

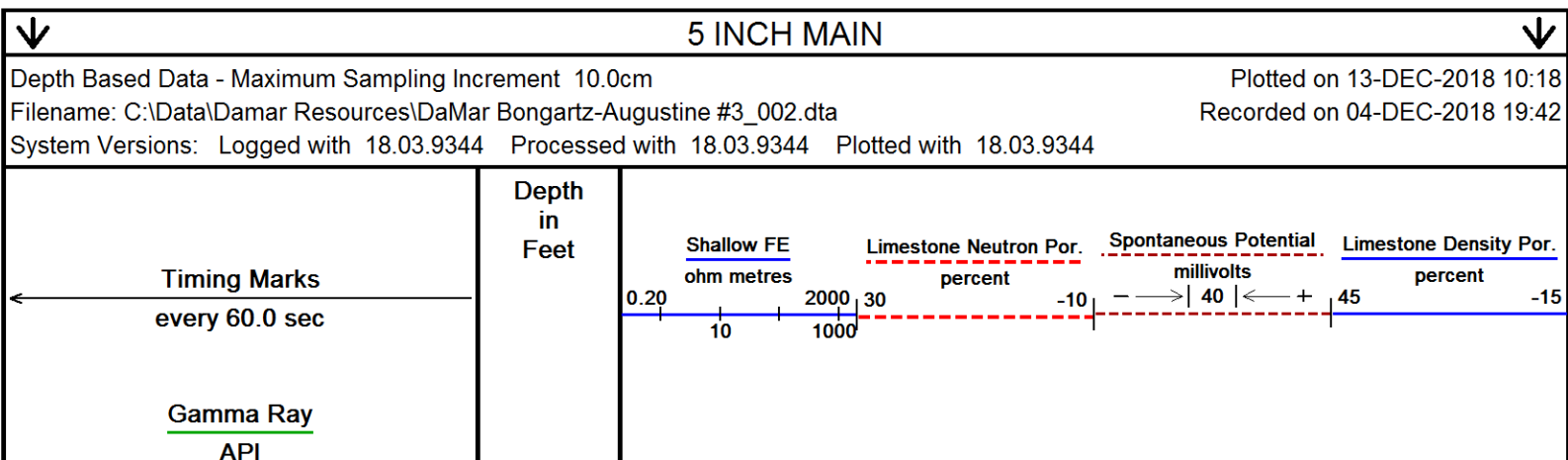


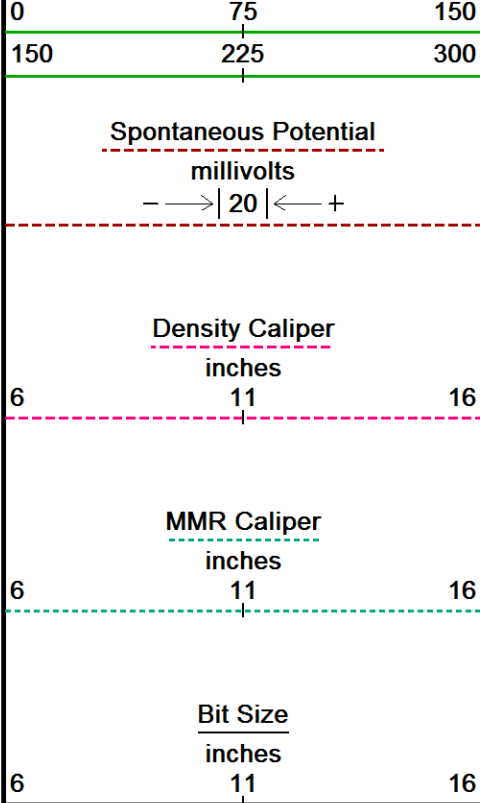
**Weatherford**

**ARRAY INDUCTION  
SHALLOW FOCUSED  
ELECTRIC LOG**

COMPANY	DAMAR RESOURCES, INC.		
WELL	BONGARTZ-AUGUSTINE #3		
FIELD	LOCKER NORTH		
PROVINCE/COUNTY	TREGO		
COUNTRY/STATE	U.S.A. / KANSAS		
LOCATION	555' FSL & 895' FWL		
SEC 29	TWP 13S	RGE 21W	Other Services
Latitude			MPD/MDN
Longitude			MML
API Number	15-195-23077		
Permanent Datum GL, Elevation	2293 feet		
Log Measured From KB, 8.00 feet above Permanent Datum			
Drilling Measured From KB			
Date	04-DEC-2018		
Run Number	ONE		
Service Order	4558-231140787		
Depth Driller	4165.00	feet	Elevations: KB 2301.00
Depth Logger	4163.00	feet	DF 2299.00
First Reading	4160.00	feet	GL 2293.00
Last Reading	263.00	feet	
Casing Driller	263.00	feet	
Casing Logger	263.00	feet	
Bit Size	7.875	inches	
Hole Fluid Type	CHEMICAL		
Density / Viscosity	9.20 lb/USg	49.00 CP	
PH / Fluid Loss	9.50	7.60 ml/30Min	
Sample Source	FLOWLINE		
Rm @ Measured Temp	0.88 @ 75.0	ohm-m	
Rmf @ Measured Temp	0.70 @ 75.0	ohm-m	
Rmc @ Measured Temp	1.06 @ 75.0	ohm-m	
Source Rmf / Rmc	CALC	CALC	
Rm @ BHT	0.65 @101.0	ohm-m	
Time Since Circulation	5 HOURS		
Max Recorded Temp	101.00	deg F	
Equipment / Base	13096	LIB	
Recorded By	ADAM SILL		
Witnessed By	RANDALL KILIAN		

In interpreting, communicating or providing information and/or making recommendations, either written or oral, as to logs or test or other data, type or amount of material, or Work or other service to be furnished, or manner of performance, or in predicting results to be obtained, the Contractor will give the Company the benefit of the Contractor's best judgment based on its experience and will perform all such Work in a good and workmanlike manner. Any interpretation of test or other data, and any recommendation or reservoir description based upon such interpretations, are opinions based upon inferences from measurements and empirical relationships and assumptions, which inferences and assumptions are not infallible, and with respect to which professional engineers and analysts may differ. ACCORDINGLY ANY INTERPRETATION OR RECOMMENDATION RESULTING FROM THE SERVICES WILL BE AT THE SOLE RISK OF THE COMPANY, AND THE CONTRACTOR CANNOT AND DOES NOT WARRANT THE ACCURACY, CORRECTNESS OR COMPLETENESS OF ANY SUCH INTERPRETATION OR RECOMMENDATION, WHICH INTERPRETATIONS AND RECOMMENDATIONS SHOULD NOT, THEREFORE, UNDER ANY CIRCUMSTANCES BE RELIED UPON AS THE SOLE OR MAIN BASIS FOR ANY DRILLING, COMPLETION, WELL TREATMENT, PRODUCTION OR FINANCIAL DECISION, OR ANY PROCEDURE INVOLVING ANY RISK TO THE SAFETY OF ANY DRILLING ACTIVITY, DRILLING RIG OR ITS CREW OR ANY OTHER INDIVIDUAL. THE COMPANY HAS FULL RESPONSIBILITY FOR ALL DECISIONS CONCERNING THE SERVICES.





