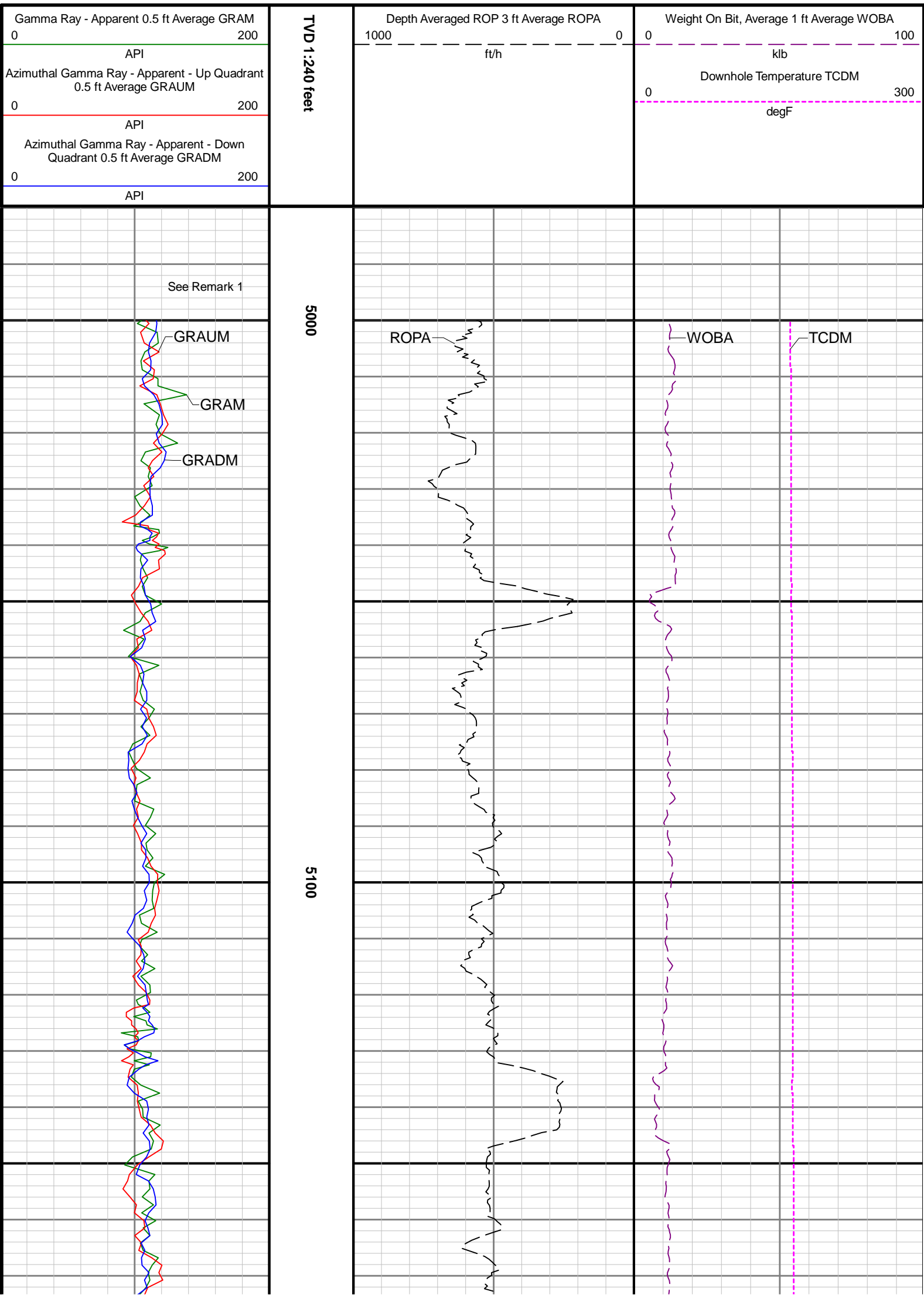
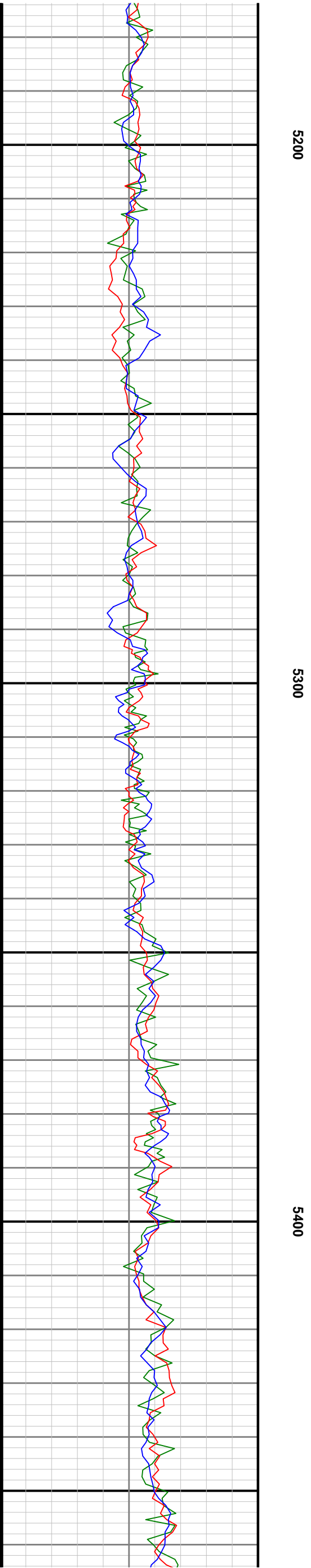
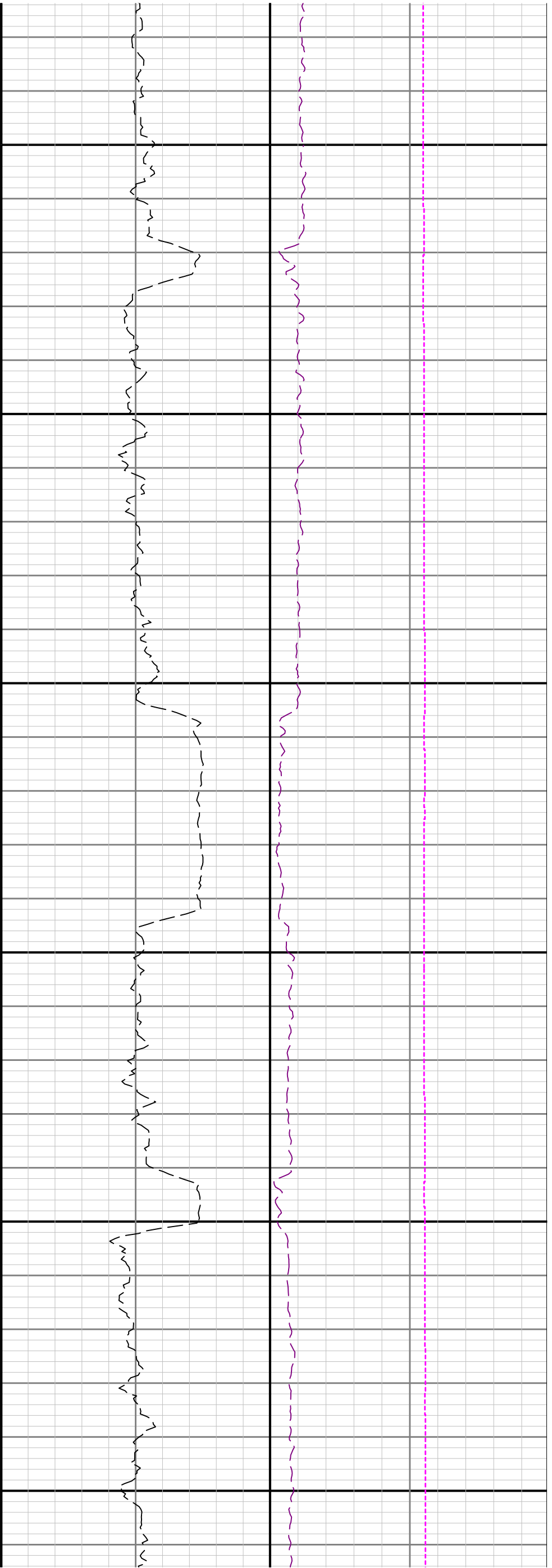


