

ENCLOSURE 1A

BOREHOLE SEISMIC ANALYSIS

FOR

SANTOS & PARTNERS

PREPARED BY

BAKER ATLAS

DOWNHOLE SEISMIC SERVICES

WELL : **MARTHA-1**
LOCATION : **OTWAY BASIN, AUSTRALIA**
ENGINEER : **B.READ**
DATE : **MON 1ST NOVEMBER 2004**

FIELD ENGINEER'S LOG

SURVEY INFORMATION

| | | | |
|---------------------------|------------------------|----------------------|-----------------------|
| CLIENT | SANTOS & PARTNERS | | |
| CLIENT REP | J.PITMAN F.FERNANDES | | |
| WELL NAME | MARTHA-1 | | |
| WELL LOCATION | OTWAY BASIN, AUSTRALIA | | |
| FIELD NAME | EXPLORATION | | |
| RIG NAME | OCEAN PATRIOT | | |
| ENGINEER | B.READ | | |
| TYPE OF SERVICE | ZVSP (MLR) | | |
| WIRELINE CO. AND DISTRICT | BAKER ATLAS, DARWIN | | |
| WIRELINE OPERATOR | UNIT 8677 | | |
| RUN NUMBER | 3 | TOTAL TRIPS THIS RUN | 1 |
| WEATHER / SEAS | CLEAR, CALM | SURVEY DATE | MON 1ST NOVEMBER 2004 |
| LINEID | MARTHA-1 | FILE NAME : | RAW |
| | | SERVICE ORDER NO. | 516561 |

WELL INFORMATION

| | | | |
|-----------------------|--|-----------------------------|------------------|
| WELL HEAD COORDINATES | 38 DEG 37' 24.33" S 142 DEG 42' 05.02" E | | |
| NORTHING | 5723638.3N | ELEV R.T. | 21.5 M |
| EASTING | 648109.3E | OPEN HOLE DIAMETER | 12.5 IN |
| RIG HEADING | 44 Deg | MAX. TEMPERATURE | 153 DEG F |
| GROUND ELEVATION | -54.66 M | FLUID TYPE | KCL/GLYCOL |
| WATER DEPTH | 54.66 M | CASING : (DIAMETER / DEPTH) | |
| WELL T.D. | 1785 M | 1 | 30" 0 - 121 M |
| REFERENCE DATUM | MEAN SEA LEVEL | 2 | 13 3/8 - 620.8 M |
| DEVIATED WELL | NO | 3 | OPEN HOLE |
| MAXIMUM DEVIATION | N/A | 4 | OPEN HOLE |

DOWNHOLE RECEIVER

| | | | | | |
|-----------------|-------------|----------------|------------|----------------|-------------|
| RECEIVER TYPE | AWS 1300 GM | ARM LENGTH | LONG 8-20" | PREAMP GAIN | 51 dB |
| SENSOR TYPE | GEOPHONE | SENSOR FREQ. | 10 HZ | GIMBALLED | YES |
| GIMBAL TYPE | 1025 | RCVR SPACING | 15 M | ZERO POINT | DRILL FLOOR |
| DEPTH ERROR | 0.8 M | ASSET NO RCV-1 | 166202 | ASSET NO RCV-2 | 166476 |
| ASSET NO. RCV-3 | 186706 | ASSET NO RCV-4 | 189237 | ASSET NO RCV-5 | 190172 |

LOGGING TOOLS USED

1309XA/MLR STRING

FIELD ENGINEER'S LOG

RECORDING SYSTEM

| | | | |
|---------------------------------------|----------------------|-----------------------------|-----------------------|
| RECORDING UNIT ASSET NUMBER | <u>9700LA 302869</u> | | |
| SURFACE A/D TYPE AND NUMBER | <u>DSS 16CH A/D</u> | | |
| DOWNHOLE A/D TYPE AND ASSET NUMBER | <u>6221XA 189564</u> | | |
| SURFACE A/D TOTAL CHANNELS | <u>8</u> | DOWNHOLE A/D TOTAL CHANNELS | <u>16</u> |
| FLASK TYPE | <u>HIGH TEMP</u> | | |
| SAMPLE RATE | <u>1 MILLISECOND</u> | RECORD LENGTH | <u>4 SECONDS</u> |
| SWEEP LENGTH | <u>N/A</u> | TRANSMIT OFFSET | <u>N/A</u> |
| TIME OF START OF RECORD TO TIME BREAK | <u>100 MSECS</u> | | |
| LOW CUT FILTER | <u>DC (0 Hz)</u> | HIGH CUT FILTER | <u>250 Hz</u> |
| TAPE TYPE | <u>DAT TAPE</u> | TAPE FORMAT | <u>TAR & SEGY</u> |

CHANNELS ASSIGNMENT AND GAIN :

| | | | | | |
|-------|------------|-------|------------|-------|------------|
| CH 1 | <u>V</u> | CH 2 | <u>H</u> | CH 3 | <u>T</u> |
| CH 4 | <u>V</u> | CH 5 | <u>H</u> | CH 6 | <u>T</u> |
| CH 7 | <u>V</u> | CH 8 | <u>H</u> | CH 9 | <u>T</u> |
| CH 10 | <u>V</u> | CH 11 | <u>H</u> | CH 12 | <u>T</u> |
| CH 13 | <u>V</u> | CH 14 | <u>H</u> | CH 15 | <u>T</u> |
| CH 16 | <u>N/A</u> | CH 17 | <u>N/A</u> | CH 18 | <u>N/A</u> |
| CH 19 | <u>N/A</u> | CH 20 | <u>SIG</u> | CH 21 | <u>N/A</u> |
| CH 22 | <u>N/A</u> | CH 23 | <u>N/A</u> | CH 24 | <u>N/A</u> |
| CH 25 | <u>N/A</u> | CH 26 | <u>N/A</u> | CH 26 | <u>N/A</u> |
| CH 28 | <u>N/A</u> | CH 29 | <u>N/A</u> | CH 30 | <u>N/A</u> |
| CH 31 | <u>N/A</u> | CH 32 | <u>N/A</u> | | |

