



**Anglian Oil Company Ltd.  
Northern Lights  
AA Pad  
AA16, Slot #09  
MWD Run #4**

**Job No. AB-CD-12345678  
Survey Date: 11 January 2013**

## **True North Directional Services Inc. Anticollision Report**

**18 August 2015**

Minimum Distance Proximity Scan (Highside Reference)

Scan Range: 0.00m to 1,638.78m Measured Depth  
Scan Radius is 500.00m. Clearance Factor cutoff is Unlimited.



**True North**  
Directional Services Inc.

**Minimum Distance Proximity Scan (Highside Reference)**  
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Comparison Structure, Well, Profile	Profile Key No.	Minimum Distance (m)	@ Measured Depth (m)	Ellipse Separation (m)	@ Measured Depth (m)	Minimum Clearance Factor	@ Measured Depth (m)
<b>AA Pad</b>							
AA01, Run #1	43	70.00	0.00	68.25	0.00	5.89	1,638.78
AA02, Gyro Survey Data	44	60.00	0.00	56.57	30.00	11.45	304.09
AA02, MWD Run #1	45	62.61	240.00	60.24	240.00	11.66	180.00
AA02, MWD Run #2	46	320.07	460.93	307.43	480.00	5.39	1,638.78
AA02, MWD Run #3	47	475.44	1,638.64	386.83	1,638.78	5.36	1,638.78
AA02, MWD Run #4	48	496.98	1,638.76	404.44	1,638.78	5.37	1,638.78
AA03, As Drilled Surveys	6	89.44	0.00	86.43	30.00	6.72	1,638.78
AA04, As Drilled Surveys	7	10.77	341.56	6.97	341.56	1.73	1,638.78
AA05, As Drilled Surveys	8	42.49	389.06	38.49	390.00	2.41	1,638.78
AA06, As Drilled Surveys	9	1.94	323.52	-0.14	323.52	0.38	323.52
AA07, As Drilled Surveys	10	8.45	1,530.00	-0.40	1,638.78	0.01	1,638.78
AA08, As Drilled Surveys	11	72.11	0.00	67.84	30.00	4.89	1,638.78
AA09, As Drilled Surveys	12	80.00	0.00	77.00	0.00	6.90	1,638.78
AA10, As Drilled Surveys	13	61.20	307.86	57.73	307.86	12.18	930.00
AA10, Sidetrack Surveys	14	294.18	518.17	276.22	540.00	4.10	1,638.78
AA11, As Drilled Surveys	15	11.37	555.00	5.17	540.00	1.22	1,638.78
AA12, As Drilled Surveys	16	80.62	0.00	77.37	270.00	5.76	1,638.78
AA13, SAGD Producer	17	51.31	337.23	47.65	337.23	3.21	1,638.78
AA14, SAGD Injector	18	37.41	271.96	34.14	271.96	3.28	1,638.78
AA15, As Drilled Surveys	19	26.11	313.11	22.68	313.11	2.48	1,638.78
AA17, As Drilled Surveys	24	27.11	465.00	21.13	480.00	1.70	1,638.78
AA18, As Drilled Surveys	25	48.81	240.00	45.62	240.00	4.10	1,638.78

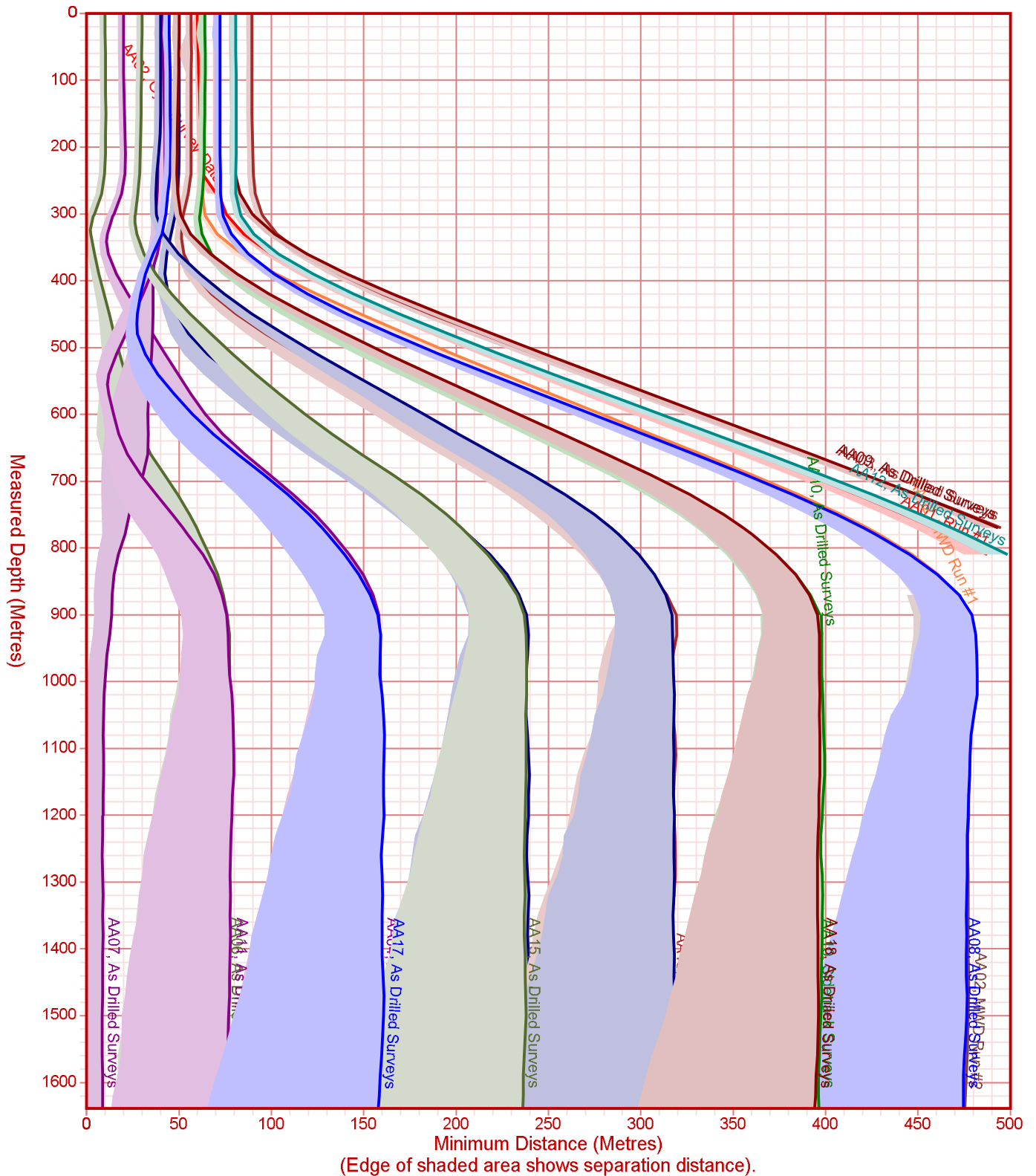
All station coordinates were calculated using the Minimum Curvature method.  
 All data is in metres unless otherwise stated. Directions and coordinates are relative to Grid North.  
 Vertical depths are relative to RKB. Northings and Eastings are relative to Well AA16.

Coordinate system is Universal Transverse Mercator, Zone 12 North.  
 Central meridian is -111.000°. Grid convergence at surface is 1.184°.

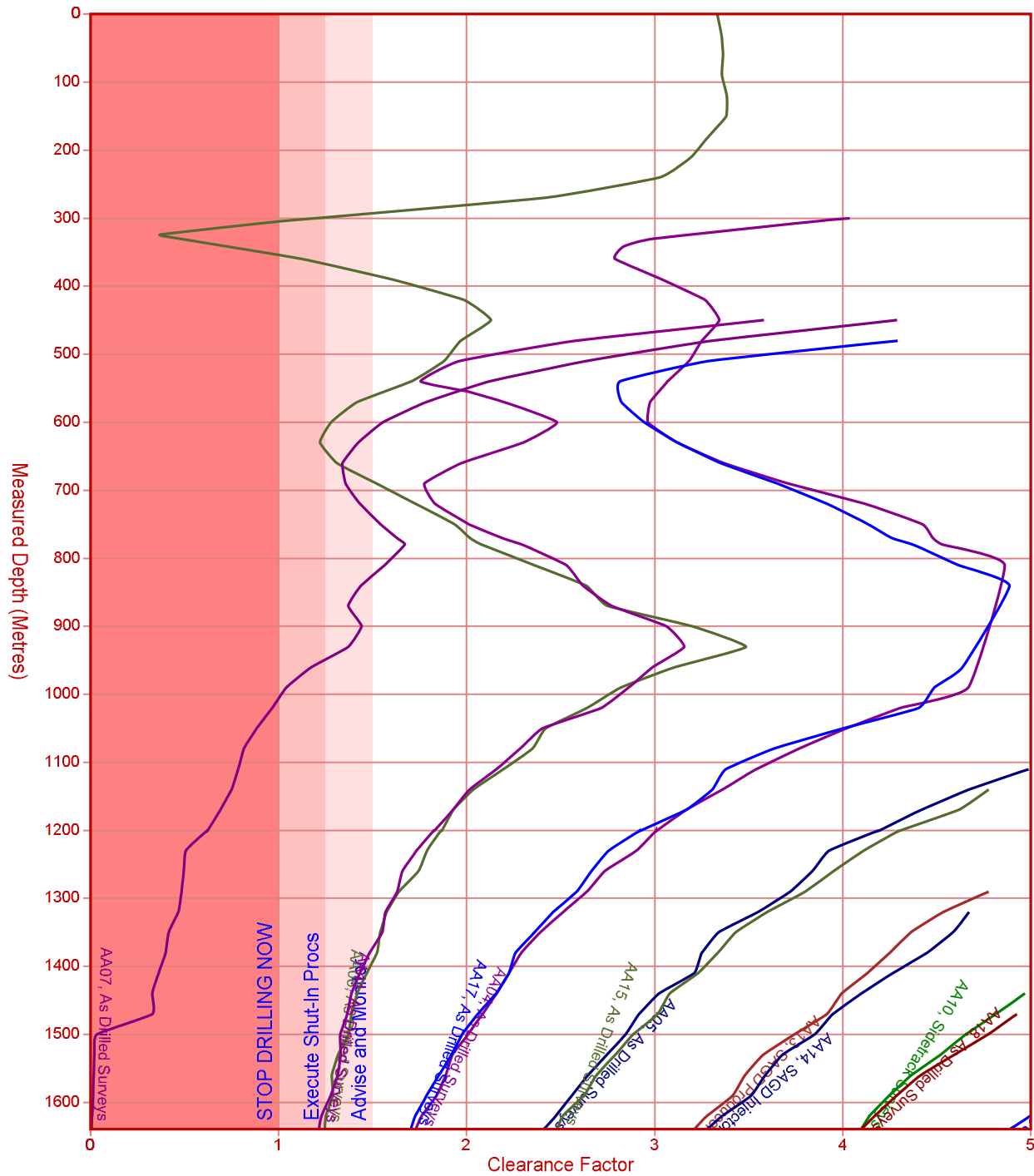
### Profile Sections

Survey: MWD Run #1 from 0.00m to 304.09m  
 Survey: MWD Run #2 from 304.09m to 770.02m  
 Survey: MWD Run #3 from 770.02m to 1,201.65m  
 Survey: MWD Run #4 from 1,201.65m to 1,638.78m

