LITTLE TUYA RIVER COAL LICENSES

Record Numbers 391201 and 391202

Tuya River Coal Basin Dease Lake - Telegraph Creek Area British Columbia

Prepared for:

CONSOLIDATED GLOBAL MINERALS LTD.

By:

N.C. Carter, Ph.D. P.Eng. June, 2002

TABLE OF CONTENTS

	Page
SUMMARY	1
INTRODUCTION	2
LOCATION, ACCESS, INFRASTRUCTURE	2
COAL TENURES	2
PHYSICAL SETTING	3
PREVIOUS WORK	3
GEOLOGICAL SETTING	4
GEOLOGY OF THE TUYA COAL LICENSES	4
COAL QUALITY	5
COAL RESOURCE	6
POTENTIAL OF THE TUYA COAL LICENSES	6
REFERENCES	7

Illustrations (following text)

Figure 1 - British Columbia Coalfi	ields	S	lfield:	Coa	mbia	Colu	British	_	1	Fiaure
------------------------------------	-------	---	---------	-----	------	------	---------	---	---	--------

- Figure 1 British Columbia Coalfields
 Figure 2 Tuya, Klappan, Groundhog and Telkwa Coalfield Locations
 Figure 3 Tuya Coalfield
 Figure 4 Regional Geology
 Figure 5 Little Tuya River Coal Licenses
 Figure 6 Tuya River Coal Basin Schematic Stratigraphic Sections

SUMMARY

Consolidated Global Minerals Ltd. has entered into an option agreement to earn a 50% interest in two coal licenses covering a 513 hectares area in the western part of the Tertiary Tuya River coal basin which is midway between the communities of Dease Lake and Telegraph Creek in northwestern British Columbia.

The license area includes a potential resource of 100 million tonnes of high-volatile bituminous B and C thermal coal which could be exploited for a coal-fired generating plant to provide electrical power to domestic and industrial customers.

Coals of the Tuya River coal basin also have demonstrated potential for coalbed methane. A potential resource of 40 billion cubic feet (bcf) has been estimated to be present in buried coal seams throughout the basin. A percentage of this resource may be present in deeper coal seams within the current license area.

INTRODUCTION

Consolidated Global Minerals Ltd. holds an option to earn a 50% interest in two contiguous coal licenses in the Liard Mining Division of northwestern British Columbia. The subject licenses cover a 513 hectares area in the western part of the Tuya River coal basin which is 45 km southwest of the community of Dease Lake.

This summary report on the Tuya River coal licenses has been prepared at the request of Consolidated Global Minerals Ltd. The writer holds no interest, directly or indirectly, in either the two coal licenses or in the securities of Consolidated Global Minerals Ltd.

LOCATION, ACCESS, INFRASTRUCTURE

The Tuya River coal basin is 1150 km north of Vancouver and midway between the communities of Dease Lake and Telegraph Creek in northwestern British Columbia (Figures 1 and 2).

Dease Lake is on Provincial highway 37 which links the Smithers - Terrace area with the Alaska highway in southern Yukon. The Dease Lake - Telegraph Creek road provides access to the general area of the Tuya coal basin. The subject coal licenses are between 8 and 10 km northwest of a point on this road 52 km southwest of Dease Lake. The most convenient access to the property area is by a 15 minute helicopter flight from Dease Lake airport.

Food, lodging and a few services are available in Dease Lake which is accessible by highway or scheduled air service from Smithers. A broader variety of supplies and services are available in Watson Lake, Yukon, some 250 km north by highway.

COAL TENURES

Consolidated Global's coal interests consist of two contiguous coal licenses in the western part of the Tuya River coal basin centred on Little Tuya River (Figure 4). The disposition of these licenses is shown on Figure 5 and details are as follows:

Coal License Tenure Number	Area (hectares)	Date of Issue
391201	259	December 11, 2001
391202	254	December 11, 2001

The coal licenses are located in map-areas 104J026 and 027 in the Liard Mining Division of British Columbia. License 391201 covers former District Lot 2908 (one mile square) in the Cassiar Land District; license 391202 covers a similar area immediately to the south.

