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EL 4795

MOUNT BARRY

**ANNUAL REPORTS AND FINAL REPORT TO LICENCE
SURRENDER, FOR THE PERIOD 1/11/2011 TO 2/9/2014**

Submitted by
Kush Corp. Pty Ltd
2014

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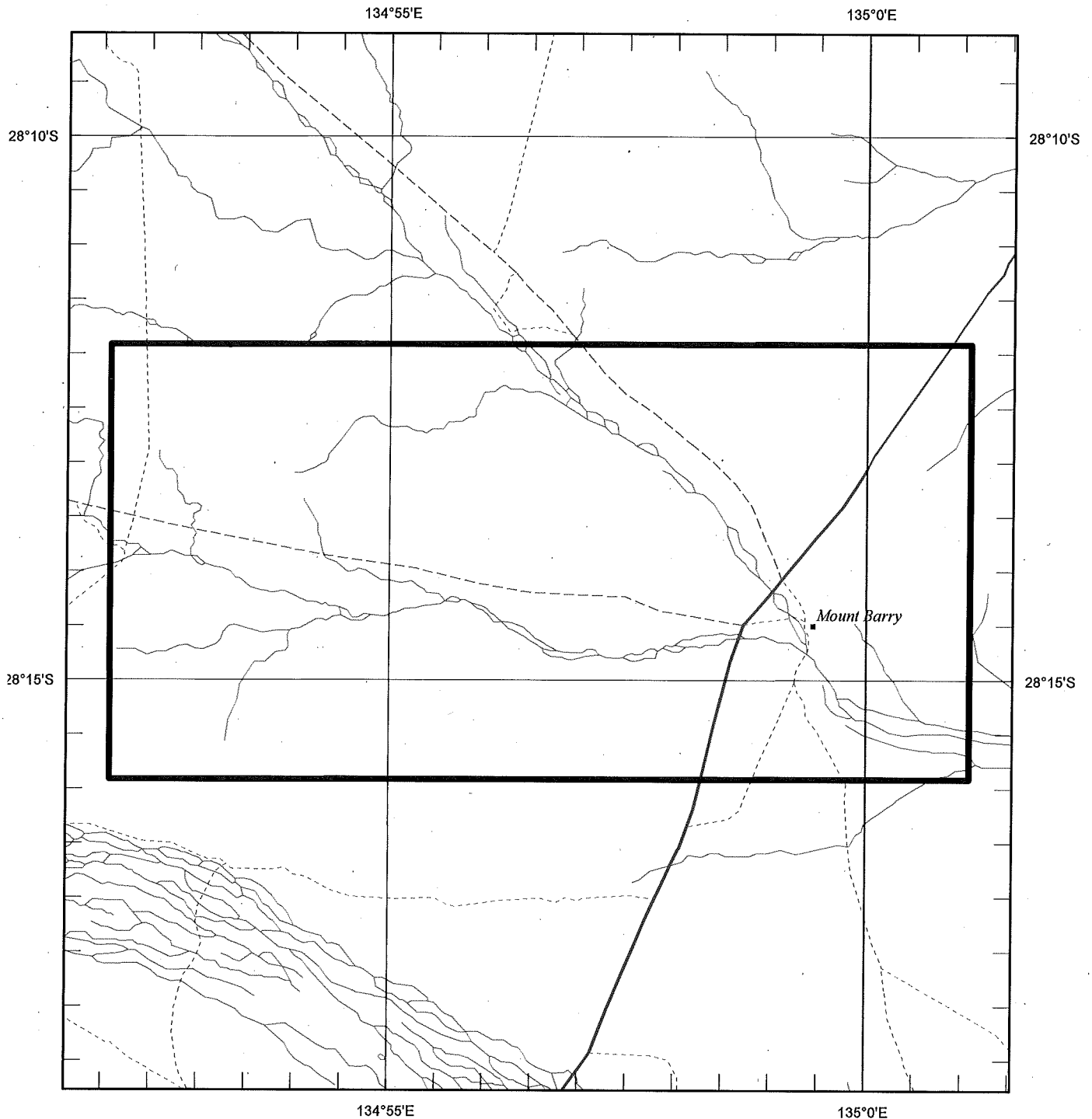
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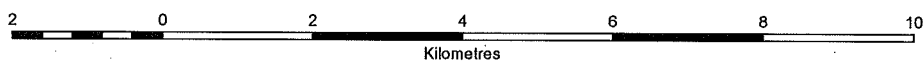


Government of South Australia
Department of State Development

SCHEDULE A



SCALE 1 : 100 000



LICENCE BOUNDARIES IN : DATUM AGD66



APPLICANT : KUSH CORPORATION PTY LTD

FILE REF : 269/10

TYPE : MINERAL ONLY

AREA : 109 sq km (approx)

1 : 250 000 MAPSHEETS : MURLOOCOPPIE WARRINA

LOCALITY : MOUNT BARRY AREA - approx 90km NNE of Coober Pedy

DATE GRANTED: 1-Nov-2011

DATE EXPIRED: 31-Oct-2012

EL NO: **4795**

KUSH CORPORATION PTY LTD.

SE WINTINNA COAL DEPOSIT – EL 4795

ANNUAL TECHNICAL REPORT for EL 4795

Investigation Period: — 2010 – 1/1/2012



Drilling of KC001 - Mt Barry 2012

DRILLING INVESTIGATION of SE WINTINNA COAL DEPOSIT



Prepared by: JLC Exploration Services

Disclaimer

This document has been compiled by JL Curtis of JLC Exploration Services, as a professional; service, from information supplied by Kush Corporation Pty. Ltd. and public domain GIS information available through the DMITRE SARIG portal, at the time of writing.

The technical information contained herein as supplied by Kush Corporation has largely been derived from professionally prepared reports by third parties and has been incorporated in good faith.

The project has been built around the large body of data accumulated by Meekatharra Minerals and related contributors since coal was first investigated in the tenure region beginning in circa 1980. Neither JLC Exploration or Kush Corporation has reason to believe that it is not accurate, reliable or complete as reported to DMITRE archives. Accordingly no warranties are offered in respect of such historical information.

JLC Exploration separately makes no representation or warranty as to the accuracy, reliability or completeness of the information in this document since it has had no active responsibility in pre & post assessments or field operations.

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Executive Summary

Near Oodnadatta in 1980 Meekatharra Minerals Pty. Ltd, which later became known as the South Australian Coal Corporation Pty. Ltd., commenced the evaluation of fully concealed Permian hosted coal resources. This work discovered significant coal deposits within what has become known as the Arckaringa Basin. The environs of the northernmost three deposits have become the focus of Kush Corporation Pty Ltd attention and exploration rights have been acquired.

During the currency period of this report a regional assessment of historical public domain data commissioned by Kush Corporation has been acted upon through the planning and initiation of a drilling based assessment of the southern extremity of the Wintinna Coal Deposit (measuring ~64 km x 17 km) that lies within EL 4795.

This report collates the regional assessment and results of one successful out of a planned phase 1 programme of four drill holes. The regional assessment identifies a potential 'all seams' exploration target of greater than 300 M tonnes possibly occurring within the EL 4795 and conjoined EL 4799 areas. The new drill hole, which is located quite near one of the two pre-existing drill holes confirms the Arckaringa Seam is the major contributor to the potential resources with a thickness of greater than 5m. The post drilling memo by the consultant drilling programme supervisor suggests that the contribution of the Archaringa Coal Seam to the conceptual exploration target is in the order of 90-100 M tonnes.

Uncertainty prevails however because the drilling density remains poor and possibly unrepresentative, the raw coal in-situ density is an historical assumption without underpinning measurements and no actual coal quality assay data exists for this part of the Wintinna deposit. The supervising consultant recommends, that despite the inabilities of the drilling company to meet the challenges of rubbly unconsolidated shallow surface materials that forced their work abandonment, the designed programme be continued to completion.

This author on appreciating the project data needs, during report compilation, has identified that moving forward on the basis of exploration targets established from unsubstantiated assumptions is a risky stance for Kush Corporation Pty. Ltd. that could be alleviated by modifying the phase 1 open hole programme to also acquire Arckaringa Seam drill core. Data thus acquired will provide order of magnitude guidance on the thus far assumed parameters.

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1.0 INTRODUCTION & PREVIOUS INVESTIGATIONS

Coal was investigated by Meekatharra Minerals Ltd commencing in 1980. Meekatharra Minerals which became the South Australian Coal Corporation finally relinquished its interest in the region in 1990 with the resource assets being on transferred to new owners. The three major deposits in the area of interest, Murloocoppie, Wintinna and Wintinna East are currently in the dominant possession of Arckaringa Energy Pty Ltd. They are hosted by the Mount Toondina Formation of Early-Late Permian age. Kush Corporations **EL 4795** (& EL 4799), the focus of this report, cover the south east extremity of the centrally placed Wintinna Deposit. The 1980-1990 investigations are summarised in DME 1991.

2.0 LOCATION & ACCESS

The Arckaringa Coal Resources are located in Central Northern South Australia 90 km south east of Oodnadatta, a community located on the former Ghan Railway route, from Port Augusta to Alice Springs. The locality is serviced by the replacement railway line 74 km km to the south west but road access is via Hopeful Hill on the Stuart Highway ~ 90 km SSW (Figure 1).

