

Great Western Operating Company, LLC

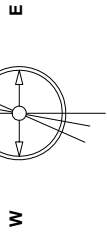
Location Colorado Slot N08 - Baseline LE 06-092HNX
 Field Wattenburg Well Baseline LE 06-092HNX
 Installation Baseline Wellbore Baseline LE 06-092HNX

Scale 1 cm = 400 ft

East (Feet) ->

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

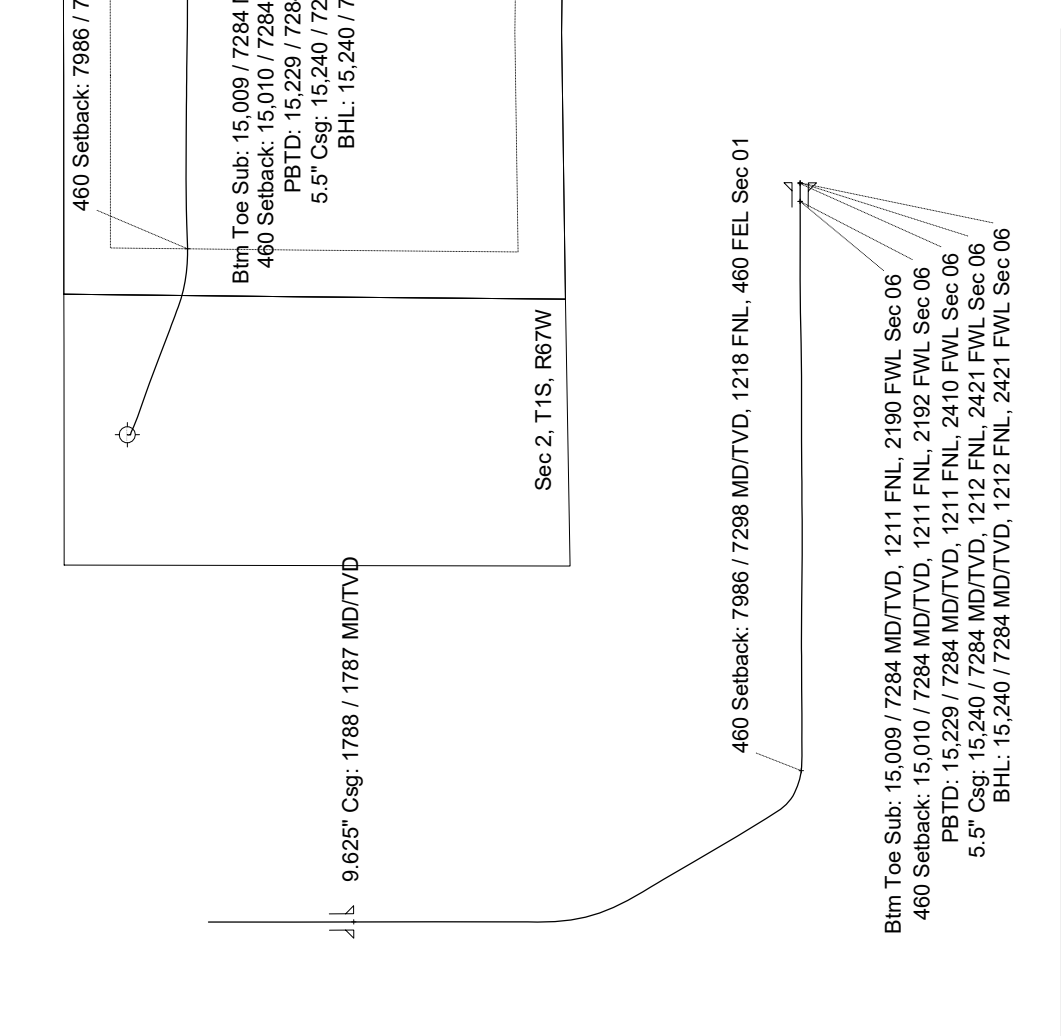
Jan-20-2017
 IGRF-12 Dip: 66.83 deg Field: 82219.1 nT
 Lat: N39 59 2.92 Long: W104 51 6 7302 Elev: 5008.80 ft
 Magnetic North is 9.27 deg East of TRUE North
 To correct azimuth from Magnetic to TRUE add 8.27 deg



