



SUMMIT
OILFIELD SERVICES, INC

Company: Bonanza Creek
Lease/Well: Wetco Farms 23-4
County/State: Weld/CO

Job Number: 8736-512320378
Date: 12-4-19
Survey Type: Memory
Declination: 9.35

Instrument Number: GP1-1023
North Reference: True North
Survey Engineer: Shon Lane

Summit Oilfield Services

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

Measured Depth	Indin	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	0.80	325.00	100.00 ft	100.00 ft	0.57 ft	-0.40 ft	0.57 ft	0.80/100 ft	0.70 ft	325.00
200.00 ft	0.68	321.20	100.00 ft	199.99 ft	1.60 ft	-1.17 ft	1.60 ft	0.12/100 ft	1.99 ft	323.86
300.00 ft	0.63	330.07	100.00 ft	299.98 ft	2.55 ft	-1.82 ft	2.55 ft	0.11/100 ft	3.13 ft	324.45
400.00 ft	0.56	329.38	100.00 ft	399.98 ft	3.45 ft	-2.35 ft	3.45 ft	0.07/100 ft	4.17 ft	325.77
500.00 ft	0.41	319.39	100.00 ft	499.97 ft	4.14 ft	-2.83 ft	4.14 ft	0.17/100 ft	5.02 ft	325.67
600.00 ft	0.53	314.29	100.00 ft	599.97 ft	4.74 ft	-3.39 ft	4.74 ft	0.12/100 ft	5.82 ft	324.40
700.00 ft	0.57	293.96	100.00 ft	699.96 ft	5.26 ft	-4.17 ft	5.26 ft	0.20/100 ft	6.71 ft	321.55
800.00 ft	0.66	308.08	100.00 ft	799.96 ft	5.81 ft	-5.08 ft	5.81 ft	0.17/100 ft	7.72 ft	318.85
900.00 ft	0.80	301.42	100.00 ft	899.95 ft	6.53 ft	-6.13 ft	6.53 ft	0.17/100 ft	8.96 ft	316.82
1000.00 ft	0.91	292.19	100.00 ft	999.94 ft	7.20 ft	-7.46 ft	7.20 ft	0.17/100 ft	10.36 ft	313.97
1100.00 ft	0.92	290.01	100.00 ft	1099.93 ft	7.77 ft	-8.95 ft	7.77 ft	0.04/100 ft	11.85 ft	310.97
1200.00 ft	0.94	289.37	100.00 ft	1199.91 ft	8.32 ft	-10.48 ft	8.32 ft	0.02/100 ft	13.38 ft	308.45
1300.00 ft	0.89	289.54	100.00 ft	1299.90 ft	8.85 ft	-11.98 ft	8.85 ft	0.05/100 ft	14.89 ft	306.45
1400.00 ft	0.85	290.33	100.00 ft	1399.89 ft	9.37 ft	-13.41 ft	9.37 ft	0.04/100 ft	16.36 ft	304.93



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Instrument Number: GP1-1023
North Reference: True North
Survey Engineer: Shon Lane

