



Weatherford®

6 3/4 & 4 3/4 in. WeatherfordM/LWD™
Gamma Ray
1 in. & 5 in. TRUE VERTICAL DEPTH
RECORDED DATA
FINAL PRINT

Company: Anadarko
Well: Thomsen 36N-18HZ
Field: Wattenburg
Rig: H&P 307
County: Weld

COMPANY Anadarko
WELL Thomsen 36N-18HZ
FIELD Wattenburg
RIG H&P 307
COUNTY Weld STATE Colorado
API # 05-123-36872-00

Location	
Latitude: 40.153758° N	x = 3221038 ft
Longitude: 104.709538° W	y = 1299842 ft
Mag Decl: 8.50°	
Mag Dip: 66.94°	

Other Services: Spectral Azimuthal Gamma Ray and Directional

Permanent Datum: <u>Mean Sea Level</u>	
Log Measured From: <u>Drill Floor</u>	Elev: <u>4977.0 ft</u> above perm. datum
Depth Reference: <u>Drillers Tally</u>	Total Depth: <u>14693 ft</u>
Depth Logged: 6450 ft	Runs: 4
Date Logged: 31-May-13 to 9-Jun-13	Spud Date: 29-May-13

Borehole Record			Casing Record			
Hole Size	From	To	Size	Weight	From	To
8.750 in.	977 ft	7734 ft	7.000 in.	26.0 lb/ft	Surface	7699 ft
6.125 in.	7734 ft	14693 ft				

Borehole Deviation Record			Mud Record			
Hole Size	Min. Inc.	Max. Inc.	Type	Weight	From	To
8.750 in.	0.30°	91.96°	WBM	8.60 - 10.80 ppq	977 ft	14693 ft
6.125 in.	86.43°	92.90°				

All interpretations of log data are opinions based on inferences from electrical or other measurements. Weatherford International does not guarantee the accuracy or correctness of any interpretation or recommendation and we shall not be liable or responsible for any loss, cost, damages or expenses incurred or sustained by anyone resulting from any interpretation or recommendation made by any of our employees or agents.

RUN SUMMARY							
M/LWD Run Number		1	2	3	4		
Bit Size	in.	8.750	8.750	6.125	6.125		
Bit Type		PDC	PDC	PDC	PDC		
Bit TFA	sq.in.	1.242	0.982	1.243	1.243		
Bit Start Depth	ft	977	5970	7734	13609		
Bit End Depth	ft	5970	7734	13609	14693		
Top Log Interval	ft	N/A	6450	7697	13573		
Bottom Log Interval	ft	N/A	7734	13609	14693		
Begin Log Time	hrs	N/A	18:00	16:39	17:53		
Begin Log Date	DD-MMM-YY	N/A	31-May-13	3-Jun-13	8-Jun-13		
End Log Time	hrs	N/A	21:45	16:19	7:39		
End Log Date	DD-MMM-YY	N/A	1-Jun-13	7-Jun-13	9-Jun-13		
Drill or Wipe		Drill	Drill	Drill	Drill		
Flow Rate	gal/min	595	590	297	298		
Max AV / CV @ MWD	ft/min	473 / 140	466 / 321	487 / 363	487 / 339		
Min Inc @ Depth	deg @ ft	0.30 @ 1375	8.34 @ 6354	86.43 @ 11866	89.32 @ 14376		
Max Inc @ Depth	deg @ ft	11.17 @ 4178	91.96 @ 7672	92.90 @ 11508	91.79 @ 13997		
MUD DATA							
Depth	ft	5970	7734	13609	14693		
Fluid Type		WBM	WBM	WBM	WBM		
Mud Weight	ppg	8.80	9.95	10.70	10.80		
Plastic Viscosity	cP	1	15	12	11		
Solids / Sand	%	0.7 / 0.1	8.0 / 0.3	11.2 / 0.3	11.1 / 0.3		
NaCl Equiv. Chlorides	ppm	1485	1650	1485	1485		
pH		8.8	9	9.2	9.2		
Oil:Water Ratio	% Vol	1.2 : 98.8	10.0 : 90.0	15.7 : 84.3	15.0 : 85.0		
KCl	% Vol	0	0	0	0		
Client Representative		C. Jones	C. Jones	P. Cain	P. Cain		
WeatherfordLWD Engineer		F.J. Harmych	F.J. Harmych	M. Chisam	M. Chisam		

EQUIPMENT SUMMARY					
M/LWD Run Number	1	2	3	4	
BTR / CDS Serial Number	849 / 983	849 / 983	N/A	N/A	
Battery Serial Number	403716789	403716789	N/A	N/A	
Gamma Ray Serial Number	2657	2657	N/A	N/A	
CMS Serial Number	1929	1929	N/A	N/A	
Pulser Serial Number	43919	43919	N/A	N/A	
Inclination Sonde Serial Number	44418	44418	N/A	N/A	
HEL Serial Number	N/A	N/A	NW131376PDBBI4.75	NW131376PDBBI4.75	
SAGR Serial Number	N/A	N/A	NW130895JB4.75-M1	NW130895JB4.75-M1	
Sensor to Bit Offsets / Acquisition Rates					
Directional	ft / sec	59.95 / RT	59.29 / RT	51.37 / RT	52.06 / RT
Gamma Ray	ft / sec	45.74 / 18	45.08 / 18	36.84 / 5	37.53 / 5
Other Information					
Total BHA Length	ft	98.30	97.43	2026.56	2027.25
BHA Assembly Type		Steerable	Steerable	Steerable	Steerable
Stabilizer Location	ft	N/A	N/A	25.03	25.97
Stabilizer Location	ft	N/A	N/A	65.17	65.86
Stabilizer Location	ft	N/A	N/A	N/A	N/A
Run Circulating Time	hr	38.21	28.79	85.97	32.24
Run Drilling Time	hr	22.39	16.28	46.17	8.62

MUD SUMMARY

Date and Time	Run	Bit Depth	Mud Weight	% K	Rm @ Temp	Rmf @ Temp	Rmc @ Temp	BHCT
31 May 13 @ 00:00	01	5970 ft	8.80 ppg	0	N/A	N/A	N/A	161 F
01 Jun 13 @ 21:45	02	7734 ft	9.95 ppg	0	N/A	N/A	N/A	182 F
07 Jun 13 @ 16:39	03	13609 ft	10.70 ppg	0	N/A	N/A	N/A	246 F
09 Jun 13 @ 07:39	04	14693 ft	10.80 ppg	0	N/A	N/A	N/A	253 F

M/LWD RUN REMARKS

Run Number: 1 :: No Logging Data

WFT Services Provided:

No Logging Services provided during Run 01.

Directional Services: On demand Inclination and Azimuth.

Run Number: 2 :: REAL-TIME DATA LOG

WFT Services Provided:

Real Time Logging: Gamma Ray and Temperature.

Directional Services: On demand Inclination and Azimuth.

Borehole and Environmental Correction:

Hole Size: 8.750 in.

Gamma Ray: Hole size, mudweight, Collar O.D., Collar I.D. and K1 factor.

Mud Weight: 9.95 ppg

Collar O.D.: 6.750 in.

K1 Factor: 3.958

Collar I.D.: 3.250 in.

Run Number: 3 :: RECORDED DATA LOG

WFT Services Provided:

Recorded and Real Time Logging: Spectral Azimuthal Gamma Ray and Temperature.

Directional Services: On demand Inclination and Azimuth.

Borehole and Environmental Correction:

Hole Size: 6.125 in.

