

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTNMOCD,
ArtesiaFORM 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 539. API Well No.
30-015-43197-00-X110. Field and Pool, or Exploratory
CEDAR LAKE11. 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 CORPORATION
Contact: EMILY FOLLIS
E-Mail: Emily.Follis@apachecorp.com3a. Address
303 VETERANS AIRPARK LANE SUITE 3000
MIDLAND, TX 797053b. Phone No. (include area code)
Ph: 432-818-18014. Location of Well (Footage, Sec., T., R., M., or Survey Description)
Sec 20 T17S R31E NWSW 1550FSL 1180FWL**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	
	☐ 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 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.)

APACHE COMPLETED THE WELL AS FOLLOWS: TOC@70' (RR 07/25/2015)

08/10/15 MIRU RU-RENEGADE WL LOG & PERF. LOG FROM 6168 TO SRFACE CNL,CBL, GRCCCL. PERF LOWER BLINBRY/TUBB ZONE @593-6138' (1 JSPF)(100 HOLES) CHARGE.37" - 42" DIAMETER HOLE W/21" PENETRATION POOH RENEGADE WL. RIH W/ PKR & 2-7/8" TBG LEAVE SWINGING@5500' SI SDFN

08/11/15 RIH W/PKR ON 2-7/8" J55 TBG TO 6128' & CIR HOLE CLEAN. SPOT 520 GAL ACID ACROSS PERFS MIRU ELITE WELL SERVICE. ACIDIZE 4767-6138' W/3234 GAL 15% ACID. RD ELITE.RELEASE PKR.POOH W/TBG & PKR.ND BOP.NU FV. CLEAN LOCATION & RDMOSU SD SI-WELL SDFN
08/14/15 FRAC- ELITE WS 4767-6138'
TOTAL SAND 672,060 #
TOTAL ACID 9618 BBLAccepted for record
NMOCD 11/6/15NM OIL CONSERVAT
ARTESIA DISTRICT
OCT 30 2015

RECEIVED

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

Electronic Submission #318963 verified by the BLM Well Information System

For APACHE CORPORATION, sent to the Carlsbad

Committed to AFMSS for processing by JENNIFER SANCHEZ on 10/23/2015 (16JAS0712SE)

Name (Printed/Typed) EMILY FOLLIS

Title REGULATORY ANALYST

Signature (Electronic Submission)

Date 10/07/2015

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By

ACCEPTED

DAVID R GLASS
Title PETROLEUM ENGINEER

Date 10/26/2015

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 Carlsbad

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.

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

Additional data for EC transaction #318963 that would not fit on the form

32. Additional remarks, continued

TOTAL CROSS LINK 6716 BBL
TOTAL LINEAR GEL 816 BBL (3 STAGE FRAC)
RDMO ELITE SDFN

09/08/15 MIRU,NU BOP, TAL TBG, PLUMP IN 1/2 FRAC, SI , SDFN
09/09/15 NU BOP,RU FOAM/NITRO UNIT,RU 1/2 FRAC,RIH W/BIT ABOVE PERF SI SDFN
09/10/15 DO CBP'S,CO TO PBTD @ 6266' CIRC CLEAN POH@4663'LEAVE BIT SWINGING SI SDFN
09/11/15 SAFETY STND DN DUE TO EXCESSIVE H2S,FOR PU CREW FIT TESTING, RU OPERATOR SUPERVISE JET OUT
09/14/15 POH W/BIT,,RIH W/PROD TBG @6217', FLANG UP
09/15/15 RIH W/PUMP & RODS, RDMO
09/16/15 SET WEATHERFORD 640 PUMPING UNIT
09/25/15 RUN ELECTRIC,PLUMB INTO BATTERY, RECEIVE FIRST FLOW, FINAL REPORT

NOTE*** GAPS IN DATES ARE DUE TO SURROUNDING AREA WATER ISSUES WHICH HAVE DELAYED COMPLETION OPERATIONS

Apache Corporation (873)
303 Veterans Airpark Lane, #3000
Midland, TX 79705

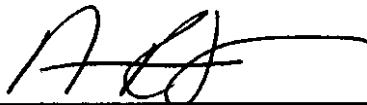
Lee Federal #053
Eddy County, New Mexico

30-015-43197

L-20-175-31E

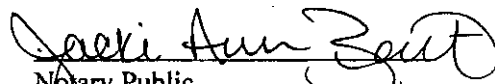
1550' FSL + 1180' FWL

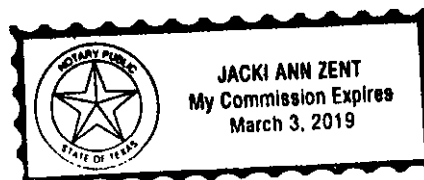
246	2.46	0.25	0.44	1.08	1.08
553	3.07	0.60	1.05	3.22	4.30
827	2.74	0.30	0.53	1.44	5.74
1082	2.55	0.90	1.58	4.02	9.75
1337	2.55	1.30	2.28	5.80	15.56
1553	2.16	1.10	1.93	4.16	19.71
1810	2.57	0.50	0.88	2.25	21.96
2105	2.95	0.90	1.58	4.65	26.61
2361	2.56	0.90	1.58	4.03	30.64
2620	2.59	1.10	1.93	4.99	35.63
2876	2.56	0.70	1.23	3.14	38.76
3130	2.54	0.70	1.23	3.11	41.87
3463	3.33	0.90	1.58	5.24	47.12
3700	2.37	5.30	9.28	21.98	69.10
3871	1.71	8.40	14.70	25.14	94.24
4127	2.56	10.20	17.85	45.70	139.93
4213	0.86	10.20	17.85	15.35	155.28
4298	0.85	10.00	17.50	14.88	170.16
4725	4.27	9.30	16.28	69.49	239.65
4896	1.71	10.00	17.50	29.93	269.58
5066	1.70	9.80	17.15	29.16	298.73
5152	0.86	9.90	17.33	14.90	313.63
5664	5.12	8.40	14.70	75.26	388.90
5834	1.70	9.00	15.75	26.78	415.67
6006	1.72	8.40	14.70	25.28	440.96
6266	2.60	8.40	14.70	38.22	479.18



Archie Brown - General Manager

The attached instrument was acknowledged before me on the 28th day of July, 2015 by
Archie Brown - General Manager, CapStar Drilling, Inc.


