



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

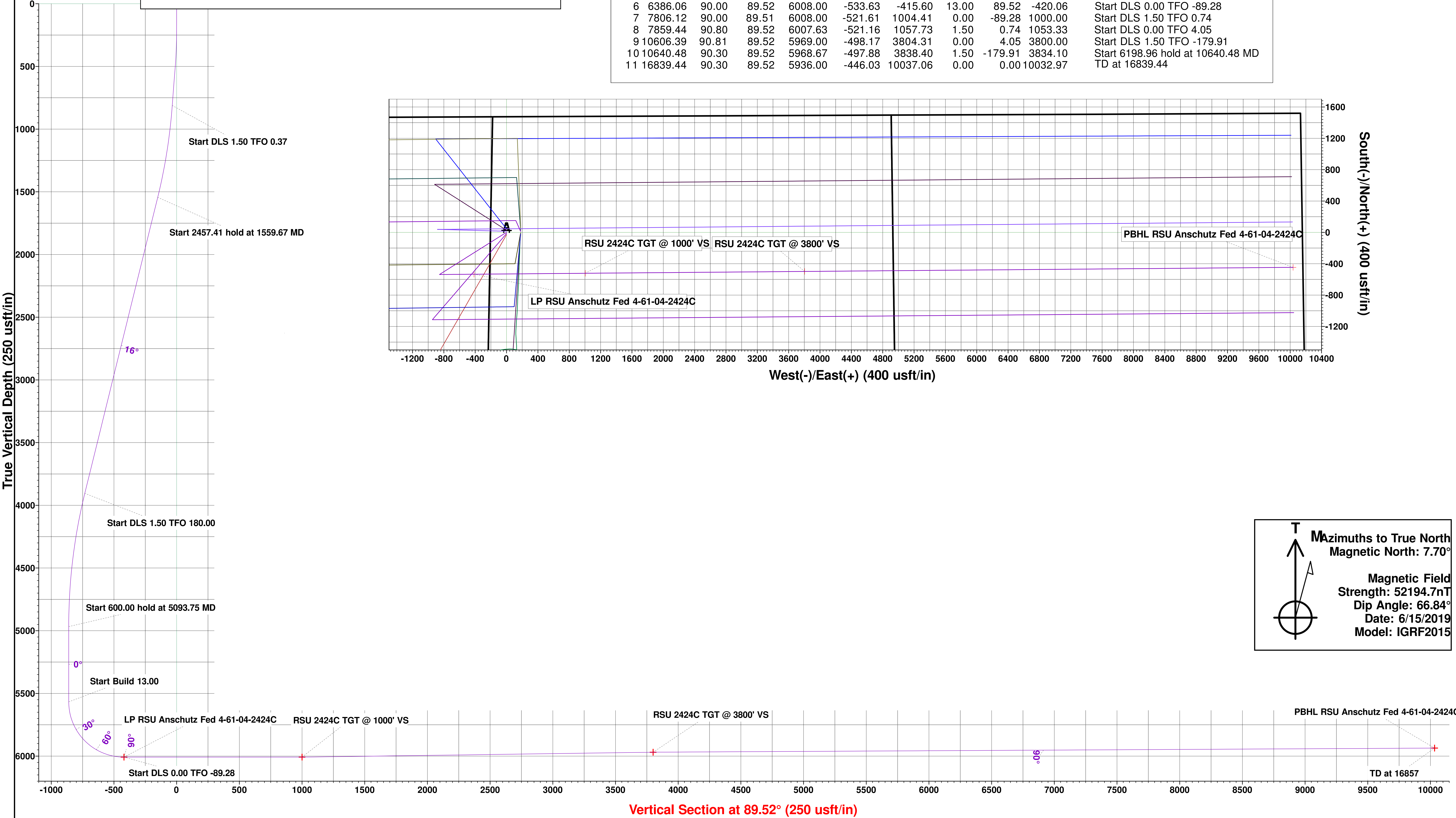
WELL DETAILS: RSU Anschutz Fed 4-61-04-2424C

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 4-61-04-2424C
Wellbore: Wellbore #1
Plan: (RSU Anschutz Fed 4-61-04-2424C/Wellbore #1)
Cade 23

