



Ameredev Operating, LLC

Lea County, NM (NAD83 NME)
(Azalea State) SEC 28_T-26-S_R-36-E
Azalea State 26_36_28 #111H

OWB

Design: AWB

HOBBS OCD
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Standard Survey Report

07 March, 2018





Company:	Ameredev Operating, LLC	Local Co-ordinate Reference:	Well Azalea State 26_36_28 #111H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	KB @ 2948.0usft (H&P 616)
Site:	(Azalea State) SEC 28_T-26-S_R-36-E	MD Reference:	KB @ 2948.0usft (H&P 616)
Well:	Azalea State 26_36_28 #111H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWB	Database:	EDM 5000.1 Single User Db

Project	Lea County, NM (NAD83 NME)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	(Azalea State) SEC 28_T-26-S_R-36-E				
Site Position:	Northing:	372,934.00 usft	Latitude:	32° 1' 15.178 N	
From: Map	Easting:	868,489.00 usft	Longitude:	103° 16' 39.908 W	
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.56 °

Well	Azalea State 26_36_28 #111H					
Well Position	+N/-S	0.0 usft	Northing:	372,934.00 usft	Latitude:	32° 1' 15.178 N
	+E/-W	0.0 usft	Easting:	868,489.00 usft	Longitude:	103° 16' 39.908 W
Position Uncertainty	0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	2,921.0 usft	

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	02/01/18	6.73	59.91	47,787

Design	AWB				
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	178.47	

Survey Program	Date 03/07/18			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
181.0	18,993.0	Intrepid MWD (OWB)	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 (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
181.0	0.53	211.31	181.0	-0.7	-0.4	0.7	0.29	0.29	0.00
365.0	0.48	201.02	365.0	-2.2	-1.2	2.1	0.06	-0.03	-5.59
547.0	0.75	178.96	547.0	-4.1	-1.4	4.0	0.19	0.15	-12.12
697.0	0.88	192.59	697.0	-6.2	-1.6	6.1	0.16	0.09	9.09
882.0	1.32	181.42	881.9	-9.7	-2.0	9.6	0.26	0.24	-6.04
1,064.0	1.36	18.74	1,063.9	-9.7	-1.4	9.7	1.46	0.02	-89.38
1,244.0	3.12	9.51	1,243.8	-2.9	0.1	2.9	0.99	0.98	-5.13
1,411.0	3.60	22.43	1,410.5	6.4	2.9	-6.4	0.54	0.29	7.74
1,523.0	3.03	40.10	1,522.3	12.0	6.1	-11.8	1.04	-0.51	15.78

