# CONTENTS ENVELOPE 8009

**TENEMENT:** EL 1445 - Pepper Tree.

**TENEMENT HOLDER:** BHP Minerals Ltd.


**REPORT:** Grey, K; 1988. EL 1445, Pepper Tree, SA. Report for the quarters ending 15th February 1988 and 15th May 1988. (BHP report no. CR5962). Pgs 3-7

**PLAN:**

Fig 1. Location map (Drwg no. A4-493A). Scale 1:1000000. Pg. 5

**REPORT:** Grey, K; 1988. EL 1445, Pepper Tree, SA. Report for the quarter ending 15th August 1988. (BHP Report no. CR6258). Pgs 8-13

**PLAN:**

Fig 1. Location map (Drwg no. A4-493A). Scale 1:1000000. Pg. 10

**REPORT:** Grey, K; 1988. EL 1445, Pepper Tree, SA. Report for the quarter ending 15th November 1988. (BHP Report no. CR6289). Pgs 14-21

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Fig 1. Location map (Drwg no. A4-493A). Scale 1:1000000. Pg. 16

Fig 2. R/C Aircore drilling programme. (Drwg no. A2-484). Scale 1:100000. 8009-1

**REPORT:** Grey, K; 1989. EL 1445, Pepper Tree, SA. Report for the quarter ending 15th February 1989. (BHP Report no. CR6263). Pgs 22-26

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**PLAN:**

Fig 1. Location map. (Drwg no. A4-493A). Scale 1:1000000. Pg. 24

**REPORT:** Grey, K; 1989. EL 1445, Pepper Tree, SA. Report for the quarter ending 15th May 1989. (BHP Report no. CR6467). Pgs 252-256

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**APPENDIX B:** Sample analysis, Belmont Laboratory. Observer sheets. Pgs 259-291

PLAN:

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REPORT: Grey, K; 1989. EL 1445, Pepper Tree, SA. Report for the quarter ending 15th August 1989. (BHP Report no. CR6479). Pgs 292-296

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| | | |
|---|---|---|
| Traverse 9 | - Line 6282320N. | 8009-2 |
| | - Line 6283300N. | 8009-3 |
| | - Line 6284040N. | 8009-4 |
| Traverse 10 | - Line 6277600N. | 8009-5 |
| Traverse 11 | - Line 62750000N. | 8009-6 |
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REPORT: Darby, P; 1989. EL 1445 Pepper Tree, SA. Report for the quarter ended 15th November 1989 and final report. (BHP Report no. CR6837). Pgs 298-312

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| | | |
|---|---|---|
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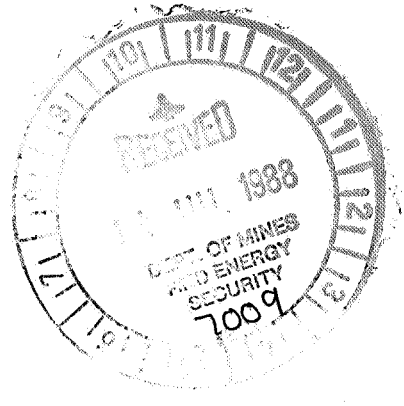
I

CR 5962

# EXPLORATION LICENCE 1445
# PEPPER TREE, SOUTH AUSTRALIA

REPORT FOR THE QUARTERS
ENDING 15TH FEBRUARY 1988,
AND 15TH MAY 1988.

K. GREY
Adelaide.



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2. TITLE

3. GEOLOGICAL ASSESSMENT

4. FUTURE EXPLORATION

5. EXPENDITURE

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LOCATION MAP A4-493

# EXPLORATION LICENCE 1445

# PEPPER TREE - SOUTH AUSTRALIA

# REPORT FOR THE QUARTERS ENDED 15TH FEBRUARY 1988

# AND 15TH MAY 1988.

## 1. GENERAL STATEMENT

Exploration Licence 1445 was taken up to test the potential for heavy mineral sands in the Pepper Tree area of the Murray Basin. It forms part of a regional exploration programme in the Murray Basin (see Figure 1).

A literature search and geological assessment of the area indicates the presence of Tertiary palaeostrandlines deposited during the Pliocene Period. Their presence indicates that the environment for heavy mineral-bearing beach sand deposition and preservation may exist.

## 2. TITLE

Exploration Licence 1445 covers 1295 square kilometres and was granted to BHP Minerals Limited on the 16th November 1987 for a period of one year.

## 3. GEOLOGICAL ASSESSMENT

A literature search and geological assessment of the Murray Basin tertiary stratigraphy indicates that the Late Miocene-Pliocene Parilla/Loxton Sand unit was deposited under strand-plain and marginal marine (beach) conditions. This environment of deposition is prospective for beach sand heavy mineral accumulations. A study of drilling information in the Murray basin indicates that the Parilla Sand is overlain

by only thin Quaternary cover in the Pepper Tree area.

## 4. FUTURE EXPLORATION

A drilling programme to test the target horizon has been proposed. A total of 150-250 holes to an average depth of 15-20 m (maximum depth 40 m) is planned. A reverse circulation air core drilling rig will be used and holes will be spaced at a distance of 500 to 1000 m on three traverses along existing station tracks. Down hole gamma logs will be carried out on all holes to indicate the presence of monazite-bearing heavy mineral sands. Drilling is expected to start in early August.

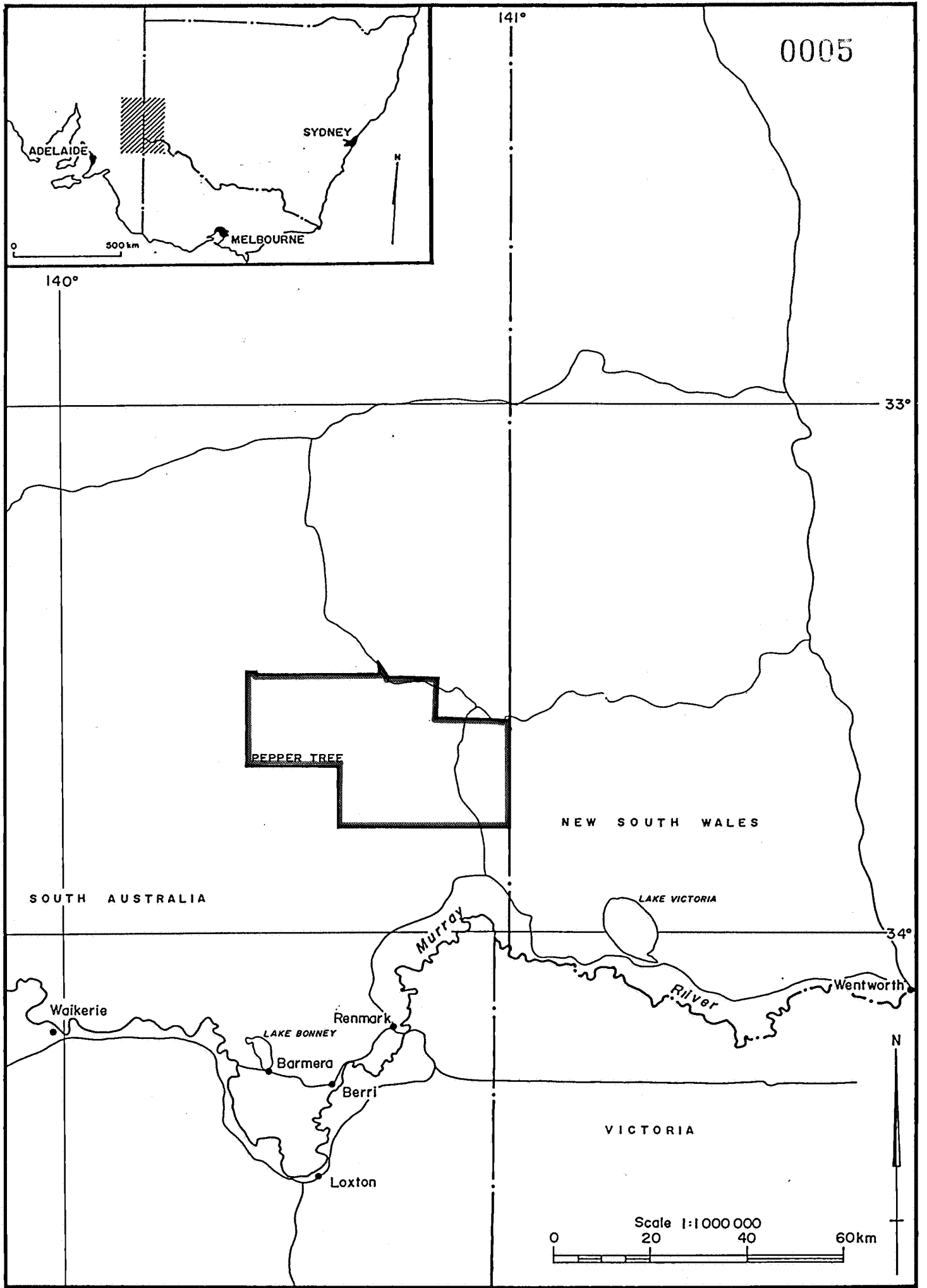
## 5. EXPENDITURE

The expenditure in the first two quarters for EL.1445 is summarised as follows:-

| | |
|---|---|
| Wages and Salaries | $ 536.00 |
| Field Support | $ 109.00 |
| Vehicles | $ 430.00 |
| Surveys | $ 35.00 |
| Office Supplies | $ 260.00 |
| Administration and Overheads | $ 137.00 |
| | $1507.00 |

The total expenditure to date for EL.1445 is $1507.00.

This report is submitted to the Department of Mines and Energy as required by Clause 2, of EL.1445.



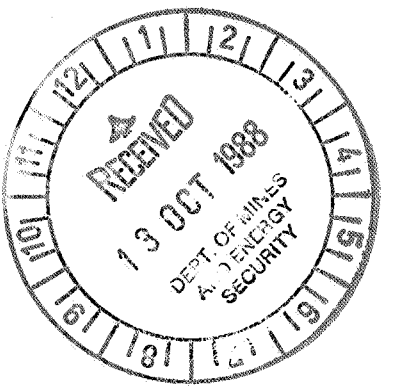

| | | |
|---|---|---|
| Centre: ADELAIDE | THE BROKEN HILL PROPRIETARY CO. LTD.<br>NORTHERN MURRAY BASIN, S.A.<br>LOCATION MAP | Project Nº |
| Date: 3-8-87 | | Drawing Nº A4-493A |

CR 6258

EXPLORATION LICENCE 1445
PEPPER TREE, SOUTH AUSTRALIA

REPORT FOR THE QUARTER ENDING
15TH AUGUST 1988.

K. GREY
ADELAIDE.



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4. FIELD WORK

5. FUTURE EXPLORATION

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LOCATION MAP A4-493A

# EXPLORATION LICENCE 1445

## PEPPER TREE - SOUTH AUSTRALIA

## REPORT FOR THE QUARTER ENDING 15TH AUGUST 1988.

### 1. GENERAL STATEMENT

Exploration Licence 1445 was taken up to test the potential for heavy mineral sands in the Pepper Tree area of the Murray Basin. It forms part of a regional exploration programme in the Murray Basin (see Figure 1).

A literature search and geological assessment of the area indicates the presence of Tertiary palaeostrandlines deposited during the Pliocene Period. Their presence indicates that the environment for heavy mineral-bearing beach sand deposition and preservation may exist.

### 2. TITLE

Exploration Licence 1445 covers 1295 square kilometres and was granted to BHP Minerals Limited on the 16th November 1987 for a period of one year.

As part of the exploration licence falls within the proposed extension to the Danggali Conservation Park a Declaration of Environmental Factors document was submitted to the Department of Mines and Energy along with a request for approval to drill on the 25th July 1988. Approval for the drilling programme was gained on the 3rd of August.

### 3. GEOLOGICAL ASSESSMENT

A literature search and geological assessment of the Murray Basin Tertiary stratigraphy indicates that the Late Miocene-Pliocene Parilla/Loxton Sand unit was deposited under

strand-plain and marginal marine (beach) conditions. This environment of deposition is prospective for beach sand heavy mineral accumulations. A study of drilling information in the Murray Basin indicates that the Parilla Sand is overlain by only thin Quaternary cover in the Pepper Tree area.

## 4. FIELD WORK

A reconnaissance field visit was undertaken to EL.1445 between 18th and 21st of July 1988 by Mr. D. Jarvis, and Mr. K. Grey. Aims included assessing suitability of proposed traverses for drilling as well as meeting landowners.

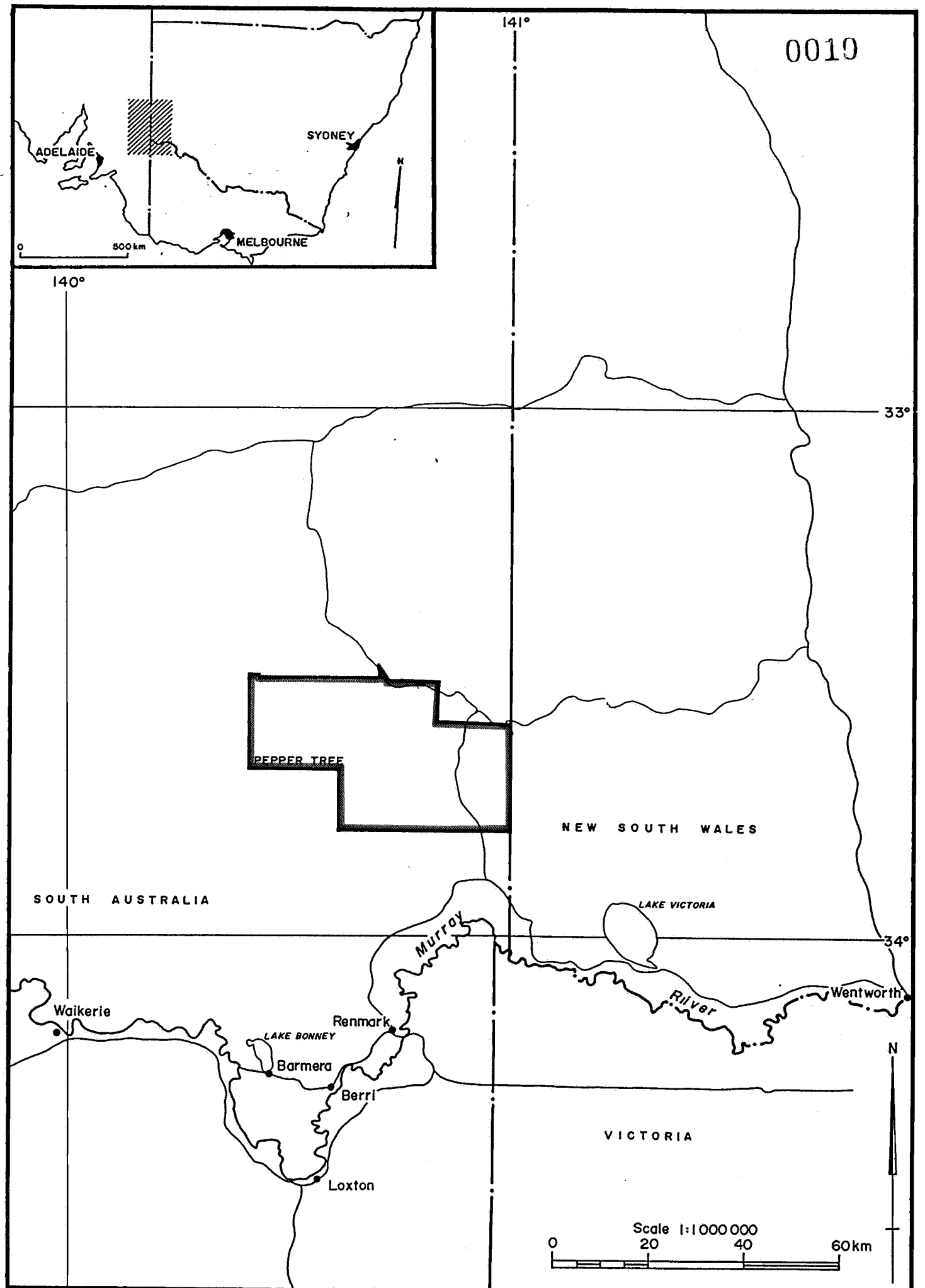
## 5. FUTURE EXPLORATION

A drilling programme to test the target horizon has been proposed. A total of approximately 150 holes to an average depth of 15-20m (maximum depth 40m) is planned. A reverse circulation air core drilling rig will be used and holes will be spaced at a distance of 500 to 1000m on three traverses along existing station tracks. Down hole gamma logs will be carried out on all holes to indicate the presence of monazite-bearing heavy mineral sands. Field work commenced on August 15th and drilling is expected to start on August 17th.

## 6. EXPENDITURE

The expenditure for the third quarter of EL.1445 for the three months to the end of August is summarised as follows:-

| | |
|---|---|
| Wages and Salaries | $ 7134 |
| Field Support | 839 |
| Vehicles | 1158 |
| Geochemistry | 1954 |
| Geophysics | 125 |
| Surveys (maps and photos) | 74 |
| General Freight | 47 |
| Equipment | 299 |
| Other (incl. postage, stationery etc) | 88 |
| Administration & Overheads | 1758 |
| | $ 13476 |




| | | |
|---|---|---|
| Centre: ADELAIDE | THE BROKEN HILL PROPRIETARY CO. LTD.<br>NORTHERN MURRAY BASIN, S.A.<br>LOCATION MAP | Project Nº |
| Date: 3-8-87 | | Drawing Nº A4-493A |

The total expenditure to date for EL.1445 is $14,983.

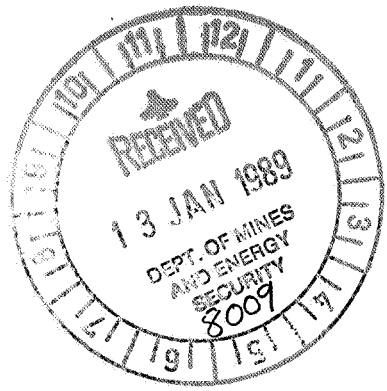
This report is submitted to the
Department of Mines and Energy
as required by Clause 2, of EL.1445.

CR 6289

# EXPLORATION LICENCE 1445
# PEPPER TREE, SOUTH AUSTRALIA

## REPORT FOR THE QUARTER ENDING
## 15TH NOVEMBER 1988.

K. GREY
ADELAIDE. S.A.



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   - 3.3 Logging Procedures
   - 3.4 Sample Analysis

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# EXPLORATION LICENCE 1445

# PEPPER TREE - SOUTH AUSTRALIA

# REPORT FOR THE QUARTER ENDING 15TH NOVEMBER 1988.

## 1. GENERAL STATEMENT

Exploration Licence 1445 was taken up to test the potential for heavy mineral sands in the Pepper Tree area of the Murray Basin. It forms part of a regional exploration programme in the Murray Basin (see Figure 1).

A literature search and geological assessment of the area indicates the presence of Tertiary palaeostrandlines deposited during the Pliocene Period. Their presence indicates that the environment for heavy mineral-bearing beach sand deposition and preservation may exist.

## 2. TITLE

Exploration Licence 1445 covers 1295 square kilometres and was granted to BHP Minerals Limited on the 16th November 1987 for a period of one year. Extension of term of Licence was granted for one year by SADME.

## 3. FIELD WORK

### 3.1 Drilling

As mentioned in the previous report field work related to the approved drilling programme commenced on the 15th of August. Drilling commenced on the 17th August and continued through to the 4th September.

A total of 139 holes were drilled in the Licence area on four traverses. Design hole depths of 20 metres were extended in encouraging sands or shortened when hard layers slowed drilling rates. Depths ranged from 4 to 45 metres for a total of 3245 metres (average 23.3m). Drilling results are summarised in Table 1.

A Reverse Circulation Air-Core drilling rig was used and averaged 171 metres per drilling day including breakdowns (3.5 drilling days) and one camp move (1 drilling day). The average for the total programme (including nearby EL's) was 220 metres per day.

Drillhole spacings were 1000 metres while the four traverses were separated by 6-10 kilometres. Traverses were located on existing east-west station tracks (Figure 2).

TABLE 1. DRILLING SUMMARY EL.1445

| TRAVERSE | HOLES | METRES | HOLE NUMBERS |
|---|---|---|---|
| 9 | 54 | 1335 | PT034-071, 124-139 |
| 10 | 26 | 600 | PT008-033 |
| 11 | 23 | 521 | PT072-094 |
| 12 | 36 | 789 | PT001-007, 095-123 |
| | 139 | 3245 | (av. depth 23.3m) |

3.2 Sampling Procedure

The Reverse Circulation Air-Core system was chosen because it gives an accurate sample from a known depth with minimal contamination when drilling unconsolidated sands. With sand entering the drill stem at the drill face downhole contamination is minimal. An additional bonus is the collection of sandstone core from consolidated layers in the sand, providing extra sedimentological information.

A two metre sample was collected from the cyclone and split to approximately 2-3 kilograms and bagged. Samples used a consecutive numbering system in the series RT6001 onwards and were bagged with numbered aluminium tags. Composite samples were also taken of portions of the hole and collected from each two metre interval left on the ground. Composite samples were collected from either the complete hole (ie 0-20m) or more often only the Parilla Sand portion or part thereof (ie 8-20m and 20-30 metres).

3.3 Logging Procedures

A full descriptive sedimentary log was written for each 2 metre interval drilled. This was based on sample piles (the bulk of the sample not bagged, ~50-75%). A representative portion of each sample was panned to give a visual estimation of the percentage of heavy minerals as well as to better define grain shape and surface, and sorting. A range of semiquantitative values for total percentage heavy minerals were recorded: nil (0%) very light trace (<0.1%), light trace (~0.1 to 0.5%), trace (0.5 to 1.0%), and good trace (≥1% individual estimates were made). These served to highlight specific samples and groups of samples for detailed analysis.

Down-hole Gamma logs were run on all holes. Gamma radiation derived from Monazite, a Thorium bearing heavy mineral, is measured and gives an indication of exact depth, thickness, and number of heavy mineral bearing horizons. Where possible the probe was run down open holes; however in some cases where holes were not sufficiently stable (ie flowing sands or below groundwater level in unconsolidated sands) the probe was run within the drill stem. An analog chart recorder was used to produce 1:100 vertical scale chart records.

A hand-held scintillometer was also run over sample piles on the ground to gain an immediate idea of the gamma radiation level of samples.

3.4 Sample Analysis

Samples to be analysed were selected on the basis of visual heavy mineral determination as well as gamma log signal and scintillometer reading. Initial analysis will be for Ti and Zr by XRF analysis with follow-up observing of minerals present.

## 4. FUTURE PROGRAMME

The results of the recent drilling programme are now awaited and future work will depend upon these analysis. The geological data collected will be reported in the next quarterly report.

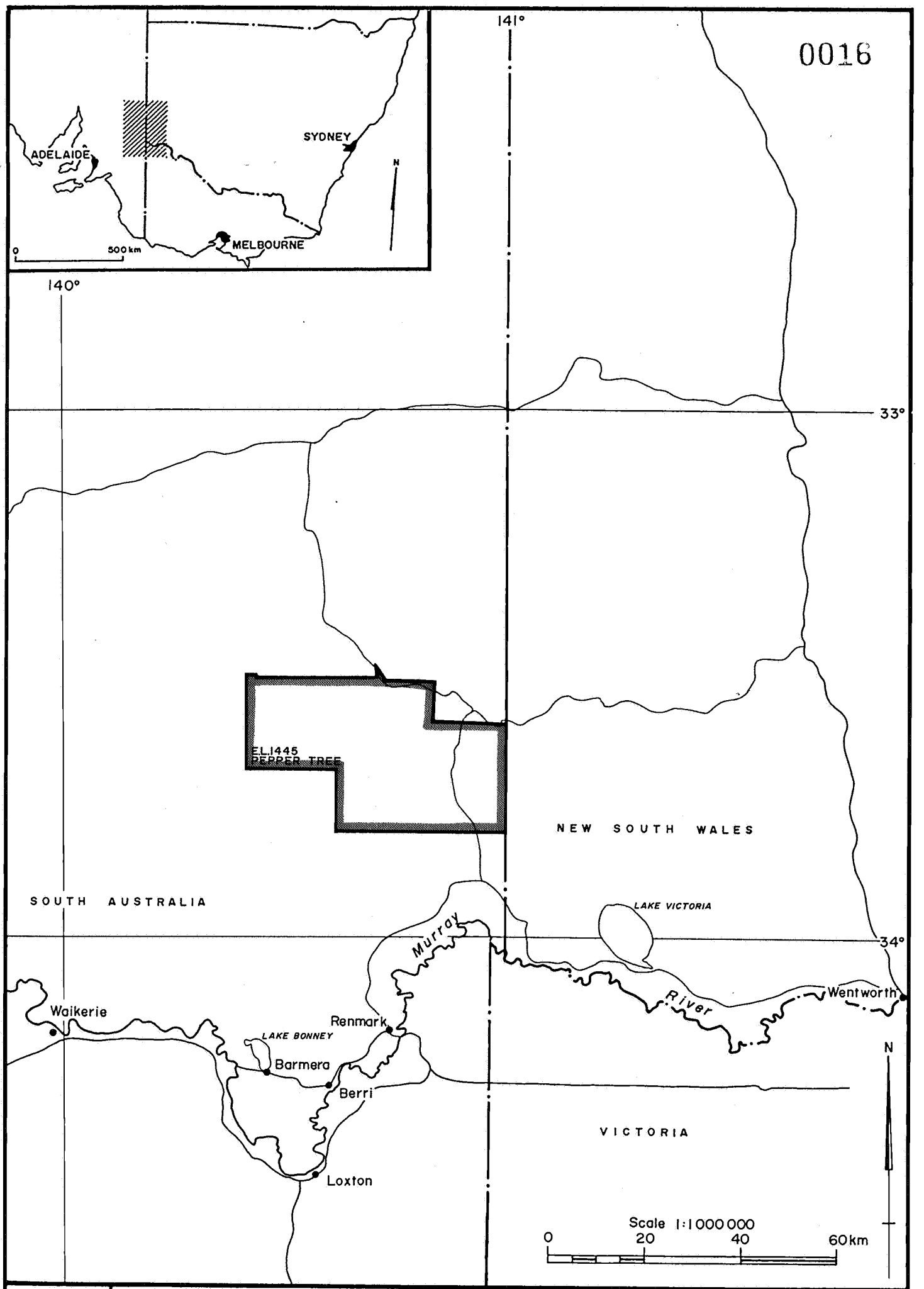
## 5. EXPENDITURE

The expenditure for the fourth quarter for the three months to the end of November 1988 totals $82379 and is summarised as follows:-

| | |
|---|---|
| Wages & Salaries | 11493 |
| Field Support | 1518 |
| Drilling | 56202 |
| Vehicles | 1250 |
| Equipment | 267 |
| Geochemistry | 2958 |
| Surveys | 91 |
| Tenement Fees | 2985 |
| Office Expenses | 366 |
| General Freight | 128 |
| Geochem./Geostats. | 305 |
| Drafting | 320 |
| Computer Services | 438 |
| Belmont Lab. | 135 |
| Administration and Overheads | 3923 |
| | $ 82379 |

The total expenditure to date for Exploration Licence 1445 is $95855.

This report is submitted to the Department of Mines and Energy as required by Clause 2, of EL.1445.




| | | |
|---|---|---|
| Centre: ADELAIDE | THE BROKEN HILL PROPRIETARY CO. LTD.<br>**E.L.1445 PEPPER TREE, S.A.**<br>**LOCATION MAP** | Project Nº |
| Date: 3-8-87 | | Drawing Nº A4-493A |

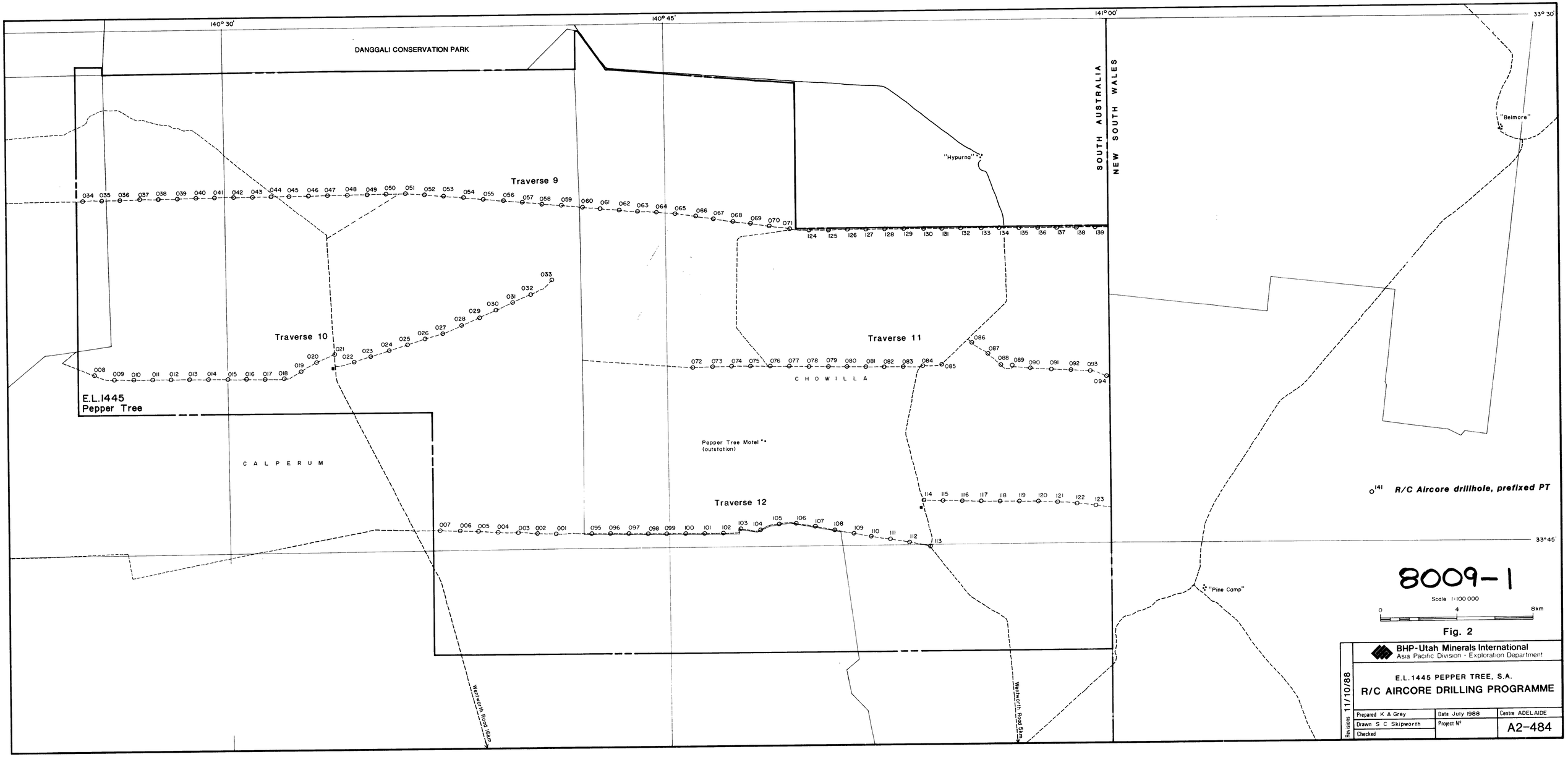



Fig. 2

BHP-Utah Minerals International
Asia Pacific Division - Exploration Department

E.L.1445 PEPPER TREE, S.A.

R/C AIRCORE DRILLING PROGRAMME

| | | |
|---|---|---|
| Revisions 11/10/88 | | |
| Prepared K A Grey | Date July 1988 | Centre ADELAIDE |
| Drawn S C Skipworth | Project N° | A2-484 |
| Checked | | |

0022

CR 6263

# EXPLORATION LICENCE 1445
# PEPPER TREE, SOUTH AUSTRALIA

## REPORT FOR THE QUARTER ENDING
## 15TH FEBRUARY 1989

K. GREY
ADELAIDE. S.A.

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C. GEOLOGICAL LOGS, HOLES PT001 - PT139

# EXPLORATION LICENCE 1445

## PEPPER TREE - SOUTH AUSTRALIA

## REPORT FOR THE QUARTER ENDING 15TH FEBRUARY 1989

### 1. GENERAL STATEMENT

Exploration Licence 1445 was taken up to test the potential for heavy mineral sands in the Pepper Tree area of the Murray Basin. It forms part of a regional exploration programme in the Murray Basin (see Figure 1).

A literature search and geological assessment of the area indicates the presence of tertiary palaeostrandlines deposited during the Pliocene period. Their presence indicates that the environment for heavy mineral-bearing beach sand deposition and preservation may exist.

### 2. TITLE

Exploration Licence 1445 covers 1295 square kilometres and was granted to BHP Minerals Limited on the 16th November 1987 for a period of one year. Extension of term of Licence was granted for one year by SADME.

### 3. SAMPLE ANALYSES

Samples from previous drilling programme were selected on the basis of visual percentage heavy minerals, down-hole gamma log signal and scintillometer reading. Initial analysis by XRF for Ti and Zr, of a 100g split from the full sample, was carried out by Classic Comlabs, Adelaide. A total of 217 samples were analysed and are included as Appendix A, a summary listing is included as Appendix B.

Further screening based on XRF results selected a total of 30 samples to be sent to BHP's Belmont Mineral Laboratory for heavy liquid separation and observation. These were sent in December and results are awaited.

Geological logs from drilling in August/September 1988 are included in Appendix C.

## 4. FUTURE WORK

Future work in EL 1445 will await results of 1988 drilling from Belmont Mineral Laboratory.

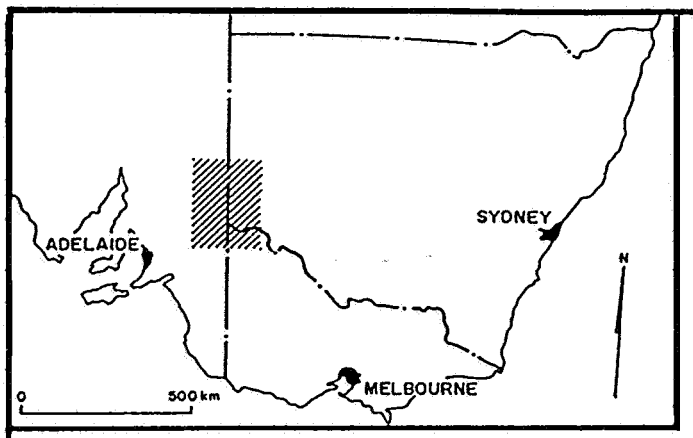
## 5. EXPENDITURE

Expenditure for the fifth quarter of EL 1445 for the three months to 28th February 1989 totals $6618 and is summarised as follows:

| | |
|---|---|
| Wages and Salaries | $ 2785 |
| Field Support | 29 |
| Vehicles | 456 |
| Equipment | 360 |
| Office Expenses | 240 |
| Drafting | 80 |
| Survey (maps) | 12 |
| Computer Services | 893 |
| Geochem./Geostats | 900 |
| Admin. and Overheads | 863 |
| | $ 6618 |

The total expenditure to date for EL 1445 is $102,473.

This report is submitted to the DME as required by Clause 2 of EL 1445.




141°

140°

33°

34°

E.L.1445
PEPPER TREE

NEW SOUTH WALES

SOUTH AUSTRALIA

VICTORIA

LAKE VICTORIA

Murray River

Wentworth

Waikerie

Renmark

LAKE BONNEY

Barmera

Berri

Loxton

N

Scale 1:1000000
0 20 40 60km

| | | |
|---|---|---|
| Centre<br>ADELAIDE | THE BROKEN HILL PROPRIETARY CO. LTD.<br>E.L.1445 PEPPER TREE; S.A.<br>LOCATION MAP | Project Nº |
| Date<br>3-8-87 | | Drawing Nº<br>A4-493A |

# APPENDIX A

SAMPLE ANALYSES -

XRF RESULTS

CLASSIC COMLABS LTD
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Job: 8AD3312
O/N: 15511

# ANALYTICAL REPORT

| SAMPLE | Zr | Ti |
|---|---|---|
| RT 6006 | 115 | 1260 |
| RT 6008 | 82 | 1120 |
| RT 6009 | 98 | 2250 |
| RT 6018 | 140 | 3250 |
| RT 6019 | 64 | 610 |
| RT 6025 | 105 | 1800 |
| RT 6032 | 40 | 270 |
| RT 6040 | 42 | 450 |
| RT 6049 | 62 | 930 |
| RT 6050 | 68 | 910 |
| RT 6055 | 82 | 1380 |
| RT 6064 | 170 | 1860 |
| RT 6077 | 58 | 1140 |
| RT 6078 | 50 | 1040 |
| RT 6082 | 56 | 830 |
| RT 6083 | 62 | 1380 |
| RT 6094 | 90 | 1440 |
| RT 6113 | 38 | 560 |
| RT 6125 | 140 | 2350 |
| RT 6147 | 105 | 1540 |
| RT 6150 | 60 | 750 |
| RT 6151 | 84 | 1560 |
| RT 6156 | 54 | 600 |
| RT 6159 | 48 | 600 |
| RT 6162 | 46 | 690 |
| UNITS | ppm | ppm |
| SCHEME | XRF1 | XRF3 |

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Job: 8AD3312
O/N: 15511

ANALYTICAL REPORT

| SAMPLE | Zr | Ti |
|---|---|---|
| RT 6164 | 56 | 730 |
| RT 6173 | 110 | 2300 |
| RT 6180 | 155 | 3050 |
| RT 6200 | 36 | 210 |
| RT 6204 | 40 | 380 |
| RT 6212 | 60 | 860 |
| RT 6213 | 46 | 620 |
| RT 6227 | 42 | 410 |
| RT 6236 | 34 | 330 |
| RT 6237 | 68 | 820 |
| RT 6246 | 68 | 1000 |
| RT 6282 | 50 | 810 |
| RT 6306 | 84 | 1280 |
| RT 6307 | 94 | 1480 |
| RT 6333 | 46 | 530 |
| RT 6341 | 66 | 1060 |
| RT 6353 | 46 | 760 |
| RT 6354 | 70 | 1200 |
| RT 6359 | 84 | 1280 |
| RT 6362 | 36 | 260 |
| RT 6364 | 36 | 320 |
| RT 6367 | 64 | 810 |
| RT 6401 | 92 | 1620 |
| RT 6417 | 36 | 260 |
| RT 6445 | 46 | 500 |
| UNITS | ppm | ppm |
| SCHEME | XRF1 | XRF3 |

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Job: 8AD3312
O/N: 15511

ANALYTICAL REPORT

| SAMPLE | Zr | Ti |
|---|---|---|
| RT 6443 | 66 | 1540 |
| RT 6446 | 110 | 1760 |
| RT 6447 | 115 | 1200 |
| RT 6448 | 150 | 1440 |
| RT 6449 | 50 | 580 |
| RT 6478 | 44 | 420 |
| RT 6479 | 32 | 340 |
| RT 6480 | 30 | 320 |
| RT 6481 | 34 | 350 |
| RT 6482 | 48 | 530 |
| RT 6483 | 46 | 580 |
| RT 6491 | 48 | 580 |
| RT 6493 | 44 | 440 |
| RT 6503 | 42 | 320 |
| RT 6504 | 42 | 430 |
| RT 6505 | 86 | 1220 |
| RT 6527 | 38 | 290 |
| RT 6529 | 46 | 470 |
| RT 6532 | 54 | 940 |
| RT 6533 | 38 | 230 |
| RT 6544 | 130 | 2500 |
| RT 6553 | 36 | 220 |
| RT 6557 | 60 | 830 |
| RT 6569 | 42 | 380 |
| RT 6581 | 60 | 910 |
| UNITS | ppm | ppm |
| SCHEME | XRF1 | XRF3 |

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Job: 8AD3312
O/N: 15511

ANALYTICAL REPORT

| SAMPLE | Zr | Ti |
|---|---|---|
| RT 6595 | 36 | 310 |
| RT 6607 | 64 | 770 |
| RT 6622 | 80 | 1040 |
| RT 6623 | 82 | 920 |
| RT 6626 | 250 | 1140 |
| RT 6629 | 66 | 790 |
| RT 6630 | 52 | 650 |
| RT 6631 | 110 | 790 |
| RT 6639 | 44 | 600 |
| RT 6640 | 38 | 600 |
| RT 6645 | 46 | 550 |
| RT 6666 | 60 | 580 |
| RT 6687 | 44 | 500 |
| RT 6692 | 56 | 660 |
| RT 6701 | 70 | 640 |
| RT 6708 | 58 | 1260 |
| RT 6709 | 100 | 1640 |
| RT 6710 | 68 | 1340 |
| RT 6711 | 74 | 1100 |
| RT 6712 | 66 | 1180 |
| RT 6722 | 48 | 700 |
| RT 6733 | 70 | 820 |
| RT 6734 | 74 | 1020 |
| RT 6746 | 44 | 620 |
| RT 6747 | 58 | 830 |
| UNITS | ppm | ppm |
| SCHEME | XRF1 | XRF3 |

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Job: 8AD3312
O/N: 15511

ANALYTICAL REPORT

| SAMPLE | Zr | Ti |
|---|---|---|
| RT 6748 | 86 | 1300 |
| RT 6749 | 64 | 730 |
| RT 6753 | 76 | 930 |
| RT 6763 | 56 | 950 |
| RT 6764 | 54 | 870 |
| RT 6768 | 140 | 1400 |
| RT 6771 | 105 | 1800 |
| RT 6773 | 110 | 4150 |
| RT 6774 | 70 | 910 |
| RT 6775 | 72 | 990 |
| RT 6776 | 135 | 1780 |
| RT 6790 | 90 | 1180 |
| RT 6799 | 76 | 1260 |
| RT 6221 | 34 | 400 |
| RT 6228 | 34 | 250 |
| RT 6235 | 36 | 390 |
| RT 6238 | 40 | 340 |
| RT 6287 | 66 | 740 |
| RT 6315 | 60 | 1040 |
| RT 6331 | 130 | 2400 |
| RT 6332 | 44 | 580 |
| RT 6340 | 42 | 490 |
| RT 6346 | 145 | 2750 |
| RT 6347 | 135 | 3150 |
| RT 6363 | 40 | 280 |
| UNITS | ppm | ppm |
| SCHEME | XRF1 | XRF3 |

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Job: 8AD3312
O/N: 15511

## ANALYTICAL REPORT

| SAMPLE | Zr | Ti |
|---|---|---|
| RT 6372 | 140 | 2250 |
| RT 6403 | 54 | 780 |
| RT 6404 | 34 | 300 |
| RT 6405 | 34 | 270 |
| RT 6415 | 30 | 195 |
| RT 6416 | 54 | 740 |
| RT 6424 | 62 | 1120 |
| RT 6804 | 92 | 1000 |
| RT 6825 | 46 | 530 |
| RT 6831 | 46 | 810 |
| RT 6841 | 44 | 310 |
| RT 6849 | 42 | 340 |
| RT 6860 | 40 | 290 |
| RT 6871 | 125 | 1600 |
| RT 6872 | 54 | 820 |
| RT 6879 | 62 | 700 |
| RT 6880 | 32 | 240 |
| RT 6892 | 88 | 540 |
| RT 6893 | 135 | 610 |
| RT 6894 | 1020 | 6000 |
| RT 6895 | 260 | 3050 |
| RT 6904 | 48 | 620 |
| RT 6905 | 72 | 1120 |
| RT 6916 | 1060 | 3550 |
| RT 6917 | 650 | 3600 |
| UNITS | ppm | ppm |
| SCHEME | XRF1 | XRF3 |

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Job: 8AD3312
O/N: 15511

ANALYTICAL REPORT

| SAMPLE | Zr | Ti |
|---|---|---|
| RT 6924 | 470 | 2550 |
| RT 6936 | 34 | 320 |
| RT 6951 | 450 | 2700 |
| RT 6952 | 115 | 1380 |
| RT 6955 | 94 | 1200 |
| RT 6959 | 140 | 4400 |
| RT 6960 | 46 | 520 |
| RT 6961 | 120 | 1560 |
| RT 7028 | 120 | 3100 |
| RT 7057 | 56 | 920 |
| RT 7108 | 50 | 390 |
| RT 7112 | 34 | 270 |
| RT 7142 | 48 | 510 |
| RT 7145 | 64 | 1120 |
| RT 7156 | 40 | 360 |
| RT 7168 | 40 | 430 |
| RT 7200 | 340 | 1780 |
| RT 7217 | 40 | 300 |
| RT 7222 | 74 | 1000 |
| RT 7223 | 34 | 260 |
| RT 7266 | 82 | 1740 |
| RT 7296 | 50 | 680 |
| RT 7324 | 64 | 940 |
| RT 7325 | 42 | 390 |
| RT 7333 | 145 | 560 |
| UNITS | ppm | ppm |
| SCHEME | XRF1 | XRF3 |

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Job: 8AD3312
O/N: 15511

ANALYTICAL REPORT

| SAMPLE | Zr | Ti |
|---|---|---|
| RT 7405 | 105 | 3750 |
| RT 7413 | 98 | 1900 |
| RT 7414 | 115 | 3150 |
| RT 7415 | 110 | 3300 |
| RT 7421 | 94 | 2550 |
| RT 7455 | 110 | 3950 |
| RT 7504 | 94 | 1680 |
| RT 7505 | 26 | 200 |
| RT 7506 | 36 | 300 |
| RT 7508 | 46 | 480 |
| RT 7514 | 30 | 470 |
| RT 7517 | 24 | 140 |
| RT 7521 | 36 | 770 |
| RT 7522 | 28 | 660 |
| RT 7523 | 190 | 3200 |
| RT 7528 | 42 | 270 |
| RT 7529 | 44 | 440 |
| RT 7533 | 70 | 980 |
| RT 7534 | 44 | 400 |
| RT 7539 | 92 | 1820 |
| RT 7547 | 100 | 1880 |
| RT 7565 | 125 | 3400 |
| RT 7580 | 84 | 1480 |
| RT 7581 | 115 | 2800 |
| RT 7589 | 105 | 2050 |
| UNITS | ppm | ppm |
| SCHEME | XRF1 | XRF3 |

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Job: 8AD3312
O/N: 15511

ANALYTICAL REPORT

| SAMPLE | Zr | Ti |
|---|---|---|
| RT 7590 | 48 | 470 |
| RT 7614 | 46 | 730 |
| RT 7634 | 36 | 330 |
| RT 7639 | 500 | 2150 |
| RT 7640 | 320 | 1960 |
| RT 7641 | 220 | 1620 |
| RT 7644 | 48 | 380 |
| RT 7645 | 260 | 1460 |
| RT 7656 | 40 | 480 |
| RT 7670 | 46 | 430 |
| RT 7679 | 34 | 350 |
| RT 7681 | 50 | 660 |
| RT 7693 | 46 | 510 |
| RT 7715 | 94 | 2300 |
| RT 7759 | 165 | 5000 |

| UNITS | ppm | ppm |
|---|---|---|
| SCHEME | XRF1 | XRF3 |

CLASSIC COMLABS LTD
Analytical Laboratories (INC. IN W.A.)

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Job: 8AD3312
O/N: 15511

ANALYTICAL REPORT

| SAMPLE | Zr | Ti |
|---|---|---|
| RT 7643 | 58 | 770 |
| RT 7724 | 130 | 3900 |
| UNITS | ppm | ppm |
| SCHEME | XRF1 | XRF3 |

# APPENDIX B

SUMMARY SAMPLE ANALYSES

PEPPER TREE DRILLING PROGRAMME
E.L. 1445, TRAVERSE NINE
ANALYSES AND COMPARISONS

| | SAMPLE INFORMATION | | | | | | COMLABS ANALYSES | | |
|---|---|---|---|---|---|---|---|---|---|
| | HOLE No | DEPTH | SAMPLE | %HM | GAMMA (cps) | | Ti (ppm) | Zr (ppm) | Ti/Zr |
| 1 | PT 34 | 0 - 2 m | RT 6401 | 0.0 | 23 | | 1620 | 92 | 17.61 |
| 2 | PT 34 | 4 - 6 m | RT 6403 | 0.4 | 9 | | 780 | 54 | 14.44 |
| 3 | PT 34 | 6 - 8 m | RT 6404 | 0.2 | 7 | | 300 | 34 | 8.82 |
| 4 | PT 34 | 8 - 10 m | RT 6405 | 0.2 | 5 | | 270 | 34 | 7.94 |
| 5 | PT 34 | 28 - 30 m | RT 6415 | 0.5 | 5 | | 195 | 30 | 6.50 |
| 6 | PT 34 | 0 - 20 m | RT 6416 | | | C | 740 | 54 | 13.70 |
| 7 | PT 34 | 20 - 30 m | RT 6417 | | | C | 260 | 36 | 7.22 |
| 8 | PT 35 | 12 - 14 m | RT 6424 | 0.2 | 8 | | 1120 | 62 | 18.06 |
| 9 | PT 37 | 6 - 8 m | RT 6443 | 0.3 | 20 | | 1540 | 66 | 23.33 |
| 10 | PT 37 | 28 - 30 m | RT 6446 | 0.5 | | | 1760 | 110 | 16.00 |
| 11 | PT 39 | 22 - 24 m | RT 6478 | 0.5 | 6 | | 420 | 44 | 9.55 |
| 12 | PT 39 | 24 - 26 m | RT 6479 | 1.0 | 5 | | 340 | 32 | 10.63 |
| 13 | PT 39 | 26 - 28 m | RT 6480 | 1.0 | | | 320 | 30 | 10.67 |
| 14 | PT 39 | 28 - 30 m | RT 6481 | 1.0 | | | 350 | 34 | 10.29 |
| 15 | PT 39 | 30 - 33 m | RT 6482 | 1.0 | | | 530 | 48 | 11.04 |
| 16 | PT 39 | 0 - 33 m | RT 6483 | | | C | 580 | 46 | 12.61 |
| 17 | PT 40 | 14 - 16 m | RT 6491 | 0.5 | 8 | | 580 | 48 | 12.08 |
| 18 | PT 40 | 18 - 21 m | RT 6493 | 0.2 | 10 | | 440 | 44 | 10.00 |
| 19 | PT 41 | 16 - 18 m | RT 6503 | 0.5 | 6 | | 320 | 42 | 7.62 |
| 20 | PT 41 | 18 - 20 m | RT 6504 | 0.5 | 5 | | 430 | 42 | 10.24 |
| 21 | PT 41 | 0 - 2 m | RT 6505 | | | C | 1220 | 86 | 14.19 |
| 22 | PT 43 | 20 - 22 m | RT 6527 | 0.2 | 7 | | 290 | 38 | 7.63 |
| 23 | PT 43 | 24 - 26 m | RT 6529 | 0.2 | 4 | | 470 | 46 | 10.22 |
| 24 | PT 43 | 0 - 18 m | RT 6532 | | | C | 940 | 54 | 17.41 |
| 25 | PT 43 | 18 - 30 m | RT 6533 | | | C | 230 | 38 | 6.05 |
| 26 | PT 44 | 0 - 21 m | RT 6544 | | | C | 2500 | 130 | 19.23 |
| 27 | PT 45 | 16 - 18 m | RT 6553 | 0.2 | 6 | | 220 | 36 | 6.11 |
| 28 | PT 45 | 0 - 24 m | RT 6557 | | | C | 830 | 60 | 13.83 |
| 29 | PT 46 | 8 - 21 m | RT 6569 | | | C | 380 | 42 | 9.05 |
| 30 | PT 47 | 10 - 21 m | RT 6581 | | | C | 910 | 60 | 15.17 |
| 31 | PT 48 | 16 - 24 m | RT 6595 | | | C | 310 | 36 | 8.61 |
| 32 | PT 49 | 10 - 21 m | RT 6607 | | | C | 770 | 64 | 12.03 |
| 33 | PT 50 | 28 - 30 m | RT 6622 | 1.0 | 6 | | 1040 | 80 | 13.00 |
| 34 | PT 50 | 30 - 32 m | RT 6623 | 1.0 | 8 | | 920 | 82 | 11.22 |
| 35 | PT 50 | 36 - 38 m | RT 6626 | 0.5 | 15 | | 1140 | 250 | 4.56 |
| 36 | PT 50 | 0 - 20 m | RT 6629 | | | C | 790 | 66 | 11.97 |
| 37 | PT 50 | 20 - 30 m | RT 6630 | | | C | 650 | 52 | 12.50 |
| 38 | PT 50 | 30 - 42 m | RT 6631 | | | C | 790 | 110 | 7.18 |
| 39 | PT 51 | 14 - 16 m | RT 6639 | 0.3 | 7 | | 600 | 44 | 13.64 |
| 40 | PT 51 | 16 - 18 m | RT 6640 | 0.3 | 9 | | 600 | 38 | 15.79 |
| 41 | PT 51 | 12 - 24 m | RT 6645 | | | C | 550 | 46 | 11.96 |
| 42 | PT 53 | 0 - 21 m | RT 6666 | | | C | 580 | 60 | 9.67 |
| 43 | PT 55 | 16 - 18 m | RT 6687 | 0.5 | 9 | | 500 | 44 | 11.36 |
| 44 | PT 55 | 10 - 24 m | RT 6692 | | | C | 660 | 56 | 11.79 |
| 45 | PT 56 | 16 - 18 m | RT 6701 | 0.2 | 7 | | 640 | 70 | 9.14 |
| 46 | PT 56 | 30 - 32 m | RT 6708 | 0.3 | 8 | | 1260 | 58 | 21.72 |
| 47 | PT 56 | 32 - 34 m | RT 6709 | 0.5 | 7 | | 1640 | 100 | 16.40 |
| 48 | PT 56 | 34 - 36 m | RT 6710 | 0.5 | | | 1340 | 68 | 19.71 |

PEPPER TREE DRILLING PROGRAMME
E.L. 1445, TRAVERSE NINE
ANALYSES AND COMPARISONS



| | SAMPLE INFORMATION | | | | | | COMLABS ANALYSES | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | HOLE No | DEPTH | SAMPLE | %HM | GAMMA (cps) | | Ti (ppm) | Zr (ppm) | Ti/Zr |
| 49 | PT 56 | 0 - 22 m | RT 6711 | | | C | 1100 | 74 | 14.86 |
| 50 | PT 56 | 22 - 36 m | RT 6712 | | | C | 1180 | 66 | 17.88 |
| 51 | PT 57 | 18 - 21 m | RT 6722 | 0.3 | 7 | | 700 | 48 | 14.58 |
| 52 | PT 58 | 18 - 21 m | RT 6733 | 0.3 | 4 | | 820 | 70 | 11.71 |
| 53 | PT 58 | 0 - 21 m | RT 6734 | | | C | 1020 | 74 | 13.78 |
| 54 | PT 59 | 22 - 24 m | RT 6746 | 0.5 | 7 | | 620 | 44 | 14.09 |
| 55 | PT 59 | 24 - 27 m | RT 6747 | 0.5 | 8 | | 830 | 58 | 14.31 |
| 56 | PT 59 | 0 - 11 m | RT 6748 | | | C | 1300 | 86 | 15.12 |
| 57 | PT 59 | 11 - 27 m | RT 6749 | | | C | 730 | 64 | 11.41 |
| 58 | PT 60 | 6 - 8 m | RT 6753 | 0.0 | 18 | | 930 | 76 | 12.24 |
| 59 | PT 60 | 26 - 28 m | RT 6763 | 0.5 | 14 | | 950 | 56 | 16.96 |
| 60 | PT 60 | 28 - 30 m | RT 6764 | 0.5 | 10 | | 870 | 54 | 16.11 |
| 61 | PT 60 | 36 - 38 m | RT 6768 | 0.5 | | | 1400 | 140 | 10.00 |
| 62 | PT 60 | 42 - 44 m | RT 6771 | 0.5 | | | 1800 | 105 | 17.14 |
| 63 | PT 60 | 46 - 48 m | RT 6773 | 0.5 | | | 4150 | 110 | 37.73 |
| 64 | PT 60 | 0 - 18 m | RT 6774 | | | C | 910 | 70 | 13.00 |
| 65 | PT 60 | 18 - 34 m | RT 6775 | | | C | 990 | 72 | 13.75 |
| 66 | PT 60 | 34 - 48 m | RT 6776 | | | C | 1780 | 135 | 13.19 |
| 67 | PT 61 | 10 - 24 m | RT 6790 | | | C | 1180 | 90 | 13.11 |
| 68 | PT 62 | 16 - 18 m | RT 6799 | 0.3 | 11 | | 1260 | 76 | 16.58 |
| 69 | PT 62 | 12 - 24 m | RT 6804 | | | C | 1000 | 92 | 10.87 |
| 70 | PT 64 | 18 - 21 m | RT 6825 | 0.0 | | | 530 | 46 | 11.52 |
| 71 | PT 65 | 8 - 21 m | RT 6831 | 0.2 | 6 | | 810 | 46 | 17.61 |
| 72 | PT 65 | 12 - 27 m | RT 6841 | | | C | 310 | 44 | 7.05 |
| 73 | PT 66 | 14 - 16 m | RT 6849 | 0.2 | 7 | | 340 | 42 | 8.10 |
| 74 | PT 67 | 14 - 16 m | RT 6860 | 0.2 | 5 | | 290 | 40 | 7.25 |
| 75 | PT 68 | 14 - 16 m | RT 6871 | 0.2 | 9 | | 1600 | 125 | 12.80 |
| 76 | PT 68 | 16 - 18 m | RT 6872 | 0.2 | 7 | | 820 | 54 | 15.19 |
| 77 | PT 68 | 22 - 24 m | RT 6880 | 0.2 | 4 | | 240 | 32 | 7.50 |
| 78 | PT 68 | 10 - 30 m | RT 6879 | | | C | 700 | 62 | 11.29 |
| 79 | PT 69 | 22 - 24 m | RT 6892 | 0.8 | 14 | | 540 | 88 | 6.14 |
| 80 | PT 69 | 24 - 26 m | RT 6893 | 0.5 | 14 | | 610 | 135 | 4.52 |
| 81 | PT 69 | 26 - 28 m | RT 6894 | 0.8 | 29 | | 6000 | 1020 | 5.88 |
| 82 | PT 69 | 28 - 30 m | RT 6895 | 0.8 | 15 | | 3050 | 260 | 11.73 |
| 83 | PT 69 | 0 - 20 m | RT 6904 | | | C | 620 | 48 | 12.92 |
| 84 | PT 69 | 30 - 45 m | RT 6905 | | | C | 1120 | 72 | 15.56 |
| 85 | PT 70 | 20 - 22 m | RT 6916 | 1.0 | 22 | | 3550 | 1060 | 3.35 |
| 86 | PT 70 | 22 - 24 m | RT 6917 | 1.0 | 10 | | 3600 | 650 | 5.54 |
| 87 | PT 70 | 20 - 30 m | RT 6922 | | | C | 2550 | 470 | 5.43 |
| 88 | PT 71 | 16 - 24 m | RT 6936 | | | C | 320 | 34 | 9.41 |
| 89 | PT 124 | 12 - 14 m | RT 7580 | 0.2 | 13 | | 1480 | 84 | 17.62 |
| 90 | PT 124 | 14 - 16 m | RT 7581 | 0.2 | 24 | | 2800 | 115 | 24.35 |
| 91 | PT 124 | 0 - 10 m | RT 7589 | | | C | 2050 | 105 | 19.52 |
| 92 | PT 124 | 10 - 30 m | RT 7590 | | | C | 470 | 48 | 9.79 |
| 93 | PT 126 | 18 - 24 m | RT 7619 | | | C | 730 | 46 | 15.87 |
| 94 | PT 128 | 12 - 14 m | RT 7634 | 0.5 | 3 | | 330 | 36 | 9.17 |
| 95 | PT 128 | 22 - 24 m | RT 7639 | 1.0 | 34 | | 2150 | 500 | 4.30 |
| 96 | PT 128 | 24 - 26 m | RT 7640 | 1.5 | 45 | | 1960 | 320 | 6.13 |
| 97 | PT 128 | 26 - 28 m | RT 7641 | 1.8 | 27 | | 1620 | 220 | 7.36 |
| 98 | PT 128 | 10 - 20 m | RT 7644 | | | C | 380 | 48 | 7.92 |
| 99 | PT 128 | 20 - 30 m | RT 7645 | | | C | 1460 | 260 | 5.62 |
| 100 | PT 129 | 0 - 21 m | RT 7656 | | | C | 480 | 40 | 12.00 |
| 101 | PT 130 | 10 - 24 m | RT 7670 | | | C | 430 | 46 | 9.35 |
| 102 | PT 131 | 16 - 18 m | RT 7679 | 0.2 | 10 | | 350 | 34 | 10.29 |
| 103 | PT 131 | 0 - 21 m | RT 7681 | | | C | 660 | 50 | 13.20 |
| 104 | PT 132 | 0 - 21 m | RT 7693 | | | C | 510 | 46 | 11.09 |
| 105 | PT 134 | 0 - 21 m | RT 7715 | | | C | 2300 | 94 | 24.47 |
| 106 | PT 138 | 0 21 m | RT 7759 | | | C | 5000 | 165 | 30.30 |

PEPPER TREE DRILLING PROGRAMME
E.L. 1445, TRAVERSE TEN
ANALYSES AND COMPARISONS

| | SAMPLE INFORMATION | | | | | COMLABS ANALYSES | | |
|---|---|---|---|---|---|---|---|---|
| | HOLE No | DEPTH | SAMPLE | %HM | GAMMA (cps) | Ti (ppm) | Zr (ppm) | Ti/Zr |
| 1 | PT 8 | 0 - 21 m | RT 6094 | | C | 1440 | 90 | 16.00 |
| 2 | PT 10 | 14 - 16 m | RT 6113 | 0.2 | | 560 | 38 | 14.74 |
| 3 | PT 11 | 16 - 18 m | RT 6125 * | 0.2 | | 2350 | 140 | 16.79 |
| 4 | PT 13 | 16 - 18 m | RT 6147 | 0.5 | | 1540 | 105 | 14.67 |
| 5 | PT 13 | 22 - 24 m | RT 6150 | 0.5 | | 750 | 60 | 12.50 |
| 6 | PT 13 | 0 - 24 m | RT 6151 | | C | 1560 | 84 | 18.57 |
| 7 | PT 14 | 8 - 10 m | RT 6156 | 0.2 | 8 | 600 | 54 | 11.11 |
| 8 | PT 14 | 14 - 16 m | RT 6159 | 0.5 | 9 | 600 | 48 | 12.50 |
| 9 | PT 14 | 20 - 22 m | RT 6162 | 0.3 | 11 | 690 | 46 | 15.00 |
| 10 | PT 14 | 0 - 24 m | RT 6164 | | C | 730 | 56 | 13.04 |
| 11 | PT 15 | 16 - 18 m | RT 6173 * | 0.2 | 40 | 2300 | 110 | 20.91 |
| 12 | PT 16 | 4 - 6 m | RT 6180 * | 1.0 | 24 | 3050 | 155 | 19.68 |
| 13 | PT 17 | 18 - 21 m | RT 6200 | 0.2 | 32 | 210 | 36 | 5.83 |
| 14 | PT 18 | 4 - 6 m | RT 6204 | 0.2 | 12 | 860 | 60 | 14.33 |
| 15 | PT 18 | 20 - 22 m | RT 6213 | 0.2 | 17 | 380 | 40 | 9.50 |
| 16 | PT 18 | 0 - 20 m | RT 6212 | | C | 620 | 46 | 13.48 |
| 17 | PT 19 | 10 - 12 m | RT 6227 | 0.5 | 9 | 410 | 42 | 9.76 |
| 18 | PT 19 | 28 - 30 m | RT 6236 | 0.2 | 61 | 330 | 34 | 9.71 |
| 19 | PT 19 | 0 - 20 m | RT 6237 | | C | 820 | 68 | 12.06 |
| 20 | PT 20 | 14 - 16 m | RT 6246 | 0.3 | 10 | 1000 | 68 | 14.71 |
| 21 | PT 24 | 2 - 4 m | RT 6286 | 0.0 | 23 | 810 | 50 | 16.20 |
| 22 | PT 25 | 0 - 21 m | RT 6306 | | C | 1280 | 84 | 15.24 |
| 23 | PT 26 | 0 - 2 m | RT 6307 | 0.2 | 25 | 1480 | 94 | 15.74 |
| 24 | PT 28 | 8 - 10 m | RT 6333 | 0.5 | 13 | 530 | 46 | 11.52 |
| 25 | PT 28 | 0 - 24 m | RT 6341 | | C | 1060 | 66 | 16.06 |
| 26 | PT 29 | 22 - 24 m | RT 6353 | 0.3 | 12 | 760 | 46 | 16.52 |
| 27 | PT 29 | 0 - 24 m | RT 6354 | | C | 1200 | 70 | 17.14 |
| 28 | PT 30 | 8 - 11 m | RT 6359 | 0.5 | 21 | 1280 | 84 | 15.24 |
| 29 | PT 30 | 14 - 16 m | RT 6362 | 0.5 | 10 | 260 | 36 | 7.22 |
| 30 | PT 30 | 18 - 20 m | RT 6364 | 1.0 | 14 | 320 | 36 | 8.89 |
| 31 | PT 30 | 0 - 24 m | RT 6367 | | C | 810 | 64 | 12.66 |
| 32 | PT 33 | 0 - 30 m | RT 6445 | | C | 500 | 46 | 10.87 |

PEPPER TREE DRILLING PROGRAMME
E.L 1445 TRAVERSE ELEVEN
ANALYSES AND COMPARISONS

| | SAMPLE INFORMATION | | | | | | COMLABS ANALYSES | | |
|---|---|---|---|---|---|---|---|---|---|
| | HOLE No | DEPTH | SAMPLE | %HM | GAMMA (cps) | | Ti (ppm) | Zr (ppm) | Ti/Zr |
| 1 | PT 72 | 28 - 30 m | RT 6951 | 1.0 | 35 | | 2700 | 450 | 6.00 |
| 2 | PT 72 | 30 - 32 m | RT 6952 | 1.0 | 16 | | 1380 | 115 | 12.00 |
| 3 | PT 72 | 36 - 38 m | RT 6955 | 1.0 | | | 1200 | 94 | 12.77 |
| 4 | PT 72 | 0 - 10 m | RT 6959 | | | C | 4400 | 140 | 31.43 |
| 5 | PT 72 | 10 - 28 m | RT 6960 | | | C | 520 | 46 | 11.30 |
| 6 | PT 72 | 28 - 45 m | RT 6961 | | | C | 1560 | 120 | 13.00 |
| 7 | PT 78 | 0 - 24 m | RT 7028 | | | C | 3100 | 120 | 25.83 |
| 8 | PT 81 | 22 - 24 m | RT 7057 | 0.2 | 6 | | 920 | 56 | 16.43 |
| 9 | PT 85 | 18 - 20 m | RT 7108 | 0.2 | 5 | | 390 | 50 | 7.80 |
| 10 | PT 85 | 18 - 24 m | RT 7112 | | | C | 270 | 34 | 7.94 |
| 11 | PT 88 | 16 - 18 m | RT 7142 | 0.2 | 4 | | 510 | 48 | 10.63 |
| 12 | PT 88 | 12 - 21 m | RT 7145 | | | C | 1120 | 64 | 17.50 |
| 13 | PT 89 | 8 - 16 m | RT 7156 | | | C | 360 | 40 | 9.00 |
| 14 | PT 90 | 12 - 21 m | RT 7168 | | | C | 430 | 40 | 10.75 |
| 15 | PT 93 | 18 - 21 m | RT 7200 | 0.0 | 40 | | 1780 | 340 | 5.24 |
| 16 | PT 94 | 30 - 32 m | RT 7217 | 0.2 | 5 | | 300 | 40 | 7.50 |
| 17 | PT 94 | 22 - 30 m | RT 7222 | | | C | 1000 | 74 | 13.51 |
| 18 | PT 94 | 30 - 39 m | RT 7223 | | | C | 260 | 34 | 7.65 |

PEPPER TREE DRILLING PROGRAMME
E.L. 1445, TRAVERSE TWELVE
ANALYSES AND COMPARISONS

| | SAMPLE INFORMATION | | | | | | COMLABS ANALYSES | | |
|---|---|---|---|---|---|---|---|---|---|
| | HOLE | No | DEPTH | SAMPLE | %HM | GAMMA (cps) | Ti (ppm) | Zr (ppm) | Ti/Zr |
| 1 | PT | 1 | 10 - 12 m | RT 6006 | 0.2 | 24 | 1260 | 115 | 10.96 |
| 2 | PT | 1 | 14 - 16 m | RT 6008 | 0.2 | 32 | 1120 | 82 | 13.66 |
| 3 | PT | 1 | 16 - 18 m | RT 6009 * | 0.5 | 54 | 2250 | 98 | 22.96 |
| 4 | PT | 2 | 12 - 14 m | RT 6018 * | 0.5 | 16 | 3250 | 140 | 23.21 |
| 5 | PT | 2 | 14 - 16 m | RT 6019 | 0.5 | 16 | 610 | 64 | 9.53 |
| 6 | PT | 3 | 4 - 6 m | RT 6025 | 0.2 | 10 | 1800 | 105 | 17.14 |
| 7 | PT | 3 | 18 - 20 m | RT 6032 | 0.2 | 5 | 270 | 40 | 6.75 |
| 8 | PT | 4 | 12 - 14 m | RT 6040 | 0.4 | 4 | 450 | 42 | 10.71 |
| 9 | PT | 5 | 8 - 10 m | RT 6049 | 0.8 | 4 | 930 | 62 | 15.00 |
| 10 | PT | 5 | 10 - 12 m | RT 6050 | 0.5 | 4 | 910 | 68 | 13.38 |
| 11 | PT | 5 | 0 - 21 m | RT 6055 | | C | 1380 | 82 | 16.83 |
| 12 | PT | 6 | 16 - 18 m | RT 6064 | 0.5 | 7 | 1860 | 170 | 10.94 |
| 13 | PT | 7 | 20 - 22 m | RT 6077 | 0.2 | 7 | 1140 | 58 | 19.66 |
| 14 | PT | 7 | 22 - 24 m | RT 6078 | 0.2 | 6 | 1040 | 50 | 20.80 |
| 15 | PT | 7 | 0 - 24 m | RT 6082 | | C | 830 | 56 | 14.82 |
| 16 | PT | 7 | 24 - 30 m | RT 6083 | | C | 1380 | 62 | 22.26 |
| 17 | PT | 98 | 14 - 16 m | RT 7266 | 0.5 | 22 | 1740 | 82 | 21.22 |
| 18 | PT | 100 | 18 - 24 m | RT 7296 | | C | 680 | 50 | 13.60 |
| 19 | PT | 102 | 8 - 20 m | RT 7324 | | C | 940 | 64 | 14.69 |
| 20 | PT | 102 | 20 - 30 m | RT 7325 | | C | 390 | 42 | 9.29 |
| 21 | PT | 103 | 14 - 16 m | RT 7333 | 0.2 | 7 | 560 | 145 | 3.86 |
| 22 | PT | 109 | 10 - 12 m | RT 7405 | 0.2 | 12 | 3750 | 105 | 35.71 |
| 23 | PT | 110 | 4 - 6 m | RT 7413 | 0.5 | 24 | 1900 | 98 | 19.39 |
| 24 | PT | 110 | 6 - 8 m | RT 7414 | 0.5 | 22 | 3150 | 115 | 27.39 |
| 25 | PT | 110 | 8 - 10 m | RT 7415 | 0.2 | 26 | 3300 | 110 | 30.00 |
| 26 | PT | 110 | 6 - 10 m | RT 7421 | | C | 2440 | 94 | 25.96 |
| 27 | PT | 113 | 6 - 14 m | RT 7455 | | C | 3950 | 110 | 35.91 |
| 28 | PT | 117 | 18 - 20 m | RT 7504 | 0.5 | 20 | 1680 | 94 | 17.87 |
| 29 | PT | 117 | 20 - 22 m | RT 7505 | 0.2 | 4 | 200 | 26 | 7.69 |
| 30 | PT | 117 | 22 - 24 m | RT 7506 | 0.2 | 6 | 300 | 36 | 8.33 |
| 31 | PT | 117 | 18 - 24 m | RT 7508 | | C | 480 | 46 | 10.43 |
| 32 | PT | 119 | 4 - 6 m | RT 7514 | 0.2 | 5 | 470 | 30 | 15.67 |
| 33 | PT | 119 | 10 - 12 m | RT 7517 | 0.0 | 6 | 140 | 24 | 5.83 |
| 34 | PT | 120 | 4 - 6 m | RT 7521 | 0.5 | 7 | 770 | 36 | 21.39 |
| 35 | PT | 120 | 6 - 8 m | RT 7522 | 0.5 | 9 | 660 | 28 | 23.57 |
| 36 | PT | 120 | 8 - 10 m | RT 7523 | 0.2 | 17 | 3200 | 190 | 16.84 |
| 37 | PT | 120 | 18 - 20 m | RT 7528 | 0.5 | 17 | 270 | 42 | 6.43 |
| 38 | PT | 120 | 20 - 22 m | RT 7529 | 0.2 | | 440 | 44 | 10.00 |
| 39 | PT | 120 | 0 - 16 m | RT 7533 | | C | 980 | 70 | 14.00 |
| 40 | PT | 120 | 16 - 27 m | RT 7534 | | C | 400 | 44 | 9.09 |
| 41 | PT | 121 | 8 - 10 m | RT 7539 | 0.0 | 12 | 1820 | 92 | 19.78 |
| 42 | PT | 121 | 0 - 14 m | RT 7547 | | C | 1880 | 100 | 18.80 |
| 43 | PT | 123 | 6 - 8 m | RT 7565 | 0.5 | 21 | 3400 | 125 | 27.20 |

# APPENDIX C

GEOLOGICAL LOGS

HOLES PT001 - PT139

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 17-AUG-88

HOLE NUMBER : PT0001
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 470797 NORTHING: 6266220 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log in rods



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6001 | Qdw | Sand | medium red brown | fine sand to medium sand well sorted | | | 0.0 | | |
| 2.0 | 4.0 | RT 6002 | Qdw | Sand silty | medium yellow brown | fine sand to medium sand well sorted | | | 0.0 | | |
| 4.0 | 6.0 | RT 6003 | Qdw | Sand silty | medium red brown | fine sand to medium sand well sorted | | | 0.0 | | |
| 6.0 | 8.0 | RT 6004 | Qdw | Sand silty | medium red brown | fine sand to medium sand well sorted | | | 0.0 | | |
| 8.0 | 10.0 | RT 6005 | Qdw | Sand silty | medium red brown | medium sand mod.well sorted | | | 0.0 | | |
| 10.0 | 12.0 | RT 6006 | Qdw | Sand silty | medium red brown | medium sand mod.well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6007 | Qdw | Sand silty | medium brown | silt to medium sand mod.well sorted | | | 0.0 | | |
| 14.0 | 16.0 | RT 6008 | Tps | Sand<br>Sandstone calcrt. ferrug. | medium brown | fine sand to v.crse sand mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6009 | Tps | Sand gritty | light brown | medium sand to granule poorly sorted | | | 0.2 light trace | | |
| 18.0 | 20.0 | RT 6010 | Tps | Sand gritty | light brown | medium sand to granule poorly sorted | | | 0.0 | | |
| 0.0 | 20.0 | RT 6011 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30
CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 17-AUG-88
HOLE NUMBER : PT0002
LOGGED BY : K.A.Grey
TOTAL DEPTH : 20.0
GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 469843 NORTHING: 6266260 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0
Comments: Gamma log in rods

SHEET 1 OF 1 HOLE NUMBER : PT0002

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6012 | Qdw | Sand<br>silty | light<br>red<br>brown | v.fine sand to<br>medium sand<br>mod.well sorted | | | 0.5<br>trace | | |
| 2.0 | 4.0 | RT 6013 | Qdw | Sand<br>silty<br>Clay | medium<br>red<br>brown | v.fine sand to<br>coarse sand<br>mod.well sorted | | weakly consol<br>Calcareous<br>friable | 0.2<br>light trace | | |
| 4.0 | 6.0 | RT 6014 | Qdw | Sand<br>silty<br>Clay | medium<br>red<br>brown | v.fine sand to<br>coarse sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 6.0 | 8.0 | RT 6015 | Qdw | Sand<br>silty | medium<br>red<br>brown | v.crse sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 8.0 | 10.0 | RT 6016 | Qdw | Sand<br>silty | light<br>brown | medium sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 10.0 | 12.0 | RT 6017 | Qdw | Clay<br>sandy | light<br>grey<br>brown | medium sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 12.0 | 14.0 | RT 6018 | Tps | Sand | medium<br>brown<br>grey | medium sand<br>well sorted<br>Comments: Tps at 13m | | | 0.5<br>trace | | |
| 14.0 | 16.0 | RT 6019 | Tps | Sand | medium<br>grey | fine sand to<br>medium sand<br>ext.well sorted | | | 0.5<br>trace | | |
| 16.0 | 18.0 | RT 6020 | Tps | Sand | medium<br>grey<br>yellow | fine sand to<br>medium sand<br>ext.well sorted | | | 0.2<br>light trace | | |
| 18.0 | 20.0 | RT 6021 | Tps | Sand | medium<br>grey<br>yellow | fine sand to<br>medium sand<br>ext.well sorted | | | 0.5<br>trace | | |
| 0.0 | 20.0 | RT 6022 | | Composite Sample | | | | | | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 17-AUG-88

HOLE NUMBER : PT0003
LOGGED BY : K.A.Grey
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 468800 NORTHING: 6266244 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log in rods



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6023 | Qdw | Silt | light red brown | medium sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 2.0 | 4.0 | RT 6024 | Qdw | Sand clayey | light red brown | fine sand to medium sand<br>mod.well sorted | | weakly consol Calcareous friable | 0.2<br>light trace | | |
| 4.0 | 6.0 | RT 6025 | Qdw | Sand clayey | light red brown | fine sand to medium sand<br>mod.well sorted | | weakly consol Calcareous friable | 0.2<br>light trace | | |
| 6.0 | 8.0 | RT 6026 | Tps | Sand | medium grey | medium sand<br>well sorted<br>Comments: Tps at 5.8m | | | 0.2<br>light trace | | |
| 8.0 | 10.0 | RT 6027 | Tps | Sand | medium grey | medium sand<br>well sorted | | | 0.2<br>light trace | | |
| 10.0 | 12.0 | RT 6028 | Tps | Sand | light brown grey | medium sand<br>well sorted | | | 0.5<br>trace | | |
| 12.0 | 14.0 | RT 6029 | Tps | Sand | light brown grey | medium sand to coarse sand<br>well sorted | | | 0.2<br>light trace | | |
| 14.0 | 16.0 | RT 6030 | Tps | Sand gritty | medium yellow orange | medium sand to v.crse sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 16.0 | 18.0 | RT 6031 | Tps | Sand gritty | medium red orange | v.crse sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 18.0 | 20.0 | RT 6032 | Tps | Sand | medium red | medium sand to v.crse sand<br>poorly sorted | | weakly consol | 0.2<br>light trace | | |
| 0.0 | 20.0 | RT 6033 | | Composite Sample | | | | | | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30
CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 17-AUG-88
HOLE NUMBER : PT0004
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0
GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 467753 NORTHING: 6266370 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0
Comments: Gamma log in rods

SHEET 1 OF 1 HOLE NUMBER : PT0004

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6034 | Qdw | Sand silty | light brown | coarse sand<br>mod.well sorted | | weakly consol Calcareous friable | 0.5<br>trace | | |
| 2.0 | 4.0 | RT 6035 | Qdw | Clay silty | light brown | fine sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 4.0 | 6.0 | RT 6036 | Qdw | Clay silty | light brown | fine sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 6.0 | 8.0 | RT 6037 | Qdw | Clay silty | light brown | fine sand<br>mod.well sorted<br>Comments: Tps at 7.5m | | | 0.2<br>light trace | | |
| 8.0 | 10.0 | RT 6038 | Tps | Sand silty | medium grey | medium sand<br>well sorted | | | 0.5<br>trace | | |
| 10.0 | 12.0 | RT 6039 | Tps | Sand | light brown yellow | medium sand to coarse sand<br>well sorted | | | 0.2<br>light trace | | |
| 12.0 | 14.0 | RT 6040 | Tps | Sand | medium grey | medium sand to coarse sand<br>ext.well sorted | | | 0.5<br>trace | | |
| 14.0 | 16.0 | RT 6041 | Tps | Sand gritty | medium grey | medium sand<br>well sorted | | | 0.2<br>light trace | | |
| 16.0 | 18.0 | RT 6042 | Tps | Sand | medium grey | fine sand to v.crse sand<br>well sorted | | | 0.2<br>light trace | Muscovite | |
| 18.0 | 21.0 | RT 6043 | Tps | Sand gritty | medium yellow | fine sand to v.crse sand<br>well sorted | | | 0.2<br>light trace | Muscovite | |
| 0.0 | 21.0 | RT 6044 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 17-AUG-88

HOLE NUMBER : PT0005
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 466730 NORTHING: 6266367 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log in rods



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6045 | Qdw | Sand clayey | light brown | fine sand to medium sand mod.well sorted | | weakly consol Calcareous friable | 0.5 trace | Iron oxide | |
| 2.0 | 4.0 | RT 6046 | Qdw | Sand clayey | medium brown | medium sand mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6047 | Qdw | Sand clayey | medium brown | medium sand mod.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6048 | Qdw | Sand gritty clayey | medium brown | v.fine sand to granule poorly sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6049 | Tps | Sand clayey | medium brown | fine sand to coarse sand mod.well sorted | | | 0.5 trace | | |
| 10.0 | 12.0 | RT 6050 | Tps | Sand clayey | medium brown | fine sand to coarse sand mod.well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6051 | Tps | Sand gritty clayey | medium yellow orange | medium sand poorly sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6052 | Tps | Sand clayey gritty | medium yellow orange | medium sand poorly sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6053 | Tps | Sand clayey gritty | medium yellow orange | medium sand poorly sorted | | | 0.2 light trace | | |
| 18.0 | 21.0 | RT 6054 | Tps | Sand gritty clayey | light brown orange | medium sand to granule mod.well sorted | | | 0.2 light trace | | |
| 0.0 | 21.0 | RT 6055 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30
GRID: AMG ZONE: 54 RELIABILITY: TOPO

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 17-AUG-88
EASTING: 465796 NORTHING: 6266410 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

HOLE NUMBER : PT0006
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

Comments: Gamma log in rods



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6056 | Qdw | Clay sandy silty Sand | light brown | v.fine sand mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6057 | Qdw | Clay | light grey brown | clay well sorted | | | 0.0 | | |
| 4.0 | 6.0 | RT 6058 | Qdw | Clay | light grey brown | clay well sorted | | | 0.0 | | |
| 6.0 | 8.0 | RT 6059 | Tps | Sand gritty | medium white grey | v.crse sand to granule mod.well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6060 | Tps | Sand gritty | medium white grey | v.crse sand to granule mod.well sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 6061 | Tps | Sand gritty | medium grey yellow | v.crse sand to granule mod.well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6062 | Tps | Sand silty | light yellow brown | fine sand to medium sand well sorted | | | 0.2 light trace | Muscovite | |
| 14.0 | 16.0 | RT 6063 | Tps | Sand silty gritty | light brown | fine sand to medium sand well sorted | | | 0.2 light trace | Muscovite | |
| 16.0 | 18.0 | RT 6064 | Tps | Sand | light brown yellow | fine sand well sorted | | | 0.5 trace | Muscovite | |
| 18.0 | 21.0 | RT 6065 | Tps | Sand clayey | light brown yellow | fine sand well sorted | | | 0.2 light trace | Muscovite | |
| 0.0 | 21.0 | RT 6066 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30
GRID: AMG ZONE: 54 RELIABILITY: TOPO

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 17-AUG-88
EASTING: 464693 NORTHING: 6266390 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0
Comments: Gamma log in rods

HOLE NUMBER : PT0007
LOGGED BY : K.A.Grey
TOTAL DEPTH : 30.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6067 | Qdw | Sand silty clayey | light brown | fine sand mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6068 | Qdw | Clay silty | light brown | clay ext.well sorted | | | 0.0 | | |
| 4.0 | 6.0 | RT 6069 | Qdw | Sand clayey | light brown | fine sand mod.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6070 | Tps | Sand gritty | medium yellow white | medium sand to granule mod.well sorted | rounded sub-spherical | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6071 | Tps | Sand gritty | medium yellow white | medium sand to granule mod.well sorted | rounded sub-spherical | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 6072 | Tps | Sand gritty | medium yellow orange | medium sand to granule mod.well sorted | rounded | | 0.2 light trace | Muscovite | |
| 12.0 | 14.0 | RT 6073 | Tps | Sand | light brown | medium sand to v.crse sand mod.well sorted | rounded | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6074 | Tps | Sand | light brown | medium sand to v.crse sand mod.well sorted | rounded | | 0.2 light trace | Muscovite | |
| 16.0 | 18.0 | RT 6075 | Tps | Sand | light brown | fine sand to medium sand well sorted | rounded | | 0.2 light trace | | |
| 18.0 | 20.0 | RT 6076 | Tps | Sand | light brown red | v.fine sand to fine sand well sorted | rounded | | 0.2 light trace | Muscovite | |
| 20.0 | 22.0 | RT 6077 | Tps | Sand | light red brown | v.fine sand to fine sand well sorted | | | 0.5 trace | Muscovite | |

SHEET 2 OF 2 HOLE NUMBER : PT0007

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.0 | 24.0 | RT 6078 | Tps | Sand | light red brown | v.fine sand to fine sand well sorted | | | 0.2 light trace | Muscovite | |
| 0.0 | 24.0 | RT 6082 | | Composite Sample | | | | | | | |
| 24.0 | 26.0 | RT 6079 | Tps | Sand | light red brown | v.fine sand to fine sand well sorted | | | 0.2 light trace | Muscovite | |
| 26.0 | 28.0 | RT 6080 | Tps | Sand clayey | light red brown | v.fine sand to fine sand well sorted | | | 0.2 light trace | Muscovite | |
| 28.0 | 30.0 | RT 6081 | Tps | Sand | medium yellow red | v.fine sand mod.well sorted | | | 0.2 light trace | | |
| 24.0 | 30.0 | RT 6083 | | Composite Sample | | | | | | | |

EOH at 30.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Parcoola 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 17-AUG-88

HOLE NUMBER : PT0008
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 446830 NORTHING: 6274860 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log in rods

SHEET 1 OF 1 HOLE NUMBER : PT0008

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6084 | Qdw | Sand clayey | light brown | medium sand mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6085 | Qdw | Sand clayey | light brown | medium sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6086 | Qdw | Sand clayey | light grey brown | fine sand to medium sand mod.well sorted | | | 0.0 | | |
| 6.0 | 8.0 | RT 6087 | Qdw | Sand clayey | light grey | medium sand to coarse sand mod.well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6088 | Qdw | Sand clayey | light brown grey | medium sand to coarse sand mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 10.0 | 12.0 | RT 6089 | Qdw | Sand | medium yellow | medium sand mod.well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6090 | Tps | Sand clayey | medium yellow | medium sand to coarse sand well sorted | | Calcareous | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6091 | Tps | Sand clayey Sandstone calcar. | light white brown | medium sand well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6092 | Tps | Sand clayey Sandstone calcar. | light white brown | medium sand well sorted | | | 0.2 light trace | | |
| 18.0 | 21.0 | RT 6093 | Tps | Sand clayey Sandstone calcar. | light white brown | medium sand well sorted | | | 0.0 | | |
| 0.0 | 21.0 | RT 6094 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Parcoola 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 17-AUG-88

HOLE NUMBER : PT0009
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 447829 NORTHING: 6274650 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log in rods

SHEET 1 OF 1 HOLE NUMBER : PT0009

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6095 | Qdw | Sand calcar. clayey | medium brown | fine sand mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6096 | Qdw | Sand clayey | medium red brown | medium sand to v.crse sand mod.well sorted | | | 0.0 | | |
| 4.0 | 6.0 | RT 6097 | Qdw | Sand clayey | light brown | medium sand mod.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6098 | Qdw | Sand clayey | light brown | fine sand to v.crse sand mod.well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6099 | Qdw | Sand clayey | light brown | medium sand to coarse sand ext.well sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 6100 | Qdw | Sand clayey | light brown | medium sand to coarse sand ext.well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6101 | Qdw | Sand clayey | light brown | medium sand to coarse sand ext.well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6102 | Qdw | Clay sandy | light brown | medium sand mod.well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6103 | Qdw | Clay sandy | light brown orange | clay well sorted | | | 0.0 | | |
| 18.0 | 21.0 | RT 6104 | Tps | Sand clayey | light brown orange | clay to medium sand mod.well sorted | | | 0.2 light trace | | |
| 0.0 | 21.0 | RT 6105 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Parcoola 1:100,000
JOB NO : T30
CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 18-AUG-88
HOLE NUMBER : PT0010
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0
GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 448792 NORTHING: 6274650 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0
Comments: Gamma log in rods

SHEET 1 OF 1 HOLE NUMBER : PT0010

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6106 | Qdw | Clay sandy | light brown | fine sand to medium sand poorly sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6107 | Qdw | Clay sandy | medium red brown | medium sand poorly sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6108 | Qdw | Clay sandy | medium red brown | medium sand mod.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6109 | Qdw | Clay sandy | medium red brown | fine sand mod.well sorted | | | 0.0 | | |
| 8.0 | 10.0 | RT 6110 | Qdw | Clay sandy | medium brown | medium sand mod.well sorted | | | 0.0 | | |
| 10.0 | 12.0 | RT 6111 | Qdw | Clay sandy | medium brown | fine sand poorly sorted | | | 0.0 | | |
| 12.0 | 14.0 | RT 6112 | Tps | Sand clayey | light brown | fine sand to medium sand well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6113 | Tps | Sand clayey | light brown | fine sand to medium sand well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6114 | Tps | Sand | light brown | fine sand to medium sand well sorted | | | 0.2 light trace | | |
| 18.0 | 21.0 | RT 6115 | Tps | Sand clayey | light brown | fine sand to medium sand well sorted | | | 0.2 light trace | | |
| 0.0 | 21.0 | RT 6116 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Parcoola 1:100,000
JOB NO : T30
GRID: AMG ZONE: 54 RELIABILITY: TOPO

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 18-AUG-88
EASTING: 449615 NORTHING: 6274630 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

HOLE NUMBER : PT0011
LOGGED BY : K.A.Grey
TOTAL DEPTH : 24.0

Comments: Gamma log in rods



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6117 | Qdw | Clay sandy | light red brown | medium sand to coarse sand mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6118 | Qdw | Clay sandy | light red brown | medium sand to coarse sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6119 | Qdw | Clay calcar. sandy | light red brown | medium sand to coarse sand mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6120 | Qdw | Clay sandy Sand calcar. clayey | light brown | medium sand mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6121 | Qdw | Sand clayey | light brown | medium sand mod.well sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 6122 | Qdw | Clay sandy | medium red brown | medium sand mod.well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6123 | Qdw | Clay sandy | medium red brown | medium sand mod.well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6124 | Qdw | Sand clayey | medium red brown | medium sand mod.well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6125 | Tps | Sand clayey | medium white grey | medium sand mod.well sorted | sub-angular | | 0.2 light trace | | |
| 18.0 | 20.0 | RT 6126 | Tps | Sand clayey | medium white grey | medium sand mod.well sorted | sub-angular | | 0.2 light trace | | |
| 20.0 | 22.0 | RT 6127 | Qdw | Clay sandy | medium brown | medium sand mod.well sorted | | | 0.2 light trace | | |

SHEET 2 OF 2 HOLE NUMBER : PT0011

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ STRENGTH | TYPE/ | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.0 | 24.0 | RT 6128 | Qdw | Clay sandy | medium brown | medium sand<br>mod.well sorted | | | | 0.2<br>light trace | | |
| 0.0 | 24.0 | RT 6129 | | Composite Sample | | | | | | | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Parcoola 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 18-AUG-88

HOLE NUMBER : PT0012
LOGGED BY : K.A.Grey
TOTAL DEPTH : 16.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 450728 NORTHING: 6274670 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6130 | Qdw | Clay sandy | light red brown | medium sand to coarse sand mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6131 | Qdw | Clay sandy | light red brown | medium sand to coarse sand mod.well sorted | | | 0.0 | | |
| 4.0 | 6.0 | RT 6132 | Qdw | Clay sandy | light brown | medium sand to coarse sand mod.well sorted | | | 0.0 | | |
| 6.0 | 8.0 | RT 6133 | Qdw | Clay sandy Sand | light brown | medium sand to coarse sand mod.well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6134 | Qdw | Clay | medium red brown | medium sand mod.well sorted | | | 0.0 | | |
| 10.0 | 12.0 | RT 6135 | Qdw | Sand clayey | medium red brown | medium sand mod.well sorted | | | 0.0 | | |
| 12.0 | 14.0 | RT 6136 | Qdw | Sand clayey | medium red brown | medium sand mod.well sorted | | | 0.0 | | |
| 14.0 | 16.0 | RT 6137 | Qdw | Sand clayey | light brown | medium sand mod.well sorted | | | 0.0 | | |
| 0.0 | 16.0 | RT 6138 | | Composite Sample | | | | | | | |

EOH at 16.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Parcoola 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 18-AUG-88

HOLE NUMBER : PT0013
LOGGED BY : K.A.Grey
TOTAL DEPTH : 24.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 451741 NORTHING: 6274650 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6139 | Qdw | Sand clayey | light brown | medium sand mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6140 | Qdw | Sand clayey | light red brown | medium sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6141 | Qdw | Clay sandy | medium brown | fine sand mod.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6142 | Qdw | Clay sandy | medium brown | coarse sand poorly sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6143 | Qdw | Clay | medium brown | clay well sorted | | | 0.0 | | |
| 10.0 | 12.0 | RT 6144 | Qdw | Clay sandy | medium brown | medium sand mod.well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6145 | Qdw | Clay sandy | medium brown | medium sand mod.well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6146 | Qdw | Clay sandy | light brown | fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6147 | Tps | Sand clayey Sandstone | light brown | medium sand mod.well sorted | | | 0.5 trace | | |
| 18.0 | 20.0 | RT 6148 | Tps | Sand clayey silty | light red brown | fine sand to medium sand well sorted | | | 0.2 light trace | | |
| 20.0 | 22.0 | RT 6149 | Tps | Sand clayey | light grey brown | medium sand well sorted | | | 0.2 light trace | | |

SHEET 2 OF 2 HOLE NUMBER : PT0013

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.0 | 24.0 | RT 6150 | Tps | Sand clayey | light grey brown | medium sand well sorted | | | 0.5 trace | | |
| 0.0 | 24.0 | RT 6151 | | Composite Sample | | | | | | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Parcoola 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 18-AUG-88

HOLE NUMBER : PT0014
LOGGED BY : K.A.Grey
TOTAL DEPTH : 24.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 452754 NORTHING: 6274660 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6152 | Qdw | Clay<br>sandy | light brown | medium sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 2.0 | 4.0 | RT 6153 | Qdw | Clay<br>sandy | light brown | medium sand<br>mod.well sorted | | | 0.0 | | |
| 4.0 | 6.0 | RT 6154 | Qdw | Clay<br>sandy | medium brown | medium sand<br>mod.well sorted | | | 0.0 | | |
| 6.0 | 8.0 | RT 6155 | Qdw | Clay<br>Sand<br>gritty | medium brown | granule<br>poorly sorted | sub-rounded<br>sub-spherical | | 0.2<br>light trace | | |
| 8.0 | 10.0 | RT 6156 | Qdw | Sand<br>gritty clayey | light brown | medium sand to<br>v.crse sand<br>mod.well sorted | sub-rounded<br>sub-spherical | | 0.2<br>light trace | | |
| 10.0 | 12.0 | RT 6157 | Qdw | Sand<br>clayey<br>Clay | medium brown | medium sand to<br>coarse sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 12.0 | 14.0 | RT 6158 | Qdw | Sand<br>clayey | light brown grey | v.crse sand to<br>granule<br>mod.well sorted | | | 0.2<br>light trace | | |
| 14.0 | 16.0 | RT 6159 | Tps | Sand<br>clayey | medium grey | v.fine sand to<br>v.crse sand<br>well sorted | | | 1.0<br>Good trace | Muscovite | |
| 16.0 | 18.0 | RT 6160 | Tps | Sand | light brown | fine sand to<br>v.crse sand<br>mod.well sorted | | | 0.2<br>light trace | Muscovite | |
| 18.0 | 20.0 | RT 6161 | Tps | Sand<br>clayey | light brown | medium sand to<br>v.crse sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 20.0 | 22.0 | RT 6162 | Tps | Sand<br>clayey | light brown | medium sand to<br>coarse sand<br>mod.well sorted | | | 0.2<br>light trace | Muscovite | |

SHEET 2 OF 2 HOLE NUMBER : PT0014

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.0 | 24.0 | RT 6163 | Tps | Sand clayey | medium yellow brown | medium sand to coarse sand mod.well sorted | | | 0.2 light trace | Muscovite | |
| 0.0 | 24.0 | RT 6164 | | Composite Sample | | | | | | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 18-AUG-88

HOLE NUMBER : PT0015
LOGGED BY : K.A.Grey
TOTAL DEPTH : 24.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 453746 NORTHING: 6274700 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ STRENGTH | TYPE/ | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6165 | Qdw | Sand | light brown | fine sand well sorted | | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6166 | Qdw | Sand | medium red brown | fine sand to medium sand well sorted | | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6167 | Qdw | Sand | light brown | fine sand well sorted | | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6168 | Qdw | Sand | pale brown | fine sand well sorted | | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6169 | Qdw | Sand | medium red brown | fine sand to medium sand mod.well sorted | | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 6170 | Qdw | Sand clayey | medium red | medium sand to coarse sand poorly sorted | | | | 0.0 | | |
| 12.0 | 14.0 | RT 6171 | Qdw | Clay gritty | medium red brown | medium sand mod.well sorted | | | | 0.0 | | |
| 14.0 | 16.0 | RT 6172 | Qdw | Clay | medium red brown | medium sand to coarse sand mod.well sorted | | | | 0.0 | | |
| 16.0 | 18.0 | RT 6173 | Tps | Sand gritty clayey | medium white | medium sand mod.well sorted | | | | 0.2 light trace | | |
| 18.0 | 20.0 | RT 6174 | Tps | Sand | medium red white | coarse sand mod.well sorted | | | | 0.2 light trace | | |
| 20.0 | 22.0 | RT 6175 | Tps | Sand gritty clayey | medium white red | coarse sand mod.well sorted | | | | 0.0 | | |

SHEET 2 OF 2 HOLE NUMBER : PT0015

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.0 | 24.0 | RT 6176 | Tps | Sand gritty clayey | medium white red | coarse sand to granule mod.well sorted | sub-rounded | | 0.0 | | |
| 10.0 | 24.0 | RT 6177 | | Composite Sample | | | | | | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30
CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 18-AUG-88
HOLE NUMBER : PT0016
LOGGED BY : K.A.Grey
TOTAL DEPTH : 24.0
GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 454731 NORTHING: 6274630 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0
Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6178 | Qdw | Sand | medium red brown | fine sand to medium sand mod.well sorted | | | 0.0 | | |
| 2.0 | 4.0 | RT 6179 | Qdw | Clay gritty | medium red brown | fine sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6180 | Qdw | Sand clayey | medium red brown | fine sand well sorted | | | 1.0 Good trace | | |
| 6.0 | 8.0 | RT 6181 | Tps | Sand clayey | medium red brown | medium sand to coarse sand poorly sorted | | | 0.0 | | |
| 8.0 | 10.0 | RT 6182 | Tps | Sand calcrt. gritty | medium brown | medium sand to granule mod.well sorted | sub-rounded sub-spherical | consolidated friable | 0.0 | | |
| 10.0 | 12.0 | RT 6183 | Tps | Sand | medium red brown | medium sand to coarse sand well sorted | | | 0.0 | | |
| 12.0 | 14.0 | RT 6184 | Tps | Sand Sand quartz. | medium white | coarse sand to granule well sorted | sub-rounded | | 0.0 | | |
| 14.0 | 16.0 | RT 6185 | Tps | Sand Sand quartz. | pale white yellow | coarse sand to v.crse sand well sorted | sub-rounded | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6186 | Tps | Sand quartz. | medium yellow | medium sand to coarse sand mod.well sorted | | | 0.2 light trace | | |
| 18.0 | 20.0 | RT 6187 | Tps | Sand quartz. | pale yellow | fine sand to medium sand poorly sorted | | | 0.2 light trace | | |
| 20.0 | 22.0 | RT 6188 | Tps | Sand quartz. | medium white | fine sand to medium sand well sorted | | | 0.0 | | |

SHEET 2 OF 2 HOLE NUMBER : PT0016

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.0 | 24.0 | RT 6189 | Tps | Sand quartz. | medium yellow | fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 0.0 | 24.0 | RT 6190 | | Composite Sample | | | | | | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 19-AUG-88

HOLE NUMBER : PT0017
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 455726 NORTHING: 6274598 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole

SHEET 1 OF 1 HOLE NUMBER : PT0017

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6191 | Qdw | Clay sandy | medium red brown | medium sand mod.well sorted | | | 0.0 | | |
| 2.0 | 4.0 | RT 6192 | Qdw | Clay silty | medium red brown | fine sand mod.well sorted | | weakly consol Calcareous friable | 0.0 | | |
| 4.0 | 6.0 | RT 6193 | Qdw | Clay sandy | medium red brown | silt to fine sand mod.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6194 | Qdw | Clay sandy | medium red brown | medium sand mod.well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6195 | Qdw | Clay sandy | medium red brown | medium sand mod.well sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 6196 | Tps | Sand | light brown | medium sand to v.crse sand mod.well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6197 | Tps | Sand calcrt. | medium grey white | medium sand to v.crse sand mod.well sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6198 | Tps | Sand calcrt. | medium grey white | coarse sand to v.crse sand mod.well sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6199 | Tps | Sand calcrt. | medium white yellow | coarse sand to v.crse sand mod.well sorted | rounded sub-spherical | | 0.2 light trace | | |
| 18.0 | 21.0 | RT 6200 | Tps | Sand calcrt. | medium white yellow | coarse sand to v.crse sand mod.well sorted | rounded sub-spherical | | 0.2 light trace | | |
| 0.0 | 21.0 | RT 6201 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 19-AUG-88

HOLE NUMBER : PT0018
LOGGED BY : K.A.Grey
TOTAL DEPTH : 36.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 456719 NORTHING: 6274610 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6202 | Qdw | Sand clayey | medium brown | medium sand to coarse sand mod.well sorted | sub-rounded | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6203 | Tps | Sand clayey | medium brown | clay to fine sand mod.well sorted | | | 0.2 light trace | | |
| | | | | | | Comments: Tps at 2.4m | | | | | |
| 4.0 | 6.0 | RT 6204 | Tps | Sand gritty clayey | light brown | medium sand to coarse sand mod.well sorted | | | 0.5 trace | | |
| 6.0 | 8.0 | RT 6205 | Tps | Sand clayey | light grey | fine sand to v.crse sand mod.well sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6206 | Tps | Sand clayey | light brown | granule mod.well sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 6207 | Tps | Sand silty | light brown | fine sand to v.crse sand mod.well sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6208 | Tps | Sand | medium yellow brown | fine sand to medium sand well sorted | sub-spherical | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6209 | Tps | Sand | medium yellow brown | fine sand to v.crse sand well sorted | sub-spherical | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6210 | Tps | Sand clayey | medium red brown | fine sand to coarse sand well sorted | | | 0.2 light trace | | |
| 18.0 | 20.0 | RT 6211 | Tps | Sand | medium yellow brown | fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 0.0 | 20.0 | RT 6212 | | Composite Sample | | | | | | | |

0069

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.0 | 22.0 | RT 6213 | Tps | Sand | medium yellow brown | fine sand to medium sand well sorted | | | 0.5 trace | | |
| 22.0 | 24.0 | RT 6214 | Tps | Sand | medium yellow brown | fine sand to medium sand well sorted | | | 0.2 light trace | | |
| 24.0 | 26.0 | RT 6215 | Tps | Sand | medium yellow brown | fine sand to medium sand well sorted | | | 0.2 light trace | | |
| 26.0 | 28.0 | RT 6216 | Tps | Sand | medium yellow brown | fine sand to medium sand well sorted | | | 0.2 light trace | | |
| 28.0 | 30.0 | RT 6217 | Tps | Sand clayey | light brown | fine sand to medium sand ext.well sorted | sub-spherical | | 0.2 light trace | | |
| 30.0 | 32.0 | RT 6218 | Tps | Sand clayey | light brown | fine sand to coarse sand ext.well sorted | sub-spherical | | 0.2 light trace | | |
| 32.0 | 34.0 | RT 6219 | Tps | Sand clayey | light brown | fine sand to medium sand ext.well sorted | sub-spherical | | 0.2 light trace | | |
| 34.0 | 36.0 | RT 6220 | Tps | Sand clayey | light brown | fine sand to medium sand well sorted | sub-spherical | | 0.2 light trace | | |
| 20.0 | 36.0 | RT 6221 | | Composite Sample | | | | | | | |

EOH at 36.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 19-AUG-88

HOLE NUMBER : PT0019
LOGGED BY : K.A.Grey
TOTAL DEPTH : 30.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 457602 NORTHING: 6274940 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6222 | Qdw | Clay sandy | medium red brown | medium sand mod.well sorted | | | 0.0 | | |
| 2.0 | 4.0 | RT 6223 | Qdw | Sand clayey | medium red brown | medium sand mod.well sorted | | | 0.0 | | |
| 4.0 | 6.0 | RT 6224 | Tps | Sand clayey | medium brown | medium sand well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6225 | Tps | Sand clayey | light brown | medium sand well sorted | sub-rounded | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6226 | Tps | Sand clayey Sandstone | light brown yellow | medium sand ext.well sorted | sub-rounded | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 6227 | Tps | Sand | medium grey | fine sand to v.crse sand mod.well sorted | sub-rounded | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6228 | Tps | Sand | medium grey white | medium sand to v.crse sand mod.well sorted | sub-rounded | | 0.5 trace | | |
| 14.0 | 16.0 | RT 6229 | Tps | Sand quartz. | medium white | medium sand to coarse sand ext.well sorted | sub-spherical | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6230 | Tps | Sand gritty | light brown white | coarse sand to v.crse sand mod.well sorted | | | 0.2 light trace | | |
| 18.0 | 20.0 | RT 6231 | Tps | Sand | light brown | medium sand to coarse sand well sorted | sub-rounded | | 0.2 light trace | | |
| 0.0 | 20.0 | RT 6237 | | Composite Sample | | | | | | | |

SHEET 2 OF 2 HOLE NUMBER : PT0019

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.0 | 22.0 | RT 6232 | Tps | Sand | medium white brown | medium sand to coarse sand well sorted | sub-rounded | | 0.2 light trace | | |
| 22.0 | 24.0 | RT 6233 | Tps | Sand clayey | light brown | fine sand to v.crse sand mod.well sorted | | | 0.2 light trace | | |
| 24.0 | 27.0 | RT 6234 | Tps | Sand clayey | light brown | fine sand to coarse sand mod.well sorted | | | 0.2 light trace | | |
| 27.0 | 28.0 | RT 6235 | Tps | Sand clayey | light brown grey | fine sand to v.crse sand mod.well sorted | | | 0.2 light trace | | |
| 28.0 | 30.0 | RT 6236 | Tps | Sand clayey | light brown grey | fine sand to v.crse sand mod.well sorted | | | 0.2 light trace | | |
| 20.0 | 30.0 | RT 6238 | | Composite Sample | | | | | | | |

EOH at 30.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30
CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 19-AUG-88
HOLE NUMBER : PT0020
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0
GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 458430 NORTHING: 6275460 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0
Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6239 | Qdw | Clay sandy | light brown | v.fine sand to fine sand mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6240 | Qdw | Clay sandy | medium red brown | v.fine sand to fine sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6241 | Qdw | Clay sandy | medium red brown | v.fine sand to fine sand mod.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6242 | Qdw | Clay sandy | medium red brown | v.fine sand to fine sand mod.well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6243 | Qdw | Clay sandy | medium brown | v.fine sand to fine sand mod.well sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 6244 | Qdw | Clay sandy | medium brown | v.fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6245 | Qdw | Clay sandy | medium brown | v.fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6246 | Tps | Sand | light grey brown | fine sand to coarse sand mod.well sorted Comments: Tps at 15m | sub-angular | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6247 | Tps | Sand | light grey brown | medium sand to coarse sand well sorted | sub-rounded | | 0.2 light trace | | |
| 18.0 | 21.0 | RT 6248 | Tps | Sand clayey | light brown | medium sand to v.crse sand well sorted | sub-angular | | 0.2 light trace | | |
| 0.0 | 21.0 | RT 6249 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 19-AUG-88

HOLE NUMBER : PT0021
LOGGED BY : K.A.Grey
TOTAL DEPTH : 24.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 459353 NORTHING: 6275830 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6250 | Qdw | Clay sandy | light brown | fine sand<br>mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6251 | Qdw | Clay sandy | medium red brown | medium sand<br>mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6252 | Qdw | Clay sandy | medium red brown | v.fine sand to fine sand<br>mod.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6253 | Qdw | Clay sandy | medium red brown | medium sand<br>mod.well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6254 | Qdw | Clay sandy | medium red brown | medium sand<br>mod.well sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 6255 | Qdw | Sand clayey silty | medium red brown | medium sand<br>mod.well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6256 | Qdw | Sand clayey silty | medium red brown | medium sand<br>mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6257 | Tps | Sand clayey | medium red brown | fine sand to coarse sand<br>well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6258 | Tps | Sand clayey | medium red brown | medium sand<br>mod.well sorted | sub-angular sub-spherical | | 0.2 light trace | | |
| 18.0 | 20.0 | RT 6259 | Tps | Sand gritty clayey | medium red brown | medium sand<br>mod.well sorted | sub-angular sub-spherical | | 0.2 light trace | | |
| 20.0 | 22.0 | RT 6260 | Tps | Sand clayey gritty | medium brown | medium sand<br>mod.well sorted | sub-rounded sub-spherical | | 0.2 light trace | | |

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 19-AUG-88

HOLE NUMBER : PT0022
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 460286 NORTHING: 6275450 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6263 | Qdw | Sand silty | light brown | v.fine sand to fine sand mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6264 | Qdw | Sand silty | light brown | v.fine sand to fine sand mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6265 | Qdw | Sand silty | light brown | v.fine sand to fine sand mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6266 | Qdw | Sand clayey silty | light brown red | fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6267 | Qdw | Clay sandy | medium red brown | medium sand mod.well sorted | sub-angular | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 6268 | Qdw | Clay sandy | medium red brown | medium sand mod.well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6269 | Qdw | Clay sandy | medium brown | v.fine sand to fine sand mod.well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6270 | Qdw | Sand clayey | medium brown | fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6271 | Tps | Sand clayey | light brown white | medium sand mod.well sorted | | | 0.2 light trace | | |
| 18.0 | 21.0 | RT 6272 | Tps | Sand clayey | light brown | medium sand to v.crse sand mod.well sorted | Comments: Tps at 17m | | 0.2 light trace | | |
| 0.0 | 21.0 | RT 6273 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 19-AUG-88

HOLE NUMBER : PT0023
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 461251 NORTHING: 6275740 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ STRENGTH/ TYPE | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6274 | Qdw | Clay sandy | light brown | v.fine sand to fine sand mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6275 | Qdw | Clay sandy<br>Clay calcrt. | medium brown<br>grey | v.fine sand to fine sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6276 | Qdw | Clay sandy<br>Clay calcrt. | medium brown<br>grey | fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6277 | Qdw | Sand clayey | medium brown | medium sand mod.well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6278 | Qdw | Sand clayey | light brown | fine sand to medium sand well sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 6279 | Qdw | Sand clayey | light brown | fine sand to medium sand well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6280 | Tps | Sand clayey<br>Clay | light brown | fine sand to medium sand well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6281 | Tps | Sand<br>Clay | light brown | fine sand to medium sand ext.well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6282 | Tps | Sand clayey gritty | light white grey | coarse sand to v.crse sand ext.well sorted | | | 0.5 trace | | |
| 18.0 | 21.0 | RT 6283 | Tps | Sand gritty | light brown | granule mod.well sorted | | | 0.2 light trace | | |
| 0.0 | 21.0 | RT 6284 | | Composite Sample | | | | | | | |

EOH at 21.0 m

SHEET 2 OF 2 HOLE NUMBER : PT0021

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.0 | 24.0 | RT 6261 | Tps | Sand clayey gritty | light brown | medium sand mod.well sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 0.0 | 24.0 | RT 6262 | | Composite Sample | | | | | | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 19-AUG-88

HOLE NUMBER : PT0024
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 462186 NORTHING: 6276057 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6285 | Qdw | Clay gritty sandy | light brown red | v.fine sand poorly sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6286 | Qdw | Sand clayey | medium brown | v.crse sand mod.well sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6287 | Qdw | Sand gritty | medium brown grey | coarse sand ext.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6288 | Tps | Sand | medium grey | Comments: Tps at 5.4m medium sand to v.crse sand ext.well sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6289 | Tps | Sand clayey | medium grey | medium sand to v.crse sand ext.well sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 6290 | Tps | Sand gritty clayey | light grey brown | medium sand to v.crse sand ext.well sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6291 | Tps | Sand gritty clayey | light grey brown | v.crse sand to granule ext.well sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6292 | Tps | Sand gritty clayey | light grey brown | v.crse sand to granule ext.well sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6293 | Tps | Sand gritty clayey | light grey brown | medium sand to granule ext.well sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 18.0 | 21.0 | RT 6294 | Tps | Sand gritty clayey | light yellow brown | fine sand to v.crse sand ext.well sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 0.0 | 21.0 | RT 6295 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30
CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 19-AUG-88
HOLE NUMBER : PT0025
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0
GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 463201 NORTHING: 6276350 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0
Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6296 | Qdw | Sand silty clayey | medium red brown | fine sand to medium sand poorly sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6297 | Qdw | Sand clayey | medium red brown | v.fine sand to fine sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6298 | Qdw | Silt clayey Sand | medium red brown | v.fine sand to fine sand mod.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6299 | Qdw | Sand clayey | medium brown | fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6300 | Qdw | Sand clayey | medium brown | fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 6301 | Qdw | Sand silty | medium brown | fine sand to coarse sand mod.well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6302 | Tps | Sand silty clayey | light brown | medium sand to v.crse sand ext.well sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6303 | Tps | Sand gritty silty | light brown | medium sand to v.crse sand ext.well sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6304 | Tps | Sand gritty silty | light brown | medium sand to granule ext.well sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 18.0 | 21.0 | RT 6305 | Tps | Sand gritty | light brown | medium sand mod.well sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 0.0 | 21.0 | RT 6306 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 19-AUG-88

HOLE NUMBER : PT0026
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 464115 NORTHING: 6276640 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6307 | Qdw | Sand clayey | medium brown | v.fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6308 | Qdw | Clay sandy | medium brown | v.fine sand to fine sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6309 | Qdw | Clay sandy | medium red brown | fine sand mod.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6310 | Qdw | Clay sandy | medium red brown | fine sand mod.well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6311 | Qdw | Sand clayey silty | light brown | v.fine sand to coarse sand mod.well sorted | sub-rounded | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 6312 | Tps | Sand clayey | light brown | fine sand to medium sand well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6313 | Tps | Sand clayey | light brown | fine sand to medium sand well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6314 | Tps | Sand clayey | light brown | fine sand to medium sand well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6315 | Tps | Sand clayey | light grey brown | fine sand to medium sand well sorted | | | 0.2 light trace | | |
| 18.0 | 21.0 | RT 6316 | Tps | Sand | medium brown | fine sand to v.crse sand well sorted | | | 0.2 light trace | | |
| 0.0 | 21.0 | RT 6317 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 19-AUG-88

HOLE NUMBER : PT0027
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 465000 NORTHING: 6276950 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6318 | Qdw | Silt | light brown | v.fine sand to | | | 0.2 | | |
| | | | | Sand clayey | grey | fine sand mod.well sorted | | | light trace | | |
| 2.0 | 4.0 | RT 6319 | Qdw | Clay sandy | light brown grey | v.fine sand to fine sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6320 | Qdw | Clay sandy | light brown grey | v.fine sand to fine sand mod.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6321 | Qdw | Sand clayey | medium red brown | v.fine sand to medium sand well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6322 | Qdw | Sand clayey | medium red brown | v.fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 6323 | Qdw | Clay sandy | medium red brown | medium sand mod.well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6324 | Qdw | Clay sandy | medium red brown | medium sand mod.well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6325 | Qdw | Sand clayey | medium red brown | medium sand well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6326 | Tps | Sand clayey | light brown yellow | medium sand ext.well sorted | | | 0.2 light trace | | |
| 18.0 | 21.0 | RT 6327 | Tps | Sand clayey | light brown grey | v.fine sand to medium sand ext.well sorted | | | 0.2 light trace | | |
| 0.0 | 21.0 | RT 6328 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 19-AUG-88

HOLE NUMBER : PT0028
LOGGED BY : K.A.Grey
TOTAL DEPTH : 24.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 466022 NORTHING: 6277360 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6329 | Qdw | Clay<br>sandy | light brown | fine sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 2.0 | 4.0 | RT 6330 | Qdw | Clay<br>sandy | medium red brown | fine sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 4.0 | 6.0 | RT 6331 | Qdw | Sand<br>clayey | light brown | fine sand to medium sand<br>well sorted<br>Comments: Tps at 5.5m | | | 0.2<br>light trace | | |
| 6.0 | 8.0 | RT 6332 | Tps | Sand<br>clayey | light brown yellow | fine sand to coarse sand<br>ext.well sorted | sub-rounded | | 0.2<br>light trace | | |
| 8.0 | 10.0 | RT 6333 | Tps | Sand<br>clayey | light brown grey | fine sand to coarse sand<br>ext.well sorted | sub-rounded | | 0.5<br>trace | | |
| 10.0 | 12.0 | RT 6334 | Tps | Sand<br>gritty<br>Clay | light brown | v.fine sand to granule<br>mod.well sorted | | | 0.2<br>light trace | | |
| 12.0 | 14.0 | RT 6335 | Tps | Sand<br>clayey gritty<br>Clay | light brown | v.fine sand to granule<br>mod.well sorted | | | 0.2<br>light trace | | |
| 14.0 | 16.0 | RT 6336 | Tps | Sand<br>clayey | light brown | fine sand to granule<br>mod.well sorted | sub-rounded<br>sub-elongate | | 0.2<br>light trace | | |
| 16.0 | 18.0 | RT 6337 | Tps | Sand<br>clayey gritty | light brown yellow | fine sand to coarse sand<br>mod.well sorted | | | 0.5<br>trace | | |
| 18.0 | 20.0 | RT 6338 | Tps | Sand<br>clayey gritty | light brown yellow | coarse sand to granule<br>mod.well sorted | | | 0.5<br>trace | | |
| 20.0 | 22.0 | RT 6339 | Tps | Sand<br>gritty clayey | light brown grey | medium sand<br>mod.well sorted<br>Comments: Clay 21-22m | | | 0.2<br>light trace | | |

SHEET 2 OF 2 HOLE NUMBER : PT0028

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.0 | 24.0 | RT 6340 | Tps | Sand clayey | medium brown | coarse sand to granule poorly sorted | sub-rounded | | 0.5 trace | | |
| 0.0 | 24.0 | RT 6341 | | Composite Sample | | | | | | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 20-AUG-88

