

HIP - 36

GENERAL CORRESPONDENCE

YEAR(S):
1993 - 1989

MERIDIAN OIL

RECEIVED

June 24, 1993

JUN 25 1993

State of New Mexico
Oil Conservation Division
P.O. Box 2088
Land Office Building
Santa Fe, NM 87504-2088

OIL CONSERVATION DIV.
SANTA FE

ATTN: Mr Roger C Anderson
Environmental Engineer

Dear Mr. Anderson:

Meridian Oil Gathering, Inc. is planning to hydrostatic test its Trunk MB 20" Loop north of it's Pump Canyon Compressor Station. The line is presently under construction. The lands is owned by the US. Government and managed by the BLM.

Trunk MB 20" Loop is constructed of 20 inch steel pipe, 8,944 feet long. The line will be tested in one closed loop. The amount of water required is 3,619 barrels of water. The test will be conducted at 90% of the specified minimum yield strength. Duration of the test will be 8 hours.

The water used in the test will be taken from storage tanks a salt water disposal well. Upon completion of the test, the water will be returned to one of Meridian's salt water disposal wells. A typical water analysis is attached for your information.

If you have any questions, please call me at (505) 326-9843.

Sincerely,

Loren W Fothergill
Loren W. Fothergill
Senior Staff Engineer

*Reviewed and
OK'd
6/24/93*

151,998
gallons

STRICKCO
Water Analysis Laboratories
 FARMINGTON, NEW MEXICO 87401

File WA/0437/91

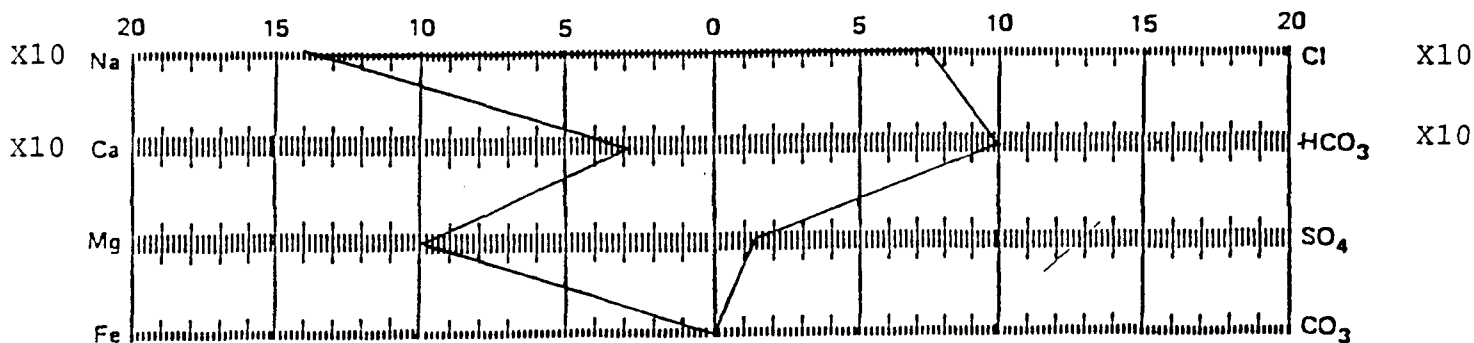
Company MERIDIAN OIL INC. Well Name Nordhaus #711 Sample No. One
 Formation Fruitland Coal Depth N/A Sampled From Produced
 Location SW 1/4 01-31N-9W Field Basin Fruitland County San Juan State N.M.
 Date Sampled 4/29/91 Date Analyzed 5/1/91 Engineer WDS

Total Dissolved Solids 12,573 mg/L CalculatedSp. Gr. 1.011 @ 64 °F.Resistivity 0.78 ohm-meters @ 64 °F. MeasuredpH 7.92 @ 64 °F. Measured

Constituents	meq/L	mg/L
Sodium	<u>136.5</u>	<u>3,138</u>
Calcium	<u>27.9</u>	<u>560</u>
Magnesium	<u>10.0</u>	<u>122</u>
Iron	<u>-0-</u>	<u>-0-</u>
Hydrogen Sulfide	<u>Absent</u>	

Constituents	meq/L	mg/L
Chloride	<u>73.1</u>	<u>2,591</u>
Bicarbonate	<u>100.0</u>	<u>6,100</u>
Sulfate	<u>1.3</u>	<u>62</u> (Grav.)
Carbonate	<u>-0-</u>	<u>-0-</u>
Hydroxide	<u>-0-</u>	<u>-0-</u>