Notary Public





Apache Corporation (873)

Eddy County, NM (NAD27 NME)

Lee Federal 30-015-43197

#53

L-20-175-31E

OH / Job #1412338

1550' FSL + 1180' FWL

Design: Surveys (Capstar 114)

Standard Survey Report

24 July, 2015

gyro + mwd survey



Company:	Apache Corporation	Local Co-ordinate Reference:	Well #53
Project:	Eddy County, NM (NAD27 NME)	TVD Reference:	KB @ 3648.00usft (Capstar 114)
Site:	Lee Federal	MD Reference:	KB @ 3648.00usft (Capstar 114)
Well:	#53	North Reference:	Gnd
Wellbore:	OH / Job #1412338	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Capstar 114)	Database:	Compass 5000 GCR

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:	Lee Federal				
Site Position:		Northings:	664,811.60 usft	Latitude:	32° 49' 36.77792 N
From:	Map	Eastings:	634,967.00 usft	Longitude:	103° 53' 38.26184 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.24 "

Well	#53					
Well Position	+N/-S	0.00 usft	Northings:	661,172.80 usft	Latitude:	32° 49' 0.79753 N
	+E/-W	0.00 usft	Eastings:	634,332.20 usft	Longitude:	103° 53' 45.87755 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	3,637.00 usft

Wellbore	OH / Job #1412338				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	7/20/2015	7.67	60.77	48,581

Design					Surveys (Capstar 114)						
Audit Notes:											
Version:		1.0		Phase:		ACTUAL		Tie On Depth:		0.00	
Vertical Section:		Depth From (TVD)			+N/-S		+E/-W		Direction		
		(usft)			(usft)		(usft)		(°)		
		0.00			0.00		0.00		77.58		

Survey Program		Date	7/24/2015		
From	To				
(usft)	(usft)	Survey (Wellbore)	Tool Name	Description	
144.00	3,468.00	Phoenix Gyro Survey (OH / Job #1412338)	PHX_SPT_GTD	PHX Continuous north-seeking gyro	
3,468.00	6,266.00	Phoenix MWD Survey (OH / Job #1412338)	PHX+MWD+HDGM	PHX+MWD+HDGM	

Survey										
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)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
144.00	1.05	346.80	143.99	1.28	-0.30	-0.02	0.73	0.73	0.00	
206.00	1.05	307.50	205.98	2.18	-0.88	-0.39	1.14	0.00	-63.39	
294.00	0.71	16.24	293.97	3.20	-1.37	-0.65	1.17	-0.39	78.11	
385.00	0.81	72.58	384.97	3.93	-0.60	0.26	0.79	0.11	61.91	
473.00	0.85	105.72	472.96	3.94	0.62	1.46	0.54	0.05	37.66	
564.00	0.73	105.42	563.95	3.60	1.83	2.57	0.13	-0.13	-0.33	
652.00	0.60	132.07	651.94	3.15	2.72	3.33	0.38	-0.15	30.28	
738.00	0.58	99.38	737.94	2.77	3.48	3.99	0.39	-0.02	-38.01	
823.00	0.45	96.58	822.94	2.67	4.24	4.71	0.16	-0.15	-3.29	



Phoenix Technology Services LP

Survey Report



Company:	Apache Corporation	Local Co-ordinate Reference:	Well #53
Project:	Eddy County, NM (NAD27 NME)	TVD Reference:	KB @ 3648.00usft (Capstar 114)
Site:	Lee Federal	MD Reference:	KB @ 3648.00usft (Capstar 114)
Well:	#53	North Reference:	Grid
Wellbore:	OH / Job #1412338	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Capstar 114)	Database:	Compass 5000 GCR

