Technical Report on the Coal Resources of the Chandgana Tal Coal Project Khentii Aimag (Province) Mongolia

Latitude 47º 23’ 21”
Longitude 110º 00’ 57”

Prepared for:

Red Hill Energy, Inc.

Prepared by:

Behre Dolbear & Company (USA), Inc.

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11 September 2007

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3.0 SUMMARY

3.1 PROJECT HIGHLIGHTS

The Chandgana Tal Coal Deposit, also known as the Tsaidam-Nuur Deposit, is located in the territory of Moron soum (sub-province) of Khentii aimag (province) in eastern Mongolia. It is located 54 kilometers (km) west of Undurkhaan, the central town of Khentii aimag, and about 300 km from Ulaanbaatar. The deposit is accessible from the highway by 7 km of unpaved road from the Ulaanbaatar-Undurkhaan highway.

Two mining and three exploration licenses cover the coal deposit. Red Hill Energy owns mining license 10126A (32.0 hectares) and Exploration License 7101X (300.3 hectares). Berkh Uul Mining Company owns the other mining license adjacent to the licenses owned by Red Hill Energy. Tethys Mining owns the other two exploration licenses.

Chandgana Tal coal deposit is located within the Nyalga depression in the Khentii zone of the Khangai-Khentii fold system and is situated on the 350 by 150-km Shorvogo steppe along the northern margin of the Gobi Desert. The elevation of the deposit ranges from 1,150 to 1,250 meters (m) above sea level.

The coal is lower Cretaceous in age and is contained in a syncline that covers an area of approximately 35,000 hectares (5 km wide by 7 km long). The coal seams crop out on the eastern margin of the syncline and generally dip at 5 to 8 degrees to the southwest. A fault defines the eastern boundary of the coal bearing area. This fault separates the mined area from the major part of the coal-bearing area. Associated with this fault are two monoclinal structures that have shallow dips but are locally steeply inclined in a very narrow zone (50 m) adjacent to the fault.

Detailed exploration was carried out on this deposit in 1962, 1980, and 2007. In 1962, 25 holes penetrated 1,554 m of strata, of which an aggregate thickness of 657 m (42%) was coal. In addition, 116 shallow pits and 3 trenches were dug to collect bulk samples. Hydrogeological testing was done at two drill sites. The exploration program was designed to determine geological and mining conditions prior to mining the deposit. A coal mine was established at the deposit in 1966, and has been operated intermittently since then to provide coal for the local population. The Mongolian government estimated that this small mine has produced about 1.8 million tonnes of coal during the last 40 years.

A second exploration program was conducted in 1980 during ongoing mining activities.

Upon acquiring the licenses in 2007, Red Hill Energy cored eight sites to verify the condition and extent of the coal deposit. A total of 730.5 m of coring was conducted, and the results generally verified the coal seam geometry as previously defined.

The main coal seam ranges from 20 to 50 m thick, with thickness increasing to the west of the fault. Historical assays showed that Chandgana Tal coal averaged 12.25% moisture, 11.6% as received ash, 1.1% as received sulfur, and 51.38% volatile matter, and the average calorific value ranged from 9,499 to 9,783 BTU/lb (5,277 to 5,435 Kcal/kg). However, samples newly taken during the 2007 coring project show that moisture is considerably higher than previously reported, which has resulted in a significant decrease in the contained energy to an average of 7,630 BTU/lb (4,240 Kcal/Kg) on an as received basis. These results have changed the ranking of the coal from Sub-bituminous A and B to Lignite B (ASTM standards).

3.2 MINERAL RESOURCES

The coal is unusually dense, having a relative density of 1.45 gm/cm^3. Using the JORC Code as a standard and this relative density, the estimate of current Measured Coal Resources of the Chandgana Tal coal deposit is 141.3 million tonnes. Mining has resulted in the sterilization of approximately 3 million tonnes of coal within Red Hill's mining license due the inefficient mining practices used to extract the coal. This tonnage is not included in the estimate of Measured Coal Resources.

4.0 INTRODUCTION

4.1 INTRODUCTION

This report was prepared by Behre Dolbear & Company (USA), Inc. (Behre Dolbear) at the request of Ranjeet Sundher, Managing Director of Red Hill Energy, Inc., a British Columbia registered company trading under the symbol “RH” on the Toronto Venture Exchange with its corporate office at:

999 West Hastings Street, Suite 525
Vancouver, British Columbia V6C 2W2
Canada

Mr. Gardar G. Dahl, Jr., CPG, a qualified person under the terms of NI 43-101, and representatives of Red Hill Energy conducted a site visit of the Property on 11 August 2007.

The purpose of this report is to provide a Technical Report and an independent Resource Estimate of the Chandgana Tal coal deposit in conformance with the standards required by NI 43-101. Behre Dolbear understands that this report will be used by Red Hill Energy for filing with the TSX-V regulatory authorities, in adherence with statutory requirements, and will also serve as the basis for a future feasibility study on the Chandgana Tal coal deposit.

4.2 DISCLAIMER

This report was prepared using information prepared by informed individuals, who may or may not be considered qualified persons under the definition of NI 43-101. The initial documents and geological records were originally recorded in the Russian language, written in the Cyrillic alphabet, then translated into English by presumably competent persons. Whenever possible, the individuals responsible for collecting the original information, including project supervisors and onsite geologists and engineers, were interviewed to confirm the findings and representations of the translated materials. Declarations of mining and legal rights to the coal and other resources described in this report are assumed to be correct, and the Qualified Person did not attempt to confirm the legality of the rights to mine, explore, and produce coal under the exploration and mining licenses described in this report.

The small mine on the eastern side of the deposit, together with various drill sites and the fault exposed in a trench on the margin of the mine, were examined by Behre Dolbear during this excursion and compared with existing documents to confirm that the information adequately portrayed onsite conditions. No sampling or other physical work was done during this visit. Subsequently, data from bore and core holes, pits, and trenches were used to construct a geological model of the deposit. Results of this modeling compared favorably with previous work and confirmed previously reported estimates of tonnage.

Behre Dolbear has conducted a reasonableness review of the estimated coal reserves and coal resources. A site visit was made to the project site by a Behre Dolbear professional. Behre Dolbear has reviewed technical data, reports, and studies produced by other consulting firms as well as information provided by Red Hill Energy and others. Behre Dolbear’s review was conducted on a reasonableness basis and Behre Dolbear has noted herein where such provided information engendered questions. Except for the instances in which it has noted questions, Behre Dolbear has relied upon the information provided as being accurate and suitable for use in this report.

Behre Dolbear assumes no liability for the accuracy of the information provided and retains the right to change or modify its conclusions if new or undisclosed information is provided which might change its opinion.

Behre Dolbear does not accept any liability other than its statutory liability to any individual, organization, or company and takes no responsibility for any loss or damage arising from the use of this report, or information, data, or assumptions contained therein. Each entity that uses this report agrees to indemnify and hold harmless Behre Dolbear, its shareholders, directors, officers, and associates from any and all losses, claims, damages, liabilities or actions to which they or any of them may become subject under any securities act, statute or common law and will reimburse them on a current basis for any legal or other expenses incurred by them in connection with investigating any claims or defending any actions.

5.0 RELIANCE ON OTHER EXPERTS

Information contained in this report was initially generated by a variety of governmental agencies and private companies to evaluate the industrial potential of this coal deposit. At the request of Red Hill Energy LLC, this information has been consolidated and compiled by MineInfo LLC, a Mongolian owned and operated Mine Service Company, and by Roebuck GeoServices to serve as the primary source of information for this report. In the preparation of this Technical Report, MineInfo LLC relied upon geological reports and related materials derived from exploration studies conducted at the Chandgana Tal coal deposit in 1962 and 1980 and upon a report on hydrology carried out in 1980. In addition, results of recent confirmation drilling conducted by Roebuck GeoServices for Red Hill in the summer of 2007 were used by Behre Dolbear to check the original conclusions and to derive the estimated Coal Resource tonnage as reported herein. S.G.S. performed analytical tests on the 2007 core samples, and the results of those tests are contrasted with older test results and reported herein.

This report was prepared for Red Hill Energy Inc. (Red Hill) by Behre Dolbear using data that were assembled by Roebuck GeoServices, Glenn S. Griesbach, and MineInfo, LLC a Mongolian mine service company. The report summarizes the available historical data, geological setting, environmental and economic considerations, site accessibility, and existing infrastructure. It summarizes the results of a computer-generated coal resource and quality model based on existing data that conforms to current NI 43-101 and JORC reporting standards.

Tasks executed by each responsible party included the following:

MineInfo LLC

- Reviewed historical exploration data.
- Verified the accuracy of existing data.
- Researched the mining and exploration data registered with the Mineral Resources Registration Office of Mongolia.
- Compiled all available data on the regional and local geology.
- Translated the available maps, reports, and permits into English.
- Prepared a technical report incorporating all historical data.

Glenn S. Griesbach, P. Geo.

- Supervised data collection and verified, to the extent possible, the accuracy of historical data.
- Supervised the creation and management of the drill hole database.
- Prepared a computer-generated geological model of the deposit.

Roebuck GeoServices LLC

- Reviewed the historical exploration data and checked for consistency.
- Compiled a drill hole database.
- Prepared a digital 3D geological model based on all available historical data.
- Provided preliminary estimates of coal resources.
- Organized and managed the 2007 Exploration Program to assess the distribution of coal seams and coal quality.
- Updated the geological database with results of the drilling program.

Behre Dolbear & Company (USA), Inc.

- Provided the Competent Person, Mr. Gardar G. Dahl, Jr., who reviewed all of the previously assembled information. Mr. Dahl then used the information to develop the Coal Resource estimate stated in this report.

The content of this report is based on the combined experience and best judgment of the parties that assembled the information and made the estimates contained herein. The results stated in this report have not been influenced in any way by Red Hill Energy.

6.0 PROPERTY DESCRIPTION AND LOCATION

The Chandgana Tal property is located in eastern Mongolia approximately 300 km east of Ulaanbaatar, the capital city of Mongolia (see Figure 6.1).

LOCATION MAP OF TSAIDAM-NUUR COAL PROPERTY /CHANDGANA/ Attachment 1

Figure 6.1. Location of Chandgana Tal coal deposit

6.1 LICENSE DESCRIPTIONS

Red Hill's mining and exploration licenses cover a total of 332.2 hectares. The boundaries of the mining and exploration licenses are defined by the following:

- Mining License No. 10126A (32.0 hectares), with the following geographic coordinates:

Latitude	Longitude
47º 23' 21"	110º 00' 57"
47º 23' 40"	110º 00' 57"
47º 23' 40"	110º 01' 23"
47º 23' 21"	110º 01' 23"

- Exploration License No. 7101X (300.3 hectares), with the following geographic coordinates:

Latitude	**Longitude**
47º 22’ 50”	110º 00’ 00”
47º 24’ 00”	110º 00’ 00”
47º 24’ 00”	110º 01’ 23”
47º 23’ 40”	110º 01’ 23”
47º 23’ 40”	110º 00’ 57”
47º 22’ 55”	110º 00’ 57”
47º 22’ 55”	110º 01’ 23”
47º 22’ 50”	110º 01’ 23”

The locations of the corners of these licenses were converted to UTM Zone 49 WG 84 coordinates to conform to drill hole and other locations at the project site. All data points used in the computation of resource estimates were rectified to this coordinate base (see Figure 6.2).

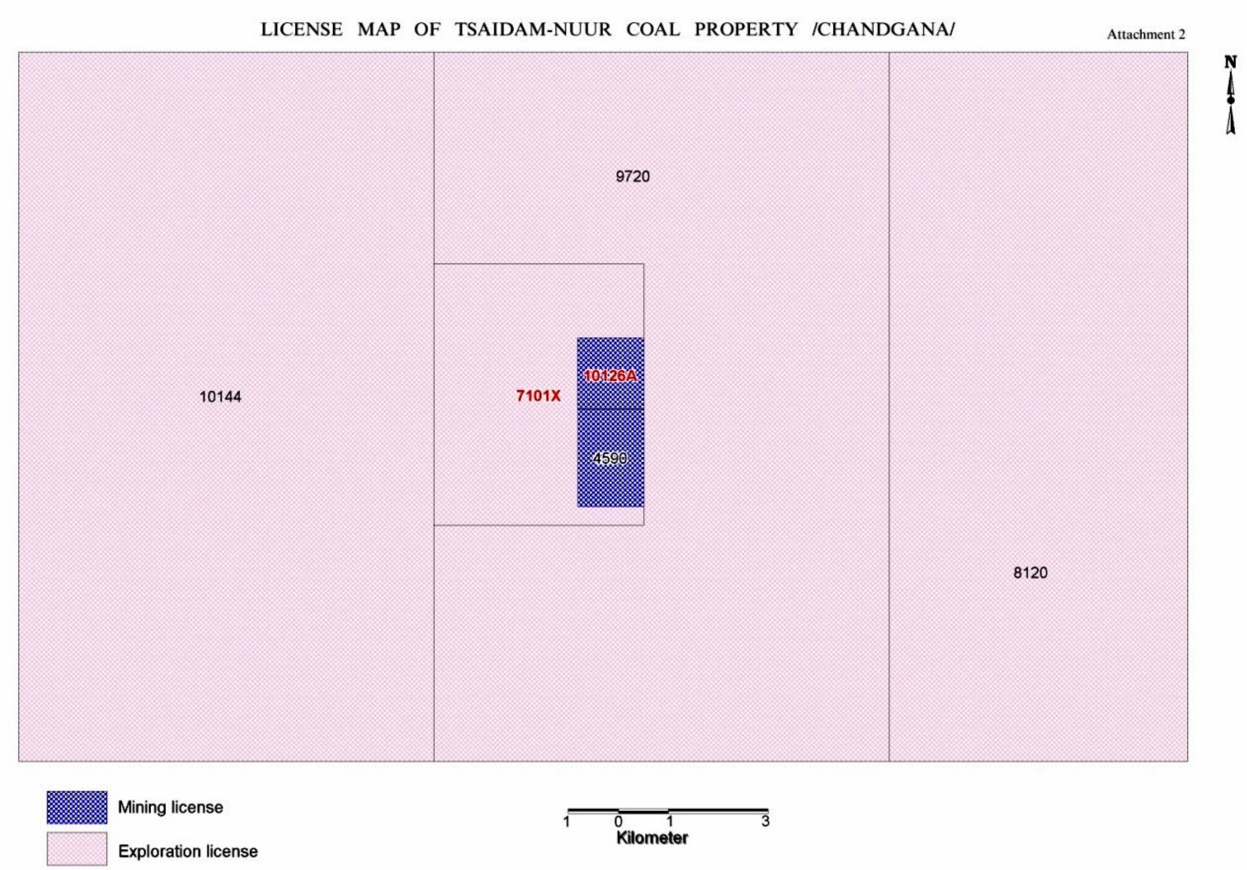


Figure 6.2. Chandgana Tal license area

6.2 OWNERSHIP AND TENURE

According to the Minerals Law of Mongolia, a mining license holder has a right to extend the mining license term for a total of 40 years. Exploration license holders have an exclusive right to claim mining licenses within the exploration license area. The term of tenure for an exploration license may be extended twice, for an additional 3 years for each extension.

Mining License No. 10126A was granted to Red Hill on 23 January 2007 for a term of 30 years. The term of mining licenses may be extended up to two times for 20 years each.

Mineral Exploration License No. 7101X was transferred from Coal Khentii to Red Hill on 3 January 2007. The original license contained a 3-year term that expired on 19 March 2007. It has since been extended until 19 March 2010. The exploration license can also be extended again for an additional 3 years if necessary.

