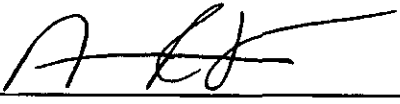


Apache Corporation
303 Veterans Airpark Lane, #3000
Midland, TX 79705

Coffee Federal #022
Eddy County, New Mexico

ART # 30-015-43366
Sic. 18, 175 R31E
10 FWL & 825 FWL

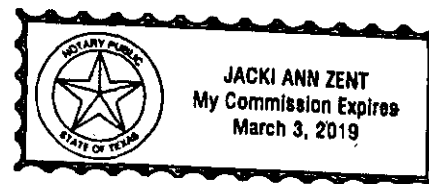
388	3.88	2.50	4.38	16.98	16.98
515	1.27	2.60	4.55	5.78	22.75
601	0.86	2.40	4.20	3.61	26.37
819	2.18	2.00	3.50	7.63	34.00
1023	2.04	2.10	3.68	7.50	41.49
1235	2.12	2.40	4.20	8.90	50.40
1450	2.15	2.30	4.03	8.65	59.05
1663	2.13	1.90	3.33	7.08	66.13
1876	2.13	2.00	3.50	7.46	73.59
2088	2.12	1.70	2.98	6.31	79.89
2301	2.13	2.40	4.20	8.95	88.84
2514	2.13	2.30	4.03	8.57	97.41
2728	2.14	2.50	4.38	9.36	106.78
2941	2.13	2.50	4.38	9.32	116.10
3154	2.13	2.30	4.03	8.57	124.67
3325	1.71	1.80	3.15	5.39	130.05
3616	2.91	1.50	2.63	7.64	137.69
3869	2.53	6.10	10.68	27.01	164.70
4039	1.70	6.00	10.50	17.85	182.55
4210	1.71	8.80	15.40	26.33	208.89
4337	1.27	8.80	15.40	19.56	228.44
4593	2.56	8.70	15.23	38.98	267.42
4721	1.28	8.40	14.70	18.82	286.24
4849	1.28	9.70	16.98	21.73	307.96
4977	1.28	10.10	17.68	22.62	330.59
5360	3.83	9.20	16.10	61.66	392.25
5615	2.55	9.10	15.93	40.61	432.86
5743	1.28	9.10	15.93	20.38	453.24
6126	3.83	7.90	13.83	52.95	506.19
6254	1.28	6.90	12.08	15.46	521.65
6430	1.76	6.30	11.03	19.40	541.05


Archie Brown - General Manager

The attached instrument was acknowledged before me on the 12th day of November, 2015
by Archie Brown - General Manager, CapStar Drilling, Inc.


Notary Public

NM OIL CONSERVATION
ARTESIA DISTRICT
AUG 22 2016



RECEIVED



NM OIL CONSERVATION
ARTESIA DISTRICT
AUG 22 2016

RECEIVED

Apache Corporation

Eddy County, NM (NAD27 NME)
Coffee Federal
#22D

OH / Job #1514537

Design: Surveys (Capstar 119)

Standard Survey Report

07 November, 2015

*final gyro +
MWD
Survey*





Phoenix Technology Services LP

Survey Report



Company:	Apache Corporation	Local Co-ordinate Reference:	Well #22D
Project:	Eddy County, NM (NAD27 NME)	TVD Reference:	KB @ 3743.00usft (TBD)
Site:	Coffee Federal	MD Reference:	KB @ 3743.00usft (TBD)
Well:	#22D	North Reference:	Grid
Wellbore:	OH / Job #1514537	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Capstar 119)	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	Coffee Federal				
Site Position:		Northing:	670,137.60 usft	Latitude:	32° 50' 29.72294 N
From:	Map	Easting:	628,912.40 usft	Longitude:	103° 54' 48.96877 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.23 "

