

HALLIBURTON

BOREHOLE
COMPENSATED
SONIC

MERCHANT ENERGY
PARTNERS, LLC

SCHWAKE A-1

WEST PEETZ

LOGAN

CO

COMPANY MERCHANT ENERGY PARTNERS, LLC
WELL SCHWAKE A-1
FIELD WEST PEETZ
COUNTY LOGAN
STATE CO

API No. 0507507167
Location 1650' FNL & 1650' FEL
NESWNE
Other Services:
ACRT
DSNT

COMPANY
WELL
FIELD
COUNTY
STATE

Sect. 6 Twp. 11 Rge. 52W

Permanent Datum
Log measured from
Drilling measured from
GL
KB
KB
KB
Elev. 4547.0 ft
2.0 ft above perm. Datum
D.F.
G.L.
4549.0 ft
4550.0 ft
4547.0 ft

Date

12-Nov-09

Run No.

TWO

Depth - Driller

5666.00 ft

Depth - Logger

5653.0 ft

Bottom - Logged Interval

5646 ft

Top - Logged Interval

5350 ft

Casing - Driller

5.500 in @ 5350.0 ft

Casing - Logger

5350.0 ft

Bit Size

4.750 in

Type Fluid in Hole

WBM

Density

8.3 ppG

PH

Source of Sample

FLOWLINE

Rm @ Meas. Temperature

0.80 ohmm @ 75.00 degF

Rmf @ Meas. Temperature

0.67 ohmm @ 75.00 degF

Rmc @ Meas. Temperature

0.74 ohmm @ 75.00 degF

Source Rmf

CHART

Rm @ BHT

0.34 ohmm @ 185.0 degF

Time Since Circulation

3.0 hr

Time on Bottom

12-Nov-09 00:51

Max. Rec. Temperature

185.0 degF @ 5666.0 ft

Equipment

10549597

Recorded By

F. LODER

Witnessed By

JEFF SCHNEIDER

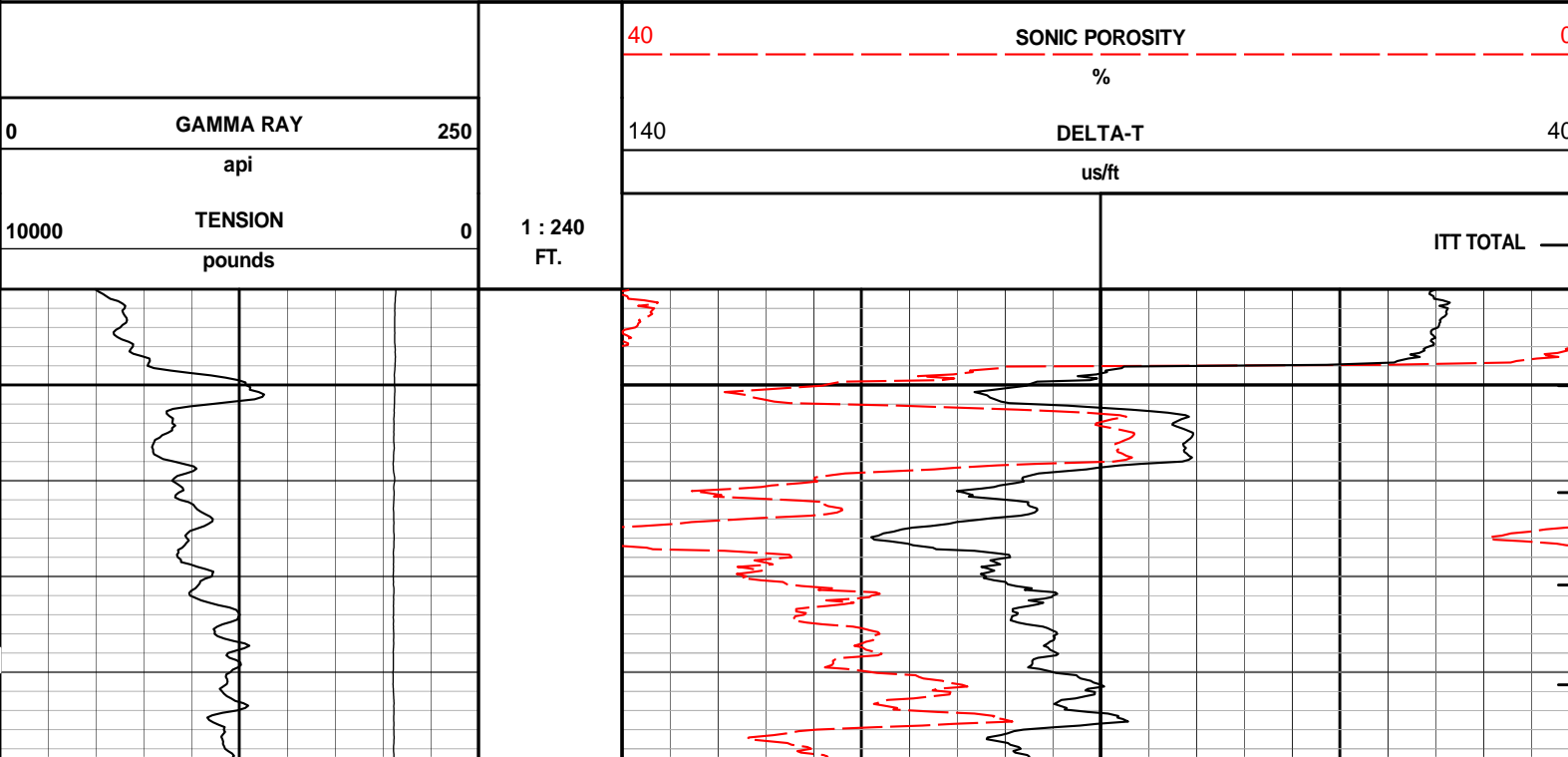
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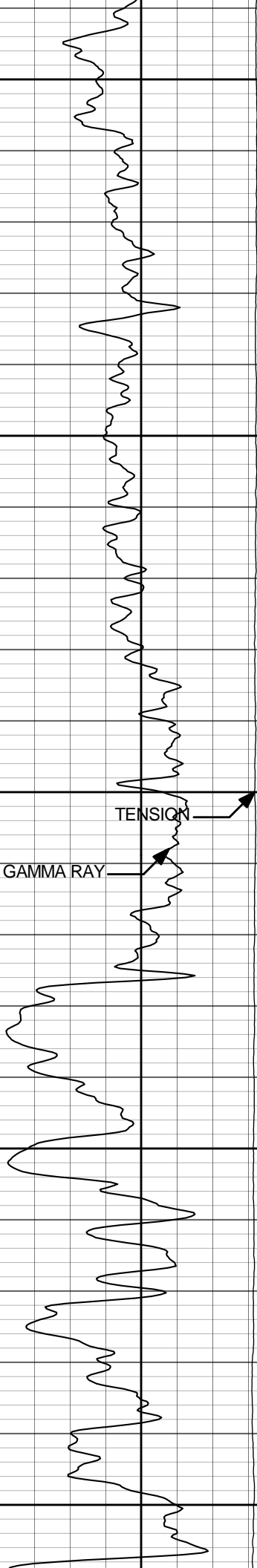
| | | | | | | | | | | | | | | |
|---|------------|----------|--------------|---|----------------------------|----------------------------|-----------------|---------------|-------------|--|--|--|--|--|
| Service Ticket No.: 7002705 | | | | | API Serial No.: 0507507167 | | | | | PGM Version: WL INSITE R2.4 (Build 20) | | | | |
