avenue (915 - 683-3348) • P.O. Box 2150 • Midland, Texas 79701

		File No. 3485000
		Report No. 38577
		Report Date <u>12-10-86</u>
Report of tests on:	Water	Date Received <u>11-25-86</u>
Client:	Reed & Associates	Delivered By R & A
Identification:	Eddy County, New Mexico, Loco Hills Water Disposal, Pit No.l, Sampled 11-24-86 by Hugh Robotham	
		PPM
	Benzene	1.60
	Toluene	1.74
	Ethyl Benzene	0.46
	Xylenes	0.67
	Other Petroleum Hydrocarbons	10.7

Method: SW-846/5020

Technician: REL

Copies 2 cc Reed & Associates

SOUTHWESTERN LABORATORIES M

Sw[

Materials, environmental and geotechnical engineering, nondestructive, metallurgical and analytical services

1703 W. Industrial Avenue [915 - 683-3348] • P.O. Box 2150 • Midland, Texas 79701

		File No. 3485000
		Report No. 38578
		Report Date
Report of tests on:	Sludge	Date Received 11-25-86
Client:	Reed & Associates	Delivered By R & A

Identification:

Eddy County, New Mexico, Loco Hills Water Disposal, Pit No.l, Sampled 11-24-86 by Hugh Robotham (Sludge)

PPM

119904

Vinylidine Chloride *	0.001
Dichloromethane	0.059
l,l-Dichloroethane	0.010
Chloroform	0.735
l,l,l-Trichloroethane	0.518
cis-l,2-Dichloropropene *	0.001
Perchloroethylene *	0.001
Chlorobenzene *	0.001

Unknown,	RT-33.31,	Calculated	as	PCE	 *	0.010
Unknown,	RT-38.82,	Calculated	as	PCE	*	0.010

* Denotes "less than"

Method: SW-846/5020

Technician: REL

Copies 2 cc Reed & Associates

SOUTHWESTERN LABORATORIES

aris

Our letters and reports are for the exclusive use of the client to whom they are addressed. The use of our name must receive our prior written approval. Our retters and reports apply only to the sample tested and/or inspected, and are not necessarily indicative of the quantities of apparently identical or similar products

Sw[

Materials, environmental and geotechnical engineering, nondestructive, metallurgical and analytical services

1703 W. Industrial Avenue (915 - 683-3348) • P.O. Box 2150 • Midland, Texas 79701

		File No.	3485000
		Report No	38578
		Report Date _	12-10-86
Report of tests on:	Sludge	Date Received	11-25-86
Client:	Reed & Associates	Delivered By	R & A
Identification:	Eddy County, New Mexico, Loco Hills Water Disposal,		

Eddy County, New Mexico, Loco Hills Water Disposal, Pit No.l, Sampled 11-24-86 by Hugh Robotham (Sludge)

PPM

119904

Benzene	4.47
Toluene	9.38
Ethyl Benzene	5.53
Xylenes	9.69

Other	Petroleum	Hydrocarbons		337
-------	-----------	--------------	--	-----

Method: SW-846/5020

Technician: REL

Copies 2 cc Reed & Associates

SOUTHWESTERN LABORATORIES

ary M. Dur

Our letters and reports are for the exclusive use of the client to whom they are addressed. The use of our name must receive our prior written approval. Our letters and reports apply only to the sample tested and/or inspected, and are not necessarily indicative of the quantities of apparently identical or similar products.

STATE OF NEW MEXICO



ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

TONEY ANAYA GOVERNOR

November 7, 1986

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

Mr. Ray Westall Loco Hills Water Disposal Co. P. O. Box 68 Loco Hills, New Mexico 88255

Dear Mr. Westall:

Enclosed are analyses of samples taken from two evaporation ponds and from monitor wells #3 and #12. General water chemistry analyses have not yet been received by this office.

Resampling is scheduled for November 24, after which jetting of any monitor wells containing fluid will be requested. I have already contacted Hugh Robotham of Reed & Associates about splitting samples on November 24.

Sincerely,

w Pa

JAMI BAILEY Field Representative

Enc.

cc: OCD, Artesia

-1156-C	SCIENTIFIC LABORATORY DIVISION
	Albuquerque, NM 30106 841 2570 111 11
EPORT TO:	David Boyer N.M. Oil Concervation Division OCT 30 1986 D. No. OR- 86-1156 A-E
	DATE REC. 10-8-86
•	P. O. Box 2088 OIL CONSERVATION DIVISION
	Salita Fe, N.M. 0/504-2088 PRIORITY
PHONE(S):	827-5812 USER CODE: 8 2 3 5
UBMITTER:	David Boyer CODE: 12 16 0
SAMPLE COLLE	COTION CODE: (YYMMDDHHMMIII) 8609292911345451481
	WATER X, SOIL , FOOD , OTHER: CODE:
COUNTY: 5	
OCATION COE	DE: (Township-Range-Section-Tracts) $ / 7 5+3 9 5+1 6+3 3 (10N06E24342)$
	QUESTED : Please check the appropriate box(es) below to indicate the type of analytical screens rer possible list specific compounds suspected or required.
	PURGEABLE SCREENS EXTRACTABLE SCREENS
	tic Purgeables (1-3 Carbons) (751) Aliphatic Hydrocarbons tic & Halogenated Purgeables (760) Organochlorine Pesticides
X	Spectrometer Purgeables [] (755) Base/Neutral Extractables
Other	Specific Compounds or Classes [] (759) Herbicides, Triazines
	(760) Organochlorine Pesticides
	(761) Organophosphate Pesticides (767) Polychlorinated Biphenyls (PCB's)
	(764) Polynuclear Aromatic Hydrocarbons
⊐ —	[] (762) SDWA Pesticides & Herbicides
lemarks:	LOCO HILLS EVAPORATION POND
	(Pond at separator - NW Pond)
PIELD DATA:	
oH=; C	onductivity=umho/cm at°C; Chlorine Residual=mg/l
Dissolved Oxyger	m=mg/l; Alkalinity=mg/l; Flow Rate/
Depth to water	ft.; Depth of wellft.; Perforation Intervalft.; Casing:
Sampling Locatio	on, Methods and Remarks (i.e. odors, etc.)
	ne results in this block accurately reflect the results of my field analyses, observations and
activities.(signatu	re collector): Method of Shipment to the Lab: for Campanies Septum Vials, Glass Jugs, and/or
	npanies Septum Vials, Glass Jugs, and/or reserved as follows:
	-No -Preservation; Sample stored at room temperature.
P-Ice	Sample stored in an ice bath (Not Frozen).
$ P-Na_2 S_2 O_3 $	Sample Preserved with Sodium Thiosulfate to remove chlorine residual.
CHAIN OF CU	
	nis sample was transferred from to
at (location)	
he statements i	n this block are correct. Evidentiary Seals: Not Sealed 🛄 Seals Intact: Yes 🧾 No 🥅

ANALYSES PERFORMED

ANALYSES PERFORMED	LAB. No.: OR- 1156
THIS PAGE FOR LA	ABORATORY RESULTS ONLY
This sample was tested using the analytical screening metho	od(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
	CAL RESULTS
COMPOUND(S) DETECTED CONC. [PPB]	COMPOUND(S) DETECTED CONC. [PPB]
ABBREVIATIONS USED: N D = NONE DETECTED AT OR ABOVE THE STA [RESULTS IN BRACKETS] ARE UNCONFIRMED A	A trace + DETECTION LIMIT + + + + + + + + + + + + + + + + + + +
LABORATORY REMARKS:	
CERTIFICATE OF AN Seal(s) Intact: Yes \square No \square . Seal(s) broken by: I certify that I followed standard laboratory procedures on har that the statements on this page accurately reflect the analytic Date(s) of analysis: $Ocf IO_{1}/9BO_{1}$. Analyst's signature: I certify that I have reviewed and concur with the analytical	ndling and analysis of this sample unless otherwise noted and cal results for this sample. Manuery
Reviewers signature: K. Meyer heh	·

" ENVERSION	700 Camino d	ABORATORY STVISIO e Salud NE NM 87106 — (505) 84			TERAL WATE		
DATE RECEIVED 10	18 186	LAB WC. 4840	USER CODE 59300	□ 59600 🕅 OTH	HER: 82235		
Collection DATE 9 29 86 Collection TIME		SITE INFORM- I ATION	Sample location	LOCO HI	ices		
1345 Collected by - Person/	Agency FREY /	OLSON/OCD	Collection site description	EVAP F	POND -	NWP	ons
SEND FINAL REPORT O Attn:	NM OIL CC State Lar Santa Fe <u>David F</u> ne: 827-	, NM 87504-20 Boyer	g, PO Box 2088		OIL CON itation/ rell code	(C)52)5(10V 2 4 1) SERVATION SANTA FE	V DIVISION
3 Bailed	🗆 Pump	Water level		Discharge	Sam	ple type	
pH (00400)	□ Tap	Conductivity (Une	corrected) µmho	Water Temp. (00010)	°C Conc	juctivity at 25°	с (00094) µmho
AMPLE FIELI		NT — Check prop	Der boxes				· · · · · · · · · · · · · · · · · · ·
NALYTICAL I	id added	Other-specify:	<u> </u>	$\frac{1}{5}$ mbrane filter $\square A$. 211 5 m1 conc. HNO_3 adde		4ml fuming Units	, HNO ₃ added
NA: No ac NALYTICAL I NF, NA Conductivity (25°C (00095) Total non-filter residue (suspe (00530) Cother: Leb Other: Other:	cid added C RESULTS fm Corrected) able	Other-specify:		nbrane filter A. 211 5m1 conc. HNO ₃ adde	ed □A: 4	4m1 fuming Units mg/1 mg/1 mg/1 mg/1 mg/1	
NA: No ac NALYTICAL I NF, NA Conductivity (25°C (00095) Total non-filter residue (suspr (00530) Cother: Other: Other: NF, A-H ₂ SO ₄ Nitrate-N + , N	cid added RESULTS fm Corrected) corre	NF: (Non-filtered) Other-specify: om SAMPLES	(0.45 μmer A: Units Date analyzed 	mbrane filter A. 211 5m1 conc. HNO3 adde 4 F. NA A Calcium (00915) A Sodium (00925) B Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00940) Sulfate (00945) Total filterable residue (dissolved) (70300)	ed $\Box A: 0$ 3600 58190 1033 513 32300 13237	4ml fuming Units mg/i mg/i mg/i mg/i mg/i mg/i	Date analyzed 10-21 11 12 11 10 27 10/30 10/30 10/30 10/30 11/5
NA: No ac ANALYTICAL I NF, NA Conductivity (25°C (00095) Total non-filter residue (susp (00530) Cother: Other: Other: NF, A-H ₂ SO ₄ Nitrate-N + , N total (00630) Ammonia-N to Total Kjeldahl- () Chemical oxy demand (0034 Total organic o ()	cid added RESULTS fm Corrected) rable ended) p p litrate-N btal (00610) N gen 40)	NF: (Non-filtered) Other-specify: om SAMPLES	Units Date analyzed	mbrane filter A. 211 5m1 conc. HNO3 adde 4 F, NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00940) Sulfate (00945) Total filterable residue (dissolved) (70300) Other:	ed $\square A$: 0 58190 1033 513 38300 13257 0	4ml fuming Units mg/i mg/i mg/i mg/i mg/i mg/i	Date analyzed 10-21 11 11 12 10/27 10/30 10/30 10/30 10/30 10/30
NA: No ac ANALYTICAL I NF, NA Conductivity (25°C (00095) Total non-filter residue (suspr (00530) Cother: Other: Other: NF, A-H ₂ SO ₄ Nitrate-N + , N total (00630) Ammonia-N to Total Kjeldahl- () Chemical oxy demand (0034	cid added RESULTS fm Corrected) rable ended) p p litrate-N btal (00610) N gen 40)	NF: (Non-filtered) Other-specify: om SAMPLES	IIII IIII IIII IIII IIII IIII IIII 	mbrane filter A. 211 5m1 conc. HNO3 addo addition f, NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00945) Total filterable residue (dissolved) (70300) Chter: Sulfate (00631) Ammonia-N dissolved (00608) Total Kjeldahl-N (ed $\square A: 0$ 3600 58190 1033 513 32360 13257 0 Date Reporte	4m1 fuming Units mg/lmg/lmg/lmg/l mg/lmg/l mg/lmg/l mg/lmg/l mg/lmg/l	Date analyzed 10-21 4 4 10 10 27 10/30 10/30 10/30 10/30 10/30 10/30 10/27