SECTION DETAILS											
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation	
1	813.00	4.95	237.56	811.49	-20.19	-34.76	0.00	0.00	-34.93	Start DLS 1.50 TFO 0.37	
2	1559.67	16.15	237.82	1544.37	-93.01	-150.21	1.50	0.37	-150.98	Start 2457.41 hold at 1559.67 MD	
3	4017.08	16.15	237.82	3904.80	-457.04	-728.74	0.00	0.00	-732.54	Start DLS 1.50 TFO 180.00	
4	5093.75	0.00	0.00	4967.27	-537.33	-856.32	1.50	180.00	-860.79	Start 600.00 hold at 5093.75 MD	
5	5693.75	0.00	0.00	5567.27	-537.33	-856.32	0.00	0.00	-860.79	Start Build 13.00	
6	6386.06	90.00	89.52	6008.00	-533.63	-415.60	13.00	89.52	-420.06	Start DLS 0.00 TFO -89.28	
7	7806.12	90.00	89.51	6008.00	-521.61	1004.41	0.00	-89.28	1000.00	Start DLS 1.50 TFO 0.74	
8	7859.44	90.80	89.52	6007.63	-521.16	1057.73	1.50	0.74	1053.33	Start DLS 0.00 TFO 4.05	
9	10606.39	90.81	89.52	5969.00	-498.17	3804.31	0.00	4.05	3800.00	Start DLS 1.50 TFO -179.91	
10	10640.48	90.30	89.52	5968.67	-497.88	3838.40	1.50	-179.91	3834.10	Start 6198.96 hold at 10640.48 MD	
11	16839.44	90.30	89.52	5936.00	-446.03	10037.06	0.00	0.00	10032.97	TD at 16839.44	



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Mazimuths to True North
Magnetic North: 7.70°

Magnetic Field
Strength: 52194.7nT
Dip Angle: 66.84°
Date: 6/15/2019
Model: IGRF2015

Vertical Section at 89.52° (250 usft/in)



