

District I
1625 N. French Drive, Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II
811 S. First Street, 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 Drive, Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 1, 2011

Submit one copy to
Appropriate District Office

OIL CONSERVATION DIVISION

1220 South St. Francis Drive
Santa Fe, NM 87505

☐ AMENDED REPORT

AS DRILLED

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-35606	*Pool Code 97232	*Pool Name BASIN MANCOS
*Property Code 315059	*Property Name MC 5 COM	*Well Number 906H
*OGRID No. 120782	*Operator Name WPX ENERGY PRODUCTION, LLC	*Elevation 7020'

¹⁰ Surface Location

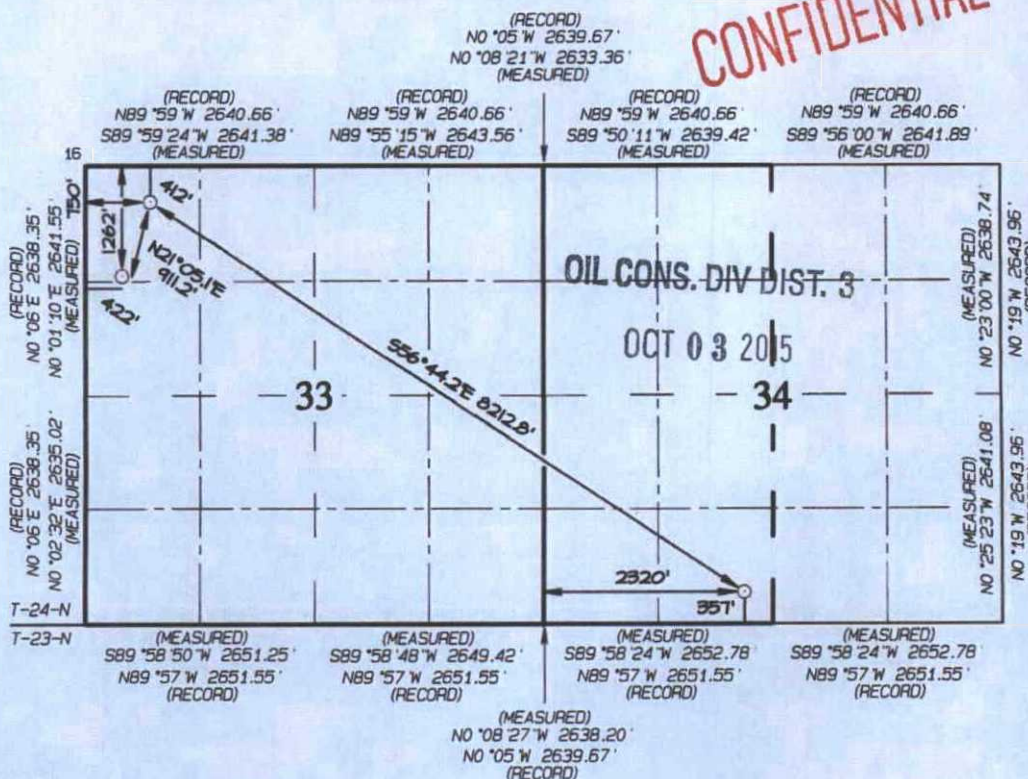
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	33	24N	8W		1262	NORTH	422	WEST	SAN JUAN

¹¹ 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
N	34	24N	8W		357	SOUTH	2320	WEST	SAN JUAN
¹² Dedicated Acres 960.0	Entire Section 33 W/2 - Section 34				¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No. NSL-7298		

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

CONFIDENTIAL



¹⁷ 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 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 a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature: LACEY GRANILLO
Date: 10/1/15
Printed Name: lacey.granillo@wpxenenergy.com
E-mail Address:

¹⁸ 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.

Date Revised: SEPTEMBER 30, 2015
Survey Date: DECEMBER 12, 2013

Signature and Seal of Professional Surveyor



JASON C. EDWARDS

Certificate Number 15269

SURFACE LOCATION
1262' FNL 422' FWL
SECTION 33, T24N, R8W
LAT: 36.274606°N
LONG: 107.694152°W
DATUM: NAD1927

LAT: 36.274618°N
LONG: 107.694763°W
DATUM: NAD1983

POINT-OF-ENTRY
412' FNL 750' FWL
SECTION 33, T24N, R8W
LAT: 36.276940°N
LONG: 107.693035°W
DATUM: NAD1927

LAT: 36.276952°N
LONG: 107.693647°W
DATUM: NAD1983

RSI TOOL
368' FSL 2303' FWL
SECTION 34, T24N, R8W
LAT: 36.264565°N
LONG: 107.669821°W
DATUM: NAD1927

LAT: 36.264577°N
LONG: 107.670432°W
DATUM: NAD1983

END-OF-LATERAL
357' FSL 2320' FWL
SECTION 34, T24N, R8W
LAT: 36.264536°N
LONG: 107.669764°W
DATUM: NAD1927

LAT: 36.264548°N
LONG: 107.670375°W
DATUM: NAD1983

RV RV



WPX Energy

T24N R8W

Chaco 2408-33D

MC 5 COM #906H - Slot A1

Wellbore #1

Design: Wellbore #1

Survey Report - Geographic

29 September, 2015

CONFIDENTIAL



www.scientificdrilling.com

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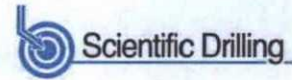


OIL CONS. DIV DIST. 3

OCT 03 2015



Company Name: WPX Energy
Project: T24N R8W
Site: Chaco 2408-33D
Well: MC 5 COM #906H

