

Company: Esso Australia Pty Ltd.

Well: A-2a

Field: Bream A

Rig : Prod4 / Crane Country: Australia

RST-C Sigma Survey
2 1/8" Powerjet Perforation Record
7" HPI Plug Setting Record

Prod4 / Crane
Bream A
Gippsland
A-2a
Esso Australia Pty Ltd.

| LOCATION | | | |
|-------------------------|-------------------------------|--------------------------|-------------------------|
| Gippsland | | | Elev.: K.B. 33.5 m |
| Basin | | | G.L. -59 m |
| Bass Strait | | | D.F. 33.5 m |
| Permanent Datum: | M.S.L. | Elev.: 0 m | |
| Log Measured From: | D.F. | 33.5 m | above Perm. Datum |
| Drilling Measured From: | D.F. | | |
| State : Victoria | Max. Well Deviation 49 deg | Longitude 147 46'15"E | Latitude 038 30'04"S |

Logging Date 20-Sep-2007

Run Number One

Depth Driller 2385 m

Schlumberger Depth 2363 m

Bottom Log Interval 2363 m

Top Log Interval 2275 m

Casing Fluid Type Production Fluids

Salinity

Density

Fluid Level 1130 m

BIT/CASING/TUBING STRING

Bit Size 8.500 in

From

To

Casing/Tubing Size 7.000 in

Weight 26 lbn/ft

Grade L-80

From 12.86 m

To 2468 m

Maximum Recorded Temperatures 208 degF

Logger On Bottom 20-Sep-2007 9:23

Unit Number 889 Prod4 / Ausl

Recorded By S Gilbert.

Witnessed By G Rimmer

PVT DATA

Run 1

Oil Density

Water Salinity

Gas Gravity

Bo

Bw

1/Bg

Bubble Point Pressure

Bubble Point Temperature

Solution GOR

Maximum Deviation

49 deg

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

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 20-Sep-2007 9:23

Unit Number 889 Prod4 / Ausl

Recorded By S Gilbert.

Witnessed By G Rimmer

DEPTH SUMMARY LISTING

Date Created: 20-SEP-2007 16:58:46

Depth System Equipment

| Depth Measuring Device | Tension Device | Logging Cable |
|---|---|---|
| Type: IDW-EB Serial Number: 6373 Calibration Date: 04-JAN-2007 Calibrator Serial Number: 9 Calibration Cable Type: 2-23ZT Wheel Correction 1: -2 Wheel Correction 2: -4 | Type: PSDS/OSDS Serial Number: 325357 Calibration Date: 05-Sep-2007 Calibrator Serial Number: 1174 Calibration Gain: 0.95 Calibration Offset: 268.00 | Type: 2-32ZT Serial Number: 24425 Length: 5584 M Conveyance Method: Wireline Rig Type: Offshore_Crane |

Depth Control Parameters

| | |
|---------------------------|----------------------------|
| Log Sequence: | Subsequent Log In the Well |
| Reference Log Name: | Solar Composite Log |
| Reference Log Run Number: | |
| Reference Log Date: | . |

Depth Control Remarks

| |
|---------------------------------------|
| 1. IDW used as primary depth control. |
| 2. Z-chart used as secondary backup |
| 3. |
| 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.














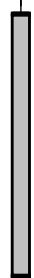


| |
|--|
| OTHER SERVICES1 |
| OS1: None |
| OS2: |
| OS3: |
| OS4: |
| OS5: |
| REMARKS: RUN NUMBER 1 |
| Log correlated to ExxonMobil composite supplied with logging program. |
| Maximum well deviation = 49 degrees at 1270 MDKB. |
| Objective: Conduct RST Sigma survey from HUD to 2292m MDKB making 2 Passes |
| @ 900ft/hr with the well shut in . Perforate the well over the interval |
| 2353.3 m to 2355.6m MDKB using a 2 1/8" 45deg Phased Powerjet Gun . Set 7" |
| HPI plug with top of seal @ 2358m MDKB. |
| Refer Cur SRPD: 2506.msc SRPT: 208.dscf HUD 2362 m MDKB |

| | | | |
|-------------------------------|---|----------------|-----------------|
| Before Gun | SBHP: 2396 psia | SBHT: 206 degf | ROD 2363 m MDKB |
| After Gun | SBHP: 2605 psia | SBHT: 210 degf | |
| Gun#1 | 6 CCL couldn't be logged due to limited Space . | | |
| Top Shot @ 2353.3m MDKB | | | |
| CCL to Top Shot : 4.2 m | | | |
| CCL Stop Depth : 2349.1m MDKB | | | |
| 7" Plug | | | |
| Top of Seal @ 2358m MDKB | | | |
| CCL to Top of Seal : 11.5m | | | |
| CCL Stop Depth : 2346.5m MDKB | | | |
| SLB Crew: A Hall, C Shiells | | | |

| | | | | | |
|------------------|-------|--------------|-----------------|-------|------|
| RUN 1 | | | | | |
| SERVICE ORDER #: | | AusI07484978 | | | |
| PROGRAM VERSION: | | 14C0-302 | | | |
| FLUID LEVEL: | | 1130 m | | | |
| LOGGED INTERVAL | START | STOP | LOGGED INTERVAL | START | STOP |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

EQUIPMENT DESCRIPTION

| | | | | | |
|-----------------------------|--|--|-------------------|--|--|
| RUN 1 | | | RUN 2 | | |
| SURFACE EQUIPMENT | | | SURFACE EQUIPMENT | | |
| WITM-A 827 PSC_16MHZ 827 | | | MWPM-. 3000 | | |

| DOWNHOLE EQUIPMENT | | | | DOWNHOLE EQUIPMENT | | | |
|---|---|-------|---|---|-------|--|--|
| AH-SWBS-B AH-SWBS-B 761 |  | 12.03 | AH-SWBS-B 761 AH-SWBS-B 761 |  | 12.31 | | |
| AH-SWBS-B AH-SWBS-B 762 |  | 11.33 | AH-SWBS-B 762 AH-SWBS-B 762 |  | 11.62 | | |
| AH-SWBS-B AH-SWBS-B 763 |  | 10.63 | AH-SWBS-B 763 AH-SWBS-B 763 |  | 10.94 | | |
| MH-SWHS-A MH-SWHS-A 726 |  | 9.93 | MH-SWHS-A 726 MH-SWHS-A 726 |  | 10.25 | | |
| PSPT-B 827 PSC-A 827 PSPT-B 827 PSTC 827 PBMS-B 827 CQG_F_Mano 827 RTD Thermometer 827 GR 827 CCL 827 PBMS 827 |  | 9.54 | AH-124 1001 MWGT-AA 69 MWPG-AA 69 MWGH-AA 69 |  | 9.92 | | |
| | | | MWPG GR |  | 2.41 | | |
| | | | MWPT-CA 74 MWPH-AA 74 MWPS-AA 74 |  | 8.74 | | |
| | | | |  | 7.02 | | |
| RST-C 23 RSCH-A 23 RSC-C 23 RSS-A 197 RSXH-A 23 RSX-C 23 |  | 7.02 | |  | 7.02 | | |
| | | | AH-Flex Joint 41 AH-Flex Joint 41 |  | 5.92 | | |
| | | | AH-122 7002 | | 5.36 | | |
| | | | AH-SAH-G 1047 | | 5.26 | | |

RSC-A Far
RSC-A PNG
RSC-A Nea
RSX-A PNG

4.24
4.09

Tension HV 0.00
TOOL ZERO

MAXIMUM STRING DIAMETER 1.72 IN
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN METERS

MPD-MB 268

MPD-MB 268
MPD-MB 268

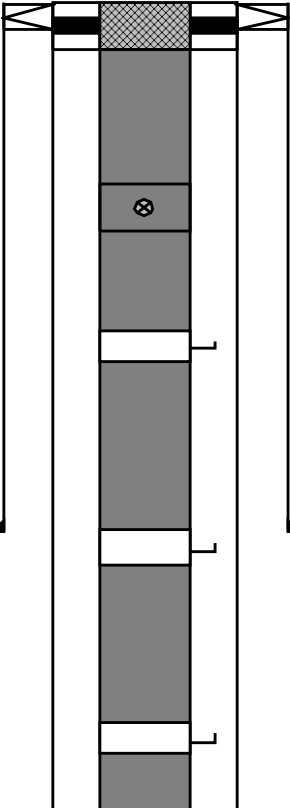
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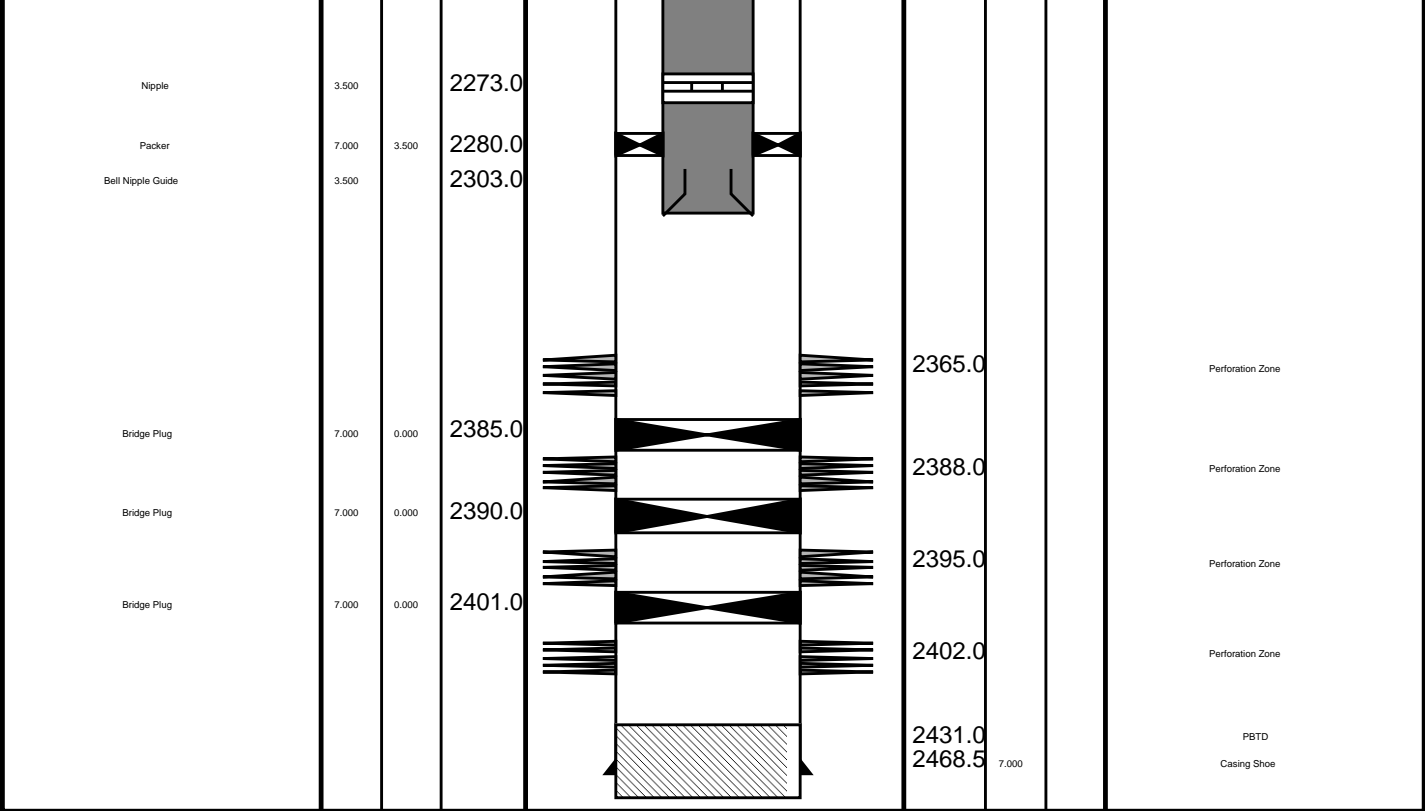
MWP_GUN
GUN-2.3 mtr Phased Powerjet Gun 1

4.80
4.27
3.81

TOOL BOTTOM

MAXIMUM STRING DIAMETER 2.13 IN
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN METERS

| Production String | (m) | | Well Schematic | (m) | | | Casing String |
|-------------------------|-------|-------|---|--------|--------|-------|--|
| | OD | ID | | MD | OD | ID | |
| Tubing Hanger Tubing | 7.000 | 3.500 |  | 12.9 | 10.750 | 7.000 | Casing String Casing String Liner Hanger |
| | 3.500 | | | 12.9 | 7.000 | | |
| | | | | 12.9 | 10.750 | 7.000 | |
| Shut-in Valve | 3.500 | | | 375.0 | | | |
| Gas Lift Mandrel | 3.500 | | | 758.0 | | | |
| Gas Lift Mandrel | 3.500 | | | 1444.0 | 10.750 | | Casing Shoe |
| Gas Lift Mandrel | 3.500 | | | 1927.0 | | | |



Job Events Summary

MAXIS Field Log

Schlumberger Job Event Summary

| | Time | Elapsed Time | Depth (M) | File | |
|---------------|-------------|--------------|-----------|-----------------|----------------|
| Log Pass (up) | 20-Sep-2007 | 9:09 | 000:09 | 2366.3 - 2277.8 | RST_PSP_007LUP |
| Log Pass (up) | 20-Sep-2007 | 9:28 | 000:20 | 2366.3 - 2282.5 | RST_PSP_009LUP |
| Log Pass (up) | 20-Sep-2007 | 9:52 | 000:18 | 2366.6 - 2278.8 | RST_PSP_010LUP |
| Log Pass (up) | 21-Sep-2007 | 7:56 | 000:05 | 2350.5 - 2303.8 | PERFO_020LUP |
| Log Pass (up) | 21-Sep-2007 | 8:05 | 000:24 | 2355.0 - 2290.1 | PERFO_021LUP |
| Station Log | 21-Sep-2007 | 8:08 | 000:12 | 2349.1 - 1.8 | PERFO_022LTP |
| Log Pass (up) | 21-Sep-2007 | 10:07 | 000:12 | 2364.6 - 2246.4 | PERFO_026LUP |
| Log Pass (up) | 21-Sep-2007 | 14:32 | 000:06 | 2326.1 - 2298.8 | PERFO_037LUP |
| Log Pass (up) | 21-Sep-2007 | 14:38 | 000:24 | 2349.4 - 2299.7 | PERFO_038LUP |



