



LWD MEMORY LOG

Gamma Ray

Scale:		Company: Noble Energy				
1:1200 TVD		Well: Hullahaloo Y21-726				
Depth Reference:		Field: Weld County				
Driller's Depth		County: Weld County				
State: Colorado		Country: United States				
Status:	Surface Location:		Other Services:			
Final Print	Latitude: Longitude:					
API No: 0512345234	SEC: 16 TWN: 2N RGE: 64W		Directional			
Job ID: 8776793	Permanent Datum (P.D.): Ground Level		Elev. KB: N/A			
Log Measured From: Rig Floor	Elevation: Above P.D.		Elev. DF: 4975.00 ft			
		30.00 ft	Elev. GL: 4945.00 ft			
Dates	Interval Logged		Magnetic Field Reference			
Date From: 2017-10-15	Top: (ft) 2032.00	Azi Reference North: Grid Dip Angle: (deg) 66.65				
Date To: 2017-10-18	Bottom: (ft) 17306.00	Total Magnetic Field Strength: (nT) 52265				
Spud Date: 2017-10-15			Mag to Reference North Correction: (deg) 7.45 E			
Borehole Record		Casing Record				
Hole Size (in)	From (ft)	To (ft)	Size (in)	Weight (lb/ft)	From (ft)	To (ft)
13.500	30.00	2032.00	16.000	36.00	30.00	110.00
8.500	2032.00	17318.00	9.625	36.00	30.00	2022.00
Mud Record						
Type	From (ft)	To (ft)	Hole Size (in)	Interval (ft)	Inc Az (Start)	Inc Az (End)
Oil Based Mud	0.00	17318.00	8.500	17318.00	0.60 129.63	90.46 177.28
Deviation Record						
Acquisition System Software Version Other						
Baker Hughes Cadence PlotStudio	RT4.1	4.1.7763.3	Rig: Contractor: District:	H&P 524 Helmerich & Payne Drilling Co RMA	Unit: N/A	

"These interpretations and analyses ("Interpretations") are opinions provided by Baker Hughes Oilfield Operations, Inc ("Baker Hughes"), based upon industry practice, empirical relationships, assumptions and measurements, (many of which may be provided by the customer). The Interpretations are not infallible and may be subject to different opinions. Vjwu. "Dcmgt"JwiJgu"fqgu"pqv"ycttcpv"vjgkt"ceewtce{"eqttgevpguu."qt"eqorngvgpguu."qt"vjcv"vjg"ewuvqogtøu"cpflqt"cp{"vjktf"rctv{øu"tgnkcpeg"qp"uwej"Kpvgtrgtgvcvkqpu"yknn"ceeqornkuj"cp{"rctvkewmct"tguwnvu0"Vjg"ewuvqogt"cuuwogu"hwnn" responsibility for the use of the Interpretations and for decisions based thereon and the customer agrees to release, defend and indemnify Baker Hughes, its parent, subsidiaries and affiliated or related entities, and subcontractors, together with its and their officers, directors, employees, agents and invitees against, any and all claims, losses, damages, or expenses sustained by the customer or any third party arising out of reliance upon or use of the Interpretations, without regard to the cause(s) thereof, including without limitation any form of negligence on the part of Baker Hughes. Unless other contract terms have been agreed to by the parties, each party's liabilities and qdnkicvkqpu"ujcnn"dg"iqxgtpgf"d{"Dcmgt"JwiJgu"Kpeqtrqtcvgføu"Yqtnfykfg"Vgtou"cpf"Eqpfkvkqpu0\$""

Log Run Summary

Run No	Bit Run No.	Bit Size (in)	Bit Type	Bit Gauge Length (in)	Assembly Type	Logged Interval		Bit Depth Interval		Date / Time		Circ. Hours (h)
						Top	Bottom	From	To	Start Logging	End Logging	
						(ft)	(ft)	(ft)	(ft)			
1	1	8.500	PDC	2.00	AutoTrak Curve	2032.00	17306.00	2032.00	17318.00	2017-10-15 21:23	2017-10-18 03:13	51.06

Crew	
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Name	Arrive Wellsite	Depart Wellsite	Name	Arrive Wellsite	Depart Wellsite	Name	Arrive Wellsite	Depart Wellsite
Alex Robinson	2017-10-15	2017-10-19	Steven Cano	2017-10-15	2017-10-17	Ty Jackson	2017-10-17	2017-10-19

Mud Properties Record

Date / Time	Run No.	Measured Depth (ft)	Mud Type	Density (ppg)	Viscosity (cP)	pH	Fluid Loss (cm3)	Oil / Water	Source	Total Chlorides (ppm)	K+ (%)
2017-10-15 17:00	1	2032.00	Oil Based Mud	9.2	9	N/A	N/A	81.9/18.1	Active Pit	27500	0.00
2017-10-16 05:00	1	4680.00	Oil Based Mud	9.0	9	N/A	N/A	82.5/17.5	Active Pit	29000	0.00
2017-10-16 17:00	1	8351.00	Oil Based Mud	9.2	10	N/A	N/A	83.4/16.6	Active Pit	27000	0.00
2017-10-17 05:00	1	11052.00	Oil Based Mud	9.3	10	N/A	N/A	84.2/15.8	Active Pit	25000	0.00
2017-10-17 17:00	1	14624.00	Oil Based Mud	9.3	10	N/A	N/A	84.2/15.8	Active Pit	25000	0.00
2017-10-18 05:00	1	17318.00	Oil Based Mud	9.2	10	N/A	N/A	84.4/15.6	Active Pit	23000	0.00

