



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

**Job No. AB-CD-12345678
Survey Date: 23 September 2017**

True North Directional Services Inc. Anticollision Report

19 November 2025

Minimum Distance Proximity Scan (Highside Reference)

Scan Range: 0.00ft to 5,371.72ft Measured Depth
Scan Radius is 400.00ft. Clearance Factor cutoff is Unlimited.



True North
Directional Services Inc.



Company:	Anglian Oil Company Ltd.	Local Co-ordinate Reference:	Well AA16
Project:	Northern Lights	TVD Reference:	RKB @ 2,065.65ft (Mean Sea Level)
Reference Site:	AA Pad	MD Reference:	Local RKB
Site Error:	16.40ft	North Reference:	Grid North
Reference Well:	AA16	Survey Calculation Method:	Minimum Curvature
Well Error:	0.83ft	Output errors are at:	2.00 Sigma
Reference wellbore:	Lateral #1	Database:	Example Project Database
Reference Survey:	Run #4	Offset TVD Reference:	2,065.65ft (Mean Sea Level)

Reference:	AA Pad, AA16, Run #4	Interpolation Method:	100.00ft
Filter Type:	None	Error Model:	ISCWSA
Depth Range:	0.00ft to 5,371.72ft Measured Depth	Scan Method:	Minimum Distance
Scan Radius:	400.00ft	Error Surface:	Elliptical Conic
Clearance Factor:	Unlimited	Casing Model:	Not applied
Warning Levels:	2.00 Sigma		

Survey Program for:	AA Pad, AA16, Run #4		
From (ft)	To (ft)	Tool Name	Description
0.00	981.26	GYRO-NS	OWSG Gyrocompass Gyro
981.26	2,508.28	MWD	MWD
2,508.28	3,926.69	MWD	MWD
3,926.69	5,371.72	MWD+IFR1+FDIR	MWD+IFR1+FDIR