	NO. HM-2008		o □ 59600 🖄 O	THER: 82	235	
	SITE INFORM-► ATION	Sample location	Loca	HILL	5	
1345		Collection site description	EVAP	PONI	-NWh	of Pond.
BAILEY /OL	50~ /OCD]	ats	eparata
ND NM OIL CO NAL State Lan	NTAL BUREAU NSERVATIONDIN d Office Bidg NM 87504-208 over	VISION CTE	5 0 1986 S 0 1986 SERVATION DIVISION SERVATION DIVISION SERVATION DIVISION		······································	
Phone: 827-	5812	L'AL CON	SANTAFE	Station/ 19		·
AMPLING CONDITIONS		OIL 0-	_ J'	Owner		
☐ Bailed ☐ Pump ≵ Dipped □ Tap	Water level		Discharge		Sample type	
р (00400)	Conductivity (Unco	prrected) µmho	Water Temp. (00010)	°C	Conductivity at 25	°C (00094) µmh
eld comments					****	
submitted /	NF: Whole sample (Non-filtered)	EXF: Filtered in 0.45 μme	mbrane filter	ml H₂SO₄/ ded টৈ		ng HNO, adde
No. of samples submitted / NA: No acid added NALYTICAL RESULTS from NF, NA Conductivity (Corrected) 25°C (00095)	NF: Whole sample (Non-filtered) Other-specify:	EXF: Filtered in 0.45 μme	5m1 conc. HNO3 ad d F. NA □ Calcium (00915) □ Magnesium (00925) □ Sodium (00930)	ded 🎽	A: 4ml fumin Units mg/l mg/l mg/l	
No. of samples submitted / NA: No acid added NALYTICAL RESULTS from NF, NA Conductivity (Corrected) 25 °C (00095) Total non-filterable residue (suspended) (00530)	NF: Whole sample (Non-filtered) Other-specify:	E Filtered in 0.45 μme Δ A: Units Date analyze	smbrane filter A: 2 5m1 conc. HNO3 ad d F. NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440)	ded	A: 4ml fumin Units mg/l mg/l mg/l mg/l	ng HNO ₃ adde Date analyzed
No. of samples submitted / NA: No acid added NALYTICAL RESULTS from NF, NA Conductivity (Corrected) 25 °C (00095) Total non-filterable residue (suspended) (00530) Other: / OA P	NF: Whole sample (Non-filtered) Other-specify: om SAMPLES	E Filtered in 0.45 μme Δ A: Units Date analyze	smbrane filter A: 2 5m1 conc. HNO3 ad d F. NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935)	ded	A: 4ml fumir Units mg/l mg/l mg/l mg/l	
No. of samples submitted / NA: No acid added NA: No acid added NALYTICAL RESULTS from NF, NA Conductivity (Corrected) 25°C (00095)	NF: Whole sample (Non-filtered) Other-specify: om SAMPLES	E Filtered in 0.45 μme Δ A: Units Date analyze	mbrane filter A: 2 5m1 conc. HNO3 ad d F. NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00940)	ded 2	A: 4ml fumin Units mg/l mg/l mg/l mg/l mg/l mg/l	
No. of samples submitted	NF: Whole sample (Non-filtered) Other-specify: om SAMPLES	E Filtered in 0.45 μme Δ A: Units Date analyze	mbrane filter A: 2 5ml conc. HNO3 ad d F. NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00940) Sulfate (00945) Total filterable residue (dissolved) (70300)	ded 2	A: 4ml fumin Units mg/l mg/l mg/l mg/l mg/l mg/l mg/l	
No. of samples submitted / NA: No acid added NALYTICAL RESULTS from NF, NA Conductivity (Corrected) 25 °C (00095)	NF: Whole sample (Non-filtered) Other-specify: Om SAMPLES	F: Filtered in 0.45 μme 0.45 μme Δ A: Units Date analyze μmho mg/l	mbrane filter A: 2 5m1 conc. HNO3 ad d F. NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00940) Sulfate (00945) Total filterable residue (dissolved) (70300) Other:	ded	A: 4ml fumin Units mg/l mg/l mg/l mg/l mg/l mg/l mg/l	
No. of samples submitted	NF: Whole sample (Non-filtered) Other-specify: Om SAMPLES		mbrane filter A: 2 5ml conc. HNO3 ad d F. NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00940) Sulfate (00945) Total filterable residue (dissolved) (70300) Other: F, A-H2 SO4 Nitrate-N + , Nitrate- dissolved (00631)	ded	A: 4ml fumin Units mg/l mg/l mg/l mg/l mg/l mg/l mg/l	
No. of samples submitted / NA: No acid added NALYTICAL RESULTS from NF, NA Conductivity (Corrected) 25 °C (00095) Total non-filterable residue (suspended) (00530) Other: / O.A. A Other: Se- F, A-H ₂ SO ₄ Nitrate-N + , Nitrate-N total (00630) Ammonia-N total (00610) Total Kjeldahl-N ()	NF: Whole sample (Non-filtered) Other-specify: Om SAMPLES	F: Filtered in 0.45 μme 0.45 μme Δ A: Units Date analyze μmho mg/l	mbrane filter A: 2 5ml conc. HNO3 ad d F. NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00930) Bicarbonate (00440) Chloride (00940) Sulfate (00945) Total filterable residue (dissolved) (70300) Other: F, A-H2 SO4 Nitrate-N + Nitrate- dissolved (00631) Ammonia-N dissolve (00608)	ded	A: 4ml fumin Units mg/l mg/l mg/l mg/l mg/l mg/l mg/l	
No. of samples submitted	NF: Whole sample (Non-filtered) Other-specify: Om SAMPLES		mbrane filter A: 2 5ml conc. HNO3 ad d F. NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00940) Sulfate (00945) Total filterable residue (dissolved) (70300) Other: F, A-H2 SO4 Nitrate-N + , Nitrate- dissolved (00631) Ammonia-N dissolved	ded	A: 4ml fumin Units mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l	
No. of samples submitted □ □ NA: No acid added □ NA: No acid added □ NA: No acid added NA: No acid added □ NE, NA □ 25 °C (00095) □ 1 25 °C (00095) □ 1 Total non-filterable residue (suspended) (00530) □ 0 Other: / C.A P □ 0 Other: / AS □ 0 Other: / S □ 0 Ammonia-N total (00610) □ 1 Total Kjeldahl-N □ 0 Chemical oxygen demand (00340) □ 1 Total organic carbon □	NF: Whole sample (Non-filtered) Other-specify: Om SAMPLES		Imbrane filter A: 2 5m1 conc. HNO3 ad Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00940) Sulfate (00945) Total filterable residue (dissolved) (70300) Other: F, A-H2 SO4 Nitrate-N + Nitrate- dissolved (00631) Ammonia-N dissolve (00608) Total Kjeldahl-N	ded	A: 4ml fumin Units mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l	
No. of samples submitted □ □ NA: No acid added □ NA: No acid added □ NA: No acid added ■ 100000000 ■ Total non-filterable residue (suspended) 000530) ■ Other: Se	NF: Whole sample (Non-filtered) Other-specify: om SAMPLES		Imbrane filter A: 2 5m1 conc. HNO3 ad Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00940) Sulfate (00945) Total filterable residue (dissolved) (70300) Other: F, A-H2 SO4 Nitrate-N + , Nitrate- dissolved (00631) Ammonia-N dissolve (00608) Total Kjeldahl-N ()	ded	A: 4ml fumin Units mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l	Date analyze
No. of samples submitted □ □ NA: No acid added □ NA: No acid added □ NA: No acid added ■ NE, NA ■ Conductivity (Corrected) ■ 25 °C (00095) ■ Total non-filterable residue (suspended)	NF: Whole sample (Non-filtered) Other-specify: DM SAMPLES		Imbrane filter A: 2 5m1 conc. HNO3 ad Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00940) Sulfate (00945) Total filterable residue (dissolved) (70300) Other: F, A-H2 SO4 Nitrate-N + , Nitrate- dissolved (00631) Ammonia-N dissolve (00608) Total Kjeldahl-N (Other:	ded	A: 4ml fumir Units mg/l	Date analyzed

Lab Number: 7-11 2008 Date Submitted: 10/8/86 By: Bailey/Blson

Sample Ede: Eve	plond
Date Analyzed:	
Reviewed By: () ashly .
Date Reported:	12/22/26

Element	ICAP VALUE (MG/L)	AA VALUE (MG/L)
Aluminum	20.1	
Barium	0.3	
Berylium	40.1	
Boron	28.	n en
Cadmium		
Calcium	3000.	· · · · · · · · · · · · · · · · · · ·
Chromium		
Cobalt	<0.1	•
Copper	<0.1	· · · · · · · · · · · · · · · · · · ·
Iron	0.8	· · · · · · · · · · · · · · · · · · ·
Lead		· · · · · · · · · · · · · · · · · · ·
Magnesium	1250.	· · · · · · · · · · · · · · · · · · ·
Manganese	0.60	· ·
Molybdenum		• • • • • • • • • • • • • • • • • • • •
Nickel	<0.1	
Silicon	7.1	
Silver	<0.1	
Strontium	65.	
Tin		
Vanadium		
Zinc	< 0.1	
Arsenic		<u>0.23</u> <u><0.05</u> matrix interference.
Selenium		<0.05 matrix interference.
Mercury		

	SCIENTIFIC LABORATORY DIVISION 700 Camino de Salud NE Albuquerque, NM 87106 841-2570
REPORT TO:	David Boyer
REFORT TO:	N.M. Oil Conservation Division 0.01301930 DATE REC. $10-8-86$
	P. 0. Box 2088
	Santa Eo N.M. 97E04 2000
PHONE(S):	$\frac{827-5812}{2 2 3 5}$
SUBMITTER:	David Boyer CODE: 12 6 0
SAMPLE COLLE	ECTION CODE: (YYMMDDHHMMIII) $ 8 6 0 9 ^2 9 4 0 0 $
	WATER [], SOIL [], FOOD [], OTHER: CODE:
COUNTY: Ex	DOY; CITY: LOCO HILLS CODE:
LOCATION COD	DE: (Township-Range-Section-Tracts) 1/1715+ 310 1E+1/16+3131/1(10N06E24342)
	QUESTED: Please check the appropriate box(es) below to indicate the type of analytical screens ver possible list specific compounds suspected or required.
required. Whether	PURGEABLE SCREENS EXTRACTABLE SCREENS
	atic Purgeables (1-3 Carbons) [(751) Aliphatic Hydrocarbons
	Atic & Halogenated Purgeables (760) Organochlorine Pesticides
[] (765) Mass	Spectrometer Purgeables (755) Base/Neutral Extractables omethanes (758) Herbicides, Chlorophenoxy acid
	r Specific Compounds or Classes (759) Herbicides, Triazines
	$\square (760) \text{ Organochlorine Pesticides}$
	[] (761) Organophosphate Pesticides
	[] (767) Polychlorinated Biphenyls (PCB's)
	(764) Polynuclear Aromatic Hydrocarbons
	[] (762) SDWA Pesticides & Herbicides
Remarks:	LOCO HILLS EVAP ROND - Serve
	(RAINWATER) South Pons - currently, und
FIELD DATA:	
pH=; Co	onductivity=umho/cm_atC; Chlorine Residual=mg/l
Dissolved Oxygen	m=mg/l; Alkalinity=mg/l; Flow Rate
Depth to water	ft.; Depth of wellft.; Perforation Intervalft.; Casing:ft.;
	on, Methods and Remarks (i.e. odors, etc.)
Sampling Locatio	in, methous and Remarks (i.e. odors, etc.)
<u> </u>	
	ne results in this block accurately reflect the results of my field analyses, observations and
activities.(signatu	re collector): Method of Shipment to the Lab for car
This form accom	npanies Septum Vials, Glass Jugs, and/or
_ · ·	reserved as follows:
11	No Preservation; Sample stored at room temperature.
	Sample stored in an ice bath (Not Frozen). Sample Preserved with Sodium Thiosulfate to remove chlorine residual.
$\begin{array}{c} P - Na_2 S_2 O_3 \\ \hline CHAIN OF CU: \end{array}$	Sample Treserved with Sodium Thosemate to remove chlorine residual.
	nis sample was transferred from to to
	on and that
	n this block are correct. Evidentiary Seals: Not Sealed 🔲 Seals Intact: Yes 🥅 No 🗍
Signatures	