Equipment and Service Data

Run No.	Tool	Serial Number	Measurement	Sensor Offset (ft)	Bit Offset (ft)	Max O.D. (in)	Min I.D. (in)
1	ATC_SU	14178990	Near Bit Inclination	5.93	6.74	7.000	4.330
1	ATC_SU	14178990	Near Bit VSS	5.93	6.74	7.000	4.330
1	ATC_MWD	12706130	Gamma (single)	2.20	12.35	7.000	3.250
1	ATC_MWD	12706130	Directional (mag)	12.27	22.42	7.000	3.250

Service and Tool Mnemonics


Mnemonic	Name	Description
ATC_SU	ATC_SU	Auto Trak Curve Steering Unit
ATC_MWD	ATC_MWD	Auto Trak Curve MWD
ATC_LCPM	ATC_LCPM	Auto Trak Curve LCPM

Comments

- 1
- Depth measurements were obtained from a depth control system not supplied or operated by Baker Hughes. Due to lack of control by Baker Hughes, calibration and measurements could not be independently verified.
- 2
- Baker Hughes LWD run 1 utilized a 6.75 inch NaviGamma service (Gamma Ray and Directional) behind an 8.5 inch bit and rotary steerable assembly from 2032 to 17318 feet MD (2032 to 6966 feet TVD).
- 3
- Periodic gaps in gamma data are due to drilling ahead while downlinking.

Remarks

Number	Measured Depth (ft)	Hole Section (in)	Run No.	Remark
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Company

