

Company: SG INTERESTS I. LTD.

Well: VOLK 12-89-21 #1

Field: COAL BASIN EXT

County: GUNNISON

State: COLORADO

CEMENT VOLUME

GAMMA RAY

County: GUNNISON
Field: COAL BASIN EXT
Location: SHL: 2438' FWL & 1491' FNL
Well: VOLK 12-89-21 #1
Company: SG INTERESTS I. LTD.

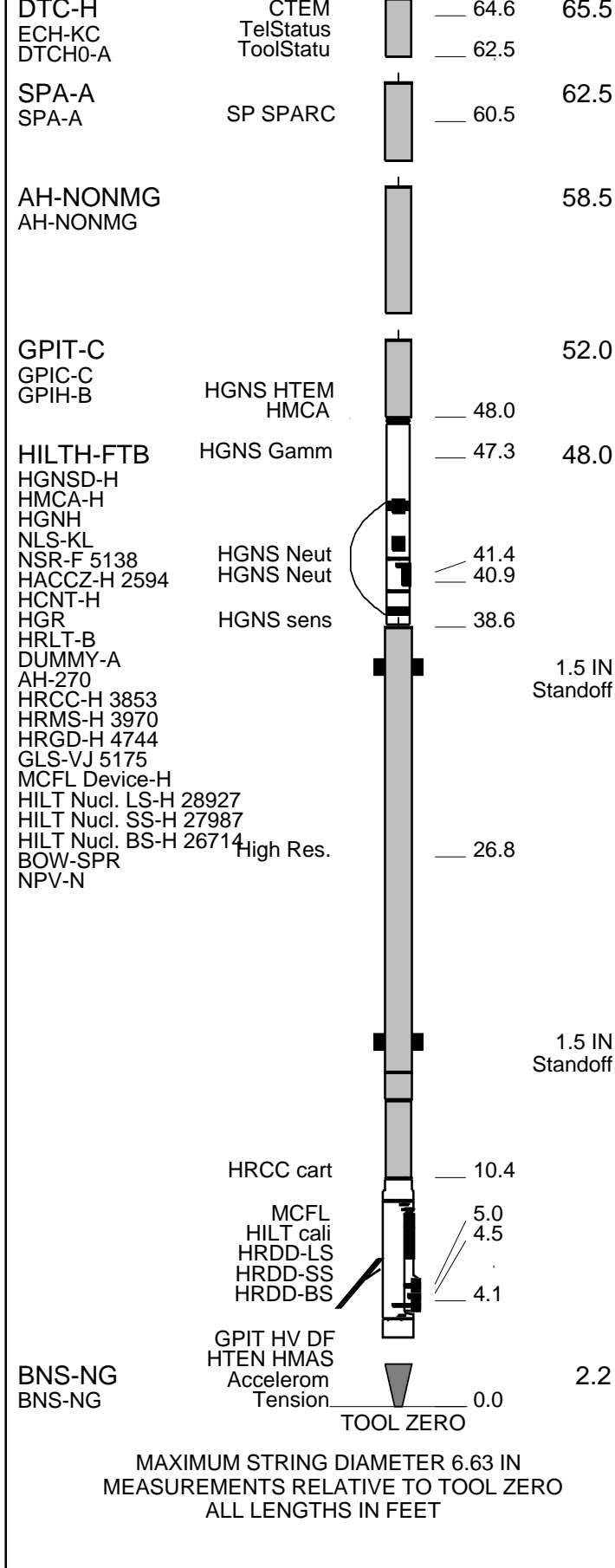
LOCATION		GROUND LEVEL
SHL: 2438' FWL & 1491' FNL		
BHL: 2441' FWL & 1991' FNL		
Lat: 39.00289 N Long: 107.34178 W		
Permanent Datum:		
Log Measured From:	KELLY BUSHING	Elev.: 7338.30 ft
Drilling Measured From:	KELLY BUSHING	22.00 ft above Perm. Datum

API Serial No. 05-051-06098-00	Section 21	Township 12S	Range 89W
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Logging Date	3-Dec-2010		
Run Number	1		
Depth Driller	3330 ft		
Schlumberger Depth	3330.5 ft		
Bottom Log Interval	3326.4 ft		
Top Log Interval	462 ft		
Casing Driller Size @ Depth	9.625 in @ 463 ft		
Casing Schlumberger	462 ft		
Bit Size	8.500 in		
Type Fluid In Hole	WBM		
Density	9.6 lbm/gal	37 s	
Fluid Loss		9.1	
PH			
Source Of Sample	Measured		
RM @ Measured Temperature	1.457 ohm.m @ 59 degF		@
RMF @ Measured Temperature	0.939 ohm.m @ 75 degF		@
RMC @ Measured Temperature	0.844 ohm.m @ 75 degF		@
Source RMF	Calculated		
RM @ MRT	0.795 @ 113	0.642 @ 113	@
RMF @ MRT	113 degF		
Maximum Recorded Temperatures			
Circulation Stopped	2-Dec-2010	20:30	
Logger On Bottom	3-Dec-2010	04:28	
Unit Number	2276	Vernal	
Recorded By	SAURABH DASS		
Witnessed By	FLOYD TRUAX		

[illegible]

