

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

CONFIDENTIAL

*API Number 30-043-21227	*Pool Code 42289	*Pool Name LYBROOK GALLUP
*Property Code 313649	*Property Name AZTEC OIL SYNDICATE	*Well Number 2H
*GRID No. 120782	*Operator Name WPX ENERGY PRODUCTION, LLC	*Elevation 7126'

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	5	22N	6W	1	989	NORTH	341	EAST	SANDOVAL

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
G	6	22N	6W		2340	NORTH	2333	EAST	SANDOVAL

12 Dedicated Acres 240.0 Acres	S/2 N/2 - Section 5 S/2 NE/4 - Section 6	13 Joint or Infill	14 Consolidation Code	15 Order No. NSL - 7158
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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

OIL CONS. DIV DIST. 3
AUG 23 2014

END-OF-LATERAL
2340' FNL 2333' FEL
SECTION 6, T22N, R6W
LAT: 36.169161°N
LONG: 107.507201°W
DATUM: NAD1927

POINT-OF-ENTRY
2257' FNL 873' FEL
SECTION 5, T22N, R6W
LAT: 36.169000°N
LONG: 107.484505°W
DATUM: NAD1927

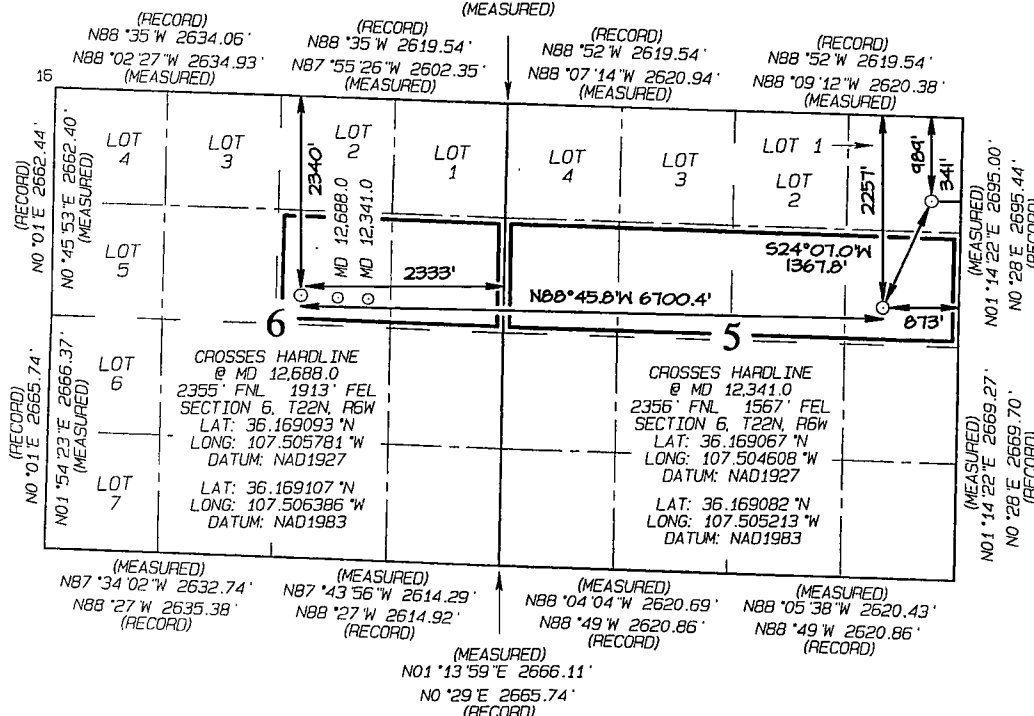
SURFACE LOCATION
989' FNL 341' FEL
SECTION 5, T22N, R6W
LAT: 36.172449°N
LONG: 107.482665°W
DATUM: NAD1927

LAT: 36.169176°N
LONG: 107.507807°W
DATUM: NAD1983

LAT: 36.169015°N
LONG: 107.485109°W
DATUM: NAD1983

LAT: 36.172463°N
LONG: 107.483270°W
DATUM: NAD1983

(RECORD)
N0°29'E 2695.44'
N01°14'25"E 2693.03'
(MEASURED)



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 herebefore entered by the division.

Signature: *Larry Higgins* Date: 9/19/14
Printed Name: Larry Higgins
larry.higgins@wpxenergy.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 19, 2014
Date of Survey: MARCH 4, 2014

