

Company: SG INTERESTS I, LTD.

Well: FEDERAL 24-2 WDW

Field: BULL MOUNTAIN

County: GUNNISON

State: COLORADO

County: GUNNISON  
Field: BULL MOUNTAIN  
Location: SW & SW  
Well: FEDERAL 24-2 WDW  
Company: SG INTERESTS I, LTD.

DIGITIZING SONIC LOGGING TOOL  
CEMENT BOND LOG  
GAMMA RAY/ CCL

LOCATION

SW & SW

Permanent Datum: \_\_\_\_\_  
Log Measured From: \_\_\_\_\_  
Drilling Measured From: \_\_\_\_\_

GROUND LEVEL  
KELLY BUSHING  
KELLY BUSHING

Elev.: \_\_\_\_\_  
Elev.: \_\_\_\_\_  
Elev.: \_\_\_\_\_

K.B. 7370.00 ft  
G.L. 7351.00 ft  
D.F. 7369.00 ft

API Serial No.  
05-051-06084-0C

Section  
24

Township  
11S

Range  
90W

| PVT DATA                 |  |  |  | Run 1   | Run 2 | Run 3 |
|--------------------------|--|--|--|---------|-------|-------|
| Oil Density              |  |  |  |         |       |       |
| Water Salinity           |  |  |  |         |       |       |
| Gas Gravity              |  |  |  |         |       |       |
| Bo                       |  |  |  |         |       |       |
| Bw                       |  |  |  |         |       |       |
| 1/Bg                     |  |  |  |         |       |       |
| Bubble Point Pressure    |  |  |  |         |       |       |
| Bubble Point Temperature |  |  |  |         |       |       |
| Solution GOR             |  |  |  |         |       |       |
| Maximum Deviation        |  |  |  |         |       |       |
| CEMENTING DATA           |  |  |  |         |       |       |
| Primary/Squeeze          |  |  |  | Primary |       |       |
| Casing String No         |  |  |  |         |       |       |
| Lead Cement Type         |  |  |  |         |       |       |
| Volume                   |  |  |  |         |       |       |
| Density                  |  |  |  |         |       |       |
| Water Loss               |  |  |  |         |       |       |
| Additives                |  |  |  |         |       |       |
| Tail Cement Type         |  |  |  |         |       |       |
| Volume                   |  |  |  |         |       |       |
| Density                  |  |  |  |         |       |       |
| Water Loss               |  |  |  |         |       |       |
| Additives                |  |  |  |         |       |       |
| Expected Cement Top      |  |  |  |         |       |       |

Logging Date 14-Jun-2009

Run Number ONE

Depth Driller 440 ft

Schlumberger Depth 386 ft

Bottom Log Interval 386 ft

Top Log Interval 0 ft

Casing Fluid Type FRESH WATER

Salinity

Density 8.4 lbm/gal

Fluid Level 0 ft

BIT/CASING/TUBING STRING

Bit Size 16.000 in

From 450 ft

To 0 ft

Casing/Tubing Size 13.375 in

Weight 54.5 lbm/ft

Grade J-55

From 450 ft

To 0 ft

Maximum Recorded Temperatures

Logger On Bottom 14-Jun-2009

Unit Number 7006

Recorded By JASON EDWARDS

Witnessed By ED WEST

Time

18:20

|                               |  |  |  |  |  |  |
|-------------------------------|--|--|--|--|--|--|
| Logging Date                  |  |  |  |  |  |  |
| Run Number                    |  |  |  |  |  |  |
| Depth Driller                 |  |  |  |  |  |  |
| Schlumberger Depth            |  |  |  |  |  |  |
| Bottom Log Interval           |  |  |  |  |  |  |
| Top Log Interval              |  |  |  |  |  |  |
| Casing Fluid Type             |  |  |  |  |  |  |
| Salinity                      |  |  |  |  |  |  |
| Density                       |  |  |  |  |  |  |
| Fluid Level                   |  |  |  |  |  |  |
| BIT/CASING/TUBING STRING      |  |  |  |  |  |  |
| Bit Size                      |  |  |  |  |  |  |
| From                          |  |  |  |  |  |  |
| To                            |  |  |  |  |  |  |
| Casing/Tubing Size            |  |  |  |  |  |  |
| Weight                        |  |  |  |  |  |  |
| Grade                         |  |  |  |  |  |  |
| From                          |  |  |  |  |  |  |
| To                            |  |  |  |  |  |  |
| Maximum Recorded Temperatures |  |  |  |  |  |  |
| Logger On Bottom              |  |  |  |  |  |  |
| Unit Number                   |  |  |  |  |  |  |
| Recorded By                   |  |  |  |  |  |  |
| Witnessed By                  |  |  |  |  |  |  |

