

Project: ROSE

Title:

Hole Name : RV005LC

Date Start: 15-MAR-11 End date : 18-MAR-11

Data Source

: Australian Height datum

## LOCATION

State : Tasmania

County :

Parish :

Portion :

Geological Province : Launceston Basin

Lease : EL44/2007 - Rosevale

Map Zone : Australian Map Grid 66 - Zone 55H

Easting Northing Elevation

Drill Hole Location : 488190.43 5410930.15 150.26

## DRILLING

Contractor : Spaulding Drilling

Drill Type : 6" Core Hole

Drill Rig : Spaulding Drilling

Drilled To	Hole Size	Core Size
53	255MM	8-inch (203mm)

## GEOPHYSICAL

Contractor : GDS

Probe Depth Probe Type

51.59	Gamma
	Caliper
	Dual Density

## LITHOLOGICAL

Logger's Initials : Andrew Basson

Date logged : 15-MAR-11,16-MAR-11,17-MAR-11,18-MAR-11

Interval logged : 0 to 53

## SEAM DETAILS

Seam Name From To

BHWE 5.78 5.78

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*****
TOP          BASE          LITHOLOGY          SAMPLE
*****
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**Blade Bit**

```
0.000 - 1.900    SOIL medium brown fine grained
(    1.900    )    sandy loose extremely weathered
1.900 - 2.300    CLAY variegated yellowish brown
(    0.400    )    fine grained sandy non plastic soft
                    extremely weathered
2.300 - 5.350    GRAVEL variegated reddish brown
(    3.050    )    quartzose fragments loose
                    subangular poorly sorted weathered
5.350 - 5.450    CLAY medium grey sandy low
(    0.100    )    plasticity soft slightly weathered
5.450 - 5.500    LIGNITE medium brownish black woody
(    0.050    )    slightly weathered
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**Tungsten Carbide Coring Bit**

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5.500 - 5.780    CLAY medium grey partially sandy
(    0.280    )    quartzose pebbles throughout
                    plastic soft slightly weathered
                    slightly weathered
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5.780          *** BHWE
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5.780 - 7.920    CORE LOSS
(    2.140    )    Fine grained sand with a clayey
                    matrix washed out of hole. coaly
                    flecks noticed in wash
7.920 - 8.220    CLAY medium grey partially sandy
(    0.300    )    quartzose pebbles throughout broken
                    core very soft fresh fresh
                    Recovered from previous run
8.220 - 8.650    CLAY medium grey sandy wisps
(    0.430    )    throughout solid core soft fresh
8.650 - 8.670    CLAY medium brownish grey solid
(    0.020    )    core soft fresh
8.670 - 8.850    CLAY medium grey sandy near middle
(    0.180    )    of unit solid core soft fresh
8.850 - 8.855    CLAY medium brown solid core soft
(    0.005    )    fresh Tectonic structure dip 45
8.855 - 8.980    LIGNITE dark blackish brown broken
(    0.125    )    core firm fresh
8.980 - 9.160    LIGNEOUS CLAY dark brown solid core
(    0.180    )    firm fresh
9.160 - 9.850    CLAY medium brown partially sandy
(    0.690    )    near base of unit solid core soft
                    fresh with faults with slickensides
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RVS001

RVS002

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*****
TOP      BASE      LITHOLOGY      SAMPLE
*****
  9.850 - 10.020    CLAY medium grey sandy solid core
(    0.170    )    soft fresh with bioturbation
10.020 - 10.130    CLAY dark brown solid core soft
(    0.110    )    fresh with bioturbation
10.130 - 10.220    CLAY medium grey sandy solid core
(    0.090    )    soft fresh
10.220 - 10.260    CLAY dark brown solid core soft
(    0.040    )    fresh with bioturbation
10.260 - 10.510    SAND medium grey fine grained
(    0.250    )    lignitic wisps clayey broken core
                    soft fresh with bioturbation
10.510 - 10.549    SAND fine grained clayey matrix
(    0.039    )    solid core soft fresh