Well	#22D					
Well Position	+N/-S	0.00 usft	Northing:	670,137.60 usft	Latitude:	32° 50' 29.72294 N
	+E/-W	0.00 usft	Easting:	628,912.40 usft	Longitude:	103° 54' 48.96877 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	3,732.00 usft

Wellbore	OH / Job #1514537				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	10/28/2015	7.65	60.77	48,543

Design: Surveys (Capstar 119)				
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	152.72

Survey Program	Date	11/7/2015			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.00	3,419.00	Phoenix Gyro Surveys (OH / Job #151453)	PHX_SPT_GTD	PHX Continuous north-seeking gyro	
3,528.00	6,430.00	Phoenix MWD Surveys (OH / Job #151453)	PHX+MWD+HDGM	PHX+OWSG 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	
100.00	0.33	125.05	100.00	-0.17	0.24	0.26	0.33	0.33	0.00	
200.00	0.33	272.29	200.00	-0.32	0.18	0.37	0.63	0.00	147.24	
300.00	1.13	72.41	299.99	-0.01	0.84	0.39	1.44	0.80	160.12	
400.00	2.24	66.97	399.95	1.05	3.57	0.70	1.12	1.11	-5.44	
500.00	2.65	59.60	499.86	2.99	7.37	0.72	0.52	0.41	-7.37	
600.00	2.29	53.94	599.76	5.33	10.98	0.29	0.43	-0.36	-5.66	
700.00	2.43	61.51	699.68	7.52	14.45	-0.06	0.34	0.14	7.57	
800.00	2.30	58.74	799.60	9.57	18.03	-0.24	0.17	-0.13	-2.77	
900.00	1.98	57.03	899.53	11.55	21.20	-0.55	0.33	-0.32	-1.71	



Phoenix Technology Services LP

Survey Report



Company:	Apache Corporation	Local Co-ordinate Reference:	Well #22D
Project:	Eddy County, NM (NAD27 NME)	TVD Reference:	KB @ 3743.00usft (TBD)
Site:	Coffee Federal	MD Reference:	KB @ 3743.00usft (TBD)
Well:	#22D	North Reference:	Grid
Wellbore:	OH / Job #1514537	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Capstar 119)	Database:	Compass 5000 GCR