## DEPTH SUMMARY LISTING

Date Created: 14-JUN-2009 16:52:09

## Depth System Equipment

| Depth Measuring Device    |             | Tension Device                |             | Logging Cable      |           |
|---------------------------|-------------|-------------------------------|-------------|--------------------|-----------|
| Type:                     | IDW-JA      | Type:                         | CMTD-B/A    | Type:              | 7-39P LXS |
| Serial Number:            | 6429        | Serial Number:                | 1656        | Serial Number:     |           |
| Calibration Date:         | 29 APR 2009 | Calibration Date:             | 28 MAY 2009 | Length:            | 13700 FT  |
| Calibrator Serial Number: | 33          | Calibrator Serial Number:     | 1           | Conveyance Method: | Wireline  |
| Calibration Cable Type:   | 7-39P LXS   | Number of Calibration Points: | 10          | Rig Type:          | LAND      |
| Wheel Correction 1:       | -6          | Calibration RMS:              | 45          |                    |           |
| Wheel Correction 2:       | -1          | Calibration Peak Error:       | 70          |                    |           |

## Depth Control Parameters

|                             |                       |
|-----------------------------|-----------------------|
| Log Sequence:               | First Log In the Well |
| Rig Up Length At Surface:   | 0.00 FT               |
| Rig Up Length At Bottom:    | 0.00 FT               |
| Rig Up Length Correction:   | 0.00 FT               |
| <b>Stretch Correction:</b>  |                       |
| Tool Zero Check At Surface: |                       |

## Depth Control Remarks

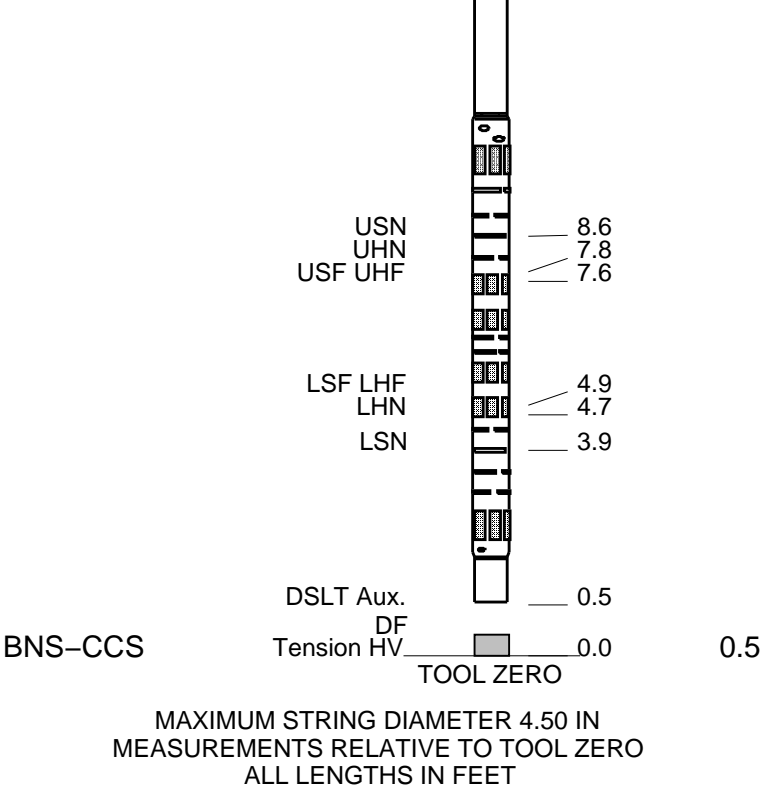
1. IDW USED AS PRIMARY DEPTH CONTROL DEVICE
2. DRUM COUNTER USED AS SECONDARY DEPTH CONTROL DEVICE
3. Z-CHART ALSO USED FOR DEPTH CONTROL
4. WELL WAS TOO SHALLOW TO DO RULS & RULB CALCULATIONS
- 5.
- 6.