Offset Survey		AA Pad, AA06, As Drilled Surveys							Offset Surface Error:				4.92ft
Reference		Offset		Semi Major Axis		HighSide Azimuth (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
0.00	0.00	0.00	0.00	0.83	4.92	-25.00	29.73 N	13.87 W	32.81	27.05	5.75	5.70	
100.00	100.00	99.99	99.99	1.07	5.15	-147.04	29.82 N	13.73 W	33.04	26.86	6.19	5.34	
200.00	200.00	200.00	199.99	1.26	5.44	-100.02	30.05 N	13.31 W	33.23	26.56	6.67	4.98	
300.00	300.00	299.85	299.84	1.43	5.79	106.09	30.42 N	12.68 W	33.36	26.17	7.20	4.64	
400.00	400.00	399.89	399.88	1.69	6.10	159.94	31.36 N	11.98 W	33.97	26.19	7.78	4.37	
500.00	500.00	500.12	500.11	1.80	6.41	152.51	31.83 N	11.19 W	34.22	26.02	8.20	4.17	
600.00	600.00	600.29	600.26	1.94	6.76	-164.11	31.68 N	9.27 W	33.64	24.96	8.68	3.87	
700.00	700.00	700.30	700.23	2.05	7.09	113.14	31.58 N	6.67 W	33.02	23.90	9.12	3.62	
800.00	799.99	801.40	801.26	2.30	7.57	-100.40	30.51 N	3.22 W	31.65	21.91	9.74	3.25	
900.00	899.68	904.22	903.18	3.65	9.23	-107.07	22.47 N	6.88 E	25.74	14.70	11.04	2.33	
981.26	979.53	986.87	982.81	5.35	11.54	-109.75	7.35 N	22.76 E	15.42	2.81	12.61	1.22	Execute Shut-In Procs
1,000.00	997.62	1,005.69	1,000.49	6.30	12.38	-113.48	2.88 N	27.42 E	13.09	0.14	12.95	1.01	Execute Shut-In Procs
1,096.87	1,088.21	1,102.63	1,088.47	8.65	14.14	-92.16	24.80 S	56.98 E	5.84	50%	7.48	0.50	STOP DRILLING NOW
1,100.00	1,091.03	1,105.79	1,091.24	8.72	14.20	-90.99	25.83 S	58.10 E	5.73	55%	7.54	0.45	STOP DRILLING NOW
1,200.00	1,177.52	1,205.08	1,174.27	10.95	16.10	-53.79	60.96 S	99.49 E	8.50	32%	9.56	0.68	STOP DRILLING NOW
1,300.00	1,255.59	1,303.46	1,248.50	12.82	17.70	-54.20	100.59 S	150.30 E	15.38	2%	15.45	0.98	STOP DRILLING NOW
1,400.00	1,324.28	1,401.27	1,312.71	14.40	19.20	-59.75	143.47 S	210.23 E	25.75	3.37	22.38	1.15	Execute Shut-In Procs
1,500.00	1,381.52	1,498.89	1,367.21	15.85	20.28	-64.96	190.72 S	275.95 E	34.92	6.65	28.27	1.24	Execute Shut-In Procs
1,600.00	1,426.54	1,595.43	1,410.88	17.72	23.16	-71.01	240.07 S	346.34 E	45.69	9.21	36.48	1.25	Advise and Monitor
1,700.00	1,458.38	1,692.57	1,441.66	22.13	27.57	-74.21	293.29 S	421.46 E	57.48	12.39	45.09	1.27	Advise and Monitor
1,800.00	1,476.73	1,790.20	1,465.68	26.79	32.21	-81.61	347.06 S	499.32 E	69.19	12.31	56.88	1.22	Execute Shut-In Procs
1,900.00	1,489.74	1,889.23	1,490.21	31.53	36.96	-91.33	401.43 S	578.37 E	82.06	13.95	68.11	1.20	Execute Shut-In Procs
2,000.00	1,502.05	1,989.82	1,512.44	36.33	41.86	-97.15	457.85 S	658.61 E	94.39	18.53	75.86	1.24	Execute Shut-In Procs
2,100.00	1,514.64	2,082.90	1,528.57	41.16	46.47	-98.99	510.23 S	733.82 E	106.34	23.47	82.87	1.28	Advise and Monitor
2,200.00	1,527.19	2,167.28	1,541.28	46.02	50.81	-98.62	550.28 S	806.94 E	128.01	39.11	88.90	1.44	Advise and Monitor
2,300.00	1,539.58	2,249.90	1,552.09	51.03	55.08	-96.54	581.34 S	882.69 E	153.16	59.31	93.85	1.63	
2,400.00	1,551.23	2,327.54	1,561.79	56.16	59.07	-94.83	602.47 S	956.73 E	175.52	80.27	95.25	1.84	
2,500.00	1,560.94	2,409.98	1,571.32	61.23	63.14	-93.94	616.29 S	1,037.41 E	194.96	96.99	97.97	1.99	
2,508.28	1,561.63	2,416.64	1,572.00	61.65	63.47	-93.83	617.12 S	1,043.98 E	196.31	98.51	97.80	2.01	
2,600.00	1,570.70	2,485.07	1,578.99	63.65	66.74	-93.22	622.09 S	1,111.84 E	211.11	116.81	94.30	2.24	
2,700.00	1,579.66	2,554.87	1,585.79	65.16	69.89	-92.34	618.08 S	1,181.13 E	228.45	140.73	87.72	2.60	
2,800.00	1,586.42	2,639.03	1,595.30	66.83	73.24	-92.42	605.39 S	1,263.77 E	240.80	151.28	89.52	2.69	
2,900.00	1,591.26	2,708.38	1,599.28	68.52	75.71	-91.99	588.50 S	1,330.86 E	248.52	167.15	81.37	3.05	
3,000.00	1,593.88	2,770.67	1,600.44	70.10	77.95	-91.52	565.44 S	1,388.65 E	253.99	181.28	72.70	3.49	
3,100.00	1,594.77	2,879.22	1,601.30	71.41	81.16	-91.47	518.56 S	1,486.52 E	255.27	171.96	83.32	3.06	
3,200.00	1,595.11	2,978.61	1,601.24	72.83	84.28	-91.37	477.09 S	1,576.84 E	255.09	163.81	91.28	2.79	
3,300.00	1,595.01	3,075.91	1,601.07	74.40	87.48	-91.36	436.21 S	1,665.14 E	255.14	156.96	98.18	2.60	
3,400.00	1,594.70	3,179.88	1,601.15	76.20	90.98	-91.45	391.99 S	1,759.22 E	255.23	147.80	107.42	2.38	
3,500.00	1,594.55	3,273.94	1,601.09	78.19	94.29	-91.48	352.37 S	1,844.53 E	254.80	141.80	113.00	2.25	
3,600.00	1,594.39	3,374.49	1,601.04	80.42	97.88	-91.49	309.68 S	1,935.57 E	255.73	134.29	121.44	2.11	