Within the Nyalga Depression, the coal-bearing basin, mining and exploration licenses are contiguous and cover most of the deposit. Tethys Mining, Berkh Uul Mining, and Red Hill control all of the existing licenses. Most historical exploration has been focused within these license boundaries. Nearly all of the remaining near-surface reserves fall within Red Hill's license areas.

The former holder of the mining license, Tugrug Nuuryn Energy LLC, was granted land title certificate No. 0049440 on 5 December 2005, covering an area of 32 hectares for land use (mining operations) for 15 years. This land title passed the surface rights for mining to Coal Khentii, according to Article 38.1 of the Mongolian Law on Land. The current expiration date is 27 February 2020. A land possession certificate can be extended for up to 40 years at a time.

The license transferred to Red Hill with state registration certificate No. 9019010107, and registration of the transfer was made by the head of Geology and Mining Cadastre Department with his decision No. 1158 of 2006.

In accordance with the Law on Environmental Impact Assessments of Mongolia, Coal Khentii LLC executed the environmental screening of the mining activity and the detailed environmental impact assessment prior to mining.

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

7.1 TOPOGRAPHY, ELEVATION, AND VEGETATION

Broad grass covered plains dominate the area of Chandgana Tal. Because the area is relatively flat, there is no permanent water stream or river within the deposit area. Small pools of water exist in shallow valleys, and one such source of water, Davst Lake, was used to supply water for drilling. However, the amount of water in these small lakes and ponds is insufficient to serve as a source of water required for mining operations. Locally, short dry ravines or creek valleys may contain additional seasonal water for use in the mine. There is one small permanent river, the Moron, 15 km north of the deposit, that could supply mine water for consumptive use in mining operations.

Geographically, Chandgana Tal is in an intermountain valley surrounded by hills and small mountains. The coal deposit is located northeast of the Nyalga depression and southeast of the northeast-trending Shorvogo basin in eastern Mongolia. This depression is surrounded by the Dashbalbar Mountains to the northwest and the Hongor Mountains to the southeast. The 100-km-long basin is oriented to the northeast, has an average width of 8 km to 10 km, but is up to 20 km wide in the area that hosts the Chandgana Tal coal deposit. Highest elevations within the deposit area fluctuate between 1,150 and 1,250 m. The surface of the deposit is generally flat, with gentle undulating hills.

Figure 7.1 is a synthetic composite of various satellite images that were combined and then distorted to show an isometric perspective of the Nyalga Basin looking from south to north. The apparent vertical exaggeration on this view is approximately 11:1 to enhance the contrast in elevations between the basin and enclosing hills.

7.2 ACCESSIBILITY

The several means of access to the Chandgana Tal deposit are shown in Figure 7.2. These are listed below, starting with the closest and most practical:

1. **Access by road from Ulaanbaatar:** The Undurkhaan-Ulaanbaatar Highway (AO501) 300 km east from Ulaanbaatar. An unpaved road leads from this highway for 7 km to the site of the Chandgana coalmine. The highway crosses the Herlen River, one of Mongolia's largest rivers, via a concrete bridge.
2. **Access by railway:** There is no direct railroad access to the deposit. The nearest railway access is located at the large, operating Baganuur Coal Mine, 180 km west of the deposit. The Baganuur mine is adjacent to the Undurkhaan-Ulaanbaatar Highway (AO501).
3. **Access by road from Russia:** A paved road in Chita province, Russia, extends to the Russian border village or port of Deed Ulikhan. Chandgana Tal is 370 km from this port via unpaved roads. Coal could be transported to this roadway and thence to access to the Trans-Siberian Railroad for access to Russian markets or Russia's Pacific Ocean Ports.
4. **Access from China:** The Trans-Mongolian railroad can be used to provide access to Baganuur station and continue as described above. Another possibility is to drive 420 km on unpaved roads from the Chandgana Tal deposit, passing the towns of Choibalsan and Undurkhaan and across the Chinese border at Havirga port in Dornod aimag.

All highways and railroads are accessible throughout the year.

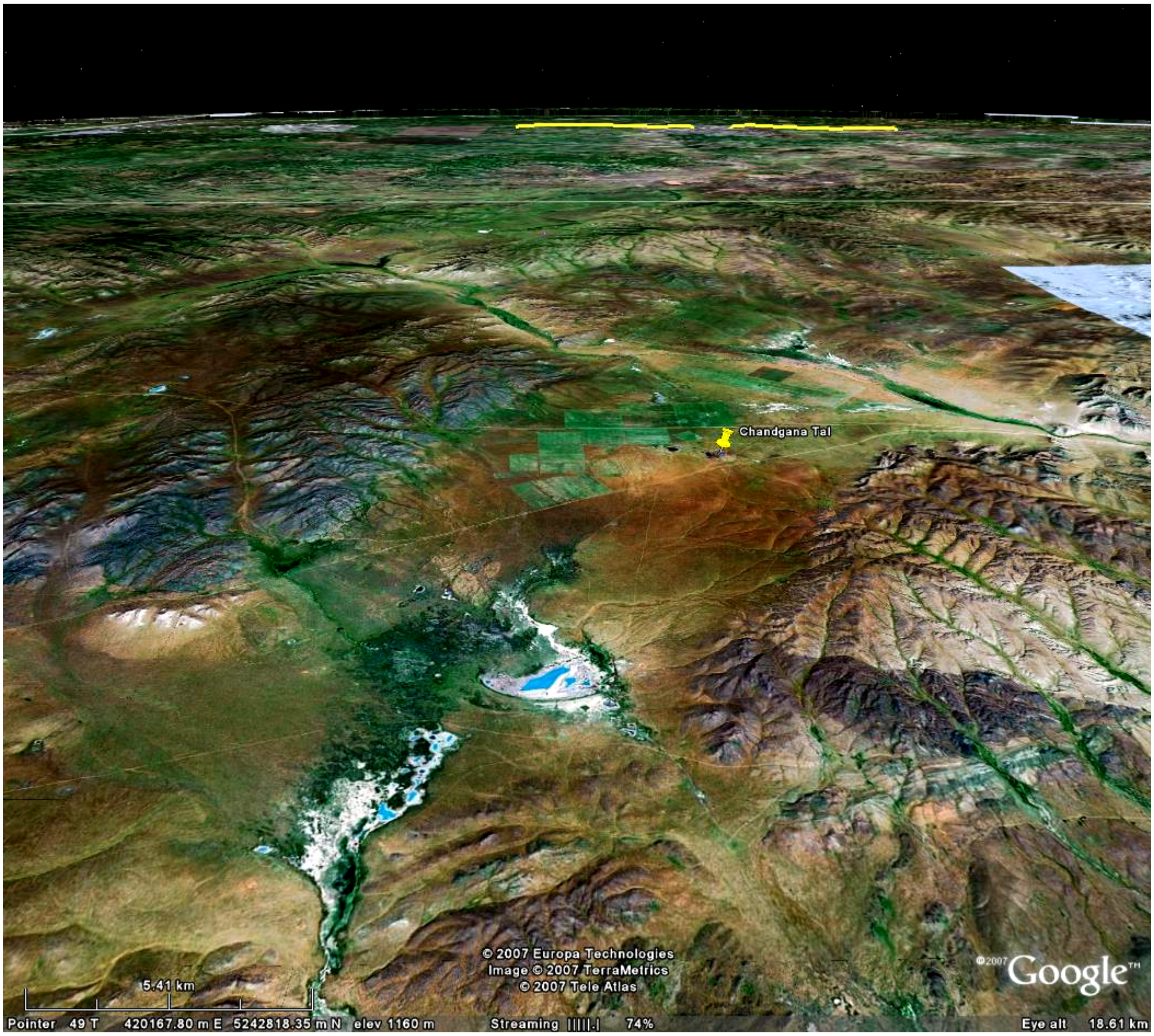


Figure 7.1. Google Earth image of the Nyalga basin

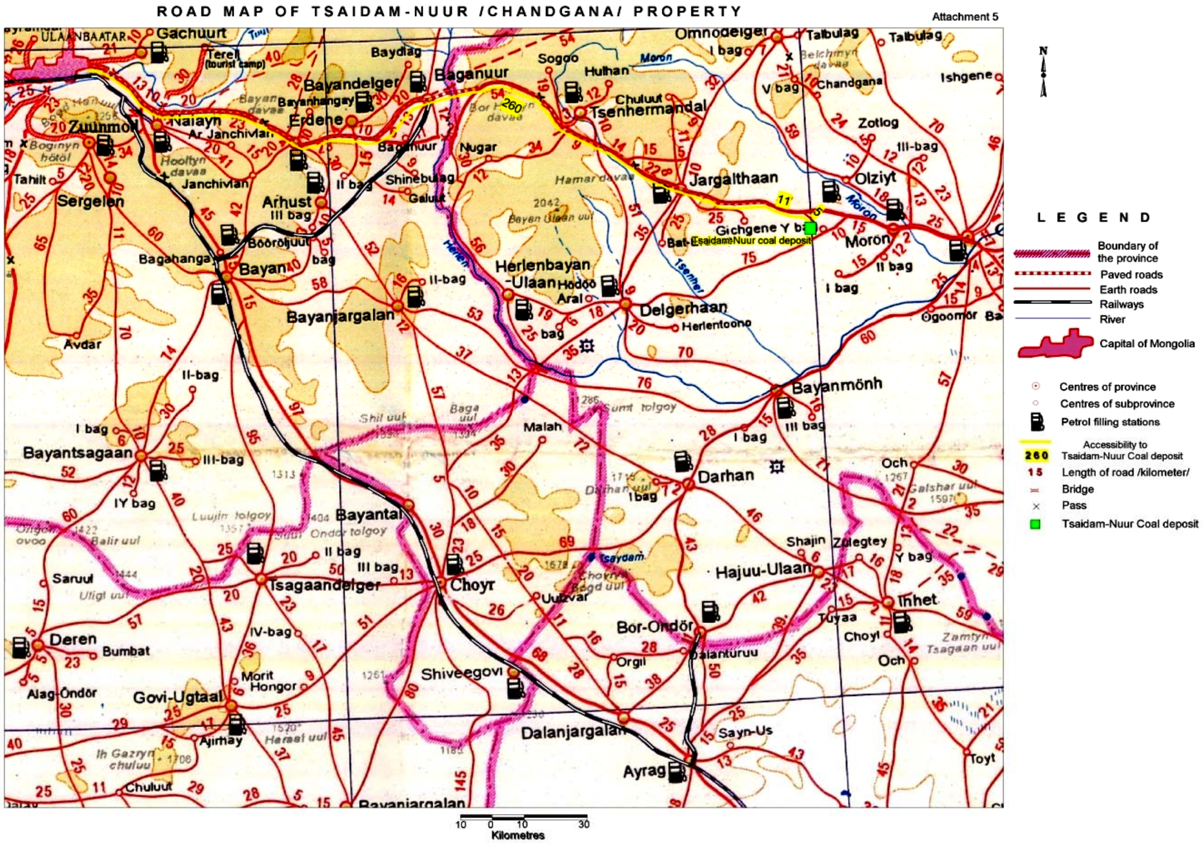


Figure 7.2. Highway access to Chandgana Tal coal deposit

7.3 PROXIMITY TO POPULATION CENTERS

The nearest settlements to the deposit are the Moron soum center, Chandgan collective farming center, and Undurkhaan, the central town of Khentii aimag. Moron is 25 km east of the deposit, the Chandgan farming center is 15 km north, and Undurkhaan is 55 km east.

7.4 CLIMATE AND LENGTH OF OPERATIONS SEASON

The area has a continental climate, with hot summers and cold winters. The area is generally flat, with little or nothing to inhibit the wind, which usually blows from northwest to southeast or from northeast to southwest at average speed of 4 to 7 m/s (9 to 16 mph). The highest wind speed sometimes reaching 20 m/s (45 mph) in the spring. Strong winds come from the northwest, usually in March and April and in September and October. Summers are generally hot and dry and winters are generally cold and dry. High temperature reaches 35ºC to 40ºC in June and July, and lows of -30ºC to -40ºC are common in December and January. Snow can form drifts of up to 1 m, and snow accumulations generally average 10 cm on flat areas. Annual precipitation fluctuates between 100 mm/year and 500 mm/year, and most (60% to 70%) of it falls as rain in August.

From a climatological perspective, open pit mining operations are possible all year around.

7.5 LOCAL INFRASTRUCTURE

The local infrastructure is conducive to surface mining. All the local settlements are connected to the central electrical power grid and have elementary to high schools, hospitals, and good infrastructure. Cellular telephone communications are good in this area. Rural residents around the deposit area are engaged in nomadic animal husbandry as well as wheat and vegetable farming.

1. Surface mining rights are not a problem. The area is used for grazing, and the current mining disturbance has not been reclaimed. Water in the bottom of the existing pit is used for stock watering.
2. The project site hosts no impediments to mining, no major waterways, highways, or civil structures.
3. Electrical power is supplied to the existing mining operation by a power line capable of supplying 110 KW from Undurkhaan. The power line is part of Choibalsan-Baruun Urt-Undurkhaan power network of Eastern Mongolia.
4. The Government has proposed construction of a new line that would link Eastern and Central Mongolia through Baganuur.
5. The area is farmed, and labor may be supplied from the local population.
6. The license area for the deposit has sufficient space for waste piles, a coal preparation plant, and a small mining community.

The dark area on the northwestern corner of the License area is a small lake, and the dark brown area near the eastern boundary of the Exploration License is the mined area (see Figure 7.3).

