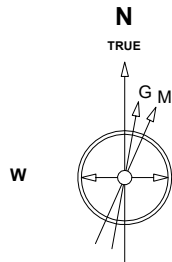


Great Western Operating Company, LLC

Location	Colorado	Slot	S16 - Postle IC 09-259HN
Field	Wattenburg	Well	Postle IC 09-259HN
Installation	Postle West	Wellbore	Postle IC 09-259HN (AWB)

Created by	admin
Date plotted	22-May-2018
Plot reference is Postle IC 09-259HN (AWB).	
Ref wellpath is Postle IC 09-259HN (AWP#1).	
Coordinates are in Feet reference S16 - Postle IC 09-259HN.	
True Vertical Depths are reference Rig Datum.	
Measured Depths are reference Rig Datum.	
Rig Datum: Actual Datum #1	
Rig Datum to Mean Sea Level: 4996.90 ft.	
Plot North is aligned to TRUE North.	



Scale 1 cm = 400 ft

East (Feet) ->

-13600 -12800 -12000 -11200 -10400 -9600 -8800 -8000 -7200 -6400 -5600 -4800 -4000 -3200 -2400 -1600 -800 0 800 1600

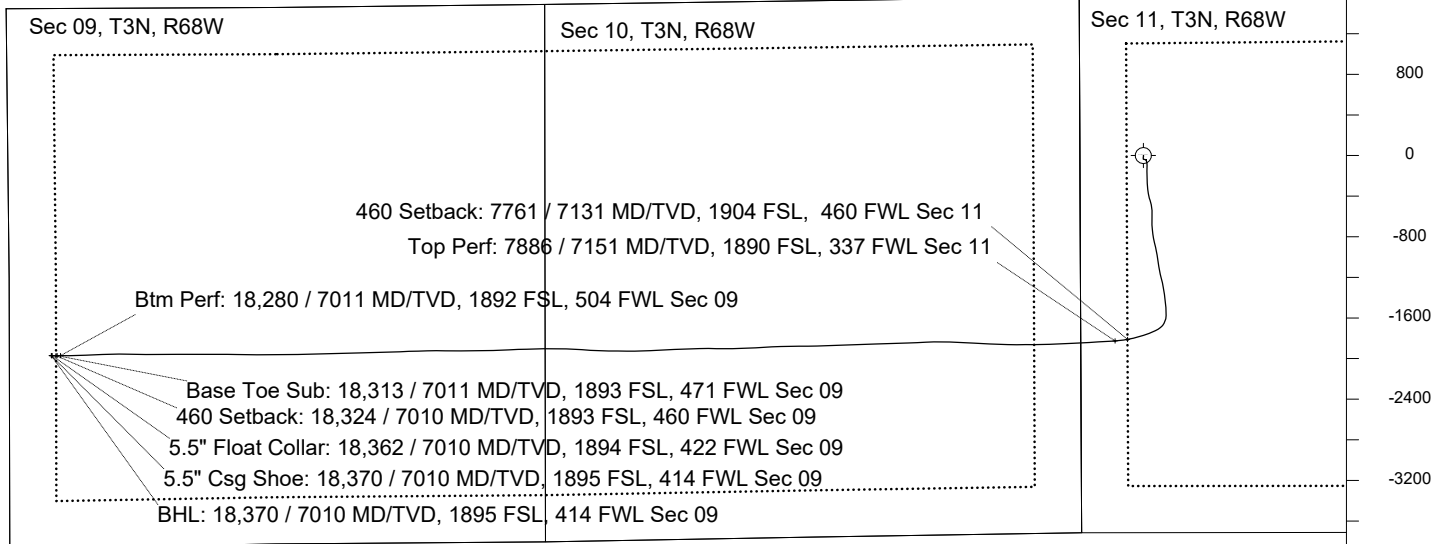
Aug-7-2014
IGRF Model [1900.0-2020.0] Dip: 66.77 deg Field: 52617.4 nT
Lat: N40 14 38.2488 Long: W104 58 42.6288 Elev: 4976.90 ft
Magnetic North is 8.62 deg East of TRUE North
To correct azimuth from Magnetic to TRUE add 8.62 deg

