

4R - 001

**GENERAL
CORRESPONDENCE**

YEAR(S):
1986 - 1985

50 YEARS



TONEY ANAYA
GOVERNOR

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION



1935 - 1985

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

March 11, 1986

Chace Oil Company, Inc.
313 Washington S.E.
Albuquerque, NM 87108

Attention: Steven Roche

RE: Pinon Unit Well No. 2
Site Reclamation

Gentlemen:

As per your letter of March 3, 1986, inquiring about removal of material in the reserve pit on the above referenced well, this office requests that this material be buried on the location. The pit liner that Chace Oil Co. has installed at this location meets the requirements as outlined by our Rule 105.

Should you have any questions pertaining to this matter, please contact me at this office.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "Roy E. Johnson".
Roy E. Johnson
Sr. Petroleum Geologist

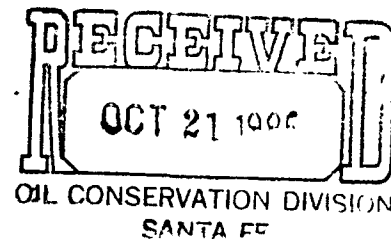
cc: R. L. Stamets - OCD Director
✓ D. Boyer - Environmental Bureau

REJ/bok



CHACE OIL COMPANY, INC.

313 Washington S.E.
Albuquerque, New Mexico 87108
(505) 265-2622



October 17, 1985

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

Attention: Mr. Jeffery S. Taylor, ESQ.

Gentlemen:

SUBJECT: Legal Opinion - Santa Fe County jurisdiction over oil and
gas operations

Chace Oil Company would like to request a legal opinion of the counsel of the Oil Conservation Division and the Attorney General's office on the jurisdiction of Santa Fe County to regulate and oversee oil and gas drilling, exploration, production, and any incidents related thereto. As you are aware, the County Development Review Committee, a zoning committee, oversees and actually approves or disapproves exploration and production "permits" for operators to do business within their county. This process required Chace Oil Company to file a 70 page document for an exploration permit, and Chace Oil Company had to make an oral argument before the County Commission in order to be granted the right to drill. The County requires all federal and state oil and gas forms be included within this county application package; they then require additional items be adhered to based on their zoning code. Thus the County is overseeing and usurping the jurisdiction of a previously regulated industry.

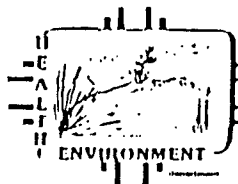
We would appreciate your help in determining who has what authority with regard to our ongoing exploration program in Santa Fe County.

Thank you.

Sincerely,

Steven P. Roche
Land

SPR/ss



STATE OF NEW MEXICO

85-0821 C

C LABORATORY DIVISION

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

REPORT TO: DAVID G. BOYER
PLEASE PRINT
NEW MEXICO OIL CONSERVATION DIV.
P.O. BOX 2088
SANTA FE, NM 87501

S.L.D. No.: OR- 821-17.3
DATE REC.: 8/09/85
SLD PRIORITY #: _____

PHONE(S): 827-5812

USER CODE: 8 2 2 3 5

SUBMITTER: DAVID BOYER

SUBMITTER CODE: SAMPLE TYPE: WATER ☐, SOIL ☐, OTHER DRILLING FLUIDSAMPLE TYPE CODE: COLLECTED: 8/8/85 - 10:50 BY JB/RJ
DATE TIME INITIALSCODE: 8508081050
Y Y M M D D H H M M I I ISOURCE: CHASE OIL CO. PINON UNIT #2CODE:
AQUIFER DEPTHNEAREST CITY: SANTA FE - CERRILLOSCODE: LOCATION: MUD PIT ARAPAHO RIG IICODE:
TOWNSHIP RANGE SECTION TRACTSpH= 7.07; Conductivity= 1500 umho/cm at 27 °C; Chlorine Residual= _____

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

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

O/G WELL BEING DRILLED 1/4 MI UPGRADEMENT FROM OWEN RANCH. MUD
ADDITIVES: GEL, STARCH, TREE BARK, SODA ASH, PARA FORMALDEHYDE, CAUSTIC SODA.
HYDRAULIC + ENGINE OILS ON PIT SURFACE; SURFACE CASING CEMENTED; PITS
LINED WITH PLASTIC

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

Method of shipment to the Laboratory Hand carried

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

- ☐ NP: No preservation; sample stored at room temperature.
☒ P-Ice Sample stored in an ice bath (not frozen).
☐ P-Na₂S₂O₃; Sample preserved with Na₂S₂O₃ to remove chlorine residual.

I (we) certify that this sample was transferred from _____
to _____ at (location) _____ on _____

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

Evidentiary Seals: Not Sealed ☐ Seals Intact: Yes ☐ No ☐

Signatures _____

(we) certify that this sample was transferred from _____
to _____ at (location) _____ on _____

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

Evidentiary Seals: Not Sealed ☐ Seals Intact: Yes ☐ No ☐

Signatures _____

ANALYSES REQUESTED

LAB. No.: ORG- 821

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

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

REMARKS:

ANALYTICAL RESULTS

COMPOUND	[PPB]	COMPOUND	[PPB]
halo. purg. screen	N.D.*	Natural Gas in head space	57%
benzene	190		
toluene	310		
ethyl benzene	16		
p-xylene	20		
m-xylene	77		
o-xylene	26		
		* DETECTION LIMIT	10 µg/m ³

REMARKS:

head space - volatiles in head space are consistent with natural gas. Sample quite likely, in fact, is probably water saturated with natural gas as well as containing aromatic hydrocarbons.