ANALYSES PERFORMED

ANALYSES PERFORMED	LAB. No.: OR- 1155
THIS PAGE FOR L	ABORATORY RESULTS ONLY
This sample was tested using the analytical screening meth	nod(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
S S	ICAL RESULTS
COMPOUND(S) DETECTED CONC.	
ppB] halogenated purgeables ND	[PPB]
harogenaren purgear ces 102	
bemane 281	
Tolinens 460	
A Alaine The	
Dranlen & TEZ	2
m-Sulenc 6	
0-xorlene 1220	
0-soprene = 20	· · · · · · · · · · · · · · · · · · ·
* DETECTION LIMIT + * ZO	
* DETECTION LIMIT * 1 20 pr	+ DETECTION LIMIT +
ABBREVIATIONS USED: N D = NONE DETECTED AT OR ABOVE THE ST T R = DETECTED AT A LEVEL BELOW THE ST [RESULTS IN BRACKETS] ARE UNCONFIRMED	ATED DETECTION LIMIT (NOT CONFIRMED)
LABORATORY REMARKS; Two other Zombo	unds were detected by the
LABORATORY REMARKS: Fire other Zompo aromatic screen That were	at identifiedo
CERTIFICATE OF A	ANALYTICAL PERSONNEL
Seal(s) Intact: Yes 🔲 No 🦳. Seal(s) broken by:	date:
I certify that I followed standard laboratory procedures on ha that the statements on this page accurately reflect the analyt	andling and analysis of this sample unless otherwise noted and
-	
Date(s) of analysis: OCT 10, 1966. Analyst's signature:	
	l results for this sample and with the statements in this block.
Reviewers signature: Meyorhelm	

÷

Brygolyser	New Mexico Hea SCIENTIFIC LAI 700 Camino de S Albuquerque, Ni	BORATOR			ERAL WATER O	
DATE RECEIVED	8 86 1	and the second	ER DE 🗌 5930	о 🗆 <u>59600</u> 🕅 отн	_{ER:} 82235	
Collection DATE	5		ple location	LOCO HILL	-5	
Collection TIME 1400 Collected by - Person	Agency		ction site description	EVAP PO.	ND (RAI	IN WATER)
BA	ILEY /DO	LSO 1/OCD			Southb	love D-Curr to -P
SEND FINAL REPORT TO Attr	State Land	SERVATION DIVIS Office Bldg, P NM 87504-2088	ION O Box 208	· · · · · · · · · · · · · · · · · · ·) Decis	4 1986
Pho	one: 827-58	812		we	H cope	JN8 (1
SAMPLING CO					OIL CONSERV	ANGREINEN
□ Bailed □ Dipped	Pump Tap	Water level		Discharge	Sampjalt	
pH (00400)	•	Conductivity (Uncorrect	ted) µmho	Water Temp. (00010)	°C	vity at 25°C (00094) µmho
Field comments	· · · · · · · · · · · · · · · · · · ·			1		
				******		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
		T — Check proper bo		1 - 1 - 1 - 1 - 1		
No. of samples submitted	/ 🗆 N	F: Whole sample (Non-filtered)	Γ F: Filtered in 0.45 μme	mbrane filter 🗆 A: 2 m	H_2SO_4/L added	<u>^</u>
🖉 NA: No a	cid added 🛛	Other-specify:		5ml conc. HNO3 adde	ed 🗖 A: 4m1	fuming HNO ₃ added
	RESULTS from	n SAMPLES			<u></u>	
NF, NA			s Date analyze	d F, NA		Units Date analyzed
Conductivity 25°C (00095	(Corrected)	\$0,750 um	11/12	Calcium (00915)	1800	mg/l/ mg/l
	·	<u> </u>	• <u> </u>	- 🖈 Magnesium (00925) - 🕀 Sodium (00930)	36700	mg/l ′
Total non-filte residue (susp				Potassium (00935)	663	mg/l <u>"(</u> mg/l <u>() 77</u>
(00530) کا Other: Lab	nll -	7.38 mg/	1	Chloride (00940)	53540	mg/l
□ Other:	p-10			 → Sulfate (00945) → → Total filterable residue → → →	54-1	_ mg/l/7
Other:				- (dissolved) (70300)	85454	
NF, A-H2SO4		•		Cother: CO3		10/27
D Nitrate-N+,	Nitrate-N			F, A-H ₂ SO ₄	<u> </u>	
total (00630)				- 🗋 Nitrate-N + , Nitrate-N		<u> </u>
Ammonia-N Total Kjeldah			n <u></u>	- dissolved (00631)		_ mg/l
()		mg/	/1	Ammonia-N dissolved (00608)		_ mg/l
Chemical oxy demand (003)			//	🗆 Total Kjeldahl-N		
Total organic	carbon	·		- () □ Other:		mg/l
() Other:		mg/	//	-		
Other:				- Analyst	Date Reported	Reviewed by
Laboratory rema	rks					
************************	*************			***************************************		
				*********		***************************************
SLD 726 (12/8	A)				<u></u>	<u></u>
		• •• •	111 -		0	
BUK UCD U	or Date	owner Notified	123	Phone or letter?	12150 Int	itials <u>(5</u>

Albuquerque	NO. HM- 200'		i9300 □ 59600 🕅 c	THER: 822	35	
ollection DATE 9 29 86	SITE	Sample location		1215		
ollection TIME	INFORM- P ATION			•		
I 4 D D): (000	Collection site desc	FVAP PC	DND (RAINWAT	TER)
BAILEY / DL	SON /OCD	L	,	٦	The active	Paula
NM OIL C	ENTAL BURGAU ONSERVATION D nd Office Bldg , NM 87504-20 Bover	ge Bly Bokne	11111 1989		Uni promi	aufel
Phone: 827-	•	LLCON	SERVATION DIVISION	Station/ weil.code		
AMPLING CONDITIONS		OILCOM	SAN	Owner		
🗆 Bailed 🖂 Pump	Water level		Discharge	• 	Sample type	
Dipped Tap	0	<u>*</u>				<u> </u>
pH (00400)	Conductivity (Une	corrected) µm	Water Temp. (00010)	°C	Conductivity at 25°	C (00094) µmha
Feld comments		··	<u>k</u>			
No. of samples submitted	NF: Whole sample (Non-filtered)	- F: Filtere	umembrane filter	!mlH₂SO₄/L		- HNO adda
No. of samples submitted (NA: No acid added	NF: Whole sample (Non-filtered)	F. Filtere	umembrane filter			g HNO ₃ added
No. of samples submitted (NA: No acid added	NF: Whole sample (Non-filtered)	- F: Filtere	: 5ml conc. HNO ₃ ad			g HNO ₃ addee Date analyzed
No. of samples submitted (NA: No acid added (NALYTICAL RESULTS find NF, NA	NF: Whole sample (Non-filtered)	I F: Filtere 0.45 ↓ □ A Units Date ana	Linembrane filter : 5ml conc. HNO ₃ ad hyzed F, NA C Calcium (00915)	Ided	: 4ml fuming Units mg/l	
No. of samples submitted (NA: No acid added (NALYTICAL RESULTS find NF, NA	NF: Whole sample (Non-filtered)	F: Filtere 0.45 µ	Linembrane filter : 5ml conc. HNO ₃ ad ilyzed F, NA Calcium (00915) Magnesium (00925)	Ided	: 4ml fuming Units	
No. of samples submitted NA: No acid added NALYTICAL RESULTS finite NF, NA Conductivity (Corrected) 25°C (00095) Total non-filterable	NF: Whole sample (Non-filtered)	Inits Date ana μmho	Linembrane filter : 5ml conc. HNO ₃ ad Livzed F, NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935)		: 4ml fuming Units mg/l	Date analyzed
submitted A Submit	NF: Whole sample (Non-filtered)	I F: Filtere 0.45 ↓ □ A Units Date ana	Linembrane filter : 5ml conc. HNO ₃ ad Liyzed F, NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440)		: 4ml fuming Units mg/l mg/l mg/l mg/l	Date analyzed
No. of samples submitted	NF: Whole sample (Non-filtered)	Inits Date ana μmho	Linembrane filter : 5ml conc. HNO ₃ ad Liyzed F, NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00940)		: 4ml fuming Units mg/l mg/l mg/l mg/l	Date analyzed
No. of samples submitted	NF: Whole sample (Non-filtered)	Inits Date ana μmho	Linembrane filter : 5ml conc. HNO ₃ ad Liyzed F, NA Calcium (00915) Calcium (00930) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00940) Sulfate (00945) Total filterable residu		: 4ml fuming Units mg/l mg/l mg/l mg/l mg/l	Date analyzed
No. of samples submitted	NF: Whole sample (Non-filtered)	Inits Date ana μmho	Linembrane filter : 5ml conc. HNO ₃ ad Liyzed F, NA Calcium (00915) Calcium (00930) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00940) Sulfate (00945) Total filterable residu (dissolved) (70300)		: 4ml fuming Units mg/l mg/l mg/l mg/l	Date analyzed
No. of samples submitted	NF: Whole sample (Non-filtered)	Inits Date ana μmho	Linembrane filter : 5ml conc. HNO ₃ ad Calcium (00915) Calcium (00930) Codium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00940) Sulfate (00945) Total filterable residu (dissolved) (70300) [°] Other:		: 4ml fuming Units mg/l mg/l mg/l mg/l mg/l	Date analyzed
No. of samples submitted	NF: Whole sample (Non-filtered)		Linembrane filter : 5ml conc. HNO ₃ ad Liyzed F, NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00940) Sulfate (00945) Total filterable residu (dissolved) (70300) Other: F, A-H ₂ SO ₄	lded A:	: 4ml fuming Units mg/l mg/l mg/l mg/l mg/l	Date analyzed
No. of samples submitted	NF: Whole sample (Non-filtered)	Inits Date ana μmho	Interpretation of the second	lded A:	: 4ml fuming Units mg/l	Date analyzed
No. of samples submitted	NF: Whole sample (Non-filtered)		Linembrane filter : 5ml conc. HNO ₃ ad Liyzed F, NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00940) Sulfate (00945) Total filterable residu (dissolved) (70300) Other: F, A-H ₂ SO ₄	lded A:	: 4ml fuming Units mg/l mg/l mg/l mg/l mg/l	Date analyzed
No. of samples submitted	NF: Whole sample (Non-filtered)	- mg/I	Imembrane filter	lded A:	: 4ml fuming Units mg/l	Date analyzed
No. of samples submitted	NF: Whole sample (Non-filtered)	Image: A mining of the second sec	Limembrane filter : 5ml conc. HNO3 ad Ilyzed F, NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00940) Sulfate (00945) Total filterable residu (dissolved) (70300) Other: F, A-H2 SO4 Nitrate-N + Nitrate- dissolved (00631) Ammonia-N dissolv (00608) Total Kjeldahl-N	lded A:	: 4ml fuming Units mg/l	Date analyzed
No. of samples submitted	NF: Whole sample (Non-filtered)		Imembrane filter	lded A:	: 4ml fuming Units mg/l	
No. of samples submitted	NF: Whole sample (Non-filtered)		Limembrane filter : 5ml conc. HNO3 ad Ilyzed F, NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00940) Sulfate (00945) Total filterable residu (dissolved) (70300) Other: F, A-H2 SO4 Nitrate-N + Nitrate- dissolved (00631) Ammonia-N dissolv (00608) Total Kjeldahl-N (Other:	Ided A: Ided A: Ided A: Ided A: Ided A: Ided Ided	: 4ml fuming 	Date analyzed
No. of samples submitted NA: No acid added NALYTICAL RESULTS fr NF, NA Conductivity (Corrected) 25°C (00095) Total non-filterable residue (suspended) (00530) Cother: ICAP Other: ICAP Other: AS Other: S NF, A-H ₂ SO ₄ Nitrate-N + , Nitrate-N total (00630) Ammonia-N total (00610) Chemical oxygen demand (00340) Cotal organic carbon ()	NF: Whole sample (Non-filtered)		Limembrane filter : 5ml conc. HNO3 ad Ilyzed F, NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00940) Sulfate (00945) Total filterable residu (dissolved) (70300) Other: F, A-H2 SO4 Nitrate-N + , Nitrate- dissolved (00631) Ammonia-N dissolv (00608) Total Kjeldahl-N ()	A: A: A: A: A: A: A: A: A: A: A: A: A: A	4ml fuming Units mg/l mg/l <td>Date analyzed</td>	Date analyzed
No. of samples submitted NA: No acid added NALYTICAL RESULTS fr NF, NA Conductivity (Corrected) 25°C (00095) Total non-filterable residue (suspended) (00530) Other: ICAP Other: A5 Other: A5 Other: S2 Nitrate-N +, Nitrate-N total (00630) Mitrate-N +, Nitrate-N total (00630) Chemical oxygen demand (00340) Total organic carbon () Other: -	NF: Whole sample (Non-filtered)	Image: Second system F: Filtere 0.45 / Units Date ana	Limembrane filter : 5ml conc. HNO3 ad Ilyzed F, NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00940) Sulfate (00945) Total filterable residu (dissolved) (70300) [°] Other: F, A-Hz SO4 Nitrate-N + , Nitrate- dissolved (00631) Ammonia-N dissolv (00608) Total Kjeldahl-N (Other: Analyst	Ided Ided Ided Ided <t< td=""><td>: 4ml fumins Units mg/l</td><td>Date analyzed</td></t<>	: 4ml fumins Units mg/l	Date analyzed
No. of samples submitted NA: No acid added NALYTICAL RESULTS fr NF, NA Conductivity (Corrected) 25°C (00095) Total non-filterable residue (suspended) (00530) Other: ICAP Other: A5 Other: A5 Other: S2 Nitrate-N +, Nitrate-N total (00630) Mitrate-N +, Nitrate-N total (00630) Chemical oxygen demand (00340) Total organic carbon () Other: -	NF: Whole sample (Non-filtered)	Image: Second system F: Filtere 0.45 / Units Date ana	Limembrane filter : 5ml conc. HNO3 ad Ilyzed F, NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00940) Sulfate (00945) Total filterable residu (dissolved) (70300) Other: F, A-H2 SO4 Nitrate-N + Nitrate- dissolved (00631) Ammonia-N dissolv (00608) Total Kjeldahl-N (Other:	Ided Ided Ided Ided <t< td=""><td>: 4ml fumins Units mg/l</td><td>Date analyzed</td></t<>	: 4ml fumins Units mg/l	Date analyzed