WIRELINE & WTS PANEL

| | | | |
|-------------------|------------------------|----------------------|----------------------|
| WIRELINE ASSET NO | <u>9520LA 10103244</u> | WIRELINE TYPE | <u>7H47RTZHS</u> |
| WIRELINE LENGTH | <u>7744 M</u> | WTS TYPE / ASSET NO. | <u>5710XD 172466</u> |
| TRANSMIT GAIN | <u>42</u> | MODE 2 GAIN 1 | <u>10</u> |
| MODE 2 EQN. 1 | <u>66</u> | MODE 2 EQN. 2 | <u>57</u> |
| MODE 5 GAIN 1 | <u>9</u> | MODE 5 EQN. 1 | <u>66</u> |
| | | MODE 2 GAIN 2 | <u>50</u> |
| | | MODE 2 EQN. 3 | <u>OUT</u> |
| | | MODE 5 EQN. 1 | <u>60</u> |

INTERCONNECTS

| | | | | | |
|------------------|---------------|-----------------|---------------|-----------------|---------------|
| SPACING DISTANCE | <u>15 M</u> | ASSET NO. INC-1 | <u>152532</u> | ASSET NO. INC-2 | <u>186728</u> |
| ASSET NO. INC-3 | <u>190271</u> | ASSET NO. INC-4 | <u>190274</u> | ASSET NO. INC-5 | <u>190275</u> |

SPECIAL FEATURES



SEISMIC DATUM : MEAN SEA LEVEL CORRECTION VELOCITY 1500 M/SEC

SURVEY INSTRUCTIONS RECEIVED

- | | |
|-------|------------------|
| (N) | PRIORITY |
| (N) | CALIBRATION |
| (N) | SYNTHETIC |
| (Y) | VSP |
| (Y) | VELOCITY |
| (N) | INVERSION |
| (N) | OFFSET VSP |
| (N) | WALKWAY |
| (N) | PROXIMITY |
| (N) | NORMAL INCIDENCE |
| (N) | 3 COMPONENTS |
| (N) | 3D |
| (N) | NAVIGATION |
| (N) | GYRO |

FROM 915 M TO 825 M (NOT INCLUDING 840M) HOLE WASHED OUT PASSED ARM LENGTH OF 20 INCHES

[illegible]

AIRGUN SURVEY

OFFSET NO. 1

| | |
|-----------------------|---------------------|
| DISTANCE FROM WELL | 46.3 M |
| AZIMUTH FROM WELL | 328 Deg |
| ELEVATION FROM MSL | -5 M |
| GUN ARRAY TYPE | SLEEVE GUN |
| GUN CONTROLLER | GCU-4 6001LA 123483 |
| WATER DEPTH | 54.66 M |
| GUN DEPTH | 5 M |
| NUMBER OF GUNS | 2 |
| GUN SEPERATION | 1 M |
| GUN VOLUMES | 2 X 150 CU IN |
| GUN UNIT NO. | 127901, 127895 |
| PIT DIMENSION (L,W,D) | OPEN SEA |

OFFSET NO. 2

| | |
|-----------------------|-----|
| DISTANCE FROM WELL | N/A |
| AZIMUTH FROM WELL | N/A |
| ELEVATION FROM MSL | N/A |
| GUN ARRAY TYPE | N/A |
| GUN CONTROLLER | N/A |
| WATER DEPTH | N/A |
| GUN DEPTH | N/A |
| NUMBER OF GUNS | N/A |
| GUN SEPERATION | N/A |
| GUN VOLUMES | N/A |
| GUN UNIT NO. | N/A |
| PIT DIMENSION (L,W,D) | N/A |

COMPRESSORS

| | |
|-----------------|---------------|
| TYPE & S/N : | RUCKER SYSTEM |
| FIRING PRESSURE | 1800 PSI |

COMPRESSORS

| | |
|-----------------|-----|
| TYPE & S/N : | N/A |
| FIRING PRESSURE | N/A |

REFERENCE PHONE

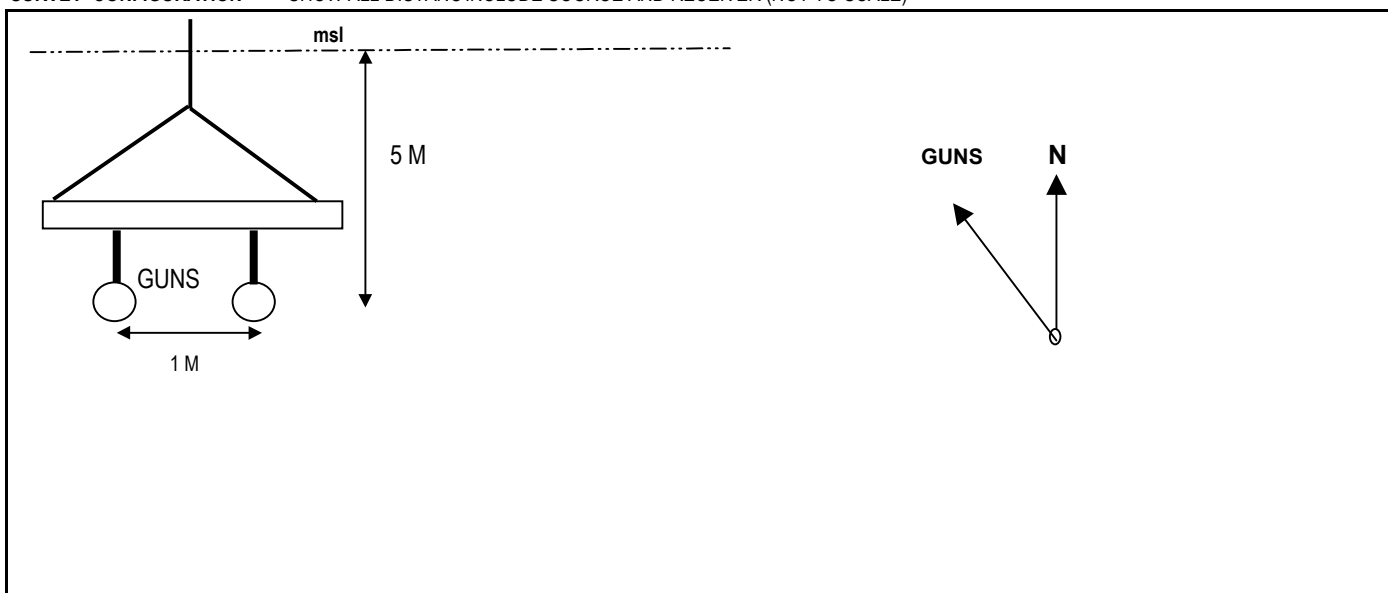
| | |
|---------------------|------------------|
| TYPE | MP8-D HYDROPHONE |
| DISTANCE TO SOURCE | 2 M |
| DIRECTION TO SOURCE | DIRECTLY BELOW |
| DEPTH | 7 M |
| FREQ. | 15 Hz |