Depth Control Remarks					
1. All Schlumberger depth control procedures followed. 2. IDW used as primary depth reference, Z-chart used as secondary depth reference 3. Log up correlated to log down from TD to CSG 4. 5. 6.					
DISCLAIMER THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE OF AND RELIANCE UPON THE RECORDED-DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED-DATA.					
OTHER SERVICES1 OS1: GPIT OS2: PEX-HRLA OS3: OS4: OS5:			OTHER SERVICES2 OS1: OS2: OS3: OS4: OS5:		
REMARKS: RUN NUMBER 1 Tool ran as per tool sketch. HGNS eccentralized with bowspring. HRLA ran eccentralized with 2x 1.5" standoffs Source of max temperature reading is HTEM on HGNS PEF Flags < 10%. Log computed with NMT=NoBarite Caliper check in casing = 8.921 +/-0.125" Neutron log corrected for Hole Size and Standoff Density Log corrected for Bit Size Cement volume calculated assuming FCD = 5.5" (given by client) Log computed with Sandstone matrix (2.68 g/cc) Logging speed = 3600 ft/hr Repeat pass done at 3050' due to client request (hole conditions) MCFL data affected due to Hole conditions. Log tied in 38 ft below casing shoe (500 ft) where measured depth = TVD (assumed) Latitude: 39.00289 N Longitude: 107.34178 W Crew: Marvin Smith, Jesse Leech, Nicole Gregory			REMARKS: RUN NUMBER 2		
RUN 1 SERVICE ORDER #: BBIM-00063 PROGRAM VERSION: 17C0-154 FLUID LEVEL: 40 ft			RUN 2 SERVICE ORDER #: PROGRAM VERSION: FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP
EQUIPMENT DESCRIPTION					
RUN 1			RUN 2		
SURFACE EQUIPMENT GSR-U/Y NCT-B CNB-AB NCS-VB					
DOWNHOLE EQUIPMENT					
LEH-QT LEH-QT					
AH-169					
DEC-11					



Client: SG INTERESTS I. LTD.

Well: VOLK 12-89-21 #1

Field: COAL BASIN EXT

State: COLORADO

Country: USA

Drawing Date: 12/3/2010

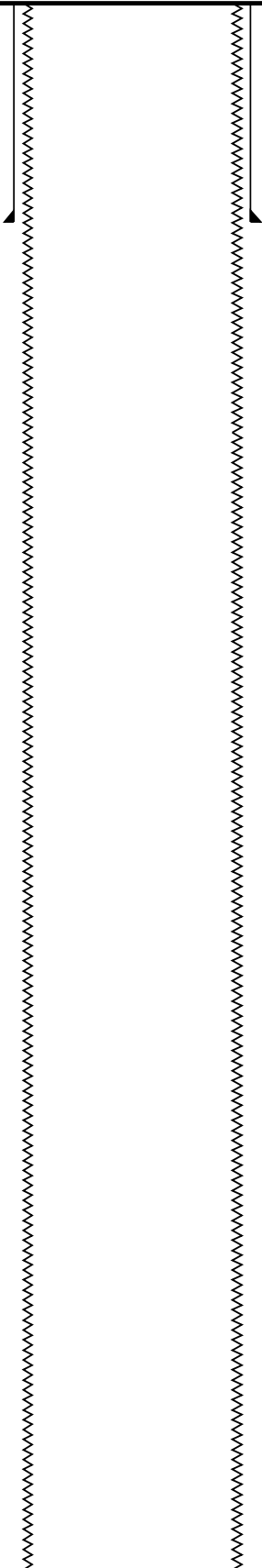
API #: 05-051-06094-00

Rig Name: PRECISION 18

Reference Datum: Kelly Bushing

Elevation: 7360.2 ft

Production String	(in)	(ft)	Well Schematic	(ft)	(in)	Casing String
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	OD	ID	MD		MD	OD	ID	
					0.0	9.625 8.500		Casing String, 36.0 lbm/ft Borehole Segment
					463.0	9.625		Casing Shoe
					3330.0	8.500		Borehole Segment Bottom

All depths are referenced to driller's depths

Input DLIS Files

DEFAULT TLD_MCFL_CNL_015LUP FN:14 PRODUCER 03-Dec-2010 04:28 3348.5 FT -4.5 FT

Output DLIS Files

DEFAULT TLD_MCFL_CNL_023PUP FN:21 PRODUCER 03-Dec-2010 07:14 3351.0 FT -2.0 FT

Integrated Hole/Cement Volume Summary

Hole Volume = 1266.54 F3

Cement Volume = 793.21 F3 (assuming 5.50 IN casing O.D.)