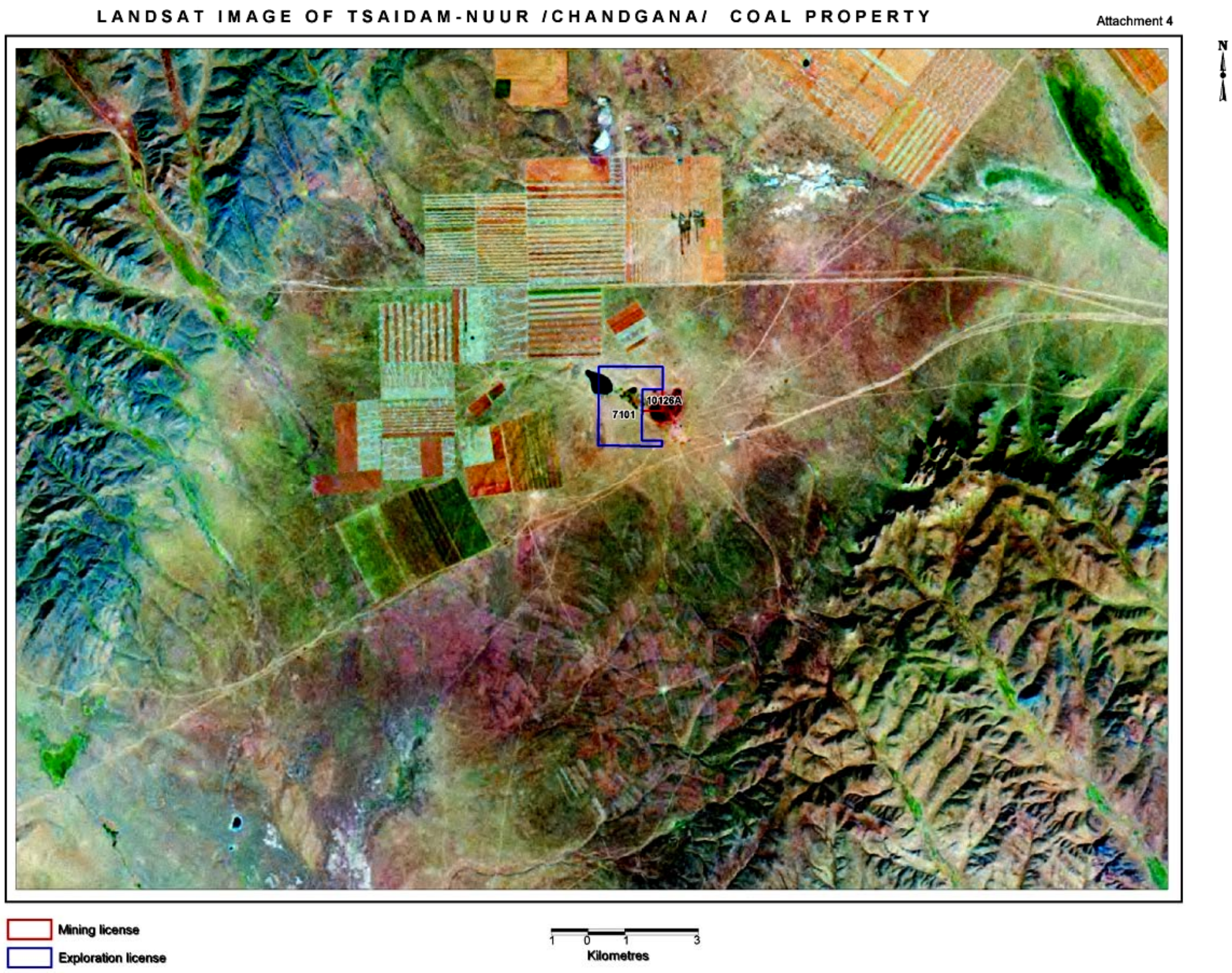


Figure 7.3. Landsat image of the area around Chandgana Tal coal deposit (exploration license area shown in blue)

8.0 HISTORY

8.1 HISTORY OF PRIOR OWNERSHIP AND OWNERSHIP CHANGES

The history of prior ownership of the property and ownership changes is as follows:

- Belchir LLC, a Mongolian company, was first granted the exploration license No. 7101X for the Chandgana Tal Property under the Minerals Law of Mongolia on 19 March 2004. The license covered an area of 332 hectares, with the following geographic boundary coordinates:

Latitude	Longitude
110º 00’ 00”	47º 22’ 50”
110º 00’ 00”	47º 24’ 00”
110º 01’ 23”	47º 24’ 00”
110º 01’ 23”	47º 23’ 21”
110º 00’ 57”	47º 23’ 21”
110º 00’ 57”	47º 22’ 55”
110º 01’ 23”	47º 22’ 55”
110º 01’ 23”	47º 22’ 50”

- Exploration license No. 7101X was transferred to Tugrug Nuuryn Energy LLC in accordance with the Minerals Law of Mongolia and registered by the head of the Office of Geological and Mining Cadastre in his decision No. 444 of the year 2005.
- A mining license (No. 10126A) covering 32 hectares within the exploration license area was granted to Tugrug Nuuryn Energy LLC for the exclusive to right mine in accordance with the Minerals Law of Mongolia. Coordinates of this Mining Lease are:

Latitude	Longitude
110º 00’ 57”	47º 23’ 21”
110º 00’ 57”	47º 23’ 40”
110º 01’ 23”	47º 23’ 40”
110º 01’ 23”	47º 23’ 21”

- Exploration license No. 7101X was transferred to Coal Khentii LLC, and the Office of Geological and Mining Cadastre registered this transaction in Decision No. 318 in 2006.
- Mining License No. 10126A was transferred to Coal Khentii LLC in accordance with the Minerals Law of Mongolia, and this was registered in the office Geological and Mining Cadastre by decision 318 of 2006.
- Subsequently, Tugrug Nuuryn Energy LLC was granted land title No. 0049440 (32 hectares) for mining.
- Red Hill Energy acquired these licenses from these companies with Government approval in 2006.

8.2 HISTORY OF GEOLOGICAL EXPLORATION

The first official geological survey work was conducted by a Russian geologist, Y.S. Jelobovskii, in 1926. His team came to the deposit area to check on information provided by local residents during the mineral exploration for the territory of Khentii aimag. The head geologist stated that the deposit had two main coal-bearing strata and that the ratio of coal-bearing sediments of the strata was 1.5. No drilling was undertaken at that time.

In 1958, Russian geologist N.A. Volkov, et al., carried out prospecting work for uranium and germanium within the Nyalga depression area. A radiometric survey of the area was made, and samples were taken from the coal seams. Based on the results of this study, it was concluded that there were no commercial concentrations of radioactive elements in the coal and the host rock. Uranium content was only 0.0015%, and no germanium was identified in the study.

Upon order by the governor of Khentii aimag and in order to provide energy coal for the central town of the aimag and the Berkh fluorspar mine, A.P. Orehov and B.P. Soroko conducted prospecting work on a 5-km^2 area and detailed exploration on a more restricted 1-km^2 area in 1962. The Chandgana Tal Coal Deposit was included in this study. Shallow trenches were initially dug to allow the general area to be evaluated. Following this effort, the area for detailed exploration was selected. This more detailed trenching entailed construction of shallow trenches on 150 to 200 m intervals. These trenches were dug by hand to depths of up to 5 m to determine coal bed thickness and geometry. The project also entailed integrating stratigraphy, magmatism, and regional tectonics, and produced the first geological map for the deposit (1:100000 scale).

The 1962 detailed exploration used an SBUD-150-ZIV drilling rig and bored 25 holes. Drill holes were started with 132 mm diameter for the first 4 to 8 m of loose soil, then continued with 108 or 127 mm, and then finished with 98 or 76 mm. Drilling used 50 mm rods. The depth of drill holes varied between 28.8 and 109.0 m. Average depth was 64.7 m. Coring was executed with 3 to 4 m runs in the host rock and shortened runs of 0.5 to 1.2 m in the coal seam. Core yield was 63.8%. As a consequence, the reported coal quality of samples taken during this exploration program is somewhat suspect.

Work lasted for 4 months from 12 May to 9 September 1962, resulting in 1,554.25 m of drilling, 361.35 m of shallow pitting (5 m depth for each shallow pit), and 45 m^3 of channel sampling. This effort yielded 411 samples. Moreover, a geological-lithologic map was created for the general area (scale 1:5,000). A 1:2,000 scale map was also made of the more detailed exploration area. These maps were created using the Mongolie-Krassovski coordinate system. The 24 drill locations have been transformed to the UTM base used in this report.

In 1980, L. Mizimkhaan and T. Lhagvasuren established a small test mine at Chandgana. This work included 1,004 m of drilling along exploration lines 4 and 5. The main purpose of the work was to develop a better understanding of the partings within the commercial mining area and to verify coal quality and overburden thickness. The work included both trenching and drilling. Intervals between exploration lines were 300 to 400 m, while intervals between drill holes were 150 to 400 m. The drill hole spacing and the area drilled were expanded to allow determination of A and B category resources (Soviet Resource Classification System).

Hydrological tests were carried out simultaneously with the drilling work. Two drill holes, Nos. 3 and 23, were tested to determine the hydrological regime in the area. Water influx into a 1.1 by 0.78-km open pit was estimated to be 472 liters/second. This suggests that a means of handling groundwater during mining will have to be considered during commercial operations.

Exploration efforts resulted in digging 116 shallow pits with a combined depth of 361.35 m, channeling of 45 m^3, and drilling of 25 holes with combined depth of 1,554.25 m. In all, 411 samples were taken for laboratory analyses. Exploration work resulted in 787 m of drilling (537 m cores, core yield 68.2%) in the host rock and 703.1 m of drilling (449.05 m cores, core yield 63.8%) in the coal seams. Three drill holes (Nos. 16, 4, and 17) did not intersect coal seam II, the main target, and most of the holes did not penetrate to the lower coal seams (IV and V). Moreover, core recovery was poor. During the drilling work, nine holes underwent geophysical borehole (logging) survey. These older logs provided by the down hole geophysical surveys were substandard and of little use in subsequent analysis. Later logs were of much greater utility. Exploration included eight drill holes with combined depth of 1,004 m drilled in an area between exploration lines 4 and 5. Holes were drilled on intervals of 60 to 100 m, and 28 samples were collected for laboratory analyses. This work used the same methodology as the 1962 detailed exploration.

In 2005, Electric Power Research and Development Center of Mongolia recommended that the deposit's sub-bituminous coal should be developed to produce a variety of products including:

- fertilizer through chemical oxidization and solution with alkali;
- liquid fuel through hydrogenization and gasification;
- briquettes; and
- filtering agents.

In 2007, Red Hill conducted an 8-hole drilling/coring program to confirm the presence of coal in the quantity and quality previously reported.

Table 8.1 summarizes the hole locations drilled from 1962 through 2007).

TABLE 8.1
DRILL HOLE LOCATIONS

Drill Hole	Easting	Northing	Collar	Depth	Drilled	Full Section
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	1170.20	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

TABLE 8.1
DRILL HOLE LOCATIONS (CONTINUED)

Drill Hole	Easting	Northing	Collar	Depth	Drilled	Full Section
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
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	5248941.00	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

Note: Only drill holes that penetrated the entire coal-bearing section were used in modeling the deposit. This model was then used to make the Coal Resource estimate.

8.3 PRODUCTION HISTORY

By decree of the government of the People's Republic of Mongolia, the state-owned "Chandgan Tal" coalmine was established in 1966. In 1995, the mine was reorganized as the Berkh Uul LLC (Berkh Uul) shareholder company, which holds a mining license adjacent to Red Hill's Chandgana Tal mining license. The mine produces a relatively low volume of coal for local consumption. According to the information submitted to the mining office in accordance with Article 39 of the Minerals Law of Mongolia, Berkh Uul mined approximately 1.8 million tonnes of coal from the Chandgana Tal deposit between 1966 and 2005.

Its primary consumers are Undurkhaan, the central town of Khentii aimag, the Chandgan farming center, and Ulziit soum.

The mine was poorly designed, and the absence of proper drainage for mine water resulted in significant high wall failures, which extended the disturbed area beyond the area that was actually mined. This, in turn, has created more difficulties for drainage and in some cases has directly affected the quality of the coal within the mined area and immediately adjacent to the area mined. Proper mine design will mitigate this problem in the future.

8.4 CURRENT ACTIVITIES

Currently there are two active mining licenses: License 10126A owned by Red Hill Energy and Mining License 4590A owned by Berkh Uul. Coal Khentii, using rented equipment, mined license 10126A briefly in 2005 and 2006. In its mining operations, Berkh Uul uses an EKG-5A (Russian) excavator with a bucket volume of 4.6 cubic m, four or five dump trucks with capacities of 12 tonnes each, and two T-30 bulldozers for preparation of road, sites, and coal stockpiles. Coal from this operation supplies house coal and boiler fuel requirements in the local villages.

9.0 GEOLOGICAL SETTING

9.1 REGIONAL GEOLOGY

9.1.1 Stratigraphy

Sedimentary and igneous rocks as shown in Figure 9.1 dominate the regional geologic setting.

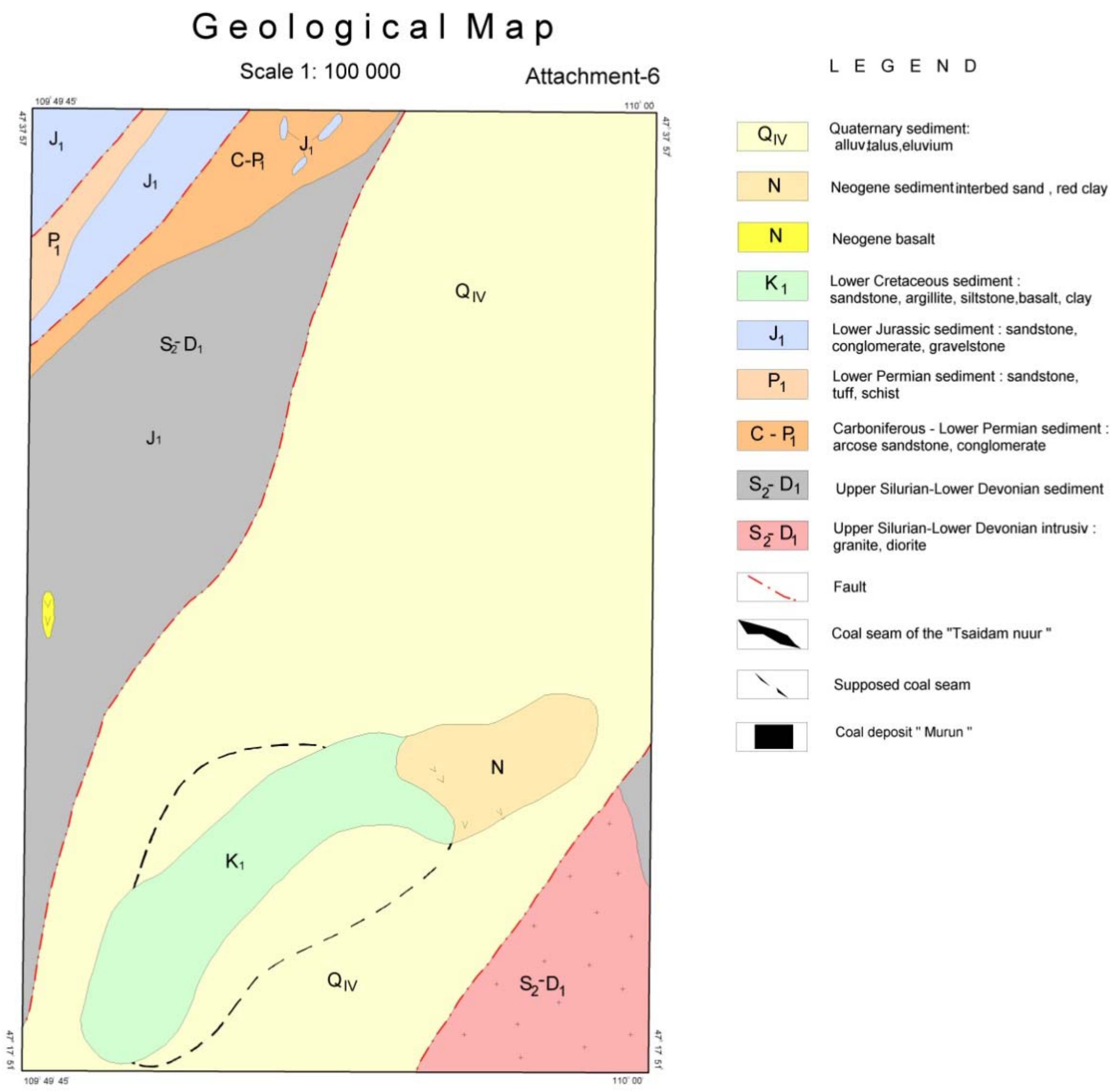


Figure 9.1. Geological map of the general area

Sedimentary rocks are distributed in the regional area as follows:

1. **Quaternary or Recent sediments (Q4):** Quaternary sediments in this region consist of lake, proluvial talus, and alluvial sediments.
2. **Neogene (Qn):** These sediments are composed mainly of arkose sandstone, greywacke, and lenses of conglomerate. Total thickness of the sedimentary unit is 900 m.
3. **Lower Cretaceous (K1):** Lower cretaceous sediment accumulation (K1). There are three different formations: Zuunbayan (K1-Zn), Tsagaan Tsav (K1-cc), and Sharil (K1-Sh).
   - Zuunbayan Formation – The upper sediments are divided into two members based upon lithological composition. The upper member is 120 to 150 m thick, with the upper part having an alternation of smaller-grained shale and clay layers. Five coal seams have been identified within this upper member. The thickest and most persistent seam is 30 m thick and covers a large area (seam II in this report). The thickness of the upper member ranges from 200 to 220 m. The lower member is 60 to 80 m thick and is comprised largely of grey-colored, coarse-grained sandstone.
   - The Tsagaan Tsav Formation has a complex structure and mainly consists of effusive volcanic rocks (largely basalt, andesite-basalt, andesite, quartz-porphyry, and tuff) interbedded with grey argillite, black clayey siltstone, and fine-grained sandstone. Total thickness of the formation is 500 m.
   - The Sharil Formation is subdivided into two members. The lower one is composed of dull red and yellowish-red conglomerates, with a thickness of approximately 300 m. The upper sandy clay formation is dull brown in color and is interbedded with sticky and greasy clay layers up to 1 m thick.
4. **Lower Jurassic:** Sandy loam-conglomerate formation (J1). This formation lies above the Permian sediment, with angular non-conformity.
5. **Permian (P1):** Sandstone and siltstone. Permian sediment accumulation (P1) occupies a small part of the northwestern part of the region. It consists of alternating layers of arkose sandstone and sand-clayey siltstone. The sandstone is light grey in color and is composed largely of quartz and feldspar grains. The sand-clayey siltstone is grey to dull grey in color and is fossiliferrous. The total thickness of the formation is 400 m.