Directional Survey Report

Company Name: High Point Resources

Well Name: RSU Anshutz FED 04-61-04-2424C

Field: DJ Basin

Rig ID: Cade 23

State/Prov: Colorado

County: Weld

Location: East of Greeley

API/UWI: 05-123-46731

Survey Company: Atlas Drilling Services

Job Number: 00211-HI-CO

Latitude: 40.345937

Longitude: -104.224875

Proposed Azimuth: 89.52

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	0.53	182.60	149.00	-0.69	-0.03	-0.04	0.36	-0.69	-0.03			1.00	0.53	73.65
2	241	0.97	204.06	240.99	-1.82	-0.37	-0.38	0.56	-1.82	-0.37			1.00	0.53	67.32
3	333	2.08	233.77	332.96	-3.52	-2.03	-2.06	1.44	-3.52	-2.03			1.00	0.47	70.66
4	425	3.54	242.62	424.84	-5.82	-5.90	-5.95	1.65	-5.82	-5.90			1.00	0.54	67.50
5	517	4.91	245.75	516.59	-8.74	-12.01	-12.09	1.51	-8.74	-12.01			1.00	0.49	64.07
6	608	5.21	250.42	607.24	-11.72	-19.46	-19.55	0.56	-11.72	-19.46			1.00	0.51	63.98
7	700	4.77	239.58	698.89	-15.06	-26.69	-26.82	1.13	-15.06	-26.69			1.00	0.53	66.53
8	792	4.91	235.97	790.56	-19.20	-33.25	-33.41	0.36	-19.20	-33.25			1.00	0.51	68.12
9	813	4.95	237.56	811.49	-20.19	-34.76	-34.93	0.68	-20.19	-34.76			1.00	0.52	65.21
10	884	4.77	235.75	882.23	-23.49	-39.79	-39.98	0.33	-23.49	-39.79			1.00	0.51	66.62
11	976	6.41	232.93	973.79	-28.74	-47.05	-47.29	1.81	-28.74	-47.05			1.00	0.52	67.15
12	1068	8.84	236.01	1,064.97	-35.79	-57.01	-57.31	2.68	-35.79	-57.01			1.00	0.52	66.97
13	1160	10.69	238.04	1,155.63	-44.26	-70.11	-70.48	2.05	-44.26	-70.11			1.00	0.52	66.97
14	1252	12.55	237.51	1,245.74	-54.15	-85.78	-86.23	2.03	-54.15	-85.78			1.00	0.52	67.15
15	1344	15.33	239.05	1,335.03	-65.77	-104.65	-105.19	3.05	-65.77	-104.65			1.00	0.52	67.06
16	1436	15.95	239.14	1,423.62	-78.51	-125.93	-126.58	0.67	-78.51	-125.93			1.00	0.52	66.97
17	1528	15.60	237.38	1,512.15	-91.66	-147.20	-147.96	0.64	-91.66	-147.20			1.00	0.52	67.06
18	1623	15.25	237.86	1,603.73	-105.20	-168.54	-169.41	0.39	-105.20	-168.54			1.00	0.52	67.06
19	1718	16.57	242.27	1,695.09	-118.15	-191.11	-192.09	1.88	-118.15	-191.11			1.00	0.52	66.97
20	1813	17.01	241.26	1,786.04	-131.13	-215.28	-216.37	0.56	-131.13	-215.28			1.00	0.52	67.06
21	1908	17.10	241.48	1,876.87	-144.48	-239.74	-240.94	0.12	-144.48	-239.74			1.00	0.52	66.97
22	2003	16.70	240.07	1,967.76	-157.96	-263.84	-265.15	0.60	-157.96	-263.84			1.00	0.52	66.97
23	2099	16.48	238.35	2,059.77	-171.99	-287.38	-288.82	0.56	-171.99	-287.38			1.00	0.52	67.15
24	2194	16.39	237.11	2,150.89	-186.34	-310.11	-311.66	0.38	-186.34	-310.11			1.00	0.52	67.06
25	2290	16	236.54	2,243.08	-200.99	-332.52	-334.19	0.44	-200.99	-332.52			1.00	0.52	66.97
26	2385	15.69	234.16	2,334.47	-215.73	-353.86	-355.65	0.76	-215.73	-353.86			1.00	0.52	67.15
27	2479	17.54	238.66	2,424.54	-230.54	-376.26	-378.18	2.40	-230.54	-376.26			1.00	0.52	66.97
28	2574	17.90	237.69	2,515.04	-245.79	-400.83	-402.87	0.49	-245.79	-400.83			1.00	0.52	67.06
29	2669	17.54	237.25	2,605.53	-261.34	-425.21	-427.38	0.40	-261.34	-425.21			1.00	0.52	66.97
30	2764	17.23	234.12	2,696.19	-277.33	-448.65	-450.95	1.04	-277.33	-448.65			1.00	0.52	67.15
31	2858	17.59	238.35	2,785.89	-292.94	-472.02	-474.46	1.40	-292.94	-472.02			1.00	0.52	67.15
32	2953	17.10	237.16	2,876.57	-308.05	-495.97	-498.54	0.64	-308.05	-495.97			1.00	0.52	67.15
33	3048	16.75	236.23	2,967.45	-323.23	-519.09	-521.78	0.47	-323.23	-519.09			1.00	0.52	66.97