Gamma Ray: Corrected for mud weight, hole size and KCl concentration.

Mud Weight: 10.70 ppg

KCl Concentration: 0%

Run Number: 4 :: RECORDED DATA LOG

WFT Services Provided:

Recorded and Real Time Logging: Spectral Azimuthal Gamma Ray and Temperature.

Directional Services: On demand Inclination and Azimuth.

Borehole and Environmental Correction:

Hole Size: 6.125 in.

Gamma Ray: Corrected for mud weight, hole size and KCl concentration.

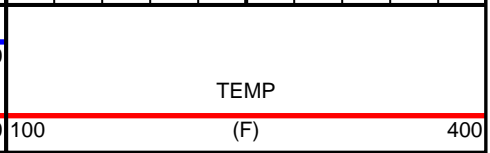
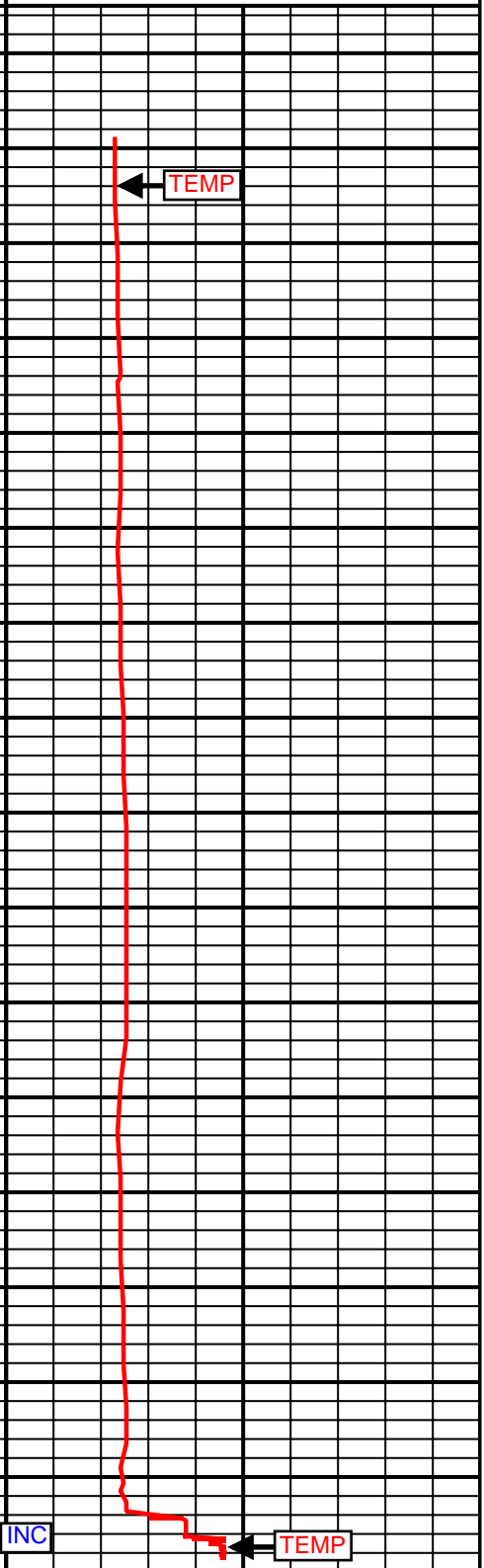
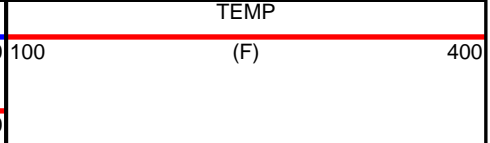
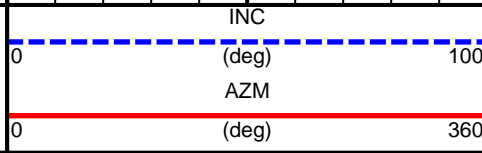
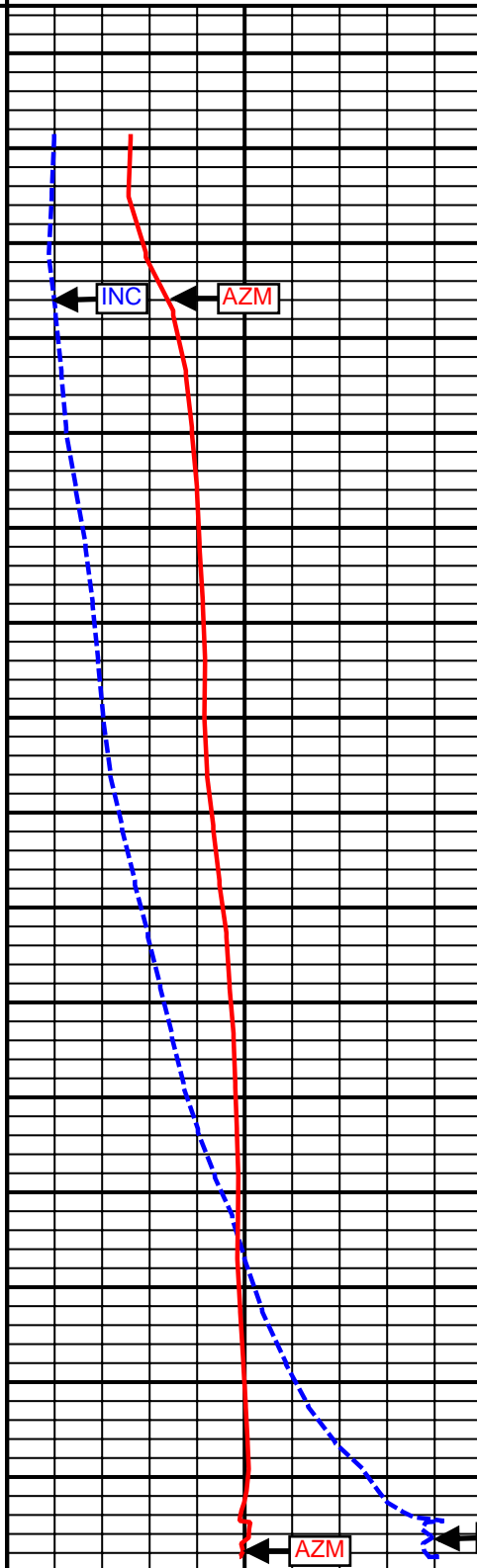
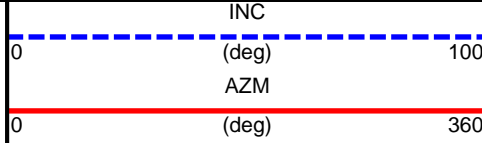
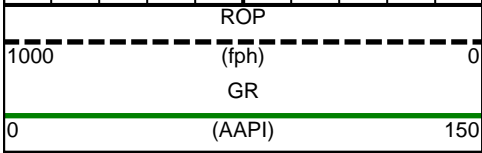
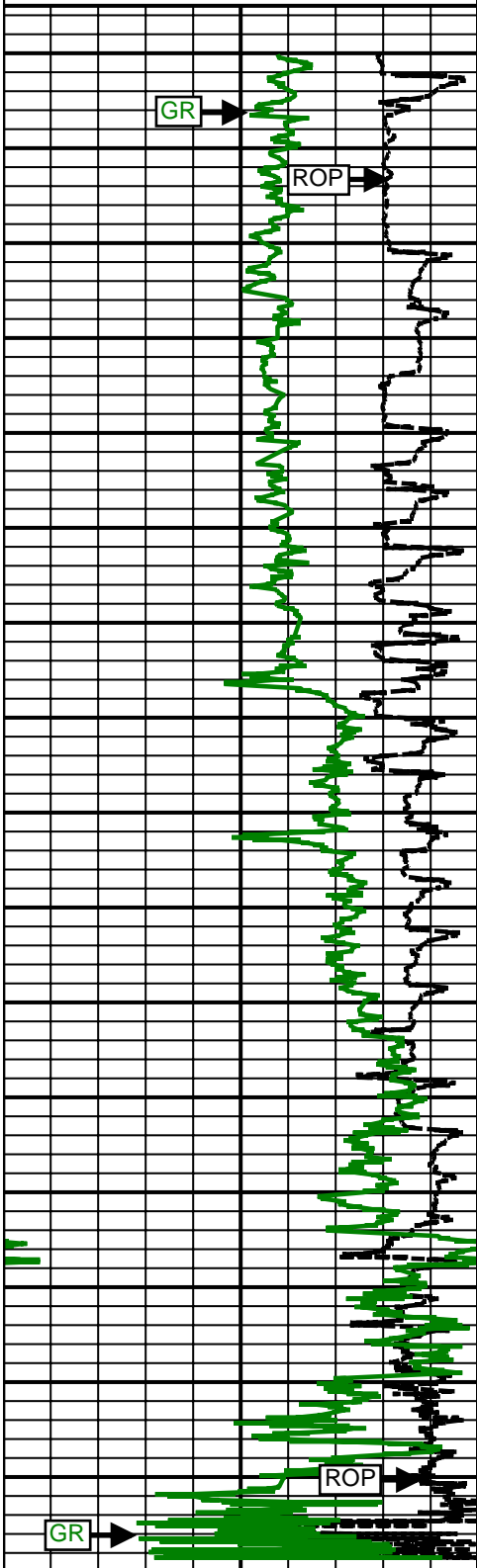
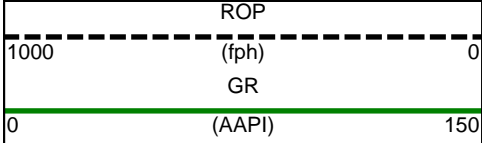
Mud Weight: 10.80 ppg

