

**TECHNICAL REPORT
COAL RESOURCES AND
PRELIMINARY ECONOMIC ASSESSMENT
COAL MINE COMPONENT
CHANDGANA TAL COAL PROJECT
Khentii Province, Mongolia**

Prepared For

PROPHECY COAL CORP

Vancouver, British Columbia, Canada

By

John T. Boyd Company

Mining and Geological Consultants

Pittsburgh, Pennsylvania, U.S.A.



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John T. Boyd Company
Mining and Geological Consultants

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Managing Director - China
Dehui (David) Zhong

Assistant to the President
Mark P. Davic

Pittsburgh
4000 Town Center Boulevard, Suite 300
Canonsburg, PA 15317
(724) 873-4400
(724) 873-4401 Fax
jtboydp@jtboyd.com

Denver
(303) 293-8988
jtboydd@jtboyd.com

Brisbane
61 7 3232-5000
jtboydau@jtboyd.com

Beijing
86 10 6500-5854
jtboydcn@jtboyd.com

www.jtboyd.com

30 November 2012
File: 3610.002

Prophecy Coal Corp
2nd Floor, 342 Water Street
Vancouver, British Columbia V6B 1B6
CANADA

Attention: Mr. John Lee
CEO and Chairman

Subject: Technical Report
Coal Resources and Preliminary Economic
Assessment – Coal Mine Component
Chandgana Tal Coal Project
Khentii Province, Mongolia

Dear Sirs:

Prophecy Coal Corp (Prophecy) has proposed the development of an integrated power plant/coal mine project in central Khentii Province in east-central Mongolia. Referred to as the Chandgana Tal Coal Project (Chandgana), this project will include the construction of a 600 megawatt (MW) (four units at 150 MW each) generating station and an adjacent openpit mine to supply the necessary fuel. The mine is projected at an annual production rate of 3.5 million tonnes per annum (Mtpa). The integrated power plant/mine project will be a major improvement to Mongolia's national electricity supply to promote future economic development of the country while reducing older less efficient, highly polluting existing power plants.

This document presents John T. Boyd Company's (BOYD) Technical Report covering the coal mine component of Chandgana. The work scope of this Technical Report includes a coal resource estimate and a preliminary mine plan with an associated Preliminary Economic Assessment (PEA). The Chandgana coal resources, proposed mine, and related facilities in this PEA are viewed as a single business unit. All raw coal production will be transferred to the proposed mine-mouth power plant to be constructed by Prophecy and the coal mine project is solely dependent upon construction of the power plant.

This PEA level study by definition has a degree of accuracy of $\pm 35\%$. Minor variations in annual production, geology, capital cost estimates, operating cost estimates, etc. should not have a material effect on the reasonable prospects for economic extraction at the coal resources stated herein. It should be noted that the results contained herein are related to an economic analysis of the coal resources. Coal 'resources' are not to be confused with coal 'reserves' and therefore do not have demonstrated economic viability. (Reference Chapter 15.0 Mineral Resource Estimates.)

Prophecy is an active coal producer in Mongolia, and produces coal at their Ulaan Ovoo Mine located in northern Mongolia. The company plans to expand its coal operations, primarily for domestic use and power generation, but it is also seeking growth through international customers.

By assignment, this report is prepared in accordance with standards and guidelines of Canadian National Instrument (NI) 43-101. Chapter number references are assigned to be consistent with NI 43-101 reporting standards. The metric system of measurements is used in this report. It should be noted that the spellings of Mongolian provinces, towns, etc. vary by source. We have attempted to be consistent in our references used in this report.

This report is a February 2014 reissue of BOYD's 30 November 2012 report to reflect the addition of corporate taxes and clarification of various items as requested by the British Columbia Securities Commission. Corporate Income Taxes (Ref. Mongolia Tax Administration, General Department of Taxation) for Mongolian Corporations are based on a two-tier system. The rate is 10% for income from 0 to 3 billion tugriks and income that exceeds 3 billion tugriks will be taxes at a 25% rate. Any conversion from tugriks to US dollars are based on an exchange rate of 1,333 tugriks per US dollar effective at the time of this analysis. The effective date of our analysis remains 31 July 2012.

Report Title

Technical Report

Coal Resources and Preliminary Economic Assessment – Coal Mine Component

Chandgana Tal Coal Project

Khentii Province, Mongolia

Report Author

The author of this report is BOYD, an international geological and mining engineering consultancy with our home office located near Pittsburgh, Pennsylvania, U.S.A.

Robert J. Farmer, P. Eng., is the designated Lead Qualified Person for this project, and contributing authors include the following BOYD staff:

Name /Title	Project Responsibility
<u>Designated Qualified Persons</u>	
Robert J. Farmer, P.Eng. Director of Advanced Computer Services Lead Qualified Person	Principal Qualified Person and additionally responsible for: geologic modeling, mine planning, sequencing, and production forecasts and oversight of entire report and relevant reports sections 15, 17, and 19.
Thaddeus J. Sobek, PE Project Manager Qualified Person	Project manager, Qualified Person responsible for infrastructure and relevant report section 18.
<u>Contributing Authors</u>	
Ronald L. Lewis, PE Managing Director & Chief Operating Officer	Managing Director, responsible for senior management and peer review of entire report.
Thaddeus J. Sobek, PE Project Manager	Project Manager with contributory review of the following relevant report sections: 1, 2, 3, 4, 5, 18, 20, 21, 22, 26, 27, and 28.
Edward C. Mast Senior Geologist/Technical Specialist	Geologic modeling, review of source data relating to geological and coal quality. Relevant report sections: 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 23, 24, and 25.

Resumes for the BOYD qualified persons are included in Item 28. Additional BOYD technical and support personnel assisted the primary project team members on as as-required basis.

John T. Boyd Company

By:



Robert J. Farmer, P. Eng.
Director of Advanced Computer Services
Lead Qualified Person



Thaddeus J. Sobek, P.E.
Project Manager
Qualified Person, Infrastructure



Ronald L. Lewis, P.E.
Managing Director and Chief Operating Officer
Senior Management Peer Review

Effective Date

Effective date of this report is 31 July 2012.

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GLOSSARY OF ABBREVIATIONS AND TERMINOLOGY

BOYD	John T. Boyd Company
BCSC	British Columbia Securities Commission
CIM	Canadian Institute of Mining, Metallurgy, and Petroleum.
CIM Standards	Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards- For Mineral Resources and Mineral Reserves, Prepared by the CIM Standing Committee on Reserve Definitions, Adopted by CIM Council on 11 December 2005.
Coal Reserve	Is the economically mineable part of a Measured and/or Indicated Coal Resource demonstrated by at least a Preliminary Feasibility Study (CIM Standards).
CPG	Certified Professional Geologist.
CSA	Coal Supply Agreement between Chandgana Coal LLC and Prophecy Power Generation LLC, dated June 5, 2013.
DCF	Discounted Cash Flow.
EMU	Equivalent mining units include cumulative total of both mined waste (bcm) plus mined coal (tonnes).
Demonstrated Coal Resource	Measured+ Indicated Coal Resources.
GSC 88-21	A Standardized Coal Resource/Reserve Reporting System for Canada Paper 88-21 by the Geological Survey of Canada, 1989 referenced in NI 43-101.
Indicated Coal Resource	That part of a Coal Resource for which quantity or quality, densities, shape, and physical characteristics can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and quality continuity to be reasonably assumed (GSC 88-21).
Inferred Coal Resource	That part of a Coal Resource for which quantity and quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and quality continuity. The estimate is based on limited information and sampling, gathered through appropriate techniques from locations

such as outcrops, trenches, pits, workings, and drill holes (GSC 88-21).

LOM	Life-of-mine (30-year projections used in this PEA).
In-Place	In-place refers to coal in identifiable seams with no recovery factors applied.
Measured Coal Resource	That part of a Coal Resource for which quantity, quality, densities, shape, and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling, and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings, and drill holes that are spaced closely enough to confirm both geological and grade continuity (GSC 88-21).
MNT	Mongolian Tugrik \$1.00 USD = 1333.33 as of 31 July 2012
NI 43-101	Canadian National Instrument 43-101 Standards of Disclosure for Mineral Projects.
NPV	Net Present Value, results of discounted cash flow or similar calculation.
OSD	Out-of-seam Dilution, rock, impurities recovered from above and below the coal seam with the coal seam during the normal mining process.
PE	Registered Professional Engineer,
Preliminary Economic Assessment	A preliminary assessment study (PEA) which includes an economic analysis of the potential viability of a material resource prior to the completion of a prefeasibility study. Based on the Society for Mining, Metallurgy and Exploration (SME) study types a PEA (also known as a conceptual or scoping study used to support a NI 43-101 Technical Report is within +/-35% degree of accuracy.
Preliminary Feasibility Study (PFS)	A comprehensive study of the viability of a coal project that has advanced to a stage where the mining method and pit configuration has been established and an effective method of coal processing has been determined, and includes a financial analysis based on reasonable assumptions of technical, engineering, legal, operating, economic, social, and environmental factors, and the evaluation of other relevant factors which are sufficient for a Qualified Person (QP), acting reasonably, to determine if all or part of a Coal Resource can be classified as a Coal Reserve (CIM Standards). Based on the SME study types a PFS used to support a NI 43-101 Technical Report is within +/-25% degree of accuracy.

Probable Coal Reserve	Is the economically mineable part of an Indicated and in some circumstances a Measured Coal Resource demonstrated by at least a PFS (CIM Standards).
Proven Coal Reserve	Is the economically mineable part of a Measured Coal Resource demonstrated by at least a PFS (CIM Standards).
Qualified Person Or QP	An individual who is an engineer or geoscientist with at least five years of experience in mineral exploration, mine development or operation, or mineral project assessment, or any combination of these; has experience relevant to the subject matter of the mineral project and the technical report; and is a member or licensee in good standing of a professional association recognized under NI 43-101 (CIM Standards).
Recoverable Resources	That portion of the coal from a mineable coal seam that can be recovered with the mining techniques considered in the feasibility study. (GSC 88-21). The portion of in-place seam tonnage recovered during mining but before OSD and coal processing considerations.
ROM	Run-of-Mine, as the mined coal material, including coal, in-seam rock partings mixed with the coal, and OSD (out-of-seam rock combination).
Saleable Reserves	Saleable coal is the quantity of coal that can be delivered to the point of use, and includes all losses in preparation and shipping. (GSC 88-21)
Strip Ratio	BCM per tonne of coal mined (typically on a ROM basis).
Tph	Tons per hour.
Tugrik	See "MNT"

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1.0 SUMMARY

1.1 Introduction

BOYD was retained to complete a coal resource estimate and a preliminary openpit mine plan and associated PEA for the proposed coal mining operations of Chandgana. The PEA is prepared for the proposed coal mine which is integral to the proposed 600 MW Chandgana Tal Power Plant project, a venture by Prophecy Power Generation LLC.

By assignment, our report is prepared in accordance with NI 43-101 Technical Report standards. The coal mining operations are projected to supply a proposed mine-mouth 600 MW thermal power plant (TPP), all of which is controlled by Prophecy Coal Corp. (Prophecy). The Society for Mining, Metallurgy and Exploration, Inc. defines a PEA (also known as Conceptual or Scoping Study) as having a +/- 35% degree of accuracy. All raw coal production will be transferred to the proposed mine-mouth power plant to be constructed by Prophecy, and the coal mine project is solely dependent upon construction of the power plant.

This technical report by assignment was developed at a PEA level to determine on a preliminary basis, the reasonable prospects for economic extraction of the coal resource estimate provided herein. We assume the future progression of project study will be completed to sequentially increase both technical detail and costing accuracy including; pre-feasibility study (PFS), feasibility (FS), and detailed design.

During the week of 14 May 2012, representatives of BOYD completed a field tour of the Chandgana coal project area including previous openpit mining areas and future mining areas. The tours were completed by Mr. Thaddeus J. Sobek, Project Manager, and by Mr. Edward C. Mast, Senior Geologist. The amount of time reviewing the proposed mine site considering there is minimal area affected by previous mining and no current activity was deemed adequate for a PEA level study.

BOYD has worked extensively throughout Mongolia, China, and Asia, and has experience with similar regional proposed and active openpit mining operations. The combination of source data and our industry experience form the basis of this PEA.

Weights and measures are expressed in metric units. Financial projections are expressed in constant dollars as of 31 July 2012. The projections presented herein are presented on a calendar year basis.

This chapter provides a brief summary of primary information contained within this technical report and is supported by remaining portions of this Technical Report including text, figures, and tables.

1.2 Ownership

The original exploration license, 7101X, was granted to Belchir LLC, a Mongolian Company under the Mineral Law of Mongolia on 19 March 2004. This exploration license covered an area of approximately 332 hectares.

This license (7101X) was subsequently transferred to Tuuryn Nuuryn Energy LLC and registered by the head of the Office of Geological and Mining Cadastre in their decision No. 444 in 2005.

A mining license (MV-010126) consisting of 32 hectares on the eastern side of the overall exploration license, was subsequently granted to Tuuryn Nuuryn Energy LLC. This license was for the exclusive rights to mine the coal in accordance with the Mineral Law of Mongolia. The balance of the exploration license has been converted into mining license MV-016767.

The geographic coordinates for the Exploration and Mining licenses have been converted to UTM 49N WGS 84 datum to create the geological and mining models of the deposit.

In 2006, the exploration (7101X) and mining (10126A) licenses were transferred to Coal Khentii LLC with the office of Geological and Mining Cadastre registering these transactions in Decision 318.

Tuuryn Nuuryn Energy LLC was later granted a land title, No. 0049440, for the 32 hectare mining license (MV-010126) and a mining license for what remained of exploration license 7101X, which subsequently became mining license MV-01016767.

Red Hill Energy LLC acquired these licenses from Coal Khentii LLC and Tuuryn Nuuryn Energy LLC in 2006.

A single company, Prophecy Resource Corporation, was formed in April 2010, when Red Hill Energy Ltd (Red Hill) and Prophecy Resource Corporation, a company formed in 2006 (Old Prophecy), merged. In 2011, the name was changed to Prophecy Coal Corporation.

BOYD is not aware of any cultural, geographic, physical, or environmental restrictions that would prohibit or restrict mining within the subject mining licenses.

1.3 Geology

The structural geology (Geology Type) of the coal measures underlying the license area is judged to be Low-B. The strata dip to the southwest at about 5 degrees to 10 degrees. The exception to this is the area situated near the high angle reverse fault, where the dip abruptly changes and can be close to vertical. Item 7 of this report contains Figure 7.2, which provides a typical cross-section through the deposit. This reverse fault trends through the property at approximately N55°W. The displacement associated with the fault is variable and appears to be in the range of 15 m to 30 m with the up thrown side to the southwest.

Normal faulting may occur within the license area but has not been identified. Any offsets that may occur are expected to be minimal and, if present, would not have a significant impact on the operational or financial performance of an openpit mining operation.

The geologic complexity associated with Chandgana can be characterized as a “Low Type B” geology type. The major coal seams exhibit thicknesses exceeding 3 m and display good lateral continuity. Dips in the region are low, generally less than 10 degrees, except in the immediate vicinity of a prominent reverse fault that strikes northwest to southeast through the license area. No other faulting within the license area has been identified.

In terms of Deposit Type, the Chandgana coal resources are classified as a “Surface” (openpit). By definition, surface deposits would be extracted by removal of overburden from the surface using truck/shovel, dragline, or other surface mineable techniques. BOYD opines that the preponderance of identified coal resources underlying the license area is amenable to surface (openpit) mining methods.

1.4 Status of Exploration

There have been four drilling programs conducted within the boundaries of the Chandgana deposit beginning in 1962. The first two, completed in 1962 and 1980, were by Russian and Mongolian exploration teams. A third program of eight drill core holes was completed in 2007 by Red Hill and the most recent program (2011) was done by Prophecy and included 15 drill-holes.

Prior to the acquisition of the Chandgana licenses by Red Hill (now Prophecy) there had been a limited number of borings drilled by Russian and Mongolian exploration teams in 1962 and 1980. This information was available, in the form of descriptive logs and cross-sections, for review.

Fourteen drill holes from the 1962 and 1980 programs are located within the boundary of Mining License MV-010126 (32 hectares); most of these were within the boundaries of the existing pit. Seven additional drill-holes were located outside that mining license, but within Mining License MV-016767 (300 hectares).

Red Hill (or their successor, Prophecy) carried out drilling exploration programs in 2007 and most recently in 2011. There were eight locations drilled and sampled in the 2007 program. At the conclusion of this drilling program and prior to the 2011 exploration activity, Red Hill commissioned Behre-Dolbear & Company (USA), Inc (Behre-Dolbear) to produce a NI 43-101 resource report. This report is titled: Technical Report on the Coal Resources of Chandgana Tal Coal Project Khentii Aimag (Province) Mongolia dated 11 September 2007. To confirm and supplement prior exploration, Prophecy drilled 15 additional drill holes within the mining licenses. Results of this 2011 program are included in our coal resource model.

1.5 Coal Resource Estimate

BOYD's estimate of the coal resources of Chandgana, as of 31 July 2012, totals 124 million in-place tonnes as follows:

Property	In-Place Coal Tonnes (millions)		
	Measured	Indicated	Inferred
Mining License MV-010126	13.5	-	-
Mining License MV-016767	110.9	-	-
Total	124.4	-	-

The coal resources of Chandgana are well-defined, being entirely within the measured category. Our estimates are derived from the results of reported drill-hole exploration which were then modeled using proven computer techniques.

Based on the available coal quality data supplied by Prophecy, the coal resources are classified as “Lignite A” by American Society for Testing and Materials (ASTM) criteria, as they exhibit the following average in-place quality parameters:

Average In-Place Coal Resource Quality (full seam, as-received basis)					
					Gross
					Calorific
					Value
					(kcal/kg)
Total	%		Fixed	Total	
Moisture	Ash	Volatile	Carbon	Sulfur	
		Matter			
40.9	10.8	25	23.3	0.61	3306

The above reflects weight average drill hole quality of the full-seam coal resource as developed in BOYD’s geologic model including all in-seam partings (excluding adjustments for deleterious material and/or coal losses typically experienced in a mining operation).

Due to their relatively shallow depth, high aggregate seam thickness, and resulting low stripping ratio, the Chandgana coal resources are exploitable by modern openpit mining methods.

The level of work completed to date for Chandgana, is sufficient to develop a preliminary or conceptual mine plan, and accompanying PEA, but not sufficient to support a PFS or FS. Therefore, the coal reserves have not been determined for the subject property.

1.6 Development and Operations

1.6.1 Development and Operations

BOYD developed a generalized, preliminary openpit mine plan for the purpose of completing a PEA of the coal mining component of the Chandgana project. The preliminary mine plan demonstrates that there are sufficient coal resources to support over 35 years of operation at a nominal annual production rate of 3.5 million run-of-mine (ROM) tonnes.

The mine planning process consisted of the following steps:

1. Developing a logical mine design that addresses practical mining requirements.
2. Scheduling waste and coal mining activities within the specified boundary limits of the operating pit to achieve the annual target quantities.

3. Designing suitable waste dumps, then scheduling waste and coal quantities to estimate waste and coal haulage distances on an annual basis.
4. Estimating mining fleet equipment requirements to achieve the required annual waste and coal schedule quantities.

1.6.2 Mine Scheduling

The coal supply requirements for the power plant were provided by Prophecy and are based on the expected operating schedule and heating requirements of the mine-mouth power plant. After ramp-up, the life-of-mine (LOM) plan was developed to provide 3.5 million tonnes (Mt) of ROM coal on an annual basis for 30 years, as shown below.

<u>Year</u>	<u>Required ROM Coal (t)</u>
2015	92,000
2016	2,504,000
2017 +	(+/-) 3,500,000

A coal inventory equal to two weeks of ROM plant feed (approximately 135,000 tonnes at full production) has been maintained in the mine site ROM stockpile throughout the LOM plan. Additionally, the mining operation will maintain significant in-pit inventory that can be readily mined and transported, if required. It is assumed that the TPP will maintain required product inventory as part of its routine operating plan.

1.6.3 Site Infrastructure

Site infrastructure included in the PEA is summarized as follows:

- Primary Crushing of ROM coal
- Camp and Associated Facilities
- Workshop and Warehouse
- Offices
- Electrical (temporary, permanent, and power lines)
- Heating and Air Conditioning
- Security and Fencing

Total infrastructure Capital Expenditure over the 30-year mine plan is \$30.1 million, including a 10% contingency.

1.6.4 Equipment Capital

Equipment capital for initial and replacement capital is shown in detail in Item 21 of this report. The following list is the primary equipment types utilized in this PEA:

- CAT 390 D Excavators (waste and coal)
- CAT 773 F Trucks (waste and coal)
- CAT D8R Dozers
- CAT 14M Graders
- CAT 988H Front-End Loaders
- CAT 773F Water Trucks

In addition, allowances have been included for ancillary equipment including small vehicles, welders, fuel and lube trucks, etc.

Total initial equipment capital and LOM replacements (sustaining capital) are estimated to be \$28.9 million and \$101.2 million, respectively, including a 10% contingency.

1.6.5 Economic Analysis

The primary assumptions of BOYD's PEA are detailed in various chapters of this technical report and summarized as follows:

- Production:
BOYD's model shows approximately 104 Mt will be mined during the 30-year projection essentially depleting the coal resource of the deposit. Average annual production at steady state operation (as projected by Prophecy in their proposed TPP plan) is approximately 3.5 Million tonnes per annum (Mtpa).
- Transfer Pricing:
The transfer price is US\$17.70 per tonne at coal mine gate for a ROM product. Prophecy has determined VAT, if applicable, will be the responsibility of the buyer. Transfer pricing is based on a CSA supplied by Prophecy and described in detail in Chapter 19.0 of this technical report.
- Operating Costs and Capital Expenditures:
Estimates of direct and indirect operating costs, and capital expenditures are developed in our PEA based on LOM mine plan volumetrics. Our review indicates PEA results are consistent with BOYD's experience with similar mining operations. The economic model utilizes a 10% contingency for direct operating cash costs and capital expenditures.

Depreciation of mining equipment was calculated on a 10-year straight line basis, and depreciation of infrastructure was calculated on a 40-year straight line basis.

- Cash Flow:
Cash flow has been derived on an after-tax basis in constant dollars as of 31 July 2012. For this project, net income is defined as revenue less cash operating costs,

less depreciation, and less corporate income tax. After-tax cash flow is net income, plus depreciation, and less capital expenditures. The cash flow analysis is considered appropriate for a PEA level study to determine potential viability of the project. The cash flow analysis excludes sunk capital and financing (if applicable).

- **Corporate Income Tax**

BOYD utilized a two-tiered corporate tax rate as published by the Mongolia Tax Administration, General Department of Taxation. This rate is:

- 10% of income for 0 to 3 billion tugriks (US\$2.25 million).
- 25% of income in excess of 3 billion tugriks (US\$2.25 million).

1.6.6 Present Value

A 30-year discounted cash flow (DCF) was completed on an after-tax constant dollar basis. Net present values (NPV) were calculated as of 31 July 2012 at: 8%, 10%, 12%, and 15% annual discount rates (applied mid-year) as follows:

<u>Discount Rate</u>	<u>DCF-NPV (US\$000)</u>
8%	66,024
10%	47,765
12%	34,692
15%	21,354

- **Internal Rate of Return (IRR)**

The IRR is defined as the discount rate at which the DCF-NPV equals zero. The IRR is approximately 28% on an after-tax basis.

- **Payback**

Payback determines how many years are required to recover the initial capital investment. The initial pre-production capital invested for the Chandgana coal mine project is US\$26.3 million for equipment and infrastructure and \$5.1 million for pre-production cash cost of operations (net). Our estimate of pre-production capital totals \$31.3 million. Payback occurs in approximately 5.3 years.

- **Qualified Results and Cautionary Notes Regarding the Economic Assessment**

This preliminary economic assessment provides potential viability of the projects coal resources. Mineral (coal) resources are not considered mineral (coal) reserves and therefore do not have 'demonstrated' economic viability. The economic assessment is preliminary in nature, and there is no certainty it will be realized. The results of this analysis are forward-looking and subject to a number of known and unknown risks, uncertainties, and other factors that may cause actual results to materially differ from those presented herein.

1.6.7 Taxes, Royalties, and Other

The following indirect costs are incorporated into the BOYD economic analysis:

- Emissions Tax
- Water Usage Fees
- Royalties
- License Fees
- General & Administration – Off Site
- Contractor Management, Margin, Overheads
- Corporate Income Tax

Excluded from the cash flow projections are sunk capital and financing cost (if required). VAT, if applicable, is assumed to be the responsibility of the buyer.

