K-Shell Chauncey Ridge 81(1)A

...ANCH
...ORT

CHAUNCEY CREEK
PROSPECT

NORTH BLOCK
GROUP 214

383

REPORT ON COAL LICENCES
NOS. 265, 266 & 267

1981

383

Ridge
CHAUNCEY CREEK PROSPECT

NORTH BLOCK PROJECT

REPORT ON COAL LICENSES

NOS. 264 to 276 INCLUSIVE

OPERATED BY: CROWS NEST RESOURCES LIMITED

HELD BY: SHELL CANADA RESOURCES LIMITED

KOOTENAY LAND DISTRICT

SOUTHEASTERN BRITISH COLUMBIA

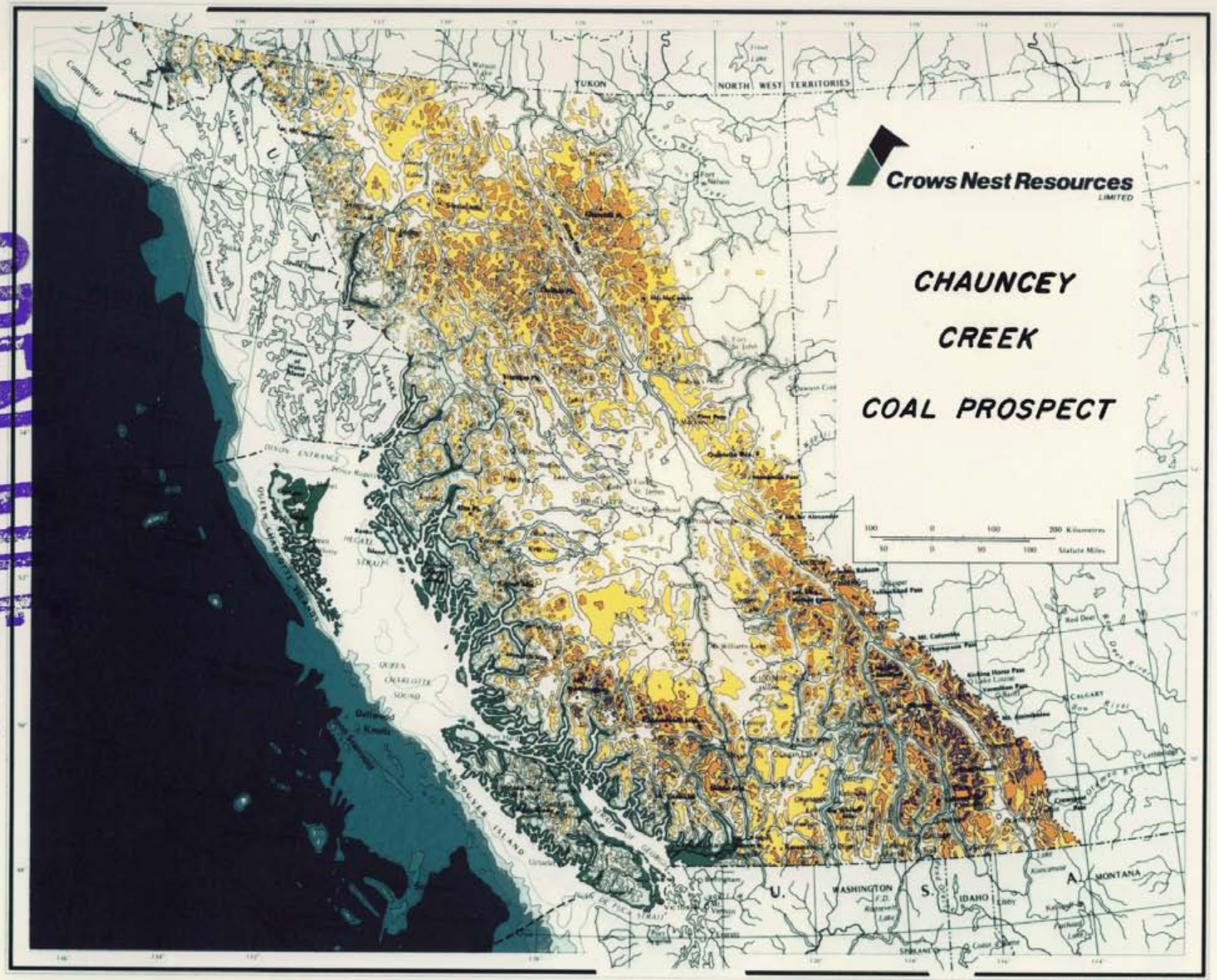
NTS MAP: 82J/2

50° 02' to 50° 08' NORTH LATITUDE

114° 45' to 114° 50' WEST LONGITUDE

Author: H. Kucera, B.Sc.
February 1982

5/BWc.0



PREMIER PROPERTY

K-Shell Chauncey Ridge 82 (1) A

Crows Nest Resources LIMITED

Eau Claire Place, 525 · 3rd Avenue S.W., Calgary, Alberta (403) 232-4355
P.O. Box 2699, Station M, Calgary, Alberta T2P 2M7 Telex 03-822505

January 31, 1982

Ministry of Energy, Mines and Petroleum Resources
British Columbia

Enclosed please find our report on the Chauncey Ridge North Block Project Coal Licence Numbers: 265, 266, 267

Dr. Barry D. Ryan supervised and directed the 1981 field exploration program on the North Block Projects. Under his supervision geologic exploration was carried on Chauncey Ridge by Hank Kucera. Mr. Kucera was assisted in mapping by Ian Piwek a geology student from the University of Alberta. This report on field activities was prepared by Mr. Kucera.

Dr. B. D. Ryan received his B.Sc. Honours degree in Geology from the Univeristy of British Columbia in 1967 and his PHd from the same University in 1973. He had worked for a number of mining companies before accepting a position with Crows Nest Resources Limited in April 1981.

Mr. H. A. Kucera graduated from the University of British Columbia with a B.Sc. in Geology in May 1981. He has spent several field seasons working in coal geology for B.C. Coal and Crows Nest Resources.

I consider the above geologists well qualified to expedite the geologic field work and report preparations involved in this project. I am satisified that the attached report dated January 1982, has been competently prepared and contains all pertinent information.

Yours very truly,

H. G. Rushton, P. Geol.
Vice President - Exploration

5/BWc.0

CONFIDENTIAL
OPEN-FILE

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CHAUNCEY CREEK
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5/BWc.3

1.0 SUMMARY

The North Block or Group #214 is comprised of B.C. Coal Licences Nos. 264 to 276 inclusive and has an areal extent of 3173 hectares. The Chauncey Creek Prospect occupies licences 265, 266, 267 of the North Block Group. The licences are held by Shell Canada Resources Limited and operated by its wholly-owned subsidiary Crows Nest Resources Limited.

The property is located in the Fording River Valley in the Rocky Mountains of Southeastern British Columbia. The prospect is 1126 kilometres by rail from Robert Bank Coal Port and 60 kilometres north of Sparwood, British Columbia. Chauncey Creek is 4 kilometres south of Fording Coal and 8 kilometres north of the Greenhills mine of B.C. Coal, presently under construction.

The Chauncey Creek prospect contains an almost complete section of the Kootenay Group from the Basal Moose Mountain Sandstone to the Elk Sandstone which caps the ridge top. This stratigraphic sequence is folded by the north-south trending Alexander Creek Syncline and crops out on both flanks of the ridge. The coal bearing Mist Mountain has normal stratigraphic thickness of 480 metres but this has been thickened to a maximum of 700 metres by the Fording River Thrust.

There are a minimum of 8 seams present in the coal bearing section on Chauncey Ridge giving a cumulative thickness of 33 metres. These seams vary from 1.0 to 7.8 metres in thickness and samples taken indicate medium volatile bituminous coal.

The 1981 field season included detailed mapping (1:2000) of the ridge on both slopes to increase correlation and obtain more data on coal seam thickness. To aid in mapping 4 machine trenches and 6 hand trenches were excavated to expose outcrop. These trenches were later infilled and seeded. The locations of the trenches were surveyed by Shelltech Canada Limited.

The coal potential of the Chauncey Ridge Prospect exceeds 85 million tonnes. Open pit mining is a remote possibility due to the high (20:1 bank cubmic metres waste per tonne of coal) overburden ratio. Underground hydraulic mining of the lower thick seams may become feasible earlier.

