



Realtime Log

Gamma Ray

Scale:

Company: Kerr-McGee Oil & Gas Onshore LP

1:240 TRUE VERTICAL DEPTH

Well: Gobbler 13N-23HZ

Field: Wattenburg

County: Weld State: Colorado

Status:

Field Print

Surface Location:

Latitude: 40° 7' 46.362" N

Longitude: 104° 45' 17.626" W

Other Services:

API Number:

05-123-36478

Section: 22 TWN: 2N Range: 66W

Wellbore Survey

Permanent Datum (P.D.): Mean Sea Level Elevation: 0.00 ft.

Elevations:

Log Measured From:

Drill Floor

5100.00 ft. Above P.D.

KB:

DF:

N/A

Depth Reference:

Driller's Depth

GL:

5100.00 ft. 5084.00 ft.

Interval Logged

Dates

Magnetic Field Reference

Top: 6885.0 ft. Date From: 14/Jul/13

Dip Angle: 66.95°

Azi Reference North: True

Bottom: 11936.0 ft. Date To: 22/Jul/13

Total

Mag to Reference

Spud Date: 14/Jul/13

Field Strength: 52958.0 nT North Correction:

8.45°

Borehole Record

Casing Record

Hole Size	From	To	Size	Weight	From	To
13.500 in.	Surface	1016.0 ft.	9.625 in.	36.00 lb/ft	Surface	1016.0 ft.
8.750 in.	1016.0 ft.	7889.0 ft.	7.000 in.	26.00 lb/ft	Surface	7882.0 ft.
6.125 in.	7889.0 ft.	11980.0 ft.				

Mud Record

Deviation Record

Type	From	To	Hole Size	Interval	Inc / Az (Start)	Inc / Az (End)
Water Based Mud	1016.0 ft.	11980.0 ft.	13.500 in.	1016.0 ft.	0.0° / 81.4°	0.0° / 227.6°
			8.750 in.	6873.0 ft.	0.1° / 293.2°	84.8° / 180.5°
			6.125 in.	4091.0 ft.	89.9° / 179.9°	90.6° / 179.0°
					/	/
					/	/
					/	/
					/	/

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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	Bottom	From	To	Start		End		
							(ft.)	(ft.)	(ft.)	(ft.)					
1	1	1	8.750	PDC	3.000	Steerable	N/A	N/A	6885.0	6932.0	14/Jul/2013	22:45	16/Jul/2013	12:50	30.3
2	2	2	8.750	PDC	3.000	Steerable	6885.0	7839.0	6932.0	7889.0	17/Jul/2013	09:00	18/Jul/2013	03:00	23.5
3	3	3	6.125	PDC	3.000	Steerable	7839.0	11928.0	7889.0	11980.0	20/Jul/2013	00:13	21/Jul/2013	22:44	45.9

Crew

Name			Arrive			Depart		
Name			Wellsite			Wellsite		
Mark Dix			16 July 2013			22 July 2013		
Adam Schlenz			13 July 2013			22 July 2013		
Name			Arrive			Depart		
Name			Wellsite			Wellsite		
Jeremiah Davidson			18 July 2013			22 July 2013		

Witness

Name	LWD Run Number
Charlie Daigle	1,2
Marvin Hackeworth	3

Mud Properties Record

Date / Time	LWD Run No.	Measured Depth (ft.)	Mud Type	Density (ppg)	Viscosity (sec/qt)	pH	Fluid Loss (cc)	Oil / Water	Source	Total Chlorides (ppm)	K+ (%)
16 July 2013 20:00	2	6550.0	Water Based	10.2	44	8.3	N/A	4.5/87.1	Active Mud Pit	1500	0.0
17 July 2013 08:00	2	6935.0	Water Based	10.2	46	8.2	N/A	4.5/87.1	Active Mud Pit	1600	0.0
17 July 2013 20:00	2	7605.0	Water Based	10.2	46	8.3	N/A	4.5/87.1	Active Mud Pit	1700	0.0
18 July 2013 08:00	2	7890.0	Water Based	10.2	47	8.2	N/A	4.5/86.7	Active Mud Pit	1800	0.0
18 July 2013 20:00	2	7890.0	Water Based	10.4	45	8.3	N/A	4.5/86.7	Active Mud Pit	1700	0.0
19 July 2013 08:00	2	7890.0	Water Based	10.3	45	8.2	N/A	5/86.2	Active Mud Pit	1700	0.0
19 July 2013 20:00	2	7890.0	Water Based	10.3	42	8.3	N/A	4.5/86.7	Active Mud Pit	1700	0.0
20 July 2013 08:00	3	8389.0	Water Based	10.1	43	8.2	N/A	5/87	Active Mud Pit	1700	0.0
20 July 2013 20:00	3	9600.0	Water Based	9.9	45	8.3	N/A	5.5/87.2	Active Mud Pit	1700	0.0
21 July 2013 08:00	3	10750.0	Water Based	10.1	43	8.3	N/A	5.5/86.4	Active Mud Pit	1700	0.0
21 July 2013 20:00	3	11618.0	Water Based	9.9	44	8.2	N/A	6.5/86.1	Active Mud Pit	1600	0.0