Computed from 3330.5 FT to 462.0 FT using data channel(s) HCAL

OP System Version: 17C0-154

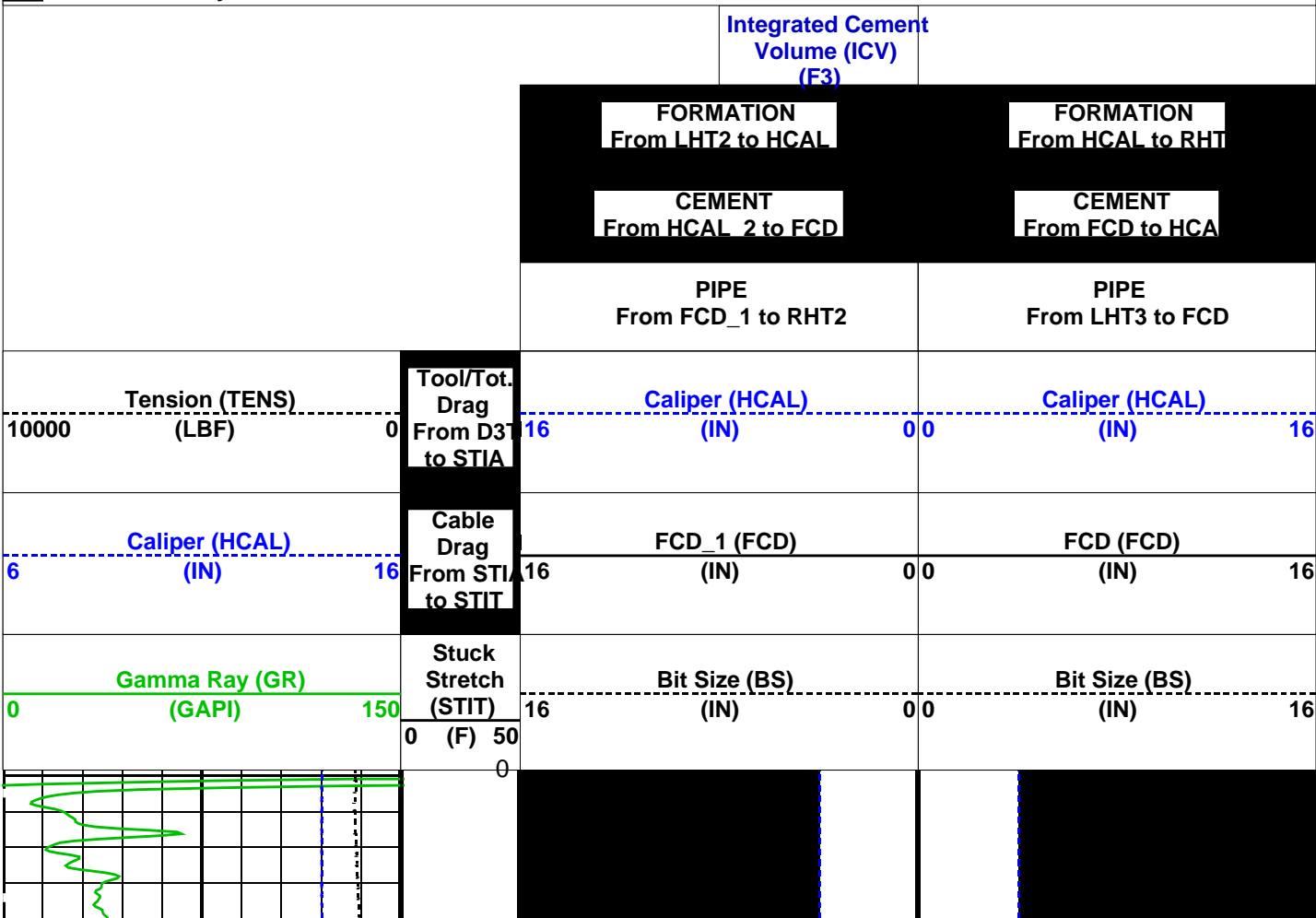
HILTH-FTB 17C0-154
SPA-A 17C0-154

