UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

NMOCD Artesia

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

	Expires. Jain	iai.	у.
Lease	Serial No.		
NMN	M131583		

COMPLY MOTICES WAS KELOKIS ON MEETS	I INMINIM 3158
o not use this form for proposals to drill or to re-enter an	
andoned well. Use form 3160-3 (APD) for such proposals.	6. If Indian, Allott
The state of the s	

abandoned	6 If Indian, Allottee or Tribe Name		
	IN TRIPLICATE - Other ins	tructions on page 2	7. If Unit or CA/Agreement, Name and/or No. NMNM139452
I. Type of Well ☑ Oil Well ☐ Gas Well ☐] Other		8. Well Name and No. PRINCE GEORGE FEDERAL COM 1H
Name of Operator MACK ENERGY CORPO	Contact: RATION E-Mail: jerrys@ma	JERRY SHERRELL ackenergycorp.com	9. API Well No. 30-005-64310-00-S1
3a. Address P.O. BOX 960 ARTESIA, NM 88211-096	60	3b. Phone No. (include area cod Ph: 505.748.1288 Fx: 505.746.9539	e) 10. Field and Pool or Exploratory Area ROUND TANK-SAN ANDRES
4. Location of Well (Footage, Se	c., T., R., M., or Survey Description)	11. County or Parish, State
Sec 32 T15S R29E NWNI 32.977936 N Lat, 104.049	E 660FNL 2285FEL 667 W Lon		CHAVES COUNTY, NM
the state of the s			
12: CHECK THE	APPROPRIATE BOX(ES)	TO INDICATE NATURE (OF NOTICE, REPORT, OR OTHER DATA
TYPE OF SUBMISSION		ТҮРЕ С	F ACTION
☐ Notice of Intent	☐ Acidize	□ Deepen	☐ Production (Start/Resume) ☐ Water Shut-Off
Subsequent Report ■ Subsequent Report ■ ■ The subsequent Report ■	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation ☐ Well Integrity
•	□ Casing Repair	■ New Construction	☐ Recomplete ☐ Other
☐ Final Abandonment Notic	Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon
	Convert to Injection	Plug Back	■ Water Disposal
Attach the Bond under which the following completion of the invetesting has been completed. Find determined that the site is ready 1. Name of formations produced a concentrations of chlorided and the water is stored on the site of th	work will be performed or provide lved operations. If the operation result Abandonnent Notices must be file for final inspection. ducing water on the lease. Result of the file form all formations in barrenalysis of produced water frow and sulfates. ease. Fiberglass tank, disposal facility. Pipeline, bility by: Mack Energy Corporation. name and number. Round Taylow) (WIW) etc. WDW.	the Bond No. on file with BLM/BL sults in a multiple completion or receded only after all requirements, including the period of	1,2/19
14 11 1 20 1 1 2			
	Electronic Submission #4	/ / / / / / / / / / / / / / / / / / /	the Roswell on 12/05/2019 (20JS0033SE) JCTION CLERK
Signature (Flactron	io Submission)		ACCEPTED FOR RECORD

THIS SPACE FOR FEDERAL OR STATE PFFICE USE BUREAU OF LAND MANAGEMENTA <u>Approved By</u> Title Conditions of approval of any are attached. Approval of this certify that the applicant/holds leval or equitable title to those which would entitle the/applicant to conduct operations thered ROSWELL FIELD OFFICE Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fichitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2) ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED **

Revisions to Operator-Submitted EC Data for Sundry Notice #494630

Operator Submitted

Sundry Type:

DISPOSE SR

Lease:

NMNM131583

Agreement:

Operator:

MACK ENERGY CORPORATION PO BOX 960 ARTESIA, NM 88211-0960 Ph: 575-748-1288

Admin Contact:

JERRY SHERRELL PRODUCTION CLERK E-Mail: jerrys@mec.com

Ph: 575-748-1288

Tech Contact:

JERRY SHERRELL PRODUCTION CLERK E-Mail: jerrys@mec.com

Ph: 575-748-1288

Location: State: County:

NM -**CHAVES**

Field/Pool:

ROUND TANK SAN ANDRES

Well/Facility:

PRINCE GEORGE FEDERAL COM 1H Sec 32 T15S R29E Mer NMP NWNE 660FNL 2285FEL 32.977936 N Lat, 104.049667 W Lon

BLM Revised (AFMSS)

DISPOSE

SR

NMNM131583

NMNM139452 (NMNM139452)

MACK ENERGY CORPORATION P.O. BOX 960 ARTESIA, NM 88211-0960 Ph: 505-748-1288

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CHAVES

ROUND TANK-SAN ANDRES

PRINCE GEORGE FEDERAL COM 1H Sec 32 T15S R29E NWNE 660FNL 2285FEL 32.977936 N Lat, 104.049667 W Lon



New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson

Joanna Prukop Cabinet Secretary Reese Fullerton Deputy Cabinet Secretary

Mark Fesmire Division Director Oil Conservation Division



Administrative Order SWD-1163

March 9, 2009

Jerry W. Sherrell 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 Bnergy 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



shows through this Devonian interval - OR

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 easing 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

Administrative Order SWD-1163 Mack Energy Corp March 9, 2009 Page 3 of 3

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



Catalyst Oilfield Services 11999 E Hwy 158 Gardendale, TX 79758 (332) 563-0727 Fax: (432) 224-1038

Water Analysis Report

Customer:	Mack Energy Corporation	Sample #	78596	
Area	Artesia	Analysis ID #:	76097	The state of the s
Lease:	Prince George	***************************************	The second second	
Location:	Fed Com 1H	Ö	$\mathcal{C}_{\mathcal{A}}}}}}}}}}$	
Sample Point	Wellhead	en e		

Sampling Date:	11/27/2018	Anions	mg/l	meq/l	Cations	mg/l	meq/l
Analysis Date:	12/3/2018	Chloride:	108863.7	3070.65	Sòdium:	67700.0	2944.78
Analyst:	Catalyst	Bicarbonate:	131.8	2.16	Magnesium:	797.8	65.63
TDS (mg/l or g/m3):	184247.5	Carbonate:			Calcium;	2491.0	124.3
Density (g/cm3):	1,124	Sulfate:	3500.0	74.95	Potassium:	516.7	13.21
(3.5)		Borate*:	91.6	0.58	Strontium:	53.7	1.23
		Phosphate*	\$		Barium:	0.9	0.01
Hydrogen Sulfide:	5				Iron:	0.0	ď,
Carbon Dioxide:	103	*Calculate elemental	d based on measured boron and phosphorus		Manganeşe:	0.325	0.01
Carrier Mar		pH at time of sa	ampling:	7.12			•
Comments:		pH at time of ar	nalysis			•	
		pH used in Ca	lculation:	7.12			
		Temperaturo ((F):	75	Conductivity (mi Resistivity (ohm	9 2	199335 .0502

	1 1	Valuës C	alculated	at the Give	n Conditi	ons - Amoi	unts of Sc	ale in lb/10	00 bbl		
Calcite CaCO3	Gypsum CaSO ₄ 2H ₂ 0		Anhydrite Caso 4		Celestite SrSO ₄		Barite BaSO ₄		Property a grap as a		
° Е.	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	
80	0.40	3.52	-0.08	0.00	-0.06	0.00	0:08	0.00	1.26	0,59	1
100"	0.41	4.40	-0.16	0.00	-0.08	0.00	-0.11	0.00	1.05	0.29	1
120	0.41	5.27	-0.23	0.00	-0.06	0.00	-0.13	0.00	0.87	0.29	
140	0.42	6.15	-0.28	0.00	0.03	0.00	-0.14	0.00	0.71	0.29	
160	0.43	7.33	0.33	0.00	0.03	64.47	-0.14	0.00	0.58	0.29	
180	0.45	8.79	-0.37	0.00	0.10	216.27	-0.14	ð.00	0.46	0.29	
200	0.47	10.26	-0.41	0.00	0:18	379.21	-0.13	0.00	0.36	0.29	
220	0.51	12.02	-0.44	0.00	0.28	542,73	-0.12	0.00	0.28	0.29	1