<- True Vertical Depth (Feet)

Scale 1 cm = 800 ft

<- North(Feet)

Scale 1 cm = 400 ft



9.625" Csc Shoe: 1525 MD/TVD

460 Setback: 7761 / 7131 MD/TVD, 1904 FSL, 460 FWL Sec 11
Top Perf: 7886 / 7151 MD/TVD, 1890 FSL, 337 FWL Sec 11

Btm Perf: 18,280 / 7011 MD/TVD, 1892 FSL, 504 FWL Sec 09
Base Toe Sub: 18,313 / 7011 MD/TVD, 1893 FSL, 471 FWL Sec 09
460 Setback: 18,324 / 7010 MD/TVD, 1893 FSL, 460 FWL Sec 09

BHL: 18,370 / 7010 MD/TVD, 1895 FSL, 414 FWL Sec 09
5.5" Csg Shoe: 18,370 / 7010 MD/TVD, 1895 FSL, 414 FWL Sec 09
5.5" Float Collar: 18,362 / 7010 MD/TVD, 1894 FSL, 422 FWL Sec 09

-1600 0 1600 3200 4800 6400 8000 9600 11200 12800 14400 16000 17600

Scale 1 cm = 800 ft

Vertical Section (Feet) ->

Azimuth 259.62 with reference 0.00 N, 0.00 E from S16 - Postle IC 09-259HN

Great Western Operating Co, LLC Wellbore Survey Report Wellpath: Postle IC 09-259HN (AWP#1) MDs and TVDs are from Rig (Actual Datum #1 4996.9ft above Mean Sea Level)
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Wellbore Information

Date Created	Date Revised	API #	Name
Mar-22-2018	May-22-2018	05-123-46038	Postle IC 09-259HN (AWB)