Scale 1 cm = 500 ft

-2000 -1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000

<- True Vertical Depth (Feet)



-1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000 11000

Vertical Section (Feet) ->

Scale 1 cm = 500 ft

Azimuth 93.61 with reference 0.00 N, 0.00 E from Slot N08 - Baseline LE 06-092HNX

<- North(Feet)

Scale 1 cm = 400 ft

1600 800 0 -800 -1600 -2400 -3200 -4000 -4800 -5600 -6400

Created by: rmmout Date plotted: 7-Mar-2020
 Plot reference is Baseline LE 06-092HNX (AWB).
 Ref wellpath is Baseline LE 06-092HNX (AWP#1).
 Coordinates are in Feet reference Slot N08 - Baseline LE 06-092HNX.
 True Vertical Depths are reference Rig Datum.
 Measured Depths are reference Rig Datum.
 Rig Datum: Actual Datum #1
 Rig Datum to Mean Sea Level: 5029.00 ft.
 Plot North is aligned to TRUE North.

Great Western Operating Co, LLC
 Directional Survey Report
 Wellpath: Baseline LE 06-092HNX
 MDs and TVDs are from Rig Floor 5029.0ft above Mean Sea
 Level

Wellbore Information

Date Created	Date Revised	API #	RKB above GL	Well Name
Mar-4-2020	Mar-7-2020	05-001-10375	20.00	Baseline LE 06-092HNX

