

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No.
NMLC-060894

6 If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2.

7 If Unit of CA/Agreement, Name and/or No.

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

8 Well Name and No
Longhorns Federal #1

2. Name of Operator

Mack Energy Corporation

9. API Well No
30-015-36259

3a. Address

P.O. Box 960 Artesia, NM 88210-0960

3b. Phone No. (include area code)

(575) 748-1288

10. Field and Pool or Exploratory Area
Queen-Grayburg
Red Lake, San Andres

4. Location of Well (Footage, Sec., T,R,M, or Survey Description)

2410 FNL & 2310 FWL Sec. 6 T18S R27E

11. Country or Parish, State

Eddy, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input checked="" type="checkbox"/> Recomplete	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation. Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomple horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recomple in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

11/17/2011 CIBP @ 2700' w/ 30sx cement on top, tag @ 2482'.

11/18/2011 Perf 2105.5-2362.5', 50holes.

11/22/2011 Acidize w/ 13bbls 15% HCL.

12/7/2011 Frac 2105.5-2362.5' w/ 94,000# 16/30 Brady sand, 21,160# Super LC, 16,554bbls B20 cross link.

12/8/2011 RIH w/ 75 jts 2 7/8", J-55, SN @ 2376', 2 1/2 x 2 x 20' pump.

RECEIVED

DEC 19 2011

NMOCD ARTESIA

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)

Jerry W. Sherrell

Title Production clerk

Signature

Jerry W. Sherrell

Date 12/16/2011

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for my 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.

(Instructions on page 2)

PA Red Lake Glorieta - Yeso

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO 1004-0137
Expires. July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other
b. Type of Completion: ☐ New Well ☒ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr.,
Other _____

2. Name of Operator
Mack Energy Corporation

3. Address P.O. Box 960 Artesia, NM 88210

3a. Phone No. (include area code)
(575) 748-1288

4. Location of Well (Report location clearly and in accordance with Federal requirements)*

At surface 2410' FNL & 2310' FWL

At top prod. interval reported below. 2303' FNL & 2297' FWL

At total depth 2295' FNL & 2302' FWL

14 Date Spudded
6/25/2008

15 Date T.D. Reached
11/17/2011

16. Date Completed
☐ D&A ☒ Ready to Prod.

5. Lease Serial No.
NMLC-060894

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No.

8. Lease Name and Well No.
Longhorns Federal #1

9. API Well No.
30-015-35259

10. Field and Pool of Development
Red Lake, San Andres

11. Sec., T., R., M., or Block

Sec. 6 T18S R27E

12. County or Parish 13 State

Eddy NM

17. Elevations (DF, RKB, RT, GR)*
3164' RKB

18. Total Depth: MD
TVD 4245'

19. Plug Back T.D.: MD
TVD 2482'

20. Depth Bridge Plug Set: MD
TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)

Gamma Ray, Neutron, Density, Lateralog, Spectral Gamma Ray

22. Was well cored? ☒ No ☐ Yes (Submit analysis)
Was DST run? ☒ No ☐ Yes (Submit report)
Directional Survey? ☐ No ☒ Yes (Submit copy)

23 Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No of Sks. & Type of Cement	Slurry Vol (BBL)	Cement Top*	Amount Pulled
12 1/4	8 5/8, J-55	24	0	1179'		600sx		0	None
7 7/8	5 1/2, J-55	17S	0	4219'		740sx		0	None

24. Tubing Record

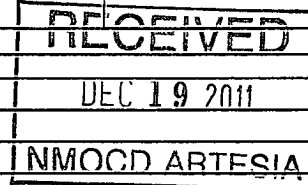
Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2 7/8	2376'							

25 Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No Holes	Perf Status
A) Red Lake; San Andres	2105.5	2362.5	2105.5-2362.5'	.41	50	
B)						
C)						
D)						

27 Acid, Fracture, Treatment, Cement Squeeze, etc.

Depth Interval 2105.5-2362.5' Amount and Type of Material See 3160-5 for details



28 Production Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr API	Gas Gravity	Production Method
12/15/2011	12/15/11	24hrs	→	17	12	396	37.400	0.600	2 1/2 x 2 x 20' pump
Choke Size	Tbg Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→	17	12	396	705	Producing	