V

Lab Number: <u>42007</u> Date Submitted: 10/8/86 By: Bailey / Olson

4

Sample Core: [mp] Date Analyzed: 10/20/ 86 abby Reviewed By: 12/22/86 Date Reported

AA VALUE (MG/L)

Element	ICAP VALUE (MG/L)
Aluminum	0,3
Barium	D.5
Berylium	20.1
Boron	20.
Cadmium	40.1
Calcium	1650.
Chromium	
Cobalt	20.1
Copper	20.1
Iron	1.0
Lead	<0.1
Magnesium	850.
Manganese	0.22
Molybdenum	201
Nickel	<0.1
Silicon	7.5
Silver	
Strontium	47.
Tin	20.1
Vanadium	_<0.1
Zinc	20.1
Arsenic	
Selenium	
Mercury	

0.28 <0.05 matrix interference.

1977, AMAR 1977, A. 1979	700 Cafhino de	Salud NE
	Albuquerque, NM 8	
REPORT TO:	David Boyer	S.I.D. No. OR-86-1157 A-B
LEFORT TO:	N.M. Oil Conservation Division	
		CONSERVATION DIVISION
	Santa Fe, N.M. 87504-2088	SANTA FE PRIORITY
PHONE(S):	827-5812	USER CODE: $ \frac{8}{2} \frac{2}{3} \frac{3}{5} $
UBMITTER:	David Boyer	CODE: 12 6 0
SAMPLE COLLE	CCTION CODE: (YYMMDDHHMMIII) <u>8 </u>	201912191/1310121 KDB
SAMPLE TYPE:	WATER 🔀, SOIL 🛄, FOOD 🛄, OTHEI	R: CODE:
	00Y ; CITY: 6000	· · · · · · · · · · · · · · · · · · ·
		5 + 3 - 16 + 16 + 3 - 3 + 1(10N06E24342)
		- ,
	UESTED : Please check the appropriate box(es ver possible list specific compounds suspected of	s) below to indicate the type of analytical screens or required.
	PURGEABLE SCREENS	EXTRACTABLE SCREENS
.	tic Purgeables (1-3 Carbons)	(751) Aliphatic Hydrocarbons
• •••••••••••••••••••••••••••••••••••	tic & Halogenated Purgeables	(760) Organochlorine Pesticides
	Spectrometer Purgeables	(755) Base/Neutral Extractables
(766) Trihal	omethanes Specific Compounds or Classes	(758) Herbicides, Chlorophenoxy acid
	Specific Compounds or Classes	(759) Herbicides, Triazines (760) Organochlorine Pesticides
=¦		(761) Organophosphate Pesticides
		(767) Polychlorinated Biphenyls (PCB's)
		(764) Polynuclear Aromatic Hydrocarbons
		(762) SDWA Pesticides & Herbicides
Remarks:	MONITOR WE	CL3 ATW 185-
	LOCO HILLS	
PIELD DATA:		
	• • • • • • • • • • • • • • • • • • •	
	onductivity=umho/cm atC;	
Dissolved Oxyger	m=mg/l; Alkalinity=mg/l; Flow	Rate//
Depth to water	ft.; Depth of wellft.; Perforat	ion Intervalft.; Casing:
Sampling Locatio	on, Methods and Remarks (i.e. odors, etc.)	
	n na anna an anna an an an an an an an a	
	······································	
	he results in this block accurately reflect the	
activities.(signatu Thia form pagem	re collector): gotte	gs, and/or
Samples were	eserved as follows:	Pal min/ar
	No Preservation; Sample stored at room ten	nperature.
_	Sample stored in an ice bath (Not Frozen).	
P-Na SO	Sample Preserved with Sodium Thiosulfate t	
CHAIN $OF^2 CU$	STODY	
		to
		on/ and that
at (location)		
		ot Sealed 🔲 Seals Intact: Yes 🦳 No 🦳

ANALYSES PERFORMED

				1 1 1	r -
1		No.	OR-		
	нυ.	110		11	ノ .

THIS PAGE FOR LABORATORY RESULTS ONLY This sample was tested using the analytical screening method(s) checked below: PURGEABLE SCREENS EXTRACTABLE SCREENS (751) Aliphatic Hydrocarbons [] (753) Aliphatic Purgeables (1-3 Carbons) (760) Organochlorine Pesticides (754) Aromatic & Halogenated Purgeables (765) Mass Spectrometer Purgeables [(755) Base/Neutral Extractables (766) Trihalomethanes (758) Herbicides, Chlorophenoxy acid (759) Herbicides, Triazines Other Specific Compounds or Classes (760) Organochlorine Pesticides (761) Organophosphate Pesticides (767) Polychlorinated Biphenyls (PCB's) (764) Polynuclear Aromatic Hydrocarbons (762) SDWA Pesticides & Herbicides ANALYTICAL RESULTS CONC. COMPOUND(S) DETECTED COMPOUND(S) DETECTED CONC. [PPB] [PPB] approx, 1000 . . Ж DETECTION LIMIT * + DETECTION LIMIT ABBREVIATIONS USED: N D = NONE DETECTED AT OR ABOVE THE STATED DETECTION LIMIT T R = DETECTED AT A LEVEL BELOW THE STATED DETECTION LIMIT (NOT CONFIRMED) [RESULTS IN BRACKETS] ARE UNCONFIRMED AND/OR WITH APPROXIMATE QUANTITATION LABORATORY REMARKS moo phea CERTIFICATE OF ANALYTICAL PERSONNEL Seal(s) Intact: Yes No No Seal(s) broken by: date: I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements on this page accurately, reflect the analytical results for this sample. Date(s) of analysis: 10-10-86, 10-21- 26 Analyst's signature: Jan I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. menerhen Reviewers signature:

SCIENTIFIC LAB 700 Camino de Sa	th and Ergenment Department ORATORY ISION alud NE 87106 — (505) 841-2555		ERAL WATER O	
DATE RECEIVED 10 8 86 NO	B WC-4836 USER [5930	оо □ 59600 🕅 отне	R: 82235	
Collection DATE 92986 Collection TIME	SITE Sample location	Loco KILL		
Collected by - Person/Agency BAILEY	Collection site description	° [™] <i>M W</i> 3		
FINAL State Land	ERVATION DIVISION Office Bldg, PO Box 208 MM 87504-2088 Mer		code SANIA	**************************************
Bailed Dump	Water level DTW 185	Discharge	Sample ty	
pH (00400)	Conductivity (Uncorrected)	Water Temp. (00010)	°C Conductiv	vity at 25°C (00094) µmho
SAMPLE FIELD TREATMENT No. of samples submitted / NF	: Whole sample (Non-filtered) ☑ F: Filtered in 0.45 μm ther-specify: □A: SAMPLES	5m1 conc. HNO3 added	H₂SO₄/Ladded i □A: 4m1	fuming HNO ₃ added
NF, NA	Units Date analyz	~		Units Date analyzed
 ▲ Conductivity (Corrected) 25 °C (00095) □ Total non-filterable residue (suspended) (00530) ▲ Other: □ Other: □ Other: □ NF, A-H₂SO₄ 	<u>85,366 µmho 11/12</u> 7.19 mg/1 <u>10/27</u>	Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00940) Sulfate (00945) Total filterable residue (dissolved) (70300) Other: 2033	8400 4440 23000 1000 134 56520 280 96486 0	$\begin{array}{c c} mg/l & \underline{/0} \cdot \underline{2/} \\ mg/l & \underline{1/} \\ \underline{1/} \\ mg/l & \underline{1/} \\ \underline{1/}$
□ Nitrate-N + , Nitrate-N	en e	F, A-H2 SO4	<u> </u>	
 Nitrate-N², Nitrate-N total (00630) Ammonia-N total (00610) Total Kjeldahl-N () Chemical oxygen demand (00340) Total organic carbon	mg/l mg/l mg/l mg/l mg/l mg/l	 Nitrate-N + , Nitrate-N dissolved (00631) Ammonia-N dissolved (00608) Total Kjeldahl-N () Other: 		_ mg/l _ mg/l _ mg/l
Conter: Conter: Caboratory remarks		Analyst	Date Reported	Reviewed by
1				

FOR OCD USE -- Date Owner Notified 11/25 Phone or letter? Action Initials

1158-6-1	700 Camino de Albuquerque, AME	ATORY DIVISION
REPORT TO:	David Boyer N.M. Oil Conservation Division P. O. Box 2088	INSERVATION DIVISION
	Santa Fe, N.M. 87504-2088	PRIORITY
PHONE(S):	827-5812	USER CODE: $\begin{bmatrix} 8 & 2 & 3 & 5 \end{bmatrix}$
SUBMITTER:	David Boyer	CODE: 2 6 0
	CTION CODE: (YYMMDDHHMMIII)	;;;;;;
	WATER \mathbf{X} , soil $\mathbf{\Box}$, food $\mathbf{\Box}$, other	
	$\frac{1}{\sqrt{7}}$; CITY: <u>COCO</u>	
	E: (Township-Range-Section-Tracts) / [7]	
		s) below to indicate the type of analytical screens
	er possible list specific compounds suspected	
(754) Aroma (765) Mass (766) Trihalo	PURGEABLE SCREENS tic Purgeables (1-3 Carbons) tic & Halogenated Purgeables Spectrometer Purgeables omethanes 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:	MONITOR WELL	12 DTW 206.6
	LOCO HILLS	
FIELD DATA:		
pH=; Co	onductivity=umho/cm_atC;	Chlorine Residual=mg/l
	=mg/l; Alkalinity=mg/l; Flow	
		tion Intervalft.; Casing:
	n, Methods and Remarks (i.e. odors, etc.)	
	• • •	
activities.(signatur This form accom Samples were pr	re collector): Rule panies Septum Vials, Glass Ju eserved as follows:	results of my field analyses, observations and Method of Shipment to the Lab: Hand Dawn gs, and/or
	No Preservation;- Sample stored at room ter Sample stored in an ice bath (Not Frozen)	
$P-Na_2S_2O_3$	Sample Preserved with Sodium Thiosulfate	
CHAIN OF CU		· · ·
		to
		on on and that
	n this block are correct. Evidentiary Seals: N	lot Sealed Seals Intact: Yes No