| CHANGE IN MUD TYPE OR ADDITIONAL SAMPLE | | | | | | RESISTIVITY SCALE CHANGES | | | | | | | | |
| Date | Sample No. | | | | | Type Log | Depth | Scale Up Hole | | Scale Down Hole | | | | |
| Depth-Driller | | | | | | | | | | | | | | |
| Type Fluid in Hole | | | | | | | | | | | | | | |
| Density | Viscosity | | | | | | | | | | | | | |
| Ph | Fluid Loss | | | | | | | | | | | | | |
| Source of Sample | | | | | | RESISTIVITY EQUIPMENT DATA | | | | | | | | |
| Rm @ Meas. Temp | | @ | | @ | | Run No. | Tool Type & No. | Pad Type | Tool Pos. | Other | | | | |
| Rmf @ Meas. Temp. | | @ | | @ | | | | | | | | | | |
| Rmc @ Meas. Temp. | | @ | | @ | | | | | | | | | | |
| Source Rmf | Rmc | | | | | | | | | | | | | |
| Rm @ BHT | | @ | | @ | | | | | | | | | | |
| Rmf @ BHT | | @ | | @ | | | | | | | | | | |
| Rmc @ BHT | | @ | | @ | | | | | | | | | | |
| EQUIPMENT DATA | | | | | | | | | | | | | | |
| GAMMA | | ACOUSTIC | | | | DENSITY | | | NEUTRON | | | | | |
| Run No. | TWO | | Run No. | | | Run No. | | | Run No. | | | | | |
| Serial No. | 11294346 | | Serial No. | | | Serial No. | | | Serial No. | | | | | |
| Model No. | GTET | | Model No. | | | Model No. | | | Model No. | | | | | |
| Diameter | 3.625" | | No. of Cent. | | | Diameter | | | Diameter | | | | | |
| Detector Model No. | 102-T | | Spacing | | | Log Type | | | Log Type | | | | | |
| Type | SCINT | | | | | Source Type | | | Source Type | | | | | |
| Length | 8" | | LSA [Y/N] | | | Serial No. | | | Serial No. | | | | | |
| Distance to Source | N/A | | FWDA [Y/N] | | | Strength | | | Strength | | | | | |

