

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTNM OIL CONSERVATION
ARTESIA OIL FIELDFORM 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.
NMLC029435B

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.
NFE FEDERAL COM 48H9. API Well No.
30-015-4344210. Field and Pool, or Exploratory
CEDAR LAKE; GLORIETA-YESO

11. County or Parish, and State

EDDY COUNTY, NM

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other2. Name of Operator
APACHE CORPORATIONContact: SORINA FLORES
E-Mail: sorina.flores@apachecorp.com3a. Address
303 VETERANS AIRPARK LANE SUITE 3000
MIDLAND, TX 797053b. Phone No. (include area code)
Ph: 432-818-1167

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

Sec 6 T17S R31E Mer NMP SWNW 1915FNL 330FWL
32.865372 N Lat, 103.915190 W Lon

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

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	Change to Original APD
	☐ Convert to Injection	☐ Plug Back	☐ 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 recompleat 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 recompleat 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.)

BLM-CO-1463 NATIONWIDE; NMB000736

FOR NFE FEDERAL COM 48H(30-015-43442), APACHE REQUEST TO CHG CSG/CMT PROGRAM:

NEW TVD: 5267' MD: 9329' LP: 5202' TVD

OLD PROD CSG STRING:

8-3/4": 0-4740'
8-3/4": 4740'-5481'
7-7/8": 5481'-9345'SEE ATTACHED FOR
CONDITIONS OF APPROVAL

NEW PROD CSG STRING:

Accepted for record

NMOC 11/20/15

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

Electronic Submission #322655 verified by the BLM Well Information System
For APACHE CORPORATION, sent to the Carlsbad
Committed to AFMSS for processing by KENNETH RENNICK on 11/10/2015 ()

Name (Printed/Typed) SORINA FLORES

Title SUBMITTING CONTACT

Signature (Electronic Submission)

Date 11/05/2015

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

Kenneth Rennick

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 #322655 that would not fit on the form

32. Additional remarks, continued

8.5": 0'-4694'

8.5": 4694'-329' ~~9329~~ 9329'

*Prod csg will be tapered string w/7" csg f/surf to KOP
(cmt thru stage tool f/KOP to 3000')

BOP OLD:

Hole: 12-1/4" Size: 13-5/8" WP: 3M Annular Test to: 2M

Hole: 9-5/8" Size: 13-5/8" WP: 3M Annular, Blind, Pipe Test to: 2M

BOP NEW:

Hole: 12-1/4" Size: 13-5/8" WP: 3M Annular Test to: 2M

Hole: 8-1/2" Size: 11" WP: 3M Annular, Blind, Pipe Test to: 2M

MUD PROGRAM OLD:

Int Shoe -TD: Brine Wgt: 9.5-10.2 Visc: 28-29 Wtr Loss: N/C

MUD PROGRAM NEW:

Int Shoe -TD: Brine Wgt: 8.6-10.2 Visc: 28-29 Wtr Loss: N/C

LOGGING:

Mud Log: Interval: 4694'-TD

DRLG CONDITIONS:

BHP @ deepest TVD: 2317psi

**New directional plan attached.

**NFE FEDERAL COM 48H
30-015-43442
Apache Corporation
Conditions of Approval**

Original COA still applies, except for the replacement of the cement fill behind the 7 x 5 1/2 inch production casing.

1. The minimum required fill of cement behind the 7 x 5 1/2 inch production casing is:

☒ Cement as proposed by operator. Operator shall provide method of verification. **Additional cement shall be required since excess is inadequate by 23% (AKA -23%).**

KG R 11102015



NM OIL CONSERVATION
ARTESIA DISTRICT
NOV 16 2015

RECEIVED

Apache Corporation
Eddy County, NM (NAD27 NME)
NFE Federal
#48H

OH

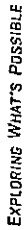
Plan: Plan #2 09-09-15

Standard Planning Report

09 September, 2015

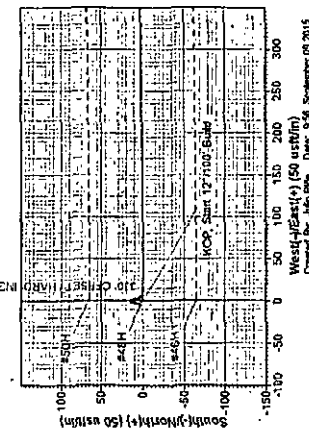


PHOENIX
TECHNOLOGY SERVICES



Azimuths to Grid North
 True North: -0.23°
 Magnetic North: 7.47°
 Magnetic Field
 Strength: 48561.9snT
 Dip Angle: 60.75°
 Date: 9/9/2015
 Model: HDQM

