



PROJECT DETAILS: Weld County, CO (NAD83)
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone
System Datum: Mean Sea Level
Local North: True

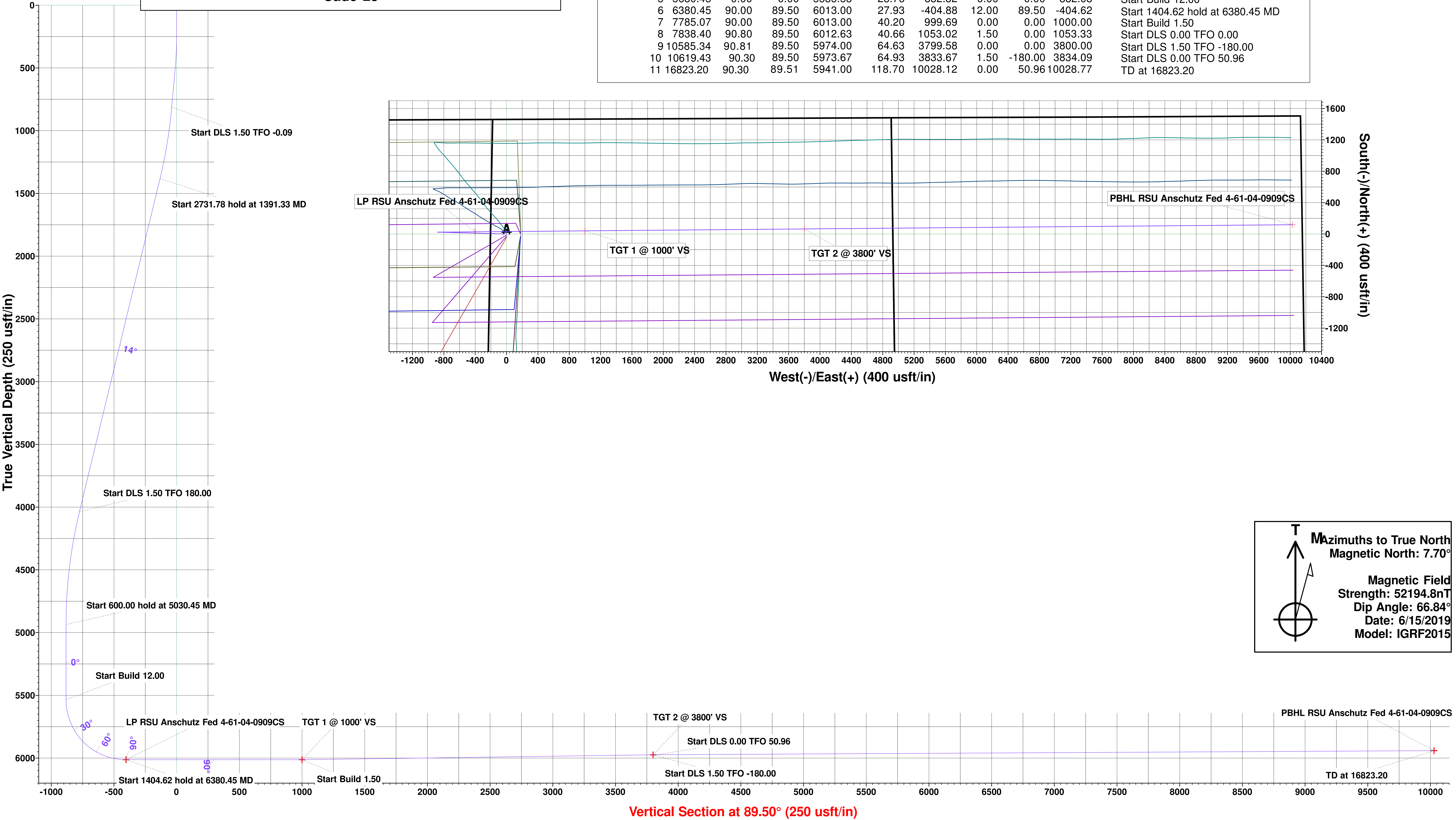
WELL DETAILS: RSU Anschutz Fed 4-61-04-0909CS

Ground Elevation:: 4501.50
RKB Elevation: kb @ 4518.00usft (Cade 23)
Rig Name: Cade 23