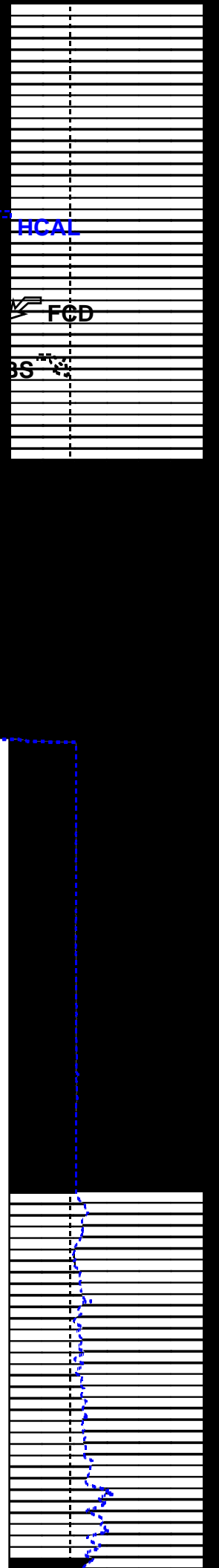
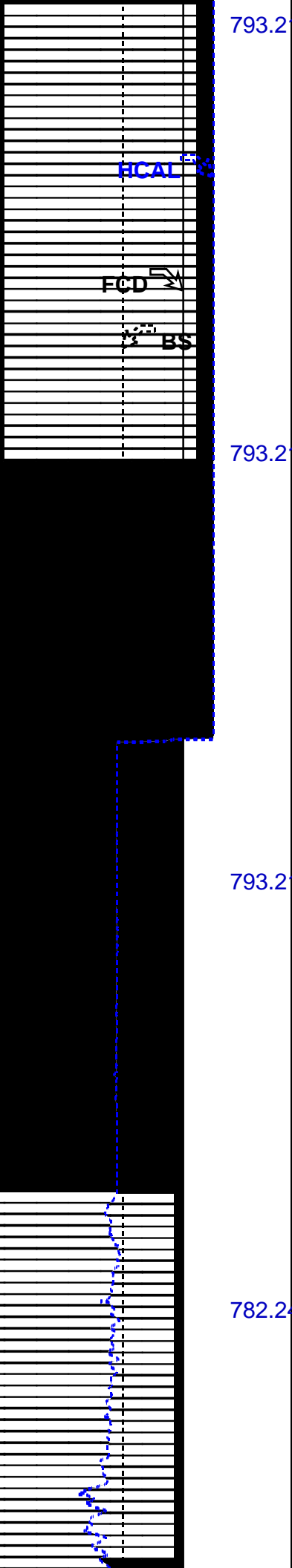
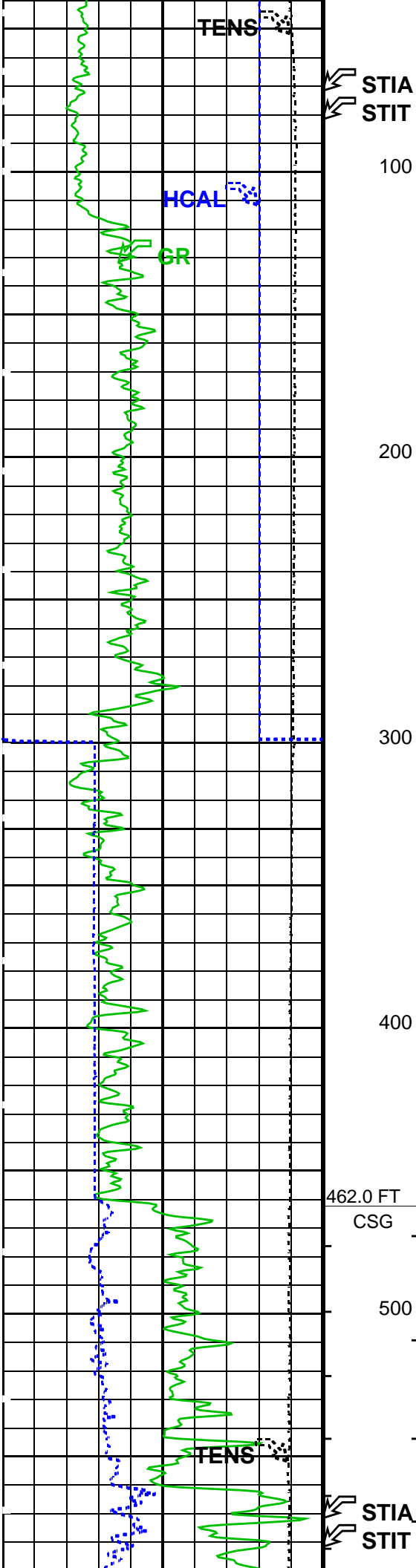
GPIT-C SRPC-4041_Q3_2010_OP17
DTC-H 17C0-154

