



Natural Formation Evaluation  
Gamma Ray

Realtime Log

Scale: Company: Anadarko

1:240 TVD Well: Howard 28C-21HZ

True Vertical Depth Field: Weld County (Kerr McGee)

County: Weld State: Colorado

Status: Surface Location: Other Services:

Final Print Latitude: 40° 1' 48.331" N

API Number: 05-123-36809-00 Longitude: 104° 53' 58.412" W

SEC: 21 TWP: 1N RNG: 67W

Directional  
VSS

Permanent Datum (P.D.): Ground Level Elevation: 5024.00 ft.

Log Measured From: Rig Floor 5041.00 ft. Above P.D.

Depth Reference: Drillers Depth Elevations: N/A

KB: 5041.00 ft.  
DF: 5024.00 ft.  
GL: 5024.00 ft.

Interval Logged Dates Magnetic Field Reference

Top: 7137.0 ft. Date From: 09/Nov/13 Dip Angle: 66.64° Azi Reference North: True

Bottom: 12217.0 ft. Date To: 18/Nov/13 Total Mag to Reference

Spud Date: 10/Nov/13 Field Strength: 52651.9 nT North Correction: 8.62°

Borehole Record Casing Record

Hole Size	From	To	Size	Weight	From	To
13,500 in.	Surface	942.0 ft.	9.625 in.	36.00 lb/ft	Surface	927.0 ft.
8,750 in.	927.0 ft.	8240.0 ft.	7.000 in.	26.00 lb/ft	Surface	8229.0 ft.
6,125 in.	8229.0 ft.	12217.0 ft.				

Mud Record

Deviation Record

Type	From	To	Hole Size	Interval	Inc / Az (Start)	Inc / Az (End)
Water Based Mud	Surface	12217.0 ft.	13,500 in.	942.0 ft.	0.0° / 0.0°	1.6° / 289.7°
			8,750 in.	7313.0 ft.	1.6° / 290.2°	89.0° / 0.5°
			6,125 in.	3989.1 ft.	88.3° / 0.5°	90.7° / 359.6°
					/	/
					/	/
					/	/

Acquisition System Software Version

Other

Advantage	2.20U4	Rig: Xtreme 6	/ Xtreme Coil Drilling
PAIS	6.4.1.34	Job No: 5589955	
		District / Unit: RMD	/ D&E

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Log Run Summary

LWD Run No.	BHA Run No.	Bit Run No.	Bit Size (in.)	Bit Type	Bit Gauge Length (in.)	Assembly Type	Logged Interval		Bit Depth Interval		Date / Time		Circ. Time (hrs.)
							Top (ft.)	Bottom (ft.)	From (ft.)	To (ft.)	Start	End	
1	1	2	8.750	PDC Core	0.600	Steerable	7137.0	8196.7	942.0	8240.0	09/Nov/2013 22:57	09/Nov/2013 22:57	65.4

Crew

Name	Arrive	Depart	Name	Arrive	Depart	Name	Arrive	Depart
	Wellsite	Wellsite		Wellsite	Wellsite		Wellsite	Wellsite
Matthew Delmore	09/Nov/2013	21/Nov/2013	Stephen Gray	09/Nov/2013	21/Nov/2013			

Mud Properties Record

Date / Time	LWD	Measured	Mud	Density	Viscosity	pH	Fluid	Oil /	Source	Total	K+
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		Run No.	Depth (ft.)	Type	(ppg)	(sec/qt)		Loss (cc)	Water		Chlorides (ppm)	(%)
10/Nov/2013	15:30	1	927.0	Water Based Mud	8.6	28	8.5	NC	0 / 98	Active Mud Pit	900	N/A
11/Nov/2013	19:00	1	5049.0	Water Based Mud	8.6	29	8.5	NC	0 / 99	Active Mud Pit	900	N/A
12/Nov/2013	19:00	1	7498.0	Water Based Mud	10.0	40	9.0	NC	0 / 92	Active Mud Pit	800	N/A
13/Nov/2013	18:00	1	8240.0	Water Based Mud	11.0	45	9.0	NC	0 / 90	Active Mud Pit	800	N/A

Mnemonics

Curve	Description	Units
GRAX	Gamma Ray Apparent, 0.5 ft. Avg.	API
ROPA	Rate of Penetration, 3.0 ft. Avg.	ft/hr
TCDX	Downhole Temperature	degF
WOBA	Surface Weight on Bit, 1.0 ft. Avg.	klbs

Equipment and Service Data

LWD Run No.	Tool	Serial Number	Measurement	Bit Offset (ft.)	Max O.D. (in.)	Min I.D. (in.)
1	DIR	11688045	Directional	46.90	6.750	3.250
1	SRIG	12578109	Gamma	43.53	6.750	3.250