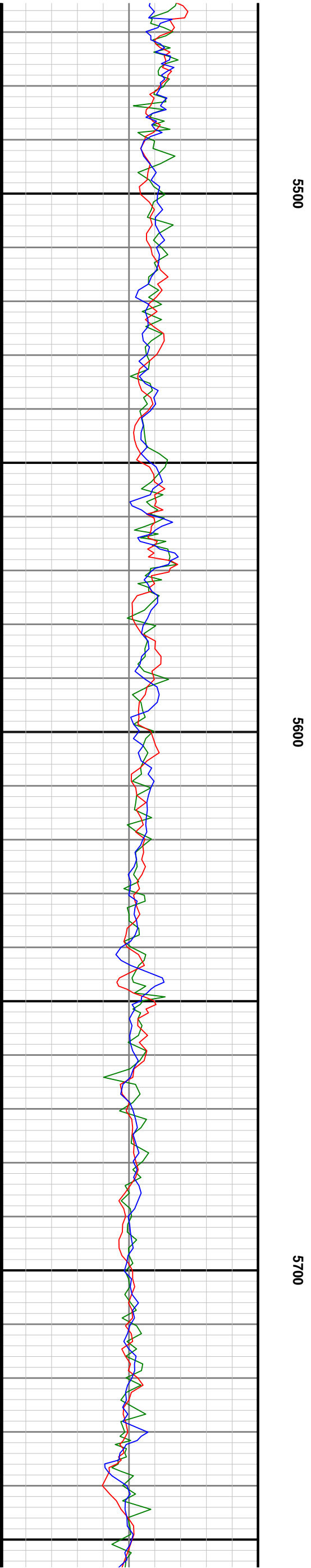
- 1612 feet TVD).
- 3 Baker Hughes LWD Run 2 used the 6 3/4 inch NaviGamma service (Gamma Ray, Azimuthal Gamma Ray and Directional) behind an 8 1/2 inch bit and rotary steerable assembly to drill from 1612 to 11657 feet MD (1612 to 6391 feet TVD).
- 4 The Gamma Ray Apparent (GRAM) data is presented from 0 to 200 API, per customer's request.

