Rangott Mineral Exploration Pty. Ltd.
ABN 36 002 563 825

for

HANSON CONSTRUCTION MATERIALS

REPORT on DRILLING PROGRAMMES

at the

PLANNED LYNDON QUARRY SITE
(East Guyong, NSW)

July - August, 2012.

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Rangott Mineral Exploration Pty. Ltd.,

31st August, 2012.

LIST OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENCIES

1.0 INTRODUCTION

During late July and early August, 2012, three phases of drilling were carried out at the Lyndon Quarry site for engineering planning and asbestos risk assessment purposes. The drill phases and their objectives were:-

(a) shallow auger drilling at key points on the planned locations of major items of plant in the proposed Infrastructure Area, to confirm that Byng Volcanics will not be intersected to the planned excavation depths at those points,

(b) reverse circulation percussion drilling in the northwestern corner of the Infrastructure Area, and along the northwestern part of the revised proposed route of the site access road where it crosses a low ridge of Tertiary basalt. The objective of this drilling was to provide information on the types of materials which will need to be excavated, to estimate the quantities of each material to be excavated (for use in construction at the site, and for calibration of the crushing plant and for construction of bunds and soil stockpiles), and for confirming that Byng Volcanics is not present to the depths of excavation,

(c) larger diameter auger geotechnical drilling to enable close-spaced penetrometer tests of the subsoil and weathered bedrock, to determine the load-bearing capacities of those materials.

As well, during the drilling programme a search was made for evidence of the locations of the percussion holes drilled by R. W. Corkery and Co. in 2000.

2.0 SHALLOW AUGER DRILLING

A total of forty four 98mm diameter auger holes (LA 41 to LA 84) were drilled by Colling Exploration Pty. Ltd. between 24th and 26th July, using their trailer-mounted auger rig. The hole depths ranged from 2 metres to 9 metres, and hole locations are shown on Figures 1 and 2.

The hole depths were planned to go to at least 3 metres below the planned RL of the Infrastructure Area (930 metres ASL on the western side, sloping to 928 metres ASL on the eastern side).

The holes were sampled at 1 metre intervals in to 750 x 450mm plastic bags, and small subsamples were taken from those and placed in a 20-compartment plastic reference chip tray for each hole. The sample returns were logged on site by M. Rangott. The geologists' logs are presented in Appendix I.

Most holes passed through soil and clay horizons and then entered weathered to extremely weathered Tertiary basalt at depth. Many of the shallow holes (2-4 metres) bottomed in clays (only) with ferruginous nodules and pisolites, believed to represent very degraded basalt.

Only hole LA 78 appears to have entered (very weathered) Byng Volcanics, from 2.8 to 3.0 metres (EOH). A sample of the clay from that interval was sent to Michael Till at AEC Environmental in Adelaide (see Appendix III), who confirmed that sparse particles of amphibole (?tremolite) are present but are too coarse to be classified as asbestos. Samples from holes LA-50 (4.0-5.2m) and LA-74 (2.0-3.0m) were also submitted, but no fibres were found in those and no amphibole minerals were detected by XRD analysis.

Holes LA 56, LA 57 and LA 60 passed through a shallow aquifer, which may create some engineering problems during excavation of the site, and possibly for long term stability of the floor of the IA in the vicinity of those holes.

708,800 mE | 709,000 mE | 709,200 mE | 709,400 mE | 709,600 mE

6,301,800 mN | 6,301,600 mN | 6,301,400 mN | 6,301,200 mN | 6,301,000 mN | 6,300,800 mN | 6,300,600 mN | 6,300,400 mN

- Auger Drill Hole
- RC Drill Hole
- Proposed Quarry Boundary
- Proposed infrastructure boundary/Road
- Proposed infrastructure Extension

GUY045 GUY044 GUY046 GUY041 GUY043 GUY038 GUY039 GUY040 GUY035 GUY036 GUY037 GUY032 GUY033 GUY034 BH04 LA61 LA62 LA64 LA63 LA60 LA59 LA66 LA65 LA57 LA58 LA68 LA67 LA69 LA56 LA70 LA71 LA55 LA72 LA73 BH02 LA54 LA53 LA75 LA76 BH01 LA52 LA74 LA51 LA50 LA48 LA49 LA47 BH03 Silt Trap Water Supply Dam LA77 LA78 LA79 LA80 BH05 LA82 LA84 LA83 LA81 LA44 LA45 LA43 LA46 LA42 LA41 GUY031 GUY030 GUY029 GUY028 BH07 BH06

RME	Rangott Mineral Exploration Pty Ltd
HANSON CONSTRUCTION MATERIALS P/L PROPOSED LYNDON QUARRY SITE EAST GUYONG SITE, SHOWING DRILLHOLES COMPLETED FIGURE 1	

Prepared:	Date Updated:	Projection:	Scale:	DWG ID:
KH	03/09/2012	MGA Zone 55 (GDA 94)	1:2,000@ A1P	HCM029

709,100 mE | 709,200 mE | 709,300 mE | 709,400 mE

6,301,500 mN | 6,301,400 mN | 6,301,300 mN | 6,301,200 mN | 6,301,100 mN | 6,301,000 mN

Auger Drill Hole

RC Drill Hole

Proposed Quarry Boundary

Proposed infrastructure boundary/Road

Proposed infrastructure Extension

LA_T 924.97 DH with RL of top of BV

GUY044 GUY045 GUY046 LA_7 LA_8 EG 006 16.0m LA_18 3.5m GUY041 GUY043 GUY038 GUY039 GUY040 LA_6 LA_9 LA_17 3.5m GUY017 GUY035 GUY036 GUY037 BH04 LA61 GUY032 GUY033 GUY034 LA62 LA63 LA64 LA_10 924.13m LA_16 920m LA60 LA_5 LA59 LA66 LA65 LA_33A LA57 LA58 LA67 LA68 LA_T 924.97m LA_38 925.39m LA69 LA56 LA_39 925.98m LA_40 924.59m LA_35 922m LA70 LA71 BH03 921.37m LA55 EG 005 920.25m LA_37 LA72 LA73 LA53 LA54 BH02 LA76 LA_11 926.43 LA75 BH01 LA52 LA50 LA51 LA74 WATER SUPPLY DAM SILT TRAP LA48 LA49 LA_36 923.27m LA_3 LA_12 926.54 LA77 LA_15 925.07m LA78 924.62m LA79 BH05 924.1m LA82 LA84 LA80 LA83 LA81 LA_14 GUY015 LA47 LA_2 LA44 LA45 LA46 LA43 LA_13 LA_1 LA42 LA41 GUY031 GUY014 GUY030 LA_22 GUY004 GUY013

RME Rangott Mineral Exploration Pty Ltd

HANSON CONSTRUCTION MATERIALS P/L
PROPOSED LYNDON QUARRY SITE

EAST GUYONG INFRASTRUCTURE AREA showing DRILLHOLES COMPLETED TO DATE and RLs OF TOP OF BYNG VOLCANICS

FIGURE 2

Prepared:	Date Updated:	Projection:	Scale:	DWG ID:
KH	03/09/2012	MGA Zone 55 (GDA 94)	1:1,000@ A2P	HCM030

709,100 mE | 709,200 mE | 709,300 mE | 709,400 mE

6,301,500 mN | 6,301,400 mN | 6,301,300 mN | 6,301,200 mN | 6,301,100 mN | 6,301,000 mN

Auger Drill Hole

RC Drill Hole

Proposed Quarry Boundary

Proposed infrastructure boundary/Road

Proposed infrastructure Extension

LA_T 924.97 DH with RL of top of BV

GUY044 GUY045 GUY046 LA_7 LA_8 EG 006 16.0m LA_18 3.5m GUY041 GUY043 GUY038 GUY039 GUY040 LA_6 LA_9 LA_17 3.5m GUY017 GUY035 GUY036 GUY037 BH04 LA61 GUY032 GUY033 GUY034 LA62 LA63 LA64 LA_10 924.13m LA_16 920m LA60 LA_5 LA59 LA66 LA65 LA_33A LA57 LA58 LA67 LA68 LA_T 924.97m LA_38 925.39m LA69 LA56 LA_39 925.98m LA_40 924.59m LA_35 922m LA70 LA71 BH03 921.37m LA55 EG 005 920.25m LA_37 LA72 LA73 LA53 LA54 BH02 LA76 LA_11 926.43 LA75 BH01 LA52 LA50 LA51 LA74 WATER SUPPLY DAM SILT TRAP LA48 LA49 LA_36 923.27m LA_3 LA_12 926.54 LA77 LA_15 925.07m LA78 924.62m LA79 BH05 924.1m LA82 LA84 LA80 LA83 LA81 LA_14 GUY015 LA47 LA_2 LA44 LA45 LA46 LA43 LA_13 LA_1 LA42 LA41 GUY031 GUY014 GUY030 LA_22 GUY004 GUY013

RME Rangott Mineral Exploration Pty Ltd

HANSON CONSTRUCTION MATERIALS P/L
PROPOSED LYNDON QUARRY SITE

EAST GUYONG INFRASTRUCTURE AREA showing DRILLHOLES COMPLETED TO DATE and RLs OF TOP OF BYNG VOLCANICS

FIGURE 2

Prepared:	Date Updated:	Projection:	Scale:	DWG ID:
KH	03/09/2012	MGA Zone 55 (GDA 94)	1:1,000@ A2P	HCM030

709,100 mE | 709,200 mE | 709,300 mE | 709,400 mE

6,301,500 mN | 6,301,400 mN | 6,301,300 mN | 6,301,200 mN | 6,301,100 mN | 6,301,000 mN

Auger Drill Hole

RC Drill Hole

Proposed Quarry Boundary

Proposed infrastructure boundary/Road

Proposed infrastructure Extension

LA_T 924.97 DH with RL of top of BV

GUY044 GUY045 GUY046 LA_7 LA_8 EG 006 16.0m LA_18 3.5m GUY041 GUY043 GUY038 GUY039 GUY040 LA_6 LA_9 LA_17 3.5m GUY017 GUY035 GUY036 GUY037 BH04 LA61 GUY032 GUY033 GUY034 LA62 LA63 LA64 LA_10 924.13m LA_16 920m LA60 LA_5 LA59 LA66 LA65 LA_33A LA57 LA58 LA67 LA68 LA_T 924.97m LA_38 925.39m LA69 LA56 LA_39 925.98m LA_40 924.59m LA_35 922m LA70 LA71 BH03 921.37m LA55 EG 005 920.25m LA_37 LA72 LA73 LA53 LA54 BH02 LA76 LA_11 926.43 LA75 BH01 LA52 LA50 LA51 LA74 WATER SUPPLY DAM SILT TRAP LA48 LA49 LA_36 923.27m LA_3 LA_12 926.54 LA77 LA_15 925.07m LA78 924.62m LA79 BH05 924.1m LA82 LA84 LA80 LA83 LA81 LA_14 GUY015 LA47 LA_2 LA44 LA45 LA46 LA43 LA_13 LA_1 LA42 LA41 GUY031 GUY014 GUY030 LA_22 GUY004 GUY013

RME Rangott Mineral Exploration Pty Ltd

HANSON CONSTRUCTION MATERIALS P/L
PROPOSED LYNDON QUARRY SITE

EAST GUYONG INFRASTRUCTURE AREA showing DRILLHOLES COMPLETED TO DATE and RLs OF TOP OF BYNG VOLCANICS

FIGURE 2

Prepared:	Date Updated:	Projection:	Scale:	DWG ID:
KH	03/09/2012	MGA Zone 55 (GDA 94)	1:1,000@ A2P	HCM030

3.0 RC PERCUSSION DRILLING

A total of eighteen 115mm diameter vertical reverse circulation percussion holes were drilled by Torpedo Air Drilling Pty. Ltd. of Cobar between 25th July and 1st August, using a small truck-mounted air rig. The total metreage drilled was 212, and hole depths ranged from 6 to 17 metres. The holes were drilled to at least 3 metres deeper than the planned floor of the IA and of the site access road. 14 holes were drilled in the northwestern corner of the planned IA, and 4 along the revised site access road. Two planned holes, GUY-042 and GUY-047, were not drilled.

The hole locations are shown on Figures 1, 2 and 3, and the drill logs are presented in Appendix II. The drilling was supervised, and the samples logged, by RME senior geologist Anne Eastwood and exploration geologist Kate Heynes.

Samples were collected over one metre intervals from top-of-hole to end-of-hole (EOH) in to 750 x 450mm plastic bags (which are now stored in the Lyndon shearing shed), and sieved and washed reference chips were taken from these and collected in a 20-compartment chip tray for each hole (see photographs in Appendix IV).

After drilling was completed, the holes were temporarily capped with no. 4 red plastic blasthole caps.

All of the holes bottomed in either fresh or partly-weathered Tertiary basalt. No Byng Volcanics were intersected to the (3 metres below grade) final depths of the holes.

709,400 mE | 709,600 mE | 709,800 mE

6,301,200 mN | 6,301,000 mN | 6,300,800 mN | 6,300,600 mN | 6,300,400 mN

Auger Drill Hole

RC Drill Hole

Proposed Quarry Boundary

Proposed infrastructure boundary/Road

Proposed infrastructure Extension

LA_35
BH03
LA_36
LA77
LA_15
LA78
LA82
LA84
BH05
LA79
LA80
LA81
LA_14
LA45
LA_13
LA_27
LA_28
GUY031
GUY030
LA_22
GUY004
GUY029
GUY013
GUY028
LA_23
LA_24
GUY027
LA_25
BH07
LA_26
BH1
LA_20
LA_19
BH06
BH2
LA_29
LA_30
LA_31
LA_32
LA_21

Alternate Access Road

Alternate Access Road

RME	Rangott Mineral Exploration Pty Ltd			
HANSON CONSTRUCTION MATERIALS P/L PROPOSED LYNDON QUARRY SITE PROPOSED SITE ACCESS ROAD SHOWING DRILLHOLES FIGURE 3				
Prepared: KH	**Date Updated:** 03/09/2012	**Projection:** MGA Zone 55 (GDA 94)	**Scale:** 1:2,000@ A2P	**DWG ID:** HCM031

4.0 GEOTECHNICAL DRILLING

Seven 110mm diameter holes, numbered MG BH 1 to 7, were drilled by Macquarie Geotech of Bathurst using their truck-mounted auger rig. MG BH 1 - 5 were drilled across the planned Infrastructure Area to 10 metres depths, and MG BH 6 and 7 were drilled along the southern part of the proposed access road, to 2 metres depth. Macquarie Geotech carried out penetrometer testing in these holes.

The drilling was monitored by M. Rangott (partly for OH&S purposes) and the sample returns were logged by M. Rangott and K. Heynes. Drillhole locations are shown on Figures 1, 2 and 3, and lithological logs are included in Appendix II. Reference chip samples were collected at 0.5 metre intervals in 20-compartment chip trays (except for hole MG BH 1), and photographs of these are provided in Appendix IV. The sample returns provided valuable geological and asbestos risk information.

MG BH 1 bottomed in very weathered basalt at 10 metres depth. **MG BH 2** passed through soil and weathered alkali basalt to 3.5 metres depth, then strongly weathered Byng Volcanics to 10.0 metres depth. A sample of the returns from 7.5 to 10.0 metres in this hole was sent to AEC Environmental, who confirmed the presence of amphibole which was too coarse to be classed as asbestos.

MG BH 3 passed through soil and intensely weathered alkali basalt, then passed in to intensely weathered Byng Volcanics at 2.0 metres depth which graded to weakly weathered, chloritic Byng Volcanics to 10.0 metres depth. A sample from 7.5-10.0 metres in this hole was sent to AEC Environmental, who detected a small amount of asbestos-sized amphibole.

MG BH 4 passed through soil and weathered alkali basalt to 6.5 metres depth, then strongly weathered Byng Volcanics to 10.0 metres depth. Small amounts of asbestos-sized amphibole were detected by AEC Environmental in a sample collected from 7.5 to 10.0 metres.

MG BH 5 passed through soil and very weathered basalt to 3.5 metres depth, then partly weathered Byng Volcanics to 10.0 metres depth. A sample taken from 7.5 to 10.0 metres depth was sent to AEC Environmental, who noted the presence of small amounts of asbestiform amphibole.

MG BH 6 passed through soil and brown plastic clays with no recognisable rock chips, to EOH at 2.0 metres depth, and **MG BH 7** passed through soil and brown and bright red plastic clays, with no recognisable rock chips, to EOH at 2.0 metres depth.

5.0 CALCULATION of MATERIAL RESOURCES in INFRASTRUCTURE AREA

The reference samples from holes GUY-032 to GUY-046 which were drilled in the northwestern corner of the Infrastructure Area ("IA") were reclogged with reference to quarry material by M. Gear from Hanson and A. Eastwood. The samples included the sieved samples in the reference chip trays, and larger, un-sieved samples stored in snap-lock plastic bags.

