

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 30-039-31109	*Pool Code 71629	*Pool Name BASIN FRUITLAND COAL
*Property Code 301345	*Property Name SCHALK 32	*Well Number 1H
*GRID No. 120782	*Operator Name WPX ENERGY PRODUCTION, LLC	*Elevation 6618'

¹⁰ Surface Location

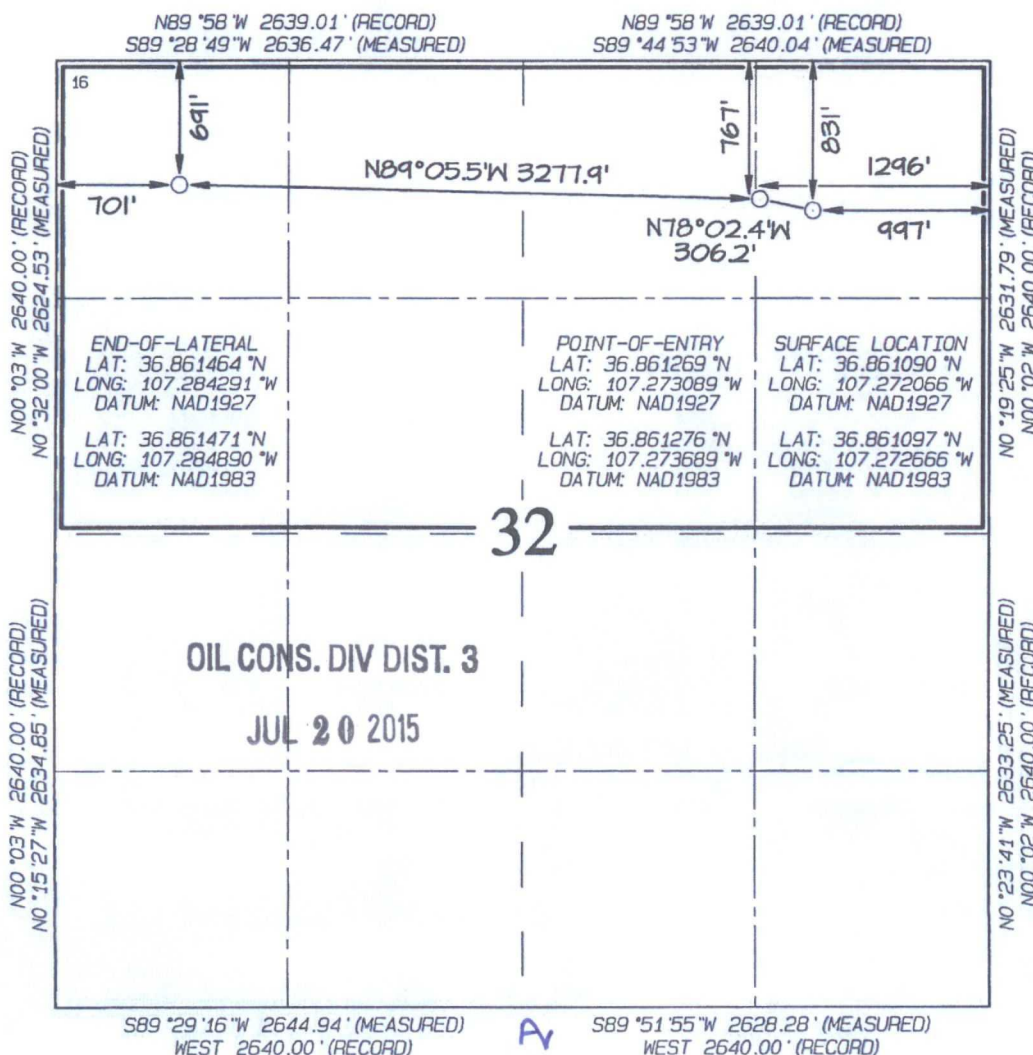
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	32	31N	4W		831	NORTH	997	EAST	RIO ARriba

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
D	32	31N	4W		691	NORTH	701	WEST	RIO ARriba

¹² Dedicated Acres 320.0 Acres - (N/2)	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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



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: 7/16/15

Printed Name: LACEY GRANILLO

E-mail Address: lacey.granillo@wpxenergy.com

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: JULY 1, 2015
Survey Date: SEPTEMBER 23, 2011

