## N.M. Oil Cons. Division

FORM APPEQUEBOX 1980

Form 3160-5 (June 1990)

**UNITED STATES** DEPARTMENT OF THE INTERIOR

Budget Bureau N4055613NM 88241

**BUREAU OF LAND MANAGEMENT** Expires: March 31, 1993 5. Lease Designation and Serial No. LC 031740A SUNDRY NOTICES AND REPORTS ON WELLS 6. If Indian, Allottee or Tribe Name 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 7. If Unit or CA, Agreement Designation SUBMIT IN TRIPLICATE 1. Type of Well 8. Well Name and No 2 Name of Operator MEYER A-1 WELL. # 19 CONOCO INC. 9. API Well No. 3. Address and Telephone No. 30-025-30091 10 DESTA DR. STE 100W, MIDLAND, TX. 79705 (915) 686-5400 10. Field and Pool, or Exploratory Area 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) **EUMONT YATES 7 RVRS QUEEN** 1980' FNL & 890' FEL, SEC. 18, T 21S, R 36E, UNIT LTR 'H', 11. County or Parish, State LEA, NM CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF SUBMISSION TYPE OF ACTION Notice of Intent Abandonment Change of Plans Recompletion **New Construction** Subsequent Report Plugging Back Non-Routine Fracturing Casing Repair Water Shut-Off Final Abandonment Notice Altering Casing Conversion to Injection X Dispose Water 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.) Water Producing Formation: Eumont Amount of Water Produced: 3 bbls water Current Water Analysis Attached: YES How is Water Stored on Lease: no storage How is Water Moved: pumped ot Meyer A-1 #20 Disposal Facility Operator: Gold Star Disposal Disposal Facility well Name & #: Christmas #3, unit B S-28, T-22s, R-37E NMOCD SWD Facility Permit #: 606 Your approval of this method of disposal is respectfully requested. **APPROVED** SEP **2** 0**/1996** 14. I hereby certify that the foregoing is true and correct AUTHORIZED OFFICER, MINERALS BUREAU OF LAND MANAGEMENT Bill R. Keathly SR. REGULATORY SPECILIST 9-6-96 Conditions of approval, if any

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, lictitious or fraudulent

statements or representations as to any matter within its jurisdiction.

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### TRETOLITE DIVISION

(505) 746-3588 Fax (505) 746-3580

> Reply to: P.O. Box 1140 Artesia, NM 88211-7531

### WATER ANALYSIS REPORT

Company : CONOCO INC. Date : 08/02/96 Address : EUNICE, NM Date Sampled : 08/02/96 Lease : MEYER A-1 Analysis No. : 310

Well : #19

Sample Pt. : WELLHEAD

	ANALYSIS			mg/L		* meq/L		
1.	pH	5.8		~ ~ ~ ~				
2.	H2S	2 PPM						
3.	Specific Gravity	NR						
	-							
4.	Total Dissolved Solid	S		142121.8				
5.	Suspended Solids			NR				
6.	Dissolved Oxygen			NR				
7.	Dissolved CO2			NR				
8.	Oil In Water			NR				
9.	Phenolphthalein Alkalinity (CaCO3)							
10.	Methyl Orange Alkalinity (CaCO3)							
11.	Bicarbonate		нсоз	780.0	нсо3	12.8		
12.	Chloride		Cl	85200.0	Cl	2403.4		
13.	Sulfate		SO4	3500.0	S04	72.9		
14.	Calcium		Ca	3200.0	Ca	159.7		
15.	Magnesium		Mg	4616.9	Mg	379.8		
16.	Sodium (calculated)		Na	44820.0	Na	1949.5		
17.	Iron		Fe	5.0				
18.	Barium		Ва	NR				
19.	Strontium		Sr	NR				
20.	Total Hardness (CaCO3	)		27000.0				

## PROBABLE MINERAL COMPOSITION

*milli equivalents per Lite	Compound	Equiv wt	X meq/L	= mg/L						
т	++									
160  *Ca < *HCO3	13	Ca(HCO3)2	81.0	12.8	1036					
>		CaSO4	68.1	72.9	4961					
380  *Mg> *S04	73	CaCl2	55.5	74.0	4107					
/		Mg(HCO3)2	73.2							
1950  *Na> *Cl	2403	MgSO4	60.2							
++	++	MgCl2	47.6	379.8	18082					
Saturation Values Dist. Wat	NaHCO3	84.0								
CaCO3 13 m	ng/L	Na2SO4	71.0							
CaSO4 * 2H2O 2090 m	ng/L	NaCl	58.4	1949.5	113931					
BaSO4 2.4 m	ng/L									

#### REMARKS:

----- CRAIG CULP



## SCALE TENDENCY REPORT

Company : CONOCO INC. Date : 08/02/96
Address : EUNICE, NM Date Sampled : 08/02/96
Lease : MEYER A-1 Analysis No. : 310

Lease : MEYER A-1 Analysis No.: 310
Well : #19 Analyst : TATE

Well : #19 Analyst : TATE LAIR Sample Pt. : WELLHEAD

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

S.I. = -0.1 at 60 deg. F or 16 deg. C S.I. = -0.0 at 80 deg. F or 27 deg. C S.I. = NR at 100 deg. F or 38 deg. C S.I. = 0.1 at 120 deg. F or 49 deg. C S.I. = 0.2 at 140 deg. F or 60 deg. C

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

S = 4847 at 60 deg. F or 16 deg C S = 5216 at 80 deg. F or 27 deg C S = 5449 at 100 deg. F or 38 deg C S = 5557 at 120 deg. F or 49 deg C S = 5634 at 140 deg. F or 60 deg C

Petrolite Oilfield Chemicals Group

Respectfully submitted, TATE LAIR