Form 3160-5 (June 1990)

or representations as to any matter within its jurisdiction

UNITED STATES

DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT FORM APPROVED

Budget Bureau No 1004-0135

Expires March 31,1993

5 Lease Designation and Serial No

CARLSBAD FIELD OFFICE

NMNM-119269/NMLC-068677 6 If Indian, Allottee or Tribe Name

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 RECEIVED f Unit or CA, Agreement Designation SUBMIT IN TRIPLICATE DEC 2 1 2009 I Type of Well Waiting on CA N Oil ell Name and No NMOCD ARTESIA 2 Name of Operator Giants Federal #1 & #2 Mack Energy Corporation 3 Address and Telephone No P O. Box 960 Artesia, NM 88211-0960 (575) 748-1288 10 Field and 4 Location of Well (Footage, Sec., T. R., M. or Survey Description) Ishee Lake; Abo 11 County or Parish, State S/2, Sec 8-T16S-R29E CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA 12 TYPE OF SUBMISSION TYPE OF ACTION Notice of Intent Abandonment Change of Plans Recompletion New Construction Subsequent Report Plugging Back Non-Routine Fracturing Casing Repair Water Shut-Off Final Abandonment Notice Altering Casing Conversion to Injection 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 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 **Mack Energy Corporation** township, and range, of the disposal facility. If the disposal Eagle Nest SWD #2 facility is an approved disposal system, the operator's name and the name of the disposal system should suffice. **SE/4 NE/4** Sec 5-T16S-R30E Accepted for record SWD-1173 Disposal Permit SUBJECT TO LIKE Production Clerk (This space for Federal or State office use) DEC 16 2009 Approved by Conditions of approval if any /s/ JD Whitlock **Jr** United BUREAU OF LAND MANAGEMENT LIENTS 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



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

Sampling Date:	8/2/2009	Anions	mg/l	meg/l	Cations	rng/l	meq/l
Analysis Date: Analyst:	9/8/2009 Mitchell	Chloride: Bicarbonate:	51556.7 311.6	1454.23 5.11	Sodium: Magnesium:	24991.0 1791.0	1087.05 147.33
TDS (mg/l or g/m3): Density (g/cm3):	85709.9 1.06	Carbonate: Sulfate:	0.0 1800.0	0. 37.48	Calcium: Strontium: Barium:	5258.2	262.38
Hydrogen Sulfide: Carbon Dioxide:	22.00 37.00				Iron: Manganese:	0.9 0.450	0.03 0.02
Comments:		pH at time of sampling		7			
		pH used in Calculation: Temperature @ lab conditions (F):		7 75	Conductivity (micro-ohms/cm): Resistivity (ohm meter):		122500 0816.

Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl											
Temp .		alcite CaCO ₃	Gypsum CaSO ₄ *2H ₂ 0		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄		
	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	