



Survey Report

Service Company: Aim Directional Services

Location: Jal

Well: Nandina Fed Com 25 36 31 114H

Rig: H&P 616

API or UWI: 30-025-46334

Job Number: WT-19-160

State: NM

Operating Company: Ameredev Operating LLC

County: Lea

Magnetic Declination: 5.98

Country: USA

Proposed Azimuth: 359.27

Comment

North Reference: GRID

Latitude: 32.0802083333333

Longitude: -103.305205555556

Tie-In Data

MD	Inclination	Azimuth	TVD	NS	EW
0.00	0.00	0.00	0.00	0.00	0.00

Survey Data

MD	Inclination	Azimuth	TVD	NS	EW	CA	CD	VS	DLS
70.00	1.00	200.00	70.00	-0.57	-0.21	200.00	0.61	-0.57	1.43
149.00	1.80	26.00	148.99	-0.11	0.10	137.03	0.15	-0.11	3.54
235.00	1.00	30.00	234.96	1.76	1.07	31.25	2.06	1.74	0.94
327.00	0.90	357.00	326.95	3.17	1.43	24.25	3.48	3.16	0.60
422.00	0.90	4.00	421.94	4.66	1.44	17.20	4.88	4.64	0.12
516.00	0.90	3.00	515.93	6.14	1.53	14.03	6.33	6.12	0.02
610.00	1.30	5.00	609.91	7.94	1.66	11.85	8.11	7.91	0.43
705.00	1.00	5.00	704.89	9.84	1.83	10.55	10.01	9.81	0.32
799.00	0.40	346.00	798.88	10.97	1.82	9.43	11.12	10.95	0.68
894.00	0.10	181.00	893.88	11.21	1.74	8.83	11.34	11.19	0.52
988.00	0.50	13.00	987.88	11.53	1.83	9.03	11.67	11.50	0.64
1083.00	1.20	334.00	1082.87	12.83	1.49	6.62	12.91	12.81	0.92
1242.00	1.16	298.73	1241.84	15.10	-0.65	357.53	15.11	15.10	0.45
1336.00	1.18	279.77	1335.82	15.72	-2.44	351.18	15.91	15.75	0.41
1430.00	1.43	288.19	1429.79	16.25	-4.51	344.49	16.86	16.30	0.33
1525.00	1.03	249.63	1524.77	16.32	-6.43	338.48	17.54	16.40	0.94

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MD	Inclination	Azimuth	TVD	NS	EW	CA	CD	VS	DLS
1714.00	1.13	206.25	1713.74	14.06	-8.85	327.80	16.61	14.17	0.43
1809.00	0.94	190.46	1808.73	12.45	-9.41	322.93	15.61	12.57	0.36
1903.00	0.89	192.70	1902.72	10.98	-9.71	318.52	14.66	11.10	0.07
1998.00	0.98	176.48	1997.70	9.45	-9.82	313.90	13.63	9.58	0.29
2092.00	0.68	147.77	2091.69	8.18	-9.47	310.80	12.51	8.30	0.54
2187.00	4.24	175.36	2186.59	4.20	-8.89	295.28	9.83	4.31	3.84
2281.00	5.50	174.16	2280.25	-3.75	-8.15	245.30	8.97	-3.64	1.34
2376.00	5.83	173.66	2374.79	-13.07	-7.15	208.69	14.90	-12.98	0.35
2470.00	7.28	169.18	2468.17	-23.67	-5.51	193.10	24.30	-23.60	1.63
2565.00	7.05	164.30	2562.43	-35.19	-2.80	184.55	35.30	-35.15	0.68
2659.00	7.31	153.14	2655.70	-46.08	1.46	178.18	46.10	-46.10	1.51
2754.00	7.14	147.95	2749.94	-56.48	7.33	172.61	56.95	-56.57	0.71
2848.00	7.49	141.64	2843.18	-66.23	14.23	167.87	67.74	-66.41	0.93
2943.00	7.95	137.92	2937.32	-75.96	22.47	163.52	79.22	-76.24	0.71
3037.00	7.14	144.54	3030.51	-85.55	30.22	160.54	90.73	-85.93	1.26
3132.00	7.15	139.31	3124.77	-94.84	37.50	158.43	101.98	-95.31	0.68
3227.00	5.94	144.13	3219.15	-103.31	44.24	156.82	112.38	-103.86	1.40
3321.00	5.10	159.39	3312.72	-111.16	48.56	156.40	121.30	-111.77	1.79
3416.00	5.26	179.07	3407.34	-119.47	50.11	157.24	129.55	-120.09	1.87
3511.00	5.24	176.97	3501.94	-128.15	50.41	158.53	137.71	-128.78	0.20
3605.00	5.11	179.48	3595.56	-136.62	50.68	159.65	145.72	-137.26	0.28
3700.00	4.51	182.52	3690.22	-144.59	50.55	160.73	153.17	-145.22	0.69
3794.00	5.52	168.67	3783.86	-152.71	51.28	161.44	161.09	-153.35	1.67
3889.00	6.32	165.35	3878.36	-162.25	53.50	161.75	170.84	-162.92	0.92
3983.00	6.05	165.61	3971.81	-172.05	56.04	161.96	180.95	-172.75	0.29
4077.00	6.03	162.96	4065.29	-181.57	58.72	162.08	190.83	-182.31	0.30
4172.00	6.11	155.64	4159.76	-190.95	62.26	161.94	200.84	-191.73	0.82
4266.00	6.00	154.07	4253.23	-199.93	66.48	161.61	210.69	-200.76	0.21
4361.00	6.06	151.23	4347.71	-208.79	71.06	161.20	220.55	-209.67	0.32
4456.00	5.95	152.77	4442.18	-217.56	75.73	160.81	230.36	-218.51	0.21
4550.00	6.30	152.58	4535.65	-226.47	80.33	160.47	240.30	-227.48	0.37
4645.00	5.92	150.49	4630.11	-235.36	85.14	160.11	250.29	-236.43	0.46
4739.00	5.92	151.24	4723.61	-243.83	89.86	159.77	259.86	-244.95	0.08
4834.00	5.84	149.56	4818.11	-252.29	94.67	159.43	269.47	-253.48	0.20
4928.00	5.85	147.52	4911.62	-260.45	99.67	159.06	278.87	-261.70	0.22
5023.00	6.53	161.12	5006.07	-269.65	104.01	158.91	289.02	-270.95	1.70
5117.00	6.68	158.91	5099.45	-279.81	107.71	158.95	299.82	-281.16	0.31

MD	Inclination	Azimuth	TVD	NS	EW	CA	CD	VS	DLS
5212.00	6.43	159.96	5193.82	-289.96	111.52	158.96	310.67	-291.36	0.29
5306.00	6.49	159.61	5287.23	-299.89	115.18	158.99	321.24	-301.33	0.08
5401.00	5.83	157.36	5381.68	-309.37	118.90	158.98	331.44	-310.86	0.74
5495.00	5.87	162.97	5475.19	-318.37	122.15	159.01	341.00	-319.90	0.61
5590.00	6.15	167.66	5569.67	-327.99	124.66	159.19	350.88	-329.55	0.59
5684.00	5.95	166.43	5663.14	-337.65	126.88	159.40	360.70	-339.23	0.25
5779.00	5.57	164.64	5757.66	-346.88	129.26	159.56	370.18	-348.50	0.44
5873.00	5.57	166.67	5851.22	-355.72	131.52	159.71	379.25	-357.36	0.21
5968.00	5.58	167.44	5945.77	-364.71	133.58	159.88	388.40	-366.38	0.08
6062.00	5.45	166.38	6039.34	-373.51	135.63	160.04	397.37	-375.21	0.18
6157.00	5.34	165.29	6133.92	-382.17	137.81	160.17	406.26	-383.89	0.16
6251.00	5.21	165.13	6227.52	-390.53	140.02	160.28	414.87	-392.28	0.14
6346.00	6.02	165.96	6322.06	-399.53	142.33	160.39	424.12	-401.31	0.86
6441.00	6.11	163.30	6416.53	-409.20	145.00	160.49	434.13	-411.02	0.31
6535.00	6.98	163.80	6509.92	-419.48	148.03	160.56	444.83	-421.33	0.93
6629.00	6.70	160.91	6603.25	-430.15	151.41	160.61	456.02	-432.04	0.47
6724.00	6.15	162.51	6697.65	-440.24	154.76	160.63	466.64	-442.17	0.61
6819.00	5.76	160.12	6792.14	-449.57	157.91	160.65	476.50	-451.55	0.49
6913.00	5.67	158.91	6885.67	-458.34	161.18	160.63	485.86	-460.36	0.16
7008.00	6.58	158.16	6980.13	-467.77	164.89	160.58	495.99	-469.84	0.96
7103.00	6.19	159.39	7074.54	-477.62	168.72	160.54	506.54	-479.73	0.44
7197.00	6.19	157.05	7167.99	-487.03	172.48	160.50	516.67	-489.19	0.27
7292.00	5.58	156.92	7262.49	-495.99	176.29	160.43	526.39	-498.20	0.64
7386.00	4.99	159.92	7356.09	-504.04	179.49	160.40	535.04	-506.28	0.69
7481.00	4.77	156.31	7450.74	-511.54	182.49	160.37	543.11	-513.82	0.40
7575.00	3.88	153.46	7544.48	-517.96	185.48	160.30	550.17	-520.28	0.97
7670.00	3.67	150.55	7639.27	-523.48	188.41	160.21	556.36	-525.84	0.30
7764.00	3.00	149.51	7733.11	-528.22	191.14	160.11	561.74	-530.62	0.72
7859.00	2.96	148.71	7827.98	-532.46	193.68	160.01	566.59	-534.89	0.06
7953.00	1.96	148.21	7921.89	-535.90	195.78	159.93	570.55	-538.35	1.06
8048.00	1.74	144.93	8016.84	-538.46	197.47	159.86	573.53	-540.94	0.26
8142.00	0.77	130.69	8110.82	-540.04	198.77	159.79	575.46	-542.53	1.08
8237.00	0.80	345.11	8205.82	-539.82	199.08	159.76	575.36	-542.31	1.58
8332.00	0.95	357.65	8300.81	-538.39	198.88	159.73	573.95	-540.88	0.26
8426.00	0.63	353.82	8394.80	-537.10	198.79	159.69	572.71	-539.59	0.34
8521.00	0.65	345.62	8489.79	-536.06	198.60	159.67	571.66	-538.54	0.10
8615.00	0.24	327.31	8583.79	-535.37	198.36	159.67	570.94	-537.86	0.46

MD	Inclination	Azimuth	TVD	NS	EW	CA	CD	VS	DLS
8710.00	0.10	15.22	8678.79	-535.13	198.28	159.67	570.68	-537.61	0.20
8804.00	0.20	32.68	8772.79	-534.91	198.39	159.65	570.51	-537.39	0.12
8899.00	0.16	129.36	8867.79	-534.85	198.58	159.63	570.53	-537.34	0.28
8993.00	0.08	93.99	8961.79	-534.94	198.75	159.62	570.67	-537.43	0.11
9088.00	0.10	94.03	9056.79	-534.95	198.89	159.60	570.73	-537.44	0.02
9183.00	0.20	204.64	9151.79	-535.11	198.91	159.61	570.88	-537.60	0.27
9277.00	0.67	228.70	9245.78	-535.62	198.43	159.67	571.19	-538.11	0.53
9371.00	0.86	219.95	9339.78	-536.52	197.56	159.79	571.74	-539.00	0.24
9466.00	0.54	211.21	9434.77	-537.45	196.87	159.88	572.38	-539.92	0.35
9560.00	0.46	192.17	9528.76	-538.20	196.56	159.94	572.97	-540.66	0.19
9655.00	0.51	152.30	9623.76	-538.95	196.68	159.95	573.71	-541.41	0.35
9749.00	0.85	55.50	9717.76	-538.92	197.45	159.88	573.96	-541.40	1.11
9844.00	1.24	11.67	9812.74	-537.52	198.24	159.76	572.91	-540.00	0.91
9938.00	1.80	2.38	9906.71	-535.05	198.50	159.65	570.68	-537.53	0.65
10016.00	1.92	11.54	9984.67	-532.54	198.81	159.53	568.44	-535.03	0.41
10033.00	2.04	16.60	10001.66	-531.97	198.96	159.49	567.96	-534.47	1.25
10127.00	2.03	16.84	10095.60	-528.78	199.92	159.29	565.31	-531.28	0.01
10222.00	1.79	13.45	10190.55	-525.72	200.75	159.10	562.75	-528.24	0.28
10317.00	1.52	8.06	10285.51	-523.03	201.27	158.95	560.42	-525.56	0.33
10411.00	1.39	12.54	10379.48	-520.69	201.70	158.83	558.39	-523.21	0.18
10506.00	1.31	3.79	10474.45	-518.48	202.02	158.71	556.44	-521.01	0.23
10600.00	1.46	2.50	10568.42	-516.21	202.14	158.62	554.38	-518.74	0.16
10695.00	1.16	357.43	10663.40	-514.04	202.15	158.53	552.36	-516.57	0.34
10789.00	1.23	244.69	10757.39	-513.52	201.20	158.60	551.53	-516.04	2.12
10883.00	1.40	240.13	10851.36	-514.52	199.29	158.83	551.77	-517.02	0.21
10978.00	1.77	248.76	10946.33	-515.63	196.91	159.10	551.95	-518.10	0.46
11072.00	2.09	248.19	11040.27	-516.80	193.97	159.43	552.00	-519.22	0.34
11167.00	2.09	255.05	11135.21	-517.89	190.69	159.79	551.88	-520.27	0.26
11261.00	2.39	258.41	11229.14	-518.72	187.11	160.16	551.44	-521.06	0.35
11331.00	2.40	262.55	11299.08	-519.21	184.23	160.46	550.92	-521.51	0.25
11354.00	2.28	264.14	11322.06	-519.31	183.30	160.56	550.71	-521.61	0.59
11448.00	5.26	311.09	11415.86	-516.67	178.19	160.97	546.53	-518.90	4.32
11497.00	10.81	325.83	11464.37	-511.39	173.91	161.22	540.15	-513.56	11.99
11543.00	16.20	327.62	11509.08	-502.39	168.04	161.51	529.75	-504.50	11.75
11638.00	23.79	325.25	11598.29	-475.42	150.00	162.49	498.52	-477.29	8.03
11685.00	30.25	327.28	11640.14	-457.65	138.18	163.20	478.06	-459.38	13.88
11732.00	34.60	330.09	11679.80	-436.11	125.12	163.99	453.71	-437.67	9.79