10.549 - 10.874    CLAY medium greyish brown sandy
(    0.325    )    carbonaceous wisps solid core soft
                    fresh
10.874 - 11.041    CLAY medium brown solid core soft
(    0.167    )    fresh
11.041 - 11.484    LIGNITE dark blackish brown sandy          RVS003
(    0.443    )    clasts solid core firm fresh with
                    bioturbation
11.484 - 12.123    CLAY medium brownish grey solid
(    0.639    )    core soft fresh
12.123 - 12.271    LIGNEOUS CLAY dark brown solid core
(    0.148    )    firm fresh with bioturbation
12.271 - 12.595    CLAY dark brown solid core firm
(    0.324    )    fresh with bioturbation
12.595 - 12.930    LIGNEOUS CLAY dark brown solid core
(    0.335    )    firm fresh with bioturbation
12.930 - 13.030    LIGNEOUS CLAY dark brown solid core
(    0.100    )    firm fresh
13.030 - 13.530    LIGNITE dark blackish brown solid          RVS004
(    0.500    )    core firm fresh with bioturbation
13.530 - 14.020    LIGNITE dark blackish brown solid          RVS005
(    0.490    )    core firm fresh with bioturbation
14.020 - 14.130    LIGNEOUS CLAY dark brown broken          RVS006
(    0.110    )    core firm fresh
14.130 - 14.240    LIGNITE dark blackish brown solid          RVS006
(    0.110    )    core firm fresh
14.240 - 14.680    LIGNITE dark blackish brown solid          RVS007
(    0.440    )    core firm fresh
14.680 - 15.130    LIGNITE dark blackish brown solid          RVS008
(    0.450    )    core firm fresh
15.130 - 15.800    SAND medium brown clayey

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*****
TOP      BASE      LITHOLOGY      SAMPLE
*****
(    0.670    )    carbonaceous wisps solid core firm
                    fresh
15.800 - 16.370    LIGNITE dark brownish black minor          RVS009
                    sandy clasts solid core firm fresh
(    0.570    )
16.370 - 16.970    LIGNITE dark brownish black solid          RVS010
                    core firm fresh with bioturbation
(    0.600    )
16.970 - 17.290    LIGNITE dark brownish black minor          RVS011
                    sandy clasts solid core firm fresh
                    with bioturbation
17.290 - 17.330    SIDERITE light greenish grey broken        RVS011
                    core strong rock fresh
(    0.040    )
17.330 - 17.820    LIGNITE dark blackish brown solid          RVS012
                    core firm fresh
(    0.490    )
17.820 - 18.250    LIGNITE dark blackish brown          RVS013
                    claystone clasts solid core firm
                    fresh
18.250 - 18.500    LIGNITE dark blackish brown          RVS014
                    claystone clasts near top of unit
                    solid core firm fresh
18.500 - 18.600    LIGNITE dark blackish brown          RVS014
                    claystone bands throughout solid
                    core firm fresh
18.600 - 18.740    LIGNITE dark blackish brown clayey        RVS014
                    solid core firm fresh with
                    bioturbation
18.740 - 19.190    LIGNITE dark blackish brown clayey        RVS015
                    solid core firm fresh with
                    bioturbation
19.190 - 19.550    LIGNITE dark blackish brown clayey        RVS016
                    clasts throughout solid core firm
                    fresh
19.550 - 19.560    LIGNEOUS CLAY dark brown solid core        RVS016
                    firm fresh
(    0.010    )
19.560 - 19.760    LIGNITE dark blackish brown clayey        RVS016
                    clasts throughout solid core firm
                    fresh
19.760 - 19.830    LIGNEOUS CLAY dark brown lignitic        RVS016
                    bands solid core firm fresh
(    0.070    )
19.830 - 19.890    LIGNITE dark blackish brown silty          RVS016
                    clasts throughout solid core firm
                    fresh
(    0.060    )
19.890 - 19.950    LIGNEOUS CLAY dark brown minor          RVS016
                    clayey clasts solid core firm fresh