Borehole  
Temp in  
deg F

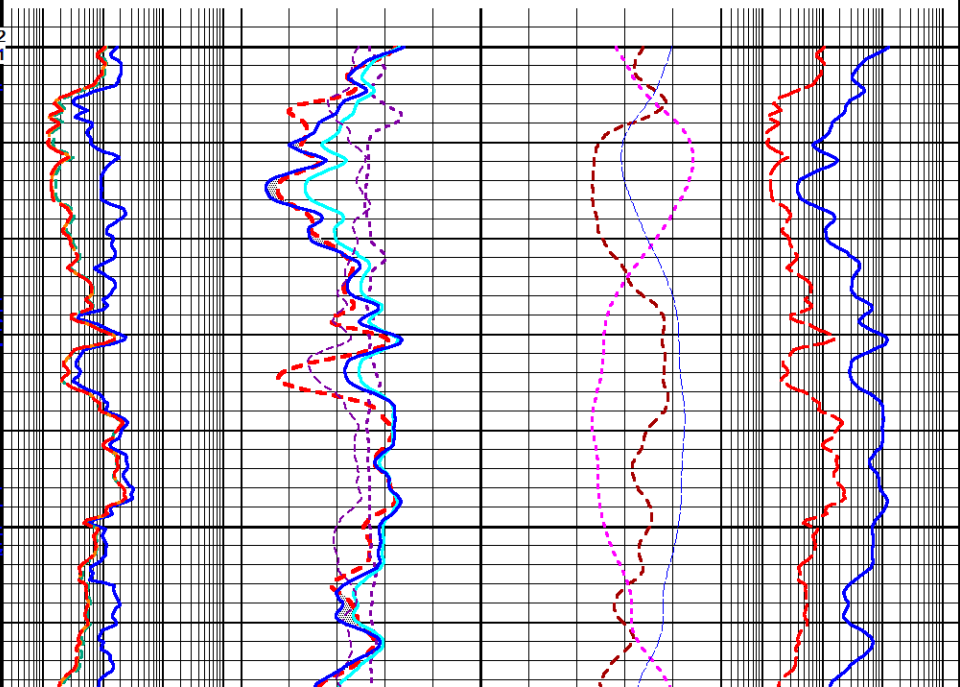
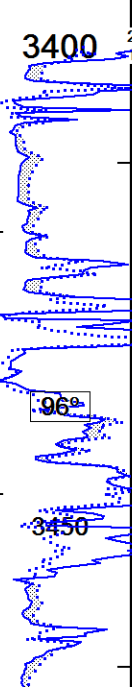
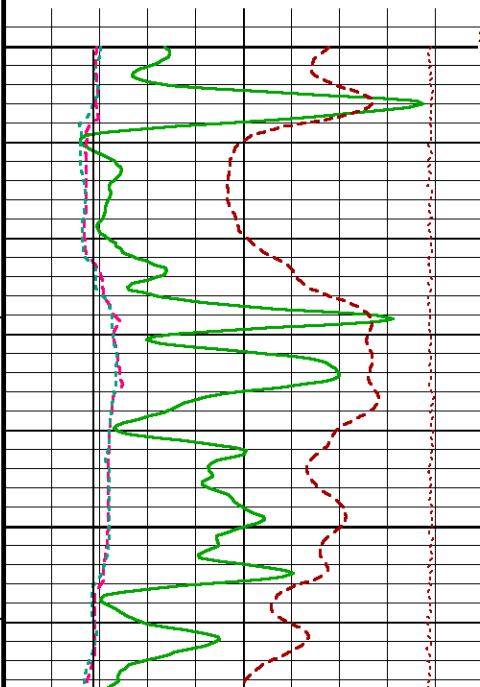
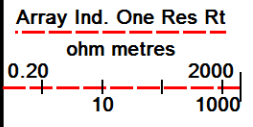
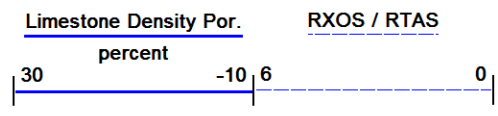
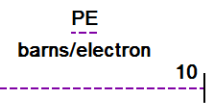
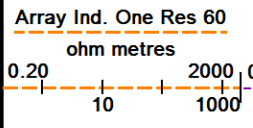
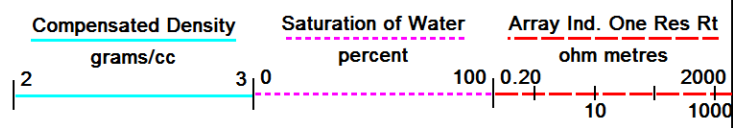
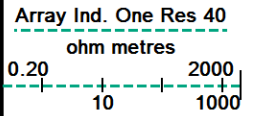
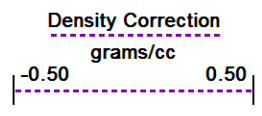
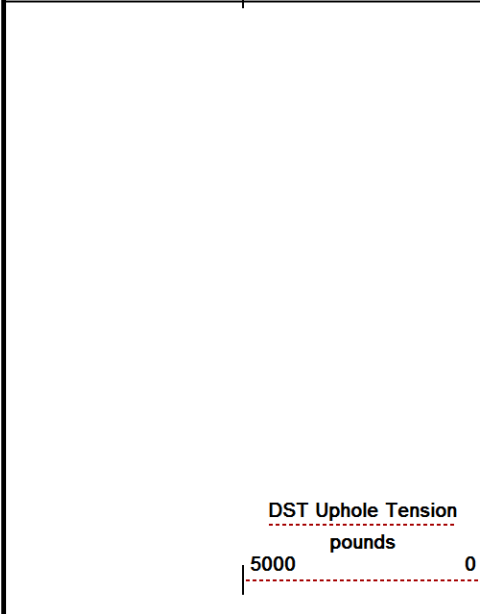
MNRL