Mud Resistivity Record

				Surface				Downhole		
Date / Time	LWD Run No.	Measured Depth (ft.)	Surface Temp (deg F)	Rm (ohm.m)	Rmf (ohm.m)	Rmc (ohm.m)	BHCT (deg F)	Rm @ BHCT (ohm.m)	Rmf @ BHCT (ohm.m)	Rmc @ BHCT (ohm.m)
19/Jul/2013 12:29	3	7889.0	90	1.40	N/A	N/A	160	0.80	N/A	N/A
19/Jul/2013 23:42	3	7889.0	71	1.84	N/A	N/A	201	0.67	N/A	N/A
20/Jul/2013 14:16	3	9130.0	78	1.46	N/A	N/A	196	0.60	N/A	N/A
21/Jul/2013 00:21	3	10129.0	70	1.63	N/A	N/A	210	0.56	N/A	N/A
21/Jul/2013 14:14	3	11225.0	81	1.51	N/A	N/A	220	0.57	N/A	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	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.)
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1	DIR	10307183	Directional	56.36	6.750	3.250
1	SRIG	12613296	Gamma	52.98	6.750	3.250
2	DIR	10307183	Directional	53.34	6.750	3.250
2	SRIG	12613296	Gamma	49.96	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

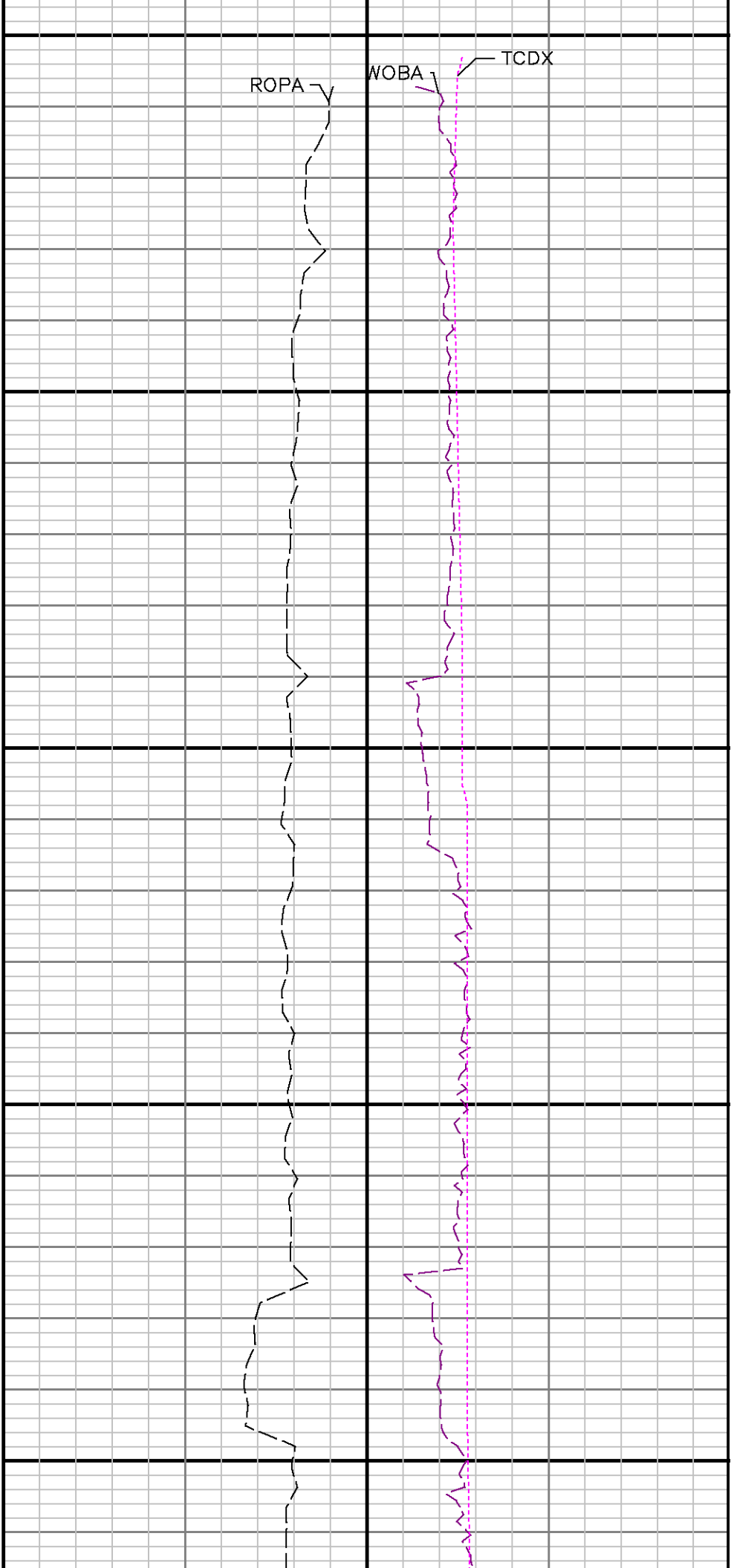
Comments

(1) Baker Hughes INTEQ runs 1 and 2 utilized 6 3/4 inch NaviGamma services (Gamma Ray and Directional) behind an 8 3/4 inch bit and steerable assembly from 6885 to 7889 feet MD (6758 to 7402 feet TVD).

Remarks

Number	Measured Depth (ft.)	Hole Section (in.)	LWD Run No.	Remark
1	6932	8.750	2	The interval from 6885 to 6932 feet MD (6758 to 6805 feet TVD) was logged more than 10 hours after being drilled due to a trip out of the hole to change out the motor and bit.
2	7839	8.750	2	The interval from 7839 to 7890 feet MD (7399 to 7401 feet TVD) was logged up to 45 hours after being drilled due to a trip out of the hole for casing and cement operations, and to pickup the lateral assembly.