KCl Concentration: 0%

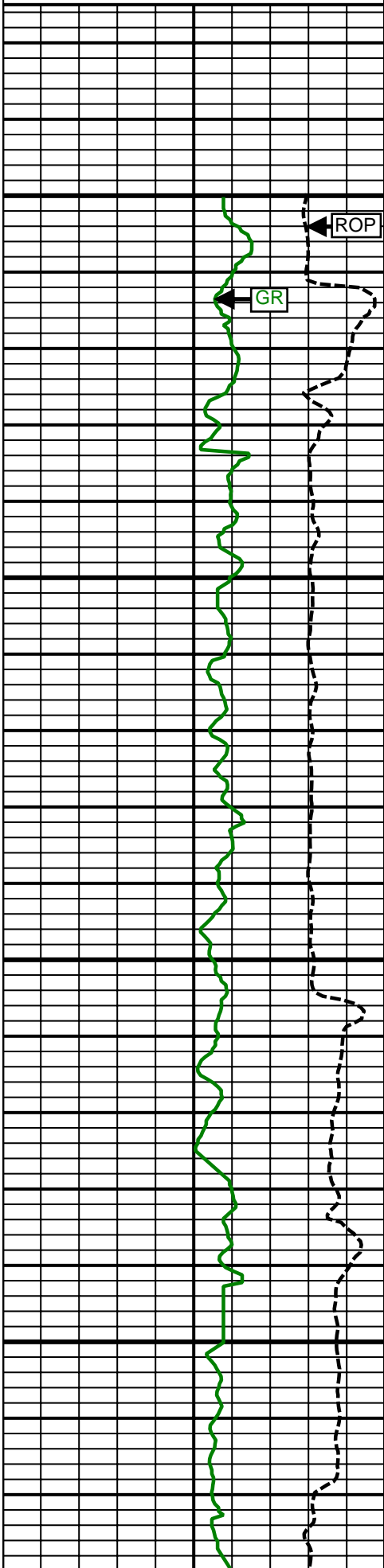
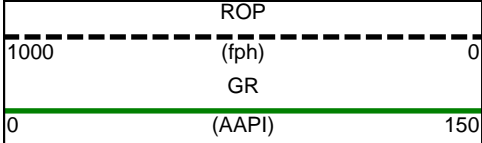
M/LWD LOG COMMENTS	
Comment No. 1-1	No Logging Services Provided for Run 01.
Comment No. 2-1	REAL-TIME DATA LOG Start of MWD Drilling Run 02 Weatherford International provided 6 3/4 in. Directional, Gamma Ray, and Temperature for Run 02. Run 02 started formation drilling May 31, 2013 at 18:00 at 5970 MD /5929 TVD. Weatherford International logged the 8.750 in. borehole. The WBM at the start of drilling was 9.30 ppg.
Comment No. 2-2	End of MWD Drilling Run 02 Run 02 ended drilling formation June 1, 2013 at 21:45 at 7734 MD / 7220 TVD. The WBM at the end of drilling was 9.95 ppg.
Comment No. 3-1	RECORDED DATA LOG Start of LWD Drilling Run 03 Weatherford International provided 4 3/4 in. Directional, Spectral Azimuthal Gamma Ray, and Temperature for Run 03. Run 03 started formation drilling June 3, 2013 at 16:39 at 7734 MD / 7221 TVD. Weatherford International logged the 6.125 in. borehole. The WBM at the start of drilling was 10.10 ppg.
Comment No. 3-2	End of LWD Drilling Run 03 Run 03 ended drilling formation June 7, 2013 at 16:19 at 13609 MD / 7238 TVD. The WBM at the end of drilling was 10.70 ppg.
Comment No. 4-1	RECORDED DATA LOG Start of LWD Drilling Run 04 Weatherford International provided 4 3/4 in. Directional, Spectral Azimuthal Gamma Ray, and Temperature for Run 04. Run 04 started formation drilling June 8, 2013 at 17:53 at 13609 MD / 7238 TVD. Weatherford International logged the 6.125 in. borehole. The WBM at the start of drilling was 10.70 ppg.
Comment No. 4-2	End of LWD Drilling Run 04 Run 04 ended drilling formation June 9, 2013 at 7:39 at 14693 MD / 7227 TVD. The WBM at the end of drilling was 10.80 ppg.

