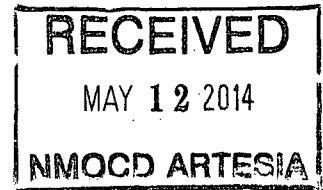




PHOENIX
TECHNOLOGY SERVICES

May 5, 2014

Oil Conservation Division
State of New Mexico
811 S. First St.
Artesia, New Mexico 88210



Dear District 2 - Artesia

Attention: Regulatory Department

Re: Apache Corporation
SB State #2
Eddy County, NM
API #30-015-42002
Job No. 1410349

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	
Josh Goff	2	337	4,066	03/15/14	03/18/14	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 1905

Phoenix Technology Services SURVEY DATA CERTIFICATION



PHOENIX
TECHNOLOGY SERVICES

PHOENIX JOB NUMBER

1410349

OPERATOR

Apache Corporation

WELL NAME

SB State #2

COUNTY & STATE

Eddy County, NM

API WELL NUMBER

30-015-42002

PROPOSED DIRECTION

354.6

TIE-IN DATA						
MEASURED	VERTICAL			N-S	E-W	DATA
DEPTH	DEPTH	INCLIN	AZIMUTH	COORD	COORD	SOURCE
300 ft	299.99 ft	0.43	107.2 ft	1.33 ft	1.71 ft	Gyro Data

FIRST	FIRST		
SURVEY	SURVEY		
DATE	DEPTH	INCLIN	AZIMUTH
15-Mar-14	337 ft	0.3	134.2

SURVEY INSTRUMENT
TYPE
Phoenix MWD

LAST	LAST		
SURVEY	SURVEY		
DATE	DEPTH	INCLIN	AZIMUTH
18-Mar-14	4066 ft	1.6	8

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-Mar-14	4115 ft	1.6	8

Josh Goff

PRINT YOUR NAME ABOVE

Josh Goff

SIGN YOUR NAME ABOVE

MAGNETIC DECLINATION OR TOTAL GRID

TOTAL CORRECTION USED	
	7.69
DECLINATION OR GRID	GRID

3/18/2014

TODAY'S DATE

MWD SUPERVISOR 1

Josh Goff

DIRECTIONAL DRILLER 1

Albert Gonzalez

MWD SUPERVISOR 2

0

DIRECTIONAL DRILLER 2

0

1805 Brittmore Road

Houston, Texas 77043

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

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, 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-	Pool Code	Pool Name Artesia; Glorieta - Yeso
Property Code	Property Name SB STATE	Well Number 2
OGRID No. 873	Operator Name APACHE CORPORATION	Elevation 3568'

Surface Location

UL or lot No	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	2	18-S	27-E		1900	NORTH	990	WEST	EDDY

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
E	2	18-S	27-E		1650	NORTH	990	WEST	EDDY

Dedicated Acres 40	Joint or Infill	Consolidation Code	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

SEE DETAIL GRID AZ.=359°06'12" HORZ. DIST.=250.0'	CORNER COORDINATES TABLE A - Y=647368.6 N, X=523356.7 E B - Y=647373.9 N, X=524673.2 E C - Y=646086.6 N, X=524694.9 E D - Y=646083.5 N, X=523376.6 E	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. <i>Michelle Cooper</i> 1-27-14 Signature Date <i>Michelle Cooper</i> Printed Name <i>michelle.cooper@apachecorp.com</i> E-mail Address	
	GEODETIC COORDINATES NAD 27 NME SURFACE LOCATION Y=646782.6 N X=524355.6 E	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. DECEMBER 24, 2013 Date of Survey	Professional Surveyor: <i>Gary G. Eidson</i> Signature <i>GARY G. EIDSON</i> Professional Surveyor 12641 <i>Gary G. Eidson</i> 1/14/14 Signature Certificate Number: Gary G. Eidson 12641 Ronald J. Eidson 3239
	BOTTOM HOLE LOCATION Y=647032.5 N X=524351.7 E	ACK	13.11.1370

Apache Corporation

Eddy County, NM (NAD27 NME)