1.6.8 Base and Sensitivity Analysis

BOYD also performed sensitivity on delivered price and operating and capital costs ($\pm 10\%$). The following NPV's resulted:

Discount Rate (%)	DCF-NPV (US\$-000)						
	Base	Price		Operating Cost		Capital Expenditures	
		+ 10%	- 10%	- 10%	+ 10%	- 10%	+ 10%
8	66,024	99,930	32,050	95,521	36,470	71,078	60,969
10	47,765	74,579	20,889	71,171	24,308	52,130	43,401
12	34,692	56,350	12,975	53,675	15,661	38,530	30,854
15	21,354	37,609	5,047	35,701	6,964	24,603	18,106
IRR (%)	28	37	18	37	19	31	25

This economic analysis is based on mine gate (free-on-board [FOB]) pricing of \$17.70 per tonne.

Sensitivities based on project design assumptions indicate that project economics range in NPV from US\$5.0 million to US\$99.9 million with IRR's ranging from 18% to 37%.

1.7 Qualified Persons Conclusions and Recommendations

1.7.1 Recommendations

Additional exploratory drilling is recommended to better identify coal outcrops, coal quality, and line of oxidation. A limited amount of in-fill drilling is also recommended to

better define coal occurrence, mining conditions, and coal quality within the area planned for near term mining.

For the next phase of mine planning (prefeasibility [PFS]), additional field study should be done in order to develop baseline hydrology and rock mechanics data which is necessary for detailed mine planning.

PFS's should include a review of alternative methods of mining (i.e., electrify mining equipment, in-pit crushing and conveyors, etc) including:

- Cost comparisons to select the preferred technical and cost effective systems
- Cost benefit analysis of utilizing a contract miner (such as a Leighton Asia) or developing in-house expertise to use 100% company owned operations.
- Complete detailed infrastructure requirements and potential synergy/cost savings of combining camp and associated facilities with the TPP camp/facilities.

1.7.2 Conclusions

The planned Chandgana coal mine is logically situated to provide a reliable 3.5 Mtpa supply of coal to fuel the proposed mine-mouth TPP. Given the total thickness of the S2 Seam (approximately 40 m), the size of the mine's footprint will be limited relative to the energy produced.

This study is a preliminary economic assessment (PEA), and there is no certainty that results of the PEA will be realized. Coal resources are not coal reserves and do not have demonstrated economic viability. The PEA level of study completed does provide a preliminary indication of potential project economics which establishes a foundation to move forward with investment studies that have a higher degree of confidence (prefeasibility, feasibility, and detailed design).

There are sufficient coal resources (approximately 124 Mt) to meet projected coal demand for a period in excess of 30 years. Adjacent properties appear to contain similar coal bearing measures, and may offer opportunities for potential expansion and/or extension of the mine/TPP life.

Based on the assumptions outlined in this Technical Report, the coal mining project, with all related infrastructure requirement included, is technically feasible and the resources are potentially economically viable. It should be noted that the results contained herein are related to an economic analysis of the coal resources. Coal 'resources' are not to be

confused with coal 'reserves' and therefore do not have demonstrated economic viability.

The base economics indicate the after-tax NPV of the project ranges from US\$21 million to US\$66 million at discount factors ranging from 8% to 15%. The payback period (based on observation) is five years and the IRR is 28%. Pre-production capital expenditures are US\$26.3 million and operating expenses (minus revenue) are \$5.0 million.

Sensitivities to the project design assumptions indicate that project economics range in NPV from US\$5.0 million (i.e., Base Case coal price reduced 10%) to US\$99.9 million on an after-tax basis with IRR's ranging from 18% to 37%. Coal price and operating cash cost are the primary drivers in the NPV of the proposed coal mine project.

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2.0 INTRODUCTION

2.1 Client Name and Purpose

This report, entitled: Technical Report, Coal Resources and Preliminary Economic Assessment – Coal Mine Component, Chandgana Tal Coal Project, Khentii Province, Mongolia, has been prepared for Prophecy Coal Corp, Vancouver, British Columbia, Canada for use in support of a public filing on the Toronto Stock Exchange.

2.2 Introduction

BOYD's assignment was to complete a coal resource estimate, and preliminary mine and economic plan as part of this PEA. The proposed mining operation will supply fuel to the proposed 600 MW mine-mouth thermal power plant (TPP). This report is prepared in accordance with NI 43-101 Technical Report standards.

Prophecy is an established coal producer in Mongolia with an operating mine, Ulaan Owoo, in northern Mongolia. Planned mining of the Chandgana deposit is to commence by the fourth quarter of 2015.

BOYD is a leading international mining consultancy. We have worked extensively throughout Mongolia, China, and Asia and have experience with similar proposed and active openpit operations that form the basis of this PEA.

The Metric system of measurement is used in this report. All forward cost projections are expressed in constant second quarter 2012 US dollar values. BOYD projects all annual production, costs, sales, and economic analysis on a calendar year basis. We also caution the reader that spellings of Mongolian provinces, towns, etc. vary by source and we have attempted to be consistent in our spellings throughout this report.

2.3 Source of Data

Drill-hole databases, map of historic surface mines, basic reserve maps by coal seam and reserve area, historic coal production, and other technical source data were provided by Prophecy. BOYD used this data to develop the coal resource estimate, mine plan, and PEA presented in this Technical Report.

As discussed in Item 20.0 – Other Relevant Data and Information, BOYD has also relied on our extensive experience in Mongolia, China, and Asia. We have also used several published studies and manufacturer guides as reference material.

2.4 Field Visits

During the week of 14 May 2012, Messrs. Sobek and Mast of BOYD completed a field tour of the Chandgana project area, including previous openpit mining areas and future mining areas. All mining activity on the Chandgana mining license had ceased at the time of our visit, though Prophecy reports seasonal mining occurs for home heating fuel.

The amount of time reviewing the proposed mine site considering there is minimal area affected by previous mining and no current activity was deemed adequate for a PEA level study.

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3.0 RELIANCE ON OTHER EXPERTS

Prophecy provided the following reference documents for use in this study:

- A NI 43-101 Technical Report was produced by Behre Dolbear & Company (USA), Inc. (Behre-Dolbear) titled: Technical Report on the Coal Resources of the Chandgana Tal Coal Project, dated 11 September 2007. The Behre-Dolbear report was prepared for Red Hills Energy, Inc. (Red Hills Energy) from data assembled by Robeck GeoServices, (Robeck), Glen S. Griesbach P. Geol. and MineInfo, LLC (MineInfo), a Mongolian Company. The principal author of the Behre-Dolbear Report is Mr. Gardar G. Dahl, Jr., a qualified person as defined in NI 43-101.
- Additionally, for reference BOYD has reviewed unpublished documents as reference material provided by Prophecy. That reference material is referenced for completeness but not relied upon by BOYD in developing our conclusions contained in this report. The unpublished reference material is listed as follows:
- A mining feasibility scoping study was completed by Leighton LLC (Leighton Asia) in October 2011, titled "Preliminary Scoping Study Chandgana Tal Coal Mine". This document is not NI 43-101 compliant, but was reviewed as part of the BOYD data review for the production of this report.

This BOYD report updates the Behre-Dolbear resource report incorporating results of the Prophecy 2011 exploration program. We also reviewed the prior geologic computer model to confirm its reasonableness for use in the BOYD coal resource update. Based on this updated geological model, BOYD developed new resource estimates and a preliminary mine and economic plan model.

The above documents, as well as those listed in Item 27.0 References, were referenced for the purposes of this report, and to the extent appropriate, have been incorporated. BOYD generated its own interpretations of the data and compared the results to the Behre-Dolbear and other reports provided by Prophecy for our review and have not relied upon these to prepare this PEA. Most differences were resolved; however, to the extent that minor differences remain, BOYD's interpretations of the data form the basis of this report. Data utilized from reference material where applicable proved to be reliable and acceptable.

4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 Property Location

The Chandgana study area is located in central Khentii Province in eastern Mongolia. The capital city of Ulaanbaatar is located approximately 300 km west of the study area and the city of Ondorkhaan, approximately 40 km to the east. Figure 4.1, following this chapter is a map of Mongolia showing the general location of the Chandgana project

4.2 Ownership and Tenure

Prophecy controls two licenses. The first is mining license MV-010126, which covers an area of approximately 32 hectares and the second is mining license MV-016767 which covers an area of approximately 300 hectares.

The coordinates for the two licenses are:

Mining License MV-010126	
Longitude	Latitude
110° 00' 57"	47° 23' 21"
110° 00' 57"	47° 23' 40"
110° 01' 23"	47° 23' 40"
110° 01' 23"	47° 23' 21"

Exploration License MV-016767	
Longitude	Latitude
110° 00' 00"	47° 22' 50"
110° 00' 00"	47° 24' 00"
110° 01' 23"	47° 24' 00"
110° 01' 23"	47° 23' 21"
110° 00' 57"	47° 23' 21"
110° 00' 57"	47° 22' 55"
110° 01' 23"	47° 22' 55"
110° 01' 23"	47° 22' 50"

The geographic coordinates for the exploration and mining licenses have been converted to UTM 49N WGS 84 datum to create the geological and mining models of the deposit.

According to the Mineral Law of Mongolia, exploration license holders have exclusive rights within the specified exploration license area. The initial term of tenure for an exploration license is three years and may be extended twice for a total of six additional

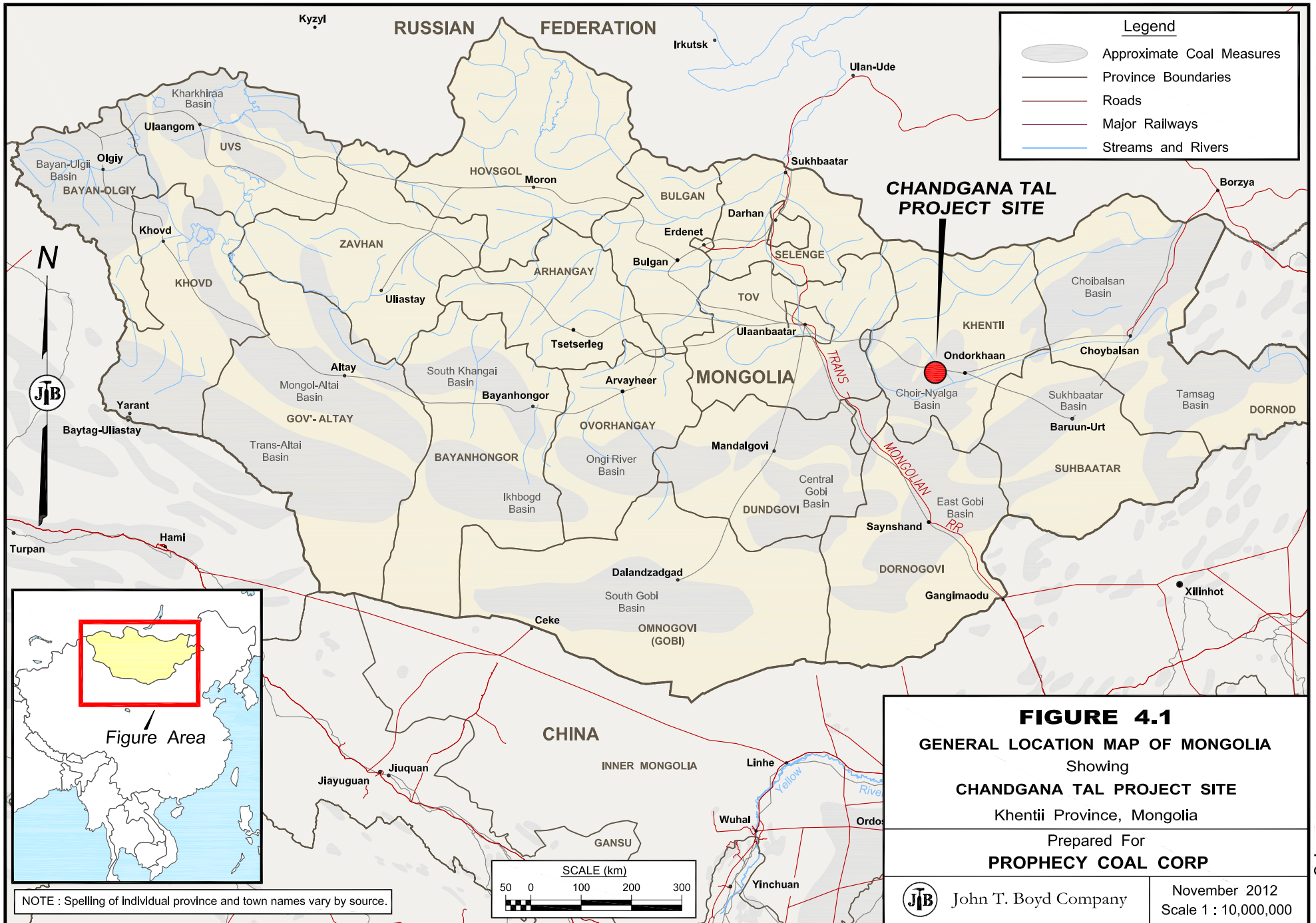
years. Exploration License 7101X was transferred from Coal Khentii to Red Hills Energy on 3 January 2007, with the first extension expiring on 20 March 2010.

Exploration license holders have an exclusive right to claim a mining license within their exploration license area. The original mining license has a term of 30 years and can be renewed twice, each for an additional 20 years. Mining License MV-010126, since transferred to Prophecy, was granted to Red Hill Energy on 23 January 2007 and will expire on 22 January 2037 (with renewal rights for an additional 40 years).

The remainder of exploration license 7101X has also been converted to a mining license, MV-016767. Since the entire exploration license has been converted into a mining license, there is no remaining area that retained the exploration license number.

Following this page is Figure 4.1, General Location Map Showing Chandgana Tal Coal Project

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5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY

5.1 Topography, Elevation, and Vegetation

Topography within the Chandgana study area is flat lying and characterized as gently rolling (hilly) terrain. Natural surface elevations range from approximately 1,150 m to 1,175 m. In pre-existing strip mined pits, elevation of the pit bottom is between 1,144 m and 1,149 m.

As shown in the photograph below, indigenous vegetation is mainly scrub grass.



5.2 Accessibility

Vehicular access to the general vicinity of the Chandgana study area is provided by the Undurkhann-Ulaanbaatar Highway (AO 501) which runs in a general east-west direction and is located approximately 2 km north of the Chandgana license boundary. Mongolia Highway AO 501 connects Ulaanbaatar, located 300 km west of the study, and Ondorkhaan, located approximately 40 km to the west. Smaller towns, villages (soum centers), and temporary settlements are scattered through the region and accessed by a limited network of secondary paved and unimproved roads.

Available rail service in Mongolia is limited and consists of the Trans-Mongolian Railway which crosses the central portion of Mongolia in a general north-south direction, extending from Sukhbaatar on the Russian border, through Ulaanbaatar, and to Gangimaodu on the Chinese border. The other existing rail extends from Choybalsun in eastern Mongolia, 239 km to the north to the Russian border. At present, only

intermittent passenger service is provided on the Choybalsan to Russia line (two days per week), but there are plans to incorporate the existing trackage in future rail development to the Tavan Tolgoi coal deposit. Since future mining on the Chandgana licenses is planned for mine-mouth electricity power generation, the lack of rail access is not considered to be a material issue.

The following picture shows rail cars loaded with coal at the rail yard located in Baganuur (approximately 150 km west of Chandgana):



The nearest International airport is at Ulaanbaatar. There is a local airstrip at Ondorkhaan; however, the airstrip was not visited by BOYD and its condition is unknown.

5.3 Climate

The region where the Chandgana study area is located has a continental climate characterized by hot summers and very cold winters. Temperatures reach 35°C to 40°C in the summer (June/July) with lows of -30°C to -40°C common in the winter (December/January). With proper provisions and facilities constructed and equipped for the extreme climate conditions, a future openpit coal mine can operate year round.

Annual precipitation totals between 10 cm and 50 cm with most precipitation occurring as rain in August. Winter snow accumulation averages approximately 10 cm, but local drifting up to 1 m can occur.

The wind direction is either from the northwest or the northeast, typically from the northwest in the spring and fall seasons when wind speed can reach 20 m/s (versus 4 m/s to 7 m/s average).

5.4 Local Resources and Infrastructure

Surface water is not readily available in the area. The nearest perennial stream is the Kherlen River, which is 30 km to the southwest. Outside the soum centers, the semi-nomadic people raise animals as well as grow wheat and other crops. The land is used mostly for grazing herds of goat, sheep, horse, and camel. Water accumulating within the previously mined coal pit is being used for stock watering.

There are no permanent waterways within or nearby the study area. Small pools of water exist seasonally in shallow depressions, with one such source (Davst Lake) was reportedly used to supply water for the 2007 drilling program. Short dry ravines or creek drainages may contain limited amounts of water in the spring months and during the rainy season.

The local settlements are connected to the central electrical power grid, and the soum centers have a reasonable amount of infrastructure including elementary to high schools and hospitals. Cellular telephone communication in the area is generally good.

Electrical power is supplied to the previous mining site by a 110 KW transmission line from Undurkhaan. The transmission line is part of the Choibalsan-Baruum Undurkhaan power network of eastern Mongolia. Construction of the mine-mouth power plant will provide a reliable supply of electricity to the planned coal mining operation.

The local infrastructure, or lack thereof, can be conducive to surface mining operations. There are no nearby major waterways, highways, or civil structures that would be an impediment to mining activities.

5.5 Physiography

The Chandgana project area is situated in an intermontane valley surrounded by low hills and northeastward trending mountain ranges on either side of the valley. The project area is located northeast of the Nyalga depression and southeast of the northeast-trending Shovogo basin in eastern Mongolia. The depression is surrounded by the Dashbalbar Mountains, and has an average width of 8 km to 10 km, but up to 20 km wide in the area of the Chandgana coal deposit.

6.0 HISTORY

6.1 History of Ownership

A history of the prior ownership for the Chandgana licenses was provided in the NI 43-101 report produced by Behre-Dolbear, 11 September 2007.

An exploration license, 7101X, was granted to Belchir LLC, a Mongolian Company under the Mineral Law of Mongolia on 19 March 2004. The exploration license covered an area of approximately 332 hectares: The exploration license was later divided into two mining licenses. They are MV-010126 and MV-016767.

This exploration license (7101X) was transferred to Tuuryn Nuuryn Energy LLC in accordance with the Mineral Law of Mongolia and registered by the head of the Office of Geological and Mining Cadastre in their decision No. 444 in 2005.

Subsequently, the mining license (MV-010126) on the eastern side and within the exploration license was granted to Tuuryn Nuuryn Energy LLC. The coordinates of this 32 hectare mining license are:

Mining License MV-010126	
Longitude	Latitude
110° 00' 57"	47° 23' 21"
110° 00' 57"	47° 23' 40"
110° 01' 23"	47° 23' 40"
110° 01' 23"	47° 23' 21"

The geographic coordinates for the exploration and mining licenses have been converted to UTM 49N WGS 84 datum to create the geological and mining models of the deposit used in this report.

In 2006, the exploration (7101X) and mining (MV-010126) licenses were transferred to Coal Khentii LLC with the office of Geological and Mining Cadastre registering these transactions in Decision 318.

Tuuryn Nuuryn Energy LLC was later granted a land title, No. 0049440, covering the 32 hectare mining license (MV-010126) area.

Red Hill Energy acquired these licenses from Coal Khentii LLC and Tuuryn Nuuryn Energy LLC in 2006. After acquisition, Red Hill Energy converted what was remaining of

the exploration license into mining license MV-016787. This mining license covers 300 hectares, with the following coordinates:

Mining License MV-016767	
Longitude	Latitude
110° 00' 00"	47° 22' 50"
110° 00' 00"	47° 24' 00"
110° 01' 23"	47° 24' 00"
110° 01' 23"	47° 23' 21"
110° 00' 57"	47° 23' 21"
110° 00' 57"	47° 22' 55"
110° 01' 23"	47° 22' 55"
110° 01' 23"	47° 22' 50"

A single company was formed in April 2010, when Prophecy Resource Corporation, a company formed in 2006 (Old Prophecy), merged with a subsidiary of Red Hill Energy and Red Hill's Energy's name was changed to Prophecy Coal Corp.

6.2 History of Geological Exploration

The first documented regional minerals exploration was conducted by a team lead by Y.S. Jelobovski, a Russian geologist, in 1926. Jelobovski was following up on information provided by local residents noting that coal was found in the territory of Khentii Province. Based on field reconnaissance work, the team concluded that there were two main coal bearing strata present, although no trenching or drilling took place at this time.

In 1958, a Russian team led by N.A. Volkov conducted a radiometric survey of the area looking for radioactive elements. They concluded there were no commercial concentrations of uranium in the coal or host rock.

Additional Russian studies performed by A.P. Orelov and B.P. Soroko took place in 1962. The objective of this work was to locate coal for use by the local soums and the nearby Berkh fluorspar mine. The Chandgana project area was included with these studies. A series of shallow trenches, 150 m to 200 m apart, were hand dug during this effort and followed up by drilling 25 core holes (average depth of approximately 65 m, total 1,625 m drilled). Eleven of the 25 drill holes did not penetrate the full coal section. Core recovery was poor (about 63% overall) and this coal quality information is not used in this study.

Exploration resumed in 1980 with the development of a small test mine at Chandgana and further on site exploration with the objective of better defining openpit potential (depth of overburden) and quality of the coal. A total of 24 total drill holes (total 936.1 m) were completed along two drill lines located 300 m to 400 m apart with a drill hole spacing of between 150 m to 400 m along each line. Only 11 of the 24 drill holes penetrated the full coal section. An unspecified amount of trenching was also done during the 1980 program.

Red Hill completed an 8-drill hole (730.5 m) exploration program in 2007 to confirm coal occurrence (thickness and depth) and coal quality with the Chandgana study area.

The most recent exploration program was undertaken by Prophecy in 2011. This program included 15 drill holes (total 1,055.5 m) and provided in-fill drilling to reduce the spacing between available drill holes to 300 m to 400 m. Selected holes were also drilled to better delineate the coal seam outcrops.

A more in-depth discussion of the 2007 and 2011 programs is presented in Chapter 12.

6.3 Historical Coal Resource Estimates

BOYD is unaware if coal resource estimates were made in conjunction with earlier exploration programs. The only documented estimates we received as part of this study were included in the Behre-Dolbear 2007 Report, summarized below:

License Area	In Situ Coal Resource (Mt) by Classification		
	Measured	Indicated	Total
MV-010126	9.3	-	9.3
MV-016767	132.0	-	132.0
Total	141.3	-	141.3

Source: Table 9.1 (pg 49 of 2007 Behre-Dolbear Report)

Note: Since the Behre-Dolbear report, the exploration license was converted to mining license MV-016767.

6.4 Production History

To BOYD's knowledge, there has not been significant mining conducted on the Chandgana mining license since the time of the 2007 Behre-Dolbear Report. Prophecy reports that a small amount of seasonal mining occurs to provide home heating fuels for the local soums. The original test mine was developed in 1962 and the first commercial mine "Chandgana Tal" was established by the Mongolian government in 1966. In 1995, the mine was reorganized under Berkh Uul LLC and operates on a limited production basis to date. It is estimated that approximately 1.8 Mt of coal has been mined from the southern half of the Chandgana mining license area.



Following this page is Table 6.1, Summary of Drill Holes.