ANALYSES PERFORMED

			· ·
ANALYSES PERFORMED		LAB. No.: OR- <u>//ら</u> ろ	
THIS PAG	E FOR LABOR	RATORY RESULTS ONLY	
This sample was tested using the analytical scree	ning 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 (755) Herbicides, Chlorophenoxy acid (759) Herbicides, Triazines (760) Organochlorine Pesticides (761) Organophosphate Pesticides (766) Polychlorinated Biphenyls (PCB's) (764) Polynuclear Aromatic-Hydrocarbons (762) SDWA Pesticides & Herbicides	
AN	ALYTICA	L RESULTS	
COMPOUND(S) DETECTED	CONC. [PPB]	COMPOUND(S) DETECTED	CONC.
bennene	approx 5		
Totrien 8	approx, 5		
dichloromethana	TR		
	11		
· · · · · · · · · · · · · · · · · · ·			
	· · · · · · · · · · · · · · · · · · ·		
* DETECTION LIMIT * 米	2ppb	+ DETECTION LIMIT + +	
ABBREVIATIONS USED: N D = NONE DETECTED AT OR ABOVE T R = DETECTED AT A LEVEL BELOW [RESULTS IN BRACKETS] ARE UNCONN	THE STATED	DETECTION LIMIT (NOT CONFIRMED)	
LABORATORY REMARKS:	bound	were detected by the an	matic
stream and GE/MS the	+ am	can to be indirected	····
hudroran bonn Farra	the first	A such a particular	testel
And the the	til il	mpaindo were also de	V/ I
and since and race	rety eg	in have amounts	rax
were not identified.			
CERTIFICA Seal(s) Intact: Yes \square No \square . Seal(s) broken b I certify that I followed standard laboratory procedu that the statements on this page accurately reflect to Date(s) of analysis: $\square - \square $	y: tres on handling the analytical re gnature:	esults for this sample.	
Reviewer's signature: K Mener her			

	SCIENTIFIC LAE 700 Camino de S Albuquerque, N	Salud NE M 87106 — (505) 841-	N 2555	G		VATER CHE	
DATE RECEIVED //D Collection DATE 9 29 86 Collection TIME 230	8 86 h	AB O. WC-4835 SITE INFORM ATION	USER 5930 Sample location	LOCO HILLS		235	
Collected by - Person/A Collected by - Person/A Collected by - Person/A	ency EY /OLS	:∂~ '/0CD		n <u>mw</u> 1	<u>پ</u> ہے		- - - - - - - - - - - - - - - - - - -
END	M OIL CON State Land Santa Fe, David Bo e: 827-58	-	, PO Box 208		Station/ well code Owner	한다. NOV 2.4 CONSERVATI SANTA	UUI ON DIMISION -
友 Bailed	C Pump	Water level	2011	Discharge		Sample type	
C Dipped pH (00400)		Conductivity (Unco	206.6 prrected) µmho	Water Temp. (00010)	°C	Conductivity at	25°C (00094) µmho
NALYTICAL R	ESULTS from	(Non-filtered) Other-specify:		5ml conc. HNO ₃ add	miH₂SO₄/I ded □A	<u> </u>	and the second
Conductivity (C 25°C (00095) Total non-filtera residue (susper (00530) Other: Other: Other: Other:		7.05	µmho <u>11/12</u> mg/I <u>1/27</u>	Calcium (00915) Calcium (00915) Agnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00940) Sulfate (00945) Total filterable residue (dissolved) (70300) Cther: CD S	37 37	7 mg/ 7 mg/ 700 mg/	" " " " " " " " " " " " " " " " " " "
 Nitrate-N + , Nii total (00630) Ammonia-N tot Total Kjeldahl-N () Chemical oxyg demand (00340 Total organic ca () Other: 	ai (00610) N en D)		. mg/l . mg/l . mg/l . mg/l . mg/l	F, A-H ₂ SO ₄ F, A-H ₂ SO ₄ Nitrate-N + , Nitrate-N dissolved (00631) Ammonia-N dissolved (00608) Total Kjeldahl-N () Other:	d	mg/ mg/ mg/	
Other: Laboratory remark	 S		· · · · · · · · · · · · · · · · · · ·	Analyst	Date Re		iewed by
SLD 726 (12/84)							



.

•

MEMORANDUM OF MEETING OR CONVERSATION

.

Telephone	Pers	sonal	Time 8:4	5 AM	Date //	15/86	
	Origir	nating Party	•		Other	Parties	<u></u>
Huch K	Coboths	m - Rey	1)+assoc.		ami Bai	Den	
0						ſ	· ·
ubject	loco the	els an	alizes for	n Som	oleo taka	~ 9/2.4/8	'6
			D D				
		<u></u>		••			
viscussion Rote	Thank	monto	the bollow	ing Azza	Of Dan	a Anna Ina	Southurstern
sas (m	id land	TRACIO	-	7 There		ange 11g	200 JAN PORSING
			$\mathcal{N}(\mathcal{L})$	17° 62			And Ren yo
MW3: CA					me Olpom		D. Fond: Bengen . 89
		ypropene.	<u></u>		2me - 01		liene. 79 ppm
					engene <.01		iflenone - 26
Chearlor	Bongene	.006			form .025	_	lene .4
					Aleropropen		alydino. Cl. 016
	·····	<u></u>			magna . 013		Alorsettone 2004
	<u></u>		*	serchionot	The fone . O		ofum . DDG
Conclusions or	Agreement	ts		<u></u>		•	Aloroethones 6/
	1.1		· · · · · ·		2		sethigenes 201
			hip is so			100, 24, ×	- well
agan	- sph	+ Empl	les with	Keed +	Wasoc.		
			<u> </u>		<u></u>	<u></u>	
stribution		·		igned			
	orgen_				Jomi Ba	le	
9- 14	de on					/	
. (

11 11 SCIENTIFIC LABORATORY DIVISION مار المراجعة المراجعة المحمد 700 Camino de Salud NE STATE OF NEW MEXICO Haussene, NM 87106 841-2570 ENVHONMENT 1 1 -S.L.D. No.: OR-52-AB DAVID G. BOYER REPORT TO: PLEASE PRINT DATE REC. : NEW MEXICO OU CONSERVATION DIV. P.O. BOX 2088 SLD PRIORITY #: SANTA FE, NM 87501 827-5812 USER CODE: |8|2|2|3|5| PHONE(S): SUBMITTER: DAVID BOYER SUBMITTER CODE: SAMPLE TYPE: WATER, SOIL , OTHER SAMPLE TYPE CODE: 5:30 BY 4/18 CODE: COLLECTED: 86/01/ INITIALS SOURCE: Settlende Nand _____ CODE: ______ + _____ NEAREST CITY: LOCATION: LOCO Hills Aispolal CODE: TOWNSHIP RANGE SECTION TRACTS pH=___; Conductivity= <u>DSS</u> umho/cm at ____°C; Chlorine Residual=____ Dissolved Oxygen=____mg/l; Alkalinity=____; Flow Rate=____ Sampling Location, Methods and Remarks (i.e. odors, etc.), Final East Dupposal Pond, N. Side. D. ppek I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Method of shipment to the Laboratory Jank Cannel This form accompanies ____Septum Vials, ___Glass Jugs, ____ Containers are marked as follows to indicate preservation: NP:No preservation; sample stored at room temperature.P-IceSample stored in an ice bath (not frozen).P-Na2S203; Sample preserved with Na2S203 to remove chlorine residual. I (we) certify that this sample was transferred from _____ at (location) onʻ to and that the statements in this block are correct. Evidentiary Seals: Not Sealed
Seals Intact: Yes No Signatures _ (we) certify that this sample was transferred from to at (location) on and that the statements in this block are correct. ATE AND TIME Evidentiary Seals: Not Sealed Seals Intact: Yes No Signatures

PL		YSES REQUESTED CHECK THE APPROPRIATE ED. WHENEVER POSSIBLE			ATE 7	AB. No.: ORG-	L SCREENS	
QUAL IT AT IVE	QUANTITATIVE	PURGEAE SCREEI		QUAL IT AT IVE	QUANTITATIV	EXTRACTAE SCREENS		
	AT 1	ALIPHATIC HYDROCARBON	المتحدث والمراجع المراجع والمترك أشتعت والمستحد والمتحد والمتحد والمتحد والمتحد والمتحد والمحاد			ALIPHATIC HYDROCAR		
X	X	AROMATIC HYDROCARBON	 - 		CHLORINATED HYDROC.			
$\mid \bigtriangleup$	X	HALOGENATED HYDROCARBON SCREEN GAS CHROMATOGRAPH/MASS SPECTROMETER			 	CHLOROPHENOXY ACID HERBICIDES HYDROCARBON FUEL SCREEN		
				- <u>-</u>		ORGANOPHOSPHATE PE	1	
			·	<u>} </u>		POLYCHLORINATED BIPHENYLS (PCB's)		
				<u> -</u>	<u> </u>	POLYNUCLEAR AROMAT		
				<u> </u>		TRIAZINE HERBICIDES		
		· SPECIFIC COMP	POUNDS			SPECIFIC COMP	OUNDS	
					ļ			
DEN	IARKS	<u> </u>				L		
REP	IAKKS	•	······································			<u> </u>		
		IA I	NALYTICAL	RE	SUL	_TS		
	COI	MPOUND	[PPB]	C	OM	POUND	[PPB]	
ha	lo.	pung screen	none detected	1				
L		benneme *	450			-		
		toluene*	380					
		ethylbernont	26					
		- Julene *						
		m-Xulene *	19			-		
		a-mlene *	7	Ø	DET	ECTION LIMIT	60 ppb	
		- preparation				ECTION LIMIT	South	
	REME	IRKS:		+- +		· · · · · · · · · · · · · · · · · · ·	FT= B	
		· · · · · · · · · · · · · · · · · · ·		~ ~				
		CI	RTIFICATE OF AN	ALYTT	CAL. I	PERSONNEL.		
Sea	l(s)	Intact: Yes NOK	. Seal(s) broke	n by:		d	ate <u>:</u>	
Ic	erti	fy that I followed star	ndard laboratory	v proc				
		unless otherwise noted page accurately reflec					analytical data	
Dat	e(s)	of analysis: 4 - A& K	John So. Analys	t's s	igna	ture:		
I c	erti	of analysis:4 Jeb\$10 fy that I have reviewed	and concur wit	h the	ana	lytical results for t	his sample and	
wit	h th	e statements in this bl	lock. Reviewers	s sign	atur	: IK menerher		

.,

فمته

	700 Camino de Si	ORATORY DIVISION		√√ G	ENERAL V and NITR		HEMISTRY NALYSIS
DATE RECEIVED	627186	5. WC 239	USER CODE 🗌 5930	o 🗆 59600 🖄	DTHER: 82	235	
		SITE INFORM- ► ATION		oco Higls	bispo	fal C	empony
Collected by - Person/A		be och	Collection site descriptio	North Se	de of	Fine	D (East)
	per para	and and]	the	ng Pond
END INAL EPORT O	State Land Santa Fe, N	ERVATION DI Office Bldg M 87501	/ISION PO Box 208	8			
Attn:	David Boy	/er					
	NOITIONS		QL GDISTS	CALLON DIVISION	Station/ well code Owner	•	· · · · · · · · · · · · · · · · · · ·
AMPLING CO		Water level		Discharge		Sample typ	De /
	□ Tap						GRAR
pH (00400)		Conductivity (Unco	prrected witho	Water Temp. (00010)	• •C	Conductivi	ty at 25°C (00094) µmho
Field comments	TREATMENT	Color	er boxes	orany	(been		
No. of samples submitted NA: No action NALYTICAL F		(Non-filtered)	□ F: Filtered ir 0.45 μme	n field with A: 2 Ambrane filter	2 ml H₂SO₄/ -	L added	
NF, NA			Units Date analyze			·	Units Date analyzed
 Conductivity (C 25°C (00095) Total non-filtera residue (suspe (00530) Other: Other: Other: NF, A-H₂SO₄ 	able	150,000 • 7.64	umho <u>2/24</u> mg/l	 Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00940) Sulfate (00945) Total filterable residu (dissolved) (70300) Other: 	$ \begin{array}{c} & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ \end{array} $	17 850 13 1.8	$\begin{array}{c c c c c c c c c c c c c c c c c c c $
Nitrate-N+, Ni	itrate-N			F, A-H ₂ SO ₄			<u> </u>
total (00630) Ammonia-N to Total Kjeldahl-I () Chemical oxyg demand (0034 Total organic c ()	tal (00610) N Jen 0)		mg/l mg/l mg/l mg/l mg/l	 Nitrate-N +, Nitrate dissolved (00631) Ammonia-N dissolved (00608) Total Kjeldahl-N () Other: 			mg/l mg/l mg/l
Other: Other: Laboratory remark		······································		Analyst		eported 25 86	Reviewed by
SLD 726 (12/84		DN: WHITE — EID,		CANARY — WS System		ID Local Offi	ce GOLDENROD — SI