| GENERAL | | | GAMMA | | ACOUSTIC | | DENSITY | | NEUTRON | | | | | | | |
|---|-------|------|--------|-------|----------|-------|---------|--------|---------|---|--------|-------|---|--------|--|---|
| Run | Depth | | Speed | Scale | | Scale | | Matrix | Scale | | Matrix | Scale | | Matrix | | |
| No. | From | To | ft/min | L | R | L | R | | L | R | | L | R | | | |
| TWO | 4350 | 5666 | REC | | | 30 | -10 | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| DIRECTIONAL INFORMATION | | | | | | | | | | | | | | | | |
| Maximum Deviation | | | | | | | | @ | KOP | | | | | | | @ |
| Remarks: | | | | | | | | | | | | | | | | |
| RUN ONE: RWCH-GTET-ACRT RAN IN COMBINATION | | | | | | | | | | | | | | | | |
| RUN TWO: RWCH-GTET-BSAT RAN IN COMBINATION | | | | | | | | | | | | | | | | |
| RUN THREE: RWCH-GTET-DSNT RAN IN COMBINATION | | | | | | | | | | | | | | | | |
| ANNULAR HOLE VOLUME NOT CALCULATED -- NO CALIPER IN HOLE | | | | | | | | | | | | | | | | |
| TENSION PULLS AFFECT TOOL RESPONSE | | | | | | | | | | | | | | | | |
| TIGHT HOLE -- BIT SIZE 4.75 INCH | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| CREW: A. LEWIS | | | | | | | | | | | | | | | | |
| THANK YOU FOR CHOSING HALLIBURTON ENERGY SERVICES 303-825-4346 | | | | | | | | | | | | | | | | |
| 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 WHICH 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. | | | | | | | | | | | | | | | | |
| HALLIBURTON | | | | | | | | | | | | | | | | |

| | |
|-------------|---|
| HALLIBURTON | Plot Time: 12-Nov-09 02:38:49 Plot Range: 5340 ft to 5654.92 ft Data: {ActiveWell}\Well Based\DAQ-0002-002* Plot File: \BSAT\BSAT_5IN_R |
|-------------|---|

REPEAT SECTION 5" = 100'