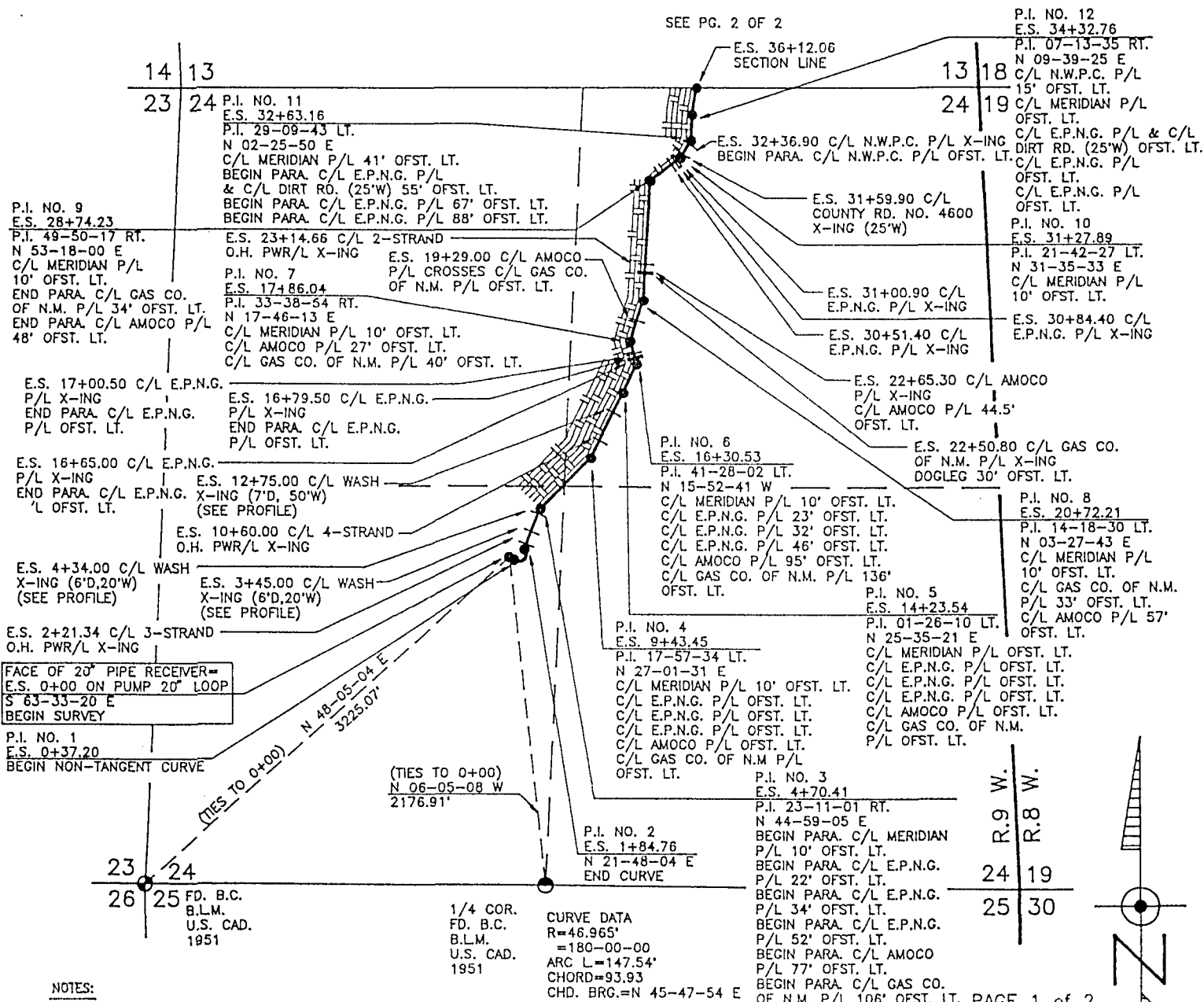
Scale: meq/L



All analyses except iron determination performed on a filtered sample.

