

K-SHELL-LODGEFOLK 75(1)A.

PRELIMINARY REPORT.
COAL LICENCES.

Nos. 490 to 495 INCLUSIVE.

CROWS NEST INDUSTRIES LTD.

OPEN FILE

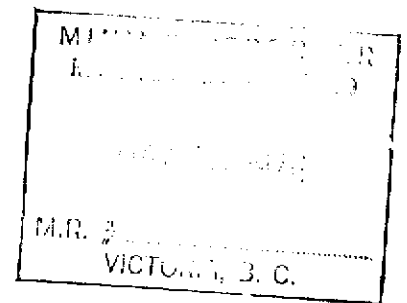
GEOLOGICAL BRANCH
ASSESSMENT REPORT

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pt 1 of 2

OPEN/AVAILABLE

PRELIMINARY REPORT COAL LICENCES

NOS. 490 TO 495 INCLUSIVE
KOOTENAY DISTRICT



CROWS NEST INDUSTRIES LIMITED
FERNIE, B. C.

MAY 7, 1976

INTRODUCTION

Crows Nest Industries Limited (C.N.I.) of Fernie, British Columbia holds coal licences 490 to 495 inclusive near the headwaters of Lodgepole and McLatchie Creeks, some 18 miles southeast of Fernie, B. C. (Lat. $49^{\circ}20'$, Long. $114^{\circ}42'$, Map ref. 82G/SE.) Total area of the 6 licences is 3345 acres. Application to Group Licences 490 - 495 incl. which have an anniversary date of May 16 accompanies this report.

During the 1975 summer season, exploration consisting of hand trenching only was undertaken on and adjacent to coal licence no. 492 and reported pursuant to Section 8, Coal Mines Regulation Act January 19, 1976.

ACCESS

Access to the prospect area is via Lodgepole Forest Development Road (to mile 18 as measured from Morrissey station near Southern Trans Provincial Highway No. 3) and then via C.N.I.'s McLatchie Creek Logging road (3½ miles) where a Kaiser exploration road turns off to the west and proceeds to the summit at an elevation of about 6800'. (See Figure 1)

WORK DONE

TOPOGRAPHIC MAPPING

A base map scale 1": 1000' showing 50 foot contours was compiled by Kenting Earth Sciences Ltd., from existing air photographs.

FIELD WORK

Aside from cleaning out Kaiser Resources access road to the ridge summit, no mechanical equipment was employed. All trenching and tracing of seams was accomplished by hand methods. Geologic mapping was confined to observing a few points along seam outcrops as shown on the accompanying map. Seven hand trenches aggregating 120 feet in length and varying in depth from 3 feet to 7 feet exposed five coal seams. These were all emplaced along one ridge where a stratigraphic section of 551 feet was measured and found to contain a total coal thickness of about 41 feet. No coal samples were taken. Figure 8 is a photograph of the trenched and measured ridge.

CONCLUSIONS & RECOMMENDATIONS

- 1) In the small area examined it appeared that a portion of the lower Kootenay was cut off by faulting. Correlation of the Kaiser exposures to the north with C.N.I. work was not possible.
- 2) There are at least 3 coal seams of mineable thickness in the section measured. These dip-slope westerly into the Fernie Coal Basin, thus providing a relatively large area of low cover. See Figure 7
- 3) Further trenching of ridges running at right angles to the main strike-ridge is necessary to determine the thickness and lateral trends of seams.
- 4) Hand trenching and surface mapping will provide a basis for providing a preliminary assessment of the coal potential, prior to embarking on a more detailed exploration program.

STRATIGRAPHIC SECTION MEASURED FROM TOP OF RIDGE DOWN
TO BASAL SANDSTONE (MOOSE MOUNTAIN MEMBER)

