

Site Investigation Report
Red Dog Coal Project
Bonaparte Basin, NT

Prepared By



for

Ebony Coal Limited



EBONYCOAL

December 2011

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LIST OF ABBREVIATIONS

<u>Abbreviation</u>	<u>Meaning</u>
ad	air dried
bcm	bank cubic metre(s)
cm	centimetre(s)
CPP	Coal Preparation Plant
CV	Calorific Value
DFS	Definitive Feasibility Study
Ebony Coal	Ebony Coal Pty Ltd
FOB	Free on board
GOD	Global Ore Discovery
HCS	Hanna Consulting Services
IM	Information Memorandum
kg	kilogram(s)
km	kilometre(s)
M	Million
m	metre(s)
Mt	Million tonne(s)
Mtpa	Million tonnes per annum
NT	Northern Territory, Australia
t	tonne(s)
t/bcm	tonnes per bank cubic metre

1 INTRODUCTION

A site investigation was conducted by Hanna Consulting Services (“HCS”) to provide an initial assessment for Ebony Coal Pty Ltd (Ebony Coal) of the Red Dog Coal Project in the Bonaparte Basin, in the Northern Territory, on the 25th October. The purpose of the assessment was to confirm the existence of coal bearing geology outcropping on the surface within the tenement.

The assessment was conducted by a single-engine fixed-winged aircraft survey over the Ebony Coal tenements in the Bonaparte Basin (Figure 3-1), and involved Patrick Hanna of HCS together with George Macdonald and James Morrison of Ebony Coal.

This report summarises the findings from the surveys and includes recommendations for the next stage of exploration activity.

2 CAPABILITY

This Report was prepared by **Patrick Hanna** of HCS who has more than thirty years experience as a coal geologist in the areas of exploration and evaluation of coal mining projects in Australia and internationally. He has planned, budgeted and managed drilling programs in Australia, Mozambique and Indonesia. Pat has experience in Coal Resource estimation for feasibility studies and bankable documentation in accordance with the JORC Code. In Australia, Pat has extensive coal exploration experience in the Bowen, Galilee, Surat, Canning and Sydney Basins. International experience of Coal Resource reporting includes China, USA, Indonesia, Philippines, Ukraine, South Africa, Mozambique and Thailand.

Pat can also provide advice on coal products for mining and marketing purposes. Pat has been a member on the JORC Committee as well as the sub-committee for the Guidelines on Black Coal Resource and Reserve Estimation.

HCS is an independent consulting company which has no vested interest in Ebony Coal nor the Red Dog Coal Project.

3 GEOLOGY

The coal geology of the Bonaparte Basin is located in the Palaeozoic sediments in the Port Keats locality. Earlier coal exploration has indicated the existence of thin (<1m) bituminous coal seams, particularly in the Keep River area, near Ebony Coal's tenements (Figure 3-2).