Signature and Seal of Professional Surveyor



JASON C. EDWARDS
Certificate Number 15269



CONFIDENTIAL

WPX Energy

T31N R4W Rosa Unit
Schalk 32 1H
Schalk 32 1H - Slot A1

Wellbore #1

OIL CONS. DIV DIST. 3

JUL 20 2015

Design: Wellbore #1

Survey Report - Geographic

24 June, 2015



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1. Directional Plot and Surveys
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4. Graphical Job History
5. Support Staff





Company Name: WPX Energy
Project: T31N R4W Rosa Unit
Site: Schalk 32 1H
Well: Schalk 32 1H



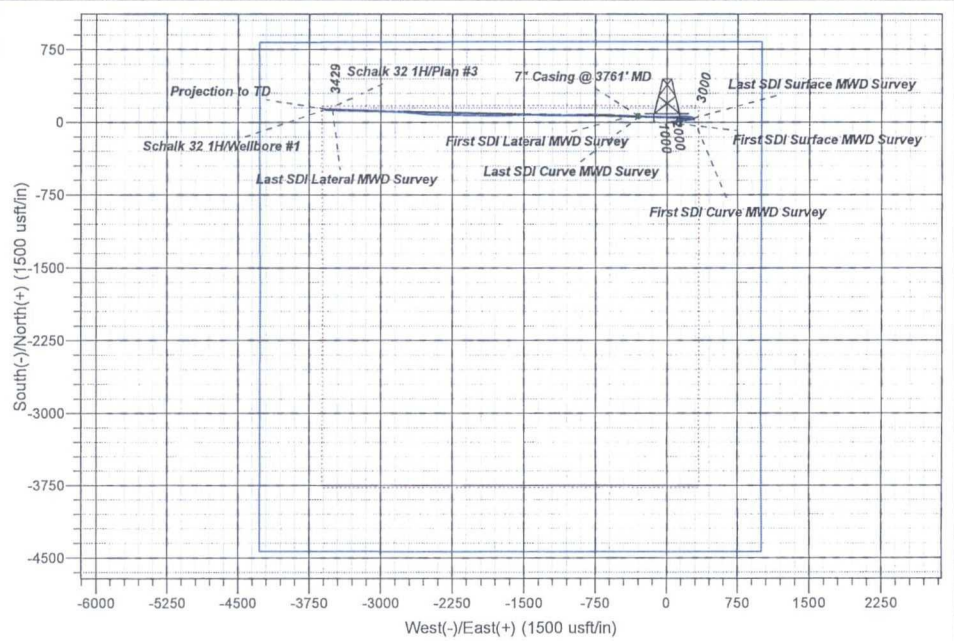
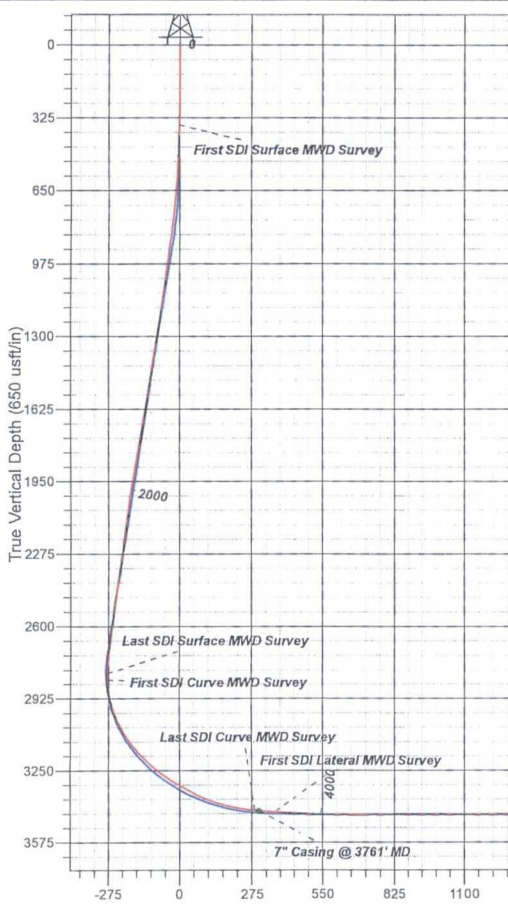
Azimuths to True North
Magnetic North: 9.17°