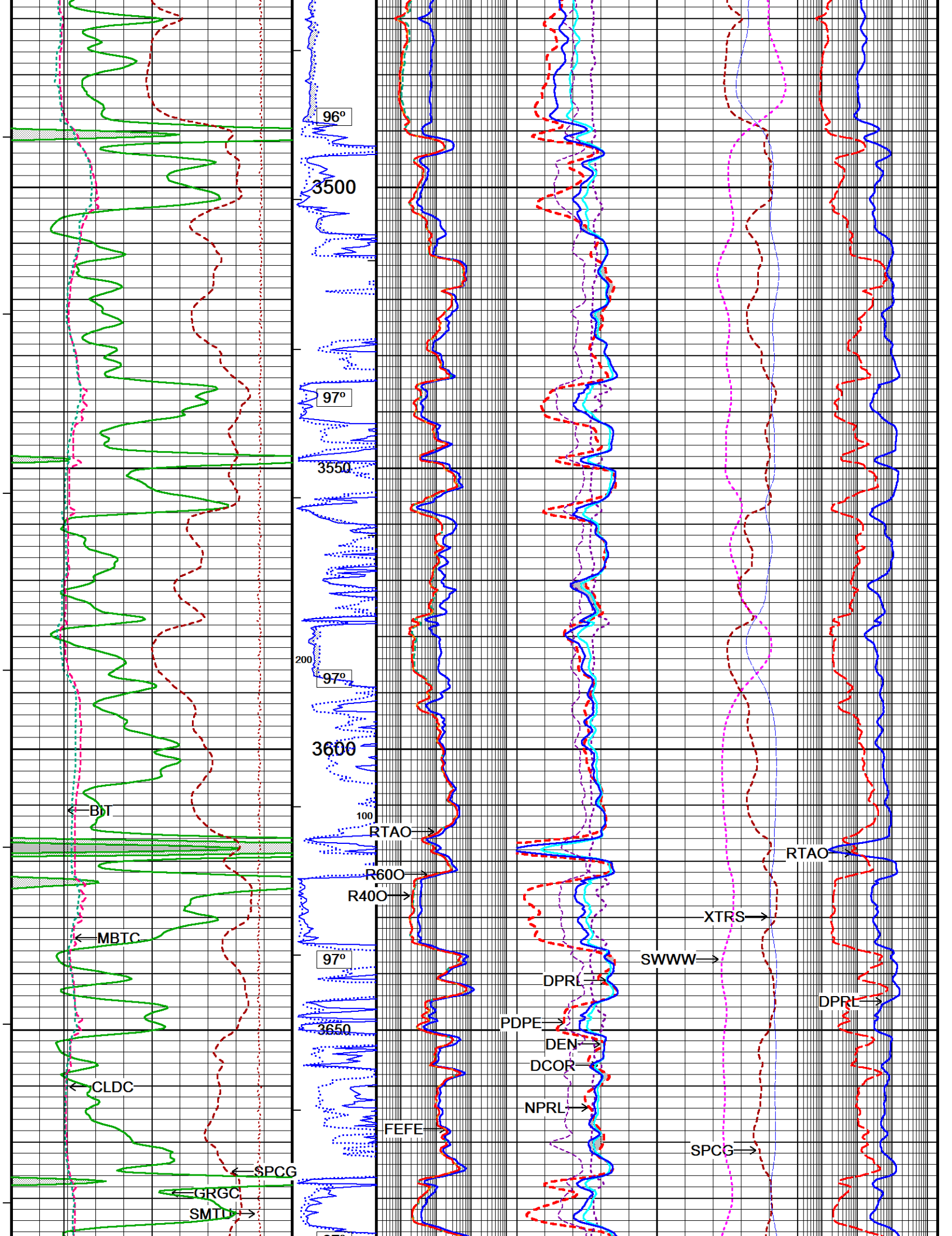
MINV

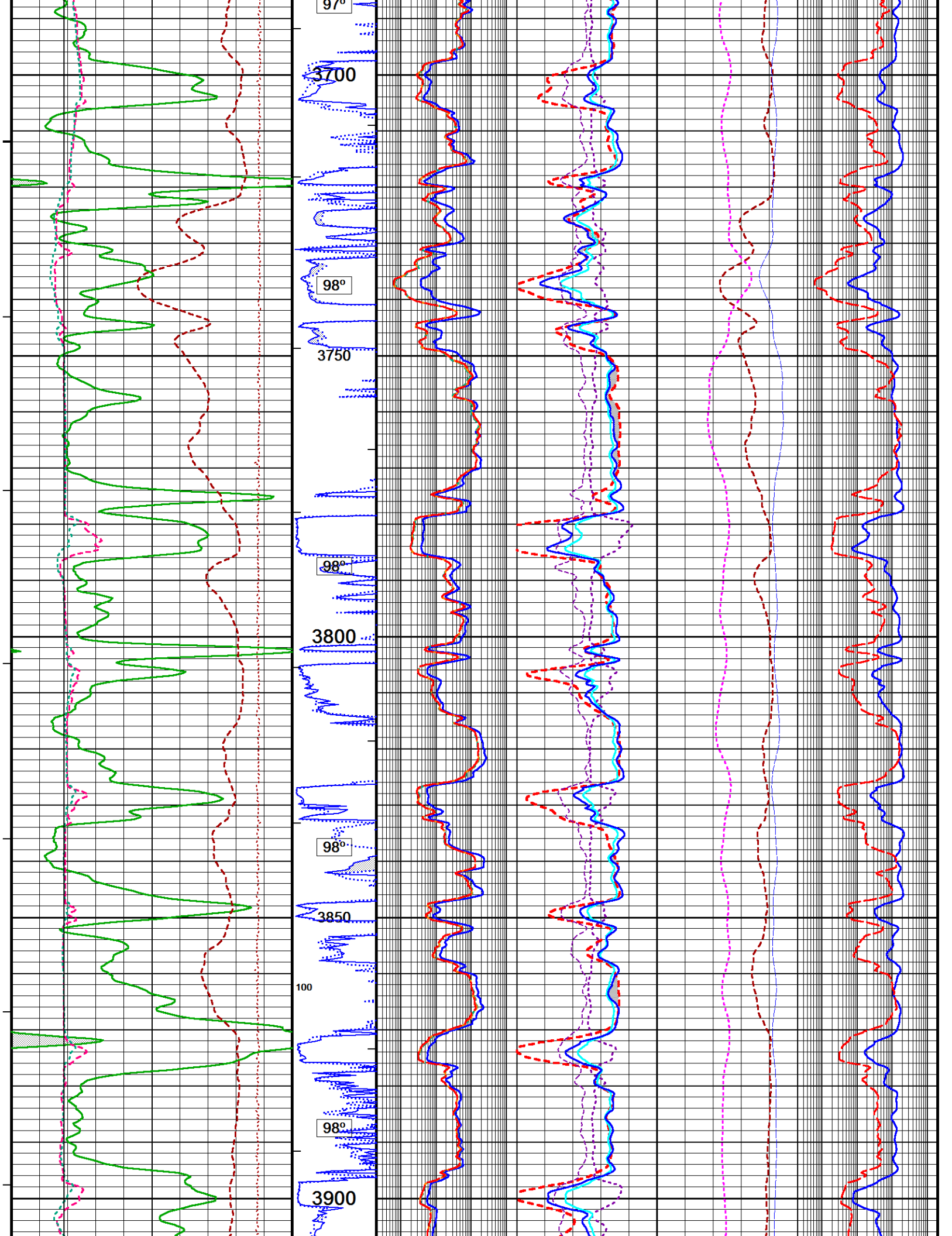
HVI  
every  
10 cu ft

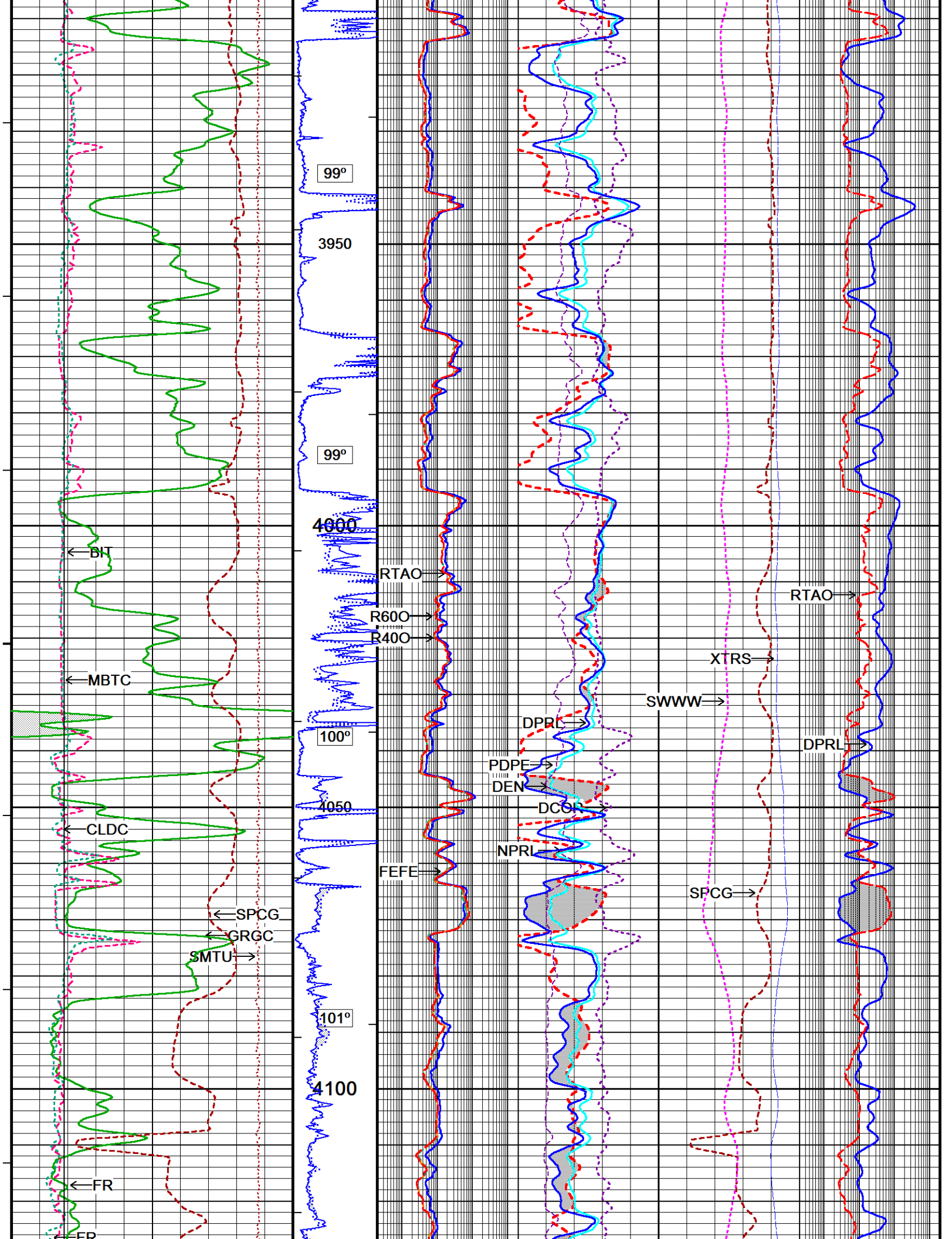