HighPoint Resources
Project: Weld County, CO (NAD83)
Site: Sec 04-T04N-R61W
Well: RSU Anschutz Fed 4-61-04-0909CS
Wellbore: Wellbore #1
Plan: (RSU Anschutz Fed 4-61-04-0909CS/Wellbore #1)
Cade 23

SECTION DETAILS											
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation	
1	814.00	4.95	271.58	812.40	1.37	-39.53	0.00	0.00	-39.52	Start DLS 1.50 TFO -0.09	
2	1391.33	13.61	271.52	1381.64	3.86	-132.51	1.50	-0.09	-132.47	Start 2731.78 hold at 1391.33 MD	
3	4123.11	13.61	271.52	4036.71	20.92	-775.10	0.00	0.00	-774.89	Start DLS 1.50 TFO 180.00	
4	5030.45	0.00	0.00	4935.53	23.76	-882.32	1.50	180.00	-882.08	Start 600.00 hold at 5030.45 MD	
5	5630.45	0.00	0.00	5535.53	23.76	-882.32	0.00	0.00	-882.08	Start Build 12.00	
6	6380.45	90.00	89.50	6013.00	27.93	-404.88	12.00	89.50	-404.62	Start 1404.62 hold at 6380.45 MD	
7	7785.07	90.00	89.50	6013.00	40.20	999.69	0.00	0.00	1000.00	Start Build 1.50	
8	7838.40	90.80	89.50	6012.63	40.66	1053.02	1.50	0.00	1053.33	Start DLS 0.00 TFO 0.00	
9	10585.34	90.81	89.50	5974.00	64.63	3799.58	0.00	0.00	3800.00	Start DLS 1.50 TFO -180.00	
10	10619.43	90.30	89.50	5973.67	64.93	3833.67	1.50	-180.00	3834.09	Start DLS 0.00 TFO 50.96	
11	16823.20	90.30	89.51	5941.00	118.70	10028.12	0.00	50.96	10028.77	TD at 16823.20	



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Mazimuths to True North

Magnetic North: 7.70°

Magnetic Field

Strength: 52194.8nT

Dip Angle: 66.84°

Date: 6/15/2019

Model: IGRF2015



Directional Survey Report

Company Name: High Point Resources
Well Name: RSU Anshutz FED 04-61-04-0909CS
Field: DJ Basin
Rig ID: Cade 23

State/Prov: Colorado
County: Weld
Location: East of Greeley
API/UWI: 05-123-46727

Survey Company: Atlas Drilling Services
Job Number: 00210-HI-CO
Latitude: 40.345977
Longitude: -104.224875