The coal licenses are recorded in the name of Richard T. Heard who holds the licenses on behalf of Mayan Minerals Ltd. Consolidated Global Minerals Ltd. has entered into an option agreement with Mayan Minerals Ltd. which provides Consolidated Global the right to earn a 50% interest in the licenses.

Coal licenses in British Columbia may be renewed annually by payment of a \$7.00 per hectare rental fee during the first five years of tenure ownership after which the annual per hectare cost increases.

The rental fee due December 11, 2002 to renew the coal licenses would amount to \$3,591.00.

PHYSICAL SETTING

The Little Tuya River coal licenses are situated near the eastern margin of the Nahlin Plateau, a subdivision of the more extensive Stikine Plateau. The area of the licenses, which is east of the 30 km diameter Level Mountain shield volcano, features gently rolling, subdued topography cut by the deeply incised valleys of Little Tuya River and Mansfield Creek (Figures 3 and 5).

Elevations within the area of the licenses average 700 metres above sea level and range from less than 600 metres along Little Tuya River to about 750 metres along the western boundary of the licenses (Figure 5).

Little Tuya River is a tributary of Tuya River which empties into the Stikine River 25 km northeast of Telegraph Creek.

Light to moderate tree cover, consisting mainly of spruce, is broken by swampy terrain. Bedrock exposures are confined to the canyon walls of Little Tuya River and Mansfield Creek.

PREVIOUS WORK

The earliest records of previous investigation of the coal resources of the Tuya River area relate to activities of the Atlin - Tuya Coal Prospecting Syndicate which held thirteen one mile square leases in the area in 1904. Work reported included prospecting and sampling and, from available descriptions (Minister of Mines Annual Report for 1904), the principal area of investigation was in the eastern part of the basin adjacent to Tuya River.

Limited follow-up work was undertaken in 1953 but the most thorough investigations to date were completed in 1979 and 1980 by PetroCanada Exploration Ltd. and Esso Minerals Canada. PetroCanada completed 10 widely-spaced, vertical, NQ-size diamond drill holes (1543 metres) within coal licenses situated marginal to Little Tuya River in the western part of the basin. PetroCanada's licenses were north and west of Consolidated Global's licenses and four of the drill holes are immediately west of the current licenses (Figure 5).

The current licenses were part of a larger, east-west land holding which extended across the Tuya coal basin and was investigated by Esso Minerals Canada in 1979. Esso's \$30,000 program consisted of geological mapping and sampling of coal measures; a recommended six hole drilling program, proposed for 1980, was not carried out.

GEOLOGICAL SETTING

The Tuya River coal basin is one of a number of isolated Tertiary coal-bearing basins within the Intermontane tectonic belt of central British Columbia. In addition to the Tuya River basin, these include the Similkameen, Merritt and Hat Creek basins (Figure 1). Coal rank ranges from lignite - sub-bituminous B (Hat Creek) to high-volatile C to A bituminous coal (Merritt, Tuya River).

The fault-bounded Tuya River basin, which overlies a basement of deformed Paleozoic and Mesozoic volcanic and sedimentary rocks, is bounded on the north and west by young (late Tertiary to Recent) volcanic rocks of the Level Mountain complex and by older (Mesozoic) rocks on the east (Figure 4).

As described by Ryan (1990), the coal-bearing strata within the Tuya River basin are of early Tertiary (Paleocene - Eocene) age and consist of poorly consolidated, coarse-grained sandstones, conglomerates and mudstones which exhibit yellow, orange and brown colouration on weathered surfaces. Diabase sills and basalt flows, related to the Level Mountain complex, locally cut and are intercalated with the sedimentary rocks.

The basin is comprised of two principal sedimentary units or members (Figure 4). The lower unit, possibly 200 to 300 metres thick, consists of sandstones, mudstones and chert pebble conglomerates and contains the principal coal-bearing zone which averages 100 metres in thickness. The overlying upper unit or member includes a 300 metres thickness of conglomerates, sandstones and basaltic volcanic rocks.

The Tuya River coal basin is an open, gently north-plunging syncline complicated locally by normal faults and minor folds.

GEOLOGY OF THE LITTLE TUYA RIVER COAL LICENSES

The two coal licenses cover the southern half of the west limb of the broader syncline south of Mansfield Creek (Figures 4 and 5). As indicated on Figure 4, the license area is underlain by both the lower and upper sedimentary members or units, both of which include coal-bearing zones.