A SURVEY FOR
MERIDIAN OIL, INC.
GAS PIPELINE
PUMP 20" LOOP

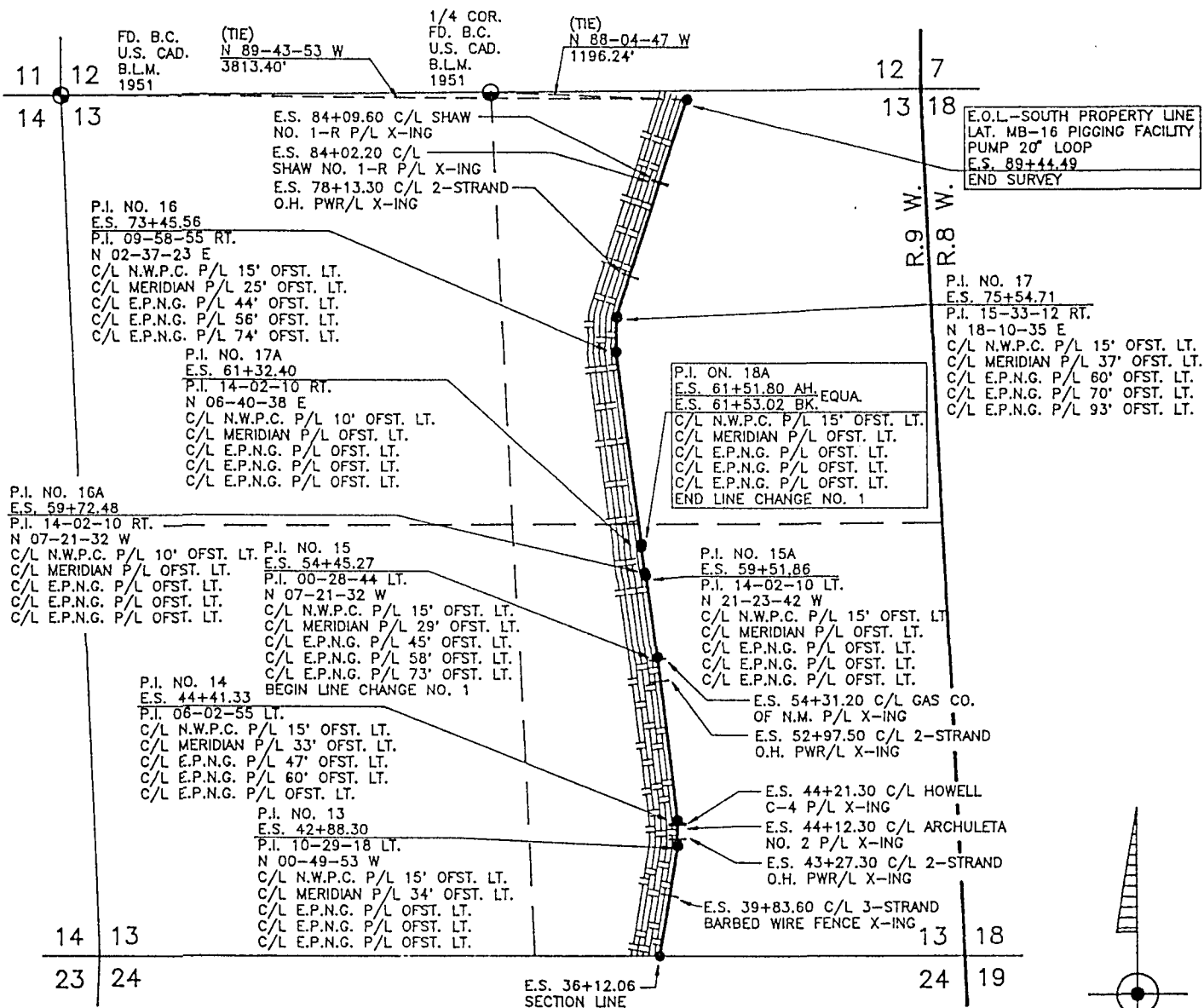
W/2 AND THE NE/4 SEC.24, T.30 N., R.9 W., N.M.P.M.,
SAN JUAN COUNTY, NEW MEXICO



I, ROY A. RUSH, A DULY QUALIFIED LAND SURVEYOR, LICENSED UNDER THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THIS PLAT CORRECTLY REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECT SUPERVISION AND THAT THIS SURVEY MEETS THE AMENDED MINIMUM STANDARDS FOR LAND SURVEYS IN NEW MEXICO.

DAGGETT SURVEYING, INC.
P.O. BOX NO.2789
FARMINGTON, NEW MEXICO 87401
(505) 326-1772
REGISTERED LAND SURVEYOR
NEW MEXICO No.8894

A SURVEY FOR
MERIDIAN OIL, INC.
GAS PIPELINE
PUMP 20" LOOP
 E/2 SEC.13, T.30 N., R.9 W., N.M.P.M.,
 SAN JUAN COUNTY, NEW MEXICO



SEE PG. 1 OF 2

NOTES:

1.) BASIS OF BEARING: RECORD GLO BEARING AS MEASURED BETWEEN THE NORTHWEST CORNER OF SECTION 13 AND THE SOUTHWEST CORNER OF SECTION 24, T.30 N., R.9 W., N.M.P.M., SAN JUAN COUNTY, NEW MEXICO.
 BEARS: S 00-10-01 W

2.) O = CAPPED IRON PIN SET AT REFERENCE POINTS.

OWNER	STATION	FT./RODS
B.L.M.	36+12.06 to 89+44.49	5333.65/323.25



„ ROY A. RUSH, A DULY QUALIFIED LAND SURVEYOR, LICENSED UNDER THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THIS PLAT CORRECTLY REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECT SUPERVISION AND THAT THIS SURVEY MEETS THE AMENDED MINIMUM STANDARDS FOR LAND SURVEYS IN NEW MEXICO.

PAGE 2 of 2

0 500 1000
 SCALE: 1"=1000'

REVISION REV. BY DATE
DAGGETT SURVEYING, INC.
 P.O. BOX NO.2789
 FARMINGTON, NEW MEXICO 87401
 (505) 326-1772
 REGISTERED LAND SURVEYOR
 NEW MEXICO No.8894

MERIDIAN OIL

CONSERVATION DIVISION
RECEIVED
'90 SEP 17 AM 9 49

September 13, 1990

State of New Mexico
Oil Conservation Division
P.O. Box 2088
Land Office Building
Santa Fe, NM 87504-2088

ATTN: Mr. Roger C. Anderson
Environmental Engineer

Dear Mr. Anderson:

Meridian Oil Gathering Inc. is planning to hydrostatic test its Lateral MA-5 Suction line as shown on the attached map. The line is presently under construction. It crosses lands owned by the U.S. and managed by the BLM, as well as lands owned by the State of New Mexico and private individuals. All land owners are aware of this work and have agreed in principal to this testing plan.