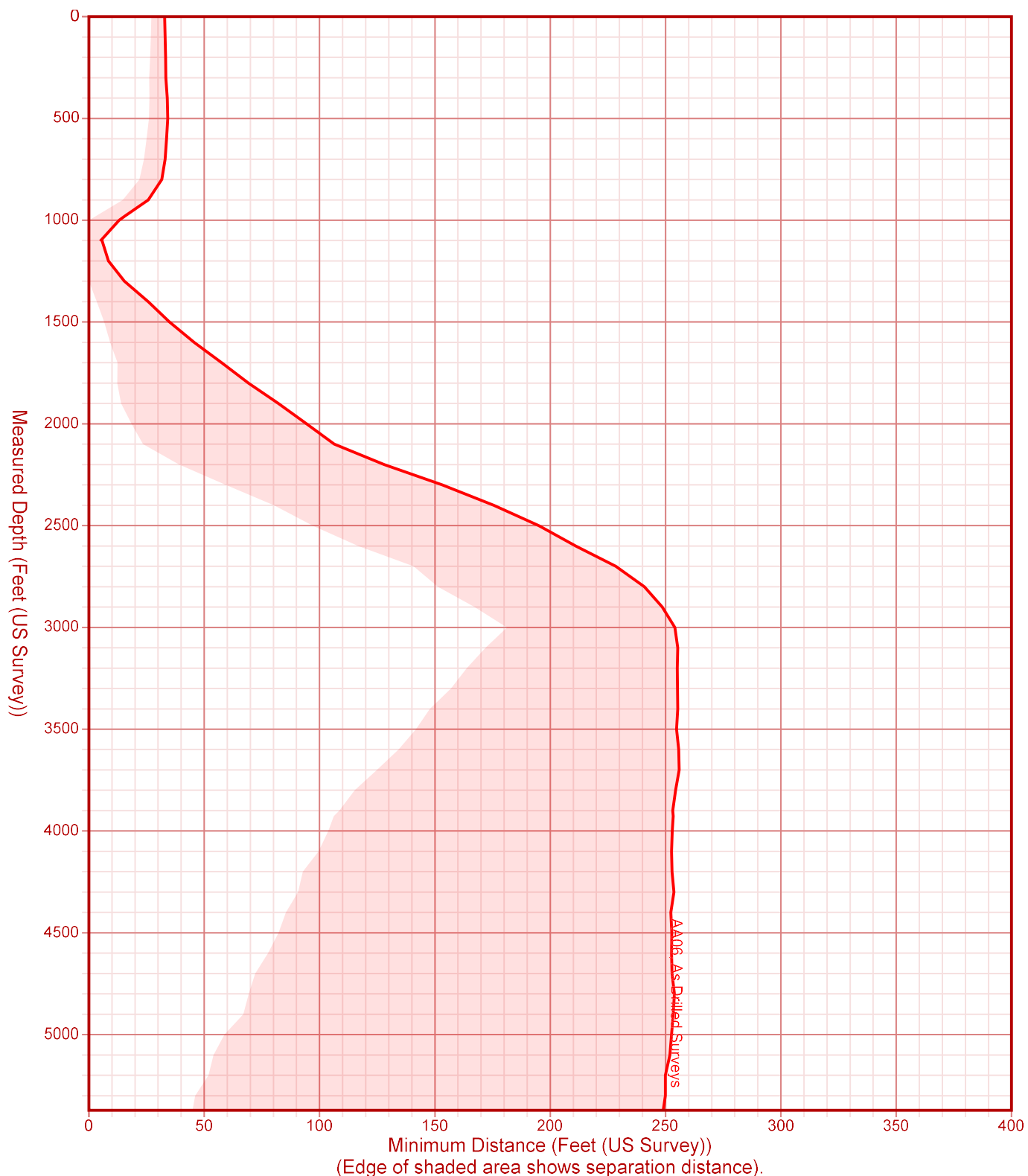


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Project:	Northern Lights	TVD Reference:	RKB @ 2,065.65ft (Mean Sea Level)
Reference Site:	AA Pad	MD Reference:	Local RKB
Site Error:	16.40ft	North Reference:	Grid North
Reference Well:	AA16	Survey Calculation Method:	Minimum Curvature
Well Error:	0.83ft	Output errors are at:	2.00 Sigma
Reference wellbore:	Lateral #1	Database:	Example Project Database
Reference Survey:	Run #4	Offset TVD Reference:	2,065.65ft (Mean Sea Level)

Offset Survey		AA Pad, AA06, As Drilled Surveys							Offset Surface Error:				4.92ft
Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Distance				Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	HighSide Azimuth (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
3,700.00	1,594.96	3,478.99	1,600.81	82.92	101.74	-91.30	265.74 S	2,030.37 E	255.91	124.81	131.10	1.95	
3,800.00	1,595.44	3,579.29	1,601.12	85.58	105.55	-91.27	223.79 S	2,121.48 E	254.37	115.20	139.17	1.83	
3,900.00	1,595.75	3,674.80	1,601.11	88.44	109.25	-91.21	183.82 S	2,208.22 E	253.11	108.51	144.60	1.75	
3,926.69	1,595.73	3,702.83	1,601.12	89.24	110.33	-91.22	171.85 S	2,233.57 E	253.29	106.12	147.17	1.72	
4,000.00	1,595.66	3,774.37	1,600.65	90.28	113.12	-91.13	141.43 S	2,298.31 E	252.91	103.76	149.15	1.70	
4,100.00	1,595.94	3,873.33	1,600.68	90.68	117.03	-91.08	99.38 S	2,387.89 E	252.54	99.59	152.96	1.65	