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)
1,000.00	2.28	62.77	999.46	13.40	24.42	-0.72	0.37	0.30	5.74
1,100.00	2.10	58.45	1,099.38	15.27	27.75	-0.86	0.24	-0.18	-4.32
1,200.00	2.27	68.47	1,199.31	16.96	31.15	-0.80	0.42	0.17	10.02
1,300.00	2.53	66.25	1,299.22	18.57	35.01	-0.46	0.28	0.26	-2.22
1,400.00	2.37	61.38	1,399.13	20.45	38.85	-0.37	0.26	-0.16	-4.87
1,500.00	2.40	71.25	1,499.05	22.12	42.64	-0.11	0.41	0.03	9.87
1,600.00	1.98	61.18	1,598.97	23.62	46.14	0.15	0.57	-0.42	-10.07
1,700.00	2.22	74.76	1,698.91	24.86	49.52	0.51	0.55	0.24	13.58
1,800.00	2.27	66.86	1,798.83	26.25	53.21	1.06	0.31	0.05	-7.90
1,900.00	1.98	61.78	1,898.76	27.85	56.56	1.17	0.35	-0.29	-5.08
2,000.00	2.20	58.34	1,998.69	29.67	59.71	1.00	0.25	0.22	-3.44
2,100.00	1.91	63.57	2,098.63	31.42	62.84	0.87	0.35	-0.29	5.23
2,200.00	2.27	48.41	2,198.56	33.48	65.81	0.41	0.66	0.36	-15.16
2,300.00	2.33	56.40	2,298.48	35.92	68.99	-0.30	0.33	0.06	7.99
2,400.00	2.44	48.17	2,398.40	38.46	72.27	-1.06	0.36	0.11	-8.23
2,500.00	2.45	40.73	2,498.31	41.50	75.25	-2.40	0.32	0.01	-7.44
2,600.00	2.53	41.69	2,598.21	44.77	78.11	-3.99	0.09	0.08	0.96
2,700.00	2.56	36.47	2,698.11	48.21	80.90	-5.77	0.23	0.03	-5.22
2,800.00	2.36	36.11	2,798.02	51.67	83.44	-7.68	0.20	-0.20	-0.36
2,900.00	2.59	30.99	2,897.93	55.27	85.82	-9.79	0.32	0.23	-5.12
3,000.00	2.55	316.37	2,997.85	58.82	85.45	-13.11	3.11	-0.04	-74.62
3,100.00	2.39	41.46	3,097.79	61.99	85.30	-16.00	3.34	-0.16	85.09
3,200.00	2.43	38.50	3,197.70	65.22	88.00	-17.63	0.13	0.04	-2.96
3,300.00	2.25	50.42	3,297.62	68.13	90.83	-18.92	0.52	-0.18	11.92
3,400.00	1.86	50.46	3,397.55	70.41	93.59	-19.68	0.39	-0.39	0.04
3,419.00	1.98	46.97	3,416.54	70.83	94.07	-19.84	0.88	0.63	-18.37
Tie In to Phoenix Gyro Surveys									
3,528.00	2.30	41.30	3,525.47	73.76	96.89	-21.15	0.35	0.29	-5.20
First Phoenix MWD Survey									
3,613.00	1.50	130.50	3,610.43	74.32	98.86	-20.74	3.21	-0.94	104.84
3,698.00	4.00	182.40	3,695.34	70.63	99.58	-17.13	3.87	2.94	61.06
3,784.00	5.30	181.40	3,781.05	63.66	99.36	-11.04	1.51	1.51	-1.16
3,869.00	6.10	166.00	3,865.64	55.36	100.36	-3.20	2.02	0.94	-18.12
3,954.00	5.90	165.70	3,950.17	46.74	102.53	5.45	0.24	-0.24	-0.35
4,039.00	6.00	164.20	4,034.71	38.23	104.82	14.06	0.22	0.12	-1.76
4,124.00	7.10	166.90	4,119.16	28.84	107.22	23.51	1.34	1.29	3.18
4,210.00	8.80	169.80	4,204.33	17.19	109.59	34.95	2.03	1.98	3.37
4,337.00	8.80	169.80	4,329.83	-1.93	113.03	53.52	0.00	0.00	0.00
4,465.00	8.30	168.60	4,456.41	-20.63	116.59	71.77	0.41	-0.39	-0.94
4,593.00	8.70	167.60	4,583.00	-39.14	120.49	90.01	0.33	0.31	-0.78
4,721.00	8.40	166.90	4,709.58	-57.70	124.69	108.43	0.25	-0.23	-0.55
4,849.00	9.70	179.20	4,836.00	-77.59	126.96	127.15	1.82	1.02	9.61
4,977.00	10.10	170.30	4,962.10	-99.44	129.00	147.50	1.23	0.31	-6.95