CURVE SPECIFICATIONS				
CURVE TYPE	MNEMONIC	UNITS	COMMENTS	CORRECTIONS
Rate of Penetration	ROP	fph	Rate of Penetration 3.0 ft window 0.5 ft Exponential Smoothing	None
Gamma Ray	GR	AAPI	Gamma Ray 3.0 ft window 0.5 ft Exponential Smoothing	See M/LWD Run Remarks
Inclination	INC	deg	Survey Inclination No Smoothing	None
Azimuth	AZM	deg	Survey Azimuth No Smoothing	
Temperature	TEMP	F	Borehole Temperature 3.0 ft window 0.5 ft Exponential Smoothing	

1 Inch - True Vertical Depth

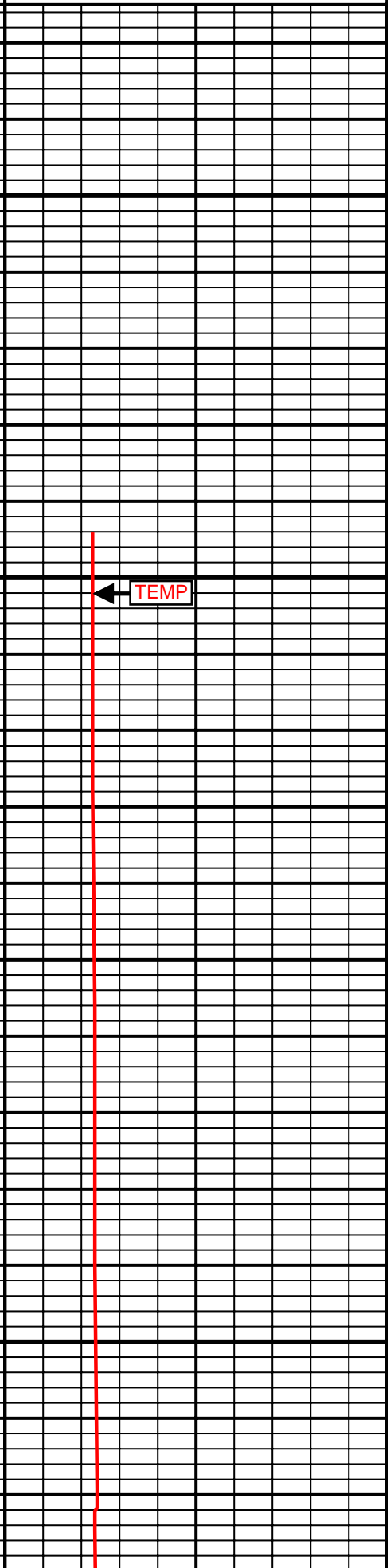
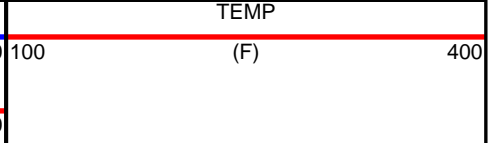
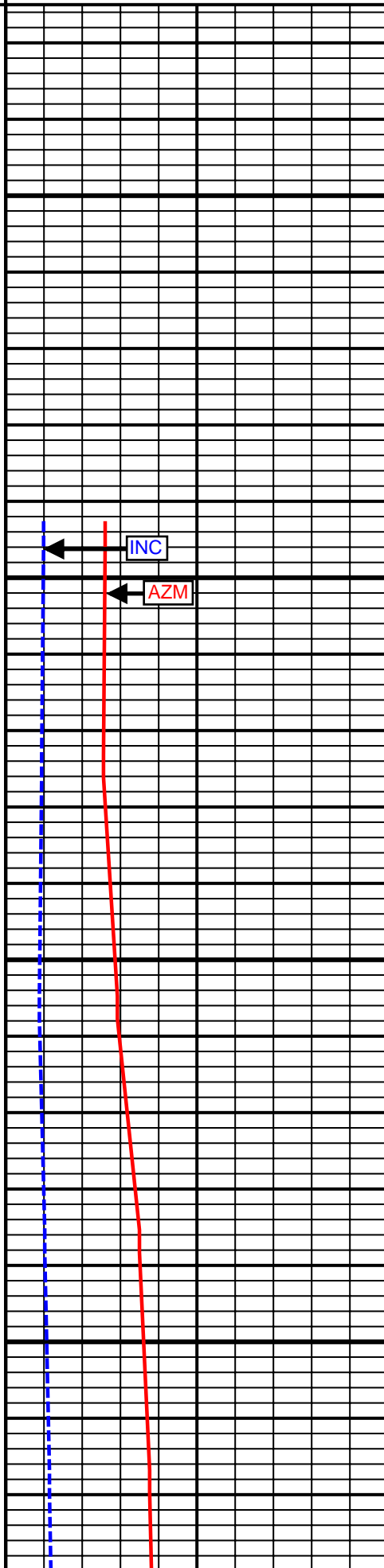
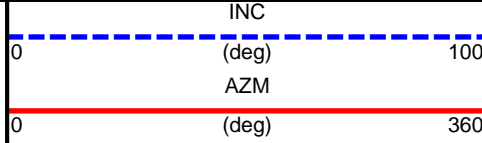


