

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

Form C-104
Revised August 1, 2011

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit one copy to appropriate District Office

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

¹ Operator name and Address Apache Corporation 303 Veterans Airpark Lane Suite 3000 Midland TX 79705		² OGRID Number 873	
		³ Reason for Filing Code/ Effective Date NW / 04/06/2014	
⁴ API Number 30-015-41843	⁵ Pool Name Cedar Lake; Glorieta-Yeso		⁶ Pool Code 96831
⁷ Property Code 308720	⁸ Property Name Lee Federal		⁹ Well Number 088

II. ¹⁰ Surface Location

UL or lot no. N	Section 20	Township 17S	Range 31E	Lot Idn	Feet from the 470	North/South Line South	Feet from the 1665	East/West line West	County Eddy
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¹¹ Bottom Hole Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Lse Code F	¹³ Producing Method Code P	¹⁴ Gas Connection Date 04/06/2014	¹⁵ C-129 Permit Number	¹⁶ C-129 Effective Date	¹⁷ C-129 Expiration Date				

III. Oil and Gas Transporters

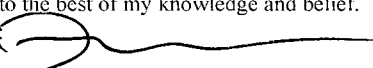
¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ O/G/W
221115	Frontier Field Services LLC 4200 East Skelly Drive Suite 700 Tulsa OK 74135	O
252293	Holly Energy Pipeline 311 W Quay / PO Box 1360 Artesia NM 88210	G
NM OIL CONSERVATION ARTESIA DISTRICT SEP 24 2014 RECEIVED		

IV. Well Completion Data

²¹ Spud Date 02/01/2014	²² Ready Date 04/06/2014	²³ TD 6400'	²⁴ PBTD 6390'	²⁵ Perforations 4800'-6299'	²⁶ DHC, MC
²⁷ Hole Size	²⁸ Casing & Tubing Size	²⁹ Depth Set	³⁰ Sacks Cement		
17-1/2"	13-3/8"	338'	1214 sx Class C		
11"	8-5/8"	3500'	1160 sx Class C		
7-7/8"	5-1/2"	6400'	980 sx Class C		
Tubing	2-7/8"	6365'			

V. Well Test Data

³¹ Date New Oil 04/06/2014	³² Gas Delivery Date 04/06/2014	³³ Test Date 09/08/2014	³⁴ Test Length 24	³⁵ Tbg. Pressure	³⁶ Csg. Pressure
³⁷ Choke Size	³⁸ Oil 2	³⁹ Water 636	⁴⁰ Gas 10		⁴¹ Test Method P

⁴² I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.
Signature: 

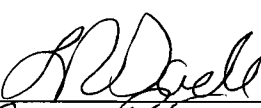
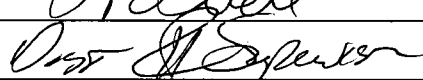
Printed name:
Fatima Vasquez

Title:
Regulatory Analyst II

E-mail Address:
Fatima.Vasquez@apachecorp.com

Date:
09/19/2014

Phone:
(432) 818-1015

OIL CONSERVATION DIVISION	
Approved by: 	
Title: 	
Approval Date: 10-9-14	
Pending BLM approvals will subsequently be reviewed and scanned	

3160-4
3160-5

NM OIL CONSERVATION ARTESIA DISTRICT

SEP 24 2014

Form 3160-4
(August 2007)

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

5. Lease Serial No.
NMLC029395B

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

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No.

2. Name of Operator
APACHE CORPORATION Contact: FATIMA VASQUEZ
E-Mail: fatima.vasquez@apachecorp.com

8. Lease Name and Well No.
LEE FEDERAL (308720) 88

3. Address 303 VETERANS AIRPARK LN
MIDLAND, TX 79705

3a. Phone No. (include area code)
Ph: 432-818-1015

9. API Well No.
30-015-41843

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

At surface SESW 470FSL 1665FWL 32.814092 N Lat, 103.895041 W Lon

At top prod interval reported below SESW 470FSL 1665FWL 32.814092 N Lat, 103.895041 W Lon