The southwestern edge of the prospect seems to warrant immediate attention and further exploration. There, partly on Crows Nest Land and partly on B.C. Coal land a potential exists for some 10 to 20 million tonnes of lower (certainly less than 10:1) overburden ratio open pit mineable coal. This area is immediately above the existing railway and 8 kilometers from B.C. Coal's plant presently under construction.

5/BWc.6

2.0 INTRODUCTION

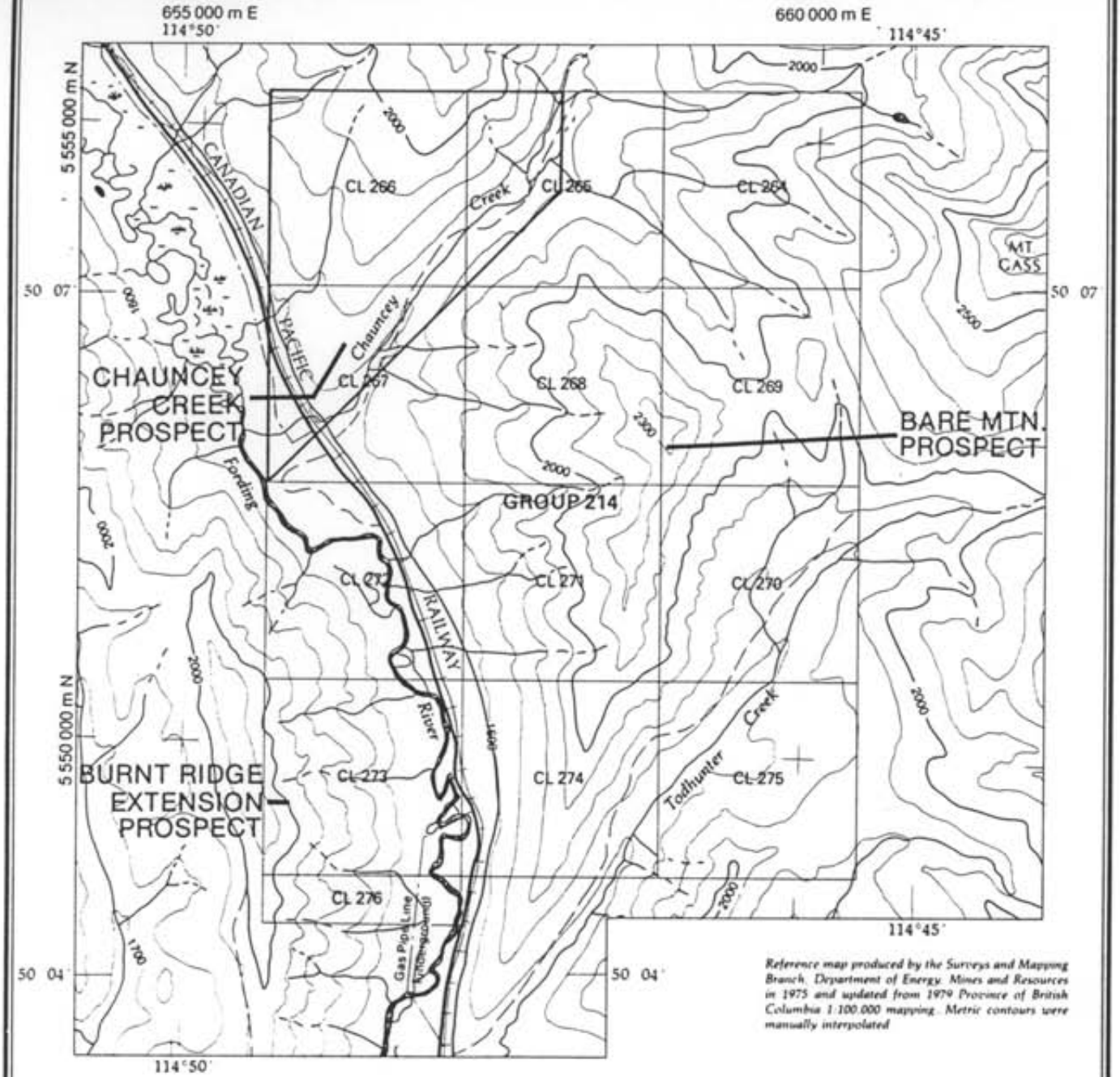
2.1 Coal Land Tenure:

Enclosure 1: Index Map to Coal Licences
Enclosure 2: Application to Extend Term of Licence
Enclosure 3: B.C. Coal Land Tenure standing North Block Group #214

The North Block or Group #214 is comprised of thirteen B.C. Coal licences (No. 264-276 inclusive) covering 3173 hectares held by Shell Canada Ltd., operated by its wholly owned subsidiary, Crows Nest Resources Limited.

This report deals with work done on the Chauncey Creek Prospect during the last term of licence. Chauncey Ridge is Part of the North Block Project and occupies Coal licence #265, 266, and 267 of Group #214.

5/BWc.7



Reference map produced by the Surveys and Mapping Branch, Department of Energy, Mines and Resources in 1975 and updated from 1979 Province of British Columbia 1:100,000 mapping. Metric contours were manually interpolated

Km. 0.5 0 0.5 1.0 1.5 2.0 Km

Mi. 0.5 0 0.5 1.0 1.5 Mi

Contour Interval 100m

Transverse Mercator Projection

Universal Transverse Mercator Grid Zone 11

T.N. ★ 1 44 Grid North

Legend

- Road: Highway, Main road
- Road: Loose surface, Dry weather
- Track or trail
- Railway
- River
- Stream
- Contours 2000 1500
- Licence boundary

Crows Nest Resources Limited
EXPLORATION

CHAUNCEY CREEK PROSPECT
S.E. BRITISH COLUMBIA

INDEX MAP TO COAL LICENSES

NTS 82J/2

AUTHOR H. KUCERA	SCALE 1:50 000	ENCLOSURE NO
DATE 82.01	REVISED	AA-805
TO ACCOMPANY		

Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources

APPLICATION TO EXTEND TERM OF LICENCE

I, LESLIE GRAMANTIK (Name) agent for SHELL CANADA RESOURCES LIMITED (Name)

P.O. BOX 100 (Address) CALGARY (Address)

ALBERTA T2P 2M7

Valid FMC No. 244642

hereby apply to the Minister to extend the term of Coal Licence(s) No(s). 264-276

13 LICENCES, GROUP NO: 214, 3173 HECTARES

for a further period of one year.

2. Property name BARE MOUNTAIN, BURNT RIDGE & CHAUNCEY RIDGE, KOOTENAY LAND DIST.

3. I am allowing the following Coal Licence(s) No(s). to forfeit N/A

4. I have performed, or caused to be performed, during the period FEBRUARY 1, 1981 to JANUARY 31, 1982, work to the value of at least $ 816,494.00

on the location of coal licence(s) as follows:

CATEGORY OF WORK	Licence(s) No(s).	Apportioned Cost
Geological mapping	264,265,267,271-273,276	96,859
Surveys: Geophysical	-	-
Geochemical	-	-
Other	265,266,268,272,273,276	5,131
Road construction	265,268,273	145,980
Surface work	265,266,268,272,273	44,638
Underground work	-	-
Drilling	265,268,272,273	419,188
Logging, sampling, and testing	265,268,272,273	66,785
Reclamation	265,268,272,273	24,663
Other work (specify)	-	-
Off-property costs GEOLOGICAL REPORTS		13,250

5. I wish to apply $ 816,494.00 of this value of work on Coal Licence(s) No(s). 264 - 276

6. I wish to pay cash in lieu of work in the amount of $ N/A on Coal Licence(s) No(s).

7. The work performed on the location(s) is detailed in the attached report entitled THE GEOLOGICAL REPORTS WILL BE SUBMITTED IN 90 DAYS

JANUARY 27, 1982 (Date)

Gramantik (Signature)

ASSISTANT LANDMAN (Position)

(FORMS AND REPORT TO BE SUBMITTED IN DUPLICATE)

GEOLOGICAL MAPPING Yes ☒ No ☐

	Area (Hectares)	Scale	Duration
Reconnaissance			
Detail: Surface	2,704		190 MAN DAYS
Underground			
Other* (specify)			