Lateral MA-5 is constructed of 21,516 feet of 20 inch O.D. steel pipe.

The pipeline will be tested as a separate closed loop sections. Testing will begin at the east end of Lateral MA-5 using 7,800 bbls. of water. The test will be conducted at 90% of the specified minimum yield strength for the 20 inch pipe. Duration of the test will be 8 hours.

The water used in the tests will be taken from storage tanks at a salt water disposal well. Upon completion of the test the water will be returned to the salt water disposal well. A typical water analysis is attached for your information.

If you have any questions, please contact Gerry Brower at (505)326-9806, or myself at (505)326-9843.

Sincerely,

Loren W. Fothergill
Loren W. Fothergill
Senior Staff Engineer

LWF/dj



Typical Water Analysis

API WATER ANALYSIS REPORT FORM

3/10/89

Company	MERIDIAN OIL COMPANY		Sample No.	Date Sampled	
Field	Legal Description		County or Parish	State	
Lease or Unit	Well	Depth	Formation	Water, B/D	
30-1-11 #39					
Type of Water (Produced, Supply, etc.)	Sampling Point		Sampled By		

DISSOLVED SOLIDS

CATIONS

Sodium, Na (calc.)
Calcium, Ca
Magnesium, Mg
Barium, Ba

mg/l
240.0
3.6
2.4

me/l

OTHER PROPERTIES

pH
Specific Gravity, 60/60 F. 72° F.
Resistivity (ohm-meters) 22.9

7.46
1.012
22.9

Total Dissolved Solids (calc.) 234.0

ANIONS

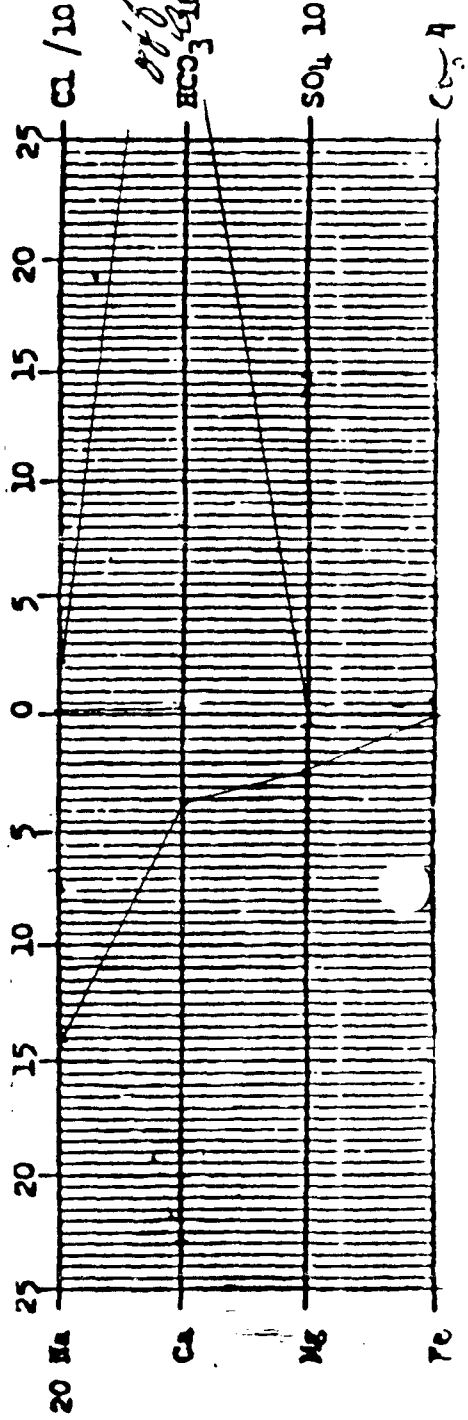
Chloride, Cl
Sulfate, SO₄
Carbonate, CO₃
Bicarbonate, HCO₃

