

District I  
1425 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**

<sup>1</sup> Operator name and Address Apache Corporation 303 Veterans Airpark Lane Suite 1000 Midland TX 79705		<sup>2</sup> OGRID Number 873
		<sup>3</sup> Reason for Filing Code/ Effective Date
<sup>4</sup> API Number 30-015-42401	<sup>5</sup> Pool Name CEDAR LAKE; GLORIETA-YESO	<sup>6</sup> Pool Code 96831
<sup>7</sup> Property Code 308720	<sup>8</sup> Property Name LEE FEDERAL	<sup>9</sup> Well Number 77

**II. <sup>10</sup>Surface Location**

Ul or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South Line	Feet from the	East/West line	County
L	20	17S	31E		1550	FSL	970	FWL	EDDY

**<sup>11</sup> 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
L	20	17S	31E		2288	FSL	950	FWL	EDDY

<sup>12</sup> Lse Code	<sup>13</sup> Producing Method Code	<sup>14</sup> Gas Connection Date	<sup>15</sup> C-129 Permit Number	<sup>16</sup> C-129 Effective Date	<sup>17</sup> C-129 Expiration Date
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**III. Oil and Gas Transporters**

<sup>18</sup> Transporter OGRID	<sup>19</sup> Transporter Name and Address	<sup>20</sup> O/G/W
221115	Frontier Field Services LLC 4200 East Skelly Drive Suite 700 Tulsa OK 74135	G
252293	Holly Energy Pipeline 311 W Quay / PO Box 1360 Artesia NM 88210	O

**NM OIL CONSERVATION**  
ARTESIA DISTRICT  
JAN 16 2015  
RECEIVED

**IV. Well Completion Data**

<sup>21</sup> Spud Date 09/15/2014	<sup>22</sup> Ready Date	<sup>23</sup> TD 6472' 6413	<sup>24</sup> PBSD 6440'	<sup>25</sup> Perforations	<sup>26</sup> DHC, MC
<sup>27</sup> Hole Size	<sup>28</sup> Casing & Tubing Size	<sup>29</sup> Depth Set	<sup>30</sup> Sacks Cement		
17.5	13-3/8 H-40	313'	375 sx Class C		
11	8-5/8 J-55	3514'	1610 sx Class C		
7.85	5-1/2 J-55	6472'	970 sx Class C		
Tubing	2-7/8 J-55	?			

**V. Well Test Data**

<sup>31</sup> Date New Oil 11/20/2014	<sup>32</sup> Gas Delivery Date SOLD	<sup>33</sup> Test Date 12/01/14	<sup>34</sup> Test Length 24 hrs	<sup>35</sup> Tbg. Pressure	<sup>36</sup> Csg. Pressure
<sup>37</sup> Choke Size	<sup>38</sup> Oil 75	<sup>39</sup> Water 264	<sup>40</sup> Gas 76	<sup>41</sup> Test Method P	

<sup>42</sup> 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: *Emily Follis*  
Printed name: Emily Follis  
Title: Reg Analyst  
E-mail Address: emily.follis@apachecorp.com  
Date: 12/15/2014  
Phone: 432-818-1801

OIL CONSERVATION DIVISION  
**"Denied"**  
Approved by:  
Title: *Amend w/complete information*  
Approval Date:  
Pending BLM approvals will subsequently be reviewed and scanned

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM 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

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

8. Well Name and No.  
LEE FEDERAL 77

9. API Well No.  
30-015-42401

10. Field and Pool, or Exploratory  
GLORIETA-YESO<96831>

11. County or Parish, and State  
EDDY COUNTY COUNTY, NM

**SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

1. Type of Well  
 Oil Well  Gas Well  Other

2. Name of Operator  
APACHE CORPORATION  
Contact: EMILY FOLLIS  
E-Mail: emily.follis@apachecorp.com

3a. Address  
303 VETERANS AIRPARK LANE #3000  
MIDLAND, TX 79705

3b. Phone No. (include area code)  
Ph: 432-818-1801

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
Sec 20 T17S R31E NWSW 1550FSL 970FWL

**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 recomplete 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 recompletion 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.)

