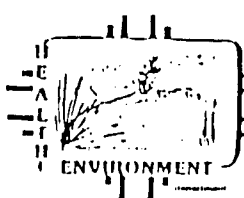


3R - 249

REPORTS

DATE:
1985



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION

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

85-1120-C

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-1120

DATE REC.: 10/29/85

SLD PRIORITY #: 3

PHONE(S):

827-5812

USER CODE: 8 2 2 3 5

SUBMITTER:

D. G. Boyer

SUBMITTER CODE: | | | | |

SAMPLE TYPE: WATER ☒, SOIL ☐, OTHER ☐

SAMPLE TYPE CODE: | | |

COLLECTED: 10/25-13:55 BY DGB

DATE

TIME

INITIALS

CODE: | | | | | | | | | | | | | | | |

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SOURCE: Manana Mary Wheeler Pit, Produced

CODE: | | | | | | | | | | | | | | | |

AQUIFER

DEPTH

NEAREST CITY: Lordsburg

CODE: | | | | | | | | | | | | | | | |

Formation
Basin
Schale

LOCATION: Municipal Well Field

CODE: | | | | | | | | | | | | | | | |

TOWNSHIP

RANGE

SECTION

TRACTS

pH= ; Conductivity= umho/cm at °C; Chlorine Residual=

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

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

Sample from Fiberglass Pit at Separator at Mary Wheeler
#15 Gas well, Pit 1/3 full (Volume lowered by pump in
AM). Witnessed by Ray Penrod FLOWNAI certify that the statements in this block accurately reflect the results
of my field analyses, observations and activities. DGB R Penrod

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 D.G. Boyer
to R. F. Meyerheim at (location) SLD Specimen Recovery on
85/10/29-14:30 and that the statements in this block are correct.

DATE AND TIME

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

Signatures DGB R Meyerheim

(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- 1120

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]
<i>benzene</i>	<i>8700</i>		
<i>toluene</i>	<i>12000</i>		
<i>ethylbenzene</i>	<i>570</i>		
<i>p-xylene</i>	<i>1000</i>		
<i>m-xylene</i>	<i>3000</i>		
<i>o-xylene</i>	<i>1200</i>		
<i>halo. purg. screen</i>	<i>none detected</i>		
		* DETECTION LIMIT	<i>100 µgm/l</i>

REMARKS:

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes ☒ NO ☐ . Seal(s) broken by: *JL Finney* date: *29 Oct 85*
 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: *29 Oct 85* . Analyst's signature: *JL Finney*
 I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewers signature: *R Meyer*



New Mexico Health and Environment Department
SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 — (505) 255-5555

PN

GENERAL WATER CHEMISTRY
NITROGEN ANALYSIS

DATE RECEIVED <u>10/29/85</u>	LAB NO. <u>WC-4990</u>	USER CODE ☐ 59300 ☐ 59600 ☒ OTHER: <u>82235</u>	# <u>1E</u>
Collection DATE <u>10/25/85</u>	SITE INFORMATION	Sample location <u>Flora Vista - Manana Oil Mary Wheeler</u>	
Collection TIME <u>1355</u>		Collection site description <u>Sample from separator pit in Municipal well field. Pit is Filtered</u>	
Collected by Person/Agency <u>Boyer - Bailey/DJS</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 <u>Gravel</u>
pH (00400)	Conductivity (Uncorrected) <u>µmho</u>	Water Temp. (00010) <u>°C</u>	Conductivity at 25°C (00094) <u>µmho</u>	
Field comments <u>Produced water sample, Pit 1/3 full</u> <u>Filtered</u>				

SAMPLE FIELD TREATMENT — Check proper boxes

No. of samples submitted <u>1</u>	☐ NF: Whole sample (Non-filtered)	☒ F: Filtered in field with 0.45 µm membrane filter	☐ A: 2 ml 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) <u>49605</u> <u>µmho</u> <u>11/18/85</u>			☒ Calcium (00915) <u>236</u> <u>mg/l</u> <u>11-8</u>		
☐ Total non-filterable residue (suspended) (00530)			☒ Magnesium (00925) <u>88.8</u> <u>mg/l</u> <u>"</u>		
☒ Other: <u>pH</u> <u>8.01</u> <u>12/3</u>			☒ Sodium (00930) <u>13813.880</u> <u>mg/l</u> <u>"</u>		
☐ Other:			☒ Potassium (00935) <u>92.5</u> <u>mg/l</u> <u>"</u>		
☐ Other:			☒ Bicarbonate (00440) <u>906.5</u> <u>mg/l</u> <u>12/3</u>		
			☒ Chloride (00940) <u>21376.8</u> <u>mg/l</u> <u>12/9</u>		
			☒ Sulfate (00945) <u>2749</u> <u>mg/l</u> <u>11/27</u>		
			☒ Total filterable residue (dissolved) (70300) <u>36,530</u> <u>mg/l</u> <u>12/12</u>		
			☒ Other: <u>CO₃</u> <u>0.1</u>		
NF, A-H ₂ SO ₄			F, A-H ₂ SO ₄		
☐ Nitrate-N +, Nitrate-N total (00630)	mg/l		☐ Nitrate-N +, Nitrate-N dissolved (00631)	mg/l	
☐ Ammonia-N total (00610)	mg/l		☐ Ammonia-N dissolved (00608)	mg/l	
☐ Total Kjeldahl-N ()	mg/l		☐ Total Kjeldahl-N ()	mg/l	
☐ Chemical oxygen demand (00340)	mg/l		☐ Other:		
☐ Total organic carbon ()	mg/l				
☐ Other:					
☐ Other:					
Laboratory remarks			Analyst	Date Reported <u>12/20/85</u>	Reviewed by <u>C. Leem</u>



New Mexico Health and Environment Department
SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 — (505) 755

N/N

GENERAL WATER CHEMISTRY
and NITROGEN ANALYSIS

WC 4988
10/29/85

DATE RECEIVED	10/29/85	LAB NO.	WC-4988	USER CODE	☐ 59300 ☐ 59600 ☒ OTHER: 82235	#1E
Collection DATE	10/25	SITE INFORMATION	Sample location	Flora Vista - Merano Oil Mary Wheeler		
Collection TIME	1355			Sample From Separator Pit in Municipal Well		
Collected by	Person/Agency	Boyer - Bailey/K&S				