At total depth SESW 470FSL 1665FWL 32.814092 N Lat, 103.895041 W Lon

10. Field and Pool, or Exploratory
CEDAR LAKE; GLORIETA-YESO

11. Sec., T., R., or Block and Survey
or Area Sec 20 T17S R31E Mer

12. County or Parish
EDDY

13. State
NM

14. Date Spudded
02/01/2014

15. Date T.D. Reached
02/11/2014

16. Date Completed
☐ D & A ☒ Ready to Prod.
04/06/2014

17. Elevations (DF, KB, RT, GL)*
3679 GL

18. Total Depth: MD
TVD 6400

19. Plug Back T.D.: MD
TVD 6390

20. Depth Bridge Plug Set: MD
TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
BHPL/CN/BHCS-SGR/HI-RES LL

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

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
17.500	13.375 H-40	48.0		338		1214		0	
11.000	8.625 J-55	32.0		3500		1160		0	
7.875	5.500 J-55	17.0		6400		980		0	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.875	6365							

25. Producing Intervals

26. Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) GLORIETA	4795		4800 TO 5360	1.000	30	PRODUCING
B) PADDOCK	4883		5447 TO 5801	1.000	18	PRODUCING
C) BLINEBRY	5284		5868 TO 6299	1.000	21	PRODUCING
D)						

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

Depth Interval	Amount and Type of Material
4800 TO 5360	206,010 GALS 20#, 268,482# SAND, 3519 GALS ACID, 4662 GALS GEL
5447 TO 5801	105,966 GALS 20#, 147,233# SAND, 5832 GALS ACID, 4032 GALS GEL
5868 TO 6299	140,574 GALS 20#, 173,090# SAND, 5035 GALS ACID, 3612 GALS GEL

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
04/06/2014	09/08/2014	24	→	2.4	9.6	636.0	37.0		ELECTRIC PUMPING UNIT
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→				4000	POW	

28a. Production - Interval B

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

Pending BLM approvals will
subsequently be reviewed
and scanned

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #264705 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED **

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
RUSTLER	327	409	SANDSTONE / ANHYDRITE	RUSTLER	327
YATES	1492	1853	SANDSTONE	YATES	1492
SEVEN RIVERS	1853	2465	DOLOMITE / ANHYDRITE - GAS	SEVEN RIVERS	1853
GRAYBURG	2842	3233	SS* / DOLOMITE - GAS & WATER	GRAYBURG	2842
GLORIETA	4795	4883	SANDSTONE - OIL, GAS & WATER	GLORIETA	4795
PADDOCK	4883	5284	DOLOMITE - OIL, GAS & WATER	PADDOCK	4883
BLINEBRY	5284	6303	DOLOMITE - OIL, GAS & WATER	BLINEBRY	5284
TUBB	6303		SANDSTONE - OIL, GAS & WATER	TUBB	6303

32. Additional remarks (include plugging procedure):

Attachments - Frac Disclosure, OCD Forms C-102 & C-104. Logs mailed 04/08/2014.

Ogallala - Water formation above Rustler - not logged.

Tansill Salt - Sandstone / Anhydrite - 409'-1305'.

Bottom Salt - Sandstone / Anhydrite - 1305'-1492'.

Queen - Sandstone / Dolomite - Gas - 2465'-2842'.

San Andres - Carbonate - Oil, Gas & Water - 3233'-4795'.

Tubb - didn't drill far enough to get bottom depth of Tubb.

33. Circle enclosed attachments:

1. Electrical/Mechanical Logs (I full set req'd.)

2. Geologic Report

3. DST Report

4. Directional Survey

5. Sundry Notice for plugging and cement verification

6. Core Analysis

7 Other:

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):

**Electronic Submission #264705 Verified by the BLM Well Information System.
For APACHE CORPORATION, sent to the Carlsbad**

Name (please print) FATIMA VASQUEZ

Title REGULATORY ANALYST II

Signature (Electronic Submission)

Date 09/19/2014

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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.

**** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ****

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010**SUNDRY NOTICES AND REPORTS ON WELLS**
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.5. Lease Serial No.
NMLC029395B

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

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

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other8. Well Name and No.
LEE FEDERAL (308720) 882. Name of Operator
APACHE CORPORATIONContact: FATIMA VASQUEZ
E-Mail: fatima.vasquez@apachecorp.com9. API Well No.
30-015-418433a. Address
303 VETERANS AIRPARK LN
MIDLAND, TX 797053b. Phone No. (include area code)
Ph: 432-818-101510. Field and Pool, or Exploratory
CEDAR LAKE; GLORIETA-YESO

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

Sec 20 T17S R31E SESW 470FSL 1665FWL
32.814092 N Lat, 103.895041 W Lon11. County or Parish, and State
EDDY COUNTY, NM**12. CHECK 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 type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Production Start-up
	<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 recompleate 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 shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleation in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Apache completed this well as follows:

02/19/2014 MIRUSU. Log TOC @ surface (CBL). Perf Lower Blinetry @ 5868', 90', 5913', 43', 67', 92', 6009', 30', 48', 70', 98', 6117', 28', 53', 65', 80', 6210', 40', 64', 80' & 99', w/ 1 SPF, 21 holes.

02/20/2014 Spot 428 gals acid. Acidize w/ 3011 gals 15% HCl NEFE acid.

02/25/2014 Stage 1 - Frac w/ 140,574 gals 20# & 173,090# 16/30 sand. Flush w/ 3612 gals 10# linear gel. Spot 1596 gals 15% HCl acid.

Stage 2 - Set CBP @ 5850'. Perf Upper Blinetry @ 5447', 74', 5505', 30', 56', 68', 87', 99', 5625', 45', 60', 74', 98', 5720', 39', 62', 79' & 5801', w/ 1 SPF, 18 holes. Acidize w/ 4632 gals 15% HCl. Frac w/ 105,966 gals 20# & 147,233# 16/30 sand. Flush w/ 4032 gals 10# linear gel & spot 1200 gals 15% HCl acid.

NM OIL CONSERVATION
ARTESIA DISTRICT
SEP 24 2014
RECEIVED

14. I hereby certify that the foregoing is true and correct.

**Electronic Submission #264710 verified by the BLM Well Information System
For APACHE CORPORATION, sent to the Carlsbad**

Name (Printed/Typed) FATIMA VASQUEZ

Title REGULATORY ANALYST II

Signature (Electronic Submission)

Date 09/19/2014

THIS SPACE FOR FEDERAL OR STATE OFFICIAL USE

Approved By

Title

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

Pending BLM approvals will
subsequently be reviewed
and scanned

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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.

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

Additional data for EC transaction #264710 that would not fit on the form

32. Additional remarks, continued

Stage 3 - Set CBP @ 5430'. Perf Glorieta/Paddock @ 4800', 10', 40', 65', 78', 4902', 15', 40', 56' & 70' w/ 1 SPF, 10 holes. Started out hole hung up @ 4819', pulled 350# over string weight. Parted wireline left 450' of wireline, CCL, 10 perf guns & setting tool in hole.

02/27/2014 Fishing - Tag TOF @ 5403'. POH w/ fishing tools, tbgs, CCL, perf guns & setting tools. SI.

02/28/2014 Perf rest of Glorieta/Paddock @ 4987', 5001', 24', 44', 56', 84', 5110', 41', 60', 78', 94', 5209', 24', 45', 60', 79', 97', 5310', 40' & 60' w/ 1 SPF, 20 holes. Spot 546 gals acid across perfs. Acidize w/ 2973 gals 15% HCl NEFE acid.

03/12/2014 Stage 3 - Frac w/ 206,010 gals 20# & 268,482# 16/30 sand. Flush w/ 4662 gals 10# linear gel.

03/13/2014 ND frac spool. NU prod spool & BOP.

03/14/2014 DO CBP's @ 5430' & 5850'. RIH w/ bit to PBTD @ 6390'.

03/17/2014 RIH w/ 2-7/8" J-55 6.5# prod tbgs. SN @ 6276' & ETD @ 6365'.

03/18/2014 RIH w/ pump & rods. Clean loc & RDMOSU.

04/04/2014 Set new 640 pumping unit. POP.