Svy	Depth	Inc	Azm	TVD	NS	EW	VS	DLS	Northing	Easting	A/B	L/R	GTot	HTot	DipA
34	3143	16.48	239.41	3,058.49	-337.70	-542.07	-544.88	1.00	-337.70	-542.07			1.00	0.52	66.97
35	3237	17.15	240.86	3,148.47	-351.23	-565.65	-568.57	0.84	-351.23	-565.65			1.00	0.52	66.97
36	3332	18.25	239.76	3,238.97	-365.54	-590.74	-593.78	1.21	-365.54	-590.74			1.00	0.52	66.97
37	3426	17.59	238.75	3,328.41	-380.32	-615.60	-618.76	0.78	-380.32	-615.60			-9999	0.52	67.15
38	3521	16.17	242.98	3,419.32	-393.78	-639.65	-642.93	1.98	-393.78	-639.65			1.00	0.52	66.97
39	3616	16.08	242.76	3,510.58	-405.81	-663.14	-666.51	0.11	-405.81	-663.14			1.00	0.52	67.06
40	3711	15.82	242.58	3,601.92	-417.80	-686.33	-689.80	0.28	-417.80	-686.33			1.00	0.52	67.15
41	3806	15.64	242.54	3,693.37	-429.67	-709.19	-712.76	0.19	-429.67	-709.19			1.00	0.52	66.88
42	3900	15.20	241.04	3,783.98	-441.48	-731.21	-734.88	0.63	-441.48	-731.21			1.00	0.52	66.97
43	3995	14.94	240.33	3,875.72	-453.57	-752.75	-756.52	0.34	-453.57	-752.75			1.00	0.52	66.88
44	4090	14.76	238.92	3,967.54	-465.88	-773.75	-777.63	0.42	-465.88	-773.75			1.00	0.52	66.97
45	4185	13.39	236.89	4,059.69	-478.13	-793.33	-797.31	1.53	-478.13	-793.33			1.00	0.52	66.88
46	4280	12.20	233.37	4,152.33	-490.13	-810.60	-814.68	1.50	-490.13	-810.60			1.00	0.52	67.06
47	4375	11.84	232.27	4,245.25	-502.09	-826.37	-830.54	0.45	-502.09	-826.37			1.00	0.52	67.15
48	4470	10.47	238.48	4,338.45	-512.56	-841.43	-845.70	1.92	-512.56	-841.43			1.00	0.52	67.06
49	4565	7.60	238.08	4,432.27	-520.40	-854.13	-858.46	3.02	-520.40	-854.13			1.00	0.52	66.88
50	4660	7.16	235	4,526.48	-527.12	-864.31	-868.69	0.62	-527.12	-864.31			1.00	0.52	66.97
51	4756	4.73	242.49	4,621.96	-532.38	-872.72	-877.15	2.65	-532.38	-872.72			1.00	0.52	66.88
52	4851	2.56	246.77	4,716.76	-535.02	-878.15	-882.60	2.30	-535.02	-878.15			1.00	0.52	66.88
53	4946	2.39	243.11	4,811.67	-536.76	-881.86	-886.33	0.24	-536.76	-881.86			1.00	0.52	66.88
54	5042	0.53	196.35	4,907.64	-538.09	-883.77	-888.25	2.15	-538.09	-883.77			1.00	0.52	66.88
55	5137	0.53	102.22	5,002.63	-538.60	-883.47	-887.95	0.82	-538.60	-883.47			1.00	0.52	66.88
56	5233	1.10	115.09	5,098.62	-539.09	-882.20	-886.68	0.62	-539.09	-882.20			1.00	0.52	67.15
57	5328	1.15	103.37	5,193.61	-539.69	-880.44	-884.94	0.25	-539.69	-880.44			1.00	0.52	67.06
58	5423	1.28	110.73	5,288.59	-540.29	-878.52	-883.02	0.21	-540.29	-878.52			1.00	0.52	67.15
59	5519	1.33	87.68	5,384.56	-540.63	-876.41	-880.91	0.55	-540.63	-876.41			1.00	0.52	66.97
60	5614	1.33	81.42	5,479.54	-540.42	-874.22	-878.71	0.15	-540.42	-874.22			1.00	0.52	66.88
61	5709	5.70	85.39	5,574.33	-539.87	-868.42	-872.91	4.60	-539.87	-868.42			1.00	0.52	66.97
62	5804	18.43	86.18	5,667.04	-538.49	-848.65	-853.14	13.40	-538.49	-848.65			1.00	0.52	66.97
63	5899	30.23	87.33	5,753.45	-536.36	-809.64	-814.11	12.43	-536.36	-809.64			-9999	0.52	67.15
64	5995	35.88	90.11	5,833.89	-535.29	-757.33	-761.78	6.09	-535.29	-757.33			1.00	-9999	66.97
65	6090	46.35	88.61	5,905.36	-534.51	-694.95	-699.41	11.07	-534.51	-694.95			1.00	0.52	-9999
66	6185	60.98	85.57	5,961.51	-530.44	-618.75	-623.18	15.61	-530.44	-618.75			1.00	0.52	66.97
67	6280	74.55	85.88	5,997.37	-523.92	-531.27	-535.64	14.29	-523.92	-531.27			1.00	0.52	66.97
68	6340	82.99	89.89	6,009.05	-521.78	-472.52	-476.88	15.52	-521.78	-472.52			1.00	0.52	66.88
69	6463	89.75	92.62	6,016.84	-524.48	-349.88	-354.26	5.93	-524.48	-349.88			1.00	0.52	-9999
70	6558	90.59	90.86	6,016.55	-527.36	-254.93	-259.34	2.05	-527.36	-254.93			-9999	-9999	-9999
71	6652	90.28	90.77	6,015.84	-528.70	-160.94	-165.36	0.34	-528.70	-160.94			1.00	-9999	-9999
72	6747	90.68	90.94	6,015.04	-530.11	-65.96	-70.39	0.46	-530.11	-65.96			1.00	-9999	-9999
73	6842	92.09	92.04	6,012.75	-532.58	28.98	24.52	1.88	-532.58	28.98			1.00	0.52	66.80
74	6938	89.53	89.18	6,011.39	-533.60	124.95	120.47	4.00	-533.60	124.95			1.00	0.52	66.88
75	7033	90.90	90.33	6,011.03	-533.20	219.94	215.47	1.88	-533.20	219.94			1.00	0.52	-9999
76	7127	91.07	89.44	6,009.42	-533.01	313.93	309.45	0.96	-533.01	313.93			1.00	0.52	66.88
77	7222	90.72	86.89	6,007.93	-529.97	408.86	404.41	2.71	-529.97	408.86			1.00	-9999	66.80
78	7318	90.32	83.50	6,007.06	-521.93	504.50	500.11	3.56	-521.93	504.50			1.00	0.52	66.80