·

٠

•

ļ

<u> </u>		1 87106 — (505) 84				TUGEN7		
	27 86 1			<u> </u>		2235		
ection DATE		SITE INFORM- I ATION		o tells	ispo	fal	Om	pany
ected by - Person/Ac	gency 72		Collection site description	orthe side	081	Fine	NE	of the
<u> </u>	27 Roile	24	,		0	171		ba A
,					S	1120	ngo	ong
	NVIRONMEN M OTL CONS	SERVATION D	IVISION					
	State Land	Office Bld	g, PO Box 2088					
	Santa Fe, I	NM 87501						
Attn:	David Boy	yer				•		
			i A		Station/ well code	<u></u>		
			and the second se		Owner			<u> </u>
		Water level		Discharge		Sample t	vpe /	_
	🗆 Tap		<u> </u>				6	nalo
H (00400)		Conductivity (Un	corrected) μmho	Water Temp. (00010)	°C	Conducti	vity at 25°	°C (00094)
		lorg 2	all mining	× 110 0				<u> </u>
MPLE FIELD		K Leck	and the second sec		, <u> </u>			
AMPLE FIELD No. of samples	TREATMEN L ØN	144	Filtered in f	ield with DA: 2	ml H ₂ SO	/L added		
AMPLE FIELD No. of samples submitted		Whole sample (Non-filtered)	Filtered in f	ield with hbrane filter	ml H ₂ SO	/L added		
MPLE FIELD No. of samples submitted IXNA: No. acid	L KN d added C C ESULTS from	Whole sample (Non-filtered) Other-specify:	□ F: Filtered in f 0.45 µmen	nbrane filter	ml H ₂ SO	,/L added		
MPLE FIELD No. of samples submitted IXNA: No aci IALYTICAL R NF, NA	L KN d added C ESULTS from	Whole sample (Non-filtered) Other-specify:	Filtered in f	F, NA	ml H₂SO2	/L added	Units	Date analyzed
MPLE FIELD No. of samples submitted (XNA: No aci IALYTICAL R NF, NA	L KN d added C ESULTS from	Whole sample (Non-filtered) Other-specify:	□ F: Filtered in f 0.45 µmen Units Date analyzed	F, NA			_ mg/l _	·····
MPLE FIELD No. of samples submitted (XNA: No aci IALYTICAL R NF, NA Conductivity (C 25°C (00095)	L KN d added C C ESULTS from Corrected	Whole sample (Non-filtered) Other-specify:	□ F: Filtered in f 0.45 µmen	F, NA □ Calcium (00915) □ Magnesium (00925) □ Sodium (00930)	······	,/L added	_ mg/l _ _ mg/l _	
MPLE FIELD No. of samples submitted (XNA: No aci NALYTICAL R NF, NA Conductivity (C 25°C (00095)	L ZNI d added C C ESULTS from Corrected	Whole sample (Non-filtered) Other-specify: SAMPLES	□ F: Filtered in f 0.45 μmen Units Date analyzed _μmho	F, NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935)			mg/l mg/l mg/l mg/l	
MPLE FIELD No. of samples submitted CNA: No acid IALYTICAL R NF, NA Conductivity (C 25°C (00095) Total non-filtera residue (suspen (00530)	L ZNI d added C C ESULTS from Corrected	Whole sample (Non-filtered) Other-specify:	□ F: Filtered in f 0.45 μmen Units Date analyzed _μmho	F, NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440)			mg/l mg/l mg/l mg/l	
MPLE FIELD No. of samples submitted XNA: No aci NALYTICAL R NF, NA Conductivity (C 25°C (00095) Conductivity (C 25°C (00095) Total non-filtera residue (susper (00530) Cother: TCA	L ZNI d added C C ESULTS from Corrected	Whole sample (Non-filtered) Other-specify: SAMPLES	□ F: Filtered in f 0.45 μmen Units Date analyzed _μmho	F, NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00945)			mg/l mg/l mg/l mg/l	
MPLE FIELD No. of samples submitted NNA: No aci NALYTICAL R NF, NA Conductivity (C 25°C (00095) Total non-filtera residue (susper (00530) Other:	L ZNI d added C C ESULTS from Corrected	Whole sample (Non-filtered) Other-specify: SAMPLES	□ F: Filtered in f 0.45 μmen Units Date analyzed _μmho	F, NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00945) Sulfate (00945) Total filterable residue			mg/l mg/l mg/l mg/l mg/l mg/l	
MPLE FIELD No. of samples submitted NNA: No aci NALYTICAL R NF, NA Conductivity (C 25°C (00095) Conductivity (C 25°C (00095) Total non-filtera residue (susper (00530) Other: Other: Other:	L ZNI d added C C ESULTS from Corrected	Whole sample (Non-filtered) Other-specify: SAMPLES	□ F: Filtered in f 0.45 μmen Units Date analyzed _μmho	F, NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00945)			mg/l mg/l mg/l mg/l mg/l mg/l	
MPLE FIELD No. of samples submitted NO. of samples submitted NALYTICAL R NF, NA Conductivity (C 25 °C (00095) Conductivity (C 25 °C (00095) Total non-filtera residue (susper (00530) Other: Other: Other: Other: F, A-H ₂ SO ₄	L ZNI d added C	Whole sample (Non-filtered) Other-specify: SAMPLES	□ F: Filtered in f 0.45 μmen Units Date analyzed _μmho	F, NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00940) Sulfate (00945) Totàl filterable residue (dissolved) (70300) Other:			mg/l mg/l mg/l mg/l mg/l mg/l	
MPLE FIELD No. of samples submitted NALYTICAL R NF, NA Conductivity (C 25°C (00095) Conductivity (C 25°C (00095) Total non-filtera residue (susper (00530) Other: Other: Other: Other: F, A-H ₂ SO ₄	L XNR d added C ESULTS from Corrected) ble nded) p SCAN	Whole sample (Non-filtered) Other-specify:	□ F: Filtered in f 0.45 μmen Units Date analyzed _μmho	F, NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00940) Sulfate (00945) Total filterable residue (dissolved) (70300) Other: F, A-H2 SO4			mg/l mg/l mg/l mg/l mg/l mg/l	
MPLE FIELD No. of samples submitted (XNA: No acid NALYTICAL R NF, NA Conductivity (C 25°C (00095) Total non-filtera residue (susper (00530) Other: Other: Cother: F, A-H ₂ SO ₄ Nitrate-N + , Nit total (00630) Ammonia-N tot	Image: Constraint of the second of the se	Whole sample (Non-filtered) Other-specify: SAMPLES	□ F: Filtered in f 0.45 μmen	F, NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00945) Total filterable residue (dissolved) (70300) Other: F, A-H ₂ SO ₄ Nitrate-N + , Nitrate-I dissolved (00631)	N		mg/l mg/lmg/l mg/l mg/l mg/l mg/l	
MPLE FIELD No. of samples submitted XNA: No acid NALYTICAL R NF, NA Conductivity (C 25°C (00095) Total non-filtera residue (susper (00530) Other: Other: Other: F, A-H ₂ SO ₄ Nitrate-N + , Nit total (00630) Ammonia-N tot	Image: Constraint of the second of the se	Whole sample (Non-filtered) Other-specify: SAMPLES	□ F : Filtered in f 0.45 μmen	F, NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00940) Sulfate (00945) Total filterable residue (dissolved) (70300) Other: F, A-H ₂ SO ₄ Nitrate-N + , Nitrate-I dissolved (00631) Ammonia-N dissolve	N		mg/l mg/lmg/l mg/l mg/l mg/l mg/l	
AMPLE FIELD No. of samples submitted VALYTICAL R NF, NA Conductivity (C 25 °C (00095) Total non-filtera residue (susper (00530) Other: Other: Other: Other: F, A-H ₂ SO ₄ Nitrate-N + , Nit total (00630) Ammonia-N tot Total Kjeldahl-N () Chemical oxyg	Image: Constraint of the second data data data data data data data da	Whole sample (Non-filtered) Other-specify: SAMPLES Notr	□ F: Filtered in f 0.45 μmen	F, NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00945) Total filterable residue (dissolved) (70300) Other: F, A-H ₂ SO ₄ Nitrate-N + , Nitrate-I dissolved (00631)	N		mg/l mg/lmg/l mg/l mg/l mg/l mg/l	
AMPLE FIELD No. of samples submitted VALYTICAL R NF, NA Conductivity (C 25 °C (00095) Total non-filtera residue (susper (00530) Other: Other: Other: IF, A-H ₂ SO ₄ Nitrate-N + , Nit total (00630) Ammonia-N tôt Total Kjeldahl-N () Chemical oxyg demand (00340)	Image: Constraint of the second of the se	Whole sample (Non-filtered) Other-specify: SAMPLES	□ F: Filtered in f 0.45 μmen	F, NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00945) Total filterable residue (dissolved) (70300) Other: F, A-H ₂ SO ₄ Nitrate-N + , Nitrate-I dissolved (00631) Ammonia-N dissolve (00608) Total Kjeldahl-N ()	N		mg/l mg/lmg/l mg/l mg/l mg/l mg/l	
AMPLE FIELD No. of samples submitted VALYTICAL R NF, NA Conductivity (C 25 °C (00095) Total non-filtera residue (susper (00530) Other: Other: Other: IF, A-H ₂ SO ₄ Nitrate-N + , Nit total (00630) Ammonia-N tôt Total Kjeldahl-N () Chemical oxyg demand (00340 Total organic ca ()	Image: Constraint of the second of the se	Whole sample (Non-filtered) Other-specify: SAMPLES Notr	F: Filtered in f 0.45 μmen Units Date analyzed μmho mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l	F, NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00940) Sulfate (00945) Total filterable residue (dissolved) (70300) Other: F, A-H ₂ SO ₄ Nitrate-N + , Nitrate-I dissolved (00631) Ammonia-N dissolve (00608)	N		mg/lmg/lmg/lmg/l mg/lmg/lmg/l mg/l mg/l	
AMPLE FIELD No. of samples submitted IXNA: No acid NALYTICAL R NF, NA Conductivity (C 25 °C (00095) Total non-filtera residue (susper (00530) Other: Other: IF, A-H₂SO4 Nitrate-N + , Nit total (00630) Ammonia-N tot Total Kjeldahl-N () Chemical oxyg demand (00340)	Image: Constraint of the second of the se	Whole sample (Non-filtered) Other-specify: SAMPLES Note	F: Filtered in f 0.45 μmen Units Date analyzed μmho mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l	F, NA Calcium (00915) Magnesium (00925) Sodium (00930) Potassium (00935) Bicarbonate (00440) Chloride (00945) Total filterable residue (dissolved) (70300) Other: F, A-H ₂ SO ₄ Nitrate-N + , Nitrate-I dissolved (00631) Ammonia-N dissolve (00608) Total Kjeldahl-N ()	N		mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l	

SLD	726	(12/84)
-----	-----	---------

ł.

ł

Date Submitted: 1/27/86 oyes Bailey By:_ 5

5

Sample Die: Joco Hills Disposed Co. Date Analyzed: 2/5/86 Reviewed By: Jin Callry Date Reported: 2/10/86 <u>AA VALUE (MG/L)</u>

Element	ICAP VALUE(MG/L)	AA VALUE (MG/L)
Aluminum	<0.1	
Barium	<u>0.3</u>	
Berylium	<0.]	
Boron	<u>33.</u>	
Cadmium	٥,١	
Calcium	3300.	
Chromium	<u> </u>	
Cobalt	40.1	
Copper	40 .	
Iron	<u> </u>	
Lead	20.1	-
Magnesium	1700.	
Manganese	0.76	
Molybdenum	40.1	· · · · · · · · · · · · · · · · · · ·
Nickel	۷۵.۱	
Silicon	5.2	
Silver	20.1	
Strontium	95.	
Tin	<u> </u>	
Vanadium	<u> </u>	
Zinc	<0.1	
Arsenic		
Selenium		
Mercury		
* Very high	Sodium also.	