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)
908.00	0.32	96.96	907.93	2.60	4.80	5.25	0.15	-0.15	0.45
994.00	0.56	84.17	993.93	2.61	5.46	5.89	0.30	0.28	-14.87
1,079.00	0.51	67.25	1,078.93	2.80	6.22	6.68	0.19	-0.06	-19.91
1,164.00	0.96	58.12	1,163.92	3.32	7.17	7.72	0.55	0.53	-10.74
1,249.00	1.28	52.16	1,248.90	4.28	8.53	9.25	0.40	0.38	-7.01
1,334.00	1.39	60.56	1,333.88	5.37	10.18	11.09	0.26	0.13	9.88
1,420.00	1.27	56.55	1,419.86	6.41	11.88	12.98	0.18	-0.14	-4.66
1,505.00	0.97	63.30	1,504.84	7.25	13.31	14.56	0.38	-0.35	7.94
1,590.00	0.92	69.93	1,589.83	7.81	14.59	15.93	0.14	-0.06	7.80
1,676.00	0.73	65.94	1,675.82	8.27	15.74	17.15	0.23	-0.22	-4.64
1,761.00	0.73	67.62	1,760.81	8.70	16.74	18.21	0.03	0.00	1.98
1,846.00	1.00	80.46	1,845.81	9.02	17.97	19.49	0.39	0.32	15.11
1,931.00	1.02	71.17	1,930.79	9.39	19.42	20.98	0.19	0.02	-10.93
2,016.00	1.05	60.83	2,015.78	10.02	20.81	22.48	0.22	0.04	-12.16
2,102.00	1.01	52.78	2,101.76	10.86	22.10	23.92	0.17	-0.05	-9.36
2,187.00	1.00	44.22	2,186.75	11.84	23.22	25.22	0.18	-0.01	-10.07
2,273.00	1.12	37.13	2,272.74	13.05	24.25	26.49	0.21	0.14	-8.24
2,358.00	1.23	28.15	2,357.72	14.52	25.18	27.71	0.26	0.13	-10.56
2,443.00	1.21	27.13	2,442.70	16.12	26.02	28.88	0.03	-0.02	-1.20
2,529.00	1.29	28.15	2,528.68	17.78	26.89	30.09	0.10	0.09	1.19
2,614.00	1.31	30.59	2,613.66	19.46	27.84	31.37	0.07	0.02	2.87
2,699.00	1.23	28.36	2,698.64	21.10	28.76	32.63	0.11	-0.09	-2.62
2,785.00	1.19	26.10	2,784.62	22.72	29.60	33.79	0.07	-0.05	-2.63
2,870.00	1.06	31.06	2,869.60	24.18	30.39	34.88	0.19	-0.15	5.84
2,956.00	0.91	29.72	2,955.59	25.46	31.14	35.88	0.18	-0.17	-1.56
3,041.00	0.85	24.76	3,040.58	26.61	31.74	36.72	0.11	-0.07	-5.84
3,126.00	0.67	17.47	3,125.57	27.66	32.15	37.35	0.24	-0.21	-8.58
3,212.00	0.71	26.15	3,211.56	28.62	32.54	37.93	0.13	0.05	10.09
3,297.00	0.65	33.75	3,296.56	29.49	33.04	38.61	0.13	-0.07	8.94
3,382.00	0.57	6.25	3,381.55	30.31	33.35	39.09	0.35	-0.09	-32.35
3,468.00	0.65	1.39	3,467.55	31.23	33.41	39.34	0.11	0.09	-5.65
Tie-on to Phoenix Gyro Survey									
3,615.00	2.80	62.10	3,614.48	33.74	36.60	43.00	1.73	1.46	41.30
First Phoenix MWD Survey									
3,700.00	5.30	77.00	3,699.26	35.60	42.26	48.93	3.17	2.94	17.53
3,786.00	5.80	85.40	3,784.86	36.84	50.47	57.21	1.11	0.58	9.77
3,871.00	7.20	86.50	3,869.31	37.51	60.06	66.72	1.65	1.65	1.29
3,957.00	8.40	82.40	3,954.52	38.67	71.67	78.31	1.54	1.40	-4.77
4,042.00	10.10	84.70	4,038.41	40.18	85.25	91.89	2.05	2.00	2.71
4,127.00	10.20	84.20	4,122.08	41.63	100.15	106.76	0.16	0.12	-0.59
4,213.00	10.20	84.20	4,206.72	43.17	115.31	121.89	0.00	0.00	0.00
4,298.00	10.00	83.50	4,290.40	44.76	130.13	136.71	0.28	-0.24	-0.82
4,384.00	9.80	82.50	4,375.12	46.56	144.80	151.43	0.31	-0.23	-1.16

Company:	Apache Corporation	Local Co-ordinate Reference:	Well #53
Project:	Eddy County, NM (NAD27, NME)	TVD Reference:	KB @ 3848.00usft (Capstar 114)
Site:	Lee Federal	MD Reference:	KB @ 3848.00usft (Capstar 114)
Well:	#53	North Reference:	Grid
Wellbore:	OH / Job #1412338	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Capstar 114)	Database:	Compass 5000 GCR

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)
4,469.00	9.50	81.30	4,458.92	48.57	158.91	165.63	0.42	-0.35	-1.41
4,554.00	9.50	80.60	4,542.75	50.77	172.76	179.64	0.14	0.00	-0.82
4,640.00	9.40	79.90	4,627.59	53.16	186.68	193.74	0.18	-0.12	-0.81
4,725.00	9.30	79.10	4,711.46	55.68	200.26	207.54	0.19	-0.12	-0.94
4,810.00	10.00	82.40	4,795.25	57.96	214.32	221.76	1.05	0.82	3.88
4,896.00	10.00	82.60	4,879.95	59.90	229.12	236.64	0.04	0.00	0.23
4,981.00	9.90	82.50	4,963.67	61.81	243.68	251.27	0.12	-0.12	-0.12
5,066.00	9.80	83.10	5,047.42	63.63	258.11	265.76	0.17	-0.12	0.71
5,152.00	9.90	82.60	5,132.15	65.48	272.71	280.40	0.15	0.12	-0.58
5,237.00	9.80	83.00	5,215.90	67.29	287.13	294.89	0.14	-0.12	0.47
5,322.00	9.20	82.50	5,299.73	69.05	301.05	308.86	0.71	-0.71	-0.59
5,407.00	9.00	82.40	5,383.66	70.82	314.38	322.25	0.24	-0.24	-0.12
5,492.00	8.70	80.30	5,467.65	72.78	327.30	335.30	0.52	-0.35	-2.47
5,578.00	8.90	71.50	5,552.64	75.99	340.02	348.41	1.58	0.23	-10.23
5,664.00	8.40	68.10	5,637.66	80.44	352.16	361.22	0.83	-0.58	-3.95
5,749.00	8.50	71.50	5,721.74	84.75	363.88	373.59	0.60	0.12	4.00
5,834.00	9.00	81.80	5,805.75	87.69	376.42	386.47	1.93	0.59	12.12
5,920.00	8.70	81.00	5,890.73	89.67	389.50	399.67	0.38	-0.35	-0.93
6,006.00	8.40	87.10	5,975.78	91.01	402.20	412.36	1.11	-0.35	7.09
6,091.00	8.40	87.90	6,059.86	91.55	414.60	424.59	0.14	0.00	0.94
6,176.00	8.40	84.90	6,143.95	92.33	426.99	436.86	0.52	0.00	-3.53
6,210.00	8.40	82.50	6,177.59	92.87	431.93	441.79	1.03	0.00	-7.06
Last Phoenix MWD Survey									
6,266.00	8.40	82.50	6,232.99	93.94	440.04	449.94	0.00	0.00	0.00
Projection to TD									