Magnetic Field
Strength: 50268.6nT
Dip Angle: 63.53°
Date: 6/15/2015
Model: HDGM

WELL DETAILS: Schalk 32 1H

	GL 6618' & RKB 14' @ 6632.00usft (Aztec 920)	6618.00
	North	Latitude
+N/-S	+E/-W	Longitude
0.00	0.00	2133181.11
		664197.01
		36.8610900
		-107.2720660

A1



Vertical Section at 272.04° (550 usft/in)

Design: Wellbore #1 (Schalk 32 1H/Wellbore #1)
Created By: Janie Collins Date: 14:26, June 24 2015
PROJECT DETAILS: T31N R4W Rosa Unit
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico West 3003
System Datum: Mean Sea Level
Local North: True

Company:	WPX Energy	Local Co-ordinate Reference:	Well Schalk 32 1H - Slot A1
Project:	T31N R4W Rosa Unit	TVD Reference:	GL 6618' & RKB 14' @ 6632.00usft (Aztec 920)
Site:	Schalk 32 1H	MD Reference:	GL 6618' & RKB 14' @ 6632.00usft (Aztec 920)
Well:	Schalk 32 1H	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Grand Junction District

Project	T31N R4W Rosa Unit		
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	Schalk 32 1H				
Site Position:		Northing:	2,133,181.10 usft	Latitude:	36.8610900
From:	Lat/Long	Easting:	664,197.02 usft	Longitude:	-107.2720660
Position Uncertainty:	0.00 usft	Slot Radius:	13.20 in	Grid Convergence:	0.34 °

Well		Schalk 32 1H - Slot A1				
Well Position	+N/-S	0.00 usft	Northing:	2,133,181.10 usft	Latitude:	36.8610900
	+E/-W	0.00 usft	Easting:	664,197.02 usft	Longitude:	-107.2720660
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	6,618.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	6/15/2015	9.17	63.53	50,269

Design	Wellbore #1				
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	272.04	

Survey Program	Date 6/24/2015				
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
14.00	299.00	Survey #1 - Gyro Survey (Wellbore #1)	GYRO-NS	Gyrocompass Gyro	
356.00	2,827.00	Survey #2 - Surface MWD Survey (Wellbo	SDI MWD	SDI MWD - Standard ver 1.0.1	
2,859.00	3,746.00	Survey #3 - Curve MWD Survey (Wellbore	SDI MWD	SDI MWD - Standard ver 1.0.1	
3,821.00	7,042.00	Survey #4 - Lateral MWD Survey (Wellbor	SDI MWD	SDI MWD - Standard ver 1.0.1	

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
0.00	0.00	0.00	0.00	0.00	0.00	2,133,181.10	664,197.02	36.8610900	-107.2720660	
14.00	0.00	0.00	14.00	0.00	0.00	2,133,181.10	664,197.02	36.8610900	-107.2720660	
44.00	0.35	102.11	44.00	-0.02	0.09	2,133,181.09	664,197.11	36.8610899	-107.2720657	
74.00	0.27	69.32	74.00	-0.01	0.25	2,133,181.09	664,197.26	36.8610899	-107.2720652	
104.00	0.33	40.11	104.00	0.08	0.37	2,133,181.18	664,197.38	36.8610902	-107.2720648	
134.00	0.32	59.72	134.00	0.19	0.50	2,133,181.29	664,197.51	36.8610905	-107.2720644	
164.00	0.27	48.02	164.00	0.28	0.62	2,133,181.38	664,197.64	36.8610907	-107.2720639	
194.00	0.34	70.94	194.00	0.35	0.76	2,133,181.46	664,197.77	36.8610909	-107.2720635	
224.00	0.57	93.88	224.00	0.37	0.99	2,133,181.48	664,198.00	36.8610910	-107.2720627	