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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)	
1,711.0	2.15	59.17	1,710.1	17.6	12.4	-17.2	0.65	-0.47	10.14	
1,900.0	1.54	42.29	1,899.0	21.3	17.1	-20.8	0.43	-0.32	-8.93	
2,088.0	3.43	17.77	2,086.8	28.5	20.5	-27.9	1.13	1.01	-13.04	
2,276.0	3.52	18.12	2,274.5	39.3	24.0	-38.7	0.05	0.05	0.19	
2,464.0	1.63	20.23	2,462.3	47.3	26.8	-46.6	1.01	-1.01	1.12	
2,652.0	1.54	24.63	2,650.2	52.1	28.7	-51.3	0.08	-0.05	2.34	
2,840.0	0.44	98.98	2,838.2	54.3	30.5	-53.5	0.79	-0.59	39.55	
3,028.0	0.26	142.31	3,026.2	53.9	31.5	-53.0	0.16	-0.10	23.05	
3,216.0	0.79	355.97	3,214.2	54.8	31.7	-54.0	0.54	0.28	-77.84	
3,405.0	0.79	331.63	3,403.2	57.3	30.9	-56.4	0.18	0.00	-12.88	
3,593.0	1.05	323.46	3,591.1	59.8	29.3	-59.0	0.15	0.14	-4.35	
3,781.0	0.88	1.07	3,779.1	62.6	28.3	-61.8	0.34	-0.09	20.01	
3,969.0	1.89	316.86	3,967.1	66.3	26.2	-65.6	0.75	0.54	-23.52	
4,157.0	1.76	332.51	4,155.0	71.1	22.8	-70.5	0.27	-0.07	8.32	
4,345.0	1.98	353.95	4,342.9	76.9	21.1	-76.3	0.39	0.12	11.40	
4,534.0	1.23	334.88	4,531.8	82.0	19.9	-81.5	0.48	-0.40	-10.09	
4,722.0	1.23	318.27	4,719.8	85.4	17.7	-84.9	0.19	0.00	-8.84	
4,911.0	1.67	319.85	4,908.7	89.0	14.6	-88.6	0.23	0.23	0.84	
5,096.0	1.76	310.62	5,093.6	92.9	10.7	-92.6	0.16	0.05	-4.99	
5,284.0	1.32	303.59	5,281.5	96.0	6.7	-95.7	0.25	-0.23	-3.74	
5,474.0	1.76	324.60	5,471.5	99.5	3.1	-99.4	0.37	0.23	11.06	
5,663.0	1.41	327.50	5,660.4	103.9	0.2	-103.8	0.19	-0.19	1.53	
5,852.0	1.58	335.06	5,849.3	108.2	-2.1	-108.2	0.14	0.09	4.00	
6,040.0	1.27	342.00	6,037.3	112.5	-3.9	-112.6	0.19	-0.16	3.69	
6,229.0	1.93	311.06	6,226.2	116.6	-6.9	-116.8	0.56	0.35	-16.37	
6,417.0	1.45	301.48	6,414.1	119.9	-11.3	-120.2	0.30	-0.26	-5.10	
6,606.0	1.63	17.77	6,603.1	123.7	-12.5	-124.0	1.01	0.10	40.37	
6,794.0	0.97	8.28	6,791.0	127.9	-11.5	-128.1	0.37	-0.35	-5.05	
6,983.0	2.07	343.76	6,980.0	132.7	-12.2	-133.0	0.66	0.58	-12.97	
7,172.0	1.67	343.41	7,168.9	138.6	-14.0	-139.0	0.21	-0.21	-0.19	
7,362.0	2.07	330.40	7,358.8	144.3	-16.5	-144.7	0.31	0.21	-6.85	
7,551.0	1.05	275.47	7,547.7	147.4	-19.9	-147.9	0.90	-0.54	-29.06	
7,741.0	1.05	250.15	7,737.7	147.0	-23.2	-147.6	0.24	0.00	-13.33	
7,930.0	0.79	273.53	7,926.6	146.5	-26.2	-147.1	0.24	-0.14	12.37	
8,120.0	0.44	253.23	8,116.6	146.4	-28.2	-147.1	0.21	-0.18	-10.68	
8,309.0	0.44	163.41	8,305.6	145.4	-28.7	-146.2	0.33	0.00	-47.52	
8,498.0	0.44	123.24	8,494.6	144.4	-27.8	-145.0	0.16	0.00	-21.25	
8,687.0	0.70	280.74	8,683.6	144.2	-28.4	-144.9	0.59	0.14	83.33	
8,875.0	0.57	323.81	8,871.6	145.1	-30.1	-145.9	0.26	-0.07	22.91	
9,063.0	0.62	308.95	9,059.6	146.5	-31.4	-147.3	0.09	0.03	-7.90	
9,252.0	0.35	27.18	9,248.6	147.7	-31.9	-148.5	0.34	-0.14	41.39	
9,442.0	0.40	287.95	9,438.6	148.4	-32.3	-149.2	0.30	0.03	-52.23	
9,631.0	0.79	295.24	9,627.6	149.2	-34.1	-150.0	0.21	0.21	3.86	
9,820.0	1.14	283.11	9,816.5	150.2	-37.1	-151.1	0.21	0.19	-6.42	