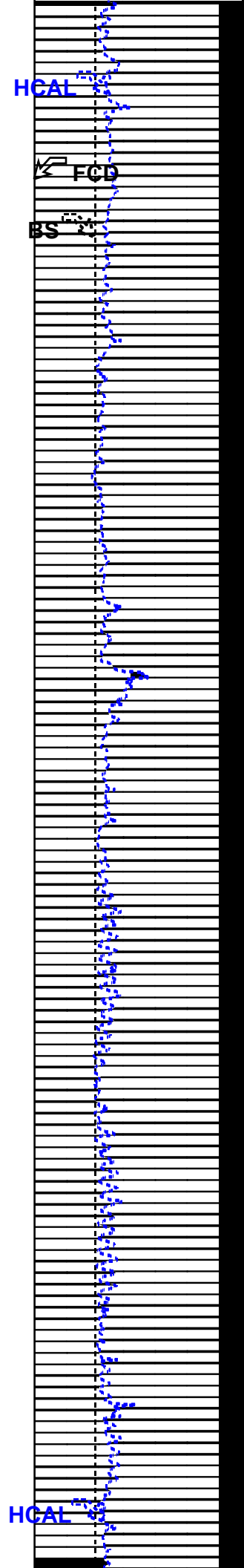
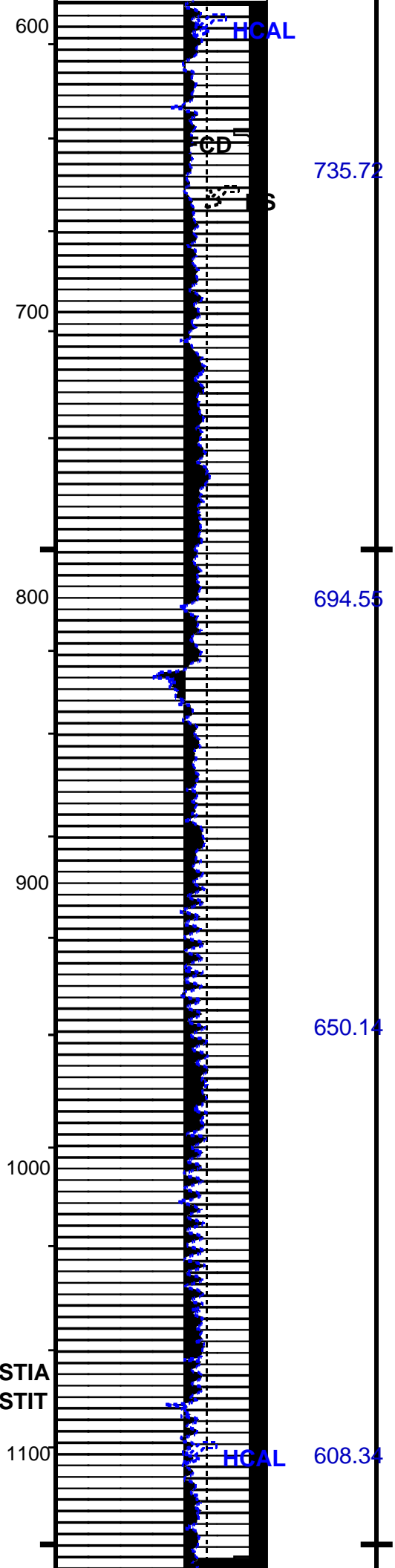
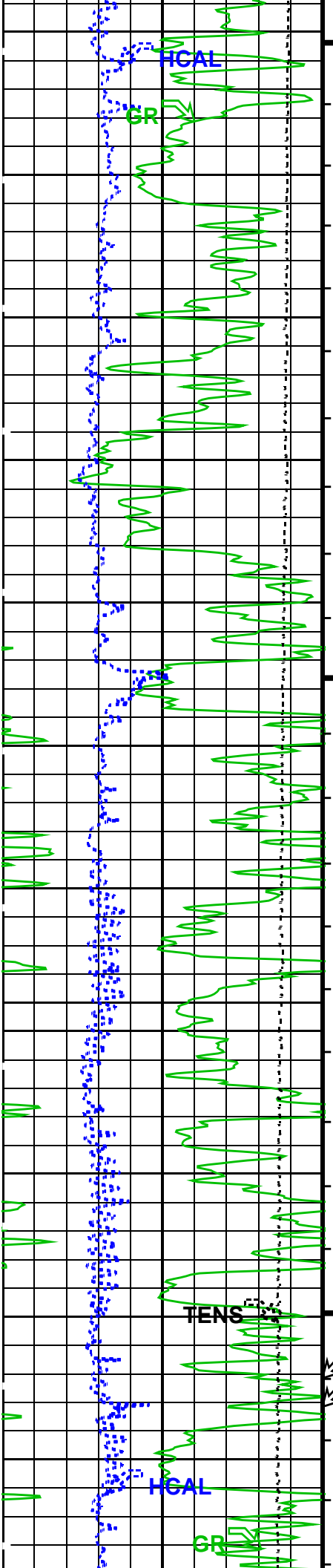
PIP SUMMARY

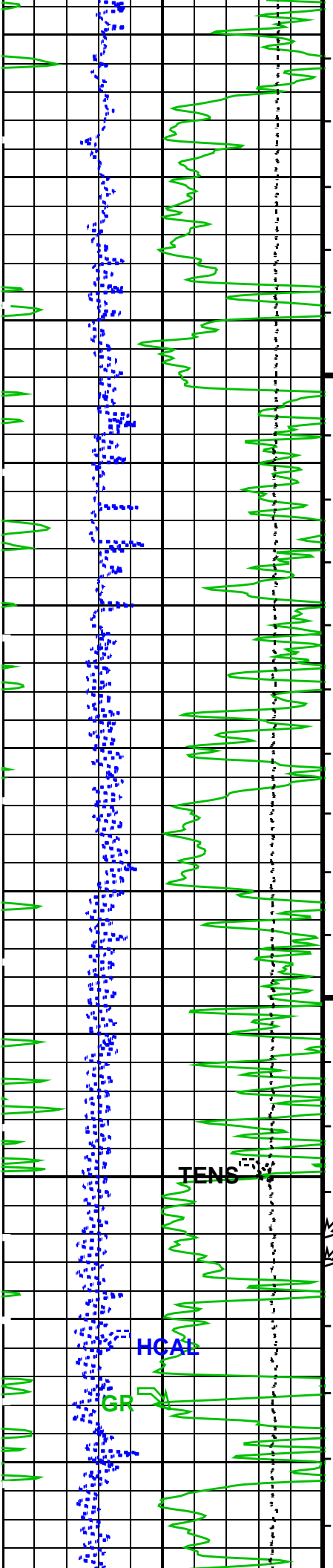
- └ Integrated Hole Volume Minor Pip Every 10 F3
- └ Integrated Hole Volume Major Pip Every 100 F3
- └ Integrated Cement Volume Minor Pip Every 10 F3
- └ Integrated Cement Volume Major Pip Every 100 F3
- Integrated Cement Volume Major Pip Every 100 F3
- Integrated Cement Volume Major Pip Every 100 F3

