



Cascade Petroleum, LLC

Rev 1

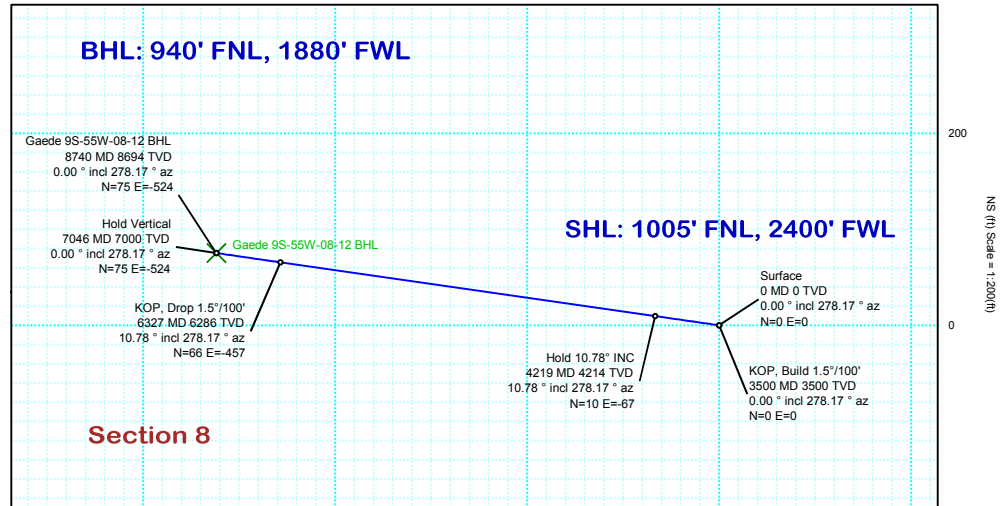
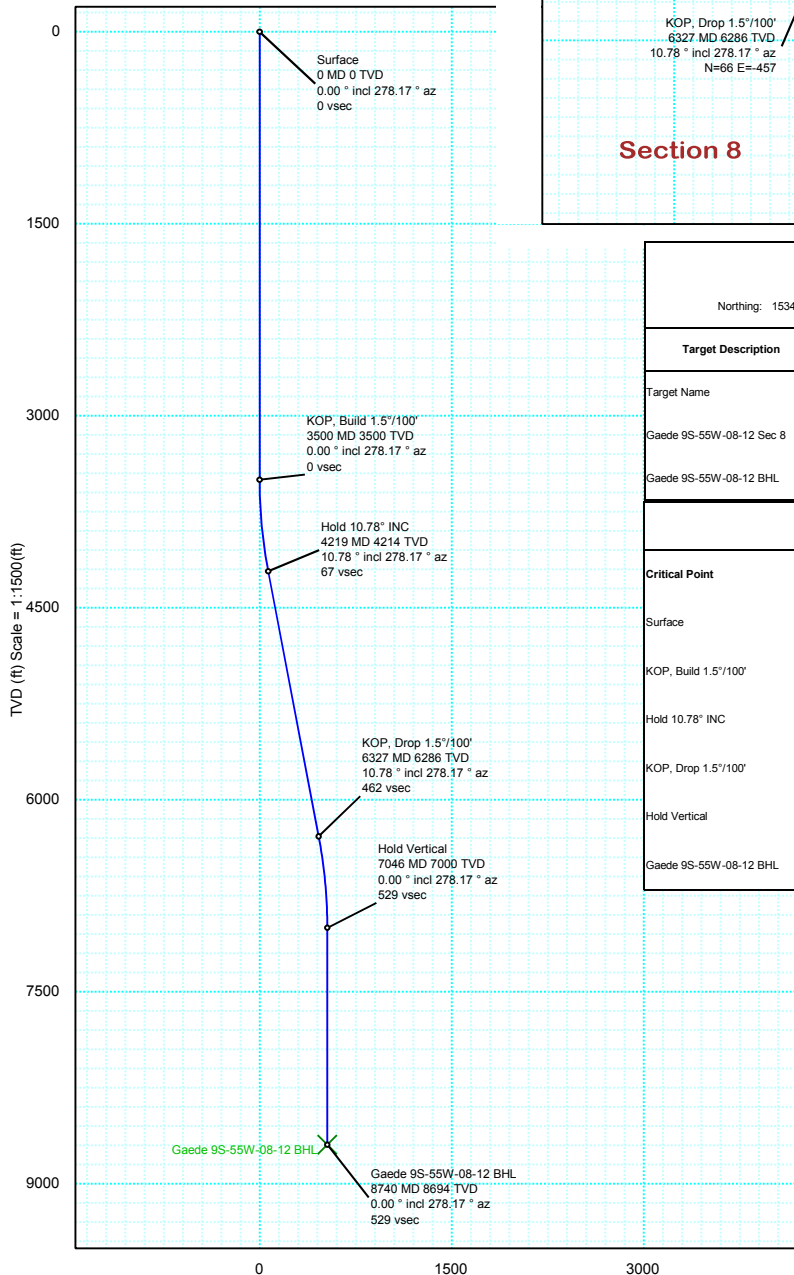


