

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED  
OCT-HOBBS

OCT 27 2010

HOBBSOCD

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

**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**

☒ Oil Well ☐ Gas Well ☐ Other

**2. Name of Operator**

Mack Energy Corporation

**3. Address and Telephone No.**

P.O. Box 960 Artesia, NM 88211-0960

(575) 748-1288

**4. Location of Well (Footage, Sec., T. R., M. or Survey Description)**

907 FSL & 1515 FEL, Sec. 5 T17S R32E

**5. Lease Designation and Serial No.**

NMLC-029406B

**6. If Indian, Allottee or Tribe Name**

**7. If Unit or CA, Agreement Designation**

**8. Well Name and No.**

Grace Mitchell B Federal #8

**9. API Well No.**

30-025-39495

**10. Field and Pool, or Exploratory Area**

Maljamar; Grayburg-San Andres

**11. County or Parish, State**

Lea, NM

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

**TYPE OF SUBMISSION**

- ☐ Notice of Intent  
☒ Subsequent Report  
☐ Final Abandonment Notice

**TYPE OF ACTION**

- ☐ Abandonment  
☐ Recompletion  
☐ Plugging Back  
☐ Casing Repair  
☐ Altering Casing  
☒ Other **Onshore Order 7**
- ☐ Change of Plans  
☐ New Construction  
☐ Non-Routine Fracturing  
☐ Water Shut-Off  
☐ Conversion to Injection  
☐ 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 )\***

Name (s) of formation (s) producing water on the lease

Maljamar; Grayburg-San Andres

Amount of water produced from each formation in barrels per day

270

A water analysis of produced water from each zone showing at lease the total dissolved solids, ph, and concentration of chlorides and sulfates.

Attached

How water is stored on lease

Fiberglass Tank

How water is moved to disposal facility

pipeline

Operator's name, well name and location, by 1/4 1/4, section township, and range, of the disposal facility. If the disposal facility is an approved disposal system, the operator's name and the name of the disposal system should suffice.

COG Operating LLC  
Pronghorn SWD

NE/4 NW/4 Sec. 20 T17S R32E

SWD-536

Disposal Permit

SEE ATTACHED FOR

CONDITIONS OF APPROVAL

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

Signed

*Gary W. Sherrill*

Title

Production Clerk

Date

10/14/10

(This space for Federal or State office use)

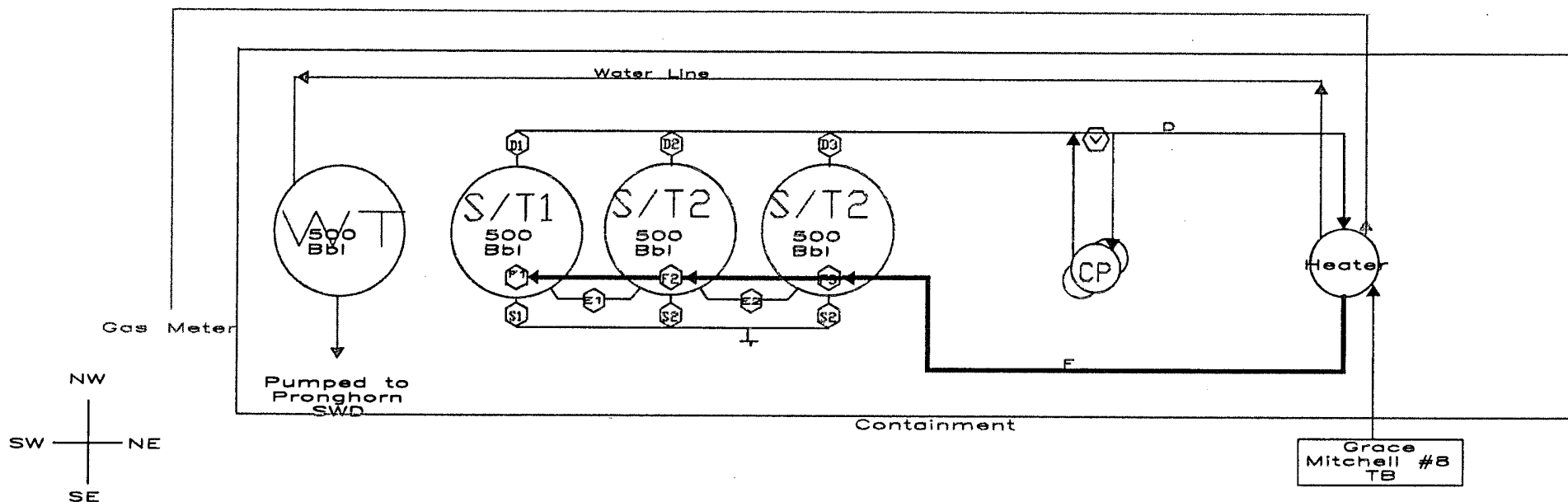
Approved by

Conditions of approval, if any:

Title

Date

PETROLEUM ENGINEER  
NOV 01 2010



#### Production Phase

Grace Mitchell Federal Battery			
S/T 1	S/T 2	S/T 3	
F1 Open	F1 Closed	F1-2 Closed	
D1 Open	D1 Closed	D1-2 Closed	
E1 Open	E1 Open	E2 Open	
S1 Closed	S1 Closed	S1-2 Closed	
F2 Closed	F2 Open	F3 Open	
D2 Closed	D2 Open	D3 Open	
S2 Closed	S2 Closed	S3 Closed	

#### Sales Phase

Grace Mitchell Federal Battery			
S/T 1	S/T 2	S/T 3	
F1 Closed	F1 Open	F1-2 Open	
D1 Closed	D1 Open	D1-2 Open	
E1 Closed	E1 Closed	E2 Closed	
S1 Open	S1 Closed	S1-2 Closed	
F2 Open	F2 Closed	F3 Closed	
D2 Open	D2 Closed	D3 Closed	
S2 Closed	S2 Open	S3 Open	

**MACK**  
Energy Corporation



o  
Grace  
Mitchell  
Federal  
#8

This Lease is subject to the site Security plan for southeast New Mexico operations.

The Plan is Located at :

Mack Energy Corporation  
P.O. Box 960  
Artesia NM 88211-0960

Mack Energy Corporation  
Grace Mitchell Federal Tank  
Battery

SW/4 SE/4

Section 5 T17S R32E

Grace Mitchell Federal Lease



Catalyst Oilfield Services  
 11999 E Hwy 158  
 Gardendale, TX 79758  
 (432) 563-0727  
 Fax: (432) 224-1038

## Water Analysis Report

Customer:	Mack Energy Corporation	Sample #:	2506
Area:	Artesia	Analysis ID #:	4879
Lease:	Grace Mitchell B		
Location:	8 0		
Sample Point:	Wellhead		

		Anions		Cations	
		mg/l	meq/l	mg/l	meq/l
Sampling Date:	8/25/2010	Chloride:	116811.7	Sodium:	72410.0
Analysis Date:	8/27/2010	Bicarbonate:	219.6	Magnesium:	1028.0
Analyst:	Catalyst	Carbonate:		Calcium:	2456.0
TDS (mg/l or g/m3):	197011.5	Sulfate:	3500.0	Potassium:	516.8
Density (g/cm3):	1.132			Strontium:	69.4
				Barium:	0.0
Hydrogen Sulfide:	117			Iron:	0.0
Carbon Dioxide:	66			Manganese:	0.000
Comments:		pH at time of sampling:	7		
		pH at time of analysis:			
		pH used in Calculation:	7		
		Temperature @ lab conditions (F):	75	Conductivity (micro-ohms/cm):	205309
				Resistivity (ohm meter):	.0487

### Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl

Temp		Calcite CaCO <sub>3</sub>		Gypsum CaSO <sub>4</sub> *2H <sub>2</sub> O		Anhydrite CaSO <sub>4</sub>		Celestite SrSO <sub>4</sub>		Barite BaSO <sub>4</sub>	
°F	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	
80	0.52	8.97	-0.10	0.00	-0.08	0.00	0.00	0.00	0.00	0.00	
100	0.55	10.71	-0.19	0.00	-0.09	0.00	-0.04	0.00	0.00	0.00	
120	0.57	12.74	-0.26	0.00	-0.08	0.00	-0.06	0.00	0.00	0.00	
140	0.58	14.76	-0.32	0.00	-0.05	0.00	-0.07	0.00	0.00	0.00	
160	0.60	17.08	-0.37	0.00	0.00	0.00	-0.07	0.00	0.00	0.00	
180	0.62	19.69	-0.41	0.00	0.07	142.73	-0.07	0.00	0.00	0.00	
200	0.65	22.29	-0.45	0.00	0.15	300.80	-0.06	0.00	0.00	0.00	
220	0.69	25.48	-0.49	0.00	0.24	461.47	-0.05	0.00	0.00	0.00	

**BUREAU OF LAND MANAGEMENT  
Carlsbad Field Office  
620 East Greene Street  
Carlsbad, New Mexico 88220  
575-234-5972**

**Disposal of Produced Water From Federal Wells  
Conditions of Approval**

Approval of the produced water disposal methodology is subject to the following conditions of approval:

1. This agency shall be notified of any change in your method or location of disposal.
2. Compliance with all provisions of Onshore Order No. 7.
3. This agency shall be notified of any spill or discharge as required by NTL-3A.
4. This agency reserves the right to modify or rescind approval whenever it determines continued use of the approved method may adversely affect the surface or subsurface environments.
5. All above ground structures on the lease shall be painted Shale Green (5Y 4/2), or as per approved APD stipulations. This is to be done within 90 days, if you have not already done so.
6. Any on-lease open top storage tanks shall be covered with a protective cover to prevent entry by birds and other wildlife.
7. This approval should not constitute the granting of any right-of-way or construction rights not granted by the lease instrument.
8. If water is transported via a pipeline that extends beyond the lease boundary, then you need to submit within 30 days an application for right-of-way approval to the Realty Section in this office if you have not already done so.
9. Disposal at any other site will require prior approval.
10. Subject to like approval by NMOCD.

9/30/2010