Time Mark Every 60 S

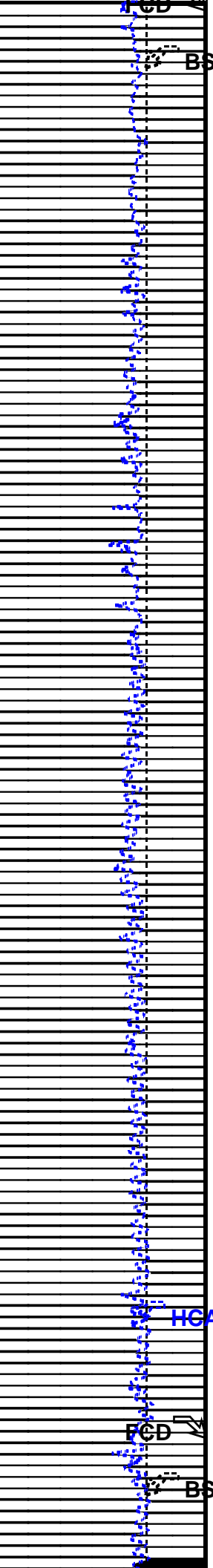




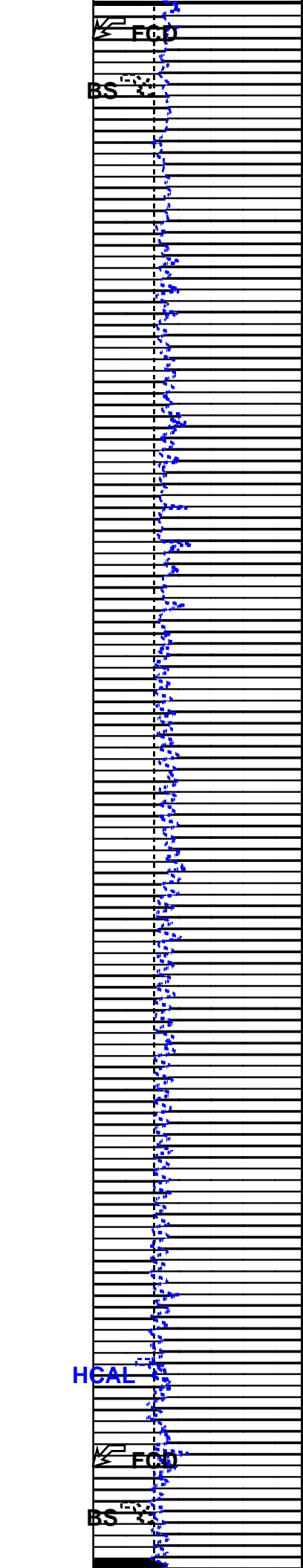


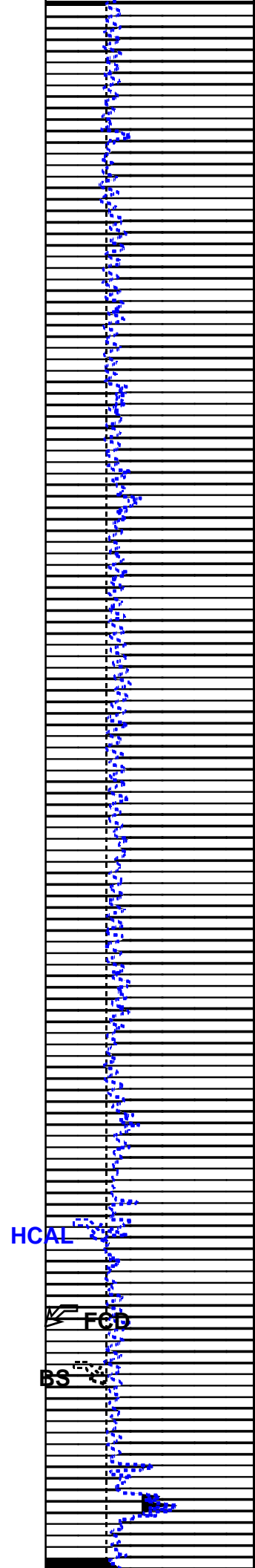
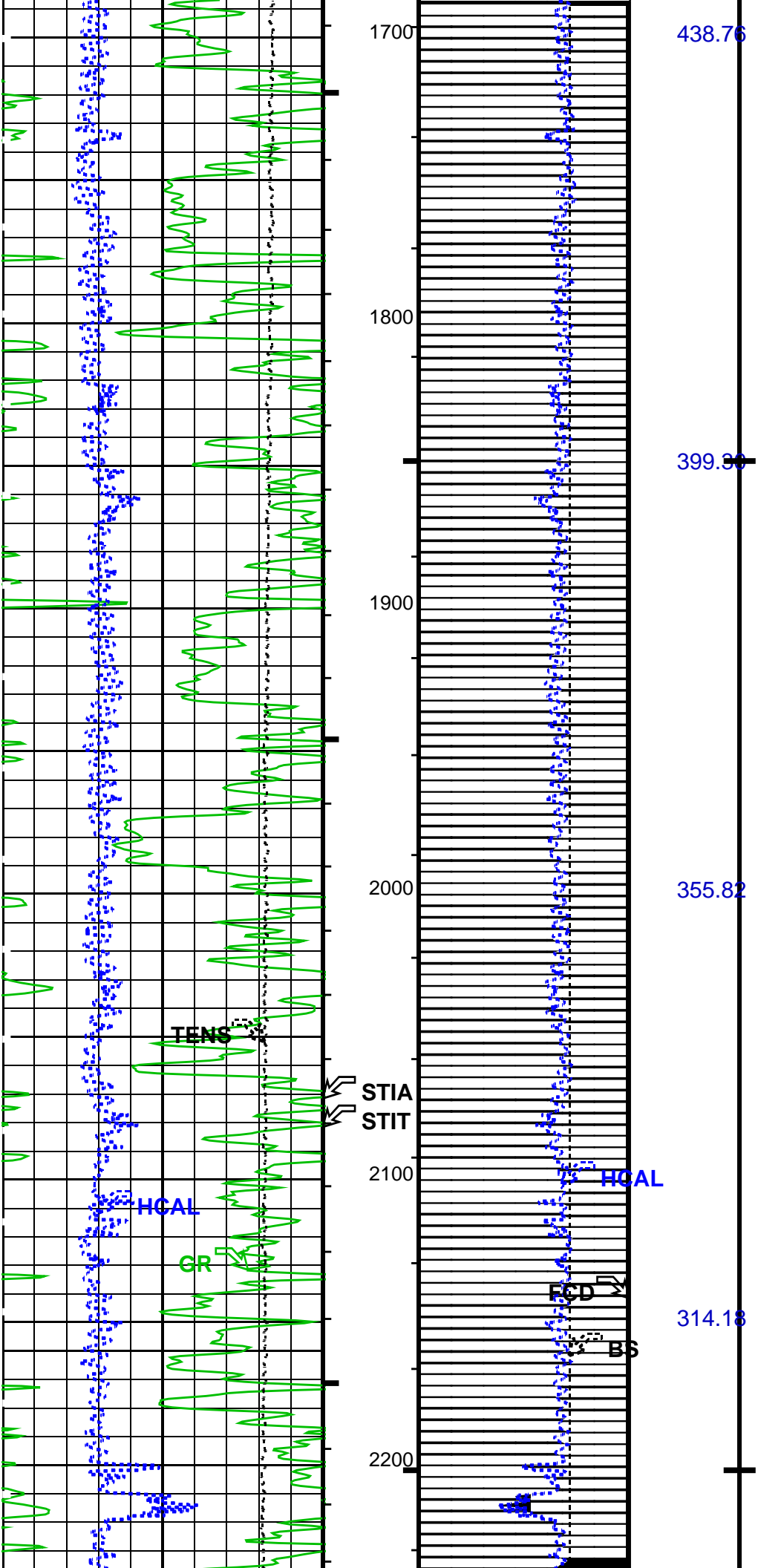


