

Borehole:	Well:	Field:	Structure:
Original Hole	Shull Fed-9-59-31-1209AE	CO, Weld County (NAD 83 NZ)	31-09N-59W (Anderson-Shull Pad 1)

Gravity & Magnetic Parameters					Surface Location				NAD83 Colorado State Plane, Northern Zone, US Feet				Miscellaneous			
Model:	HDGM 2015	Dip:	67.142°	Date:	13-Apr-2016	Lat:	N 40 42 39.86	Northing:	1505301.2ftUS	Grid Conv:	0.9549°	Slot:	Shull Fed-9-59-31-1209AE	TVD Ref:	KB 18ft(4923ft above MSL)	
MagDec:	8.028°	FS:	52770.378nT	Gravity FS:	999.08mgn (9.80665 Based)	Lon:	W 104 1 19.56	Easting:	3409702.95ftUS	Scale Fact:	0.9998907	Plan:	Shull Fed-9-59-31-1209AE R0 mdv 13Apr16			

Northing: 1505301.195		Easting: 3409702.951		Surface Location		Longitude: W 104 1 19.56		VSec Azimuth: 87.836	
Target Description		Grid Coord		Local Coord					
Target Name	Latitude	Longitude	Northing	Easting	TVD	VSec	N(+)/S(-)	E(+)/W(-)	DLS
Pad 1	N 40 42 41.43	W 104 1 22.06	1505457.62	3409507.95	4923.00	-188.96	156.42	-195.01	
Anderson-Shull Pad Sec 31-32 - 460' Setback	N 40 42 41.43	W 104 1 22.06	1505457.62	3409507.95	4923.00	-188.96	156.42	-195.01	
Anderson-Shull Pad Sec 31-9N-59W	N 40 42 41.43	W 104 1 22.06	1505457.62	3409507.95	4923.00	-188.96	156.42	-195.01	
Anderson-Shull Pad Sec 32-9N-59W	N 40 42 41.43	W 104 1 22.06	1505457.62	3409507.95	4923.00	-188.96	156.42	-195.01	
Shull Fed-9-59-31-1209AE BHL	N 40 42 41.46	W 103 59 39.02	1505593.60	3417441.70	6031.00	7744.37	292.41	7738.85	
Shull Fed-9-59-31-1209AE LP	N 40 42 41.21	W 104 1 8.57	1505452.33	3410546.99	6061.00	849.16	151.14	844.05	

Critical Point		Critical Point		Critical Point		Critical Point		Critical Point	
MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DLS		
Surface	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
KOP, Build 1.5 DLS	1500.00	0.00	37.12	1500.00	0.00	0.00	0.00		
Hold	1644.90	2.17	37.12	1644.86	1.74	2.19	1.66	1.50	
KOP, Build/Turn 10 DLS	5420.00	2.17	37.12	5417.24	92.40	116.34	88.07	0.00	
Hold 200' @ 65° INC	6056.41	65.00	88.02	5922.78	423.16	138.23	418.24	10.00	
KOP, Build 10 DLS to Landing	6256.41	65.00	88.02	6007.30	604.42	144.49	599.39	0.00	
Landing Point, Hold to TD	6509.02	90.25	88.83	6061.00	849.16	151.14	844.05	10.00	
7" Casing Point	6510.00	90.25	88.83	6061.00	850.14	151.16	845.03	0.00	
Shull Fed-9-59-31-1209AE BHL	13405.33	90.25	88.83	6031.00	7744.37		7738.85	0.00	

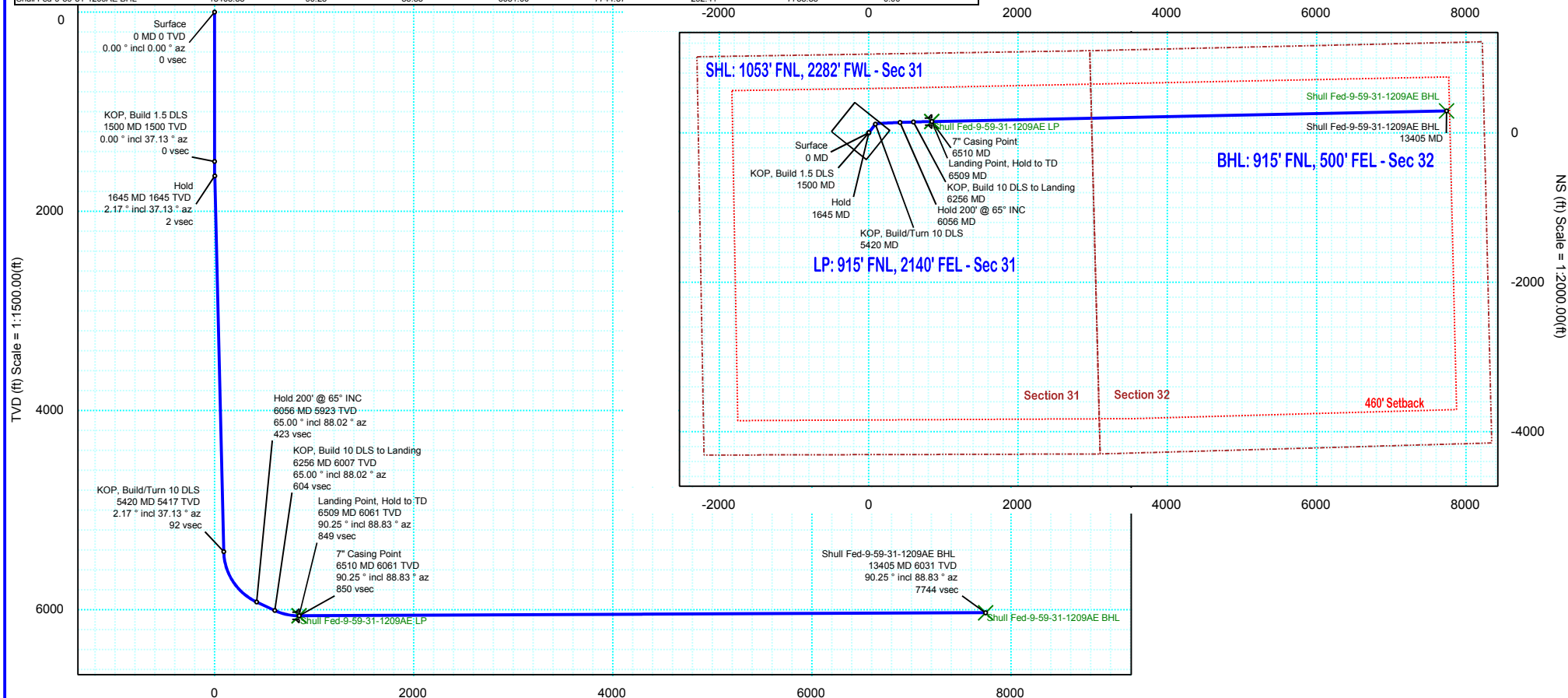
Proposal
Rev 0



Grid
True
Mag

Grid North
Tot Corr (M→G 7.073°)
Mag Dec (8.028°)
Grid Conv (0.955°)

EW (ft) Scale = 1:2000.00(ft)



Vertical Section (ft) Azim = 87.836° Scale = 1:1500.00(ft) Origin = 0N/-S, 0E/-W