REFERENCE PHONE

| | |
|---------------------|-----|
| TYPE | N/A |
| DISTANCE TO SOURCE | N/A |
| DIRECTION TO SOURCE | N/A |
| DEPTH | N/A |
| FREQ. | N/A |

SURVEY CONFIGURATION

SHOW ALL DISTANC INCLUDE SOURCE AND RECEIVER (NOT TO SCALE)



TOOL STATIONS

Baker Atlas

CLIENT : **SANTOS & PARTNERS**
SOURCE : **2 x 150 cu in Sleeve Guns**

WELL NAME : **MARTHA-1**
ENGINEER : **B.READ**

SERVICE : **ZVSP (MLR)**
DATE : **MON 1ST NOV 2004**

| LEVEL NO | TOOL STATION DEPTH | FILE NUMBER | STATION NO. | TOOL NO | VERTICAL CHAN TIME PICK (MSEC) | TIME AT COMPLETION OF LEVEL | CABLE SLACK | PRE-AMP GAIN | REMARKS (COMMENTS, UH TIME, CHARGE TYPE, DEPTH, ETC) |
|----------|--------------------|-------------|-------------|---------|--------------------------------|-----------------------------|-------------|--------------|---|
| 10 | 59 | 1 -- 10 | 1 | 5 | 213.0 | Mon 12:29 Nov 01, 2004 | 0 | 0 | file 1Ch 5-16 are bad. Kill file 1 |
| 20 | 44 | 1 -- 10 | 1 | 4 | 200.0 | Mon 12:29 Nov 01, 2004 | 0 | 0 | file 1Ch 5-16 are bad. Kill file 1 |
| 30 | 29 | 1 -- 10 | 1 | 3 | 1596.0 | Mon 12:29 Nov 01, 2004 | 0 | 0 | file 1Ch 5-16 are bad. Kill file 1 |
| 40 | 14 | 1 -- 10 | 1 | 2 | 693.0 | Mon 12:29 Nov 01, 2004 | 0 | 0 | file 1Ch 5-16 are bad. Kill file 1 |
| 59 | 9999 | 1 -- 10 | 1 | 1 | 970.0 | Mon 12:29 Nov 01, 2004 | 0 | 0 | file 1Ch 5-16 are bad. Sig Ch Pick = 97.0 ms. kill file 1. GUN TIMING |
| 6 | 1020 | 11 -- 14 | 2 | 5 | 428.0 | Mon 13:09 Nov 01, 2004 | 0 | 0 | kill file 11. |
| 7 | 1005 | 11 -- 14 | 2 | 4 | 425.0 | Mon 13:27 Nov 01, 2004 | 0 | 0 | kill file 11. |
| 8 | 990 | 11 -- 14 | 2 | 3 | 418.0 | Mon 13:27 Nov 01, 2004 | 0 | 0 | kill file 11. |
| 9 | 975 | 11 -- 14 | 2 | 2 | 414.0 | Mon 13:09 Nov 01, 2004 | 0 | 0 | kill file 11. |
| 10 | 960 | 11 -- 14 | 2 | 1 | 410.0 | Mon 13:09 Nov 01, 2004 | 0 | 0 | Sig Ch Pick = 100.0 ms. kill file 11. FIRST CHECKSHOT LEVEL |
| 11 | 1320 | 15 -- 18 | 3 | 5 | 534.0 | Mon 13:09 Nov 01, 2004 | 0 | 0 | kill file 15. |
| 12 | 1305 | 15 -- 18 | 3 | 4 | 531.0 | Mon 13:27 Nov 01, 2004 | 0 | 0 | kill file 15. |
| 13 | 1290 | 15 -- 18 | 3 | 3 | 525.0 | Mon 13:27 Nov 01, 2004 | 0 | 0 | kill file 15. |