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N-S (usft)	+E-W (usft)	
3,468.00	3,467.55	31.23	33.41	Tie-on to Phoenix Gyro Survey
3,615.00	3,614.48	33.74	36.60	First Phoenix MWD Survey
6,210.00	6,177.59	92.87	431.93	Last Phoenix MWD Survey
6,266.00	6,232.99	93.94	440.04	Projection to TD

Checked By: _____ Approved By: _____ Date: _____

Project: Eddy County, NM (NAD27 NME)
Site: Lee Federal
Well: #53
Wellbore: OH / Job #1412338
Design: Plan #3 07-19-15
Rig: Capstar 114



PHOENIX
TECHNOLOGY SERVICES

Map System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Eipsoid: Clarke 1880
Zone Name: New Mexico East 3001
Local Origin: Well #53, Grid North

Latitude: 32° 49' 0.79753 N
Longitude: 103° 53' 45.87755 W

Grid East: 634332.20
Grid North: 661172.80
Scale Factor: 1.000

Geographic Model: HDGM
Sample Date: 20-Jul-15
Magnetic Declination: 7.67°
Dip Angle from Horizontal: 60.77°
Magnetic Field Strength: 48581

Geographic Field Strength: 48580.9mT
Dip Angle: 60.77°
Date: 7/20/2015
Model: HDGM

WELL DETAILS						
Well	MD	Inc	Asi	TVD	North	East
#53	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00

SECTION DETAILS									
Sec	MD	Inc	Asi	TVD	North	East	YFace	YSec	Target
1	3488.00	0.65	1.30	3467.55	31.73	33.41	0.00	0.00	33.34
2	3600.00	0.65	1.30	3569.54	32.72	33.44	0.00	0.00	36.70
3	4084.33	0.78	81.15	4081.49	41.82	74.26	2.00	83.51	81.52
4	6437.05	0.78	81.15	6409.00	103.30	489.29	0.00	0.00	480.44 BHL-Lee Fed #53

DESIGN TARGET DETAILS									
Name	TVD	MD	Inc	Asi	North	East	Latitude	Longitude	Shape
BHL-Lee Fed #53	6400.00	103.30	489.29	0.00	0.00	0.00	32° 49' 0.79753 N	103° 53' 45.87755 W	Circle (Radius: 20.00)

CASING DETAILS					FORMATION TOP DETAILS				
TVD	MD	Name	Size		TVD	MD	Formation	DipAngle	DipDir
600.00		13 3/8" Surface	13-3/8"		4678.00	889.05	Gloria	0.00	
3500.00	3500.45	8 5/8" Intermediate	8-5/8"		4756.00	478.00	Yaso	0.00	
6400.00	6437.05	5 1/2" Production	5-1/2"		5280.00	530.53	Blindly	0.00	
					6164.00	6277.88	Tube	0.00	

Map System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Eipsoid: Clarke 1880
Zone Name: New Mexico East 3001
Local Origin: Well #53, Grid North