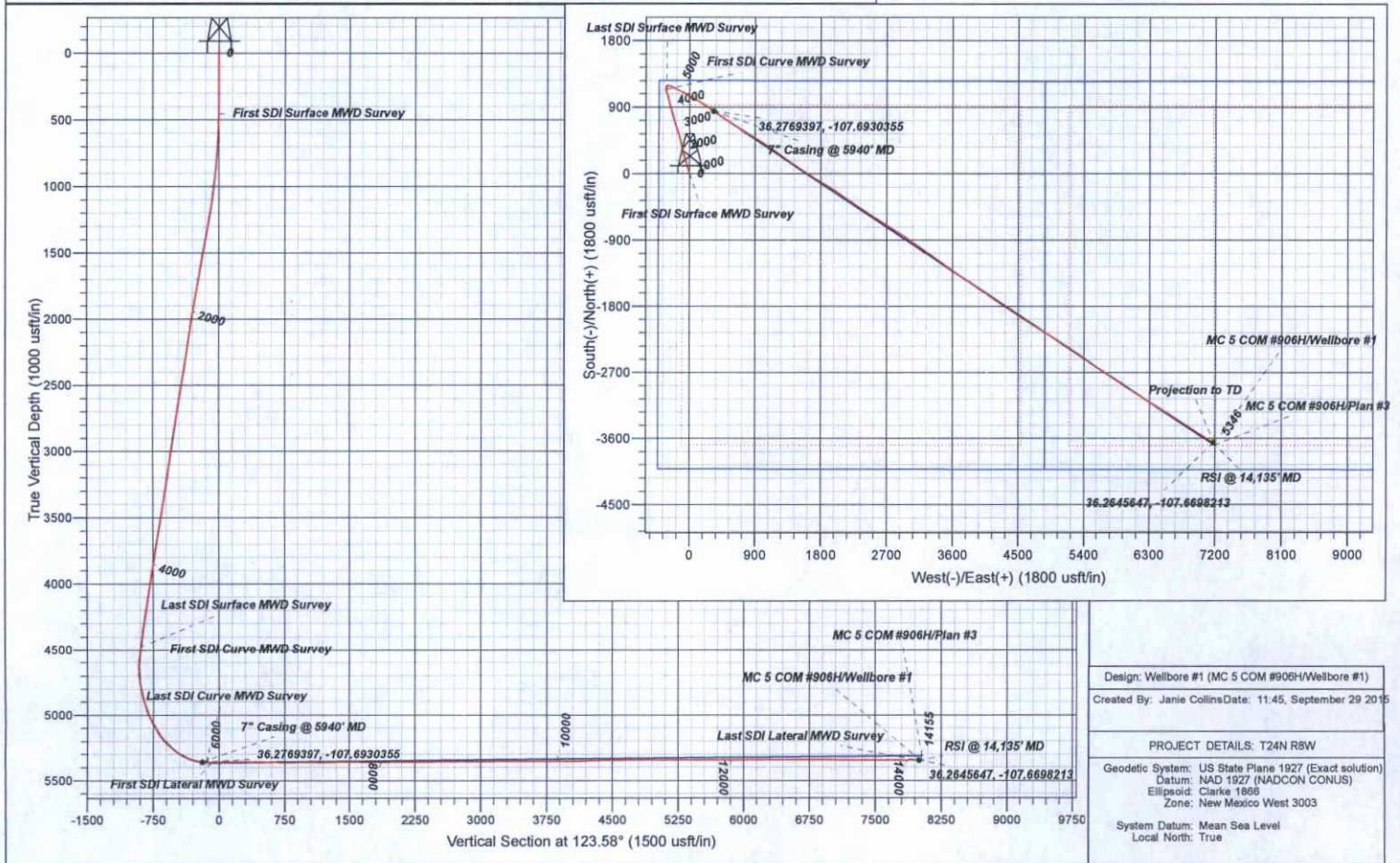


Azimuths to True North
Magnetic North: 9.13°

Magnetic Field
Strength: 49886.9nT
Dip Angle: 62.95°
Date: 9/8/2015
Model: HDGM

WELL DETAILS: MC 5 COM #906H

KB @ 7034.00usft (Aztec 920) 7020.00
+N/-S +E/-W Northing Easting Latitude Longitude
0.00 0.00 1919229.79 541026.47 36.2746100 -107.6941500 A1





Company:	WPX Energy	Local Co-ordinate Reference:	Well MC 5 COM #906H - Slot A1
Project:	T24N R8W	TVD Reference:	KB @ 7034.00usft (Aztec 920)
Site:	Chaco 2408-33D	MD Reference:	KB @ 7034.00usft (Aztec 920)
Well:	MC 5 COM #906H	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Grand Junction District

Project	T24N R8W		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico West 3003		

Site	Chaco 2408-33D		
Site Position:		Northing:	1,919,215.20 usft
From:	Lat/Long	Easting:	541,008.80 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13.20 in
		Latitude:	36.2745700
		Longitude:	-107.6942100
		Grid Convergence:	0.08 °

Well	MC 5 COM #906H - Slot A1		
Well Position	+N/-S	0.00 usft	Northing:
	+E/-W	0.00 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft
		Latitude:	36.2746100
		Longitude:	-107.6941500
		Ground Level:	7,020.00 usft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination
			(°)
	HDGM	9/8/2015	9.13
			Dip Angle
			(°)
			62.95
			Field Strength
			(nT)
			49,887

Design	Wellbore #1		
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
			(°)
			123.58

Survey Program	Date 9/29/2015		
From	To	Survey (Wellbore)	Tool Name
(usft)	(usft)		Description
14.00	374.00	Surface Gyro 11Aug15 sam (Wellbore #1)	NS-GYRO-MS
452.00	4,650.00	Survey #2 - Surface MWD Survey (Wellbo	SDI MWD
4,679.00	5,984.00	Survey #3 - Curve MWD Survey (Wellbore	SDI MWD
6,047.00	14,155.00	Survey #4 - Lateral MWD Survey (Wellbor	SDI MWD
			SDI MWD - Standard ver 1.0.1
			SDI MWD - Standard ver 1.0.1
			SDI MWD - Standard ver 1.0.1