MD	Inclination	Azimuth	TVD	NS	EW	CA	CD	VS	DLS
11785.00	39.77	333.32	11722.02	-407.90	110.00	164.91	422.47	-409.27	10.42
11864.00	46.98	335.11	11779.40	-359.06	86.47	166.46	369.32	-360.13	9.26
11896.00	50.46	335.58	11800.51	-337.21	76.44	167.23	345.76	-338.15	10.93
11928.00	55.72	335.69	11819.72	-313.91	65.89	168.15	320.75	-314.72	16.44
11959.00	60.45	333.68	11836.11	-290.13	54.63	169.34	295.23	-290.81	16.22
11991.00	66.58	334.11	11850.37	-264.42	42.03	170.97	267.74	-264.94	19.19
12038.00	74.12	339.10	11866.17	-223.83	24.52	173.75	225.17	-224.12	18.90
12085.00	79.65	341.07	11876.84	-180.81	8.94	177.17	181.03	-180.91	12.45
12132.00	82.51	342.42	11884.12	-136.72	-5.60	182.34	136.83	-136.63	6.71
12180.00	84.89	345.61	11889.39	-90.86	-18.73	191.65	92.77	-90.61	8.26
12227.00	86.00	349.42	11893.12	-45.13	-28.86	212.60	53.56	-44.75	8.42
12274.00	87.48	354.22	11895.80	1.31	-35.53	272.11	35.55	1.76	10.67
12369.00	88.27	359.69	11899.32	96.07	-40.57	337.11	104.29	96.58	5.81
12483.00	87.38	359.93	11903.65	209.99	-40.95	348.97	213.94	210.49	0.81
12577.00	88.17	0.16	11907.30	303.91	-40.87	352.34	306.65	304.41	0.88
12672.00	89.29	0.23	11909.41	398.89	-40.55	354.20	400.95	399.37	1.18
12767.00	90.74	1.15	11909.38	493.88	-39.41	355.44	495.45	494.34	1.81
12861.00	89.91	2.05	11908.85	587.84	-36.78	356.42	588.99	588.26	1.30
12956.00	90.06	4.39	11908.87	682.68	-31.45	357.36	683.41	683.03	2.47
13051.00	86.51	1.97	11911.72	777.47	-26.18	358.07	777.91	777.74	4.52
13146.00	87.51	358.91	11916.67	872.33	-25.45	358.33	872.70	872.58	3.38
13241.00	86.43	357.76	11921.69	967.15	-28.21	358.33	967.56	967.43	1.66
13336.00	87.44	355.91	11926.77	1061.86	-33.44	358.20	1062.39	1062.20	2.22
13431.00	87.66	356.72	11930.83	1156.58	-39.54	358.04	1157.26	1156.99	0.88
13526.00	89.37	357.90	11933.30	1251.44	-44.00	357.99	1252.21	1251.90	2.19
13621.00	88.66	359.06	11934.93	1346.39	-46.52	358.02	1347.19	1346.87	1.43
13716.00	85.19	358.80	11940.02	1441.22	-48.29	358.08	1442.03	1441.72	3.66
13811.00	84.76	358.10	11948.35	1535.82	-50.85	358.10	1536.66	1536.34	0.86
13906.00	87.87	358.51	11954.45	1630.57	-53.65	358.12	1631.45	1631.12	3.30
14001.00	88.15	359.40	11957.75	1725.50	-55.39	358.16	1726.39	1726.06	0.98
14096.00	89.61	0.79	11959.61	1820.47	-55.23	358.26	1821.31	1821.03	2.12
14191.00	94.22	0.94	11956.43	1915.38	-53.79	358.39	1916.14	1915.91	4.86
14286.00	88.84	359.86	11953.90	2010.31	-53.13	358.49	2011.01	2010.83	5.78
14380.00	86.86	359.92	11957.42	2104.24	-53.31	358.55	2104.92	2104.75	2.11
14475.00	88.93	1.11	11960.91	2199.17	-52.46	358.63	2199.79	2199.66	2.51
14570.00	87.88	0.33	11963.56	2294.12	-51.27	358.72	2294.69	2294.59	1.38
14665.00	90.73	1.77	11964.71	2389.08	-49.52	358.81	2389.60	2389.52	3.36

MD	Inclination	Azimuth	TVD	NS	EW	CA	CD	VS	DLS
14759.00	88.20	0.19	11965.59	2483.06	-47.92	358.89	2483.52	2483.47	3.17
14854.00	88.22	0.05	11968.55	2578.01	-47.72	358.94	2578.45	2578.41	0.15
14949.00	87.99	359.44	11971.70	2672.96	-48.14	358.97	2673.39	2673.35	0.69
15044.00	91.08	0.34	11972.47	2767.94	-48.32	359.00	2768.36	2768.33	3.39
15138.00	91.09	0.72	11970.69	2861.92	-47.45	359.05	2862.31	2862.29	0.40
15233.00	89.04	359.14	11970.58	2956.91	-47.57	359.08	2957.29	2957.28	2.72
15328.00	86.28	358.76	11974.46	3051.81	-49.31	359.07	3052.20	3052.19	2.93
15422.00	87.60	358.56	11979.48	3145.64	-51.50	359.06	3146.07	3146.05	1.42
15517.00	88.46	357.85	11982.74	3240.54	-54.48	359.04	3241.00	3240.97	1.17
15612.00	89.26	359.06	11984.63	3335.48	-57.04	359.02	3335.97	3335.94	1.53
15706.00	88.79	359.03	11986.23	3429.46	-58.61	359.02	3429.96	3429.93	0.50
15801.00	87.32	358.53	11989.46	3524.38	-60.63	359.01	3524.90	3524.86	1.63
15895.00	90.30	359.35	11991.41	3618.33	-62.36	359.01	3618.87	3618.83	3.29
15990.00	91.75	0.08	11989.71	3713.31	-62.84	359.03	3713.84	3713.81	1.71
16085.00	91.82	0.00	11986.75	3808.27	-62.77	359.06	3808.78	3808.76	0.11
16179.00	88.52	359.69	11986.47	3902.25	-63.02	359.07	3902.76	3902.74	3.53
16274.00	87.19	0.23	11990.03	3997.18	-63.09	359.10	3997.68	3997.66	1.51
16369.00	89.41	359.97	11992.84	4092.13	-62.93	359.12	4092.62	4092.60	2.35
16464.00	90.63	0.08	11992.81	4187.13	-62.88	359.14	4187.60	4187.59	1.29
16559.00	90.64	359.82	11991.76	4282.13	-62.97	359.16	4282.59	4282.58	0.27
16653.00	92.08	0.05	11989.53	4376.10	-63.07	359.17	4376.55	4376.55	1.55
16748.00	90.98	358.90	11986.99	4471.06	-63.94	359.18	4471.51	4471.51	1.67
16843.00	91.59	358.28	11984.86	4566.00	-66.28	359.17	4566.48	4566.48	0.92
16938.00	92.95	358.66	11981.10	4660.89	-68.82	359.15	4661.40	4661.39	1.49
17032.00	91.36	358.02	11977.56	4754.78	-71.54	359.14	4755.32	4755.31	1.82
17127.00	92.67	359.59	11974.22	4849.70	-73.52	359.13	4850.26	4850.24	2.15
17222.00	91.18	359.91	11971.03	4944.64	-73.93	359.14	4945.19	4945.18	1.60
17317.00	90.25	358.46	11969.85	5039.62	-75.28	359.14	5040.18	5040.17	1.81
17412.00	91.82	358.34	11968.13	5134.56	-77.94	359.13	5135.16	5135.14	1.66
17507.00	92.02	358.48	11964.95	5229.47	-80.57	359.12	5230.10	5230.08	0.26
17601.00	90.74	358.62	11962.68	5323.42	-82.95	359.11	5324.06	5324.04	1.37
17696.00	93.86	359.52	11958.87	5418.31	-84.49	359.11	5418.97	5418.95	3.42
17791.00	95.69	359.39	11950.96	5512.98	-85.39	359.11	5513.64	5513.62	1.93
17886.00	96.03	358.50	11941.26	5607.46	-87.13	359.11	5608.14	5608.12	1.00
17981.00	96.17	0.12	11931.17	5701.91	-88.27	359.11	5702.60	5702.58	1.70
18076.00	94.96	1.03	11921.95	5796.46	-87.32	359.14	5797.12	5797.10	1.59
18171.00	91.41	359.56	11916.68	5891.29	-86.83	359.16	5891.93	5891.92	4.04

MD	Inclination	Azimuth	TVD	NS	EW	CA	CD	VS	DLS
18266.00	93.07	359.45	11912.96	5986.21	-87.65	359.16	5986.86	5986.84	1.75
18361.00	88.81	359.47	11911.41	6081.17	-88.55	359.17	6081.82	6081.81	4.48
18456.00	88.44	358.38	11913.69	6176.13	-90.33	359.16	6176.79	6176.78	1.21
18551.00	90.76	358.90	11914.35	6271.09	-92.58	359.15	6271.78	6271.76	2.50
18646.00	91.56	358.82	11912.43	6366.05	-94.47	359.15	6366.76	6366.74	0.85
18741.00	93.49	359.05	11908.24	6460.94	-96.24	359.15	6461.66	6461.64	2.05
18836.00	94.35	0.38	11901.75	6555.71	-96.71	359.15	6556.43	6556.41	1.66
18931.00	91.11	359.64	11897.22	6650.59	-96.69	359.17	6651.30	6651.29	3.50
19026.00	91.53	2.36	11895.03	6745.54	-95.03	359.19	6746.21	6746.21	2.90
19120.00	94.02	2.49	11890.48	6839.34	-91.06	359.24	6839.95	6839.95	2.65
19215.00	96.69	1.59	11881.62	6933.86	-87.69	359.28	6934.41	6934.41	2.96
19310.00	92.84	359.38	11873.73	7028.50	-86.90	359.29	7029.04	7029.04	4.67
19405.00	91.58	358.16	11870.06	7123.41	-88.94	359.28	7123.96	7123.96	1.85
19500.00	89.66	358.46	11869.03	7218.36	-91.74	359.27	7218.94	7218.94	2.05
19595.00	90.53	358.28	11868.88	7313.32	-94.44	359.26	7313.93	7313.93	0.94
19690.00	92.49	359.76	11866.37	7408.26	-96.06	359.26	7408.88	7408.88	2.58
19785.00	89.45	358.96	11864.77	7503.23	-97.13	359.26	7503.86	7503.86	3.31
19880.00	93.82	358.62	11862.06	7598.15	-99.13	359.25	7598.79	7598.79	4.61
19975.00	89.89	359.00	11858.98	7693.06	-101.10	359.25	7693.72	7693.72	4.16
20070.00	88.53	360.00	11860.29	7788.04	-101.93	359.25	7788.71	7788.71	1.78
20165.00	94.10	359.67	11858.11	7882.98	-102.20	359.26	7883.64	7883.64	5.87
20260.00	91.17	2.02	11853.74	7977.85	-100.80	359.28	7978.49	7978.49	3.95
20355.00	91.59	4.75	11851.46	8072.65	-95.20	359.32	8073.21	8073.21	2.91
20450.00	92.10	5.00	11848.40	8167.26	-87.13	359.39	8167.72	8167.70	0.60
20481.00	91.56	4.18	11847.41	8198.14	-84.65	359.41	8198.58	8198.55	3.17
20545.00	89.29	3.37	11846.93	8262.00	-80.43	359.44	8262.39	8262.35	3.77
20577.00	87.83	2.84	11847.74	8293.94	-78.70	359.46	8294.31	8294.27	4.85
20608.00	86.05	2.39	11849.39	8324.86	-77.29	359.47	8325.22	8325.17	5.92
20640.00	86.32	2.24	11851.52	8356.76	-76.00	359.48	8357.11	8357.05	0.96
20671.00	86.39	2.48	11853.49	8387.67	-74.72	359.49	8388.01	8387.94	0.80
20703.00	86.97	2.04	11855.34	8419.59	-73.46	359.50	8419.92	8419.85	2.27
20735.00	87.49	0.58	11856.89	8451.55	-72.73	359.51	8451.86	8451.79	4.84
20766.00	88.11	359.41	11858.08	8482.52	-72.74	359.51	8482.84	8482.76	4.27
20799.00	88.16	359.20	11859.15	8515.50	-73.14	359.51	8515.82	8515.75	0.65
20830.00	87.86	358.83	11860.23	8546.48	-73.67	359.51	8546.80	8546.73	1.54
20861.00	88.79	359.09	11861.14	8577.46	-74.23	359.50	8577.78	8577.71	3.11
20893.00	89.02	359.24	11861.75	8609.45	-74.70	359.50	8609.78	8609.71	0.86