Proposed Azimuth: 89.5
Declination: 7.7
North Reference: True
KB: 4518

Svy	Depth	Inc	Azm	TVD	NS	EW	VS	DLS	Northing	Easting	A/B	L/R	GTot	HTot	DipA
Tiein	0	0	0	0	0	0	0	0	0	0			0	0	0
1	149	0.27	33.26	149.00	0.29	0.19	0.20	0.18	0.29	0.19			1.00	0.53	70.05
2	241	0.44	304.45	241.00	0.67	0.02	0.03	0.56	0.67	0.02			1.00	0.54	64.07
3	333	1.77	270.78	332.98	0.89	-1.69	-1.68	1.55	0.89	-1.69			1.00	0.50	68.91
4	425	3.31	271.58	424.89	0.99	-5.77	-5.76	1.67	0.99	-5.77			1.00	0.54	66.88
5	517	4.99	271.53	516.64	1.17	-12.42	-12.41	1.83	1.17	-12.42			1.00	0.51	66.27
6	608	5.44	269.11	607.27	1.21	-20.69	-20.68	0.55	1.21	-20.69			1.00	0.53	66.53
7	700	5.26	270.83	698.86	1.20	-29.27	-29.26	0.26	1.20	-29.27			1.00	0.53	67.41
8	792	5.13	270.96	790.49	1.33	-37.60	-37.59	0.14	1.33	-37.60			1.00	0.52	67.06
9	814	4.95	271.58	812.40	1.37	-39.53	-39.52	0.85	1.37	-39.53			1.00	0.52	67.06
10	885	5.04	271.09	883.13	1.51	-45.71	-45.70	0.14	1.51	-45.71			1.00	0.50	66.53
11	977	7.11	270.87	974.61	1.68	-55.45	-55.43	2.25	1.68	-55.45			1.00	0.52	66.88
12	1069	9.90	276.07	1,065.59	2.60	-69.01	-68.98	3.14	2.60	-69.01			1.00	0.52	66.88
13	1161	12.02	277.92	1,155.91	4.76	-86.36	-86.32	2.34	4.76	-86.36			1.00	0.52	66.88
14	1253	13.26	273.69	1,245.68	6.76	-106.38	-106.32	1.68	6.76	-106.38			1.00	0.52	66.97
15	1345	13.57	272.10	1,335.17	7.83	-127.69	-127.62	0.52	7.83	-127.69			1.00	0.52	66.88
16	1437	13.21	273.21	1,424.67	8.82	-148.98	-148.89	0.48	8.82	-148.98			1.00	0.52	66.97
17	1528	12.95	273.47	1,513.31	10.01	-169.53	-169.44	0.29	10.01	-169.53			1.00	0.52	66.97
18	1624	13.70	272.46	1,606.72	11.15	-191.63	-191.53	0.82	11.15	-191.63			1.00	0.52	66.97
19	1719	13.30	269.68	1,699.10	11.58	-213.80	-213.69	0.80	11.58	-213.80			1.00	0.52	66.97
20	1814	12.86	266.68	1,791.63	10.90	-235.28	-235.17	0.85	10.90	-235.28			1.00	0.52	66.97
21	1909	14.41	268.40	1,883.95	9.96	-257.65	-257.55	1.69	9.96	-257.65			1.00	0.52	66.97
22	2004	14.89	265.14	1,975.87	8.60	-281.63	-281.54	1.00	8.60	-281.63			1.00	0.52	66.88
23	2100	15.16	264.22	2,068.58	6.29	-306.41	-306.34	0.38	6.29	-306.41			1.00	0.52	66.88
24	2195	15.78	269.81	2,160.15	4.99	-331.69	-331.63	1.70	4.99	-331.69			1.00	0.52	66.88
25	2290	16.57	269.46	2,251.39	4.82	-358.15	-358.09	0.84	4.82	-358.15			1.00	0.52	66.88
26	2386	15.33	269.55	2,343.69	4.59	-384.53	-384.47	1.29	4.59	-384.53			1.00	0.52	66.97
27	2480	15.07	271.13	2,434.40	4.74	-409.17	-409.12	0.52	4.74	-409.17			1.00	0.52	66.88
28	2575	15.73	270.43	2,525.99	5.08	-434.40	-434.34	0.72	5.08	-434.40			1.00	0.52	66.88
29	2670	13.61	272.15	2,617.89	5.59	-458.45	-458.38	2.28	5.59	-458.45			1.00	0.52	66.97
30	2765	13.21	271.44	2,710.30	6.29	-480.47	-480.39	0.46	6.29	-480.47			1.00	0.52	66.97
31	2859	13.12	268.89	2,801.83	6.35	-501.87	-501.80	0.63	6.35	-501.87			1.00	0.52	66.88
32	2954	12.81	266.77	2,894.41	5.55	-523.17	-523.10	0.60	5.55	-523.17			1.00	0.52	66.97
33	3048	12.46	271.71	2,986.13	5.26	-543.71	-543.64	1.21	5.26	-543.71			1.00	0.52	66.88