| 14 | 1275 | 15 -- 18 | 3 | 2 | 519.0 | Mon 13:27 Nov 01, 2004 | 0 | 0 | kill file 15. SECOND CHECKSHOT LEVEL |
| 15 | 1260 | 15 -- 18 | 3 | 1 | 362.0 | Mon 13:27 Nov 01, 2004 | 0 | 0 | Sig Ch Pick = 100.0 ms. kill file 15. |
| 16 | 1620 | 19 -- 21 | 4 | 5 | 638.0 | Mon 13:27 Nov 01, 2004 | 0 | 0 | GR CORRELATION +0.8M |
| 17 | 1605 | 19 -- 21 | 4 | 4 | 634.0 | Mon 13:50 Nov 01, 2004 | 0 | 0 | |
| 18 | 1590 | 19 -- 21 | 4 | 3 | 1980.0 | Mon 13:50 Nov 01, 2004 | 0 | 0 | |
| 19 | 1575 | 19 -- 21 | 4 | 2 | 624.0 | Mon 13:50 Nov 01, 2004 | 0 | 0 | |
| 20 | 1560 | 19 -- 21 | 4 | 1 | 618.0 | Mon 13:50 Nov 01, 2004 | 0 | 0 | Sig Ch Pick = 99.0 ms. THIRD CHECKSHOT LEVEL |
| 21 | 1785 | 22 -- 26 | 5 | 5 | 689.0 | Mon 14:06 Nov 01, 2004 | 0 | 0 | BOTTOM LEVEL TAGGED TD @ 1785 M |
| 22 | 1770 | 22 -- 26 | 5 | 4 | 684.0 | Mon 14:06 Nov 01, 2004 | 0 | 0 | |
| 23 | 1755 | 22 -- 26 | 5 | 3 | 680.0 | Mon 14:06 Nov 01, 2004 | 0 | 0 | |
| 24 | 1740 | 22 -- 26 | 5 | 2 | 675.0 | Mon 14:06 Nov 01, 2004 | 0 | 0 | |
| 25 | 1725 | 22 -- 26 | 5 | 1 | 670.0 | Mon 14:06 Nov 01, 2004 | 0 | 0 | Sig Ch Pick = 100.0 ms. |
| 26 | 1710 | 27 -- 31 | 6 | 5 | 665.0 | Mon 14:21 Nov 01, 2004 | 0 | 0 | |
| 27 | 1695 | 27 -- 31 | 6 | 4 | 661.0 | Mon 14:21 Nov 01, 2004 | 0 | 0 | |
| 28 | 1680 | 27 -- 31 | 6 | 3 | 655.0 | Mon 14:21 Nov 01, 2004 | 0 | 0 | |
| 29 | 1665 | 27 -- 31 | 6 | 2 | 652.0 | Mon 14:21 Nov 01, 2004 | 0 | 0 | |
| 30 | 1650 | 27 -- 31 | 6 | 1 | 646.0 | Mon 14:21 Nov 01, 2004 | 0 | 0 | Sig Ch Pick = 100.0 ms. |
| 31 | 1635 | 32 -- 39 | 7 | 5 | 642.0 | Mon 14:42 Nov 01, 2004 | 0 | 0 | kill files 32 33 34. |
| 32 | 1620 | 32 -- 39 | 7 | 4 | 638.0 | Mon 14:42 Nov 01, 2004 | 0 | 0 | kill files 32 33 34. |
| 33 | 1605 | 32 -- 39 | 7 | 3 | 632.0 | Mon 14:42 Nov 01, 2004 | 0 | 0 | kill files 32 33 34. POOR COUPLING REPEAT |
| 34 | 1590 | 32 -- 39 | 7 | 2 | 628.0 | Mon 14:42 Nov 01, 2004 | 0 | 0 | kill files 32 33 34. |
| 35 | 1575 | 32 -- 39 | 7 | 1 | 623.0 | Mon 14:42 Nov 01, 2004 | 0 | 0 | Sig Ch Pick = 100.0 ms. kill files 32 33 34. |
| 36 | 1605 | 40 -- 44 | 8 | 5 | 633.0 | Mon 14:50 Nov 01, 2004 | 0 | 0 | |
| 37 | 1590 | 40 -- 44 | 8 | 4 | 627.0 | Mon 14:50 Nov 01, 2004 | 0 | 0 | |