MD	Inclination	Azimuth	TVD	NS	EW	CA	CD	VS	DLS
20925.00	87.88	359.12	11862.61	8641.44	-75.16	359.50	8641.76	8641.69	3.58
21020.00	85.56	358.82	11868.05	8736.26	-76.86	359.50	8736.60	8736.53	2.46
21067.00	85.96	358.68	11871.52	8783.12	-77.88	359.49	8783.47	8783.40	0.90
21115.00	90.37	358.20	11873.06	8831.07	-79.19	359.49	8831.42	8831.36	9.24
21210.00	91.18	355.88	11871.78	8925.92	-84.09	359.46	8926.32	8926.27	2.59
21304.00	92.16	356.07	11869.04	9019.65	-90.69	359.42	9020.11	9020.07	1.06
21405.00	91.55	356.31	11865.77	9120.37	-97.40	359.39	9120.89	9120.87	0.65
21500.00	94.84	357.64	11860.47	9215.08	-102.40	359.36	9215.65	9215.64	3.73
21595.00	95.98	357.52	11851.52	9309.57	-106.40	359.35	9310.18	9310.17	1.21
21690.00	97.10	357.77	11840.70	9403.87	-110.27	359.33	9404.52	9404.51	1.21
21785.00	95.96	1.55	11829.89	9498.23	-110.83	359.33	9498.88	9498.87	4.13
21880.00	95.23	0.61	11820.63	9592.76	-109.05	359.35	9593.38	9593.37	1.25
21975.00	91.98	0.18	11814.65	9687.56	-108.40	359.36	9688.16	9688.15	3.45
22070.00	88.04	359.83	11814.64	9782.54	-108.39	359.37	9783.14	9783.13	4.16
22165.00	88.64	359.12	11817.39	9877.49	-109.26	359.37	9878.10	9878.09	0.98
22260.00	88.59	359.36	11819.69	9972.46	-110.52	359.37	9973.07	9973.06	0.26
22355.00	91.47	0.76	11819.64	10067.45	-110.42	359.37	10068.05	10068.04	3.37
22450.00	93.01	0.96	11815.92	10162.36	-108.99	359.39	10162.94	10162.92	1.63
22509.00	93.50	0.95	11812.57	10221.26	-108.01	359.39	10221.83	10221.80	0.83

AMEREDEV

Ameredev Operating, LLC.

NAN/GB

NAN/GB #5N

Nandina 114H

Nandina 114H As Drilled

Plan: Final

Lease Penetration Section Line Foot

11 November, 2019

Company: Ameredev Operating, LLC.
 Project: NAN/GB
 Site: NAN/GB #5N
 Well: Nandina 114H
 Wellbore: Nandina 114H As Drilled
 Design: Final

Local Co-ordinate Reference: Well Nandina 114H
 TVD Reference: KB @ 3044.0usft
 MD Reference: KB @ 3044.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM5000

Project	NAN/GB		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	NAN/GB #5N		
Site Position:		Northing:	394,434.39 usft
From:	Lat/Long	Easting:	859,774.27 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16"
		Latitude:	32° 4' 48.750 N
		Longitude:	103° 18' 18.744 W
		Grid Convergence:	0.55 °

Well	Nandina 114H		
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	32° 4' 48.750 N
		Longitude:	103° 18' 18.511 W
		Ground Level:	3,017.0 usft

Wellbore	Nandina 114H As Drilled		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF2015	11/11/2019	6.56
			Dip Angle
			(°)
			Field Strength
			(nT)
			47,636.30533681

Design	Final		
Audit Notes:			
Version:	Phase:	PROTOTYPE	Tie On Depth:
			0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction
			(°)
			359.40

Survey Tool Program	Date 11/11/2019		
From	To	Survey (Wellbore)	Tool Name
(usft)	(usft)		Description
0.0	22,573.7	Final (Nandina 114H As Drilled)	MWD
			OWSG MWD - Standard

Planned Survey							
MD	Inc	Azi (azimuth)	TVD	+FSL/-FNL	+FWL/-FEL	Latitude	Longitude
(usft)	(°)	(°)	(usft)	(usft)	(usft)		
0.0	0.00	0.00	0.0	230.2	2,348.0	32° 4' 48.750 N	103° 18' 18.511 W
70.0	1.00	200.00	70.0	229.7	2,347.8	32° 4' 48.744 N	103° 18' 18.514 W
100.0	0.09	70.20	100.0	229.4	2,347.7	32° 4' 48.742 N	103° 18' 18.514 W
149.0	1.80	26.00	149.0	230.1	2,348.1	32° 4' 48.749 N	103° 18' 18.510 W
200.0	1.32	27.79	200.0	231.4	2,348.7	32° 4' 48.761 N	103° 18' 18.503 W
235.0	1.00	30.00	235.0	232.0	2,349.1	32° 4' 48.767 N	103° 18' 18.499 W
300.0	0.90	7.27	300.0	233.0	2,349.4	32° 4' 48.777 N	103° 18' 18.494 W
327.0	0.90	357.00	326.9	233.4	2,349.4	32° 4' 48.781 N	103° 18' 18.494 W
400.0	0.90	2.38	399.9	234.5	2,349.4	32° 4' 48.792 N	103° 18' 18.494 W
422.0	0.90	4.00	421.9	234.9	2,349.5	32° 4' 48.796 N	103° 18' 18.494 W
500.0	0.90	3.17	499.9	236.1	2,349.5	32° 4' 48.808 N	103° 18' 18.493 W
516.0	0.90	3.00	515.9	236.4	2,349.5	32° 4' 48.810 N	103° 18' 18.493 W

Company: Ameredev Operating, LLC.
Project: NAN/GB
Site: NAN/GB #5N
Well: Nandina 114H
Wellbore: Nandina 114H As Drilled
Design: Final

Local Co-ordinate Reference: Well Nandina 114H
TVD Reference: KB @ 3044.0usft
MD Reference: KB @ 3044.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM5000

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	+FSL/-FNL (usft)	+FWL/-FEL (usft)	Latitude	Longitude
600.0	1.28	4.85	599.9	237.9	2,349.7	32° 4' 48.826 N	103° 18' 18.491 W
610.0	1.30	5.00	609.9	238.2	2,349.7	32° 4' 48.828 N	103° 18' 18.491 W
700.0	1.02	5.00	699.9	240.0	2,349.8	32° 4' 48.846 N	103° 18' 18.489 W
705.0	1.00	5.00	704.9	240.1	2,349.8	32° 4' 48.847 N	103° 18' 18.489 W
799.0	0.40	346.00	798.9	241.2	2,349.8	32° 4' 48.858 N	103° 18' 18.489 W
800.0	0.39	345.96	799.9	241.2	2,349.8	32° 4' 48.858 N	103° 18' 18.489 W
894.0	0.10	181.00	893.9	241.4	2,349.8	32° 4' 48.861 N	103° 18' 18.490 W
900.0	0.06	174.93	899.9	241.4	2,349.8	32° 4' 48.861 N	103° 18' 18.490 W
988.0	0.50	13.00	987.9	241.8	2,349.8	32° 4' 48.864 N	103° 18' 18.489 W
1,000.0	0.56	3.24	999.9	241.9	2,349.9	32° 4' 48.865 N	103° 18' 18.488 W
1,083.0	1.20	334.00	1,082.9	243.1	2,349.5	32° 4' 48.877 N	103° 18' 18.492 W
1,100.0	1.18	330.51	1,099.9	243.4	2,349.3	32° 4' 48.880 N	103° 18' 18.494 W
1,200.0	1.13	308.07	1,199.8	244.9	2,348.1	32° 4' 48.895 N	103° 18' 18.509 W
1,242.0	1.16	298.73	1,241.8	245.3	2,347.4	32° 4' 48.899 N	103° 18' 18.517 W
1,300.0	1.16	286.93	1,299.8	245.8	2,346.3	32° 4' 48.904 N	103° 18' 18.530 W
1,336.0	1.18	279.77	1,335.8	245.9	2,345.6	32° 4' 48.906 N	103° 18' 18.538 W
1,400.0	1.35	285.84	1,399.8	246.3	2,344.2	32° 4' 48.909 N	103° 18' 18.554 W
1,430.0	1.43	288.19	1,429.8	246.5	2,343.5	32° 4' 48.911 N	103° 18' 18.562 W
1,500.0	1.08	262.19	1,499.8	246.7	2,342.0	32° 4' 48.913 N	103° 18' 18.579 W
1,525.0	1.03	249.63	1,524.8	246.5	2,341.6	32° 4' 48.912 N	103° 18' 18.584 W
1,600.0	1.00	231.62	1,599.8	245.9	2,340.4	32° 4' 48.906 N	103° 18' 18.598 W
1,700.0	1.10	208.97	1,699.7	244.5	2,339.3	32° 4' 48.892 N	103° 18' 18.611 W
1,714.0	1.13	208.25	1,713.7	244.3	2,339.2	32° 4' 48.890 N	103° 18' 18.613 W
1,800.0	0.95	192.21	1,799.7	242.8	2,338.6	32° 4' 48.875 N	103° 18' 18.619 W
1,809.0	0.94	190.46	1,808.7	242.7	2,338.6	32° 4' 48.874 N	103° 18' 18.619 W
1,900.0	0.89	192.62	1,899.7	241.3	2,338.3	32° 4' 48.860 N	103° 18' 18.623 W
1,903.0	0.89	192.70	1,902.7	241.2	2,338.3	32° 4' 48.859 N	103° 18' 18.623 W
1,998.0	0.98	176.48	1,997.7	239.7	2,338.2	32° 4' 48.844 N	103° 18' 18.624 W
2,000.0	0.97	176.07	1,999.7	239.6	2,338.2	32° 4' 48.844 N	103° 18' 18.624 W
2,092.0	0.68	147.77	2,091.7	238.4	2,338.5	32° 4' 48.832 N	103° 18' 18.620 W
2,100.0	0.95	157.75	2,099.7	238.3	2,338.6	32° 4' 48.831 N	103° 18' 18.620 W
2,187.0	4.24	175.36	2,186.6	234.4	2,339.1	32° 4' 48.792 N	103° 18' 18.614 W
2,200.0	4.41	175.15	2,199.6	233.4	2,339.2	32° 4' 48.783 N	103° 18' 18.613 W
2,281.0	5.50	174.16	2,280.3	226.5	2,339.9	32° 4' 48.714 N	103° 18' 18.606 W
2,300.0	5.57	174.08	2,299.2	224.7	2,340.0	32° 4' 48.696 N	103° 18' 18.604 W
2,376.0	5.83	173.66	2,374.8	217.2	2,340.9	32° 4' 48.621 N	103° 18' 18.596 W
2,400.0	6.20	172.32	2,398.7	214.7	2,341.2	32° 4' 48.596 N	103° 18' 18.592 W
2,470.0	7.28	169.18	2,468.2	206.6	2,342.5	32° 4' 48.516 N	103° 18' 18.578 W
2,500.0	7.20	167.67	2,497.9	202.9	2,343.3	32° 4' 48.479 N	103° 18' 18.569 W
2,565.0	7.05	164.30	2,562.4	195.0	2,345.2	32° 4' 48.402 N	103° 18' 18.548 W
2,600.0	7.12	160.05	2,597.2	190.9	2,346.5	32° 4' 48.361 N	103° 18' 18.533 W
2,659.0	7.31	153.14	2,655.7	184.1	2,349.5	32° 4' 48.294 N	103° 18' 18.499 W
2,700.0	7.23	150.93	2,696.4	179.6	2,351.9	32° 4' 48.248 N	103° 18' 18.472 W
2,754.0	7.14	147.95	2,749.9	173.8	2,355.3	32° 4' 48.190 N	103° 18' 18.432 W