Total Cost $ 96,859

GEOPHYSICAL/GEOCHEMICAL SURVEYS Yes ☒ No ☐

Method
Grid
Topographic (LOCATION, LAND SURVEY)
Other* (specify)

Total Cost $ 5,133

ROAD CONSTRUCTION Yes ☒ No ☐

Length 4.7 KM (NEW) 0.8 KM (RE-OPEN) Width
On Licence(s) No.(s) 265,268,273
Access to

Total Cost $ 145,980

SURFACE WORK Yes ☒ No ☐

	Length	Width	Depth	Cost
Trenching (MACHINE)	3553.68 M	1M	1-2M	
Seam Tracing				
Crosscutting				
Other* (specify) (HAND)	187.9 M	0.5 M	0.5 - 1 M	

Total Cost $4,638

UNDERGROUND WORK Yes ☐ No ☒

	No. of Adits	Maximum Length	No. of Holes	Total Metres	Cost
Test Adits					
Other workings*					

Total Cost $

DRILLING Yes ☒ No ☐

	Hole Size	No. of Holes	Total Metres	Cost
Core: Diamond	HQ	5	2128.5	
Wireline				
Rotary: Conventional				
Reverse circulation				

Other* (specify)
Contractor D.W. COATES
Where is the core stored? ON SITE

Total Cost $419,188

LOGGING, SAMPLING, AND TESTING Yes ☒ No ☐

Lithology:	Drill samples	☐	Core samples	☒	Bulk samples	☐
Logs:	Gamma-neutron	☒	Density	☒		

Other* (specify) RESISTIVITY CALIPER

Testing:	Proximate analysis	☒	FSI	☒	Washability	☐
	Carbonization	☐	Petrographic	☐	Plasticity	☐

Other* (specify)

Total Cost $66,785

RECLAMATION Yes ☒ No ☐

Details Total Cost $24,663

OTHER WORK (Specify details) Yes ☐ No ☒ Cost

Total Cost $

OFF-PROPERTY COSTS Yes ☒ No ☐

Details GEOLOGICAL REPORTS Total Cost $13,250

Total Expenditures $816,494.00

Jan. 26/82
(Date)

R J F Konrad
(Signature)

MANAGER-ACCOUNTING CNRL
(Position)

*A full explanation of other work is to be included.

CHAUNCEY RIDGE, GROUP # 214

GEOLOGICAL MAPPING Yes ☒ No ☐

	Area (Hectares)	Scale	Duration
Reconnaissance			
Detail: Surface	600	1:2000	74 MAN DAYS
Underground			
Other* (specify)			

Total Cost $ 45,340

GEOPHYSICAL/GEOCHEMICAL SURVEYS Yes ☒ No ☐

Method
Grid
Topographic (LOCATION)
Other* (specify)

Total Cost $ 2,175

ROAD CONSTRUCTION Yes ☐ No ☒

Length Width
On Licence(s) No.(s)
Access to

Total Cost $

SURFACE WORK Yes ☐ No ☐

	Length	Width	Depth	Cost
Trenching	844.9	1 M	2 M	
Seam Tracing				
Crosscutting				
Other* (specify) (HAND)	162.9	0.5M	1 M	

Total Cost $ 13,725

UNDERGROUND WORK Yes ☐ No ☒

	No. of Adits	Maximum Length	No. of Holes	Total Metres	Cost
Test Adits					
Other workings*					

Total Cost $

DRILLING Yes ☐ No ☒

		Hole Size	No. of Holes	Total Metres	Cost
Core:	Diamond				
	Wireline				
Rotary:	Conventional				
	Reverse circulation				

Other* (specify)
Contractor
Where is the core stored?

Total Cost $

LOGGING, SAMPLING, AND TESTING Yes ☐ No ☒

Lithology: Drill samples ☐ Core samples ☐ Bulk samples ☐
Logs: Gamma-neutron ☐ Density ☐

Other* (specify)

Testing: Proximate analysis ☐ FSI ☐ Washability ☐
Carbonization ☐ Petrographic ☐ Plasticity ☐

Other* (specify)

Total Cost $

RECLAMATION Yes ☐ No ☒

Details Total Cost $

OTHER WORK (Specify details) Yes ☐ No ☒ Cost

Total Cost $

OFF-PROPERTY COSTS Yes ☒ No ☐

Details GEOLOGICAL REPORT Total Cost $ 3,480.

Total Expenditures $ 66,720

Jan. 29/82
(Date)

(Signature)

MANAGER - ACCOUNTING CNRL
(Position)

*A full explanation of other work is to be included.

CROWS NEST RESOURCES LIMITED (Exploration)

B.C. COAL LICENCES
TENURE STANDING

BLOCK: NORTH BLOCK
GROUP: #214

PROJECT: BARE MOUNTAIN, BURNT RIDGE, CHAUNCEY RIDGE

YEAR: 1981
DATE: JANUARY 1982

LICENCE			ACQ/ADM		RENTALS		REQUIREMENT WORK						BUDGET		EXP	POTL	REMARKS
NO.	LEGAL DESCRIPTION	AREA TOTAL AC/HA.	FEES YEAR	FEES $	ANNUAL $	TOTAL TO NEXT ANN. $ 10^3	EXPIRED $ 10^3	CURRENT YEAR LIC. YEAR	CURRENT YEAR $	PRE-FULFILMENT YEAR	PRE-FULFILMENT $	ANNIVERSARY DATE	CURRENT YEAR AFE	CURRENT YEAR $ 10^3	TOTAL $ 10^3	SHELL CLASS.	
11 LIC		3173	75	3,298	15,865	94.8	250.8	7	39,200	9+	1,134,820	JANUARY 31ST	-	-	4,713	Y	THE LICENCES ARE
264	LOT 6731	259															IN GOOD STANDING U
265	LOT 6732	259															JAN. 31, 1985 UNDER
266	LOT 6733	259															THE '74 COAL ACT A
267	LOT 6734	259															UNTIL JAN 31, 1991
268	LOT 6735	259															UNDER THE '78 COAL
269	LOT 6736	259															ACT, WITH $20.59
270	LOT 6737	259															EXCESS CREDIT FOR
271	LOT 6738	259															THE SUBSEQUENT TER
272	LOT 6739	259															
273	LOT 6740	259															
274	LOT 6741	259															
275	LOT 6742	259															
276	LOT 6745	65															
				WORK DONE	PRIOR TO '78	1978	1979		1980		1981						
				$	-	93,107	15,279		172,422		816,494						