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TABLE 6.1

SUMMARY OF DRILL HOLES
 CHANDGANA TAL COAL PROJECT
 Khentii Province, Mongolia
 Prepared for
PROPHECY COAL CORP
 As Completed By
 Behere-Dolbear and John T. Boyd Company
November 2012

Drill Hole	Location		Collar	Total	Date	Full Section
	Easting	Northing	Elevation (m)	Depth (m)	Drilled	Penetrated
SKV-01	425964.21	5249131.65	1163.00	80.00	1962	yes
SKV-02	426022.20	5249190.91	1163.23	73.10	1962	yes
SKV-03	425839.00	5249011.74	1162.90	109.00	1962	yes
SKV-04	425620.99	5249378.93	1156.16	28.80	1962	yes
SKV-05	425733.33	5248730.78	1165.60	83.30	1962	no
SKV-06	425503.24	5248200.79	1172.80	58.00	1962	no
SKV-07	425462.21	5248089.57	1173.50	64.40	1962	no
SKV-08	425344.03	5247869.54	1176.00	74.60	1962	yes
SKV-09	425580.04	5248389.70	1171.10	101.90	1962	yes
SKV-10	425566.71	5249239.29	1160.50	73.40	1962	yes
SKV-11	426423.87	5248554.15	1171.20	57.00	1962	no
SKV-12	426516.43	5248628.80	1170.30	57.40	1962	yes
SKV-13	426142.50	5249307.04	1163.40	65.20	1962	yes
SKV-14	426214.03	5248313.33	1171.20	69.50	1962	no
SKV-15	426706.58	5248859.14	1171.70	64.30	1962	no
SKV-16	425453.80	5248955.08	1163.70	50.20	1962	no
SKV-17	426007.73	5249173.82	1163.20	47.10	1962	yes
SKV-18	425749.49	5249569.62	1159.20	63.00	1962	no
SKV-19	426105.01	5248742.50	1167.10	70.10	1962	yes
SKV-20	426366.05	5248900.84	1167.30	40.75	1962	yes
SKV-21	426654.92	5248396.83	1173.80	55.50	1962	no
SKV-22	426615.74	5248730.43	1173.30	50.90	1962	no
SKV-23	426224.07	5248815.36	1166.10	50.00	1962	no
SKV-24	425667.20	5249455.31	1159.60	66.30	1962	yes
SKV-25	426070.00	5248925.00	1162.70	70.90	1962	yes
SKV-26	426190.00	5248789.00	1166.10	42.70	1980	yes
SKV-27	426003.00	5249023.00	1161.70	71.80	1980	yes
SKV-28	425963.00	5248875.00	1161.80	73.40	1980	yes
SKV-29	425917.00	5248970.00	1162.00	75.90	1980	yes
SKV-30	425873.00	5249105.00	1161.30	73.80	1980	yes
SKV-31	426005.00	5248734.00	1163.00	74.00	1980	yes
SKV-32	426090.00	5248808.00	1164.70	71.90	1980	yes
SKV-33	426029.00	5248992.00	1161.90	72.70	1980	yes
SKV-34	426189.00	5248870.00	1163.80	41.40	1980	yes
SKV-35	425816.00	5248925.00	1163.10	74.10	1980	yes

TABLE 6.1 - Continued

Drill Hole	Location		Collar	Total	Date	Full Section
	Easting	Northing	Elevation (m)	Depth (m)	Drilled	Penetrated
SKV-36	426160.00	5248929.00	1162.90	42.80	1980	yes
SKV-37	425832.00	5249076.00	1161.00	17.80	1980	no
SKV-38	425848.00	5248888.00	1163.30	17.40	1980	no
SKV-39	425840.00	5248978.00	1162.40	17.00	1980	no
SKV-40	425792.00	5249044.00	1161.80	17.40	1980	no
SKV-41	425937.00	5248930.00	1162.20	16.00	1980	no
SKV-42	425748.00	5249004.00	1162.50	17.60	1980	no
SKV-43	425796.00	5248984.00	1162.60	17.20	1980	no
SKV-44	425876.00	5249051.00	1162.60	16.40	1980	no
SKV-45	425896.00	5249051.00	1161.80	17.20	1980	no
SKV-46	425904.00	5248972.00	1161.90	16.40	1980	no
SKV-47	425905.00	5248890.00	1163.10	17.00	1980	no
SKV-48	425875.00	5249026.00	1161.90	16.40	1980	no
SKV-49	425764.00	5248954.00	1162.90	17.80	1980	no
RH-07-01	426226.46	5248004.44	1174.44	89.70	2007	yes
RH-07-02	425489.76	5248196.78	1170.13	112.30	2007	yes
RH-07-03	424838.51	5248225.64	1166.02	115.80	2007	yes
RH-07-04	424850.05	5248700.74	1162.59	100.70	2007	yes
RH-07-05	425418.75	5248870.73	1163.66	97.50	2007	yes
RH-07-06	426070.00	5249170.00	1163.80	73.60	2007	yes
RH-07-07	425500.13	5249590.28	1157.45	64.50	2007	yes
RH-07-08	424777.82	5249229.13	1155.54	76.40	2007	yes
CCT-11-01	425878.56	5249475.17	1159.02	67.60	2011	yes
CCT-11-02	425546.27	5249666.06	1155.43	58.60	2011	yes
CCT-11-03	425326.69	5249349.19	1157.65	66.10	2011	yes
CCT-11-04	425001.56	5249374.30	1152.97	61.60	2011	yes
CCT-11-05	425090.60	5249023.29	1161.77	81.00	2011	yes
CCT-11-06	424600.67	5248959.81	1160.93	80.60	2011	yes
CCT-11-07	425651.90	5248653.33	1166.64	91.00	2011	yes
CCT-11-08	425233.77	5248487.50	1168.23	95.00	2011	yes
CCT-11-09	424591.89	5248449.87	1167.86	109.60	2011	yes
CCT-11-10	425096.24	5248024.82	1170.64	122.80	2011	yes
CCT-11-11	425951.00	5249535.14	1157.00	49.60	2011	yes
CCT-11-12	425547.44	5249722.56	1151.72	41.80	2011	yes
CCT-11-13	425332.02	5249409.57	1154.58	49.60	2011	yes
CCT-11-14	425013.64	5249432.15	1152.11	55.60	2011	yes
CCT-11-15	425015.31	5249477.42	1152.42	25.00	2011	no

Note:

Drill Hole data for 1962, 1980, and 2007 programs are compiled by Behre-Dolbear (Table 8.1 of Behre-Dolbear 2007 Report).

Drill Hole data for 2011 program as compiled by BOYD.

7.0 GEOLOGICAL SETTING AND MINERALIZATION

7.1 Introduction

The Chandgana study area is located on the eastern end of the Shorvogo plain, a 150 km by 350 km northeast-southwest striking valley. Geologically this valley is known as the Nyalga Depression and occurs within the Khentii zone of the Hangai-Khentii fold system. The Khangai-Khentii fold system is a series of folded Silurian to Permian age sediments found in eastern Mongolia.

7.2 Stratigraphy

Regionally, the valley floor is covered with Quaternary deposits largely composed of lake, proluvial talus, and alluvial sediments. The underlying Tertiary age sediments are mainly arkosic sandstones, and greywackes with lenses of conglomerate. These Tertiary age sediments are reported to be up to 900 m thick (Behre-Dolbear, September 2007) in the region.

The lower Cretaceous rocks have been divided into three formations; youngest to oldest they are the Zuunbayan, Tsaganysav, and Sharil Formations. It is the Zuunbayan Formation that is of greatest importance, as it contains the coal resources for the Chandgana property.

The Zuunbayan Formation is divided into two members based on their lithological composition. The Upper Member is about 120 m to 150 m thick and composed of alternating beds and lenses of claystones to fine grained clastic material. The coal zone of interest is in this Upper Member. Within the coal zone there are up to five separate identifiable coal seams, with the S2 Seam being of greatest economic interest. The S2 has been further divided top to bottom into the S2A and S2B splits. Figure 7.1, following this text, illustrates the generalized columnar section for the Chandgana Tal Coal Project.

The Lower Member of the Zuunbayan Formation is 60 m to 80 m thick and is composed of grey colored coarse-grained sandstone.

The Tsagantsav Formation has a complex structure consisting mainly of effusive volcanic rocks interbedded with grey argillite, black clayey siltstone, and fine grained sandstones. Total thickness of the formation can range up to 500 m.

The oldest Cretaceous formation is the Sharil. The Sharil is divided into Upper and Lower members. The Upper Member is dull brown sandy clays interbedded with sticky clay lenses that are up to a meter in thickness. This Upper Member is 50 m to 100 m in thickness. The Lower Member is composed of dull red and yellowish-red conglomerates with a thickness of approximately 300 m.

The underlying Jurassic age rocks are unnamed and range in composition from interbedded sandstones and conglomerates to gravellites. The thickness of this strata is reported to be around 700 m.

7.3 Structural Geology

Within the license area, the structural geology is judged to be Low-B Type. The strata dip to the southwest at about 5 degrees to 10 degrees. The exception to this is the area situated near the high angle reverse fault, where the dip abruptly changes and can be close to vertical. Figure 7.2, following this text, provides a typical cross-section through the deposit. This reverse fault trends through the property at approximately N55°W with the vertical offset along the fault appears to range from 15 m to 30 m. The up thrown side is to the southwest.

Normal faulting may occur within the license, but has not been identified. Offsets that may occur are expected to be minimal and, if present, would not have a significant impact on a surface openpit mining operation.

7.4 Significant Mineralization

The focus of study, coal resource estimation, and future open pit mine planning, is the two splits of the S2 coal seam (S2A – Upper and S2B – Lower [see Figure 7.1]). The S2 Seam sub-crops across the northern portion of the two license areas, and underlies the southern 80% of the overall study area.

Average thickness of the combined splits is 40.65 m: S2A at 15.19 m, rock parting at 1.52 m, and S2B at 23.94 m. Trend in total coal thickness (excluding the rock parting) is thinner along the subcrop (minus 20 m) and increases southward exceeding 60 m in the south-central portion of the exploration license. Depth of overburden above the S2 Seam ranges from approximately 15 m at the subcrop to over 60 m in the southwestern corner of the exploration license area.

The two coal seams overlying the S2 Seam, S0 and S1, have the potential to be mineable based on average seam thickness (i.e., each seam is plus 2.5 m), but require additional exploration and coal quality testing to determine commercial mineability. The two coal seams underlying the S2 Seam, S3 and S4, were not considered in our resource estimate.

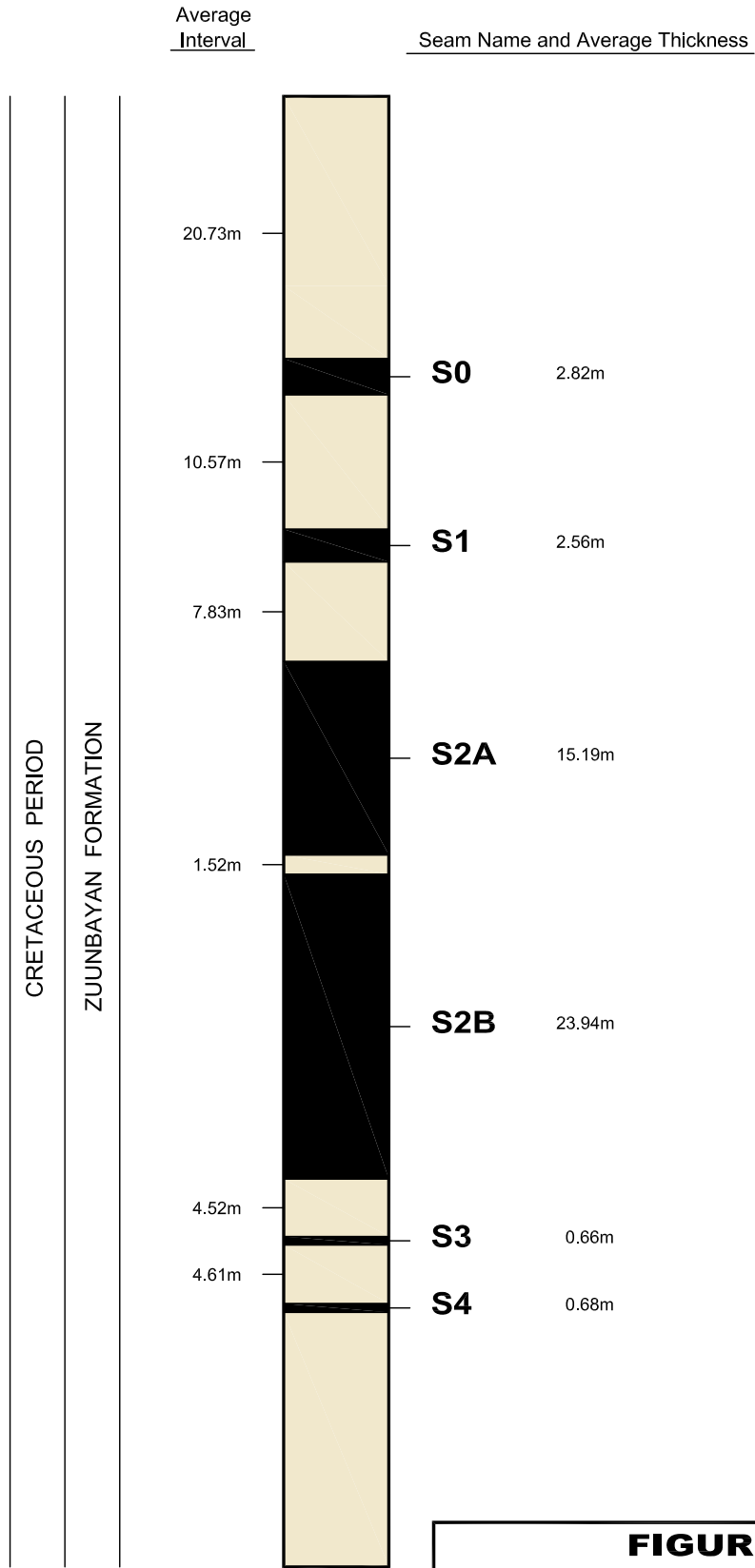
Following this page are:

Figures

7.1 Generalized Section, Chandgana Tal Coal Project

7.2 Cross Section A-A', Chandgana Tal Coal Project

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CRETACEOUS PERIOD

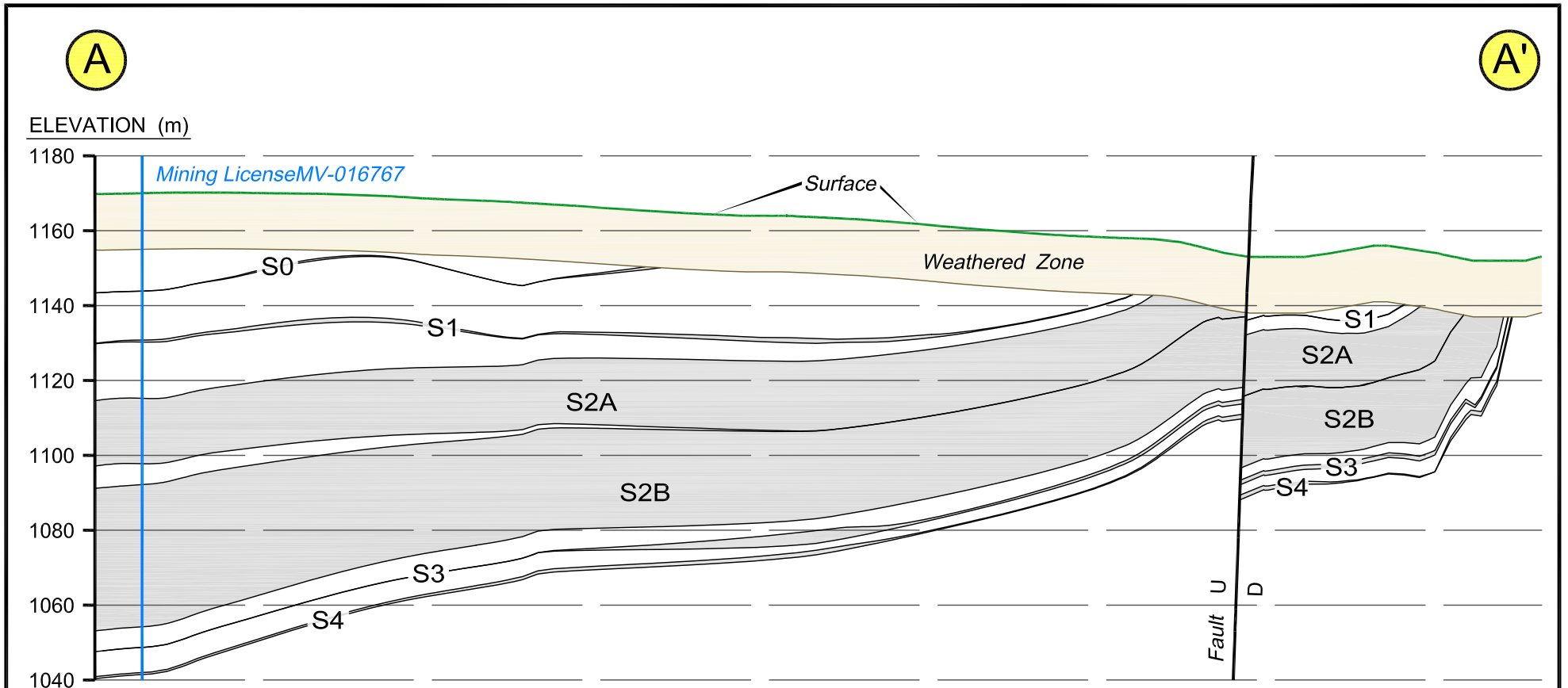
ZUUNBAYAN FORMATION

FIGURE 7.1
GENERALIZED SECTION
CHANDGANA TAL COAL PROJECT
 Khentii Province, Mongolia

Prepared For
PROPHECY COAL CORP


 John T. Boyd Company

November 2012
 No Scale



CROSS SECTION A - A'

Scale Horizontal 1 : 8,000
Vertical 1 : 32,000

<p>FIGURE 7.2</p> <p>CROSS SECTION A - A'</p> <p>CHANDGANA TAL COAL PROJECT</p> <p>Khentii Province, Mongolia</p>	
<p>Prepared For</p> <p>PROPHECY COAL CORP</p>	
 John T. Boyd Company	<p>November 2012</p> <p>Scale as Shown</p>

NOTES : 1. See figure 14.1 for cross section location
2. Vertical exaggeration 4X

8.0 DEPOSIT TYPES

8.1 Introduction

BOYD has independently developed the criteria used in our estimation of the coal resources underlying the Chandgana study area. These criteria and the derived estimates are based on our independent Qualified Person judgement and experience and our understanding of the subject coal deposit. With reference to procedural guidelines outlined in GCS 88-21, we have included our opinion of the Geology Type (geologic complexity) and Deposit Type (mining method).

8.2 Geology Type

The geologic complexity associated with the Chandgana coal deposit is judged to be “Low Type B” geology type. The major coal seams exhibit thicknesses exceeding 3 m and good lateral continuity. Dips in the region are low, generally less than 10 degrees, except in the immediate vicinity of a prominent reverse fault that strikes northwest to southeast through the license area. No other faulting within the license area has been identified. BOYD’s Geology Type classification is consistent with the previous NI 43-101 Resource Report by Behre-Dolbear, which also concluded that the area is a Low Type B Geology coal deposit.

8.3 Deposit Type

The defined Chandgana coal resources are amenable to openpit mining within study the area and are classified as a “Surface” mineable deposit type. By definition, surface mineable deposits would be extracted by removal of overburden from the surface using truck/shovel, dragline, or other surface mineable techniques. BOYD believes that the preponderance of recoverable coal that is likely within the license area is amenable to using openpit mining methods utilizing truck/shovel mining techniques.

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9.0 EXPLORATION

9.1 Introduction

The Chandgana site is located in a broad open plain with rolling to flat lying topography. A limited amount of prior surface mapping of the coal seams has taken place within the Chandgana mining license. The extent of coal seam outcrop mapping is constrained because the surface is typically covered with thin to thick accumulations of alluvial material. The coal sub-crop is exposed in the area where previous mining took place in Mining License MV-010126.

9.2 Drilling Exploration

Prior to the acquisition of the Chandgana licenses by Red Hill Energy (now Prophecy), there had been a limited number of borings drilled by Russian and Mongolian exploration teams in 1962 and 1980. This information was available for review in the form of descriptive logs and cross-sections. The information for drill locations from the earlier exploration programs that could be verified on the ground was included as part of the structural database. Coal quality data from the 1962 and 1980 programs were not considered reliable (due to unacceptable coal recovery) and therefore excluded in the estimation of resources in this study.

The drill holes from the Russian/Mongolian exploration programs are prefixed with "SKV". Within the boundary of Mining License MV-010126 (32 hectares) there are 14 "SKV" locations, most of these within the boundaries of the existing pit. In mining license MV-016767 (300 hectares) there are seven of the "SKV" drill-hole locations.

Red Hill Energy (or their successor, Prophecy) carried out more recent drilling exploration programs in 2007 and 2011. There were eight locations drilled and sampled in the 2007 program. Although this 2007 drilling program substantially placed the resource in the measured reliability (geologic assurance) category, Prophecy core drilled an additional 15 locations within the exploration and mining license boundaries in 2011.

Details of the 2007 and 2011 programs are discussed in Item 10.

10.0 DRILLING

10.1 Introduction

There have been four distinct drilling programs conducted within the boundaries of the Chandgana study area. The first two, completed in 1962 and 1980, were by Russian and Mongolian exploration teams. A third program was comprised of eight core-drilled holes, and was completed in 2007 by Red Hill Energy. Prophecy completed an in-fill program in 2011, which included a 15-hole program in 2011.

10.2 Russian and Mongolian Drilling Exploration

There are 29 locations that were drilled in the 1962 and 1980 programs and used in the modeling of the coal deposit. These drill-hole locations are based on “relevant drill hole survey data” (Behre-Dolbear, 11 September 2007). The majority of these locations are documented as being in the existing pit or to the south of it.

Generally, these holes were drilled through the S2 Seam. The descriptive logs of these locations have recorded the top and bottoms depths of the various lithologies alongside a graphic log. Several of the logs of these drilled locations were also logged using a down-hole natural gamma detection tool. However, there is no indication of scale (cps) on the log and they are non-descriptive; therefore, such logs are considered to be of minimal to no value.

Core recovery through the coal seams was spot checked and appears to be in the order of 60%. Coal quality information for these programs was not available; even if such information was present, it would have been regarded as unreliable due to the low percentage coal core recovery.

10.3 2007 Drilling Exploration Program

The Chandgana licenses were acquired by Red Hill Energy in 2007. To confirm the results of the earlier drilling program, an eight core hole program was implemented in May 2007. The core holes are located on nominal 500-m to 700-m spacing, meaning that the deposit was drilled to a measured category (see Chapter 16). The 2007 coal exploration program was managed by Mr. Eric Robeck.

The drilling contractor for the 2007 Chandgana exploration program was Landdrill Drilling Company from Ulaanbaatar. When drilling activity commenced at a location, the contractor would set steel casing through the relatively unconsolidated material at the top of the hole. This material varied from 3.2 m to 19.5 m in thickness. Once casing was set, the hole was advanced using an HQ diameter coring assembly and continuously coring through the coal horizon of the Zuunbayan Formation.

Upon removal from the core barrel, the core was measured for recovery, washed, photographed, and the lithology described. Rock Quality Designation (RQD) measurements were also recorded.

The sampled intervals, which included roof, floor, and the coal cores, were wrapped in plastic to maintain moisture integrity, boxed and shipped to the SGS analytical laboratory in Tianjin, China. All coal was collected as well as 20 cm samples of the roof and floor. Non-coal parting within the coal seam greater than 15 cm were collected and sampled separately.

Upon completion of drilling, the holes were geophysically logged by Monkarotaj Borehole Logging and Ground Geophysical Services (Monkarotaj), with offices in Ulaanbaatar, using a slim line geophysical tool. The data recorded were: natural gamma, gamma-gamma density, resistivity, and caliper which are a typical suite of geophysical logs used in the coal industry.

The results of this eight drill hole program compared favorably with earlier drilling results and confirmed the presence of five coal seams, with the S2 (S2A and S2B) being the principal coal seam. Core recovery in the coal seams ranged from around 84.8% to 94.5%; overall the drilling program averaged just over 90.6% recovery. The percentage coal recovery is considered to be adequate to enable the data be used (when the individual seam recovery is greater than 90%) in the estimation of coal quality.

10.4 2011 Drilling Exploration Program

Prophecy conducted a 15-hole program in 2011. This program mainly consisted of in-fill drilling, thereby reducing the distance between drill holes to 300 m to 400 m. Prophecy also completed holes at a number of locations near the sub-crop to better delineate the location of the sub-crop and to identify the nature of the faulting. Upon completion of this drilling program, the drill hole density within the Chandgana license areas are within the measured classification.

The 2011 coal exploration program was overseen by Christopher M. Kravits, CPG and Manager of Geology for Prophecy. Mr. Kravits was also the geologist of record for the first of the holes completed (CCT-11-01). Mr. Munkherdene was the site geologist on CTT-11-08, and Mr. Khishignyam was the site geologist for all remaining locations. Both Mr. Munkherdene and Mr. Khishignyam are geologists employed by MineInfo, a Mongolian company.

The drilling contractor for the Prophecy exploration program was Best Drilling from Ulaanbaatar. They used a Longyear 44 drilling machine for the project. Eight of the 15 drill holes drilled did not require casing. The other seven had between 3 m and 21 m of steel casing advanced prior to continuous core drilling the remainder of the hole. Once casing was set, the hole was cored with a HQ diameter coring assembly and continuously coring through the coal horizon of the Zuunbayan Formation.

Upon removal from the core barrel, the core was measured for recovery, washed, photographed and the lithology described. RQD measurements were also recorded.