Well

Interval

Created

Noble Energy

Hullabaloo Y21-726

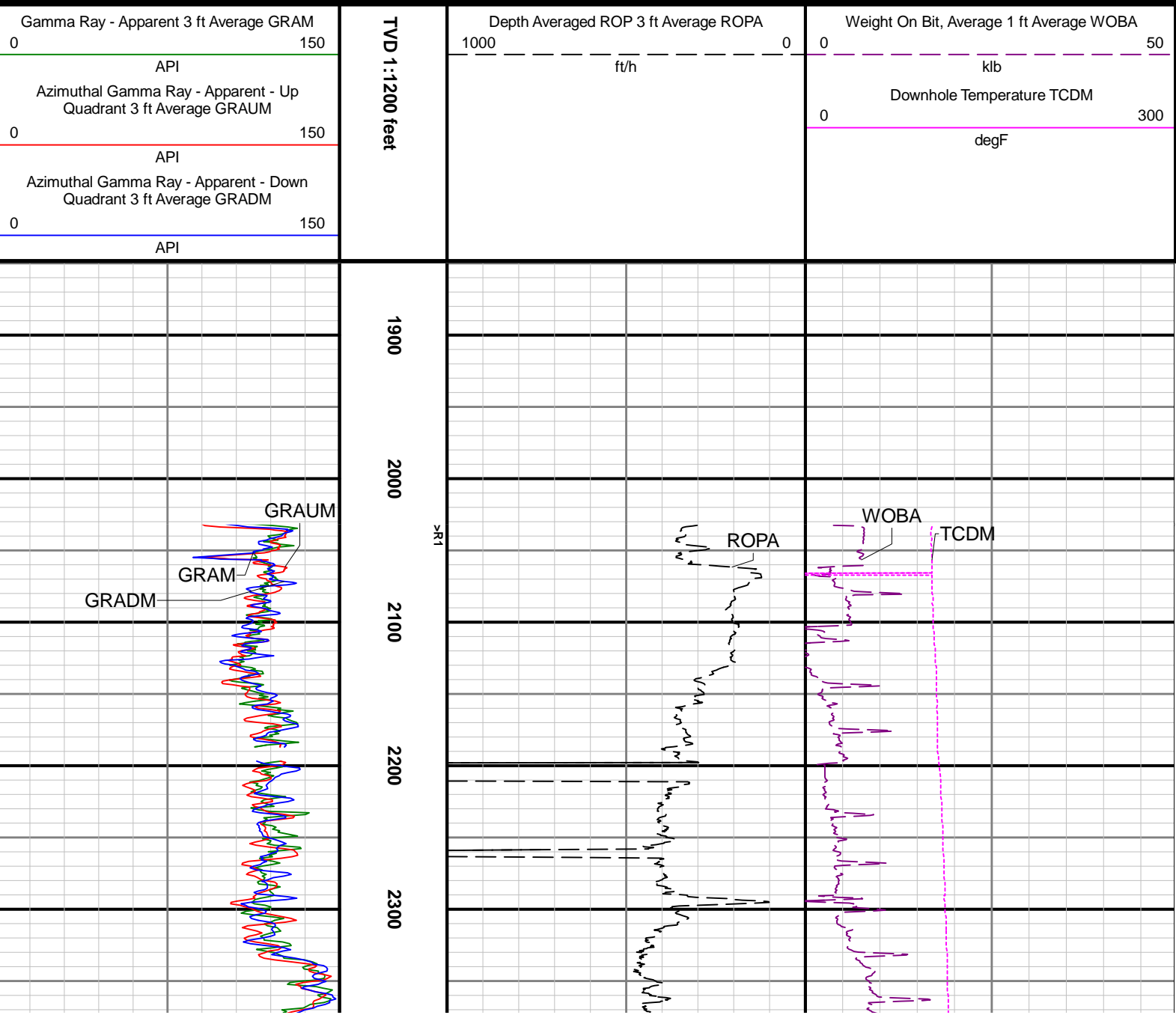
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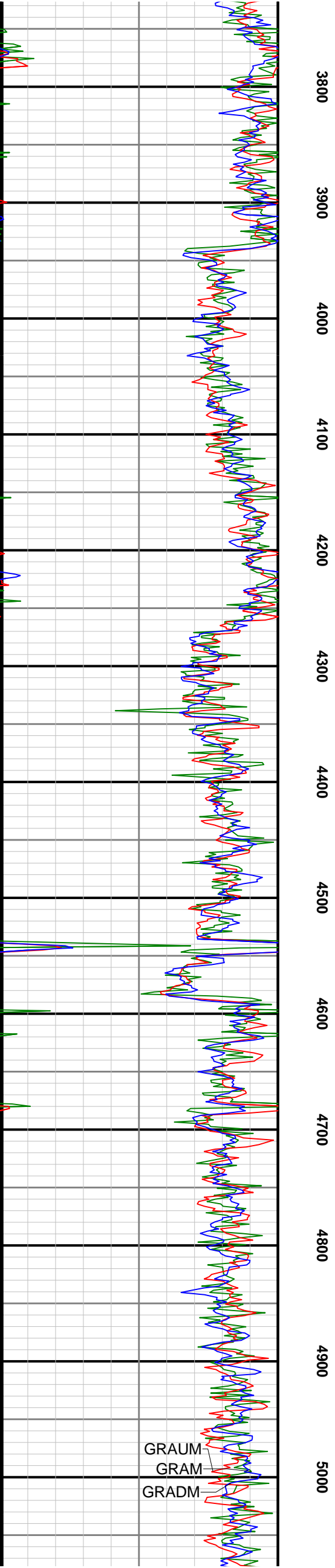