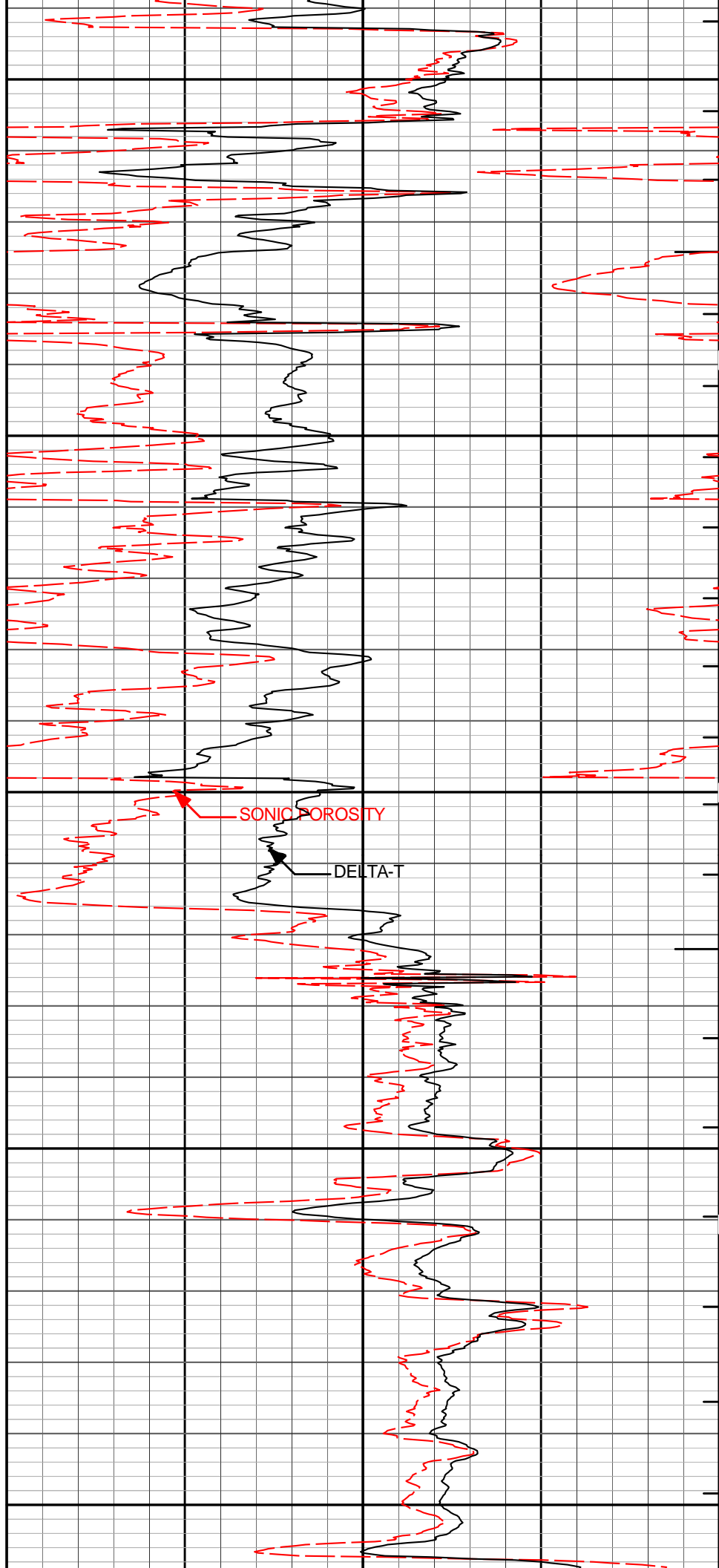
GAMMA RAY

TENSION

5400

5500

5600



SONIC POROSITY

DELTA-T



| | | | | | |
|-------|-----------|-----|----------------|-----|----------------|
| 10000 | TENSION | 0 | 1 : 240 FT. | | ITT TOTAL |
| | pounds | | | | |
| 0 | GAMMA RAY | 250 | | 140 | DELTA-T |
| | api | | | | us/ft |
| | | | | 40 | SONIC POROSITY |
| | | | | | % |

