

TELKWA PROJECTPROJECT DESCRIPTION:

The Telkwa thermal coal property is located in west-central B.C., about 20 km south of the town of Smithers and 14 km south-southwest of the town of Telkwa. There is good gravel road access to the property from Telkwa. Both Telkwa and Smithers are on main road and C.N. Rail routes connecting the port of Prince Rupert, about 370 km to the west, and Prince George to the east.

Coal mining has been carried out almost continuously on the Telkwa property since 1918. Mining has been from four small underground mines and a number of small surface pits. A total of about 400,000 tonnes has been extracted. Bulkley Valley Coal Ltd. is currently mining only a few hundred tonnes of coal per year for the local domestic heating market.

All previous and current mining operations have been on three crown-granted lots held by Bulkley Valley Collieries Ltd. (Doug Carnahan) on which Bulkley Valley Coal Ltd. (Lloyd Gething) is mining under an agreement which can be terminated on short notice by Bulkley Valley Collieries Ltd. Bulkley Valley Coal Ltd. holds directly two coal licences adjacent to the crown grants and will be issued an additional eleven contiguous licences in the near future. Cyprus Anvil Mining Corporation has entered into an agreement with Bulkley Valley Coal Ltd. whereby Cyprus Anvil can acquire all the coal licences and an assignment of the Bulkley Valley Collieries agreement. Attempts to date by both Cyprus Anvil and Bulkley Valley Coal Ltd. to conclude a reasonable long term agreement with Bulkley Valley Collieries have been unsuccessful.

The property is underlain by the Jurassic - Lower Cretaceous Hazelton Group, consisting predominantly of volcanics, but with a number of interbedded continental sedimentary formations with associated coal seams. Within the project area, at least five seams greater than 2.5 m thick are known. In the area of exploration interest, there is very little bedrock exposure, and faulting, as encountered in the old underground workings, suggests structural complexity. Correlation of coal seams between the old underground workings is uncertain. However, based on old mine and exploration drilling records and on some recent new coal seam discoveries, a number of exploration target areas have been defined, in which there is potential for the discovery of significant surface and/or underground mineable coal reserves.

PROPOSED PROGRAM 1978:

1. Continued efforts to negotiate a satisfactory agreement with Bulkley Valley Collieries Ltd. on the central three crown granted lots.
2. Preparation of new topographic base maps using existing B.C. Government photography.
3. Compilation of all available old mine and exploration data.
4. Detailed geological mapping of the property.
5. Bulldozer and/or backhoe trenching to expose coal seams for sampling and to aid in mapping in areas of little natural bedrock exposure.

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6. Proximate analyses and preliminary washability testing of coal samples.
7. Limited diamond drilling in area(s) chosen on basis of above work.

JUSTIFICATION:

There is sufficient area of good exploration potential on the Telkwa coal licences (13 licences) for the discovery of mineable reserves in the order of tens of millions of tonnes. This is illustrated by the following examples.

A recently-discovered flat lying coal seam is thicker (4.3 m) and of better quality (4.4% raw ash; 4% R.M.; 7,720 kilocal./kg) than any seam previously encountered on the property. Two additional seams (3.2 m, 2.4 m) occur within the overlying 30 m of section. A single 4 m flat lying seam within the area of one coal licence (1 square mile) would contain approximately 14,500,000 in-situ tonnes.

At another location on the property, an old (approximately 1950) isolated exploration diamond drill hole is reported to have intersected 10.7 m of coal to a depth of 33.5 m in 5 seams, including 2.4 m, 2.9 m, and 3.0 m seams. A pit in this area with dimensions 1,500 m x 460 m x 33.5 m deep would contain approximately 10,000,000 tonnes at a stripping ratio of less than 2:1 (m³/raw tonne).

The property is well situated with respect to existing local infrastructure (road, rail, towns, manpower availability) and is in a good position to supply a developing export thermal coal market through the Port of Prince Rupert. It is probable that bulk loading facilities will be available at Prince Rupert in the foreseeable future.

to December 31, 1978, covering a period of 9 months. Total estimated costs are \$ 56,320, an average of \$ 6.77 per acre.

GEOLOGICAL MAPPING Yes No Estimated cost \$ 12,000.00

	Area (Acres)	Scale	Estimated Time
Reconnaissance			
Detail: Surface	10,240	1:5,000	July, August, 1978
Underground			
Other			

GEOPHYSICAL OR GEOCHEMICAL SURVEYS Yes No Estimated cost \$ _____

Method _____ Line miles _____

OTHER SURVEYS Yes No Estimated cost \$ 6,000.00

Grid _____ Topographic _____ Other _____

ROAD CONSTRUCTION Yes No Estimated cost \$ 1,000.00

Length: On licences Uncertain, say 5,000' Access (off licences) _____
 (most work will use existing access roads and old bulldozer trails. Minimal new access may be required to new drill sites).

SURFACE WORK Yes No Estimated cost \$ 2,000.00

	Length	Licence Location
Trenching	Say 500'? (most trenching will consist of small backhoe pits along roads, and cleaning off of existing road cut banks.)	Lots Nos. 223, 226, 227, 388, 390, 392, 393
Seam-tracing		
Crosscutting		
Other		

UNDERGROUND WORK Yes No Estimated cost \$ _____

Test adits: Number _____ Average length _____ Total footage _____

Other workings _____ Total footage _____

DRILLING Yes No Estimated cost \$ 30,000

	Hole Size	Number of Holes	Total Footage
Core: Diamond <input checked="" type="checkbox"/> Wireline <input checked="" type="checkbox"/>	HQ	6	1,500
Rotary: Conventional <input type="checkbox"/>			
Reverse circulation <input type="checkbox"/>			
Other			

LOGGING, SAMPLING, AND TESTING (check) Yes No Estimated cost \$ 1,000.00

Lithology: Drill samples Core samples Bulk samples

Logs: Gamma-Neutron Density Other

Testing: Prox. analysis FSI Washability

Carbonization Petrographic Plasticity Other

CONTRACTORS

Name	Service	Estimated Contract Amount
Contracts not yet finalized.	Topographic mapping, orthophotos	6,000.00
	Bulldozing, backhoe trenching	3,000.00
	Coal analysis, washability testing	1,000.00
	Diamond Drilling	30,000.00

REMARKS

Additional expenditures not included above - Camp Maintenance 2,320.00

- Misc. Transp. 2,000.00

OPERATIONS Work to be supervised by T. J. Adamson Coal Geologist
 Position CYPRUS ANVIL MINING CORPORATION
 Is this person a registered or licensed Professional Engineer in British Columbia? Yes No

NOTE—The purpose of this plan of operations is to clarify the applicants' intentions, and all details must be specified; where space is insufficient, attach supplementary sheets. The plan must be supported by such maps as required to show clearly the areas and types of work proposed.