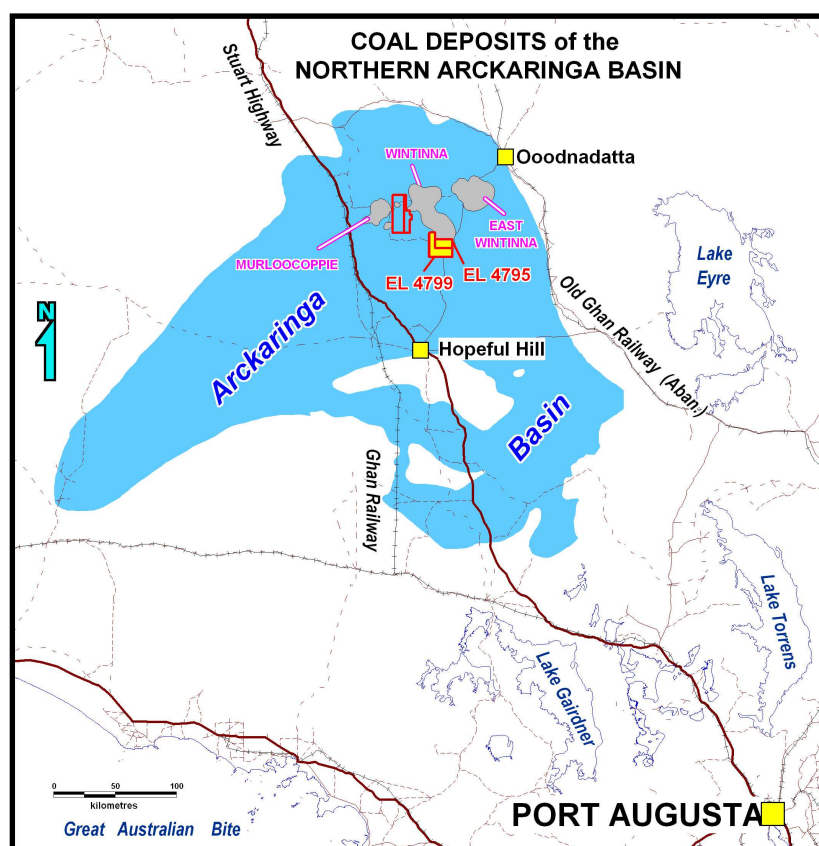


Figure 1: Location Diagram of Mt Barry Area, Arckaringa Basin

3.0 ARCKARINGA BASIN ~ COAL GEOLOGY

The Arckaringa Basin contains an estimated 10 billion tonnes of low grade sub-bituminous coals which have features (coal thickness, continuity and suitable depth) which make them appealing for CSM feasibility projects. The coal is hosted by Mount Toondina Formation that is equivalent to Patchawarra Fm in the Cooper Basin and Purni Formation in the Pedirka Basin. (Drexel et al 1995)

The Arckaringa Basin has 8 persistent coal seams named from top to bottom: - ISOLATION (**IS**); PETENTIE (**PE**); GOORIKIANA (**GO**); MIRACKINA (**MI**); ARCKARINGA (**AR**); MT. BARRY (**MT**); NILKINNA (**NI**) AND WADDIKEE (**WA**). Where seams exhibit splitting, coded a suffixes ***U** & ***L** are used. (see Figure 2)

3.1 Wintinna Deposit

The thickness of overburden to top coal seam ranges from 140 to 240 m and the average cumulative thickness is 25 m over a stratigraphic interval of 75 m.

Arckaringa Energy, the current owner quotes Wintinna quality data as being:-

Parameter	Value	Unit
Total moisture:	36.60	%
Raw ash:	8.20	%
Volatile matter:	23.60	%
Total Sulphur:	1.19	%
Chlorine:	0.03	%
Specific energy:	17.10	Mj/kg

TABLE 1: Wintinna Coal Quality Data (Naidoo)

Quality Parameter (air-dried basis)	Min	Max	Var	Units
Moisture	10	13	3	%
Ash	7	10	3	%
Volatiles	28	39	11	%
Fixed Carbon*	55	38	17	%
Specific Energy	21	28	7	Mj/Kg
Total Sulphur	1.5	2	0.5	%

* Note: Fixed Carbon Calculated by Difference

Compiled from open source data

TABLE 2: “Wintinna” Coal Quality Variance Data Prediction (Naidoo)

Kush Corporation commissioned an assessment of the coal resources of the region by Minarco MineConsult Pty Ltd of Sydney (*now RungePincockMinarco Limited*) to provide forecasts of potential resources predicted from historical data over several areas of interest. (Naidoo 2011, Wintinna = Area 2). (G. Naidoo, the CP consultant employed by Runge Limited, was tasked as a service to Minarco MineConsult.)

Naidoo determined that historical exploration indicates that the SE portion Wintinna Deposit extends into EL 4795 with seam thicknesses in excess of 5 m cumulative but there are only two drill holes BR 27 and OP/ED 3 that occur within the title area. However the drilling for the Wintinna Deposit extends from MT Barry HS in a north westward direction for 59 km (see Figure 1).

This work used an unsubstantiated a raw coal relative density of 1.35 g/cm^3 and determined that uncertainties in coal quality as listed in table 2 could be expected.

The first stage objective of Kush Corporation is therefore to validate and dimension the inferred extent of the Wintinna Deposit within EL 4795 and any adjacent extent on co-joined EL 4799.

The second objective is to assess coal quality and properly measure the in-situ coal density.

Thus far Kush Corporation has initiated drilling to satisfy the first objective but the plan to drill three or more drill holes ran into difficulties when un-consolidated surface materials proved too unstable to establish top collars for deeper drilling and the programme was curtailed with only one successfully completed hole. The successful drill hole, **KC001**, is therefore the specific focus of this report.

4.0 STRATIGRAPHIC MODEL

(After Naidoo 2011, Drexal et al 1995)
The Permian Arckaringa Basin comprises intracratonic deep marginal grabens, or half-grabens, with a large central area over shallow basement (Figure1). It lies generally to the west of the Peake and Denison Ranges and to the east of the Officer Basin. Its southern boundary on-laps the Gawler Craton over which it was formerly more extensive.

Basement rocks are mainly Pre-Cambrian crystalline rocks, and some early Paleozoic sediment in the Northern Boothanna Trough, and in Mount Willoughby area. The north-eastern region of the basin is overlain by (generally) thin Tertiary sediments and Pleistocene regolith.

Locally however it is unconformably covered by successive Jurassic & Cretaceous units, the Alibuckina Sandstone\ Cadna-owie Formation, Maree Subgroup and Bulldog Shale. The first named unit being an aquifer of the Great Artesian Basin.

The Basin sediments comprise up to 1500m of coarse basal clastics, dark grey siltstones and fine grained sandstones with seams of coal.

Only the lower Permian is known in the Arckaringa Basin. The coal bearing Mount Toondina Formation occurs towards the top of the Lower Permian sequence.

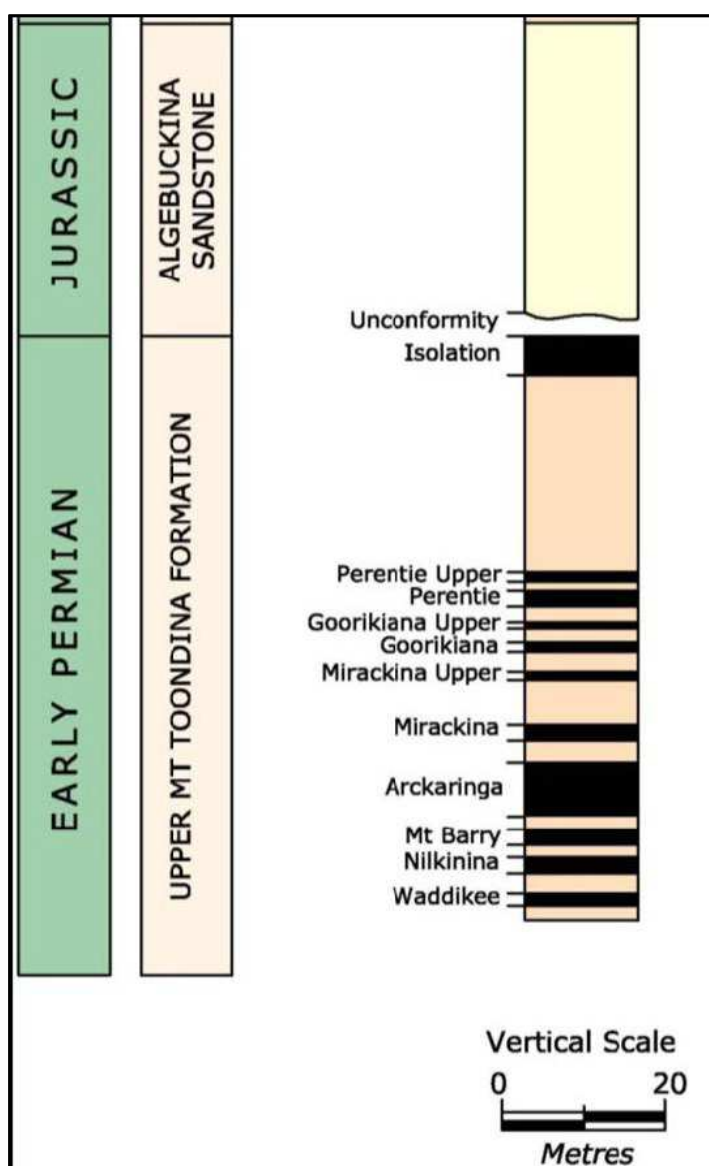


Figure 2: Mt. Toondina Formation Coal Seams

5.0 RESOURCE POTENTIAL (After Naidoo 2011)

(Mt Barry – Wintinna Deposit)

Referred to as Area 2 in Naidoo 2011, the Mt Barry area assessment was dependent on two drill holes BR 27 and BR 53 (OP/ED 3 was not used) guided by the overall statistics of the major portion of the deposit which lies to the north. (see Figures 1 & 4)

Naidoo determined that the **ISolation**, **PERentie**, **GOorikana**, and **MIRikina** seams are absent in BR 53, where the thickest intercepts of 1.19m and 0.95m occur in the **NIlkinna** and of **WADdikee** seams respectively. The **ISolation**, **NIlkinna** and of **WADdikee** seams are absent in BR 27 where the thickest intercepts of 1.4m, 1.35m, and 6.1m occur in the **PERentie**, **MIRikina Upper**, and **ARckaringa Lower** seams respectively (see Figure 2).

Naidoo's work ultimately concluded that an aggregate resource potential of between 300 and 610 Mtonnes could exist depending on the corresponding average thickness range of 8-15 m, and an assumed relative density of 1.35 g/cm³. Clearly the coal thickness is heavily weighted by that of the Lower Arckaringa 6.1 m intercept in BR 27. Naidoo points out that the forecast has low reliability

because of the wide drill hole spacing and evident seam correlation issues. (see Naidoo Tables 4.3 & 4.4)

Based on the Minarco-MineConsult report (Naidoo 2011) Kush Corporation engaged GEOS Mining Mineral Consultants to plan and implement drill testing of the ground. T. Bradbury, the appointed consultant designed a three phase programme for the NE corner of EL 4795. Phase one was four open holes and Phase 2 a combination of open and core hole drilling. Phase 3 was envisaged to be higher density drill-out programme capable of being used to generate a basis for reliable resource estimation (see Appendix 4).