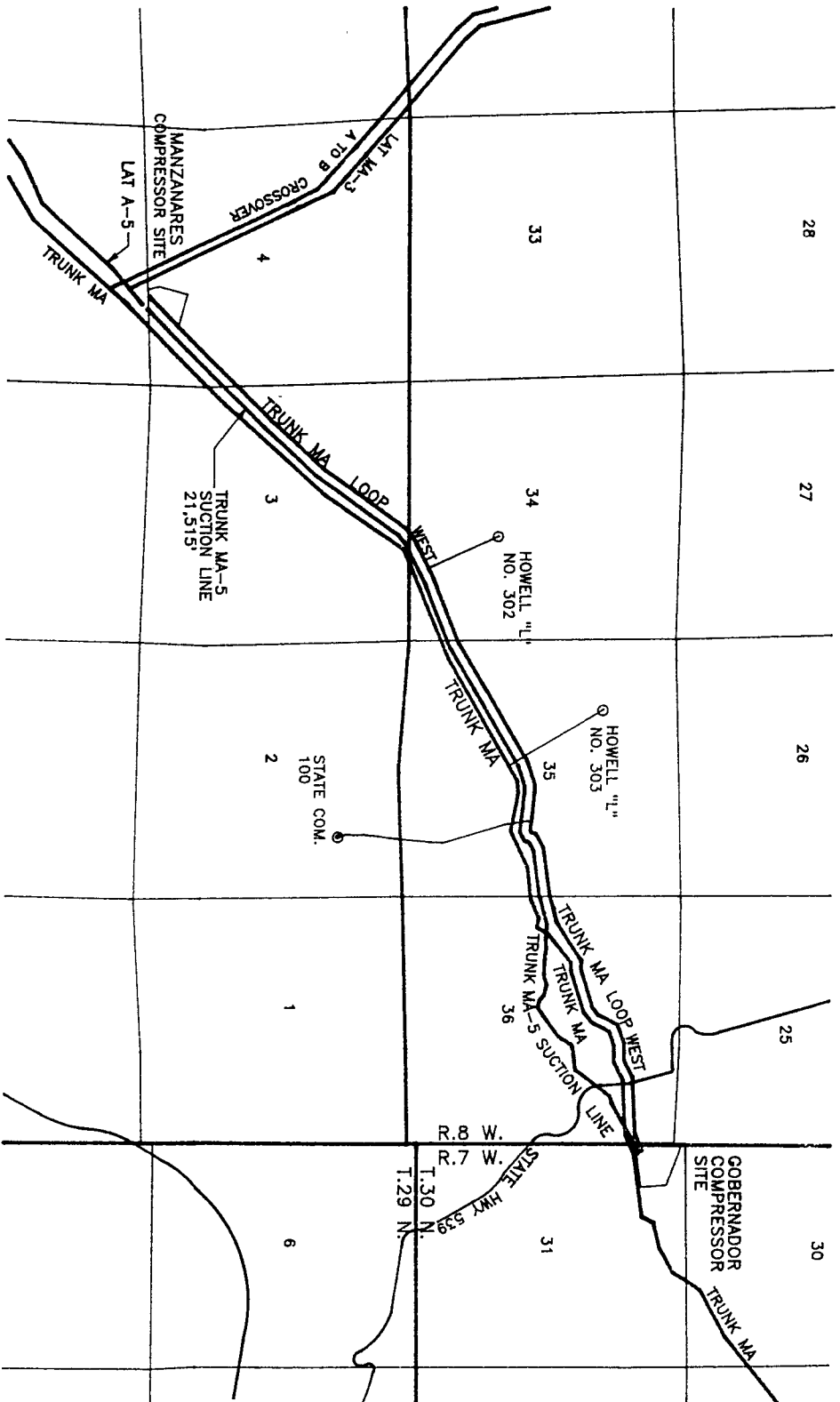
mg/l
781
0
0
1410.4

me/l
2.220
0
0
264.0

Iron, Fe (total)
Sulfide, as H₂S
neg

REMARKS & RECOMMENDATIONS:





**MANZANARES
GATHERING SYSTEM**
MERIDIAN OIL GATHERING, INC.
DAGGETT SURVEYING, INC.

1414 SCHOFIELD LN.
FARMINGTON, NEW MEXICO 87401
(505) 376-1772
REGISTERED LAND SURVEYOR
R. HOWARD DAGGETT NEW MEXICO NO. 9670

MERIDIAN OIL

OIL CONSERVATION DIVISION
October 19, 1989 RECEIVED

'89 OCT 25 AM 9 25

State of New Mexico
Oil Conservation Division
P.O. Box 2088
Land Office Building
Santa Fe, NM 87504-2088

ATTN: Mr. Roger C. Anderson
Environmental Engineer

Dear Mr. Anderson:

Meridian Oil Inc. is planning to hydrostatic test its Trunk MA Loop pipeline, which is shown on the attached map. The line is being constructed presently and crosses lands owned by the U.S. and managed by the BLM, owned by the State of New Mexico and owned by private individuals. All land owners are aware of this work and have agreed in principal to this testing plan.

The trunk line consists of 43,000' of 20" O.D. steel pipe and 18,500' of 6" O.D. steel pipe laying in the same ditch as a portion of the 20" pipe.

The system will be tested as a closed loop system in three sections. Testing will begin at the east end pigging facility and move west using 9,000 Bbls. of water. The water used for testing will be taken from company wells and transported by truck to portable storage tanks located at the east end. This water will be pumped from the tanks into the pipeline following a line scraper. When the first section is full (9,000 Bbls.) it will be pressure tested to 90% of specified minimum yield strength for eight hours.

The water will then be moved forward in the pipeline by placing a trailing scraper behind the water and using compressed air to propel the water. This procedure will be used to move the water to the west end of the pipeline. Each section will be pressure tested to 90% SMYS before the water is moved.

At the completion of the hydrostatic testing of all the pipeline sections the water will be moved into temporary storage tanks and then trucked to the water disposal well #112Y located in the San Juan 30-6 Unit. A typical water analysis is also attached for your information.

