

Company QUICKSILVER RESOURCES INC.				Company QUICKSILVER RESOURCES INC.				
Well PIRTLAW PARTINERS LIMITED24-33				Well PIRTLAW PARTINERS LIMITED24-33				
Field WOLF MOUNTAIN				Field WOLF MOUNTAIN				
County ROUTT				County ROUTT				
State COLORADO				State COLORADO				
Location:				API # : N/A		Other Services		
Permanent Datum				N/A		N/A		
Log Measured From				N/A		N/A		
Drilling Measured From				KB 16' ABOVE GROUND LEVEL		K.B. N/A D.F. N/A G.L. N/A		
Date		16 JUNE 2012						
Run Number		1						
Depth Driller		1250'						
Depth Logger		1108'						
Bottom Logged Interval		1098'						
Top Log Interval		SURFACE						
Open Hole Size		9 5/8"						
Type Fluid		WATER						
Density / Viscosity		8.4						
Max. Recorded Temp.		N/A						
Estimated Cement Top		SURFACE						
Time Well Ready		0900						
Time Logger on Bottom		1000						
Equipment Number		113						
Location		VERNAL, UT						
Recorded By		J. TORGERSON						
Witnessed By		MR. DENNING						
Borehole Record				Tubing Record				
Run Number		Bit	From	To	Size	Weight	From	To
Casing Record		Size			Wgt/Ft		Top	Bottom
Surface String		9 5/8"			N/A		N/A	N/A
Prot. String								
Production String								
Liner								

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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

### Comments

NO LOG TO CORRELATE TO  
LOG RAN WITH 0 (PSI)  
THANK YOU FOR USING CASEDHOLE SOLUTIONS

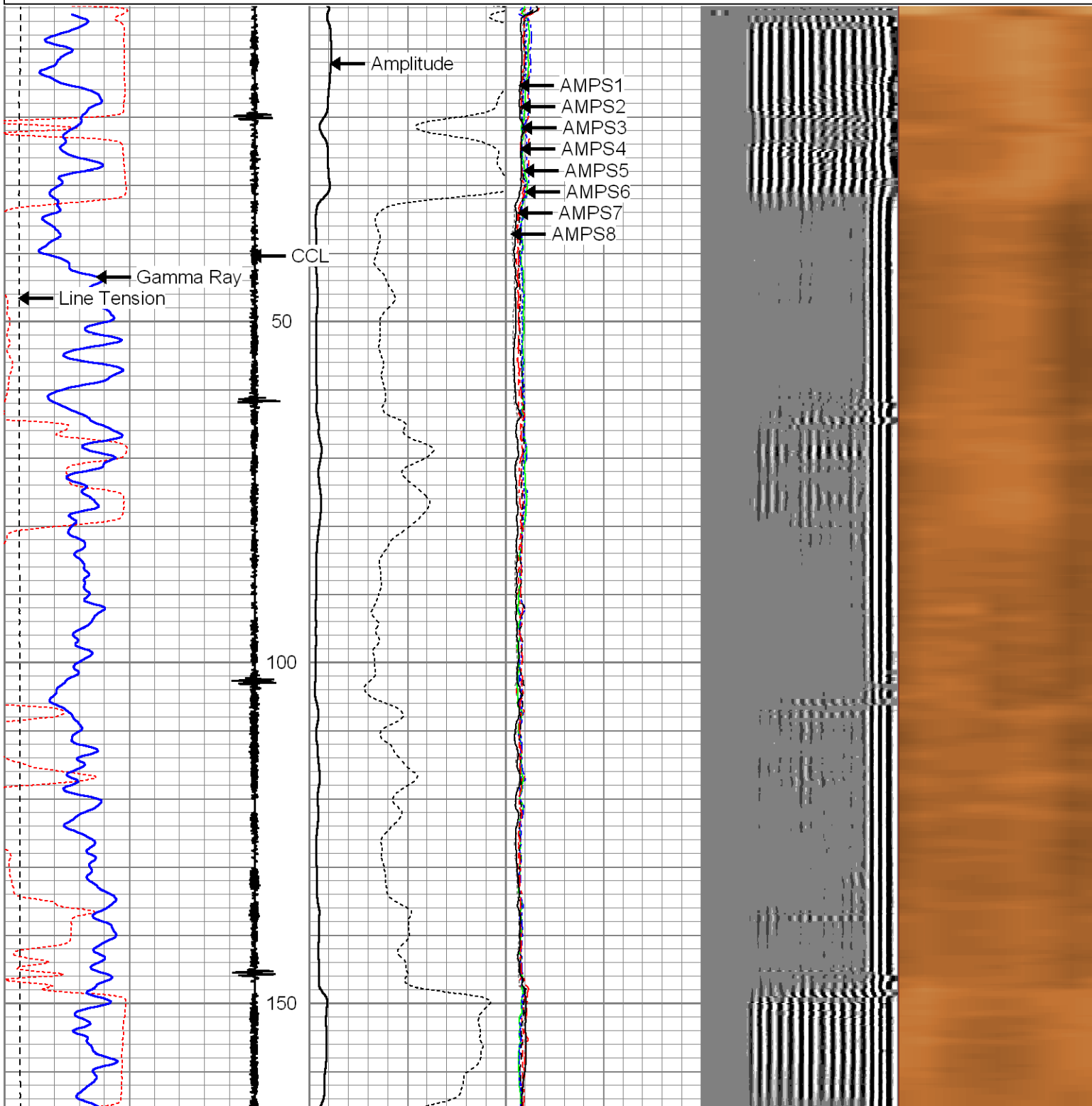
Database File: v-6465 quicksilver.db  
Dataset Pathname: pass6  
Presentation Format: sbttk5\_5  
Dataset Creation: Sat Jun 16 10:22:41 2012 by Log SCH 120126  
Charted by: Depth in Feet scaled 1:240