4.0 FIELD PROGRAMME

It was agreed that the phase 1 programme would consist of four open drill holes. In the event only one hole was successfully drilled. GEOS consultant T. Bradbury compiled a technical report of the field operations from which essential passages and details have been extracted and placed within this report. (Bradbury 2012)

4.1 Aboriginal and Landholder Consents

A field party led by Sandra Jarvis - *Consultant Anthropologist*, and Fraser J Vickery - *Consultant Archaeologist* accompanied by Bill Lennon, Joseph Lennon, Barney Lennon jnr., Emily Austin, Emily Betts and Amanda Smith, representing the Antakirinja Matu-Yankunytjatjara people, viewed the four proposed drilling sites and their proposed access, on Saturday, 5th of May 2012. Final agreed locations and accesses were certified to be free of heritage conflict and approved. Gabriel Kushnir and Esther Kushnir, representing Kush Corporation accompanied the Inspection Survey Team (see Appendix 3).

Land holder notices were issued to Williams Cattle Company, Mount Barry Station and subsequently access to water for drilling operations was successfully negotiated.

4.2 Field Operations

Dean Milgate of Aust- Wide Drilling Services Pty Ltd of 22L Debeaufort Drive, Dubbo NSW, was engaged to provide drilling services and GAA Wireline of MT Barker, SA, to undertake down hole geophysical logging.

Ken & Nola Boland Backhoe Services was engaged to prepare the drill sites and Williams Cattle Company, Mount Barry Station undertook follow-up surface rehabilitation in accordance with DMITRE requirements. (See Appendix 2)

Drilling water was acquired from Mt Barry Station.

Field supervision on behalf of Kush Corporation was provided by Gabriel Kushnir and M Doyle. of GEOS Mining Mineral Consultants.

All personnel were accommodated at Mt Barry shearers' quarters.

Mud – rotary open hole drilling was carried out over the period 7-12 June 2012 inclusive as per the drilling statistics presented in table 3 as follows.

Hole ID	Hole Type	GDA94 Z53		AHD RL m	Survey Method	Total Depth m	Operations		Drilling Company	Supervising Geologist	Comments
		Easting	Northing				Commenced	Completed			
KC001	Mud Rotary	499,587	6,878,598	133	GPS	276	7/06/2012	11/06/2012	Aust-Wide	M. Doyle	Upon completion, the hole was grouted with cement
KC002	Mud Rotary	498,997	6,879,200	122	GPS	15	11/06/2012	12/06/2012	Aust-Wide	M. Doyle	Hole abandoned due to gravel jamming rods in casing causing integrity failure of casing
KC003	Mud Rotary	499,597	6,877,401	127	GPS	9	12/06/2012	12/06/2012	Aust-Wide	M. Doyle	Hole abandoned due to gravels falling in, unable to set casing. Issues also with sump collapse, risking rig safety.

TABLE 3: EL 4595 Drilling Statistics KC 001, KC 002, & KC 003 June 2012

Drill hole K001 was abandoned in accordance with DMITRE guidelines. (see Appendix 2)

MT BARRY EXPLORATION & GEOLOGY MAP

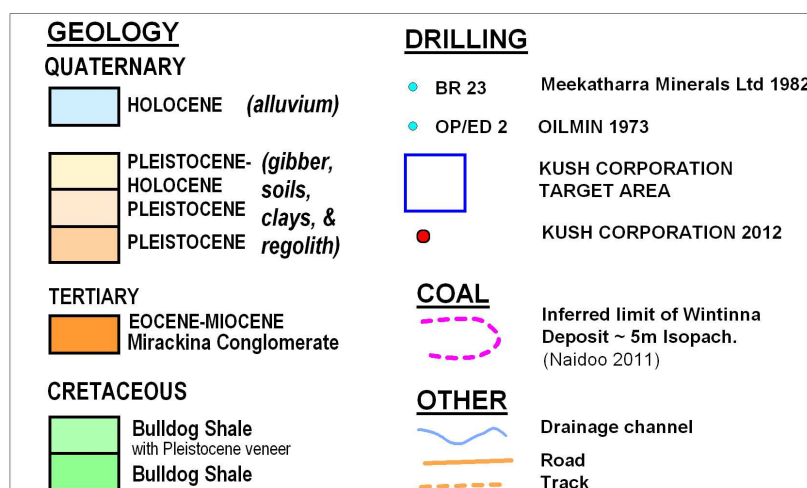
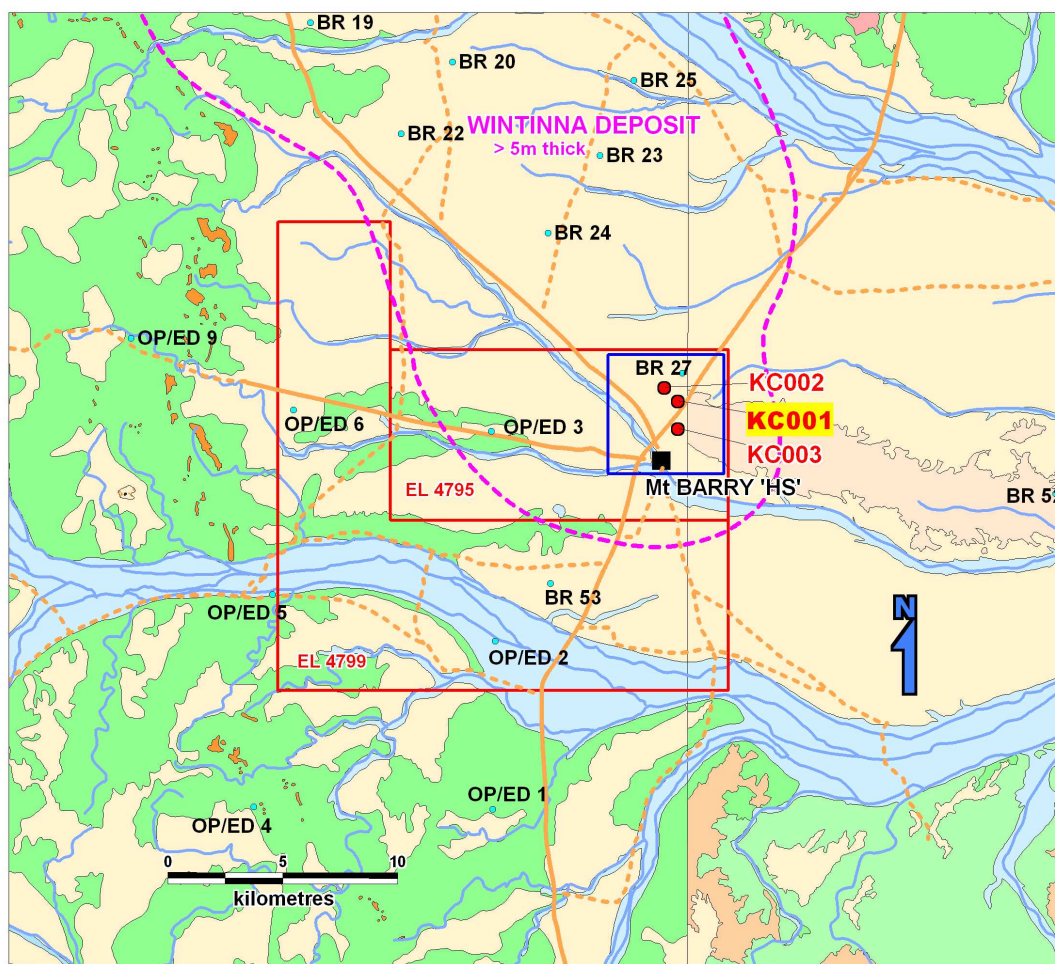


Figure 4: MT Barry Exploration and Geology Map

4.3 Drilling Results

4.3.1 KC 001

KC001, located 1km south of Meekatharra Minerals drill hole BR27, was drilled to a total depth of 276m. The Perentie, Goorikiana, Marackina, (upper and lower splits) and Mt Barry seams were intersected within the depth interval 170 - 217m.

Several thin (<1m thick) underlying seams were intersected below the Mt Barry Seam and have been tentatively identified as splits of the Nilkinna and Waddikee seams but the hole was not deep enough to preclude additional coal beds below TD leaving some doubt about these correlations.

The Arckaringa Seam was intersected at 200m depth and is split into an upper and lower unit by a 1.0 m thick grey mudstone band, with the upper coal section 0.72 m thick and the lower section 5.61m thick. This is similar to the intersection in BR 27.

All other seams intersected, generally range from 0.6 to 1.5m thick, with the Perentie, Mirackina and Waddikee seams split into two coal sub-units by mudstone bands (sometimes carbonaceous) around 0.7-1 m thick. (see summary in Table 4)

KC 001 COAL SEAM INTERCEPTS				
Seam	From (m)	To (m)	Thickness (m)	Comments
Perentie-1	170.16	171.38	1.22	Carbonaceous mudstone interburden
Perentie-2	172.09	172.63	0.54	
Goorikiana	190.59	192.09	1.50	
Mirackina-1	193.58	194.50	0.92	
Mirackina-2	195.45	195.85	0.40	
Arckaringa- Upper	198.97	199.69	0.72	
Arckaringa	200.69	206.30	5.61	
Mount Barry	216.04	216.89	0.85	
Nilkinina-1	231.44	232.05	0.61	
Nilkinina-2?	246.02	246.97	0.95	
Waddikee-1?	261.71	262.26	0.55	Carbonaceous mudstone interburden
Waddikee-2?	262.98	263.43	0.45	
Waddikee-3?	271.34	271.97	0.63	

TABLE 4: KC 001 Coal Seam Intercepts (GEOS Table 2)

4.3.2 KC 002

KC 002 was abandoned at 15 m depth as a result of collapsing unconsolidated Quaternary gravel. These alluvials could possibly be due to channel deposits associated with the nearby creek, observable in airborne imagery, that traverses Oodnadatta Road to the immediate south of the drill hole. The hole was later backfilled with excavated material from the in-ground sumps.

4.3.3 KC 003

KC 003 encountered similar problems to KC 002, and had to be abandoned at 9 m depth due to collapsing unconsolidated Quaternary gravels. The alluvials are possibly also associated with those from the same nearby creek mentioned for KC 002. The hole was later backfilled with excavated material from the in-ground sump.

Consequent upon this second failure the programme was curtailed without attempting the fourth planned drill hole.