28a Production -Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr API	Gas Gravity	Production Method
			→						
Choke Size	Tbg Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→						

*(See instructions and spaces for additional data on page 2)

28b Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg Press Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→						

28c Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg Press Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→						

29 Disposition of Gas (Sold, used for fuel, vented, etc.)

Sold

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas Depth
Red Lake; San Andres	2105.5	2362.5		Queen Grayburg San Andres Glorietta Tubb	596' 968' 1282' 2620' 4094'

32. Additional remarks (include pugging procedure):

33 Indicate which items have been attached by placing a check in the appropriate boxes:

- ☐ Electrical/Mechanical Logs (1 full set req'd)
 ☐ Geologic Report
 ☐ DST Report
 ☐ Directional Survey
- ☐ Sundry Notice for plugging and cement verification
 ☐ Core Analysis
 ☐ Other

34 I hereby certify that the foregoing and attached information is complete as determined from all available records (see attached instruction)*

Name (please print) Jerry W. Sherrell

Signature Jerry W. Sherrell

Title Production Clerk

Date 12-16-2011

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

(Continued on page 3)

(Form 3160-4, page 2)

DISTRICT I
1825 N. FRENCH DR., HOBBS, NM 88240

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102

DISTRICT II
1361 W. GRAND AVENUE, ARTESIA, NM 88210

OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Revised October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT III
1000 Rio Brazos Rd., Artesia, NM 87410

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-015-36259	Pool Code 97253 51300	Well Name Red Lake; San Andres
Property Code 37105	Property Name LONGHORNS FEDERAL	Well Number 1
OGRID No. 013837	Operator Name MACK ENERGY CORPORATION	Elevation 3415'

Surface Location

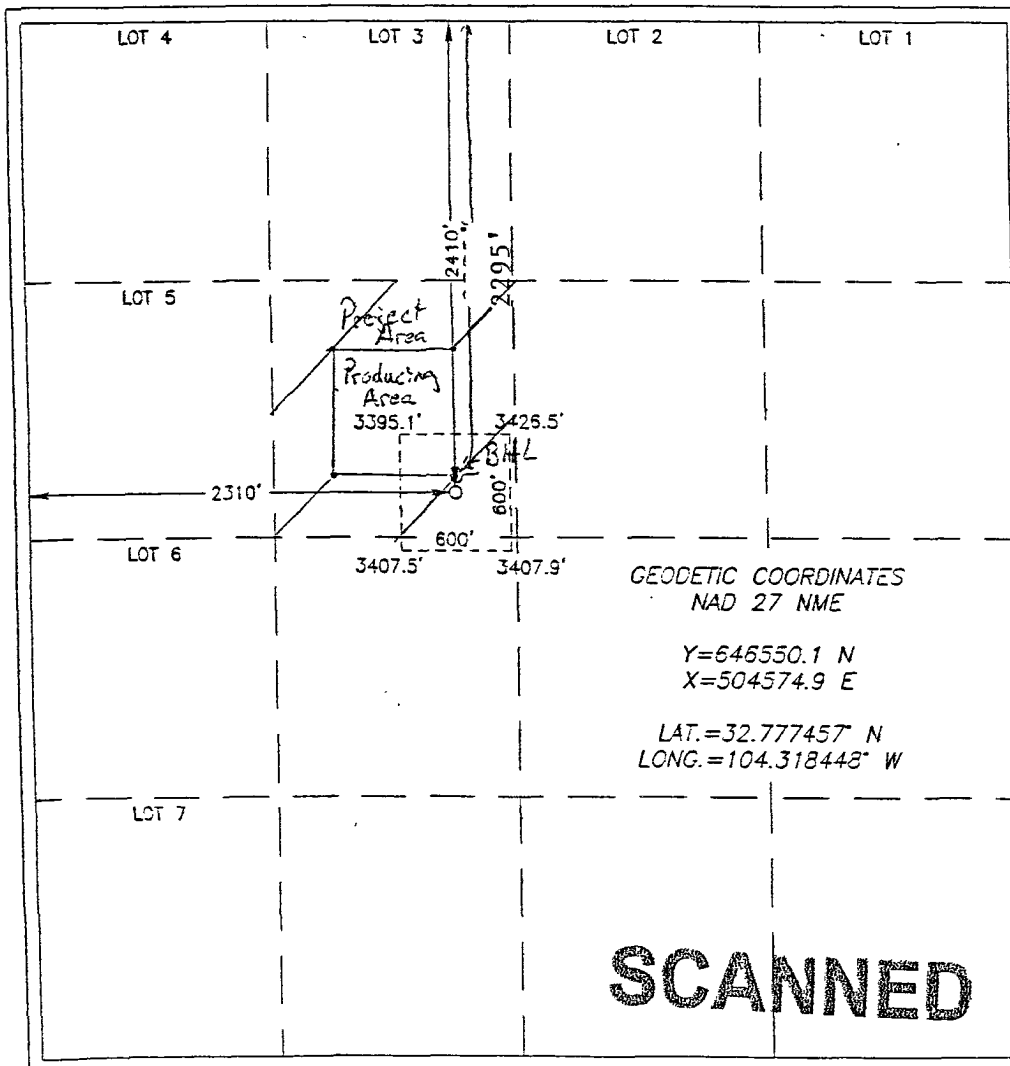
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/EAST line	County
F	6	18-S	27-E		2410	NORTH	2310	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/EAST line	County
F	6	18S	27E		2295	NORTH	2302	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
40			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