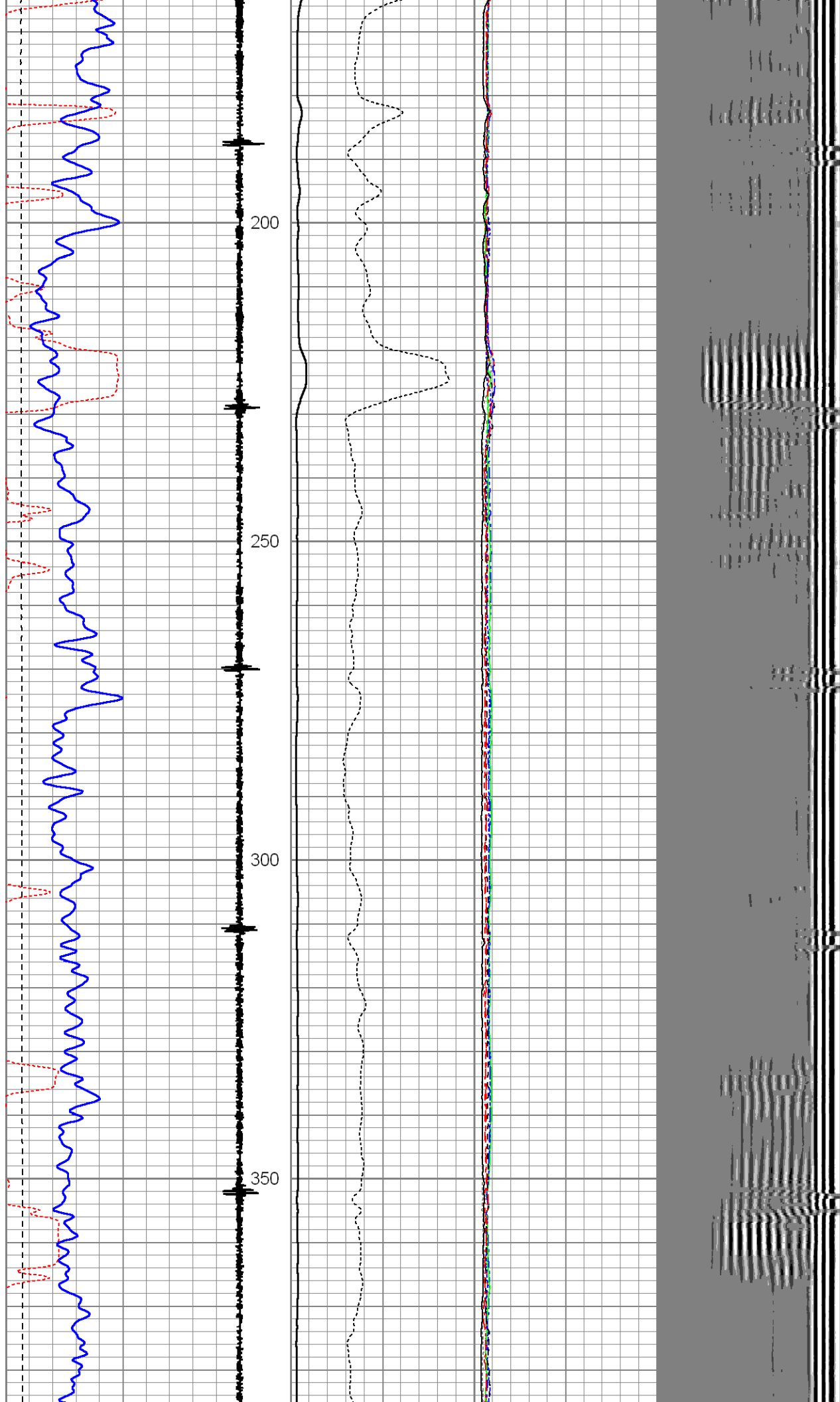
420 Travel Time (usec) 220  
0 Gamma Ray (GAPI) 150  
0 Line Tension (lb) 4000