Slot Coordinates

Latitude	Longitude
39.99867200	-104.85149900

Pad Information

Pad Name	Ground Elev.
Baseline	5009.00

Field

Name
Wattenburg

Wellpath Report

MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	DLS [deg/100ft]	Vertical Section[ft]	Lat - NAD 83	Long - NAD 83
0.00	0.00	0.00	0.00	0.00	0.00		0.00	39.99867200	-104.85149900
14.00	0.00	0.00	14.00	0.00	0.00	0.00	0.00	39.99867200	-104.85149900
94.00	0.57	132.41	94.00	-0.27	0.29	0.00	0.31	39.99867126	-104.85149795
181.00	0.13	17.28	181.00	-0.47	0.64	0.00	0.67	39.99867072	-104.85149671
266.00	0.44	355.57	266.00	-0.05	0.65	0.00	0.65	39.99867187	-104.85149669
359.00	0.79	244.65	358.99	0.03	0.04	0.00	0.04	39.99867209	-104.85149886
448.00	0.40	273.65	447.99	-0.21	-0.83	0.00	-0.81	39.99867142	-104.85150195
538.00	0.66	157.20	537.99	-0.67	-0.94	0.00	-0.89	39.99867017	-104.85150235
628.00	1.14	181.28	627.97	-2.04	-0.76	0.00	-0.63	39.99866640	-104.85150170
718.00	1.36	177.76	717.95	-4.00	-0.74	0.00	-0.48	39.99866101	-104.85150163
808.00	2.33	189.19	807.91	-6.88	-0.99	0.00	-0.55	39.99865312	-104.85150252
898.00	2.64	190.51	897.82	-10.72	-1.66	0.00	-0.98	39.99864257	-104.85150491
988.00	2.42	173.60	987.73	-14.65	-1.82	0.00	-0.90	39.99863179	-104.85150550
1078.00	2.15	168.18	1077.66	-18.19	-1.26	0.00	-0.12	39.99862207	-104.85150351
1168.00	2.11	179.35	1167.60	-21.50	-0.90	0.00	0.46	39.99861299	-104.85150221
1258.00	2.07	172.75	1257.54	-24.77	-0.68	0.00	0.89	39.99860402	-104.85150141
1348.00	1.49	163.88	1347.50	-27.50	-0.15	0.00	1.59	39.99859650	-104.85149952
1437.00	1.41	168.18	1436.47	-29.69	0.40	0.00	2.27	39.99859051	-104.85149757
1527.00	0.04	236.65	1526.46	-30.79	0.60	0.00	2.54	39.99858749	-104.85149686
1617.00	0.13	248.52	1616.46	-30.84	0.48	0.00	2.42	39.99858734	-104.85149729
1708.00	0.18	277.96	1707.46	-30.86	0.24	0.00	2.19	39.99858729	-104.85149814
1737.00	0.35	40.39	1736.46	-30.79	0.25	0.00	2.19	39.99858749	-104.85149810
1871.00	0.60	97.71	1870.46	-30.57	1.21	0.00	3.14	39.99858809	-104.85149467
1960.00	0.07	226.78	1959.45	-30.67	1.64	0.00	3.57	39.99858781	-104.85149316
2050.00	0.12	359.13	2049.45	-30.61	1.59	0.00	3.52	39.99858797	-104.85149331
2139.00	0.13	277.81	2138.45	-30.50	1.49	0.00	3.41	39.99858826	-104.85149367
2229.00	0.14	325.20	2228.45	-30.40	1.33	0.00	3.24	39.99858855	-104.85149426
2319.00	0.17	219.90	2318.45	-30.41	1.18	0.00	3.10	39.99858852	-104.85149479
2408.00	0.06	252.46	2407.45	-30.53	1.05	0.00	2.97	39.99858820	-104.85149525
2498.00	0.21	228.60	2497.45	-30.65	0.88	0.00	2.81	39.99858786	-104.85149585
2588.00	0.05	1.43	2587.45	-30.72	0.76	0.00	2.70	39.99858767	-104.85149629
2677.00	0.09	52.61	2676.45	-30.64	0.82	0.00	2.75	39.99858789	-104.85149609
2767.00	0.07	159.21	2766.45	-30.65	0.89	0.00	2.82	39.99858787	-104.85149582
2856.00	0.07	78.98	2855.45	-30.69	0.96	0.00	2.90	39.99858776	-104.85149556
2946.00	0.05	90.88	2945.45	-30.68	1.06	0.00	2.99	39.99858779	-104.85149522
3036.00	0.14	315.23	3035.45	-30.60	1.02	0.00	2.95	39.99858800	-104.85149536
3125.00	0.10	86.90	3124.45	-30.52	1.02	0.00	2.94	39.99858822	-104.85149536
3215.00	0.13	46.47	3214.45	-30.44	1.17	0.00	3.09	39.99858843	-104.85149481
3305.00	0.08	299.92	3304.45	-30.34	1.19	0.00	3.10	39.99858871	-104.85149474
3395.00	0.10	206.18	3394.45	-30.38	1.10	0.00	3.02	39.99858860	-104.85149506
3484.00	0.01	112.47	3483.45	-30.45	1.08	0.00	2.99	39.99858840	-104.85149516
3574.00	0.08	73.60	3573.45	-30.44	1.14	0.00	3.06	39.99858844	-104.85149492
3663.00	0.07	1.69	3662.45	-30.37	1.21	0.00	3.12	39.99858864	-104.85149470
3753.00	0.18	197.19	3752.45	-30.45	1.17	0.00	3.08	39.99858842	-104.85149484
3843.00	0.17	196.19	3842.45	-30.71	1.09	0.00	3.02	39.99858769	-104.85149512
3932.00	0.03	21.85	3931.45	-30.82	1.06	0.00	3.00	39.99858740	-104.85149522
4022.00	0.13	143.03	4021.45	-30.88	1.13	0.00	3.07	39.99858724	-104.85149497
4111.00	0.08	266.84	4110.45	-30.96	1.13	0.00	3.08	39.99858701	-104.85149498
4201.00	0.96	112.56	4200.45	-31.25	1.76	0.00	3.73	39.99858621	-104.85149272
4291.00	4.98	109.28	4290.31	-32.83	6.15	0.00	8.20	39.99858187	-104.85147706
4380.00	5.74	100.55	4378.92	-34.92	14.17	0.00	16.34	39.99857613	-104.85144843
4470.00	9.23	107.35	4468.14	-37.90	25.49	0.00	27.82	39.99856796	-104.85140803
4560.00	11.98	109.52	4556.60	-43.18	41.18	0.00	43.82	39.99855348	-104.85135201
4649.00	13.58	114.79	4643.39	-50.64	59.38	0.00	62.45	39.99853298	-104.85128707
4739.00	16.26	118.02	4730.35	-61.00	80.10	0.00	83.78	39.99850456	-104.85121312
4829.00	19.95	115.73	4815.88	-73.58	105.06	0.00	109.49	39.99847000	-104.85112402
4919.00	24.10	111.88	4899.30	-87.10	135.96	0.00	141.18	39.99843289	-104.85101373
5008.00	27.02	111.41	4979.58	-101.26	171.65	0.00	177.69	39.99839403	-104.85088634
5098.00	27.93	106.73	5059.44	-114.79	210.87	0.00	217.69	39.99835689	-104.85074635
5188.00	26.87	107.38	5139.34	-126.93	250.47	0.00	257.97	39.99832355	-104.85060501
5277.00	30.99	108.58	5217.22	-140.25	291.40	0.00	299.66	39.99828700	-104.85045892
5367.00	31.18	110.43	5294.30	-155.76	335.19	0.00	344.35	39.99824441	-104.85030261
5457.00	30.79	109.75	5371.45	-171.68	378.71	0.00	388.78	39.99820071	-104.85014730
5547.00	31.78	109.99	5448.37	-187.57	422.66	0.00	433.64	39.99815710	-104.84999042

MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	DLS [deg/100ft]	Vertical Section[ft]	Lat - NAD 83	Long - NAD 83
5636.00	31.81	109.90	5524.01	-203.56	466.74	0.00	478.64	39.99811319	-104.84983309
5726.00	31.69	110.40	5600.54	-219.88	511.20	0.00	524.04	39.99806841	-104.84967440
5816.00	30.42	111.17	5677.64	-236.35	554.61	0.00	568.40	39.99802319	-104.84951947
5905.00	31.83	109.89	5753.83	-252.47	597.69	0.00	612.42	39.99797893	-104.84936570
5995.00	31.55	110.73	5830.41	-268.88	642.03	0.00	657.70	39.99793389	-104.84920745
6085.00	31.26	110.41	5907.22	-285.35	685.94	0.00	702.56	39.99788865	-104.84905073
6174.00	31.90	110.80	5983.04	-301.76	729.56	0.00	747.13	39.99784362	-104.84889502
6264.00	32.00	111.08	6059.41	-318.78	774.04	0.00	792.60	39.99779689	-104.84873626
6354.00	31.07	110.96	6136.12	-335.66	817.98	0.00	837.51	39.99775053	-104.84857944
6444.00	31.65	111.17	6212.97	-352.50	861.69	0.00	882.20	39.99770432	-104.84842344
6533.00	31.02	110.78	6288.99	-369.07	904.90	0.00	926.37	39.99765883	-104.84826920
6623.00	31.65	110.12	6365.86	-385.42	948.76	0.00	971.17	39.99761394	-104.84811268
6712.00	32.65	110.91	6441.21	-402.02	993.11	0.00	1016.48	39.99756836	-104.84795437
6802.00	32.35	110.29	6517.12	-419.03	1038.38	0.00	1062.73	39.99752165	-104.84779281
6892.00	32.00	110.73	6593.30	-435.83	1083.26	0.00	1108.58	39.99747555	-104.84763260
6981.00	32.50	110.78	6668.57	-452.66	1127.67	0.00	1153.96	39.99742935	-104.84747410
7071.00	32.89	109.72	6744.31	-469.48	1173.28	0.00	1200.54	39.99738316	-104.84731131
7161.00	32.52	110.67	6820.04	-486.26	1218.92	0.00	1247.15	39.99733708	-104.84714842
7250.00	32.00	110.16	6895.30	-502.84	1263.44	0.00	1292.63	39.99729158	-104.84698953
7340.00	32.93	110.61	6971.23	-519.67	1308.72	0.00	1338.88	39.99724538	-104.84682790
7430.00	38.46	102.85	7044.34	-534.52	1358.97	0.00	1389.97	39.99720459	-104.84664856
7520.00	44.72	103.65	7111.62	-548.23	1417.09	0.00	1448.83	39.99716695	-104.84644113
7609.00	53.25	102.58	7169.97	-563.41	1482.44	0.00	1515.01	39.99712525	-104.84620789
7699.00	65.76	98.92	7215.56	-577.69	1558.49	0.00	1591.80	39.99708605	-104.84593646
7789.00	68.96	93.96	7250.22	-586.96	1640.99	0.00	1674.73	39.99706059	-104.84564200
7878.00	74.18	91.22	7278.35	-590.74	1725.30	0.00	1759.11	39.99705019	-104.84534108
7968.00	83.21	91.03	7295.98	-592.47	1813.44	0.00	1847.19	39.99704543	-104.84502647
8058.00	87.19	87.51	7303.51	-591.32	1903.09	0.00	1936.58	39.99704857	-104.84470651
8147.00	90.61	87.73	7305.22	-587.63	1991.98	0.00	2025.06	39.99705869	-104.84438923
8237.00	90.26	89.20	7304.53	-585.22	2081.95	0.00	2114.70	39.99706529	-104.84406814
8327.00	89.47	88.66	7304.75	-583.54	2171.93	0.00	2204.39	39.99706988	-104.84374697
8416.00	90.07	88.37	7305.10	-581.23	2260.90	0.00	2293.04	39.99707619	-104.84342943
8506.00	89.69	89.57	7305.29	-579.61	2350.88	0.00	2382.74	39.99708061	-104.84310826
8595.00	89.73	90.17	7305.74	-579.41	2439.88	0.00	2471.55	39.99708114	-104.84279061
8685.00	89.79	89.55	7306.12	-579.19	2529.88	0.00	2561.36	39.99708172	-104.84246938
8775.00	90.58	89.72	7305.83	-578.62	2619.87	0.00	2651.14	39.99708327	-104.84214817
8864.00	91.18	90.17	7304.46	-578.53	2708.86	0.00	2739.95	39.99708347	-104.84183055
8954.00	91.07	90.01	7302.69	-578.67	2798.85	0.00	2829.76	39.99708306	-104.84150938
9044.00	90.07	91.20	7301.80	-579.62	2888.83	0.00	2919.63	39.99708042	-104.84118820
9133.00	90.18	90.48	7301.60	-580.93	2977.82	0.00	3008.52	39.99707681	-104.84087058
9223.00	89.94	90.32	7301.51	-581.56	3067.82	0.00	3098.38	39.99707506	-104.84054936
9313.00	89.88	90.24	7301.65	-582.00	3157.82	0.00	3188.23	39.99707382	-104.84022814
9402.00	90.74	90.10	7301.17	-582.26	3246.82	0.00	3277.06	39.99707306	-104.83991049