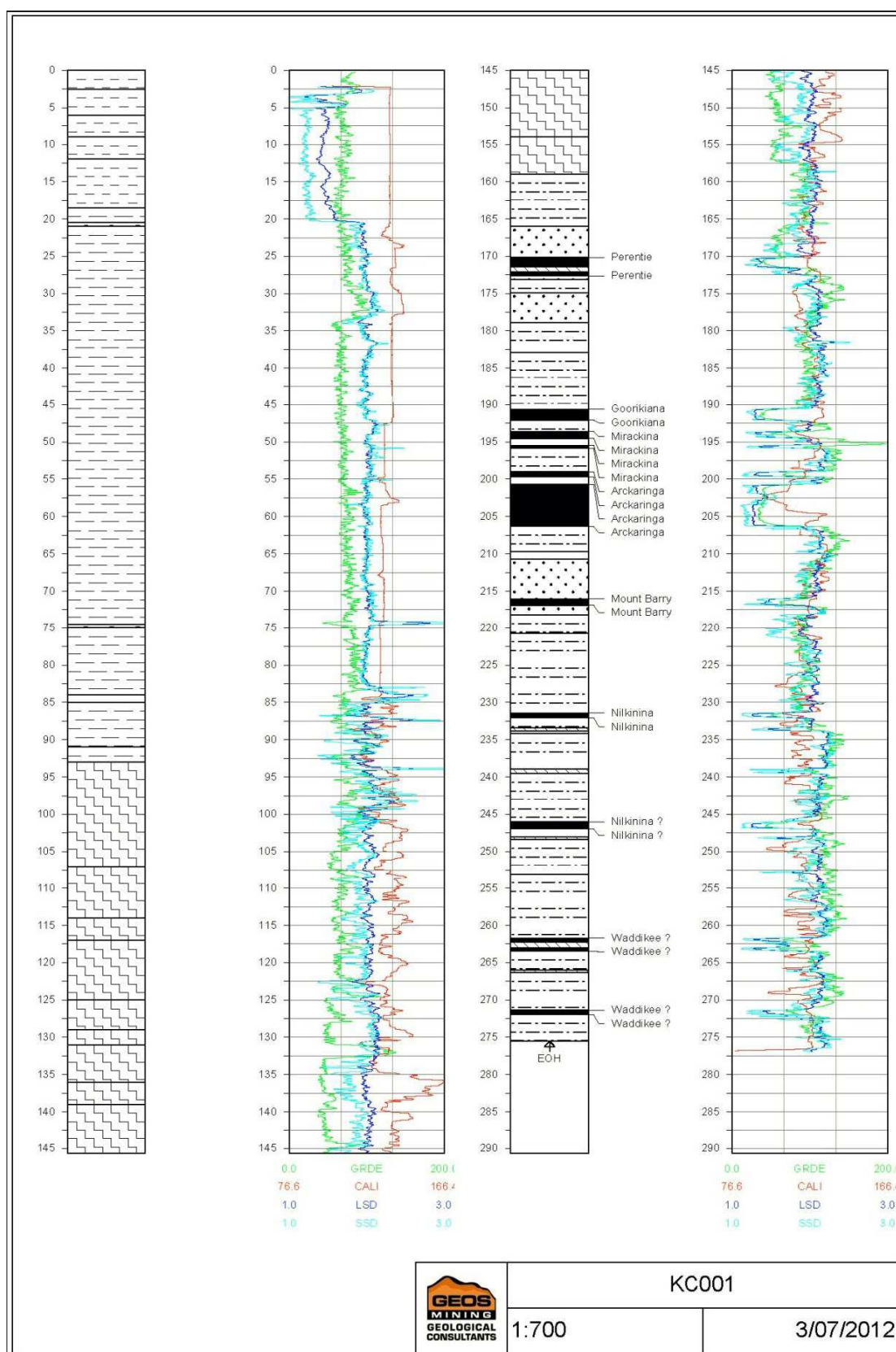
5.0 GEOLOGICAL INTERPRETATION

The results of KC 001 indicate that the Arckaringa main seam is of similar magnitude but 18 m shallower than in historical hole BR27, located ~1300 m to the north. There is insufficient drilling to establish if this is a trend or a localised fault related offset.

Equally there is insufficient evidence to suggest a southward trend of reducing Arckaringa Seam thickness is confirmed.

The un-restricted accumulated coal thickness in KC 001 is 15 m, and aggregate thickness of seams > 1.0 m thick is 8.3 m which increases to 10.2m if the Mirakina 1 and Nikinna 2 are added. These numbers are compatible with the Naidoo predictions. However if the apparent trend in declining thickness for the Arckaringa Seam is confirmed the size of the geological target that warrants investigation could become appreciably reduced as additional drilling is undertaken.

Based on an average seam thickness of 5 m over an area of 19 km² and using the assumed density of 1.35 g/cm³ T Bradbury of GEOS Mining Consultants suggests the Arckaringa Seam in north east EL 4795 could contain an Exploration Target of 90-100 Mtonnes of coal.



**Figure 4: KC 001 Mt Toodina Formation Coal Seams, Arckaringa Basin
Interpreted geophysical strip logs , scale ~ 1:700, (GEOS Mining Fig 6)**

6.0 CONCLUSIONS & RECOMMENDATIONS

6.1 Conclusions

- The Minarco MineConsult study of historical information identified verification of data accuracy including drill hole collar positioning as a concern.
- The Minarco MineConsult study also drew the conclusion that the lack of a reliable raw coal density was of major importance and needed addressing.
- The Minarco MineConsult study proposed that initial follow-up drilling to verify historical predictions should be on 4km x 4km grid base.
- Minarco MineConsult study demonstrates that in the Mt Barry area (ELs, 4795 & 4799) a conceptual exploration target could be 300-600 Mt of coal dependent on the average aggregate seam thickness, varying from 8-15m. Major uncertainty arises from there being only two contributing drill holes within the tenure area with heavy prediction reliance being placed on projection of trends from the north.
- The GEOS supervised drilling programme only succeeded in drilling one hole out of four locations and consequently there are now only three viable drill holes for assessing coal abundance.
- The **KC001** data confirms that the Arckaringa Seam is the major resource unit and it constitutes a conceptual exploration target of 90-130 Mt on the basis of an average seam thickness of 5 m over an area of 19 km², using the assumed density of 1.35 g/cm³.
- The GEOS report proposes that the original planned programme phase 1 be completed and reassessment of the resource potential proceed in advance of further subsequent drilling.
- The Aboriginal stakeholder inspection appears to have been thorough and further drilling within the target area on figure 4 should be able to proceed providing it meets the terms of the existing confidential agreement between Antakirinja Matu-Yankunytjatjara people and the Kush Corporation.

6.2 Recommendations

- GEOS: The Phase one drilling programme be completed and followed up with conceptual target reassessment.
- JLC: The phase one drilling programme be upgraded slightly by considering wedging off, to enable drill core acquisition through the Arckaringa Seam interval, from at least one drill hole.
- JLC: If coring is attempted protocols and personnel from Challenger Geological Services are recommended for core management to ensure maximum data is reliably obtained. Namely coal quality and density data that can be compared to down hole geophysical logs. The Challenger protocols have been designed and demonstrated to capture and preserve core in a pristine state from the time of core barrel retrieval to laboratory bench.

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Special Background Reference: used by *Minarco MineConsult, & GEOS Mining, Minerals Consultants*

Department of Mines and Energy, (DME) 1991. Progress Reports from 12/5/1980 to 30/11/1990. South Australian Coal Corporation Pty Ltd (Formerly Meekatharra Minerals Limited, Meekatharra Minerals (Australia) Limited.) and Bahoil Nominees Pty. Limited. exploration activities, DMITE open file envelope series No 5910.

Exploration Licence list for above reference: EL 1472, & EL1587 are of interest.

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EL 591, EL 983, EL 1530 -WOORONG CREEK
EL 686, EL 1095 - MT. BARRIE
EL 1472, EL 1587 - MT. BARRY
EL 961 - ALINYA
EL 1160 - MURLOOCOPPIE
EL 1493 - EVELYN CREEK**

List of Appendixes

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- Appendix 4:** 2012 Exploration Plan, Extract from Bradbury, T., 2012. (*.Pdf file)