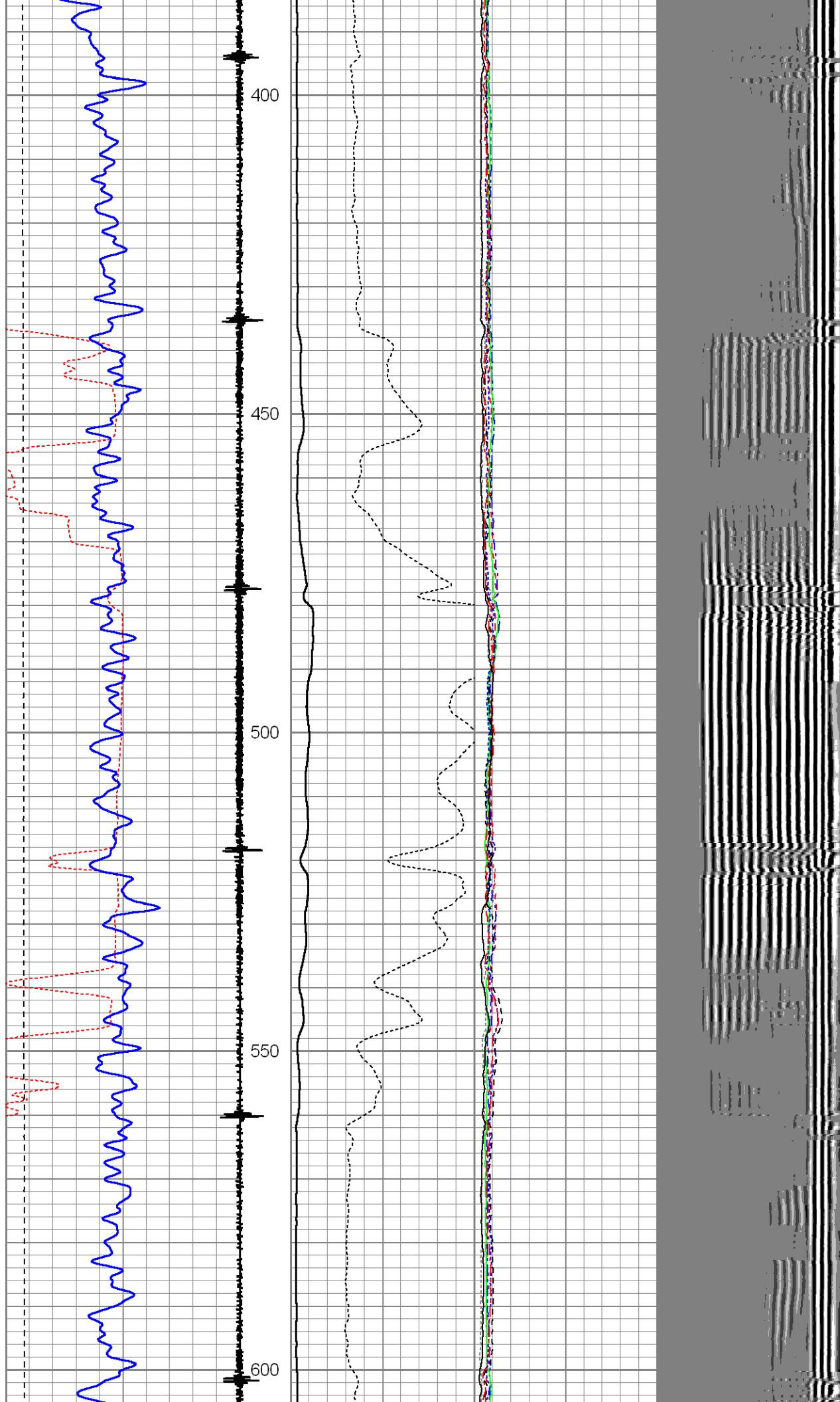
CCL

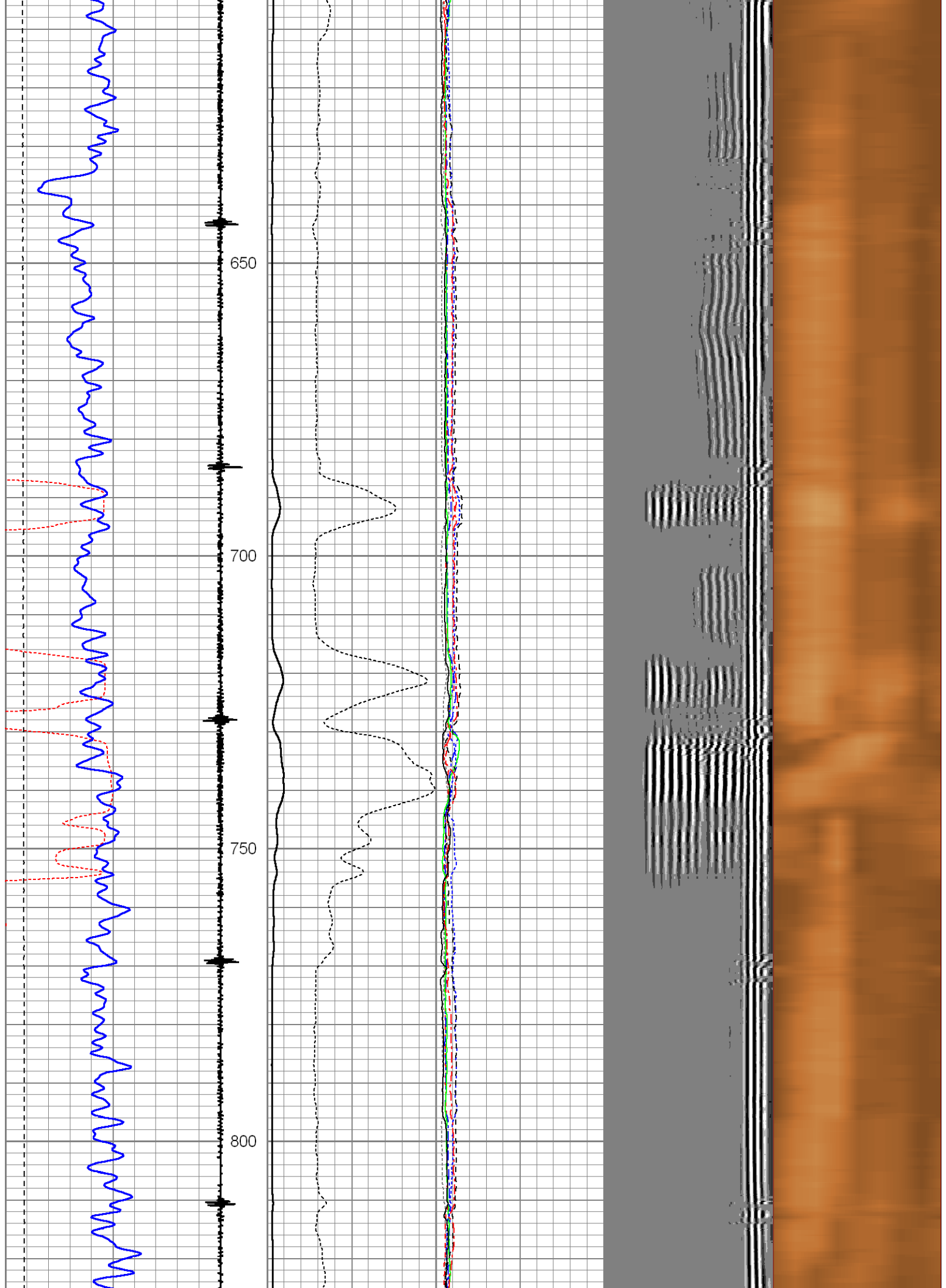
0	Amplitude (mV)100	-5	AMPS8	150
Amplified Amplitude		-5	AMPS7	150
0	(mV) 10	-5	AMPS6	150
		-5	AMPS5	150
		-5	AMPS4	150
		-5	AMPS3	150
		-5	AMPS2	150
		-5	AMPS1	150