Plug Setting Pass

MAXIS Field Log

Output DLIS Files

DEFAULT PERFO_038LUP FN:37 PRODUCER 21-Sep-2007 14:38 2349.4 M 2299.7 M

OP System Version: 14C0-302
MCM

SHM_GUN 14C0-302 CCL-L 14C0-302

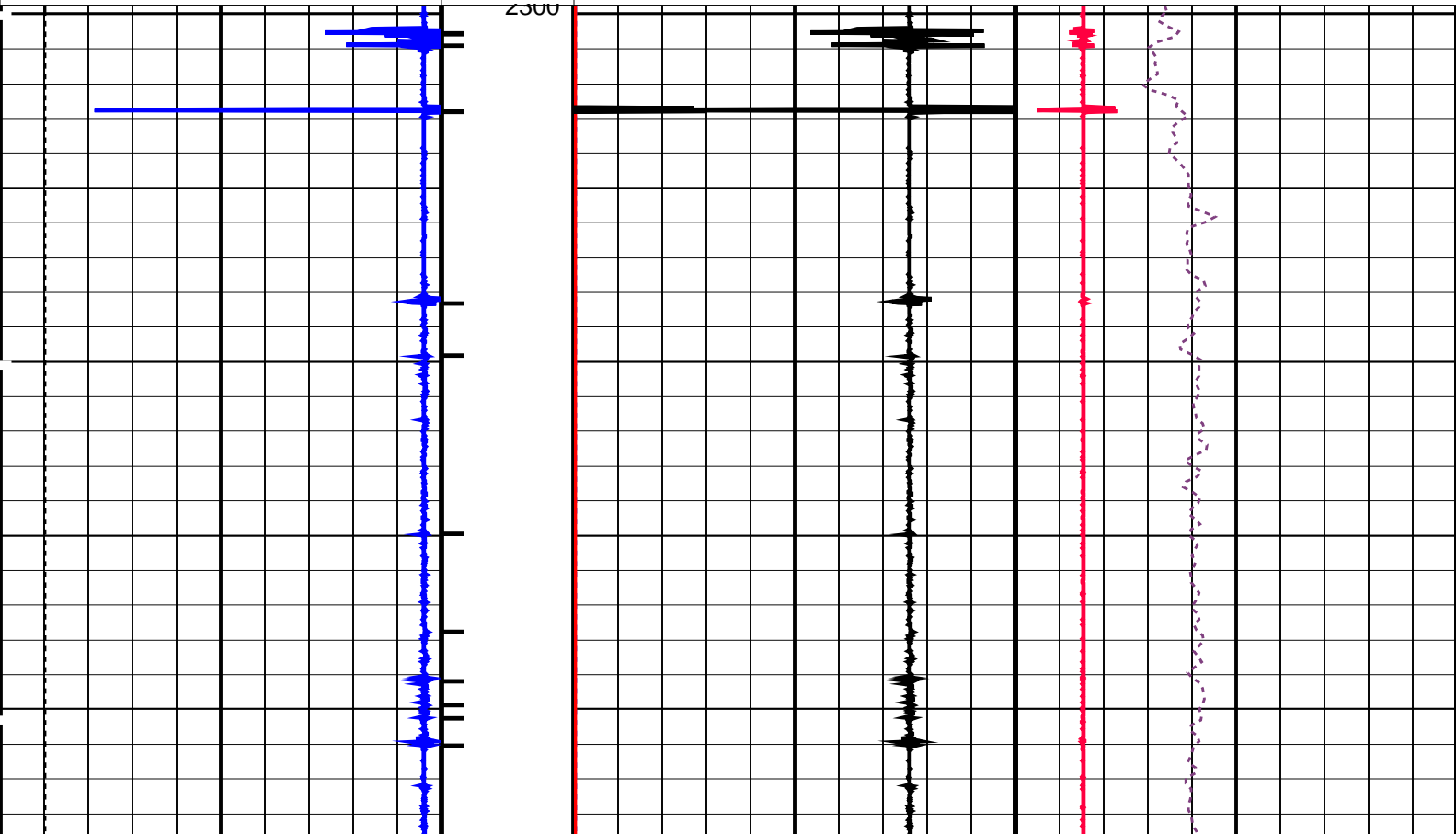
PIP SUMMARY

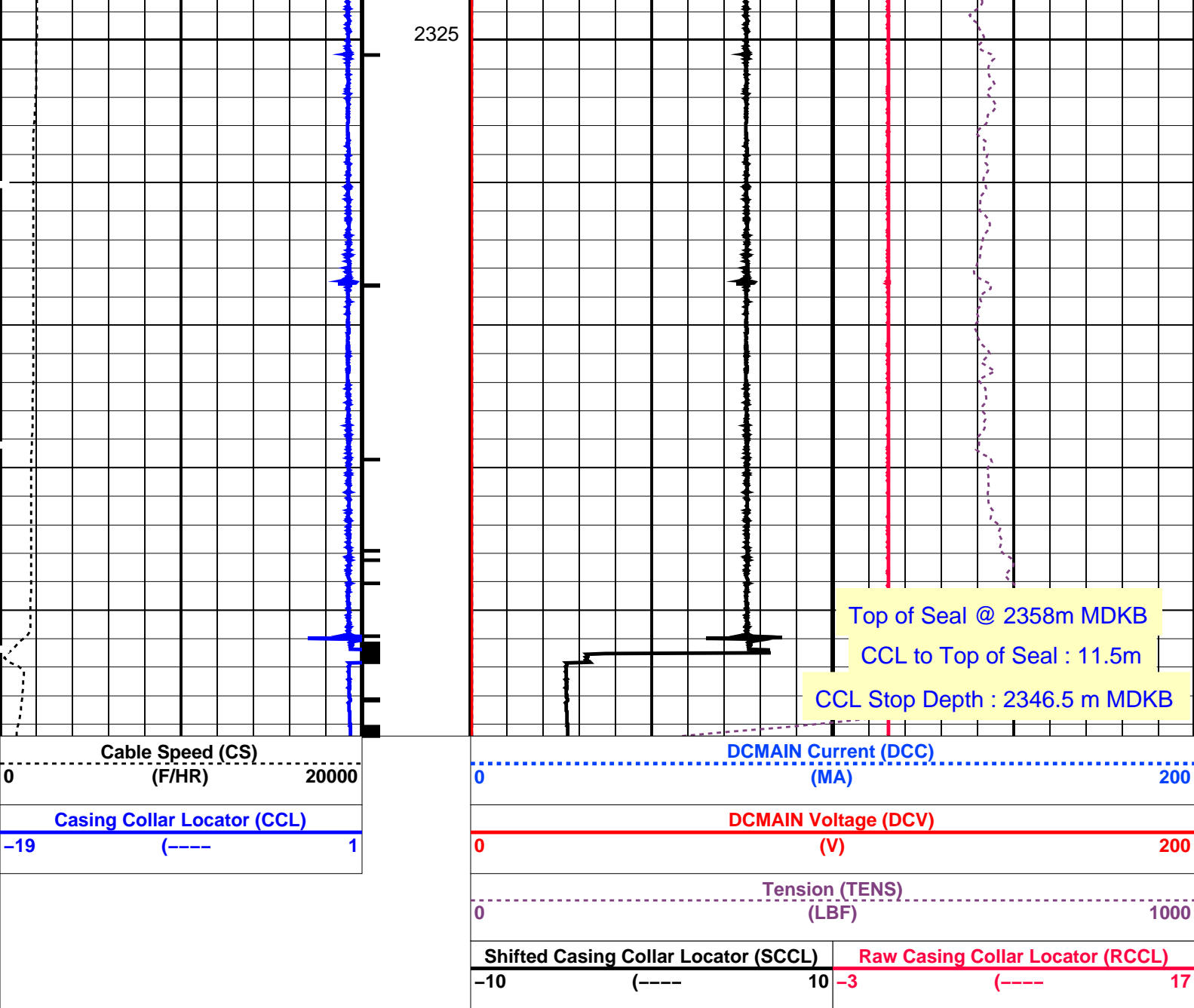
└─ Casing Collars

Time Mark Every 60 S

| | | | | | | |
|-----------------------------|--|--------------------------------------|-------|----------------------------------|----------|------|
| | | Shifted Casing Collar Locator (SCCL) | | Raw Casing Collar Locator (RCCL) | | |
| | | -10 | (---- | 10 | -3 (---- | 17 |
| | | Tension (TENS) | | | | |
| | | (LBF) | | | | |
| | | 0 | | | | 1000 |
| Casing Collar Locator (CCL) | | DCMAIN Voltage (DCV) | | | | |
| -19 (---- | | 1 200 | | | | |
| | | (V) | | | | |
| Cable Speed (CS) | | DCMAIN Current (DCC) | | | | |
| 0 (F/HR) | | 20000 (MA) | | | | |
| | | 0 | | | | 200 |

| Casing Collar Locator (CCL) | | |
|-----------------------------|--------|-------|
| -19 | (---- | 1 |
| Cable Speed (CS) | | |
| 0 | (F/HR) | 20000 |





PIP SUMMARY

└─ Casing Collars

Time Mark Every 60 S

Parameters

| DLIS Name | Description | Value |
|-----------|------------------------------|-------|
| CCLD | CCL-L: Casing Collar Locator | 12 IN |
| CCLT | CCL reset delay | 0.3 V |
| | CCL Detection Level | |