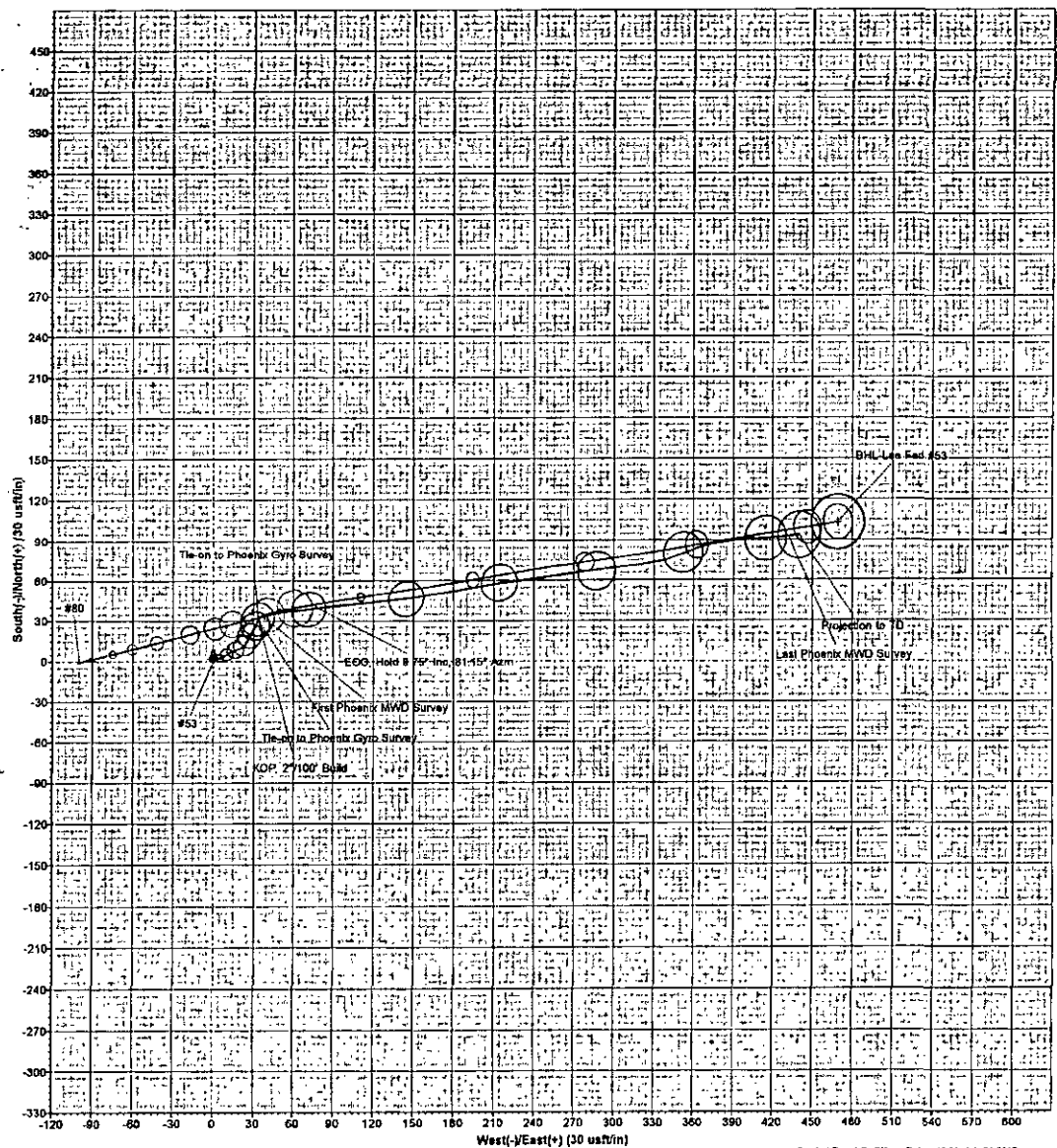
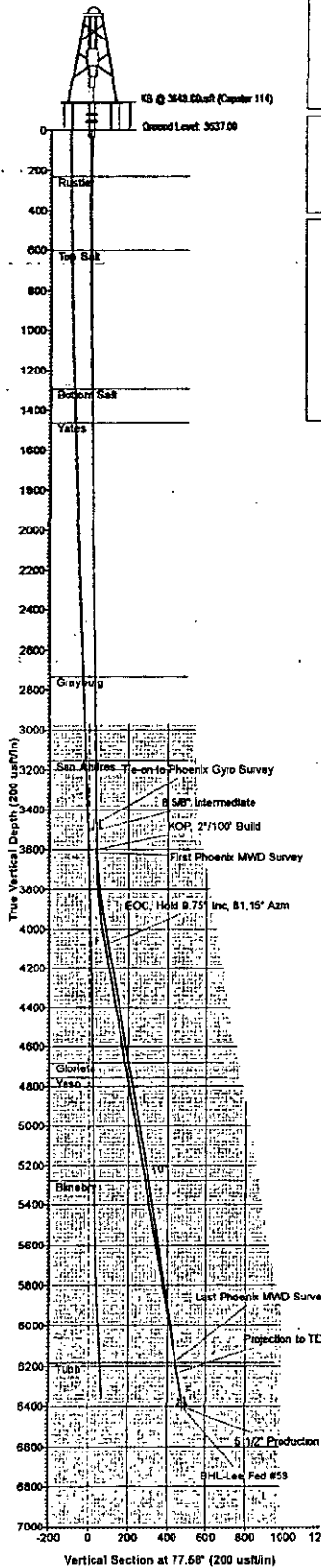
Latitude: 32° 49' 0.79753 N
Longitude: 103° 53' 45.87755 W

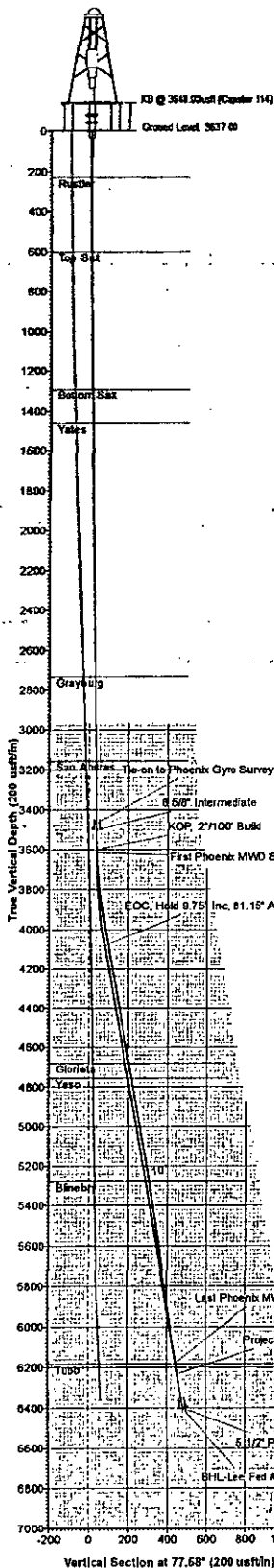
Grid East: 634332.20
Grid North: 661172.80
Scale Factor: 1.000

Geographic Model: HDGM
Sample Date: 20-Jul-15
Magnetic Declination: 7.67°
Dip Angle from Horizontal: 60.77°
Magnetic Field Strength: 48581

To convert a Magnetic Direction to a Grid Direction, Add 7.43°
To convert a Magnetic Direction to a True Direction, Add 7.67° East
To convert a True Direction to a Grid Direction, Subtract 0.24°

LEGEND				
—	#50, OH, Surveys V0			
—	#53, OH / Job #1412338, Surveys (Capstar 114) V0			
—	Plan #3 07-19-15			





WELL DETAILS									
MD	Inc	Adj	TVD	-49-S	-49-W	Depth	True	Vertical	Target
3428.00	0.05	1.39	3447.55	31.23	33.41	0.00	0.00	39.34	
3603.00	0.05	1.39	3599.54	32.72	31.44	0.00	0.00	39.70	
4084.33	9.78	81.15	4081.48	41.82	74.26	7.00	83.51	81.52	
8437.05	9.78	81.15	8420.09	103.39	463.29	9.00	0.00	480.44	BHL-Lee Fed #53

SECTION DETAILS									
Sec	MD	Inc	Adj	TVD	-49-S	-49-W	Depth	True	Vertical
1	3428.00	0.05	1.39	3447.55	31.23	33.41	0.00	0.00	39.34
2	3603.00	0.05	1.39	3599.54	32.72	31.44	0.00	0.00	39.70
3	4084.33	9.78	81.15	4081.48	41.82	74.26	7.00	83.51	81.52
4	8437.05	9.78	81.15	8420.09	103.39	463.29	9.00	0.00	480.44

