



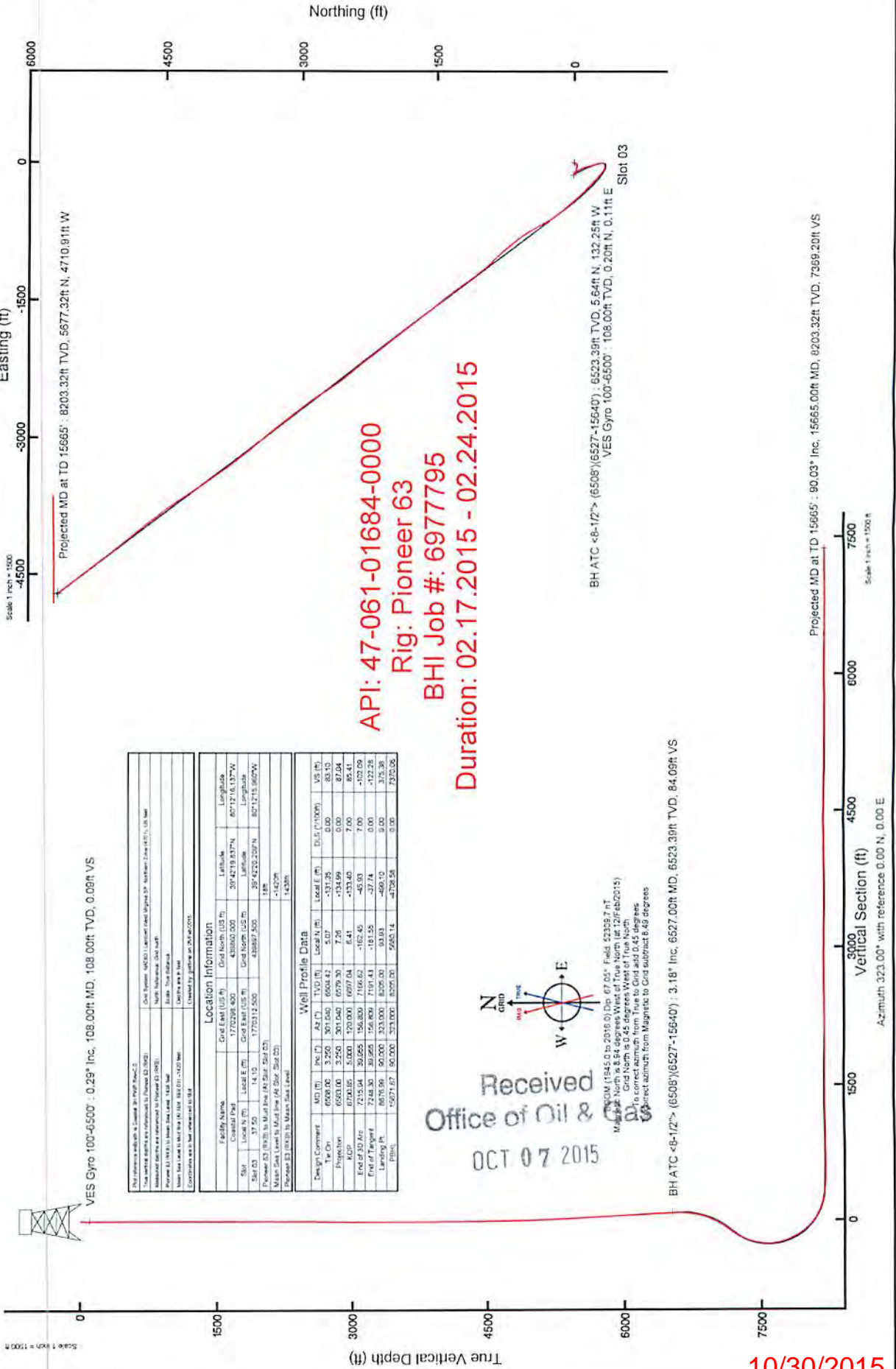
NORTHEAST NATURAL ENERGY, LLC

Location: Monongalia County, WV
 Field: Monongalia
 Facility: Coastal Pad

Slot: Slot 03
 Well: Coastal 3H
 Wellbore: Coastal 3H PWB



61-01684



API: 47-061-01684-0000
 Rig: Pioneer 63
 BHI Job #: 6977795
 Duration: 02.17.2015 - 02.24.2015

Location Information			
Grid East (USFT)	Grid North (USFT)	Latitude	Longitude
8203.32	4710.91	39.42191877N	8071.911377W
Grid East (USFT)	Grid North (USFT)	Latitude	Longitude
8203.32	4710.91	39.42191877N	8071.911377W
Grid East (USFT)	Grid North (USFT)	Latitude	Longitude
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Grid East (USFT)	Grid North (USFT)	Latitude	Longitude
8203.32	4710.91	39.42191877N	8071.911377W

Well Profile Data			
Design Comment	MD (ft)	AZ (°)	TVD (ft)
The On	6508.00	325.00	6508.42
Projection	6508.00	325.00	6508.42
End of 30' Arc	7248.00	302.655	7166.82
End of Tangent	7248.00	302.655	7166.82
Landing Pt	8676.00	80.000	8205.00
PBH	15071.87	90.000	8205.00
			5000.14
			-4709.58
			0.00
			7370.06
			0.00
			0.00
			83.10
			84.09
			7.00
			-137.40
			64.4
			150.000
			6997.04
			6.48
			-162.45
			-45.93
			-377.74
			0.00
			-122.28
			3.75.36
			7370.06

Received
 Office of Oil & Gas
 OCT 07 2015

10/30/2015

ACTUAL WELLPATH REPORT (CSV version)
 Prepared by Baker Hughes
 Software System: WellArchitect® 4.0.1

REFERENCE WELLPATH IDENTIFICATION

Operator NORTHEAST NATURAL ENERGY, LLC
 Area Monongalia County, WV
 Field Monongalia
 Facility Coastal Pad
 Slot 03
 Well Coastal 3H
 Wellbore Coastal 3H AWB
 Wellpath Coastal 3H AWP Proj: 15665'
 Sidetrack (none)