SB State

#2

WB1/Job #1410349

Survey: Phoenix MWD Surveys

Standard Survey Report

19 March, 2014

Survey Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well #2:
Project:	Eddy County NM (NAD27 NME)	TVD Reference:	KB @ 3579.00usft (Capstar 120)
Site:	SB State	MD Reference:	KB @ 3579.00usft (Capstar 120)
Well:	#2	North Reference:	Grid
Wellbore:	WB1/Job #1410349	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Capstar 120)	Database:	Compass 5000 GCR/DB

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	SB State		
Site Position:		Northing:	646,167.30 usft
From:	Map	Easting:	524,175.20 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 46' 34.97110 N
		Longitude:	104° 15' 16.83912 W
		Grid Convergence:	0.04 °

Well	#2		
Well Position	+N/-S	0.00 usft	Northing:
	+E/-W	0.00 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft
		Latitude:	32° 46' 41.05847 N
		Longitude:	104° 15' 14.72072 W
		Ground Level:	3,568.00 usft

Wellbore	WB1/Job #1410349		
Magnetics	Model Name	Sample Date	Declination
	BGGM2013	02/24/14	7.73
			Dip Angle
			60.50
			Field Strength
			48,576

Design	Surveys (Capstar 120)		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.00	0.00	0.00
			Direction
			(°)
			354.60

Survey Program	Date 03/19/14		
From	To	Survey (Wellbore)	Tool Name
(usft)	(usft)		
337.00	4,115.00	Phoenix MWD Surveys (WB1/Job #14103)	MWD
			Description
			MWD - Standard

Survey									
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Vertical	Dogleg	Build	Turn
Depth	(°)	(°)	Depth	(usft)	(usft)	Section	Rate	Rate	Rate
(usft)			(usft)			(usft)	(°/100usft)	(°/100usft)	(°/100usft)
300.00	0.43	107.23	299.99	-1.33	1.71	-1.49	0.00	0.00	0.00
Tie In to Gyro Surveys									
337.00	0.30	134.20	336.99	-1.44	1.91	-1.61	0.57	-0.35	72.89
First Phoenix MWD Survey									
456.00	0.70	338.60	455.99	-0.98	1.87	-1.15	0.82	0.34	-130.76
517.00	1.90	336.50	516.97	0.30	1.33	0.17	1.97	1.97	-3.44
588.00	3.00	338.00	587.90	3.10	0.17	3.07	1.55	1.55	2.11
673.00	4.00	338.90	672.74	7.93	-1.73	8.05	1.18	1.18	1.06
758.00	3.70	338.20	757.55	13.24	-3.82	13.54	0.36	-0.35	-0.82
844.00	3.30	337.30	843.39	18.10	-5.81	18.56	0.47	-0.47	-1.05

Survey Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well #2
Project:	Eddy County, NM (NAD27-NME)	TVD Reference:	KB @ 3579.00usft. (Capstar 120)
Site:	SB, State	MD Reference:	KB @ 3579.00usft. (Capstar 120)
Well:	#2	North Reference:	Grid
Wellbore:	WB1/Job #1410349	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Capstar 120)	Database:	Compass 5000 GCR-DB