Svy	Depth	Inc	Azm	TVD	NS	EW	VS	DLS	Northing	Easting	A/B	L/R	GTot	HTot	DipA
79	7412	90.77	83.80	6,006.17	-511.53	597.92	593.62	0.58	-511.53	597.92			1.00	0.52	66.80
80	7507	90.72	85.79	6,004.93	-502.91	692.52	688.28	2.10	-502.91	692.52			1.00	0.52	66.80
81	7603	90.41	87.59	6,003.99	-497.37	788.35	784.15	1.90	-497.37	788.35			1.00	0.52	66.80
82	7698	90.19	90.02	6,003.49	-495.39	883.32	879.14	2.57	-495.39	883.32			1.00	0.52	66.88
83	7793	91.60	90.63	6,002.00	-495.93	978.30	974.11	1.62	-495.93	978.30			1.00	0.52	66.80
84	7888	89.40	89.97	6,001.18	-496.43	1,073.29	1,069.10	2.42	-496.43	1,073.29			0	0	0
85	7983	89.22	92.40	6,002.32	-498.39	1,168.26	1,164.04	2.56	-498.39	1,168.26			1.00	0.52	-9999
86	8079	91.91	93.32	6,001.37	-503.18	1,264.12	1,259.86	2.96	-503.18	1,264.12			-9999	0.52	-9999
87	8175	90.59	91.82	5,999.28	-507.48	1,360.00	1,355.70	2.08	-507.48	1,360.00			1.00	0.52	66.80
88	8270	91.03	93.90	5,997.94	-512.22	1,454.87	1,450.52	2.24	-512.22	1,454.87			1.00	0.52	66.88
89	8366	90.94	94.20	5,996.29	-519.00	1,550.61	1,546.21	0.33	-519.00	1,550.61			-9999	0.52	66.80
90	8461	89.97	95.57	5,995.53	-527.09	1,645.26	1,640.79	1.77	-527.09	1,645.26			1.00	0.52	-9999
91	8555	91.21	93.15	5,994.56	-534.24	1,738.98	1,734.44	2.89	-534.24	1,738.98			1.00	0.52	66.88
92	8650	90.94	91.47	5,992.78	-538.07	1,833.88	1,829.31	1.79	-538.07	1,833.88			-9999	0.52	66.88
93	8745	89.57	91.25	5,992.36	-540.32	1,928.85	1,924.25	1.46	-540.32	1,928.85			1.00	0.52	-9999
94	8840	87.94	91.56	5,994.42	-542.65	2,023.79	2,019.18	1.75	-542.65	2,023.79			1.00	0.52	-9999
95	8934	88.73	90.11	5,997.15	-544.02	2,117.74	2,113.11	1.76	-544.02	2,117.74			1.00	0.52	66.88
96	9029	89.66	90.06	5,998.49	-544.16	2,212.73	2,208.09	0.98	-544.16	2,212.73			1.00	0.52	66.88
97	9124	90.81	87.81	5,998.10	-542.39	2,307.71	2,303.08	2.66	-542.39	2,307.71			1.00	0.52	66.80
98	9219	90.85	87.24	5,996.72	-538.29	2,402.61	2,398.01	0.60	-538.29	2,402.61			1.00	0.52	66.80
99	9313	92	88.96	5,994.38	-535.17	2,496.52	2,491.95	2.20	-535.17	2,496.52			1.00	0.52	66.80
100	9407	91.65	87.15	5,991.39	-531.99	2,590.41	2,585.87	1.96	-531.99	2,590.41			1.00	0.52	66.80
101	9502	90.50	85.66	5,989.61	-526.03	2,685.21	2,680.71	1.98	-526.03	2,685.21			1.00	0.52	66.80
102	9597	91.25	87.73	5,988.16	-520.55	2,780.03	2,775.57	2.32	-520.55	2,780.03			1.00	0.52	66.80
103	9692	91.21	87.42	5,986.12	-516.54	2,874.92	2,870.50	0.33	-516.54	2,874.92			1.00	0.52	66.80
104	9788	91.12	87.46	5,984.17	-512.25	2,970.81	2,966.41	0.10	-512.25	2,970.81			1.00	0.52	66.80
105	9883	92.62	89.09	5,981.07	-509.39	3,065.71	3,061.33	2.33	-509.39	3,065.71			1.00	0.52	-9999
106	9978	93.24	88.92	5,976.21	-507.74	3,160.57	3,156.21	0.68	-507.74	3,160.57			1.00	0.52	66.80
107	10074	92.14	90.41	5,971.70	-507.18	3,256.46	3,252.10	1.93	-507.18	3,256.46			1.00	0.52	66.80
108	10168	90.23	90.19	5,969.76	-507.67	3,350.43	3,346.06	2.05	-507.67	3,350.43			-9999	0.52	66.88
109	10263	88.16	90.15	5,971.09	-507.96	3,445.42	3,441.04	2.18	-507.96	3,445.42			1.00	0.52	66.88
110	10358	88.78	89.27	5,973.63	-507.48	3,540.38	3,536.01	1.13	-507.48	3,540.38			1.00	0.52	66.88
111	10453	87.36	90.81	5,976.83	-507.54	3,635.32	3,630.94	2.20	-507.54	3,635.32			1.00	-9999	89.47
112	10547	89	88.56	5,979.82	-507.02	3,729.26	3,724.89	2.96	-507.02	3,729.26			1.00	0.52	66.80
113	10642	89.53	90.24	5,981.04	-506.03	3,824.25	3,819.87	1.85	-506.03	3,824.25			1.00	0.52	66.88
114	10737	89	89.05	5,982.25	-505.44	3,919.24	3,914.86	1.37	-505.44	3,919.24			1.00	0.52	-9999
115	10832	90.94	88.65	5,982.30	-503.53	4,014.21	4,009.85	2.09	-503.53	4,014.21			-9999	0.52	66.80
116	10927	90.94	88.78	5,980.75	-501.40	4,109.18	4,104.83	0.14	-501.40	4,109.18			1.00	0.52	-9999
117	11021	90.94	88.26	5,979.20	-498.98	4,203.13	4,198.80	0.55	-498.98	4,203.13			1.00	0.52	66.80
118	11116	90.59	87.33	5,977.93	-495.32	4,298.05	4,293.75	1.05	-495.32	4,298.05			1.00	0.52	66.80
119	11212	91.69	88.70	5,976.02	-492.00	4,393.97	4,389.69	1.83	-492.00	4,393.97			1.00	0.52	-9999
120	11308	90.99	89.05	5,973.78	-490.11	4,489.93	4,485.66	0.82	-490.11	4,489.93			1.00	-9999	-9999
121	11400	91.74	87.51	5,971.59	-487.35	4,581.85	4,577.61	1.86	-487.35	4,581.85			1.00	0.52	-9999
122	11492	92.27	88.96	5,968.37	-484.52	4,673.75	4,669.53	1.68	-484.52	4,673.75			1.00	-9999	-9999
123	11584	92.22	89.53	5,964.77	-483.31	4,765.67	4,761.46	0.62	-483.31	4,765.67			1.00	0.52	-9999