Phoenix Technology Services LP
Survey Report



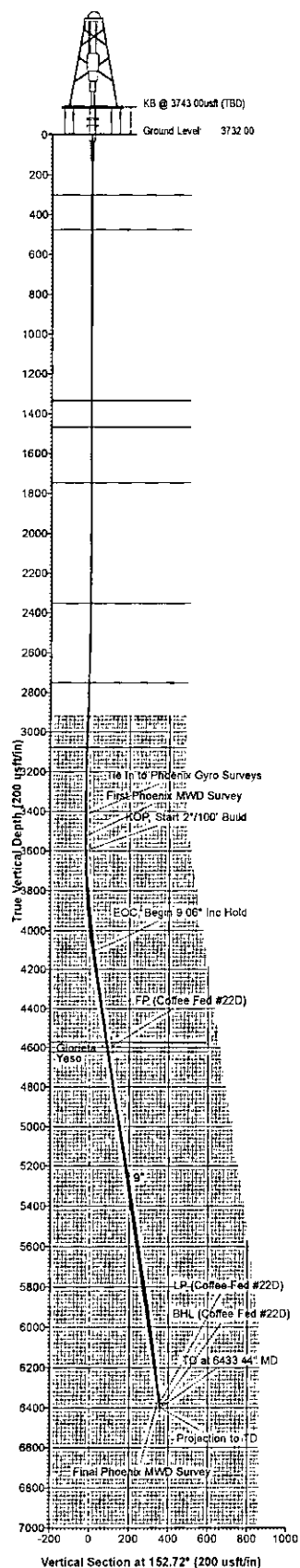
Company:	Apache Corporation	Local Co-ordinate Reference:	Well #22D
Project:	Eddy County, NM (NAD27-NME)	TVD Reference:	KB @ 3743.00usft (TBD)
Site:	Coffee Federal	MD Reference:	KB @ 3743.00usft (TBD)
Well:	#22D	North Reference:	Grid
Wellbore:	OH / Job #1514537	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Capstar 119)	Database:	Compass 5000 GCR

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)
5,105.00	9.90	170.00	5,088.15	-121.34	132.81	168.71	0.16	-0.16	-0.23
5,233.00	9.60	169.10	5,214.30	-142.65	136.73	189.46	0.26	-0.23	-0.70
5,360.00	9.20	168.10	5,339.60	-162.99	140.83	209.41	0.34	-0.31	-0.79
5,488.00	9.10	167.70	5,465.97	-182.89	145.10	229.05	0.09	-0.08	-0.31
5,615.00	9.10	166.10	5,591.37	-202.45	149.65	248.52	0.20	0.00	-1.26
5,743.00	9.10	168.80	5,717.76	-222.20	154.05	268.10	0.33	0.00	2.11
5,871.00	9.00	174.20	5,844.17	-242.09	157.02	287.14	0.67	-0.08	4.22
5,999.00	8.80	173.90	5,970.63	-261.79	159.08	305.58	0.16	-0.16	-0.23
6,126.00	7.90	171.80	6,096.28	-280.09	161.35	322.89	0.75	-0.71	-1.65
6,254.00	6.90	172.10	6,223.21	-296.41	163.67	338.46	0.78	-0.78	0.23
6,378.00	6.30	170.00	6,346.39	-310.49	165.87	351.98	0.52	-0.48	-1.69
Final Phoenix MWD Survey									
6,430.00	6.30	170.00	6,398.08	-316.11	166.86	357.43	0.00	0.00	0.00
Projection to TD									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
BHL (Coffee Fed #22D)	0.00	0.00	6,400.00	-319.90	165.00	669,817.70	629,077.40	32° 50' 26.55099 N	103° 54' 47.04970 W
- actual wellpath misses target center by 4.64usft at 6430.00usft MD (6398.08 TVD, -316.11 N, 166.86 E)									
- Circle (radius 20.00)									

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
3,419.00	3,416.54	70.83	94.07	Tie In to Phoenix Gyro Surveys
3,528.00	3,525.47	73.76	96.89	First Phoenix MWD Survey
6,378.00	6,346.39	-310.49	165.87	Final Phoenix MWD Survey
6,430.00	6,398.08	-316.11	166.86	Projection to TD