Borehole: Original Hole		Well: Gaede 9S-55W-08-12	Field: CO, Lincoln County (NAD 83 CZ)	Structure: 8-9S-55W (Gaede 9S-55W-08-12)
Gravity & Magnetic Parameters Model: BGGM 2014 Dip: 66.226° Date: 12-Sep-2014 MagDec: 7.812° FS: 52196.412nT Gravity FS: 998.916mgn (9.80665 Based)		Surface Location NAD83 Colorado State Plane, Central Zone, US Feet Lat: N 39 17 5.64 Northing: 1534421.91ftU Grid Conv: 1.2132° Lon: W 103 34 34.90 Easting: 3544438.87ftU Scale Fact: 0.99994104		Miscellaneous Slot: Gaede 9S-55W-08-12 TVD Ref: KB 12ft(5563ft above MSL) Plan: Gaede 9S-55W-08-12 R1 mdy 29Sept14

Proposal



True North
Tot Corr (M->T 7.812°)
Mag Dec (7.812°)
Grid Conv (1.213°)



Surface Location									
Northing: 1534421.906		Easting: 3544438.867		Latitude: N 39 17 5.64		Longitude: W 103 34 34.90		VSec Azimuth: 278.17	
Target Description		Grid Coord						Local Coord	
Target Name	Latitude	Longitude	Northing	Easting	TVD	VSec	N(+)/S(-)	E(+)/W(-)	
Gaede 9S-55W-08-12 Sec 8	N 39 17 5.64	W 103 34 34.90	1534421.91	3544438.87	5563.00	0.00	0.00	0.00	
Gaede 9S-55W-08-12 BHL	N 39 17 6.38	W 103 34 41.57	1534486.00	3543913.62	8694.00	529.17	75.20	-523.80	
Critical Points									
Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DLS	
Surface	0.00	0.00	278.17	0.00	0.00	0.00	0.00		
KOP, Build 1.5°/100'	3500.00	0.00	278.17	3500.00	0.00	0.00	0.00	0.00	
Hold 10.78° INC	4218.69	10.78	278.17	4214.46	67.41	9.58	-66.73	1.50	
KOP, Drop 1.5°/100'	6326.98	10.78	278.17	6285.54	461.76	65.62	-457.07	0.00	
Hold Vertical	7045.67	0.00	278.17	7000.00	529.17	75.20	-523.80	1.50	
Gaede 9S-55W-08-12 BHL	8739.67	0.00	278.17	8694.00	529.17	75.20	-523.80	0.00	

Vertical Section (ft) Azim = 278.17° Scale = 1:1500(ft) Origin = 0N/-S, 0E/-W