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	Grab
pH (00400)	Conductivity (Uncorrected) μ mho	Water Temp. (00010) $^{\circ}$ C	Conductivity at 25 $^{\circ}$ C (00094) μ mho		
Field comments: Produced water sample, Pit 1/3 full (Not Filtered)					

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	NA, NF	Units	Date analyzed
☒ Conductivity (Corrected) 25 $^{\circ}$ C (00095)	49516 μ mho	11/18	☒ Calcium (00915)	352 mg/l	11-8
☐ Total non-filterable residue (suspended) (00530)			☒ Magnesium (00925)	75.6 mg/l	"
☒ Other: pH	8.22	12/3	☒ Sodium (00930)	680 mg/l	"
☐ Other:			☒ Potassium (00935)	2.4 mg/l	"
☐ Other:			☒ Bicarbonate (00440)	987 mg/l	"
			☒ Chloride (00940)	19526.2 mg/l	12/9
			☒ Sulfate (00945)	3683 mg/l	11/27
			☒ Total filterable residue (dissolved) (70300)	36790 mg/l	11/22
			☒ Other: CO ₃		
NF, A-H ₂ SO ₄			F, A-H ₂ SO ₄		
☐ Nitrate-N +, Nitrate-N total (00630)	mg/l		☐ Nitrate-N +, Nitrate-N dissolved (00631)	mg/l	
☐ Ammonia-N total (00610)	mg/l		☐ Ammonia-N dissolved (00608)	mg/l	
☐ Total Kjeldahl-N ()	mg/l		☐ Total Kjeldahl-N ()	mg/l	
☐ Chemical oxygen demand (00340)	mg/l		☐ Other:		
☐ Total organic carbon ()	mg/l				
☐ Other:					
☐ Other:					
Laboratory remarks			Analyst	Date Reported	Reviewed by
				12/3/85	Calderon



New Mexico Health and Environment Department
SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 — (505) 755-5555

GENERAL WATER CHEMISTRY
and NITROGEN ANALYSIS

DATE RECEIVED 11/29/85 LAB NO. WC-1995 USER CODE 59300 59600 ☒ OTHER: 82235 #1E
Collection DATE 05/10/85 SITE INFORMATION Sample location Flora Vista - Menana Oil Mary Wheeler
Collection TIME 1355 Collection site description Sample from Separator Pit in Municipal Well
Collected by Person/Agency Boyer - Bailey/TCS Pit is Filtered

SEND
FINAL
REPORT
TO

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

Attn: David Boyer

JAN 10 1986
OIL CONSERVATION DIVISION

SAMPLING CONDITIONS

☐ Bailed ☐ Pump ☐ Water level ☐ Discharge ☐ Sample type Grel
☒ Dipped ☐ Tap
pH (00400) Conductivity (Uncorrected) μ mho Water Temp. (00010) $^{\circ}$ C Conductivity at 25 $^{\circ}$ C (00094) μ mho
Field comments Produced water sample, Pit 1/3 full
Filtered

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 H₂SO₄/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)	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)	0.098 mg/l	11/8
☐ Ammonia-N total (00610)	mg/l		☒ Ammonia-N dissolved (00608)	17.4 mg/l	11/14
☐ Total Kjeldahl-N ()	mg/l		☒ Total Kjeldahl-N ()	23.75 mg/l	12/17
☐ Chemical oxygen demand (00340)	mg/l		☐ Other:		
☐ Total organic carbon ()	mg/l				
☐ Other:					
☐ Other:					
Laboratory remarks			Analyst	Date Reported 12/20/85	Reviewed by C. Dean



DATE RECEIVED <u>10/29/85</u>	LAB NO. <u>WC-4994</u>	USER CODE ☐ 59300 ☐ 59600 ☒ OTHER: 82235	# <u>1E</u>
Collection DATE <u>10/25</u>	SITE INFORMATION	Sample location <u>Flora Vista - Monans Oil Mary Wheeler</u>	
Collection TIME <u>1355</u>		Collection site description <u>Sample from Separator Pit in Municipal Well Field. Pit is Fiberglass</u>	
Collected by Person/Agency <u>Boyer-Railley/TX&</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 <u>Grab</u>
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>Produced water sample, Pit 1/3 full</u> <u>(Not Filtered)</u>				

SAMPLE FIELD TREATMENT — Check proper boxes

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

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)	<u>0.095</u> mg/l	<u>11/8</u>	☐ Nitrate-N +, Nitrate-N dissolved (00631)	mg/l	
☒ Ammonia-N total (00610)	<u>18.0</u> mg/l	<u>11/14</u>	☐ Ammonia-N dissolved (00608)	mg/l	
☒ Total Kjeldahl-N ()	<u>4.36</u> mg/l	<u>11/8</u>	☐ Total Kjeldahl-N ()	mg/l	
☐ Chemical oxygen demand (00340)	mg/l		☐ Other:		
☐ Total organic carbon ()	mg/l				
☐ Other:			Analyst	Date Reported	Reviewed by
☐ Other:				<u>11/20/85</u>	<u>CD</u>
Laboratory remarks					



New Mexico Health and Environment Department
SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 — (505) 255-2555

PF
Heavy Metal

GENERAL WATER-CHEMISTRY
and NITROGEN ANALYSIS

DATE RECEIVED	10/29/85	LAB NO.	HM-1858	USER CODE	☐ 59300 ☐ 59600 ☒ OTHER: 82235	#1E
Collection DATE	05/10/85	SITE INFORMATION	Sample location	Flora Vista - Merano Oil Mary Wheeler		
Collection TIME	1355			Sample from Separator Pit in Municipal Well Pit is Fiberglass		
Collected by	Person/Agency		Boyer - Bailey/XES			

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	Grab
pH (00400)	Conductivity (Uncorrected) μ mho	Water Temp. (00010) $^{\circ}$ C	Conductivity at 25 $^{\circ}$ C (00094) μ mho		
Field comments: Produced water sample, Pit 1/3 full (Filtered)					