## DISCLAIMER

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|  |   |
|--|---|
| OTHER SERVICES1<br>OS1: NONE<br>OS2:<br>OS3:<br>OS4:<br>OS5: | OTHER SERVICES2<br>OS1:<br>OS2:<br>OS3:<br>OS4:<br>OS5: |
| REMARKS: RUN NUMBER 1  | REMARKS: RUN NUMBER 2                                   |
| LOG CORRELATED TO DOWNLOG                                    |   |
| NO FREE PIPE PASS WAS RUN BECAUSE OF CEMENT TO SURFACE       |   |
|  |   |
|  |   |
| TDL ----- 386 F  |   |
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| THANK YOU FOR CHOOSING SCHLUMBERGER WIRELINE |       |      |                  |       |      |
| YOUR SCHLUMNERGER CREW:                      |       |      |                  |       |      |
| J. EDWARDS, I. WOLVERTON                     |       |      |                  |       |      |
| RUN 1  |       |      | RUN 2            |       |      |
| SERVICE ORDER #:                             |       |      | SERVICE ORDER #: |       |      |
| PROGRAM VERSION:                             |       |      | PROGRAM VERSION: |       |      |
| FLUID LEVEL:                                 |       |      | FLUID LEVEL:     |       |      |
| 17C0-154                                     |       |      |                  |       |      |
| 0 ft   |       |      |                  |       |      |
| LOGGED INTERVAL                              | START | STOP | LOGGED INTERVAL  | START | STOP |
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| EQUIPMENT DESCRIPTION                        |       |      |                  |       |      |
| RUN 1  |       |      | RUN 2            |       |      |
| SURFACE EQUIPMENT                            |       |      |                  |       |      |
| GSR-U/Y                                      |       |      |                  |       |      |
| WITM (DTS)-A                                 |       |      |                  |       |      |
| DOWNHOLE EQUIPMENT                           |       |      |                  |       |      |
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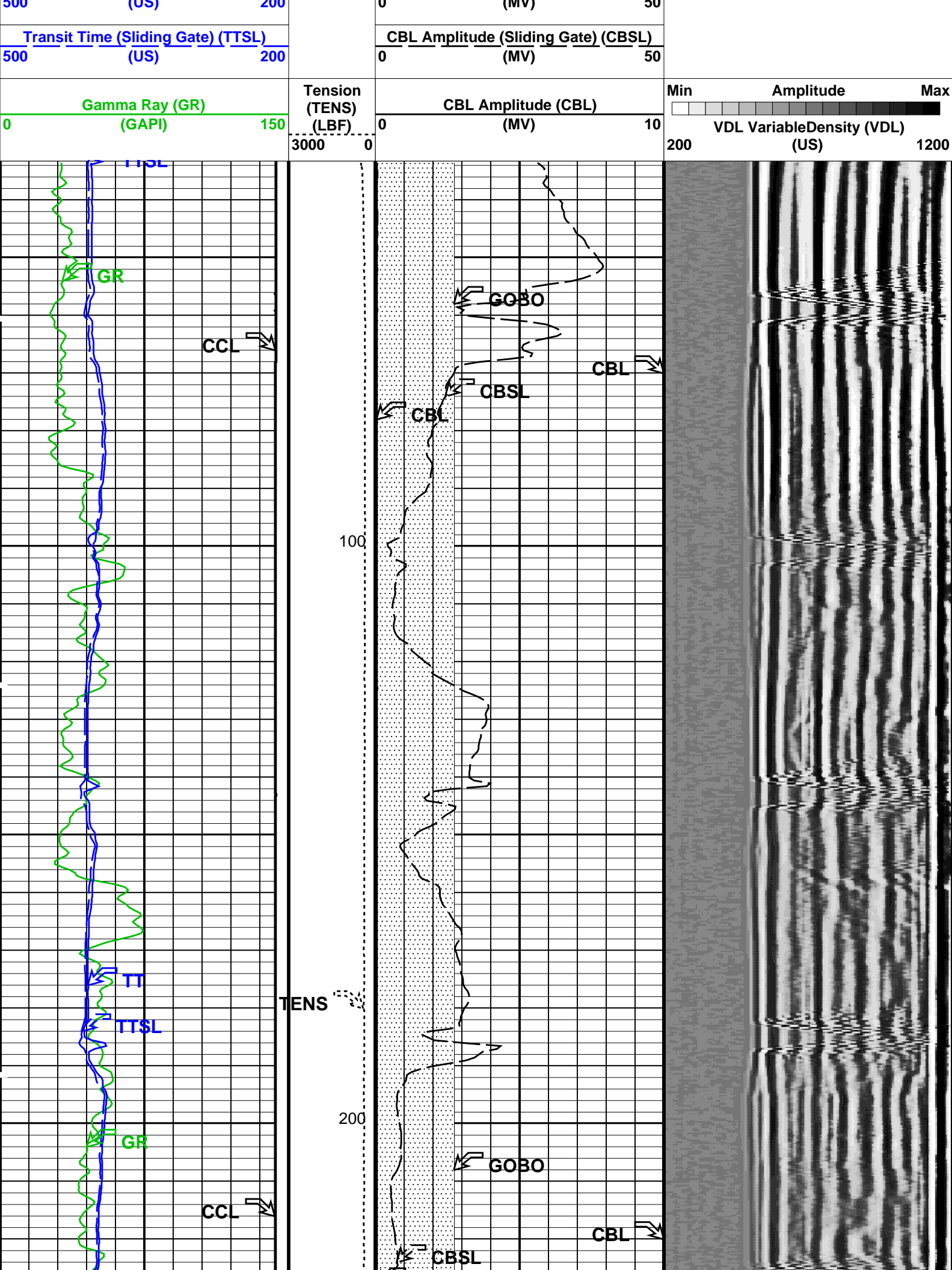
Main Pass 5" = 100'

