HALLIBURTON

RADIAL CEMENT BOND LOG

Company	SG INTERESTS
Well	FEDERAL 11-89-17 #1
Field	GUNNISON
County	WILDCAT State CO

Company SG INTERESTS
Well FEDERAL 11-89-17 #1
Field GUNNISON
County WILDCAT State CO
API No.: 050510608600 Serv #: 6880731
Location: SURFACE HOLE:
2402' FNL & 2116' FEL

Other Services
TEMP LOG

Sec: 17 Twp: 11S Rge: 89W

Permanent Datum	GROUND LEVEL	Elevation 7425'		Elevation
Log Measured From	K.B. . 19 Ft. above perm. datum			K.B. 7444'
Drilling Measured From	K.B.			D.F. ____ G.L. 7425'

Date @ Time Logged	06/SEPT/2009 10:15	Type Fluid in Hole	WATER
Run No.	TWO	Density of Fluid	8.34 PPG
Depth - Driller	405'	Fluid Level	FULL
Depth - Logger	354'	Cement Top Est. Logged	LOGGED
Bottom - Logged Interval	349'	Equipment / Location	10971659 / GJ
Top - Log Interval	SURFACE	Recorded by	A. LINTEL
Max. Recorded Temp.	86 F	Witnessed by	C. MILLER

CEMENTING DATA	Surface	Protection	Production	Liner
	String	String	String	
Date / Time Cemented				
Primary / Squeeze				
Expected Compressive Strength	psi@ hrs	psi@ hrs	psi@ hrs	psi@ hrs
Cement Volume	/	/	/	/
Cement Type / Weight	/	/	/	/
Formulation	/	/	/	/
Mud Type / Mud Wgt.	/			

Borehole Record			Casing & Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
ONE	16"	SURFACE	405'	13.375"	54#	SURFACE	405'

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HALLIBURTON DOES NOT GUARANTEE THE ACCURACY OF ANY INTERPRETATION OF THE LOG DATA, CONVERSION OF LOG DATA TO PHYSICAL ROCK PARAMETERS OR RECOMMENDATIONS WHICH MAY BE GIVEN BY HALLIBURTON PERSONNEL OR WHCIH APPEAR ON THE LOG OR IN ANY OTHER FORM. ANY USER OF SUCH DATA, INTERPRETATIONS, CONVERSIONS, OR RECOMMENDATIONS AGREES THAT HALLIBURTON IS NOT RESPONSIBLE EXCEPT WHERE DUE TO GROSS NEGLIGENCE OR WILLFUL MISCONDUCT, FOR ANY LOSS, DAMAGES, OR EXPENSES RESULTING FROM THE USE THEREOF.

Comments

GR-CCL-RBT RAN IN COMBINATION

NO REFERENCE LOG FOR CORRELATION

LOGGED INTERVALS PER CUSTOMER REQUEST

USED CALIBRATION FROM PREVIOUS WELL BECAUSE
NO SUFFICIENT FREE PIPE FOUND TO CALIBRATE

THANK YOU FOR USING HALLIBURTON ENERGY SERVICES GRAND JUNCTION, CO

Service Ticket No. 6880731 API No. 050510608600 PGM Ver WARRIOR 7.0

The Well Name, Location, Borehole Description, and / or Cementing Data Furnished by Client

EQUIPMENT DATA

TELEMETRY		RBT					
Run No.	TWO	Run No.	TWO	Run No.		Run No.	
Serial No.	219615	Serial No.	11002214	Serial No.		Serial No.	
Model No.	TTTC-U	Model No.	RBT-001	Model No.		Model No.	
Diameter	1.69"	Diameter	3.125"	Diameter		Diameter	

LOGGING DATA

General Data

Pass	Depths		Well Head	Speed	Logging Run Comments
No.	From	To	Pressure	Ft/Min	
ONE	354'	SURFACE	0 PSI	60	MAIN SECTION

	GR		CCL		AMPLITUDE			
Pass	Scale		Scale		Scale		Scale	
No.	L	R	L	R	L	R	L	L
ONE	0	200	27	-3	0	100		

