

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA RECEIVED

JUL 7 2010

NMOCD ARTESIA

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

5 Lease Designation and Serial No

NMLC-062996B

6 If Indian, Allottee or Tribe Name

7 If Unit or CA, Agreement Designation

NMNM-123771

8 Well Name and No

Titans Federal Com #1

9 API Well No

30-015-36449

10 Field and Pool, or Exploratory Area

Ishee Lake; Abo

11 County or Parish, State

Eddy, NM

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)

1675 FNL & 30 FWL, Sec. 17 T16S R29E

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 Ishee Lake; Abo

Amount of water produced from each formation in barrels per day

517

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

Trucked

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

Aid State 14 #1

SW/4 SE/4 Sec 14-T17S-R28E

Disposal Permit

SWD-757

SEE ATTACHED FOR

CONDITIONS OF APPROVAL

14 I hereby certify that the foregoing is true and correct

Signed Gerry W. Sherrill

Title Production Clerk

Date 6/15/10

(This space for Federal or State office use)

Approved by _____
Conditions of approval, if any

Title _____

Date _____

ACCEPTED FOR RECORD

JUL 3 2010

/s/ JD Whitlock Jr

BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

Accepted for record

NMOCD RE

7/8/10



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

Water Analysis Report

Company:	Mack Energy Corporation	Sample #:	14959
Area:	Artesia	Analysis ID #:	2376
Lease:	Titans		
Location:	1		0
Sample Point:	Wellhead		

		Anions		Cations	
		mg/l	meq/l	mg/l	meq/l
Sampling Date:	9/2/2009	Chloride:	45550.1	Sodium:	23508.1
Analysis Date:	9/8/2009	Bicarbonate:	394.7	Magnesium:	1010.2
Analyst:	Mitchell	Carbonate:	0.0	Calcium:	4470.2
TDS (mg/l or g/m3):	76734.3	Sulfate:	1800.0	Strontium:	
Density (g/cm3):	1.053			Barium:	
				Iron:	0.7
Hydrogen Sulfide:	18.00			Manganese:	0.330
Carbon Dioxide:	79.00				
Comments:		pH at time of sampling:	6.7		
		pH at time of analysis:			
		pH used in Calculation:	6.7		
		Temperature @ lab conditions (F):	75	Conductivity (micro-ohms/cm):	111200
				Resistivity (ohm meter):	.0899

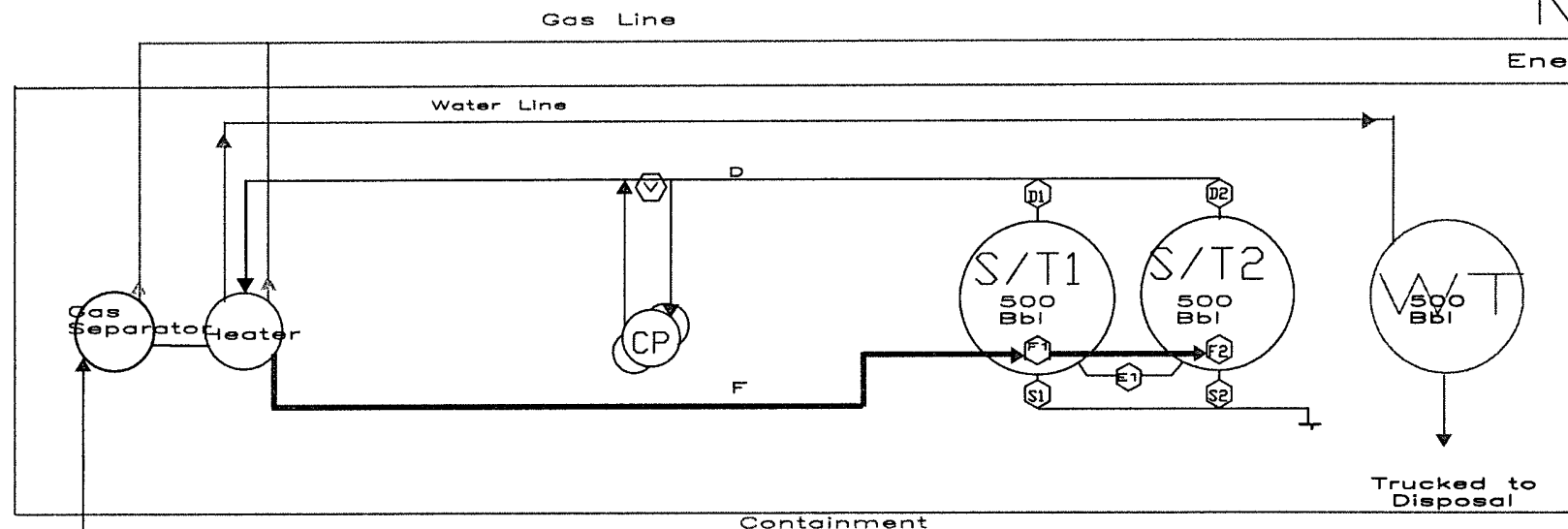
Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl

Values Generated at the Given Conditions: Amounts of Gases in Air (Vol %)												
Temp		Calcite CaCO ₃		Gypsum CaSO ₄ *2H ₂ O		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄		
°F	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount		
80	0.59	32.82	-0.02	0.00	-0.05	0.00	0.00	0.00	0.00	0.00		
100	0.68	38.67	-0.05	0.00	-0.02	0.00	0.00	0.00	0.00	0.00		
120	0.78	44.52	-0.08	0.00	0.03	52.64	0.00	0.00	0.00	0.00		
140	0.88	50.37	-0.10	0.00	0.11	169.31	0.00	0.00	0.00	0.00		
160	0.98	56.22	-0.11	0.00	0.20	291.82	0.00	0.00	0.00	0.00		
180	1.09	62.07	-0.11	0.00	0.31	408.48	0.00	0.00	0.00	0.00		
200	1.19	67.92	-0.11	0.00	0.43	511.17	0.00	0.00	0.00	0.00		
220	1.30	73.12	-0.10	0.00	0.56	596.64	0.00	0.00	0.00	0.00		

SCANNED

MACK

Energy Corporation



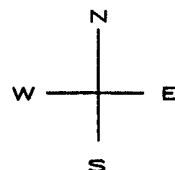
Titans
Federal #1

Production Phase

Titans Federal Battery			
S/T 1		S/T 2	
F1	Open	F1	Closed
D1	Open	D1	Closed
E1	Open	E1	Open
S1	Closed	S1	Closed
F2	Closed	F2	Open
D2	Closed	D2	Open
S2	Closed	S2	Closed

Sales Phase

Titans Federal Battery			
S/T 1		S/T 2	
F1	Closed	F1	Open
D1	Closed	D1	Open
E1	Closed	E1	Closed
S1	Open	S1	Closed
F2	Open	F2	Closed
D2	Open	D2	Closed
S2	Closed	S2	Open



Titans
Federal
#1

This Lease is subject to the site Security plan for southeast New Mexico operations.

The Plan is Located at :

Mack Energy Corporation
P.O. Box 960
Artesia NM 88211-0960

Mack Energy Corporation
Titans Federal Tank Battery
SW/4 NW/4
Section 17 T16S R29E

— Titans Federal Com Lease

**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. Subject to like approval by NMOCD.
10. If approved facility is down you must obtain approval prior to taking water to any other facility.

3/25/2010