Svy	Depth	Inc	Azm	TVD	NS	EW	VS	DLS	Northing	Easting	A/B	L/R	GTot	HTot	DipA
124	11676	90.28	89.97	5,962.76	-482.91	4,857.65	4,853.43	2.16	-482.91	4,857.65			1.00	0.52	66.80
125	11767	90.77	91.08	5,961.92	-483.74	4,948.64	4,944.41	1.33	-483.74	4,948.64			1.00	0.52	66.88
126	11859	89.75	89.40	5,961.51	-484.13	5,040.63	5,036.40	2.14	-484.13	5,040.63			1.00	0.52	-9999
127	11951	90.37	90.90	5,961.41	-484.37	5,132.63	5,128.39	1.76	-484.37	5,132.63			1.00	0.52	66.88
128	12043	88.25	88.61	5,962.52	-483.98	5,224.61	5,220.37	3.39	-483.98	5,224.61			1.00	0.52	66.80
129	12135	89.75	90.81	5,964.12	-483.51	5,316.58	5,312.35	2.89	-483.51	5,316.58			1.00	0.52	66.88
130	12228	89.17	90.63	5,965.00	-484.68	5,409.57	5,405.32	0.65	-484.68	5,409.57			1.00	-9999	-9999
131	12320	90.85	91.25	5,964.98	-486.19	5,501.56	5,497.29	1.95	-486.19	5,501.56			1.00	0.52	66.80
132	12411	90.50	89.75	5,963.91	-486.98	5,592.54	5,588.27	1.69	-486.98	5,592.54			1.00	0.52	66.88
133	12503	89.88	90.81	5,963.61	-487.43	5,684.54	5,680.26	1.33	-487.43	5,684.54			-9999	0.52	66.80
134	12595	88.91	89.67	5,964.58	-487.82	5,776.53	5,772.24	1.63	-487.82	5,776.53			-9999	0.52	66.80
135	12687	91.52	90.24	5,964.23	-487.74	5,868.52	5,864.23	2.90	-487.74	5,868.52			1.00	0.52	66.88
136	12782	92.31	90.63	5,961.06	-488.47	5,963.47	5,959.16	0.93	-488.47	5,963.47			1.00	0.52	66.80
137	12878	91.38	88.87	5,957.97	-488.05	6,059.41	6,055.11	2.07	-488.05	6,059.41			1.00	0.52	66.80
138	12973	92.22	89	5,954.98	-486.28	6,154.35	6,150.06	0.89	-486.28	6,154.35			1.00	0.52	66.80
139	13067	93.50	87.55	5,950.29	-483.46	6,248.18	6,243.91	2.06	-483.46	6,248.18			1.00	0.52	66.80
140	13163	91.96	89.14	5,945.72	-480.69	6,344.03	6,339.78	2.30	-480.69	6,344.03			1.00	-9999	66.80
141	13257	88.51	88.70	5,945.34	-478.92	6,438.00	6,433.76	3.70	-478.92	6,438.00			1.00	0.52	66.88
142	13352	90.10	90.15	5,946.49	-477.96	6,532.98	6,528.74	2.27	-477.96	6,532.98			1.00	0.52	66.80
143	13447	89.93	89.18	5,946.46	-477.41	6,627.97	6,623.74	1.04	-477.41	6,627.97			1.00	0.52	66.88
144	13542	89.75	90.02	5,946.73	-476.74	6,722.97	6,718.74	0.90	-476.74	6,722.97			1.00	0.52	66.88
145	13636	90.23	89.67	5,946.75	-476.49	6,816.97	6,812.74	0.63	-476.49	6,816.97			1.00	0.52	66.88