REPORT SETUP INFORMATION

Projection System NAD83 / Lambert West Virginia 5P, Northern Zone (4703), US feet
 North Reference Grid
 Scale 0.999942
 Convergence at slot 0.45° West
 Software System WellArchitect® 4.0.1
 User Gofbral
 Report Generated 25/Feb/2015 at 12:11
 Database/Source file WANorthEast/ev4546.xml

WELLPATH LOCATION

Local North	Local East	Easting	Northing	Latitude	Longitude
[ft]	[ft]	[US ft]	[US ft]	[°]	[°]
37.5	14.1	1770313	439897.5	39°42'20.2	80°12'15.960°W
		1770298	439860	39°42'19.8	80°12'16.137°W
		1777686	440640.7	39°42'28.1	80°10'41.690°W

WELLPATH DATUM

Calculation method Minimum curvature
 Horizontal Reference Point Slot
 Vertical Reference Point Pioneer 63 (RKB)
 MD Reference Point Pioneer 63 (RKB)
 Field Vertical Reference Mean Sea Level
 Pioneer 63 (RKB) to Facility' 18.00ft
 Pioneer 63 (RKB) to Mean Sr. 1438.00ft
 Pioneer 63 (RKB) to Mud Lin 18.00ft
 Section Origin N 0.00, E 0.00 ft
 Section Azimuth 323.00°

WELLPATH DATA † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dir. [ft]	Closure Dir. DLS ["/100ft]	Build Rate ["/100ft]	Turn Rate ["/100ft]
†	0	0	29.04	0	0	0	0	1770313	439897.5	39°42'20.209°N	80°12'15.960°W	0	0	0
	18	0	29.04	18	0	0	0	1770313	439897.5	39°42'20.209°N	80°12'15.960°W	0	0	0
	108	0.29	29.04	108	0.09	0.2	0.11	1770313	439897.7	39°42'20.211°N	80°12'15.959°W	0.23	29.04	0.32
	208	0.08	39.99	208	0.21	0.47	0.28	1770313	439897.97	39°42'20.213°N	80°12'15.957°W	0.55	30.423	0.21
	308	0.13	29.17	308	0.27	0.63	0.38	1770313	439898.13	39°42'20.215°N	80°12'15.956°W	0.73	31.137	0.05
														-10.82