   During 1940 geological exploration, V.M. Nosikov identified three thin coal seams with a very complex structure in the Permian sediment. He called this the Moron Coal Deposit. The thickness of the coal seams ranges from 0.3 to 1.4 m. Their ash is high, 40% to 60%. The middle seam has relatively consistent thickness compared to the other two. Its ash is lower, 30% to 50%. The other two seams, the upper and lower, are highly variable in thickness and are frequently absent.
6. **Carboniferous-Lower Permian (C-P1):** Arkose and polymict rocks. This formation is composed of alternating conglomerate and sandstone layers. The conglomerate is light yellowish in color, and the rubble is well-smoothed pebbles composed of granite, quartz-porphyry, felsite-porphyry, clayey and silicic schist, sandstone, quartz, and jasper. The sandstone is light-grey colored, with a greenish tint. Formation thickness is 700 m.

   Bitumen-containing sediment. This consists of an upper member composed of thin layers of greenish-grey and brown argillite, limestone, and sandy loam containing varying amounts of bitumen. The thickness of this zone is generally 45 to 62 m. Below this member is another zone composed largely of a clay-rich siltstone, with small layers of limestone and brownish-grey clay. The lower formation is 170 to 250 m thick.

7. **Upper Silurian-Lower Devonian (S2):** Igneous intrusive rocks. A large granite massif occurs in the southeastern part of the region. It displays two separate phases: (1) Granite with pink-colored crystal biotite. (2) Granodiorite. There is a sharp contact between these two rock types, even though they are approximately the same age. Rubble of these abyssal rocks is contained in Jurassic and Permian conglomerate, thus it is deemed to be mid-Paleozoic in age. Paleozoic complexes contain spessartite, diorite porphyry, felsite porphyry, and aplite veins believed to be associated with these intrusive rocks.

9.1.2 Structure

In terms of tectonic zonation and geological structure, the Chandgana coal deposit is situated to the east of Nyalga depression in the Khentii zone of the Hangai-Khentii folded system. It is located in Shorvogo plain, at 1,150 to 1,250 m above sea level in a 350 × 150 km wide valley.

Structurally, the area is relatively simple, with large, generally flat folds containing sedimentary rocks enclosed by more erosion-resistant, older sedimentary and igneous rocks. Minor faulting has occurred, which in one case helps to define the eastern edge of the coal-bearing area.

9.2 LOCAL GEOLOGY

Exposed rocks within the deposit area are Quaternary (Q) sediments, Neogene Rocks (N), and lower Cretaceous (K1-dz2). Coal is hosted in the lower Cretaceous sediments in the upper part of the Zuunbayan Formation.

Quaternary sediment (Q). These rocks have a wide distribution within the deposit area. They are largely composed of proluvial sediment consisting of schist, granite, and quartz clasts enclosed in coarse-grained sandy loam. Thickness of the Quaternary deposits ranges between 0.5 m and 4 to 5 m.

Neogene sediment (N). These sedimentary rocks are composed of reddish-brown elastic clay, with sandy loam layers. Average thickness of the sediment fluctuates between 11.1 m and 16.35 m. Neogene sedimentary deposits are thicker in the northeastern part of the area, reaching 35.7 m. Dull grey basalt occurs above the Neogene sediment in the northeastern part of the deposit area.

Zuubayan Formation – upper member (green-grey – K1-dz^2).

Several drill holes penetrated the entire upper coal-bearing member of the Zuunbayan Formation, particularly those drilled at the behest of Red Hill. The coal-bearing zone has an average thickness of 160 m. Drill holes did not penetrate the lower part of the formation. The green-grey member is composed of alternating argillite, siltstone, and sandstone layers and includes all five coal seams in the deposit. The micacous sandstone, the main part of the lower member, is light grey in color (see Figure 9.2).

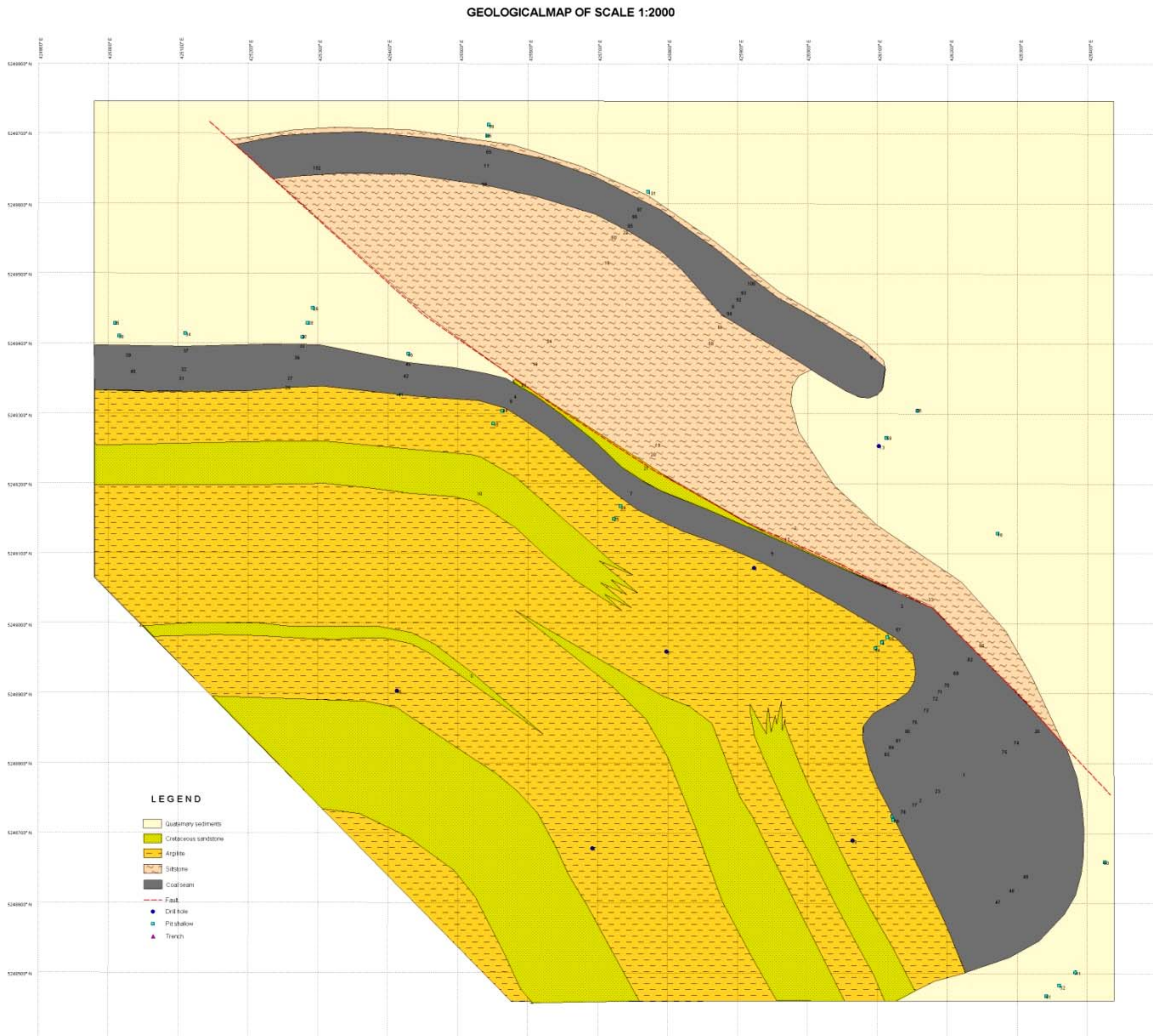


Figure 9.2. General geological map of the Chandgana Tal coal deposit

The lower Cretaceous sediments are poorly indurated, with very poor rock strength. Surface mining will require very low angles on the high and low walls in order to maintain stability. Future feasibility studies should consider the use of bucket wheel excavators in the mining of this deposit.

9.3 DEPOSIT TECTONICS

The coal-bearing strata are essentially flat lying, with faults defining the eastern margin of the deposit. Associated with these faults are narrow monoclines located immediately adjacent to the faults. To the west of the faulted area, dips increase to approximately 8 degrees to the west and southwest. With the exception of these faults, the strata do not exhibit any significant degree of deformity associated with tectonic activity (see Figure 9.3).

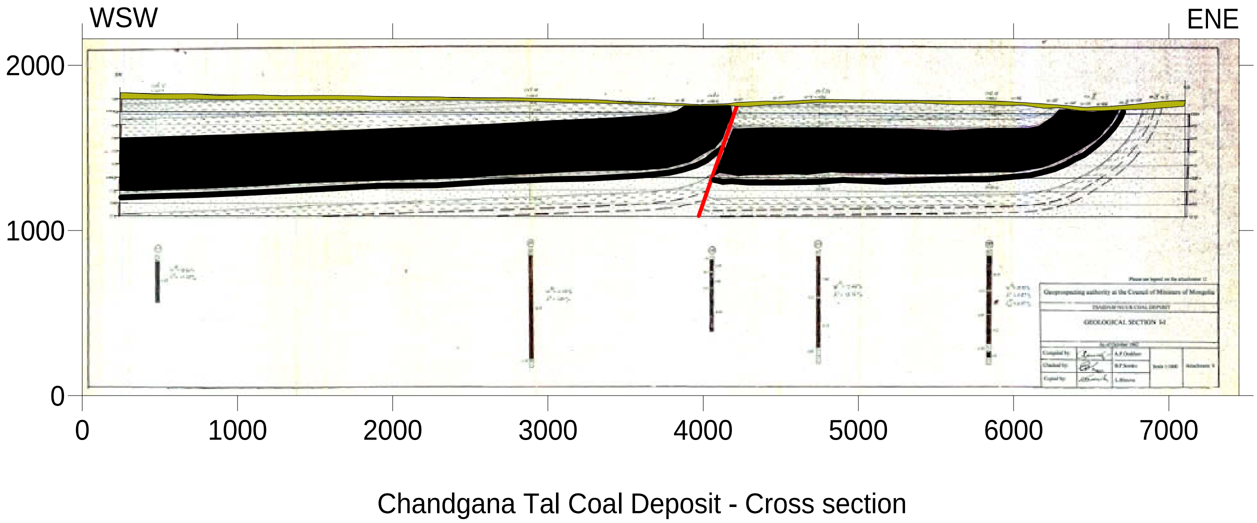


Figure 9.3. Typical cross section – Chandgana Tal coal deposit

10.0 DEPOSIT TYPE

Coal in the Chandgana Tal deposit lies under extremely low cover and is considered to be potentially surface mineable. A small mine has been operated along the outcrop within the mining license and on the adjacent mining license that is not controlled by Red Hill. The coal sub-crops along the northeastern margin of the deposit. Where the combined seam thickness is less than 20 m, it is considered to be oxidized and is not included in the Coal Resource estimate.

The in situ stripping ratio varies from <0.1:1 to slightly over 1:1 bank cubic meters per tonne and averages 0.52:1. This applies for much of the shallow coal (low cover) in the Nyalga Basin. Figure 10.1 shows an orthographic perspective of the basin. The darker area to the center right of the image is the shallow lake located at the northwestern corner of the exploration license area. The darker area to the right of the lake is a small existing surface mine that has been operated to produce coal for local consumption.

10.1 COAL SEAMS AND ZONES

Chandgana Tal coal is contained in the lower Cretaceous, coal-bearing upper member of the Zuunbayan Formation. Five coal seams have been identified, with a total coal thickness ranging from 30 m to over 50 m. Seam II is the thickest and most persistent. Seams are numbered from top to bottom (I through V).

Seam I. This upper-most seam is thin, having an average thickness of 0.35 m. This seam in not persistent and is only found in a restricted part of the lease area. Where identified, it generally occurs 45 m above Seam II.

Seam II. This very complex seam has a number of relatively thin non-persistent clay-rich partings. It is the most consistent and the thickest of all of the coal seams at Chandgana Tal. Partings within the seam are 0.1 to 2.0 m thick (thinnest to its western part and thickest to its eastern part). Total thickness of the seam ranges from 30.45 m to 49.95 m.

Seam III. This seam occurs from 1.2 m to 6.0 m below seam II. Thickness is inconsistent, ranging from 0.2 m to 2.0 m. In the older exploration efforts, many of the drill holes did not intersect the seam because of drilling problems. Seam III also merges with Seam II. A consistent correlation between the two was not attempted in making the Coal Resource estimate stated in this report.

Seam IV. This seam is located approximately 2 m below Seam III. The seam is generally thin, generally less than 1 m, and is laterally not persistent.

Seam V. This seam occurs approximately 5 m below Seam IV and was not encountered by most of the drilling. Where it has been identified, it is less than 1 m thick.

Most of the early drilling did not penetrate to a consistent depth, so there has historically been a perception that there may be undiscovered coal below the identified coal seams. Red Hill's recent drilling, however, penetrated through the coal-bearing horizon, and no additional seams were identified.