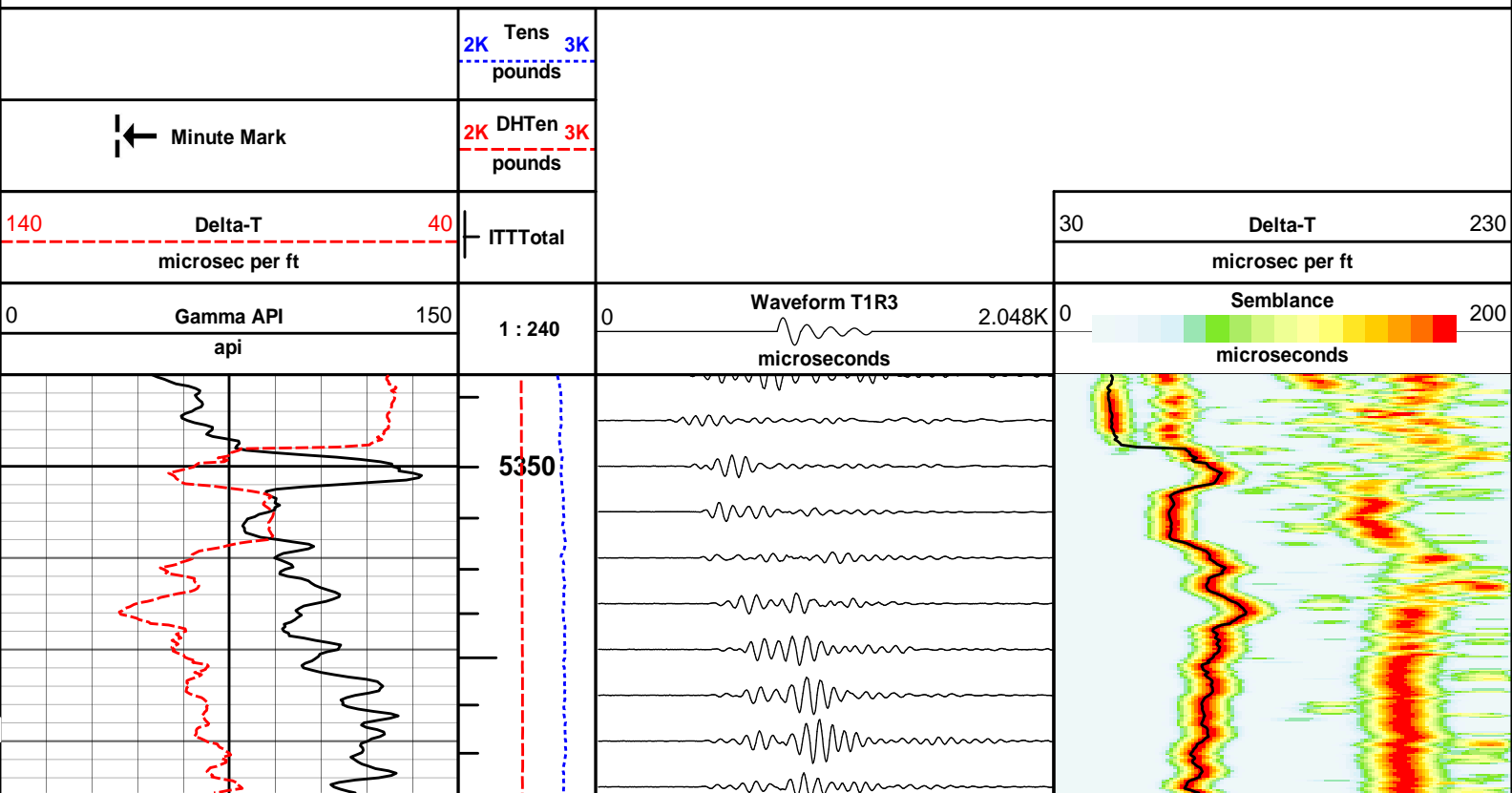
HALLIBURTON

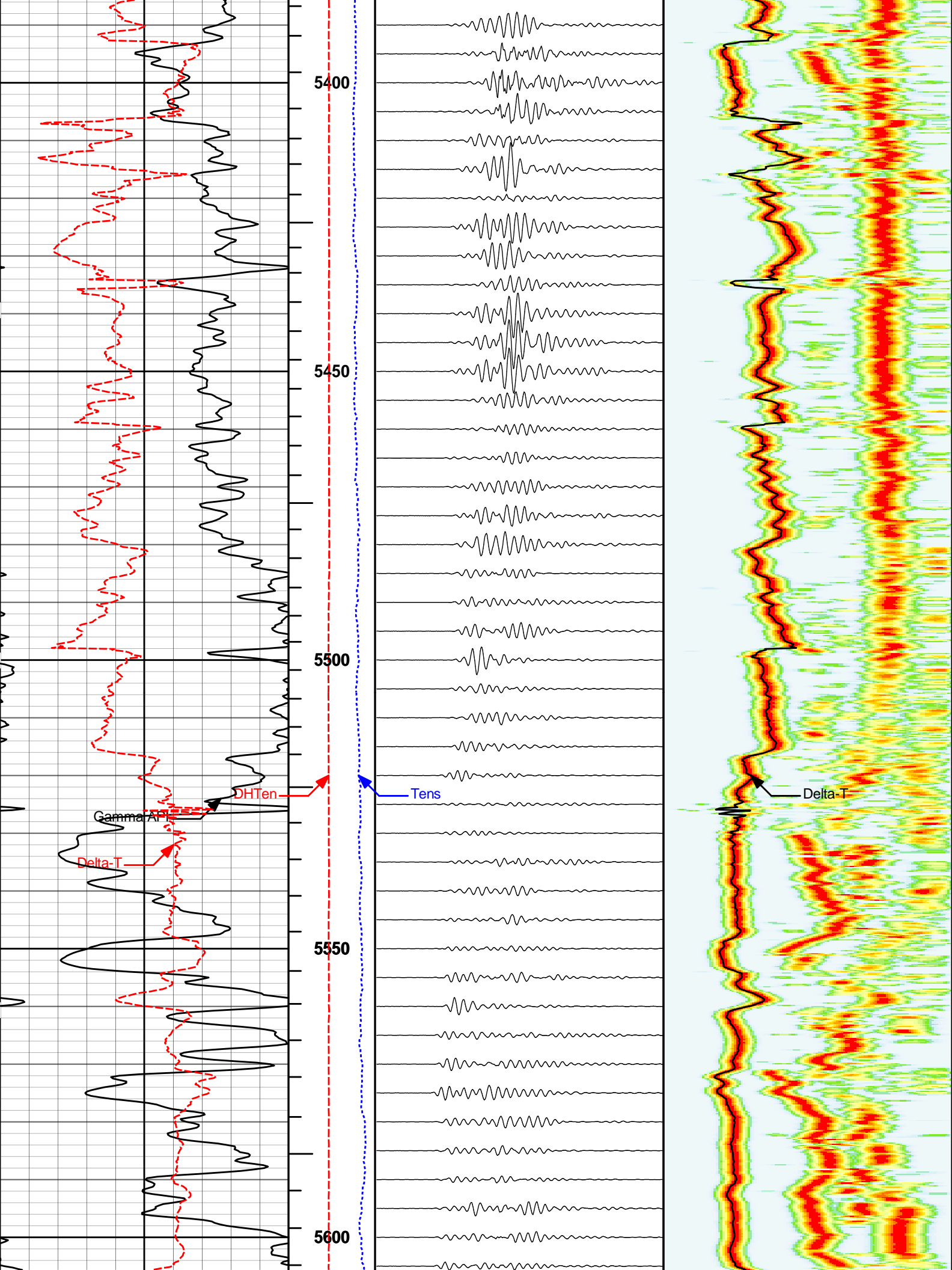
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Plot Range: 5340 ft to 5654.92 ft
Data: {ActiveWell}\Well Based\DAQ-0002-002\
Plot File: \BSAT\BSAT_5IN_R