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: 2M H ₂ SO ₄ added	HNO ₃
☐ NA: No acid added ☐ Other-specify:					

ANALYTICAL RESULTS from SAMPLES

NF, NA	F, HNO ₃	Units	Date analyzed	F, NA	Units	Date analyzed
☐ Conductivity (Corrected) 25 $^{\circ}$ C (00095)		μ mho		☐ Calcium (00915)	mg/l	
☐ Total non-filterable residue (suspended) (00530)		mg/l		☐ Magnesium (00925)	mg/l	
☒ Other: 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:				Analyst	Date Reported	Reviewed by
☐ Other:					12/9/85	Jim Bailey
Laboratory remarks						

ICAP -SCREEN

Lab Number: HM 1858Date Submitted: 10/29/85By: Boyer/BaileySample Code: Flora Vista, Manana WellDate Reported: 12/9/85By: Jim AshbyDate Analyzed: 11/7/85DeterminationConcentration (µg/ml)

Aluminum	<u>40.1</u>
Barium	<u>40.1</u>
Beryllium	<u>40.1</u>
Boron	<u>1.9</u>
Cadmium	<u>40.1</u>
Calcium	<u>405.</u>
Chromium	<u>40.1</u>
Cobalt	<u>40.1</u>
Copper	<u>40.1</u>
Iron	<u>1.0</u>
Lead	<u>40.1</u>
Magnesium	<u>71.0</u>
Manganese	<u>0.19</u>
Molybdenum	<u>40.1</u>
Nickel	<u>40.1</u>
Silicon	<u>11.8</u>
Silver	<u>40.1</u>
Strontium	<u>22.8</u>
Tin	<u>40.1</u>
Vanadium	<u>40.1</u>
Yttrium	<u>40.1</u>
Zinc	<u>40.1</u>

ATOMIC ABSORPTION ANALYSES

DeterminationConcentration (µg/ml)

Arsenic	<u>0.021</u>
Selenium	<u>0.023</u>
Mercury	<u></u>

* Very hi Sodium also present.



New Mexico Health and Environment Department
SCIENTIFIC LABORATORY DIVISION
700 Camino de Salud NE
Albuquerque, NM 87106 — (505) 255-2555

PN
Heavy Metal

GENERAL WATER CHEMISTRY
and NITROGEN ANALYSIS

DATE RECEIVED	10/29/85	LAB NO.	4M-1857	USER CODE	☐ 59300 ☐ 59600 ☒ OTHER: 82235	#1E
Collection DATE	05/10/85	SITE INFORMATION	Sample location	Flora Vista - Merano Oil Mary Wheeler		
Collection TIME	1335			Sample from separator pit in Municipal well field. Pit is Fiberglass		
Collected by	Person/Agency		Boyer - Bailey/XES			

SEND
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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	Grab
pH (00400)	Conductivity (Uncorrected) μ mho	Water Temp. (00010) $^{\circ}$ C	Conductivity at 25 $^{\circ}$ C (00094) μ mho		
Field comments: Produced water sample, Pit 1/3 full NOT FILTERED					

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	☒ LA: 2 mL H_2SO_4 added HNO_3
☐ NA: No acid added ☐ Other-specify:				

ANALYTICAL RESULTS from SAMPLES

NF, NA HNO_3	Units	Date analyzed	F, NA	Units	Date analyzed
☐ Conductivity (Corrected) 25 $^{\circ}$ C (00095)	μ mho		☐ Calcium (00915)	mg/l	
☐ Total non-filterable residue (suspended) (00530)	mg/l		☐ Magnesium (00925)	mg/l	
☒ Other: 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_2SO_4			F, A- H_2SO_4		
☐ Nitrate-N +, Nitrate-N total (00630)	mg/l		☐ Nitrate-N +, Nitrate-N dissolved (00631)	mg/l	
☐ Ammonia-N total (00610)	mg/l		☐ Ammonia-N dissolved (00608)	mg/l	
☐ Total Kjeldahl-N ()	mg/l		☐ Total Kjeldahl-N ()	mg/l	
☐ Chemical oxygen demand (00340)	mg/l		☐ Other:		
☐ Total organic carbon ()	mg/l				
☐ Other:			Analyst	Date Reported	Reviewed by
☐ Other:				12/13/85	Jim Bailey
Laboratory remarks: Sample digested					

Lab Number: HM 1857

Date Submitted: 10/25/85

By: Boyer/Bailey

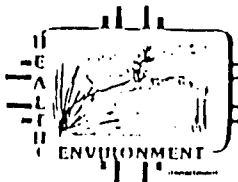
Sample Code: Flora Vista Moñana Oil.

Date Analyzed: 12/12/85

Reviewed By: Jim Bailey

Date Reported: 12/13/85

Element	ICAP VALUE (MG/L)	AA VALUE (MG/L)
Aluminum	<u>40.1</u>	<u> </u>
Barium	<u>40.1</u>	<u> </u>
Beryllium	<u>40.1</u>	<u> </u>
Boron	<u>2.0</u>	<u> </u>
Cadmium	<u>40.1</u>	<u> </u>
Calcium	<u>255.</u>	<u> </u>
Chromium	<u>40.1</u>	<u> </u>
Cobalt	<u>40.1</u>	<u> </u>
Copper	<u>40.1</u>	<u> </u>
Iron	<u>2.1</u>	<u> </u>
Lead	<u>40.1</u>	<u> </u>
Magnesium	<u>66.</u>	<u> </u>
Manganese	<u>0.17</u>	<u> </u>
Molybdenum	<u>40.1</u>	<u> </u>
Nickel	<u>40.1</u>	<u> </u>
Silicon	<u>3.0</u>	<u> </u>
Silver	<u>40.1</u>	<u> </u>
Strontium	<u>25.</u>	<u> </u>
Tin	<u>40.1</u>	<u> </u>
Vanadium	<u>40.1</u>	<u> </u>
Zinc	<u>40.1</u>	<u> </u>
Arsenic		<u>0.022</u>
Selenium		<u>0.022</u>
Mercury		<u> </u>