Format: PERFO Vertical Scale: 1:200

Graphics File Created: 21-Sep-2007 14:38

OP System Version: 14C0-302
MCM

SHM_GUN 14C0-302 CCL-L 14C0-302

Output DLIS Files

DEFAULT PERFO_038LUP FN:37 PRODUCER 21-Sep-2007 14:38

Output DLIS Files

DEFAULT PERFO_037LUP FN:36 PRODUCER 21-Sep-2007 14:32 2326.1 M 2298.8 M

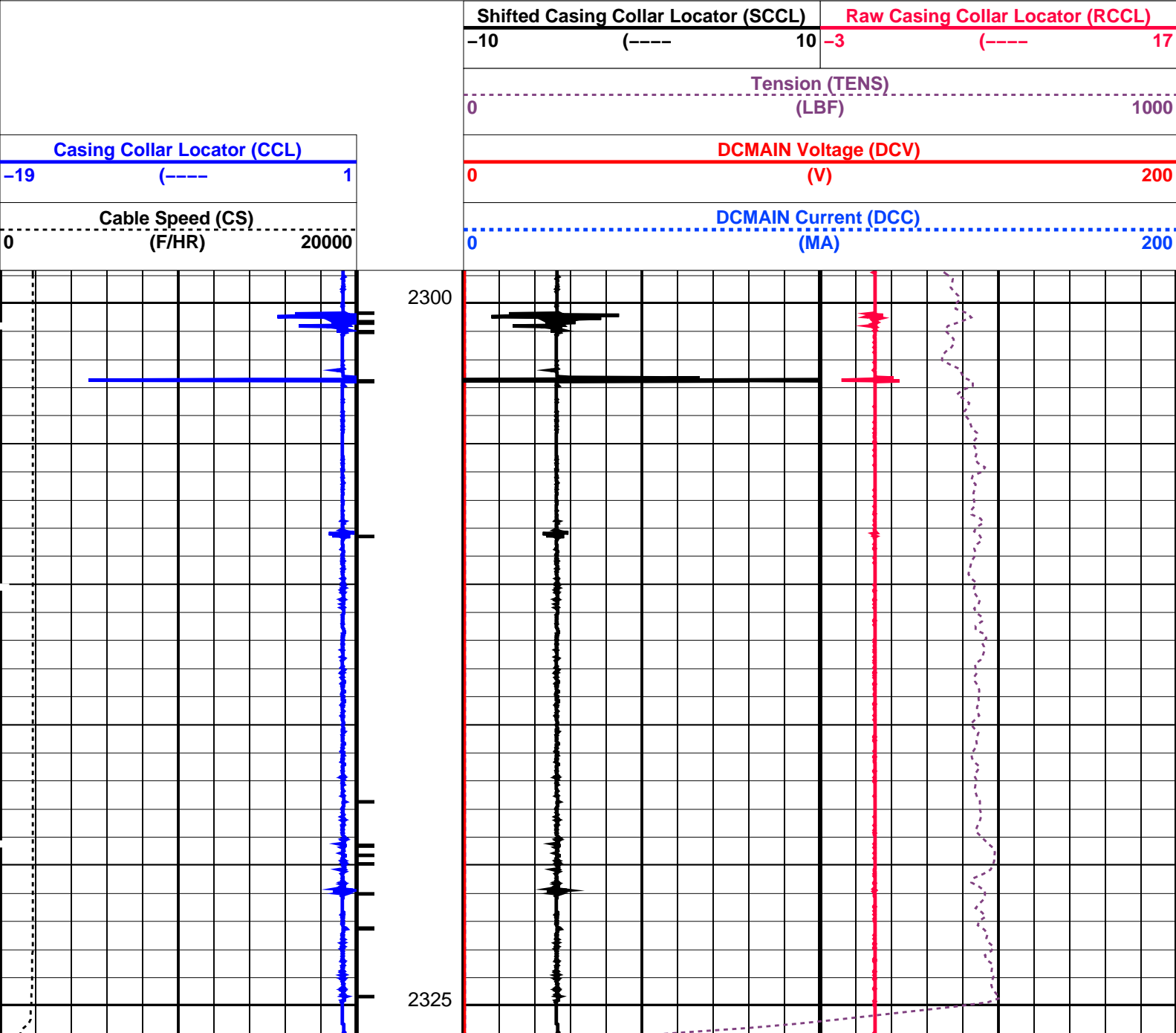
OP System Version: 14C0-302
MCM

SHM_GUN 14C0-302 CCL-L 14C0-302

PIP SUMMARY

Casing Collars

Time Mark Every 60 S



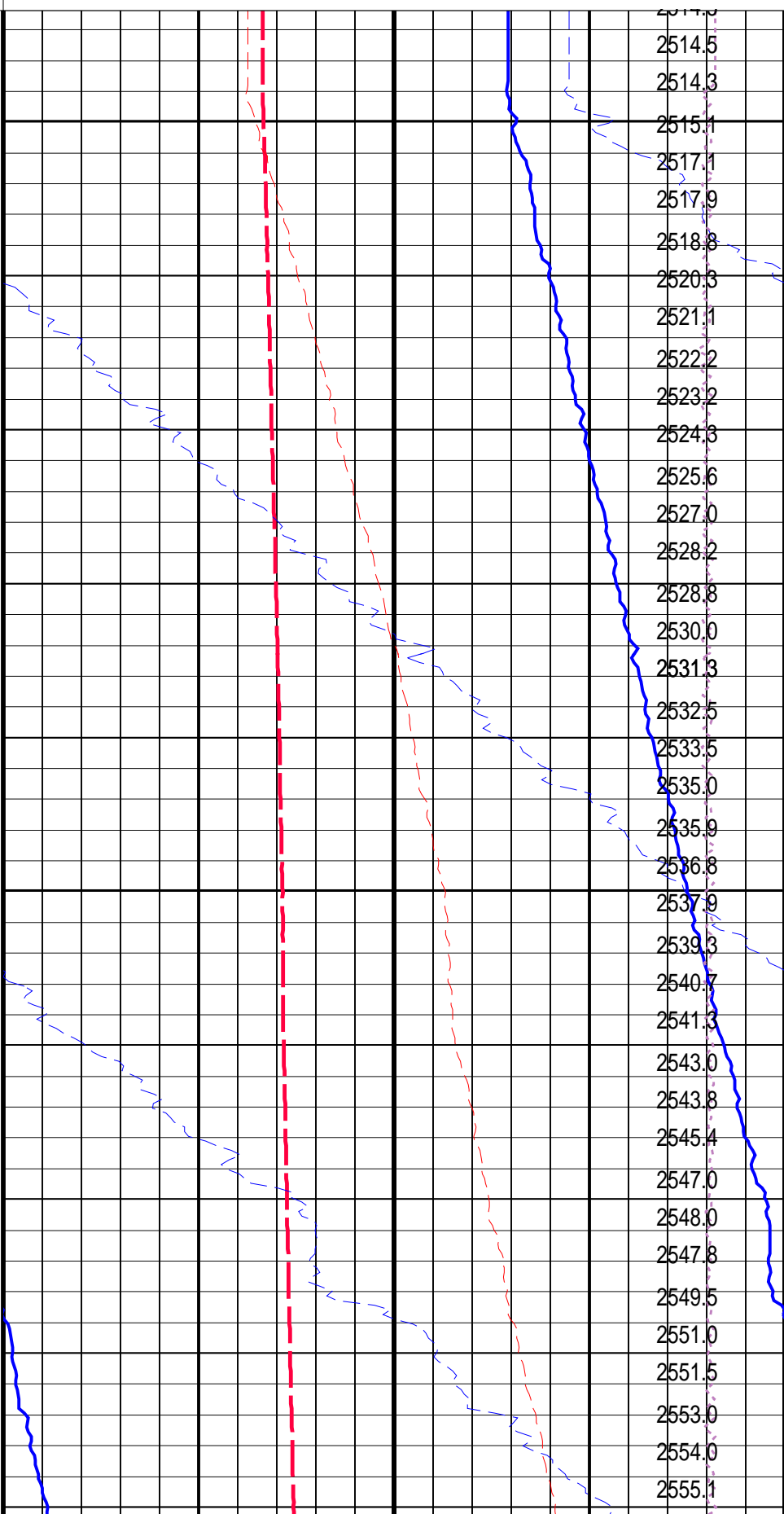
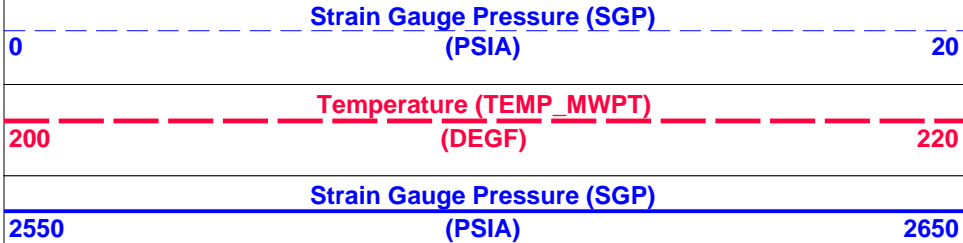
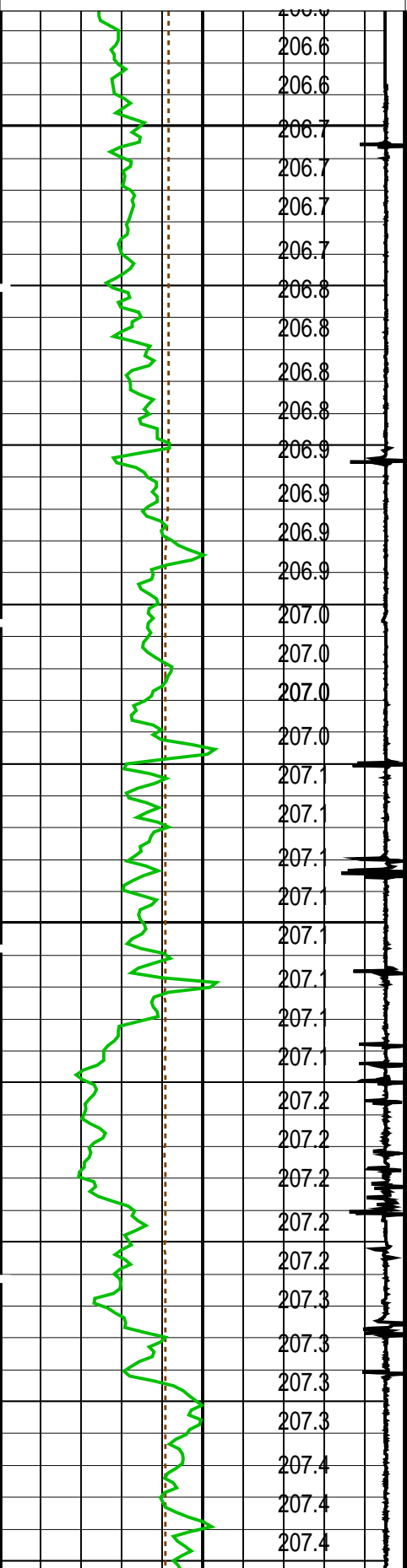
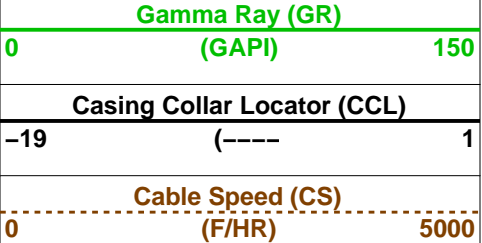
| | | | |
|--------------------------------------|--------|----------------------------------|-------|
| Cable Speed (CS) | | DCMAIN Current (DCC) | |
| 0 | (F/HR) | 0 | (MA) |
| 20000 | | 200 | |
| Casing Collar Locator (CCL) | | DCMAIN Voltage (DCV) | |
| -19 | (---- | 0 | (V) |
| 1 | | 200 | |
| | | Tension (TENS) | |
| | | 0 | (LBF) |
| | | | 1000 |
| Shifted Casing Collar Locator (SCCL) | | Raw Casing Collar Locator (RCCL) | |
| -10 | (---- | -3 | (---- |
| 10 | | 17 | |

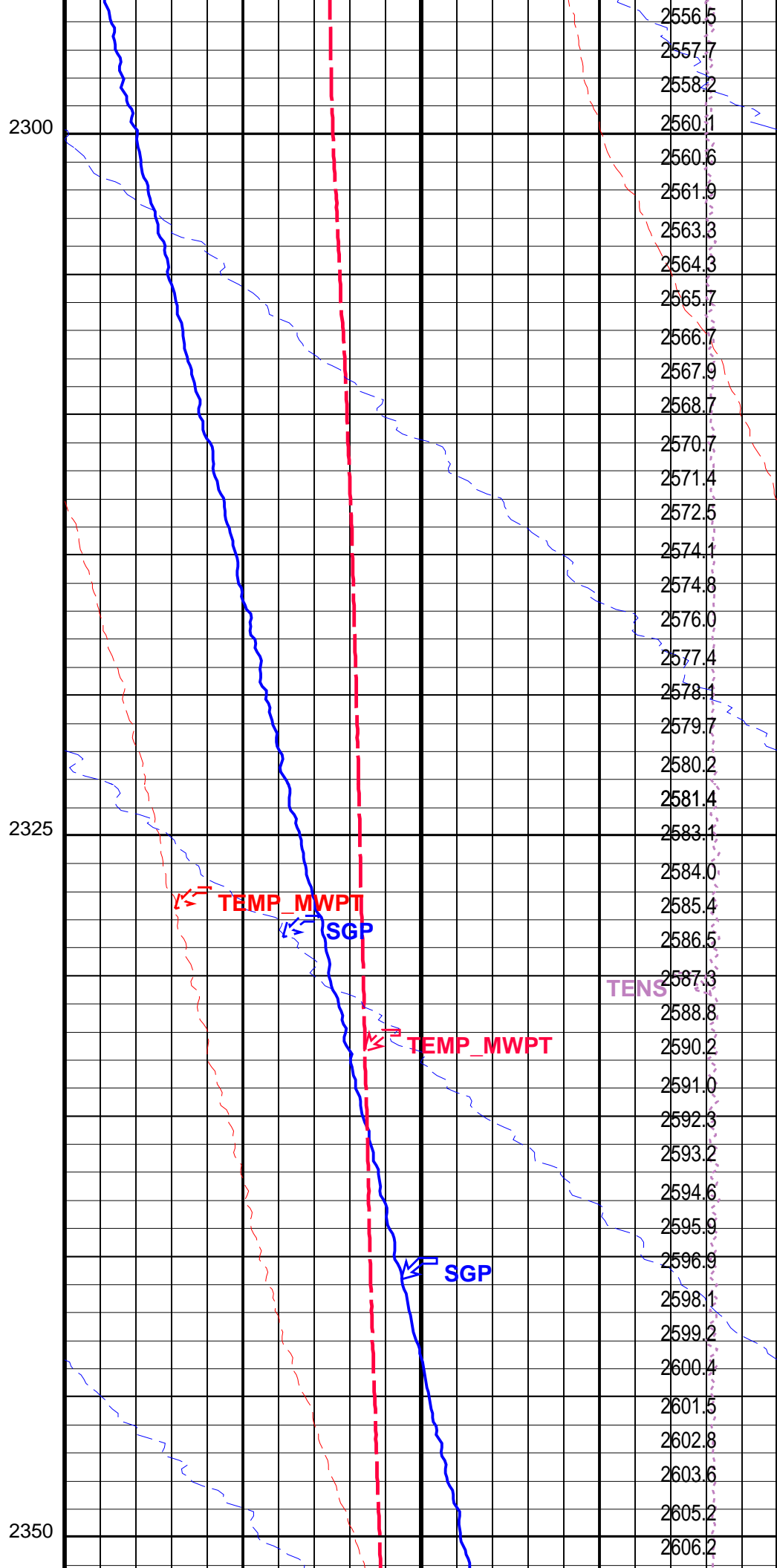
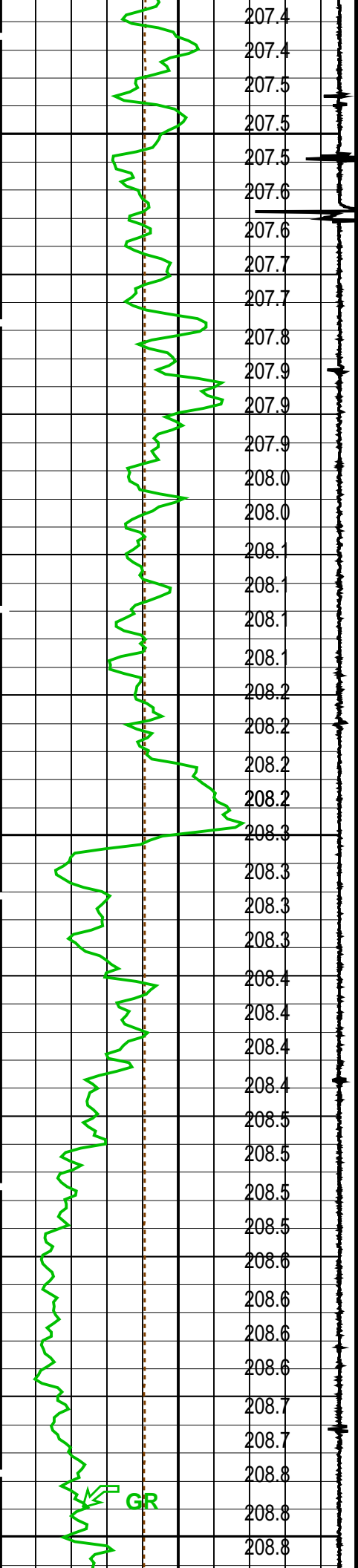
| | | | | | |
|---|--|--|--|--|--|
| PIP SUMMARY | | | | | |
| <div> <div></div> <div>Time Mark Every 60 S</div> </div> <div> <div></div> <div>Casing Collars</div> </div> | | | | | |