Company: Ameredev Operating, LLC.
Project: NAN/GB
Site: NAN/GB #5N
Well: Nandina 114H
Wellbore: Nandina 114H As Drilled
Design: Final

Local Co-ordinate Reference: Well Nandina 114H
TVD Reference: KB @ 3044.0usft
MD Reference: KB @ 3044.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM5000

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	+FSL/-FNL (usft)	+FWL/-FEL (usft)	Latitude	Longitude
2,800.0	7.30	144.79	2,795.6	168.9	2,358.5	32° 4' 48.142 N	103° 18' 18.396 W
2,848.0	7.49	141.64	2,843.2	164.0	2,362.2	32° 4' 48.093 N	103° 18' 18.353 W
2,900.0	7.74	139.55	2,894.7	158.7	2,366.6	32° 4' 48.040 N	103° 18' 18.303 W
2,943.0	7.95	137.92	2,937.3	154.3	2,370.5	32° 4' 47.996 N	103° 18' 18.258 W
3,000.0	7.45	141.76	2,993.8	148.4	2,375.4	32° 4' 47.938 N	103° 18' 18.202 W
3,037.0	7.14	144.54	3,030.5	144.7	2,378.2	32° 4' 47.901 N	103° 18' 18.169 W
3,100.0	7.14	141.07	3,093.0	138.4	2,383.0	32° 4' 47.838 N	103° 18' 18.115 W
3,132.0	7.15	139.31	3,124.8	135.4	2,385.5	32° 4' 47.808 N	103° 18' 18.086 W
3,200.0	6.28	142.57	3,192.3	129.2	2,390.5	32° 4' 47.746 N	103° 18' 18.028 W
3,227.0	5.94	144.13	3,219.1	126.9	2,392.2	32° 4' 47.724 N	103° 18' 18.009 W
3,300.0	5.25	155.58	3,291.8	120.8	2,395.8	32° 4' 47.663 N	103° 18' 17.967 W
3,321.0	5.10	159.39	3,312.7	119.1	2,396.6	32° 4' 47.645 N	103° 18' 17.959 W
3,400.0	5.19	175.88	3,391.4	112.2	2,398.1	32° 4' 47.577 N	103° 18' 17.943 W
3,416.0	5.26	179.07	3,407.3	110.8	2,398.1	32° 4' 47.563 N	103° 18' 17.942 W
3,500.0	5.24	177.21	3,491.0	103.1	2,398.4	32° 4' 47.487 N	103° 18' 17.940 W
3,511.0	5.24	176.97	3,501.9	102.1	2,398.4	32° 4' 47.477 N	103° 18' 17.940 W
3,600.0	5.12	179.34	3,590.6	94.0	2,398.7	32° 4' 47.398 N	103° 18' 17.937 W
3,605.0	5.11	179.48	3,595.6	93.6	2,398.7	32° 4' 47.393 N	103° 18' 17.937 W
3,700.0	4.51	182.52	3,690.2	85.6	2,398.6	32° 4' 47.314 N	103° 18' 17.940 W
3,794.0	5.52	168.67	3,783.9	77.5	2,399.3	32° 4' 47.234 N	103° 18' 17.932 W
3,800.0	5.57	168.43	3,789.8	76.9	2,399.4	32° 4' 47.228 N	103° 18' 17.931 W
3,889.0	6.32	165.35	3,878.4	68.0	2,401.5	32° 4' 47.139 N	103° 18' 17.907 W
3,900.0	6.29	165.38	3,889.3	66.8	2,401.8	32° 4' 47.128 N	103° 18' 17.904 W
3,983.0	6.05	165.61	3,971.8	58.2	2,404.0	32° 4' 47.042 N	103° 18' 17.879 W
4,000.0	6.05	165.13	3,988.7	56.4	2,404.5	32° 4' 47.025 N	103° 18' 17.874 W
4,077.0	6.03	162.96	4,065.3	48.7	2,406.7	32° 4' 46.948 N	103° 18' 17.849 W
4,100.0	6.04	161.17	4,088.2	46.4	2,407.5	32° 4' 46.925 N	103° 18' 17.841 W
4,172.0	6.11	155.64	4,159.8	39.3	2,410.3	32° 4' 46.855 N	103° 18' 17.809 W
4,200.0	6.08	155.18	4,187.6	36.6	2,411.5	32° 4' 46.828 N	103° 18' 17.795 W
4,266.0	6.00	154.07	4,253.2	30.3	2,414.5	32° 4' 46.765 N	103° 18' 17.761 W
4,300.0	6.02	153.05	4,287.0	27.1	2,416.1	32° 4' 46.734 N	103° 18' 17.743 W
4,361.0	6.06	151.23	4,347.7	21.4	2,419.1	32° 4' 46.677 N	103° 18' 17.709 W
4,400.0	6.01	151.86	4,386.5	17.8	2,421.0	32° 4' 46.641 N	103° 18' 17.686 W
4,456.0	5.95	152.77	4,442.2	12.7	2,423.7	32° 4' 46.590 N	103° 18' 17.655 W
4,500.0	6.11	152.68	4,485.9	8.6	2,425.9	32° 4' 46.549 N	103° 18' 17.631 W
4,550.0	6.30	152.58	4,535.6	3.8	2,428.3	32° 4' 46.501 N	103° 18' 17.603 W
4,600.0	6.10	151.51	4,585.4	-1.0	2,430.9	32° 4' 46.454 N	103° 18' 17.574 W
4,645.0	5.92	150.49	4,630.1	-5.1	2,433.2	32° 4' 46.413 N	103° 18' 17.548 W
4,700.0	5.92	150.93	4,684.8	-10.1	2,435.9	32° 4' 46.364 N	103° 18' 17.516 W
4,739.0	5.92	151.24	4,723.6	-13.6	2,437.9	32° 4' 46.329 N	103° 18' 17.494 W
4,800.0	5.87	150.17	4,784.3	-19.1	2,440.9	32° 4' 46.274 N	103° 18' 17.459 W
4,834.0	5.84	149.56	4,818.1	-22.1	2,442.7	32° 4' 46.245 N	103° 18' 17.439 W
4,900.0	5.85	148.13	4,883.8	-27.8	2,446.2	32° 4' 46.187 N	103° 18' 17.399 W
4,928.0	5.85	147.52	4,911.6	-30.2	2,447.7	32° 4' 46.163 N	103° 18' 17.382 W

Company: Ameredev Operating, LLC.
Project: NAN/GB
Site: NAN/GB #5N
Well: Nandina 114H
Wellbore: Nandina 114H As Drilled
Design: Final

Local Co-ordinate Reference: Well Nandina 114H
TVD Reference: KB @ 3044.0usft
MD Reference: KB @ 3044.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM5000

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	+FSL/FNL (usft)	+FWL/FEL (usft)	Latitude	Longitude
5,000.0	6.33	158.11	4,983.2	-37.0	2,451.1	32° 4' 46.096 N	103° 18' 17.342 W
5,023.0	6.53	161.12	5,006.1	-39.4	2,452.0	32° 4' 46.072 N	103° 18' 17.332 W
5,100.0	6.65	159.30	5,082.6	-47.7	2,455.0	32° 4' 45.989 N	103° 18' 17.298 W
5,117.0	6.68	158.91	5,099.4	-49.6	2,455.7	32° 4' 45.971 N	103° 18' 17.290 W
5,200.0	6.46	159.82	5,181.9	-58.5	2,459.1	32° 4' 45.883 N	103° 18' 17.253 W
5,212.0	6.43	159.96	5,193.8	-59.7	2,459.5	32° 4' 45.870 N	103° 18' 17.247 W
5,300.0	6.49	159.63	5,281.3	-69.0	2,462.9	32° 4' 45.778 N	103° 18' 17.209 W
5,306.0	6.49	159.61	5,287.2	-69.7	2,463.2	32° 4' 45.772 N	103° 18' 17.206 W
5,400.0	5.84	157.39	5,380.7	-79.1	2,466.9	32° 4' 45.678 N	103° 18' 17.164 W
5,401.0	5.83	157.36	5,381.7	-79.1	2,466.9	32° 4' 45.678 N	103° 18' 17.164 W
5,495.0	5.87	162.97	5,475.2	-88.1	2,470.2	32° 4' 45.588 N	103° 18' 17.127 W
5,500.0	5.88	163.23	5,480.2	-88.6	2,470.3	32° 4' 45.583 N	103° 18' 17.125 W
5,590.0	6.15	167.66	5,569.7	-97.8	2,472.7	32° 4' 45.493 N	103° 18' 17.099 W
5,600.0	6.13	167.53	5,579.6	-98.8	2,472.9	32° 4' 45.482 N	103° 18' 17.096 W
5,684.0	5.95	166.43	5,663.1	-107.4	2,474.9	32° 4' 45.397 N	103° 18' 17.074 W
5,700.0	5.89	166.14	5,679.1	-109.0	2,475.3	32° 4' 45.381 N	103° 18' 17.070 W
5,779.0	5.57	164.64	5,757.7	-116.7	2,477.3	32° 4' 45.305 N	103° 18' 17.047 W
5,800.0	5.57	165.09	5,778.6	-118.6	2,477.8	32° 4' 45.286 N	103° 18' 17.042 W
5,873.0	5.57	166.67	5,851.2	-125.5	2,479.5	32° 4' 45.218 N	103° 18' 17.022 W
5,900.0	5.57	166.89	5,878.1	-128.0	2,480.1	32° 4' 45.192 N	103° 18' 17.016 W
5,968.0	5.58	167.44	5,945.8	-134.5	2,481.6	32° 4' 45.129 N	103° 18' 16.999 W
6,000.0	5.54	167.08	5,977.6	-137.5	2,482.3	32° 4' 45.099 N	103° 18' 16.992 W
6,062.0	5.45	166.38	6,039.3	-143.3	2,483.6	32° 4' 45.041 N	103° 18' 16.976 W
6,100.0	5.41	165.95	6,077.2	-146.8	2,484.5	32° 4' 45.007 N	103° 18' 16.967 W
6,157.0	5.34	165.29	6,133.9	-151.9	2,485.8	32° 4' 44.955 N	103° 18' 16.952 W
6,200.0	5.28	165.22	6,176.7	-155.8	2,486.8	32° 4' 44.917 N	103° 18' 16.941 W
6,251.0	5.21	165.13	6,227.5	-160.3	2,488.0	32° 4' 44.873 N	103° 18' 16.927 W
6,300.0	5.63	165.59	6,276.3	-164.8	2,489.2	32° 4' 44.828 N	103° 18' 16.914 W
6,346.0	6.02	165.96	6,322.1	-169.3	2,490.3	32° 4' 44.783 N	103° 18' 16.901 W
6,400.0	6.07	164.44	6,375.8	-174.8	2,491.8	32° 4' 44.729 N	103° 18' 16.885 W
6,441.0	6.11	163.30	6,416.5	-179.0	2,493.0	32° 4' 44.687 N	103° 18' 16.871 W
6,500.0	6.66	163.63	6,475.2	-185.3	2,494.9	32° 4' 44.625 N	103° 18' 16.850 W
6,535.0	6.98	163.80	6,509.9	-189.3	2,496.0	32° 4' 44.585 N	103° 18' 16.837 W
6,600.0	6.78	161.83	6,574.4	-196.7	2,498.3	32° 4' 44.511 N	103° 18' 16.811 W
6,629.0	6.70	160.91	6,603.2	-199.9	2,499.4	32° 4' 44.479 N	103° 18' 16.799 W
6,700.0	6.29	162.08	6,673.8	-207.5	2,502.0	32° 4' 44.404 N	103° 18' 16.770 W
6,724.0	6.15	162.51	6,697.7	-210.0	2,502.8	32° 4' 44.379 N	103° 18' 16.761 W
6,800.0	5.84	160.62	6,773.2	-217.5	2,505.3	32° 4' 44.305 N	103° 18' 16.733 W
6,819.0	5.76	160.12	6,792.1	-219.3	2,505.9	32° 4' 44.287 N	103° 18' 16.726 W
6,900.0	5.68	159.08	6,872.7	-226.9	2,508.7	32° 4' 44.211 N	103° 18' 16.694 W
6,913.0	5.67	158.91	6,885.7	-228.1	2,509.2	32° 4' 44.200 N	103° 18' 16.689 W
7,000.0	6.50	158.22	6,972.2	-236.7	2,512.6	32° 4' 44.114 N	103° 18' 16.651 W
7,008.0	6.58	158.16	6,980.1	-237.5	2,512.9	32° 4' 44.106 N	103° 18' 16.647 W
7,100.0	6.20	159.35	7,071.6	-247.1	2,516.6	32° 4' 44.011 N	103° 18' 16.605 W
7,103.0	6.19	159.39	7,074.5	-247.4	2,516.7	32° 4' 44.008 N	103° 18' 16.603 W