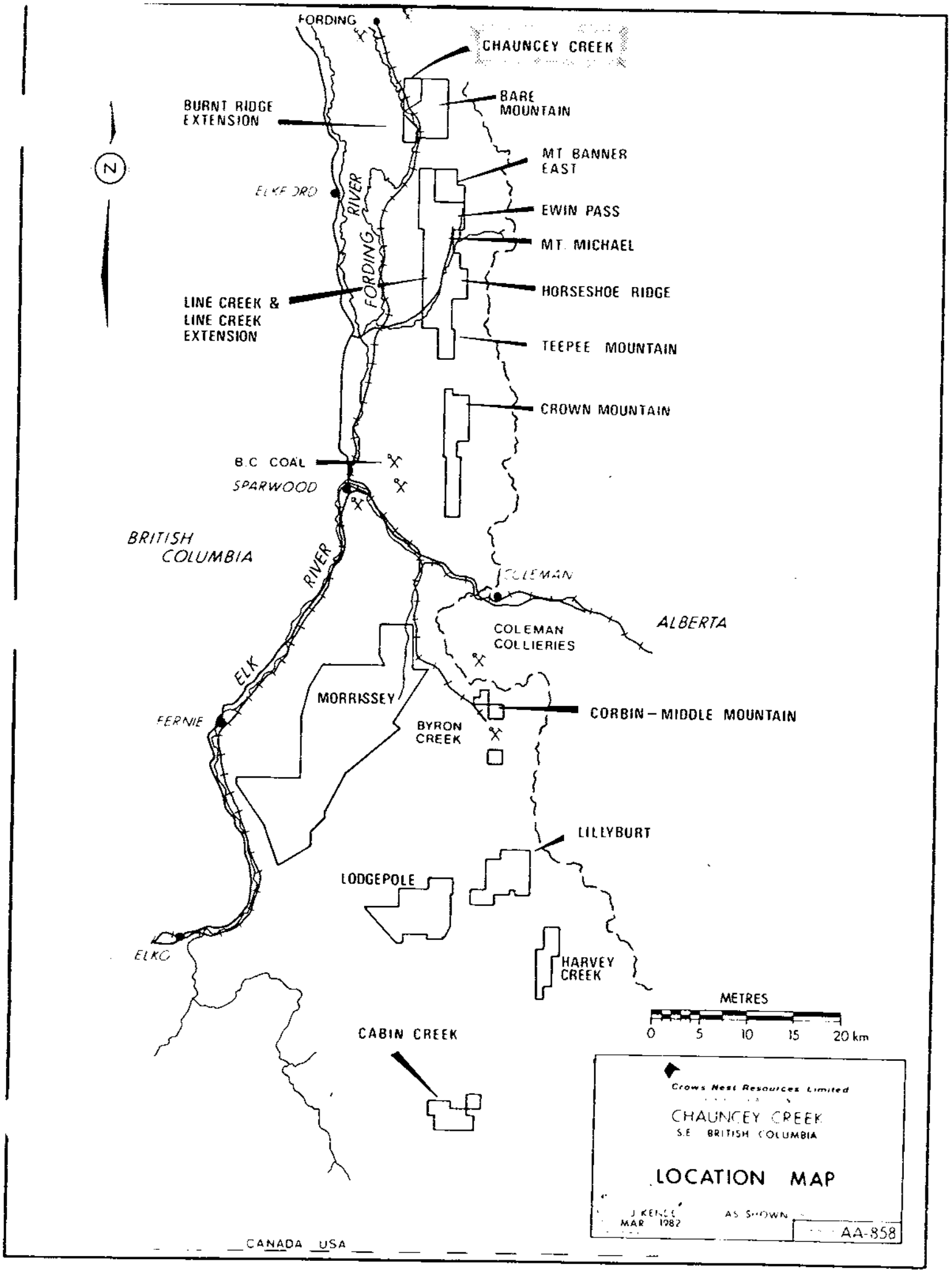
BA : 312

2.2 Location and Physiography

Enclosure 4: South East B.C. Location Map

The Chauncey Creek Prospect is located in the Front Ranges of the Rocky Mountains of southeastern British Columbia. More specifically, Chauncey Ridge is situated on the east side of the Fording River valley, nine air-kilometers northeast of Elkford and three air-kilometers south of the Fording Mine Operations. Chauncey Ridge is 1126 km by rail from the coal handling facilities of Roberts Bank near Vancouver, B.C.

The project area consist of a North-South trending ridge with a steep east dipping slope and a shallow west dipping slope. The ridge is bound on the east by Chauncey Creek and on the west by the Fording River. The east slope is mainly open grassland cut by prominent gullies with seasonal stream flow. The west slope of Chauncey Ridge has abundant coniferous tree cover and has four substantial drainages with year round water flow.

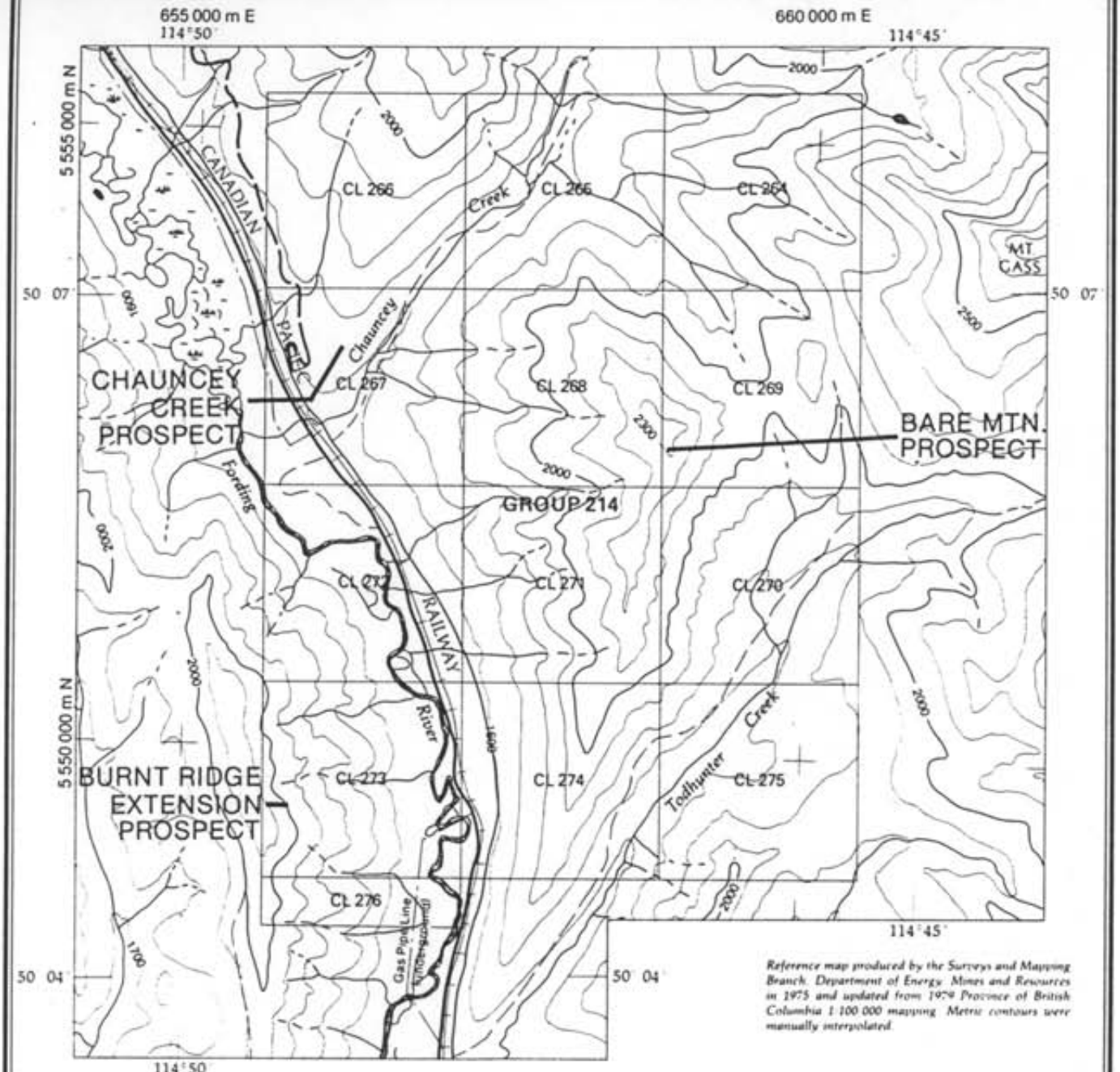

FORDING
CHAUNCEY CREEK
BURNT RIDGE EXTENSION
BARE MOUNTAIN
MT BANNER EAST
N
ELKFORD
RIVER
FORDING
EWIN PASS
MT. MICHAEL
LINE CREEK & LINE CREEK EXTENSION
HORSESHOE RIDGE
TEEPEE MOUNTAIN
CROWN MOUNTAIN
B.C COAL
SPARWOOD
BRITISH COLUMBIA
RIVER
COLEMAN
ALBERTA
COLEMAN COLLIERIES
ELK
MORRISSEY
FERNIE
BYRON CREEK
CORBIN – MIDDLE MOUNTAIN
LILLYBURT
LODGEPOLE
ELKO
HARVEY CREEK
METRES
0 5 10 15 20 km
CABIN CREEK
Crows Nest Resources Limited
CHAUNCEY CREEK
S.E. BRITISH COLUMBIA
LOCATION MAP
J. KENCE
MAR 1982
AS SHOWN
AA-858
CANADA USA

2.3 Access:

Enclosure 5: Access Map

Access to the Fording River Valley is along a paved secondary road owned by Fording Coal Limited. This road originates in Elkford 22 km to the southwest. A C.P.R. spurline serving Fording Coal runs along the base of the west slope.

Access to the west slope was on a B.C. Coal Exploration road .5 km north of Chauncey Creek. This road was partially reclaimed in the 1981 field season. Access to the east slope is on an upgraded four wheel drive road along Chauncey Creek. This road also serves as access to North Bare Mountain, another Crows Nest Resources exploration prospect directly to the South.



