

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**NMOCD**  
**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.  
NMNM132673

6. If Indian, Allottee or Tribe Name

**SUBMIT IN TRIPLICATE - Other instructions on page 2**

7. If Unit or CA/Agreement, Name and/or No.  
NMNM139453

1. Type of Well  
 Oil Well  Gas Well  Other

8. Well Name and No.  
AJAX STATE COM 1H

2. Name of Operator  
MACK ENERGY CORPORATION  
Contact: JERRY SHERRELL  
E-Mail: jerrys@mackenergycorp.com

9. API Well No.  
30-005-64294-00-S1

3a. Address  
P.O. BOX 960  
ARTESIA, NM 88211-0960  
3b. Phone No. (include area code)  
Ph: 505.748.1288  
Fx: 505.746.9539

10. Field and Pool or Exploratory Area  
ROUND TANK-SAN ANDRES

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
Sec 36 T15S R28E NENE 736FNL 464FEL  
32.977707 N Lat, 104.078194 W Lon

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 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 checked="" 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 the lease. Round Tank; San Andres.
- Amount of water produced from all formations in barrels per day. 250.
- Attach a current water analysis of produced water from all zones showing at least tds, ph, and concentrations of chlorides and sulfates.
- How water is stored on lease. Fiberglass tank.
- How water is moved to disposal facility. Pipeline.
- Identify the Disposal Facility by:
  - Facility operators name. Mack Energy Corporation.
  - Name of Facility or well name and number. Round Tank SWD #1
  - Type of facility or well (WDW) (WIW) etc. WDW.
  - Location. NESW Sec. 19 T15S R29E.
- Attach a copy of the state issued permit for th Disposal Facility.

RECEIVED

DEC 11 2019

GC 12/12/19  
Accepted for record - NMOCD

DISTRICT 7-ARTESIA O.C.D.

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

Electronic Submission #494618 verified by the BLM Well Information System  
For MACK ENERGY CORPORATION, sent to the Roswell  
Committed to AFMSS for processing by JENNIFER SANCHEZ on 12/05/2019 (20JS0034SE)

Name (Printed/Typed) JERRY SHERRELL

Title PRODUCTION CLERK

Signature (Electronic Submission)

Date 12/05/2019

ACCEPTED FOR RECORD

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

DEC 05 2019

Approved By

Title

BUREAU OF LAND MANAGEMENT  
ROSWELL FIELD OFFICE

Date

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

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1712, make 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.

(Instructions on page 2)

\*\* BLM REVISED \*\*

Revisions to Operator-Submitted EC Data for Sundry Notice #494618

	Operator Submitted	BLM Revised (AFMSS)
Sundry Type:	DISPOSE SR	DISPOSE SR
Lease:	NMNM132673	NMNM132673
Agreement:	NMNM139453	NMNM139453 (NMNM139453)
Operator:	MACK ENERGY CORPORATION PO BOX 960 ARTESIA, NM 88211-0960 Ph: 575-748-1288	MACK ENERGY CORPORATION P.O. BOX 960 ARTESIA, NM 88211-0960 Ph: 505-748-1288
Admin Contact:	JERRY SHERRELL PRODUCTION CLERK E-Mail: jerrys@mec.com  Ph: 575-748-1288	JERRY SHERRELL PRODUCTION CLERK E-Mail: jerrys@mackenergycorp.com  Ph: 505.748.1288 Fx: 505.746.9539
Tech Contact:	JERRY SHERRELL PRODUCTION CLERK E-Mail: jerrys@mec.com  Ph: 575-748-1288	JERRY SHERRELL PRODUCTION CLERK E-Mail: jerrys@mackenergycorp.com  Ph: 505.748.1288 Fx: 505.746.9539
Location:		
State:	NM	NM
County:	CHAVES	CHAVES
Field/Pool:	ROUND TANK SAN ANDRES	ROUND TANK-SAN ANDRES
Well/Facility:	AJAX STATE COM 1H Sec 36 T15S R28E Mer NMP NENE 736FNL 464FEL 32.977707 N Lat, 104.078194 W Lon	AJAX STATE COM 1H Sec 36 T15S R28E NENE 736FNL 464FEL 32.977707 N Lat, 104.078194 W Lon



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 #: 81443  
 Area: Artesia      Analysis ID #: 80568  
 Lease: Ajax  
 Location: 1H      0  
 Sample Point: Wellhead

Sampling Date:	1/10/2019	<b>Anions</b>	mg/l	meq/l	<b>Cations</b>	mg/l	meq/l
Analysis Date:	1/22/2019	Chloride:	92946.1	2621.67	Sodium:	58080.0	2526.34
Analyst:	Catalyst	Bicarbonate:	197.6	3.24	Magnesium:	693.1	57.02
TDS (mg/l or g/m3):	157589.1	Carbonate:			Calcium:	1955.0	97.55
Density (g/cm3):	1.106	Sulfate:	3200.0	66.62	Potassium:	390.4	9.98
Hydrogen Sulfide:	17	Borate*:	82.7	0.52	Strontium:	43.0	0.98
Carbon Dioxide:	112	Phosphate*			Barium:	1.0	0.01
Comments:		*Calculated based on measured elemental boron and phosphorus.			Iron:	0.0	0.0
		pH at time of sampling:		7	Manganese:	0.222	0.01
		pH at time of analysis:			Conductivity (micro-ohms/cm):		198854
		pH used in Calculation:		7	Resistivity (ohm meter):		.0503
		Temperature @ lab conditions (F):		75			