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION

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

85-0970-C

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-

DATE REC.:

SLD PRIORITY #:

PHONE(S):

827-5812

USER CODE:

8 2 2 3 5

SUBMITTER:

DAVID G. BOYER

SUBMITTER CODE:

SAMPLE TYPE: WATER ☒ , SOIL ☐ , OTHER ☐

SAMPLE TYPE CODE:

COLLECTED: 85/09/12-15:05

BY

DGB

CODE: 85091215050812

Y Y M M D D H H M M I I I

SOURCE: Manana Oil - Mary Wheeler Well

CODE: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

AQUIFER DEPTH

NEAREST CITY: Santa Fe

CODE: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

LOCATION:

Gas well near city supply

CODE: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

TOWNSHIP RANGE SECTION TRACTS

pH= 7; Conductivity= 26500 umho/cm at 23.5 °C; Chlorine Residual= —Dissolved Oxygen= — mg/l; Alkalinity= —; Flow Rate= —

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

Sample from Separator pit (green fiberglass tank)
Separator dumps frequently, 1/4 - 1/2" oil on surface
Produced water sample. Pit nearly full.

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

Method of shipment to the Laboratory

Hand Carried

This form accompanies 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- 970

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

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

REMARKS:

ANALYTICAL RESULTS

COMPOUND	[PPB]	COMPOUND	[PPB]
<i>halo. purgeable screen</i>	<i>none detected</i>		
<i>Benzene</i>	<i>16000</i>		
<i>Toluene</i>	<i>20000</i>		
<i>ethyl-benzene</i>	<i>630</i>		
<i>p-xylene</i>	<i>1200</i>		
<i>m-xylene</i>	<i>3800</i>		
<i>o-xylene</i>	<i>1300</i>		
		* DETECTION LIMIT	<i>10 ug/ml</i>

REMARKS: *Six other compounds also detected by aromatic screen that were not identified.*

CERTIFICATE OF ANALYTICAL PERSONNEL

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

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

Date(s) of analysis: *19 Sept 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) 841-2555

AT FW

GENERAL WATER CHEMISTRY
and NITROGEN ANALYSIS

DATE RECEIVED	9/18/85	LAB NO.	WC-4449	USER CODE	☐ 59300 ☐ 59600 ☒ OTHER: 82235
Collection DATE	8/10/85	SITE INFORMATION	Sample location		
Collection TIME	15.05		Mexana Oil Co, Mary Wheeler well		
Collected by — Person/Agency		Collection site description			
Boyer / DCB		Gas well at Flora Vista, Sample from produced water, separator, 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)	—	Conductivity (Uncorrected) μ mho	Water Temp. (00010) $^{\circ}$ C	Conductivity at 25 $^{\circ}$ C (00094) μ mho
Field comments		Pit nearly full, separator dumps frequently Thin layer of oil on surface		

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: 2 ml H ₂ SO ₄ /L added
☒ NA: No acid added ☐ Other-specify:				

ANALYTICAL RESULTS from SAMPLES

F, NA	Units	Date analyzed	F, NA	Units	Date analyzed
☒ Conductivity (Corrected) 25 $^{\circ}$ C (00095)	40,000 μ mho	10/10	☒ Calcium (00915)	236.0 mg/l	11/4
☐ Total non-filterable residue (suspended) (00530)			☒ Magnesium (00925)	80.5 mg/l	11/4
☒ Other: pH	7.6	12/2	☒ Sodium (00930)	11523.0 mg/l	11/4
☐ Other:			☒ Potassium (00935)	85.0 mg/l	11/4
☐ Other:			☒ Bicarbonate (00440)	888.3 mg/l	12/2
			☒ Chloride (00940)	19381 mg/l	10/23
			☒ Sulfate (00945)	3248 mg/l	10/31
			☒ Total filterable residue (dissolved) (70300)	34755 mg/l	11/19
			☒ Other: CO ₃	0.0	12/2
			☒ F	0.51	10/25
NF, A-H ₂ SO ₄			F, A-H ₂ SO ₄		
☐ Nitrate-N +, Nitrate-N total (00630)	mg/l		☐ Nitrate-N +, Nitrate-N dissolved (00631)	mg/l	
☐ Ammonia-N total (00610)	mg/l		☐ Ammonia-N dissolved (00608)	mg/l	
☐ Total Kjeldahl-N ()	mg/l		☐ Total Kjeldahl-N ()	mg/l	
☐ Chemical oxygen demand (00340)	mg/l		☐ Other:		
☐ Total organic carbon ()	mg/l				
☐ Other:					
☐ Other:					
Laboratory remarks			Analyst: [Signature] Date Reported: 11/26/85 Reviewed by: [Signature]		



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

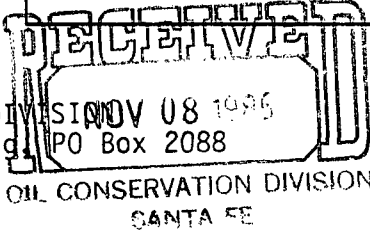
PF

GENERAL WATER CHEMISTRY and NITROGEN ANALYSIS

DATE RECEIVED	9/18/85	LAB NO.	WC-4654	USER CODE	☐ 59300 ☐ 59600 ☒ OTHER: 82235
Collection DATE	85/09/12	SITE INFORMATION	Sample location		
Collection TIME	10:00		Mariana Oil Co, Mary Wheeler well		
Collected by		Collection site description			
Person/Agency		Gas well at Flora Vista, Sample from produced water separator pit			

SEND
FINAL
REPORT
TO

ENVIRONMENTAL BUREAU
NM OIL CONSERVATION DIVISION
State Land Office Bldg.
Santa Fe, NM 87501



Attn: David Boyer

SAMPLING CONDITIONS

☐ Bailed ☒ Dipped	☐ Pump ☐ Tap	Water level	Discharge	Sample type
pH (00400)	Conductivity (Uncorrected)	Water Temp. (00010)	Conductivity at 25°C (00094)	
—	26500 µmho	23.5 °C	— µmho	Grab
Field comments				
Pit nearly full, separator dumps frequently Thin layer of oil on surface				