9492.00	90.65	90.70	7300.08	-582.89	3336.81	0.00	3366.92	39.99707130	-104.83958930
9582.00	90.04	90.74	7299.54	-584.02	3426.80	0.00	3456.80	39.99706817	-104.83926810
9671.00	89.66	90.34	7299.77	-584.86	3515.79	0.00	3545.67	39.99706583	-104.83895046
9761.00	89.36	90.93	7300.54	-585.86	3605.78	0.00	3635.54	39.99706306	-104.83862927
9850.00	89.35	91.06	7301.54	-587.40	3694.77	0.00	3724.45	39.99705878	-104.83831168
9940.00	89.69	90.41	7302.30	-588.56	3784.75	0.00	3814.33	39.99705557	-104.83799049
10030.00	89.75	90.52	7302.74	-589.29	3874.75	0.00	3904.19	39.99705353	-104.83766928
10120.00	90.06	90.37	7302.88	-589.98	3964.75	0.00	3994.05	39.99705157	-104.83734806
10209.00	89.27	90.49	7303.40	-590.65	4053.74	0.00	4082.91	39.99704970	-104.83703042
10299.00	88.98	90.85	7304.78	-591.70	4143.73	0.00	4172.78	39.99704677	-104.83670926
10389.00	89.12	89.93	7306.27	-592.32	4233.71	0.00	4262.63	39.99704505	-104.83638809
10478.00	89.27	90.00	7307.52	-592.26	4322.70	0.00	4351.44	39.99704515	-104.83607046
10568.00	89.15	90.64	7308.76	-592.77	4412.69	0.00	4441.28	39.99704373	-104.83574927
10658.00	90.28	90.27	7309.21	-593.48	4502.69	0.00	4531.14	39.99704172	-104.83542806
10748.00	90.43	89.30	7308.65	-593.14	4592.68	0.00	4620.94	39.99704260	-104.83510685
10837.00	89.80	90.47	7308.47	-592.96	4681.68	0.00	4709.75	39.99704305	-104.83478920
10927.00	90.05	89.41	7308.59	-592.87	4771.68	0.00	4799.56	39.99704326	-104.83446798
11017.00	90.45	89.87	7308.20	-592.30	4861.68	0.00	4889.34	39.99704477	-104.83414676
11106.00	90.21	90.02	7307.69	-592.22	4950.67	0.00	4978.16	39.99704495	-104.83382911
11196.00	90.38	89.66	7307.22	-591.97	5040.67	0.00	5067.96	39.99704559	-104.83350789
11286.00	90.73	89.59	7306.35	-591.38	5130.67	0.00	5157.74	39.99704716	-104.83318668
11376.00	89.95	89.74	7305.82	-590.85	5220.66	0.00	5247.52	39.99704855	-104.83286547
11465.00	90.44	88.95	7305.51	-589.83	5309.65	0.00	5336.28	39.99705129	-104.83254784
11555.00	90.24	88.60	7304.98	-587.91	5399.63	0.00	5425.95	39.99705652	-104.83222669
11645.00	91.35	88.72	7303.73	-585.81	5489.60	0.00	5515.61	39.99706224	-104.83190558
11734.00	90.28	88.66	7302.47	-583.77	5578.56	0.00	5604.27	39.99706777	-104.83158804
11824.00	90.27	89.95	7302.03	-582.68	5668.55	0.00	5694.01	39.99707072	-104.83126685
11914.00	89.74	89.90	7302.03	-582.56	5758.55	0.00	5783.82	39.99707098	-104.83094562
12003.00	89.75	87.72	7302.42	-580.71	5847.53	0.00	5872.51	39.99707600	-104.83062806
12093.00	90.32	88.87	7302.37	-578.04	5937.49	0.00	5962.12	39.99708329	-104.83030697
12182.00	90.18	89.37	7301.98	-576.67	6026.48	0.00	6050.84	39.99708698	-104.82998936
12272.00	90.13	89.99	7301.74	-576.17	6116.47	0.00	6140.63	39.99708830	-104.82966814
12361.00	90.30	88.93	7301.40	-575.33	6205.47	0.00	6229.39	39.99709054	-104.82935050
12451.00	90.29	88.88	7300.94	-573.61	6295.45	0.00	6319.09	39.99709520	-104.82902933
12541.00	90.28	88.89	7300.49	-571.86	6385.43	0.00	6408.78	39.99709995	-104.82870817
12630.00	90.39	88.68	7299.97	-569.97	6474.41	0.00	6497.46	39.99710507	-104.82839059
12720.00	89.61	90.18	7299.97	-569.07	6564.40	0.00	6587.22	39.99710746	-104.82806939
12810.00	89.79	90.02	7300.44	-569.23	6654.40	0.00	6677.05	39.99710696	-104.82774816
12900.00	89.87	90.39	7300.71	-569.55	6744.40	0.00	6766.89	39.99710601	-104.82742694
12989.00	90.78	90.27	7300.20	-570.07	6833.40	0.00	6855.74	39.99710454	-104.82710930
13079.00	90.92	89.80	7298.87	-570.12	6923.39	0.00	6945.56	39.99710432	-104.82678811
13169.00	91.13	91.12	7297.26	-570.84	7013.37	0.00	7035.40	39.99710227	-104.82646695
13258.00	91.24	89.79	7295.42	-571.55	7102.34	0.00	7124.25	39.99710026	-104.82614938
13348.00	91.37	90.12	7293.37	-571.48	7192.32	0.00	7214.04	39.99710038	-104.82582823

MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	DLS [deg/100ft]	Vertical Section[ft]	Lat - NAD 83	Long - NAD 83
13438.00	91.13	91.06	7291.40	-572.41	7282.29	0.00	7303.89	39.99709776	-104.82550710
13527.00	91.25	90.68	7289.56	-573.76	7371.26	0.00	7392.77	39.99709398	-104.82518955
13617.00	91.41	89.98	7287.47	-574.28	7461.24	0.00	7482.60	39.99709249	-104.82486842
13707.00	91.29	89.94	7285.35	-574.21	7551.21	0.00	7572.39	39.99709258	-104.82454728
13796.00	90.52	89.97	7283.94	-574.14	7640.20	0.00	7661.20	39.99709270	-104.82422967
13886.00	89.85	90.89	7283.65	-574.82	7730.19	0.00	7751.06	39.99709077	-104.82390846
13976.00	90.01	90.01	7283.76	-575.52	7820.19	0.00	7840.92	39.99708875	-104.82358724
14065.00	89.78	90.71	7283.92	-576.08	7909.19	0.00	7929.77	39.99708714	-104.82326959
14154.00	89.98	90.17	7284.11	-576.77	7998.18	0.00	8018.64	39.99708519	-104.82295195
14244.00	89.77	90.00	7284.31	-576.90	8088.18	0.00	8108.46	39.99708474	-104.82263072
14333.00	90.12	90.22	7284.39	-577.07	8177.18	0.00	8197.30	39.99708419	-104.82231307
14423.00	90.08	90.69	7284.23	-577.79	8267.18	0.00	8287.16	39.99708215	-104.82199185
14513.00	89.90	90.67	7284.25	-578.85	8357.17	0.00	8377.04	39.99707913	-104.82167065
14602.00	90.12	88.77	7284.23	-578.42	8446.17	0.00	8465.83	39.99708024	-104.82135301
14692.00	90.00	89.75	7284.14	-577.26	8536.16	0.00	8555.57	39.99708335	-104.82103181
14782.00	89.93	88.99	7284.20	-576.27	8626.15	0.00	8645.32	39.99708598	-104.82071061
14871.00	89.95	89.24	7284.29	-574.89	8715.14	0.00	8734.05	39.99708967	-104.82039298
14961.00	90.01	89.39	7284.32	-573.82	8805.14	0.00	8823.80	39.99709254	-104.82007178
15051.00	90.15	89.76	7284.19	-573.15	8895.13	0.00	8913.57	39.99709428	-104.81975056
15140.00	90.04	90.69	7284.05	-573.50	8984.13	0.00	9002.42	39.99709323	-104.81943291
15197.00	89.78	89.96	7284.14	-573.82	9041.13	0.00	9059.32	39.99709229	-104.81922947
15240.00	89.78	89.96	7284.30	-573.79	9084.13	0.00	9102.23	39.99709233	-104.81907600