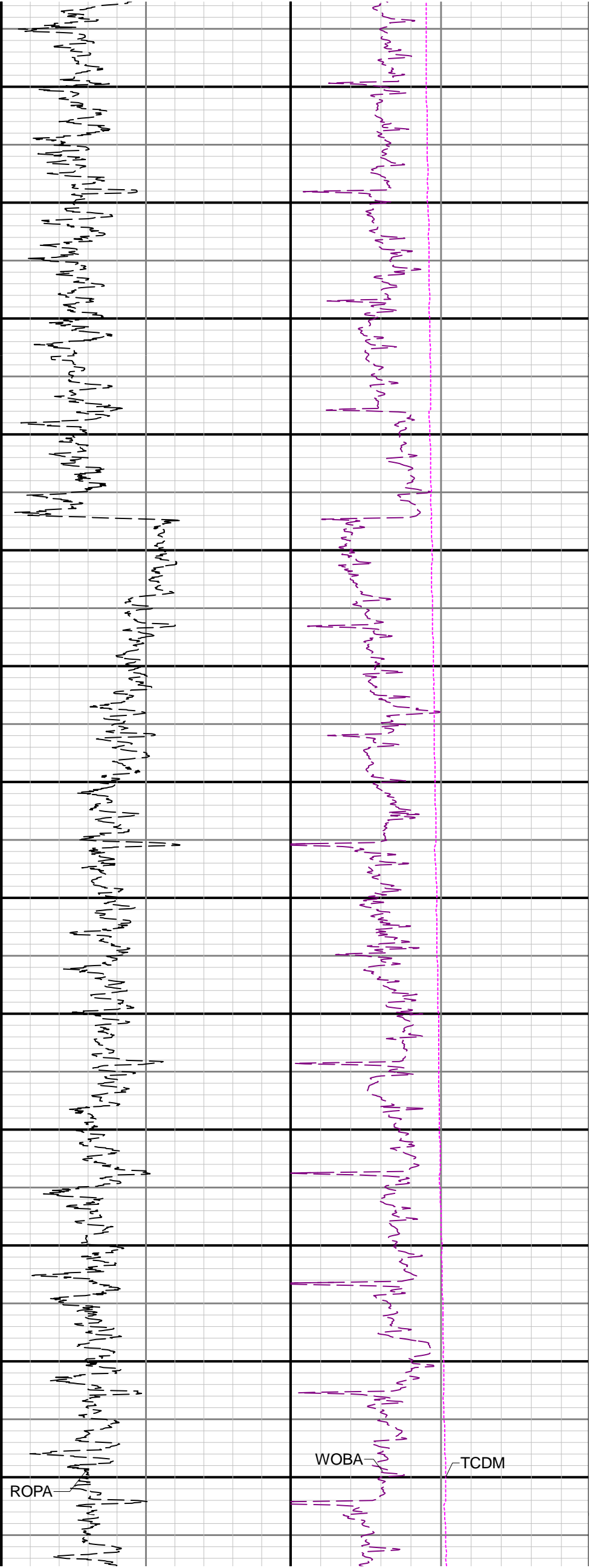
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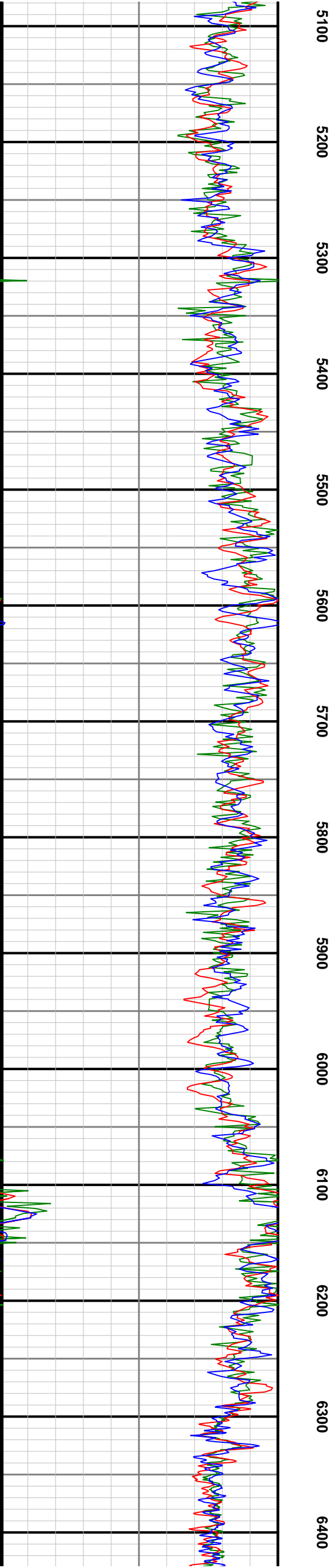
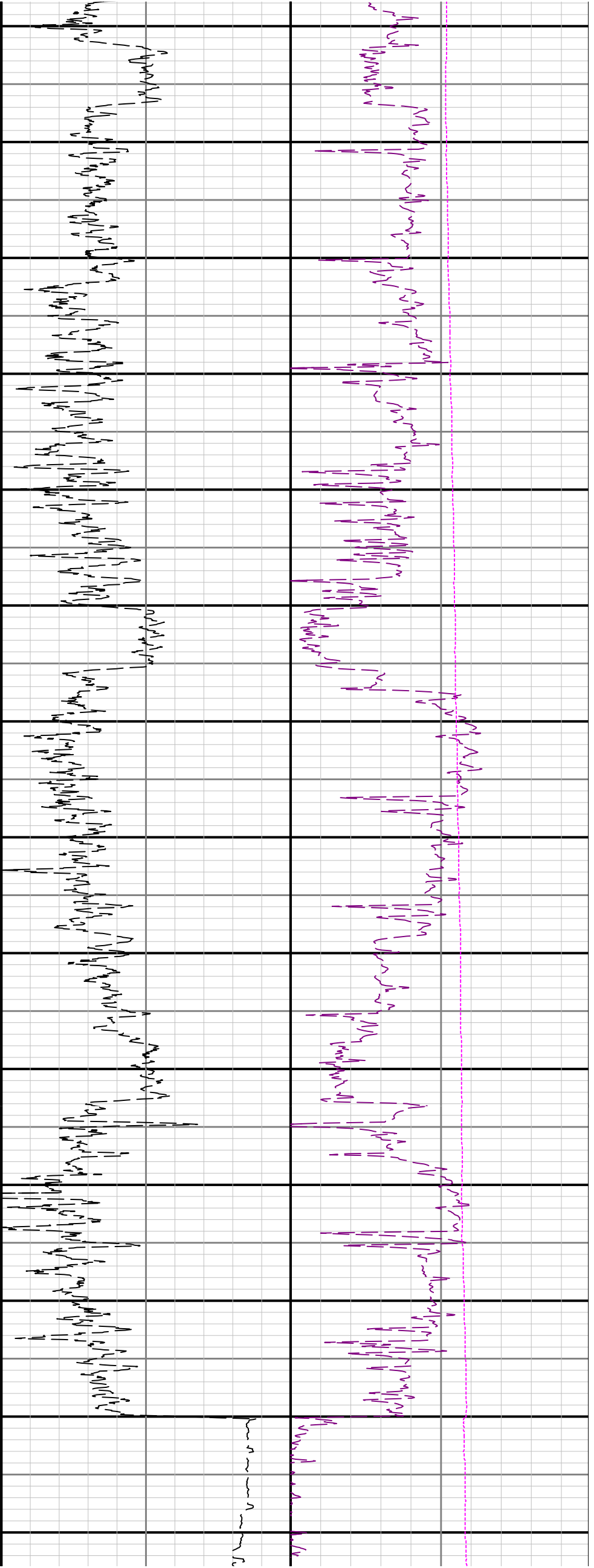
2017-10-19 01:21:31