Thickness
Interval

Lithology

185'	Interbedded Shales and Sandstones
	<u>Seam #7 (Trench #1, length 14' ft.)</u> 75 TO
0'-11"	Roof - blocky brown shale
0'-4"	Blocky black shale
0'-5"	Friable, carbonaceous shale
0'-4"	Coal - soft and dirty
9'-4"	Friable, carbonaceous shale
	Coal - clean and medium hard
	Floor - blocky gray shale
30'-0"	Sandstone underlain by blocky shale and siltstone.
	<u>Seam #6 (Trench #2, length 12 ft.)</u> 75 TO
5'-0"	Roof - Siltstone
2'-8"	Shale and coal stringers 75% and 25% respectively.
	Coal - containing three - 2" shale stringers.
	Floor - dark shale
75'-0"	Sandstone underlain by shale.
	<u>Seam #5 (Trench #3, length 40 ft.)</u> 75 TO
1'-0"	Roof - blocky brown shale
0'-8"	Coal (75%) with shale stringers (25%)
1'-11"	Blocky black shale
0'-4"	Coal - medium hard
13'-8"	Shale lenses - friable gray
0'-11"	Coal - very clean, medium hard
1'-0"	Friable brown shale
0'-6"	Coal
1'-3"	Friable brown shale
0'-6"	Coal - soft, clean
	Friable carbonaceous shale
	Floor - Siltstone
5'-0"	Shale

Thickness
Interval

Lithology

Trench #4, length 20 ft., depth 7 ft.

Abandoned - appear to lie in fault zone

15'-0" Soil - like material

Trench #5, length 10 ft.

Abandoned - also in faulted area - only small amounts of coal found.

25'-0" Sandstone - forms a prominent mound above Trench #2 underlain by carbonaceous shale.

Seam #4 (Trench #6, length 27 ft.)

Roof - blocky gray shale
Mixture of finely banded shale and coal
Coal - soft
Friable gray shale
Shale with coal stringers (50% each)
Coal - clean, medium hardness
Rusty Siltstone
Coal - clean, hard
Rusty siltstone
Coal - clean, hard
Shale
Coal - clean, hard
Oolitic hematite
Coal and shale (50% each)
Floor - shale

25'-0" Blocky gray shale

85'-0" Sandstone

Seam #5 (Trench #7, length 3 ft.)

1'-0" Coal

10'-0" Shale - blocky gray
Basal Kootenay (Moose Mountain) Sandstone

550.9' Total section measured
40.8' Total coal in section
126.0' Total length of Trenches



Figure 1

View to north of ridge where stratigraphic section was measured, showing Kaiser Resources' exploration and access roads.



Figure 2

View of ridge where stratigraphic section was measured from top of ridge downward to the second prominent topographic break (Moose Mtn. Sandstone). A fault passes through the notch above snow patch.



Figure 3

Photo taken from a point on top of the basal Kootenay Sandstone (Moose Mtn Member) looking west towards the ridge summit showing several hand trenches in coal seams.

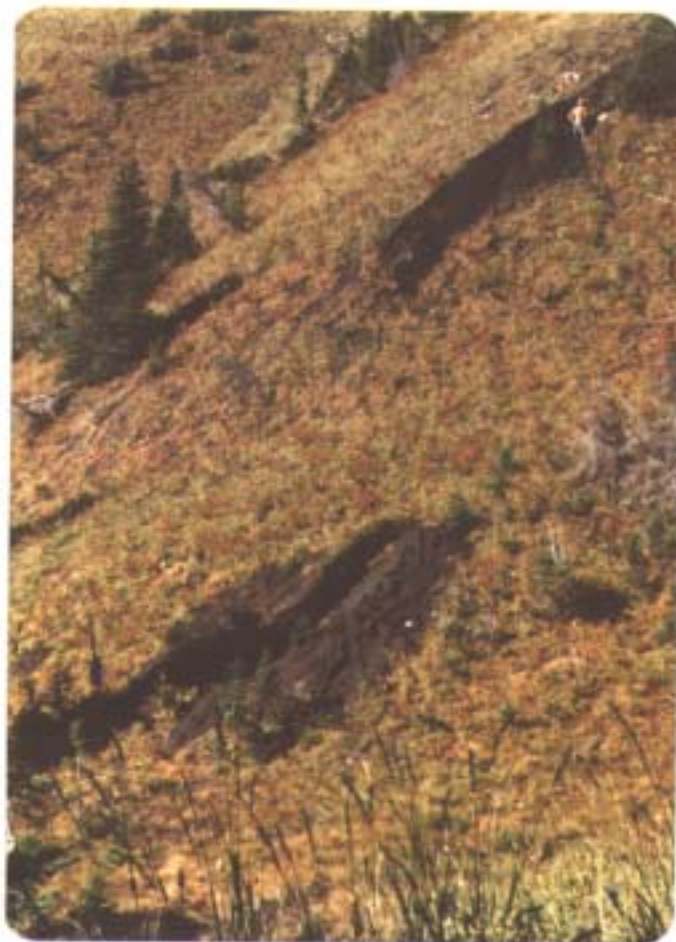


Figure 4

Trenches 3, 4 & 5 (top to bottom) Trench No. 3
is in Seam No. 5 as numbered from the base.