SAMPLE FIELD TREATMENT — Check proper boxes

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

ANALYTICAL RESULTS from SAMPLES

NF, NA	Units	Date analyzed	F, NA	Units	Date analyzed
☐ Conductivity (Corrected) 25°C (00095)	µmho		☐ Calcium (00915)	mg/l	
☐ Total non-filterable residue (suspended) (00530)	mg/l		☐ Magnesium (00925)	mg/l	
☐ Other:			☐ Sodium (00930)	mg/l	
☐ Other:			☐ Potassium (00935)	mg/l	
☐ Other:			☐ Bicarbonate (00440)	mg/l	
			☐ Chloride (00940)	mg/l	
			☐ Sulfate (00945)	mg/l	
			☐ Total filterable residue (dissolved) (70300)	mg/l	
			☐ Other:		
NF, A-H 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	20.04 10/28
☐ Ammonia-N total (00610)	mg/l		☒ Ammonia-N dissolved (00608)	mg/l	15.7 10/17
☐ Total Kjeldahl-N ()	mg/l		☒ Total Kjeldahl-N ()	mg/l	17.7 9/25
☐ Chemical oxygen demand (00340)	mg/l		☐ Other:		
☐ Total organic carbon ()	mg/l				
☐ Other:					
☐ Other:					
Laboratory remarks			Analyst	Date Reported	Reviewed by
				10/28/85	Clean



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

PF

Heavy Metal - Acid, Slick

GENERAL WATER CHEMISTRY
and NITROGEN ANALYSIS

DATE RECEIVED	9/18/85	LAB NO.	HM-1681	USER CODE	☐ 59300 ☐ 59600 ☒ OTHER: 82235
Collection DATE	85/09/12	SITE INFORMATION	Sample location		
Collection TIME	1500		Mahana Oil Co. Mary Wheelerwell		
Collected by		Person/Agency			
Boyer/DOE		Collection site description			
		Crag well at Flora Vista, Sample from produced water separator 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

Sample filtered by acs

☐ Bailed ☒ Dipped	☐ Pump ☐ Tap	Water level	Discharge	Sample type
				Grab
pH (00400)		Conductivity (Uncorrected) μ mho	Water Temp. (00010) $^{\circ}$ C	Conductivity at 25 $^{\circ}$ C (00094) μ mho
		26500	23.5	
Field comments				
Pit nearly full, separator dumps frequently Thin layer of oil on surface				

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: 2 ml H ₂ SO ₄ /L added	5 ml HNO ₃
☐ NA: No acid added ☐ Other-specify:					

ANALYTICAL RESULTS from SAMPLES

F, A HNO ₃	Units	Date analyzed	F, NA	Units	Date analyzed
☐ Conductivity (Corrected) 25 $^{\circ}$ C (00095)	μ mho		☐ Calcium (00915)	mg/l	
☐ Total non-filterable residue (suspended) (00530)	mg/l		☐ Magnesium (00925)	mg/l	
☒ Other: 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:					
Laboratory remarks			Analyst	Date Reported	Reviewed by
				9/23/81	J. F. Ashby

ICAP - SCREEN

Lab Number: HM 1681Date Submitted: 9/18/85By: BoyerSample Code: Mary Wheeler WellDate Reported: 9/23/85By: Jim AshbyDate analyzed: 9/23/85

<u>Determination</u>	<u>Concentration (µg/ml)</u>
Aluminum	<u><0.1</u>
Barium	<u><0.1</u>
Beryllium	<u><0.1</u>
Boron	<u>1.6</u>
Cadmium	<u><0.1</u>
Calcium	<u>220.</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>65.</u>
Manganese	<u>0.2</u>
Molybdenum	<u><0.1</u>
Nickel	<u><0.1</u>
Silicon	<u>11.</u>
Silver	<u><0.1</u>
Strontium	<u>21.</u>
Tin	<u><0.1</u>
Vanadium	<u><0.1</u>
Yttrium	<u><0.1</u>
Zinc	<u><0.1</u>

* Very high Sodium present.



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

PH
PH

Heavy Metal - No Acid
GENERAL WATER CHEMISTRY
and NITROGEN ANALYSIS

DATE RECEIVED	9/18/85	LAB NO.	HM-1684	USER CODE	☐ 59300 ☐ 59600 ☒ OTHER: 82235
Collection DATE	85/09/12	SITE INFORMATION	Sample location	Mahana Oil Co, Mary Wheeler well	
Collection TIME	1505			Collection site description	
Collected by — Person/Agency			Cra well at Flora Vista, Sample from produced water separator pit		
Boyer/DCB					

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

Sample not filtered by DCB

☐ Bailed ☒ Dipped	☐ Pump ☐ Tap	Water level	Discharge	Sample type
pH (00400)	Conductivity (Uncorrected)	Water Temp. (00010)	Conductivity at 25°C (00094)	
—	26500 μ mho	23.5 °C	— μ mho	Grab
Field comments				
Pit nearly full, separator dumps frequently Thin layer of oil on surface				

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: ICA SCAN			☐ Sodium (00930)	mg/l	
☐ Other:			☐ Potassium (00935)	mg/l	
☐ Other:			☐ Bicarbonate (00440)	mg/l	
☐ Other:			☐ Chloride (00940)	mg/l	
			☐ Sulfate (00945)	mg/l	
			☐ Total filterable residue (dissolved) (70300)	mg/l	
			☐ Other:		
NF, A-H ₂ SO ₄			F, A-H ₂ SO ₄		
☐ Nitrate-N +, Nitrate-N total (00630)	mg/l		☐ Nitrate-N +, Nitrate-N dissolved (00631)	mg/l	
☐ Ammonia-N total (00610)	mg/l		☐ Ammonia-N dissolved (00608)	mg/l	
☐ Total Kjeldahl-N ()	mg/l		☐ Total Kjeldahl-N ()	mg/l	
☐ Chemical oxygen demand (00340)	mg/l		☐ Other:		
☐ Total organic carbon ()	mg/l				
☐ Other:			Analyst	Date Reported	Reviewed by
☐ Other:				10/22/85	Jim Ashby
Laboratory remarks					
Sample digested.					

