



SUMMIT
OILFIELD SERVICES, INC

Company: Bonanza Creek
Lease/Well: Gutterson Ranch 34-9
County/State: Weld/CO

Job Number: 7427-512325660
Date: 2-28-19
Survey Type: Memory
Declination: 9.39

Instrument Number: GP1-1000
North Reference: True North
Survey Engineer: Nathan Proffitt

Summit Oilfield Services

*Minimum Curvature Method
Vertical Section Plane: 0.00
Vertical Section Reference:
Rectangular Coordinates Reference:*

Measured Depth	Inclin	Azimuth	Course Length	True Vertical Depth	N[+]/S[-]	E[+]/W[-]	Vertical Section	Dogleg Severity	Closure Distance	Closure Direction
0.00 ft	0.00	0.00	0.00 ft	0.00 ft	0.00 ft	0.00 ft	0.00 ft	0.00/100 ft	0.00 ft	0.00
100.00 ft	1.00	132.76	100.00 ft	99.99 ft	-0.59 ft	0.64 ft	-0.59 ft	1.00/100 ft	0.87 ft	132.76
200.00 ft	0.24	69.40	100.00 ft	199.99 ft	-1.11 ft	1.47 ft	-1.11 ft	0.91/100 ft	1.84 ft	126.93
300.00 ft	1.03	94.09	100.00 ft	299.98 ft	-1.10 ft	2.56 ft	-1.10 ft	0.82/100 ft	2.79 ft	113.17
400.00 ft	0.85	162.50	100.00 ft	399.97 ft	-1.87 ft	3.68 ft	-1.87 ft	1.07/100 ft	4.13 ft	116.91
500.00 ft	1.50	128.62	100.00 ft	499.95 ft	-3.39 ft	4.93 ft	-3.39 ft	0.93/100 ft	5.98 ft	124.55
600.00 ft	1.11	115.53	100.00 ft	599.93 ft	-4.63 ft	6.83 ft	-4.63 ft	0.49/100 ft	8.25 ft	124.13
700.00 ft	1.38	122.12	100.00 ft	699.90 ft	-5.69 ft	8.73 ft	-5.69 ft	0.31/100 ft	10.42 ft	123.10
800.00 ft	1.03	114.68	100.00 ft	799.88 ft	-6.71 ft	10.57 ft	-6.71 ft	0.39/100 ft	12.51 ft	122.40
900.00 ft	1.58	153.13	100.00 ft	899.85 ft	-8.31 ft	12.00 ft	-8.31 ft	1.00/100 ft	14.60 ft	124.69
1000.00 ft	1.53	162.24	100.00 ft	999.82 ft	-10.81 ft	13.03 ft	-10.81 ft	0.25/100 ft	16.93 ft	129.67
1100.00 ft	0.59	160.15	100.00 ft	1099.80 ft	-12.56 ft	13.61 ft	-12.56 ft	0.93/100 ft	18.52 ft	132.70
1200.00 ft	1.24	169.30	100.00 ft	1199.79 ft	-14.11 ft	13.99 ft	-14.11 ft	0.66/100 ft	19.87 ft	135.25
1300.00 ft	0.40	160.60	100.00 ft	1299.78 ft	-15.51 ft	14.31 ft	-15.51 ft	0.85/100 ft	21.10 ft	137.31
1400.00 ft	0.40	109.52	100.00 ft	1399.77 ft	-15.96 ft	14.76 ft	-15.96 ft	0.35/100 ft	21.74 ft	137.24



SUMMIT
OILFIELD SERVICES, INC

Company: Bonanza Creek
Lease/Well: Gutterson Ranch 34-9
County/State: Weld/CO

Job Number: 7427-512325660
Date: 2-28-19
Survey Type: Memory
Declination: 9.39

Instrument Number: GP1-1000
North Reference: True North
Survey Engineer: Nathan Proffitt