APPENDIX 1.1

Geological Logs ***KC 001, KC 002 & KC 003***

KC 001

KC001 English Log																
Hole_ID	Seam	CDepth_from	CDepth_to	Interval	%Recovery	Major_Lithology	Minor_Lithology	%Minor	Lightness	Tint	Colour	Mottled	Grain_size	Texture	Qualifier	Weathering
KC001	0	2.5	2.5			Clay	Gravel	20	Moderate	Red	Brown	0		Sandy		Extremely weathered
KC001	2.5	6	3.5			Clay		10	Moderate	Orange	Cream	1		Sandy		Extremely weathered
KC001	6	9	3			Clay			Moderate	Green	Cream	0				Extremely weathered
KC001	9	12	3			Clay			Moderate	Green	Cream	0				Extremely weathered
KC001	12	18.5	6.5			Clay			Moderate	Orange	Cream	1				Extremely weathered
KC001	18.5	20.5	2			Shale			Dark	Grey	Black	0		Clayey		Slightly weathered
KC001	20.5	21	0.5			Gravel			Variable		Multicoloured	0	Pebble			Extremely weathered
KC001	21	24.5	3.5			Shale			Dark		Black	0				Fresh rock
KC001	24.5	25	0.5			Gravel			Variable		Multicoloured	0	Pebble			Hard drilling, thought to be gravel, fragments that came up were similar to gravels earlier
KC001	25	84	9			Shale			Dark		Black	0				Fresh rock
KC001	84	85	1			Shale	Siderite	30	Dark		Black	0				Fresh rock
KC001	85	91	6			Shale	Siderite	20	Dark		Black	0				Fresh rock
KC001	91	93	2			Shale	Siderite	40	Dark		Black	0				Fresh rock
KC001	93	107	14			Siderite			Light	Grey	White	0	Very coarse		Quartzose	Fresh rock
KC001	107	114	7			Siderite			Light	White	Grey	0	Granule		Quartzose	Fresh rock
KC001	114	117	3			Siderite			Light	White	Grey	0	Very coarse		Quartzose	Fresh rock
KC001	117	125	8			Siderite			Light	White	Grey	0	Medium to very coarse		Quartzose	Fresh rock
KC001	125	129	4			Siderite			Light	Grey	White	0	Medium to very coarse		Quartzose	Fresh rock
KC001	129	131	2			Siderite			Light	Grey	White	0	Medium to very coarse	Clayey	Quartzose	Fresh rock
KC001	131	136	5			Siderite	Clay	20	Light	Grey	White	0	Coarse		Quartzose	Fresh rock
KC001	136	139	3			Siderite			Light	Grey	White	0	Medium to coarse	Clayey	Quartzose	Fresh rock
KC001	139	154	15			Siderite			Light	Grey	White	0	Coarse		Quartzose	Fresh rock
KC001	154	159	5			Siderite			Light	White	Grey	0	Medium to coarse	Clayey	Quartzose	Fresh rock
KC001	159	166	7			Mudstone			Moderate		Grey	0				Fresh rock
KC001	166	170.16	4.16			Sandstone			Light	White	Grey	0	Coarse		Quartzose	Fresh rock
KC001	Perentie	170.16	171.38	1.22		Coal			Dark		Black	0				Fresh rock
KC001	Perentie	171.38	172.99	0.71		Carbonaceous mudstone			Dark	Brown	Black	0				Fresh rock
KC001	Perentie	172.99	172.63	0.54		Coal			Dark		Black	0				Fresh rock
KC001	Perentie	172.63	173.13	0.5		Sandstone			Light	White	Grey	0	Coarse		Quartzose	Fresh rock
KC001	Perentie	173.13	174.88	1.75		Mudstone			Dark		Grey	0				Fresh rock
KC001	Perentie	174.88	178.88	4		Sandstone			Light	White	Grey	0	Medium to coarse		Quartzose	Fresh rock
KC001	Perentie	178.88	182.88	4		Mudstone			Dark		Grey	0				Fresh rock
KC001	Perentie	182.88	189.59	7.71		Mudstone			Light		Grey	0		Silty		Fresh rock
KC001	Goorikana	189.59	192.09	1.5		Coal			Dark		Black	0				Fresh rock
KC001	Goorikana	192.09	193.58	1.49		Mudstone			Dark		Grey	0				Fresh rock
KC001	Mitackina	193.58	194.5	0.92		Coal			Dark		Black	0				Fresh rock
KC001	Mitackina	194.5	195.45	0.95		Mudstone			Dark		Grey	0				Fresh rock
KC001	Mitackina	195.45	196.85	0.4		Mudstone			Dark		Black	0				Fresh rock
KC001	Mitackina	196.85	198.97	3.12		Mudstone			Dark		Grey	0				Fresh rock
KC001	Arckalinga	198.97	199.69	0.72		Coal			Dark		Black	0				Fresh rock
KC001	Arckalinga	199.69	200.69	1		Mudstone			Moderate		Grey	0				Fresh rock
KC001	Arckalinga	200.69	206.3	5.61		Coal			Dark		Black	0				Fresh rock
KC001	Arckalinga	206.3	209.69	3.39		Mudstone			Moderate		Grey	0		Silty		Fresh rock
KC001	Arckalinga	209.69	210.69	1		Mudstone			Moderate		Grey	0				Fresh rock
KC001	Arckalinga	210.69	216.04	5.35		Sandstone			Light		Grey	0	Fine	Clayey		Fresh rock
KC001	Mount Barr	216.04	218.89	0.85		Coal			Dark		Black	0				Fresh rock
KC001	Mount Barr	218.89	218.19	1.3		Sandstone			Light		Grey	0	Fine	Clayey		Fresh rock
KC001	Mount Barr	218.19	220.69	2.5		Mudstone			Moderate		Grey	0		Silty		Fresh rock
KC001	Mount Barr	220.69	231.44	10.75		Mudstone			Light		Grey	0		Silty		Fresh rock
KC001	Nilkinnia	231.44	232.05	0.61		Coal			Dark	Brown	Black	0				Fresh rock
KC001	Nilkinnia	232.05	233.42	1.37		Mudstone			Moderate		Grey	0		Silty		Fresh rock
KC001	Nilkinnia	233.42	233.85	0.43		Carbonaceous mudstone			Moderate		Grey	0		Silty		Fresh rock
KC001	Nilkinnia	233.85	234.23	0.38		Mudstone			Moderate		Grey	0		Silty		Fresh rock
KC001	Nilkinnia	234.23	238.95	4.72		Mudstone			Moderate		Grey	0		Silty		Fresh rock
KC001	Nilkinnia	238.95	239.56	0.61		Carbonaceous mudstone			Moderate		Grey	0		Silty		Fresh rock
KC001	Nilkinnia	239.56	246.02	6.46		Mudstone			Moderate		Grey	0		Silty		Fresh rock
KC001	Nilkinnia	246.02	246.97	0.95		Coal			Dark		Black	0				Fresh rock
KC001	Nilkinnia	246.97	248.03	1.06		Mudstone			Moderate		Grey	0				Fresh rock
KC001	Nilkinnia	248.03	248.37	0.34		Carbonaceous mudstone			Dark		Black	0				Fresh rock
KC001	Nilkinnia	248.37	253.03	4.66		Mudstone			Moderate		Grey	0				Fresh rock
KC001	Nilkinnia	253.03	261.71	8.68		Mudstone			Light		Grey	0				Fresh rock
KC001	Waddilee	261.71	262.26	0.55		Coal			Dark		Black	0				Fresh rock
KC001	Waddilee	262.26	262.98	0.72		Carbonaceous mudstone			Dark		Black	0				Fresh rock
KC001	Waddilee	262.98	263.43	0.45		Coal			Dark		Black	0				Fresh rock
KC001	Waddilee	263.43	266.02	2.59		Mudstone			Light		Grey	0				Fresh rock
KC001	Waddilee	266.02	266.31	0.29		Carbonaceous mudstone			Dark		Black	0				Fresh rock
KC001	Waddilee	266.31	271.34	5.03		Mudstone			Light		Grey	0				Fresh rock
KC001	Waddilee	271.34	271.97	0.63		Coal			Dark		Black	0				Fresh rock
KC001	Waddilee	271.97	275.53	3.56		Mudstone			Light		Grey	0				Fresh rock

KC 002

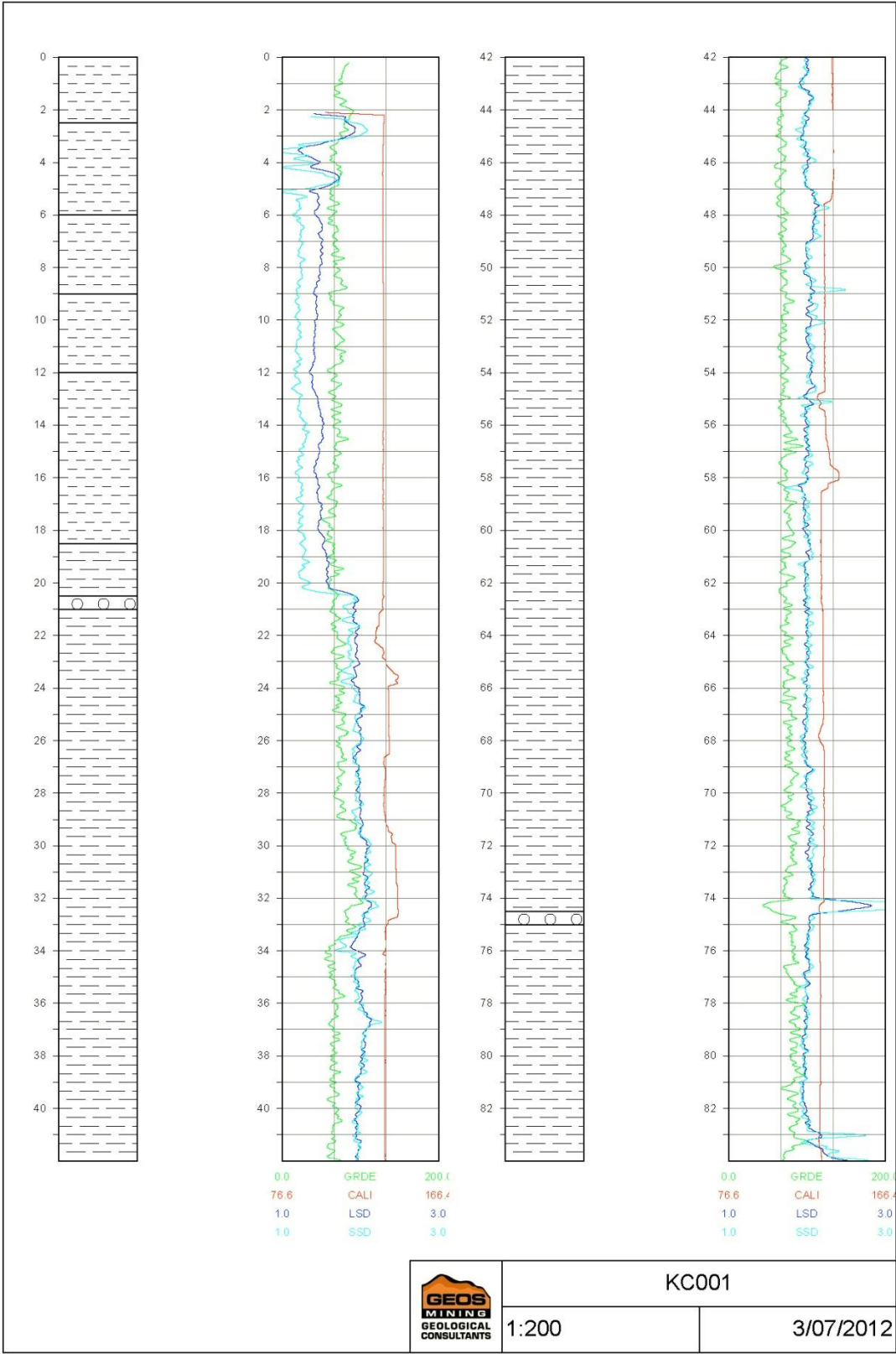
Hole_ID	Seam	CDepth_from	CDepth_to	Interval	%Recovery	Major_Lithology	Minor_Lithology	%Minor	Lightness	Tint	Colour	Mottled	Grain_size	Texture	Qualifier	Weathering	Description
KC002		0	2.75	2.75		Siderite			Moderate	Red	Brown	0	Fine	Clayey		Extremely weathered	
KC002		2.75	6.25	3.5		Gravel			Light		Multicoloured	0	Pebble			Extremely weathered	
KC002		6.25	11	4.75		Siderite			Moderate	Green	Cream	0	Fine	Clayey		Extremely weathered	Minor gravels present
KC002		11	15	4		Siderite			Moderate	Green	Cream	0	Fine	Clayey		Extremely weathered	