Reference map produced by the Surveys and Mapping Branch, Department of Energy, Mines and Resources in 1975 and updated from 1979 Province of British Columbia 1:100 000 mapping. Metric contours were manually interpolated.

Km. 0.5 0 0.5 1.0 1.5 2.0 Km

Mi. 0.5 0 0.5 1.0 1.5 Mi

Contour Interval 100m
Transverse Mercator Projection
Universal Transverse Mercator Grid Zone 11

T.N.
1.44
Grid North

Legend

- Road: Highway, Main road
- Road: Loose surface, Dry weather
- Track or trail
- Railway
- River
- Stream
- Contours 2000 / 1500
- Licence boundary
- Access road (four wheel drive)

Crows Nest Resources Limited
EXPLORATION

CHAUNCEY CREEK PROSPECT
S.E. BRITISH COLUMBIA
ACCESS MAP

NTS 82J/2

AUTHOR H. KUCERA	SCALE 1:50 000	ENCLOSURE No.
DATE 82.01	REVISED	AA-806
Technicians		

3.0 WORK DONE

3.1 Work Done Previous to 1981:

The 1980 Crows Nest Resources exploration program was under the supervision of R.J. Morris. The exploration program included extensive trenching and detailed mapping on a scale of 1:5,000. A comprehensive report and detail geological map (1:5,000) were produced.

No exploration was undertaken on the North Block coal licences by Crows Nest Resources in 1979.

The 1978 Crows Nest Resources exploration program was under the supervision of J. Horachek. This program included reconnaisance mapping of the North Block Coal Licences. A comprehensive report accompanied by a 1:10,000 preliminary geological map was prepared.

A reconnaisance report by N.P. Elphinstone was compiled in 1951 which deals briefly with this area.

3.2 Scope and Objectives of Exploration in 1981:

The objectives of the exploration program on Chauncey Ridge in 1981 were:

- to produce detail geologic maps (1:2,000) of areas of mining potential, specifically the area on the west slope of Chauncey Ridge.

- to establish detail stratigraphic sections and to attempt correlating seams both along strike and across the major North-South trending fold axis (Alexander Syncline).

- to determine the thickness and location of coal seams by trenching.

- to provide preliminary indication of coal quality by analysis of trench samples.

3.3 Work Done in 1981:

Enclosure 9: Table of Trench Data
Enclosure 10: Location of Coal Seams over 1 meter

Detail mapping was carried out on a scale of 1:2,000 using topographic maps, air-photos and orthophoto coverage. Areas mapped included the east and west slopes of Chauncey Ridge in B.C. Coal licenses 265, 266 and 267.

Trenching:

6 hand trenches:	5 on east slope, 1 on west slope, for a distance of 162.9 metres.
4 machine trenches:	on B.C. Coal access road for a total of 844.9 metres.

All trenches were filled and machine trenches were seeded.

Sampling:

8 samples were procurred from hand trenches for proximate analysis. Samples were also procured from machine trenches for proximate analysis.

Survey:

Location survey was supplied for hand trenches by Shelltech Canada Ltd.

4.0 GEOLOGY

4.1 Regional Geology

Enclosure 1, Vol. 1; Table of Formations
Enclosure 5, Vol. 2; General Geological Map

Chauncey Ridge lies within the Elk Valley Coal Field and the coal licences contain a nearly complete section of the Kootenay Group from the basal Moose Mountain Member to the Elk Formation. Structurally the Chauncey Ridge property is centered on the Alexander Creek Syncline, also called the Fording River Syncline (D. Grieve 1980). The syncline plunges to the south, and bisects the prospect on a north-south trend. The Mist Mountain Formation is structurally thickened by the Fording River thrust which can be traced south to Bare Mountain and north to Eagle Mountain. This thrust is also referred to as the Ewin Creek thrust in a report done by the B.C. Ministry of Energy, Mines, and Petroleum Resources.

4.2 Stratigraphy

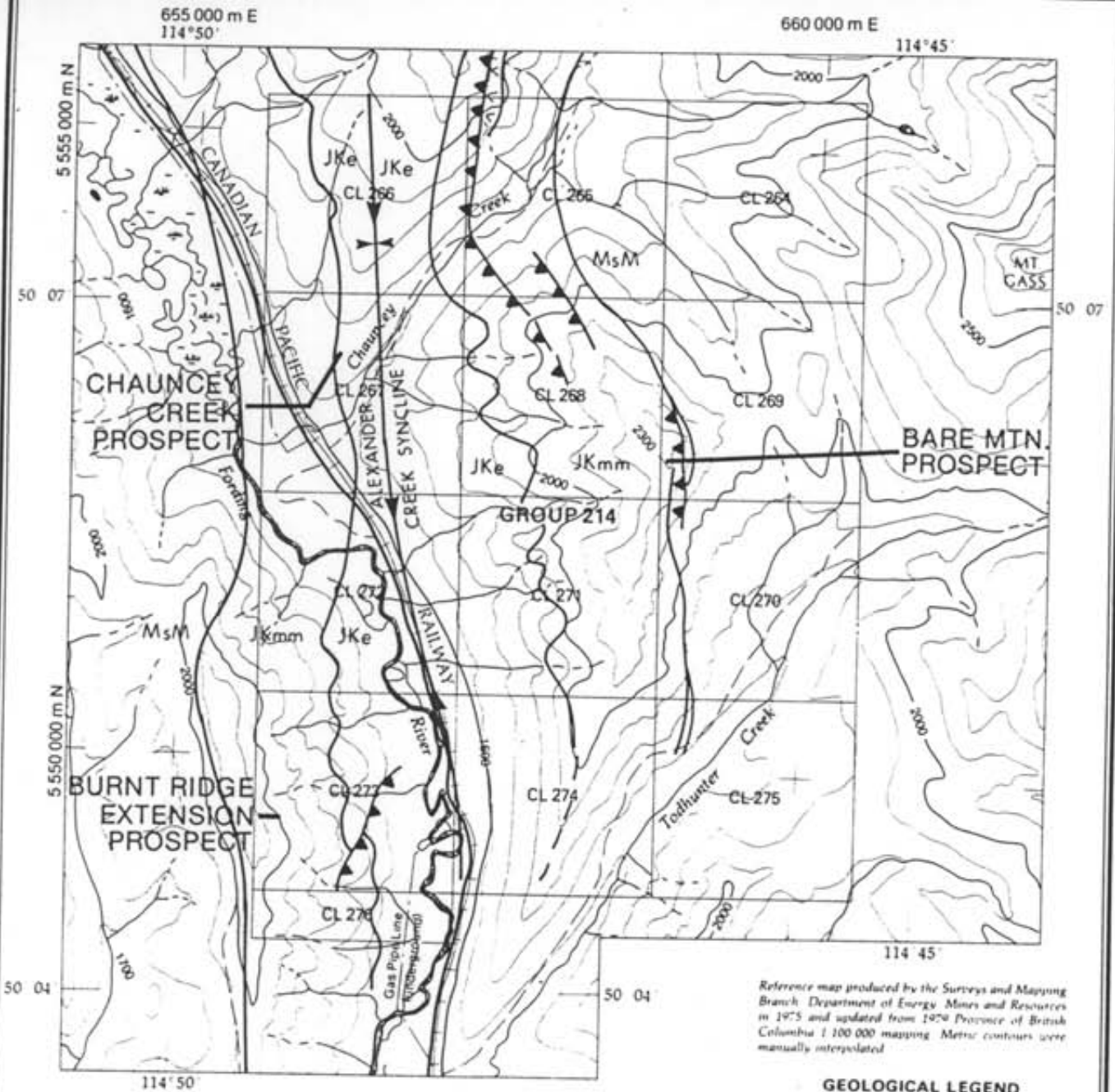
Enclosure 6: Compilation Geology Map
Enclosure 7: Table of Formations

The late Jura-Cretaceous Kootenay Group is subdivided into the Morrisey, the Mist Mountain and Elk Formations in an ascending order (Gibson, 1979).