Slot Coordinates

Latitude	Longitude
40.243674	-104.977546

Pad Information

Name	Ground Elev
Postle West	4976.90

Field

Name
Wattenburg

Wellpath Report

MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]
0.00	0.00	0.000	0.00	0.00	0.00		0.00
20.00	0.00	115.140	20.00	0.00	0.00	==>	0.00
214.00	0.57	115.140	214.00	-0.41	0.87	0.29	-0.79
309.00	1.19	130.100	308.99	-1.25	2.06	0.69	-1.80
405.00	1.19	185.100	404.97	-2.88	2.73	1.14	-2.17
500.00	1.54	189.230	499.94	-5.12	2.44	0.38	-1.47
596.00	2.02	201.880	595.89	-7.97	1.60	0.64	-0.14
691.00	1.67	195.820	690.84	-10.85	0.60	0.42	1.37
785.00	2.29	203.820	784.79	-13.89	-0.53	0.72	3.03
880.00	1.76	176.480	879.73	-17.08	-1.21	1.14	4.27
976.00	1.49	175.250	975.69	-19.80	-1.02	0.28	4.57
1070.00	1.05	142.380	1069.67	-21.70	-0.39	0.89	4.29
1165.00	1.19	150.030	1164.65	-23.24	0.63	0.22	3.56
1260.00	1.41	182.200	1259.63	-25.26	1.08	0.79	3.49
1354.00	1.49	203.380	1353.60	-27.54	0.55	0.57	4.42
1449.00	1.63	204.430	1448.56	-29.90	-0.50	0.15	5.88
1481.00	1.89	188.080	1480.55	-30.84	-0.76	1.76	6.30
1525.00	1.73	192.400	1524.53	-32.21	-1.00	0.48	6.79
1551.00	1.64	195.340	1550.52	-32.95	-1.19	0.48	7.10
1620.00	2.00	150.480	1619.48	-34.95	-0.85	2.07	7.14
1709.00	4.03	97.540	1708.37	-36.71	3.01	3.64	3.65
1799.00	6.57	106.160	1797.98	-38.56	11.10	2.95	-3.96
1888.00	4.98	104.750	1886.53	-40.96	19.72	1.79	-12.02
1978.00	2.27	90.740	1976.34	-41.98	25.28	3.15	-17.30
2067.00	0.10	181.260	2065.32	-42.08	27.04	2.55	-19.02
2156.00	0.15	218.690	2154.32	-42.25	26.97	0.10	-18.91
2246.00	0.07	288.100	2244.32	-42.32	26.84	0.16	-18.78
2335.00	0.39	21.800	2333.31	-42.03	26.90	0.45	-18.89
2424.00	0.07	266.500	2422.31	-41.75	26.96	0.48	-19.00
2514.00	0.03	298.290	2512.31	-41.74	26.89	0.05	-18.92
2603.00	0.07	215.940	2601.31	-41.77	26.83	0.08	-18.87
2692.00	0.21	335.320	2690.31	-41.67	26.73	0.28	-18.79
2782.00	0.07	338.850	2780.31	-41.47	26.65	0.16	-18.74
2871.00	0.09	257.230	2869.31	-41.43	26.56	0.12	-18.66
2961.00	0.11	216.590	2959.31	-41.52	26.44	0.08	-18.52
3050.00	0.04	62.990	3048.31	-41.57	26.41	0.17	-18.49
3140.00	0.13	243.560	3138.31	-41.60	26.35	0.19	-18.42
3229.00	0.17	205.820	3227.31	-41.77	26.20	0.12	-18.25
3319.00	0.07	320.180	3317.31	-41.84	26.11	0.23	-18.14
3408.00	0.03	300.740	3406.31	-41.79	26.05	0.05	-18.10
3497.00	0.11	34.510	3495.31	-41.71	26.08	0.13	-18.14
3587.00	2.58	153.720	3585.28	-43.45	27.03	2.93	-18.76
3676.00	6.01	161.300	3674.02	-49.66	29.41	3.90	-19.98
3766.00	9.16	167.110	3763.22	-61.11	32.52	3.60	-20.97
3855.00	11.58	172.010	3850.76	-76.87	35.34	2.89	-20.91
3944.00	13.40	177.320	3937.66	-96.02	37.07	2.42	-19.16
4034.00	14.90	183.130	4024.93	-117.99	36.92	2.29	-15.05
4123.00	18.14	182.890	4110.24	-143.26	35.60	3.64	-9.20
4213.00	22.30	178.090	4194.68	-174.33	35.46	4.97	-3.46
4302.00	24.19	179.420	4276.46	-209.45	36.21	2.20	2.13
4392.00	26.23	177.490	4357.88	-247.76	37.27	2.44	7.99
4481.00	28.39	175.190	4436.96	-288.50	39.90	2.70	12.74
4571.00	29.94	174.530	4515.55	-332.18	43.84	1.76	16.74
4660.00	30.24	170.930	4592.56	-376.42	49.49	2.06	19.16
4750.00	30.19	165.720	4670.35	-420.74	58.64	2.91	18.14
4839.00	30.14	161.760	4747.30	-463.65	71.16	2.24	13.56
4928.00	28.89	169.720	4824.78	-506.05	81.99	4.62	10.54
5017.00	30.07	180.420	4902.31	-549.53	85.67	6.06	14.76
5107.00	29.77	181.170	4980.31	-594.42	85.05	0.53	23.46
5196.00	30.16	179.960	5057.42	-638.86	84.61	0.81	31.90
5285.00	30.11	178.000	5134.39	-683.53	85.41	1.11	39.17
5375.00	30.11	174.880	5212.25	-728.58	88.21	1.74	44.53
5464.00	30.16	172.740	5289.23	-773.00	93.03	1.21	47.80
5547.00	30.12	168.630	5361.01	-814.10	99.77	2.49	48.57
5637.00	30.23	166.840	5438.82	-858.30	109.38	1.01	47.09
5726.00	30.27	166.030	5515.70	-901.88	119.90	0.46	44.60
5816.00	30.04	167.530	5593.52	-945.89	130.24	0.88	42.35
5905.00	30.07	173.790	5670.57	-989.82	137.46	3.52	43.17
5995.00	30.23	173.710	5748.40	-1034.76	142.38	0.18	46.42
6084.00	30.10	169.080	5825.36	-1078.95	149.06	2.62	47.81
6174.00	30.09	167.520	5903.23	-1123.13	158.22	0.87	46.77
6263.00	30.25	167.040	5980.17	-1166.76	168.06	0.33	44.95
6353.00	30.02	167.670	6058.01	-1210.85	177.96	0.43	43.16
6442.00	30.11	167.690	6135.03	-1254.41	187.47	0.10	41.66
6531.00	29.23	168.910	6212.36	-1297.55	196.41	1.20	40.64

MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]
6620.00	30.08	170.430	6289.71	-1340.87	204.30	1.28	40.68
6710.00	29.43	173.960	6367.85	-1385.10	210.37	2.08	42.68
6799.00	30.53	174.780	6444.94	-1429.36	214.73	1.32	46.37
6889.00	30.50	174.590	6522.47	-1474.86	218.97	0.11	50.40
6978.00	30.48	174.200	6599.16	-1519.80	223.38	0.22	54.16
7067.00	30.00	178.410	6676.06	-1564.50	226.27	2.44	59.37
7157.00	30.10	192.950	6754.07	-1609.05	221.84	8.07	71.76
7246.00	34.78	209.810	6829.31	-1652.94	204.17	11.40	97.05
7336.00	39.16	230.270	6901.48	-1693.55	169.40	14.45	138.56
7425.00	45.17	244.490	6967.57	-1725.20	119.15	12.64	193.70
7514.00	53.66	249.820	7025.44	-1751.22	56.88	10.56	259.64
7604.00	61.86	252.730	7073.42	-1775.55	-15.17	9.51	334.89
7693.00	69.42	255.340	7110.11	-1797.78	-93.07	8.90	415.52
7760.71	75.07	259.940	7130.76	-1811.53	-156.02	10.56	479.92
7783.00	76.95	261.400	7136.15	-1815.04	-177.36	10.56	501.54
7872.00	84.97	265.970	7150.13	-1824.65	-264.63	10.34	589.12
7886.00	85.80	266.190	7151.25	-1825.61	-278.55	6.13	602.99
7962.00	90.31	267.350	7153.83	-1829.89	-354.37	6.13	678.33
8051.00	90.31	265.540	7153.35	-1835.41	-443.19	2.03	766.69
8141.00	90.28	265.940	7152.89	-1842.09	-532.94	0.45	856.18
8230.00	90.28	268.360	7152.45	-1846.52	-621.82	2.72	944.40
8319.00	89.97	268.100	7152.26	-1849.27	-710.78	0.45	1032.40
8409.00	89.94	266.310	7152.33	-1853.65	-800.67	1.99	1121.61
8498.00	90.03	267.330	7152.35	-1858.59	-889.53	1.15	1209.91
8588.00	89.94	269.380	7152.37	-1861.18	-979.49	2.28	1298.86
8677.00	89.94	269.340	7152.47	-1862.17	-1068.49	0.04	1386.57
8767.00	89.82	269.790	7152.66	-1862.85	-1158.48	0.52	1475.22
8856.00	89.91	269.940	7152.87	-1863.06	-1247.48	0.20	1562.80
8946.00	89.97	271.180	7152.96	-1862.18	-1337.48	1.38	1651.16
9035.00	90.03	271.980	7152.96	-1859.73	-1426.44	0.90	1738.23
9124.00	90.15	272.900	7152.82	-1855.94	-1515.36	1.04	1825.01
9214.00	90.12	273.150	7152.61	-1851.19	-1605.23	0.28	1912.55
9303.00	90.03	273.170	7152.49	-1846.28	-1694.10	0.10	1999.08
9392.00	90.09	272.660	7152.40	-1841.76	-1782.98	0.58	2085.69
9482.00	90.00	271.830	7152.33	-1838.23	-1872.91	0.93	2173.52
9571.00	90.62	271.270	7151.85	-1835.83	-1961.88	0.94	2260.59
9661.00	90.89	268.830	7150.66	-1835.75	-2051.86	2.73	2349.09
9750.00	90.99	267.390	7149.20	-1838.68	-2140.80	1.62	2437.10
9840.00	90.71	267.460	7147.86	-1842.72	-2230.70	0.32	2526.26
9929.00	90.92	267.640	7146.60	-1846.53	-2319.61	0.31	2614.39
10018.00	91.51	268.220	7144.71	-1849.74	-2408.53	0.93	2702.44
10108.00	91.66	268.650	7142.22	-1852.20	-2498.46	0.51	2791.34
10197.00	91.66	268.580	7139.64	-1854.35	-2587.40	0.08	2879.21
10286.00	89.97	267.790	7138.38	-1857.17	-2676.34	2.10	2967.20
10376.00	89.94	267.750	7138.45	-1860.67	-2766.27	0.06	3056.29
10466.00	90.03	267.710	7138.47	-1864.24	-2856.20	0.11	3145.39
10555.00	90.03	267.940	7138.43	-1867.61	-2945.14	0.26	3233.48
10644.00	90.06	267.940	7138.36	-1870.81	-3034.08	0.03	3321.55
10734.00	89.97	268.310	7138.33	-1873.76	-3124.03	0.42	3410.56
10823.00	90.09	268.910	7138.29	-1875.92	-3213.01	0.69	3498.46
10913.00	90.06	269.150	7138.17	-1877.44	-3302.99	0.27	3587.25
11001.00	90.15	269.290	7138.01	-1878.64	-3390.98	0.19	3674.02
11090.00	90.15	269.210	7137.77	-1879.80	-3479.98	0.09	3761.76
11180.00	90.15	268.490	7137.54	-1881.61	-3569.96	0.80	3850.59
11269.00	90.18	267.410	7137.28	-1884.79	-3658.90	1.21	3938.65
11359.00	89.97	266.980	7137.16	-1889.20	-3748.79	0.53	4027.87
11448.00	89.91	266.750	7137.26	-1894.06	-3837.66	0.27	4116.16
11538.00	89.69	266.500	7137.57	-1899.36	-3927.50	0.37	4205.48
11627.00	89.85	269.530	7137.93	-1902.44	-4016.44	3.41	4293.52
11716.00	90.12	270.810	7137.95	-1902.18	-4105.43	1.47	4381.01
11806.00	89.91	270.800	7137.93	-1900.92	-4195.42	0.23	4469.30
11895.00	89.75	269.790	7138.19	-1900.46	-4284.42	1.15	4556.76
11984.00	90.12	268.660	7138.29	-1901.66	-4373.41	1.34	4644.51
12074.00	92.18	267.920	7136.49	-1904.35	-4463.35	2.43	4733.46
12163.00	91.88	267.920	7133.33	-1907.57	-4552.23	0.34	4821.47
12253.00	91.91	267.500	7130.36	-1911.17	-4642.11	0.47	4910.52
12342.00	91.91	267.100	7127.39	-1915.36	-4730.96	0.45	4998.68
12431.00	92.09	267.140	7124.29	-1919.83	-4819.80	0.21	5086.86
12521.00	92.03	267.630	7121.05	-1923.93	-4909.65	0.55	5175.98
12610.00	91.82	269.470	7118.06	-1926.18	-4998.56	2.08	5263.84
12700.00	91.32	270.320	7115.59	-1926.35	-5088.53	1.10	5352.37
12789.00	90.43	270.340	7114.24	-1925.83	-5177.52	1.00	5439.80
12878.00	90.58	270.620	7113.45	-1925.09	-5266.51	0.36	5527.21
12968.00	90.46	272.260	7112.63	-1922.83	-5356.47	1.83	5615.29
13057.00	90.28	273.020	7112.06	-1918.73	-5445.38	0.88	5702.00
13147.00	90.25	273.270	7111.64	-1913.79	-5535.24	0.28	5789.50
13236.00	90.58	274.850	7111.00	-1907.49	-5624.01	1.81	5875.68
13325.00	90.28	271.810	7110.33	-1902.32	-5712.85	3.43	5962.13
13414.00	91.17	268.730	7109.20	-1901.90	-5801.83	3.60	6049.58
13504.00	91.23	268.390	7107.32	-1904.16	-5891.78	0.38	6138.47

MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]
13593.00	91.26	268.930	7105.39	-1906.24	-5980.73	0.61	6226.34
13683.00	91.05	268.800	7103.57	-1908.03	-6070.70	0.27	6315.15
13772.00	91.17	268.750	7101.85	-1909.93	-6159.66	0.15	6403.00
13862.00	90.89	266.540	7100.23	-1913.63	-6249.56	2.47	6492.10
13951.00	90.43	266.660	7099.20	-1918.90	-6338.40	0.53	6580.44
14040.00	90.34	270.090	7098.61	-1921.43	-6427.35	3.86	6668.38
14130.00	90.55	270.380	7097.91	-1921.06	-6517.35	0.40	6756.84
14219.00	90.52	267.450	7097.08	-1922.74	-6606.32	3.29	6844.66
14308.00	90.62	269.050	7096.19	-1925.46	-6695.27	1.80	6932.64
14397.00	90.31	271.080	7095.47	-1925.36	-6784.26	2.31	7020.16
14487.00	90.31	271.230	7094.98	-1923.55	-6874.24	0.17	7108.34
14576.00	90.49	269.890	7094.36	-1922.68	-6963.23	1.52	7195.72
14666.00	90.49	268.860	7093.59	-1923.66	-7053.22	1.14	7284.41
14755.00	90.37	268.080	7092.92	-1926.03	-7142.19	0.89	7372.35
14845.00	90.52	268.290	7092.22	-1928.88	-7232.14	0.29	7461.34
14934.00	90.52	267.040	7091.42	-1932.51	-7321.06	1.40	7549.46
15023.00	90.52	267.610	7090.61	-1936.66	-7409.96	0.64	7637.65
15113.00	90.43	268.520	7089.86	-1939.70	-7499.90	1.02	7726.67
15202.00	90.46	268.360	7089.17	-1942.12	-7588.87	0.18	7814.62
15291.00	90.43	268.610	7088.48	-1944.48	-7677.84	0.28	7902.55
15381.00	90.52	269.040	7087.73	-1946.32	-7767.81	0.49	7991.39
15470.00	90.40	269.060	7087.02	-1947.80	-7856.80	0.14	8079.18
15560.00	90.31	268.740	7086.46	-1949.53	-7946.78	0.37	8168.00
15649.00	91.29	268.490	7085.22	-1951.68	-8035.74	1.14	8255.90
15739.00	91.35	268.620	7083.14	-1953.95	-8125.69	0.16	8344.78
15828.00	91.38	268.390	7081.02	-1956.27	-8214.64	0.26	8432.69
15918.00	91.11	268.220	7079.07	-1958.93	-8304.57	0.35	8521.63
16007.00	91.38	269.190	7077.14	-1960.94	-8393.53	1.13	8609.49
16096.00	91.38	269.260	7074.99	-1962.14	-8482.50	0.08	8697.22
16186.00	91.17	269.400	7072.99	-1963.20	-8572.47	0.28	8785.91
16275.00	91.38	269.990	7071.01	-1963.67	-8661.44	0.70	8873.51
16365.00	91.38	270.240	7068.84	-1963.49	-8751.42	0.28	8961.98
16454.00	91.35	271.040	7066.72	-1962.49	-8840.39	0.90	9049.31
16544.00	93.05	271.300	7063.27	-1960.66	-8930.30	1.91	9137.42
16633.00	93.02	271.000	7058.55	-1958.88	-9019.15	0.34	9224.50
16723.00	92.89	270.300	7053.91	-1957.86	-9109.03	0.79	9312.72
16812.00	93.08	270.010	7049.28	-1957.61	-9197.91	0.39	9400.10
16902.00	93.08	269.360	7044.44	-1958.11	-9287.78	0.72	9488.59
16991.00	92.80	269.930	7039.88	-1958.66	-9376.66	0.71	9576.11
17081.00	91.05	270.500	7036.86	-1958.32	-9466.60	2.04	9664.52
17170.00	91.23	270.350	7035.09	-1957.66	-9555.58	0.26	9751.93
17259.00	91.14	269.020	7033.24	-1958.15	-9644.56	1.50	9839.54
17349.00	91.29	268.800	7031.34	-1959.86	-9734.52	0.30	9928.34
17438.00	91.35	270.950	7029.29	-1960.06	-9823.49	2.42	10015.89
17528.00	91.05	271.140	7027.40	-1958.42	-9913.46	0.39	10104.08
17617.00	91.14	270.780	7025.70	-1956.93	-10002.43	0.42	10191.33
17707.00	91.20	269.940	7023.86	-1956.36	-10092.41	0.94	10279.73
17796.00	90.98	269.290	7022.17	-1956.96	-10181.39	0.77	10367.36
17885.00	91.35	266.850	7020.36	-1959.95	-10270.31	2.77	10455.37
17975.00	91.35	267.220	7018.24	-1964.61	-10360.17	0.41	10544.59
18064.00	91.35	268.360	7016.14	-1968.04	-10449.08	1.28	10632.66
18154.00	91.17	268.890	7014.16	-1970.20	-10539.03	0.62	10721.53
18243.00	91.29	269.670	7012.25	-1971.32	-10628.00	0.89	10809.25
18280.00	91.25	270.140	7011.43	-1971.38	-10664.99	1.28	10845.65
18313.00	91.22	270.560	7010.72	-1971.17	-10697.98	1.28	10878.06
18324.15	91.21	270.710	7010.48	-1971.05	-10709.13	1.28	10889.00
18333.00	91.20	270.820	7010.30	-1970.93	-10717.98	1.28	10897.68
18362.00	91.20	270.820	7009.69	-1970.52	-10746.97	==>	10926.13
18370.00	91.20	270.820	7009.52	-1970.40	-10754.96	==>	10933.97