Measured Depth	Inclin	Azimuth	Course Length	True Vertical Depth	N[+]/S[-]	E[+]/W[-]	Vertical Section	Dogleg Severity	Closure Distance	Closure Direction
1500.00 ft	0.60	279.43	100.00 ft	1499.88 ft	9.71 ft	-14.62 ft	9.71 ft	0.29/100 ft	17.55 ft	303.59
1600.00 ft	0.46	273.72	100.00 ft	1599.88 ft	9.82 ft	-15.53 ft	9.82 ft	0.15/100 ft	18.38 ft	302.30
1700.00 ft	0.43	280.94	100.00 ft	1699.87 ft	9.92 ft	-16.30 ft	9.92 ft	0.06/100 ft	19.08 ft	301.32
1800.00 ft	0.68	298.82	100.00 ft	1799.87 ft	10.28 ft	-17.19 ft	10.28 ft	0.30/100 ft	20.03 ft	300.87
1900.00 ft	0.79	302.05	100.00 ft	1899.86 ft	10.93 ft	-18.30 ft	10.93 ft	0.12/100 ft	21.32 ft	300.85
2000.00 ft	0.79	324.37	100.00 ft	1999.85 ft	11.86 ft	-19.29 ft	11.86 ft	0.31/100 ft	22.64 ft	301.58
2100.00 ft	0.63	334.79	100.00 ft	2099.84 ft	12.92 ft	-19.92 ft	12.92 ft	0.20/100 ft	23.74 ft	302.95
2200.00 ft	0.41	312.08	100.00 ft	2199.84 ft	13.65 ft	-20.42 ft	13.65 ft	0.30/100 ft	24.57 ft	303.76
2300.00 ft	0.47	316.24	100.00 ft	2299.84 ft	14.19 ft	-20.97 ft	14.19 ft	0.07/100 ft	25.32 ft	304.08
2400.00 ft	0.53	0.04	100.00 ft	2399.83 ft	14.95 ft	-21.26 ft	14.95 ft	0.38/100 ft	25.99 ft	305.11
2500.00 ft	1.04	45.75	100.00 ft	2499.83 ft	16.04 ft	-20.61 ft	16.04 ft	0.77/100 ft	26.11 ft	307.88
2600.00 ft	1.62	52.03	100.00 ft	2599.80 ft	17.54 ft	-18.85 ft	17.54 ft	0.60/100 ft	25.75 ft	312.93
2700.00 ft	1.65	57.51	100.00 ft	2699.76 ft	19.18 ft	-16.52 ft	19.18 ft	0.16/100 ft	25.31 ft	319.26
2800.00 ft	1.64	34.60	100.00 ft	2799.72 ft	21.13 ft	-14.50 ft	21.13 ft	0.65/100 ft	25.63 ft	325.55
2900.00 ft	1.33	33.52	100.00 ft	2899.68 ft	23.28 ft	-13.04 ft	23.28 ft	0.31/100 ft	26.68 ft	330.75
3000.00 ft	0.48	11.85	100.00 ft	2999.67 ft	24.66 ft	-12.31 ft	24.66 ft	0.90/100 ft	27.57 ft	333.48
3100.00 ft	0.46	224.24	100.00 ft	3099.67 ft	24.79 ft	-12.50 ft	24.79 ft	0.91/100 ft	27.76 ft	333.23
3200.00 ft	0.96	205.21	100.00 ft	3199.66 ft	23.74 ft	-13.14 ft	23.74 ft	0.54/100 ft	27.14 ft	331.04
3300.00 ft	1.69	188.18	100.00 ft	3299.63 ft	21.52 ft	-13.71 ft	21.52 ft	0.83/100 ft	25.52 ft	327.51
3400.00 ft	1.74	182.69	100.00 ft	3399.59 ft	18.54 ft	-13.99 ft	18.54 ft	0.17/100 ft	23.23 ft	322.97
3500.00 ft	1.57	190.05	100.00 ft	3499.55 ft	15.68 ft	-14.30 ft	15.68 ft	0.27/100 ft	21.22 ft	317.63
3600.00 ft	1.66	193.23	100.00 ft	3599.51 ft	12.92 ft	-14.87 ft	12.92 ft	0.13/100 ft	19.70 ft	310.98