Annular  
Integral  
every  
10 cu ft

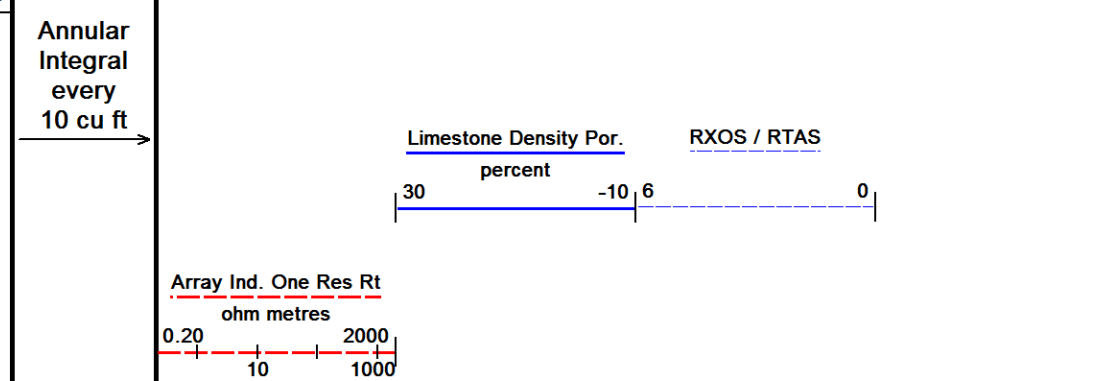
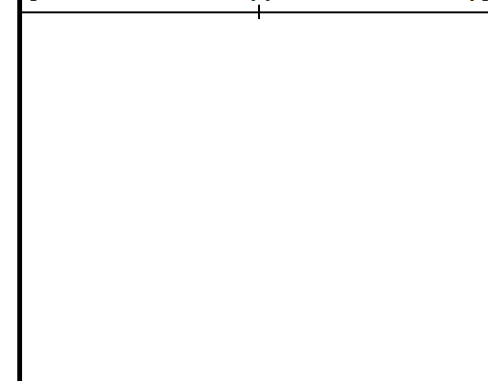
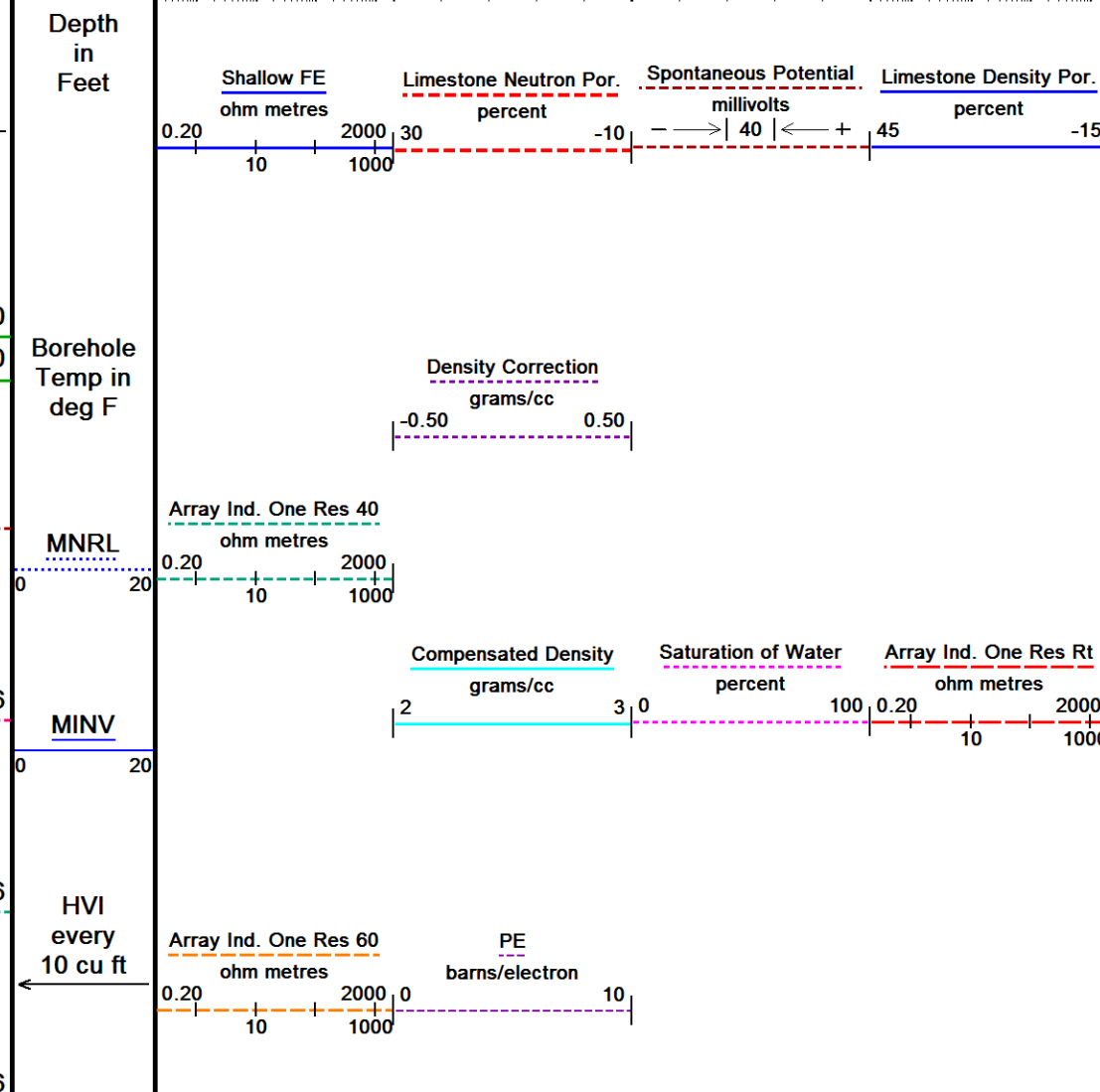