Comments				
MD[ft]	TVD[ft]	North[ft]	East[ft]	Comment
1525.00	1524.53	-32.21	-1.00	9.625" Csc Shoe: 1525 MD/TVD
7760.71	7130.76	-1811.53	-156.02	460 Setback: 7761 / 7131 MD/TVD, 1904 FSL, 460 FWL Sec 11
7886.00	7151.25	-1825.61	-278.55	Top Perf: 7886 / 7151 MD/TVD, 1890 FSL, 337 FWL Sec 11
18280.00	7011.43	-1971.38	-10664.99	Btm Perf: 18,280 / 7011 MD/TVD, 1892 FSL, 504 FWL Sec 09
18313.00	7010.72	-1971.17	-10697.98	Base Toe Sub: 18,313 / 7011 MD/TVD, 1893 FSL, 471 FWL Sec 09
18324.15	7010.48	-1971.05	-10709.13	460 Setback: 18,324 / 7010 MD/TVD, 1893 FSL, 460 FWL Sec 09
18362.00	7009.69	-1970.52	-10746.97	5.5" Float Collar: 18,362 / 7010 MD/TVD, 1894 FSL, 422 FWL Sec 09
18370.00	7009.52	-1970.40	-10754.96	5.5" Csg Shoe: 18,370 / 7010 MD/TVD, 1895 FSL, 414 FWL Sec 09
18370.00	7009.52	-1970.40	-10754.96	BHL: 18,370 / 7010 MD/TVD, 1895 FSL, 414 FWL Sec 09