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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)
10,009.0	0.57	288.65	10,005.5	150.9	-39.8	-151.9	0.30	-0.30	2.93
10,198.0	0.79	315.11	10,194.5	152.1	-41.6	-153.2	0.20	0.12	14.00
10,387.0	1.23	311.24	10,383.5	154.4	-44.1	-155.5	0.24	0.23	-2.05
10,575.0	0.70	321.43	10,571.5	156.6	-46.3	-157.8	0.30	-0.28	5.42
10,763.0	0.88	184.06	10,759.4	156.0	-47.1	-157.2	0.78	0.10	-73.07
10,951.0	0.31	145.92	10,947.4	154.2	-47.0	-155.4	0.35	-0.30	-20.29
11,138.0	0.62	61.28	11,134.4	154.3	-45.8	-155.4	0.36	0.17	-45.26
11,267.0	0.57	38.16	11,263.4	155.1	-44.8	-156.2	0.19	-0.04	-17.92
11,378.0	1.14	143.81	11,374.4	154.6	-43.8	-155.7	1.27	0.51	95.18
11,427.0	8.31	160.24	11,423.2	150.9	-42.3	-152.0	14.74	14.63	33.53
11,473.0	14.73	161.12	11,468.3	142.2	-39.3	-143.2	13.96	13.96	1.91
11,522.0	22.33	165.87	11,514.7	127.3	-35.0	-128.2	15.80	15.51	9.69
11,568.0	28.84	170.00	11,556.2	107.9	-30.9	-108.7	14.67	14.15	8.98
11,617.0	31.34	168.33	11,598.6	83.7	-26.3	-84.4	5.38	5.10	-3.41
11,663.0	35.56	167.45	11,636.9	59.0	-21.0	-59.5	9.23	9.17	-1.91
11,711.0	41.80	167.54	11,674.4	29.7	-14.5	-30.1	13.00	13.00	0.19
11,757.0	44.79	167.63	11,707.9	-1.1	-7.7	0.9	6.50	6.50	0.20
11,806.0	47.74	167.71	11,741.7	-35.7	-0.1	35.7	6.02	6.02	0.16
11,852.0	50.02	168.33	11,772.0	-69.6	7.1	69.8	5.06	4.96	1.35
11,890.8	51.69	168.47	11,796.5	-99.1	13.1	99.4	4.31	4.31	0.35
FTP @ 11890.8'MD, 330'FNL & 272.1'FWL									
11,901.0	52.13	168.50	11,802.8	-106.9	14.7	107.3	4.31	4.31	0.34
11,947.0	54.33	167.71	11,830.3	-143.0	22.3	143.5	4.98	4.78	-1.72
11,996.0	60.22	167.89	11,856.8	-183.3	31.0	184.0	12.02	12.02	0.37
12,042.0	66.46	170.35	11,877.4	-223.6	38.8	224.6	14.38	13.57	5.35
12,091.0	68.84	170.26	11,896.0	-268.3	46.4	269.4	4.86	4.86	-0.18
12,137.0	72.75	170.17	11,911.2	-311.1	53.8	312.4	8.50	8.50	-0.20
12,186.0	79.08	171.58	11,923.1	-358.0	61.3	359.5	13.22	12.92	2.88
12,232.0	82.59	172.28	11,930.4	-402.9	67.7	404.6	7.78	7.63	1.52
12,281.0	86.73	173.95	11,935.0	-451.4	73.5	453.2	9.10	8.45	3.41
12,323.0	89.10	175.36	11,936.5	-493.1	77.4	495.0	6.56	5.64	3.36
12,372.0	91.03	177.56	11,936.5	-542.1	80.4	544.0	5.97	3.94	4.49
12,467.0	90.20	177.73	11,935.4	-637.0	84.3	639.0	0.89	-0.87	0.18
12,561.0	91.21	178.08	11,934.3	-730.9	87.8	733.0	1.14	1.07	0.37
12,656.0	88.35	174.83	11,934.6	-825.7	93.7	827.9	4.56	-3.01	-3.42
12,750.0	87.52	174.13	11,938.0	-919.2	102.7	921.6	1.15	-0.88	-0.74
12,845.0	89.76	175.10	11,940.3	-1,013.7	111.6	1,016.4	2.57	2.36	1.02
12,939.0	90.11	175.01	11,940.4	-1,107.4	119.7	1,110.2	0.38	0.37	-0.10
13,034.0	91.34	175.62	11,939.2	-1,202.1	127.5	1,205.0	1.45	1.29	0.64
13,128.0	90.64	177.21	11,937.6	-1,295.9	133.3	1,299.0	1.85	-0.74	1.69
13,223.0	91.65	179.31	11,935.7	-1,390.8	136.2	1,393.9	2.45	1.06	2.21
13,318.0	92.84	180.28	11,931.9	-1,485.7	136.6	1,488.8	1.62	1.25	1.02
13,413.0	92.97	180.72	11,927.1	-1,580.6	135.7	1,583.6	0.48	0.14	0.46

