

UNITED STATES
DEPARTMENT OF THE INTERIOR **NMOCD**
BUREAU OF LAND MANAGEMENT **Artesia**

FORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

5. Lease Serial No.
NMNM131581

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

SUBMIT IN TRIPLICATE - Other instructions on page 2

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		8. Well Name and No. WHITE ROCK FEDERAL 1H
2. Name of Operator MACK ENERGY CORPORATION Contact: JERRY SHERRELL E-Mail: jerrys@mec.com		9. API Well No. 30-005-64300
3a. Address PO BOX 960 ARTESIA, NM 88211-0960	3b. Phone No. (include area code) Ph: 575-748-1288	10. Field and Pool or Exploratory Area ROUND TANK, SAN ANDRES
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 28 T15S R29E Mer NMP NWNW 140FNL 555FWL		11. County or Parish, State CHAVES COUNTY, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input checked="" type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

- Name of formations producing water on this lease. ROUND TANK SAN ANDRES.
- Amount of water produced in barrels per day. 2050.
- Water analysis. ATTACHED.
- How is water stored on lease. FIBERGLASS TANKS.
- How water is moved to disposal facility. PIPELINE.
- Disposal facility. MACK ENERGY CORPORATION, ROUND TANK SWD #1, WDW, NESW SEC. 19 T15S R29E.

RECEIVED

NOV 28 2018

DISTRICT II-ARTESIA O.C.D

GC 12-3-18
Accepted for record - NMOCD

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

14. I hereby certify that the foregoing is true and correct. Electronic Submission #444803 verified by the BLM Well Information System For MACK ENERGY CORPORATION, sent to the Roswell Committed to AFMSS for processing by JENNIFER SANCHEZ on 11/20/2018 ()	
Name (Printed/Typed) JERRY SHERRELL	Title PRODUCTION CLERK
Signature (Electronic Submission)	Date 11/20/2018
THIS SPACE FOR FEDERAL OR STATE OFFICE USE	
Approved By _____	Title _____
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office _____

(Instructions on page 2)

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****



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 #:	69216
Area:	Artesia	Analysis ID #:	66858
Lease:	White Rock		
Location:	2H		0
Sample Point:	Wellhead		

Sampling Date:	7/19/2018	Anions	mg/l	meq/l	Cations	mg/l	meq/l
Analysis Date:	7/30/2018	Chloride:	107459.3	3031.03	Sodium:	66850.0	2907.81
Analyst:	Catalyst	Bicarbonate:	950.4	15.58	Magnesium:	1064.0	87.53
TDS (mg/l or g/m3):	184246.9	Carbonate:			Calcium:	2647.0	132.09
Density (g/cm3):	1.122	Sulfate:	4500.0	93.69	Potassium:	544.0	13.91
Hydrogen Sulfide:	12	Borate*:	172.9	1.09	Strontium:	54.2	1.24
Carbon Dioxide:	152	Phosphate*			Barium:	0.3	0.
Comments:		*Calculated based on measured elemental boron and phosphorus.			Iron:	4.2	0.15
		pH at time of sampling:		6.5	Manganese:	0.565	0.02
		pH at time of analysis:					
		pH used in Calculation:		6.5	Conductivity (micro-ohms/cm):		185718
		Temperature @ lab conditions (F):		75	Resistivity (ohm meter):		.0538

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

Temp	Calcite CaCO ₃		Gypsum CaSO ₄ *2H ₂ O		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄	
	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount
80	0.66	82.32	0.03	97.26	0.05	128.90	0.01	1.17	0.87	0.00
100	0.75	93.74	-0.05	0.00	0.04	99.90	-0.02	0.00	0.67	0.00
120	0.83	105.46	-0.11	0.00	0.05	137.69	-0.03	0.00	0.49	0.00
140	0.91	117.18	-0.17	0.00	0.09	230.26	-0.04	0.00	0.33	0.00
160	0.99	129.19	-0.22	0.00	0.14	362.09	-0.04	0.00	0.20	0.00
180	1.06	141.20	-0.26	0.00	0.21	518.81	-0.04	0.00	0.08	0.00
200	1.14	153.21	-0.29	0.00	0.30	687.55	-0.03	0.00	-0.02	0.00
220	1.22	164.64	-0.32	0.00	0.40	857.17	-0.02	0.00	-0.10	0.00

BUREAU OF LAND MANAGEMENT
Roswell Field Office
2909 West Second Street
Roswell, New Mexico 88201
(575) 622-5335

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 to the BLM Roswell Field office at 2909 West Second Street, Roswell, New Mexico 88201 if you have not already done so.