146	13731	90.32	88.21	5,946.29	-474.73	6,911.95	6,907.73	1.54	-474.73	6,911.95			1.00	0.52	66.80
147	13825	90.99	90.41	5,945.21	-473.60	7,005.93	7,001.72	2.45	-473.60	7,005.93			1.00	0.52	66.80
148	13920	91.12	88.87	5,943.47	-473.00	7,100.91	7,096.70	1.63	-473.00	7,100.91			1.00	0.52	66.80
149	14015	91.21	89.71	5,941.53	-471.83	7,195.88	7,191.68	0.89	-471.83	7,195.88			1.00	0.52	66.88
150	14111	91.47	88.83	5,939.29	-470.60	7,291.85	7,287.65	0.96	-470.60	7,291.85			1.00	0.52	66.88
151	14205	90.99	88.56	5,937.27	-468.46	7,385.80	7,381.62	0.59	-468.46	7,385.80			1.00	0.52	-9999
152	14300	90.81	87.24	5,935.78	-464.98	7,480.72	7,476.57	1.40	-464.98	7,480.72			1.00	0.52	66.80
153	14395	90.85	88.12	5,934.40	-461.14	7,575.63	7,571.51	0.93	-461.14	7,575.63			1.00	0.52	66.80
154	14490	90.99	88.34	5,932.88	-458.20	7,670.58	7,666.47	0.27	-458.20	7,670.58			1.00	0.52	66.80
155	14585	91.43	87.02	5,930.87	-454.36	7,765.48	7,761.40	1.46	-454.36	7,765.48			1.00	0.52	66.80
156	14679	89.66	90.19	5,929.98	-452.07	7,859.43	7,855.36	3.86	-452.07	7,859.43			1.00	0.52	66.80
157	14775	87.94	90.63	5,931.99	-452.76	7,955.40	7,951.33	1.85	-452.76	7,955.40			1.00	0.52	66.80
158	14868	89.66	90.06	5,933.93	-453.32	8,048.37	8,044.29	1.95	-453.32	8,048.37			1.00	0.52	-9999
159	14964	90.46	91.52	5,933.83	-454.64	8,144.36	8,140.27	1.73	-454.64	8,144.36			-9999	0.52	-9999
160	15059	90.01	92.35	5,933.44	-457.85	8,239.31	8,235.18	0.99	-457.85	8,239.31			1.00	0.52	66.80
161	15154	91.65	91.38	5,932.07	-460.94	8,334.24	8,330.09	2.01	-460.94	8,334.24			1.00	0.52	66.80
162	15249	90.68	88.43	5,930.14	-460.78	8,429.21	8,425.05	3.27	-460.78	8,429.21			1.00	0.52	-9999
163	15345	89.40	90.06	5,930.07	-459.52	8,525.20	8,521.05	2.16	-459.52	8,525.20			1.00	0.52	66.80
164	15440	87.98	88.30	5,932.24	-458.16	8,620.16	8,616.01	2.38	-458.16	8,620.16			1.00	0.52	66.88
165	15535	89.88	89.22	5,934.02	-456.10	8,715.11	8,710.98	2.22	-456.10	8,715.11			1.00	-9999	-9999
166	15629	90.41	89.97	5,933.78	-455.44	8,809.11	8,804.98	0.98	-455.44	8,809.11			1.00	0.52	66.80
167	15725	89.04	88.26	5,934.24	-453.96	8,905.09	8,900.97	2.28	-453.96	8,905.09			1.00	0.52	-9999
168	15820	90.15	89.62	5,934.91	-452.20	9,000.07	8,995.96	1.85	-452.20	9,000.07			1.00	0.52	66.88