Svy	Depth	Inc	Azm	TVD	NS	EW	VS	DLS	Northing	Easting	A/B	L/R	GTot	HTot	DipA
34	3143	12.86	272.15	3,078.82	5.96	-564.52	-564.44	0.43	5.96	-564.52			1.00	0.52	66.88
35	3238	13.79	272.90	3,171.26	6.93	-586.39	-586.31	1.00	6.93	-586.39			1.00	0.52	66.97
36	3332	15.20	273.03	3,262.27	8.15	-609.88	-609.79	1.50	8.15	-609.88			1.00	0.52	66.88
37	3427	16.53	273.91	3,353.65	9.73	-635.81	-635.70	1.42	9.73	-635.81			1.00	0.52	66.88
38	3522	15.25	274.22	3,445.02	11.57	-661.75	-661.62	1.35	11.57	-661.75			1.00	0.52	66.97
39	3617	15.07	273.69	3,536.71	13.29	-686.53	-686.39	0.24	13.29	-686.53			1.00	0.52	66.97
40	3711	13.74	273.25	3,627.75	14.71	-709.88	-709.72	1.42	14.71	-709.88			1.00	0.52	66.97
41	3806	13.26	272.77	3,720.13	15.87	-732.02	-731.86	0.52	15.87	-732.02			1.00	0.52	66.88
42	3901	13.21	272.68	3,812.61	16.91	-753.75	-753.57	0.06	16.91	-753.75			1.00	0.52	66.97
43	3996	13.61	272.32	3,905.01	17.87	-775.76	-775.57	0.43	17.87	-775.76			1.00	-9999	66.97
44	4091	13.88	272.46	3,997.29	18.81	-798.31	-798.12	0.29	18.81	-798.31			1.00	-9999	66.88
45	4186	12.55	275.28	4,089.78	20.25	-819.97	-819.77	1.56	20.25	-819.97			1.00	0.52	-9999
46	4281	11.05	269.81	4,182.77	21.17	-839.36	-839.14	1.97	21.17	-839.36			1.00	0.52	66.97
47	4376	9.59	264.30	4,276.23	20.35	-856.34	-856.13	1.85	20.35	-856.34			1.00	0.52	66.97
48	4470	7.73	267.39	4,369.16	19.29	-870.44	-870.24	2.04	19.29	-870.44			1.00	0.52	66.97
49	4566	6.67	268.36	4,464.40	18.83	-882.47	-882.27	1.11	18.83	-882.47			1.00	0.52	66.97
50	4661	5.79	282.37	4,558.84	19.70	-892.66	-892.46	1.84	19.70	-892.66			1.00	0.52	66.97
51	4757	4.95	292.33	4,654.42	22.31	-901.22	-901.00	1.30	22.31	-901.22			1.00	0.52	66.97
52	4852	3.05	287.53	4,749.19	24.63	-907.43	-907.18	2.03	24.63	-907.43			-9999	0.52	66.97
53	4947	3.14	257.30	4,844.06	24.82	-912.37	-912.12	1.70	24.82	-912.37			1.00	0.52	66.97
54	5043	1.41	267.52	4,939.98	24.19	-916.12	-915.87	1.84	24.19	-916.12			1.00	0.52	66.88
55	5137	1.33	276.78	5,033.95	24.27	-918.36	-918.11	0.25	24.27	-918.36			1.00	0.52	66.88
56	5233	0.57	121.26	5,129.94	24.15	-919.06	-918.81	1.94	24.15	-919.06			1.00	0.52	66.97
57	5328	0.62	79.13	5,224.94	24.00	-918.15	-917.90	0.45	24.00	-918.15			1.00	0.52	66.97
58	5424	0.84	93.98	5,320.93	24.05	-916.94	-916.69	0.30	24.05	-916.94			1.00	0.52	66.97
59	5520	1.06	91.30	5,416.92	23.98	-915.35	-915.10	0.23	23.98	-915.35			1.00	0.52	66.97
60	5615	1.72	62.19	5,511.89	24.63	-913.21	-912.96	1.00	24.63	-913.21			1.00	0.52	66.97
61	5709	19.09	90.72	5,604.01	25.10	-896.46	-896.20	18.72	25.10	-896.46			1.00	0.52	66.97
62	5805	28.94	74.59	5,691.68	31.09	-858.23	-857.93	12.24	31.09	-858.23			1.00	0.52	66.97
63	5900	31.51	70.54	5,773.77	45.48	-812.66	-812.23	3.45	45.48	-812.66			1.00	0.52	66.97
64	5995	46	84.20	5,847.79	57.28	-754.84	-754.31	17.63	57.28	-754.84			1.00	0.52	66.97
65	6091	56.08	89.67	5,908.10	61.01	-680.43	-679.87	11.39	61.01	-680.43			1.00	0.52	66.97
66	6185	64.25	89.67	5,954.83	61.48	-598.96	-598.40	8.69	61.48	-598.96			1.00	0.52	66.97
67	6280	76.05	94.20	5,987.04	58.34	-509.85	-509.32	13.20	58.34	-509.85			1.00	0.52	66.88
68	6370	84.18	96.85	6,002.48	49.79	-421.68	-421.23	9.49	49.79	-421.68			1.00	0.52	66.97
69	6462	88.60	91.43	6,008.28	43.17	-330.16	-329.77	7.59	43.17	-330.16			1.00	0.52	66.62
70	6557	87.89	91.16	6,011.19	41.03	-235.23	-234.86	0.80	41.03	-235.23			1.00	0.52	66.80
71	6651	87.27	91.91	6,015.16	38.51	-141.35	-141.01	1.03	38.51	-141.35			1.00	0.52	66.88
72	6746	88.29	91.25	6,018.84	35.89	-46.46	-46.14	1.28	35.89	-46.46			1.00	0.52	66.88
73	6841	88.78	90.63	6,021.27	34.34	48.50	48.80	0.83	34.34	48.50			1.00	0.52	66.88
74	6937	90.23	90.94	6,022.10	33.02	144.48	144.77	1.54	33.02	144.48			1.00	0.52	66.80
75	7032	89.57	90.55	6,022.26	31.79	239.47	239.74	0.81	31.79	239.47			1.00	0.52	66.88
76	7126	91.03	90.72	6,021.77	30.74	333.46	333.72	1.56	30.74	333.46			1.00	0.52	66.88
77	7221	91.12	91.43	6,019.99	28.96	428.43	428.67	0.75	28.96	428.43			1.00	-9999	66.80
78	7317	91.30	90.90	6,017.96	27.01	524.39	524.60	0.58	27.01	524.39			1.00	0.52	66.88