As a result of the re-logging, the returns from the drillholes were classified (based on probable end uses) as aggregate material (Agg, fresh Tertiary basalt), roadbase (RB, strongly to weakly weathered basalt), subsoil (Subs, red-brown plastic clays and brown loamy clay with basalt fragments and ferruginous nodules) and topsoil (Soil). The logged intersections of these materials in each hole are tabulated in Appendix VI of this report.

From this table and the differential GPS pickups of the hole collars, Anne Eastwood was able to construct a series of grid east-west oriented vertical sections showing the materials intersected and the interpreted correlations of the boundaries between these materials from hole to hole, which are presented on Figure 4.

The resource calculation covered an area approximately 115 metres long by 45-55 metres wide, constrained by the northernmost line of percussion holes (GUY-044 - 046) and the southernmost line (GUY-032 - 034), and projected from the westernmost hole on each traverse, to approximately half the hole spacing (i.e. 10 metres) beyond the easternmost hole on each traverse. An average batter angle of 80° was assumed from the daylight line of the IA.

On each section, the areas of each material domain (separate colours) were calculated. In line with the wire-frame technique of calculating volumes of ore reserves undrilled, intermediate sections were constructed at 6301441N, 6301414N and 6301383N and the material boundaries interpreted on to them from the adjoining sections, to allow a smoother and more reliable calculation of volumes.

For each section a consistent one metre thick zone of topsoil was assumed to be present throughout.

The volumes of each material were calculated from section to section by averaging the areas of each domain on adjoining sections and multiplying the average area by the distances between those sections, then totaling all of the calculated volumes for each material (see Table 1 below).

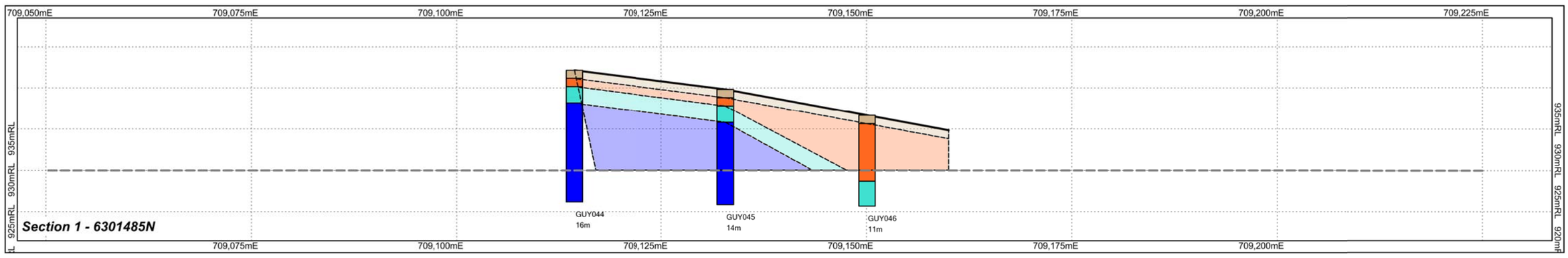
Densities of fresh basalt were measured on lengths of core from the 2000 core holes EG-01 and EG-03. These averaged 2.83. However, as those holes were drilled vertically and there may be minor zones of alteration along the boundaries between vertical columns in the basalt, a lower and more conservative density figure of 2.80 was adopted for the calculations. Density figures of 2.2 for roadbase, 1.6 for subsoil and 1.4 for topsoil were provided by M. Gear (based on densities used at Hanson's Bathurst Quarry) and used in the calculations.

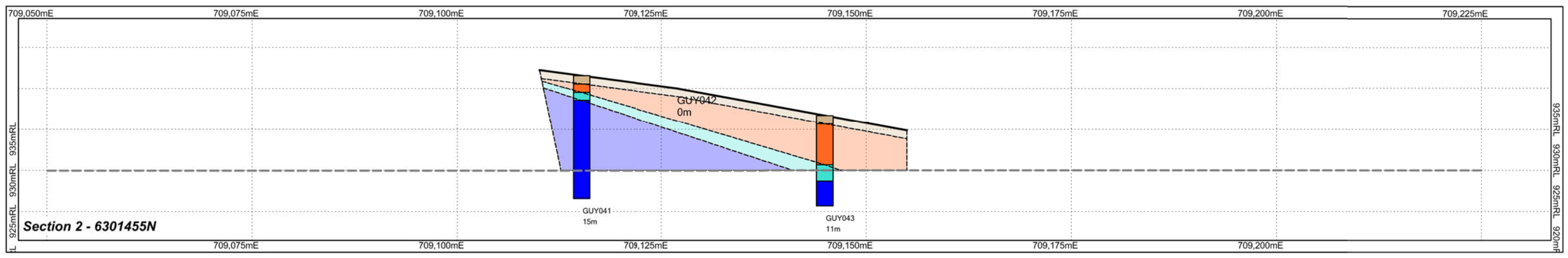
For the 115 x 45-50 metres area, resources of 16,887cu.m. (47,283 tonnes) of aggregate material (10,839cu.m. (23,847 tonnnes) of roadbase, 20,598cu.m. (32,955 tonnes) of subsoil, and 5,335cu.m. (7,469 tonnes) of topsoil were calculated, for removal and processing or storage nearby.

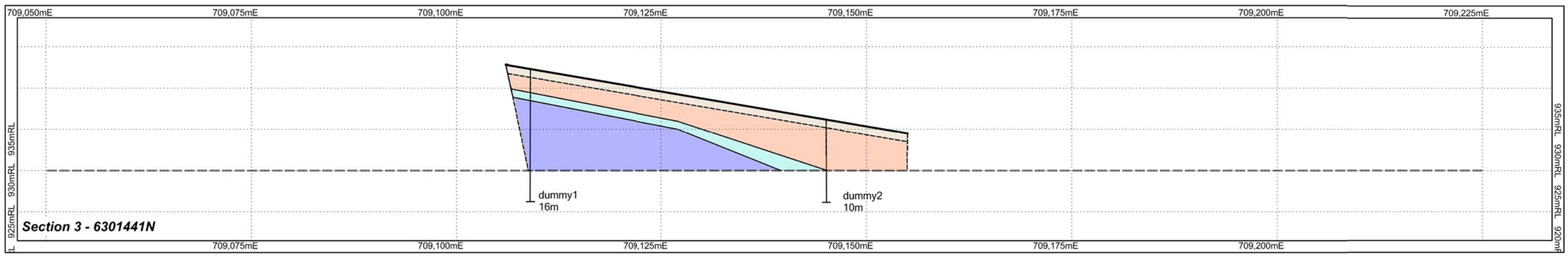
It is pointed out the most variable and least predictable domain is that of subsoil, reflecting the rapidly varying depths of weathering of the basalt flow along this east-facing slope.

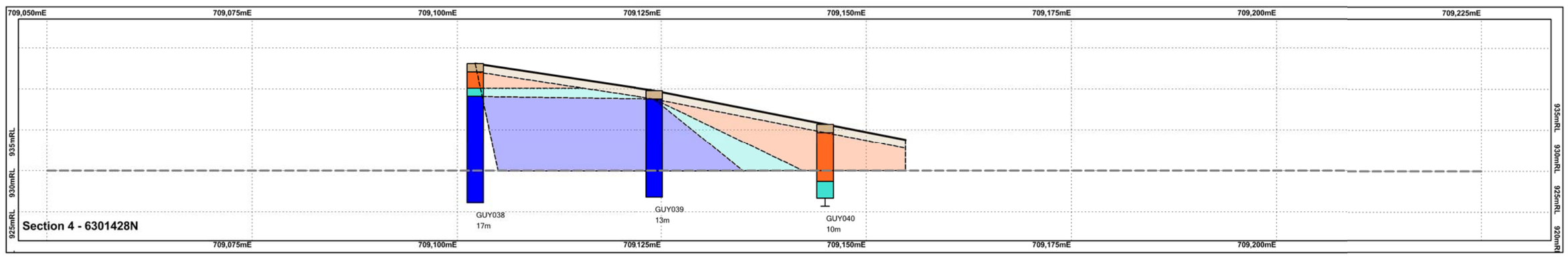
TABLE 1 - ROCK and SOIL EXTRACTION VOLUME and TONNEAGE CALCULATIONS for NORTHWESTERN CORNER OF INFRASTRUCTURE AREA

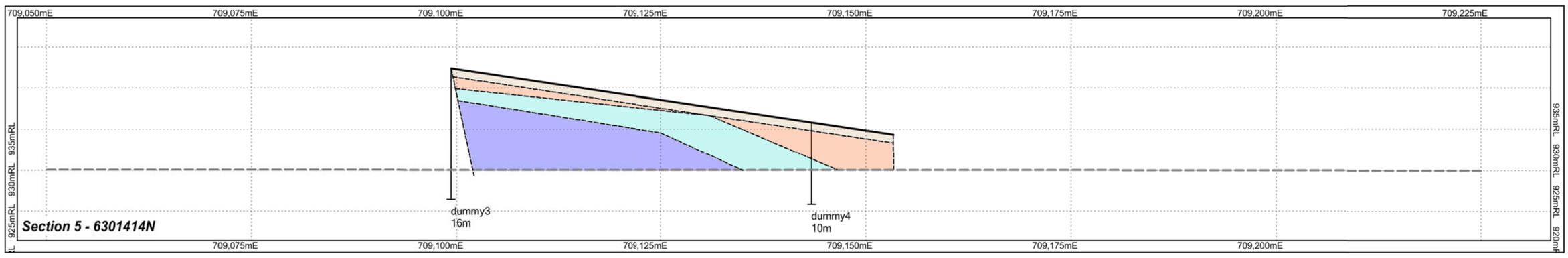
	AGGREGATE	ROADBASE	SUBSOIL	SOIL
SECTION 1 6301485N				
Area (m^2)	145.5	88.1	181.2	46.0
Volume Section 1 to 2 (m^3)	4,275.0	1,978.5	9,345.0	1,365.0
SECTION 2 6301455N				
Area (m^2)	139.5	43.8	441.8	45.0
Volume Section 2 to 3 (m^3)	2,032.0	583.8	4,194.4	595.0
SECTION 3 6301441N				
Area (m^2)	150.8	39.6	157.4	40.0
Volume Section 3 to 4 (m^3)	2,436.8	564.2	1,692.6	295.7
SECTION 4 6301428N				
Area (m^2)	224.1	47.2	103.0	53.5
Volume Section 4 to 5 (m^3)	3,208.1	1,459.5	1,285.9	756.0
SECTION 5 6301414N				
Area (m^2)	234.2	160.4	80.7	54.5
Volume Section 5 to 6 (m^3)	2,597.7	2,380.7	583.3	752.5
SECTION 6 6301400N				
Area (m^2)	136.9	178.8	41.4	53.0
Volume Section 6 to 7 (m^3)	1,584.4	2,590.8	1,509.6	901.0
SECTION 7 6301383N				
Area (m^2)	49.5	126.0	136.2	53.0
Volume Section 7 to 8 (m^3)	325.6	1,281.8	1,987.0	669.5
SECTION 8 6301370N				
Area (m^2)	0.6	71.2	169.5	50.0
TOTAL VOLUME	16,887.1	10,839.3	20,597.8	5,334.7
SG	2.8	2.2	1.6	1.4
TONNAGES	47,283.9	23,846.5	32,955.2	7,468.6

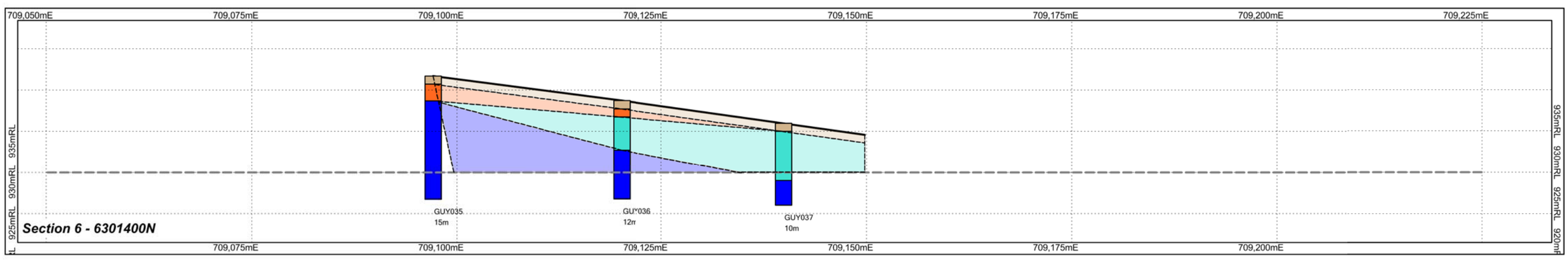


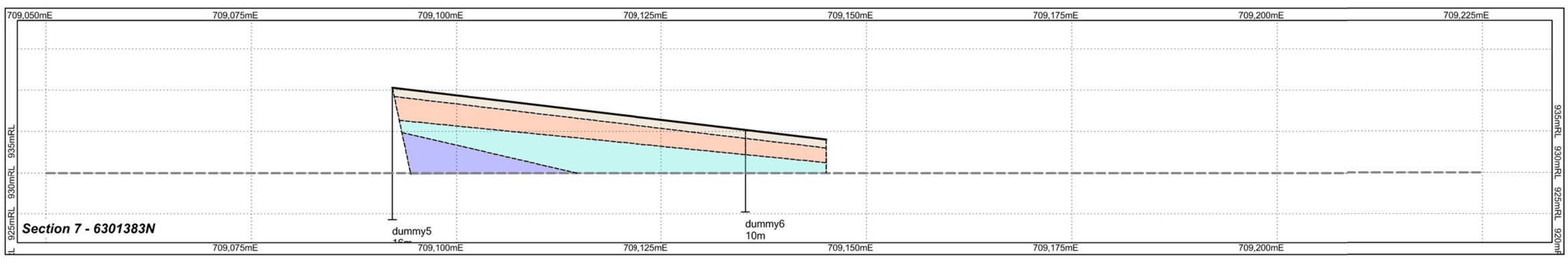


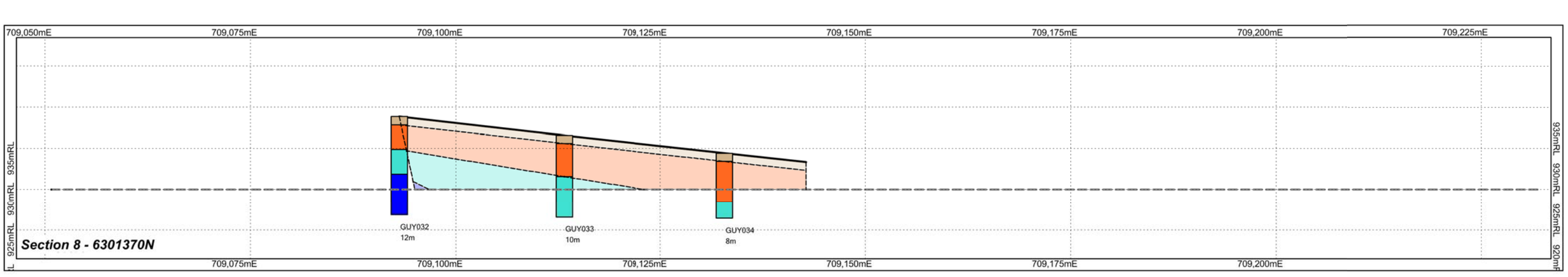












Soil
Subsoil
Road Base
Aggregate

Section Orientation = 90° Grid; 1:1 Vertical Ratio

Hanson Construction Materials
Lyndon Quarry
Infrastructure Area - RC Drillhole Cross Sections
Scale 1:500 MGA94 zone 55

Figure 4

RME
Rangott Mineral Exploration Pty Ltd

HCM027

6.0 CALCULATION of MATERIAL RESOURCES on SITE ACCESS ROAD

Four percussion holes (GUY-028 to 031) were drilled along the northwestern part of the revised proposed site access road, to investigate sub-surface materials and quantify materials to be extracted. In this area, downcutting will be required to bring the road down from the broad swampy plain north of the Mitchell Highway, to the entrance to the IA in a valley. A fifth planned hole, GUY-047, was not drilled.

All of the four holes intersected weathered to fresh basalt at relatively shallow depths. The materials classified by M. Gear have been plotted on a long section (Figure 6) along the road course, and the boundaries between them have been projected along the section between and beyond the drillholes.

In order to calculate volumes and materials to be excavated for the downcut, it was necessary to prepare a preliminary design of the roadway along this section line. For this design, RLs for the sites of the five holes, as well as selected reference points, were obtained by differential GPS pickups of those points by D. Brownlee, and used to plot the land surface. The reference points were where the road centre line crosses 6300800mN (RL 937.61) and at the entrance to the IA immediately to the southeast of the planned weighbridge (RL 929.216).