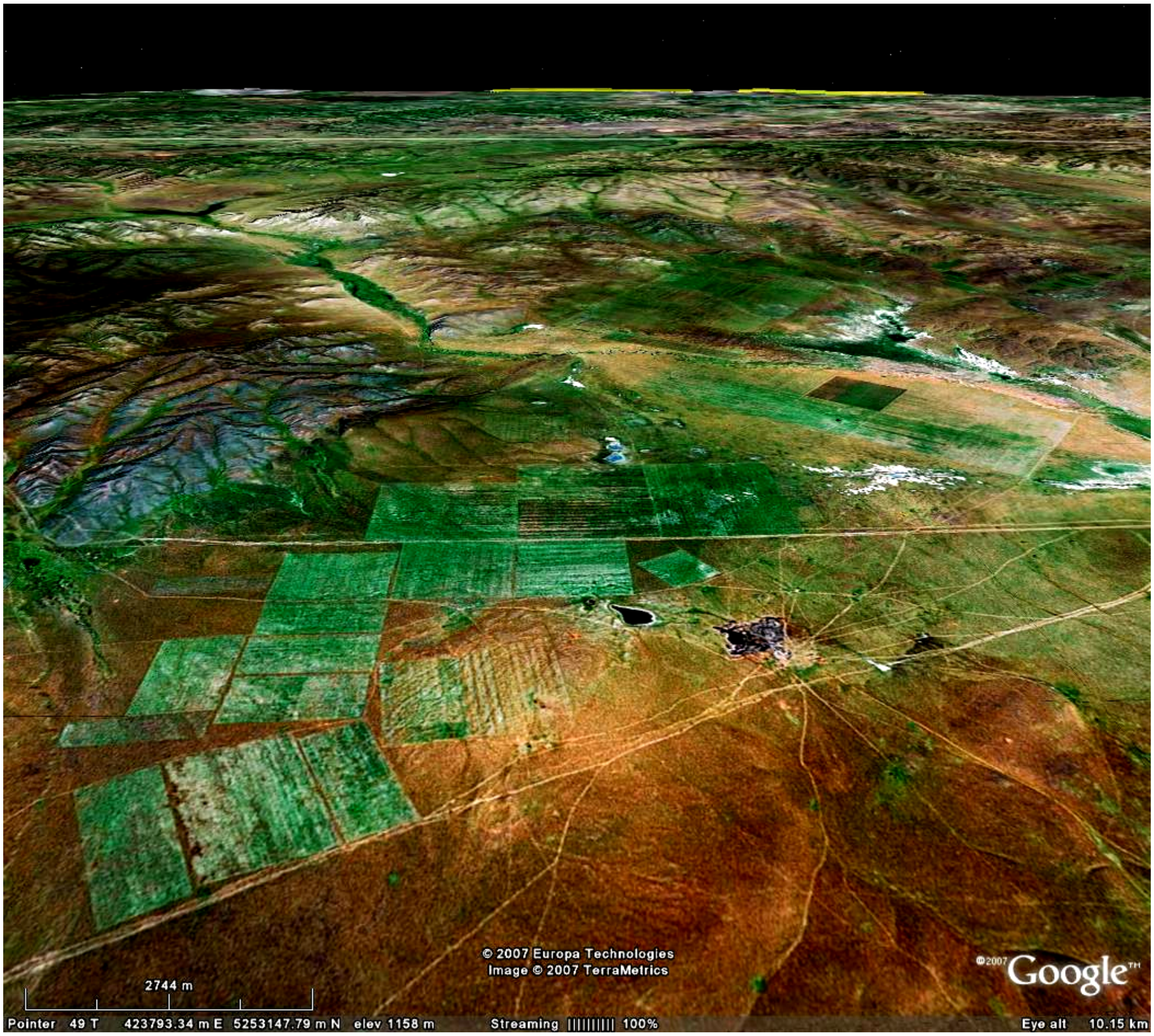


Figure 10.1. Nyalga coal basin (Google Earth image from composited satellite images)

11.0 MINERALIZATION AND COAL RANK

11.1 COAL QUALITY

Chandgana coal is black with a slight brownish luster. Because all of the exploration and prospecting work conducted at the Chandgana Tal coal deposit was designed to establish a thermal coal resource for local power supply, all coal analyses and researches were oriented to that objective. Thus, no detailed petrographic analysis has been carried out on Chandgana Tal coal.

In the areas where the coal outcrops and immediately adjacent to the outcrop, it is severely weathered. This contact is gradual, and the precise area where the coal transitions from weathered to in situ has not been determined in detail. For purposes of this study, it is assumed that weathering occurs where the total coal thickness is less than 30 m. This generally occurs where the overburden is extremely thin or within or immediately adjacent to the mined area.

The following analyses were made of composited samples taken during the 2007 drilling program. They represent the most current coal quality data available (see Table 11.1).

TABLE 11.1
COAL QUALITY

Hole ID	Thick (m)	Density	Proximate Analysis (%)		Ash	Vol. Matter	Fixed Carbon	Total Sulfur
			As Received Moisture	Air Dried Moisture				
RH-07-01	30.44	1.48	40.38	29.52	15.58	28.02	26.88	0.54
RH-07-02	47.95	1.49	38.86	25.36	15.12	28.35	31.17	0.76
RH-07-03	39.51	1.43	38.42	25.24	12.62	29.00	33.14	0.71
RH-07-04	41.20	1.39	40.63	27.07	9.63	30.09	33.21	0.68
RH-07-05	41.92	1.41	40.66	27.21	12.02	29.44	31.33	0.71
RH-07-06	18.00	1.40	40.83	27.06	12.55	28.29	32.10	0.75
RH-07-07	28.05	1.39	43.85	28.66	10.35	28.21	32.78	0.72
RH-07-08	37.85	1.39	43.54	27.45	11.28	28.61	32.66	0.58
Wt Ave.	37.85	1.45	40.68	27.01	12.49	28.82	31.68	0.68
Total:	*284.92*							

Note: Ash, Volatile Matter, Fixed Carbon, Sulfur, and energy are reported on an Air Dried Basis

Hole ID	MJ/Kg	Kcal/Kg	BTU/lb.	Mineral Matter	MAF Kcal/Kg	MAF BTU/lb.
RH-07-01	16.14	3,855	6,940	17.12	4,652	8,374
RH-07-02	17.29	4,129	7,433	16.75	4,960	8,928
RH-07-03	18.24	4,355	7,840	14.02	5,066	9,119
RH-07-04	18.70	4,467	8,041	10.77	5,007	9,013
RH-07-05	17.66	4,218	7,593	13.37	4,869	8,764
RH-07-06	17.62	4,208	7,574	13.97	4,891	8,804
RH-07-07	17.94	4,286	7,714	11.57	4,847	8,725
RH-07-08	18.17	4,340	7,812	12.50	4,960	8,928
WtAve.	17.74	4,238	7,628	13.86	4,919	8,854
		BTU/lb:	*7,628*			

TABLE 11.1
COAL QUALITY (CONTINUED)

Air Dried Hole ID	Kcal/Kg	Total Sul (%)	lbs SO_2/Million BTU
RH-07-01	4,567	0.64	1.56
RH-07-02	4,865	0.90	2.06
RH-07-03	4,984	0.81	1.81
RH-07-04	4,943	0.75	1.69
RH-07-05	4,795	0.81	1.88
RH-07-06	4,811	0.86	1.99
RH-07-07	4,780	0.80	1.86
RH-07-08	4,892	0.65	1.48
Wt Ave.	4,841	0.78	1.79

Hole ID	HGI	Air Dried – %Carbon	Hydrogen	Nitrogen	Oxygen	Chlorine
RH-07-01	51.0	40.19	2.33	0.49	11.35	0.004
RH-07-02	42.0	43.34	2.86	0.48	12.08	0.005
RH-07-03	38.0	46.37	2.73	0.35	11.98	0.004
RH-07-04	39.0	48.30	2.82	0.50	11.00	0.004
RH-07-05	48.5	44.54	3.08	0.46	11.98	0.005
RH-07-06	50.0	44.72	2.88	0.31	11.73	0.005
RH-07-07	57.0	44.17	2.80	0.35	12.95	0.004
RH-07-08	65.0	44.37	2.54	0.49	13.29	0.007
Wt Ave.	47.9	44.58	2.76	0.44	12.04	0.005

Elemental Analysis of Ash (dry basis) – %

Hole ID	SiO_2	Al_2O_3	Fe_2O_3	CaO	MgO	Na_2O	K_2O	TiO_2
RH-07-01	39.85	16.68	17.84	7.92	5.03	1.67	0.64	0.76
RH-07-02	42.37	18.91	12.55	8.43	4.38	0.64	0.70	0.78
RH-07-03	40.09	17.61	12.80	10.13	4.37	0.64	0.62	0.81
RH-07-04	35.97	14.90	11.58	14.28	5.05	0.58	0.85	0.69
RH-07-05	32.73	14.60	21.65	10.90	4.74	0.46	0.74	0.64
RH-07-06	39.27	17.75	12.57	10.23	5.31	0.62	0.67	0.73
RH-07-07	38.01	15.36	10.65	12.15	5.19	0.64	0.82	0.67
RH-07-08	41.41	14.41	12.42	12.28	3.78	0.85	0.69	0.66
Wt Ave.	38.73	16.29	14.16	10.76	4.65	0.75	0.72	0.72

TABLE 11.1
COAL QUALITY (CONTINUED)

Elemental Analysis of Ash (dry basis) – % (continued)

Hole ID	Mn_3O_4	SO_3	P_2O_5	SrO	BaO	ZnO
RH-07-01	0.44	8.64	0.22	0.073	0.059	0.014
RH-07-02	0.22	9.56	0.13	0.087	0.065	0.018
RH-07-03	0.24	11.11	0.18	0.120	0.085	0.017
RH-07-04	0.24	13.56	0.40	0.200	0.110	0.018
RH-07-05	0.43	11.61	0.39	0.130	0.093	0.020
RH-07-06	0.20	11.51	0.11	0.088	0.060	0.016
RH-07-07	0.25	14.11	0.33	0.140	0.093	0.016
RH-07-08	0.47	11.28	0.18	0.140	0.097	0.015
Wt Ave.	0.31	11.31	0.25	0.124	0.084	0.017

Ash Fusion Temperatures (°C)

Hole ID	Oxidizing Initial Deform	$H=^1/_2W$	H=W	Fusion	Reducing Initial Deform	$H=^1/_2W$	H=W	Fusion
RH-07-01	1,225	1,231	1,246	1,263	1,156	1,162	1,166	1,186
RH-07-02	1,238	1,242	1,248	1,265	1,165	1,173	1,179	1,201
RH-07-03	1,233	1,238	1,242	1,259	1,167	1,173	1,177	1,197
RH-07-04	1,208	1,212	1,216	1,232	1,153	1,157	1,163	1,187
RH-07-05	1,230	1,241	1,247	1,267	1,141	1,147	1,157	1,181
RH-07-06	1,232	1,238	1,247	1,263	1,179	1,183	1,187	1,202
RH-07-07	1,200	1,208	1,218	1,236	1,162	1,167	1,173	1,194
RH-07-08	1,191	1,195	1,201	1,217	1,142	1,150	1,156	1,183
Wt Ave.	1,220	1,226	1,233	1,250	1,157	1,163	1,169	1,191

Ash Fusion Temperatures (°F)

Hole ID	Oxidizing Initial Deform	$H=^1/_2W$	H=W	Fusion	Reducing Initial Deform	$H=^1/_2W$	H=W	Fusion
RH-07-01	2,205	2,216	2,243	2,273	2,081	2,092	2,099	2,135
RH-07-02	2,228	2,236	2,246	2,277	2,097	2,111	2,122	2,162
RH-07-03	2,219	2,228	2,236	2,266	2,101	2,111	2,119	2,155
RH-07-04	2,174	2,182	2,189	2,218	2,075	2,083	2,093	2,137
RH-07-05	2,214	2,234	2,245	2,281	2,054	2,065	2,083	2,126
RH-07-06	2,218	2,228	2,245	2,273	2,122	2,129	2,137	2,164
RH-07-07	2,160	2,174	2,192	2,225	2,092	2,101	2,111	2,149
RH-07-08	2,144	2,151	2,162	2,191	2,056	2,070	2,081	2,129
Wt. Ave.	2,197	2,207	2,220	2,251	2,082	2,093	2,104	2,144

A comparison between the coal quality data from the older exploration and the data from samples taken from the open pit during production suggests that the coal quality reported in the previous studies did not reflect actual moisture conditions in the coal because it was not properly sampled and preserved prior to coal analysis. Comparison of results of the older exploration and the 2007 exploration shows that the initial results were based upon dried samples, and, therefore, the proximate and ultimate results reported for the older sample suites are probably not reliable. Based upon the 2007 analytical results, the coal is classified as Lignite. On an air dried basis, the coal averages 7,628 BTU/lb (4,238 Kg/Kcal).

11.2 MINERALIZATION

The coal and the host rocks underwent spectral analyses, and germanium content was 0.001% to 0.004%. In addition, surface lakes and ponds have shown elevated concentrations of alkali materials, which could have significant influence on the ash fusion characteristics of the coal. Other than these elements, there is no unusual mineralization associated with the coal.

12.0 EXPLORATION

The area is generally covered with alluvial material and, with the exception of the existing mined area, is difficult to map geologically. Previous drilling defined coal in the northern part of the license area. Upon acquiring the property, Red Hill conducted an eight-hole drill program in May 2007 to expand confidence in understanding the Coal Resource and to confirm drilling results reported for the work previously conducted by Russian and Mongolian teams.

Red Hill's work confirmed the previous work and expanded the knowledge of the deposit to the southwest. All holes were cored and lithologically and geophysically logged, and the resulting core was sent to the S.G.S. laboratory in Tianjin, China for analysis. This program was conducted under the direction of a qualified geologist and was prosecuted in an extremely professional manner. The drilling, sampling methodology, and data security arrangements used are more fully detailed below.

13.0 DRILLING

Upon acquiring the Chandgana Tal Licenses, Red Hill Energy elected to conduct a limited drilling program of 8 core holes this year (2007) to confirm the results of previous exploration programs that had been conducted in 1962 and 1980. The program was carried out in May 2007. Drill sites were selected to cover as broad an area as possible, while maintaining spacing sufficiently close to allow classification of the coal resources in the License areas as Measured. All of the holes were cored and all penetrated completely through the coal-bearing section of the Zuunbayan Formation.

Because of the relatively unconsolidated nature of the uppermost parts of the holes, all of the holes were cased to depths varying from 3.2 m to 19.5 m. HQ diameter core was recovered thereafter. Coal cores were described as they were retrieved, and upon conclusion of drilling each hole, a slim-hole geophysical log was run, recording gamma, gamma-gamma density, resistivity, and caliper. The coal core was taken from the barrel, washed, and photographed before being described. RQD data were also recorded. When the geophysical log was available, the core description log was rectified to the geophysical log to maintain integrity of data.

Once washed, fully described, and photographed, the selected core was wrapped in plastic to maintain moisture integrity, boxed, and shipped to S.G.S.'s laboratory in Tianjin, China for analysis. Results of this analysis are shown in the section on Coal Quality. All of the coal seams were taken for analyses, and 0.2 m of roof and floor were also taken. Significant partings (>15 cm) were analyzed separately.

The results of drilling conducted under this program compared favorably with the earlier results and confirmed the presence of five coal seams with aggregate thickness ranging from 64.6 m to 115.8 m and averaging 91.31 m. The sediment is extremely soft and in some cases difficult to core. Core recoveries ranged from 84.83% to 94.49% and averaged 90.64%. Core recovery of the harder coal, at 96.8%, was better than the average core recovery.

14.0 SAMPLING METHOD AND APPROACH

All coal extracted from drill holes during the 2007 drilling program was tested. Procedures used in this program were as follows:

1. Core was extracted from the barrel and placed in half of a split tube inner core barrel.
2. It was then washed with fresh water to clean drilling mud and extraneous material from the outside of the core.
3. Successive sections of core were then photographed from a distance of approximately 1 m using a digital camera.
4. The core fractures in the core were logged to determine RQD and then lithologically described, with the data recorded on a form to ensure that all data was properly captured and recorded.
5. Core was then wrapped in plastic to preserve moisture, placed in boxes, and shipped to S.G.S.'s coal laboratory in Tianjin, China for analysis.
6. When the hole was completed to depth, the hole was logged using a standard suite of slim wire line geophysical logs (gamma, gamma-gamma density, caliper, and resistivity). Data were recorded digitally and presented as a printout of all four logs on a geophysical log.
7. The intercept data recorded in the lithological logging were then rectified to intercepts interpreted from the geophysical log.
8. All data collected in the field were converted to digital format for storage. Physical logs were placed into to steel cabinets and stored at Red Hill's office in Ulaanbaatar.
9. At the laboratory, the samples were crushed, split, and analyzed in conformance to ASTM and ISO9000 standards.