Svy	Depth	Inc	Azm	TVD	NS	EW	VS	DLS	Northing	Easting	A/B	L/R	GTot	HTot	DipA
79	7411	91.16	91.43	6,015.94	25.10	618.35	618.54	0.58	25.10	618.35			1.00	0.52	66.88
80	7507	91.43	90.15	6,013.77	23.78	714.31	714.49	1.36	23.78	714.31			1.00	0.52	66.88
81	7602	90.99	89.22	6,011.77	24.30	809.29	809.47	1.08	24.30	809.29			1.00	0.52	66.88
82	7697	91.25	88.26	6,009.91	26.39	904.25	904.44	1.05	26.39	904.25			-9999	0.52	66.88
83	7792	90.15	88.30	6,008.75	29.24	999.19	999.41	1.16	29.24	999.19			1.00	-9999	66.88
84	7887	89.13	87.99	6,009.35	32.31	1,094.14	1,094.38	1.12	32.31	1,094.14			1.00	0.52	66.88
85	7982	89.09	87.99	6,010.82	35.65	1,189.07	1,189.34	0.04	35.65	1,189.07			1.00	0.52	66.80
86	8079	89	88.12	6,012.44	38.94	1,286.00	1,286.29	0.16	38.94	1,286.00			1.00	0.52	66.88
87	8174	90.37	88.92	6,012.96	41.39	1,380.97	1,381.27	1.67	41.39	1,380.97			1.00	0.52	66.80
88	8270	90.06	87.99	6,012.60	43.98	1,476.93	1,477.26	1.02	43.98	1,476.93			1.00	0.52	66.80
89	8365	91.47	89.31	6,011.33	46.22	1,571.89	1,572.23	2.03	46.22	1,571.89			1.00	0.52	66.80
90	8460	91.30	88.92	6,009.04	47.68	1,666.85	1,667.20	0.45	47.68	1,666.85			1.00	0.52	66.80
91	8555	90.94	88.03	6,007.18	50.21	1,761.80	1,762.17	1.01	50.21	1,761.80			1.00	0.52	66.80
92	8649	90.59	89.67	6,005.92	52.10	1,855.77	1,856.15	1.78	52.10	1,855.77			1.00	0.52	66.80
93	8744	90.50	90.11	6,005.02	52.28	1,950.76	1,951.14	0.47	52.28	1,950.76			1.00	0.52	66.88
94	8839	90.32	90.06	6,004.34	52.14	2,045.76	2,046.14	0.20	52.14	2,045.76			1.00	0.52	66.80
95	8933	90.81	89.80	6,003.41	52.25	2,139.75	2,140.13	0.59	52.25	2,139.75			1.00	0.52	66.80
96	9028	91.21	89.84	6,001.74	52.55	2,234.74	2,235.11	0.42	52.55	2,234.74			1.00	0.52	66.80
97	9123	91.38	90.11	5,999.59	52.59	2,329.71	2,330.08	0.34	52.59	2,329.71			1.00	0.52	-9999
98	9218	91.21	89.80	5,997.45	52.67	2,424.69	2,425.06	0.37	52.67	2,424.69			1.00	0.52	66.80
99	9313	90.77	89.58	5,995.80	53.18	2,519.67	2,520.04	0.52	53.18	2,519.67			1.00	-9999	66.80
100	9407	90.68	90.50	5,994.61	53.12	2,613.67	2,614.03	0.98	53.12	2,613.67			1.00	0.52	66.80
101	9502	90.81	90.63	5,993.38	52.18	2,708.65	2,709.01	0.19	52.18	2,708.65			-9999	0.52	66.80
102	9597	90.50	89.89	5,992.29	51.75	2,803.65	2,803.99	0.84	51.75	2,803.65			1.00	0.52	-9999
103	9692	91.78	90.86	5,990.40	51.13	2,898.62	2,898.96	1.69	51.13	2,898.62			1.00	0.52	89.47
104	9787	90.90	91.12	5,988.18	49.49	2,993.58	2,993.90	0.97	49.49	2,993.58			1.00	0.52	89.47
105	9882	90.01	89.40	5,987.43	49.06	3,088.57	3,088.88	2.04	49.06	3,088.57			-9999	0.52	66.71
106	9977	89.97	88.74	5,987.44	50.60	3,183.56	3,183.88	0.70	50.60	3,183.56			1.00	0.52	66.80
107	10073	89.26	89.09	5,988.09	52.42	3,279.54	3,279.87	0.82	52.42	3,279.54			1.00	0.52	66.80
108	10167	90.41	89.22	5,988.36	53.80	3,373.53	3,373.87	1.23	53.80	3,373.53			1.00	0.52	-9999
109	10262	90.37	88.43	5,987.71	55.75	3,468.50	3,468.86	0.83	55.75	3,468.50			1.00	0.52	66.80
110	10357	90.54	88.34	5,986.96	58.43	3,563.46	3,563.84	0.20	58.43	3,563.46			1.00	0.52	66.80
111	10452	92.05	88.39	5,984.81	61.14	3,658.40	3,658.79	1.59	61.14	3,658.40			1.00	0.52	66.80
112	10547	92.49	87.55	5,981.05	64.50	3,753.26	3,753.68	1.00	64.50	3,753.26			1.00	0.52	-9999
113	10641	91.69	89.71	5,977.62	66.74	3,847.17	3,847.60	2.45	66.74	3,847.17			1.00	0.52	66.80
114	10736	89.70	90.24	5,976.47	66.79	3,942.15	3,942.59	2.17	66.79	3,942.15			1.00	0.52	66.80
115	10832	90.41	90.24	5,976.38	66.38	4,038.15	4,038.58	0.74	66.38	4,038.15			1.00	0.52	66.80
116	10926	90.32	89.14	5,975.78	66.89	4,132.15	4,132.57	1.17	66.89	4,132.15			1.00	0.52	66.80
117	11021	89.62	89.80	5,975.83	67.77	4,227.14	4,227.57	1.01	67.77	4,227.14			1.00	0.52	66.80
118	11116	91.03	89.18	5,975.29	68.62	4,322.13	4,322.57	1.62	68.62	4,322.13			-9999	0.52	66.80
119	11211	90.68	88.61	5,973.87	70.45	4,417.11	4,417.55	0.70	70.45	4,417.11			-9999	0.52	66.80
120	11307	90.15	88.74	5,973.17	72.67	4,513.08	4,513.54	0.57	72.67	4,513.08			1.00	0.52	66.80
121	11399	89.84	89.49	5,973.18	74.09	4,605.07	4,605.54	0.88	74.09	4,605.07			-9999	0.52	66.80
122	11491	89.75	88.30	5,973.51	75.86	4,697.05	4,697.53	1.30	75.86	4,697.05			1.00	0.52	66.80
123	11583	90.90	89.53	5,972.99	77.61	4,789.02	4,789.52	1.83	77.61	4,789.02			1.00	0.52	-9999