The Morrisey Formation is a prominent cliff-forming unit which crops out on the lower eastern slopes and north of Crowsnest Coal licence boundaries on the western slopes. It is composed of the lower Weary Ridge Member (formerly the Orange Beds) and the upper Moose Mountain Member. The Weary Ridge Member is a fine to medium grained, finely laminated sandstone that weathers a distinct orange colour. This unit is more argillaceous and less well indurated than the overlying Moose Mountain Member. The Moose Mountain sandstone is the more prominent, cliff-forming member. It is generally coarse grained and massive with a salt and pepper texture. Large scale trough cross-bedding is sometimes evident. The Moose Mountain Member is an easily mappable horizon and all work done in 1981 was performed stratigraphically above it.

The Mist Mountain Formation directly overlies the Moose Mountain Member and appears to have a normal thickness of 480 metres. This thickness has been increased structurally to 680 metres on the West Slope and 760 metres on the East Slope. The normal section includes sandstones, siltstones and shales and at least 8 coal seams. The lower half of the Mist Mountain appears to contain three major channel sandstones and 4 thick coal seams. The upper half is devoid of prominent sandstones and contains less coal reserves.

The Elk Formation is the uppermost formation of the Kootenay Group and is the highest stratigraphic unit present on Chauncey Ridge. It consists of prominent sandstones with interbedded siltstones, shales and thin, lenticular coal seams. It is not conglomeratic in the project area. The Mist Mountain-Elk Formation contact was mapped as the base of the first thick prominent sandstone above the uppermost major continuous coal seam.



Reference map produced by the Surveys and Mapping Branch, Department of Energy, Mines and Resources in 1975 and updated from 1970 Province of British Columbia 1:100 000 mapping. Metric contours were manually interpolated.

GEOLOGICAL LEGEND

- JKe — Elk Formation
- JKmm — Mist Mtn. Formation
- MsM — Moose Mtn. Member
- Thrust Fault
- Syncline

Km 0.5 0 0.5 1.0 1.5 2.0 km

Mi 0.5 0 0.5 1.0 1.5 Mi

Contour Interval 100m
Transverse Mercator Projection
Universal Transverse Mercator Grid Zone 11

T.N.
1.44
Grid North

Legend

- Road: Highway, Main road
- Road: Loose surface, Dry weather
- Track or trail
- Railway
- River
- Stream
- Contours 2000 / 1500
- Licence boundary

Crows Nest Resources Limited
EXPLORATION

CHAUNCEY CREEK PROSPECT
S.E. BRITISH COLUMBIA

COMPILATION GEOLOGY MAP

NTS 82 J/2

AUTHOR H. KUCERA	SCALE 1:5000	ENCLOSURE No.
DATE 82.01	REVISED	AA-807
TO ACCOMPANY		

TABLE OF FORMATIONS (North Block)

ERA	PERIOD	FORMATION	LITHOLOGY	THICKNESS (M)
MESOZOIC	Lower Cretaceous	Cadomin Fm.	non-marine: sandstone, conglomerate and shale	360 - 1980
	LOWER CRETACEOUS AND JURASSIC	KOOTENAY GROUP: Pocaterra Creek	non-marine: sandstones, conglomerate siltstones and shales	
		KOOTENAY GROUP: ELK FORMATION	non-marine: interbedded medium to coarse grain sandstone, chert-pebble conglomerate with minor siltstone shale and uneconomic coals	150 - 490
		KOOTENAY GROUP: MIST MTN. FORMATION	non-marine and brackish: interbedded coal, siltstones, shales, and sandstones	380 - 480
		KOOTENAY GROUP: MORRISSEY FORMATION: Moose mtn. / Weary Ridge	non-marine: massive cliff-forming sandstone	40 - 60
	Jurassic	Fernie Fm.	marine: shales, siltstone, sandstone, limestone	180 - 380

(Adapted from Gibson 1979)

4.3 Geologic Structure:

The Alexander Syncline trends north-south along the west slope of Chauncey Ridge. The ridge crest and the upper slopes are composed of outcrops of the resistant Elk Formation, which forms the core of the syncline. The lower slopes encompass the complete Mist Mountain Formation and basal Moose Mountain sandstone which outcrop on both limbs of the syncline. The east slope displays large scale thrust-faulting which repeats the upper one-third of the Mist Mountain Formation. There is evidence of small scale thrust faults which may be related to the major Fording thrust. Also present are small scale normal faults which may have formed later. There is evidence on the West slope for thrust faulting including an overthickening of the Mist Mountain Formation. Again there is evidence of small scale normal faulting and local minor folding.

4.4 Coal Geology:

Enclosure : Seam Thickness Table

Work on the east slope of Chauncey Ridge indicates from 29 metres to 33 metres of cumulative coal thickness in a total section varying from 450 to 480 metres in normal thickness. In addition, approximately 220 metres of Mist Mountain Formation repeated by a major thrust Fault contains up to 4 additional coal seams, the lowest seam in the repeat being the thickest (3 metres). In the normal coal bearing Mist Mountain section the thickest seam encountered was Seam #2 with a thickness of 7.8 metres. Thickness and location of the lower seams were checked by trenching. Locations of the upper seams were taken from the 1980 report by R.J. Morris and confirmed during the field season. Correlation was enhanced by using the continuous cliff forming sandstones in the lower half of the coal bearing Mist Mountain Formation.

On the west slope of Chauncey Ridge, B.C. Coal constructed an exploration access road in 1979. This road goes up section from just above Seam #2 to within 150 metres stratigraphically of Elk Formation. A total of 4 seams over 1 metre in true thickness were exposed by machine trenching for a total average thickness of 15.32 metres. In addition, three seams less than 1 metre thick were exposed. A hand trench was also excavated in a railroad cut further down section uncovering a coal seam 6.52 metres in thickness. This work combined with that of R.J. Morris gives at least 24.54 metres of coal in an overthickened section of the Mist Mountain, with a probable addition 3.0 metres of coal from seams less than 1 metre in thickness.

SEAM THICKNESS TABLE

	Seam No.	Thickness East	Thickness West	Ave. Thickness
	1	2.4	bloom only	2.4
	2	7.8	6.52	7.15
	3 Lower	.6	1.8	1.20
	3	3.7	4.0	3.85
	4	4.42	4.5	4.46
RJM	5	bloom	3.5	3.50
RJM	6	4.36	bloom	4.36
RJM	7	5.35	bloom	5.35
RJM	8	.97	<.5	.75
SUB TOTAL		29.6	20.82	33.02
	Elk Seam	2.5 m	<1.0 m	1.5
TOTAL		32.1	21.82	34.52

* On the East slope 220 metres of Mist Mtn. have been repeated giving a possible 6.5 metres increase to total stratigraphic thickness of coal seam.

Enclosure 5, Vol. 1

5/BWc.27

5.0 MINEABILITY, COAL POTENTIAL, ECONOMIC ASSESSMENT

The Chauncey Creek Prospect is in the grass roots stage of development. Information gathered during the 1981 exploration season indicates that this will be a long term project.

The coal potential is in excess of 85 million tonnes but several factors limit mining feasibility. The high overburden ratio of 20:1 bank cubic metres of waste per tonne of coal coupled with the steeply dipping nature of the strata limits the feasibility of an open pit operation. An underground operation to exploit the thick lower seams near the axis of the Alexander Creek syncline may be an alternative. Further exploration is warranted on the southwestern edge of the prospect. This area has a coal potential of some 10 to 20 million tonnes of lower (less than 10:1) overburden ratio open pit mineable coal. The land is partly held by Crows Nest Resources Limited and partly by B.C. Coal. Any development would be immediately above the existing railway and is only 8 kilometers north of the B.C. Coal Greenhills project. Any further conclusions as to the mineability on the Chauncey Creek prospect are limited by the need for further exploration.

6.0 QUALITY

Enclosure 9: 1980 Coal Quality Summary

Samples taken and analysed in 1980 indicate medium volatile bituminous coal. Fourteen additional trench samples were obtained in 1981 and laboratory analyses are expected to confirm these results.