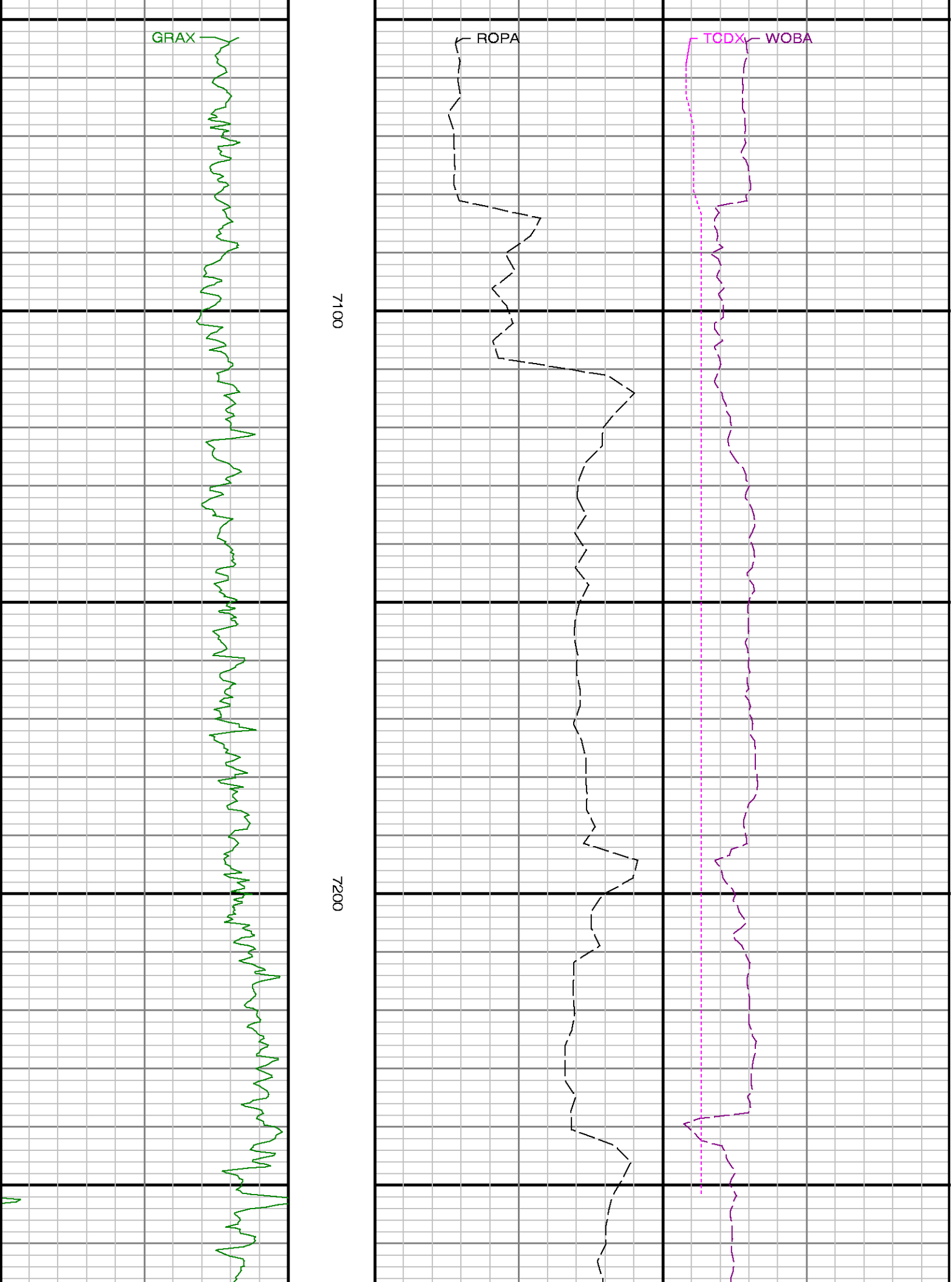
Service and Tool Mnemonics

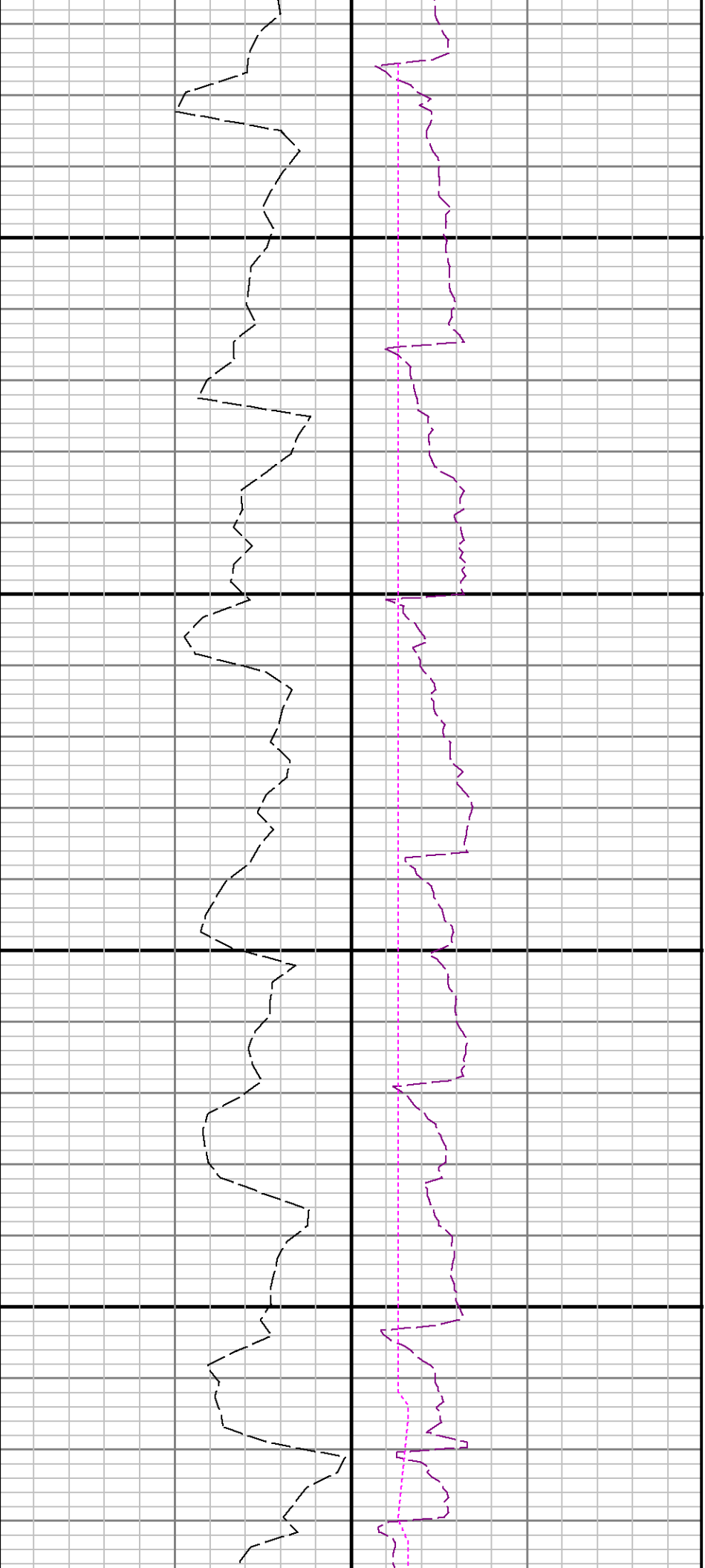
Mnemonic	Name	Description
DIR	Directional	Wellbore directional survey
SRIG	Inclination and Gamma	Probe based gamma ray and inclination module