CERTIFICATE OF ANALYTICAL PERSONNEL

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

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

Date(s) of analysis: 12 Aug 85 8/2/85. Analyst's signature: W. Turner AS BureauI certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewers signature: R. Meyer



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

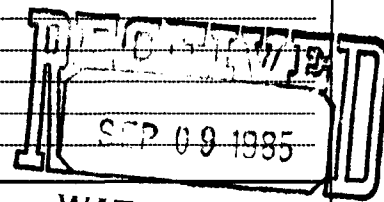
HEAVY METAL ANALYSIS
GENERAL WATER CHEMISTRY
and NITROGEN ANALYSIS

DATE RECEIVED	8/12/85	LAB NO.	HM-1438	USER CODE	☐ 59300 ☐ 59600 ☒ OTHER: 82235
Collection DATE	8/8/85	SITE INFORMATION	Sample location		
Collection TIME	1050		CHASE OIL CO ARAPAH0 RIG II		
Collected by — Person/Agency		Collection site description			
BAILEY 1000		LINED MUD PIT . SAMPLE FILTERED THRU 112mm MEMBRANE prefilter			

SEND FINAL REPORT TO

ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg, PO Box 2088
Santa Fe, NM 87501

Attn: David Boyer



Station/well code
Owner
WATER SUPPLY REGULATION SECTION

SAMPLING CONDITIONS

☐ Bailed ☒ Dipped	☐ Pump ☐ Tap	Water level	Discharge	Sample type			
pH (00400)	7.07	Conductivity (Uncorrected)	1500 μ mho	Water Temp. (00010)	27 °C	Conductivity at 25°C (00094)	μ mho

Field comments

O/G WELL BEING DRILLED 1/4 mi. UPGRADEMENT FROM OWEN RANCH.
MUD ADDITIVES: GEL, STARCH, TREE BARK, SODA ASH, PARA FORMALDEHYDE, CAUSTIC SODA

SAMPLE FIELD TREATMENT — Check proper boxes

No. of samples submitted	1	☒ NF: Whole sample (Non-filtered)	☐ F: Filtered in field with 0.45 μ m membrane filter	☒ A: 4 ml H ₂ SO ₄ /L added HNO ₃
☐ NA: No acid added ☐ Other-specify: <i>prefilter only</i>				

ANALYTICAL RESULTS from SAMPLES

NF, HNO ₃	Units	Date analyzed	F, NA	Units	Date analyzed
☐ Conductivity (Corrected) 25°C (00095)	μ mho		☐ Calcium (00915)	mg/l	
☐ Total non-filterable residue (suspended) (00530)	mg/l		☐ Magnesium (00925)	mg/l	
☒ Other: 1 CAP SCAN			☐ Sodium (00930)	mg/l	
☐ Other:			☐ Potassium (00935)	mg/l	
☐ Other:			☐ Bicarbonate (00440)	mg/l	
			☐ Chloride (00940)	mg/l	
			☐ Sulfate (00945)	mg/l	
			☐ Total filterable residue (dissolved) (70300)	mg/l	
			☐ Other:		
NF, A-H ₂ SO ₄			F, A-H ₂ SO ₄		
☐ Nitrate-N ⁺ , Nitrate-N total (00630)	mg/l		☐ Nitrate-N ⁺ , Nitrate-N dissolved (00631)	mg/l	
☐ Ammonia-N total (00610)	mg/l		☐ Ammonia-N dissolved (00608)	mg/l	
☐ Total Kjeldahl-N ()	mg/l		☐ Total Kjeldahl-N ()	mg/l	
☐ Chemical oxygen demand (00340)	mg/l		☐ Other:		
☐ Total organic carbon ()	mg/l				
☐ Other:					
☐ Other:					

RECEIVED

SEP 4 1985

LIQUID WASTE/GROUND WATER SURVEILLANCE

Analyst Date Reported 8/28/85 Reviewed by JAA

Laboratory remarks *digested 8/20/85*

ICAP SCREEN

Lab Number: HM 1438Date Submitted: 8/12/85By: BaileySample Code: CHASE OIL CO. ARAPAHO RIG II
LINED MUD PITDate Reported: 8/28/85By: Jim AsheryDate Analyzed: 8/21/85DeterminationConcentration (µg/ml)

Aluminum	<u>150.</u>
Barium	<u>7.8</u>
Beryllium	<u><0.1</u>
Boron	<u>0.3</u>
Cadmium	<u><0.1</u>
Calcium	<u>170.</u>
Chromium	<u>0.2</u>
Cobalt	<u><0.1</u>
Copper	<u>0.1</u>
Iron	<u>116.</u>
Lead	<u>0.7</u>
Magnesium	<u>40.</u>
Manganese	<u>1.3</u>
Molybdenum	<u><0.1</u>
Nickel	<u><0.1</u>
Silicon	<u>1.9</u>
Silver	<u><0.1</u>
Strontium	<u>1.9</u>
Tin	<u><0.1</u>
Vanadium	<u>0.2</u>
Yttrium	<u><0.1</u>
Zinc	<u>0.7</u>

ATOMIC ABSORPTION ANALYSES

DeterminationConcentration (µg/ml)

Arsenic

Selenium

Mercury

[SEP 6 - 1985]

LIQUID WASTE/GROUND WATER
SURVEILLANCE



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

GENERAL WATER CHEMISTRY
and NITROGEN ANALYSIS

DATE RECEIVED	8/12/85	LAB NO.	MC-3495	USER CODE	☐ 59300 ☐ 59600 ☒ OTHER: 82235
Collection DATE	8/8/85	SITE INFORMATION	Sample location		
Collection TIME	1050		CHACE OIL CO ARAPAHO RIG II		
Collected by — Person/Agency		Collection site description			
BAILEY / OCO		LINED MUD PIT			

SEND
FINAL
REPORT
TO

ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg, PO Box 2088
Santa Fe, NM 87501

Attn: David Boyer

SAMPLING CONDITIONS

☐ Bailed ☒ Dipped	☐ Pump ☐ Tap	Water level	Discharge	Sample type			
pH (00400)	7.07	Conductivity (Uncorrected)	1500 μ mho	Water Temp. (00010)	27 $^{\circ}$ C	Conductivity at 25 $^{\circ}$ C (00094)	μ mho