DESIGN TARGET DETAILS									
Name	TVD	-49-S	-49-W	Depth	True	Vertical	Depth	True	Vertical
BHL-Lee Fed #53	8420.09	103.39	463.29	861276.30	634332.20	32° 49' 1.80000 N	103° 53' 45.87755 W	0.00	0.00

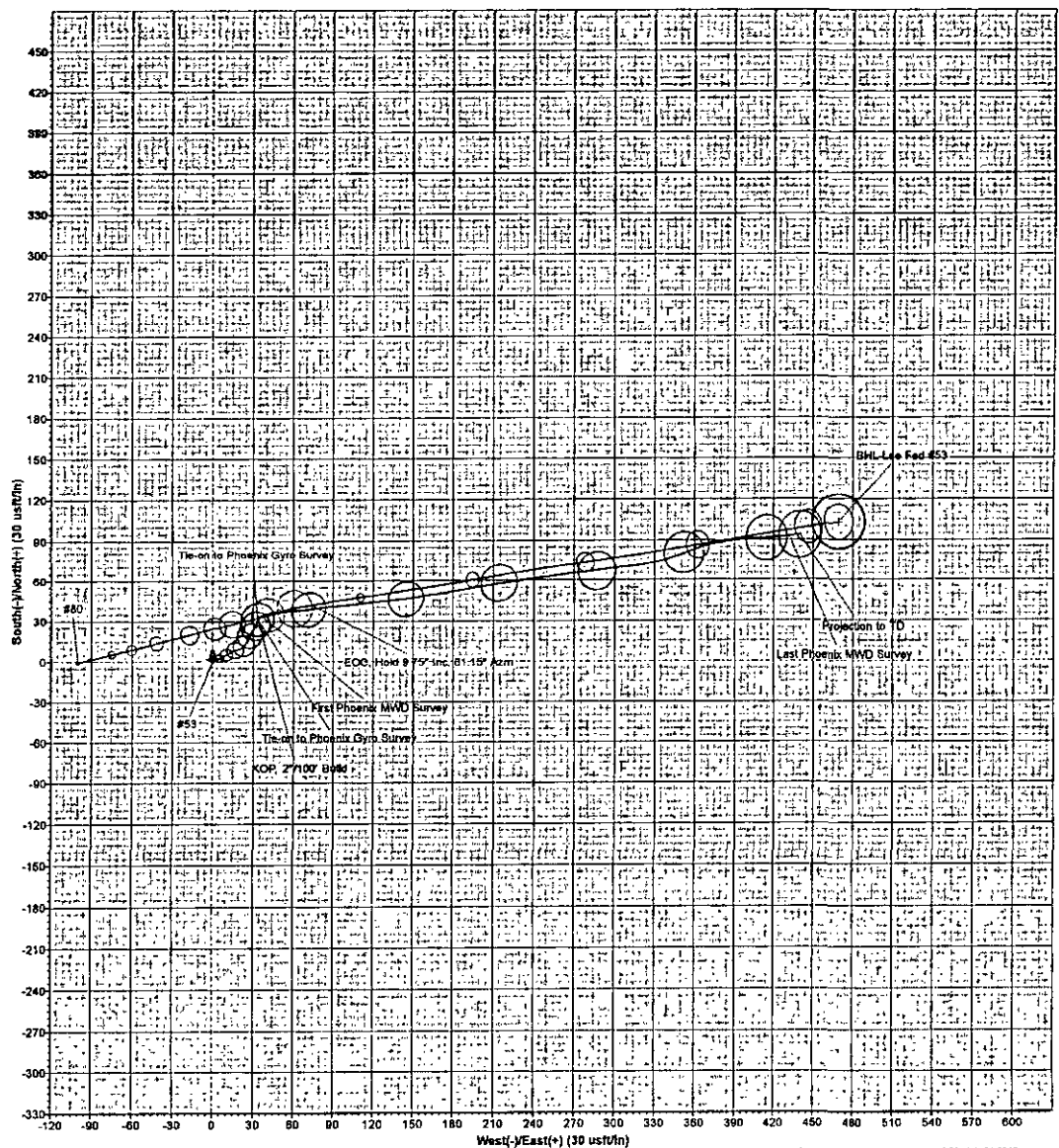
CASING DETAILS									
TVD	MD	Name	Size	Depth	True	Vertical	Depth	True	Vertical
408.00	3500.45	13 3/8" Surface	13-3/8	408.00	3500.45	13-3/8	408.00	3500.45	13-3/8
3500.00	3500.45	8 5/8" Intermediate	8-5/8	3500.00	3500.45	8-5/8	3500.00	3500.45	8-5/8
8430.00	8437.05	5 1/2" Production	5-1/2	8430.00	8437.05	5-1/2	8430.00	8437.05	5-1/2

FORMATION TOP DETAILS									
TVD	MD	Name	Depth	True	Vertical	Depth	True	Vertical	Depth
408.00	3500.45	Glendon	0.00	408.00	3500.45	0.00	408.00	3500.45	0.00
4750.00	4750.00	Yesso	0.00	4750.00	4750.00	0.00	4750.00	4750.00	0.00
5280.00	5280.00	Blinberry	0.00	5280.00	5280.00	0.00	5280.00	5280.00	0.00
6184.00	6184.00	Tub	0.00	6184.00	6184.00	0.00	6184.00	6184.00	0.00

Map System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Elevation: Clarke 1866
Zone Name: New Mexico East 3001
Local Origin: Well #53, Grid North
Latitude: 32° 49' 0.70753 N
Longitude: 103° 53' 45.87755 W
Grid East: 634332.20
Grid North: 861172.80
Scale Factor: 1.000
Geometric Model: HDGM
Sample Date: 20-Jul-15
Magnetic Declination: 7.67°
Dip Angle from Horizontal: 60.77°
Magnetic Field Strength: 48581
To convert a Magnetic Direction to a Grid Direction, Add 7.43°
To convert a Magnetic Direction to a True Direction, Add 7.67° East
To convert a True Direction to a Grid Direction, Subtract 0.24°