PATE RECEIVED / 27 86 N	HM 1/2 USER D	59300 🗆 59600 🖄	X OTHER: 82		
56 01 07	SITE Sample location	Loco tells	bispo	fel Comp	ony
Collected by Person/Agency	ATION Collection site de	scription worth Se	ile 81	Finichter	
Kayer /ksasta				TTI ing to	70-
ENVIRONMEN					~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
INAL State Land	SERVATION DIVISION Office Bldg, PO Box	2088			
Santa Fe, I	NM 87501	· ·			
Attn:David_Boy	/er	• .		· · · · · · · · · · · · · · · · · · ·	
			Station/ well code Owner	. <u></u>	
C Bailed C Pump	Water level	Discharge		Sample tupe	
Dipped 🗆 Tap		· · · · · · · · · · · · · · · · · · ·		Sample type	elo
рН (00400)	Conductivity (Uncorrected)	Water Temp. (00010)	°C	Conductivity at 25°C (00094) µmho
No. of samples L	Whole sample [Non-filtered]	$\frac{\mathcal{L}_{\mathcal{L}}}{\mathcal{L}_{\mathcal{L}}} \xrightarrow{\mathcal{D}} \mathcal{D}$	2 ml H₂SO₄	Ladded	
SAMPLE FIELD TREATMENT No. of samples <i>L</i> XNF submitted <i>L</i> XNF (XNA: No acid added C C	Whole sample (Non-filtered) F: Filte 0.45		2 ml H₂SO₄)	/L added	
SAMPLE FIELD TREATMENT No. of samples i submitted i SNF (XNA: No acid added C ANALYTICAL RESULTS from NF, NA Heary N	Whole sample (Non-filtered) Dther-specify: SAMPLES	µmembrane filter			ate analyzed
SAMPLE FIELD TREATMENT No. of samples [ØNF submitted] ØNF [VNA: No acid added] O NALYTICAL RESULTS from	Whole sample (Non-filtered) F: Filte 0.45 Other- <i>specify:</i> SAMPLES	µmembrane filter		Units D	
SAMPLE FIELD TREATMENT No. of samples submitted I INF (XNA: No acid added III C ANALYTICAL RESULTS from NF, NA Heary M III Conductivity (Corrected) 25°C (00095)	Whole sample \Box F: Filte (Non-filtered) \Box F: $\frac{1}{0.45}$ Other-specify: SAMPLES Motel Units Date an	µmembrane filter) 925)	Units D mg/I mg/I mg/I	
SAMPLE FIELD TREATMENT No. of samples submitted I INF [XNA: No acid added II C ANALYTICAL RESULTS from NF, NA Heart M I Conductivity (Corrected) 25°C (00095) I Total non-filterable residue (suspended) (00530)	$\begin{array}{c} \begin{array}{c} & \text{Whole sample} \\ & (\text{Non-filtered}) \end{array} & \square \ \mbox{F: } \ \begin{array}{c} \mbox{Filte} \\ 0.45 \end{array} \end{array} \\ \hline \mbox{Other-specify:} \\ \hline \mbox{SAMPLES} \\ \hline \mbox{Moddle} \end{array} & \hline \mbox{Units Date an} \\ \hline \mbox{μmho} \end{array} \end{array}$	µmembrane filter A: alyzed F, NA □ Calcium (00915) □ Magnesium (009 □ Sodium (00930) □ Potassium (00930) □ Bicarbonate (00	925) 35) 440)	Units D mg/I mg/I mg/I mg/I mg/I mg/I	
SAMPLE FIELD TREATMENT No. of samples submitted I INF (XNA: No acid added III) (XNA: No acid add	Whole sample \Box F: Filte (Non-filtered) \Box F: $\frac{1}{0.45}$ Other-specify: SAMPLES Motel Units Date an	µmembrane filter A: alyzed F, NA □ Calcium (00915) □ Magnesium (009 □ Sodium (00930) □ Potassium (0093)	925) 35) 440)	Units D mg/I mg/I mg/I mg/I	
SAMPLE FIELD TREATMENT No. of samples submitted Image: Construction of the second s	$\begin{array}{c} \begin{array}{c} & \text{Whole sample} \\ & (\text{Non-filtered}) \end{array} & \square \ \mbox{F: } \ \begin{array}{c} \mbox{Filte} \\ 0.45 \end{array} \end{array} \\ \hline \mbox{Other-specify:} \\ \hline \mbox{SAMPLES} \\ \hline \mbox{Moddle} \end{array} & \hline \mbox{Units Date an} \\ \hline \mbox{μmho} \end{array} \end{array}$	µmembrane filter A: alyzed F, NA □ Calcium (00915) □ Magnesium (009 □ Sodium (00930) □ Potassium (00930) □ Potassium (00930) □ Bicarbonate (00 □ Chloride (00940) □ Sulfate (00945) □ Total filterable res (dissotved) (7030)	925) 925) 35) 440) i sidue	Units D mg/l mg/l mg/l mg/l mg/l mg/l mg/l	
SAMPLE FIELD TREATMENT No. of samples submitted I INA: No acid added I INALYTICAL RESULTS from I NF, NA I INALYTICAL RESULTS from I Conductivity (Corrected) I 25°C (00095) I Intra Interable I residue (suspended) I INALY TICAL RESULTS from I	$\begin{array}{c} \begin{array}{c} & \text{Whole sample} \\ & (\text{Non-filtered}) \end{array} & \square \ \mbox{F: } \ \begin{array}{c} \mbox{Filte} \\ 0.45 \end{array} \end{array} \\ \hline \mbox{Other-specify:} \\ \hline \mbox{SAMPLES} \\ \hline \mbox{Moddle} \end{array} & \hline \mbox{Units Date an} \\ \hline \mbox{μmho} \end{array} \end{array}$	µmembrane filter A: A: A: A: A: A: A: A: A: A:	925) 925) 35) 440) i sidue	Units D mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l	
SAMPLE FIELD TREATMENT No. of samples submitted I IVNA: No acid added IVNF IVNE: IVNE: IVNE IVNF IVNE: IVNE: NUTRAL IVNE IVNE: NO acid added IVNE IVNE: IVNE IVNE IVNE: IVNE IVNE IVNE: IVNE IVNE IVNE: IVNE IVNE <td>$\begin{array}{c} \begin{array}{c} & \text{Whole sample} \\ & (\text{Non-filtered}) \end{array} & \square F: \begin{array}{c} \text{Filte} \\ 0.45 \end{array} \\ \hline \\ \text{Other-specify:} \\ \hline \\ \text{SAMPLES} \\ \hline \\ \hline \\ \text{Model} \end{array} & \begin{array}{c} \text{Units Date an} \\ \hline \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$</td> <td>µmembrane filter A: alyzed F, NA □ Calcium (00915) □ Magnesium (00930) □ Potassium (00930) □ Potassium (00930) □ Bicarbonate (00 □ Chloride (00940) □ Sulfate (00945) □ Total filterable res (dissolved) (7030) □ Other: F, A-H₂ SO4</td> <td>) 925) 35) 440) isidue 00)</td> <td>Units D mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l</td> <td></td>	$ \begin{array}{c} \begin{array}{c} & \text{Whole sample} \\ & (\text{Non-filtered}) \end{array} & \square F: \begin{array}{c} \text{Filte} \\ 0.45 \end{array} \\ \hline \\ \text{Other-specify:} \\ \hline \\ \text{SAMPLES} \\ \hline \\ \hline \\ \text{Model} \end{array} & \begin{array}{c} \text{Units Date an} \\ \hline \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ $	µmembrane filter A: alyzed F, NA □ Calcium (00915) □ Magnesium (00930) □ Potassium (00930) □ Potassium (00930) □ Bicarbonate (00 □ Chloride (00940) □ Sulfate (00945) □ Total filterable res (dissolved) (7030) □ Other: F, A-H₂ SO4) 925) 35) 440) isidue 00)	Units D mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l	
SAMPLE FIELD TREATMENT No. of samples submitted Image: Submitted IXNA: No acid added Image: Submitted IXNA: No acid added Image: Submitted IXNALYTICAL RESULTS from NF, NA NF, NA Image: Submitted IConductivity (Corrected) Image: Submitted IConter: Image: Submitted Image: Submit		µmembrane filter A: A: A: A: A: A: A: A: A: A:) 925) 35) 440) isidue 00) rate-N	Units D mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg/l	
SAMPLE FIELD TREATMENT No. of samples I SUBMITTED INF, NA Particular Stress Conductivity (Corrected) Conductivity (Cor		µmembrane filter □ A: alyzed F, NA □ Calcium (00915) □ Magnesium (00930) □ Sodium (00930) □ Potassium (00930) □ Potassium (00930) □ Potassium (00930) □ Potassium (00940) □ Sulfate (00940) □ Sulfate (00945) □ Total filterable restriction (dissolved) (7030) □ Other: F , A -H ₂ SO 4 □ □ Nitrate-N + , Nitration (0063) □ Armmonia-N dissolved (0063)) 925) 35) 440) sidue 00) rate-N 1)	Units D mg/I mg/I mg/I mg/I mg/I mg/I mg/I	
SAMPLE FIELD TREATMENT No. of samples submitted Image: Construction of the samples submitted IXNA: No acid added Image: Construction of the samples construction of the sample of the sample set of the sample of	Whole sample (Non-filtered) □ F: Filte 0.45 Other-specify: SAMPLES Modef Units Date an mmho	µmembrane filter ☐ A: alyzed F, NA □ Calcium (00915) □ Magnesium (00930) □ Sodium (00930) □ Potassium (00930) □ Potassium (00930) □ Potassium (00930) □ Potassium (00940) □ Chloride (00940) □ Chloride (00945) □ Total filterable restriction (dissolved) (7030) □ Other: F, A-H₂ SO4 Nitrate-N + , Nitratissolved (00633) □ Armmonia-N dissolved (00608) □ Total Kjeldahl-N) 925) 35) 440) sidue 00) rate-N 1) solved	Units D mg/l	
SAMPLE FIELD TREATMENT No. of samples submitted Image: Construction of the second s	Whole sample (Non-filtered) □ F: Filte 0.45 Other-specify: SAMPLES Mode filtered Units Date an µmho mg/l mg/l mg/l mg/l	µmembrane filter ☐ A: alyzed F, NA □ Calcium (00915) □ Magnesium (00930) □ Sodium (00930) □ Potassium (00930) □ Potassium (00930) □ Potassium (00930) □ Potassium (00940) □ Chloride (00940) □ Chloride (00945) □ Total filterable restriction (dissolved) (7030) □ Other: F, A-H₂ SO4) 925) 35) 440) sidue 00) rate-N 1) solved	Units D mg/I mg/I mg/I mg/I mg/I mg/I mg/I	

Lab Number: #M112 Date Submitted: 1/27/86 By: Boyer Bailey

Sample Code: $\frac{f_{oco}}{f_{oco}}$ Hills Dispred 6. Date Analyzed: $\frac{2}{5/86}$ Reviewed By: $\frac{7}{74}$ Date Reported: $\frac{2}{10}/86$ <u>AA VALUE (MG/L)</u>

Element	ICAP VALUE (MG/L)	AA VALUE (MO
Aluminum	<0.1	
Barium	0.3	
Berylium	٢٥.]	
Boron	<u>33.</u>	
Cadmium	<0.1	
Calcium	3300.	, ,
Chromium	40.1	
Cobalt	40.1	·
Copper	40.1	• •
Iron	<0.1	· · · ·
Lead	<0.1	
Magnesium	1700.	
Manganese	0.76	·····
Molybdenum	<0.1	- <u></u>
Nickel	20.1	•
Silicon	5.2	
Silver	∠D.	
Strontium	95.	
Tin	<u> </u>	
Vanadium	<0.1	·
Zinc	<01	
Arsenic		0.47
Selenium		
Mercury		<0.0005
* Very high	Sodium also.	

1 5/2/20

Feb. 24, 1986

Dear Mr. Boyer,

Enclosed please find a copy of sample # 112 for heavy metals results. This is simply the confirmation of Strontium by flame AA.