In the older exploration programs, samples were first placed into core boxes and marked. The samples were then sorted according to their macroscopic types and subjected to analysis. Length of coal of the same type was taken not to exceed 2 m. Cores from the host rock were also sampled to determine if there were other potentially useful components, especially with regard to the red clay at the eastern part of the deposit. This was tested to determine its potential as a raw material for brick production.

Coal samples were also taken from shallow pits in erosion zones in order to provide comparison with the deeper coal. Shallow pit sampling used a cross-section of 5×10 m, and the pits were taken perpendicular to the direction of the coal trend. Prospecting and exploration work extracted 411 samples from coal seams, 33 samples from the host rock, and 13 samples of red clay. All samples were analyzed at the laboratory of the Geology and Exploration Authority of Mongolian People's Republic. Some samples also were sent to the Geology and Exploration authority of Irkutsk, Russia.

No independent agent was used to provide external monitoring or inside supervision to provide an independent check of either the 1962 or the 1980 exploration. However, the current license holder, in 2006, extracted 4 to 6 kg of coal sample from an open pit and sent it to the laboratory of Fuel and Power Test and Research Center in Ulaanbaatar for assaying. Quality control was insufficient in both the 1962 and 1980 exploration work. It can only be noted that the previous core yields were rather poor.

During the course of the older exploration programs, additional samples were collected from the coal-bearing sediment and from rocks other than coal, and testing was done to determine their composition and structure. Moreover, samples were taken from the clay layers within the deposit area. These samples underwent relevant analyses to determine suitability for other uses such as production of bricks. Host rock analyses by the Central Geological Laboratory of Mongolia used spectral methods to determine mineralogy.

15.0 SAMPLE PREPARATION, ANALYSIS, AND SECURITY

In the 1962 and 1980 exploration programs, at all stages of exploration, sampling was done by geological engineers under supervision of the chief geological engineer, who had more than 10 years of exploration experience and who was responsible for the work. Samples from drill holes were placed in storage boxes in proper order, and the cores were washed and numbered. Every sample was kept in a polyethylene bag before it was put in an additional cotton bag. The shipping of samples to their respective laboratories was arranged on a monthly basis. Selected samples were to be analyzed for "working" or "as produced" moisture of the coal. To determine the geo-mechanical properties of the coal and host rock, the samples were secured by wrapping them in cotton bandages that were then coated with paraffin wax to prevent loss of moisture. This sample preparation was done after the cores were extracted from drill holes in a cabin that was attached to the core drill.

The geology and exploration authority of Mongolian People's Republic executed the laboratory analyses on Chandgana Tal coal. The main objective of the exploration work was to establish a source of energy coal, thus laboratory analyses primarily focused on that end. All samples from drill holes and shallow pits were examined to determine their ash and moisture, and some were analyzed to determine sulfur, phosphorus, and volatile matter content. Samples from two drill holes underwent analyses to determine their calorific value. All samples from the coal seams underwent spectral analysis to determine rare earth and dispersed element contents.

During the 2007 program conducted at the behest of Red Hill, all samples were tracked using the proper form of chain of custody forms. When received at the laboratory, samples were prepared in conformance to ASTM and ISO9000 standards. This was done in conformance to industry standards (see Table 15.1).

TABLE 15.1
ANALYTICAL STATISTICS OF THE OLDER TEST PROGRAMS

Analyses	Number of Samples Analyzed
Ash and Moisture Content	411
Content of Volatile Matter	45
Overall Sulfur Content	113
Phosphorus Content	29
Calorific Value	*45
Coal Spectral Analyses	411

***Note:** Five of these samples were sent to laboratory in Irkutsk as laboratory checks

There is no recorded information currently available regarding data security and control on the older analytic reports. None of the samples or laboratory duplicates from the older drilling have been retained. All coal samples are lost, and hard cores from drilling were scattered over the drilling area.

16.0 DATA VERIFICATION

The older data could not be directly verified, but review of the new drilling data and comparison of this data with the older drill information confirms the older results. The results of the latest analyses of the coal from the older drilling compare favorably in terms of thickness and, with the exception of the difference in the reported moisture content, also confirm the previous analytical results. No attempt was made by the writer to take and analyze samples, but an audit was performed on the new drill data comparing core logs with geophysical logs and photos of the physical core. The conclusion was that care and professionalism were practiced in collecting the most recent information.

17.0 ADJACENT PROPERTY

Essentially the entire coal-bearing area (35,000 hectares) is under licenses. Red Hill Energy controls approximately 10% of the total area and most of the coal under shallow cover. Berkh Uul Mining Company owns the mining license adjacent to the licenses owned by Red Hill. Tethys Mining (a subsidiary of CVRD) owns the other two exploration licenses.

18.0 MINERAL PROCESSING AND METALLURGICAL TESTING

No mineral processing or metallurgical testing was conducted on the core samples.

19.0 MINERAL RESOURCES AND MINERAL RESERVE ESTIMATES

Coal is a naturally occurring sedimentary rock formed from vegetative matter through the process of coalification. Coalification is driven by the application of pressure and heat. Through the application of these agents, vegetative matter is converted to peat, then to lignite, and finally to coal. Increasing heat and pressure change the rank of the coal from sub-bituminous to bituminous and finally to anthracite. Tthe higher the rank of the coal, the lower the moisture and volatile gas content. Pressure is initially applied to the vegetative mat by the weight of all of the sediments accumulated after the formation of peat. Tectonic forces can supply additional thermal energy to the system, helping to accelerate the chemical reactions that increase the rank of the coal. Coal seams frequently maintain a relatively consistent thickness over relatively large areas.

19.1 USE OF THE JORC CODE

This Study uses the JORC Code Standards to report Inventory Coal, Coal Resources, and Coal Reserves. This methodology of reporting has been adopted as a general world standard of "best practices," and the principles are clearly stated in the "Australian Guidelines for Estimating and Reporting of Inventory Coal, Coal Resources, and Coal Reserves, Prepared and Issued by the Coal Fields Geology Council of New South Wales and the Queensland Mining Council – March 2003." This methodology complies with CIM Guidelines and Section 1.5 of the Companion Policy to NI 43-101 (NI 43-101 CP).

Several concepts used in this report are considered key to reporting Coal Resources and Reserves on an International Basis. For example, reported coal estimates must be made by a "Qualified Person," defined as one who:

- is qualified in the discipline of geology or mining;
- has a minimum of 5 years experience in the reporting and estimation of reserves and has practical experience in the mining of coal; and
- belongs to a group that requires minimum standards of professional education, experience, and ethical conduct.

In addition, reporting standards are extremely stringent and must conform to the established criteria described in the following sections to be considered consistent with to World Standards. The only portion of the JORC Code used in this report is that applying to Coal Resources. Other Categories specified in the Code refer to those for which mining and economic studies have been made or for which a mine is or had been in production – these are not used in this report.

Coal in the Chandgana Tal licenses area conforms to the definitions put forth in GSC Paper 88-21 in the following manner:

1. In terms of the geological complexity (geology type), the coal is classed as Low – type B. Although the coal occurs in up to 5 major seams, it also contains partings of variable thickness. The deposit has also been faulted along its northeastern margin, resulting in a replication of the coal-bearing horizon. On a composite basis, the coal thickness varies from 0 to 62.22 m and averages 22.29 m. Partings range from less than 1 cm to over 9 m in thickness. Where the thickness of the parting exceeds 15 cm, it was not considered to be part of the coal thickness. Individual coal horizons of less than 1 m thickness were not included in the composite coal thickness.

2. A radius of 450 m around each drill hole was used in estimating coal resources. This radius was used in lieu of the 600 m suggested by GSC Paper 88-21. All coal resources fell within the Measured Category using this radius.
3. The deposit is surface mineable, with a maximum in situ point ratio of 1.00 bank cubic meters of overburden per metric tonne of coal (bcm/tn). The average point ratio is 0.53:1 bcm/tn.

These criteria were used in determining the resource estimate.

19.2 COAL RESOURCE

Coal Resource is defined as that portion of a coal deposit in such form and quantity that there are "reasonable prospects for economic extraction." Location, quantity, quality, and geological characteristics are known, estimated, or interpreted from specific geological evidence and knowledge. Established reporting criteria are as follows:

- **Measured** – the highest level of confidence – points of observation are 450 m or less apart. Points of observations are boreholes and outcroppings of coal that have been logged and sampled to industry standards.
- **Indicated** – the next highest level of confidence – points of observation are between 900 and 450 m apart. Points of observations are boreholes and outcroppings of coal that have been logged and sampled to industry standards.
- **Inferred** – the lowest level of confidence for which reporting is allowed – points of observation are between 3,000 and 900 m apart. Points of observations are boreholes and outcroppings of coal that have been logged and sampled to industry standards.

These criteria are based upon both practical experience and theoretical mathematical calculations. Coal is deposited under circumstances that are remarkably similar over long distances. The major disturbances to coal deposition are generally related to flooding events, which also cover large areas. The closer together coal measurements are, one from another, the more similar they are, and the farther apart, the less similar. When measurements are taken at distances of greater than approximately 900 m, there is greater likelihood that the differences will be too great to determine that the coal is continuous from one point to another. All coal resources in Red Hill's Chandgana Tal Project are considered to be Measured under these criteria.

19.3 COAL RESERVES

Measured and Indicated coal resources can be categorized as proven and probable coal reserves, if feasibility studies or mine plans have determined that they can be economically recovered. These feasibility studies or mine plans will include such "modifying factors" as:

- mining methods for exploitation;
- coal beneficiation, if necessary;
- economic mineability;
- markets for the product;
- legal rights to mine and market the coal;
- environmental considerations and constraints;
- social impacts of mining; and
- governmental factors.

The tonnages reported must include adjustments for dilution and for mining losses. When all of these considerations and constraints have been factored into the estimates, the coal may be reported on the following basis:

- **Proven Coal Reserves** – This corresponds to the Measured Coal Resource Category with coal observations being 450 m or less apart with the recovery considerations factored into the estimate.
- **Probable Coal Reserves** – This corresponds to the Indicated Coal Resource Category with coal observations being between 450 m and 900 m apart with the recovery considerations factored into the estimate.

No economic analysis or formal mine planning has been done on this deposit, and for this reason, the term "Coal Reserve" is not used in describing the coal resources of the Chandgana Tal Coal Deposit.

19.4 METHODOLOGY EMPLOYED

There are a number of accepted ways to develop estimates of in place resources. All employ the concept of the continuity of coal to model a deposit. A number of these methods use computer algorithms to project coal. One of the methods is the use of gridded models of coal seam attributes. The strength of using grids to model deposits is that the grids can be used to develop maps that provide a means of mathematically comparing various features of a coal seam, such as depth of cover and tonnage. These in turn can be used to develop derivative grids, in this case strip ratio.

Gridding algorithms rely upon a number of assumptions and the use of different algorithms can and does produce different results. Experience has shown that comparison of point (borehole) data with projected estimates from the algorithm is one of the best ways to ensure that data are well represented. These algorithms can also be used to project probable results beyond the areal limits of data points. However, beyond a certain distance the projections become unstable mathematically and the results are unusable.

The writer, using the results of 33 selected boreholes that were drilled through the bottom of the coal section, constructed a gridded model of the Chandgana Tal Coal Deposit using a Surfer 8® computer program licensed from Golden Software. Kriging-based algorithms were used to develop the grids that were used to project in-place coal resources. A series of grids were developed to model the deposit, including:

- topography – based on digitized points from the topographic map of the area developed during the 1962, 1980, and 2007 exploration programs;
- bottom structure of the lowest coal seam based upon 33 drill hole intercepts;
- projected outcrops based upon intersecting topography and bottom structure;
- borehole locations based upon relevant survey data;
- a thickness grid of total coal thickness was derived from drill information;
- the grid was converted to in situ tonnage using a bulk density of the coal of 1.45 g/cc;
- the thickness grid was then cut by a series of polygons that represented areas within 450 m of the nearest measurement of coal thickness to represent measured coal resources, and,
- this methodology is consistent with the JORC method of computing coal resources as presented in the Australian Code for Reporting of Mineral Resources and Ore Reserves

(the JORC Code) September 1999 and the Proposed Revisions to the Code dated 2 June 2004.

Figures 19.1 through 19.7 show the results of the major constraints noted above for estimation of Coal Resources.