Signature and Seal of Professional Surveyor



JASON C. EDWARDS
Certificate Number 15269

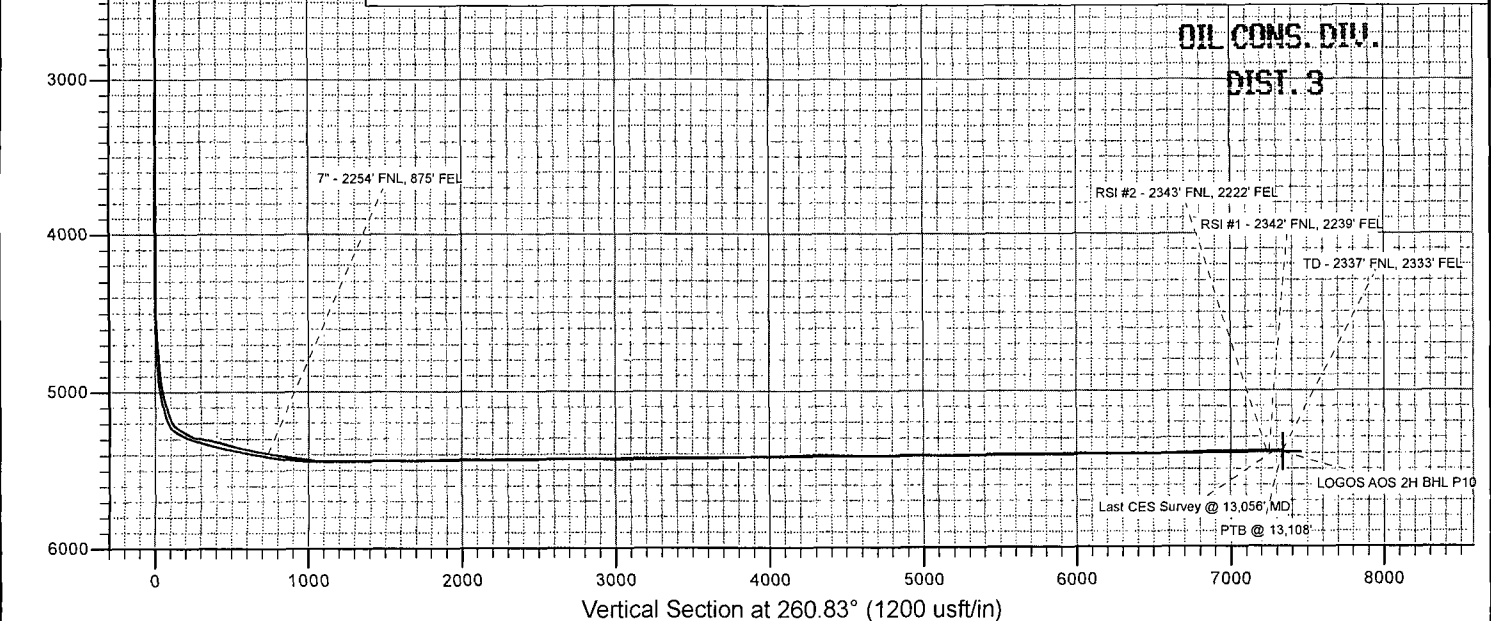
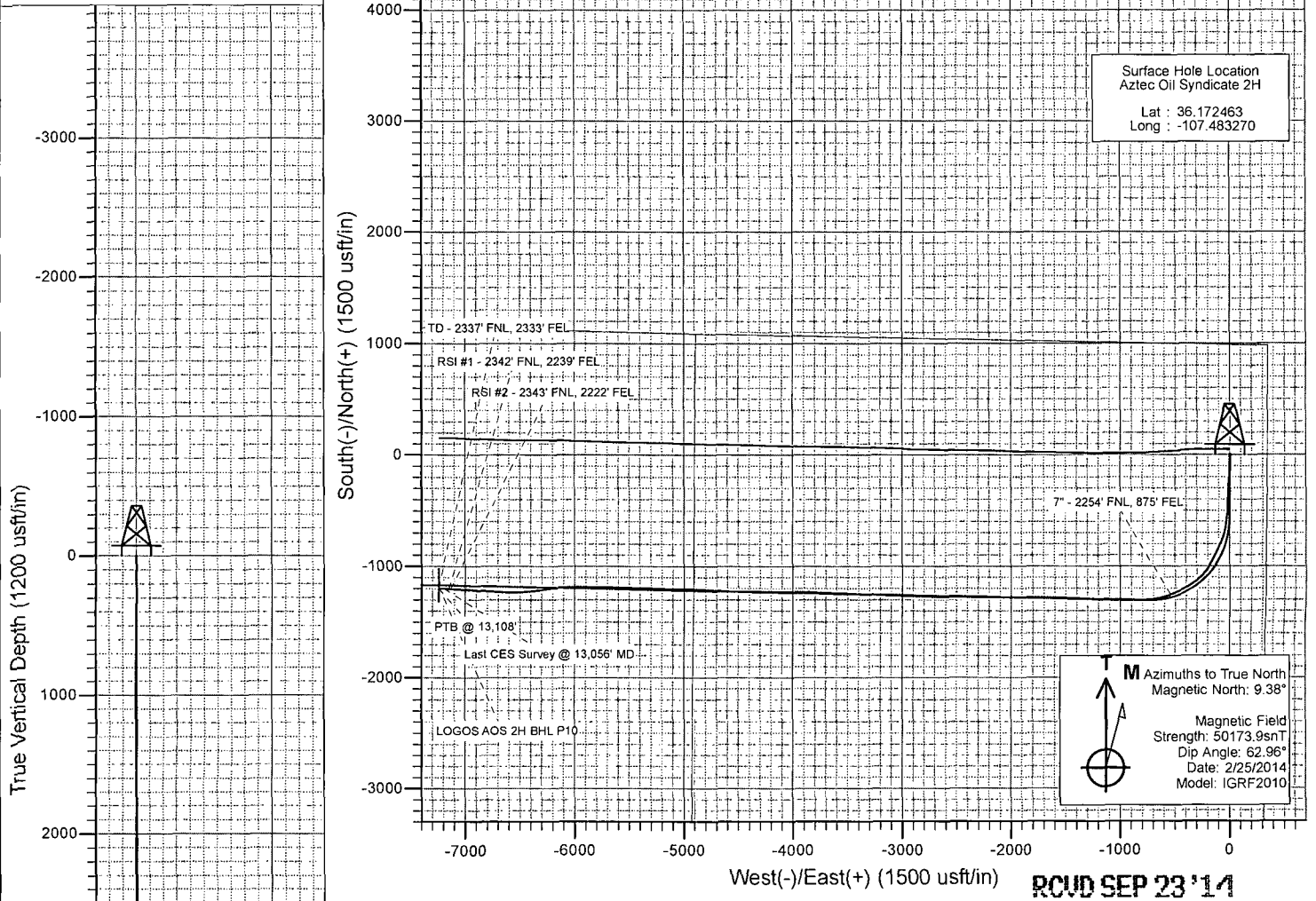
AV



Project: Sandoval County, NM
Site: S5-T22N-R6W
Well: Aztec Oil Syndicate 2H
Wellbore: HZ
Design: FINAL

