WESC WARRIOR Energy Services Corp.

CEMENT BOND LOG
GAMMA RAY / CCL / VDL

Company BONANZA CREEK
Well NMU #11-12H
Field McCALLUM
County JACKSON State COLORADO
Location: API # : 05-057-06532
NW / NE
SEC 11 TWP 9N RGE 79W

Other Services
NONE

Permanent Datum GROUND LEVEL Elevation 8165'
Log Measured From GROUND LEVEL
Drilling Measured From GROUND LEVEL

Elevation
K.B.
D.F.
G.L. 8165'

Company BONANZA CREEK
Well NMU #11-12H
Field McCALLUM
County JACKSON
State COLORADO

Date	19-NOV-2014
Run Number	ONE
Depth Driller	3000'
Depth Logger	2660'
Bottom Logged Interval	2660'
Top Log Interval	SURFACE
Open Hole Size	12.25"
Type Fluid	WATER
Density / Viscosity	N/A
Max. Recorded Temp.	N/A
Estimated Cement Top	
Time Well Ready	9:00AM
Time Logger on Bottom	SEE LOG
Equipment Number	4400
Location	CASPER
Recorded By	J.CRANDALL
Witnessed By	MR.DAVE VOORHEES

Borehole Record

Run Number	Bit	From	To

Tubing Record

Size	Weight	From	To

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	13.375"	54.4	SURFACE	250'
Prot. String	9.625"	40	SURFACE	2666'
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

LOGGED FROM GROUND LEVEL

THANK YOU FOR USING WARRIOR ENERGY SERVICES CORP.

WESC WARRIOR Energy Services Corp.

MAIN PASS

Database File:	nmu11-12h.db
Dataset Pathname:	pass4
Presentation Format:	2scblvdl
Dataset Creation:	Wed Nov 19 12:05:27 2014 by Log SCH 120126
Charted by:	Depth in Feet scaled 1:240

280 Travel Time (usec) 180
9 Collar Locator -1
0 Gamma Ray (GAPI) 250
0 Amplified Amplitude (mV) 20
0 Amplitude (mV) 100
200 VDL 1200

280 Travel Time (usec) 180
9 Collar Locator -1
0 Gamma Ray (GAPI) 250
0 Amplified Amplitude (mV) 20
0 Amplitude (mV) 100
200 VDL 1200