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Measured Depth	Inclin	Azimuth	Course Length	True Vertical Depth	N[+]/S[-]	E[+]/W[-]	Vertical Section	Dogleg Severity	Closure Distance	Closure Direction
3700.00 ft	1.64	196.86	100.00 ft	3699.47 ft	10.14 ft	-15.62 ft	10.14 ft	0.11/100 ft	18.62 ft	302.98
3800.00 ft	1.51	201.23	100.00 ft	3799.43 ft	7.54 ft	-16.51 ft	7.54 ft	0.18/100 ft	18.15 ft	294.55
3900.00 ft	1.37	209.62	100.00 ft	3899.40 ft	5.28 ft	-17.58 ft	5.28 ft	0.25/100 ft	18.35 ft	286.71
4000.00 ft	1.06	216.22	100.00 ft	3999.37 ft	3.48 ft	-18.72 ft	3.48 ft	0.34/100 ft	19.04 ft	280.55
4100.00 ft	0.91	232.63	100.00 ft	4099.36 ft	2.25 ft	-19.90 ft	2.25 ft	0.32/100 ft	20.03 ft	276.45
4200.00 ft	0.83	231.78	100.00 ft	4199.35 ft	1.32 ft	-21.10 ft	1.32 ft	0.09/100 ft	21.14 ft	273.58
4300.00 ft	1.16	255.36	100.00 ft	4299.33 ft	0.62 ft	-22.65 ft	0.62 ft	0.52/100 ft	22.66 ft	271.56
4400.00 ft	1.98	271.34	100.00 ft	4399.30 ft	0.40 ft	-25.35 ft	0.40 ft	0.92/100 ft	25.35 ft	270.91
4500.00 ft	2.60	282.92	100.00 ft	4499.22 ft	0.95 ft	-29.29 ft	0.95 ft	0.77/100 ft	29.30 ft	271.86
4600.00 ft	2.39	290.60	100.00 ft	4599.12 ft	2.19 ft	-33.45 ft	2.19 ft	0.40/100 ft	33.52 ft	273.75
4700.00 ft	2.11	293.69	100.00 ft	4699.04 ft	3.66 ft	-37.08 ft	3.66 ft	0.30/100 ft	37.26 ft	275.64
4800.00 ft	1.90	292.21	100.00 ft	4798.98 ft	5.03 ft	-40.31 ft	5.03 ft	0.21/100 ft	40.62 ft	277.11
4900.00 ft	1.25	299.55	100.00 ft	4898.94 ft	6.20 ft	-42.79 ft	6.20 ft	0.68/100 ft	43.24 ft	278.24
5000.00 ft	0.70	308.59	100.00 ft	4998.93 ft	7.12 ft	-44.22 ft	7.12 ft	0.57/100 ft	44.79 ft	279.14
5100.00 ft	0.57	312.50	100.00 ft	5098.92 ft	7.83 ft	-45.06 ft	7.83 ft	0.14/100 ft	45.73 ft	279.86
5200.00 ft	0.54	333.53	100.00 ft	5198.92 ft	8.58 ft	-45.63 ft	8.58 ft	0.20/100 ft	46.43 ft	280.65
5300.00 ft	0.41	1.67	100.00 ft	5298.92 ft	9.36 ft	-45.83 ft	9.36 ft	0.26/100 ft	46.78 ft	281.54
5400.00 ft	0.43	341.19	100.00 ft	5398.91 ft	10.07 ft	-45.94 ft	10.07 ft	0.15/100 ft	47.03 ft	282.36
5500.00 ft	0.46	309.95	100.00 ft	5498.91 ft	10.68 ft	-46.37 ft	10.68 ft	0.24/100 ft	47.58 ft	282.97
5600.00 ft	0.72	279.35	100.00 ft	5598.91 ft	11.04 ft	-47.30 ft	11.04 ft	0.40/100 ft	48.57 ft	283.14
5700.00 ft	1.02	285.38	100.00 ft	5698.89 ft	11.38 ft	-48.77 ft	11.38 ft	0.31/100 ft	50.08 ft	283.13
5800.00 ft	1.28	311.00	100.00 ft	5798.87 ft	12.35 ft	-50.48 ft	12.35 ft	0.57/100 ft	51.97 ft	283.75



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5900.00 ft	1.40	316.33	100.00 ft	5898.85 ft	13.97 ft	-52.16 ft	13.97 ft	0.17/100 ft	54.00 ft	284.99
6000.00 ft	1.60	318.02	100.00 ft	5998.81 ft	15.88 ft	-53.94 ft	15.88 ft	0.21/100 ft	56.23 ft	286.41
6100.00 ft	1.55	331.21	100.00 ft	6098.77 ft	18.11 ft	-55.53 ft	18.11 ft	0.37/100 ft	58.41 ft	288.06
6200.00 ft	1.77	3.25	100.00 ft	6198.73 ft	20.84 ft	-56.09 ft	20.84 ft	0.94/100 ft	59.84 ft	290.38
6300.00 ft	3.49	24.46	100.00 ft	6298.63 ft	25.15 ft	-54.74 ft	25.15 ft	1.95/100 ft	60.25 ft	294.68
6400.00 ft	2.19	7.70	100.00 ft	6398.50 ft	29.82 ft	-53.23 ft	29.82 ft	1.53/100 ft	61.01 ft	299.26