LEGEND

- 880, OH Surveys VO
- #53, OH / Job #1412338, Surveys (Capstar 114) VO
- Plan #3 07-19-15



DISTRICT I
1625 N. French Dr., Hobbs, NM 88241
Phone: (575) 393-6161 Fax: (575) 393-0720

DISTRICT II
811 S. First St., Artesia, NM 88210
Phone: (575) 746-1283 Fax: (575) 746-0720

DISTRICT III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office
AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-43197	Pool Code 96831	Pool Name CEDAR LAKE; GLORIETA-YESO
Property Code 308720	Property Name LEE FEDERAL	Well Number 53D
OGRID No. 873	Operator Name APACHE CORPORATION	Elevation 3637'

Surface Location

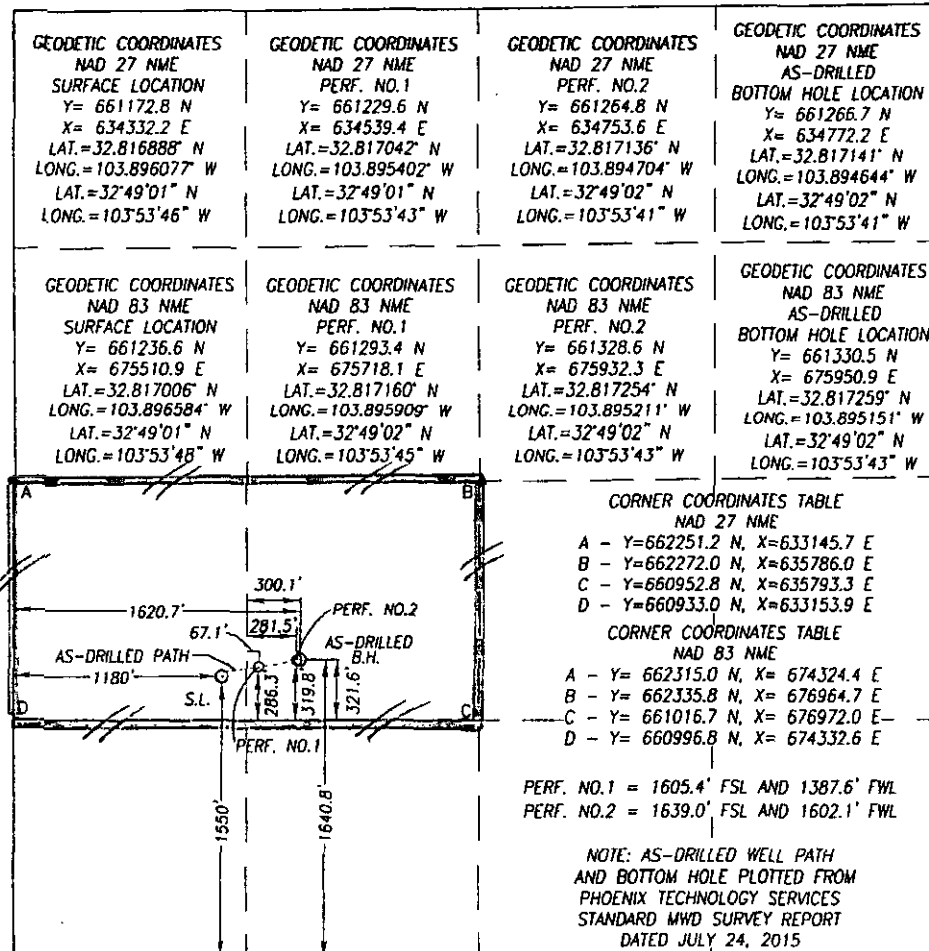
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	20	17-S	31-E		1550	SOUTH	1180	WEST	EDDY

As-Drilled 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/West line	County
K	20	17-S	31-E		1640.8	SOUTH	1620.7	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
80			NSL-7345

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.

Reesa Fisher 8/27/15
Signature Date
REESEA FISHER
Printed Name
Reesa.Fisher@apachecorp.com
E-mail Address

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.

JULY 27, 2011

Date of Survey
Signature & Seal of Professional Surveyor:

Ronald J. Eidson
NEW MEXICO
3239
Certificate Number
Ronald J. Eidson 12641
3239
LSL REV. 8/1/15 JWSC W.O. 15.13.0784

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 1000 Midland TX 79705		² OGRID Number 873
		³ Reason for Filing Code/ Effective Date NW 09/25/2015
⁴ API Number 30-015-43197	⁵ Pool Name CEDAR LAKE; GLORIETA-YESO	⁶ Pool Code [96831]
⁷ Property Code [308720]	⁸ Property Name LEE FEDERAL	⁹ Well Number #053

II. ¹⁰ 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	SOUTH	1180	WEST	EDDY

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
K	20	17S	31E		1640.8	SOUTH	1650.7	WEST	EDDY

¹² Lse Code F	¹³ Producing Method Code P	¹⁴ Gas Connection Date 09/25/15	¹⁵ C-129 Permit Number	¹⁶ C-129 Effective Date	¹⁷ C-129 Expiration Date
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III. Oil and Gas Transporters

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

IV. Well Completion Data

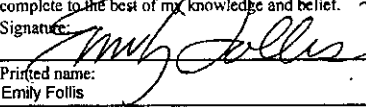
²¹ Spud Date 07/16/2015	²² Ready Date 09/25/15	²³ TD 6266'	²⁴ PBTD 6266'	²⁵ Perforations 4767-6138	²⁶ DHC, MC
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²⁷ Hole Size	²⁸ Casing & Tubing Size	²⁹ Depth Set	³⁰ Sacks Cement
17.5	13.375 H-40 48#	400'	560 sx Class C
11	8.625 J-55 32#	3500'	1100 sx Class C
7.875'	5.5 L-80 17#	6266'	1000 sx Class C
Tubing	2-7/8" J-55	6217'	