4,200.00	1,596.10	3,978.52	1,601.31	91.13	121.25	-91.18	54.86 S	2,483.18 E	252.77	92.79	159.98	1.58	
4,300.00	1,596.20	4,076.39	1,601.48	91.63	125.23	-91.19	13.27 S	2,571.77 E	253.57	90.65	162.92	1.56	
4,400.00	1,596.04	4,175.87	1,601.61	92.18	129.33	-91.26	28.17 N	2,662.21 E	252.33	85.45	166.88	1.51	
4,500.00	1,596.28	4,274.95	1,601.90	92.73	133.44	-91.28	69.97 N	2,752.04 E	252.65	82.24	170.41	1.48	Advise and Monitor
4,600.00	1,596.97	4,375.66	1,601.83	93.36	137.65	-91.10	112.42 N	2,843.36 E	252.62	77.64	174.98	1.44	Advise and Monitor
4,700.00	1,597.07	4,477.62	1,601.56	94.01	141.92	-91.02	155.81 N	2,935.63 E	252.83	72.10	180.72	1.40	Advise and Monitor
4,800.00	1,597.04	4,576.90	1,601.88	94.69	146.13	-91.09	197.72 N	3,025.63 E	253.81	69.26	184.55	1.38	Advise and Monitor
4,900.00	1,597.43	4,673.79	1,601.66	95.44	150.26	-90.96	238.63 N	3,113.45 E	253.36	66.94	186.43	1.36	Advise and Monitor
5,000.00	1,597.69	4,778.43	1,601.65	96.22	154.72	-90.90	283.25 N	3,208.09 E	252.62	58.81	193.81	1.30	Advise and Monitor
5,100.00	1,597.81	4,878.84	1,601.69	97.03	159.05	-90.89	325.75 N	3,299.07 E	251.87	54.01	197.86	1.27	Advise and Monitor
5,200.00	1,597.89	4,973.82	1,601.17	97.87	163.15	-90.75	365.72 N	3,385.23 E	249.90	51.80	198.10	1.26	Advise and Monitor
5,300.00	1,597.76	5,076.41	1,601.13	98.75	167.58	-90.77	409.82 N	3,477.85 E	249.88	46.07	203.82	1.23	Execute Shut-In Procs
5,371.72	1,597.69	5,145.40	1,601.17	99.43	170.57	-90.80	439.05 N	3,540.34 E	248.96	44.91	204.04	1.22	Execute Shut-In Procs