SEE ATTACHED 3160-5 FOR THE LEE FEDERAL #77

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

**Electronic Submission #285331 verified by the BLM Well Information System For APACHE CORPORATION, sent to the Carlsbad**

Name (Printed/Typed) EMILY FOLLIS	Title REGULATORY ANALYST I
Signature (Electronic Submission)	Date 12/16/2014

**THIS SPACE FOR FEDERAL OR STATE OFFICE 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 any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

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

**APACHE HAS COMPLETED THIS WELL AS FOLLOWS:**

**Lee Federal 77D – SUNDRY 3160-5**

**09/15/2014 RIG DOWN**

**10/09/2014** LOG FROM PBTD @ 6411' TO SF. FOUND GOOD CMT ACROSS ALL PAY INTERVALS. TOC @ 115'. POOH W/ LOGGING TOOLS. PU & RIH W/ 3-1/8" PERF GUNS & PERF Blinebry/Tubb zone @@ 5841, 66, 92, 5904, 14, 33, 47, 67, 95, 6024, 40, 59, 81, 6105, 36,59, 78, 97, 6228 & 50'. (1 JSPF) (20 holes) . POOH W/ PERF GUNS & RDMO WL.PREP TO ACIDIZE LOWER BLINEBRY ZONE @ LATER

**10/14/2014** PERFS & ACIDIZE LOWER BLINEBRY ZONE 5841'-6250'

**10/27/2014** STAGE 1: RU BAKER FRAC Blinebry/Tubb zone @ 5841, 66, 92, 5904, 14, 33, 47, 67, 95, 6024, 40, 59, 81, 6105, 36, 59, 78, 97, 6228 & 50'. (1 JSPF) (20 holes). PUMP 129,819# 16/30 BROWN, 40,737# 16/30 SIBER PROP. SPOT 1050 GAL 15% HCL, TOTAL PROP = 170,556#,STAGE 2:SET CBP @ 5,830' PERF THE Blinebry @ 5286, 5316, 43, 65, 82, 5404, 39, 54, 72, 5500, 17, 37, 52, 75, 5600, 21, 40, 64, 83, 5700, 20, 40, 71 & 5800'. (1 JSPF) (24 holes).STAGE 2 PUMP 3,486 GAL 15% HCL

**10/28/2014** STAGE 2.FRAC Blinebry @ 5286, 5316, 43, 65, 82, 5404, 39, 54, 72, 5500, 17, 37, 52, 75, 5600, 21, 40, 64, 83, 5700, 20, 40, 71 & 5800'.PUMP -162,110# 16/30 BROWN, 30,211# 16/30 SIBER PROP. SPOT 1050 GAL 15% HCL, TOTAL PROP = 192,321#,STAGE 3:SET CBP @ 5,260'

PERF Paddock/Glorieta @ 4643, 64, 80, 95, 4716, 42, 65, 84, 4813, 29, 58, 80, 4900, 21, 38, 57, 64, 95, 5020, 47, 62, 85, 5108, 26, 42, 72, 98 & 5215'. (1 JSPF) (28 holes)STAGE 3 ACID JOB PUMP 3,906 GAL 15% HCL STAGE 3. FRAC PADDOCK @ 4643-5215 PUMP -168,686# 16/30 BROWN, 47,145# 16/30 siber prop. total prop+215,831

**11/05/2014** 2-7/8" J-55 TBG. @ 5100'. POOH W/ TBG & BIT TO ABOVE PERFS. MIRU FOAM AIR UNIT. DO CBPs & CO WELL TO PBTD.