Top:2032.00

Bottom:17318.00







		1404.60	0.33	349.47	N/A	-2.70	6.02	1404.57	-3570.43	2.71	94.33	0.76	-0.20	-119.97
		1499.07	0.24	343.49	N/A	-2.24	5.92	1499.04	-3475.96	2.25	94.47	0.10	-0.10	-6.33
		1593.74	0.38	213.91	N/A	-2.31	5.69	1593.71	-3381.29	2.32	94.67	0.60	0.15	-136.88
		1688.63	0.15	50.92	N/A	-2.49	5.61	1688.60	-3286.40	2.50	94.89	0.55	-0.24	-171.77
		1783.09	0.25	296.71	N/A	-2.32	5.52	1783.06	-3191.94	2.33	94.46	0.36	0.11	-120.91
		1877.64	0.47	329.12	N/A	-1.90	5.14	1877.60	-3097.40	1.90	94.55	0.31	0.23	34.28
		1972.14	0.47	18.52	N/A	-1.20	5.06	1972.10	-3002.90	1.20	94.50	0.42	0.00	52.28
		2021.00	0.43	28.65	N/A	-0.85	5.21	2020.96	-2954.04	0.85	48.86	0.18	-0.08	20.73
		2081.00	0.87	320.92	N/A	-0.29	5.03	2080.96	-2894.04	0.30	60.00	1.35	0.73	-112.88
		2175.00	4.07	331.97	N/A	3.20	3.01	2174.86	-2800.14	-3.20	94.00	3.43	3.40	11.76
		2270.00	7.20	331.28	N/A	11.40	-1.43	2269.39	-2705.61	-11.41	95.00	3.30	3.29	-0.73
		2364.00	7.54	336.19	N/A	22.21	-6.75	2362.61	-2612.39	-22.22	94.00	0.76	0.36	5.22
		2459.00	7.59	344.26	N/A	33.95	-10.97	2456.79	-2518.21	-33.97	95.00	1.12	0.05	8.49
		2553.00	7.55	351.14	N/A	46.03	-13.61	2549.97	-2425.03	-46.05	94.00	0.96	-0.04	7.32
		2648.00	7.63	355.27	N/A	58.48	-15.09	2644.14	-2330.86	-58.51	95.00	0.58	0.08	4.35
		2743.00	7.58	4.27	N/A	71.02	-15.14	2738.31	-2236.69	-71.04	95.00	1.25	-0.05	9.47
		2837.00	7.16	1.91	N/A	83.05	-14.48	2831.53	-2143.47	-83.08	94.00	0.55	-0.45	-2.51
		2932.00	7.26	355.98	N/A	94.96	-14.71	2925.78	-2049.22	-94.98	95.00	0.79	0.11	-6.24
		3026.00	7.35	350.85	N/A	106.82	-16.08	3019.02	-1955.98	-106.85	94.00	0.70	0.10	-5.46
		3121.00	7.22	345.56	N/A	118.60	-18.54	3113.25	-1861.75	-118.63	95.00	0.72	-0.14	-5.57
		3216.00	7.22	341.38	N/A	130.04	-21.93	3207.50	-1767.50	-130.07	95.00	0.55	0.00	-4.40
		3310.00	7.19	341.33	N/A	141.21	-25.70	3300.76	-1674.24	-141.25	94.00	0.03	-0.03	-0.05
		3405.00	7.15	343.85	N/A	152.52	-29.25	3395.01	-1579.99	-152.57	95.00	0.33	-0.04	2.65
		3499.00	7.15	342.75	N/A	163.73	-32.61	3488.28	-1486.72	-163.78	94.00	0.15	0.00	-1.17
		3594.00	7.14	345.10	N/A	175.08	-35.88	3582.54	-1392.46	-175.14	95.00	0.31	-0.01	2.47
		3688.00	7.21	343.70	N/A	186.39	-39.04	3675.81	-1299.19	-186.45	94.00	0.20	0.07	-1.49
		3783.00	7.10	347.58	N/A	197.84	-41.97	3770.07	-1204.93	-197.91	95.00	0.52	-0.12	4.08
		3877.00	7.20	346.31	N/A	209.24	-44.62	3863.34	-1111.66	-209.31	94.00	0.20	0.11	-1.35
		3972.00	7.31	345.41	N/A	220.87	-47.55	3957.58	-1017.42	-220.95	95.00	0.17	0.12	-0.95
		4067.00	7.32	339.74	N/A	232.40	-51.17	4051.81	-923.19	-232.48	95.00	0.76	0.01	-5.97
		4161.00	7.40	332.35	N/A	243.38	-56.05	4145.03	-829.97	-243.47	94.00	1.01	0.09	-7.86
		4256.00	6.86	326.28	N/A	253.52	-62.04	4239.30	-735.70	-253.61	95.00	0.97	-0.57	-6.39
		4351.00	6.94	331.90	N/A	263.30	-67.89	4333.61	-641.39	-263.41	95.00	0.72	0.08	5.92
		4445.00	6.96	340.12	N/A	273.67	-72.50	4426.92	-548.08	-273.78	94.00	1.06	0.02	8.74
		4540.00	6.97	348.32	N/A	284.72	-75.63	4521.23	-453.77	-284.84	95.00	1.05	0.01	8.63
		4635.00	6.96	349.46	N/A	296.03	-77.85	4615.53	-359.47	-296.15	95.00	0.15	-0.01	1.20
		4729.00	7.02	350.59	N/A	307.29	-79.83	4708.83	-266.17	-307.42	94.00	0.16	0.06	1.20
		4824.00	6.91	346.22	N/A	318.57	-82.14	4803.13	-171.87	-318.70	95.00	0.57	-0.12	-4.60
		4918.00	6.87	346.97	N/A	329.54	-84.75	4896.45	-78.55	-329.67	94.00	0.10	-0.04	0.80
		5013.00	6.84	349.29	N/A	340.63	-87.09	4990.77	15.77	-340.77	95.00	0.29	-0.03	2.44
		5108.00	6.53	352.91	N/A	351.55	-88.80	5085.12	110.12	-351.69	95.00	0.55	-0.33	3.81
		5202.00	7.27	351.23	155.4	362.73	-90.37	5178.44	203.44	-362.88	94.00	0.82	0.79	-1.79
		5296.00	7.28	348.55	155.4	374.45	-92.46	5271.69	296.69	-374.60	94.00	0.36	0.01	-2.85
		5391.00	7.34	345.67	160.8	386.23	-95.16	5365.91	390.91	-386.38	95.00	0.39	0.06	-3.03