Comments

<p>1.) Baker Hughes LWD run 1 utilized 6 3/4 inch NaviTrak Services (VSS, Directional) from 899 to 7137 ft. MD (898.32 to 7060.12 ft. TVD) and NaviGamma Services (VSS, Directional, Gamma Ray) behind an 8 3/4 inch bit and steerable assembly from 7137 to 8240 ft. MD (7060.12 to 7726.74 ft. TVD).</p> <p>2.) Depth measurements were obtained from a depth tracking system not supplied or operated by Baker Hughes. Due to the lack of control by Baker Hughes LWD logging engineers, depth calibrations and measurements could not be independently verified and the unverified depths as supplied to Baker Hughes are being used to present logging data.</p>
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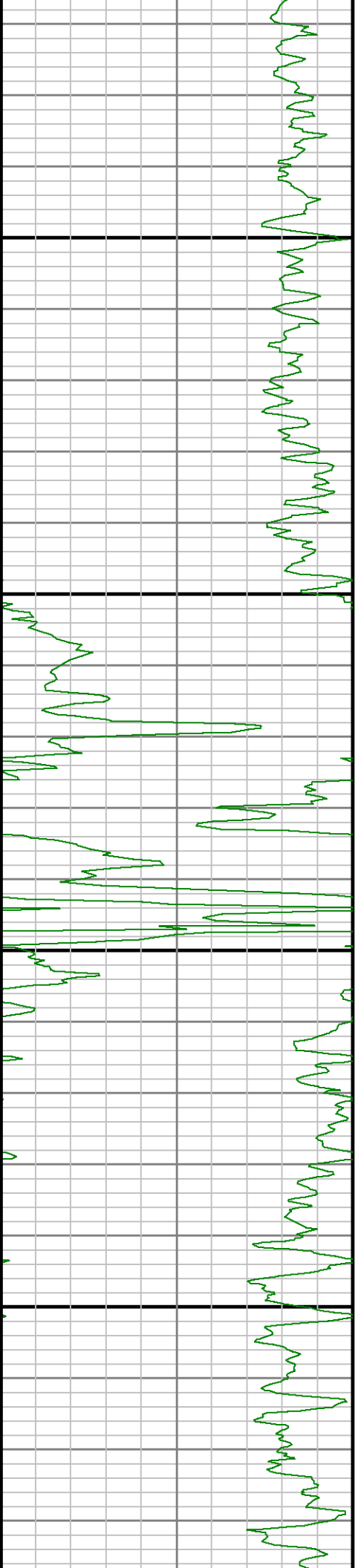
<div><div><div><div><div></div><div></div><div></div></div><div><div></div><div></div><div></div></div></div><div><div>BAKER</div><div>HUGHES</div></div></div><div><div>Company : Anadarko</div><div>Well : Howard 28C-21HZ</div><div>Interval : 7040.00 - 7740.00 feet</div><div>Created : 20/Nov/2013 6:06:52 AM</div></div></div>												
<div><div>Gamma Ray Apparent 0.5 ft Avg GRAX</div><div>0150</div><div>API</div></div>				<div>TVD feet 1:240</div>	<div><div>Rate of Penetration 3.0 ft Avg ROP_AVG</div><div>5000</div><div>ft/hr</div></div>				<div><div>Surface Weight On Bit 1.0 ft Avg WOB_AVG</div><div>0100</div><div>klbf</div><div>Downhole Temperature TCDX</div><div>150250</div><div>degF</div></div>			