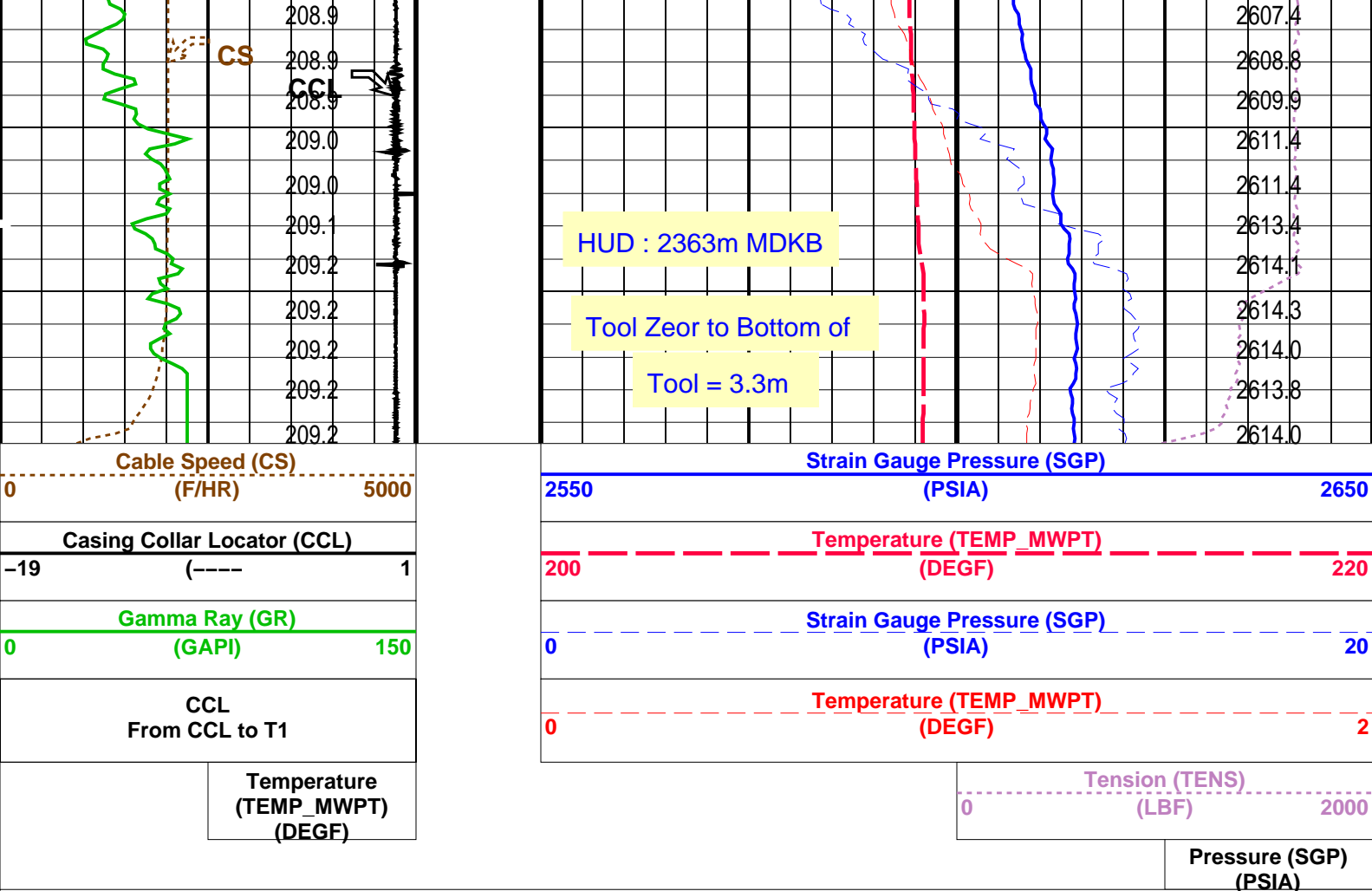
| Parameters | | | | | |
|------------------------------|-----------------------|---------------------|--|-------------------|----|
| DLIS Name | | Description | | Value | |
| CCL-L: Casing Collar Locator | | CCL reset delay | | 12 | IN |
| CCLD | | CCL Detection Level | | 0.3 | V |
| CCLT | | | | | |
| Format: PERFO | Vertical Scale: 1:200 | | Graphics File Created: 21-Sep-2007 14:32 | | |
| OP System Version: 14C0-302 | | | | | |
| MCM | | | | | |
| SHM_GUN | 14C0-302 | CCL-L | 14C0-302 | | |
| Output DLIS Files | | | | | |
| DEFAULT | PERFO_037LUP | FN:36 | PRODUCER | 21-Sep-2007 14:32 | |

| | | | |
|---|--|-----------------|--|
| <div> <div>Schlumberger</div> <div>2.13" Dummy Plug Pass</div> </div> | | MAXIS Field Log | |
|---|--|-----------------|--|

| | | | | | | |
|--|--------------|-----------------------------------|----------|-------------------|--------------------------|----------|
| Company: Esso Australia Pty Ltd. | | | | | Well: A-2a | |
| Output DLIS Files | | | | | | |
| DEFAULT | PERFO_026LUP | FN:25 | PRODUCER | 21-Sep-2007 10:07 | 2364.6 M | 2246.4 M |
| OP System Version: 14C0-302 | | | | | | |
| MCM | | | | | | |
| MWPT-CA | 14C0-302 | MWGT-AA | 14C0-302 | | | |
| PIP SUMMARY | | | | | | |
| <div><div></div>Time Mark Every 60 S</div> | | | | | | |
| | | | | | Pressure (SGP) (PSIA) | |
| Temperature (TEMP_MWPT) (DEGF) | | | | | Tension (TENS) (LBF) | |
| | | | | | 0 | 2000 |
| CCL From CCL to T1 | | Temperature (TEMP_MWPT) (DEGF) | | | | |
| | | 02 | | | | |







PIP SUMMARY

Time Mark Every 60 S

| Parameters | | |
|---|--|----------|
| DLIS Name | Description | Value |
| MWPT-CA: MEASUREMENT WHILE PERFORATING TOOL | | |
| DEVI_FL_CORR | Deviation Angle for Flow Line Correction | 0 DEG |
| FLD | Flow Line Density | 1 G/C3 |
| MWPT_NULL_SOURCE | MWPT NULL Temperature Source | TEMS |
| MWPT_NULL_TEMP | MWPT NULL Temperature | 0.0 DEGC |

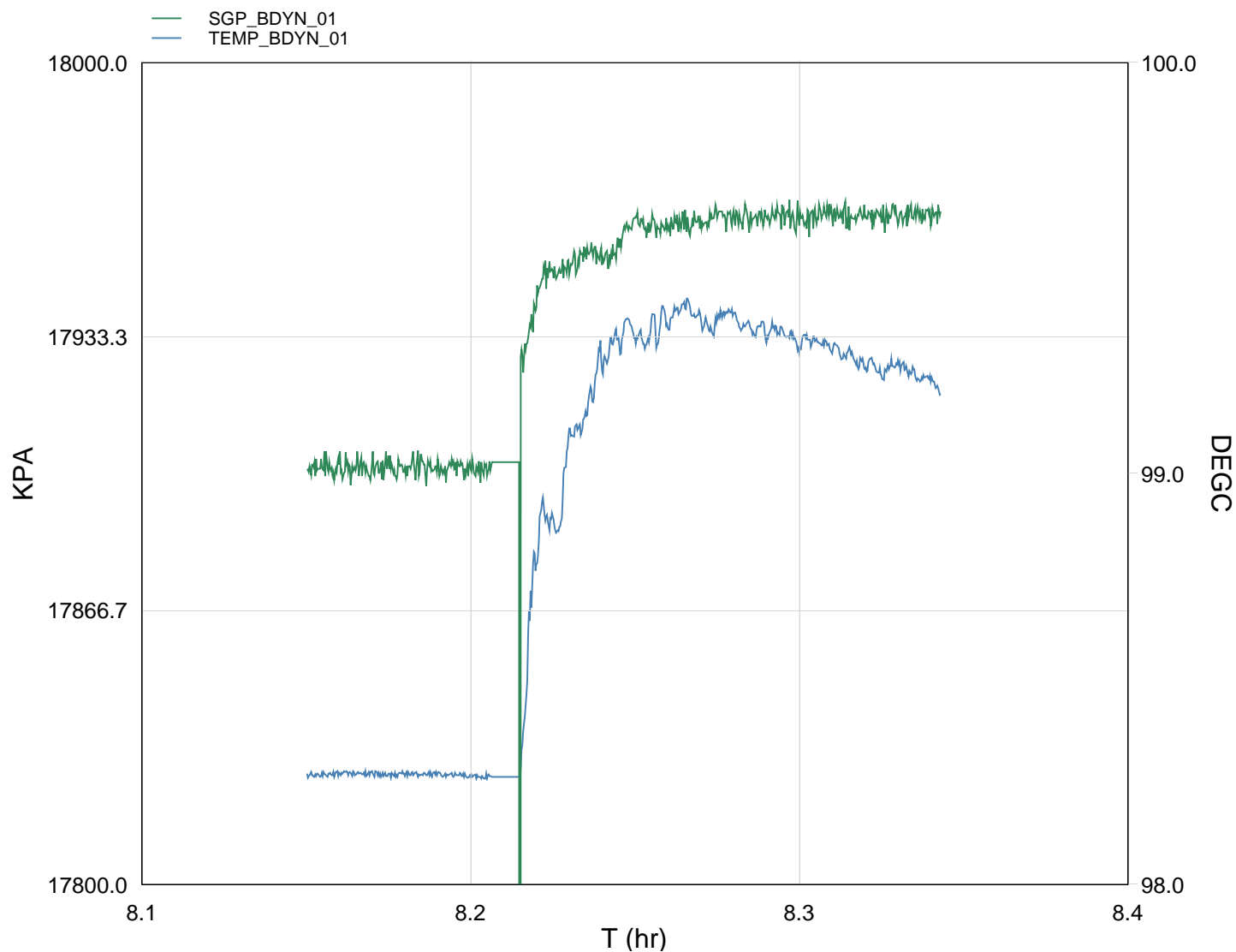
Format: MWP Vertical Scale: 1:200 Graphics File Created: 21-Sep-2007 10:07

| OP System Version: 14C0-302 | | | |
|-----------------------------|----------|---------|----------|
| MCM | | | |
| MWPT-CA | 14C0-302 | MWGT-AA | 14C0-302 |

| Output DLIS Files | | | |
|-------------------|--------------|-------|----------------------------|
| DEFAULT | PERFO_026LUP | FN:25 | PRODUCER 21-Sep-2007 10:07 |

Schlumberger

Gun # 1 Fired @
2353.3m to 2355.6m MDKB



| TIME | TEMP_MWPT_S | SGPA_SL |
|--------|-------------|----------|
| 2640.0 | 208.88 | 2596.363 |
| 2700.0 | 208.89 | 2596.374 |
| 2760.0 | 208.88 | 2596.134 |
| 2820.0 | 208.87 | 2596.296 |
| 2880.0 | 209.59 | 2601.114 |
| 2940.0 | 210.45 | 2604.180 |
| 3000.0 | 210.80 | 2604.990 |
| 3060.0 | 210.90 | 2604.828 |
| 3120.0 | 210.87 | 2605.010 |
| 3180.0 | 210.80 | 2605.248 |
| 3240.0 | 210.68 | 2605.233 |
| 3300.0 | 210.66 | 2605.234 |

| TIME | TEMP_MWPT_S | SGPA_SL |
|--------|-------------|----------|
| 2640.0 | 208.88 | 2596.363 |
| 2700.0 | 208.89 | 2596.374 |
| 2760.0 | 208.88 | 2596.134 |
| 2820.0 | 208.87 | 2596.296 |
| 2880.0 | 209.59 | 2601.114 |
| 2940.0 | 210.45 | 2604.180 |
| 3000.0 | 210.80 | 2604.990 |
| 3060.0 | 210.90 | 2604.828 |
| 3120.0 | 210.87 | 2605.010 |
| 3180.0 | 210.80 | 2605.248 |
| 3240.0 | 210.68 | 2605.233 |
| 3300.0 | 210.66 | 2605.234 |

Company: Esso Australia Pty Ltd. Well: A-2a

Output DLIS Files

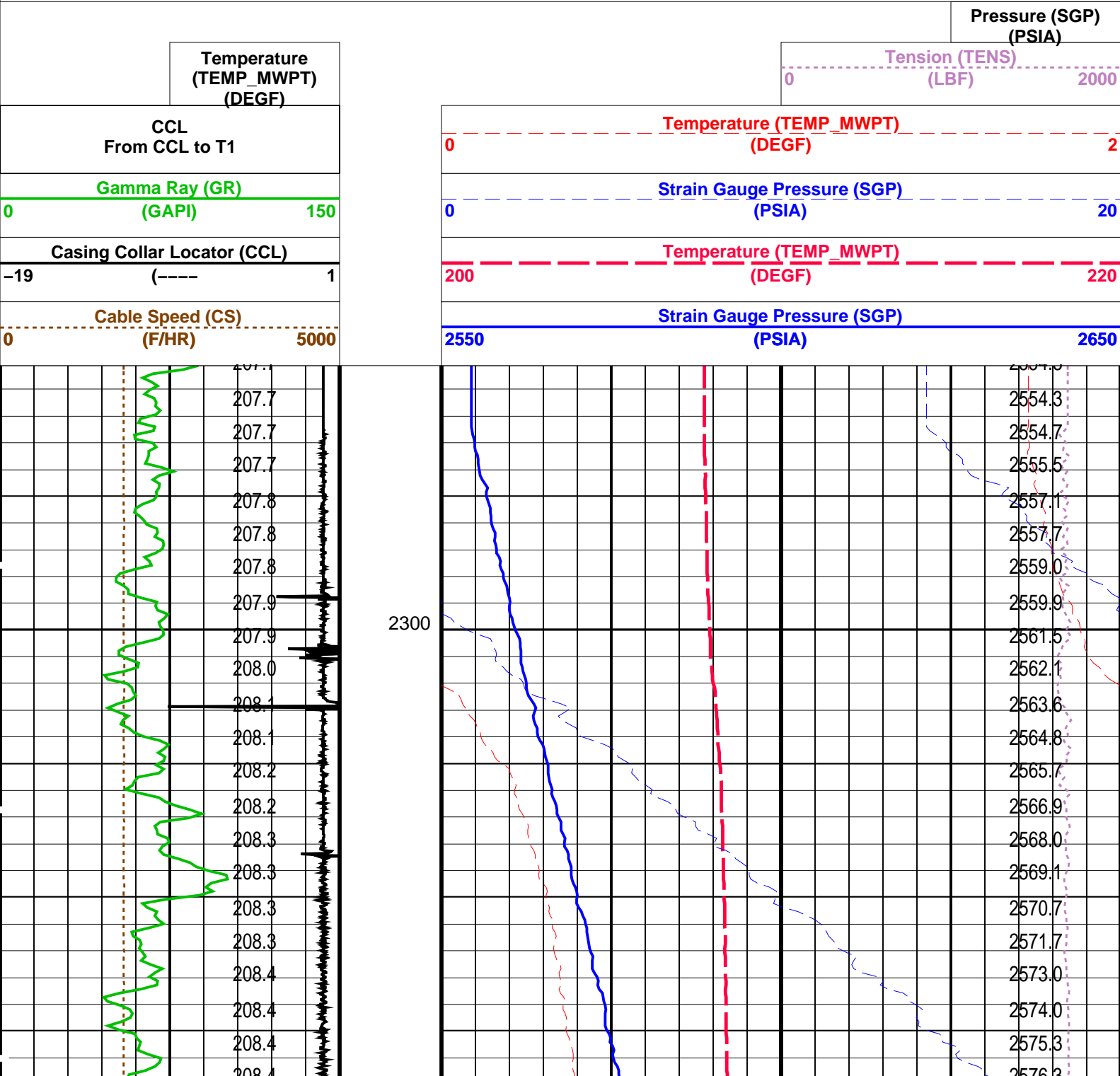
DEFAULT PERFO_021LUP FN:20 PRODUCER 21-Sep-2007 08:05 2355.0 M 2290.1 M

