



Interchange A S16-20-19C

Directional Survey Report

Start date: 09/18/2019

End date:

Company Name: Extraction Oil & Gas
Well Name: Interchange A S16-20-19C
Field: Wattenberg
Rig ID: Ensign #147
API/UWI: 05-014-20770

State/Prov: Colorado
County: Broomfield
Country: US
Location: Interchange A
Latitude/Longitude: 39.980863 / -104.993909

Survey Company: Atlas Drilling Services
Job Number: EX-CO
Proposed Azimuth: 188.69
Declination: 8.05 **KB:** 28'
North Reference: True

Svy	Depth	Inc	Azm	TVD	NS	EW	VS	CD	CA	DLS	CL
TiIn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	90.00	0.00	
1	123.00	1.59	252.18	122.98	-0.52	-1.62	0.76	1.71	252.18	1.29	123.00
2	215.00	2.74	288.63	214.92	-0.21	-4.92	0.95	4.93	267.55	1.89	92.00
3	306.00	4.07	316.17	305.76	2.81	-9.22	-1.39	9.64	286.97	2.28	91.00
4	395.00	5.52	333.09	394.45	8.91	-13.35	-6.79	16.05	303.73	2.26	89.00
5	485.00	8.13	338.11	483.81	18.68	-17.68	-15.79	25.72	316.57	2.97	90.00
6	574.00	10.74	339.00	571.60	32.26	-23.00	-28.42	39.62	324.52	2.94	89.00
7	664.00	12.11	339.70	659.81	48.94	-29.28	-43.96	57.03	329.11	1.53	90.00
8	754.00	12.68	340.05	747.71	67.08	-35.92	-60.89	76.10	331.83	0.64	90.00
9	844.00	14.76	337.19	835.14	86.94	-43.74	-79.33	97.32	333.29	2.43	90.00
10	932.00	17.41	334.32	919.69	109.14	-53.79	-99.76	121.68	333.76	3.14	88.00
11	1,022.00	19.58	331.11	1,005.04	134.48	-66.92	-122.83	150.21	333.55	2.66	90.00
12	1,112.00	21.52	328.07	1,089.31	161.70	-82.93	-147.31	181.73	332.85	2.46	90.00
13	1,201.00	22.27	329.48	1,171.89	190.08	-100.13	-172.77	214.84	332.22	1.03	89.00
14	1,290.00	22.80	331.15	1,254.10	219.72	-117.02	-199.51	248.93	331.96	0.93	89.00
15	1,379.00	23.24	329.48	1,336.01	249.95	-134.26	-226.79	283.72	331.76	0.88	89.00
16	1,469.00	22.76	327.41	1,418.86	279.91	-152.65	-253.63	318.83	331.39	1.04	90.00
17	1,558.00	22.67	327.10	1,500.95	308.82	-171.24	-279.40	353.12	330.99	0.17	89.00
18	1,573.00	22.63	327.58	1,514.80	313.68	-174.36	-283.74	358.88	330.93	1.26	15.00
PTB	1,634.00	22.63	327.58	1,571.10	333.49	-186.94	-301.42	382.31	330.73	0.00	61.00