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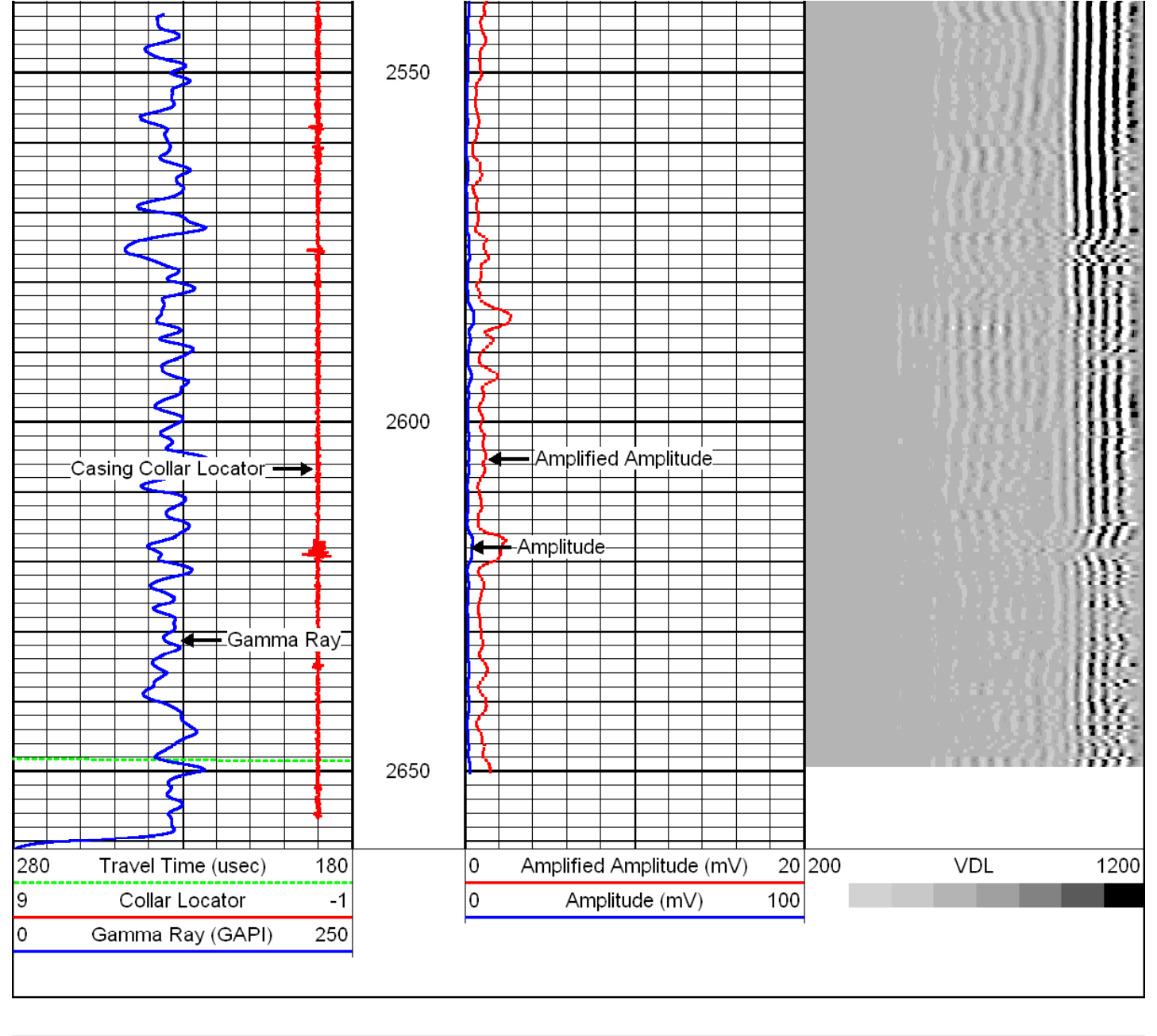
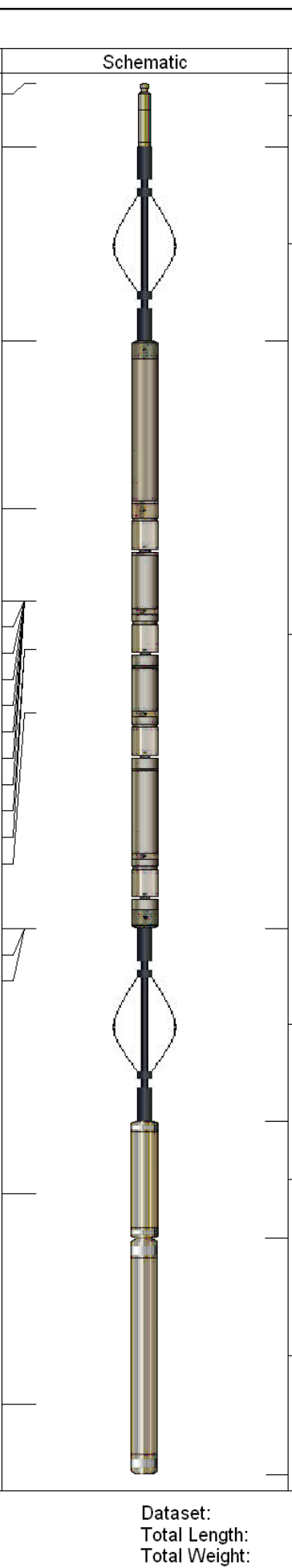
REPEAT PASS

Database File:	nmu11-12h.db
Dataset Pathname:	pass3
Presentation Format:	2scblvdl
Dataset Creation:	Wed Nov 19 12:03:38 2014 by Log SCH 120126
Charted by:	Depth in Feet scaled 1:240

280 Travel Time (usec) 180
9 Collar Locator -1
0 Gamma Ray (GAPI) 250
0 Amplified Amplitude (mV) 20
0 Amplitude (mV) 100
200 VDL 1200



280 Travel Time (usec) 180
9 Collar Locator -1
0 Gamma Ray (GAPI) 250
0 Amplified Amplitude (mV) 20
0 Amplitude (mV) 100
200 VDL 1200

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
CHD	21.61		CHD1_0	1.00	1.00	1.00
CENT	20.61		LTEC-1.68 LTEC Six Arm	3.00	1.69	15.00
SCBL	17.61					
TEMP	14.98					
WVFS1	13.56		SCBL-SBT27 (27SBT20-0249) Tekco 2 3/4" Sector Bond Temp (Can)	9.13	2.75	102.00
WVFS2	13.56					
WVFS3	13.56					
WVFS4	13.56					
WVFS5	13.56					
WVFS6	13.56					
WVFS7	13.56					
WVFS8	13.56					
WVF3FT	12.81					
WVFCAL	12.81					
WVF5FT	11.81					
WVFTEMP	8.48					
WVFSYNC	8.48					
CENT	8.48		LTEC-1.68 LTEC Six Arm	3.00	1.69	15.00
CCL	4.35		CCL-CCL27 (27CCL40-0146) Tekco 2 3/4" Collar Locator	1.81	2.75	20.00
GR	1.08		GR-GRL27 (27GRL20-0254) Tekco 2 3/4" Gemma Ray 6" Crystal (400 deg Flask)	3.67	2.75	30.00

Dataset:	nmu11-12h.db: field/well/run1/pass4
Total Length:	21.61 ft
Total Weight:	183.00 lb
O.D.	2.75 in