Bedrock exposures are non-existent on the plateau surface and are restricted to the canyons of Mansfield Creek and Little Tuya River in the northwestern and central parts of the license area respectively. The upper sedimentary member is exposed along Little Tuya River in the southern part of coal license 391201 (Figure 5) and consists of mudstone, shale and several 10 to 20 cm coal horizons.

Described as "the best coal in the area" (Vincent, 1979) is the exposure along Mansfield Creek in the northwest corner of license 391201 (Figure 5). Minor folds thicken the coal-bearing zone in this area and two 5 metres thick coal seams are exposed above and below a diabase sill Ryan,1990). The entire coal zone is about 100 metres thick and contains a cumulative 10 metres thickness of coal. The zene dips moderately to the east (Figure 5) and northerly-trending normal faults (east side down), mapped by Esso Minerals Canada, suggest that this coal zone may be n displaced to depths of about 600 metres over a relatively short lateral distance.

As noted previously, several diamond drill holes were completed by PetroCanada in 1979 and 1980 immediately west of the current license area (Figure 5). Three of these holes (79-04, 80-01, 80-06) intersected the lower sedimentary member stratigraphically below the coal member. Hole 79-03, drilled immediately north of Mansfield Creek a few hundred metres northwest of the northwest corner of license 391201 (Figure 5), intersected several 1.10 to 10.30 metres thick coal seams for a cumulative thickness of about 16 metres within a 200 metres thickness of coal zone. Coal seams are hosted by poorly consolidated sandstones and individual seams contain <0.5 metre mudstone and carbonaceous rock partings and bentonite layers. Some of the coal seams intersected were interpreted as being fault repetitions (Coal Assessment report 242).

Results for drill hele 79-03 and two other holes which intersected the coal zone north of the current license area are shown schematically on Figure 6 (Ryan, 1990).

Esso Minerals Canada had recommended that at least one hole be drilled south of Mansfield Creek (Figure 5) but, as noted previously, this program was not undertaken.

COAL QUALITY

The best coal quality data available for the lower sedimentary member coal zone pertains to samples from the three drill holes which intersected the coal zone on previous PetroCanada licenses immediately north of Consolidated Global's current licenses. Coal quality was determined for drill cores recovered from the three drill holes on an as received basis. Average values, as reported by Ryan (1990) are as follows:

Moisture	12.4%
Ash	19.1%
Volatile Matter	30.7%
Fixed Carbon	37.8%
Sulphur	0.50%
Calorific Value (range)	9680 - 11994 BTU/lb

Based on the calorifio values, the rank of the coal ranges from high-volatile bituminous B to C. Mean maximum reflectances of vitrinite in oil range up to 0.79, indicative of a high-volatile bituminous B rank.

Hardgrove index values, a measure of friability, were determined on core samples. These average 52.5 which is indicative of a moderately hard coal.

Esso Minerals Canada undertoek determinations of coal quality on a number of surface samples collected from the lower member coal zone exposed along Tuya River in their 1979 eastern license area. These samples included at least one from the upper member coal zone exposed along Little Tuya River on current license 391201. Average values for all samples were:

Moisture	19.0%
Ash	21.5%
Volatile Matter	29.4%
Fixed Carbon	30.1%
Sulphur	0.46%
Calorific Value	6950 BTU/lb

COAL RESOURCE

An in-situ, inferred coal resource of 214 million tonnes (to a depth of 500 metres) was estimated to be present in the western half of the Tuya River basin by Gigliotti (1983).

Approximately half, or 100 million tonnes of this resource may be present within the current license area. Detailed drilling would be required to establish and possibly expand this potential coal resource.

POTENTIAL OF THE LITTLE TUYA RIVER COAL LICENSES

The potential thermal coal resource within the current license area, if present, would be sufficient to generate electrical power for the Stikine Regional District (population 1,500) for a significant period of time in view of estimates that a single house using electricity derived from coal requires between 1 and 5 tonnes of coal per year. The necessity of providing transmission lines from a central coal-fired generating station would probably preclude this scenario, particularly in view of the fact that the nearby community of Dease Lake is serviced by a small (1.5 megawatts) hydroelectric facility recently developed on the Hluey Lakes drainage 20 km southwest of the community.