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)
929.00	3.10	339.20	928.26	22.50	-7.57	23.12	0.27	-0.24	2.24
1,015.00	4.00	340.10	1,014.09	27.50	-9.41	28.26	1.05	1.05	1.05
1,100.00	3.40	338.20	1,098.92	32.63	-11.36	33.55	0.72	-0.71	-2.24
1,186.00	3.80	341.60	1,184.75	37.70	-13.21	38.77	0.53	0.47	3.95
1,271.00	5.10	339.40	1,269.49	43.91	-15.42	45.16	1.54	1.53	-2.59
1,357.00	4.70	333.40	1,355.17	50.64	-18.35	52.14	0.76	-0.47	-6.98
1,442.00	4.40	331.20	1,439.91	56.61	-21.48	58.38	0.41	-0.35	-2.59
1,528.00	3.80	341.90	1,525.69	62.21	-23.95	64.18	1.13	-0.70	12.44
1,613.00	3.70	2.00	1,610.51	67.62	-24.73	69.65	1.54	-0.12	23.65
1,698.00	3.70	0.80	1,695.33	73.11	-24.60	75.10	0.09	0.00	-1.41
1,783.00	4.70	1.10	1,780.10	79.33	-24.49	81.29	1.18	1.18	0.35
1,868.00	5.20	3.60	1,864.79	86.66	-24.18	88.55	0.64	0.59	2.94
1,954.00	4.90	2.90	1,950.45	94.22	-23.75	96.03	0.36	-0.35	-0.81
2,039.00	4.80	2.20	2,035.15	101.40	-23.43	103.15	0.14	-0.12	-0.82
2,125.00	4.80	3.00	2,120.85	108.58	-23.11	110.28	0.08	0.00	0.93
2,210.00	4.70	3.00	2,205.55	115.61	-22.74	117.24	0.12	-0.12	0.00
2,295.00	4.80	0.30	2,290.26	122.65	-22.54	124.22	0.29	0.12	-3.18
2,381.00	4.70	0.60	2,375.97	129.77	-22.48	131.31	0.12	-0.12	0.35
2,466.00	4.70	359.60	2,460.68	136.73	-22.47	138.24	0.10	0.00	-1.18
2,552.00	4.70	1.30	2,546.39	143.78	-22.41	145.25	0.16	0.00	1.98
2,637.00	4.30	2.00	2,631.13	150.44	-22.22	151.87	0.47	-0.47	0.82
2,723.00	3.70	6.40	2,716.92	156.42	-21.80	157.78	0.78	-0.70	5.12
2,808.00	3.60	345.10	2,801.75	161.73	-22.18	163.10	1.59	-0.12	-25.06
2,893.00	3.70	342.00	2,886.58	166.92	-23.71	168.41	0.26	0.12	-3.65
2,978.00	3.80	350.60	2,971.40	172.30	-25.02	173.89	0.67	0.12	10.12
3,064.00	4.10	355.00	3,057.19	178.18	-25.76	179.81	0.50	0.35	5.12
3,149.00	4.10	354.30	3,141.98	184.23	-26.32	185.89	0.06	0.00	-0.82
3,234.00	4.00	9.20	3,226.77	190.18	-26.15	191.80	1.24	-0.12	17.53
3,320.00	4.00	357.00	3,312.56	196.14	-25.83	197.70	0.99	0.00	-14.19
3,405.00	4.10	351.10	3,397.35	202.10	-26.45	203.69	0.50	0.12	-6.94
3,490.00	4.00	351.70	3,482.13	208.03	-27.35	209.68	0.13	-0.12	0.71
3,575.00	4.20	359.20	3,566.92	214.08	-27.82	215.75	0.67	0.24	8.82
3,660.00	4.40	359.50	3,651.68	220.45	-27.89	222.10	0.24	0.24	0.35
3,746.00	4.40	357.70	3,737.42	227.05	-28.06	228.68	0.16	0.00	-2.09
3,831.00	4.00	357.10	3,822.20	233.27	-28.34	234.90	0.47	-0.47	-0.71
3,916.00	3.70	357.00	3,907.00	238.97	-28.63	240.60	0.35	-0.35	-0.12
4,002.00	2.90	353.20	3,992.86	243.90	-29.03	245.55	0.96	-0.93	-4.42
4,066.00	1.60	8.00	4,056.81	246.39	-29.10	248.04	2.21	-2.03	23.13
Final Phoenix MWD Survey									
4,115.00	1.60	8.00	4,105.79	247.74	-28.91	249.37	0.00	0.00	0.00
Projection to TD									

Survey Report

Company:	Apache Corporation	Local Co-ordinate Reference:	Well #2
Project:	Eddy County, NM (NAD27-NME)	TVD Reference:	KB @ 3579.00usft (Capstar 120)
Site:	SB/State	MD Reference:	KB @ 3579.00usft (Capstar 120)
Well:	#2	North Reference:	Grid
Wellbore:	WB1/Job #1410349	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Capstar 120)	Database:	Compass 5000 GCR DB

Survey Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
300.00	299.99	-1.33	1.71	Tie In to Gyro Surveys
337.00	336.99	-1.44	1.91	First Phoenix MWD Survey
4,066.00	4,056.81	246.39	-29.10	Final Phoenix MWD Survey
4,115.00	4,105.79	247.74	-28.91	Projection to TD