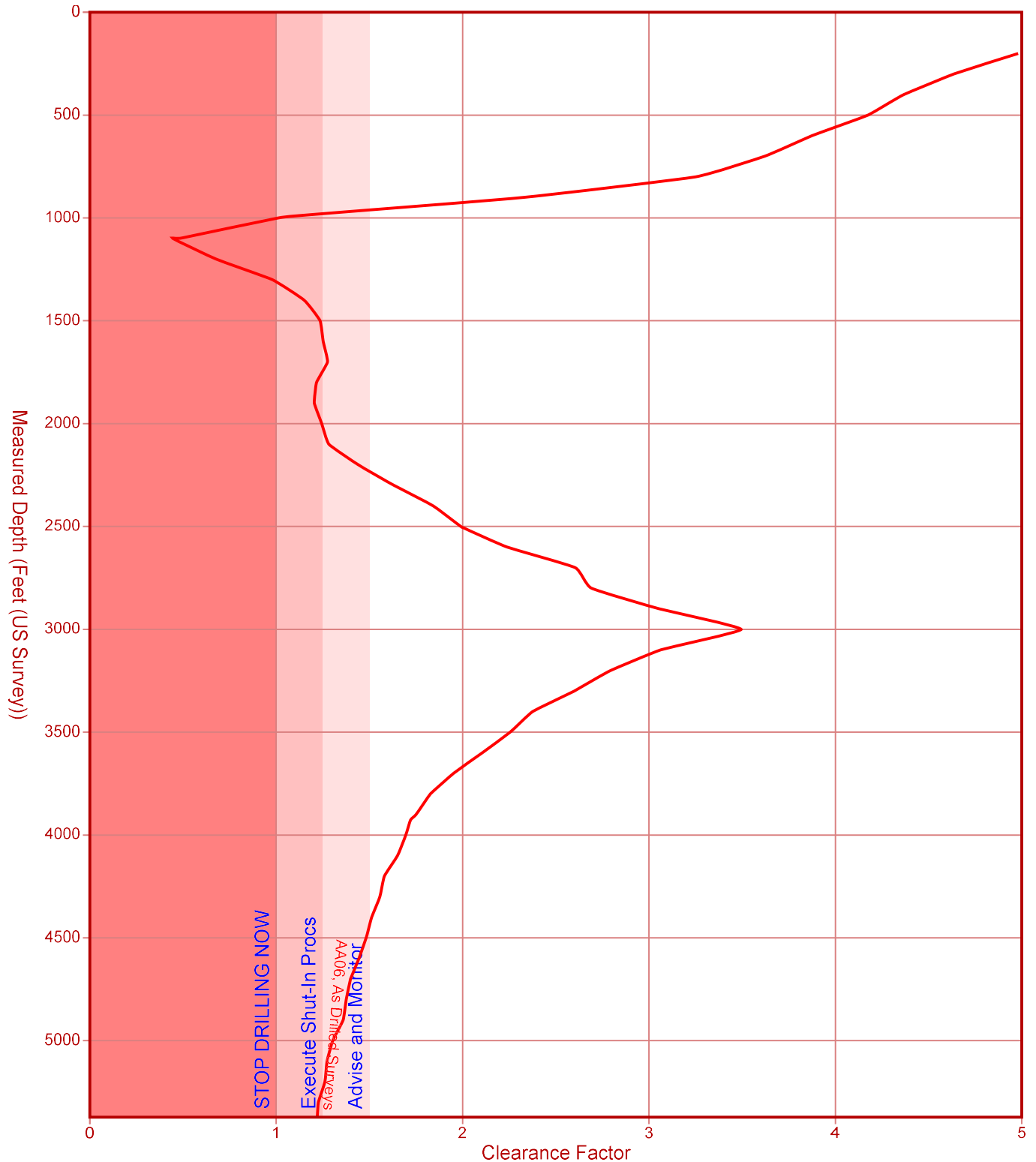


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