However, proposed industrial developments for the general area, including the Cassiar magnesium metal plant and the Red-Chris copper-gold deposit, might well be potential customers for coal-fired electrical power generation as opposed to the conventional diesel-powered generating plants used for similar projects in the past.

The Tuya River coal basin also has potential for coalbed methane which is s clean natural gas adsorbed to buried coal seams. Wells drilled into such coal seams decrease pressure on the coal allowing the methane gas to desorb from the coal. The liberated gas flows to surface following the injection of water-based fluids to fracture the coal seam. A coalbed methane field is developed by drilling a number of wells which are connected to a central compressor station.

The amount of methane gas trapped in coal seams is proportional to the areal extent of the seams and is dependent on coal rank and depth of burial.

The amount of methane gas potentially retained by coals of the Tuya River basin has been estimated by Ryan (1990) as being as much as 40 billion cubic feet (bcf). It has been suggested that the lower member coal zone within the current license area has been displaced by faulting to depths of 600 metres. If this hypothesis is correct, these deeply buried portions of the coal seams within the current license area may contain 10% of the total postulated methane gas resource or 4 bcf.

REFERENCES

British Columbia Minister of Mines - Annual Report for 1904, p. G97, 98

Ministry of Energy and Mines, Coal Assessment reports 242, 243, 244

Ministry of Energy and Mines - Coalbed methane in British Columbia, miscellaneous publication

Ryan, Barry (1990): Geology and Potential Coal and Coalbed methane resources of the Tuya River Coal Basin (104J 2,7) in Geological Fieldwork 1990, Ministry of Energy Mines and Petroleum Resources Paper 1991-1, p. 419-429

Ryan, Barry (2000): Coal in British Columbia, Ministry of Energy and Mines miscellaneous publication

Vincent, Bruce D.(1979): Geological Mapping of the Tuya River Property, Coal Assessment Report 246