A road centerline RL of 938.5m was assumed from where it crosses 709500mE, and 929.0m at GUY-031, resulting in a grade of approximately 1 in 27 between those points. It was assumed that, for safety purposes, the short section of roadway from GUY-031 to the entrance of the IA, should be level.

It was also assumed that for areas of the cut known to have a base in fresh to moderately weathered basalt, it would only be necessary to excavate to 0.5m below the final centerline of the road surface, whereas in areas with a subsoil base, it will be necessary to excavate 1.0 metre below (and backfill with competent roadbase material in each case).

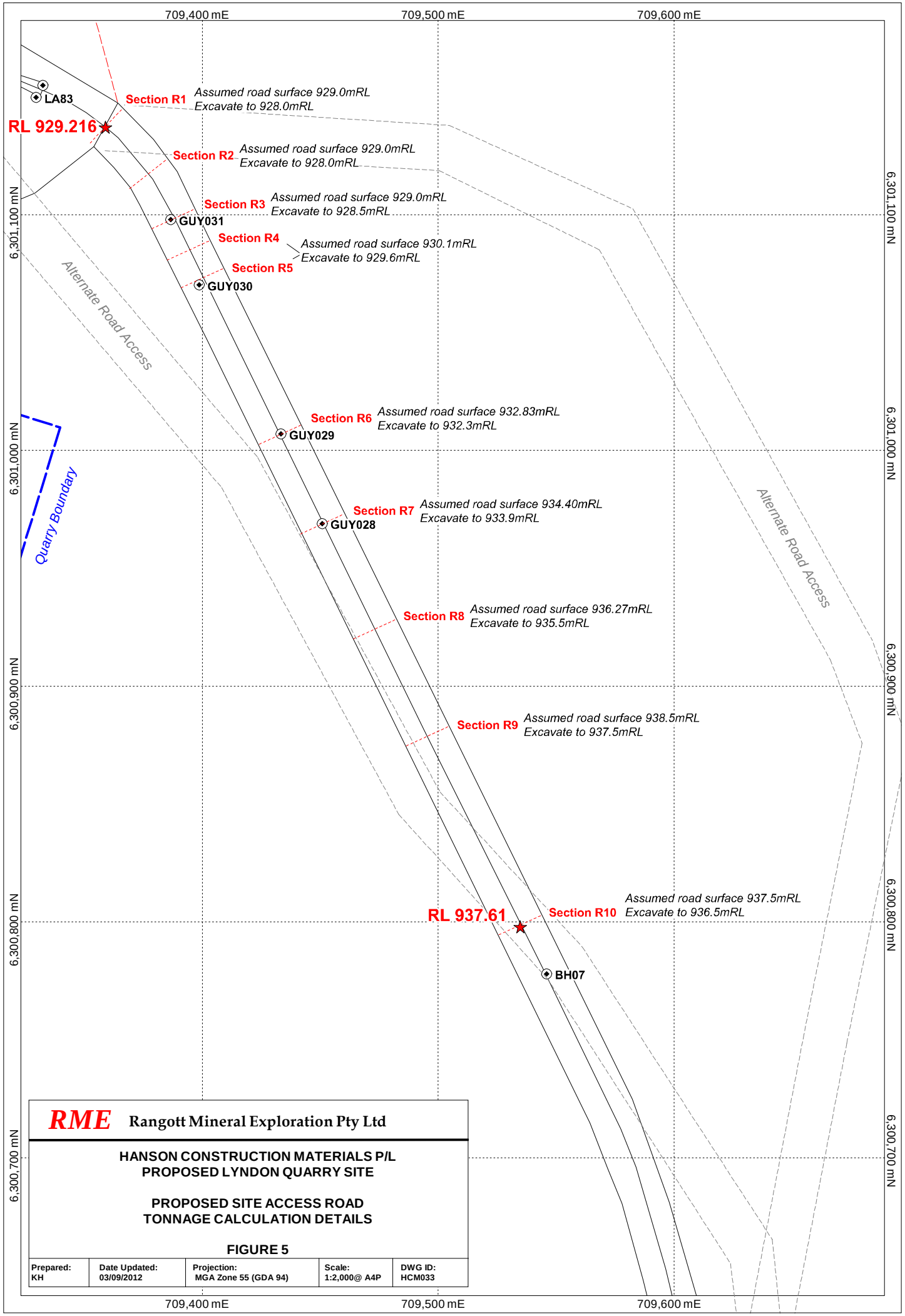
The design parameters are shown on Figure 5. From the long section (Figure 6), a series of cross sections (R1 to R10) located where shown on Figure 5, were hand-drawn, with boundaries between the material domains plotted on to them.

The volumes of the four material domains, and the corresponding tonneages, were then calculated in the same manner, and using the same density figures, as used for the resource calculations for the northwestern corner of the IA.

The calculated figures for the planned roadcut are 5,397cu.m. (15,113 tonnes) of aggregate material, 10,924cu.m. (24,032 tonnes) of roadbase, 9,900cu.m. (15,840 tonnes) of subsoil, and 8,170cu.m. (11,438 tonnes) of topsoil. These figures should be regarded as approximate only, as they are based on only four drillholes, with some major projection distances between and beyond the drillholes.

TABLE 2 - ROCK and SOIL EXTRACTION VOLUME and TONNEAGE CALCULATIONS for NORTHWESTERN PART of PROPOSED SITE ACCESS ROAD

	AGGREGATE	ROADBASE	SUBSOIL	SOIL
SECTION R1				
Area (m^2)	-	-	-	25.0
Volume section R1 to R2 (25.5m) - (m^3)	-	-	603.1	624.8
SECTION R2				
Area (m^2)	-	-	47.3	24.0
Volume section R2 to R3 (18.0m) - (m^3)	-	276.7	1,235.7	432.0
SECTION R3				
Area (m^2)	-	30.75	90.0	24.0
Volume section R3 to R4 (14.0m) - (m^3)	-	614.3	946.4	347.9
SECTION R4				
Area (m^2)	-	57.0	45.2	25.7
Volume section R4 to R5 (16.0m) - (m^3)	331.2	827.2	790.4	423.2
SECTION R5				
Area (m^2)	41.4	46.4	53.6	27.2
Volume section R5 to R6 (72.0m) - (m^3)	2,070.0	3,978.0	4,705.2	1,987.2
SECTION R6				
Area (m^2)	16.1	64.1	77.1	28.0
Volume section R6 to R7 (42.0m) - (m^3)	1,558.2	2,358.3	1,619.1	1,129.8
SECTION R7				
Area (m^2)	58.1	48.2	-	25.8
Volume section R7 to R8 (49.5m) - (m^3)	1,438.0	2,470.1	-	1,210.3
SECTION R8				
Area (m^2)	-	51.6	-	23.1
Volume section R8 to R9 (50.0m) - (m^3)	-	1,290.0	-	1,090.0
SECTION R9				
Area (m^2)	-	-	-	20.5
Volume section R9 to R10 (90.2m) - (m^3)	-	-	-	924.6
SECTION R10				
Area (m^2)	-	-	-	-
TOTAL VOLUME	5,397.4	10,923.6	9,899.9	8,169.8
DENSITY	2.8	2.2	1.6	1.4
TONNEAGE	15,112.7	24,031.9	15,839.8	11,437.7



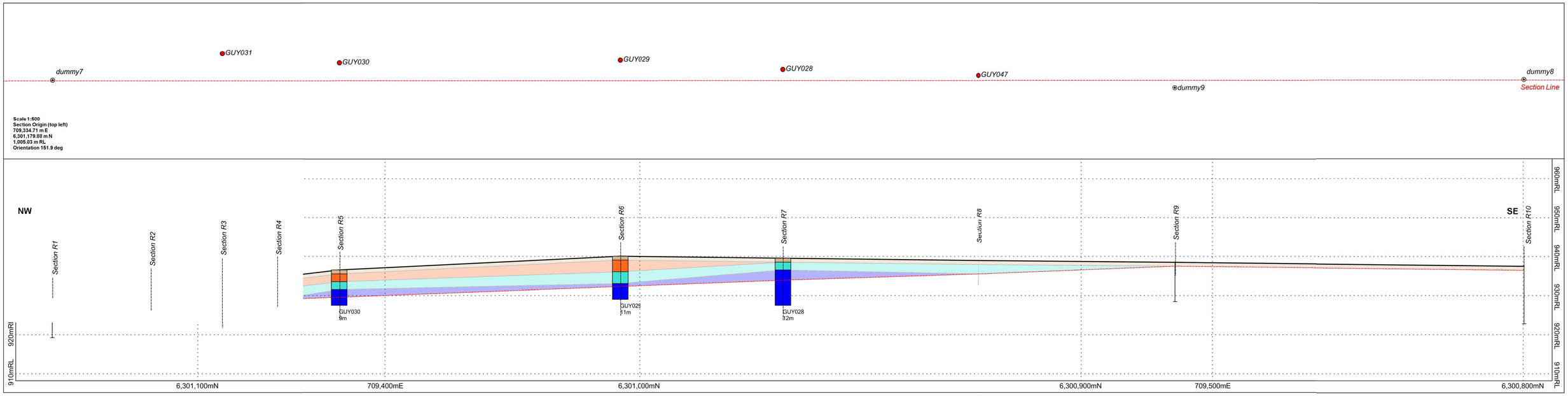
RME Rangott Mineral Exploration Pty Ltd

HANSON CONSTRUCTION MATERIALS P/L
PROPOSED LYNDON QUARRY SITE

PROPOSED SITE ACCESS ROAD
TONNAGE CALCULATION DETAILS

FIGURE 5

Prepared:	Date Updated:	Projection:	Scale:	DWG ID:
KH	03/09/2012	MGA Zone 55 (GDA 94)	1:2,000@ A4P	HCM033



Hanson Construction Materials
Lyndon Quarry
Long Section Along Proposed Site Access Road,
Showing Interpreted Units for Extraction

Scale 1:500 MGA94 zone 55

- Soil
- Subsoil
- Road Base
- Aggregate

RME
Rangott Mineral Exploration Pty Ltd

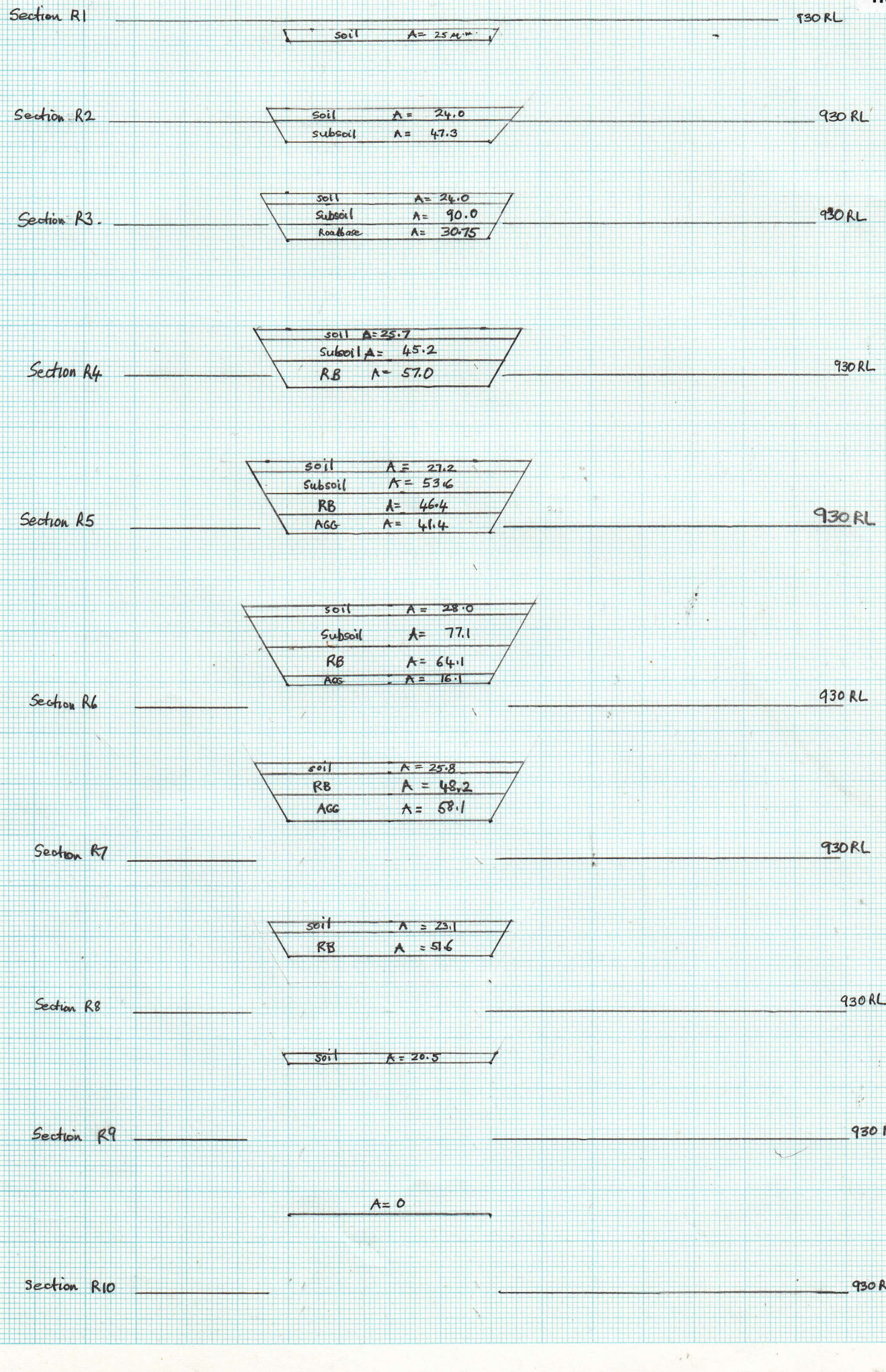
Section Orientation = 152° Grid; 1:1 Vertical Ratio

FIGURE 6

HCM028

LYNDON SITE – ACCESS ROAD CROSS SECTIONS

Figure 7
1:500



7.0 RELOCATION of R.W. CORKERY DRILL COLLARS

In late 2011, a photocopy of an airphoto contact print, on which R.W Corkery and Co. had plotted the locations of their holes drilled in 2000, was used to calculate approximate coordinates of their holes, by rescaling the photocopy and obtaining “best fit” locations for the holes on a recent digital orthophoto plot.

During the July, 2012 drilling, each of the calculated coordinates and their surroundings, were located in the field and checked by M. Rangott. Evidence of prior drillholes (subsidence cones, surveyor’s pegs, basalt chips) were found at the site of EG-002, 003 and 012 and revised coordinates taken with a hand-held GPS meter. These are regarded as confirmed sites, and three sites with lower order evidence, EG-007, 010 and 011 were also recorded. No unequivocal evidence of drillholes could be found at or close to the rest of the coordinate points.

The current status of the 2000 drillsites is summarised in Table 3 below.

TABLE 3 - LYNDON SITE
REVISED POSITIONS OF CORKERY'S PERCUSSION HOLES

HOLE No.	MGA_E	MGA_N	STATUS	EVIDENCE
EG-001	709047	6301560	assumed	best fit from RWC airphoto
EG-002	708983	6301228	confirmed	depression + chips
EG-003	709187	6300995	confirmed	depression + surveyor's peg
EG-004	709397	6301050	assumed	best fit from RWC airphoto
EG-005	709113	6301283	assumed	best fit from RWC airphoto
EG-006	709240	6301490	assumed	best fit from RWC airphoto
EG-007	709185	6301707	probable	old steel star post
EG-008	709007	6301742	assumed	best fit from RWC airphoto
EG-009	708987	6301403	assumed	best fit from RWC airphoto
EG-010	708839	6301269	probable	mound of fresh Tb chips
EG-011	708828	6301177	probable	surveyor's peg
EG-012	709022	6301075	confirmed	surveyor's peg (025E, 074N) and Tb chips (020E, 075N)

Rangott Mineral Exploration Pty. Ltd.
ABN 36 002 563 825

for

HANSON CONSTRUCTION MATERIALS

REPORT on DRILLING PROGRAMMES

at the

PLANNED LYNDON QUARRY SITE
(East Guyong, NSW)

July - August, 2012.