CHAUNCEY RIDGE

COAL QUALITY SUMMARY

WEST RIDGE

SAMPLE NO.	m ABOVE MOOSE MOUNTAIN	TRUE THICKNESS (m)	(RAW A.D.B.) % MOIST	% ASH	FSI
COB 11 S	-	3.59	4.34	16.15	0
COB 12 S	-	7.25 ?	No sample	No sample	No sample
COB 13 S	-	3.02	7.10	19.81	0
COB 14 S	-	1.49	4.50	30.35	0
COB 15 S	-	2.19	3.84	36.49	0
COB 16 S	-	6.42	3.32	4.96	0
COB 17 S	295	16.0 ?			
TOTAL		39.36			

Enclosure 4

5/BWc.29

CHAUNCEY RIDGE

COAL QUALITY SUMMARY

EAST RIDGE (NORTH)

SAMPLE NO.	m ABOVE MOOSE MOUNTAIN	TRUE THICKNESS (m)	(RAW A.D.B.) % MOIST	% ASH	FSI
COB 3 S	585	0.97	2.32	21.12	0
COB 4 S	425	5.35	3.69	16.57	0
COB 5 S	375	4.36	3.30	18.06	0
COB 6 S	360	4.36	3.32	21.00	0
COB 7 S	320	2.20	3.30	24.95	0
TOTAL		17.51			

EAST RIDGE (CENTRAL)

SAMPLE NO.	m ABOVE MOOSE MOUNTAIN	TRUE THICKNESS (m)	(RAW A.D.B.) % MOIST	% ASH	FSI
COB 1,2 S	580	6.0	2.87	11.06	0
COB 1 S	470	1.5	3.18	12.94	0
COB 2 S	440	2.37	2.15	28.43	0
COB 3 S	360	3.69	3.51	10.48	0
COB 4 S	220	4.77	2.62	23.72	0
COB 5 S	10	2.99	3.95	15.48	0
TOTAL		21.32			

CHAUNCEY RIDGE

COAL QUALITY SUMMARY

EAST RIDGE (SOUTH)

SAMPLE NO.	m ABOVE MOOSE MOUNTAIN	TRUE THICKNESS (m)	(RAW A.D.B.) % MOIST	% ASH	FSI
COB 10 S		2.95	3.34	9.45	0

7.0 RECOMMENDATION FOR FURTHER WORK

Chauncey Creek Prospect is a long range project. Several aspects make development of this prospect unattractive in the short term. However, the lower west slope contains at least 3 thick coal seams (over 3.0 m) based on mapping of the east slope. These seams are very close to rail transport at a low overburden ratio so further exploration is recommended in this area. Due to abundant thick cover drill holes should be used to attain accurate thickness and seam locations. A rotary drill hole in the southern tip of the prospect could be used to determine how many coal seams are present. This could be augmented by an angled continuous core hole in the north western corner of the property. Both of these drill holes would be located on the existing access road. Further detailed mapping enhanced by trenching could be carried out in conjunction with the drilling.

5/BWc.32

8.0 PREVIOUS REPORTS AND SELECTED BIBIIOGRAPHY

Elphinstone, N.P., 1951. Report on the Former Imperial Coal and Coke Properties of the Upper Elk Valley: C.N.I.

Gibson, D.W., 1977. "Sedimentary facies in the Jura-Cretaceous Kootenay Formation, Crows Nest Pass Area, Southwestern Alberta and Southeastern British Columbia": Bull. Can. Petroleum Geology, V.25, No.4, pp.767-791.

Gibson, D.W., 1979. "The Morrisey and Mist Mountain Formations - Newly Defined Lithostratigraphic Units of the Jura-Cretaceous Kootenay Group, Alberta and British Columbia": Bull. Can. Petroleum Geology, V.27, No.2, pp.183-208.

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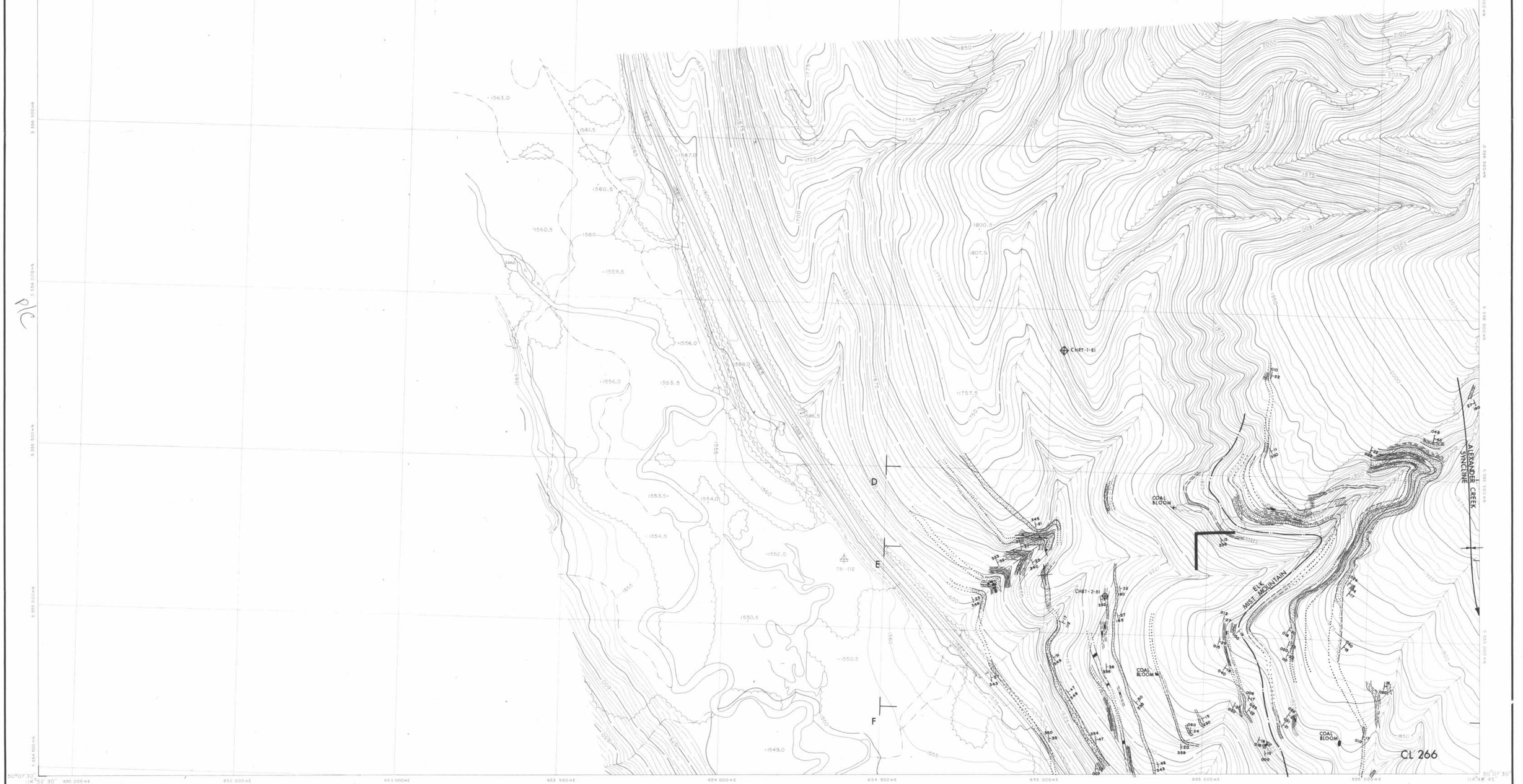
Horachek, J. and Fietz, D., 1979. Report on Coal Licences 264-276 inclusive: Crows Nest Resources Limited, unpublished report.

Morris, R.J., 1981. Report on Coal Licences 264-276 inclusive: Crows Nest Resources Limited, unpublished report.

5/BWc.33

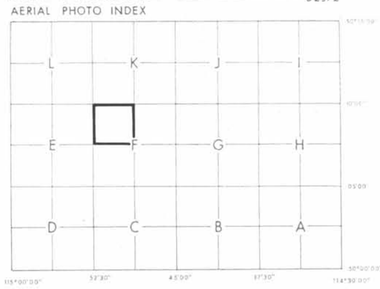
Shell Chauncey Ridge 81(a)A

383



MAP INDEX AND AERIAL PHOTO INDEX

82J/2



G.N.
T.N.