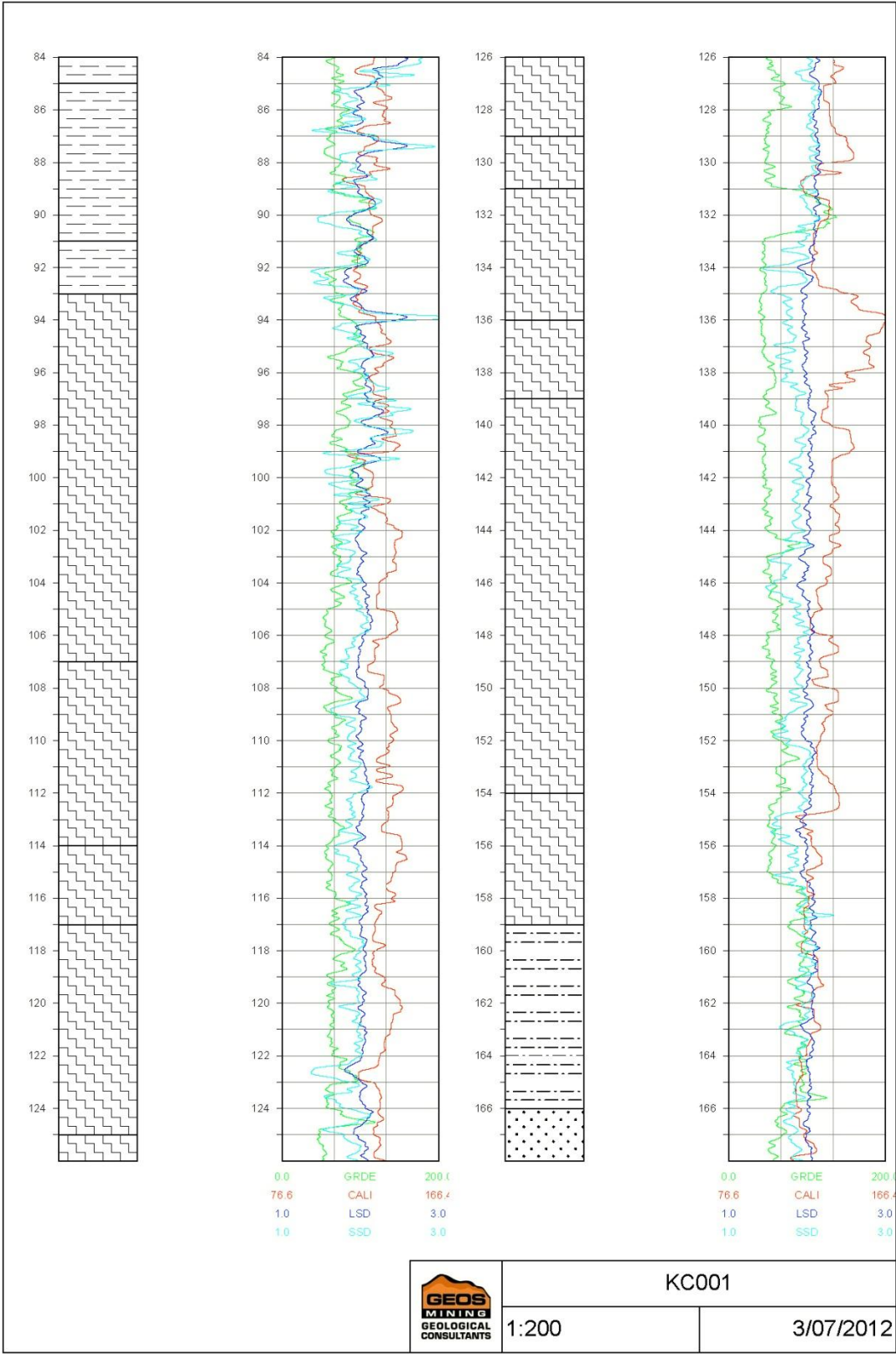
KC 003

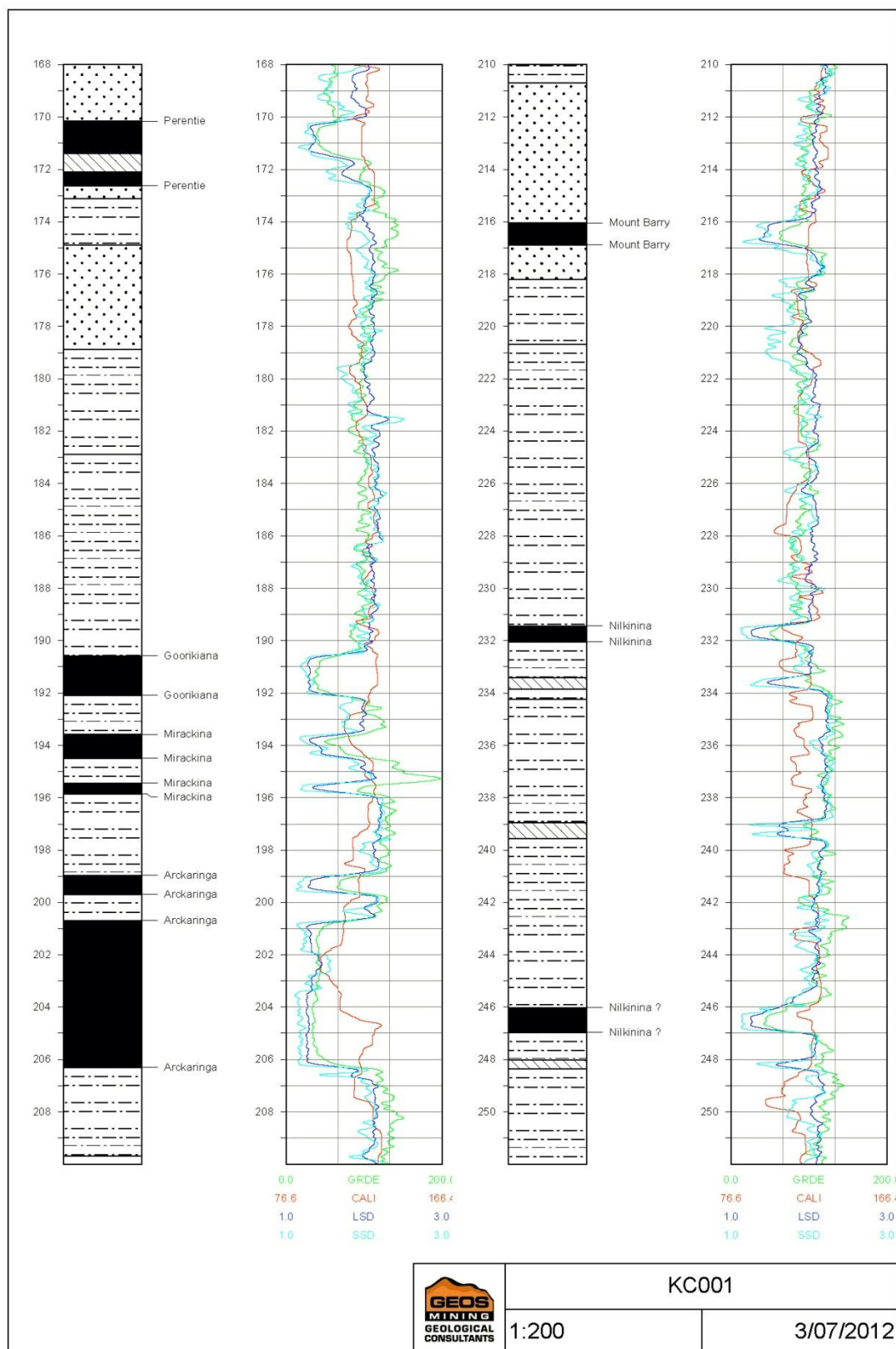
Hole_ID	Seam	CDepth_from	CDepth_to	Interval	%Recovery	Major_Lithology	Minor_Lithology	%Minor	Lightness	Tint	Colour	Mottled	Grain_size	Texture	Qualifier	Weathering	Description
KC003		0	1	1		Clay			Dark		Brown	0		Sandy		Extremely weathered	
KC003		1	3	2		Siderite			Moderate	Brown	Red	0	Fine			Extremely weathered	
KC003		3	6	3		Gravel			Moderate		Multicoloured	0	Pebble	Sandy		Extremely weathered	
KC003		6	9	3		Siderite			Moderate	Red	Brown	0	Fine			Extremely weathered	