Company:	WPX Energy	Local Co-ordinate Reference:	Well Schalk 32 1H - Slot A1
Project:	T31N R4W Rosa Unit	TVD Reference:	GL 6618' & RKB 14' @ 6632.00usft (Aztec 920)
Site:	Schalk 32 1H	MD Reference:	GL 6618' & RKB 14' @ 6632.00usft (Aztec 920)
Well:	Schalk 32 1H	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
254.00	0.53	98.05	254.00	0.34	1.28	2,133,181.45	664,198.29	36.8610909	-107.2720617
284.00	0.68	102.15	283.99	0.28	1.59	2,133,181.40	664,198.60	36.8610908	-107.2720606
299.00	0.71	107.20	298.99	0.24	1.76	2,133,181.35	664,198.78	36.8610906	-107.2720600
356.00	0.97	111.21	355.99	-0.04	2.55	2,133,181.08	664,199.57	36.8610899	-107.2720573
First SDI Surface MWD Survey									
386.00	0.70	138.61	385.98	-0.27	2.91	2,133,180.85	664,199.93	36.8610892	-107.2720561
446.00	0.74	106.98	445.98	-0.66	3.52	2,133,180.47	664,200.54	36.8610882	-107.2720540
507.00	1.80	103.64	506.96	-1.00	4.83	2,133,180.13	664,201.85	36.8610872	-107.2720495
567.00	3.22	95.44	566.90	-1.38	7.42	2,133,179.77	664,204.45	36.8610862	-107.2720407
628.00	4.32	91.37	627.77	-1.60	11.42	2,133,179.57	664,208.45	36.8610856	-107.2720270
689.00	4.79	91.98	688.58	-1.74	16.27	2,133,179.46	664,213.29	36.8610852	-107.2720104
750.00	5.76	87.58	749.32	-1.70	21.87	2,133,179.53	664,218.90	36.8610853	-107.2719913
811.00	6.45	81.41	809.97	-1.06	28.32	2,133,180.21	664,225.34	36.8610871	-107.2719693
873.00	6.42	80.03	871.58	0.06	35.17	2,133,181.37	664,232.19	36.8610901	-107.2719458
933.00	6.65	80.25	931.19	1.23	41.90	2,133,182.58	664,238.91	36.8610933	-107.2719228
994.00	6.83	83.56	991.77	2.24	48.99	2,133,183.63	664,245.99	36.8610961	-107.2718986
1,054.00	6.94	84.86	1,051.34	2.96	56.14	2,133,184.39	664,253.14	36.8610981	-107.2718741
1,115.00	7.43	81.99	1,111.86	3.84	63.72	2,133,185.32	664,260.71	36.8611005	-107.2718482
1,175.00	7.72	77.32	1,171.34	5.26	71.49	2,133,186.79	664,268.48	36.8611044	-107.2718217
1,236.00	7.74	76.16	1,231.78	7.15	79.48	2,133,188.72	664,276.45	36.8611096	-107.2717944
1,296.00	7.84	76.66	1,291.23	9.06	87.38	2,133,190.68	664,284.34	36.8611148	-107.2717674
1,357.00	8.13	78.97	1,351.64	10.84	95.66	2,133,192.51	664,292.62	36.8611198	-107.2717390
1,418.00	8.56	77.76	1,411.99	12.63	104.33	2,133,194.35	664,301.28	36.8611247	-107.2717094
1,478.00	8.65	77.51	1,471.32	14.55	113.10	2,133,196.32	664,310.03	36.8611299	-107.2716794
1,539.00	8.70	76.07	1,531.62	16.66	122.06	2,133,198.48	664,318.98	36.8611357	-107.2716488
1,600.00	8.34	77.32	1,591.95	18.74	130.85	2,133,200.61	664,327.76	36.8611414	-107.2716188