		5486.00	7.14	346.36	160.8	397.85	-98.05	5460.16	485.16	-398.00	95.00	0.23	-0.21	0.73
		5580.00	7.30	348.64	163.5	409.38	-100.60	5553.41	578.41	-409.54	94.00	0.35	0.17	2.43
		5675.00	7.04	343.28	163.5	420.87	-103.47	5647.67	672.67	-421.03	95.00	0.76	-0.27	-5.64
		5769.00	6.85	345.69	166.2	431.82	-106.51	5740.98	765.98	-431.99	94.00	0.37	-0.20	2.56
		5864.00	6.82	348.96	168.9	442.85	-108.99	5835.30	860.30	-443.02	95.00	0.41	-0.03	3.44
		5958.00	6.79	351.16	168.9	453.82	-110.91	5928.64	953.64	-453.99	94.00	0.28	-0.03	2.34
		6053.00	6.86	343.86	168.9	464.81	-113.35	6022.97	1047.97	-464.99	95.00	0.92	0.07	-7.68
		6148.00	6.80	345.11	171.6	475.70	-116.38	6117.30	1142.30	-475.88	95.00	0.17	-0.06	1.32
		6242.00	6.79	340.25	174.3	486.31	-119.68	6210.64	1235.64	-486.50	94.00	0.61	-0.01	-5.17
		6337.00	6.44	329.23	174.3	496.17	-124.31	6305.01	1330.01	-496.37	95.00	1.38	-0.37	-11.60
		6431.00	7.03	233.51	174.3	497.28	-131.65	6398.60	1423.60	-497.49	94.00	10.62	0.63	-101.83
		6526.00	14.60	212.45	177.0	483.70	-142.77	6491.87	1516.87	-483.92	95.00	8.86	7.97	-22.17
		6621.00	20.89	198.56	179.7	457.50	-154.60	6582.35	1607.35	-457.74	95.00	7.94	6.62	-14.62
		6715.00	26.48	186.12	182.5	420.72	-162.18	6668.45	1693.45	-420.98	94.00	7.95	5.95	-13.23
		6810.00	32.93	177.02	182.5	373.80	-163.10	6750.96	1775.96	-374.06	95.00	8.27	6.79	-9.58
		6905.00	42.15	174.63	185.2	316.15	-158.76	6826.21	1851.21	-316.40	95.00	9.82	9.71	-2.52
		6999.00	51.47	173.33	185.2	248.08	-151.52	6890.48	1915.48	-248.32	94.00	9.97	9.91	-1.38
		7093.00	60.34	174.02	190.6	170.79	-142.98	6943.12	1968.12	-171.01	94.00	9.46	9.44	0.73
		7188.00	71.23	174.97	193.3	84.67	-134.71	6982.03	2007.03	-84.89	95.00	11.50	11.46	1.00
		7282.00	80.66	177.56	196.0	-6.21	-128.82	7004.84	2029.84	6.01	94.00	10.38	10.03	2.76
		7377.00	87.29	179.72	198.7	-100.60	-126.59	7014.80	2039.80	100.40	95.00	7.34	6.98	2.27
		7471.00	90.22	179.29	201.4	-194.56	-125.78	7016.84	2041.84	194.37	94.00	3.15	3.12	-0.46
		7566.00	89.91	179.29	201.4	-289.56	-124.60	7016.74	2041.74	289.36	95.00	0.33	-0.33	0.00
		7661.00	90.15	180.02	204.1	-384.55	-124.03	7016.69	2041.69	384.36	95.00	0.81	0.25	0.77
		7755.00	90.12	179.98	206.8	-478.55	-124.03	7016.47	2041.47	478.36	94.00	0.05	-0.03	-0.04
		7850.00	90.22	180.46	209.5	-573.55	-124.39	7016.18	2041.18	573.36	95.00	0.52	0.11	0.51
		7944.00	90.28	181.25	212.2	-667.54	-125.80	7015.77	2040.77	667.34	94.00	0.84	0.06	0.84
		8039.00	90.15	179.98	212.2	-762.53	-126.82	7015.42	2040.42	762.33	95.00	1.34	-0.14	-1.34
		8133.00	90.15	180.78	214.9	-856.53	-127.44	7015.17	2040.17	856.33	94.00	0.85	0.00	0.85
		8228.00	90.03	181.20	214.9	-951.51	-129.08	7015.02	2040.02	951.31	95.00	0.46	-0.13	0.44
		8322.00	90.00	181.52	214.9	-1045.49	-131.31	7015.00	2040.00	1045.28	94.00	0.34	-0.03	0.34
		8417.00	90.46	181.09	217.6	-1140.46	-133.48	7014.62	2039.62	1140.25	95.00	0.66	0.48	-0.45
		8511.00	90.37	179.91	217.6	-1234.45	-134.30	7013.93	2038.93	1234.24	94.00	1.26	-0.10	-1.26
		8606.00	90.34	178.55	217.6	-1329.44	-133.02	7013.35	2038.35	1329.23	95.00	1.43	-0.03	-1.43
		8701.00	90.34	178.52	217.6	-1424.41	-130.59	7012.78	2037.78	1424.20	95.00	0.03	0.00	-0.03
		8795.00	90.43	178.34	217.6	-1518.37	-128.02	7012.15	2037.15	1518.17	94.00	0.21	0.10	-0.19
		8889.00	90.43	176.94	223.0	-1612.29	-124.14	7011.45	2036.45	1612.09	94.00	1.49	0.00	-1.49
		8984.00	90.71	176.49	223.0	-1707.12	-118.70	7010.50	2035.50	1706.94	95.00	0.56	0.29	-0.47
		9079.00	90.49	173.31	223.0	-1801.73	-110.26	7009.50	2034.50	1801.56	95.00	3.36	-0.23	-3.35
		9173.00	90.15	169.49	223.0	-1894.66	-96.20	7008.98	2033.98	1894.50	94.00	4.08	-0.36	-4.06
		9268.00	90.18	175.34	217.6	-1988.78	-83.67	7008.71	2033.71	1988.65	95.00	6.16	0.03	6.16
		936												