<div></div>		Company : Kerr-McGee Oil & Gas Onshore LP			
		Well : Gobbler 13N-23HZ			
		Interval : 6740.00 - 7420.00 feet			
		Created : 22/Jul/2013 9:44:48 AM			
Gamma Ray Apparent 0.5 ft Avg GRAX		TVD feet 1:240	Rate of Penetration 3.0 ft Avg ROPA	Surface Weight On Bit 1.0 ft Avg WOB	
0 200			500 0	0 100	
API			ft/hr	klbf	
				Downhole Temperature TCDX	
				100 300	
				degF	



TCDX

WOBA

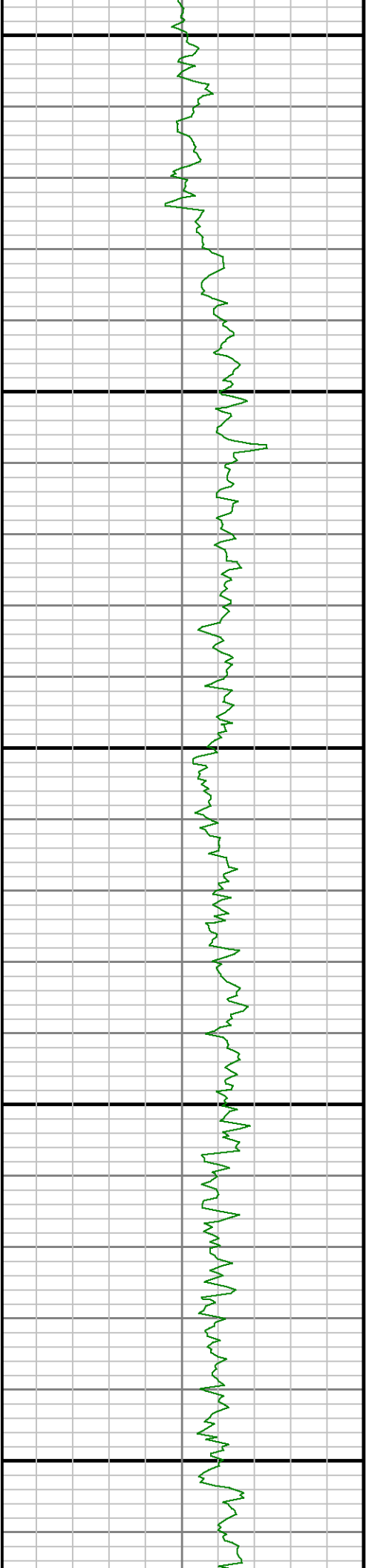
ROPA

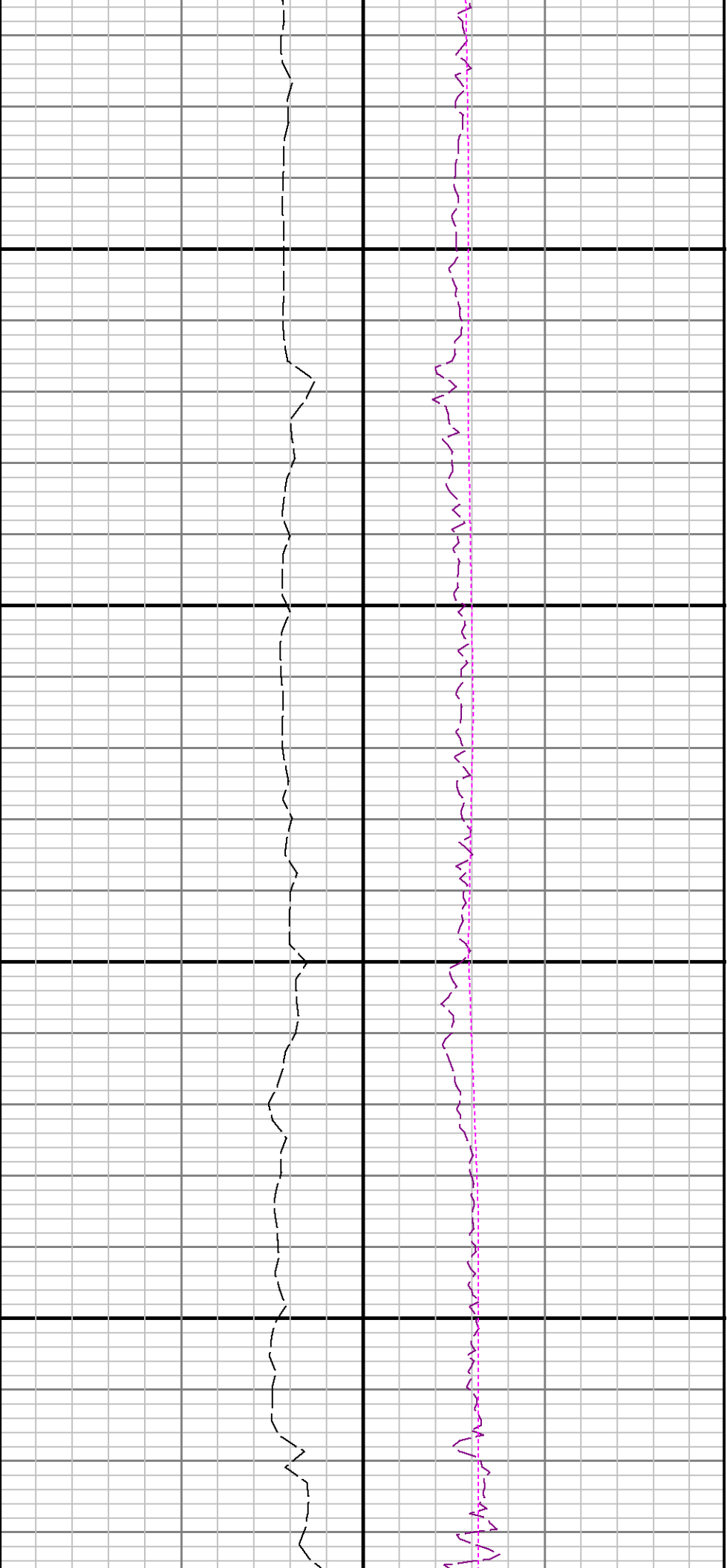
> Run 2

6800

6900

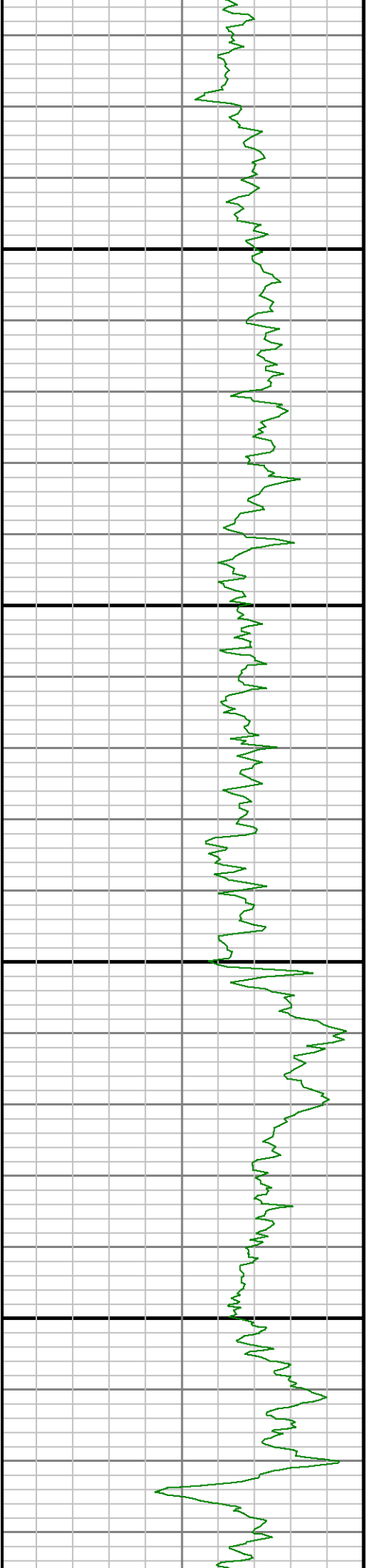
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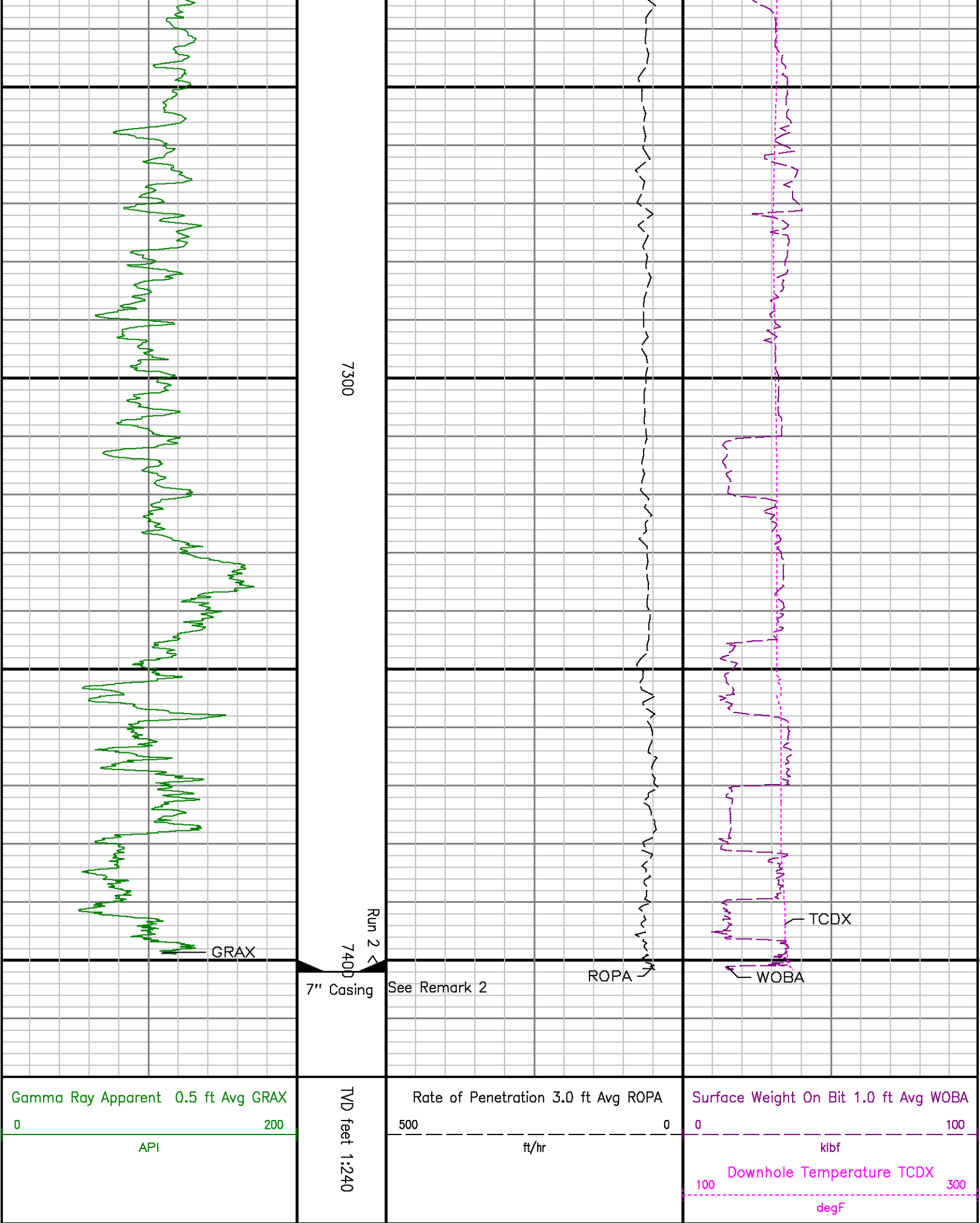