APPENDIX I

Auger Drill Hole Logs

Rangott Mineral Exploration Pty Ltd — **AUGER DRILL LOG** — for **Hanson Construction Materials**

SITE: EAST GULGONG — SHEET 1 OF 1 — COLLAR CO-ORDS: MGA 709248E, 6301083N

PROJECT: LYNDON — AZIMUTH: —

HOLE No: LA-41 — LOGGED BY: M. RANGOTT — DECLINATION: VERTICAL — Date Drilled: 24/7/12

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	RED-BROWN CLAYEY SOIL	
1	2	" - " " "	
2	3	RED - BROWN CLAY, WITH CHIPS OF VERY WEATHERED BASALT.	
3	4	" - " " " " " " " " " " " " ,	
4	5	" - " " , " " " WEATHERED BASALT.	
5	6	YELLOW-BROWN CLAY, WITH CHIPS OF VERY WEATHERED BASALT.	
6	7	" - " " , " " " " " " " .	
7	8	" - " " , WITH RARE FINE YELLOW-GREEN CHIPS.	
8	9	" - " " , WITH RARE CHIPS OF BASALT (VERY WEATHERED).	
		EOH 9m.	

Rangott Mineral Exploration Pty Ltd

AUGER DRILL LOG

for Hanson Construction Materials

SITE: EAST GUYONG SHEET 1 OF 1 COLLAR CO-ORDS: 709 251 E, 6 301 108 N

PROJECT: LYNDON AZIMUTH: –

HOLE No: LA-42 LOGGED BY: M. RANGOTT DECLINATION: VERTICAL Date Drilled: 24/7/2012.

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	RED-BROWN LOAMEY SOIL	
1	2	RED-BROWN CLAYEY SOIL	
2	3	YELLOW-BROWN CLAY, WITH ABUNDANT CHIPS OF VERY WEATHERED BASALT.	
3	4	" – " " , " " " " " " " " .	
4	5	" – " " , " " VERY FINE FRAGMENTS OF VERY DEGRADED (?)BASALT.	
5	6	" – " " , " " " " " " " " " " .	
6	7	" – " " , " FINE CHIPS OF DEGRADED BASALT.	
7	8	" – " " , " CHIPS OF VERY WEATHERED BASALT.	
		E.O.H. 8m	

Rangott Mineral Exploration Pty Ltd

AUGER DRILL LOG

for Hanson Construction Materials

SITE: EAST GUYONG SHEET 1 OF 1 COLLAR CO-ORDS: MGA 709209E, 6301129mN

PROJECT: LYNDON AZIMUTH: –

HOLE No: LA-043 LOGGED BY: M. RANGOTT DECLINATION: VERTICAL Date Drilled: 24/7/202

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	RED-BROWN SOIL	
1	2	RED-BROWN, VERY PUGGY CLAY	
2	3	" – ", " " ", WITH CHIPS OF VERY DEGRADED BASALT	
3	4	BROWN CLAY, WITH CHIPS OF PARTLY-WEATHERED BASALT.	
4	5	" " , " " " " – " " .	
5	6	" " , " " " " – " " .	
		E.O.H. 6m (TOO HARD TO DRILL FURTHER)	

Rangott Mineral Exploration Pty Ltd

AUGER DRILL LOG

for Hanson Construction Materials

SITE: EAST GLYONG SHEET 1 OF 1 COLLAR CO-ORDS: MGA 709 222E, 6 301 154N

PROJECT: LYNDON AZIMUTH: —

HOLE No: LA-44 LOGGED BY: M. RANGOTT DECLINATION: VERTICAL Date Drilled: 24/7/2012.

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	RED-BROWN CLAYEY SOIL.	
1	2	" - " " " .	
2	3	PURPLE-BROWN CLAY, WITH CHIPS OF VERY WEATHERED BASALT (MnOx & GOETHITE STAINED)	
3	4	PURPLE-BROWN CLAY, FOLLOWED BY ORANGE-BROWN CLAY, SOME PISOLITES	150×10^{-5}
4	5	PURPLE-BROWN & ORANGE-BROWN CLAY (INTERLAYERED), + PISOLITES, FEW FRAGMENTS OF VERY DEGRADED BASALT	150×10^{-3}
		(EOH 5m).	

Rangott Mineral Exploration Pty Ltd

AUGER DRILL LOG

for Hanson Construction Materials

SITE: EAST GUYONG SHEET 1 OF 1 COLLAR CO-ORDS: MGA 709264E, 6 301 134N

PROJECT: LYNDON AZIMUTH: —

HOLE No: LA-45 LOGGED BY: M. RANGOTT DECLINATION: VERTICAL Date Drilled: 24/7/2012.

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	RED-BROWN CLAYEY SOIL.	
1	2	" - " " " .	
2	3	DARK BROWN CLAYEY SOIL, WITH ABUNDANT CHIPS OF WEATHERED BASALT	
3	4	ALTERNATING RED-BROWN & DARK GREY CLAY, WITH ABUNDANT FINE CHIPS OF VERY WEATHERED BASALT	
4	5	~~DARK~~ VERY DARK GREY PUGGY CLAY (?MANGANIFEROUS) WITH SCATTERED CHIPS OF VERY ~~DEGRADED~~ BASALT.	
		(EOH 5m).	

Rangott Mineral Exploration Pty Ltd — **AUGER DRILL LOG** — for **Hanson Construction Materials**

SITE: EAST GUYONG — SHEET 1 OF 1 — COLLAR CO-ORDS: MGA 709 236, 6 301 131 N

PROJECT: LYNDON — AZIMUTH: —

HOLE No: LA-46 — LOGGED BY: M. RANGOTT — DECLINATION: VERTICAL — Date Drilled: 24/1/2012.

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	RED-BROWN CLAYEY SOIL	
1	2	RED-BROWN CLAYEY SOIL, WITH SCATTERED FINE CHIPS OF EXTREMELY WEATHERED BASALT.	
2	3	" - " " ", WITH BANDS OF NODULES OF VERY WEATHERED BASALT.	
3	4	DARK BROWN CLAY, WITH ABUNDANT YELLOW-GREEN FRAGMENTS (SAPROLITIC BASALT)	
4	5.	MID-BROWN WITH SOME YELLOW-GREY PATCHES (SAPROLITIC ? BASALT).	
5	6	MID-BROWN GRITTY CLAY & GREY-GREEN CLAY WITH FEW CHIPS OF WEATHERED BASALT	
		(EOH 6m)	

Rangott Mineral Exploration Pty Ltd | **AUGER DRILL LOG** | for **Hanson Construction Materials**

SITE: EAST GULGONG | SHEET 1 OF 1 | COLLAR CO-ORDS: MGA 709 148E, 6 301 174

PROJECT: LINDON | AZIMUTH: —

HOLE No: LA-47 | LOGGED BY: M. RANGOTT | DECLINATION: VERTICAL | Date Drilled: 24/7/2012.

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	RED-BROWN CLAYEY SOIL	
1	2	" - " " ", WITH SCATTERED CHIPS OF EXTREMELY WEATHERED BASALT	
2	3	DARK RED-BROWN SOIL, WITH ABUNDANT FINE CHIPS OF VERY WEATHERED BASALT	
3	4	" " - " ", WITH CHIPS OF VERY WEATHERED BASALT	
4	5	YELLOW-BROWN GRIT, WITH CHIPS OF VERY WEATHERED BASALT.	
5	6	" - " " , " " " " " "	
6	7	KHAKI GRIT, WITH RARE CHIPS OF VERY WEATHERED BASALT.	
7	8	" " , " " " " " " " .	
		E.O.H. 8m	

Rangott Mineral Exploration Pty Ltd

AUGER DRILL LOG

for Hanson Construction Materials

SITE: EAST GUYONG SHEET 1 OF 1 COLLAR CO-ORDS: MGA 709 111E, 6 301 230

PROJECT: LYNDON AZIMUTH: —

HOLE No: LA-48 LOGGED BY: M. RANGOTT DECLINATION: VERTICAL Date Drilled: 24/7/2012.

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	RED-BROWN CLAYEY SOIL.	
1	2	" — " " " .	
2	3	" — " " " , ~~few small chips of very weathered rock~~	
3	4	" — " " " , ~~with abundant chips of very weathered (?) basalt.~~	
4	5	GREY-BROWN CLAY, WITH ABUNDANT CHIPS OF WEATHERED TO NEAR-FRESH BASALT	
5	6	" — " & RED-BROWN CLAY, WITH CHIPS & NODULES OF PARTLY-WEATHERED BASALT	
6	7	GREY CLAY, WITH SMALL CHIPS OF PARTLY-WEATHERED BASALT.	
7	8	GREY PUGGY CLAY.	
		E.O.H. 8m	

Rangott Mineral Exploration Pty Ltd

AUGER DRILL LOG

for Hanson Construction Materials

SITE: EAST GUYONG | SHEET 1 OF 1 | COLLAR CO-ORDS: MGA 709127, 6 301 232

PROJECT: LYNDON | AZIMUTH: <

HOLE No: LA-49 | LOGGED BY: M. RANGOTT | DECLINATION: VERTICAL | Date Drilled: 24/7/2012

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	~~RED~~ BROWN CLAYEY SOIL	
1	2	RED-BROWN CLAYEY SOIL	
2	3	" - " " " , gritty weathered bedrock chips 2.9-3.0m	
3	4	MID-BROWN CLAY, WITH COMMON CHIPS OF WEATHERED BASALT.	
4	5	GREY-BROWN CLAY, WITH ABUNDANT CHIPS OF " " .	
5	6	GREY SILTY CLAY, WITH FEW SMALL CHIPS OF WEATHERED BASALT.	
6	7	" " " , " ~~FEW~~ NODULES OF WEATHERED BASALT	
		E.O.H. 7m	

Rangott Mineral Exploration Pty Ltd

AUGER DRILL LOG

for Hanson Construction Materials

SITE: EAST GUYONG

SHEET 1 OF 1

COLLAR CO-ORDS: MGA 709124, 6 301 254

PROJECT: LYNDON

AZIMUTH: —

HOLE No: LA - 50

LOGGED BY: M. RANGOTT

DECLINATION: VERTICAL

Date Drilled: 24/7/2012.

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	RED-BROWN CLAYEY SOIL.	
1	2	" - " " " .	
2	3	" - " CLAY.	
3	4	MID-BROWN CLAY, WITH CHIPS OF WEATHERED BASALT.	
4	5	" - " " , " " " " " .	
5	5.2	" - " " , WITH ABUNDANT CHIPS OF WEATHERED BASALT.	
		E.O.H. 5.2m - HIT BOULDER OF HARD ROCK.	

Rangott Mineral Exploration Pty Ltd — **AUGER DRILL LOG** — for **Hanson Construction Materials**

SITE: EAST GUYONG — SHEET 1 OF 1 — COLLAR CO-ORDS: MGA 709107 6301251

PROJECT: LYNDON — AZIMUTH: –

HOLE No: LA-51 — LOGGED BY: M. RANGOTT — DECLINATION: VERTICAL — Date Drilled: 25/7/2012.

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	RED-BROWN SOIL.	
1	2	" – " CLAYEY SOIL.	
2	3	" – " " " .	
3	4	" – " CLAY, WITH SOME CHIPS OF WEATHERED BASALT	
4	5	AS ABOVE, THEN CHANGE TO YELLOW-GREY WITH ABUNDANT CHIPS OF VERY WEATHERED BASALT, AT ABOUT 4.8m	
5	6	YELLOW-GREY PUGGY CLAY, WITH FEW LARGE CHIPS OF VERY WEATHERED BASALT	
6	7	GREY PUGGY CLAY, WITH SCATTERED SMALL CHIPS OF VERY WEATHERED BASALT	
7	8	YELLOW-GREY PUGGY CLAY.	
		E.O.H. 8m	

Rangott Mineral Exploration Pty Ltd

AUGER DRILL LOG

for Hanson Construction Materials

SITE: EAST GUYONG

SHEET 1 OF 1

COLLAR CO-ORDS: MGA 709 114E, 6 301 263N

PROJECT:

AZIMUTH: —

HOLE No: LA-52

LOGGED BY: M. RANGOTT

DECLINATION: VERTICAL

Date Drilled: 25/7/2012.

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	RED-BROWN CLAYEY SOIL	
1	2	" — " " "	
2	3	" — " CLAY, WITH LARGE NODULES OF EXTREMELY WEATHERED & FERRUGINISED BASALT	
3	4	BROWN CLAY, WITH LARGE CHIPS OF VERY WEATHERED BASALT	
4	5	GREY-BROWN PUGGY CLAY, WITH SMALL CHIPS OF WEATHERED BASALT	
5	6	GREY PUGGY CLAY (WET) - DERIVED FROM VERY WEATHERED BASALT	
		(E.O.H. 6m)	

Rangott Mineral Exploration Pty Ltd

AUGER DRILL LOG

for Hanson Construction Materials

SITE: EAST GUYONG SHEET 1 OF 1 COLLAR CO-ORDS: MGA 709121E, 6 301 275N

PROJECT: LYNDON AZIMUTH: –

HOLE No: LA-53 LOGGED BY: M. RANGOTT DECLINATION: VERTICAL Date Drilled: 25/7/2012.

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	RED-BROWN CLAYEY SOIL.	
1	2	RED-BROWN CLAY, FEW CHIPS OF EXTREMELY WEATHERED ROCK.	
2	3	DARK BROWN CLAY, SCATTERED CHIPS " " " " .	
3	3.1	Rock – boulder prevented progress. DARK BROWN CLAY, FEW CHIPS OF WEATHERED BASALT.	
		E.O.H. 3.1m.	

Rangott Mineral Exploration Pty Ltd

AUGER DRILL LOG

for Hanson Construction Materials

SITE: EAST GUYONG

SHEET 1 OF 1

COLLAR CO-ORDS: MGA 709 104E, 6 301 272N

PROJECT: LYNDON

AZIMUTH: —

HOLE No: LA-54

LOGGED BY: M. RANGOTT

DECLINATION: VERTICAL

Date Drilled: 25/7/2012.

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	RED-BROWN CLAYEY SOIL.	
1	2	" — " " " .	
2	3	BROWN CLAY, WITH FEW ROCK CHIPS (EXTREMELY WEATHERED).	
3	4	" " , " " " " " " .	
4	5	" " , WITH ROCK CHIPS (VERY WEATHERED BASALT)	
5	6	AS ABOVE TO ABOUT 5.5m, THEN PUGGY GREY CLAY WITH NODULES OF PARTLY-WEATHERED BASALT	
6	7	VERY DAMP, PUGGY GREY CLAY. RARE CHIPS OF FERRUGINISED BASALT.	
		(EOH. 7m).	

Rangott Mineral Exploration Pty Ltd

AUGER DRILL LOG

for Hanson Construction Materials

SITE: EAST GUYONG

SHEET 1 OF 1

COLLAR CO-ORDS: MGA 709 115E, 6 301 286N

PROJECT: LYNDON

AZIMUTH: —

HOLE No: LA-55.

LOGGED BY: M. RANGOTT

DECLINATION: VERTICAL

Date Drilled: 25/7/2012.

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	RED - BROWN CLAYEY SOIL.	
1	2	RED - BROWN PUGGY CLAY.	
2	3	" — " " ".	
3	4	BROWN CLAY, WITH SCATTERED CHIPS OF FERRUGINISED BASALT.	
4	5	GREY, VERY PUGGY CLAY	
5	6	GREY-BROWN, VERY DAMP, VERY PUGGY CLAY — VERY DEGRADED BASALT.	
		(EOH 6m).	

Rangott Mineral Exploration Pty Ltd

AUGER DRILL LOG

for Hanson Construction Materials

SITE: EAST GUYONG

SHEET 1 OF 1

COLLAR CO-ORDS: MGA 709121E 6301303

PROJECT: LYNDON

AZIMUTH: —

HOLE No: LA-56

LOGGED BY: M. RANGOTT

DECLINATION: VERTICAL

Date Drilled: 25/7/2012.

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	RED-BROWN CLAYEY SOIL	
1	2	BROWN CLAY (WET) WITH SMALL CHIPS OF FERRUGINISED BASALT	
2	3	DARK BROWN CLAY & GREY CLAY (WET), WITH MAGHAEMITE NODULES.	
3	4	DARK CHOCOLATE CLAY (VERY WET) WITH ABUNDANT CHIPS OF FERRUGINOUS ROCK	
4	5	GREY PUGGY CLAY (WET)	
		(EOH 5m).	
		(SHALLOW AQUIFER).	

Rangott Mineral Exploration Pty Ltd

AUGER DRILL LOG

for Hanson Construction Materials

SITE: EAST GUYONG

SHEET 1 OF 1

COLLAR CO-ORDS: 709124E, 6301321N

PROJECT: LYNDON

AZIMUTH: —

HOLE No: LA-57

LOGGED BY: M. RANGOTT

DECLINATION: VERTICAL

Date Drilled: 25/7/2012.