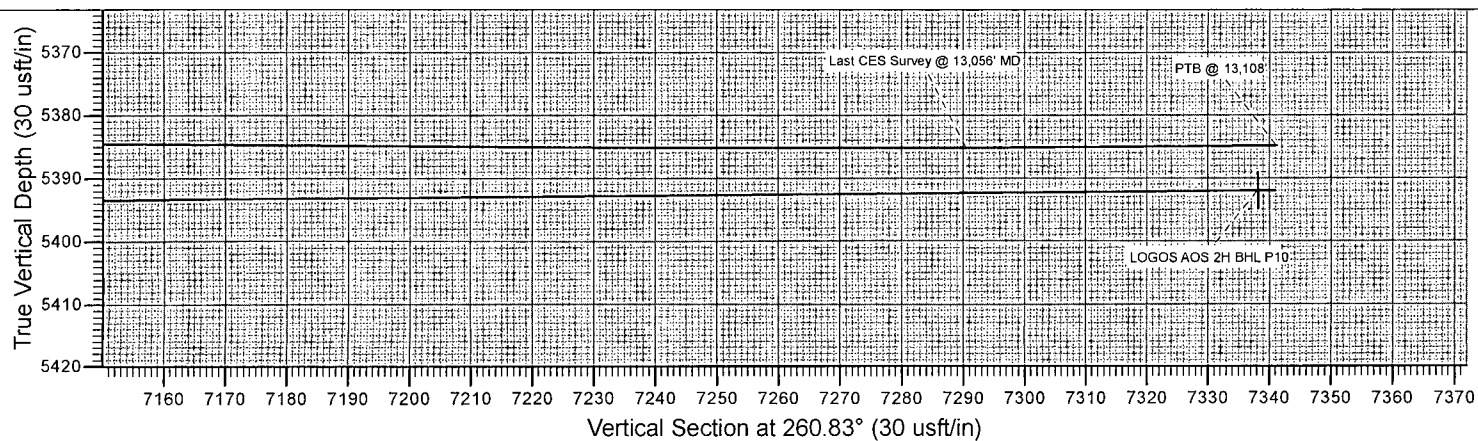
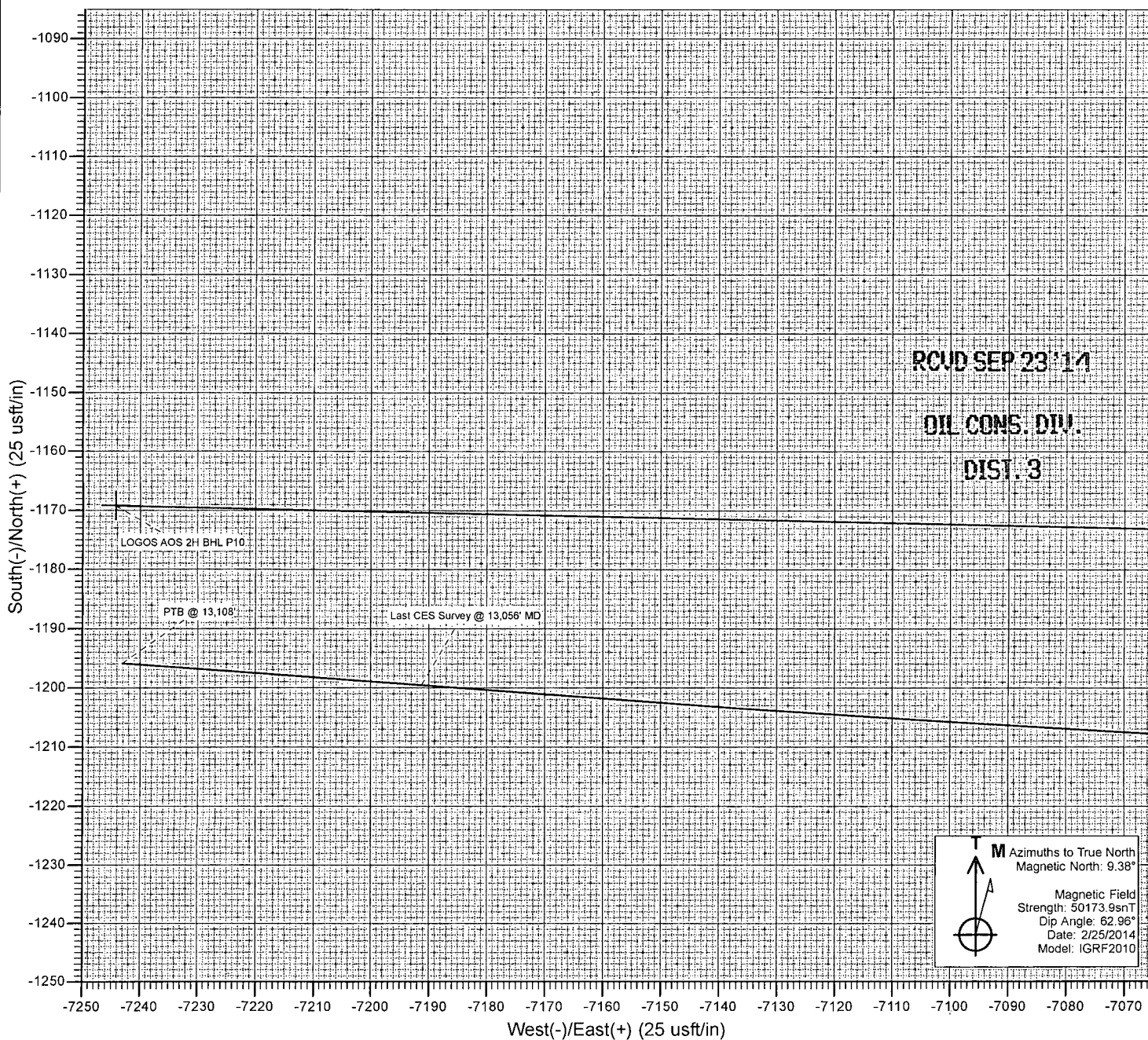


FINAL
Aztec Oil Syndicate 2H
145XXX, SC
KB=15' @ 7141.0usft (Aztec #222)
Ground Elevation @ 7126.0
North American Datum 1983
Well Aztec Oil Syndicate 2H, True North





Project: Sandoval County, NM
Site: S5-T22N-R6W
Well: Aztec Oil Syndicate 2H
Wellbore: HZ
Design: FINAL



Cathedral Energy Services

Survey Report

Company:	LOGOS Operating LLC	Local Co-ordinate Reference:	Well Aztec Oil Syndicate 2H
Project:	Sandoval County, NM	TVD Reference:	KB=15' @ 7141.0usft (Aztec #222)
Site:	S5-T22N-R6W	MD Reference:	KB=15' @ 7141.0usft (Aztec #222)
Well:	Aztec Oil Syndicate 2H	North Reference:	True
Wellbore:	HZ	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

Project	Sandoval County, NM		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Central Zone		

Site						S5-T22N-R6W											
Site Position:			Northing:			1,883,183.57 usft			Latitude:			36.169247					
From:			Lat/Long			Easting:			1,276,424.49 usft			Longitude:			-107.483219		
Position Uncertainty:			0.0 usft			Slot Radius:			13-3/16"			Grid Convergence:			-0.73 °		

Well	Aztec Oil Syndicate 2H					
Well Position	+N/-S	0.0 usft	Northing:	1,884,354.48 usft	Latitude:	36.172463
	+E/-W	0.0 usft	Easting:	1,276,424.34 usft	Longitude:	-107.483270
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	7,126.0 usft