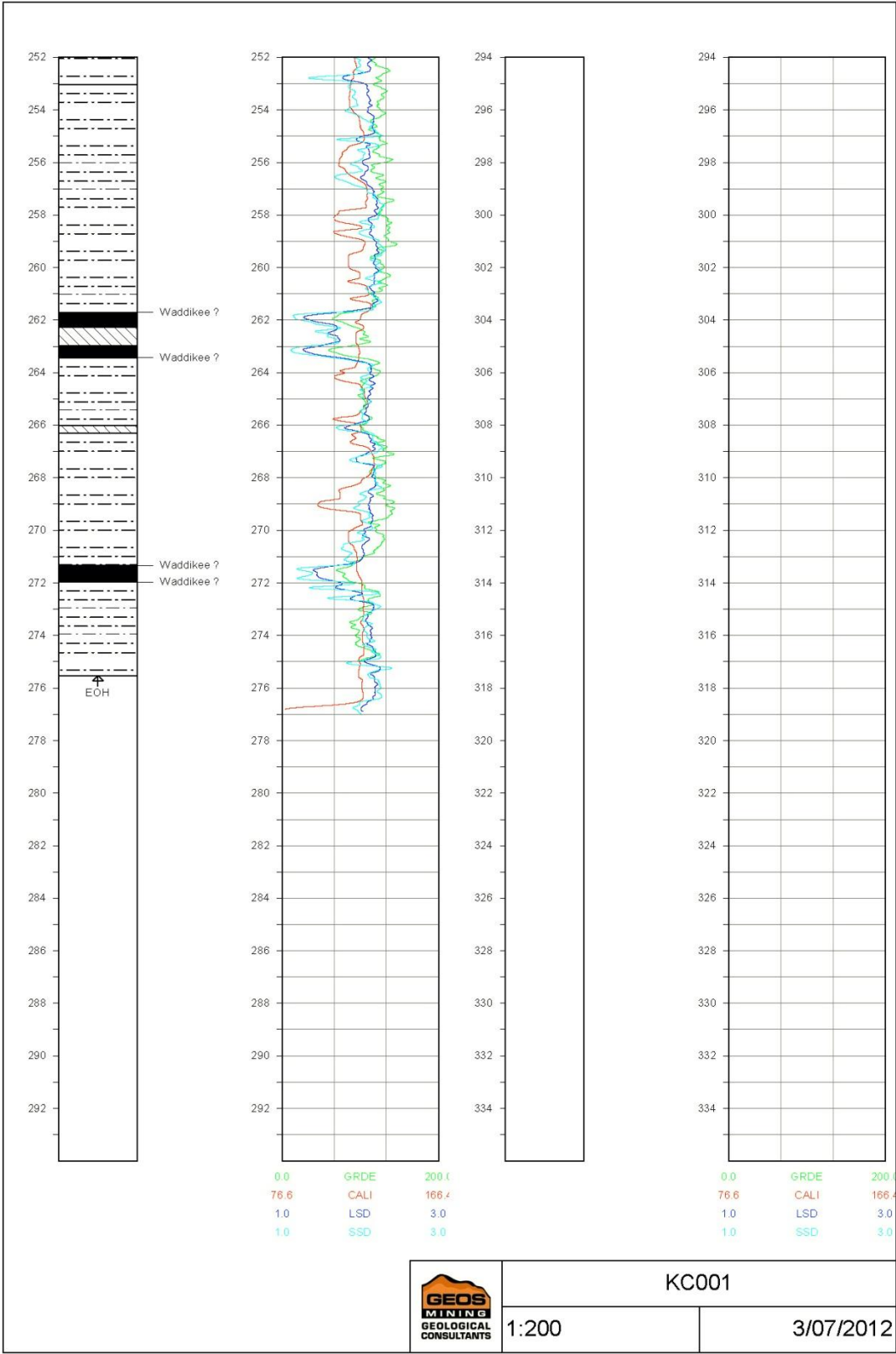
APPENDIX 1.2

Geophysical Logs KC 001 – 1 :200 Scale









APPENDIX 2

Rehabilitation Report by Kush Corporation

29 March 2013

Mining Regulations and Rehabilitation Branch
Office of Mineral and Energy Resources
DMITRE
GPO Box 1671
ADELAIDE SA 5001

Dear Sir/Madam

EL4795 – Mount Barry Rehabilitation Report

Please find attached a copy of the rehabilitation report detailing work carried out upon EL4795 following completion of the drilling program. This work was done in accordance with EWA approval (E-PEPR 2012-067 / A1345702 / C2012/00285), and adhering to PIRSA guidelines outlined within;

- M21 – PIRSA Information Sheet – *Mineral exploration drill-holes – General specifications for construction and backfilling*
- M33 – PIRSA Information Sheet – *Statement of environmental objectives and environmental guidelines for mineral exploration activities in South Australia*

A copy of this report has been supplied to DMITRE in both hard copy and digital format as stipulated in the EWA approval letter.

Yours faithfully



Gabriel Kushnir
Director

To: DMITRE **Copy:** File
From: Kush Corporation
Date: March 2013
Re: Drill hole rehabilitation – EL4795 Mount Barry Project

This report details the rehabilitation of the Mount Barry drill sites located on EL4795. The report briefly outlines the drill hole details and contains a number of photographs of the drill sites and access tracks taken prior to the drill program, during the drill program and after rehabilitation as per guidelines detailed in the EWA (E-PEPR 2012-067 / A1345702 / C2012/00285)

The rehabilitation program managed by Kush Corporation (Kush) consisted of three drill holes (1A - KC 001, 1B – KC002, 1C – KC003) and one drill site that was not drilled (1D - KC 004).

1A - KC 001**Hole and drill site details;**

Hole ID	1A - KC 001
Location – AGD84 Z53	499587mE, 6878598mN
EOH Depth	276m
Drilling Contractor	Aust-Wide (Mud Rotary)
Date Drilled	June 2012
GAB	No evidence of artesian flows were observed.
Hole Details	• 0 – 30.00m – Mud Rotary Pre-Collar • 30.00m – 276.00m - Mud Rotary Open Hole
Gear left in hole	• 0-20m 125mm PVC casing (has been cut 40cm below ground level, capped and collar backfilled to form a small mound over the collar
Current status of the Hole	• The collar was cut ~40cm below ground level. Hole was grouted with cement.
Drill site status	• Sumps were excavated for drilling. Soil material from the sump excavation was stockpiled including a spate topsoil pile. All sumps were backfilled, topsoil spread and scarified (Figure 2) • All drill spoils were disposed of and green bags placed into landfill. • The drill pad is clean of rubbish and has been scarified (Figure 2)
Access track status	• The 200m long track created for access to the KC 001 drill hole was scarified back to the Oodnadatta Track in consultation with landowner.

Figure 1: 1A - KC001 drill site before rehabilitation – looking north



Figure 2: 1A - KC001 drill site post rehabilitation – looking north



1B - KC 002

Hole and drill site details;

Hole ID	1B - KC 002
Location – AGD84z53	498997mE, 6879200mN
EOH Depth	15m
Drilling Contractor	Aust-Wide (Mud Rotary)
Date Drilled	June 2012
GAB	Non
Hole Details	0 – 15.00m – Mud Rotary Abandoned
Gear left in hole	None
Current status of the Hole	The hole was backfilled with excavated material from in-ground sumps.
Drill site status	- Sumps were excavated for drilling. Soil material from the sump excavation was stockpiled including a spate topsoil pile. All sumps were backfilled, topsoil spread and scarified (Figure 4) - The drill pad is clean of rubbish and has been scarified (Figure 4)
Access track status	The 700m long track created for access to the KC 002 drill from pre-existing station tracks. This access track was not compacted as it was not utilised by heavy equipment enough. The track was rehabilitated in accordance with PTRSA guidelines.

Figure 3: 1B - KC002 drill site before rehabilitation – looking north



Figure 4: 1B - KC002 drill site post rehabilitation – looking north



1C - KC 003

Hole and drill site details;

Hole ID	1C - KC 003
Location – AGD84z53	499597mE, 6877401mN
EOH Depth	9m
Drilling Contractor	Aust-Wide (Mud Rotary)
Date Drilled	June 2012
GAB	Non
Hole Details	0 – 9.00m – Mud Rotary Abandoned
Gear left in hole	None
Current status of the Hole	The hole was backfilled with excavated material from in-ground sumps.
Drill site status	- Sumps were excavated for drilling. Soil material from the sump excavation was stockpiled including a spate topsoil pile. All sumps were backfilled, topsoil spread and scarified (Figure 6) - The drill pad is clean of rubbish and has been scarified (Figure 6)
Access track status	The 250m long track created for access to the KC 002 drill from pre-existing station tracks. This access track was not compacted as it was not utilised by heavy equipment enough. The track was rehabilitated in accordance with PTRSA guidelines.

Figure 5: 1C - KC003 drill site before rehabilitation – looking north



Figure 6: 1C - KC003 drill site post rehabilitation – looking north



1D - KC 004

Hole and drill site details;

Hole ID	1D - KC 004
Location – AGD84z53	500800mE, 6879800mN
EOH Depth	Not Drilled
Drilling Contractor	Not Drilled
Date Drilled	Not Drilled
GAB	Non
Hole Details	• None
Gear left in hole	• None
Current status of the Hole	• None
Drill site status	• Sumps were excavated for drilling. Soil material from the sump excavation was stockpiled including a spate topsoil pile. All sumps were backfilled, topsoil spread and scarified (Figure 8) • The drill pad is clean of rubbish and has been scarified (Figure 8)
Access track status	• The 200m long track created for access to the KC 002 drill from pre-existing station tracks. This access track was not compacted as it was not utilised by heavy equipment (the drillhole was not drilled). The track was rehabilitated in accordance with PIRSA guidelines.

Figure 7: 1D-KC004 drill site before rehabilitation – looking north



Figure 8: 1D-KC004 drill site post rehabilitation – looking north



Appendix 3

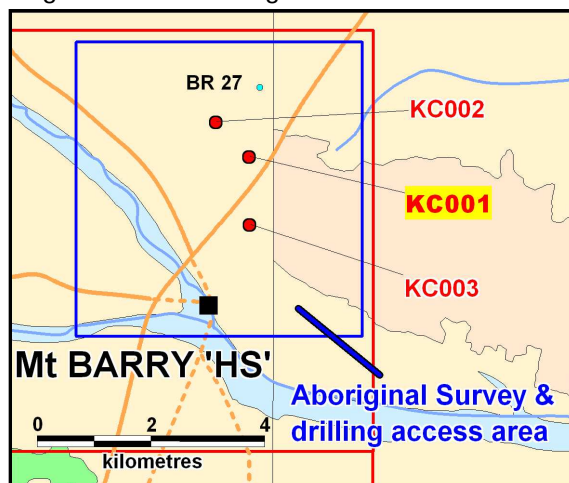
Aboriginal Heritage & Native Title Survey Summary

In early 2102 the Kush Corporation [KUSH] requested Antakirinja Matu-Yankunyjtjara Aboriginal Corporation [AMYAC] and their nominated anthropologist and archaeologist to undertake an Access Inspection Survey (Work Area Clearance) in relation to 35 proposed boreholes at Mt Barry. The survey areas are contained within the determined Antakirinja Matu-Yankunyjtjara Native Title area.

The area surveyed was that envisaged for possible Phase 2 & Phase 3 drilling subsequent to the completion of phase 1 drilling to the North of the MT Barry Homestead as illustrated.

Survey Team

AMYAC : The Aboriginal team comprised AM-Y Native Title Holders which included senior men and women who were born, lived on and worked throughout the AM-Y Native Title area; all have the authority and responsibility to represent the AM-Y community of Native Title holders. The younger members of the team were being instructed by senior members in accordance with the traditional laws and customs of the Antakirinja Matu-Yankunyjtjara people, a process which occurs over many years.



Men: Bill Lennon, Joseph Lennon, Barney Lennon jnr.

Women: Emily Austin, Emily Betts and Amanda Smith.

Specialists:

Sandra Jarvis - *Consultant Anthropologist: Cultural Heritage & Native Title*; and

Fraser J Vickery - *Consultant Archaeologist: Environment and Natural & Cultural Resources Management*.

Kush Corporation Pty Ltd (KUSH)

The survey team was accompanied by Gabriel Kushnir and Esther Kushnir.

Certification

The specialists certify that the report is an accurate record of the Access Inspection Survey (Work Area Clearance) conducted on 5 May 2012.