To convert a Magnetic Direction to a Grid Direction, Add 7.42°
 To convert a Magnetic Direction to a True Direction, Add 7.65° East
 To convert a True Direction to a Grid Direction, Subtract 0.23°



Database:	Compass 5000 GCR	Local Co-ordinate Reference:	Well #48H
Company:	Apache Corporation	TVD Reference:	KB @ 3774.00usft (TBD)
Project:	Eddy County, NM (NAD27 NME)	MD Reference:	KB @ 3774.00usft (TBD)
Site:	NFE Federal	North Reference:	Grid
Well:	#48H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2 09-09-15		

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Direction (°)
274.00	274.00	Rustler		0.96	89.61
444.00	444.00	T/Salt		0.96	89.61
1,326.00	1,326.00	B/Salt		0.96	89.61
1,489.00	1,489.00	Yates		0.96	89.61
1,767.00	1,767.00	Seven Rivers		0.96	89.61
2,361.00	2,361.00	Queen		0.96	89.61
2,779.00	2,779.00	Grayburg		0.96	89.61
3,102.00	3,102.00	San Andres		0.96	89.61
4,539.00	4,539.00	Glorieta		0.96	89.61
4,594.00	4,594.00	Yeso (Paddock)		0.96	89.61
5,120.39	5,076.60	Yeso (Blinberry)		0.96	89.61

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		N-E (usft)	E-W (usft)		
4,724.60	4,724.60	0.00	0.00	KOP, Start 12"/100' Build	
5,466.56	5,202.00	3.20	469.41	LP, Hold 88.04° Inc	
9,329.28	5,267.00	29.50	4,331.50	TD at 9329.28' MD	

Database:	Compass 5000 GCR	Local Co-ordinate Reference:	Well #48H
Company:	Apache Corporation	TVD Reference:	KB @ 3774.00usft (TBD)
Project:	Eddy County, NM (NAD27 NME)	MD Reference:	KB @ 3774.00usft (TBD)
Site:	NFE Federal	North Reference:	Grid
Well:	#48H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2 09-09-15		

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	N-S (usft)	E-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7,400.00	89.04	89.61	5,234.53	16.36	2,402.54	2,402.32	0.00	0.00	0.00
7,500.00	89.04	89.61	5,236.22	17.04	2,502.52	2,502.30	0.00	0.00	0.00
7,600.00	89.04	89.61	5,237.90	17.72	2,602.50	2,602.27	0.00	0.00	0.00
7,700.00	89.04	89.61	5,239.58	18.41	2,702.49	2,702.24	0.00	0.00	0.00
7,800.00	89.04	89.61	5,241.26	19.09	2,802.47	2,802.22	0.00	0.00	0.00
7,900.00	89.04	89.61	5,242.95	19.77	2,902.45	2,902.19	0.00	0.00	0.00
8,000.00	89.04	89.61	5,244.63	20.45	3,002.44	3,002.17	0.00	0.00	0.00
8,100.00	89.04	89.61	5,246.31	21.13	3,102.42	3,102.14	0.00	0.00	0.00
8,200.00	89.04	89.61	5,248.00	21.81	3,202.40	3,202.12	0.00	0.00	0.00
8,300.00	89.04	89.61	5,249.68	22.49	3,302.39	3,302.09	0.00	0.00	0.00
8,400.00	89.04	89.61	5,251.36	23.17	3,402.37	3,402.07	0.00	0.00	0.00
8,500.00	89.04	89.61	5,253.04	23.85	3,502.35	3,502.04	0.00	0.00	0.00
8,600.00	89.04	89.61	5,254.73	24.53	3,602.34	3,602.02	0.00	0.00	0.00
8,700.00	89.04	89.61	5,256.41	25.21	3,702.32	3,701.99	0.00	0.00	0.00
8,800.00	89.04	89.61	5,258.09	25.90	3,802.31	3,801.97	0.00	0.00	0.00
8,900.00	89.04	89.61	5,259.78	26.58	3,902.29	3,901.94	0.00	0.00	0.00
9,000.00	89.04	89.61	5,261.46	27.26	4,002.27	4,001.91	0.00	0.00	0.00
9,100.00	89.04	89.61	5,263.14	27.94	4,102.26	4,101.89	0.00	0.00	0.00
9,200.00	89.04	89.61	5,264.82	28.62	4,202.24	4,201.86	0.00	0.00	0.00
9,300.00	89.04	89.61	5,266.51	29.30	4,302.22	4,301.84	0.00	0.00	0.00
9,329.28	89.04	89.61	5,267.00	29.50	4,331.50	4,331.11	0.00	0.00	0.00
TD at 9329.28' MD									