Field comments

O/G WELL BEING DRILLED 1/4 MI. UPGRADIENT FROM OWEN RANCH.
MUD ADDITIVES: GEL, STARCH, TREE BARK, SODA ASH, PARA FORMALDEHYDE, CAUSTIC SODA

SAMPLE FIELD TREATMENT — Check proper boxes

No. of samples submitted	1	☒ NF: Whole sample (Non-filtered)	☐ F: Filtered in field with 0.45 μ m membrane filter	☐ A: 2 ml H ₂ SO ₄ /L added
☒ NA: No acid added ☐ Other-specify:				

ANALYTICAL RESULTS from SAMPLES

NF, NA	Units	Date analyzed	F, NA	Units	Date analyzed
☐ Conductivity (Corrected) 25 $^{\circ}$ C (00095)	μ mho		☒ Calcium (00915)	6.5	8/21
☐ Total non-filterable residue (suspended) (00530)	mg/l		☒ Magnesium (00925)	1.54	8/21
☐ Other:			☒ Sodium (00930)	1150	8/28
☐ Other:			☒ Potassium (00935)	6.63	8/28
☐ Other:			☒ Bicarbonate (00440)	1689	8/26
			☒ Chloride (00940)	290	8/26
			☒ Sulfate (00945)	304	8/27
			☒ Total filterable residue (dissolved) (70300)	3155	8/28
			☒ Other: CO ₂	NONE	
NF, A-H ₂ SO ₄			☒ F	0.66	8/27
☐ Nitrate-N +, Nitrate-N total (00630)	mg/l		F, A-H ₂ SO ₄		
☐ Ammonia-N total (00610)	mg/l		☐ Nitrate-N +, Nitrate-N dissolved (00631)	mg/l	
☐ Total Kjeldahl-N ()	mg/l		☐ Ammonia-N dissolved (00608)	mg/l	
☐ Chemical oxygen demand (00340)	mg/l		☐ Total Kjeldahl-N ()	mg/l	
☐ Total organic carbon ()	mg/l		☐ Other:		
☐ Other:			Analyst	Date Reported	Reviewed by
☐ Other:				8/27/85	C. L. L.

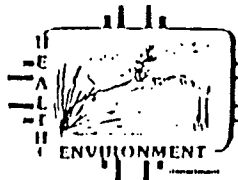
Laboratory remarks

PRIORITY II
DOMESTIC WELL

85-0819 -C

C LABORATORY DIVISION

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



STATE OF NEW MEXICO

REPORT TO: DAVID G. BOYER
PLEASE PRINT
NEW MEXICO OIL CONSERVATION DIV.
P.O. BOX 2088
SANTA FE, NM 87501

S.L.D. No.: OR- 819-H.B
DATE REC.: 8/9/85
SLD PRIORITY #: _____

PHONE(S): 827-5812

USER CODE: 82235

SUBMITTER: DAVID BOYER

SUBMITTER CODE:

SAMPLE TYPE: WATER ☒, SOIL ☐, OTHER _____

SAMPLE TYPE CODE:

COLLECTED: 8/8/85 - 10:10 BY GB/RJ
DATE TIME INITIALS

CODE: 850808101098
Y Y M M D D H H M M I I I

SOURCE: OWEN RANCH CORRAL FAUCET
471-1459

CODE:
AQUIFER DEPTH

NEAREST CITY: SANTA FE - CERRILLOS

CODE:

LOCATION: _____

CODE:
TOWNSHIP RANGE SECTION TRACTS

pH= 6.97; Conductivity= 710 umho/cm at 22 °C; Chlorine Residual= _____

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

Sampling Location, Methods and Remarks (i.e. odors, etc.)
HORSE RANCH. SEPTIC 7300' DOWN GRADIENT. TASTES MUSTY + CLAYEY.
WELL 200 gpm, TO 70', WATER LEVEL 16'

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

Method of shipment to the Laboratory Hand carried

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

- ☐ NP: No preservation; sample stored at room temperature.
☒ P-Ice Sample stored in an ice bath (not frozen).
☐ P-Na₂S₂O₃; Sample preserved with Na₂S₂O₃ to remove chlorine residual.

I (we) certify that this sample was transferred from _____
to _____ at (location) _____ on _____
_____/_____/_____-_____: _____ and that the statements in this block are correct.

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.

Evidentiary Seals: Not Sealed ☐ Seals Intact: Yes ☐ No ☐
Signatures _____

ANALYSES REQUESTED

LAB. No.: ORG- 819

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

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

REMARKS:

ANALYTICAL RESULTS

COMPOUND	[PPB]	COMPOUND	[PPB]
arom. purg. screen	N.D.*		
halo. purg. screen	N.D.*		
METHANE in head space	= LAB Air		
		* DETECTION LIMIT	1 µg/m ³

REMARKS: No purgeables detected.*

LAB Air = 1.3 ppm CH₄ MDL = 1 ppm CH₄

CERTIFICATE OF ANALYTICAL PERSONNEL

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

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

Date(s) of analysis: 12 Aug 85 8/27/85 analyst's signature: J. J. Turner CSBI certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewers signature: R. Meyer



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

JS

GENERAL WATER CHEMISTRY and NITROGEN ANALYSIS

DATE RECEIVED	8/12/85	LAB NO.	WC-3943	USER CODE	☐ 59300 ☐ 59600 ☒ OTHER: 82235
Collection DATE	8/8/85	SITE INFORMATION	Sample location		
Collection TIME	1010		OWEN RANCH CORRAL FAUCET		
Collected by — Person/Agency		Collection site description			
BAILEY/DCO		WELL 70' T.O. - HORSE RANCH. WATER TASTES MUSTY; PUMP CONNECTIONS COATED WITH WHITE SCALE			

ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg, PO Box 2088
Santa Fe, NM 87501