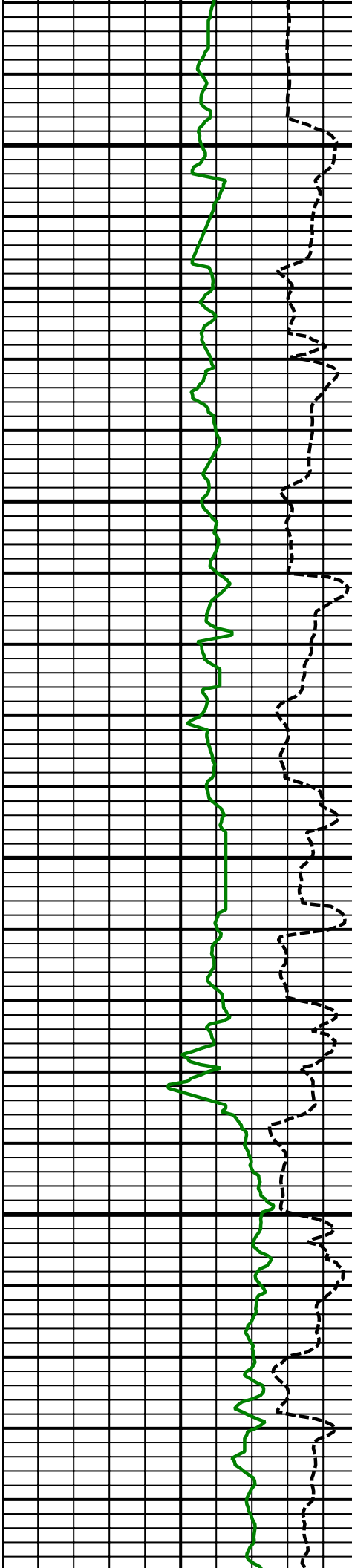
5 Inch - True Vertical Depth



6500
TVD

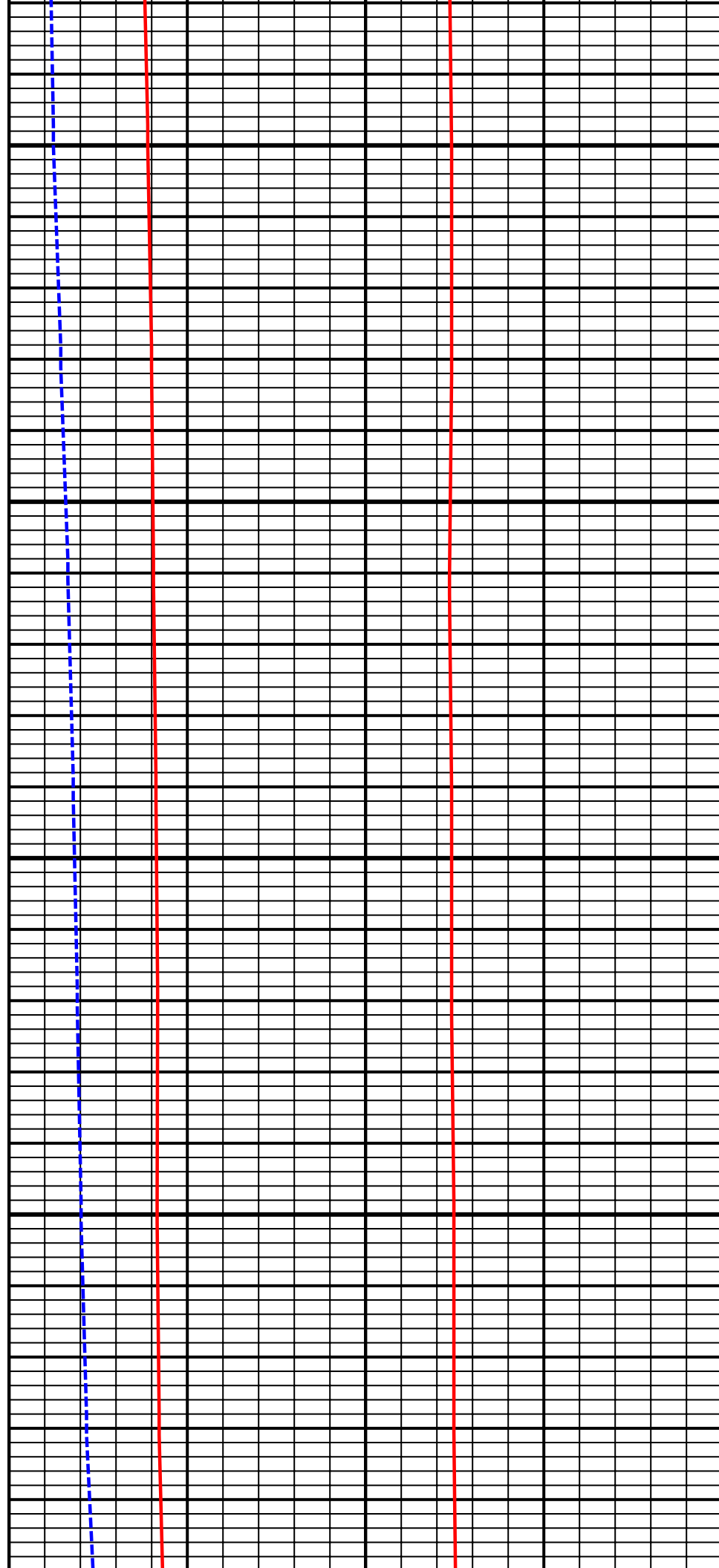
6600
TVD

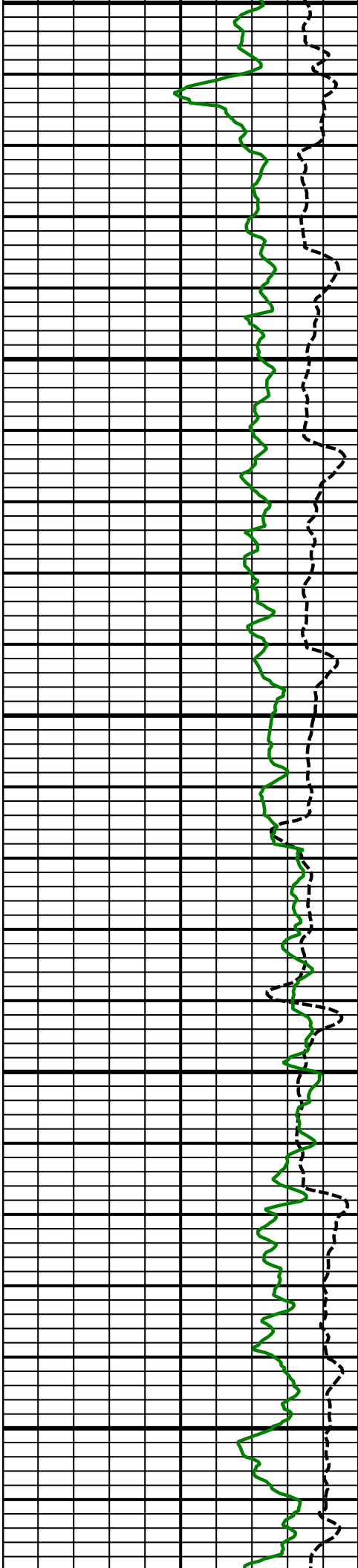




6700
TVD

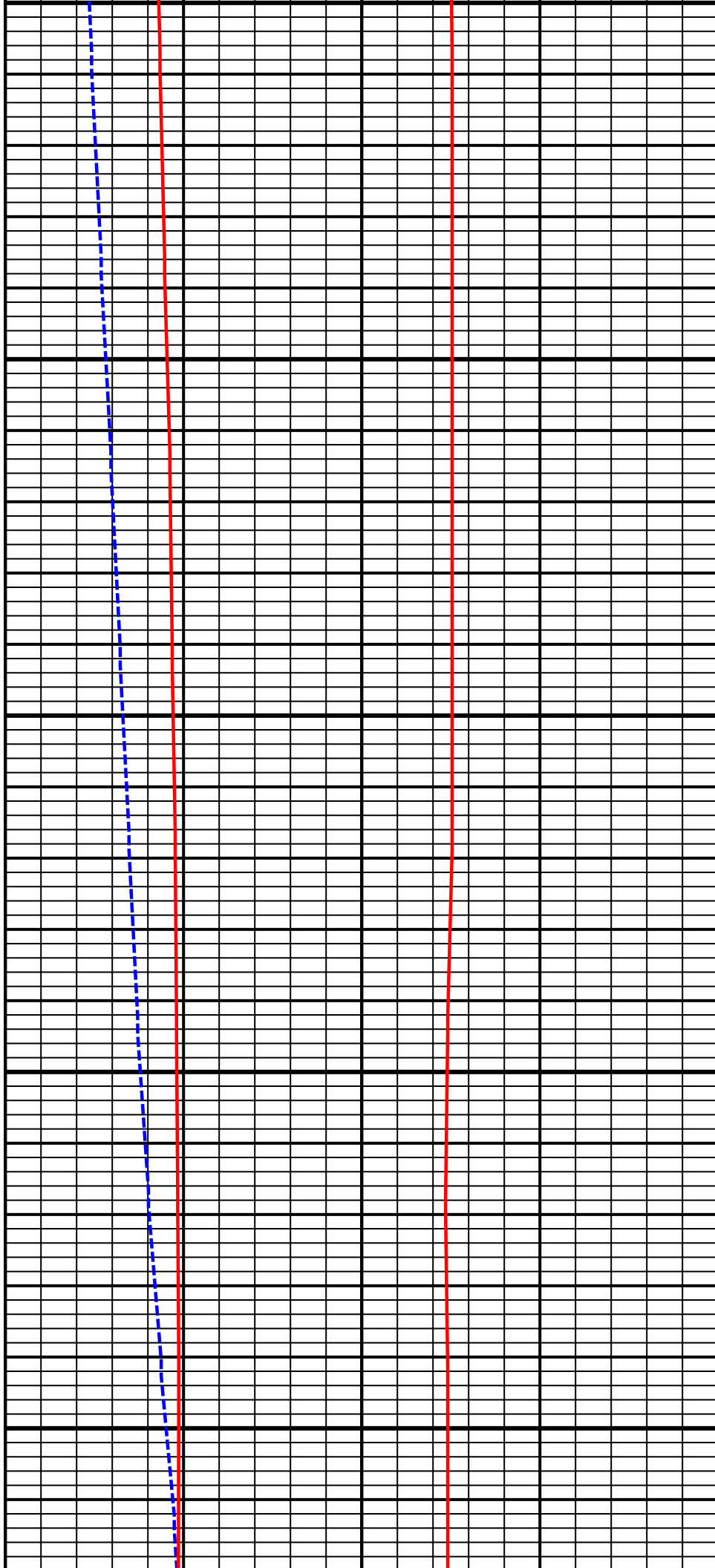
6800
TVD