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>	
	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount
80	0.32	5.11	-0.22	0.00	-0.21	0.00	-0.17	0.00	1.31	0.60
100	0.36	6.61	-0.29	0.00	-0.22	0.00	-0.20	0.00	1.11	0.60
120	0.40	8.42	-0.35	0.00	-0.20	0.00	-0.21	0.00	0.93	0.60
140	0.44	10.22	-0.40	0.00	-0.15	0.00	-0.22	0.00	0.78	0.30
160	0.47	12.62	-0.44	0.00	-0.09	0.00	-0.22	0.00	0.65	0.30
180	0.51	15.33	-0.47	0.00	-0.02	0.00	-0.22	0.00	0.53	0.30
200	0.56	18.03	-0.50	0.00	0.08	144.57	-0.21	0.00	0.44	0.30
220	0.61	21.04	-0.53	0.00	0.18	318.00	-0.19	0.00	0.36	0.30

MAR 11 2009



# New Mexico Energy, Minerals and Natural Resources Department

**Bill Richardson**  
Governor

Joanna Prukop  
Cabinet Secretary  
Reese Fullerton  
Deputy Cabinet Secretary

Mark Fesmire  
Division Director  
Oil Conservation Division



March 9, 2009

Administrative Order SWD-1163

Jeffrey W. Sheirell  
Mack Energy Corp  
PO Box 960  
Artesia, NM 88211-0960

## ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of Division Rule 26.8B., Mack Energy Corp seeks an administrative order to utilize its Roundtank SWD Well No. 1 (API 30-005-64095) located 1980 feet from the South line and 1980 feet from the West line, Unit K of Section 19, Township 15 South, Range 29 East, NMPM, Chaves County, New Mexico, for produced water disposal purposes.

### THE DIVISION DIRECTOR FINDS THAT:

The application has been duly filed under the provisions of Division Rule 26.8B. Satisfactory information has been provided that affected parties as defined in Rule 26.8B.(2) have been notified and no objections have been received within the prescribed waiting period. The applicant has presented satisfactory evidence that all requirements prescribed in Rule 26.8 will be met and the operator is in compliance with Division Rule 5.9.

### IT IS THEREFORE ORDERED THAT:

The applicant Mack Energy Corp, is hereby authorized to utilize its Roundtank SWD Well No. 1 (API 30-005-64095) located 1980 feet from the South line and 1980 feet from the West line, Unit K of Section 19, Township 15 South, Range 29 East, NMPM, Chaves County, New Mexico, for disposal of produced water into the Devonian formation from approximately 10500 feet to 11200 feet through 2-7/8 inch or smaller diameter, plastic-lined tubing set within 100 feet of the disposal interval.

As preparation and prior to commencing disposal, the operator shall perform the following work on the subject well:

- 1) Unless hole-conditions prevent this, run openhole resistivity and porosity logs from total depth to surface and supply copies of these electric logs to the Division (send to Hobbs district for scanning).
- 2) Send a copy of a mudlog with plots of lithology, drilltimes, and any hydrocarbon

Oil Conservation Division \* 1220 South St. Francis Drive

\* Santa Fe, New Mexico 87505

\* Phone: (505) 476-3440 \* Fax (505) 476-3462 \* <http://www.emnrd.state.nm.us>



- shows through this Devonian interval - OR
- 3) If a mudlog is NOT available, perforate and swab test the new perforations for hydrocarbon potential and catch a water sample for analysis. The Division's district office shall be noticed prior to this test and given the opportunity to witness the swab test. The results of the swab test and water analysis shall be sent to the Division attached to a sundry notice.

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the disposed water enters only the proposed disposal interval and is not permitted to escape to other formations or onto the surface:

After installing tubing, the casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge or an approved leak detection device in order to determine leakage in the casing, tubing, or packer. The casing shall be pressure tested from the surface to the packer setting depth to assure casing integrity.

The wellhead injection pressure on the well shall be limited to no more than 2100 psi. In addition, the disposal well or system shall be equipped with a pressure limiting device in workable condition which shall, at all times, limit surface tubing pressure to the maximum allowable pressure for this well.

The Director of the Division may authorize an increase in tubing pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the disposed fluid from the target formation. Such proper showing shall be demonstrated by an acceptable Step-Rate-Test.

The operator shall notify the supervisor of the Division's district II office in Artesia of the date and time of the installation of disposal equipment and of any mechanical integrity test so that the same may be inspected and witnessed. The operator shall provide written notice of the date of commencement of disposal to the Division's district II office. The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with Division Rules 26.13 and 7.24.

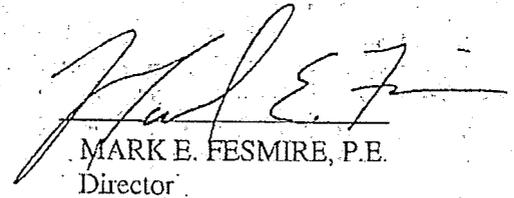
Without limitation on the duties of the operator as provided in Division Rules 30 and 29, or otherwise, the operator shall immediately notify the Division's district office of any failure of the tubing, casing or packer in the well, or of any leakage or release of water, oil or gas from around any produced or plugged and abandoned well in the area, and shall take such measures as may be timely and necessary to correct such failure or leakage.

In accordance with Division Rule No 26.12.C., the disposal authority granted herein shall terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject well, provided however, the Division, upon written request, mailed by the operator prior to the termination date, may grant an extension thereof for good

cause. One year after disposal into the well has ceased, the authority to dispose will terminate *ipso facto*.

Compliance with this order does not relieve the operator of the obligation to comply with other applicable federal, state or local laws or rules, or to exercise due care for the protection of fresh water, public health and safety and the environment.

Jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh or protectable waters or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the disposal authority granted herein.



MARK E. FESMIRE, P.E.  
Director

MEF/wvjj

cc: Oil Conservation Division – Artesia  
State Land Office – Oil, Gas, and Minerals Division