Survey									
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Map	Map		
Depth	(°)	(°)	Depth	(usft)	(usft)	Northing	Easting	Latitude	Longitude
(usft)			(usft)			(usft)	(usft)		
0.00	0.00	0.00	0.00	0.00	0.00	1,919,229.79	541,026.47	36.2746100	-107.6941500
14.00	0.00	0.00	14.00	0.00	0.00	1,919,229.79	541,026.47	36.2746100	-107.6941500
64.00	0.39	316.40	64.00	0.12	-0.12	1,919,229.91	541,026.35	36.2746103	-107.6941504
114.00	0.41	289.22	114.00	0.31	-0.40	1,919,230.10	541,026.06	36.2746108	-107.6941514
164.00	0.53	304.56	164.00	0.50	-0.76	1,919,230.28	541,025.70	36.2746113	-107.6941526
214.00	0.55	313.72	213.99	0.79	-1.13	1,919,230.58	541,025.34	36.2746122	-107.6941539
264.00	0.53	315.92	263.99	1.12	-1.46	1,919,230.91	541,025.00	36.2746131	-107.6941550
314.00	0.57	314.00	313.99	1.46	-1.80	1,919,231.25	541,024.66	36.2746140	-107.6941562
374.00	0.27	359.12	373.99	1.81	-2.02	1,919,231.60	541,024.45	36.2746150	-107.6941569

Company:	WPX Energy	Local Co-ordinate Reference:	Well MC 5 COM #906H - Slot A1
Project:	T24N R8W	TVD Reference:	KB @ 7034.00usft (Aztec 920)
Site:	Chaco 2408-33D	MD Reference:	KB @ 7034.00usft (Aztec 920)
Well:	MC 5 COM #906H	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Grand Junction District

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
452.00	0.32	353.41	451.99	2.21	-2.05	1,919,232.00	541,024.42	36.2746161	-107.6941570
First SDI Surface MWD Survey									
511.00	1.93	348.02	510.97	3.35	-2.27	1,919,233.13	541,024.19	36.2746192	-107.6941577
572.00	4.75	344.15	571.86	6.78	-3.17	1,919,236.57	541,023.28	36.2746286	-107.6941608
633.00	6.60	345.21	632.56	12.60	-4.76	1,919,242.39	541,021.69	36.2746446	-107.6941662
694.00	7.56	346.35	693.10	19.89	-6.60	1,919,249.67	541,019.84	36.2746646	-107.6941724
755.00	9.15	348.20	753.45	28.54	-8.54	1,919,258.32	541,017.89	36.2746884	-107.6941790
816.00	10.20	347.93	813.58	38.57	-10.66	1,919,268.34	541,015.75	36.2747159	-107.6941862
876.00	11.26	344.77	872.53	49.42	-13.31	1,919,279.19	541,013.09	36.2747457	-107.6941952
937.00	12.40	343.71	932.23	61.45	-16.71	1,919,291.22	541,009.67	36.2747788	-107.6942067
998.00	14.16	344.68	991.60	74.93	-20.52	1,919,304.69	541,005.84	36.2748158	-107.6942197
1,059.00	15.12	344.86	1,050.62	89.81	-24.57	1,919,319.56	541,001.77	36.2748567	-107.6942334
1,121.00	14.68	343.71	1,110.53	105.16	-28.89	1,919,334.90	540,997.43	36.2748989	-107.6942480
1,181.00	16.18	344.33	1,168.37	120.50	-33.28	1,919,350.24	540,993.02	36.2749410	-107.6942629
1,242.00	18.29	343.63	1,226.63	137.87	-38.27	1,919,367.61	540,988.00	36.2749887	-107.6942799
1,303.00	19.08	343.01	1,284.41	156.59	-43.88	1,919,386.32	540,982.36	36.2750402	-107.6942989
1,364.00	19.41	342.54	1,342.00	175.79	-49.84	1,919,405.51	540,976.38	36.2750929	-107.6943191
1,425.00	19.53	341.17	1,399.52	195.11	-56.17	1,919,424.82	540,970.02	36.2751460	-107.6943406
1,485.00	19.76	341.59	1,456.02	214.23	-62.61	1,919,443.93	540,963.55	36.2751985	-107.6943624
1,546.00	19.72	344.71	1,513.44	233.94	-68.58	1,919,463.63	540,957.55	36.2752526	-107.6943827
1,607.00	19.41	346.34	1,570.92	253.72	-73.69	1,919,483.40	540,952.42	36.2753070	-107.6944000