ICAP SCREEN

Lab Number: HM 1684Date Submitted: 9/18/85By: BoyerSample Code: Monona Oil Co. May WharDate Reported: 10/22/85By: Jim BallyDate Analyzed: 10/21/85DeterminationConcentration (µg/ml)

Aluminum	<u><0.1</u>
Barium	<u><0.1</u>
Beryllium	<u><0.1</u>
Boron	<u>1.6</u>
Cadmium	<u><0.1</u>
Calcium	<u>210.</u>
Chromium	<u><0.1</u>
Cobalt	<u><0.1</u>
Copper	<u><0.1</u>
Iron	<u>3.9</u>
Lead	<u><0.1</u>
Magnesium	<u>64.</u>
Manganese	<u>0.16</u>
Molybdenum	<u><0.1</u>
Nickel	<u><0.1</u>
Silicon	<u>7.9</u>
Silver	<u><0.1</u>
Strontium	<u>20.</u>
Tin	<u><0.1</u>
Vanadium	<u><0.1</u>
Yttrium	<u><0.1</u>
Zinc	<u><0.1</u>

ATOMIC ABSORPTION ANALYSES

DeterminationConcentration (µg/ml)

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

* Hi Sodium in Samples



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION

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

86- 0503-C

REPORT TO:
PLEASE PRINT

DAVID G. BOYER

NEW MEXICO OIL CONSERVATION DIV.

P.O. BOX 2088

SANTA FE, NM 87504-2088

S.L.D. No.: OR- 503-H.BDATE REC.: 4/28/86

SLD PRIORITY #: _____

PHONE(S): 827-5812

USER CODE: 8 2 2 3 5SUBMITTER: DAVID BOYERSUBMITTER CODE: SAMPLE TYPE: WATER ☒ , SOIL ☐ , OTHER _____SAMPLE TYPE CODE: COLLECTED: 4/23/86 - 13 : 55 BY DB
DATE TIME INITIALSCODE: 8 6 0 4 2 3 1 3 5 5 9 3
Y Y M M D D H H M M I I ISOURCE: MANANA TANK DRAINCODE: + +
AQUIFER DEPTHNEAREST CITY: FLORA VISTACODE: LOCATION: MARY WHEELERCODE:
TOWNSHIP RANGE SECTION TRACTS

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

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

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

Water drain from oil tank - oil and produced waterI certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Ami RodriguezMethod of shipment to the Laboratory Hand CarriedThis 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 David Boyer to J.F. at (location) SLD on _____

_____/_____/_____: _____ and that the statements in this block are correct.

Evidentiary Seals: Not Sealed ☐ Seals Intact: Yes ☒ No ☐Signatures Ami Rodriguez David Boyer

(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- 503

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

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

REMARKS:

ANALYTICAL RESULTS

COMPOUND	[PPB]	COMPOUND	[PPB]
<i>aromatic hydrocarbons *</i>		<i>halogenated hydrocarbons * none detected</i>	
<i>benzene</i>	<i>550</i>		
<i>toluene</i>	<i>120</i>		
<i>ethylbenzene</i>	<i>45</i>		
<i>p-xylene</i>	<i>120</i>		
<i>m-xylene</i>	<i>540</i>		
<i>o-xylene</i>	<i>145</i>		
		* DETECTION LIMIT	<i>1</i>

REMARKS:

teflon septum was inverted. Rubber part was in contact with the sample.

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes ☒ NO ☐ . Seal(s) broken by: *Mary C. Eden* date: *5/21/86*
 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: *5/21/86* . Analyst's signature: *Mary C. Eden*
 I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewers signature: *R. Mayenher*



STATE OF NEW MEXICO

86-0583-C

SCIENTIFIC LABORATORY DIVISION

700 Camino de Salud NE
Albuquerque, NM 87106 841-2570REPORT TO:
PLEASE PRINT

DAVID G. BOYER

NEW MEXICO OIL CONSERVATION DIV.

P.O. BOX 2088

SANTA FE, NM 87504-2088

PHONE(S):

827-5812

S.L.D. No.:

OR- 583-17-B

DATE REC.:

3/22/86

SLD PRIORITY #:

SUBMITTER:

DAVID BOYER

SUBMITTER CODE:

SAMPLE TYPE: WATER ☒ , SOIL ☐ , OTHER ☐

SAMPLE TYPE CODE:

COLLECTED:

5/21/86 - 13:00

BY RA

CODE:

8605211300RA

SOURCE:

TANK DRAIN PIT

CODE:

+ + + + +

NEAREST CITY:

FLORA VISTA

CODE:

LOCATION:

MARY WHEELER LE

CODE:

30N10W43332

pH=

9.2

Conductivity= 5000 umho/cm at

27 °C

Chlorine Residual=

Dissolved Oxygen=

mg/l

Alkalinity=

Flow Rate=

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

DIPPED GRAB SAMPLE FROM TANK (This is drained from oil storage tank. DGB)

I certify that the statements in this block accurately reflect the results of my field analyses, observations and activities. Dominic BoyleMethod of shipment to the Laboratory Hand carriedThis 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 Doris Boyerto TAF at (location) SLA on

____/____/____:____ and that the statements in this block are correct.

Evidentiary Seals: Not Sealed ☐ Seals Intact: Yes ☒ No ☐Signatures JD Juiney Doris Boyer

(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- 583

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

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

REMARKS:

ANALYTICAL RESULTS

COMPOUND	[PPB]	COMPOUND	[PPB]
<i>halogenated purgables</i>	<i>none detected</i>		
<i>benzene</i>	<i>150</i>		
<i>toluene</i>	<i>500</i>		
<i>ethylbenzene</i>	<i>11</i>		
<i>p-xylene</i>	<i>120</i>		
<i>m-xylene</i>	<i>640</i>		
<i>o-xylene</i>	<i>180</i>		
		* DETECTION LIMIT	<i>5 ug/ml</i>