HOLE NUMBER : PT0029
LOGGED BY : K.A.Grey
TOTAL DEPTH : 24.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 466943 NORTHING: 6277770 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6342 | Qdw | Clay silty | medium red brown | v.fine sand mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6343 | Qdw | Sand clayey | medium red brown | v.fine sand to fine sand mod.well sorted | sub-rounded sub-elongate | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6344 | Qdw | Sand clayey | medium red brown | v.fine sand to fine sand mod.well sorted | sub-rounded sub-elongate | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6345 | Qdw | Sand clayey | medium brown | v.fine sand to medium sand mod.well sorted | sub-angular sub-elongate | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6346 | Qdw | Sand clayey Clay calcrt. | medium brown | v.fine sand to medium sand mod.well sorted | sub-angular sub-elongate | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 6347 | Tps | Clay sandy | light brown | fine sand poorly sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6348 | Tps | Sand gritty clayey | light brown grey | coarse sand to granule mod.well sorted | sub-rounded sub-elongate | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6349 | Tps | Sand gritty clayey | light brown grey | v.crse sand to granule mod.well sorted | sub-rounded sub-elongate | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6350 | Tps | Sand gritty clayey | light brown grey | v.crse sand to granule mod.well sorted | sub-rounded sub-elongate | | 0.2 light trace | | |
| 18.0 | 20.0 | RT 6351 | Tps | Sand gritty clayey | light grey brown | coarse sand to granule mod.well sorted | sub-rounded sub-elongate | | 0.2 light trace | | |
| 20.0 | 22.0 | RT 6352 | Tps | Sand gritty | light grey brown | fine sand to coarse sand ext.well sorted | sub-rounded sub-elongate | | 0.2 light trace | | |

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.0 | 24.0 | RT 6353 | Tps | Sand<br>gritty | light grey brown | fine sand to coarse sand<br>ext.well sorted | sub-rounded<br>sub-elongate | | 0.5<br>trace | | |
| 0.0 | 24.0 | RT 6354 | | Composite Sample | | | | | | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 20-AUG-88

HOLE NUMBER : PT0030
LOGGED BY : K.A.Grey
TOTAL DEPTH : 24.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 467836 NORTHING: 6278150 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6355 | Qdw | Sand clayey | medium red brown | medium sand mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6356 | Qdw | Sand clayey | medium red brown | medium sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6357 | Qdw | Sand clayey | medium red brown | medium sand mod.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6358 | Qdw | Sand Clay | light brown | v.fine sand to medium sand well sorted | sub-rounded | | 0.2 light trace | | |
| 8.0 | 11.0 | RT 6359 | Qdw | Sand Clay | light brown | medium sand to coarse sand well sorted | sub-angular | | 0.5 trace | | |
| 11.0 | 12.0 | RT 6360 | Tps | Sand Clay | light brown | Comments: Tps at 10m medium sand to coarse sand ext.well sorted | sub-angular | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6361 | Tps | Sand clayey | light brown grey | medium sand to coarse sand well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6362 | Tps | Sand clayey | medium white grey | medium sand to coarse sand ext.well sorted | | | 0.5 trace | | |
| 16.0 | 18.0 | RT 6363 | Tps | Sand clayey | medium white grey | medium sand to coarse sand ext.well sorted | | | 0.5 trace | | |
| 18.0 | 20.0 | RT 6364 | Tps | Sand clayey | medium white grey | medium sand to coarse sand ext.well sorted | | | 0.5 trace | | |
| 20.0 | 22.0 | RT 6365 | Tps | Sand clayey | medium white grey | medium sand to coarse sand ext.well sorted | sub-rounded | | 0.2 light trace | | |

SHEET 2 OF 2 HOLE NUMBER : PT0030

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.0 | 24.0 | RT 6366 | Tps | Sand clayey | medium grey | v.crse sand to granule mod.well sorted | sub-angular sub-elongate | | 0.2 light trace | | |
| 0.0 | 24.0 | RT 6367 | | Composite Sample | | | | | | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 20-AUG-88

HOLE NUMBER : PT0031
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 468718 NORTHING: 6278510 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ STRENGTH / TYPE/ | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6368 | Qdw | Clay<br>sandy | light brown | v.fine sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 2.0 | 4.0 | RT 6369 | Qdw | Clay<br>sandy | light brown | v.fine sand to medium sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 4.0 | 6.0 | RT 6370 | Qdw | Clay<br>sandy | medium red brown | medium sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 6.0 | 8.0 | RT 6371 | Qdw | Clay<br>sandy | medium red brown | fine sand to medium sand<br>mod.well sorted | sub-angular | | 0.2<br>light trace | | |
| 8.0 | 10.0 | RT 6372 | Qdw | Clay<br>sandy | medium red brown | medium sand<br>well sorted | sub-rounded sub-spherical | | 0.2<br>light trace | | |
| 10.0 | 12.0 | RT 6373 | Tps | Sand<br>clayey gritty | light brown grey | Comments: Sandstone 9.9m<br>coarse sand to granule<br>ext.well sorted | sub-rounded sub-spherical | | 0.2<br>light trace | | |
| 12.0 | 14.0 | RT 6374 | Tps | Sand<br>clayey gritty | light brown grey | coarse sand to granule<br>ext.well sorted | | | 0.2<br>light trace | | |
| 14.0 | 16.0 | RT 6375 | Tps | Sand<br>clayey gritty | light brown grey | coarse sand to granule<br>ext.well sorted | sub-rounded sub-spherical | | 0.2<br>light trace | | |
| 16.0 | 18.0 | RT 6376 | Tps | Sand<br>clayey gritty<br>Sand<br>gritty | light brown grey | coarse sand to granule<br>ext.well sorted | sub-rounded sub-spherical | | 0.2<br>light trace | | |
| 18.0 | 21.0 | RT 6377 | Tps | Sand<br>clayey gritty | light brown grey | coarse sand to granule<br>ext.well sorted | sub-rounded sub-elongate | | 0.2<br>light trace | | |
| 0.0 | 21.0 | RT 6378 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30
CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 20-AUG-88
HOLE NUMBER : PT0032
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0
GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 469649 NORTHING: 6278960 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0
Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6379 | Qdw | Clay sandy | medium brown | v.fine sand to fine sand mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6380 | Qdw | Clay sandy | medium brown | v.fine sand to fine sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6381 | Qdw | Sand<br>Clay | light brown | v.fine sand to medium sand mod.well sorted | sub-rounded | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6382 | Qdw | Sand<br>Clay | medium red brown | medium sand to coarse sand mod.well sorted | sub-rounded | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6383 | Qdw | Sand<br>Clay | medium red brown | medium sand to coarse sand mod.well sorted | sub-rounded | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 6384 | Qdw | Sand<br>Clay | medium red brown | medium sand to coarse sand mod.well sorted | sub-rounded | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6385 | Qdw | Sand | medium brown | v.fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6386 | Qdw | Sand | medium brown | v.fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6387 | Qdw | Sand | medium red brown | v.fine sand to coarse sand mod.well sorted | | | 0.2 light trace | | |
| 18.0 | 21.0 | RT 6388 | Qdw | Sand<br>Clay gritty | medium red brown | coarse sand to granule well sorted | rounded sub-spherical | | 0.2 light trace | | |
| 0.0 | 21.0 | RT 6389 | | Composite Sample | | Comments: Tps at 20m | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 20-AUG-88

HOLE NUMBER : PT0033
LOGGED BY : K.A.Grey
TOTAL DEPTH : 30.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 470476 NORTHING: 6279530 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6390 | Qdw | Clay sandy | medium red brown | medium sand mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 5.0 | RT 6391 | Qdw | Sand Clay | medium brown | coarse sand to v.crse sand well sorted | | | 0.2 light trace | | |
| 5.0 | 6.0 | RT 6392 | Tps | Sand clayey | medium brown | coarse sand to v.crse sand ext.well sorted | sub-rounded | weakly consol Calcareous friable | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6393 | Tps | Sand clayey | medium brown | coarse sand to v.crse sand ext.well sorted | sub-rounded | weakly consol Calcareous friable | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6394 | Tps | Sand clayey | medium brown | coarse sand to v.crse sand ext.well sorted | sub-rounded | weakly consol Calcareous friable | 0.2 light trace | | |
| 10.0 | 12.0 | RT 6395 | Tps | Sand clayey | medium brown | v.crse sand to granule ext.well sorted | sub-rounded sub-elongate | weakly consol Calcareous friable | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6396 | Tps | Sand clayey | medium brown | v.crse sand to granule ext.well sorted | sub-rounded sub-elongate | weakly consol Calcareous friable | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6397 | Tps | Sand clayey | medium brown | fine sand to v.crse sand ext.well sorted | sub-rounded sub-elongate | weakly consol Calcareous friable | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6398 | Tps | Sand | medium brown | fine sand to v.crse sand mod.well sorted | sub-elongate | | 0.2 light trace | | |
| 18.0 | 20.0 | RT 6399 | Tps | Sand gritty Clay | medium brown | v.fine sand to granule poorly sorted | sub-rounded sub-elongate | | 0.2 light trace | | |
| 20.0 | 22.0 | RT 6400 | Tps | Sand gritty Clay | medium brown | v.fine sand to granule poorly sorted | sub-rounded sub-elongate | | 0.2 light trace | | |

SHEET 2 OF 2 HOLE NUMBER : PT0033

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.0 | 24.0 | RT 6449 | Tps | Sand clayey silty | light brown yellow | v.fine sand ext.well sorted | | | 1.0 Good trace | | |
| 24.0 | 26.0 | RT 6448 | Tps | Sand clayey silty | light brown yellow | v.fine sand to medium sand ext.well sorted | | | 0.5 trace | | |
| 26.0 | 28.0 | RT 6447 | Tps | Sand clayey silty | light brown yellow | v.fine sand to fine sand ext.well sorted | | | 0.5 trace | | |
| 28.0 | 30.0 | RT 6446 | Tps | Sand clayey silty | light brown yellow | v.fine sand to fine sand ext.well sorted | | | 0.5 trace | Muscovite | |
| 0.0 | 30.0 | RT 6445 | | Composite Sample | | | | | | | |

EOH at 30.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 20-AUG-88

HOLE NUMBER : PT0034
LOGGED BY : K.A.Grey
TOTAL DEPTH : 30.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 446180 NORTHING: 6284120 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6401 | Qdw | Clay silty Sand | light brown | v.fine sand to fine sand mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6402 | Qdw | Clay sandy | medium brown | v.fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6403 | Tps | Sand clayey | medium white grey | v.fine sand to medium sand ext.well sorted | | | 0.5 trace | | |
| 6.0 | 8.0 | RT 6404 | Tps | Sand clayey | medium white grey | fine sand to coarse sand ext.well sorted | rounded spherical | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6405 | Tps | Sand clayey | medium grey yellow | fine sand to coarse sand ext.well sorted | rounded spherical | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 6406 | Tps | Sand clayey | medium yellow brown | fine sand to medium sand ext.well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6407 | Tps | Sand silty Clay | medium red brown | fine sand to coarse sand well sorted | sub-rounded sub-elongate | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6408 | Tps | Sand gritty | medium red brown | coarse sand to v.crse sand well sorted | sub-rounded sub-elongate | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6409 | Tps | Sand clayey | medium grey | coarse sand to granule ext.well sorted | rounded sub-elongate | | 0.2 light trace | | |
| 18.0 | 20.0 | RT 6410 | Tps | Sand clayey | medium grey | coarse sand to granule ext.well sorted | rounded sub-elongate | | 0.2 light trace | | |
| 0.0 | 20.0 | RT 6416 | | Composite Sample | | | | | | | |

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.0 | 22.0 | RT 6411 | Tps | Sand clayey | medium grey | medium sand to v.crse sand ext.well sorted | rounded sub-elongate | | 0.2 light trace | | |
| 22.0 | 24.0 | RT 6412 | Tps | Sand clayey | medium grey | coarse sand to granule ext.well sorted | rounded sub-elongate | | 0.2 light trace | | |
| 24.0 | 26.0 | RT 6413 | Tps | Sand clayey | light brown grey | coarse sand to granule ext.well sorted | rounded sub-elongate | | 0.2 light trace | | |
| 26.0 | 28.0 | RT 6414 | Tps | Sand gritty | medium grey | coarse sand to granule ext.well sorted | sub-rounded | | 0.2 light trace | | |
| 28.0 | 30.0 | RT 6415 | Tps | Sand clayey | medium red brown | medium sand to v.crse sand well sorted | sub-rounded | | 0.5 trace | Iron oxide | |
| 20.0 | 30.0 | RT 6417 | | Composite Sample | | | | | | | |

EOH at 30.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 20-AUG-88

HOLE NUMBER : PT0035
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 447080 NORTHING: 6284180 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6418 | Qdw | Clay<br>sandy | light<br>brown | v.fine sand to<br>fine sand<br>mod.well sorted | | weakly consol<br>Calcareous<br>soft | 0.2<br>light trace | | |
| 2.0 | 4.0 | RT 6419 | Qdw | Clay<br>sandy | medium<br>red<br>brown | v.fine sand to<br>fine sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 4.0 | 6.0 | RT 6420 | Qdw | Sand<br>clayey | medium<br>brown | v.fine sand to<br>medium sand<br>mod.well sorted | | weakly consol<br>Calcareous<br>soft | 0.2<br>light trace | | |
| 6.0 | 8.0 | RT 6421 | Qdw | Sand<br>clayey | medium<br>brown | v.fine sand to<br>medium sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| | | | | | | Comments: Tps at 7.8m | | | | | |
| 8.0 | 10.0 | RT 6422 | Tps | Sand<br>clayey<br>Clay | light<br>brown<br>grey | v.fine sand to<br>medium sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 10.0 | 12.0 | RT 6423 | Tps | Sand<br>clayey<br>Clay | medium<br>grey | v.fine sand to<br>medium sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 12.0 | 14.0 | RT 6424 | Tps | Sand<br>clayey<br>Clay | medium<br>grey | v.fine sand to<br>medium sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 14.0 | 16.0 | RT 6425 | Tps | Sand<br>clayey<br>Clay | medium<br>grey | v.fine sand to<br>medium sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 16.0 | 18.0 | RT 6426 | Tps | Sand<br>clayey | medium<br>grey<br>brown | v.fine sand to<br>medium sand<br>well sorted | sub-rounded | | 0.2<br>light trace | | |
| 18.0 | 21.0 | RT 6427 | Tps | Sand<br>clayey | medium<br>red<br>brown | v.fine sand to<br>medium sand<br>well sorted | sub-rounded | | 0.2<br>light trace | | |
| 0.0 | 21.0 | RT 6428 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 20-AUG-88

HOLE NUMBER : PT0036
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 448135 NORTHING: 6284150 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6429 | Qdw | Clay | light brown | v.fine sand to medium sand | | weakly consol Calcareous friable | 0.2 light trace | | |
| | | | | Sand | | mod.well sorted | | | | | |
| 2.0 | 4.0 | RT 6430 | Qdw | Clay | light brown | v.fine sand to medium sand | | weakly consol Calcareous friable | 0.2 light trace | | |
| | | | | Sand | | mod.well sorted | | | | | |
| 4.0 | 6.0 | RT 6431 | Qdw | Clay | light brown | v.fine sand to fine sand | | | 0.2 light trace | | |
| | | | | Sand | | mod.well sorted | | | | | |
| 6.0 | 8.0 | RT 6432 | Qdw | Sand | light brown | fine sand | sub-rounded | | 0.2 light trace | | |
| | | | | Clay | | well sorted | | | | | |
| 8.0 | 10.0 | RT 6433 | Qdw | Sand | light brown | fine sand | sub-rounded | | 0.2 light trace | | |
| | | | | Clay | grey | well sorted | | | | | |
| 10.0 | 12.0 | RT 6434 | Qdw | Sand silty | light grey | fine sand | sub-rounded | | 0.2 light trace | | |
| | | | | Clay | brown | well sorted | | | | | |
| 12.0 | 14.0 | RT 6435 | Qdw | Sand silty | medium brown | fine sand | sub-rounded | | 0.2 light trace | | |
| | | | | Clay | | well sorted | | | | | |
| 14.0 | 16.0 | RT 6436 | Qdw | Sand silty | light brown | fine sand | sub-rounded | | 0.2 light trace | | |
| | | | | Clay | grey | well sorted | | | | | |
| 16.0 | 18.0 | RT 6437 | Qdw | Sand silty | light grey | v.fine sand to fine sand | sub-rounded | | 0.2 light trace | | |
| | | | | Clay | | well sorted | | | | | |
| 18.0 | 21.0 | RT 6438 | Tps | Sand silty clayey | medium grey | v.fine sand to medium sand well sorted | | | 0.2 light trace | | |
| 0.0 | 21.0 | RT 6439 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30
GRID: AMG ZONE: 54 RELIABILITY: TOPO

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 20-AUG-88
EASTING: 449127 NORTHING: 6284190 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

HOLE NUMBER : PT0037
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6440 | Qdw | Sand silty clayey | light brown | v.fine sand to fine sand mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6441 | Qdw | Sand silty clayey | light brown | v.fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6442 | Qdw | Sand silty clayey | medium red brown | v.fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6443 | Qdw | Sand clayey silty | light brown grey | v.fine sand to fine sand mod.well sorted | sub-rounded | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6444 | Qdw | Sand clayey silty | light brown red | v.fine sand to medium sand mod.well sorted | sub-rounded | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 6450 | Qdw | Sand clayey silty | medium red brown | v.fine sand to medium sand mod.well sorted | sub-rounded | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6451 | Qdw | Sand clayey silty | medium red brown | v.fine sand to medium sand mod.well sorted | sub-rounded | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6452 | Qdw | Sand clayey silty | medium red brown | v.fine sand to medium sand mod.well sorted | sub-rounded | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6453 | Qdw | Sand clayey silty | medium red brown | v.fine sand to medium sand mod.well sorted | sub-rounded | | 0.2 light trace | | |
| 18.0 | 20.0 | RT 6454 | Tps | Sand gritty clayey | medium brown | medium sand poorly sorted | rounded | | 0.2 light trace | | |
| 0.0 | 20.0 | RT 6455 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30
CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 20-AUG-88
HOLE NUMBER : PT0038
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 450049 NORTHING: 6284240 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6456 | Qdw | Clay silty sandy | medium brown | v.fine sand mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6457 | Qdw | Clay silty sandy | medium brown | v.fine sand mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6458 | Qdw | Clay silty sandy | medium brown | v.fine sand mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6459 | Qdw | Clay silty sandy Clay silty | medium brown | v.fine sand mod.well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6460 | Qdw | Silt sandy | light brown | medium sand mod.well sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 6461 | Qdw | Sand silty clayey | medium brown | v.fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6462 | Qdw | Sand silty clayey | medium brown | v.fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6463 | Qdw | Sand clayey | medium red brown | v.fine sand to medium sand well sorted | sub-rounded | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6464 | Qdw | Sand clayey | medium red brown | v.fine sand to medium sand well sorted | sub-rounded | | 0.2 light trace | | |
| 18.0 | 21.0 | RT 6465 | Qdw | Sand clayey | medium red brown | v.fine sand to medium sand well sorted | sub-rounded | | 0.2 light trace | | |
| 0.0 | 21.0 | RT 6466 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 20-AUG-88

HOLE NUMBER : PT0039
LOGGED BY : K.A.Grey
TOTAL DEPTH : 33.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 451083 NORTHING: 6284225 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6467 | Qdw | Clay sandy | medium brown | v.fine sand mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6468 | Qdw | Clay sandy | medium brown | v.fine sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6469 | Qdw | Clay sandy silty | medium brown | v.fine sand to fine sand mod.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6470 | Qdw | Sand clayey | medium brown | medium sand mod.well sorted | sub-rounded sub-elongate | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6471 | Qdw | Sand clayey | medium brown | medium sand mod.well sorted | sub-rounded sub-elongate | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 6472 | Qdw | Sand clayey | medium brown | medium sand mod.well sorted | sub-rounded sub-elongate | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6473 | Qdw | Sand clayey | medium brown | v.fine sand to medium sand mod.well sorted | sub-rounded sub-elongate | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6474 | Tps | Sand | light brown | medium sand to granule mod.well sorted | sub-rounded sub-elongate | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6475 | Tps | Sand | light brown | medium sand to granule mod.well sorted | sub-rounded sub-elongate | | 0.2 light trace | | |
| 18.0 | 20.0 | RT 6476 | Tps | Sand | light brown | medium sand to v.crse sand mod.well sorted | sub-rounded sub-elongate | | 0.2 light trace | | |
| 20.0 | 22.0 | RT 6477 | Tps | Sand clayey gritty | light brown | coarse sand to granule mod.well sorted | sub-rounded | | 0.2 light trace | | |

SHEET 2 OF 2 HOLE NUMBER : PT0039

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.0 | 24.0 | RT 6478 | Tps | Sand clayey gritty | light brown | fine sand to coarse sand mod.well sorted | sub-rounded | | 0.5 trace | | |
| 24.0 | 26.0 | RT 6479 | Tps | Sand clayey gritty | light brown yellow | fine sand to v.crse sand mod.well sorted | sub-rounded | | 1.0 Good trace | | |
| 26.0 | 28.0 | RT 6480 | Tps | Sand clayey gritty | light brown yellow | fine sand to v.crse sand mod.well sorted | sub-rounded | | 1.0 Good trace | | |
| 28.0 | 30.0 | RT 6481 | Tps | Sand clayey gritty | light brown yellow | fine sand to v.crse sand mod.well sorted | sub-rounded | | 1.0 Good trace | | |
| 30.0 | 33.0 | RT 6482 | Tps | Sand clayey gritty | light brown yellow | fine sand to v.crse sand mod.well sorted | sub-rounded | | 1.0 Good trace | | |
| 0.0 | 33.0 | RT 6483 | | Composite Sample | | | | | | | |

EOH at 33.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 20-AUG-88

HOLE NUMBER : PT0040
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 452095 NORTHING: 6284250 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole

SHEET 1 OF 1 HOLE NUMBER : PT0040

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6484 | Qdw | Sand<br>silty | medium<br>brown | v.fine sand<br>mod.well sorted | | weakly consol<br>Calcareous<br>friable | 0.2<br>light trace | | |
| 2.0 | 4.0 | RT 6485 | Qdw | Clay<br>sandy | medium<br>red<br>brown | v.fine sand to<br>medium sand<br>mod.well sorted | sub-rounded | weakly consol<br>Calcareous<br>friable | 0.2<br>light trace | | |
| 4.0 | 6.0 | RT 6486 | Qdw | Clay<br>sandy | medium<br>red<br>brown | v.fine sand to<br>medium sand<br>mod.well sorted | sub-rounded | | 0.2<br>light trace | | |
| 6.0 | 8.0 | RT 6487 | Qdw | Clay<br>sandy | medium<br>red<br>brown | v.fine sand to<br>medium sand<br>mod.well sorted | sub-rounded | | 0.2<br>light trace | | |
| 8.0 | 10.0 | RT 6488 | Tps | Sand<br>clayey | light<br>brown | v.fine sand to<br>fine sand<br>mod.well sorted | sub-rounded | | 0.2<br>light trace | | |
| 10.0 | 12.0 | RT 6489 | Tps | Sand<br>Clay | light<br>brown | v.fine sand to<br>fine sand<br>mod.well sorted | sub-rounded | | 0.2<br>light trace | | |
| 12.0 | 14.0 | RT 6490 | Tps | Sand<br>Clay | medium<br>brown<br>grey | v.fine sand to<br>fine sand<br>mod.well sorted | sub-rounded | | 0.2<br>light trace | | |
| 14.0 | 16.0 | RT 6491 | Tps | Sand<br>Clay | medium<br>brown<br>grey | v.fine sand to<br>fine sand<br>mod.well sorted | sub-rounded | | 0.5<br>trace | | |
| 16.0 | 18.0 | RT 6492 | Tps | Sand<br>Clay | medium<br>grey<br>brown | coarse sand to<br>v.crse sand<br>mod.well sorted | sub-rounded | | 0.2<br>light trace | | |
| 18.0 | 21.0 | RT 6493 | Tps | Sand<br>clayey | medium<br>red<br>brown | v.fine sand to<br>v.crse sand<br>poorly sorted | sub-rounded | | 0.2<br>light trace | | |
| 0.0 | 21.0 | RT 6494 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 21-AUG-88

HOLE NUMBER : PT0041
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 453068 NORTHING: 6284260 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6495 | Qdw | Clay sandy silty | medium red brown | v.fine sand mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6496 | Qdw | Clay sandy silty | medium red brown | v.fine sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6497 | Qdw | Clay sandy silty | medium red brown | v.fine sand mod.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6498 | Qdw | Clay sandy silty | medium red brown | v.fine sand mod.well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6499 | Qdw | Clay sandy silty | medium red brown | v.fine sand mod.well sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 6500 | Qdw | Sand clayey | medium brown | coarse sand to v.crse sand poorly sorted | sub-rounded | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6501 | Qdw | Sand clayey | light brown | coarse sand to v.crse sand poorly sorted | sub-rounded | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6502 | Qdw | Clay sandy | medium brown | v.fine sand to fine sand mod.well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6503 | Tps | Sand clayey | light brown | fine sand to medium sand ext.well sorted | | | 0.5 trace | | |
| 18.0 | 21.0 | RT 6504 | Tps | Sand clayey | medium grey yellow | fine sand to medium sand well sorted | | | 0.5 trace | | |
| 0.0 | 21.0 | RT 6505 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30
GRID: AMG ZONE: 54 RELIABILITY: TOPO

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 21-AUG-88
EASTING: 454071 NORTHING: 6284260 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0
Comments: Gamma log open hole

HOLE NUMBER : PT0042
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6506 | Qdw | Clay sandy | medium brown | medium sand mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6507 | Qdw | Sand clayey | medium red brown | fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6508 | Qdw | Sand clayey | medium red brown | fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6509 | Qdw | Sand clayey | medium red brown | fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6510 | Qdw | Sand clayey | medium red brown | fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 6511 | Qdw | Clay sandy | medium red brown | fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6512 | Qdw | Clay sandy | medium red brown | fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6513 | Qdw | Clay sandy | medium red brown | fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6514 | Qdw | Clay sandy | medium red brown | fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 18.0 | 21.0 | RT 6515 | Qdw | Clay sandy | medium red brown | fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 0.0 | 21.0 | RT 6516 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 21-AUG-88

HOLE NUMBER : PT0043
LOGGED BY : K.A.Grey
TOTAL DEPTH : 30.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 455064 NORTHING: 6284270 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6517 | Qdw | Clay<br>sandy silty | medium red brown | v.fine sand<br>well sorted | | | 0.2<br>light trace | | |
| 2.0 | 4.0 | RT 6518 | Qdw | Clay<br>sandy silty | medium red brown | v.fine sand<br>well sorted | | | 0.2<br>light trace | | |
| 4.0 | 6.0 | RT 6519 | Qdw | Clay | medium red brown | v.fine sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 6.0 | 8.0 | RT 6520 | Qdw | Clay | medium brown | v.fine sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 8.0 | 10.0 | RT 6521 | Qdw | Clay | medium brown | v.fine sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 10.0 | 12.0 | RT 6522 | Qdw | Sand<br>clayey<br>Clay | light brown | v.fine sand to medium sand<br>well sorted | sub-rounded | | 0.2<br>light trace | | |
| 12.0 | 14.0 | RT 6523 | Qdw | Sand<br>Clay | light brown | v.fine sand to medium sand<br>well sorted | sub-rounded | weakly consol<br>Calcareous<br>friable | 0.2<br>light trace | | |
| 14.0 | 16.0 | RT 6524 | Tps | Sand<br>Clay | light brown | v.fine sand to medium sand<br>well sorted | sub-rounded | weakly consol<br>Calcareous<br>friable | 0.2<br>light trace | | |
| 16.0 | 18.0 | RT 6525 | Tps | Sand<br>Clay | medium brown grey | v.fine sand to medium sand<br>ext.well sorted | sub-rounded | weakly consol<br>Calcareous<br>friable | 0.2<br>light trace | | |
| 0.0 | 18.0 | RT 6532 | | Composite Sample | | | | | | | |
| 18.0 | 20.0 | RT 6526 | Tps | Sand<br>Clay | medium white grey | v.fine sand to medium sand<br>ext.well sorted | sub-rounded | weakly consol<br>Calcareous<br>friable | 0.2<br>light trace | | |

SHEET 2 OF 2 HOLE NUMBER : PT0043

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.0 | 22.0 | RT 6527 | Tps | Sand | medium white | v.fine sand to medium sand | sub-rounded | weakly consol Calcareous friable | 0.2 light trace | | |
| | | | | Clay | grey | ext.well sorted | | | | | |
| 22.0 | 24.0 | RT 6528 | Tps | Sand | medium grey | v.fine sand to medium sand | sub-rounded | weakly consol Calcareous friable | 0.2 light trace | | |
| | | | | Clay | yellow | ext.well sorted | | | | | |
| 24.0 | 26.0 | RT 6529 | Tps | Sand | medium grey | v.fine sand to medium sand | sub-rounded | weakly consol Calcareous friable | 0.2 light trace | | |
| | | | | Clay | yellow | ext.well sorted | | | | | |
| 26.0 | 28.0 | RT 6530 | Tps | Sand | light brown | v.fine sand to medium sand | sub-rounded | weakly consol Calcareous friable | 0.2 light trace | | |
| | | | | Clay | yellow | ext.well sorted | | | | | |
| 28.0 | 30.0 | RT 6531 | Tps | Sand | medium yellow | v.fine sand to medium sand | sub-rounded | weakly consol Calcareous friable | 0.2 light trace | | |
| | | | | Clay | grey | ext.well sorted | | | | | |
| 18.0 | 30.0 | RT 6533 | | Composite Sample | | | | | | | |

EOH at 30.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 21-AUG-88

HOLE NUMBER : PT0044
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 456067 NORTHING: 6284290 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6534 | Qdw | Clay<br>silty | light brown | clay<br>ext.well sorted | | weakly consol<br>Calcareous<br>friable | 0.0 | | |
| 2.0 | 4.0 | RT 6535 | Qdw | Clay<br>silty | medium brown | clay<br>ext.well sorted | | | 0.0 | | |
| 4.0 | 6.0 | RT 6536 | Qdw | Clay<br>silty | medium red brown | clay<br>ext.well sorted | | | 0.2<br>light trace | | |
| 6.0 | 8.0 | RT 6537 | Qdw | Clay<br>silty sandy | medium red brown | fine sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 8.0 | 10.0 | RT 6538 | Qdw | Clay<br>silty sandy<br>Sand | medium red brown | fine sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 10.0 | 12.0 | RT 6539 | Qdw | Sand<br>clayey silty | medium red brown | v.fine sand to fine sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 12.0 | 14.0 | RT 6540 | Qdw | Sand<br>Clay | medium brown grey | v.fine sand<br>mod.well sorted<br>Comments: Tps at 13m | | Calcareous<br>friable | 0.2<br>light trace | | |
| 14.0 | 16.0 | RT 6541 | Tps | Sand<br>Clay | medium grey | v.fine sand to medium sand<br>mod.well sorted | | weakly consol<br>Calcareous<br>friable | 0.2<br>light trace | | |
| 16.0 | 18.0 | RT 6542 | Tps | Sand<br>clayey | light brown | v.fine sand to medium sand<br>well sorted | | | 0.2<br>light trace | | |
| 18.0 | 21.0 | RT 6543 | Tps | Sand<br>clayey | light brown | fine sand to granule<br>mod.well sorted | sub-rounded | | 0.2<br>light trace | | |
| 0.0 | 21.0 | RT 6544 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 21-AUG-88

HOLE NUMBER : PT0045
LOGGED BY : K.A.Grey
TOTAL DEPTH : 24.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 457029 NORTHING: 6284330 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6545 | Qdw | Clay sandy silty | medium red brown | fine sand mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6546 | Qdw | Clay sandy silty | medium red brown | fine sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6547 | Qdw | Sand clayey | light brown yellow | fine sand to medium sand mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| | | | | | | Comments: Tps at 5.5m | | | | | |
| 6.0 | 8.0 | RT 6548 | Tps | Sand clayey | light brown yellow | fine sand to medium sand mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6549 | Tps | Sand clayey | light brown yellow | fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 6550 | Tps | Sand Clay | light brown yellow | fine sand to medium sand ext.well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6551 | Tps | Sand Clay | light brown yellow | fine sand to medium sand ext.well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6552 | Tps | Sand Clay | medium yellow | fine sand to medium sand ext.well sorted | sub-rounded sub-elongate | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6553 | Tps | Sand Clay | medium yellow | fine sand to medium sand ext.well sorted | sub-rounded sub-elongate | | 0.2 light trace | | |
| 18.0 | 20.0 | RT 6554 | Tps | Sand Clay | medium yellow | fine sand to medium sand ext.well sorted | sub-rounded sub-elongate | | 0.2 light trace | | |
| 20.0 | 22.0 | RT 6555 | Tps | Sand Clay | medium yellow | fine sand to medium sand ext.well sorted | sub-rounded sub-elongate | | 0.2 light trace | | |

SHEET 2 OF 2 HOLE NUMBER : PT0045

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.0 | 24.0 | RT 6556 | Tps | Sand clayey | medium yellow | medium sand to v.crse sand ext.well sorted | sub-rounded | | 0.2 light trace | | |
| 0.0 | 24.0 | RT 6557 | | Composite Sample | | | | | | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30
CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 21-AUG-88
HOLE NUMBER : PT0046
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0
GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 458022 NORTHING: 6284340 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0
Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6558 | Qdw | Clay<br>sandy | medium brown | fine sand<br>mod.well sorted | | weakly consol<br>Calcareous<br>friable | 0.2<br>light trace | | |
| 2.0 | 4.0 | RT 6559 | Qdw | Clay<br>sandy | medium brown | fine sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 4.0 | 6.0 | RT 6560 | Qdw | Sand<br>clayey | medium red brown | v.fine sand to medium sand<br>poorly sorted | sub-angular | | 0.2<br>light trace | | |
| 6.0 | 8.0 | RT 6561 | Qdw | Sand<br>clayey | medium red brown | v.fine sand to medium sand<br>poorly sorted | sub-angular | | 0.2<br>light trace | | |
| 0.0 | 8.0 | RT 6568 | | Composite Sample | | | | | | | |
| 8.0 | 10.0 | RT 6562 | Tps | Sand<br>Clay | light brown | fine sand to medium sand<br>well sorted | sub-rounded sub-elongate | | 0.2<br>light trace | | |
| 10.0 | 12.0 | RT 6563 | Tps | Sand<br>Clay | light brown | fine sand to medium sand<br>well sorted | sub-rounded sub-elongate | | 0.2<br>light trace | | |
| 12.0 | 14.0 | RT 6564 | Tps | Sand<br>Clay | light brown | fine sand to medium sand<br>well sorted | sub-rounded sub-elongate | | 0.2<br>light trace | | |
| 14.0 | 16.0 | RT 6565 | Tps | Sand<br>Clay | light brown | fine sand to medium sand<br>well sorted | sub-rounded sub-elongate | | 0.2<br>light trace | | |
| 16.0 | 18.0 | RT 6566 | Tps | Sand<br>clayey<br>Clay | light brown | fine sand to medium sand<br>well sorted | sub-rounded sub-elongate | | 0.2<br>light trace | | |
| 18.0 | 21.0 | RT 6567 | Tps | Sand<br>clayey | light brown | fine sand to medium sand<br>ext.well sorted | sub-rounded sub-elongate | | 0.2<br>light trace | | |

SHEET 2 OF 2 HOLE NUMBER : PT0046

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.0 | 21.0 | RT 6569 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 21-AUG-88

HOLE NUMBER : PT0047
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 459034 NORTHING: 6284370 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6570 | Qdw | Sand silty clayey | light brown | v.fine sand to fine sand mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6571 | Qdw | Sand silty clayey | medium brown | v.fine sand to fine sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6572 | Qdw | Clay sandy silty | medium red brown | v.fine sand mod.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6573 | Qdw | Clay sandy silty | medium red brown | v.fine sand mod.well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6574 | Qdw | Clay sandy | medium red brown | fine sand mod.well sorted | | | 0.2 light trace | | |
| 0.0 | 10.0 | RT 6580 | | Composite Sample | | | | | | | |
| 10.0 | 12.0 | RT 6575 | Qdw | Sand clayey | light brown | v.fine sand to medium sand well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6576 | Tps | Sand<br>Clay | medium brown | coarse sand to v.crse sand ext.well sorted | rounded sub-elongate | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6577 | Tps | Sand<br>Clay | light brown | fine sand to medium sand ext.well sorted | rounded sub-elongate | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6578 | Tps | Sand clayey | light brown | fine sand to medium sand ext.well sorted | sub-rounded sub-elongate | | 0.2 light trace | | |
| 18.0 | 21.0 | RT 6579 | Tps | Sand clayey | light brown | fine sand to medium sand ext.well sorted | sub-rounded sub-elongate | | 0.2 light trace | | |

SHEET 2 OF 2 HOLE NUMBER : PT0047

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.0 | 21.0 | RT 6581 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30
CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 21-AUG-88
HOLE NUMBER : PT0048
LOGGED BY : K.A.Grey
TOTAL DEPTH : 24.0
GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 460036 NORTHING: 6284400 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0
Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6582 | Qdw | Sand silty Clay | light brown | v.fine sand to fine sand mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6583 | Qdw | Sand silty Clay | medium brown | v.fine sand to fine sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6584 | Qdw | Clay sandy silty | medium red brown | v.fine sand mod.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6585 | Qdw | Clay sandy silty | medium red brown | v.fine sand mod.well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6586 | Qdw | Clay sandy | medium red brown | fine sand mod.well sorted | | | 0.2 light trace | | |
| 0.0 | 10.0 | RT 6594 | | Composite Sample | | | | | | | |
| 10.0 | 12.0 | RT 6587 | Qdw | Sand clayey | light brown | v.fine sand to medium sand well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6588 | Qdw | Sand | medium brown | medium sand to v.crse sand ext.well sorted | sub-rounded sub-elongate | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6589 | Qdw | Sand clayey | light brown | medium sand to v.crse sand ext.well sorted | sub-rounded sub-elongate | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6590 | Qdw | Sand clayey | light brown | fine sand to medium sand ext.well sorted | sub-rounded sub-elongate | | 0.2 light trace | | |
| 18.0 | 20.0 | RT 6591 | Tps | Sand clayey | light brown | fine sand to medium sand ext.well sorted | sub-rounded sub-elongate | | 0.2 light trace | | |

SHEET 2 OF 2 HOLE NUMBER : PT0048

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.0 | 21.0 | RT 6595 | | Composite Sample | | | | | | | |
| 20.0 | 22.0 | RT 6592 | Tps | Sand clayey | light grey yellow | fine sand to coarse sand ext.well sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 22.0 | 24.0 | RT 6593 | Tps | Sand clayey | light grey yellow | fine sand to coarse sand ext.well sorted | sub-rounded sub-elongate | | 0.2 light trace | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30
CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 21-AUG-88
HOLE NUMBER : PT0049
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0
GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 461140 NORTHING: 6284410 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0
Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6596 | Qdw | Clay sandy silty | light brown | v.fine sand mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6597 | Qdw | Clay sandy silty | medium red brown | v.fine sand to fine sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6598 | Qdw | Clay sandy silty | medium red brown | v.fine sand to fine sand mod.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6599 | Qdw | Clay sandy silty | medium red brown | v.fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6600 | Qdw | Clay sandy silty | medium red brown | v.fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 0.0 | 10.0 | RT 6606 | | Composite Sample | | | | | | | |
| 10.0 | 12.0 | RT 6601 | Qdw | Sand<br>Clay | light brown<br>grey | fine sand to medium sand<br>mod.well sorted<br>Comments: Tps at 11m | sub-angular | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6602 | Tps | Sand | medium grey | fine sand to coarse sand well sorted | sub-rounded | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6603 | Tps | Sand | medium grey | fine sand to coarse sand well sorted | sub-rounded | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6604 | Tps | Sand clayey | medium grey | medium sand to coarse sand ext.well sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 18.0 | 21.0 | RT 6605 | Tps | Sand clayey | medium grey | medium sand to coarse sand ext.well sorted | sub-rounded sub-spherical | | 0.2 light trace | | |

SHEET 2 OF 2 HOLE NUMBER : PT0049

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.0 | 21.0 | RT 6607 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30
CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 21-AUG-88
HOLE NUMBER : PT0050
LOGGED BY : K.A.Grey
TOTAL DEPTH : 42.0
GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 462041 NORTHING: 6284450 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0
Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6608 | Qdw | Clay sandy | light brown | medium sand mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6609 | Qdw | Sand clayey | medium brown | v.fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6610 | Qdw | Sand clayey | medium yellow | medium sand to v.crse sand well sorted | sub-rounded | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6611 | Tps | Sand clayey | medium yellow grey | medium sand to coarse sand well sorted | sub-rounded | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6612 | Tps | Sand clayey | medium yellow grey | medium sand to granule well sorted | sub-rounded | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 6613 | Tps | Sand clayey | medium yellow grey | medium sand to granule well sorted | sub-rounded | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6614 | Tps | Sand clayey | medium grey | medium sand to granule well sorted | sub-rounded | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6615 | Tps | Sand clayey | medium grey | coarse sand to granule ext.well sorted | sub-rounded | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6616 | Tps | Sand clayey | light brown | coarse sand to granule ext.well sorted | rounded sub-elongate | | 0.2 light trace | | |
| 18.0 | 20.0 | RT 6617 | Tps | Sand clayey | medium brown | coarse sand to granule ext.well sorted | rounded sub-elongate | | 0.2 light trace | | |
| 0.0 | 20.0 | RT 6629 | | Composite Sample | | | | | | | |

SHEET 2 OF 2 HOLE NUMBER : PT0050

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.0 | 22.0 | RT 6618 | Tps | Sand clayey | medium brown | fine sand to v.crse sand ext.well sorted | rounded sub-elongate | | 0.2 light trace | | |
| 22.0 | 24.0 | RT 6619 | Tps | Sand clayey | light brown | fine sand to v.crse sand ext.well sorted | rounded sub-elongate | | 0.2 light trace | | |
| 24.0 | 26.0 | RT 6620 | Tps | Sand gritty clayey | light brown | medium sand mod.well sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 26.0 | 28.0 | RT 6621 | Tps | Sand gritty clayey | light brown | medium sand mod.well sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 28.0 | 30.0 | RT 6622 | Tps | Sand clayey | medium grey | fine sand to coarse sand ext.well sorted | | | 1.0 Good trace | Muscovite | |
| 20.0 | 30.0 | RT 6630 | | Composite Sample | | | | | | | |
| 30.0 | 32.0 | RT 6623 | Tps | Sand | medium yellow grey | fine sand to medium sand well sorted | | | 1.0 Good trace | Muscovite | |
| 32.0 | 34.0 | RT 6624 | Tps | Sand | medium yellow | v.fine sand to granule poorly sorted | | | 0.5 trace | Muscovite | |
| 34.0 | 36.0 | RT 6625 | Tps | Sand | medium yellow | v.fine sand to granule poorly sorted | | | 0.5 trace | Muscovite | |
| 36.0 | 38.0 | RT 6626 | Tps | Sand | medium yellow | v.fine sand to granule poorly sorted | | | 0.5 trace | Muscovite | |
| 38.0 | 40.0 | RT 6627 | Tps | Sand | medium grey | v.fine sand to medium sand poorly sorted | | | 0.5 trace | | |
| 40.0 | 42.0 | RT 6628 | Tps | Sand clayey | medium grey | v.fine sand to medium sand poorly sorted | | | 0.2 light trace | | |
| 30.0 | 42.0 | RT 6631 | | Composite Sample | | | | | | | |

EOH at 42.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30
CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 21-AUG-88
HOLE NUMBER : PT0051
LOGGED BY : K.A.Grey
TOTAL DEPTH : 24.0
GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 463136 NORTHING: 6284410 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0
Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6632 | Qdw | Clay silty sandy | light brown | v.fine sand to medium sand mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6633 | Qdw | Clay silty sandy | medium red brown | v.fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6634 | Qdw | Sand clayey silty | light brown | v.fine sand mod.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6635 | Tps | Sand clayey silty | medium brown | v.fine sand to coarse sand mod.well sorted | sub-rounded | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6636 | Tps | Sand silty | medium brown | v.fine sand to v.crse sand mod.well sorted | sub-rounded | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 6637 | Tps | Sand silty | medium brown | v.fine sand to coarse sand mod.well sorted | sub-rounded | | 0.2 light trace | | |
| 0.0 | 12.0 | RT 6644 | | Composite Sample | | | | | | | |
| 12.0 | 14.0 | RT 6638 | Tps | Sand silty | light brown yellow | v.fine sand to v.crse sand mod.well sorted | sub-rounded | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6639 | Tps | Sand Silt | medium grey | v.fine sand to fine sand ext.well sorted | | | 0.5 trace | | |
| 16.0 | 18.0 | RT 6640 | Tps | Sand Silt | medium grey | v.fine sand to fine sand ext.well sorted | | | 0.5 trace | | |
| 18.0 | 20.0 | RT 6641 | Tps | Sand Silt | medium grey | v.fine sand to medium sand well sorted | | | 0.5 trace | | |

SHEET 2 OF 2 HOLE NUMBER : PT0051

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.0 | 22.0 | RT 6642 | Tps | Sand | medium grey | v.fine sand to granule | sub-rounded | | 0.2 | | |
| | | | | Silt | | mod.well sorted | | | light trace | | |
| 22.0 | 24.0 | RT 6643 | Tps | Sand | light brown | v.fine sand to granule | sub-rounded | | 0.2 | | |
| | | | | Silt | grey | mod.well sorted | | | light trace | | |
| 12.0 | 24.0 | RT 6645 | | Composite Sample | | | | | | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 21-AUG-88

HOLE NUMBER : PT0052
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 464101 NORTHING: 6284340 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6646 | Qdw | Clay<br>silty | light<br>brown<br>tan | clay<br><br>ext.well sorted | | weakly consol<br>Calcareous<br>friable | 0.2<br>light trace | | |
| 2.0 | 4.0 | RT 6647 | Qdw | Clay<br>silty | medium<br>brown | clay<br><br>ext.well sorted | | | 0.2<br>light trace | | |
| 4.0 | 6.0 | RT 6648 | Qdw | Silt<br>clayey<br>Sand | medium<br>red<br>brown | v.fine sand to<br>fine sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 6.0 | 8.0 | RT 6649 | Qdw | Silt<br>sandy<br>Clay | medium<br>red<br>brown | v.fine sand to<br>fine sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 8.0 | 10.0 | RT 6650 | Tps | Sand<br>silty | light<br>brown | v.fine sand to<br>medium sand<br>mod.well sorted | rounded | | 0.2<br>light trace | | |
| 10.0 | 12.0 | RT 6651 | Tps | Sand<br>silty<br>Silt | light<br>brown | v.fine sand to<br>medium sand<br>mod.well sorted | rounded | | 0.2<br>light trace | | |
| 12.0 | 14.0 | RT 6652 | Tps | Sand<br>silty<br>Silt | light<br>brown | v.fine sand to<br>medium sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 14.0 | 16.0 | RT 6653 | Tps | Sand<br>silty<br>Silt | light<br>brown | v.fine sand to<br>medium sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 16.0 | 18.0 | RT 6654 | Tps | Sand<br>silty<br>Silt | light<br>yellow<br>brown | v.fine sand to<br>medium sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 18.0 | 21.0 | RT 6655 | Tps | Sand<br>silty<br>Silt | medium<br>brown<br>yellow | v.fine sand to<br>medium sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 0.0 | 21.0 | RT 6656 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30
CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 21-AUG-88
HOLE NUMBER : PT0053
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0
GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 465116 NORTHING: 6284290 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0
Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6657 | Qdw | Clay sandy silty | medium white grey | v.fine sand to fine sand mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6658 | Qdw | Clay sandy silty | medium white grey | v.fine sand to fine sand mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6659 | Qdw | Clay sandy silty | medium red brown | v.fine sand to fine sand mod.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6660 | Qdw | Silt clayey Sand | light brown yellow | v.fine sand to fine sand mod.well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6661 | Tps | Sand Silt | light yellow brown | fine sand to coarse sand mod.well sorted | sub-rounded | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 6662 | Tps | Sand Silt | medium yellow | fine sand to v.crse sand well sorted | sub-rounded | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6663 | Tps | Sand Silt | medium yellow | fine sand to granule well sorted | sub-rounded | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6664 | Tps | Sand clayey silty | light brown | fine sand to medium sand well sorted | sub-rounded | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6665 | Tps | Sand clayey silty | light brown | fine sand to medium sand well sorted | sub-rounded | | 0.2 light trace | | |
| 18.0 | 21.0 | RT 6666 | Tps | Sand clayey silty | light brown | fine sand to medium sand well sorted | sub-rounded | | 0.2 light trace | | |
| 0.0 | 21.0 | RT 6667 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 22-AUG-88

HOLE NUMBER : PT0054
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 466132 NORTHING: 6284200 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole

SHEET 1 OF 1 HOLE NUMBER : PT0054

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6668 | Qdw | Clay<br>silty | light brown | clay to<br>medium sand<br>well sorted | | | 0.2<br>light trace | | |
| 2.0 | 4.0 | RT 6669 | Qdw | Clay<br>sandy silty | light brown | clay to<br>v.fine sand<br>well sorted | | | 0.2<br>light trace | | |
| 4.0 | 6.0 | RT 6670 | Qdw | Clay<br>sandy silty | medium red brown | clay to<br>v.fine sand<br>well sorted | | | 0.2<br>light trace | | |
| 6.0 | 8.0 | RT 6671 | Qdw | Clay<br>sandy silty | medium red brown | clay to<br>v.fine sand<br>well sorted | | | 0.2<br>light trace | | |
| 8.0 | 10.0 | RT 6672 | Qdw | Silt<br>Sand | medium red brown | v.fine sand to<br>fine sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 10.0 | 12.0 | RT 6673 | Qdw | Silt<br>Sand clayey | light brown | v.fine sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 12.0 | 14.0 | RT 6674 | Qdw | Sand<br>silty clayey | light brown yellow | v.fine sand to<br>medium sand<br>mod.well sorted | sub-angular | | 0.2<br>light trace | | |
| 14.0 | 16.0 | RT 6675 | Qdw | Sand<br>silty clayey | light brown yellow | v.fine sand to<br>medium sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 16.0 | 18.0 | RT 6676 | Qdw | Sand<br>silty clayey | light brown yellow | v.fine sand to<br>medium sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 18.0 | 21.0 | RT 6677 | Qdw | Sand<br>silty clayey | light brown yellow | v.fine sand to<br>medium sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 0.0 | 21.0 | RT 6678 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30
CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 22-AUG-88
HOLE NUMBER : PT0055
LOGGED BY : K.A.Grey
TOTAL DEPTH : 24.0
GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 467147 NORTHING: 6284100 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0
Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6679 | Qdw | Clay<br>silty<br>Sand | medium<br>brown | v.fine sand to<br>fine sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 2.0 | 4.0 | RT 6680 | Qdw | Clay<br>silty<br>Sand | medium<br>brown | v.fine sand to<br>fine sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 4.0 | 6.0 | RT 6681 | Qdw | Silt<br><br>Clay<br>sandy | medium<br>red<br>brown | v.fine sand to<br>fine sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 6.0 | 8.0 | RT 6682 | Qdw | Clay<br>silty | medium<br>brown | clay<br><br>mod.well sorted | | | 0.2<br>light trace | | |
| 8.0 | 10.0 | RT 6683 | Qdw | Clay<br>silty | medium<br>brown | clay<br><br>mod.well sorted | | | 0.2<br>light trace | | |
| 0.0 | 10.0 | RT 6691 | | Composite Sample | | | | | | | |
| 10.0 | 12.0 | RT 6684 | Qdw | Clay<br>sandy | mottled<br>grey | v.fine sand to<br>fine sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 12.0 | 14.0 | RT 6685 | Qdw | Clay<br>sandy | dark<br>khaki | v.fine sand to<br>fine sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 14.0 | 16.0 | RT 6686 | Qdw | Silt<br><br>Sand | medium<br>brown<br>red | v.fine sand to<br>fine sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 16.0 | 18.0 | RT 6687 | Tps | Sand<br>silty | light<br>brown | v.fine sand to<br>medium sand<br>well sorted | sub-rounded<br>sub-elongate | | 0.5<br>trace | | |
| 18.0 | 20.0 | RT 6688 | Tps | Sand<br>silty | light<br>brown | v.fine sand to<br>medium sand<br>well sorted | sub-rounded<br>sub-elongate | | 0.2<br>light trace | | |

SHEET 2 OF 2 HOLE NUMBER : PT0055

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.0 | 22.0 | RT 6689 | Tps | Sand clayey | light brown grey | v.fine sand to fine sand poorly sorted | | | 0.2 light trace | | |
| 22.0 | 24.0 | RT 6690 | Tps | Sand clayey | medium grey | v.fine sand to v.crse sand poorly sorted | sub-rounded | | 0.2 light trace | | |
| 10.0 | 24.0 | RT 6692 | | Composite Sample | | | | | | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 22-AUG-88

HOLE NUMBER : PT0056
LOGGED BY : K.A.Grey
TOTAL DEPTH : 36.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 468205 NORTHING: 6283970 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6693 | Qdw | Clay silty sandy | medium brown | fine sand to v.crse sand poorly sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6694 | Qdw | Clay silty sandy | medium brown | fine sand to v.crse sand poorly sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6695 | Qdw | Clay silty sandy | medium brown | fine sand to v.crse sand poorly sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6696 | Qdw | Sand clayey silty | light brown | fine sand to v.crse sand poorly sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6697 | Qdw | Sand clayey silty | light brown | fine sand to v.crse sand poorly sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 6698 | Qdw | Sand clayey silty | light brown | fine sand to v.crse sand poorly sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6699 | Qdw | Sand clayey | light brown | v.crse sand poorly sorted | rounded sub-spherical | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6700 | Qdw | Sand clayey | light brown | medium sand to v.crse sand poorly sorted | rounded sub-spherical | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6701 | Qdw | Sand clayey | light brown | medium sand to v.crse sand poorly sorted | | | 0.2 light trace | | |
| 18.0 | 20.0 | RT 6702 | Qdw | Sand clayey | light brown | medium sand to v.crse sand poorly sorted | | | 0.2 light trace | | |
| 20.0 | 22.0 | RT 6703 | Qdw | Sand<br>Silt clayey | medium yellow | medium sand<br>poorly sorted | | | 0.2 light trace | | |

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 22.0 | RT 6711 | | Composite Sample | | | | | | | |
| 22.0 | 24.0 | RT 6704 | Tps | Sand clayey | medium yellow brown | v.fine sand to fine sand ext.well sorted | | | 0.2 light trace | Muscovite | |
| 24.0 | 26.0 | RT 6705 | Tps | Sand clayey | medium red brown | v.fine sand to fine sand ext.well sorted | | | 0.2 light trace | Muscovite | |
| 26.0 | 28.0 | RT 6706 | Tps | Sand clayey | medium red brown | v.fine sand to fine sand ext.well sorted | | | 0.2 light trace | Muscovite | |
| 28.0 | 30.0 | RT 6707 | Tps | Sand clayey | medium red brown | v.fine sand to fine sand ext.well sorted | | | 0.5 trace | Muscovite | |
| 30.0 | 32.0 | RT 6708 | Tps | Sand clayey | medium yellow brown | v.fine sand to fine sand ext.well sorted | | | 0.5 trace | Muscovite | |
| 32.0 | 34.0 | RT 6709 | Tps | Sand clayey | medium yellow brown | v.fine sand to fine sand ext.well sorted | | | 0.5 trace | Muscovite | |
| 34.0 | 36.0 | RT 6710 | Tps | Sand clayey | medium yellow brown | v.fine sand to fine sand ext.well sorted | | | 0.5 trace | Muscovite | |
| 22.0 | 36.0 | RT 6712 | | Composite Sample | | | | | | | |

EOH at 36.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30
CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 22-AUG-88
HOLE NUMBER : PT0057
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 469208 NORTHING: 6283960 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole

SHEET 1 OF 1 HOLE NUMBER : PT0057

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6713 | Qdw | Silt sandy clayey | light brown | v.fine sand well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6714 | Qdw | Silt sandy clayey | light brown | v.fine sand well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6715 | Qdw | Clay sandy silty | medium red brown | v.fine sand mod.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6716 | Qdw | Clay sandy silty | medium red brown | v.fine sand mod.well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6717 | Qdw | Silt sandy clayey | medium red brown | v.fine sand to fine sand mod.well sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 6718 | Qdw | Silt sandy clayey | medium red brown | coarse sand to v.crse sand poorly sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6719 | Qdw | Sand gritty silty | medium brown | fine sand to medium sand poorly sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6720 | Qdw | Sand gritty silty | medium brown | fine sand to medium sand poorly sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6721 | Qdw | Sand gritty silty | light brown | fine sand to medium sand poorly sorted | | | 0.2 light trace | | |
| 18.0 | 21.0 | RT 6722 | Tps | Sand Silt | light brown | v.fine sand to v.crse sand ext.well sorted | sub-rounded sub-elongate | | 0.5 trace | Muscovite | |
| 0.0 | 21.0 | RT 6723 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 22-AUG-88

HOLE NUMBER : PT0058
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 470275 NORTHING: 6283840 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6724 | Qdw | Clay<br>silty | light<br>brown | clay<br>ext.well sorted | | | 0.2<br>light trace | | |
| 2.0 | 4.0 | RT 6725 | Qdw | Clay<br>sandy silty | light<br>brown | v.fine sand to<br>fine sand<br>ext.well sorted | | | 0.2<br>light trace | | |
| 4.0 | 6.0 | RT 6726 | Qdw | Sand<br>clayey silty | medium<br>red<br>brown | v.fine sand to<br>coarse sand<br>mod.well sorted | sub-rounded<br>sub-elongate | | 0.2<br>light trace | | |
| 6.0 | 8.0 | RT 6727 | Qdw | Sand<br>clayey silty | medium<br>red<br>brown | v.fine sand to<br>coarse sand<br>mod.well sorted | sub-rounded<br>sub-elongate | | 0.2<br>light trace | | |
| 8.0 | 10.0 | RT 6728 | Qdw | Sand<br>clayey silty | medium<br>brown | v.fine sand to<br>coarse sand<br>mod.well sorted | sub-rounded<br>sub-elongate | | 0.2<br>light trace | | |
| 10.0 | 12.0 | RT 6729 | Qdw | Sand<br>silty | light<br>brown | v.fine sand to<br>v.crse sand<br>mod.well sorted | sub-rounded | | 0.2<br>light trace | | |
| 12.0 | 14.0 | RT 6730 | Qdw | Sand<br>silty | light<br>brown | v.fine sand to<br>v.crse sand<br>mod.well sorted | sub-rounded | | 0.2<br>light trace | | |
| 14.0 | 16.0 | RT 6731 | Qdw | Sand<br>silty | light<br>brown | v.fine sand to<br>v.crse sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 16.0 | 18.0 | RT 6732 | Qdw | Sand<br>silty | light<br>brown<br>yellow | v.fine sand to<br>granule<br>poorly sorted | sub-rounded | | 0.2<br>light trace | | |
| 18.0 | 21.0 | RT 6733 | Qdw | Sand<br>silty | light<br>brown<br>yellow | v.fine sand to<br>granule<br>poorly sorted | | | 0.5<br>trace | | |
| 0.0 | 21.0 | RT 6734 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 22-AUG-88

HOLE NUMBER : PT0059
LOGGED BY : K.A.Grey
TOTAL DEPTH : 27.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 471321 NORTHING: 6283750 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6735 | Qdw | Clay<br>silty | light<br>brown | clay<br>ext.well sorted | | | 0.2<br>light trace | | |
| 2.0 | 4.0 | RT 6736 | Qdw | Silt<br>clayey<br>Sand | medium<br>red<br>brown | v.fine sand to<br>fine sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 4.0 | 6.0 | RT 6737 | Qdw | Silt<br>clayey<br>Sand | medium<br>red<br>brown | v.fine sand to<br>fine sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 6.0 | 8.0 | RT 6738 | Qdw | Sand<br>silty | medium<br>red<br>brown | v.fine sand to<br>fine sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 8.0 | 11.0 | RT 6739 | Tps | Sand<br>silty | medium<br>red<br>brown | v.fine sand to<br>v.crse sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 0.0 | 11.0 | RT 6748 | | Composite Sample | | | | | | | |
| 11.0 | 12.0 | RT 6740 | Tps | Sand<br>silty | medium<br>brown<br>grey | v.fine sand to<br>v.crse sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 12.0 | 14.0 | RT 6741 | Tps | Sand<br>silty | medium<br>brown<br>grey | v.fine sand to<br>v.crse sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 14.0 | 16.0 | RT 6742 | Tps | Sand<br>silty | medium<br>brown<br>grey | v.fine sand to<br>v.crse sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 16.0 | 18.0 | RT 6743 | Tps | Sand<br>silty | light<br>brown<br>yellow | medium sand to<br>granule<br>mod.well sorted | sub-rounded | | 0.2<br>light trace | | |
| 18.0 | 20.0 | RT 6744 | Tps | Sand<br>silty | light<br>brown<br>yellow | fine sand to<br>granule<br>mod.well sorted | sub-rounded | | 0.2<br>light trace | | |

SHEET 2 OF 2 HOLE NUMBER : PT0059

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.0 | 22.0 | RT 6745 | Tps | Sand silty | light brown yellow | fine sand to granule mod.well sorted | | | 0.2 light trace | | |
| 22.0 | 24.0 | RT 6746 | Tps | Sand silty | light brown yellow | fine sand to granule well sorted | | | 0.5 trace | | |
| 24.0 | 27.0 | RT 6747 | Tps | Sand silty | medium yellow brown | fine sand to granule well sorted | | | 0.5 trace | | |
| 11.0 | 27.0 | RT 6749 | | Composite Sample | | | | | | | |

EOH at 27.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 22-AUG-88

HOLE NUMBER : PT0060
LOGGED BY : K.A.Grey
TOTAL DEPTH : 48.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 472418 NORTHING: 6283630 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6750 | Qdw | Clay<br>silty | light<br>brown | clay<br><br>well sorted | | weakly consol<br>Calcareous<br>friable | 0.2<br>light trace | | |
| 2.0 | 4.0 | RT 6751 | Qdw | Clay<br>silty | medium<br>brown | clay<br><br>well sorted | | | 0.2<br>light trace | | |
| 4.0 | 6.0 | RT 6752 | Qdw | Clay<br>silty<br>Sand | medium<br>brown | v.fine sand to<br>fine sand<br>well sorted | | | 0.2<br>light trace | | |
| 6.0 | 8.0 | RT 6753 | Tps | Sand<br><br>Silt<br>clayey | medium<br>red<br>brown | v.fine sand to<br>fine sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 8.0 | 10.0 | RT 6754 | Tps | Sand<br><br>Silt<br>clayey | medium<br>red<br>brown | v.fine sand to<br>fine sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 10.0 | 12.0 | RT 6755 | Tps | Sand<br><br>Silt<br>clayey | medium<br>red<br>brown | v.fine sand to<br>v.crse sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 12.0 | 14.0 | RT 6756 | Tps | Sand<br><br>Silt<br>clayey | medium<br>brown | v.fine sand to<br>v.crse sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 14.0 | 16.0 | RT 6757 | Tps | Sand<br><br>Silt<br>clayey | medium<br>brown<br>yellow | v.fine sand to<br>v.crse sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 16.0 | 18.0 | RT 6758 | Tps | Sand<br><br>Silt<br>clayey | medium<br>brown<br>yellow | v.fine sand to<br>v.crse sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 0.0 | 18.0 | RT 6774 | | Composite Sample | | | | | | | |
| 18.0 | 20.0 | RT 6759 | Tps | Sand<br>clayey<br>Silt<br>clayey | medium<br>brown<br>yellow | v.fine sand to<br>fine sand<br>ext.well sorted | sub-rounded | | 0.5<br>trace | Muscovite | |

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.0 | 22.0 | RT 6760 | Tps | Sand clayey<br>Silt clayey | light yellow brown | v.fine sand to fine sand<br>ext.well sorted | sub-rounded | | 0.5<br>trace | Muscovite | |
| 22.0 | 24.0 | RT 6761 | Tps | Sand clayey<br>Silt clayey | light yellow brown | v.fine sand to fine sand<br>ext.well sorted | sub-rounded | | 0.5<br>trace | Muscovite | |
| 24.0 | 26.0 | RT 6762 | Tps | Sand clayey<br>Silt clayey | light brown grey | v.fine sand to fine sand<br>ext.well sorted | sub-rounded | | 0.5<br>trace | Muscovite | |
| 26.0 | 28.0 | RT 6763 | Tps | Sand clayey<br>Silt clayey | medium grey | v.fine sand to fine sand<br>ext.well sorted | sub-rounded | | 0.5<br>trace | Muscovite | |
| 28.0 | 30.0 | RT 6764 | Tps | Sand clayey<br>Silt clayey | medium grey brown | v.fine sand to fine sand<br>ext.well sorted | sub-rounded | | 0.5<br>trace | Muscovite | |
| 30.0 | 32.0 | RT 6765 | Tps | Sand clayey | light brown yellow | v.fine sand to fine sand<br>ext.well sorted | | | 0.5<br>trace | Muscovite | |
| 32.0 | 34.0 | RT 6766 | Tps | Sand clayey | light brown yellow | v.fine sand to fine sand<br>ext.well sorted | | | 0.5<br>trace | Muscovite | |
| 18.0 | 34.0 | RT 6775 | | Composite Sample | | | | | | | |
| 34.0 | 36.0 | RT 6767 | Tps | Sand silty | dark grey | v.fine sand<br>ext.well sorted | | | 0.5<br>trace | Muscovite | |
| 36.0 | 38.0 | RT 6768 | Tps | Sand silty | dark grey | v.fine sand<br>ext.well sorted | | | 0.5<br>trace | Muscovite | |
| 38.0 | 40.0 | RT 6769 | Tps | Sand silty | dark grey | v.fine sand<br>ext.well sorted | | | 0.5<br>trace | Muscovite | |
| 40.0 | 42.0 | RT 6770 | Tps | Sand clayey silty | dark grey | v.fine sand<br>well sorted | | | 0.5<br>trace | | |
| 42.0 | 44.0 | RT 6771 | Tps | Sand clayey silty<br>Silt | dark grey | v.fine sand<br>well sorted | | | 0.5<br>trace | | |

SHEET 3 OF 2 HOLE NUMBER : PT0060

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ STRENGTH | TYPE/ | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 44.0 | 46.0 | RT 6772 | Tps | Sand clayey silty<br>Silt | dark grey | v.fine sand<br>poorly sorted | | | | 0.5<br>trace | | |
| 46.0 | 48.0 | RT 6773 | Tps | Clay sandy<br>Silt | dark grey | v.fine sand<br>well sorted | | soft | | 0.5<br>trace | | |
| 34.0 | 48.0 | RT 6776 | | Composite Sample | | | | | | | | |

EOH at 48.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 22-AUG-88

HOLE NUMBER : PT0061
LOGGED BY : K.A.Grey
TOTAL DEPTH : 24.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 473363 NORTHING: 6283540 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6777 | Qdw | Clay silty | medium red brown | clay well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6778 | Qdw | Clay sandy silty | medium red brown | clay well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6779 | Tps | Sand silty gritty | medium brown red | v.fine sand to granule poorly sorted | sub-rounded | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6780 | Tps | Sand silty gritty | medium red brown | v.fine sand to granule poorly sorted | sub-rounded | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6781 | Tps | Sand silty gritty | medium red brown | v.fine sand to granule poorly sorted | sub-rounded | | 0.2 light trace | | |
| 0.0 | 10.0 | RT 6789 | | Composite Sample | | | | | | | |
| 10.0 | 12.0 | RT 6782 | Tps | Sand silty | medium yellow grey | v.fine sand to medium sand poorly sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6783 | Tps | Sand silty | medium grey | v.fine sand to medium sand poorly sorted | sub-rounded | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6784 | Tps | Sand silty | medium brown | v.fine sand to fine sand mod.well sorted | sub-rounded sub-elongate | | 0.2 light trace | Muscovite | |
| 16.0 | 18.0 | RT 6785 | Tps | Sand silty | medium brown | v.fine sand to fine sand mod.well sorted | | | 0.5 trace | | |
| 18.0 | 20.0 | RT 6786 | Tps | Sand silty | medium yellow brown | v.fine sand to fine sand mod.well sorted | | | 0.5 trace | | |

SHEET 2 OF 2 HOLE NUMBER : PT0061

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.0 | 22.0 | RT 6787 | Tps | Sand silty | medium yellow brown | v.fine sand to fine sand mod.well sorted | | | 0.5 trace | | |
| 22.0 | 24.0 | RT 6788 | Tps | Sand silty | medium yellow brown | v.fine sand to fine sand mod.well sorted | | | 0.5 trace | | |
| 10.0 | 24.0 | RT 6790 | | Composite Sample | | | | | | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30
CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 24-AUG-88
HOLE NUMBER : PT0062
LOGGED BY : K.A.Grey
TOTAL DEPTH : 24.0
GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 474318 NORTHING: 6283460 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0
Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6791 | Qdw | Clay | medium brown | medium sand | | | 0.2 | | |
| | | | | Sand | | poorly sorted | | | light trace | | |
| 2.0 | 4.0 | RT 6792 | Qdw | Clay | light brown | medium sand | | | 0.2 | | |
| | | | | Sand | | poorly sorted | | | light trace | | |
| 4.0 | 6.0 | RT 6793 | Qdw | Clay | medium red | medium sand | | | 0.2 | | |
| | | | | Sand | brown | poorly sorted | | | light trace | | |
| 6.0 | 8.0 | RT 6794 | Qdw | Clay silty Sand | medium brown | v.fine sand to coarse sand poorly sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6795 | Tps | Sand clayey silty | light brown | v.fine sand to v.crse sand poorly sorted | sub-angular elongate | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 6796 | Tps | Sand clayey silty | light brown | v.fine sand to v.crse sand poorly sorted | | | 0.2 light trace | | |
| 0.0 | 12.0 | RT 6803 | | Composite Sample | | | | | | | |
| 12.0 | 14.0 | RT 6797 | Tps | Sand clayey silty | medium red brown | v.fine sand to v.crse sand poorly sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6798 | Tps | Sand clayey silty | light brown | v.fine sand to v.crse sand poorly sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6799 | Tps | Sand | medium red brown | v.fine sand to fine sand well sorted | rounded | | 0.5 trace | Muscovite | |
| 18.0 | 20.0 | RT 6800 | Tps | Sand | light brown yellow | v.fine sand to fine sand well sorted | | | 0.5 trace | Muscovite | |

SHEET 2 OF 2 HOLE NUMBER : PT0062

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.0 | 22.0 | RT 6801 | Tps | Sand | light brown yellow | v.fine sand to fine sand well sorted | | | 0.2 light trace | Muscovite | |
| 22.0 | 24.0 | RT 6802 | Tps | Sand | light brown yellow | v.fine sand to fine sand well sorted | | | 0.2 light trace | Muscovite | |
| 12.0 | 24.0 | RT 6804 | | Composite Sample | | | | | | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 24-AUG-88

HOLE NUMBER : PT0063
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 475315 NORTHING: 6283250 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ STRENGTH/ TYPE | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6805 | Qdw | Clay<br>sandy | silty | light brown | clay<br>well sorted | | weakly consol<br>Calcareous<br>friable | 0.2<br>light trace | | |
| 2.0 | 4.0 | RT 6806 | Qdw | Clay<br>sandy | silty | medium brown | clay<br>well sorted | | | 0.2<br>light trace | | |
| 4.0 | 6.0 | RT 6807 | Qdw | Silt<br>clayey | | medium red brown | v.fine sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 6.0 | 8.0 | RT 6808 | Qdw | Clay<br>silty | | medium red brown | v.fine sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 8.0 | 10.0 | RT 6809 | Qdw | Clay<br>silty | | medium red brown | v.fine sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 10.0 | 12.0 | RT 6810 | Tps | Sand<br>silty | clayey | medium brown | v.fine sand to granule<br>poorly sorted | rounded<br>sub-elongate | | 0.2<br>light trace | | |
| 12.0 | 14.0 | RT 6811 | Tps | Sand<br>silty | clayey | medium brown | v.fine sand to granule<br>poorly sorted | | | 0.2<br>light trace | | |
| 14.0 | 16.0 | RT 6812 | Tps | Sand<br>silty | clayey | medium brown | v.fine sand to granule<br>poorly sorted | | | 0.2<br>light trace | | |
| 16.0 | 18.0 | RT 6813 | Tps | Sand | | light brown | v.fine sand to medium sand<br>well sorted | sub-rounded | | 0.2<br>light trace | | |
| 18.0 | 21.0 | RT 6814 | Tps | Sand<br>gritty | | medium brown | v.fine sand to v.crse sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 0.0 | 21.0 | RT 6815 | | Composite Sample | | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 24-AUG-88

HOLE NUMBER : PT0064
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 476320 NORTHING: 6283280 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6816 | Qdw | Silt sandy clayey | medium brown | v.fine sand well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6817 | Qdw | Silt sandy clayey | medium brown | v.fine sand well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6818 | Qdw | Silt sandy clayey | medium brown | v.fine sand well sorted | | | 0.0 | | |
| 6.0 | 8.0 | RT 6819 | Qdw | Silt sandy | medium brown | v.fine sand to granule poorly sorted | sub-rounded | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6820 | Tps | Sand | medium brown | v.fine sand to granule poorly sorted | rounded | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 6821 | Tps | Sand | medium brown | v.fine sand to granule poorly sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6822 | Tps | Sand | medium brown | v.fine sand to granule poorly sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6823 | Tps | Sand | medium brown | v.fine sand to granule poorly sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6824 | Tps | Sand | medium red brown | v.fine sand to granule poorly sorted | | | 0.2 light trace | | |
| 18.0 | 21.0 | RT 6825 | Tps | Sand | medium red brown | v.fine sand to granule poorly sorted | | | 0.2 light trace | | |
| 0.0 | 21.0 | RT 6826 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30
CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 24-AUG-88
HOLE NUMBER : PT0065
LOGGED BY : K.A.Grey
TOTAL DEPTH : 27.0
GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 477285 NORTHING: 6283190 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0
Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6827 | Qdw | Silt | light brown | v.fine sand | | weakly consol Calcareous friable | 0.2 light trace | | |
| | | | | Sand | | mod.well sorted | | | | | |
| 2.0 | 4.0 | RT 6828 | Qdw | Silt | light brown | v.fine sand | | | 0.2 light trace | | |
| | | | | Sand | | mod.well sorted | | | | | |
| 4.0 | 6.0 | RT 6829 | Qdw | Silt | medium brown | v.fine sand | | | 0.2 light trace | | |
| | | | | Sand | | mod.well sorted | | | | | |
| 6.0 | 8.0 | RT 6830 | Qdw | Silt | medium brown | v.fine sand | | | 0.2 light trace | | |
| | | | | Sand | | mod.well sorted | | | | | |
| 8.0 | 10.0 | RT 6831 | Tps | Sand silty | light brown grey | v.fine sand ext.well sorted | sub-rounded | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 6832 | Tps | Sand silty | light brown grey | v.fine sand ext.well sorted | sub-rounded | | 0.2 light trace | | |
| 0.0 | 12.0 | RT 6840 | | Composite Sample | | | | | | | |
| 12.0 | 14.0 | RT 6833 | Tps | Sand silty | light brown grey | v.fine sand to fine sand ext.well sorted | sub-rounded | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6834 | Tps | Sand silty | light brown grey | fine sand to granule poorly sorted | rounded | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6835 | Tps | Sand silty | light brown grey | fine sand to granule poorly sorted | rounded | | 0.2 light trace | | |
| 18.0 | 20.0 | RT 6836 | Tps | Sand silty | medium red brown | fine sand to granule poorly sorted | rounded | | 0.2 light trace | | |

SHEET 2 OF 2 HOLE NUMBER : PT0065

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ STRENGTH | TYPE/ | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.0 | 22.0 | RT 6837 | Tps | Sand<br>silty | medium red brown | fine sand to granule<br>poorly sorted | rounded | | | 0.2<br>light trace | | |
| 22.0 | 24.0 | RT 6838 | Tps | Sand<br>Silt | medium red brown | v.fine sand to granule<br>poorly sorted | rounded | | | 0.2<br>light trace | | |
| 24.0 | 27.0 | RT 6839 | Tps | Sand<br>Silt | medium red brown | v.fine sand to granule<br>poorly sorted | rounded | | | 0.2<br>light trace | | |
| 12.0 | 27.0 | RT 6841 | | Composite Sample | | | | | | | | |

EOH at 27.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 24-AUG-88

HOLE NUMBER : PT0066
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 478382 NORTHING: 6283070 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole

SHEET 1 OF 1 HOLE NUMBER : PT0066

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6842 | Qdw | Silt sandy clayey | light brown | v.fine sand well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6843 | Qdw | Silt sandy clayey | light brown | v.fine sand well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6844 | Qdw | Silt sandy clayey | light brown | v.fine sand well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6845 | Qdw | Silt sandy clayey | medium brown | v.fine sand well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6846 | Qdw | Silt sandy clayey Sand | medium brown | v.fine sand to fine sand mod.well sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 6847 | Tps | Sand Silt | light brown | v.fine sand to coarse sand mod.well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6848 | Tps | Sand Silt | light brown | v.fine sand to coarse sand mod.well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6849 | Tps | Sand silty | medium grey | v.fine sand to granule poorly sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6850 | Tps | Sand Silt | light yellow brown | v.fine sand to granule poorly sorted | | | 0.2 light trace | | |
| 18.0 | 21.0 | RT 6851 | Tps | Sand Silt | light yellow brown | v.fine sand to granule poorly sorted | | | 0.2 light trace | | |
| 0.0 | 21.0 | RT 6852 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 24-AUG-88

HOLE NUMBER : PT0067
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 479301 NORTHING: 6282880 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole

SHEET 1 OF 1 HOLE NUMBER : PT0067

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6853 | Qdw | Silt<br>sandy<br>Clay | medium brown | medium sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 2.0 | 4.0 | RT 6854 | Qdw | Silt<br>sandy<br>Clay | medium brown | medium sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 4.0 | 6.0 | RT 6855 | Qdw | Sand<br>silty | medium brown | v.fine sand to medium sand<br>well sorted | sub-rounded | | 0.2<br>light trace | | |
| 6.0 | 8.0 | RT 6856 | Tps | Sand<br>gritty | medium brown | v.fine sand to granule<br>poorly sorted | sub-rounded<br>sub-spherical | | 0.2<br>light trace | | |
| 8.0 | 10.0 | RT 6857 | Tps | Sand<br>gritty | medium brown | v.fine sand to granule<br>poorly sorted | sub-rounded | | 0.2<br>light trace | | |
| 10.0 | 12.0 | RT 6858 | Tps | Sand<br>gritty | light grey brown | v.fine sand to granule<br>poorly sorted | sub-rounded<br>sub-spherical | | 0.2<br>light trace | | |
| 12.0 | 14.0 | RT 6859 | Tps | Sand<br>gritty | light brown | v.fine sand to granule<br>poorly sorted | sub-rounded<br>sub-spherical | | 0.2<br>light trace | | |
| 14.0 | 16.0 | RT 6860 | Tps | Sand<br>gritty | light brown | v.fine sand to granule<br>poorly sorted | sub-rounded | | 0.2<br>light trace | | |
| 16.0 | 18.0 | RT 6861 | Tps | Sand<br>gritty | light brown | v.fine sand to granule<br>poorly sorted | sub-rounded | | 0.2<br>light trace | | |
| 18.0 | 21.0 | RT 6862 | Tps | Sand<br>Silt | medium brown | v.fine sand to granule<br>poorly sorted | rounded<br>sub-spherical | | 0.2<br>light trace | | |
| 0.0 | 21.0 | RT 6863 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 24-AUG-88

HOLE NUMBER : PT0068
LOGGED BY : K.A.Grey
TOTAL DEPTH : 30.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 480267 NORTHING: 6282760 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6864 | Qdw | Silt sandy clayey | light brown | v.fine sand mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6865 | Qdw | Silt sandy clayey | light brown | v.fine sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6866 | Qdw | Silt sandy clayey | light brown | v.fine sand to fine sand well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6867 | Qdw | Silt sandy clayey | light brown | v.fine sand to fine sand well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6868 | Qdw | Silt sandy clayey | light brown | v.fine sand to fine sand well sorted | | | 0.2 light trace | | |
| 0.0 | 10.0 | RT 6878 | | Composite Sample | | | | | | | |
| 10.0 | 12.0 | RT 6869 | Tps | Sand silty | medium brown | v.fine sand to medium sand mod.well sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6870 | Tps | Sand silty | medium brown | v.fine sand to medium sand mod.well sorted | sub-rounded | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6871 | Tps | Sand silty | medium brown | v.fine sand to medium sand mod.well sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6872 | Tps | Sand silty | light brown | v.fine sand to fine sand well sorted | sub-rounded sub-spherical | | 0.5 trace | | |
| 18.0 | 20.0 | RT 6873 | Tps | Sand | light brown | v.fine sand to granule mod.well sorted | sub-rounded sub-spherical | | 0.2 light trace | | |

SHEET 2 OF 2 HOLE NUMBER : PT0068

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.0 | 22.0 | RT 6874 | Tps | Sand | light brown | fine sand to granule poorly sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 22.0 | 24.0 | RT 6880 | Tps | Sand | light brown | fine sand to granule poorly sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 24.0 | 26.0 | RT 6875 | Tps | Sand | light brown | fine sand to granule poorly sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 26.0 | 28.0 | RT 6876 | Tps | Sand | light brown | fine sand to granule poorly sorted | sub-rounded | | 0.2 light trace | | |
| 28.0 | 30.0 | RT 6877 | Tps | Sand | light brown | fine sand to granule poorly sorted | sub-rounded | | 0.2 light trace | | |
| 10.0 | 30.0 | RT 6879 | | Composite Sample | | | | | | | |

EOH at 30.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 25-AUG-88

HOLE NUMBER : PT0069
LOGGED BY : K.A.Grey
TOTAL DEPTH : 45.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 481224 NORTHING: 6282610 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log in rods



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6881 | Qdw | Siltstone<br>sandy | medium<br>brown | v.fine sand to<br>fine sand<br>mod.well sorted | | weakly consol<br>Calcareous<br>friable | 0.2<br>light trace | | |
| 2.0 | 4.0 | RT 6882 | Qdw | Siltstone<br>sandy | medium<br>brown | v.fine sand to<br>fine sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 4.0 | 6.0 | RT 6883 | Tps | Sand<br>silty | medium<br>grey | fine sand<br>ext.well sorted | sub-rounded<br>sub-spherical | | 0.2<br>light trace | | |
| 6.0 | 8.0 | RT 6884 | Tps | Sand<br>silty | light<br>grey<br>brown | v.fine sand to<br>fine sand<br>ext.well sorted | sub-rounded<br>sub-spherical | | 0.2<br>light trace | | |
| 8.0 | 10.0 | RT 6885 | Tps | Sand<br>silty | light<br>grey<br>brown | v.fine sand to<br>fine sand<br>ext.well sorted | sub-rounded<br>sub-spherical | | 0.2<br>light trace | | |
| 10.0 | 12.0 | RT 6886 | Tps | Sand<br>silty | light<br>grey<br>brown | v.fine sand to<br>v.crse sand<br>ext.well sorted | sub-rounded | | 0.2<br>light trace | | |
| 12.0 | 14.0 | RT 6887 | Tps | Sand<br>Silt | light<br>brown | v.fine sand to<br>granule<br>poorly sorted | rounded<br>sub-spherical | | 0.2<br>light trace | | |
| 14.0 | 16.0 | RT 6888 | Tps | Sand<br>Silt | light<br>brown | v.fine sand to<br>granule<br>poorly sorted | rounded | | 0.2<br>light trace | | |
| 16.0 | 18.0 | RT 6889 | Tps | Sand<br>Silt | light<br>brown | v.fine sand to<br>granule<br>poorly sorted | rounded | | 0.2<br>light trace | | |
| 18.0 | 20.0 | RT 6890 | Tps | Sand<br>Silt | light<br>brown | v.fine sand to<br>granule<br>poorly sorted | rounded | | 0.2<br>light trace | | |
| 0.0 | 20.0 | RT 6904 | | Composite Sample | | | | | | | |

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.0 | 22.0 | RT 6891 | Tps | Sand<br>Silt | light brown | v.fine sand to granule<br>poorly sorted | rounded | | 0.2<br>light trace | | |
| 22.0 | 24.0 | RT 6892 | Tps | Sand | medium grey | fine sand to medium sand<br>ext.well sorted | sub-rounded | | 1.0<br>Good trace | Muscovite | |
| 24.0 | 26.0 | RT 6893 | Tps | Sand<br>Silt | medium grey | v.fine sand to granule<br>mod.well sorted | | | 0.5<br>trace | | |
| 26.0 | 28.0 | RT 6894 | Tps | Sand | dark grey | v.fine sand to fine sand<br>ext.well sorted | | | 1.0<br>Good trace | Muscovite | |
| 28.0 | 30.0 | RT 6895 | Tps | Sand | dark grey | v.fine sand to fine sand<br>ext.well sorted | | | 1.0<br>Good trace | | |
| 20.0 | 30.0 | RT 6903 | | Composite Sample | | | | | | | |
| 30.0 | 32.0 | RT 6896 | Tps | Sand | dark grey | v.fine sand to fine sand<br>ext.well sorted | | | 0.5<br>trace | | |
| 32.0 | 34.0 | RT 6897 | Tps | Sand | dark grey | v.fine sand to fine sand<br>ext.well sorted | | | 0.5<br>trace | | |
| 34.0 | 36.0 | RT 6898 | Tps | Sand | dark grey | v.fine sand to fine sand<br>ext.well sorted | | | 0.5<br>trace | | |
| 36.0 | 38.0 | RT 6899 | Tps | Sand | dark grey | v.fine sand to fine sand<br>ext.well sorted | | | 0.5<br>trace | | |
| 38.0 | 40.0 | RT 6900 | Tps | Sand | dark grey | v.fine sand to fine sand<br>ext.well sorted | | | 0.5<br>trace | | |
| 40.0 | 42.0 | RT 6901 | Tps | Sand | dark grey | v.fine sand to fine sand<br>ext.well sorted | | | 0.5<br>trace | | |
| 42.0 | 45.0 | RT 6902 | Tps | Sand | dark grey | v.fine sand to fine sand<br>ext.well sorted | | | 0.5<br>trace | | |

SHEET 3 OF 2 HOLE NUMBER : PT0069

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 30.0 | 45.0 | RT 6905 | | Composite Sample | | | | | | | |

EOH at 45.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30
CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 25-AUG-88
HOLE NUMBER : PT0070
LOGGED BY : K.A.Grey
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 482222 NORTHING: 6282450 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log in rods



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6909 | Qdw | Silt sandy | medium brown | v.fine sand to fine sand well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6910 | Qdw | Silt sandy | medium brown | v.fine sand to fine sand well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6911 | Qdw | Silt sandy | medium brown | v.fine sand to fine sand well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6909 | Tps | Sand silty | medium brown | v.fine sand to fine sand ext.well sorted | sub-rounded | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6910 | Tps | Sand gritty silty | medium brown | fine sand to granule poorly sorted | rounded | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 6911 | Tps | Sand gritty silty | medium brown | fine sand to granule poorly sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6912 | Tps | Sand gritty silty | medium brown yellow | fine sand to granule poorly sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6913 | Tps | Sand gritty silty | light yellow brown | fine sand to granule poorly sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6914 | Tps | Sand | light grey | v.fine sand to granule poorly sorted | sub-rounded sub-elongate | | 0.5 trace | | |
| 18.0 | 20.0 | RT 6915 | Tps | Sand | light grey | v.fine sand to granule poorly sorted | | | 0.5 trace | | |
| 0.0 | 20.0 | RT 6921 | | Composite Sample | | | | | | | |

SHEET 2 OF 2 HOLE NUMBER : PT0070

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.0 | 22.0 | RT 6916 | Tps | Sand | light grey | v.fine sand to granule poorly sorted | | | 1.0 Good trace | | |
| 22.0 | 24.0 | RT 6917 | Tps | Sand | light grey | v.fine sand to granule poorly sorted | | | 1.0 Good trace | Muscovite | |
| 24.0 | 26.0 | RT 6918 | Tps | Sand silty | medium grey | v.fine sand to fine sand ext.well sorted | | | 1.0 Good trace | | |
| 26.0 | 28.0 | RT 6919 | Tps | Sand silty | medium grey | v.fine sand to fine sand ext.well sorted | | | 1.0 Good trace | | |
| 28.0 | 30.0 | RT 6920 | Tps | Sand silty | medium grey | v.fine sand to fine sand ext.well sorted | | | 1.0 Good trace | | |
| 21.0 | 30.0 | RT 6922 | | Composite Sample | | | | | | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 26-AUG-88

HOLE NUMBER : PT0071
LOGGED BY : K.A.Grey
TOTAL DEPTH : 24.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 483278 NORTHING: 6282343 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6923 | Qdw | Silt clayey sandy | medium brown | v.fine sand to fine sand mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6924 | Qdw | Silt clayey sandy | medium brown | v.fine sand to fine sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6925 | Qdw | Silt<br>Sand clayey | medium red brown | v.fine sand to fine sand mod.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6926 | Qdw | Clay<br>Silt | light brown grey | clay<br>ext.well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6927 | Qdw | Clay<br>Silt | light brown grey | clay<br>ext.well sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 6928 | Qdw | Silt sandy clayey | light brown | v.fine sand mod.well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6929 | Qdw | Silt sandy clayey | light brown | v.fine sand to fine sand mod.well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6930 | Tps | Sand silty | medium yellow brown | v.fine sand to v.crse sand well sorted | sub-rounded | | 0.2 light trace | | |
| 0.0 | 16.0 | RT 6935 | | Composite Sample | | | | | | | |
| 16.0 | 18.0 | RT 6931 | Tps | Sand silty | light brown | v.fine sand to coarse sand mod.well sorted | sub-rounded sub-elongate | | 0.2 light trace | | |
| 18.0 | 20.0 | RT 6932 | Tps | Sand<br>Silt | medium red brown | fine sand to granule poorly sorted | sub-rounded | | 0.2 light trace | | |

SHEET 2 OF 2 HOLE NUMBER : PT0071

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.0 | 22.0 | RT 6933 | Tps | Sand<br>Silt | light brown | fine sand to granule<br>poorly sorted | | | 0.2<br>light trace | | |
| 22.0 | 24.0 | RT 6934 | Tps | Sand<br>Silt | light brown | fine sand to granule<br>poorly sorted | | | 0.2<br>light trace | | |
| 16.0 | 24.0 | RT 6936 | | Composite Sample | | | | | | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 26-AUG-88

HOLE NUMBER : PT0072
LOGGED BY : K.A.Grey
TOTAL DEPTH : 45.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 478157 NORTHING: 6274970 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log in rods



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6937 | Qdw | Clay silty | medium red brown | clay well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6938 | Qdw | Clay silty | light brown | clay well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6939 | Qdw | Clay silty | light brown | clay well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6940 | Qdw | Clay silty | light brown | clay well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6941 | Qdw | Clay silty | light brown | clay well sorted | | | 0.2 light trace | | |
| 0.0 | 10.0 | RT 6959 | | Composite Sample | | | | | | | |
| 10.0 | 12.0 | RT 6942 | Tps | Sand silty | light grey brown | fine sand to medium sand well sorted | sub-rounded | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6943 | Tps | Sand | light grey brown | medium sand to v.crse sand well sorted | sub-rounded | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6944 | Tps | Sand | light grey brown | medium sand to v.crse sand well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6945 | Tps | Sand | light grey brown | medium sand to v.crse sand well sorted | | | 0.2 light trace | | |
| 18.0 | 20.0 | RT 6946 | Tps | Sand silty | light brown | medium sand to v.crse sand well sorted | sub-rounded sub-elongate | | 0.2 light trace | | |

SHEET 2 OF 2 HOLE NUMBER : PT0072

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.0 | 22.0 | RT 6947 | Tps | Sand silty | light brown | medium sand to v.crse sand well sorted | | | 0.2 light trace | | |
| 22.0 | 24.0 | RT 6948 | Tps | Sand silty | light brown | v.fine sand to granule mod.well sorted | sub-rounded sub-elongate | | 0.2 light trace | | |
| 24.0 | 26.0 | RT 6949 | Tps | Sand silty | light brown | v.fine sand to granule mod.well sorted | | | 0.2 light trace | | |
| 26.0 | 28.0 | RT 6950 | Tps | Sand silty | light brown | v.fine sand to granule mod.well sorted | | | 0.2 light trace | | |
| 10.0 | 28.0 | RT 6960 | | Composite Sample | | | | | | | |
| 28.0 | 30.0 | RT 6951 | Tps | Sand silty | medium grey | v.fine sand to fine sand ext.well sorted | sub-rounded | | 1.0 Good trace | Muscovite | |
| 30.0 | 32.0 | RT 6952 | Tps | Sand silty | medium grey | v.fine sand to fine sand ext.well sorted | | | 1.0 Good trace | | |
| 32.0 | 34.0 | RT 6953 | Tps | Sand silty | medium grey | v.fine sand to fine sand ext.well sorted | | | 1.0 Good trace | | |
| 34.0 | 36.0 | RT 6954 | Tps | Sand silty | dark grey | v.fine sand to coarse sand well sorted | sub-rounded | | 0.5 trace | Muscovite | |
| 36.0 | 38.0 | RT 6955 | Tps | Sand silty | dark grey | v.fine sand to fine sand ext.well sorted | sub-rounded | | 1.0 Good trace | Muscovite | |
| 38.0 | 40.0 | RT 6956 | Tps | Sand silty | dark grey | v.fine sand to fine sand ext.well sorted | sub-rounded | | 1.0 Good trace | Muscovite | |
| 40.0 | 42.0 | RT 6957 | Tps | Sand | dark grey | v.fine sand to fine sand ext.well sorted | sub-rounded | | 1.0 Good trace | Muscovite | |
| 42.0 | 45.0 | RT 6958 | Tps | Sand | dark grey | v.fine sand to fine sand ext.well sorted | | | 1.0 Good trace | | |

SHEET 3 OF 2 HOLE NUMBER : PT0072

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 28.0 | 45.0 | RT 6961 | | Composite Sample | | | | | | | |

EOH at 45.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 26-AUG-88

HOLE NUMBER : PT0073
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 479239 NORTHING: 6275020 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6962 | Qdw | Silt clayey | medium red brown | silt mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6963 | Qdw | Silt clayey | medium red brown | silt mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6964 | Qdw | Clay silty | medium brown | clay well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6965 | Qdw | Clay silty | light brown tan | clay ext.well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6966 | Qdw | Clay silty | light brown tan | clay ext.well sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 6967 | Qdw | Clay silty | light brown tan | clay ext.well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6968 | Qdw | Clay silty | light brown tan | clay ext.well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6969 | Qdw | Clay silty | light brown tan | clay ext.well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6970 | Qdw | Clay silty | light brown tan | clay ext.well sorted | | | 0.2 light trace | | |
| 18.0 | 21.0 | RT 6971 | Qdw | Clay silty | light brown tan | clay ext.well sorted | | | 0.2 light trace | | |
| 0.0 | 21.0 | RT 6972 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30
CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 26-AUG-88
HOLE NUMBER : PT0074
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0
GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 480202 NORTHING: 6275020 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0
Comments: Gamma log open hole

SHEET 1 OF 1 HOLE NUMBER : PT0074

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6973 | Qdw | Silt clayey | medium red brown | silt well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6974 | Qdw | Silt clayey | medium red brown | silt well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6975 | Qdw | Silt clayey | medium red brown | silt well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6976 | Qdw | Clay | light brown tan | clay ext.well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6977 | Qdw | Clay | light brown tan | clay ext.well sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 6978 | Qdw | Clay | light brown tan | clay ext.well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6979 | Qdw | Clay | light brown tan | clay ext.well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6980 | Qdw | Clay | light brown tan | clay ext.well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6981 | Qdw | Clay | light brown tan | clay ext.well sorted | | | 0.2 light trace | | |
| 18.0 | 21.0 | RT 6982 | Qdw | Clay | light brown tan | clay ext.well sorted | | | 0.2 light trace | | |
| 0.0 | 21.0 | RT 6983 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30
CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 26-AUG-88
HOLE NUMBER : PT0075
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 481196 NORTHING: 6275010 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole

SHEET 1 OF 1 HOLE NUMBER : PT0075

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6984 | Qdw | Silt clayey | light brown | v.fine sand well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6985 | Qdw | Silt clayey | light brown | v.fine sand well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6986 | Qdw | Silt | medium brown | v.fine sand to fine sand mod.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6987 | Qdw | Clay silty | light brown | clay well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6988 | Qdw | Clay silty | light brown | clay well sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 6989 | Qdw | Clay | medium khaki | clay mod.well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 6990 | Qdw | Clay | medium khaki | clay mod.well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 6991 | Qdw | Clay | medium khaki | clay mod.well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 6992 | Qdw | Clay | medium khaki | clay mod.well sorted | | | 0.2 light trace | | |
| 18.0 | 21.0 | RT 6993 | Qdw | Clay | medium khaki | clay mod.well sorted | | | 0.2 light trace | | |
| 0.0 | 21.0 | RT 6994 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 26-AUG-88

HOLE NUMBER : PT0076
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 482220 NORTHING: 6274980 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole

SHEET 1 OF 1 HOLE NUMBER : PT0076

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 6995 | Qdw | Silt clayey | medium red brown | silt mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 2.0 | 4.0 | RT 6996 | Qdw | Silt clayey | medium red brown | silt mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 6997 | Qdw | Silt clayey | medium red brown | silt mod.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 6998 | Qdw | Silt clayey | medium red brown | silt mod.well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 6999 | Qdw | Silt clayey | medium red brown | silt mod.well sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 7000 | Qdw | Clay silty | light brown tan | clay well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 7001 | Qdw | Clay silty | light brown tan | clay well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 7002 | Qdw | Clay silty | light brown tan | clay well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 7003 | Qdw | Clay silty | light brown tan | clay well sorted | | | 0.2 light trace | | |
| 18.0 | 21.0 | RT 7004 | Qdw | Clay silty | light brown tan | clay well sorted | | | 0.2 light trace | | |
| 0.0 | 21.0 | RT 7005 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30
CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 26-AUG-88
HOLE NUMBER : PT0077
LOGGED BY : K.A.Grey
TOTAL DEPTH : 18.0
GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 483253 NORTHING: 6275000 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0
Comments: Gamma log open hole

SHEET 1 OF 1 HOLE NUMBER : PT0077

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7006 | Qdw | Silt sandy | medium brown red | v.fine sand to fine sand well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 2.0 | 4.0 | RT 7007 | Qdw | Silt sandy | medium brown red | v.fine sand to fine sand well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 7008 | Qdw | Clay silty | medium khaki | clay mod.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 7009 | Qdw | Clay silty Sand | medium khaki | clay mod.well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 7010 | Qdw | Sand clayey | medium khaki | v.fine sand to fine sand mod.well sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 7011 | Qdw | Clay sandy | medium khaki | clay well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 7012 | Qdw | Clay sandy | medium khaki | clay well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 7013 | Qdw | Clay sandy | medium khaki | clay well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 7014 | Qdw | Clay sandy | medium khaki | clay well sorted | | | 0.2 light trace | | |
| 0.0 | 18.0 | RT 7015 | | Composite Sample | | | | | | | |

EOH at 18.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30
CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 26-AUG-88
HOLE NUMBER : PT0078
LOGGED BY : K.A.Grey
TOTAL DEPTH : 24.0
GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 484275 NORTHING: 6275020 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0
Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7016 | Qdw | Silt sandy | medium brown | v.fine sand to fine sand mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 2.0 | 4.0 | RT 7017 | Qdw | Silt sandy | medium brown | v.fine sand to fine sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 7018 | Qdw | Silt sandy | medium brown | v.fine sand to fine sand mod.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 7019 | Qdw | Silt sandy | light brown | silt to fine sand mod.well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 7020 | Qdw | Clay silty | medium khaki | clay well sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 7021 | Qdw | Clay silty | medium khaki | clay well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 7022 | Qdw | Clay silty | medium khaki | clay well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 7023 | Qdw | Clay silty | medium khaki | clay well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 7024 | Qdw | Clay silty | medium khaki | clay well sorted | | | 0.2 light trace | | |
| 18.0 | 20.0 | RT 7025 | Qdw | Clay silty | medium khaki | clay well sorted | | | 0.2 light trace | | |
| 20.0 | 22.0 | RT 7026 | Qdw | Clay silty | medium khaki | clay well sorted | | | 0.2 light trace | | |

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.0 | 24.0 | RT 7027 | Qdw | Sand | light yellow brown | v.fine sand to fine sand well sorted | sub-angular sub-elongate | | 0.2 light trace | | |
| | | | | | | Comments: | Tps at 22.5m | | | | |
| 0.0 | 24.0 | RT 7028 | | Composite Sample | | | | | | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 26-AUG-88

HOLE NUMBER : PT0079
LOGGED BY : K.A.Grey
TOTAL DEPTH : 12.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 485249 NORTHING: 6274980 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7029 | Qdw | Silt clayey | light brown | silt mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 2.0 | 4.0 | RT 7030 | Qdw | Silt clayey | light brown | silt mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 4.0 | 6.0 | RT 7031 | Qdw | Silt clayey | medium brown | silt mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 6.0 | 8.0 | RT 7032 | Qdw | Silt clayey | medium brown | silt mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 8.0 | 10.0 | RT 7033 | Qdw | Clay | light khaki | clay well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 10.0 | 12.0 | RT 7034 | Qdw | Clay | light khaki | clay well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 0.0 | 12.0 | RT 7035 | | Composite Sample | | | | | | | |

EOH at 12.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 26-AUG-88

HOLE NUMBER : PT0080
LOGGED BY : K.A.Grey
TOTAL DEPTH : 18.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 486243 NORTHING: 6274960 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7036 | Qdw | Silt | light brown grey | silt well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 2.0 | 4.0 | RT 7037 | Qdw | Clay sandy silty | light brown | clay to v.fine sand well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 4.0 | 6.0 | RT 7038 | Qdw | Clay silty | light brown | clay to silt ext.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 6.0 | 8.0 | RT 7039 | Qdw | Clay silty | light khaki | clay to silt well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 7040 | Qdw | Clay silty | light khaki | clay to silt well sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 7041 | Qdw | Clay silty | light khaki | clay to silt well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 7042 | Qdw | Clay silty | light khaki | clay to silt well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 7043 | Qdw | Clay silty | light khaki | clay to silt well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 7044 | Qdw | Clay silty | light khaki | clay to silt well sorted | | | 0.2 light trace | | |
| 0.0 | 18.0 | RT 7045 | | Composite Sample | | | | | | | |

EOH at 18.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 26-AUG-88

HOLE NUMBER : PT0081
LOGGED BY : K.A.Grey
TOTAL DEPTH : 33.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 487267 NORTHING: 6274940 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7046 | Qdw | Silt clayey | medium red brown | silt<br>mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 2.0 | 4.0 | RT 7047 | Qdw | Silt clayey | medium red brown | silt<br>mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 7048 | Qdw | Silt clayey | medium red brown | silt<br>mod.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 7049 | Qdw | Clay | medium khaki | clay<br>well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 7050 | Qdw | Sand silty | light brown | v.fine sand to fine sand<br>mod.well sorted | | friable | 0.2 light trace | | |
| 10.0 | 12.0 | RT 7051 | Qdw | Clay | light grey | clay<br>well sorted | | firm | 0.2 light trace | | |
| 12.0 | 14.0 | RT 7052 | Qdw | Clay | light grey | clay<br>well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 7053 | Qdw | Clay | light grey | clay<br>well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 7054 | Qdw | Clay | light grey | clay<br>well sorted | | | 0.2 light trace | | |
| 18.0 | 21.0 | RT 7055 | Qdw | Clay | light grey | clay<br>well sorted | | | 0.2 light trace | | |
| 0.0 | 21.0 | RT 7062 | | Composite Sample | | | | | | | |

Comments: Sand 20-21m Tps at 20.0m

SHEET 2 OF 2 HOLE NUMBER : PT0081

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 21.0 | 22.0 | RT 7056 | Tps | Sand silty | medium grey | v.fine sand to medium sand well sorted | | | 0.2 light trace | | |
| 22.0 | 24.0 | RT 7057 | Tps | Sand silty | medium grey | v.fine sand to medium sand well sorted | | | 0.2 light trace | | |
| 24.0 | 26.0 | RT 7058 | Tps | Sand silty | medium grey | v.fine sand to medium sand well sorted | | | 0.2 light trace | | |
| 26.0 | 28.0 | RT 7059 | Tps | Sand silty | medium grey | v.fine sand to medium sand well sorted | | | 0.2 light trace | | |
| 28.0 | 30.0 | RT 7060 | Tps | Sand silty | medium grey | v.fine sand to medium sand well sorted | | | 0.2 light trace | | |
| 30.0 | 33.0 | RT 7061 | Tps | Sand silty | medium grey yellow | v.fine sand to medium sand well sorted | | | 0.2 light trace | | |
| 21.0 | 33.0 | RT 7063 | | Composite Sample | | | | | | | |

EOH at 33.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 26-AUG-88

HOLE NUMBER : PT0082
LOGGED BY : K.A.Grey
TOTAL DEPTH : 18.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 488240 NORTHING: 6274938 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole

SHEET 1 OF 1 HOLE NUMBER : PT0082

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7065 | Qdw | Silt sandy clayey | medium brown | clay to v.fine sand well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 7066 | Qdw | Silt sandy clayey | medium brown | clay to v.fine sand well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 7067 | Qdw | Clay silty | light brown tan | clay to silt well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 7068 | Qdw | Clay | medium tan | clay well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 7069 | Qdw | Clay Sand | medium tan | clay to v.fine sand mod.well sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 7070 | Qdw | Clay Sand | medium tan | clay to v.fine sand ext.well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 7071 | Qdw | Clay | medium tan | clay ext.well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 7072 | Qdw | Clay | medium tan | clay ext.well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 7073 | Qdw | Clay | medium khaki | clay well sorted | | | 0.2 light trace | | |
| 0.0 | 18.0 | RT 7074 | | Composite Sample | | | | | | | |

EOH at 18.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 26-AUG-88

HOLE NUMBER : PT0083
LOGGED BY : K.A.Grey
TOTAL DEPTH : 24.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 489284 NORTHING: 6274930 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7075 | Qdw | Silt | medium brown | silt<br>mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 2.0 | 4.0 | RT 7076 | Qdw | Clay | medium brown | clay<br>well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 4.0 | 6.0 | RT 7077 | Qdw | Clay | medium brown khaki | clay<br>well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 7078 | Qdw | Clay | medium brown khaki | clay<br>well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 7079 | Qdw | Clay | medium brown khaki | clay<br>well sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 7080 | Qdw | Clay | medium brown khaki | clay<br>well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 7081 | Qdw | Clay | medium brown khaki | clay<br>well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 7082 | Qdw | Clay | medium brown khaki | clay<br>well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 7083 | Qdw | Clay | medium brown khaki | clay<br>well sorted | | | 0.2 light trace | | |
| 18.0 | 20.0 | RT 7084 | Qdw | Clay | medium brown khaki | clay<br>well sorted | | | 0.2 light trace | | |
| 20.0 | 22.0 | RT 7085 | Qdw | Silt clayey | light brown | clay to fine sand<br>mod.well sorted | | | 0.2 light trace | | |

SHEET 2 OF 2 HOLE NUMBER : PT0083

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.0 | 24.0 | RT 7086 | Qdw | Silt clayey | light brown | clay to fine sand mod.well sorted | | | 0.2 light trace | | |
| 0.0 | 24.0 | RT 7087 | | Composite Sample | | | | | | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 27-AUG-88

HOLE NUMBER : PT0084
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 490248 NORTHING: 6274900 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7088 | Qdw | Clay silty | light brown | clay to silt well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 7089 | Qdw | Clay silty | light brown | clay to silt well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 7090 | Qdw | Clay silty | light brown khaki | clay to silt well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 7091 | Qdw | Clay | medium khaki | clay well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 7092 | Qdw | Clay | medium khaki | clay well sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 7093 | Qdw | Clay | medium khaki | clay well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 7094 | Qdw | Clay | medium khaki | clay well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 7095 | Qdw | Clay | medium khaki | clay well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 7096 | Qdw | Clay | medium khaki | clay well sorted | | | 0.2 light trace | | |
| 18.0 | 21.0 | RT 7097 | Qdw | Clay | medium khaki | clay well sorted | | | 0.2 light trace | | |
| 0.0 | 21.0 | RT 7098 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30
CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 27-AUG-88
HOLE NUMBER : PT0085
LOGGED BY : K.A.Grey
TOTAL DEPTH : 24.0
GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 491236 NORTHING: 6275062 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0
Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7099 | Qdw | Silt<br>clayey | medium brown | clay to silt<br>mod.well sorted | | | 0.2<br>light trace | | |
| 2.0 | 4.0 | RT 7100 | Qdw | Clay<br>Silt | medium brown | clay to silt<br>mod.well sorted | | | 0.2<br>light trace | | |
| 4.0 | 6.0 | RT 7101 | Qdw | Clay | light brown khaki | clay<br>ext.well sorted | | | 0.2<br>light trace | | |
| 6.0 | 8.0 | RT 7102 | Qdw | Clay | light brown khaki | clay<br>ext.well sorted | | | 0.2<br>light trace | | |
| 8.0 | 10.0 | RT 7103 | Qdw | Clay | medium khaki | clay<br>ext.well sorted | | | 0.2<br>light trace | | |
| 10.0 | 12.0 | RT 7104 | Qdw | Clay | medium khaki | clay<br>ext.well sorted | | | 0.2<br>light trace | | |
| 12.0 | 14.0 | RT 7105 | Qdw | Clay | medium khaki | clay<br>ext.well sorted | | | 0.2<br>light trace | | |
| 14.0 | 16.0 | RT 7106 | Qdw | Clay | medium khaki | clay<br>ext.well sorted | | | 0.2<br>light trace | | |
| 16.0 | 18.0 | RT 7107 | Qdw | Clay<br>silty sandy | light brown | clay to fine sand<br>mod.well sorted<br>Comments: Tps at 17.7m | sub-rounded sub-elongate | | 0.2<br>light trace | | |
| 0.0 | 18.0 | RT 7111 | | Composite Sample | | | | | | | |
| 18.0 | 20.0 | RT 7108 | Tps | Sand<br>silty | light brown | v.fine sand to medium sand<br>mod.well sorted | | | 0.2<br>light trace | | |

SHEET 2 OF 2 HOLE NUMBER : PT0085

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.0 | 22.0 | RT 7109 | Tps | Sand | light brown yellow | v.fine sand to medium sand mod.well sorted | sub-angular sub-elongate | | 0.2 light trace | | |
| 22.0 | 24.0 | RT 7110 | Tps | Sand | light yellow brown | v.fine sand to medium sand mod.well sorted | sub-angular sub-elongate | | 0.2 light trace | | |
| 18.0 | 24.0 | RT 7112 | | Composite Sample | | | | | | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 27-AUG-88

HOLE NUMBER : PT0086
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 492868 NORTHING: 6276270 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole

SHEET 1 OF 1 HOLE NUMBER : PT0086

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7113 | Qdw | Silt clayey | medium brown | silt to v.fine sand mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 2.0 | 4.0 | RT 7114 | Qdw | Silt clayey | medium brown | silt to v.fine sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 7115 | Qdw | Clay | light khaki | clay ext.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 7116 | Qdw | Clay | light khaki | clay ext.well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 7117 | Qdw | Clay | light khaki | clay ext.well sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 7118 | Qdw | Clay | light khaki | clay ext.well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 7119 | Qdw | Clay | light khaki | clay ext.well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 7120 | Qdw | Clay | light khaki | clay ext.well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 7121 | Qdw | Clay | light khaki | clay ext.well sorted | | | 0.2 light trace | | |
| 18.0 | 21.0 | RT 7122 | Qdw | Clay | light khaki | clay ext.well sorted | | | 0.2 light trace | | |
| 0.0 | 21.0 | RT 7123 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 27-AUG-88

HOLE NUMBER : PT0087
LOGGED BY : K.A.Grey
TOTAL DEPTH : 18.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 493657 NORTHING: 6275670 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7124 | Qdw | Clay silty | light brown | clay well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 7125 | Qdw | Clay silty | medium brown khaki | clay ext.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 7126 | Qdw | Clay silty | medium brown khaki | clay ext.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 7127 | Qdw | Clay silty | medium brown khaki | clay ext.well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 7128 | Qdw | Clay silty | medium brown khaki | clay ext.well sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 7129 | Qdw | Clay silty | medium brown khaki | clay ext.well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 7130 | Qdw | Clay silty | medium brown khaki | clay ext.well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 7131 | Qdw | Clay silty | medium brown khaki | clay ext.well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 7132 | Qdw | Clay silty | medium brown khaki | clay ext.well sorted | | | 0.2 light trace | | |
| 0.0 | 18.0 | RT 7133 | | Composite Sample | | | | | | | |

EOH at 18.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 27-AUG-88

HOLE NUMBER : PT0088
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 494378 NORTHING: 6275020 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log in rods



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ STRENGTH | TYPE/ | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7134 | Qdw | Clay | medium brown | clay<br>well sorted | | | | 0.2<br>light trace | | |
| 2.0 | 4.0 | RT 7135 | Qdw | Clay | light brown | clay<br>mod.well sorted | | | | 0.2<br>light trace | | |
| 4.0 | 6.0 | RT 7136 | Qdw | Clay | light brown khaki | clay<br>mod.well sorted | | | | 0.2<br>light trace | | |
| 6.0 | 8.0 | RT 7137 | Qdw | Clay | light brown khaki | clay<br>mod.well sorted | | | | 0.2<br>light trace | | |
| 8.0 | 10.0 | RT 7138 | Qdw | Clay | light brown khaki | clay<br>mod.well sorted | | | | 0.2<br>light trace | | |
| 10.0 | 12.0 | RT 7139 | Qdw | Clay | light brown khaki | clay<br>mod.well sorted | | | | 0.2<br>light trace | | |
| 0.0 | 12.0 | RT 7144 | | Composite Sample | | | | | | | | |
| 12.0 | 14.0 | RT 7140 | Qdw | Clay silty sandy | medium khaki | clay to fine sand<br>well sorted<br>Comments: Tps at 13m | | | | 0.2<br>light trace | | |
| 14.0 | 16.0 | RT 7141 | Tps | Sand silty | light brown | silt to fine sand<br>ext.well sorted | sub-rounded sub-spherical | | | 0.5<br>trace | | |
| 16.0 | 18.0 | RT 7142 | Tps | Sand silty | light brown | silt to fine sand<br>ext.well sorted | | | | 0.5<br>trace | | |
| 18.0 | 21.0 | RT 7143 | Tps | Sand silty | light brown | silt to fine sand<br>ext.well sorted | | | | 0.5<br>trace | | |

SHEET 2 OF 2 HOLE NUMBER : PT0088

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.0 | 21.0 | RT 7145 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30
CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 27-AUG-88
HOLE NUMBER : PT0089
LOGGED BY : K.A.Grey
TOTAL DEPTH : 16.5

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 494921 NORTHING: 6274990 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole

SHEET 1 OF 1 HOLE NUMBER : PT0089

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7146 | Qdw | Clay<br>silty | medium<br>brown | clay to<br>silt<br>well sorted | | | 0.2<br>light trace | | |
| 2.0 | 4.0 | RT 7147 | Qdw | Clay<br>silty | light<br>brown | clay to<br>silt<br>well sorted | | | 0.2<br>light trace | | |
| 4.0 | 6.0 | RT 7148 | Qdw | Clay<br>silty | medium<br>brown<br>khaki | clay to<br>silt<br>well sorted | | | 0.2<br>light trace | | |
| 6.0 | 8.0 | RT 7149 | Qdw | Clay<br>silty | medium<br>brown<br>khaki | clay to<br>silt<br>well sorted | | | 0.2<br>light trace | | |
| 0.0 | 8.0 | RT 7155 | | Composite Sample | | | | | | | |
| 8.0 | 10.0 | RT 7150 | Qdw | Clay<br>silty | light<br>brown | clay to<br>silt<br>mod.well sorted | | | 0.2<br>light trace | | |
| 10.0 | 12.0 | RT 7151 | Tps | Sand<br>silty | light<br>brown | silt to<br>medium sand<br>mod.well sorted | sub-rounded<br>sub-elongate | | 0.2<br>light trace | | |
| 12.0 | 14.0 | RT 7152 | Tps | Sand<br>silty | light<br>brown | silt to<br>granule<br>poorly sorted | sub-rounded<br>sub-elongate | | 0.2<br>light trace | | |
| 14.0 | 16.0 | RT 7153 | Tps | Sand<br>silty | light<br>brown | silt to<br>granule<br>poorly sorted | | | 0.2<br>light trace | | |
| 16.0 | 16.5 | RT 7154 | Tps | Sand<br>silty | light<br>brown | silt to<br>granule<br>poorly sorted | | | 0.2<br>light trace | | |
| 8.0 | 16.5 | RT 7156 | | Composite Sample | | | | | | | |

EOH at 16.5 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 28-AUG-88

HOLE NUMBER : PT0090
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 495917 NORTHING: 6274882 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ STRENGTH/ TYPE | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7157 | Qdw | Clay<br>silty | light brown | clay to silt<br>mod.well sorted | | | 0.2<br>light trace | | |
| 2.0 | 4.0 | RT 7158 | Qdw | Clay | medium khaki | clay<br>well sorted | | | 0.2<br>light trace | | |
| 4.0 | 6.0 | RT 7159 | Qdw | Clay | medium khaki | clay<br>well sorted | | | 0.2<br>light trace | | |
| 6.0 | 8.0 | RT 7160 | Qdw | Clay | medium khaki | clay<br>well sorted | | | 0.2<br>light trace | | |
| 8.0 | 10.0 | RT 7161 | Qdw | Clay | medium khaki | clay<br>well sorted | | | 0.2<br>light trace | | |
| 10.0 | 12.0 | RT 7162 | Qdw | Clay | medium khaki | clay<br>well sorted | | | 0.2<br>light trace | | |
| 0.0 | 12.0 | RT 7167 | | Composite Sample | | | | | | | |
| 12.0 | 14.0 | RT 7163 | Qdw | Clay<br>Sand | light brown<br>yellow | clay to fine sand<br>mod.well sorted<br>Comments: Tps at 13m | sub-rounded<br>sub-elongate | | 0.2<br>light trace | | |
| 14.0 | 16.0 | RT 7164 | Tps | Sand | light brown yellow | v.fine sand to v.crse sand<br>mod.well sorted | sub-rounded | | 0.2<br>light trace | | |
| 16.0 | 18.0 | RT 7165 | Tps | Sand | light brown yellow | v.fine sand to v.crse sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 18.0 | 21.0 | RT 7166 | Tps | Sand | light brown yellow | v.fine sand to v.crse sand<br>mod.well sorted | | | 0.2<br>light trace | | |

SHEET 2 OF 2 HOLE NUMBER : PT0090

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.0 | 21.0 | RT 7168 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 30-AUG-88