Checked By: _____ Approved By: _____ Date: _____



WELL DETAILS											
		Ground Level		3732.00		Latitude		Longitude			
+N/S	+E/W	North	East								
0 00	0 00	870137.60	628512.40	32° 50' 25	72294 N	103° 54' 48	95877 W				
SECTION DETAILS											
Sec	MD	Inc	Azi	TVD	+N/S	+E/W	Dleg	TFace	Vtsect	Target	Annotation
1	3418.00	1.98	45.67	3415.54	70.83	94.07	0.00	0.00	-19.83		Tie In to Phoenix Gyro Surveys
2	3000.00	1.98	45.67	3591.43	75.10	88.00	0.00	0.00	-21.52		KOP Start 27100' Bulk
3	4115.37	9.06	171.52	4110.82	40.97	111.17	2.00	133.57	14.55		EOC, Begin 9.06" Inc Hold
4	6433.44	9.06	171.52	6400.00	-319.90	165.00	0.00	0.00	356.95	BHLL (Coffee Fed #220)	TD at 6433.44" MD
DESIGN TARGET DETAILS											
Name		TVD	+N/S	+E/W	North	East		Latitude		Longitude	Shape
LP (Coffee Fed #220)	4582.89	-37.80	50.40	69039.80	628662.80	32° 50' 25	75361 N	103° 54' 48	36254 W		Point
	+ plan masses target center by 9.7562 at 6411.8540 MD (4600.89 TVD, -36.29 N, 122.89 E)										
FF (Coffee Fed #220)	6378.40	-317.90	163.40	669620.80	629975.80	32° 50' 25	57975 N	103° 54' 47	06852 W		Point
	+ plan masses target center by 9.7440 at 6400.00 MD (6366.98 TVD, -314.89 N, 164.22 E)										
BHL (Coffee Fed #220)	6400.00	-319.90	165.00	669817.70	629907.40	32° 50' 25	55099 N	103° 54' 47	04970 W		Circle (Radius: 20.00)

FORMATION TOP DETAILS				
TVDPATH	MDPATH	FORMATION	DPANGLE	DPDW
301.00	301.01	Russell		
475.00	475.12	TiSalt		
1334.00	1334.81	BrSalt		
1468.00	1468.93	Yates		
1745.00	1747.13	Seven Rivers		
2352.00	2353.56	Queen		
2752.00	2753.94	Grayburg		
3079.00	3081.20	San Andres		
4571.00	4581.36	Glorieta		
4822.00	4833.00	Yeso		

Map System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone Name: New Mexico East 3001
Local Origin: Well #22D, Grid North
Latitude: 32° 50' 29.72294 N
Longitude: 103° 54' 48.98877 W