	9836.00	90.49	187.05	231.1	-2555.80	-77.60	7006.84	2031.84	2555.68	95.00	3.54	0.16	3.54
	9930.00	90.52	188.34	231.1	-2648.95	-90.18	7006.02	2031.02	2648.80	94.00	1.37	0.03	1.37
	10025.00	90.37	185.88	228.4	-2743.21	-101.94	7005.28	2030.28	2743.05	95.00	2.59	-0.16	-2.59
	10120.00	90.25	181.06	228.4	-2838.01	-107.69	7004.76	2029.76	2837.83	95.00	5.08	-0.13	-5.07
	10214.00	90.49	179.46	228.4	-2932.00	-108.11	7004.16	2029.16	2931.83	94.00	1.72	0.26	-1.70
	10309.00	90.49	178.24	231.1	-3026.97	-106.21	7003.34	2028.34	3026.80	95.00	1.28	0.00	-1.28
	10404.00	90.40	177.95	231.1	-3121.92	-103.05	7002.61	2027.61	3121.75	95.00	0.32	-0.09	-0.31
	10498.00	90.49	178.21	233.8	-3215.86	-99.90	7001.88	2026.88	3215.70	94.00	0.29	0.10	0.28
	10593.00	90.40	178.38	236.5	-3310.82	-97.07	7001.14	2026.14	3310.66	95.00	0.20	-0.09	0.18
	10687.00	90.31	186.08	239.2	-3404.67	-100.73	7000.55	2025.55	3404.51	94.00	8.19	-0.10	8.19
	10782.00	90.31	186.30	233.8	-3499.12	-110.97	7000.04	2025.04	3498.94	95.00	0.23	0.00	0.23
	10876.00	90.40	180.41	231.1	-3592.92	-116.47	6999.46	2024.46	3592.73	94.00	6.27	0.10	-6.27
	10971.00	90.25	176.97	233.8	-3687.87	-114.30	6998.92	2023.92	3687.69	95.00	3.62	-0.16	-3.62
	11065.00	89.94	174.23	233.8	-3781.59	-107.09	6998.76	2023.76	3781.42	94.00	2.93	-0.33	-2.91
	11160.00	89.75	177.15	236.5	-3876.31	-99.95	6999.02	2024.02	3876.15	95.00	3.08	-0.20	3.07
	11255.00	89.69	177.60	239.2	-3971.21	-95.60	6999.48	2024.48	3971.05	95.00	0.48	-0.06	0.47
	11349.00	89.72	176.44	239.2	-4065.08	-90.71	6999.97	2024.97	4064.93	94.00	1.23	0.03	-1.23
	11443.00	89.91	177.28	241.9	-4158.94	-85.56	7000.27	2025.27	4158.80	94.00	0.92	0.20	0.89
	11538.00	89.75	177.10	239.2	-4253.82	-80.91	7000.55	2025.55	4253.69	95.00	0.25	-0.17	-0.19
	11633.00	89.72	175.88	241.9	-4348.64	-75.09	7000.99	2025.99	4348.52	95.00	1.28	-0.03	-1.28
	11727.00	89.63	176.58	241.9	-4442.43	-68.91	7001.53	2026.53	4442.32	94.00	0.75	-0.10	0.74
	11822.00	89.66	178.06	241.9	-4537.33	-64.47	7002.11	2027.11	4537.22	95.00	1.56	0.03	1.56
	11916.00	90.58	179.39	241.9	-4631.30	-62.38	7001.92	2026.92	4631.20	94.00	1.72	0.98	1.41
	12011.00	90.71	180.41	244.6	-4726.29	-62.21	7000.85	2025.85	4726.19	95.00	1.08	0.14	1.07
	12106.00	90.55	181.67	247.3	-4821.27	-63.93	6999.80	2024.80	4821.16	95.00	1.34	-0.17	1.33
	12200.00	90.46	182.46	244.6	-4915.20	-67.32	6998.98	2023.98	4915.09	94.00	0.85	-0.10	0.84
	12295.00	90.36	181.98	247.3	-5010.13	-71.00	6998.30	2023.30	5010.01	95.00	0.52	-0.11	-0.51
	12390.00	90.39	180.89	247.3	-5105.10	-73.38	6997.67	2022.67	5104.97	95.00	1.15	0.03	-1.15
	12484.00	90.52	180.16	247.3	-5199.09	-74.24	6996.93	2021.93	5198.97	94.00	0.79	0.14	-0.78
	12579.00	90.49	179.21	250.0	-5294.08	-73.72	6996.09	2021.09	5293.96	95.00	1.00	-0.03	-1.00
	12673.00	90.76	179.37	250.0	-5388.07	-72.55	6995.06	2020.06	5387.95	94.00	0.33	0.29	0.17
	12768.00	90.64	179.00	250.0	-5483.05	-71.20	6993.90	2018.90	5482.93	95.00	0.41	-0.13	-0.39
	12862.00	90.61	179.96	252.7	-5577.04	-70.35	6992.88	2017.88	5576.92	94.00	1.02	-0.03	1.02
	12957.00	90.64	180.51	252.7	-5672.03	-70.74	6991.84	2016.84	5671.92	95.00	0.58	0.03	0.58
	13052.00	90.39	180.15	250.0	-5767.03	-71.29	6990.99	2015.99	5766.91	95.00	0.46	-0.26	-0.38
	13146.00	90.86	178.98	252.7	-5861.02	-70.57	6989.96	2014.96	5860.90	94.00	1.34	0.50	-1.24
	13241.00	90.76	178.07	252.7	-5955.98	-68.13	6988.62	2013.62	5955.86	95.00	0.96	-0.11	-0.96
	13336.00	90.39	177.19	252.7	-6050.89	-64.20	6987.67	2012.67	6050.78	95.00	1.00	-0.39	-0.93
	13430.00	90.39	176.66	255.4	-6144.75	-59.16	6987.03	2012.03	6144.65	94.00	0.56	0.00	-0.56
	13525.00	90.42	176.15	255.4	-6239.56	-53.20	6986.36	2011.36	6239.47	95.00	0.54	0.03	-0.54