Svy	Depth	Inc	Azm	TVD	NS	EW	VS	DLS	Northing	Easting	A/B	L/R	GTot	HTot	DipA
124	11675	91.25	90.81	5,971.26	77.33	4,881.01	4,881.49	1.44	77.33	4,881.01			1.00	0.52	66.80
125	11766	91.16	89.58	5,969.35	77.02	4,971.98	4,972.47	1.35	77.02	4,971.98			1.00	0.52	66.80
126	11858	90.81	89.05	5,967.77	78.12	5,063.96	5,064.45	0.69	78.12	5,063.96			1.00	0.52	66.80
127	11950	90.54	88.92	5,966.69	79.75	5,155.94	5,156.44	0.33	79.75	5,155.94			1.00	0.52	66.80
128	12042	89.88	88.70	5,966.35	81.66	5,247.92	5,248.43	0.76	81.66	5,247.92			1.00	0.52	66.80
129	12135	90.15	87.59	5,966.32	84.67	5,340.87	5,341.41	1.23	84.67	5,340.87			1.00	0.52	66.80
130	12227	90.28	90.24	5,965.98	86.42	5,432.85	5,433.39	2.88	86.42	5,432.85			1.00	0.52	66.80
131	12319	90.54	90.50	5,965.32	85.82	5,524.84	5,525.38	0.40	85.82	5,524.84			1.00	0.52	66.80
132	12411	90.54	89.93	5,964.45	85.48	5,616.84	5,617.37	0.62	85.48	5,616.84			1.00	0.52	66.80
133	12502	90.23	89.80	5,963.84	85.69	5,707.83	5,708.36	0.37	85.69	5,707.83			1.00	0.52	66.80
134	12594	89.75	89.18	5,963.86	86.51	5,799.83	5,800.36	0.85	86.51	5,799.83			1.00	0.52	66.80
135	12686	90.10	89.31	5,963.98	87.72	5,891.82	5,892.36	0.41	87.72	5,891.82			1.00	0.52	66.80
136	12782	88.73	88.56	5,964.96	89.51	5,987.80	5,988.35	1.63	89.51	5,987.80			1.00	0.52	66.80
137	12877	90.50	89.58	5,965.60	91.05	6,082.78	6,083.34	2.15	91.05	6,082.78			1.00	0.52	66.80
138	12972	89.04	88.21	5,965.98	92.88	6,177.75	6,178.33	2.11	92.88	6,177.75			1.00	0.52	66.80
139	13067	91.12	90.24	5,965.85	94.16	6,272.73	6,273.32	3.06	94.16	6,272.73			1.00	0.52	66.80
140	13162	90.68	89.40	5,964.35	94.46	6,367.72	6,368.30	1.00	94.46	6,367.72			1.00	0.52	66.80
141	13256	91.30	91.47	5,962.73	93.75	6,461.70	6,462.27	2.30	93.75	6,461.70			1.00	0.52	66.80
142	13351	91.21	91.47	5,960.65	91.31	6,556.64	6,557.19	0.09	91.31	6,556.64			1.00	0.52	66.88
143	13446	90.59	91.91	5,959.16	88.51	6,651.59	6,652.11	0.80	88.51	6,651.59			1.00	0.52	66.80
144	13541	90.41	91.47	5,958.33	85.71	6,746.55	6,747.04	0.50	85.71	6,746.55			1.00	0.52	66.80
145	13635	90.32	91.08	5,957.73	83.62	6,840.52	6,840.99	0.43	83.62	6,840.52			1.00	0.52	66.80