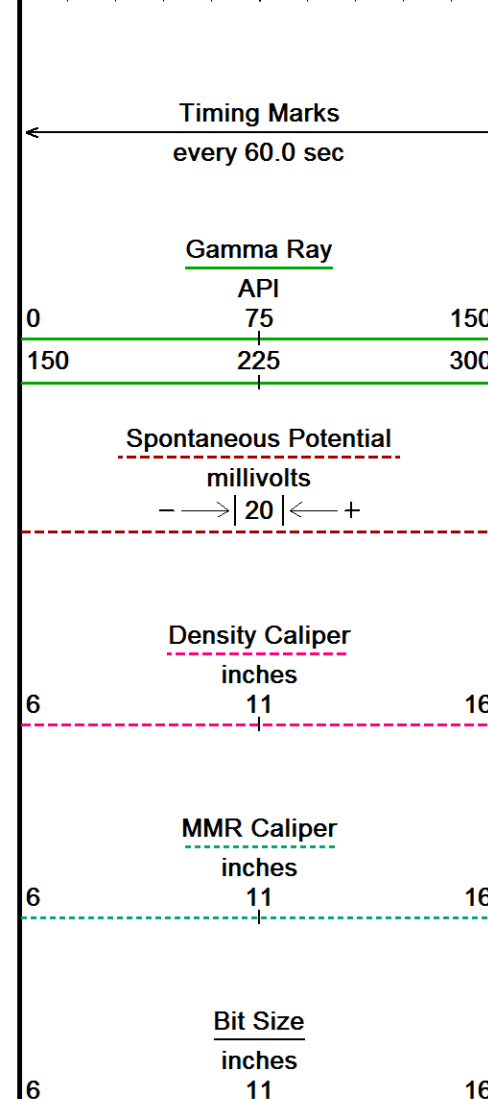
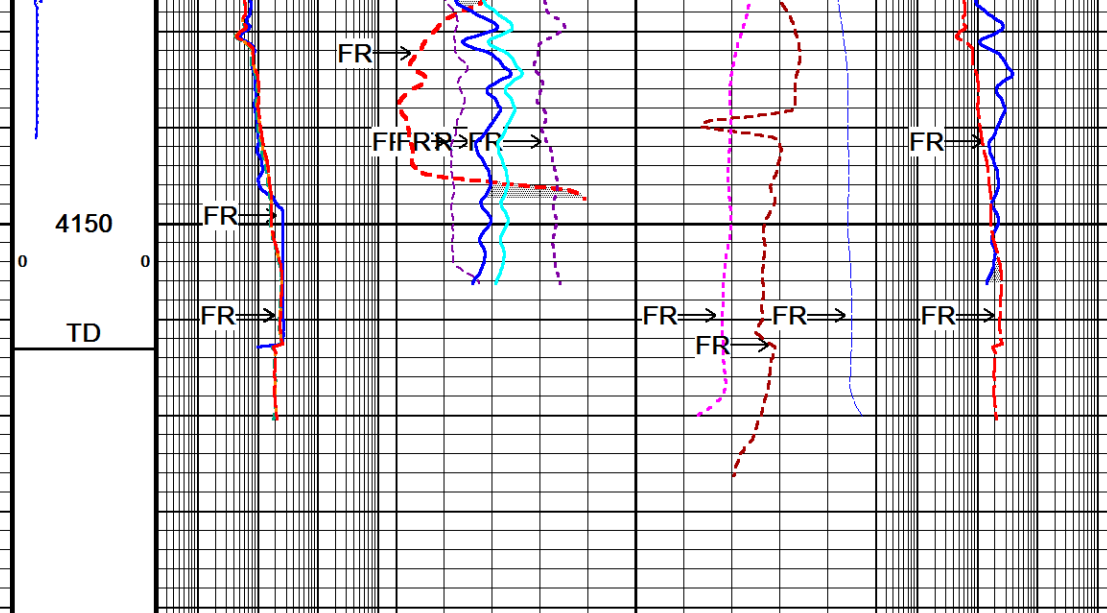
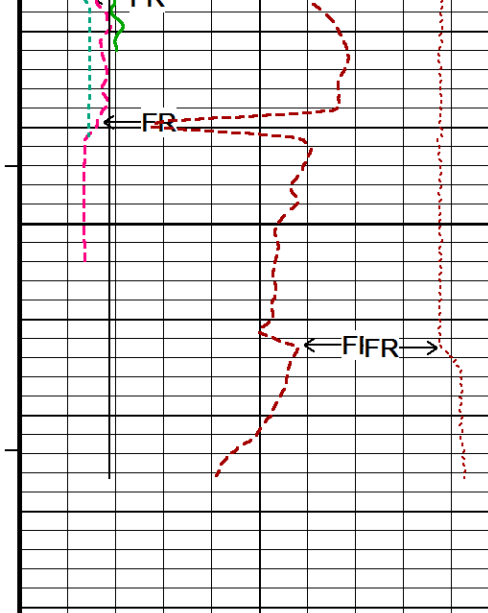
Replay  
Scale  
1:240