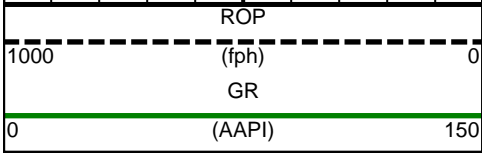
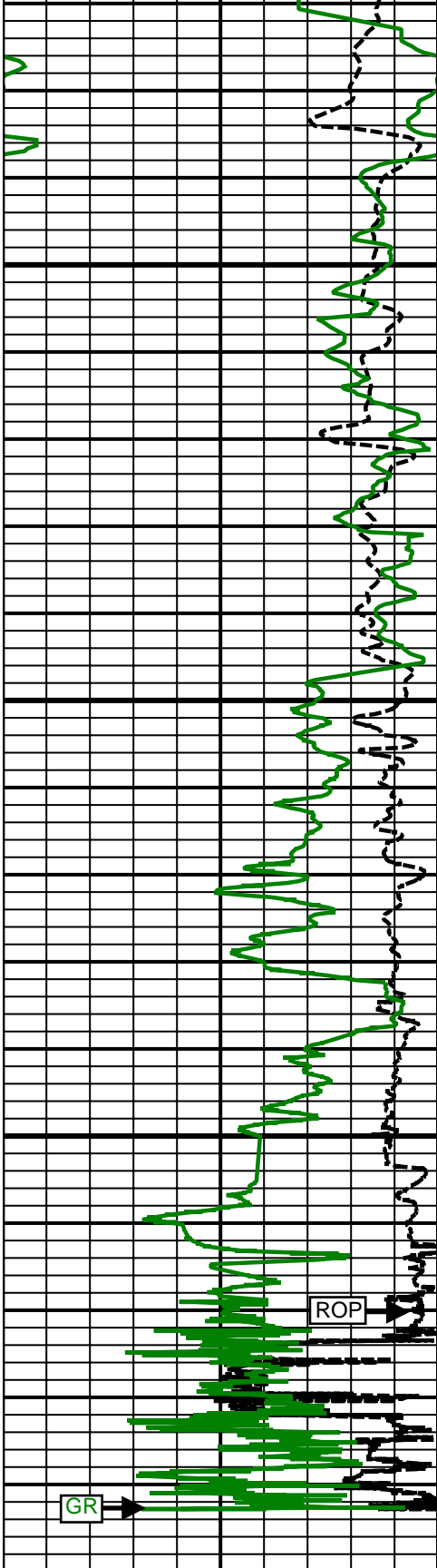




6900
TVD

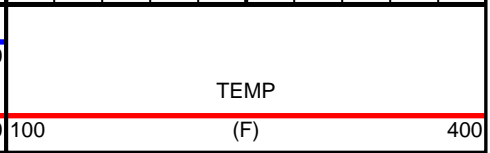
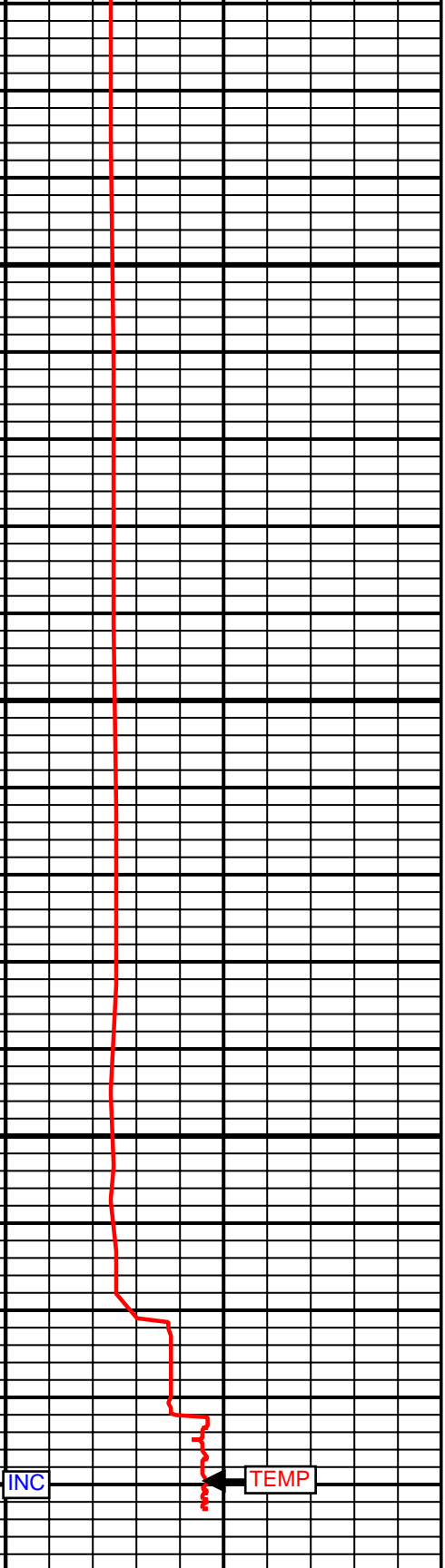
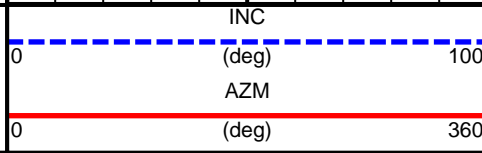
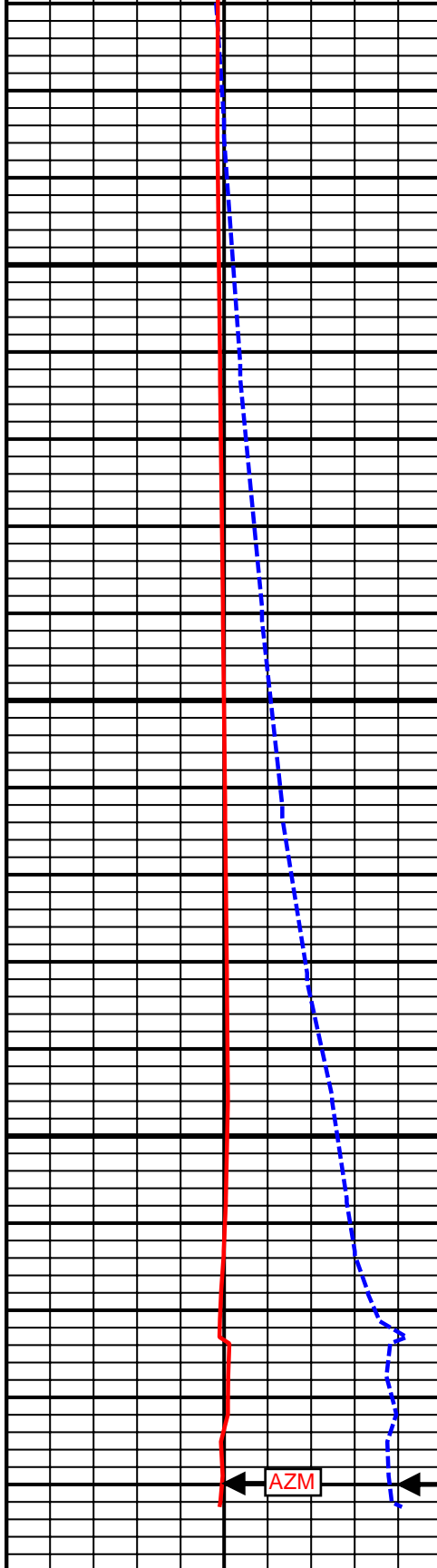
7000
TVD