Perpared by:

Gabriel Kushnir
Director

APPENDIX 4

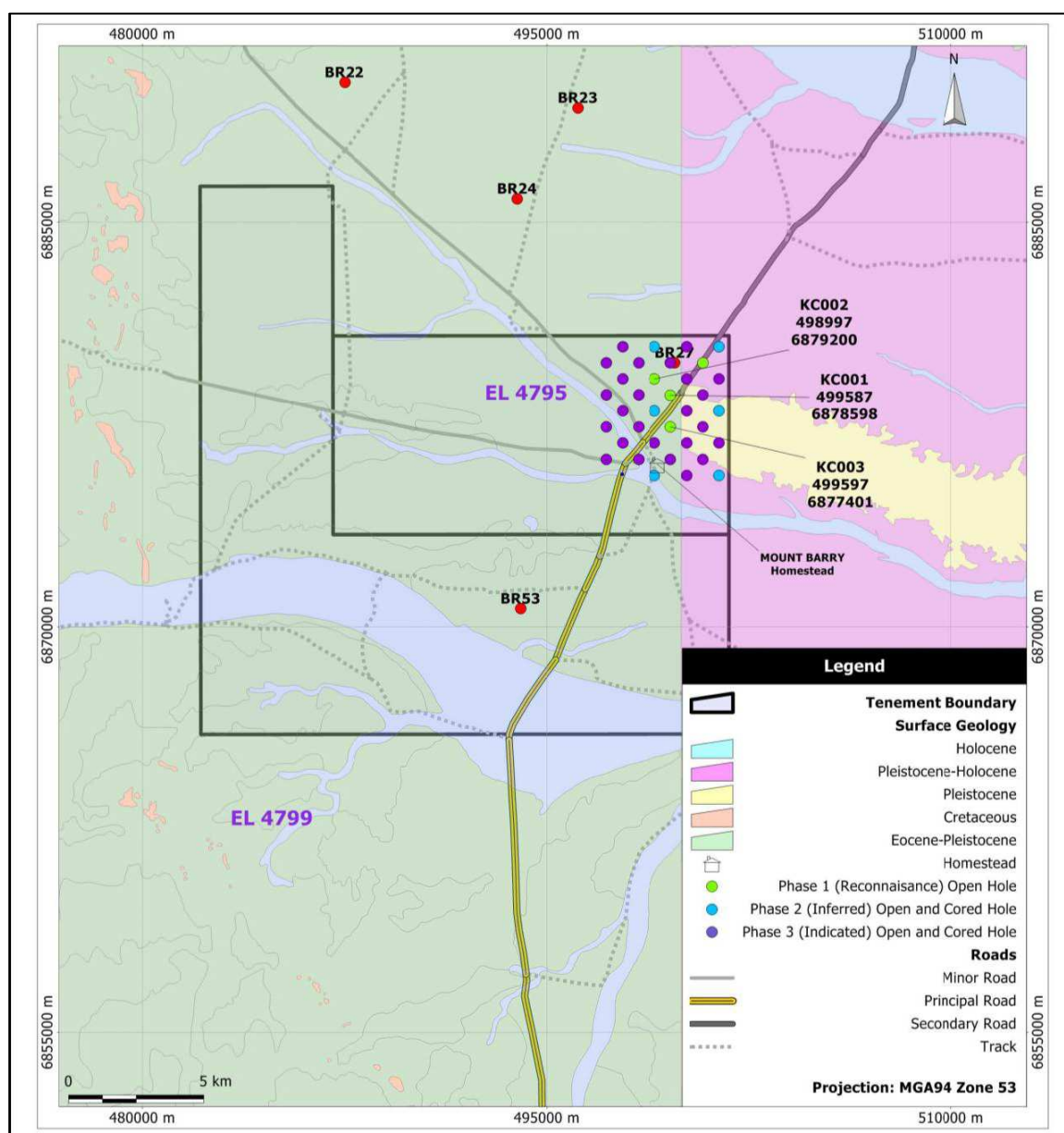
**2012 Exploration Plan,
Extract from Bradbury, T., 2012**
(pages 1-3 inclusive)

GEOS: Overview:

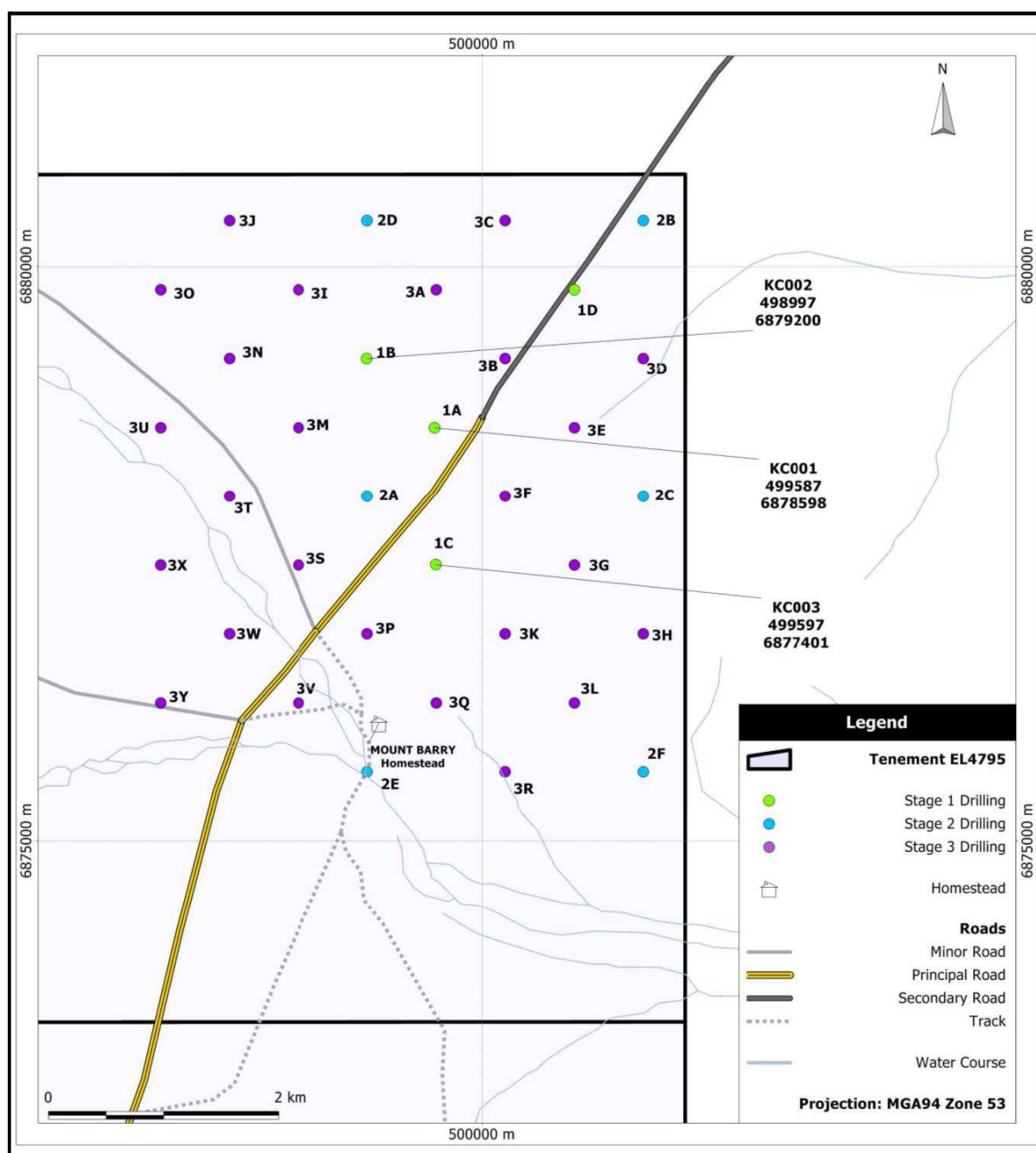
Between 7-12 June 2012, Kush Corporation commenced the Phase 1 of an exploration program in EL4795 (Mt Barry), comprising four holes situated to the immediate south and east of historical drillhole BR27, that was drilled on EL686 in 1982 and which intersected a 6m thick Arckaringa Seam from 218.6m depth (NB: a 0.5m thick upper coal split was identified as well, separated from the main seam by a 1.15m thick mudstone parting).

Kush Corporation undertook the drilling in the northeast portion of EL4795, aimed at confirming coal resource potential in the Early Permian Upper Mt Toondina Formation, with the main target seam being the Arckaringa Seam. Holes were located in order to determine whether sufficient coal resource potential extended south and east of BR27.

Hole locations are shown in Figures 1 and 2 below:



GEOS: Figure 1 EL4795 - Location of holes drilled compared to planned holes, and surface geology.



GEOS: Figure 2 EL4795 - Location of drillsites and holes drilled

05 March 2014

EL Reporting Officer
Mineral Tenements
DMITRE
GPO Box 1264
ADELAIDE SA 5001

PO Box 115, Kent Town

South Australia 5071

M. 0415 397 870

F/AH. 08 8342 4914

E. tcoppin@teneman.com.au

Dear Nella

EL 4795 – Mt Barry – Annual Technical Report for the period ending 31/10/2013

EL 4795 was granted to Kush Corporation Pty Ltd on 1 November 2011 and is due to expire on 31 October 2014.

During the reporting period the only field work undertaken was rehabilitation. As no new technical data were acquired, a formal report will not be submitted.

Total expenditure for the year was \$65,471. Details have been provided in the relevant summary reports.

Please contact me on 8342 4914 or 0415 397 870 if you require additional information.

Yours sincerely



Teena Coppin
Tenement Manager

28 November 2014

EL Reporting Officer
Mineral Tenements
DMITRE
GPO Box 1264
ADELAIDE SA 5001

PO Box 115, Kent Town

South Australia 5071

M. 0415 397 870

F/AH. 08 8342 4914

E. tcoppin@teneman.com.au

Dear Nella

EL 4795 – Mt Barry – Final Technical Report for the period ending 27/6/14

EL 4795 was granted to Kush Corporation Pty Ltd on 1 November 2011 and consent to the surrender of the tenement was given on 27 June 2014.

During the reporting period no field work was undertaken. As no new technical data were acquired, a formal report will not be submitted.

Expenditure details have been provided in the relevant summary reports.

Please contact me on 8342 4914 or 0415 397 870 if you require additional information.

Yours sincerely



Teena Coppin
Tenement Manager
Kush Corporation Pty Ltd