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

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes ☒ NO ☐ . Seal(s) broken by: *JE* date: *10 Jun 86*
 I certify that I followed standard laboratory procedures on handling and analysis of this sample unless otherwise noted and that the statements in this block and the analytical data on this page accurately reflect the analytical results for this sample.
 Date(s) of analysis: *6/10 Jun 86* . Analyst's signature: *JE*
 I certify that I have reviewed and concur with the analytical results for this sample and with the statements in this block. Reviewers signature: *R Meyer*

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

7643
SCIENTIFIC LABORATORY DIVISION700 Camino de Salud NE
Albuquerque, NM 87106 841-2570

86- 0600-B

JUL 22 1986

REPORT TO: DAVID G. BOYER
PLEASE PRINT
NEW MEXICO OIL CONSERVATION DIV.
P.O. BOX 2088
SANTA FE, NM 87504-2088S.L.D. No.: OR- 600-14
DATE REC.: 5/22/86
SLD PRIORITY #:

PHONE(S): 827-5812

USER CODE: 8 2 2 3 5

SUBMITTER: David G. Boyer

SUBMITTER CODE: | | | |

SAMPLE TYPE: WATER ☐, SOIL ☐, OTHER

SAMPLE TYPE CODE: | | |

COLLECTED: 86/05/21-13:00 BY DGB/JR
DATE TIME INITIALSCODE: | | | | | | | | | | | | | |
Y Y M M D D H H M M I I I

SOURCE: Manana Tank Drain Pit

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

NEAREST CITY: Flora Vista

CODE: | | | | | | | |

LOCATION:

CODE: | | | | | | | | | | | | | |
TOWNSHIP RANGE SECTION TRACTSpH= 7.2; Conductivity= 5,000⁺ umho/cm at °C; Chlorine Residual=

Dissolved Oxygen= mg/l; Alkalinity= 27; Flow Rate=

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

Dipped Grab Sample from Tank, Oil & Water in Tank,
(This fluid from oil storage tank. DGB)

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

Method of shipment to the Laboratory Hand Carried

This form accompanies Septum Vials, 1 Glass Jugs,
Containers are marked as follows to indicate preservation:

- ☐
- NP: No preservation; sample stored at room temperature.
-
- ☒
- P-Ice Sample stored in an ice bath (not frozen).
-
- ☐
- P-Na
- ₂
- S
- ₂
- O
- ₃
- ; Sample preserved with Na
- ₂
- S
- ₂
- O
- ₃
- to remove chlorine residual.

I (we) certify that this sample was transferred from DGB to JAF at (location) SLD on

86/05/22-11:00 and that the statements in this block are correct.

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

Signatures J. J. Finney DGB

(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

LAB. No.: ORG- 490

THE TYPE OF ANALYTICAL SCREENS

SPECIFIC COMPOUNDS

Naphthalene, Benzopyrene

ANALYTICAL RESULTS

* DETECTION LIMIT

* Maximum - Due to the presence of ALKANE INTERFERENCES CANNOT TELL OUT BENZO(a)PYRENE. HOWEVER DON'T THINK IT IS PRESENT ABOVE 5PPB.

Seal(s) Intact: Yes ☒ NO . Seal(s) broken by: *RBH* date: *6/23/86*

Date(s) of analysis: 7/9/86. Analyst's signature: [Signature]
I certify that I have reviewed and concur with the analytical results for this sample and
with the statements in this block. Reviewers signature: [Signature]

86- 0230-C

STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION

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

ENVIRONMENT

REPORT TO: DAVID BOYER
PLEASE PRINT NM OIL CONSERVATION DIVISION
STATE LAND OFFICE B.O.G. PO BOX 2088
SANTA FE, NM 87504-2088

S.L.D. No.: OR- 230 A, B
DATE REC.: 3/4/86

SLD Prior #3

PHONE(S): 827-5812USER CODE: 82235SUBMITTER: DAVID BOYERSUBMITTER CODE: SAMPLE TYPE: WATER ☒, SOIL ☐, OTHER SAMPLE TYPE CODE: COLLECTED: 2/28/86 - 13:05 BY JBCODE: 8602281305SOURCE: DEHYDRATOR BARREL - EPNGCODE: NEAREST CITY: FLORA VISTACODE: LOCATION: MANANA MARY WHEELER 1ECODE: pH= 5.5; Conductivity= 81 umho/cm at 17 °C; Chlorine Residual= Dissolved Oxygen= mg/l; Alkalinity= ; Flow Rate=

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

Dipped from 55 gal barrel containing 45 gal fluid. Barrel emptied 2 weeks ago. No rain or snow since.
Witnessed by Gae Sandoval - EPNG

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- $\text{Na}_2\text{S}_2\text{O}_3$; 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 OCG to R Meyerheim at (location) 5240 on

3/4/86 - 15:12 and that the statements in this block are correct.

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

Signatures James Bailey R Meyerheim

(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- 230

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

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

REMARKS:

ANALYTICAL RESULTS

COMPOUND	[PPB] PPM	COMPOUND	[PPB]
Headspace *		Aromatic Hydrocarbons **	
Methane	207	Benzene	550
Ethane	74	Toluene	350
Propane	29	Ethyl benzene	2
Isobutane	16	p-xylene	1800
Butane	13	o-xylene	499
Isopentane	26	** Detection Limit	2
Pentane	49		
REMARKS:		* DETECTION LIMIT Methane 20.3 ppb	
		Halogenated Hydrocarbons ***	
		Dibromochloromethane	4
		Bromoform	2
		Detection Limit	1

CERTIFICATE OF ANALYTICAL PERSONNEL

Seal(s) Intact: Yes ☒ NO ☐. Seal(s) broken by: C.S. Burney date: 3/5/86

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: 3/6/86, 4/4/86. Analyst's signature: C.S. Burney, Mary Eden

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



PN

Heavy Metal

GENERAL WATER CHEMISTRY
a NITROGEN ANALYSIS

DATE RECEIVED	3/5/86	LAB NO.	HM 461	USER CODE	☐ 59300 ☐ 59600 ☒ OTHER: 82235
Collection DATE	2/28/86	SITE INFORMATION	Sample location		
Collection TIME	1305		MANANA MARY WHEELER IE		
Collected by — Person/Agency		Collection site description			
BAILEY/OCG SANDOVAL/EPNG		EPNG DEHYDRATOR DISCHARGE BARREL			

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

SEND
FINAL
REPORT
TO

Attn: David Boyer

SAMPLING CONDITIONS

☐ Bailed ☒ Dipped	☐ Pump ☐ Tap	Water level	Discharge	Sample type			
pH (00400)	5.5	Conductivity (Uncorrected)	81 μ mho	Water Temp. (00010)	17 °C	Conductivity at 25 °C (00094)	μ mho
Field comments							
Dipped from 55 gal. barrel containing < 5 gal fluid. Witnessed by Sgo Sandoval - EPNG barrel emptied 2 weeks ago; no rain or snow since.							