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13,508.0	92.22	182.30	11,922.8	-1,675.5	133.2	1,678.4	1.84	-0.79	1.66	
13,603.0	94.81	181.60	11,917.0	-1,770.2	130.0	1,773.0	2.82	2.73	-0.74	
13,698.0	92.13	180.72	11,911.3	-1,865.0	128.1	1,867.8	2.97	-2.82	-0.93	
13,793.0	91.52	179.84	11,908.2	-1,960.0	127.6	1,962.7	1.13	-0.64	-0.93	
13,887.0	95.12	178.79	11,902.8	-2,053.8	128.7	2,056.5	3.99	3.83	-1.12	
13,982.0	92.79	178.52	11,896.2	-2,148.5	131.0	2,151.2	2.47	-2.45	-0.28	
14,077.0	94.42	179.31	11,890.3	-2,243.3	132.8	2,246.1	1.91	1.72	0.83	
14,172.0	91.12	179.75	11,885.7	-2,338.2	133.5	2,340.9	3.50	-3.47	0.46	
14,267.0	93.27	180.02	11,882.0	-2,433.1	133.7	2,435.8	2.28	2.26	0.28	
14,362.0	90.46	178.88	11,878.9	-2,528.0	134.6	2,530.7	3.19	-2.96	-1.20	
14,457.0	88.13	178.26	11,880.1	-2,623.0	137.0	2,625.7	2.54	-2.45	-0.65	
14,552.0	87.60	178.44	11,883.6	-2,717.9	139.7	2,720.7	0.59	-0.56	0.19	
14,647.0	86.64	178.96	11,888.4	-2,812.7	141.9	2,815.5	1.15	-1.01	0.55	
14,742.0	86.86	180.02	11,893.8	-2,907.6	142.7	2,910.4	1.14	0.23	1.12	
14,837.0	83.87	179.49	11,901.5	-3,002.3	143.2	3,005.0	3.20	-3.15	-0.56	
14,932.0	82.95	179.58	11,912.4	-3,096.6	143.9	3,099.4	0.97	-0.97	0.09	
15,027.0	85.89	179.05	11,921.6	-3,191.2	145.0	3,193.9	3.14	3.09	-0.56	
15,121.0	93.76	180.28	11,921.9	-3,285.1	145.6	3,287.8	8.47	8.37	1.31	
15,216.0	89.93	179.93	11,918.8	-3,380.0	145.4	3,382.7	4.05	-4.03	-0.37	
15,311.0	87.69	179.58	11,920.8	-3,475.0	145.8	3,477.6	2.39	-2.36	-0.37	
15,406.0	88.70	178.26	11,923.8	-3,569.9	147.6	3,572.6	1.75	1.06	-1.39	
15,501.0	85.98	177.73	11,928.2	-3,664.8	150.9	3,667.5	2.92	-2.86	-0.56	
15,596.0	84.97	179.05	11,935.7	-3,759.4	153.6	3,762.2	1.75	-1.06	1.39	
15,691.0	88.70	180.90	11,941.0	-3,854.3	153.6	3,857.0	4.38	3.93	1.95	
15,786.0	89.41	180.54	11,942.5	-3,949.2	152.4	3,951.9	0.84	0.75	-0.38	
15,881.0	89.80	180.81	11,943.2	-4,044.2	151.3	4,046.8	0.50	0.41	0.28	
15,976.0	89.10	180.19	11,944.1	-4,139.2	150.5	4,141.8	0.98	-0.74	-0.65	
16,071.0	87.87	178.96	11,946.6	-4,234.2	151.2	4,236.7	1.83	-1.29	-1.29	
16,166.0	87.47	179.67	11,950.5	-4,329.1	152.3	4,331.6	0.86	-0.42	0.75	
16,261.0	89.45	180.19	11,953.0	-4,424.0	152.5	4,426.5	2.15	2.08	0.55	
16,356.0	91.21	178.17	11,952.5	-4,519.0	153.8	4,521.5	2.82	1.85	-2.13	
16,451.0	93.32	180.28	11,948.7	-4,613.9	155.1	4,616.4	3.14	2.22	2.22	
16,546.0	92.22	179.49	11,944.1	-4,708.8	155.3	4,711.3	1.42	-1.16	-0.83	
16,641.0	90.02	178.52	11,942.3	-4,803.8	156.9	4,806.3	2.53	-2.32	-1.02	
16,736.0	90.68	178.35	11,941.7	-4,898.7	159.5	4,901.3	0.72	0.69	-0.18	
16,831.0	90.20	178.96	11,941.0	-4,993.7	161.8	4,996.3	0.82	-0.51	0.64	
16,889.0	91.80	178.91	11,940.0	-5,051.7	162.8	5,054.2	2.76	2.76	-0.09	
Cross SL @ 16889'MD, 372.9'FWL										
16,925.0	92.79	178.88	11,938.5	-5,087.7	163.5	5,090.2	2.76	2.76	-0.09	
17,020.0	91.47	178.08	11,935.0	-5,182.6	166.0	5,185.1	1.62	-1.39	-0.84	
17,115.0	91.87	179.75	11,932.2	-5,277.5	167.8	5,280.1	1.81	0.42	1.76	
17,210.0	89.49	180.11	11,931.1	-5,372.5	168.0	5,375.0	2.53	-2.51	0.38	
17,305.0	91.16	181.25	11,930.5	-5,467.5	166.8	5,470.0	2.13	1.76	1.20	
17,400.0	93.98	180.98	11,926.3	-5,562.3	165.0	5,564.8	2.98	2.97	-0.28	