1,660.00	8.16	79.33	1,651.32	20.48	139.28	2,133,202.40	664,336.18	36.8611462	-107.2715900
1,721.00	7.93	81.90	1,711.72	21.88	147.70	2,133,203.85	664,344.59	36.8611501	-107.2715612
1,782.00	8.27	79.76	1,772.12	23.25	156.19	2,133,205.27	664,353.06	36.8611538	-107.2715322
1,845.00	8.59	82.68	1,834.44	24.65	165.31	2,133,206.73	664,362.18	36.8611577	-107.2715010
1,909.00	8.61	83.22	1,897.72	25.83	174.81	2,133,207.96	664,371.67	36.8611609	-107.2714685
1,972.00	7.95	83.03	1,960.06	26.91	183.82	2,133,209.10	664,380.67	36.8611639	-107.2714377
2,035.00	7.48	83.44	2,022.49	27.91	192.22	2,133,210.14	664,389.07	36.8611666	-107.2714090
2,098.00	7.14	83.52	2,084.98	28.82	200.18	2,133,211.10	664,397.02	36.8611691	-107.2713818
2,162.00	6.72	85.88	2,148.51	29.54	207.87	2,133,211.86	664,404.71	36.8611711	-107.2713555
2,225.00	7.05	84.89	2,211.05	30.15	215.39	2,133,212.52	664,412.23	36.8611728	-107.2713298
2,288.00	6.73	86.45	2,273.60	30.72	222.93	2,133,213.14	664,419.76	36.8611743	-107.2713040
2,352.00	6.63	85.17	2,337.17	31.26	230.35	2,133,213.72	664,427.18	36.8611758	-107.2712787
2,415.00	7.15	82.18	2,399.71	32.10	237.86	2,133,214.61	664,434.69	36.8611781	-107.2712530
2,478.00	7.02	82.23	2,462.23	33.16	245.56	2,133,215.71	664,442.38	36.8611810	-107.2712267
2,542.00	7.07	85.89	2,525.75	33.97	253.37	2,133,216.56	664,450.18	36.8611833	-107.2712000
2,605.00	6.57	84.12	2,588.30	34.62	260.82	2,133,217.25	664,457.63	36.8611850	-107.2711745
2,668.00	6.58	84.46	2,650.89	35.33	268.00	2,133,218.01	664,464.80	36.8611870	-107.2711500
2,700.00	6.70	84.56	2,682.67	35.69	271.68	2,133,218.39	664,468.48	36.8611880	-107.2711374
2,732.00	6.06	78.65	2,714.47	36.20	275.19	2,133,218.92	664,471.99	36.8611894	-107.2711254
2,763.00	5.42	59.22	2,745.32	37.27	278.06	2,133,220.01	664,474.85	36.8611923	-107.2711156
2,795.00	5.65	33.42	2,777.18	39.36	280.22	2,133,222.11	664,477.00	36.8611981	-107.2711082
2,827.00	4.57	11.77	2,809.05	41.92	281.35	2,133,224.68	664,478.12	36.8612051	-107.2711043
Last SDI Surface MWD Survey									
2,859.00	3.68	345.23	2,840.97	44.16	281.35	2,133,226.92	664,478.10	36.8612113	-107.2711044
First SDI Curve MWD Survey									
2,890.00	4.71	310.29	2,871.89	45.95	280.12	2,133,228.70	664,476.86	36.8612162	-107.2711085
2,922.00	9.00	302.67	2,903.66	48.15	277.01	2,133,230.88	664,473.74	36.8612222	-107.2711192
2,954.00	13.63	299.56	2,935.03	51.36	271.62	2,133,234.06	664,468.33	36.8612310	-107.2711376
2,986.00	17.16	291.66	2,965.88	54.96	263.95	2,133,237.62	664,460.64	36.8612409	-107.2711638