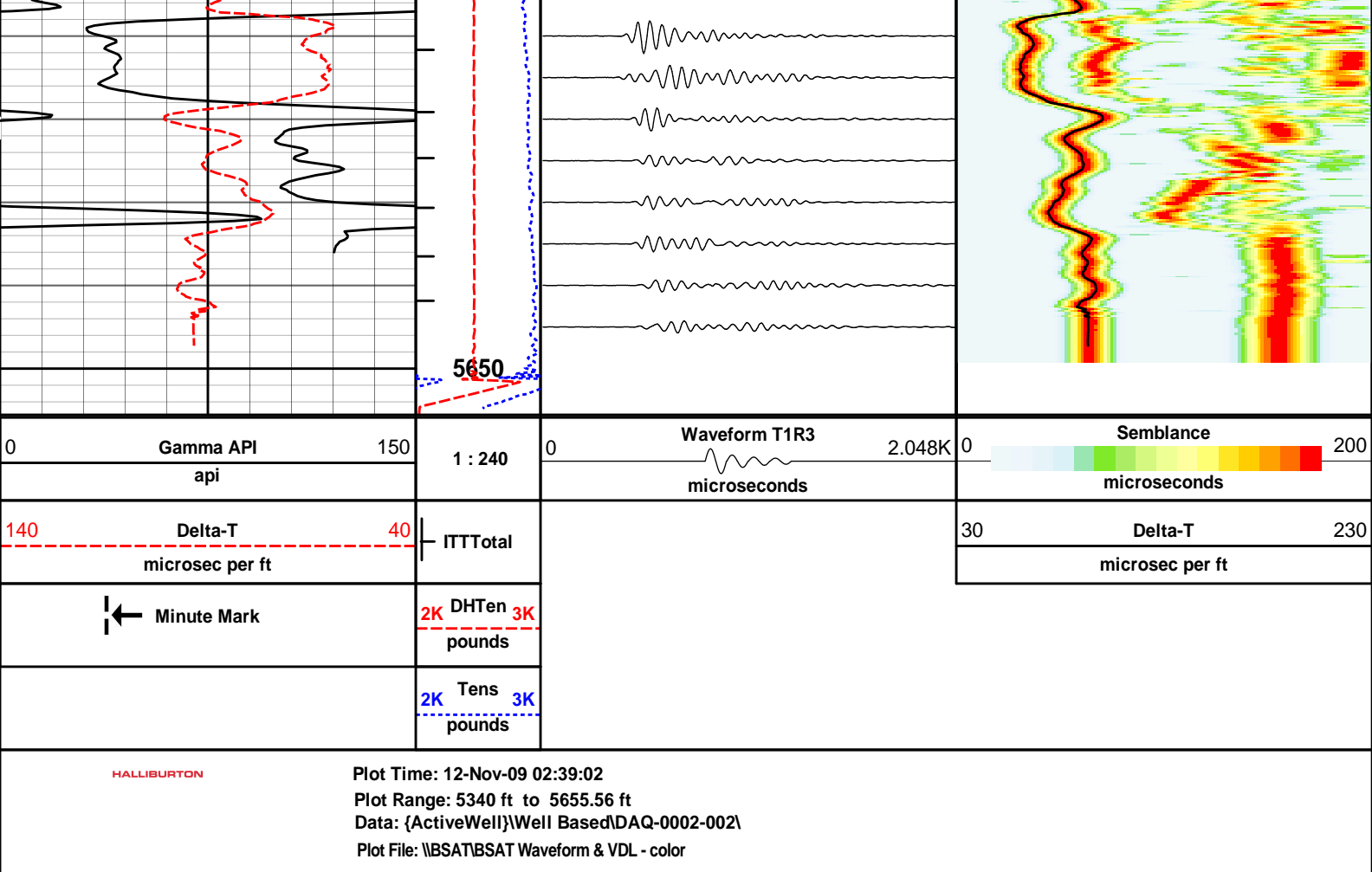
REPEAT SECTION 5" = 100'