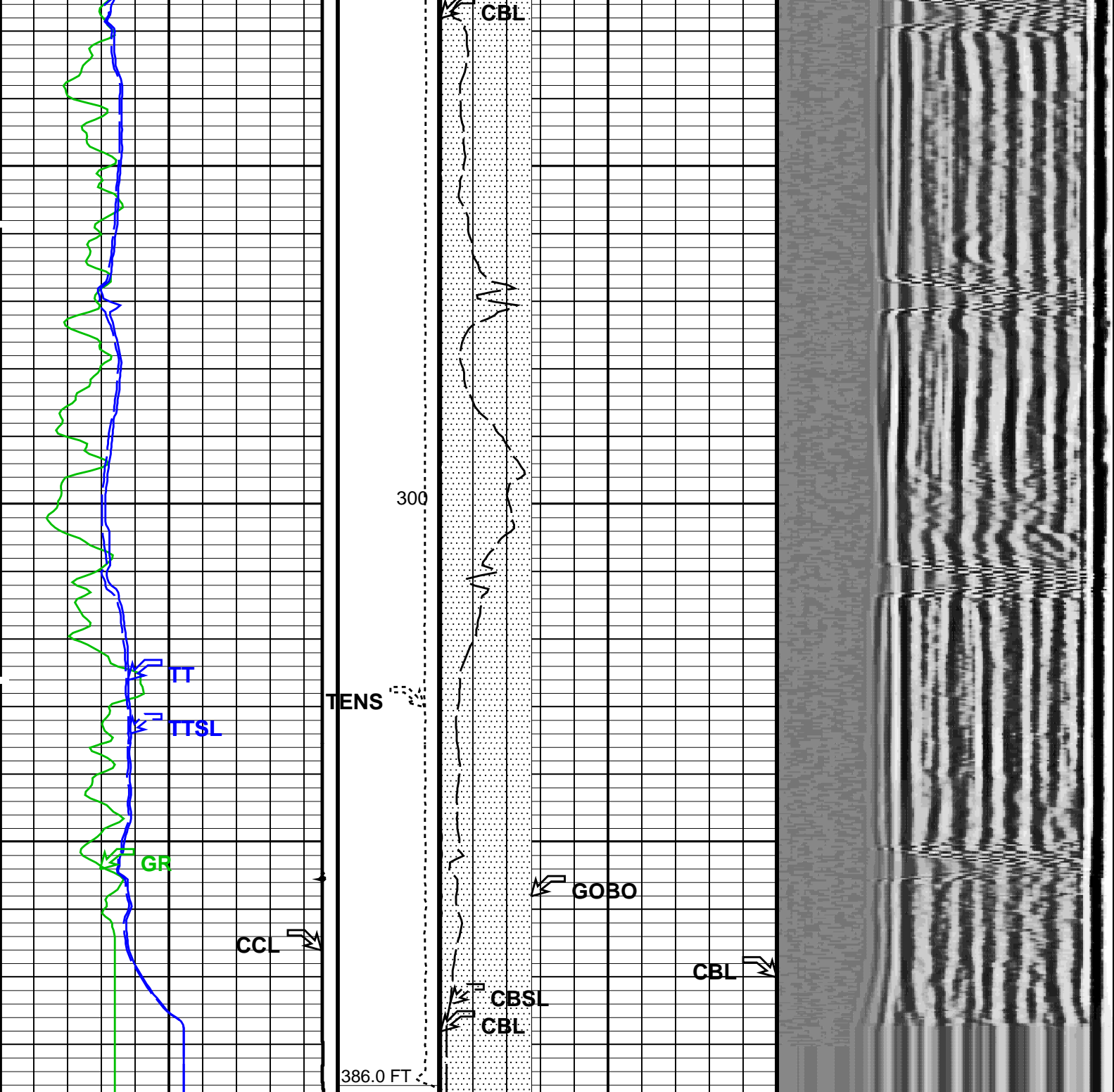
MAXIS Field Log

Company: SG INTERESTS I, LTD. Well: FEDERAL 24-2 WDW

| Input DLIS Files            |              |       |          |                   |          |         |
|-----------------------------|--------------|-------|----------|-------------------|----------|---------|
| DEFAULT                     | SONIC_007LUP | FN:6  | PRODUCER | 14-Jun-2009 18:50 | 387.5 FT | 33.0 FT |
| Output DLIS Files           |              |       |          |                   |          |         |
| DEFAULT                     | SONIC_023PUP | FN:22 | PRODUCER | 14-Jun-2009 19:24 | 387.5 FT | 33.0 FT |
| OP System Version: 17C0-154 |              |       |          |                   |          |         |
| DSLT-H                      | 17C0-154     | SGT-N | 17C0-154 |                   |          |         |
| CAL-Y                       | 17C0-154     | DTC-H | 17C0-154 |                   |          |         |