SEND FINAL REPORT TO

Attn: David Boyer

CORRAL FAUCET CLOSEST TO WELL
GALISTEO CREEK AREA

Station/
well code
Owner

SAMPLING CONDITIONS

☐ Bailed ☐ Dipped	☐ Pump ☒ Tap	Water level	16'	Discharge	200 gpm	Sample type
pH (00400)	6.97	Conductivity (Uncorrected)	710 μ mho	Water Temp. (00010)	22 $^{\circ}$ C	Conductivity at 25 $^{\circ}$ C (00094) μ mho

Field comments: SEPTIC FIELD > 300' DOWNGRADIENT. COMPLAINS OF SULFUR SMELL. O/G WELL BEING DRILLED 1/4 MI UPGRAADIENT. LINED PITS

SAMPLE FIELD TREATMENT — Check proper boxes

No. of samples submitted	1	☒ NF: Whole sample (Non-filtered)	☒ F: Filtered in field with 0.45 μ m membrane filter	☐ A: 2 ml H ₂ SO ₄ /L added
☒ NA: No acid added ☐ Other-specify:				

ANALYTICAL RESULTS from SAMPLES

NF, NA	Units	Date analyzed	F, NA	Units	Date analyzed
☐ Conductivity (Corrected) 25 $^{\circ}$ C (00095)	μ mho		☒ Calcium (00915)	117.6 mg/l	8/27
☐ Total non-filterable residue (suspended) (00530)	mg/l		☒ Magnesium (00925)	62.5 mg/l	"
☐ Other:			☒ Sodium (00930)	138.0 mg/l	8-13
☐ Other:			☒ Potassium (00935)	39.6 mg/l	7-13
☐ Other:			☒ Bicarbonate (00440)	242 mg/l	8/26
			☒ Chloride (00940)	19.9 mg/l	8/27
			☒ Sulfate (00945)	515 mg/l	8/27
			☒ Total filterable residue (dissolved) (70300)	1088 mg/l	8/27
			☒ Other: CO ₃	1100 mg/l	
NF, A-H ₂ SO ₄			☒ F, A-H ₂ SO ₄	1107	8/20
☐ Nitrate-N +, Nitrate-N total (00630)	mg/l		☐ Nitrate-N +, Nitrate-N dissolved (00631)	mg/l	
☐ Ammonia-N total (00610)	mg/l		☐ Ammonia-N dissolved (00608)	mg/l	
☐ Total Kjeldahl-N ()	mg/l		☐ Total Kjeldahl-N ()	mg/l	
☐ Chemical oxygen demand (00340)	mg/l		☐ Other:		
☐ Total organic carbon ()	mg/l				
☐ Other:					
☐ Other:					

Laboratory remarks



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

GENERAL WATER CHEMISTRY
and NITROGEN ANALYSIS

DATE RECEIVED	8/12/85	LAB NO.	UC 3994	USER CODE	☐ 59300 ☐ 59600 ☒ OTHER: 82235
Collection DATE	8/8/85	SITE INFORMATION	Sample location		
Collection TIME	1010		OWEN RANCH CORRAL FAUCET		
Collected by — Person/Agency		Collection site description			
BAILEY/DCD		WELL 70' T.O. HORSE RANCH. WATER TASTES MUSTY; PUMP CONNECTIONS COATED WITH WHITE SCALE			

SEND
FINAL
REPORT
TO

ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg, PO Box 2088
Santa Fe, NM 87501

Attn: David Boyer

CORRAL FAUCET CLOSEST
TO WELL

GALISTEO CREEK AREA

Station/
well code

Owner

SAMPLING CONDITIONS

☐ Bailed ☐ Dipped	☐ Pump ☒ Tap	Water level	16'	Discharge	200 gpm	Sample type
pH (00400)	6.97	Conductivity (Uncorrected)	710 μ mho	Water Temp. (00010)	22 °C	Conductivity at 25°C (00094) μ mho

Field comments

SEPTIC FIELD > 300' DOWNGRADIENT. COMPLAINS OF SULFUR
SMELL. O/G WELL BEING DRILLED 1/4 mi UPGRADIENT. LINED PITS

SAMPLE FIELD TREATMENT — Check proper boxes

No. of samples submitted	1	☐ NF: Whole sample (Non-filtered)	☒ F: Filtered in field with 0.45 μ m membrane filter	☒ A: 2 ml H ₂ SO ₄ /L added
☐ NA: No acid added ☐ Other-specify:				

ANALYTICAL RESULTS from SAMPLES

NF, NA	Units	Date analyzed	F, NA	Units	Date analyzed
☐ Conductivity (Corrected) 25°C (00095)	μ mho		☐ Calcium (00915)	mg/l	
☐ Total non-filterable residue (suspended) (00530)	mg/l		☐ Magnesium (00925)	mg/l	
☐ Other:			☐ Sodium (00930)	mg/l	
☐ Other:			☐ Potassium (00935)	mg/l	
☐ Other:			☐ Bicarbonate (00440)	mg/l	
			☐ Chloride (00940)	mg/l	
			☐ Sulfate (00945)	mg/l	
			☐ Total filterable residue (dissolved) (70300)	mg/l	
			☐ Other:		
NF, A-H ₂ SO ₄			F, A-H ₂ SO ₄		
☐ Nitrate-N +, Nitrate-N total (00630)	mg/l		☒ Nitrate-N +, Nitrate-N dissolved (00631)	0.23 mg/l	8/23
☐ Ammonia-N total (00610)	mg/l		☒ Ammonia-N dissolved (00608)	< 0.1 mg/l	8/26
☐ Total Kjeldahl-N ()	mg/l		☒ Total Kjeldahl-N ()	< 0.1 mg/l	8/27
☐ Chemical oxygen demand (00340)	mg/l		☐ Other:		
☐ Total organic carbon ()	mg/l				
☐ Other:					
☐ Other:					
Laboratory remarks			Analyst	Date Reported	Reviewed by
				8/27/85	Calvin