HOLE NUMBER : PT0091
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 496982 NORTHING: 6274810 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7169 | Qdw | Silt clayey | medium brown | clay to silt well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 7170 | Qdw | Silt clayey | medium brown | clay to silt well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 7171 | Qdw | Silt clayey | medium brown | clay to silt well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 7172 | Qdw | Clay silty | light brown | clay to silt well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 7173 | Qdw | Clay | light khaki grey | clay well sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 7174 | Qdw | Clay | light khaki grey | clay well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 7175 | Qdw | Clay | light khaki grey | clay well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 7176 | Qdw | Clay | light khaki grey | clay well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 7177 | Qdw | Clay | light khaki grey | clay well sorted | | | 0.2 light trace | | |
| 18.0 | 21.0 | RT 7178 | Qdw | Clay | light khaki grey | clay well sorted | | | 0.2 light trace | | |
| 0.0 | 21.0 | RT 7179 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 30-AUG-88

HOLE NUMBER : PT0092
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 498046 NORTHING: 6274801 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7180 | Qdw | Silt<br>clayey | light<br>red<br>brown | clay to<br>silt<br>well sorted | | | 0.2<br>light trace | | |
| 2.0 | 4.0 | RT 7181 | Qdw | Clay<br>silty | medium<br>brown<br>grey | clay to<br>silt<br>ext.well sorted | | | 0.2<br>light trace | | |
| 4.0 | 6.0 | RT 7182 | Qdw | Clay<br>silty | medium<br>brown<br>grey | clay to<br>silt<br>ext.well sorted | | | 0.2<br>light trace | | |
| 6.0 | 8.0 | RT 7183 | Qdw | Clay<br>silty | medium<br>brown<br>grey | clay to<br>silt<br>ext.well sorted | | | 0.2<br>light trace | | |
| 8.0 | 10.0 | RT 7184 | Qdw | Clay<br>silty | light<br>khaki<br>grey | clay to<br>silt<br>mod.well sorted | | | 0.2<br>light trace | | |
| 10.0 | 12.0 | RT 7185 | Qdw | Clay<br>silty | light<br>khaki<br>grey | clay to<br>silt<br>ext.well sorted | | | 0.2<br>light trace | | |
| 12.0 | 14.0 | RT 7186 | Qdw | Clay<br>silty | light<br>khaki<br>grey | clay to<br>silt<br>ext.well sorted | | | 0.2<br>light trace | | |
| 14.0 | 16.0 | RT 7187 | Qdw | Clay<br>silty | light<br>khaki<br>grey | clay to<br>silt<br>ext.well sorted | | | 0.2<br>light trace | | |
| 16.0 | 18.0 | RT 7188 | Qdw | Clay<br>silty | light<br>khaki<br>grey | clay to<br>silt<br>ext.well sorted | | | 0.2<br>light trace | | |
| 18.0 | 21.0 | RT 7189 | Qdw | Clay<br>silty | light<br>khaki<br>grey | clay to<br>silt<br>ext.well sorted | | | 0.2<br>light trace | | |
| 0.0 | 21.0 | RT 7190 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30
CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 30-AUG-88
HOLE NUMBER : PT0093
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0
GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 499011 NORTHING: 6274710 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0
Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7191 | Qdw | Clay silty | medium red brown | clay to silt well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 7192 | Qdw | Clay | light brown | clay well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 7193 | Qdw | Clay | medium khaki brown | clay well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 7194 | Qdw | Clay | medium khaki brown | clay well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 7195 | Qdw | Clay | medium khaki brown | clay well sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 7196 | Qdw | Clay | medium khaki brown | clay well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 7197 | Qdw | Clay | medium khaki brown | clay well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 7198 | Qdw | Clay | medium khaki brown | clay well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 7199 | Qdw | Clay | medium khaki brown | clay well sorted | | | 0.2 light trace | | |
| 18.0 | 21.0 | RT 7200 | Qdw | Clay | medium khaki brown | clay well sorted | | | 0.2 light trace | | |
| 0.0 | 21.0 | RT 7201 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 30-AUG-88

HOLE NUMBER : PT0094
LOGGED BY : K.A.Grey
TOTAL DEPTH : 39.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 499932 NORTHING: 6274440 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7203 | Qdw | Clay<br>silty | medium<br>red<br>brown | clay to<br>silt<br>well sorted | | | 0.2<br>light trace | | |
| 2.0 | 4.0 | RT 7204 | Qdw | Clay | light<br>brown<br>grey | clay<br>well sorted | | | 0.2<br>light trace | | |
| 4.0 | 6.0 | RT 7204 | Qdw | Clay | medium<br>khaki<br>grey | clay<br>well sorted | | | 0.2<br>light trace | | |
| 6.0 | 8.0 | RT 7205 | Qdw | Clay | medium<br>khaki<br>grey | clay<br>well sorted | | | 0.2<br>light trace | | |
| 8.0 | 10.0 | RT 7206 | Qdw | Clay | medium<br>khaki<br>grey | clay<br>well sorted | | | 0.2<br>light trace | | |
| 10.0 | 12.0 | RT 7207 | Qdw | Clay | medium<br>khaki<br>grey | clay<br>well sorted | | | 0.2<br>light trace | | |
| 12.0 | 14.0 | RT 7208 | Qdw | Clay | medium<br>khaki<br>grey | clay<br>well sorted | | | 0.2<br>light trace | | |
| 14.0 | 16.0 | RT 7209 | Qdw | Clay<br>Silt | medium<br>khaki<br>grey | clay<br>well sorted | | | 0.2<br>light trace | | |
| 16.0 | 18.0 | RT 7210 | Qdw | Clay<br>Silt | medium<br>khaki<br>grey | clay<br>well sorted | | | 0.2<br>light trace | | |
| 18.0 | 20.0 | RT 7211 | Qdw | Clay<br>Silt<br>sandy | medium<br>khaki<br>grey | clay to<br>medium sand<br>well sorted | | | 0.2<br>light trace | | |
| 20.0 | 22.0 | RT 7212 | Qdw | Clay<br>Silt<br>sandy | medium<br>khaki<br>grey | clay to<br>medium sand<br>well sorted | | | 0.2<br>light trace | | |

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 22.0 | RT 7221 | | Composite Sample | | | | | | | |
| 22.0 | 24.0 | RT 7213 | Tps | Sand<br>Silt | light brown | silt to medium sand<br>mod.well sorted | sub-angular<br>sub-spherical | | 0.2<br>light trace | | |
| 24.0 | 26.0 | RT 7214 | Tps | Sand<br>Silt | light brown | silt to medium sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 26.0 | 28.0 | RT 7215 | Tps | Sand<br>Silt | light brown | silt to medium sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 28.0 | 30.0 | RT 7216 | Tps | Sand<br>silty | light brown | silt to fine sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 22.0 | 30.0 | RT 7222 | | Composite Sample | | | | | | | |
| 30.0 | 32.0 | RT 7217 | Tps | Sand<br>Silt | light brown | v.fine sand to granule<br>poorly sorted | sub-angular<br>sub-spherical | | 0.2<br>light trace | | |
| 32.0 | 34.0 | RT 7218 | Tps | Sand<br>Silt | light brown | v.fine sand to granule<br>poorly sorted | | | 0.5<br>trace | | |
| 34.0 | 36.0 | RT 7219 | Tps | Sand<br>Silt | light brown | v.fine sand to granule<br>poorly sorted | | | 0.5<br>trace | | |
| 36.0 | 39.0 | RT 7220 | Tps | Sand<br>Silt | light brown | v.fine sand to granule<br>poorly sorted | | | 0.5<br>trace | | |
| 30.0 | 39.0 | RT 7223 | | Composite Sample | | | | | | | |

EOH at 39.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 31-AUG-88

HOLE NUMBER : PT0095
LOGGED BY : K.A.Grey
TOTAL DEPTH : 24.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 472683 NORTHING: 6266220 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7224 | Qdw | Silt sandy | light brown | silt to fine sand mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 7225 | Qdw | Silt sandy | light brown | silt to fine sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 7226 | Qdw | Silt sandy | light brown | silt to fine sand mod.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 7227 | Qdw | Clay silty | light brown red | clay to silt mod.well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 7228 | Qdw | Sand silty | light brown | silt to medium sand mod.well sorted | sub-angular sub-spherical | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 7229 | Qdw | Sand clayey silty | light brown | silt to medium sand mod.well sorted | sub-angular sub-spherical | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 7230 | Qdw | Clay sandy silty | medium grey khaki | clay to silt mod.well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 7231 | Qdw | Clay sandy silty | light khaki grey | clay to fine sand well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 7232 | Qdw | Clay sandy silty | light khaki grey | clay to fine sand well sorted | | | 0.2 light trace | | |
| 18.0 | 20.0 | RT 7233 | Qdw | Clay sandy silty | light khaki grey | clay to fine sand well sorted | | | 0.2 light trace | | |
| 20.0 | 22.0 | RT 7234 | Qdw | Clay sandy silty | light khaki grey | clay to fine sand well sorted | | | 0.2 light trace | | |

SHEET 2 OF 2 HOLE NUMBER : PT0095

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.0 | 24.0 | RT 7235 | Qdw | Clay sandy silty | light khaki grey | clay to fine sand well sorted | | | 0.2 light trace | | |
| 0.0 | 24.0 | RT 7236 | | Composite Sample | | | | | | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 31-AUG-88

HOLE NUMBER : PT0096
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 473717 NORTHING: 6266210 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ STRENGTH | TYPE/ | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7237 | Qdw | Silt<br>Sand | light brown | silt to fine sand<br>mod.well sorted | sub-angular | | | 0.2<br>light trace | | |
| 2.0 | 4.0 | RT 7238 | Qdw | Silt<br>Sand | light brown | silt to fine sand<br>mod.well sorted | | | | 0.2<br>light trace | | |
| 4.0 | 6.0 | RT 7239 | Qdw | Silt<br>clayey | medium brown | clay to silt<br>well sorted | | | | 0.2<br>light trace | | |
| 6.0 | 8.0 | RT 7240 | Qdw | Clay<br>silty | medium brown | clay to silt<br>well sorted | | | | 0.2<br>light trace | | |
| 8.0 | 10.0 | RT 7241 | Qdw | Clay<br>silty | medium brown | clay to silt<br>well sorted | | | | 0.2<br>light trace | | |
| 10.0 | 12.0 | RT 7242 | Qdw | Silt<br>clayey | light brown | clay to silt<br>well sorted | | | | 0.2<br>light trace | | |
| 12.0 | 14.0 | RT 7243 | Qdw | Clay<br>silty | light brown | clay to v.fine sand<br>poorly sorted | | | | 0.2<br>light trace | | |
| 14.0 | 16.0 | RT 7244 | Qdw | Clay<br>silty | light brown grey | clay to silt<br>well sorted | | | | 0.2<br>light trace | | |
| 16.0 | 18.0 | RT 7245 | Qdw | Clay<br>silty | light brown grey | clay to silt<br>well sorted | | | | 0.2<br>light trace | | |
| 18.0 | 21.0 | RT 7246 | Qdw | Clay<br>silty | light brown grey | clay to silt<br>well sorted | | | | 0.2<br>light trace | | |
| 0.0 | 21.0 | RT 7247 | | Composite Sample | | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30
GRID: AMG ZONE: 54 RELIABILITY: TOPO

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 31-AUG-88

HOLE NUMBER : PT0097
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

EASTING: 474670 NORTHING: 6266200 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole

SHEET 1 OF 1 HOLE NUMBER : PT0097

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7248 | Qdw | Silt sandy | light brown | silt to v.fine sand mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 7249 | Qdw | Silt sandy | light brown | silt to v.fine sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 7250 | Qdw | Silt sandy | light brown | silt to v.fine sand mod.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 7251 | Qdw | Silt sandy clayey | light brown | clay to v.fine sand poorly sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 7252 | Qdw | Silt sandy clayey | light brown | clay to v.fine sand poorly sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 7253 | Qdw | Clay | light khaki grey | clay well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 7254 | Qdw | Clay Sand | light brown | clay to medium sand well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 7255 | Qdw | Sand silty | light brown | silt to fine sand well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 7256 | Qdw | Clay silty | light grey khaki | clay well sorted | sub-angular | | 0.2 light trace | | |
| 18.0 | 21.0 | RT 7257 | Qdw | Clay silty | light grey khaki | clay well sorted | | | 0.2 light trace | | |
| 0.0 | 21.0 | RT 7258 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 31-AUG-88

HOLE NUMBER : PT0098
LOGGED BY : K.A.Grey
TOTAL DEPTH : 24.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 475653 NORTHING: 6266230 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7259 | Qdw | Silt<br>sandy | light brown | silt to v.fine sand<br>well sorted | sub-angular sub-spherical | | 0.0 | | |
| 2.0 | 4.0 | RT 7260 | Qdw | Silt<br>sandy | light brown | silt to v.fine sand<br>well sorted | sub-angular sub-spherical | | 0.0 | | |
| 4.0 | 6.0 | RT 7261 | Qdw | Silt<br>sandy | light brown | silt to v.fine sand<br>well sorted | sub-angular sub-spherical | | 0.0 | | |
| 6.0 | 8.0 | RT 7262 | Qdw | Silt<br>sandy<br>Clay<br>sandy | light brown | clay to fine sand<br>poorly sorted | sub-angular sub-spherical | | 0.0 | | |
| 8.0 | 10.0 | RT 7263 | Qdw | Silt<br>sandy<br>Clay<br>sandy | light brown | clay to fine sand<br>poorly sorted | sub-angular sub-spherical | | 0.0 | | |
| 10.0 | 12.0 | RT 7264 | Qdw | Clay | medium khaki grey | clay<br>well sorted | | | 0.0 | | |
| 12.0 | 14.0 | RT 7265 | Qdw | Clay<br>Clay<br>sandy | medium khaki grey | clay<br>well sorted | | | 0.0 | | |
| 14.0 | 16.0 | RT 7266 | Qdw | Sand<br>silty | light brown | silt to fine sand<br>well sorted | sub-angular sub-spherical | | 0.5<br>trace | | XRF |
| 16.0 | 18.0 | RT 7267 | Qdw | Clay<br>silty | medium khaki grey | clay to silt<br>well sorted | | | 0.0 | | |
| 18.0 | 20.0 | RT 7268 | Qdw | Clay<br>silty | medium khaki grey | clay to silt<br>well sorted | | | 0.0 | | |
| 20.0 | 22.0 | RT 7269 | Qdw | Clay<br>silty | medium khaki grey | clay to silt<br>well sorted | | | 0.0 | | |

SHEET 2 OF 2 HOLE NUMBER : PT0098

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.0 | 24.0 | RT 7270 | Qdw | Clay silty | medium khaki grey | clay to silt well sorted | | | 0.0 | | |
| 0.0 | 24.0 | RT 7271 | | Composite Sample | | | | | | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 31-AUG-88

HOLE NUMBER : PT0099
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 476636 NORTHING: 6266200 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7272 | Qdw | Silt sandy | medium red brown | silt to v.fine sand mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 2.0 | 4.0 | RT 7273 | Qdw | Silt sandy | medium red brown | silt to v.fine sand mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 4.0 | 6.0 | RT 7274 | Qdw | Silt sandy | medium red brown | silt to v.fine sand mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 6.0 | 8.0 | RT 7275 | Qdw | Silt sandy | medium red brown | silt to v.fine sand mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 8.0 | 10.0 | RT 7276 | Qdw | Silt sandy | medium red brown | silt to v.fine sand mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 10.0 | 12.0 | RT 7277 | Qdw | Silt clayey | light brown | clay to silt mod.well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 7278 | Qdw | Clay | medium brown | clay well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 7279 | Qdw | Clay | medium brown | clay well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 7280 | Qdw | Clay | medium grey khaki | clay well sorted | | | 0.2 light trace | | |
| 18.0 | 21.0 | RT 7281 | Qdw | Clay | medium grey khaki | clay well sorted | | | 0.2 light trace | | |
| 0.0 | 21.0 | RT 7282 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 31-AUG-88

HOLE NUMBER : PT0100
LOGGED BY : K.A.Grey
TOTAL DEPTH : 24.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 477650 NORTHING: 6266200 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7283 | Qdw | Sand silty | medium red brown | silt to fine sand mod.well sorted | sub-angular | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 7284 | Qdw | Silt | light grey | silt mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 4.0 | 6.0 | RT 7285 | Qdw | Clay silty | medium brown | clay to silt well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 7286 | Qdw | Clay silty | medium brown | clay to silt well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 7287 | Qdw | Clay | medium brown | clay well sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 7288 | Qdw | Clay sandy | medium khaki grey | clay to fine sand mod.well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 7289 | Qdw | Clay sandy | medium khaki grey | clay to fine sand well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 7290 | Qdw | Clay sandy | medium khaki grey | clay to fine sand well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 7291 | Qdw | Clay sandy | medium khaki grey | clay to fine sand well sorted | | | 0.2 light trace | | |
| 0.0 | 18.0 | RT 7295 | | Composite Sample | | | | | | | |
| 18.0 | 20.0 | RT 7292 | Tps | Sand | light grey | v.fine sand to fine sand well sorted | sub-rounded | | 0.2 light trace | | |

SHEET 2 OF 2 HOLE NUMBER : PT0100

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.0 | 22.0 | RT 7293 | Tps | Sand | light grey | v.fine sand to fine sand well sorted | sub-rounded | | 0.2 light trace | | |
| 22.0 | 24.0 | RT 7294 | Tps | Sand | light grey | v.fine sand to fine sand well sorted | sub-rounded | | 0.2 light trace | | |
| 18.0 | 24.0 | RT 7296 | | Composite Sample | | | | | | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 31-AUG-88

HOLE NUMBER : PT0101
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 478653 NORTHING: 6266190 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7297 | Qdw | Silt | pale brown | v.fine sand | | weakly consol Calcareous friable | 0.2 light trace | | |
| | | | | Sand | | mod.well sorted | | | | | |
| 2.0 | 4.0 | RT 7298 | Qdw | Silt | light brown | v.fine sand | | | 0.2 light trace | | |
| | | | | Sand | | mod.well sorted | | | | | |
| 4.0 | 6.0 | RT 7299 | Qdw | Silt | medium red | v.fine sand | | | 0.2 light trace | | |
| | | | | Sand | brown | mod.well sorted | | | | | |
| 6.0 | 8.0 | RT 7300 | Qdw | Silt | medium red | v.fine sand | | | 0.2 light trace | | |
| | | | | Sand | brown | mod.well sorted | | | | | |
| 8.0 | 10.0 | RT 7301 | Qdw | Clay | light brown | clay to silt | | | 0.2 light trace | | |
| | | | | Silt | | well sorted | | | | | |
| 10.0 | 12.0 | RT 7302 | Qdw | Clay | medium grey khaki | clay well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 7303 | Qdw | Clay | medium grey khaki | clay well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 7304 | Qdw | Clay | medium grey khaki | clay well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 7305 | Qdw | Clay | medium grey khaki | clay well sorted | | | 0.2 light trace | | |
| 18.0 | 21.0 | RT 7306 | Qdw | Clay | medium grey khaki | clay well sorted | | | 0.2 light trace | | |
| 0.0 | 21.0 | RT 7307 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 31-AUG-88

HOLE NUMBER : PT0102
LOGGED BY : K.A.Grey
TOTAL DEPTH : 30.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 479615 NORTHING: 6266205 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log in rods



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7308 | Qdw | Clay silty | medium red brown | clay to silt well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 7309 | Qdw | Clay | medium brown | clay well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 7310 | Qdw | Clay | medium khaki grey | clay well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 7311 | Qdw | Clay | medium khaki grey | clay well sorted | | | 0.2 light trace | | |
| 0.0 | 8.0 | RT 7323 | | Composite Sample | | | | | | | |
| 8.0 | 10.0 | RT 7312 | Qdw | Clay | medium khaki grey | clay well sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 7313 | Tps | Sand silty | pale grey | Comments: Tps at 9m v.fine sand to medium sand mod.well sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 7314 | Tps | Sand silty | pale grey | v.fine sand to medium sand well sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 7315 | Tps | Sand silty | light brown yellow | v.fine sand to medium sand well sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 7316 | Tps | Sand silty | light brown yellow | v.fine sand to medium sand well sorted | | | 0.2 light trace | | |
| 18.0 | 20.0 | RT 7317 | Tps | Sand silty | light brown yellow | v.fine sand to medium sand well sorted | | | 0.2 light trace | | |

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.0 | 20.0 | RT 7324 | | Composite Sample | | | | | | | |
| 20.0 | 22.0 | RT 7318 | Tps | Sand silty | light brown yellow | v.fine sand to medium sand well sorted | | | 0.2 light trace | | |
| 22.0 | 24.0 | RT 7319 | Tps | Sand silty | light brown yellow | v.fine sand to medium sand well sorted | | | 0.2 light trace | | |
| 24.0 | 26.0 | RT 7320 | Tps | Sand silty | light yellow brown | medium sand ext.well sorted | rounded spherical | | 0.2 light trace | | |
| 26.0 | 28.0 | RT 7321 | Tps | Sand gritty | light brown | fine sand to granule well sorted | rounded sub-spherical | | 0.2 light trace | | |
| 28.0 | 30.0 | RT 7322 | Tps | Sand gritty | light brown | fine sand to granule well sorted | rounded sub-spherical | | 0.2 light trace | | |
| 20.0 | 30.0 | RT 7325 | | Composite Sample | | | | | | | |

EOH at 30.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 31-AUG-88

HOLE NUMBER : PT0103
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 480533 NORTHING: 6266400 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log in rods



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7326 | Qdw | Silt<br>sandy<br>Clay | medium<br>red<br>brown | clay to<br>fine sand<br>poorly sorted | | weakly consol<br>Calcareous<br>friable | 0.2<br>light trace | | |
| 2.0 | 4.0 | RT 7327 | Qdw | Clay<br>silty | medium<br>brown | clay to<br>silt<br>mod.well sorted | | | 0.2<br>light trace | | |
| 4.0 | 6.0 | RT 7328 | Qdw | Clay | medium<br>brown | clay<br>well sorted<br>Comments: Tps at 5m | | | 0.2<br>light trace | | |
| 6.0 | 8.0 | RT 7329 | Tps | Sand<br>silty | pale<br>grey | v.fine sand to<br>fine sand<br>well sorted | sub-angular | | 0.2<br>light trace | | |
| 8.0 | 10.0 | RT 7330 | Tps | Sand<br>silty | pale<br>grey | v.fine sand to<br>fine sand<br>well sorted | sub-angular<br>sub-elongate | | 0.2<br>light trace | | |
| 10.0 | 12.0 | RT 7331 | Tps | Sand<br>silty | pale<br>grey | v.fine sand to<br>fine sand<br>well sorted | sub-angular<br>sub-elongate | | 0.2<br>light trace | | |
| 12.0 | 14.0 | RT 7332 | Tps | Sand<br>silty | pale<br>grey | v.fine sand to<br>fine sand<br>well sorted | sub-angular<br>sub-elongate | | 0.2<br>light trace | | |
| 14.0 | 16.0 | RT 7333 | Tps | Sand<br>silty | pale<br>grey | v.fine sand to<br>fine sand<br>well sorted | sub-angular<br>sub-elongate | | 0.2<br>light trace | | |
| 16.0 | 18.0 | RT 7334 | Tps | Sand<br>silty | medium<br>grey<br>yellow | fine sand to<br>medium sand<br>well sorted | sub-angular<br>sub-elongate | | 0.2<br>light trace | | |
| 18.0 | 20.0 | RT 7335 | Tps | Sand<br>silty | medium<br>grey<br>yellow | fine sand to<br>medium sand<br>well sorted | | | 0.2<br>light trace | | |
| 20.0 | 21.0 | RT 7336 | Tps | Sand<br>silty | medium<br>grey<br>yellow | fine sand to<br>medium sand<br>well sorted | | | 0.2<br>light trace | | |

SHEET 2 OF 2 HOLE NUMBER : PT0103

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 21.0 | RT 7337 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 31-AUG-88

HOLE NUMBER : PT0104
LOGGED BY : K.A.Grey
TOTAL DEPTH : 24.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 481519 NORTHING: 6266310 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7338 | Qdw | Silt | medium red brown | silt well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 2.0 | 4.0 | RT 7339 | Qdw | Silt sandy | medium red brown | silt to fine sand well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 7340 | Qdw | Silt sandy Clay | medium red brown | silt to fine sand mod.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 7341 | Qdw | Silt sandy Clay | medium red brown | silt to fine sand mod.well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 7342 | Qdw | Clay silty | medium red brown | clay well sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 7343 | Qdw | Clay | medium khaki grey | clay well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 7344 | Qdw | Clay | medium khaki grey | clay well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 7345 | Qdw | Clay | medium khaki grey | clay well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 7347 | Qdw | Clay | medium khaki grey | clay well sorted | | | 0.2 light trace | | |
| 18.0 | 20.0 | RT 7348 | Qdw | Clay Sand | medium khaki grey | clay to fine sand well sorted | | | 0.2 light trace | | |
| 20.0 | 22.0 | RT 7346 | Qdw | Clay | medium grey khaki | clay well sorted | | | 0.2 light trace | | |

SHEET 2 OF 2 HOLE NUMBER : PT0104

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.0 | 24.0 | RT 7349 | Qdw | Clay | medium grey khaki | clay well sorted | | | 0.2 light trace | | |
| 0.0 | 24.0 | RT 7350 | | Composite Sample | | | | | | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30
CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 31-AUG-88
HOLE NUMBER : PT0105
LOGGED BY : K.A.Grey
TOTAL DEPTH : 24.0
GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 482513 NORTHING: 6266640 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0
Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7351 | Qdw | Sand | pale brown | fine sand<br>mod.well sorted | | | 0.0 | | |
| 2.0 | 4.0 | RT 7352 | Qdw | Sand quartz. | medium red | fine sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 4.0 | 6.0 | RT 7353 | Qdw | Sand clayey quartz. | medium red brown | fine sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 6.0 | 8.0 | RT 7354 | Qdw | Sand clayey quartz. | medium brown grey | fine sand to medium sand<br>mod.well sorted | | | 0.0 | | |
| 8.0 | 10.0 | RT 7355 | Qdw | Clay sandy quartz. | medium khaki | clay to medium sand<br>mod.well sorted | | | 0.0 | | |
| 10.0 | 12.0 | RT 7356 | Qdw | Clay | medium grey | clay<br>well sorted | | | 0.0 | | |
| 12.0 | 14.0 | RT 7357 | Qdw | Clay | medium grey | clay<br>well sorted | | | 0.0 | | |
| 14.0 | 16.0 | RT 7358 | Qdw | Clay | medium grey | clay<br>well sorted | | | 0.0 | | |
| 16.0 | 18.0 | RT 7359 | Qdw | Clay sandy | medium white grey | clay to medium sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 18.0 | 20.0 | RT 7360 | Qdw | Clay | light grey | clay<br>well sorted | | | 0.2<br>light trace | | |
| 20.0 | 22.0 | RT 7361 | Qdw | Clay | light grey | clay<br>well sorted | | | 0.2<br>light trace | | |

SHEET 2 OF 2 HOLE NUMBER : PT0105

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.0 | 24.0 | RT 7362 | Qdw | Clay | light grey | clay<br>well sorted | | | 0.2<br>light trace | | |
| 6.0 | 24.0 | RT 7363 | | Composite Sample | | | | | | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 31-AUG-88

HOLE NUMBER : PT0106
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 483445 NORTHING: 6266680 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log in rods

SHEET 1 OF 1 HOLE NUMBER : PT0106

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7364 | Qdw | Sand | light brown | medium sand<br>well sorted | | weakly consol<br>Calcareous<br>friable | 0.2<br>light trace | | |
| 2.0 | 4.0 | RT 7365 | Qdw | Sand | light brown | medium sand<br>mod.well sorted | | weakly consol<br>Calcareous<br>friable | 0.0 | | |
| 4.0 | 6.0 | RT 7366 | Qdw | Clay<br>Sand | light brown | clay to medium sand<br>mod.well sorted | | | 0.0 | | |
| 6.0 | 8.0 | RT 7367 | Qdw | Clay<br>sandy | medium grey | clay to medium sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 8.0 | 10.0 | RT 7368 | Qdw | Clay<br>sandy | medium grey | clay to medium sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 10.0 | 12.0 | RT 7369 | Qdw | Clay<br>quartz. sandy | medium grey | clay to medium sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 12.0 | 14.0 | RT 7370 | Qdw | Sand<br>quartz. clayey | medium grey | clay to medium sand<br>poorly sorted | sub-rounded | | 0.2<br>light trace | | |
| 14.0 | 16.0 | RT 7371 | Qdw | Sand<br>quartz. clayey | medium grey | clay to medium sand<br>poorly sorted | sub-rounded | | 0.2<br>light trace | | |
| 16.0 | 18.0 | RT 7372 | Qdw | Sand<br>quartz. clayey | medium grey | clay to medium sand<br>poorly sorted | sub-rounded | | 0.2<br>light trace | | |
| 18.0 | 21.0 | RT 7373 | Qdw | Clay | dark grey | clay to fine sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 0.0 | 21.0 | RT 7374 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 01-SEP-88

HOLE NUMBER : PT0107
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 484433 NORTHING: 6266520 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7375 | Qdw | Sand | medium brown | medium sand<br>well sorted | | | 0.0 | | |
| 2.0 | 4.0 | RT 7376 | Qdw | Clay | medium grey | clay<br>well sorted | | | 0.0 | | |
| 4.0 | 6.0 | RT 7377 | Qdw | Clay<br>sandy | medium grey | clay<br>well sorted | | | 0.0 | | |
| 6.0 | 8.0 | RT 7378 | Qdw | Clay<br>sandy | medium grey | clay<br>well sorted | | | 0.0 | | |
| 8.0 | 10.0 | RT 7379 | Qdw | Clay<br>sandy | medium grey | clay<br>mod.well sorted | | | 0.0 | | |
| 10.0 | 12.0 | RT 7380 | Qdw | Sand<br>clayey | medium khaki | fine sand to v.crse sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 12.0 | 14.0 | RT 7381 | Qdw | Sand<br>quartz. clayey | medium khaki | coarse sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 14.0 | 16.0 | RT 7382 | Qdw | Sand<br>quartz. | pale khaki | medium sand<br>well sorted | | | 0.2<br>light trace | | |
| 16.0 | 18.0 | RT 7383 | Qdw | Clay | medium grey white | v.fine sand to fine sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 18.0 | 21.0 | RT 7384 | Qdw | Sand<br>quartz. | medium white | medium sand<br>well sorted | | | 0.2<br>light trace | | |
| 0.0 | 21.0 | RT 7385 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 01-SEP-88

HOLE NUMBER : PT0108
LOGGED BY : K.A.Grey
TOTAL DEPTH : 27.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 485811 NORTHING: 6266330 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7386 | Qdw | Sand | medium brown | fine sand to medium sand mod.well sorted | | | 0.0 | | |
| 2.0 | 4.0 | RT 7387 | Qdw | Clay | medium grey | clay to v.fine sand mod.well sorted | | | 0.0 | | |
| 4.0 | 6.0 | RT 7388 | Qdw | Clay | medium grey | clay to v.fine sand mod.well sorted | | | 0.0 | | |
| 6.0 | 8.0 | RT 7389 | Qdw | Clay<br>Sand | pale khaki | clay to fine sand well sorted | | | 0.2<br>light trace | | |
| 8.0 | 10.0 | RT 7390 | Qdw | Sand quartz. | pale white | fine sand to medium sand well sorted | | | 0.2<br>light trace | | |
| 10.0 | 12.0 | RT 7391 | Qdw | Clay | medium khaki | clay to fine sand well sorted | | | 0.0 | | |
| 12.0 | 14.0 | RT 7392 | Qdw | Clay | medium khaki | clay to fine sand well sorted | | | 0.0 | | |
| 14.0 | 16.0 | RT 7393 | Qdw | Clay | medium khaki | clay to fine sand well sorted | | | 0.0 | | |
| 16.0 | 18.0 | RT 7394 | Qdw | Clay sandy | medium grey | clay to v.fine sand well sorted | | | 0.0 | | |
| 18.0 | 20.0 | RT 7395 | Qdw | Clay | light grey | clay well sorted | | | 0.0 | | |
| 20.0 | 22.0 | RT 7396 | Qdw | Clay | light grey | clay well sorted | | | 0.0 | | |

SHEET 2 OF 2 HOLE NUMBER : PT0108

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.0 | 24.0 | RT 7397 | Qdw | Clay | light grey | clay<br>well sorted | | | 0.0 | | |
| 24.0 | 27.0 | RT 7398 | Qdw | Clay | dark grey | clay<br>well sorted | | | 0.0 | | |
| 2.0 | 27.0 | RT 7399 | | Composite Sample | | Comments: Marked colour change | | | | | |

EOH at 27.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 01-SEP-88

HOLE NUMBER : PT0109
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 486479 NORTHING: 6266160 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole

SHEET 1 OF 1 HOLE NUMBER : PT0109

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7400 | Qdw | Sand | medium red brown | medium sand well sorted | | | 0.0 | | |
| 2.0 | 4.0 | RT 7401 | Qdw | Sand | medium red brown | medium sand well sorted | | | 0.0 | | |
| 4.0 | 6.0 | RT 7402 | Qdw | Clay | medium grey brown | clay to fine sand well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 6.0 | 8.0 | RT 7403 | Qdw | Clay | medium grey | clay well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 7404 | Qdw | Clay | medium grey | clay well sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 7405 | Qdw | Sand quartz. | light grey | fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 7406 | Qdw | Clay | medium grey | clay well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 7407 | Qdw | Clay | medium grey | clay well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 7408 | Qdw | Clay | medium grey | clay well sorted | | | 0.2 light trace | | |
| 18.0 | 21.0 | RT 7409 | Qdw | Clay | medium grey | clay well sorted | | | 0.2 light trace | | |
| 4.0 | 21.0 | RT 7410 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 01-SEP-88

HOLE NUMBER : PT0110
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 487468 NORTHING: 6265950 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7411 | Qdw | Sand quartz. | medium brown | fine sand to medium sand mod.well sorted | rounded | | 0.0 | | |
| 2.0 | 4.0 | RT 7412 | Qdw | Sand quartz. | medium brown | fine sand to medium sand mod.well sorted | | | 0.0 | | |
| 4.0 | 6.0 | RT 7413 | Qdw | Sand clayey quartz. | medium red brown | fine sand to medium sand mod.well sorted | | | 0.5 trace | | |
| 6.0 | 8.0 | RT 7414 | Qdw | Sand clayey quartz. | medium red brown | coarse sand mod.well sorted | sub-rounded | | 1.0 Good trace | | |
| 8.0 | 10.0 | RT 7415 | Qdw | Sand clayey quartz. | medium red brown | coarse sand mod.well sorted | | | 0.2 light trace | | |
| 6.0 | 10.0 | RT 7421 | | Composite Sample | | | | | | | |
| 10.0 | 12.0 | RT 7416 | Qdw | Clay | medium brown | clay well sorted | | soft | 0.0 | | |
| 12.0 | 14.0 | RT 7417 | Qdw | Clay sandy | pale grey | clay to medium sand mod.well sorted | | | 0.0 | | |
| 14.0 | 16.0 | RT 7418 | Qdw | Clay | pale grey | clay well sorted | | | 0.0 | | |
| 16.0 | 18.0 | RT 7419 | Qdw | Clay | pale grey | clay well sorted | | | 0.0 | | |
| 18.0 | 21.0 | RT 7420 | Qdw | Clay | pale grey | clay well sorted | | | 0.0 | | |

SHEET 2 OF 2 HOLE NUMBER : PT0110

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.0 | 21.0 | RT 7422 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 01-SEP-88

HOLE NUMBER : PT0111
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 488436 NORTHING: 6265790 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7423 | Qdw | Sand | medium red brown | medium sand well sorted | | | 0.0 | | |
| 2.0 | 4.0 | RT 7424 | Qdw | Sand | medium red brown | medium sand well sorted | | weakly consol Calcareous friable | 0.0 | | |
| 4.0 | 6.0 | RT 7425 | Qdw | Clay Sand | medium grey | clay well sorted | | | 0.0 | | |
| 6.0 | 8.0 | RT 7426 | Qdw | Clay Sand | medium grey | clay well sorted | | | 0.0 | | |
| 8.0 | 10.0 | RT 7427 | Qdw | Clay Sand | medium grey | clay to coarse sand poorly sorted | | | 0.0 | | |
| 10.0 | 12.0 | RT 7428 | Qdw | Clay | light grey | clay well sorted | | | 0.0 | | |
| 12.0 | 14.0 | RT 7429 | Qdw | Clay | medium grey | clay well sorted | | | 0.0 | | |
| 14.0 | 16.0 | RT 7430 | Qdw | Clay | light grey | clay well sorted | | | 0.0 | | |
| 16.0 | 18.0 | RT 7431 | Qdw | Clay | medium grey | clay well sorted | | | 0.0 | | |
| 8.0 | 18.0 | RT 7433 | | Composite Sample | | | | | | | |
| 18.0 | 21.0 | RT 7432 | Qdw | Clay | medium grey | clay well sorted | | | 0.0 | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 01-SEP-88

HOLE NUMBER : PT0112
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 489494 NORTHING: 6265620 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ STRENGTH | TYPE/ | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7434 | Qdw | Sand | medium red brown | fine sand to medium sand well sorted | | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 7435 | Qdw | Clay quartz. | medium grey | clay to medium sand poorly sorted | | | | 0.0 | | |
| 4.0 | 6.0 | RT 7436 | Qdw | Clay quartz. | medium grey | clay to medium sand poorly sorted | | | | 0.0 | | |
| 6.0 | 8.0 | RT 7437 | Qdw | Clay quartz. | medium grey | clay to medium sand poorly sorted | | | | 0.0 | | |
| 8.0 | 10.0 | RT 7438 | Qdw | Clay | medium grey | clay ext.well sorted | | | | 0.0 | | |
| 10.0 | 12.0 | RT 7439 | Qdw | Clay | medium grey | clay ext.well sorted | | | | 0.0 | | |
| 12.0 | 14.0 | RT 7440 | Qdw | Clay | medium grey | clay ext.well sorted | | | | 0.0 | | |
| 14.0 | 16.0 | RT 7441 | Qdw | Clay | medium grey | clay ext.well sorted | | | | 0.0 | | |
| 16.0 | 18.0 | RT 7442 | Qdw | Clay | medium grey | clay ext.well sorted | | | | 0.0 | | |
| 18.0 | 21.0 | RT 7443 | Qdw | Clay | medium grey | clay ext.well sorted | | | | 0.0 | | |
| 0.0 | 21.0 | RT 7444 | | Composite Sample | | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 01-SEP-88

HOLE NUMBER : PT0113
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 490482 NORTHING: 6265440 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7445 | Qdw | Sand | medium red brown | fine sand to medium sand mod.well sorted | | | 0.0 | | |
| 2.0 | 4.0 | RT 7446 | Qdw | Sand | medium red brown | fine sand to medium sand mod.well sorted | | | 0.0 | | |
| 4.0 | 6.0 | RT 7447 | Qdw | Clay sandy | medium brown | clay to fine sand mod.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 7448 | Qdw | Sand clayey | light white | clay to fine sand mod.well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 7449 | Qdw | Clay | medium grey | clay well sorted | | | 0.0 | | |
| 10.0 | 12.0 | RT 7450 | Qdw | Clay | medium grey | clay well sorted | | | 0.0 | | |
| 12.0 | 14.0 | RT 7451 | Qdw | Clay | medium grey | clay well sorted | | | 0.0 | | |
| 6.0 | 14.0 | RT 7455 | | Composite Sample | | | | | | | |
| 14.0 | 16.0 | RT 7452 | Qdw | Clay | medium grey | clay well sorted | | | 0.0 | | |
| 16.0 | 18.0 | RT 7453 | Qdw | Clay | medium grey | clay well sorted | | | 0.0 | | |
| 18.0 | 21.0 | RT 7454 | Qdw | Clay | medium grey | clay well sorted | | | 0.0 | | |

SHEET 2 OF 2 HOLE NUMBER : PT0113

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.0 | 21.0 | RT 7456 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30
CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 01-SEP-88
HOLE NUMBER : PT0114
LOGGED BY : K.A.Grey
TOTAL DEPTH : 24.0
GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 490151 NORTHING: 6267920 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0
Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7457 | Qdw | Sand clayey | pale brown | medium sand mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 7458 | Qdw | Clay sandy quartz. | medium grey | fine sand to coarse sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 7459 | Qdw | Sand clayey | medium grey | clay to coarse sand poorly sorted | | | 0.0 | | |
| 6.0 | 8.0 | RT 7460 | Qdw | Sand clayey | medium khaki | medium sand mod.well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 7461 | Qdw | Clay | medium grey | clay well sorted | | | 0.2 light trace | | |
| 2.0 | 10.0 | RT 7469 | | Composite Sample | | | | | | | |
| 10.0 | 12.0 | RT 7462 | Qdw | Clay | medium grey | clay well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 7463 | Qdw | Clay | medium grey | clay well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 7464 | Qdw | Clay | medium grey | clay well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 7465 | Qdw | Clay | medium grey | clay well sorted | | | 0.2 light trace | | |
| 18.0 | 20.0 | RT 7466 | Qdw | Clay | medium grey | clay well sorted | | | 0.2 light trace | | |

SHEET 2 OF 2 HOLE NUMBER : PT0114

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.0 | 22.0 | RT 7467 | Qdw | Clay | medium grey | clay<br>well sorted | | | 0.2<br>light trace | | |
| 22.0 | 24.0 | RT 7468 | Qdw | Clay | medium grey | clay<br>well sorted | | | 0.2<br>light trace | | |
| 10.0 | 24.0 | RT 7470 | | Composite Sample | | | | | | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30
CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 01-SEP-88
HOLE NUMBER : PT0115
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0
GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 491178 NORTHING: 6267820 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0
Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7471 | Qdw | Sand clayey | medium brown | clay to medium sand poorly sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 7472 | Qdw | Clay<br>Sand ferrug. | light khaki<br>red | clay to medium sand poorly sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 7473 | Qdw | Clay quartz. | light khaki | clay well sorted | | | 0.0 | | |
| 6.0 | 8.0 | RT 7474 | Qdw | Clay | medium khaki | clay well sorted | | | 0.0 | | |
| 8.0 | 10.0 | RT 7475 | Qdw | Clay | medium khaki | clay well sorted | | | 0.0 | | |
| 10.0 | 12.0 | RT 7476 | Qdw | Clay | medium khaki grey | clay well sorted | | | 0.0 | | |
| 12.0 | 14.0 | RT 7477 | Qdw | Clay | medium khaki grey | clay well sorted | | | 0.0 | | |
| 14.0 | 16.0 | RT 7478 | Qdw | Clay | light grey | clay well sorted | | | 0.0 | | |
| 16.0 | 18.0 | RT 7479 | Qdw | Clay | medium grey | clay well sorted | | | 0.0 | | |
| 18.0 | 21.0 | RT 7480 | Qdw | Clay | medium grey | clay well sorted | | | 0.0 | | |
| 6.0 | 21.0 | RT 7481 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 01-SEP-88

HOLE NUMBER : PT0116
LOGGED BY : K.A.Grey
TOTAL DEPTH : 24.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 492221 NORTHING: 6267840 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7482 | Qdw | Sand | medium red brown | medium sand mod.well sorted | | | 0.0 | | |
| 2.0 | 4.0 | RT 7483 | Qdw | Sand clayey | medium red brown | clay to medium sand poorly sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 7484 | Qdw | Clay | medium grey | clay well sorted | | | 0.0 | | |
| 6.0 | 8.0 | RT 7485 | Qdw | Clay | medium grey | clay well sorted | | | 0.0 | | |
| 8.0 | 10.0 | RT 7486 | Qdw | Clay | medium grey | clay well sorted | | | 0.0 | | |
| 10.0 | 12.0 | RT 7487 | Qdw | Clay quartz. sandy | light grey | clay to coarse sand poorly sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 7488 | Qdw | Clay | light grey | clay well sorted | | | 0.0 | | |
| 14.0 | 16.0 | RT 7489 | Qdw | Clay | light grey | clay well sorted | | | 0.0 | | |
| 16.0 | 18.0 | RT 7490 | Qdw | Clay | light grey khaki | clay well sorted | | | 0.0 | | |
| 18.0 | 21.0 | RT 7491 | Qdw | Clay | light grey khaki | clay well sorted | | | 0.0 | | |
| 21.0 | 22.0 | RT 7492 | Qdw | Clay | light grey khaki | clay well sorted | | | 0.0 | | |

0217

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.0 | 24.0 | RT 7493 | Qdw | Clay | light grey khaki | clay<br>well sorted | | | 0.0 | | |
| 0.0 | 24.0 | RT 7494 | | Composite Sample | | | | | | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 01-SEP-88

HOLE NUMBER : PT0117
LOGGED BY : K.A.Grey
TOTAL DEPTH : 24.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 493194 NORTHING: 6267820 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log in rods



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ STRENGTH/ TYPE | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7495 | Qdw | Sand | medium brown yellow | medium sand mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 7496 | Qdw | Clay | medium khaki grey | clay well sorted | | | 0.0 | | |
| 4.0 | 6.0 | RT 7497 | Qdw | Clay | medium khaki grey | clay well sorted | | soft | 0.0 | | |
| 6.0 | 8.0 | RT 7498 | Qdw | Clay | light khaki grey | clay well sorted | | soft | 0.0 | | |
| 8.0 | 10.0 | RT 7499 | Qdw | Clay | light khaki grey | clay well sorted | | soft | 0.0 | | |
| 10.0 | 12.0 | RT 7500 | Qdw | Clay | light khaki grey | clay well sorted | | soft | 0.0 | | |
| 12.0 | 14.0 | RT 7501 | Qdw | Clay | light khaki grey | clay well sorted | | soft | 0.0 | | |
| 14.0 | 16.0 | RT 7502 | Qdw | Clay | light khaki grey | clay well sorted | | soft | 0.0 | | |
| 16.0 | 18.0 | RT 7503 | Qdw | Clay | medium black grey | clay well sorted | | soft | 0.0 | | |
| 4.0 | 18.0 | RT 7507 | | Composite Sample | | | | | | | |
| 18.0 | 20.0 | RT 7504 | Tps | Sand clayey | dark grey | clay to medium sand mod.well sorted | | | 1.0 Good trace | | |

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ STRENGTH | TYPE/ | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.0 | 22.0 | RT 7505 | Tps | Sand | light grey | coarse sand<br>well sorted | | | | 0.5<br>trace | | |
| 22.0 | 24.0 | RT 7506 | Tps | Grit<br>quartz. | medium grey | granule<br>mod.well sorted | | | | 0.5<br>trace | | |
| 18.0 | 24.0 | RT 7508 | | Composite Sample | | | | | | | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 01-SEP-88

HOLE NUMBER : PT0118
LOGGED BY : K.A.Grey
TOTAL DEPTH : 4.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 494168 NORTHING: 6267810 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: No gamma log

SHEET 1 OF 1 HOLE NUMBER : PT0118

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7509 | Qdw | Sand | medium red brown | fine sand to medium sand well sorted | | cemented,open Calcareous mod.str.cons. | 0.2 light trace | | |
| 2.0 | 4.0 | RT 7510 | Qdw | Sandstone quartz. | medium red brown | medium sand well sorted | | cemented,open very strong | 0.2 light trace | | |
| 0.0 | 4.0 | RT 7511 | | Composite Sample | | | | | | | |

EOH at 4.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30
GRID: AMG ZONE: 54 RELIABILITY: TOPO

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 02-SEP-88
EASTING: 495163 NORTHING: 6267749 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

HOLE NUMBER : PT0119
LOGGED BY : K.A.Grey
TOTAL DEPTH : 12.0

Comments: Gamma log in rods

SHEET 1 OF 1 HOLE NUMBER : PT0119

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7512 | Qdw | Sand | light red brown | medium sand poorly sorted | | | 0.0 | | |
| 2.0 | 4.0 | RT 7513 | Tps | Sand clayey | light white | medium sand poorly sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 7514 | Tps | Sand clayey | medium white yellow | medium sand to coarse sand poorly sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 7515 | Qdw | Sand clayey | light white grey | coarse sand poorly sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 7516 | Qdw | Grit | medium grey white | coarse sand to granule poorly sorted | | | 0.2 light trace | | |
| 10.0 | 11.0 | RT 7517 | Qdw | Grit | medium grey white | coarse sand to granule poorly sorted | | | 0.2 light trace | | |
| 0.0 | 11.0 | RT 7518 | | Composite Sample | | | | | | | |

EOH at 12.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 02-SEP-88

HOLE NUMBER : PT0120
LOGGED BY : K.A.Grey
TOTAL DEPTH : 27.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 496207 NORTHING: 6267730 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log in rods



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7519 | Qdw | Sand | light brown | medium sand<br>mod.well sorted | | weakly consol<br>Calcareous<br>friable | 0.2<br>light trace | | |
| 2.0 | 4.0 | RT 7520 | Qdw | Sand<br>quartz. | light brown | medium sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 4.0 | 6.0 | RT 7521 | Tps | Sand<br>quartz. | light brown | medium sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 6.0 | 8.0 | RT 7522 | Tps | Sand<br>quartz. | light brown | medium sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 8.0 | 10.0 | RT 7523 | Tps | Clay<br>sandy | light grey white | clay to<br>medium sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 10.0 | 12.0 | RT 7524 | Tps | Sand<br>clayey | light grey | clay to<br>coarse sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 12.0 | 14.0 | RT 7525 | Tps | Grit<br>quartz. | medium yellow | v.crse sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 14.0 | 16.0 | RT 7526 | Tps | Grit | medium yellow | v.crse sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 0.0 | 16.0 | RT 7533 | | Composite Sample | | | | | | | |
| 16.0 | 18.0 | RT 7527 | Tps | Grit | light yellow grey | v.crse sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 18.0 | 20.0 | RT 7528 | Tps | Grit | light yellow grey | v.crse sand<br>poorly sorted | | | 1.0<br>Good trace | | |

SHEET 2 OF 2 HOLE NUMBER : PT0120

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.0 | 22.0 | RT 7529 | Tps | Grit | dark grey | v.crse sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 22.0 | 24.0 | RT 7530 | Tps | Grit | dark grey | v.crse sand<br>poorly sorted | | | 1.0<br>Good trace | | |
| 24.0 | 26.0 | RT 7531 | Tps | Grit | dark grey | v.crse sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 26.0 | 27.0 | RT 7532 | Tps | Grit | dark grey | v.crse sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 16.0 | 27.0 | RT 7534 | | Composite Sample | | | | | | | |

EOH at 27.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 02-SEP-88

HOLE NUMBER : PT0121
LOGGED BY : K.A.Grey
TOTAL DEPTH : 24.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 497209 NORTHING: 6267750 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7535 | Qdw | Sand<br>quartz. | medium<br>red<br>brown | medium sand to<br>coarse sand<br>mod.well sorted | sub-rounded | | 0.2<br>light trace | | |
| 2.0 | 4.0 | RT 7536 | Qdw | Sand<br>quartz.<br>Clay | medium<br>red<br>brown | medium sand to<br>coarse sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 4.0 | 6.0 | RT 7537 | Qdw | Clay<br>quartz. sandy | mottled<br>brown | medium sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 6.0 | 8.0 | RT 7538 | Qdw | Clay | mottled<br>grey<br>red | clay<br>well sorted | | | 0.2<br>light trace | | |
| 8.0 | 10.0 | RT 7539 | Qdw | Sand<br>clayey | pale<br>red | medium sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 10.0 | 12.0 | RT 7540 | Qdw | Sand<br>clayey | pale<br>red | medium sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 12.0 | 14.0 | RT 7541 | Qdw | Sand<br>clayey | medium<br>red | medium sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 0.0 | 14.0 | RT 7547 | | Composite Sample | | | | | | | |
| 14.0 | 16.0 | RT 7542 | Qdw | Clay | medium<br>red | medium sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 16.0 | 18.0 | RT 7543 | Qdw | Clay | medium<br>grey | medium sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 18.0 | 20.0 | RT 7544 | Qdw | Clay | medium<br>grey | medium sand<br>poorly sorted | | | 0.2<br>light trace | | |

SHEET 2 OF 2 HOLE NUMBER : PT0121

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.0 | 22.0 | RT 7545 | Qdw | Clay | medium grey | medium sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 22.0 | 24.0 | RT 7546 | Qdw | Clay | medium grey | medium sand<br>poorly sorted | | soft | 0.2<br>light trace | | |
| 14.0 | 24.0 | RT 7548 | | Composite Sample | | | | | | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 02-SEP-88

HOLE NUMBER : PT0122
LOGGED BY : K.A.Grey
TOTAL DEPTH : 24.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 498215 NORTHING: 6267660 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7549 | Qdw | Sand | medium brown | fine sand to medium sand well sorted | sub-rounded | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 7550 | Qdw | Sand clayey | medium red brown | fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 7551 | Qdw | Sand clayey | medium red brown | fine sand to medium sand well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 7552 | Qdw | Sand clayey | medium red brown | fine sand to medium sand well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 7553 | Qdw | Clay quartz. | medium grey | clay well sorted | | | 0.0 | | |
| 10.0 | 12.0 | RT 7554 | Qdw | Clay quartz. | medium grey | clay well sorted | | | 0.0 | | |
| 12.0 | 14.0 | RT 7555 | Qdw | Sand clayey | medium yellow | clay to medium sand mod.well sorted | | | 0.2 light trace | | |
| 0.0 | 14.0 | RT 7561 | | Composite Sample | | | | | | | |
| 14.0 | 16.0 | RT 7556 | Qdw | Clay | medium grey | clay well sorted | | | 0.0 | | |
| 16.0 | 18.0 | RT 7557 | Qdw | Clay | medium grey | clay well sorted | | | 0.0 | | |
| 18.0 | 20.0 | RT 7558 | Qdw | Clay | medium grey | clay well sorted | | | 0.0 | | |

SHEET 2 OF 2 HOLE NUMBER : PT0122

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.0 | 22.0 | RT 7559 | Qdw | Clay | medium grey | clay<br>well sorted | | | 0.0 | | |
| 22.0 | 24.0 | RT 7560 | Qdw | Clay | medium grey | clay<br>well sorted | | | 0.0 | | |
| EOH at 24.0 m | | | | | | | | | | | |

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 02-SEP-88

HOLE NUMBER : PT0123
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 499172 NORTHING: 6267530 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7562 | Qdw | Soil calcar. | light red brown | medium sand mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 2.0 | 4.0 | RT 7563 | Qdw | Sand quartz. | medium red brown | fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 7564 | Qdw | Clay | light grey | clay well sorted | | soft | 0.0 | | |
| 6.0 | 8.0 | RT 7565 | Qdw | Sand clayey | light grey | clay to medium sand mod.well sorted | | | 1.0 Good trace | | |
| 0.0 | 8.0 | RT 7573 | | Composite Sample | | | | | | | |
| 8.0 | 10.0 | RT 7566 | Qdw | Clay | medium grey | clay well sorted | | soft | 0.0 | | |
| 10.0 | 12.0 | RT 7567 | Qdw | Clay | medium grey | clay well sorted | | soft | 0.0 | | |
| 12.0 | 14.0 | RT 7568 | Qdw | Clay | medium grey | clay well sorted | | soft | 0.0 | | |
| 14.0 | 16.0 | RT 7569 | Qdw | Clay | medium grey | clay well sorted | | soft | 0.0 | | |
| 16.0 | 18.0 | RT 7570 | Qdw | Clay | medium grey | clay well sorted | | soft | 0.0 | | |
| 18.0 | 20.0 | RT 7571 | Qdw | Clay | medium grey | clay well sorted | | soft | 0.0 | | |

SHEET 2 OF 2 HOLE NUMBER : PT0123

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.0 | 21.0 | RT 7572 | Qdw | Clay | medium grey | clay | | | 0.0 | | |
| | | | | | | well sorted | | soft | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 02-SEP-88

HOLE NUMBER : PT0124
LOGGED BY : K.A.Grey
TOTAL DEPTH : 30.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 484302 NORTHING: 6282340 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log in rods



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7574 | Qdw | Sand<br>calcrt. | light<br>brown<br>red | fine sand to<br>medium sand<br>well sorted | | weakly consol<br>Calcareous<br>friable | 0.2<br>light trace | | |
| 2.0 | 4.0 | RT 7575 | Qdw | Sand | medium<br>brown | coarse sand<br><br>well sorted | | weakly consol<br>Calcareous<br>friable | 0.0 | | |
| 4.0 | 6.0 | RT 7576 | Qdw | Clay<br>sandy | medium<br>grey<br>white | clay to<br>fine sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 6.0 | 8.0 | RT 7577 | Qdw | Clay<br>sandy quartz. | medium<br>brown | clay<br><br>mod.well sorted | | | 0.2<br>light trace | | |
| 8.0 | 10.0 | RT 7578 | Qdw | Clay<br>sandy | mottled<br>yellow<br>red | clay to<br>fine sand<br>poorly sorted | | | 0.0 | | |
| 0.0 | 10.0 | RT 7589 | | Composite Sample | | | | | | | |
| 10.0 | 12.0 | RT 7579 | Tps | Sand<br>quartz. | medium<br>grey | fine sand to<br>medium sand<br>well sorted | sub-rounded | | 0.2<br>light trace | | |
| 12.0 | 14.0 | RT 7580 | Tps | Sand<br>quartz. | medium<br>grey | fine sand to<br>medium sand<br>well sorted | | | 0.2<br>light trace | | |
| 14.0 | 16.0 | RT 7581 | Tps | Sand<br>quartz. | light<br>grey<br>khaki | fine sand to<br>medium sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 16.0 | 18.0 | RT 7582 | Tps | Sand<br>quartz. | medium<br>khaki | fine sand to<br>medium sand<br>well sorted | | | 0.2<br>light trace | | |
| 18.0 | 20.0 | RT 7583 | Tps | Sand<br>quartz. | medium<br>khaki | fine sand to<br>medium sand<br>well sorted | | | 0.2<br>light trace | | |

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.0 | 22.0 | RT 7584 | Tps | Sand quartz. | medium khaki | fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 22.0 | 24.0 | RT 7585 | Tps | Grit | light yellow brown | coarse sand to v.crse sand mod.well sorted | | | 0.2 light trace | | |
| 24.0 | 26.0 | RT 7586 | Tps | Grit | light yellow brown | coarse sand to v.crse sand mod.well sorted | | | 0.2 light trace | | |
| 26.0 | 28.0 | RT 7587 | Tps | Grit | pale red | coarse sand to v.crse sand mod.well sorted | | | 0.2 light trace | | |
| 28.0 | 30.0 | RT 7588 | Tps | Grit | pale red | medium sand to granule mod.well sorted | | | 0.2 light trace | | |
| 10.0 | 30.0 | RT 7590 | | Composite Sample | | | | | | | |

EOH at 30.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30
CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 02-SEP-88
HOLE NUMBER : PT0125
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 485376 NORTHING: 6282310 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole

SHEET 1 OF 1 HOLE NUMBER : PT0125

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7591 | Qdw | Sand | medium red brown | medium sand to coarse sand mod.well sorted | | weakly consol Calcareous friable | 0.0 | | |
| 2.0 | 4.0 | RT 7592 | Qdw | Sand quartz. | light brown | medium sand mod.well sorted | | | 0.0 | | |
| 4.0 | 6.0 | RT 7593 | Qdw | Sand quartz. | light brown red | fine sand to medium sand well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 7594 | Qdw | Clay sandy | medium brown | clay to fine sand mod.well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 7595 | Qdw | Clay sandy | medium brown | clay to fine sand mod.well sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 7596 | Qdw | Sand clayey | medium brown | medium sand mod.well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 7597 | Qdw | Clay sandy | medium brown | medium sand mod.well sorted | | | 0.0 | | |
| 14.0 | 16.0 | RT 7598 | Qdw | Clay | pale khaki | clay well sorted | | | 0.0 | | |
| 16.0 | 18.0 | RT 7599 | Qdw | Clay | pale khaki grey | clay well sorted | | | 0.0 | | |
| 18.0 | 21.0 | RT 7600 | Qdw | Clay | pale khaki grey | clay well sorted | | | 0.0 | | |
| 0.0 | 21.0 | RT 7601 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 02-SEP-88

HOLE NUMBER : PT0126
LOGGED BY : K.A.Grey
TOTAL DEPTH : 24.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 486328 NORTHING: 6282330 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7602 | Qdw | Sand | medium red orange | fine sand to medium sand mod.well sorted | | | 0.0 | | |
| 2.0 | 4.0 | RT 7603 | Qdw | Sand quartz. | medium brown | fine sand to medium sand poorly sorted | | | 0.0 | | |
| 4.0 | 6.0 | RT 7604 | Qdw | Sand quartz. | medium brown | fine sand to medium sand poorly sorted | | | 0.0 | | |
| 6.0 | 8.0 | RT 7605 | Qdw | Clay quartz. sandy | medium brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 8.0 | 10.0 | RT 7606 | Qdw | Clay sandy | medium khaki | clay mod.well sorted | | | 0.0 | | |
| 10.0 | 12.0 | RT 7607 | Qdw | Clay | medium brown | clay well sorted | | | 0.0 | | |
| 12.0 | 14.0 | RT 7608 | Qdw | Clay | medium brown grey | clay well sorted | | | 0.0 | | |
| 14.0 | 16.0 | RT 7609 | Qdw | Clay | medium grey | clay well sorted | | soft | 0.0 | | |
| 16.0 | 18.0 | RT 7610 | Qdw | Clay | medium grey | clay well sorted | | | 0.0 | | |
| 18.0 | 20.0 | RT 7611 | Tps | Sand | medium grey | fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 20.0 | 22.0 | RT 7612 | Tps | Sand | pale grey yellow | fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |

SHEET 2 OF 2 HOLE NUMBER : PT0126

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.0 | 24.0 | RT 7613 | Tps | Sand | light grey white | fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 18.0 | 24.0 | RT 7614 | | Composite Sample | | | | | | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30
GRID: AMG ZONE: 54 RELIABILITY: TOPO

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 02-SEP-88
EASTING: 487312 NORTHING: 6282300 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

HOLE NUMBER : PT0127
LOGGED BY : K.A.Grey
TOTAL DEPTH : 24.0

Comments: Gamma log in rods



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7615 | Qdw | Sand | medium red | fine sand to medium sand mod.well sorted | angular | | 0.0 | | |
| 2.0 | 4.0 | RT 7616 | Qdw | Sand | medium red | fine sand to medium sand well sorted | | | 0.0 | | |
| 4.0 | 6.0 | RT 7617 | Qdw | Sand quartz. | medium brown | medium sand mod.well sorted | | | 0.2 light trace | Iron oxide | |
| 6.0 | 8.0 | RT 7618 | Qdw | Sand quartz. | medium red brown | fine sand well sorted | | | 0.2 light trace | Iron oxide | |
| 8.0 | 10.0 | RT 7619 | Tps | Sand quartz. | medium grey | fine sand well sorted | | | 0.0 | | |
| 10.0 | 12.0 | RT 7620 | Tps | Sand clayey | light grey white | fine sand to medium sand well sorted | | | 0.0 | | |
| 12.0 | 14.0 | RT 7621 | Tps | Sand clayey | light grey white | fine sand to medium sand well sorted | | | 0.0 | | |
| 14.0 | 16.0 | RT 7622 | Tps | Grit quartz. | medium yellow | medium sand to coarse sand poorly sorted | | | 0.0 | | |
| 16.0 | 18.0 | RT 7623 | Tps | Grit quartz. | medium yellow | medium sand to coarse sand poorly sorted | | | 0.0 | | |
| 18.0 | 20.0 | RT 7624 | Tps | Grit quartz. | medium yellow | v.crse sand to granule poorly sorted | | | 0.0 | | |
| 20.0 | 22.0 | RT 7625 | Tps | Grit quartz. | medium yellow | v.crse sand to granule poorly sorted | | | 0.0 | | |

SHEET 2 OF 2 HOLE NUMBER : PT0127

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.0 | 24.0 | RT 7626 | Tps | Grit<br>quartz. | medium<br>yellow | v.crse sand to<br>granule<br>poorly sorted | | | 0.0 | | |
| 8.0 | 24.0 | RT 7627 | | Composite Sample | | | | | | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 03-SEP-88

HOLE NUMBER : PT0128
LOGGED BY : K.A.Grey
TOTAL DEPTH : 30.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 488305 NORTHING: 6282300 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log in rods



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7628 | Qdw | Silt | light brown | silt to fine sand mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 2.0 | 4.0 | RT 7629 | Qdw | Silt sandy | medium red brown | silt to fine sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 7630 | Qdw | Silt sandy | medium red brown | silt to fine sand mod.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 7631 | Tps | Sand gritty Silt | medium brown | silt to granule poorly sorted | sub-angular sub-spherical | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 7632 | Tps | Sand gritty silty | medium brown | silt to granule mod.well sorted | sub-angular sub-spherical | | 0.2 light trace | | |
| 0.0 | 10.0 | RT 7643 | | Composite Sample | | | | | | | |
| 10.0 | 12.0 | RT 7633 | Tps | Sand gritty silty | light brown | silt to granule mod.well sorted | sub-angular sub-spherical | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 7634 | Tps | Sand gritty silty | light brown | silt to granule mod.well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 7635 | Tps | Sand gritty silty | light brown | silt to granule mod.well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 7636 | Tps | Sand gritty silty | light brown | silt to granule mod.well sorted | | | 0.2 light trace | | |
| 18.0 | 20.0 | RT 7637 | Tps | Sand gritty silty | light brown | silt to granule mod.well sorted | | | 0.2 light trace | | |

SHEET 2 OF 2 HOLE NUMBER : PT0128

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.0 | 20.0 | RT 7644 | | Composite Sample | | | | | | | |
| 20.0 | 22.0 | RT 7638 | Tps | Sand gritty silty | light brown grey | silt to granule mod.well sorted | | | 0.2 light trace | | |
| 22.0 | 24.0 | RT 7639 | Tps | Sand gritty silty | dark grey | v.fine sand to fine sand well sorted | sub-rounded sub-elongate | | 0.5 trace | | |
| 24.0 | 26.0 | RT 7640 | Tps | Sand gritty silty | dark grey | v.fine sand to fine sand ext.well sorted | sub-rounded sub-elongate | | 1.0 Good trace | Muscovite | |
| 26.0 | 28.0 | RT 7641 | Tps | Sand gritty silty | dark grey | v.fine sand to fine sand ext.well sorted | | | 1.0 Good trace | Muscovite | |
| 28.0 | 30.0 | RT 7642 | Tps | Sand gritty silty | dark grey | v.fine sand to fine sand ext.well sorted | | | 0.5 trace | Muscovite | |
| 20.0 | 30.0 | RT 7645 | | Composite Sample | | | | | | | |

EOH at 30.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30
GRID: AMG ZONE: 54 RELIABILITY: TOPO

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 03-SEP-88

HOLE NUMBER : PT0129
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

EASTING: 489329 NORTHING: 6282300 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole

SHEET 1 OF 1 HOLE NUMBER : PT0129

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7646 | Qdw | Silt | medium red brown | silt to fine sand mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 7647 | Qdw | Silt | medium red brown | silt to fine sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 7648 | Tps | Sand silty | light brown | medium sand ext.well sorted | sub-rounded sub-spherical | | 0.0 | | |
| 6.0 | 8.0 | RT 7649 | Tps | Sand silty | light brown | medium sand ext.well sorted | sub-rounded sub-spherical | | 0.0 | | |
| 8.0 | 10.0 | RT 7650 | Tps | Sand silty | light brown | medium sand ext.well sorted | sub-rounded sub-spherical | | 0.0 | | |
| 10.0 | 12.0 | RT 7651 | Tps | Sand silty | light brown | medium sand ext.well sorted | sub-rounded sub-spherical | | 0.0 | | |
| 12.0 | 14.0 | RT 7652 | Tps | Sand silty | light brown | fine sand to v.crse sand well sorted | sub-rounded sub-spherical | | 0.0 | | |
| 14.0 | 16.0 | RT 7653 | Tps | Sand silty | light brown yellow | medium sand to v.crse sand well sorted | sub-rounded sub-spherical | | 0.0 | | |
| 16.0 | 18.0 | RT 7654 | Tps | Sand silty | light brown | fine sand to granule poorly sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 18.0 | 21.0 | RT 7655 | Tps | Sand silty | light brown grey | fine sand to coarse sand well sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 0.0 | 21.0 | RT 7656 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30
CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 03-SEP-88
HOLE NUMBER : PT0130
LOGGED BY : K.A.Grey
TOTAL DEPTH : 24.0
GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 490332 NORTHING: 6282300 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0
Comments: Gamma log in rods



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7657 | Qdw | Silt sandy | medium red brown | silt to v.fine sand mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 7658 | Qdw | Silt sandy | medium red brown | silt to v.fine sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 7659 | Qdw | Clay silty | medium red brown | clay to silt well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 7660 | Qdw | Clay silty | medium red brown | clay to silt well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 7661 | Tps | Sand silty | pale grey | fine sand well sorted | | | 0.2 light trace | | |
| 0.0 | 10.0 | RT 7669 | | Composite Sample | | | | | | | |
| 10.0 | 12.0 | RT 7662 | Tps | Sand silty | pale grey | v.fine sand to fine sand well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 7663 | Tps | Sand silty | pale grey | v.fine sand to fine sand well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 7664 | Tps | Sand silty | pale grey | v.fine sand to fine sand well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 7665 | Tps | Sand silty | pale grey | v.fine sand to fine sand well sorted | | | 0.2 light trace | | |
| 18.0 | 20.0 | RT 7666 | Tps | Sand silty | medium grey | medium sand to granule poorly sorted | sub-rounded sub-elongate | | 0.2 light trace | | |

SHEET 2 OF 2 HOLE NUMBER : PT0130

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.0 | 22.0 | RT 7667 | Tps | Sand<br>silty | medium grey | medium sand to granule<br>poorly sorted | | | 0.2<br>light trace | | |
| 22.0 | 24.0 | RT 7668 | Tps | Sand<br><br>Silt | light brown | fine sand to medium sand<br>mod.well sorted | sub-rounded<br>sub-spherical | | 0.2<br>light trace | | |
| 10.0 | 24.0 | RT 7670 | | Composite Sample | | | | | | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 03-SEP-88

HOLE NUMBER : PT0131
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 491304 NORTHING: 6282327 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole

SHEET 1 OF 1 HOLE NUMBER : PT0131

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7671 | Qdw | Silt sandy | light brown | v.fine sand to fine sand mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 2.0 | 4.0 | RT 7672 | Qdw | Silt sandy | light brown | v.fine sand to fine sand mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 4.0 | 6.0 | RT 7673 | Tps | Sand silty | light brown grey | fine sand to medium sand well sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 7674 | Tps | Sand silty | light brown grey | fine sand to medium sand well sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 7675 | Tps | Sand silty | light brown grey | fine sand to coarse sand well sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 7676 | Tps | Sand silty gritty | pale grey | medium sand to v.crse sand well sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 7677 | Tps | Sand silty gritty | light grey brown | medium sand to v.crse sand well sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 7678 | Tps | Sand silty gritty | light grey brown | medium sand to v.crse sand well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 7679 | Tps | Sand | light brown | v.fine sand to coarse sand ext.well sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 18.0 | 21.0 | RT 7680 | Tps | Sand | light brown | v.fine sand to coarse sand ext.well sorted | sub-rounded sub-spherical | | 0.2 light trace | | |
| 0.0 | 21.0 | RT 7681 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 03-SEP-88

HOLE NUMBER : PT0132
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 492298 NORTHING: 6282310 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ STRENGTH | TYPE/ | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7682 | Qdw | Sand<br>silty | medium<br>red<br>brown | v.fine sand to<br>fine sand<br>mod.well sorted | | | | 0.2<br>light trace | | |
| 2.0 | 4.0 | RT 7683 | Qdw | Sand<br>silty | medium<br>red<br>brown | v.fine sand to<br>fine sand<br>mod.well sorted | | | | 0.2<br>light trace | | |
| 4.0 | 6.0 | RT 7684 | Qdw | Silt<br><br>Sand | light<br>brown | silt to<br>fine sand<br>mod.well sorted | | | | 0.2<br>light trace | | |
| 6.0 | 8.0 | RT 7685 | Qdw | Clay | light<br>brown<br>khaki | clay<br><br>well sorted | | | | 0.2<br>light trace | | |
| 8.0 | 10.0 | RT 7686 | Qdw | Clay | light<br>brown<br>khaki | clay<br><br>well sorted | | | | 0.2<br>light trace | | |
| 0.0 | 10.0 | RT 7692 | | Composite Sample | | | | | | | | |
| 10.0 | 12.0 | RT 7687 | Tps | Sand<br>silty | pale<br>grey | v.fine sand to<br>medium sand<br>well sorted | sub-rounded | | | 0.2<br>light trace | | |
| 12.0 | 14.0 | RT 7688 | Tps | Sand<br>silty | pale<br>grey | v.fine sand to<br>medium sand<br>well sorted | | | | 0.2<br>light trace | | |
| 14.0 | 16.0 | RT 7689 | Tps | Sand<br>silty | pale<br>grey | v.fine sand to<br>medium sand<br>well sorted | | | | 0.2<br>light trace | | |
| 16.0 | 18.0 | RT 7690 | Tps | Sand<br>silty | pale<br>grey | v.fine sand to<br>medium sand<br>well sorted | | | | 0.2<br>light trace | | |
| 18.0 | 21.0 | RT 7691 | Tps | Sand<br>silty gritty | light<br>yellow | medium sand to<br>v.crse sand<br>mod.well sorted | sub-rounded | | | 0.2<br>light trace | | |

SHEET 2 OF 2 HOLE NUMBER : PT0132

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.0 | 21.0 | RT 7693 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30
GRID: AMG ZONE: 54 RELIABILITY: TOPO

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 03-SEP-88
EASTING: 493501 NORTHING: 6282320 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

HOLE NUMBER : PT0133
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7694 | Qdw | Silt sandy | light brown | v.fine sand to fine sand mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 2.0 | 4.0 | RT 7695 | Qdw | Silt sandy | light brown | v.fine sand to fine sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 7696 | Qdw | Silt sandy | light brown | v.fine sand to fine sand mod.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 7697 | Qdw | Silt sandy | light brown | v.fine sand to fine sand mod.well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 7698 | Qdw | Silt Clay | light brown | clay to fine sand poorly sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 7699 | Qdw | Clay silty | medium red grey | clay to silt well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 7700 | Qdw | Clay silty | medium grey | clay to silt well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 7701 | Qdw | Clay silty | medium khaki grey | clay to silt well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 7702 | Qdw | Clay silty | medium khaki grey | clay to silt well sorted | | | 0.2 light trace | | |
| 18.0 | 21.0 | RT 7703 | Tps | Sand | pale grey | medium sand well sorted | | | 0.2 light trace | | |
| 0.0 | 21.0 | RT 7704 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 03-SEP-88

HOLE NUMBER : PT0134
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 494265 NORTHING: 6282300 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7705 | Qdw | Sand silty | light brown | silt to fine sand mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 7706 | Qdw | Sand silty | light brown | silt to fine sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 7707 | Qdw | Sand silty | light brown | silt to fine sand mod.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 7708 | Qdw | Sand silty | light grey | silt to medium sand mod.well sorted | sub-angular | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 7709 | Qdw | Sand silty | light grey | silt to medium sand mod.well sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 7710 | Qdw | Sand silty | light grey | silt to medium sand mod.well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 7711 | Qdw | Sand silty | light grey | silt to medium sand mod.well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 7712 | Qdw | Clay sandy silty | medium grey | clay to v.fine sand mod.well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 7713 | Qdw | Clay sandy silty | medium grey | clay to v.fine sand mod.well sorted | | | 0.2 light trace | | |
| 18.0 | 21.0 | RT 7714 | Qdw | Clay sandy silty | medium grey | clay to v.fine sand mod.well sorted | | | 0.2 light trace | | |
| 0.0 | 21.0 | RT 7715 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 04-SEP-88

HOLE NUMBER : PT0135
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 495399 NORTHING: 6282280 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole

SHEET 1 OF 1 HOLE NUMBER : PT0135

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7716 | Qdw | Silt | medium brown | silt to fine sand mod.well sorted | | weakly consol Calcareous friable | 0.2 light trace | | |
| 2.0 | 4.0 | RT 7717 | Qdw | Silt | medium red brown | silt to fine sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 7718 | Qdw | Clay silty | medium red brown | clay well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 7719 | Qdw | Clay silty | light brown | clay well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 7720 | Qdw | Clay | medium grey brown | clay ext.well sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 7721 | Qdw | Clay | medium grey brown | clay ext.well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 7722 | Qdw | Clay | medium grey brown | clay ext.well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 7723 | Qdw | Clay | medium grey brown | clay ext.well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 7724 | Qdw | Clay Sand | medium khaki grey | clay to medium sand well sorted | | | 0.2 light trace | | |
| 18.0 | 21.0 | RT 7725 | Qdw | Clay | medium grey khaki | clay well sorted | | | 0.2 light trace | | |
| 0.0 | 21.0 | RT 7726 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 04-SEP-88

HOLE NUMBER : PT0136
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 496370 NORTHING: 6282360 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole

SHEET 1 OF 1 HOLE NUMBER : PT0136

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7727 | Qdw | Silt sandy | light brown | silt to fine sand mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 7728 | Qdw | Silt sandy | medium red brown | silt to fine sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 7729 | Qdw | Silt sandy Clay | medium brown | clay to v.fine sand mod.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 7730 | Qdw | Clay | light grey brown | clay well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 7731 | Qdw | Clay | light grey brown | clay well sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 7732 | Qdw | Clay | medium khaki grey | clay ext.well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 7733 | Qdw | Clay | medium khaki grey | clay ext.well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 7734 | Qdw | Clay | medium khaki grey | clay ext.well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 7735 | Qdw | Clay | medium khaki grey | clay ext.well sorted | | | 0.2 light trace | | |
| 18.0 | 21.0 | RT 7736 | Qdw | Clay | medium khaki grey | clay ext.well sorted | | | 0.2 light trace | | |
| 0.0 | 21.0 | RT 7737 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 04-SEP-88

HOLE NUMBER : PT0137
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 497375 NORTHING: 6282290 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole

SHEET 1 OF 1 HOLE NUMBER : PT0137

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7738 | Qdw | Clay silty | medium red brown | clay to silt mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | RT 7739 | Qdw | Clay silty | medium brown | clay to silt mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | RT 7740 | Qdw | Clay | light brown grey | clay ext.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | RT 7741 | Qdw | Clay | light khaki grey | clay ext.well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | RT 7742 | Qdw | Clay | light khaki grey | clay ext.well sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | RT 7743 | Qdw | Clay | light khaki grey | clay ext.well sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | RT 7744 | Qdw | Clay | light khaki grey | clay ext.well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | RT 7745 | Qdw | Clay | light khaki grey | clay ext.well sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | RT 7746 | Qdw | Clay | light khaki grey | clay ext.well sorted | | | 0.2 light trace | | |
| 18.0 | 21.0 | RT 7747 | Qdw | Clay | light khaki grey | clay ext.well sorted | | | 0.2 light trace | | |
| 0.0 | 21.0 | RT 7748 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 04-SEP-88

HOLE NUMBER : PT0138
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 498378 NORTHING: 6282290 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7749 | Qdw | Clay | medium brown | clay<br>well sorted | | | 0.2<br>light trace | | |
| 2.0 | 4.0 | RT 7750 | Qdw | Clay | light brown | clay<br>well sorted | | | 0.2<br>light trace | | |
| 4.0 | 6.0 | RT 7751 | Qdw | Clay | light brown | clay<br>well sorted | | | 0.2<br>light trace | | |
| 6.0 | 8.0 | RT 7752 | Qdw | Clay | light brown | clay<br>well sorted | | | 0.2<br>light trace | | |
| 8.0 | 10.0 | RT 7753 | Qdw | Clay | light grey | clay<br>well sorted | | | 0.2<br>light trace | | |
| 10.0 | 12.0 | RT 7754 | Qdw | Clay | light grey | clay<br>well sorted | | | 0.2<br>light trace | | |
| 12.0 | 14.0 | RT 7755 | Qdw | Clay | light grey | clay<br>well sorted | | | 0.2<br>light trace | | |
| 14.0 | 16.0 | RT 7756 | Qdw | Clay | light grey | clay<br>well sorted | | | 0.2<br>light trace | | |
| 16.0 | 18.0 | RT 7757 | Qdw | Clay | light grey | clay<br>well sorted | | | 0.2<br>light trace | | |
| 18.0 | 21.0 | RT 7758 | Qdw | Clay | light grey | clay<br>well sorted | | | 0.2<br>light trace | | |
| 0.0 | 21.0 | RT 7759 | | Composite Sample | | | | | | | |

EOH at 21.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Murray Basin
LOCALITY: Pepper Tree EL 1445
SHEET : Chowilla 1:100,000
JOB NO : T30

CONTRACTOR : Wallis Drilling
RIG TYPE : Mantis 200 RC AC
DATE DRILLED: 04-SEP-88

HOLE NUMBER : PT0139
LOGGED BY : K.A.Grey
TOTAL DEPTH : 21.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 499331 NORTHING: 6282291 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

Comments: Gamma log open hole

SHEET 1 OF 1 HOLE NUMBER : PT0139

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | RT 7760 | Qdw | Silt<br>Sand | light brown | silt to medium sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 2.0 | 4.0 | RT 7761 | Qdw | Silt<br>Sand | medium red brown | silt to medium sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 4.0 | 6.0 | RT 7762 | Qdw | Clay | light brown grey | clay<br>well sorted | | | 0.2<br>light trace | | |
| 6.0 | 8.0 | RT 7763 | Qdw | Clay | light grey | clay<br>ext.well sorted | | | 0.2<br>light trace | | |
| 8.0 | 10.0 | RT 7764 | Qdw | Clay | light grey | clay<br>ext.well sorted | | | 0.2<br>light trace | | |
| 10.0 | 12.0 | RT 7765 | Qdw | Clay | light grey | clay<br>ext.well sorted | | | 0.2<br>light trace | | |
| 12.0 | 14.0 | RT 7766 | Qdw | Clay | light grey | clay<br>ext.well sorted | | | 0.2<br>light trace | | |
| 14.0 | 16.0 | RT 7767 | Qdw | Clay | light grey | clay<br>ext.well sorted | | | 0.2<br>light trace | | |
| 16.0 | 18.0 | RT 7768 | Qdw | Clay | light grey | clay<br>ext.well sorted | | | 0.2<br>light trace | | |
| 18.0 | 21.0 | RT 7769 | Qdw | Clay | light grey | clay<br>ext.well sorted | | | 0.2<br>light trace | | |
| 0.0 | 21.0 | RT 7770 | | Composite Sample | | | | | | | |

EOH at 21.0 m

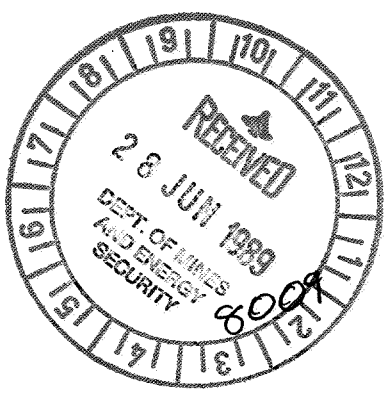
0252

CR 6467

# EXPLORATION LICENCE 1445
# PEPPER TREE, SOUTH AUSTRALIA

## REPORT FOR THE QUARTER ENDING
## 15TH MAY 1989

K. GREY
ADELAIDE. S.A.



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3. SAMPLE ANALYSES

4. FUTURE WORK

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B. SAMPLE ANALYSES, BELMONT LABORATORY,
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# EXPLORATION LICENCE 1445

# PEPPER TREE - SOUTH AUSTRALIA

# REPORT FOR THE QUARTER ENDING 15th MAY 1989

## 1. GENERAL STATEMENT

Exploration Licence 1445 was taken up to test the potential for heavy mineral sands in the Pepper Tree area of the Murray Basin. It forms part of a regional exploration programme in the Murray Basin (see Figure 1).

A literature search and geological assessment of the area indicates the presence of Tertiary palaeostrandlines deposited during the Pliocene period. Their presence indicates that the environment for heavy mineral-bearing beach sand deposition and preservation may exist.

## 2. TITLE

Exploration Licence 1445 covers 1295 square kilometres and was granted to BHP Minerals Limited on the 16th November 1987 for a period of one year. Extension of term of Licence was granted for one year by SADME.

## 3. SAMPLE ANALYSES

Sample Analyses for percentage heavy minerals for the 31 samples sent to BHP's Belmont Mineral Laboratory are included in Appendix A. Appendix B contains observers sheets for these samples including percentage estimates of the proportions of the economic heavy minerals in the observed size fractions.

## 4. FUTURE WORK

Followup and infill drilling mainly in the western half of the licence is likely to be completed in August/September (approximately 100 holes, 2000 metres).

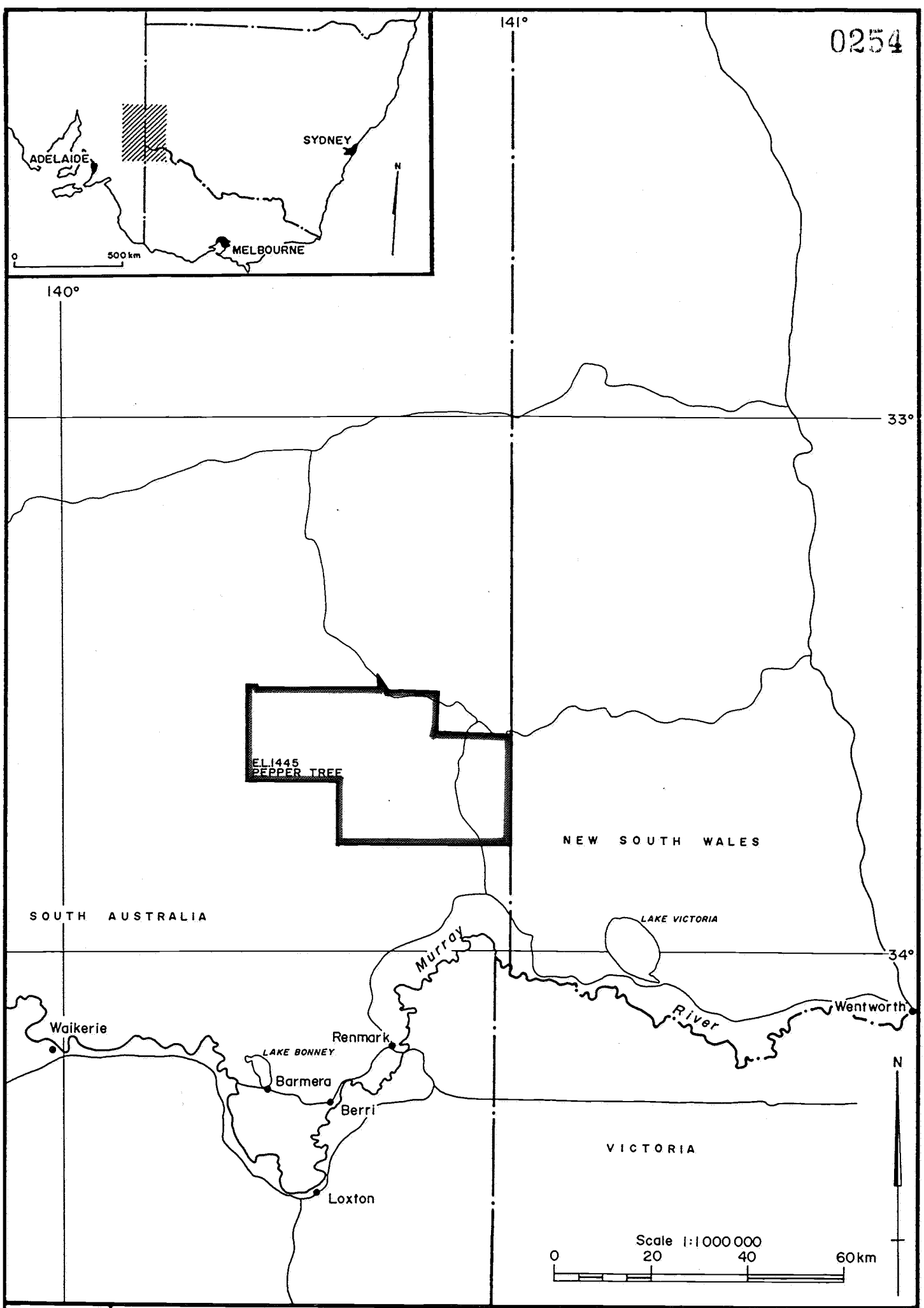
## 5. EXPENDITURE

Expenditure for the sixth quarter of EL 1445 for the three months to the end of May 1989 totals $16,135 and is summarised as follows:-

| | |
|---|---|
| Wages and Salaries | $ 2886 |
| Field Support | 311 |
| Vehicles | 1227 |
| Equipment | 91 |
| Geochemistry | 1000 |
| Surveys | 48 |
| Office Expenses | 513 |
| Capital Purchases | 5880 |
| Computer Services | 148 |
| Freight | 48 |
| Geochem./Geostats. | 65 |
| Belmont Laboratory | 3150 |
| Administration and Overheads | 768 |
| Total | $16135 |

Total expenditure to date for EL 1445 is $118,608.? $120 115

This report is submitted to the DME as required by Clause 2 of EL 1445.




| | | |
|---|---|---|
| Centre ADELAIDE | THE BROKEN HILL PROPRIETARY CO. LTD. | Project Nº |
| Date 3-8-87 | E.L.1445 PEPPER TREE, S.A. | Drawing Nº A4-493A |
| | LOCATION MAP | |

# APPENDIX A

SAMPLE ANALYSES
BELMONT LABORATORY
PERCENTAGE HEAVY MINERALS

Weight Percent Heavy Mineral - 008

| Lab Number | Field No. | Received Weight | Weight H.M. | Weight Percent Heavy Min. |
|---|---|---|---|---|
| RT 6009 | RT 6009 | 2.600 | 0.90 | 0.03 |
| RT 6018 | RT 6018 | 2.700 | 2.30 | 0.09 |
| RT 6125 | RT 6125 | 2.800 | 2.80 | 0.10 |
| RT 6173 | RT 6173 | 1.700 | 0.40 | 0.02 |
| RT 6180 | RT 6180 | 1.700 | 0.70 | 0.04 |
| RT 6331 | RT 6331 | 2.600 | 0.30 | 0.01 |
| RT 6346 | RT 6346 | 2.000 | 0.40 | 0.02 |
| RT 6347 | RT 6347 | 2.400 | 0.90 | 0.04 |
| RT 6372 | RT 6372 | 3.000 | 0.50 | 0.02 |
| RT 6544 | RT 6544 | 3.100 | 0.70 | 0.02 |
| RT 6773 | RT 6773 | 1.400 | 1.20 | 0.09 |
| RT 6894 | RT 6894 | 2.000 | 21.20 | 1.06 |
| RT 6895 | RT 6895 | 1.500 | 7.70 | 0.51 |
| RT 6916 | RT 6916 | 2.500 | 14.30 | 0.57 |
| RT 6917 | RT 6917 | 2.500 | 15.00 | 0.60 |
| RT 6951 | RT 6951 | 2.900 | 14.90 | 0.51 |
| RT 6959 | RT 6959 | 1.600 | 0.90 | 0.06 |
| RT 7028 | RT 7028 | 2.400 | 0.70 | 0.03 |
| RT 7405 | RT 7405 | 1.600 | 0.60 | 0.04 |
| RT 7414 | RT 7414 | 2.000 | 1.00 | 0.05 |
| RT 7415 | RT 7415 | 1.600 | 3.60 | 0.23 |
| RT 7421 | RT 7421 | 1.500 | 1.20 | 0.08 |
| RT 7455 | RT 7455 | 0.900 | 0.60 | 0.07 |
| RT 7523 | RT 7523 | 1.700 | 0.60 | 0.04 |
| RT 7565 | RT 7565 | 2.400 | 1.70 | 0.07 |
| RT 7581 | RT 7581 | 4.400 | 0.30 | 0.01 |
| RT 7589 | RT 7589 | 1.700 | 0.30 | 0.02 |
| RT 7639 | RT 7639 | 3.900 | 16.30 | 0.42 |
| RT 7715 | RT 7715 | 2.500 | 0.50 | 0.02 |
| RT 7724 | RT 7724 | 2.000 | 0.40 | 0.02 |
| RT 7759 | RT 7759 | 1.700 | 0.20 | 0.01 |

# APPENDIX B

SAMPLE ANALYSES
BELMONT LABORATORY
OBSERVER SHEETS

BHP MINERALS EXPLORATION 0269

# OBSERVER'S DATA SHEET --- TITANIUM SAMPLE No. KT6009

OBSERVER: PAULINE SIZE RANGE OBSERVED: -0.4 +0.075 mm

SHEET No: 103 DATE STARTED: 27.4.89 DATE FINISHED: 27.4.89.

| MATERIAL | NON MAGS ( ~~HANDMAGNET~~ ) NAG SEPARATED. | | | TICK OR SHOW OTHER: | ENTERED |
|---|---|---|---|---|---|
| OBSERVED | -0.4 +0.25 | -0.25 *+0.18 | -0.18 +0.075 | OTHER: m3+4. | GRAINS BOTTLED IN BAG / GRAINS FOR PROBING |
| WEIGHT | 0.01 | <0.01 | 0.1 | 0.4 | |

| MINERAL | Flag | VISUAL ESTIMATE OF MINERAL % | GRAIN COUNT CHECK | ( SHOW SIZE FRACTION ) |
|---|---|---|---|---|
| ILMENITE | E | 15 | | |
| MONAZITE | E | | | |
| RUTILE | E | 2 | | |
| ZIRCON | E | 1 | | |
| LEUCOXENE | E | 1 7 | | |
| OTHERS | | 99 100 90 85 | | |

COMMENTS:

Others quartz + rocks (nm)

" rocks, tourmaline + amphibole in mags.

* -25+18 Fraction very small.

0261

BHP MINERALS EXPLORATION

# OBSERVER'S DATA SHEET --- TITANIUM SAMPLE No. RT6018

OBSERVER: Pauline SIZE RANGE OBSERVED: -0.4 +0.075 mm

SHEET No: 104 DATE STARTED: 27.4.89 DATE FINISHED: 27.4.89.

| MATERIAL OBSERVED | NON MAGS (~~HANDMAGNET~~) MAG SEPARATED. ☐ TICK OR SHOW OTHER: | | | | | |
|---|---|---|---|---|---|---|
| | -0.4 +0.25 | -0.25 +0.18 | -0.18 +0.075 | OTHER: M3H4. | | |
| WEIGHT | 0.02 | 0.05 | 0.02 | 2.0 | | |

ENTERED ☐

GRAINS BOTTLED IN BAG

GRAINS FOR PROBING

| MINERAL | Flag | VISUAL ESTIMATE OF MINERAL % | | | | | | | | | | | | | | | GRAIN COUNT CHECK | | | | | | ( SHOW SIZE FRACTION ) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ILMENITE | E | | | | | | | | | | | | | | | 2 | | | | | | | | |
| MONAZITE | E | | | | | | | | | | | | | | | | | | | | | | | |
| RUTILE | E | | | | | | | < | 1 | | | | 1 | | | | | | | | | | | |
| ZIRCON | E | | | | | | | | | | | | 4 | | | | | | | | | | | |
| LEUCOXENE | E | | | T | R | | | < | 1 | | | | 4 | | | | | | | | | | | |
| OTHERS | | 1 | 0 | 0 | | | | 9 | 9 | | | 9 | 1 | | | 9 | 8 | | | | | | | |

COMMENTS:

Others quartz + rocks. (Mn)

" rocks in mags.

BHP MINERALS EXPLORATION 0262

# OBSERVER'S DATA SHEET --- TITANIUM SAMPLE No. RT6125

OBSERVER: Pauline SIZE RANGE OBSERVED: -0.4 +0.075 mm

SHEET No: 108 DATE STARTED: 28.4.89 DATE FINISHED: 28.4.89

| MATERIAL OBSERVED | NON MAGS ( ~~HANDMAGNET~~ ) MAG SEPARATED. ☐ TICK OR SHOW OTHER: | | | | | |
|---|---|---|---|---|---|---|
| | -0.4 +0.25 | * -0.25 +0.18 | -0.18 +0.075 | OTHER: M3+4. | | |
| WEIGHT | 0.09 | <0.01 | 0.4 | 1.5 | | |

ENTERED ☐

| MINERAL | Flag | VISUAL ESTIMATE OF MINERAL % | GRAIN COUNT CHECK | GRAINS BOTTLED IN BAG | GRAINS FOR PROBING (SHOW SIZE FRACTION) |
|---|---|---|---|---|---|
| ILMENITE | E | 80 | | | |
| MONAZITE | E | | | | |
| RUTILE | E | 3 | | | |
| ZIRCON | E | 1 | | | |
| LEUCOXENE | E | <1 12 | | | |
| OTHERS | | 100 100 84 20 | | | |

COMMENTS:

Others quartz rocks.

" rocks + tourmaline in mags.

* -.25 +.18 Fraction very small.

BHP MINERALS EXPLORATION

0263

# OBSERVER'S DATA SHEET --- TITANIUM SAMPLE No. RT 6173

OBSERVER: Pauline SIZE RANGE OBSERVED: -0.4 +0.075 mm

SHEET No: 105 DATE STARTED: 27.4.89 DATE FINISHED: 27.4.89

| MATERIAL | NON MAGS ( ~~HANDMAGNET~~ MAG SEPARATED ) ☐ TICK OR SHOW OTHER: | | | | | | ENTERED ☐ |
|---|---|---|---|---|---|---|---|
| OBSERVED | -0.4 +0.25 | -0.25 +0.18 | -0.18 +0.075 | OTHER: mag. | | | GRAINS BOTTLED IN BAG / GRAINS FOR PROBING |
| WEIGHT | 0.01 | 0.01 | 0.02 | 0.2 | | | |

| MINERAL | Flag | VISUAL ESTIMATE OF MINERAL % | GRAIN COUNT CHECK | ( SHOW SIZE FRACTION ) |
|---|---|---|---|---|
| ILMENITE | E | 50 | | |
| MONAZITE | E | | | |
| RUTILE | E | <1 2 | | |
| ZIRCON | E | 2 | | |
| LEUCOXENE | E | 3 1 2 | | |
| OTHERS | | 100 97 84 50 | | |

COMMENTS:

Others rocks + quartz (vm)

" rocks, tourmaline + amphibole in mags.

0264

BHP MINERALS EXPLORATION

# OBSERVER'S DATA SHEET --- TITANIUM SAMPLE No. RT 6180

OBSERVER: Pauline SIZE RANGE OBSERVED: -0.4 +0.075 mm

SHEET No: 109 DATE STARTED: 28.4.89 DATE FINISHED: 28.4.89

ENTERED

MATERIAL OBSERVED: NON MAGS (~~HANDMAGNET~~) ☐ TICK OR SHOW OTHER: MAG SEPARATED.

| | -0.4 +0.25 | -0.25 *+0.18 | -0.18 +0.075 | OTHER: M3+4. | | | GRAINS BOTTLED IN BAG | GRAINS FOR PROBING |
|---|---|---|---|---|---|---|---|---|
| WEIGHT | 0.01 | 0.01 | 0.05 | 0.3 | | | | |

| MINERAL | Flag | VISUAL ESTIMATE OF MINERAL % | GRAIN COUNT CHECK | ( SHOW SIZE FRACTION ) |
|---|---|---|---|---|
| ILMENITE | E | 85 | | |
| MONAZITE | E | | | |
| RUTILE | E | 2 | | |
| ZIRCON | E | 1 | | |
| LEUCOXENE | E | 1 10 | | |
| OTHERS | | 99 100 87 15 | | |

COMMENTS: Others quartz rocks (nm)

" rocks + tourmaline in mags.

*-25+.18 Fraction very small.

BHP MINERALS EXPLORATION 0265

# OBSERVER'S DATA SHEET --- TITANIUM SAMPLE No. RT 6331

OBSERVER: Pauline SIZE RANGE OBSERVED: -0.4 +0.075 mm

SHEET No: 106 DATE STARTED: 27.4.89 DATE FINISHED: 27.4.89

| MATERIAL | NON MAGS ( ~~HANDMAGNET~~ ) MAG SEPARATED. ☐ TICK OR SHOW OTHER: | | | | | | ENTERED ☐ |
|---|---|---|---|---|---|---|---|
| OBSERVED | -0.4 +0.25 | -0.25 +0.18 | -0.18 +0.075 | OTHER: n3 t4. | | | GRAINS BOTTLED IN BAG / GRAINS FOR PROBING |
| WEIGHT | 0.01 | 0.01 | 0.06 | 0.07 | | | |

| MINERAL | Flag | VISUAL ESTIMATE OF MINERAL % | GRAIN COUNT CHECK | ( SHOW SIZE FRACTION ) |
|---|---|---|---|---|
| ILMENITE | E | 75 | | |
| MONAZITE | E | | | |
| RUTILE | E | 4 | | |
| ZIRCON | E | 3 | | |
| LEUCOXENE | E | <1 1 1 10 | | |
| OTHERS | | 100 99 83 25 | | |

COMMENTS:

Others quartz + rocks (vn)

" rocks + tourmaline in mags:

0266

BHP MINERALS EXPLORATION

# OBSERVER'S DATA SHEET --- TITANIUM SAMPLE No. RT 6346

OBSERVER : PAULINE SIZE RANGE OBSERVED : - 0.4 + 0.075 mm

SHEET No : 107 DATE STARTED : 28.4.89 DATE FINISHED : 28.4.89.

| MATERIAL | NON MAGS ( ~~HANDMAGNET~~ ) MAG SEPARATED. ☐ TICK OR SHOW OTHER: | | | | | | ENTERED ☐ |
|---|---|---|---|---|---|---|---|
| OBSERVED | -0.4 +0.25 | -0.25 +0.18 | -0.18 +0.075 | OTHER: mstd. | | | GRAINS BOTTLED IN BAG / GRAINS FOR PROBING |
| WEIGHT | 0.04 | 0.06 | 0.05 | 0.09 | | | |

| MINERAL | Flag | VISUAL ESTIMATE OF MINERAL % | GRAIN COUNT CHECK | ( SHOW SIZE FRACTION ) |
|---|---|---|---|---|
| ILMENITE | E | 50 | | |
| MONAZITE | E | | | |
| RUTILE | E | 41 2 | | |
| ZIRCON | E | 2 | | |
| LEUCOXENE | E | 1 1 6 | | |
| OTHERS | | 99 99 90 50 | | |

COMMENTS : Others quartz + rocks (nm)

Others rocks + tourmaline in mags.

BHP MINERALS EXPLORATION

0267

# OBSERVER'S DATA SHEET --- TITANIUM SAMPLE No . RT 6347

OBSERVER : Pauline SIZE RANGE OBSERVED : - 0.4 + 0.075 mm

SHEET No : 111 DATE STARTED : 28.4.89 DATE FINISHED : 28.4.89

| MATERIAL | NON MAGS ( ~~HANDMAGNET~~ ) MAG SEPARATED. | | | TICK OR SHOW OTHER: | | ENTERED |
|---|---|---|---|---|---|---|
| OBSERVED | -0.4 +0.25 | -0.25 +0.18 | -0.18 +0.075 | OTHER: NON. | | GRAINS BOTTLED IN BAG / GRAINS FOR PROBING |
| WEIGHT | 0.06 | 0.01 | 0.06 | 0.5 | | |

| MINERAL | Flag | VISUAL ESTIMATE OF MINERAL % | | | | | | | | | | | | | | | | GRAIN COUNT CHECK | | | | | | ( SHOW SIZE FRACTION ) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ILMENITE | E | | | | | | | | | | | | | | | 1 | 0 | | | | | | | | |
| MONAZITE | E | | | | | | | | | | | | | | | | | | | | | | | | |
| RUTILE | E | | | | | | | | | | | < | 1 | | | | | | | | | | | | |
| ZIRCON | E | | | | | | | | | | | | 1 | | | | | | | | | | | | |
| LEUCOXENE | E | | | | 5 | | | 1 | 0 | | | 2 | 0 | | | | | | | | | | | | |
| OTHERS | | | | 9 | 5 | | | 9 | 0 | | | 7 | 9 | | | 9 | 0 | | | | | | | | |

COMMENTS :

Others quartz rocks. (NM)

" mainly rocks in mags.

0268

BHP MINERALS EXPLORATION

# OBSERVER'S DATA SHEET --- TITANIUM SAMPLE No. RT 6372

OBSERVER: Pauline SIZE RANGE OBSERVED: -0.4 +0.075 mm

SHEET No: 110 DATE STARTED: 28.4.89 DATE FINISHED: 28.4.89.

ENTERED

| MATERIAL OBSERVED | NON MAGS ( ~~HANDMAGNET~~ MAG SEPARATED. ) ☐ TICK OR SHOW OTHER: | | | | | |
|---|---|---|---|---|---|---|
| | -0.4 +0.25 | -0.25 +0.18 | -0.18 +0.075 | OTHER: MTT4. | | |
| WEIGHT | 0.1 | 0.1 | 0.07 | 0.06 | | |

| GRAINS BOTTLED IN BAG | GRAINS FOR PROBING |
|---|---|
| | |

| MINERAL | Flag | VISUAL ESTIMATE OF MINERAL % | GRAIN COUNT CHECK | ( SHOW SIZE FRACTION ) |
|---|---|---|---|---|
| ILMENITE | E | 75 | | |
| MONAZITE | E | | | |
| RUTILE | E | <1 2 | | |
| ZIRCON | E | <1 2 | | |
| LEUCOXENE | E | <1 2 6 | | |
| OTHERS | | 100 97 90 25 | | |

COMMENTS:

Others quartz + rocks (NM)

" rocks + tourmaline in eggs.

BHP MINERALS EXPLORATION

# OBSERVER'S DATA SHEET --- TITANIUM SAMPLE No. RT 6544

OBSERVER: Pauline SIZE RANGE OBSERVED: -0.4 +0.075 mm

SHEET No: 112 DATE STARTED: 28.4.89 DATE FINISHED: 28.4.89.

| MATERIAL OBSERVED | NON MAGS ( ~~HANDMAGNET~~ ) MAG SEPARATED. ☐ TICK OR SHOW OTHER: | | | | | |
|---|---|---|---|---|---|---|
| | -0.4 +0.25 | -0.25 +0.18 | -0.18 +0.075 | OTHER: MJ+4. | | |
| WEIGHT | 0.04 | 0.04 | 0.08 | 0.3 | | |

ENTERED ☐

| GRAINS BOTTLED IN BAG | GRAINS FOR PROBING |
|---|---|
| | |

| MINERAL | Flag | VISUAL ESTIMATE OF MINERAL % | GRAIN COUNT CHECK | ( SHOW SIZE FRACTION ) |
|---|---|---|---|---|
| ILMENITE | E | 90 | | |
| MONAZITE | E | | | |
| RUTILE | E | 1 2 | | |
| ZIRCON | E | <1 1 | | |
| LEUCOXENE | E | <1 4 10 | | |
| OTHERS | | 100 95 87 10 | | |

COMMENTS: Other quartz rocks.

" rocks + tourmaline in mags.

0270

BHP MINERALS EXPLORATION

# OBSERVER'S DATA SHEET --- TITANIUM SAMPLE No. RT 6773

OBSERVER : Pauline SIZE RANGE OBSERVED : - 0.4 + 0.075 mm

SHEET No : 113 DATE STARTED : 28.4.89 DATE FINISHED : 28.4.89.

ENTERED

| MATERIAL | NON MAGS ( ~~HANDMAGNET~~ ) MAG SEPARATED. | | | TICK OR SHOW OTHER: | | |
|---|---|---|---|---|---|---|
| OBSERVED | -0.4 +0.25 | -0.25 +0.18 | -0.18 +0.075 | OTHER: M3+4. | | |
| WEIGHT | 0.01 | 0.08 | 0.2 | 0.7 | | |

| GRAINS BOTTLED IN BAG | GRAINS FOR PROBING |
|---|---|
| | |

| MINERAL | Flag | VISUAL ESTIMATE OF MINERAL % | GRAIN COUNT CHECK | ( SHOW SIZE FRACTION ) |
|---|---|---|---|---|
| ILMENITE | E | 25 | | |
| MONAZITE | E | | | |
| RUTILE | E | <1 7 | | |
| ZIRCON | E | 1 | | |
| LEUCOXENE | E | 3 10 | | |
| OTHERS. | | 100 97 82 75 | | |

COMMENTS :

Others quartz + rocks (NM)

" rocks + tourmaline in mags.

0271

BHP MINERALS EXPLORATION

# OBSERVER'S DATA SHEET --- TITANIUM SAMPLE No. RT6894

OBSERVER: Pauline SIZE RANGE OBSERVED: -0.4 +0.075 mm

SHEET No: 114 DATE STARTED: 28.4.89 DATE FINISHED: 28.4.89.

ENTERED

| MATERIAL OBSERVED | NON MAGS ( ~~HANDMAGNET~~ MAG SEPARATED ) | | | TICK OR SHOW OTHER: | | | GRAINS BOTTLED IN BAG | GRAINS FOR PROBING |
|---|---|---|---|---|---|---|---|---|
| | -0.4 +0.25 | -0.25 +0.18 | -0.18 +0.075 | OTHER: NMH. | | | | |
| WEIGHT | 0.02 | 008 | 1.6 | 12.6 | | | | |

| MINERAL | Flag | VISUAL ESTIMATE OF MINERAL % | GRAIN COUNT CHECK | ( SHOW SIZE FRACTION ) |
|---|---|---|---|---|
| ILMENITE | E | 90 | | |
| MONAZITE | E | | | |
| RUTILE | E | <1 13 | | |
| ZIRCON | E | <1 5 | | |
| LEUCOXENE | E | 2 22 | | |
| OTHERS. | | 100 98 60 10 | | |

COMMENTS:

Others quartz rocks. (NM)

" rocks + tourmaline in mags.

0272

BHP MINERALS EXPLORATION

# OBSERVER'S DATA SHEET --- TITANIUM SAMPLE No. RT 6895.

OBSERVER: Pauline SIZE RANGE OBSERVED: -0.4 +0.075 mm

SHEET No: 1 DATE STARTED: 1.5.89 DATE FINISHED: 1.5.89

ENTERED ☐

| MATERIAL | NON MAGS ( ~~HANDMAGNET~~ ) MAG SEPARATED. ☐ TICK OR SHOW OTHER: | | | | | | GRAINS BOTTLED IN BAG | GRAINS FOR PROBING |
|---|---|---|---|---|---|---|---|---|
| OBSERVED | -0.4 +0.25 | -0.25 +0.18 | -0.18 +0.075 | OTHER: M3+4 - | | | | |
| WEIGHT | 0.04 | 0.1 | 1.0 | 4.1 | | | | |

| MINERAL | Flag | VISUAL ESTIMATE OF MINERAL % | GRAIN COUNT CHECK | ( SHOW SIZE FRACTION ) |
|---|---|---|---|---|
| ILMENITE | E | 90 | | |
| MONAZITE | E | | | |
| RUTILE | E | 15 | | |
| ZIRCON | E | 1 | | |
| LEUCOXENE | E | <1 1 2 25 | | |
| OTHERS | | 100 98 59 10 | | |

COMMENTS:

Others quartz rocks. (vvv)

" rocks + tourmaline in mags.

BHP MINERALS EXPLORATION

0273

# OBSERVER'S DATA SHEET --- TITANIUM SAMPLE No. RT 6916

OBSERVER: Pauline SIZE RANGE OBSERVED: -0.4 +0.075 mm

SHEET No: 2. DATE STARTED: 1.5.89 DATE FINISHED: 1.5.89.

MATERIAL: NON MAGS (~~HANDMAGNET~~) ☐ TICK OR SHOW OTHER: MAG SEPARATED.

ENTERED ☐

| OBSERVED | -0.4 +0.25 | -0.25 +0.18 | -0.18 +0.075 | OTHER: M3+4. | | |
|---|---|---|---|---|---|---|
| WEIGHT | 0.03 | 0.1 | 1.4 | 8.1 | | |

GRAINS BOTTLED IN BAG | GRAINS FOR PROBING

| MINERAL | Flag | VISUAL ESTIMATE OF MINERAL % | GRAIN COUNT CHECK | (SHOW SIZE FRACTION) |
|---|---|---|---|---|
| ILMENITE | E | 93 | | |
| MONAZITE | E | | | |
| RUTILE | E | 41 15 | | |
| ZIRCON | E | 5 | | |
| LEUCOXENE | E | 1 3 20 | | |
| OTHERS | | 99 97 60 7 | | |

COMMENTS:

Others quartz + rocks (NM)

" rocks + tourmaline in mags.

BHP MINERALS EXPLORATION

0274

# OBSERVER'S DATA SHEET --- TITANIUM SAMPLE No. RT 6917

OBSERVER: PAULINE SIZE RANGE OBSERVED: -0.4 +0.075 mm

SHEET No: 3 DATE STARTED: 1.5.89 DATE FINISHED: 1.5.89

| MATERIAL | NON MAGS ( ~~HANDMAGNET~~ ) MAG SEPARATED. | TICK OR SHOW OTHER: | ENTERED |
|---|---|---|---|

| OBSERVED | -0.4 +0.25 | -0.25 +0.18 | -0.18 +0.075 | OTHER: M3T4. | | | GRAINS BOTTLED IN BAG | GRAINS FOR PROBING |
|---|---|---|---|---|---|---|---|---|
| WEIGHT | 0.04 | 0.2 | 1.9 | 8.6 | | | | |

| MINERAL | Flag | VISUAL ESTIMATE OF MINERAL % | GRAIN COUNT CHECK | ( SHOW SIZE FRACTION ) |
|---|---|---|---|---|
| ILMENITE | E | 93 | | |
| MONAZITE | E | | | |
| RUTILE | E | <1 15 | | |
| ZIRCON | E | 3 | | |
| LEUCOXENE | E | <1 2 22 | | |
| OTHERS | | 100 98 60 7 | | |

COMMENTS:

Others quartz + rocks. (NM)

" rocks + tourmaline in mags.

06

BHP MINERALS EXPLORATION 0275

# OBSERVER'S DATA SHEET --- TITANIUM SAMPLE No. RT 6951

OBSERVER : PAULINE SIZE RANGE OBSERVED : -0.4 +0.075 mm

SHEET No : 4 DATE STARTED : 1.5.89 DATE FINISHED : 1.5.89.

| MATERIAL | NON MAGS ( ~~HANDMAGNET~~ ) MAG SEPARATED. | TICK OR SHOW OTHER: | ENTERED |
|---|---|---|---|

| OBSERVED | -0.4 +0.25 | -0.25 +0.18 | -0.18 +0.075 | OTHER: MIXED. | | | GRAINS BOTTLED IN BAG | GRAINS FOR PROBING |
|---|---|---|---|---|---|---|---|---|
| WEIGHT | 0.03 | 0.07 | 2.3 | 8.8 | | | | |

| MINERAL | Flag | VISUAL ESTIMATE OF MINERAL % | GRAIN COUNT CHECK | ( SHOW SIZE FRACTION ) |
|---|---|---|---|---|
| ILMENITE | E | 90 | | |
| MONAZITE | E | | | |
| RUTILE | E | <1 15 | | |
| ZIRCON | E | 2 | | |
| LEUCOXENE | E | 1 3 25 | | |
| OTHERS | | 99 97 58 10 | | |

COMMENTS : Others quartz + rocks (NA)

.. rocks + tourmaline in mags.

BHP MINERALS EXPLORATION

# OBSERVER'S DATA SHEET --- TITANIUM SAMPLE No. RT 6959

OBSERVER: Pauline SIZE RANGE OBSERVED: -0.4 +0.075mm

SHEET No: 5 DATE STARTED: 1.5.89 DATE FINISHED: 1.5.89.

| MATERIAL | NON MAGS ( ~~HANDMAGNET~~ ) MAG-SEPARATED. | | | TICK OR SHOW OTHER: | | ENTERED |
|---|---|---|---|---|---|---|
| OBSERVED | -0.4 +0.25 | -0.25 +0.18 | -0.18 +0.075 | OTHER: M3+4. | | GRAINS BOTTLED IN BAG / GRAINS FOR PROBING |
| WEIGHT | 0.06 | 0.1 | 0.1. | 0.6 | | |

| MINERAL | Flag | VISUAL ESTIMATE OF MINERAL % | | | | GRAIN COUNT CHECK | ( SHOW SIZE FRACTION ) |
|---|---|---|---|---|---|---|---|
| ILMENITE | E | | | | 30 | | |
| MONAZITE | E | | | | | | |
| RUTILE | E | | <1 | 4 | | | |
| ZIRCON | E | | | <1 | | | |
| LEUCOXENE | E | | 1 | 6 | | | |
| OTHERS | | 100 | 99 | 90 | 70 | | |

COMMENTS:

Other quartz rocks (NM)

" mainly rocks in mags.

0277

BHP MINERALS EXPLORATION

# OBSERVER'S DATA SHEET --- TITANIUM SAMPLE No. RT 7028

OBSERVER: Pauline SIZE RANGE OBSERVED: -0.4 +0.075 mm

SHEET No: 6 DATE STARTED: 1.5.89 DATE FINISHED: 1.5.89.

ENTERED ☐

MATERIAL: NON MAGS ( ~~HANDMAGNET~~ ) ☐ TICK OR SHOW OTHER:

MAG SEPARATED.

| OBSERVED | -0.4 +0.25 | -0.25 +0.18 | -0.18 +0.075 | OTHER: 113+4. | | | GRAINS BOTTLED IN BAG | GRAINS FOR PROBING |
|---|---|---|---|---|---|---|---|---|
| WEIGHT | 0.05 | 0.05 | 0.2 | 0.3 | | | | |

| MINERAL | Flag | VISUAL ESTIMATE OF MINERAL % | GRAIN COUNT CHECK | ( SHOW SIZE FRACTION ) |
|---|---|---|---|---|
| ILMENITE | E | 50 | | |
| MONAZITE | E | | | |
| RUTILE | E | 3 | | |
| ZIRCON | E | 1 | | |
| LEUCOXENE | E | TR 1 7 | | |
| OTHERS | | 100 99 89 50 | | |

COMMENTS:

Others quartz + rocks (NM)

" rocks + tourmaline in mags.

BHP MINERALS EXPLORATION 0278

# OBSERVER'S DATA SHEET --- TITANIUM SAMPLE No. RT 7405

OBSERVER: Pauline SIZE RANGE OBSERVED: -0.4 +0.075mm

SHEET No: 7 DATE STARTED: 1.5.89. DATE FINISHED: 1.5.89.

| MATERIAL | NON MAGS ( ~~HANDMAGNET~~ ) MAG SEPARATED. ☐ TICK OR SHOW OTHER: | | | | | | ENTERED ☐ |
|---|---|---|---|---|---|---|---|
| OBSERVED | -0.4 +0.25 | -0.25 +0.18 | -0.18 +0.075 | OTHER: M3+4. | | | GRAINS BOTTLED IN BAG / GRAINS FOR PROBING |
| WEIGHT | 0.03 | 0.03 | 0.08 | 0.3 | | | |

| MINERAL | Flag | VISUAL ESTIMATE OF MINERAL % | GRAIN COUNT CHECK | ( SHOW SIZE FRACTION ) |
|---|---|---|---|---|
| ILMENITE | E | 15 | | |
| MONAZITE | E | | | |
| RUTILE | E | 4 | | |
| ZIRCON | E | 1 | | |
| LEUCOXENE | E | 1 10 | | |
| OTHERS | | 100 99 85 85 | | |

COMMENTS:

Others quartz + rocks. (NA)

" rocks + tourmaline in mags.