Wellbore	HZ				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2/25/2014	9.38	62.96	50,174

Design	FINAL				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	260.83	

Survey Program	Date	9/4/2014			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
390.0	13,108.0	Survey #1 (HZ)	ISCWSA MWD	MWD - Standard	

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100u)	Formations / Comments
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
390.0	0.50	111.40	390.0	-0.6	1.6	-1.5	0.13	0.13	
451.0	0.40	139.00	451.0	-0.9	2.0	-1.8	0.39	-0.16	
512.0	0.70	128.90	512.0	-1.3	2.4	-2.2	0.51	0.49	
573.0	0.60	109.10	573.0	-1.6	3.0	-2.7	0.40	-0.16	
635.0	0.50	119.20	635.0	-1.9	3.5	-3.2	0.22	-0.16	
696.0	0.60	131.00	696.0	-2.2	4.0	-3.6	0.25	0.16	
757.0	0.70	126.70	757.0	-2.6	4.5	-4.1	0.18	0.16	
818.0	0.70	133.30	818.0	-3.1	5.1	-4.6	0.13	0.00	
880.0	0.90	140.50	880.0	-3.7	5.7	-5.0	0.36	0.32	
940.0	1.10	137.90	940.0	-4.5	6.4	-5.6	0.34	0.33	
1,001.0	0.70	77.20	1,001.0	-4.9	7.1	-6.3	1.59	-0.66	
1,062.0	0.80	36.30	1,061.9	-4.5	7.8	-7.0	0.87	0.16	

Cathedral Energy Services

Survey Report

Company:	LOGOS Operating LLC	Local Co-ordinate Reference:	Well Aztec Oil Syndicate. 2H
Project:	Sandoval County, NM	TVD Reference:	KB=15' @ 7141.0usft (Aztec #222)
Site:	S5-T22N-R6W.	MD Reference:	KB=15' @ 7141.0usft (Aztec #222)
Well:	Aztec Oil Syndicate 2H	North Reference:	True
Wellbore:	HZ	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usf)	Build Rate (°/100u)	Formations / Comments	
1,124.0	0.50	41.80	1,123.9	-3.9	8.2	-7.5	0.49	-0.48		
1,184.0	1.10	344.20	1,183.9	-3.2	8.2	-7.6	1.56	1.00		
1,246.0	1.80	332.90	1,245.9	-1.7	7.6	-7.2	1.21	1.13		
1,306.0	1.60	292.00	1,305.9	-0.6	6.4	-6.2	2.00	-0.33		
1,367.0	1.80	289.40	1,366.9	0.1	4.7	-4.7	0.35	0.33		
1,428.0	2.10	292.90	1,427.8	0.8	2.8	-2.9	0.53	0.49		
1,489.0	1.00	294.70	1,488.8	1.5	1.3	-1.5	1.80	-1.80		
1,552.0	0.60	279.30	1,551.8	1.8	0.4	-0.7	0.72	-0.63		
1,615.0	0.40	273.80	1,614.8	1.8	-0.1	-0.2	0.33	-0.32		
1,678.0	0.70	234.90	1,677.8	1.6	-0.6	0.4	0.73	0.48		
1,740.0	1.00	244.90	1,739.8	1.2	-1.4	1.2	0.54	0.48		
1,803.0	0.90	226.30	1,802.8	0.6	-2.3	2.2	0.51	-0.16		
1,866.0	1.00	234.10	1,865.8	-0.1	-3.1	3.1	0.26	0.16		
1,929.0	1.00	233.60	1,928.8	-0.7	-4.0	4.0	0.01	0.00		
1,992.0	1.10	236.40	1,991.8	-1.4	-4.9	5.1	0.18	0.16		
2,055.0	1.00	233.00	2,054.7	-2.0	-5.9	6.1	0.19	-0.16		
2,118.0	0.30	205.10	2,117.7	-2.5	-6.4	6.7	1.19	-1.11		
2,181.0	0.30	77.40	2,180.7	-2.6	-6.3	6.6	0.85	0.00		
2,244.0	0.50	47.60	2,243.7	-2.4	-5.9	6.2	0.45	0.32		
2,307.0	0.50	45.30	2,306.7	-2.0	-5.5	5.8	0.03	0.00		
2,370.0	0.90	59.60	2,369.7	-1.6	-4.9	5.1	0.69	0.63		
2,433.0	0.80	77.70	2,432.7	-1.2	-4.1	4.2	0.45	-0.16		
2,496.0	0.90	56.30	2,495.7	-0.9	-3.2	3.3	0.52	0.16		
2,559.0	0.60	61.40	2,558.7	-0.4	-2.5	2.5	0.49	-0.48		
2,621.0	0.70	20.80	2,620.7	0.1	-2.1	2.1	0.74	0.16		
2,684.0	0.60	4.20	2,683.7	0.8	-1.9	1.8	0.34	-0.16		
2,747.0	0.60	353.80	2,746.7	1.4	-1.9	1.7	0.17	0.00		
2,810.0	0.60	352.90	2,809.7	2.1	-2.0	1.7	0.01	0.00		
2,872.0	0.40	5.60	2,871.7	2.6	-2.0	1.6	0.37	-0.32		
2,935.0	0.60	355.90	2,934.7	3.2	-2.0	1.5	0.34	0.32		
2,998.0	0.40	330.50	2,997.7	3.7	-2.2	1.6	0.47	-0.32		
3,061.0	0.30	355.80	3,060.7	4.0	-2.3	1.6	0.29	-0.16		
3,124.0	0.30	290.20	3,123.7	4.3	-2.5	1.7	0.52	0.00		
3,187.0	0.20	254.00	3,186.7	4.3	-2.7	2.0	0.29	-0.16		
3,250.0	0.20	323.80	3,249.7	4.3	-2.9	2.2	0.36	0.00		
3,313.0	0.20	304.00	3,312.7	4.5	-3.0	2.3	0.11	0.00		
3,376.0	0.40	248.90	3,375.7	4.5	-3.3	2.6	0.52	0.32		
3,438.0	0.40	245.80	3,437.7	4.3	-3.7	3.0	0.03	0.00		
3,501.0	0.40	167.20	3,500.7	4.0	-3.9	3.2	0.80	0.00		
3,564.0	0.30	176.80	3,563.7	3.6	-3.8	3.2	0.18	-0.16		
3,627.0	0.20	174.80	3,626.7	3.4	-3.8	3.2	0.16	-0.16		
3,690.0	0.40	328.40	3,689.7	3.4	-3.9	3.3	0.93	0.32		
3,752.0	0.60	305.10	3,751.7	3.8	-4.3	3.6	0.45	0.32		
3,815.0	0.50	304.00	3,814.7	4.1	-4.8	4.1	0.16	-0.16		
3,878.0	0.30	293.90	3,877.7	4.4	-5.2	4.4	0.34	-0.32		
3,941.0	0.50	230.10	3,940.7	4.3	-5.5	4.8	0.72	0.32		
4,004.0	0.60	157.20	4,003.7	3.8	-5.6	4.9	1.05	0.16		
4,066.0	0.50	140.00	4,065.7	3.3	-5.3	4.7	0.31	-0.16		
4,128.0	0.70	129.30	4,127.7	2.8	-4.9	4.3	0.37	0.32		
4,191.0	0.50	100.60	4,190.7	2.5	-4.3	3.8	0.56	-0.32		
4,254.0	0.70	111.80	4,253.7	2.3	-3.7	3.2	0.37	0.32		
4,316.0	0.50	128.40	4,315.7	2.0	-3.1	2.7	0.42	-0.32		
4,379.0	0.40	118.00	4,378.6	1.8	-2.7	2.4	0.20	-0.16		