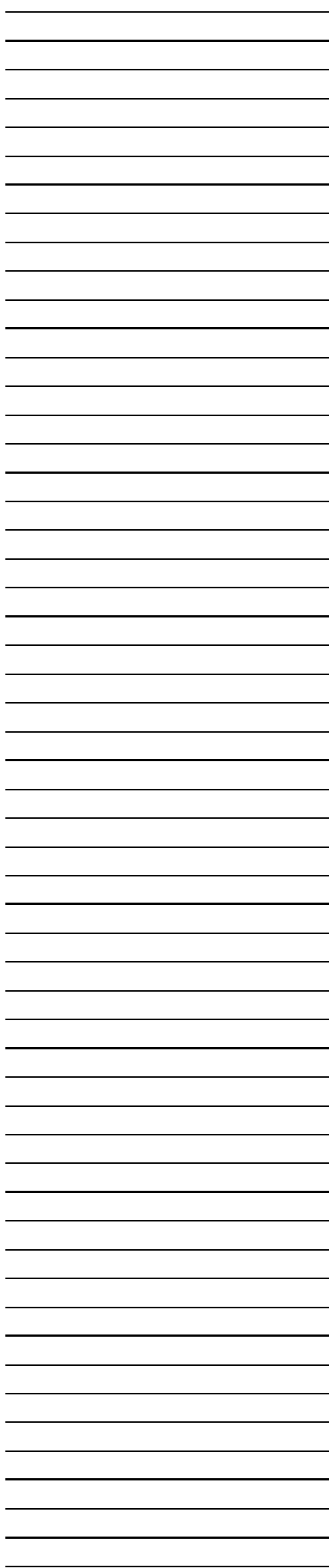
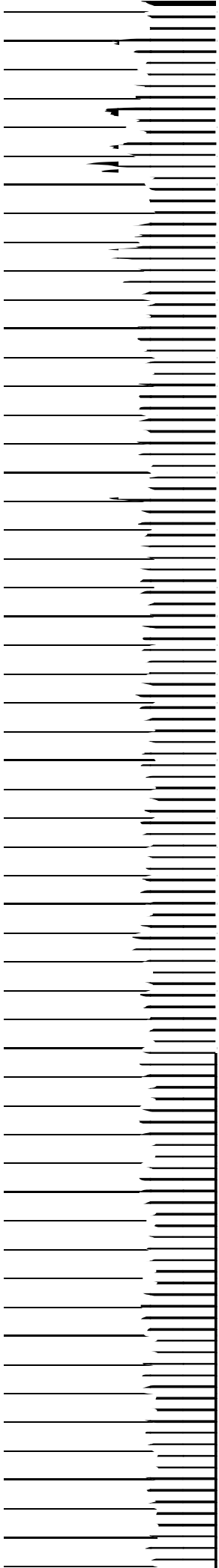
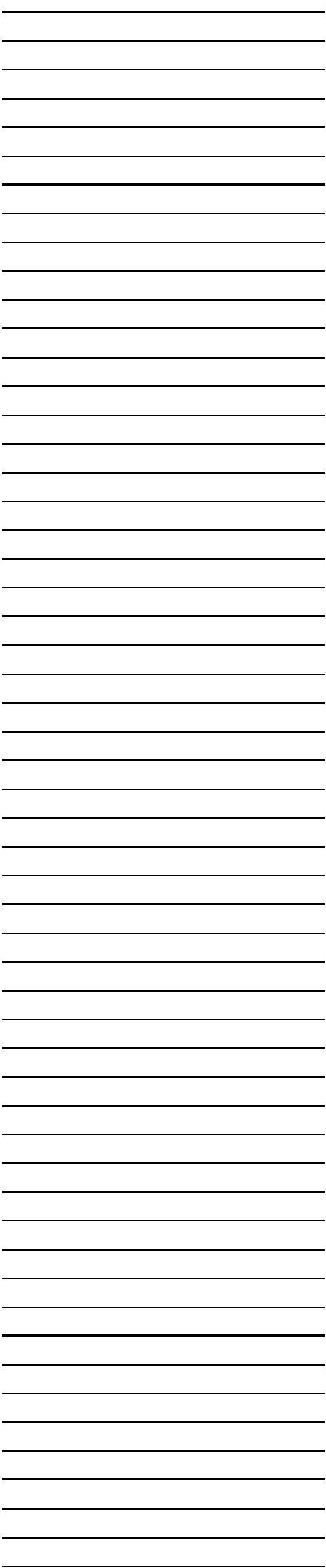
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1300
1400
1500
1600