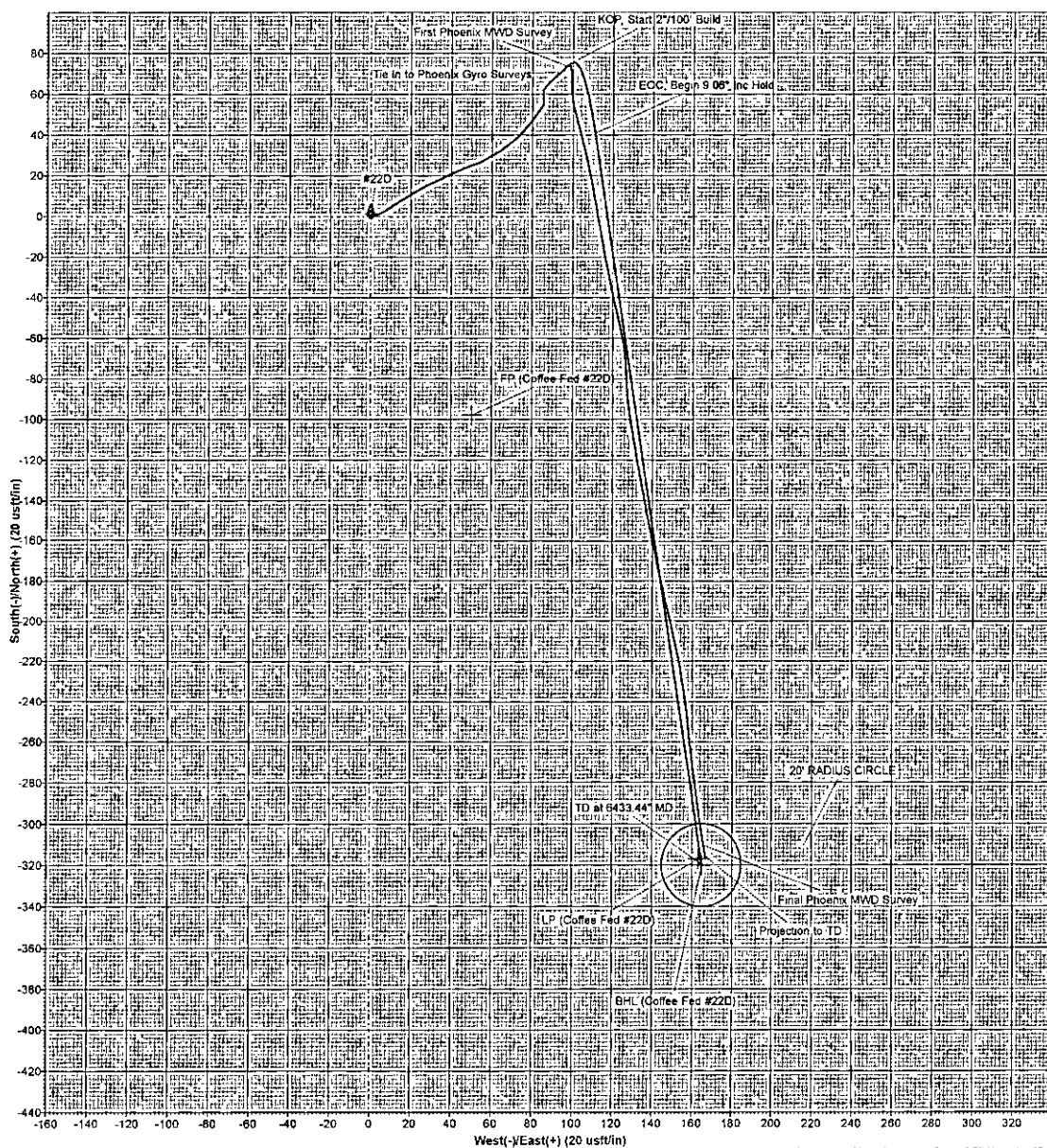
Grid East: 628912.40
Grid North: 670137.60
Scale Factor: 1.000

Geomagnetic Model	HDGM
Sample Date	28-Oct-15
Magnetic Declination:	7.65°
Angle from Horizontal:	60.77°
Magnetic Field Strength:	48543

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°

LEGEND

— #22D, OH / Job #1514537, Surveys (Capstar 119) V0
— Plan #3 11-01-15



Phoenix Technology Services
Design Report 07-Nov-2015 08:49:25

Apache Corporation

Coffee Federal #22D
Eddy County, NM (NAD27 NME)
OH / Job #1514537
Surveys (Capstar 119)

Surface Loc.:
Northing: (Y) 670137.60
Easting: (X) 628912.40
KB Elev: 3743.00'
GL Elev: 3732.00'

Survey Type Information:

H 100.00 - 3419.00 PHOENIX GYRO SURVEYS : PHX_SPT_GTD ✓
H 3528.00 - 6430.00 PHOENIX MWD SURVEYS : PHX+MWD+HDGM ✓

Measured Depth (ft)	Incl.	Azim.	Sub-Sea Depth (ft)	Vertical Depth (ft)	Local Coord (+N/-S) (ft)	Local Coord (+E/-W) (ft)	UTM Coord Northings (ft)	UTM Coord Easting (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Annotation
0	0	0	-3743	0	0	0	670137.6	628912.4	0	0	
100	0.33	125.05	-3643	100	-0.17	0.24	670137.4	628912.6	0.26	0.33	
200	0.33	272.29	-3543	200	-0.32	0.18	670137.3	628912.6	0.37	0.63	
300	1.13	72.41	-3443.01	299.99	-0.01	0.84	670137.6	628913.2	0.39	1.44	
400	2.24	66.97	-3343.05	399.95	1.05	3.57	670138.7	628916	0.7	1.12	
500	2.65	59.6	-3243.14	499.86	2.99	7.37	670140.6	628919.8	0.72	0.52	
600	2.29	53.94	-3143.24	599.76	5.33	10.98	670142.9	628923.4	0.29	0.43	
700	2.43	61.51	-3043.32	699.68	7.52	14.45	670145.1	628926.9	-0.06	0.34	
800	2.3	58.74	-2943.4	799.6	9.57	18.03	670147.2	628930.4	-0.24	0.17	
900	1.98	57.03	-2843.47	899.53	11.55	21.2	670149.2	628933.6	-0.55	0.33	
1000	2.28	62.77	-2743.54	999.46	13.4	24.42	670151	628936.8	-0.72	0.37	
1100	2.1	58.45	-2643.62	1099.38	15.27	27.75	670152.9	628940.2	-0.86	0.24	
1200	2.27	68.47	-2543.69	1199.31	16.96	31.15	670154.6	628943.6	-0.8	0.42	
1300	2.53	66.25	-2443.78	1299.22	18.57	35.01	670156.2	628947.4	-0.46	0.28	
1400	2.37	61.38	-2343.87	1399.13	20.45	38.85	670158.1	628951.3	-0.37	0.26	
1500	2.4	71.25	-2243.95	1499.05	22.12	42.64	670159.7	628955	-0.11	0.41	
1600	1.98	61.18	-2144.03	1598.97	23.62	46.14	670161.2	628958.5	0.15	0.57	
1700	2.22	74.76	-2044.09	1698.91	24.96	49.52	670162.6	628961.9	0.51	0.55	
1800	2.27	66.86	-1944.17	1798.83	26.25	53.21	670163.9	628965.6	1.06	0.31	
1900	1.98	61.78	-1844.24	1898.76	27.85	56.56	670165.5	628969	1.17	0.35	
2000	2.2	58.34	-1744.31	1998.69	29.67	59.71	670167.3	628972.1	1	0.25	
2100	1.91	63.57	-1644.37	2098.63	31.42	62.84	670169	628975.2	0.87	0.35	
2200	2.27	48.41	-1544.44	2198.56	33.48	65.81	670171.1	628978.2	0.41	0.66	
2300	2.33	56.4	-1444.52	2298.48	35.92	68.99	670173.5	628981.4	-0.3	0.33	
2400	2.44	48.17	-1344.6	2398.4	38.46	72.27	670176.1	628984.7	-1.06	0.36	
2500	2.45	40.73	-1244.69	2498.31	41.5	75.25	670179.1	628987.7	-2.4	0.32	
2600	2.53	41.69	-1144.79	2598.21	44.77	78.11	670182.4	628990.5	-3.99	0.09	
2700	2.56	36.47	-1044.89	2698.11	48.21	80.9	670185.8	628993.3	-5.77	0.23	
2800	2.36	36.11	-944.98	2798.02	51.67	83.44	670189.3	628995.8	-7.68	0.2	
2900	2.59	30.99	-845.07	2897.93	55.27	85.82	670192.9	628998.2	-9.79	0.32	
3000	2.55	316.37	-745.15	2997.85	58.82	85.45	670196.4	628997.9	-13.11	3.11	
3100	2.39	41.46	-645.21	3097.79	61.99	85.3	670199.6	628997.7	-16	3.34	
3200	2.43	38.5	-545.3	3197.7	65.22	88	670202.8	629000.4	-17.63	0.13	
3300	2.25	50.42	-445.38	3297.62	68.13	90.83	670205.7	629003.2	-18.92	0.52	
3400	1.86	50.46	-345.45	3397.55	70.41	93.59	670208	629006	-19.68	0.39	
3419	1.98	46.97	-326.46	3416.54	70.83	94.07	670208.4	629006.5	-19.84	0.88	Tie In to Phoenix Gyro Surveys
3528	2.3	41.3	-217.54	3525.46	73.76	96.89	670211.4	629009.3	-21.15	0.35	First Phoenix MWD Survey
3613	1.5	130.5	-132.57	3610.43	74.32	98.86	670211.9	629011.3	-20.74	3.21	
3698	4	182.4	-47.66	3695.34	70.63	99.58	670208.2	629012	-17.13	3.87	
3784	5.3	181.4	38.05	3781.05	63.66	99.36	670201.3	629011.8	-11.04	1.51	