Cathedral Energy Services

Survey Report

Company:	LOGOS Operating LLC	Local Co-ordinate Reference:	Well Aztec Oil Syndicate 2H
Project:	Sandoval County - NM	TVD Reference:	KB=15' @ 7141.0usft (Aztec #222)
Site:	S5-T22N-R6W	MD Reference:	KB=15' @ 7141.0usft (Aztec #222)
Well:	Aztec Oil Syndicate 2H	North Reference:	True
Wellbore:	HZ	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usf)	Build Rate (°/100u)	Formations / Comments
4,432.0	0.40	131.40	4,431.6	1.5	-2.4	2.1	0.18	0.00	
4,471.0	0.70	144.00	4,470.6	1.3	-2.1	1.9	0.82	0.77	
4,503.0	4.40	172.40	4,502.6	-0.1	-1.9	1.9	11.87	11.56	
4,535.0	8.40	175.20	4,534.4	-3.7	-1.5	2.1	12.53	12.50	
4,566.0	12.30	177.60	4,564.9	-9.2	-1.2	2.6	12.65	12.58	
4,598.0	15.20	182.00	4,596.0	-16.8	-1.2	3.8	9.63	9.06	
4,629.0	17.50	184.30	4,625.7	-25.5	-1.7	5.7	7.71	7.42	
4,660.0	20.10	183.90	4,655.1	-35.5	-2.4	8.0	8.40	8.39	
4,691.0	22.10	182.50	4,684.0	-46.6	-3.0	10.4	6.65	6.45	
4,723.0	21.80	181.20	4,713.7	-58.6	-3.4	12.7	1.78	-0.94	
4,754.0	23.20	180.40	4,742.3	-70.5	-3.6	14.7	4.62	4.52	
4,785.0	25.10	179.70	4,770.6	-83.1	-3.6	16.8	6.20	6.13	
4,816.0	27.30	180.90	4,798.4	-96.8	-3.6	19.0	7.30	7.10	
4,847.0	29.00	181.10	4,825.7	-111.4	-3.9	21.6	5.49	5.48	
4,879.0	29.70	180.80	4,853.6	-127.1	-4.2	24.4	2.24	2.19	
4,911.0	30.90	181.30	4,881.2	-143.3	-4.4	27.2	3.83	3.75	
4,943.0	32.90	182.40	4,908.4	-160.2	-5.0	30.5	6.51	6.25	
4,974.0	35.50	183.00	4,934.0	-177.6	-5.8	34.0	8.46	8.39	
5,005.0	37.90	184.00	4,958.9	-196.1	-7.0	38.1	7.98	7.74	
5,037.0	40.00	184.30	4,983.8	-216.1	-8.4	42.7	6.59	6.56	
5,068.0	42.50	185.40	5,007.1	-236.5	-10.1	47.7	8.40	8.06	
5,099.0	45.50	185.70	5,029.4	-257.9	-12.2	53.2	9.70	9.68	
5,130.0	48.50	184.10	5,050.5	-280.5	-14.2	58.7	10.39	9.68	
5,162.0	50.00	183.00	5,071.4	-304.7	-15.7	64.0	5.36	4.69	
5,193.0	52.10	182.40	5,090.9	-328.8	-16.8	69.0	6.94	6.77	
5,224.0	54.40	181.50	5,109.5	-353.6	-17.6	73.8	7.78	7.42	
5,255.0	57.00	182.00	5,126.9	-379.2	-18.4	78.6	8.49	8.39	
5,287.0	59.20	181.60	5,143.8	-406.3	-19.3	83.8	6.96	6.88	
5,318.0	62.20	182.30	5,159.0	-433.4	-20.2	89.0	9.88	9.68	
5,350.0	65.40	182.60	5,173.1	-462.0	-21.4	94.8	10.04	10.00	
5,381.0	68.20	182.70	5,185.3	-490.5	-22.7	100.6	9.04	9.03	
5,413.0	70.50	183.80	5,196.6	-520.4	-24.4	107.1	7.87	7.19	
5,444.0	73.90	184.80	5,206.1	-549.8	-26.7	113.9	11.39	10.97	
5,475.0	77.50	185.10	5,213.8	-579.7	-29.2	121.3	11.65	11.61	
5,507.0	77.60	187.40	5,220.7	-610.8	-32.6	129.6	7.03	0.31	
5,538.0	76.50	189.50	5,227.6	-640.7	-37.1	138.7	7.49	-3.55	
5,569.0	75.10	192.00	5,235.2	-670.2	-42.7	148.9	9.03	-4.52	
5,601.0	74.00	195.70	5,243.7	-700.1	-50.1	161.0	11.66	-3.44	
5,632.0	74.70	197.60	5,252.1	-728.7	-58.6	174.0	6.32	2.26	
5,663.0	75.20	200.30	5,260.1	-757.1	-68.3	188.1	8.56	1.61	
5,695.0	75.00	202.90	5,268.4	-785.8	-79.7	203.9	7.88	-0.63	
5,727.0	76.00	204.70	5,276.4	-814.2	-92.2	220.8	6.28	3.12	
5,758.0	77.70	206.00	5,283.4	-841.4	-105.2	237.9	6.84	5.48	
5,790.0	80.10	206.10	5,289.6	-869.6	-118.9	256.0	7.51	7.50	
5,821.0	82.40	207.70	5,294.3	-897.0	-132.8	274.1	9.00	7.42	
5,852.0	83.50	208.40	5,298.1	-924.1	-147.3	292.7	4.20	3.55	
5,884.0	84.00	207.70	5,301.6	-952.2	-162.2	311.9	2.68	1.56	
5,916.0	83.60	210.20	5,305.1	-980.0	-177.6	331.5	7.87	-1.25	
5,947.0	82.80	213.00	5,308.7	-1,006.2	-193.8	351.6	9.33	-2.58	
5,978.0	82.20	216.00	5,312.8	-1,031.6	-211.2	372.9	9.79	-1.94	
6,010.0	80.60	219.60	5,317.6	-1,056.6	-230.5	396.0	12.20	-5.00	
6,041.0	79.10	223.70	5,323.0	-1,079.4	-250.8	419.6	13.89	-4.84	
6,073.0	77.20	226.90	5,329.6	-1,101.4	-273.1	445.1	11.45	-5.94	