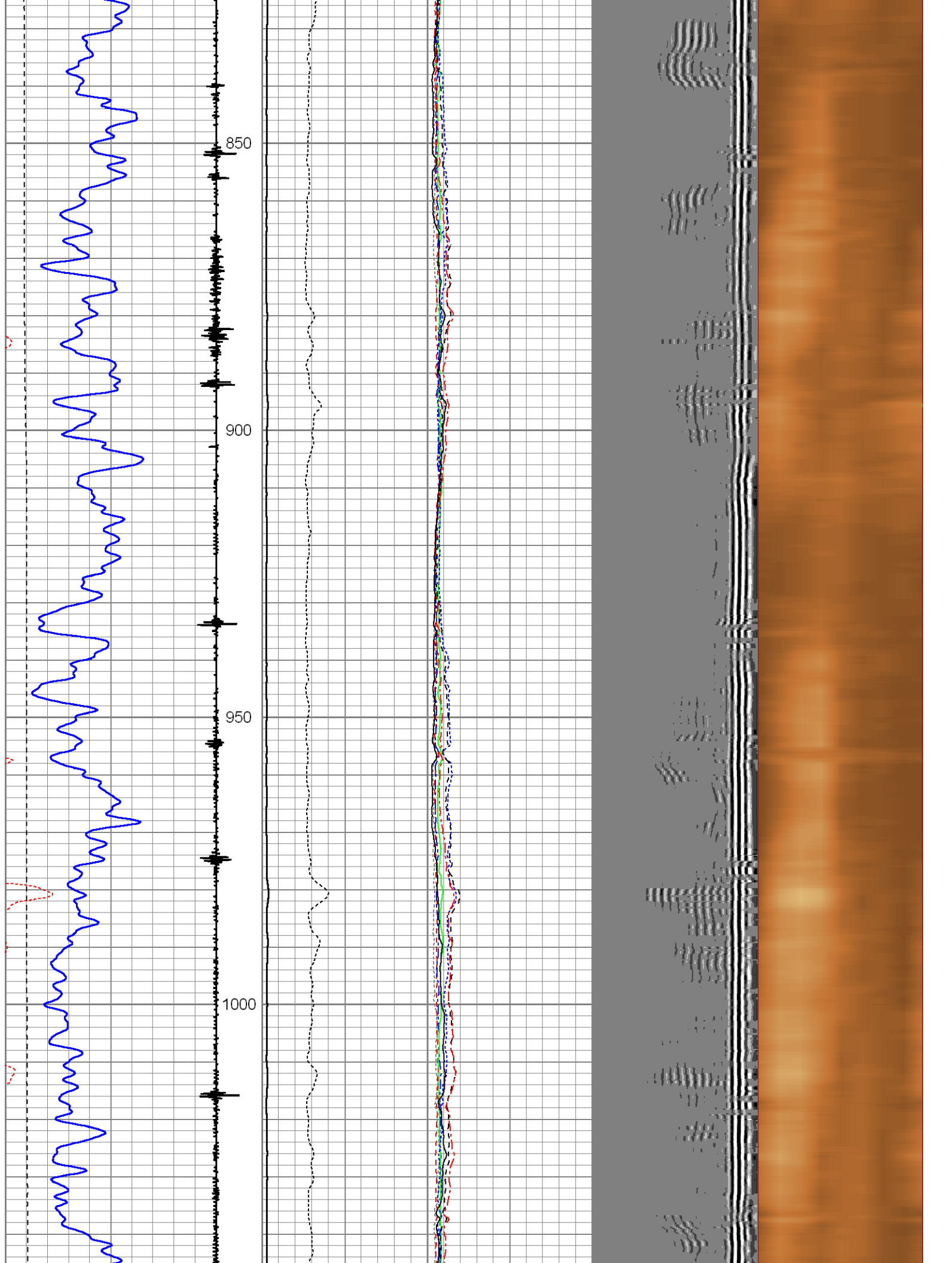
200 VDL 1200 Cement Map  
1 80

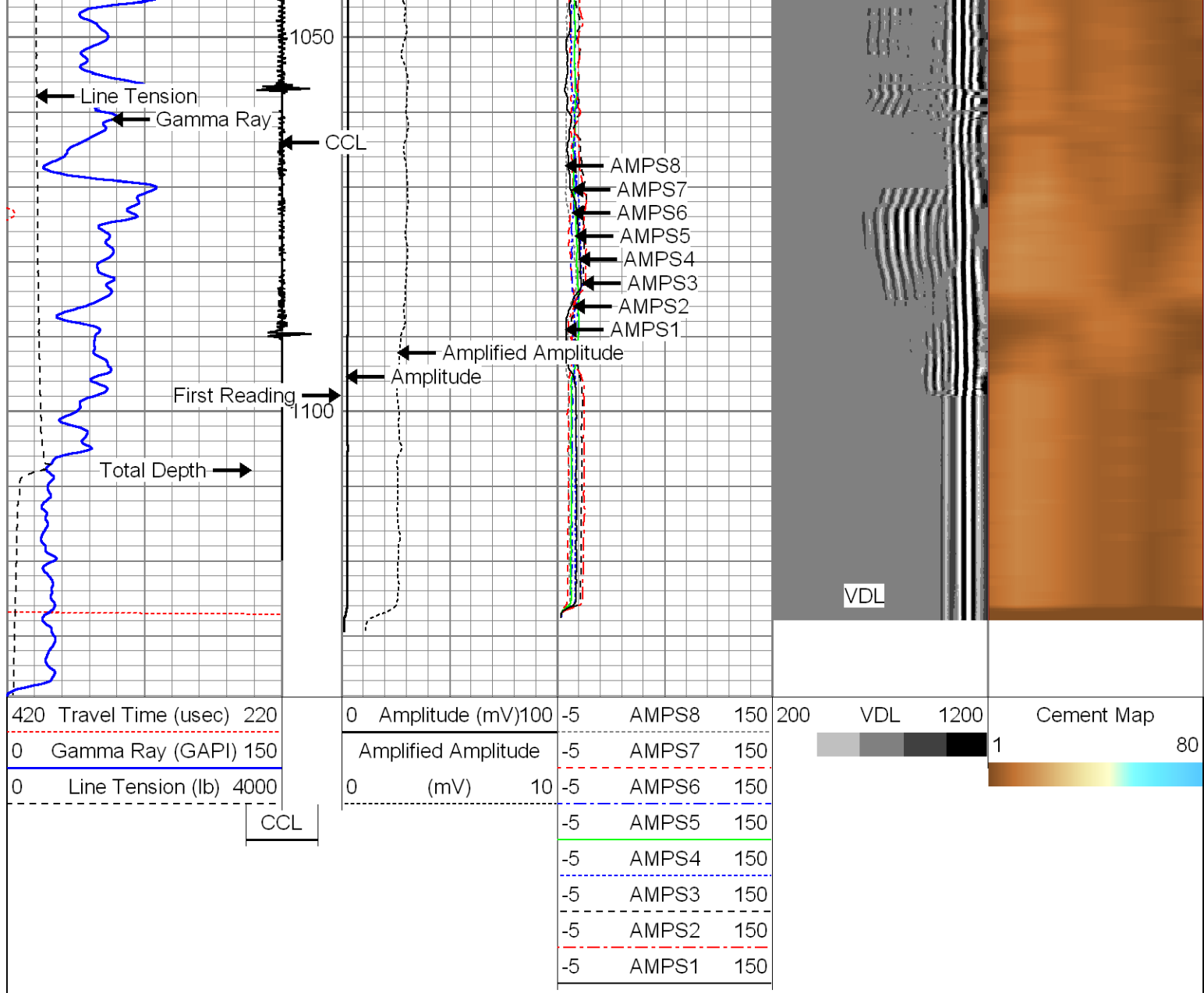












**CASED HOLE  
SOLUTIONS**

MAIN PASS

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
CCL	18.17		1.4375CHD Titan Cable Head 1 7/16	1.00	1.44	10.00
			Probe Probe 2 3/4 Centralizer	3.00	2.75	20.00
			WFD-CCL-Tekco (4CCL2.75) 2 3/4" Tekco Logging Collar Locator	1.83	2.75	20.00

TEMP	13.17		WFD-TekcoRIB_500-275 (7CBL2.75) 2.75" Tekco RIB High Temp (500 Deg.) w/ Temperature	10.71	2.75	120.00
WVFS1	11.82					
WVFS2	11.82					
WVFS3	11.82					
WVFS4	11.82					
WVFS5	11.82					
WVFS6	11.82					
WVFS7	11.82					
WVFS8	11.82					
WVF3FT	11.04					
WVF5FT	10.04					
WVFCAL	6.79					
WVFTEMP	6.79					
WVFSYNC	6.79					
GR	1.00		WFD-GR-TEKCOGR169 (GRS1.2) Tekco 1 11/16" Gamma Ray	3.79	1.69	