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408	0.15	52.06	408	0.32	0.81	0.54	1770313	439898.31	39°42'20.217"N	80°12'15.954"W	0.97	33.673	0.06	0.02	22.89
508	0.06	42.18	508	0.33	0.93	0.68	1770313	439898.43	39°42'20.218"N	80°12'15.952"W	1.15	36.126	0.09	-0.09	-9.88
608	0.06	20.98	608	0.37	1.01	0.73	1770313	439898.51	39°42'20.219"N	80°12'15.951"W	1.25	35.752	0.02	0	-21.2
708	0.15	3.3	708	0.5	1.19	0.76	1770313	439898.69	39°42'20.220"N	80°12'15.951"W	1.41	31.357	0.09	0.09	-17.68
808	0.03	12.3	808	0.61	1.35	0.77	1770313	439898.85	39°42'20.222"N	80°12'15.951"W	1.55	29.679	0.12	-0.12	9
908	0.06	26.34	908	0.66	1.42	0.8	1770313	439898.92	39°42'20.223"N	80°12'15.950"W	1.63	29.296	0.03	0.03	14.04
1008	0.05	19.83	1008	0.7	1.51	0.84	1770313	439899.01	39°42'20.224"N	80°12'15.950"W	1.73	28.968	0.01	-0.01	-6.51
1108	0.16	27.68	1108	0.79	1.67	0.92	1770313	439899.17	39°42'20.225"N	80°12'15.949"W	1.91	28.666	0.11	0.11	7.85
1208	0.17	65.63	1208	0.81	1.86	1.12	1770314	439899.36	39°42'20.227"N	80°12'15.946"W	2.17	30.961	0.11	0.01	37.95
1308	0.12	77.81	1308	0.74	1.94	1.35	1770314	439899.44	39°42'20.228"N	80°12'15.943"W	2.37	34.856	0.06	-0.05	12.18
1408	0.25	88.02	1408	0.57	1.97	1.57	1770314	439899.47	39°42'20.228"N	80°12'15.939"W	2.59	40.315	0.13	0.13	10.21
1508	0.12	61.33	1508	0.43	2.03	1.98	1770314	439899.53	39°42'20.229"N	80°12'15.935"W	2.84	44.335	0.15	-0.13	-26.69
1608	0.26	79.12	1608	0.31	2.12	2.3	1770315	439899.62	39°42'20.230"N	80°12'15.931"W	3.13	47.268	0.15	0.14	17.79
1708	0.32	65.19	1708	0.15	2.28	2.77	1770315	439899.78	39°42'20.231"N	80°12'15.925"W	3.59	50.55	0.09	0.06	-13.93
1808	0.15	71.6	1808	0.05	2.44	3.15	1770316	439899.94	39°42'20.233"N	80°12'15.920"W	3.99	52.24	0.17	-0.17	6.41
1908	0.18	77.88	1908	0.05	2.52	3.43	1770316	439900.02	39°42'20.234"N	80°12'15.917"W	4.25	53.741	0.03	0.03	6.28
2008	0.34	89.9	2008	0.3	2.55	3.88	1770316	439900.05	39°42'20.234"N	80°12'15.911"W	4.64	56.696	0.17	0.16	12.02
2108	0.42	128.13	2108	-0.83	2.32	4.46	1770317	439899.82	39°42'20.232"N	80°12'15.903"W	5.03	62.511	0.26	0.08	38.23
2208	0.41	183.75	2208	-1.46	1.74	4.73	1770317	439899.24	39°42'20.226"N	80°12'15.900"W	5.04	69.804	0.39	-0.01	55.62
2308	1.08	224.63	2308	-1.87	0.71	4.04	1770317	439898.21	39°42'20.216"N	80°12'15.909"W	4.11	80.014	0.82	0.67	40.88
2408	1.58	228.64	2408	-2.11	-0.87	2.35	1770315	439896.63	39°42'20.209"N	80°12'15.930"W	2.5	110.328	0.51	0.5	4.01
2608	1.95	209.55	2608	-3.75	-5.77	-1.42	1770311	439891.73	39°42'20.151"N	80°12'15.978"W	5.94	193.843	0.29	0.22	-11.55
2708	2.12	204.76	2708	-5.3	-8.93	-3.03	1770309	439888.57	39°42'20.120"N	80°12'15.998"W	9.43	198.777	0.24	0.17	-4.79
2808	2.26	206.32	2808	-7.06	-15.66	-4.68	1770308	439885.13	39°42'20.086"W	80°12'16.019"W	13.23	200.733	0.15	0.14	1.56
2908	2.09	213.26	2908	-8.56	-15.66	-6.56	1770306	439881.84	39°42'20.053"N	80°12'16.043"W	16.98	202.716	0.31	-0.17	6.94
3008	1.78	218.78	3008	-9.56	-18.4	-8.53	1770304	439879.1	39°42'20.026"W	80°12'16.068"W	20.28	204.873	0.36	-0.31	5.52
3108	1.75	225.16	3108	-10.15	-20.69	-10.59	1770302	439876.81	39°42'20.003"N	80°12'16.094"W	23.24	207.099	0.2	-0.03	6.38
3208	1.67	226.09	3208	-10.53	-22.78	-12.72	1770300	439874.73	39°42'19.983"N	80°12'16.121"W	26.09	209.181	0.08	-0.08	0.93
3308	1.54	228.1	3308	-10.82	-24.68	-14.77	1770298	439872.82	39°42'19.963"N	80°12'16.147"W	28.76	210.893	0.14	-0.13	2.01
3408	1.47	229.55	3408	-11.02	-26.41	-16.74	1770296	439871.09	39°42'19.946"N	80°12'16.172"W	31.27	212.373	0.08	-0.07	1.45
3508	1.44	233.68	3508	-11.08	-27.99	-18.73	1770294	439869.51	39°42'19.931"N	80°12'16.197"W	33.68	213.795	0.11	-0.03	4.13
3608	1.33	239.79	3608	-10.93	-29.32	-20.75	1770292	439868.18	39°42'19.917"N	80°12'16.223"W	35.92	215.288	0.18	-0.11	6.11
3708	1.06	246.55	3708	-10.57	-30.27	-22.6	1770290	439867.23	39°42'19.908"N	80°12'16.246"W	37.78	216.746	0.3	-0.27	6.76
3808	0.95	257.27	3808	-10.02	-30.82	-24.26	1770288	439866.68	39°42'19.902"N	80°12'16.268"W	39.22	218.205	0.22	-0.11	10.72
3908	1.1	258.48	3908	-9.26	-31.19	-26.01	1770287	439866.31	39°42'19.898"N	80°12'16.290"W	40.61	219.818	0.15	0.15	1.21
4008	1.14	256.7	4008	-8.45	-31.61	-27.92	1770285	439865.89	39°42'19.894"N	80°12'16.314"W	42.18	221.444	0.05	0.04	-1.78
4108	1.07	255.56	4108	-7.69	-32.08	-29.79	1770283	439865.43	39°42'19.889"N	80°12'16.338"W	43.77	222.881	0.07	-0.07	-1.14
4208	1	258.05	4208	-6.96	-32.49	-31.55	1770281	439865.01	39°42'19.885"N	80°12'16.361"W	45.28	224.155	0.08	-0.07	2.49
4308	1.06	271.77	4308	-6.01	-32.64	-33.32	1770279	439864.86	39°42'19.883"N	80°12'16.383"W	46.65	225.592	0.25	0.06	13.72
4408	1.22	275.06	4408	-4.72	-32.52	-35.31	1770277	439864.98	39°42'19.884"N	80°12'16.409"W	48	227.354	0.17	0.16	3.29
4508	1.34	276.81	4508	-3.2	-32.29	-37.53	1770275	439865.21	39°42'19.887"N	80°12'16.437"W	49.51	229.294	0.13	0.12	1.75
4608	1.31	275.23	4608	-1.62	-32.04	-39.83	1770273	439865.46	39°42'19.889"N	80°12'16.467"W	51.12	231.182	0.05	-0.03	-1.58
4708	1.72	276.99	4708	0.19	-31.76	-42.46	1770270	439865.74	39°42'19.891"N	80°12'16.500"W	53.02	233.204	0.41	0.41	1.76
4808	1.89	277.06	4808	2.38	-31.37	-45.58	1770267	439866.13	39°42'19.895"N	80°12'16.540"W	55.34	235.463	0.17	0.17	0.07
4908	2.24	277.46	4908	4.89	-30.92	-49.16	1770263	439866.59	39°42'19.899"N	80°12'16.586"W	58.07	237.834	0.35	0.35	0.4
5008	2.51	277.37	5008	7.79	-30.38	-53.27	1770259	439867.12	39°42'19.904"N	80°12'16.639"W	61.32	240.301	0.27	0.27	-0.09
5108	2.72	279.82	5108	11.05	-29.7	-57.78	1770255	439867.81	39°42'19.911"N	80°12'16.697"W	64.96	242.798	0.24	0.21	2.45
5208	2.98	283.44	5208	14.79	-28.69	-62.64	1770250	439868.81	39°42'19.920"N	80°12'16.759"W	68.9	245.395	0.32	0.26	3.62
5308	3.2	286.5	5308	19.04	-27.29	-67.85	1770245	439870.21	39°42'19.934"N	80°12'16.826"W	73.13	248.089	0.27	0.22	3.06
5408	3.36	287.24	5408	23.66	-25.63	-73.32	1770239	439871.87	39°42'19.950"N	80°12'16.896"W	77.67	250.734	0.17	0.16	0.74
5508	3.39	292.4	5508	28.58	-23.63	-78.85	1770234	439873.87	39°42'19.969"N	80°12'16.967"W	82.32	253.316	0.31	0.03	5.16