TOOL STATIONS

Baker Atlas

CLIENT : **SANTOS & PARTNERS**
SOURCE : **2 x 150 cu in Sleeve Guns**

WELL NAME : **MARTHA-1**
ENGINEER : **B.READ**

SERVICE : **ZVSP (MLR)**
DATE : **MON 1ST NOV 2004**

| LEVEL NO | TOOL STATION DEPTH | FILE NUMBER | STATION NO. | TOOL NO | VERTICAL CHAN TIME PICK (MSEC) | TIME AT COMPLETION OF LEVEL | CABLE SLACK | PRE-AMP GAIN | REMARKS (COMMENTS, UH TIME, CHARGE TYPE, DEPTH, ETC) |
|----------|--------------------|-------------|-------------|---------|--------------------------------|-----------------------------|-------------|--------------|--|
| 38 | 1575 | 40 -- 44 | 8 | 3 | 623.0 | Mon 14:50 Nov 01, 2004 | 0 | 0 | |
| 39 | 1560 | 40 -- 44 | 8 | 2 | 618.0 | Mon 14:50 Nov 01, 2004 | 0 | 0 | |
| 40 | 1545 | 40 -- 44 | 8 | 1 | 613.0 | Mon 14:50 Nov 01, 2004 | 0 | 0 | Sig Ch Pick = 100.0 ms. |
| 41 | 1530 | 45 -- 49 | 9 | 5 | 609.0 | Mon 14:58 Nov 01, 2004 | 0 | 0 | |
| 42 | 1515 | 45 -- 49 | 9 | 4 | 604.0 | Mon 14:58 Nov 01, 2004 | 0 | 0 | |
| 43 | 1500 | 45 -- 49 | 9 | 3 | 599.0 | Mon 14:58 Nov 01, 2004 | 0 | 0 | |
| 44 | 1485 | 45 -- 49 | 9 | 2 | 594.0 | Mon 14:58 Nov 01, 2004 | 0 | 0 | |
| 45 | 1470 | 45 -- 49 | 9 | 1 | 589.0 | Mon 14:58 Nov 01, 2004 | 0 | 0 | Sig Ch Pick = 100.0 ms. |
| 46 | 1455 | 50 -- 55 | 10 | 5 | 583.0 | Mon 15:04 Nov 01, 2004 | 0 | 0 | kill file 50. |
| 47 | 1440 | 50 -- 55 | 10 | 4 | 577.0 | Mon 15:04 Nov 01, 2004 | 0 | 0 | kill file 50. |
| 48 | 1425 | 50 -- 55 | 10 | 3 | 114.0 | Mon 15:04 Nov 01, 2004 | 0 | 0 | kill file 50.BAD LEVEL REPEAT |
| 49 | 1410 | 50 -- 55 | 10 | 2 | 566.0 | Mon 15:04 Nov 01, 2004 | 0 | 0 | kill file 50. |
| 50 | 1395 | 50 -- 55 | 10 | 1 | 560.0 | Mon 15:04 Nov 01, 2004 | 0 | 0 | Sig Ch Pick = 100.0 ms. kill file 50.BAD LEVEL REPEAT |
| 51 | 1425 | 56 -- 61 | 11 | 5 | 571.0 | Mon 15:10 Nov 01, 2004 | 0 | 0 | |
| 52 | 1410 | 56 -- 61 | 11 | 4 | 568.0 | Mon 15:10 Nov 01, 2004 | 0 | 0 | |
| 53 | 1395 | 56 -- 61 | 11 | 3 | 1961.0 | Mon 15:10 Nov 01, 2004 | 0 | 0 | BAD LEVEL REPEAT |
| 54 | 1380 | 56 -- 61 | 11 | 2 | 556.0 | Mon 15:10 Nov 01, 2004 | 0 | 0 | |
| 55 | 1365 | 56 -- 61 | 11 | 1 | 1032.0 | Mon 15:10 Nov 01, 2004 | 0 | 0 | Sig Ch Pick = 100.0 ms. |
| 56 | 1350 | 62 -- 69 | 12 | 5 | 549.0 | Mon 15:21 Nov 01, 2004 | 0 | 0 | kill files 62 64 65.WRONG DEPTH SHOULD BE 1365 |
| 57 | 1335 | 62 -- 69 | 12 | 4 | 545.0 | Mon 15:21 Nov 01, 0 | 0 | 0 | kill files 62 64 65.WRONG DEPTH SHOULD BE 1350 |
| 58 | 1320 | 62 -- 69 | 12 | 3 | 1833.0 | Mon 15:21 Nov 01, 2004 | 0 | 0 | kill files 62 64 65.BAD LEVEL REPEAT. WRONG DEPTH SHOULD BE 1335 |
| 59 | 1305 | 62 -- 69 | 12 | 2 | 536.0 | Mon 15:21 Nov 01, 0 | 0 | 0 | kill files 62 64 65.WRONG DEPTH SHOULD BE 1320 |
| 60 | 1290 | 62 -- 69 | 12 | 1 | 529.0 | Mon 15:21 Nov 01, 2004 | 0 | 0 | Sig Ch Pick = 100.0 ms. kill files 62 64 65.WRONG DEPTH SHOULD BE 1305 |
| 61 | 1335 | 70 -- 75 | 13 | 5 | 540.0 | Mon 15:27 Nov 01, 2004 | 0 | 0 | kill file 71. |
| 62 | 1320 | 70 -- 75 | 13 | 4 | 534.0 | Mon 15:27 Nov 01, 2004 | 0 | 0 | kill file 71. |
| 63 | 1305 | 70 -- 75 | 13 | 3 | 529.0 | Mon 15:27 Nov 01, 2004 | 0 | 0 | kill file 71. |
| 64 | 1290 | 70 -- 75 | 13 | 2 | 524.0 | Mon 15:27 Nov 01, 2004 | 0 | 0 | kill file 71. |
| 65 | 1275 | 70 -- 75 | 13 | 1 | 519.0 | Mon 15:27 Nov 01, 2004 | 0 | 0 | Sig Ch Pick = 100.0 ms. kill file 71. |
| 66 | 1260 | 76 -- 80 | 14 | 5 | 512.0 | Mon 15:33 Nov 01, 2004 | 0 | 0 | |
| 67 | 1245 | 76 -- 80 | 14 | 4 | 506.0 | Mon 15:33 Nov 01, 2004 | 0 | 0 | |
| 68 | 1230 | 76 -- 80 | 14 | 3 | 501.0 | Mon 15:33 Nov 01, 2004 | 0 | 0 | |
| 69 | 1215 | 76 -- 80 | 14 | 2 | 496.0 | Mon 15:33 Nov 01, 2004 | 0 | 0 | |
| 70 | 1200 | 76 -- 80 | 14 | 1 | 493.0 | Mon 15:33 Nov 01, 2004 | 0 | 0 | Sig Ch Pick = 100.0 ms.BAD LEVEL REPEAT |
| 71 | 1200 | 81 -- 87 | 15 | 5 | 490.0 | Mon 15:44 Nov 01, 2004 | 0 | 0 | kill files 81 84. |
| 72 | 1185 | 81 -- 87 | 15 | 4 | 485.0 | Mon 15:44 Nov 01, 2004 | 0 | 0 | kill files 81 84. |
| 73 | 1170 | 81 -- 87 | 15 | 3 | 478.0 | Mon 15:44 Nov 01, 2004 | 0 | 0 | kill files 81 84.BAD LEVEL REPEAT |

