Form 3160-5
(June 1990)

OCD-ARTESIA

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

RECEIVED
DEC 21 2009
NMOCD ARTESIA

5 Lease Designation and Serial No
NMNM-119269/NMLC-068677

6 If Indian, Allottee or Tribe Name

7 If Unit or CA Agreement Designation
Waiting on CA

1 Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

8 Well Name and No
Giants Federal #1 & #2

2 Name of Operator
Mack Energy Corporation

9 API Well No
30-015-36431
30-015-36523

3 Address and Telephone No
P.O Box 960 Artesia, NM 88211-0960 (575) 748-1288

10 Field and Pool, or Exploratory Area
Ishee Lake;Abo

4 Location of Well (Footage, Sec , T R , M or Survey Description)
S/2, Sec 8-T16S-R29E

11 County or Parish, State
Eddy
Lea, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION	
☐ Notice of Intent	☐ Abandonment	☐ Change of Plans
☒ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	☒ Other **Onshore Order 7**	☐ 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	**34**
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.	**Mack Energy Corporation** **Eagle Nest SWD #2** **SE/4 NE/4 Sec 5-T16S-R30E**
Disposal Permit	**SWD-1173**

Accepted for record
NMOCD

SUBJECT TO LIKE APPROVAL BY STATE

14 I hereby certify that the foregoing is true and correct

Signed Jerry W. Sherrell Title Production Clerk Date 11/10/09

(This space for Federal or State office use)

APPROVED
DEC 16 2009
/s/ JD Whitlock Jr
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

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

•See Instruction on Reverse Side

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

CATALYST
Oilfield Services

Water Analysis Report

Company:	Mack Energy Corporation	Sample #:	14961
Area:	Artesia	Analysis ID #:	2374
Lease:	Giants		
Location:	1 0		
Sample Point:	Wellhead		

Sampling Date:	8/2/2009
Analysis Date:	9/8/2009
Analyst:	Mitchell
TDS (mg/l or g/m3):	85709.9
Density (g/cm3):	1.06
Hydrogen Sulfide:	22.00
Carbon Dioxide:	37.00
Comments	

Anions	mg/l	meq/l
Chloride:	**51556.7**	**1454.23**
Bicarbonate:	**311.6**	**5.11**
Carbonate:	**0.0**	**0.**
Sulfate:	**1800.0**	**37.48**

Cations	mg/l	meq/l
Sodium:	**24991.0**	**1087.05**
Magnesium:	**1791.0**	**147.33**
Calcium:	**5258.2**	**262.38**
Strontium:		
Barium:		
Iron:	**0.9**	**0.03**
Manganese:	**0.450**	**0.02**

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):	**122500**
Resistivity (ohm meter):	**.0816**

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

Temp	Calcite $CaCO_3$		Gypsum $CaSO_4*2H_2O$		Anhydrite $CaSO_4$		Celestite $SrSO_4$		Barite $BaSO_4$	
°F	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount
80	0.83	28.99	0 02	34.47	-0.02	0.00	0.00	0.00	0.00	0.00
100	0.91	32 86	-0.02	0.00	0 01	19.33	0.00	0.00	0.00	0.00
120	0.98	37 05	-0.05	0.00	0.06	106.64	0 00	0.00	0.00	0.00
140	1.06	41.24	-0.07	0.00	0.14	215.53	0.00	0.00	0.00	0.00
160	1.13	45.43	-0 08	0.00	0.23	329.90	0.00	0.00	0.00	0.00
180	1.21	49.61	-0.08	0.00	0.34	438.47	0.00	0.00	0.00	0.00
200	1.29	53 80	-0.08	0 00	0.46	533.51	0.00	0.00	0.00	0.00
220	1.38	57.67	-0 08	0.00	0.59	612.44	0.00	0.00	0.00	0.00