Company:	WPX Energy	Local Co-ordinate Reference:	Well Schalk 32 1H - Slot A1
Project:	T31N R4W Rosa Unit	TVD Reference:	GL 6618' & RKB 14' @ 6632.00usft (Aztec 920)
Site:	Schalk 32 1H	MD Reference:	GL 6618' & RKB 14' @ 6632.00usft (Aztec 920)
Well:	Schalk 32 1H	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
3,018.00	20.50	282.09	2,996.17	57.88	254.08	2,133,240.48	664,450.75	36.8612490	-107.2711976
3,049.00	23.59	279.55	3,024.90	60.05	242.65	2,133,242.58	664,439.31	36.8612549	-107.2712366
3,081.00	24.53	274.89	3,054.12	61.68	229.72	2,133,244.13	664,426.37	36.8612594	-107.2712808
3,113.00	26.67	271.40	3,082.98	62.42	215.92	2,133,244.79	664,412.56	36.8612614	-107.2713280
3,145.00	30.33	271.03	3,111.10	62.74	200.66	2,133,245.02	664,397.30	36.8612623	-107.2713802
3,177.00	33.25	269.85	3,138.29	62.86	183.80	2,133,245.05	664,380.44	36.8612626	-107.2714378
3,208.00	36.71	268.04	3,163.69	62.52	166.04	2,133,244.60	664,362.68	36.8612617	-107.2714985
3,240.00	40.81	269.64	3,188.64	62.13	146.01	2,133,244.09	664,342.66	36.8612606	-107.2715670
3,271.00	42.66	265.87	3,211.77	61.31	125.40	2,133,243.15	664,322.06	36.8612584	-107.2716374
3,303.00	45.05	265.85	3,234.85	59.71	103.29	2,133,241.42	664,299.95	36.8612540	-107.2717130
3,335.00	47.41	267.26	3,256.98	58.33	80.23	2,133,239.90	664,276.90	36.8612502	-107.2717918
3,367.00	49.82	268.02	3,278.14	57.34	56.24	2,133,238.78	664,252.92	36.8612475	-107.2718738
3,398.00	52.33	269.57	3,297.61	56.84	32.13	2,133,238.13	664,228.81	36.8612461	-107.2719562
3,430.00	54.68	270.82	3,316.65	56.93	6.41	2,133,238.07	664,203.09	36.8612463	-107.2720441
3,462.00	56.87	271.19	3,334.64	57.40	-20.04	2,133,238.38	664,176.63	36.8612476	-107.2721346
3,493.00	59.45	271.14	3,350.99	57.93	-46.37	2,133,238.76	664,150.30	36.8612491	-107.2722246
3,525.00	62.33	271.35	3,366.56	58.54	-74.32	2,133,239.21	664,122.35	36.8612508	-107.2723201
3,557.00	65.95	271.12	3,380.52	59.16	-103.10	2,133,239.66	664,093.57	36.8612525	-107.2724185
3,588.00	68.15	270.87	3,392.60	59.66	-131.64	2,133,239.99	664,065.02	36.8612538	-107.2725160
3,620.00	71.20	271.06	3,403.72	60.16	-161.64	2,133,240.31	664,035.02	36.8612552	-107.2726186
3,651.00	74.36	271.78	3,412.89	60.90	-191.24	2,133,240.88	664,005.42	36.8612572	-107.2727197
3,683.00	77.94	272.23	3,420.55	61.98	-222.29	2,133,241.78	663,974.37	36.8612602	-107.2728259
3,715.00	80.78	272.26	3,426.46	63.22	-253.71	2,133,242.83	663,942.94	36.8612636	-107.2729333
3,746.00	83.42	272.68	3,430.72	64.54	-284.38	2,133,243.97	663,912.26	36.8612672	-107.2730381
Last SDI Curve MWD Survey									
3,761.00	84.06	272.56	3,432.36	65.22	-299.28	2,133,244.57	663,897.36	36.8612691	-107.2730890