All coal seams and coal seam splits were collected, as well as 20-cm samples of the roof and floor. Non-coal partings that were less than 15 cm were included with the coal samples, while partings that were 15 cm to 30 cm thick were collected, sampled and analyzed separately. Non-coal intervals greater than 30 cm were collected but not analyzed. The sampled intervals were wrapped in plastic to maintain moisture integrity, boxed and shipped to the SGS analytical laboratory in Ulaanbaatar. The samples were then prepared for analysis at the SGS laboratory in Ulaanbaatar and proximate analysis, sulfur, gross calorific (GCV) and ultimate analyses were performed. Prepared sample splits were then transported to the SGS laboratory in Tianjin where ash analysis, ash fusion temperature (AFT) and trace element analysis (TE) were performed.

Upon completion of drilling, the holes were geophysically logged by Monkarotaj using a slim line geophysical tool. The data recorded were: natural gamma, gamma-gamma density, resistivity, and caliper which are a typical set of geophysical logs used in the coal industry.

The results of the 2011 program complemented the 2007 drilling results by providing additional structural and quality control. Core recovery ranged from 82.9% to 100%, with this overall drilling program averaging 92% recovery in the coal seams. The percentage of core recovery is adequate to enable this data be used (when the individual seam recovery is greater than 90%) in the estimation of coal quality.

11.0 SAMPLE PREPARATION, ANALYSES, AND SECURITY

Drill core sample coal seam quality analysis obtained from the 2007 and 2011 exploration programs were used to estimate coal resource quality. The methodology and sampling approach for earlier programs from 1962 and 1980 were not verified by BOYD and therefore were not used in the estimation of coal quality in this study.

BOYD was not present during either the 2007 or 2011 programs and therefore cannot validate the sampling procedures or protocols that may have been used. However, based on available descriptive information, the methodologies used in such exploration programs appear to have been performed in a manner that is consistent with accepted international coal industry practice.

11.1 2007 Drilling Program

A description of the methodology and approach for the 2007 program is presented in Item 14.0 of the Behre-Dolbear's Report, and shown below. This program was commissioned by Red Hill Energy.

The following is the sample handling procedure outlined in the Behre-Dolbear 2007 Report for:

- Core was extracted from the core barrel then placed in a split tube inner core barrel.
- The core was washed with fresh water to clean off mud and other extraneous material.
- The core was then photographed from a distance of approximately 1 m.
- The lithology and RQD were logged and recorded.
- The core was wrapped in plastic to preserve moisture, placed in boxes and shipped to the SGS coal laboratory in Tianjin, China for analysis.
- At the laboratory, the samples were crushed, split and analyzed in conformation to ASTM and International Standards Organization (ISO) 9000 standards.
- When the drill hole was completed, it was geophysically logged (natural gamma, gamma density, caliper and resistivity). The output was digitally recorded and a paper copy given to the site geologist.
- The intercept data recorded in the lithology logging were then reconciled to intercepts interpreted from the geophysical logs.

The outline of the above procedure does not mention when the core is measured for recovery, but in a typical exploration program of this nature, the recovered core sample would be measured for recovery once it was extracted from the core barrel.

The following criteria were used to determine coal and non-coal intervals to be sampled:

- All coal was sampled. It appears from the analytical database that the maximum coal sample size was 3 m.
- 0.2 m of the roof and floor samples were collected.
- Non-coal parting greater than 0.15 m was sampled separately.
- Non-coal intervals within the coal seam less than 0.15 m were included with the coal sample.

In the 2007 program, all samples were tracked using proper Chain of Custody (COC) forms. When received at the laboratory, samples were reportedly prepared in conformance with ASTM and ISO9000 Standards (Behre-Dolbear, 11 September 2007 Report).

11.2 2011 Drilling Program

The following is a description of the methodology and approach used for the 2011 program that was commissioned by Prophecy, and supervised by Christopher M. Kravits, CPG. Drill site geologists were provided by MineInfo:

The following is the sample handling procedure as described by project personnel:

- Core was extracted from the core barrel then placed in a split tube inner core barrel.
- The core was measured for recovery.
- The core was washed with fresh water to clean off mud and other extraneous material.
- The core was then photographed.
- Lithology and RQD were logged and recorded.
- The core was wrapped in plastic to preserve moisture, placed in boxes and shipped to the SGS coal laboratory in Ulaanbaatar.
- At the laboratory in Ulaanbaatar, the samples were crushed and split with a portion going to the SGS Laboratory in Tianjin, China. Some analyses were performed in Ulaanbaatar and some in Tianjin, China (see Item 10.0, Drilling).

- Samples were analyzed in conformation with ASTM and ISO9000 standards.
- When the drill hole was completed, it was geophysically logged (natural gamma, gamma density, caliper, and resistivity). The output was digitally recorded and a paper copy given to the site geologist.
- The intercept data recorded in the lithology logging were then reconciled to intercepts interpreted from the geophysical logs.

The following criteria were used to determine coal and non-coal intervals to be sampled:

- All coal was sampled. It appears from the analytical database that the maximum coal sample size was approximately 4 m.
- 0.2 m of the roof and floor samples were collected.
- Non-coal parting between 0.15 m and 0.30 m were sampled separately.
- Non-coal intervals within the coal seam less than 0.15 m were included with the coal sample.
- Intervals greater than 0.30 were sampled but not sent in for analysis.

A Chain of Custody (COC) form was completed by the drill site geologist. This form had sufficient information – drill hole identification, sample number, and depth intervals (from and to) – to track the samples. The COC, which also lists the requested analysis, accompanied the samples to the laboratory. The COC is signed by all parties involved with the sample transportation as well as the laboratory upon receipt. The laboratory then entered the samples into their laboratory information management system, which tracks the sample progress and generates unique laboratory identification numbers. Once in the custody of the laboratory the samples are stored in a secure storage facility.

The samples remained in the custody of employees of Prophecy after packaging at the drill site to ensure their security. No Prophecy employees were involved in the preparation of the samples (personnel communication Christopher M. Kravits, CPG, Kravits Geological Services, LLC).

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12.0 DATA VERIFICATION

BOYD was not involved in the Chandgana project prior to May 2012 and did not participate in any prior manner of work. Representatives of BOYD visited the site on 15 and 16 May 2012. We focused on the data acquired by and reports prepared for Red Hill Energy and their successor Prophecy as addressed in the Technical Report on the Coal Resources of the Chandgana Tal Coal Project Khentii Aimag (Province) Mongolia by Behre-Dolbear, 11 September 2007 and Preliminary Scoping Study Chandgana Tal Coal Mine by Leighton LLC October 2011.

Prophecy conducted an exploration program in 2011, including core drilling, and analytical sampling; that information is not included in previous reports. These data, consisting of topographic mapping, geologist descriptive logs, geophysical logs, analytical results, etc., were accepted as provided to us, but we then reviewed this data for reasonableness before interpreting and integrating it into the pre-existing database.

BOYD did not conduct an independent verification of property control surveys or other property control documents, but relied upon Prophecy representations of property control.

To assess the validity of the drill-hole database, BOYD spot checked and compared the geological descriptions and geophysical logs against information recorded in the database. Also, the database was audited for obvious input errors and misnamed or miscorrelated seams. The updated database was judged to be reasonable and provided the input for a new geologic model created in Vulcan Geologic and Mine Modeling software. BOYD generated sub-crop interpretations based on the available structural and topographic models, assuming a subcrop depth of 15 m. Cross-sections were created to help in the correlation and to further identify any remaining problem areas. This process was iterative, and the process was refined until BOYD was satisfied that the results provided a suitable representation of the geology at the subject coal deposit. We anticipate some refinement of the subcrop location may occur during future mine design work phases.

The primary limitations on verification efforts were that they were not contemporaneous with the actual field work. Because BOYD was not present, verification of methodology and protocols is not possible. The database represents the best available information regarding the deposit. BOYD has, for purposes of this study commissioned by Prophecy, accepted the drilling results as reported to us to be the best available reflections of the

geology and extents of the coal deposits within the Chandgana license area. The coal existence and extent is well understood, and the precise knowledge of the total nature of the coal deposits is sufficient to estimate coal quantities and qualities at a level of reliability commensurate with the PEA work on the project.

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13.0 MINERAL PROCESSING & METALLURGICAL TESTING

13.1 Introduction

The equivalent title for coal properties is “Coal Processing and Coal Quality.”

13.2 Coal Processing

It is anticipated that the TPP will utilize ROM coal from the planned Chandgana openpit coal mining operation (i.e., no washing [beneficiation] in a coal preparation plant will be required). This is consistent with comparable lignite mining/ mine-mouth power stations facilities throughout the world. Prophecy and its predecessor Red Hill have not commissioned coal washing or other beneficiation studies on core or other samples thus such data is not available.

13.3 Coal Quality

Drill core samples obtained during the 2007 and 2011 exploration drilling and laboratory testing programs provide the analyses for coal quality estimation within the Prophecy study area. We have included analyses from the 2007 and 2011 programs where reported coal seam core recovery averaged 90% or greater. As shown on Figure 14.1, available quality boreholes are distributed throughout the Chandgana study area. Of the 21 quality boreholes, 19 are located in the 300 hectare mining license area. Nominal spacing between quality boreholes is 450 m or less.

Due to poor core recovery, any quality results for the 1962 and 1980 exploration programs have not been considered.

The results from 2007/2011 exploration and testing programs have been transcribed into a raw coal database for use in coal quality modeling. This database consists of 436 raw coal entries.

Average raw coal quality analyses (raw, full seam, by seam, as-received basis) of the identified seams from the coring/exploration program are summarized below. The analyses represent composites over the full seam thickness, including in-seam partings.

Average of Composited Coal Quality Analyses by Seam (As-Received Basis)

Seam	Number of Composites	%					Gross Calorific Value (kcal/kg)
		Total Moisture	Ash	Volatile Matter	Fixed Carbon	Total Sulfur	
S0		- No Data Available -					
S1	3	37.0	22.6	20.6	19.8	0.85	2,688
S2A	22	41.1	11.4	24.8	22.7	0.57	3,234
S2B	22	41.8	10.6	25.0	22.6	0.67	3,255
S3	6	35.8	22.5	19.6	22.1	0.44	2,863
S4	2	39.1	17.7	21.9	21.4	0.49	2,892

Gross calorific values for the S2A and S2B seams (benches of S2 Seam) range from 2,340 to 3,690 kcal/kg (raw, full seam, as-received basis); ash for the same intervals ranges from 7.2% to 20.2%. Given the low number of samples, results for the S1, S3, and S4 Seams are considered indicative. However, our coal resource estimate and preliminary mining plan are limited to the S2 Seam.

14.0 MINERAL RESOURCE ESTIMATES

14.1 Introduction

An estimate of the coal resources for the Chandgana study area was independently prepared by BOYD, using source data provided by Prophecy. Our work is done in accordance with NI 43-101. This item (chapter) is comprised of a review of the NI 43-101 reporting standards, BOYD's estimation methodology, and our resource estimate for Chandgana.

14.2 Definitions and Applicable Standards

Estimates of coal resources are always subject to a degree of uncertainty. The level of confidence that can be applied to a particular estimate is a function of, among other things: the amount, quality, and completeness of exploration data; the geological complexity of the deposit; and economic, legal, social, and environmental factors associated with mining the coal.

In accordance with NI 43-101, BOYD used the applicable definitions provided by the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), as the "CIM Definition Standards on Mineral Resources and Mineral Reserves" (CIM Standards) to describe the degree of uncertainty associated with the estimate reported herein.

The definition of mineral (coal) resource provided by the CIM Standards is:

A Mineral Resource is a concentration or occurrence of diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial minerals in or on the Earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge.

Resources are subdivided into classes of Measured, Indicated, and Inferred, with the level of geologic confidence reducing with each class, respectively:

A "Measured Mineral Resource" is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are so

well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.

An “Indicated Mineral Resource” is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.

An “Inferred Mineral Resource” is that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

Coal resources are reported as in situ tonnage and are not adjusted for mining losses or dilution. Unless noted, estimates presented herein are reported in metric units.

14.3 Resource Estimate

The estimates of coal resources presented herein have been independently prepared by BOYD from information provided by Prophecy. In general, our estimates are the result of the following procedures:

- Thorough review and validation of the provided geologic model and supporting data.
- Incorporate lithologic and analytical data derived from the 2011 exploration program into the pre-existing databases.
- Adjustment, revision, or recalculation of the geologic models where warranted in the professional judgment of BOYD.

- Review of available exploration data to ascertain the level of geologic continuity for each coal seam.
- Development and application of estimation assumptions, parameters, and criteria.
- Estimation of the coal resources based on the defined criteria.

Prophecy provided BOYD with a geologic model, consisting of structure (coal seam floor and roof elevations), coal thickness, and select coal quality grids for each identified coal seam. The grids were prepared by Prophecy through application of Gemcom's Minex suite of geologic modeling software. In order to verify the models, BOYD reconstructed the geologic model in Maptek's Vulcan software. The model grids were interrogated by BOYD and found to appropriately represent the coal geology of the deposit. A subset of the exploration drilling data was also checked against original field lithology and geophysical logs. The drill hole collar elevations were also compared against the topographic model. No material errors were found.

To facilitate our mine planning exercises, BOYD supplemented the geologic model with several coal quality grids that had not been provided by Prophecy. These grids were interpolated from lab analysis data provided by Prophecy and included:

- Inherent moisture (weight %, air-dried basis).
- Ash, volatile matter, fixed carbon, total sulfur (weight %, dry basis).
- Gross calorific value (kcal/kg, dry basis).

Geological assuredness is established by the availability of both structural (thickness and elevation) and quality information for each individual coal seam. Classification is generally based on the concentration or spacing of exploration data, which can be used to demonstrate the geologic continuity of the deposit. The following table provides the general criteria used by BOYD in the classification of the reported coal resources:

Classification (Geologic Confidence)	Data Point Spacing (m)	
	Structure	Quality
Measured	< 500	< 1,000
Indicated	< 1,000	1,000 – 2,000
Inferred	< 4,000	2,000 – 4,000

Extrapolation or projection of resources in any category beyond any point of observation does not exceed one-half of the defined spacing. We have assigned these spacing criteria based on our independent assessment of the site-specific geologic conditions encountered or expected at Chandgana. We believe these criteria are appropriate and

provide the required level of geological assurance. Seams with insufficient quality data were excluded from the resource estimates. As such, no resources are reported for the S0, S1, S3, and S4 seams.

The following parameters were applied in our estimation of the coal resources at Chandgana.

1. A minimum mineable seam thickness of 1 m is required to be included in the resources.
2. Coal density is derived from analyzed coal samples (which were provided on an air dried basis) and adjusted for in situ moisture using the Preston-Sanders equation. The average in situ coal seam density for the deposit is approximately 1.33 grams per cubic centimeter (g/cc). The average total field moisture for the deposit is approximately 41%.
3. Coal within the zone of weathering (modeled as extending from the surface to a distance of 15 m below the surface) is excluded from the resource estimate. This is based on BOYD's experience and additional sampling is recommended to determine the final oxidized zone.
4. Previously mined regions (as indicated by current topographic mapping) are excluded from the resource estimate.
5. The coal resources are limited to the two tenements — Mining Licenses MV-010126 and MV-016767 — controlled by Prophecy at the time of reporting.

Given the relatively shallow depth of coal seams, high aggregate seam thickness, and resulting low stripping ratio of the deposit, no maximum depth or maximum stripping ratio cut-offs were applied to the coal resources.

Chandgana is judged to be Geologic Type Low – Type B deposit, amenable to surface (openpit) mining method. Total coal resources are estimated to be 124 million in-place tonnes, as follows:

Type	ASTM Coal Rank	In-Place Coal Tonnes (millions)		
		Measured	Indicated	Inferred
Surface	Lignite A	124.4	-	-

As shown, the coal resources of Chandgana are well-defined, being entirely within the Measured category. In-place resource estimates are also summarized in Table 14.1, following this text. The coal resource area is illustrated in Figure 14.1.

Based on the available coal quality data supplied by Prophecy, the coal resources exhibit the following average in-place quality parameters.

Average In-Place Coal Resource Quality (Full Seam, As-Received Basis)					
					Gross
					Calorific
					Value
					(kcal/kg)
Total	Ash	%		Total	
Moisture		Volatile	Fixed	Sulfur	
		Matter	Carbon		
40.9	10.8	25.0	23.3	0.61	3,306

The above reflects weight average drill hole quality of the full-seam coal resource as developed in BOYD's geologic model including all in-seam partings (excluding adjustments for deleterious material and/or coal losses typically experienced in a mining operation).

Based on available documentation and our regional experience, BOYD is not aware of significant environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant modifying factors that materially could affect the resource estimate. It should be noted that in the northwest corner of the mining license center is a low depression known as Tsaidam nuur (Blue Lake) that is reported to have seasonal accumulation of shallow water during wet periods. Typically, areas such as these can be mined if precautions are taken to create barriers preventing inflow of water to the pits during mining and creation of a similar low depression upon completion of mining during the reclamation process. We have assumed mining and calculated resources in this area for the purpose of this PEA, and are subject to further detailed review during the PFS or FS stages of the project.

Following this page are:

Table 14.1, Estimated Coal Resources by Property
Figure 14.1, Coal Resource Map

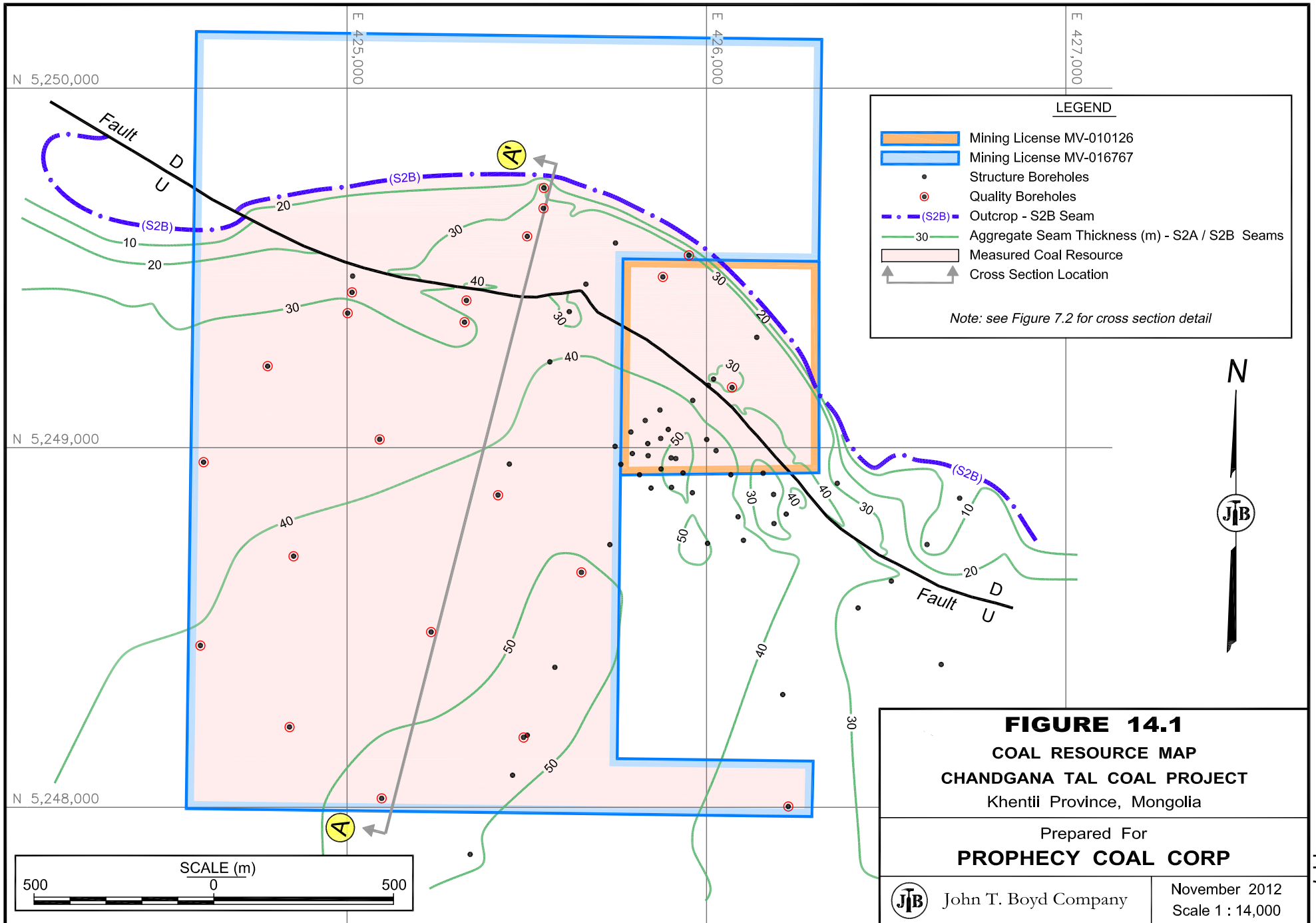
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TABLE 14.1

ESTIMATED COAL RESOURCES
BY PROPERTY
AS OF 31 JULY 2012
CHANDGANA TAL COAL PROJECT
Khentii Province, Mongolia
Prepared For
PROPHECY COAL CORP
By
John T. Boyd Company
Mining and Geological Consultants
November 2012

Seam	Deposit Type	ASTM Coal Rank	Average Coal Quality (raw, full seam, as-received basis)										In-Place Waste BCM (millions)
			In-Place Coal Tonnes (millions)			% Total					Gross Calorific Value (kcal/kg)		
			Measured	Indicated	Inferred	Moisture	Ash	Volatile Matter	Fixed Carbon	Sulfur			
MV - 010126													
S2A	Surface	Lignite A	4.1	-	-	40.6	10.4	24.8	24.2	0.83	3,351	3.8	
S2B	Surface	Lignite A	9.4	-	-	41.8	11.0	24.0	23.1	0.85	3,217	0.3	
			13.5	-	-	41.5	10.8	24.3	23.4	0.84	3,258	4.1	
Mining License MV-016767													
S2A	Surface	Lignite A	42.7	-	-	40.9	10.9	24.9	23.3	0.50	3,293	72.7	
S2B	Surface	Lignite A	68.2	-	-	40.8	10.8	25.1	23.3	0.62	3,323	2.9	
			110.9	-	-	40.8	10.8	25.1	23.3	0.58	3,314	75.6	
Grand Total													
S2A	Surface	Lignite A	46.8	-	-	40.8	10.9	24.9	23.4	0.53	3,298	76.5	
S2B	Surface	Lignite A	77.6	-	-	41.0	10.8	25.0	23.3	0.64	3,310	3.2	
			124.4	-	-	40.9	10.8	25.0	23.3	0.61	3,306	79.7	

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15.0 MINERAL RESERVE ESTIMATES

15.1 Introduction

The level of work completed to date for the Chandgana deposit is sufficient to support a PEA, but not sufficient to support a PFS or Feasibility Study. Therefore, the coal reserves have not been determined for the subject property.

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16.0 MINING METHODS

16.1 Introduction

BOYD developed a generalized mine plan and preliminary economic model as the basis to determine the potential economic viability of Chandgana. The preliminary mine plan indicates that there are adequate coal resources to support over 35 years of operation at the Prophecy specified nominal annual production rate of 3.5 million ROM tonnes.

There are several key criteria which underlie BOYD's preliminary mine plan:

1. Due to its relatively shallow depth and low strip ratio, the Chandgana deposit is amenable to openpit mining.
2. Waste and coal mining activities within the operating pit are scheduled to achieve the annual target quantities.
3. The mining sequence should minimize variations in ROM coal quality by capitalizing on in-pit blending opportunities where appropriate.
4. The mining sequence should maximize potential for in-pit dumping of overburden waste material and disposal of ash generated at the power station.
5. Coal remaining in the existing pits is planned to be recovered in the mining operation.

16.2 Methodology

The mine planning process consisted of the following steps:

1. Developing a logical mine design that addresses practical mining requirements.
2. Scheduling waste and coal mining activities within the operating pit to achieve the annual target quantities.
3. Designing suitable waste dumps and scheduling waste and coal quantities to estimate waste and coal haulage distances on an annual basis.
4. Estimating mining fleet equipment requirements to achieve the required annual waste and coal schedule quantities.

Each step is described in more detail in the following text.

16.3 Mine Design

The planning horizon for a TPP is long – 30 years or more. The proposed coal mine, as the integrated on site supply of TTP fuel, must have an equally long planning horizon. In order to meet the supply needs of the TPP, understand mining cost trends, and adhere to the requirements for maximum resource utilization, the preliminary mine plan contemplates the recovery of as much of the indentified coal resource as practical.

Primary pit design parameters include the wall slopes and mining block dimensions that are required to address the geotechnical conditions and operational conditions of the coal deposit. At the time BOYD was designing the pit shell and mining block configurations, no analysis of available geotechnical data was available. BOYD assumed the following nominal pit design parameters in order to advance the mine planning process:

<u>Pit Design Parameter</u>	<u>Value</u>
Bench height	10 m
Bench width	100 m
Block length	300 m
Overall pit wall slope	60 degrees

The bench height design parameter has been utilized for scheduling purposes only and final bench height would be determined by equipment geometry.