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5608	3.38	289.99	5606.05	33.6	-21.5	-84.36	1770228	439876	39°42'19.990"N	80°12'17.038"W	87.05	255.702	0.14	-0.01	-2.41
5708	3.48	295.71	5705.87	38.86	-18.99	-89.76	1770223	439878.51	39°42'20.014"N	80°12'17.107"W	91.75	258.057	0.59	0.1	9.72
5808	3.35	297.78	5805.69	44.29	-16.12	-94.99	1770218	439881.38	39°42'20.042"N	80°12'17.174"W	96.34	260.367	0.17	-0.13	-1.93
5908	3.52	298.89	5905.51	49.73	-13.28	-100.26	1770212	439884.22	39°42'20.070"N	80°12'17.242"W	101.13	262.457	0.18	0.17	1.11
6008	3.67	299.28	6005.32	55.47	-10.23	-105.74	1770207	439887.27	39°42'20.099"N	80°12'17.312"W	106.23	264.475	0.15	0.15	0.39
6108	3.52	298.71	6105.12	61.19	-7.19	-111.22	1770201	439890.31	39°42'20.129"N	80°12'17.383"W	111.45	266.302	0.15	-0.15	-0.57
6208	3.39	303.66	6204.94	66.78	-4.07	-116.38	1770196	439893.43	39°42'20.159"N	80°12'17.449"W	116.45	267.995	0.33	-0.13	4.95
6308	3.43	297.84	6304.76	72.28	-1.04	-121.68	1770191	439896.46	39°42'20.189"N	80°12'17.515"W	121.49	269.51	0.35	0.04	-5.82
6408	3.32	304.12	6404.59	77.73	1.98	-126.52	1770186	439899.48	39°42'20.218"N	80°12'17.579"W	126.54	270.898	0.39	-0.11	6.28
6508	3.25	301.04	6504.42	83.1	5.07	-131.35	1770181	439902.57	39°42'20.248"N	80°12'17.641"W	131.45	272.21	0.19	-0.07	-3.08
6527	3.18	303.54	6523.39	84.09	5.64	-132.25	1770180	439903.14	39°42'20.254"N	80°12'17.653"W	132.37	272.441	0.82	-0.37	13.16
6553	3.33	304.74	6549.35	85.49	6.47	-133.47	1770179	439903.97	39°42'20.262"N	80°12'17.669"W	133.63	272.774	0.63	0.58	4.62
6617	0.6	93	6613.32	87.04	7.51	-134.67	1770178	439905.01	39°42'20.272"N	80°12'17.684"W	134.87	273.191	6.02	-4.27	231.66
6680	7.35	110.02	6676.13	83.44	6.11	-130.54	1770182	439903.61	39°42'20.259"N	80°12'17.631"W	130.69	272.68	10.76	10.71	27.02
6743	9.26	111.64	6738.47	75.73	2.86	-122.05	1770190	439900.36	39°42'20.227"N	80°12'17.522"W	122.08	271.343	3.05	3.03	2.57
6807	11.96	127.39	6801.38	64.95	-3.07	-111.99	1770201	439894.43	39°42'20.170"N	80°12'17.393"W	112.03	268.431	6.15	4.22	24.61
6870	16.85	143.4	6862.41	49.51	-14.37	-101.35	1770211	439883.13	39°42'20.059"N	80°12'17.256"W	102.36	261.928	9.94	7.76	25.41
6933	21.77	147.01	6921.85	28.71	-31.51	-89.53	1770223	439865.99	39°42'19.890"N	80°12'17.103"W	94.92	250.609	8.03	7.81	5.73
6996	25.97	147.23	6979.44	3.29	-52.92	-75.7	1770237	439844.58	39°42'19.680"N	80°12'16.924"W	92.36	235.043	6.67	6.67	0.35
7059	29.37	155.1	7035.25	-25.59	-78.55	-61.72	1770251	439818.96	39°42'19.428"N	80°12'16.742"W	99.9	218.159	7.91	5.4	12.49
7122	33.5	164.1	7089.02	-56.94	-109.31	-50.44	1770262	439788.19	39°42'19.124"N	80°12'16.595"W	120.39	204.77	9.91	6.56	14.29
7185	40.45	166.8	7139.33	-91.91	-145.98	-41	1770272	439751.53	39°42'18.763"N	80°12'16.470"W	151.63	195.688	11.33	11.03	4.29
7249	36.85	166.44	7189.3	-128.52	-184.86	-31.76	1770281	439712.65	39°42'18.379"N	80°12'16.348"W	187.57	189.747	5.64	-5.62	-0.56
7312	31.8	165.34	7241.31	-161.23	-219.31	-23.12	1770289	439678.21	39°42'18.039"N	80°12'16.234"W	220.52	186.018	8.08	-8.02	-1.75
7375	26.84	164.95	7296.22	-189.79	-249.12	-15.22	1770297	439648.4	39°42'17.745"N	80°12'16.130"W	249.58	183.496	7.88	-7.87	-0.62
7438	21.61	165.04	7353.66	-213.75	-274.08	-8.53	1770304	439623.44	39°42'17.499"N	80°12'16.042"W	274.21	181.782	8.3	-8.3	0.14
7501	17.89	174.23	7412.95	-232.79	-294.92	-4.56	1770308	439602.59	39°42'17.294"N	80°12'15.989"W	294.96	180.886	7.68	-5.9	14.59
7565	15.06	196.74	7474.38	-246.13	-312.69	-5.97	1770307	439584.83	39°42'17.118"N	80°12'16.005"W	312.75	181.093	10.82	-4.42	35.17
7627	12.45	217.75	7534.64	-252.66	-325.7	-12.38	1770300	439571.82	39°42'16.989"N	80°12'16.086"W	325.93	182.177	9.02	-4.21	33.89
7690	12.66	237.18	7596.16	-253.94	-334.81	-22.35	1770290	439562.71	39°42'16.898"N	80°12'16.213"W	335.56	183.819	6.68	0.33	30.84
7753	13.64	269.68	7657.59	-249	-338.6	-35.6	1770270	439558.92	39°42'16.860"N	80°12'16.382"W	340.47	186.001	11.68	1.56	51.99
7816	17.77	288.53	7718.26	-236.62	-335.58	-52.16	1770260	439561.94	39°42'16.888"N	80°12'16.594"W	339.61	188.834	10.34	6.56	29.92
7879	24.54	298.84	7777	-216.73	-326.2	-72.76	1770240	439571.32	39°42'16.979"N	80°12'16.859"W	334.22	192.575	12.22	10.75	16.37
7943	26.87	306.27	7834.68	-190.74	-311.23	-96.08	1770216	439586.29	39°42'17.125"N	80°12'17.158"W	325.72	197.155	6.21	3.64	11.61
8006	29.01	310.43	7890.34	-162.19	-292.9	-119.19	1770193	439604.62	39°42'17.305"N	80°12'17.456"W	316.22	202.143	4.59	3.4	6.6
8132	41.5	312.96	7993.44	-91.51	-244.68	-144.08	1770168	439626.56	39°42'17.520"N	80°12'17.777"W	306.88	208.002	9	8.87	2.83
8195	46.81	313.07	8038.62	-48.31	-214.75	-172.64	1770140	439652.83	39°42'17.777"N	80°12'18.145"W	299.46	215.206	10.98	10.95	1.19
8258	53.26	313.53	8079.07	-0.73	-181.65	-239.83	1770073	439715.86	39°42'18.395"N	80°12'18.558"W	296.7	223.63	8.43	8.43	0.17
8321	59.89	313.35	8113.75	51.09	-145.52	-277.99	1770035	439751.99	39°42'18.749"N	80°12'19.503"W	313.78	242.37	10.25	10.24	0.73
8385	65.99	316.03	8142.86	107.45	-105.43	-318.46	1769994	439792.07	39°42'19.142"N	80°12'20.024"W	335.46	251.682	10.23	9.53	4.19
8448	70.97	317.33	8165.96	165.69	-62.8	-358.65	1769954	439834.7	39°42'19.560"N	80°12'20.543"W	364.11	260.068	8.13	7.9	2.06
8511	76.93	318.72	8183.37	225.97	-17.8	-399.11	1769913	439879.7	39°42'20.002"N	80°12'21.065"W	399.51	267.446	9.69	9.46	2.21
8637	81.41	318.82	8195.21	287.67	75.88	-480.65	1769873	439926.22	39°42'20.458"N	80°12'21.591"W	440.82	273.736	7.11	7.11	0.16
8700	84.3	320.85	8211.91	412.32	123.91	-520.7	1769792	440021.4	39°42'21.393"N	80°12'22.635"W	535.24	283.386	4.35	3.79	2.14
8763	88.83	322.18	8215.68	475.17	173.12	-559.82	1769753	440070.61	39°42'21.876"N	80°12'23.140"W	585.98	287.184	7.49	7.19	2.11
8826	90.25	326.25	8216.19	538.14	224.22	-596.65	1769716	440121.7	39°42'22.378"N	80°12'23.617"W	637.99	290.596	6.84	6.25	6.46
8890	90.68	330.84	8215.67	601.82	278.8	-630.04	1769683	440176.28	39°42'22.915"N	80°12'24.049"W	688.97	293.87	7.2	0.67	7.17
8954	90.77	331.61	8214.86	665.16	334.89	-660.84	1769652	440232.37	39°42'23.467"N	80°12'24.449"W	740.85	296.874	1.21	0.14	1.2
9017	90.37	329.65	8214.23	777.59	389.78	-691.74	1769621	440287.26	39°42'24.007"N	80°12'24.850"W	794	299.401	3.18	-0.63	-3.11
9080	90.68	329.94	8213.66	790.15	444.23	-723.43	1769589	440341.7	39°42'24.542"N	80°12'25.261"W	848.94	301.552	0.67	0.49	0.46

