

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

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)

355 FNL & 330 FEL, Sec. 17 T16S R29E

5 Lease Designation and Serial No

NMLC-062996B

6 If Indian, Allottee or Tribe Name

7 If Unit or CA, Agreement Designation

8 Well Name and No

Cowboys Federal #1

9 API Well No

30-015-36526

10 Field and Pool, or Exploratory Area

Ishee Lake; Abo

11 County or Parish, State

Eddy, NM

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 **418**

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 **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**

ACCEPTED FOR RECORD
JUL 3 2010
/s/ JD Whitlock Jr
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

Disposal Permit **Accepted for record** **NMOCD RE** **SWD-757**
7/8/10

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

14 I hereby certify that the foregoing is true and correct

Signed *Jerry W. Sherrill* Title Production Clerk Date 6/11/10

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____
Conditions of approval, if any.

Title 18 U S C Section 1001, makes 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



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 #: 14875
 Area: Artesia Analysis ID #: 2393
 Lease: Cowboys
 Location: A-1 0
 Sample Point: Wellhead

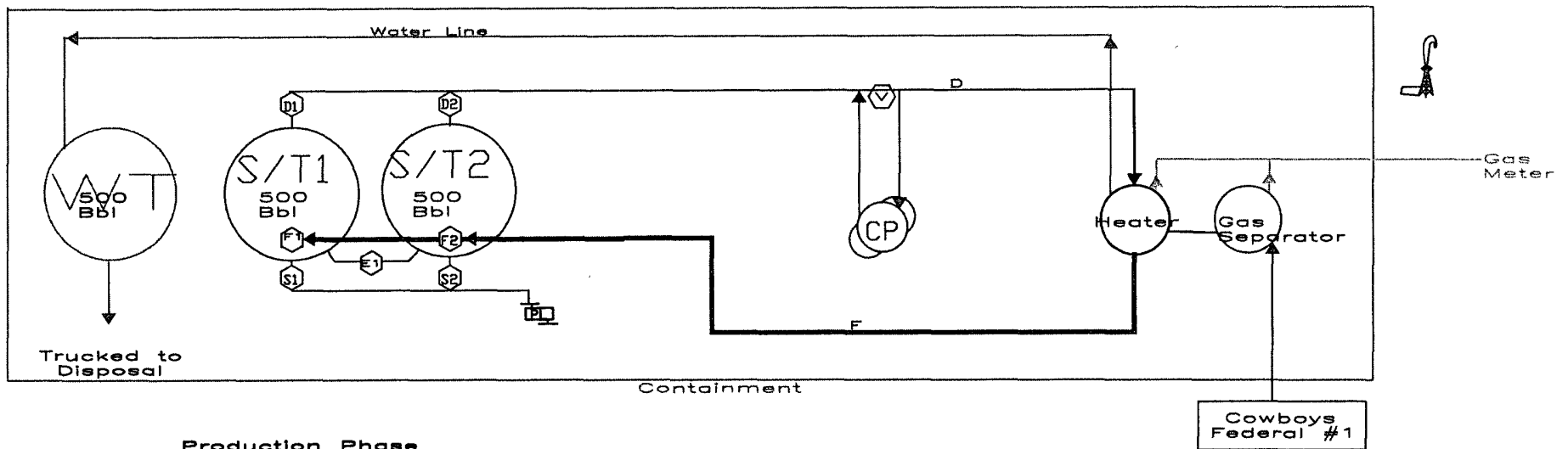
Sampling Date:	8/31/2009	Anions	mg/l	meq/l	Cations	mg/l	meq/l
Analysis Date:	9/2/2009	Chloride:	48052.8	1355.39	Sodium:	25354.8	1102.87
Analyst:	Mitchell	Bicarbonate:	290.8	4.77	Magnesium:	1015.0	83.5
TDS (mg/l or g/m3):	81172.8	Carbonate:	0.0	0.	Calcium:	4357.7	217.45
Density (g/cm3):	1.056	Sulfate:	2100.0	43.72	Strontium:		
					Barium:		
Hydrogen Sulfide:	20.00				Iron:	1.5	0.05
Carbon Dioxide:	44.00				Manganese:	0.240	0.01
Comments:		pH at time of sampling:		7			
		pH at time of analysis:					
		pH used in Calculation:		7			
		Temperature @ lab conditions (F):		75	Conductivity (micro-ohms/cm):		113100
					Resistivity (ohm meter):		.0884

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	0.74	23.94	0.03	72.80	0.00	0.00	0.00	0.00	0.00	0.00
100	0.82	27.83	-0.01	0.00	0.02	44.33	0.00	0.00	0.00	0.00
120	0.89	31.71	-0.04	0.00	0.07	139.13	0.00	0.00	0.00	0.00
140	0.97	35.59	-0.06	0.00	0.15	258.85	0.00	0.00	0.00	0.00
160	1.04	39.80	-0.07	0.00	0.24	386.66	0.00	0.00	0.00	0.00
180	1.12	44.00	-0.07	0.00	0.35	509.29	0.00	0.00	0.00	0.00
200	1.20	48.21	-0.07	0.00	0.47	618.33	0.00	0.00	0.00	0.00
220	1.29	52.42	-0.07	0.00	0.60	709.90	0.00	0.00	0.00	0.00

MACK

Energy Corporation

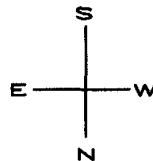


Production Phase

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

Sales Phase

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



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Cowboys
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 980
Artesia NM 88211-0980

Mack Energy Corporation
Cowboys Federal Tank Battery
NE/4 NE/4
Section 17 T16S R29E

— Cowboys Federal 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