Company:	Ameredev Operating, LLC.	Local Co-ordinate Reference:	Well Nandina 114H
Project:	NAN/GB	TVD Reference:	KB @ 3044.0usft
Site:	NAN/GB #5N	MD Reference:	KB @ 3044.0usft
Well:	Nandina 114H	North Reference:	Grid
Wellbore:	Nandina 114H As Drilled	Survey Calculation Method:	Minimum Curvature
Design:	Final	Database:	EDM5000

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	+FSL/-FNL (usft)	+FWL/-FEL (usft)	Latitude	Longitude
7,197.0	6.19	157.05	7,168.0	-256.8	2,520.5	32° 4' 43.915 N	103° 18' 16.561 W
7,200.0	6.17	157.05	7,171.0	-257.1	2,520.6	32° 4' 43.912 N	103° 18' 16.559 W
7,292.0	5.58	156.92	7,262.5	-265.8	2,524.3	32° 4' 43.826 N	103° 18' 16.517 W
7,300.0	5.53	157.15	7,270.5	-266.5	2,524.6	32° 4' 43.818 N	103° 18' 16.514 W
7,386.0	4.99	159.92	7,356.1	-273.8	2,527.5	32° 4' 43.748 N	103° 18' 16.481 W
7,400.0	4.96	159.41	7,370.0	-274.9	2,527.9	32° 4' 43.734 N	103° 18' 16.476 W
7,481.0	4.77	156.31	7,450.7	-281.3	2,530.5	32° 4' 43.671 N	103° 18' 16.447 W
7,500.0	4.59	155.82	7,469.7	-282.7	2,531.1	32° 4' 43.657 N	103° 18' 16.440 W
7,575.0	3.88	153.46	7,544.5	-287.7	2,533.5	32° 4' 43.607 N	103° 18' 16.413 W
7,600.0	3.82	152.73	7,569.4	-289.2	2,534.3	32° 4' 43.592 N	103° 18' 16.404 W
7,670.0	3.67	150.55	7,639.3	-293.3	2,536.4	32° 4' 43.552 N	103° 18' 16.380 W
7,700.0	3.46	150.26	7,669.2	-294.9	2,537.3	32° 4' 43.536 N	103° 18' 16.369 W
7,764.0	3.00	149.51	7,733.1	-298.0	2,539.1	32° 4' 43.505 N	103° 18' 16.348 W
7,800.0	2.98	149.21	7,769.1	-299.6	2,540.1	32° 4' 43.489 N	103° 18' 16.337 W
7,859.0	2.96	148.71	7,828.0	-302.2	2,541.7	32° 4' 43.463 N	103° 18' 16.319 W
7,900.0	2.52	148.54	7,868.9	-303.9	2,542.7	32° 4' 43.446 N	103° 18' 16.308 W
7,953.0	1.96	148.21	7,921.9	-305.7	2,543.8	32° 4' 43.429 N	103° 18' 16.295 W
8,000.0	1.85	146.68	7,968.9	-307.0	2,544.6	32° 4' 43.416 N	103° 18' 16.286 W
8,048.0	1.74	144.93	8,016.8	-308.2	2,545.5	32° 4' 43.403 N	103° 18' 16.276 W
8,100.0	1.19	139.90	8,068.8	-309.3	2,546.3	32° 4' 43.393 N	103° 18' 16.267 W
8,142.0	0.77	130.69	8,110.8	-309.8	2,546.8	32° 4' 43.388 N	103° 18' 16.261 W
8,200.0	0.29	20.23	8,168.8	-309.9	2,547.1	32° 4' 43.386 N	103° 18' 16.257 W
8,237.0	0.80	345.11	8,205.8	-309.6	2,547.1	32° 4' 43.390 N	103° 18' 16.257 W
8,300.0	0.89	353.90	8,268.8	-308.7	2,546.9	32° 4' 43.399 N	103° 18' 16.259 W
8,332.0	0.95	357.65	8,300.8	-308.2	2,546.9	32° 4' 43.404 N	103° 18' 16.260 W
8,400.0	0.72	355.22	8,368.8	-307.2	2,546.8	32° 4' 43.414 N	103° 18' 16.260 W
8,426.0	0.63	353.82	8,394.8	-306.9	2,546.8	32° 4' 43.417 N	103° 18' 16.260 W
8,500.0	0.64	347.39	8,468.8	-306.1	2,546.7	32° 4' 43.425 N	103° 18' 16.262 W
8,521.0	0.65	345.62	8,489.8	-305.8	2,546.6	32° 4' 43.427 N	103° 18' 16.263 W
8,600.0	0.30	333.51	8,568.8	-305.2	2,546.4	32° 4' 43.433 N	103° 18' 16.265 W
8,615.0	0.24	327.31	8,583.8	-305.1	2,546.4	32° 4' 43.434 N	103° 18' 16.265 W
8,700.0	0.11	5.23	8,668.8	-304.9	2,546.3	32° 4' 43.436 N	103° 18' 16.266 W
8,710.0	0.10	15.22	8,678.8	-304.9	2,546.3	32° 4' 43.436 N	103° 18' 16.266 W
8,800.0	0.20	32.31	8,768.8	-304.7	2,546.4	32° 4' 43.438 N	103° 18' 16.265 W
8,804.0	0.20	32.68	8,772.8	-304.7	2,546.4	32° 4' 43.438 N	103° 18' 16.265 W
8,899.0	0.16	129.36	8,867.8	-304.6	2,546.6	32° 4' 43.439 N	103° 18' 16.263 W
8,900.0	0.16	129.18	8,868.8	-304.6	2,546.6	32° 4' 43.439 N	103° 18' 16.263 W
8,993.0	0.08	93.99	8,961.8	-304.7	2,546.8	32° 4' 43.438 N	103° 18' 16.261 W
9,000.0	0.08	93.99	8,968.8	-304.7	2,546.8	32° 4' 43.438 N	103° 18' 16.261 W
9,088.0	0.10	94.03	9,056.8	-304.7	2,546.9	32° 4' 43.438 N	103° 18' 16.259 W
9,100.0	0.08	110.80	9,068.8	-304.7	2,546.9	32° 4' 43.438 N	103° 18' 16.259 W
9,183.0	0.20	204.64	9,151.8	-304.9	2,546.9	32° 4' 43.436 N	103° 18' 16.259 W
9,200.0	0.28	214.84	9,168.8	-304.9	2,546.9	32° 4' 43.436 N	103° 18' 16.259 W
9,277.0	0.67	228.70	9,245.8	-305.4	2,546.4	32° 4' 43.431 N	103° 18' 16.265 W

Company: Ameredev Operating, LLC.
 Project: NAN/GB
 Site: NAN/GB #5N
 Well: Nandina 114H
 Wellbore: Nandina 114H As Drilled
 Design: Final

Local Co-ordinate Reference: Well Nandina 114H
 TVD Reference: KB @ 3044.0usft
 MD Reference: KB @ 3044.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM5000

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	+FSL/-FNL (usft)	+FWL/-FEL (usft)	Latitude	Longitude
9,300.0	0.71	226.13	9,268.8	-305.6	2,546.2	32° 4' 43.430 N	103° 18' 16.267 W
9,371.0	0.86	219.95	9,339.8	-306.3	2,545.6	32° 4' 43.422 N	103° 18' 16.275 W
9,400.0	0.76	218.06	9,368.8	-306.6	2,545.3	32° 4' 43.419 N	103° 18' 16.278 W
9,466.0	0.54	211.21	9,434.8	-307.2	2,544.9	32° 4' 43.413 N	103° 18' 16.283 W
9,500.0	0.50	205.04	9,468.8	-307.5	2,544.7	32° 4' 43.411 N	103° 18' 16.285 W
9,560.0	0.46	192.17	9,528.8	-308.0	2,544.6	32° 4' 43.406 N	103° 18' 16.286 W
9,600.0	0.45	174.46	9,568.8	-308.3	2,544.6	32° 4' 43.403 N	103° 18' 16.287 W
9,655.0	0.51	152.30	9,623.8	-308.7	2,544.7	32° 4' 43.399 N	103° 18' 16.285 W
9,700.0	0.46	90.61	9,668.8	-308.9	2,545.0	32° 4' 43.397 N	103° 18' 16.282 W
9,749.0	0.85	55.50	9,717.8	-308.7	2,545.5	32° 4' 43.399 N	103° 18' 16.276 W
9,800.0	0.99	27.69	9,768.8	-308.1	2,546.0	32° 4' 43.405 N	103° 18' 16.270 W
9,844.0	1.24	11.67	9,812.7	-307.3	2,546.2	32° 4' 43.413 N	103° 18' 16.267 W
9,900.0	1.57	5.34	9,868.7	-305.9	2,546.4	32° 4' 43.426 N	103° 18' 16.265 W
9,938.0	1.80	2.38	9,906.7	-304.8	2,546.5	32° 4' 43.437 N	103° 18' 16.264 W
10,000.0	1.89	9.76	9,968.7	-302.8	2,546.7	32° 4' 43.457 N	103° 18' 16.261 W
10,016.0	1.92	11.54	9,984.7	-302.3	2,546.8	32° 4' 43.462 N	103° 18' 16.260 W
10,033.0	2.04	16.60	10,001.7	-301.7	2,547.0	32° 4' 43.467 N	103° 18' 16.258 W
10,100.0	2.03	16.77	10,068.6	-299.5	2,547.7	32° 4' 43.490 N	103° 18' 16.250 W
10,127.0	2.03	16.84	10,095.6	-298.6	2,547.9	32° 4' 43.499 N	103° 18' 16.246 W
10,200.0	1.84	14.31	10,168.6	-296.2	2,548.6	32° 4' 43.522 N	103° 18' 16.238 W
10,222.0	1.79	13.45	10,190.5	-295.5	2,548.8	32° 4' 43.529 N	103° 18' 16.236 W
10,300.0	1.57	9.16	10,268.5	-293.3	2,549.2	32° 4' 43.551 N	103° 18' 16.231 W
10,317.0	1.52	8.06	10,285.5	-292.8	2,549.3	32° 4' 43.556 N	103° 18' 16.230 W
10,400.0	1.40	11.97	10,368.5	-290.7	2,549.6	32° 4' 43.576 N	103° 18' 16.226 W
10,411.0	1.39	12.54	10,379.5	-290.5	2,549.7	32° 4' 43.579 N	103° 18' 16.225 W
10,500.0	1.31	4.37	10,468.5	-288.4	2,550.0	32° 4' 43.599 N	103° 18' 16.221 W
10,506.0	1.31	3.79	10,474.5	-288.3	2,550.0	32° 4' 43.601 N	103° 18' 16.221 W
10,600.0	1.46	2.50	10,568.4	-286.0	2,550.1	32° 4' 43.623 N	103° 18' 16.219 W
10,695.0	1.16	357.43	10,663.4	-283.8	2,550.2	32° 4' 43.645 N	103° 18' 16.219 W
10,700.0	1.07	354.21	10,668.4	-283.7	2,550.2	32° 4' 43.646 N	103° 18' 16.219 W
10,789.0	1.23	244.69	10,757.4	-283.3	2,549.2	32° 4' 43.650 N	103° 18' 16.230 W
10,800.0	1.25	244.09	10,768.4	-283.4	2,549.0	32° 4' 43.649 N	103° 18' 16.232 W
10,883.0	1.40	240.13	10,851.4	-284.3	2,547.3	32° 4' 43.640 N	103° 18' 16.252 W
10,900.0	1.46	241.99	10,868.4	-284.5	2,546.9	32° 4' 43.638 N	103° 18' 16.257 W
10,978.0	1.77	248.76	10,946.3	-285.4	2,544.9	32° 4' 43.629 N	103° 18' 16.280 W
11,000.0	1.84	248.61	10,968.3	-285.7	2,544.3	32° 4' 43.627 N	103° 18' 16.287 W
11,072.0	2.09	248.19	11,040.3	-286.6	2,542.0	32° 4' 43.618 N	103° 18' 16.314 W
11,100.0	2.09	250.21	11,068.3	-286.9	2,541.0	32° 4' 43.615 N	103° 18' 16.325 W
11,167.0	2.09	255.05	11,135.2	-287.7	2,538.7	32° 4' 43.608 N	103° 18' 16.353 W
11,200.0	2.19	256.33	11,168.2	-288.0	2,537.5	32° 4' 43.605 N	103° 18' 16.366 W
11,261.0	2.39	258.41	11,229.1	-288.5	2,535.1	32° 4' 43.600 N	103° 18' 16.394 W
11,300.0	2.39	260.72	11,268.1	-288.8	2,533.5	32° 4' 43.597 N	103° 18' 16.413 W
11,331.0	2.40	262.55	11,299.1	-289.0	2,532.2	32° 4' 43.595 N	103° 18' 16.428 W
11,354.0	2.28	264.14	11,322.1	-289.1	2,531.3	32° 4' 43.594 N	103° 18' 16.439 W