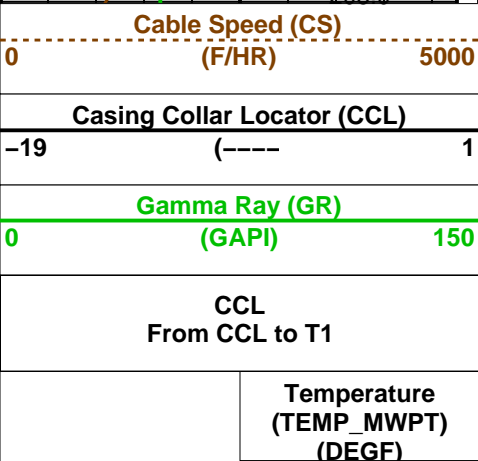
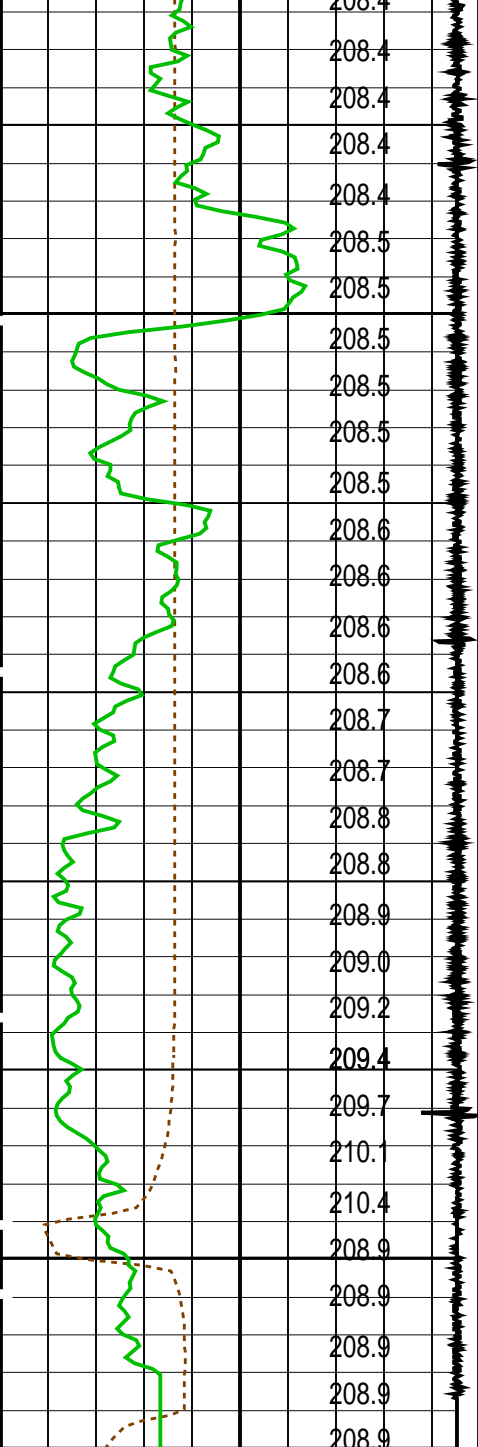
OP System Version: 14C0-302
MCM

MWP_GUN 14C0-302 MWPT-CA 14C0-302
MWGT-AA 14C0-302

PIP SUMMARY

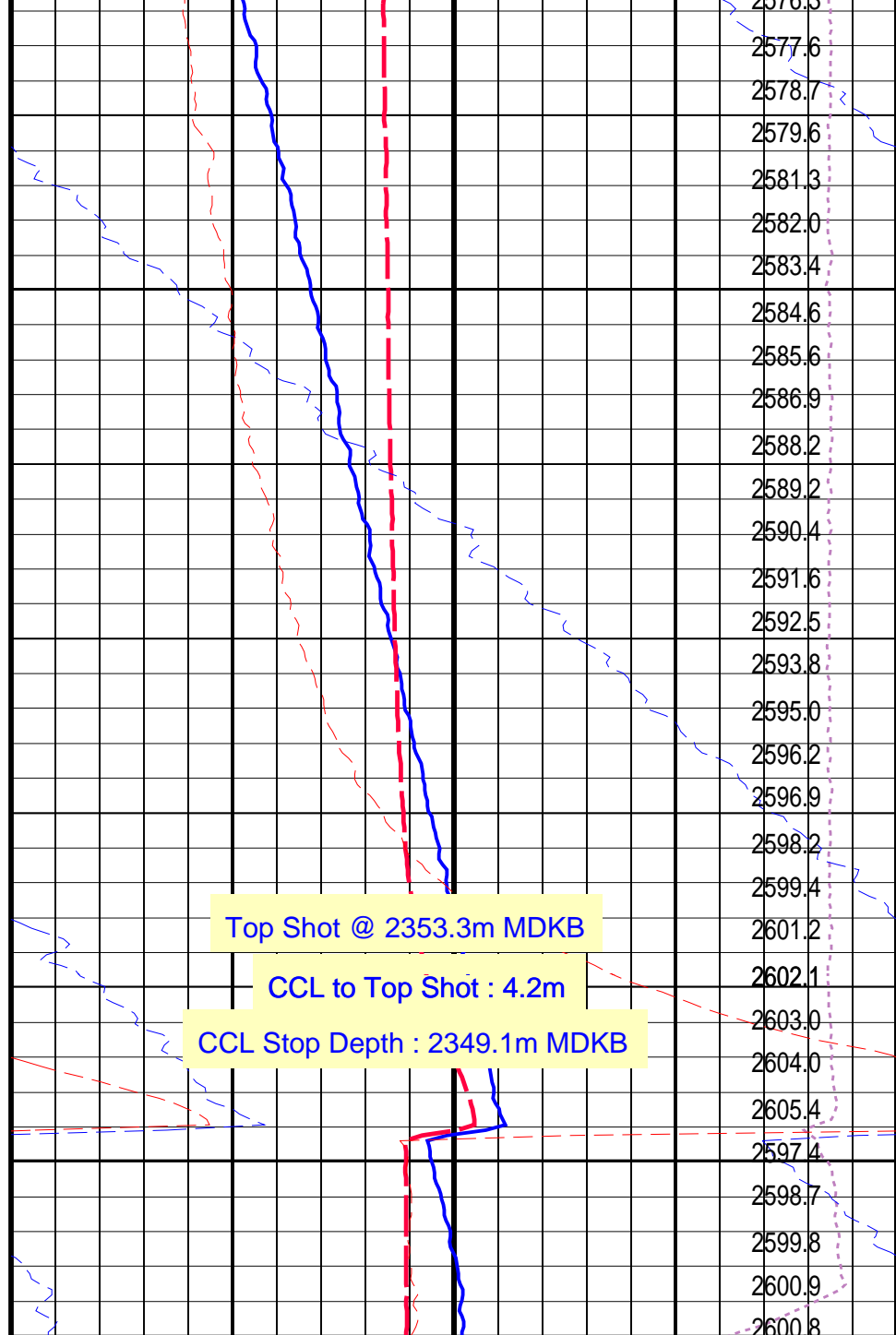
Time Mark Every 60 S





2325

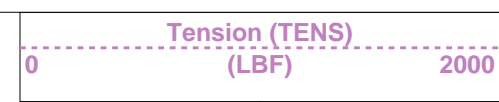
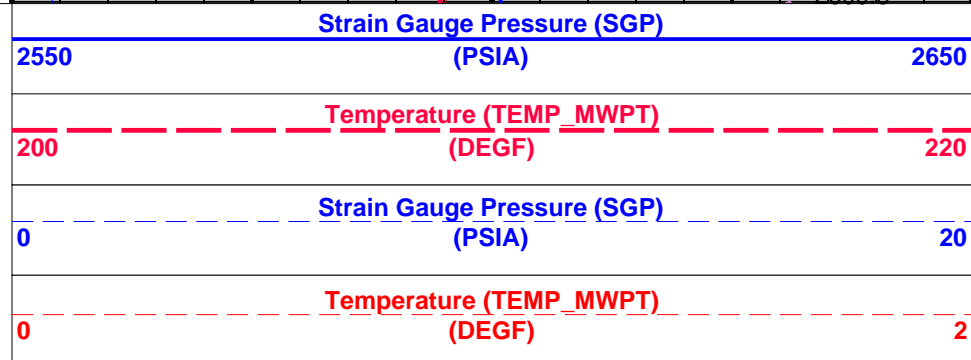
2350



Top Shot @ 2353.3m MDKB

CCL to Top Shot : 4.2m

CCL Stop Depth : 2349.1m MDKB

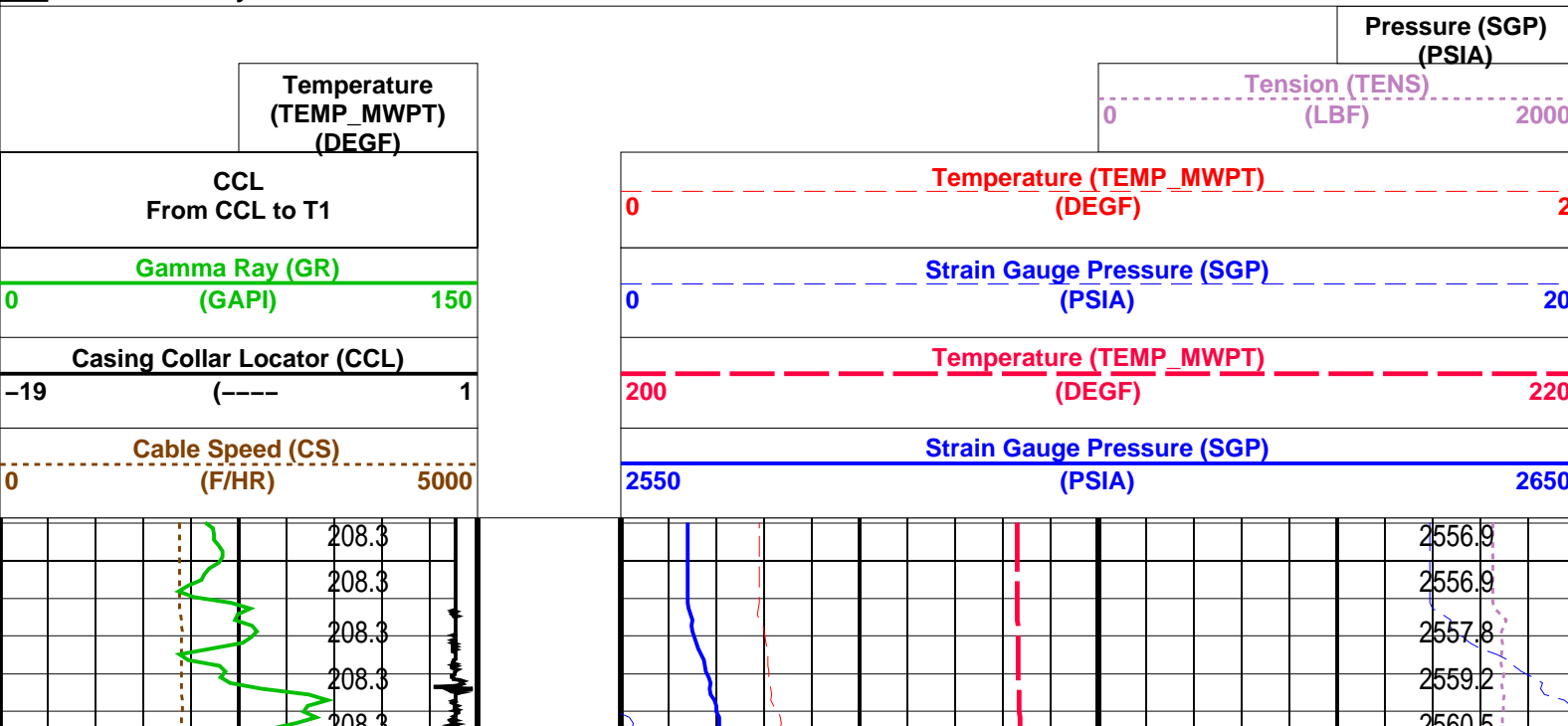


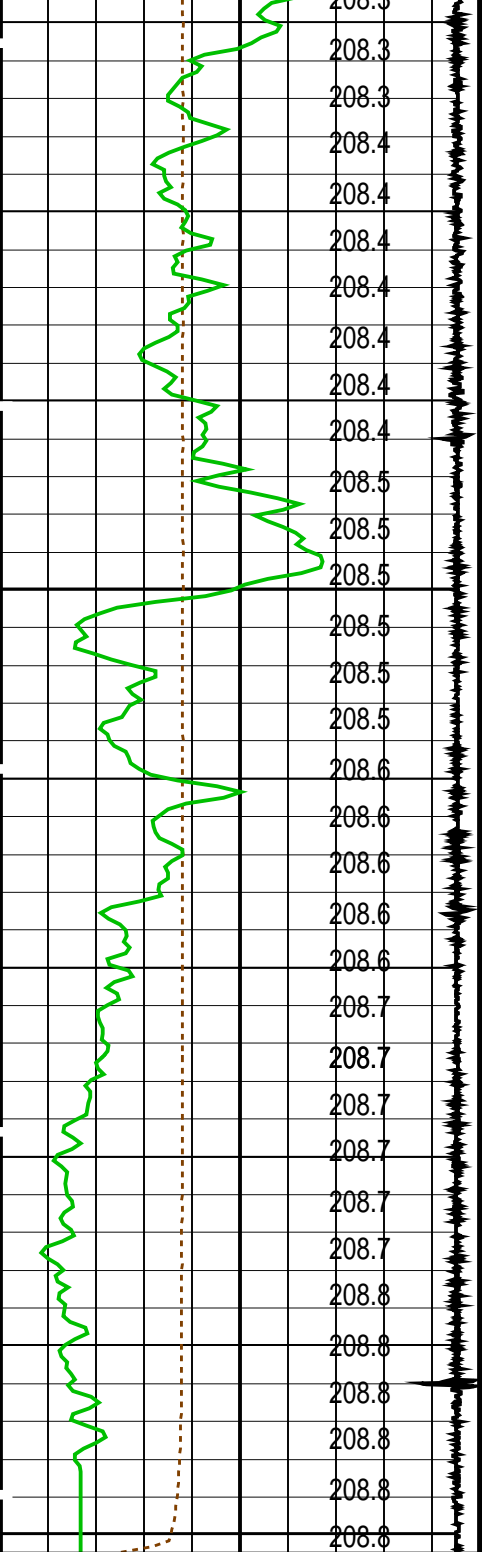
Pressure (SGP)
(PSIA)