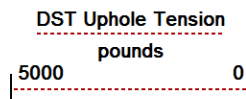












Replay  
Scale  
1:240

Depth Based Data - Maximum Sampling Increment 10.0cm Plotted on 13-DEC-2018 10:18  
 Filename: C:\Data\Damar Resources\DaMar Bongartz-Augustine #3\_002.dta Recorded on 04-DEC-2018 19:42  
 System Versions: Logged with 18.03.9344 Processed with 18.03.9344 Plotted with 18.03.9344

↑ 5 INCH MAIN ↑

BEFORE SURVEY CALIBRATION

C:\Data\Damar Resources\DaMar Bongartz-Augustine #3\_002.dta

General Constants All 000 Last Edited on 04-DEC-2018,19:00

General Parameters

Mud Resistivity 0.880 ohm-metres  
 Mud Resistivity Temperature 75.000 degrees F  
 Water Level 0.000 feet  
 Borehole Fluid Processing Wet Hole

Hole/Annular Volume and Differential Caliper Parameters

HVOL Method Single Caliper  
 HVOL Caliper 1 Density Caliper  
 HVOL Caliper 2 N/A  
 Annular Volume Diameter 5.500 inches  
 Caliper for Differential Caliper Density Caliper

Rwa Parameters

Porosity used Crossplot Porosity  
 Resistivity used Array Ind. Two Res Rt  
 RWA Constant A 0.620  
 RWA Constant M 2.150  
 SW/APOR Tool Source 0.000

High Resolution Temperature Calibration MCG-D.K 443 Field Calibration on 12-OCT-2018,05:20

	Measured	Calibrated(Deg F)
Lower	50.00	50.00
Upper	212.00	212.00

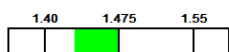
High Resolution Temperature Constants MCG-D.K 443 Last Edited on 12-OCT-2018,05:20

Pre-filter Length 11

Gamma Calibration MCG-D.K 443 Field Calibration on 04-DEC-2018 13:14

	Measured	Calibrated (API)
Background	106	74
Calibrator (Gross)	758	530
Calibrator (Net)	652	456