OPERATOR CERTIFICATION

I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Jerry W. Sherrell
Signature

Date

Jerry W. Sherrell

Printed Name

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

JANUARY 11 2008

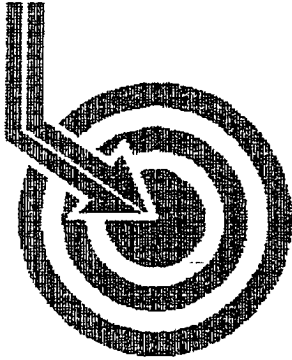
Date Surveyed

Signature & Seal of
Professional Surveyor

Ronald J. Edson
3239

Certificate No. GARY E. EDSON 12841
RONALD J. EDSON 3239

SCANNED



Scientific Drilling

MACK ENERGY

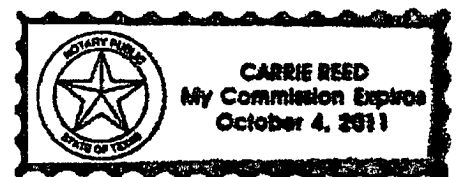
Field: Red Lake
Site: Eddy County, NM
Well: Longhorns Federal #1
Wellpath: DH - Job #32D0608477
Survey: 06/27/08-07/04/08

This survey is correct to the best of my knowledge
and is supported by actual field data.

.....L. Wharton..... Company Representative

Notorized this date 4th of August, 2008.

Carrie Reed
Notary Signature
County of Midland
State of Texas





Scientific Drilling International Survey Report

Company: MACK ENERGY
Field: Red Lake
Site: Eddy County, NM
Well: Longhorns Federal #1
Wellpath: VH - Job #32K0608488

Date: 07/31/2008 Time: 21:23:20 Page: 1
Co-ordinate(NE) Reference: Site: Eddy County, NM, Grid North
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: Well (0.00N,0.00E,354.55Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Survey: 06/29/08
KSRG 0'-1000'