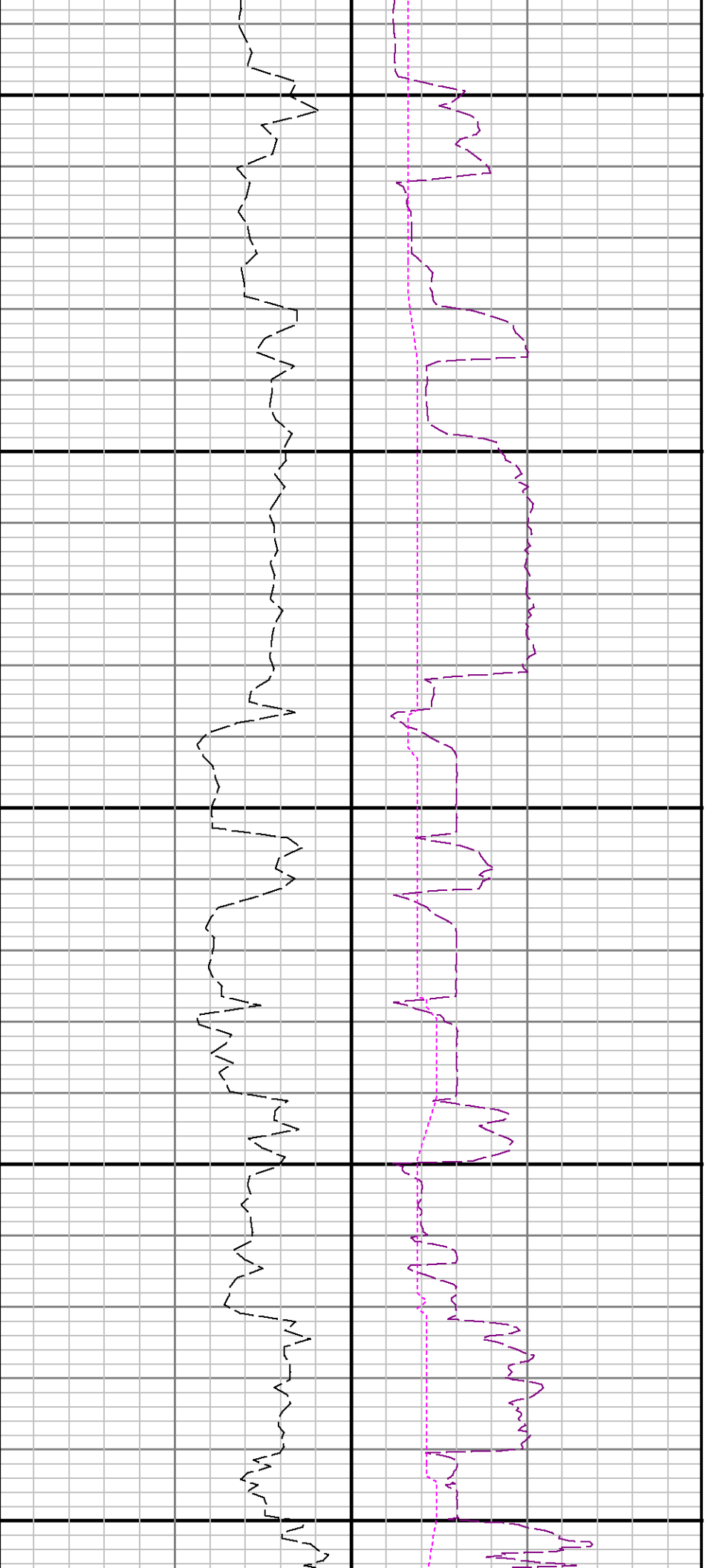




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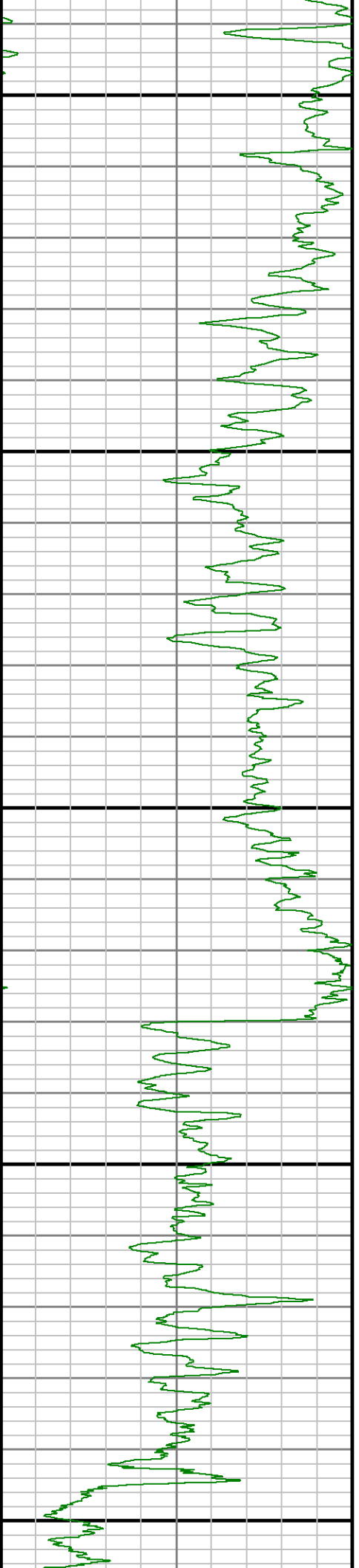