Cathedral Energy Services

Survey Report

Company:	LOGOS Operating LLC	Local Co-ordinate Reference:	Well Aztec Oil Syndicate 2H
Project:	Sandoval County, NM	TVD Reference:	KB=15' @ 7141.0usft (Aztec #222)
Site:	S5-T22N-R6W	MD Reference:	KB=15' @ 7141.0usft (Aztec #222)
Well:	Aztec Oil Syndicate 2H	North Reference:	True
Wellbore:	HZ	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB.

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usf)	Build Rate (°/100u)	Formations / Comments	
6,105.0	75.50	230.50	5,337.2	-1,121.9	-296.4	471.4	12.15	-5.31		
6,136.0	75.80	234.10	5,344.8	-1,140.3	-320.2	497.8	11.29	0.97		
6,167.0	77.60	237.30	5,352.0	-1,157.3	-345.1	525.1	11.60	5.81		
6,199.0	79.10	240.60	5,358.4	-1,173.4	-372.0	554.2	11.13	4.69		
6,231.0	78.40	243.60	5,364.7	-1,188.1	-399.7	583.9	9.45	-2.19		
6,262.0	78.90	244.10	5,370.8	-1,201.5	-427.0	613.0	2.26	1.61		
6,294.0	79.50	243.60	5,376.8	-1,215.4	-455.2	643.0	2.42	1.88		
6,325.0	79.80	243.40	5,382.4	-1,229.0	-482.5	672.2	1.16	0.97		
6,357.0	80.10	246.40	5,387.9	-1,242.3	-511.0	702.4	9.28	0.94		
6,388.0	80.90	248.70	5,393.1	-1,254.0	-539.3	732.2	7.76	2.58		
6,392.0	80.91	249.10	5,393.7	-1,255.4	-542.9	736.1	9.88	0.29	7" - 2254' FNL, 875' FEL	
6,419.0	81.00	251.80	5,397.9	-1,264.3	-568.1	762.3	9.88	0.33		
6,451.0	80.30	253.90	5,403.1	-1,273.7	-598.2	793.6	6.83	-2.19		
6,482.0	79.80	256.80	5,408.5	-1,281.4	-627.8	824.0	9.35	-1.61		
6,513.0	81.00	258.50	5,413.7	-1,287.9	-657.6	854.5	6.65	3.87		
6,545.0	82.40	260.40	5,418.3	-1,293.7	-688.8	886.1	7.33	4.37		
6,577.0	82.40	263.10	5,422.5	-1,298.3	-720.2	917.8	8.36	0.00		
6,608.0	81.50	265.70	5,426.9	-1,301.3	-750.7	948.5	8.80	-2.90		
6,639.0	82.90	267.40	5,431.1	-1,303.1	-781.4	979.0	7.06	4.52		
6,671.0	84.70	268.10	5,434.5	-1,304.4	-813.1	1,010.6	6.03	5.62		
6,699.0	86.20	268.80	5,436.7	-1,305.1	-841.0	1,038.3	5.91	5.36		
6,722.0	86.80	269.60	5,438.1	-1,305.4	-864.0	1,061.0	4.34	2.61		
6,753.0	88.40	269.80	5,439.4	-1,305.6	-895.0	1,091.6	5.20	5.16		
6,785.0	91.50	271.50	5,439.5	-1,305.2	-927.0	1,123.1	11.05	9.69		
6,848.0	90.50	271.20	5,438.4	-1,303.7	-989.9	1,185.1	1.66	-1.59		
6,910.0	89.70	270.50	5,438.3	-1,302.8	-1,051.9	1,246.1	1.71	-1.29		
6,973.0	89.40	270.60	5,438.8	-1,302.2	-1,114.9	1,308.2	0.50	-0.48		
7,036.0	89.20	272.90	5,439.5	-1,300.3	-1,177.9	1,370.0	3.66	-0.32		
7,099.0	91.10	273.50	5,439.4	-1,296.8	-1,240.8	1,431.6	3.16	3.02		
7,162.0	91.30	273.50	5,438.0	-1,292.9	-1,303.6	1,493.0	0.32	0.32		
7,225.0	90.60	273.20	5,437.0	-1,289.3	-1,366.5	1,554.5	1.21	-1.11		
7,287.0	90.10	272.40	5,436.6	-1,286.2	-1,428.5	1,615.2	1.52	-0.81		
7,350.0	89.60	271.70	5,436.8	-1,284.0	-1,491.4	1,677.0	1.37	-0.79		
7,413.0	90.90	271.50	5,436.5	-1,282.2	-1,554.4	1,738.9	2.09	2.06		
7,665.0	90.20	269.70	5,434.1	-1,279.6	-1,806.3	1,987.2	0.77	-0.28		
7,727.0	90.90	270.30	5,433.5	-1,279.6	-1,868.3	2,048.4	1.49	1.13		
7,790.0	89.30	270.50	5,433.4	-1,279.1	-1,931.3	2,110.5	2.56	-2.54		
7,853.0	89.30	269.90	5,434.2	-1,278.9	-1,994.3	2,172.6	0.95	0.00		
7,915.0	89.80	269.70	5,434.6	-1,279.1	-2,056.3	2,233.9	0.87	0.81		
7,978.0	90.40	271.20	5,434.5	-1,278.6	-2,119.3	2,296.0	2.56	0.95		
8,041.0	90.80	271.10	5,433.9	-1,277.4	-2,182.3	2,358.0	0.65	0.63		
8,104.0	91.30	270.70	5,432.7	-1,276.4	-2,245.3	2,420.0	1.02	0.79		
8,167.0	89.80	270.00	5,432.1	-1,276.0	-2,308.3	2,482.1	2.63	-2.38		
8,230.0	90.00	270.00	5,432.2	-1,276.0	-2,371.3	2,544.3	0.32	0.32		
8,293.0	90.60	269.90	5,431.9	-1,276.1	-2,434.3	2,606.5	0.97	0.95		
8,355.0	90.80	269.80	5,431.1	-1,276.2	-2,496.3	2,667.7	0.36	0.32		
8,418.0	91.10	269.70	5,430.1	-1,276.5	-2,559.3	2,730.0	0.50	0.48		
8,480.0	89.70	271.60	5,429.7	-1,275.8	-2,621.2	2,791.1	3.81	-2.26		
8,543.0	89.80	271.20	5,429.9	-1,274.2	-2,684.2	2,853.0	0.65	0.16		
8,606.0	89.70	272.10	5,430.2	-1,272.4	-2,747.2	2,914.9	1.44	-0.16		
8,668.0	89.30	271.90	5,430.7	-1,270.3	-2,809.2	2,975.7	0.72	-0.65		
8,728.0	88.90	272.00	5,431.7	-1,268.2	-2,869.1	3,034.6	0.69	-0.67		
8,790.0	89.30	271.50	5,432.7	-1,266.3	-2,931.1	3,095.4	1.03	0.65		

Cathedral Energy Services

Survey Report

Company:	LOGOS Operating LLC	Local Co-ordinate Reference:	Well Aztec Oil Syndicate 2H
Project:	Sandoval County, NM	TVD Reference:	KB=15' @ 7141.0usft (Aztec #222)
Site:	S5-T22N-R6W	MD Reference:	KB=15' @ 7141.0usft (Aztec #222)
Well:	Aztec Oil Syndicate 2H	North Reference:	True
Wellbore:	HZ	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100u	Formations / Comments
8,851.0	89.70	271.60	5,433.2	-1,264.7	-2,992.1	3,155.4	0.68	0.66	
8,913.0	91.20	272.10	5,432.7	-1,262.7	-3,054.0	3,216.2	2.55	2.42	
8,974.0	90.90	272.40	5,431.6	-1,260.3	-3,115.0	3,276.0	0.70	-0.49	
9,035.0	90.20	272.60	5,431.0	-1,257.6	-3,175.9	3,335.7	1.19	-1.15	
9,096.0	90.60	272.20	5,430.6	-1,255.1	-3,236.8	3,395.5	0.93	0.66	
9,158.0	91.50	272.10	5,429.4	-1,252.7	-3,298.8	3,456.3	1.46	1.45	
9,219.0	91.50	271.90	5,427.8	-1,250.6	-3,359.7	3,516.1	0.33	0.00	
9,280.0	91.20	271.50	5,426.4	-1,248.8	-3,420.7	3,576.0	0.82	-0.49	
9,342.0	91.40	272.50	5,425.0	-1,246.6	-3,482.6	3,636.8	1.64	0.32	
9,402.0	91.00	272.20	5,423.7	-1,244.2	-3,542.6	3,695.6	0.83	-0.67	
9,464.0	92.00	272.00	5,422.1	-1,241.9	-3,604.5	3,756.4	1.64	1.61	
9,525.0	92.10	272.00	5,419.9	-1,239.8	-3,665.4	3,816.2	0.16	0.16	
9,587.0	91.50	272.20	5,418.0	-1,237.5	-3,727.4	3,876.9	1.02	-0.97	
9,648.0	91.10	272.90	5,416.6	-1,234.8	-3,788.3	3,936.6	1.32	-0.66	
9,709.0	91.50	271.60	5,415.2	-1,232.4	-3,849.2	3,996.4	2.23	0.66	
9,770.0	92.00	270.60	5,413.4	-1,231.2	-3,910.2	4,056.4	1.83	0.82	
9,831.0	91.80	271.10	5,411.3	-1,230.3	-3,971.1	4,116.5	0.88	-0.33	
9,892.0	90.80	270.60	5,410.0	-1,229.4	-4,032.1	4,176.5	1.83	-1.64	
9,953.0	90.40	270.40	5,409.3	-1,228.9	-4,093.1	4,236.6	0.73	-0.66	
10,014.0	90.30	270.00	5,408.9	-1,228.7	-4,154.1	4,296.8	0.68	-0.16	
10,076.0	90.30	270.00	5,408.6	-1,228.7	-4,216.1	4,358.0	0.00	0.00	
10,139.0	89.40	270.80	5,408.8	-1,228.2	-4,279.1	4,420.1	1.91	-1.43	
10,202.0	89.00	269.90	5,409.7	-1,227.9	-4,342.1	4,482.3	1.56	-0.63	
10,265.0	88.60	269.70	5,411.0	-1,228.1	-4,405.1	4,544.5	0.71	-0.63	
10,328.0	89.20	270.40	5,412.2	-1,228.0	-4,468.1	4,606.7	1.46	0.95	
10,391.0	89.70	271.50	5,412.8	-1,227.0	-4,531.1	4,668.7	1.92	0.79	
10,454.0	91.20	273.20	5,412.3	-1,224.4	-4,594.0	4,730.4	3.60	2.38	
10,517.0	91.50	274.00	5,410.8	-1,220.4	-4,656.8	4,791.8	1.36	0.48	
10,580.0	91.90	274.30	5,409.0	-1,215.9	-4,719.7	4,853.1	0.79	0.63	
10,643.0	89.30	273.20	5,408.3	-1,211.8	-4,782.5	4,914.5	4.48	-4.13	
10,706.0	88.90	271.90	5,409.3	-1,209.0	-4,845.4	4,976.2	2.16	-0.63	
10,769.0	89.00	272.50	5,410.4	-1,206.5	-4,908.4	5,037.9	0.97	0.16	
10,832.0	88.60	271.30	5,411.8	-1,204.5	-4,971.3	5,099.7	2.01	-0.63	
10,895.0	89.60	271.50	5,412.7	-1,202.9	-5,034.3	5,161.7	1.62	1.59	
10,958.0	92.20	270.80	5,411.8	-1,201.7	-5,097.3	5,223.6	4.27	4.13	
11,021.0	92.60	270.90	5,409.1	-1,200.7	-5,160.2	5,285.6	0.65	0.63	
11,084.0	92.70	270.90	5,406.2	-1,199.7	-5,223.1	5,347.6	0.16	0.16	
11,147.0	91.10	271.20	5,404.1	-1,198.6	-5,286.1	5,409.5	2.58	-2.54	
11,210.0	90.30	271.40	5,403.3	-1,197.2	-5,349.1	5,471.5	1.31	-1.27	
11,272.0	89.90	271.40	5,403.2	-1,195.6	-5,411.1	5,532.4	0.65	-0.65	
11,335.0	90.80	271.80	5,402.9	-1,193.9	-5,474.0	5,594.3	1.56	1.43	
11,398.0	90.30	271.40	5,402.2	-1,192.1	-5,537.0	5,656.2	1.02	-0.79	
11,461.0	90.10	272.50	5,402.0	-1,190.0	-5,600.0	5,718.0	1.77	-0.32	
11,524.0	90.80	270.70	5,401.5	-1,188.2	-5,662.9	5,779.9	3.07	1.11	
11,587.0	90.80	271.40	5,400.7	-1,187.1	-5,725.9	5,841.9	1.11	0.00	
11,649.0	90.80	270.60	5,399.8	-1,186.0	-5,787.9	5,903.0	1.29	0.00	
11,712.0	90.40	270.20	5,399.1	-1,185.5	-5,850.9	5,965.1	0.90	-0.63	
11,775.0	90.50	270.00	5,398.6	-1,185.4	-5,913.9	6,027.2	0.35	0.16	
11,838.0	90.60	269.10	5,398.0	-1,185.9	-5,976.9	6,089.5	1.44	0.16	
11,901.0	90.40	267.70	5,397.5	-1,187.7	-6,039.9	6,152.0	2.24	-0.32	
11,964.0	90.00	266.30	5,397.3	-1,191.0	-6,102.8	6,214.6	2.31	-0.63	
12,027.0	90.60	265.60	5,396.9	-1,195.4	-6,165.6	6,277.3	1.46	0.95	
12,090.0	90.20	263.70	5,396.5	-1,201.3	-6,228.4	6,340.2	3.08	-0.63	

