

REFERENCE INFORMATION

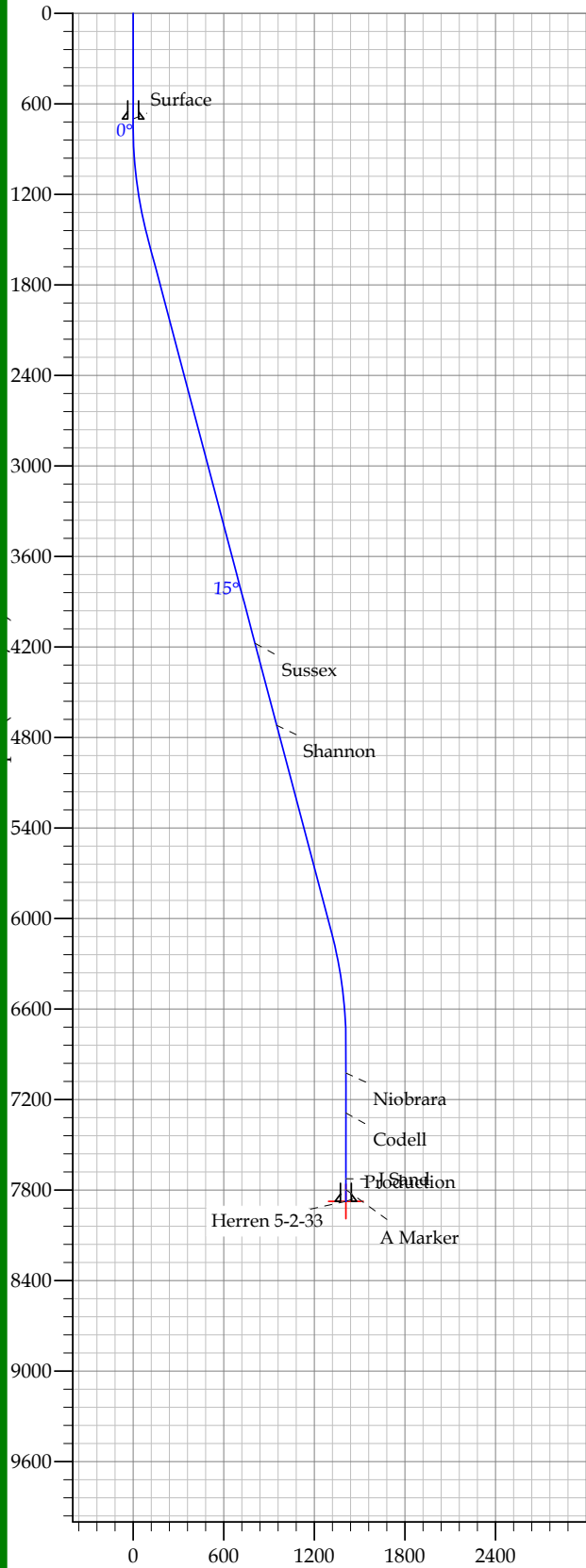
Co-ordinate (N/E) Reference: Well Herren 5-2-33, True North
 Vertical (TVD) Reference: WELL @ 4837.0ft (Original Well Elev)
 Section (VS) Reference: Slot - (0.0N, 0.0E)
 Measured Depth Reference: WELL @ 4837.0ft (Original Well Elev)
 Calculation Method:

WELL DETAILS: Herren 5-2-33

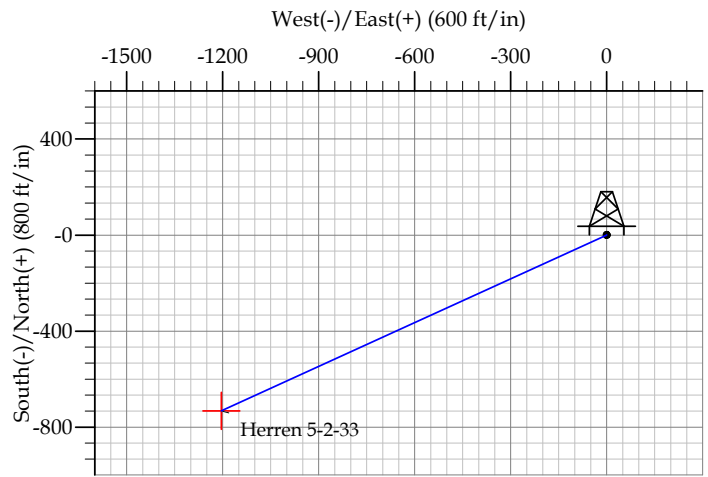
+N/-S	+E/-W	Northing	Ground Level:	4824.0	Longitude	Slot
0.0	0.0	1312207.47	Easting	3171304.8940° 11' 19.608 N	04° 53' 12.588 W	

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	750.0	0.00	0.00	750.0	0.0	0.0	0.00	0.00	0.0	
3	1490.5	14.81	238.70	1482.3	-49.4	-81.3	2.00	238.70	95.2	
4	6259.4	14.81	238.70	6092.7	-682.7	-1122.8	0.00	0.00	1314.1	
5	6999.9	0.00	0.00	6825.0	-732.2	-1204.2	2.00	180.00	1409.3	
6	8049.9	0.00	0.00	7875.0	-732.2	-1204.2	0.00	0.00	1409.3	Herren 5-2-33



Vertical Section at 238.70° (1200 ft/in)



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
4177.0	4277.8	Sussex
4719.0	4838.4	Shannon
7024.0	7198.9	Niobrara
7289.0	7463.9	Codell
7725.0	7899.9	J Sand
7797.0	7971.9	A Marker

CASING DETAILS

TVD	MD	Name	Size
700.0	700.0	Surface	8.625
7875.0	8049.9	Production	4.500