Company: Ameredev Operating, LLC.
Project: NAN/GB
Site: NAN/GB #5N
Well: Nandina 114H
Wellbore: Nandina 114H As Drilled
Design: Final

Local Co-ordinate Reference: Well Nandina 114H
TVD Reference: KB @ 3044.0usft
MD Reference: KB @ 3044.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM5000

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	+FSL/-FNL (usft)	+FWL/-FEL (usft)	Latitude	Longitude
11,400.0	3.48	296.90	11,368.0	-288.5	2,529.2	32° 4' 43.600 N	103° 18' 16.464 W
11,448.0	5.26	311.09	11,415.9	-286.4	2,526.2	32° 4' 43.621 N	103° 18' 16.498 W
11,497.0	10.81	325.83	11,464.4	-281.2	2,521.9	32° 4' 43.673 N	103° 18' 16.547 W
11,500.0	11.16	326.00	11,467.3	-280.7	2,521.6	32° 4' 43.678 N	103° 18' 16.550 W
11,543.0	16.20	327.62	11,509.1	-272.2	2,516.1	32° 4' 43.763 N	103° 18' 16.614 W
11,600.0	20.75	326.00	11,563.1	-257.1	2,506.1	32° 4' 43.913 N	103° 18' 16.727 W
11,638.0	23.79	325.25	11,598.3	-245.2	2,498.0	32° 4' 44.032 N	103° 18' 16.821 W
11,685.0	30.25	327.28	11,640.1	-227.4	2,486.2	32° 4' 44.209 N	103° 18' 16.956 W
11,700.0	31.63	328.25	11,653.0	-220.9	2,482.1	32° 4' 44.273 N	103° 18' 17.003 W
11,732.0	34.60	330.09	11,679.8	-205.9	2,473.1	32° 4' 44.423 N	103° 18' 17.105 W
11,785.0	39.77	333.32	11,722.0	-177.7	2,458.0	32° 4' 44.703 N	103° 18' 17.278 W
11,800.0	41.14	333.70	11,733.4	-169.0	2,453.7	32° 4' 44.790 N	103° 18' 17.328 W
11,864.0	46.98	335.11	11,779.4	-128.8	2,434.5	32° 4' 45.189 N	103° 18' 17.546 W
11,896.0	50.46	335.58	11,800.5	-107.0	2,424.4	32° 4' 45.406 N	103° 18' 17.660 W
11,900.0	51.12	335.59	11,803.0	-104.2	2,423.2	32° 4' 45.434 N	103° 18' 17.675 W
11,928.0	55.72	335.69	11,819.7	-83.7	2,413.9	32° 4' 45.638 N	103° 18' 17.780 W
11,959.0	60.45	333.68	11,836.1	-59.9	2,402.6	32° 4' 45.874 N	103° 18' 17.908 W
11,991.0	66.58	334.11	11,850.4	-34.2	2,390.0	32° 4' 46.130 N	103° 18' 18.052 W
12,000.0	68.01	335.10	11,853.8	-26.7	2,386.5	32° 4' 46.204 N	103° 18' 18.093 W
12,038.0	74.12	339.10	11,866.2	6.4	2,372.5	32° 4' 46.533 N	103° 18' 18.251 W
12,085.0	79.65	341.07	11,876.8	49.4	2,357.0	32° 4' 46.960 N	103° 18' 18.427 W
12,100.0	80.56	341.50	11,879.4	63.4	2,352.2	32° 4' 47.099 N	103° 18' 18.481 W
12,132.0	82.51	342.42	11,884.1	93.5	2,342.4	32° 4' 47.398 N	103° 18' 18.591 W
12,138.8	82.84	342.87	11,885.0	99.9	2,340.4	32° 4' 47.461 N	103° 18' 18.614 W
Nan114 As Drilled FTP							
12,180.0	84.89	345.61	11,889.4	139.4	2,329.3	32° 4' 47.853 N	103° 18' 18.739 W
12,200.0	85.36	347.23	11,891.1	158.7	2,324.6	32° 4' 48.045 N	103° 18' 18.791 W
12,227.0	86.00	349.42	11,893.1	185.1	2,319.2	32° 4' 48.306 N	103° 18' 18.852 W
12,274.0	87.48	354.22	11,895.8	231.5	2,312.5	32° 4' 48.766 N	103° 18' 18.924 W
12,300.0	87.69	355.72	11,896.9	257.4	2,310.2	32° 4' 49.022 N	103° 18' 18.948 W
12,369.0	88.27	359.69	11,899.3	326.3	2,307.4	32° 4' 49.704 N	103° 18' 18.972 W
12,400.0	88.03	359.76	11,900.3	357.3	2,307.3	32° 4' 50.011 N	103° 18' 18.970 W
12,483.0	87.38	359.93	11,903.7	440.2	2,307.1	32° 4' 50.831 N	103° 18' 18.964 W
12,500.0	87.52	359.97	11,904.4	457.2	2,307.0	32° 4' 51.000 N	103° 18' 18.962 W
12,577.0	88.17	0.16	11,907.3	534.1	2,307.1	32° 4' 51.761 N	103° 18' 18.953 W
12,600.0	88.44	0.18	11,908.0	557.1	2,307.2	32° 4' 51.988 N	103° 18' 18.949 W
12,672.0	89.29	0.23	11,909.4	629.1	2,307.5	32° 4' 52.701 N	103° 18' 18.938 W
12,700.0	89.72	0.50	11,909.6	657.1	2,307.6	32° 4' 52.978 N	103° 18' 18.933 W
12,767.0	90.74	1.15	11,909.4	724.1	2,308.6	32° 4' 53.640 N	103° 18' 18.914 W
12,800.0	90.45	1.47	11,909.0	757.1	2,309.4	32° 4' 53.967 N	103° 18' 18.902 W
12,861.0	89.91	2.05	11,908.8	818.1	2,311.2	32° 4' 54.570 N	103° 18' 18.874 W
12,900.0	89.97	3.01	11,908.9	857.0	2,312.9	32° 4' 54.955 N	103° 18' 18.849 W
12,956.0	90.06	4.39	11,908.9	912.9	2,316.6	32° 4' 55.508 N	103° 18' 18.801 W
13,000.0	88.42	3.27	11,909.5	956.8	2,319.5	32° 4' 55.942 N	103° 18' 18.762 W

Company: Ameredev Operating, LLC.
Project: NAN/GB
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Wellbore: Nandina 114H As Drilled
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TVD Reference: KB @ 3044.0usft
MD Reference: KB @ 3044.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM5000

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	+FSL/FNL (usft)	+FWL/FEL (usft)	Latitude	Longitude
13,051.0	86.51	1.97	11,911.7	1,007.7	2,321.8	32° 4' 56.445 N	103° 18' 18.729 W
13,100.0	87.02	0.39	11,914.5	1,056.6	2,322.8	32° 4' 56.929 N	103° 18' 18.712 W
13,146.0	87.51	358.91	11,916.7	1,102.6	2,322.6	32° 4' 57.384 N	103° 18' 18.710 W
13,200.0	86.90	358.26	11,919.3	1,156.5	2,321.2	32° 4' 57.917 N	103° 18' 18.720 W
13,241.0	86.43	357.76	11,921.7	1,197.4	2,319.8	32° 4' 58.322 N	103° 18' 18.732 W
13,300.0	87.06	356.61	11,925.0	1,256.2	2,316.9	32° 4' 58.905 N	103° 18' 18.759 W
13,336.0	87.44	355.91	11,926.8	1,292.1	2,314.6	32° 4' 59.260 N	103° 18' 18.782 W
13,400.0	87.59	356.46	11,929.5	1,355.9	2,310.3	32° 4' 59.892 N	103° 18' 18.825 W
13,431.0	87.66	356.72	11,930.8	1,386.8	2,308.5	32° 5' 0.198 N	103° 18' 18.843 W
13,500.0	88.90	357.58	11,932.9	1,455.7	2,305.0	32° 5' 0.880 N	103° 18' 18.875 W
13,526.0	89.37	357.90	11,933.3	1,481.7	2,304.0	32° 5' 1.137 N	103° 18' 18.884 W
13,600.0	88.82	358.80	11,934.5	1,555.6	2,301.9	32° 5' 1.869 N	103° 18' 18.900 W
13,621.0	88.66	359.06	11,934.9	1,576.6	2,301.5	32° 5' 2.076 N	103° 18' 18.903 W
13,700.0	85.77	358.84	11,938.8	1,655.5	2,300.0	32° 5' 2.857 N	103° 18' 18.911 W
13,716.0	85.19	358.80	11,940.0	1,671.4	2,299.7	32° 5' 3.015 N	103° 18' 18.913 W
13,800.0	84.81	358.18	11,947.3	1,755.1	2,297.5	32° 5' 3.843 N	103° 18' 18.929 W
13,811.0	84.76	358.10	11,948.3	1,766.0	2,297.2	32° 5' 3.951 N	103° 18' 18.932 W
13,900.0	87.67	358.48	11,954.2	1,854.8	2,294.5	32° 5' 4.830 N	103° 18' 18.953 W
13,906.0	87.87	358.51	11,954.5	1,860.8	2,294.4	32° 5' 4.889 N	103° 18' 18.954 W
14,000.0	88.15	359.39	11,957.7	1,954.7	2,292.6	32° 5' 5.818 N	103° 18' 18.964 W
14,001.0	88.15	359.40	11,957.7	1,955.7	2,292.6	32° 5' 5.828 N	103° 18' 18.964 W
14,096.0	89.61	0.79	11,959.6	2,050.7	2,292.8	32° 5' 6.768 N	103° 18' 18.951 W
14,100.0	89.80	0.80	11,959.6	2,054.7	2,292.8	32° 5' 6.808 N	103° 18' 18.950 W
14,191.0	94.22	0.94	11,956.4	2,145.6	2,294.2	32° 5' 7.707 N	103° 18' 18.924 W
14,200.0	93.71	0.84	11,955.8	2,154.6	2,294.4	32° 5' 7.796 N	103° 18' 18.922 W
14,286.0	88.84	359.86	11,953.9	2,240.5	2,294.9	32° 5' 8.646 N	103° 18' 18.906 W
14,300.0	88.55	359.87	11,954.2	2,254.5	2,294.8	32° 5' 8.785 N	103° 18' 18.905 W
14,380.0	86.86	359.92	11,957.4	2,334.5	2,294.7	32° 5' 9.576 N	103° 18' 18.898 W
14,400.0	87.30	0.17	11,958.4	2,354.4	2,294.7	32° 5' 9.773 N	103° 18' 18.895 W
14,475.0	88.93	1.11	11,960.9	2,429.4	2,295.5	32° 5' 10.515 N	103° 18' 18.877 W
14,500.0	88.65	0.90	11,961.4	2,454.4	2,296.0	32° 5' 10.762 N	103° 18' 18.869 W
14,570.0	87.88	0.33	11,963.6	2,524.3	2,296.7	32° 5' 11.454 N	103° 18' 18.853 W
14,600.0	88.78	0.78	11,964.4	2,554.3	2,297.0	32° 5' 11.751 N	103° 18' 18.846 W
14,665.0	90.73	1.77	11,964.7	2,619.3	2,298.5	32° 5' 12.394 N	103° 18' 18.822 W
14,700.0	89.79	1.18	11,964.6	2,654.3	2,299.4	32° 5' 12.740 N	103° 18' 18.808 W
14,759.0	88.20	0.19	11,965.6	2,713.3	2,300.1	32° 5' 13.323 N	103° 18' 18.793 W
14,800.0	88.21	0.13	11,966.9	2,754.3	2,300.2	32° 5' 13.729 N	103° 18' 18.787 W
14,854.0	88.22	0.05	11,968.6	2,808.2	2,300.3	32° 5' 14.263 N	103° 18' 18.780 W
14,900.0	88.11	359.75	11,970.0	2,854.2	2,300.2	32° 5' 14.718 N	103° 18' 18.776 W
14,949.0	87.99	359.44	11,971.7	2,903.2	2,299.9	32° 5' 15.202 N	103° 18' 18.775 W
15,000.0	89.65	359.92	11,972.7	2,954.2	2,299.6	32° 5' 15.707 N	103° 18' 18.772 W
15,044.0	91.08	0.34	11,972.5	2,998.2	2,299.7	32° 5' 16.142 N	103° 18' 18.766 W
15,100.0	91.09	0.57	11,971.4	3,054.2	2,300.1	32° 5' 16.696 N	103° 18' 18.755 W
15,138.0	91.09	0.72	11,970.7	3,092.1	2,300.6	32° 5' 17.072 N	103° 18' 18.746 W