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	RED-BROWN CLAYEY SOIL	
1	2	WET, RED-BROWN PUGGY CLAY	
2	3	VERY WET BROWN CLAY	
3	4	" " " ", WITH ABUNDANT NODULES OF MAGHAEMITE & VERY WEATHERED (?) BASALT.	
4	5	" " " ", WITH LUMPS OF PUGGY GREY CLAY & FEW NODULES OF FERRUGINOUS MATERIAL.	
		E.O.H. 5m	
		(SHALLOW AQUIFER).	

Rangott Mineral Exploration Pty Ltd — **AUGER DRILL LOG** — for **Hanson Construction Materials**

SITE: EAST GUYONG — SHEET 1 OF 1 — COLLAR CO-ORDS: MGA 709130E, 6301319N

PROJECT: LYNDON — AZIMUTH: —

HOLE No: LA-58 — LOGGED BY: M. RANGOTT — DECLINATION: VERTICAL — Date Drilled: 25/7/2012.

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	RED-BROWN CLAYEY SOIL.	
1	2	VERY DAMP BROWN PUGGY CLAY, WITH NODULES OF FERRUGINISED ROCK	
2	3	" " " " " .	
3	4	" " " , VERY PUGGY CLAY	
4	5	DAMP BROWN & GREY CLAY, WITH ABUNDANT CHIPS OF WEATHERED BASALT	
		EOH 5m.	

Rangott Mineral Exploration Pty Ltd

AUGER DRILL LOG

for Hanson Construction Materials

SITE: EAST GLYONG SHEET 1 OF 1 COLLAR CO-ORDS: MGA 709131E, 6 301 332N

PROJECT: LYNDON AZIMUTH: —

HOLE No: LA-59 LOGGED BY: M. RANGOTT DECLINATION: VERTICAL Date Drilled: 25/7/2012.

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	RED-BROWN CLAYEY SOIL	
1	2	RED-BROWN PUGGY CLAY (VERY DAMP)	
2	3	BROWN PUGGY CLAY (VERY DAMP) - FEW ROCK CHIPS	
3	4	" " " (VERY WET) - " " "	
4	5	" " " (WET) - LUMPS OF GREY CLAY & ABUNDANT NODULES OF FERRUGINISED (?) BASALT)	
		EOH. 5m.	

Rangott Mineral Exploration Pty Ltd — **AUGER DRILL LOG** — for **Hanson Construction Materials**

SITE: EAST GULGONG — SHEET 1 OF 1 — COLLAR CO-ORDS: MGA 709135E, 6301344N

PROJECT: LYNDON — AZIMUTH: —

HOLE No: LA-60 — LOGGED BY: M. RANGOTT — DECLINATION: VERTICAL — Date Drilled: 25/7/2012.

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	RED-BROWN CLAYEY SOIL.	
1	2	WET, BROWN PUGGY CLAY.	
2	3	" , " " " .	
3	4	WET (VERY), LIGHT TAN PUGGY CLAY.	
4	5	LIGHT TAN CLAY SLURRY	
5	6	" " " " , WITH ABUNDANT CHIPS OF VARIABLY WEATHERED & FERRUGINISED BASALT	
		EOH. 6m	

Rangott Mineral Exploration Pty Ltd

AUGER DRILL LOG

for Hanson Construction Materials

SITE: EAST GUYONG

SHEET 1 OF 1

COLLAR CO-ORDS: MGA 709 165E, 6 301 362N

PROJECT: LYNDON

AZIMUTH: —

HOLE No: LA-61

LOGGED BY: M. RANGOTT

DECLINATION: VERTICAL

Date Drilled: 25/7/2012.

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	RED - BROWN CLAYEY SOIL	
1	2	RED - BROWN PUGGY CLAY.	
2	3	" - " " ".	
3	4	BROWN PUGGY CLAY WITH FEW ROCK CHIPS	
4	5	" " ".	
		E.O.H. 5m.	

Rangott Mineral Exploration Pty Ltd

AUGER DRILL LOG

for Hanson Construction Materials

SITE: EAST GLYDONG

SHEET 1 OF 1

COLLAR CO-ORDS: MGA 709172E, 6 301 362N

PROJECT: LYNDON

AZIMUTH: —

HOLE No: LA - 62

LOGGED BY: M. RANGOTT

DECLINATION: VERTICAL

Date Drilled: 25/7/2012.

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	RED-BROWN CLAYEY SOIL	
1	2	RED-BROWN PUGGY CLAY	
2	3	" - " " " .	
3	4	" - " " "	
		EOH 4m	

Rangott Mineral Exploration Pty Ltd

AUGER DRILL LOG

for **Hanson Construction Materials**

SITE: EAST GUYONG SHEET 1 OF 1 COLLAR CO-ORDS: MGA 709172E, 6301353N

PROJECT: LYNDON AZIMUTH: –

HOLE No: LA-63 LOGGED BY: M. RANGOTT DECLINATION: VERTICAL Date Drilled: 26/7/2012

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	RED-BROWN CLAYEY SOIL.	
1	2	BROWN PUGGY CLAY.	
2	3	" " " .	
3	4	BROWN, TENDING TO GREY-BROWN PUGGY CLAY, WITH FEW NODULES OF VERY WEATHERED BASALT.	
		E.O.H. 4m	

Rangott Mineral Exploration Pty Ltd

AUGER DRILL LOG

for Hanson Construction Materials

SITE: EAST GUYONG

SHEET 1 OF 1

COLLAR CO-ORDS: MGA 709165E, 6301352N

PROJECT: LYNDON

AZIMUTH: —

HOLE No: LA-64

LOGGED BY: M. RANGOTT

DECLINATION: VERTICAL

Date Drilled: 26/7/2012.

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	RED-BROWN CLAYEY SOIL.	
1	2	BROWN PUGGY CLAY, WITH SCATTERED NODULES OF FERRUGINISED ROCK.	
2	3	GREY-BROWN, VERY DAMP, VERY PUGGY CLAY.	
3	4	WET LIGHT BROWN CLAY, WITH ABUNDANT NODULES OF FERRUGINISED to VERY WEATHERED (?) BASALT.	
		EOH 4m.	

Rangott Mineral Exploration Pty Ltd

AUGER DRILL LOG

for Hanson Construction Materials

SITE: EAST GUYONG

SHEET 1 OF 1

COLLAR CO-ORDS: MGA 709176E, 6 301 328N

PROJECT: LYNDON

AZIMUTH: —

HOLE No: LA-65

LOGGED BY: M. RANGOTT

DECLINATION: VERTICAL

Date Drilled: 26/7/2012.

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	RED - BROWN CLAYEY SOIL	
1	2	BROWN PUGGY CLAY (WET)	
2	3	GREY & BROWN PUGGY CLAY (VERY WET) WITH SMALL FERRUGINOUS NODULES.	
		E.O.H. 3m	

Rangott Mineral Exploration Pty Ltd

AUGER DRILL LOG

for Hanson Construction Materials

SITE: EAST GUYONG

SHEET 1 OF 1

COLLAR CO-ORDS: MGA 709170E, 6327N

PROJECT: LYNDON

AZIMUTH: –

HOLE No: LA-66

LOGGED BY: M. RANGOTT

DECLINATION: VERTICAL

Date Drilled: 26/7/2012.

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	RED-BROWN CLAYEY SOIL	
1	2	BROWN VERY PUGGY CLAY (WET), WITH FERRUGINOUS NODULES	
2	3	GREY " " " (WET), " " "	
		EOH 3m	

Rangott Mineral Exploration Pty Ltd

AUGER DRILL LOG

for Hanson Construction Materials

SITE: EAST GULYONG

SHEET 1 OF 1

COLLAR CO-ORDS: MGA 709172E, 6 301 317N

PROJECT: LYNDON

AZIMUTH: –

HOLE No: LA - 67.

LOGGED BY: M. RANGOTT

DECLINATION: VERTICAL

Date Drilled: 26/7/2012.

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	RED-BROWN CLAYEY SOIL	
1	2	BROWN PUGGY CLAY (WET)	
2	3	YELLOW-GREY VERY PUGGY CLAY (WET), WITH FERRUGINOUS NODULES.	
		E.O.H. 3m	

Rangott Mineral Exploration Pty Ltd

AUGER DRILL LOG

for Hanson Construction Materials

SITE: EAST GUYONG

SHEET 1 OF 1

COLLAR CO-ORDS: MGA 709 177E, 6301318N

PROJECT: LYNDON

AZIMUTH: —

HOLE No: LA-68.

LOGGED BY: M. RANGOTT

DECLINATION: VERTICAL

Date Drilled: 26/7/2012.

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	GREY & RED-BROWN CLAYEY SOIL	
1	2	VERY DAMP, PUGGY BROWN CLAY, WITH FERRUGINOUS NODULES	
		(E.O.H. 2m)	

Rangott Mineral Exploration Pty Ltd

AUGER DRILL LOG

for Hanson Construction Materials

SITE: EAST GUYONG SHEET 1 OF 1 COLLAR CO-ORDS: MGA 709150E, 6301305N

PROJECT: LYNDON AZIMUTH: —

HOLE No: LA-69. LOGGED BY: M. RANGOTT DECLINATION: VERTICAL Date Drilled: 26/7/2012

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	RED-BROWN CLAYEY SOIL	
1	2	BROWN CLAY SLURRY, WITH FERRUGINOUS NODULES.	
2	3	YELLOW-GREY VERY PUGGY CLAY (VERY DAMP)	
		EOH 3m.	

Rangott Mineral Exploration Pty Ltd

AUGER DRILL LOG

for Hanson Construction Materials

SITE: EAST GULGONG SHEET 1 OF 1 COLLAR CO-ORDS: MGA 709150E, 6301293N

PROJECT: LYNDON AZIMUTH: –

HOLE No: LA-70 LOGGED BY: M. RANGOTT DECLINATION: VERTICAL Date Drilled: 26/7/2012.

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	RED-BROWN CLAYEY SOIL	
1	2	BROWN CLAY (WET) WITH FERRUGINOUS NODULES	
2	3	HARD, DAMP YELLOW-GREY CLAY, WITH FEW FERRUGINOUS NODULES	
3	4	YELLOW-GREY & BROWN CLAY (WET), WITH NODULES OF FERRUGINISED & VERY WEATHERED BASALT.	
		EOH 4m	

Rangott Mineral Exploration Pty Ltd

AUGER DRILL LOG

for Hanson Construction Materials

SITE: EAST GUYONG

SHEET 1 OF 1

COLLAR CO-ORDS: MGA 709159E, 6301293N

PROJECT: LYNDON

AZIMUTH: —

HOLE No: LA-71

LOGGED BY: M. RANGOTT

DECLINATION: VERTICAL

Date Drilled: 26/7/2012.

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	RED-BROWN CLAYEY SOIL.	
1	2	WET BROWN STICKY CLAY, WITH FINE ROCK FRAGMENTS.	
2	3	BROWN, PASSING TO GREY/PUGGY CLAY; FEW NODULES OF FERRUGINISED ROCK	
		E.O.H. 3m.	

Rangott Mineral Exploration Pty Ltd

AUGER DRILL LOG

for Hanson Construction Materials

SITE: EAST GUYONG

SHEET 1 OF 1

COLLAR CO-ORDS: MGA 709163E, 6 301278N

PROJECT: LYNDON

AZIMUTH: —

HOLE No: LA-72

LOGGED BY: M. RANGOTT

DECLINATION: VERTICAL

Date Drilled: 26/7/2012.

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	RED-BROWN CLAYEY SOIL.	
1	2	BROWN CLAY (PUGGY) WITH FEW FERRUGINOUS NODULES	
2	3	BROWN & YELLOW-GREY CLAY (VERY DAMP) WITH FEW IRONSTONE NODULES — DECOMPOSED BASALT	
		EOH 3m.	

Rangott Mineral Exploration Pty Ltd

AUGER DRILL LOG

for Hanson Construction Materials

SITE: EAST GULGONG SHEET 1 OF 1 COLLAR CO-ORDS: MGA 709157E, 6301276N

PROJECT: LYNDON AZIMUTH: –

HOLE No: LA-73 LOGGED BY: M. RANGOTT DECLINATION: VERTICAL Date Drilled: 26/7/2012.

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	RED-BROWN CLAYEY SOIL.	
1	2	BROWN PUGGY CLAY.	
2	3	GREY-BROWN PUGGY CLAY, WITH ABUNDANT CHIPS OF WEATHERED BASALT.	
3	4	" - " " " , " " " " " " " .	
		EOH 4m	

Rangott Mineral Exploration Pty Ltd

AUGER DRILL LOG

for Hanson Construction Materials

SITE: EAST GUYONG

SHEET 1 OF 1

COLLAR CO-ORDS: MGA 709158E, 6301271N

PROJECT: LYNDON

AZIMUTH: —

HOLE No: LA-74

LOGGED BY: M. RANGOTT

DECLINATION: VERTICAL

Date Drilled: 26/1/2012.

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	RED-BROWN CLAYEY SOIL.	
1	2	BROWN PUGGY CLAY.	
2	3	GREY PUGGY CLAY, WITH ABUNDANT CHIPS OF WEATHERED BASALT, with MONTMORITE ZONES.	
		E.O.H. 3m	

Rangott Mineral Exploration Pty Ltd

AUGER DRILL LOG

for **Hanson Construction Materials**

SITE: EAST GULGONG SHEET 1 OF 1 COLLAR CO-ORDS: MGA 709152E, 6 301 264N

PROJECT: LYNDON AZIMUTH: —

HOLE No: LA-75 LOGGED BY: M. RANGOTT DECLINATION: VERTICAL Date Drilled: 26/7/2012.

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	RED-BROWN CLAYEY SOIL.	
1	2	" - " " " .	
2	3	RED-BROWN PUGGY CLAY, PASSING TO VERY PUGGY YELLOW-GREY CLAY.	
3	4	DARK GREY VERY PUGGY CLAY, WITH FEW KERNELS OF DARK WEATHERED BASALT.	
		E.O.H. 4m	

Rangott Mineral Exploration Pty Ltd

AUGER DRILL LOG

for Hanson Construction Materials

SITE: EAST GUYONG SHEET 1 OF 1 COLLAR CO-ORDS: MGA 709165E, 6301266N

PROJECT: LYNDON AZIMUTH: –

HOLE No: LA-76 LOGGED BY: M. RANGOTT DECLINATION: VERTICAL Date Drilled: 26/7/2012.

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	RED-BROWN CLAYEY SOIL.	
1	2	BROWN PUGGY CLAY.	
2	3	GREY PUGGY (DAMP) CLAY, WITH NODULES OF VERY WEATHERED BASALT.	
		E.O.H. 3m.	

Rangott Mineral Exploration Pty Ltd

AUGER DRILL LOG

for Hanson Construction Materials

SITE: EAST GUYONG SHEET 1 OF 1 COLLAR CO-ORDS: MGA 709280E, 6 301 178N

PROJECT: LYNDON AZIMUTH: –

HOLE No: LA-77. LOGGED BY: M. RANGOTT DECLINATION: VERTICAL Date Drilled: 26/7/2011.

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	RED-BROWN CLAYEY SOIL	
1	2	YELLOW-BROWN CLAY, WITH ABUNDANT PISOLITES.	
		E.O.H. 2m.	

Rangott Mineral Exploration Pty Ltd

AUGER DRILL LOG

for **Hanson Construction Materials**

SITE: EAST GUYONG

SHEET 1 OF 1

COLLAR CO-ORDS: MGA 709 278E, 6 301 173N.

PROJECT: LYNDON

AZIMUTH: —

HOLE No: **LA-78**

LOGGED BY: M. RANGOTT

DECLINATION: VERTICAL

Date Drilled: 26/7/2011.

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	RED-BROWN CLAYEY SOIL	
1	2	RED-BROWN CLAY	
2	3	AS ABOVE, THEN ABUNDANT YELLOW-GREEN WEATHERED BASALT & PISOLITES (CHANGE AT ABOUT 2.8m) - COULIBE B.V.	
		E.O.H. 3m	

Rangott Mineral Exploration Pty Ltd

AUGER DRILL LOG

for Hanson Construction Materials

SITE: EAST GUYONG SHEET 1 OF 1 COLLAR CO-ORDS: MGA 709 299, 6 301 164N

PROJECT: LYNDON AZIMUTH: —

HOLE No: LA-79 LOGGED BY: M. RANGOTT DECLINATION: VERTICAL Date Drilled: 26/7/2012.

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	BROWN LOAMY SOIL.	
1	2	BROWN SILTY CLAY.	
		E.O.H. 2m.	

Rangott Mineral Exploration Pty Ltd

AUGER DRILL LOG

for Hanson Construction Materials

SITE: EAST GUYONG

SHEET 1 OF 1

COLLAR CO-ORDS: MGA 709295E, 6 301 154N.

PROJECT: LYNDON

AZIMUTH: # –

HOLE No: LA-80.