DIRECTIONAL INFORMATION

Maximum Deviation		deg. @		KOP	

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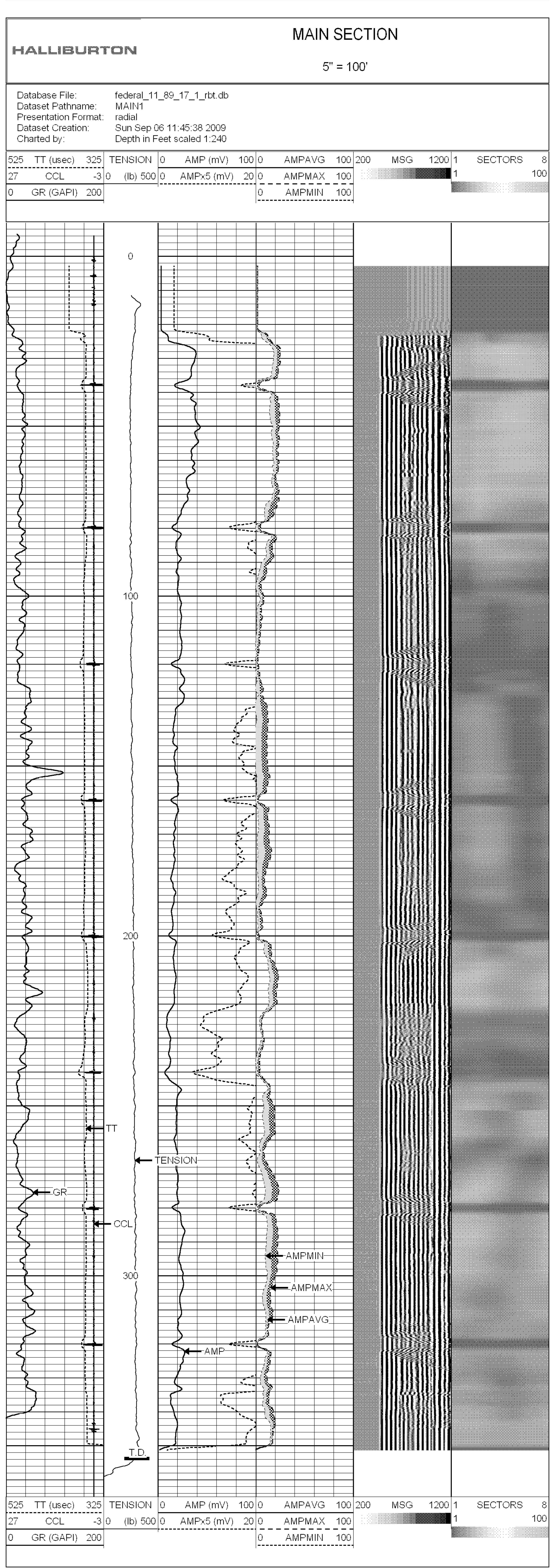
MAIN SECTION

5" = 100'

Database File: federal_11_89_17_1_rbt.db
Dataset Pathname: MAIN1
Presentation Format: radial
Dataset Creation: Sun Sep 06 11:45:38 2009
Charted by: Depth in Feet scaled 1:240



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MAIN SECTION

5" = 100'