SAMPLE FIELD TREATMENT — Check proper boxes

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

ANALYTICAL RESULTS from SAMPLES

NF, NA	Units	Date analyzed	F, NA	Units	Date analyzed
☒ Conductivity (Corrected) 25 °C (00095)	μ mho		☐ Calcium (00915)	mg/l	
☐ Total non-filterable residue (suspended) (00530)	mg/l		☐ Magnesium (00925)	mg/l	
☒ Other: ICAP SCAN		3/20/86	☐ Sodium (00930)	mg/l	
☒ Other: AS	< 0.005	4/9/86	☐ Potassium (00935)	mg/l	
☒ Other: Hg	< 0.005	3/25/86	☐ 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		Analyst		
☐ Other:			Date Reported		
☐ Other:			Reviewed by		

Laboratory remarks	Seal intact. Broken by JFA 3/6/86. 2.5 ml HNO ₃ added @ Lab. JFA Sample Digested.
--------------------	--

Lab Number: HM 461

Date Submitted: 3/5/86

By: Bailey

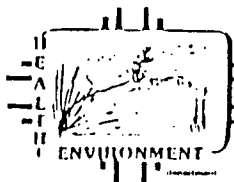
Sample de: Manana Mary Wheeler

Date Analyzed: 3/20/86

Reviewed By: Jim Ashley

Date Reported: 4/18/86

Element	ICAP VALUE (MG/L)	AA VALUE (MG/L)
Aluminum	<u><0.1</u>	<u> </u>
Barium	<u><0.1</u>	<u> </u>
Beryllium	<u><0.1</u>	<u> </u>
Boron	<u><0.1</u>	<u> </u>
Cadmium	<u><0.1</u>	<u> </u>
Calcium	<u>8.6</u>	<u> </u>
Chromium	<u><0.1</u>	<u> </u>
Cobalt	<u><0.1</u>	<u> </u>
Copper	<u><0.1</u>	<u> </u>
Iron	<u>16.</u>	<u> </u>
Lead	<u><0.1</u>	<u> </u>
Magnesium	<u>0.2</u>	<u> </u>
Manganese	<u>0.65</u>	<u> </u>
Molybdenum	<u><0.1</u>	<u> </u>
Nickel	<u><0.1</u>	<u> </u>
Silicon	<u><0.1</u>	<u> </u>
Silver	<u><0.1</u>	<u> </u>
Strontium	<u><0.1</u>	<u> </u>
Tin	<u>0.2</u>	<u> </u>
Vanadium	<u><0.1</u>	<u> </u>
Zinc	<u><0.1</u>	<u> </u>
Arsenic		<u><0.005</u>
Selenium		<u> </u>
Mercury		<u><0.0005</u>



STATE OF NEW MEXICO

SCIENTIFIC LABORATORY DIVISION

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

86-53-C

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-53-14-B
DATE REC.: 1-27-86
SLD PRIORITY #: 3

PHONE(S): 827-5812

USER CODE: 8 2 2 3 5

SUBMITTER: DAVID BOYER

SUBMITTER CODE: [] [] [] [] []

SAMPLE TYPE: WATER ☒, SOIL ☐, OTHER ☐

SAMPLE TYPE CODE: [] [] []

COLLECTED: 86/01/17-19:15 BY AGB
DATE TIME INITIALSCODE: [] [] [] [] [] [] [] [] [] [] [] []
Y Y M M D D H H M M I I I

SOURCE: Dehydrator Barrel

CODE: [] [] [] [] [] [] [] [] [] [] [] []
AQUIFER DEPTH

NEAREST CITY: Flora Vista

CODE: [] [] [] [] [] []

LOCATION: El Paso Natural Gas Dehydrator

CODE: [] [] [] [] [] [] [] [] [] [] [] []
TOWNSHIP RANGE SECTION TRACTS

pH= ; Conductivity= umho/cm at °C; Chlorine Residual=

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

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

Sampled dipped with clean Mason jar from 55 gallon
drum located at Mary Wheeler 1E Gas well
in Municipal well field

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

Method of shipment to the Laboratory Hand Carried - J. Bailey

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- $\text{Na}_2\text{S}_2\text{O}_3$; 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 _____

_____/_____/_____-_____: 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- 53

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 Space Test			ORGANOPHOSPHATE PESTICIDES
					POLYCHLORINATED BIPHENYLS (PCB's)
					POLYNUCLEAR AROMATIC HYDROCARBONS
					TRIAZINE HERBICIDES
		SPECIFIC COMPOUNDS			SPECIFIC COMPOUNDS

REMARKS:

ANALYTICAL RESULTS

COMPOUND	[PPB]	COMPOUND	[PPB]
Methane in headspace	0.5%	Benzene	14000
Ethane in "	0.05%	Toluene	37000
Propane in "	0.06%	ethylbenzene	1200
Isobutane in "	0.02%	p-xylene	3000
Butane in "	0.04%	m-xylene	11000
		o-xylene	4100
halo. purg. screen	no data	* DETECTION LIMIT	200 ppb
		* DETECTION LIMIT (Methane)	2 ppm

REMARKS:

CERTIFICATE OF ANALYTICAL PERSONNEL

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

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

Date(s) of analysis: 2/4/86 4:10 PM. 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]