HALLIBURTON

Plot Time: 12-Nov-09 02:38:51
Plot Range: 5340 ft to 5655.56 ft
Data: {ActiveWell}\Well Based\DAQ-0002-002\
Plot File: \BSAT\BSAT Waveform & VDL - color




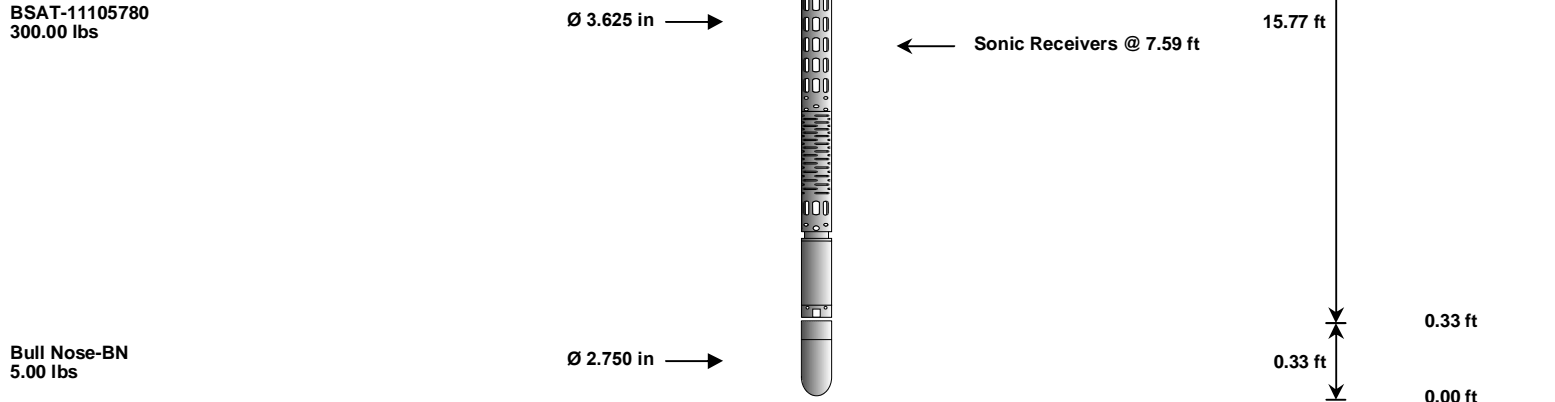




HALLIBURTON

TOOL STRING DIAGRAM REPORT

| Description | O.D. | Diagram | Sensors @ Delays | Length | Accumulated Length |
|-----------------------------|--------------|---|---|----------|--------------------|
| RWCH-B097 135.00 lbs | Ø 3.625 in → |  | ← Load Cell @ 27.19 ft ← BH Temperature @ 26.63 ft | 6.25 ft | 30.88 ft |
| GTET-11294346 165.00 lbs | Ø 3.625 in → | | ← GammaRay @ 18.57 ft | 24.63 ft | 24.63 ft |
| | | | | 8.52 ft | 16.11 ft |
| | | | | | |



| Mnemonic | | Tool Name | Serial Number | Weight (lbs) | Length (ft) | Accumulated Length (ft) | Max.Log. Speed (fpm) |
|----------------------------------|--------------------------------|-----------|---------------|--------------|-------------|--------------------------|----------------------|
| RWCH | Releasable Wireline Cable Head | | B097 | 135.00 | 6.25 | 24.63 | 300.00 |
| GTET | Natural Gamma Ray Tool | | 11294346 | 165.00 | 8.52 | 16.11 | 60.00 |
| BCAS | Borehole Sonic Array Tool | | 11105780 | 300.00 | 15.77 | 0.33 | 60.00 |
| BLNS | Bull Nose | | BN | 5.00 | 0.33 | 0.00 | 300.00 |
| Total | | | | 605.00 | 30.88 | | |
| Data: SCHWAKE_A_1\0002 BSAT\IDLE | | | | | | Date: 12-Nov-09 00:46:12 | |

COMPANY

MERCHANT ENERGY PARTNERS, LLC

WELL

SCHWAKE A-1

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