Start Date: 06/29/2008

Company: Scientific Drilling International
Tool: Keeper;Keeper Gyro

Engineer: Melendez w/P&M
Tied-to: From Surface

Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
0.00	0.00	359.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.41	346.16	100.00	0.35	0.35	-0.09	0.41	0.36	346.16
200.00	0.68	340.39	199.99	1.28	1.25	-0.37	0.28	1.31	343.54
300.00	0.59	325.71	299.99	2.31	2.24	-0.86	0.19	2.40	338.99
400.00	0.54	344.57	399.98	3.22	3.12	-1.27	0.19	3.37	337.76
500.00	0.45	15.06	499.98	4.06	3.95	-1.30	0.27	4.16	341.81
600.00	0.31	97.32	599.98	4.36	4.30	-0.93	0.51	4.40	347.81
700.00	0.27	92.99	699.98	4.27	4.25	-0.42	0.05	4.27	354.30
800.00	0.98	209.22	799.97	3.53	3.49	-0.61	1.13	3.54	350.14
900.00	1.81	218.65	899.94	1.69	1.51	-2.01	0.86	2.51	306.92
1000.00	2.40	219.67	999.87	-0.92	-1.33	-4.33	0.59	4.53	252.89



Scientific
Drilling

Scientific Drilling International Survey Report

Company: MACK ENERGY
Field: Red Lake
Site: Eddy County, NM
Well: Longhorns Federal #1
Wellpath: DH - Job #32D0608477

Date: 08/04/2008 Time: 15:34:34 Page: 1
Co-ordinate(NE) Reference: Site: Eddy County, NM, Grid North
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: Well (0.00N,0.00E,354.55Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Survey: 06/27/08-07/04/08
MWD 1200'-4191'

Start Date: 06/27/2008

Company: Scientific Drilling Internatio
Tool: MWD;MWD

Engineer: Calvert/Ramirez
Tied-to: From: Definitive Path

Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
1000.00	2.40	219.67	999.87	-0.92	-1.33	-4.33	0.00	4.53	252.89
1200.00	2.31	224.16	1199.71	-6.48	-7.45	-9.81	0.10	12.32	232.80
1284.00	3.51	9.47	1283.66	-5.09	-6.13	-10.57	6.63	12.22	239.91
1377.00	9.25	20.63	1376.05	4.38	3.68	-7.47	6.29	8.33	296.27
1471.00	13.80	14.68	1468.13	21.70	21.61	-1.96	5.00	21.70	354.82
1564.00	15.18	3.10	1558.19	44.16	44.51	1.51	3.44	44.53	1.94
1627.00	14.81	355.57	1619.05	60.37	60.77	1.33	3.15	60.79	1.26
1720.00	10.04	344.28	1709.86	80.24	80.44	-1.78	5.73	80.46	358.73
1814.00	5.62	343.19	1802.96	92.83	92.74	-5.34	4.70	92.89	356.71
1906.00	5.58	345.43	1894.52	101.66	101.38	-7.76	0.24	101.68	355.62
2000.00	2.24	329.79	1988.29	107.84	107.39	-9.84	3.70	107.84	354.77
2094.00	0.65	227.10	2082.27	109.19	108.62	-11.15	2.62	109.19	354.14
2281.00	0.55	224.24	2269.26	107.96	107.25	-12.56	0.06	107.98	353.32
2468.00	0.43	191.03	2456.25	106.71	105.92	-13.32	0.16	106.75	352.83
2655.00	0.68	185.65	2643.24	104.94	104.13	-13.56	0.14	105.01	352.58
2811.00	0.72	195.60	2799.23	103.12	102.26	-13.92	0.08	103.20	352.25
2997.00	1.05	351.26	2985.22	103.73	102.82	-14.49	0.93	103.84	351.98
3121.00	0.99	337.00	3109.20	105.89	104.93	-15.08	0.21	106.01	351.82
3308.00	1.56	44.74	3296.16	109.06	108.23	-13.92	0.80	109.12	352.67
3495.00	1.08	52.10	3483.11	111.63	111.12	-10.74	0.27	111.63	354.48
3682.00	0.10	79.62	3670.10	112.59	112.23	-9.19	0.53	112.60	355.32
3818.00	0.24	351.47	3806.10	112.89	112.53	-9.11	0.19	112.90	355.37
3994.00	0.54	29.12	3982.10	113.94	113.62	-8.76	0.22	113.96	355.59
4191.00	0.56	20.44	4179.09	115.57	115.33	-7.97	0.04	115.61	356.04