If you have any questions, please contact me or Gerry Brower at (505)326-9843.

Sincerely,



Loren W. Fothergill
Senior Staff Engineer

GTB/dj

xc: G.T. Brower
W.L. Arnold

INDIAN WATER TREATMENT

API WATER ANALYSIS REPORT FORM

3/10/89

Company		MERIDIAN OIL COMPANY		Sample No.	Date Sampled	
Field	Legal Description			County or Parish	State	
Lease or Unit	Well	Depth	Formation	Water, B/D		
30-1-24 #39						
Type of Water (Produced, Supply, etc.)			Sampling Point	Sampled By		

DISSOLVED SOLIDS

CATIONS	mg/l	me/l
Sodium, Na (calc)	441.2	280.0
Calcium, Ca	72	3.6
Magnesium, Mg	27	2.4
Barium, Ba		

OTHER PROPERTIES

pH 7.46
 Specific Gravity, 60/60 F. 1.012
 Resistivity (ohm-meters) 257 °F.

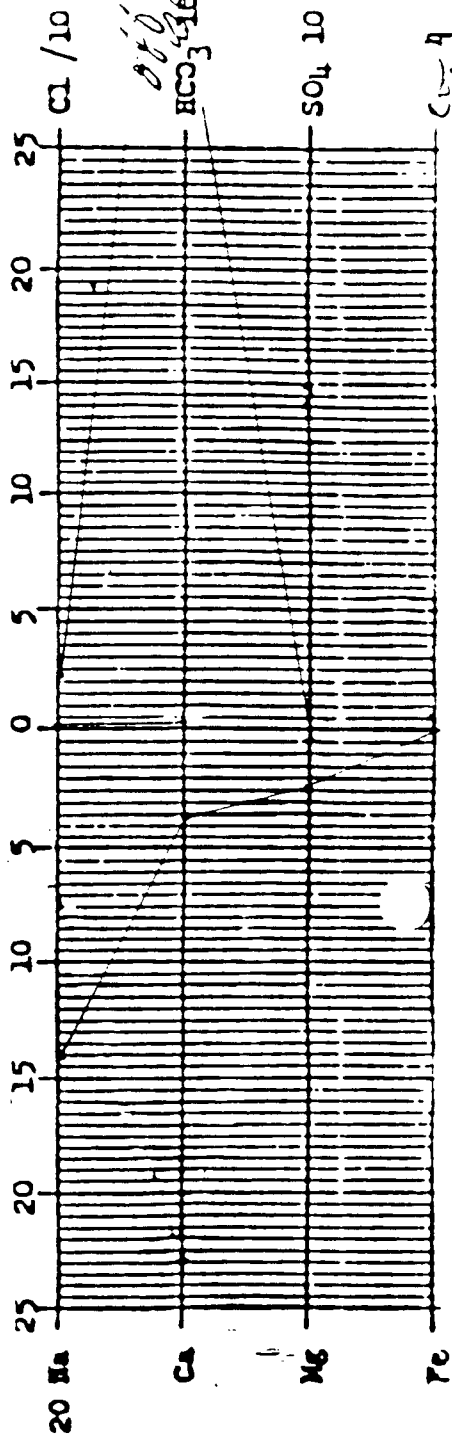
Total Dissolved Solids (calc.) 23400

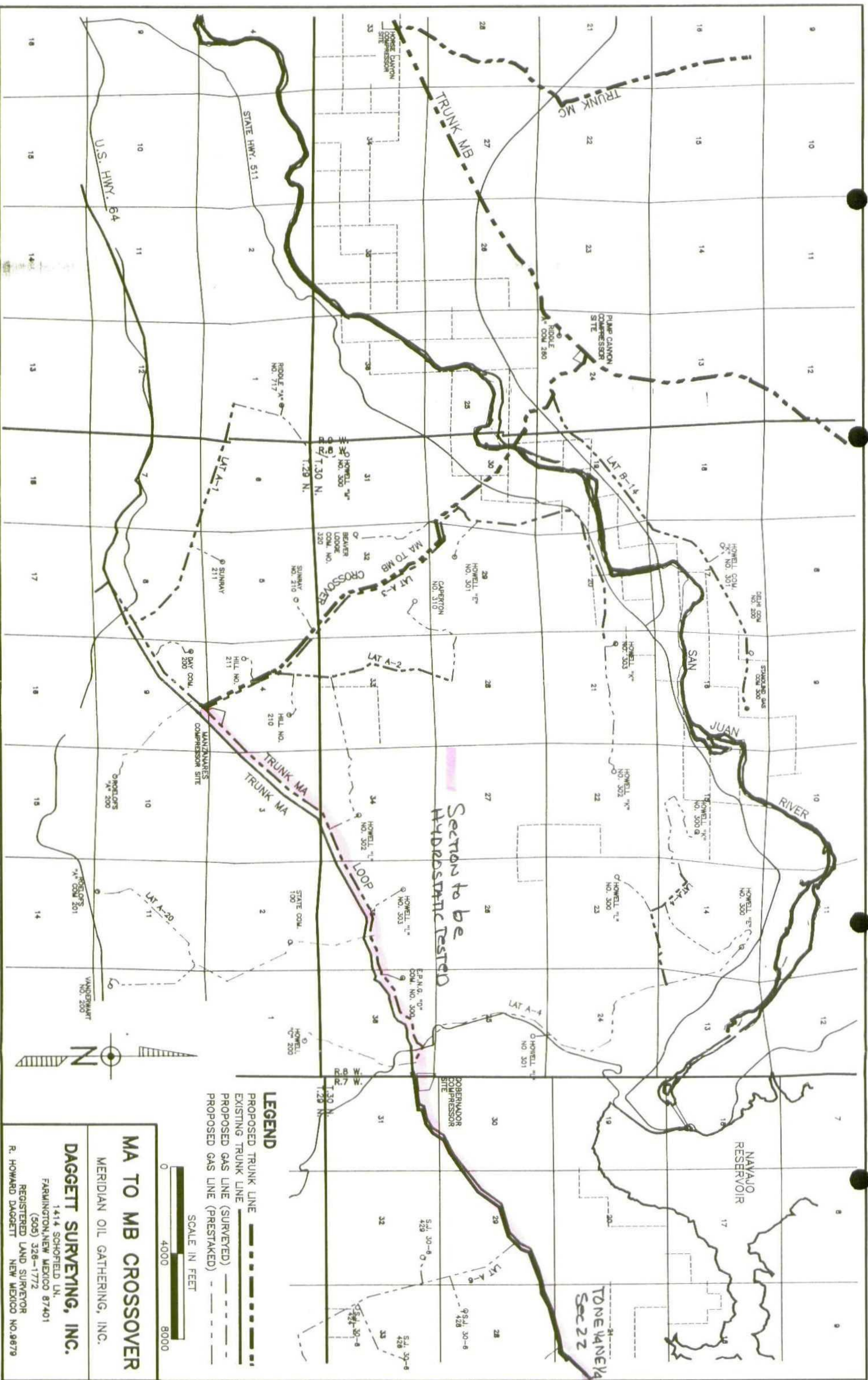
ANIONS

Chloride, Cl	781	22.0
Sulfate, SO ₄	8	8
Carbonate, CO ₃	8	8
Bicarbonate, HCO ₃	14104	268.0

Iron, Fe (total)
 Sulfide, as H₂S neg

REMARKS & RECOMMENDATIONS:





MERIDIAN OIL

August 7, 1989

RECEIVED

AUG 17 1989

State of New Mexico
Oil Conservation Division
P.O. Box 2088
Land Office Building
Santa Fe, NM 87504-2088

OIL CONSERVATION DIV.
SANTA FE

ATTN: Mr. Roger C. Anderson
Environmental Engineer

Dear Mr. Anderson:

Meridian Oil, Inc., is planning to hydrostatic test its MA-7 Lateral Gas and Water lines in Sections 21, 25, 26, 27, 28, 35 and 36 of T30N, R7W; Sections 30 and 31 of T30N, R6W; Section 1 of T29N, R7W and Section 6 of T29N, R6W as shown on the attached map. All the property involved is either owned by the U.S. and managed by the BLM or is privately owned. The owners have agreed in principal to this testing plan.