LOGGED BY: M. RANGOTT

DECLINATION: VERTICAL

Date Drilled: 26/7/2012

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	RED-BROWN CLAYEY SOIL.	
1	2	RED-BROWN CLAY	
2	3	RED-BROWN CLAY, WITH PELLETS OF YELLOW-GREEN, PUGGY, EXTREMELY WEATHERED BASALT NEAR BOTTOM OF HOLE.	
		E.O.H. 3m.	

Rangott Mineral Exploration Pty Ltd

AUGER DRILL LOG

for Hanson Construction Materials

SITE: EAST GUYONG

SHEET 1 OF 1

COLLAR CO-ORDS: MGA 709313E, 6301146N

PROJECT: LYNDON

AZIMUTH: —

HOLE No: LA-81.

LOGGED BY: M. RANGOTT

DECLINATION: VERTICAL

Date Drilled: 26/7/2012.

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	RED-BROWN CLAY.	
1	2	BROWN CLAY.	
2	3	BROWN CLAY, WITH HARD NODULES OF VERY WEATHERED BASALT	
		EOH 3m.	

Rangott Mineral Exploration Pty Ltd

AUGER DRILL LOG

for Hanson Construction Materials

SITE: EAST GUYONG

SHEET 1 OF 1

COLLAR CO-ORDS: MGA 709318E, 6301152N

PROJECT: LYNDON

AZIMUTH: —

HOLE No: LA-82

LOGGED BY: M. RANGOTT

DECLINATION: VERTICAL

Date Drilled: 26/7/2012.

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	BROWN LOAMY SOIL.	
1	2	BROWN SILTY CLAY.	
		EOH 2m.	

Rangott Mineral Exploration Pty Ltd

AUGER DRILL LOG

for Hanson Construction Materials

SITE: EAST GUYONG

SHEET 1 OF 1

COLLAR CO-ORDS: MGA 709331E, 6 301 150N

PROJECT: LYNDON

AZIMUTH: —

HOLE No: LA - 83

LOGGED BY: M. RANGOTT

DECLINATION: VERTICAL

Date Drilled: 26/7/2012

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	RED - BROWN LOAMY CLAY.	
1	2	BROWN LOAMY CLAY.	
		E.O.H. 2m.	

Rangott Mineral Exploration Pty Ltd

AUGER DRILL LOG

for Hanson Construction Materials

SITE: EAST GUYONG

SHEET 1 OF 1

COLLAR CO-ORDS: MGA 709 383E, 6 301 155N

PROJECT: LYNDON

AZIMUTH: –

HOLE No: LA-84.

LOGGED BY: M. RANGOTT

DECLINATION: VERTICAL

Date Drilled: 26/7/2012.

DEPTH (m) FROM	DEPTH (m) TO	DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
0	1	RED – BROWN LOAMY SOIL.	
1	2	BROWN CLAY	
		EOH. 0–2m.	

Rangott Mineral Exploration Pty. Ltd.
ABN 36 002 563 825

for

HANSON CONSTRUCTION MATERIALS

REPORT on DRILLING PROGRAMMES

at the

PLANNED LYNDON QUARRY SITE
(East Guyong, NSW)

July - August, 2012.

APPENDIX II

Percussion Drill Hole Logs

Rangott Mineral Exploration Pty Ltd **PERCUSSION DRILL LOG** for **Hanson Construction Materials**

SITE: East Guyong **SHEET** 1 **OF** 1 **COLLAR CO-ORDS:** 709451mE 6300969mN GDA94

PROJECT: Lyndon Quarry **AZIMUTH:** - **Date Drilled:** 25/7/12

HOLE No: GUY028 **LOGGED BY: KH** **DECLINATION:** -90

DEPTH (m)		DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
FROM	TO		
0	1	Dk grey to black olivine-rich basalt, moderately oxidised with common weathered brown fragments	113
1	2	as above, with decreased weathered chips. Oxidation predominantly on fractures surfaces	15
2	3	as above, with decreased weathered chips. Oxidation predominantly on fractures surfaces	19
3	4	dk grey to black fg fresh basalt. Minor clay (likely to be contamination within rods)	31
4	5	dk grey to black fg fresh basalt with weak oxidation on fract surfaces. Base of oxidation	35
5	6	dk grey to black, fresh, vfg basalt with common olivine xls	38
6	7	as above	13
7	8	as above with increased ol-phyric texture	14
8	9	as above	2
9	10	as above	10
10	11	as above	6
11	12	as above	14

Rangott Mineral Exploration Pty Ltd **PERCUSSION DRILL LOG** for **Hanson Construction Materials**

SITE: Lyndon Quarry **SHEET 1 OF 1** **COLLAR CO-ORDS:**

PROJECT: Hanson **AZIMUTH: -**

HOLE No: GUY029 **LOGGED BY: KH** **DECLINATION: -90** **Date Drilled:**

DEPTH (m)		DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
FROM	TO		
0	1	Med reddish brown clay-rich soil	31
1	2	med brown clay rich soil, and minor strongly weathered green/brown basaltic rock chips	23
2	3	med brown clay rich weathered basalt, and increased strongly wealthered basalt fragments	25
3	4	med brown clay and increased (>50%) moderately weathered dk grey basalt fragments	14
4	5	dk grey to black fine-grained basalt, with FeOx on fractured surfaces. Base of oxidation	7
5	6	dark grey to black fine grained, fresh, olivine rich basalt	11
6	7	As above	9
7	8	As above	6
8	9	As above with rare med gr olivine xls. Dk green, waxy chloritic veining noted.	2
9	10	As above, with no veining noted	6
10	11	As above	13

Rangott Mineral Exploration Pty Ltd **PERCUSSION DRILL LOG** for **Hanson Construction Materials**

SITE: Lyndon Quarry **SHEET 1 OF 1** **COLLAR CO-ORDS:**

PROJECT: Hanson **AZIMUTH: -**

HOLE No: GUY030 **LOGGED BY: KH** **DECLINATION: -90** **Date Drilled:**

DEPTH (m)		DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
FROM	TO		
0	1	Brown/grey organic rich soil/overburden	9
1	2	med brown/red clay (in-situ weahtered basalt clay), and weathered basaltic fragments	51
2	3	dk grey weak to moderately oxidised basalt	25
3	4	dk grey weak to moderately oxidised on frac surfaces, basalt. Base of oxidation	33
4	5	dk grey to black vfg fresh basalt	9
5	6	dk grey to black olivine-rich vfg basalt	26
6	7	As above	50
7	8	As above	14
8	9	As above	35

Rangott Mineral Exploration Pty Ltd **PERCUSSION DRILL LOG** for **Hanson Construction Materials**

SITE: East Guyong **SHEET** 1 **OF** 1 **COLLAR CO-ORDS:** 709388mE 6301100mN GDA94

PROJECT: Lyndon Quarry **AZIMUTH:** - **Date Drilled:** 26/7/12

HOLE No: GUY031 **LOGGED BY: KH** **DECLINATION:** -90

DEPTH (m)		DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
FROM	TO		
0	1	Med brown/red clay rich soil (weathered basalt) and common oxidised basalt fragments	49
1	2	as above, with increased weakly oxidused basalt fragments	14
2	3	dk grey-brown weakly to moderately oxidised vfg basalt	14
3	4	dk grey to black weakly oxidised (on frac surfaces) olivine rich basalt	89
4	5	as above	127
5	6	dk grey to black vfg olivine rich basalt	196

Rangott Mineral Exploration Pty Ltd **PERCUSSION DRILL LOG** for **Hanson Construction Materials**

SITE: East Guyong **SHEET** 1 **OF** 1 **COLLAR CO-ORDS:** 709093mE 6301370mN GDA94

PROJECT: Lyndon Quarry **AZIMUTH:** - **Date Drilled:** 26/7/12

HOLE No: GUY032 **LOGGED BY: KH** **DECLINATION:** -90

DEPTH (m)		DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
FROM	TO		
0	1	Reddish brown organic clay-rich soil	400
1	2	reddish brown clay (in-situ weathered basalt, and intensely weathered basalt - friable)	400
2	3	as above, clay dominant	600
3	4	Med-brown strongly weathered (texture retained) basalt. Minimal clay in interval.	400
4	5	D.grey fine-grained basalt. Weak weathering on fractured surfaces.	500
5	6	as above	400
6	7	Med-brown/green & orange, strongly oxidised basalt with common clay - approx.1/3	250
7	8	Weakly weathered, green/black fine-grained basalt - minor oxidation. No clay	350
8	9	Fresh green/black fine-grained basalt	500
9	10	Fresh green/black fine-grained basalt. Rough surface	550
10	11	Fresh green/black fine-grained basalt. Rough surface	700
11	12	Fresh green/black fine-grained basalt.	550

Rangott Mineral Exploration Pty Ltd **PERCUSSION DRILL LOG** for **Hanson Construction Materials**

SITE: East Guyong **SHEET** 1 **OF** 1 **COLLAR CO-ORDS:** 709113mE 6301370mN GDA94

PROJECT: Lyndon Quarry **AZIMUTH:** - **Date Drilled:** 27/7/12

HOLE No: GUY033 **LOGGED BY:** AE **DECLINATION:** -90

DEPTH (m)		DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
FROM	TO		
0	1	Dark orange-brown, plastic clay. Very minor rock fragments - approx.2%	550
1	2	Dark orange-brown, plastic clay + approx. 50% green-brown rock chips.	350
2	3	Dark red-orange-brown clay + approx. 50% green-brown oxidised rock chips.	300
3	4	Dark orange-brown clay + 5% green-brown oxidised rock chips	300
4	5	Orange-brown puggy clay + 40% green-orange oxidised mafic rock chips - basalt?	200
5	6	Orange-brown puggy clay + 30% green-orange oxidised mafic rock chips.	25
6	7	Orange-brown clay (20%) + green & orange-brown oxidised fine-grained basalt chips.	40
7	8	Minor approx. 5% orange-brown clay. Green-black + orange-brown, weakly oxidised fine-grained basalt chips	180
8	9	As above. Approx. 5% oxidised basalt chips. 2% orange-brown clay	200
9	10	Moderately oxidised fine-grained basalt chips + 2% orange-brown clay. Orange-brown + green-black basalt chips.	200

Rangott Mineral Exploration Pty Ltd **PERCUSSION DRILL LOG** for **Hanson Construction Materials**

SITE: East Guyong **SHEET** 1 **OF** 1 **COLLAR CO-ORDS:** 709132mE 6301370mN GDA94

PROJECT: Lyndon Quarry **AZIMUTH:** - **Date Drilled:** 27/7/12

HOLE No: GUY034 **LOGGED BY:** AE **DECLINATION:** -90

DEPTH (m)		DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
FROM	TO		
0	1	Dark orange-brown clay/soil. Minor weathered rock chips - approx.5%	220
1	2	Dark orange-brown clay + 40% orange-brown oxidised rock chips.	75
2	3	Dark orange-brown, plastic clay + minor (approx. 1%) small oxidised rock chips.	100
3	4	Dark orange-brown clay + 40% oxidised rock chips - fine-grained mafic - basalt.	35
4	5	Dark orange-brown clay + approx. 1% small oxidised rock chips.	100
5	6	Orange-brown puggy clay + minor (approx. 5%) light green, orange-brown weathered rock chips.	80
6	7	Light green + orange-brown weathered & oxidised fine-grained basalt chips (15%? Clay)	10
7	8	Light green + orange-brown weathered & oxidised, fine-grained basalt chips. 15% clay. Tertiary.	10

Rangott Mineral Exploration Pty Ltd **PERCUSSION DRILL LOG** for **Hanson Construction Materials**

SITE: East Guyong **SHEET** 1 **OF** 1 **COLLAR CO-ORDS:** 709097mE 6301400mN GDA94

PROJECT: Lyndon Quarry **AZIMUTH:** - **Date Drilled:** 27/7/12

HOLE No: GUY035 **LOGGED BY:** AE **DECLINATION:** -90

DEPTH (m)		DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
FROM	TO		
0	1	Orange-brown clay + minor light green & orange-brown basalt chips - approx.10% rock chips	150
1	2	Orange-brown clay + minor (10%) light green & orange-brown weathered basalt chips. Plastic clay.	220
2	3	Orange-brown clay + minor light green basalt chips (1%) - weathered & oxidised.	100
3	4	Green-black, weakly oxidised, fine-grained basalt. Trace amounts of clay.	300
4	5	Green-black, slightly oxidised, fine-grained basalt.	350
5	6	Fresh green-black, fine-grained basalt.	350
6	7	Fresh green-black, fine-grained basalt.	300
7	8	Fresh green-black, fine-grained basalt.	300
8	9	Fresh green-black, fine-grained basalt.	350
9	10	Slightly oxidised, green-black, fine-grained basalt	400
10	11	Fresh green-black, fine-grained basalt. Tertiary aged	300
11	12	Fresh green-black, fine-grained basalt. Tertiary aged	300
12	13	Fresh green-black, fine-grained basalt. Tertiary aged	350
13	14	Fresh green-black, fine-grained basalt. Tertiary aged	400
14	15	Fresh green-black, fine-grained basalt. Tertiary aged	450

Rangott Mineral Exploration Pty Ltd **PERCUSSION DRILL LOG** for **Hanson Construction Materials**

SITE: East Guyong **SHEET** 1 **OF** 1 **COLLAR CO-ORDS:** 709120mE 6301400mN GDA94

PROJECT: Lyndon Quarry **AZIMUTH:** - **Date Drilled:** 27/7/12

HOLE No: GUY036 **LOGGED BY: AE** **DECLINATION:** -90

DEPTH (m)		DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
FROM	TO		
0	1	Orange-brown clay + soil (50%) + weathered, fine-grained basalt chips.	200
1	2	Plastic orange-brown clay (80%) + moderately oxidised, fine-grained basalt chips.	100
2	3	Weakly oxidised, green-black & orange-brown fine-grained basalt chips + minor (approx. 5%) clay.	200
3	4	Moderately oxidised, fine-grained basalt chips + (approx. 10%) orange-brown clay.	150
4	5	Moderately oxidised, green-black + orange-brown fine-grained basalt chips + 30% puggy clay.	100
5	6	Weakly oxidised, green-black + orange-brown fine-grained basalt chips + 3% clay.	80
6	7	Green-black, slightly oxidised fine-grained basalt chips. Tertiary aged.	400
7	8	Green-black, slightly oxidised fine-grained basalt chips. Tertiary aged.	350
8	9	Green-black, slightly oxidised fine-grained basalt chips. Tertiary aged.	350
9	10	Green-black, slightly oxidised fine-grained basalt chips. Tertiary aged.	400
10	11	Green-black, slightly oxidised fine-grained basalt chips. Tertiary aged.	350
11	12	Green-black, slightly oxidised fine-grained basalt chips. Tertiary aged.	350

Rangott Mineral Exploration Pty Ltd **PERCUSSION DRILL LOG** for **Hanson Construction Materials**

SITE: East Guyong **SHEET** 1 **OF** 1 **COLLAR CO-ORDS:** 709140mE 6301400mN GDA94

PROJECT: Lyndon Quarry **AZIMUTH:** - **Date Drilled:** 27/7/12

HOLE No: GUY037 **LOGGED BY: AE** **DECLINATION:** -90

DEPTH (m)		DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
FROM	TO		
0	1	Dark orange-brown plastic clay + minor (approx. 10%) weathered mafic chips.	80
1	2	Orange-brown + green-brown plastic clays. Trace weathered rock chips.	100
2	3	Green-brown plastic clays + minor (approx. 5%), weathered mafic chips.	200
3	4	Green-brown plastic clays + minor (approx. 5%), weathered mafic chips.	150
4	5	Green-brown plastic clays + 50% very weathered fine-grained basalt chips.	50
5	6	40% green-brown clay + 60% very weathered fine-grained basalt chips.	50
6	7	Orange-green-brown clay (70%) + 30% moderately weathered basalt chips.	20
7	8	Moderately weathered & oxidised, fine-grained basalt chips. Tertiary aged.	20
8	9	Orange-brown & green-brown, moderately oxidised, fine-grained basalt chips. 15% clay	10
9	10	Orange-brown & green-brown, moderately oxidised, fine-grained Tertiary basalt.	10

Rangott Mineral Exploration Pty Ltd **PERCUSSION DRILL LOG** for **Hanson Construction Materials**

SITE: East Guyong **SHEET** 1 **OF** 1 **COLLAR CO-ORDS:** 709102mE 6301428mN GDA94