Svy	Depth	Inc	Azm	TVD	NS	EW	VS	DLS	Northing	Easting	A/B	L/R	GTot	HTot	DipA
169	15915	88.86	87.33	5,935.73	-449.67	9,095.02	9,090.94	2.77	-449.67	9,095.02			1.00	0.52	66.80
170	16010	91.07	88.30	5,935.79	-446.05	9,189.95	9,185.89	2.54	-446.05	9,189.95			1.00	0.52	66.80
171	16104	89.66	86.18	5,935.19	-441.52	9,283.83	9,279.80	2.71	-441.52	9,283.83			1.00	0.52	66.80
172	16199	92.09	90.72	5,933.74	-438.96	9,378.75	9,374.74	5.42	-438.96	9,378.75			1.00	0.52	66.88
173	16295	91.69	89.62	5,930.57	-439.24	9,474.69	9,470.68	1.22	-439.24	9,474.69			1.00	0.52	66.80
174	16390	91.78	89.80	5,927.70	-438.76	9,569.65	9,565.64	0.21	-438.76	9,569.65			-9999	0.52	66.88
175	16485	91.30	88.08	5,925.14	-437.00	9,664.60	9,660.60	1.88	-437.00	9,664.60			1.00	0.52	66.88
176	16580	91.07	86.80	5,923.18	-432.76	9,759.48	9,755.51	1.37	-432.76	9,759.48			1.00	-9999	66.80
177	16675	91.43	85.30	5,921.11	-426.22	9,854.23	9,850.31	1.62	-426.22	9,854.23			1.00	0.52	-9999
178	16770	89.22	85.66	5,920.57	-418.73	9,948.92	9,945.07	2.36	-418.73	9,948.92			1.00	0.52	66.80
179	16789	89.17	85.13	5,920.83	-417.21	9,967.86	9,964.02	2.80	-417.21	9,967.86			1.00	0.52	66.80
PTB	16857	89.17	85.13	5,921.82	-411.43	10,035.61	10,031.81	0	-411.43	10,035.61			0	0	0