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Database: EDM5000

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	+FSL/FNL (usft)	+FWL/FEL (usft)	Latitude	Longitude
15,200.0	89.75	359.69	11,970.2	3,154.1	2,300.8	32° 5' 17.686 N	103° 18' 18.736 W
15,233.0	89.04	359.14	11,970.6	3,187.1	2,300.4	32° 5' 18.012 N	103° 18' 18.736 W
15,300.0	87.09	358.87	11,972.8	3,254.1	2,299.3	32° 5' 18.675 N	103° 18' 18.743 W
15,328.0	86.28	358.76	11,974.5	3,282.0	2,298.7	32° 5' 18.951 N	103° 18' 18.746 W
15,400.0	87.29	358.61	11,978.5	3,353.9	2,297.0	32° 5' 19.662 N	103° 18' 18.757 W
15,422.0	87.60	358.56	11,979.5	3,375.9	2,296.5	32° 5' 19.880 N	103° 18' 18.761 W
15,500.0	88.31	357.98	11,982.3	3,453.8	2,294.1	32° 5' 20.651 N	103° 18' 18.780 W
15,517.0	88.46	357.85	11,982.7	3,470.8	2,293.5	32° 5' 20.819 N	103° 18' 18.785 W
15,600.0	89.16	358.91	11,984.5	3,553.7	2,291.2	32° 5' 21.640 N	103° 18' 18.803 W
15,612.0	89.26	359.06	11,984.6	3,565.7	2,291.0	32° 5' 21.759 N	103° 18' 18.805 W
15,700.0	88.82	359.03	11,986.1	3,653.7	2,289.5	32° 5' 22.629 N	103° 18' 18.812 W
15,706.0	88.79	359.03	11,986.2	3,659.7	2,289.4	32° 5' 22.689 N	103° 18' 18.812 W
15,800.0	87.34	358.54	11,989.4	3,753.6	2,287.4	32° 5' 23.618 N	103° 18' 18.825 W
15,801.0	87.32	358.53	11,989.5	3,754.6	2,287.4	32° 5' 23.628 N	103° 18' 18.825 W
15,895.0	90.30	359.35	11,991.4	3,848.6	2,285.6	32° 5' 24.558 N	103° 18' 18.835 W
15,900.0	90.38	359.39	11,991.4	3,853.6	2,285.6	32° 5' 24.607 N	103° 18' 18.835 W
15,990.0	91.75	0.08	11,989.7	3,943.5	2,285.2	32° 5' 25.498 N	103° 18' 18.830 W
16,000.0	91.76	0.07	11,989.4	3,953.5	2,285.2	32° 5' 25.597 N	103° 18' 18.829 W
16,085.0	91.82	0.00	11,986.7	4,038.5	2,285.2	32° 5' 26.437 N	103° 18' 18.819 W
16,100.0	91.29	359.95	11,986.3	4,053.5	2,285.2	32° 5' 26.586 N	103° 18' 18.817 W
16,179.0	88.52	359.69	11,986.5	4,132.5	2,285.0	32° 5' 27.367 N	103° 18' 18.811 W
16,200.0	88.23	359.81	11,987.1	4,153.5	2,284.9	32° 5' 27.575 N	103° 18' 18.810 W
16,274.0	87.19	0.23	11,990.0	4,227.4	2,284.9	32° 5' 28.307 N	103° 18' 18.802 W
16,300.0	87.80	0.16	11,991.2	4,253.4	2,285.0	32° 5' 28.564 N	103° 18' 18.798 W
16,369.0	89.41	359.97	11,992.8	4,322.4	2,285.1	32° 5' 29.246 N	103° 18' 18.789 W
16,400.0	89.81	0.01	11,993.1	4,353.4	2,285.1	32° 5' 29.553 N	103° 18' 18.786 W
16,464.0	90.63	0.08	11,992.8	4,417.4	2,285.1	32° 5' 30.186 N	103° 18' 18.778 W
16,500.0	90.63	359.98	11,992.4	4,453.4	2,285.1	32° 5' 30.542 N	103° 18' 18.774 W
16,559.0	90.64	359.82	11,991.8	4,512.4	2,285.0	32° 5' 31.126 N	103° 18' 18.769 W
16,600.0	91.27	359.92	11,991.1	4,553.3	2,284.9	32° 5' 31.532 N	103° 18' 18.765 W
16,653.0	92.08	0.05	11,989.5	4,606.3	2,284.9	32° 5' 32.056 N	103° 18' 18.759 W
16,700.0	91.54	359.48	11,988.0	4,653.3	2,284.7	32° 5' 32.521 N	103° 18' 18.756 W
16,748.0	90.98	358.90	11,987.0	4,701.3	2,284.1	32° 5' 32.996 N	103° 18' 18.759 W
16,800.0	91.31	358.58	11,985.9	4,753.3	2,282.9	32° 5' 33.510 N	103° 18' 18.767 W
16,843.0	91.59	358.28	11,984.9	4,796.2	2,281.7	32° 5' 33.935 N	103° 18' 18.776 W
16,900.0	92.41	358.51	11,982.9	4,853.2	2,280.1	32° 5' 34.499 N	103° 18' 18.788 W
16,938.0	92.95	358.66	11,981.1	4,891.1	2,279.2	32° 5' 34.874 N	103° 18' 18.795 W
17,000.0	91.90	358.24	11,978.5	4,953.0	2,277.5	32° 5' 35.487 N	103° 18' 18.807 W
17,032.0	91.36	358.02	11,977.6	4,985.0	2,276.5	32° 5' 35.804 N	103° 18' 18.816 W
17,100.0	92.30	359.14	11,975.4	5,053.0	2,274.8	32° 5' 36.476 N	103° 18' 18.828 W
17,127.0	92.67	359.59	11,974.2	5,079.9	2,274.5	32° 5' 36.743 N	103° 18' 18.828 W
17,200.0	91.53	359.84	11,971.5	5,152.9	2,274.1	32° 5' 37.465 N	103° 18' 18.824 W
17,222.0	91.18	359.91	11,971.0	5,174.9	2,274.1	32° 5' 37.682 N	103° 18' 18.823 W
17,300.0	90.42	358.72	11,969.9	5,252.9	2,273.1	32° 5' 38.454 N	103° 18' 18.825 W
17,317.0	90.25	358.46	11,969.8	5,269.8	2,272.7	32° 5' 38.622 N	103° 18' 18.828 W

Company: Amerdev Operating, LLC.
 Project: NAN/GB
 Site: NAN/GB #5N
 Well: Nandina 114H
 Wellbore: Nandina 114H As Drilled
 Design: Final

Local Co-ordinate Reference: Well Nandina 114H
 TVD Reference: KB @ 3044.0usft
 MD Reference: KB @ 3044.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM5000

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	+FSL-FNL (usft)	+FWL-FEL (usft)	Latitude	Longitude
17,400.0	91.62	358.36	11,968.5	5,352.8	2,270.4	32° 5' 39.443 N	103° 18' 18.845 W
17,412.0	91.82	358.34	11,968.1	5,364.8	2,270.1	32° 5' 39.562 N	103° 18' 18.848 W
17,500.0	92.01	358.47	11,965.2	5,452.7	2,267.6	32° 5' 40.432 N	103° 18' 18.867 W
17,507.0	92.02	358.48	11,964.9	5,459.7	2,267.4	32° 5' 40.501 N	103° 18' 18.868 W
17,600.0	90.75	358.62	11,962.7	5,552.6	2,265.1	32° 5' 41.421 N	103° 18' 18.885 W
17,601.0	90.74	358.62	11,962.7	5,553.6	2,265.1	32° 5' 41.431 N	103° 18' 18.885 W
17,696.0	93.86	359.52	11,958.9	5,648.5	2,263.5	32° 5' 42.370 N	103° 18' 18.893 W
17,700.0	93.94	359.51	11,958.6	5,652.5	2,263.5	32° 5' 42.410 N	103° 18' 18.893 W
17,791.0	95.69	359.39	11,951.0	5,743.2	2,262.6	32° 5' 43.307 N	103° 18' 18.893 W
17,800.0	95.72	359.31	11,950.1	5,752.2	2,262.5	32° 5' 43.396 N	103° 18' 18.893 W
17,886.0	96.03	358.50	11,941.3	5,837.7	2,260.9	32° 5' 44.242 N	103° 18' 18.903 W
17,900.0	96.05	358.74	11,939.8	5,851.6	2,260.5	32° 5' 44.380 N	103° 18' 18.905 W
17,981.0	96.17	0.12	11,931.2	5,932.1	2,259.7	32° 5' 45.177 N	103° 18' 18.905 W
18,000.0	95.93	0.30	11,929.2	5,951.0	2,259.8	32° 5' 45.364 N	103° 18' 18.902 W
18,076.0	94.96	1.03	11,922.0	6,026.7	2,260.7	32° 5' 46.112 N	103° 18' 18.884 W
18,100.0	94.06	0.66	11,920.1	6,050.6	2,261.0	32° 5' 46.349 N	103° 18' 18.877 W
18,171.0	91.41	359.56	11,916.7	6,121.5	2,261.2	32° 5' 47.051 N	103° 18' 18.868 W
18,200.0	91.92	359.53	11,915.8	6,150.5	2,260.9	32° 5' 47.337 N	103° 18' 18.867 W
18,266.0	93.07	359.45	11,913.0	6,216.4	2,260.4	32° 5' 47.990 N	103° 18' 18.867 W
18,300.0	91.55	359.46	11,911.6	6,250.4	2,260.0	32° 5' 48.326 N	103° 18' 18.867 W
18,361.0	88.81	359.47	11,911.4	6,311.4	2,259.5	32° 5' 48.930 N	103° 18' 18.867 W
18,400.0	88.66	359.02	11,912.3	6,350.4	2,259.0	32° 5' 49.315 N	103° 18' 18.868 W
18,456.0	88.44	358.38	11,913.7	6,406.4	2,257.7	32° 5' 49.869 N	103° 18' 18.877 W
18,500.0	89.51	358.62	11,914.5	6,450.3	2,256.5	32° 5' 50.304 N	103° 18' 18.885 W
18,551.0	90.76	358.90	11,914.3	6,501.3	2,255.4	32° 5' 50.809 N	103° 18' 18.892 W
18,600.0	91.17	358.86	11,913.5	6,550.3	2,254.5	32° 5' 51.294 N	103° 18' 18.898 W
18,646.0	91.56	358.82	11,912.4	6,596.3	2,253.5	32° 5' 51.749 N	103° 18' 18.904 W
18,700.0	92.66	358.95	11,910.4	6,650.2	2,252.5	32° 5' 52.283 N	103° 18' 18.910 W
18,741.0	93.49	359.05	11,908.2	6,691.2	2,251.8	32° 5' 52.688 N	103° 18' 18.914 W
18,800.0	94.02	359.88	11,904.4	6,750.0	2,251.2	32° 5' 53.270 N	103° 18' 18.914 W
18,836.0	94.35	0.38	11,901.7	6,785.9	2,251.3	32° 5' 53.626 N	103° 18' 18.909 W
18,900.0	92.17	359.88	11,898.1	6,849.8	2,251.4	32° 5' 54.258 N	103° 18' 18.900 W
18,931.0	91.11	359.64	11,897.2	6,880.8	2,251.3	32° 5' 54.564 N	103° 18' 18.898 W
19,000.0	91.42	1.62	11,895.7	6,949.8	2,252.1	32° 5' 55.247 N	103° 18' 18.882 W
19,026.0	91.53	2.36	11,895.0	6,975.8	2,253.0	32° 5' 55.504 N	103° 18' 18.868 W
19,100.0	93.49	2.46	11,891.8	7,049.6	2,256.1	32° 5' 56.234 N	103° 18' 18.824 W
19,120.0	94.02	2.49	11,890.5	7,069.6	2,256.9	32° 5' 56.432 N	103° 18' 18.812 W
19,200.0	96.27	1.73	11,883.3	7,149.2	2,259.9	32° 5' 57.219 N	103° 18' 18.769 W
19,215.0	96.69	1.59	11,881.6	7,164.1	2,260.3	32° 5' 57.366 N	103° 18' 18.762 W
19,300.0	93.25	359.61	11,874.3	7,248.7	2,261.2	32° 5' 58.204 N	103° 18' 18.742 W
19,310.0	92.84	359.38	11,873.7	7,258.7	2,261.1	32° 5' 58.303 N	103° 18' 18.742 W
19,400.0	91.65	358.22	11,870.2	7,348.6	2,259.2	32° 5' 59.193 N	103° 18' 18.754 W
19,405.0	91.58	358.16	11,870.1	7,353.6	2,259.1	32° 5' 59.242 N	103° 18' 18.756 W
19,500.0	89.66	358.46	11,869.0	7,448.6	2,256.3	32° 6' 0.182 N	103° 18' 18.778 W