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9143	90.58	329.67	8212.96	852.7	498.68	-755.12	1769557	440396.15	39°42'25.078"N	80°12'25.672"W	904.92	303.441	0.46	-0.16	-0.43
9206	88.25	324.95	8213.61	915.5	551.68	-789.13	1769523	440449.14	39°42'25.599"N	80°12'26.112"W	962.84	304.957	8.35	-3.7	-7.49
9270	89.35	322.06	8214.95	979.47	603.11	-827.18	1769485	440500.57	39°42'26.105"N	80°12'26.604"W	1033.7	306.096	4.83	1.72	-4.52
9333	90.25	321.7	8215.17	1042.46	652.67	-866.07	1769446	440550.13	39°42'26.591"N	80°12'27.107"W	1084.46	307.002	1.54	1.43	-0.57
9396	91.05	321.24	8214.45	1105.43	701.95	-905.31	1769407	440599.41	39°42'27.075"N	80°12'27.614"W	1145.57	307.789	1.46	1.27	-0.73
9459	91.08	319.73	8213.28	1168.36	750.54	-945.39	1769367	440648.39	39°42'27.552"N	80°12'28.132"W	1207.09	308.446	2.4	0.05	-2.4
9521	90.8	318.23	8212.26	1230.2	797.31	-986.07	1769326	440694.77	39°42'28.011"N	80°12'28.657"W	1268.09	308.958	2.46	-0.45	-2.42
9584	90.83	316.75	8211.37	1292.9	843.75	-1028.64	1769284	440741.12	39°42'28.467"N	80°12'29.206"W	1330.42	309.361	2.35	0.05	-2.35
9648	90.4	313.66	8210.68	1356.29	889.16	-1073.72	1769239	440786.6	39°42'28.912"N	80°12'29.788"W	1394.09	309.628	4.87	-0.67	-4.83
9711	90.4	316.2	8210.24	1418.66	933.65	-1118.32	1769194	440831.09	39°42'29.348"N	80°12'30.363"W	1456.82	309.857	4.03	0	4.03
9775	90.4	321.28	8209.79	1482.46	981.74	-1160.51	1769152	440879.18	39°42'29.820"N	80°12'30.908"W	1520.07	310.23	7.94	0	7.94
9838	90.28	323.09	8209.42	1545.45	1031.51	-1199.13	1769113	440928.94	39°42'30.309"N	80°12'31.407"W	1581.75	310.702	2.88	-0.19	2.87
9902	90.09	322.06	8209.21	1609.45	1082.33	-1238.03	1769073	440979.77	39°42'30.808"N	80°12'31.910"W	1644.43	311.161	1.64	-0.3	-1.61
9965	90.03	323.84	8209.15	1672.45	1132.61	-1275.98	1769037	441030.04	39°42'31.302"N	80°12'32.400"W	1706.15	311.593	2.83	-0.1	2.83
10029	90.37	324.73	8208.92	1736.43	1184.57	-1313.34	1768999	441082.39	39°42'31.813"N	80°12'32.884"W	1768.64	312.049	1.49	0.53	1.39
10092	90.09	324.24	8208.67	1799.41	1235.85	-1349.94	1768963	441133.28	39°42'32.317"N	80°12'33.357"W	1830.21	312.474	0.9	-0.44	-0.78
10155	90.43	323.88	8208.38	1862.4	1286.86	-1386.92	1768926	441184.28	39°42'32.818"N	80°12'33.835"W	1891.97	312.857	0.79	0.54	-0.57
10218	90.4	322.56	8207.93	1925.39	1337.31	-1424.64	1768888	441234.73	39°42'33.314"N	80°12'34.323"W	1953.97	313.189	2.1	-0.05	-2.1
10281	90.46	321.39	8207.46	1988.38	1386.94	-1463.44	1768849	441284.36	39°42'33.801"N	80°12'34.825"W	2016.25	313.463	1.86	0.1	-1.86
10344	90.89	320.21	8206.71	2051.33	1435.76	-1503.26	1768809	441333.17	39°42'34.281"N	80°12'35.339"W	2078.75	313.684	1.99	0.68	-1.87
10408	90.77	319.46	8205.79	2115.23	1484.66	-1544.53	1768768	441382.07	39°42'34.761"N	80°12'35.872"W	2142.98	313.868	1.19	-0.19	-1.17
10471	90.55	321.14	8205.06	2178.15	1533.13	-1584.77	1768728	441430.53	39°42'35.236"N	80°12'36.392"W	2204.99	314.051	2.69	-0.35	2.64
10532	90.62	323.24	8204.44	2239.14	1581.31	-1622.16	1768690	441478.72	39°42'35.710"N	80°12'36.875"W	2265.38	314.269	3.44	0.11	3.44
10595	90.62	322.83	8203.76	2302.13	1631.65	-1660.04	1768653	441529.05	39°42'36.204"N	80°12'37.365"W	2327.67	314.506	0.65	0	-0.65
10658	90.71	322	8203.02	2365.12	1681.57	-1698.47	1768614	441578.37	39°42'36.695"N	80°12'37.862"W	2390.08	314.714	1.33	0.14	-1.32
10721	90.58	323.06	8202.32	2428.11	1731.57	-1736.79	1768576	441628.96	39°42'37.186"N	80°12'38.357"W	2452.5	314.914	1.7	-0.21	1.68