(    0.060    )
19.950 - 21.210    CLAY medium brown broken core soft
                    fresh
(    1.260    )
21.210 - 21.430    CLAY light brown sandy solid core
                    soft fresh

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*****
TOP      BASE      LITHOLOGY      SAMPLE
*****
( 0.220 )
21.430 - 21.810  CLAY dark brown solid core soft
( 0.380 )      fresh
21.810 - 21.950  LIGNITE dark blackish brown minor      RVS017
( 0.140 )      clayey clasts solid core firm fresh
21.950 - 22.140  LIGNEOUS CLAY dark brown solid core      RVS018
( 0.190 )      firm fresh
22.140 - 22.270  CLAY medium brown solid core soft      RVS018
( 0.130 )      fresh
22.270 - 22.310  LIGNEOUS CLAY dark brown solid core      RVS018
( 0.040 )      soft fresh
22.310 - 22.360  LIGNITE dark blackish brown solid      RVS019
( 0.050 )      core firm fresh
22.360 - 22.500  CORE LOSS      RVS019
( 0.140 )
22.500 - 22.830  LIGNITE dark brownish black solid      RVS020
( 0.330 )      core firm fresh
22.830 - 23.000  CLAY medium brown lignitic in part      RVS021
( 0.170 )      solid core soft fresh
23.000 - 23.060  LIGNEOUS CLAY dark brown solid core      RVS022
( 0.060 )      firm fresh
23.060 - 23.550  LIGNITE dark blackish brown solid      RVS022
( 0.490 )      core firm fresh
                Sap remains
23.550 - 24.150  LIGNITE dark blackish brown solid      RVS023
( 0.600 )      core firm fresh
24.150 - 24.400  LIGNITE dark blackish brown solid      RVS024
( 0.250 )      core firm fresh
24.400 - 24.450  LIGNEOUS CLAY dark brown solid core      RVS024
( 0.050 )      firm fresh
24.450 - 24.700  LIGNITE dark blackish brown rare      RVS024
( 0.250 )      clayey clasts solid core firm fresh
24.700 - 25.130  LIGNITE dark blackish brown solid      RVS025
( 0.430 )      core firm fresh
25.130 - 25.160  LIGNEOUS CLAY dark brown solid core      RVS025
( 0.030 )      firm fresh
25.160 - 25.280  LIGNITE dark blackish brown solid      RVS025
( 0.120 )      core firm fresh
25.280 - 25.350  LIGNEOUS CLAY dark brown solid core      RVS026
( 0.070 )      firm fresh
25.350 - 25.620  LIGNITE dark blackish brown rare      RVS026
( 0.270 )      claystone clasts solid core firm
                fresh
25.620 - 26.340  LIGNITE dark blackish brown solid      RVS027

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*****
TOP      BASE      LITHOLOGY      SAMPLE
*****
( 0.720 ) core firm fresh
26.340 - 26.440 LIGNEOUS CLAY dark brown solid core
( 0.100 ) firm fresh
26.440 - 26.570 SAND light brown fine grained
( 0.130 ) clayey carbonaceous wisps solid
core soft fresh
26.570 - 26.810 CLAY medium brown sandy clasts near
( 0.240 ) middle of unit solid core firm
fresh common carbonaceous wisps
26.810 - 27.150 CLAY medium brown rare sandy clasts
( 0.340 ) solid core firm fresh with
bioturbation
27.150 - 27.260 CLAY medium greyish brown sandy
( 0.110 ) laminae throughout solid core firm
fresh
27.260 - 27.670 CLAY medium greyish brown rare
( 0.410 ) sandy clasts solid core firm fresh
with bioturbation
27.670 - 27.870 CLAY medium greyish brown sandy
( 0.200 ) laminae throughout solid core firm
fresh with bioturbation rare
carbonaceous wisps
27.870 - 28.270 CLAY medium brown solid core firm
( 0.400 ) fresh
28.270 - 28.380 LIGNEOUS CLAY dark brown solid core
( 0.110 ) soft fresh
28.380 - 28.740 LIGNITE dark blackish brown clayey RVS028
( 0.360 ) minor sandy solid core firm fresh
with bioturbation
28.740 - 28.780 LIGNEOUS CLAY dark brown solid core
( 0.040 ) soft fresh
28.780 - 29.160 CLAY medium brown solid core soft
( 0.380 ) fresh
29.160 - 29.690 LIGNITE dark blackish brown clayey RVS029
( 0.530 ) solid core firm fresh with
bioturbation
29.690 - 29.760 LIGNEOUS CLAY dark blackish brown RVS029
( 0.070 ) solid core firm fresh
29.760 - 30.410 LIGNITE dark blackish brown clayey RVS030
( 0.650 ) solid core firm fresh with
bioturbation
30.410 - 30.710 LIGNITE dark blackish brown solid RVS031
( 0.300 ) core firm fresh