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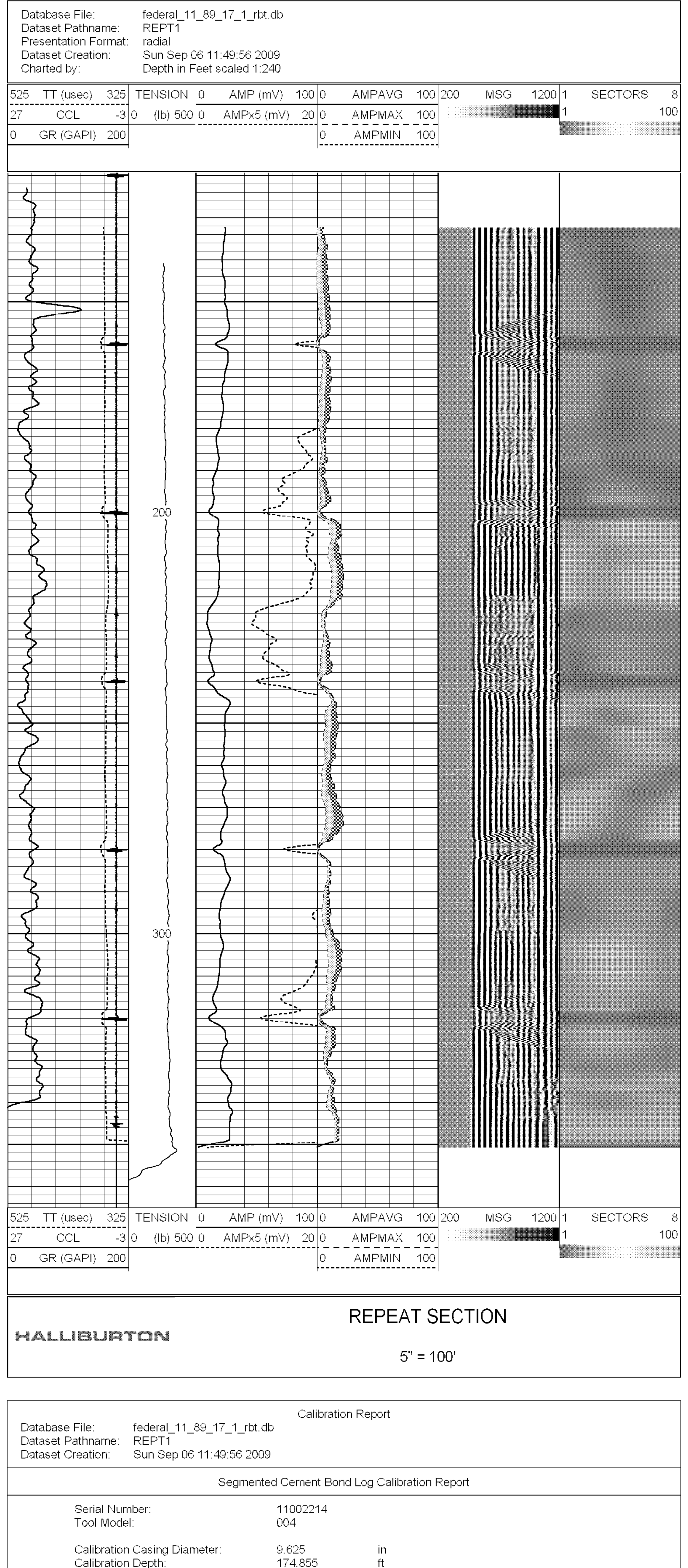
REPEAT SECTION

5" = 100'

Database File: federal_11_89_17_1_rbt.db
Dataset Pathname: REPT1
Presentation Format: radial
Dataset Creation: Sun Sep 06 11:49:56 2009
Charted by: Depth in Feet scaled 1:240



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REPEAT SECTION

5" = 100'

Calibration Report

Database File: federal_11_89_17_1_rbt.db
Dataset Pathname: REPT1
Dataset Creation: Sun Sep 06 11:49:56 2009

Segmented Cement Bond Log Calibration Report

Serial Number: 11002214
Tool Model: 004

Calibration Casing Diameter: 9.625 in
Calibration Depth: 174.855 ft

Master Calibration, performed Tue Aug 18 17:43:57 2009:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3FT	0.002	0.433	2.000	51.280	114.418	1.777
5FT	-0.002	0.761	2.000	51.280	64.627	2.117
S1	0.002	0.426	0.000	100.000	235.918	-0.389
S2	0.001	0.438	0.000	100.000	229.071	-0.288
S3	0.002	0.428	0.000	100.000	234.594	-0.470
S4	0.003	0.438	0.000	100.000	229.810	-0.741
S5	0.003	0.447	0.000	100.000	225.322	-0.784
S6	0.007	0.447	0.000	100.000	227.259	-1.517
S7	0.001	0.443	0.000	100.000	226.380	-0.249
S8	0.007	0.427	0.000	100.000	237.781	-1.547