| PIP SUMMARY   |  |   |  |
|---|--|---|--|
| <div> <div></div> <div>Time Mark Every 60 S</div> </div> <div> <div></div> <div>Casing Collars</div> </div> |  |   |  |
| <div>CasCollar</div> <div>From CCL to T1</div>  |  | <div>GoodBond</div> <div>From ACBL to GOBO</div>    |  |
| <div>Casing Collar Locator (CCL)</div> <div>-19 (----) 1</div>  |  | <div>Good Bond (GOBO)</div> <div>0 (MV) 10</div>    |  |
| <div>Transit Time (TT)</div> <div>500 (US) 200</div>  |  | <div>CBL Amplitude (CBL)</div> <div>2 (MV) 50</div> |  |





|                          |  |                            |                     |  |   |
|--------------------------|--|----------------------------|---------------------|--|---|
| Gamma Ray (GR)<br>(GAPI) |  | Tension<br>(TENS)<br>(LBF) | CBL Amplitude (CBL) |  | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><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|
|--------------------------|--|----------------------------|---------------------|--|---|

Time Mark Every 60 S

Casing Collars

Format: CBL\_Dual\_Gate

Vertical Scale: 5" per 100'

Graphics File Created: 14-Jun-2009 19:24

OP System Version: 17C0-154

DSLT-H

17C0-154

SGT-N

17C0-154

CAL-Y

17C0-154

DTC-H

17C0-154

### Information for DSLT Sonde Status and Casing Features ###

Sonde Type

Not Recorded

Sonde Serial Number

Not Recorded (0)

Casing Size (CSIZ)

13.3750 IN

Casing Weight (CWEI)

54.5000 LB/F

Expected CBL Amplitude in Free Pipe Section (CBRA)

43.0 MV

Minimum Sonic Amplitude (MSA : 100% Cement)

1.36065 MV

Minimum Sonic Amplitude (MSA : 80% Cement)

2.71450 MV

Date of Master Calibration

Not Recorded

CBL Correction Factor (Master Calibration)

2.50000

Depth of Before Calibration (BDEP)

Not Recorded

CBL Adjustment Factor (CBAF : Before Calibration)

1.0

Parameters

| DLIS Name                             | Description                        | Value     |
|---------------------------------------|------------------------------------|-----------|
| DSLT-H: Digitizing Sonic Logging Tool |                                    |           |
|                                       | Telemetry Mode                     | DSLCTB    |
|                                       | DSLT Firing Mode                   | CBL_W     |
| AMSG                                  | Auxiliary Minimum Sliding Gate     | 120 US    |
| CBAF                                  | CBL Adjustment Factor              | 1         |
| CBLG                                  | CBL Gate Width                     | 100 US    |
| DDEL                                  | Digitizing Delay                   | 0 US      |
| DRCS                                  | DSLT DLIS Recording Size           | 120       |
| DSIN                                  | Digitizing Sample Interval         | 10        |
| DTFS                                  | DSLCTelemetry Frame Size           | 236       |
| DWCO                                  | Digitizing Word Count              | 120       |
| GAI                                   | Manual Gain                        | 40        |
| GOBO                                  | Good Bond                          | 2.7145 MV |
| MAHTR                                 | Manual High Threshold Reference    | 40        |
| MGAI                                  | Maximum Gain                       | 1000      |
| MNHTR                                 | Minimum High Threshold Reference   | 1         |
| NMSG                                  | Near Minimum Sliding Gate          | 123 US    |
| NMXG                                  | Near Maximum Sliding Gate          | 750 US    |
| RATE                                  | Firing Rate                        | R7        |
| SFAF                                  | Sonic Formation Attenuation Factor | 0 DB/F    |
| SGCL                                  | Sliding Gate Closing Delta-T       | 250 US/F  |
| SGDT                                  | Sliding Gate Delta-T               | 170 US/F  |
| SGW                                   | Sliding Gate Width                 | 80 US     |
| SLEV                                  | Signal Level for AGC               | 5000      |
| VDLG                                  | VDL Manual Gain                    | 5         |
| WAGC                                  | Waveform AGC Allow/Disallow        | OFF       |
| WMOD                                  | Waveform Firing Mode               | FULL      |
| CAL-Y: Casing Anomaly Locator - Y     |                                    |           |
| CCLD                                  | CCL reset delay                    | 12 IN     |
| CCLT                                  | CCL Detection Level                | 0.3 V     |
| System and Miscellaneous              |                                    |           |
| DO                                    | Depth Offset for Playback          | 0.0 FT    |
| PP                                    | Playback Processing                | RECOMPUTE |