PIP SUMMARY

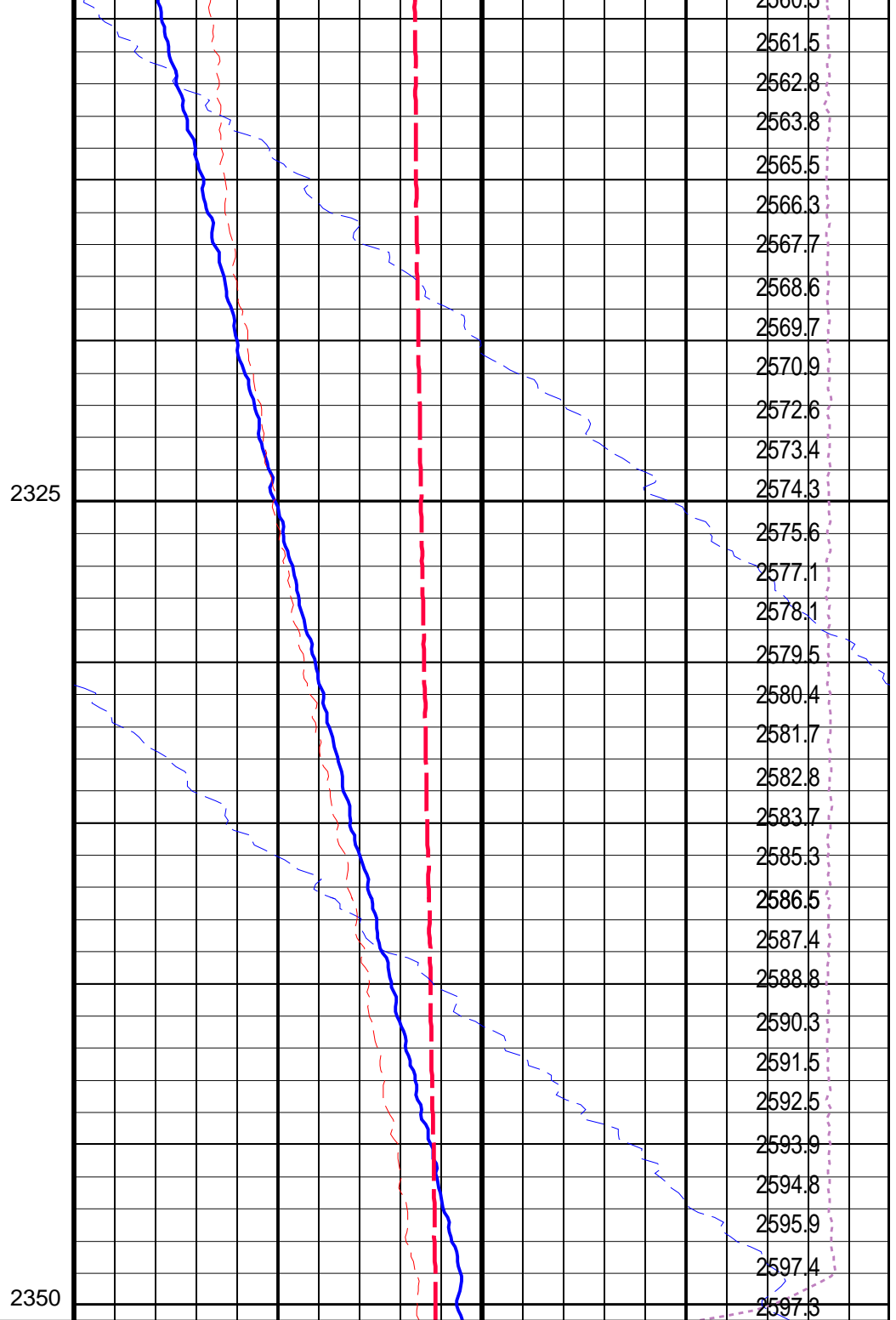
Time Mark Every 60 S

Parameters





| | |
|--------------------------------------|------|
| Cable Speed (CS) (F/HR) | |
| 0 | 5000 |
| Casing Collar Locator (CCL) (---- | |
| -19 | 1 |
| Gamma Ray (GR) (GAPI) | |
| 0 | 150 |
| CCL From CCL to T1 | |
| Temperature (TEMP_MWPT) (DEGF) | |



| | |
|---------------------------------------|------|
| Strain Gauge Pressure (SGP) (PSIA) | |
| 2550 | 2650 |
| Temperature (TEMP_MWPT) (DEGF) | |
| 200 | 220 |
| Strain Gauge Pressure (SGP) (PSIA) | |
| 0 | 20 |
| Temperature (TEMP_MWPT) (DEGF) | |
| 0 | 2 |
| Tension (TENS) (LBF) | |
| 0 | 2000 |
| Pressure (SGP) (PSIA) | |

Parameters

| DLIS Name | Description | Value |
|---|--|----------|
| MWPT-CA: MEASUREMENT WHILE PERFORATING TOOL | | |
| DEVI_FL_CORR | Deviation Angle for Flow Line Correction | 0 DEG |
| FLD | Flow Line Density | 1 G/C3 |
| MWPT_NULL_SOURCE | MWPT NULL Temperature Source | TEMS |
| MWPT_NULL_TEMP | MWPT NULL Temperature | 0.0 DEGC |

Format: MWP Vertical Scale: 1:200

Graphics File Created: 21-Sep-2007 07:56

OP System Version: 14C0-302

MCM

| | | | |
|---------|----------|---------|----------|
| MWP_GUN | 14C0-302 | MWPT-CA | 14C0-302 |
| MWGT-AA | 14C0-302 | | |

Output DLIS Files

DEFAULT PERFO_020LUP FN:19 PRODUCER 21-Sep-2007 07:56

Schlumberger

SIGMA Pass # 2

MAXIS Field Log

Company: Esso Australia Pty Ltd.

Well: A-2a

Output DLIS Files

DEFAULT RST_PSP_010LUP FN:9 PRODUCER 20-Sep-2007 09:52 2366.6 M 2278.8 M

OP System Version: 14C0-302

MCM

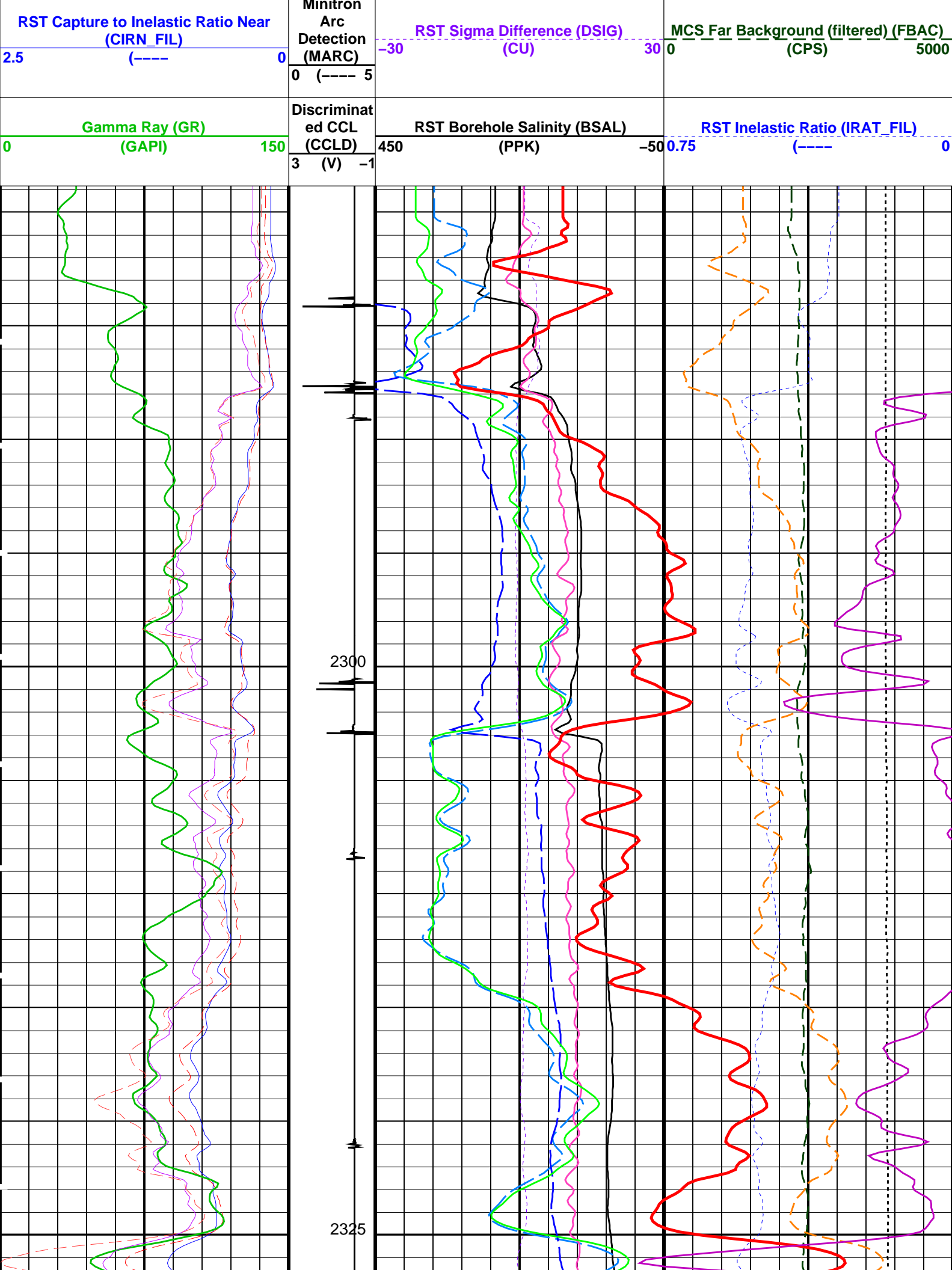
| | | | |
|-------|----------|--------|----------|
| RST-C | 14C0-302 | PSPT-B | 14C0-302 |
|-------|----------|--------|----------|

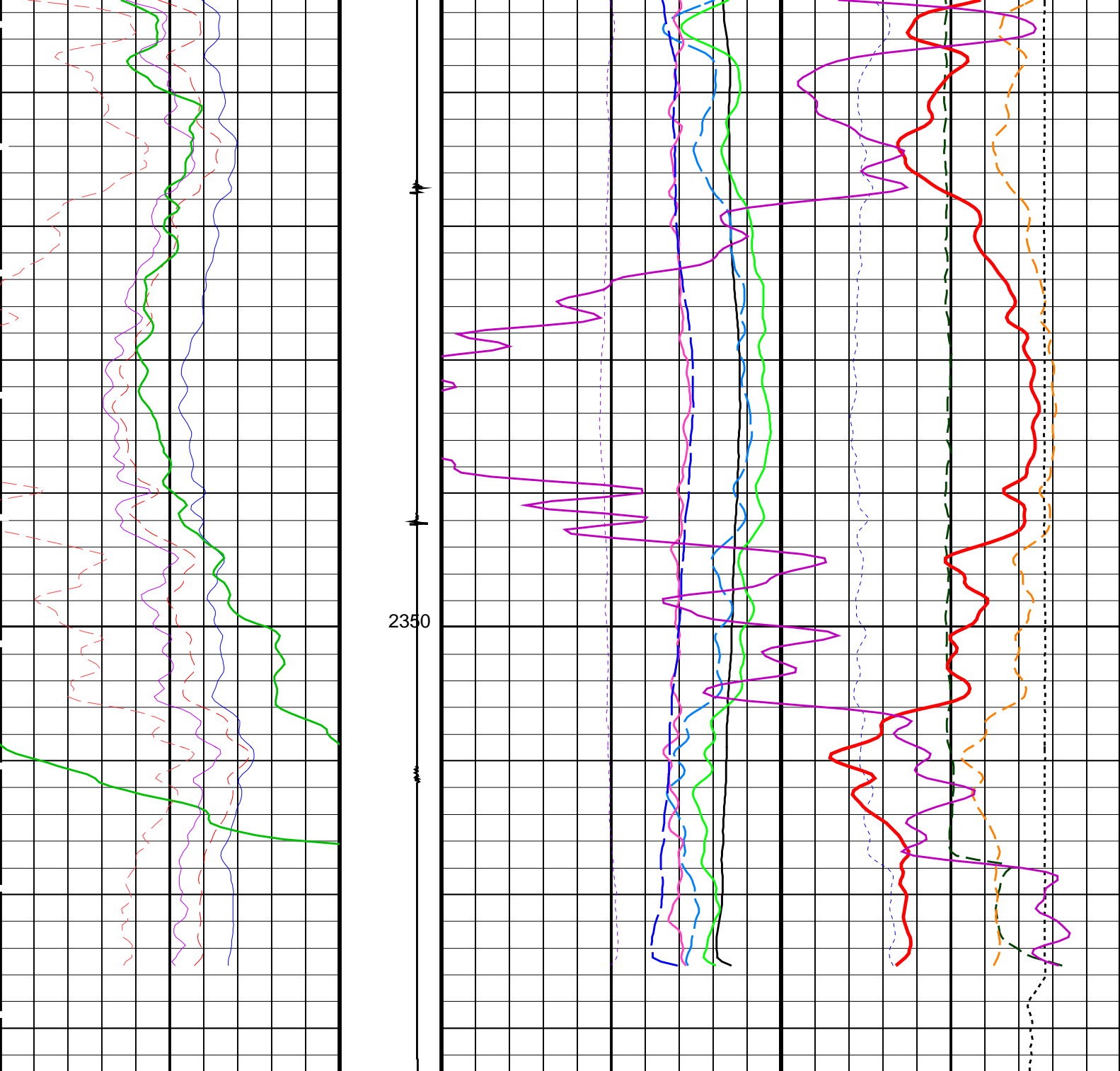
PIP SUMMARY

Time Mark Every 60 S

| | | | |
|---|-------|---|-----------|
| | | RST Sigma (SIGM) | |
| 60 | | (CU) | 0 |
| | | RST Weighted Inelastic Ratio (WINR_RST) | |
| 0.4 | | (---- | 0 |
| | | RST Porosity (TPHI) | |
| 0.6 | | (V/V) | 0 |
| RST Far Effective Capture CR (RSCF_RST) | | RST Sigma Borehole Fluid (SIBF) | |
| 45 | (---- | 100 | (CU) 0 |
| RST Near Effective Capture CR (RSCN_RST) | | Sigma Borehole Far Apparent (SBFA_FIL) | |
| 45 | (---- | 150 | (CU) 0 |
| RST Capture to Inelastic Ratio Far (CIRF_FIL) | | RST Capture Ratio (TRAT_FIL) | |
| 5 | (---- | 1.5 | (---- 0.5 |
| | | Sigma Formation Far Apparent (SFFA_FIL) | |
| | | 60 | (CU) 0 |