BOYD recommends that analysis and additional geotechnical sampling and testing, be completed and incorporated into future PFS/FS studies.

The advancing face within the surface mine resembles a stair-step series of mining benches. This series of benches allows access to multiple coal faces and provides working space around each loading/hauling fleet to facilitate a productive operation without excessive traffic congestion.

Due to the relatively low dip angle of the coal seams – typically less than 5% – BOYD has selected mining benches that will follow the seams rather than establishing benches at set elevations (e.g., benches at 1,120 m elevation or 1,110 m elevation, etc.). The mining benches will therefore coincide with the shallow dip of the seams. At dips of less

than 10%, rear-dump trucks have adequate capabilities to enable safe and efficient operation on the benches.

Each bench is 100 m wide to allow easy turning of trucks and to enable the productive practice of double-sided truck loading. The chosen nominal block length of 300 m provides some mining scheduling flexibility, but reflects the preliminary nature of our study.

16.4 Mine Scheduling

The coal supply requirements for the TPP were provided by Prophecy and are largely based on the expected operating schedule and heating requirements of the power plant units. The build-up to full production is shown below.

<u>Year</u>	<u>Required ROM Coal (tonnes)</u>
2015	72,900
2016	2,405,700
2017 +	3,499,200

BOYD anticipates minor variations in the annual production schedule which will not have a material effect on the potential viability of the project

A ROM stockpile equivalent to two weeks of required plant feed (approximately 135,000 tonnes at full production) has been maintained throughout the LOM plan. It is assumed that the TPP will maintain product stockpiles as part of the TPP feasibility study.

BOYD's proposed mining sequence begins in the northeast portion of the deposit where overburden is shallowest, and progresses down dip to the southwest. The proposed mining sequence is depicted in Figure 16.1, following this text. Initial development of the coal lying north of the major fault, which subdivides the deposit, accomplishes several benefits:

1. Waste removal is minimized by scheduling the lowest strip ratio coal first.
2. Coal haulage is minimized by mining coal closest to the TPP.
3. Waste haulage is minimized by removing waste closest to the dump.
4. Opportunities for in-pit waste dumping are accelerated by opening up the pit floor sooner.

During the process of mining and recovery of the coal seam, the operation will experience a loss of coal at each waste/coal interface and a gain of deleterious material (waste). BOYD has accepted the following modifying factors in this study to estimate ROM coal quantities and qualities, which are as follows:

<u>Mining Parameter</u>	<u>Value</u>
Minimum mineable coal thickness	1.0 m
Minimum removable parting thickness	30 cm
Coal losses:	
Loss at seam roof	10 cm
Loss at seam floor	10 cm
Additional loss around faults	approx. 5%
Dilution:	
Gain at seam roof	10 cm
Gain at seam floor	10 cm

These factors are based on the openpit mining techniques and equipment selected.

Available proximate analyses for non-coal parting, roof, and floor material were used to establish average quality values for anticipated dilution materials. The average dilution qualities used for ROM quality calculations are:

<u>Dilution Quality Parameter</u>	<u>Value</u>
Specific gravity	2.25 t/bcm (adb)
Total moisture content	26.0 % (arb)
Inherent moisture content	10.0 % (adb)
Ash content	75.0 % (db)
Volatile matter content	16.0 % (db)
Fixed carbon content	9.0 % (db)
Total sulfur content	0.27 % (db)
Gross calorific value	1,140 kcal/kg (db)

Coal and waste production derived from our preliminary mine plan is provided in Table 16.1, following this text.

16.5 Waste Dump Development

The proposed surface mine will have in-pit and external (out-of-pit) waste dumps. Both will have similar designs, as summarized in the following table:

Spoil Dump Design Parameter	Value
Bench height	20 m
Overall slope dump angle	33.7 degrees
Maximum height:	
In-pit dump	Limited to original topography
External dump	60 m above original topography
Final (compacted) swell factor of waste	125%

The toes of the external spoil dumps will also be offset from the pit crest by 100 m. This offset will enable access between the pit and the spoil dumps, and will also facilitate grading to final slopes when the dump is reclaimed.

When the spoil dumps are situated within the pit, we have assumed the toe of the in-pit spoil dump will be offset from the advancing highwall by 50 m. We have also limited the height of the in-pit spoil dump to original topography.

The TPP plans to pump fly ash to on-site ash disposal for permanent storage. The costs associated with fly ash disposal are included within the first 8 to 10 years of the TPP feasibility study. Following this initial period, fly ash will be co-mingled with waste for disposal when backfilling pits.

16.6 Equipment Requirements

Production rates for major mining equipment were estimated from first principles using assumed material characteristics (per cent swell and density), manufacturer performance guidelines, and factors based on engineering experience. Estimated

equipment productivities for major mining equipment used in this mine plan are summarized below.

Loading Units	Waste		Coal		14M Grader	D8R Dozer	988H Wheel	773F Water Truck
	CAT 390D Excavator	Cat 773F	CAT 390D Excavator	Cat 773F				
Capacity (cm)	6.0	-	9.9	-	-	-	-	-
Usefull Life (hrs)	60,000	35,000	60,000	35,000	50,000	30,000	50,000	100,000
Mechanical Availability (%)	85	75	85	75	85	85	85	85
Utilization	80	90	80	90	80	80	80	90
Max. Available hrs/yr	6,600	5,751	6,600	5,751	5,794	6,156	5,432	3,621
Max. Productivity (t/hr)	770	varies	458	varies	-	-	-	-
kt/yr	5,082	-	3,023	-	-	-	-	-
kbcm/yr	2,210	-	-	-	-	-	-	-

Using preliminary haulage profiles, BOYD estimated the required truck operating hours to haul the various materials – coal, waste and combustion ash – to their respective destinations, including allocation of equipment hours to transfer ROM coal to the TPP active stockpiles which are in close proximity (approximately 1 km) to one another. Our analysis assumes pit access ramps and spoil ramps will be built at a 10% grade. We have assumed trucks will travel at the following average speeds in our calculations of truck requirements:

Haul Segment	Truck Speed (km/hr)
1. Loaded flat haul	35.0
2. Loaded uphill 10% haul	12.5
3. Empty flat haul	35.0
4. Empty downhill 10% haul	12.5

Productivity estimates were developed for selected equipment units, applying required machine hours as appropriate to achieve desired production levels. The estimated hours developed for the primary equipment and haulage profiles for waste and coal trucks are shown in Table 16.2, following this text.

Following this text are:

Tables

16.1 Estimated Production Schedule

16.2 Estimated Equipment Hour Schedule

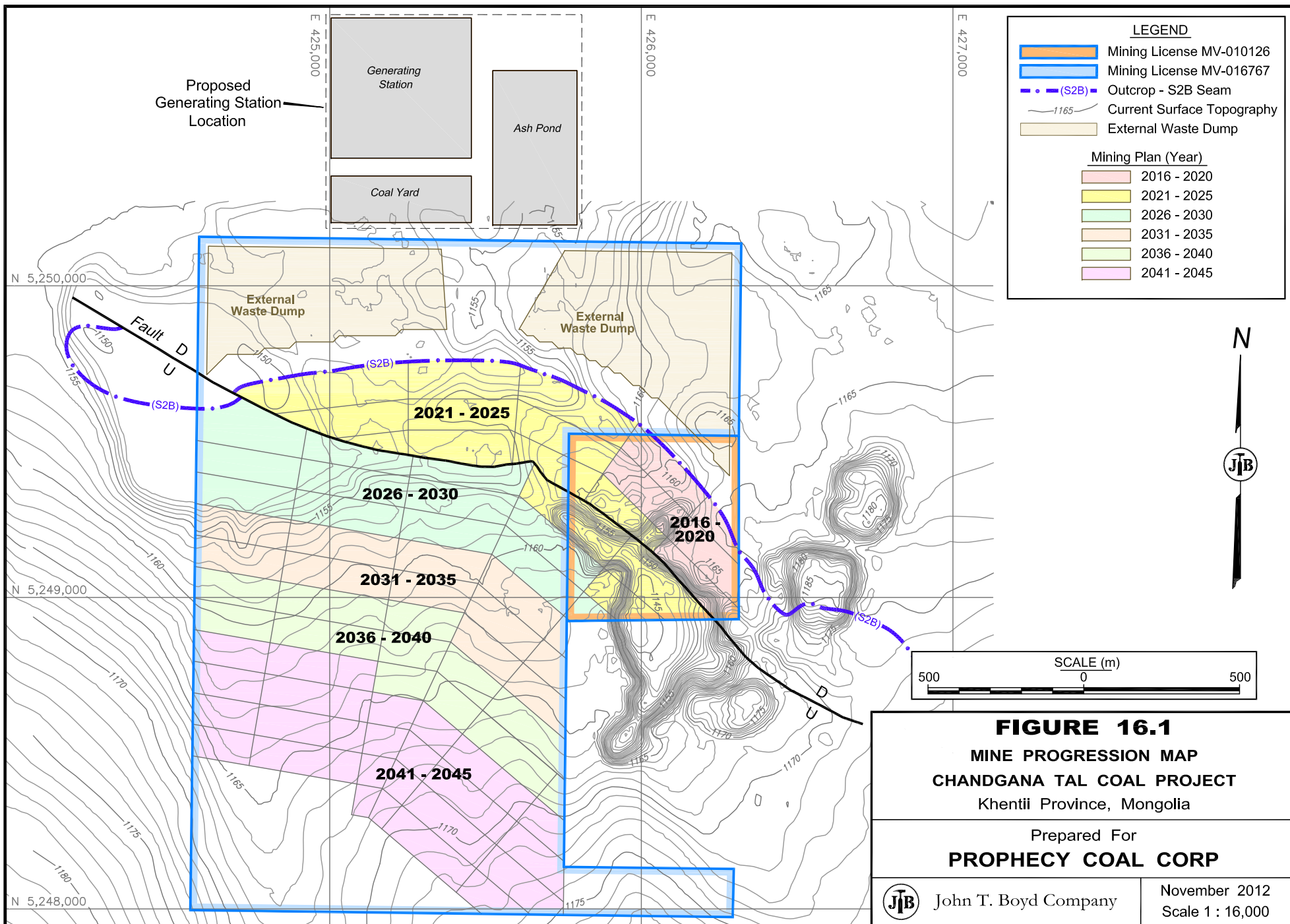
Figure 16.1, Mine Progression Map, Chandgana Tal Coal Project

TABLE 16.1
ESTIMATED PRODUCTION SCHEDULE
CHANDGANA TAL COAL PROJECT
Prepared For
PROPHECY COAL CORP
By
John T. Boyd Company
Mining and Geological Consultants
November 2012

Data Field Name	2015\Qtr1	2015\Qtr2	2015\Qtr3	2015\Qtr4	2016	2017	2018	2019	2020	2021 - 2025	2026 - 2030	2031 - 2035	2036 - 2040	2041 - 2045	Total
No. of Year in Period:	-	-	0.25	0.25	1	1	1	1	1	5	5	5	5	5	
<u>Waste Removal (BCM - 000)</u>															
Free Dig - Pass No. 1	-	-	369	257	1,798	1,803	2,056	1,873	1,303	3,514	2,790	3,309	2,360	1,462	22,894
Free Dig - Pass No. 2	-	-	192	53	908	808	796	994	639	1,749	1,390	1,493	1,304	761	11,087
Waste Bench - Pass No. 1	-	-	-	170	364	367	119	84	1,017	2,942	3,034	3,394	3,770	2,792	18,053
Waste Bench - Pass No. 2	-	-	-	-	-	-	-	-	10	975	2,593	3,104	2,921	2,108	11,712
Waste Bench - Pass No. 3	-	-	-	-	-	-	-	-	-	-	578	1,464	2,373	2,108	6,523
Waste Bench - Pass No. 4	-	-	-	-	-	-	-	-	-	-	-	31	902	1,674	2,606
Waste Bench - Pass No. 5	-	-	-	-	-	-	-	-	-	-	-	-	38	209	247
Waste Bench - Pass No. 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	561	481	3,070	2,978	2,971	2,950	2,968	9,180	10,386	12,795	13,668	11,114	73,122
<u>Coal Extraction (tonnes - 000)</u>															
Coal Pass No. 1	-	-	-	92	1,703	2,032	1,926	2,286	2,440	9,912	9,324	8,470	7,593	7,268	53,047
Coal Pass No. 2	-	-	-	-	664	1,173	1,434	1,150	1,048	5,980	7,375	7,534	6,545	6,176	39,080
Coal Pass No. 3	-	-	-	-	137	294	130	31	-	1,551	772	1,492	3,091	3,637	11,135
Coal Pass No. 4	-	-	-	-	-	-	-	-	-	4	-	-	266	415	685
Total	-	-	-	92	2,504	3,499	3,491	3,466	3,488	17,447	17,471	17,496	17,496	17,496	103,946
Stripping Ratio (BCM/Tonne)	-	-	-	5.23	1.23	0.85	0.85	0.85	0.85	0.53	0.59	0.73	0.78	0.64	0.70
Area Effected	-	-	3.7	2.6	18.0	18.0		18.7	13.0	35.1	27.9	33.1	23.6	14.6	230.0

TABLE 16.2
ESTIMATED EQUIPMENT HOUR SCHEDULE
CHANDGANA TAL COAL PROJECT
Prepared For
PROPHECY COAL CORP
By
John T. Boyd Company
Mining and Geological Consultants
November 2012

			2015\Qtr3	2015\Qtr4	2016	2017	2018	2019	2020	2021 - 2025	2026 - 2030	2031 - 2035	2036 - 2040	2041 - 2045	Total		
Mine Plan Quantities																	
	Waste (bcm - 000)		-	-	561	481	3,070	2,978	2,971	2,950	2,968	9,180	10,386	12,795	13,668	11,114	73,122
	Coal Extraction (ROM tonnes - 000)		-	-	-	92	2,504	3,499	3,491	3,466	3,488	17,447	17,471	17,496	17,496	17,496	103,946
	Stripping Ratio (BCM per ROM Tonne)		-	-	-	5.23	1.23	0.85	0.85	0.85	0.85	0.53	0.59	0.73	0.78	0.64	0.70
Waste Loading																	
	Cat 390D Excavator				1,676	1,436	9,171	8,896	8,875	8,812	8,867	27,421	31,022	38,219	40,827	33,196	
	Nbr of Units	Hours	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		calculated	-	-	1.02	0.87	1.39	1.35	1.34	1.34	1.34	0.83	0.94	1.16	1.24	0.50	
		w/utilization	85%	-	1.19	1.02	1.63	1.59	1.58	1.57	1.58	0.98	1.11	1.36	1.46	0.59	
Coal Loading																	
	Cat 390D Excavator				201	5,468	7,640	7,622	7,568	7,615	7,615	38,094	38,145	38,201	38,201	38,201	
	Nbr of Units	Hours	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		calculated	-	-	0.12	0.83	1.16	1.15	1.15	1.15	1.15	1.15	1.16	1.16	1.16	0.58	
		w/utilization	85%	-	0.14	0.97	1.36	1.36	1.35	1.36	1.36	1.36	1.36	1.36	1.36	0.68	
Total Waste and Coal - Excavators																	
	Nbr of Units	w/utilization	-	-	1.19	1.17	2.61	2.95	2.94	2.92	2.94	2.34	2.47	2.72	2.82	1.27	
		assigned	-	-	2.00	2.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	2.00	
	Additions/Replacements		-	-	2.00	-	1.00	-	-	-	-	-	-	-	-	-	
Waste Haulage - End Dump Trucks																	
	Fleet	Hours	-	-	5,337	5,082	33,028	33,647	35,081	43,349	43,243	131,618	134,663	173,540	182,501	147,732	
	Nbr of Units	calculated	-	-	3.71	3.53	5.74	5.85	6.10	7.54	7.52	4.58	4.68	6.04	6.35	2.57	
		w/utilization	85%	-	4.37	4.16	6.76	6.88	7.18	8.87	8.85	5.38	5.51	7.10	7.47	3.02	
Coal Haulage - End Dump Trucks																	
	Fleet	Hours	-	-	545	16,972	23,681	22,225	20,502	20,941	20,941	110,259	118,216	129,473	139,809	147,666	
	Nbr of Units	calculated	-	-	-	0.02	0.74	4.12	3.86	3.56	3.64	3.83	4.11	4.50	4.86	2.57	
		w/utilization	85%	-	-	0.03	0.87	4.84	4.55	4.19	4.28	4.51	4.84	5.30	5.72	3.02	
Total Waste and Coal - Trucks																	
	Nbr of Units	w/utilization	-	-	4.37	4.19	7.62	11.73	11.72	13.06	13.13	9.90	10.35	12.40	13.19	6.04	
		assigned	-	-	5.00	5.00	8.00	12.00	12.00	14.00	14.00	10.00	11.00	13.00	14.00	7.00	
	Additions/Replacements		-	-	5.00	-	3.00	4.00	-	2.00	-	-	-	-	-	-	
Track Dozers (D8/D9)																	
	one unit per shovel plus 1	Hours	-	-	1,676	1,637	14,639	16,536	16,498	16,379	16,482	65,515	69,168	76,420	79,028	71,397	
	No. of Units	calculated	-	-	1.09	1.06	2.38	2.69	2.68	2.66	2.68	2.13	2.25	2.48	2.57	1.16	
		w/utilization	90%	-	1.21	1.18	2.64	2.98	2.98	2.96	2.98	2.37	2.50	2.76	2.85	1.29	
	No. of Units	required	-	-	2.21	2.18	3.64	3.98	3.98	3.96	3.98	3.37	3.50	3.76	3.85	2.29	
		acquisitions	-	-	3.00	3.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	3.00	
	Additions/Replacements		-	-	3.00	-	1.00	-	-	-	-	-	-	-	-	-	
Graders																	
	One hr per 9 truck hrs plus 1	Hours	-	-	593	625	5,555	6,370	6,367	7,095	7,132	26,875	28,098	33,668	35,812	32,822	
	No. of Units	calculated	-	-	0.41	0.43	0.96	1.10	1.10	1.22	1.23	0.93	0.97	1.16	1.24	0.57	
		w/utilization	90%	-	0.45	0.48	1.07	1.22	1.22	1.36	1.37	1.03	1.08	1.29	1.37	0.63	
	No. of Units	required	-	-	1.45	1.48	2.07	2.22	2.22	2.36	2.37	2.03	2.08	2.29	2.37	1.63	
		acquisitions	-	-	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	2.00	
	Additions/Replacements		-	-	2.00	-	-	1.00	-	-	-	-	-	-	-	-	
FEL (988)																	
	One hr per 2 waste shovel hrs	Hours	-	-	838	718	4,585	4,448	4,438	4,406	4,433	13,710	15,511	19,109	20,413	16,598	
	No. of Units	calculated	-	-	0.62	0.53	0.84	0.82	0.82	0.81	0.82	0.50	0.57	0.70	0.75	0.31	
		w/utilization	90%	-	0.69	0.59	0.94	0.91	0.91	0.90	0.91	0.56	0.63	0.78	0.84	0.34	
	No. of Units	required	-	-	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
		acquisitions	-	-	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	
	Additions/Replacements		-	-	1.00	-	1.00	-	-	-	-	-	-	-	-	-	
Water Trucks (773)																	
	One hr per 27 truck hrs	Hours	-	-	62	61	542	612	611	607	610	2,426	2,562	2,830	2,927	2,644	
	No. of Units	calculated	-	-	0.07	0.07	0.15	0.17	0.17	0.17	0.17	0.13	0.14	0.16	0.16	0.07	
		w/utilization	90%	-	0.08	0.07	0.17	0.19	0.19	0.19	0.19	0.15	0.16	0.17	0.18	0.08	
	No. of Units	required	-	-	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
		acquisitions	-	-	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
	Additions/Replacements		-	-	1.00	-	-	-	-	-	-	-	-	-	-	-	



17.0 RECOVERY METHODS

17.1 Proposed Process Plant

The Chandgana Tal Coal Mine is developed to supply ROM coal to the mine-mouth TPP. The boilers at the TPP are assumed to be designed specifically in accordance with the physical characteristics of the coal resources in the Chandgana coal deposit.

Processing the output from the mine will be limited to sizing the raw product. The ROM coal from the mining operations will be truck hauled from the pit, dumped, and processed through a primary crusher designed to reduce ROM coal to <150 mm in size. The sized coal then is anticipated to be transferred to the TPP for coal stockpiling, secondary, and final crushing.

No other processing of the coal production is anticipated.

Electricity to operate the coal handling and crushing facility will be provided by the on-site TPP.

17.2 Plant Design

There is no "wet" processing plant anticipated for the Chandgana coal mine other than a crusher utilized to reduce top size to less than <150 mm prior to transfer to the TPP double roll crushers.

17.3 Projected Requirements

The rotary breaker will need to be designed to be compatible with an annual throughput production of 3.5 Mtpa.

18.0 PROJECT INFRASTRUCTURE

18.1 Site Infrastructure

Leighton Asia (a major contract mine operator), in their report dated 2011 (see Chapter 3.0, References), provided a listing of site infrastructure requirements based on their Mongolian experience. BOYD has utilized the Leighton report to the extent possible and made revisions (updates) as deemed applicable in our professional judgment.

Given that the coal mining and TPP facilities will be situated in close proximity to each other, we suggest that the development of the mining operations and the TPP be integrated to the extent possible for efficiency and cost savings. This would include infrastructure components such as the camp and associated accommodations, etc. Mining and TPP infrastructure, such as the workshops, offices, ablution buildings, etc., should be built in close proximity to the work site to facilitate the provision of heating, water, and sewage, but separated to the extent necessary to prevent interference between the mine and the TPP operations

18.2 Camp

The camp setup is planned to be built in two stages to accommodate start-up and future changes in the number of persons on site: the initial camp establishment, and then one extension. The majority of the investment will be in the initial camp establishment, which is intended to accommodate sufficient staff through the first 18 months of build up, but will have appropriate support facilities (kitchen, laundry, etc) required for full camp capacity.

The maximum number of personnel on site through the initial 18 months has been estimated at 132 people. Upon reaching full capacity, the camp is expected to house 162 people, although not all 162 will be present on site at any given time. The number of beds to support the project was calculated based on permanent rooms for management staff and guests. A 70% occupancy rate is utilized for support staff and laborers based on a proposed roster of two weeks on followed by one week off. The initial camp will therefore require 100 beds while the complete camp will require 125 beds.

All categories of equipment related to the camp have been assigned an appropriate operational life, after which time those items need to be replaced. Operational life takes

into consideration servicing and maintenance which has been provisioned to ensure facilities remain in working order.

There are several local soums that will most likely house local workers and there is a possibility of reducing the total number of beds required. BOYD has opted to utilize a more conservative plan for this PEA.

18.2.1 Accommodation

Accommodations between management quarters and support staff/laborer quarters will differ. For management accommodations it has been assumed that there will be two rooms for each 40-ft container, with each room having an en suite bathroom. The support staff and laborers will also be housed in 40-ft containers, with each container having two separate rooms, and have two people per room. This equates to two people per 40-ft container for management staff, and four people per 40-ft container for support staff and laborers.

It is assumed that the containers will have a life of 15 years, after which time all accommodation containers will need to be replaced.

The TPP has included significant facilities for accommodations. As part of any future feasibility work, we recommend the potential of utilizing common facilities to reduce overall camp cost and providing better facilities to improve employee retention.

18.2.2 Kitchen and Dining

The kitchen and dining setup have been assumed to be constructed using a sandwich panel arrangement. The initial setup of the kitchen and dining facilities will be built to accommodate the camp once it reaches full capacity. The sandwich panel units will be constructed on site, and then fully furnished with the necessary kitchen equipment and furniture.

18.2.3 Laundry

The laundry has been assumed to be fully equipped during initial setup to accommodate the camp when the workforce reaches full capacity. The capital expenditures include washing, drying, and ironing facilities.

18.2.4 Entertainment

As part of the camp infrastructure, a recreational room, including gym facilities, was included in the capital expenditure estimates. This facility is intended for use by all camp

residents, and will include items such as treadmills, exercise bikes, weight facilities, table tennis, and snooker tables.

18.2.5 Ablutions

Ablution facilities included in the estimated capital expenditures are comprised of pre-fabricated 40-ft containers which include three separate rooms, each containing a shower, toilet, sink and hot water system. It has been assumed that for each ten rooms there will be three toilet facilities.

The waste water from the ablutions are planned to be transported by sewage truck to a waste water treatment facility comprised of a 20,000L septic tank, grey water storage tank, membrane bioreactor, and an underground seepage area. Capital expenditures for installing these facilities are assumed to be incorporated in the mining plant and labor components.