0279

BHP MINERALS EXPLORATION

# OBSERVER'S DATA SHEET --- TITANIUM SAMPLE No. RT 7414

OBSERVER: Pauline SIZE RANGE OBSERVED: -0.4 +0.075 mm

SHEET No: 8 DATE STARTED: 1.5.89 DATE FINISHED: 1.5.89.

MATERIAL: NON MAGS ( ~~HANDMAGNET~~ ) ☐ TICK OR SHOW OTHER:
MAG SEPARATED.

ENTERED ☐

| OBSERVED | -0.4 +0.25 | -0.25 +0.18 | -0.18 +0.075 | OTHER: NM+4. | | |
|---|---|---|---|---|---|---|
| WEIGHT | 0.04 | 0.2 | 0.2 | 0.2 | | |

GRAINS BOTTLED IN BAG | GRAINS FOR PROBING

| MINERAL | Flag | VISUAL ESTIMATE OF MINERAL % | | | | GRAIN COUNT CHECK | ( SHOW SIZE FRACTION ) |
|---|---|---|---|---|---|---|---|
| ILMENITE | E | | | | 15 | | |
| MONAZITE | E | | | | | | |
| RUTILE | E | | TR. | 2 | | | |
| ZIRCON | E | | | <1 | | | |
| LEUCOXENE | E | | 1 | 5. | | | |
| OTHERS | | 100 | 99 | 93 | 85 | | |

COMMENTS:

Others quartz + rocks. (NM)

" tourmaline + rocks in mags.

0280

BHP MINERALS EXPLORATION

# OBSERVER'S DATA SHEET --- TITANIUM SAMPLE No. RT 7415

OBSERVER: Pauline SIZE RANGE OBSERVED: -0.4 +0.075 mm

SHEET No: 9 DATE STARTED: 1-5-89 DATE FINISHED: 1-5-89.

MATERIAL: NON MAGS ( ~~HANDMAGNET~~ ) ☐ TICK OR SHOW OTHER: MAG SEPARATED.

ENTERED ☐

| OBSERVED | -0.4 +0.25 | -0.25 +0.18 | -0.18 +0.075 | OTHER: MJ+4. | | |
|---|---|---|---|---|---|---|
| WEIGHT | 0.02 | 0.04 | 0.08 | 3.0 | | |

GRAINS BOTTLED IN BAG | GRAINS FOR PROBING

| MINERAL | Flag | VISUAL ESTIMATE OF MINERAL % | | | | | | | | | | | | | | | | GRAIN COUNT CHECK | | | | | | ( SHOW SIZE FRACTION ) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ILMENITE | E | | | | | | | | | | | | | | | | 2 | | | | | | | | |
| MONAZITE | E | | | | | | | | | | | | | | | | | | | | | | | | |
| RUTILE | E | | | | | | | | | | | | | 3 | | | | | | | | | | | |
| ZIRCON | E | | | <1 | | | | <1 | | | | <1 | | | | | | | | | | | | | |
| LEUCOXENE | E | | | | 1 | | | | 1 | | | | 7 | | | | | | | | | | | | |
| OTHERS | | | | 9 | 9 | | | 9 | 9 | | | 9 | 0 | | | 9 | 8 | | | | | | | | |

COMMENTS: Others quartz rocks (wn)

" mainly rocks in mags.

0281

BHP MINERALS EXPLORATION

# OBSERVER'S DATA SHEET --- TITANIUM SAMPLE No. RT 7421

OBSERVER: Pauline SIZE RANGE OBSERVED: -0.4 +0.075 mm

SHEET No: 10 DATE STARTED: 2.5.89 DATE FINISHED: 2.5.89.

| MATERIAL | NON MAGS (~~HANDMAGNET~~) MAG SEPARATED. | TICK OR SHOW OTHER: | | | | ENTERED |
|---|---|---|---|---|---|---|
| OBSERVED | -0.4 +0.25 | -0.25 +0.18 | -0.18 +0.075 | OTHER: MIXT. | | GRAINS BOTTLED IN BAG / GRAINS FOR PROBING |
| WEIGHT | 0.01 | 0.01 | 0.02 | 0.8 | | |

| MINERAL | Flag | VISUAL ESTIMATE OF MINERAL % | GRAIN COUNT CHECK | ( SHOW SIZE FRACTION ) |
|---|---|---|---|---|
| ILMENITE | E | 3 | | |
| MONAZITE | E | | | |
| RUTILE | E | 1 3 | | |
| ZIRCON | E | 1 | | |
| LEUCOXENE | E | 1 1 5 | | |
| OTHERS | | 100 99 81 97 | | |

COMMENTS:

Others quartz + rocks. (Nm)

" mainly rocks in mags.

BHP MINERALS EXPLORATION 0282

# OBSERVER'S DATA SHEET --- TITANIUM SAMPLE No. RT 7455

OBSERVER: Pauline SIZE RANGE OBSERVED: -0.4 +0.075 mm

SHEET No: 11 DATE STARTED: 2.5.89 DATE FINISHED: 2.5.89

| MATERIAL | NON MAGS ( ~~HANDMAGNET~~ ) MAG SEPARATED. ☐ TICK OR SHOW OTHER: | | | | | | ENTERED ☐ |
|---|---|---|---|---|---|---|---|
| OBSERVED | -0.4 +0.25 | -0.25 +0.18 | -0.18 +0.075 | OTHER: M3+4. | | | GRAINS BOTTLED IN BAG / GRAINS FOR PROBING |
| WEIGHT | 0.01 | 0.01 | 0.01 | 0.2. | | | |

| MINERAL | Flag | VISUAL ESTIMATE OF MINERAL % | | | | | | | | | | | | | | | | GRAIN COUNT CHECK | | | | | | ( SHOW SIZE FRACTION ) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ILMENITE | E | | | | | | | | | | | | | | | | 5 | | | | | | | | |
| MONAZITE | E | | | | | | | | | | | | | | | | | | | | | | | | |
| RUTILE | E | | | | | | | | | | | 3 | | | | | | | | | | | | | |
| ZIRCON | E | | | | | | | | | | | 1 | | | | | | | | | | | | | |
| LEUCOXENE | E | | | | | | | 2 | | | | 7 | | | | | | | | | | | | | |
| OTHERS | | 1 | 0 | 0 | | 9 | 8 | | 8 | 9 | | | 9 | 5 | | | | | | | | | | | |

COMMENTS:

Others quartz + rocks (No)

" mainly rocks in mags.

0283

BHP MINERALS EXPLORATION

# OBSERVER'S DATA SHEET --- TITANIUM SAMPLE No. RT 7523

OBSERVER: Pauline SIZE RANGE OBSERVED: -0.4 +0.075 mm

SHEET No: 12 DATE STARTED: 2.5.89 DATE FINISHED: 2.5.89.

MATERIAL: NON MAGS ( ~~HANDMAGNET~~) ☐ TICK OR SHOW OTHER:
MAG SEPARATED.

ENTERED ☐

| OBSERVED | -0.4 +0.25 | -0.25 +0.18 | -0.18 +0.075 | OTHER: nil. | | | GRAINS BOTTLED IN BAG | GRAINS FOR PROBING |
|---|---|---|---|---|---|---|---|---|
| WEIGHT | 0.02 | 0.03 | 0.1 | 0.1 | | | | |

| MINERAL | Flag | VISUAL ESTIMATE OF MINERAL % | | | | GRAIN COUNT CHECK | | | | | | ( SHOW SIZE FRACTION ) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ILMENITE | E | | | | 35 | | | | | | | | |
| MONAZITE | E | | | | | | | | | | | | |
| RUTILE | E | | TR | | 2 | | | | | | | | |
| ZIRCON | E | | | | <1 | | | | | | | | |
| LEUCOXENE | E | | <1 | | 6 | | | | | | | | |
| OTHERS | | 100 | 100 | | 92 | | 65 | | | | | | |

COMMENTS:

Others quartz rocks. (pm)

" rocks + tourmaline in mags.

0284

BHP MINERALS EXPLORATION

# OBSERVER'S DATA SHEET --- TITANIUM SAMPLE No. RT 7565

OBSERVER: Pauline SIZE RANGE OBSERVED: -0.4 +0.075 mm

SHEET No: 13 DATE STARTED: 2.5.89 DATE FINISHED: 2.5.89.

| MATERIAL | NON MAGS ( ~~HANDMAGNET~~ ) MAG SEPARATED. | TICK OR SHOW OTHER: | ENTERED |
|---|---|---|---|

| OBSERVED | -0.4 +0.25 | -0.25 +0.18 | -0.18 +0.075 | OTHER: M3+4. | | | GRAINS BOTTLED IN BAG | GRAINS FOR PROBING |
|---|---|---|---|---|---|---|---|---|
| WEIGHT | 0.01 | 0.02 | 0.04 | 1.4 | | | | |

| MINERAL | Flag | VISUAL ESTIMATE OF MINERAL % | GRAIN COUNT CHECK | ( SHOW SIZE FRACTION ) |
|---|---|---|---|---|
| ILMENITE | E | 3 | | |
| MONAZITE | E | | | |
| RUTILE | E | <1 4 | | |
| ZIRCON | E | <1 | | |
| LEUCOXENE | E | <1 10 | | |
| OTHERS | | 100 100 86 97 | | |

COMMENTS:

Others quartz + rocks (un)

" mainly rocks in mags.

0285

BHP MINERALS EXPLORATION

# OBSERVER'S DATA SHEET --- TITANIUM SAMPLE No. RT 7581

OBSERVER: PAULINE SIZE RANGE OBSERVED: -0.4 +0.075 mm

SHEET No: 14 DATE STARTED: 2.5.89 DATE FINISHED: 2.5.89.

| MATERIAL | NON MAGS (~~HANDMAGNET~~) NAG SEPARATED. ☐ TICK OR SHOW OTHER: | | | | | ENTERED ☐ |
|---|---|---|---|---|---|---|
| OBSERVED | -0.4 +0.25 | -0.25 +0.18 | -0.18 +0.075 | OTHER: MJ+4. | -0.18 +0.075. | GRAINS BOTTLED IN BAG / GRAINS FOR PROBING |
| WEIGHT | 0.01 | 0.01 | 0.01 | 0.1 | | |

| MINERAL | Flag | VISUAL ESTIMATE OF MINERAL % | GRAIN COUNT CHECK | ( SHOW SIZE FRACTION ) |
|---|---|---|---|---|
| ILMENITE | E | 15 | | |
| MONAZITE | E | | | |
| RUTILE | E | 1 8 | 12.2. | |
| ZIRCON | E | 41 10 | 11.3. | |
| LEUCOXENE | E | 2 10 | 13.4. | |
| OTHERS. | | 100 97 72. 85 | 63.0 | |

COMMENTS:

Others quartz rocks.

" rocks + tourmaline in mags.

GRAIN COUNT RT 7581 (-0.18+0.075)

| Ilmenite | Rutile | Zircon | Leucoxene | Others | |
|---|---|---|---|---|---|
| | 4 | 2 | 1 | 14 | 21 |
| | | 3 | 3 | 15 | 21 |
| | | 2 | 4 | 12 | 18 |
| | 4 | 1 | 2 | 15 | 22 |
| | 1 | 2 | 4 | 15 | 22 |
| | 3 | 4 | 3 | 15 | 25 |
| | 5 | 1 | 4 | 15 | 25 |
| | 5 | 4 | 3 | 14 | 26 |
| | 2 | 2 | 5 | 14 | 23 |
| | 4 | 5 | 2 | 16 | 27 |
| | 28 | 26 | 31 | 145 | 230 |
| | 12.2 | 11.3 | 13.4 | 63.0 | |

0287

BHP MINERALS EXPLORATION

# OBSERVER'S DATA SHEET --- TITANIUM SAMPLE No. RT 7589

OBSERVER: Pauline SIZE RANGE OBSERVED: -0.4 +0.075 mm

SHEET No: 15 DATE STARTED: 2.5.89 DATE FINISHED: 2.5.89

ENTERED

| MATERIAL | NON MAGS ( ~~HANDMAGNET~~ ) ☐ TICK OR SHOW OTHER: Mag separated. | | | | | |
|---|---|---|---|---|---|---|
| OBSERVED | -0.4 +0.25 | -0.25 +0.18 | -0.18 +0.075 | OTHER: M3+4. | | |
| WEIGHT | 0.02 | 0.01 | 0.01 | 0.1 | | |

| MINERAL | Flag | VISUAL ESTIMATE OF MINERAL % | | | | | | | | | | | | | | | | | | GRAIN COUNT CHECK | | | | | | GRAINS BOTTLED IN BAG (SHOW SIZE FRACTION) | GRAINS FOR PROBING (SHOW SIZE FRACTION) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ILMENITE | E | | | | | | | | | | | | | | | | | 1 | 5 | | | | | | | | |
| MONAZITE | E | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RUTILE | E | | | | | | | | | < | 1 | | | | | | | 7 | | | | | | | | | |
| ZIRCON | E | | | | | | | | | | | | | | | | | 3 | | | | | | | | | |
| LEUCOXENE | E | | | | | | | | | | | | | | | 1 | | 1 | 0 | | | | | | | | |
| OTHERS | | 1 | 0 | 0 | | | | | | 9 | 9 | | | | | 8 | 0 | | | 8 | 5 | | | | | | |

COMMENTS: Others quartz + rocks.

" rocks + tourmaline in mags.

0288

BHP MINERALS EXPLORATION

# OBSERVER'S DATA SHEET --- TITANIUM SAMPLE No. RT 7639

OBSERVER: Pauline SIZE RANGE OBSERVED: -0.4 +0.075 mm

SHEET No: 17 DATE STARTED: 2.5.89 DATE FINISHED: 2.5.89.

ENTERED

| MATERIAL | NON MAGS ( ~~HANDMAGNET~~ ) MAG SEPARATED. | | | TICK OR SHOW OTHER: | | |
|---|---|---|---|---|---|---|
| OBSERVED | -0.4 +0.25 | -0.25 +0.18 | -0.18 +0.075 | OTHER: M3H4. | | |
| WEIGHT | 0.08 | 0.2 | 2.8 | 9.0 | | |

| GRAINS BOTTLED IN BAG | GRAINS FOR PROBING |
|---|---|
| | |

| MINERAL | Flag | VISUAL ESTIMATE OF MINERAL % | GRAIN COUNT CHECK | ( SHOW SIZE FRACTION ) |
|---|---|---|---|---|
| ILMENITE | E | 97 | | |
| MONAZITE | E | | | |
| RUTILE | E | <1 1 15 | | |
| ZIRCON | E | <1 1 15 | | |
| LEUCOXENE | E | <1 1 15 | | |
| OTHERS | | 100 98 55 3 | | |

COMMENTS: Others sulphides, quartz + rocks.

BHP MINERALS EXPLORATION

0289

# OBSERVER'S DATA SHEET --- TITANIUM SAMPLE No. RT 7715

OBSERVER: PAULINE SIZE RANGE OBSERVED: -0.4 +0.075mm

SHEET No: 20 DATE STARTED: 3.5.89 DATE FINISHED: 3.5.89.

| MATERIAL | NON MAGS ( ~~HANDMAGNET~~ ) MAG SEPARATED. | | | TICK OR SHOW OTHER: | | ENTERED |
|---|---|---|---|---|---|---|
| OBSERVED | -0.4 +0.25 | -0.25 +0.18 | -0.18 +0.075 | OTHER: M3+4. | | GRAINS BOTTLED IN BAG / GRAINS FOR PROBING |
| WEIGHT | 0.01 | 0.05 | 0.1. | 0.3 | | |

| MINERAL | Flag | VISUAL ESTIMATE OF MINERAL % | GRAIN COUNT CHECK | ( SHOW SIZE FRACTION ) |
|---|---|---|---|---|
| ILMENITE | E | 60 | | |
| MONAZITE | E | | | |
| RUTILE | E | <1 8 | | |
| ZIRCON | E | <1 4 | | |
| LEUCOXENE | E | 1 2 12 | | |
| OTHERS | | 99 98 76 40 | | |

COMMENTS:

Others quartz + rocks. (un)

" rocks + tourmaline in mags.

0290

BHP MINERALS EXPLORATION

# OBSERVER'S DATA SHEET --- TITANIUM SAMPLE No . RT 7724.

OBSERVER : Pauline SIZE RANGE OBSERVED : -0.4 +0.075mm

SHEET No : 16 DATE STARTED : 2.5.89 DATE FINISHED : 2.5.89.

| MATERIAL OBSERVED | NON MAGS ( ~~HANDMAGNET~~ ) MAG SEPARATED. | TICK OR SHOW OTHER: | | | | ENTERED |
|---|---|---|---|---|---|---|
| | -0.4 +0.25 | -0.25 +0.18 | -0.18 +0.075 | OTHER: MIXT. | GRAINS BOTTLED IN BAG | GRAINS FOR PROBING |
| WEIGHT | 0.02 | 0.03 | 0.03 | 0.1 | | |

| MINERAL | Flag | VISUAL ESTIMATE OF MINERAL % | | | | GRAIN COUNT CHECK | ( SHOW SIZE FRACTION ) |
|---|---|---|---|---|---|---|---|
| ILMENITE | E | | | | 80 | | |
| MONAZITE | E | | | | | | |
| RUTILE | E | | TR | 5 | | | |
| ZIRCON | E | | | 2 | | | |
| LEUCOXENE | E | | 1 | 1 5 | | | |
| OTHERS | | 100 | 100 | 78 | 20 | | |

COMMENTS :

Others quartz, rocks + ? barite (MM)

" tourmaline trocks in mags.

BHP MINERALS EXPLORATION

0291

# OBSERVER'S DATA SHEET --- TITANIUM SAMPLE No. RT 7759

OBSERVER: Pauline SIZE RANGE OBSERVED: -0.4 +0.075 mm

SHEET No: 18 DATE STARTED: 3.5.89 DATE FINISHED: 3.5.89.

| MATERIAL | NON MAGS ( ~~HANDMAGNET~~ ) MAG SEPARATED. | TICK OR SHOW OTHER: | ENTERED |
|---|---|---|---|

| OBSERVED | -0.4 +0.25 | -0.25 +0.18 | -0.18 +0.075 | OTHER: M3+4. | | | GRAINS BOTTLED IN BAG | GRAINS FOR PROBING |
|---|---|---|---|---|---|---|---|---|
| WEIGHT | 0.01 | 0.02 | 0.02 | 0.08 | | | | |

| MINERAL | Flag | VISUAL ESTIMATE OF MINERAL % | GRAIN COUNT CHECK | ( SHOW SIZE FRACTION ) |
|---|---|---|---|---|
| ILMENITE | E | 6 S | | |
| MONAZITE | E | | | |
| RUTILE | E | < 1 5 | | |
| ZIRCON | E | 4 | | |
| LEUCOXENE | E | 1 8 | | |
| OTHERS | | 100 99 83 3 S | | |

COMMENTS:

Others quartz rocks. (NA)

" rocks + tourmaline in mags.

0292

CR 6479

EXPLORATION LICENCE 1445
PEPPER TREE, SOUTH AUSTRALIA

REPORT FOR THE QUARTER ENDING
15TH AUGUST 1989

K. GREY
ADELAIDE. S.A.

Our ref: Peppertr.q1

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1. GENERAL STATEMENT

2. TITLE

3. FIELD WORK

3.1 Cross Sections

4. EXPENDITURE

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1. EL 1445 PEPPER TREE,
NORTHERN MURRAY BASIN, SOUTH AUSTRALIA
LOCATION MAP A4-493A

## APPENDICES

A. GEOLOGICAL CROSS SECTIONS
TRAVERSES 9, 10, 11, 12.

# EXPLORATION LICENCE 1445

# PEPPER TREE - SOUTH AUSTRALIA

# REPORT FOR THE QUARTER ENDED 15TH AUGUST 1989

## 1. GENERAL STATEMENT

Exploration Licence 1445 was taken up to test the potential for heavy mineral sands in the Pepper Tree area of the Murray Basin. It forms part of a regional exploration programme in the Murray Basin (see Figure 1).

A literature search and geological assessment of the area indicates the presence of tertiary palaeostrandlines deposited during the Pliocene period. Their presence indicates that the environment for heavy mineral-bearing beach sand deposition and preservation may exist.

## 2. TITLE

Exploration Licence 1445 covers 1295 square kilometres and was granted to BHP Minerals Limited on the 16th November 1987 for a period of one year. Extension of term of Licence was granted for one year by SADME.

## 3. FIELD WORK

During July a total of four days were spent checking the access along tracks and fencelines to be drilled in the next quarter.

A drilling programme of approximately 100 holes (2000 metres) will commence in mid-September.

### 3.1 Cross Sections

Computer generated geological cross sections have been compiled from geological logs (including: lithology, stratigraphy, AMG coordinates) and results from Comlabs (XRF Ti, Zr) and Belmont (% HM) laboratories; these are included in Appendix A.

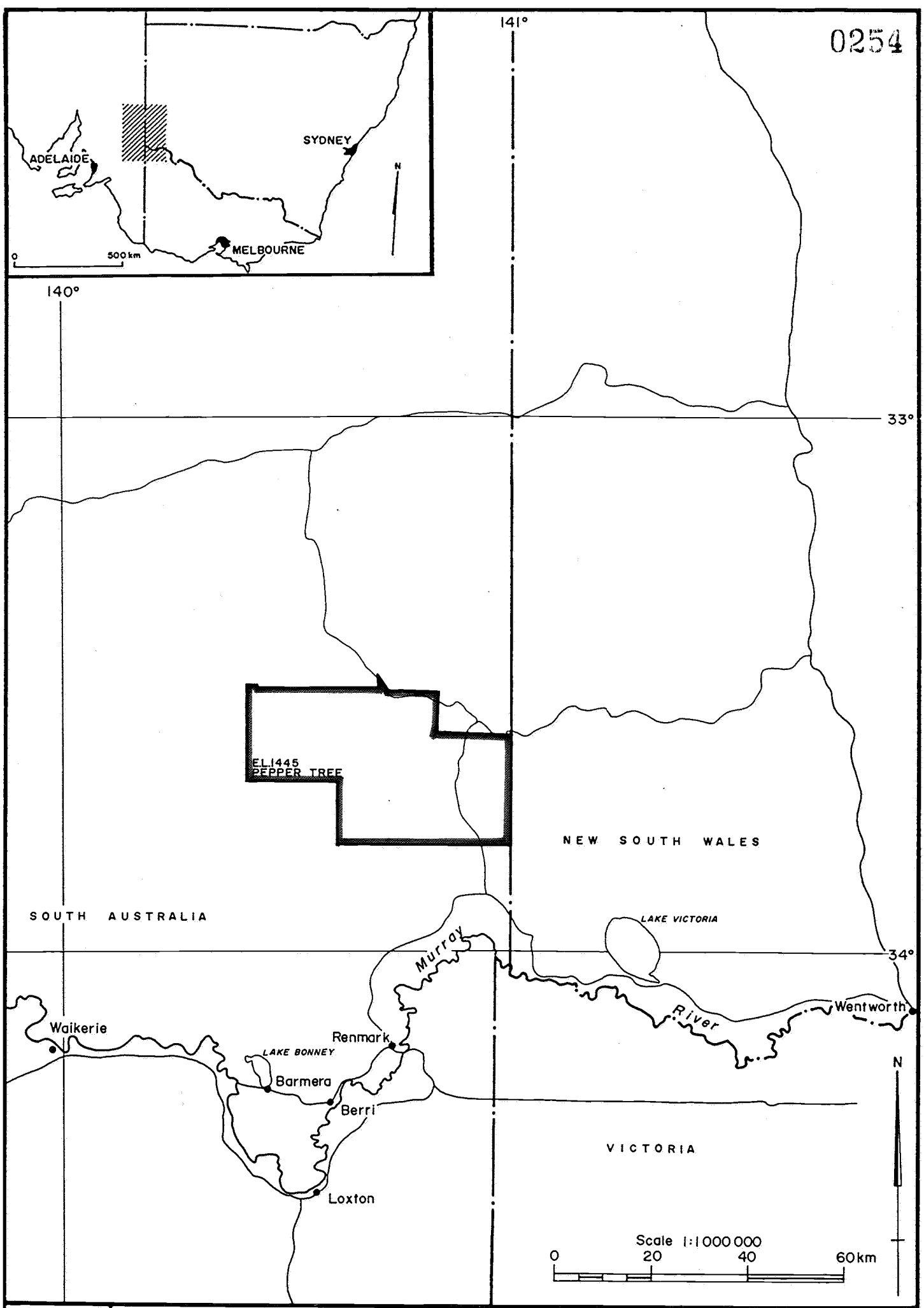
4. EXPENDITURE

Expenditure for the sixth quarter of EL 1445 for the three months to the end of May 1989 totals $15,761 and is summarised as follows:-

| | |
|---|---|
| Wages and Salaries | 4889 |
| Field Support | 936 |
| Vehicles | 1404 |
| Equipment | 297 |
| Geochemistry | 2536 |
| Surveys | 116 |
| Office Expenses | 573 |
| Capital Purchases | 1581 |
| Computer Services | 60 |
| Other | 98 |
| Admin & overheads | 1432 |
| In-house specialist services e.g. drafting, geostatistics | 1839 |
| Total | 15761 |

Total expenditure to date for EL 1445 is $134,369.

This report is submitted to the SADME as required under Clause 2 of EL 1445.



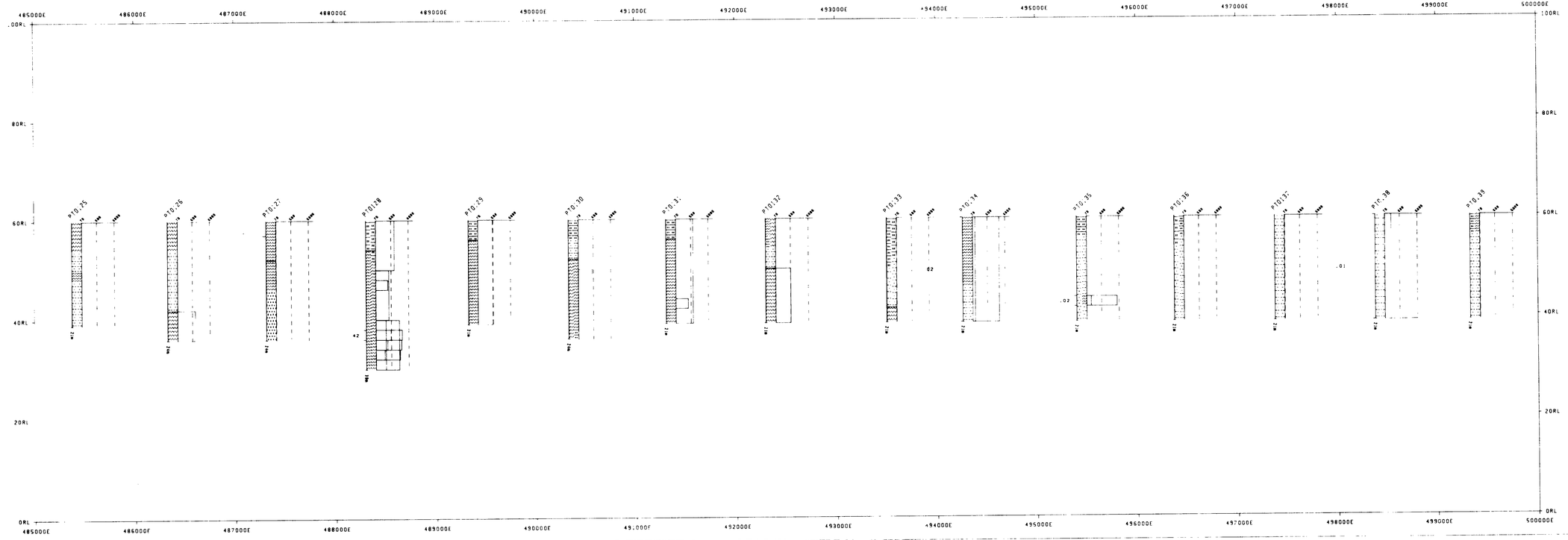

| | | |
|---|---|---|
| Centre ADELAIDE | THE BROKEN HILL PROPRIETARY CO. LTD. | Project Nº |
| Date 3-8-87 | E.L.1445 PEPPER TREE, S.A. | Drawing Nº A4-493A |
| | LOCATION MAP | |

# APPENDIX A

GEOLOGICAL CROSS SECTIONS

TRAVERSES 9, 10, 11, 12.

# Murray Basin - SECTION 6282320 NORTH




SAMPLE BASED RESULTS:

| TI XRF PPM | | ZR XRF PPM | | HMMTPCT CALC pct | | HMMTPCTC CALC pct | |
|---|---|---|---|---|---|---|---|
| > 5000 | | > 5000 | | | | | |
| > 500 | | > 500 | | | | | |
| 70 | 10000+ | 70 | 10000+ | 0 | 100+ | 0 | 100+ |

ROCK1:

- SAND
- CLAY
- GRIT
- SILT

ROCK2:

- SAND
- CLAY
- GRIT
- SILT

DOWNHOLE MARKER CODES:

Tps Top of Parilla Sand

BHP-UTAH Minerals International

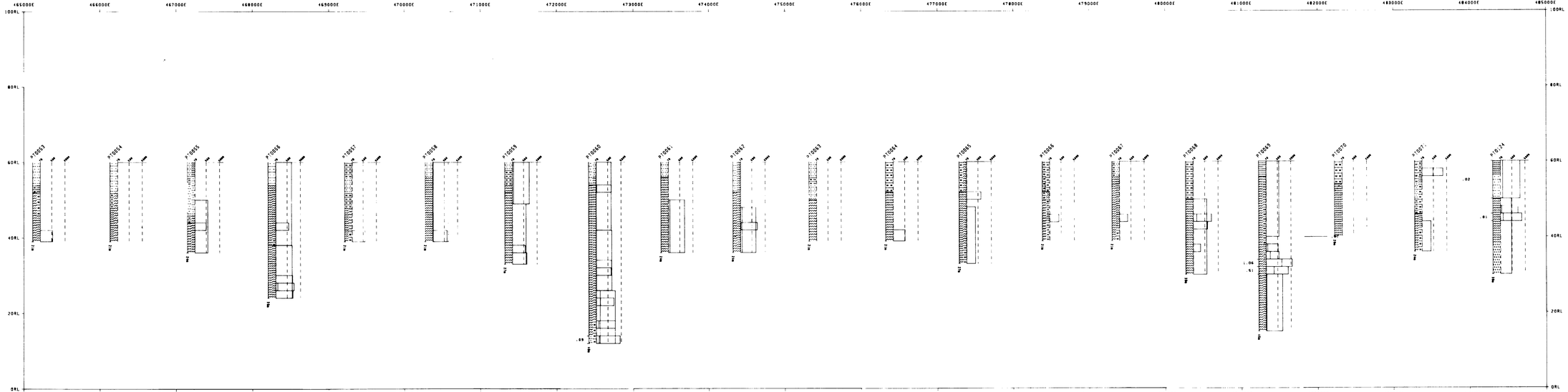
Murray Basin

MURRAY BASIN TITANIUM
E.L. 1445 PEPPERTREE S.A.
CROSS SECTION TRAVERSE NINE

# 8009-2

| DATE: 29-AUG-89 | Compiled by KLB | BHP-UTAH MINERALS INTERNATIONAL |
|---|---|---|
| X SCALE: 1:25000 | Y SCALE: 1:500 | ASIA PACIFIC DIVISION EXPLORATION DEPARTMENT |

# Murray Basin - SECTION 6283300 NORTH




SAMPLE BASED RESULTS:

| TI XRF PPM | ZR XRF PPM | HMMTPCT CALC pct | HMMTPCTC CALC pct |
|---|---|---|---|
| > 5000 | > 5000 | | |
| > 500 | > 500 | | |
| 70 :10000+ | 70 :10000+ | 0 :100+ | 0 :100+ |

ROCK1:
- CLAY
- SILT
- SAND
- SILTSTONE
- GRIT

ROCK2:
- CLAY
- SAND
- SILT
- SILTSTONE
- GRIT

DOMEHOLE MARKER CODES:

Tps Top of Parilla Sand

BHP-UTAH Minerals International

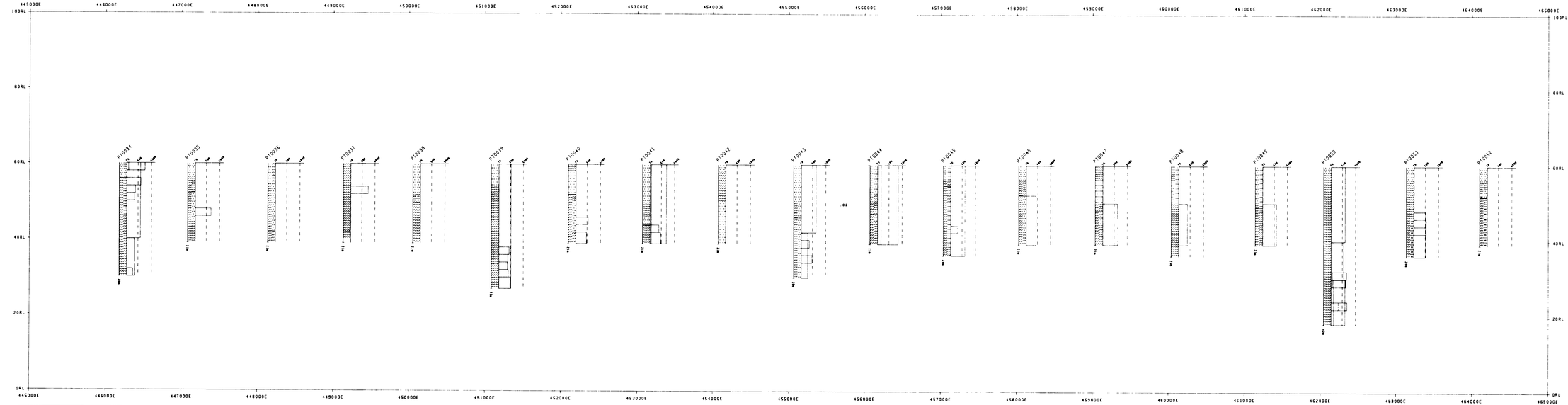
Murray Basin

MURRAY BASIN TITANIUM
E.L. 1445 PEPPERTREE S.A.
CROSS SECTION TRAVERSE NINE

8009-3

| | | |
|---|---|---|
| DATE: 29-AUG-89 | Compiled by KLB | BHP-UTAH MINERALS INTERNATIONAL ASIA PACIFIC DIVISION EXPLORATION DEPARTMENT |
| X SCALE: 1:25000 | Y SCALE: 1:500 | |

# Murray Basin - SECTION 6284040 NORTH




SAMPLE BASED RESULTS:

| TI XRF PPM | ZR XRF PPM | HMMTPCT CALC pct | HMMTPCTC CALC pct |
|---|---|---|---|
| > 5000 | > 5000 | | |
| > 500 | > 500 | | |
| 70 10000+ | 70 10000+ | 0 100+ | 0 150+ |

ROCK1:

- CLAY
- SAND
- SILT

ROCK2:

- SAND
- CLAY
- SILT

DOWNHOLE MARKER CODES:

Tps Top of Parilla Sand

BHP-UTAH Minerals International

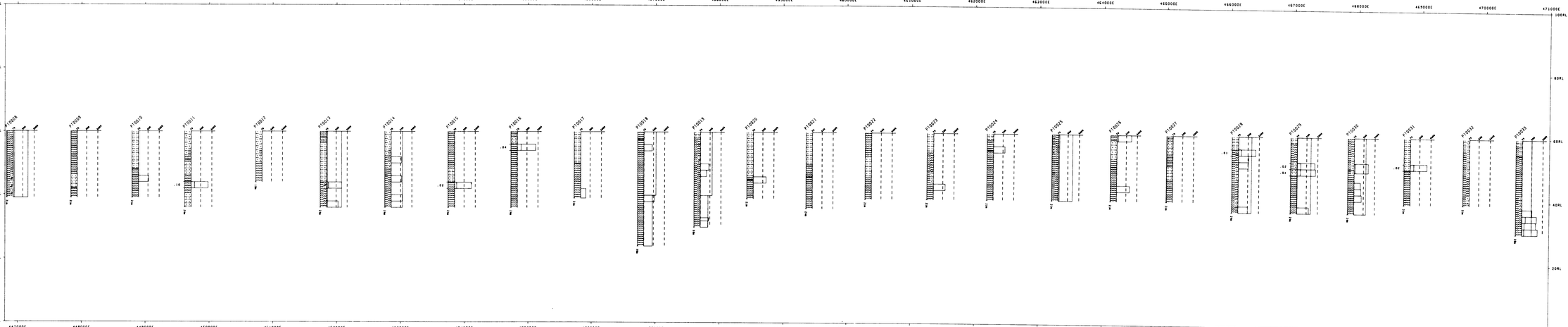
Murray Basin

MURRAY BASIN TITANIUM
E.L. 1445 PEPPERTREE S.A.
CROSS SECTION TRAVERSE NINE

**8009-4**

| | | |
|---|---|---|
| DATE: 29-AUG-89 | Compiled by KLB | BHP-UTAH MINERALS INTERNATIONAL |
| X SCALE: 1:25000 | Y SCALE: 1:500 | ASIA PACIFIC DIVISION EXPLORATION DEPARTMENT |

# Murray Basin - SECTION 6277600 NORTH




SAMPLE BASED RESULTS:

| TI XRF PPm | ZR XRF PPm | HMTPCT CALC per | HMTPCTC CALC per |
|---|---|---|---|
| > 5000 | > 6000 | | |
| > 600 | > 600 | | |
| 70 10000+ | 70 10000+ | 0 100+ | 0 100+ |

ROCK1:

- SAND
- CLAY
- SILT

ROCK2:

- SAND
- SANDSTONE
- CLAY

DOWNHOLE MARKER CODES:

Tpz Top of Perrille Sand

BHP-UTAH Minerals International

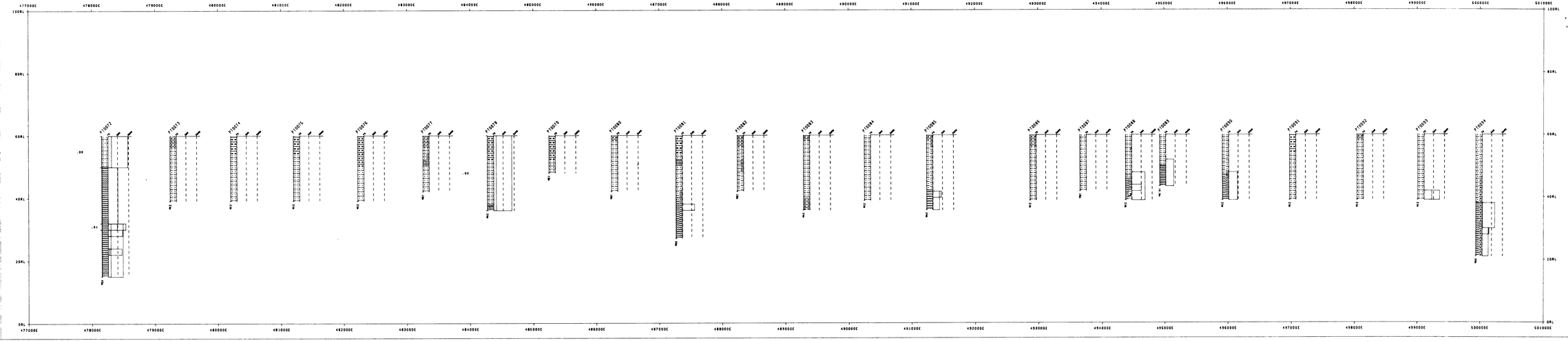
Murray Basin

MURRAY BASIN TITANIUM
C.L.L. 1445 PEPPERTREE S.A.
CROSS SECTION TRAVERSE TEN

8009-5

| DATE: 31-AUG-89 | Compiled by KLB | BHP-UTAH MINERALS INTERNATIONAL |
|---|---|---|
| X SCALE: 1:25000 | Y SCALE: 1:500 | ASIA PACIFIC DIVISION EXPLORATION DEPARTMENT |

# Murray Basin - SECTION 6275000 NORTH




SAMPLE BASED RESULTS:

| TI XRF PPM | ZR XRF PPM | HMITPCT CALC pct | HMITPCTC CALC pct |
|---|---|---|---|
| > 6000 | > 6000 | | |
| > 600 | > 600 | | |
| 70 | 70 | 0 | 0 |
| 10000+ | 10000+ | 100+ | 100+ |

ROCK1:

- CLAY
- SAND
- SILT

ROCK2:

- CLAY
- SAND
- SILT
- SANDSTONE

DOWNHOLE MARKER CODES:

Tps Top of Parilla Sand

BHP-UTAH Minerals International

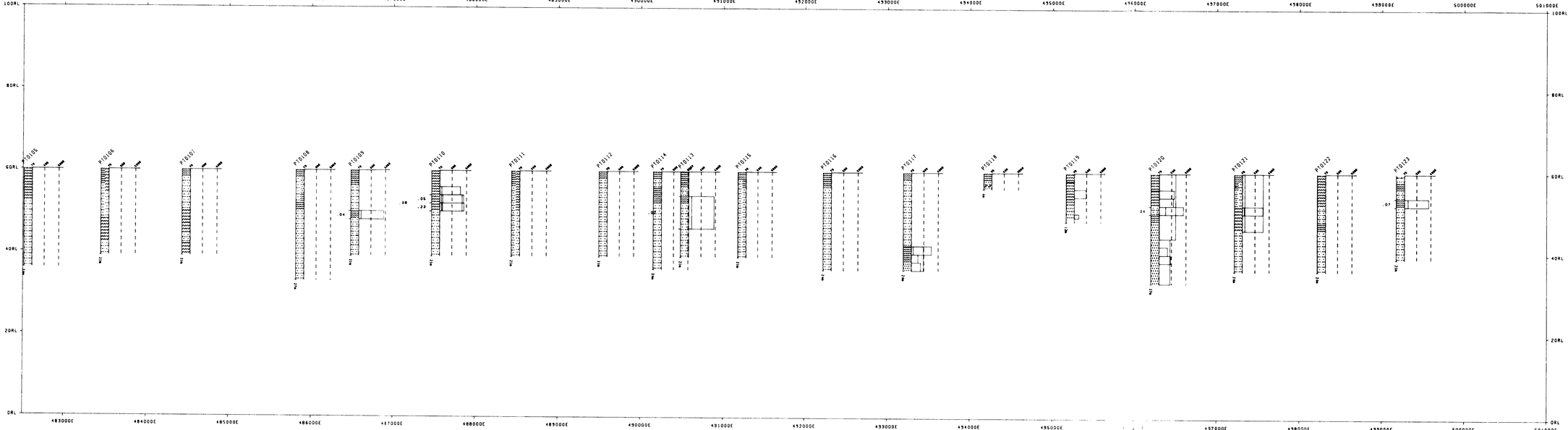
Murray Basin

MURRAY BASIN TITANIUM
E.L. 1445 PEPPERTREE S.A.
CROSS SECTION TRAVERSE ELEVEN

8009-6

| DATE: 29-AUG-89 | Compiled by RLB | BHP-UTAH MINERALS INTERNATIONAL |
|---|---|---|
| X SCALE: 1:25000 | Y SCALE: 1:500 | BHA PACIFIC DIVISION EXPLORATION DEPARTMENT |

# Murray Basin - SECTION 6266700 NORTH




SAMPLE BASED RESULTS:

| TI XRF PPM | ZR XRF PPM | HMMTPCT CALC pct | HMMTPCTC CALC pct |
|---|---|---|---|
| > 5000 | > 5000 | | |
| > 500 | > 500 | | |
| 70 10000+ | 70 10000+ | 0 100+ | 0 100+ |

ROCK1:

- SAND
- CLAY
- GRIT
- SANDSTONE
- SOIL

ROCK2:

- SAND
- CLAY
- GRIT
- SANDSTONE
- SOIL

DOWNHOLE MARKER CODES:

Tps Top of Parilla Sand

BHP-UTAH Minerals International

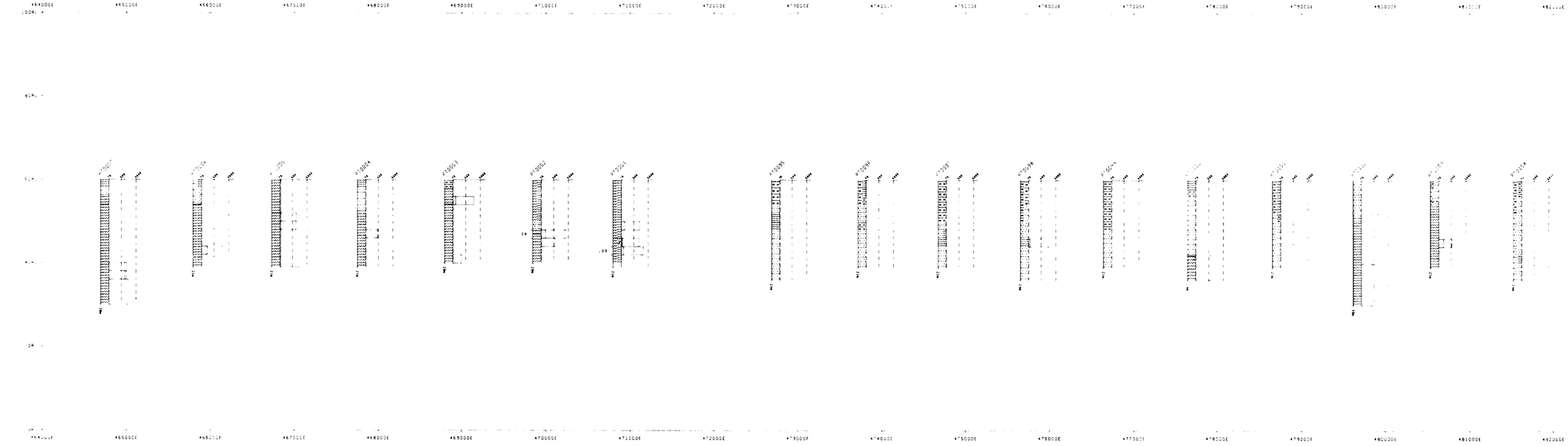
Murray Basin

MURRAY BASIN TITANIUM
E.L. 1445 PEPPERTREE S.A.
CROSS SECTION TRAVERSE TWELVE

8009-7

| DATE: 29-AUG-89 | Compiled by KLB | BHP-UTAH MINERALS INTERNATIONAL |
|---|---|---|
| X SCALE: 1:25000 | Y SCALE: 1:500 | ASIA PACIFIC DIVISION EXPLORATION DEPARTMENT |

Murray Basin - SECTION PROFILE VIEW




SAMPLE BASED RESULTS:

| > 5000 PPM | > 5000 PPM | > 600 PPT | > 600 PPT |
|---|---|---|---|
| 70 - 10000 PPM | 70 - 10000 PPM | 0 - 100 PPT | 0 - 100 PPT |
| TI XRF | ZR XRF | HMTPCT (QAL) | HMTPCTC (CALC) |

ROCK:

- SAND
- CLAY
- SILT

ROCK:

- SAND
- SANDSTONE
- CLAY
- SILT

DOWNHOLE MARKER CODES:

Tps Top of Pal. a Sand

BHP-UTAH MINERALS INTERNATIONAL

Murray Basin

MURRAY BASIN TITANIUM
E.L. 1445 PEPPERTREE S.A.
CROSS SECTION TRAVERSE TWELVE

8009-8

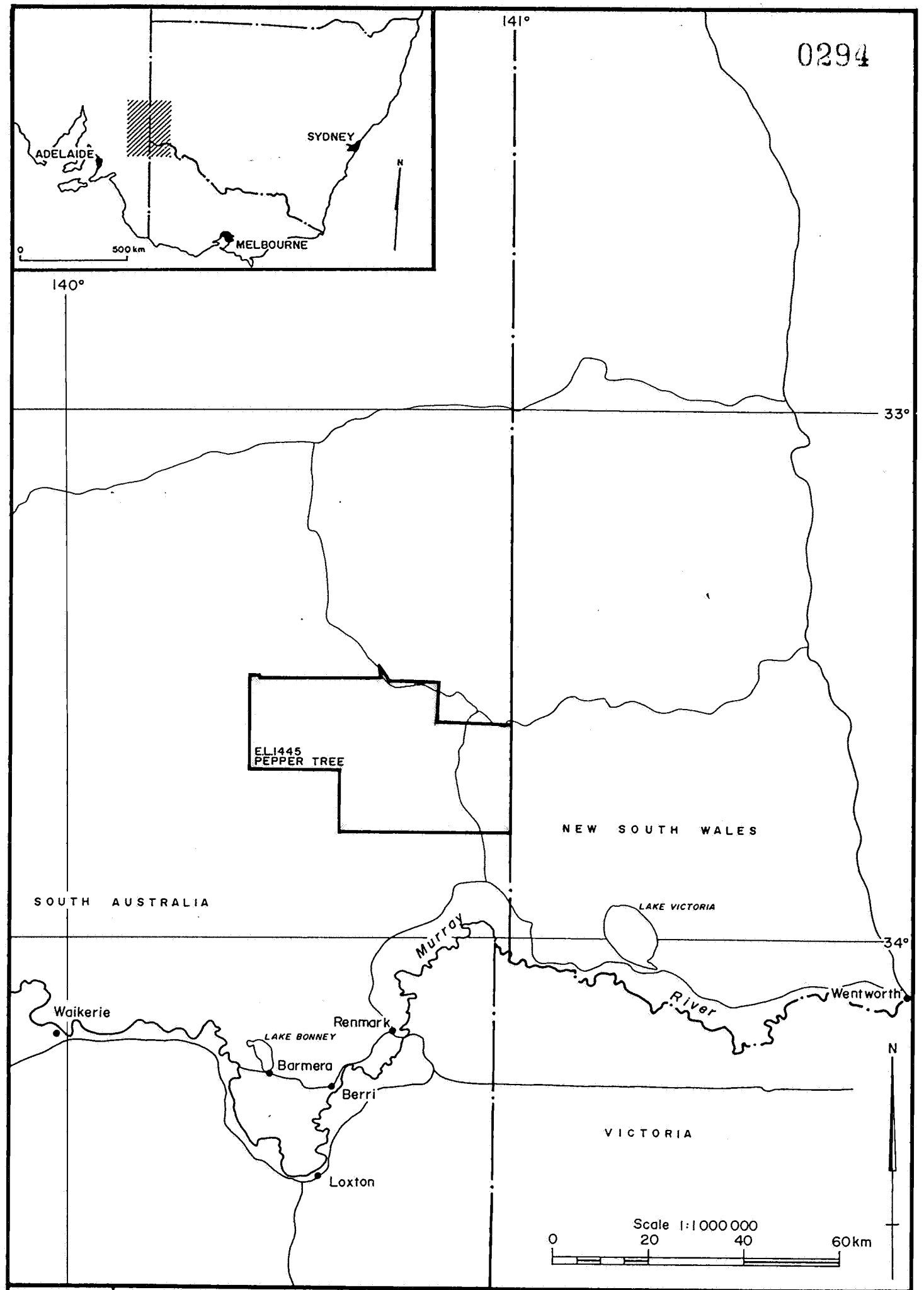
DATE: 29-AUG-85

Compiled by KLB

X SCALE: 1:25000

Y SCALE: 1:500

BHP-UTAH MINERALS INTERNATIONAL
ASIA PACIFIC DIVISION
EXPLORATION DEPARTMENT



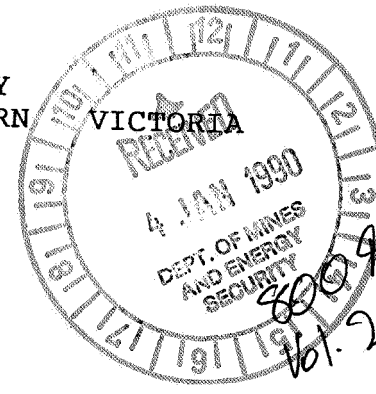

| | | |
|---|---|---|
| Centre: ADELAIDE | THE BROKEN HILL PROPRIETARY CO. LTD. | Project Nº |
| Date: 3-8-87 | E.L.1445 PEPPER TREE, S.A. | Drawing Nº A4-493A |
| | LOCATION MAP | |

Figure 1.

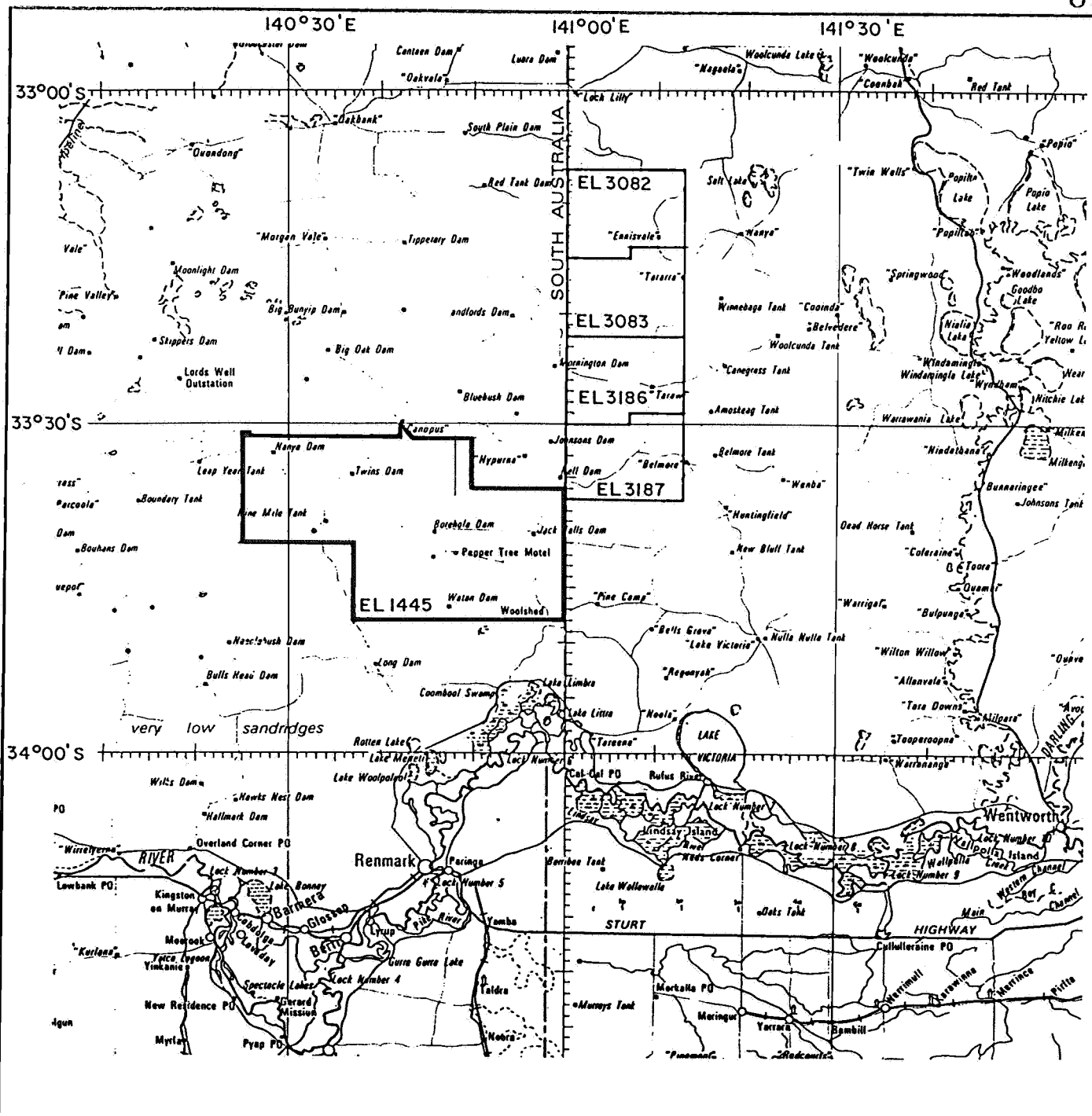
CR 6837
EXPLORATION LICENCE 1445
PEPPERTREE, SOUTH AUSTRALIA

REPORT FOR THE QUARTER
ENDED 15 NOVEMBER 1989
AND FINAL REPORT

P DARBY
HAWTHORN VICTORIA




8009
Vol. 2




| | | |
|---|---|---|
| Prepared: E. Bartlett | BHP-Utah Minerals International (Asia Pacific Division) | Proj: Min Properties |
| Drawn: M. Rosker | PEPPER TREE REGION | Drg No.: A4-2970 |
| Date: Sept 89 | EXPLORATION TENEMENTS | Fig 1 |
| Centre: Melbourne | | |

## 1. INTRODUCTION

Exploration Licence 1445 was taken up to test the potential for heavy mineral sands in the Pepper Tree area of the Murray Basin. It forms part of a regional exploration programme in the Murray Basin (see Figure 1).

A literature search and geological assessment of the area indicates the presence of Tertiary palaeostrandlines deposited during the Pliocene Period. Their presence indicates that the environment for heavy mineral-bearing beach sand deposition and preservation may exist. The Parilla Sand was identified as the target unit for exploration in EL 1445.

## 2. TITLE

Exploration Licence 1445 covers 1295 square kilometres and was granted to BHP Minerals Limited on 16 November, 1987, for a period of one year. Extension of term of Licence was granted for one year by SADME.

## 3. SUMMARY OF WORK CARRIED OUT PRIOR TO 15 AUGUST, 1989

### 3.1 DRILLING AND SAMPLING

Following initial reconnaissance work the first drilling programme was carried out from 17 August to 4 September, 1988. One hundred and thirty-nine holes, totalling 3245 metres, were drilled along traverses 9 - 12 (Table 1 and Figure 2).

Table 1. Drilling Summary 17 August - 4 September, 1988.

| TRAVERSE | HOLES | METRES | HOLE NUMBERS |
|---|---|---|---|
| 9 | 54 | 1335 | PT 034 - 071, 124 - 139 |
| 10 | 26 | 600 | PT 008 - 033 |
| 11 | 23 | 521 | PT 072 - 094 |
| 12 | 36 | 789 | PT 001 - 007, 095 - 123 |
| | 139 | 3245 | (average depth 23.3m) |

A total of 1,770 samples were collected in two metre intervals, numbered from RT 6001 to RT 7770. Full descriptive logs of each drill hole and sample were presented in Appendix C of the report for the quarter ended 15 February, 1989.

Two hundred and seventeen samples were sent to Classic Comlabs for Ti and Zr analysis by XRF. They were chosen on the basis of visually estimated heavy mineral content (from panning), down-hole gamma ray log and hand-held scintillometer reading. Since most of the Ti and Zr in any sample would be expected to be contained in ilmenite, rutile and zircon, the XRF analyses provided an efficient method of screening out samples likely to contain very low concentrations of these minerals.

## 3.2 RESULTS

The results are shown in detail in the report mentioned above. Most of the results were below about 60 ppm for Zr and 350 ppm for Ti and the highest assays were 1060 ppm for Zr and 6000 ppm for Ti (Table 2). The 31 samples with the highest assays were sent for TBE heavy mineral separation and observation. The heavy mineral content was generally very low (less than 0.1%) although sample RT 6894 (from drill hole PT69, 26 - 28m, Figure 2) contained 1.06% of greater than 2.96 S.G. product.

Table 2. Summary of XRF Results from 1988 Drilling (217 Samples)

| | MIN | MAX | Avg | S.D. |
|---|---|---|---|---|
| Zr | 26 | 1060 | 92 | 119 |
| Ti | 195 | 6000 | 1155 | 992 |

The >2.96 SG product was observed for the following fractions: Magnetic fraction (>0.5A) and non-magnetic fractions + 0.25mm, - 0.25 + 0.18mm and - 0.18 + 0.075mm. The results for each fraction were reported in Appendix B of 15 May, 1989, report and are summarised below:

Table 3. Summary of Mineral Observation for 1988 Drilling.

Note: Other - monazite, leucoxene
Trash - non-economic heavy minerals
Rec HM - subtracts quartz and rocks from total HM %

| Sample No | HM % | Rec HM % | Zir % | Ilm % | Rut % | Other % | Trash % |
|---|---|---|---|---|---|---|---|
| RT 6009 | 0.03 | 0.004 | 0.00004 | 0.00231 | 0.00008 | 0.00027 | 0.00131 |
| RT 6018 | 0.09 | 0.009 | 0.00003 | 0.00148 | 0.00002 | 0.00004 | 0.00726 |
| RT 6125 | 0.10 | 0.046 | 0.00014 | 0.04286 | 0.00043 | 0.00173 | 0.00107 |
| RT 6173 | 0.02 | 0.007 | 0.00002 | 0.00588 | 0.00003 | 0.00016 | 0.00059 |
| RT 6180 | 0.04 | 0.016 | 0.00003 | 0.01500 | 0.00006 | 0.00030 | 0.00026 |
| RT 6331 | 0.01 | 0.002 | 0.00007 | 0.00202 | 0.00009 | 0.00024 | 0.00007 |
| RT 6346 | 0.02 | 0.003 | 0.00005 | 0.00225 | 0.00007 | 0.00020 | 0.00022 |
| RT 6347 | 0.04 | 0.005 | 0.00003 | 0.00208 | 0.00001 | 0.00067 | 0.00188 |
| RT 6372 | 0.02 | 0.002 | 0.00006 | 0.00150 | 0.00006 | 0.00022 | 0.00005 |
| RT 6544 | 0.02 | 0.009 | 0.00003 | 0.00871 | 0.00006 | 0.00032 | 0.00010 |
| RT 6773 | 0.09 | 0.019 | 0.00014 | 0.01250 | 0.00103 | 0.00160 | 0.00375 |
| RT 6894 | 1.06 | 0.605 | 0.00402 | 0.56700 | 0.01042 | 0.01768 | 0.00630 |
| RT 6895 | 0.51 | 0.276 | 0.00067 | 0.24600 | 0.01000 | 0.01681 | 0.00273 |
| RT 6916 | 0.57 | 0.326 | 0.00280 | 0.30132 | 0.00842 | 0.01133 | 0.00227 |
| RT 6917 | 0.60 | 0.353 | 0.00228 | 0.31992 | 0.01144 | 0.01689 | 0.00241 |
| RT 6951 | 0.51 | 0.310 | 0.00159 | 0.27310 | 0.01191 | 0.01991 | 0.00303 |
| RT 6959 | 0.06 | 0.015 | 0.00003 | 0.01125 | 0.00028 | 0.00044 | 0.00263 |
| RT 7028 | 0.03 | 0.008 | 0.00008 | 0.00625 | 0.00025 | 0.00060 | 0.00062 |
| RT 7405 | 0.04 | 0.005 | 0.00005 | 0.00281 | 0.00020 | 0.00052 | 0.00159 |
| RT 7414 | 0.05 | 0.003 | 0.00005 | 0.00150 | 0.00020 | 0.00060 | 0.00085 |
| RT 7415 | 0.23 | 0.023 | 0.00004 | 0.00375 | 0.00015 | 0.00039 | 0.01837 |
| RT 7421 | 0.08 | 0.007 | 0.00001 | 0.00160 | 0.00004 | 0.00021 | 0.00517 |
| RT 7455 | 0.07 | 0.003 | 0.00001 | 0.00111 | 0.00003 | 0.00010 | 0.00211 |
| RT 7523 | 0.04 | 0.003 | 0.00003 | 0.00206 | 0.00012 | 0.00036 | 0.00038 |
| RT 7565 | 0.07 | 0.008 | 0.00001 | 0.00175 | 0.00009 | 0.00017 | 0.00566 |
| RT 7581 | 0.01 | 0.001 | 0.00003 | 0.00034 | 0.00003 | 0.00004 | 0.00019 |
| RT 7589 | 0.02 | 0.002 | 0.00002 | 0.00088 | 0.00004 | 0.00006 | 0.00050 |
| RT 7639 | 0.42 | 0.257 | 0.01079 | 0.22385 | 0.01079 | 0.01083 | 0.00069 |
| RT 7715 | 0.02 | 0.009 | 0.00017 | 0.00720 | 0.00033 | 0.00052 | 0.00048 |
| RT 7724 | 0.02 | 0.004 | 0.00003 | 0.00400 | 0.00008 | 0.00023 | 0.00010 |
| RT 7759 | 0.01 | 0.003 | 0.00005 | 0.00306 | 0.00006 | 0.00011 | 0.00016 |

Table 3 shows the heavy mineral assemblage to be dominated by ilmenite, and that while the total HM% is very low, the % of the three main economic minerals, ilmenite, rutile and zircon appear to be one or more orders of magnitude lower. These results are discussed further, in conjunction with the 1989 results, in section 5 of this report.

## 4. WORK CARRIED OUT DURING THE CURRENT REPORT QUARTER

### 4.1 DRILLING

Although the results from the 1988 drilling programme had not been particularly encouraging, the distance between each drill traverse, about 10 kilometres, was such that the area was not considered to have been adequately tested. Accordingly, a further 106 holes were drilled as shown on Figure 2 and summarised in Table 4. A reverse circulation air core rig was used.

Table 4. Drilling Summary 18 - 28 September, 1989

| TRAVERSE | HOLES | METRES | HOLE NUMBERS |
|---|---|---|---|
| 22 | 15 | 330 | PT 348 - 362 |
| 23 | 3 | 86 | PT 363 - 365 |
| 24 | 33 | 690 | (PT 366 - 390, |
| | | | (PT 398 - 405 |
| 25 | 7 | 140 | PT 391 - 397 |
| 26 | 7 | 154 | PT 442 - 448 |
| 27 | 5 | 100 | PT 449 - 453 |
| 28 | 22 | 456 | PT 420 - 441 |
| 29 | 14 | 287 | PT 406 - 419 |
| | 106 | 2243 | (average depth 21.2m) |

## 4.2 SAMPLING AND LOGGING

Eight hundred and thirty-four samples were collected, using a two metre sample interval, numbered from DA46 to DA879. Generally, surficial clays and any clay layers within the Parilla Sand were not sampled. Composite samples were collected from the Parilla Sand portion of each hole, and any reasonable sized pieces of sandstone core were bagged separately to provide extra petrological information.

Each hole was lithologically logged, with the details input to a hand held computer via a bar code reader. The main features of interest were colour, grain-size, sorting, roundness and whether any heavy minerals could be panned. A rough, quantitative estimate of the heavy mineral content of each non-clay two metre interval was made from panning. The main purpose of these estimates is to highlight any samples to be sent for detailed analysis.

Full descriptive logs of each sample and drill hole are presented in Appendix 1, and the logs are shown pictorially with Ti and Zr analyses in geological cross sections in Appendix 2.

Down hole gamma ray logs were also run (Appendix 3). Where possible the log was run down open holes, however in some cases the holes were not sufficiently stable and the probe was lowered within the drill-rods. The gamma log serves as a back up to the visual estimates, as monazite is a minor but persistent part of the heavy mineral assemblage in the Murray Basin. The gamma log also provides a more accurate measure of the thickness and depth of any heavy mineral bearing horizon identified in the samples.

## 4.3 RESULTS

One hundred and forty-two samples were sent to Classic Comlabs for Ti and Zr analysis. Samples were selected on the basis of visually estimated heavy mineral content and gamma ray logs. In addition, composite samples from barren holes were analysed as an added check and to provide enough analyses to obtain a realistic estimate of the background Ti and Zr values. The results are presented in Table 5 and discussed in the following section.

## 5. DISCUSSION OF RESULTS

The generally low to very low Zr and Ti values in Table 5 are consistent with the field observations of generally low to negligible heavy mineral content. In addition to Zr and Ti values, Table 5 shows the hole number and depth of each sample, and the theoretically calculated % of zircon, ilmenite and rutile in each sample.

Assumptions made in performing the calculations are:

1. All Zr and Ti in the sample is attributable to zircon, ilmenite and rutile,
2. No account of variation from perfect stoichiometry of the three minerals is made,
3. To calculate % ilmenite and rutile, it is necessary to decide what proportion of Ti is to go into ilmenite and what proportion is to go into rutile (i.e. the relative proportions of ilmenite and rutile need to be known). For the calculations in Table 5, relative proportions of ilmenite 96.9% to rutile 3.1% were used, based upon the results of the mineral observation work summarised in Table 3.
4. It should also be noted that what is being calculated is a total contained % of each mineral, and this will obviously be greater than the recoverable %.

Table 5 Zr and Ti results, and calculation of theoretical zircon, ilmenite and rutile content. Relative proportion (by weight) of ilmenite to rutile used was 0.969 to 0.031.

| Hole No | Depth m | Sample No | Zr ppm | Zircon % | Ti ppm | Ilmenite % | Rutile % |
|---|---|---|---|---|---|---|---|
| PT 350 | 12-14 | DA 71 | 80 | 0.016 | 1280 | 0.382 | 0.012 |
| | 14-16 | DA 72 | 84 | 0.017 | 1300 | 0.388 | 0.012 |
| | 16-18 | DA 73 | 140 | 0.028 | 2400 | 0.717 | 0.023 |
| | 18-20 | DA 74 | 140 | 0.028 | 2500 | 0.747 | 0.024 |
| | 20-22 | DA 75 | 66 | 0.013 | 920 | 0.275 | 0.009 |
| | 6-22 | DA 76 | 115 | 0.023 | 2050 | 0.612 | 0.019 |
| PT 351 | 6-22 | DA 89 | 46 | 0.009 | 500 | 0.149 | 0.005 |
| | 22-30 | DA 90 | 38 | 0.008 | 220 | 0.066 | 0.002 |
| PT 352 | 4-6 | DA 91 | 105 | 0.021 | 1560 | 0.466 | 0.015 |
| | 14-16 | DA 96 | 56 | 0.011 | 360 | 0.108 | 0.003 |
| | 16-18 | DA 97 | 70 | 0.014 | 700 | 0.209 | 0.007 |
| PT 353 | 8-20 | DA 110 | 35 | 0.007 | 300 | 0.090 | 0.003 |
| PT 354 | 4-20 | DA 122 | 40 | 0.008 | 440 | 0.131 | 0.004 |
| PT 355 | 2-18 | DA 133 | 34 | 0.007 | 290 | 0.087 | 0.003 |
| PT 356 | 2-20 | DA 143 | 50 | 0.010 | 540 | 0.161 | 0.005 |
| PT 357 | 2-4 | DA 144 | 150 | 0.030 | 1740 | 0.520 | 0.017 |
| | 20-22 | DA 153 | 30 | 0.006 | 130 | 0.039 | 0.001 |
| PT 358 | 4-18 | DA 163 | 74 | 0.015 | 980 | 0.293 | 0.009 |
| PT 359 | 12-20 | DA 171 | 36 | 0.007 | 230 | 0.069 | 0.002 |
| PT 360 | 4-6 | DA 172 | 95 | 0.019 | 1900 | 0.568 | 0.018 |
| PT 361 | 12-20 | DA 186 | 50 | 0.010 | 610 | 0.182 | 0.006 |
| PT 362 | 18-20 | DA 187 | 240 | 0.048 | 4300 | 1.285 | 0.041 |
| PT 363 | 16-38 | DA 199 | 45 | 0.009 | 220 | 0.066 | 0.002 |
| PT 364 | 12-26 | DA 207 | 34 | 0.007 | 220 | 0.066 | 0.002 |
| PT 365 | 10-22 | DA 214 | 50 | 0.010 | 520 | 0.155 | 0.005 |
| PT 366 | 14-16 | DA 220 | 60 | 0.012 | 810 | 0.242 | 0.008 |
| PT 367 | 14-16 | DA 230 | 140 | 0.028 | 2450 | 0.732 | 0.023 |
| | 4-20 | DA 233 | 98 | 0.020 | 1160 | 0.347 | 0.011 |
| PT 368 | 10-24 | DA 241 | 60 | 0.012 | 730 | 0.218 | 0.007 |
| PT 370 | 12-20 | DA 250 | 52 | 0.010 | 650 | 0.194 | 0.006 |
| PT 371 | 18-24 | DA 254 | 52 | 0.010 | 430 | 0.128 | 0.004 |
| PT 372 | 10-12 | DA 257 | 46 | 0.009 | 510 | 0.152 | 0.005 |
| | 12-14 | DA 258 | 35 | 0.007 | 260 | 0.078 | 0.002 |
| | 14-16 | DA 259 | 36 | 0.007 | 290 | 0.087 | 0.003 |
| | 8-24 | DA 264 | 46 | 0.009 | 320 | 0.096 | 0.003 |
| PT 373 | 4-20 | DA 273 | 82 | 0.016 | 970 | 0.290 | 0.009 |
| PT 374 | 6-20 | DA 281 | 52 | 0.010 | 560 | 0.167 | 0.005 |
| PT 375 | 4-20 | DA 291 | 40 | 0.008 | 370 | 0.111 | 0.004 |
| PT 376 | 6-8 | DA 292 | 96 | 0.019 | 1400 | 0.418 | 0.013 |
| | 8-20 | DA 299 | 66 | 0.013 | 730 | 0.218 | 0.007 |
| PT 377 | 14-20 | DA 303 | 60 | 0.012 | 1080 | 0.323 | 0.010 |
| PT 379 | 14-16 | DA 311 | 42 | 0.008 | 350 | 0.105 | 0.003 |
| | 6-20 | DA 314 | 45 | 0.009 | 410 | 0.122 | 0.004 |
| PT 380 | 8-10 | DA 316 | 38 | 0.008 | 250 | 0.075 | 0.002 |
| | 6-20 | DA 322 | 36 | 0.007 | 240 | 0.072 | 0.002 |

Table 5 (continued)

| Hole No | Depth m | Sample No | Zr ppm | Zircon % | Ti ppm | Ilmenite % | Rutile % |
|---|---|---|---|---|---|---|---|
| PT 381 | 18-20 | DA 329 | 55 | 0.011 | 580 | 0.173 | 0.006 |
| | 20-22 | DA 330 | 68 | 0.014 | 780 | 0.233 | 0.007 |
| | 22-24 | DA 331 | 55 | 0.011 | 870 | 0.260 | 0.008 |
| | 24-26 | DA 332 | 42 | 0.008 | 600 | 0.179 | 0.006 |
| | 26-28 | DA 333 | 44 | 0.009 | 700 | 0.209 | 0.007 |
| | 28-30 | DA 334 | 44 | 0.009 | 560 | 0.167 | 0.005 |
| | 6-20 | DA 335 | 42 | 0.008 | 310 | 0.093 | 0.003 |
| | 20-30 | DA 336 | 48 | 0.010 | 690 | 0.206 | 0.007 |
| PT 382 | 12-14 | DA 340 | 50 | 0.010 | 520 | 0.155 | 0.005 |
| | 14-16 | DA 341 | 42 | 0.008 | 380 | 0.114 | 0.004 |
| | 16-18 | DA 342 | 44 | 0.009 | 470 | 0.140 | 0.004 |
| PT 383 | 10-12 | DA 347 | 46 | 0.009 | 420 | 0.125 | 0.004 |
| | 12-14 | DA 348 | 36 | 0.007 | 300 | 0.090 | 0.003 |
| | 6-20 | DA 352 | 52 | 0.010 | 570 | 0.170 | 0.005 |
| PT 384 | 14-16 | DA 357 | 45 | 0.009 | 450 | 0.134 | 0.004 |
| | 6-20 | DA 360 | 38 | 0.008 | 280 | 0.084 | 0.003 |
| PT 385 | 10-20 | DA 367 | 44 | 0.009 | 360 | 0.108 | 0.003 |
| PT 386 | 10-20 | DA 373 | 68 | 0.014 | 850 | 0.254 | 0.008 |
| PT 387 | 2-20 | DA 383 | 36 | 0.007 | 280 | 0.084 | 0.003 |
| PT 388 | 2-20 | DA 393 | 60 | 0.012 | 740 | 0.221 | 0.007 |
| PT 389 | 4-20 | DA 402 | 56 | 0.011 | 610 | 0.182 | 0.006 |
| PT 390 | 14-16 | DA 406 | 40 | 0.008 | 460 | 0.137 | 0.004 |
| | 16-18 | DA 407 | 40 | 0.008 | 470 | 0.140 | 0.004 |
| | 18-20 | DA 408 | 44 | 0.009 | 490 | 0.146 | 0.005 |
| PT 391 | 10-12 | DA 414 | 48 | 0.010 | 410 | 0.122 | 0.004 |
| | 4-20 | DA 419 | 40 | 0.008 | 350 | 0.105 | 0.003 |
| PT 392 | 10-20 | DA 425 | 44 | 0.009 | 400 | 0.119 | 0.004 |
| PT 394 | 12-14 | DA 436 | 84 | 0.017 | 1260 | 0.376 | 0.012 |
| | 14-16 | DA 437 | 160 | 0.032 | 2300 | 0.687 | 0.022 |
| | 16-18 | DA 438 | 110 | 0.022 | 1680 | 0.502 | 0.016 |
| | 18-20 | DA 439 | 60 | 0.012 | 560 | 0.167 | 0.005 |
| PT 395 | 6-20 | DA 448 | 60 | 0.012 | 560 | 0.167 | 0.005 |
| PT 396 | 12-14 | DA 453 | 62 | 0.012 | 770 | 0.230 | 0.007 |
| | 14-16 | DA 454 | 58 | 0.012 | 830 | 0.248 | 0.008 |
| | 16-18 | DA 455 | 50 | 0.010 | 520 | 0.155 | 0.005 |
| | 18-20 | DA 456 | 88 | 0.018 | 1000 | 0.299 | 0.010 |
| | 4-20 | DA 457 | 56 | 0.011 | 670 | 0.200 | 0.006 |
| PT 397 | 12-14 | DA 462 | 42 | 0.008 | 590 | 0.176 | 0.006 |
| | 14-16 | DA 463 | 45 | 0.009 | 510 | 0.152 | 0.005 |
| | 16-18 | DA 464 | 56 | 0.011 | 550 | 0.164 | 0.005 |
| | 18-20 | DA 465 | 64 | 0.013 | 590 | 0.176 | 0.006 |
| PT 398 | 4-24 | DA 477 | 38 | 0.008 | 350 | 0.105 | 0.003 |
| PT 399 | 14-16 | DA 483 | 72 | 0.014 | 600 | 0.179 | 0.006 |
| | 16-18 | DA 484 | 210 | 0.042 | 1200 | 0.358 | 0.011 |
| PT 401 | 4-20 | DA 504 | 60 | 0.012 | 620 | 0.185 | 0.006 |
| PT 402 | 10-12 | DA 508 | 65 | 0.013 | 820 | 0.245 | 0.008 |
| | 12-14 | DA 509 | 58 | 0.012 | 560 | 0.167 | 0.005 |
| | 18-20 | DA 512 | 82 | 0.016 | 680 | 0.203 | 0.006 |
| | 4-24 | DA 515 | 64 | 0.013 | 590 | 0.176 | 0.006 |
| PT 403 | 18-20 | DA 522 | 115 | 0.023 | 630 | 0.188 | 0.006 |
| | 6-20 | DA 523 | 52 | 0.010 | 510 | 0.152 | 0.005 |

Table 5 (continued)

| Hole No | Depth m | Sample No | Zr ppm | Zircon % | Ti ppm | Ilmenite % | Rutile % |
|---|---|---|---|---|---|---|---|
| PT 404 | 12-20 | DA 532 | 60 | 0.012 | 600 | 0.179 | 0.006 |
| PT 405 | 12-14 | DA 537 | 94 | 0.019 | 1250 | 0.373 | 0.012 |
| | 4-20 | DA 541 | 52 | 0.010 | 460 | 0.137 | 0.004 |
| PT 406 | 20-22 | DA 550 | 42 | 0.008 | 380 | 0.114 | 0.004 |
| | 22-24 | DA 551 | 160 | 0.032 | 940 | 0.281 | 0.009 |
| | 24-26 | DA 552 | 290 | 0.058 | 1650 | 0.493 | 0.016 |
| | 26-28 | DA 553 | 240 | 0.048 | 1480 | 0.442 | 0.014 |
| | 28-30 | DA 554 | 700 | 0.141 | 3650 | 1.090 | 0.035 |
| PT 407 | 6-8 | DA 558 | 80 | 0.016 | 920 | 0.275 | 0.009 |
| | 4-20 | DA 565 | 70 | 0.014 | 860 | 0.257 | 0.008 |
| PT 408 | 6-20 | DA 573 | 54 | 0.011 | 490 | 0.146 | 0.005 |
| PT 409 | 10-12 | DA 579 | 52 | 0.010 | 630 | 0.188 | 0.006 |
| PT 410 | 20-22 | DA 585 | 60 | 0.012 | 450 | 0.134 | 0.004 |
| | 12-24 | DA 587 | 48 | 0.010 | 380 | 0.114 | 0.004 |
| PT 411 | 12-14 | DA 591 | 62 | 0.012 | 370 | 0.111 | 0.004 |
| | 14-16 | DA 592 | 380 | 0.076 | 1540 | 0.460 | 0.015 |
| | 16-18 | DA 593 | 75 | 0.015 | 450 | 0.134 | 0.004 |
| | 6-20 | DA 595 | 94 | 0.019 | 560 | 0.167 | 0.005 |
| PT 412 | 6-20 | DA 604 | 42 | 0.008 | 400 | 0.119 | 0.004 |
| PT 413 | 4-20 | DA 613 | 35 | 0.007 | 200 | 0.060 | 0.002 |
| PT 414 | 8-24 | DA 622 | 48 | 0.010 | 400 | 0.119 | 0.004 |
| PT 415 | 6-20 | DA 630 | 58 | 0.012 | 520 | 0.155 | 0.005 |
| PT 416 | 16-18 | DA 636 | 40 | 0.008 | 320 | 0.096 | 0.003 |
| | 18-20 | DA 637 | 38 | 0.008 | 200 | 0.060 | 0.002 |
| | 4-20 | DA 638 | 32 | 0.006 | 155 | 0.046 | 0.001 |
| PT 417 | 4-20 | DA 648 | 40 | 0.008 | 260 | 0.078 | 0.002 |
| PT 418 | 8-20 | DA 657 | 56 | 0.011 | 940 | 0.281 | 0.009 |
| PT 426 | 12-14 | DA 704 | 98 | 0.020 | 690 | 0.206 | 0.007 |
| | 14-16 | DA 705 | 125 | 0.025 | 860 | 0.257 | 0.008 |
| | 16-18 | DA 706 | 78 | 0.016 | 600 | 0.179 | 0.006 |
| | 18-20 | DA 707 | 78 | 0.016 | 580 | 0.173 | 0.006 |
| | 20-22 | DA 708 | 80 | 0.016 | 710 | 0.212 | 0.007 |
| | 22-24 | DA 709 | 54 | 0.011 | 630 | 0.188 | 0.006 |
| PT 431 | 8-10 | DA 730 | 46 | 0.009 | 530 | 0.158 | 0.005 |
| | 10-12 | DA 731 | 100 | 0.020 | 1200 | 0.358 | 0.011 |
| | 12-14 | DA 732 | 44 | 0.009 | 370 | 0.111 | 0.004 |
| PT 439 | 18-20 | DA 783 | 82 | 0.016 | 690 | 0.206 | 0.007 |
| PT 443 | 12-14 | DA 802 | 40 | 0.008 | 380 | 0.114 | 0.004 |
| | 14-16 | DA 803 | 58 | 0.012 | 840 | 0.251 | 0.008 |
| | 16-18 | DA 804 | 38 | 0.008 | 430 | 0.128 | 0.004 |
| PT 446 | 22-24 | DA 827 | 40 | 0.008 | 360 | 0.108 | 0.003 |
| | 24-26 | DA 828 | 38 | 0.008 | 330 | 0.099 | 0.003 |
| | 26-28 | DA 829 | 130 | 0.026 | 560 | 0.167 | 0.005 |
| | 28-30 | DA 830 | 185 | 0.037 | 1060 | 0.317 | 0.010 |
| PT 448 | 6-20 | DA 842 | 56 | 0.011 | 520 | 0.155 | 0.005 |
| PT 450 | 6-20 | DA 858 | 46 | 0.009 | 440 | 0.131 | 0.004 |
| | | Max | 700 | 0.141 | 4300 | 1.285 | 0.041 |
| | | Min | 30 | 0.006 | 130 | 0.039 | 0.001 |
| | | Avg | 75 | 0.015 | 741 | 0.221 | 0.007 |

Table 5 shows several samples with apparently anomalous heavy mineral concentrations (samples DA 73 - 74, DA 187, DA 230, DA 552 - 554, DA 592). Sample DA 187 is clay-rich and interpreted to be from the Blanchetown Clay which overlies the Parilla Sand. Sample DA 230 is also clay-rich and may also be from a clayey unit overlying the Parilla Sand. The other three anomalous intervals are all clean, quartz sandstones. However, in each case the low grade, limited thickness (maximum 6 metres) and not inconsiderable depth downgrade their economic significance.

Samples with similar, or even slightly higher, Ti and Zr contents were obtained from holes PT 69, 70 and 128 in the 1988 drilling (Table 6 and Figure 2). Since the results in Table 6 are the highest that were obtained from anywhere in EL 1445 and they are covered by at least 20m of overburden and the heavy mineral grades are far below that needed for mining, there is little encouragement for continued exploration in EL 1445.

Table 6. Best Intervals From 1988 and 1989 Drilling Programmes

| HOLE NO. | INTERVAL | SAMPLE NUMBER | % HM (FIELD ESTIMATE) | TOTAL % HM (Lab) | Zr ppm | Ti ppm |
|---|---|---|---|---|---|---|
| PT 069 | 26-28 | RT6894 | 0.8 | 1.06 | 1020 | 6000 |
| | 28-30 | RT6895 | 0.8 | 0.51 | 260 | 3050 |
| PT 070 | 20-22 | RT6916 | 1.0 | 0.57 | 1060 | 3550 |
| | 22-24 | RT6917 | 1.0 | 0.60 | 650 | 3600 |
| | 20-30 | RT6922 | NA | NA | 470 | 2500 |
| PT 128 | 22-24 | RT7639 | 1.0 | 0.42 | 500 | 2150 |
| | 24-26 | RT7640 | 1.5 | NA | 320 | 1960 |
| PT 406 | 24-26 | DA552 | 0.5 | NA | 290 | 1650 |
| | 26-28 | DA553 | 0.5 | NA | 240 | 1480 |
| | 28-30 | DA554 | 1.0 | NA | 700 | 3650 |

It is also apparent that the "theoretical" zircon, ilmenite and rutile percentages calculated in Table 5 do not correlate well, for samples with similar XRF Zr and Ti values, with the percentages for these minerals obtained from heavy mineral separation and observation.

The ilmenite, zircon and rutile percentages in Table 3 (obtained from laboratory observation) are approximately one to three orders of magnitude lower than the percentages that would be obtained according to the calculation method in Table 5. Such a large discrepancy is probably not entirely explained by background or non-recoverable Zr and Ti (in what form is unknown). The lack of correlation may at least partly be explained by the failure to observe the minus 0.075mm fraction, which is known to contain a large proportion of any heavy minerals in certain deposits (e.g. WIM 150).

If it is true that a large proportion of the heavy minerals do occur in the minus 0.075mm fraction, as seems likely from observation work from similar nearby areas, then the percentages in Table 3 are all under-estimates. Despite this, it is still apparent that the samples are sub-economic from the total heavy mineral percentage and XRF Ti and Zr, which are independent of what size fractions were observed. The point to be made from the preceding two paragraphs is that samples need to be observed over as broad a range of size fractions as possible. This is necessary so that a reasonably accurate determination of the recoverable heavy mineral percentage and the heavy mineral assemblage can be made.

## 6. CONCLUSION

Exploration in EL 1445 has failed to locate any zone of economic heavy mineral accumulation. It is conceded that large areas within the licence remain untested (Figure 2), however the lack of encouragement from the work to date does not justify any further exploration.

## 7. EXPENDITURE

Expenditure in EL 1445 for the quarter ended 15 November totalled $51,358 and is itemised below:

| | |
|---|---|
| Wages and Salaries | 9898 |
| Field Support | 1314 |
| Drilling | 32580 |
| Vehicles | 1436 |
| Equipment | 555 |
| Geochemistry | 1823 |
| Geophysics | 45 |
| Surveys | 51 |
| Office Expenses | 198 |
| Computer Services | 257 |
| Other | 6 |
| In-house Services | 750 |
| Admin and Overheads | 2445 |
| TOTAL | $51358 |

This brings total expenditure for EL 1445 to $185,727.

# APPENDIX 1

## GEOLOGICAL LOGS

## HOLES PT 348 - PT 453

$\frac{348}{105} = 106.$

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 19-SEP-89

HOLE NUMBER : PT0348
LOGGED BY : PRD
TOTAL DEPTH : 22.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 458099 NORTHING: 6276717 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0348

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Clay<br>sandy | medium<br>red | clay to<br>medium sand<br>poorly sorted | | | 0.0 | | |
| 2.0 | 4.0 | | Qdw | Clay<br>sandy | medium<br>red | clay to<br>medium sand<br>poorly sorted | | | 0.0 | | |
| 4.0 | 6.0 | | Qdw | Clay<br>sandy | medium<br>red | clay to<br>medium sand<br>poorly sorted | | | 0.0 | | |
| 6.0 | 8.0 | DA 0046 | Tps | Sand<br>clayey | light<br>brown | medium sand to<br>coarse sand<br>poorly sorted | | | 0.0 | | |
| 8.0 | 10.0 | DA 0047 | Tps | Sand<br>quartz. | medium<br>brown | medium sand to<br>coarse sand<br>poorly sorted | sub-angular | | 0.2<br>light trace | | |
| 10.0 | 12.0 | DA 0048 | Tps | Sand<br>quartz. | light<br>brown | medium sand to<br>coarse sand<br>mod.well sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0049 | Tps | Sand<br>quartz. | light<br>brown | medium sand to<br>coarse sand<br>mod.well sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0050 | Tps | Sand<br>massive<br>Sandstone | pale<br>tan | fine sand to<br>coarse sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 16.0 | 18.0 | DA 0051 | Tps | Sand<br>quartz.<br>Sandstone | light<br>brown | medium sand to<br>coarse sand<br>poorly sorted | | | 0.0 | | |
| 18.0 | 20.0 | DA 0052 | Tps | Sand<br>quartz. | medium<br>brown | medium sand to<br>coarse sand<br>poorly sorted | | | 0.5<br>trace | | |
| 20.0 | 22.0 | DA 0053 | Tps | Sand<br>quartz. | medium<br>brown | medium sand to<br>v.crse sand<br>poorly sorted | | | 0.2<br>light trace | | |

EOH at 22.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 19-SEP-89

HOLE NUMBER : PT0349
LOGGED BY : PRD
TOTAL DEPTH : 26.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 457241 NORTHING: 6277271 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Clay sandy | light brown | clay to fine sand poorly sorted | | | 0.0 | | |
| 2.0 | 4.0 | | Qdw | Clay sandy | light brown | clay to fine sand poorly sorted | | | 0.0 | | |
| 4.0 | 6.0 | DA 0054 | Tps | Sand quartz. | pale tan | fine sand to coarse sand poorly sorted | | | 0.0 | | |
| 6.0 | 8.0 | DA 0055 | Tps | Sand quartz. | pale tan | fine sand to coarse sand poorly sorted | | | 0.0 | | |
| 8.0 | 10.0 | DA 0056 | Tps | Sand quartz. | pale tan | fine sand to coarse sand poorly sorted | | | 0.0 | | |
| 10.0 | 12.0 | DA 0057 | Tps | Sand quartz. | pale tan | fine sand to coarse sand poorly sorted | | | 0.0 | | |
| 12.0 | 14.0 | DA 0058 | Tps | Sand quartz. | medium brown | medium sand mod.well sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | DA 0059 | Tps | Sand quartz. | medium brown | medium sand mod.well sorted | | | 0.0 | | |
| 16.0 | 18.0 | DA 0060 | Tps | Sand quartz. | medium brown | medium sand mod.well sorted | | | 0.0 | | |
| 6.0 | 18.0 | DA 0065 | | Composite Sample | | | | | 0.0 | | |
| 18.0 | 20.0 | DA 0061 | Tps | Sand gritty | light brown | medium sand to v.crse sand poorly sorted | | | 0.0 | | |

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.0 | 22.0 | DA 0062 | Tps | Sand gritty | light brown | medium sand to granule poorly sorted | | | 0.0 | | |
| 22.0 | 24.0 | DA 0063 | Tps | Sand gritty | light brown | medium sand to granule poorly sorted | | | 0.0 | | |
| 24.0 | 26.0 | DA 0064 | Tps | Sand gritty | light brown | medium sand to granule poorly sorted | | | 0.0 | | |
| 18.0 | 26.0 | DA 0066 | | Composite Sample | | | | | 0.0 | | |

EOH at 26.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 19-SEP-89

HOLE NUMBER : PT0350
LOGGED BY : PRD
TOTAL DEPTH : 22.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 456401 NORTHING: 6277753 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Clay sandy | light brown | clay to fine sand mod.well sorted | | | 0.0 | | |
| 2.0 | 4.0 | | Qdw | Clay sandy | light brown | clay to fine sand mod.well sorted | | | 0.0 | | |
| 4.0 | 6.0 | DA 0067 | Tps | Sand clayey | medium brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 6.0 | 8.0 | DA 0068 | Tps | Sand clayey | medium brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 8.0 | 10.0 | DA 0069 | Tps | Sand clayey | medium brown | fine sand to coarse sand poorly sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | DA 0070 | Tps | Sand quartz. | medium brown | fine sand to coarse sand poorly sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | DA 0071 | Tps | Sand clayey | medium brown | fine sand to coarse sand poorly sorted | | | 0.5 trace | | |
| 14.0 | 16.0 | DA 0072 | Tps | Sand quartz. | medium brown | fine sand to medium sand well sorted | | | 0.5 trace | | |
| 16.0 | 18.0 | DA 0073 | Tps | Sand quartz. | medium brown | fine sand to medium sand well sorted | | | 0.5 trace | | |
| 18.0 | 20.0 | DA 0074 | Tps | Sand clayey Clay | medium red brown | fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 20.0 | 22.0 | DA 0075 | Tps | Sand quartz. | medium grey brown | fine sand to medium sand mod.well sorted | | | 0.5 trace | | |

0318

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.0 | 22.0 | DA 0076 | | Composite Sample | | | | | 0.0 | | |

EOH at 22.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 19-SEP-89

HOLE NUMBER : PT0351
LOGGED BY : PRD
TOTAL DEPTH : 30.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 455492 NORTHING: 6278288 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand<br>aeolian | medium<br>red<br>brown | v.fine sand to<br>fine sand<br>well sorted | | | 0.0 | | |
| 2.0 | 4.0 | | Qdw | Sand<br>aeolian<br>Clay<br>ferrug. | medium<br>red<br>brown | v.fine sand to<br>fine sand<br>well sorted | | | 0.0 | | |
| 4.0 | 6.0 | | Qdw | Clay<br>ferrug. | medium<br>red<br>brown | clay<br>well sorted | | | 0.0 | | |
| 6.0 | 8.0 | DA 0077 | Tps | Sand<br>quartz. ferrug. | medium<br>yellow<br>brown | fine sand to<br>medium sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 8.0 | 10.0 | DA 0078 | Tps | Sand<br>quartz. | pale<br>grey | medium sand to<br>v.crse sand<br>poorly sorted | | | 0.0 | | |
| 10.0 | 12.0 | DA 0079 | Tps | Sand<br>quartz. | pale<br>grey | medium sand to<br>v.crse sand<br>poorly sorted | | | 0.0 | | |
| 12.0 | 14.0 | DA 0080 | Tps | Sand<br>gritty quartz. | light<br>grey | medium sand to<br>granule<br>poorly sorted | | | 0.0 | | |
| 14.0 | 16.0 | DA 0081 | Tps | Sand<br>gritty quartz. | medium<br>brown | medium sand to<br>v.crse sand<br>poorly sorted | | | 0.0 | | |
| 16.0 | 18.0 | DA 0082 | Tps | Sand<br>gritty quartz. | medium<br>brown | medium sand to<br>v.crse sand<br>poorly sorted | | | 0.0 | | |
| 18.0 | 20.0 | DA 0083 | Tps | Sand<br>quartz. | light<br>grey | medium sand to<br>v.crse sand<br>poorly sorted | | | 0.0 | | |
| 20.0 | 22.0 | DA 0084 | Tps | Sand<br>quartz. | light<br>yellow<br>grey | medium sand to<br>v.crse sand<br>poorly sorted | | | 0.5<br>trace | | |

0329

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.0 | 22.0 | DA 0089 | | Composite Sample | | | | | 0.0 | | |
| 22.0 | 24.0 | DA 0085 | Tps | Sand quartz. | pale yellow grey | medium sand to v.crse sand poorly sorted | | | 0.0 | | |
| 24.0 | 26.0 | DA 0086 | Tps | Sand quartz. | pale yellow grey | medium sand to v.crse sand poorly sorted | | | 0.0 | | |
| 26.0 | 28.0 | DA 0087 | Tps | Sand quartz. | pale yellow grey | medium sand to v.crse sand poorly sorted | | | 0.0 | | |
| 28.0 | 30.0 | DA 0088 | Tps | Sand quartz. | pale yellow grey | fine sand to v.crse sand poorly sorted | | | 0.2 light trace | | |
| 22.0 | 30.0 | DA 0090 | | Composite Sample | | | | | 0.0 | | |

EOH at 30.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30
CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 19-SEP-89
HOLE NUMBER : PT0352
LOGGED BY : PRD
TOTAL DEPTH : 20.0
GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 454642 NORTHING: 6278770 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand<br>aeolian | medium red brown | fine sand<br>well sorted | | | 0.0 | | |
| 2.0 | 4.0 | | Qdw | Calcrete | light grey | fine sand to medium sand<br>mod.well sorted | | | 0.0 | | |
| 4.0 | 6.0 | DA 0091 | Qdw | Calcrete<br>quartz. | light grey | fine sand to medium sand<br>mod.well sorted | sub-angular | | 0.5<br>trace | | |
| 6.0 | 8.0 | DA 0092 | QPC | Clay<br>sandy | medium grey brown | clay to fine sand<br>mod.well sorted | | | 0.0 | | |
| 8.0 | 10.0 | DA 0093 | Tps | Sand<br><br>Clay<br>quartz. | medium red brown | medium sand to v.crse sand<br>poorly sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0094 | Tps | Sand<br>quartz. | light grey | medium sand to granule<br>poorly sorted | angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0095 | Tps | Sand<br>gritty | light yellow grey | medium sand to granule<br>poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0096 | Tps | Sand<br>quartz. | light grey | fine sand to v.crse sand<br>poorly sorted | sub-angular | | 0.5<br>trace | | |
| 16.0 | 18.0 | DA 0097 | Tps | Sand<br>quartz. | light grey | fine sand to v.crse sand<br>poorly sorted | sub-angular | | 1.0<br>Good trace | | |
| 18.0 | 20.0 | DA 0098 | Tps | Sand<br>quartz. | light grey | fine sand to v.crse sand<br>poorly sorted | sub-angular | | 0.5<br>trace | | |
| 10.0 | 20.0 | DA 0100 | | Composite Sample | | | | | 0.0 | | |

Comments: SAMPLE100

0322

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.0 | 22.0 | DA 0099 | Tps | Sand<br>quartz. | light grey | fine sand to v.crse sand<br>poorly sorted | sub-angular | | 0.5<br>trace | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 19-SEP-89

HOLE NUMBER : PT0353
LOGGED BY : PRD
TOTAL DEPTH : 24.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 453753 NORTHING: 6279304 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand<br>aeolian<br>Calcrete | light brown | v.fine sand to fine sand<br>well sorted | | | 0.0 | | |
| 2.0 | 4.0 | | Qdw | Calcrete<br><br>Clay | light grey | clay to fine sand<br>mod.well sorted | | | 0.0 | | |
| 4.0 | 6.0 | | Qpc | Clay | medium red brown | clay<br>well sorted | | | 0.0 | | |
| 6.0 | 8.0 | DA 0101 | Tps | Sand<br>quartz. | medium yellow brown | fine sand to v.crse sand<br>poorly sorted | angular | | 0.0 | | |
| 8.0 | 10.0 | DA 0102 | Tps | Sand<br>quartz. | light grey | medium sand to v.crse sand<br>poorly sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0103 | Tps | Sand<br>quartz. | light grey | medium sand to v.crse sand<br>poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0104 | Tps | Sand<br>quartz. | light grey | medium sand to v.crse sand<br>poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0105 | Tps | Sand<br>quartz. | light grey | fine sand to coarse sand<br>mod.well sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0106 | Tps | Sand<br>quartz. | light grey | fine sand to coarse sand<br>mod.well sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0107 | Tps | Sand<br>quartz. | light grey | fine sand to coarse sand<br>mod.well sorted | sub-angular | | 0.0 | | |
| 8.0 | 20.0 | DA 0110 | | Composite Sample | | | | | 0.0 | | |

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.0 | 22.0 | DA 0108 | Tps | Sand quartz. | pale tan | fine sand to medium sand mod.well sorted | sub-angular | | 0.0 | | |
| 22.0 | 24.0 | DA 0109 | Tps | Sand quartz. | pale tan | fine sand to medium sand mod.well sorted | sub-angular | | 0.0 | | |
| 20.0 | 24.0 | DA 0111 | | Composite Sample | | | | | 0.0 | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 19-SEP-89

HOLE NUMBER : PT0354
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 452854 NORTHING: 6279858 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0354

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | DA 0112 | Qdw | Calcrete<br>Sand<br>aeolian | pale red<br>grey | fine sand to medium sand<br>mod.well sorted | | | 0.0 | | |
| 2.0 | 4.0 | DA 0113 | Qpc | Clay | light grey | clay<br>well sorted | | | 0.0 | | |
| 4.0 | 6.0 | DA 0114 | Tps | Sand<br>quartz. | medium red brown | fine sand to v.crse sand<br>poorly sorted | angular | | 0.0 | | |
| 6.0 | 8.0 | DA 0115 | Tps | Sand<br>quartz. | medium yellow brown | fine sand to coarse sand<br>mod.well sorted | sub-angular | | 0.0 | | |
| 8.0 | 10.0 | DA 0116 | Tps | Sand<br>quartz. | medium yellow brown | fine sand to v.crse sand<br>poorly sorted | angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0117 | Tps | Sand<br>quartz. | medium yellow brown | fine sand to v.crse sand<br>poorly sorted | angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0118 | Tps | Sand<br>quartz. | medium yellow brown | fine sand to v.crse sand<br>poorly sorted | angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0119 | Tps | Sand<br>quartz. | pale tan | medium sand to coarse sand<br>mod.well sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0120 | Tps | Sand<br>quartz. | pale tan | medium sand to coarse sand<br>mod.well sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0121 | Tps | Sand<br>quartz. | light yellow brown | fine sand to medium sand<br>mod.well sorted | sub-angular | | 0.2<br>light trace | | |
| 4.0 | 20.0 | DA 0122 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 19-SEP-89

HOLE NUMBER : PT0355
LOGGED BY : PRD
TOTAL DEPTH : 18.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 452035 NORTHING: 6280391 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand aeolian Clay | light red brown | fine sand mod.well sorted | | | 0.0 | | |
| 2.0 | 4.0 | DA 0123 | Tps | Sand quartz. | light brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 4.0 | 6.0 | DA 0124 | Tps | Sand quartz. | light brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 6.0 | 8.0 | DA 0125 | Tps | Sand quartz. | light brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 8.0 | 10.0 | DA 0126 | Tps | Sand quartz. | light brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0127 | Tps | Sand quartz. | light yellow grey | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0128 | Tps | Sand quartz. | light yellow grey | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0129 | Tps | Sand quartz. | light yellow grey | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0130 | Tps | Sand quartz. | light yellow grey | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 2.0 | 18.0 | DA 0133 | | Composite Sample | | | | | 0.0 | | |
| 18.0 | 20.0 | DA 0131 | Tps | Sand quartz. | light grey | medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.0 | 22.0 | DA 0132 | Tps | Sand quartz. | light grey | medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |

EOH at 18.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 19-SEP-89

HOLE NUMBER : PT0356
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 451206 NORTHING: 6280903 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0356

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Clay sandy | medium brown | clay to coarse sand poorly sorted | | | 0.0 | | |
| 2.0 | 4.0 | DA 0134 | Tps | Sand quartz. | light grey | medium sand to coarse sand mod.well sorted | sub-rounded | | 0.0 | | |
| 4.0 | 6.0 | DA 0135 | Tps | Sand quartz. | light grey | medium sand to coarse sand mod.well sorted | sub-rounded | | 0.0 | | |
| 6.0 | 8.0 | DA 0136 | Tps | Sand ferrug. quartz. | medium brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.2 light trace | | |
| 8.0 | 10.0 | DA 0137 | Tps | Sand gritty quartz. | medium brown | medium sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0138 | Tps | Pebbly sandstone quartz. | light grey | fine sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0139 | Tps | Sand quartz. | light yellow grey | fine sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0140 | Tps | Sand quartz. | light yellow grey | fine sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0141 | Tps | Sand quartz. | light yellow brown | fine sand to v.crse sand poorly sorted | | | 0.0 | | |
| 18.0 | 20.0 | DA 0142 | Tps | Sand quartz. | light yellow brown | fine sand to v.crse sand poorly sorted | | | 0.0 | | |
| 2.0 | 20.0 | DA 0143 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 19-SEP-89

HOLE NUMBER : PT0357
LOGGED BY : PRD
TOTAL DEPTH : 22.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 450184 NORTHING: 6281318 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand<br>aeolian<br>Clay | medium<br>red<br>brown | v.fine sand to<br>fine sand<br>mod.well sorted | | | 0.0 | | |
| 2.0 | 4.0 | DA 0144 | Qdw | Sand<br>quartz. | medium<br>red<br>brown | v.fine sand to<br>medium sand<br>mod.well sorted | sub-rounded | | 0.5<br>trace | | |
| 4.0 | 6.0 | DA 0145 | Qdw | Sand<br>aeolian | light<br>red<br>brown | silt to<br>medium sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 6.0 | 8.0 | DA 0146 | Qpc | Clay<br>sandy | medium<br>brown | clay to<br>medium sand<br>poorly sorted | | | 0.0 | | |
| 8.0 | 10.0 | DA 0147 | Tps | Sand<br>quartz. | medium<br>brown<br>grey | fine sand to<br>v.crse sand<br>poorly sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0148 | Tps | Sand<br>quartz. | medium<br>brown<br>grey | fine sand to<br>v.crse sand<br>poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0149 | Tps | Sand<br>quartz. | medium<br>brown<br>grey | fine sand to<br>v.crse sand<br>poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0150 | Tps | Sand<br>quartz. | medium<br>brown<br>grey | fine sand to<br>v.crse sand<br>poorly sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0151 | Tps | Sand<br>quartz. gritty<br>Sandstone<br>gritty | medium<br>yellow<br>grey | medium sand to<br>granule<br>poorly sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0152 | Tps | Sand<br>quartz. | medium<br>yellow<br>grey | fine sand to<br>granule<br>poorly sorted | sub-angular | | 0.0 | | |
| 20.0 | 22.0 | DA 0153 | Tps | Sand<br>quartz. | medium<br>yellow<br>grey | fine sand to<br>granule<br>poorly sorted | sub-angular | | 0.0 | | |

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.0 | 22.0 | DA 0154 | | Composite Sample | | | | | 0.0 | | |

EOH at 22.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 19-SEP-89

HOLE NUMBER : PT0358
LOGGED BY : PRD
TOTAL DEPTH : 18.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 449410 NORTHING: 6281566 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0358

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ STRENGTH TYPE/ | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Calcrete<br>Clay sandy | medium brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 2.0 | 4.0 | | Qpc | Clay sandy | medium brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 4.0 | 6.0 | DA 0155 | Tps | Sand<br>Clay sandy | light brown | fine sand to v.crse sand poorly sorted | sub-angular | | 0.2<br>light trace | | |
| 6.0 | 8.0 | DA 0156 | Tps | Sand<br>Clay sandy | light brown | fine sand to v.crse sand poorly sorted | sub-angular | | 0.2<br>light trace | | |
| 8.0 | 10.0 | DA 0157 | Tps | Sand clayey | pale tan | fine sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0158 | Tps | Sand clayey | pale tan | fine sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0159 | Tps | Sand ferrug. quartz. | light brown | v.fine sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0160 | Tps | Sand ferrug. quartz. | light brown | v.fine sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0161 | Tps | Sand ferrug. quartz. | light brown | v.fine sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 4.0 | 18.0 | DA 0163 | | Composite Sample | | | | | 0.0 | | |
| 18.0 | 20.0 | DA 0162 | Tps | Pebbly sandstone quartz. | light brown | fine sand to granule poorly sorted | | | 0.0 | | |

EOH at 18.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 19-SEP-89

HOLE NUMBER : PT0359
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 448586 NORTHING: 6281805 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0359

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Calcrete | light brown | silt to medium sand poorly sorted | | | 0.0 | | |
| 2.0 | 4.0 | | Qpc | Clay sandy | medium brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 4.0 | 6.0 | DA 0164 | Qpc | Clay sandy | medium brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 6.0 | 8.0 | DA 0165 | Qpc | Clay sandy | medium brown | clay to medium sand poorly sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | DA 0166 | Qpc | Clay sandy | medium brown | clay to medium sand poorly sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | | Qpc | Clay sandy | medium brown | clay to medium sand poorly sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | DA 0167 | Tps | Sand quartz. | light grey | fine sand to coarse sand mod.well sorted | | | 0.0 | | |
| 14.0 | 16.0 | DA 0168 | Tps | Sand quartz. | light grey | fine sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0169 | Tps | Sand quartz. | medium brown grey | fine sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0170 | Tps | Sand quartz. | medium brown grey | fine sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 20.0 | DA 0171 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30
CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 19-SEP-89

HOLE NUMBER : PT0360
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 447693 NORTHING: 6282095 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0360

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand<br>aeolian<br>Calcrete | pale<br>tan | silt to<br>fine sand<br>well sorted | | | 0.2<br>light trace | | |
| 2.0 | 4.0 | | Qdw | Sand<br>aeolian | light<br>brown | v.fine sand to<br>fine sand<br>well sorted | | | 0.2<br>light trace | | |
| 4.0 | 6.0 | DA 0172 | Qpc | Clay<br>sandy | medium<br>brown | clay to<br>medium sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 6.0 | 8.0 | DA 0173 | Qpc | Clay<br>sandy | medium<br>brown | clay to<br>medium sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 8.0 | 10.0 | DA 0174 | Qpc | Clay<br>sandy | medium<br>brown | clay to<br>medium sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 10.0 | 12.0 | DA 0175 | Qpc | Clay<br>sandy | medium<br>brown | clay to<br>medium sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 12.0 | 14.0 | DA 0176 | Qpc | Clay<br>sandy | medium<br>grey | clay to<br>medium sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 14.0 | 16.0 | | Qpc | Clay<br>sandy | medium<br>grey | clay to<br>medium sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 16.0 | 18.0 | | Qpc | Clay<br>sandy | medium<br>grey | clay to<br>medium sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 18.0 | 20.0 | DA 0177 | Tps | Sand<br>quartz. | light<br>yellow<br>brown | fine sand to<br>v.crse sand<br>poorly sorted | sub-angular | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 20-SEP-89

HOLE NUMBER : PT0361
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 446717 NORTHING: 6282327 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0361

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ STRENGTH/ TYPE | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand<br>aeolian | medium<br>red<br>brown | silt to<br>fine sand<br>well sorted | | | 0.0 | | |
| 2.0 | 4.0 | | Qpc | Clay<br>sandy | medium<br>brown | clay to<br>coarse sand<br>poorly sorted | | | 0.0 | | |
| 4.0 | 6.0 | DA 0178 | Qpc | Clay<br>sandy | medium<br>brown | clay to<br>medium sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 6.0 | 8.0 | DA 0179 | Qpc | Clay<br>sandy | medium<br>brown | clay to<br>medium sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 8.0 | 10.0 | DA 0180 | Qpc | Clay<br>sandy | light<br>grey | clay to<br>medium sand<br>poorly sorted | | | 0.0 | | |
| 10.0 | 12.0 | DA 0181 | Qpc | Clay<br>sandy | light<br>grey | clay to<br>medium sand<br>poorly sorted | | | 0.0 | | |
| 12.0 | 14.0 | DA 0182 | Tps | Sand<br>quartz. | light<br>grey | fine sand to<br>coarse sand<br>mod.well sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0183 | Tps | Sand<br>clayey | medium<br>brown<br>grey | clay to<br>coarse sand<br>poorly sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0184 | Tps | Sand<br>clayey | medium<br>brown<br>grey | clay to<br>coarse sand<br>poorly sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0185 | Tps | Sand<br>clayey | medium<br>brown<br>grey | clay to<br>coarse sand<br>poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 20.0 | DA 0186 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 20-SEP-89

HOLE NUMBER : PT0362
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 445753 NORTHING: 6282639 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0362

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand<br>aeolian | medium<br>red<br>brown | v.fine sand to<br>medium sand<br>mod.well sorted | sub-rounded | | 0.2<br>light trace | | |
| 2.0 | 4.0 | | Qpc | Clay<br>sandy | medium<br>brown | clay to<br>medium sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 4.0 | 6.0 | | Qpc | Clay<br>sandy | medium<br>grey<br>brown | clay to<br>coarse sand<br>poorly sorted | | | 0.0 | | |
| 6.0 | 8.0 | | Qpc | Clay<br>sandy | medium<br>grey<br>brown | clay to<br>coarse sand<br>poorly sorted | | | 0.0 | | |
| 8.0 | 10.0 | | Qpc | Clay<br>sandy | medium<br>grey<br>brown | clay to<br>coarse sand<br>poorly sorted | | | 0.0 | | |
| 10.0 | 12.0 | | Qpc | Clay<br>sandy | medium<br>grey<br>brown | clay to<br>coarse sand<br>poorly sorted | | | 0.0 | | |
| 12.0 | 14.0 | | Qpc | Clay<br>sandy | medium<br>grey<br>brown | clay to<br>coarse sand<br>poorly sorted | | | 0.0 | | |
| 14.0 | 16.0 | | Qpc | Clay<br>sandy | medium<br>grey<br>brown | clay to<br>coarse sand<br>poorly sorted | | | 0.0 | | |
| 16.0 | 18.0 | | Qpc | Clay<br>laminat | medium<br>khaki | clay<br>well sorted | | | 0.0 | | |
| 18.0 | 20.0 | DA 0187 | Qpc | Clay<br>sandy | medium<br>khaki | clay to<br>coarse sand<br>poorly sorted | | | 0.2<br>light trace | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 20-SEP-89

HOLE NUMBER : PT0363
LOGGED BY : PRD
TOTAL DEPTH : 38.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 446416 NORTHING: 6288366 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Calcrete<br>Sand ferrug. | medium red brown | silt to medium sand poorly sorted | | | 0.0 | | |
| 2.0 | 4.0 | | Qpc | Clay ferrug. Calcrete | dark brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 4.0 | 6.0 | | Qpc | Clay ferrug. Calcrete | dark brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 6.0 | 8.0 | | Qpc | Clay ferrug. Calcrete | dark brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 8.0 | 10.0 | | Qpc | Clay ferrug. Calcrete | dark brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 10.0 | 12.0 | | Qpc | Clay laminat | medium khaki grey | clay to fine sand well sorted | | | 0.0 | | |
| 12.0 | 14.0 | | Qpc | Clay laminat | medium khaki grey | clay to fine sand well sorted | | | 0.0 | | |
| 14.0 | 16.0 | | Qpc | Clay laminat | medium khaki grey | clay to fine sand well sorted | | | 0.0 | | |
| 16.0 | 18.0 | DA 0188 | Tps | Sand clayey | medium grey brown | clay to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0189 | Tps | Sand quartz. | light grey | fine sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 20.0 | 22.0 | DA 0190 | Tps | Sand ferrug. quartz. | light brown | medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.0 | 24.0 | DA 0191 | Tps | Sand ferrug. quartz. | light brown | medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 24.0 | 26.0 | DA 0192 | Tps | Sand quartz. | light grey | medium sand to coarse sand mod.well sorted | sub-rounded | | 0.0 | | |
| 26.0 | 28.0 | DA 0193 | Tps | Sand quartz. | light grey | medium sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 28.0 | 30.0 | DA 0194 | Tps | Sand quartz. | light grey | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 30.0 | 32.0 | DA 0195 | Tps | Sand ferrug. quartz. | light grey brown | medium sand to granule poorly sorted | angular | | 0.0 | | |
| 32.0 | 34.0 | DA 0196 | Tps | Sand ferrug. quartz. | light grey brown | medium sand to granule poorly sorted | angular | | 0.0 | | |
| 34.0 | 36.0 | DA 0197 | Tps | Sand quartz. | light grey brown | medium sand to granule poorly sorted | sub-angular | | 0.2 light trace | | |
| 36.0 | 38.0 | DA 0198 | Tps | Sand quartz. | light grey brown | medium sand to coarse sand mod.well sorted | sub-angular | | 0.2 light trace | | |
| 16.0 | 38.0 | DA 0199 | | Composite Sample | | | | | 0.0 | | |

EOH at 38.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 20-SEP-89

HOLE NUMBER : PT0364
LOGGED BY : PRD
TOTAL DEPTH : 26.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 447326 NORTHING: 6288957 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qpc | Clay ferrug. Sand aeolian | medium brown | clay well sorted | | | 0.0 | | |
| 2.0 | 4.0 | | Qpc | Clay ferrug. | medium brown | clay well sorted | | | 0.0 | | |
| 4.0 | 6.0 | | Qpc | Clay ferrug. | medium brown | clay well sorted | | | 0.0 | | |
| 6.0 | 8.0 | | Qpc | Clay | light brown | clay well sorted | | | 0.0 | | |
| 8.0 | 10.0 | | Qpc | Clay | light brown grey | clay well sorted | | | 0.0 | | |
| 10.0 | 12.0 | | Qpc | Clay sandy | medium khaki grey | clay to coarse sand poorly sorted | | | 0.0 | | |
| 12.0 | 14.0 | DA 0200 | Tps | Sand quartz. | light grey | fine sand to medium sand mod.well sorted | sub-rounded | | 0.0 | | |
| 14.0 | 16.0 | DA 0201 | Tps | Sand quartz. | light grey | fine sand to medium sand mod.well sorted | sub-rounded | | 0.0 | | |
| 16.0 | 18.0 | DA 0202 | Tps | Sand quartz. | light grey | fine sand to medium sand mod.well sorted | sub-rounded | | 0.0 | | |
| 18.0 | 20.0 | DA 0203 | Tps | Sand ferrug. quartz. | medium red brown | fine sand to medium sand mod.well sorted | sub-rounded | | 0.0 | | |
| 20.0 | 22.0 | DA 0204 | Tps | Sand ferrug. quartz. | medium red brown | medium sand to coarse sand mod.well sorted | sub-rounded | | 0.0 | | |

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.0 | 24.0 | DA 0205 | Tps | Sand gritty | medium red brown | fine sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 24.0 | 26.0 | DA 0206 | Tps | Sand gritty | medium red brown | fine sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 26.0 | DA 0207 | | Composite Sample | | | | | 0.0 | | |