1,670.00	19.37	345.65	1,630.35	274.01	-78.75	1,919,503.69	540,947.33	36.2753627	-107.6944172
1,733.00	19.42	344.64	1,689.77	294.23	-84.11	1,919,523.90	540,941.93	36.2754183	-107.6944354
1,797.00	19.12	344.19	1,750.18	314.58	-89.79	1,919,544.24	540,936.23	36.2754742	-107.6944546
1,860.00	18.76	343.98	1,809.77	334.24	-95.39	1,919,563.89	540,930.59	36.2755282	-107.6944737
1,924.00	19.14	342.77	1,870.30	354.15	-101.34	1,919,583.80	540,924.62	36.2755829	-107.6944938
1,987.00	19.43	345.24	1,929.77	374.15	-107.07	1,919,603.79	540,918.86	36.2756378	-107.6945133
2,050.00	19.49	348.10	1,989.17	394.57	-111.91	1,919,624.20	540,913.99	36.2756939	-107.6945297
2,113.00	18.74	349.11	2,048.70	414.79	-115.99	1,919,644.41	540,909.89	36.2757495	-107.6945435
2,177.00	17.95	348.94	2,109.45	434.57	-119.82	1,919,664.18	540,906.02	36.2758038	-107.6945565
2,240.00	17.39	348.48	2,169.47	453.32	-123.56	1,919,682.93	540,902.25	36.2758553	-107.6945692
2,304.00	16.68	346.61	2,230.67	471.63	-127.60	1,919,701.23	540,898.19	36.2759056	-107.6945829
2,367.00	16.30	345.36	2,291.07	488.98	-131.93	1,919,718.58	540,893.84	36.2759533	-107.6945976
2,430.00	16.67	343.88	2,351.49	506.21	-136.67	1,919,735.80	540,889.07	36.2760006	-107.6946137
2,494.00	16.99	343.24	2,412.74	523.98	-141.92	1,919,753.57	540,883.80	36.2760494	-107.6946315
2,557.00	16.76	342.24	2,473.03	541.45	-147.34	1,919,771.02	540,878.35	36.2760974	-107.6946499
2,621.00	16.80	340.32	2,534.34	558.84	-153.23	1,919,788.41	540,872.43	36.2761452	-107.6946699
2,684.00	16.84	341.08	2,594.68	575.95	-159.22	1,919,805.51	540,866.42	36.2761922	-107.6946902
2,747.00	16.73	338.92	2,654.99	593.04	-165.44	1,919,822.59	540,860.17	36.2762391	-107.6947113
2,810.00	16.69	341.23	2,715.33	610.07	-171.62	1,919,839.61	540,853.97	36.2762859	-107.6947323
2,874.00	16.95	343.38	2,776.59	627.71	-177.24	1,919,857.24	540,848.32	36.2763344	-107.6947514
2,937.00	16.59	342.28	2,836.92	645.08	-182.61	1,919,874.60	540,842.93	36.2763821	-107.6947696
3,001.00	16.51	342.69	2,898.26	662.46	-188.09	1,919,891.98	540,837.42	36.2764298	-107.6947882
3,064.00	17.08	344.70	2,958.58	679.93	-193.20	1,919,909.44	540,832.29	36.2764778	-107.6948055
3,127.00	16.98	345.68	3,018.81	697.77	-197.92	1,919,927.27	540,827.55	36.2765268	-107.6948215
3,191.00	16.21	345.14	3,080.15	715.46	-202.52	1,919,944.96	540,822.92	36.2765754	-107.6948371
3,255.00	16.53	344.46	3,141.55	732.87	-207.25	1,919,962.36	540,818.17	36.2766233	-107.6948532
3,318.00	17.44	346.56	3,201.81	750.68	-211.84	1,919,980.17	540,813.55	36.2766722	-107.6948687
3,381.00	16.88	345.75	3,262.00	768.73	-216.29	1,919,998.21	540,809.07	36.2767218	-107.6948838
3,445.00	17.31	344.12	3,323.17	786.89	-221.18	1,920,016.37	540,804.15	36.2767717	-107.6949004
3,508.00	18.37	344.15	3,383.14	805.46	-226.46	1,920,034.92	540,798.85	36.2768227	-107.6949183
3,572.00	18.49	342.64	3,443.86	824.85	-232.24	1,920,054.30	540,793.04	36.2768759	-107.6949379
3,635.00	18.17	341.85	3,503.67	843.72	-238.28	1,920,073.16	540,786.97	36.2769278	-107.6949584
3,699.00	17.88	340.73	3,564.52	862.47	-244.63	1,920,091.91	540,780.60	36.2769793	-107.6949800
3,762.00	17.87	344.11	3,624.48	880.90	-250.47	1,920,110.33	540,774.73	36.2770299	-107.6949998