V. Well Test Data

³¹ Date New Oil 09/25/15	³² Gas Delivery Date 09/25/15	³³ Test Date 10/02/15	³⁴ Test Length 24 hrs	³⁵ Tbg. Pressure	³⁶ Csg. Pressure
³⁷ Choke Size	³⁸ Oil 75	³⁹ Water 152	⁴⁰ Gas 180		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: Emily Folis
Title: Reg Analyst
E-mail Address: emily.folis@apachecorp.com
Date: 10/06/2015
Phone: 432-818-1801

OIL CONSERVATION DIVISION

Approved by:

Title:

Approval Date:

Hydraulic Fracturing Fluid Product Component Information Disclosure

Fracture Date	8/14/2015
State:	NM
County:	Eddy
API Number:	30-015-43197
Operator Name:	Apache Corporation
Well Name and Number:	- Lee Federal #53D
Longitude:	-103.53494
Latitude:	32.49023
Long/Lat Projection:	NAD27
Production Type:	Oil
True Vertical Depth (TVD):	6,195
Total Water Volume (gal):	316,344

Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS#)	Maximum Ingredient Concentration in Additive** (% by mass)**	Maximum Ingredient Concentration in HF Fluid** (% by mass)**	Comments
Water	Customer	Carrier/Base Fluid	Water	7732-18-5	100.00%	77.18058%	
Sand (Proppant)	US Silica	Proppant	Silica Substrate	14808-60-7	100.00%	15.43734%	
RCS (Proppant)	Momentive	Proppant	Silica Substrate	14808-60-7	100.00%	4.21119%	
Hydrochloric Acid (1:1)	CNR	Acidizing	Hydrochloric Acid	7647-01-0	38.80000%	0.98331%	
Claymax	Chemplex	Clay Stabilizer	Choline Chloride	67-48-1	62.00000%	0.00000%	
4-N-1 Plus	Chemplex	Iron Control/Corr Inhib	Acetic Acid	64-19-7	80.00%	0.01433%	
			Methanol	67-56-1	10.00000%	0.00179%	
Plexicide 24L	Chemplex	Biocide	Tetrahydro-3,Dimethyl-2H	533-74-4	24.00000%	0.00000%	
Plexset 730	Chemplex	Activator	Secondary Alcohol Ethoxylate	84133-50-6	50.00000%	0.02556%	
Plexsurf 240 E	Chemplex	Surfactant	Methyl Alcohol	67-56-1	10.00000%	0.00811%	
			Alcohol Alkoxylate	Proprietary	50.00000%	0.04055%	
Plexslick 953	Chemplex	Friction Reducer	Alcohol Ethoxylate Surfactants	Proprietary	8.00000%	0.00000%	
			Hydrotreated Petroleum Distillate	64742-47-8	30.00000%	0.00000%	
AMA 398	Chemplex	Biocide	Polyacrylamide-co-Acrylic Acid	9003-06-9	31.00000%	0.00000%	
Plexgel 907 LE	Chemplex	Polymer	Tetrahydro-3,Dimethyl-2H	533-74-4	98.00%	0.00000%	
			Guar Gum	9000-30-0	50.00000%	0.15108%	
			Mineral Oil	64742-47-8	55.00000%	0.16618%	
			Bentonite Clay	14808-60-7	2.00000%	0.00604%	
			Surfactant	68439-51-0	2.00000%	0.00604%	
Plexbor 101	Chemplex	Crosslinker	Ethylene Glycol	107-21-1	9.99000%	0.01188%	
			Potassium Metaborate	13709-94-9	30.00000%	0.03567%	
Plexgel Breaker 10L	Chemplex	Gel Breaker	Potassium Hydroxide	1310-58-3	5.00000%	0.00594%	
			Mannanase Enzymes	Proprietary	2.00000%	0.00063%	
			Sodium Chloride	7647-14-5	15.00000%	0.00473%	
Sodium Persulfate	Chemplex	Gel Breaker	Sodium Persulfate	7775-27-1	98.00%	0.00089%	
Waxaid 21	Chemplex	Wax crystal modifier	Toluene	108-88-3	25.00000%	0.00144%	
			Trimethylbenzene	25551-13-7	5.00000%	0.00029%	

Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Clayplex 650	Chemplex	Clay Stabilizer	Naphthalene	91-20-3	5.00000%	0.00029%	
			Water	7732-18-5	60.000000%	0.72749%	
Plexicide 15G	Chemplex, LCBiocide		Ethanaminium, 2-hydroxy-N,N,N-trimethyl	67-48-1	35.000000%	0.42437%	
			Glutaraldehyde	111-30-8	14.000000%	0.00308%	
			Didecyl dimethyl ammonium chloride	7173-51-5	3.000000%	0.00066%	
			Alkyl dimethyl benzyl ammonium chloride	68424-85-1	3.000000%	0.00066%	
			Ethanol	64-17-5	3.000000%	0.00066%	

* Total Water Volume sources may include fresh water, produced water, and/or recycled water

** Information is based on the maximum potential for concentration and thus the total may be over 100%

All component information listed was obtained from the supplier's Material Safety Data Sheets (MSDS). As such, the Operator is not responsible for inaccurate and/or incomplete information. Any questions regarding the content of the MSDS should be directed to the supplier who provided it. The Occupational Safety and Health Administration's (OSHA) regulations govern the criteria for the disclosure of this information. Please note that Federal Law protects "proprietary", "trade secret", and "confidential business information" and the criteria for how this information is reported on an MSDS is subject to 29 CFR 1910.1200(i) and Appendix D.