Gamma Calibration Tolerances MCG-D.K 443

Ratio 1.430  Counts/API

Gamma Constants MCG-D.K 443 Last Edited on 04-DEC-2018,17:51

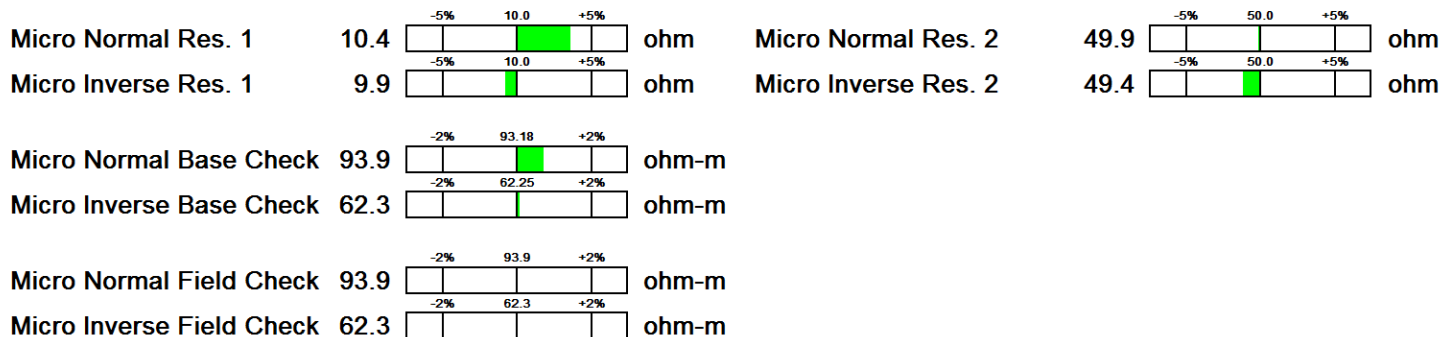
Gamma Calibrator Number MCGGRCC141  
 GRC-M Calibrator Jig in Use? NO  
 Inactive Background Jig in Use? NO  
 Mud Density 1.10 gm/cc  
 Caliper Source for Processing Density Caliper  
 Tool Position Eccentred  
 Potassium Equivalence Chloride  
 K Mud Concentration 0.00 %

Micro Normal and Micro Inverse Calibration MMR-B.A 91

Base Calibration on 04-DEC-2018 12:12  
Field Check on 04-DEC-2018 12:14

	Resistor 1 (ohm)	Resistor 2 (ohm)		
Base Calibration	10.0	50.0		
	Measured	Calibrated (ohm-m)		
Micro Normal	10.4	49.9	5.1	25.6
Micro Inverse	9.9	49.4	3.4	16.9
Channel	Base Check (ohm-m)	Field Check (ohm-m)		
Micro Normal	93.9	93.9		
Micro Inverse	62.3	62.3		

Micro Normal & Micro Inverse Calibration Tolerance MMR-B.A 91



Micro Normal and Micro Inverse Constants MMR-B.A 91

Last Edited on 13-APR-2018,05:04

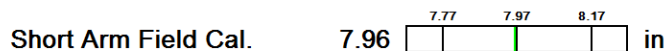
Pad Type	8-12 in Soft Rubber Inflatable 006-9011-159		
Micro Normal K Factor	0.5110		
Micro Inverse K Factor	0.3380		
Standoff Offset	0.0000	inches	

Caliper Calibration MMR-B.A 91

Base Calibration on 04-DEC-2018 12:06  
Field Calibration on 04-DEC-2018 12:07

Base Calibration	Reading No	Measured	Calibrator Size (in)
	1	14099	5.98
	2	17485	7.97
	3	20790	9.86
	4	24525	11.92
	5	0	0.00
	6	N/A	N/A
Field Calibration		Measured Caliper (in)	Actual Caliper (in)
		7.96	7.97

Caliper Calibration Tolerances MMR-B.A 91

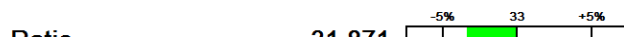


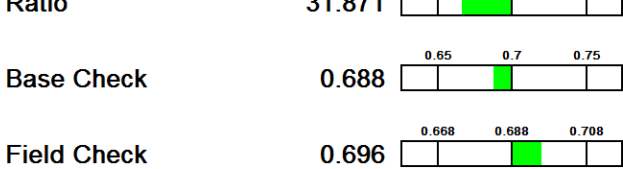
Neutron Calibration MDN-B.A 292

Base Calibration on 04-DEC-2018,13:14  
Field Check on 04-DEC-2018 13:18

Base Calibration	Measured		Calibrated (cps)	
	Near	Far	Near	Far
Ratio	2910	91	3714	110
	31.871		33.764	
Field Calibrator at Base			Calibrated (cps)	
Ratio			2207	3209
			0.688	
Field Check			Calibrated (cps)	
Ratio			2182	3137
			0.696	

Neutron Calibration Tolerances MDN-B.A 292





Neutron Constants MDN-B.A 292

Last Edited on 04-DEC-2018,17:51

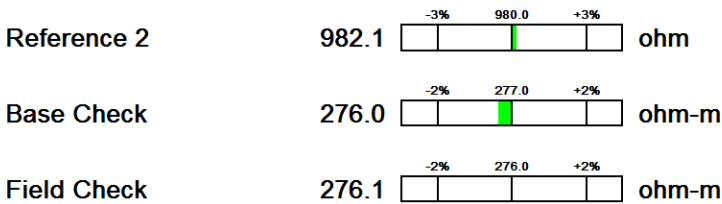
Neutron Source Id	P0204NN	
Neutron Jig Number	NJ5736	
Air Hole Processing	Legacy	
Caliper Source for Processing	Density Caliper	
Stand-off	0.00	inches
Mud Density	1.00	gm/cc
Limestone Sigma	7.10	cu
Sandstone Sigma	4.26	cu
Dolomite Sigma	4.70	cu
Formation Pressure Source	None	
Formation Pressure	N/A	kpsi
Temperature Source	Constant Value	
Temperature	68.00	degrees F
Mud Salinity	0.00	kppm
Salinity Correction	Not Applied	
Formation Fluid Salinity Source	None	
Formation Fluid Salinity	N/A	kppm
Barite Mud Correction	Not Applied	

FE Calibration MFE-B.J 352

Base Calibration on 04-DEC-2018 11:51  
Field Check on 04-DEC-2018 11:55

	Resistor 1 (ohm)	Resistor 2 (ohm)
	0.0	1000.0
Base Calibration		
	Measured	Calibrated (ohm-m)
Reference 1	0.0	0.0
Reference 2	982.1	126.8
Base Check		276.0
Field Check		276.1

FE Calibration Tolerances MFE-B.J 352



FE Constants MFE-B.J 352

Last Edited on 04-DEC-2018,17:50

Running Mode	No Sleeve	
MFE K Factor	0.1268	
Borehole Correction Constants		
Sonde Position	0.5	inches
Hole Size Source	Density Caliper	
Hole Size Constant Value	N/A	inches
Rm Source	Global Value: Temperature Corrected	
Temp. for Rm Corr.	MCG External Temperature	

Induction Calibration MAI-B.J 390

Factory Loop Calibration 04-DEC-2018 12:54  
Field Check on 04-DEC-2018 12:56

Factory Loop Calibration

High Conductivity Reference Resistor	3.3	ohm
Low Conductivity Reference Resistor	333.3	ohm