7" Casing @ 3761' MD									
3,821.00	86.64	272.06	3,437.22	67.63	-359.03	2,133,246.62	663,837.60	36.8612757	-107.2732933
First SDI Lateral MWD Survey									
3,882.00	86.24	272.79	3,441.00	70.20	-419.86	2,133,248.84	663,776.76	36.8612828	-107.2735012
3,947.00	86.38	271.96	3,445.19	72.89	-484.66	2,133,251.15	663,711.93	36.8612902	-107.2737227
4,011.00	88.46	272.43	3,448.07	75.34	-548.55	2,133,253.22	663,648.03	36.8612969	-107.2739411
4,072.00	89.03	272.51	3,449.40	77.97	-609.48	2,133,255.49	663,587.09	36.8613041	-107.2741493
4,133.00	91.14	272.45	3,449.31	80.61	-670.42	2,133,257.77	663,526.14	36.8613114	-107.2743576
4,194.00	92.25	271.89	3,447.51	82.92	-731.35	2,133,259.72	663,465.20	36.8613177	-107.2745659
4,254.00	90.91	269.53	3,445.86	83.66	-791.31	2,133,260.11	663,405.23	36.8613197	-107.2747709
4,314.00	89.08	268.36	3,445.86	82.55	-851.30	2,133,258.66	663,345.25	36.8613167	-107.2749759
4,375.00	89.96	268.10	3,446.37	80.67	-912.27	2,133,256.41	663,284.29	36.8613115	-107.2751843
4,435.00	90.81	267.22	3,445.97	78.22	-972.21	2,133,253.61	663,224.36	36.8613048	-107.2753892
4,496.00	87.88	267.74	3,446.67	75.54	-1,033.14	2,133,250.57	663,163.45	36.8612974	-107.2755975
4,557.00	89.73	269.38	3,447.94	74.01	-1,094.11	2,133,248.68	663,102.49	36.8612932	-107.2758059
4,617.00	90.57	269.79	3,447.78	73.57	-1,154.10	2,133,247.89	663,042.50	36.8612920	-107.2760110
4,679.00	91.82	270.30	3,446.49	73.62	-1,216.09	2,133,247.58	662,980.52	36.8612921	-107.2762229
4,739.00	90.17	272.89	3,445.45	75.29	-1,276.05	2,133,248.90	662,920.55	36.8612967	-107.2764278
4,801.00	91.24	271.56	3,444.68	77.70	-1,338.00	2,133,250.94	662,858.59	36.8613033	-107.2766396
4,861.00	91.17	270.46	3,443.42	78.76	-1,397.97	2,133,251.64	662,798.61	36.8613062	-107.2768446
4,922.00	91.54	269.73	3,441.98	78.86	-1,458.96	2,133,251.39	662,737.62	36.8613065	-107.2770530
4,982.00	91.41	270.24	3,440.43	78.84	-1,518.94	2,133,251.02	662,677.64	36.8613064	-107.2772580
5,043.00	90.64	266.64	3,439.34	77.18	-1,579.89	2,133,249.00	662,616.70	36.8613018	-107.2774664
5,103.00	92.25	266.08	3,437.83	73.37	-1,639.75	2,133,244.84	662,556.86	36.8612914	-107.2776710
5,164.00	90.20	268.45	3,436.53	70.46	-1,700.66	2,133,241.57	662,495.97	36.8612834	-107.2778792
5,225.00	90.13	269.94	3,436.35	69.61	-1,761.65	2,133,240.36	662,434.99	36.8612810	-107.2780877
5,285.00	91.31	269.89	3,435.60	69.52	-1,821.65	2,133,239.92	662,374.99	36.8612808	-107.2782927
5,346.00	88.82	270.58	3,435.53	69.77	-1,882.64	2,133,239.81	662,314.00	36.8612814	-107.2785012
5,407.00	89.20	272.24	3,436.58	71.27	-1,943.61	2,133,240.95	662,253.02	36.8612855	-107.2787096