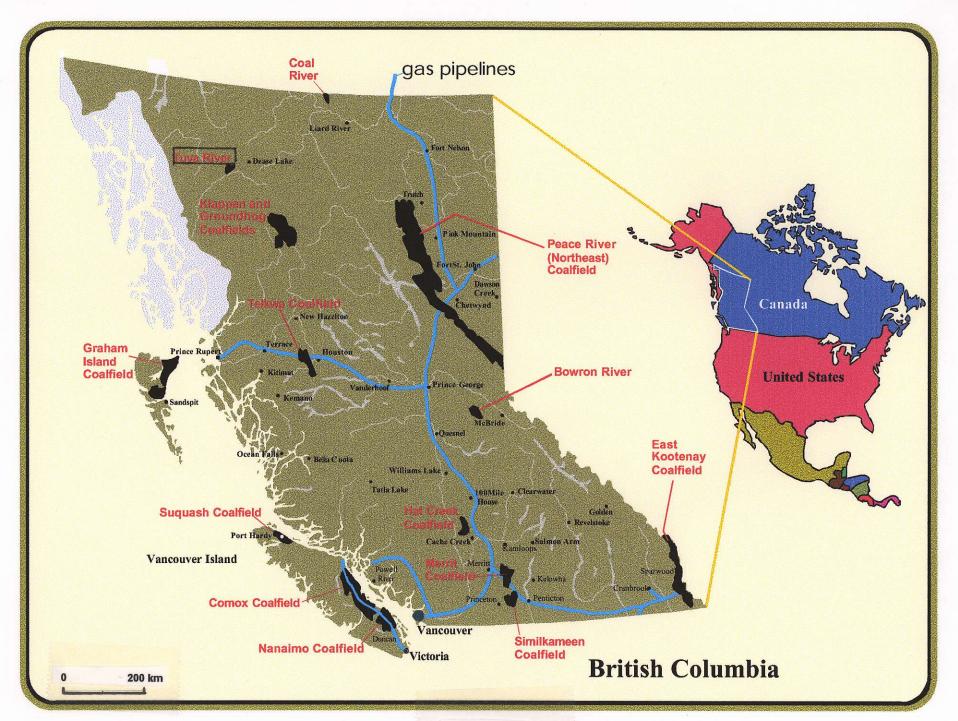


FIGURE 1

TUYA, KLAPPAN, GROUNDHOG AND TELKWA COALFIELD LOCATIONS

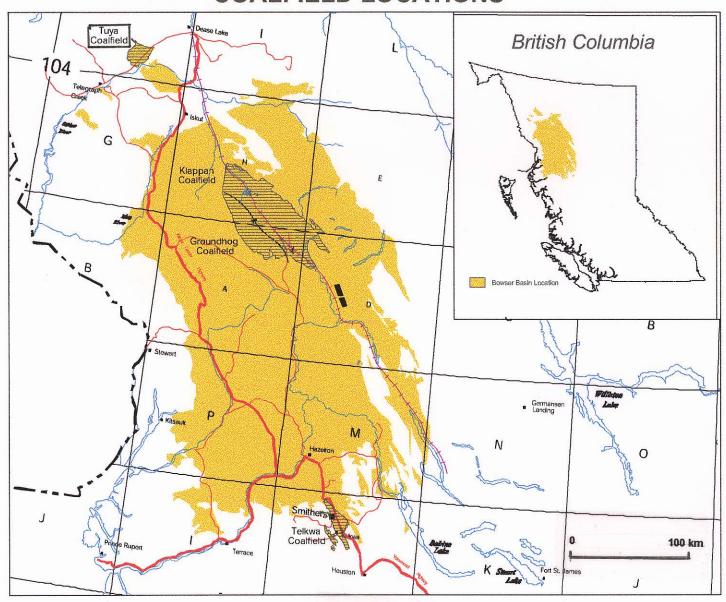


FIGURE 2

Tuya Coalfield

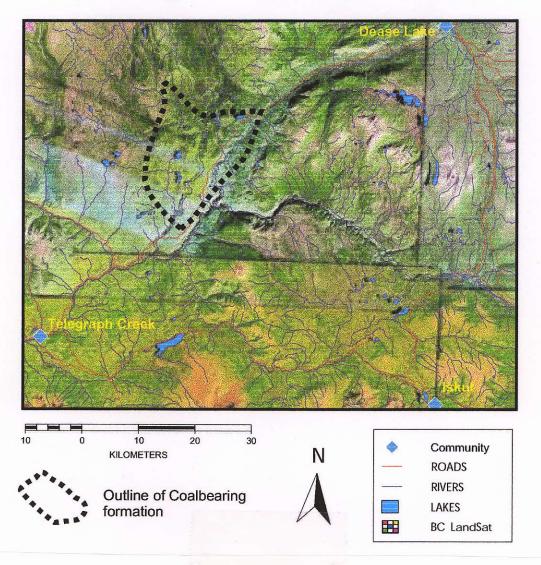


FIGURE 3

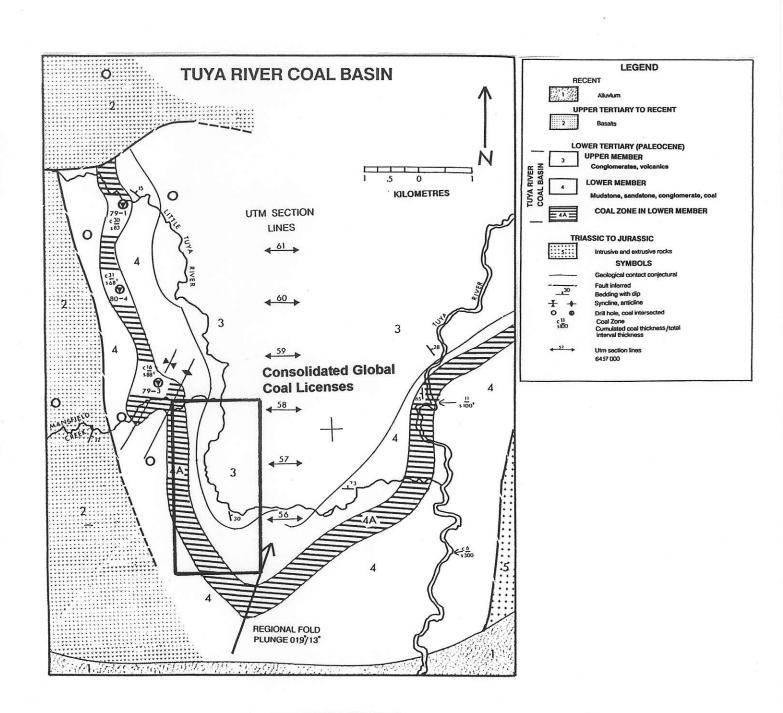


FIGURE 4 - REGIONAL GEOLOGY (After Ryan, 1991)