Target Name	Dip Angle (°)	Dip Dir (°)	TVD (usft)	N-S (usft)	E-W (usft)	Northing (usft)	Eastings (usft)	Latitude	Longitude
MP-NFE Fed #48 v2	0.00	0.00	5,235.00	16.55	2,430.25	678,804.45	630,820.65	32° 51' 55.40678 N	103° 54' 26.19218 W
- plan hits target center									
- Point									
BHL-NFE Fed #48H v2	0.00	0.00	5,267.00	29.50	4,331.50	678,817.40	632,721.90	32° 51' 55.45843 N	103° 54' 3.90087 W
- plan hits target center									
- Point									

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Site:	NFE Federal	North Reference:	Grid
Well:	#48H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2 09-09-15		

Planned Survey									
Measured	Vertical	Vertical	Dogleg	Build	Turn				
Depth	Inclination	Azimuth	Depth	N/S	E/W	Section	Ratio	Ratio	Ratio
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
274.00	0.00	0.00	274.00	0.00	0.00	0.00	0.00	0.00	0.00
Rustler									
444.00	0.00	0.00	444.00	0.00	0.00	0.00	0.00	0.00	0.00
T/Salt									
1,326.00	0.00	0.00	1,326.00	0.00	0.00	0.00	0.00	0.00	0.00
B/Salt									
1,489.00	0.00	0.00	1,489.00	0.00	0.00	0.00	0.00	0.00	0.00
Yates									
1,767.00	0.00	0.00	1,767.00	0.00	0.00	0.00	0.00	0.00	0.00
Seven Rivers									
2,361.00	0.00	0.00	2,361.00	0.00	0.00	0.00	0.00	0.00	0.00
Queen									
2,779.00	0.00	0.00	2,779.00	0.00	0.00	0.00	0.00	0.00	0.00
Grayburg									
3,102.00	0.00	0.00	3,102.00	0.00	0.00	0.00	0.00	0.00	0.00
San Andres									
4,539.00	0.00	0.00	4,539.00	0.00	0.00	0.00	0.00	0.00	0.00
Glorieta									
4,594.00	0.00	0.00	4,594.00	0.00	0.00	0.00	0.00	0.00	0.00
Yeso (Paddock)									
4,724.60	0.00	0.00	4,724.60	0.00	0.00	0.00	0.00	0.00	0.00
KOP, Start 12°/100' Build									
4,800.00	9.05	89.61	4,799.69	0.04	5.94	5.94	12.00	12.00	0.00
4,900.00	21.05	89.61	4,896.08	0.22	31.86	31.85	12.00	12.00	0.00
5,000.00	33.05	89.61	4,984.98	0.53	77.25	77.24	12.00	12.00	0.00
5,100.00	45.05	89.61	5,062.50	0.95	140.13	140.11	12.00	12.00	0.00
5,120.39	47.49	89.61	5,076.60	1.05	154.86	154.85	12.00	12.00	0.00
Yeso (Blindbry)									
5,200.00	57.05	89.61	5,125.25	1.48	217.75	217.73	12.00	12.00	0.00
5,300.00	69.05	89.61	5,170.50	2.09	306.72	306.70	12.00	12.00	0.00
5,400.00	81.05	89.61	5,196.25	2.75	403.16	403.12	12.00	12.00	0.00
5,466.56	89.04	89.61	5,202.00	3.20	469.41	469.37	12.00	12.00	0.00
LP, Hold 88.04° Inc									
5,500.00	89.04	89.61	5,202.56	3.42	502.85	502.80	0.00	0.00	0.00
5,600.00	89.04	89.61	5,204.24	4.11	602.83	602.78	0.00	0.00	0.00
5,700.00	89.04	89.61	5,205.93	4.79	702.82	702.75	0.00	0.00	0.00
5,800.00	89.04	89.61	5,207.61	5.47	802.80	802.73	0.00	0.00	0.00
5,900.00	89.04	89.61	5,209.29	6.15	902.78	902.70	0.00	0.00	0.00
6,000.00	89.04	89.61	5,210.97	6.83	1,002.77	1,002.68	0.00	0.00	0.00
6,100.00	89.04	89.61	5,212.66	7.51	1,102.75	1,102.65	0.00	0.00	0.00
6,200.00	89.04	89.61	5,214.34	8.19	1,202.73	1,202.63	0.00	0.00	0.00
6,300.00	89.04	89.61	5,216.02	8.87	1,302.72	1,302.60	0.00	0.00	0.00
6,400.00	89.04	89.61	5,217.71	9.55	1,402.70	1,402.58	0.00	0.00	0.00
6,500.00	89.04	89.61	5,219.39	10.23	1,502.68	1,502.55	0.00	0.00	0.00
6,600.00	89.04	89.61	5,221.07	10.92	1,602.67	1,602.52	0.00	0.00	0.00
6,700.00	89.04	89.61	5,222.75	11.60	1,702.65	1,702.50	0.00	0.00	0.00
6,800.00	89.04	89.61	5,224.44	12.28	1,802.63	1,802.47	0.00	0.00	0.00
6,900.00	89.04	89.61	5,226.12	12.96	1,902.62	1,902.45	0.00	0.00	0.00
7,000.00	89.04	89.61	5,227.80	13.64	2,002.60	2,002.42	0.00	0.00	0.00
7,100.00	89.04	89.61	5,229.49	14.32	2,102.59	2,102.40	0.00	0.00	0.00
7,200.00	89.04	89.61	5,231.17	15.00	2,202.57	2,202.37	0.00	0.00	0.00
7,300.00	89.04	89.61	5,232.85	15.68	2,302.55	2,302.35	0.00	0.00	0.00