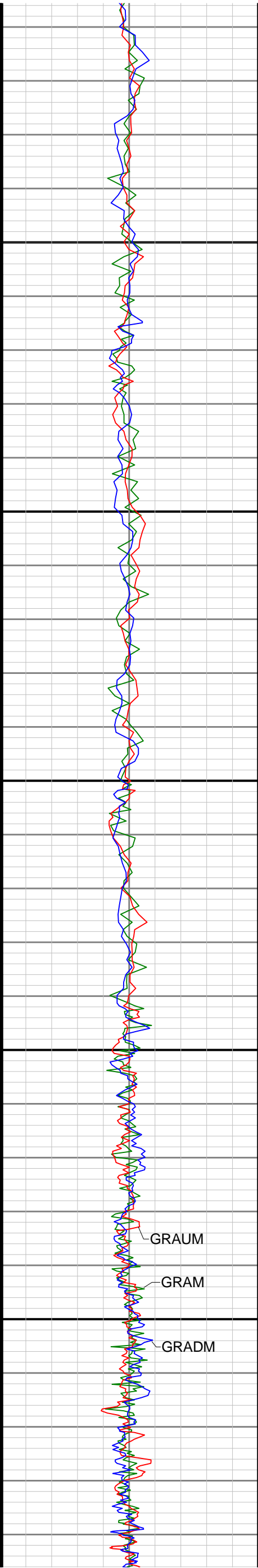
Remarks				
Number	Measured Depth (ft)	Hole Section (in)	Run No.	Remark
1	5090.00	8.500	2	The Gamma Ray Apparent (GRAM) log starts at 5000 feet, per customer's request.

Curve Mnemonics		
Presented Curves	Description	Units
ROPA	Depth Averaged ROP 3 ft Average	ft/h
WOBA	Weight On Bit, Average 1 ft Average	klb
GRAM	Gamma Ray - Apparent - Memory 0.5 ft Average	API
GRADM	Gamma Ray - Apparent - Down Quadrant - Memory 0.5 ft Average	API
GRAUM	Gamma Ray - Apparent - Up Quadrant - Memory 0.5 ft Average	API
TCDM	Directional Real-Time Survey Temperature	degF