EOH at 26.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 20-SEP-89

HOLE NUMBER : PT0365
LOGGED BY : PRD
TOTAL DEPTH : 22.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 447315 NORTHING: 6289991 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qpc | Clay<br>ferrug. sandy | medium brown | clay to medium sand<br>poorly sorted | | | 0.0 | | |
| 2.0 | 4.0 | | Qpc | Clay<br>ferrug. sandy | medium brown | clay to medium sand<br>poorly sorted | | | 0.0 | | |
| 4.0 | 6.0 | | Qpc | Clay<br>silty | medium khaki grey | clay to silt<br>well sorted | | | 0.0 | | |
| 6.0 | 8.0 | | Qpc | Clay<br>silty | medium khaki grey | clay to silt<br>well sorted | | | 0.0 | | |
| 8.0 | 10.0 | | Qpc | Clay<br>ferrug.<br>Sand | medium brown | clay<br>well sorted | | | 0.0 | | |
| | | | | | | Comments: Tps at 95M | | | | | |
| 10.0 | 12.0 | DA 0208 | Tps | Sand<br>ferrug. quartz.<br>Sandstone | | fine sand to coarse sand<br>mod.well sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0209 | Tps | Sand<br>quartz. | light yellow grey | fine sand to coarse sand<br>poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0210 | Tps | Sand<br>quartz. | light yellow grey | fine sand to coarse sand<br>poorly sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0211 | Tps | Sand<br>ferrug. quartz. | light brown | fine sand to v.crse sand<br>poorly sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0212 | Tps | Sand<br>ferrug. quartz. | light brown | fine sand to v.crse sand<br>poorly sorted | sub-angular | | 0.0 | | |
| 20.0 | 22.0 | DA 0213 | Tps | Sand<br>ferrug. quartz. | medium red | medium sand to v.crse sand | | | 0.0 | | |

SHEET 2 OF 2 HOLE NUMBER : PT0365

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.0 | 22.0 | DA 0214 | | Composite Sample | | | | | 0.0 | | |

EOH at 22.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 20-SEP-89

HOLE NUMBER : PT0366
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 447362 NORTHING: 6290862 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0366

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand aeolian Clay | medium brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 2.0 | 4.0 | | Qpc | Clay sandy | medium brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 4.0 | 6.0 | DA 0215 | Qpc | Clay sandy | medium brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 6.0 | 8.0 | DA 0216 | Qpc | Clay sandy | medium brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 8.0 | 10.0 | DA 0217 | Tps | Sand ferrug. | medium brown | fine sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0218 | Tps | Sand quartz. ferrug. | light yellow brown | fine sand to medium sand mod.well sorted | sub-rounded | | 0.0 | | |
| 12.0 | 14.0 | DA 0219 | Tps | Sand quartz. ferrug. | light yellow brown | fine sand to medium sand mod.well sorted | sub-rounded | | 0.0 | | |
| 14.0 | 16.0 | DA 0220 | Tps | Sand quartz. | light grey | fine sand to coarse sand mod.well sorted | | | 0.0 | | |
| 16.0 | 18.0 | DA 0221 | Tps | Sand clayey | light grey brown | clay to coarse sand poorly sorted | | | 0.0 | | |
| 18.0 | 20.0 | DA 0222 | Tps | Sand clayey | light grey brown | clay to coarse sand poorly sorted | | | 0.0 | | |
| 8.0 | 20.0 | DA 0223 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30
CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 20-SEP-89
HOLE NUMBER : PT0367
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 448404 NORTHING: 6290914 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0367

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qpc | Clay sandy | medium brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 2.0 | 4.0 | DA 0224 | Tps | Sand clayey | medium brown | clay to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 4.0 | 6.0 | DA 0225 | Tps | Sand clayey | medium brown | clay to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 6.0 | 8.0 | DA 0226 | Tps | Sand clayey quartz. | medium grey brown | clay to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 8.0 | 10.0 | DA 0227 | Tps | Sand clayey quartz. | medium grey brown | clay to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0228 | Tps | Sand clayey | medium brown | clay to coarse sand poorly sorted | sub-rounded | | 0.0 | | |
| 12.0 | 14.0 | DA 0229 | Tps | Sand clayey | light khaki | clay to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0230 | Tps | Clay sandy | light grey | clay to medium sand poorly sorted | | | 0.0 | | |
| 16.0 | 18.0 | DA 0231 | Tps | Sand clayey | medium red brown | clay to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0232 | Tps | Sand clayey | medium red brown | clay to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 4.0 | 20.0 | DA 0233 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 20-SEP-89

HOLE NUMBER : PT0368
LOGGED BY : PRD
TOTAL DEPTH : 24.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 449453 NORTHING: 6290853 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Clay sandy | medium brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 2.0 | 4.0 | | Qpc | Clay ferrug. sandy | medium red brown | clay to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 4.0 | 6.0 | | Qpc | Clay sandy | medium grey | clay to medium sand poorly sorted | | | 0.0 | | |
| 6.0 | 8.0 | | Qpc | Clay ferrug. sandy | medium grey brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 8.0 | 10.0 | | Qpc | Clay ferrug. sandy | medium grey brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 10.0 | 12.0 | DA 0234 | Tps | Sand clayey | medium brown | clay to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0235 | Tps | Sand clayey | medium brown | clay to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0236 | Tps | Sand silty quartz. | light brown | silt to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0237 | Tps | Sand silty quartz. | light brown | silt to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0238 | Tps | Sand silty quartz. | medium brown | silt to medium sand mod.well sorted | sub-angular | | 0.0 | | |
| 20.0 | 22.0 | DA 0239 | Tps | Sand silty | light yellow grey | silt to medium sand mod.well sorted | sub-angular | | 0.0 | | |

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.0 | 24.0 | DA 0240 | Tps | Sand<br>quartz. | medium<br>red<br>brown | fine sand to<br>v.crse sand<br>poorly sorted | sub-angular | | 0.0 | | |
| 10.0 | 24.0 | DA 0241 | | Composite Sample | | | | | 0.0 | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 20-SEP-89

HOLE NUMBER : PT0369
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 450494 NORTHING: 6290844 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0369

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ STRENGTH TYPE/ | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand<br>Clay sandy | medium brown | clay to medium sand<br>mod.well sorted | | | 0.0 | | |
| 2.0 | 4.0 | | Qpc | Clay ferrug. | medium grey brown | clay<br>well sorted | | | 0.0 | | |
| 4.0 | 6.0 | | Qpc | Clay ferrug. | medium grey brown | clay<br>well sorted | | | 0.0 | | |
| 6.0 | 8.0 | | Qpc | Clay sandy | medium khaki | clay to medium sand<br>poorly sorted | | | 0.0 | | |
| 8.0 | 10.0 | | Qpc | Clay sandy | medium khaki | clay to medium sand<br>poorly sorted | | | 0.0 | | |
| 10.0 | 12.0 | | Qpc | Clay sandy | medium khaki | clay to medium sand<br>poorly sorted | | | 0.0 | | |
| 12.0 | 14.0 | | Qpc | Clay sandy | medium khaki | clay to medium sand<br>poorly sorted | | | 0.0 | | |
| 14.0 | 16.0 | DA 0242 | Tps | Sand silty | light grey | silt to coarse sand<br>poorly sorted | sub-rounded | | 0.0 | | |
| 16.0 | 18.0 | DA 0243 | Tps | Sand ferrug. quartz. | medium yellow brown | fine sand to v.crse sand<br>poorly sorted | sub-rounded | | 0.0 | | |
| 18.0 | 20.0 | DA 0244 | Tps | Sand quartz. | light brown | v.fine sand to medium sand<br>mod.well sorted | | | 0.0 | | |
| 14.0 | 20.0 | DA 0245 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30
CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 20-SEP-89

HOLE NUMBER : PT0370
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 451565 NORTHING: 6290854 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ STRENGTH/ TYPE | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand<br>Clay | medium brown | clay to medium sand<br>mod.well sorted | | | 0.0 | | |
| 2.0 | 4.0 | | Qpc | Clay sandy | medium brown grey | clay to coarse sand<br>poorly sorted | | | 0.0 | | |
| 4.0 | 6.0 | | Qpc | Clay sandy | medium brown grey | clay to coarse sand<br>poorly sorted | | | 0.0 | | |
| 6.0 | 8.0 | | Qpc | Clay sandy | medium brown grey | clay to coarse sand<br>poorly sorted | | | 0.0 | | |
| 8.0 | 10.0 | | Qpc | Clay sandy | medium brown grey | clay to coarse sand<br>poorly sorted | | | 0.0 | | |
| 10.0 | 12.0 | | Tps | Sand clayey | medium grey | clay to v.crse sand<br>poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0246 | Tps | Sand quartz. | light yellow grey | fine sand to v.crse sand<br>poorly sorted | | | 0.0 | | |
| 14.0 | 16.0 | DA 0247 | Tps | Sand quartz. | light yellow grey | fine sand to v.crse sand<br>poorly sorted | | | 0.0 | | |
| 16.0 | 18.0 | DA 0248 | Tps | Sand silty | light brown | silt to medium sand<br>mod.well sorted | | | 0.0 | | |
| 18.0 | 20.0 | DA 0249 | Tps | Sand silty | light brown | silt to medium sand<br>mod.well sorted | | | 0.0 | | |
| 12.0 | 20.0 | DA 0250 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 20-SEP-89

HOLE NUMBER : PT0371
LOGGED BY : PRD
TOTAL DEPTH : 24.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 452576 NORTHING: 6290865 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand clayey | medium brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 2.0 | 4.0 | | Qpc | Clay sandy | medium brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 4.0 | 6.0 | | Qpc | Clay ferrug. sandy | medium brown | clay to coarse sand poorly sorted | | | 0.0 | | |
| 6.0 | 8.0 | | Qpc | Clay | medium grey | clay well sorted | | | 0.0 | | |
| 8.0 | 10.0 | | Qpc | Clay | medium grey | clay well sorted | | | 0.0 | | |
| | | | | | | Comments: STIFfine CLAY HARDNESS | | | | | |
| 10.0 | 12.0 | | Qpc | Clay | medium grey | clay well sorted | | | 0.0 | | |
| 12.0 | 14.0 | | Qpc | Clay | medium grey | clay well sorted | | | 0.0 | | |
| 14.0 | 16.0 | | Qpc | Clay | medium grey | clay well sorted | | | 0.0 | | |
| 16.0 | 18.0 | | Qpc | Clay sandy | light yellow grey | clay to medium sand poorly sorted | | | 0.0 | | |
| 18.0 | 20.0 | DA 0251 | Tps | Sand silty | light grey | silt to medium sand mod.well sorted | | | 0.0 | | |
| 20.0 | 22.0 | DA 0252 | Tps | Sand silty | light tan | silt to medium sand mod.well sorted | sub-rounded | | 0.2 light trace | | |

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.0 | 24.0 | DA 0253 | Tps | Sand silty | light tan | silt to medium sand mod.well sorted | sub-rounded | | 0.0 | | |
| 18.0 | 24.0 | DA 0254 | | Composite Sample | | | | | 0.0 | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30
CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 20-SEP-89
HOLE NUMBER : PT0372
LOGGED BY : PRD
TOTAL DEPTH : 24.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 453556 NORTHING: 6290887 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qpc | Clay<br>sandy | light grey | clay to medium sand<br>poorly sorted | | | 0.0 | | |
| 2.0 | 4.0 | | Qpc | Clay<br>sandy | light grey | clay to medium sand<br>poorly sorted | | | 0.0 | | |
| 4.0 | 6.0 | | Qpc | Clay<br>sandy<br>Sand<br>clayey | light grey | clay to medium sand<br>poorly sorted | sub-angular | | 0.0 | | |
| 6.0 | 8.0 | DA 0255 | Tps | Sand<br>quartz. | light yellow grey | fine sand to medium sand<br>mod.well sorted | sub-rounded | | 0.0 | | |
| 8.0 | 10.0 | DA 0256 | Tps | Sand<br>quartz. | light yellow | fine sand to medium sand<br>mod.well sorted | sub-rounded | | 0.0 | | |
| 10.0 | 12.0 | DA 0257 | Tps | Sand<br>quartz. | light yellow | fine sand to medium sand<br>mod.well sorted | sub-rounded | | 0.2<br>light trace | | |
| 12.0 | 14.0 | DA 0258 | Tps | Sand<br>quartz. | light grey | fine sand to medium sand<br>mod.well sorted | sub-rounded | | 0.2<br>light trace | | |
| 14.0 | 16.0 | DA 0259 | Tps | Sand<br>quartz. | light grey | fine sand to medium sand<br>mod.well sorted | sub-rounded | | 0.2<br>light trace | | |
| 16.0 | 18.0 | DA 0260 | Tps | Sand<br>quartz. | light yellow brown | fine sand to coarse sand<br>poorly sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0261 | Tps | Sand<br>quartz. | light yellow brown | fine sand to coarse sand<br>poorly sorted | sub-angular | | 0.0 | | |
| 20.0 | 22.0 | DA 0262 | Tps | Sand<br>quartz. gritty | light tan | medium sand to granule<br>poorly sorted | sub-angular | | 0.0 | | |

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.0 | 24.0 | DA 0263 | Tps | Sand<br>quartz. gritty | light tan | medium sand to granule<br>poorly sorted | sub-angular | | 0.0 | | |
| 8.0 | 24.0 | DA 0264 | | Composite Sample | | | | | 0.0 | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 20-SEP-89

HOLE NUMBER : PT0373
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 454609 NORTHING: 6290989 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand silty Clay sandy | medium red brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 2.0 | 4.0 | | Qdw | Clay sandy | medium red brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 4.0 | 6.0 | DA 0265 | Qdw | Sand clayey | pale tan | clay to medium sand mod.well sorted | sub-angular | | 0.0 | | |
| 6.0 | 8.0 | DA 0266 | Qdw | Sand clayey | pale tan | clay to medium sand poorly sorted | sub-angular | | 0.0 | | |
| 8.0 | 10.0 | DA 0267 | Qdw | Sand clayey | pale tan | clay to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0268 | Qdw | Sand clayey | pale tan | clay to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0269 | Qdw | Sand clayey | light grey | clay to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0270 | Tps | Sand silty | light brown | silt to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0271 | Tps | Sand silty | light brown | silt to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0272 | Tps | Sand gritty | pale tan | fine sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 4.0 | 20.0 | DA 0273 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 21-SEP-89

HOLE NUMBER : PT0374
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 455669 NORTHING: 6290939 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0374

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Soil<br>Clay ferrug. | medium brown | clay to coarse sand poorly sorted | | | 0.0 | | |
| 2.0 | 4.0 | | Qdw | Sand clayey | medium brown | clay to fine sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | | Qdw | Sand clayey | light yellow grey | clay to medium sand mod.well sorted | | | 0.0 | | |
| 6.0 | 8.0 | DA 0274 | Qdw | Sand clayey | light yellow grey | silt to medium sand mod.well sorted | sub-angular | | 0.0 | | |
| 8.0 | 10.0 | DA 0275 | Qdw | Sand clayey | light yellow grey | silt to medium sand mod.well sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0276 | Qdw | Sand clayey quartz. | pale tan | v.fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0277 | Tps | Sand quartz. | pale tan | fine sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0278 | Tps | Sand quartz. | light yellow brown | fine sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0279 | Tps | Sand quartz. | light grey brown | fine sand to v.crse sand poorly sorted | sub-angular | | 0.2 light trace | | |
| 18.0 | 20.0 | DA 0280 | Tps | Sand quartz. | light grey brown | v.fine sand to medium sand mod.well sorted | sub-rounded | | 0.2 light trace | | |
| 6.0 | 20.0 | DA 0281 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 21-SEP-89

HOLE NUMBER : PT0375
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 456689 NORTHING: 6290929 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0375

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand aeolian | light brown | silt to fine sand well sorted | | | 0.0 | | |
| 2.0 | 4.0 | DA 0282 | Tps | Sand ferrug. quartz. | light brown | v.fine sand to medium sand mod.well sorted | sub-rounded | | 0.0 | | |
| 4.0 | 6.0 | DA 0283 | Tps | Sand quartz. | light tan | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 6.0 | 8.0 | DA 0284 | Tps | Sand quartz. | light tan | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 8.0 | 10.0 | DA 0285 | Tps | Sand quartz. | light brown | fine sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0286 | Tps | Sand quartz. | light brown | fine sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0287 | Tps | Sand | light brown | fine sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0288 | Tps | Sand quartz. | light red brown | fine sand to granule poorly sorted | angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0289 | Tps | Sand silty | medium red brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0290 | Tps | Sand silty | medium red brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 4.0 | 20.0 | DA 0291 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 21-SEP-89

HOLE NUMBER : PT0376
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 457678 NORTHING: 6290870 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand aeolian | light tan | silt to fine sand well sorted | | | 0.0 | | |
| 2.0 | 4.0 | | Qpc | Clay sandy | medium red brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 4.0 | 6.0 | | Qpc | Clay sandy | medium red brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 6.0 | 8.0 | DA 0292 | Tps | Sand clayey quartz. | light brown | v.fine sand to medium sand mod.well sorted | sub-rounded | | 0.2 light trace | | |
| 8.0 | 10.0 | DA 0293 | Tps | Sand clayey ferrug. | medium red brown | v.fine sand to coarse sand mod.well sorted | | | 0.0 | | |
| 10.0 | 12.0 | DA 0294 | Tps | Sand quartz. | medium red brown | v.fine sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0295 | Tps | Sand quartz. | medium red brown | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0296 | Tps | Sand quartz. | medium red brown | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0297 | Tps | Sand quartz. | medium red brown | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0298 | Tps | Sand quartz. | light grey brown | fine sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 8.0 | 20.0 | DA 0299 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 21-SEP-89

HOLE NUMBER : PT0377
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 458466 NORTHING: 6290855 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand aeolian | medium red brown | fine sand to medium sand mod.well sorted | sub-angular | | 0.0 | | |
| 2.0 | 4.0 | | Qdw | Sand aeolian | medium red brown | fine sand to medium sand mod.well sorted | sub-angular | | 0.0 | | |
| 4.0 | 6.0 | | Qpc | Clay ferrug. sandy | medium brown | clay to coarse sand poorly sorted | | | 0.0 | | |
| 6.0 | 8.0 | | Qpc | Clay ferrug. sandy | medium brown | clay to coarse sand poorly sorted | | | 0.0 | | |
| 8.0 | 10.0 | | Qpc | Clay ferrug. sandy | medium brown | clay to coarse sand poorly sorted | | | 0.0 | | |
| 10.0 | 12.0 | | Qpc | Clay | medium khaki | clay well sorted | | | 0.0 | | |
| 12.0 | 14.0 | | Qpc | Clay | medium khaki | clay well sorted | | | 0.0 | | |
| 14.0 | 16.0 | DA 0300 | Qpc | Clay sandy | patchy white | clay to medium sand poorly sorted | | | 0.0 | | |
| 16.0 | 18.0 | DA 0301 | Qpc | Clay | light grey white | clay well sorted | | | 0.0 | | |
| 18.0 | 20.0 | DA 0302 | Qpc | Clay | light grey white | clay well sorted | | | 0.0 | | |
| 14.0 | 20.0 | DA 0303 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 21-SEP-89

HOLE NUMBER : PT0378
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 459477 NORTHING: 6290877 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0378

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand aeolian | medium brown | v.fine sand to medium sand mod.well sorted | | | 0.0 | | |
| 2.0 | 4.0 | | Qdw | Sand aeolian | medium brown | v.fine sand to medium sand mod.well sorted | | | 0.0 | | |
| 4.0 | 6.0 | | Qpc | Clay sandy | light khaki | clay to medium sand poorly sorted | | | 0.0 | | |
| 6.0 | 8.0 | | Qpc | Clay sandy | light khaki | clay to medium sand poorly sorted | | | 0.0 | | |
| 8.0 | 10.0 | | Qpc | Clay sandy | light khaki | clay to medium sand poorly sorted | | | 0.0 | | |
| 10.0 | 12.0 | | Qpc | Clay | light grey | clay well sorted | | | 0.0 | | |
| 12.0 | 14.0 | | Qpc | Clay sandy | dark grey | clay to medium sand poorly sorted | | | 0.0 | | |
| 14.0 | 16.0 | DA 0304 | Tps | Sand quartz. | light yellow | fine sand to coarse sand mod.well sorted | | | 0.0 | | |
| 16.0 | 18.0 | DA 0305 | Tps | Sand quartz. | light yellow | fine sand to coarse sand mod.well sorted | | | 0.0 | | |
| 18.0 | 20.0 | DA 0306 | Tps | Sand quartz. | light yellow | fine sand to coarse sand mod.well sorted | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 21-SEP-89

HOLE NUMBER : PT0379
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 460486 NORTHING: 6290837 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0379

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand aeolian | medium red brown | fine sand to medium sand mod.well sorted | | | 0.0 | | |
| 2.0 | 4.0 | | Qpc | Clay sandy | medium brown | clay to coarse sand poorly sorted | | | 0.0 | | |
| 4.0 | 6.0 | | Qpc | Clay sandy | medium brown | clay to coarse sand poorly sorted | | | 0.0 | | |
| 6.0 | 8.0 | DA 0307 | Tps | Sand clayey | light brown | v.fine sand to coarse sand poorly sorted | | | 0.0 | | |
| 8.0 | 10.0 | DA 0308 | Tps | Sand ferrug. quartz. | light yellow brown | fine sand to v.crse sand poorly sorted | | | 0.0 | | |
| 10.0 | 12.0 | DA 0309 | Tps | Sand ferrug. quartz. | light yellow brown | fine sand to v.crse sand poorly sorted | | | 0.0 | | |
| 12.0 | 14.0 | DA 0310 | Tps | Sand gritty quartz. | light yellow brown | fine sand to granule poorly sorted | | | 0.0 | | |
| 14.0 | 16.0 | DA 0311 | Tps | Sand gritty quartz. | light tan | fine sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0312 | Tps | Sand gritty quartz. | light tan | fine sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0313 | Tps | Sand gritty quartz. | light tan | fine sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 6.0 | 20.0 | DA 0314 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 21-SEP-89

HOLE NUMBER : PT0380
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 461528 NORTHING: 6290868 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0380

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand aeolian | medium brown | v.fine sand to medium sand mod.well sorted | | | 0.0 | | |
| 2.0 | 4.0 | | Qpc | Clay | medium brown | clay well sorted | | | 0.0 | | |
| 4.0 | 6.0 | | Qpc | Clay | medium brown | clay well sorted | | | 0.0 | | |
| 6.0 | 8.0 | DA 0315 | Tps | Sand | medium brown | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 8.0 | 10.0 | DA 0316 | Tps | Sand quartz. | light grey | fine sand to medium sand mod.well sorted | sub-angular | | 0.2 light trace | | |
| 10.0 | 12.0 | DA 0317 | Tps | Sand quartz. | light grey | fine sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0318 | Tps | Sand ferrug. quartz. | medium brown | fine sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0319 | Tps | Sand ferrug. quartz. | medium brown | fine sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0320 | Tps | Sand ferrug. quartz. | medium brown | fine sand to v.crse sand poorly sorted | | | 0.0 | | |
| 18.0 | 20.0 | DA 0321 | Tps | Sand ferrug. quartz. | medium brown | fine sand to v.crse sand poorly sorted | | | 0.0 | | |
| 6.0 | 20.0 | DA 0322 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 21-SEP-89

HOLE NUMBER : PT0381
LOGGED BY : PRD
TOTAL DEPTH : 30.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 462548 NORTHING: 6290839 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ STRENGTH/ TYPE | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | medium brown | silt to medium sand mod.well sorted | | | 0.0 | | |
| 2.0 | 4.0 | | Qpc | Clay sandy | dark brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 4.0 | 6.0 | | Qpc | Clay sandy | dark brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 6.0 | 8.0 | DA 0323 | Tps | Sand clayey | medium brown | silt to coarse sand poorly sorted | sub-rounded | | 0.0 | | |
| 8.0 | 10.0 | DA 0324 | Tps | Sand quartz. | medium brown grey | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0325 | Tps | Sand quartz. | medium brown grey | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0326 | Tps | Sand ferrug. quartz. | medium brown | fine sand to v.crse sand poorly sorted | sub-angular | | 0.2 light trace | | |
| 14.0 | 16.0 | DA 0327 | Tps | Sand quartz. | light grey | fine sand to medium sand mod.well sorted | sub-rounded | | 0.2 light trace | | |
| 16.0 | 18.0 | DA 0328 | Tps | Sand quartz. | light grey | fine sand to medium sand mod.well sorted | sub-rounded | | 0.2 light trace | | |
| 18.0 | 20.0 | DA 0329 | Tps | Sand quartz. | light grey | fine sand to medium sand mod.well sorted | sub-rounded | | 0.2 light trace | | |
| 6.0 | 20.0 | DA 0335 | | Composite Sample | | | | | 0.0 | | |

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.0 | 22.0 | DA 0330 | Tps | Sand<br>quartz. | light grey | v.fine sand to fine sand<br>well sorted | rounded | | 0.5<br>trace | | |
| 22.0 | 24.0 | DA 0331 | Tps | Sand<br>quartz. | light grey | v.fine sand to fine sand<br>well sorted | rounded | | 0.5<br>trace | | |
| 24.0 | 26.0 | DA 0332 | Tps | Sand<br>quartz. | light grey | v.fine sand to fine sand<br>well sorted | rounded | | 0.5<br>trace | | |
| 26.0 | 28.0 | DA 0333 | Tps | Sand<br>quartz. | light yellow grey | v.fine sand to medium sand<br>mod.well sorted | sub-angular | | 0.2<br>light trace | | |
| 28.0 | 30.0 | DA 0334 | Tps | Sand<br>quartz. | light yellow grey | v.fine sand to medium sand<br>mod.well sorted | sub-angular | | 0.2<br>light trace | | |
| 20.0 | 30.0 | DA 0336 | | Composite Sample | | | | | 0.0 | | |

EOH at 30.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 21-SEP-89

HOLE NUMBER : PT0382
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 463507 NORTHING: 6290800 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0382

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand aeolian | medium brown | silt to medium sand mod.well sorted | | | 0.0 | | |
| 2.0 | 4.0 | | Qdw | Sand aeolian | medium brown | silt to medium sand mod.well sorted | | | 0.0 | | |
| 4.0 | 6.0 | | Qpc | Clay sandy | dark brown | clay to coarse sand poorly sorted | | | 0.0 | | |
| 6.0 | 8.0 | DA 0337 | Tps | Sand clayey | medium brown | v.fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 8.0 | 10.0 | DA 0338 | Tps | Sand clayey | light yellow brown | fine sand to medium sand mod.well sorted | sub-rounded | | 0.0 | | |
| 10.0 | 12.0 | DA 0339 | Tps | Sand clayey | light yellow grey | fine sand to medium sand mod.well sorted | sub-rounded | | 0.0 | | |
| 12.0 | 14.0 | DA 0340 | Tps | Sand quartz. gritty | light yellow grey | fine sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0341 | Tps | Sand quartz. gritty | light yellow grey | fine sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0342 | Tps | Sand quartz. | light yellow grey | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0343 | Tps | Sand quartz. | light yellow grey | fine sand to v.crse sand poorly sorted | sub-angular | | 0.2 light trace | | |
| 8.0 | 20.0 | DA 0344 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 21-SEP-89

HOLE NUMBER : PT0383
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 464548 NORTHING: 6290811 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0383

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand aeolian | medium brown | silt to fine sand well sorted | | | 0.0 | | |
| 2.0 | 4.0 | | Qpc | Clay sandy | dark khaki | clay to medium sand poorly sorted | | | 0.0 | | |
| 4.0 | 6.0 | | Qpc | Clay sandy | medium brown | clay to coarse sand poorly sorted | | | 0.0 | | |
| 6.0 | 8.0 | DA 0345 | Tps | Sand silty quartz. | pale yellow tan | medium sand to coarse sand mod.well sorted | sub-rounded | | 0.0 | | |
| 8.0 | 10.0 | DA 0346 | Tps | Sand quartz. | light grey | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0347 | Tps | Sand quartz. | light grey | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0348 | Tps | Sand quartz. | light grey | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0349 | Tps | Sand quartz. | light grey brown | medium sand to v.crse sand poorly sorted | | | 0.0 | | |
| 16.0 | 18.0 | DA 0350 | Tps | Sand quartz. | light grey brown | fine sand to v.crse sand poorly sorted | | | 0.0 | | |
| 18.0 | 20.0 | DA 0351 | Tps | Sand quartz. | light grey brown | fine sand to v.crse sand poorly sorted | | | 0.0 | | |
| 6.0 | 20.0 | DA 0352 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 21-SEP-89

HOLE NUMBER : PT0384
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 465518 NORTHING: 6290823 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand aeolian | medium brown | v.fine sand to medium sand mod.well sorted | | | 0.0 | | |
| 2.0 | 4.0 | | Qpc | Clay sandy | medium brown | clay to coarse sand poorly sorted | | | 0.0 | | |
| 4.0 | 6.0 | | Qpc | Clay sandy | medium brown | clay to coarse sand poorly sorted | | | 0.0 | | |
| 6.0 | 8.0 | DA 0353 | Tps | Sand quartz. | pale yellow grey | fine sand to medium sand mod.well sorted | sub-angular | | 0.0 | | |
| 8.0 | 10.0 | DA 0354 | Tps | Sand quartz. | light grey | fine sand to medium sand mod.well sorted | sub-rounded | | 0.0 | | |
| 10.0 | 12.0 | DA 0355 | Tps | Sand quartz. | light grey | fine sand to medium sand mod.well sorted | sub-rounded | | 0.0 | | |
| 12.0 | 14.0 | DA 0356 | Tps | Sand quartz. | light grey | fine sand to v.crse sand poorly sorted | | | 0.0 | | |
| 14.0 | 16.0 | DA 0357 | Tps | Sand ferrug. quartz. | light yellow grey | medium sand to granule poorly sorted | | | 0.0 | | |
| 16.0 | 18.0 | DA 0358 | Tps | Sand ferrug. quartz. | light yellow grey | medium sand to granule poorly sorted | | | 0.0 | | |
| 18.0 | 20.0 | DA 0359 | Tps | Sand | light yellow grey | fine sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 6.0 | 20.0 | DA 0360 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 21-SEP-89

HOLE NUMBER : PT0385
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 466539 NORTHING: 6290855 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0385

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand aeolian | medium brown | silt to medium sand mod.well sorted | | | 0.0 | | |
| 2.0 | 4.0 | | Qdw | Sand aeolian Clay sandy | medium brown | clay to coarse sand poorly sorted | | | 0.0 | | |
| 4.0 | 6.0 | | Qpc | Clay sandy | dark brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 6.0 | 8.0 | | Qpc | Clay sandy | dark brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 8.0 | 10.0 | DA 0361 | Tps | Sand clayey | medium brown | fine sand to coarse sand mod.well sorted | sub-rounded | | 0.0 | | |
| 10.0 | 12.0 | DA 0362 | Tps | Sand quartz. | pale tan | fine sand to medium sand mod.well sorted | sub-rounded | | 0.0 | | |
| 12.0 | 14.0 | DA 0363 | Tps | Sand quartz. | light yellow grey | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0364 | Tps | Sand quartz. | light yellow grey | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0365 | Tps | Sand quartz. | light yellow grey | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0366 | Tps | Sand quartz. | light grey | medium sand to granule poorly sorted | | | 0.0 | | |
| 10.0 | 20.0 | DA 0367 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30
GRID: AMG ZONE: 54 RELIABILITY: TOPO

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 21-SEP-89

HOLE NUMBER : PT0386
LOGGED BY : PRD
TOTAL DEPTH : 20.0
EASTING: 467529 NORTHING: 6290877 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand aeolian | medium brown | silt to fine sand mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Sand aeolian | medium brown | silt to fine sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | | Qpc | Clay sandy | dark brown | clay to coarse sand poorly sorted | | | 0.0 | | |
| 6.0 | 8.0 | | Qpc | Clay sandy | dark brown | clay to coarse sand poorly sorted | | | 0.0 | | |
| 8.0 | 10.0 | | Qpc | Clay sandy | dark brown | clay to coarse sand poorly sorted | | | 0.0 | | |
| 10.0 | 12.0 | DA 0368 | Tps | Sand quartz. | light grey yellow | fine sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0369 | Tps | Sand quartz. | light grey yellow | fine sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0370 | Tps | Sand quartz. | light grey | medium sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0371 | Tps | Sand quartz. | light grey | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0372 | Tps | Sand quartz. | light grey | medium sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 10.0 | 20.0 | DA 0373 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 22-SEP-89

HOLE NUMBER : PT0387
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 468601 NORTHING: 6290927 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0387

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qpc | Clay sandy | dark brown | clay to coarse sand poorly sorted | | | 0.0 | | |
| 2.0 | 4.0 | DA 0374 | Tps | Sand ferrug. | medium brown | fine sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 4.0 | 6.0 | DA 0375 | Tps | Sand ferrug. quartz. | medium brown | fine sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 6.0 | 8.0 | DA 0376 | Tps | Sand quartz. | light brown grey | fine sand to coarse sand mod.well sorted | sub-rounded | | 0.0 | | |
| 8.0 | 10.0 | DA 0377 | Tps | Sand quartz. | light brown grey | fine sand to coarse sand mod.well sorted | sub-rounded | | 0.0 | | |
| 10.0 | 12.0 | DA 0378 | Tps | Sand quartz. | light grey | fine sand to coarse sand mod.well sorted | sub-angular | | 0.2 light trace | | |
| 12.0 | 14.0 | DA 0379 | Tps | Sand quartz. | light grey | fine sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0380 | Tps | Sand quartz. | light grey | fine sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0381 | Tps | Sand quartz. | light grey | fine sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0382 | Tps | Sand quartz. | light brown grey | medium sand to granule poorly sorted | angular | | 0.0 | | |
| 2.0 | 20.0 | DA 0383 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 22-SEP-89

HOLE NUMBER : PT0388
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 469541 NORTHING: 6290899 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0388

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | medium brown | v.fine sand to coarse sand poorly sorted | | | 0.0 | | |
| 2.0 | 4.0 | DA 0384 | Tps | Sand clayey | medium brown | clay to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 4.0 | 6.0 | DA 0385 | Tps | Sand ferrug. clayey | medium brown | clay to coarse sand poorly sorted | sub-angular | | 0.2 light trace | | |
| 6.0 | 8.0 | DA 0386 | Tps | Sand ferrug. clayey | medium brown | clay to coarse sand poorly sorted | sub-angular | | 0.2 light trace | | |
| 8.0 | 10.0 | DA 0387 | Tps | Sand quartz. | light brown grey | fine sand to v.crse sand poorly sorted | angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0388 | Tps | Sand quartz. | light brown grey | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0389 | Tps | Sand quartz. | light brown grey | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0390 | Tps | Sand quartz. | light grey | v.fine sand to coarse sand poorly sorted | angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0391 | Tps | Sand quartz. | light grey | v.fine sand to coarse sand poorly sorted | angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0392 | Tps | Sand ferrug. quartz. | light brown grey | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 2.0 | 20.0 | DA 0393 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 22-SEP-89

HOLE NUMBER : PT0389
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 470571 NORTHING: 6290870 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0389

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand aeolian | medium brown | silt to fine sand well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Clay sandy | medium brown | clay to medium sand poorly sorted | sub-angular | | 0.2 light trace | | |
| 4.0 | 6.0 | DA 0394 | Tps | Sand ferrug. clayey | medium brown | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 6.0 | 8.0 | DA 0395 | Tps | Sand quartz. | light grey | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 8.0 | 10.0 | DA 0396 | Tps | Sand quartz. | light grey | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0397 | Tps | Sand quartz. | light grey | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0398 | Tps | Sand quartz. gritty | light grey | medium sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0399 | Tps | Sand quartz. gritty | light grey | medium sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0400 | Tps | Sand ferrug. quartz. | medium red brown | fine sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0401 | Tps | Sand ferrug. quartz. | medium red brown | fine sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 4.0 | 20.0 | DA 0402 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 22-SEP-89

HOLE NUMBER : PT0390
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 471601 NORTHING: 6290881 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0390

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | medium brown | v.fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qpc | Clay sandy | medium brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 4.0 | 6.0 | | Qpc | Clay sandy | medium brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 6.0 | 8.0 | | Qpc | Clay | medium brown | clay to coarse sand poorly sorted | | | 0.0 | | |
| 8.0 | 10.0 | DA 0403 | Tps | Sandstone ferrug. Sand ferrug. quartz. | medium brown | Comments: Tps at 7m medium sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0404 | Tps | Sand ferrug. quartz. | medium brown | medium sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0405 | Tps | Sand | medium brown | fine sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0406 | Tps | Sand gritty quartz. | light brown grey | fine sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0407 | Tps | Sand quartz. | light brown | fine sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0408 | Tps | Sand quartz. | light yellow | v.fine sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 8.0 | 20.0 | DA 0409 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 22-SEP-89

HOLE NUMBER : PT0391
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 467731 NORTHING: 6289798 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0391

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | medium brown | silt to medium sand mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | DA 0410 | Tps | Sand ferrug. quartz. | medium brown | fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | DA 0411 | Tps | Sand quartz. | light yellow grey | fine sand to v.crse sand poorly sorted | angular | | 0.0 | | |
| 6.0 | 8.0 | DA 0412 | Tps | Sand quartz. | light yellow grey | fine sand to v.crse sand poorly sorted | angular | | 0.0 | | |
| 8.0 | 10.0 | DA 0413 | Tps | Sand ferrug. quartz. | medium brown grey | fine sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0414 | Tps | Sand quartz. ferrug. | medium brown | fine sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0415 | Tps | Sand quartz. ferrug. | medium brown | fine sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0416 | Tps | Sand ferrug. silty | medium red brown | silt to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0417 | Tps | Sand quartz. | light brown grey | fine sand to v.crse sand poorly sorted | sub-angular | | 0.2 light trace | | |
| 18.0 | 20.0 | DA 0418 | Tps | Sand quartz. | light brown grey | fine sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 4.0 | 20.0 | DA 0419 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 22-SEP-89

HOLE NUMBER : PT0392
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 467815 NORTHING: 6288843 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0392

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | medium brown | silt to fine sand well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Sand | medium brown | silt to fine sand well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | | Qdw | Sand | medium brown | silt to fine sand well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | | Qdw | Sand | medium brown | silt to fine sand well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | | Qpc | Clay sandy | dark brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 10.0 | 12.0 | DA 0420 | Tps | Sand | medium brown | fine sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0421 | Tps | Sand gritty quartz. | medium grey | medium sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0422 | Tps | Sand gritty quartz. | light yellow grey | medium sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0423 | Tps | Sand gritty quartz. | light yellow grey | medium sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0424 | Tps | Sand quartz. | light brown | fine sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 10.0 | 20.0 | DA 0425 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 22-SEP-89

HOLE NUMBER : PT0393
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 467261 NORTHING: 6287880 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0393

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | medium brown | silt to fine sand well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | DA 0426 | Qdw | Sand | medium brown | silt to fine sand well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | DA 0427 | Tps | Sand ferrug. quartz. | medium red brown | silt to medium sand mod.well sorted | sub-rounded | | 0.2 light trace | | |
| 6.0 | 8.0 | | Qdw | Sand clayey | medium brown | clay to medium sand poorly sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | DA 0428 | Tps | Sand ferrug. clayey | medium brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 10.0 | 12.0 | DA 0429 | Tps | Sand quartz. | light brown grey | fine sand to coarse sand poorly sorted | | | 0.0 | | |
| 12.0 | 14.0 | DA 0430 | Tps | Sand quartz. | light brown grey | fine sand to coarse sand poorly sorted | | | 0.0 | | |
| 14.0 | 16.0 | DA 0431 | Tps | Sand quartz. | light grey | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0432 | Tps | Sand quartz. | light grey | fine sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0433 | Tps | Sand ferrug. quartz. | medium red brown | medium sand to v.crse sand poorly sorted | | | 0.0 | | |
| 10.0 | 20.0 | DA 0434 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 22-SEP-89

HOLE NUMBER : PT0394
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 466421 NORTHING: 6287267 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | medium brown | silt to fine sand well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Sand | medium brown | silt to medium sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | | Qdw | Sand | medium brown | silt to medium sand mod.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | | Qpc | Clay sandy | dark brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 8.0 | 10.0 | | Qpc | Clay sandy | dark brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 10.0 | 12.0 | DA 0435 | Tps | Sand ferrug. quartz. | light brown | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0436 | Tps | Sand clayey quartz. | light yellow brown | clay to medium sand poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0437 | Tps | Sand quartz. Clay | light grey | fine sand to medium sand mod.well sorted | | | 0.0 | | |
| 16.0 | 18.0 | DA 0438 | Tps | Sand quartz. Clay | light grey | fine sand to medium sand mod.well sorted | | | 0.0 | | |
| 18.0 | 20.0 | DA 0439 | Tps | Sand ferrug. quartz. | medium brown grey | fine sand to medium sand mod.well sorted | sub-rounded | | 0.2 light trace | | |
| 10.0 | 20.0 | DA 0440 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 22-SEP-89

HOLE NUMBER : PT0395
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 465707 NORTHING: 6286886 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0395

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | medium brown | v.fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qpc | Clay sandy | dark brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 4.0 | 6.0 | | Qpc | Clay sandy | dark brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 6.0 | 8.0 | DA 0441 | Tps | Sand ferrug. | medium brown | medium sand to coarse sand mod.well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | DA 0442 | Tps | Sand quartz. | light yellow grey | fine sand to medium sand mod.well sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0443 | Tps | Sand quartz. | light yellow grey | fine sand to medium sand mod.well sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0444 | Tps | Sand quartz. | light yellow grey | fine sand to medium sand mod.well sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0445 | Tps | Sand quartz. | pale grey tan | medium sand to coarse sand mod.well sorted | sub-rounded | | 0.0 | | |
| 16.0 | 18.0 | DA 0446 | Tps | Sand quartz. | light grey | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0447 | Tps | Sand quartz. | light grey | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 6.0 | 20.0 | DA 0448 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 22-SEP-89

HOLE NUMBER : PT0396
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 465006 NORTHING: 6286159 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | medium red brown | v.fine sand to fine sand well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Sand clayey | medium brown | v.fine sand to medium sand poorly sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | DA 0449 | Tps | Sand ferrug. quartz. | medium red brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 6.0 | 8.0 | DA 0450 | Tps | Sand ferrug. quartz. | medium red brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 8.0 | 10.0 | DA 0451 | Tps | Sand ferrug. quartz. | medium red brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0452 | Tps | Sand ferrug. quartz. | medium brown grey | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0453 | Tps | Sand ferrug. quartz. | medium brown grey | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0454 | Tps | Sand ferrug. quartz. | medium brown grey | medium sand to v.crse sand poorly sorted | sub-rounded | | 0.2 light trace | | |
| 16.0 | 18.0 | DA 0455 | Tps | Sand ferrug. quartz. | medium brown grey | medium sand to v.crse sand poorly sorted | sub-rounded | | 0.2 light trace | | |
| 18.0 | 20.0 | DA 0456 | Tps | Sand quartz. | medium brown | fine sand to granule poorly sorted | sub-angular | | 0.2 light trace | | |
| 4.0 | 20.0 | DA 0457 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 23-SEP-89

HOLE NUMBER : PT0397
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 464333 NORTHING: 6285299 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand<br>Calcrete | medium brown | v.fine sand to medium sand<br>mod.well sorted | | | 0.2<br>light trace | | |
| 2.0 | 4.0 | | Qdw | Sand clayey | pale tan | clay to medium sand<br>poorly sorted | | | 0.0 | | |
| 4.0 | 6.0 | DA 0458 | Qdw | Sand clayey quartz. | medium brown | clay to v.crse sand<br>poorly sorted | sub-angular | | 0.0 | | |
| 6.0 | 8.0 | DA 0459 | Tps | Sand quartz. | light yellow brown | fine sand to v.crse sand<br>poorly sorted | sub-angular | | 0.0 | | |
| 8.0 | 10.0 | DA 0460 | Tps | Sand quartz. | light yellow brown | medium sand to granule<br>poorly sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0461 | Tps | Sand quartz. | light yellow brown | fine sand to v.crse sand<br>poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0462 | Tps | Sand quartz. | light yellow brown | fine sand to coarse sand<br>mod.well sorted | sub-angular | | 0.2<br>light trace | | |
| 14.0 | 16.0 | DA 0463 | Tps | Sand quartz. | light yellow brown | medium sand to coarse sand<br>mod.well sorted | sub-angular | | 0.2<br>light trace | | |
| 16.0 | 18.0 | DA 0464 | Tps | Sand quartz. | light yellow brown | medium sand to coarse sand<br>mod.well sorted | sub-angular | | 0.2<br>light trace | | |
| 18.0 | 20.0 | DA 0465 | Tps | Sand quartz. | light yellow brown | medium sand to granule<br>poorly sorted | sub-angular | | 0.5<br>trace | | |
| 4.0 | 20.0 | DA 0466 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30
CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 23-SEP-89
HOLE NUMBER : PT0398
LOGGED BY : PRD
TOTAL DEPTH : 24.0
GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 473662 NORTHING: 6290842 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | medium brown | silt to medium sand mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Sand | medium brown | silt to medium sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | DA 0467 | Tps | Sand | light red brown | Comments: Tps at 3m medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 6.0 | 8.0 | DA 0468 | Tps | Sand | light red brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 8.0 | 10.0 | DA 0469 | Tps | Sand ferrug. quartz. | medium red brown | medium sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0470 | Tps | Sand ferrug. quartz. | medium red brown | fine sand to v.crse sand poorly sorted | sub-angular | | 0.2 light trace | | |
| 12.0 | 14.0 | DA 0471 | Tps | Sand ferrug. quartz. | medium red brown | fine sand to v.crse sand poorly sorted | sub-angular | | 0.2 light trace | | |
| 14.0 | 16.0 | DA 0472 | Tps | Sand quartz. | light yellow brown | fine sand to coarse sand mod.well sorted | sub-angular | | 0.2 light trace | | |
| 16.0 | 18.0 | DA 0473 | Tps | Sand quartz. | light brown grey | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0474 | Tps | Sand quartz. | light brown grey | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 20.0 | 22.0 | DA 0475 | Tps | Sand quartz. | light yellow grey | fine sand to medium sand mod.well sorted | sub-rounded | | 0.0 | | |

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.0 | 24.0 | DA 0476 | Tps | Sand quartz. | light brown | fine sand to v.crse sand poorly sorted | | | 0.0 | | |
| 4.0 | 24.0 | DA 0477 | | Composite Sample | | | | | 0.0 | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 23-SEP-89

HOLE NUMBER : PT0399
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 474661 NORTHING: 6290803 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | medium brown | silt to fine sand mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Sand | medium brown | silt to fine sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | DA 0478 | Tps | Sand ferrug. | medium red brown | fine sand to coarse sand poorly sorted | sub-angular | | 0.2 light trace | | |
| 6.0 | 8.0 | DA 0479 | Tps | Sand quartz. | pale tan | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 8.0 | 10.0 | DA 0480 | Tps | Sand quartz. | pale tan | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0481 | Tps | Sand ferrug. quartz. | medium yellow brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0482 | Tps | Sand ferrug. quartz. | medium yellow brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0483 | Tps | Sand quartz. | light brown grey | fine sand to coarse sand poorly sorted | sub-angular | | 0.2 light trace | | |
| 16.0 | 18.0 | DA 0484 | Tps | Sand quartz. | light brown grey | fine sand to coarse sand poorly sorted | sub-angular | | 0.5 trace | | |
| 18.0 | 20.0 | DA 0485 | Tps | Sand quartz. | light brown grey | fine sand to coarse sand poorly sorted | sub-angular | | 0.5 trace | | |
| 4.0 | 20.0 | DA 0486 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 23-SEP-89

HOLE NUMBER : PT0400
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 475752 NORTHING: 6290762 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | medium brown | v.fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Sand | medium brown | v.fine sand to medium sand mod.well sorted | | | 0.2 light trace | | |
| | | | | | | Comments: Tps at 3m | | | | | |
| 4.0 | 6.0 | | Qdw | Sand clayey | medium red brown | clay to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 6.0 | 8.0 | DA 0487 | Qdw | Sand clayey | medium red brown | clay to coarse sand poorly sorted | sub-angular | | 0.2 light trace | | |
| 8.0 | 10.0 | DA 0488 | Tps | Sand ferrug. quartz. | medium red brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0489 | Tps | Sand ferrug. quartz. | light yellow brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0490 | Tps | Sand ferrug. quartz. | light brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0491 | Tps | Sand ferrug. quartz. | mottled grey brown | fine sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0492 | Tps | Sand ferrug. quartz. | mottled grey brown | fine sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0493 | Tps | Sand ferrug. quartz. | mottled red brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 6.0 | 20.0 | DA 0494 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30
GRID: AMG ZONE: 54 RELIABILITY: TOPO

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 23-SEP-89

HOLE NUMBER : PT0401
LOGGED BY : PRD
TOTAL DEPTH : 20.0
EASTING: 476760 NORTHING: 6290641 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0401

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ STRENGTH/ TYPE | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand aeolian | medium red brown | silt to fine sand well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | DA 0495 | Qdw | Sand | medium red brown | fine sand to coarse sand poorly sorted | sub-angular | | 0.2 light trace | | |
| 4.0 | 6.0 | DA 0496 | Qdw | Sand | light brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 6.0 | 8.0 | DA 0497 | Tps | Sand quartz. | light yellow brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 8.0 | 10.0 | DA 0498 | Tps | Sand ferrug. quartz. | medium red brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0499 | Tps | Sand ferrug. quartz. | medium red brown | medium sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0500 | Tps | Sand ferrug. quartz. | medium red brown | medium sand to v.crse sand poorly sorted | | | 0.0 | | |
| 14.0 | 16.0 | DA 0501 | Tps | Sand ferrug. quartz. | medium yellow brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.2 light trace | | |
| 16.0 | 18.0 | DA 0502 | Tps | Sand quartz. | light brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.2 light trace | | |
| 18.0 | 20.0 | DA 0503 | Tps | Sand quartz. | light brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.2 light trace | | |
| 4.0 | 20.0 | DA 0504 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 23-SEP-89

HOLE NUMBER : PT0402
LOGGED BY : PRD
TOTAL DEPTH : 24.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 477860 NORTHING: 6290570 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 2 HOLE NUMBER : PT0402

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand aeolian | medium red brown | silt to fine sand well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Sand | medium red brown | silt to medium sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | DA 0505 | Tps | Sand ferrug. | medium red brown | v.fine sand to medium sand mod.well sorted | sub-angular | | 0.2 light trace | | |
| 6.0 | 8.0 | DA 0506 | Tps | Sand ferrug. quartz. | medium red brown | fine sand to coarse sand poorly sorted | sub-angular | | 0.2 light trace | | |
| 8.0 | 10.0 | DA 0507 | Tps | Sand ferrug. quartz. | medium red brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0508 | Tps | Sand quartz. | medium tan | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0509 | Tps | Sand quartz. | mottled brown grey | fine sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0510 | Tps | Sand quartz. | mottled brown grey | fine sand to granule poorly sorted | sub-angular | | 0.2 light trace | | |
| 16.0 | 18.0 | DA 0511 | Tps | Sand quartz. | mottled brown grey | fine sand to granule poorly sorted | sub-angular | | 0.2 light trace | | |
| 18.0 | 20.0 | DA 0512 | Tps | Sand quartz. | light brown | fine sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 20.0 | 22.0 | DA 0513 | Tps | Sand quartz. | light brown | fine sand to v.crse sand poorly sorted | sub-angular | | 0.2 light trace | | |

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.0 | 24.0 | DA 0514 | Tps | Sand gritty quartz. | medium red brown | medium sand to granule poorly sorted | sub-angular | | 0.2 light trace | | |
| 4.0 | 24.0 | DA 0515 | | Composite Sample | | | | | 0.0 | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 23-SEP-89

HOLE NUMBER : PT0403
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 478889 NORTHING: 6290510 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0403

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | medium red brown | silt to fine sand mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Sand | medium red brown | silt to fine sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | | Qdw | Sand<br>Calcrete | light brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | DA 0516 | Tps | Sand ferrug. quartz. | medium red brown | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 8.0 | 10.0 | DA 0517 | Tps | Sand quartz. | pale tan | medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0518 | Tps | Sand quartz. | mottled red brown | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0519 | Tps | Sand quartz. | mottled red brown | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0520 | Tps | Sand quartz. | medium brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0521 | Tps | Sand quartz. | medium brown | medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0522 | Tps | Sand ferrug. quartz. | patchy orange brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 6.0 | 20.0 | DA 0523 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 23-SEP-89

HOLE NUMBER : PT0404
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 479898 NORTHING: 6290409 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand aeolian | medium red brown | silt to fine sand mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Sand aeolian | medium red brown | silt to fine sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | DA 0524 | Tps | Sand ferrug. quartz. | medium brown | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 6.0 | 8.0 | DA 0525 | Tps | Sand ferrug. quartz. | medium brown | fine sand to coarse sand poorly sorted | sub-angular | | 0.2 light trace | | |
| 8.0 | 10.0 | DA 0526 | Tps | Sand quartz. | medium brown | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0527 | Tps | Sand quartz. | medium brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0528 | Tps | Sand quartz. | pale tan | fine sand to coarse sand poorly sorted | sub-angular | | 0.2 light trace | | |
| 14.0 | 16.0 | DA 0529 | Tps | Sand quartz. | pale tan | fine sand to coarse sand poorly sorted | sub-angular | | 0.2 light trace | | |
| 16.0 | 18.0 | DA 0530 | Tps | Sand quartz. | light yellow brown | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0531 | Tps | Sand gritty quartz. | light yellow brown | medium sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 20.0 | DA 0532 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 23-SEP-89

HOLE NUMBER : PT0405
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 480896 NORTHING: 6290289 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0405

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | medium brown | silt to fine sand well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Sand | medium brown | silt to fine sand well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | DA 0533 | Tps | Sand ferrug. quartz. | pale tan | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 6.0 | 8.0 | DA 0534 | Tps | Sand ferrug. quartz. | pale tan | medium sand to v.crse sand poorly sorted | sub-angular | | 0.2 light trace | | |
| 8.0 | 10.0 | DA 0535 | Tps | Clay sandy | light brown | clay to coarse sand poorly sorted | sub-angular | | 0.2 light trace | | |
| 10.0 | 12.0 | DA 0536 | Tps | Sand clayey | medium brown | clay to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0537 | Tps | Sand clayey | medium brown | clay to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0538 | Tps | Sand calcrt. | light brown grey | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0539 | Tps | Sand gritty quartz. | light yellow brown | medium sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0540 | Tps | Sand gritty quartz. | light yellow brown | medium sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 4.0 | 20.0 | DA 0541 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 23-SEP-89

HOLE NUMBER : PT0406
LOGGED BY : PRD
TOTAL DEPTH : 30.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 477678 NORTHING: 6289468 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | medium brown | silt to medium sand mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Sand | medium brown | silt to medium sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | DA 0542 | Tps | Sand ferrug. quartz. | medium red brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 6.0 | 8.0 | DA 0543 | Tps | Sand gritty quartz. | medium brown | fine sand to granule poorly sorted | sub-rounded | | 0.2 light trace | | |
| 8.0 | 10.0 | DA 0544 | Tps | Sand quartz. | medium brown | fine sand to v.crse sand poorly sorted | sub-angular | | 0.2 light trace | | |
| 10.0 | 12.0 | DA 0545 | Tps | Sand quartz. | medium yellow brown | fine sand to coarse sand poorly sorted | sub-angular | | 0.2 light trace | | |
| 12.0 | 14.0 | DA 0546 | Tps | Sand quartz. | medium yellow brown | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0547 | Tps | Sand quartz. | mottled grey brown | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0548 | Tps | Sand quartz. | light grey | fine sand to medium sand mod.well sorted | sub-rounded | | 0.2 light trace | | |
| 18.0 | 20.0 | DA 0549 | Tps | Sand quartz. | light grey | fine sand to medium sand mod.well sorted | sub-rounded | | 0.2 light trace | | |
| 4.0 | 20.0 | DA 0555 | | Composite Sample | | | | | 0.0 | | |

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.0 | 22.0 | DA 0550 | Tps | Sand quartz. | light grey | fine sand to medium sand mod.Well sorted | sub-rounded | | 0.2 light trace | | |
| 22.0 | 24.0 | DA 0551 | Tps | Sand quartz. | light grey | fine sand to medium sand mod.Well sorted | sub-rounded | | 1.0 Good trace | | |
| 24.0 | 26.0 | DA 0552 | Tps | Sand quartz. | light grey | fine sand to medium sand mod.Well sorted | sub-rounded | | 1.0 Good trace | | |
| 26.0 | 28.0 | DA 0553 | Tps | Sand quartz. | pale tan | fine sand well sorted | sub-rounded | | 0.5 trace | | |
| 28.0 | 30.0 | DA 0554 | Tps | Sand quartz. | pale tan | fine sand well sorted | sub-rounded | | 1.0 Good trace | | |
| 20.0 | 30.0 | DA 0556 | | Composite Sample | | | | | 0.0 | | |

EOH at 30.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 23-SEP-89

HOLE NUMBER : PT0407
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 477658 NORTHING: 6288454 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | medium brown | silt to medium sand mod.well sorted | sub-angular | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Clay sandy | medium brown | silt to medium sand mod.well sorted | sub-angular | | 0.2 light trace | | |
| 4.0 | 6.0 | DA 0557 | Qdw | Clay sandy | medium brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 6.0 | 8.0 | DA 0558 | Tps | Sand silty quartz. | medium brown | silt to coarse sand poorly sorted | sub-angular | | 0.2 light trace | | |
| 8.0 | 10.0 | DA 0559 | Tps | Sand quartz. | medium brown | fine sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0560 | Tps | Sand quartz. | mottled brown grey | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0561 | Tps | Sand quartz. | mottled brown grey | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0562 | Tps | Sand quartz. | mottled brown grey | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0563 | Tps | Sand gritty ferrug. | medium red brown | medium sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0564 | Tps | Sand quartz. | light brown | fine sand to v.crse sand poorly sorted | sub-angular | | 0.2 light trace | | |
| 4.0 | 20.0 | DA 0565 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 23-SEP-89

HOLE NUMBER : PT0408
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 477518 NORTHING: 6287453 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0408

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand silty | medium brown | silt to medium sand mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Sand silty | medium brown | silt to medium sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | | Qdw | Clay sandy | medium brown | clay to coarse sand poorly sorted | | | 0.0 | | |
| 6.0 | 8.0 | | Tps | Sand ferrug. | | fine sand to v.crse sand poorly sorted | | | 0.0 | | |
| 8.0 | 10.0 | DA 0567 | Tps | Sand | medium brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0568 | Tps | Sand ferrug. quartz. | medium red brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0569 | Tps | Sand gritty ferrug. | medium red brown | medium sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0570 | Tps | Sand gritty ferrug. | medium red brown | fine sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0571 | Tps | Sand ferrug. gritty | dark brown | fine sand to granule poorly sorted | sub-angular | | 0.2 light trace | | |
| 18.0 | 20.0 | DA 0572 | Tps | Sand ferrug. gritty | dark brown | fine sand to granule poorly sorted | sub-rounded | | 0.0 | | |
| 6.0 | 20.0 | DA 0573 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 24-SEP-89

HOLE NUMBER : PT0409
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 477457 NORTHING: 6286319 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0409

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | light brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Sand | light red brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | | Qdw | Sand | light red brown | silt to coarse sand poorly sorted | | | 0.0 | | |
| 6.0 | 8.0 | | Qdw | Clay sandy | light red brown | clay to coarse sand poorly sorted | | | 0.0 | | |
| 8.0 | 10.0 | | Qdw | Clay sandy | light red brown | clay to coarse sand poorly sorted | | | 0.0 | | |
| 10.0 | 12.0 | DA 0574 | Tps | Sand clayey | light red brown | clay to coarse sand poorly sorted | | | 0.0 | | |
| 12.0 | 14.0 | DA 0575 | Tps | Sand clayey | medium grey | clay to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0576 | Tps | Sand clayey | medium grey | clay to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0577 | Tps | Sand clayey ferrug. | medium red brown | clay to v.crse sand poorly sorted | | | 0.0 | | |
| 18.0 | 20.0 | DA 0578 | Tps | Sand clayey ferrug. | medium red brown | clay to v.crse sand poorly sorted | | | 0.0 | | |
| 12.0 | 20.0 | DA 0579 | | Composite Sample | | | | | | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30
CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 24-SEP-89
HOLE NUMBER : PT0410
LOGGED BY : PRD
TOTAL DEPTH : 24.0
GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 477346 NORTHING: 6285256 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | medium red brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Sand | medium red brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | | Qdw | Sand | medium red brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | | Qdw | Sand | medium red brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | | Qdw | Clay sandy | medium brown | silt to medium sand poorly sorted | | | 0.0 | | |
| 10.0 | 12.0 | DA 0580 | Tps | Sand clayey | medium brown | clay to coarse sand poorly sorted | | | 0.0 | | |
| 12.0 | 14.0 | DA 0581 | Tps | Sand quartz. | light grey | fine sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0582 | Tps | Sand quartz. gritty | light grey | medium sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0583 | Tps | Sand quartz. gritty | light grey | medium sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0584 | Tps | Sand quartz. | light grey | fine sand to medium sand mod.well sorted | sub-rounded | | 0.5 trace | | |
| 20.0 | 22.0 | DA 0585 | Tps | Sand quartz. ferrug. | medium brown grey | fine sand to coarse sand poorly sorted | sub-angular | | 0.2 light trace | | |

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.0 | 24.0 | DA 0586 | Tps | Sand quartz. ferrug. | medium brown | fine sand to granule poorly sorted | sub-angular | | 0.2 light trace | | |
| 12.0 | 24.0 | DA 0587 | | Composite Sample | | | | | | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 24-SEP-89

HOLE NUMBER : PT0411
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 477326 NORTHING: 6284212 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0411

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | medium red brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Clay sandy | medium red brown | clay to coarse sand poorly sorted | | | 0.0 | | |
| 4.0 | 6.0 | | Qdw | Clay sandy ferrug. | medium red brown | clay to coarse sand poorly sorted | | | 0.0 | | |
| 6.0 | 8.0 | DA 0588 | Tps | Sand quartz. | light yellow brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 8.0 | 10.0 | DA 0589 | Tps | Sand quartz. gritty | light yellow grey | fine sand to granule v.poorly sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0590 | Tps | Sand quartz. gritty | pale orange | fine sand to granule v.poorly sorted | angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0591 | Tps | Sand quartz. | light brown | fine sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0592 | Tps | Sand quartz. | light brown | fine sand to medium sand mod.well sorted | interm.round. | | 0.5 trace | | |
| 16.0 | 18.0 | DA 0593 | Tps | Sand quartz. gritty | light brown | fine sand to granule v.poorly sorted | angular | | 0.2 light trace | | |
| 18.0 | 20.0 | DA 0594 | Tps | Sand quartz. | light brown | fine sand to v.crse sand poorly sorted | angular | | 0.2 light trace | | |
| 6.0 | 20.0 | DA 0595 | | Composite Sample | | | | | | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 24-SEP-89

HOLE NUMBER : PT0412
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 477361 NORTHING: 6282275 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0412

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | pale orange | silt to medium sand f.poorly sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Clay sandy | medium brown | clay to coarse sand v.poorly sorted | | | 0.0 | | |
| 4.0 | 6.0 | DA 0596 | Tps | Sand quartz. | medium brown | v.fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 6.0 | 8.0 | DA 0597 | Tps | Sand quartz. | light tan | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 8.0 | 10.0 | DA 0598 | Tps | Sand quartz. | light tan | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0599 | Tps | Sand quartz. | pale tan | fine sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0600 | Tps | Sand quartz. | pale tan | fine sand to medium sand mod.well sorted | sub-rounded | | 0.2 light trace | | |
| 14.0 | 16.0 | DA 0601 | Tps | Sand quartz. ferrug. | medium red brown | fine sand to v.crse sand poorly sorted | sub-angular | | 0.2 light trace | | |
| 16.0 | 18.0 | DA 0602 | Tps | Sand quartz. ferrug. | medium red brown | fine sand to v.crse sand poorly sorted | sub-angular | | 0.2 light trace | | |
| 18.0 | 20.0 | DA 0603 | Tps | Sand quartz. gritty | patchy grey brown | fine sand to granule v.poorly sorted | angular | | 0.2 light trace | | |
| 6.0 | 20.0 | DA 0604 | | Composite Sample | | | | | | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30
CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 24-SEP-89
HOLE NUMBER : PT0413
LOGGED BY : PRD
TOTAL DEPTH : 20.0
GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 478119 NORTHING: 6281784 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0413

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | light brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Sand | medium brown | silt to medium sand poorly sorted | | | 0.0 | | |
| 4.0 | 6.0 | DA 0605 | Tps | Sand quartz. | pale brown | fine sand to coarse sand f.poorly sorted | sub-angular | | 0.0 | | |
| 6.0 | 8.0 | DA 0606 | Tps | Sand quartz. | pale yellow brown | fine sand to coarse sand f.poorly sorted | sub-angular | | 0.0 | | |
| 8.0 | 10.0 | DA 0607 | Tps | Sand quartz. | pale orange | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0608 | Tps | Sand quartz. gritty | pale orange | medium sand to granule poorly sorted | angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0609 | Tps | Sand quartz. | pale tan | medium sand to v.crse sand mod.well sorted | interm.round. | | 0.0 | | |
| 14.0 | 16.0 | DA 0610 | Tps | Sand quartz. Sandstone | pale orange | medium sand to v.crse sand mod.well sorted | interm.round. | | 0.2 light trace | | |
| 16.0 | 18.0 | DA 0611 | Tps | Sand quartz. | pale tan | medium sand to v.crse sand mod.well sorted | interm.round. | | 0.0 | | |
| 18.0 | 20.0 | DA 0612 | Tps | Sand quartz. gritty | pale orange | medium sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 4.0 | 20.0 | DA 0613 | | Composite Sample | | | | | | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 24-SEP-89

HOLE NUMBER : PT0414
LOGGED BY : PRD
TOTAL DEPTH : 24.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 479126 NORTHING: 6281075 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | pale brown | silt to coarse sand poorly sorted | | | 0.0 | | |
| 2.0 | 4.0 | | Qdw | Sand | pale brown | silt to coarse sand poorly sorted | | | 0.0 | | |
| 4.0 | 6.0 | | Qdw | Clay sandy | dark brown | clay to coarse sand v.poorly sorted | | | 0.0 | | |
| 6.0 | 8.0 | | Qdw | Clay sandy | dark brown | clay to coarse sand v.poorly sorted | | | 0.0 | | |
| 8.0 | 10.0 | DA 0614 | Tps | Sand quartz. gritty | medium red brown | medium sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0615 | Tps | Sand quartz. gritty | pale orange | medium sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0616 | Tps | Sand quartz. gritty | pale orange | medium sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0617 | Tps | Sand quartz. | light brown grey | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0618 | Tps | Sand quartz. gritty | light grey brown | medium sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0619 | Tps | Sand quartz. | light grey brown | fine sand to granule f.poorly sorted | sub-angular | | 0.2 light trace | | |
| 20.0 | 22.0 | DA 0620 | Tps | Sand quartz. | light grey | fine sand to medium sand mod.well sorted | interm.round. | | 0.2 light trace | | |

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.0 | 24.0 | DA 0621 | Tps | Sand quartz. | light grey | fine sand to v.crse sand poorly sorted | sub-angular | | 0.5 trace | | |
| 8.0 | 24.0 | DA 0622 | | Composite Sample | | | | | | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 24-SEP-89

HOLE NUMBER : PT0415
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 479984 NORTHING: 6280481 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0415

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | DA 000 | Qdw | Sand | pale brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Clay sandy | light brown | clay to coarse sand v.poorly sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | | Qdw | Clay sandy | medium red brown | v.fine sand to medium sand poorly sorted | | | 0.0 | | |
| 6.0 | 8.0 | DA 0623 | Tps | Clay sandy | medium brown | fine sand to coarse sand poorly sorted | | | 0.0 | | |
| 8.0 | 10.0 | DA 0624 | Tps | Sand quartz. gritty | light tan | medium sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0625 | Tps | Sand quartz. gritty | light tan | medium sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0626 | Tps | Sand quartz. ferrug. | medium red brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0627 | Tps | Sand quartz. gritty | patchy grey brown | coarse sand to granule poorly sorted | angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0628 | Tps | Sand quartz. gritty | medium khaki | fine sand to v.crse sand poorly sorted | sub-angular | | 0.2 light trace | | |
| 18.0 | 20.0 | DA 0629 | Tps | Sand quartz. gritty | light grey brown | fine sand to granule poorly sorted | sub-angular | | 0.2 light trace | | |
| 6.0 | 20.0 | DA 0630 | | Composite Sample | | | | | | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30
CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 24-SEP-89
HOLE NUMBER : PT0416
LOGGED BY : PRD
TOTAL DEPTH : 20.0
GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 480505 NORTHING: 6279700 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0416

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | light brown | v.fine sand to coarse sand poorly sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Sand | light brown | v.fine sand to coarse sand poorly sorted | | | 0.0 | | |
| 4.0 | 6.0 | | Qdw | Sand | light brown | fine sand to medium sand mod.well sorted | | | 0.0 | | |
| 6.0 | 8.0 | DA 0631 | Tps | Sand quartz. | light yellow brown | fine sand to medium sand mod.well sorted | sub-angular | | 0.0 | | |
| 8.0 | 10.0 | DA 0632 | Tps | Sand quartz. | light yellow brown | fine sand to medium sand mod.well sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0633 | Tps | Sand quartz. | pale orange | fine sand to medium sand mod.well sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0634 | Tps | Sand quartz. | pale orange | medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0635 | Tps | Sand quartz. | light grey | medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0636 | Tps | Sand quartz. | medium red grey | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0637 | Tps | Sand quartz. | medium red grey | coarse sand to granule poorly sorted | angular | | 0.0 | | |
| 4.0 | 20.0 | DA 0638 | | Composite Sample | | | | | | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 24-SEP-89

HOLE NUMBER : PT0417
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 480563 NORTHING: 6278493 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0417

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | light brown | silt to coarse sand poorly sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | DA 0639 | Tps | Sand | medium brown | fine sand to coarse sand poorly sorted | | | 0.0 | | |
| 4.0 | 6.0 | DA 0640 | Tps | Sand quartz. | light yellow grey | fine sand to medium sand mod.well sorted | interm.round. | | 0.0 | | |
| 6.0 | 8.0 | DA 0641 | Tps | Sand quartz. | pale orange | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 8.0 | 10.0 | DA 0642 | Tps | Sand quartz. ferrug. | medium red brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0643 | Tps | Sand ferrug. gritty | medium red brown | medium sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0644 | Tps | Sand quartz. ferrug. | medium red brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.2 light trace | | |
| 14.0 | 16.0 | DA 0645 | Tps | Sand quartz. gritty | medium orange grey | coarse sand to granule poorly sorted Comments: fine grained matrix | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0646 | Tps | Sand quartz. gritty | medium orange | coarse sand to granule poorly sorted Comments: fine grained matrix | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0647 | Tps | Sand quartz. gritty | light yellow brown | coarse sand to granule poorly sorted Comments: fine grained matrix | interm.round. | | 0.0 | | |
| 4.0 | 20.0 | DA 0648 | | Composite Sample | | | | | | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 24-SEP-89

HOLE NUMBER : PT0418
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 480543 NORTHING: 6277408 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0418

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | medium brown | silt to coarse sand poorly sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Sand | medium brown | silt to coarse sand poorly sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | DA 0649 | Qdw | Clay sandy | light grey | clay to coarse sand poorly sorted | | | 0.0 | | |
| 6.0 | 8.0 | DA 0650 | Tps | Sand ferrug. clayey | light red grey | clay to coarse sand poorly sorted | | | 0.0 | | |
| 8.0 | 10.0 | DA 0651 | Tps | Sand quartz. | light grey | fine sand to medium sand mod.well sorted | sub-angular Comments: fine grained matrix | | 0.0 | | |
| 10.0 | 12.0 | DA 0652 | Tps | Sand quartz. | light yellow grey | fine sand to medium sand mod.well sorted | sub-angular Comments: fine grained matrix | | 0.0 | | |
| 12.0 | 14.0 | DA 0653 | Tps | Sand quartz. | light yellow grey | fine sand to medium sand mod.well sorted | sub-angular Comments: fine grained matrix | | 0.0 | | |
| 14.0 | 16.0 | DA 0654 | Tps | Sand quartz. | light red grey | fine sand to medium sand mod.well sorted | sub-angular Comments: fine grained matrix | | 0.0 | | |
| 16.0 | 18.0 | DA 0655 | Tps | Sand quartz. | light grey | fine sand to medium sand mod.well sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0656 | Tps | Sand ferrug. quartz. | light yellow brown | fine sand to medium sand mod.well sorted | sub-angular | | 0.0 | | |
| 8.0 | 20.0 | DA 0657 | | Composite Sample | | | | | | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 24-SEP-89

HOLE NUMBER : PT0419
LOGGED BY : PRD
TOTAL DEPTH : 9.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 481169 NORTHING: 6276291 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0419

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | light brown | silt to coarse sand poorly sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Sand | medium red brown | silt to coarse sand poorly sorted | | | 0.0 | | |
| 4.0 | 6.0 | | Qdw | Sand clayey | medium red brown | clay to coarse sand poorly sorted | | | 0.0 | | |
| 6.0 | 8.0 | | Qpc | Clay sandy | light grey | clay to medium sand poorly sorted | | | 0.0 | | |
| 8.0 | 9.0 | | Qpc | Clay sandy | light grey | clay to fine sand poorly sorted | | | 0.0 | | |

EOH at 9.0 m

Comments: rig breakdown - hole abandoned

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 26-SEP-89

HOLE NUMBER : PT0420
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 472064 NORTHING: 6289686 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ STRENGTH / TYPE | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | light brown | silt to medium sand poorly sorted | sub-angular | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Sand | light brown | silt to medium sand poorly sorted | sub-angular | | 0.2 light trace | | |
| 4.0 | 6.0 | | Qdw | Sand | medium red brown | silt to fine sand mod.well sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | | Qdw | Sand | medium red brown | silt to fine sand mod.well sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | | Qdw | Clay sandy | medium red brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 10.0 | 12.0 | | Qdw | Clay sandy | light brown grey | clay to medium sand poorly sorted | | | 0.0 | | |
| 12.0 | 14.0 | | Qdw | Clay sandy | light grey | clay to medium sand poorly sorted | | firm | 0.0 | | |
| | | | | | | Comments: UNSURE Ofine STRATIG | | | | | |
| 14.0 | 16.0 | DA 0658 | Tps | Sand quartz. | light yellow brown | fine sand to medium sand mod.well sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0659 | Tps | Sand quartz. | light grey | fine sand to coarse sand poorly sorted | angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0660 | Tps | Sand quartz. | light grey | fine sand to coarse sand poorly sorted | angular | | 0.0 | | |
| 14.0 | 20.0 | DA 0661 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 26-SEP-89

HOLE NUMBER : PT0421
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 472117 NORTHING: 6288772 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | medium red brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Sand | medium red brown | silt to medium sand poorly sorted | angular | | 0.2 light trace | | |
| 4.0 | 6.0 | | Qdw | Clay sandy | medium red brown | clay to coarse sand poorly sorted | angular | | 0.0 | | |
| 6.0 | 8.0 | DA 0662 | Tps | Sand quartz. | light yellow brown | fine sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 8.0 | 10.0 | DA 0663 | Tps | Sand quartz. | medium orange brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0664 | Tps | Sand quartz. | medium orange brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0665 | Tps | Sand quartz. | medium orange brown | medium sand to coarse sand mod.well sorted | sub-angular | | 0.2 light trace | | |
| 14.0 | 16.0 | DA 0666 | Tps | Sand quartz. | light orange grey | fine sand to v.crse sand poorly sorted | angular | | 0.2 light trace | | |
| 16.0 | 18.0 | DA 0667 | Tps | Sand quartz. | light orange grey | medium sand to v.crse sand poorly sorted | sub-angular | | 0.5 trace | | |
| 18.0 | 20.0 | DA 0668 | Tps | Sand quartz. | light orange grey | medium sand to v.crse sand poorly sorted | sub-angular | | 0.2 light trace | | |
| 6.0 | 20.0 | DA 0669 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 26-SEP-89

HOLE NUMBER : PT0422
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 472158 NORTHING: 6287707 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | light brown | silt to medium sand poorly sorted | sub-angular | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Sand | medium red brown | silt to medium sand poorly sorted | sub-angular | | 0.2 light trace | | |
| 4.0 | 6.0 | | Tps | Sand quartz. clayey | medium yellow brown | medium sand to v.crse sand poorly sorted | angular | | 0.0 | | |
| 6.0 | 8.0 | DA 0670 | Tps | Sand quartz. clayey | medium yellow brown | coarse sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 8.0 | 10.0 | DA 0671 | Tps | Sand gritty quartz. | medium grey brown | medium sand to granule poorly sorted Comments: CLAYEY MATRIX | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0672 | Tps | Sand quartz. | medium grey brown | medium sand to v.crse sand poorly sorted Comments: CLAYEY MATRIX | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0673 | Tps | Sand gritty quartz. | medium grey brown | medium sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0674 | Tps | Sand quartz. | light yellow grey | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0675 | Tps | Sand quartz. | light yellow grey | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0676 | | Sand quartz. | medium orange yellow | fine sand to v.crse sand poorly sorted | sub-angular | | 0.2 light trace | | |
| 6.0 | 20.0 | DA 0677 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 26-SEP-89

HOLE NUMBER : PT0423
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 472200 NORTHING: 6286712 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0423

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | medium red brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Sand | medium red brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | | Qdw | Clay sandy | medium red brown | clay to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 6.0 | 8.0 | | Qdw | Clay sandy | medium red brown | clay to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 8.0 | 10.0 | DA 0678 | Tps | Sand ferrug. | medium red brown | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0679 | Tps | Sand quartz. | light yellow brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0680 | Tps | Sand gritty quartz. | light orange tan | coarse sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0681 | Tps | Sand gritty quartz. | light orange tan | coarse sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0682 | Tps | Sand quartz. | medium orange brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0683 | Tps | Sand ferrug. quartz. | medium red brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 8.0 | 20.0 | DA 0684 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 26-SEP-89

HOLE NUMBER : PT0424
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 472253 NORTHING: 6285758 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0424

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | medium brown | silt to coarse sand poorly sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Clay sandy | light khaki | clay to medium sand poorly sorted | | | 0.0 | | |
| 4.0 | 6.0 | DA 0685 | Tps | Sand quartz. | light orange grey | medium sand to coarse sand mod.well sorted | sub-angular | weakly consol | 0.2 light trace | | |
| 6.0 | 8.0 | DA 0686 | Tps | Sand quartz. | light yellow grey | medium sand to coarse sand mod.well sorted | sub-rounded | weakly consol Ferruginous | 0.0 | | |
| 8.0 | 10.0 | DA 0687 | Tps | Sand quartz. | medium orange brown | medium sand to coarse sand mod.well sorted | sub-rounded | weakly consol Ferruginous | 0.0 | | |
| 10.0 | 12.0 | DA 0688 | Tps | Sand quartz. | light brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0689 | Tps | Pebbly sandstone conglom | light brown tan | v.crse sand to granule poorly sorted | sub-rounded | | 0.0 | | |
| 14.0 | 16.0 | DA 0690 | Tps | Sand gritty quartz. | medium orange brown | Comments: OCCASIONAL PEBBLES to 1 CM medium sand to granule poorly sorted | sub-rounded | | 0.0 | | |
| 16.0 | 18.0 | DA 0691 | Tps | Sand quartz. | medium orange brown | medium sand to coarse sand mod.well sorted | sub-rounded | | 0.0 | | |
| 18.0 | 20.0 | DA 0692 | Tps | Sand quartz. | light yellow tan | fine sand to medium sand mod.well sorted | interm.round. | | 0.0 | | |
| 6.0 | 20.0 | DA 0693 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 26-SEP-89

HOLE NUMBER : PT0425
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 472255 NORTHING: 6284795 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0425

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand silty | medium brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Clay ferrug. sandy | medium brown | clay to medium sand poorly sorted | | firm | 0.0 | | |
| 4.0 | 6.0 | | Qdw | Clay sandy | medium brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 6.0 | 8.0 | DA 0694 | Tps | Sand | light orange brown | medium sand to v.crse sand poorly sorted | | | 0.0 | | |
| 8.0 | 10.0 | DA 0695 | Tps | Sand quartz. | medium red brown | coarse sand to v.crse sand mod.well sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0696 | Tps | Sand gritty quartz. | light grey | coarse sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0697 | Tps | Sand gritty quartz. | light brown grey | coarse sand to granule poorly sorted | | | 0.0 | | |
| 14.0 | 16.0 | DA 0698 | Tps | Sand quartz. | light orange brown | coarse sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0699 | Tps | Sand quartz. | light orange brown | medium sand to coarse sand mod.well sorted | sub-angular | | 0.2 light trace | | |
| 18.0 | 20.0 | DA 0700 | Tps | Sand quartz. | light orange brown | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 6.0 | 20.0 | DA 0701 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 26-SEP-89

HOLE NUMBER : PT0426
LOGGED BY : PRD
TOTAL DEPTH : 24.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 472315 NORTHING: 6282613 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | light red brown | silt to medium sand mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Clay sandy | medium red brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 4.0 | 6.0 | | Qdw | Clay sandy | medium red brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 6.0 | 8.0 | | Qdw | Clay sandy | medium brown | clay to medium sand poorly sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | DA 0702 | Tps | Sand clayey | light orange brown | clay to coarse sand poorly sorted | | | 0.0 | | |
| 10.0 | 12.0 | DA 0703 | Tps | Sand quartz. | light orange brown | medium sand to v.crse sand poorly sorted | sub-rounded | | 0.0 | | |
| 12.0 | 14.0 | DA 0704 | Tps | Sand gritty quartz. | light orange grey | coarse sand to granule poorly sorted | sub-rounded | | 0.0 | | |
| 14.0 | 16.0 | DA 0705 | Tps | Sand quartz. | light orange grey | fine sand to medium sand mod.well sorted<br>Comments: OCCASIONAL LARGER GRAINS | sub-rounded | | 0.5 trace | | |
| 16.0 | 18.0 | DA 0706 | Tps | Sand quartz. | light orange grey | fine sand to medium sand mod.well sorted | sub-rounded | | 1.0 Good trace | | |
| 18.0 | 20.0 | DA 0707 | Tps | Sand quartz. | light brown grey | fine sand to medium sand mod.well sorted<br>Comments: OCCASIONAL LARGER GRAINS | sub-rounded | | 1.0 Good trace | | |
| 10.0 | 20.0 | DA 0710 | | Composite Sample | | | | | 0.0 | | |

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.0 | 22.0 | DA 0708 | Tps | Sand quartz. | light orange brown | fine sand to medium sand mod.well sorted | sub-rounded | | 0.5 trace | | |
| 22.0 | 24.0 | DA 0709 | Tps | Sand quartz. | light orange brown | fine sand to medium sand mod.well sorted | sub-rounded | | 0.2 light trace | | |
| 20.0 | 24.0 | DA 0711 | | Composite Sample | | | | | 0.0 | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 26-SEP-89

HOLE NUMBER : PT0427
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 472288 NORTHING: 6281691 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0427

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand silty | medium red brown | silt to medium sand mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Sand silty | medium red brown | silt to medium sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | | Qdw | Clay sandy | medium brown | clay to coarse sand poorly sorted | | | 0.0 | | |
| 6.0 | 8.0 | | Qdw | Clay sandy | medium brown | clay to coarse sand poorly sorted | | | 0.0 | | |
| 8.0 | 10.0 | | Qdw | Clay sandy | medium brown | clay to coarse sand poorly sorted | | | 0.0 | | |
| 10.0 | 12.0 | DA 0712 | Tps | Sand quartz. | light orange brown | medium sand to v.crse sand poorly sorted | angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0713 | Tps | Sand quartz. | medium orange brown | medium sand to coarse sand mod.well sorted | sub-angular | | 0.2 light trace | | |
| 14.0 | 16.0 | DA 0714 | Tps | Sand quartz. | light orange grey | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0715 | Tps | Sand gritty ferrug. | medium red brown | medium sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0716 | Tps | Sand ferrug. quartz. | medium red brown | medium sand to granule poorly sorted | sub-angular | | 0.2 light trace | | |
| 10.0 | 20.0 | DA 0717 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30
CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 26-SEP-89
HOLE NUMBER : PT0428
LOGGED BY : PRD
TOTAL DEPTH : 20.0
GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 472268 NORTHING: 6280667 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand silty | medium red brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Sand silty | medium red brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | | Qdw | Sand ferrug. | medium red brown | silt to v.crse sand poorly sorted | | | 0.0 | | |
| 6.0 | 8.0 | | Qdw | Clay ferrug. sandy | dark red brown | clay to coarse sand poorly sorted | | | 0.0 | | |
| 8.0 | 10.0 | DA 0718 | Tps | Sand ferrug. clayey | medium orange brown | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0719 | Tps | Sand gritty quartz. | light orange brown | medium sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0720 | Tps | Sand quartz. | light orange brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| | | | | | | Comments: OCCASIONAL LARGER GRAINS | | | | | |
| 14.0 | 16.0 | DA 0721 | Tps | Sand quartz. | light orange brown | medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0722 | Tps | Sand quartz. gritty | light orange brown | coarse sand to granule poorly sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0723 | Tps | Sand quartz. | medium grey brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 8.0 | 20.0 | DA 0724 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 26-SEP-89

HOLE NUMBER : PT0429
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 472332 NORTHING: 6279754 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand ferrug. | medium red brown | silt to coarse sand poorly sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Sand ferrug. | medium red brown | silt to coarse sand poorly sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | | Qdw | Sand ferrug. | medium red brown | silt to coarse sand poorly sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | | Qdw | Sand silty | medium red brown | silt to coarse sand poorly sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | | Qdw | Sand silty clayey | medium red brown | silt to coarse sand poorly sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | | Qdw | Sand silty clayey | medium red brown | silt to coarse sand poorly sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | | Tpc | Clay sandy | medium brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 14.0 | 16.0 | | Tpc | Clay sandy | medium brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 16.0 | 18.0 | | Tpc | Clay sandy | medium brown | clay to medium sand poorly sorted | | | 0.2 light trace | | |
| 18.0 | 20.0 | | Tpc | Clay sandy | medium brown | clay to medium sand poorly sorted | | | 0.2 light trace | | |

Comments: STRATIGRAPHY UNCERTAIN

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 26-SEP-89

HOLE NUMBER : PT0430
LOGGED BY : PRD
TOTAL DEPTH : 24.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 472323 NORTHING: 6278750 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand<br>silty | medium<br>brown | silt to<br>medium sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 2.0 | 4.0 | | Qdw | Sand<br>silty | medium<br>brown | silt to<br>medium sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 4.0 | 6.0 | | Qdw | Sand<br>silty | medium<br>brown | silt to<br>medium sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 6.0 | 8.0 | | Qdw | Sand<br>silty | medium<br>brown | silt to<br>coarse sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 8.0 | 10.0 | | Qdw | Sand<br>silty | medium<br>red<br>brown | silt to<br>coarse sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 10.0 | 12.0 | | Qdw | Sand<br>silty | medium<br>red<br>brown | silt to<br>coarse sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 12.0 | 14.0 | | Qdw | Clay<br>sandy | medium<br>red<br>brown | clay to<br>medium sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 14.0 | 16.0 | | Qdw | Clay<br>sandy | medium<br>red<br>brown | clay to<br>medium sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 16.0 | 18.0 | DA 0725 | Tps | Sand<br>gritty quartz. | medium<br>red<br>grey | coarse sand to<br>granule<br>poorly sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0726 | Tps | Sand<br>quartz. | light<br>grey | coarse sand to<br>v.crse sand<br>mod.well sorted | sub-angular | | 0.0 | | |
| 20.0 | 22.0 | DA 0727 | | Sand<br>gritty quartz. | light<br>grey | v.crse sand to<br>granule<br>mod.well sorted | sub-rounded | | 0.0 | | |

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.0 | 24.0 | DA 0728 | Tps | Sand ferrug. quartz. | light red brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 18.0 | 24.0 | DA 0729 | | Composite Sample | | | | | 0.0 | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 26-SEP-89

HOLE NUMBER : PT0431
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 472334 NORTHING: 6277726 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0431

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand silty | light brown | silt to medium sand mod.well sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Sand silty | light brown | silt to medium sand mod.well sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | | Qdw | Clay sandy | medium red brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 6.0 | 8.0 | | Qdw | Clay sandy | medium red brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 8.0 | 10.0 | DA 0730 | Tps | Sand silty clayey | light orange brown | silt to coarse sand poorly sorted | | | 0.2 light trace | | |
| | | | | | | Comments: stratig uncertain may be QDW | | | | | |
| 10.0 | 12.0 | DA 0731 | Tps | Sand silty clayey | medium red brown | silt to coarse sand poorly sorted | | | 0.2 light trace | | |
| | | | | | | Comments: STRATIG UNCERTAIN MAY BE QDW | | | | | |
| 12.0 | 14.0 | DA 0732 | Tps | Sand quartz. | light grey | medium sand to coarse sand mod.well sorted | interm.round. | | 0.0 | | |
| 14.0 | 16.0 | DA 0733 | Tps | Sand quartz. | light grey | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0734 | Tps | Sand quartz. | light grey | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0735 | Tps | Sand quartz. | light grey | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| | | | | | | Comments: OCCASIONAL LARGER GRAINS | | | | | |
| 12.0 | 20.0 | DA 0736 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 26-SEP-89

HOLE NUMBER : PT0432
LOGGED BY : PRD
TOTAL DEPTH : 24.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 472317 NORTHING: 6276824 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand<br>silty | medium<br>red<br>brown | silt to<br>medium sand<br>poorly sorted | | | 0.2<br>light trace | | |
| | | | | | | Comments: HOLE LOCATED 20 M FROM CREST O | | | | | |
| 2.0 | 4.0 | | Qdw | Sand<br>silty | medium<br>red<br>brown | silt to<br>medium sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 4.0 | 6.0 | | Qdw | Sand<br>silty | medium<br>red<br>brown | silt to<br>medium sand<br>poorly sorted | | | 0.2<br>light trace | | |
| 6.0 | 8.0 | | Qdw | Clay<br>sandy | medium<br>brown | clay to<br>medium sand<br>poorly sorted | | | 0.0 | | |
| 8.0 | 10.0 | | Qdw | Clay<br>sandy | medium<br>red<br>brown | clay to<br>medium sand<br>poorly sorted | | | 0.0 | | |
| | | | | | | Comments: MOLDABLE IN Hand | | | | | |
| 10.0 | 12.0 | | Qdw | Clay<br>sandy | medium<br>red<br>brown | clay to<br>medium sand<br>poorly sorted | | | 0.0 | | |
| 12.0 | 14.0 | | Qdw | Clay<br>sandy | medium<br>red<br>brown | clay to<br>coarse sand<br>poorly sorted | | | 0.0 | | |
| 14.0 | 16.0 | | Qdw | Clay<br>sandy | medium<br>brown | clay to<br>coarse sand<br>poorly sorted | | | 0.0 | | |
| 16.0 | 18.0 | DA 0737 | Tps | Sand<br>quartz. | light<br>grey | fine sand to<br>medium sand<br>mod.well sorted | sub-rounded | | 0.2<br>light trace | | |
| 18.0 | 20.0 | DA 0738 | Tps | Sand<br>quartz. | light<br>grey | fine sand to<br>coarse sand<br>poorly sorted | sub-angular | | 0.0 | | |
| 20.0 | 22.0 | DA 0739 | Tps | Sand<br>quartz. | light<br>grey | medium sand to<br>coarse sand<br>mod.well sorted | sub-angular | | 0.0 | | |

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.0 | 24.0 | DA 0740 | Tps | Sand quartz. | light yellow grey | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| | | | | | | Comments: OCCASIONAL LARGER CLASTS | | | | | |
| 16.0 | 24.0 | DA 0741 | | Composite Sample | | | | | 0.0 | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 26-SEP-89

HOLE NUMBER : PT0433
LOGGED BY : PRD
TOTAL DEPTH : 22.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 472317 NORTHING: 6275718 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0433

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | light brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Sand | light brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | | Qdw | Clay sandy | light orange brown | clay to medium sand poorly sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | DA 0742 | Tps | Sand quartz. | light orange brown | medium sand to v.crse sand poorly sorted | | | 0.0 | | |
| 8.0 | 10.0 | DA 0743 | Tps | Sand clayey | light orange brown | fine sand to coarse sand poorly sorted Comments: CLAYEY MATRIX | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0744 | Tps | Sand quartz. | light orange brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0745 | Tps | Sand ferrug. quartz. | medium red brown | medium sand to v.crse sand poorly sorted Comments: OCCASIONAL LARGER GRAINS | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0746 | Tps | Sand quartz. | light grey | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0747 | Tps | Sand quartz. | light grey | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0748 | Tps | Sand ferrug. quartz. | medium orange brown | medium sand to coarse sand mod.well sorted Comments: OCCASIONAL LARGER GRAINS | sub-angular | | 0.2 light trace | | |
| 6.0 | 20.0 | DA 0749 | | Composite Sample | | | | | 0.0 | | |

EOH at 22.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 26-SEP-89

HOLE NUMBER : PT0434
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 472378 NORTHING: 6274673 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand silty | medium brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Sand silty | medium brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | | Qdw | Sand silty | medium brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | DA 0750 | Tps | Sand quartz. | light yellow grey | fine sand to medium sand mod.well sorted | sub-rounded | | 0.0 | | |
| 8.0 | 10.0 | DA 0751 | Tps | Sand quartz. | light yellow grey | Comments: CLAYEY MATRIX medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0752 | Tps | Sand quartz. | light orange grey | medium sand to coarse sand mod.well sorted | angular | | 0.2 light trace | | |
| 12.0 | 14.0 | DA 0753 | Tps | Sand quartz. | light orange brown | medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0754 | Tps | Sand quartz. | light orange brown | medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0755 | Tps | Sand gritty quartz. | light grey | coarse sand to granule poorly sorted | sub-angular | | 0.2 light trace | | |
| 18.0 | 20.0 | DA 0756 | Tps | Sand gritty quartz. | light grey | coarse sand to granule poorly sorted | angular | | 0.0 | | |
| 6.0 | 20.0 | DA 0757 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 27-SEP-89

HOLE NUMBER : PT0435
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 472370 NORTHING: 6273710 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0435

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand silty | medium brown | silt to medium sand poorly sorted | sub-angular | | 0.0 | | |
| 2.0 | 4.0 | | Qdw | Sand silty | medium brown | silt to medium sand poorly sorted | sub-angular | | 0.0 | | |
| 4.0 | 6.0 | | Qdw | Sand silty | medium brown | silt to medium sand poorly sorted | sub-angular | | 0.0 | | |
| 6.0 | 8.0 | | Qdw | Clay sandy | medium brown | clay to medium sand poorly sorted | sub-angular | | 0.2 light trace | | |
| 8.0 | 10.0 | DA 0758 | Tps | Sand quartz. | light yellow khaki | fine sand to medium sand f.well sorted | sub-rounded | | 0.0 | | |
| 10.0 | 12.0 | DA 0759 | Tps | Sand quartz. | light yellow khaki | medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0760 | Tps | Sand quartz. | light orange brown | medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0761 | Tps | Sand quartz. | medium orange brown | fine sand to coarse sand poorly sorted | angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0762 | Tps | Sand quartz. | medium orange brown | medium sand to v.crse sand poorly sorted | angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0763 | Tps | Sand ferrug. quartz. | medium red brown | medium sand to v.crse sand poorly sorted | angular | | 0.0 | | |
| 8.0 | 20.0 | DA 0764 | | Composite Sample | | Comments: OCCASIONAL LARGER GRAINS | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 27-SEP-89

HOLE NUMBER : PT0436
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 472354 NORTHING: 6272838 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0436

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand silty | medium brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Sand silty | medium brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | | Qdw | Sand silty | medium brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | DA 0765 | Tps | Sand quartz. | medium orange brown | medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| | | | | | | Comments: Tps at 7m | | | | | |
| 8.0 | 10.0 | DA 0766 | Tps | Sand quartz. | medium brown | medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0767 | Tps | Sand quartz. | medium brown | medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0768 | Tps | Sand quartz. | light orange brown | medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0769 | Tps | Sand quartz. | light orange brown | medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0770 | Tps | Sand quartz. | light grey | medium sand to v.crse sand poorly sorted | angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0771 | Tps | Sand ferrug. quartz. | medium red brown | medium sand to v.crse sand poorly sorted | angular | | 0.0 | | |
| | | | | | | Comments: OCCASIONAL GRANULES | | | | | |
| 10.0 | 20.0 | DA 0772 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 27-SEP-89

HOLE NUMBER : PT0437
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 472382 NORTHING: 6271671 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0437

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand silty | medium brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Sand silty | medium brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | | Qdw | Sand silty | medium brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | | Tpc | Clay sandy | medium grey | clay to fine sand poorly sorted | | | 0.0 | | |
| | | | | | | Comments: STRATIGRAPHY UNCERTAIN | | | | | |
| 8.0 | 10.0 | | Tpc | Clay sandy | medium grey | clay to fine sand poorly sorted | | | 0.0 | | |
| 10.0 | 12.0 | | Tpc | Clay sandy | medium grey | clay to fine sand poorly sorted | | | 0.0 | | |
| 12.0 | 14.0 | DA 0773 | Tps | Sand quartz. | light grey | medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0774 | Tps | Sand quartz. | light orange grey | fine sand to medium sand mod.well sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0775 | Tps | Sand quartz. | light orange yellow | medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0776 | Tps | Sand quartz. | light orange yellow | medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 12.0 | 20.0 | DA 0777 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 27-SEP-89

HOLE NUMBER : PT0438
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 472426 NORTHING: 6270758 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0438

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand silty | medium brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Tpc | Clay ferrug. sandy | medium red brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 4.0 | 6.0 | | Tpc | Clay ferrug. sandy | medium red brown | clay to medium sand poorly sorted | | | 0.0 | | |
| 6.0 | 8.0 | | Tpc | Clay ferrug. sandy | medium brown grey | clay to medium sand poorly sorted | | | 0.0 | | |
| 8.0 | 10.0 | | Tpc | Clay sandy | medium brown grey | clay to fine sand poorly sorted | | stiff | 0.0 | | |
| 10.0 | 12.0 | | Tpc | Clay sandy | medium brown grey | clay to fine sand poorly sorted | | stiff | 0.0 | | |
| 12.0 | 14.0 | | Tpc | Clay sandy | light grey | clay to fine sand poorly sorted | | firm | 0.0 | | |
| 14.0 | 16.0 | DA 0778 | Tps | Sand quartz. | light grey | fine sand well sorted | sub-rounded | | 0.0 | | |
| 16.0 | 18.0 | DA 0779 | Tps | Sand clayey | light grey | fine sand well sorted Comments: CLAYEY MATRIX | sub-rounded | | 0.0 | | |
| 18.0 | 20.0 | DA 0780 | Tps | Sand clayey | medium orange grey | fine sand to medium sand mod.well sorted Comments: CLAYEY MATRIX | sub-rounded | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 27-SEP-89

HOLE NUMBER : PT0439
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 472387 NORTHING: 6269775 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0439

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | medium brown | clay to medium sand poorly sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Sand clayey | medium brown | clay to medium sand poorly sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | | Tpc | Clay sandy | medium brown grey | clay to medium sand poorly sorted | | | 0.0 | | |
| 6.0 | 8.0 | | Tpc | Clay ferrug. sandy | medium khaki | clay to medium sand poorly sorted | | | 0.0 | | |
| 8.0 | 10.0 | | Tpc | Clay ferrug. sandy | medium khaki | clay to medium sand poorly sorted | | | 0.0 | | |
| 10.0 | 12.0 | | Tpc | Clay | medium grey | clay to silt mod.well sorted | | stiff | 0.0 | | |
| 12.0 | 14.0 | | Tpc | Clay | medium grey | clay to silt mod.well sorted | | stiff | 0.0 | | |
| 14.0 | 16.0 | DA 0781 | Tps | Sand clayey | light brown grey | v.fine sand to medium sand mod.well sorted Comments: CLAYEY MATRIX | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0782 | Tps | Sand clayey | medium orange brown | clay to coarse sand poorly sorted | | | 0.0 | | |
| 18.0 | 20.0 | DA 0783 | Tps | Clay sandy | medium khaki | clay to coarse sand poorly sorted | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 27-SEP-89

HOLE NUMBER : PT0440
LOGGED BY : PRD
TOTAL DEPTH : 24.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 472407 NORTHING: 6268680 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand silty | medium brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Sand silty | medium brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | | Tpc | Clay sandy | medium khaki | clay to fine sand poorly sorted | | soft | 0.0 | | |
| 6.0 | 8.0 | | Tpc | Clay sandy | medium khaki | clay to medium sand poorly sorted | | stiff | 0.0 | | |
| 8.0 | 10.0 | | Tpc | Clay sandy | medium khaki | clay to medium sand poorly sorted | | stiff | 0.0 | | |
| 10.0 | 12.0 | | Tpc | Clay sandy | medium khaki | clay to medium sand poorly sorted | | stiff | 0.0 | | |
| 12.0 | 14.0 | | Tpc | Clay | light grey | clay to silt mod.well sorted | | | 0.0 | | |
| 14.0 | 16.0 | DA 0784 | Tps | Sand clayey quartz. | medium orange grey | fine sand to medium sand mod.well sorted Comments: CLAYEY MATRIX | | | 0.0 | | |
| 16.0 | 18.0 | DA 0785 | Tps | Sand quartz. | light grey | medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0786 | Tps | Sand quartz. | light grey | medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 20.0 | 22.0 | DA 0787 | Tps | Sand quartz. | light grey | medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.0 | 24.0 | DA 0788 | Tps | Sand quartz. | light grey | medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 14.0 | 24.0 | DA 0789 | | Composite Sample | | | | | 0.0 | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 27-SEP-89

HOLE NUMBER : PT0441
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 472439 NORTHING: 6267675 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0441

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand silty | medium brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Sand silty | medium brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | | Tpc | Clay | light grey | clay well sorted | | | 0.0 | | |
| 6.0 | 8.0 | | Tpc | Clay | light grey | clay well sorted | | stiff | 0.0 | | |
| 8.0 | 10.0 | | Tpc | Clay | light grey | clay well sorted | | stiff | 0.0 | | |
| 10.0 | 12.0 | | Tpc | Clay | light grey | clay well sorted | | stiff | 0.0 | | |
| 12.0 | 14.0 | | Tpc | Clay | light grey | clay well sorted | | stiff | 0.0 | | |
| 14.0 | 16.0 | DA 0790 | Tps | Sand clayey quartz. | light grey | v.fine sand to medium sand poorly sorted | | | 0.0 | | |
| 16.0 | 18.0 | DA 0791 | Tps | Sand clayey quartz. | light grey | Comments: CLAYEY MATRIX v.fine sand to medium sand poorly sorted | | | 0.0 | | |
| 18.0 | 20.0 | DA 0792 | Tps | Sand quartz. | light orange grey | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 27-SEP-89

HOLE NUMBER : PT0442
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 459090 NORTHING: 6279943 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | medium brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Tpc | Clay ferrug. sandy | dark brown | clay to medium sand poorly sorted | | firm | 0.0 | | |
| 4.0 | 6.0 | | Tpc | Clay ferrug. sandy | dark brown | clay to medium sand poorly sorted | | firm | 0.0 | | |
| 6.0 | 8.0 | | Tpc | Clay ferrug. sandy | dark brown | clay to medium sand poorly sorted | | firm | 0.0 | | |
| 8.0 | 10.0 | DA 0793 | Tps | Sand gritty ferrug. | medium red brown | coarse sand to granule poorly sorted | angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0794 | Tps | Sand gritty ferrug. | medium red brown | coarse sand to granule poorly sorted | angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0795 | Tps | Sand clayey ferrug. | medium red brown | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| | | | | | | Comments: CLAYEY MATRIX | | | | | |
| 14.0 | 16.0 | DA 0796 | Tps | Clay sandy ferrug. | medium red brown | clay to coarse sand poorly sorted | angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0797 | Tps | Sand clayey | medium brown | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| | | | | | | Comments: CLAY - contamination ? | | | | | |
| 18.0 | 20.0 | DA 0798 | Tps | Sand quartz. | light grey | fine sand to medium sand mod.well sorted | sub-angular | cemented,clsd Siliceous | 0.0 | | |
| 8.0 | 20.0 | DA 0799 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 27-SEP-89

HOLE NUMBER : PT0443
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 460029 NORTHING: 6279956 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0443

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | medium brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Sand | medium brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| | | | | | | Comments: CLAY at 3 METRES | | | | | |
| 4.0 | 6.0 | | Qdw | Clay sandy | medium brown khaki | clay to medium sand poorly sorted | | | 0.0 | | |
| 6.0 | 8.0 | | Qdw | Clay sandy | medium brown | clay to coarse sand poorly sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | DA 0800 | Tps | Sand quartz. | light orange brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0801 | Tps | Sand quartz. | light orange brown | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0802 | Tps | Sand quartz. | pale tan | medium sand to coarse sand mod.well sorted | sub-angular | | 0.2 light trace | | |
| 14.0 | 16.0 | DA 0803 | Tps | Sand quartz. | pale tan | medium sand to coarse sand mod.well sorted | sub-angular | | 0.2 light trace | | |
| | | | | | | Comments: OCCASIONAL LARGER GRAINS | | | | | |
| 16.0 | 18.0 | DA 0804 | Tps | Sand | light orange brown | fine sand to coarse sand poorly sorted | sub-angular | | 0.2 light trace | | |
| 18.0 | 20.0 | DA 0805 | Tps | Sand ferrug. quartz. Clay | medium red brown | medium sand to v.crse sand poorly sorted | | | 0.0 | | |
| | | | | | | Comments: CLAY FROM 19 METRES to EOH | | | | | |
| 8.0 | 20.0 | DA 0806 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 27-SEP-89

HOLE NUMBER : PT0444
LOGGED BY : PRD
TOTAL DEPTH : 24.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 461010 NORTHING: 6279998 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | medium brown | silt to coarse sand poorly sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Sand clayey | medium brown | clay to medium sand poorly sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | | Qdw | Sand clayey | medium brown | clay to medium sand poorly sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | DA 0807 | Qdw | Sand ferrug. clayey | medium red brown | fine sand to v.crse sand poorly sorted | angular | | 0.0 | | |
| 8.0 | 10.0 | DA 0808 | Qdw | Sand ferrug. | medium red brown | clay to coarse sand poorly sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | DA 0809 | Qdw | Clay sandy | medium brown | clay to coarse sand poorly sorted | | | 0.0 | | |
| 12.0 | 14.0 | | Qdw | Clay sandy | medium brown | clay to coarse sand poorly sorted | | | 0.0 | | |
| 14.0 | 16.0 | | Qdw | Clay sandy | dark red brown | clay to coarse sand poorly sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | | Qdw | Clay sandy | dark red brown | clay to coarse sand poorly sorted | | | 0.2 light trace | | |
| 18.0 | 20.0 | DA 0810 | Tps | Sand quartz. | medium orange brown | fine sand to medium sand mod.well sorted | sub-angular | | 0.0 | | |
| 20.0 | 22.0 | DA 0811 | Tps | Sand quartz. | medium orange brown | fine sand to medium sand mod.well sorted | sub-angular | | 0.0 | | |

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.0 | 24.0 | DA 0812 | Tps | Sand quartz. | medium orange brown | fine sand to medium sand mod.well sorted | sub-angular | | 0.0 | | |

EOH at 24.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 27-SEP-89

HOLE NUMBER : PT0445
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 462101 NORTHING: 6279957 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0445

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | medium brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Clay sandy | medium brown | clay to coarse sand poorly sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | | Qdw | Clay sandy | medium brown | clay to coarse sand poorly sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | | Qdw | Clay sandy | medium brown | clay to coarse sand poorly sorted | | | 0.2 light trace | | |
| 8.0 | 10.0 | | Qdw | Clay sandy | medium orange brown | clay to medium sand poorly sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | DA 0813 | Tps | Sand quartz. | medium orange brown | fine sand to coarse sand mod.well sorted | sub-angular | cemented,clsd Ferruginous | 0.0 | | |
| 12.0 | 14.0 | DA 0814 | Tps | Sand quartz. | pale tan | fine sand to medium sand mod.well sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0815 | Tps | Sand quartz. | pale tan | fine sand to medium sand mod.well sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0816 | Tps | Sand quartz. | pale tan | medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0817 | Tps | Sand quartz. | light white grey | medium sand to coarse sand mod.well sorted | | | 0.0 | | |
| 10.0 | 20.0 | DA 0818 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 27-SEP-89

HOLE NUMBER : PT0446
LOGGED BY : PRD
TOTAL DEPTH : 30.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 463577 NORTHING: 6280000 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | medium red brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Sand | medium red brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | | Qdw | Sand | medium red brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | DA 0819 | TPS | Sand quartz. | light orange brown | medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 8.0 | 10.0 | DA 0820 | Tps | Sand gritty quartz. | light tan | coarse sand to granule poorly sorted | angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0821 | Tps | Sand quartz. | light tan | medium sand to v.crse sand poorly sorted | angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0822 | Tps | Sand gritty quartz. | pale orange grey | medium sand to granule poorly sorted | angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0823 | Tps | Sand quartz. | pale brown grey | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0824 | Tps | Sand gritty quartz. | light red brown | medium sand to granule poorly sorted | angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0825 | Tps | Sand gritty quartz. | light red brown | medium sand to granule poorly sorted | angular | | 0.2 light trace | | |
| 6.0 | 20.0 | DA 0831 | | Composite Sample | | | | | 0.0 | | |

SHEET 2 OF 2 HOLE NUMBER : PT0446

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.0 | 22.0 | DA 0826 | Tps | Sand quartz. | light orange brown | medium sand to v.crse sand poorly sorted | angular | | 0.0 | | |
| 22.0 | 24.0 | DA 0827 | Tps | Sand gritty quartz. | medium brown grey | coarse sand to granule poorly sorted | sub-angular | | 0.2 light trace | | |
| 24.0 | 26.0 | DA 0828 | Tps | Sand quartz. | pale tan | medium sand to coarse sand mod.well sorted | sub-angular | | 0.2 light trace | | |
| 26.0 | 28.0 | DA 0829 | Tps | Sand quartz. | light grey | fine sand well sorted | sub-rounded | | 1.0 Good trace | | |
| 28.0 | 30.0 | DA 0830 | Tps | Sand quartz. | light grey | medium sand to coarse sand mod.well sorted | sub-rounded | | 0.5 trace | | |
| 20.0 | 30.0 | DA 0832 | | Composite Sample | | | | | 0.0 | | |

EOH at 30.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 27-SEP-89

HOLE NUMBER : PT0447
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 465133 NORTHING: 6280042 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0447

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | medium brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Sand | medium brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | | Qdw | Sand | medium brown | silt to medium sand poorly sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | | Qdw | Clay sandy | medium brown khaki | clay to medium sand poorly sorted | | | 0.0 | | |
| 8.0 | 10.0 | | Qdw | Clay ferrug. sandy | medium red brown | clay to coarse sand poorly sorted | | | 0.2 light trace | | |
| 10.0 | 12.0 | | Qdw | Clay ferrug. sandy | medium red brown | clay to coarse sand poorly sorted | | | 0.2 light trace | | |
| 12.0 | 14.0 | | Qdw | Clay ferrug. sandy | medium red brown | clay to coarse sand poorly sorted | | | 0.2 light trace | | |
| 14.0 | 16.0 | | Qdw | Clay sandy | medium red brown | clay to coarse sand poorly sorted | | | 0.2 light trace | | |
| 16.0 | 18.0 | DA 0833 | Tps | Sand clayey | medium red brown | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0834 | Tps | Sand clayey | medium red brown | Comments: MAY BE QDW fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 28-SEP-89

HOLE NUMBER : PT0448
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 466677 NORTHING: 6279921 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0448

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand clayey | medium brown | clay to coarse sand poorly sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Clay sandy | medium brown | clay to coarse sand poorly sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | | Qdw | Clay sandy | medium brown | clay to coarse sand poorly sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | DA 0835 | Tps | Sand quartz. | pale orange brown | Comments: Tps at 5.5m medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 8.0 | 10.0 | DA 0836 | Tps | Sand quartz. | pale orange brown | medium sand to v.crse sand poorly sorted | angular | weakly consol Ferruginous | 0.0 | | |
| 10.0 | 12.0 | DA 0837 | Tps | Sand quartz. | pale orange brown | medium sand to v.crse sand poorly sorted | angular | weakly consol Ferruginous | 0.0 | | |
| 12.0 | 14.0 | DA 0838 | Tps | Sand quartz. | pale orange brown | medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0839 | Tps | Sand quartz. | pale orange brown | Comments: OCCASIONAL LARGER GRAINS medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0840 | Tps | Sand quartz. | light orange grey | medium sand to v.crse sand poorly sorted | angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0841 | Tps | Sand quartz. | light orange grey | medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 6.0 | 20.0 | DA 0842 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 28-SEP-89

HOLE NUMBER : PT0449
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 454617 NORTHING: 6285524 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0



| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | medium brown | silt to coarse sand poorly sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Clay sandy | medium brown | clay to coarse sand poorly sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | | Qdw | Clay sandy | dark red brown | clay to coarse sand poorly sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | DA 0843 | Tps | Sand quartz. | light orange brown | medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 8.0 | 10.0 | DA 0844 | Tps | Sand quartz. | light orange grey | medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0845 | Tps | Sand quartz. | light grey | medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0846 | Tps | Sand quartz. | light grey | medium sand to v.crse sand poorly sorted | angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0847 | Tps | Sand quartz. | light grey | medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0848 | Tps | Sand quartz. | light grey | medium sand to v.crse sand poorly sorted | angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0849 | Tps | Sand quartz. | light grey | medium sand to v.crse sand poorly sorted | angular | | 0.0 | | |
| 6.0 | 20.0 | DA 0850 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30
CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 28-SEP-89

HOLE NUMBER : PT0450
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 453811 NORTHING: 6286178 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0450

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | medium brown | silt to coarse sand poorly sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Clay sandy | medium red brown | clay to coarse sand poorly sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | | Qdw | Clay sandy | medium red brown | clay to coarse sand poorly sorted | | | 0.2 light trace | | |
| 6.0 | 8.0 | DA 0851 | Tps | Sand quartz. | medium orange brown | medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 8.0 | 10.0 | DA 0852 | Tps | Sand quartz. | light orange brown | medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0853 | Tps | Sand ferrug. quartz. | medium red brown | v.fine sand to coarse sand poorly sorted | angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0854 | Tps | Sand quartz. | medium orange brown | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0855 | Tps | Sand quartz. | medium brown grey | fine sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0856 | Tps | Sand quartz. | medium brown grey | fine sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0857 | Tps | Sand quartz. | medium red brown | medium sand to v.crse sand poorly sorted | angular | | 0.0 | | |
| 6.0 | 20.0 | DA 0858 | | Composite Sample | | Comments: FINE GRAINED MATRIX | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 28-SEP-89

HOLE NUMBER : PT0451
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 453075 NORTHING: 6286780 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0451

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | medium brown | silt to coarse sand poorly sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Qdw | Clay sandy | dark brown | clay to coarse sand poorly sorted | | | 0.2 light trace | | |
| 4.0 | 6.0 | DA 0859 | Tps | Sand | pale orange brown | medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 6.0 | 8.0 | DA 0860 | Tps | Sand quartz. | medium brown grey | fine sand to coarse sand poorly sorted | | | 0.0 | | |
| 8.0 | 10.0 | DA 0861 | Tps | Sand quartz. | medium brown grey | fine sand to coarse sand poorly sorted | | | 0.0 | | |
| 10.0 | 12.0 | DA 0862 | Tps | Sand quartz. | light orange brown | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0863 | Tps | Sand quartz. | light orange brown | fine sand to coarse sand poorly sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0864 | Tps | Sand silty quartz. | medium brown | silt to v.crse sand poorly sorted | | | 0.0 | | |
| 16.0 | 18.0 | DA 0865 | | Sand quartz. | medium orange brown | fine sand to coarse sand poorly sorted | | | 0.0 | | |
| 18.0 | 20.0 | DA 0866 | | Sand quartz. | patchy brown grey | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 4.0 | 20.0 | DA 0867 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30
CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 28-SEP-89
HOLE NUMBER : PT0452
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 452299 NORTHING: 6287413 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0452

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Qdw | Sand | medium brown | silt to coarse sand poorly sorted | | | 0.2 light trace | | |
| 2.0 | 4.0 | | Tpc | Clay sandy | medium khaki | clay to fine sand mod.well sorted | | | 0.0 | | |
| 4.0 | 6.0 | | Tpc | Clay | pale khaki white | clay well sorted | | | 0.0 | | |
| 6.0 | 8.0 | | Tpc | Clay | dark grey | clay well sorted | | | 0.0 | | |
| 8.0 | 10.0 | DA 0868 | Tps | Sand quartz. | light yellow grey | medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 10.0 | 12.0 | DA 0869 | Tps | Sand quartz. | light yellow grey | medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 12.0 | 14.0 | DA 0870 | Tps | Sand quartz. | light yellow grey | medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0871 | Tps | Sand quartz. | light yellow grey | medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0872 | Tps | Sand quartz. | light orange yellow | medium sand to coarse sand mod.well sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0873 | Tps | Sand quartz. | light orange yellow | medium sand to v.crse sand poorly sorted | sub-angular | | 0.0 | | |
| 8.0 | 20.0 | DA 0874 | | Composite Sample | | | | | 0.0 | | |

EOH at 20.0 m

# TITANIUM MINERAL SANDS LOGSHEET

PROJECT : Titanium Murray Bas
LOCALITY: PepperTree EL1445 .
SHEET : Chowilla 1:100,000 .
JOB NO : T30

CONTRACTOR : Wallis Drilling .
RIG TYPE : Mantis200 RCAirC
DATE DRILLED: 28-SEP-89

HOLE NUMBER : PT0453
LOGGED BY : PRD
TOTAL DEPTH : 20.0

GRID: AMG ZONE: 54 RELIABILITY: TOPO EASTING: 451498 NORTHING: 6287823 R.L.: 60.0 AZIM.: 0.0 INCL.:-90.0

SHEET 1 OF 1 HOLE NUMBER : PT0453

| DEPTH FROM (m) | DEPTH TO (m) | SAMPLE NUMBER | STRAT. CODE | ROCK TYPES major/ minor | COLOUR L/ hue | GRAIN SIZE RANGE/ SORTING | ROUNDNESS/ SPHERICITY/ GRAIN SURFACE | CEMENTATION DEGREE/ TYPE/ STRENGTH | HEAVY MINERALS (visual) | MINERALS SEEN | LAB CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.0 | | Tpc | Clay | medium brown | clay<br>well sorted | | | 0.0 | | |
| 2.0 | 4.0 | | Tpc | Clay | medium khaki | clay<br>well sorted | | | 0.0 | | |
| 4.0 | 6.0 | | Tpc | Clay | medium khaki | clay<br>well sorted | | | 0.0 | | |
| 6.0 | 8.0 | | Tpc | Clay | medium khaki | clay<br>well sorted | | | 0.0 | | |
| 8.0 | 10.0 | | Tpc | Clay calcrt. | light grey white | clay<br>well sorted | | | 0.0 | | |
| 10.0 | 12.0 | | Tpc | Clay | medium grey khaki | clay<br>well sorted | | | 0.0 | | |
| 12.0 | 14.0 | DA 0875 | Tps | Sand quartz. | light grey yellow | medium sand to coarse sand<br>mod.well sorted | angular | | 0.0 | | |
| 14.0 | 16.0 | DA 0876 | Tps | Sand quartz. | light grey | medium sand to coarse sand<br>mod.well sorted | sub-angular | | 0.0 | | |
| 16.0 | 18.0 | DA 0877 | Tps | Sand quartz. | light yellow grey | medium sand to v.crse sand<br>mod.well sorted | sub-angular | | 0.0 | | |
| 18.0 | 20.0 | DA 0878 | Tps | Sand quartz. | light red brown | coarse sand to granule<br>poorly sorted | sub-rounded | | 0.0 | | |
| 12.0 | 20.0 | DA 0879 | | Composite Sample | | | | | 0.0 | | |