Array	Measured Signal (unitless)		Reference Conductivity (mmho/m)		Calibration	
	Low	High	Low	High	Gain	Offset
1 (near)	16.8	458.6	9.3	966.2	2.166	-27.2
2	6.3	377.7	7.6	821.4	2.191	-6.2
3	3.8	258.6	5.2	566.0	2.200	-3.0

4 (far) 1.9 132.3 2.6 279.2 2.121 -1.4

Array Temperature 77.9 Deg F

Tool Checks

Array	Factory Reference (mmho/m)		Before Survey (mmho/m)	
	Low	High	Low	High
1 (near)	13.1	3959.5	13.2	3959.2
2	29.9	3563.6	29.9	3562.8
3	27.9	3061.5	27.9	3061.1
4 (far)	19.7	2088.1	19.7	2087.7
Array Temperature		62.3	62.5	Deg F

Induction Check Tolerances MAI-B.J 390

Low Array 1	13.2		mmho/m	High Array 1	3959.2		mmho/m
Low Array 2	29.9		mmho/m	High Array 2	3562.8		mmho/m
Low Array 3	27.9		mmho/m	High Array 3	3061.1		mmho/m
Low Array 4	19.7		mmho/m	High Array 4	2087.7		mmho/m

Induction Constants MAI-B.J 390

Last Edited on 04-DEC-2018,17:50

Induction Model	RtAP-WBM		
Borehole Correction Constants			
Tool Centred	No		
Hole Size Source	Density Caliper		
Hole Size Constant Value	N/A	inches	
Stand-off Type	Fins		
Stand-off	0.50	inches	
Number of Fins on Stand-off	8.0000		
Stand-off Fin Angle	45.00	degrees	
Stand-off Fin Width	0.5000	inches	
Rm Source	Global Value: Constant Temperature		
Temp. for Rm Corr.	N/A		
Borehole Correction Method	Default		
Squasher Start	0.0020	mhos/metre	
Squasher Offset	N/A	mhos/metre	
Borehole Normalisation			
DRM1	0.0000	DRC1	0.0000
DRM2	0.0000	DRC2	0.0000
MRM1	0.0000	MRC1	0.0000
MRM2	0.0000	MRC2	0.0000
SRM1	0.0000	SRC1	0.0000
SRM2	0.0000	SRC2	0.0000

Calibration Site Corrections

Channel 1	0.00	mhos/metre
Channel 2	0.00	mhos/metre
Channel 3	0.00	mhos/metre
Channel 4	0.00	mhos/metre

Symmetrised Receiver Gains

Receiver 1	1.00
Receiver 2	1.00
Receiver 3	1.00
Receiver 4	1.00

Apparent Porosity and Water Saturation Constants

Archie Constant (A)	1.00	
Cementation Exponent (M)	2.00	
Saturation Exponent (N)	2.00	
Saturation of Water for Apor	100.00	percent
Resistivity of Water for Apor and Sw	0.05	ohm-m
Resistivity of Mud Filtrate for Sw	0.00	ohm-m
Source for Rt	0.00	

Source for Rxo 0.00

Caliper Calibration MPD-C.A 216

Base Calibration on 04-DEC-2018 12:24  
Field Calibration on 04-DEC-2018 12:25

Base Calibration Reading No	Measured	Calibrator Size (in)
1	15599	3.99
2	24289	5.98
3	32989	7.97
4	41250	9.86
5	50464	11.92
6	N/A	N/A

Field Calibration	Measured Caliper (in)	Actual Caliper (in)
	7.94	7.97

Caliper Calibration Tolerances MPD-C.A 216

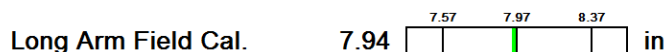


Photo Density Calibration MPD-C.A 216

Base Calibration on 04-DEC-2018 12:43  
Field Check on 04-DEC-2018 12:50

Density Calibration Base Calibration	Measured		Calibrated (sdu)	
	Near	Far	Near	Far
Background	996	1188		
Reference 1	49174	23910	59556	30836
Reference 2	19716	2252	24941	2541

Field Check at Base	Measured	Calibrated
	996.3	1187.9

Field Check	Measured	Calibrated
	1001.5	1186.9

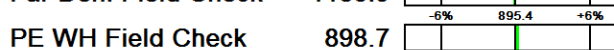
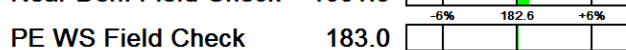
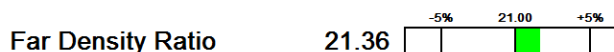
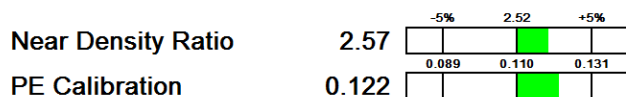
PE Calibration

Base Calibration	Measured			Calibrated Ratio
	WS	WH	Ratio	
Background	183	895		
Reference 1	20502	49024	0.422	0.371
Reference 2	5636	19607	0.291	0.272

Field Check at Base	WS	WH
	182.6	895.4

Field Check	WS	WH
	183.0	898.7

Photo Density Calibration Tolerances MPD-C.A 216



Density Constants MPD-C.A 216


Last Edited on 04-DEC-2018,17:51

Density Source Id	P50557B
Nylon Calibrator Number	DNCE695
Aluminium Calibrator Number	DACD698
Density Shoe Profile	8 inch
Caliper Source for Processing	Density Caliper
PE Correction to Density	Not Applied
Mud Density	1.10 gm/cc
Mud Density Type	
Mud Filtrate Density	1.00 gm/cc
Dry Hole Mud Filtrate Density	1.00 gm/cc
DNCT	0.00 gm/cc

CRCT	0.00	gm/cc
Density Z/A Correction	Hybrid	
Precision Enhanced Density Processing	Applied	
Matrix Density (gm/cc)	Depth (ft)	
2.71	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	

COMPANY	DaMAR RESOURCES, INC.
WELL	BONGARTZ-AUGUSTINE #3
FIELD	LOCKER NORTH
PROVINCE/COUNTY	TREGO
COUNTRY/STATE	U.S.A. / KANSAS

Elevation Kelly Bushing	2301	feet	First Reading	4160.00	feet
Elevation Drill Floor	2299	feet	Depth Driller	4165.00	feet
Elevation Ground Level	2293	feet	Depth Logger	4163.00	feet

	ARRAY INDUCTION
	SHALLOW FOCUSED
	ELECTRIC LOG