7100

7200





ADVANTAGE Final Survey Listing

Operator	:Kerr-McGee Oil & Gas Onshore LP	Field	: Wattenburg	API No	: 05-123-36478
Well	:Gobbler 13N-23HZ	Rig	: Xtreme 20	Job	:5587373
Wellbore	: Gobbler 13N-23HZ Orig Hole				

Well Origin

Latitude	40.13 deg	Longitude	-104.75 deg
North Reference	True	Drill Depth Zero	Kelly Bushing
Vertical Datum is	Mean Sea Level	Vertical Datum to DDZ	5100.00 ft
Vertical Section North	0.00 ft	Vertical Section East	0.00 ft
Vertical Section Azimuth	180.33 deg	Vertical Section Depth	0.00ft
Grid Convergence	0.00 deg	Magnetic Declination	8.44 deg
Total Correction	8.44 deg	TVD Calculation Method	Minimal Curvature
D-Raw Calculation	Magcorr1	Local Magnetic Field	52986 nT
Local Magnetic Dip Angle	66.93 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	16.00	0.00	81.41	0.00	0.00	16.00	0.00	0.00	16.00	0.00	0.00	508.81
	116.00	0.22	81.41	0.03	0.19	116.00	-0.03	0.19	100.00	0.22	0.22	0.00
	216.00	0.22	59.93	0.15	0.55	216.00	-0.18	0.57	100.00	0.08	0.00	-21.48
	316.00	0.20	104.02	0.21	0.88	316.00	-0.21	0.91	100.00	0.16	-0.02	44.09
	416.00	0.53	52.04	0.45	1.42	416.00	-0.46	1.50	100.00	0.44	0.33	-51.98
	516.00	0.15	19.15	0.86	1.82	515.99	-0.87	2.07	100.00	0.41	-0.38	-32.89
	616.00	0.31	5.94	1.25	1.89	615.99	-1.26	2.47	100.00	0.17	0.16	-13.21
	716.00	0.28	13.10	1.74	1.97	715.99	-1.75	2.97	100.00	0.06	-0.05	7.18
	816.00	0.14	0.85	2.08	2.03	815.99	-2.10	3.31	100.00	0.13	-0.12	-12.25
	916.00	0.18	349.00	2.34	2.00	915.99	-2.35	3.58	100.00	0.04	0.02	-11.85
	946.00	0.03	227.61	2.38	1.99	945.99	-2.39	3.61	30.00	0.59	-0.43	-404.63
	1065.00	0.09	293.23	2.39	1.88	1064.99	-2.41	3.72	119.00	0.07	0.05	55.14
	1159.00	0.17	336.25	2.55	1.75	1158.99	-2.56	3.92	94.00	0.13	0.09	45.77
	1251.00	1.82	55.30	3.51	2.90	1250.98	-3.52	5.42	92.00	1.95	1.79	85.92
	1342.00	2.88	56.96	5.58	6.01	1341.90	-5.61	9.15	91.00	1.17	1.16	1.82
	1433.00	4.53	60.66	8.58	11.06	1432.70	-8.65	15.02	91.00	1.83	1.81	4.07
	1525.00	5.91	67.50	12.18	18.60	1524.32	-12.28	23.38	92.00	1.64	1.50	7.43
	1616.00	7.48	62.87	16.67	28.20	1614.70	-16.83	33.98	91.00	1.82	1.73	-5.09
	1707.00	9.01	64.54	22.44	39.90	1704.76	-22.67	47.03	91.00	1.70	1.68	1.84
	1799.00	10.56	66.59	28.88	54.15	1795.41	-29.19	62.66	92.00	1.73	1.68	2.23
	1890.00	12.93	68.60	35.91	71.28	1884.50	-36.32	81.18	91.00	2.64	2.60	2.21
	1982.00	14.04	68.71	43.72	91.26	1973.97	-44.24	102.63	92.00	1.21	1.21	0.12
	2066.00	14.79	67.88	51.48	110.69	2055.32	-52.09	123.54	84.00	0.93	0.89	-0.99
	2151.00	16.41	68.01	60.04	131.87	2137.19	-60.80	146.40	85.00	1.91	1.91	0.15
	2236.00	16.09	64.78	69.55	153.66	2218.79	-70.44	170.18	85.00	1.13	-0.36	-3.80
	2322.00	17.27	64.92	80.04	178.01	2301.17	-81.06	194.86	86.00	1.37	1.37	0.16
	2407.00	17.18	63.00	91.09	198.62	2382.36	-92.23	220.03	85.00	0.68	-0.11	-2.26
	2491.00	16.86	61.07	102.81	220.34	2462.88	-103.88	244.81	84.00	0.77	-0.38	-2.30
	2576.00	16.16	60.09	114.48	241.38	2544.18	-115.86	268.77	85.00	0.89	-0.82	-1.15
	2661.00	16.36	62.07	125.98	262.21	2625.78	-127.49	292.56	85.00	0.69	0.24	2.33
	2746.00	16.04	65.91	136.38	283.51	2707.41	-138.01	316.27	85.00	1.32	-0.38	4.52
	2831.00	15.75	67.89	145.52	304.91	2789.16	-147.27	339.54	85.00	0.72	-0.34	2.33
	2916.00	15.93	67.64	154.30	326.39	2870.93	-156.17	362.74	85.00	0.23	0.21	-0.29
	3001.00	16.16	68.75	163.02	348.20	2952.62	-165.02	386.24	85.00	0.45	0.27	1.31
	3086.00	16.15	69.22	171.50	370.28	3034.26	-173.63	409.89	85.00	0.15	-0.01	0.55
	3171.00	17.21	70.76	179.84	393.20	3115.88	-182.10	434.28	85.00	1.35	1.25	1.81
	3256.00	16.54	70.89	187.95	416.51	3197.02	-190.34	458.95	85.00	0.79	-0.79	0.15
	3341.00	16.29	70.80	195.83	439.20	3278.56	-198.35	482.97	85.00	0.30	-0.29	-0.11
	3426.00	16.52	69.66	203.95	461.79	3360.10	-206.60	506.98	85.00	0.47	0.27	-1.34
	3511.00	16.47	68.09	212.65	484.30	3441.60	-215.43	531.11	85.00	0.53	-0.06	-1.85
	3596.00	16.66	68.16	221.87	506.79	3523.07	-224.59	555.35	85.00	0.22	0.22	0.08