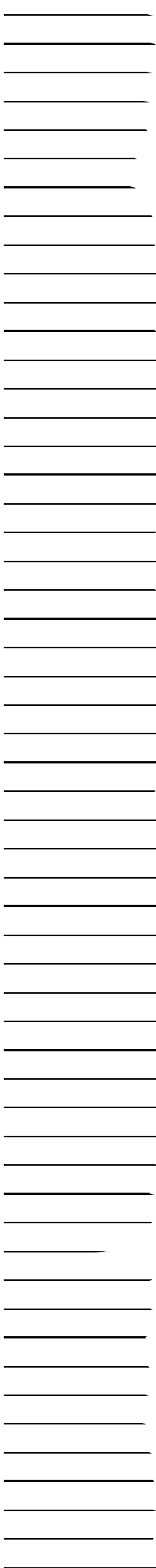


565.24
521.9
478.19









<div> <div>0</div> <div>Gamma Ray (GR) (GAPI)</div> <div>150</div> </div>		<div> <div>0</div> <div>Stuck Stretch (STIT)</div> <div>0 (F) 50</div> </div>	<div> <div>16</div> <div>Bit Size (BS) (IN)</div> <div>0</div> </div>	<div> <div>0</div> <div>Bit Size (BS) (IN)</div> <div>16</div> </div>
<div> <div>6</div> <div>Caliper (HCAL) (IN)</div> <div>16</div> </div>		<div> <div>16</div> <div>Cable Drag From STI to STIT</div> </div>	<div> <div>0</div> <div>FCD_1 (FCD) (IN)</div> <div>0</div> </div>	<div> <div>0</div> <div>FCD (FCD) (IN)</div> <div>16</div> </div>
<div> <div>10000</div> <div>Tension (TENS) (LBF)</div> <div>0</div> </div>		<div> <div>16</div> <div>Tool/Tot. Drag From D3T to STIA</div> </div>	<div> <div>0</div> <div>Caliper (HCAL) (IN)</div> <div>0</div> </div>	<div> <div>0</div> <div>Caliper (HCAL) (IN)</div> <div>16</div> </div>
			<div> <div>PIPE</div> <div>From FCD_1 to RHT2</div> </div>	<div> <div>PIPE</div> <div>From LHT3 to FCD</div> </div>
			<div> <div>CEMENT</div> <div>From HCAL_2 to FCD</div> </div>	<div> <div>CEMENT</div> <div>From FCD to HCA</div> </div>
			<div> <div>FORMATION</div> <div>From LHT2 to HCAL</div> </div>	<div> <div>FORMATION</div> <div>From HCAL to RHT</div> </div>
			<div> <div>Integrated Cement Volume (ICV) (F3)</div> </div>	

PIP SUMMARY

- └ Integrated Hole Volume Minor Pip Every 10 F3
- └ Integrated Hole Volume Major Pip Every 100 F3
 - └ Integrated Cement Volume Minor Pip Every 10 F3
 - └ Integrated Cement Volume Major Pip Every 100 F3
- Integrated Cement Volume Major Pip Every 100 F3
- Integrated Cement Volume Major Pip Every 100 F3

Time Mark Every 60 S

Format: CALIPER Vertical Scale: 2" per 100'

Graphics File Created: 03-Dec-2010 07:14

OP System Version: 17C0-154

HILTH-FTB
SPA-A

17C0-154
17C0-154

GPIT-C
DTC-H

SRPC-4041_Q3_2010_OP17
17C0-154

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Schlumberger

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 County: **GUNNISON**
 State: **COLORADO**

CEMENT VOLUME

GAMMA RAY