30.710 - 30.960 CLAY medium brown solid core soft
( 0.250 ) fresh
30.960 - 31.140 LIGNEOUS CLAY dark brown clayey
clasts throughout solid core soft

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*****
TOP          BASE          LITHOLOGY          SAMPLE
*****
(    0.180    )    fresh
31.140 - 32.300    CLAY medium brown lignitic clasts
(    1.160    )    throughout solid core soft fresh
32.300 - 32.580    LIGNEOUS CLAY dark brown clayey
(    0.280    )    clasts throughout solid core soft
                    fresh
32.580 - 32.690    CLAY medium brown lignitic clasts
(    0.110    )    throughout solid core soft fresh
32.690 - 32.940    LIGNEOUS CLAY dark brown clayey
(    0.250    )    clasts throughout solid core soft
                    fresh
32.940 - 33.090    CLAY medium brown lignitic clasts
(    0.150    )    throughout solid core soft fresh
33.090 - 33.210    LIGNEOUS CLAY dark brown clayey
(    0.120    )    clasts throughout solid core soft
                    fresh with rootlets
33.210 - 33.390    CLAY light grey broken core very
(    0.180    )    soft fresh
33.390 - 33.520    LIGNEOUS CLAY dark brown broken
(    0.130    )    core firm fresh
33.520 - 33.630    CLAY medium brownish grey solid
(    0.110    )    core soft fresh
33.630 - 33.820    LIGNEOUS CLAY dark brown clayey
(    0.190    )    solid core firm fresh with
                    bioturbation
33.820 - 34.690    CLAY medium brown minor lignitic
(    0.870    )    near base of unit solid core firm
                    fresh with bioturbation with faults
                    @80degree with slickensides
34.690 - 34.710    LIGNITE dark blackish brown clayey
(    0.020    )    solid core firm fresh with
                    bioturbation
34.710 - 34.730    CLAY medium brown solid core soft
(    0.020    )    fresh
34.730 - 34.780    LIGNEOUS CLAY dark brown lignitic
(    0.050    )    throughout solid core firm fresh
34.780 - 34.790    CLAY medium brown solid core soft
(    0.010    )    fresh
34.790 - 34.810    LIGNEOUS CLAY dark brown solid core
(    0.020    )    soft fresh with bioturbation
34.810 - 35.200    CLAY light creamy brown solid core
(    0.390    )    soft fresh
35.200 - 35.320    LIGNEOUS CLAY dark brown clayey
(    0.120    )    wisps throughout solid core firm
                    fresh
35.320 - 35.830    CLAY light creamy grey solid core

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*****
TOP      BASE      LITHOLOGY      SAMPLE
*****
( 0.510 ) soft fresh with fractures
35.830 - 36.120 CLAY light creamy brown solid core
( 0.290 ) soft fresh with faults @45degree
36.120 - 36.140 LIGNEOUS CLAY dark brown solid core
( 0.020 ) soft fresh
36.140 - 36.240 SAND light grey fine grained clayey
( 0.100 ) matrix lignitic solid core soft
fresh
36.240 - 36.260 LIGNITE dark blackish brown solid
( 0.020 ) core firm fresh
36.260 - 36.460 CLAY medium brown lignitic wisps
( 0.200 ) near top of unit solid core soft
fresh
36.460 - 36.540 LIGNEOUS CLAY dark brown solid core
( 0.080 ) firm fresh
36.540 - 37.190 LIGNITE dark blackish brown minor          RVS032
( 0.650 ) clayey clasts solid core firm fresh
37.190 - 37.310 LIGNEOUS CLAY dark brown solid core
( 0.120 ) firm fresh
37.310 - 37.430 CLAY medium brown minor lignitic
( 0.120 ) throughout solid core soft fresh
with joints @80degree
37.430 - 38.820 CLAY medium creamy brown broken
( 1.390 ) core soft fresh with faults
@45degree with slickensides
38.820 - 39.040 CORE LOSS
( 0.220 )

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**Blade Bit**

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39.040 - 42.500 CLAY medium creamy brown minor
( 3.460 ) lignitic throughout low plasticity
soft fresh
42.500 - 42.750 SIDERITE light brown strong rock
( 0.250 ) fresh
42.750 - 53.000 CLAY medium creamy brown minor
( 10.250 ) lignitic throughout low plasticity
soft fresh

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53.000       \*\*\*\*\*    TOTAL DEPTH    \*\*\*\*\*