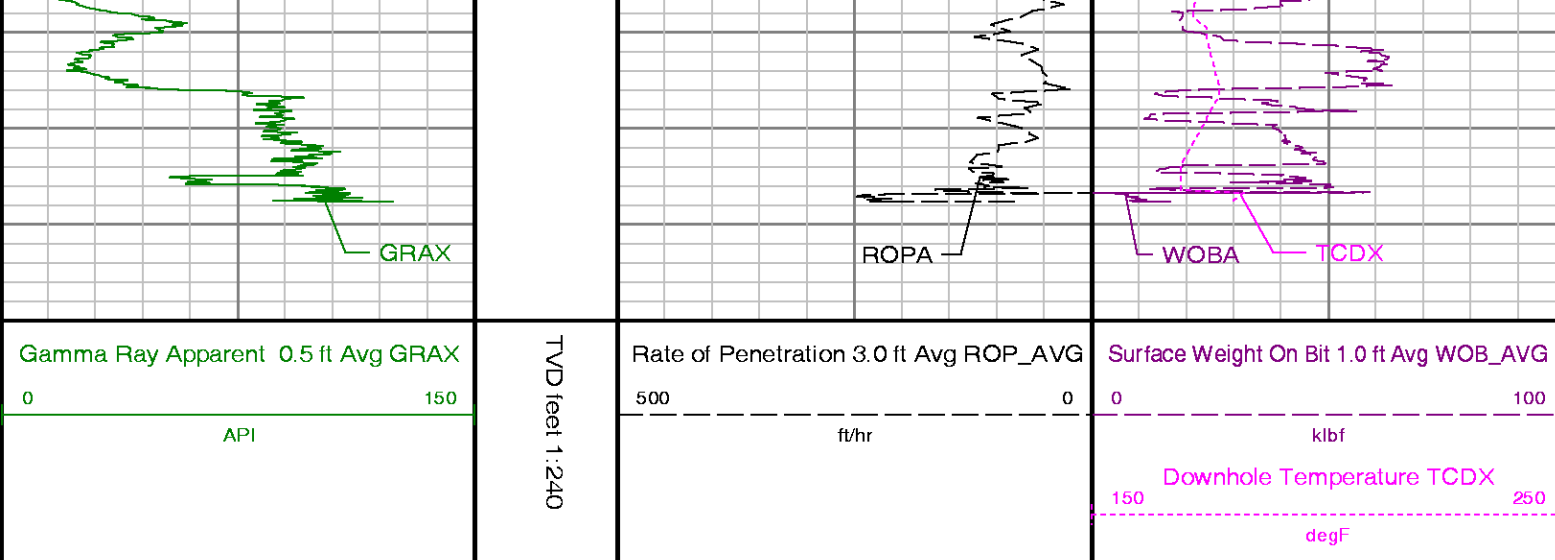


7500

7600

7700





### ADVANTAGE Final Survey Listing

Operator : Anadarko Field : Weld County (Kerr McGee) API No : 05-123-36809-0  
 Well : Howard 28C-21HZ Rig : Xtreme 6 Job : 5589955  
 Wellbore : Howard 28C-21HZ Orig Hole

### Well Origin

Latitude	40.0301 deg	Longitude	-104.8996 deg
North Reference	True	Drill Depth Zero	NULL
Vertical Datum is	Ground Level	Vertical Datum to DDZ	17.00 ft
Vertical Section North	0.00 ft	Vertical Section East	0.00 ft
Vertical Section Azimuth	359.7800 deg	Vertical Section Depth	0.00ft
Grid Convergence	0.0000 deg	Magnetic Declination	8.6201 deg
Total Correction	8.6201 deg	TVD Calculation Method	Minimal Curvature
D-Row Calculation	Magcorr1	Local Magnetic Field	52652 nT
Local Magnetic Dip Angle	66.6358 deg	Local Gravity Field	9.801 m/s^2

Tie	MD ft	Incl deg	Azim deg	North ft	East ft	TVD ft	VS ft	Incr VS ft	Crs Len ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft
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U	0.00	0.0000	0.0000	0.00	0.00	0.00	0.00	0.00				
	866.00	1.5600	292.3700	5.44	-14.03	865.83	5.50	4.53	866.00	0.18	0.18	-7.81
	975.00	1.6179	288.5195	6.49	-16.86	974.79	6.56	7.55	109.00	0.11	0.05	-3.53
	1067.00	1.8804	233.4109	6.01	-19.30	1066.75	6.08	10.04	92.00	1.78	0.29	-59.90
	1158.00	3.0019	191.0944	2.78	-20.96	1157.67	2.86	13.67	91.00	2.25	1.23	-46.50
	1249.00	3.7700	164.2700	-2.44	-20.61	1248.52	-2.36	18.90	91.00	1.91	0.84	-29.48
	1341.00	4.2200	140.7800	-7.97	-17.65	1340.30	-7.91	25.18	92.00	1.83	0.49	-25.53
	1436.00	5.0800	118.9900	-12.72	-11.76	1435.00	-12.68	32.74	95.00	2.05	0.91	-22.94
	1497.00	5.2600	111.7200	-15.07	-6.80	1495.75	-15.04	38.23	61.00	1.11	0.30	-11.92
	1588.00	6.3900	97.5900	-17.28	2.10	1586.28	-17.29	47.39	91.00	2.00	1.24	-15.53
	1681.00	8.0000	104.3300	-19.56	13.50	1678.55	-19.62	59.02	93.00	1.95	1.73	7.25
	1773.00	9.6400	100.4600	-22.55	27.28	1769.46	-22.65	73.12	92.00	1.89	1.78	-4.21
	1864.00	10.8500	99.2000	-25.30	43.22	1859.01	-25.47	89.30	91.00	1.35	1.33	-1.38
	1949.00	10.5000	98.2300	-27.69	58.79	1942.53	-27.91	105.05	85.00	0.46	-0.41	-1.14
	2035.00	9.4800	97.7600	-29.77	73.56	2027.23	-30.05	119.97	86.00	1.19	-1.19	-0.55
	2120.00	9.9200	105.0000	-32.61	87.57	2111.02	-32.94	134.26	85.00	1.52	0.52	8.52
	2205.00	10.8400	108.0100	-36.97	102.24	2194.63	-37.36	149.57	85.00	1.26	1.08	3.54
	2291.00	9.9200	106.5700	-41.58	117.03	2279.22	-42.03	165.06	86.00	1.11	-1.07	-1.67
	2376.00	8.8100	103.1200	-45.15	130.39	2363.08	-45.65	178.89	85.00	1.46	-1.31	-4.06
	2461.00	9.1600	107.4400	-48.66	143.18	2447.04	-49.21	192.15	85.00	0.89	0.41	5.08
	2546.00	10.1600	110.1500	-53.27	156.68	2530.84	-53.87	206.41	85.00	1.29	1.18	3.19
	2632.00	10.6800	108.2100	-58.37	171.37	2615.42	-59.03	221.96	86.00	0.73	0.60	-2.26