	13620.00	90.36	175.62	255.4	-6334.32	-46.38	6985.71	2010.71	6334.23	95.00	0.56	-0.06	-0.56
	13714.00	90.21	175.65	258.1	-6428.04	-39.23	6985.24	2010.24	6427.97	94.00	0.16	-0.16	0.03
	13809.00	90.30	175.98	255.4	-6522.79	-32.30	6984.82	2009.82	6522.73	95.00	0.36	0.09	0.35
	13903.00	90.30	176.27	255.4	-6616.57	-25.94	6984.33	2009.33	6616.52	94.00	0.31	0.00	0.31
	13998.00	90.36	177.28	258.1	-6711.42	-20.60	6983.78	2008.78	6711.38	95.00	1.07	0.06	1.06
	14093.00	90.46	177.28	258.1	-6806.31	-16.09	6983.10	2008.10	6806.27	95.00	0.11	0.11	0.00
	14187.00	90.24	177.31	260.8	-6900.20	-11.66	6982.52	2007.52	6900.17	94.00	0.24	-0.23	0.03
	14282.00	90.21	178.30	258.1	-6995.13	-8.02	6982.15	2007.15	6995.11	95.00	1.04	-0.03	1.04
	14377.00	90.36	179.13	260.8	-7090.10	-5.89	6981.68	2006.68	7090.09	95.00	0.89	0.16	0.87
	14471.00	90.33	181.44	260.8	-7184.09	-6.35	6981.11	2006.11	7184.08	94.00	2.46	-0.03	2.46
	14566.00	90.33	184.27	260.8	-7278.97	-11.09	6980.57	2005.57	7278.94	95.00	2.98	0.00	2.98
	14661.00	90.33	178.81	260.8	-7373.89	-13.64	6980.02	2005.02	7373.86	95.00	5.75	0.00	-5.75
	14755.00	90.39	178.82	260.8	-7467.87	-11.69	6979.43	2004.43	7467.84	94.00	0.06	0.06	0.01
	14850.00	90.24	179.46	255.4	-7562.86	-10.27	6978.91	2003.91	7562.83	95.00	0.69	-0.16	0.67
	14945.00	90.36	180.58	260.8	-7657.86	-10.30	6978.41	2003.41	7657.83	95.00	1.19	0.13	1.18
	15039.00	90.24	180.47	260.8	-7751.85	-11.16	6977.92	2002.92	7751.82	94.00	0.17	-0.13	-0.12
	15134.00	90.42	179.54	263.5	-7846.85	-11.17	6977.37	2002.37	7846.82	95.00	1.00	0.19	-0.98
	15229.00	90.21	178.28	263.5	-7941.83	-9.36	6976.85	2001.85	7941.80	95.00	1.34	-0.22	-1.33
	15323.00	90.49	174.68	263.5	-8035.63	-3.59	6976.27	2001.27	8035.62	94.00	3.84	0.30	-3.83
	15418.00	90.36	176.20	239.2	-8130.33	3.96	6975.57	2000.57	8130.32	95.00	1.61	-0.14	1.60
	15513.00	90.21	177.59	263.5	-8225.18	9.10	6975.09	2000.09	8225.19	95.00	1.47	-0.16	1.46
	15607.00	90.39	177.12	263.5	-8319.08	13.44	6974.60	1999.60	8319.09	94.00	0.54	0.19	-0.50
	15702.00	90.24	178.05	263.5	-8414.00	17.45	6974.08	1999.08	8414.01	95.00	0.99	-0.16	0.98
	15797.00	90.18	179.75	266.2	-8508.97	19.27	6973.73	1998.73	8508.99	95.00	1.79	-0.06	1.79
	15892.00	90.30	180.54	263.5	-8603.97	19.03	6973.33	1998.33	8603.99	95.00	0.84	0.13	0.83
	15986.00	90.36	180.85	266.2	-8697.96	17.89	6972.79	1997.79	8697.98	94.00	0.34	0.06	0.33
	16080.00	90.33	182.24	385.2	-8791.92	15.35	6972.23	1997.23	8791.94	94.00	1.48	-0.03	1.48
	16175.00	90.46	182.34	263.5	-8886.85	11.56	6971.57	1996.57	8886.85	95.00	0.17	0.14	0.11
	16270.00	90.27	182.49	266.2	-8981.76	7.56	6970.97	1995.97	8981.76	95.00	0.25	-0.20	0.16
	16364.00	90.42	182.07	269.0	-9075.68	3.82	6970.40	1995.40	9075.68	94.00	0.47	0.16	-0.45
	16459.00	90.27	180.41	269.0	-9170.66	1.76	6969.83	1994.83	9170.65	95.00	1.75	-0.16	-1.75
	16553.00	90.49	178.98	269.0	-9264.65	2.26	6969.20	1994.20	9264.64	94.00	1.54	0.23	-1.52
	16648.00	90.42	179.33	269.0	-9359.64	3.66	6968.45	1993.45	9359.63	95.00	0.38	-0.07	0.37
	16742.00	90.42	178.14	271.7	-9453.61	5.74	6967.76	1992.76	9453.61	94.00	1.27	0.00	-1.27
	16837.00	90.36	176.77	271.7	-9548.51	9.95	6967.11	1992.11	9548.52	95.00	1.44	-0.06	-1.44
	16932.00	89.99	176.61	269.0	-9643.35	15.44	6966.82	1991.82	9643.37	95.00	0.42	-0.39	-0.17
	17026.00	90.24	176.70	271.7	-9737.19	20.92	6966.64	1991.64	9737.21	94.00	0.28	0.27	0.10
	17121.00	90.15	175.88	271.7	-9831.99	27.07	6966.31	1991.31	9832.02	95.00	0.87	-0.09	-0.86
	17215.00	90.27	177.91	274.4	-9925.85	32.16	6965.97	1990.97	9925.89	94.00	2.16	0.13	2.16
	17294.00	90.15	178.72	269.0	-10004.81	34.49	6965.68	1990.68	10004.85	79.00	1.04	-0.15	1.03
Projection	17318.00	90.15	178.72	N/A	-10028.81	35.02	6965.62	1990.62	10028.85	24.00	0.00	0.00	0.00