The lines consist of 6", 4" and 2" O.D. steel pipe approximately 4 miles in length. Water used for the testing will be taken from the Meridian Oil Company's wells connected to the pipeline. The water will be injected into the lines behind a pig. About 1,300 BBLs of water will be required. When the line is full, it will be pressure tested to 90% of specified minimum yield strength for 8 hours. Upon completion of the test, the water will be returned to the well site tankage.

The test water will then be transported to a Meridian Oil water disposal well 112Y in the San Juan 30-6 Unit. A typical water analysis is attached for your use.

If you require further information for this permit, please contact me at (505)326-9843.

Sincerely,

Loren W. Fothergill
Loren W. Fothergill
Senior Staff Engineer

GTB/dj

attachments

xc: Ward Arnold
Gerry Brower

MERIDIAN OIL

August 10, 1989

State of New Mexico
Oil Conservation Division
P.O. Box 2088
Land Office Building
Santa Fe, NM 87504-2088

ATTN: Mr. Roger C. Anderson
Environmental Engineer

Dear Mr. Anderson:

Meridian Oil, Inc., is planning to hydrostatic test its MA-12 Lateral line in Sections 11, 12, 13 and 14 of T30N-R07W as shown on the attached map. All the property involved is owned by the U.S. and managed by the BLM. They have agreed in principal to this testing plan.

The line is 4", 6", and 8" O.D. steel pipe approximately 4 1/4 miles in length. Water used for the testing will be taken from the Meridian Oil Company's wells connected to the pipeline. The water will be injected into the lines behind a pig. About 1,050 BBLs of water will be required. When the line is full, it will be pressure tested to 90% of specified minimum yield strength for 8 hours. Upon completion of the test, the water will be pumped to the water disposal pipeline to which the MA-12 Lateral is connected.