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Project:	Eddy County, NM (NAD27 NME)	MD Reference:	KB @ 3774.00usft (TBD)
Site:	NFE Federal	North Reference:	Grid
Well:	#48H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2 09-09-15		

Project:	Eddy County, NM (NAD27 NME)		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site:	NFE Federal		
Site Position:		Northing:	673,264.70 usft
From:	Map	Easting:	633,303.50 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 51' 0.49036 N
		Longitude:	103° 53' 57.34966 W
		Grid Convergence:	0.24 °

Well:	#48H		
Well Position	+N/-S	5,523.20 usft	Northing:
	+E/-W	-4,913.10 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	3,763.00 usft
		Latitude:	32° 51' 55.33914 N
		Longitude:	103° 54' 54.68576 W
		Ground Level:	

Wellbore:	OH		
Magnetics:	Model Name:	Sample Date:	Declination:
	HDGM	9/9/2015	7.65
		Dip Angle:	60.78
		Field Strength:	48,582

Design:	Plan #2 09-09-15		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth:
			0.00
Vertical Section:	Depth From (TVD)	+N/-S	E/W
	(usft)	(usft)	(usft)
	0.00	0.00	0.00
			90.47

Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TEO
Depth	(°)	(°)	Depth	(usft)	(usft)	Rate	Rate	Rate	(°)
(usft)			(usft)			(°/100usft)	(°/100usft)	(°/100usft)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,724.60	0.00	0.00	4,724.60	0.00	0.00	0.00	0.00	0.00	0.00
5,466.56	89.04	89.61	5,202.00	3.20	469.42	12.00	12.00	12.08	89.61
9,329.28	89.04	89.61	5,267.00	29.50	4,331.50	0.00	0.00	0.00	0.00 BHL-NFE Fed #48H v