146	13730	89.79	90.41	5,957.64	82.38	6,935.51	6,935.97	0.90	82.38	6,935.51			1.00	0.52	66.88
147	13825	89.22	89.27	5,958.46	82.65	7,030.51	7,030.96	1.34	82.65	7,030.51			1.00	0.52	66.88
148	13920	91.21	89.75	5,958.10	83.46	7,125.50	7,125.95	2.15	83.46	7,125.50			1.00	0.52	-9999
149	14014	90.41	90.02	5,956.77	83.65	7,219.49	7,219.94	0.90	83.65	7,219.49			1.00	0.52	66.80
150	14110	89.75	90.24	5,956.64	83.43	7,315.48	7,315.93	0.72	83.43	7,315.48			1.00	0.52	66.80
151	14204	89.35	90.33	5,957.38	82.96	7,409.48	7,409.92	0.44	82.96	7,409.48			1.00	0.52	66.80
152	14299	90.90	89.53	5,957.17	83.08	7,504.48	7,504.92	1.84	83.08	7,504.48			1.00	0.52	66.80
153	14394	90.01	89.71	5,956.41	83.71	7,599.47	7,599.91	0.96	83.71	7,599.47			1.00	0.52	66.80
154	14489	89.97	90.90	5,956.43	83.20	7,694.47	7,694.90	1.25	83.20	7,694.47			1.00	0.52	66.80
155	14584	90.01	90.37	5,956.45	82.15	7,789.46	7,789.88	0.56	82.15	7,789.46			1.00	0.52	66.80
156	14678	88.78	90.15	5,957.44	81.73	7,883.45	7,883.87	1.33	81.73	7,883.45			1.00	0.52	66.80
157	14774	91.25	89.22	5,957.42	82.25	7,979.44	7,979.86	2.75	82.25	7,979.44			1.00	0.52	66.80
158	14868	91.47	88.17	5,955.18	84.39	8,073.39	8,073.82	1.14	84.39	8,073.39			1.00	0.52	66.80
159	14963	90.90	88.03	5,953.22	87.54	8,168.32	8,168.77	0.62	87.54	8,168.32			1.00	0.52	66.80
160	15058	90.10	87.86	5,952.39	90.95	8,263.25	8,263.73	0.86	90.95	8,263.25			1.00	0.52	66.80
161	15153	89.53	88.65	5,952.70	93.84	8,358.21	8,358.71	1.03	93.84	8,358.21			1.00	0.52	66.80
162	15248	91.25	88.21	5,952.05	96.44	8,453.17	8,453.68	1.87	96.44	8,453.17			1.00	0.52	66.80
163	15344	89.97	89.18	5,951.03	98.63	8,549.13	8,549.67	1.67	98.63	8,549.13			1.00	0.52	66.80
164	15439	89.79	88.08	5,951.23	100.90	8,644.10	8,644.65	1.17	100.90	8,644.10			1.00	0.52	66.80
165	15534	88.56	88.48	5,952.60	103.75	8,739.05	8,739.62	1.36	103.75	8,739.05			1.00	0.52	-9999
166	15629	91.25	87.81	5,952.75	106.83	8,833.99	8,834.58	2.92	106.83	8,833.99			1.00	0.52	66.80
167	15724	90.81	88.65	5,951.05	109.76	8,928.93	8,929.54	1.00	109.76	8,928.93			1.00	0.52	66.80
168	15819	90.37	88.30	5,950.07	112.29	9,023.89	9,024.52	0.59	112.29	9,023.89			1.00	0.52	66.80