Jeanne Banera

		Lab Number #M	112	sample cod poor Hills Dispreal to.	
	the star	Date Submitted:		Date Analyzed: $\frac{2}{5}/86$	
	The Marine	THE PILL BIT	<u></u>	Reviewed By: 0 274	
	EN EN	100 Days Date	<u>y</u>	Date Reported: 2/10/86	
	EFR SS	1996 Flomouting I.	D VALUE/MC/LA		
	1	Element ICA	AP VALUE(MG/L) <0.1	AA VALUE(MG/L)	
1.	001021804	Barium «			
		-Berylium	0.3		
r Tarasar t			<u> </u>		
		Boron Cadmium	<u><0,1</u>		
4 		Calcium			
;		Chromium	<u>3300.</u> <0.1		
:		Cobalt	<u> </u>		
		•	 		
		Copper	·		
	\bigcirc	Iron	<u> </u>		
	\bigcirc	Magnesium			
		1	1700.		
	•	Manganese	0.76		
		Molybdenum			
		Nickel			
		Silicon	<u>5.2.</u> 20.1		
		Silver		azt AAU a zhilve	
		Strontium	95.	93. by AH flame -121186	
· · ·		Tin			
		Vanadium			
1		Zinc	<01		
		Arsenic			
	Ø	Selenium			,
• •	÷	Mercury			
		* Very high Soc	dium also.		•
		· • •			

 $1 \leq j \leq \ell$

i i

Į.

| 4

: '

STATE OF NEW MEXICO



ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION ARTESIA DISTRICT OFFICE

P.O. DRAWER DD ARTESIA, NEW MEXICO 88210 (505) 748-1283

August 20, 1986

Mr. Richard L. Stamets, Director New Mexico Oil Conservation Division P. O. Box 2088 Santa Fe, New Mexico 87504-2088

Dear Mr. Stamets:

This letter is in regard to the recent discovery of water in some of the monitor wells around the Loco Hills Salt Water Disposal facility. Attached is a plat of the facility with the location, depth, and water status of the monitor wells.

Until July, 1986, no water had been detected in any of the wells. However, on my visit of July 7, 1986, water was found in MH-1 and MH-12. These were checked at 4000 and 8000 mg/1 of chlorides respectively. Since the area had just received 8 inches of rain in the preceeding 10 days, it was thought that the water was attributable to this.

On my next visit of August 7, 1986, water was found in MH-1, MH-12, and MH-3 with chloride readings of 21,000 mg/1, 39,000 mg/1 and 55,000 mg/1, respectively. All other holes were dry. A sample of water from the pits checked out at 79,000 mg/l chlorides.

As you can see on the plat, MH-1, MH-12, and MH-3 are all deep (Rustler) wells. Using a crude measuring device, we came up with values of 20' of water in MH-1, 60' in MH-12 and 40' in MH-3. Since these wells only penetrate the Rustler from 2 to 5 feet, it's unlikely this water is from the Rustler. Since the shallow wells are all dry, it is my opinion that the fluid is percolating down to the deep clay at approximately 150 feet and then moving horizontally into the deep wells.

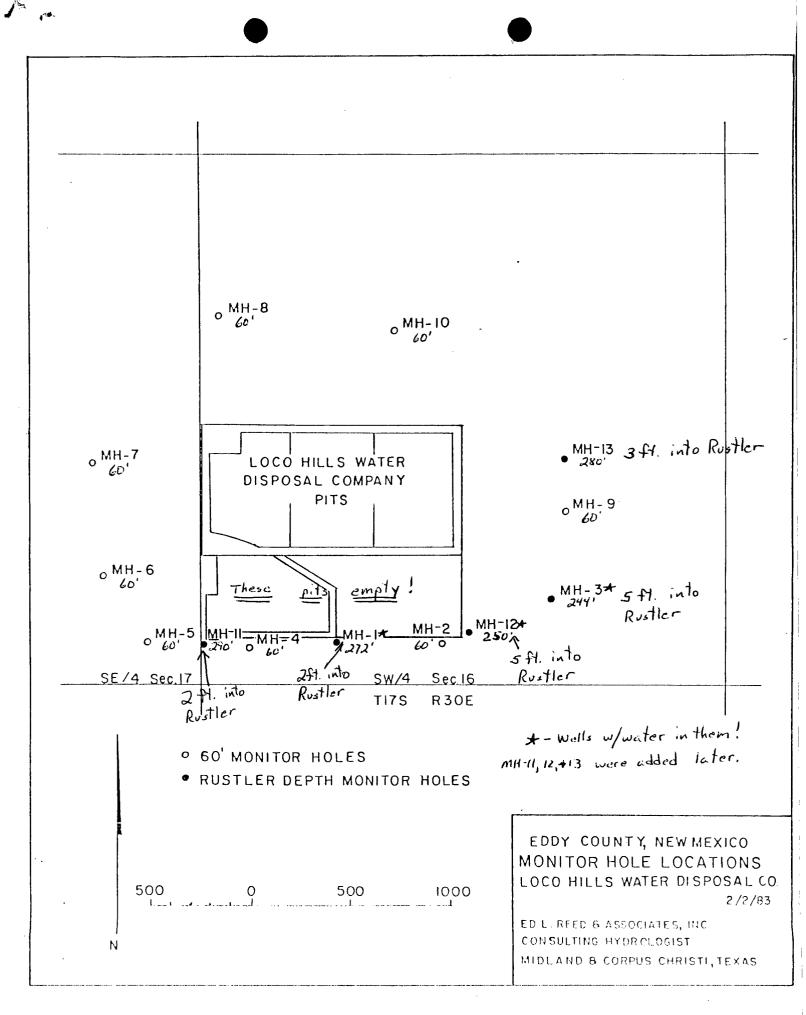
Should you need any additional information, I will be glad to assist in any way possible.

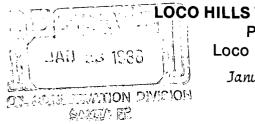
Sincerely,

Il Moore

Darrell G. Moore Geologist

DGM/acs





January 16, 1986

Oil Conservation Division P. O. Box 2088 Santa Fe, New Mexico 87501

RE: Loco Hills Water Disposal

Gentlemen:

We have checked the monitor wells in December, 1985 and there is no fluid of any kind.

Yours truly,

ay Wester

Ray Westall President

RW/WL

August 15, 1985

Oil Conservation Division P. O. Box 2088 Santa Fe, N. M. 87501

RE: Loco Hills Water Disposal

Gentlemen:

······

· · ·

We have checked the monitor wells in July, 1985 and there is no fluid of any kind.

150

Yours truly,

ay Westall

Ray Westall Director

July 14, 1985

Oil Conservation Division P. O. Box 2088 Santa Fe, N. M. 87501

RE: Loco Hills Water Disposal

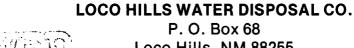
Gentlemen:

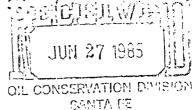
We have checked the monitor wells in June, 1985 and there is no fluid of any kind.

Yours truly,

ay Westall

Ray Westall Director





P. O. Box 68 Loco Hills, NM 88255

June 14, 1985

Oil Conservation Division P. 0. Box 2088 Santa Fe, N. M. 87501

RE: Loco Hills Water Disposal

Gentlemen:

We have checked the monitor wells in May, 1985 and there is no fluid of any kind.

Yours truly,

Westall

Ray Westall Director

LOCO HILLS WATER DISPOSAL CO.

P. O. Box 68 Loco Hills, NM 88255

May 14, 1985

 $m^{(1)}$ MAY 27 1995 ON COMPLEMENT /ISION 2.13172 64

i

Oil Conservation Division P. 0. Box 2088 Santa Fe, N. M. 87501

RE: Loco Hills Water Disposal

Gentlemen:

We have checked the monitor wells in April, 1985 and there is no fluid of any kind.

Yours truly,

Lay Westall

Ray Westall Director



April 15, 1985

Oil Conservation Division P. O. Box 2088 Santa Fe, N. M. 87501

RE: Loco Hills Water Disposal

Gentlemen:

We have checked the monitor wells in March, 1985 and there is no fluid of any kind.

Yours Truly,

estall

Ray Westall Director

MAY 22 1985 OIL CONSERVATION DIVISION SANTA FE

March 15, 1985

Oil Conservation Division P. O. Box 2088 Santa Fe, N. M. 87501

RE: Loco Hills Water Disposal

Gentlemen:

We have checked the monitor wells in February, 1985 and there is no fluid of any kind.

Yours Truly,

ay westall

Ray Westall Director

22

February 14, 1985

Oil Conservation Division P. O. Box 2088 Santa Fe, N. M. 87501

RE: Loco Hills Water Disposal

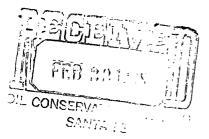
Gentlemen:

We have checked the monitor wells in January, 1985 and there is no fluid of any kind.

Yours truly,

Kay

Ray Westall Director





January 15, 1985

Oil Conservation Division P. O. Box 2088 Santa Fe, N. M. 87501

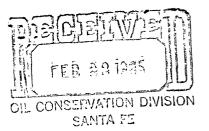
RE: Loco Hills Water Disposal

Gentlemen:

We have checked the monitor wells in December and there is no fluid of any kind.

Yours truly, X au

Ray Westall Director



LOCO HILLS WATER DISPOSAL CO.

P. O. Box 68 Loco Hills, NM 88255

DEC 31 1984

9 2

ŝ

RECEIVED

December 16. 1984

Oil Conservation Division P. O. Box 2088 Santa Fe, N. M. 87501

RE: Loco Hills Water Disposal

Gentlemen:

We have checked the monitor wells in November and there is no fluid of any kind.

Yours truly,

y stestale

Ray Westall Director

LOCO HILLS WATER DISPOSAL CO.

P. O. Box 68 Loco Hills, NM 88255

DEC 31 1984

ر ..

Pine.

November 16, 1984

村民が生

Oil Conservation Division P. O. Box 2088 Santa Fe, N. M. 87501

RE: Loco Hills Water Disposal

Gentlemen:

We have checked the monitor wells in October and there is no fluid of any kind.

Yours truly,

. Westall

Ray Westall Director



October 12, 1984

Oil Conservation Division P. O. Box 2088 Santa Fe, N. M. 87501

RE: Loco Hills Water Disposal

Gentlemen:

We have checked the monitor wells in September and there is no fluid of any kind.

Yours truly,

Ray Westall Director

LOCO HILLS WATER DISPOSAL CO.

P. O. Box 68 Loco Hills, NM 88255



Ŋ.

September 14, 1984

Oil Conservation Division P. O. Box 2088 Santa Fe, N. M. 87501

RE: Loco Hills Water Disposal

Gentlemen:

We have checked our monitor wells in August and there is no fluid of any kind.

Yours truly,

y Westall

Ray Westall Director

August 14, 1984

Oil Conservation Division P. O. Box 2088 Santa Fe, N. M. 87501

RE: Loco Hills Water Disposal

Gentlemen:

We have checked the monitor wells in July and there is no fluid of any kind.

Yours truly,

Kaip Stestall

Ray Westall Director

July 11, 1984

Oil Conservation Division P. O. Box 2088 Santa Fe, N. M. 87501

RE: Loco Hills Water Disposal

Gentlemen:

We have checked the monitor wells in June and there is no fluid of any kind.

Yours truly,

Weiter

Ray Westall Director

June 3, 1984

Oil Conservation Divison P. O. Box 2088 Santa Fe, N. M. 87501

RE: Loco Hills Water Disposal

Gentlemen:

We have checked the monitor wells in May and there is no fluid of any kind.

Yours truly,

estal ai

Ray Westall Director

Mäy 8, 1984

MANY FION DIVISION SANATA FE CO_i OIL

Oil Conservation Division P. O. Box 2088 Santa Fe, New Mexico 87501

RE: Loco Hills Water Disposal

Gentlemen:

We have checked the monitor wells in April and there is no fluid of any kind.

Yours Truly,

Ray Westall

Ray Westall Director

HUGHES HOT OIL SERVICE

P. O. BOX 68 / (505) 677-3113 LOCO HILLS; NEW MEXICO 88255



£ ...

April 16, 1984

Oil Conservation Division P. O. Box 2088 Santa Fe, New Mexico 87501

RE: Loco Hills Water Disposal

Gentlemen:

We have checked the monitor wells in March and there is no fluid of any kind.

Yours Truly

tel

Ray Westall Director