Company:	WPX Energy	Local Co-ordinate Reference:	Well MC 5 COM #906H - Slot A1
Project:	T24N R8W	TVD Reference:	KB @ 7034.00usft (Aztec 920)
Site:	Chaco 2408-33D	MD Reference:	KB @ 7034.00usft (Aztec 920)
Well:	MC 5 COM #906H	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Grand Junction District

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
3,826.00	17.98	347.01	3,685.38	899.97	-255.38	1,920,129.39	540,769.80	36.2770823	-107.6950164
3,889.00	18.04	345.22	3,745.29	918.88	-260.05	1,920,148.29	540,765.09	36.2771342	-107.6950323
3,953.00	17.82	344.37	3,806.18	937.89	-265.22	1,920,167.30	540,759.90	36.2771865	-107.6950498
4,016.00	17.30	341.99	3,866.25	956.08	-270.71	1,920,185.48	540,754.38	36.2772365	-107.6950685
4,079.00	17.85	345.52	3,926.31	974.34	-276.02	1,920,203.73	540,749.04	36.2772866	-107.6950865
4,143.00	17.90	347.03	3,987.22	993.42	-280.68	1,920,222.81	540,744.36	36.2773390	-107.6951023
4,206.00	17.80	345.98	4,047.19	1,012.20	-285.19	1,920,241.58	540,739.82	36.2773906	-107.6951176
4,269.00	17.54	344.66	4,107.22	1,030.70	-290.03	1,920,260.07	540,734.95	36.2774414	-107.6951340
4,333.00	16.90	344.48	4,168.35	1,048.96	-295.07	1,920,278.32	540,729.89	36.2774916	-107.6951511
4,396.00	16.06	343.98	4,228.76	1,066.16	-299.93	1,920,295.52	540,725.01	36.2775389	-107.6951676
4,459.00	15.59	343.06	4,289.37	1,082.63	-304.80	1,920,311.98	540,720.11	36.2775841	-107.6951841
4,524.00	15.79	343.19	4,351.95	1,099.45	-309.90	1,920,328.80	540,714.98	36.2776303	-107.6952014
4,587.00	16.00	342.78	4,412.54	1,115.95	-314.95	1,920,345.29	540,709.91	36.2776756	-107.6952186
4,650.00	14.99	341.86	4,473.25	1,131.99	-320.06	1,920,361.32	540,704.78	36.2777197	-107.6952359
Last SDI Surface MWD Survey									
4,679.00	14.39	341.53	4,501.30	1,138.97	-322.37	1,920,368.30	540,702.46	36.2777389	-107.6952437
First SDI Curve MWD Survey									
4,743.00	14.54	359.64	4,563.31	1,154.56	-324.94	1,920,383.88	540,699.87	36.2777817	-107.6952525
4,806.00	16.17	32.76	4,624.17	1,169.87	-320.23	1,920,399.20	540,704.55	36.2778238	-107.6952365
4,870.00	16.37	55.50	4,685.67	1,182.49	-307.97	1,920,411.83	540,716.80	36.2778584	-107.6951949
4,933.00	15.15	83.78	4,746.39	1,188.42	-292.44	1,920,417.79	540,732.32	36.2778747	-107.6951422
4,996.00	17.02	105.06	4,806.97	1,186.91	-275.34	1,920,416.30	540,749.42	36.2778706	-107.6950842
5,059.00	21.10	113.00	4,866.52	1,180.08	-255.99	1,920,409.50	540,768.79	36.2778518	-107.6950185
5,123.00	25.59	114.14	4,925.26	1,169.92	-232.76	1,920,399.38	540,792.03	36.2778239	-107.6949397
5,186.00	30.93	114.71	4,980.73	1,157.58	-205.61	1,920,387.07	540,819.19	36.2777900	-107.6948476
5,250.00	35.60	115.13	5,034.23	1,142.79	-173.79	1,920,372.33	540,851.04	36.2777494	-107.6947396
5,313.00	39.20	116.25	5,084.27	1,126.19	-139.32	1,920,355.78	540,885.53	36.2777038	-107.6946227
5,377.00	44.12	117.51	5,132.07	1,106.94	-101.40	1,920,336.58	540,923.48	36.2776509	-107.6944941
5,440.00	49.86	118.46	5,175.03	1,085.32	-60.74	1,920,315.02	540,964.16	36.2775915	-107.6943561
5,504.00	56.54	118.49	5,213.34	1,060.90	-15.72	1,920,290.66	541,009.22	36.2775244	-107.6942034
5,567.00	61.41	118.76	5,245.81	1,035.04	31.65	1,920,264.87	541,056.63	36.2774534	-107.6940427
5,630.00	60.79	118.56	5,276.25	1,008.59	80.05	1,920,238.49	541,105.06	36.2773807	-107.6938785
5,694.00	67.01	120.82	5,304.40	980.11	129.93	1,920,210.08	541,154.99	36.2773025	-107.6937092
5,758.00	72.62	124.80	5,326.48	947.55	180.37	1,920,177.60	541,205.47	36.2772130	-107.6935381
5,821.00	77.17	124.11	5,342.89	913.15	230.51	1,920,143.27	541,255.66	36.2771185	-107.6933680
5,890.00	82.54	123.00	5,355.04	875.63	287.09	1,920,105.83	541,312.30	36.2770154	-107.6931761
5,940.00	86.55	124.29	5,359.79	848.05	328.52	1,920,078.32	541,353.76	36.2769397	-107.6930355
7" Casing @ 5940' MD - 36.2769397, -107.6930355									
5,966.00	88.64	124.96	5,360.88	833.29	349.89	1,920,063.59	541,375.16	36.2768991	-107.6929630
5,984.00	89.26	124.99	5,361.21	822.98	364.64	1,920,053.29	541,389.92	36.2768708	-107.6929130
Last SDI Curve MWD Survey									
6,047.00	90.34	124.79	5,361.43	786.94	416.31	1,920,017.33	541,441.65	36.2767718	-107.6927377
First SDI Lateral MWD Survey									
6,110.00	89.73	123.76	5,361.40	751.46	468.37	1,919,981.93	541,493.76	36.2766743	-107.6925610
6,173.00	91.07	122.76	5,360.96	716.91	521.05	1,919,947.45	541,546.48	36.2765794	-107.6923823
6,236.00	92.12	123.07	5,359.20	682.69	573.91	1,919,913.31	541,599.40	36.2764854	-107.6922030
6,299.00	88.62	120.47	5,358.80	649.53	627.46	1,919,880.22	541,652.99	36.2763943	-107.6920213
6,362.00	90.50	120.82	5,359.28	617.42	681.66	1,919,848.19	541,707.24	36.2763061	-107.6918375
6,426.00	89.76	121.65	5,359.13	584.24	736.38	1,919,815.08	541,762.01	36.2762149	-107.6916518
6,489.00	88.90	121.26	5,359.87	551.36	790.12	1,919,782.29	541,815.79	36.2761246	-107.6914695
6,553.00	90.81	123.04	5,360.03	517.31	844.30	1,919,748.31	541,870.02	36.2760311	-107.6912857
6,616.00	89.43	121.39	5,359.90	483.73	897.60	1,919,714.81	541,923.37	36.2759388	-107.6911049
6,679.00	89.77	122.11	5,360.34	450.58	951.17	1,919,681.73	541,976.99	36.2758477	-107.6909231
6,742.00	89.03	121.56	5,361.00	417.35	1,004.69	1,919,648.58	542,030.55	36.2757564	-107.6907416

Company:	WPX Energy	Local Co-ordinate Reference:	Well MC 5 COM #906H - Slot A1
Project:	T24N R8W	TVD Reference:	KB @ 7034.00usft (Aztec 920)
Site:	Chaco 2408-33D	MD Reference:	KB @ 7034.00usft (Aztec 920)
Well:	MC 5 COM #906H	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Grand Junction District