	2717.00	10.6600	106.2800	-63.92	186.33	2698.96	-63.74	237.66	83.00	0.43	-0.09	-2.27
	2802.00	8.8800	105.4800	-66.97	200.18	2782.73	-67.73	252.04	85.00	2.03	-2.02	-0.94
	2887.00	9.1000	109.8100	-70.99	212.83	2866.69	-71.81	265.31	85.00	0.84	0.26	5.09
	2972.00	9.9500	105.2200	-75.20	226.24	2950.51	-76.07	279.36	85.00	1.34	1.00	-5.40
	3057.00	11.0200	101.8900	-78.80	241.28	3034.09	-79.73	294.82	85.00	1.45	1.26	-3.92
	3143.00	9.6900	99.8500	-81.73	256.45	3118.69	-82.72	310.28	86.00	1.60	-1.55	-2.37
	3228.00	10.2500	100.5600	-84.34	270.93	3202.41	-85.38	325.00	85.00	0.67	0.66	0.84
	3313.00	10.7700	101.8400	-87.36	286.14	3285.98	-88.46	340.50	85.00	0.67	0.61	1.51
	3398.00	10.6400	105.9800	-91.15	301.46	3369.50	-92.31	356.28	85.00	0.92	-0.15	4.87
	3483.00	11.4200	108.2400	-95.94	316.99	3452.93	-97.16	372.54	85.00	1.05	0.92	2.66
	3568.00	10.4700	106.2800	-100.74	332.40	3536.39	-102.02	388.67	85.00	1.20	-1.12	-2.31
	3653.00	10.9000	106.8800	-105.24	347.50	3619.91	-106.57	404.43	85.00	0.52	0.51	0.71
	3735.00	9.8900	105.7800	-109.41	361.70	3700.57	-110.80	419.23	82.00	1.26	-1.23	-1.34
	3819.00	10.7800	108.8900	-113.91	376.07	3783.20	-115.36	434.29	84.00	1.25	1.06	3.70
	3904.00	9.8400	106.6100	-118.56	390.56	3866.83	-120.06	449.50	85.00	1.21	-1.11	-2.68
	3989.00	9.5800	108.8200	-122.92	404.21	3950.61	-124.47	463.84	85.00	0.53	-0.31	2.60
	4074.00	10.8900	106.4900	-127.48	418.61	4034.26	-129.09	478.94	85.00	1.62	1.54	-2.74
	4160.00	9.6500	101.6900	-131.25	433.45	4118.88	-132.91	494.26	86.00	1.75	-1.44	-5.58
	4245.00	10.5900	96.8100	-133.62	448.19	4202.56	-135.34	509.18	85.00	1.50	1.11	-5.74
	4330.00	11.0500	96.0600	-135.40	464.04	4286.05	-137.18	525.13	85.00	0.57	0.54	-0.88
	4415.00	9.9800	95.4800	-136.97	479.48	4369.62	-138.81	540.64	85.00	1.26	-1.26	-0.68
	4500.00	10.2800	103.5700	-139.45	494.18	4453.30	-141.35	555.56	85.00	1.71	0.35	9.52
	4585.00	11.0500	104.7300	-143.30	509.43	4536.83	-145.26	571.29	85.00	0.94	0.91	1.36
	4670.00	9.8900	100.9700	-146.76	524.48	4620.41	-148.77	586.73	85.00	1.58	-1.36	-4.42
	4754.00	10.2600	100.6300	-149.51	538.91	4703.12	-151.58	601.42	84.00	0.45	0.44	-0.40
	4840.00	11.5400	101.2700	-152.61	554.88	4787.56	-154.74	617.68	86.00	1.49	1.49	0.74
	4925.00	11.5600	99.9500	-155.74	571.60	4870.84	-157.94	634.70	85.00	0.31	0.02	-1.55
	5010.00	11.4800	99.7000	-158.64	588.33	4954.13	-160.90	651.68	85.00	0.11	-0.09	-0.29
Tie	MD	Incl	Azim	North	East	TVD	VS	Incr VS	Crs Len	DLS	Build	Turn
	ft	deg	deg	ft	ft	ft	ft	ft	ft	deg/100ft	deg/100ft	deg/100ft
	5095.00	10.8600	98.5100	-161.25	604.59	5037.52	-163.57	668.14	85.00	0.78	-0.73	-1.40
	5181.00	9.9600	97.0600	-163.36	619.98	5122.10	-165.74	683.68	86.00	1.09	-1.05	-1.69
	5266.00	10.6100	101.8700	-165.87	634.93	5205.74	-168.31	698.84	85.00	1.27	0.76	5.66
	5351.00	11.4900	106.2700	-169.86	650.72	5289.16	-172.35	715.12	85.00	1.43	1.04	5.18
	5436.00	11.1500	107.6900	-174.73	666.68	5372.51	-177.28	731.80	85.00	0.52	-0.40	1.67
	5521.00	10.0800	107.1700	-179.42	681.61	5456.05	-182.03	747.46	85.00	1.26	-1.26	-0.61
	5607.00	8.9400	105.4200	-183.42	695.25	5540.87	-186.09	761.67	86.00	1.37	-1.33	-2.03
	5692.00	9.8600	106.0300	-187.18	708.61	5624.73	-189.90	775.55	85.00	1.09	1.08	0.72
	5777.00	11.1100	104.9000	-191.30	723.52	5708.31	-194.08	791.02	85.00	1.49	1.47	-1.33
	5863.00	10.1200	104.2600	-195.29	738.85	5792.84	-198.13	806.86	86.00	1.16	-1.15	-0.74
	5948.00	9.0800	102.5000	-198.58	752.63	5876.64	-201.47	821.03	85.00	1.27	-1.22	-2.07
	6033.00	8.4600	108.0300	-201.97	765.13	5960.65	-204.91	833.98	85.00	1.23	-0.73	6.51
	6118.00	9.7000	107.4400	-206.05	777.91	6044.59	-209.04	847.39	85.00	1.46	1.46	-0.69
	6203.00	8.6400	104.8700	-209.84	790.91	6128.50	-212.87	860.93	85.00	1.34	-1.25	-3.02
	6288.00	7.2200	103.7100	-212.74	802.27	6212.68	-215.82	872.66	85.00	1.68	-1.67	-1.36
	6374.00	5.7200	101.5300	-214.88	811.72	6298.13	-217.99	882.35	86.00	1.77	-1.74	-2.53
	6459.00	4.8700	118.0100	-217.42	819.06	6382.77	-220.56	890.11	85.00	2.04	-1.00	19.39
	6544.00	4.0100	114.3900	-220.34	824.95	6467.52	-223.51	896.69	85.00	1.06	-1.01	-4.26
	6629.00	3.2000	106.2900	-222.23	829.93	6552.35	-225.42	902.02	85.00	1.12	-0.95	-9.53
	6714.00	2.8000	101.6300	-223.32	834.24	6637.23	-226.52	906.47	85.00	0.55	-0.47	-5.48
	6799.00	1.8400	125.5300	-224.53	837.39	6722.17	-227.74	909.84	85.00	1.58	-1.13	28.12
	6884.00	0.5800	53.3200	-225.07	838.84	6807.15	-228.28	911.39	85.00	2.06	-1.48	-84.95
	6969.00	0.6100	354.5900	-224.36	839.14	6892.14	-227.58	912.16	85.00	0.69	0.04	-69.09
	7055.00	0.9800	345.3900	-223.19	838.92	6978.14	-226.41	913.35	86.00	0.45	0.43	-10.70
	7140.00	1.1100	313.4600	-221.92	838.13	7063.12	-225.14	914.84	85.00	0.69	0.15	-37.56
	7182.00	1.6200	324.9200	-221.15	837.50	7105.11	-224.37	915.83	42.00	1.37	1.21	27.29
	7225.00	5.8600	347.2100	-218.52	836.66	7148.01	-221.73	918.60	43.00	10.24	9.86	51.84
	7267.00	11.8300	354.4400	-212.13	835.77	7189.49	-215.34	925.05	42.00	14.43	14.21	17.21
	7310.00	17.8900	359.2300	-201.13	835.25	7231.04	-204.34	936.06	43.00	14.37	14.09	11.14
	7353.00	22.8700	359.3200	-186.16	835.07	7271.33	-189.37	951.03	43.00	11.58	11.58	0.21
	7395.00	27.4700	359.1500	-168.31	834.83	7309.33	-171.51	968.89	42.00	10.95	10.95	-0.40
	7437.00	32.0200	0.4100	-147.48	834.76	7345.79	-150.68	989.72	42.00	10.93	10.83	3.00
	7480.00	35.9700	0.6900	-123.44	834.99	7381.44	-126.64	1013.76	43.00	9.19	9.19	0.65
	7522.00	39.9200	0.9100	-97.62	835.36	7414.55	-100.83	1039.58	42.00	9.41	9.40	0.52