Cathedral Energy Services

Survey Report

Company:	LOGOS Operating LLC	Local Co-ordinate Reference:	Well Aztec Oil Syndicate 2H
Project:	Sandoval County, NM	TVD Reference:	KB=15' @ 7141.0usft (Aztec #222)
Site:	S5-T22N-R6W	MD Reference:	KB=15' @ 7141.0usft (Aztec #222)
Well:	Aztec Oil Syndicate 2H	North Reference:	True
Wellbore:	HZ	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usf)	Build Rate (°/100u)	Formations / Comments
12,153.0	89.10	262.30	5,396.9	-1,209.0	-6,290.9	6,403.1	2.83	-1.75	
12,184.0	88.20	261.70	5,397.6	-1,213.3	-6,321.6	6,434.1	3.49	-2.90	
12,216.0	88.20	261.70	5,398.6	-1,217.9	-6,353.2	6,466.1	0.00	0.00	
12,247.0	89.70	262.70	5,399.2	-1,222.1	-6,383.9	6,497.1	5.82	4.84	
12,279.0	90.80	264.60	5,399.0	-1,225.7	-6,415.7	6,529.1	6.86	3.44	
12,310.0	91.20	265.40	5,398.5	-1,228.4	-6,446.6	6,560.0	2.88	1.29	
12,341.0	92.20	267.20	5,397.6	-1,230.4	-6,477.5	6,590.8	6.64	3.23	
12,373.0	92.20	267.50	5,396.3	-1,231.8	-6,509.5	6,622.6	0.94	0.00	
12,404.0	92.70	269.70	5,395.0	-1,232.6	-6,540.4	6,653.3	7.27	1.61	
12,435.0	92.90	269.90	5,393.5	-1,232.7	-6,571.4	6,683.9	0.91	0.65	
12,467.0	92.90	269.90	5,391.9	-1,232.8	-6,603.3	6,715.4	0.00	0.00	
12,498.0	92.50	271.90	5,390.4	-1,232.3	-6,634.3	6,745.9	6.57	-1.29	
12,530.0	92.50	272.60	5,389.0	-1,231.0	-6,666.3	6,777.2	2.19	0.00	
12,561.0	92.00	273.10	5,387.8	-1,229.5	-6,697.2	6,807.5	2.28	-1.61	
12,593.0	92.10	274.10	5,386.7	-1,227.5	-6,729.1	6,838.7	3.14	0.31	
12,624.0	91.20	273.90	5,385.8	-1,225.3	-6,760.0	6,868.9	2.97	-2.90	
12,656.0	90.90	274.10	5,385.2	-1,223.1	-6,791.9	6,900.0	1.13	-0.94	
12,718.0	90.00	273.20	5,384.7	-1,219.1	-6,853.8	6,960.5	2.05	-1.45	
12,781.0	90.50	273.30	5,384.4	-1,215.6	-6,916.7	7,022.0	0.81	0.79	
12,844.0	89.80	272.50	5,384.3	-1,212.4	-6,979.6	7,083.6	1.69	-1.11	
12,907.0	89.70	273.40	5,384.5	-1,209.1	-7,042.5	7,145.2	1.44	-0.16	
12,970.0	89.60	273.20	5,384.9	-1,205.5	-7,105.4	7,206.7	0.35	-0.16	
12,997.0	89.51	273.98	5,385.1	-1,203.8	-7,132.4	7,233.1	2.92	-0.32	RSI #2 - 2343' FNL, 2222' FEL
13,001.0	89.50	274.10	5,385.2	-1,203.5	-7,136.4	7,237.0	2.92	-0.32	
13,014.0	89.71	274.10	5,385.3	-1,202.6	-7,149.3	7,249.6	1.64	1.64	RSI #1 - 2342' FNL, 2239' FEL
13,056.0	90.40	274.10	5,385.2	-1,199.6	-7,191.2	7,290.5	1.64	1.64	Last CES Survey @ 13,056' MD
13,108.0	90.40	274.10	5,384.9	-1,195.9	-7,243.1	7,341.1	0.00	0.00	PTB @ 13,108' - TD - 2337' FNL, 2333' FEL