Company: Ameredev Operating, LLC
Project: Lea County, NM (NAD83 NME)
Site: (Azalea State) SEC 28_T-26-S_R-36-E
Well: Azalea State 26_36_28 #111H
Wellbore: OWB
Design: AWB

Local Co-ordinate Reference: Well Azalea State 26_36_28 #111H
TVD Reference: KB @ 2948.0usft (H&P 616)
MD Reference: KB @ 2948.0usft (H&P 616)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

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)
17,495.0	91.03	181.78	11,922.1	-5,657.2	162.7	5,659.5	3.22	-3.11	0.84
17,590.0	89.63	181.07	11,921.6	-5,752.2	160.3	5,754.4	1.65	-1.47	-0.75
17,685.0	87.82	180.28	11,923.7	-5,847.1	159.2	5,849.3	2.08	-1.91	-0.83
17,780.0	86.73	177.21	11,928.2	-5,942.0	161.3	5,944.2	3.43	-1.15	-3.23
17,875.0	86.64	176.77	11,933.7	-6,036.7	166.3	6,039.0	0.47	-0.09	-0.46
17,970.0	87.60	177.29	11,938.5	-6,131.5	171.2	6,133.8	1.15	1.01	0.55
18,065.0	87.30	177.73	11,942.7	-6,226.3	175.3	6,228.7	0.56	-0.32	0.46
18,160.0	89.14	178.08	11,945.7	-6,321.2	178.8	6,323.7	1.97	1.94	0.37
18,255.0	89.71	178.26	11,946.6	-6,416.1	181.8	6,418.7	0.63	0.60	0.19
18,350.0	91.78	180.11	11,945.4	-6,511.1	183.2	6,513.7	2.92	2.18	1.95
18,445.0	87.96	180.28	11,945.6	-6,606.1	182.9	6,608.6	4.03	-4.02	0.18
18,528.0	86.64	179.05	11,949.5	-6,689.0	183.3	6,691.5	2.17	-1.59	-1.48
18,623.0	86.86	180.19	11,954.9	-6,783.8	184.0	6,786.3	1.22	0.23	1.20
18,718.0	86.77	179.84	11,960.2	-6,878.7	183.9	6,881.1	0.38	-0.09	-0.37
18,813.0	87.78	180.63	11,964.7	-6,973.6	183.5	6,976.0	1.35	1.06	0.83
18,908.0	90.07	180.81	11,966.5	-7,068.5	182.4	7,070.9	2.42	2.41	0.19
LAST SVY									
18,993.0	90.07	180.81	11,966.4	-7,153.5	181.2	7,155.8	0.00	0.00	0.00
PTD @ 18993'MD, 330'4'FSL & 376.5'FWL									