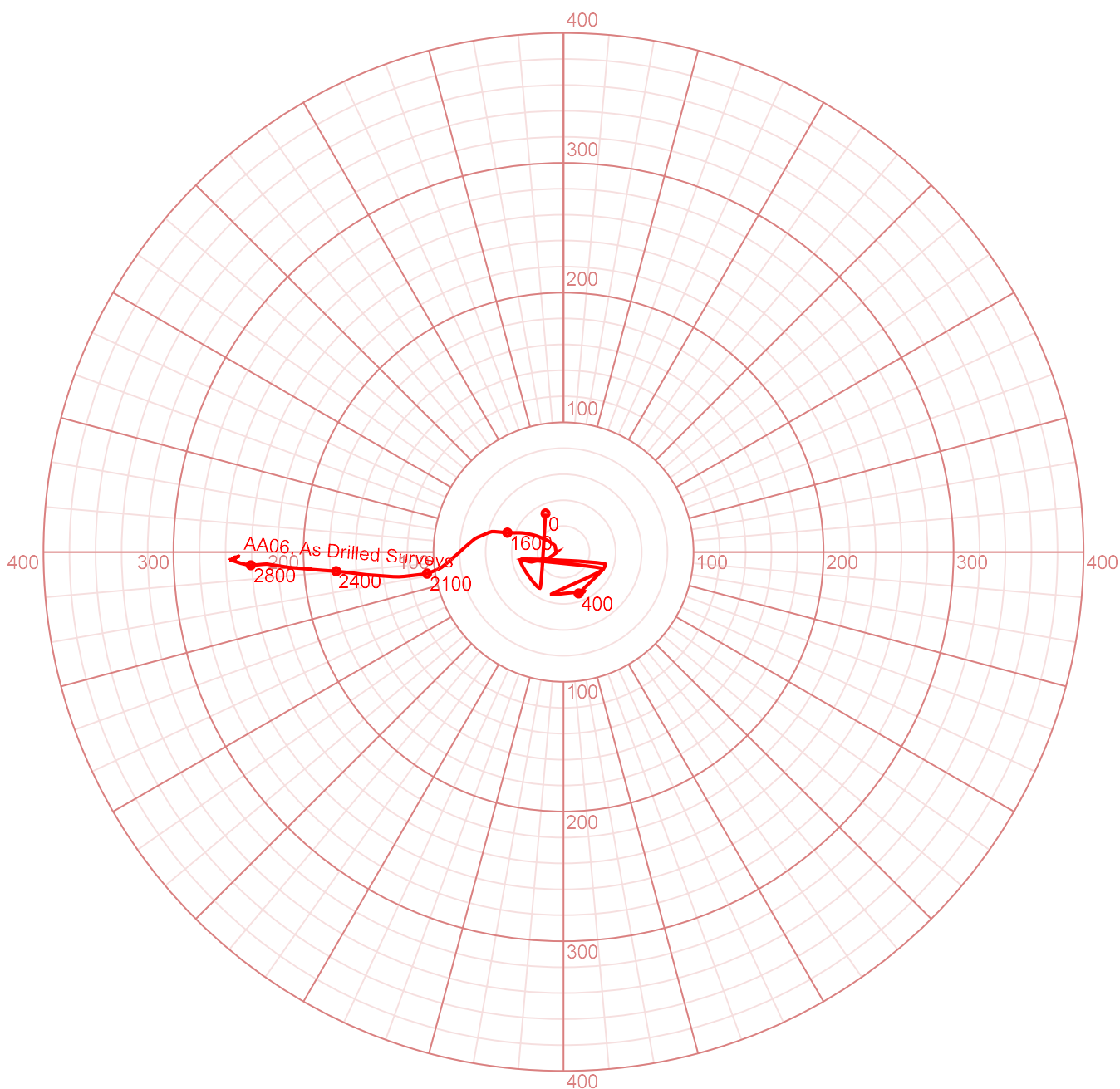


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