**11/06/2014** POOH W/ TBG & BIT. RIH W/ PROD EQUIP MIRU AIR FOAM UNIT. CIRC HOLE CLEAN TO PBTD PBTD @ 6440'.

**11/07/2014** 139 JTS OF 2-7/8" J-55 TBG. ETD @ 6400.22' RKB. SN @ 6310.15' RKB

**11/10/2014** PREP TO RIH W/ PUMP & RODS

**11/11/2014** AMPSCOT 640-365-168 PUMPING UNIT

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 \_\_\_\_\_

2. Name of Operator APACHE CORPORATION Contact: EMILY FOLLIS  
E-Mail: Emily.Follis@apachecorp.com

3. Address 303 VETERANS AIRPARK LANE SUITE 1000 MIDLAND, TX 79705 3a. Phone No. (include area code) Ph: 432-818-1801

4. Location of Well (Report location clearly and in accordance with Federal requirements)\*  
 At surface NWSW 1550FSL 970FWL  
 At top prod interval reported below NWSW 1550FSL 970FWL  
 At total depth NWSW 2288FSL 950FWL

6. If Indian, Allottee or Tribe Name  
 7. Unit or CA Agreement Name and No.  
 8. Lease Name and Well No. LEE FEDERAL 77  
 9. API Well No. 30-015-42401  
 10. Field and Pool, or Exploratory CEDAR LAKE: GLORIETA-YESO  
 11. Sec., T., R., M., or Block and Survey or Area Sec 20 T17S R31E Mer  
 12. County or Parish EDDY COUNTY 13. State NM  
 14. Date Spudded 09/05/2014 15. Date T.D. Reached 09/14/2014 16. Date Completed  D & A  Ready to Prod. 11/20/2014  
 17. Elevations (DF, KB, RT, GL)\* 3633 GL

18. Total Depth: MD 6472 TVD 6413 19. Plug Back T.D.: MD 6440 TVD 20. Depth Bridge Plug Set: MD TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each) CBL/BHCS/SGR/CN/PHPL/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 Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
17.500	13.375 H-40	48.0	0	313		375		0	
11.000	8.625 J-55	32.0	0	3514		1650		1350	
7.625	5.500 J-55	17.0	0	6472		970		115	

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	6250							

25. Producing Intervals 26. Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) PADDOCK	4643	5215	4643 TO 5215		28	PADDOCK
B) BLINBRY	5286	6250	5286 TO 5800		24	BLINBRY
C)			5841 TO 6250		20	BLINBRY
D)						

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

Depth Interval	Amount and Type of Material
4643 TO 6250	11841 BBL WATER, 578,708# PROPANT

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
11/20/2014	12/01/2014	24	→	75.0	76.0	264.0	36.0		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	
			→				1013	POW	

28a. Production - Interval B

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

ending BLM approvals will subsequently be reviewed and scanned

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	299	427	SANDSTONE	RUSTLER	299
TANSIL SALT	427	1297	SALT	TANSIL SALT	427
BOTTOM SALT	1297	1430	SALT	BOTTOM SALT	1297
YATES	1430	1763	SANDSTONE	YATES	1430
SEVEN RIVERS	1763	2395	SANDSTONE, CARBONATE	SEVEN RIVERS	1763
QUEEN	2395	3167	SANDSTONE, CARBONATE	QUEEN	2395
SAN ANDRES	3167	4673	CARBONATE	SAN ANDRES	3167
GLORIETA	4673	4747	SANDSTONE	GLORIETA	4673

32. Additional remarks (include plugging procedure):  
PADDOCK - 4747 - 5284 DOLOMITE  
BLINEBRY - 5284 - 6252 DOLOMITE  
TUBB - 6251 SANDSTONE

33. Circle enclosed attachments:

- 1. Electrical/Mechanical Logs (1 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 #285334 Verified by the BLM Well Information System.  
For APACHE CORPORATION, sent to the Carlsbad**

Name (please print) EMILY FOLLIS Title REGULATORY ANALYST

Signature (Electronic Submission) Date 12/16/2014

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 \*\***