	7565.00	43.0000	0.1400	-69.16	835.61	7446.77	-72.36	1068.04	43.00	7.26	7.16	-1.79
	7608.00	45.8700	358.4900	-39.06	835.24	7477.47	-42.27	1098.14	43.00	7.19	6.67	-3.84
	7650.00	47.6100	357.9700	-8.49	834.29	7506.26	-11.69	1128.73	42.00	4.24	4.14	-1.24
	7693.00	49.2900	357.0400	23.66	832.89	7534.78	20.46	1160.91	43.00	4.23	3.91	-2.16
	7735.00	53.7200	357.2100	56.48	831.24	7560.91	53.29	1193.77	42.00	10.55	10.55	0.40
	7778.00	59.4300	357.6200	92.32	829.63	7584.59	89.13	1229.64	43.00	13.30	13.28	0.95
	7820.00	61.7900	357.5600	128.88	828.09	7605.20	125.70	1266.23	42.00	5.62	5.62	-0.14
	7863.00	63.1500	358.0500	166.98	826.63	7625.07	163.80	1304.36	43.00	3.32	3.16	1.14
	7906.00	63.9200	358.7000	205.46	825.54	7644.24	202.29	1342.86	43.00	2.24	1.79	1.51
	7948.00	64.4000	358.6000	243.25	824.65	7662.54	240.08	1380.66	42.00	1.16	1.14	-0.24
	7991.00	68.0500	357.5200	282.57	823.31	7679.87	279.40	1420.00	43.00	8.79	8.49	-2.51
	8034.00	72.9800	357.7000	323.06	821.62	7694.21	319.90	1460.53	43.00	11.47	11.47	0.42
	8076.00	75.4300	358.2500	363.44	820.20	7705.64	360.29	1500.94	42.00	5.97	5.83	1.31
	8119.00	79.4000	359.2500	405.39	819.29	7715.01	402.24	1542.89	43.00	9.51	9.23	2.33
	8162.00	82.6800	0.1900	447.86	819.08	7721.71	444.71	1585.36	43.00	7.93	7.63	2.19
	8192.00	86.0200	0.4900	477.71	819.26	7724.66	474.56	1615.21	30.00	11.18	11.13	1.00
Tie	MD	Incl	Azim	North	East	TVD	VS	Incr VS	Crs Len	DLS	Build	Turn
	ft	deg	deg	ft	ft	ft	ft	ft	ft	deg/100ft	deg/100ft	deg/100ft
	8240.00	89.0100	0.4900	525.66	819.67	7726.74	522.51	1663.16	48.00	6.23	6.23	0.00
	8274.00	89.2000	0.4900	559.65	819.96	7727.27	556.50	1697.16	34.00	0.56	0.56	0.00
	8359.00	90.4300	0.7800	644.64	820.90	7727.55	641.49	1782.16	85.00	1.49	1.45	0.34
	8444.00	90.6700	1.9400	729.61	822.92	7726.73	726.45	1867.15	85.00	1.39	0.28	1.36
	8529.00	90.4900	2.6200	814.54	826.30	7725.87	811.36	1952.15	85.00	0.83	-0.21	0.80
	8614.00	90.6400	1.4100	899.48	829.29	7725.03	896.29	2037.14	85.00	1.43	0.18	-1.42
	8699.00	91.0100	1.6500	984.45	831.56	7723.81	981.24	2122.13	85.00	0.52	0.44	0.28
	8785.00	91.5400	1.1600	1070.40	833.66	7721.90	1067.19	2208.11	86.00	0.84	0.62	-0.57
	8870.00	91.7500	0.5800	1155.35	834.95	7719.46	1152.14	2293.07	85.00	0.73	0.25	-0.68
	8956.00	91.6300	0.6000	1241.31	835.84	7716.92	1238.09	2379.04	86.00	0.14	-0.14	0.02
	9041.00	92.3300	359.7700	1326.26	836.11	7713.98	1323.04	2463.99	85.00	1.28	0.82	-0.98
	9127.00	92.3400	358.6200	1412.18	834.91	7710.48	1408.96	2549.91	86.00	1.34	0.01	-1.34
	9212.00	92.4000	358.5000	1497.08	832.77	7706.96	1493.87	2634.84	85.00	0.16	0.07	-0.14
	9297.00	92.5500	359.2100	1581.98	831.08	7703.29	1578.78	2719.76	85.00	0.85	0.18	0.84
	9383.00	91.3500	358.7200	1667.91	829.52	7700.37	1664.72	2805.71	86.00	1.51	-1.40	-0.57
	9468.00	90.2100	358.6000	1752.88	827.54	7699.21	1749.69	2890.70	85.00	1.35	-1.34	-0.14