7100
TVD

7200
TVD



SURVEY						
Survey Calculation Method: Minimum Curvature						
Magnetic Reference	Target Direction	Total Magnetic Field	Magnetic Dip Angle	Magnetic Declination	Grid Convergence	Total Correction
True North	180.08 deg	52889 nT	66.94 deg	8.50 deg	0.00 deg	8.50 deg
Survey Tie-On	Depth	INC	AZ	TVD	NS	EW
	918.00 ft	0.22 deg	104.52 deg	917.99 ft	0.07 ft	0.97 ft

Well Head							
Depth (ft)	Inc (deg)	Azm (deg)	TVD (ft)	NS (ft)	EW (ft)	VSect (ft)	Dogleg (deg/100ft)
1009.00	0.50	245.17	1008.99	-0.14	0.78	0.14	0.75
1375.00	0.30	232.97	1374.98	-1.39	-1.44	1.39	0.06
1833.00	0.43	338.21	1832.97	-0.51	-3.03	0.52	0.13
2200.00	0.56	311.15	2199.96	1.94	-4.89	-1.94	0.07
2569.00	1.44	130.16	2568.93	0.14	-2.71	-0.14	0.54
2661.00	3.52	130.70	2660.84	-2.45	0.32	2.45	2.26
2754.00	5.42	121.46	2753.55	-6.60	6.23	6.59	2.18
2850.00	7.04	122.57	2848.98	-12.13	15.06	12.11	1.69
2945.00	8.85	115.37	2943.07	-18.40	26.57	18.36	2.17
3040.00	9.33	106.87	3036.88	-23.77	40.54	23.71	1.50
3135.00	8.99	102.53	3130.67	-27.61	55.15	27.53	0.81
3230.00	7.92	98.79	3224.64	-30.22	68.87	30.13	1.27
3324.00	7.54	88.77	3317.79	-31.08	81.44	30.97	1.49
3419.00	7.50	89.68	3411.97	-30.91	93.87	30.78	0.13
3514.00	7.90	101.01	3506.12	-32.12	106.48	31.97	1.65
3609.00	8.79	101.62	3600.11	-34.83	119.99	34.67	0.94
3704.00	10.27	96.16	3693.80	-37.20	135.53	37.01	1.82
3799.00	10.16	88.71	3787.30	-37.92	152.32	37.71	1.39
3894.00	8.86	82.53	3880.99	-36.78	167.95	36.55	1.74
3988.00	9.01	87.84	3973.85	-35.57	182.49	35.31	0.89
4083.00	9.59	96.22	4067.61	-36.14	197.79	35.87	1.55
4178.00	11.17	87.79	4161.06	-36.64	214.85	36.34	2.30
4273.00	10.35	88.82	4254.39	-36.11	232.58	35.79	0.89
4367.00	8.98	84.52	4347.05	-35.24	248.33	34.89	1.65
4462.00	9.10	86.69	4440.87	-34.10	263.21	33.73	0.38
4556.00	8.42	89.43	4533.78	-33.60	277.51	33.21	0.85
4651.00	8.67	86.57	4627.72	-33.10	291.61	32.70	0.52
4746.00	10.17	90.18	4721.44	-32.70	307.15	32.27	1.70
4840.00	9.05	86.29	4814.12	-32.25	322.82	31.80	1.38
4935.00	9.28	94.09	4907.91	-32.31	337.92	31.84	1.33
5030.00	8.77	93.87	5001.73	-33.35	352.79	32.85	0.54
5125.00	9.50	95.21	5095.53	-34.55	367.82	34.03	0.80
5219.00	9.61	93.28	5188.22	-35.70	383.38	35.17	0.36
5314.00	10.06	91.58	5281.83	-36.38	399.59	35.82	0.56
5409.00	9.29	85.72	5375.48	-36.04	415.53	35.46	1.31
5503.00	8.85	87.71	5468.30	-35.18	430.32	34.58	0.57
5598.00	9.07	90.23	5562.14	-34.92	445.11	34.30	0.47
5693.00	8.41	92.77	5656.04	-35.29	459.54	34.65	0.80
5787.00	9.70	94.10	5748.87	-36.19	474.30	35.52	1.39
5882.00	9.40	94.00	5842.55	-37.30	490.03	36.62	0.32
5976.00	10.45	92.21	5935.14	-38.16	506.20	37.46	1.16
6070.00	11.83	91.28	6027.37	-38.71	524.36	37.98	1.48

6165.00	11.93	80.94	6120.34	-37.38	543.79	36.62	2.24
6260.00	10.44	77.43	6213.54	-33.96	561.89	33.18	1.72
6354.00	8.34	84.74	6306.28	-31.48	576.99	30.68	2.56
6449.00	8.36	98.61	6400.28	-31.88	590.68	31.06	2.12
6544.00	9.87	93.57	6494.08	-33.42	605.64	32.58	1.80
6575.00	9.38	91.95	6524.64	-33.68	610.81	32.82	1.81
6607.00	8.77	105.01	6556.25	-34.40	615.78	33.54	6.70
6638.00	10.19	125.88	6586.83	-36.62	620.28	35.75	11.91
6670.00	11.41	135.41	6618.27	-40.53	624.80	39.66	6.75
6701.00	12.41	139.99	6648.60	-45.26	629.09	44.39	4.44
6733.00	14.47	143.78	6679.72	-51.12	633.67	50.24	7.00
6764.00	16.47	145.79	6709.60	-57.88	638.43	56.99	6.68
6796.00	17.99	148.22	6740.16	-65.84	643.58	64.94	5.25
6827.00	19.13	149.97	6769.55	-74.30	648.64	73.40	4.09
6859.00	20.19	149.46	6799.68	-83.60	654.07	82.69	3.36
6891.00	21.72	151.51	6829.56	-93.56	659.71	92.64	5.30
6922.00	24.19	156.21	6858.11	-104.42	665.00	103.49	9.92
6954.00	26.87	160.91	6886.99	-117.25	670.02	116.32	10.49
6985.00	29.62	166.15	6914.30	-131.32	674.14	130.38	11.94
7017.00	32.23	168.57	6941.75	-147.36	677.73	146.42	9.03
7048.00	34.67	171.52	6967.61	-164.19	680.67	163.24	9.46
7080.00	37.11	172.92	6993.53	-182.77	683.20	181.82	8.04
7111.00	40.16	174.08	7017.75	-202.00	685.38	201.05	10.11
7143.00	43.73	175.09	7041.54	-223.29	687.39	222.33	11.35
7174.00	47.37	174.90	7063.25	-245.33	689.33	244.37	11.75
7206.00	49.95	174.38	7084.39	-269.25	691.57	268.29	8.15
7251.00	53.69	176.54	7112.20	-304.51	694.35	303.54	9.13
7301.00	58.68	178.97	7140.02	-346.00	695.96	345.03	10.76
7348.00	63.36	180.73	7162.78	-387.10	696.05	386.13	10.48
7395.00	69.04	182.21	7181.74	-430.07	694.93	429.10	12.42
7440.00	74.78	183.02	7195.71	-472.78	692.98	471.81	12.87
7490.00	78.16	181.36	7207.41	-521.35	691.13	520.39	7.49
7522.00	80.03	179.64	7213.46	-552.77	690.85	551.80	7.87
7553.00	83.06	177.40	7218.02	-583.42	691.65	582.45	12.11
7585.00	85.59	176.48	7221.18	-615.21	693.35	614.24	8.41
7672.00	91.96	176.07	7223.04	-701.96	699.00	700.99	7.34
7814.00	91.60	175.02	7218.63	-843.46	710.02	842.47	0.78
7907.00	90.43	175.08	7216.99	-936.10	718.04	935.10	1.26
7999.00	90.18	174.93	7216.50	-1027.75	726.05	1026.73	0.32
8090.00	89.56	176.16	7216.70	-1118.47	733.12	1117.45	1.51
8182.00	91.06	177.39	7216.20	-1210.32	738.30	1209.29	2.11
8273.00	90.62	177.92	7214.87	-1301.23	742.02	1300.20	0.76
8364.00	91.11	179.42	7213.50	-1392.20	744.13	1391.16	1.73
8456.00	90.92	180.03	7211.87	-1484.18	744.57	1483.14	0.69
8548.00	90.92	180.23	7210.39	-1576.17	744.37	1575.13	0.22
8640.00	90.62	180.87	7209.15	-1668.15	743.48	1667.11	0.77
8732.00	88.77	180.92	7209.64	-1760.14	742.05	1759.10	2.01
8824.00	89.57	181.61	7210.98	-1852.10	740.01	1851.07	1.15
8915.00	89.91	182.15	7211.39	-1943.05	737.03	1942.02	0.70
9005.00	90.00	181.87	7211.46	-2033.00	733.87	2031.97	0.33
9097.00	89.12	183.56	7212.17	-2124.89	729.51	2123.87	2.07
9189.00	89.51	182.63	7213.27	-2216.75	724.55	2215.73	1.10
9282.00	89.74	182.68	7213.87	-2309.64	720.24	2308.64	0.25
9374.00	90.35	182.86	7213.80	-2401.54	715.79	2400.53	0.69
9465.00	89.57	183.79	7213.87	-2492.38	710.52	2491.39	1.33
9558.00	89.69	183.45	7214.47	-2585.19	704.64	2584.21	0.39
9651.00	88.34	184.09	7216.06	-2677.98	698.53	2677.00	1.61
9743.00	88.06	184.45	7218.95	-2769.68	691.68	2768.71	0.50
9836.00	88.33	184.27	7221.88	-2862.36	684.62	2861.40	0.35
9899.00	88.15	184.27	7223.82	-2925.16	679.93	2924.20	0.29
9994.00	87.29	183.34	7227.60	-3019.87	673.63	3018.93	1.33

