

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

NM OIL CONS COMMISSION APPROVED  
Drawer DD  
Artesia, NM 88210  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993  
Well Designation and Serial No.  
NM12828

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals

**SUBMIT IN TRIPLICATE**

1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other	6. If Indian, Allottee or Tribe Name
2. Name of Operator MERIDIAN OIL INC.	7. If Unit or CA, Agreement Designation
3. Address and Telephone No. P.O. Box 51810 Midland, TX 79710 915-688-6943	8. Well Name and No. SHELBY FEDERAL # 3
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) SEC. 12, T22S, R24E 1900' FSL & 2150' FWL	9. API Well No. 30-015-25949
	10. Field and Pool, or Exploratory Area MCKITTRICK HILLS U/PENN
	11. County or Parish, State EDDY CO., NM

**12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other AMEND WATER DISPOSAL METHOD
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

1. WATER IS PRODUCED FROM THE CISCO U/PENN ZONE.
2. THERE IS APPROXIMATELY 830 BOWPD PRODUCED
3. A CURRENT WATER ANALYSIS IS FORTHCOMING
4. WATER IS STORED IN FOUR (4) 500 BBL CLOSED TOP FIBERGLASS TANKS
5. WATER IS MOVED THRU A POLY LINE SYSTEM (ABOVE GROUND)
6. WATER IS TRANSPORTED VIA POLY LINE TO:  
NEARBURG PRODUCING COMPANY  
1819 N. TURNER, STE. A  
HOBBS, NEW MEXICO 88240  
505-397-4186  
M-H FEDERAL IN # 1, SEC.1,T18S,R24E, (660' FSL & 1650' FWL)

PERMIT NOS: OCD 9933 & NM 90793

14. I hereby certify that the foregoing is true and correct

Signed Donna Williams Title PRODUCTION ASSISTANT

Date 10/7/93

(This space for Federal or State office use)

Approved by Eng. Kenneth J. Shaw  
Conditions of approval, if any:

Title PETROLEUM ENGINEER

Date 11/30/93

RECEIVED  
OCT 13 12 11 PM '93  
BUREAU OF LAND MANAGEMENT  
HOBBS, NM

PETROLITE

SCALE TENDENCY REPORT  
-----

Company	: MERIDIAN OIL CO.	Date	: 7-7-93
Address	: ARTESIA, N.M.	Date Sampled	: 7-7-93
Lease	: SHELBY	Analysis No.	: 243
Well	: 1	Analyst	: DON CANADA
Sample Pt.	: WELLHEAD		

STABILITY INDEX CALCULATIONS  
(Stiff-Davis Method)  
CaCO3 Scaling Tendency

S.I. =	0.2	at	80 deg. F	or	27 deg. C
S.I. =	0.2	at	100 deg. F	or	38 deg. C
S.I. =	0.3	at	120 deg. F	or	49 deg. C
S.I. =	0.3	at	140 deg. F	or	60 deg. C
S.I. =	0.4	at	160 deg. F	or	71 deg. C

\*\*\*\*\*

CALCIUM SULFATE SCALING TENDENCY CALCULATIONS  
(Skillman-McDonald-Stiff Method)  
Calcium Sulfate

S =	1704	at	80 deg. F	or	27 deg C
S =	1730	at	100 deg. F	or	38 deg C
S =	1725	at	120 deg. F	or	49 deg C
S =	1711	at	140 deg. F	or	60 deg C
S =	1676	at	160 deg. F	or	71 deg C

Petrolite Oilfield Chemicals Group

Respectfully submitted,  
DON CANADA

## PETROLITE

## WATER ANALYSIS REPORT

Company : MERIDIAN OIL CO.  
 Address : ARTESIA, N.M.  
 Lease : SHELBY  
 Well : 3  
 Sample Pt. : WELLHEAD

Date : 7-7-93  
 Date Sampled : 7-7-93  
 Analysis No. : 243

ANALYSIS		mg/L	* meq/L	
-----		----	-----	
1.	pH	7.2		
2.	H2S	240 PPM		
3.	Specific Gravity	1.000		
4.	Total Dissolved Solids	5765.7		
5.	Suspended Solids	N/A		
6.	Dissolved Oxygen	N/A		
7.	Dissolved CO2	44 PPM		
8.	Oil In Water	N/A		
9.	Phenolphthalein Alkalinity (CaCO3)			
10.	Methyl Orange Alkalinity (CaCO3)			
11.	Bicarbonate	HCO3 146.0	HCO3	2.4
12.	Chloride	Cl 1278.0	Cl	36.1
13.	Sulfate	SO4 2425.0	SO4	50.5
14.	Calcium	Ca 560.0	Ca	27.9
15.	Magnesium	Mg 51.4	Mg	4.2
16.	Sodium (calculated)	Na 1305.2	Na	56.8
17.	Iron	Fe 0.1		
18.	Barium	Ba 0.0		
19.	Strontium	Sr 0.0		
20.	Total Hardness (CaCO3)	1610.0		

## PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter				Compound	Equiv wt	X meq/L	= mg/L
+-----+				-----			
28	*Ca <-----	*HCO3	2	Ca(HCO3)2	81.0	2.4	194
	/----->			CaSO4	68.1	25.6	1739
4	*Mg ----->	*SO4	50	CaCl2	55.5		
	<-----/			Mg(HCO3)2	73.2		
57	*Na ----->	*Cl	36	MgSO4	60.2	4.2	254
+-----+				MgCl2	47.6		
Saturation Values Dist. Water 20 C				NaHCO3	84.0		
CaCO3		13 mg/L		Na2SO4	71.0	20.7	1472
CaSO4 * 2H2O		2090 mg/L		NaCl	58.4	36.1	2107
BaSO4		2.4 mg/L					

REMARKS:

Petrolite Oilfield Chemicals Group

Respectfully submitted,  
DON CANADA