5800

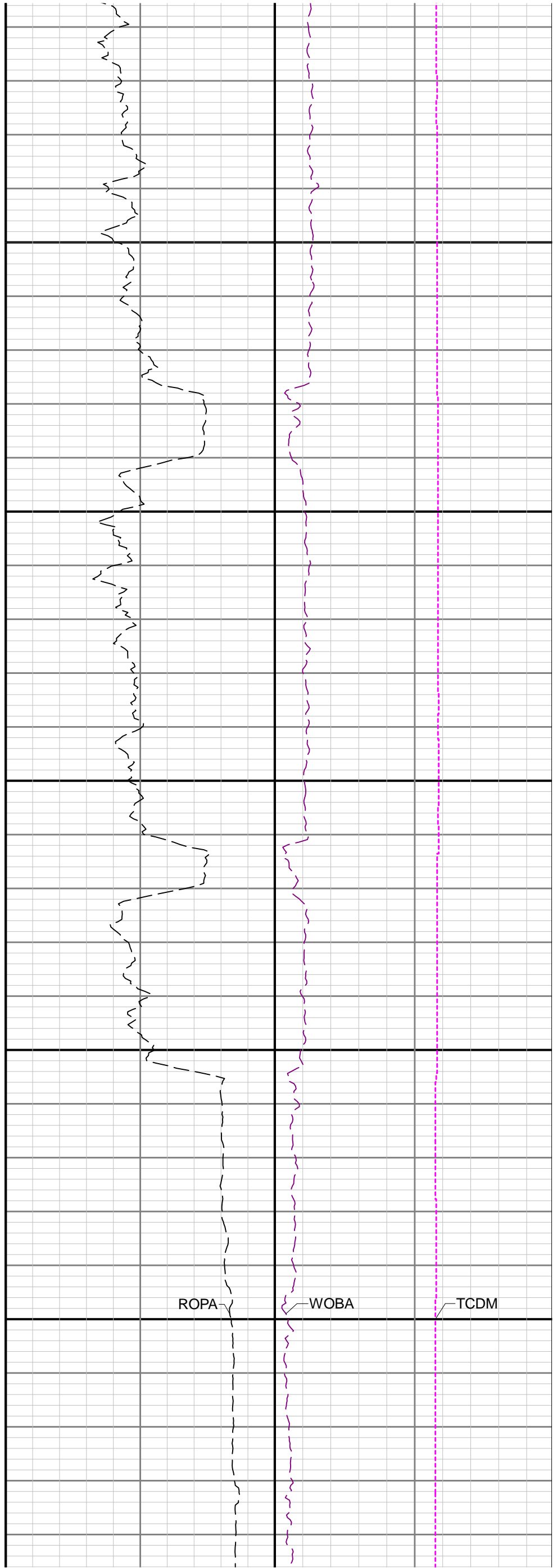
5900

6000

GRAUM

GRAM

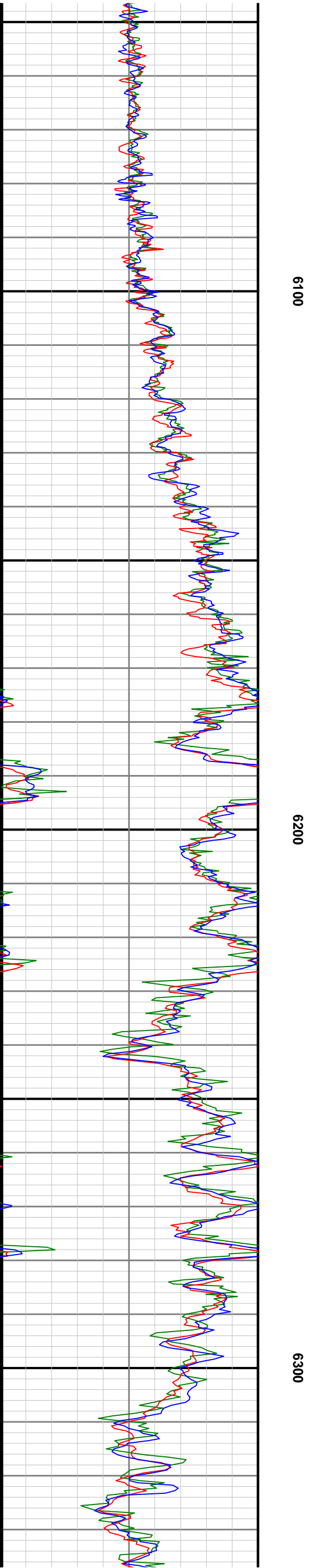
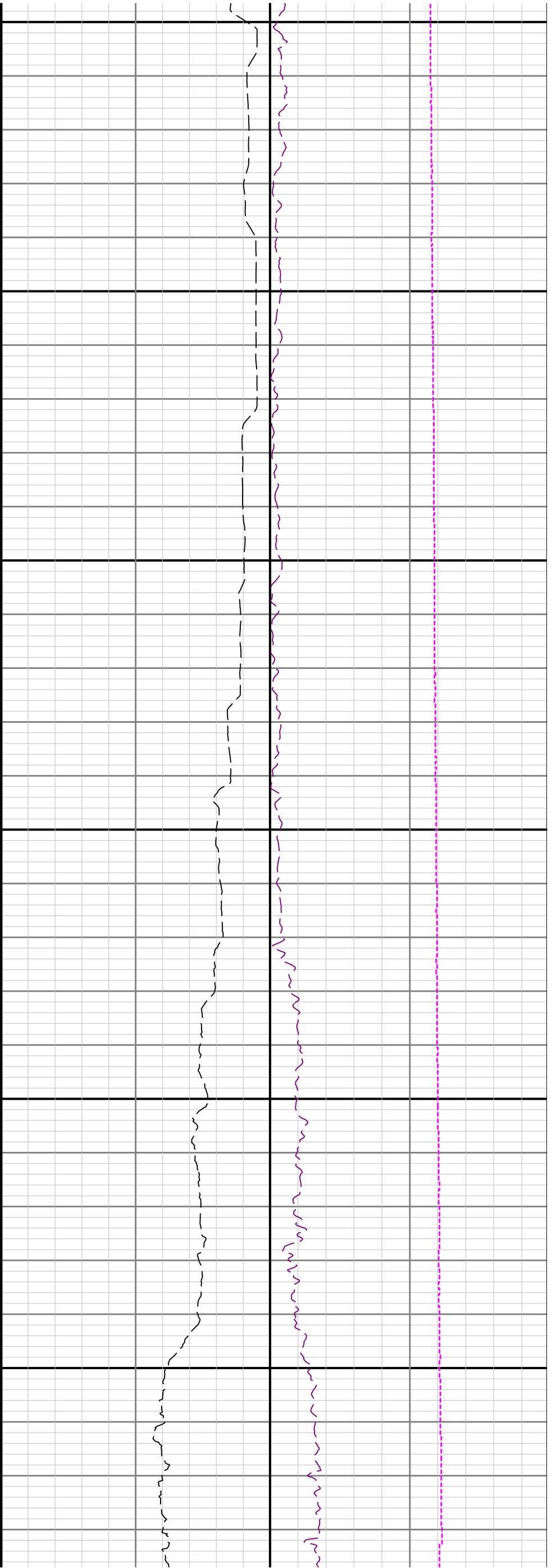
GRADM

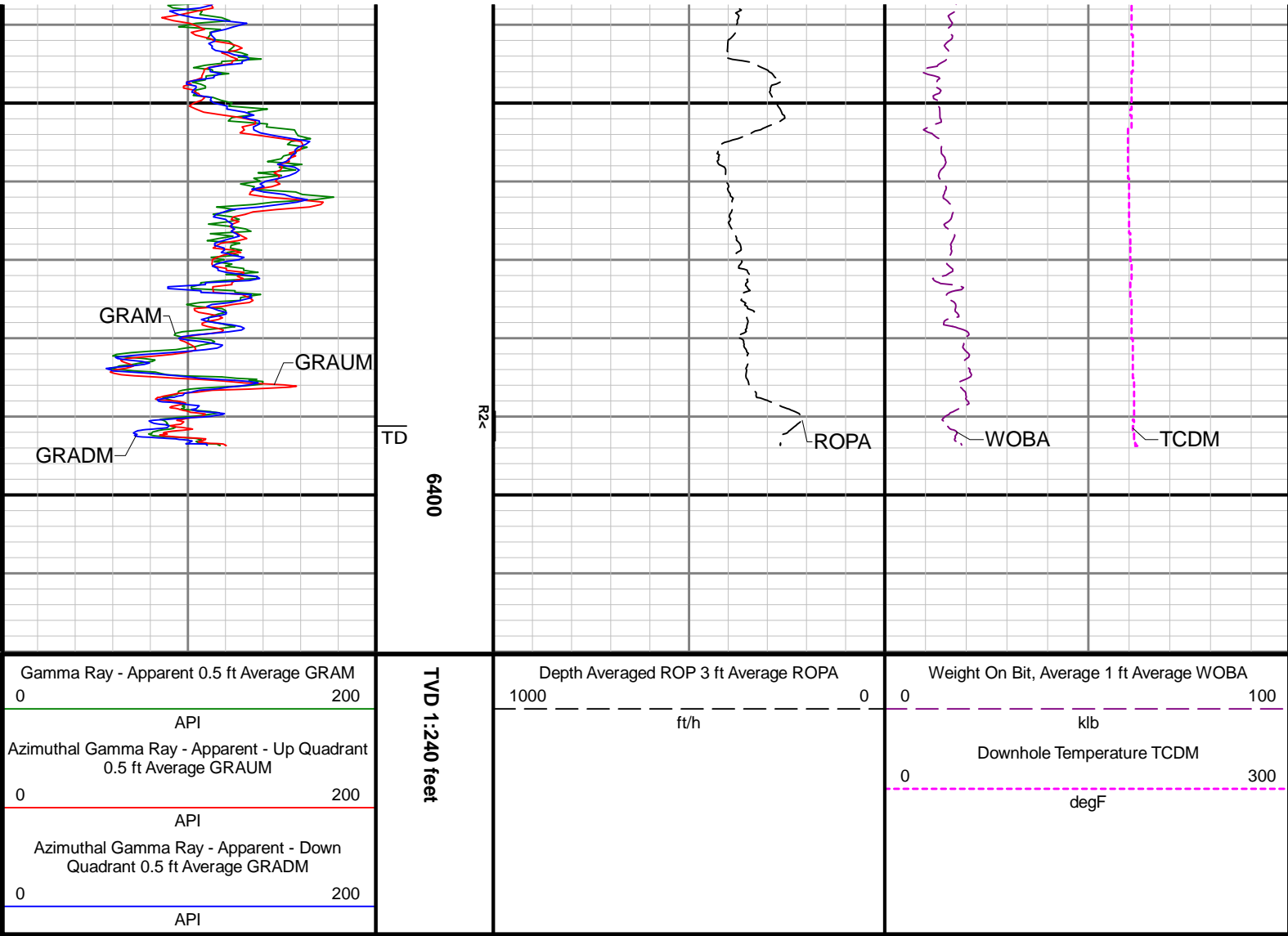


ROPA

WOBA

TCDM





Directional Survey Summary

Latitude:	040° 22' 53.918" N	Longitude:	104° 26' 42.914" W
North Reference:	True	Drill Depth Zero:	Rig Floor
Vertical Datum is:	Mean Sea Level	Vertical Datum to DDZ: (ft)	4570.00
Vertical Section North: (ft)	0.00	Vertical Section East: (ft)	0.00
Vertical Section Azimuth: (deg)	175.27		
Grid Convergence: (deg)	N/A	Magnetic Declination: (deg)	8.08
Total Correction: (deg)	8.08	TVD Calculation Method:	Minimum Curvature
Magnetic Correction:	On	Local Magnetic Field: (nT)	52332
Local Magnetic Dip Angle: (deg)	66.84	Local Gravity Field: (m/s2)	9.801

Tie-In / Projection	Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	Temperature (degF)	North (ft)	East (ft)	True Vertical Depth (ft)	TVD Subsea (ft)	Vertical Section (ft)	Course Length (ft)	Dog Leg Severity (deg/100ft)	Build Rate (deg/100ft)	Turn Rate (deg/100ft)
Tie-In	17.00	0.00	0.00	N/A	0.00	0.00	17.00	-4553.00	0.00	0.00	0.00	0.00	0.00
	131.00	0.55	65.00	-18457.9	0.23	0.50	131.00	-4439.00	-0.19	114.00	0.48	0.48	57.02
	219.00	0.17	7.92	85.1	0.54	0.90	219.00	-4351.00	-0.46	88.00	0.54	-0.43	-64.86
	309.00	0.46	37.39	87.8	0.96	1.13	309.00	-4261.00	-0.86	90.00	0.36	0.32	32.74
	396.00	0.19	43.38	87.8	1.34	1.45	395.99	-4174.01	-1.22	87.00	0.31	-0.31	6.89
	486.00	0.55	342.74	87.8	1.86	1.42	485.99	-4084.01	-1.74	90.00	0.54	0.40	-67.38
	575.00	0.43	66.01	87.8	2.41	1.60	574.99	-3995.01	-2.27	89.00	0.74	-0.13	93.56
	665.00	0.07	264.59	90.5	2.54	1.85	664.99	-3905.01	-2.38	90.00	0.55	-0.40	-179.36
	755.00	0.37	17.74	93.2	2.81	1.89	754.99	-3815.01	-2.64	90.00	0.45	0.33	125.72
	843.00	0.23	50.18	93.2	3.19	2.11	842.99	-3727.01	-3.01	88.00	0.24	-0.16	36.86
	934.00	0.19	61.42	93.2	3.38	2.38	933.99	-3636.01	-3.17	91.00	0.06	-0.04	12.35
	1023.00	0.63	171.67	87.8	2.97	2.58	1022.98	-3547.02	-2.75	89.00	0.81	0.49	123.88
	1114.00	0.70	179.78	90.5	1.92	2.66	1113.98	-3456.02	-1.69	91.00	0.13	0.08	8.91
	1206.00	0.64	188.22	93.2	0.85	2.58	1205.97	-3364.03	-0.63	92.00	0.13	-0.07	9.17
	1295.00	0.17	303.27	93.2	0.43	2.40	1294.97	-3275.03	-0.23	89.00	0.82	-0.53	129.27
	1383.00	0.67	251.91	93.2	0.34	1.81	1382.97	-3187.03	-0.19	88.00	0.66	0.57	-58.36
	1474.00	0.72	264.21	93.2	0.12	0.73	1473.96	-3096.04	-0.06	91.00	0.17	0.05	13.52
	1558.00	0.65	284.35	93.2	0.18	-0.26	1557.96	-3012.04	-0.20	84.00	0.30	-0.08	23.98
	1608.00	0.25	241.38	93.2	0.20	-0.63	1607.95	-2962.05	-0.25	50.00	0.99	-0.80	-85.94
	1698.00	0.03	359.56	96.0	0.13	-0.80	1697.95	-2872.05	-0.19	90.00	0.29	-0.24	131.31
	1787.00	0.28	74.32	98.7	0.21	-0.59	1786.95	-2783.05	-0.26	89.00	0.31	0.28	84.00
	1877.00	0.64	306.51	101.4	0.57	-0.78	1876.95	-2693.05	-0.63	90.00	0.93	0.40	-142.01
	2057.00	0.14	182.79	106.8	0.95	-1.60	2056.95	-2513.05	-1.08	180.00	0.40	-0.28	-68.73
	2146.00	0.32	346.04	109.5	1.08	-1.67	2145.95	-2424.05	-1.21	89.00	0.51	0.20	183.43
	2237.00	2.22	160.28	114.9	-0.33	-1.13	2236.93	-2333.07	0.24	91.00	2.79	2.09	191.47
	2327.00	4.38	159.82	114.9	-5.20	0.64	2326.77	-2243.23	5.23	90.00	2.40	2.40	-0.51
	2416.00	5.95	160.35	117.6	-12.73	3.36	2415.41	-2154.59	12.97	89.00	1.76	1.76	0.60
	2505.00	7.42	157.81	120.3	-22.40	7.09	2503.80	-2066.20	22.91	89.00	1.68	1.65	-2.85
	2594.00	9.53	157.29	120.3	-34.52	12.10	2591.82	-1978.18	35.40	89.00	2.37	2.37	-0.58
	2685.00	11.57	157.25	123.0	-49.89	18.54	2681.28	-1888.72	51.24	91.00	2.24	2.24	-0.04
	2775.00	12.83	156.02	125.7	-67.34	26.09	2769.25	-1800.75	69.26	90.00	1.43	1.40	-1.37
	2865.00	13.00	147.23	128.4	-84.98	35.63	2856.98	-1713.02	87.63	90.00	2.19	0.19	-9.77
	2956.00	14.96	148.63	131.1	-103.62	47.29	2945.28	-1624.72	107.17	91.00	2.19	2.15	1.54
	3045.00	15.89	150.58	131.1	-124.04	59.25	3031.07	-1538.93	128.51	89.00	1.20	1.04	2.19
	3133.00	15.87	152.12	133.8	-145.17	70.80	3115.72	-1454.28	150.51	88.00	0.48	-0.02	1.75
	3223.00	15.86	154.13	136.5	-167.11	81.92	3202.29	-1367.71	173.30	90.00	0.61	-0.01	2.23
	3315.00	15.91	154.64	136.5	-189.82	92.80	3290.78	-1279.22	196.83	92.00	0.16	0.05	0.55
	3406.00	16.50	152.58	139.2	-212.56	104.10	3378.16	-1191.84	220.42	91.00	0.91	0.65	-2.26
	3498.00	16.37	146.00	139.2	-234.91	117.36	3466.41	-1103.59	243.79	92.00	2.03	-0.14	-7.15
	3589.00	16.41	143.90	139.2	-255.93	132.11	3553.71	-1016.29	265.95	91.00	0.65	0.04	-2.31
	3678.00	16.19	143.12	144.6	-276.01	146.96	3639.13	-930.87	287.19	89.00	0.35	-0.25	-0.88
	3767.00	16.25	144.29	144.6	-296.04	161.68	3724.59	-845.41	308.37	89.00	0.37	0.07	1.31
	3858.00	15.87	146.04	139.8	-316.75	176.44	3812.93	-757.89	330.84	91.00	0.64	0.24	1.89

	3858.00	15.97	146.01	279.8	-316.76	176.11	3812.02	-757.98	330.21	91.00	0.61	-0.31	1.89
	3949.00	16.06	150.78	147.3	-338.13	189.25	3899.49	-670.51	352.58	91.00	1.45	0.10	5.24
	4038.00	16.22	153.60	147.3	-360.01	200.79	3984.98	-585.02	375.34	89.00	0.90	0.18	3.17
	4128.00	16.18	151.77	150.0	-382.31	212.31	4071.41	-498.59	398.52	90.00	0.57	-0.04	-2.03
	4219.00	16.17	149.97	150.0	-404.46	224.65	4158.81	-411.19	421.60	91.00	0.55	-0.01	-1.98
	4310.00	16.28	150.99	152.7	-426.58	237.17	4246.19	-323.81	444.69	91.00	0.34	0.12	1.12
	4399.00	16.11	157.05	152.7	-448.86	248.04	4331.66	-238.34	467.79	89.00	1.91	-0.19	6.81
	4489.00	16.32	160.43	150.0	-472.28	257.14	4418.08	-151.92	491.87	90.00	1.07	0.23	3.76
	4580.00	16.38	166.81	152.7	-496.82	264.36	4505.41	-64.59	516.92	91.00	1.97	0.07	7.01
	4672.00	16.58	167.86	155.4	-522.28	270.08	4593.63	23.63	542.77	92.00	0.39	0.22	1.14
	4763.00	16.75	162.81	155.4	-547.50	276.68	4680.81	110.81	568.45	91.00	1.60	0.19	-5.55
	4855.00	16.76	158.66	158.1	-572.52	285.43	4768.91	198.91	594.11	92.00	1.30	0.01	-4.51
	4943.00	16.60	152.99	158.1	-595.54	295.75	4853.21	283.21	617.90	88.00	1.86	-0.18	-6.44
	5032.00	16.64	151.08	160.8	-618.02	307.69	4938.49	368.49	641.29	89.00	0.62	0.04	-2.15
	5123.00	16.56	149.42	160.8	-640.59	320.59	5025.70	455.70	664.85	91.00	0.53	-0.09	-1.82
	5212.00	16.66	150.20	163.5	-662.58	333.38	5110.99	540.99	687.82	89.00	0.27	0.11	0.88
	5301.00	16.64	151.25	163.5	-684.82	345.85	5196.26	626.26	711.01	89.00	0.34	-0.02	1.18
	5392.00	16.65	153.05	166.2	-707.87	358.03	5283.45	713.45	734.98	91.00	0.57	0.01	1.98
	5482.00	16.76	151.16	166.2	-730.73	370.13	5369.65	799.65	758.76	90.00	0.62	0.12	-2.10
	5574.00	16.72	151.72	166.2	-754.00	382.80	5457.75	887.75	783.00	92.00	0.18	-0.04	0.61
	5666.00	16.74	150.65	168.9	-777.21	395.56	5545.85	975.85	807.18	92.00	0.34	0.02	-1.16
	5757.00	16.78	148.14	168.9	-799.79	408.92	5632.99	1062.99	830.78	91.00	0.80	0.04	-2.76
	5846.00	16.48	148.05	171.6	-821.41	422.38	5718.27	1148.27	853.44	89.00	0.34	-0.34	-0.10
	5936.00	16.65	147.02	174.3	-843.06	436.15	5804.53	1234.53	876.15	90.00	0.38	0.19	-1.14
	6024.00	16.48	145.43	174.3	-863.91	450.10	5888.88	1318.88	898.08	88.00	0.55	-0.19	-1.81
	6112.00	18.06	142.44	174.3	-885.00	465.50	5972.91	1402.91	920.38	88.00	2.06	1.80	-3.40
	6202.00	25.81	142.51	174.3	-911.65	485.96	6056.33	1486.33	948.62	90.00	8.61	8.61	0.08
	6292.00	34.23	159.28	177.0	-951.01	506.91	6134.33	1564.33	989.57	90.00	13.13	9.36	18.63
	6381.00	43.83	172.71	179.7	-1005.22	519.73	6203.51	1633.51	1044.65	89.00	14.33	10.79	15.09
	6471.00	53.32	180.58	179.7	-1072.43	523.33	6263.04	1693.04	1111.93	90.00	12.40	10.54	8.74
	6560.00	64.28	181.83	182.5	-1148.42	521.69	6309.07	1739.07	1187.53	89.00	12.37	12.31	1.40
	6651.00	69.50	180.88	182.5	-1232.06	519.72	6344.78	1774.78	1270.72	91.00	5.82	5.74	-1.04
	6739.00	74.65	180.72	179.7	-1315.76	518.55	6371.85	1801.85	1354.03	88.00	5.85	5.85	-0.18
	6830.00	83.80	181.03	182.5	-1405.05	517.19	6388.85	1818.85	1442.91	91.00	10.06	10.05	0.34
	6920.00	89.97	180.82	185.2	-1494.86	515.74	6393.74	1823.74	1532.29	90.00	6.86	6.86	-0.23
	7010.00	90.03	181.19	296.0	-1584.84	514.16	6393.74	1823.74	1621.84	90.00	0.42	0.07	0.41
	7096.00	90.18	180.07	185.2	-1670.84	513.21	6393.58	1823.58	1707.47	86.00	1.31	0.17	-1.30
	7185.00	89.91	177.81	187.9	-1759.82	514.86	6393.51	1823.51	1796.28	89.00	2.56	-0.30	-2.54
	7275.00	90.00	174.24	193.3	-1849.58	521.10	6393.58	1823.58	1886.26	90.00	3.97	0.10	-3.97
	7365.00	90.31	176.15	193.3	-1939.26	528.64	6393.34	1823.34	1976.25	90.00	2.15	0.34	2.12
	7456.00	89.94	178.62	196.0	-2030.16	532.79	6393.14	1823.14	2067.18	91.00	2.74	-0.41	2.71
	7544.00	90.18	179.70	193.3	-2118.15	534.08	6393.05	1823.05	2154.98	88.00	1.26	0.27	1.23
	7634.00	90.15	177.15	187.9	-2208.11	536.55	6392.79	1822.79	2244.83	90.00	2.83	-0.03	-2.83