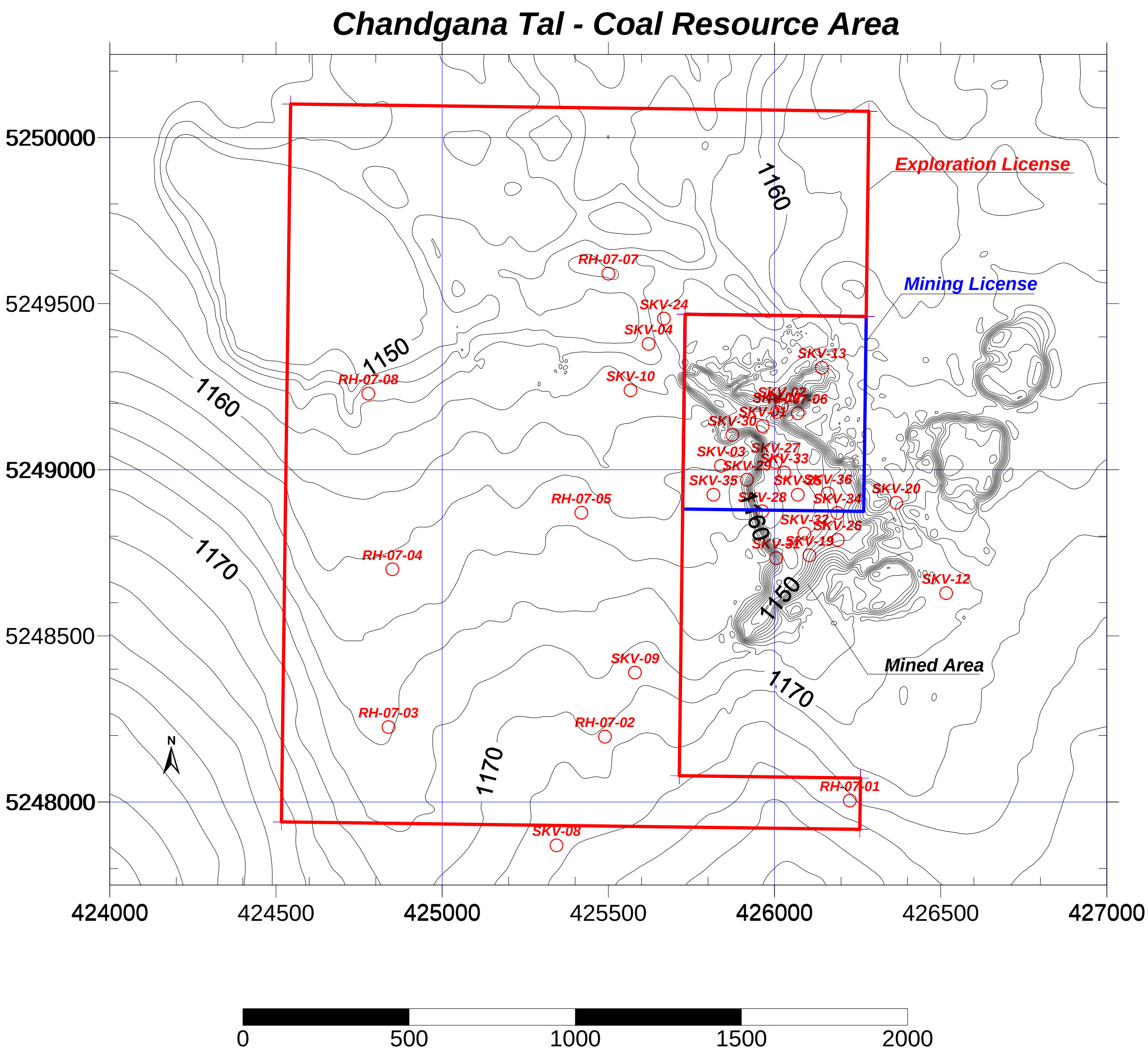


Figure 19.1. General topography of the Chandgana Tal coal deposit

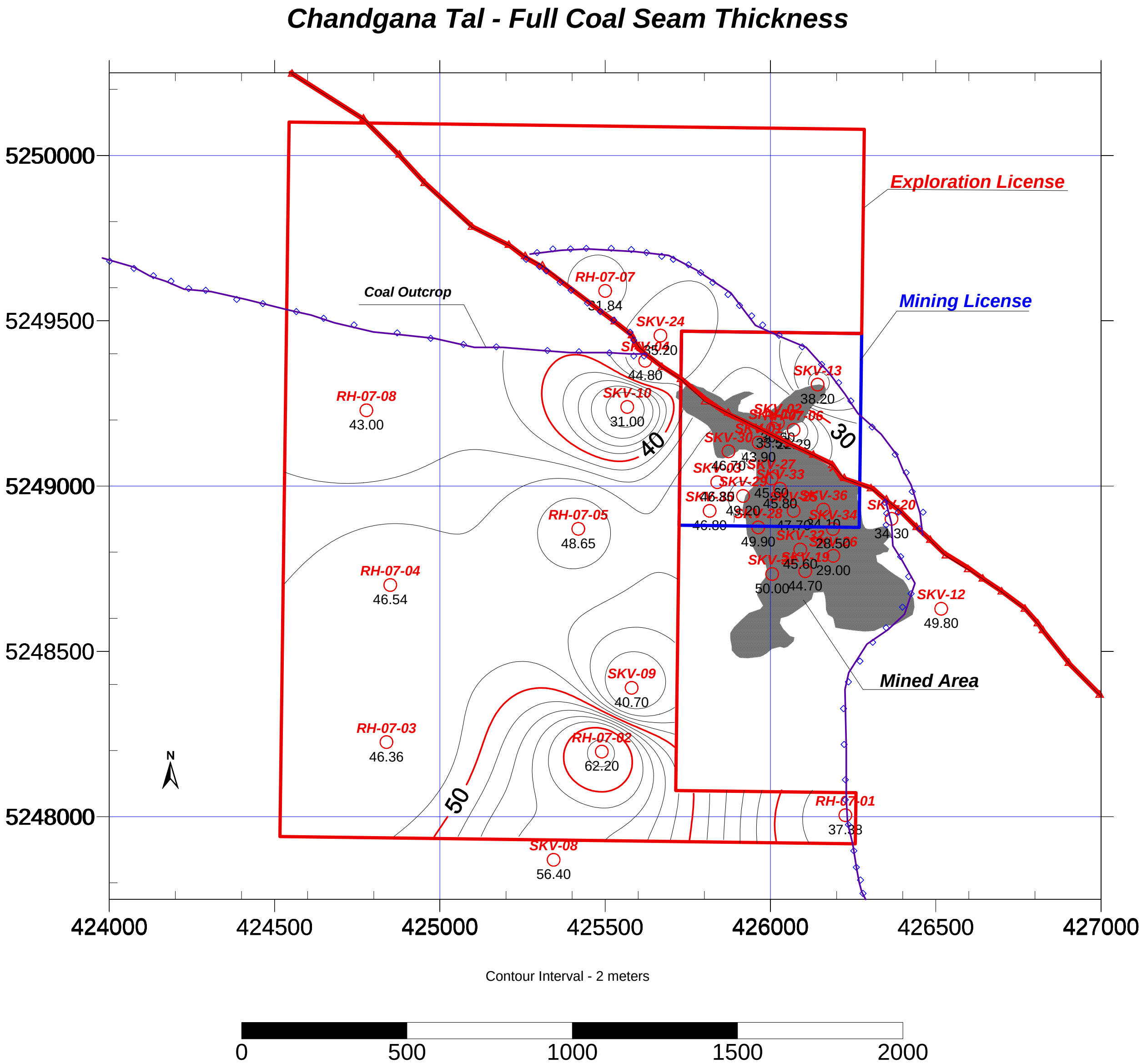


Figure 19.2. Coal thickness based upon 33 drill holes

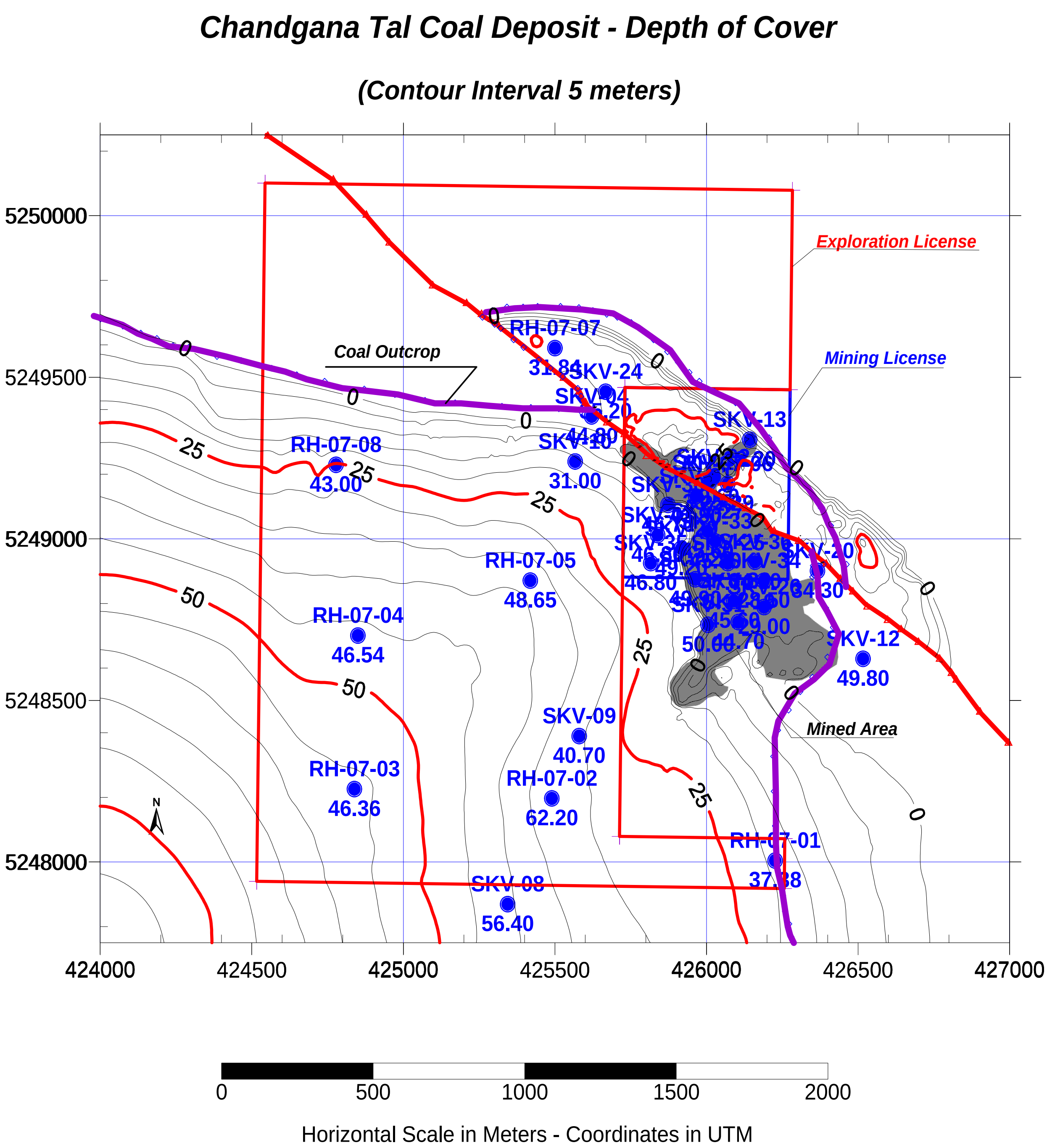


Figure 19.3. Chandgana Tal coal deposit – Depth of cover

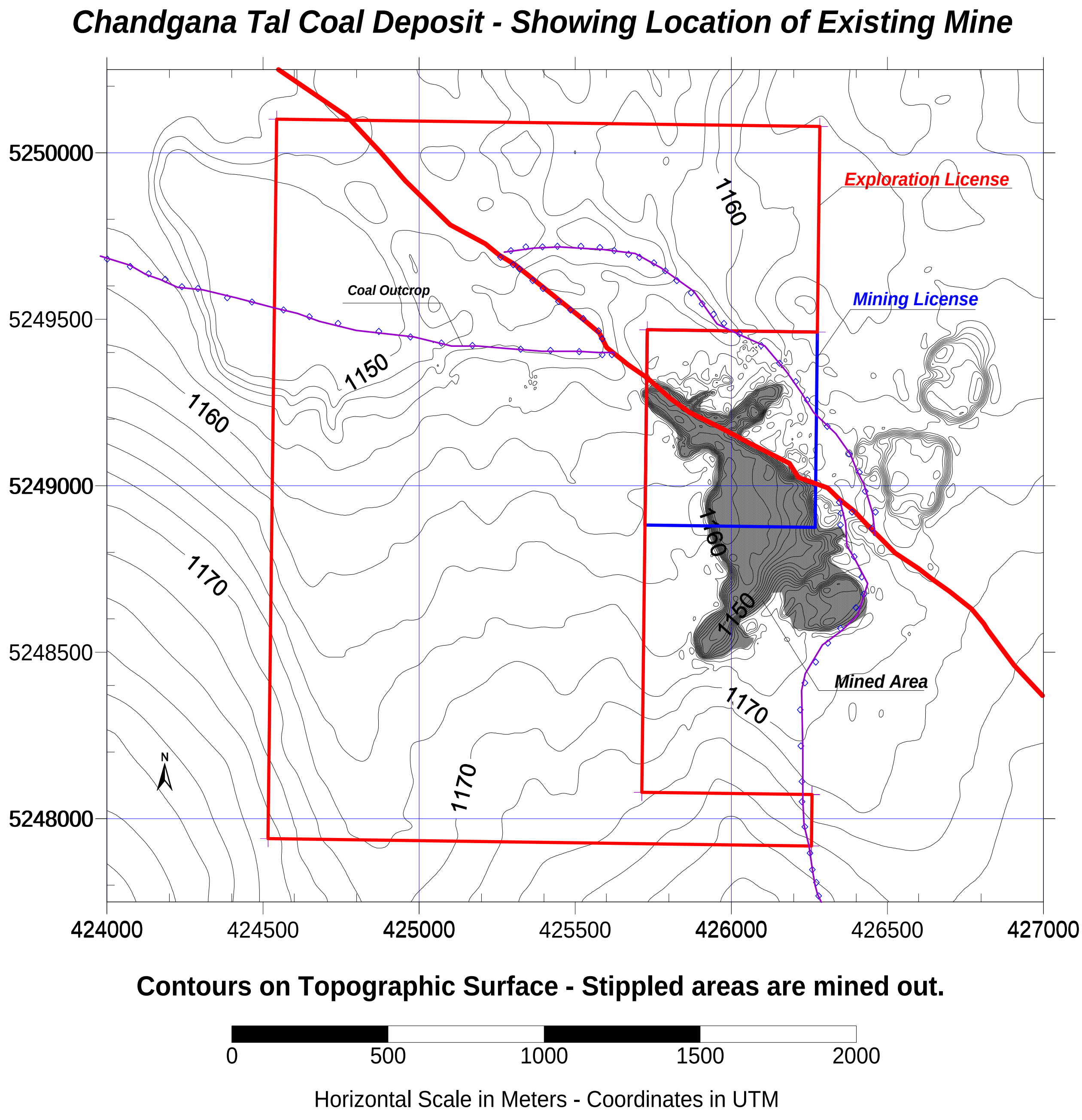


Figure 19.4. Mine area in the vicinity of Chandgana Tal

In the above figure, the mine license area is outlined in blue and the exploration license area is outlined in red.