3681.00	16.50	87.60	230.79	529.26	3604.54	-233.84	579.60	85.00	0.25	-0.19	-0.56
3766.00	15.97	86.05	240.12	551.12	3686.15	-243.29	603.38	85.00	0.82	-0.82	-1.92
3851.00	15.28	87.43	249.17	572.15	3768.01	-252.46	626.25	85.00	0.92	-0.81	1.62
3936.00	15.72	86.58	258.04	593.06	3849.92	-261.46	648.97	85.00	0.58	0.52	-1.00
4021.00	16.26	86.49	267.37	614.53	3931.83	-270.90	672.38	85.00	0.64	0.64	-0.11
4106.00	15.93	82.80	277.45	635.82	4013.30	-281.10	695.94	85.00	1.26	-0.39	-4.34
4191.00	15.68	81.85	286.20	656.32	4095.08	-291.97	719.09	85.00	0.42	-0.29	-1.12
4276.00	15.90	84.88	296.56	676.99	4176.88	-302.45	742.21	85.00	1.00	0.26	3.56

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
	4361.00	16.24	84.16	308.68	698.23	4258.56	-312.70	765.74	85.00	0.46	0.40	-0.85
	4446.00	17.16	84.48	319.27	720.25	4339.97	-323.41	790.16	85.00	1.09	1.08	0.38
	4531.00	17.14	83.73	330.21	742.79	4421.19	-334.48	815.23	85.00	0.26	-0.02	-0.88
	4616.00	15.45	87.30	340.13	764.47	4502.78	-344.52	839.06	85.00	2.31	-1.99	4.20
	4701.00	13.96	88.29	348.29	784.44	4584.99	-352.80	860.64	85.00	1.78	-1.75	1.18
	4786.00	12.63	70.15	355.24	802.71	4667.71	-359.85	880.18	85.00	1.64	-1.56	2.19
	4871.00	11.92	65.56	362.02	819.44	4750.77	-366.74	898.24	85.00	1.42	-0.84	-5.40
	4956.00	11.05	65.98	368.97	834.88	4834.07	-373.77	915.16	85.00	1.03	-1.02	0.49
	5041.00	10.18	61.09	375.92	848.89	4917.61	-380.80	930.81	85.00	1.47	-1.02	-5.75
	5126.00	8.81	64.06	382.40	861.32	5001.45	-387.35	944.83	85.00	1.71	-1.61	3.49
	5211.00	7.17	59.34	387.95	871.74	5085.62	-392.97	956.63	85.00	2.08	-1.93	-5.55
	5296.00	5.42	61.23	392.59	879.82	5170.10	-397.65	965.95	85.00	2.07	-2.06	2.22
	5381.00	4.17	54.62	396.31	885.86	5254.80	-401.40	973.04	85.00	1.61	-1.47	-7.78
	5466.00	3.08	60.30	399.23	890.36	5339.63	-404.35	978.41	85.00	1.35	-1.26	6.66
	5551.00	2.94	71.16	401.06	894.41	5424.52	-406.21	982.85	85.00	0.69	-0.16	12.78
	5636.00	1.73	60.63	402.40	897.59	5509.45	-407.56	986.30	85.00	1.50	-1.42	-12.39
	5721.00	0.32	99.66	402.99	898.94	5594.43	-408.16	987.77	85.00	1.76	-1.66	45.92
	5806.00	0.13	25.14	403.03	899.22	5679.43	-408.21	988.05	85.00	0.37	-0.22	-67.67
	5891.00	0.30	16.66	403.33	899.32	5764.43	-406.51	988.37	85.00	0.20	0.20	-9.72
	5976.00	0.69	22.28	404.02	899.58	5849.43	-409.19	989.10	85.00	0.46	0.46	6.35
	6061.00	0.80	1.43	405.09	899.79	5934.42	-410.26	990.19	85.00	0.34	0.13	-24.53
	6147.00	0.74	343.04	406.22	899.64	6020.41	-411.39	991.33	86.00	0.29	-0.07	-21.38