3869	6.1	166	122.64	3865.64	55.36	100.36	670193	629012.8	-3.2	2.02
3954	5.9	165.7	207.17	3950.17	46.74	102.53	670184.3	629014.9	5.45	0.24
4039	6	164.2	291.71	4034.71	38.23	104.82	670175.8	629017.2	14.06	0.22
4124	7.1	166.9	376.16	4119.16	28.84	107.22	670166.4	629019.6	23.51	1.34
4210	8.8	169.8	461.33	4204.33	17.19	109.59	670154.8	629022	34.95	2.03
4337	8.8	169.8	586.83	4329.83	-1.93	113.03	670135.7	629025.4	53.52	0
4465	8.3	168.6	713.41	4456.41	-20.63	116.59	670117	629029	71.77	0.41
4593	8.7	167.6	840	4583	-39.14	120.49	670098.5	629032.9	90.01	0.33
4721	8.4	166.9	966.58	4709.58	-57.7	124.69	670079.9	629037.1	108.43	0.25
4849	9.7	179.2	1093	4836	-77.59	126.96	670060	629039.4	127.15	1.82
4977	10.1	170.3	1219.1	4962.1	-99.44	129	670038.2	629041.4	147.5	1.23
5105	9.9	170	1345.15	5088.15	-121.34	132.81	670016.3	629045.2	168.71	0.16
5233	9.6	169.1	1471.3	5214.3	-142.65	136.73	669995	629049.1	189.46	0.26
5360	9.2	168.1	1596.6	5339.6	-162.99	140.83	669974.6	629053.2	209.41	0.34
5488	9.1	167.7	1722.97	5465.97	-182.89	145.1	669954.7	629057.5	229.05	0.09
5615	9.1	166.1	1848.37	5591.37	-202.45	149.65	669935.2	629062.1	248.52	0.2
5743	9.1	168.8	1974.76	5717.76	-222.2	154.05	669915.4	629066.5	268.1	0.33
5871	9	174.2	2101.17	5844.17	-242.09	157.02	669895.5	629069.4	287.14	0.67
5999	8.8	173.9	2227.63	5970.63	-261.79	159.08	669875.8	629071.5	305.58	0.16
6126	7.9	171.8	2353.28	6096.28	-280.09	161.35	669857.5	629073.8	322.89	0.75
6254	6.9	172.1	2480.21	6223.21	-296.41	163.67	669841.2	629076.1	338.46	0.78
6378	6.3	170	2603.39	6346.39	-310.49	165.87	669827.1	629078.3	351.98	0.52 Final Phoenix MWD Survey
6430	6.3	170	2655.08	6398.08	-316.11	166.86	669821.5	629079.3	357.43	0 Projection to TD

All data are in feet unless otherwise stated. Directions and coordinates are relative to Grid North.
Vertical depths are relative to KB. Northings and Eastings are relative to Well.

The Dogleg Severity is in Degrees per 100 feet.
Vertical Section is from Slot and calculated along an Azimuth of 152.720° (Grid).

Coordinate System is NAD 1927 (NADCON CONUS) US State Plane 1927 (Exact solution), New Mexico East 3001.
Grid Convergence at Surface is 0.228°.

Based upon Minimum Curvature type calculations, at a Measured Depth of 6430.00ft.,
the Bottom Hole Displacement is 357.45ft., in the Direction of 152.720° (Grid).