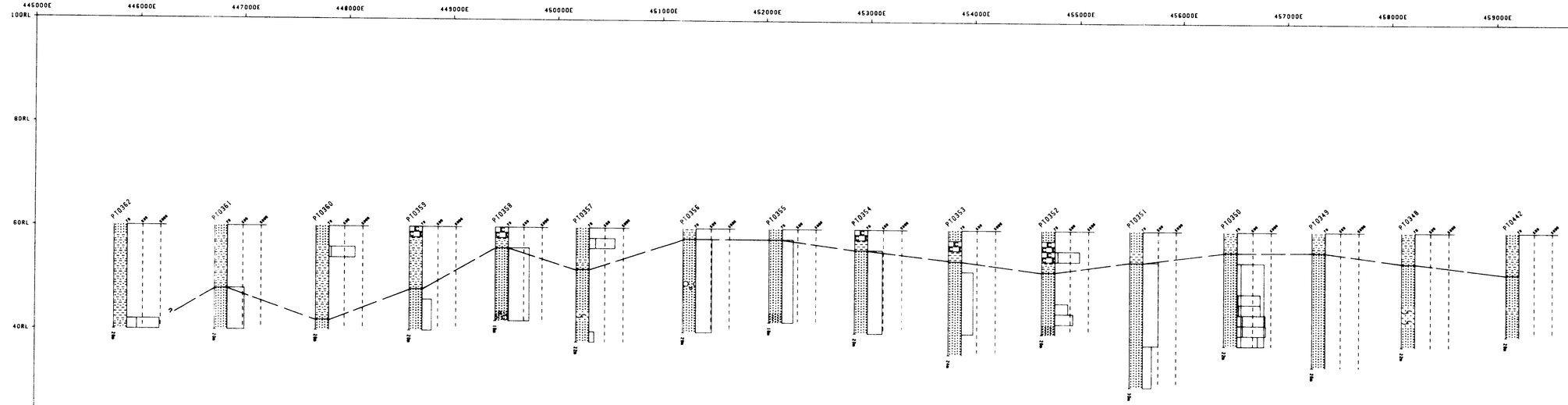
EOH at 20.0 m

# A P P E N D I X  2

## GEOLOGICAL CROSS SECTIONS

## TRAVERSES 22 - 29

# Murray Basin - SECTION 6279700 NORTH




SAMPLE BASED RESULTS:

| TI XRF PPM | ZR XRF PPM |
|---|---|
| > 5000 | > 5000 |
| > 500 | > 500 |
| 70 – 10000+ | 70 – 10000+ |

ROCKS:

- CLAYEY SAND
- SAND
- SANDSTONE
- CLAY
- CALCRETE
- PEBBLY SAND

DOWNHOLE MARKER CODES:

TPS

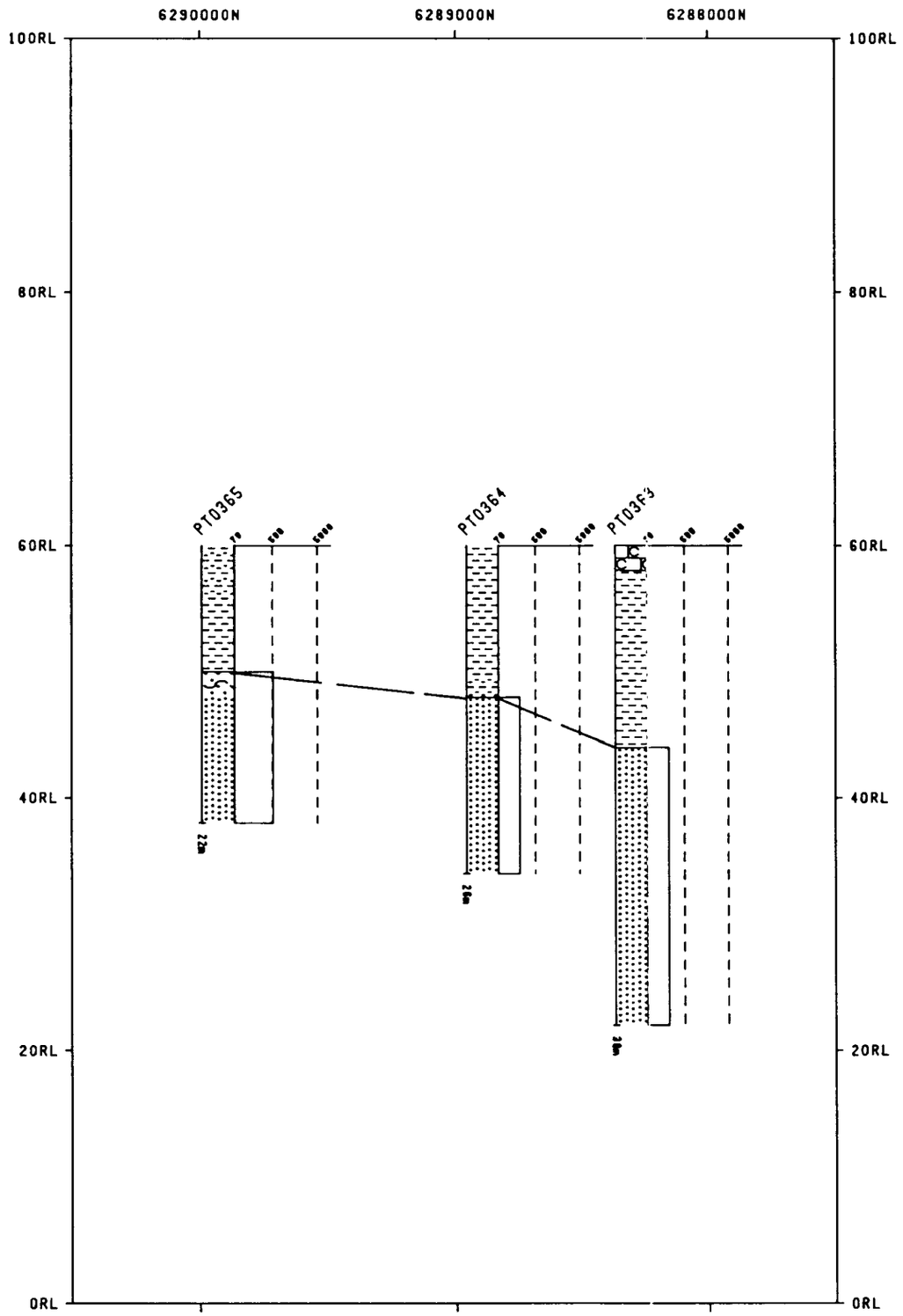
BHP-UTAH Minerals International

Murray Basin

MURRAY BASIN TITANIUM
E.L. 1445 PEPPERTREE S.A.
CROSS SECTION TRAVERSE TWENTY TWO

8009-9

# Murray Basin - SECTION 446870 EAST




SAMPLE BASED RESULTS:

| TI XRF PPM | ZR XRF PPM |
|---|---|
| > 5000 | > 5000 |
| > 500 | > 500 |
| 70 – 10000+ | 70 – 10000+ |

ROCK3:

- CALCRETE
- CLAY
- SAND
- CLAYEY SAND
- SANDSTONE

DOWNHOLE MARKER CODES:

TPS

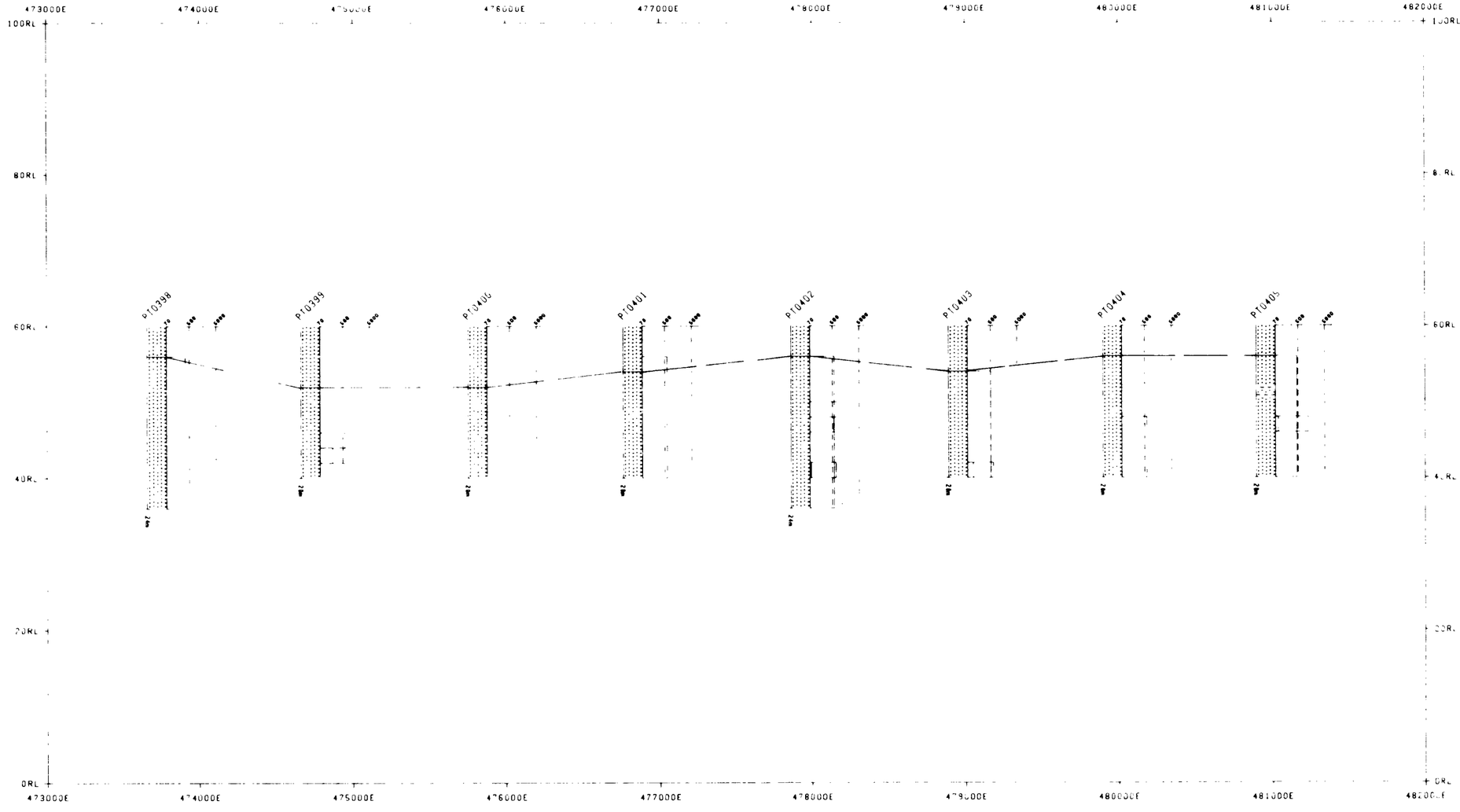
## BHP-UTAH Minerals International

Murray Basin

MURRAY BASIN TITANIUM
E.L. 1445 PEPPERTREE S.A.
CROSS SECTION TRAVERSE TWENTY THREE

| | | |
|---|---|---|
| DATE: 20-DEC-89 | Compiled by KLB | BHP-UTAH MINERALS INTERNATIONAL ASIA PACIFIC DIVISION EXPLORATION DEPARTMENT |
| X SCALE: 1:25000 | Y SCALE: 1:500 | |

Murray Basin SECTION 8,480,550 North




SAMPLE BASED RESULTS:

| TI XRF PPM | | ZR XRF PPM | |
|---|---|---|---|
| > 5000 | | > 5000 | |
| > 500 | | > 500 | |
| 70 | 10000+ | 70 | 10000+ |

ROCKS:

SAND

CLAYEY SAND

DOWNHOLE MARKER CODES:

TPS

BHP-UTAH Minerals International

Murray Basin

MURRAY BASIN TITANIUM
E.L. 1445 PEPPERTREE S.A.
CROSS SECTION TRAVERSE TWENTY FOUR

8009-10

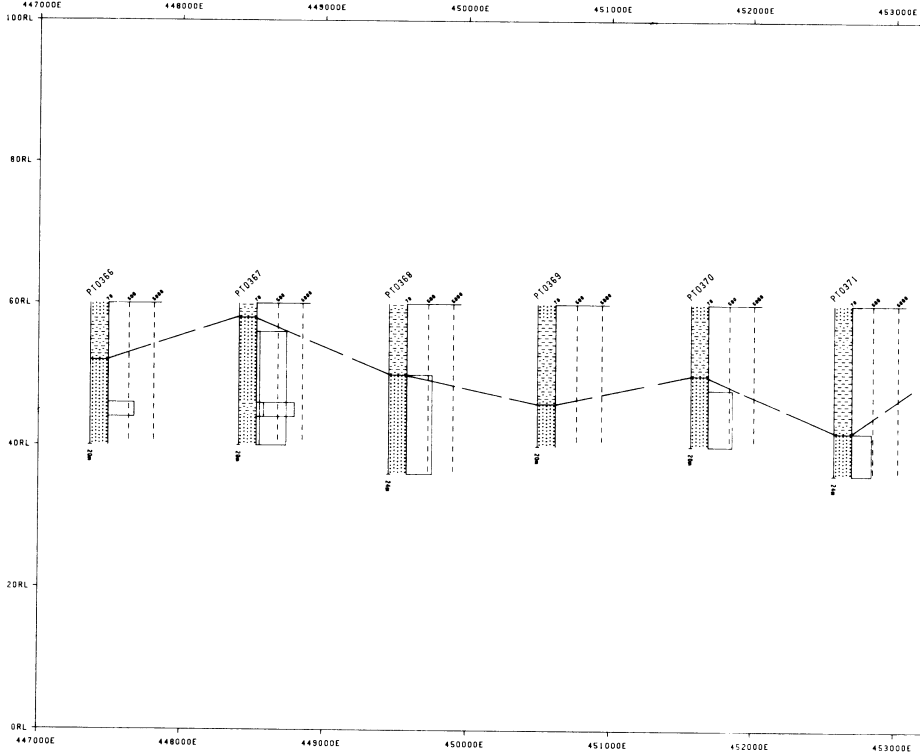
DATE: 20-DEC-89

Compiled by KLB

X SCALE: 1:25000

Y SCALE: 1:500

BHP-UTAH MINERALS INTERNATIONAL
ASIA PACIFIC DIVISION
EXPLORATION DEPARTMENT



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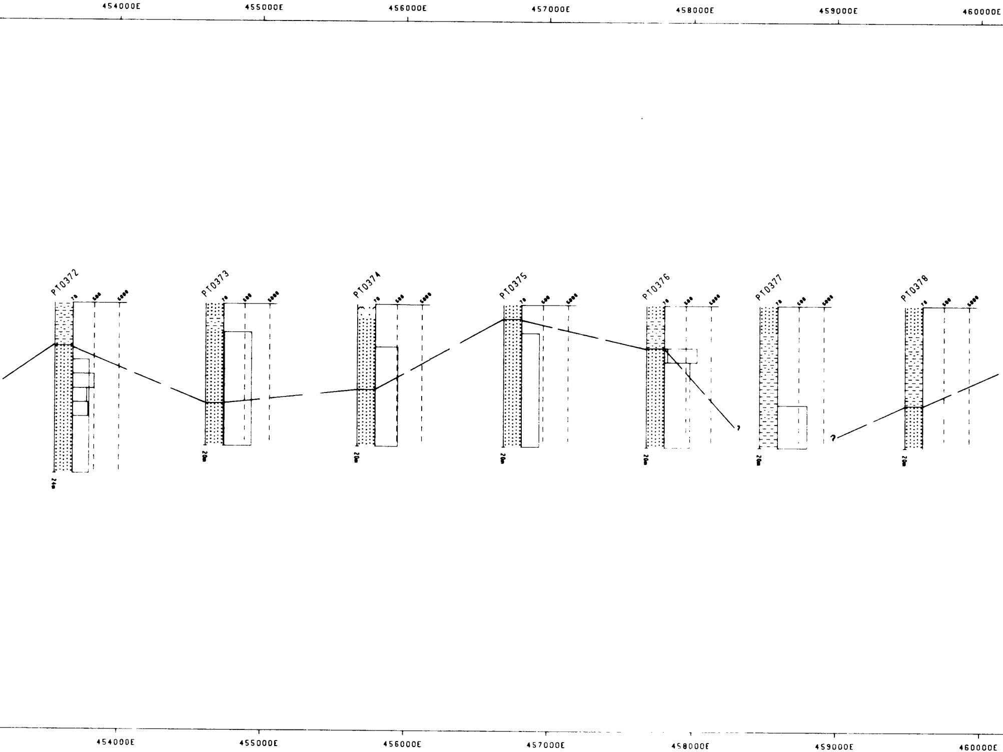
Murray Basin - SECTI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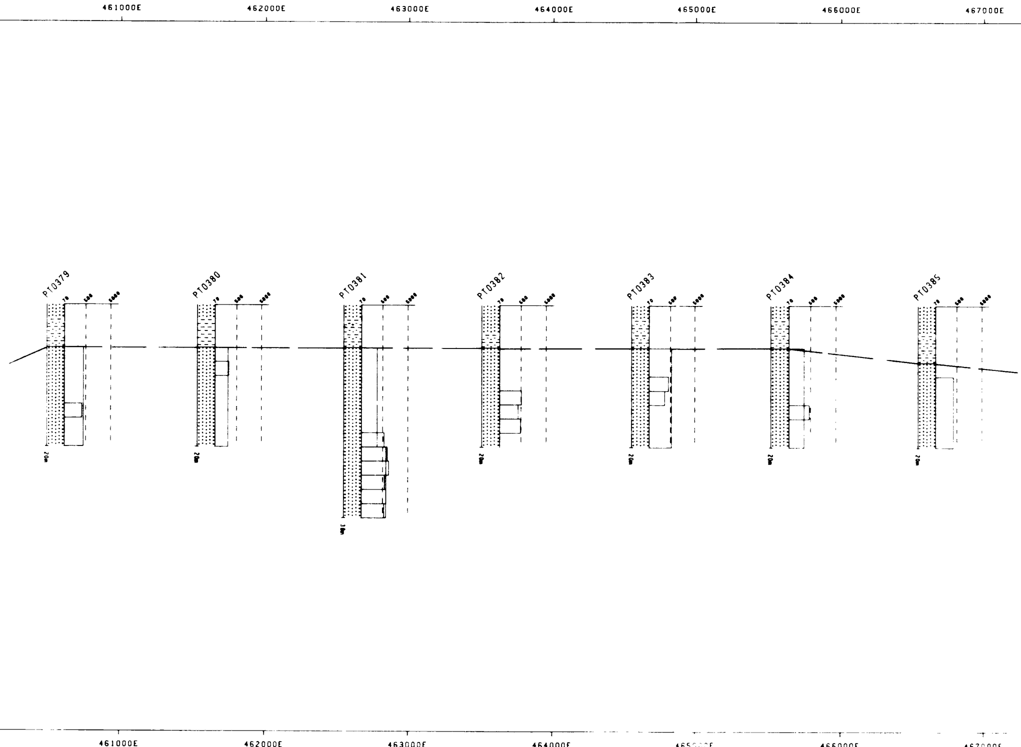
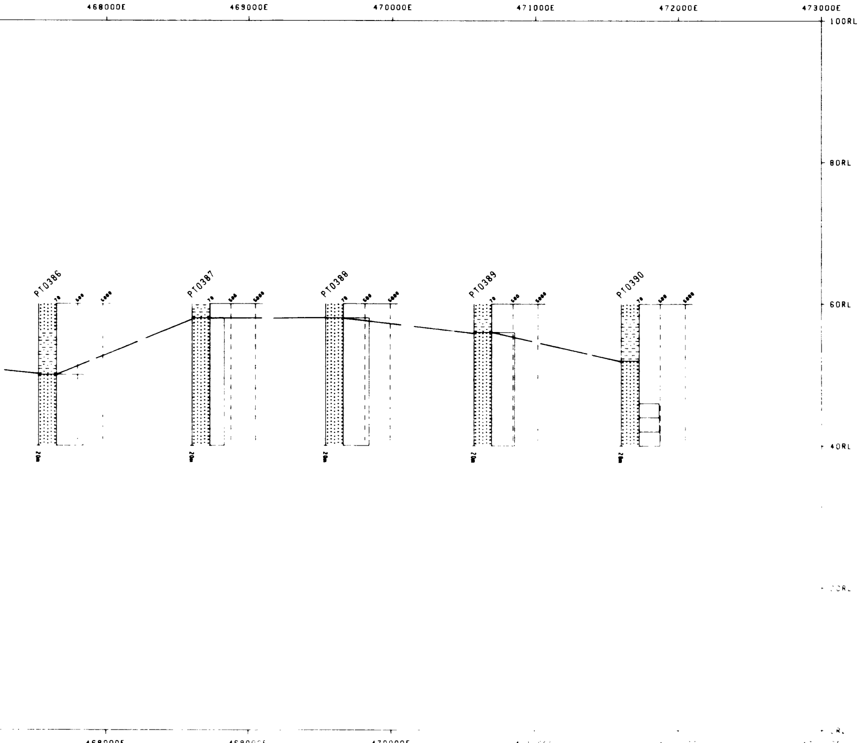


461000E
462000E
463000E
464000E
465000E
466000E
467000E
PT0379
PT0380
PT0381
PT0382
PT0383
PT0384
PT0385
70
500
5000
20m
30m


468000E
469000E
470000E
471000E
472000E
473000E
100RL
80RL
60RL
40RL
20RL
PT0386
PT0387
PT0388
PT0389
PT0390
70
500
5000
20m

SAMPLE BASED RESULTS:

TI XRF PPM	ZR XRF PPM
> 5000	> 5000
> 500	> 500
70 — 10000+	70 — 10000+

ROCKS:

- ░ SAND
- ░ CLAYEY SAND
- ░ CLAY
- ░ SOIL

DOWNHOLE MARKER CODES:

TPS ——— ———

BHP-UTAH Minerals International

Murray Basin

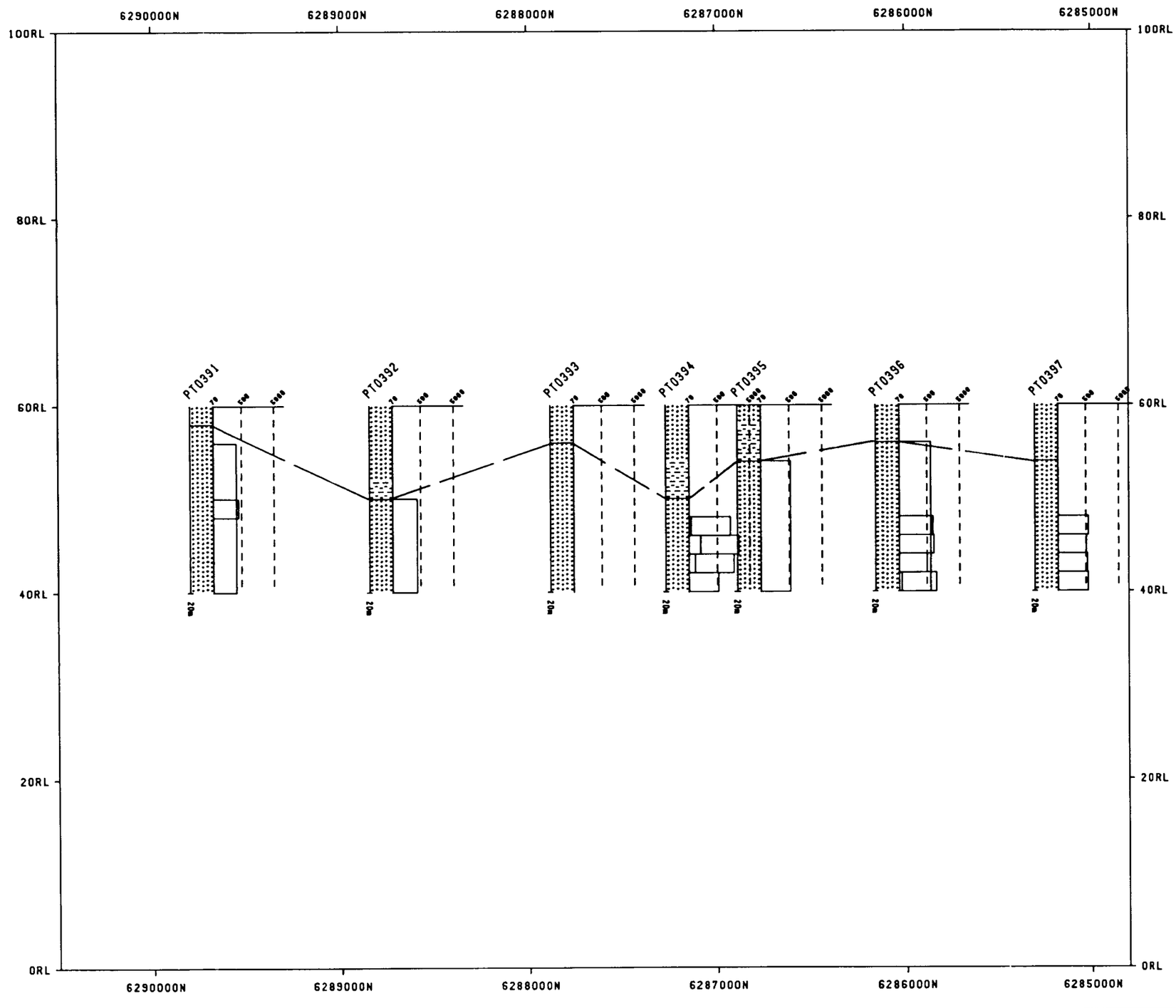
MURRAY BASIN TITANIUM
E.L. 1445 PEPPERTREE S.A.
CROSS SECTION TRAVERSE TWENTY FOUR

8009-11

DATE: 20-DEC-89
Compiled by KLB
X SCALE: 1:25000
Y SCALE: 1:500

BHP-UTAH MINERALS INTERNATIONAL
ASIA PACIFIC DIVISION

# Murray Basin - SECTION 466100 EAST




SAMPLE BASED RESULTS:

| TI XRF PPM | ZR XRF PPM |
|---|---|
| > 5000 | > 5000 |
| > 500 | > 500 |
| 70 – 10000+ | 70 – 10000+ |

ROCK3:

- SAND
- CLAYEY SAND

DOWNHOLE MARKER CODES:

TPS

## BHP-UTAH Minerals International

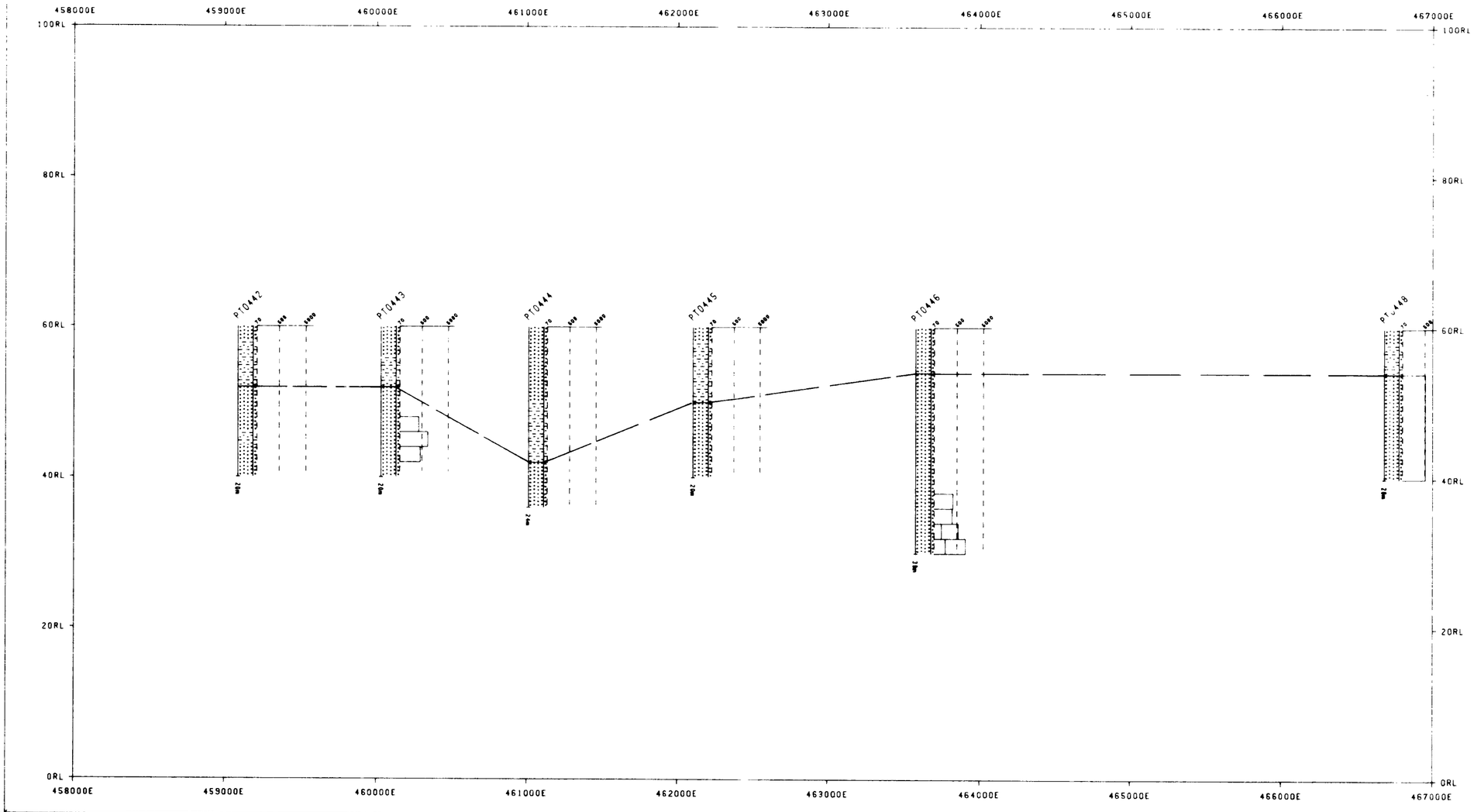
Murray Basin

MURRAY BASIN TITANIUM
E.L. 1445 PEPPERTREE S.A.
CROSS SECTION TRAVERSE TWENTY FIVE

0441

| | | |
|---|---|---|
| DATE: 20-DEC-89 | Compiled by KLB | BHP-UTAH MINERALS INTERNATIONAL ASIA PACIFIC DIVISION EXPLORATION DEPARTMENT |
| X SCALE: 1:25000 | Y SCALE: 1:500 | |

Murray Basin 6278920 NORTH




SAMPLE BASED RESULTS:

| TI XRF PPM | | ZR XRF PPM | |
|---|---|---|---|
| > 5000 | | > 5000 | |
| > 500 | | > 500 | |
| 70 | 10000+ | 70 | 10000+ |

ROCKS:

SAND

CLAYEY SAND

DOWNHOLE MARKER CODES:

*PS

BHP-UTAH Minerals International

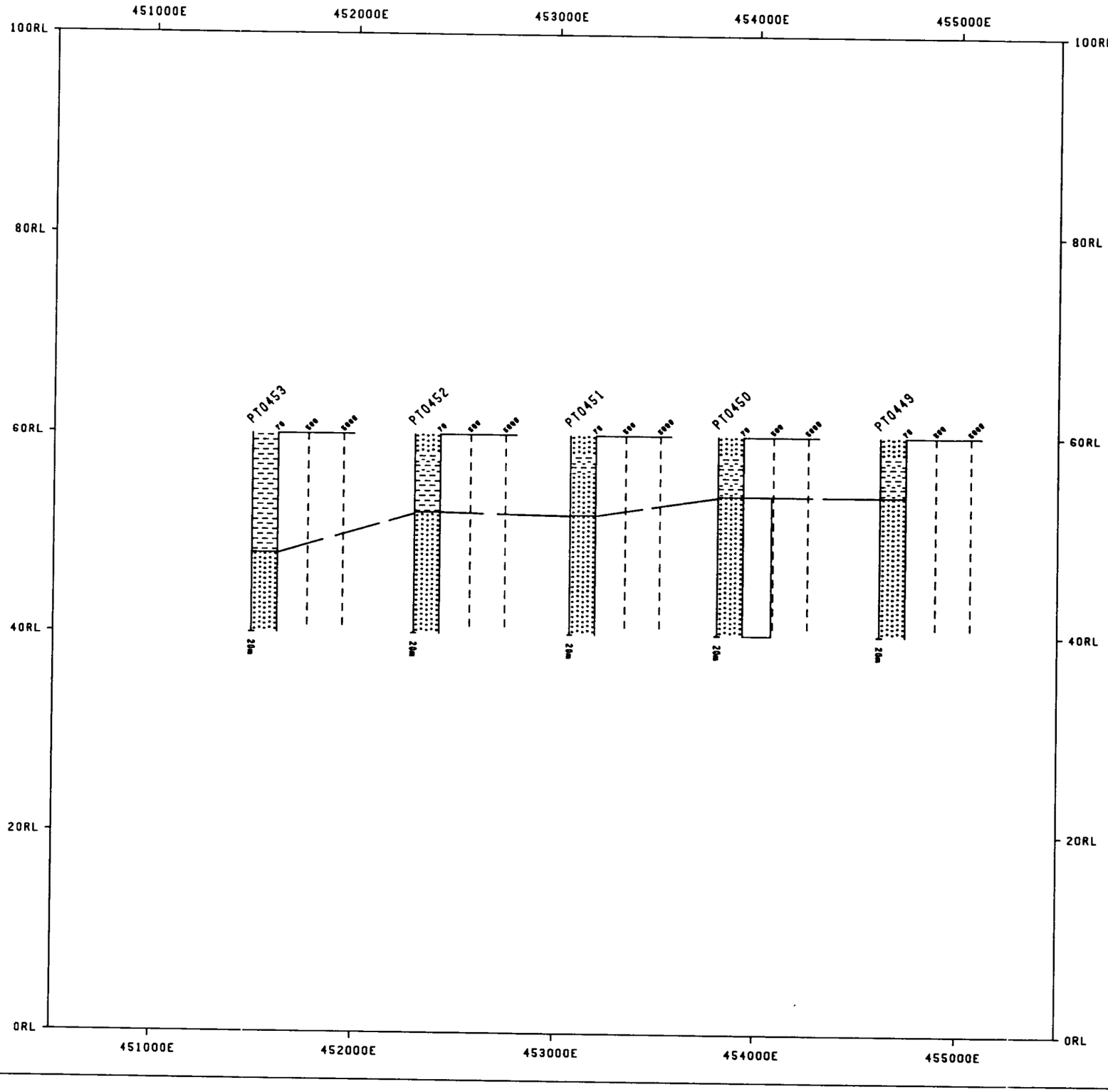
Murray Basin

MURRAY BASIN TITANIUM
E.L. 1445 PEPPERTREE S.A.
CROSS SECTION TRAVERSE TWENTY SIX

8009-12

| DATE: 18-DEC-89 | Compiled by KLB | BHP-UTAH MINERALS INTERNATIONAL |
|---|---|---|
| X SCALE: 1:25000 | Y SCALE: 1:500 | ASIA PACIFIC DIVISION EXPLORATION DEPARTMENT |

# Murray Basin - SECTION 6286700 NORTH




SAMPLE BASED RESULTS:

| TI XRF PPM | ZR XRF PPM |
|---|---|
| > 5000 | > 5000 |
| > 500 | > 500 |
| 70 – 10000+ | 70 – 10000+ |

ROCK3:

- SAND
- CLAYEY SAND
- CLAY

DOWNHOLE MARKER CODES:

TPS

BHP-UTAH Minerals International

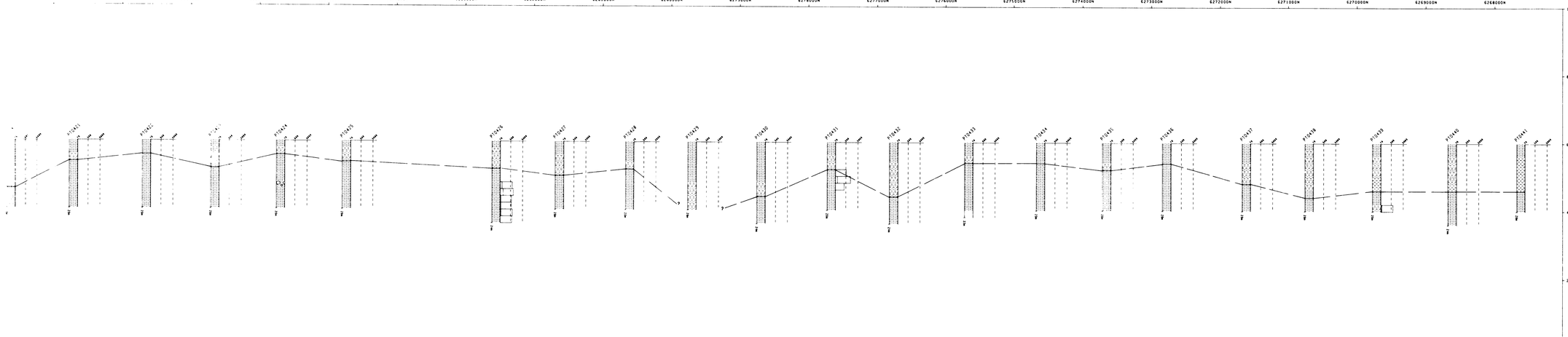
Murray Basin

MURRAY BASIN TITANIUM
E.L. 1445 PEPPERTREE S.A.
CROSS SECTION TRAVERSE TWENTY SEVEN

0443

| | | |
|---|---|---|
| DATE: 20-DEC-89 | Compiled by KLB | BHP-UTAH MINERALS INTERNATIONAL ASIA PACIFIC DIVISION EXPLORATION DEPARTMENT |
| X SCALE: 1:25000 | Y SCALE: 1:500 | |

# Murray Basin - SECTION 472240 EAST




SAMPLE BASED RESULTS:

| > 5000 | > 5000 |
|---|---|
| > 500 | > 500 |
| 70 — 10000+ | 70 — 10000+ |
| TI XRF PPM | ZR XRF PPM |

ROCKS:

- SAND
- CLAYEY SAND
- PEBBLY SAND
- CLAY

DRINHOLE MARKER CODES:

TPS

BHP-UTAH Minerals International

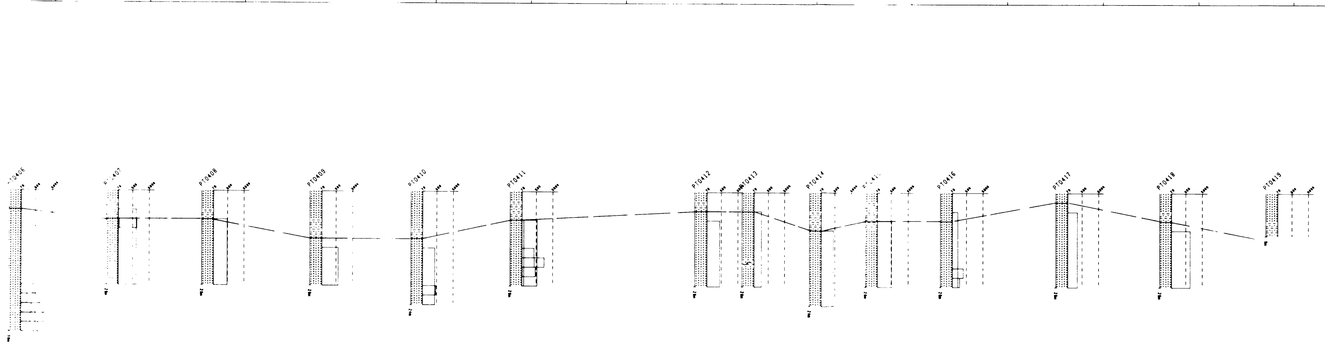
Murray Basin

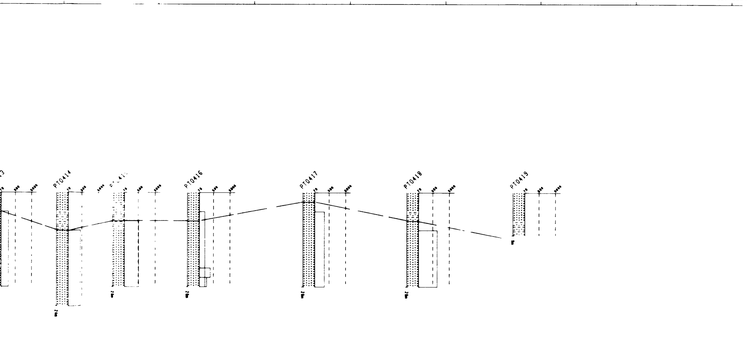
MURRAY BASIN TITANIUM
E.L. 1445 PEPPERTREE S.A.
CROSS SECTION TRAVERSE TWENTY EIGHT

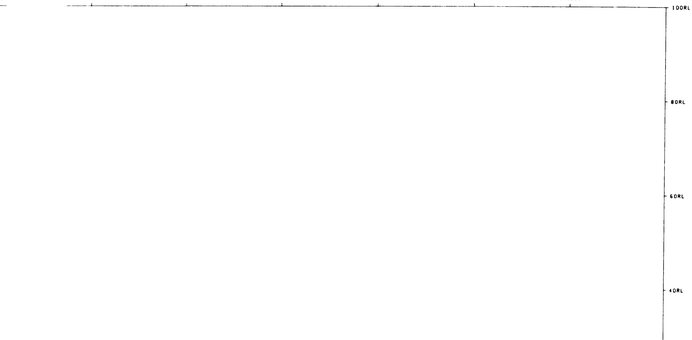
8009-13

| DATE: 20-DEC-89 | Compiled by KLB | BHP-UTAH MINERALS INTERNATIONAL |
|---|---|---|
| X SCALE: 1:25000 | Y SCALE: 1:500 | ASIA PACIFIC DIVISION EXPLORATION DEPARTMENT |

# Murray Basin - SECTION 479200 EAST




SAMPLE BASED RESULTS:

| TI XRF PPM | | | | | | | | | 10000+ | TI XRF PPM |
|---|---|---|---|---|---|---|---|---|---|---|
| 70 | | | | | | | | | 10000+ | 70 |
| > 500 | | | | | | | | | | > 500 |
| > 5000 | | | | | | | | | | > 5000 |

ROCKS:

- SAND
- CLAYEY SAND
- SANDSTONE

DOWNHOLE MARKER CODES:

- TPS

BHP-UTAH Minerals International

Murray Basin

MURRAY BASIN TITANIUM
E.L.L. 1445 PEPPERTREE S.A.
CROSS SECTION TRAVERSE TWENTY NINE

8009-14

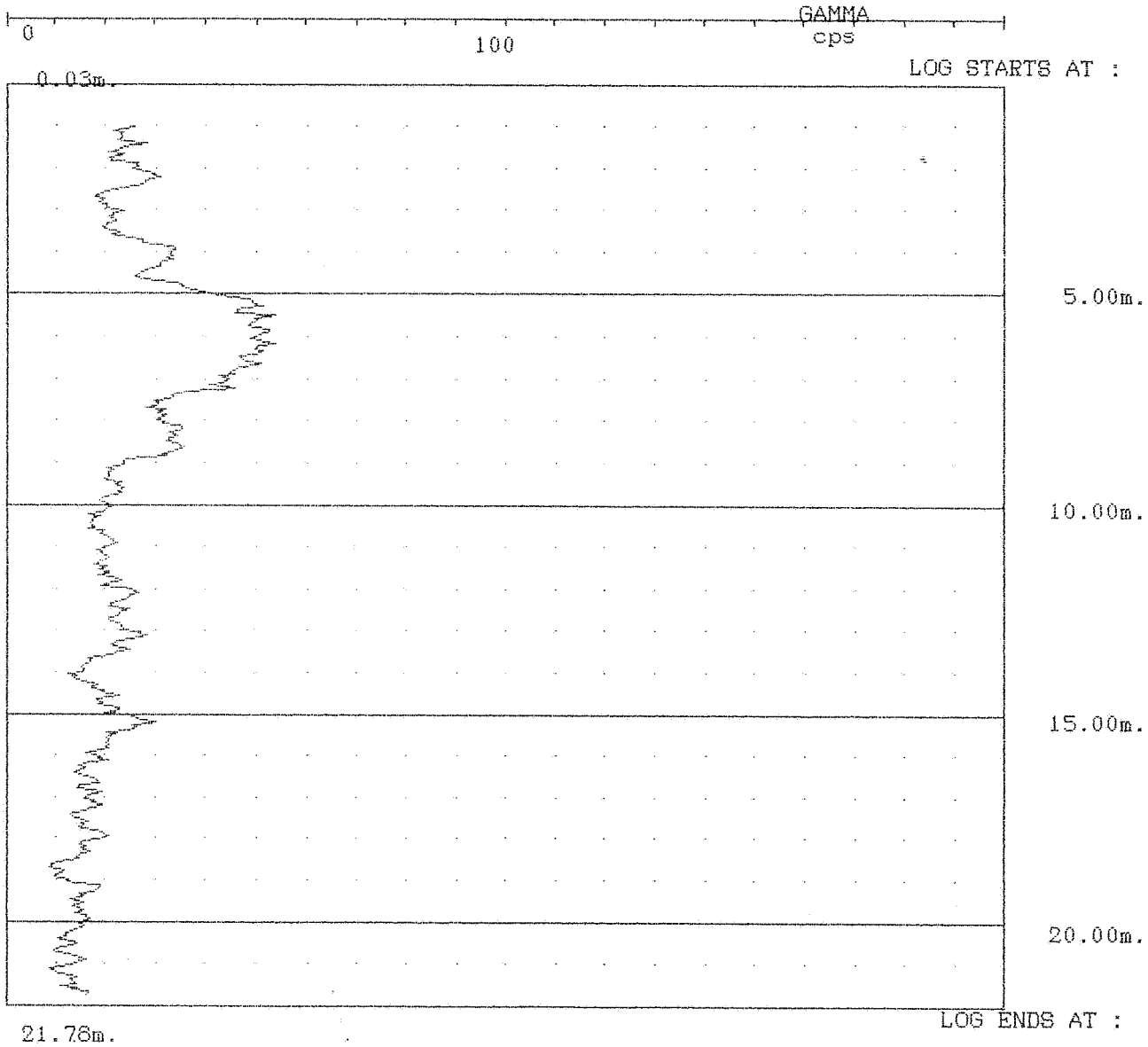
| DATE: 20-DEC-89 | Compiled by KLB | BHP-UTAH MINERALS INTERNATIONAL |
|---|---|---|
| X SCALE: 1:25000 | Y SCALE: 1:500 | ASIA PACIFIC DIVISION EXPLORATION DEPARTMENT |

# A P P E N D I X 3

## GAMMA RAY LOGS

REPLAY of A:\\PT3480002 at 11:32 on 25/09/89

SCALE: 1 TO 100
Using
DEPTH CORRECTION

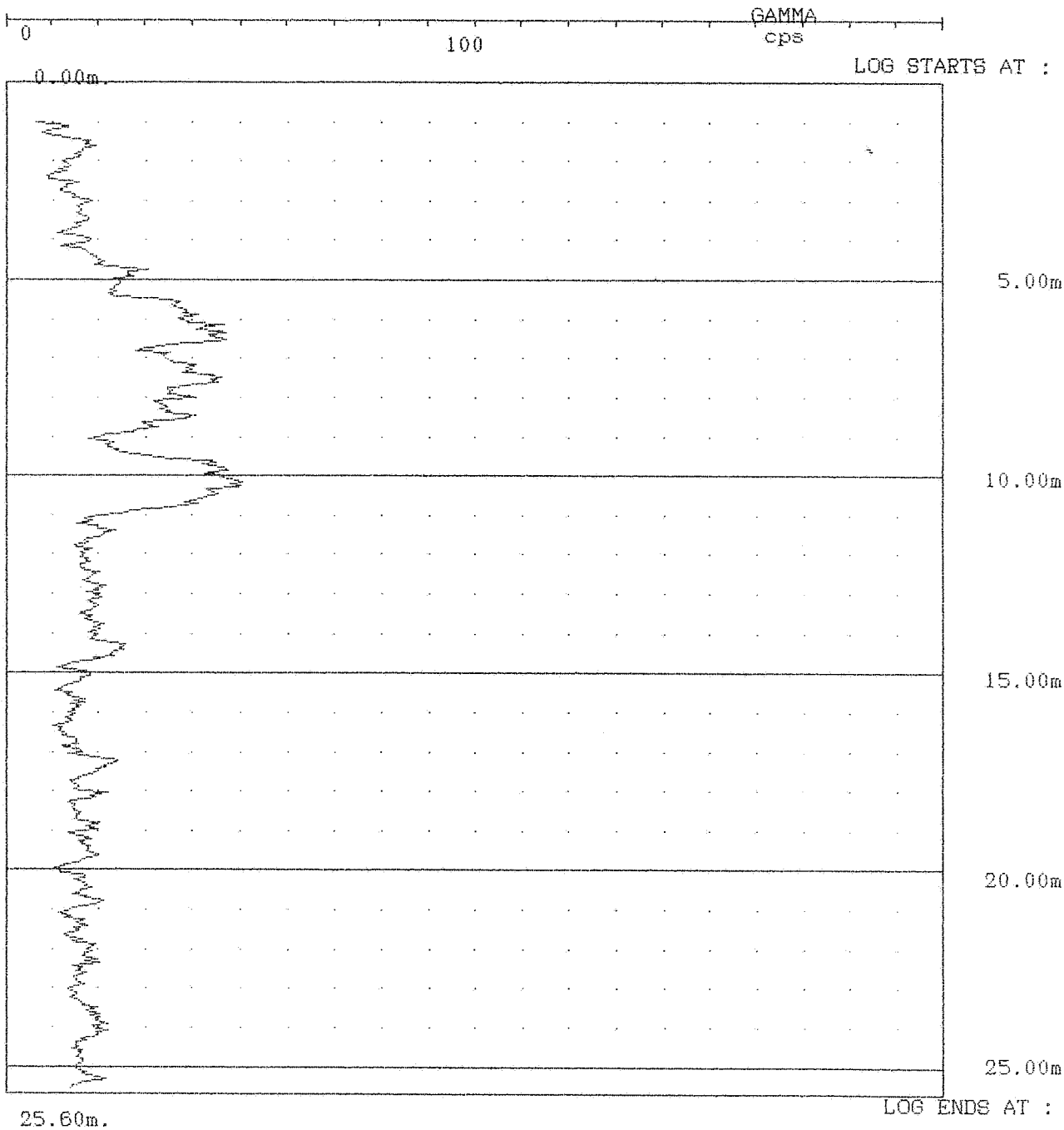


REPLAY of A:\\PT3490001 at 11:38 on 25/09/89

SCALE: 1 TO 100

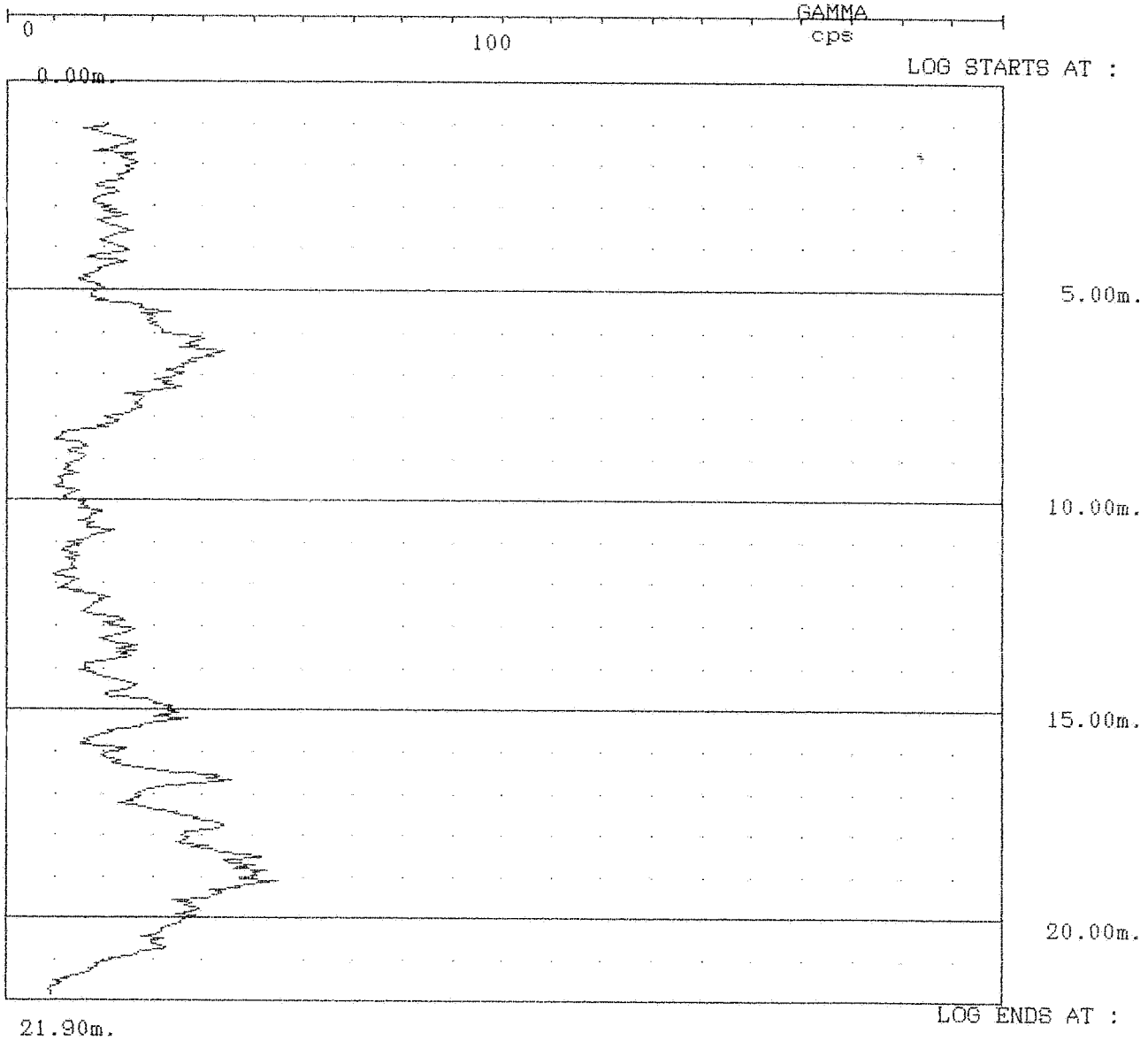
using

DEPTH CORRECTION



REPLAY of A:\\PT3500001 at 11:42 on 25/09/89

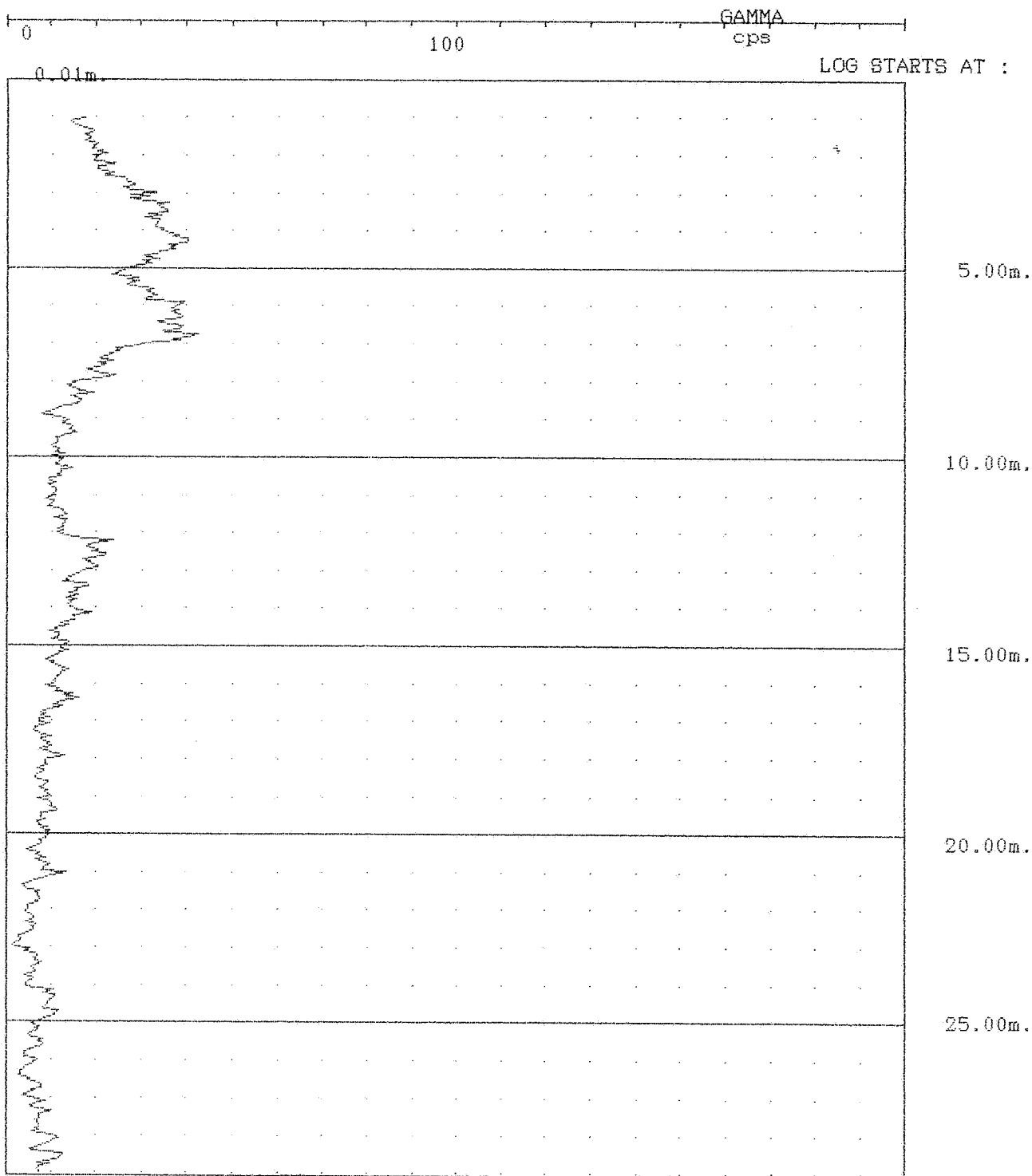
SCALE: 1 TO 100
using
DEPTH CORRECTION



REPLAY of A:\\PT3510001 at 11:46 on 25/09/89

SCALE: 1 TO 100

DEPTH CORRECTION using

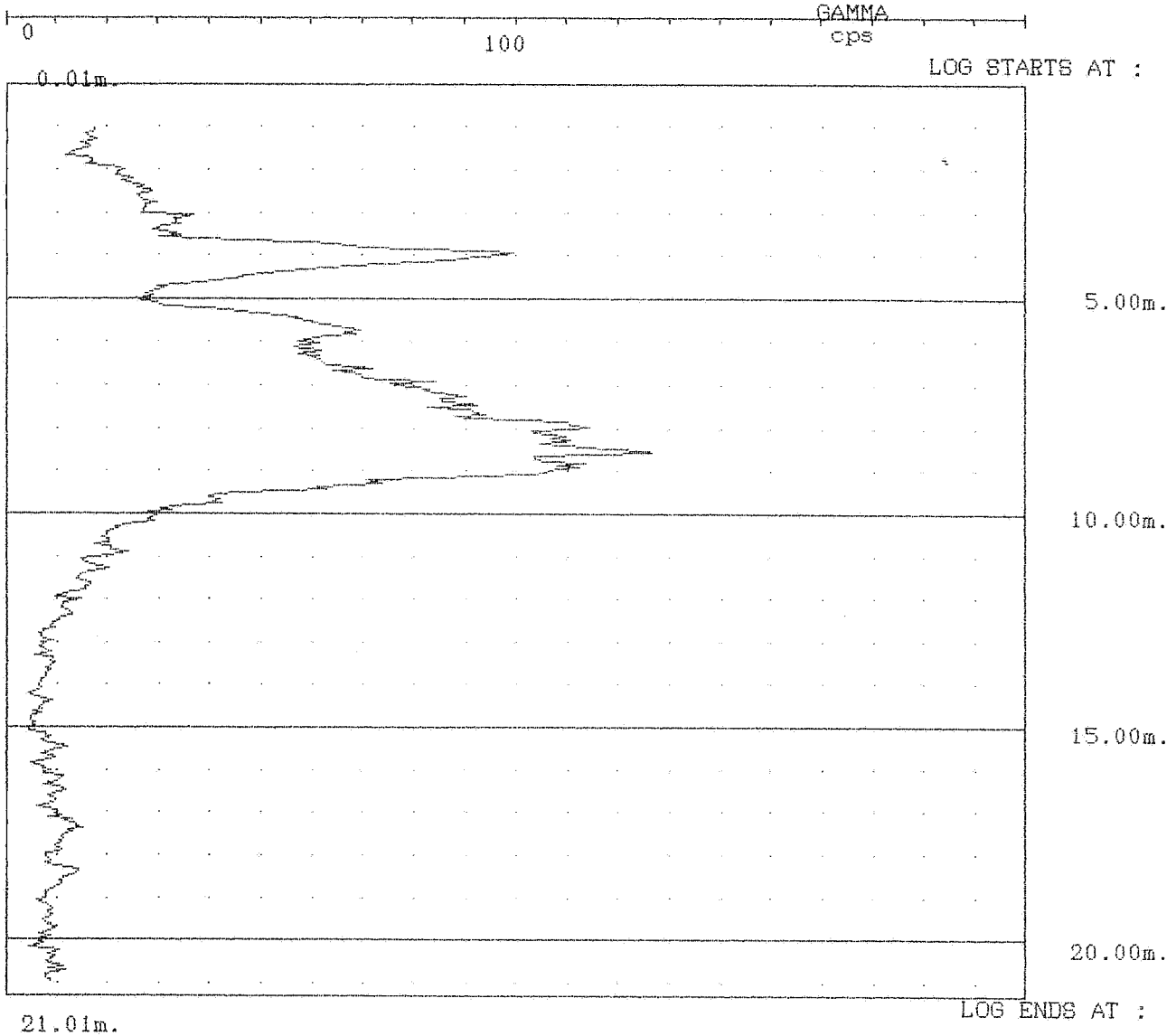


REPLAY of A:\\PT3520001 at 11:52 on 25/09/89

SCALE: 1 TO 100

using

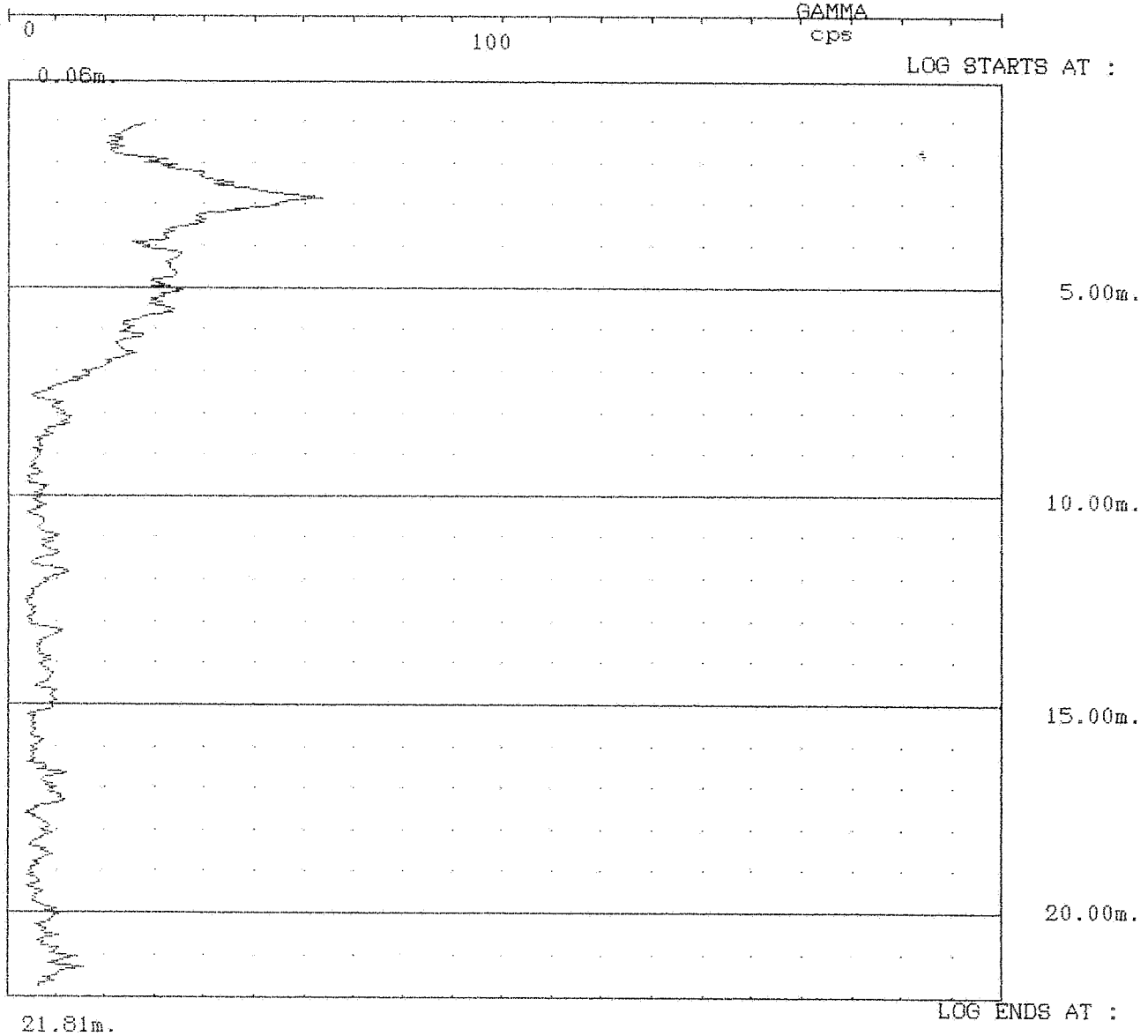
DEPTH CORRECTION



REPLAY of A:\\PT3530001 at 11:56 on 25/09/89

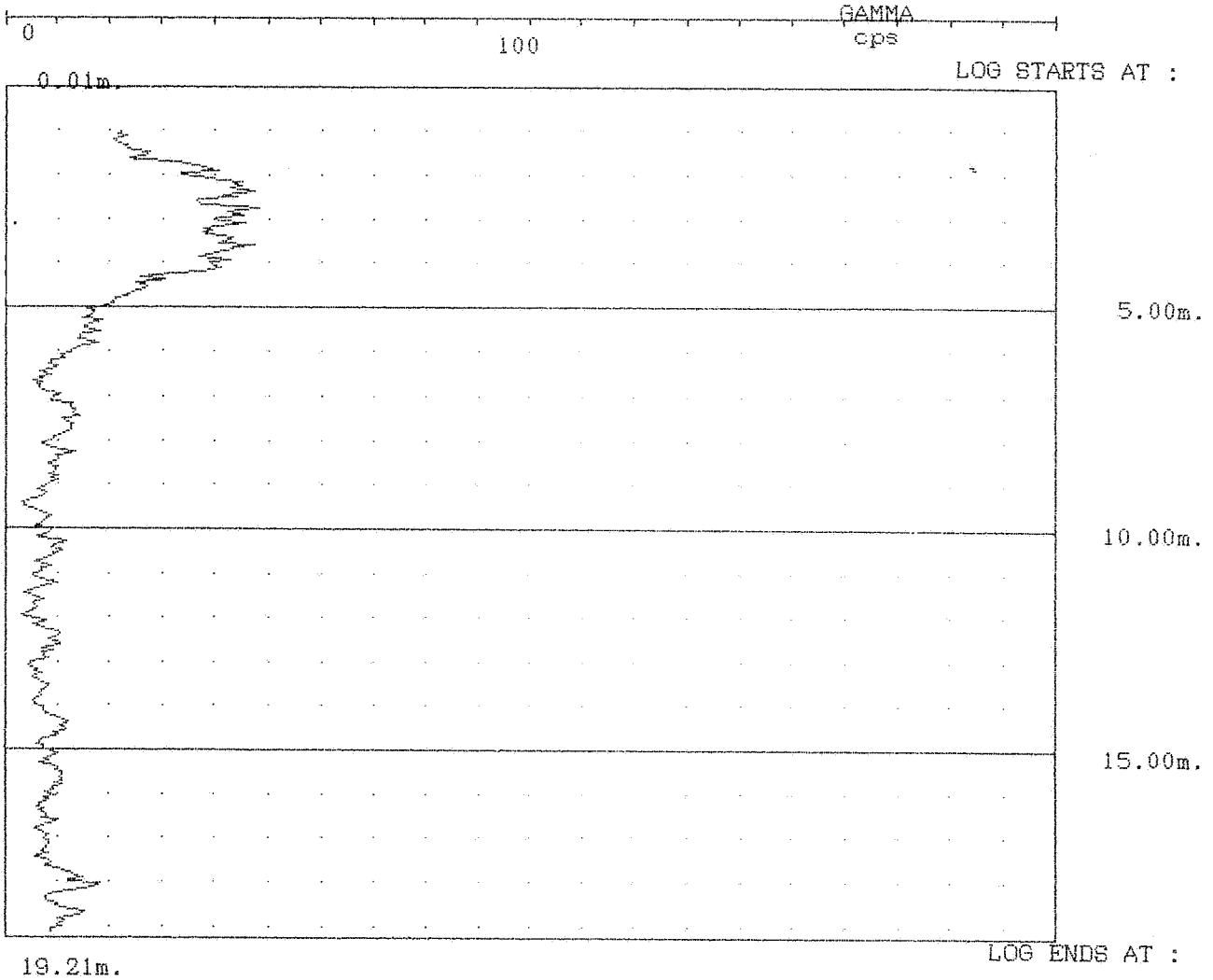
SCALE: 1 TO 100

DEPTH CORRECTION



REPLAY of A:\\PT3540001 at 12:00 on 25/09/89

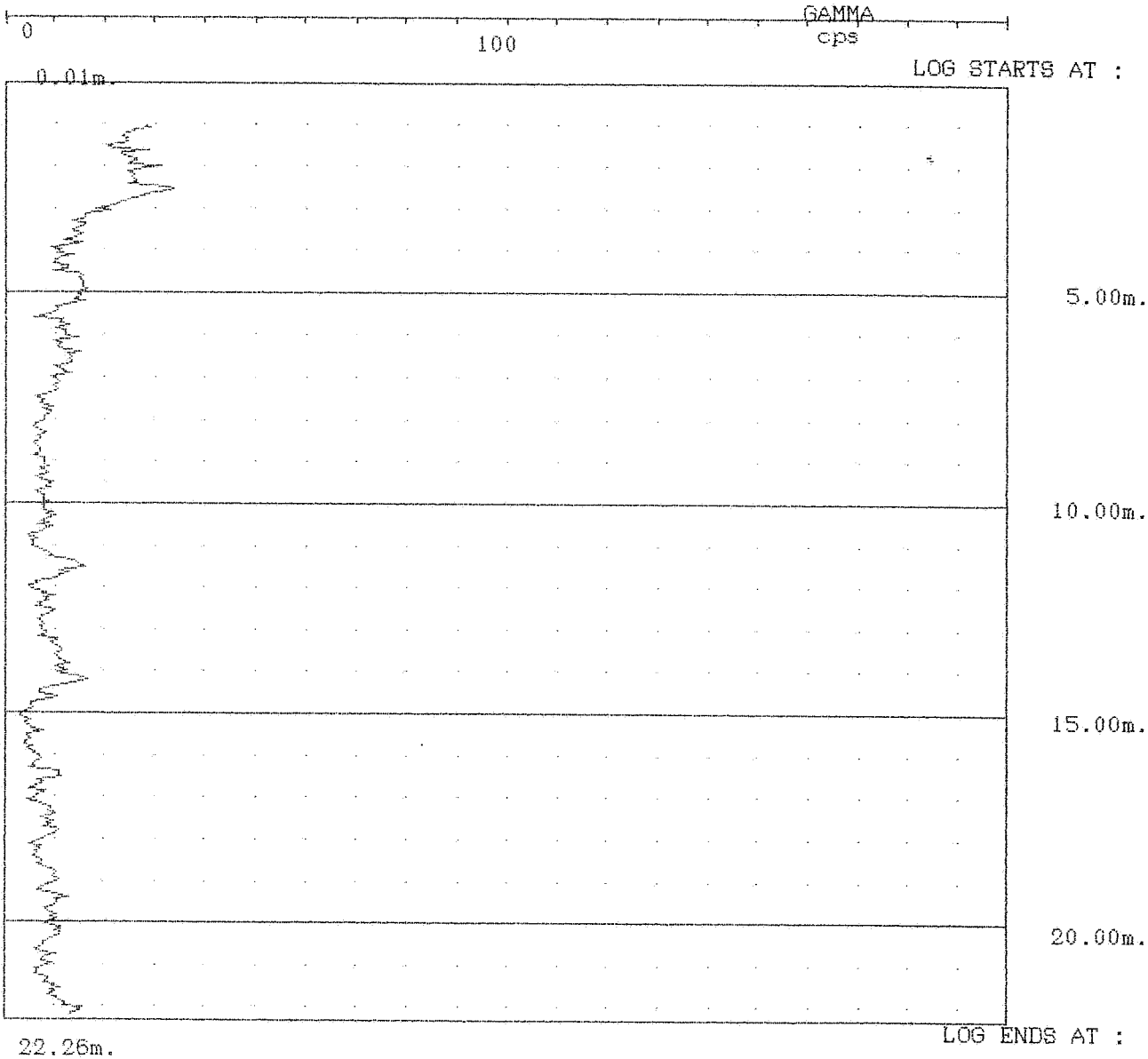
SCALE: 1 TO 100
using
DEPTH CORRECTION



REPLAY of A:\\PT3550002 at 12:10 on 25/09/89

SCALE: 1 TO 100

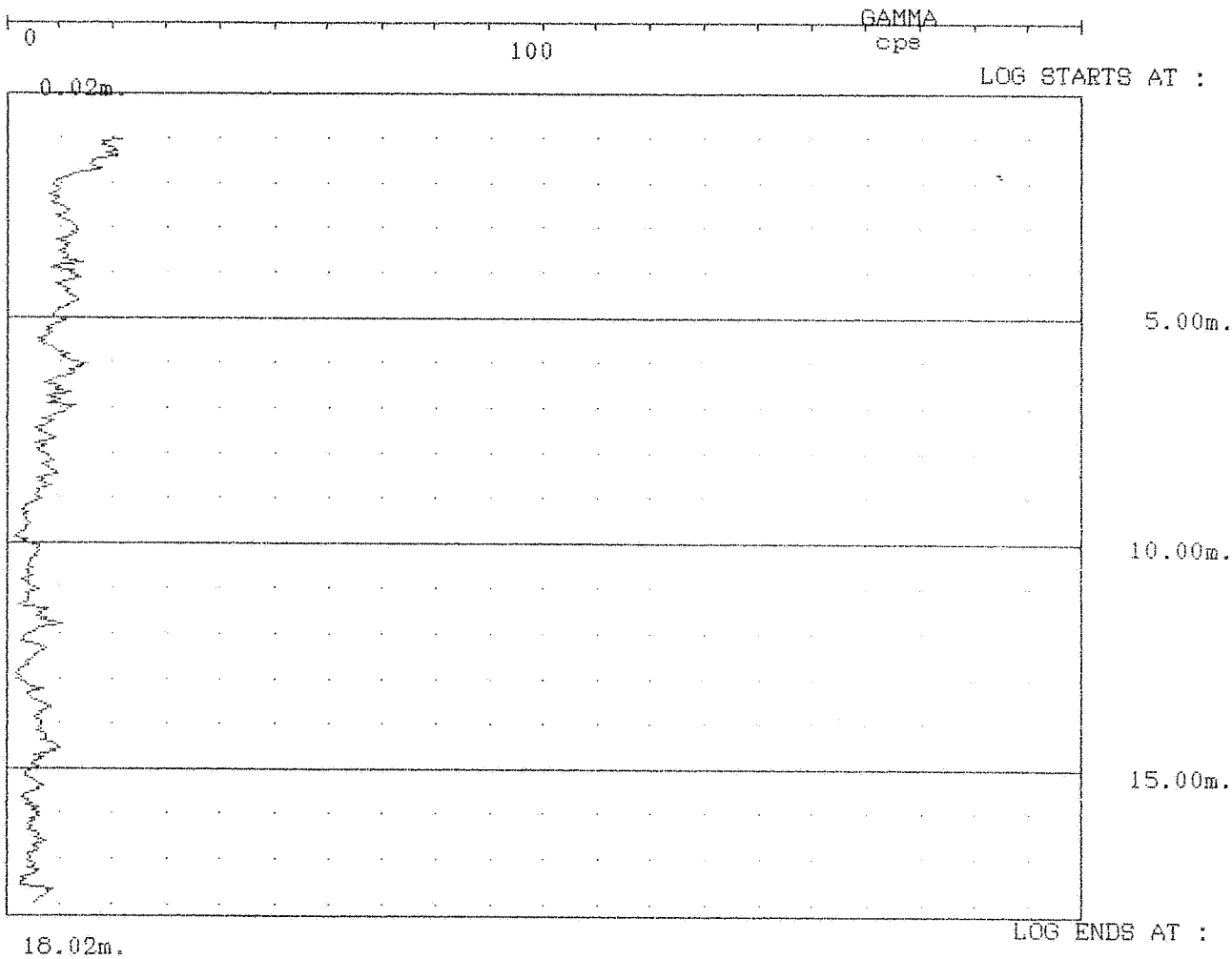
using DEPTH CORRECTION



REPLAY of A:\\PT3560001 at 12:15 on 25/09/89

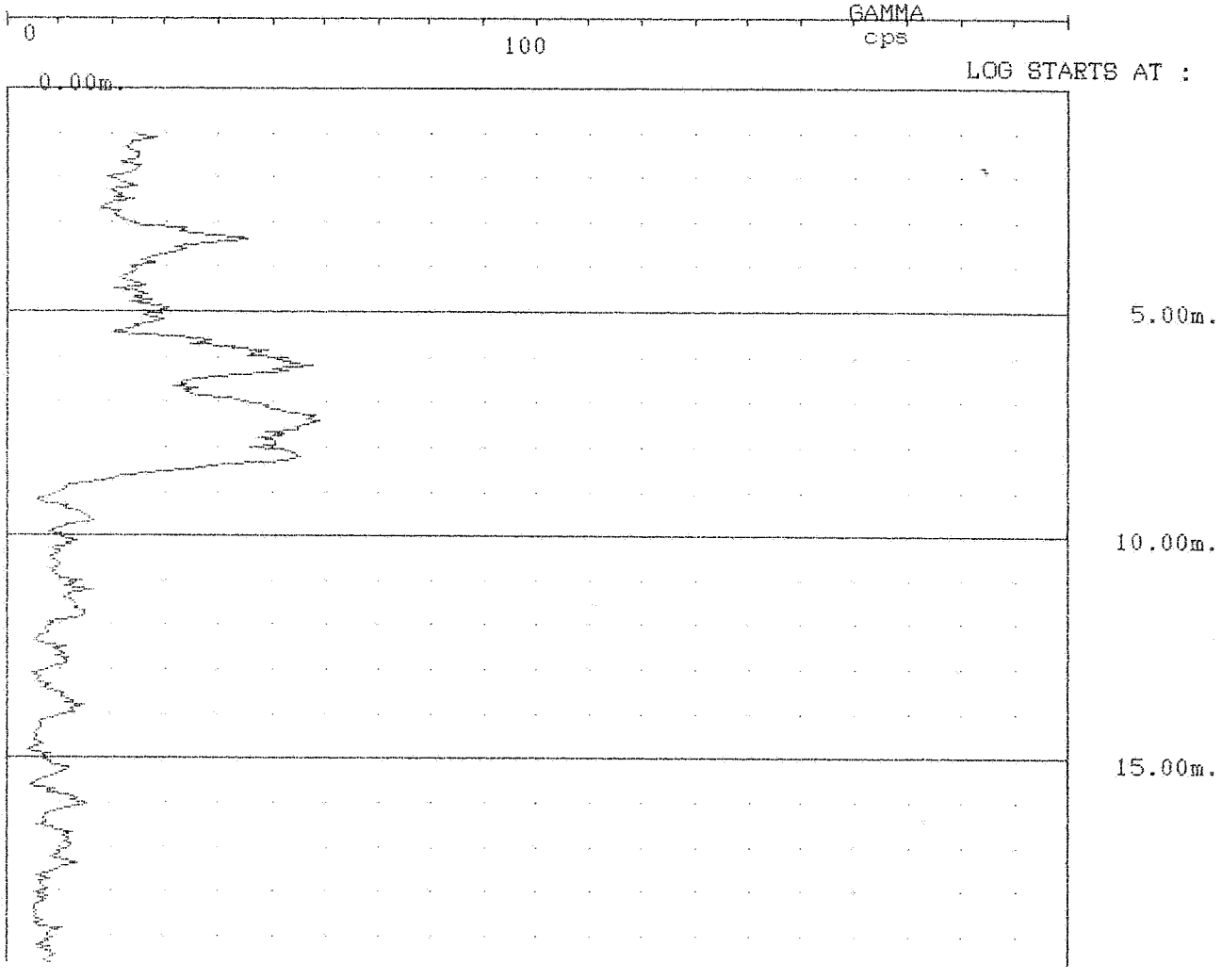
SCALE: 1 TO 100

DEPTH CORRECTION



REPLAY of A:\\PT3570001 at 12:19 on 25/09/89

SCALE: 1 TO 100
using
DEPTH CORRECTION




AUTOSCAN of FILE PT3570001 From 0.00 m. to 30.00 m.

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There were 400 scans from 0.00 m. to 19.95 m.

Channel 1 GAMMA

Min value 0.000 cps
Avg value 9.146 cps
Max value 39.216 cps

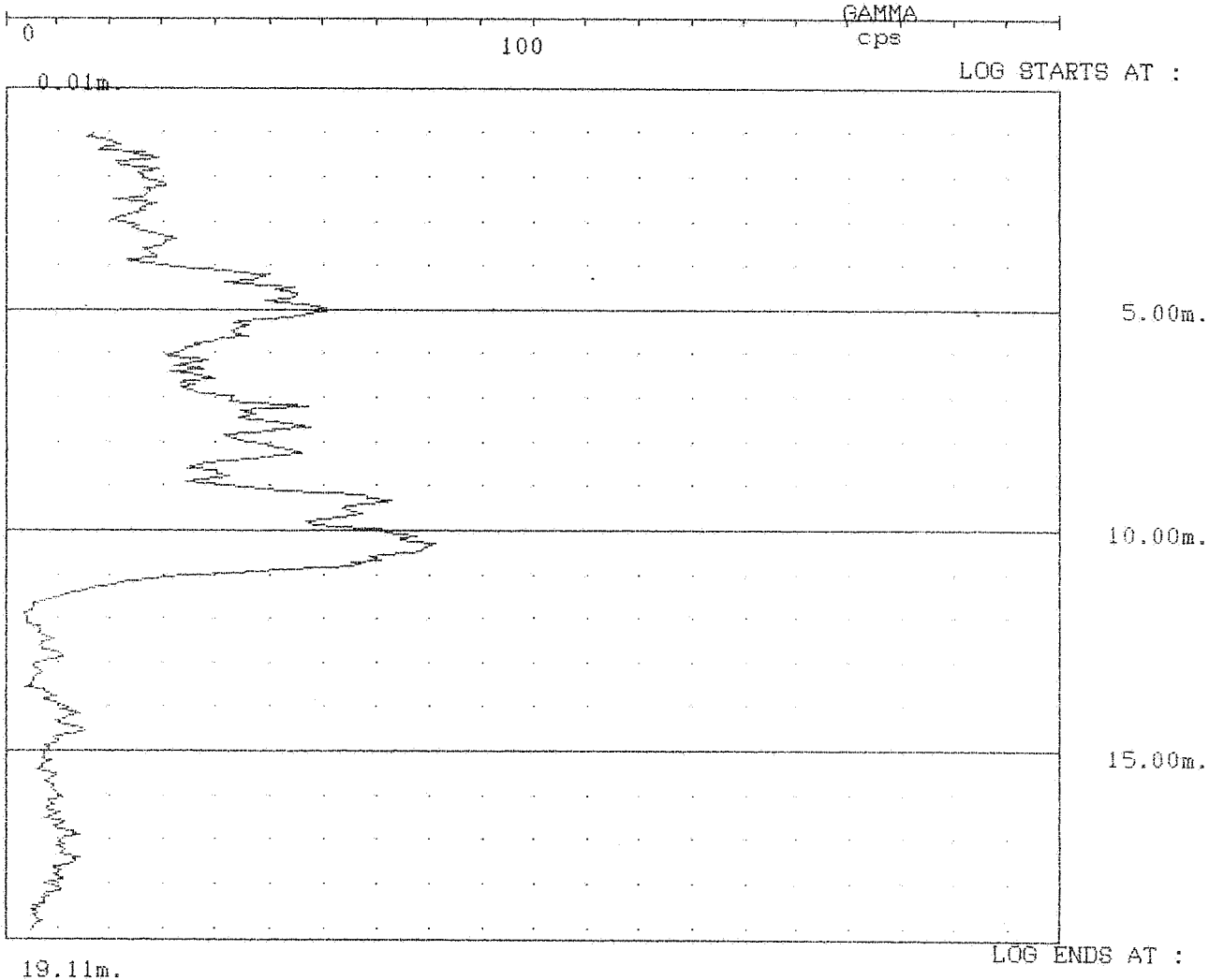
AVG Logging Speed = 5.90 m/min

REPLAY of A:\\PT3580001 at 12:25 on 25/09/89

SCALE: 1 TO 100

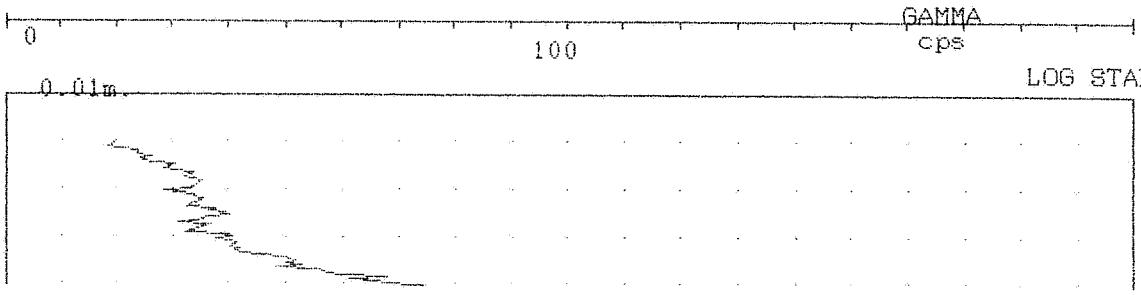
usiog

DEPTH CORRECTION



REPLAY of A:\\PT3590001 at 12:29 on 25/09/89

SCALE: 1 TO 100
using
DEPTH CORRECTION

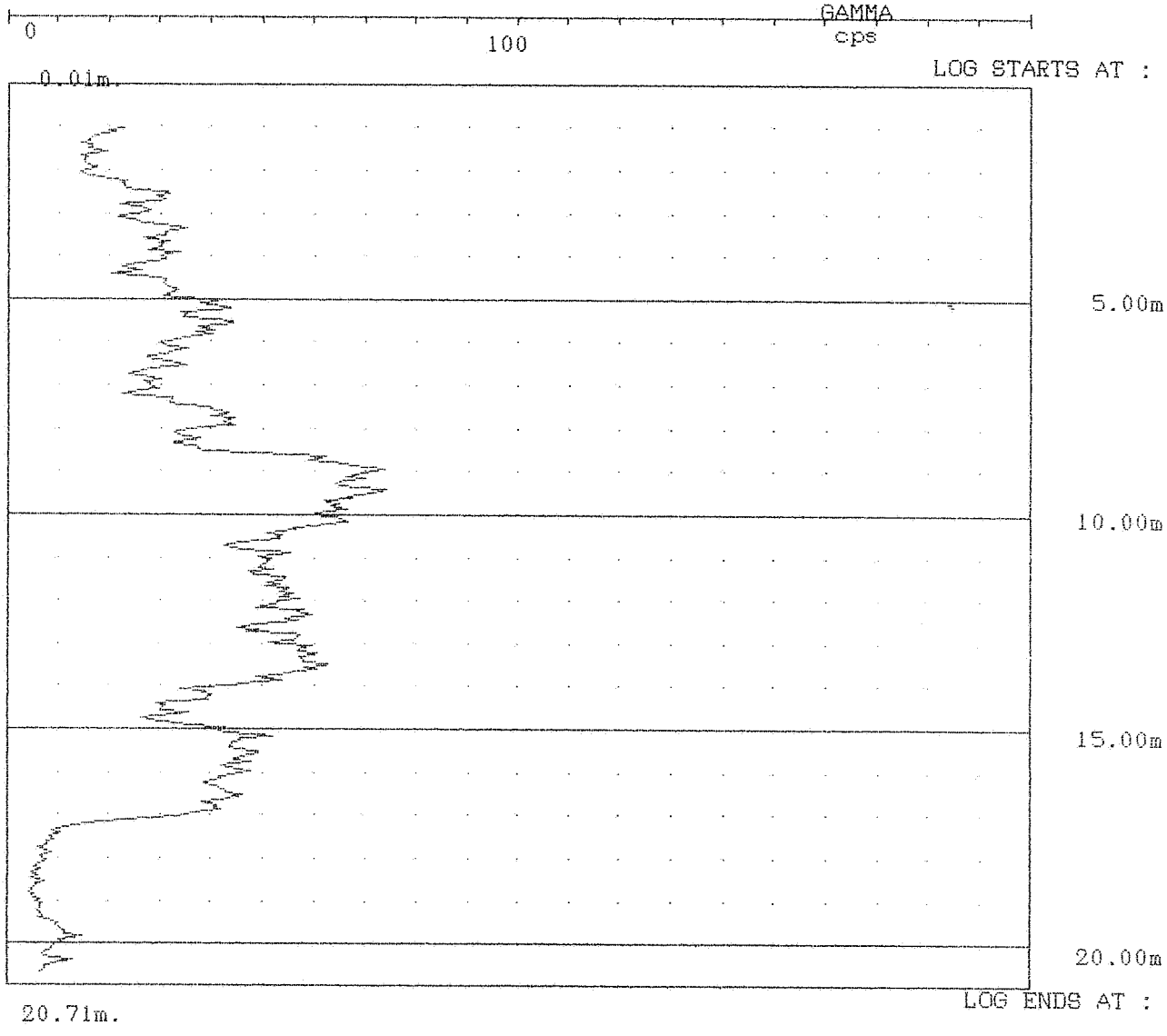


REPLAY of A:\\PT3600001 at 12:33 on 25/09/89

SCALE: 1 TO 100

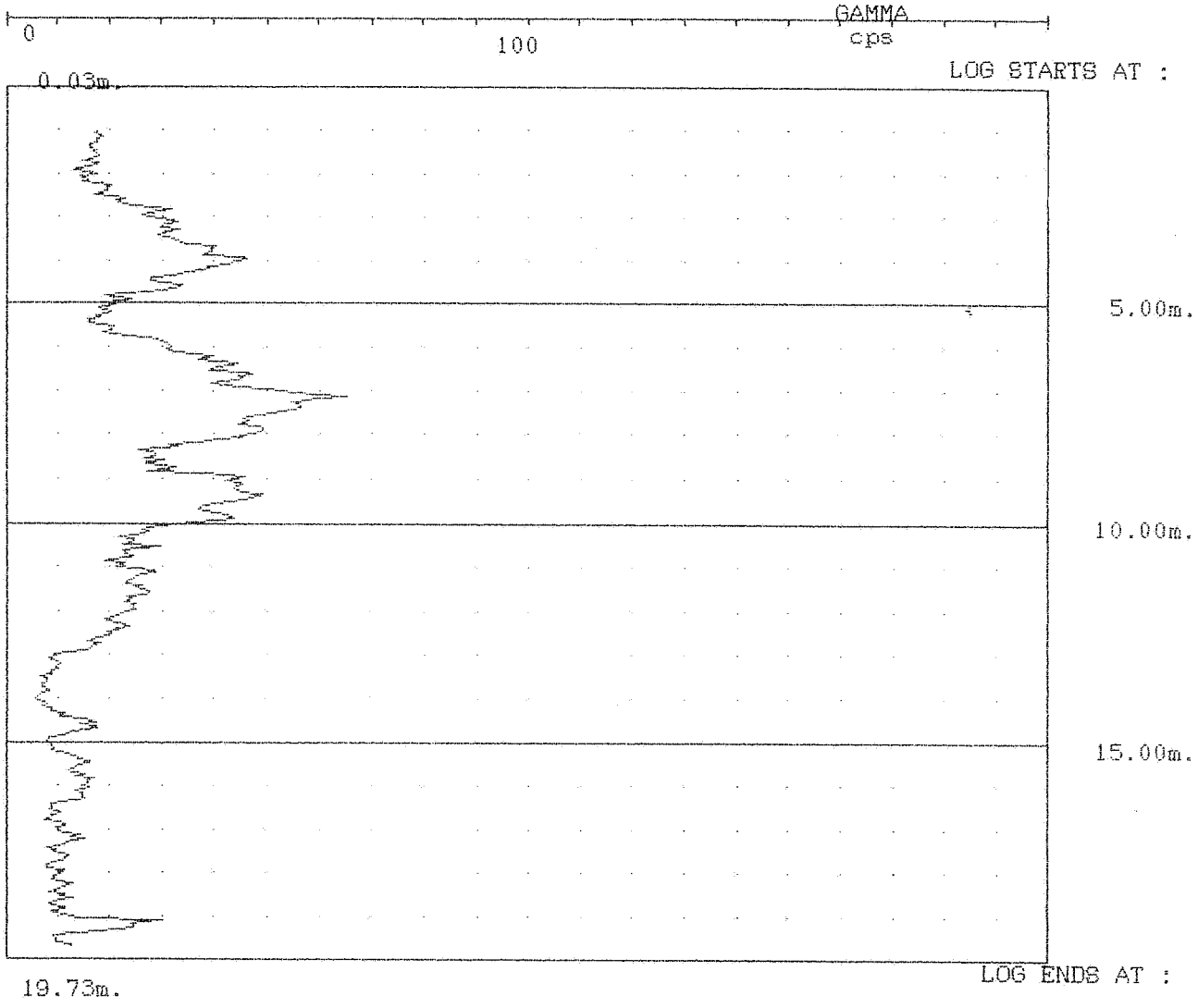
using

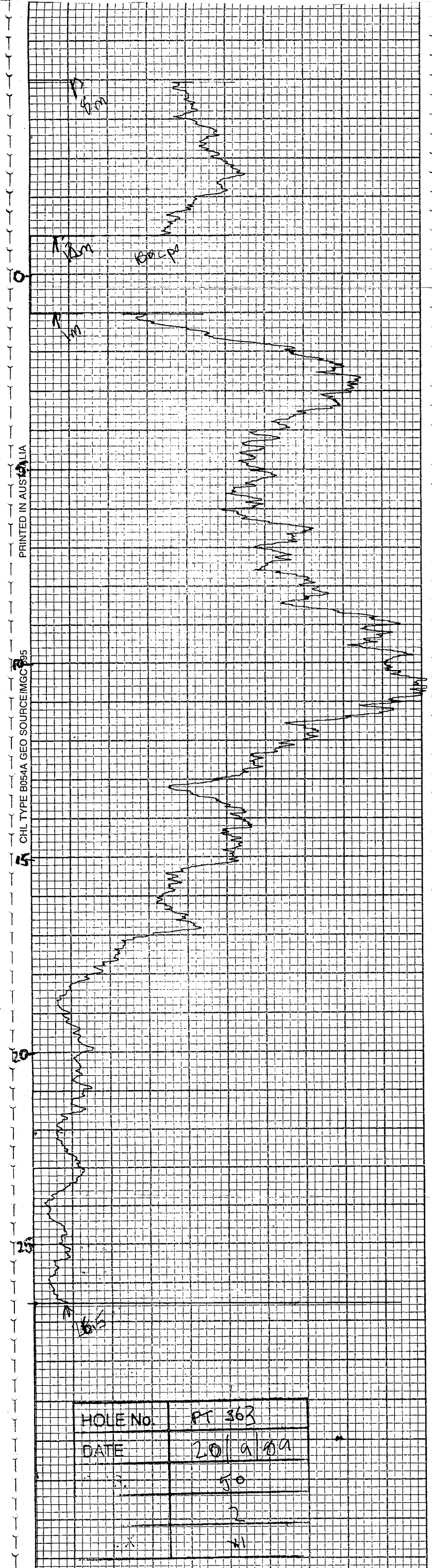
DEPTH CORRECTION

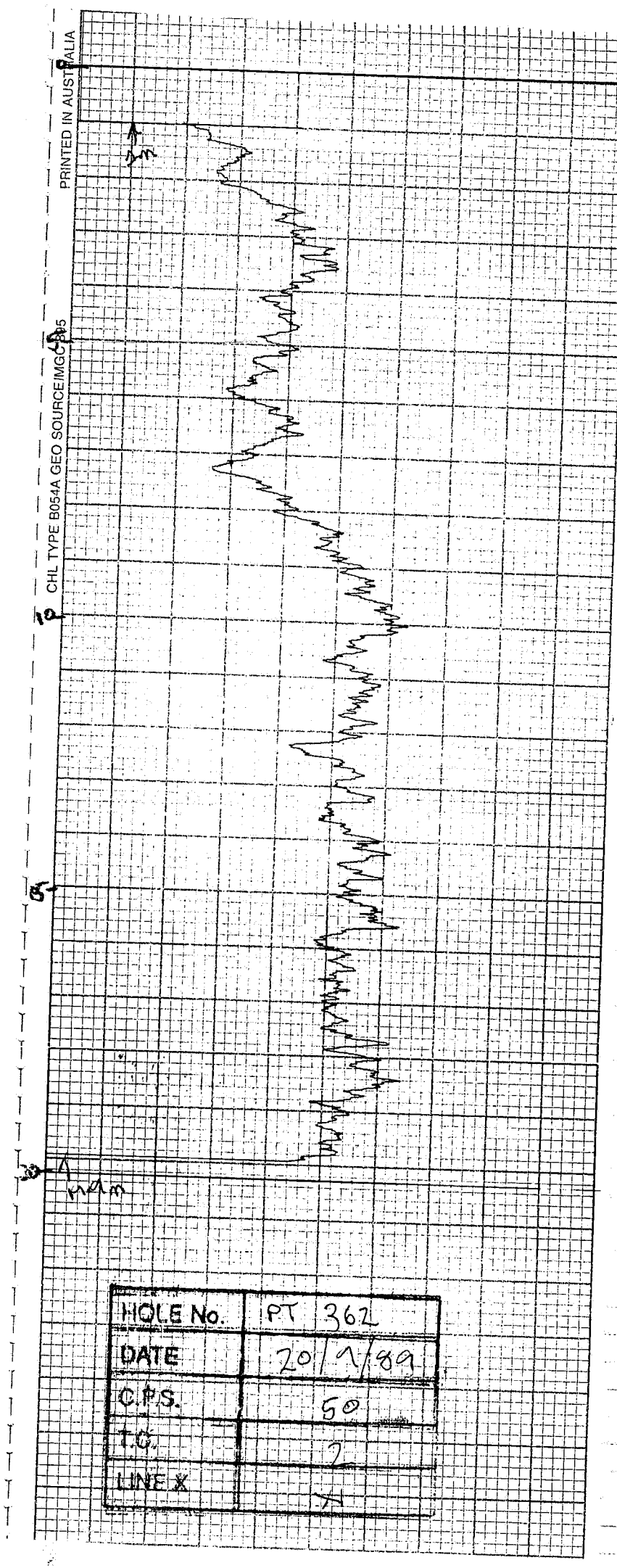


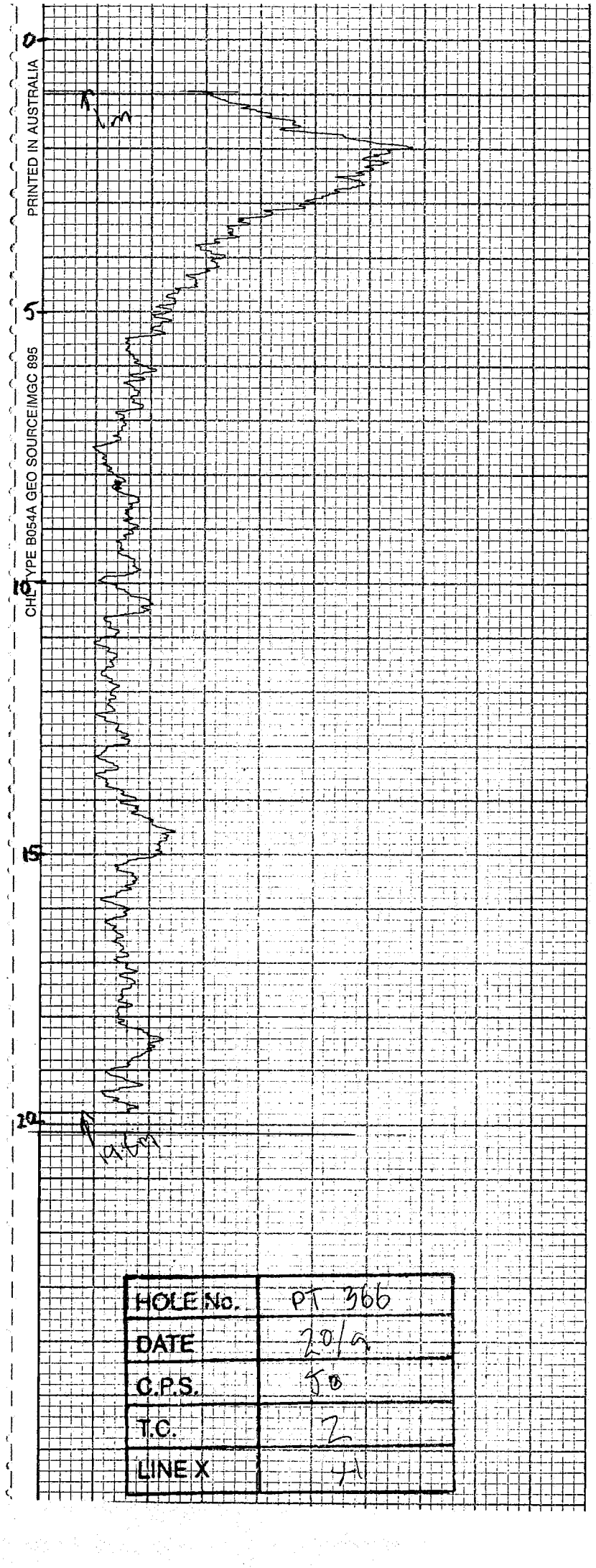
REPLAY of C:\LOGDATA\PT3610001 at 12:38 on 25/09/89

SCALE: 1 TO 100
using
DEPTH CORRECTION

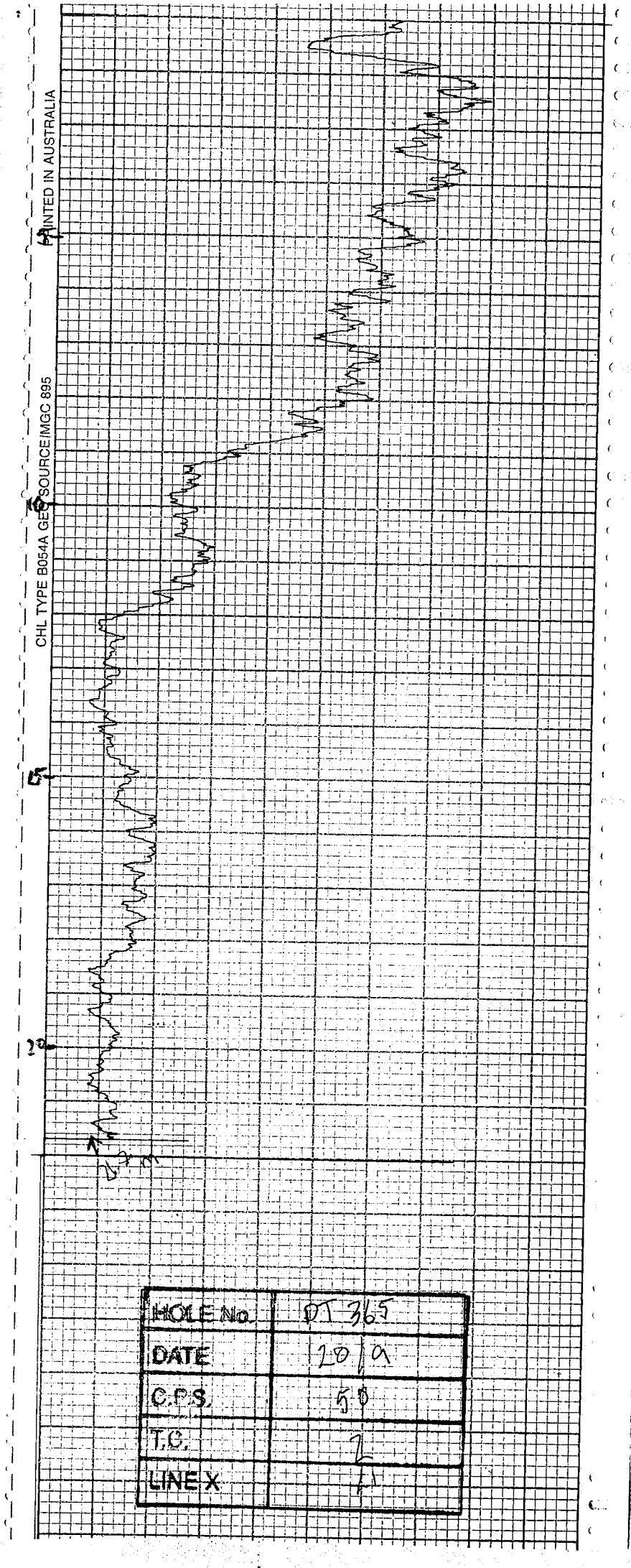



CHL TYPE B054A GEO SOURCE/MGC 1995
PRINTED IN AUSTRALIA
5
10
15
20
25
HOLE No. PT 363
DATE 20/9/89
50
2
N1

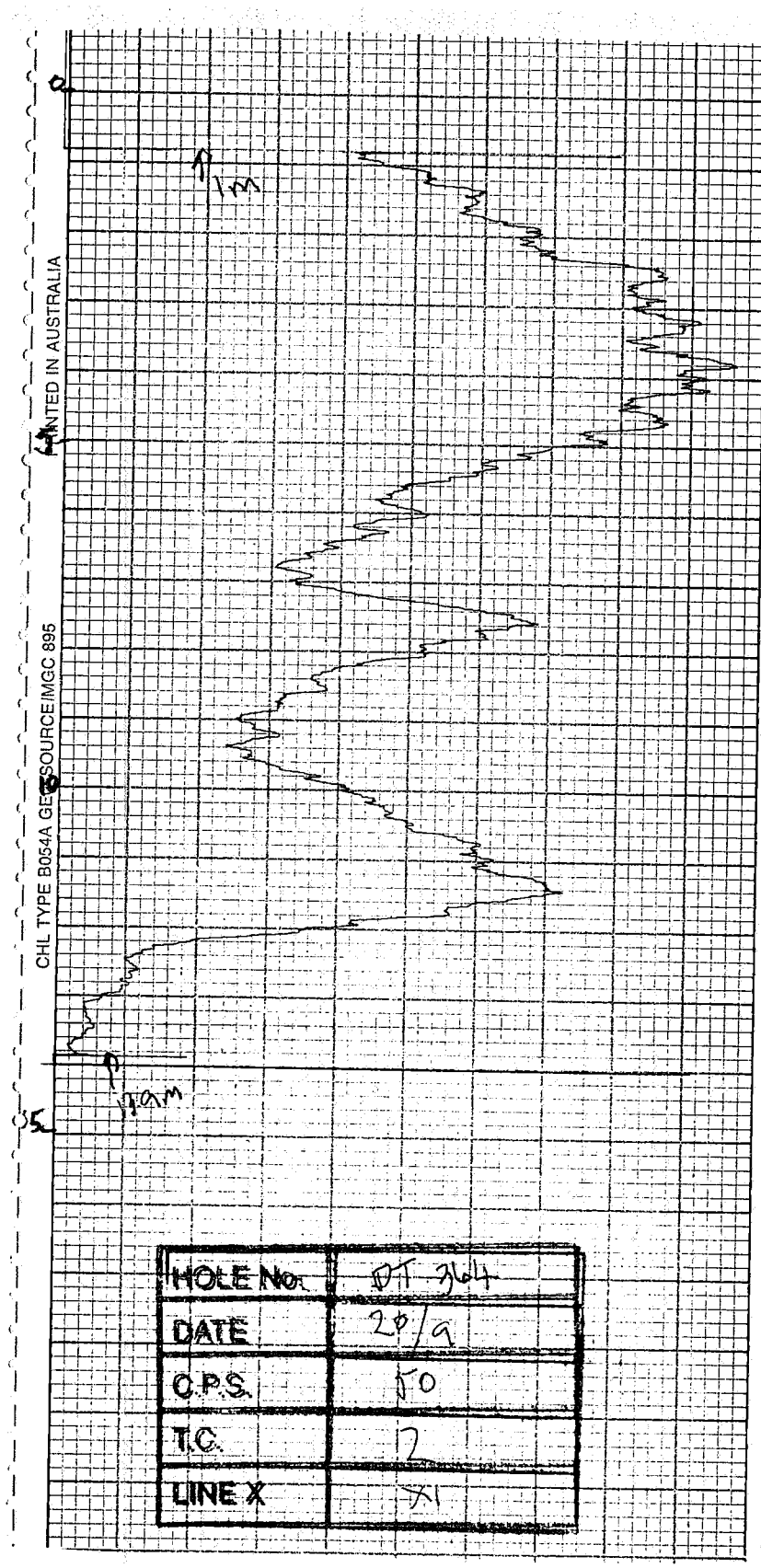

CHL TYPE B054A GEO SOURCE/MGC 1995
PRINTED IN AUSTRALIA
5
10
HOLE No. PT 362
DATE 20/9/89
C.P.S. 50
T.C. 2
LINE X



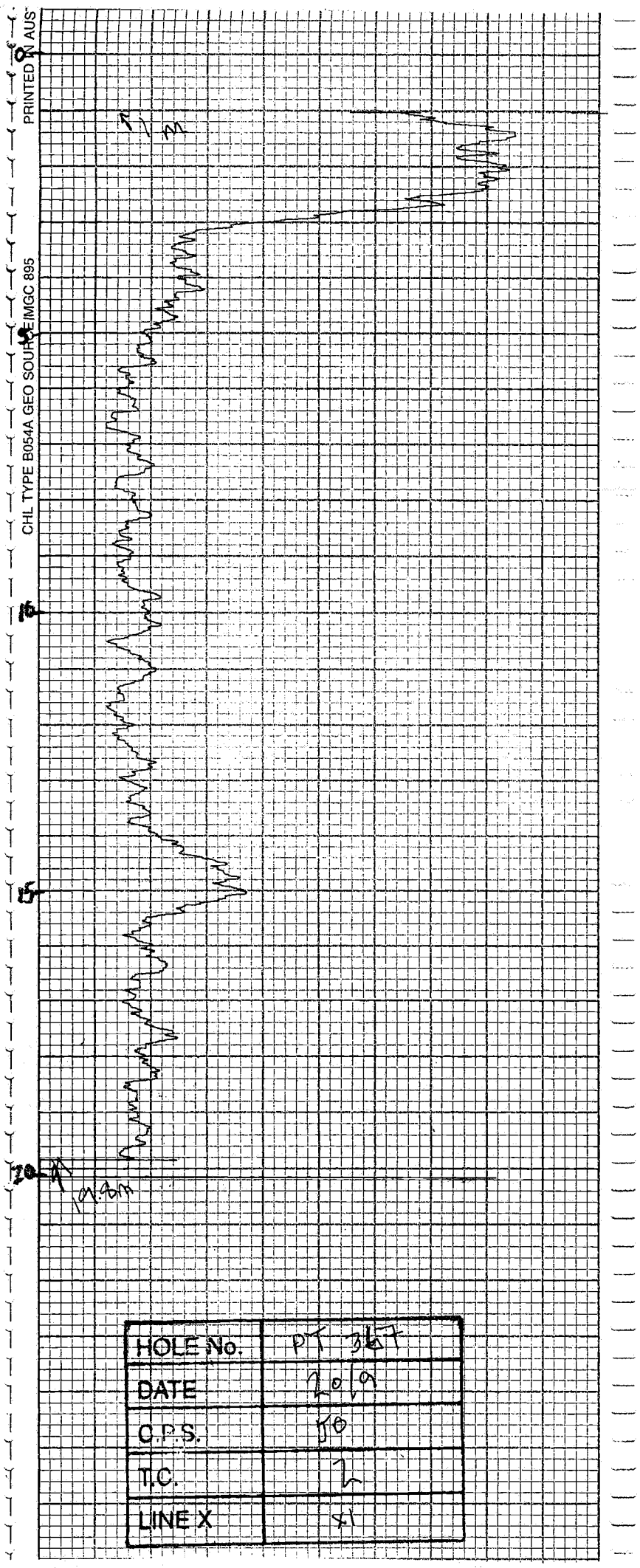

| | |
|---|---|
| HOLE No. | DT 366 |
| DATE | 20/9 |
| C.P.S. | 50 |
| T.C. | 2 |
| LINE X | 71 |




| | |
|---|---|
| HOLE No. | DT 365 |
| DATE | 20/9 |
| C.P.S. | 50 |
| T.C. | 2 |
| LINE X | 71 |




| | |
|---|---|
| HOLE No. | DT 364 |
| DATE | 20/9 |
| C.P.S. | 50 |
| T.C. | 2 |
| LINE X | 71 |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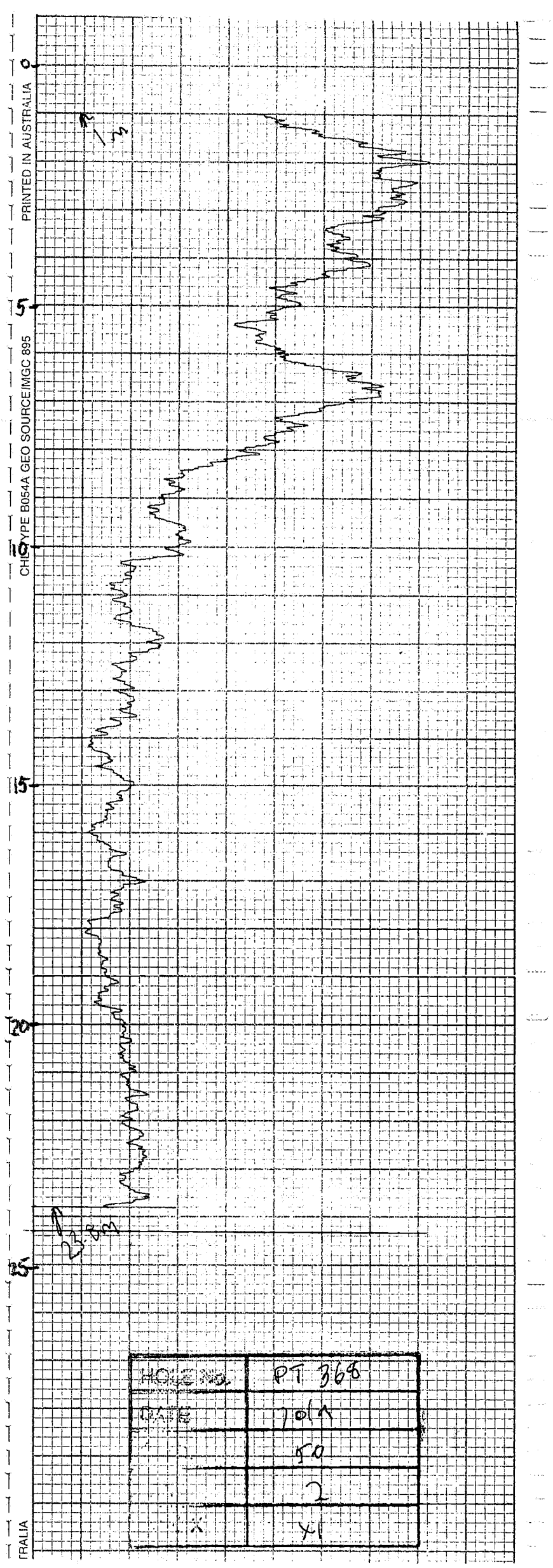
CHL TYPE B054A GEO SOURCE IMGC 895
0
5
10
15
20
HOLE No. PT 367
DATE 2019
C.P.S. 50
T.C. 2
LINE X X1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CHL TYPE B054A GEO SOURCE IMGC 895
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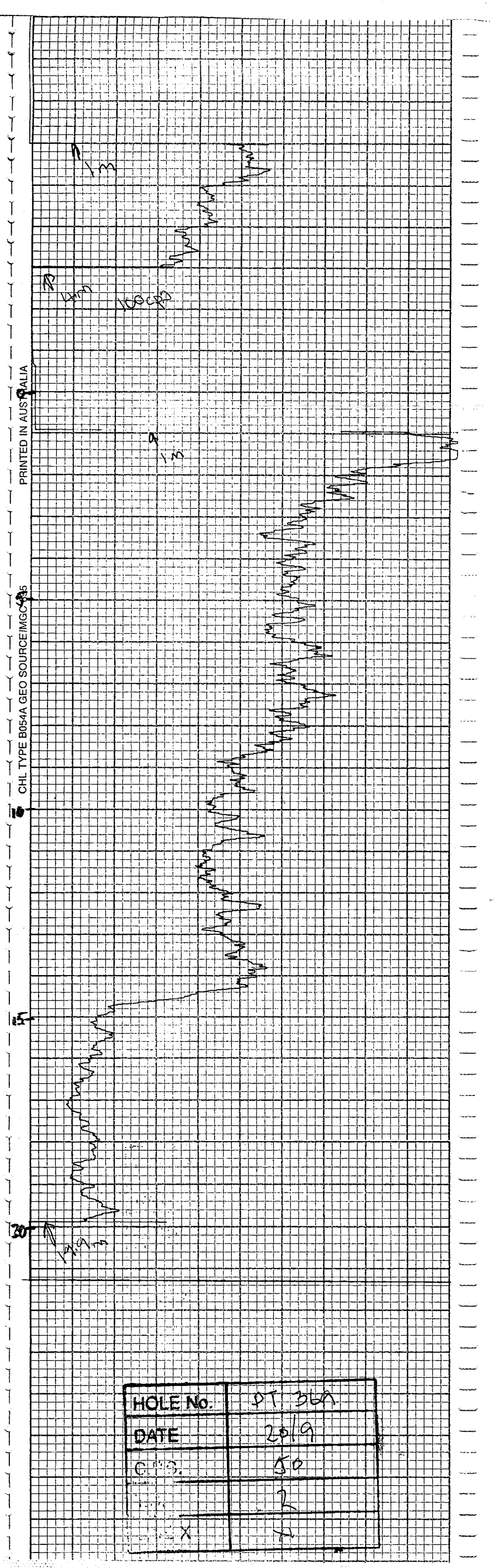
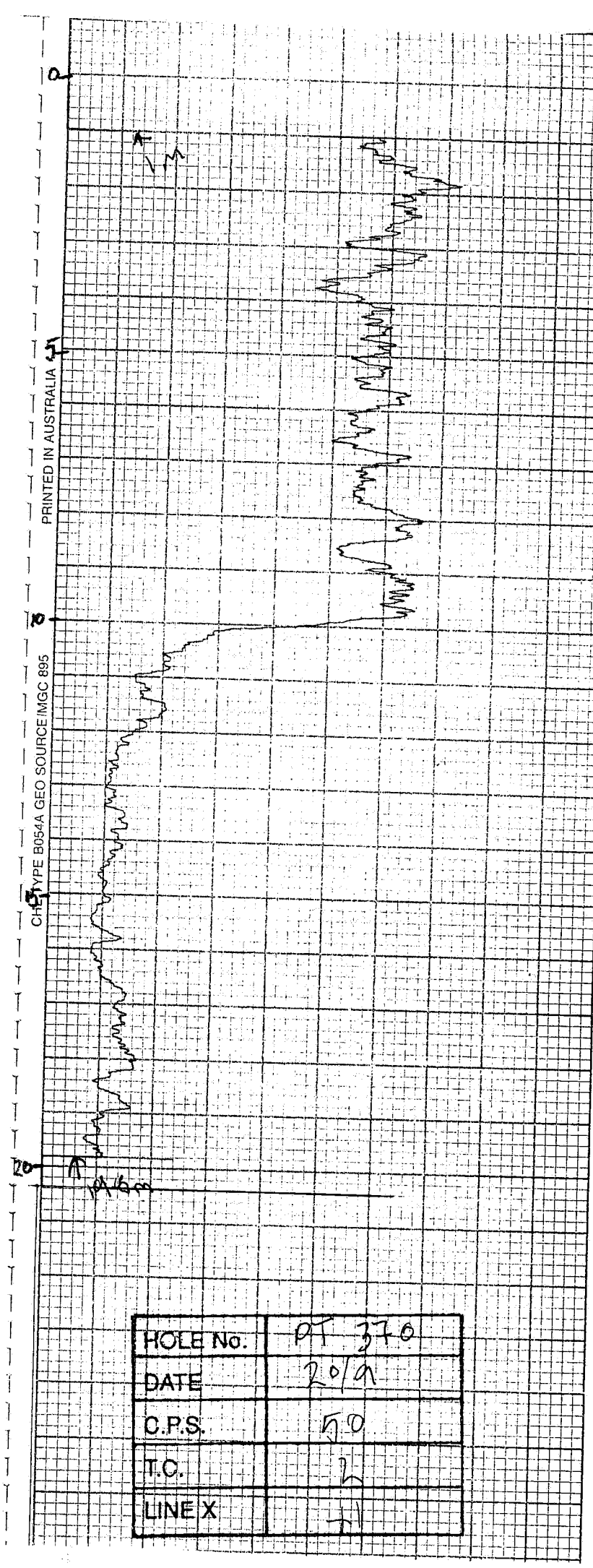
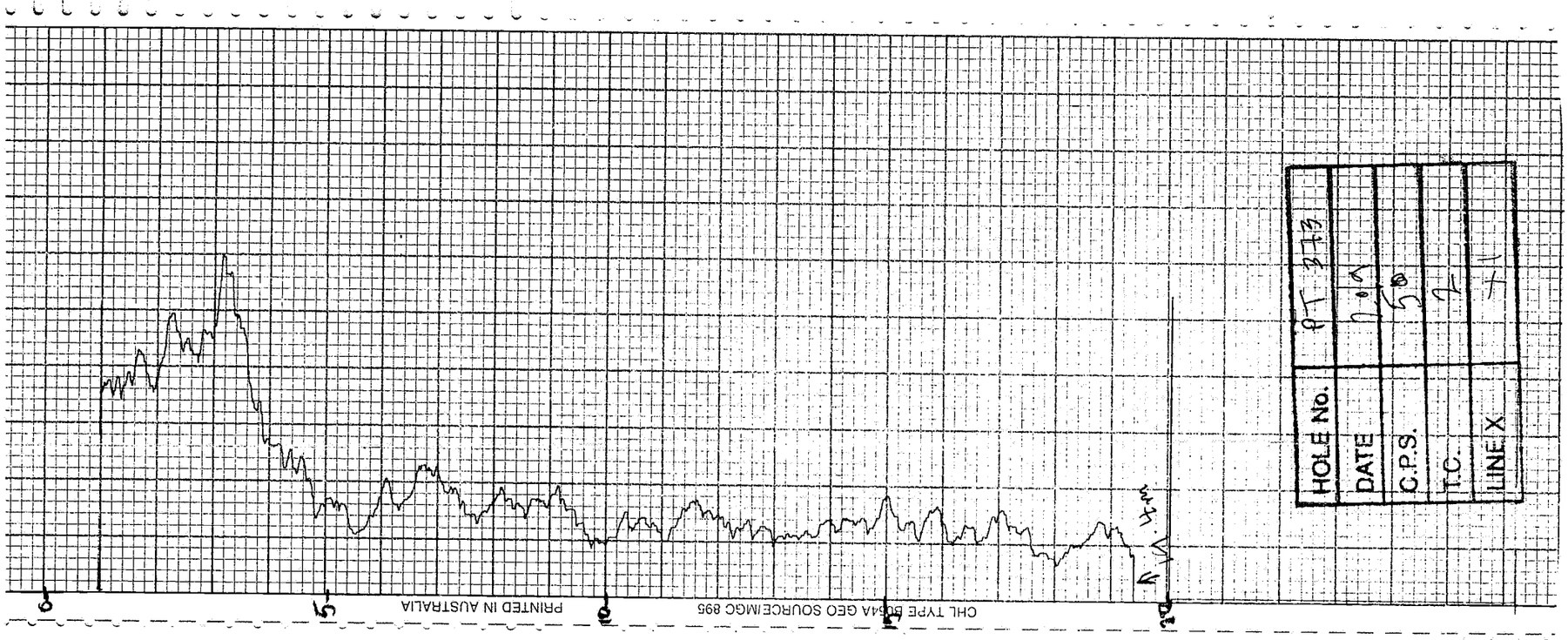
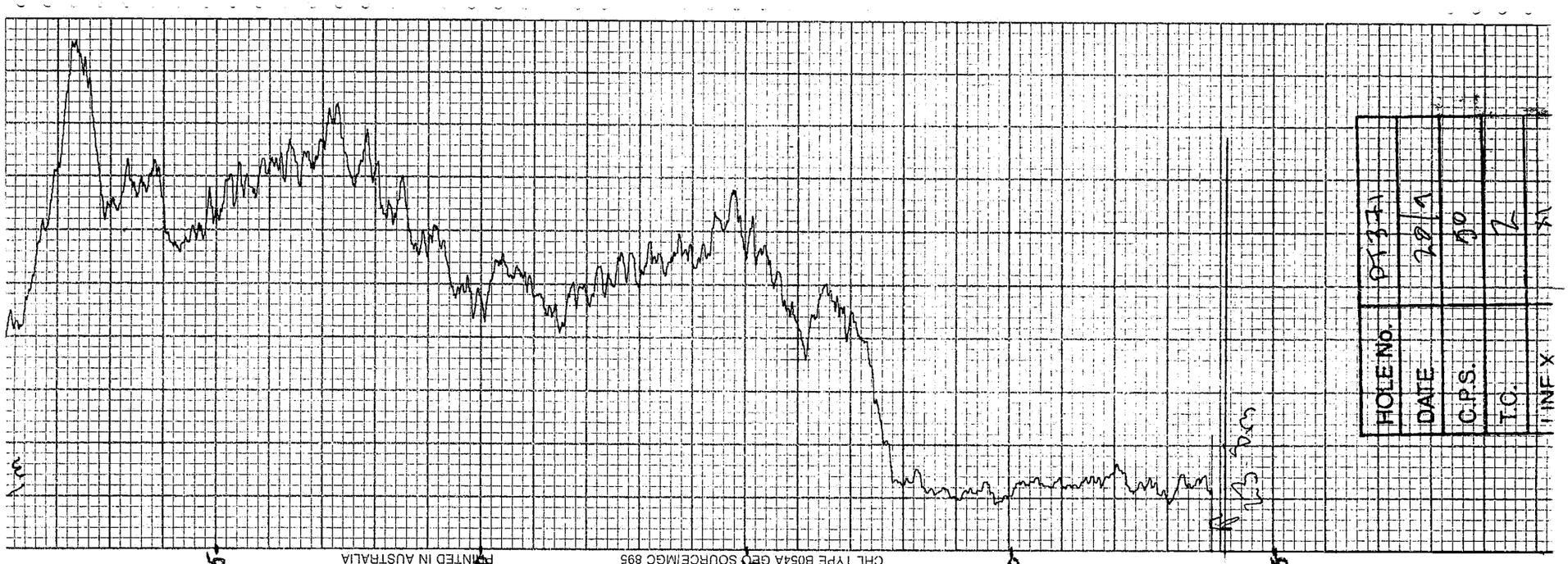
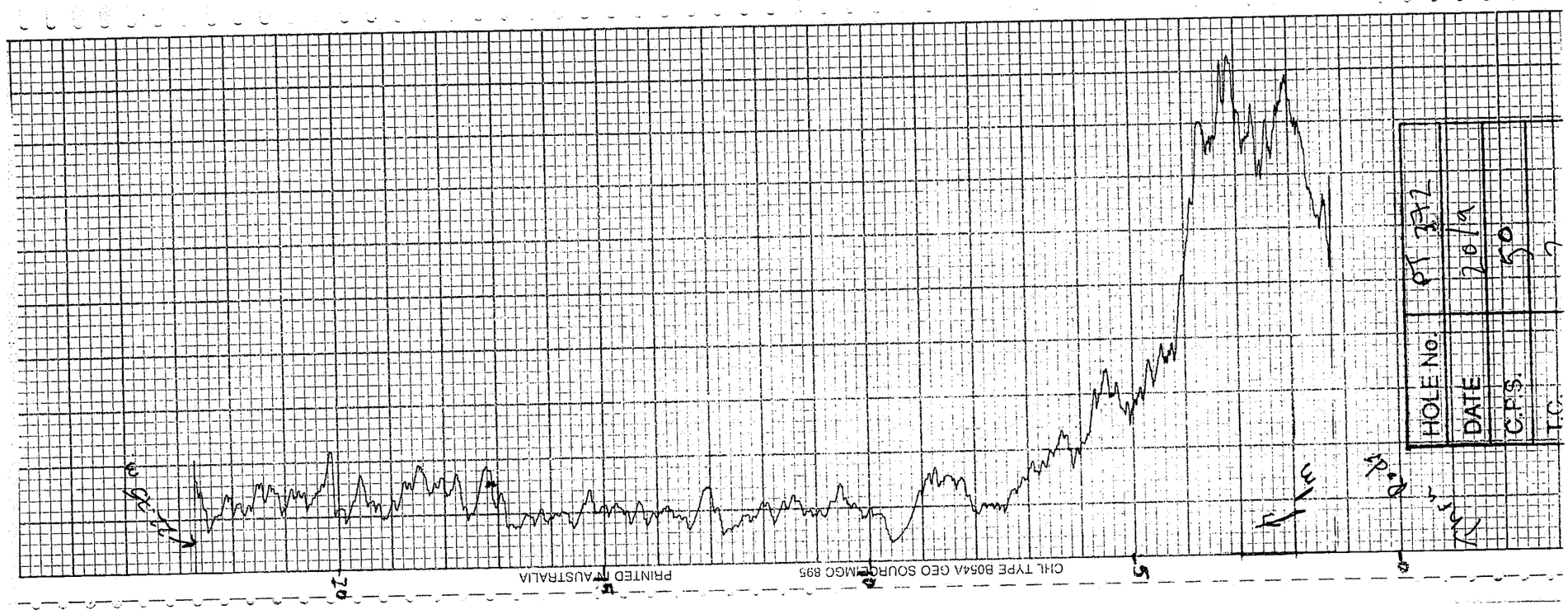
5
10
15
20
25
HOLE No. PT 368
DATE 1019
50
2
X1