Comments

MD[ft]	TVD[ft]	North[ft]	East[ft]	Lat - NAD 83	Long - NAD 83	Comment
1788.00	1787.46	-30.61	0.52	39.99858798	-104.85149715	9.625" Csg: 1788 / 1787 MD/TVD
7985.99	7297.98	-592.68	1831.32	39.99704485	-104.84496267	460 Setback: 7986 / 7298 MD/TVD, 1218 FNL, 460 FWL Sec 01
15009.36	7284.28	-573.39	8853.50	39.99709367	-104.81989918	Btm Toe Sub: 15,009 / 7284 MD/TVD, 1211 FNL, 2190 FWL Sec 06
15010.44	7284.28	-573.38	8854.58	39.99709369	-104.81989532	460 Setback: 15,010 / 7284 MD/TVD, 1211 FNL, 2192 FWL Sec 06
15229.17	7284.26	-573.80	9073.30	39.99709232	-104.81911465	PBTD: 15,229 / 7284 MD/TVD, 1211 FNL, 2410 FWL Sec 06
15240.00	7284.30	-573.79	9084.13	39.99709233	-104.81907600	5.5" Csg: 15,240 / 7284 MD/TVD, 1212 FNL, 2421 FWL Sec 06
15240.00	7284.30	-573.79	9084.13	39.99709233	-104.81907600	BHL: 15,240 / 7284 MD/TVD, 1212 FNL, 2421 FWL Sec 06

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	1788.00	1787.46	-30.61	0.52
8.500	0.00	0.00	0.00	0.00	15240.00	7284.30	-573.79	9084.13

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	1788.00	1787.46	-30.61	0.52
5 1/2in Casing	0.00	0.00	0.00	0.00	15240.00	7284.30	-573.79	9084.13

Survey Tool Program

Reference	Survey Name	MD[ft]	TVD[ft]	Survey Tool
794500	As Drilled - 20200307	15240.00	7284.30	MWD

Coordinates are from Slot
MD's and TVD's are from Rig Floor 5029.0ft above Mean Sea Level
Vertical Section is from Wellhead on azimuth 93.61 degrees
Bottom hole distance is 9102.23 Feet on azimuth 93.61 degrees from Wellhead
Survey calculation uses Minimum Curvature method