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

ppf

HEAVY METAL ANALYSIS

**GENERAL WATER CHEMISTRY
and NITROGEN ANALYSIS**

DATE RECEIVED	8/2/85	LAB NO.	HM-1437	USER CODE	☐ 59300 ☐ 59600 ☒ OTHER: 82235
Collection DATE	8/8/85	SITE INFORMATION	Sample location		
Collection TIME	1010		OWEN RANCH CORRAL FAUCET		
Collected by — Person/Agency		Collection site description			
BAILEY/DCD		WELL 70' T.O. HORSE RANCH. WATER TASTES MUSTY; PUMP CONNECTIONS COATED WITH WHITE SCALE			

ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg, PO Box 2088
Santa Fe, NM 87501

SEND
FINAL
REPORT
TO

Attn: David Boyer

CORRAL FAUCET CLOSEST
TO WELL

GALISTED CREEK AREA

Station/
well code
Owner

SAMPLING CONDITIONS

☐ Bailed ☐ Dipped	☐ Pump ☒ Tap	Water level	16'	Discharge	200 gpm	Sample type
pH (00400)	6.97	Conductivity (Uncorrected)	710 μ mho	Water Temp. (00010)	22 °C	Conductivity at 25°C (00094) μ mho
Field comments						
SEPTIC FIELD > 300' DOWNGRADIENT. COMPLAINS OF SULFUR SMELL. O/G WELL BEING DRILLED 1/4 MI UPGRAADIENT. LINED PITS						

SAMPLE FIELD TREATMENT — Check proper boxes

No. of samples submitted	1	☐ NF: Whole sample (Non-filtered)	☒ F: Filtered in field with 0.45 μ membrane filter	☐ A: 4 ml H_2SO_4 /L added HNO₃
☐ NA: No acid added ☐ Other-specify:				

ANALYTICAL RESULTS from SAMPLES

Units	Date analyzed	F, NA	Units	Date analyzed
☐ Conductivity (Corrected) 25°C (00095) μ mho		☐ Calcium (00915) mg/l		
☐ Total non-filterable residue (suspended) (00530) mg/l		☐ Magnesium (00925) mg/l		
☒ Other: ICAP SCAN		☐ Sodium (00930) mg/l		
☐ Other:		☐ Potassium (00935) mg/l		
☐ Other:		☐ Bicarbonate (00440) mg/l		
		☐ Chloride (00940) mg/l		
		☐ Sulfate (00945) mg/l		
		☐ Total filterable residue (dissolved) (70300) mg/l		
		☐ Other:		
NF. A-H ₂ SO ₄		F. A-H ₂ SO ₄		
☐ Nitrate-N + Nitrate-N total (00630) mg/l		☐ Nitrate-N + Nitrate-N dissolved (00631) mg/l		
☐ Ammonia-N total (00610) mg/l		☐ Ammonia-N dissolved (00608) mg/l		
☐ Total Kjeldahl-N () mg/l		☐ Total Kjeldahl-N () mg/l		
☐ Chemical oxygen demand (00340) mg/l		☐ Other:		
☐ Total organic carbon () mg/l				
☐ Other:				
☐ Other:				

Analyst

Date Reported

Reviewed by

8/26/85

Jim Bailey

Laboratory remarks

ICAP SCREEN

Lab Number: HM1437

Date Submitted: 8/12/85

By: Barley

Sample Code: Owen Ranch Corral
Faucet

Date Reported: 8/26/85

By: Jim Ashby

Date Analyzed: 8/21/85

Determination

Concentration (µg/ml)

Aluminum	<u><0.1</u>
Barium	<u><0.1</u>
Beryllium	<u><0.1</u>
Boron	<u>0.2</u>
Cadmium	<u><0.1</u>
Calcium	<u>120.</u>
Chromium	<u><0.1</u>
Cobalt	<u><0.1</u>
Copper	<u><0.1</u>
Iron	<u><0.1</u>
Lead	<u><0.1</u>
Magnesium	<u>42.</u>
Manganese	<u><0.05</u>
Molybdenum	<u><0.1</u>
Nickel	<u><0.1</u>
Silicon	<u>10.</u>
Silver	<u><0.1</u>
Strontium	<u>1.6</u>
Tin	<u><0.1</u>
Vanadium	<u><0.1</u>
Yttrium	<u><0.1</u>
Zinc	<u><0.1</u>

ATOMIC ABSORPTION ANALYSES

Determination

Concentration (µg/ml)

Arsenic	<u> </u>
Selenium	<u> </u>
Mercury	<u> </u>



STATE OF NEW MEXICO

0650 -B

SCIENTIFIC LABORATORY DIVISION

700 Camino de Salud NE, Albuquerque, New Mexico 87106

(505) 841-2500

REPORT TO: DAVID G. BOYER
NEW MEXICO OIL CONSERVATION DIV
P.O. BOX 2088
SANTA FE, NM 87501

S.L.D. No.: OR- 650-A
DATE REC.: 7/15/85
PHONE 827-5812
USER CODE: 82235

CONTAINERS WHICH ACCOMPANY THIS FORM ARE COLLECTIVELY REFERED TO AS SAMPLE.

SUBMITTER: NM OCS CODE
LOCATION: CHACE OIL CO. PINON #2 CODE 14N08E26
SOURCE: MUD PIT CODE
COLLECTED: 7/2/85 BY BAILEY CODE 850702140608
SAMPLE TYPE: WATER SOIL OTHER CODE
NEAREST CITY: GALISTED CODE

pH= 9.95; Conductivity= umho/cm at °C; Chlorine Residual=
Dissolved Oxygen= mg/l; Alkalinity= ; Flow Rate=

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

PLASTIC LINED MUD PIT. MUD WT. 8.9 lbs/gal. VIS 3680.
BENTONITE MUD WITH BMC STARCH, SODA ASH, NaOH ADDITIVES

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 Hand CarriedThis form accompanies 1 Septum Vials, Glass Jugs,

Containers are marked as follows to indicate preservation (circle):

NP: No preservation; sample stored at room temperature.

P-Ice Sample stored in an ice bath (not frozen).P- $\text{Na}_2\text{S}_2\text{O}_3$: Sample preserved with $\text{Na}_2\text{S}_2\text{O}_3$ to remove chlorine residual.

I (we) certify that this sample was transferred from
to at (location) on
(date & time) and that the statements in this block are correct
Evidentiary Seals: Not Sealed Intact: Yes No
Signatures

(we) certify that this sample was transferred from
to at (location) on
(date & time) and that the statements in this block are correct
Evidentiary Seals: Not Sealed Intact: Yes No
Signatures

ANALYSES REQUESTED

LAB. No.: ORG- 650

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

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

REMARKS:

ANALYTICAL RESULTS

COMPOUND	[PPB]	COMPOUND	[PPB]
halogenated purgable	none detected		
Benzene	N.D.*		
Toluene	N.D.		
ethylbenzene	N.D.		
p-Xylene	N.D.		
m-Xylene	N.D.		
o-Xylene	N.D.		
		* DETECTION LIMIT	50 µg/m ³

REMARKS:

all samples should be submitted in duplicate
Twenty unsaturated hydrocarbons also detected
by aromatic screen at < 5 ppb.

CERTIFICATE OF ANALYTICAL PERSONNEL

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

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

Date(s) of analysis: 8 July 85. Analyst's signature: [Signature]

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



New Mexico Health and Environment Department
SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 — (505) 844-2555

NN

GENERAL WATER CHEMISTRY and NITROGEN ANALYSIS

DATE RECEIVED <u>07/05/85</u>	LAB NO. <u>CC-3347</u>	USER CODE ☐ 59300 ☐ 59600 ☒ OTHER: 82235
Collection DATE <u>7/2/85</u>	SITE INFORMATION	Sample location <u>CHACE OIL CO. PIÑON #2 ORTIZ MINE</u>
Collection TIME <u>1406</u>		<u>LEASE SEC 26 T14N R8E</u>
Collected by — Person/Agency <u>NM OCA BAILEY</u>		Collection site description <u>PLASTIC LINED MUO PIT</u>

SEND FINAL REPORT TO
ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg, PO Box 2088
Santa Fe, NM 87501
Attn: David Boyer

SAMPLING CONDITIONS			
☐ Bailed ☒ Dipped	☐ Pump ☐ Tap	Water level	Discharge
pH (00400) <u>9.95</u>	Conductivity (Uncorrected) <u> </u> μ mho	Water Temp. (00010) <u> </u> °C	Conductivity at 25°C (00094) <u> </u> μ mho
Field comments <u>MUD WT 8.9 lbs/gal VIS 36 SEC. BENTONITE MUD WITH CMC, STARCH, SODA ASH, NaOH ADDITIVES</u>			

SAMPLE FIELD TREATMENT — Check proper boxes	
No. of samples submitted <u> </u>	☒ NF: Whole sample (Non-filtered) ☐ F: Filtered in field with 0.45 μ m membrane filter ☐ A: 2 mL H ₂ SO ₄ /L added
☒ NA: No acid added ☐ Other-specify: <u> </u>	

ANALYTICAL RESULTS from SAMPLES			
NF, NA	Units	Date analyzed	NF, NA
☒ Conductivity (Corrected) 25°C (00095) <u>2000</u> μ mho		<u>8/2</u>	☒ Calcium (00915) <u>100</u> mg/l
☒ Total non-filterable residue (suspended) (00530) <u>7.4</u> mg/l		<u>8/2</u>	☒ Magnesium (00925) <u>25.4</u> mg/l
☒ Other: <u>pH</u>		<u>8/2</u>	☒ Sodium (00930) <u>506</u> mg/l
☐ Other:			☒ Potassium (00935) <u>5.85</u> mg/l
☐ Other:			☒ Bicarbonate (00440) <u>1194</u> mg/l
			☒ Chloride (00940) <u>62.7</u> mg/l
			☒ Sulfate (00945) <u>235.8</u> mg/l
			☒ Total filterable residue (dissolved) (70300) <u>1570</u> mg/l
			☒ Other: <u>F CO₂</u> <u>1.76</u> mg/l
NF, A-H ₂ SO ₄ , HNO ₃			F, A-H ₂ SO ₄
☐ Nitrate-N +, Nitrate-N total (00630) <u> </u> mg/l			☐ Nitrate-N +, Nitrate-N dissolved (00631) <u> </u> mg/l
☐ Ammonia-N total (00610) <u> </u> mg/l			☐ Ammonia-N dissolved (00608) <u> </u> mg/l
☐ Total Kjeldahl-N () <u> </u> mg/l			☐ Total Kjeldahl-N () <u> </u> mg/l
☐ Chemical oxygen demand (00340) <u> </u> mg/l			☐ Other: <u> </u>
☐ Total organic carbon () <u> </u> mg/l			
☐ Other: <u> </u>			
☐ Other: <u> </u>			
Laboratory remarks			Analyst <u> </u> Date Reported <u>8/28/85</u> Reviewed by <u> </u>



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

991

GENERAL WATER CHEMISTRY and NITROGEN ANALYSIS

DATE RECEIVED <u>07/25/85</u>	LAB NO. <u>77M-1247</u>	USER CODE ☐ 59300 ☐ 59600 ☒ OTHER: 82235
Collection DATE <u>7/2/85</u>	SITE INFORMATION	Sample location <u>CHACE OIL CO. PIÑON #2 ORTIZ MINE</u>
Collection TIME <u>1406</u>		<u>LEASE SEC 26 T14N R8E</u>
Collected by — Person/Agency <u>NM OCS BAILEY</u>		Collection site description <u>PLASTIC LINED MUO PIT</u>

SEND
FINAL
REPORT
TO

ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg, PO Box 2088
Santa Fe, NM 87501

Attn: David Boyer

SAMPLING CONDITIONS

☐ Bailed ☒ Dipped	☐ Pump ☐ Tap	Water level	Discharge	Sample type
pH (00400) <u>9.95</u>	Conductivity (Uncorrected) <u> </u> μ mho	Water Temp. (00010) <u> </u> °C	Conductivity at 25°C (00094) <u> </u> μ mho	
Field comments <u>MUD WT. 8.9 lbs/gal V15 36 SEC. BENTONITE MUD WITH CMC, STARCH, SODA ASH, NaOH ADDITIVES</u>				

SAMPLE FIELD TREATMENT — Check proper boxes

No. of samples submitted	☒ NF: Whole sample (Non-filtered)	☐ F: Filtered in field with 0.45 μ membrane filter	☒ A: 2 mL H ₂ SO ₄ /L added <u>HNO₃</u>
☐ NA: No acid added ☐ Other-specify: <u> </u>			

ANALYTICAL RESULTS from SAMPLES

NF, A-H ₂ SO ₄		F, NA	
Units	Date analyzed	Units	Date analyzed
☐ Conductivity (Corrected) 25°C (00095) <u> </u> μ mho		☐ Calcium (00915) <u> </u> mg/l	
☐ Total non-filterable residue (suspended) (00530) <u> </u> mg/l		☐ Magnesium (00925) <u> </u> mg/l	
☒ Other: <u>10.00 AP SLAN</u>		☐ Sodium (00930) <u> </u> mg/l	
☐ Other: <u> </u>		☐ Potassium (00935) <u> </u> mg/l	
☐ Other: <u> </u>		☐ Bicarbonate (00440) <u> </u> mg/l	
		☐ Chloride (00940) <u> </u> mg/l	
		☐ Sulfate (00945) <u> </u> mg/l	
		☐ Total filterable residue (dissolved) (70300) <u> </u> mg/l	
		☐ Other: <u> </u>	
NF, A-H ₂ SO ₄		F, A-H ₂ SO ₄	
☐ Nitrate-N +, Nitrate-N total (00630) <u> </u> mg/l		☐ Nitrate-N +, Nitrate-N dissolved (00631) <u> </u> mg/l	
☐ Ammonia-N total (00610) <u> </u> mg/l		☐ Ammonia-N dissolved (00608) <u> </u> mg/l	
☐ Total Kjeldahl-N () <u> </u> mg/l		☐ Total Kjeldahl-N () <u> </u> mg/l	
☐ Chemical oxygen demand (00340) <u> </u> mg/l		☐ Other: <u> </u>	
☐ Total organic carbon () <u> </u> mg/l			
☐ Other: <u> </u>			
☐ Other: <u> </u>			
Laboratory remarks <u>acid added in lab</u>		Analyst <u> </u>	Date Reported <u>8/28/85</u>
		Reviewed by <u>Jim Bailey</u>	
<u>Sample digested</u>			

ICAP SCREEN

Lab Number: HM-1247Date Submitted: 7/5/85By: BaileySample Code: CHACE OIL CO. Pmon #2
PLASTIC Lined Mud PitDate Reported: 8/23/85By: Jim AshbyDeterminationConcentration (µg/ml)

Aluminum	<u>630</u>
Barium	<u>130</u>
Beryllium	<u><0.5</u>
Boron	<u>0.5</u>
Cadmium	<u><0.5</u>
Calcium	<u>1550</u>
Chromium	<u><0.5</u>
Cobalt	<u><0.5</u>
Copper	<u><0.5</u>
Iron	<u>450</u>
Lead	<u>3.0</u>
Magnesium	<u>200</u>
Manganese	<u>15.</u>
Molybdenum	<u><0.5</u>
Nickel	<u><0.5</u>
Silicon	<u>4.5</u>
Silver	<u><0.5</u>
Strontium	<u>8.5</u>
Tin	<u>0.5</u>
Vanadium	<u>0.5</u>
Yttrium	<u><0.5</u>
Zinc	<u>2.0</u>

NN

GENERAL WATER CHEMISTRY
and NITROGEN ANALYSIS

DATE RECEIVED <u>07/05/85</u>	LAB NO. <u>WC-3396</u>	USER CODE ☐ 59300 ☐ 59600 ☒ OTHER: 82235
Collection DATE <u>7/2/85</u>	SITE INFORMATION	Sample location <u>CHASE OIL CO. PINON #2 ORTIZ MINE LEASE</u>
Collection TIME <u>1422</u>		<u>SEC 26 T14N R8E</u>
Collected by — Person/Agency <u>BAILEY / NMOCN</u>		Collection site description <u>WATER TANK USED TO STORE</u>
		<u>WATER HAULED FROM SANTA FE.</u>

ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg, PO Box 2088
Santa Fe, NM 87501

Attn: David Boyer

Station/
well code

Owner

SAMPLING CONDITIONS

☐ Bailed ☐ Dipped	☐ Pump ☒ Tap	Water level	Discharge	Sample type
pH (00400)	Conductivity (Uncorrected) <u> </u> μ mho	Water Temp. (00010) <u> </u> °C	Conductivity at 25°C (00094) <u> </u> μ mho	
Field comments <u>WATER USED TO MIX MUD FOR DRILLING WELL</u> <u>PRESENT WELL DEPTH 2977'</u>				

SAMPLE FIELD TREATMENT — Check proper boxes

No. of samples submitted	☒ NF: Whole sample (Non-filtered)	☐ F: Filtered in field with 0.45 μ membrane filter	☐ A: 2 mL H ₂ SO ₄ /L added
☒ NA: No acid added ☐ Other-specify: <u> </u>			