Tension (TENS)
0 (LBF) 3000





| | | | | | |
|---|--|--|--------|---|---------------|
| <div>Gamma Ray (GR) (GAPI)</div> <div>0150</div> | Discriminat ed CCLD (CCLD) | RST Borehole Salinity (BSAL) | | RST Inelastic Ratio (IRAT_FIL) | |
| | 3 (V) -1 | 450 | (PPK) | -50 | 0.75 (----) 0 |
| <div>RST Capture to Inelastic Ratio Near (CIRN_FIL)</div> <div>2.5 (----) 0</div> | Minitron Arc Detection (MARC) | RST Sigma Difference (DSIG) | | MCS Far Background (filtered) (FBAC) | |
| | 0 (----) 5 | -30 | (CU) | 30 | 0 (CPS) 5000 |
| <div>RST Capture to Inelastic Ratio Far (CIRF_FIL)</div> <div>5 (----) 0</div> | | RST Capture Ratio (TRAT_FIL) | | Sigma Formation Far Apparent (SFFA_FIL) | |
| | | 1.5 | (----) | 0.5 | 60 (CU) 0 |
| <div>RST Near Effective Capture CR (RSCN_RST)</div> <div>45 (----) 0</div> | | Sigma Borehole Far Apparent (SBFA_FIL) | | Tension (TENS) | |
| | | 150 | (CU) | 0 | 0 (LBF) 3000 |
| <div>RST Far Effective Capture CR (RSCF_RST)</div> | | RST Sigma Borehole Fluid (SIBF) | | | |

| | | |
|-----|---|---|
| 45 | RST) (----- | 0 |
| 100 | RST Sigma Borehole Fluid (SIGM) (CU) | 0 |
| 0.6 | RST Porosity (TPHI) (V/V) | 0 |
| 0.4 | RST Weighted Inelastic Ratio (WINR_RST) (----- | 0 |
| 60 | RST Sigma (SIGM) (CU) | 0 |

PIP SUMMARY

Time Mark Every 60 S

Parameters

| DLIS Name | Description | Value |
|--|---|---------------|
| RST-C: Reservoir Saturation Pro Tool C | | |
| AIRB | RST Air Borehole | No |
| BHS | Borehole Status | CASED |
| BSALOPT | RST Borehole Salinity Option | Unknown |
| BSFL | RST Borehole Salinity Filter Length | 51 |
| DFPC | RST Depth Filter Processing Constant | One |
| DFPC_TDTL | RST Depth Filter Processing Constant (TDT-like) | Two |
| MATR | Rock Matrix for Neutron Porosity Corrections | SANDSTONE |
| NORM_IRAT_RST | RST Normalized Inelastic Ratio | 0.48 |
| NORM_SIGM_RST | RST Normalized Sigma | 30 CU |
| RGAI | Near/Far Gain Calibration Ratio | 1 |
| SMBMO | RST Sigma Mode Background Minित्रon Off | No |
| TIER_SIGM | RST Sigma Acquisition Mode | 0_RST_Sigma |
| PSPT-B: Production Services Logging Platform | | |
| BHS | Borehole Status | CASED |
| MATR | Rock Matrix for Neutron Porosity Corrections | SANDSTONE |
| System and Miscellaneous | | |
| BS | Bit Size | 8.500 IN |
| BSAL | Borehole Salinity | -50000.00 PPM |
| CSIZ | Current Casing Size | 7.000 IN |
| CWEI | Casing Weight | 26.00 LB/F |

Format: RST_SIG_ANSW Vertical Scale: 1:200 Graphics File Created: 20-Sep-2007 09:52

OP System Version: 14C0-302

MCM

RST-C 14C0-302 PSPT-B 14C0-302

Output DLIS Files

DEFAULT RST_PSP_010LUP FN:9 PRODUCER 20-Sep-2007 09:52



SIGMA Pass # 1

MAXIS Field Log

Company: Esso Australia Pty Ltd. Well: A-2a

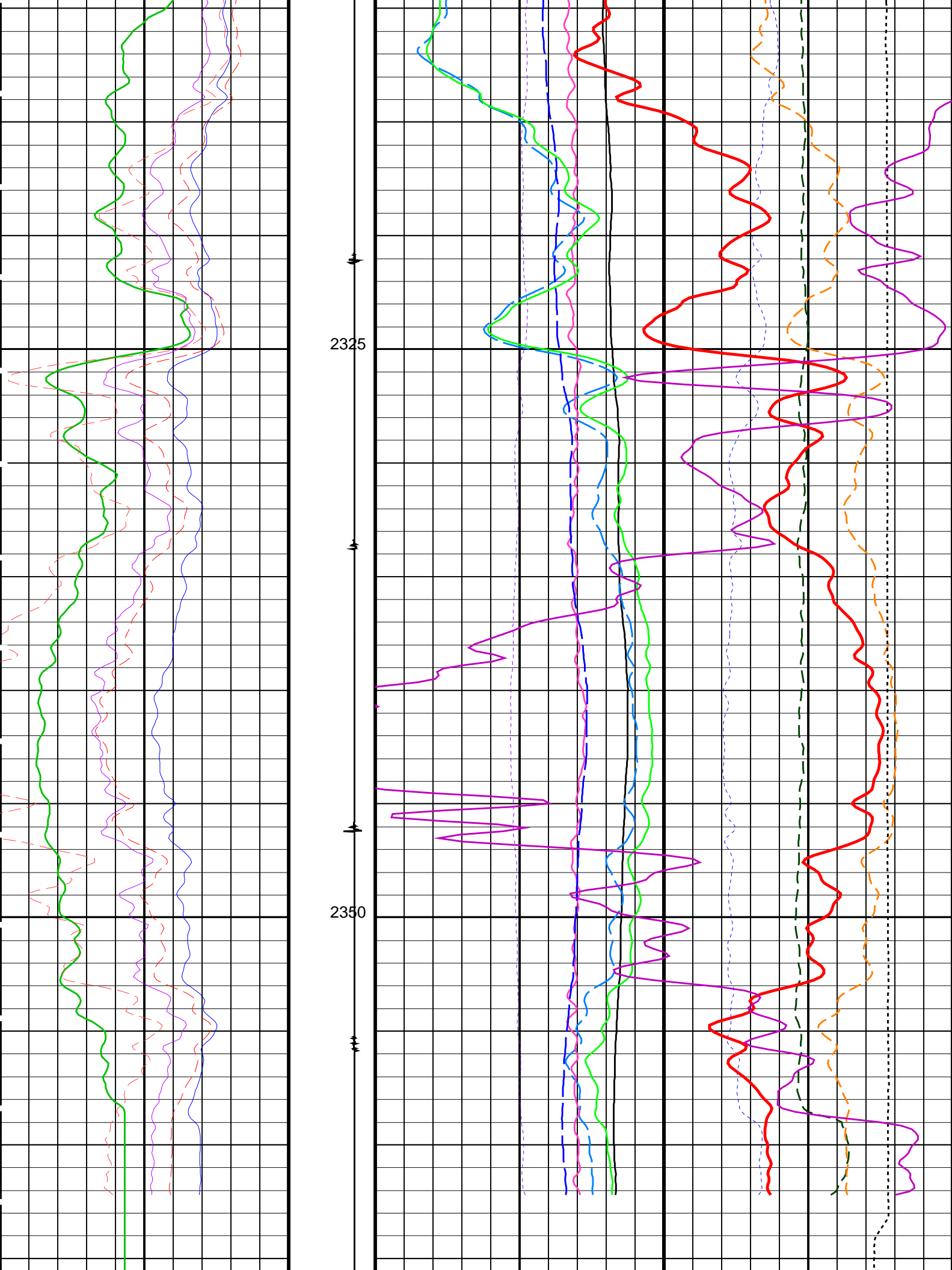
Output DLIS Files

DEFAULT RST_PSP_009LUP FN:8 PRODUCER 20-Sep-2007 09:28 2366.3 M 2282.5 M

OP System Version: 14C0-302

MCM

Time Mark Every 60 S



| | | | | | | | |
|--|--|--|---|--|--|---|--|
| <div>Gamma Ray (GR)</div> <div>(GAPI)</div> <div>0150</div> | | | <div>Discriminat ed CCL (CCLD)</div> <div>3 (V) -1</div> | <div>RST Borehole Salinity (BSAL)</div> <div>450 (PPK) -50</div> | | <div>RST Inelastic Ratio (IRAT_FIL)</div> <div>0.75 (----) 0</div> | |
| | | | | | | | |
| <div>RST Capture to Inelastic Ratio Near</div> <div>(CIRN_FIL)</div> <div>2.5 (----) 0</div> | | | <div>Minitron Arc Detection (MARC)</div> <div>0 (---- 5</div> | <div>RST Sigma Difference (DSIG)</div> <div>-30 (CU) 30</div> | | <div>MCS Far Background (filtered) (FBAC)</div> <div>0 (CPS) 5000</div> | |
| | | | | | | | |
| <div>RST Capture to Inelastic Ratio Far</div> <div>(CIRF_FIL)</div> <div>5 (----) 0</div> | | | | <div>RST Capture Ratio (TRAT_FIL)</div> <div>1.5 (----) 0.5</div> | | <div>Sigma Formation Far Apparent (SFFA_FIL)</div> <div>60 (CU) 0</div> | |
| <div>RST Near Effective Capture CR (RSCN_RST)</div> <div>45 (----) 0</div> | | | | <div>Sigma Borehole Far Apparent (SBFA_FIL)</div> <div>150 (CU) 0</div> | | <div>Tension (TENS)</div> <div>0 (LBF) 3000</div> | |
| <div>RST Far Effective Capture CR (RSCF_RST)</div> <div>45 (----) 0</div> | | | | <div>RST Sigma Borehole Fluid (SIBF)</div> <div>100 (CU) 0</div> | | | |
| | | | | <div>RST Porosity (TPHI)</div> <div>0.6 (V/V) 0</div> | | | |
| | | | | <div>RST Weighted Inelastic Ratio (WINR_RST)</div> <div>0.4 (----) 0</div> | | | |
| | | | | <div>RST Sigma (SIGM)</div> <div>60 (CU) 0</div> | | | |
| | | | | | | | |

PIP SUMMARY

Time Mark Every 60 S

Parameters

| DLIS Name | Description | Value | |
|--|---|-------------|------|
| RST-C: Reservoir Saturation Pro Tool C | | | |
| AIRB | RST Air Borehole | No | |
| BHS | Borehole Status | CASED | |
| BSALOPT | RST Borehole Salinity Option | Unknown | |
| BSFL | RST Borehole Salinity Filter Length | 51 | |
| DFPC | RST Depth Filter Processing Constant | One | |
| DFPC_TDTL | RST Depth Filter Processing Constant (TDT-like) | Two | |
| MATR | Rock Matrix for Neutron Porosity Corrections | SANDSTONE | |
| NORM_IRAT_RST | RST Normalized Inelastic Ratio | 0.48 | |
| NORM_SIGM_RST | RST Normalized Sigma | 30 | CU |
| RGAI | Near/Far Gain Calibration Ratio | 1 | |
| SMBMO | RST Sigma Mode Background Minitron Off | No | |
| TIER_SIGM | RST Sigma Acquisition Mode | 0_RST_Sigma | |
| PSPT-B: Production Services Logging Platform | | | |
| BHS | Borehole Status | CASED | |
| MATR | Rock Matrix for Neutron Porosity Corrections | SANDSTONE | |
| System and Miscellaneous | | | |
| BS | Bit Size | 8.500 | IN |
| BSAL | Borehole Salinity | -50000.00 | PPM |
| CSIZ | Current Casing Size | 7.000 | IN |
| CWEI | Casing Weight | 26.00 | LB/F |

Format: RST_SIG_ANSW Vertical Scale: 1:200 Graphics File Created: 20-Sep-2007 09:28

OP System Version: 14C0-302

MCM

| | | | |
|-------|----------|--------|----------|
| RST-C | 14C0-302 | PSPT-B | 14C0-302 |
|-------|----------|--------|----------|

Output DLIS Files

| | | | | |
|---------|----------------|------|----------|-------------------|
| DEFAULT | RST_PSP_009LUP | FN:8 | PRODUCER | 20-Sep-2007 09:28 |
|---------|----------------|------|----------|-------------------|

Company: Esso Australia Pty Ltd.

