N.M. Oil Cons. DIV-Dist. 2 1301 W. Grand Avenue



Form 3160-5 (June 1990)

UNITED STATES Artesia, NM 88210 DEPARTMENT OF THE INTERIOR

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

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 I Type of Well Other Name of Operator Mack Energy Corporation. Address and Telephone No Address and Telephone No NAM 882444 0000	Packers Federal #1 API Well No 30-005-64032 Field and Pool, or Exploratory Area
SUBMIT IN TRIPLICATE I Type of Well Oli 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	7 If Unit or CA, Agreement Designation NMOCD ARTESIA 8 Well Name and No Packers Federal #1 9 API Well No 30-005-64032 10 Field and Pool, or Exploratory Area
SUBMIT IN TRIPLICATE I Type of Well Solid Gas Other	NMOCD ARTESIA Well Name and No Packers Federal #1 API Well No 30-005-64032 TO Field and Pool, or Exploratory Area
Solution	Packers Federal #1 API Well No 30-005-64032 Field and Pool, or Exploratory Area
Mack Energy Corporation. 3 Address and Telephone No P.O. Box 960 Artesia, NM 88211-0960 (575) 748-1288	30-005-64032 To Field and Pool, or Exploratory Area
3 Address and Telephone No P.O. Box 960 Artesia, NM 88211-0960 (575) 748-1288	30-005-64032 To Field and Pool, or Exploratory Area
	Round Tank; San Andres
1675 FNL & 330 FEL, Sec. 29 T15S R29E	11 County or Parish, State
OUESY ASSESSED FOR A STATE PORT OF A STATE O	Chaves, NM
CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT	OR OTHER DATA
TYPE OF SUBMISSION TYPE OF ACTION	
Notice of Intent Abandonment Recompletion	Change of Plans New Construction
Subsequent Report Plugging Back Casing Repair	Non-Routine Fracturing Water Shut-Off
Final Abandonment Notice Altering Casing Other Onshore Order 7	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 give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work)*	y proposed work If well is directionally drilled,
Name (s) of formation (s) producing water on the lease Round Tank; San Andres	
Amount of water produced from each formation in barrels per day 368	
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 t 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 **Round Tank SWD #1**	
the name of the disposal system should suffice. NE/4 SW/4 Sec 19-T15S-R29E	
Disposal Permit SWD-1163	
.,	
14 I hereby certify that the foregoing is true and correct Signed Lewy W. Sheroll Title Production Clerk	4/22/10
(This space for Federal or State office use) Approved S DAVID R. GLASS Tyle PETROLEUM ENGINEER	MAY 1.1 2010

ROSWELL FIELD OFFICE SEE ATTACHED FOR

Title 18 U S C Section 1001, makes it a crime for any person knowingly and willfully to make to any department or again. In the 18 U S C Section 1001, makes it a crime for any person knowingly and willfully to make to any department or again. In the 18 U S C Section 1001, makes it a crime for any person knowingly and willfully to make to any department or again. or representations as to any matter within its jurisdiction





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 #:	11096
Area:	Artesia		Analysis ID #:	1167
Lease:	Packers			
Location:	1	0		
Sample Point:	Wellhead			

Sampling Date:	10/1/2008	Anions	mg/l	meq/l	Cations	mg/l	meq/l
Analysis Date: Analyst:	10/6/2008 Mitchell	Chloride: Bicarbonate:	72079.2 598.8	2033.09 9.81	Sodium: Magnesium:	41334.5 1429.8	1797.95 117.62
TDS (mg/l or g/m3): Density (g/cm3):	121822.2 1.085	Carbonate: Sulfate:	0.0 2700.0	0. 56.21	Calcium: Strontium: Barium:	3674.3	183.35
Hydrogen Sulfide: Carbon Dioxide:	116 59				Iron: Manganese:	5.3 0.310	0.19 0.01
Comments:		pH at time of samplir	s:	7			1
		pH used in Calculation: Temperature @ lab conditions (F):			Conductivity (mi	•	162400 .0616

Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl											
Temp °F Inde		alcite SaCO ₃	Gypsum CaSO ₄ *2H ₂ 0		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄		
	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	
80	0.99	62.54	-0.01	0.00	-0.02	0.00	0.00	0.00	0.00	0.00	
100	1.06	69.70	-0.06	0.00	-0.01	0.00	0.00	0.00	0.00	0 00	
120	1.12	77.17	-0.11	0.00	0.03	57.87	0.00	0.00	0.00	0.00	
140	1.17	84.63	-0.14	0.00	0.08	178.91	0.00	0.00	0.00	0.00	

BUREAU OF LAND MANAGEMENT Roswell Field Office 2909 West Second Street Roswell, New Mexico 88201 575-627-0272

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. Any on-lease open top storage tanks shall be covered with a wire screen to prevent entry by birds and other wildlife.
- 6. This approval should not constitute the granting of any right-of-way or construction rights not granted by the lease instrument.
- 7. 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 for wells in Chaves or Roosevelt County if you have not already done so.