PROJECT: Lyndon Quarry **AZIMUTH:** - **Date Drilled:** 31/7/12

HOLE No: GUY038 **LOGGED BY: AE** **DECLINATION:** -90

DEPTH (m)		DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
FROM	TO		
0	1	Dark orange-brown clay + 1% small rock chips.	250
1	2	Dark orange-brown clay + 4% small weathered basalt chips.	200
2	3	Green-orange-brown clay (60%) + strongly oxidised & weathered basalt chips.	200
3	4	5% clay + weakly oxidised, fine-grained, green-black Tertiary basalt.	270
4	5	Fresh, green-black, fine-grained Tertiary basalt	400
5	6	Fresh, green-black, fine-grained Tertiary basalt	350
6	7	Fresh, green-black, fine-grained Tertiary basalt	300
7	8	Fresh, green-black, fine-grained Tertiary basalt	200
8	9	Fresh, green-black, fine-grained Tertiary basalt	300
9	10	Fresh, green-black, fine-grained Tertiary basalt	400
10	11	Fresh, green-black, fine-grained Tertiary basalt	450
11	12	Fresh, green-black, fine-grained Tertiary basalt	500
12	13	Fresh, green-black, fine-grained Tertiary basalt	500
13	14	Fresh, green-black, fine-grained Tertiary basalt	500
14	15	Fresh, green-black, fine-grained Tertiary basalt	500
15	16	Fresh, green-black, fine-grained Tertiary basalt	400
16	17	Fresh, green-black, fine-grained Tertiary basalt	400

Rangott Mineral Exploration Pty Ltd **PERCUSSION DRILL LOG** for **Hanson Construction Materials**

SITE: East Guyong **SHEET** 1 **OF** 1 **COLLAR CO-ORDS:** 709124mE 6301428mN GDA94

PROJECT: Lyndon Quarry **AZIMUTH:** - **Date Drilled:** 1/8/12

HOLE No: GUY039 **LOGGED BY:** AE **DECLINATION:** -90

DEPTH (m)		DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
FROM	TO		
0	1	Weakly oxidised, fine-grained basalt chips - green-black & orange-brown. 5% clay	100
1	2	Slightly oxidised, fine-grained green-black Tertiary basalt chips.	200
2	3	Fine-grained green-black Tertiary basalt chips. Very slight oxidation.	250
3	4	Fine-grained green-black Tertiary basalt chips. Very slight oxidation.	300
4	5	Fine-grained green-black Tertiary basalt chips. Very slight oxidation.	300
5	6	Fine-grained green-black Tertiary basalt chips. Very slight oxidation.	300
6	7	Fine-grained green-black Tertiary basalt chips. Very slight oxidation.	200
7	8	Fine-grained green-black Tertiary basalt chips. Very slight oxidation.	250
8	9	Fine-grained green-black Tertiary basalt chips. Very slight oxidation.	220
9	10	Fine-grained green-black Tertiary basalt chips. Very slight oxidation.	450
10	11	Fine-grained green-black Tertiary basalt chips. Very slight oxidation.	500
11	12	Fine-grained green-black Tertiary basalt chips. Very slight oxidation.	500
12	13	Fresh, green-black, fine-grained Tertiary basalt	550

Rangott Mineral Exploration Pty Ltd **PERCUSSION DRILL LOG** for **Hanson Construction Materials**

SITE: East Guyong **SHEET** 1 **OF** 1 **COLLAR CO-ORDS:** 709145mE 6301428mN GDA94

PROJECT: Lyndon Quarry **AZIMUTH:** - **Date Drilled:** 1/8/12

HOLE No: GUY040 **LOGGED BY: AE** **DECLINATION:** -90

DEPTH (m)		DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
FROM	TO		
0	1	Orange-brown clay + minor (approx. 5%) strongly weathered rock chips	200
1	2	Orange-brown clay + 10% weathered & oxidised rock chips	200
2	3	Orange-brown clay + 60% green-orange-brown weathered & oxidised basalt chips	15
3	4	Orange-brown clay + 50% green-orange-brown weathered & oxidised basalt chips	50
4	5	Orange-green-brown clay + approx. 5% weathered rock chips	20
5	6	Orange-brown plastic clay + approx. 5% weathered rock chips	80
6	7	Moderately oxidised, fine-grained basalt + 10% orange-brown clay	100
7	8	Moderately oxidised, green-brown & orange-brown fine-grained basalt chips	100
8	9	Moderately oxidised, green-black & orange-brown fine-grained basalt chips	150
9	10	Green-black, weakly oxidised, fine-grained Tertiary basalt chips	400

Rangott Mineral Exploration Pty Ltd **PERCUSSION DRILL LOG** for **Hanson Construction Materials**

SITE: East Guyong **SHEET** 1 **OF** 1 **COLLAR CO-ORDS:** 709115mE 6301456mN GDA94

PROJECT: Lyndon Quarry **AZIMUTH:** - **Date Drilled:** 1/8/12

HOLE No: GUY041 **LOGGED BY: AE** **DECLINATION:** -90

DEPTH (m)		DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
FROM	TO		
0	1	Dark orange-brown clay (50%) + fresh & oxidised green-black, fine-grained Tertiary basalt chips	
1	2	Green-black & orange-brown (weakly to moderately oxidised) fine-grained basalt chips	
2	3	Slightly oxidised, green-black, fine-grained basalt chips	
3	4	Fresh, green-black, fine-grained basalt	
4	5	Fresh, green-black, fine-grained basalt	
5	6	Fresh, green-black, fine-grained basalt	
6	7	Fresh, green-black, fine-grained basalt	
7	8	Fresh, green-black, fine-grained basalt	
8	9	Fresh, green-black, fine-grained basalt	
9	10	Fresh, green-black, fine-grained basalt	
10	11	Fresh, green-black, fine-grained basalt	
11	12	Fresh, green-black, fine-grained basalt	
12	13	Fresh, green-black, fine-grained basalt	
13	14	Fresh, green-black, fine-grained basalt	
14	15	Fresh, green-black, fine-grained Tertiary basalt	

Rangott Mineral Exploration Pty Ltd **PERCUSSION DRILL LOG** for **Hanson Construction Materials**

SITE: East Guyong **SHEET** 1 **OF** 1 **COLLAR CO-ORDS:** 709145mE 6301456mN GDA94

PROJECT: Lyndon Quarry **AZIMUTH:** - **Date Drilled:** 1/8/12

HOLE No: GUY043 **LOGGED BY: AE** **DECLINATION:** -90

DEPTH (m)		DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
FROM	TO		
0	1	Orange-brown clay + 20% orange-brown weathered & oxidised rock chips	200
1	2	40% orange-brown clay + light green & orange-brown weathered & oxidised basalt chips.	120
2	3	40% orange-brown clay + light green & orange-brown fine-grained, strongly weathered & oxidised basalt chips.	50
3	4	40% orange-brown clay + light green & orange-brown fine-grained, strongly weathered & oxidised basalt chips.	0
4	5	60% orange-brown plastic clay + green-brown & orange-brown oxidised basalt chips.	100
5	6	35% orange-brown clay + strongly weathered & oxidised basalt chips.	40
6	7	20% orange-brown clay + green-black & orange-brown, weakly oxidised, fine-grained basalt chips.	50
7	8	Weakly oxidised green-black, fine-grained Tertiary basalt chips.	100
8	9	Weakly oxidised green-black, fine-grained Tertiary basalt chips.	80
9	10	Weakly oxidised green-black, fine-grained Tertiary basalt chips.	200
10	11	Moderately oxidised green-black & orange-brown, fine-grained Tertiary basalt chips.	300

Rangott Mineral Exploration Pty Ltd **PERCUSSION DRILL LOG** for **Hanson Construction Materials**

SITE: East Guyong **SHEET** 1 **OF** 1 **COLLAR CO-ORDS:** 709114mE 6301485mN GDA94

PROJECT: Lyndon Quarry **AZIMUTH:** - **Date Drilled:** 1/8/12

HOLE No: GUY044 **LOGGED BY:** AE **DECLINATION:** -90

DEPTH (m)		DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
FROM	TO		
0	1	Orange-brown clay (60%) + fresh, oxidised & very weathered basalt chips	100
1	2	Orange-brown clay (10%) + moderately oxidised, orange-brown & green-black basalt chips.	100
2	3	Weakly oxidised green-black, fine-grained Tertiary basalt chips.	150
3	4	Fresh, green-black, fine-grained basalt.	200
4	5	Slightly oxidised, green-grey-black, fine-grained basalt	200
5	6	Slightly oxidised, green-grey-black, fine-grained basalt	200
6	7	Fresh, green-grey-black, fine-grained basalt.	200
7	8	Fresh, green-grey-black, fine-grained basalt.	200
8	9	Fresh, green-grey-black, fine-grained basalt.	100
9	10	Fresh, green-grey-black, fine-grained basalt.	100
10	11	Fresh, green-grey-black, fine-grained basalt.	100
11	12	Fresh, green-grey-black, fine-grained basalt. Rare nepheline? phenocrysts to 2mm	400
12	13	Fresh, green-grey-black, fine-grained basalt.	300
13	14	Fresh, green-grey-black, fine-grained basalt. Rare translucent phenocrysts to 2mm	400
14	15	Fresh, green-grey-black, fine-grained basalt.	350
15	16	Fresh, green-grey-black, fine-grained Tertiary basalt with rare nepheline? phenocrysts to 2mm	400

Rangott Mineral Exploration Pty Ltd **PERCUSSION DRILL LOG** for **Hanson Construction Materials**

SITE: East Guyong **SHEET** 1 **OF** 1 **COLLAR CO-ORDS:** 709133mE 6301486mN GDA94

PROJECT: Lyndon Quarry **AZIMUTH:** - **Date Drilled:** 30/7/12

HOLE No: GUY045 **LOGGED BY: AE** **DECLINATION:** -90

DEPTH (m)		DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
FROM	TO		
0	1	50% orange-brown clay + strongly weathered & oxidised green-orange-brown rock chips	150
1	2	60% orange-brown clay + strongly weathered & oxidised rock chips	150
2	3	10% orange-brown clay + weakly oxidised, fine-grained green-black Tertiary basalt chips	200
3	4	Weakly oxidised, fine-grained green-black basalt chips	300
4	5	Weakly oxidised, fine-grained green-black basalt chips	400
5	6	Weakly to moderately oxidised, green-black to orange-brown fine-grained basalt chips	200
6	7	Slightly oxidised, green-black, fine-grained basalt	400
7	8	Slightly oxidised, green-black, fine-grained basalt	400
8	9	Weakly oxidised, green-black, fine-grained basalt	200
9	10	Slightly oxidised, green-black, fine-grained basalt	300
10	11	Slightly oxidised, green-black, fine-grained basalt	400
11	12	Slightly oxidised, green-black, fine-grained basalt	500
12	13	Weakly oxidised, green-black, fine-grained basalt	500
13	14	Very slightly oxidised, green-black, fine-grained Tertiary basalt	300

Rangott Mineral Exploration Pty Ltd **PERCUSSION DRILL LOG** for **Hanson Construction Materials**

SITE: East Guyong **SHEET** 1 **OF** 1 **COLLAR CO-ORDS:** 709160mE 6301486mN GDA94

PROJECT: Lyndon Quarry **AZIMUTH:** - **Date Drilled:** 30/7/12

HOLE No: GUY046 **LOGGED BY:** **AE** **DECLINATION:** -90

DEPTH (m)		DESCRIPTION OF RETURNS	K (mag. susc. x 10^{-5} SI units
FROM	TO		
0	1	Orange-brown clay + minor (approx.10%) strongly weathered & oxidised rock chips	300
1	2	Orange-brown plastic clay + minor (approx.5%) weathered rock chips	220
2	3	Green-orange-brown clay + rare (approx.1%) weathered rock chips	200
3	4	Green-orange-brown clay + rare (approx.1%) weathered rock chips	50
4	5	Green-orange-brown clay + minor (approx.5%) weathered rock chips	50
5	6	Green-orange-brown clay + minor (approx.5%) weathered rock chips	50
6	7	50% green-orange-brown clay + 50% green-orange-brown weathered & oxidised rock chips	200
7	8	50% clay + orange-green-brown strongly weathered & oxidised basalt chips	300
8	9	Moderately oxidised, fine-grained Tertiary basalt chips. Minor (approx 5%) clay	350
9	10	Weakly oxidised, fine-grained green-black Tertiary basalt.	400
10	11	Weakly oxidised, fine-grained green-black Tertiary basalt.	430

Rangott Mineral Exploration Pty. Ltd.
ABN 36 002 563 825

for

HANSON CONSTRUCTION MATERIALS

REPORT on DRILLING PROGRAMMES

at the

PLANNED LYNDON QUARRY SITE
(East Guyong, NSW)

July - August, 2012.

APPENDIX III

AEC Environmental - Mineral Identification Report no. 67722

AEC Environmental

MINERAL IDENTIFICATION REPORT No. 67722

1. INTRODUCTION

Drill chip samples were received from Max Rangott of Rangott Mineral Exploration Pty Ltd with a request for determination the presence of any asbestiform minerals. The Reference was RME/LYND/012

2. PROCEDURE

The samples were air-dried and cursorily examined using a stereomicroscope. A representative portion was pulverized a small portion examined using a polarized light microscope. Particular attention was given to particles that may be classed as asbestos fibres, using the classification of being less than 1 micrometer in width and at least 20 micrometers in length. A separate portion was analysed by X-ray diffraction to identify the minerals present.

3. RESULTS

MG BH2, 7.5-10.0m
This is a sample of green clay and off-white gravel. The amphibole present occurs as blocky and stubby elongated particles which are too coarse to be classed as asbestos-sized

MG BH3, 7.5-10.0m
This is a sample of green clay and off-white gravel. The amphibole present occurs as elongated particles, a small proportion of which are fine enough and long enough to be classed as asbestos-sized

MG BH4, 8.5-10.0m
This is a sample of brown clay. The amphibole present in low abundance occurs as elongated particles, a small proportion of which are fine enough and long enough to be classed as asbestos-sized

MG BH5, 7.5-10.0m
This is a sample of green clay and off-white gravel. The amphibole present occurs as elongated particles, a small proportion of which are fine enough and long enough to be classed as asbestos-sized

LA-50, 4.0-5.2m
This is a sample of brown sand and off-white gravel. No fibres were detected and no amphibole was detected by XRD

LA-74, 2.0-3.0m
This is a sample of brown sand and off-white gravel. No fibres were detected and no amphibole was detected by XRD

LA78, 2.8-3.0m
This is a sample of pale green and brown clay. The amphibole present in low abundance occurs as elongated particles which are too coarse to be classed as asbestos-sized

TESTING OFFICER: Michael Till (Senior Mineralogist)
REPORT DATE: 21 August 2012

AEC Environmental Pty Ltd 12 Greenhill Road, Wayville SA 5034 PO Box 582 Unley SA 5061
T (08) 8299 9955 F (08) 8299 9954 E aec@aecaust.com.au W www.aecaust.com.au ABN 31130561358