ANALYTICAL RESULTS from SAMPLES

NF, NA	Units	Date analyzed	NF, NA	Units	Date analyzed
☒ Conductivity (Corrected) 25°C (00095) <u>250</u> μ mho		<u>8/21</u>	☒ Calcium (00915) <u>52</u> mg/l		<u>8/21</u>
☒ Total non-filterable residue (suspended) (00530) <u> </u> mg/l			☒ Magnesium (00925) <u>2.93</u> mg/l		<u> </u>
☒ Other: pH <u>7.94</u>		<u>8/21</u>	☒ Sodium (00930) <u>32.2</u> mg/l		<u>8-13</u>
☐ Other: <u> </u>			☒ Potassium (00935) <u>0.28</u> mg/l		<u>8-13</u>
☐ Other: <u> </u>			☒ Bicarbonate (00440) <u>124.5</u> mg/l		<u>8/21</u>
			☒ Chloride (00940) <u>7.8</u> mg/l		<u>8/27</u>
			☒ Sulfate (00945) <u>17.0</u> mg/l		<u>8/14</u>
			☒ Total filterable residue (dissolved) (70300) <u>172</u> mg/l		<u>8/27</u>
			☒ Other: F <u>0.72</u>		<u>7/31</u>
			☒ CO ₃ <u> </u>		<u>8/21</u>
NF, A-H ₂ SO ₄			F, A-H ₂ SO ₄		
☐ Nitrate-N +, Nitrate-N total (00630) <u> </u> mg/l			☐ Nitrate-N +, Nitrate-N dissolved (00631) <u> </u> mg/l		
☐ Ammonia-N total (00610) <u> </u> mg/l			☐ Ammonia-N dissolved (00608) <u> </u> mg/l		
☐ Total Kjeldahl-N () <u> </u> mg/l			☐ Total Kjeldahl-N () <u> </u> mg/l		
☐ Chemical oxygen demand (00340) <u> </u> mg/l			☐ Other: <u> </u>		
☐ Total organic carbon () <u> </u> mg/l					
☐ Other: <u> </u>			Analyst <u> </u>	Date Reported <u>8/27/85</u>	Reviewed by <u> </u>
☐ Other: <u> </u>					

Laboratory remarks



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

GENERAL WATER CHEMISTRY
and NITROGEN ANALYSIS

DATE RECEIVED <u>07/05/85</u>	LAB NO. <u>711-1248</u>	USER CODE ☐ 59300 ☐ 59600 ☒ OTHER: 82235
Collection DATE <u>7/2/85</u>	SITE INFORMATION	Sample location <u>CHACE OIL CO. PINON #2 ORTIZ MINE LEASE</u>
Collection TIME <u>1422</u>		<u>SEC 26 T14N R8E</u>
Collected by — Person/Agency <u>BAILEY / NMOCN</u>		Collection site description <u>WATER TANK USED TO STORE</u> <u>WATER HAULED FROM</u> <u>SANTA FE.</u>

SEND
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REPORT
TO

ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg, PO Box 2088
Santa Fe, NM 87501

Attn: David Boyer

SAMPLING CONDITIONS

☐ Bailed ☐ Dipped	☐ Pump ☒ Tap	Water level	Discharge	Sample type
pH (00400)	Conductivity (Uncorrected) <u> </u> μ mho	Water Temp. (00010) <u> </u> °C	Conductivity at 25°C (00094) <u> </u> μ mho	
Field comments <u>WATER USED TO MIX MUD FOR DRILLING WELL</u> <u>PRESENT WELL DEPTH 2977'</u>				

SAMPLE FIELD TREATMENT — Check proper boxes

No. of samples submitted	☒ NF: Whole sample (Non-filtered)	☐ F: Filtered in field with 0.45 μ m membrane filter	☒ A: 2 mH ₂ SO ₄ /L added <u>HNO₃</u>
☐ NA: No acid added ☐ Other-specify: <u> </u>			

ANALYTICAL RESULTS from SAMPLES

NF, <u>HNO₃</u>	Units	Date analyzed	F, NA	Units	Date analyzed
☐ Conductivity (Corrected) 25°C (00095) <u> </u> μ mho			☐ Calcium (00915)	mg/l	
☐ Total non-filterable residue (suspended) (00530) <u> </u> mg/l			☐ Magnesium (00925)	mg/l	
☒ Other: <u>ICAPSCAN</u>			☐ Sodium (00930)	mg/l	
☐ Other: <u> </u>			☐ Potassium (00935)	mg/l	
☐ Other: <u> </u>			☐ Bicarbonate (00440)	mg/l	
			☐ Chloride (00940)	mg/l	
			☐ Sulfate (00945)	mg/l	
			☐ Total filterable residue (dissolved) (70300)	mg/l	
			☐ Other: <u> </u>		
NF, A-H ₂ SO ₄			F, A-H ₂ SO ₄		
☐ Nitrate-N +, Nitrate-N total (00630) <u> </u> mg/l			☐ Nitrate-N +, Nitrate-N dissolved (00631) <u> </u> mg/l		
☐ Ammonia-N total (00610) <u> </u> mg/l			☐ Ammonia-N dissolved (00608) <u> </u> mg/l		
☐ Total Kjeldahl-N () <u> </u> mg/l			☐ Total Kjeldahl-N () <u> </u> mg/l		
☐ Chemical oxygen demand (00340) <u> </u> mg/l			☐ Other: <u> </u>		
☐ Total organic carbon () <u> </u> mg/l					
☐ Other: <u> </u>			Analyst	Date Reported <u>8/16/85</u>	Reviewed by <u>J. R. Wiley</u>
☐ Other: <u> </u>			Laboratory remarks		

ICAP -SCREEN

Lab Number: HM 1248Date Submitted: 7/5/85By: NMOC DSample Code: Chase Oil Co. Pinon #2Date Reported: 8/16/85By: Jim AshbyDeterminationConcentration (µg/ml)

Aluminum

<0.1

Barium

0.1

Beryllium

<0.1

Boron

<0.1

Cadmium

<0.1

Calcium

18.

Chromium

<0.1

Cobalt

<0.1

Copper

<0.1

Iron

0.1

Lead

<0.1

Magnesium

2.3

Manganese

<0.05

Molybdenum

<0.1

Nickel

<0.1

Silicon

7.7

Silver

<0.1

Strontium

0.2

Tin

<0.1

Vanadium

<0.1

Yttrium

<0.1

Zinc

<0.1