10783	90.49	322.28	8201.74	2490.11	1780.86	-1774.39	1768538	441678.26	39°42'37.670"N	80°12'38.843"W	2513.95	315.104	1.27	-0.15	-1.26
10846	90.43	323.34	8201.23	2553.11	1831.05	-1812.46	1768500	441728.44	39°42'38.163"N	80°12'39.335"W	2576.39	315.292	1.69	-0.1	1.68
10909	90.52	323.24	8200.71	2616.11	1881.55	-1850.12	1768462	441778.94	39°42'38.659"N	80°12'39.822"W	2638.79	315.483	0.21	0.14	-0.16
10973	90.49	321.37	8200.14	2680.1	1932.19	-1889.25	1768423	441829.57	39°42'39.156"N	80°12'40.338"W	2702.34	315.644	2.92	-0.05	-2.92
11036	90.55	320.81	8199.57	2743.06	1981.21	-1928.82	1768384	441878.59	39°42'39.638"N	80°12'40.839"W	2765.06	315.768	0.89	0.01	-0.89
11099	90.34	322.39	8199.08	2806.04	2030.58	-1967.95	1768345	441927.96	39°42'40.123"N	80°12'41.345"W	2827.74	315.897	2.53	-0.33	2.51
11162	90.4	322.49	8198.68	2869.03	2080.52	-2006.35	1768306	441977.9	39°42'40.613"N	80°12'41.841"W	2890.33	316.04	0.19	0.1	0.16
11226	90.18	322.56	8198.35	2933.03	2131.31	-2045.29	1768267	442028.68	39°42'41.112"N	80°12'42.345"W	2953.93	316.18	0.36	-0.34	0.11
11289	90.18	322.16	8198.15	2996.02	2181.2	-2083.77	1768229	442078.57	39°42'41.602"N	80°12'42.842"W	3016.57	316.309	0.63	0	-0.63
11352	90.22	324.16	8197.93	3059.02	2231.62	-2121.54	1768191	442128.98	39°42'42.097"N	80°12'43.331"W	3079.13	316.449	3.18	0.06	3.17
11415	90.06	324.09	8197.78	3122.01	2282.66	-2158.46	1768154	442180.03	39°42'42.599"N	80°12'43.808"W	3141.57	316.602	0.28	-0.25	-0.11
11478	89.97	321.7	8197.76	3185	2332.9	-2196.46	1768116	442230.26	39°42'43.092"N	80°12'44.300"W	3204.2	316.725	3.8	-0.14	-3.79
11541	90.03	320.99	8197.76	3247.98	2382.1	-2235.81	1768077	442279.46	39°42'43.575"N	80°12'44.808"W	3267	316.814	1.13	0.1	-1.13
11605	90.03	320.12	8197.73	3311.92	2431.52	-2276.47	1768036	442328.88	39°42'44.061"N	80°12'45.333"W	3330.86	316.886	1.36	0	-1.36
11668	89.88	321.01	8197.78	3374.86	2480.18	-2316.49	1767996	442377.53	39°42'44.538"N	80°12'45.850"W	3393.73	316.955	1.43	-0.24	1.41
11731	90.06	323.02	8197.81	3437.85	2529.83	-2355.26	1767957	442427.18	39°42'45.026"N	80°12'46.352"W	3456.49	317.047	3.2	0.29	3.19
11795	90.12	325.16	8197.71	3501.83	2581.67	-2392.8	1767920	442479.01	39°42'45.535"N	80°12'46.837"W	3520.01	317.174	3.35	0.09	3.34
11857	90.12	325.91	8197.58	3563.77	2632.78	-2427.88	1767885	442530.13	39°42'46.038"N	80°12'47.291"W	3581.36	317.319	1.21	0	1.21
11921	90.06	326.97	8197.48	3627.65	2686.12	-2463.26	1767849	442583.45	39°42'46.562"N	80°12'47.749"W	3644.57	317.478	1.66	-0.09	1.66
11984	90.03	327.94	8197.43	3690.46	2739.22	-2497.15	1767816	442636.56	39°42'47.084"N	80°12'48.188"W	3706.63	317.647	1.54	-0.05	1.54
12047	90.09	327.34	8197.37	3753.26	2792.44	-2530.87	1767782	442689.77	39°42'47.607"N	80°12'48.625"W	3768.69	317.813	0.96	0.1	-0.95
12110	90.12	326.83	8197.25	3816.1	2845.32	-2565.11	1767748	442742.65	39°42'48.127"N	80°12'49.069"W	3830.88	317.965	0.81	0.05	-0.81
12172	89.97	325.52	8197.2	3878	2896.83	-2599.62	1767713	442794.15	39°42'48.634"N	80°12'49.516"W	3892.25	318.095	2.13	-0.24	-2.11
12236	90.09	323.43	8197.17	3941.98	2948.91	-2636.8	1767676	442846.24	39°42'49.146"N	80°12'49.997"W	3955.86	318.198	3.27	0.19	-3.27
12299	90.09	322.55	8197.07	4004.97	2998.22	-2674.73	1767638	442896.54	39°42'49.640"N	80°12'50.487"W	4018.64	318.273	1.4	0	-1.4
12363	90	322.41	8197.02	4068.97	3049.98	-2713.71	1767599	442947.3	39°42'50.138"N	80°12'50.991"W	4082.47	318.339	0.26	-0.14	-0.22