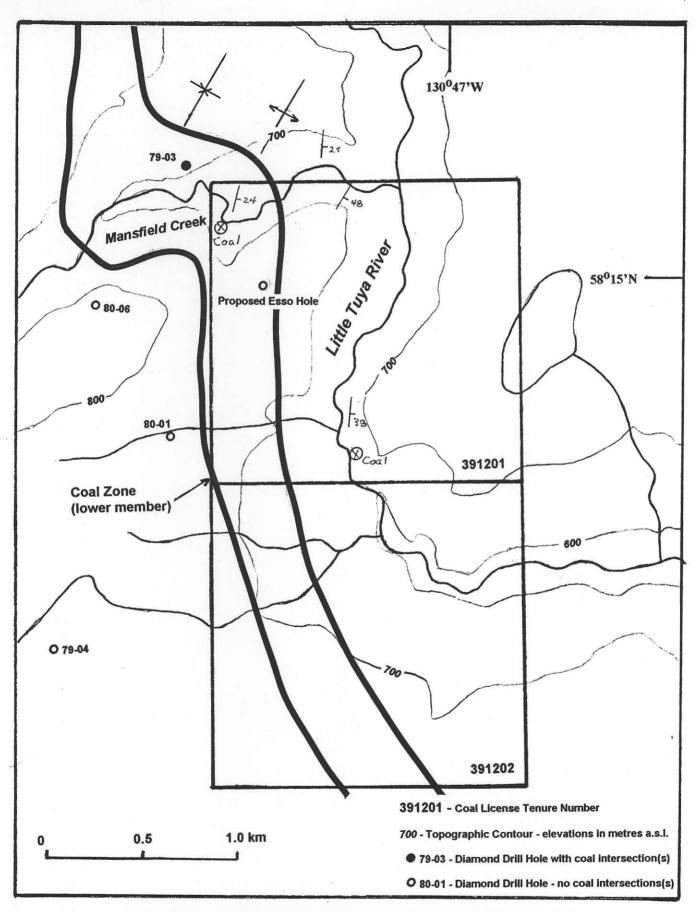


FIGURE 5 - CONSOLIDATED GLOBAL MINERALS LTD.
TUYA RIVER COAL LICENSES

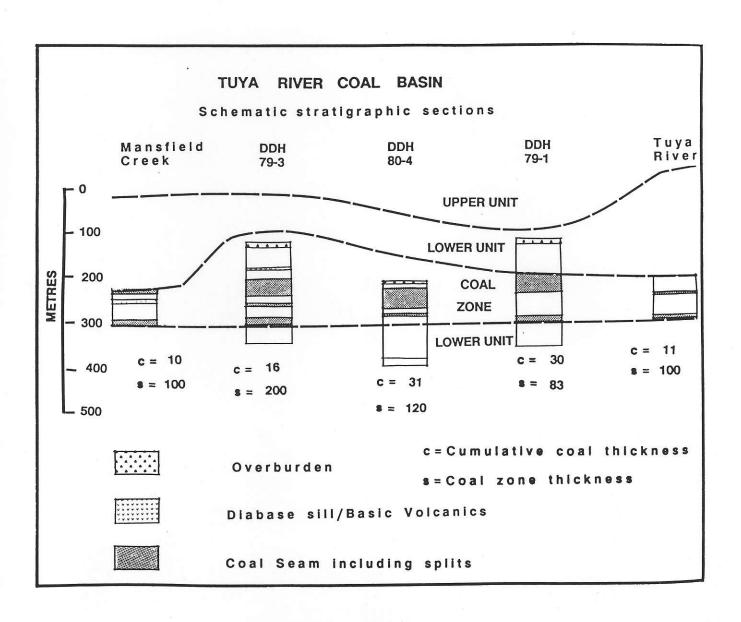


FIGURE 6 - (after Ryan, 1991)