The test water will be pumped to a Meridian Oil water disposal well 112Y in the San Juan 30-6 Unit. A typical water analysis is attached for your use.

If you require further information for this permit, please contact me at (505)326-9843.

Sincerely,

Loren W. Fothergill
Loren W. Fothergill
Senior Staff Engineer

GTB/dj

attachments

3/10/89

Company MERIDIAN OIL COMPANY		Sample No.		Date Sampled	
Field		Legal Description		County or Parish	
Lease or Unit San Juan 30-4-439		Well		Depth	
Type of Water (Produced, Supply, etc.)		Sampling Point		Water, B/D	
				Sampled By	

Sodium, Na (calc.)
 Calcium, Ca
 Magnesium, Mg
 Barium, Ba

mg/l

44.2

24

me/l

380.0

3.4

pH
 Specific Gravity, 60/60 F.
 Resistivity (ohm-meters)

72° F.

Total Dissolved Solids (calc.)

234.0

Chloride, Cl
 Sulfate, SO₄
 Carbonate, CO₃
 Bicarbonate, HCO₃

781

8

1410.4

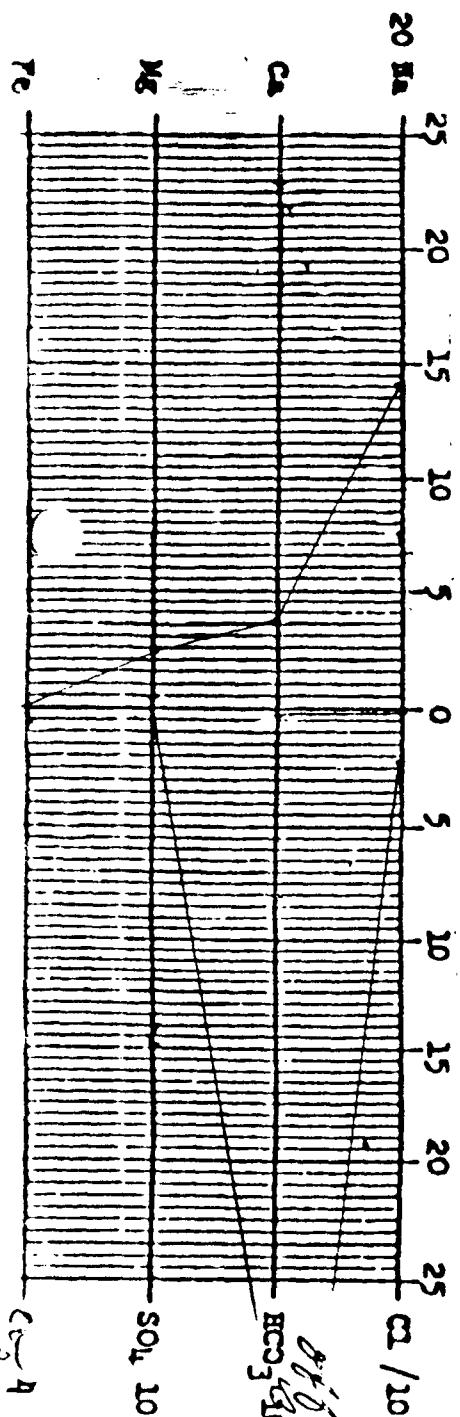
22.0

8

264.0

Iron, Fe (total)
 Sulfide, as H₂S

mg



T30N

R.7 W.
R.6 W.



R.7 W.
R.6 W.

T30N



LEGEND

LATERAL —————
WELL TIE —————
EXISTING WATER LINE
ROAD —————
PIPELINE ————||———||———||———||———
FENCE ————X———X———X———X———

LATERAL MA-12

MERIDIAN OIL GATHERING, INC.

DAGGETT LAND SURVEYING

1414 SCHOFIELD LN.
FARMINGTON, NEW MEXICO 87401
(505) 326-1772
R. HOWARD DAGGETT R.P.L.S.
REGISTRATION NO. 9679

TRICAL WATER ANALYSIS

API WATER ANALYSIS REPORT FORM

3/10/89

Company		MERIDIAN OIL COMPANY		Sample No.	Date Sampled	
Field		Legal Description		County or Parish	State	
Lease or Unit	Well	Depth	Formation	Water, B/D		
San Juan	30-6-24 439					
Type of Water (Produced, Supply, etc.)		Sampling Point		Sampled By		

DISSOLVED SOLIDS

CATIONS
Sodium, Na (calc.)
Calcium, Ca
Magnesium, Mg
Barium, Ba

mg/l
64.2
7.2
2.4

meq/l
280.0
3.6
2.4

OTHER PROPERTIES

pH
Specific Gravity, 60/60 F.
Resistivity (ohm-meters)

7.46
1.012
2.59

ANIONS

Chloride, Cl
Sulfate, SO₄
Carbonate, CO₃
Bicarbonate, HCO₃

mg/l
781
2
1410.4

meq/l
22.0
0
268.0

Total Dissolved Solids (calc.)

Iron, Fe (total)
Sulfide, as H₂S

34400
mg

REMARKS & RECOMMENDATIONS:

