HALLIBURTON

ARRAY COMPENSATED RESISTIVITY

1 IN = 100 FT TVD

COMPANY	CROWN DRILLING INCORPORATED
WELL	MERMENTAU MINERALS & LAND CO 13 #1
FIELD	MERMENTAU
PARISH	CAMERON
STATE	LA

COMPANY CROWN DRILLING INCORPORATED
WELL MERMENTAU MINERALS & LAND CO 13 #1
FIELD MERMENTAU
PARISH CAMERON **STATE** LA

API No. 17023230860000
Location Longitude: 92º 56' 18.00" E
Latitude: 29º 49' 30.00" N
SERIAL NO : 243693

Other Services:
SWC

Sect. N/A Twp. N/A Rge. N/A

Permanent Datum	GL	Elev. 1.0 ft	Elev.: K.B.	15.0 ft
Log measured from	DF	, 13.0 ft above perm. Datum	D.F.	14.0 ft
Drilling measured from	DF		G.L.	1.0 ft

Date		10-Oct-11				
Run No.		ONE				
Depth - Driller		8619.00 ft				
Depth - Logger		8594.0 ft				
Bottom - Logged Interval		8584.O ft				
Top - Logged Interval		2526.0 ft				
Casing - Driller		9.625 in @ 2524.0 ft		@		@
Casing - Logger		2526.0 ft				
Bit Size		8.500 in		@		@
Type Fluid in Hole		WBM				
Density	Viscosity	10.0 ppg	43.00 s/qt			
PH	Fluid Loss	9.50 pH	4.0 cptm			
Source of Sample		FLOW LINE				
Rm @ Meas. Temperature		0.650 ohmm @ 85.00 degF		@		@
Rmf @ Meas. Temperature		0.60 ohmm @ 85.00 degF		@		@
Rmc @ Meas. Temperature		0.687 ohmm @ 85.00 degF		@		@
Source Rmf	Rmc	MEASURED	MEASURED			
Rm @ BHT		0.31 ohmm @ 183.0 degF		@		@
Time Since Circulation		10.6 hr				
Time on Bottom		10-Oct-11 18:07				
Max. Rec. Temperature		183.0 degF @ 8594.0 ft		@		@
Equipment	Location	10959019	NEW IBERIA			
Recorded By		J. NICHOLSON				
Witnessed By		HERBERT ANTIE				

Fold here

Service Ticket No.: 8535317 API Serial No.: 17023230860000 PGM Version: WL INSITE R3.4.2 (Build 2)

CHANGE IN MUD TYPE OR ADDITIONAL SAMPLE					
Date	Sample No.				
Depth-Driller					
Type Fluid in Hole					
Density	Viscosity				
Ph	Fluid Loss				
Source of Sample					
Rm @ Meas. Temp		@		@	
Rmf @ Meas. Temp.		@		@	
Rmc @ Meas. Temp.		@		@	
Source Rmf	Rmc	MEAS	MEAS		
Rm @ BHT		0.31 ohmm @ 183 deg F		@	
Rmf @ BHT		0.29 ohmm @ 183 deg F		@	
Rmc @ BHT		0.33 ohmm @ 183 deg F		@	

RESISTIVITY SCALE CHANGES			
Type Log	Depth	Scale Up Hole	Scale Down Hole

RESISTIVITY EQUIPMENT DATA				
Run No.	Tool Type & No.	Pad Type	Tool Pos.	Other
ONE	ACRT	N/A	1.5" S.O.	N/A
	10982661			
	10976085			

EQUIPMENT DATA

GAMMA		ACOUSTIC		DENSITY		NEUTRON	
Run No.	ONE	Run No.		Run No.	ONE	Run No.	ONE
Serial No.	10964330	Serial No.		Serial No.	11012605	Serial No.	11277439
Model No.	GTET	Model No.		Model No.	SDLT	Model No.	DSNT
Diameter	3.625"	No. of Cent.		Diameter	4.5"	Diameter	3.625"
Detector Model No.	T-102A	Spacing		Log Type	GAM -GAM	Log Type	NEU -NEU
Type	SCINT			Source Type	Cs 137	Source Type	Am241Be
Length	8"	LSA [Y/N]		Serial No.	20790B	Serial No.	DSN - 412
Distance to Source	N/A	FWDA [Y/N]		Strength	1.5 Ci	Strength	15 Ci

LOGGING DATA

GENERAL			GAMMA		ACOUSTIC			DENSITY			NEUTRON		
Run	Depth		Speed	Scale		Scale		Matrix	Scale		Matrix	Scale		Matrix
No.	From	To	ft/min	L	R	L	R		L	R		L	R	
ONE	8594	2526	REC	0	150				60.0 %	0.0 %	2.65 g/cc	60.0 %	0.0 %	SAND

DIRECTIONAL INFORMATION

Maximum Deviation	20.60 deg	@	7998.00 ft	KOP	@	3800.00 ft

Remarks: GTET-DSNT-SDLT-ACRT RAN IN COMBINATION

LOG TIED INTO DIRECTIONAL SURVEY DATED OCTOBER 9, 2011

ANNULAR HOLE VOLUME CALCULATED FOR 5.5 IN PRODUCTION CASING

MAX TEMP: 183 deg F, 183 deg F, 182 deg F

CHLORIDES: (CaCl) 3300 mg/L

RIG: CROWN #2

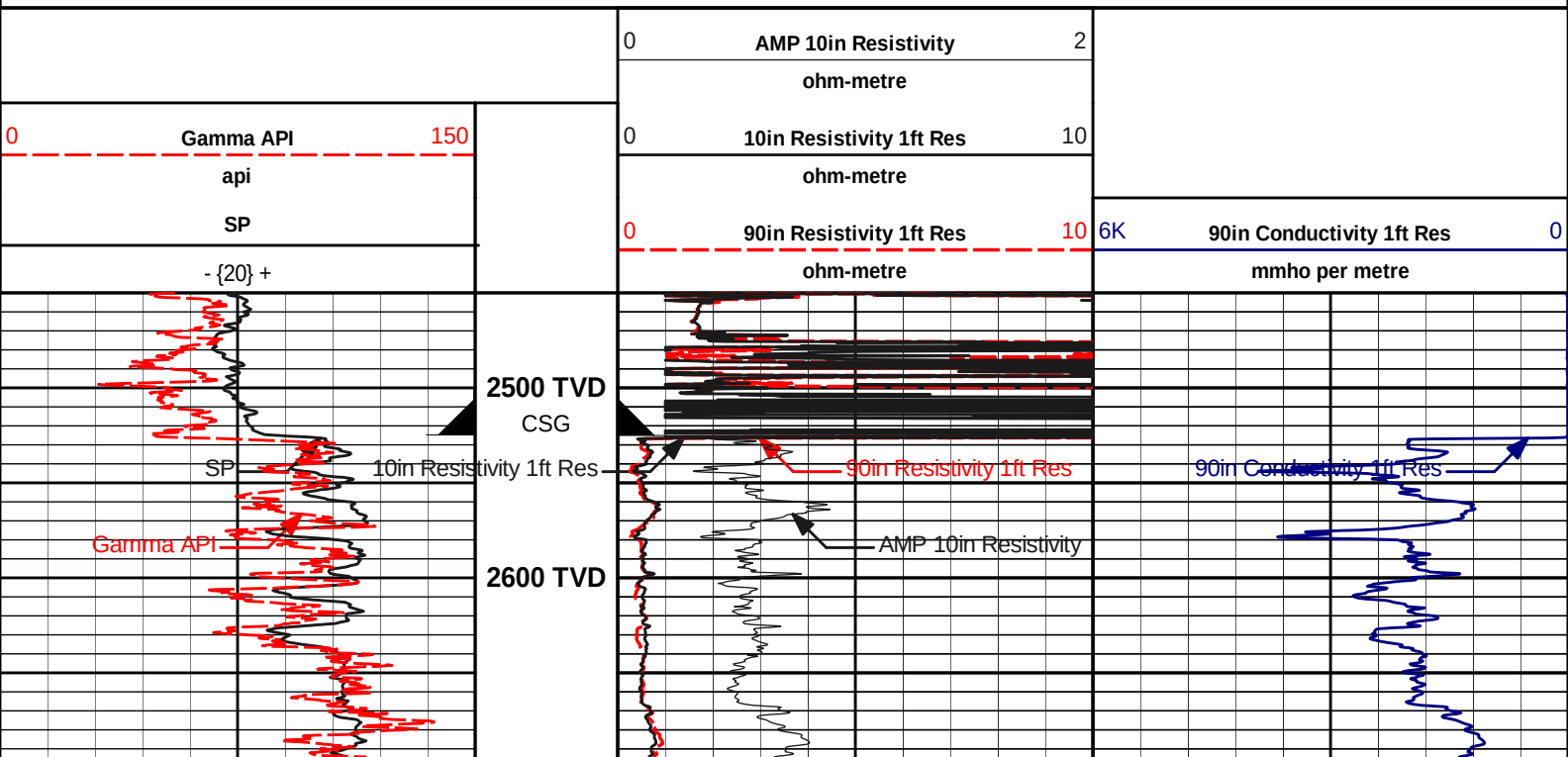
CREW: D. VARNADO, C. THOMAS, D. SIMON

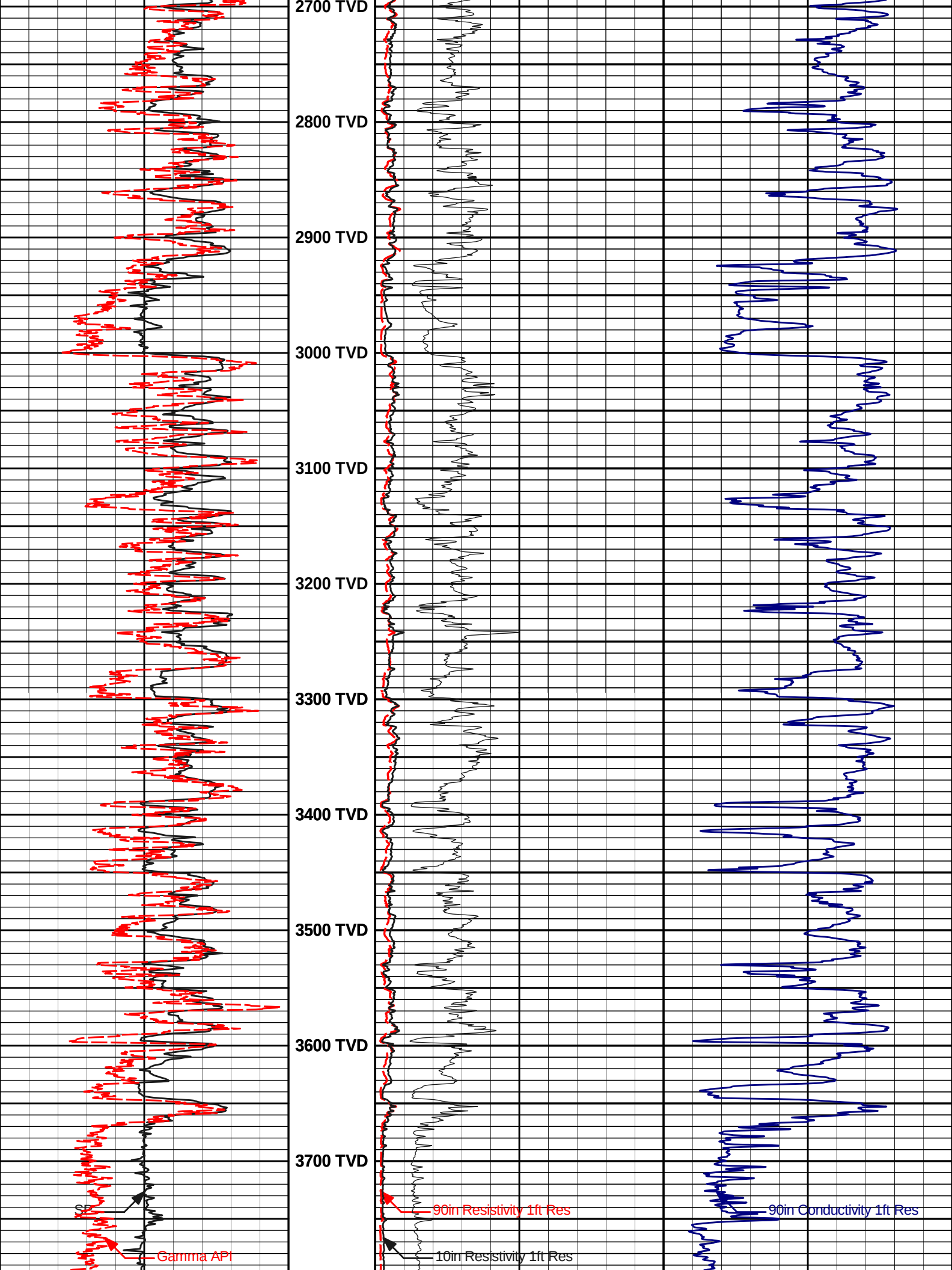
THANK YOU FOR CHOOSING HALLIBURTON ENERGY SERVICES -- NEW IBERIA, LA -- 337.367.9261

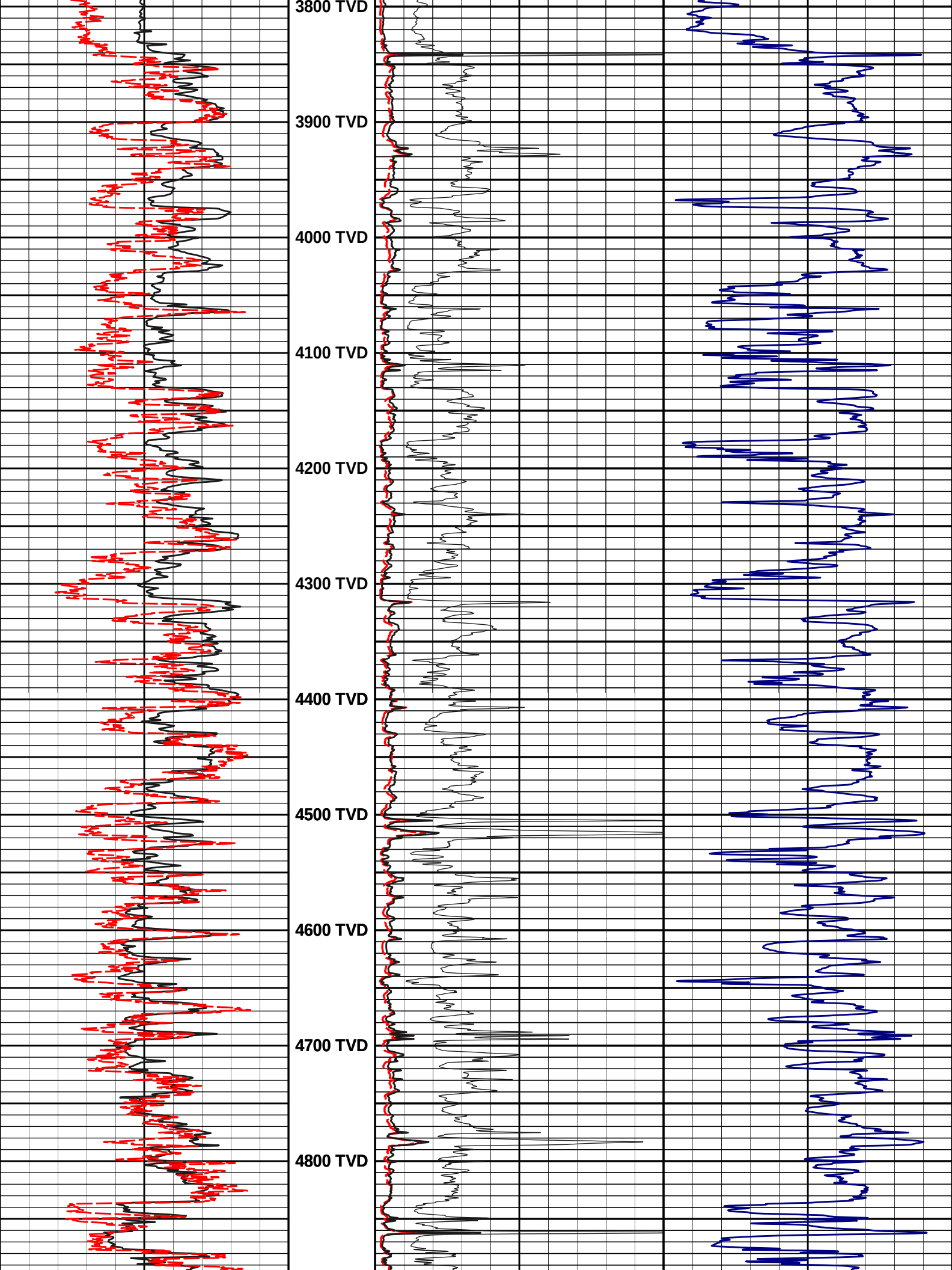
HALLIBURTON

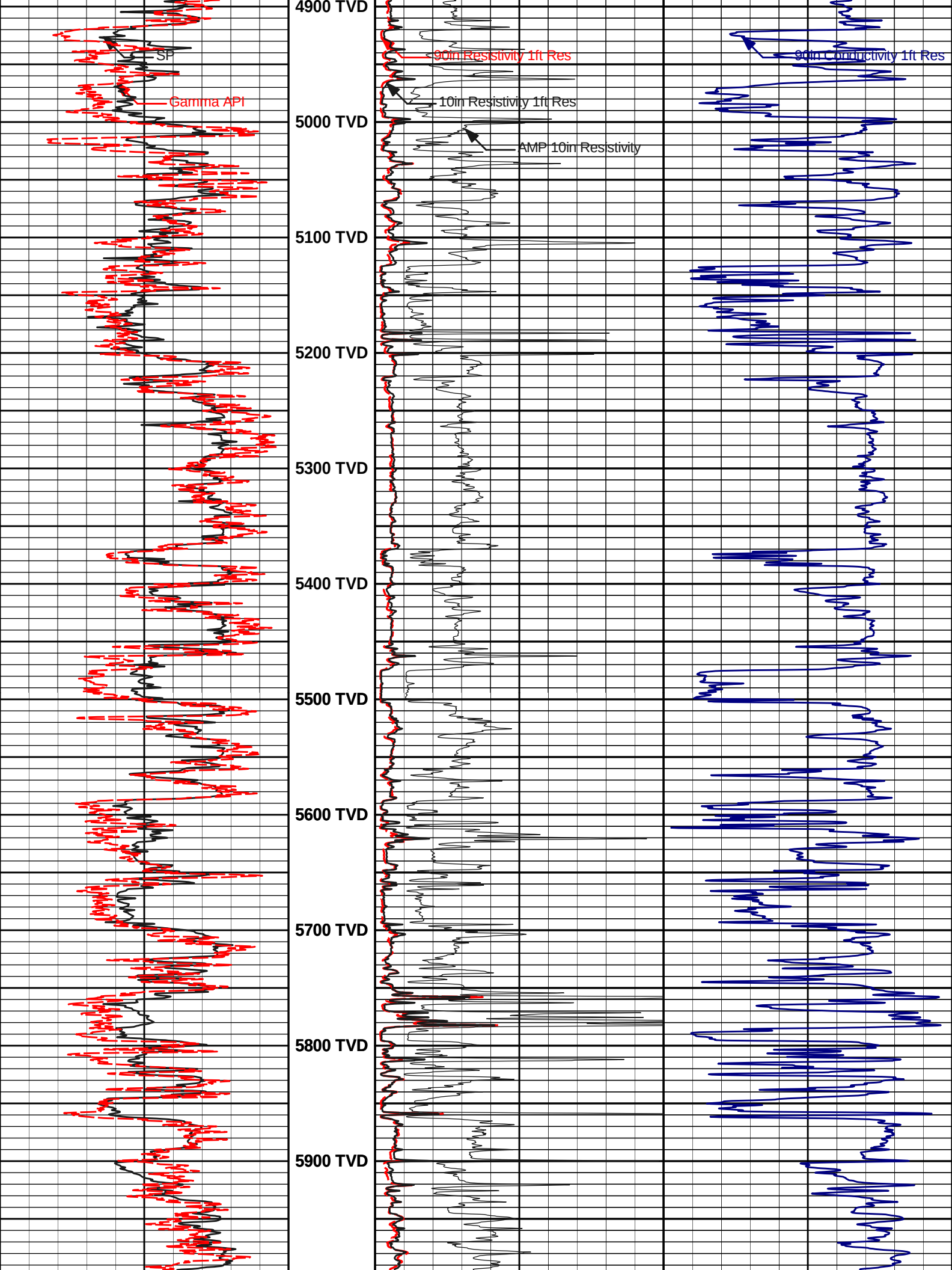
Plot Time: 10-Oct-11 21:12:33
Plot Range: 2450 ft to 8415 ft
Data: 10_10_CROWN\Well Based\DAQ-0001-003
Plot File: \\1IN_TVD\1IN_MD

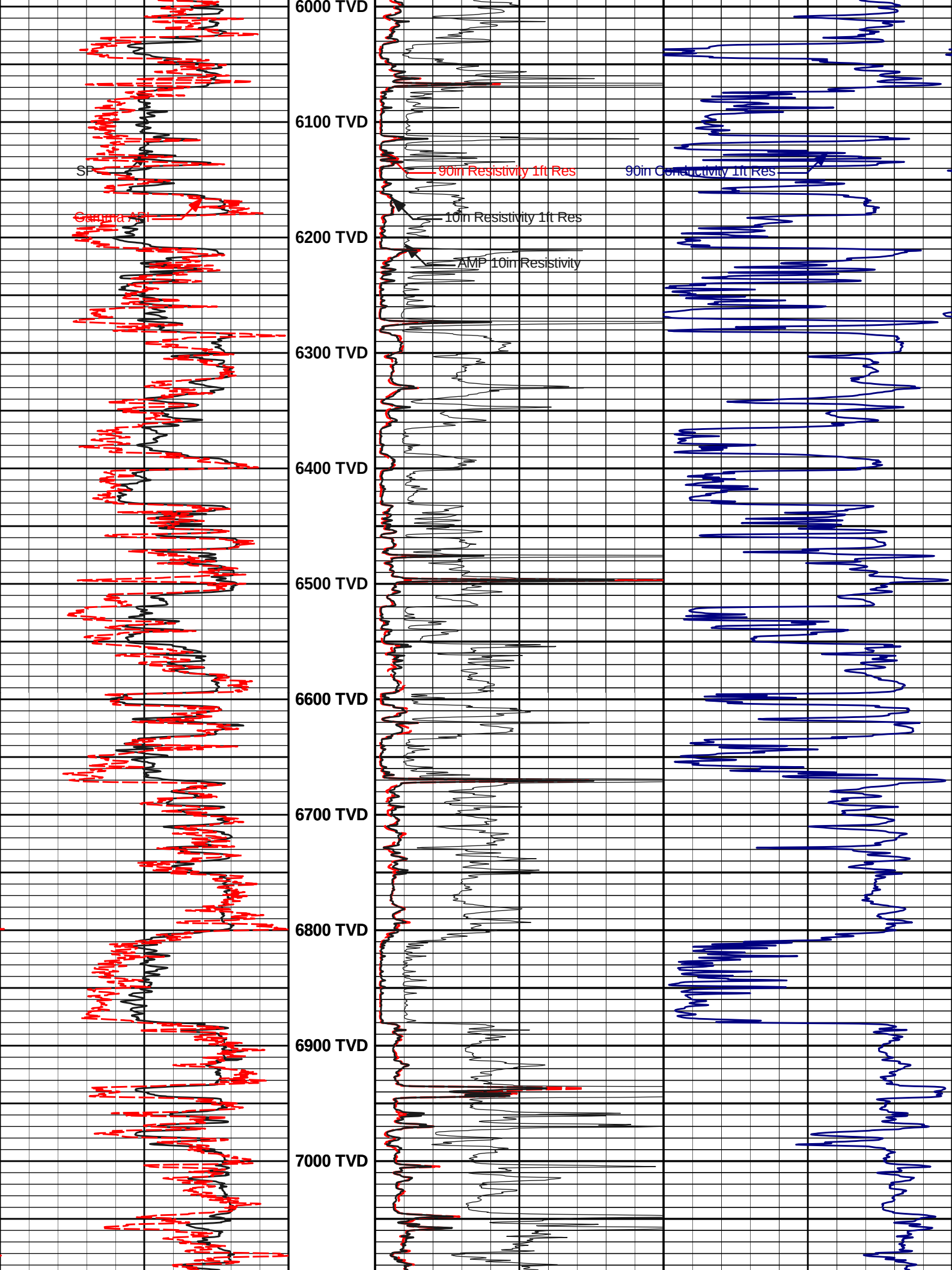
1 IN = 100 FT TVD
MAIN PASS

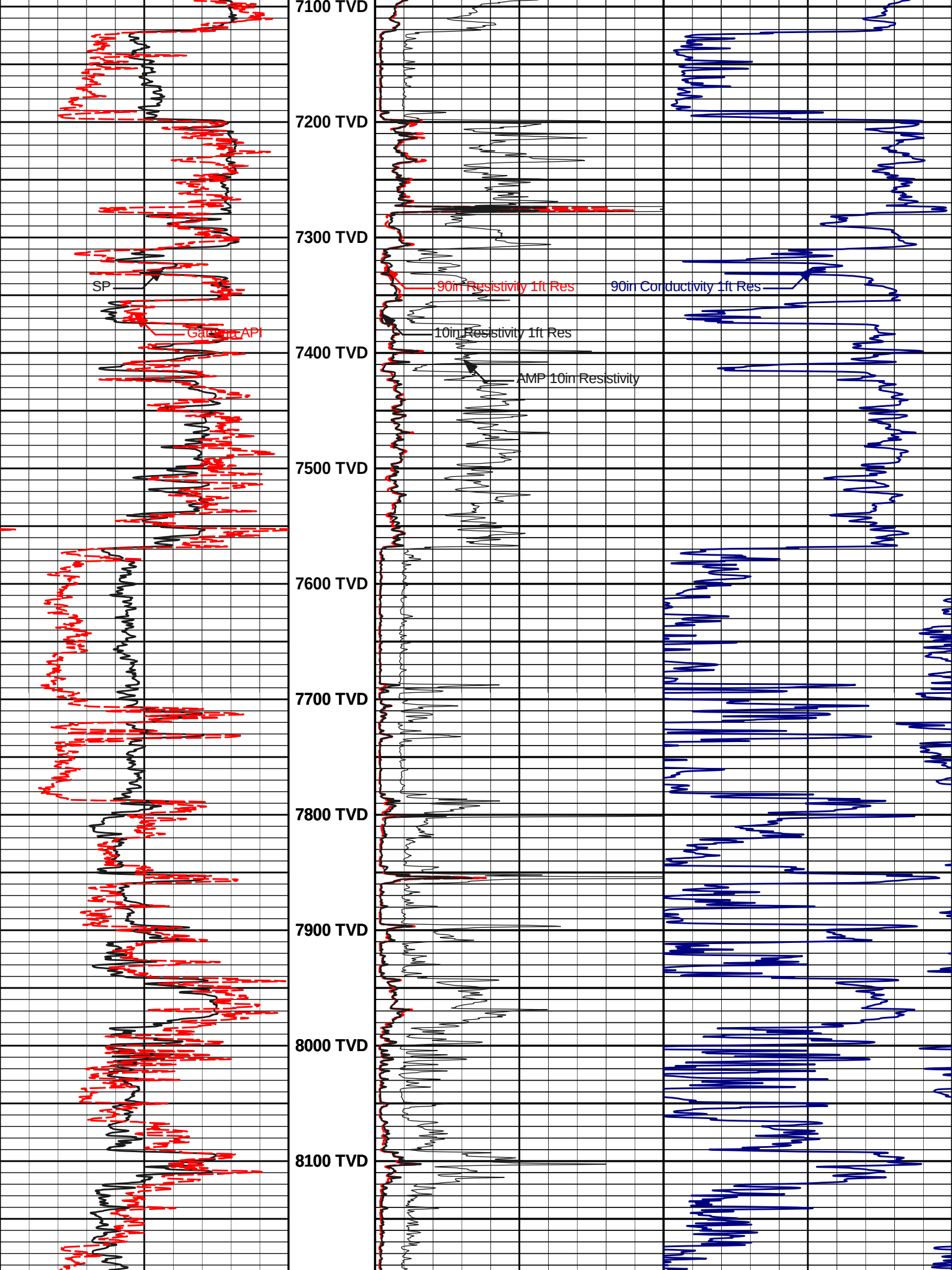


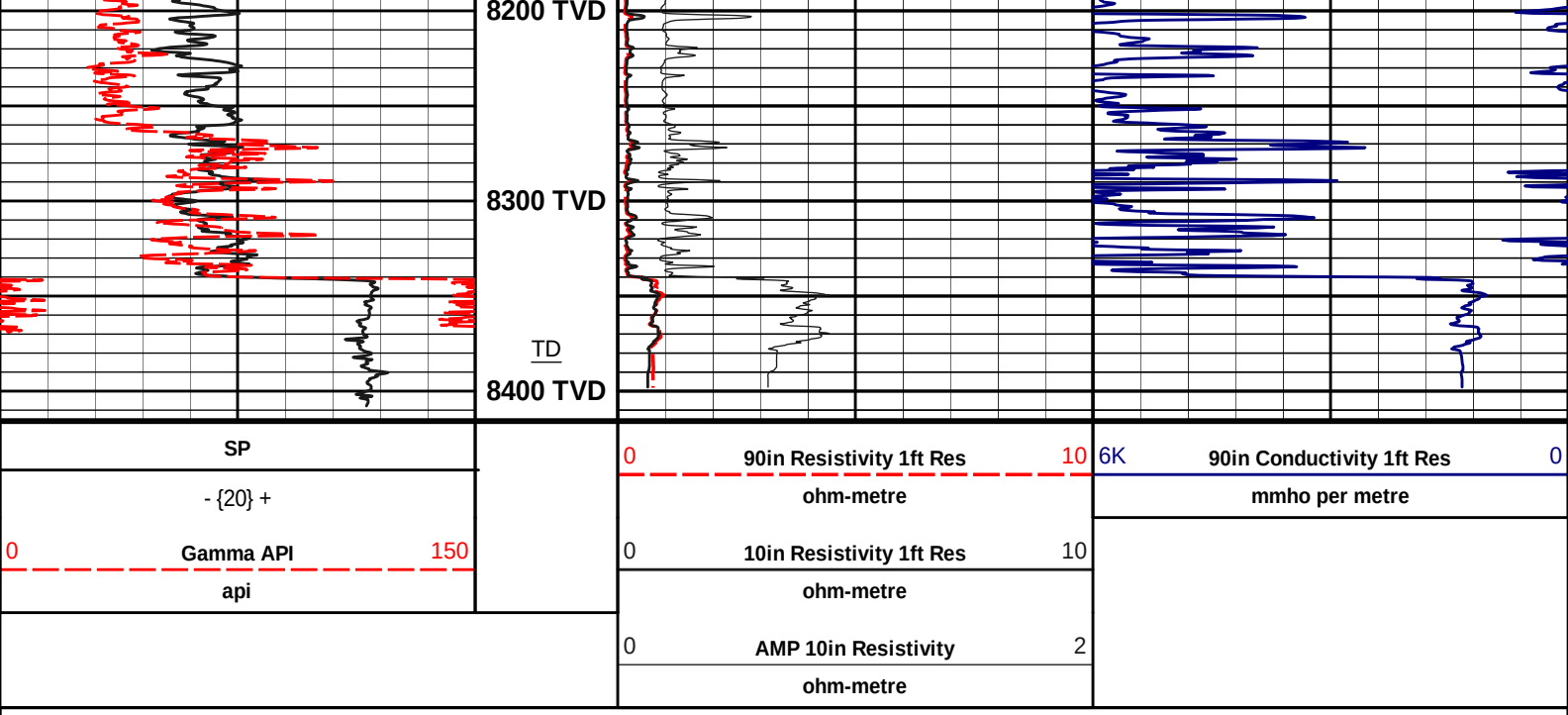

2700 TVD
2800 TVD
2900 TVD
3000 TVD
3100 TVD
3200 TVD
3300 TVD
3400 TVD
3500 TVD
3600 TVD
3700 TVD
SP
Gamma API
90in Resistivity 1ft Res
10in Resistivity 1ft Res
90in Conductivity 1ft Res


3800 TVD
3900 TVD
4000 TVD
4100 TVD
4200 TVD
4300 TVD
4400 TVD
4500 TVD
4600 TVD
4700 TVD
4800 TVD


SP
Gamma API
90in Resistivity 1ft Res
10in Resistivity 1ft Res
AMP 10in Resistivity
90in Conductivity 1ft Res
4900 TVD
5000 TVD
5100 TVD
5200 TVD
5300 TVD
5400 TVD
5500 TVD
5600 TVD
5700 TVD
5800 TVD
5900 TVD


6000 TVD
6100 TVD
6200 TVD
6300 TVD
6400 TVD
6500 TVD
6600 TVD
6700 TVD
6800 TVD
6900 TVD
7000 TVD
SP
Gamma API
90in Resistivity 1ft Res
10in Resistivity 1ft Res
AMP 10in Resistivity
90in Conductivity 1ft Res


7100 TVD
7200 TVD
7300 TVD
7400 TVD
7500 TVD
7600 TVD
7700 TVD
7800 TVD
7900 TVD
8000 TVD
8100 TVD
SP
90in Resistivity 1ft Res
90in Conductivity 1ft Res
10in Resistivity 1ft Res
AMP 10in Resistivity



HALLIBURTON

Plot Time: 10-Oct-11 21:12:48
Plot Range: 2450 ft to 8415 ft
Data: 10_10_CROWN\Well Based\DAQ-0001-003\
Plot File: \\1IN_TVD\1IN_MD

1 IN = 100 FT TVD
MAIN PASS

HALLIBURTON

TVD SURVEY REPORT

Hole Position Calculation Method:	Minimum Curvature	Tie in Data	Depth:	3800.00	ft
Magnetic Declination:			TVD:	3799.49	ft
			Inclination:	1.8	deg
			Azimuth:	256.46	deg
			N/S Departure:	-18.09	ft
			E/W Departure:	-52.15	ft

Measured Depth (ft)	Inclination (deg)	True Vertical Depth (ft)	Azimuth (deg)	N/S Departure (ft)	E/W Departure (ft)
3800.00	1.8	3799.49	256.46	-18.09	-52.15
3900.00	1.8	3899.44	264.63	-18.59	-55.15
3950.00	2.0	3949.42	268.34	-18.69	-56.79
4020.00	1.8	4019.38	259.50	-18.92	-59.09
4082.00	1.8	4081.35	260.90	-19.25	-61.01
4144.00	2.3	4143.31	278.10	-19.23	-63.20
4206.00	3.0	4205.24	278.10	-18.83	-66.04
4268.00	3.2	4267.15	278.80	-18.34	-69.36
4331.00	3.7	4330.04	283.90	-17.58	-73.07
4393.00	4.6	4391.87	294.80	-16.05	-77.27
4455.00	5.4	4453.64	295.50	-13.74	-82.18
4517.00	6.5	4515.30	296.00	-10.94	-87.99
4579.00	7.6	4576.83	291.70	-7.88	-94.96
4641.00	8.4	4638.23	293.10	-4.59	-102.93

4703.00	9.9	4699.43	292.40	-0.78	-112.02
4765.00	11.1	4760.40	290.10	3.30	-122.56
4828.00	12.3	4822.08	290.20	7.70	-134.55
4891.00	12.8	4883.58	293.20	12.77	-147.26
4953.00	13.5	4943.95	291.50	18.12	-160.31
5015.00	15.1	5004.03	289.20	23.43	-174.67
5076.00	17.1	5062.64	285.80	28.49	-190.80
5138.00	18.8	5121.62	287.60	33.99	-209.10
5201.00	19.2	5181.19	291.10	40.79	-228.44
5263.00	19.2	5239.74	291.30	48.16	-247.45
5325.00	18.7	5298.38	291.80	55.56	-266.18
5387.00	19.0	5357.05	293.90	63.34	-284.63
5449.00	19.7	5415.55	295.30	71.89	-303.31
5509.00	19.7	5472.04	295.00	80.49	-321.62
5571.00	19.5	5530.45	295.50	89.36	-340.43
5634.00	19.5	5589.83	295.70	98.45	-359.39
5698.00	19.2	5650.22	298.20	108.05	-378.29
5760.00	19.5	5708.72	298.20	117.76	-396.40
5822.00	19.9	5767.09	296.40	127.34	-414.97
5885.00	20.1	5826.29	297.50	137.11	-434.17
5947.00	19.7	5884.59	298.20	146.97	-452.83
6009.00	19.5	5943.00	298.30	156.81	-471.15
6072.00	19.7	6002.35	296.60	166.55	-489.91
6134.00	19.7	6060.72	292.20	175.18	-508.93
6197.00	19.9	6120.00	292.70	183.33	-528.65
6259.00	19.5	6178.37	291.80	191.24	-547.99
6321.00	19.2	6236.87	289.50	198.49	-567.21
6383.00	19.4	6295.38	289.90	205.40	-586.50
6444.00	19.9	6352.83	290.60	212.50	-605.75
6506.00	19.2	6411.25	289.70	219.65	-625.22
6568.00	18.3	6469.96	288.50	226.17	-644.05
6631.00	18.1	6529.81	289.20	232.53	-662.67
6692.00	18.5	6587.73	290.80	239.08	-680.67
6754.00	18.3	6646.56	290.80	246.03	-698.96
6817.00	18.5	6706.34	291.50	253.21	-717.51
6878.00	18.5	6764.18	289.20	259.94	-735.65
6940.00	18.7	6822.95	285.80	265.88	-754.51
7003.00	18.5	6882.66	286.70	271.50	-773.80
7066.00	18.1	6942.47	287.60	277.33	-792.70
7128.00	18.1	7001.40	287.40	283.12	-811.07
7188.00	18.5	7058.37	287.60	288.79	-829.04
7250.00	18.1	7117.23	288.10	294.76	-847.57
7314.00	18.3	7178.03	288.70	301.07	-866.54
7376.00	18.5	7236.86	289.50	307.47	-885.03
7438.00	18.5	7295.66	289.90	314.10	-903.55
7501.00	18.3	7355.44	290.80	321.02	-922.19
7563.00	17.9	7414.37	291.70	328.00	-940.15
7626.00	17.9	7474.32	292.20	335.23	-958.11
7688.00	17.9	7533.32	292.50	342.48	-975.73
7750.00	18.5	7592.22	291.80	349.78	-993.67
7812.00	19.0	7650.93	290.10	356.90	-1012.28
7874.00	19.2	7709.51	290.20	363.89	-1031.32
7936.00	20.1	7767.90	289.50	370.97	-1050.93
7998.00	20.6	7826.03	289.50	378.16	-1071.26
8059.00	20.6	7883.13	290.40	385.49	-1091.43
8122.00	20.4	7942.14	291.10	393.30	-1112.06
8185.00	20.1	8001.25	292.00	401.31	-1132.34
8247.00	19.9	8059.51	292.70	409.37	-1151.96
8309.00	19.7	8117.84	292.50	417.45	-1171.35
8371.00	19.9	8176.18	293.10	425.58	-1190.71
8434.00	20.1	8235.38	292.90	434.00	-1210.54
8497.00	20.2	8294.52	292.90	442.45	-1230.53
8527.00	20.2	8322.68	292.90	446.48	-1240.07
8594.00	20.2	8385.56	292.20	455.35	-1261.44

Horizontal displacement is relative to the well head.

Horizontal displacement (closure) at 8,594.00 ft is 1,341.11 ft along 289.85 deg (Grid).

Data: 10_10_CROWN **Date: 10-Oct-11 20:39:37**

COMPANY	**CROWN DRILLING INCORPORATED**		
WELL	**MERMENTAU MINERALS & LAND CO 13 #1**		
FIELD	**MERMENTAU**		
PARISH	**CAMERON**	STATE	**LA**

HALLIBURTON

ARRAY COMPENSATED RESISTIVITY

1 IN = 100 FT TVD