Measured Depth	Inclin	Azimuth	Course Length	True Vertical Depth	N[+]/S[-]	E[+]/W[-]	Vertical Section	Dogleg Severity	Closure Distance	Closure Direction
1500.00 ft	0.78	113.48	100.00 ft	1499.77 ft	-16.35 ft	15.72 ft	-16.35 ft	0.38/100 ft	22.68 ft	136.13
1600.00 ft	0.45	218.17	100.00 ft	1599.76 ft	-16.93 ft	16.10 ft	-16.93 ft	1.00/100 ft	23.37 ft	136.43
1700.00 ft	0.84	130.66	100.00 ft	1699.76 ft	-17.71 ft	16.42 ft	-17.71 ft	0.93/100 ft	24.15 ft	137.17
1800.00 ft	0.29	264.39	100.00 ft	1799.76 ft	-18.22 ft	16.73 ft	-18.22 ft	1.06/100 ft	24.73 ft	137.44
1900.00 ft	0.76	88.73	100.00 ft	1899.75 ft	-18.22 ft	17.14 ft	-18.22 ft	1.04/100 ft	25.02 ft	136.76
2000.00 ft	1.02	112.13	100.00 ft	1999.74 ft	-18.54 ft	18.62 ft	-18.54 ft	0.44/100 ft	26.28 ft	134.88
2100.00 ft	0.20	153.66	100.00 ft	2099.74 ft	-19.04 ft	19.53 ft	-19.04 ft	0.87/100 ft	27.27 ft	134.28
2200.00 ft	0.43	169.22	100.00 ft	2199.73 ft	-19.57 ft	19.67 ft	-19.57 ft	0.24/100 ft	27.75 ft	134.84
2300.00 ft	0.86	323.45	100.00 ft	2299.73 ft	-19.33 ft	19.30 ft	-19.33 ft	1.26/100 ft	27.31 ft	135.05
2400.00 ft	0.35	238.37	100.00 ft	2399.73 ft	-18.88 ft	18.59 ft	-18.88 ft	0.90/100 ft	26.50 ft	135.44
2500.00 ft	1.23	275.35	100.00 ft	2499.72 ft	-18.94 ft	17.26 ft	-18.94 ft	0.97/100 ft	25.63 ft	137.65
2600.00 ft	0.64	324.18	100.00 ft	2599.70 ft	-18.39 ft	15.87 ft	-18.39 ft	0.94/100 ft	24.29 ft	139.20
2700.00 ft	0.67	243.60	100.00 ft	2699.70 ft	-18.19 ft	15.02 ft	-18.19 ft	0.85/100 ft	23.59 ft	140.46
2800.00 ft	1.30	286.57	100.00 ft	2799.69 ft	-18.13 ft	13.41 ft	-18.13 ft	0.93/100 ft	22.55 ft	143.51
2900.00 ft	1.18	305.01	100.00 ft	2899.66 ft	-17.21 ft	11.48 ft	-17.21 ft	0.42/100 ft	20.69 ft	146.31
3000.00 ft	0.75	320.80	100.00 ft	2999.65 ft	-16.12 ft	10.22 ft	-16.12 ft	0.50/100 ft	19.08 ft	147.62
3100.00 ft	1.24	292.24	100.00 ft	3099.63 ft	-15.20 ft	8.80 ft	-15.20 ft	0.68/100 ft	17.56 ft	149.92
3200.00 ft	0.96	255.97	100.00 ft	3199.62 ft	-14.99 ft	6.99 ft	-14.99 ft	0.73/100 ft	16.54 ft	155.00
3300.00 ft	0.70	252.87	100.00 ft	3299.61 ft	-15.37 ft	5.60 ft	-15.37 ft	0.27/100 ft	16.36 ft	159.98
3400.00 ft	1.11	317.64	100.00 ft	3399.60 ft	-14.83 ft	4.37 ft	-14.83 ft	1.03/100 ft	15.46 ft	163.60
3500.00 ft	0.75	324.91	100.00 ft	3499.58 ft	-13.58 ft	3.34 ft	-13.58 ft	0.39/100 ft	13.99 ft	166.20
3600.00 ft	0.71	323.00	100.00 ft	3599.57 ft	-12.56 ft	2.59 ft	-12.56 ft	0.05/100 ft	12.82 ft	168.34



SUMMIT
OILFIELD SERVICES, INC

Company: Bonanza Creek
Lease/Well: Gutterson Ranch 34-9
County/State: Weld/CO

Job Number: 7427-512325660
Date: 2-28-19
Survey Type: Memory
Declination: 9.39

Instrument Number: GP1-1000
North Reference: True North
Survey Engineer: Nathan Proffitt