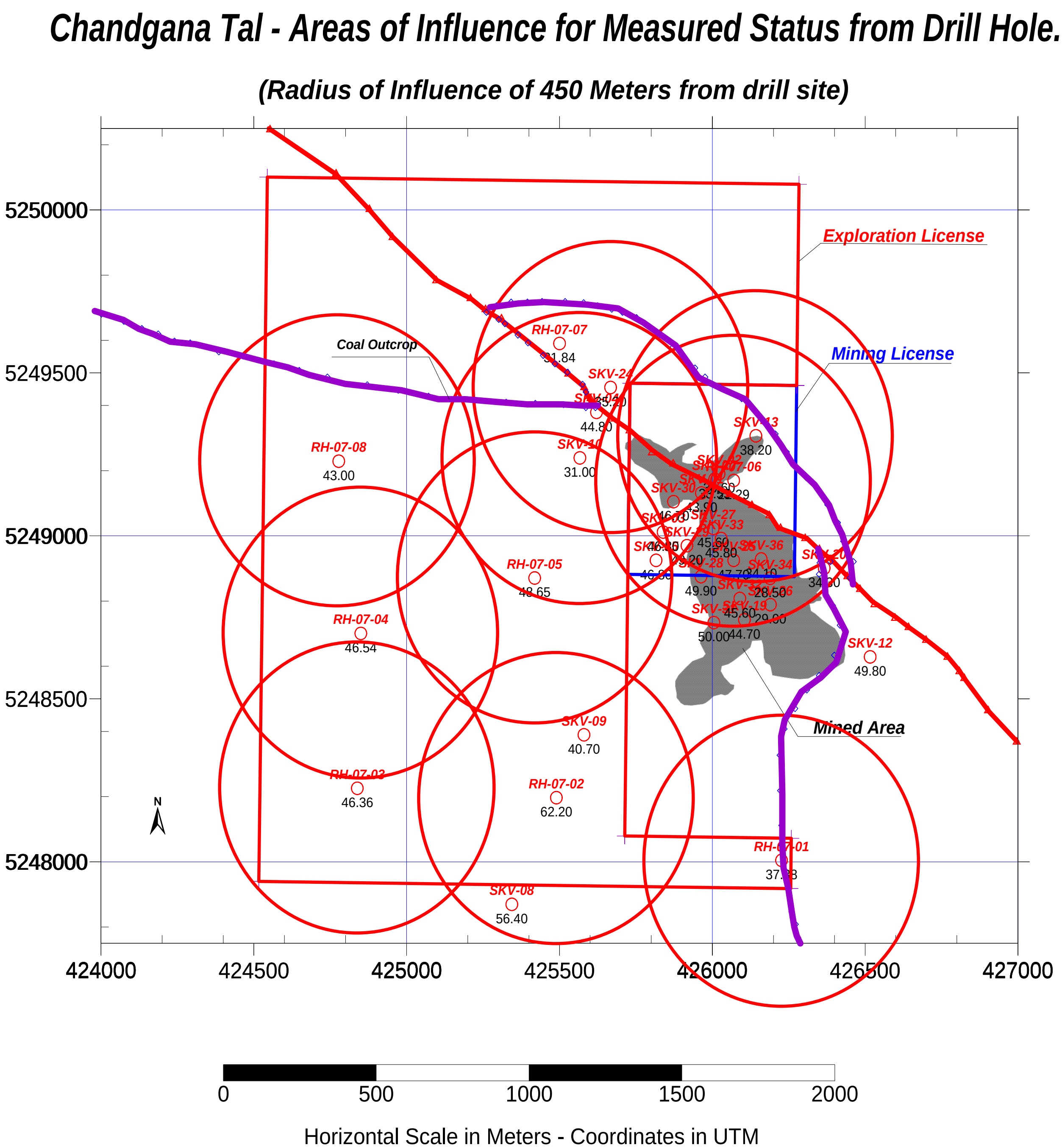


Figure 19.5. Chandgana Tal areas of influence for Measured Resources

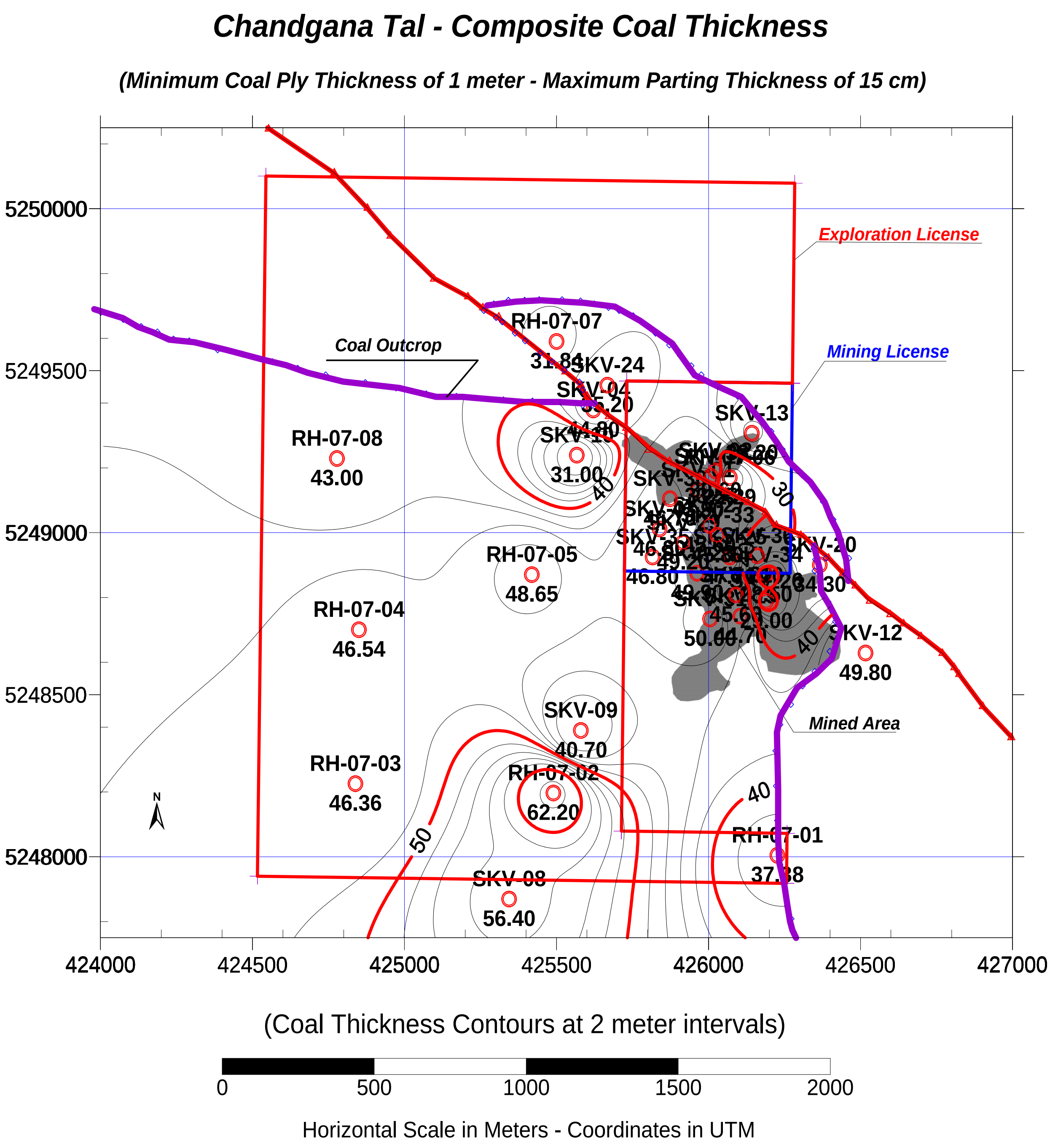


Figure 19.6. Chandgana Tal – Composite coal seam thickness

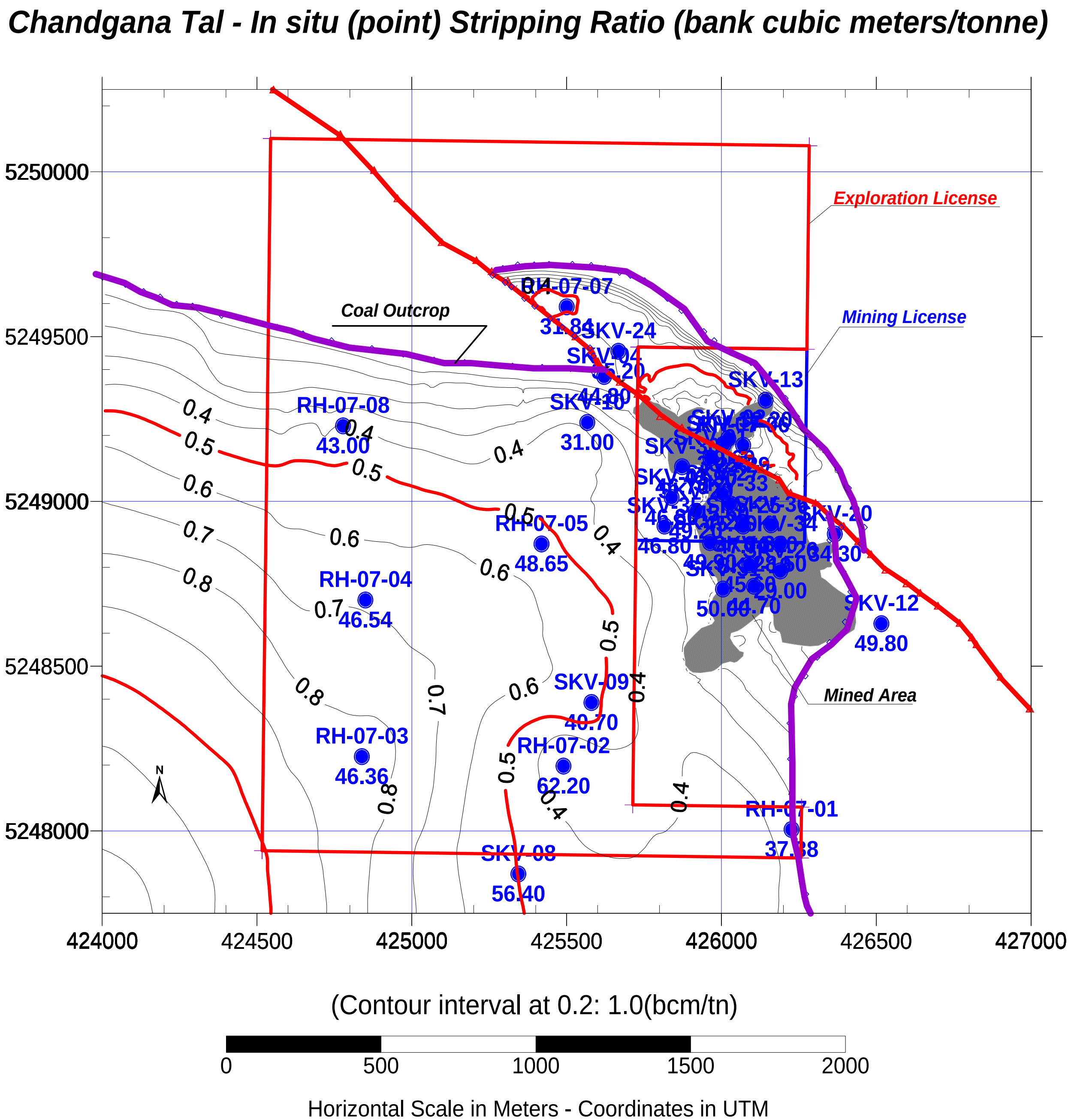


Figure 19.7. Chandgana Tal – In situ stripping ratio

Results of this modeling are shown in Table 19.1.

TABLE 19.1
IN SITU COAL RESOURCES
(IN MILLION TONNES)

Category	Measured	Probable	Total
Mine License	9.3	–	9.3
Exploration License	132.0	–	132.0
Total	**141.3**	**–**	**141.3**

20.0 OTHER RELEVANT DATA AND INFORMATION

Subject to further analytical information, the overall coal quality appears makes it an ideal candidate for electrical power generation or as a feedstock for chemical conversion to a higher-valued end product.

Overall, the deposit has an extremely low cover, and as a consequence the potential stripping ratio is very low at less than 2:1.

The coal is unusual in that it has a high relative density, averaging 1.45 gm/cm^3.

21.0 INTERPRETATION AND CONCLUSIONS

1. The coal in the Chandgana Tal deposit is of lower Cretaceous age.
2. The coal is contained in a syncline measuring 7 km in length and 5 km in width. The coal-bearing area is bounded by a north-northwest trending fault.
3. Previous exploration was conducted mainly by drilling and trenching.
4. The deposit area contains five coal seams (with aggregate coal thickness of up to 62.79 m). The geometry of the seams is complex, with the thickest zone splitting into two main seams.
5. Coal Seam II ranges from 29.81 m to 63.9 m thick, with an average of 53.88 m.
6. Seam II also includes 5 to 11 definable partings of clay and sandstone, with thicknesses ranging from 0.15 m to 1.0 m.
7. Where the main seam splits, the two dominant resulting seams are generally separated by a 9.6 m to 33.7-m-thick sandstone layer.
8. Seam I is the bottommost coal-bearing layer, and its average thickness 3.91 m.
9. Chandgana Tal's coal is weathered or degraded along the eastern margin of the deposit, and becomes sooty where weathered.
10. The Chandgana Tal coal deposit has a demonstrated coal resource of 141.3 million tonnes, with 64.6 million tonnes being categorized as Measured and 76.7 million tonnes as classed as Indicated.
11. Limited hydrological testing suggests that measures to dewater the seams will be an important consideration in mine design.
12. Even though the area is relatively well explored, in-fill drilling will be required to bring the entire deposit into a Measured status.
13. Coal analyses were based only on drill cores. No bulk sampling has taken place. Mining has resulted in sterilizing approximately 3 million tonnes of coal within Red Hill's mining license due the inefficient mining practices used to extract the coal.
14. A limited amount of coal may be produced to satisfy local demand.
15. Limited work has been done on environmental protection with regard to the exploitation of the deposit. This will be a significant component of future feasibility studies.

22.0 RECOMMENDATIONS

1. A scoping study should be commissioned to explore the best means of exploiting this deposit.
2. A geotechnical program should be undertaken to identify the strength of the coal and overburden in order to facilitate pit design.
3. Additional hydrological testing should be undertaken to better define the hydrological regime in the area.
4. Analysis of potential markets for this coal should be undertaken.
5. Cost of these programs is estimated to be on the order of US$500,000.

23.0 REFERENCES

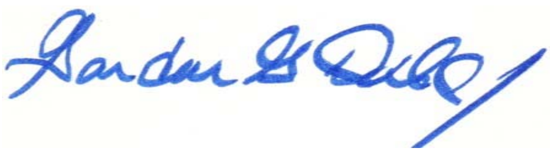
1. Geological Report of the 1962 Detailed Exploration at Tsaidam Nuur Coal Deposit. Authors: A.P. Orehov, B.P. Soroko, and B.I. Martin.
2. Report of Mining Exploration at Chandgan Coal Deposit. 1980. Authors: L. Mizimkhaan and T. Lhagvasuren.
3. Mining Plan for the Year of 2005 for Chandgan Tal Mine.
4. Production Project to Conduct Mining at Chandgan Tal Mine. 2005. Writers: Ch. Munkhbat, B. Munkhzorig, and B. Ayush.
5. Recommendation on Full Processing to Produce Different Products. 2005. Developed by Fuel Research and Development Division.

24.0 DATE AND SIGNATURE

The undersigned prepared this Technical Report, titled Technical Report on the Resources of the Chandgana Tal Coal Project, Khentii Aimag (Province) Mongolia dated 11 September 2007.

The format and content of the report are intended to conform to Form 43-101F1 of National Instrument 43-101 (NI 43-101) of the Canadian Securities Administrators.

Signed and Sealed



Gardar G. Dahl, Jr., CPG 11 September 2007

CERTIFICATE OF AUTHOR

Gardar G. Dahl, Jr.

I, Gardar G. Dahl, Jr., CPG do hereby certify that:

1. I am a Senior Associate of Behre Dolbear & Company (USA), Inc.
   999 18th Street, Suite 1500, Denver, Colorado 80202, USA.

2. I graduated with BS and MS degrees in Geological Engineering from Montana College of Mineral Science and Technology.

3. I am a Certified Professional Geologist in good standing CPG #4423 (American Institute of Professional Geologists).

4. I have practiced my profession for a total of 38 years since obtaining my BS degree. My relevant experience for the purpose of the Technical Report is:

   - the evaluation of over 100 coal properties in 15 countries; and
   - during a 7-year period as Cyprus Coal Company's Manager of Geology, I was responsible for all coal-related geological activities, acquisition analysis, and reserve development and in that position, formalized reserve estimates for all of Cyprus Coal's operations and presented reserve estimates to various Securities and Exchange Commissions.

5. I have read the definition of "qualified person" set out in 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 fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.

6. I am responsible for the Technical Report titled "Technical Report on the Chandgana Tal Coal Resource, Khentii Aimag, Eastern Mongolia" dated 11 September 2007.

7. I visited the Chandgana Tal coal deposit on 11 August 2007.

8. I previously prepared a 43-101 compliant study for Red Hill Energy, LLC, entitled "Technical Report on the Selenge Aimag, Northern Mongolia"

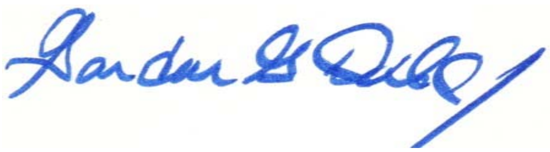
9. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the report, the omission of which would make the report misleading.

10. I am independent of Red Hill Energy LLC, applying all of the tests in Section 1.5 of National Instrument 43-101.

11. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.

12. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication of the Technical Report by such authority, including electronic publication in public company files on their websites accessible to the public.

Dated this 11th day of September 2007



"Signed and sealed"
Gardar G. Dahl, Jr., CPG No. 4423