Company: Ameredev Operating, LLC.
 Project: NAN/GB
 Site: NAN/GB #5N
 Well: Nandina 114H
 Wellbore: Nandina 114H As Drilled
 Design: Final

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 TVD Reference: KB @ 3044.0usft
 MD Reference: KB @ 3044.0usft
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 Survey Calculation Method: Minimum Curvature
 Database: EDM5000

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	+FSL/-FNL (usft)	+FWL/-FEL (usft)	Latitude	Longitude
19,595.0	90.53	358.28	11,868.9	7,543.5	2,253.6	32° 6' 1.122 N	103° 18' 18.798 W
19,600.0	90.63	358.36	11,868.8	7,548.5	2,253.4	32° 6' 1.171 N	103° 18' 18.800 W
19,690.0	92.49	359.76	11,866.4	7,638.5	2,251.9	32° 6' 2.061 N	103° 18' 18.807 W
19,700.0	92.17	359.68	11,866.0	7,648.5	2,251.9	32° 6' 2.160 N	103° 18' 18.806 W
19,785.0	89.45	358.96	11,864.8	7,733.5	2,250.9	32° 6' 3.001 N	103° 18' 18.809 W
19,800.0	90.14	358.91	11,864.8	7,748.5	2,250.6	32° 6' 3.149 N	103° 18' 18.810 W
19,880.0	93.82	358.62	11,862.1	7,828.4	2,248.9	32° 6' 3.940 N	103° 18' 18.821 W
19,900.0	92.99	358.70	11,860.9	7,848.3	2,248.4	32° 6' 4.138 N	103° 18' 18.825 W
19,975.0	89.89	359.00	11,859.0	7,923.3	2,246.9	32° 6' 4.880 N	103° 18' 18.834 W
20,000.0	89.53	359.26	11,859.1	7,948.3	2,246.5	32° 6' 5.127 N	103° 18' 18.835 W
20,070.0	88.53	360.00	11,860.3	8,018.3	2,246.1	32° 6' 5.820 N	103° 18' 18.833 W
20,100.0	90.29	359.90	11,860.6	8,048.3	2,246.1	32° 6' 6.116 N	103° 18' 18.830 W
20,165.0	94.10	359.67	11,858.1	8,113.2	2,245.8	32° 6' 6.759 N	103° 18' 18.826 W
20,200.0	93.02	0.54	11,855.9	8,148.1	2,245.9	32° 6' 7.105 N	103° 18' 18.821 W
20,260.0	91.17	2.02	11,853.7	8,208.1	2,247.2	32° 6' 7.698 N	103° 18' 18.799 W
20,300.0	91.35	3.17	11,852.9	8,248.0	2,249.0	32° 6' 8.093 N	103° 18' 18.773 W
20,355.0	91.59	4.75	11,851.5	8,302.9	2,252.8	32° 6' 8.635 N	103° 18' 18.723 W
20,400.0	91.83	4.87	11,850.1	8,347.7	2,256.6	32° 6' 9.078 N	103° 18' 18.674 W
20,450.0	92.10	5.00	11,848.4	8,397.5	2,260.9	32° 6' 9.570 N	103° 18' 18.619 W
20,481.0	91.56	4.18	11,847.4	8,428.4	2,263.4	32° 6' 9.876 N	103° 18' 18.587 W
20,500.0	90.89	3.94	11,847.0	8,447.3	2,264.7	32° 6' 10.063 N	103° 18' 18.569 W
20,545.0	89.29	3.37	11,846.9	8,492.2	2,267.6	32° 6' 10.507 N	103° 18' 18.530 W
20,577.0	87.83	2.84	11,847.7	8,524.2	2,269.3	32° 6' 10.823 N	103° 18' 18.507 W
20,600.0	86.51	2.51	11,848.9	8,547.1	2,270.4	32° 6' 11.050 N	103° 18' 18.492 W
20,608.0	86.05	2.39	11,849.4	8,555.1	2,270.7	32° 6' 11.129 N	103° 18' 18.487 W
20,640.0	86.32	2.24	11,851.5	8,587.0	2,272.0	32° 6' 11.444 N	103° 18' 18.468 W
20,671.0	86.39	2.48	11,853.5	8,617.9	2,273.3	32° 6' 11.750 N	103° 18' 18.450 W
20,700.0	86.92	2.08	11,855.2	8,646.8	2,274.4	32° 6' 12.036 N	103° 18' 18.434 W
20,703.0	86.97	2.04	11,855.3	8,649.8	2,274.5	32° 6' 12.066 N	103° 18' 18.432 W
20,735.0	87.49	0.58	11,856.9	8,681.8	2,275.3	32° 6' 12.382 N	103° 18' 18.420 W
20,766.0	88.11	359.41	11,858.1	8,712.8	2,275.3	32° 6' 12.689 N	103° 18' 18.417 W
20,799.0	88.16	359.20	11,859.2	8,745.7	2,274.9	32° 6' 13.015 N	103° 18' 18.418 W
20,800.0	88.15	359.19	11,859.2	8,746.7	2,274.9	32° 6' 13.025 N	103° 18' 18.418 W
20,830.0	87.86	358.83	11,860.2	8,776.7	2,274.3	32° 6' 13.321 N	103° 18' 18.420 W
20,861.0	88.79	359.09	11,861.1	8,807.7	2,273.8	32° 6' 13.628 N	103° 18' 18.423 W
20,893.0	89.02	359.24	11,861.7	8,839.7	2,273.3	32° 6' 13.945 N	103° 18' 18.425 W
20,900.0	88.77	359.21	11,861.9	8,846.7	2,273.2	32° 6' 14.014 N	103° 18' 18.426 W
20,925.0	87.88	359.12	11,862.6	8,871.7	2,272.9	32° 6' 14.261 N	103° 18' 18.427 W
21,000.0	86.05	358.88	11,866.6	8,946.5	2,271.5	32° 6' 15.002 N	103° 18' 18.434 W
21,020.0	85.56	358.82	11,868.0	8,966.5	2,271.1	32° 6' 15.200 N	103° 18' 18.436 W
21,067.0	85.96	358.68	11,871.5	9,013.3	2,270.1	32° 6' 15.663 N	103° 18' 18.443 W
21,100.0	88.99	358.35	11,873.0	9,046.3	2,269.3	32° 6' 15.989 N	103° 18' 18.449 W
21,115.0	90.37	358.20	11,873.1	9,061.3	2,268.8	32° 6' 16.138 N	103° 18' 18.453 W
21,200.0	91.09	356.12	11,872.0	9,146.2	2,264.6	32° 6' 16.978 N	103° 18' 18.482 W

Company: Ameredev Operating, LLC.
Project: NAN/GB
Site: NAN/GB #5N
Well: Nandina 114H
Wellbore: Nandina 114H As Drilled
Design: Final

Local Co-ordinate Reference: Well Nandina 114H
TVD Reference: KB @ 3044.0usft
MD Reference: KB @ 3044.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM5000

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	+FSL/-FNL (usft)	+FWL/-FEL (usft)	Latitude	Longitude
21,210.0	91.18	355.88	11,871.8	9,156.2	2,263.9	32° 6' 17.077 N	103° 18' 18.499 W
21,300.0	92.12	356.06	11,869.2	9,245.9	2,257.6	32° 6' 17.965 N	103° 18' 18.563 W
21,304.0	92.16	356.07	11,869.0	9,249.9	2,257.3	32° 6' 18.005 N	103° 18' 18.566 W
21,400.0	91.58	356.30	11,865.9	9,345.6	2,250.9	32° 6' 18.953 N	103° 18' 18.629 W
21,405.0	91.55	356.31	11,865.8	9,350.6	2,250.6	32° 6' 19.002 N	103° 18' 18.632 W
21,500.0	94.84	357.64	11,860.5	9,445.3	2,245.6	32° 6' 19.940 N	103° 18' 18.680 W
21,595.0	95.98	357.52	11,851.5	9,539.8	2,241.6	32° 6' 20.875 N	103° 18' 18.716 W
21,600.0	96.04	357.53	11,851.0	9,544.8	2,241.4	32° 6' 20.924 N	103° 18' 18.718 W
21,690.0	97.10	357.77	11,840.7	9,634.1	2,237.7	32° 6' 21.808 N	103° 18' 18.751 W
21,700.0	96.98	358.17	11,839.5	9,644.0	2,237.4	32° 6' 21.907 N	103° 18' 18.754 W
21,785.0	95.96	1.55	11,829.9	9,728.5	2,237.2	32° 6' 22.742 N	103° 18' 18.747 W
21,800.0	95.84	1.40	11,828.3	9,743.4	2,237.6	32° 6' 22.890 N	103° 18' 18.741 W
21,880.0	95.23	0.61	11,820.6	9,823.0	2,239.0	32° 6' 23.677 N	103° 18' 18.716 W
21,900.0	94.55	0.52	11,818.9	9,842.9	2,239.2	32° 6' 23.875 N	103° 18' 18.711 W
21,975.0	91.98	0.18	11,814.7	9,917.8	2,239.6	32° 6' 24.615 N	103° 18' 18.697 W
22,000.0	90.94	0.09	11,814.0	9,942.8	2,239.7	32° 6' 24.863 N	103° 18' 18.694 W
22,070.0	88.04	359.83	11,814.6	10,012.8	2,239.6	32° 6' 25.555 N	103° 18' 18.687 W
22,100.0	88.23	359.61	11,815.6	10,042.8	2,239.5	32° 6' 25.852 N	103° 18' 18.685 W
22,165.0	88.64	359.12	11,817.4	10,107.7	2,238.8	32° 6' 26.495 N	103° 18' 18.686 W
22,200.0	88.62	359.21	11,818.2	10,142.7	2,238.2	32° 6' 26.841 N	103° 18' 18.688 W
22,260.0	88.59	359.36	11,819.7	10,202.7	2,237.5	32° 6' 27.434 N	103° 18' 18.691 W
22,300.0	89.80	359.95	11,820.2	10,242.7	2,237.2	32° 6' 27.830 N	103° 18' 18.689 W
22,355.0	91.47	0.76	11,819.6	10,297.7	2,237.6	32° 6' 28.374 N	103° 18' 18.679 W
22,400.0	92.20	0.85	11,818.2	10,342.6	2,238.2	32° 6' 28.819 N	103° 18' 18.666 W
22,450.0	93.01	0.96	11,815.9	10,392.6	2,239.0	32° 6' 29.313 N	103° 18' 18.652 W
22,500.0	93.43	0.95	11,813.1	10,442.5	2,239.8	32° 6' 29.807 N	103° 18' 18.637 W
22,509.0	93.50	0.95	11,812.6	10,451.5	2,240.0	32° 6' 29.896 N	103° 18' 18.634 W
Nan114 As Drilled LTP							
22,573.7	93.50	0.95	11,808.6	10,516.0	2,241.1	32° 6' 30.534 N	103° 18' 18.614 W
Nan114 As Drilled BHL							

Checked By: _____ Approved By: _____ Date: _____