Hole Sections								
Diameter [in]	Start MD[ft]	Start TVD[ft]	Start North[ft]	Start East[ft]	End MD[ft]	End TVD[ft]	End North[ft]	End East[ft]
13.500	0.00	0.00	0.00	0.00	1525.00	1524.53	-32.21	-1.00
8.500	1525.00	1524.53	-32.21	-1.00	18370.00	7009.52	-1970.40	-10754.96

Casings								
Name	Top MD[ft]	Top TVD[ft]	Top North[ft]	Top East[ft]	Shoe MD[ft]	Shoe TVD[ft]	Shoe North[ft]	Shoe East[ft]
9 5/8in Casing	0.00	0.00	0.00	0.00	1525.00	1524.53	-32.21	-1.00
5 1/2in Casing	0.00	0.00	0.00	0.00	18370.00	7009.52	-1970.40	-10754.96

Survey Tool Program					
Reference	Survey Name	MD[ft]	TVD[ft]	Survey Tool	Error Model
328553	As Drilled - 20180322	18370.00	7009.52	MWD	

Coordinates are from Slot MD's are from Rig and TVD's are from Rig (Actual Datum #1 4996.9ft above Mean Sea Level)
Vertical Section is from 0.00 0.00 on azimuth 259.620 degrees
Bottom hole distance is 10933.97 Feet on azimuth 259.62 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by Great Western Operating Co.
Date Printed: