

HOBBS OCD

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
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, NM 87505

Form C-102

Revised August 1, 2011

Submit one copy to appropriate

District Office

RECEIVED

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-25-41751		² Pool Code 23000		³ Pool Name Eunice Monument, Grayburg - San Andres	
⁴ Property Code		⁵ Property Name NMGSAU		⁶ Well Number #435	
⁷ OGRID No. 873		⁸ Operator Name APACHE CORPORATION		⁹ Elevation 3614.021	
¹⁰ Surface Location					
UL or lot no. 9	Section 29	Township 19 S	Range 37 E	Lot Idn	Feet from the 2498
		North/South line SOUTH		Feet from the 180	East/West line EAST
				County LEA	
¹¹ Bottom Hole Location If Different From Surface					
UL or lot no. 8	Section 29	Township 19 S	Range 37 E	Lot Idn	Feet from the 2630
		North/South line NORTH		Feet from the 10	East/West line EAST
				County LEA	
¹² Dedicated Acres 40		¹³ Joint or Infill		¹⁴ Consolidation Code	
				¹⁵ Order No.	

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.

SECTION 29, TOWNSHIP 19 SOUTH, RANGE 37 EAST P.J.A.

FOUND 3 INCH IRON PIPE, MARKED "U.S. GENERAL LAND OFFICE" LAT: 32.638380N LONG: 103.282053W NUSPCE N: 592555.298 NUSPCE E: 821620.918 (N.A.D. 27) LAT: 32.638380N LONG: 103.282053W NUSPCE N: 592574.851 NUSPCE E: 864951.394 (N.A.D. 83)		FOUND 3 INCH IRON PIPE, MARKED "U.S. GENERAL LAND OFFICE" LAT: 32.638335N LONG: 103.264997W NUSPCE N: 592591.314 NUSPCE E: 828074.830 (N.A.D. 27) LAT: 32.638335N LONG: 103.264997W NUSPCE N: 592610.868 NUSPCE E: 870205.192 (N.A.D. 83)		¹¹ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or undivided 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 a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <i>Michelle Cooper</i> 3-24-14 Signature Date Michelle Cooper Printed Name michelle.cooper@apachecorp.com E-mail Address							
4 3 3 2 2 1 5 6 6 7 7 8		BOTTOM HOLE LOCATION DD LAT: 32.631392N DD LONG: 103.265083W DUS LAT: 32.3752.9767N DUS LONG: 103.1554.3007W NUSPCE N: 595081.527 NUSPCE E: 828870.619 (N.A.D. 27) DD LAT: 32.631392N DD LONG: 103.265083W DUS LAT: 32.3752.9767N DUS LONG: 103.1554.3007W NUSPCE N: 595080.899 NUSPCE E: 870201.012 (N.A.D. 83)		¹² 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. 10 MARCH 2014 Date of Survey <i>Jeffrey E. Hudson</i> Signature and Seal of Professional Surveyor 20559 Certificate Number							
5 6 5 7 7 8 12 11 11 10 10 9		SURFACE LOCATION DD LAT: 32.630843N DD LONG: 103.265640W DUS LAT: 32.3751.0387N DUS LONG: 103.1556.3007W NUSPCE N: 594883.828 NUSPCE E: 870701.078 (N.A.D. 27) DD LAT: 32.630843N DD LONG: 103.265640W DUS LAT: 32.3751.0387N DUS LONG: 103.1556.3007W NUSPCE N: 594881.344 NUSPCE E: 870031.445 (N.A.D. 83)		¹³ 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. 10 MARCH 2014 Date of Survey <i>Jeffrey E. Hudson</i> Signature and Seal of Professional Surveyor 20559 Certificate Number							
12 11 11 10 10 9 13 14 14 15 15 16		SURFACE HOLE TO BOTTOM HOLE LOCATION DEVIATION <table border="1"> <tr> <th>LINE</th> <th>BEARING</th> <th>DISTANCE</th> </tr> <tr> <td>L1</td> <td>N40°37'31"E</td> <td>268.42'</td> </tr> </table>		LINE	BEARING	DISTANCE	L1	N40°37'31"E	268.42'	FOUND 3 INCH IRON PIPE, MARKED "U.S. GENERAL LAND OFFICE" LAT: 32.623778N LONG: 103.282132W NUSPCE N: 592245.194 NUSPCE E: 823640.303 (N.A.D. 27) LAT: 32.623778N LONG: 103.282132W NUSPCE N: 592262.580 NUSPCE E: 864979.781 (N.A.D. 83)	
LINE	BEARING	DISTANCE									
L1	N40°37'31"E	268.42'									
13 14 14 15 15 16		FOUND 3 INCH IRON PIPE, MARKED "U.S. GENERAL LAND OFFICE" LAT: 32.623985N LONG: 103.265719W NUSPCE N: 592370.162 NUSPCE E: 828826.629 (N.A.D. 27) LAT: 32.623985N LONG: 103.265719W NUSPCE N: 592389.550 NUSPCE E: 870218.993 (N.A.D. 83)		SEP 08 2014							



PHOENIX
TECHNOLOGY SERVICES

Apache Corporation

Lea County, NM (NAD83 NME)

NMGSAU

#435

Wellbore #1 Job #1411196

Survey: Phoenix MWD Surveys

Planning Report

18 July, 2014

Apache
EXPLORING WHAT'S POSSIBLE



Phoenix Technology Services

Planning Report



Company:	Apache Corporation	Local Co-ordinate Reference:	Well #435
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	KB: 11' @ 3625.00usft (Capstar 119)
Site:	NMGSAU	MD Reference:	KB: 11' @ 3625.00usft (Capstar 119)
Well:	#435	North Reference:	Grid
Wellbore:	Wellbore #1 Job #1411196	Survey Calculation Method:	Minimum Curvature
Design:	Capstar 119 (Surveys)	Database:	Compass 5000 GCR DB

Project	Lea County, NM (NAD83 NME)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	NMGSAU		
Site Position:		Northing:	582,973.08 usft
From:	Map	Easting:	870,597.88 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 35' 53.14439 N
		Longitude:	103° 15' 51.08348 W
		Grid Convergence:	0.58 °

Well	#435					
Well Position	+N/-S	0.00 usft	Northing:	594,883.34 usft	Latitude:	32° 37' 51.03760 N
	+E/-W	0.00 usft	Easting:	870,031.44 usft	Longitude:	103° 15' 56.30556 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	3,614.00 usft

Wellbore	Wellbore #1 Job #1411196				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2013	2014/07/03	7.21	60.53	48,568

Design		Capstar 119 (Surveys)			
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:		Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
		0.00	0.00	0.00	40.63

Survey Program	Date	2014/07/18		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
1,439.00	3,982.00	Phoenix MWD Surveys (Wellbore #1 Job #	PHX+MWD+BGGM	PHX+MWD+BGGM v3:standard declination



Phoenix Technology Services

Planning Report



Company: Apache Corporation
Project: Lea County, NM (NAD83 NME)
Site: NMGSAU
Well: #435
Wellbore: Wellbore #1 Job #1411196
Design: Capstar 119 (Surveys)

Local Co-ordinate Reference: Well #435
TVD Reference: KB: 11' @ 3625.00usft (Capstar 119)
MD Reference: KB: 11' @ 3625.00usft (Capstar 119)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Compass 5000 GCR DB

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVDSS (usft)	TVD (usft)	N/S (usft)	E/W (usft)	Northing (usft)	Easting (usft)	V. Sec (usft)	DLeg (°/100usft)	
0.00	0.00	0.00	-3,625.00	0.00	0.00	0.00	594,883.34	870,031.44	0.00	0.00	
1,439.00	0.40	271.90	-2,186.01	1,438.99	0.17	-5.02	594,883.51	870,026.42	-3.14	0.03	
First Phoenix MWD Survey											
1,692.00	5.10	42.30	-1,933.33	1,691.67	8.52	1.67	594,891.86	870,033.12	7.55	2.12	
1,945.00	8.00	37.30	-1,682.01	1,942.99	30.85	19.91	594,914.19	870,051.36	36.38	1.17	
2,198.00	8.20	39.80	-1,431.53	2,193.47	58.71	42.13	594,942.06	870,073.57	71.99	0.16	
2,449.00	8.20	34.90	-1,183.09	2,441.91	87.15	63.83	594,970.49	870,095.27	107.70	0.28	
2,702.00	7.30	40.30	-932.40	2,692.60	114.20	84.55	594,997.55	870,115.99	141.73	0.46	
2,954.00	6.50	41.20	-682.23	2,942.77	137.15	104.30	595,020.49	870,135.74	172.00	0.32	
3,206.00	7.10	50.80	-432.00	3,193.00	157.72	125.76	595,041.07	870,157.21	201.59	0.51	
3,459.00	5.90	42.80	-180.62	3,444.38	177.15	146.72	595,060.49	870,178.16	229.98	0.59	
3,932.00	3.60	44.70	290.72	3,915.72	205.54	173.68	595,088.89	870,205.13	269.09	0.49	
Final Phoenix MWD Survey											
3,982.00	3.60	44.70	340.62	3,965.62	207.77	175.89	595,091.12	870,207.34	272.22	0.00	
Projection to TD											