	9554.00	90.5800	357.6600	1838.83	824.73	7698.62	1835.65	2976.70	86.00	1.17	0.43	-1.09
	9639.00	89.7800	357.3300	1923.75	821.01	7698.35	1920.58	3061.69	85.00	1.02	-0.94	-0.39
	9724.00	90.2100	359.4400	2008.71	818.62	7698.36	2005.55	3146.69	85.00	2.53	0.51	2.48
	9809.00	90.5200	359.7700	2093.71	818.03	7697.82	2090.55	3231.69	85.00	0.53	0.36	0.39
	9895.00	90.9200	0.3200	2179.70	818.10	7696.74	2176.54	3317.68	86.00	0.79	0.47	0.64
	9980.00	90.7700	0.2200	2264.69	818.50	7695.48	2261.53	3402.67	85.00	0.21	-0.18	-0.12
	10066.00	91.2300	0.6000	2350.67	819.12	7693.98	2347.51	3488.66	86.00	0.69	0.53	0.44
	10151.00	89.9000	0.4800	2435.66	819.92	7693.14	2432.50	3573.65	85.00	1.57	-1.56	-0.14
	10236.00	90.4600	0.0100	2520.66	820.28	7692.88	2517.49	3658.65	85.00	0.86	0.66	-0.55
	10322.00	91.2000	1.4100	2606.64	821.35	7691.63	2603.47	3744.64	86.00	1.84	0.86	1.63
	10413.00	90.2400	0.8900	2697.62	823.17	7690.49	2694.44	3835.63	91.00	1.20	-1.05	-0.57
	10498.00	90.7400	0.5000	2782.61	824.20	7689.76	2779.42	3920.63	85.00	0.75	0.59	-0.46
	10583.00	89.4100	0.4300	2867.60	824.89	7689.65	2864.41	4005.62	85.00	1.57	-1.56	-0.08
	10668.00	89.1300	359.8900	2952.60	825.13	7690.73	2949.41	4090.62	85.00	0.72	-0.33	-0.64
	10754.00	88.9500	0.4100	3038.58	825.36	7692.17	3035.39	4176.60	86.00	0.64	-0.21	0.60
	10839.00	89.3500	359.7700	3123.57	825.49	7693.43	3120.38	4261.59	85.00	0.89	0.47	-0.75
	10925.00	90.4300	359.2000	3209.57	824.72	7693.60	3206.38	4347.59	86.00	1.42	1.26	-0.66
	11010.00	90.5500	359.2600	3294.56	823.57	7692.87	3291.37	4432.59	85.00	0.16	0.14	0.07
	11094.00	90.8600	359.8500	3378.55	822.92	7691.84	3375.36	4516.58	84.00	0.79	0.37	0.70
	11180.00	90.9200	359.7900	3464.54	822.65	7690.50	3461.35	4602.57	86.00	0.10	0.07	-0.07
	11265.00	91.2300	0.6600	3549.52	822.98	7688.91	3546.33	4687.56	85.00	1.09	0.36	1.02
	11350.00	90.2700	359.8300	3634.51	823.35	7687.79	3631.32	4772.55	85.00	1.49	-1.13	-0.98
	11435.00	90.0900	359.9400	3719.51	823.18	7687.53	3716.32	4857.55	85.00	0.25	-0.21	0.13
	11521.00	89.4400	359.8300	3805.51	823.00	7687.88	3802.32	4943.55	86.00	0.77	-0.76	-0.13
	11604.00	89.5600	358.8800	3888.50	822.07	7688.60	3885.31	5026.54	83.00	1.15	0.14	-1.14
	11689.00	90.0000	358.4000	3973.47	820.05	7688.93	3970.30	5111.54	85.00	0.77	0.52	-0.56
	11774.00	91.5900	359.3100	4058.44	818.35	7687.75	4055.27	5196.53	85.00	2.16	1.87	1.07
	11858.00	91.5700	359.0200	4142.40	817.13	7685.44	4139.24	5280.50	84.00	0.35	-0.02	-0.35
	11943.00	91.6300	359.9100	4227.37	816.34	7683.06	4224.20	5365.46	85.00	1.05	0.07	1.05



12029.00	91.1700	359.6200	4313.34	815.98	7680.96	4310.17	5451.44	86.00	0.63	-0.53	-0.34
12114.00	90.8900	359.7300	4398.32	815.50	7679.43	4395.16	5536.42	85.00	0.35	-0.33	0.13
12161.00	90.6700	359.6300	4445.32	815.24	7678.79	4442.16	5583.42	47.00	0.51	-0.47	-0.21
Projection to TD:											
12217.00	90.6700	359.6300	4501.31	814.88	7678.14	4498.15	5639.41	56.00	0.00	0.00	0.00