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
6,804.00	90.34	122.51	5,361.34	384.46	1,057.24	1,919,615.77	542,083.16	36.2756661	-107.6905633
6,868.00	90.00	124.02	5,361.15	349.36	1,110.75	1,919,580.74	542,136.72	36.2755696	-107.6903817
6,931.00	89.26	124.19	5,361.56	314.03	1,162.92	1,919,545.50	542,188.93	36.2754726	-107.6902048
6,995.00	89.46	124.76	5,362.27	277.81	1,215.67	1,919,509.35	542,241.74	36.2753731	-107.6900258
7,059.00	91.71	126.94	5,361.62	240.33	1,267.54	1,919,471.95	542,293.66	36.2752701	-107.6898499
7,123.00	89.80	125.19	5,360.78	202.66	1,319.27	1,919,434.35	542,345.44	36.2751666	-107.6896744
7,186.00	90.37	125.76	5,360.68	166.10	1,370.57	1,919,397.86	542,396.80	36.2750662	-107.6895003
7,250.00	88.12	123.30	5,361.53	129.83	1,423.28	1,919,361.67	542,449.56	36.2749665	-107.6893215
7,313.00	90.13	123.09	5,362.49	95.35	1,475.99	1,919,327.26	542,502.32	36.2748718	-107.6891427
7,376.00	91.01	122.92	5,361.86	61.03	1,528.82	1,919,293.02	542,555.20	36.2747775	-107.6889635
7,440.00	91.75	122.98	5,360.32	26.23	1,582.51	1,919,258.30	542,608.94	36.2746819	-107.6887813
7,504.00	90.07	122.44	5,359.30	-8.35	1,636.35	1,919,223.80	542,662.83	36.2745869	-107.6885987
7,567.00	89.87	123.15	5,359.34	-42.47	1,689.31	1,919,189.75	542,715.84	36.2744932	-107.6884190
7,631.00	89.60	121.42	5,359.63	-76.65	1,743.42	1,919,155.64	542,769.99	36.2743993	-107.6882355
7,694.00	89.36	120.36	5,360.20	-108.99	1,797.48	1,919,123.38	542,824.10	36.2743104	-107.6880521
7,757.00	89.23	120.21	5,360.98	-140.76	1,851.87	1,919,091.69	542,878.54	36.2742231	-107.6878676
7,820.00	90.54	122.14	5,361.11	-173.37	1,905.77	1,919,059.16	542,932.49	36.2741335	-107.6876847
7,883.00	89.66	123.48	5,361.00	-207.51	1,958.72	1,919,025.10	542,985.48	36.2740397	-107.6875051
7,946.00	90.97	123.27	5,360.65	-242.16	2,011.33	1,918,990.52	543,038.14	36.2739445	-107.6873266
8,009.00	89.96	123.46	5,360.14	-276.81	2,063.94	1,918,955.95	543,090.81	36.2738493	-107.6871481
8,072.00	90.07	124.91	5,360.12	-312.21	2,116.06	1,918,920.62	543,142.97	36.2737521	-107.6869714
8,135.00	90.74	124.46	5,359.68	-348.06	2,167.86	1,918,884.85	543,194.83	36.2736536	-107.6867956
8,199.00	89.90	123.65	5,359.32	-383.90	2,220.88	1,918,849.09	543,247.90	36.2735551	-107.6866158
8,262.00	90.03	123.84	5,359.36	-418.89	2,273.27	1,918,814.17	543,300.34	36.2734590	-107.6864380
8,325.00	89.83	123.73	5,359.43	-453.92	2,325.63	1,918,779.21	543,352.75	36.2733627	-107.6862604
8,389.00	90.30	123.47	5,359.36	-489.34	2,378.94	1,918,743.87	543,406.10	36.2732654	-107.6860796
8,452.00	90.40	123.17	5,358.98	-523.95	2,431.58	1,918,709.34	543,458.80	36.2731703	-107.6859010
8,515.00	90.44	122.50	5,358.52	-558.11	2,484.51	1,918,675.26	543,511.78	36.2730765	-107.6857215
8,578.00	90.27	122.37	5,358.13	-591.90	2,537.68	1,918,641.54	543,565.00	36.2729837	-107.6855411
8,641.00	90.47	122.80	5,357.72	-625.82	2,590.77	1,918,607.69	543,618.13	36.2728904	-107.6853610
8,704.00	90.20	123.11	5,357.35	-660.09	2,643.63	1,918,573.50	543,671.04	36.2727963	-107.6851817
8,768.00	90.44	122.68	5,356.99	-694.85	2,697.37	1,918,538.82	543,724.83	36.2727008	-107.6849994
8,829.00	90.07	123.00	5,356.72	-727.93	2,748.62	1,918,505.81	543,776.13	36.2726099	-107.6848255
8,893.00	90.03	122.21	5,356.67	-762.42	2,802.53	1,918,471.40	543,830.09	36.2725151	-107.6846427
8,956.00	89.52	122.14	5,356.91	-795.96	2,855.85	1,918,437.93	543,883.46	36.2724230	-107.6844618
9,020.00	90.24	123.34	5,357.05	-830.58	2,909.68	1,918,403.40	543,937.34	36.2723279	-107.6842792
9,081.00	90.24	124.19	5,356.79	-864.48	2,960.39	1,918,369.57	543,988.10	36.2722347	-107.6841071
9,142.00	90.44	123.59	5,356.43	-898.49	3,011.03	1,918,335.63	544,038.79	36.2721413	-107.6839354
9,203.00	90.47	123.73	5,355.94	-932.30	3,061.80	1,918,301.89	544,089.61	36.2720484	-107.6837632
9,264.00	90.40	125.83	5,355.48	-967.09	3,111.90	1,918,267.17	544,139.75	36.2719528	-107.6835932
9,325.00	90.34	125.96	5,355.09	-1,002.86	3,161.31	1,918,231.48	544,189.22	36.2718545	-107.6834256
9,385.00	90.27	125.29	5,354.77	-1,037.81	3,210.08	1,918,196.60	544,238.04	36.2717585	-107.6832602
9,445.00	90.37	125.53	5,354.43	-1,072.57	3,258.98	1,918,161.91	544,286.99	36.2716630	-107.6830943
9,506.00	89.97	125.13	5,354.25	-1,107.85	3,308.75	1,918,126.70	544,336.81	36.2715661	-107.6829255
9,567.00	89.90	125.23	5,354.32	-1,142.99	3,358.61	1,918,091.63	544,386.71	36.2714695	-107.6827564
9,628.00	90.34	124.99	5,354.19	-1,178.07	3,408.51	1,918,056.62	544,436.67	36.2713731	-107.6825871
9,689.00	89.87	125.25	5,354.08	-1,213.17	3,458.40	1,918,021.60	544,486.61	36.2712767	-107.6824178
9,749.00	90.30	125.48	5,353.99	-1,247.89	3,507.33	1,917,986.94	544,535.59	36.2711813	-107.6822519
9,810.00	90.44	124.76	5,353.60	-1,282.99	3,557.23	1,917,951.92	544,585.53	36.2710848	-107.6820826
9,871.00	89.97	124.30	5,353.38	-1,317.56	3,607.48	1,917,917.42	544,635.84	36.2709898	-107.6819122
9,932.00	90.24	124.08	5,353.27	-1,351.84	3,657.94	1,917,883.21	544,686.34	36.2708957	-107.6817410
9,993.00	88.32	123.49	5,354.04	-1,385.76	3,708.63	1,917,849.37	544,737.08	36.2708025	-107.6815691
10,054.00	90.50	124.44	5,354.66	-1,419.83	3,759.21	1,917,815.36	544,787.72	36.2707088	-107.6813975
10,115.00	90.20	124.94	5,354.29	-1,454.55	3,809.37	1,917,780.72	544,837.92	36.2706134	-107.6812273
10,176.00	89.66	123.94	5,354.37	-1,489.05	3,859.68	1,917,746.29	544,888.28	36.2705187	-107.6810567

Company:	WPX Energy	Local Co-ordinate Reference:	Well MC 5 COM #906H - Slot A1
Project:	T24N R8W	TVD Reference:	KB @ 7034.00usft (Aztec 920)
Site:	Chaco 2408-33D	MD Reference:	KB @ 7034.00usft (Aztec 920)
Well:	MC 5 COM #906H	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Grand Junction District