Well: A-2a

Input DLIS Files

| | | | | | | |
|---------|----------------|------|----------|-------------------|----------|----------|
| DEFAULT | RST_PSP_007LUP | FN:6 | PRODUCER | 20-Sep-2007 09:09 | 2366.3 M | 2277.8 M |
|---------|----------------|------|----------|-------------------|----------|----------|

Output DLIS Files

| | | | | | | |
|---------|----------------|------|----------|-------------------|----------|----------|
| DEFAULT | RST_PSP_008PUP | FN:7 | PRODUCER | 20-Sep-2007 09:19 | 2368.3 M | 2274.7 M |
|---------|----------------|------|----------|-------------------|----------|----------|

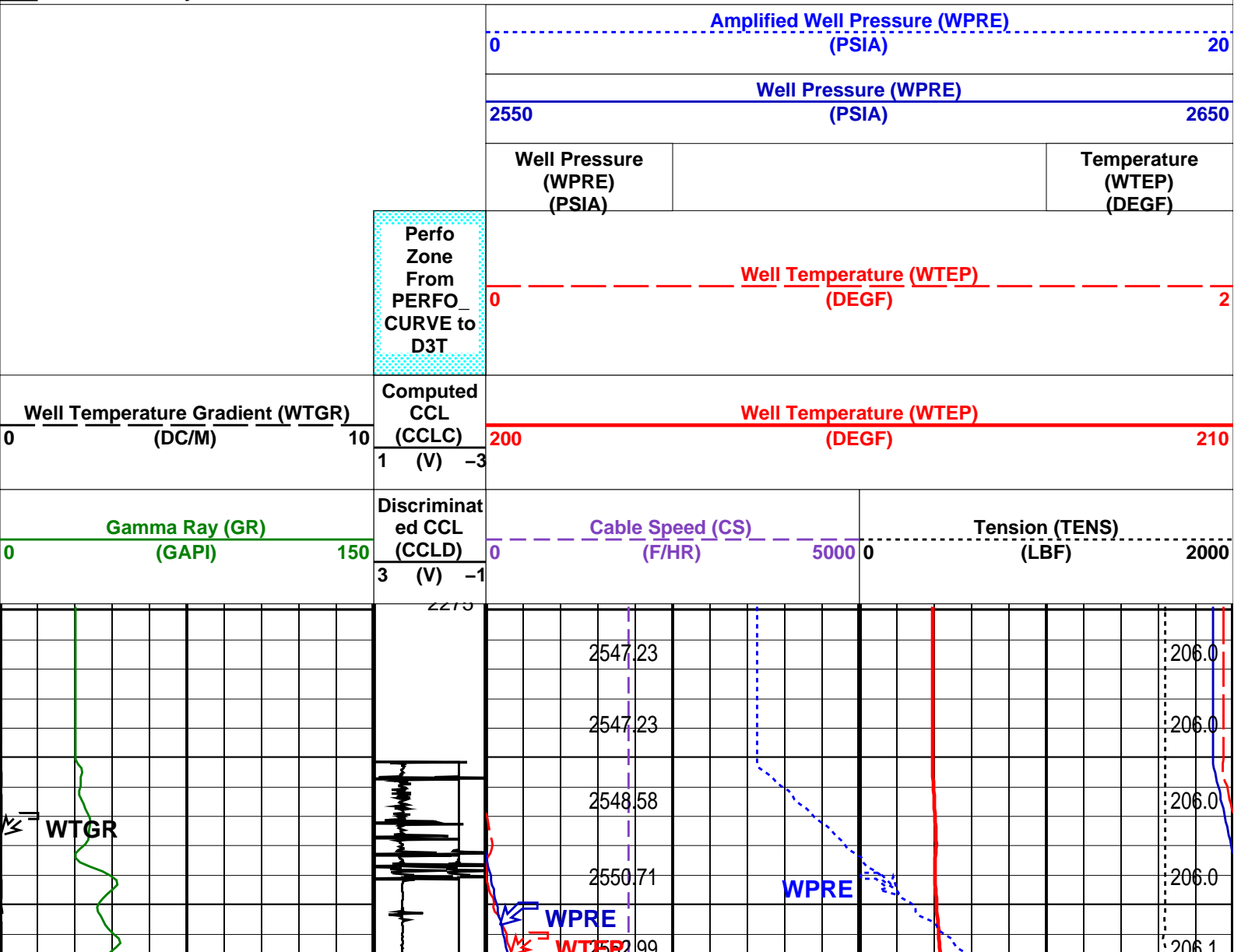
OP System Version: 14C0-302

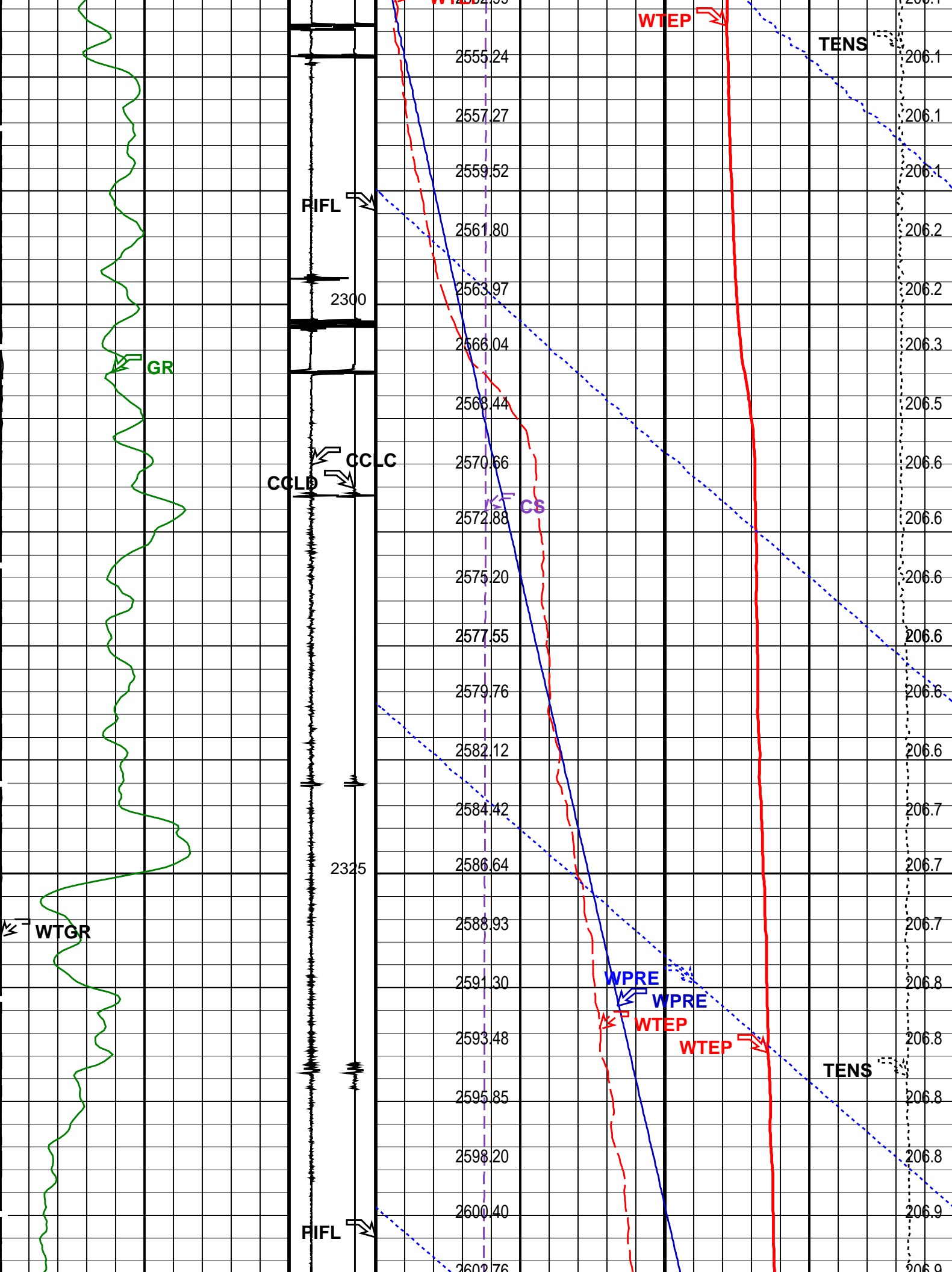
MCM

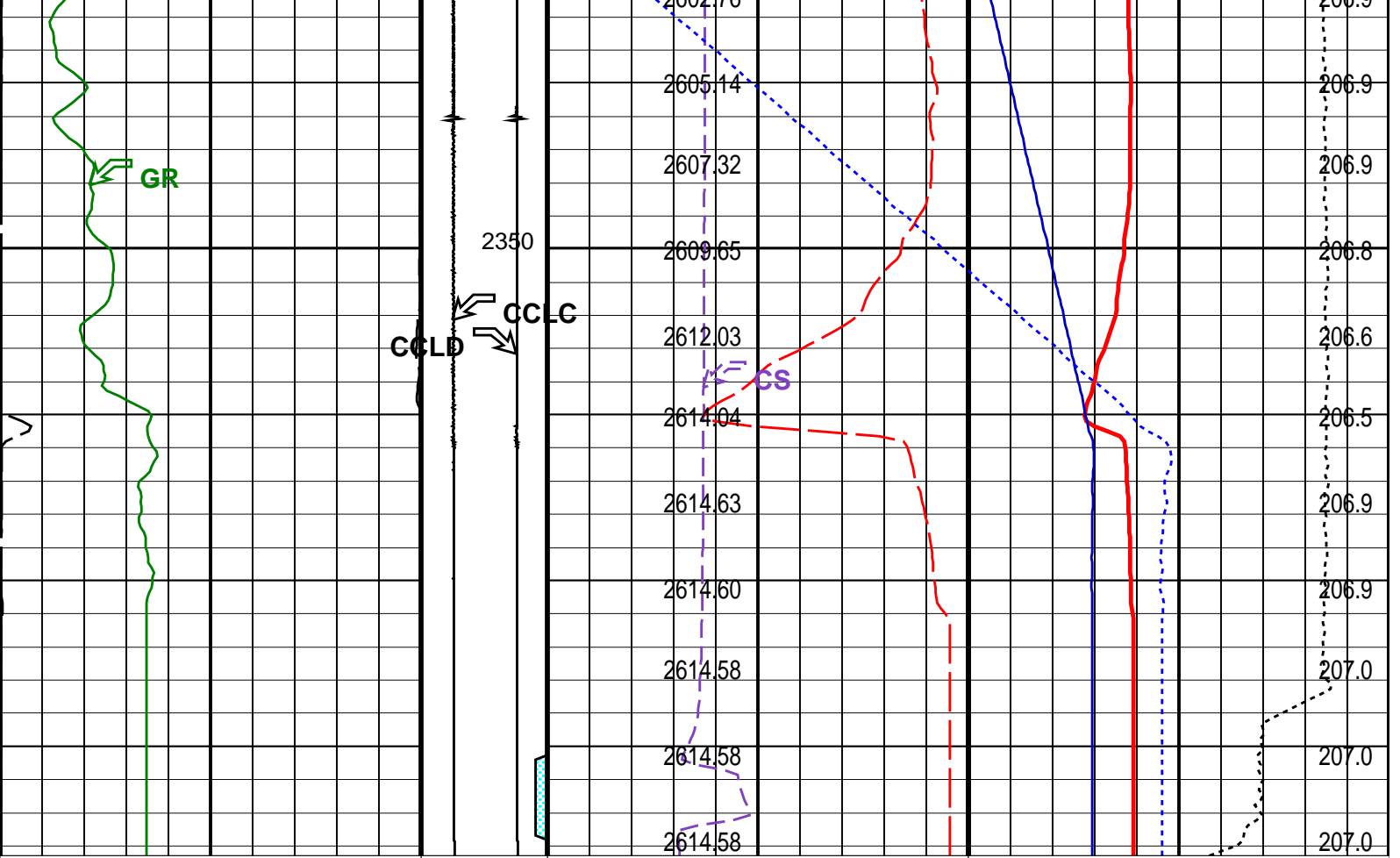
| | | | |
|-------|----------|--------|----------|
| RST-C | 14C0-302 | PSPT-B | 14C0-302 |
|-------|----------|--------|----------|

PIP SUMMARY

Time Mark Every 60 S







| | | | | | |
|--|--|--|---------------------------------|-------------------------|------|
| Gamma Ray (GR) (GAPI) | Discriminat ed CCL (CCLD) | Cable Speed (CS) (F/HR) | | Tension (TENS) (LBF) | |
| | | 0 | 5000 | 0 | 2000 |
| Well Temperature Gradient (WTGR) (DC/M) | Computed CCL (CCLC) | Well Temperature (WTEP) (DEGF) | | | |
| | | 0 | 200 | 210 | |
| | Perfo Zone From PERFO_ CURVE to D3T | Well Temperature (WTEP) (DEGF) | | | |
| | | 0 | | 2 | |
| | | Well Pressure (WPRE) (PSIA) | Temperature (WTEP) (DEGF) | | |
| | | Well Pressure (WPRE) (PSIA) | | | |
| | | 2550 | 2650 | | |
| | | Amplified Well Pressure (WPRE) (PSIA) | | | |
| | | 0 | 20 | | |

PIP SUMMARY

Time Mark Every 60 S

Format: PSP_1 Vertical Scale: 1:200

Graphics File Created: 20-Sep-2007 09:19

OP System Version: 14C0-302
MCM

RST-C

14C0-302

PSPT-B

14C0-302

Parameters

| DLIS Name | Description | Value | | | |
|-------------------|--|-------|----------|-------------------|-------------------|
| DO | System and Miscellaneous | | | 2.0 | M |
| PP | Depth Offset for Playback Playback Processing | | | NORMAL | |
| Input DLIS Files | | | | | |
| DEFAULT | RST_PSP_007LUP | FN:6 | PRODUCER | 20-Sep-2007 09:09 | 2366.3 M 2277.8 M |
| Output DLIS Files | | | | | |
| DEFAULT | RST_PSP_008PUP | FN:7 | PRODUCER | 20-Sep-2007 09:19 | |

Company: **Esso Australia Pty Ltd.**

Schlumberger

Well: **A-2a**

Field: **Bream A**

Rig : **Prod4 / Crane**

Country: **Australia**

RST-C Sigma Survey

2 1/8" Powerjet Perforation Record

7" HPI Plug Setting Record