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12426	90	322.48	8197.02	4131.97	3099.93	-2752.1	1767561	442997.24	39°42'50.629"N	80°12'51.487"W	318.401	0	0.11
12488	90.15	323	8196.94	4193.97	3149.27	-2789.64	1767523	443046.58	39°42'51.114"N	80°12'51.973"W	318.465	0.24	0.84
12551	90.03	322.68	8196.84	4256.97	3199.48	-2827.7	1767485	443096.79	39°42'51.607"N	80°12'52.465"W	318.53	-0.19	-0.51
12614	90.06	322.7	8196.79	4319.97	3249.59	-2865.88	1767447	443146.89	39°42'52.099"N	80°12'52.959"W	318.59	0.05	0.03
12678	89.91	321.26	8196.81	4383.95	3300	-2905.3	1767407	443197.31	39°42'52.594"N	80°12'53.468"W	318.64	2.26	-0.23
12741	90	321.25	8196.86	4446.93	3349.14	-2944.73	1767368	443246.44	39°42'53.077"N	80°12'53.978"W	318.676	0.14	0.14
12804	89.88	320.05	8196.92	4509.87	3397.86	-2984.67	1767328	443295.15	39°42'53.555"N	80°12'54.494"W	318.704	1.91	-0.19
12868	89.85	320.01	8197.07	4573.79	3446.91	-3025.79	1767287	443344.2	39°42'54.036"N	80°12'55.025"W	318.722	0.08	-0.05
12933	89.88	319.32	8197.22	4636.68	3494.93	-3066.56	1767246	443392.23	39°42'54.508"N	80°12'55.552"W	318.735	1.1	-0.05
12993	90.03	319.73	8197.27	4698.56	3542.09	-3106.81	1767206	443439.38	39°42'54.971"N	80°12'56.071"W	318.746	0.7	0.24
13057	89.88	322.53	8197.32	4762.52	3591.91	-3146.97	1767166	443489.2	39°42'55.460"N	80°12'56.590"W	318.778	4.38	4.37
13120	89.63	323.01	8197.59	4825.52	3642.85	-3185.08	1767128	443539.36	39°42'55.953"N	80°12'57.083"W	318.83	0.86	-0.4
13184	89.54	322	8198.05	4889.52	3692.85	-3224.04	1767089	443589.13	39°42'56.451"N	80°12'57.587"W	318.877	1.58	-0.14
13246	89.69	321.53	8198.47	4951.5	3741.55	-3262.41	1767050	443638.82	39°42'56.930"N	80°12'58.083"W	318.914	0.8	0.24
13309	89.6	323.3	8198.86	5014.49	3791.47	-3300.83	1767012	443688.74	39°42'57.420"N	80°12'58.580"W	318.957	2.81	-0.14
13372	89.32	324.03	8199.45	5077.49	3842.22	-3338.16	1766975	443739.49	39°42'57.918"N	80°12'59.062"W	319.016	1.24	-0.44
13434	89.57	325.26	8200.06	5139.46	3892.78	-3374.03	1766939	443790.05	39°42'58.415"N	80°12'59.527"W	319.083	2.02	0.4
13497	89.38	324.74	8200.63	5202.42	3944.39	-3410.17	1766903	443841.65	39°42'58.922"N	80°12'59.994"W	319.155	0.88	-0.3
13560	89.57	324.05	8201.21	5265.39	3995.61	-3446.84	1766866	443892.86	39°42'59.426"N	80°13'00.469"W	319.217	1.14	-0.11
13624	89.54	324.92	8201.71	5329.37	4047.7	-3484.02	1766829	443944.95	39°42'59.938"N	80°13'00.950"W	319.28	1.36	-0.05
13687	89.85	326.06	8202.04	5392.31	4099.59	-3519.73	1766793	443996.85	39°43'00.448"N	80°13'01.412"W	319.352	1.8	0.49
13750	90.15	326.06	8202.04	5455.22	4151.84	-3559.49	1766758	444049.09	39°43'00.961"N	80°13'01.868"W	319.429	0.48	0.73
13813	89.94	325.22	8201.99	5518.15	4203.85	-3590.11	1766722	444101.1	39°43'01.472"N	80°13'02.328"W	319.5	1.37	-0.33
13877	90.06	326.22	8201.99	5582.08	4256.73	-3626.53	1766686	444153.98	39°43'01.992"N	80°13'02.795"W	319.571	1.57	0.19
13940	89.88	327.62	8202.03	5644.93	4309.52	-3660.92	1766652	444206.76	39°43'02.511"N	80°13'03.240"W	319.652	2.24	-0.29
14003	90.03	326.64	8202.08	5707.77	4362.43	-3695.11	1766618	444259.67	39°43'03.031"N	80°13'03.683"W	319.734	1.57	0.24
14065	90.07	325.2	8202.08	5769.69	4413.78	-3729.85	1766583	444311.02	39°43'03.536"N	80°13'04.133"W	319.801	2.32	-0.1
14129	90.03	323.43	8202.08	5833.67	4465.76	-3767.18	1766546	444363.99	39°43'04.047"N	80°13'04.616"W	319.85	2.77	0.09
14192	90.03	322.57	8202.04	5896.67	4516.08	-3805.1	1766508	444413.31	39°43'04.541"N	80°13'05.106"W	319.884	1.37	0
14256	89.97	323.39	8202.12	5960.66	4566.99	-3843.88	1766469	444464.21	39°43'05.041"N	80°13'05.608"W	319.914	0.42	-0.09
14382	89.91	323.35	8202.24	6086.66	4617.38	-3881.7	1766431	444515.64	39°43'05.536"N	80°13'06.097"W	319.947	0.9	-0.14
14444	89.42	322.58	8202.6	6148.66	4667.93	-3919.29	1766393	444565.15	39°43'06.033"N	80°13'06.583"W	319.983	0.08	0.05
14508	89.51	320.81	8203.2	6212.64	4767.64	-3956.63	1766356	444614.64	39°43'06.519"N	80°13'07.066"W	320.03	1.47	-0.79
14572	89.63	319.31	8203.68	6276.55	4816.71	-4037.38	1766275	444713.92	39°43'07.494"N	80°13'08.110"W	320.03	2.77	0.14
14634	89.66	320.28	8204.06	6338.45	4864.06	-4077.4	1766235	444761.27	39°43'07.958"N	80°13'08.627"W	320.03	2.35	-0.19
14697	90.28	321.23	8204.1	6401.4	4912.85	-4117.26	1766195	444810.05	39°43'08.437"N	80°13'09.142"W	320.035	1.57	0.05
14760	89.78	321.15	8204.06	6464.37	4961.94	-4156.74	1766156	444859.14	39°43'08.919"N	80°13'09.652"W	320.035	1.8	0.98
14823	89.69	321.54	8204.36	6527.34	5011.14	-4196.09	1766117	444908.34	39°43'09.402"N	80°13'10.161"W	320.046	0.8	-0.79
14886	89.72	321.54	8204.68	6590.32	5060.47	-4235.28	1766077	444957.66	39°43'09.887"N	80°13'10.667"W	320.059	0.64	-0.14
14949	89.63	322.96	8205.04	6653.31	5110.28	-4273.84	1766039	445007.47	39°43'10.376"N	80°13'11.166"W	320.073	0.05	0.05
15012	89.85	322.69	8205.32	6716.31	5160.48	-4311.91	1766001	445057.67	39°43'10.869"N	80°13'11.658"W	320.093	2.26	-0.14
15075	90.09	322.54	8205.36	6779.31	5210.54	-4350.16	1765963	445107.72	39°43'11.361"N	80°13'12.153"W	320.119	0.55	0.35
15138	90.26	322.09	8205.19	6842.31	5260.39	-4388.68	1765924	445157.58	39°43'11.851"N	80°13'12.651"W	320.142	0.45	0.38
15201	90.42	322.83	8204.81	6905.3	5310.35	-4427.06	1765886	445207.53	39°43'12.341"N	80°13'13.147"W	320.162	0.74	0.21
15265	90.37	323.52	8204.35	6969.3	5361.57	-4465.42	1765847	445258.75	39°43'12.844"N	80°13'13.643"W	320.183	1.23	0.38
15328	90.34	322.24	8203.96	7032.3	5411.81	-4503.44	1765809	445308.98	39°43'13.338"N	80°13'14.135"W	320.211	1.09	-0.14
15391	90	321.32	8203.77	7095.28	5461.3	-4542.81	1765770	445358.47	39°43'13.824"N	80°13'14.639"W	320.248	2.03	-0.05
15455	90.12	322.2	8203.7	7159.27	5511.57	-4582.03	1765731	445408.74	39°43'14.317"N	80°13'15.151"W	320.262	1.56	-0.54
15517	90.15	323.74	8203.56	7221.26	5561.06	-4619.36	1765693	445458.23	39°43'14.804"N	80°13'15.634"W	320.285	2.48	0.05
15580	90.12	322.13	8203.41	7284.26	5611.33	-4657.33	1765655	445508.49	39°43'15.297"N	80°13'16.125"W	320.308	2.56	-0.05
15640	90.03	320.27	8203.33	7344.23	5658.09	-4694.93	1765618	445555.25	39°43'15.756"N	80°13'16.611"W	320.315	3.1	-0.15