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
10,237.00	91.41	123.28	5,353.80	-1,522.81	3,910.47	1,917,712.60	544,939.13	36.2704259	-107.6808844
10,298.00	92.92	123.68	5,351.49	-1,556.43	3,961.32	1,917,679.05	544,990.02	36.2703335	-107.6807119
10,359.00	91.21	125.51	5,349.29	-1,591.04	4,011.49	1,917,644.51	545,040.24	36.2702384	-107.6805417
10,419.00	89.70	124.60	5,348.82	-1,625.50	4,060.61	1,917,610.13	545,089.41	36.2701437	-107.6803751
10,479.00	90.87	124.71	5,348.52	-1,659.62	4,109.96	1,917,576.08	545,138.81	36.2700500	-107.6802077
10,541.00	90.94	124.65	5,347.54	-1,694.89	4,160.94	1,917,540.88	545,189.84	36.2699531	-107.6800348
10,601.00	89.80	123.89	5,347.15	-1,728.68	4,210.52	1,917,507.17	545,239.47	36.2698602	-107.6798666
10,661.00	90.34	123.69	5,347.08	-1,762.05	4,260.38	1,917,473.87	545,289.38	36.2697685	-107.6796975
10,721.00	90.66	123.37	5,346.55	-1,795.19	4,310.40	1,917,440.80	545,339.44	36.2696775	-107.6795278
10,782.00	90.24	123.37	5,346.08	-1,828.74	4,361.34	1,917,407.32	545,390.43	36.2695853	-107.6793551
10,844.00	89.93	123.54	5,345.98	-1,862.92	4,413.07	1,917,373.22	545,442.21	36.2694914	-107.6791796
10,905.00	90.10	123.51	5,345.97	-1,896.61	4,463.92	1,917,339.60	545,493.11	36.2693988	-107.6790071
10,965.00	90.34	123.63	5,345.74	-1,929.79	4,513.91	1,917,306.50	545,543.15	36.2693076	-107.6788375
11,025.00	90.20	123.11	5,345.45	-1,962.79	4,564.02	1,917,273.57	545,593.30	36.2692169	-107.6786676
11,085.00	90.07	123.54	5,345.31	-1,995.75	4,614.15	1,917,240.67	545,643.48	36.2691264	-107.6784975
11,143.00	90.13	123.21	5,345.21	-2,027.66	4,662.59	1,917,208.84	545,691.97	36.2690387	-107.6783332
11,204.00	90.20	122.74	5,345.04	-2,060.86	4,713.76	1,917,175.71	545,743.19	36.2689475	-107.6781597
11,266.00	89.83	122.14	5,345.02	-2,094.12	4,766.09	1,917,142.53	545,795.56	36.2688561	-107.6779822
11,327.00	90.24	122.02	5,344.98	-2,126.51	4,817.77	1,917,110.21	545,847.29	36.2687671	-107.6778069
11,387.00	89.83	121.67	5,344.95	-2,158.17	4,868.74	1,917,078.62	545,898.30	36.2686801	-107.6776340
11,448.00	89.93	121.14	5,345.07	-2,189.96	4,920.80	1,917,046.91	545,950.41	36.2685927	-107.6774574
11,509.00	90.34	121.11	5,344.93	-2,221.49	4,973.02	1,917,015.45	546,002.68	36.2685061	-107.6772803
11,570.00	90.57	122.69	5,344.45	-2,253.72	5,024.81	1,916,983.30	546,054.51	36.2684175	-107.6771046
11,631.00	90.00	122.25	5,344.14	-2,286.47	5,076.27	1,916,950.62	546,106.02	36.2683275	-107.6769301
11,692.00	89.87	122.75	5,344.21	-2,319.24	5,127.72	1,916,917.92	546,157.51	36.2682374	-107.6767556
11,753.00	90.17	122.04	5,344.19	-2,351.92	5,179.22	1,916,885.31	546,209.06	36.2681476	-107.6765809
11,816.00	89.73	123.33	5,344.25	-2,385.94	5,232.25	1,916,851.37	546,262.14	36.2680542	-107.6764010
11,880.00	89.63	123.12	5,344.60	-2,421.01	5,285.78	1,916,816.38	546,315.72	36.2679578	-107.6762194
11,943.00	89.40	123.21	5,345.14	-2,455.47	5,338.52	1,916,781.99	546,368.51	36.2678631	-107.6760406
12,006.00	91.01	125.47	5,344.91	-2,491.01	5,390.53	1,916,746.53	546,420.57	36.2677655	-107.6758642
12,069.00	90.24	125.45	5,344.22	-2,527.55	5,441.84	1,916,710.06	546,471.94	36.2676650	-107.6756901
12,132.00	90.10	125.01	5,344.04	-2,563.90	5,493.30	1,916,673.79	546,523.45	36.2675652	-107.6755156
12,195.00	90.27	125.00	5,343.83	-2,600.04	5,544.91	1,916,637.73	546,575.11	36.2674659	-107.6753406
12,259.00	90.22	124.78	5,343.56	-2,636.64	5,597.40	1,916,601.20	546,627.65	36.2673653	-107.6751625
12,322.00	90.24	124.23	5,343.31	-2,672.33	5,649.32	1,916,565.58	546,679.62	36.2672672	-107.6749864
12,385.00	90.10	124.85	5,343.12	-2,708.05	5,701.21	1,916,529.94	546,731.57	36.2671690	-107.6748104
12,448.00	89.93	124.25	5,343.10	-2,743.78	5,753.10	1,916,494.28	546,783.51	36.2670709	-107.6746344
12,512.00	90.27	124.02	5,342.99	-2,779.69	5,806.08	1,916,458.45	546,836.53	36.2669722	-107.6744547
12,575.00	90.17	123.59	5,342.75	-2,814.74	5,858.42	1,916,423.47	546,888.93	36.2668759	-107.6742772
12,640.00	90.24	123.78	5,342.52	-2,850.79	5,912.51	1,916,387.50	546,943.07	36.2667768	-107.6740937
12,703.00	89.60	123.31	5,342.60	-2,885.61	5,965.02	1,916,352.76	546,995.63	36.2666811	-107.6739157
12,766.00	89.96	123.46	5,342.85	-2,920.27	6,017.62	1,916,318.17	547,048.28	36.2665859	-107.6737372
12,830.00	89.83	123.01	5,342.96	-2,955.35	6,071.15	1,916,283.17	547,101.86	36.2664895	-107.6735557
12,893.00	89.90	122.71	5,343.11	-2,989.53	6,124.07	1,916,249.06	547,154.83	36.2663955	-107.6733762
12,956.00	89.97	122.44	5,343.18	-3,023.45	6,177.16	1,916,215.22	547,207.97	36.2663023	-107.6731961
13,019.00	90.03	122.07	5,343.18	-3,057.07	6,230.44	1,916,181.67	547,261.29	36.2662099	-107.6730154
13,083.00	89.78	121.44	5,343.29	-3,090.76	6,284.86	1,916,148.07	547,315.76	36.2661174	-107.6728308
13,146.00	89.66	121.29	5,343.60	-3,123.55	6,338.65	1,916,115.36	547,369.60	36.2660273	-107.6726484
13,209.00	89.70	123.19	5,343.95	-3,157.15	6,391.93	1,916,081.83	547,422.93	36.2659349	-107.6724677
13,272.00	89.93	122.72	5,344.15	-3,191.42	6,444.80	1,916,047.63	547,475.85	36.2658407	-107.6722884
13,336.00	89.39	122.03	5,344.53	-3,225.69	6,498.85	1,916,013.44	547,529.94	36.2657465	-107.6721051
13,399.00	89.60	121.70	5,345.09	-3,258.95	6,552.35	1,915,980.26	547,583.50	36.2656551	-107.6719236
13,462.00	89.80	122.52	5,345.42	-3,292.44	6,605.71	1,915,946.85	547,636.91	36.2655631	-107.6717426
13,525.00	90.13	122.40	5,345.46	-3,326.25	6,658.87	1,915,913.12	547,690.11	36.2654702	-107.6715623
13,589.00	89.66	121.81	5,345.57	-3,360.26	6,713.08	1,915,879.18	547,744.37	36.2653767	-107.6713785

