

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

HOBBS OGD  
OCD Hobbs

JUL 29 2013

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)

NE/4 NE/4, Sec. 30 T17S R32E

5. Lease Designation and Serial No.

NMLC-060199B

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

Brook Federal Lease

9. API Well No.

Multiple

10. Field and Pool, or Exploratory Area

Maljamar; Yeso, West/Wolfcamp

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 **Yeso/Wolfcamp**

Amount of water produced from each formation in barrels per day **3000**

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 **Pipelined to Disposal**

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**

Disposal Permit **SWD-536**

**SEE ATTACHED FOR  
CONDITIONS OF APPROVAL**

SUBJECT TO LIKE  
APPROVAL BY STATE

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

Signed **James W. Sherrill**

Title **Production Clerk**

Date **5/15/13**

(This space for Federal or State office use)

Approved by **James D. Shubley**

Title

Conditions of approval, if any

**APPROVED**

**JUL 25 2013**

**BUREAU OF LAND MANAGEMENT  
CARLSBAD FIELD OFFICE**

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, fictitious or fraudulent statements or representations as to any matter within its jurisdiction

\*See Instruction on Reverse Side

**AUG 27 2013**



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 #: 7524  
Area: Artesia Analysis ID #: 9524  
Lease: Brook Fed  
Location: 1 0  
Sample Point: Wellhead

Sampling Date:	2/8/2012	Anions	mg/l	meq/l	Cations	mg/l	meq/l
Analysis Date:	2/9/2012	Chloride:	111315.9	3139.82	Sodium:	62280.0	2709.03
Analyst:	Catalyst	Bicarbonate:	197.6	3.24	Magnesium:	1176.0	96.74
TDS (mg/l or g/m3):	185440.9	Carbonate:			Calcium:	7275.0	363.02
Density (g/cm3):	1.126	Sulfate:	2300.0	47.89	Potassium:	710.6	18.17
Hydrogen Sulfide:	4.1				Strontium:	185.8	4.24
Carbon Dioxide:	123				Barium:	0.0	0.
					Iron:	0.0	0.
					Manganese:	0.000	0.
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):		193700
					Resistivity (ohm meter):		.0516

### 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	0.87	15.22	0.14	330.55	0.16	291.03	0.22	45.97	0.00	0.00
100	0.90	16.98	0.07	174.21	0.15	281.95	0.20	41.87	0.00	0.00
120	0.92	19.03	0.01	25.47	0.17	312.40	0.18	39.53	0.00	0.00
140	0.95	21.08	-0.04	0.00	0.22	373.00	0.18	38.94	0.00	0.00
160	0.98	23.42	-0.08	0.00	0.28	452.06	0.18	39.82	0.00	0.00
180	1.01	25.76	-0.12	0.00	0.35	538.72	0.19	41.58	0.00	0.00
200	1.05	28.11	-0.15	0.00	0.45	624.21	0.21	43.92	0.00	0.00
220	1.09	30.45	-0.17	0.00	0.55	702.38	0.23	46.55	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. This **approval is for produced water disposal only** and any hydrocarbons removed from lease by this method will be subject to royalty payment as well as other enforcement actions as necessary.
10. Disposal at any other site will require prior approval.
11. Subject to like approval by NMOCD.

JDB2013

# Well Selection Criteria Quick Print

opno = 13837 and Field\_No = 38762 and WL\_STATUS Like 'A' and PoolNo = 44500

API Well #	Well Name and No.		Operator Name	Typ	Stat	County	Surf	UL	Sec	Twp	Rng	Ft N/S	Ft E/W	UICPrmt	Lst Insp Dt
30-025-40339-00-00	BROOK FEDERAL	004	MACK ENERGY CORP	O	A	Lea	F	A	30	17 S	32 E	750 N	1120 E		
30-025-40338-00-00	BROOK FEDERAL	003	MACK ENERGY CORP	O	A	Lea	F	A	30	17 S	32 E	785 N	10 E		7/10/2013
30-025-40337-00-00	BROOK FEDERAL	002	MACK ENERGY CORP	O	A	Lea	F	A	30	17 S	32 E	360 N	1180 E		
30-025-40244-00-00	BROOK FEDERAL	001	MACK ENERGY CORP	O	A	Lea	F	A	30	17 S	32 E	635 N	10 E		