Intrepid
Survey Report



Company:	Ameredev Operating, LLC	Local Co-ordinate Reference:	Well Azalea State 26_36_28 #111H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	KB @ 2948.0usft (H&P 616)
Site:	(Azalea State) SEC 28_T-26-S_R-36-E	MD Reference:	KB @ 2948.0usft (H&P 616)
Well:	Azalea State 26_36_28 #111H	North Reference:	Grid
Wellbore:	OWB	Survey Calculation Method:	Minimum Curvature
Design:	AWB	Database:	EDM 5000.1 Single User Db

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Azalea State 26_36_28 - hit/miss target - Shape	0.00	0.01	11,915.0	-98.0	121.0	372,836.00	868,610.00	32° 1' 14.196 N	103° 16' 38.514 W
- actual wellpath misses target center by 134.7usft at 11973.3usft MD (11845.1 TVD, -164.3 N, 26.9 E)									
- Point									
TRGT 1(Azalea State	0.00	0.00	11,929.3	-3,585.1	155.6	369,348.88	868,644.59	32° 0' 39.689 N	103° 16' 38.508 W
- actual wellpath misses target center by 9.0usft at 15421.7usft MD (11924.2 TVD, -3585.6 N, 148.1 E)									
- Point									
TRGT 4(Azalea State	0.48	359.43	11,936.6	-5,085.3	170.5	367,848.74	868,659.48	32° 0' 24.844 N	103° 16' 38.505 W
- actual wellpath misses target center by 7.3usft at 16922.8usft MD (11938.6 TVD, -5085.5 N, 163.5 E)									
- Rectangle (sides W60.0 H579.0 D25.0)									
TRGT 2(Azalea State	-2.43	359.43	11,938.4	-4,085.2	160.6	368,848.83	868,649.56	32° 0' 34.740 N	103° 16' 38.507 W
- actual wellpath misses target center by 10.9usft at 15921.8usft MD (11943.4 TVD, -4085.0 N, 150.8 E)									
- Rectangle (sides W60.0 H500.0 D25.0)									
TRGT 5(Azalea State	-0.27	359.43	11,940.2	-5,684.3	176.4	367,249.68	868,665.42	32° 0' 18.916 N	103° 16' 38.504 W
- actual wellpath misses target center by 23.5usft at 17521.7usft MD (11921.7 TVD, -5683.9 N, 161.9 E)									
- Rectangle (sides W60.0 H599.0 D25.0)									
TRGT 3(Azalea State	-0.05	359.43	11,941.3	-4,506.2	164.7	368,427.79	868,653.73	32° 0' 30.574 N	103° 16' 38.507 W
- actual wellpath misses target center by 16.0usft at 16343.4usft MD (11952.7 TVD, -4506.4 N, 153.4 E)									
- Rectangle (sides W60.0 H421.0 D25.0)									
TRGT 6(Azalea State	0.00	0.01	11,944.4	-6,184.4	181.4	366,749.64	868,670.38	32° 0' 13.968 N	103° 16' 38.504 W
- actual wellpath misses target center by 8.6usft at 18023.5usft MD (11940.8 TVD, -6184.9 N, 173.6 E)									
- Point									
LTP (Azalea State 26	-0.49	359.43	11,952.6	-7,154.0	191.0	365,780.00	868,680.00	32° 0' 4.372 N	103° 16' 38.502 W
- actual wellpath misses target center by 16.9usft at 18993.0usft MD (11966.4 TVD, -7153.5 N, 181.2 E)									
- Rectangle (sides W60.0 H1,469.5 D25.0)									

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
11,890.8	11,796.5	-99.1	13.1	FTP @ 11890.8'MD, 330'FNL & 272.1'FWL
16,889.0	11,940.0	-5,051.7	162.8	Cross SL @ 16889'MD, 372.9'FWL
18,908.0	11,966.5	-7,068.5	182.4	LAST SVY
18,993.0	11,966.4	-7,153.5	181.2	PTD @ 18993'MD, 330'4'FSL & 376.5'FWL

Checked By: _____ Approved By: _____ Date: _____