	6232.00	0.70	337.60	407.22	899.28	6105.40	-412.40	992.40	85.00	0.09	-0.05	-6.40
	6316.00	1.08	328.41	408.37	898.67	6189.39	-413.54	993.70	84.00	0.48	0.45	-10.94
	6401.00	1.18	312.58	409.65	897.61	6274.38	-414.81	995.36	85.00	0.38	0.12	-18.62
	6487.00	1.29	312.01	410.89	896.24	6360.36	-416.05	997.21	86.00	0.13	0.13	-0.66
	6572.00	1.33	331.14	412.40	895.05	6445.34	-417.55	999.13	85.00	0.51	0.05	22.51
	6657.00	1.46	332.29	414.22	894.07	6530.31	-419.36	1001.20	85.00	0.16	0.15	1.35
	6742.00	1.59	328.31	416.16	892.95	6615.28	-421.32	1003.46	85.00	0.20	0.15	-4.68
	6827.00	1.73	328.75	418.28	891.66	6700.25	-423.41	1005.92	85.00	0.17	0.16	0.52
	6901.00	1.31	338.40	420.02	890.77	6774.22	-425.15	1007.88	74.00	0.66	-0.57	13.04
	6944.00	1.59	187.82	419.89	890.51	6817.21	-425.01	1008.17	43.00	6.53	0.65	-350.19
	6986.00	5.99	165.87	417.13	890.21	6859.11	-422.25	1010.95	42.00	10.48	10.48	-4.64
	7029.00	9.65	169.64	411.35	889.37	6901.70	-416.46	1016.79	43.00	8.59	8.51	6.77
	7071.00	12.95	190.51	403.25	887.93	6942.88	-408.35	1025.02	42.00	7.87	7.86	2.07
	7114.00	16.06	197.50	392.83	885.26	6984.51	-397.92	1035.77	43.00	6.29	7.23	16.26
	7156.00	16.72	191.13	380.66	882.21	7024.59	-385.75	1046.31	42.00	7.76	6.33	-15.17
	7199.00	23.34	191.51	365.55	879.18	7064.72	-370.61	1063.73	43.00	10.75	10.74	0.88
	7241.00	27.16	189.69	347.94	875.90	7102.70	-352.98	1081.64	42.00	9.28	9.10	-4.33
	7284.00	32.56	188.32	326.80	872.57	7139.98	-331.82	1103.04	43.00	12.66	12.56	-3.19
	7326.00	36.14	185.12	303.27	869.83	7174.65	-306.28	1126.73	42.00	9.54	8.52	-7.62
	7369.00	41.17	160.95	276.47	866.46	7206.22	-281.47	1153.57	43.00	13.17	11.70	-9.70
	7411.00	45.49	178.84	247.66	866.54	7238.77	-252.66	1182.38	42.00	10.85	10.29	-5.02
	7454.00	50.92	177.12	215.64	869.69	7267.42	-220.64	1214.42	43.00	12.97	12.63	-4.00
	7496.00	56.23	177.29	181.90	871.33	7292.35	-186.91	1248.20	42.00	12.65	12.64	0.40
	7539.00	60.50	177.59	145.33	872.96	7314.90	-150.36	1284.81	43.00	9.95	9.93	0.70
	7581.00	65.23	178.91	107.96	874.10	7334.05	-113.01	1322.17	42.00	11.60	11.26	3.14
	7624.00	68.99	179.19	68.38	874.75	7350.77	-73.42	1361.78	43.00	8.76	8.74	0.65
	7666.00	72.64	179.63	26.72	875.16	7364.57	-33.76	1401.44	42.00	8.75	8.69	1.05
	7709.00	75.18	180.04	-12.59	875.28	7376.49	7.55	1442.75	43.00	5.98	5.91	0.95

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
	7751.00	78.88	180.77	-53.49	874.99	7385.98	48.45	1483.66	42.00	8.50	8.33	1.74