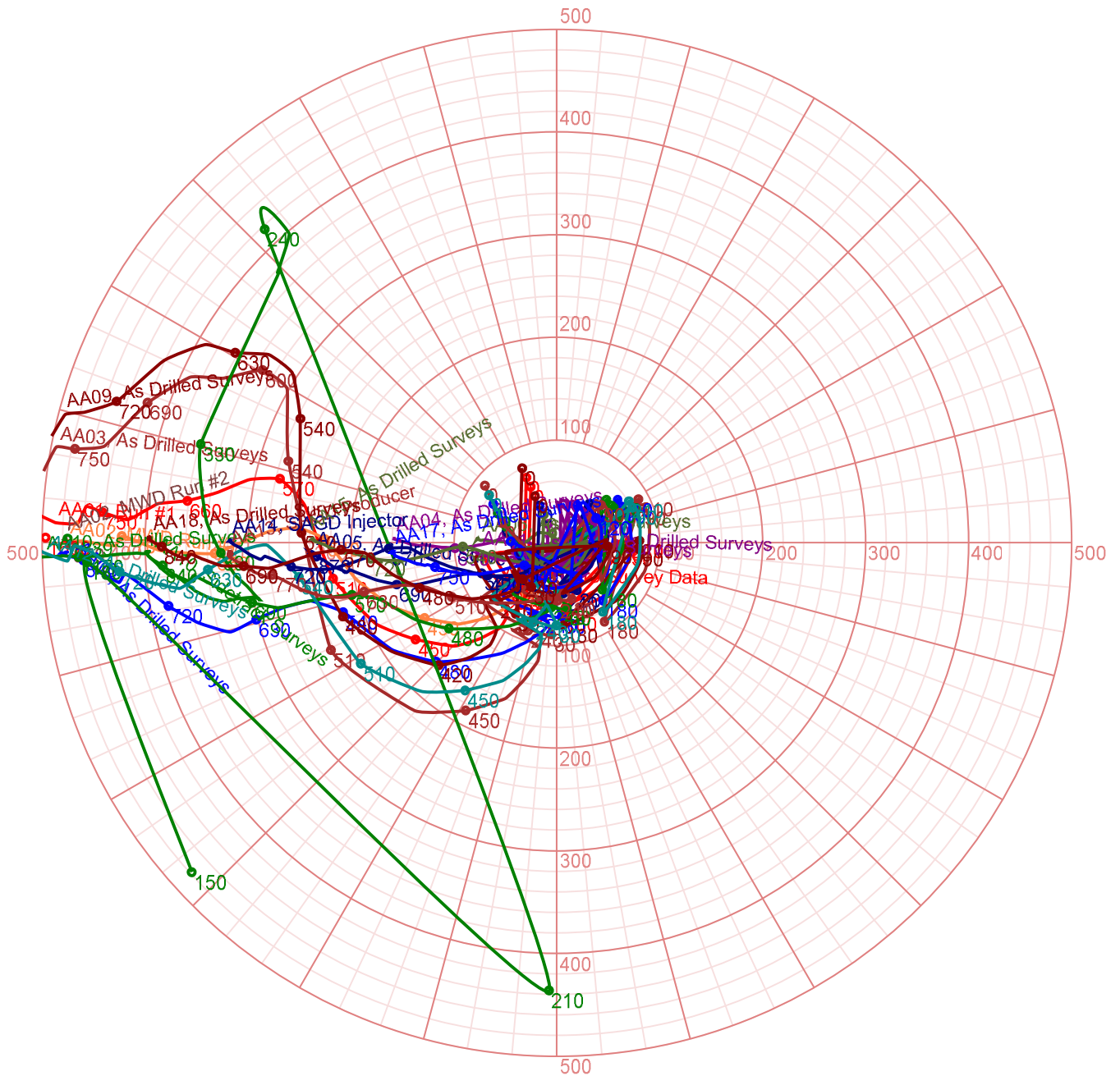
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**Survey Tool Program for AA16, MWD Run #4**

From		To		Survey Tool Description
Measured Depth (m)	Vertical Depth (m)	Measured Depth (m)	Vertical Depth (m)	
0.00	0.00	240.00	240.00	North Seeking Gyro MS (GYRO-NS)
240.00	240.00	1,638.78	492.32	MWD

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