15665 90.03 320.27 8203.32 7369.2 5677.32 -4710.91 1765602 445574.47 39°43'15.945"N 80°13'16.817"W 7377.3 320.315 0 0 0

T A R G E T S

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape	Comment
Coastal 3H HL Pt 1	1420	5716.71	-4809.04	1765504	445613.87	39°43'16.327"N	80°13'18.0 point			
Coastal 3H HL Pt 2	1420	5713.94	-4457.45	1765855	445611.1	39°43'16.327"N	80°13'13.5 point			
Coastal 3H HL Pt 3	1420	5716.41	-3637.01	1766676	445623.56	39°43'16.515"N	80°13'03.0 point			
Coastal 3H LP Rev-1	8205	93.93	-499.1	1769813	439991.42	39°42'21.098"N	80°12'22.3 point			
Coastal 3H PBHL-Rev-1	8205	-5680.14	-4708.58	1765604	445577.3	39°43'15.973"N	80°13'16.7 point			

WELLPATH COMPOSITION Ref Wellbore: Coastal 3H AWB Ref Wellpath: Coastal 3H AWP Proj: 15665'

Log Name/Comment Start MD End MD Pos Unc Model

01_VES Gyro 100'-6500'	18	6508	Generic gyro - northseeking [Standard]
02_BH ATC <8-1/2"> (6508')	6508	15640	NavTrak (AT Curve Short Spaced)
Projection to bit	15640	15665	Blind Drilling (std)

C O M M E N T S

Wellpath general comments

API: 47-061-01684-0000

Rig: Pioneer 63

BHI Job #: 6977795

Duration: 02.17.2015 - 02.24.2015

VES Gyro 100'-6500'

BH ATC <8-1/2"> (6508') [6527'-15640"]

Projected MD at TD 15665'