Dataset: v-6465 quicksilver.db: field/well/run1/pass6 Total Length: 23.34 ft Total Weight: 190.00 lb O.D. 2.75 in						

Calibration Report		
Database File:	v-6465 quicksilver.db	
Dataset Pathname:	pass6	
Dataset Creation:	Sat Jun 16 10:22:41 2012 by Log SCH 120126	
Gamma Ray Calibration Report		
Serial Number:	GRS1.2	
Tool Model:	TEKCOGR169	
Performed:	Mon May 21 13:47:09 2012	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.8597	GAPI/cps



# Radial Cement Bond Calibration Report

Serial Number: 7CBL2.75  
 Tool Model: 275  
 Calibration Casing Diameter: 9.625 in  
 Calibration Depth: 0.000 ft

Master Calibration, performed Sat Jun 16 09:56:54 2012:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.014	1.224	1.700	51.280	40.955	1.136
CAL	0.014	0.255				
5'	0.014	1.518	1.700	51.280	32.972	1.242
SUM						
S1	0.014	0.681	0.000	100.000	149.817	-2.059
S2	0.014	0.693	0.000	100.000	147.309	-2.027
S3	0.014	0.758	0.000	100.000	134.289	-1.843
S4	0.014	0.793	0.000	100.000	128.397	-1.762
S5	0.014	0.770	0.000	100.000	132.212	-1.809
S6	0.014	0.766	0.000	100.000	132.842	-1.823
S7	0.014	0.753	0.000	100.000	135.313	-1.868
S8	0.014	0.716	0.000	100.000	142.435	-1.956

Internal Reference Calibration, performed Wed Dec 31 17:00:00 1969:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.014	0.255	1.000	0.000

## Temperature Calibration Report

Serial Number: 7CBL2.75  
 Tool Model: 275  
 Performed: Sun Jun 13 13:33:21 1993

	Reference		Reading	
Low Reference:	0.00	degF	0.00	usec
High Reference:	1.00	degF	1.00	usec

Gain: 1.00  
 Offset: 0.00  
 Delta Spacing: 1

Company: QUICKSILVER RESOURCES INC.  
 Well: PIRTLAW PARTINERS LIMITED 24-33  
 Field: WOLF MOUNTAIN  
 County: ROUTT State: COLORADO

**CASED HOLE  
SOLUTIONS**

RADIAL CEMENT BOND  
 GAMMA RAY CCL  
 LOG