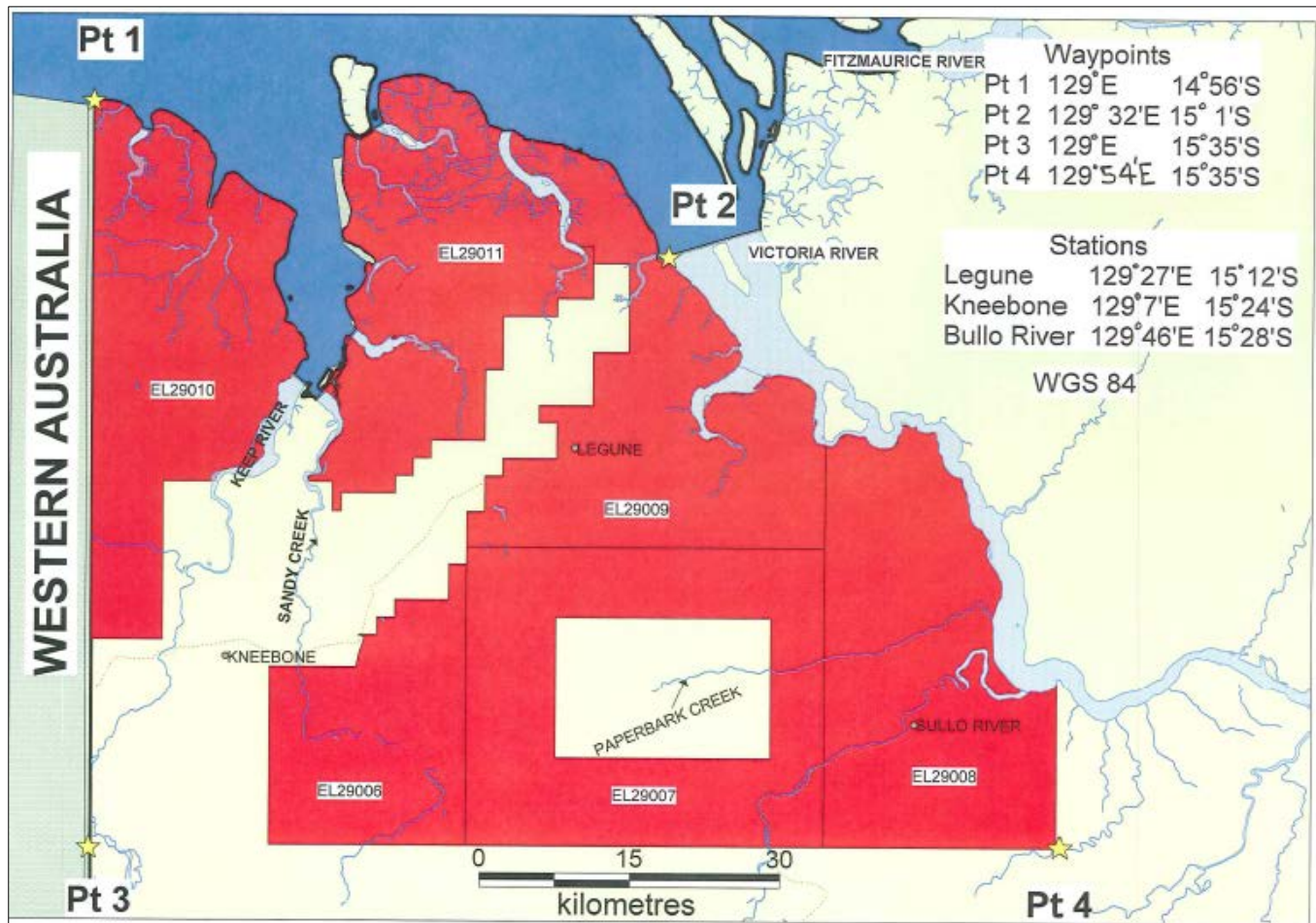


Figure 3-1: EPC Tenement Locations for Red Dog Coal Project

Coal outcrops have been noted and during the site survey, carbonaceous beds were found to outcrop at Fossil Head (Photo 3-1). Other parts of the Keep River area indicated the presence of outcropping Carboniferous/Permian sediments typically associated with coal sequences. These outcrops indicate the coal seams can be found at the surface and therefore there is a possibility of finding economic coal in the region.

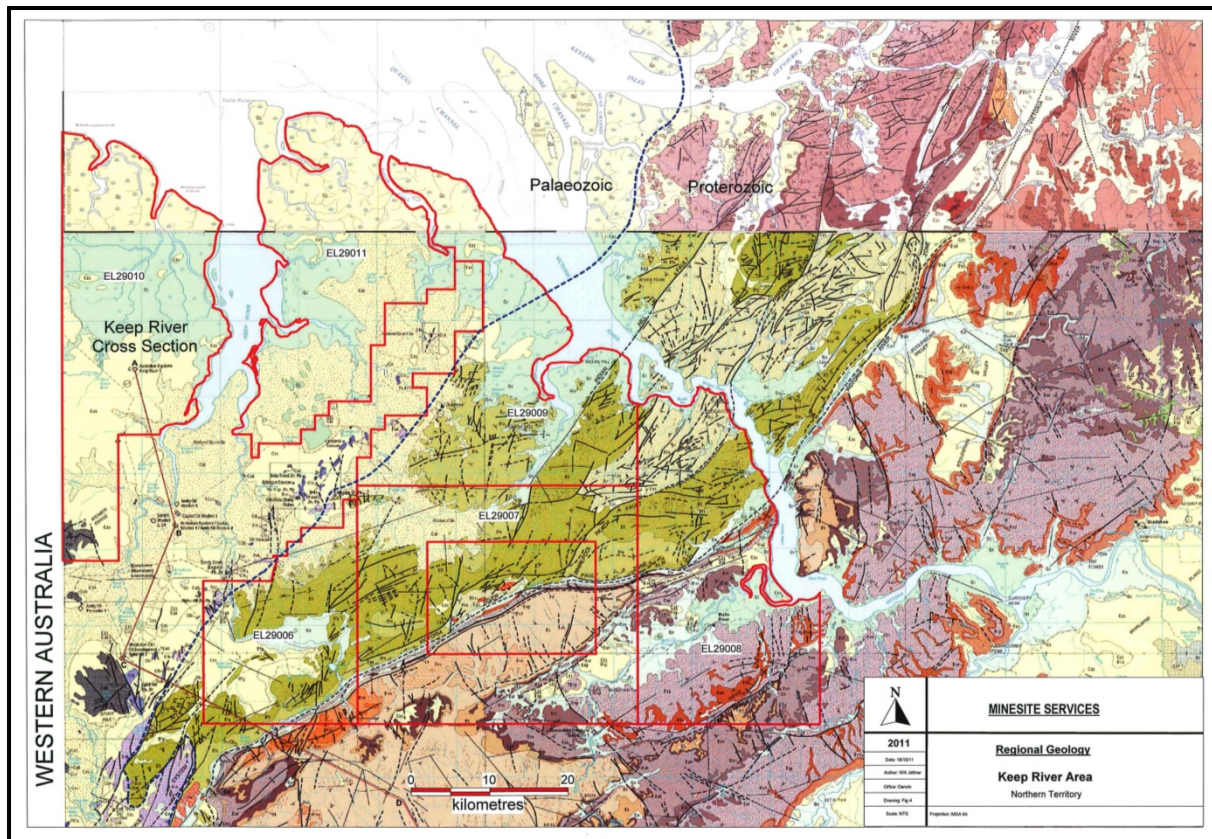


Figure 3-2: Geology of Bonaparte Basin in Red Dog Coal Project



Photo 3-1: Carbonaceous Sediments at Fossil Head



Photo 3-2: Carboniferous_Permian Outcropping Sediments in Keep River Area

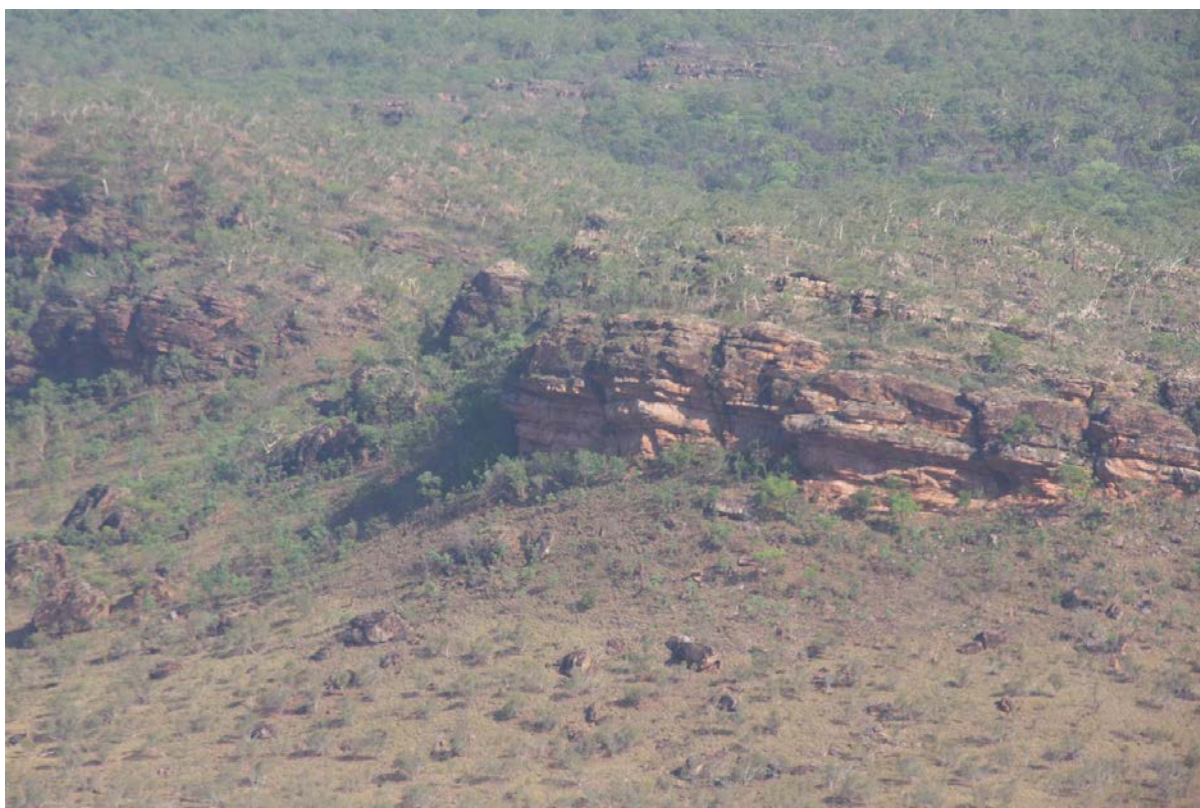


Photo 3-3: Carboniferous_Permian Outcropping Sediments in Keep River Area

4 CONCLUSIONS

The following conclusions have been determined from this review:

- The intersections of carbonaceous material in the coal exploration boreholes in the region of the Keep River are a strong indicator that there is potential to find economic bituminous coal seams in the Red Dog Coal Project area
- The presence of carbonaceous/coaly material outcropping in the Port Keating area further supports this potential as it is rare to find any outcrops of coal in the other basins; and
- The outcropping of Carboniferous_Permian sediments in the Keep River area is evidence that shallow coal seams are likely to be found in Red Dog Project.

5 RECOMMENDATIONS

The following course of action is recommended for your consideration:

1. Review results from nearby historical coal exploration boreholes;
2. Conduct a desktop search over the region (up to 50kms from the EPC tenements) for more water bore data;
3. Acquire and analyse satellite imagery and airborne geophysical data including magnetics, radiometrics and gravity, to provide a better understanding of the structural setting of the region and delineate any volcanic intrusives if they exist;
4. Based on the results of the desktop research, plan an initial exploratory drilling program which would confirm shallow intersections of carbonaceous/coaly sediments, and test for continuity of such intersections over large distances;
5. Assess the results of this initial drilling program and make a recommendation to the Board of Ebony Coal.



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