Survey Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
1,439.00	1,438.99	0.17	-5.02	First Phoenix MWD Survey	
3,932.00	3,915.72	205.54	173.68	Final Phoenix MWD Survey	
3,982.00	3,965.62	207.77	175.89	Projection to TD	

Checked By: _____ Approved By: _____ Date: _____



PHOENIX
TECHNOLOGY SERVICES

HOBBS OCD

SEP 05 2014

RECEIVED

September 2, 2014

Oil Conservation Division
State of New Mexico
1625 N. French Drive
District 1 - Hobbs
Hobbs, New Mexico 88240

Attention: Regulatory Department

Re: Apache Corporation
NMGSAU #435
Lea County, NM
API #30-025-41751
Job No. 1411196

Enclosed please find the Survey Data Certification, and the original Plat and one copy of the Survey Report performed on the above referenced well by Phoenix Technology Services, Inc. (P-5 No. 664171). Other information required by your office is as follows:

Name & Title of Surveyor	Drain Hole Number	Surveyed Depths		Dates Performed		Type of Survey
		From	To	Start	End	
Jon Dunlop	435	1,439	3,932	07/15/14	07/18/14	MWD

A certified plat on which the bottom hole location is oriented both to the surface location and to the lease lines (or unit lines in case of pooling) is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.

Best Regards,

Dana Robinson

Dana Robinson
Operations Administrator

Certified mail receipt number: 7011 1570 0001 4365 2315

Phoenix Technology Services
SURVEY DATA CERTIFICATION



PHOENIX JOB NUMBER

1411196

OPERATOR

Apache

WELL NAME

NMGSAU #435

COUNTY & STATE

Lea County, NM

API WELL NUMBER

30-025-41751

PROPOSED DIRECTION

40.63

TIE-IN DATA						
MEASURED	VERTICAL			N-S	E-W	DATA
DEPTH	DEPTH	INCLIN	AZIMUTH	COORD	COORD	SOURCE
0 ft	.00 ft	.0 ft	.0 ft	.00 ft	.00 ft	Surface

FIRST	FIRST		
SURVEY	SURVEY		
DATE	DEPTH	INCLIN	AZIMUTH
15-Jul-14	1,439 ft	0.4	271.9

SURVEY INSTRUMENT
TYPE

Phoenix MWD

LAST	LAST		
SURVEY	SURVEY		
DATE	DEPTH	INCLIN	AZIMUTH
18-Jul-14	3,932 ft	3.6	44.7

TO THE BEST OF MY KNOWLEDGE I
CERTIFY THIS SURVEY DATA TO BE
TRUE AND CORRECT.

PROJECTED	PROJECTED		
TD SURVEY	TD SURVEY		
DATE	DEPTH	INCLIN	AZIMUTH
18-Jul-14	3,982 ft	3.6	44.7

Jon Dunlop

PRINT YOUR NAME ABOVE

Jon Dunlop

SIGN YOUR NAME ABOVE

7/18/2014

TODAY'S DATE

MAGNETIC DECLINATION OR TOTAL GRID

TOTAL CORRECTION USED	6.63
DECLINATION OR GRID	DECLINATION

MWD SUPERVISOR 1

Jon Dunlop

DIRECTIONAL DRILLER 1

John Hoover

MWD SUPERVISOR 2

DIRECTIONAL DRILLER 2

1805 Brittmore Road

Houston, Texas 77043

(713)3370609 (Voice), (713)337-0599 (Fax)