CHL TYPE B054A GEO SOURCE IMGC 895
PRINTED IN AUSTRALIA
0
5
10
15
20
1/3
2/3
1/3
1/3
HOLE No. PT 369
DATE 20/9
C.P.S. 50
T.C. 2
LINE X 2


CHL TYPE B054A GEO SOURCE IMGC 895
PRINTED IN AUSTRALIA
0
5
10
20
1/3
HOLE No. PT 370
DATE 20/9
C.P.S. 50
T.C. 2
LINE X 2

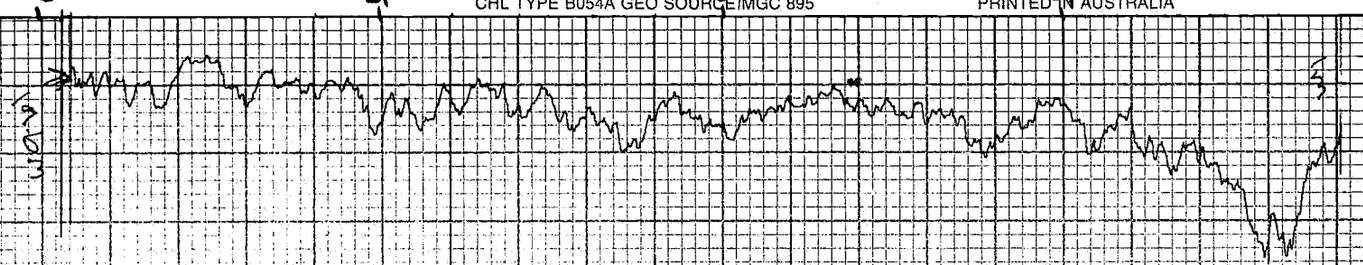

HOLE No. PT 373
DATE 1/11
C.P.S. 50
T.C. 2
LINE X
CHL TYPE B054A GEO SOURCE/MGC 895
PRINTED IN AUSTRALIA


HOLE No. PT 373
DATE 1/11
C.P.S. 50
T.C. 2
INF X
CHL TYPE B054A GEO SOURCE/MGC 895
PRINTED IN AUSTRALIA


HOLE No. PT 372
DATE 20/1/a
C.P.S. 50
T.C. 2
CHL TYPE B054A GEO SOURCE/MGC 895
PRINTED IN AUSTRALIA

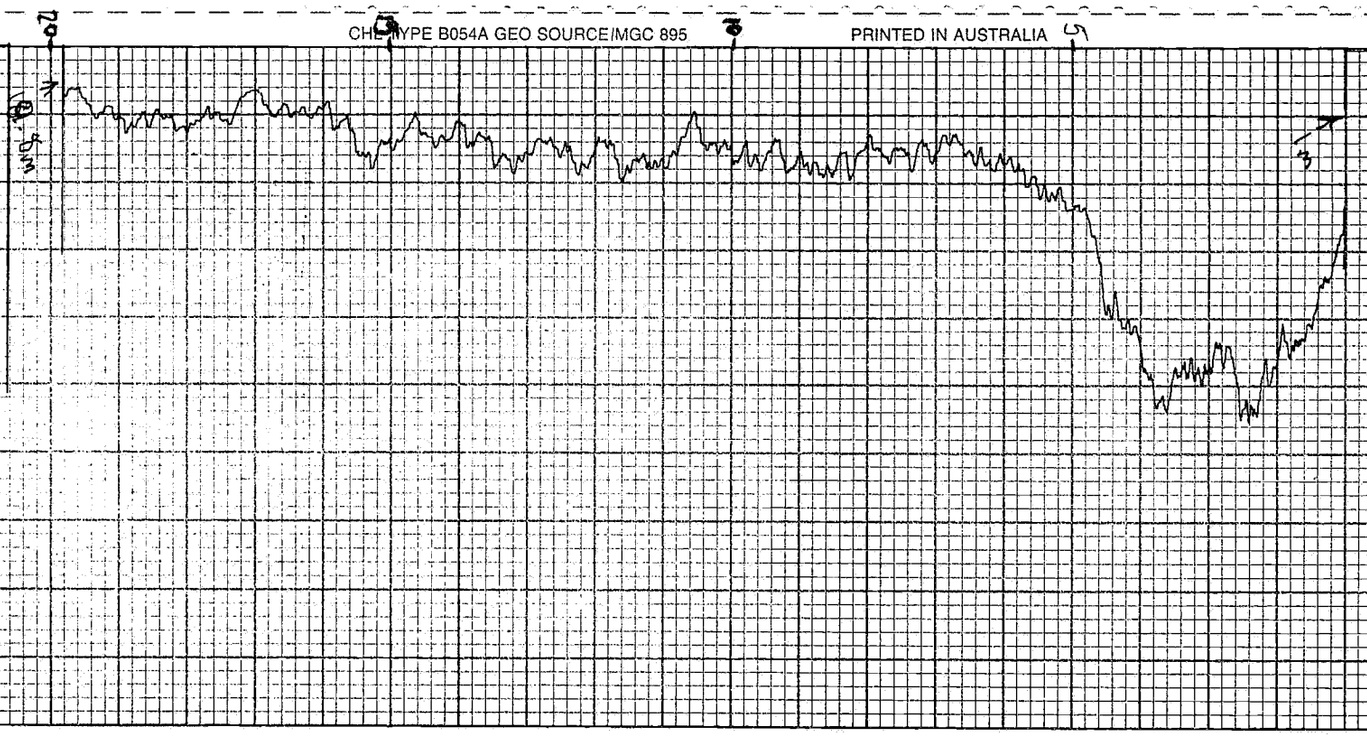
CHL TYPE B054A GEO SOURCE/MGC 895 PRINTED IN AUSTRALIA

| | |
|---|---|
| HOLE No. | PT 375 |
| DATE | 21/9 |
| C.P.S. | 50 |
| T.C. | 2 |
| LINE X | X1 |



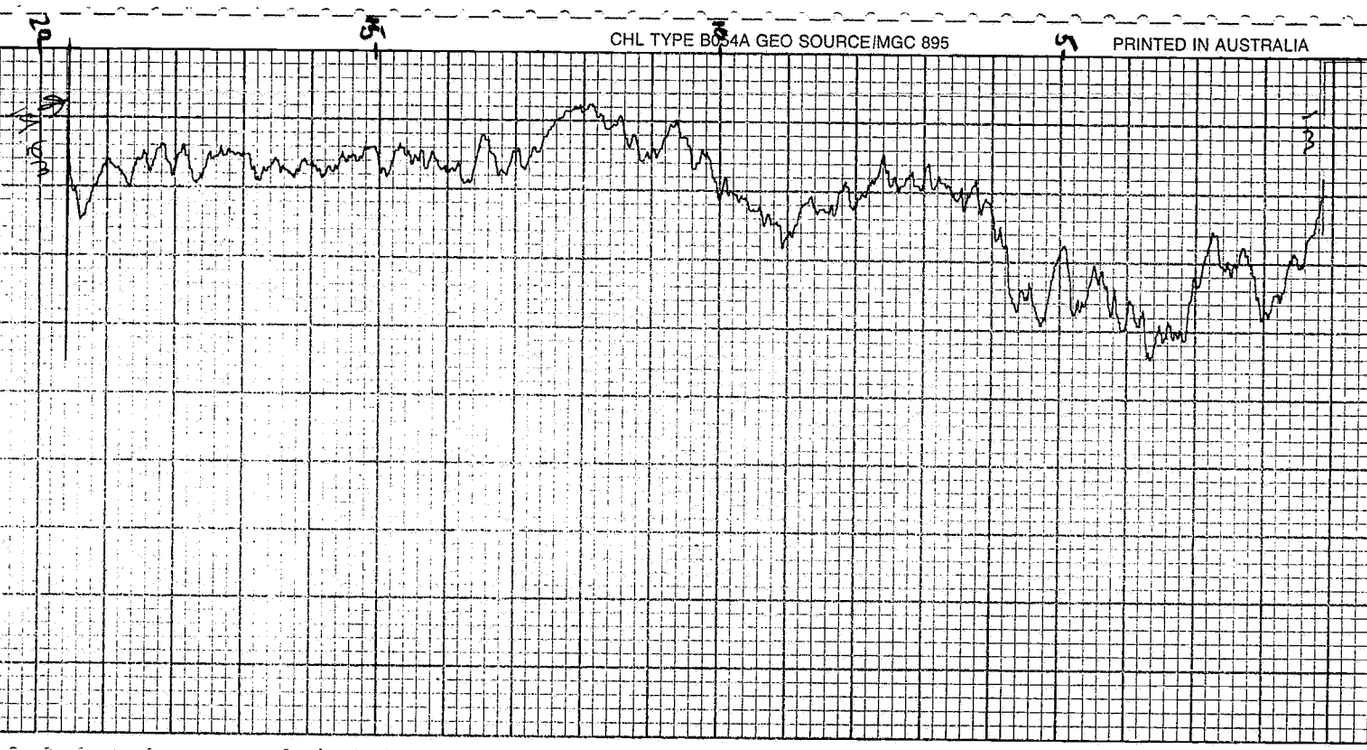
CHL TYPE B054A GEO SOURCE/MGC 895 PRINTED IN AUSTRALIA

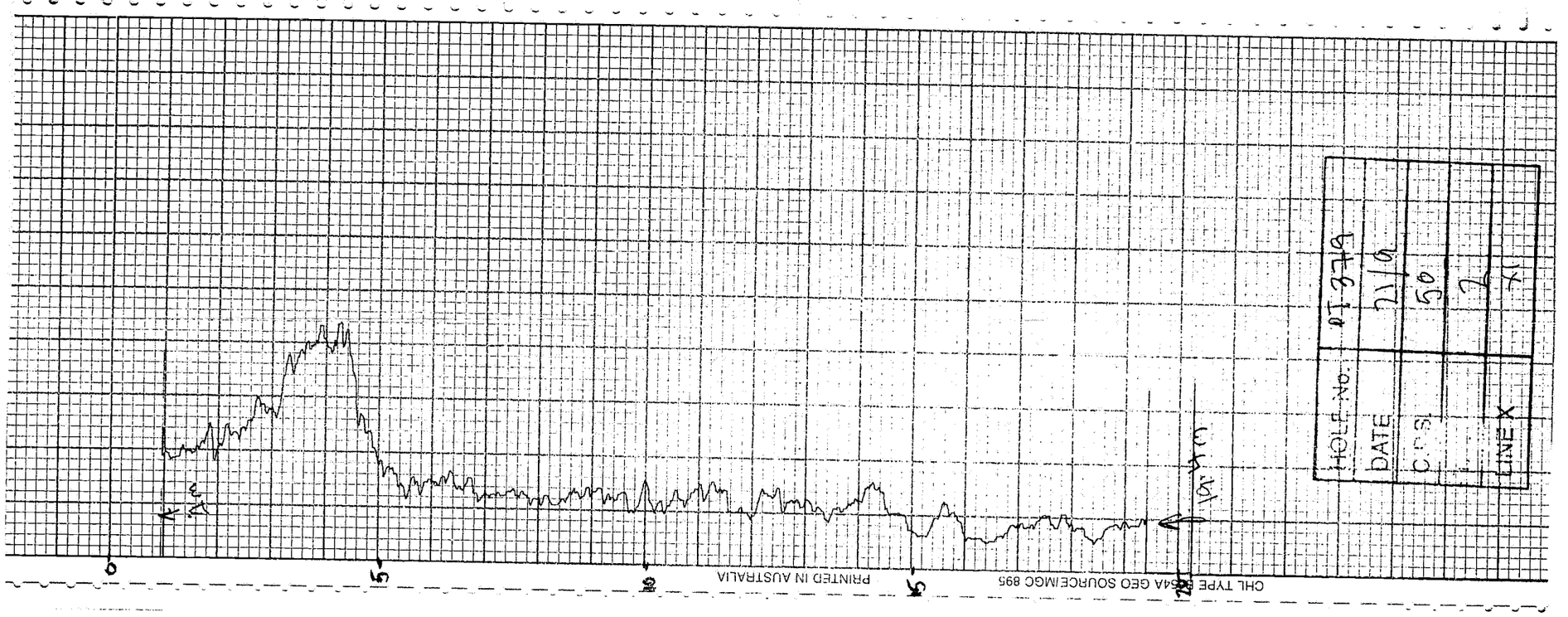
| | |
|---|---|
| HOLE No. | PT 376 |
| DATE | 21/9 |
| C.P.S. | 50 |
| T.C. | 2 |
| LINE X | X1 |

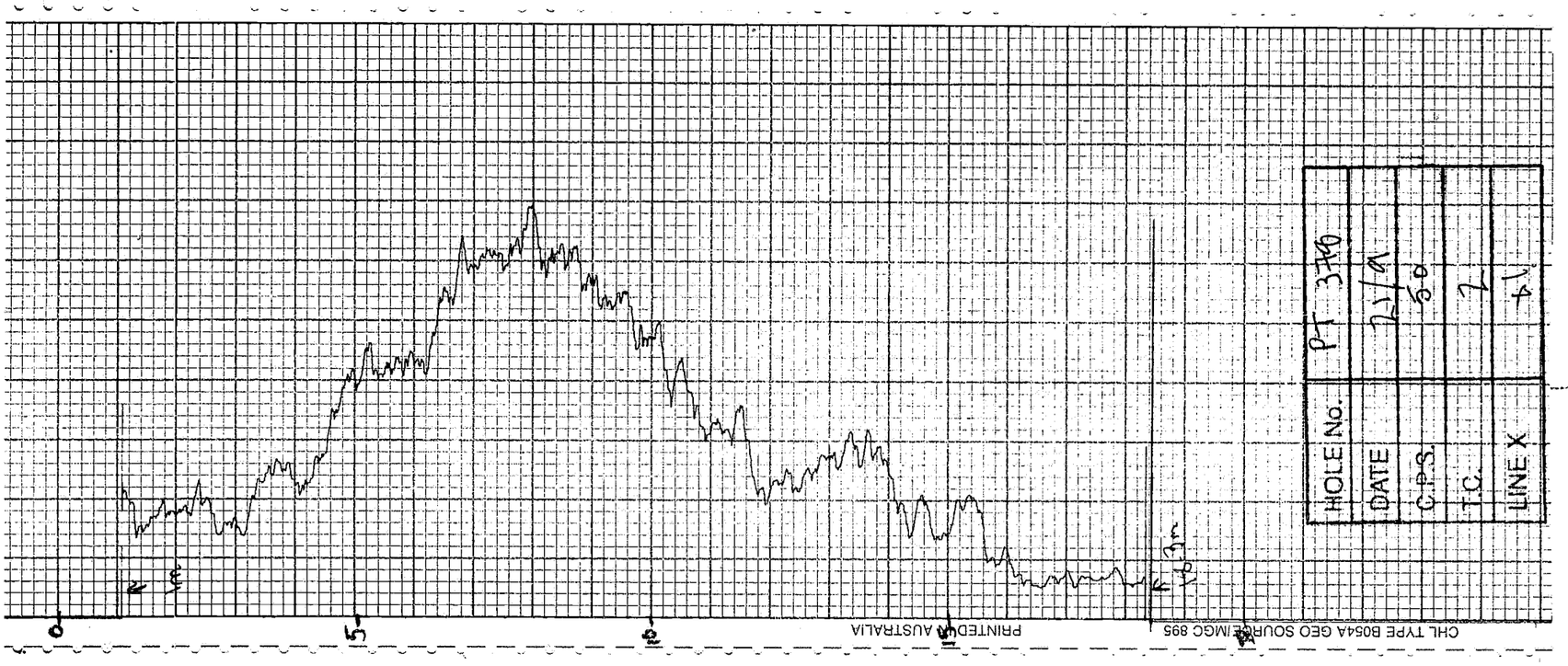


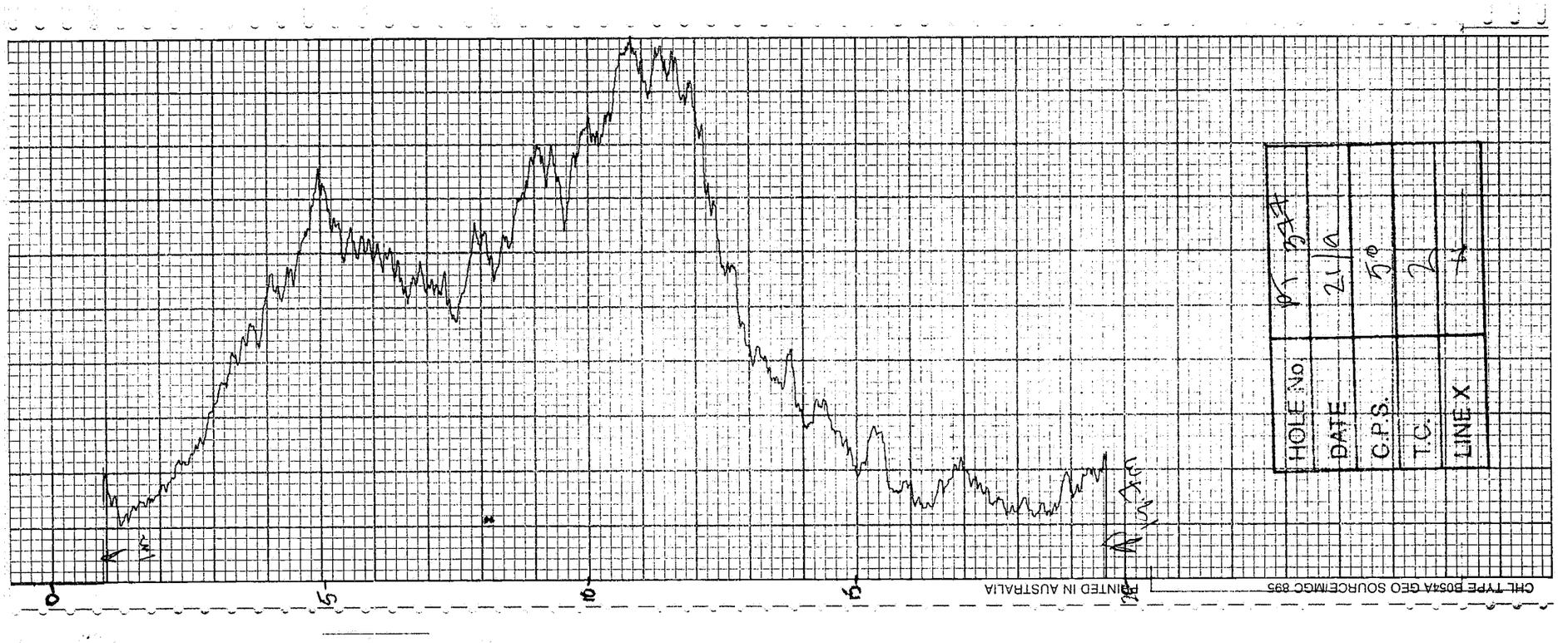
CHL TYPE B054A GEO SOURCE/MGC 895 PRINTED IN AUSTRALIA

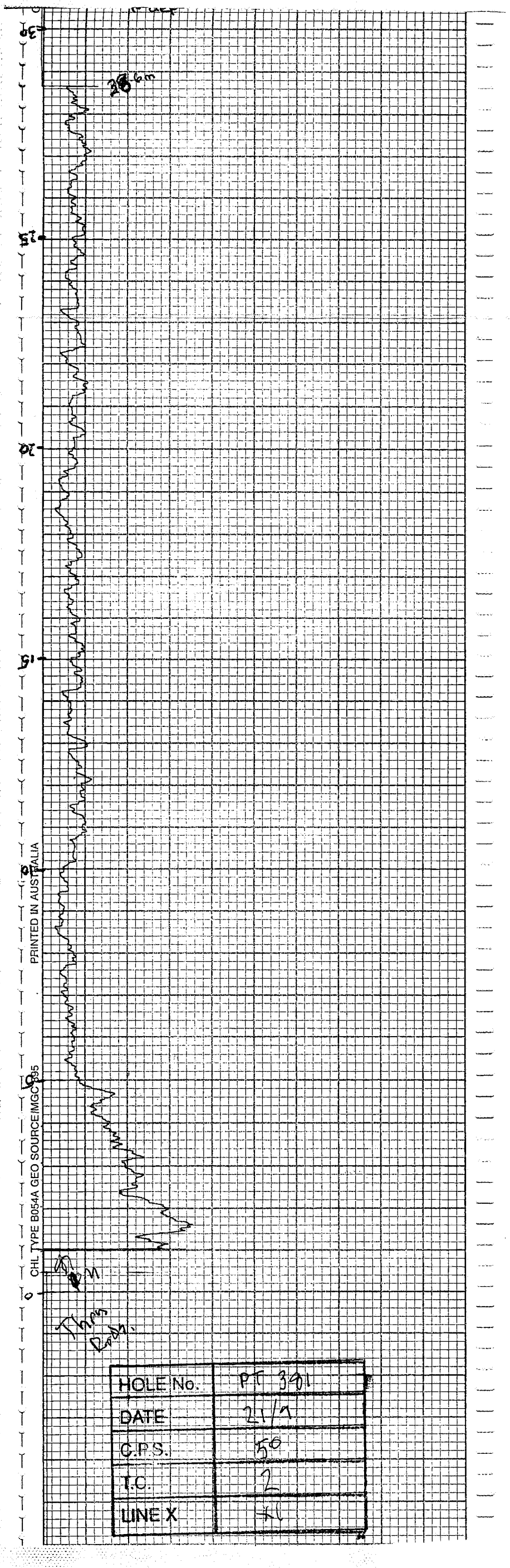
| | |
|---|---|
| HOLE No. | PT 377 |
| DATE | 21/9 |
| C.P.S. | 50 |
| T.C. | 2 |
| LINE X | X1 |



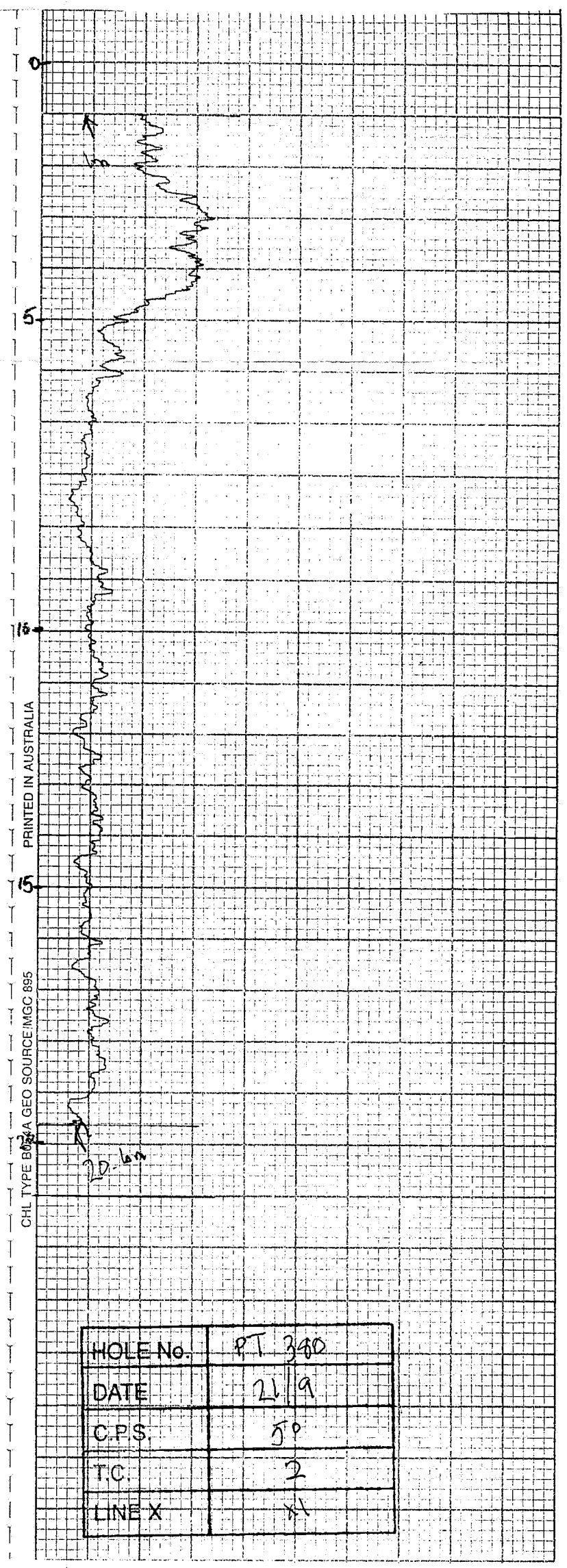

HOLE No.
DATE
C.P.S.
T.C.
LINE X
PRINTED IN AUSTRALIA
CHL TYPE B054A GEO SOURCE IMGC 895


HOLE No.
DATE
C.P.S.
T.C.
LINE X
PRINTED IN AUSTRALIA
CHL TYPE B054A GEO SOURCE IMGC 895

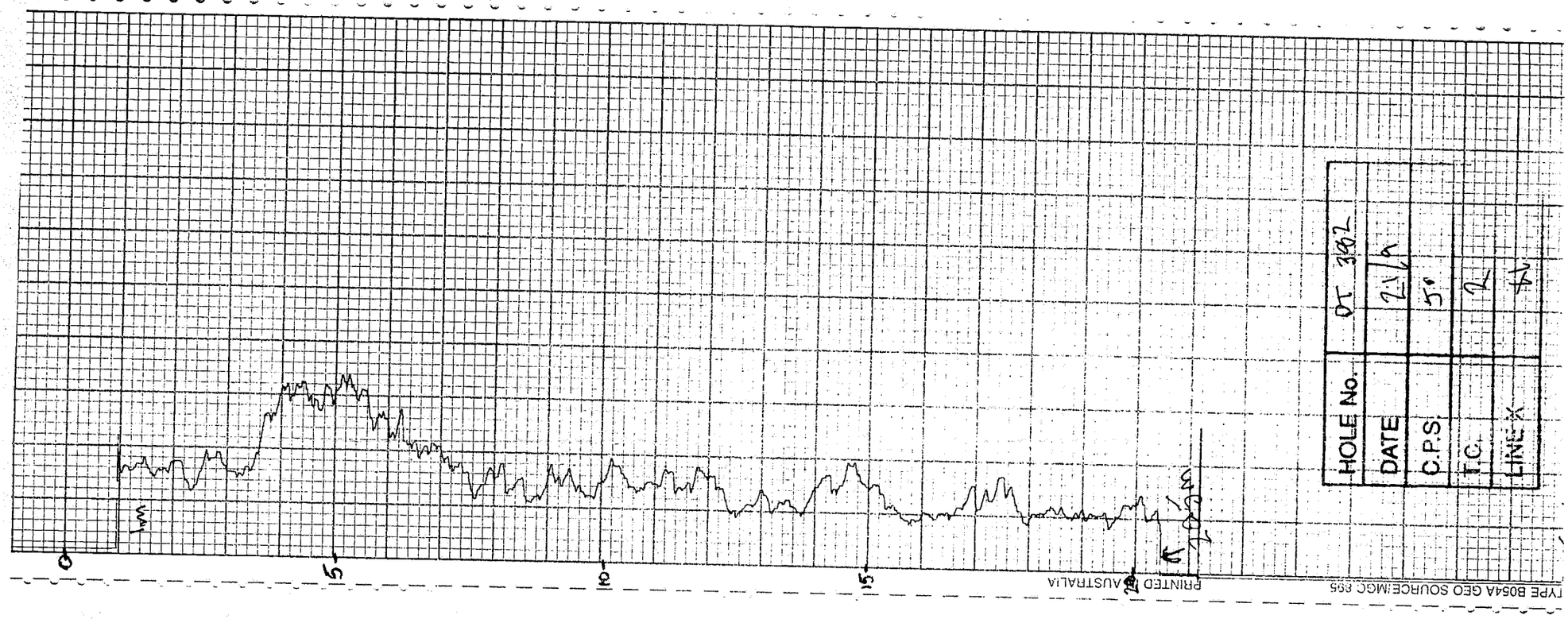

HOLE No.
DATE
C.P.S.
T.C.
LINE X
PRINTED IN AUSTRALIA
CHL TYPE B054A GEO SOURCE IMGC 895

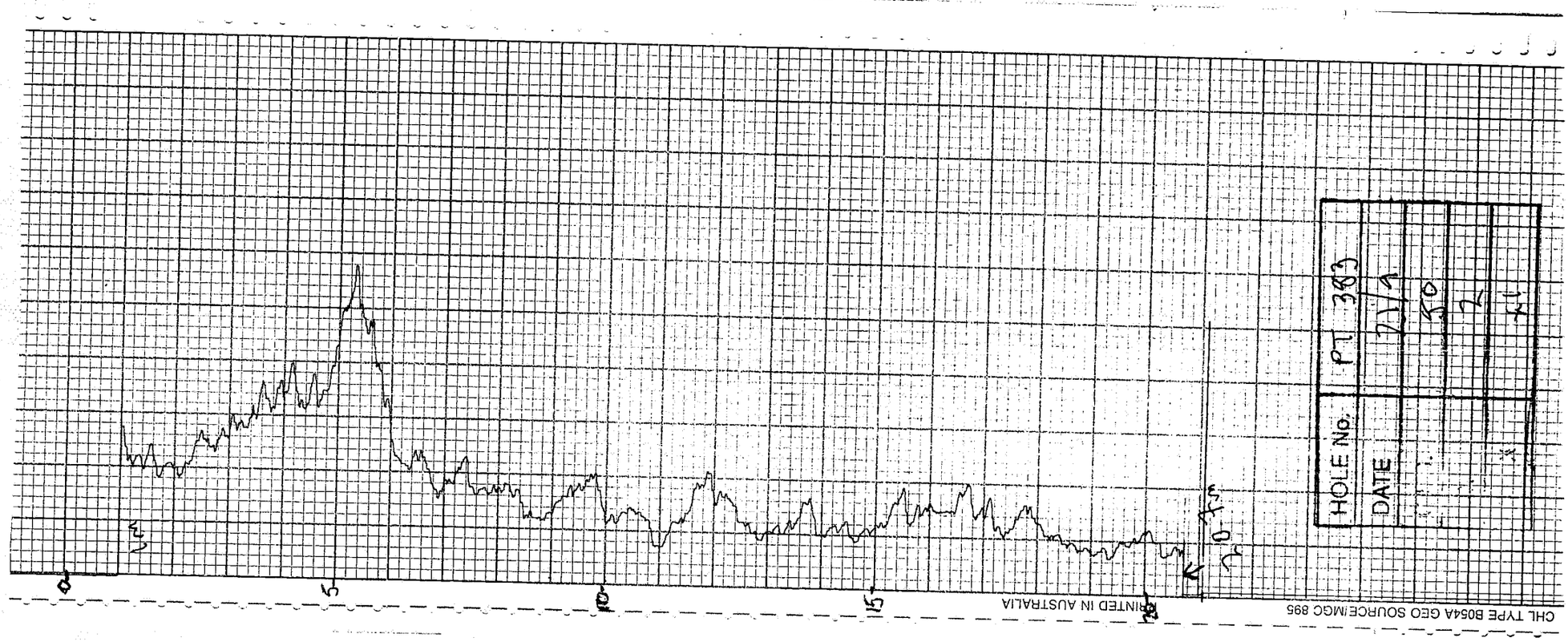



| HOLE No. | PT 391 |
|---|---|
| DATE | 21/9 |
| C.P.S. | 50 |
| T.C. | 2 |
| LINE X | X1 |




| HOLE No. | PT 390 |
|---|---|
| DATE | 21/9 |
| C.P.S. | 50 |
| T.C. | 2 |
| LINE X | X1 |


HOLE No. DT 382
DATE 2/4
C.P.S. 50
T.C. 2
LINE X
0
5
10
15
20
PRINTED IN AUSTRALIA
CHL TYPE B054A GEO SOURCE:MGC 895


HOLE No. PT 383
DATE 2/4
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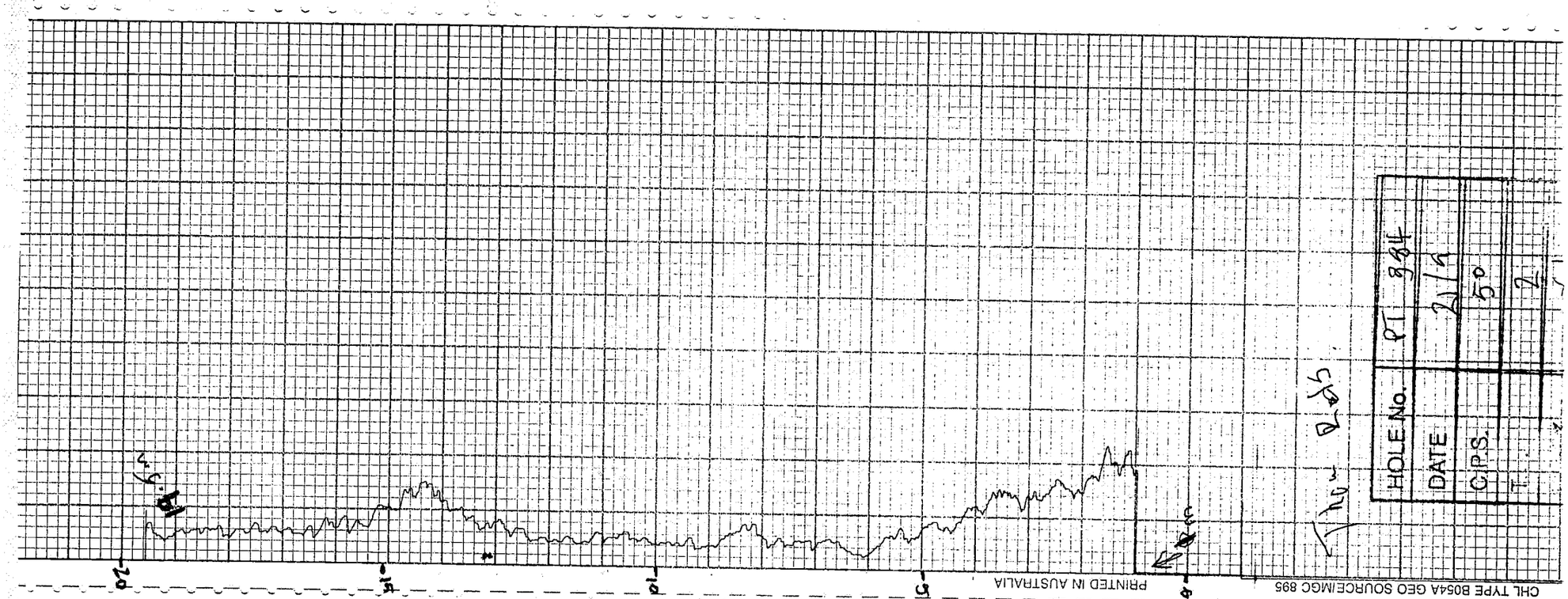
HOLE No. PT 384
DATE 2/4
C.P.S. 50
T.C. 2
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5
10
15
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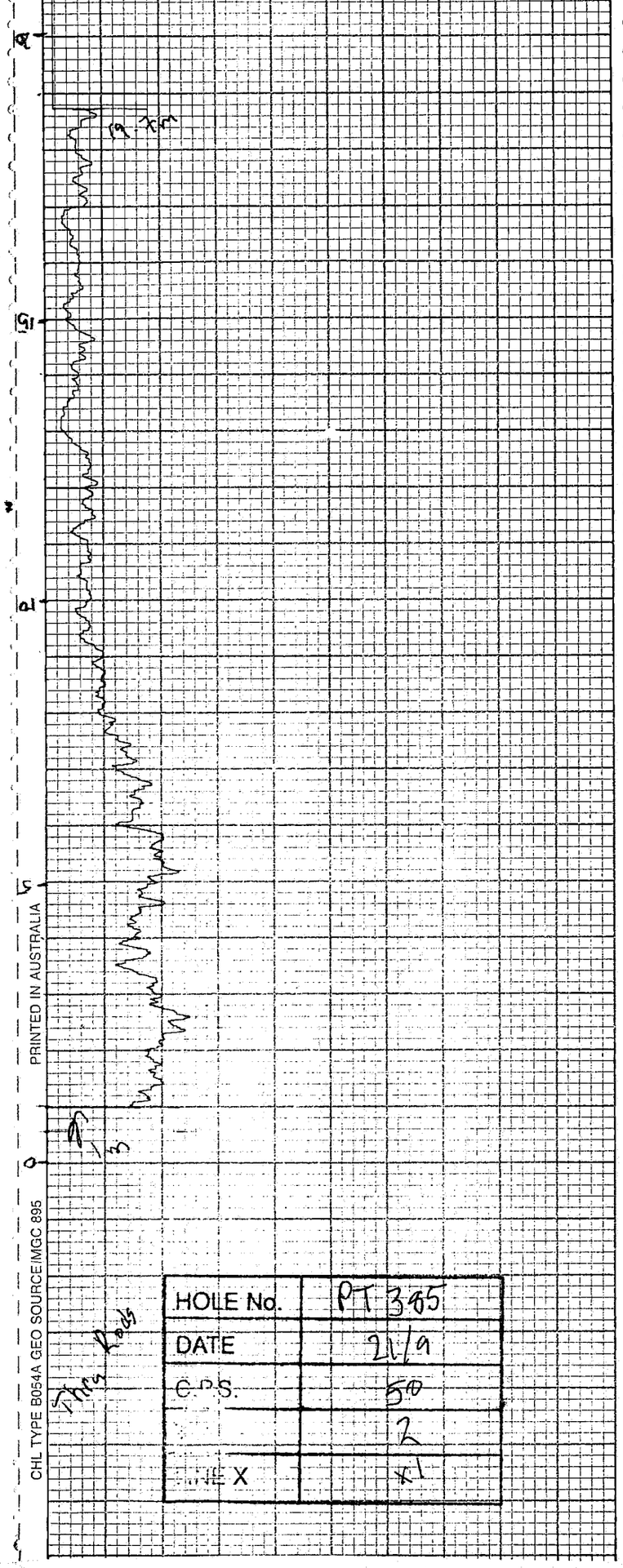
PRINTED IN AUSTRALIA
CHL TYPE B054A GEO SOURCE:MGC 895


20
15
10
5
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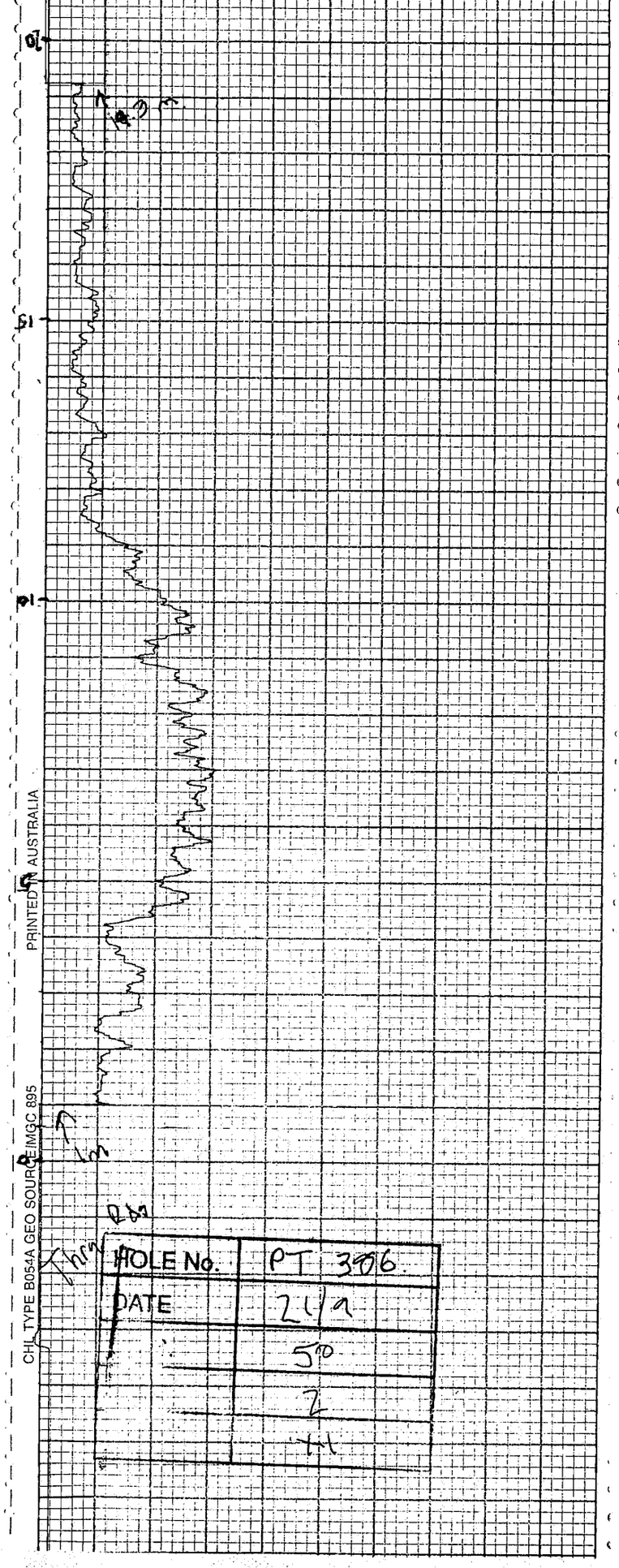
-5
PRINTED IN AUSTRALIA
CHL TYPE B054A GEO SOURCE IMGC 895
HOLE No. PT 385
DATE 21/9
C.P.S. 50
2
LINE X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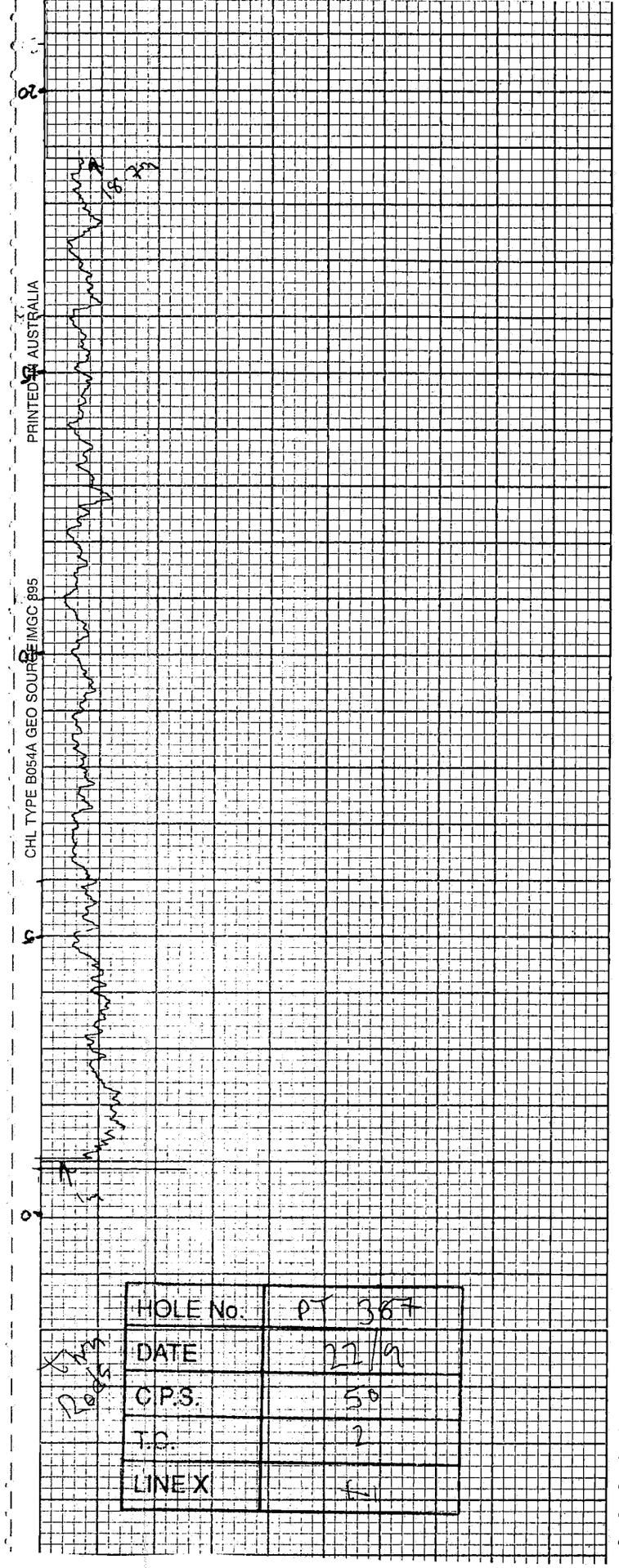
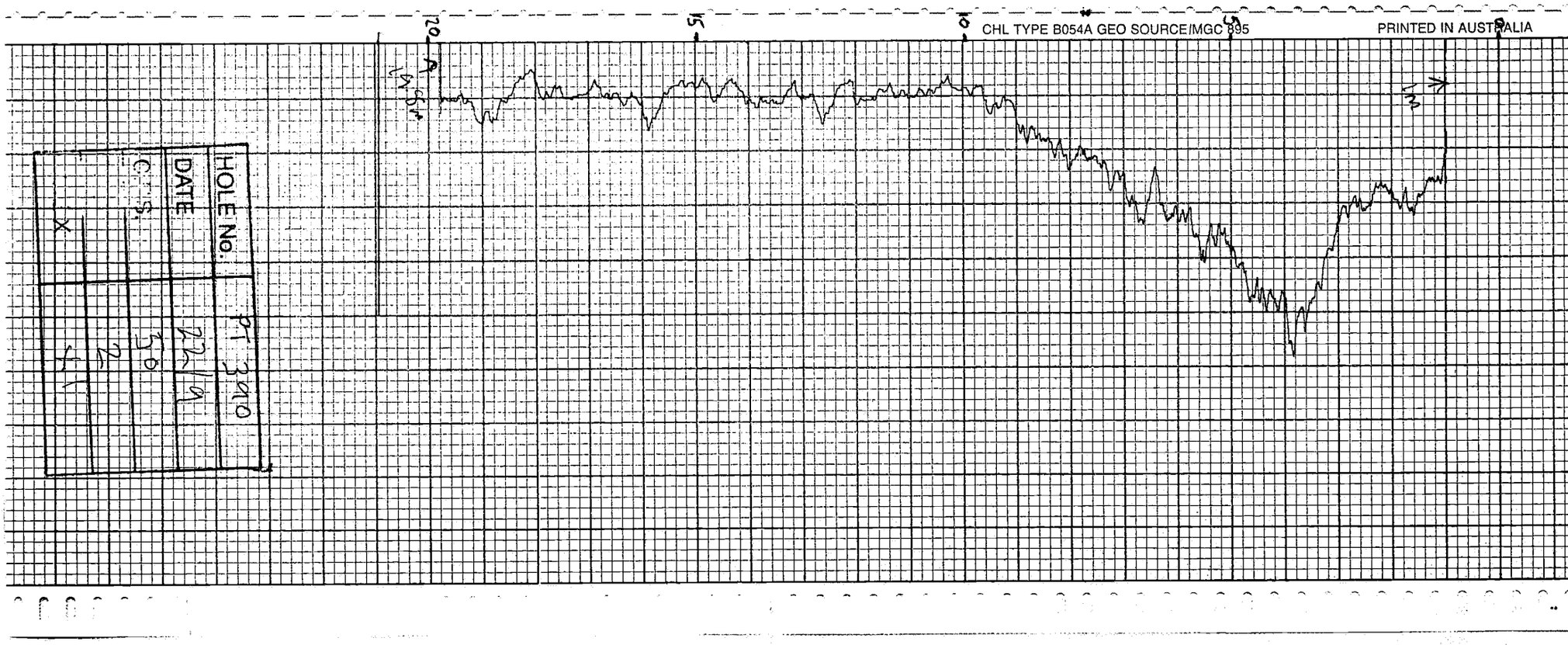
-5
PRINTED IN AUSTRALIA
CHL TYPE B054A GEO SOURCE IMGC 895
HOLE No. PT 386
DATE 21/9
50
2


20
15
10
5
0
PRINTED IN AUSTRALIA
CHL TYPE B054A GEO SOURCE IMGC 895
HOLE No. PT 387
DATE 22/9
C.P.S. 50
T.C. 2
LINE X


CHL TYPE B054A GEO SOURCE/MGC 895
PRINTED IN AUSTRALIA
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15
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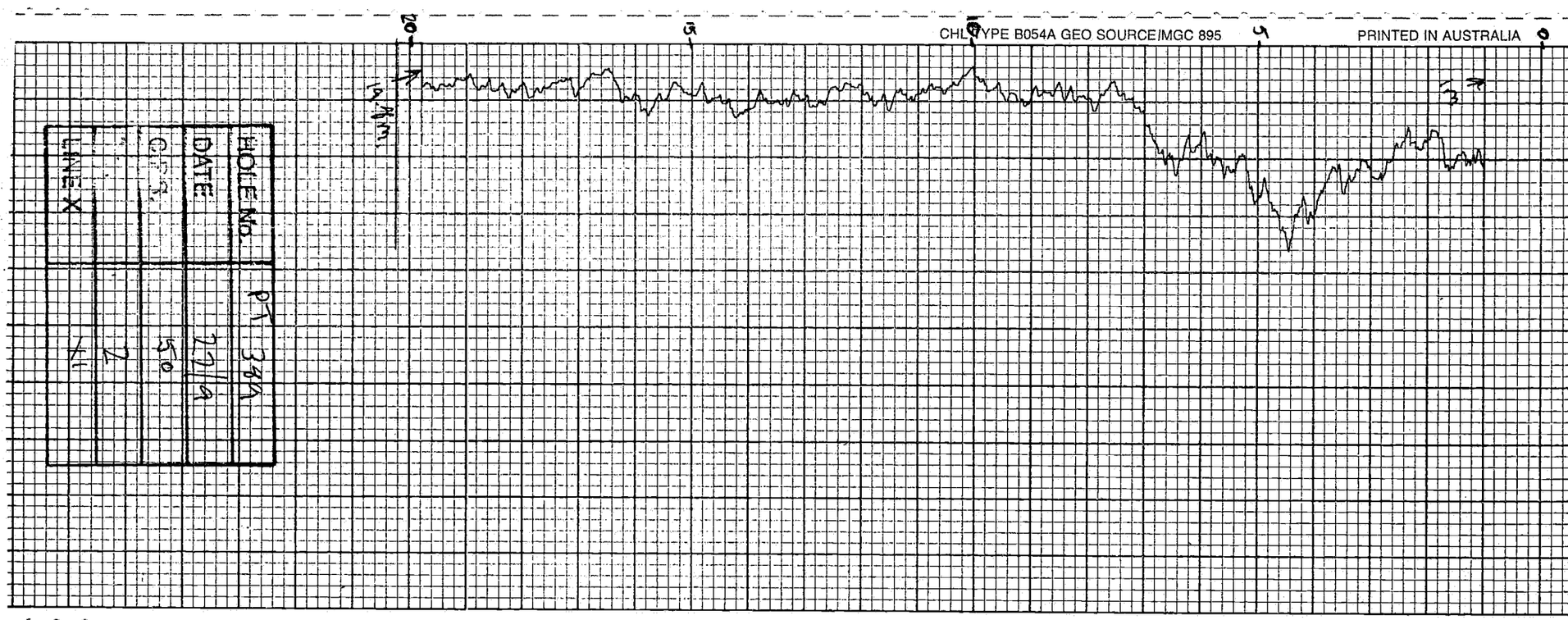
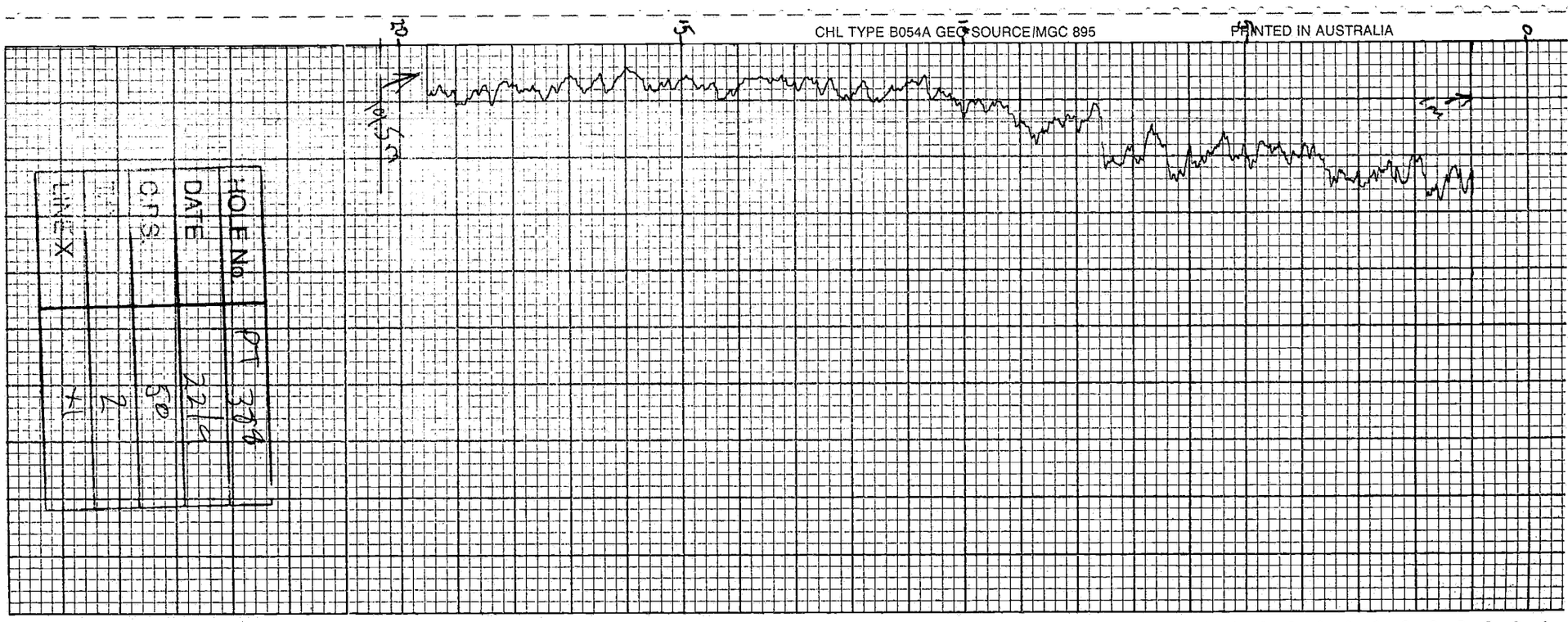
5
0
HOLE No. PT 340
DATE 22/9
GRID
LINE X


CHL TYPE B054A GEO SOURCE/MGC 895
PRINTED IN AUSTRALIA
20
15
10
5
0
HOLE No. PT 340
DATE 22/9
GRID
LINE X


CHL TYPE B054A GEO SOURCE/MGC 895
PRINTED IN AUSTRALIA
20
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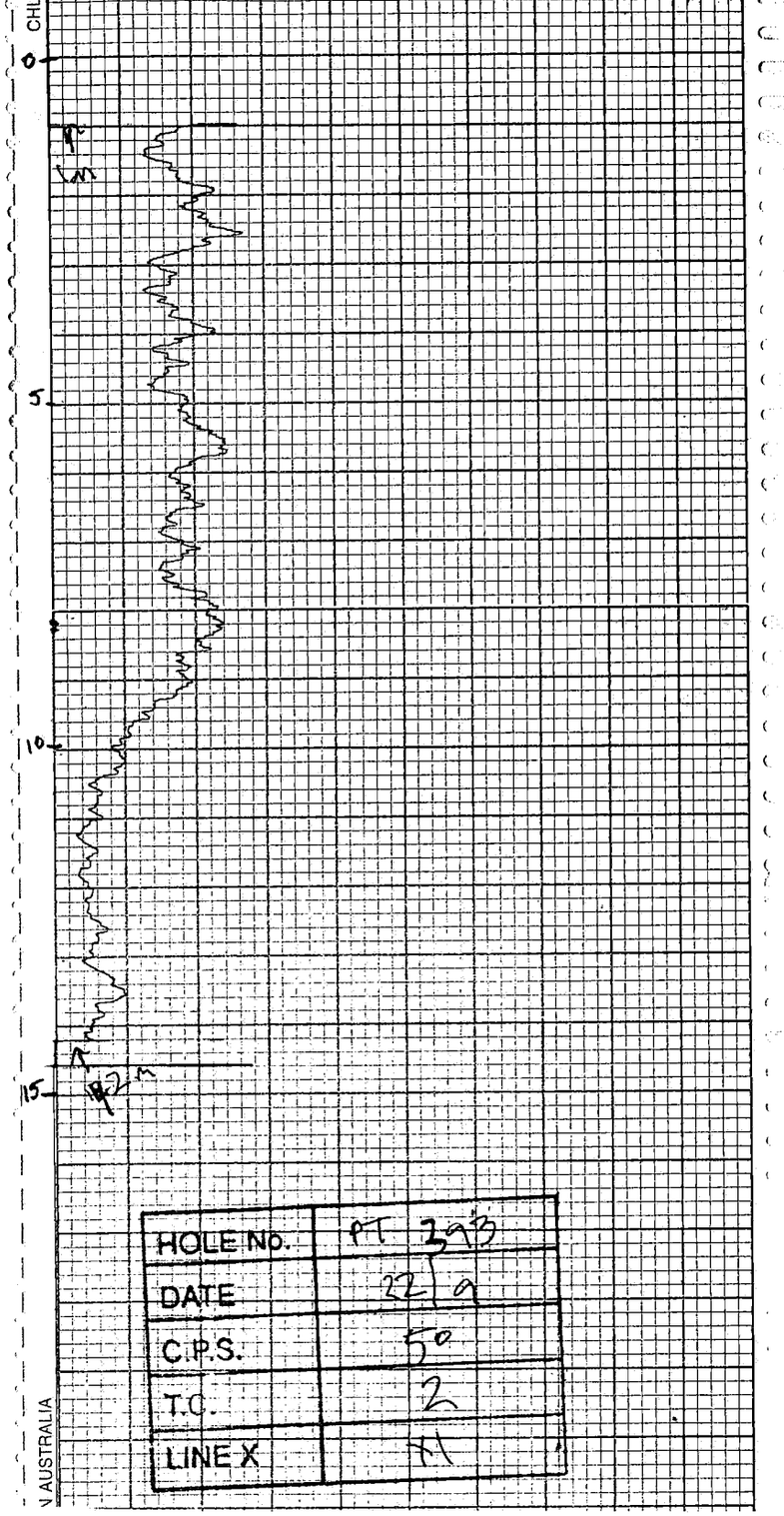
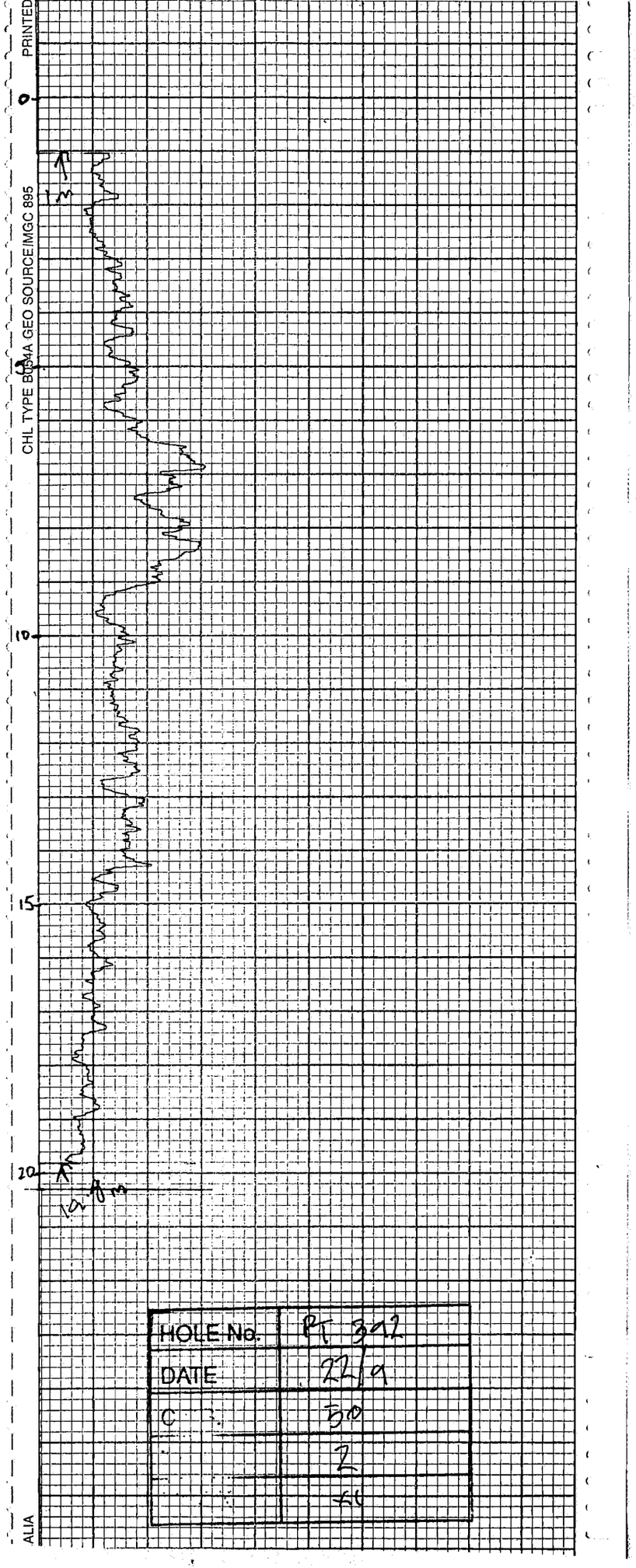
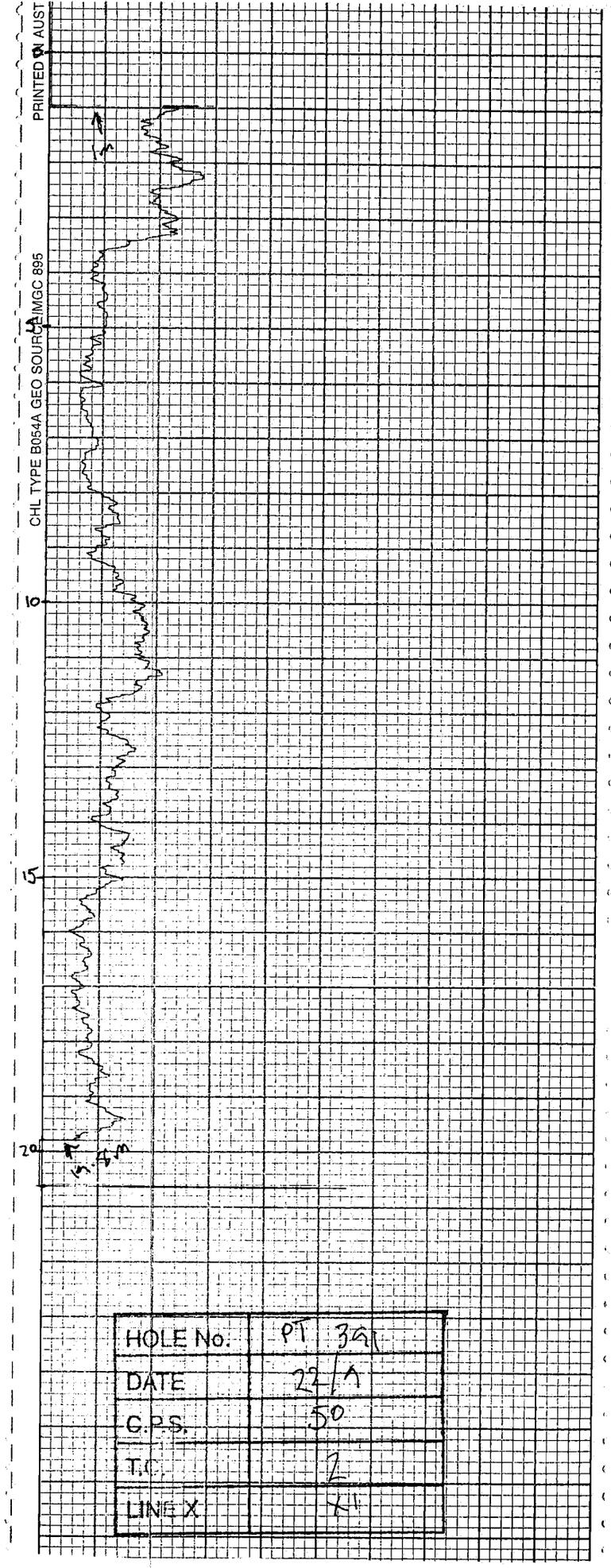
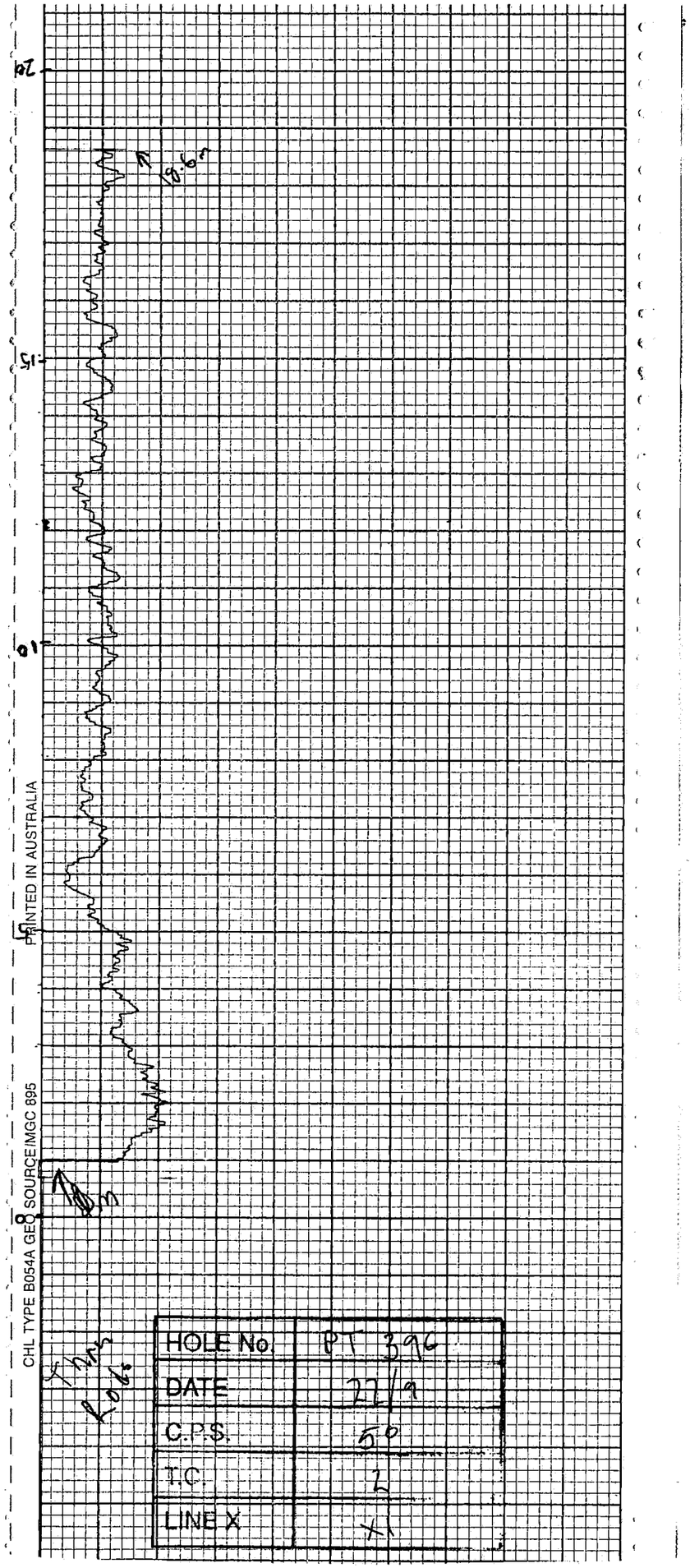
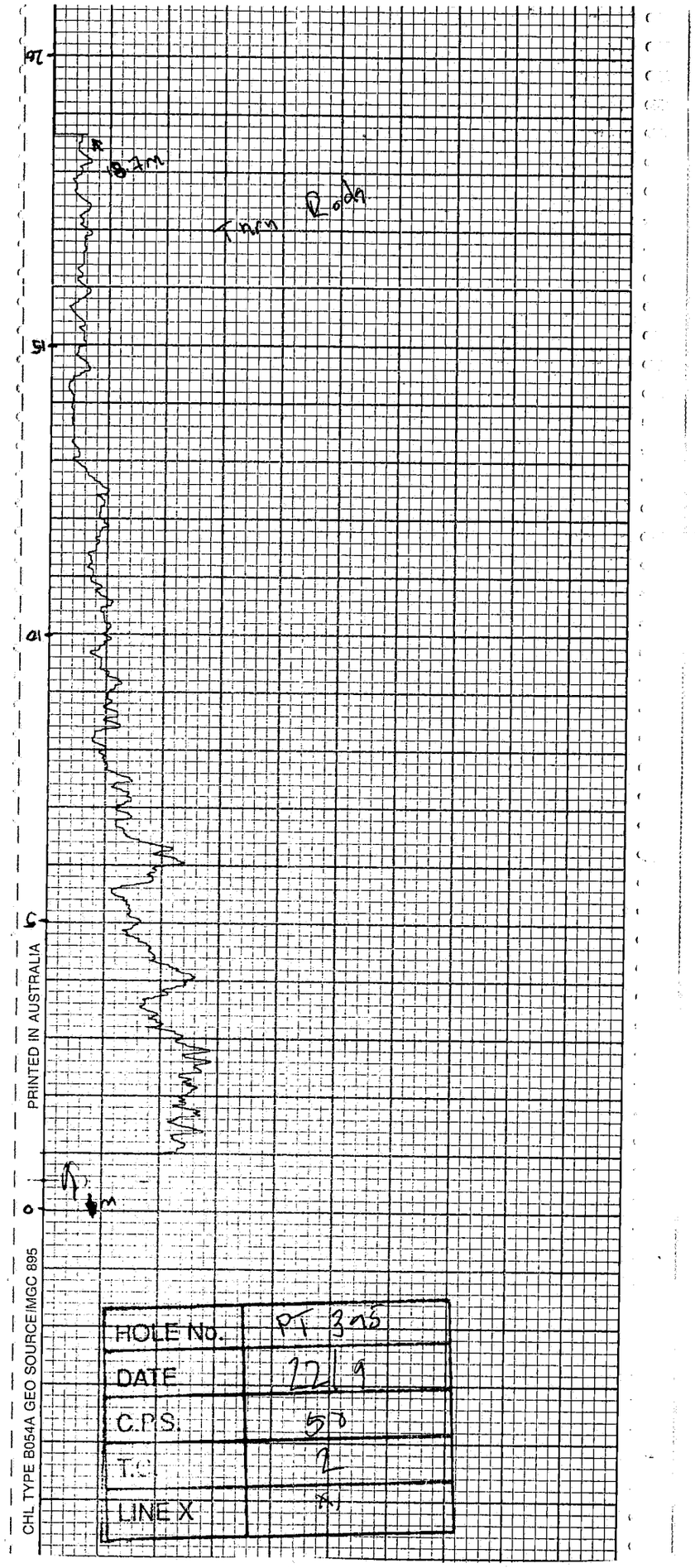
10
5
0
HOLE No. PT 340
DATE 22/9
GRID
LINE X

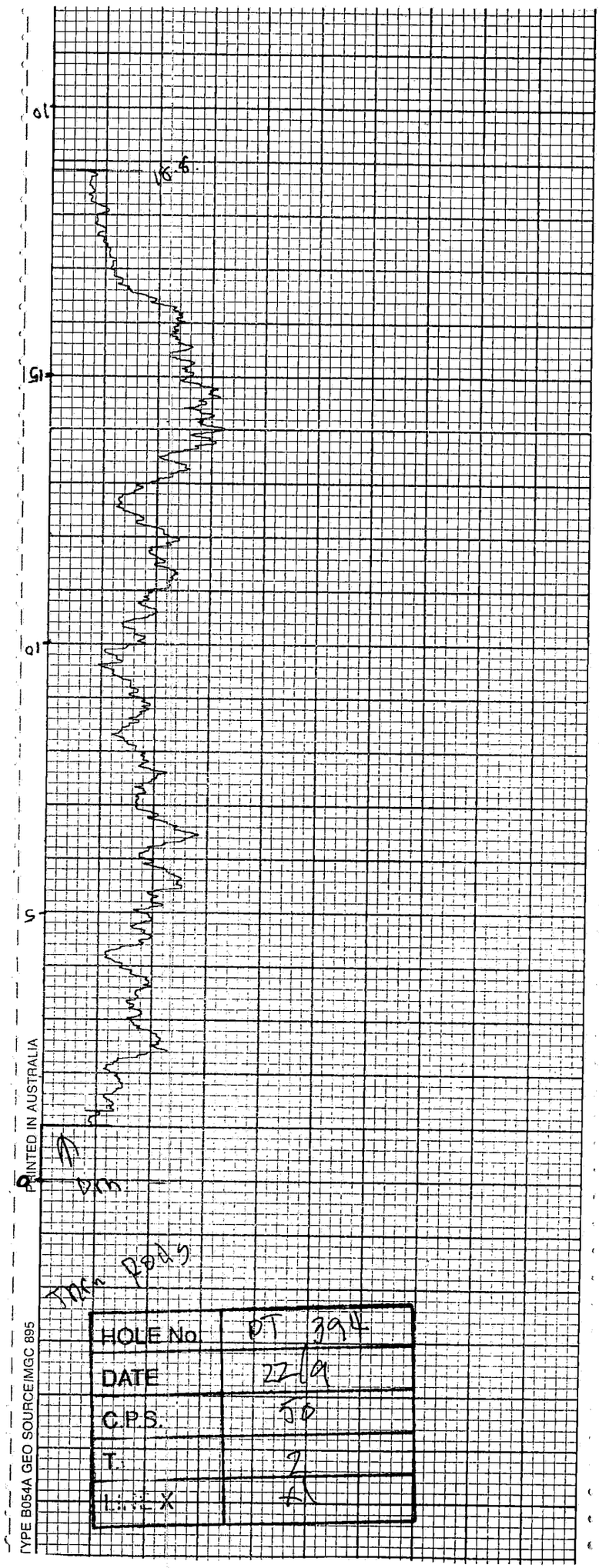

CHL TYPE B054A GEO SOURCE/MGC 895
PRINTED IN AUSTRALIA
0
5
10
15
20
HOLE No. PT 393
DATE 22/9
C.P.S. 50
T.C. 2
LINE X


CHL TYPE B054A GEO SOURCE/MGC 895
PRINTED IN AUSTRALIA
0
5
10
15
20
HOLE No. PT 392
DATE 22/9
C
50
2
X


CHL TYPE B054A GEO SOURCE/MGC 895
PRINTED IN AUSTRALIA
0
5
10
15
20
HOLE No. PT 391
DATE 22/9
G.P.S. 50
T.C. 2
LINE X


20
15
10
5
0
19.6m
Tiny Rods
CHL TYPE B054A GEO SOURCE/MGC 895
PRINTED IN AUSTRALIA
HOLE No. PT 396
DATE 27/9
C.P.S. 50
T.C. 2
LINE X X1


20
15
10
5
0
18.7m
Tiny Rods
CHL TYPE B054A GEO SOURCE/MGC 895
PRINTED IN AUSTRALIA
HOLE No. PT 395
DATE 27/9
C.P.S. 50
T.C. 2
LINE X X1


20
15
10
5
0
16.5
Tiny Rods
CHL TYPE B054A GEO SOURCE/MGC 895
PRINTED IN AUSTRALIA
HOLE No. PT 394
DATE 27/9
C.P.S. 50
T. 2
LINE X X1

PRINTED IN AUSTRALIA

CHL TYPE B054A GEO SOURCE IMGC 895

| HOLE No. | PT 397 |
|---|---|
| DATE | 22/9 |
| C.P.S. | 50 |
| T.C. | 2 |
| LINE X | X1 |

PRINTED IN AUSTRALIA

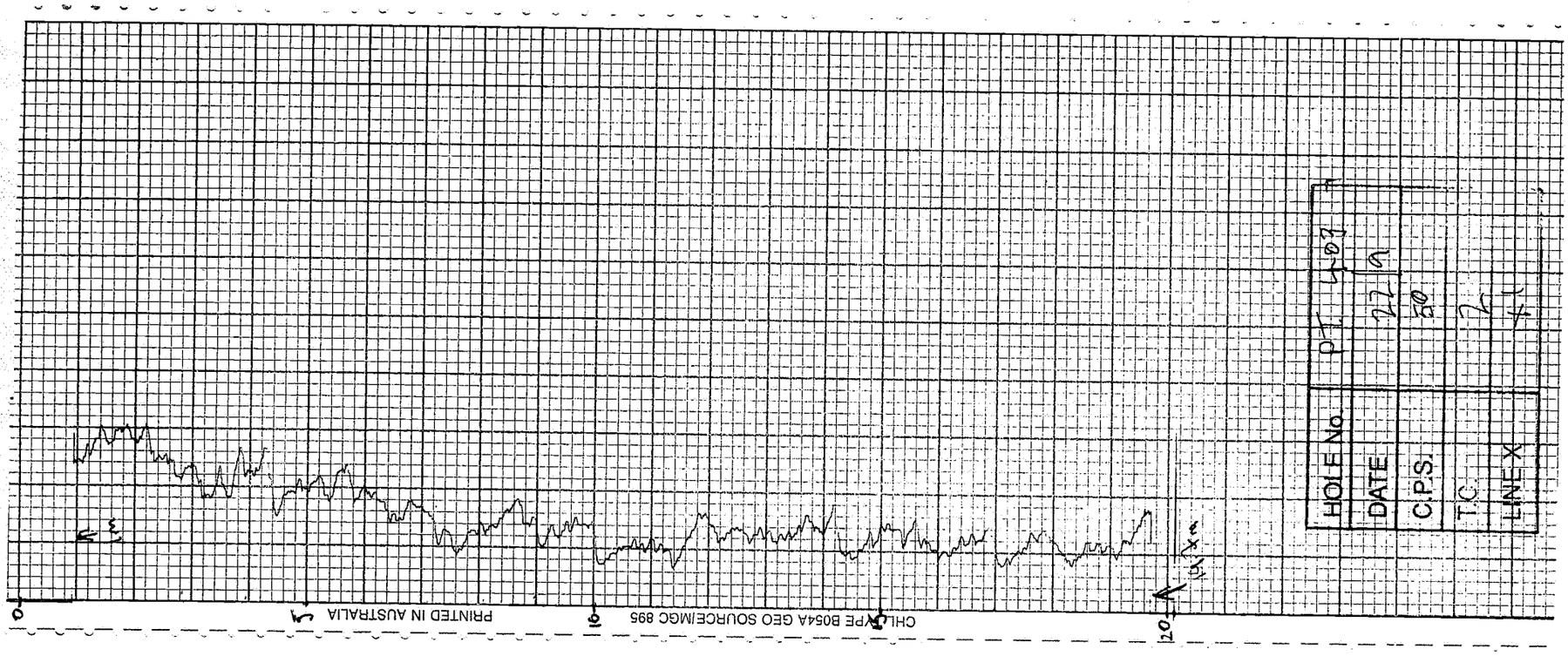
CHL TYPE B054A GEO SOURCE IMGC 895

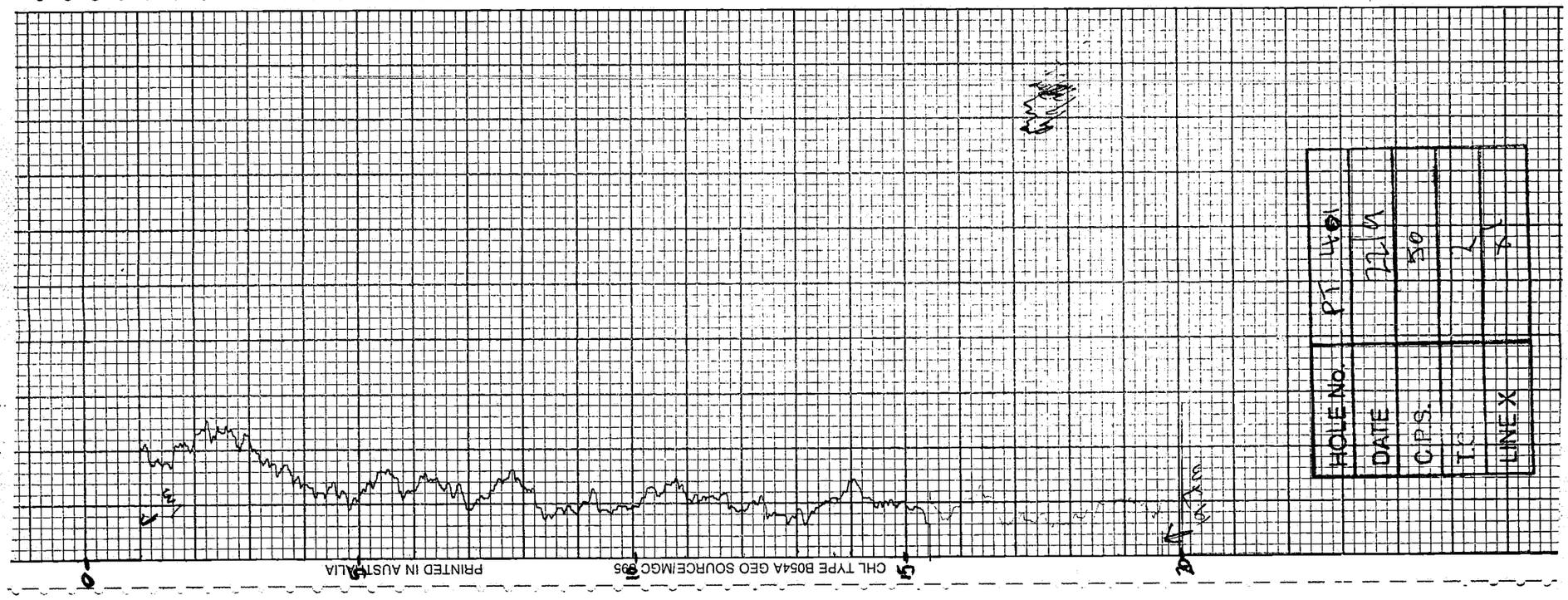
| HOLE No. | PT 2?? |
|---|---|
| DATE | 22/9 |
| C.P.S. | 50 |
| T.C. | 2 |
| LINE X | X1 |

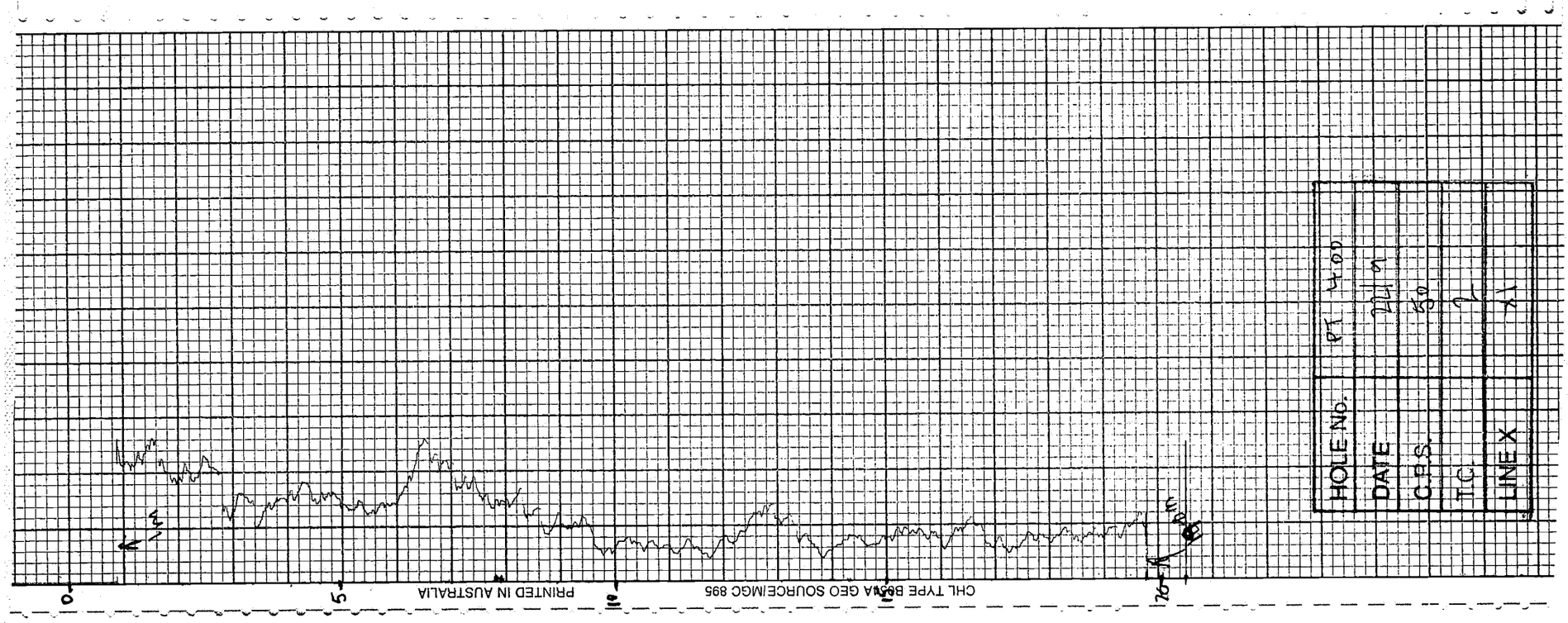
PRINTED IN AUSTRALIA

CHL TYPE B054A GEO SOURCE IMGC 895

| HOLE No. | PT 394 |
|---|---|
| DATE | 22/9 |
| C.P.S. | 50 |
| T.C. | 2 |
| LINE X | X1 |


HOLE No
DATE
C.P.S.
T.C.
LINE X
PT 402
22 N
50
2
1+
0
5
10
15
20
CHL TYPE B054A GEO SOURCE/MGC 895
PRINTED IN AUSTRALIA


HOLE No.
DATE
C.P.S.
T.C.
LINE X
PT 401
22 N
50
1
1+
0
5
10
15
20
CHL TYPE B054A GEO SOURCE/MGC 895
PRINTED IN AUSTRALIA

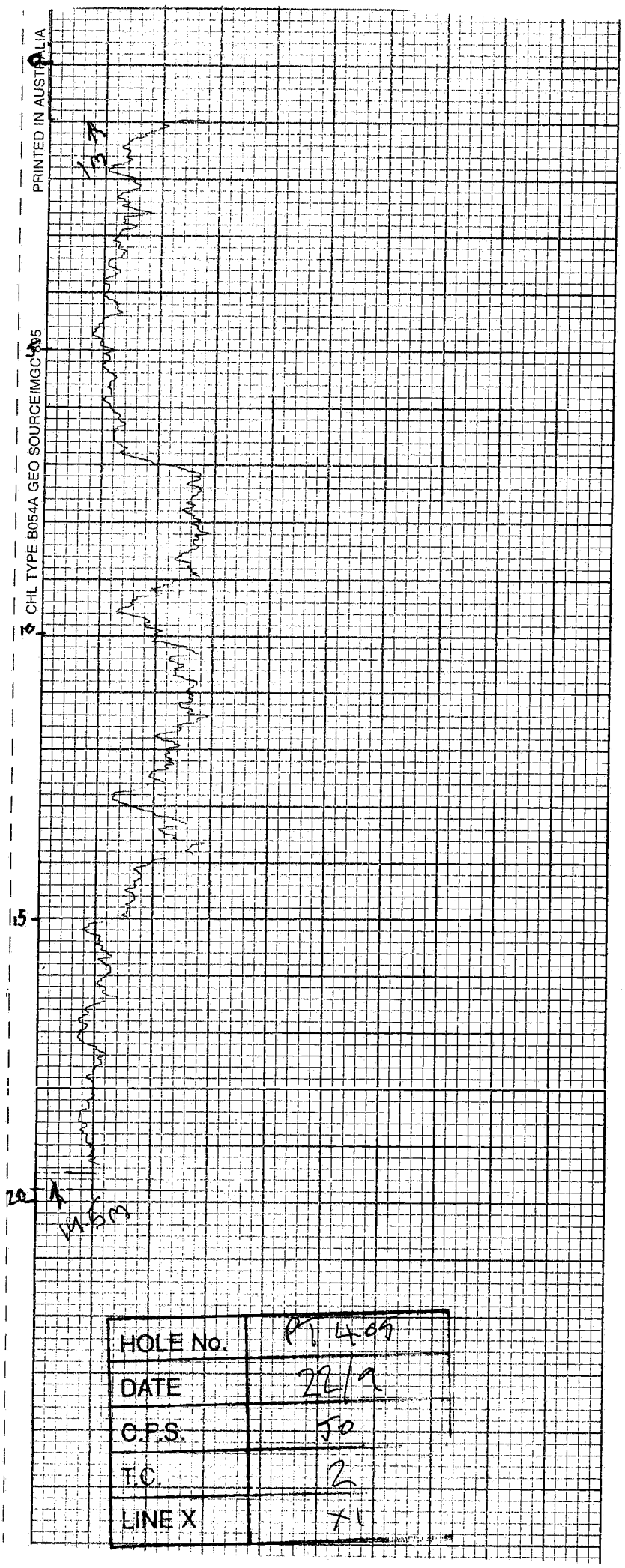

HOLE No.
DATE
C.P.S.
T.C.
LINE X
PT 400
22 N
50
2
1+
0
5
10
15
20
CHL TYPE B054A GEO SOURCE/MGC 895
PRINTED IN AUSTRALIA

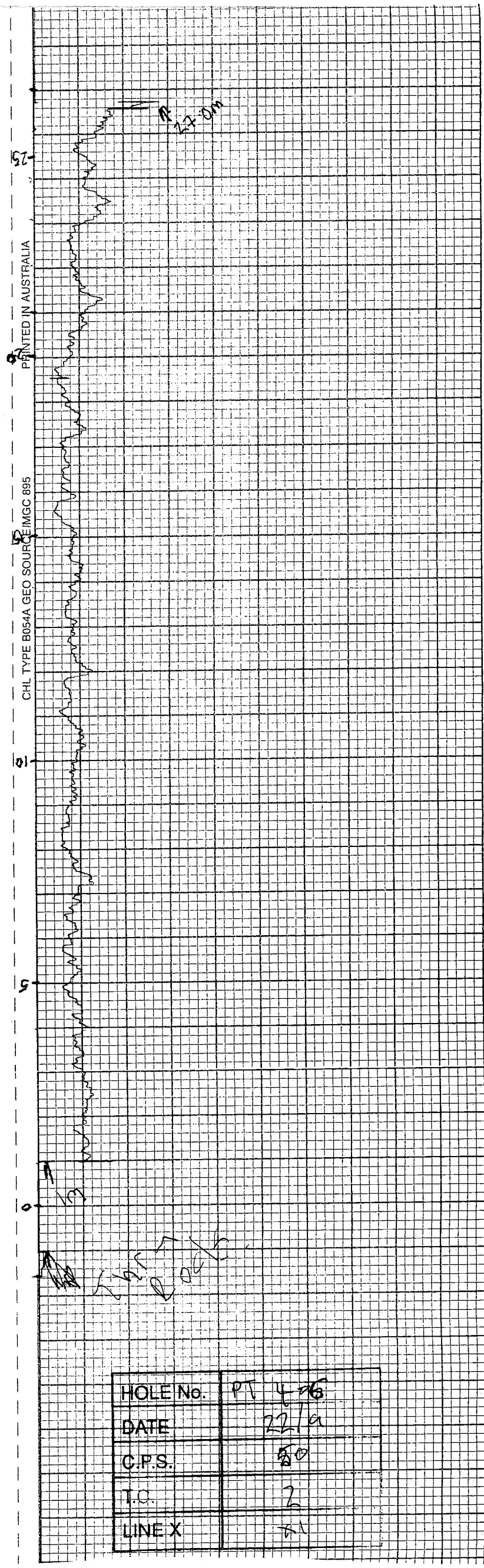
CHL TYPE B054A GEOSOURCE/MGC 895 PRINTED IN AUSTRALIA

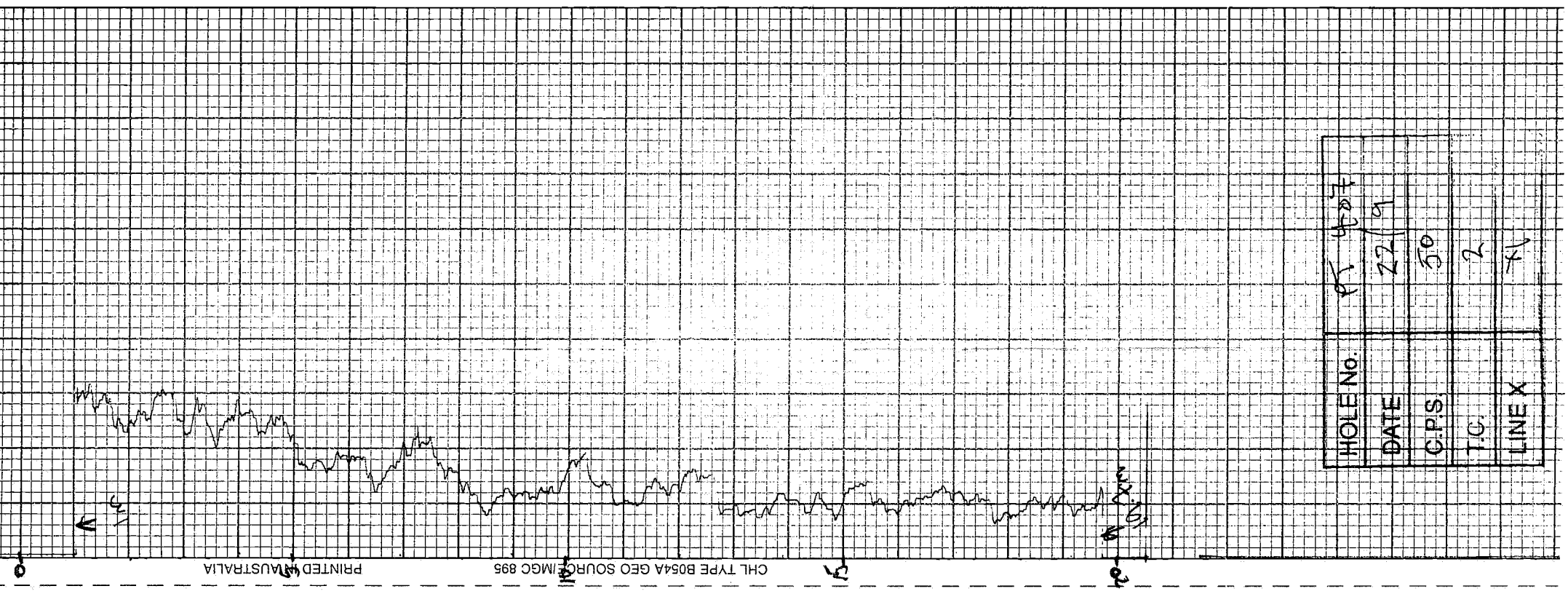
| HOLE No. | PT 402 |
|---|---|
| DATE | 22/9 |
| C.P.S. | 50 |
| T.C. | 2 |
| LINE X | X1 |

CHL TYPE B054A GEOSOURCE/MGC 895 PRINTED IN AUSTRALIA

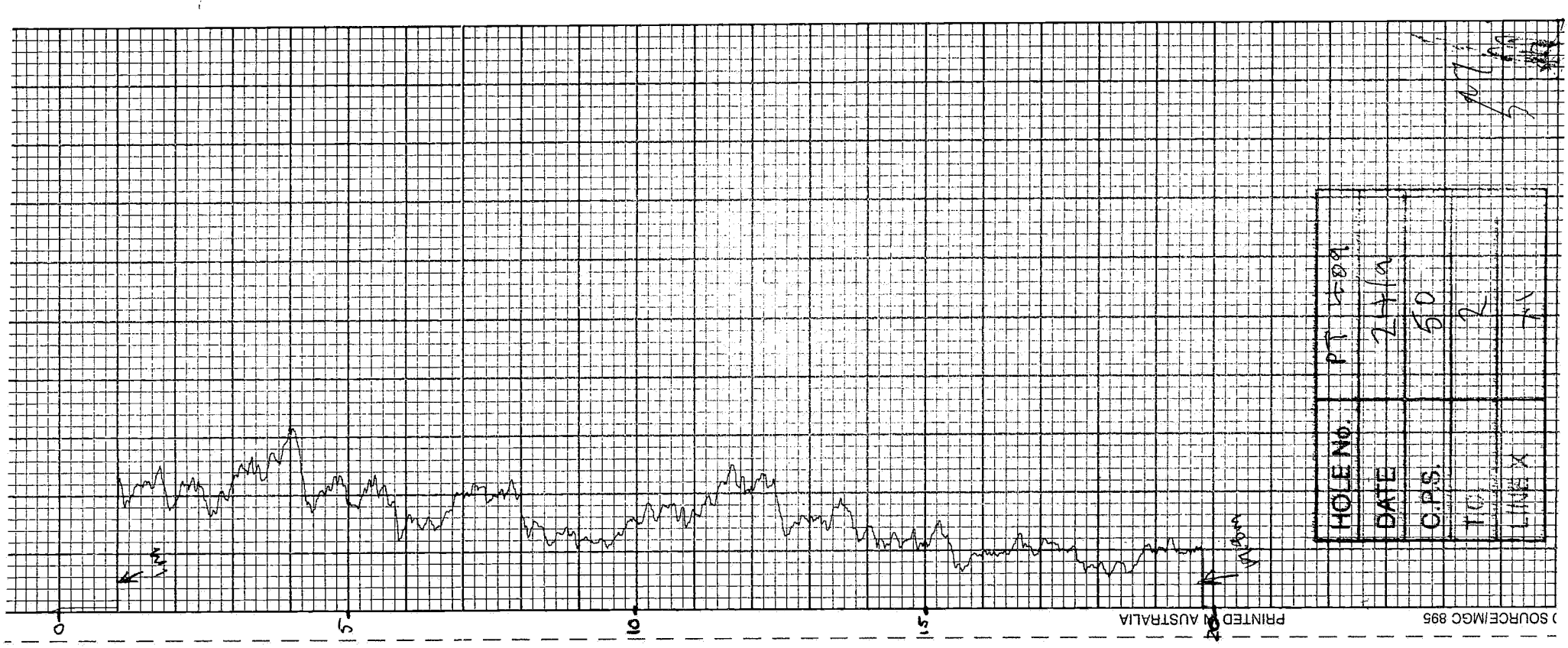
| HOLE No. | PT 404 |
|---|---|
| DATE | 22/9 |
| C.P.S. | 50 |
| T.C. | 2 |
| LINE X | X1 |

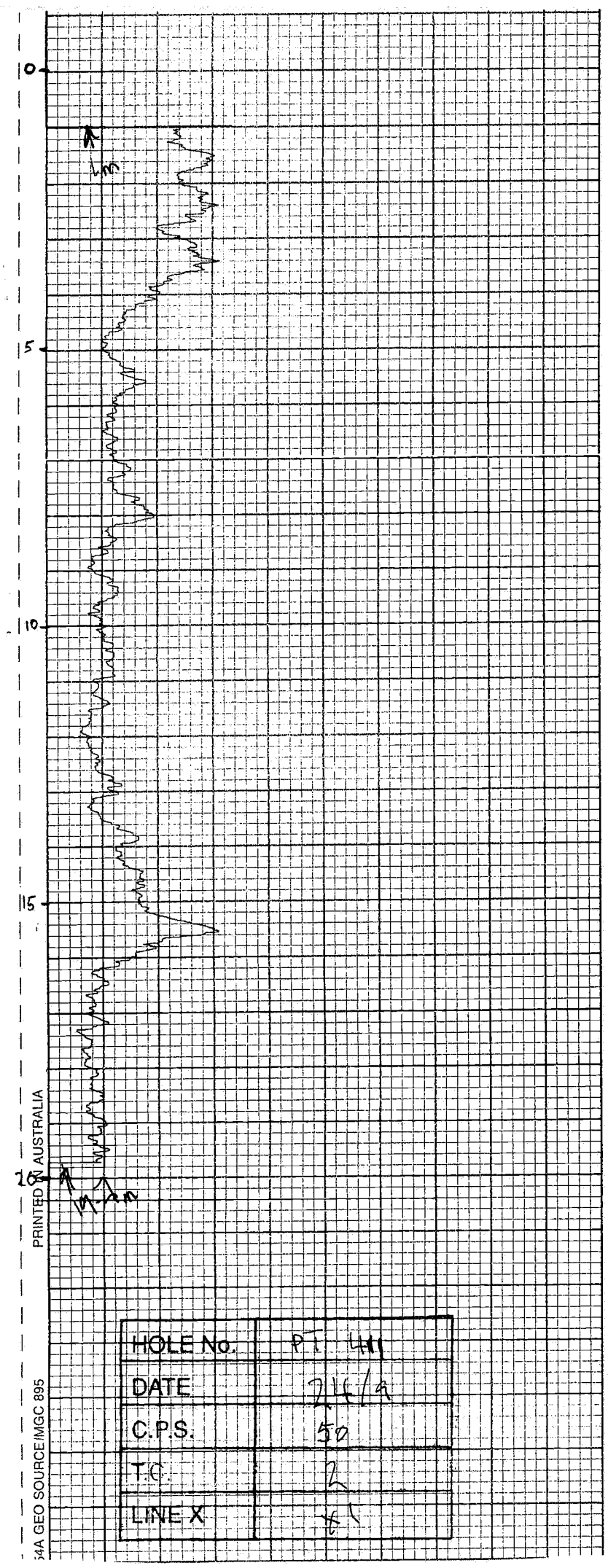

CHL TYPE B054A GEO SOURCE/MGC 895
PRINTED IN AUSTRALIA
25
20
15
10
5
0
1/3 ft
14.5m
HOLE No. PT 4-69
DATE 22/9
C.P.S. 50
T.C. 2
LINE X

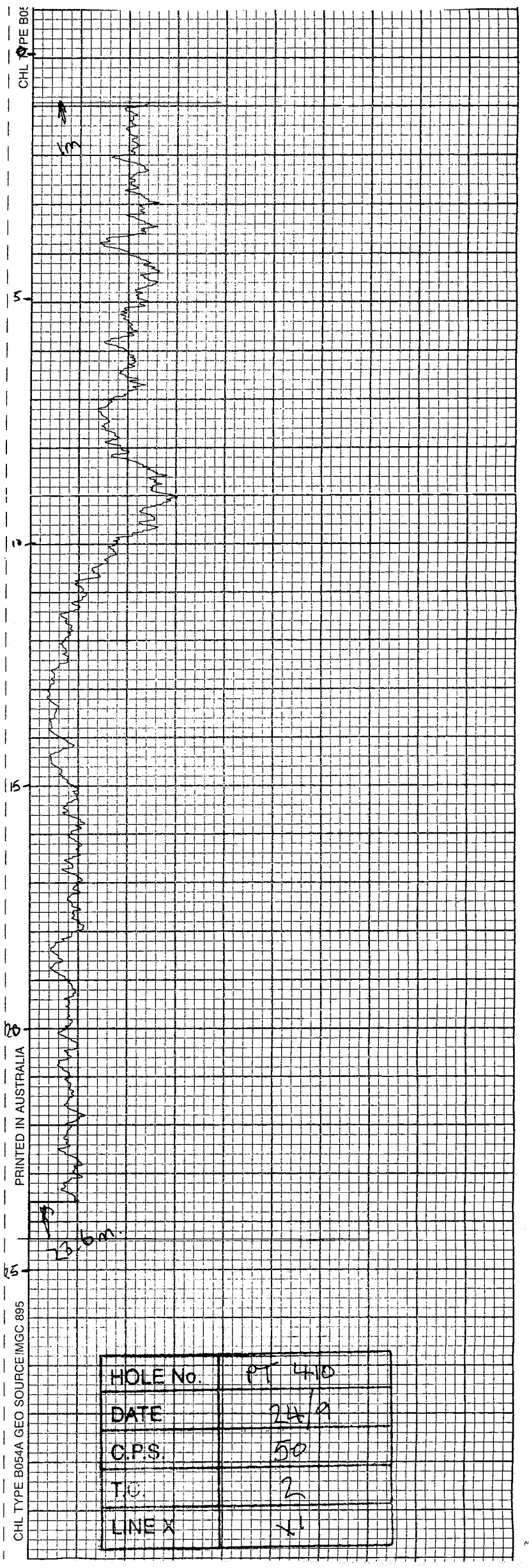

CHL TYPE B054A GEO SOURCE/MGC 895
PRINTED IN AUSTRALIA
25
20
15
10
5
0
22.0m
HOLE No. PT 4-76
DATE 22/9
C.P.S. 50
T.C. 2
LINE X