Figure 5

Trench No. 6 (Seam No. 4)



Figure 6

Trench No. 7 (Seam No. 5) lowest seam.



Figure 7

View to west from eastern rim of Fernie Coal Basin.
Strata seen through trees in foreground lie parallel
to the hillside.

Fernie, British Columbia
Telephone: (604) 423-4464

CROWS NEST INDUSTRIES LIMITED

May 10, 1976

J. J. CRABB
VICE PRESIDENT -
EXPLORATION



Dr. James T. Fyles
Deputy Minister of Mines
Department of Mines and
Petroleum Resources
Victoria, B. C.

Dear Sir:

RE: Coal Licences 490 - 495
Lodgepole Creek Area K.D.

We are pleased to submit the enclosed report entitled "Preliminary Report Coal Licences 490 to 495 K.D." in support of our Application to Extend Term of Licence dated May 7, 1976 pursuant to Sections 19 and 21 of the Coal Act 1974.

The report covers only a limited amount of work which falls short of the Act requirements.

It is our intention to undertake further field work of a similar nature this season which could provide us with a better basis for assessing the area's coal potential.

GENERAL OFFICES
FERNIE, B. C.

MINERALS DIVISION
FERNIE, B. C.

FOREST PRODUCTS DIVISION
MAIN OFFICE
FERNIE, B. C.

ELKO OPERATIONS
ELKO, B. C.

Yours very truly,

J. J. Crabb

JJC/k1
Encls.

K-SHELL- LODGEPOLE 75(2)A.

FLAPS

CROWS NEST INDUSTRIES LTD.

423

pt. 2 of 2



- LEGEND
- BUILDING
 - ROADS
 - WAGON ROAD (4-WHEEL DRIVE)
 - TRAIL
 - TREE LINE
 - SINGLE TREE
 - STREAM
 - RIVER
 - CONTOURS
 - SPOT ELEVATION
 - MINING AREA BOUNDARY
 - HORIZONTAL CONTROL POINT
 - PHOTO CENTRE

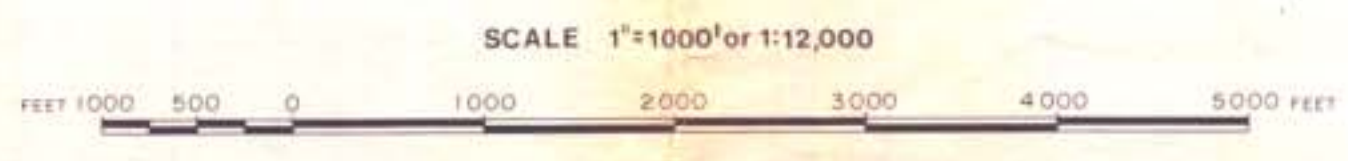
PREPARED FOR

CROWS NEST INDUSTRIES LIMITED

TOPOGRAPHIC MAP OF

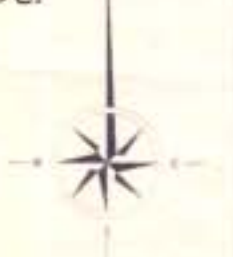
LODGEPOLE COAL AREA

BRITISH COLUMBIA



Contour Interval 50 feet
Contours in wooded areas are approximate only
Elevations in feet above Mean Sea Level

- SEAM OUTCROP APPROX.
- " " ASSUMED
- X HAND TRENCH
- MEASURED SECTION
- TOP OF BASAL SANDSTONE
- PROMINENT CONGLOMERATE
- FAULT - APPROX. LOC.



NOTE: Horizontal and Vertical Information
Derived From N.T.S. 1:50,000 Maps
ARBITRARY GRID: No Fixed Origin

DATE: November 1975.

1

KENTON EARTH SCIENCES LIMITED
Vancouver, British Columbia

423