As project analyses progress, BOYD recommends an evaluation of piping the grey water and waste water to the waste water treatment facilities (versus trucking) to determine the most economic approach.

18.2.6 Water Treatment Infrastructure

The PEA plan utilizes three separate water treatment facilities on site: waste water treatment (as discussed in Section 18.2.5), raw water from the mine treatment, and camp water treatments.

The camp water treatment facilities used to prepare water for usage in all activities at the camp requiring fresh water, including showers, toilet, laundry, kitchen, and for drinking water. The intended treatment process will be capable of using the mine waste water for filtration.

The water treatment facility for converting raw water to potable water will be located at the camp, where a water storage tank will feed the filtration system. The system included in the estimated expenditures involves a seven-step filtration system: (particle, iron-reduction, clearing, coal, softening, mechanical, and UF filters). At the end of this process, potable water will be produced and would be bottled for distribution about the site.

18.3 Workshop

Workshop construction was also staged in order to defer capital expenditures. The initial temporary workshop was scheduled for construction as part of the ramp-up of production during the initial 18 months. The permanent workshop extension was scheduled for construction as operations ramped up to full production thereafter.

Certain workshop equipment (tools, overhead crane) and electrical work is scheduled for replacement every ten years.

18.3.1 Temporary Workshop

The temporary workshop will be constructed to provide adequate enclosed area needed to service a single Cat 773. This would be sufficient to meet service requirements of a single fleet as initially planned during operations ramp up. The temporary workshop would be built using four 40-ft and two 20-ft containers to form the sides and rear walls, with a structurally sound roof to cover the entire container structure and inner work area. The facility would be enclosed with two large sliding doors. The outside of the structure will have full steel insulated cladding to insulate the workshop area.

The estimated capital expenditures for the workshop also include office facilities, meeting rooms, parts storage, and servicing facilities.

18.3.2 Permanent Workshop

The permanent workshop capital expenditure estimates include provisions for three bays (servicing, major repairs, and welding). Each will have the capacity to house a Cat 773 truck with tray up. There will also be a light vehicle servicing area, along with a concrete pad for a tire bay.

This facility will be constructed of a steel structure and reinforced concrete and will require minimal maintenance and have an operational life of over 30 years.

18.3.3 Wash-down

An enclosed heated wash-down bay would be constructed as an attached area to the workshop. Capacity would be designed to fit a Cat 773 truck and is included in the estimated capital expenditure. The bay would have an adjacent sump, along with an oil treatment system to remove oil and grease waste products.

18.3.4 Tire Changing

A tire changing facility is included in the site infrastructure. It is assumed that the facility would be comprised of a reinforced concrete pad in an outside area, which would allow for a tire handler to have easy access to both sides of the truck.

18.4 Offices

The office setup is planned to be constructed using a sandwich panel arrangement, with an assumed working area of 5 m² for each person, with extra capacity for a break room and meeting room. Installation and fabrication of the offices will be completed on-site. The office structure has an assumed life span of 20 years before full replacement is required.

The planned location of the offices is within close proximity to the ablution and dining facilities; thus it would not be necessary to have additional infrastructure for a separate lunch room or additional ablution services.

18.5 Heating and Air Conditioning

Electric heating facilities for water and indoor temperature are anticipated, as it has been assumed that electricity from the TPP will be available after one year of mine operations. Generators will be utilized until on-site power is available.

Electric boilers used for the kitchen will have two units, each having a 200 L capacity. The ablution facilities will have individual independent hot water facilities.

The indoor spaces (rooms, dining facilities, kitchen, and recreation room) will be constructed with electric heaters and air conditioners to ensure a comfortable living environment. It is also anticipated that the TPP will have steam available for heating use that will potentially offset stand-alone heating requirements and associated capital.

18.6 Electricity

Electricity will be required at the camp, office, workshop, crushing facilities, and for other specific tasks at the mine site. Temporary generators will be utilized to supply electricity until the TPP becomes operational. The infrastructure required to get electricity from the TPP to the camp, office, workshop, and crushing facility will be through a three-phase power line installation.

It has been reported that electricity is available through a power line from Undurkhaan; however, capacity and reliability are not believed to be sufficient to meet the mine's electrical requirements. Therefore it has been assumed that no electricity will be sourced from the existing line.

18.6.1 Temporary Supply

Temporary power supply will come from diesel generators until the power lines have been installed and the TPP is operational. These generator sets will be hired on a short term basis.

The generator needed for power to the crushing facility is a 565-kVA unit, and will be required for a period of eight months. Electricity for the camp and workshop require one 125 kVA unit and one 250 kVA unit, which have been included in the capital expenditures, as well as one backup 125 kVA unit. Initial use of the generating units powering the camp and office facility is planned for a period of 12 months.

18.6.2 Permanent Supply

Permanent electric supply is assumed to come directly from the TPP once operational, and has been assumed to be a three-phased 415 volt supply. The permanent supply would require minimal electrical infrastructure on site to transform and distribute at residential voltages. The capital budget for power line installation is based on three wires (required for 3-phase) placed on power poles on 100 m centers. A total of 3 km of line will be installed to distribute power supply to necessary site locations.

18.7 Security

On-site security is an important aspect to keep the mining operations safe and avoid pilfering. Security measures will be designed to minimize interference from outside influences and to enable efficient management of the on-site staff. Consideration is also given to the potential for live-stock to enter the secure area. Security infrastructure that will be required includes fencing, security posts, access gates, and lighting.

18.7.1 Fencing

Fencing will be used to segregate the mining areas and the office area from their surroundings to enhance overall safety, to prevent people and animals from accessing the site where hazards exist, and to help protect property.

The fencing around the mine lease is assumed to be comprised of barbed wire fencing approximately 1.5 m high, with six wires to ensure that small animals such as goats are unable to pass. The initial installation of the mine lease fencing assumes encompassing

sufficient area to support 2 1/2 years of production; fencing would be progressively moved according to pit development. The mine fence would be designed and constructed so that it is able to be easily relocated as the pit advances. There are provisions for additional fencing as the active mining area increases.

The office and camp fencing is intended to ensure that access to and from enclosed areas is directed through security control points. Fencing around the office and camp facilities would be for delineation purposes. Capital expenditure estimates are based on experience at similar mining operations.

18.7.2 Guard Houses and Site Entry Gates

The establishment of guard houses and access gates are essential to monitor and to manage the flow of people as they enter the site. A main guard house with site entry gates will be located at the main entrance to the mine. Personnel will be stationed there on a continuous schedule in order to regulate the access of personnel and equipment entering the mining license. An additional guard house will be located at the access point to the camp facilities.

Lighting towers will be used in conjunction with the guard houses and site entry gates. Lighting for the camp, office, and workshop areas would initially be provided by diesel lighting plants, with subsequent replacement with permanent lighting facilities once the connection to the main power system is completed.

19.0 MARKET STUDIES AND CONTRACTS

19.1 Market

The projected output from the Chandgana mining operation is a low calorific value (CV) product averaging 3,300 kcal/kg, with relatively high moisture content (approximately 40% arb), and low ash content. As with other comparable lignite products, the low CV of the coal limits opportunities for commercial use. This is due to the cost of transportation of a raw coal product, which tends to be cost prohibitive compared to its relative value as a low CV lignite coal and associated spontaneous combustion issues related to low rank coals. The property is isolated by its location (300 km east of Ulaanbaatar), as the distance to potential existing markets requiring low CV coals would result in a delivered cost that precludes the use of Chandgana coal. Therefore, Chandgana coal currently only has value when utilized locally or in a mine-mouth power station.

Lignite products that potentially can be mined at relatively low costs are typically utilized as fuel for mine-mouth thermal power plants or a nearby TPPs. Therefore, Prophecy has developed plans to construct a mine-mouth power station referred to as the Chandgana Tal 600 MW TPP. The TPP would utilize the Chandgana coal product on site, an approach that potentially offers the most economical beneficial use of the coal product. A non-published report provided background for the Chandgana Power project.

Feasibility of the project as discussed in the unpublished report depends mainly on input parameters related to power consumption and grid demand. Primary future use and demand is expected to be in the Ulaanbaatar region, which represents a logical market that would be connected to the power plant. The eastern region of Mongolia (location of the proposed TPP) will be developing industrially; however, the current installed electrical generating capacity is only 21 MW. Construction of the Chandgana Power project would provide a major contribution to Mongolian governments plans to expand electrification and power transmission network. BOYD believes it is reasonable to assume that the TPP report was prepared by competent engineers in evaluating these types of projects. There is significant risk (known and unknown) to the Chandgana coal mine project since it is solely dependent upon construction of the TPP project which would be the first Independent Power Project in the country.

19.2 Contracts

Prophecy has provided the mine gate transfer price of \$17.70 per tonne, based on coal price negotiations at the time of our study. This was further supported after the effective date of this study with a fully executed “Coal Supply Agreement between Chandgana Coal LLC and Prophecy Power Generation LLC, dated June 5, 2013.” This was also confirmed in a public announcement by Prophecy on June 5, 2013.

BOYD has not performed an independent assessment of the market price, but as confirmed by the CSA provided by Prophecy, we have utilized the \$US17.70/tonne as the mine gate transfer price in our preliminary economic model. The coal from the mine operation will be placed on a conveyor belt at the delivery point on the miner lease and conveyed to the TPP stockpile. The TPP will be responsible for all belting cost per the CSA. This price assumes that VAT, if applicable, is the responsibility of the buyer (the TPP). Because of the unique quality of the deposit, there is limited value other than a mine-mouth generating plant; therefore, the negotiated price and overall TPP economics dictate the value of this project.

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20.0 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

20.1 Environmental Studies

Prophecy commissioned EkhMongolynBaigali LLC, (EkhMongolyn Baigali) a Mongolian Environmental Consulting Company, to produce a detailed Environmental and Social baseline study. The EkhMongolyn Baigali report was prepared to meet the requirements for screening under the Mongolian Environmental Impact Assessment (EIA) Procedures and contains sections on the following:

- Physical Environment (geography, geology, mineralization, climate, and hydrological conditions).
- Biological Environment (soil cover, flora, and fauna).
- Socio-Economic Environment.

This 199-page report is the primary phase of an EIA which is typically requested by International Financing Institutions, as well as by the Mongolian Ministry of Nature and Environmental. The document was completed in 2012.

This report in summary concludes that there will be no adverse environmental impact caused by the proposed Chandgana development. This report recommends the following:

1. The project be required to strictly adhere to the relevant laws, rules and regulations, procedures, and standards in accordance with recommendations provided by the environmental assessment company in regard to the issues of environmental protection, proper use of mineral resources and environmental rehabilitation.
2. The water with high values of minerals, hardness, ammonium, and some heavy metals, which come from the mining activity, will be processed through waste water treatment facilities designed in accordance with recommendation outlined in the EIA.
3. Area impacted by mining activity and associated works will be operated in accordance with an approved environmental conservation plan which will be developed in adherence with the laws and regulations of Mongolia.
4. Project implementation will cooperate and coordinate with government administration of the Moron Soum and assist in development of the soum center as to provide a workplace for local residents and assist in supporting herder's social problems.

20.2 Waste Disposal

Requirements and plans for waste placement and TPP ash have been included in the mine plan as part of the PEA.

20.3 Permitting

This environmental impact study is one part of the permitting process; additional detailed life-of-mine mine planning and annual planning also need to be completed to continue the mining process. Detailed plans and annual plans have not been completed, but will be scheduled in accordance with mine development schedules.

20.4 Social and Community Relations

The EkhMongolyn Baigali study has assessed in detail the: (1) environmental impacts to be potentially caused by the coal extraction activity, (2) effects on the project's environment, composition of the ecosystem, socio-economic situations, workers' social issues, and (3) the project's possible adverse impacts. The primary conclusion is the Chandgana project is sufficiently isolated to have no major effect on populated areas. Job creation and secondary industry development will improve the social economic aspects of the region.

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21.0 CAPITAL AND OPERATING COSTS

21.1 Cost Estimation Procedure

Estimated costs contained in this Technical Report are consistent with the definition of a PEA, a study that does not reach the detail presented in a PFS or feasibility study, but is sufficient to determine on a preliminary basis, that there are reasonable prospects for economic extraction of the coal resources stated herein. SME states that a PEA for a NI 43-101 Technical Report has +/-35% degree of accuracy, coupled with other qualifying statements.

BOYD has utilized the Preliminary Scoping Study that was prepared by Leighton Asia as guidance for infrastructure requirement and equipment selection. BOYD developed annual coal production based on heat requirements shown in technical documents provided by Prophecy for the proposed TPP. Economic assumptions utilized in our analysis are as outlined in this chapter. The preliminary cost estimates within this study were developed based on costs as of July 2012, constant dollar basis, after-tax basis excluding assumptions relative to financing costs, working capital, etc. We have assumed that Prophecy will utilize a third-party contractor to procure (or hire) primary equipment complements, manage operating activities on site, and coordinate delivery of the raw product to the TPP.

Capital cost estimates contained in this report were based on the Leighton Study assumptions, which were reviewed and adjusted by BOYD as deemed appropriate. Leighton utilized capital costs experienced in recent projects (for most capital cost items) as incurred in Leighton's various Mongolian mining and infrastructure projects. BOYD is familiar with several Leighton infrastructure projects. It is our opinion that the capital cost values used in this report provide a reasonable basis for a PEA.

Direct cash cost of operations include work activities required to produce coal, such as labor (including operations and maintenance personnel), consumables (supplies), fuel, and ancillary fleet costs, etc..

Indirect (other) cash cost of operations are essentially overhead costs, such as contractor related margins and overheads, management staff, general and administrative expenses, royalties, emissions tax, license fees, etc.

Contractor related costs (margins and overhead) have been segregated should Prophecy opt to manage and operate the mining activities with their own work force.

Capital expenditures are shown as a separate line item, although under a contract miner scenario, the equipment purchases would typically be incorporated within the contract mining rates. This is subject to negotiation between Prophecy and the ultimate third party contractor.

21.2 Equipment Operating Costs

Equipment operating material and supply (M&S) cost estimates are based on Leighton's actual experience in Asia and input from their suppliers, and have been reviewed by BOYD for reasonableness.

Direct mine operating cash costs account for approximately 65% of the total cash cost of operations contained in this Technical Report. M&S costs account for 87% of the total direct cash costs. The fuel component is the largest single category, as it accounts for 40% of the total M&S cost (25% of the total direct cash costs). Fuel is expected to be the cost component with the most volatile pricing. For the purpose of this report we have used the current fuel rate of \$1.30/liter.

21.2.1 Equipment

Hourly operating costs (fuel, lube, repair parts, tires, and ground engagement components) for the selected equipment at the Chandgana coal mining operation were developed from Leighton's reported Mongolian experience with similar equipment, and validated by published sources (i.e., Caterpillar handbook and various heavy equipment cost reference guides) and BOYD's general experience with similar equipment.

21.2.2 Unit Cost Per Hour

Estimated equipment hourly operating costs are highly dependent on the variable fuel component. BOYD utilized, and Leighton's reported rate appears to compare to, the current rate of \$1.30 per liter. Other aspects of the hourly operating costs are based on reported costs with review and confirmation of reasonableness from published and our internal sources.

21.2.3 Productivity

Scheduled and operating hours for equipment were developed based on production capacity of the primary excavators and coal mining equipment. Scheduled labor and equipment hours are driven by the primary production units and provide the basis for calculating cash operating costs.

21.2.4 Unit Costs

The following are the unit costs by category used to develop Operating Costs estimates in this PEA:

Operating Cost Per Unit	
Equipment Type (or Equivalent)	\$/Operating-hour
CAT 390D Excavator (waste)	320 *
CAT 773F	135
CAT 390D Excavator (coal)	280 *
CAT 773F	135
CAT D8/D9	100
CAT 14M	150
CAT 988	160
CAT 773F (water truck)	135
Mine Site Costs	Assigned (\$)
ROM Processing and Handling (per ROM tonne)	0.35
Communications (\$000)	300
Mine Site Roads (\$000)	250
Camp (employee/day)	20
Power (\$000)	Variable
Water Variable (MNT per cubic meter)	127.6
Road Maintenance (Shipped/tonne)	0.15
Rehabilitation (per Ha)	20,000
Project Overheads and Administration (per ROM tonne)	0.50

* The difference is based on duty use of the excavator such as waste versus coal

21.2.5 Material and Supplies Cost Schedules

Table 21.1, following this text, shows material and supply cost estimates.

21.3 Other Operating Costs

There are substantial other cash operating costs assigned to various non-equipment related categories. At the PEA level, we have utilized typical costs based on BOYD's experience with similar operations or those provided in the Leighton Study (after our independent review to confirm reasonableness).

21.3.1 ROM Processing and Handling

ROM processing and handling is based on crushing ROM coal to minus 150 mm (top size) in this plan using an apron feeder and a double roll crusher. The cost to perform this function is estimated to be \$0.35 per ROM tonne, which is consistent with similar operations.

21.3.2 Communications

Communications costs were estimated at a constant annual fixed rate of \$300,000 for maintenance, repair and replacement.

21.3.3 Mine Site Roads

Graders and miscellaneous equipment will be utilized in the maintenance of mine-site roads (with gravel or segregated mine materials) to keep the roads in a good state of repair. Road maintenance equipment is included as ancillary equipment in the economic model. An additional materials cost for miscellaneous is estimated to be \$250,000 per year.

21.3.4 Camp

Camp operating and maintenance costs for meals and miscellaneous camp site services are estimated at \$20/person/day.

21.3.5 Power

The cost of electrical power is assumed to be initially sourced from diesel generators and ultimately will be supplied from the proposed mine-mouth TPP. At the PEA level we do not have a detailed consumption profile, but have assumed power to be initially \$50,000 per quarter (using generators) and peak consumption at \$150,000 per annum at full production (sourced from the mine mouth TPP).

21.3.6 Water

Sourcing and cost of future water requirements have not yet been determined for the mining operations and camp site. We anticipate minimal requirements for mine operations and camp site. The largest consumer of water relative to the mining operations will be for dust suppression. The mine operations are rather compact and should not require significant water resources. We have estimated the cost for water fees and licensing at a rate of 127.6 MNT (\$0.096) per cubic meter based on projected use of 40,000 cubic meters per day.

21.3.7 Road Maintenance

We have estimated that road maintenance from the mine operations to the TPP to be the responsibility of the mining operations. The cost includes continual maintenance for gravel and on-going repair. The cost is estimated at \$0.15 per ROM tonne.

21.3.8 Rehabilitation

Rehabilitation is based on US\$20,000 per hectare of disturbed area. The Chandgana coal mine operations will result in a deficit overburden waste situation and rehabilitation of waste piles is expected to be minimal.

21.3.9 Project Overheads and Administration

Project overheads and administration costs include corporate administration in Vancouver, Ulaanbaatar, and at the mine site. Costs include allocation of transport for ex-pat labor for holiday breaks and transportation to the mine site. Project overheads and administration are estimated at US\$0.50 per ROM tonne.

21.4 Labor

Mine site labor cost is developed by BOYD for the purpose of this PEA based on an individual standard work schedule of 5 day/week and 8 hours/day. Any additional work hours will be paid at 1.5 times the standard rate. Work on public holidays will be paid at 2.0 times standard rates. A minimum of 12 hours off-time per employee between shifts is mandated by law. Basic vacation leave is 15 days per year plus additional days for service over 6 years. We have utilized 20 days of leave per year (average) for the purpose of developing annual labor rates. We have also included 8 public holidays per year.

Pensions are assumed to be based on a combination of company and employee contributions. Employer paid benefits and social insurances include: health insurance, injury and professional disease insurance, special benefits insurance, and unemployment insurance. The assigned cost of pension and other employee benefits equals 30% of direct wages. To encourage skilled tradesman and operators to commute to this remote location, a 5% remote duty premium is applied to the standard wage rate.

Though we have not developed detailed roster schedules for this PEA, a roster will need to be developed to provide Mongolian staff home leave on a reasonable basis. Given the allocation of premium pay opportunities, we anticipate that many employees may opt to reside in nearby towns, villages and local soums. General work staff and unskilled labor are anticipated to be recruited from local soums.

21.4.1 Schedules

BOYD anticipates the following work schedule per employee:

Work Schedule	Days/Year
52 weeks/year x 5 days/week	260
Vacation Days 15 to 29 days/year (based on years of service)	20
Public Holidays	9
Net Work Days/Employee	231
Assigned Net Work Days/Employee	230
Scheduled Work Hours/Year	1,840
Net hours/year (5% absentee rate)	1,750

21.4.2 Labor Wages and Benefits

The following lists labor benefit parameters used in BOYD economic model:

	Percentage of Base Pay
Vacation/Holiday	12.6
OT/Extra Pay	28.0
Remote Location Premium	13.0
Employer Direct Benefits*	30.0
Employers Indirect Benefits**	22.6

* Insurance, taxes, etc

** Meal and housing allowances

Value of Labor benefit parameters are incrementally calculated as a percentage of base labor shown above.

The following pay rate structure was used in this PEA:

Position	Annual Pay Rate (US\$)						
	Base	Holiday/ Vacation	OT Extra Duty	Remote Premium	Employer Paid Benefits	Employer Paid Indirect	Assigned Total
Worker (General)	5,040	635	1,411	655	2,322	1,750	12,000
Skilled Worker (Operator)	7,440	937	2,083	967	3,428	2,583	18,000
Team Leader	7,800	983	2,184	1,014	3,594	2,708	19,000
Jr. Mgmt	8,100	1,021	2,268	1,053	3,732	2,812	20,000
Deputy Manager	8,400	1,058	2,352	1,092	3,871	2,916	21,000
Manager	9,000	1,134	2,520	1,170	4,147	3,124	25,000

21.4.3 Labor and Cost Schedules

Table 21.2, following this text, shows estimated labor costs.

21.5 Capital Costs

The Chandgana project site is located in a semi-remote area of east central Mongolia. The primary infrastructure and community amenities necessary to operate the proposed mine will have to be developed. Construction of the mine/TPP complex will promote regional development and create substantial primary and secondary employment opportunities.

We have excluded sunk capital cost from this PEA; these include: mining license purchase, exploration and testing costs, and previous technical studies. The estimated expenditures do not include working capital, financing costs, etc.

The estimated capital expenditures (CAPEX) presented in this PEA are based on Prophecy providing 100% of the capital and operating requirements. In actual practice it is typical that a third party contractor will have the responsibility to purchase the required mining equipment and recoup these costs through the negotiated payment for services. Since the terms of any potential mining contract have not been developed, we assumed all CAPEX to be the responsibility of the mine owner.

The CAPEX schedule reflects the development of a 3.5 Mtpa operation.

21.5.1 Equipment Capital

Unit capital costs used in the PEA for mining equipment are:

<u>Initial Surface Mine Equipment Capital</u>		<u>Unit Capital</u> <u>(\$000)</u>	<u>Hrs. Life</u>
Excavators	CAT 390D – Waste	1,175	60,000
Excavators	CAT 390D - Coal	1,175	60,000
Haultrucks	CAT 773F – Waste	910	35,000
Haultrucks	CAT 773F - Coal	910	35,000
Dozers	D8R	675	30,000
Graders	14M	849	50,000
FEL	CAT 988H	1,150	50,000
Water Truck	773F (46,000 L)	959	100,000

Equipment for use in Mongolia is often more expensive than similar equipment used in other countries. This is because most equipment must be fitted with cold-weather packages, and there are additional costs for delivery of equipment to remote locations. It is our understanding that any VAT paid by the mine on capital purchases is refunded by the government in the case of a domestic operation (coal used in-country). Therefore, VAT is excluded in equipment capital costs.

Table 21.3, provides Estimated Capital Expenditures for the mine plan (initial and replacement).

21.5.2 Infrastructure Capital

Project infrastructure is described in Item 18.0 of this report. The following lists the unit cost for each item.

<u>Infrastructure Capital</u>	<u>LOM Capital (\$000)</u>
Crusher Unit, Assembly and Stockpile pad	1,800
Office	260
Camp Establishment	2,465
Camp Ramp-Up	350
Camp	380
Temporary Workshop	190
Permanent Workshop	6,090
Fencing	90
Powerlines	625
Communication Network Towers	45
Access Roads	470
Dam Construction	4,090
Exploration, Testing, and Reports	1,686
Miscellaneous Ancillary Capital	2,500
Design, Permitting, Construction, Project Management, and Other	6,312

Project management is included assuming design and construction of the various facilities will be completed by a third party contractor.

Initial development sunk costs such as: preliminary development costs for licensing, feasibility studies, exploration cost, drilling and testing are excluded from capital cost used in this study.

Based on a PEA level study, we have assumed a 10% overall contingency to be added to the capital expenditures.

Table 21.3, following this text, provides Estimated Capital Expenditures for the mine plan infrastructure capital. Annual depreciation (infrastructure and equipment) is also shown on Table 21.3.

21.6 Conclusions

The estimated mining capital and operating costs for this PEA are developed by BOYD to be within an accuracy range of $\pm 35\%$, which is appropriate for this level of PEA study.

Because fuel pricing reflects a high percentage of the cash cost of operations, the project's operating expenses are sensitive to the market price for petroleum products. CAPEX assumptions applied to equipment purchases tend to have a higher degree of accuracy, but this may be offset by inherent difficulty in accurately anticipating the magnitude and cost of site infrastructure items.

Pre-production (initial) cash costs are expenditures (both equipment and infrastructure) that occur prior to the start of commercial sales.

Following this page are:

Tables:

- 21.1 Estimated Material and Supplies Cost
- 21.2 Estimated Labor Requirements and Cost
- 21.3 Estimated Capital Expenditures

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TABLE 21.1

ESTIMATED MATERIAL AND SUPPLIES COST
CHANDGANA TAL COAL PROJECT

Prepared For

PROPHECY COAL CORP.

By

John T. Boyd Company

Mining and Geological Consultants

November 2012

		2015\Qtr1	2015\Qtr2	2015\Qtr3	2015\Qtr4	2016	2017	2018	2019	2020	2021 - 2025	2026 - 2030	2031 - 2035	2036 - 2040	2041 - 2045	Total
Equipment Operating - Hours	Equipment Type (or Equiv)															
Overburden Excavators	Cat 390D Excavator	-	-	1,676	1,436	9,171	8,896	8,875	8,812	8,867	27,421	31,022	38,219	40,827	33,196	-
Overburden Trucks	Cat 773F	-	-	5,337	5,082	33,028	33,647	35,081	43,349	43,243	131,618	134,663	173,540	182,501	147,732	-
Coal Excavators	Cat 390D Excavator	-	-	-	201	5,468	7,640	7,622	7,568	7,615	38,094	38,145	38,201	38,201	38,201	-
Coal Trucks	Cat 773F	-	-	-	545	16,972	23,681	22,225	20,502	20,941	110,259	118,216	129,473	139,809	147,666	-
Track Dozers	Cat D8/D9	-	-	1,676	1,637	14,639	16,536	16,498	16,379	16,482	65,515	69,168	76,420	79,028	71,397	-
Graders	Cat 14M	-	-	593	625	5,555	6,370	6,367	7,095	7,132	26,875	28,098	33,668	35,812	32,822	-
Front-End Loaders	Cat 988	-	-	838	718	4,585	4,448	4,438	4,406	4,433	13,710	15,511	19,109	20,413	16,598	-
Water Trucks	Cat 773F	-	-	62	61	542	612	611	607	610	2,426	2,562	2,830	2,927	2,644	-
Equipment Operating Cost (\$ - 000)	Equipment Type (or Equiv)	\$/hour														
Overburden Excavators	Cat 390D Excavator	320	-	536	460	2,935	2,847	2,840	2,820	2,837	8,775	9,927	12,230	13,065	10,623	69,894
Overburden Trucks	Cat 773F	135	-	720	686	4,459	4,542	4,736	5,852	5,838	17,768	18,180	23,428	24,638	19,944	130,791
Coal Excavators	Cat 390D Excavator	280	-	-	56	1,531	2,139	2,134	2,119	2,132	10,666	10,681	10,696	10,696	10,696	63,548
Coal Trucks	Cat 773F	135	-	-	74	2,291	3,197	3,000	2,768	2,827	14,885	15,959	17,479	18,874	19,935	101,289
Track Dozers	Cat D8/D9	125	-	209	205	1,830	2,067	2,062	2,047	2,060	8,189	8,646	9,552	9,878	8,925	55,672
Graders	Cat 14M	100	-	59	63	556	637	637	709	713	2,688	2,810	3,367	3,581	3,282	19,101
Front-End Loaders	Cat 988	150	-	126	108	688	667	666	661	665	2,057	2,327	2,866	3,062	2,490	16,381
Water Trucks	Cat 773F	160	-	10	10	87	98	98	97	98	388	410	453	468	423	2,639
Ancilliary Equipment		5%	-	83	83	719	810	809	854	859	3,271	3,447	4,004	4,213	3,816	22,966
Total Equipment Costs		-	-	1,744	1,743	15,094	17,004	16,982	17,927	18,029	68,687	72,386	84,075	88,476	80,133	482,281
Equipment Cost per ROM Tonne		-	-	-	18.94	6.03	4.86	4.86	5.17	5.17	3.94	4.14	4.81	5.06	4.58	4.64
Other Operating Cost (\$ - 000)	Units	Assigned														
ROM Processing & Handling	\$/ROM Tonne	0.35	-	-	32	877	1,225	1,222	1,213	1,221	6,106	6,115	6,124	6,124	6,124	36,381
Testing and Quality Analysis	\$/ROM Tonne	0.15	-	-	14	376	525	524	520	523	2,617	2,621	2,624	2,624	2,624	15,592
Communications	Total (\$000)	300	-	75	75	300	300	300	300	300	1,500	1,500	1,500	1,500	3,000	10,650
Mine Site Roads	Total (\$000)	250	-	63	63	250	250	250	250	250	1,250	1,250	1,250	1,250	2,500	8,875
Camp (per employee)	Per Employee per day	20.00	-	85	92	363	607	589	580	621	2,990	3,611	3,726	3,588	7,314	24,166
Power	Total (\$000)	Variable	-	50	50	100	150	150	150	150	750	750	750	750	1,500	5,300
Water	Total (\$000)	750	-	188	188	750	750	750	750	750	3,750	3,750	3,750	3,750	7,500	26,625
Road Maintenance (per Shipped Tonne)	\$/ROM Tonne	0.15	-	-	14	376	525	524	520	523	2,617	2,621	2,624	2,624	2,624	15,592
Rehabilitation (per Ha)	Per Ha	20,000	-	74	51	360	361	433	375	261	703	558	662	472	292	4,600
Project Overheads & Administration (per ROM Tonne)	\$/ROM Tonne	0.50	-	-	46	1,252	1,750	1,746	1,733	1,744	8,724	8,735	8,748	8,748	8,748	51,973
Total Other Costs		-	-	534	624	5,003	6,442	6,486	6,390	6,342	31,007	31,510	31,758	31,430	42,227	199,754
Other Costs per ROM Tonne		-	-	-	6.78	2.00	1.84	1.86	1.84	1.82	1.78	1.80	1.82	1.80	2.41	1.92
Total Operating Costs		-	-	2,278	2,367	20,097	23,446	23,468	24,317	24,371	99,694	103,896	115,833	119,906	122,360	682,035
Total Operating Costs per ROM Tonne		-	-	-	25.73	8.03	6.70	6.72	7.02	6.99	5.71	5.95	6.62	6.85	6.99	6.56

TABLE 21.2

ESTIMATED LABOR REQUIREMENTS AND COST
CHANDGANA TAL COAL PROJECTPrepared For
PROPHECY COAL CORP.By
John T. Boyd Company
Mining and Geological Consultants
November 2012

		2015\Qtr1	2015\Qtr2	2015\Qtr3	2015\Qtr4	2016	2017	2018	2019	2020	2021 - 2025	2026 - 2030	2031 - 2035	2036 - 2040	2041 - 2045	Totals
<u>Equipment Operating - Hours</u>	<u>Equipment Type (or Equiv)</u>															
Overburden Excavators	Cat 390D Excavator	-	-		1,436	9,171	8,896	8,875	8,812	8,867	27,421	31,022	38,219	40,827	33,196	
Overburden Trucks	Cat 773F	-	-	5,337	5,082	33,028	33,647	35,081	43,349	43,243	131,618	134,663	173,540	182,501	147,732	
Coal Excavators	Cat 390D Excavator	-	-	-	201	5,468	7,640	7,622	7,568	7,615	38,094	38,145	38,201	38,201	38,201	
Coal Trucks	Cat 773F	-	-	-	545	16,972	23,681	22,225	20,502	20,941	110,259	118,216	129,473	139,809	147,666	
Track Dozers	Cat D8/D9	-	-	1,676	1,637	14,639	16,536	16,498	16,379	16,482	65,515	69,168	76,420	79,028	71,397	
Graders	Cat 14M	-	-	593	625	5,555	6,370	6,367	7,095	7,132	26,875	28,098	33,668	35,812	32,822	
Front-End Loaders	Cat 988	-	-	-	718	4,585	4,448	4,438	4,406	4,433	13,710	15,511	19,109	20,413	16,598	
Water Trucks	Cat 773F	-	-	62	61	542	612	611	607	610	2,426	2,562	2,830	2,927	2,644	
Ancillary Equipment	20% of Equipment	-	-	2,036	2,061	17,992	20,366	20,343	21,743	21,865	83,184	87,477	102,292	107,904	98,052	
<u>Equivalent Employee - Hours</u>																
Equipment Operators - Overburden		-	-	7,013	6,518	42,199	42,543	43,956	52,161	52,110	159,039	165,686	211,759	223,328	180,929	
Equipment Operators - Coal		-	-	-	746	22,439	31,321	29,847	28,069	28,556	148,353	156,361	178,674	185,867	185,867	
Support Equipment Operators		-	-	5,205	5,102	43,314	48,333	48,257	50,230	50,522	191,711	202,815	234,320	246,084	221,513	
<u>Equivalent Employee - Numbers</u>																
Equipment Operators - Overburden		-	-	16	15	24	24	25	30	30	18	19	24	26	10	
Equipment Operators - Coal		-	-	-	2	13	18	17	16	16	17	18	19	20	11	
Support Equipment Operators		-	-	-	12	25	28	28	29	29	22	23	27	28	13	
<u>Employee Numbers - Assigned</u>																
Equipment Operators - Overburden		-	-	20	23	18	33	20	18	22	20	28	30	27	28	
Equipment Operators - Coal		-	-	-	1	5	13	15	16	17	16	18	19	20	20	
Support Equipment Operators		-	-	14	14	14	26	19	18	22	20	26	27	25	26	
Blasters, Pumpers, Lights		-	-	2	2	2	4	4	4	4	4	6	6	6	6	
Material Handling - ROM Stockpile		-	-	2	2	2	4	4	4	4	4	4	4	4	4	
Plant Maintenance / Electricians		-	-	2	2	2	4	4	4	4	4	6	6	6	6	
Laboratory		-	-	2	2	2	4	4	4	4	4	4	4	4	4	
Warehouse		-	-	2	2	2	4	4	4	4	4	4	4	4	4	
Maintenance	30%	-	-	13	14	14	20	24	24	24	24	29	30	29	29	
Security/Safety/General Labor	20%	-	-	9	10	10	10	20	20	20	20	20	20	19	20	
Administration & Management - Domestic	10%	-	-	6	6	6	8	8	8	8	8	10	10	10	10	
Administration & Management - Expat	2%	-	-	2	2	2	2	2	2	2	2	2	2	2	2	
Total		-	-	74	80	79	132	128	126	135	130	157	162	156	159	
<u>Labor Costs</u>	<u>\$/Year</u>															
Equipment Operators - Overburden	18,000	-	-	90	104	324	594	360	324	396	1,800	2,520	2,700	2,430	2,520	14,162
Equipment Operators - Coal	18,000	-	-	-	5	90	234	270	288	306	1,440	1,620	1,710	1,800	1,800	9,563
Support Equipment Operators	12,000	-	-	42	42	168	312	228	216	264	1,200	1,560	1,620	1,500	1,560	8,712
Blasters, Pumpers, Lights	12,000	-	-	6	6	24	48	48	48	48	240	360	360	360	360	1,908
Material Handling - ROM Stockpile	12,000	-	-	6	6	24	48	48	48	48	240	240	240	240	240	1,428
Plant Maintenance / Electricians	18,000	-	-	9	9	36	72	72	72	72	360	540	540	540	540	2,862
Laboratory	12,000	-	-	6	6	24	48	48	48	48	240	240	240	240	240	1,428
Warehouse	12,000	-	-	6	6	24	48	48	48	48	240	240	240	240	240	1,428
Maintenance	18,000	-	-	59	63	252	360	432	432	432	2,160	2,610	2,700	2,610	2,610	14,720
Security/Safety/General Labor	12,000	-	-	27	30	120	120	240	240	240	1,200	1,200	1,200	1,140	1,200	6,957
Administration & Management - Domestic	20,000	-	-	30	30	120	160	160	160	160	800	1,000	1,000	1,000	1,000	5,620
Administration & Management - Expat	200,000	-	-	100	100	400	400	400	400	400	2,000	2,000	2,000	2,000	2,000	12,200
Total Labor Costs		-	-	381	406	1,606	2,444	2,354	2,324	2,462	11,920	14,130	14,550	14,100	14,310	80,987
Labor Cost per ROM Tonne		-	-	-	4.41	0.64	0.70	0.67	0.67	0.71	0.68	0.81	0.83	0.81	0.82	0.78

TABLE 21.3

ESTIMATED CAPITAL EXPENDITURES
 CHANDGANA TAL COAL PROJECT
 Prepared For
 PROPHECY COAL CORP.
 By
 John T. Boyd Company
 Mining and Geological Consultants
 November 2012

	Capital (\$-000)	Hrs. Life	Yrs. Life	2015\Qtr3	2015\Qtr4	2016	2017	2018	2019	2020	2021 - 2025	2026 - 2030	2031 - 2035	2036 - 2040	2041 - 2045	TOTAL
Surface Equipment Capital																
Initial																
Excavators	Cat 390D - Waste	1,175	60,000	9	1,175	-	588	-	-	-	-	-	-	-	-	1,763
Excavators	Cat 390D - Coal	1,175	60,000	9	1,175	-	588	-	-	-	-	-	-	-	-	1,763
Haultrucks	Cat 773F - Waste	910	35,000	6	2,275	-	1,365	1,820	-	910	-	-	-	-	-	6,370
Haultrucks	Cat 773F - Coal	910	35,000	6	2,275	-	1,365	1,820	-	910	-	-	-	-	-	6,370
Dozers	D8R	675	30,000	5	2,025	-	675	-	-	-	-	-	-	-	-	2,700
Graders	14M	849	50,000	8	1,698	-	-	849	-	-	-	-	-	-	-	2,547
FEL	Cat 988H	1,150	50,000	8	1,150	-	1,150	-	-	-	-	-	-	-	-	2,300
Water Truck	773F 46,000 L	959	100,000	15	959	-	-	-	-	-	-	-	-	-	-	959
Ancillary Eqpt	Various	1,500	50,000	8	1,000	500	-	-	-	-	-	-	-	-	-	1,500
Total Initial Capital				13,732	500	5,730	4,489	-	1,820	-	-	-	-	-	-	26,271
Replacement																
Excavators	Cat 390D - Waste	1,175			-	-	-	-	-	-	-	1,175	588	1,175	588	3,526
Excavators	Cat 390D - Coal	1,175			-	-	-	-	-	-	-	1,175	588	1,175	588	3,526
Haultrucks	Cat 773F - Waste	910			-	-	-	-	-	-	6,370	6,370	6,370	-	6,370	25,480
Haultrucks	Cat 773F - Coal	910			-	-	-	-	-	-	6,370	6,370	6,370	-	6,370	25,480
Dozers	D8R	675			-	-	-	-	-	-	2,700	2,700	2,700	2,700	5,400	16,200
Graders	14M	849			-	-	-	-	-	-	1,698	-	1,698	-	3,396	6,792
FEL	Cat 988H	1,150			-	-	-	-	-	-	1,150	-	1,150	-	2,300	4,600
Water Truck	773F 46,000 L	959			-	-	-	-	-	-	-	-	959	-	959	1,918
Ancillary Eqpt	Various	1,500			-	-	-	-	-	-	1,500	-	1,500	-	1,500	4,500
Total Replacement				-	-	-	-	-	-	-	19,788	17,790	21,923	5,050	27,471	92,022
Infrastructure Capital																
	Crusher Unit & Assembly				-	1,800	-	-	-	-	-	-	-	-	-	1,800
	Office				125	-	-	-	-	-	10	-	-	125	-	260
	Camp Establishment				1,050	-	-	35	-	-	235	520	-	625	-	2,465
	Camp Ramp-up				-	-	160	-	-	-	-	160	-	30	-	350
	Camp				160	-	50	-	-	-	-	170	-	-	-	380
	Temporary Workshop				190	-	-	-	-	-	-	-	-	-	-	190
	Permanent Workshop				-	-	3,260	-	-	-	-	1,415	-	1,415	-	6,090
	Fencing				50	-	-	10	-	-	10	10	-	10	-	90
	Powerlines				-	-	625	-	-	-	-	-	-	-	-	625
	Communication Network Towers				30	-	15	-	-	-	-	-	-	-	-	45
	Access Roads				470	-	-	-	-	-	-	-	-	-	-	470
	Dam Construction				600	-	-	580	-	-	580	1,165	-	1,165	-	4,090
	Exploration, Testing and Reports				2,500	-	-	-	-	-	-	-	-	-	-	2,500
	Miscellaneous Ancillary Capital				268	180	64	347	63	-	84	344	-	337	-	1,686
	Design, Permitting and Construction Mgmt				1,633	594	211	1,145	206	-	276	1,135	-	1,112	-	6,312
Total Infrastructure Capital				7,075	2,574	915	4,962	894	-	-	1,194	4,919	-	4,819	-	27,353
Total Capital Contingency @ 10%				2,081	307	665	945	89	182	-	2,098	2,271	2,192	987	2,747	14,565
Total Capital Expenditures (US\$ - 000)				22,888	3,381	7,310	10,396	983	2,002	-	23,080	24,980	24,115	10,856	30,218	160,210
Calculated Depreciation*				131	131	3,259	3,798	4,048	3,912	4,278	30,576	26,536	25,202	25,201	25,430	

* Depreciation is based on capitalization of mining equipment with 10-year straight line depreciation (10% each year) and capitalization of infrastructure with 40-year straight line depreciation (2.5% each year).

22.0 ECONOMIC ANALYSIS

22.1 BOYD Analysis and Assumptions

BOYD utilized a coal transfer price of US\$17.70 per tonne, as defined in Chapter 19 “Market Studies and Contracts”. This preliminary economic assessment is developed on an after-tax cash flow with corresponding NPV and IRR calculations for the 30-year mine plan. Our projected production, cash cost, capital spending, and cash flow analyses are illustrated in detail in Table 22.1, following this text.

The primary assumptions of BOYD’s PEA are detailed in various chapters of this report and summarized below:

Production

BOYD’s preliminary mine plan recovers approximately 104 Mt during the 30-year projection period. Average annual production at steady state operation is approximately 3.5 Mtpa.

Transfer Pricing

Prophecy has negotiated a market price (as of July 2012) to be US\$17.70/tonne at the mine gate. Prophecy has determined VAT, if applicable, will be the responsibility of the buyer. BOYD has utilized the specified transfer price and held it constant throughout the 30-year cash flow. The transfer price is intended to establish a market value of the coal under the assumption that the mine and the TPP are independent projects. This price was based on negotiations at the time of this study and was further supported after the effective date of the study based on a fully executed CSA, dated June 5, 2013. It should be noted that the pricing is based on a mine-mouth power station and overall TPP economics. Because of the unique quality of the deposit, there is limited or no value for this coal deposit other than a mine-mouth TPP.

The coal from the mine operation will be placed on a conveyor belt at the delivery point on the mine lease and conveyed to the TPP stockpile. The TPP will be responsible for all belting cost per the CSA.

The analysis for this mining operation differs from a typical market driven analysis, as the sole market and primary driver for mining the Chandgana resources is the potential viability of the TPP. A transfer price is useful when comparing the viability of similar coal projects, as it enables the competitiveness of a captive project to be evaluated as if its output were to be sold at commercial market prices. Alternatively, a range of transfer pricing can be applied to a mine’s output to provide financial support to a mine in the

absence of alternative fuel sources. For example, a mine's output could be sold at a price that is higher than prevailing markets, thereby enabling the mine to achieve a reasonable return on investment and positive financial performance. However, an above-market price paid by the mine's customer (such as the TPP) would still be advantageous to the customer if the transfer price is less than the delivered cost of a comparable coal product sourced from another off-site coal supplier.

BOYD believes it is reasonable to assume that the TPP feasibility study provided was prepared by competent engineers in evaluating TPP projects. There is significant risk to the Chandgana project since it is solely dependent upon construction of the TPP project and negotiation with the Mongolian Government to purchase the electric power generated.

Operating Costs and Capital Expenditures

Estimates of direct and indirect operating costs as well as capital expenditures have been derived based on the analysis herein, and are supported by BOYD's experience with similar operations.

Depreciation of mining equipment was calculated on a 10-year straight line basis and depreciation of infrastructure was calculated on a 40-year straight line basis.

Based on a PEA level study, we have applied a 10% contingency on direct operating cash costs and capital expenditures.

Cash Flow

Cash flow has been derived on an after-tax basis in constant dollars as of 31 July 2012. For this project, net income is defined as revenue less cash operating costs, less depreciation, and less corporate income tax. After-tax cash flow is net income, plus depreciation, and less capital expenditures. The cash flow analysis is considered appropriate for a PEA level study to determine the reasonable prospects for economic extraction of the coal resources estimated herein. The cash flow analysis excludes sunk capital and financing (if applicable).

Corporate Income Tax

BOYD utilized a two-tiered corporate tax rate as published by the Mongolia Tax Administration, General Department of Taxation. This rate is:

- 10% of income for 0 to 3 billion tugriks (US\$2.25 million).
- 25% of income in excess of 3 billion tugriks (US\$2.25 million).

22.2 Cash Flow

BOYD's estimated after-tax cash flow analysis is shown on Table 22.1.

22.3 Present Value

This analysis of the Chandgana coal mine PEA includes preliminary financial analysis of DCF-NPV, IRR, and payback.

DCF-NPV

LOM (30-years) DCF-NPVs were calculated as of 31 July 2012, at 8%, 10%, 12%, and 15% annual discount rates applied mid-year with all monetary value stated in constant dollars. The lower end of the range is generally applied to a well-defined coal mining operation where production and costs are well understood to a high level of accuracy and there is a secure market for the mine's output. The upper end of the range of discount rates is more consistent with a deposit that has some level of geological inconsistencies, potential fluctuations in financial performance, and an element of market risk. The following shows positive NPVs at the applied discount rates:

<u>Discount Rate</u>	<u>DCF-NPV (US\$-000)</u>
8%	66,024
10%	47,765
12%	34,692
15%	21,354

IRR

The IRR is defined as the discount rate at which the DCF-NPV equals zero. Companies typically compare the IRR with their internal "hurdle rate" when evaluating the economic viability of projects. While the IRR should not be the only criteria for project selection, a project with an IRR greater than the company's hurdle rate represents a favorable project meriting further study and investment. The IRR for the Chandgana project is approximately 28% on an after tax basis.

Payback

Payback determines how many years cash flow are required to recover the preproduction capital investment. The preproduction capital invested for Chandgana coal mine project is US\$26.3 million for equipment and infrastructure capital and \$5.1 million pre-production cash costs of operations (net). Our estimate of pre-production capital totals \$31.3 million. Payback occurs in approximately 5.3 years.

Payback is rarely recommended as a basis for making financial decisions associated with the development of a mining project, since:

- It does not account for the time value of money.

- Cash flows beyond the payback period are given no consideration. These post-payback sums could represent significant information to an investor, as such cash flows could be either large or small.
- DCF-NPV and IRR provide insight on value the project adds to (detracts from) the investor. In contrast, payback only tells how long it takes to recoup initial investment, and there is no relationship between payback and the financial performance the project delivers to the investor.

For these reasons, DCF-NPV and IRR are more widely utilized to provide measures of value.

Qualified Results and Notes Regarding the Economic Assessment

This economic assessment is an indication of the potential viability of the coal mining project. Coal resources are not considered a coal reserves and therefore do not have 'demonstrated' economic viability. The economic assessment is preliminary in nature, and there is no certainty it will be realized. The results of this analysis are forward-looking and subject to a number of known and unknown risks, uncertainties, and other factors that may cause actual results to materially differ from those presented herein.

22.4 Taxes, Royalties and Other

Table 22.1 provides indirect cost estimates for the following:

- Emissions Tax
- Royalties
- License Fees
- General & Administration – Off Site
- Contractor Management, Margin, Overheads
- Corporate Income Tax

These indirect cash costs of operations are included in our economic assessment.

22.5 Sensitivity Analysis

BOYD also performed sensitivity on delivered price, operating cost, and capital. The application of $\pm 10\%$ on price to operating cost and capital cost resulted in the following outcomes:

Discount Rate (%)	DCF-NPV (US\$-000)						
	Base	Price		Operating Cost		Capital Expenditures	
		+ 10%	- 10%	- 10%	+ 10%	- 10%	+ 10%
8	66,024	99,930	32,050	95,521	36,470	71,078	60,969
10	47,765	74,579	20,889	71,171	24,308	52,130	43,401
12	34,692	56,350	12,975	53,675	15,661	38,530	30,854
15	21,354	37,609	5,047	35,701	6,964	24,603	18,106
IRR (%)	28	37	18	37	19	31	25

This economic analysis is based on mine gate (free-on-board [FOB]) pricing of \$17.70 per tonne.

Sensitivities based on design assumptions indicate that project economics range in NPV from US\$5.0 million to US\$99.9 million with IRR's ranging from 18% to 37%.

Following this page is Table 22.1, Estimated After-Tax Cash Flow.

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TABLE 22.1

ESTIMATED AFTER-TAX CASH FLOW
 PROPOSED CHANDGANA TAL COAL MINE
 Prepared For
PROPHECY COAL CORP.
 By
 John T. Boyd Company
 Mining and Geological Consultants
 November 2012

	Total US \$	2012	2013	2014	2015				2016	2017	2018	2019	2020	2021 - 2025	2026 - 2030	2031 - 2035	2036 - 2040	2041 - 2045
					Q1	Q2	Q3	Q4										
Coal Price (US\$/tonne)																		
Delivered to Power Plant	17.70	17.70	17.70	17.70	17.70	17.70	17.70	17.70	17.70	17.70	17.70	17.70	17.70	17.70	17.70	17.70	17.70	17.70
Coal Production (000 tonnes)																		
ROM - Produced/Sold	103,946	-	-	-	-	-	-	92	2,504	3,499	3,491	3,466	3,488	17,447	17,471	17,496	17,496	17,496
Gross Revenue by Product Type (US\$ - 000)																		
Total Gross Revenue	1,839,845	-	-	-	-	-	-	1,629	44,326	61,936	61,792	61,348	61,733	308,814	309,229	309,679	309,679	309,679
Net Revenue (US\$ - 000)	1,839,845	-	-	-	-	-	-	1,629	44,326	61,936	61,792	61,348	61,733	308,814	309,229	309,679	309,679	309,679
Cash Cost of Sales (US\$-000)																		
Direct Costs																		
Labor	80,987	-	-	-	-	-	381	406	1,606	2,444	2,354	2,324	2,462	11,920	14,130	14,550	14,100	14,310
Materials & Supplies	655,410	-	-	-	-	-	2,090	2,180	19,347	22,696	22,718	23,567	23,621	95,944	100,146	112,083	116,156	114,860
Subtotal Direct Costs	736,396	-	-	-	-	-	2,471	2,586	20,953	25,140	25,072	25,891	26,083	107,864	114,276	126,633	130,256	129,170
Contingency Direct Cash Costs (@ 10%)	73,640	-	-	-	-	-	247	259	2,095	2,514	2,507	2,589	2,608	10,786	11,428	12,663	13,026	12,917
Indirect Costs																		
General & Administration - Off Site	77,960	-	-	-	-	-	-	69	1,878	2,624	2,618	2,599	2,616	13,085	13,103	13,122	13,122	13,122
Royalties	45,996	-	-	-	-	-	-	41	1,108	1,548	1,545	1,534	1,543	7,720	7,731	7,742	7,742	7,742
Emissions Tax (per ROM tonne)	77,960	-	-	-	-	-	-	69	1,878	2,624	2,618	2,599	2,616	13,085	13,103	13,122	13,122	13,122
Water Usage (per cubic meter)	42,749	-	-	-	-	-	350	350	1,402	1,402	1,402	1,402	1,402	7,008	7,008	7,008	7,008	7,008
License Fees (per year)	177	-	-	-	-	-	1	1	6	6	6	6	6	29	29	29	29	29
Contractor Management, Margin, Overheads	266,777	-	-	-	-	-	-	236	6,427	8,981	8,960	8,895	8,951	44,778	44,838	44,903	44,903	44,903
Subtotal Indirect Costs	511,618	-	-	-	-	-	352	767	12,699	17,185	17,149	17,036	17,134	85,706	85,812	85,926	85,926	85,926
Total Cash Cost of Sales (US\$-000)	1,321,654	-	-	-	-	-	3,070	3,611	35,748	44,839	44,728	45,516	45,825	204,356	211,515	225,223	229,208	228,014
\$/Tonne	12.71	-	-	-	-	-	-	39.25	14.28	12.81	12.81	13.14	13.14	11.71	12.11	12.87	13.10	13.03
Gross Income (US\$-000)	518,191	-	-	-	-	-	(3,070)	(1,983)	8,578	17,096	17,064	15,832	15,907	104,458	97,714	84,456	80,471	81,666
Depreciation (US\$-000)	152,513	-	-	-	-	-	132	132	3,259	3,798	4,048	3,982	4,278	30,516	26,536	25,202	25,201	25,430
Taxable Income (US\$-000)	365,678	-	-	-	-	-	(3,201)	(2,114)	5,319	13,299	13,016	11,850	11,629	73,942	71,178	59,254	55,270	56,236
Corporate Income Tax (US\$-000)																		
Tier One (up to US\$ 2.25 million @ 10%)	6,750	-	-	-	-	-	-	-	225	225	225	225	225	1,125	1,125	1,125	1,125	1,125
Tier Two (greater than US\$2.25 million @ 25%)	75,873	-	-	-	-	-	-	-	767	2,762	2,692	2,400	2,345	15,673	14,982	12,001	11,005	11,246
	82,623	-	-	-	-	-	-	-	992	2,987	2,917	2,625	2,570	16,798	16,107	13,126	12,130	12,371
Net Income (US\$-000)	283,054	-	-	-	-	-	(3,201)	(2,114)	4,327	10,312	10,100	9,225	9,060	57,144	55,071	46,128	43,140	43,864
Capital Expenditures (US\$-000)	(160,210)	-	-	-	-	-	(22,888)	(3,381)	(7,310)	(10,396)	(983)	(2,002)	-	(23,080)	(24,980)	(24,115)	(10,856)	(30,218)
Plus Depreciation (US\$-000)	152,513	-	-	-	-	-	132	132	3,259	3,798	4,048	3,982	4,278	30,516	26,536	25,202	25,201	25,430
Cash Flow (US\$-000)	275,357	-	-	-	-	-	(25,958)	(5,364)	276	3,713	13,165	11,205	13,337	64,580	56,627	47,215	57,485	39,076
Financial Analysis																		
NPV by Discount Rate (US\$-000)																		
8%	66,024	-	-	-	-	-	(20,540)	(4,164)	204	2,543	8,349	6,580	7,252	28,034	16,745	9,496	7,868	3,654
10%	47,765	-	-	-	-	-	(19,425)	(3,920)	190	2,324	7,490	5,796	6,272	23,016	12,546	6,490	4,906	2,081
12%	34,692	-	-	-	-	-	(18,389)	(3,694)	177	2,127	6,733	5,117	5,438	18,976	9,455	4,469	3,087	1,197
15%	21,354	-	-	-	-	-	(16,969)	(3,386)	160	1,868	5,758	4,262	4,411	14,313	6,250	2,588	1,566	533
IRR (%)	28																	
Initial Capital Investment (US\$-000)	31,036																	
Approximate Payback (by inspection, yrs)	5.3																	

Notes:

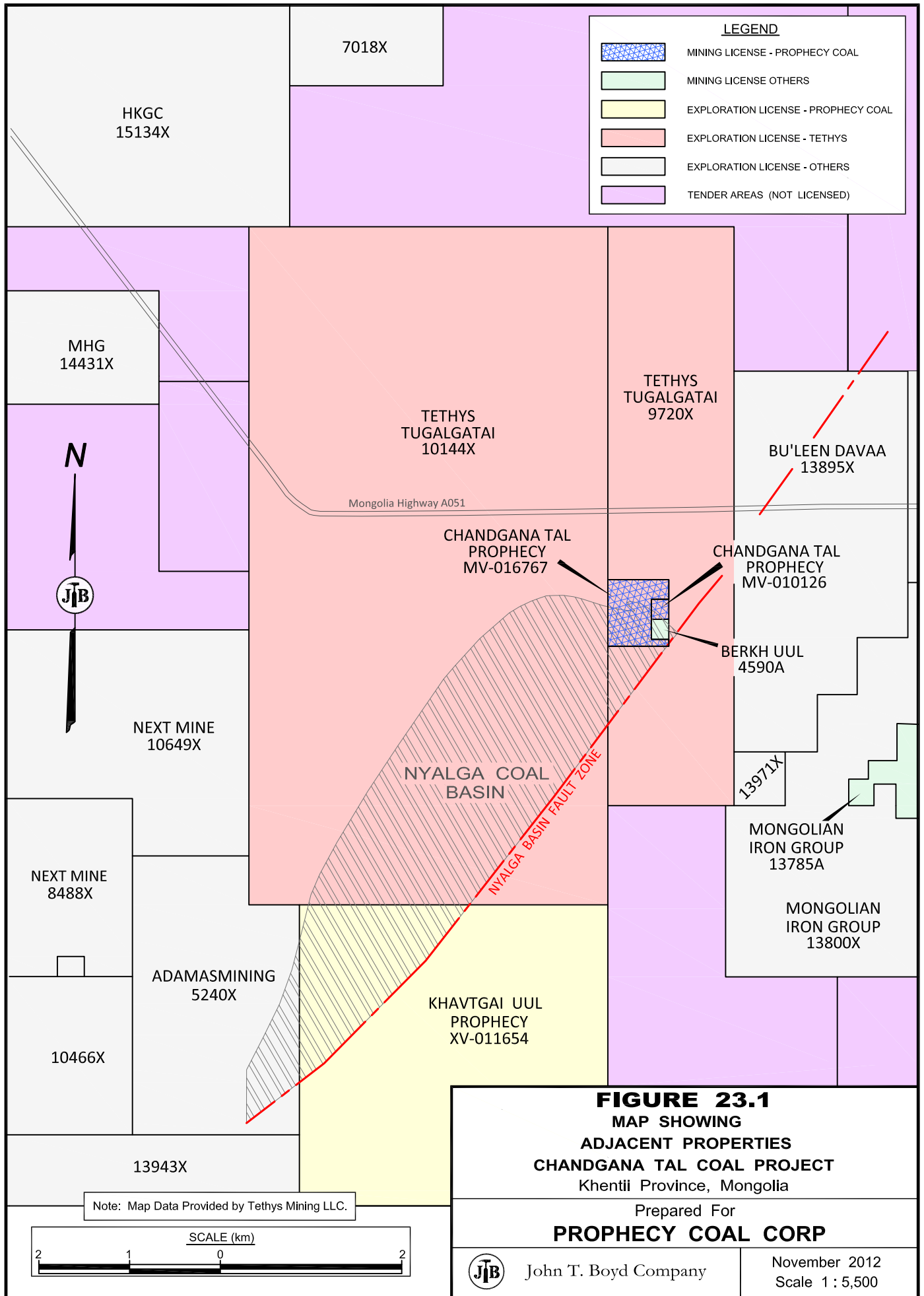
- NPV and economic analysis excludes working capital requirements, sustaining capital, interest (if applicable) and accretion.
- BOYD did not apply a credit for negative taxable income in 2015

23.0 ADJACENT PROPERTIES

Much of the Zuunbayan Coalfield is currently under a number of exploration and mining licenses, as shown on Figure 23.1 – Adjacent Properties, Chandgana Tal Coal Project, following this page. The Berkh Uul Mining Company owns the southern extension of the existing pit (Mining License 4590A and approximately 44 hectares in size) that is adjacent and south of Prophecy's Mining License MV-010126. During BOYD's site visit of 15 May and 16 May there was no mining activity observed on this license. BOYD did observe un-reclaimed spoil piles, a few standing vacated buildings, and some idled equipment on site. The pit water has become a source of drinking water for local herds of animals.

There are two other exploration licenses that surround the Prophecy study area. They are Exploration License 10144X and 9720X controlled by Tethys Mining (a division of CVRD). Tethys has conducted drilling exploration programs on these licenses over the last few years. These two Tethys licenses cover a majority of the licensed area of the Zuunbayan Coalfield.

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24.0 OTHER RELEVANT DATA AND INFORMATION

There are no other relevant data or information used in this PEA that would have a material effect on the results.

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25.0 INTERPRETATION AND CONCLUSION

It is concluded that:

- The proposed Chandgana coal mine is logically situated to provide a reliable supply of up to 3.5 Mtpa of coal to the proposed mine-mouth TPP. Given the total thickness of two benches of the S2 Seam (averaging approximately 40 m), the size of the mine's footprint will be limited relative to the energy produced.
- Coal will be delivered to the TPP on a ROM (unprocessed) basis. Average heating value of the product is anticipated to be 3,306 kcal/kg. Other key quality parameters of the delivered (as-received) coal are total moisture of 40%, ash content of 10.8%, volatile matter of 25%, fixed carbon of 23.3%, and total sulfur content of 0.61%.
- The ROM coal will be delivered to a staging point near the mining operations, and the coal will be fed into a primary crushing unit (roll crusher). The maximum size (top) of the product will be 150 mm, transported by truck approximately 3 km to the TPP fuel stockpile area.
- There are sufficient coal resources (approximately 124 Mt) to meet coal demand for a period in excess of 30 years. Adjacent properties appear to contain similar coal bearing measures, and may offer opportunities for potential expansion and/or extension of the mine/TPP life.
- This PEA was conducted at a level of analysis that provides reasonable prospects for economic extraction of the coal resources estimated herein. Based on the positive findings of the PEA, investment in further studies with a higher degree of confidence (PFS, FS, and detailed mine design) is warranted.
- The foundation for the estimated initial capital expenditures associated with mine infrastructure is based upon comparable Mongolian mining operations. There may be some opportunity for synergistic cost savings if camp and living arrangements can be developed in conjunction with the TPP's camp, or negotiated arrangements for living quarters within nearby soums or towns.
- The project is based on an assigned transfer price of US\$17.70/tonne at the mine gate. BOYD has not completed a separate market study, although it is logical to assume that the low rank and low calorific value of the coal being produced precludes shipment to any customer other than an on-site TPP. Therefore, the Chandgana coal project is solely dependent upon the construction of the TPP.
- Based on the assumptions outlined in this technical report, the coal mining project, with all related infrastructure requirements included, is technically feasible and the economic assessment indicates reasonable prospects for economic extraction. It should be noted that the results contained herein are related to an economic assessment of the coal resources. Coal 'resources' are not to be confused with coal 'reserves' and therefore do not have demonstrated economic viability.

- The base economics indicate the NPV of the project ranges from US\$21 million to US\$66 million at discount factors of 8% to 15%. The payback period (based on observation) is 5.3 years and the IRR is 28%. Pre-production capital requirements are US\$31.3 million. This economic assessment is preliminary in nature, and there is no certainty it will be realized.
- Sensitivities to the project design assumptions indicate that project economics range in NPV from \$5.0 million to \$99.9 million. The economic model is primarily sensitive to coal price and operating cash cost. This economic assessment is preliminary in nature, and there is no certainty it will be realized.

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26.0 RECOMMENDATIONS

BOYD offers the following recommendations as the Chandgana project continues through pre-feasibility, feasibility, and detailed design phases of development:

- Perform additional exploration to better identify the location of the S2A/S2B sub-crop (limit of weathering) and the reverse fault, using a combination of trenching, open-hole drilling and down hole geophysical logging. Limited in-fill core drilling is also recommended to provide additional coal quality data for use in detailed short-term mine planning.
- Coal quality information is limited for the upper seams (S0 and S1). While these seams, compared to S2A and S2B benches, are thinner, they could be a supplemental source of future production. As additional drilling is being performed at various locations within the study area, core samples of the upper seams should be obtained for analysis.
- Collect baseline hydrology and rock mechanics data for detailed mine planning.
- Estimate detailed water usage requirements of the mining operations and determine license and usage fees.
- Perform a comprehensive prefeasibility or feasibility level study for Chandgana, including evaluation of alternative mining methods that may offer improvements in financial performance (electrify mining equipment, in-pit crushing and conveyors, etc.). Review the advantages and disadvantages of utilizing a skilled and experienced contract miner versus the development of in-house expertise (company owned operations) to avoid paying a profit margin to a contractor.

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27.0 REFERENCES

The following technical documents were provided to and referenced by BOYD to aid in the preparation of this report:

- Technical Report on the Coal Resources of the Chandgana Tal Coal Project Khentii Aimag (Province) Mongolia prepared for Red Hill Energy, Inc. by Behre Dolbear & Company (USA), Inc., 11 September 2007.
- Preliminary Scoping Study Chandgana Tal Coal Mine prepared for Prophecy Coal Corporation by Leighton LLC., October 2011.
- Bankable Feasibility Study, Chandgana Tal Power Plant Project, 4 x 150MW, Mongolia Khentii Aimag, Volume 1, Project Overview, Prepared for Prophecy Resource Corp, by Steag Energy Services GmbH, February 14, 2012, Revision 7.
- Technical Report on the Coal Resources of the Chandgana Khavtgai Coal Resource Area, Khentii Aimag, Mongolia prepared for Red Hill Energy Inc. by Christopher M. Kravits CPG, LPG, Kravits Geological Services, LLC and Eric Robeck, Robeck GeoServices, LLC, 9 January 2008.
- A Standardized Coal Resource/Reserve Reporting System for Canada, Geological Survey of Canada Paper 88-21 by J.D. Hughes, L. Klatzel-Mudry and D.J. Nikols, 1989.
- Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards – For Mineral Resources and Mineral Reserves, Prepared by the CIM Standing Committee on Reserve Definitions, Adopted by CIM Council on 11 December 2005.
- Detailed Environmental Impact Assessment Report for “Chandgana Tal Openpit Coal Mining Project” in Tsaidam Coal Deposit of Chandgana Coal LLC, developed by EkhMongolynCaigali LLC, 199 pages, 2012.
- Report of the Detailed Assessment of Environmental Impact of the Project for Establishing a 600 MW power plant to be constructed based on the Chandgana Tal Coal Mine of the Khentii Province, Environmental Protection Plan, Environmental Control and Analysis Program, prepared by ECOS LLC, Environmental Consulting and Assessment Service Provider, Ulaanbaater, 2010.
- Mongolia Tax Administration, General Department of Taxation, Corporate Income Tax rate.
- Coal Supply Agreement between Chandgana Coal, LLC and Prophecy Power Generation LLC (CSA) dated June 3, 2013. (Note: see Chapter 19.0 Market Studies and Contracts for explanation of use.)

28.0 STATEMENT OF QUALIFICATIONS

Robert J. Farmer

I, Robert J. Farmer, P.Eng., Director of Advanced Computer Services, as Lead Qualified Person and a co-author of this report entitled Technical Report, Coal Resources and Preliminary Economic Assessment – Coal Mine Component, Chandgana Tal Coal Project prepared for Prophecy Coal Corporation, dated, 30 November 2012, do hereby certify:

- I am a Senior Engineer with the John T. Boyd Company (BOYD), Mining and Geological Consultants, and employed at BOYD headquarter office located at 4000 Town Center Boulevard, Canonsburg, Pennsylvania, 15317, USA.
- I graduated with a Bachelor of Science degree in Mining Engineering from Queen's University in 1994.
- I am a member and licensed "Professional Engineer" with Professional Engineers Ontario. I am a Registered Member of the Society for Mining, Metallurgy, and Exploration, Inc. (SME).
- I have practiced my profession continuously for 18 years. I have been directly involved in the geologic modeling, resource and reserve estimation, underground and surface mine design, production scheduling, and financial modeling of coal projects for over 13 years. I have conducted studies and prepared technical reports on coal projects in Australia, Canada, Colombia, Indonesia, Mongolia, People's Republic of China, Republic of South Africa, and Venezuela.
- I have read the definition of "Qualified Person" set out in the National Instrument 43-101 ("NI-43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfil the requirements to be a "Qualified Person" for the purposes of NI 43-10.
- I have not visited Chandgana Tal Coal Project property, but my co-author has visited the site in May 2012.
- I have authored or supervised the work carried out by other BOYD professionals for inclusion in the Technical Report, and take responsibility for all sections of the Technical Report. Contributing authors include the following BOYD staff:

Name /Title	Project Responsibility
<u>Designated Qualified Persons</u>	
Robert J. Farmer, P.Eng. Director of Advanced Computer Services Lead Qualified Person	Principal Qualified Person and additionally responsible for: geologic modeling, mine planning, sequencing, and production forecasts and oversight of entire report and relevant reports sections 15, 17, and 19.

Name /Title	Project Responsibility
<u>Designated Qualified Persons</u>	
Thaddeus J. Sobek, PE Project Manager Qualified Person, Infrastructure	Project manager, Qualified Person responsible for infrastructure and relevant report section 18.
<u>Contributing Authors</u>	
Ronald L. Lewis, PE Managing Director & Chief Operating Officer	Managing Director, responsible for senior management and peer review of entire report.
Thaddeus J. Sobek, PE Project Manager	Project Manager with contributory review of the following relevant report sections: 1, 2, 3, 4, 5, 18, 20, 21, 22, 26, 27, and 28.
Edward C. Mast Senior Geologist/Technical Specialist	Geologic modeling, review of source data relating to geological and coal quality. Relevant report sections: 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 23, 24, and 25.

- I am independent of Prophecy Coal Corporation as independence is described by Section 1.5 of the NI 43–101, pursuant to Section 8.1(2)(h).
- I have read the NI 43-101 standards and prepared this technical report, to the extent possible, to be in compliance with NI 43-101 and Form 43-101F1, pursuant to Section 8.1(2)(h).
- To the best of my knowledge, information, and belief, this report entitled “Technical Report, Coal Resource and Preliminary Economic Assessment – Coal Mine Component, Chandgana Tal Coal Project” dated 30 November 2012, contains all the scientific and technical information required to be disclosed to make the technical report not misleading and to the extent possible within the definitions of a preliminary economic assessment.

Dated 30 November 2012



Robert J. Farmer
Professional Engineer
Lead Qualified Person

Thaddeus J. Sobek

I, Thaddeus J. Sobek, Qualified Person related to infrastructure related chapters and Project Manager, as a co-author of this report entitled Technical Report, Coal Resources and Preliminary Economic Assessment – Coal Mine Component, Chandgana Tal Coal Project, prepared for Prophecy Coal Corporation, dated, 30 November 2012, do hereby certify:

- I am a Senior Engineer with the John T. Boyd Company (BOYD), Mining and Geological Consultants, and employed at BOYD headquarter office located at, 4000 Town Center Boulevard, Canonsburg, Pennsylvania, 15317, USA.
- I graduated from University of Pittsburgh, Pennsylvania, in 1976, with a Bachelor of Science degree in Civil Engineering.
- I am a registered Professional Mining Engineer in the State of Pennsylvania, Registration Number PE029037E. I am a Registered Member of the Society for Mining, Metallurgy, and Exploration, Inc. (SME). My experience relative for the purpose of this report is:
 - Over 37 years working as a senior mining engineer and project manager.
 - Over 37 years of direct experience in mine engineering, planning and feasibility studies, including projects in Australia, Bulgaria, Canada, Colombia, India, Indonesia, Mongolia, Pakistan, Thailand, the People's Republic of China (PRC), and the United States.
 - I have supervised and managed mine engineering projects in the United States, Mongolia, and People's Republic of China, Indonesia, Thailand, India, Australia, Colombia, and Bulgaria.
 - I have prepared and supervised numerous technical reports related to mine due diligence, feasibility studies, acting project manager for a mine start-up, preparation of technical reports for various stock exchanges.
- I have read the definition of "Qualified Person" included within the National Instrument 43-101 (NI 43-101) and certify that by reason of my education, experience, professional registration, and engineering and mining society membership, fulfill the requirements needed to be a Qualified Person in compliance with the NI 43-101.
- I visited the Chandgana Tal Coal Project property and Prophecy offices located in Ulaan Baatar, Mongolia the week of 14 May 2012.
- I am responsible for infrastructure related chapters specifically report section 18.
- I am independent of: Prophecy Coal Corporation as defined in Part 1.5 of the NI 43-101, pursuant to Sections 8.1(2)(f).

- I have read the NI 43-101 standards and prepared this technical report, to the extent possible, to be in compliance with NI 43-101 and Form 43-101F1, pursuant to Section 8.1(2)(h).
- To the best of my knowledge, information, and belief “Technical Report, Coal Resource and Preliminary Economic Assessment – Coal Mine Component, Chandgana Tal Coal Project” dated 30 November 2012, contains all the scientific and technical information required to be disclosed to make the technical report not misleading and to the extent possible within the definitions of a preliminary economic assessment.

Dated 30 November 2012



Thaddeus J. Sobek
Professional Engineer
Qualified Person

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