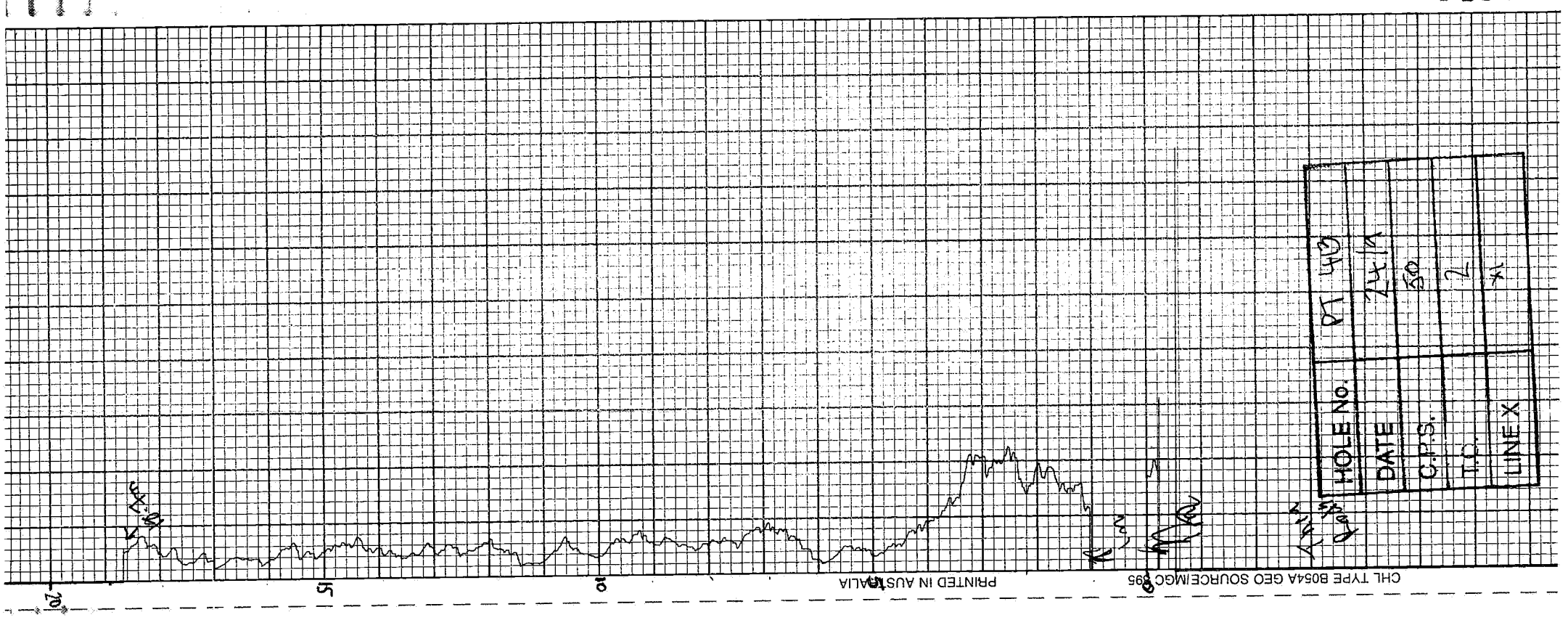

HOLE No.
DATE
C.P.S.
T.C.
LINE X
PRINTED IN AUSTRALIA
CHL TYPE B054A GEO SOURCE/MGC 895

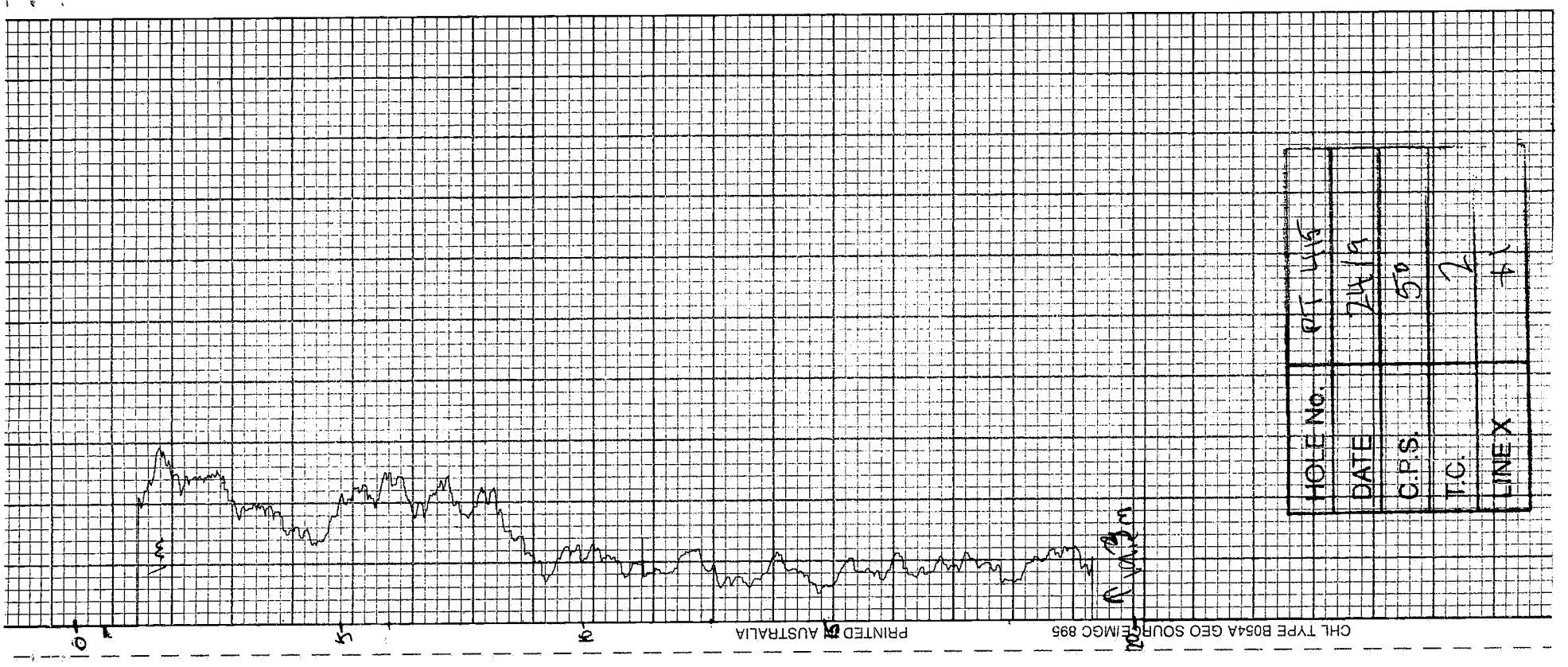
HOLE No.
DATE
C.P.S.
T.C.
LINE X
PRINTED IN AUSTRALIA
CHL TYPE B054A GEO SOURCE/MGC 895

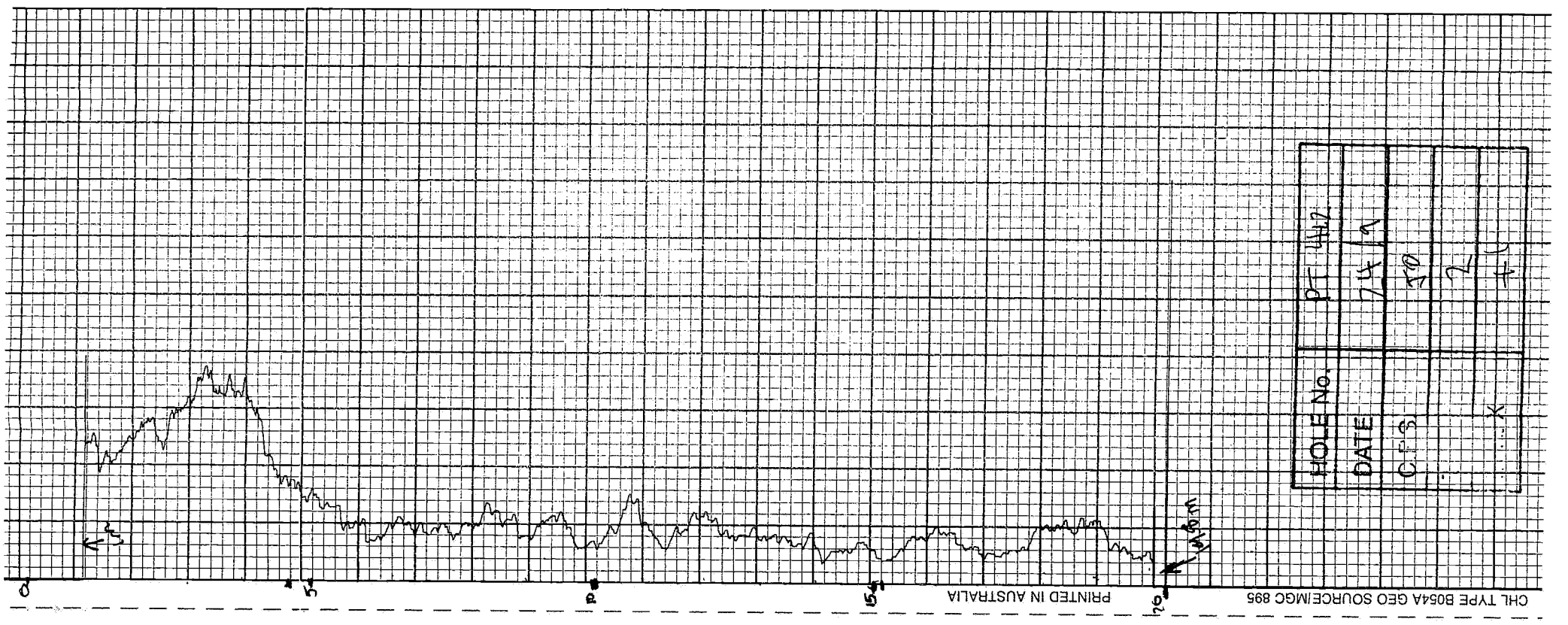

HOLE No.
DATE
C.P.S.
T.C.
LINE X
PRINTED IN AUSTRALIA
SOURCE/MGC 895

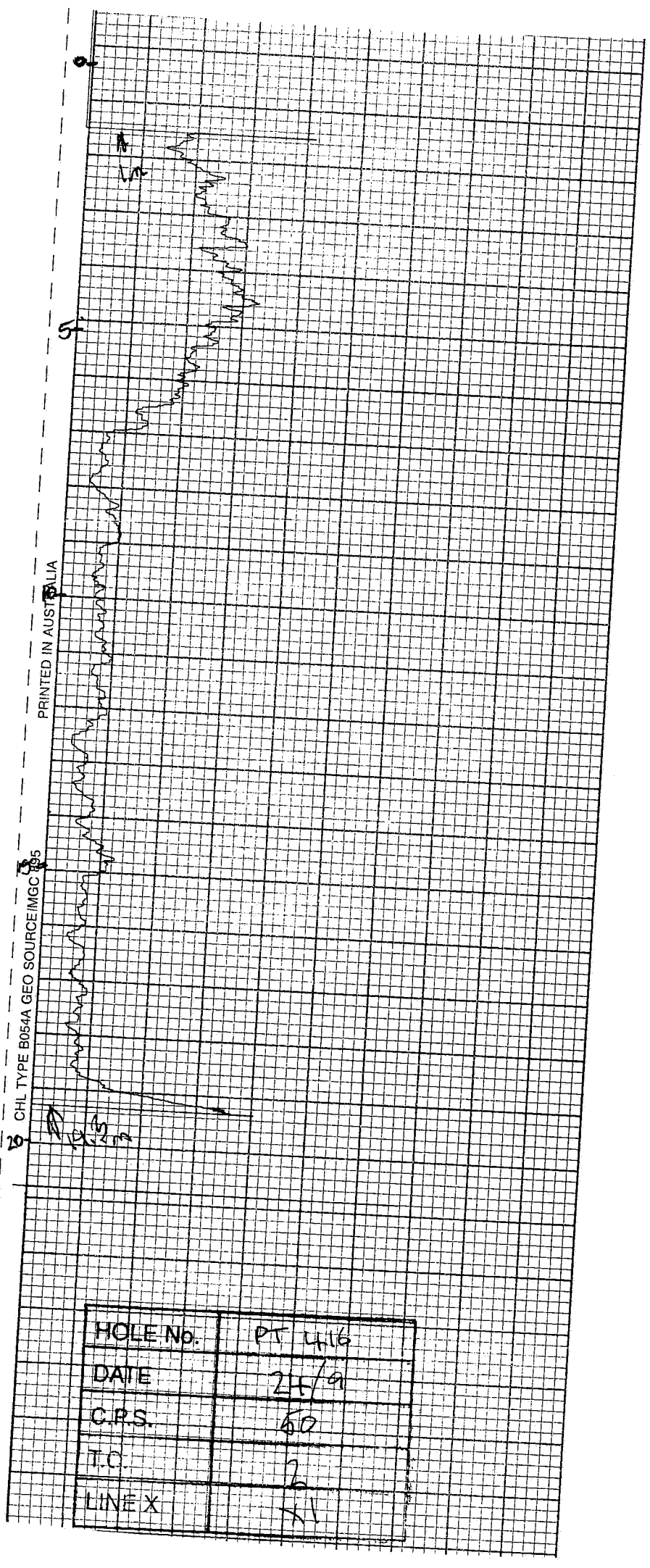

0
5
10
15
20
HOLE No. PT 411
DATE 21/9
C.P.S. 50
T.C. 2
LINE X #1
PRINTED IN AUSTRALIA
54A GEO SOURCE/MGC 895

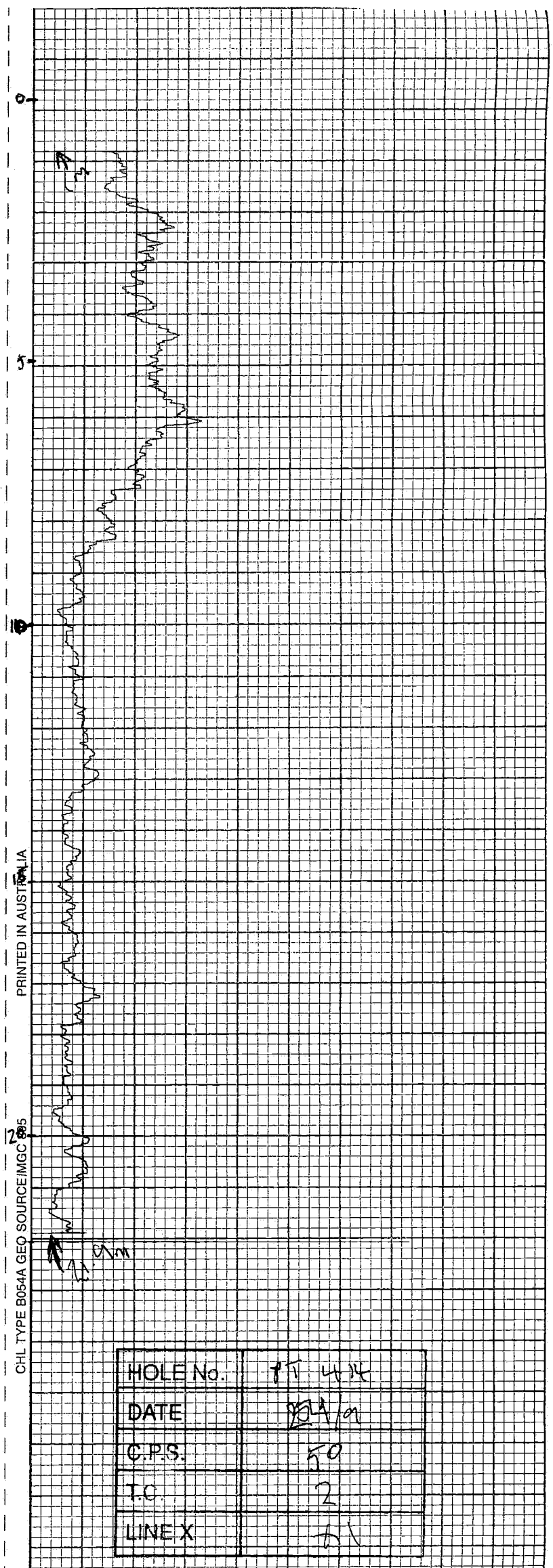

0
5
10
15
20
25
HOLE No. PT 410
DATE 24/9
C.P.S. 50
T.C. 2
LINE X #1
PRINTED IN AUSTRALIA
CHL TYPE B054A GEO SOURCE/MGC 895

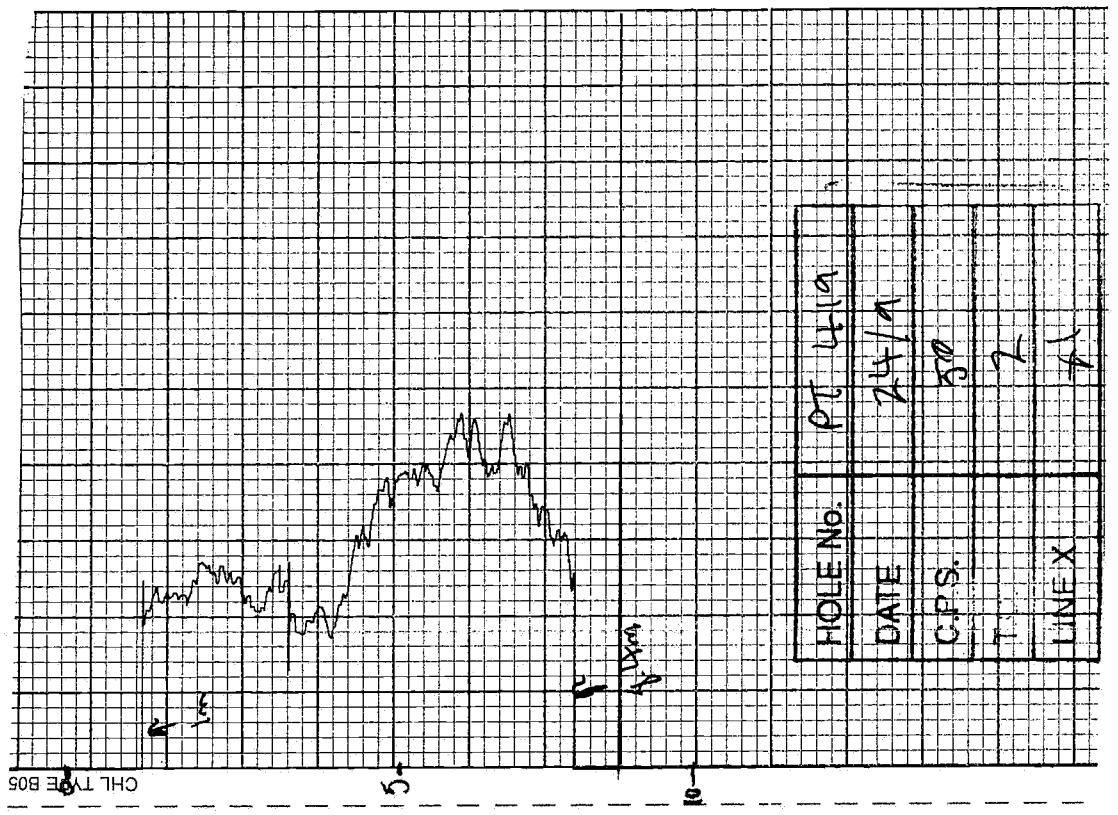

HOLE No.
DATE
C.P.S.
T.C.
LINE X
CHL TYPE B054A GEO SOURCE/MGC 895
PRINTED IN AUSTRALIA

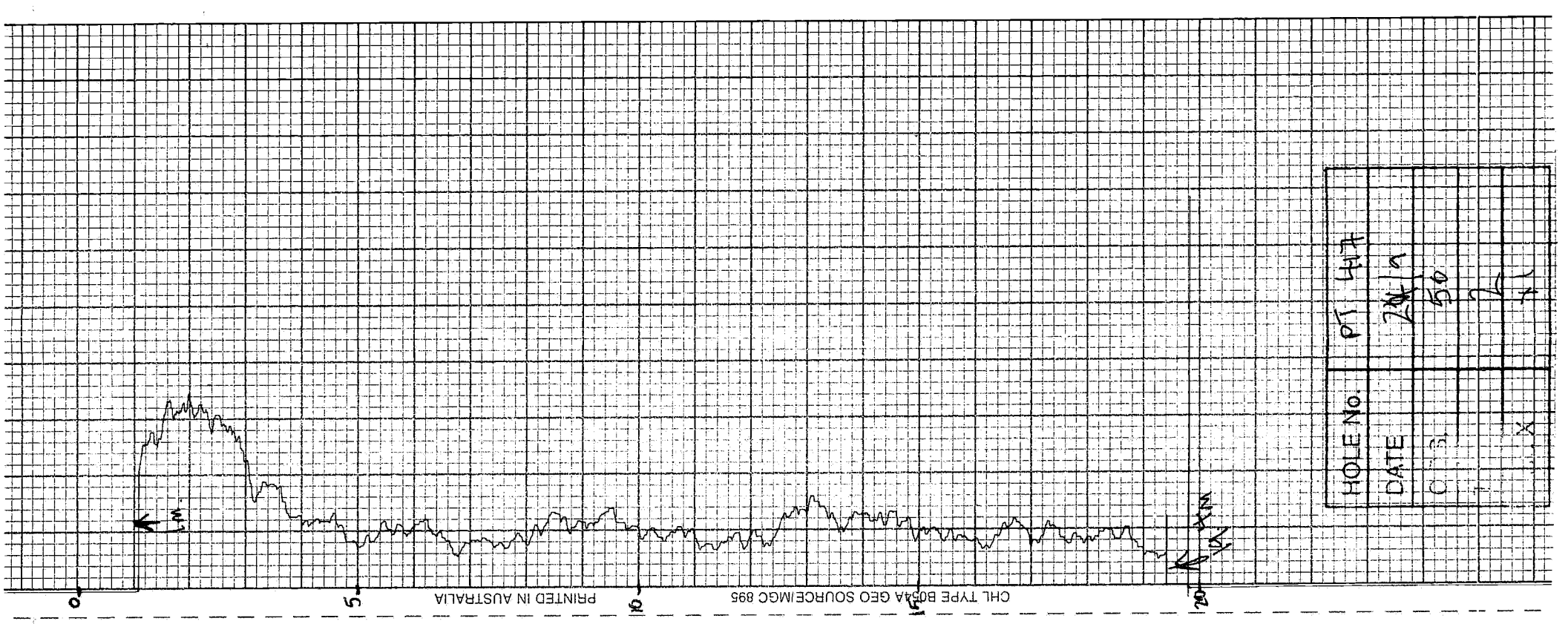

HOLE No.
DATE
C.P.S.
T.C.
LINE X
CHL TYPE B054A GEO SOURCE/MGC 895
PRINTED IN AUSTRALIA


HOLE No.
DATE
C.P.S.
T.C.
LINE X
CHL TYPE B054A GEO SOURCE/MGC 895
PRINTED IN AUSTRALIA


0
5
10
15
20
CHL TYPE B054A GEO SOURCE/MGC 885
PRINTED IN AUSTRALIA
HOLE No. PT 4.16
DATE 24/9
C.P.S. 50
T.C. 2
LINE X


0
5
10
15
20
CHL TYPE B054A GEO SOURCE/MGC 885
PRINTED IN AUSTRALIA
HOLE No. PT 4.14
DATE 24/9
C.P.S. 50
T.C. 2
LINE X


HOLE No. PT 4-18
DATE 24/4
C.P.S. 50
T.C. 2
LINE X
CHL TYPE B05


HOLE No. PT 4-18
DATE 24/4
C.P.S. 50
T.C. 2
LINE X
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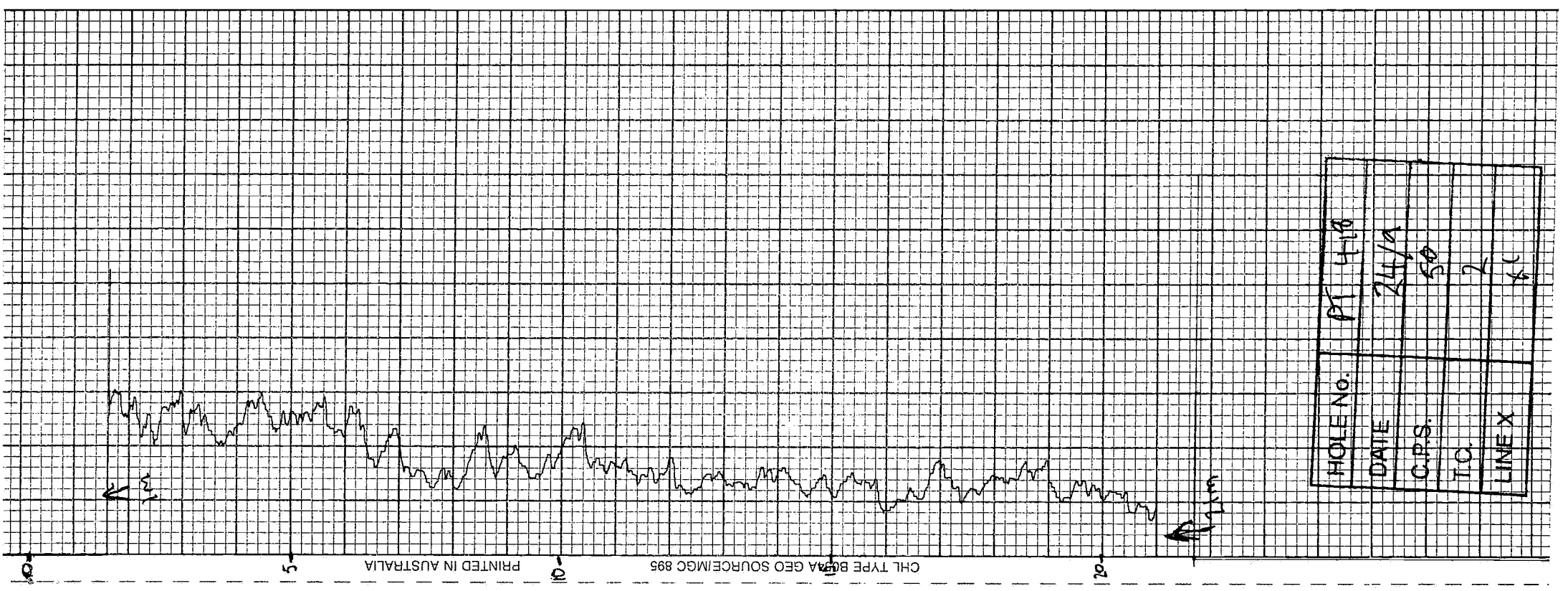
PRINTED IN AUSTRALIA


HOLE No. PT 4-18
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C.P.S. 50
T.C. 2
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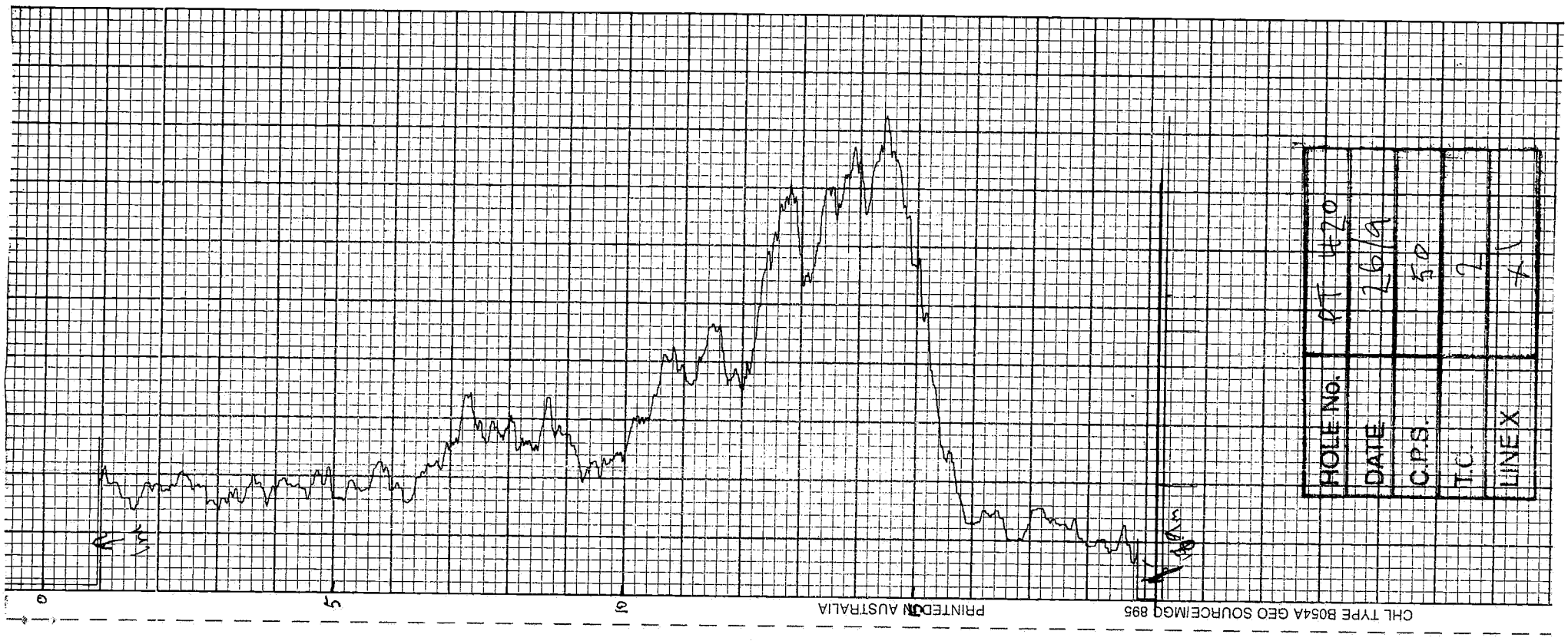
PRINTED IN AUSTRALIA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DATE 7/9/84
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PRINTED IN AUSTRALIA
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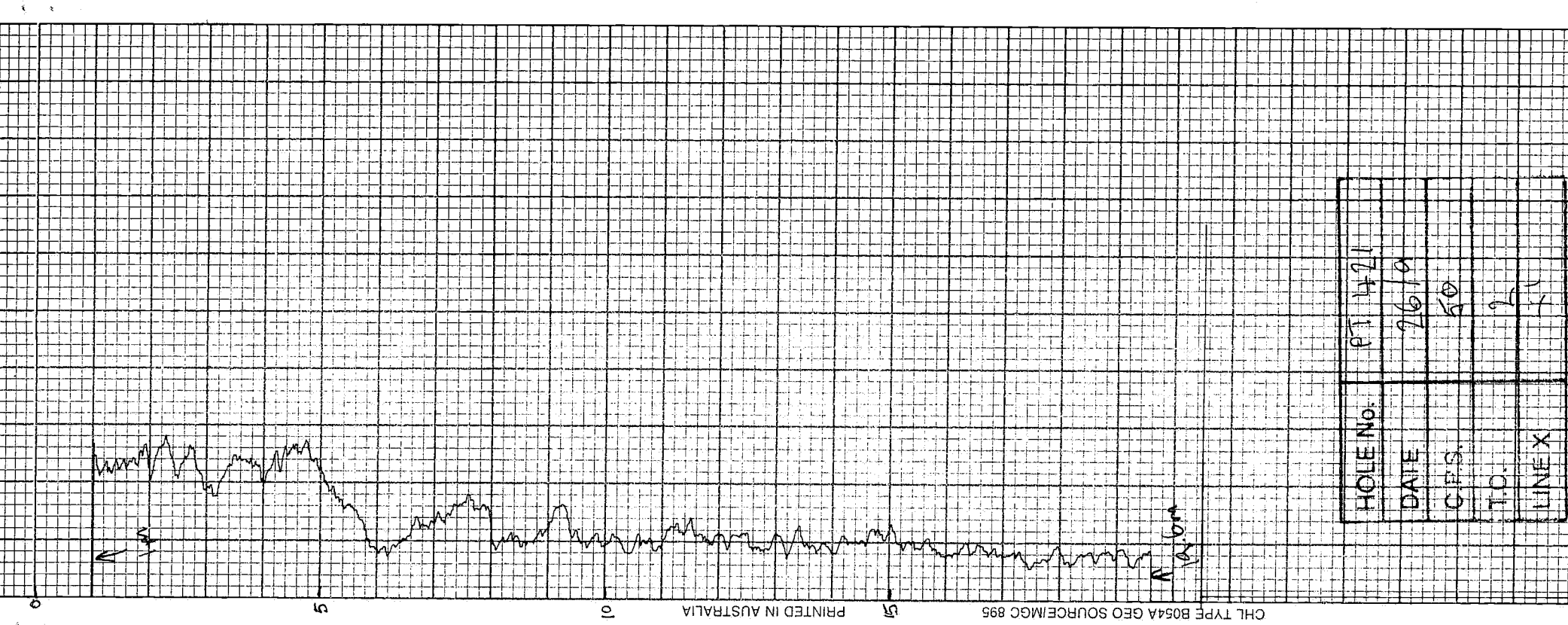
HOLE No. PT #22
DATE 9/9/84
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T.C. 2
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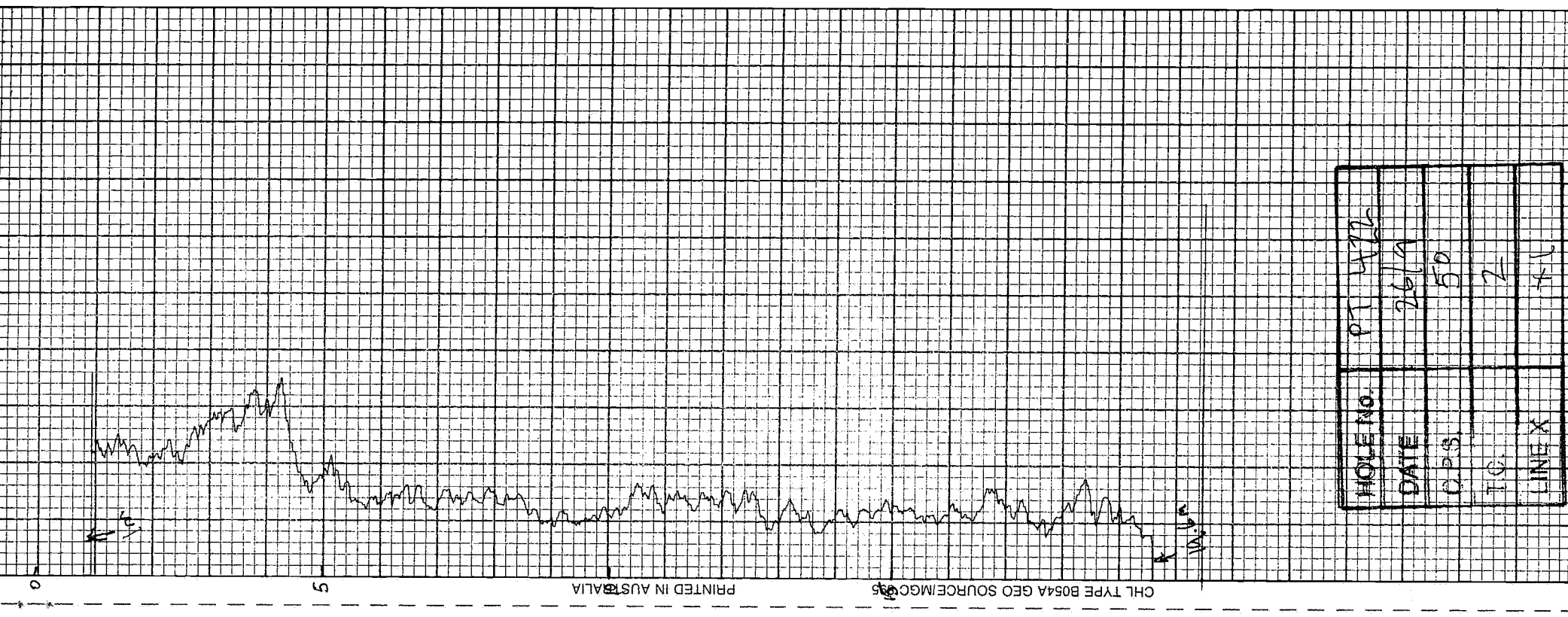
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DATE 26/9/84
C.P.S. 50
T.C. 2
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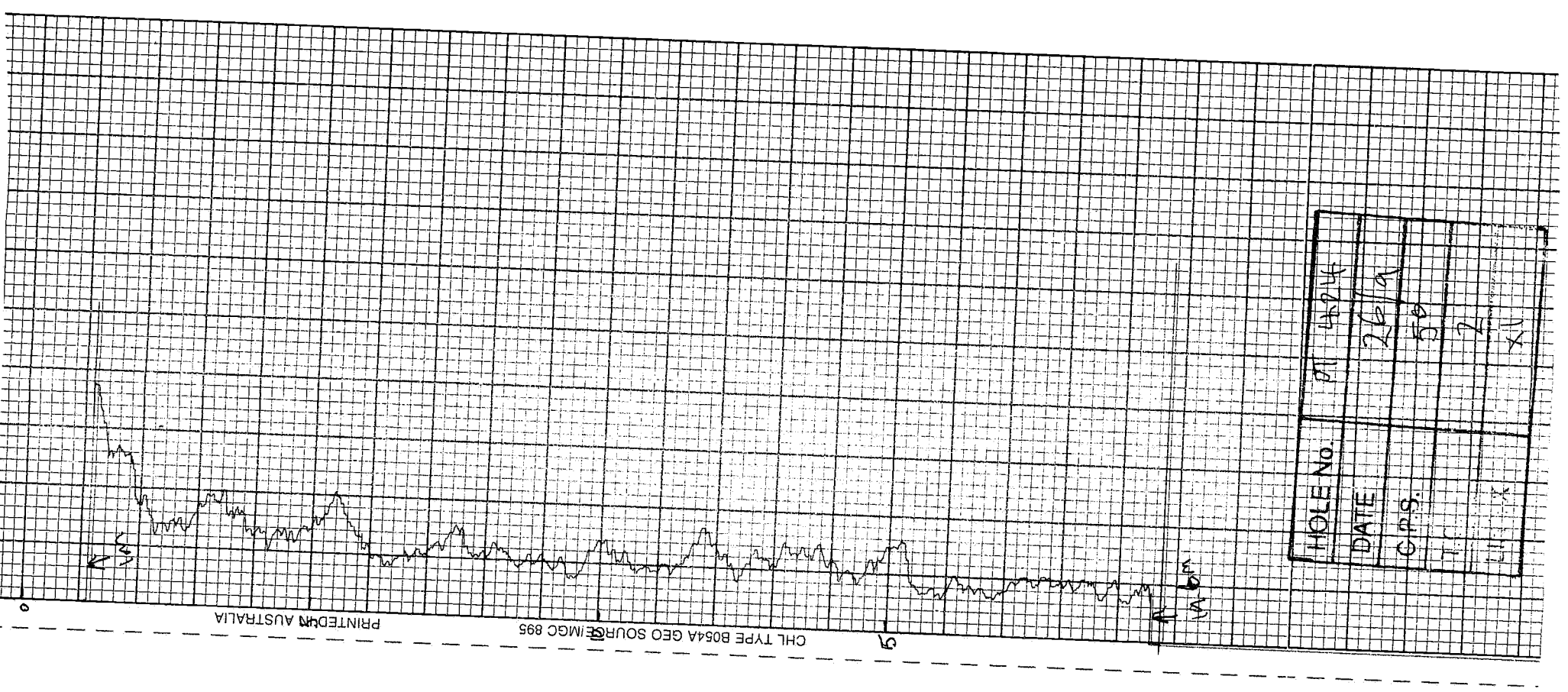
PRINTED IN AUSTRALIA
CHL TYPE B054A GEO SOURCE/MGC 895

HOLE No. #1 1775
DATE 27/6
C.P.S. 50
T.C. 2
LINE X
CHL TYPE B54A GEO SOURCE/MGC 895
PRINTED IN AUSTRALIA


HOLE No. #1 4924
DATE 27/6
C.P.S. 50
T.C. 2
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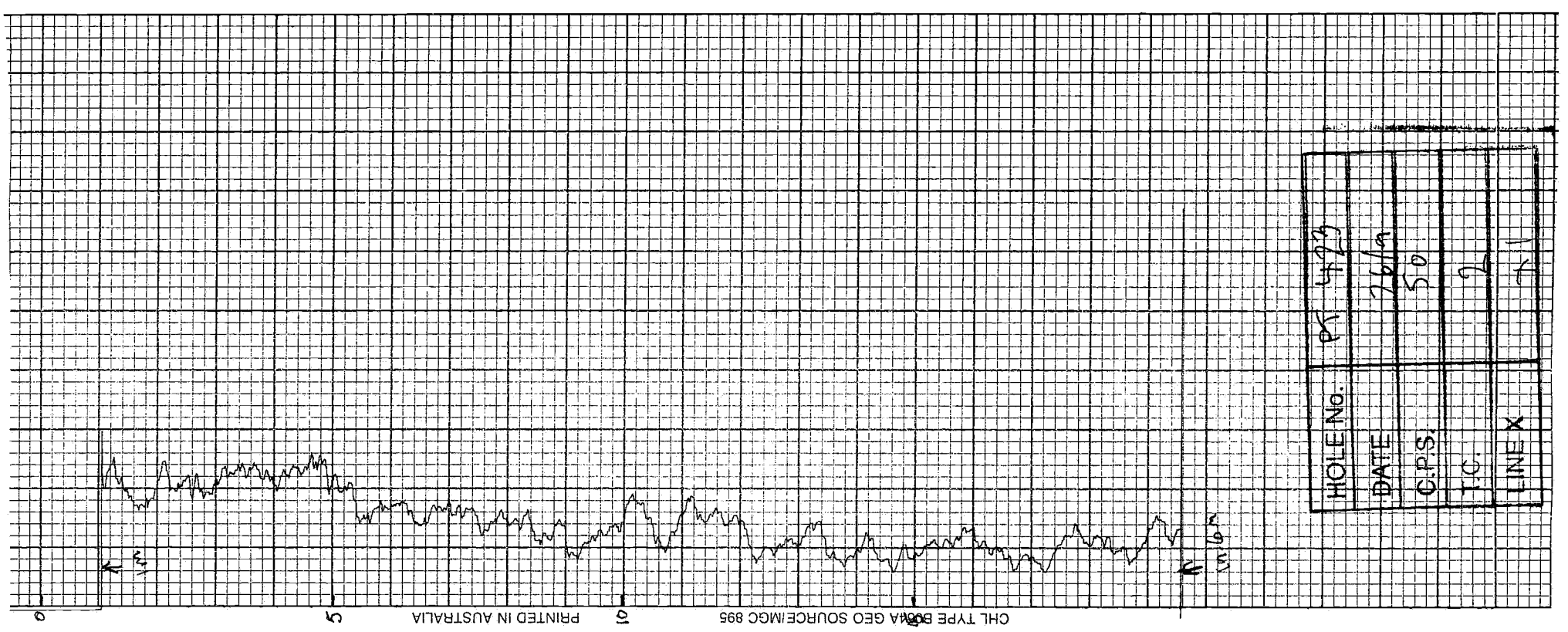
PRINTED IN AUSTRALIA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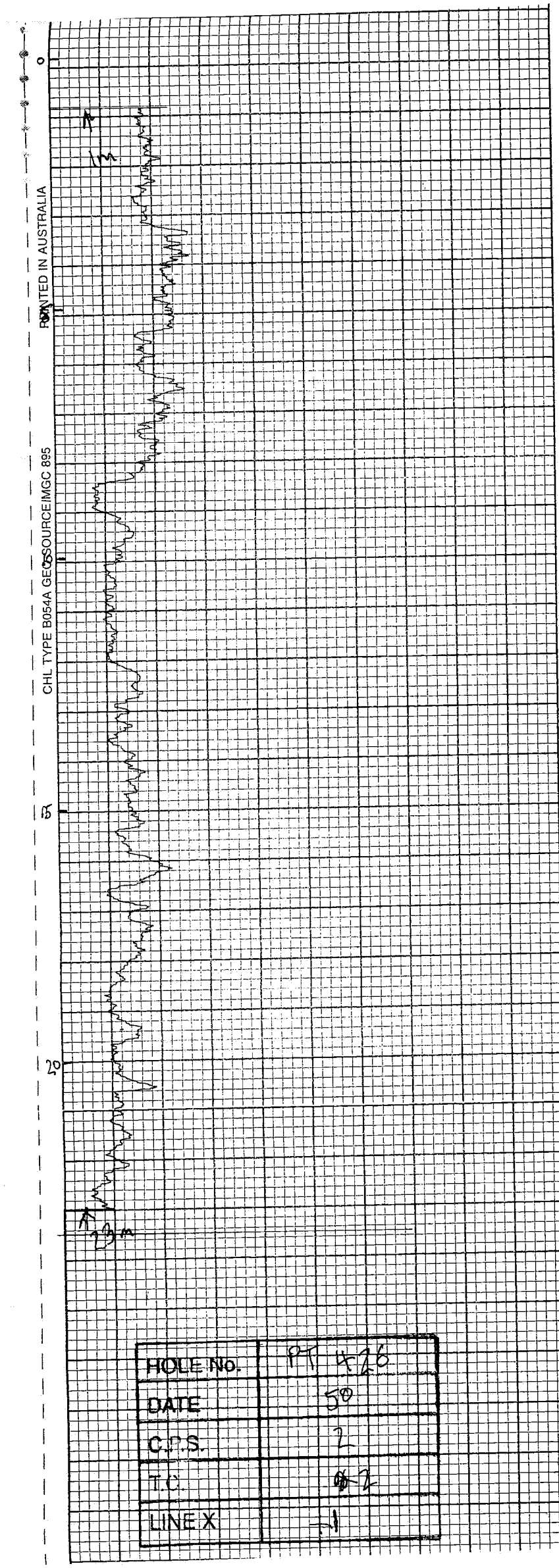
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DATE 5/9
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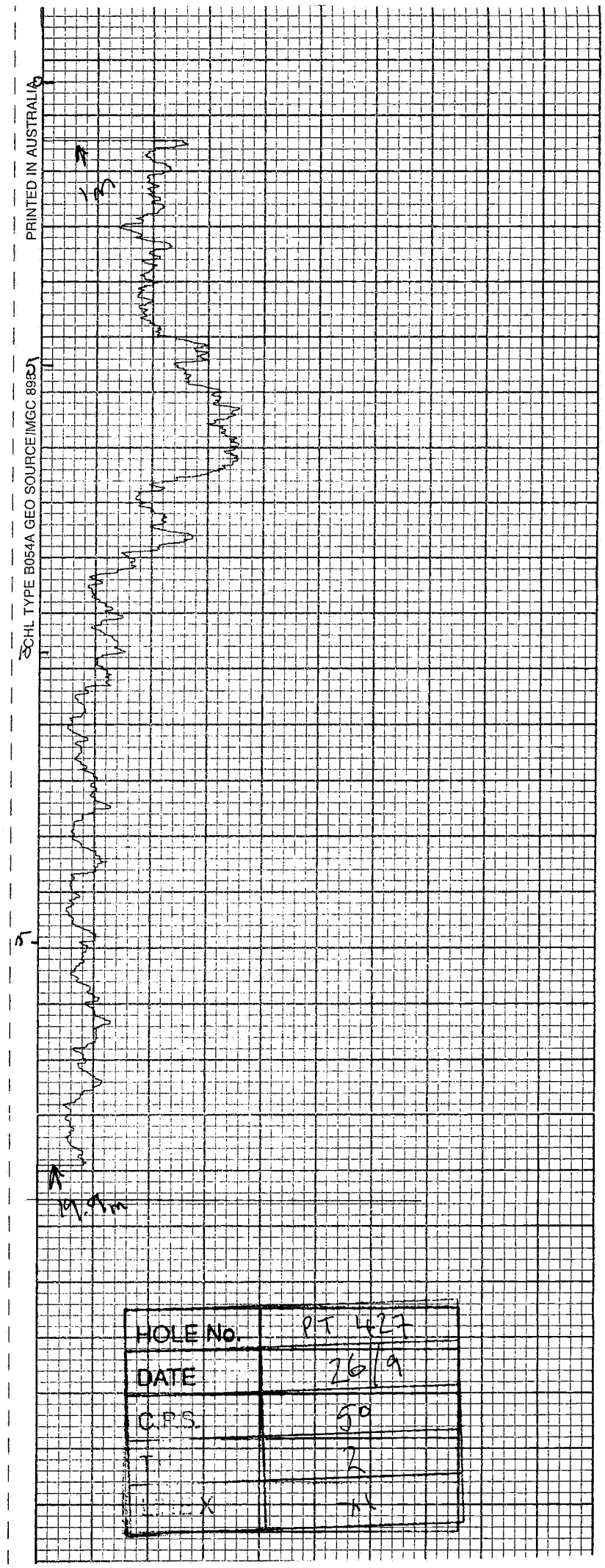
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DATE 26/9
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X -1

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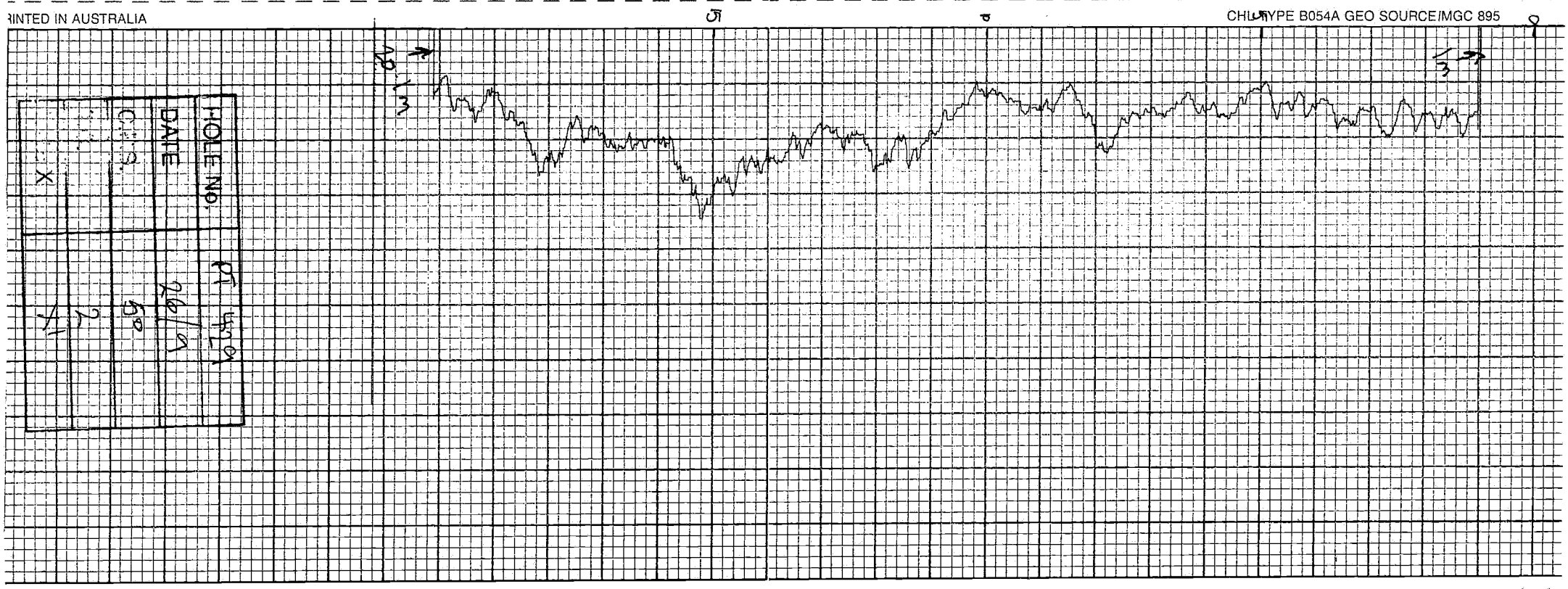


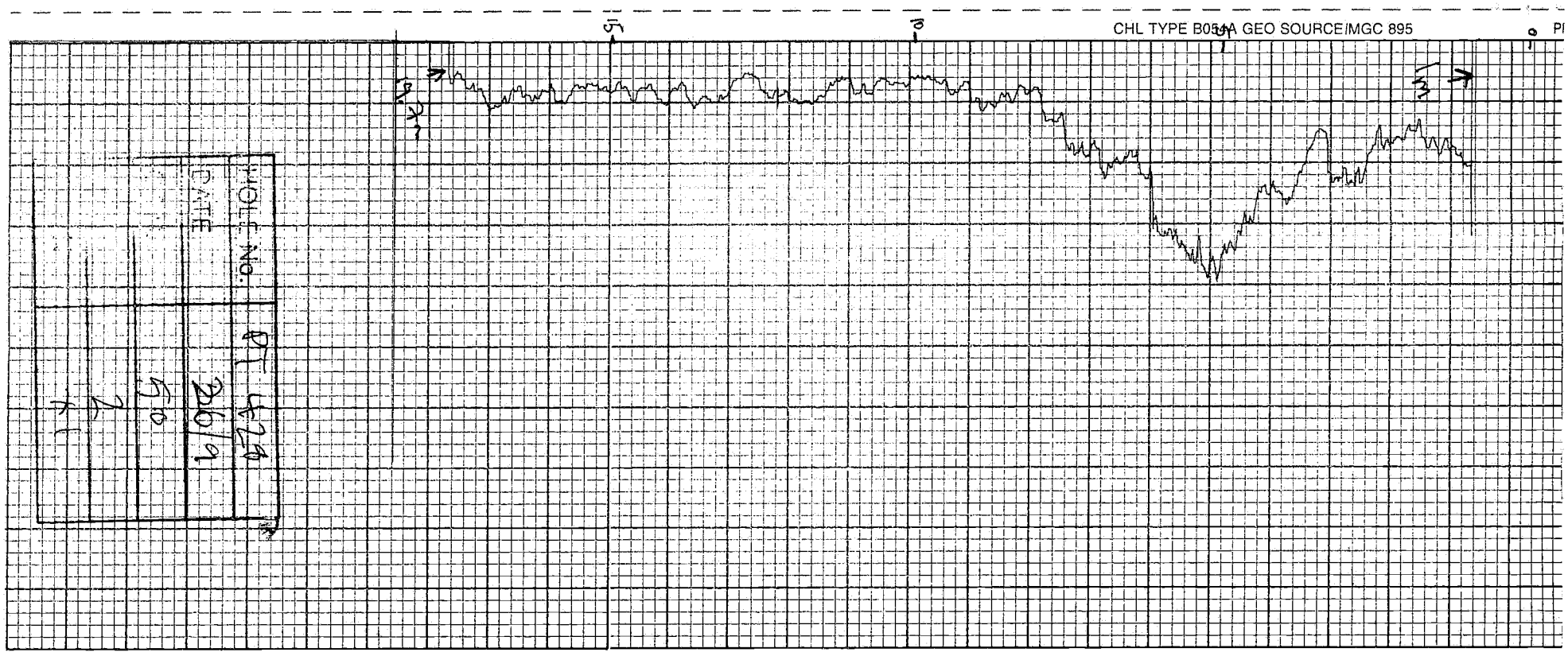


No. SIE B054 A PRINTED IN AUSTRALIA 6/81

0489

HOLE No. PT 433
DATE 29/9
C.P.S. 52
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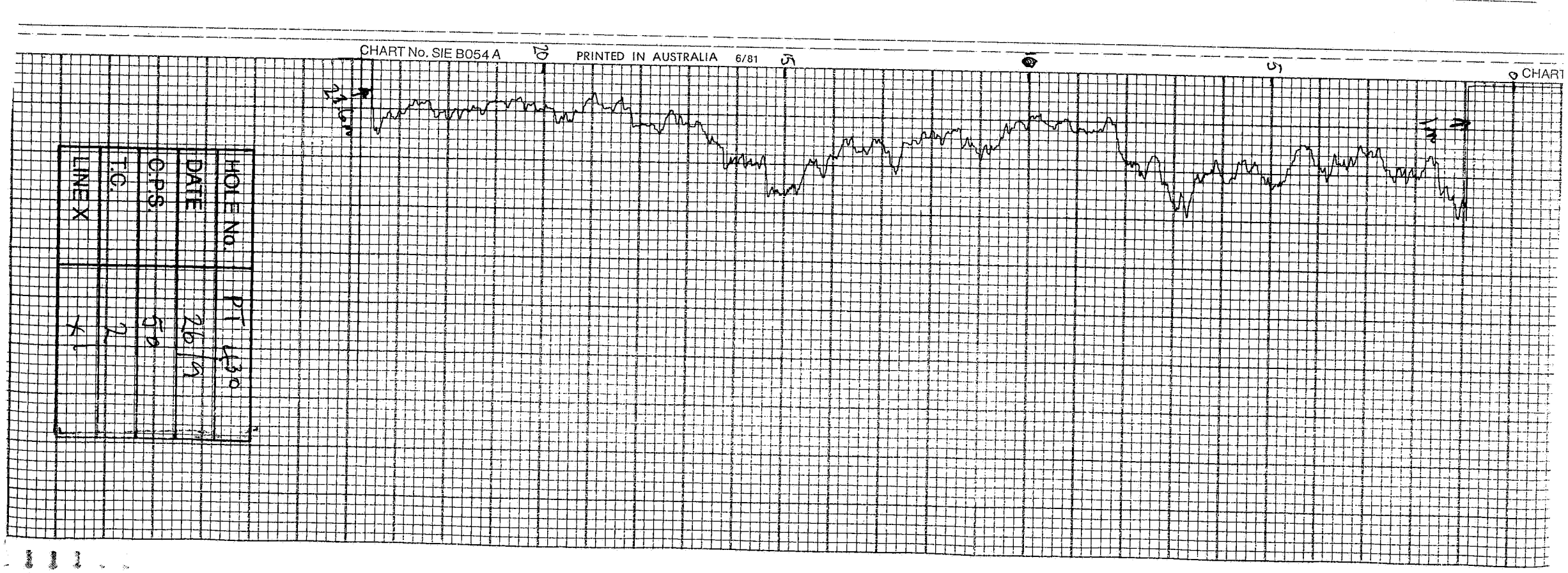
CHART No. SIE B054 A
PRINTED IN AUSTRALIA 6/81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HOLE No. PT 433
DATE 26/9/82
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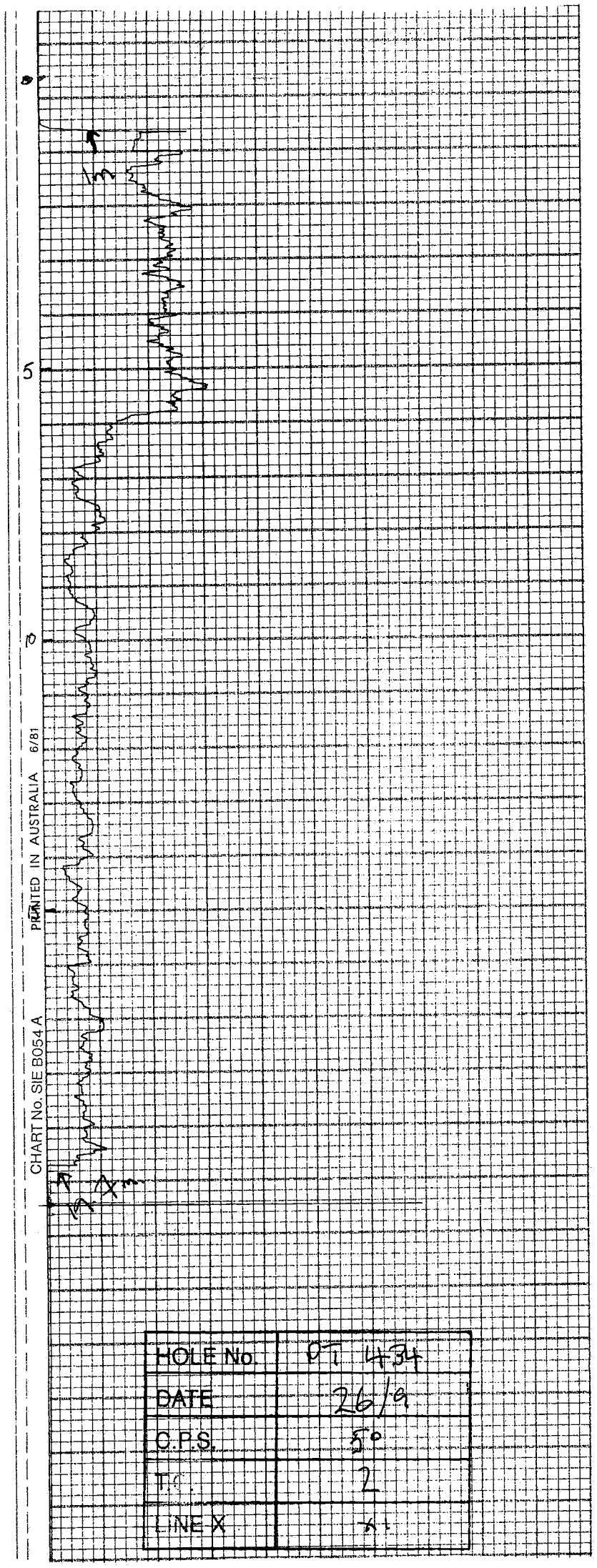
0490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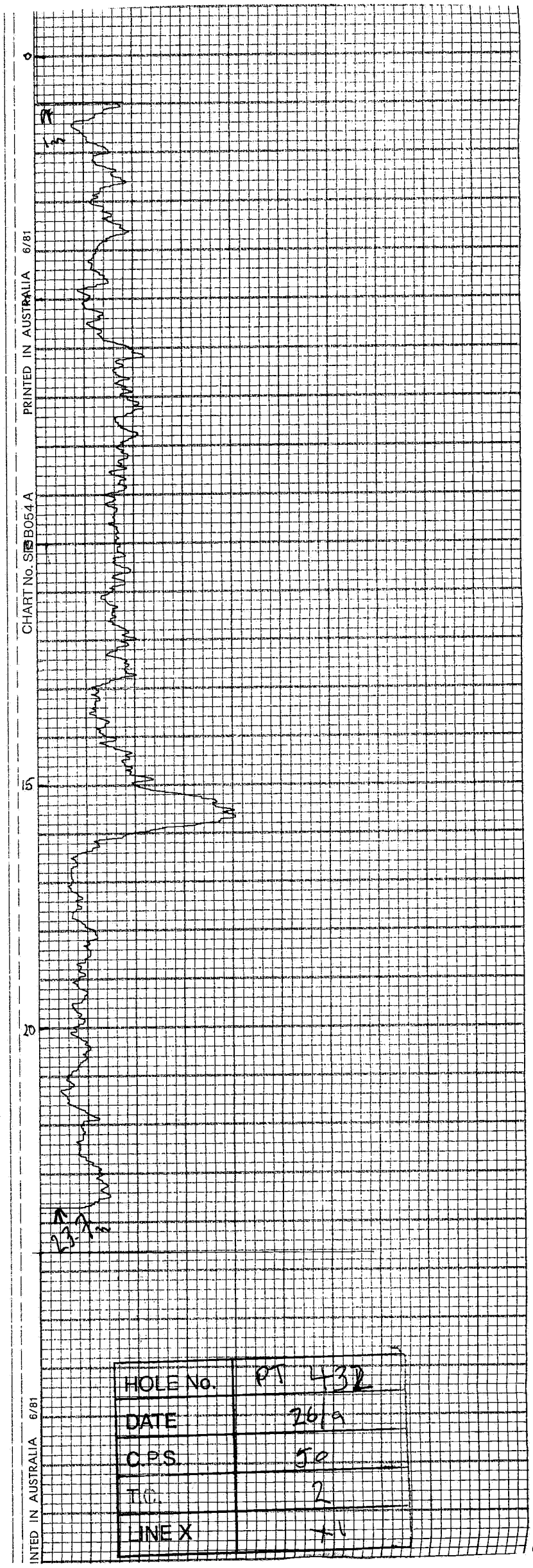
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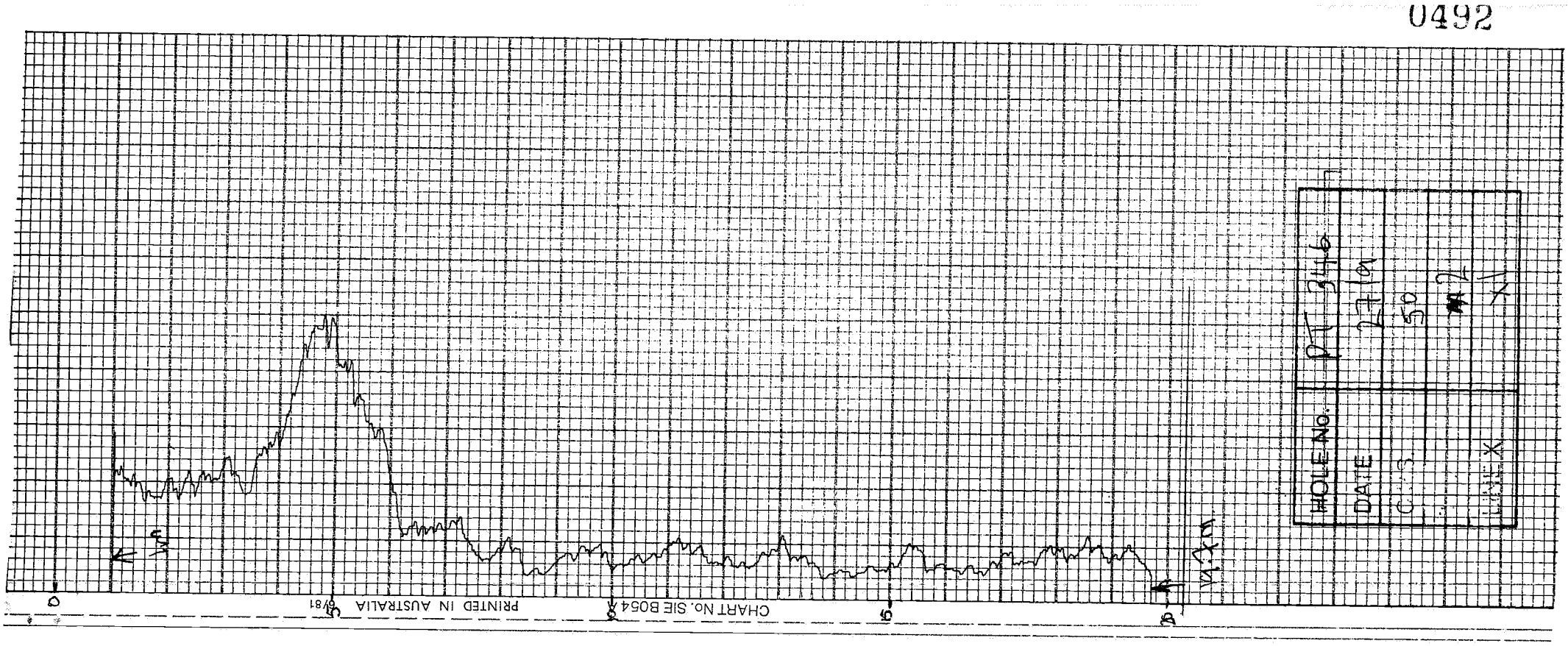
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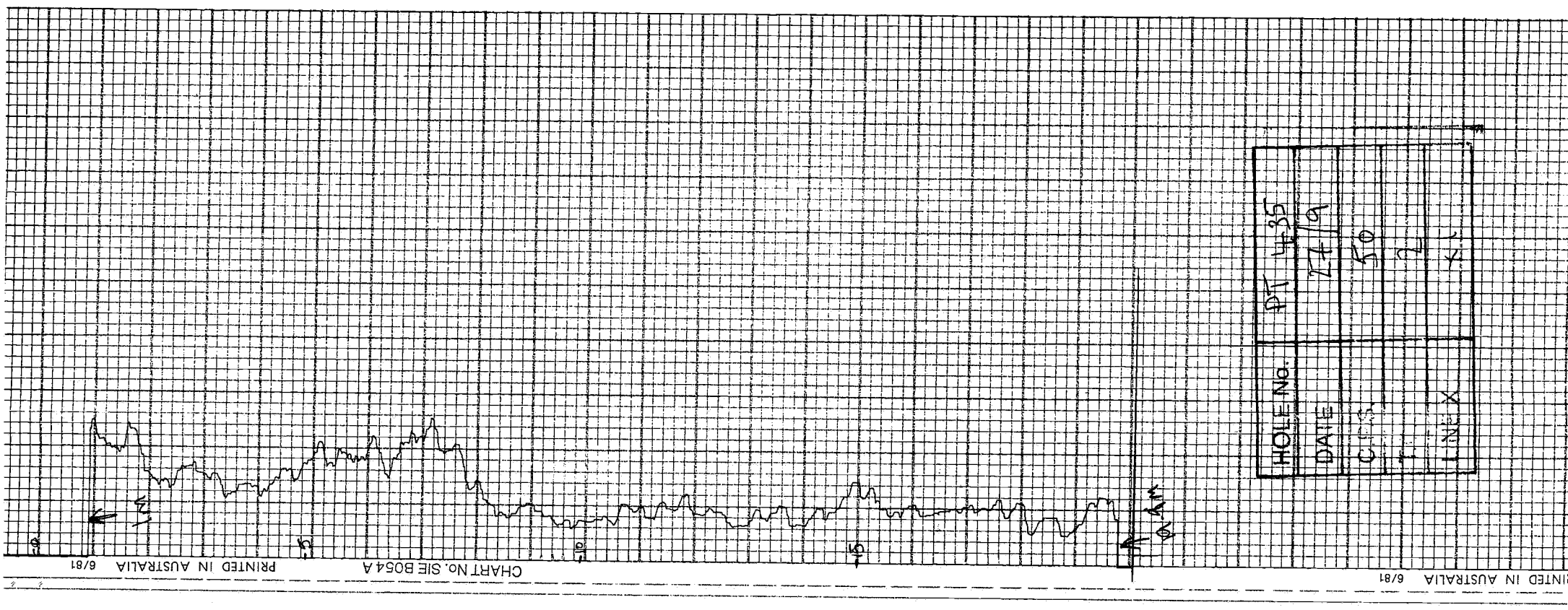
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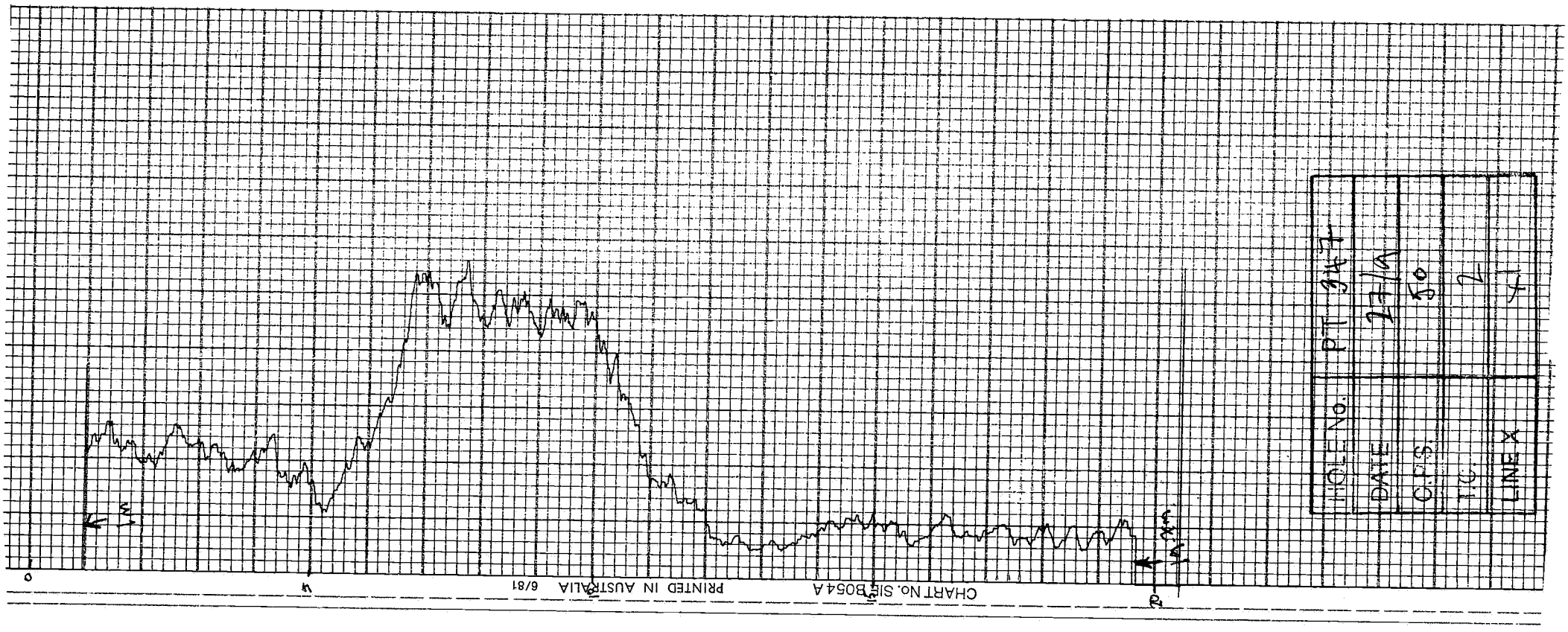
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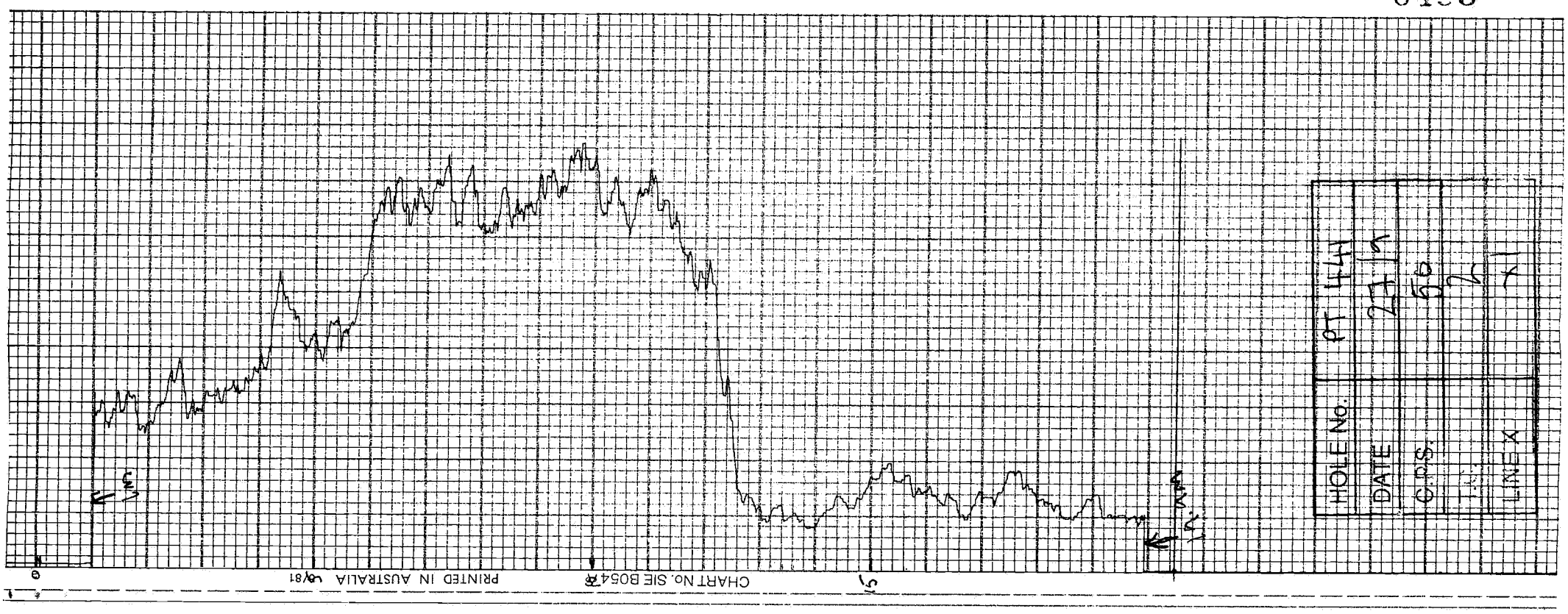
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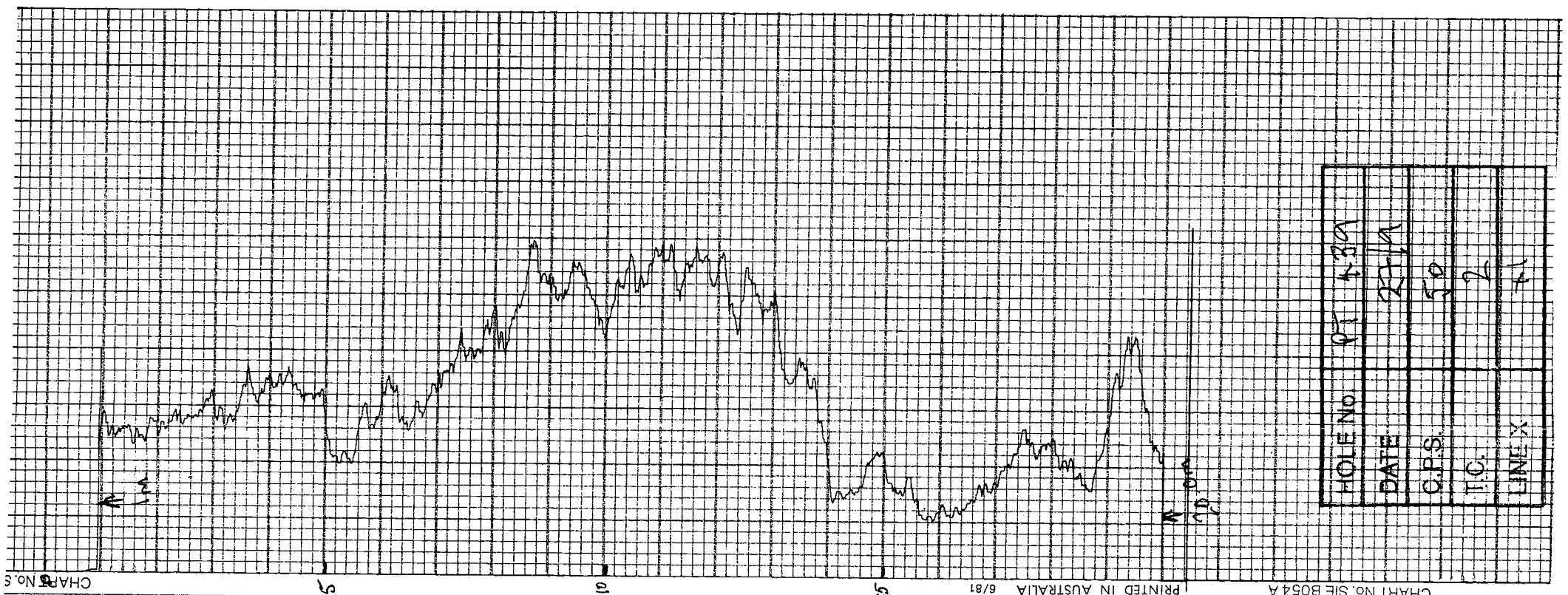
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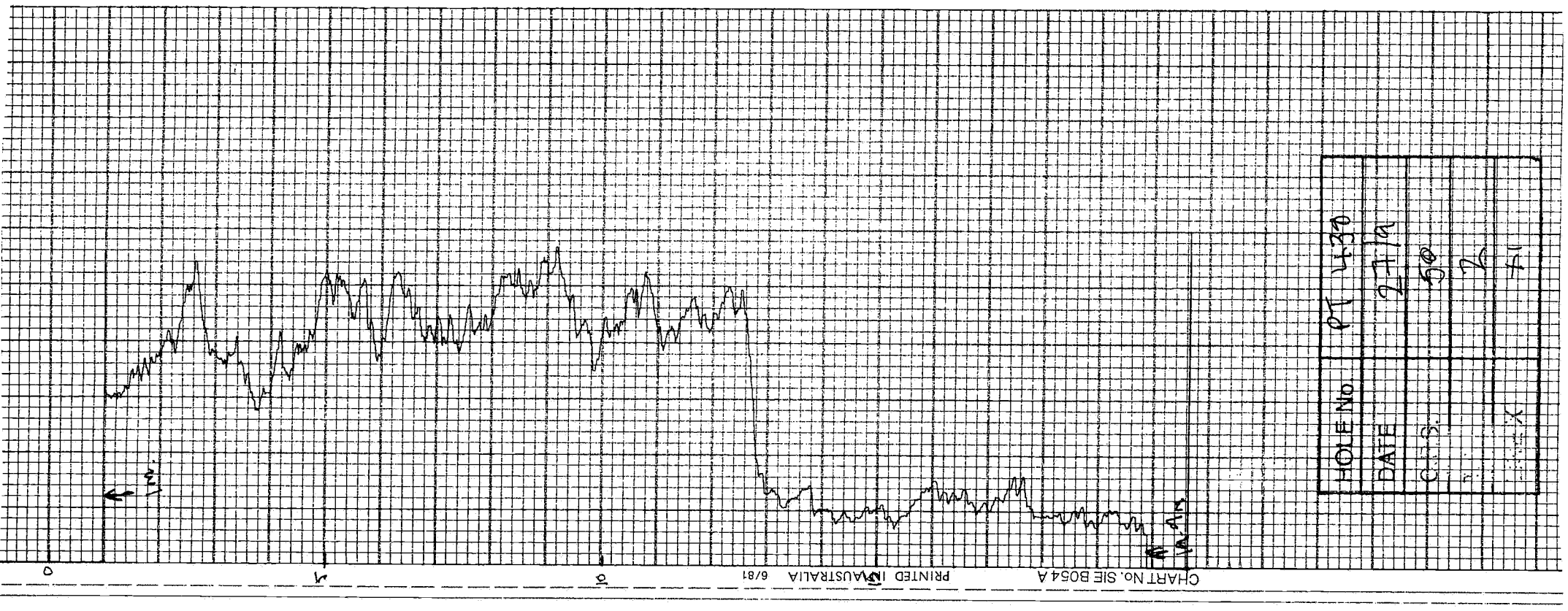
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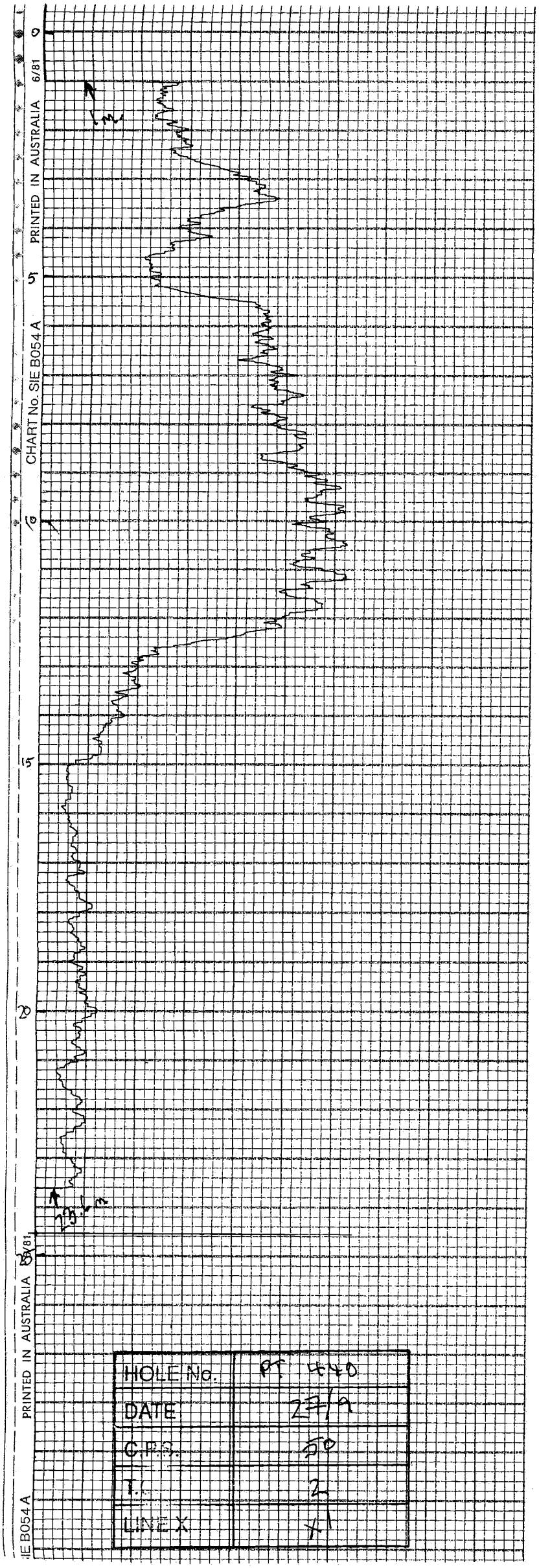
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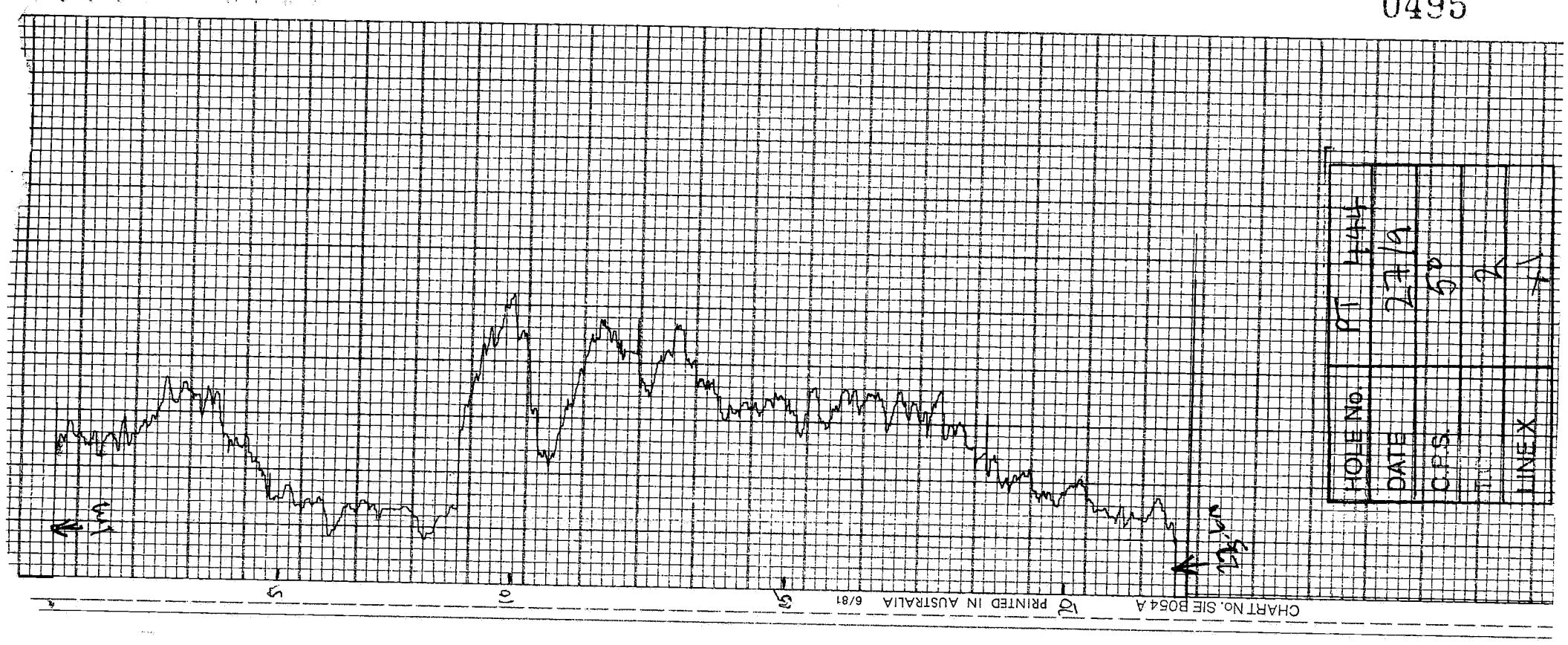
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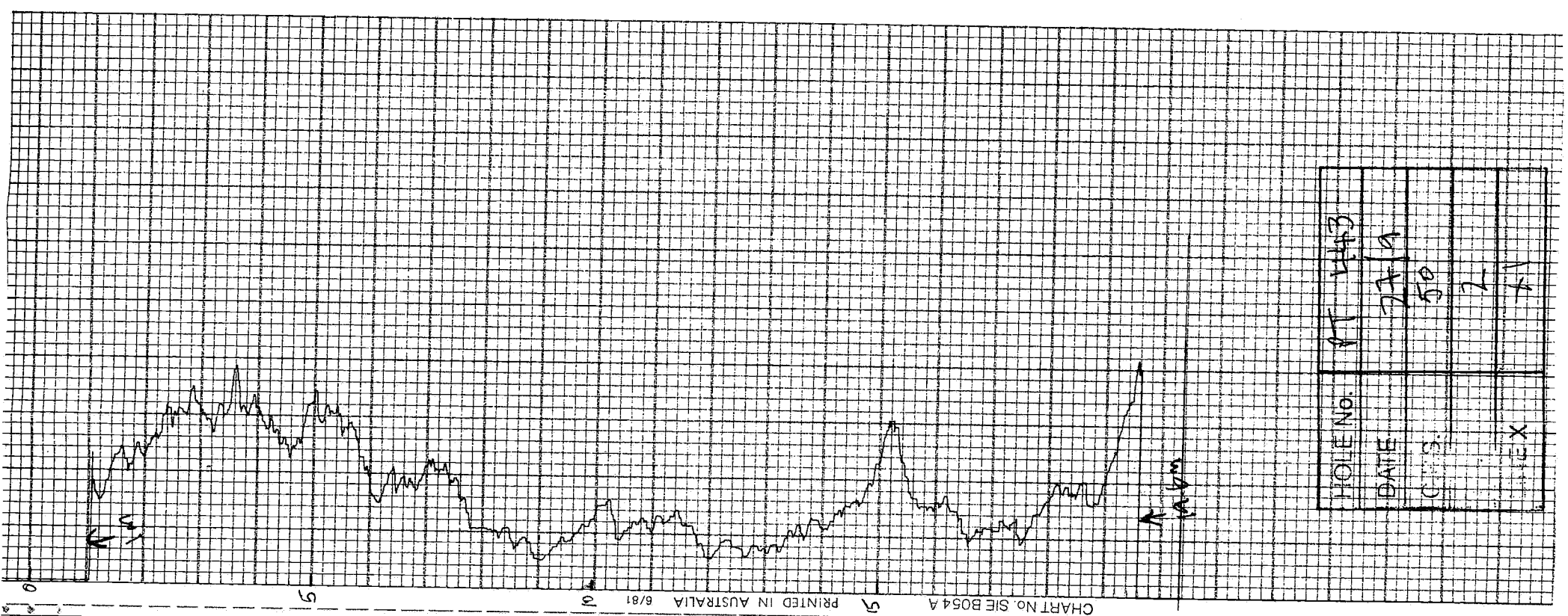
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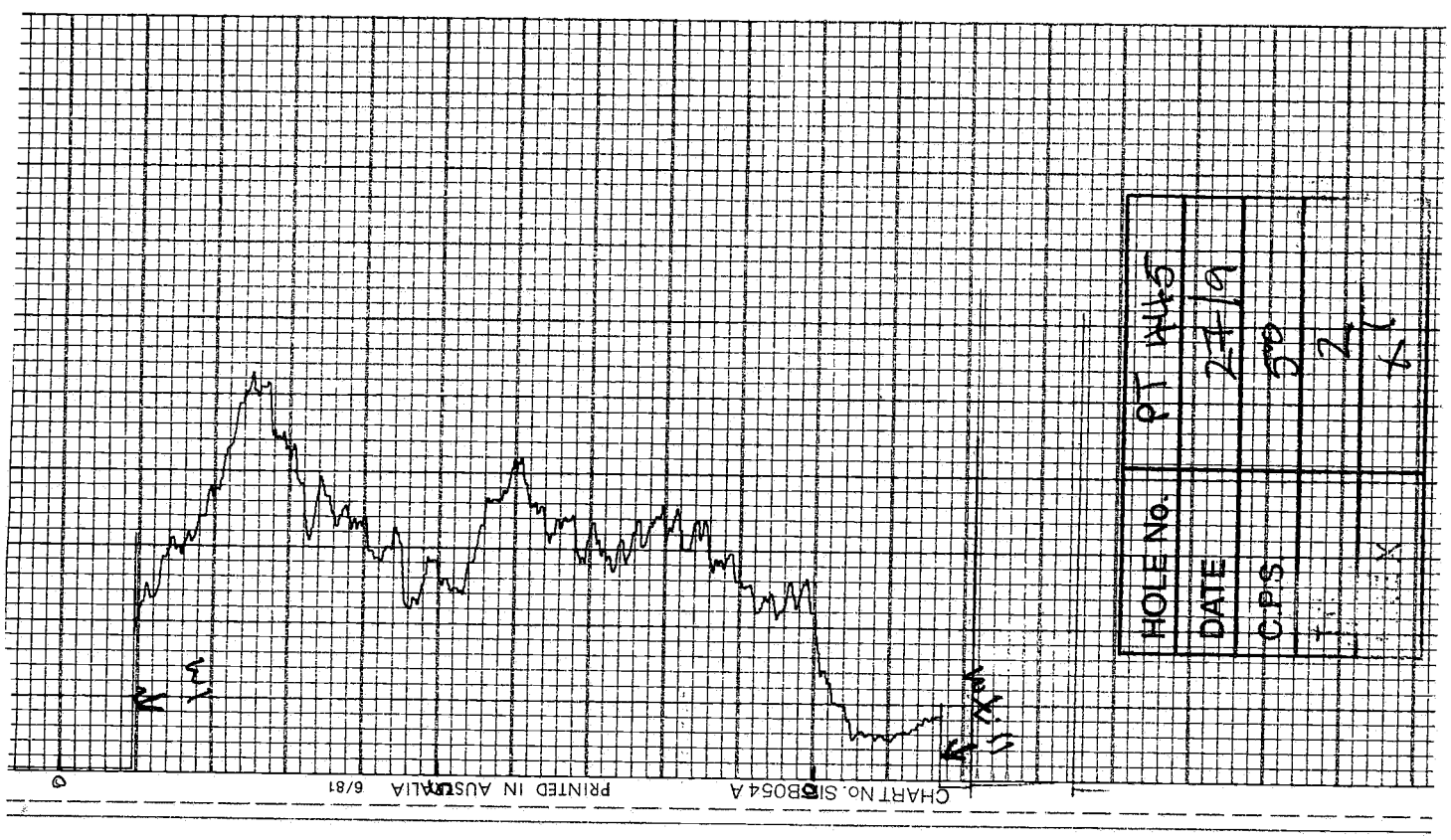
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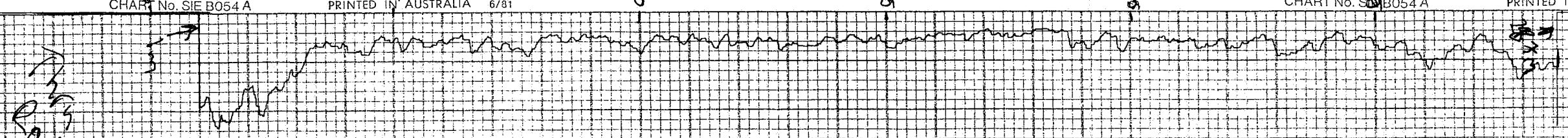
HOLE No. PT HILL 6
DATE 22-4-9
c.p.s 50
X 22
Y 71



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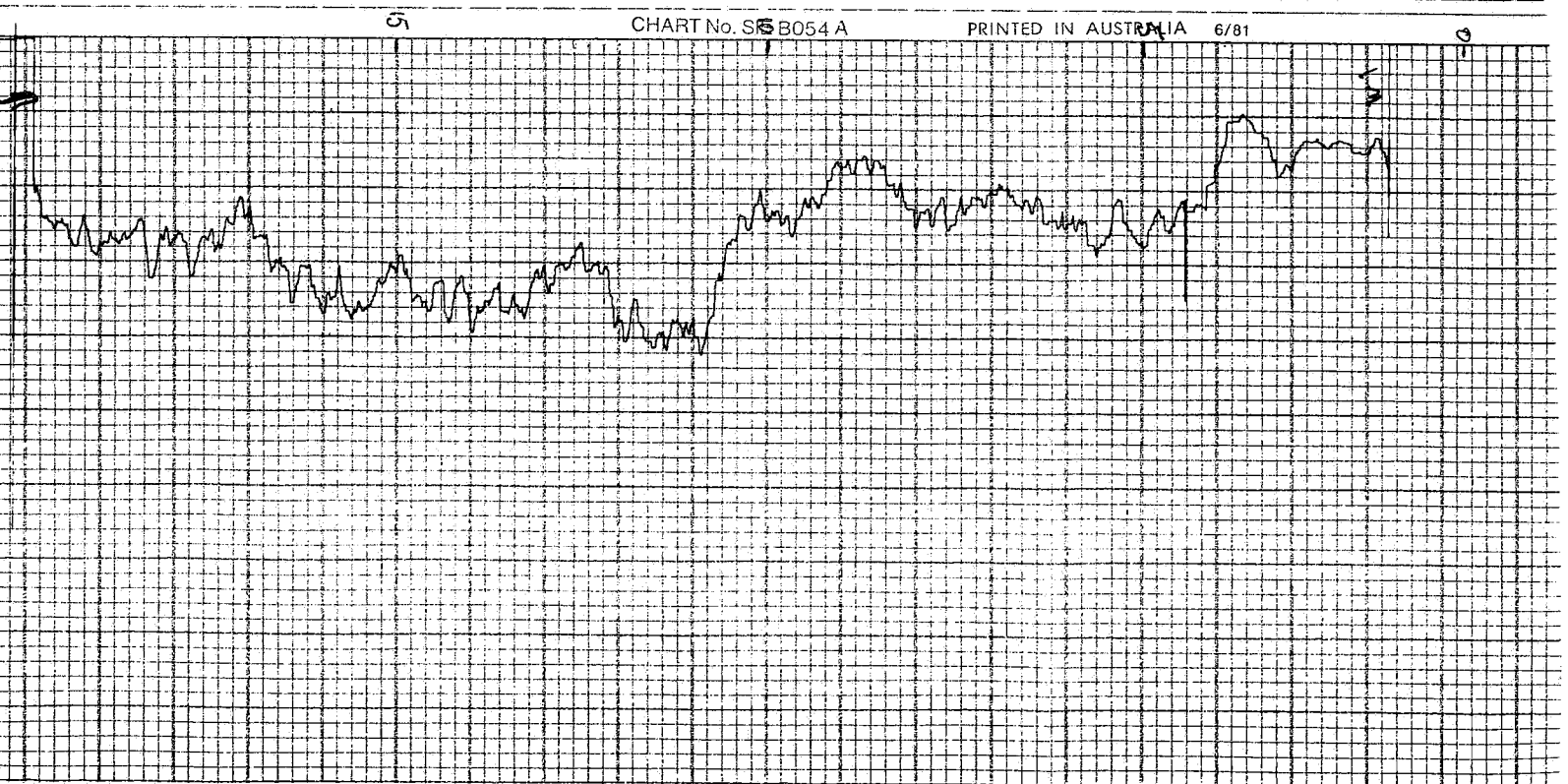
c.p.s 50
X 22
Y 71



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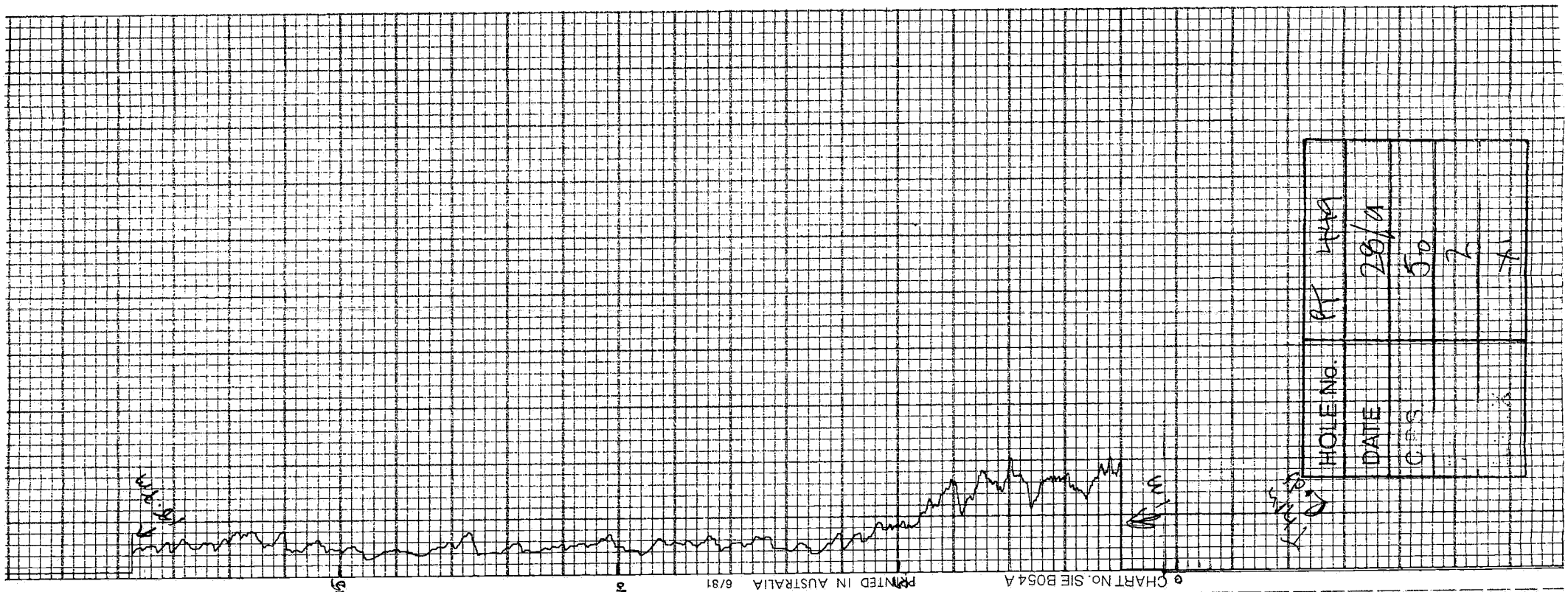


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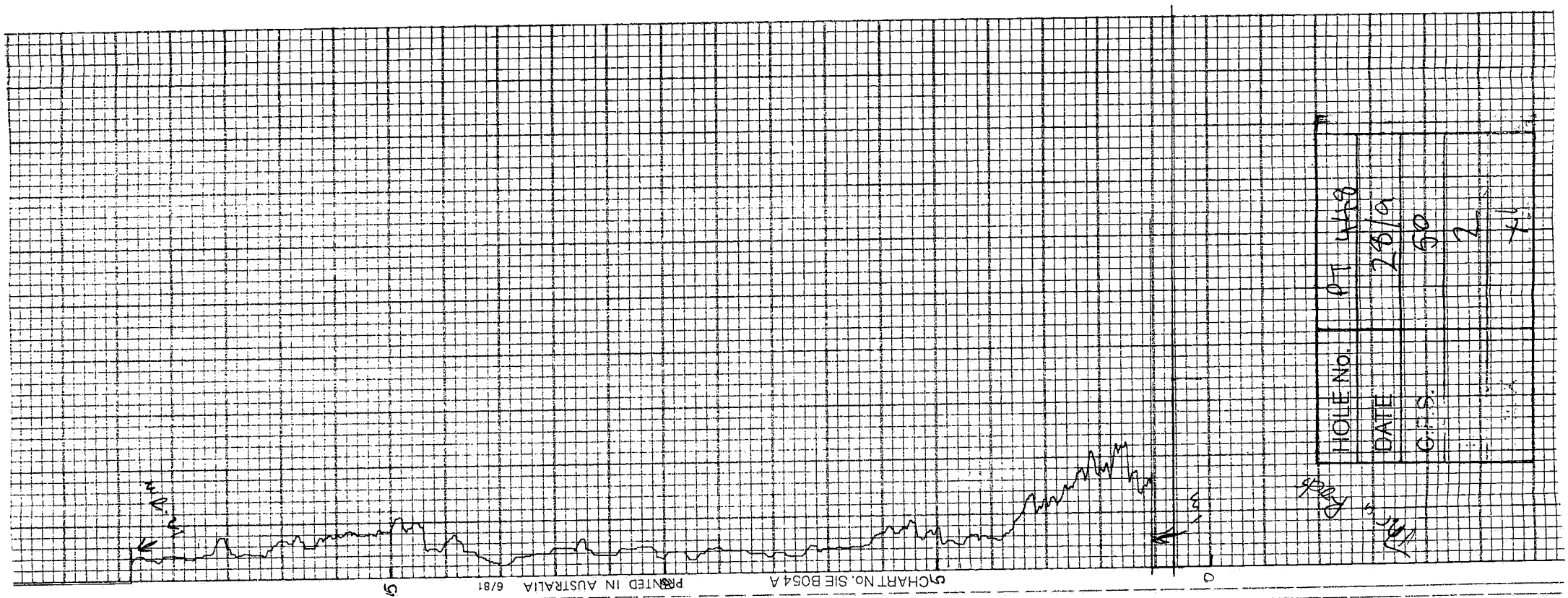


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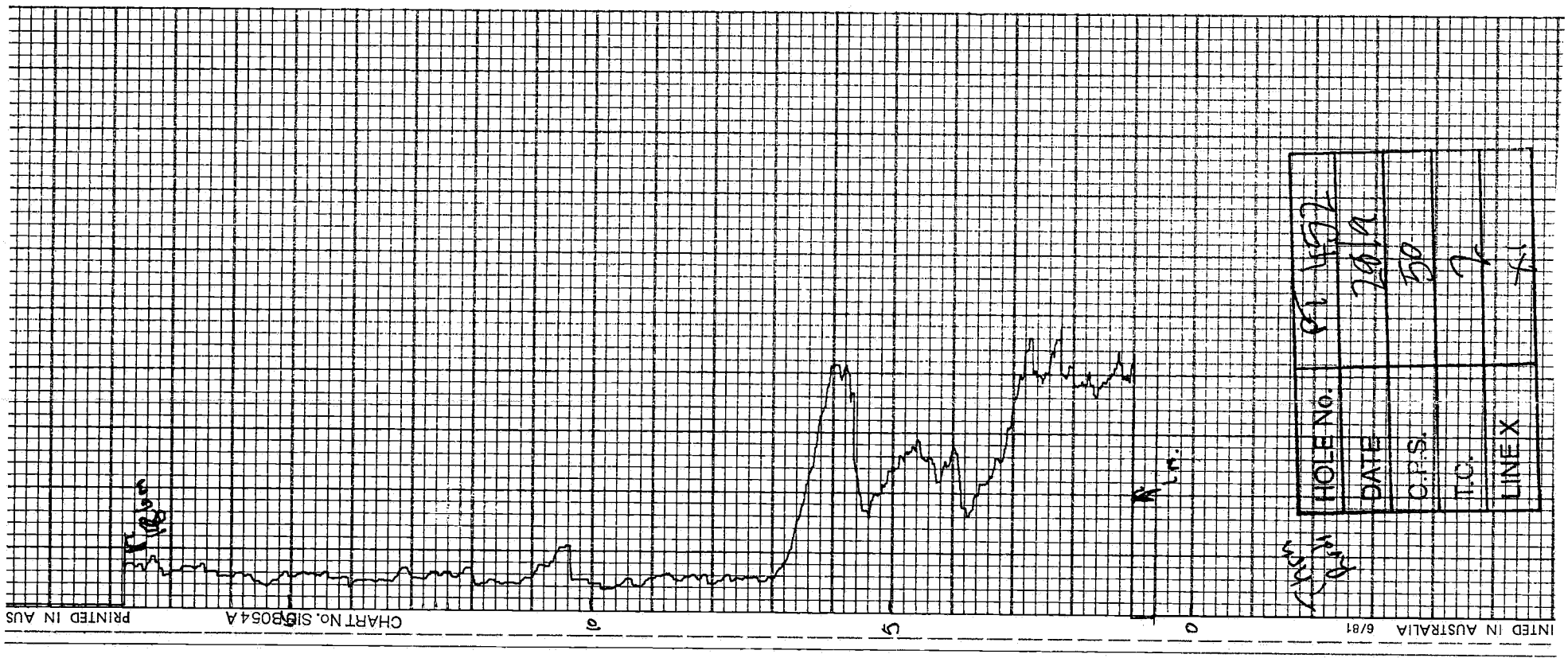
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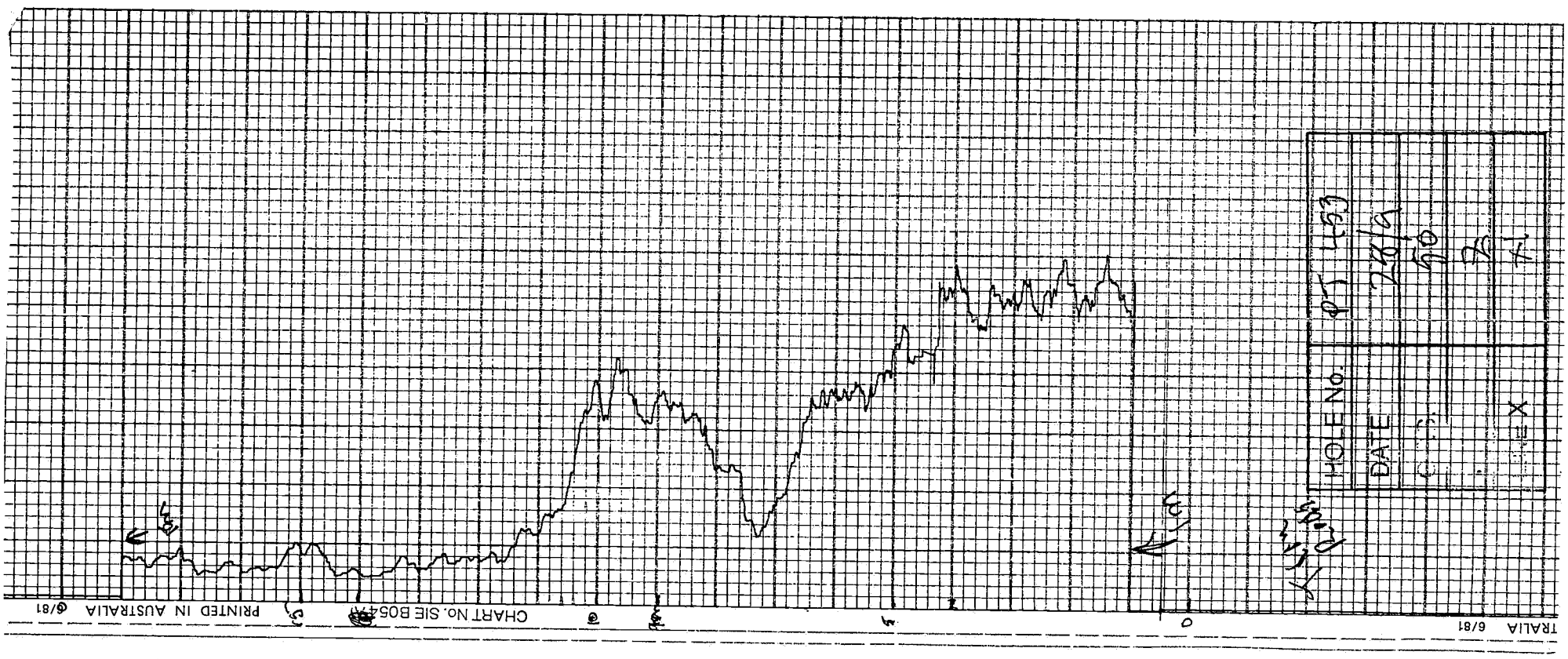
HOLE No.
DATE
G.P.S.
PRINTED IN AUSTRALIA 6/81
CHART No. SIE B054 A


LINE X
HOLE No.
DATE
G.P.S.
PRINTED IN AUSTRALIA 6/81
CHART No. SIE B054 A

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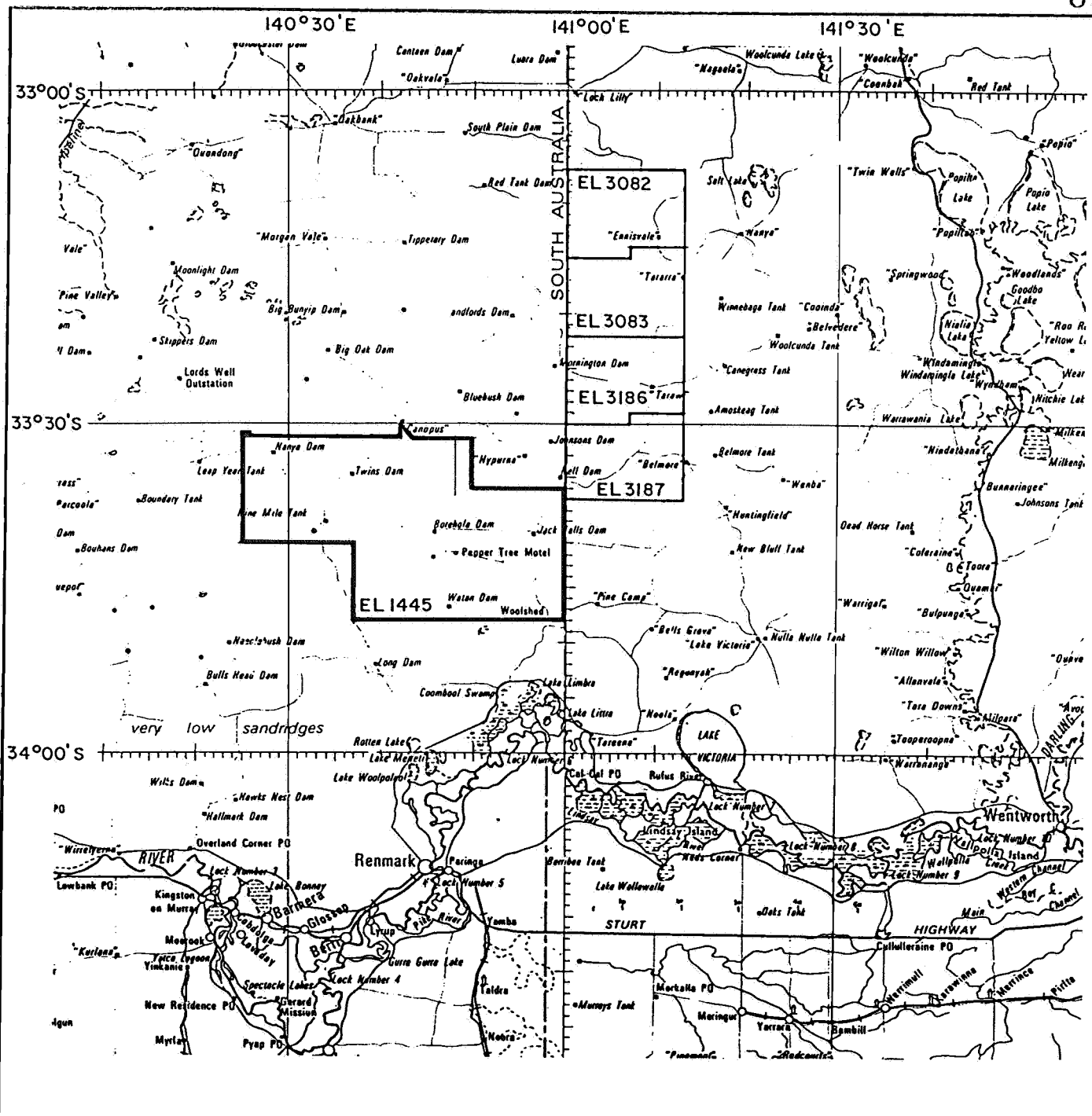
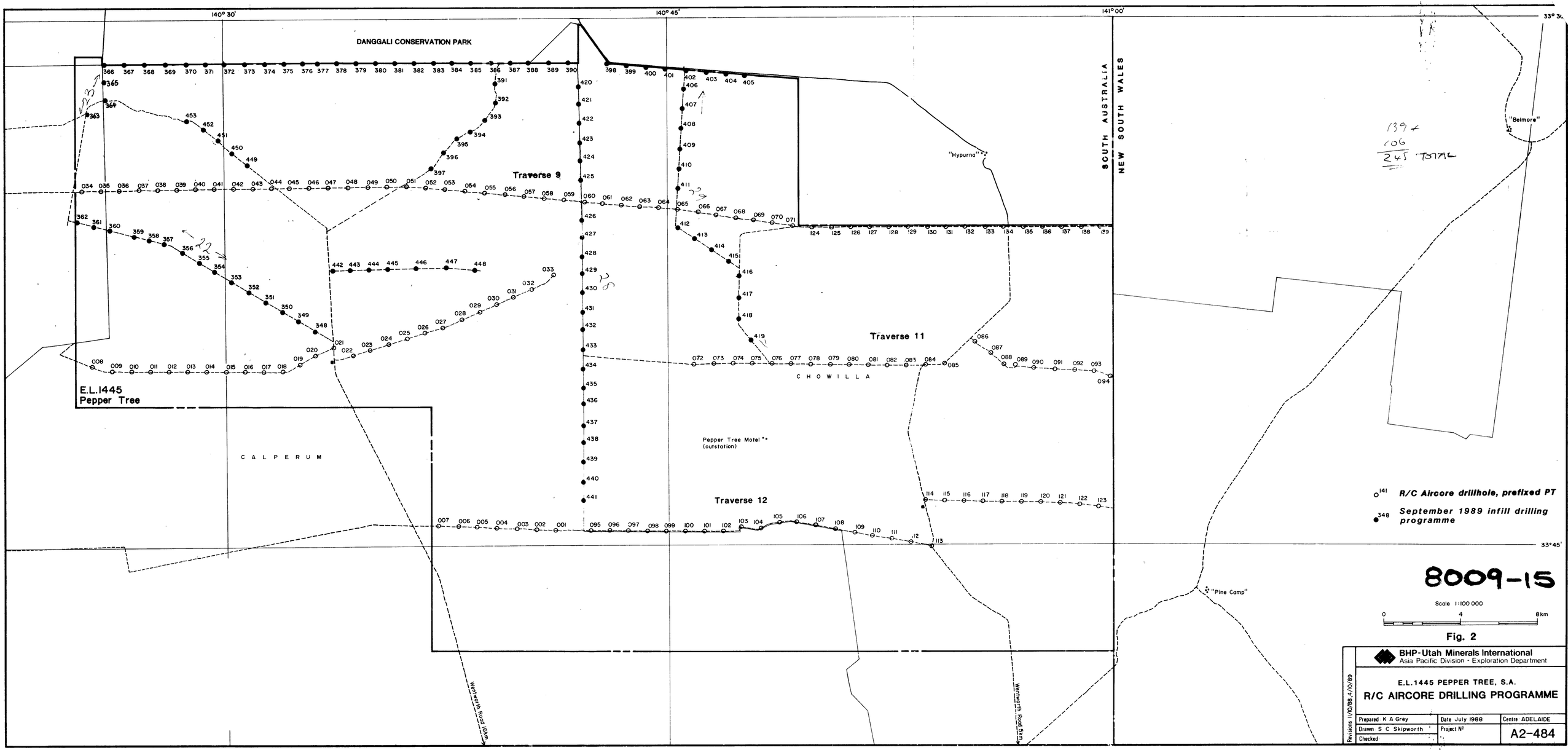
HOLE No.
DATE
G.P.S.
PRINTED IN AUSTRALIA 6/81
CHART No. SIE B054 A




| | | |
|---|---|---|
| Prepared: E. Bartlett | BHP-Utah Minerals International (Asia Pacific Division) | Proj: Min Properties |
| Drawn: M. Rosker | PEPPER TREE REGION | Drg No.: A4-2970 |
| Date: Sept 89 | EXPLORATION TENEMENTS | Fig 1 |
| Centre: Melbourne | | |


140° 30'
140° 45'
141° 00'
33° 30'
33°45'
DANGGALI CONSERVATION PARK
SOUTH AUSTRALIA
NEW SOUTH WALES
"Hypurna"
"Belmore"
"Pine Camp"
Traverse 9
Traverse 11
Traverse 12
E.L.1445
Pepper Tree
CALPERUM
CHOWILLA
Pepper Tree Motel **
(outstation)
Wentworth Road 16km
Wentworth Road 5km
139 +
106
245 TOTAL
R/C Aircore drillhole, prefixed PT
September 1989 infill drilling programme
8009-15
Scale 1:100 000
0 4 8km
Fig. 2
BHP-Utah Minerals International
Asia Pacific Division - Exploration Department
E.L.1445 PEPPER TREE, S.A.
R/C AIRCORE DRILLING PROGRAMME
Revisions 11/10/89, 4/10/89
Prepared K A Grey
Drawn S C Skipworth
Checked
Date July 1989
Project N?
Centre ADELAIDE
A2-484