Company:	WPX Energy	Local Co-ordinate Reference:	Well MC 5 COM #906H - Slot A1
Project:	T24N R8W	TVD Reference:	KB @ 7034.00usft (Aztec 920)
Site:	Chaco 2408-33D	MD Reference:	KB @ 7034.00usft (Aztec 920)
Well:	MC 5 COM #906H	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Grand Junction District

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
13,652.00	89.33	122.48	5,346.13	-3,393.78	6,766.42	1,915,845.74	547,797.76	36.2652846	-107.6711976
13,715.00	90.87	122.56	5,346.02	-3,427.65	6,819.54	1,915,811.95	547,850.93	36.2651915	-107.6710174
13,779.00	89.90	123.80	5,345.59	-3,462.67	6,873.10	1,915,777.00	547,904.54	36.2650953	-107.6708357
13,843.00	89.73	123.29	5,345.80	-3,498.04	6,926.45	1,915,741.71	547,957.93	36.2649981	-107.6706548
13,907.00	89.87	122.81	5,346.02	-3,532.94	6,980.09	1,915,706.89	548,011.63	36.2649022	-107.6704729
13,970.00	89.97	123.24	5,346.11	-3,567.28	7,032.91	1,915,672.63	548,064.50	36.2648078	-107.6702937
14,033.00	90.40	122.53	5,345.90	-3,601.48	7,085.81	1,915,638.50	548,117.45	36.2647138	-107.6701143
14,086.00	89.66	122.00	5,345.88	-3,629.77	7,130.63	1,915,610.27	548,162.31	36.2646361	-107.6699623
Last SDI Lateral MWD Survey									
14,135.00	89.66	122.00	5,346.17	-3,655.74	7,172.18	1,915,584.36	548,203.90	36.2645647	-107.6698214
RSI @ 14,135' MD - 36.2645647, -107.6698213									
14,155.00	89.66	122.00	5,346.29	-3,666.34	7,189.14	1,915,573.79	548,220.87	36.2645356	-107.6697639
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
Start 60 tan #906H	0.00	0.00	5,244.71	1,085.36	-0.05	1,920,315.15	541,024.86	36.2775916	-107.6941502
- hit/miss target									
- Shape									
- actual wellpath misses target center by 38.44usft at 5521.92usft MD (5223.04 TVD, 1053.70 N, -2.49 E)									
- Point									
End 60 tan #906H	0.00	0.00	5,274.71	1,056.62	43.24	1,920,286.47	541,068.19	36.2775126	-107.6940033
- actual wellpath misses target center by 35.34usft at 5580.81usft MD (5252.43 TVD, 1029.21 N, 42.28 E)									
- Point									
BHL #906H	0.00	0.00	5,342.00	-3,688.81	7,191.37	1,915,551.32	548,223.13	36.2644738	-107.6697563
- actual wellpath misses target center by 22.98usft at 14155.00usft MD (5346.29 TVD, -3666.34 N, 7189.14 E)									
- Point									

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
452.00	451.99	2.21	-2.05	First SDI Surface MWD Survey
4,650.00	4,473.25	1,131.99	-320.06	Last SDI Surface MWD Survey
4,679.00	4,501.30	1,138.97	-322.37	First SDI Curve MWD Survey
5,940.00	5,359.79	848.05	328.52	7" Casing @ 5940' MD
5,940.00	5,359.79	848.05	328.52	36.2769397, -107.6930355
5,984.00	5,361.21	822.98	364.64	Last SDI Curve MWD Survey
6,047.00	5,361.43	786.94	416.31	First SDI Lateral MWD Survey
14,086.00	5,345.88	-3,629.77	7,130.63	Last SDI Lateral MWD Survey
14,135.00	5,346.17	-3,655.74	7,172.18	RSI @ 14,135' MD
14,135.00	5,346.17	-3,655.74	7,172.18	36.2645647, -107.6698213
14,155.00	5,346.29	-3,666.34	7,189.14	Projection to TD

Checked By: _____ Approved By: _____ Date: _____