Svy	Depth	Inc	Azm	TVD	NS	EW	VS	DLS	Northing	Easting	A/B	L/R	GTot	HTot	DipA
169	15914	89.40	87.68	5,950.26	115.62	9,118.83	9,119.49	1.21	115.62	9,118.83			1.00	0.52	66.80
170	16009	90.99	87.02	5,949.93	120.01	9,213.72	9,214.42	1.81	120.01	9,213.72			1.00	0.52	66.80
171	16104	90.37	86.89	5,948.81	125.06	9,308.58	9,309.32	0.67	125.06	9,308.58			1.00	0.52	66.80
172	16199	91.03	87.37	5,947.65	129.82	9,403.45	9,404.23	0.86	129.82	9,403.45			1.00	0.52	66.80
173	16294	90.23	88.03	5,946.60	133.63	9,498.37	9,499.17	1.09	133.63	9,498.37			1.00	0.52	66.80
174	16389	90.99	90.94	5,945.59	134.48	9,593.35	9,594.16	3.17	134.48	9,593.35			1.00	0.52	66.80
175	16484	90.37	89.40	5,944.46	134.20	9,688.34	9,689.14	1.75	134.20	9,688.34			1.00	0.52	66.80
176	16579	89.97	88.74	5,944.18	135.74	9,783.33	9,784.14	0.81	135.74	9,783.33			1.00	0.52	66.80
177	16674	89.13	89.09	5,944.93	137.54	9,878.31	9,879.13	0.96	137.54	9,878.31			1.00	0.52	66.80
178	16755	89.09	88.17	5,946.18	139.48	9,959.27	9,960.11	1.14	139.48	9,959.27			1.00	0.52	66.80
PTB	16823	89.09	88.17	5,947.26	141.65	10,027.23	10,028.08	0	141.65	10,027.23			0	0	0