Measured Depth	Inclin	Azimuth	Course Length	True Vertical Depth	N[+]/S[-]	E[+]/W[-]	Vertical Section	Dogleg Severity	Closure Distance	Closure Direction
3700.00 ft	0.88	256.25	100.00 ft	3699.57 ft	-12.25 ft	1.47 ft	-12.25 ft	0.89/100 ft	12.34 ft	173.15
3800.00 ft	0.66	225.75	100.00 ft	3799.56 ft	-12.83 ft	0.31 ft	-12.83 ft	0.46/100 ft	12.84 ft	178.61
3900.00 ft	0.46	188.59	100.00 ft	3899.55 ft	-13.63 ft	-0.16 ft	-13.63 ft	0.40/100 ft	13.63 ft	180.66
4000.00 ft	0.13	177.68	100.00 ft	3999.55 ft	-14.15 ft	-0.21 ft	-14.15 ft	0.33/100 ft	14.15 ft	180.86
4100.00 ft	0.44	287.38	100.00 ft	4099.55 ft	-14.14 ft	-0.58 ft	-14.14 ft	0.50/100 ft	14.16 ft	182.34
4200.00 ft	1.10	251.97	100.00 ft	4199.54 ft	-14.33 ft	-1.86 ft	-14.33 ft	0.78/100 ft	14.45 ft	187.38
4300.00 ft	0.39	212.44	100.00 ft	4299.53 ft	-14.91 ft	-2.95 ft	-14.91 ft	0.83/100 ft	15.20 ft	191.19
4400.00 ft	0.84	286.75	100.00 ft	4399.53 ft	-14.99 ft	-3.84 ft	-14.99 ft	0.83/100 ft	15.47 ft	194.36
4500.00 ft	1.05	270.58	100.00 ft	4499.51 ft	-14.77 ft	-5.45 ft	-14.77 ft	0.34/100 ft	15.75 ft	200.26
4600.00 ft	1.32	242.49	100.00 ft	4599.49 ft	-15.29 ft	-7.39 ft	-15.29 ft	0.63/100 ft	16.98 ft	205.78
4700.00 ft	0.83	260.68	100.00 ft	4699.48 ft	-15.94 ft	-9.12 ft	-15.94 ft	0.59/100 ft	18.37 ft	209.78
4800.00 ft	0.15	172.20	100.00 ft	4799.47 ft	-16.19 ft	-9.82 ft	-16.19 ft	0.84/100 ft	18.93 ft	211.24
4900.00 ft	0.73	326.91	100.00 ft	4899.47 ft	-15.78 ft	-10.15 ft	-15.78 ft	0.87/100 ft	18.77 ft	212.75
5000.00 ft	0.73	259.39	100.00 ft	4999.46 ft	-15.37 ft	-11.13 ft	-15.37 ft	0.81/100 ft	18.97 ft	215.91
5100.00 ft	0.47	296.92	100.00 ft	5099.46 ft	-15.30 ft	-12.12 ft	-15.30 ft	0.46/100 ft	19.52 ft	218.40
5200.00 ft	0.82	28.57	100.00 ft	5199.45 ft	-14.48 ft	-12.15 ft	-14.48 ft	0.96/100 ft	18.90 ft	219.99
5300.00 ft	1.20	73.06	100.00 ft	5299.44 ft	-13.55 ft	-10.80 ft	-13.55 ft	0.84/100 ft	17.32 ft	218.56
5400.00 ft	0.82	32.43	100.00 ft	5399.43 ft	-12.64 ft	-9.41 ft	-12.64 ft	0.79/100 ft	15.76 ft	216.68
5500.00 ft	0.76	84.23	100.00 ft	5499.42 ft	-11.97 ft	-8.37 ft	-11.97 ft	0.69/100 ft	14.60 ft	214.96
5600.00 ft	0.96	99.01	100.00 ft	5599.41 ft	-12.03 ft	-6.88 ft	-12.03 ft	0.30/100 ft	13.86 ft	209.75
5700.00 ft	0.79	159.45	100.00 ft	5699.40 ft	-12.81 ft	-5.81 ft	-12.81 ft	0.89/100 ft	14.06 ft	204.39
5800.00 ft	0.84	153.16	100.00 ft	5799.39 ft	-14.11 ft	-5.23 ft	-14.11 ft	0.10/100 ft	15.05 ft	200.36



SUMMIT
OILFIELD SERVICES, INC

Company: Bonanza Creek
Lease/Well: Gutttersen Ranch 34-9
County/State: Weld/CO

Job Number: 7427-512325660
Date: 2-28-19
Survey Type: Memory
Declination: 9.39

Instrument Number: GP1-1000
North Reference: True North
Survey Engineer: Nathan Proffitt

Measured Depth	Inclin	Azimuth	Course Length	True Vertical Depth	N[+]/S[-]	E[+]/W[-]	Vertical Section	Dogleg Severity	Closure Distance	Closure Direction
5900.00 ft	0.66	143.32	100.00 ft	5899.38 ft	-15.23 ft	-4.56 ft	-15.23 ft	0.22/100 ft	15.89 ft	196.66
6000.00 ft	0.21	3.01	100.00 ft	5999.38 ft	-15.51 ft	-4.20 ft	-15.51 ft	0.83/100 ft	16.07 ft	195.15
6100.00 ft	0.50	127.71	100.00 ft	6099.37 ft	-15.60 ft	-3.84 ft	-15.60 ft	0.65/100 ft	16.07 ft	193.84
6200.00 ft	0.71	224.97	100.00 ft	6199.37 ft	-16.31 ft	-3.94 ft	-16.31 ft	0.93/100 ft	16.78 ft	193.56
6300.00 ft	0.41	98.05	100.00 ft	6299.37 ft	-16.80 ft	-4.02 ft	-16.80 ft	1.02/100 ft	17.28 ft	193.45
6400.00 ft	0.11	68.48	100.00 ft	6399.37 ft	-16.82 ft	-3.57 ft	-16.82 ft	0.33/100 ft	17.20 ft	192.00
6500.00 ft	0.72	220.30	100.00 ft	6499.36 ft	-17.27 ft	-3.90 ft	-17.27 ft	0.81/100 ft	17.70 ft	192.71
6600.00 ft	0.24	94.70	100.00 ft	6599.36 ft	-17.76 ft	-4.10 ft	-17.76 ft	0.88/100 ft	18.23 ft	192.98