10089.00	88.94	183.03	7230.72	-3114.67	668.35	3113.73	1.77
10183.00	89.56	183.03	7231.95	-3208.53	663.39	3207.60	0.66
10278.00	91.60	182.77	7230.99	-3303.40	658.58	3302.47	2.16
10372.00	89.82	182.15	7229.83	-3397.30	654.55	3396.38	2.01
10467.00	90.18	181.46	7229.83	-3492.25	651.55	3491.34	0.82
10562.00	91.79	181.62	7228.19	-3587.20	649.00	3586.29	1.70
10656.00	90.92	182.37	7225.97	-3681.11	645.73	3680.21	1.22
10751.00	89.20	181.57	7225.87	-3776.05	642.46	3775.15	2.00
10845.00	89.51	181.92	7226.93	-3870.00	639.60	3869.11	0.50
10940.00	90.00	181.85	7227.34	-3964.95	636.48	3964.06	0.52
11035.00	91.05	180.78	7226.47	-4059.92	634.30	4059.03	1.58
11129.00	92.53	180.28	7223.53	-4153.87	633.43	4152.98	1.66
11224.00	92.10	179.72	7219.69	-4248.79	633.43	4247.90	0.74
11318.00	92.84	179.35	7215.64	-4342.70	634.19	4341.81	0.88
11413.00	92.77	179.14	7210.99	-4437.58	635.44	4436.68	0.23
11508.00	92.90	178.99	7206.29	-4532.45	636.99	4531.55	0.21
11602.00	90.68	179.62	7203.36	-4626.39	638.13	4625.49	2.45
11697.00	89.51	178.12	7203.20	-4721.36	640.00	4720.47	2.00
11791.00	87.10	178.19	7205.98	-4815.27	643.03	4814.36	2.56
11886.00	86.43	177.86	7211.34	-4910.06	646.30	4909.15	0.79
11980.00	87.16	177.96	7216.60	-5003.85	649.72	5002.94	0.78
12075.00	88.09	177.39	7220.53	-5098.69	653.57	5097.77	1.15
12170.00	87.47	176.65	7224.21	-5193.49	658.50	5192.56	1.02
12264.00	88.77	175.95	7227.30	-5287.24	664.57	5286.30	1.57
12359.00	88.89	176.20	7229.24	-5382.00	671.07	5381.05	0.29
12454.00	88.27	176.24	7231.59	-5476.76	677.33	5475.81	0.65
12548.00	87.47	177.34	7235.08	-5570.54	682.59	5569.59	1.45
12643.00	87.78	178.70	7239.02	-5665.40	685.87	5664.44	1.47
12737.00	88.52	176.85	7242.06	-5759.28	689.52	5758.31	2.12
12832.00	90.86	176.08	7242.57	-5854.09	695.37	5853.11	2.59
12927.00	91.32	177.75	7240.76	-5948.93	700.48	5947.95	1.82
13021.00	91.42	177.63	7238.52	-6042.83	704.27	6041.84	0.17
13116.00	90.80	181.12	7236.67	-6137.79	705.31	6136.80	3.73
13210.00	90.06	181.13	7235.97	-6231.77	703.46	6230.78	0.79
13305.00	89.26	177.03	7236.53	-6326.73	704.99	6325.74	4.40
13400.00	90.49	176.32	7236.74	-6421.57	710.50	6420.57	1.49
13494.00	89.57	176.15	7236.69	-6515.37	716.67	6514.36	1.00
13619.00	90.25	177.87	7236.89	-6640.19	723.19	6639.17	1.48
13714.00	90.62	178.60	7236.17	-6735.14	726.12	6734.12	0.86
13808.00	90.06	179.71	7235.61	-6829.13	727.50	6828.11	1.32
13903.00	91.79	178.87	7234.08	-6924.10	728.68	6923.08	2.02
13997.00	91.79	179.11	7231.14	-7018.04	730.33	7017.02	0.26
14092.00	91.35	179.01	7228.54	-7112.99	731.89	7111.97	0.47
14187.00	90.86	178.97	7226.70	-7207.96	733.57	7206.93	0.52
14281.00	91.42	180.09	7224.83	-7301.94	734.34	7300.91	1.33
14376.00	89.32	179.07	7224.22	-7396.93	735.03	7395.89	2.46
14470.00	89.63	179.04	7225.08	-7490.91	736.58	7489.87	0.33
14565.00	89.82	178.22	7225.54	-7585.88	738.86	7584.84	0.89
14639.00	89.45	177.42	7226.01	-7659.83	741.67	7658.78	1.19
Projection to Total Depth							
14693.00	89.45	177.42	7226.53	-7713.77	744.10	7712.72	0.00

Weatherford surveys from 1009 ft MD to 14639 ft MD.

TD called at 14693 ft MD.

The total correction is 8.50 deg relative to True North.



Weatherford®

Final Print

COMPANY	<u>Anadarko</u>		
WELL	<u>Thomsen 36N-18HZ</u>		
FIELD	<u>Wattenburg</u>		
RIG	<u>H&P 307</u>		
LOC.	<u>Colorado</u>	COUNTY	<u>Weld</u>