TOOL STATIONS

Baker Atlas

CLIENT : SANTOS & PARTNERS
SOURCE : 2 x 150 cu in Sleeve Guns

WELL NAME : MARTHA-1
ENGINEER : B.READ

SERVICE : ZVSP (MLR)
DATE : MON 1ST NOV 2004

| LEVEL NO | TOOL STATION DEPTH | FILE NUMBER | STATION NO. | TOOL NO | VERTICAL CHAN TIME PICK (MSEC) | TIME AT COMPLETION OF LEVEL | CABLE SLACK | PRE-AMP GAIN | REMARKS (COMMENTS, UH TIME, CHARGE TYPE, DEPTH, ETC) |
|----------|--------------------|-------------|-------------|---------|--------------------------------|-----------------------------|-------------|--------------|---|
| 74 | 1155 | 81 -- 87 | 15 | 2 | 474.0 | Mon 15:44 Nov 01, 2004 | 0 | 0 | kill files 81 84. |
| 75 | 1140 | 81 -- 87 | 15 | 1 | 470.0 | Mon 15:44 Nov 01, 2004 | 0 | 0 | Sig Ch Pick = 100.0 ms. kill files 81 84. |
| 76 | 1170 | 88 -- 95 | 16 | 5 | 479.0 | Mon 15:50 Nov 01, 2004 | 0 | 0 | kill files 89 92 94. |
| 77 | 1155 | 88 -- 95 | 16 | 4 | 474.0 | Mon 15:50 Nov 01, 2004 | 0 | 0 | kill files 89 92 94. |
| 78 | 1140 | 88 -- 95 | 16 | 3 | 61.0 | Mon 15:50 Nov 01, 2004 | 0 | 0 | kill files 89 92 94. |
| 79 | 1125 | 88 -- 95 | 16 | 2 | 463.0 | Mon 15:50 Nov 01, 2004 | 0 | 0 | kill files 89 92 94. |
| 80 | 1110 | 88 -- 95 | 16 | 1 | 458.0 | Mon 15:50 Nov 01, 2004 | 0 | 0 | Sig Ch Pick = 100.0 ms. kill files 89 92 94. |
| 81 | 1095 | 96 -- 100 | 17 | 5 | 452.0 | Mon 15:58 Nov 01, 2004 | 0 | 0 | |
| 82 | 1080 | 96 -- 100 | 17 | 4 | 447.0 | Mon 15:58 Nov 01, 2004 | 0 | 0 | |
| 83 | 1065 | 96 -- 100 | 17 | 3 | 442.0 | Mon 15:58 Nov 01, 2004 | 0 | 0 | |
| 84 | 1050 | 96 -- 100 | 17 | 2 | 438.0 | Mon 15:58 Nov 01, 2004 | 0 | 0 | |
| 85 | 1035 | 96 -- 100 | 17 | 1 | 433.0 | Mon 15:58 Nov 01, 2004 | 0 | 0 | Sig Ch Pick = 101.5 ms. BAD LEVEL REPEAT |
| 86 | 1035 | 101 -- 105 | 18 | 5 | 432.0 | Mon 16:04 Nov 01, 2004 | 0 | 0 | |
| 87 | 1020 | 101 -- 105 | 18 | 4 | 428.0 | Mon 16:04 Nov 01, 2004 | 0 | 0 | |
| 88 | 1005 | 101 -- 105 | 18 | 3 | 423.0 | Mon 16:04 Nov 01, 2004 | 0 | 0 | |
| 89 | 990 | 101 -- 105 | 18 | 2 | 418.0 | Mon 16:04 Nov 01, 2004 | 0 | 0 | |
| 90 | 975 | 101 -- 105 | 18 | 1 | 414.0 | Mon 16:04 Nov 01, 2004 | 0 | 0 | Sig Ch Pick = 100.7 ms. BAD LEVEL REPEAT |
| 91 | 975 | 106 -- 111 | 19 | 5 | 413.0 | Mon 16:21 Nov 01, 2004 | 0 | 0 | |
| 92 | 960 | 106 -- 111 | 19 | 4 | 408.0 | Mon 16:21 Nov 01, 2004 | 0 | 0 | |
| 93 | 945 | 106 -- 111 | 19 | 3 | 404.0 | 0 16:21 Nov 01, 2004 | 0 | 0 | |
| 94 | 930 | 106 -- 111 | 19 | 2 | 400.0 | Mon 16:21 Nov 01, 2004 | 0 | 0 | HOLE OVER 20" LEVEL CANCELLED |
| 95 | 915 | 106 -- 111 | 19 | 1 | 831.0 | Mon 16:21 Nov 01, 2004 | 0 | 0 | Sig Ch Pick = 100.0 ms. HOLE OVER 20" LEVEL CANCELLED |
| 96 | 930 | 112 -- 117 | 20 | 5 | 398.0 | Mon 16:29 Nov 01, 2004 | 0 | 0 | HOLE OVER 20" LEVEL CANCELLED |
| 97 | 915 | 112 -- 117 | 20 | 4 | 1000.0 | Mon 16:29 Nov 01, 2004 | 0 | 0 | HOLE OVER 20" LEVEL CANCELLED |
| 98 | 900 | 112 -- 117 | 20 | 3 | 1000.0 | Mon 16:29 Nov 01, 2004 | 0 | 0 | HOLE OVER 20" LEVEL CANCELLED |
| 99 | 885 | 112 -- 117 | 20 | 2 | 1000.0 | Mon 16:29 Nov 01, 2004 | 0 | 0 | HOLE OVER 20" LEVEL CANCELLED |
| 100 | 870 | 112 -- 117 | 20 | 1 | 1000.0 | Mon 16:29 Nov 01, 2004 | 0 | 0 | Sig Ch Pick = 100.0 ms. HOLE GREATER THAN 20 INCHES |
| 101 | 855 | 118 -- 122 | 21 | 5 | 376.0 | Mon 16:40 Nov 01, 2004 | 0 | 0 | HOLE OVER 20" LEVEL CANCELLED |
| 102 | 840 | 118 -- 122 | 21 | 4 | 367.0 | 0 16:40 Jan 00, 2004 | 0 | 0 | |
| 103 | 825 | 118 -- 122 | 21 | 3 | 363.0 | Mon 16:40 Nov 01, 2004 | 0 | 0 | HOLE OVER 20" LEVEL CANCELLED |
| 104 | 810 | 118 -- 122 | 21 | 2 | 357.0 | Mon 16:40 Nov 01, 2004 | 0 | 0 | |
| 105 | 795 | 118 -- 122 | 21 | 1 | 355.0 | Mon 16:40 Nov 01, 2004 | 0 | 0 | Sig Ch Pick = 100.0 ms. BAD LEVEL REPEAT |
| 106 | 795 | 123 -- 127 | 22 | 5 | 350.0 | Mon 16:48 Nov 01, 2004 | 0 | 0 | NOISY LEVEL |
| 107 | 780 | 123 -- 127 | 22 | 4 | 345.0 | Mon 16:53 Nov 01, 2004 | 0 | 0 | NOISY LEVEL |
| 108 | 765 | 123 -- 127 | 22 | 3 | 339.0 | Mon 16:53 Nov 01, 2004 | 0 | 0 | NOISY LEVEL |
| 109 | 750 | 123 -- 127 | 22 | 2 | 332.0 | Mon 16:48 Nov 01, 2004 | 0 | 0 | NOISY LEVEL |