	7794.00	81.23	181.01	-95.83	874.33	7393.48	90.79	1525.99	43.00	5.96	5.93	0.56
	7836.00	84.79	180.50	-137.50	873.78	7398.59	132.47	1567.67	42.00	8.56	8.48	-1.21
	7906.00	89.91	179.87	-207.41	873.55	7401.83	202.37	1637.58	70.00	7.37	7.31	-0.90
	7991.00	89.51	179.87	-292.40	873.75	7402.26	287.37	1722.57	85.00	0.47	-0.47	0.00
	8076.00	90.03	179.75	-377.40	874.03	7402.80	372.38	1807.57	85.00	0.63	0.61	-0.14
	8161.00	90.28	178.65	-462.39	875.22	7402.37	457.34	1892.57	85.00	1.33	0.29	-1.29
	8246.00	91.29	178.99	-547.36	876.97	7401.20	542.30	1977.56	85.00	1.25	1.19	0.40
	8330.00	91.17	178.84	-631.33	878.56	7399.40	626.26	2061.54	84.00	0.23	-0.14	-0.18
	8415.00	91.56	178.65	-716.29	880.42	7397.38	711.20	2146.52	85.00	0.51	0.46	-0.22
	8500.00	91.57	179.94	-801.25	881.46	7395.06	796.16	2231.49	85.00	1.52	0.01	1.52
	8585.00	91.26	179.09	-886.22	882.18	7392.96	881.12	2316.46	85.00	1.06	-0.36	-1.00
	8670.00	91.04	178.79	-971.18	883.75	7391.25	966.08	2401.44	85.00	0.44	-0.26	-0.35
	8755.00	90.73	178.64	-1056.15	885.66	7389.94	1051.03	2486.43	85.00	0.41	-0.36	-0.18
	8840.00	90.55	178.39	-1141.12	887.86	7388.99	1135.99	2571.43	85.00	0.36	-0.21	-0.29
	8925.00	91.90	179.14	-1226.08	889.69	7387.17	1220.93	2656.40	85.00	1.82	1.59	0.88
	9010.00	91.47	180.67	-1311.04	889.84	7384.67	1305.89	2741.36	85.00	1.87	-0.51	1.80
	9095.00	91.73	180.75	-1396.00	888.78	7382.30	1390.86	2826.33	85.00	0.32	0.31	0.09
	9180.00	90.09	180.11	-1480.98	888.14	7380.95	1475.84	2911.32	85.00	2.07	-1.93	-0.75
	9265.00	90.00	180.02	-1565.98	888.05	7380.88	1560.84	2996.32	85.00	0.15	-0.11	-0.11
	9349.00	90.06	179.95	-1649.98	888.07	7380.84	1644.84	3080.32	84.00	0.11	0.07	-0.08
	9434.00	89.53	179.06	-1734.98	888.80	7381.14	1729.83	3165.32	85.00	1.22	-0.62	-1.05
	9519.00	89.87	180.15	-1819.97	889.39	7381.59	1814.82	3250.31	85.00	1.34	0.40	1.28
	9604.00	90.64	180.63	-1904.97	888.81	7381.21	1899.82	3335.31	85.00	1.07	0.91	0.58
	9689.00	90.49	179.93	-1989.96	888.40	7380.37	1984.81	3420.31	85.00	0.84	-0.18	-0.82
	9773.00	90.78	180.77	-2073.95	887.88	7379.45	2068.81	3504.30	84.00	1.05	0.32	1.00
	9858.00	90.36	180.56	-2158.94	886.90	7378.62	2153.80	3589.30	85.00	0.53	-0.47	-0.25
	9943.00	89.08	180.19	-2243.94	886.34	7379.04	2238.80	3674.29	85.00	1.57	-1.51	-0.44
	10028.00	90.15	180.66	-2328.93	885.71	7379.61	2323.79	3759.29	85.00	1.37	1.26	0.55
	10113.00	89.44	180.95	-2413.92	884.52	7379.91	2408.79	3844.29	85.00	0.90	-0.84	0.34
	10199.00	90.06	182.16	-2499.89	882.18	7380.29	2494.77	3930.29	86.00	1.58	0.72	1.41
	10284.00	88.46	181.65	-2584.83	879.36	7381.39	2579.73	4015.28	85.00	1.98	-1.88	-0.60
	10369.00	88.40	181.57	-2669.77	876.97	7383.72	2664.67	4100.24	85.00	0.12	-0.07	-0.09
	10454.00	87.53	181.36	-2754.69	874.80	7386.73	2749.60	4185.19	85.00	1.05	-1.02	-0.26
	10539.00	88.68	180.78	-2839.62	873.21	7389.54	2834.55	4270.14	85.00	1.52	1.35	-0.68
	10624.00	88.49	180.41	-2924.59	872.33	7391.64	2919.52	4355.11	85.00	0.49	-0.22	-0.44
	10710.00	89.38	180.51	-3010.57	871.64	7393.24	3005.50	4441.10	86.00	1.04	1.03	0.12
	10795.00	88.76	179.89	-3095.56	871.34	7394.62	3090.49	4526.09	85.00	1.03	-0.73	-0.73
	10880.00	89.96	181.12	-3180.55	870.59	7395.57	3175.48	4611.08	85.00	2.02	1.41	1.45
	10965.00	90.39	180.01	-3265.54	869.75	7395.31	3260.46	4696.08	85.00	1.40	0.51	-1.31
	11050.00	90.06	180.18	-3350.54	869.63	7394.98	3345.48	4781.08	85.00	0.43	-0.39	0.18
	11135.00	90.67	180.04	-3435.54	869.48	7394.44	3430.47	4866.07	85.00	0.73	0.72	-0.14
	11220.00	90.09	179.94	-3520.54	869.50	7393.87	3515.47	4951.07	85.00	0.69	-0.66	-0.12
	11305.00	90.98	179.62	-3605.53	869.82	7393.08	3600.46	5036.07	85.00	1.11	1.05	-0.38
	11391.00	91.63	178.95	-3691.50	870.89	7391.12	3686.42	5122.04	86.00	1.09	0.76	-0.78
	11476.00	91.47	179.57	-3776.46	871.99	7388.82	3771.38	5207.01	85.00	0.75	-0.19	0.73
	11561.00	91.13	179.38	-3861.44	872.77	7388.89	3856.35	5291.99	85.00	0.46	-0.40	-0.22
	11646.00	91.04	179.47	-3946.42	873.62	7385.28	3941.32	5376.97	85.00	0.15	-0.11	0.11
	11732.00	91.26	179.37	-4032.40	874.49	7383.56	4027.29	5462.96	86.00	0.28	0.26	-0.12
	11817.00	90.98	180.04	-4117.38	874.93	7381.90	4112.27	5547.94	85.00	0.85	-0.33	0.79
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
	11922.00	90.62	179.05	-4222.36	875.76	7380.43	4217.25	5652.93	105.00	1.00	-0.34	-0.94
Projection to TD:	11980.00	90.62	179.05	-4280.35	876.73	7379.80	4275.23	5710.93	58.00	0.00	0.00	0.00