Company:	WPX Energy	Local Co-ordinate Reference:	Well Schalk 32 1H - Slot A1
Project:	T31N R4W Rosa Unit	TVD Reference:	GL 6618' & RKB 14' @ 6632.00usft (Aztec 920)
Site:	Schalk 32 1H	MD Reference:	GL 6618' & RKB 14' @ 6632.00usft (Aztec 920)
Well:	Schalk 32 1H	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
5,467.00	90.91	272.67	3,436.52	73.84	-2,003.55	2,133,243.17	662,193.07	36.8612926	-107.2789145
5,528.00	89.39	270.72	3,436.36	75.64	-2,064.52	2,133,244.61	662,132.09	36.8612975	-107.2791229
5,589.00	89.96	270.82	3,436.71	76.46	-2,125.51	2,133,245.07	662,071.09	36.8612998	-107.2793314
5,650.00	89.56	269.87	3,436.97	76.83	-2,186.51	2,133,245.08	662,010.09	36.8613008	-107.2795399
5,711.00	91.04	269.81	3,436.65	76.66	-2,247.51	2,133,244.55	661,949.10	36.8613003	-107.2797484
5,774.00	92.11	270.37	3,434.91	76.76	-2,310.48	2,133,244.28	661,886.12	36.8613005	-107.2799637
5,837.00	88.90	270.82	3,434.36	77.41	-2,373.47	2,133,244.57	661,823.13	36.8613023	-107.2801790
5,900.00	89.25	271.08	3,435.38	78.46	-2,436.45	2,133,245.24	661,760.15	36.8613052	-107.2803943
5,964.00	89.40	274.15	3,436.13	81.38	-2,500.37	2,133,247.79	661,696.21	36.8613132	-107.2806128
6,027.00	91.51	276.09	3,435.63	87.00	-2,563.11	2,133,253.04	661,633.44	36.8613286	-107.2808272
6,091.00	93.16	276.52	3,433.02	94.02	-2,626.67	2,133,259.69	661,569.84	36.8613479	-107.2810445
6,154.00	91.11	275.68	3,430.68	100.71	-2,689.27	2,133,266.01	661,507.20	36.8613662	-107.2812584
6,217.00	90.74	273.08	3,429.66	105.52	-2,752.07	2,133,270.45	661,444.37	36.8613794	-107.2814731
6,281.00	90.13	273.09	3,429.17	108.96	-2,815.97	2,133,273.52	661,380.45	36.8613889	-107.2816916
6,344.00	89.19	272.45	3,429.55	112.01	-2,878.90	2,133,276.19	661,317.51	36.8613972	-107.2819066
6,408.00	90.64	272.60	3,429.64	114.83	-2,942.84	2,133,278.64	661,253.56	36.8614049	-107.2821252
6,470.00	91.55	271.80	3,428.46	117.21	-3,004.78	2,133,280.65	661,191.60	36.8614115	-107.2823369
6,534.00	89.77	273.22	3,427.72	120.01	-3,068.71	2,133,283.08	661,127.66	36.8614191	-107.2825554
6,598.00	90.20	272.89	3,427.74	123.42	-3,132.62	2,133,286.11	661,063.73	36.8614285	-107.2827739
6,661.00	90.24	271.47	3,427.49	125.82	-3,195.57	2,133,288.14	661,000.76	36.8614351	-107.2829891
6,723.00	89.16	271.81	3,427.82	127.59	-3,257.54	2,133,289.55	660,938.78	36.8614399	-107.2832009
6,787.00	89.73	272.12	3,428.44	129.79	-3,321.50	2,133,291.37	660,874.81	36.8614459	-107.2834195
6,850.00	90.77	272.76	3,428.16	132.47	-3,384.44	2,133,293.68	660,811.86	36.8614533	-107.2836347
6,913.00	90.44	272.08	3,427.50	135.13	-3,447.38	2,133,295.97	660,748.90	36.8614605	-107.2838498
6,972.00	89.29	270.13	3,427.64	136.27	-3,506.37	2,133,296.76	660,689.91	36.8614637	-107.2840515
Last SDI Lateral MWD Survey									
7,042.00	89.29	270.13	3,428.50	136.42	-3,576.36	2,133,296.51	660,619.92	36.8614641	-107.2842907
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
POE Schalk 32 1H	0.00	0.00	3,443.00	10.20	-315.96	2,133,189.44	663,881.00	36.8611180	-107.2731460
- actual wellpath misses target center by 56.45usft at 3776.27usft MD (3433.85 TVD, 65.88 N, -314.46 E)									
- Point									
POE (N 50') Schalk 32 1	0.00	0.00	3,443.00	60.20	-315.66	2,133,239.45	663,881.00	36.8612553	-107.2731450
- actual wellpath misses target center by 10.69usft at 3777.98usft MD (3434.00 TVD, 65.95 N, -316.16 E)									
- Point									
BHL Schalk 32 1H	0.00	0.00	3,443.00	127.65	-3,576.17	2,133,287.74	660,620.16	36.8614400	-107.2842900
- actual wellpath misses target center by 16.94usft at 7041.97usft MD (3428.50 TVD, 136.42 N, -3576.33 E)									
- Point									



Survey Report - Geographic



Company:	WPX Energy	Local Co-ordinate Reference:	Well Schalk 32 1H - Slot A1
Project:	T31N R4W Rosa Unit	TVD Reference:	GL 6618' & RKB 14' @ 6632.00usft (Aztec 920)
Site:	Schalk 32 1H	MD Reference:	GL 6618' & RKB 14' @ 6632.00usft (Aztec 920)
Well:	Schalk 32 1H	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Grand Junction District

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
356.00	355.99	-0.04	2.55	First SDI Surface MWD Survey
2,827.00	2,809.05	41.92	281.35	Last SDI Surface MWD Survey
2,859.00	2,840.97	44.16	281.35	First SDI Curve MWD Survey
3,746.00	3,430.72	64.54	-284.38	Last SDI Curve MWD Survey
3,761.00	3,432.36	65.22	-299.28	7" Casing @ 3761' MD
3,821.00	3,437.22	67.63	-359.03	First SDI Lateral MWD Survey
6,972.00	3,427.64	136.27	-3,506.37	Last SDI Lateral MWD Survey
7,042.00	3,428.50	136.42	-3,576.36	Projection to TD

Checked By: _____ Approved By: _____ Date: _____