Input DLIS Files

Output DLIS Files



Repeat Section

MAXIS Field Log

Input DLIS Files

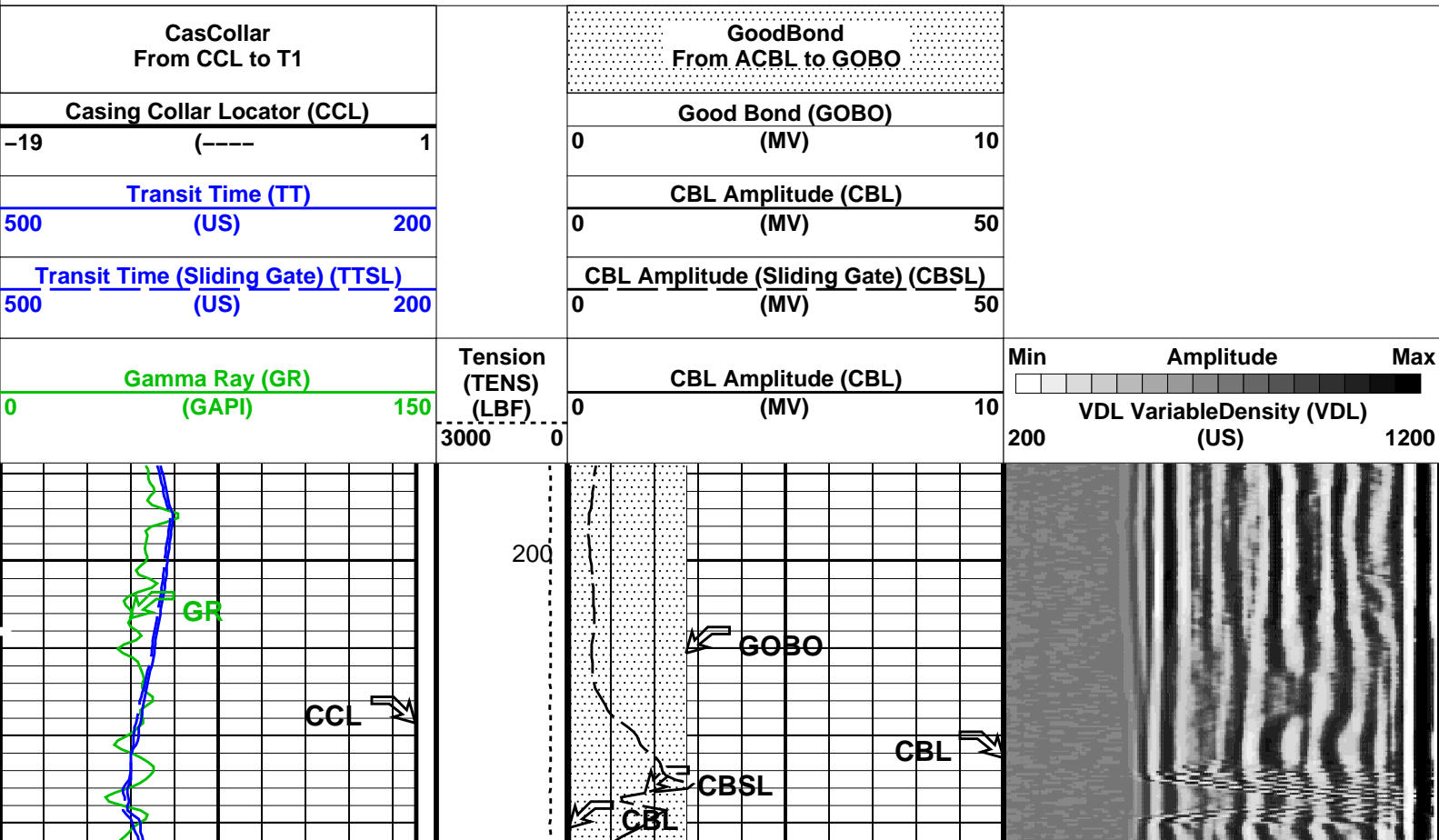
Output DLIS Files

OP System Version: 17C0-154

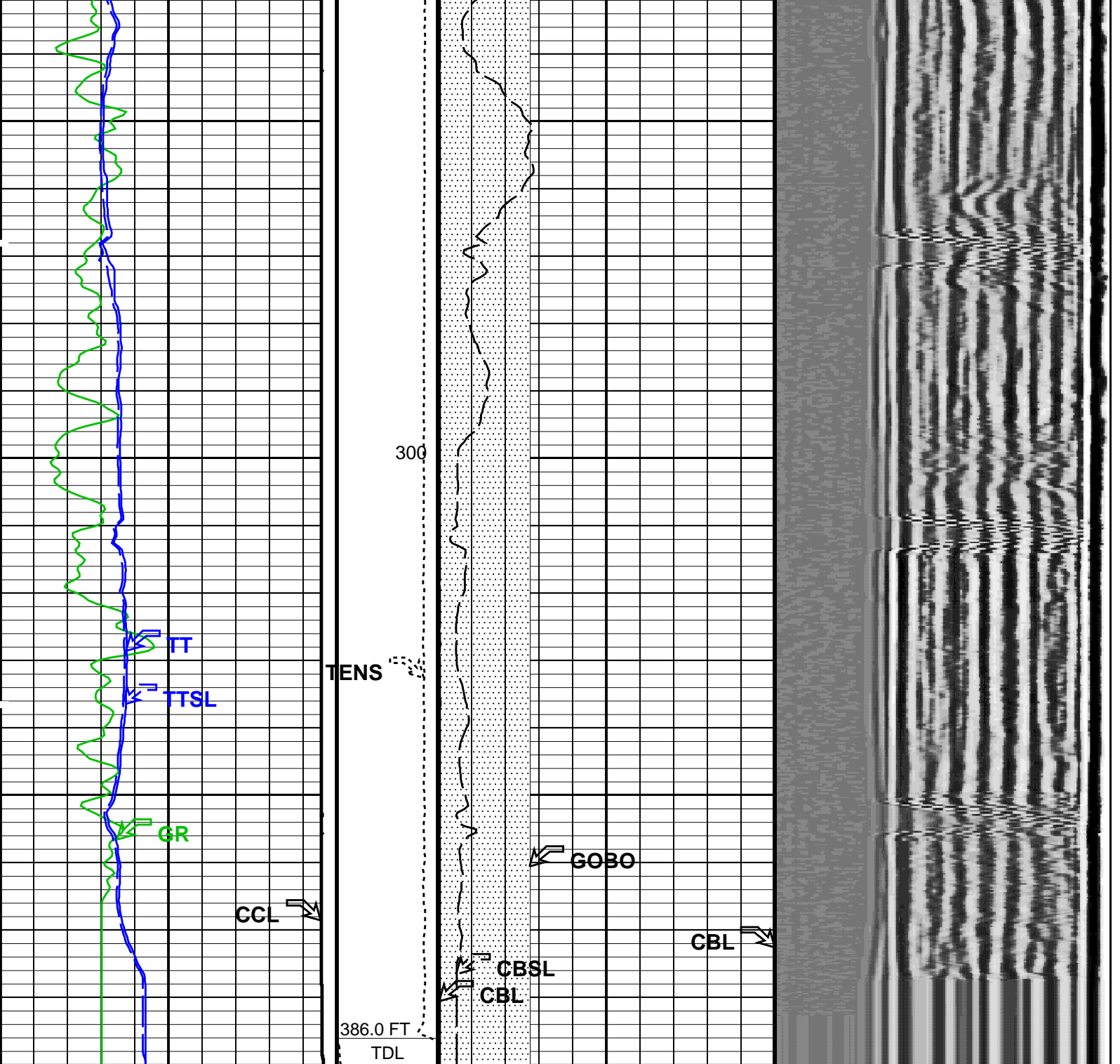
PIP SUMMARY

Casing Collars

Time Mark Every 60 S







|   |   |   |   |
|---|---|---|---|
| <div>Gamma Ray (GR)</div> <div>0(GAPI)150</div>                     | Tension<br>(TENS)<br>(LBF)<br>30000               | <div>CBL Amplitude (CBL)</div> <div>0(MV)10</div>                 | <div>MinAmplitudeMax</div> <div>VDL VariableDensity (VDL)<br/>(US)</div> <div>2001200</div> |
| <div>Transit Time (Sliding Gate) (TTSL)</div> <div>500(US)200</div> |   | <div>CBL Amplitude (Sliding Gate) (CBSL)</div> <div>0(MV)50</div> |   |
| <div>Transit Time (TT)</div> <div>500(US)200</div>                  | <div>CBL Amplitude (CBL)</div> <div>0(MV)50</div> |   |   |
| <div>Casing Collar Locator (CCL)</div> <div>-19(----)1</div>        | <div>Good Bond (GOBO)</div> <div>0(MV)10</div>    |   |   |
| <div>CasCollar<br/>From CCL to T1</div>                             | <div>GoodBond<br/>From ACBL to GOBO</div>         |   |   |