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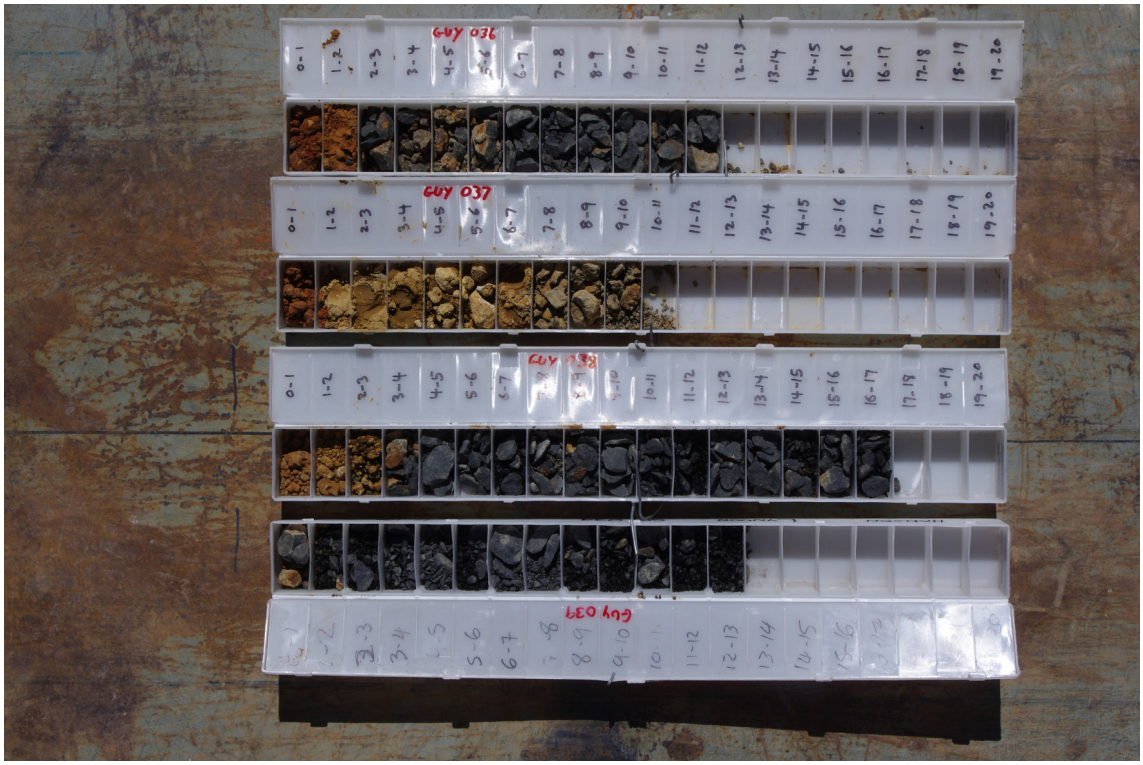
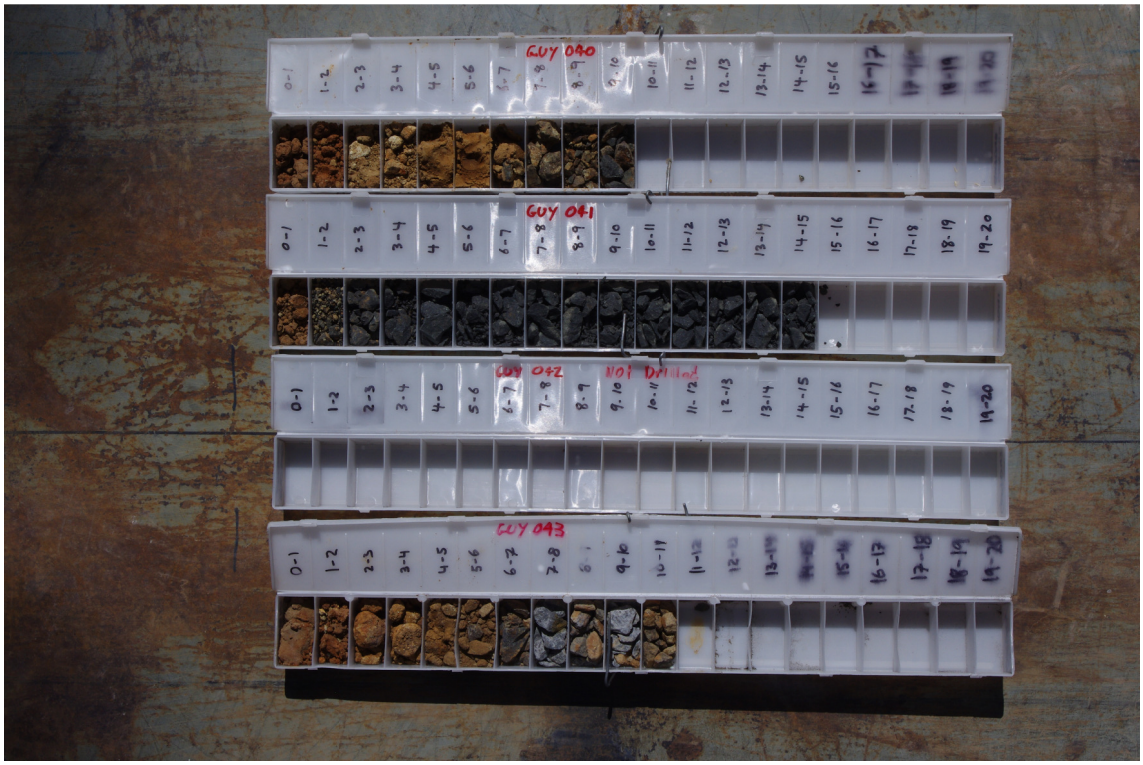
APPENDIX IV

Photographs of Reference Chip Samples for Percussion and Geotechnical Holes

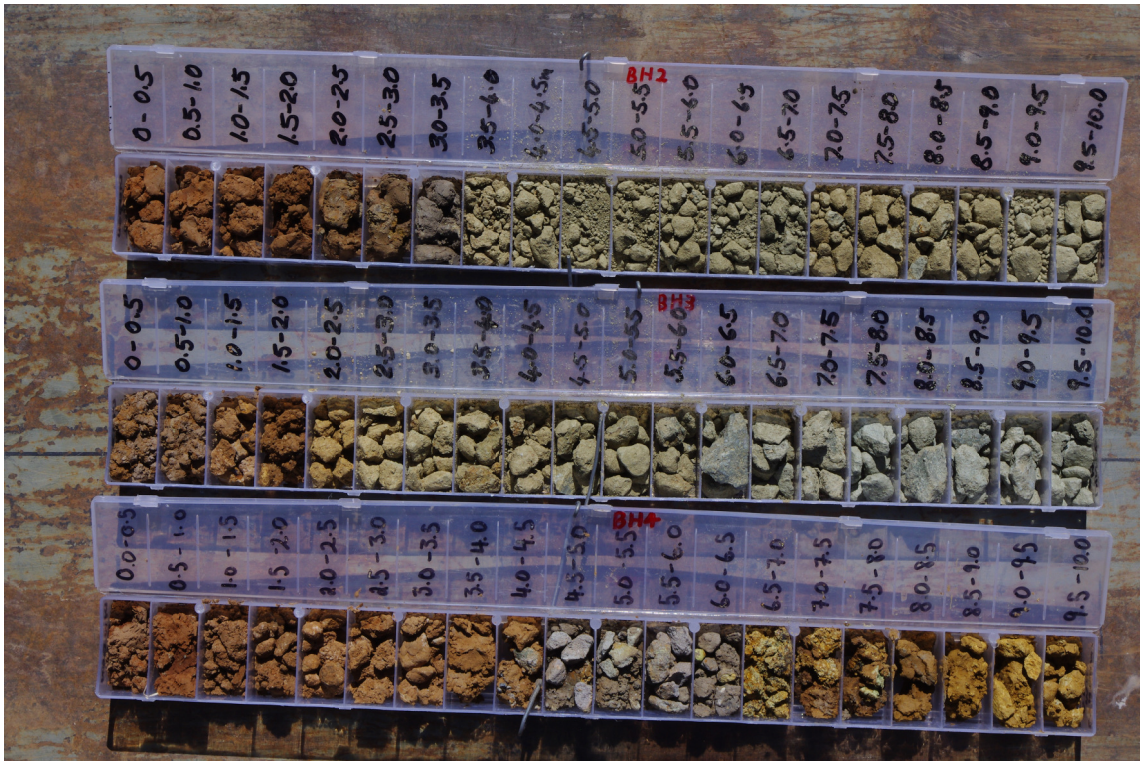
GUY028
GUY029
GUY 030
GUY 031

GUY 032
GUY 033
GUY 034
GUY 035


GUY 036
GUY 037
GUY 039


GUY 040
GUY 041
GUY 042
Not Drilled
GUY 043


0-1
1-2
2-3
3-4
4-5
5-6
6-7
7-8
8-9
9-10
10-11
11-12
12-13
13-14
14-15
15-16
16-17
17-18
18-19
19-20
GUY 085
GUY 085
GUY 085


BH2
0-0.5
0.5-1.0
1.0-1.5
1.5-2.0
2.0-2.5
2.5-3.0
3.0-3.5
3.5-4.0
4.0-4.5
4.5-5.0
5.0-5.5
5.5-6.0
6.0-6.5
6.5-7.0
7.0-7.5
7.5-8.0
8.0-8.5
8.5-9.0
9.0-9.5
9.5-10.0
BH3
0-0.5
0.5-1.0
1.0-1.5
1.5-2.0
2.0-2.5
2.5-3.0
3.0-3.5
3.5-4.0
4.0-4.5
4.5-5.0
5.0-5.5
5.5-6.0
6.0-6.5
6.5-7.0
7.0-7.5
7.5-8.0
8.0-8.5
8.5-9.0
9.0-9.5
9.5-10.0
BH4
0.0-0.5
0.5-1.0
1.0-1.5
1.5-2.0
2.0-2.5
2.5-3.0
3.0-3.5
3.5-4.0
4.0-4.5
4.5-5.0
5.0-5.5
5.5-6.0
6.0-6.5
6.5-7.0
7.0-7.5
7.5-8.0
8.0-8.5
8.5-9.0
9.0-9.5
9.5-10.0


BH5
0-0.5
0.5-1.0
1.0-1.5
1.5-2.0
2.0-2.5
3.5-3.0
3.0-3.5
3.5-4.0
4.0-4.5
6.5-7.0
8.5-9.0
9.0-9.5
9.5-10.0
BH6
1.0-1.5
1.5-2.0
BH7
0.2-0.5
0.5-1.0

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APPENDIX V

Drillholes Survey Data

(Updated 02/08/12)

Hole Type	Hole ID	East GDA	North GDA	Collar RL	Bottom of Hole RL	Total Depth (m)
Percussion	GUY028	709450.89	6300969.03	939.53	927.53	12.00
Percussion	GUY029	709433.28	6301007.03	940.06	929.06	11.00
Percussion	GUY030	709398.73	6301070.24	936.53	927.53	9.00
Percussion	GUY031	709386.67	6301097.91	932.99	926.99	6.00
Percussion	GUY032	709093.11	6301369.89	938.86	926.86	12.00
Percussion	GUY033	709113.21	6301370.01	936.58	926.58	10.00
Percussion	GUY034	709132.84	6301369.91	934.42	926.42	8.00
Percussion	GUY035	709097.10	6301399.75	941.72	926.72	15.00
Percussion	GUY036	709120.09	6301400.14	938.75	926.75	12.00
Percussion	GUY037	709139.91	6301399.94	936.00	926.00	10.00
Percussion	GUY038	709102.18	6301427.82	943.09	926.09	17.00
Percussion	GUY039	709124.14	6301428.01	939.77	926.77	13.00
Percussion	GUY040	709144.98	6301428.00	935.67	925.67	10.00
Percussion	GUY041	709115.16	6301455.62	941.55	926.55	15.00
Percussion	GUY042	709126.98	6301456.14	940.01		not drilled
Percussion	GUY043	709144.94	6301456.19	936.69	925.69	11.00
Percussion	GUY044	709114.31	6301485.48	942.18	926.18	16.00
Percussion	GUY045	709132.83	6301485.96	939.83	925.83	14.00
Percussion	GUY046	709150.06	6301486.48	936.67	925.67	11.00
Percussion	GUY047	709473.17	6300924.06	938.935		not drilled
Auger	LA41	709246.59	6301091.95	935.61	926.61	9.00
Auger	LA42	709249.61	6301106.76	933.87	925.87	8.00
Auger	LA43	709208.19	6301127.40	933.24	927.24	6.00
Auger	LA44	709221.20	6301152.75	930.31	925.31	5.00
Auger	LA45	709262.19	6301133.11	930.50	925.50	5.00
Auger	LA46	709234.47	6301129.60	931.75	925.75	6.00
Auger	LA47	709147.30	6301173.55	934.11	926.11	8.00
Auger	LA48	709109.14	6301228.84	934.85	926.85	8.00
Auger	LA49	709125.83	6301230.48	933.16	926.16	7.00
Auger	LA50	709122.68	6301252.85	932.38	927.18	5.20
Auger	LA51	709106.04	6301249.55	934.01	926.01	8.00
Auger	LA52	709113.00	6301261.27	933.03	927.03	6.00
Auger	LA53	709119.67	6301273.00	932.03	928.93	3.10
Auger	LA54	709102.76	6301269.82	933.80	926.80	7.00
Auger	LA55	709113.86	6301284.00	932.25	926.25	6.00
Auger	LA56	709120.09	6301300.95	931.41	926.41	5.00
Auger	LA57	709122.89	6301318.54	931.48	926.48	5.00
Auger	LA58	709129.36	6301316.51	930.95	925.95	5.00
Auger	LA59	709130.57	6301329.23	931.42	926.42	5.00
Auger	LA60	709134.54	6301340.91	931.69	925.69	6.00
Auger	LA61	709165.05	6301362.00	930.61	925.61	5.00
Auger	LA62	709170.82	6301362.10	930.11	926.11	4.00
Auger	LA63	709171.93	6301352.98	929.60	925.60	4.00
Auger	LA64	709164.93	6301351.91	930.03	926.03	4.00
Auger	LA65	709176.04	6301328.14	928.43	925.43	3.00
Auger	LA66	709169.87	6301326.83	928.62	925.62	3.00

Hole Type	Hole ID	East GDA	North GDA	Collar RL	Bottom of Hole RL	Total Depth (m)
Auger	LA67	709171.99	6301317.03	928.27	925.27	3.00
Auger	LA68	709177.04	6301318.03	928.08	926.08	2.00
Auger	LA69	709149.95	6301304.97	929.33	926.33	3.00
Auger	LA70	709149.88	6301292.98	929.49	925.49	4.00
Auger	LA71	709159.10	6301293.00	929.09	926.09	3.00
Auger	LA72	709163.06	6301278.05	929.02	926.02	3.00
Auger	LA73	709150.91	6301275.87	929.62	925.62	4.00
Auger	LA74	709158.06	6301270.95	929.34	926.34	3.00
Auger	LA75	709151.96	6301263.98	929.95	925.95	4.00
Auger	LA76	709164.94	6301266.03	929.14	926.14	3.00
Auger	LA77	709278.40	6301177.03	927.05	925.05	2.00
Auger	LA78	709276.72	6301172.41	927.42	924.42	3.00
Auger	LA79	709297.64	6301163.64	927.44	925.44	2.00
Auger	LA80	709293.52	6301153.51	928.10	925.10	3.00
Auger	LA81	709311.68	6301145.69	928.39	925.39	3.00
Auger	LA82	709316.27	6301155.57	927.50	925.50	2.00
Auger	LA83	709329.55	6301149.74	927.77	925.77	2.00
Auger	LA84	709332.35	6301154.78	927.48	925.48	2.00
Auger	BH01	709104.71	6301261.01	933.752	923.75	10.00
Auger	BH02	709162.19	6301272.53	928.901	918.90	10.00
Auger	BH03	709270.33	6301286.05	923.869	913.87	10.00
Auger	BH04	709198.55	6301379.25	929.193	919.19	10.00
Auger	BH05	709305.73	6301154.47	927.648	917.65	10.00
Auger	BH06	709586.80	6300375.26	935.831	933.83	2.00
Auger	BH07	709545.93	6300778.02	937.557	935.56	2.00

Rangott Mineral Exploration Pty. Ltd.
ABN 36 002 563 825

for

HANSON CONSTRUCTION MATERIALS

REPORT on DRILLING PROGRAMMES

at the

PLANNED LYNDON QUARRY SITE
(East Guyong, NSW)

July - August, 2012.

APPENDIX VI

Percussion Hole Materials Classification (M. Gear)

HOLE ID	FROM (m)	TO (m)	CLASSIFICATION
GUY028	0	1	SOIL
GUY028	1	3	RB
GUY028	3	12	AGG
GUY029	0	1	SOIL
GUY029	1	4	SUBS
GUY029	4	7	RB
GUY029	7	11	AGG
GUY030	0	1	SOIL
GUY030	1	3	SUBS
GUY030	3	5	RB
GUY030	5	9	AGG
GUY031	0	1	SOIL
GUY031	1	3	SUBS
GUY031	3	6	RB
GUY032	0	1	SOIL
GUY032	1	4	SUBS
GUY032	4	7	RB
GUY032	7	12	AGG
GUY033	0	1	SOIL
GUY033	1	5	SUBS
GUY033	5	10	RB
GUY034	0	1	SOIL
GUY034	1	6	SUBS
GUY034	6	8	RB
GUY035	0	1	SOIL
GUY035	1	3	SUBS
GUY035	3	15	AGG
GUY036	0	1	SOIL
GUY036	1	2	SUBS
GUY036	2	6	RB
GUY036	6	12	AGG

HOLE ID	FROM (m)	TO (m)	CLASSIFICATION
GUY037	0	1	SOIL
GUY037	1	7	RB
GUY037	7	10	AGG
GUY038	0	1	SOIL
GUY038	1	3	SUBS
GUY038	3	4	RB
GUY038	4	17	AGG
GUY039	0	1	SOIL
GUY039	1	13	AGG
GUY040	0	1	SOIL
GUY040	1	7	SUBS
GUY040	7	9	RB
GUY041	0	1	SOIL
GUY041	1	2	SUBS
GUY041	2	3	RB
GUY041	3	15	AGG
GUY043	0	1	SOIL
GUY043	1	6	SUBS
GUY043	6	8	RB
GUY043	8	11	AGG
GUY044	0	1	SOIL
GUY044	1	2	SUBS
GUY044	2	4	RB
GUY044	4	16	AGG
GUY045	0	1	SOIL
GUY045	1	2	SUBS
GUY045	2	4	RB
GUY045	4	14	AGG
GUY046	0	1	SOIL
GUY046	1	8	SUBS
GUY046	8	11	RB