TOOL STATIONS

Baker Atlas

CLIENT : SANTOS & PARTNERS
SOURCE : 2 x 150 cu in Sleeve Guns

WELL NAME : MARTHA-1
ENGINEER : B.READ

SERVICE : ZVSP (MLR)
DATE : MON 1ST NOV 2004

| LEVEL NO | TOOL STATION DEPTH | FILE NUMBER | STATION NO. | TOOL NO | VERTICAL CHAN TIME PICK (MSEC) | TIME AT COMPLETION OF LEVEL | CABLE SLACK | PRE-AMP GAIN | REMARKS (COMMENTS, UH TIME, CHARGE TYPE, DEPTH, ETC) |
|----------|--------------------|-------------|-------------|---------|--------------------------------|-----------------------------|-------------|--------------|--|
| 110 | 735 | 123 -- 127 | 22 | 1 | 327.0 | Mon 16:48 Nov 01, 2004 | 0 | 0 | Sig Ch Pick = 100.0 ms. NOISY LEVEL |
| 111 | 720 | 128 -- 132 | 23 | 5 | 322.0 | Mon 16:48 Nov 01, 2004 | 0 | 0 | |
| 112 | 705 | 128 -- 132 | 23 | 4 | 316.0 | Mon 16:53 Nov 01, 2004 | 0 | 0 | |
| 113 | 690 | 128 -- 132 | 23 | 3 | 312.0 | Mon 16:53 Nov 01, 2004 | 0 | 0 | HOLE OVER 20" LEVEL CANCELLED |
| 114 | 675 | 128 -- 132 | 23 | 2 | 306.0 | Mon 16:53 Nov 01, 2004 | 0 | 0 | |
| 115 | 660 | 128 -- 132 | 23 | 1 | 304.0 | Mon 16:53 Nov 01, 2004 | 0 | 0 | Sig Ch Pick = 100.0 ms. BAD LEVEL REPEAT |
| 116 | 660 | 133 -- 140 | 24 | 5 | 301.0 | Mon 16:53 Nov 01, 2004 | 0 | 0 | kill files 134 135 139. |
| 117 | 645 | 133 -- 140 | 24 | 4 | 295.0 | Mon 17:01 Nov 01, 2004 | 0 | 0 | kill files 134 135 139. |
| 118 | 630 | 133 -- 140 | 24 | 3 | 287.0 | Mon 17:01 Nov 01, 2004 | 0 | 0 | kill files 134 135 139. |
| 119 | 615 | 133 -- 140 | 24 | 2 | 281.0 | Mon 17:01 Nov 01, 2004 | 0 | 0 | kill files 134 135 139. |
| 120 | 600 | 133 -- 140 | 24 | 1 | 275.0 | Mon 17:01 Nov 01, 2004 | 0 | 0 | Sig Ch Pick = 100.0 ms. kill files 134 135 139. |
| 121 | 585 | 141 -- 147 | 25 | 5 | 267.0 | Mon 17:09 Nov 01, 2004 | 0 | 0 | kill file 146. |
| 122 | 570 | 141 -- 147 | 25 | 4 | 261.0 | Mon 17:09 Nov 01, 2004 | 0 | 0 | kill file 146. |
| 123 | 555 | 141 -- 147 | 25 | 3 | 254.0 | Mon 17:09 Nov 01, 2004 | 0 | 0 | kill file 146. |
| 124 | 540 | 141 -- 147 | 25 | 2 | 247.0 | Mon 17:09 Nov 01, 2004 | 0 | 0 | kill file 146. |
| 125 | 525 | 141 -- 147 | 25 | 1 | 240.0 | Mon 17:09 Nov 01, 2004 | 0 | 0 | Sig Ch Pick = 100.0 ms. kill file 146. |
| 126 | 510 | 148 -- 152 | 26 | 5 | 233.0 | Mon 17:17 Nov 01, 2004 | 0 | 0 | |
| 127 | 495 | 148 -- 152 | 26 | 4 | 226.0 | Mon 17:17 Nov 01, 2004 | 0 | 0 | |
| 128 | 480 | 148 -- 152 | 26 | 3 | 219.0 | Mon 17:17 Nov 01, 2004 | 0 | 0 | |
| 129 | 465 | 148 -- 152 | 26 | 2 | 212.0 | Mon 17:17 Nov 01, 2004 | 0 | 0 | |
| 130 | 450 | 148 -- 152 | 26 | 1 | 206.0 | Mon 17:17 Nov 01, 2004 | 0 | 0 | Sig Ch Pick = 100.0 ms. |
| 131 | 435 | 153 -- 159 | 27 | 5 | 198.0 | Mon 17:24 Nov 01, 2004 | 0 | 0 | kill files 153 157. |
| 132 | 420 | 153 -- 159 | 27 | 4 | 192.0 | Mon 17:24 Nov 01, 2004 | 0 | 0 | kill files 153 157. |
| 133 | 405 | 153 -- 159 | 27 | 3 | 184.0 | Mon 17:24 Nov 01, 2004 | 0 | 0 | kill files 153 157. BAD LEVEL REPEAT |
| 134 | 390 | 153 -- 159 | 27 | 2 | 178.0 | Mon 17:24 Nov 01, 2004 | 0 | 0 | kill files 153 157. |
| 135 | 375 | 153 -- 159 | 27 | 1 | 171.0 | Mon 17:24 Nov 01, 2004 | 0 | 0 | Sig Ch Pick = 100.0 ms. kill files 153 157. |
| 136 | 400 | 160 -- 165 | 28 | 5 | 185.0 | Mon 17:29 Nov 01, 2004 | 0 | 0 | kill file 160. WRONG DEPTH SHOULD BE 405 |
| 137 | 385 | 160 -- 165 | 28 | 4 | 176.0 | Mon 17:29 Nov 01, 2004 | 0 | 0 | kill file 160. WRONG DEPTH SHOULD BE 390 |
| 138 | 370 | 160 -- 165 | 28 | 3 | 169.0 | Mon 17:29 Nov 01, 2004 | 0 | 0 | kill file 160. WRONG DEPTH SHOULD BE 375 |
| 139 | 355 | 160 -- 165 | 28 | 2 | 165.0 | Mon 17:29 Nov 01, 2004 | 0 | 0 | kill file 160. WRONG DEPTH SHOULD BE 360 |
| 140 | 340 | 160 -- 165 | 28 | 1 | 160.0 | Mon 17:29 Nov 01, 2004 | 0 | 0 | Sig Ch Pick = 100.0 ms. kill file 160. WRONG DEPTH SHOULD BE 345 |
| 141 | 345 | 166 -- 175 | 29 | 5 | 159.0 | Mon 17:38 Nov 01, 2004 | 0 | 0 | kill files 166 167 168 172 173. BAD LEVEL REPEAT |
| 142 | 330 | 166 -- 175 | 29 | 4 | 149.0 | Mon 17:38 Nov 01, 2004 | 0 | 0 | kill files 166 167 168 172 173. |
| 143 | 315 | 166 -- 175 | 29 | 3 | 145.0 | Mon 17:38 Nov 01, 2004 | 0 | 0 | kill files 166 167 168 172 173. |
| 144 | 300 | 166 -- 175 | 29 | 2 | 137.0 | Mon 17:38 Nov 01, 2004 | 0 | 0 | kill files 166 167 168 172 173. |
| 145 | 285 | 166 -- 175 | 29 | 1 | 132.0 | Mon 17:38 Nov 01, 2004 | 0 | 0 | Sig Ch Pick = 100.0 ms. kill files 166 167 168 172 173. |