Calibration Report

Serial Number: 11002214
Tool Model: 004
Performed:

	Reference (degF)	Reading ()
Low:	0.000	0.000
High:	1.000	1.000
	Gain = 1.000	Offset= 0.000

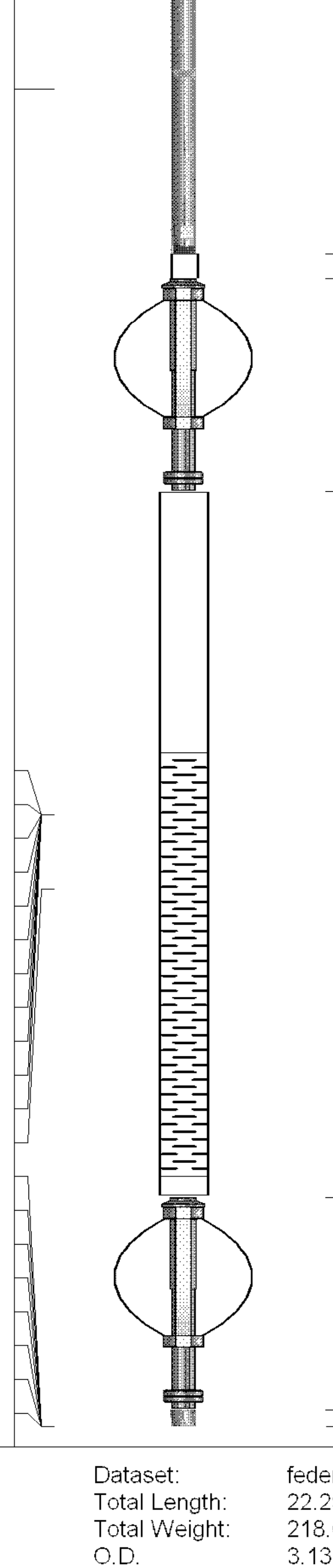
Gamma Ray Calibration Report

Serial Number: 219615
Tool Model: ULTRA_LINK
Performed: Sun Sep 06 10:40:15 2009

Calibrator Value: 230.0 GAPI

Background Reading: 25.9 cps
Calibrator Reading: 162.9 cps

Sensitivity: 1.6778 GAPI/cps



Sensor	Offset (ft)	Description	Len (ft)	OD (in)	Wt (lb)
CCL	20.20				
GR	17.94	TTTCU-ULTRA_LINK (219615) Through Tubing Telemetry Cartridge - Ultrawire	6.55	1.69	33.00
		AUH-001 (000001) Adaptor Ultrawire/Halliburton	0.33	1.69	3.00
		TITAN_SNDX	2.85	2.63	20.00
WVF3FT	8.21				
WVFS1	8.21				
WVFS2	8.21	RBT-004 (11002214) Radial Bond Tool (UW 3 1/8)	9.47	3.13	140.00
WVFS3	8.21				
WVFS4	8.21				
WVFS5	8.21				
WVFS6	8.21				
WVFS7	8.21				
WVFS8	8.21				
CBLTEMP	8.21				
CBLROT	8.21				
WVF5FT	7.21				
LLMTEN	0.00				
XHUTEMP	0.00				
XHUCURR	0.00				
XHUVOLT	0.00				
XHUSTAT	0.00	TITAN_SNDX	2.85	2.63	20.00
TSTAMP	0.00				
ITEMPX	0.00				
HVOLTX	0.00	SNDX_TERM	0.22	1.69	2.00

Dataset: federal_11_89_17_1_rbt.db: field/well/run1/REPT1
Total Length: 22.29 ft
Total Weight: 218.00 lb
O.D. 3.13 in

Company	SG INTERESTS
Well	FEDERAL 11-89-17 #1
Field	GUNNISON
County	WILDCAT State CO

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