	7725.00	90.18	177.19	193.3	-2299.00	541.04	6392.52	1822.52	2335.78	91.00	0.05	0.03	0.04
	7814.00	90.06	178.06	187.9	-2387.92	544.73	6392.34	1822.34	2424.71	89.00	0.99	-0.13	0.98
	7904.00	89.94	178.95	198.7	-2477.89	547.08	6392.34	1822.34	2514.56	90.00	1.00	-0.13	0.99
	7993.00	90.22	179.66	198.7	-2566.88	548.16	6392.21	1822.21	2603.34	89.00	0.86	0.31	0.80
	8085.00	89.94	178.77	201.4	-2658.87	549.42	6392.09	1822.09	2695.12	92.00	1.01	-0.30	-0.97
	8174.00	90.09	182.92	204.1	-2747.84	548.11	6392.06	1822.06	2783.68	89.00	4.67	0.17	4.66
	8264.00	90.00	178.66	206.8	-2837.81	546.87	6391.99	1821.99	2873.24	90.00	4.73	-0.10	-4.73
	8354.00	90.28	177.15	206.8	-2927.75	550.16	6391.77	1821.77	2963.14	90.00	1.71	0.31	-1.68
	8446.00	89.88	178.48	209.5	-3019.68	553.67	6391.64	1821.64	3055.05	92.00	1.51	-0.43	1.45
	8533.00	90.06	178.04	212.2	-3106.64	556.31	6391.69	1821.69	3141.93	87.00	0.55	0.21	-0.51
	8622.00	90.00	180.96	214.9	-3195.63	557.08	6391.64	1821.64	3230.68	89.00	3.28	-0.07	3.28
	8712.00	90.15	183.28	214.9	-3285.56	553.75	6391.52	1821.52	3320.03	90.00	2.58	0.17	2.58
	8801.00	90.22	186.01	217.6	-3374.26	546.55	6391.24	1821.24	3407.83	89.00	3.07	0.08	3.07
	8891.00	89.82	185.00	220.3	-3463.84	537.91	6391.21	1821.21	3496.40	90.00	1.21	-0.44	-1.12
	8980.00	90.00	183.56	220.3	-3552.59	531.27	6391.35	1821.35	3584.30	89.00	1.63	0.20	-1.62
	9069.00	90.00	182.79	220.3	-3641.45	526.34	6391.35	1821.35	3672.45	89.00	0.87	0.00	-0.87
	9161.00	90.00	181.47	223.0	-3733.39	522.92	6391.35	1821.35	3763.79	92.00	1.43	0.00	-1.43
	9252.00	89.91	179.42	223.0	-3824.38	522.22	6391.42	1821.42	3854.42	91.00	2.25	-0.10	-2.25
	9339.00	90.22	179.07	225.7	-3911.37	523.36	6391.32	1821.32	3941.21	87.00	0.54	0.36	-0.40
	9429.00	90.03	184.82	225.7	-4001.28	520.31	6391.12	1821.12	4030.56	90.00	6.39	-0.21	6.39
	9519.00	90.06	190.45	225.7	-4090.45	508.36	6391.05	1821.05	4118.44	90.00	6.26	0.03	6.26
	9608.00	89.91	189.26	217.6	-4178.13	493.12	6391.07	1821.07	4204.57	89.00	1.35	-0.17	-1.34
	9699.00	90.00	184.11	220.3	-4268.48	482.53	6391.15	1821.15	4293.74	91.00	5.66	0.10	-5.66
	9789.00	89.97	181.10	220.3	-4358.38	478.44	6391.17	1821.17	4382.99	90.00	3.34	-0.03	-3.34
	9881.00	90.03	178.12	223.0	-4450.37	479.07	6391.17	1821.17	4474.72	92.00	3.24	0.07	-3.24
	9975.00	89.97	175.21	225.7	-4544.20	484.54	6391.17	1821.17	4568.68	94.00	3.10	-0.06	-3.10
	10069.00	89.97	173.12	225.7	-4637.71	494.09	6391.22	1821.22	4662.66	94.00	2.22	0.00	-2.22
	10162.00	89.94	173.88	225.7	-4730.11	504.62	6391.29	1821.29	4755.61	93.00	0.82	-0.03	0.82
	10256.00	90.12	174.81	228.4	-4823.65	513.88	6391.24	1821.24	4849.60	94.00	1.01	0.19	0.99
	10350.00	90.00	178.76	228.4	-4917.48	519.16	6391.14	1821.14	4943.55	94.00	4.20	-0.13	4.20
	10444.00	89.85	179.63	231.1	-5011.47	520.48	6391.27	1821.27	5037.32	94.00	0.94	-0.16	0.93
	10538.00	89.97	179.38	231.1	-5105.47	521.29	6391.41	1821.41	5131.07	94.00	0.30	0.13	-0.27
	10632.00	90.06	180.50	231.1	-5199.47	521.39	6391.39	1821.39	5224.75	94.00	1.20	0.10	1.19
	10725.00	89.97	180.42	233.8	-5292.46	520.64	6391.37	1821.37	5317.37	93.00	0.13	-0.10	-0.09
	10819.00	89.91	180.42	233.8	-5386.46	519.95	6391.46	1821.46	5410.99	94.00	0.06	-0.06	0.00
	10913.00	89.88	179.45	233.8	-5480.46	520.06	6391.64	1821.64	5504.68	94.00	1.03	-0.03	-1.03
	11007.00	90.03	180.35	236.5	-5574.46	520.22	6391.71	1821.71	5598.37	94.00	0.97	0.16	0.96
	11101.00	89.94	180.85	236.5	-5668.45	519.24	6391.73	1821.73	5691.97	94.00	0.54	-0.10	0.53
	11195.00	90.03	181.22	239.2	-5762.44	517.54	6391.76	1821.76	5785.49	94.00	0.41	0.10	0.39
	11289.00	90.22	181.31	236.5	-5856.42	515.46	6391.55	1821.55	5878.98	94.00	0.22	0.20	0.10
	11383.00	89.91	180.61	239.2	-5950.40	513.89	6391.45	1821.45	5972.51	94.00	0.81	-0.33	-0.74
	11477.00	90.03	180.40	239.2	-6044.40								