PIP SUMMARY

└─ Casing Collars

## OP System Version: 17C0-154

|        |          |       |          |
|--------|----------|-------|----------|
| DSLT-H | 17C0-154 | SGT-N | 17C0-154 |
| CAL-Y  | 17C0-154 | DTC-H | 17C0-154 |

## ### Information for DSLT Sonde Status and Casing Features ###

|  |                  |
|--|------------------|
| Sonde Type   | Not Recorded     |
| Sonde Serial Number                                | Not Recorded (0) |
| Casing Size (CSIZ)                                 | 13.3750 IN       |
| Casing Weight (CWEI)                               | 54.5000 LB/F     |
| Expected CBL Amplitude in Free Pipe Section (CBRA) | 43.0 MV          |
| Minimum Sonic Amplitude (MSA : 100% Cement)        | 1.36065 MV       |
| Minimum Sonic Amplitude (MSA : 80% Cement)         | 2.71450 MV       |
| Date of Master Calibration                         | Not Recorded     |
| CBL Correction Factor (Master Calibration)         | 2.50000          |
| Depth of Before Calibration (BDEP)                 | Not Recorded     |
| CBL Adjustment Factor (CBAF : Before Calibration)  | 1.0              |

## Parameters

| DLIS Name                             | Description                        | Value     |
|---------------------------------------|------------------------------------|-----------|
| DSLT-H: Digitizing Sonic Logging Tool |                                    |           |
|                                       | Telemetry Mode                     | DSLCTB    |
|                                       | DSLT Firing Mode                   | CBL_W     |
| AMSG                                  | Auxiliary Minimum Sliding Gate     | 120 US    |
| CBAF                                  | CBL Adjustment Factor              | 1         |
| CBLG                                  | CBL Gate Width                     | 100 US    |
| DDEL                                  | Digitizing Delay                   | 0 US      |
| DRCS                                  | DSLT DLIS Recording Size           | 120       |
| DSIN                                  | Digitizing Sample Interval         | 10        |
| DTFS                                  | DSLCT Telemetry Frame Size         | 236       |
| DWCO                                  | Digitizing Word Count              | 120       |
| GAI                                   | Manual Gain                        | 40        |
| GOBO                                  | Good Bond                          | 2.7145 MV |
| MAHTR                                 | Manual High Threshold Reference    | 40        |
| MGAI                                  | Maximum Gain                       | 1000      |
| MNHTR                                 | Minimum High Threshold Reference   | 1         |
| NMSG                                  | Near Minimum Sliding Gate          | 123 US    |
| NMXG                                  | Near Maximum Sliding Gate          | 750 US    |
| RATE                                  | Firing Rate                        | R7        |
| SFAF                                  | Sonic Formation Attenuation Factor | 0 DB/F    |
| SGCL                                  | Sliding Gate Closing Delta-T       | 250 US/F  |
| SGDT                                  | Sliding Gate Delta-T               | 170 US/F  |
| SGW                                   | Sliding Gate Width                 | 80 US     |
| SLEV                                  | Signal Level for AGC               | 5000      |
| VDLG                                  | VDL Manual Gain                    | 5         |
| WAGC                                  | Waveform AGC Allow/Disallow        | OFF       |
| WMOD                                  | Waveform Firing Mode               | FULL      |
| CAL-Y: Casing Anomaly Locator - Y     |                                    |           |
| CCLD                                  | CCL reset delay                    | 12 IN     |
| CCLT                                  | CCL Detection Level                | 0.3 V     |
| System and Miscellaneous              |                                    |           |
| DO                                    | Depth Offset for Playback          | 0.0 FT    |
| PP                                    | Playback Processing                | RECOMPUTE |

## Input DLIS Files

|         |              |      |          |                   |          |          |
|---------|--------------|------|----------|-------------------|----------|----------|
| DEFAULT | SONIC_006LUP | FN:5 | PRODUCER | 14-Jun-2009 18:40 | 390.0 FT | 188.5 FT |
|---------|--------------|------|----------|-------------------|----------|----------|

## Output DLIS Files

DEFAULT

SONIC\_024PUP

FN:23

PRODUCER

14-Jun-2009 19:24

Company: **SG INTERESTS I, LTD.**

**Schlumberger**

Well: **FEDERAL 24-2 WDW**

Field: **BULL MOUNTAIN**

County: **GUNNISON**

State: **COLORADO**

DIGITIZING SONIC LOGGING TOOL  
CEMENT BOND LOG  
GAMMA RAY/ CCL