TOOL STATIONS

Baker Atlas

CLIENT : **SANTOS & PARTNERS**
SOURCE : **2 x 150 cu in Sleeve Guns**

WELL NAME : **MARTHA-1**
ENGINEER : **B.READ**

SERVICE : **ZVSP (MLR)**
DATE : **MON 1ST NOV 2004**

| LEVEL NO | TOOL STATION DEPTH | FILE NUMBER | STATION NO. | TOOL NO | VERTICAL CHAN TIME PICK (MSEC) | TIME AT COMPLETION OF LEVEL | CABLE SLACK | PRE-AMP GAIN | REMARKS (COMMENTS, UH TIME, CHARGE TYPE, DEPTH, ETC) |
|----------|--------------------|-------------|-------------|---------|--------------------------------|-----------------------------|-------------|--------------|---|
| 146 | 300 | 176 -- 184 | 30 | 5 | 137.0 | Mon 17:48 Nov 01, 2004 | 0 | 0 | kill files 176 181 182 183. |
| 147 | 285 | 176 -- 184 | 30 | 4 | 130.0 | Mon 17:48 Nov 01, 2004 | 0 | 0 | kill files 176 181 182 183. |
| 148 | 270 | 176 -- 184 | 30 | 3 | 126.0 | Mon 17:48 Nov 01, 2004 | 0 | 0 | kill files 176 181 182 183. |
| 149 | 255 | 176 -- 184 | 30 | 2 | 117.0 | Mon 17:48 Nov 01, 2004 | 0 | 0 | kill files 176 181 182 183. |
| 150 | 240 | 176 -- 184 | 30 | 1 | 111.0 | Mon 17:48 Nov 01, 2004 | 0 | 0 | Sig Ch Pick = 100.0 ms. kill files 176 181 182 183. |
| 151 | 315 | 185 -- 189 | 31 | 5 | 144.0 | Mon 17:56 Nov 01, 2004 | 0 | 0 | |
| 152 | 300 | 185 -- 189 | 31 | 4 | 137.0 | Mon 17:56 Nov 01, 2004 | 0 | 0 | |
| 153 | 285 | 185 -- 189 | 31 | 3 | 132.0 | Mon 17:56 Nov 01, 2004 | 0 | 0 | BAD LEVEL REPEAT |
| 154 | 270 | 185 -- 189 | 31 | 2 | 1511.0 | Mon 17:56 Nov 01, 2004 | 0 | 0 | BAD LEVEL REPEAT |
| 155 | 255 | 185 -- 189 | 31 | 1 | 1987.0 | Mon 17:56 Nov 01, 2004 | 0 | 0 | Sig Ch Pick = 100.0 ms. BAD LEVEL REPEAT |
| 156 | 270 | 190 -- 200 | 32 | 5 | 125.0 | Mon 18:06 Nov 01, 2004 | 0 | 0 | kill files 190 195 196 197 198 199. |
| 0 | 255 | 190 -- 200 | 32 | 4 | 114.0 | Mon 18:06 Nov 01, 0 | 0 | 0 | kill files 190 195 196 197 198 199. |
| 158 | 240 | 190 -- 200 | 32 | 3 | 111.0 | Mon 18:06 Nov 01, 2004 | 0 | 0 | kill files 190 195 196 197 198 199. |
| 159 | 225 | 190 -- 200 | 32 | 2 | 107.0 | Mon 18:06 Nov 01, 0 | 0 | 0 | kill files 190 195 196 197 198 199. |
| 160 | 210 | 190 -- 200 | 32 | 1 | 99.0 | Mon 18:06 Nov 01, 2004 | 0 | 0 | Sig Ch Pick = 100.0 ms. kill files 190 195 196 197 198 199. |
| 161 | 195 | 201 -- 206 | 33 | 5 | 90.0 | Mon 18:15 Nov 01, 2004 | 0 | 0 | kill file 205. |
| 162 | 180 | 201 -- 206 | 33 | 4 | 83.0 | Mon 18:15 Nov 01, 2004 | 0 | 0 | kill file 205. |
| 163 | 165 | 201 -- 206 | 33 | 3 | 75.0 | Mon 18:15 Nov 01, 2004 | 0 | 0 | kill file 205. |
| 164 | 150 | 201 -- 206 | 33 | 2 | 66.7 | Mon 18:15 Nov 01, 2004 | 0 | 0 | kill file 205. |
| 165 | 135 | 201 -- 206 | 33 | 1 | 1461.0 | Mon 18:15 Nov 01, 2004 | 0 | 0 | Sig Ch Pick = 100.0 ms. kill file 205. |
| 166 | 135 | 207 -- 215 | 34 | 5 | 61.0 | Mon 18:27 Nov 01, 2004 | 0 | 0 | kill files 210 211 213 214. |
| 167 | 120 | 207 -- 215 | 34 | 4 | 57.0 | Mon 18:27 Nov 01, 2004 | 0 | 0 | kill files 210 211 213 214. |
| 168 | 105 | 207 -- 215 | 34 | 3 | 52.0 | Mon 18:27 Nov 01, 2004 | 0 | 0 | kill files 210 211 213 214. |
| 169 | 90 | 207 -- 215 | 34 | 2 | 46.0 | Mon 18:27 Nov 01, 2004 | 0 | 0 | kill files 210 211 213 214. |
| 170 | 75 | 207 -- 215 | 34 | 1 | 40.0 | Mon 18:27 Nov 01, 2004 | 0 | 0 | Sig Ch Pick = 100.0 ms. kill files 210 211 213 214. |