REFERENCE

MAIN ROAD
SECONDARY ROAD
TRACK OR TRAIL
RAILWAY
HEDGE FENCE
BRIDGE CULVERT
CUT FILL
SWAMP
DRILL HOLE
RIVER, LAKE
INTERMITTENT RIVER
TREED AREA
LINE OF TREES
INDIVIDUAL TREES
VERTICAL INTERVAL
DEPRESSION
SPOT HEIGHT
CONTROL POINT

MAP PROJECTION : UNIVERSAL TRANSVERSE MERCATOR
CENTRAL MERIDIAN REFERENCE 117° W.

PREPARED BY :
NORTH WEST SURVEY CORPORATION (YUKON) LTD.

METRES 100 50 0 100 200 300 METRES
SCALE 1 : 5000

GEOLOGICAL LEGEND

JURASSIC - CRETACEOUS
- JKk Kootenay Group
- JKe Elk Formation
- JKmm Mist Mountain Formation
- JKm Morrissey Formation
- MoM Moose Mountain Member
- WrM Weary Ridge Member

- CONGLOMERATE (Cong)
- COARSE SANDSTONE (CsSst)
- FINE SANDSTONE (FSst)
- SILTSTONE (Siltst)
- MUDSTONE/SHALE (Mdst/sh)
- COAL

- NORMAL FAULT
- DEFINED THRUST FAULT
- ASSUMED THRUST FAULT
- BEDDING ATTITUDE
- SYNCLINE
- ANTICLINE
- COAL SEAMS
- STRIATIONS
- ASSUMED CONTACT
- APPROXIMATE CONTACT
- DEFINED CONTACT
- DIAMOND DRILL HOLE
- ROTARY DRILL HOLE (BC COAL)
- COAL LICENCE BOUNDARY (APPROX.)
- MACHINE TRENCH

K-Shell Chauncey Ridge 81(G)A

Crows Nest Resources Limited
EXPLORATION

CHAUNCEY CREEK PROSPECT
S.E. B.C.

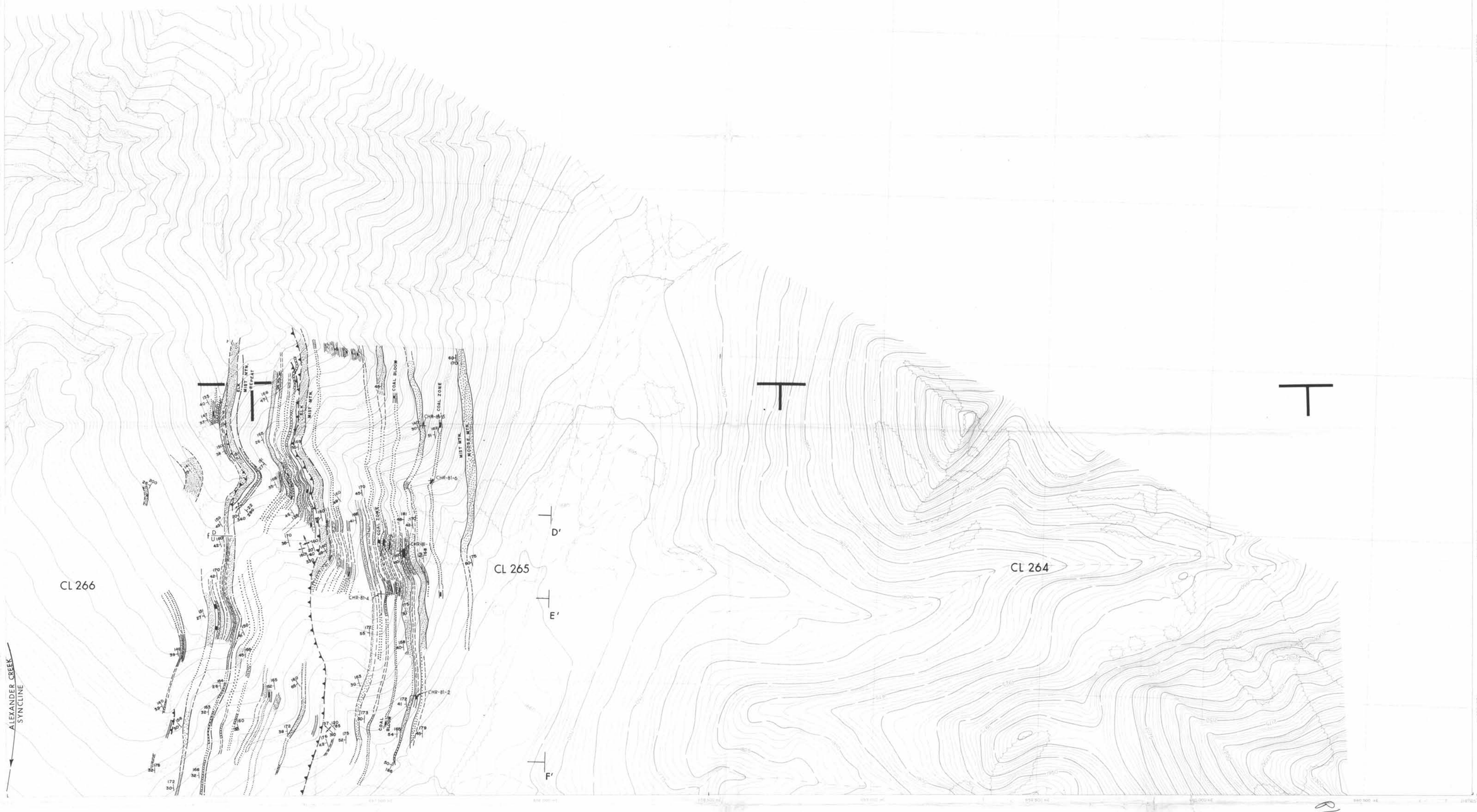
383

GEOLOGY MAP
(1 of 2)

NTS. 82J2 UTM ZONE 11

AUTHOR: H. KUCERA	SCALE: 1:5000 METRES	ENCLOSURE No: 12
DATE: 82 01	REVISED:	DRAWING No: HF-95
To Accompany		

CR2U1



MAP INDEX AND AERIAL PHOTO INDEX

82J/2

L K J I
E F G H
D C B A

G.T.
T.N.

REFERENCE

MAIN ROAD — RIVER, LAKE
SECONDARY ROAD — INTERMITTENT RIVER
TRACK OR TRAIL — TREED AREA
RAILWAY — LINE OF TREES
HEDGE FENCE — INDIVIDUAL TREES
BRIDGE, CULVERT — VERTICAL INTERVAL
CUT, FILL — DEPRESSION
SWAMP — SPOT HEIGHT
DRILL HOLE — CONTROL POINT

MAP PROJECTION: UNIVERSAL TRANSVERSE MERCATOR
CENTRAL MERIDIAN REFERENCE 117° W

PREPARED BY
NORTH WEST SURVEY CORPORATION (YUKON) LTD.

JURASSIC - CRETACEOUS

- JKk — Kootenay Group
- JKe — Elk Formation
- JKmm — Mist Mountain Formation
- JKm — Morrissey Formation
- MoM — Moose Mountain Member
- WrM — Weary Ridge Member

METRES 100 50 0 100 200 300 METRES

SCALE 1 : 5000

GEOLOGICAL LEGEND

- CONGLOMERATE (Cong)
- COARSE SANDSTONE (CsSst)
- FINE SANDSTONE (FSst)
- SILTSTONE (Siltst)
- MUDSTONE/SHALE (Mdst/sh)
- COAL

- NORMAL FAULT
- DEFINED THRUST FAULT
- ASSUMED THRUST FAULT
- BEDDING ATTITUDE
- SYNCLINE
- ANTICLINE
- COAL SEAMS

- STRIATIONS
- ASSUMED CONTACT
- APPROXIMATE CONTACT
- DEFINED CONTACT
- DIAMOND DRILL HOLE
- ROTARY DRILL HOLE (BC COAL)
- COAL LICENCE BOUNDARY (APPROX.)
- HAND TRENCH

K. Shell Chauncey Ridge 81(3)A

Crows Nest Resources Limited
EXPLORATION

CHAUNCEY CREEK PROSPECT
S.E. B.C.

383

GEOLOGY MAP
(2 of 2)

NTS. 82J2 — UTM ZONE 11

AUTHOR: H. KUCERA	SCALE: 1:5000 METRES	ENCLOSURE No.: 12
DATE: 82 01	REVISED:	DRAWING No: HF-95A
To Accompany		

CR2U2

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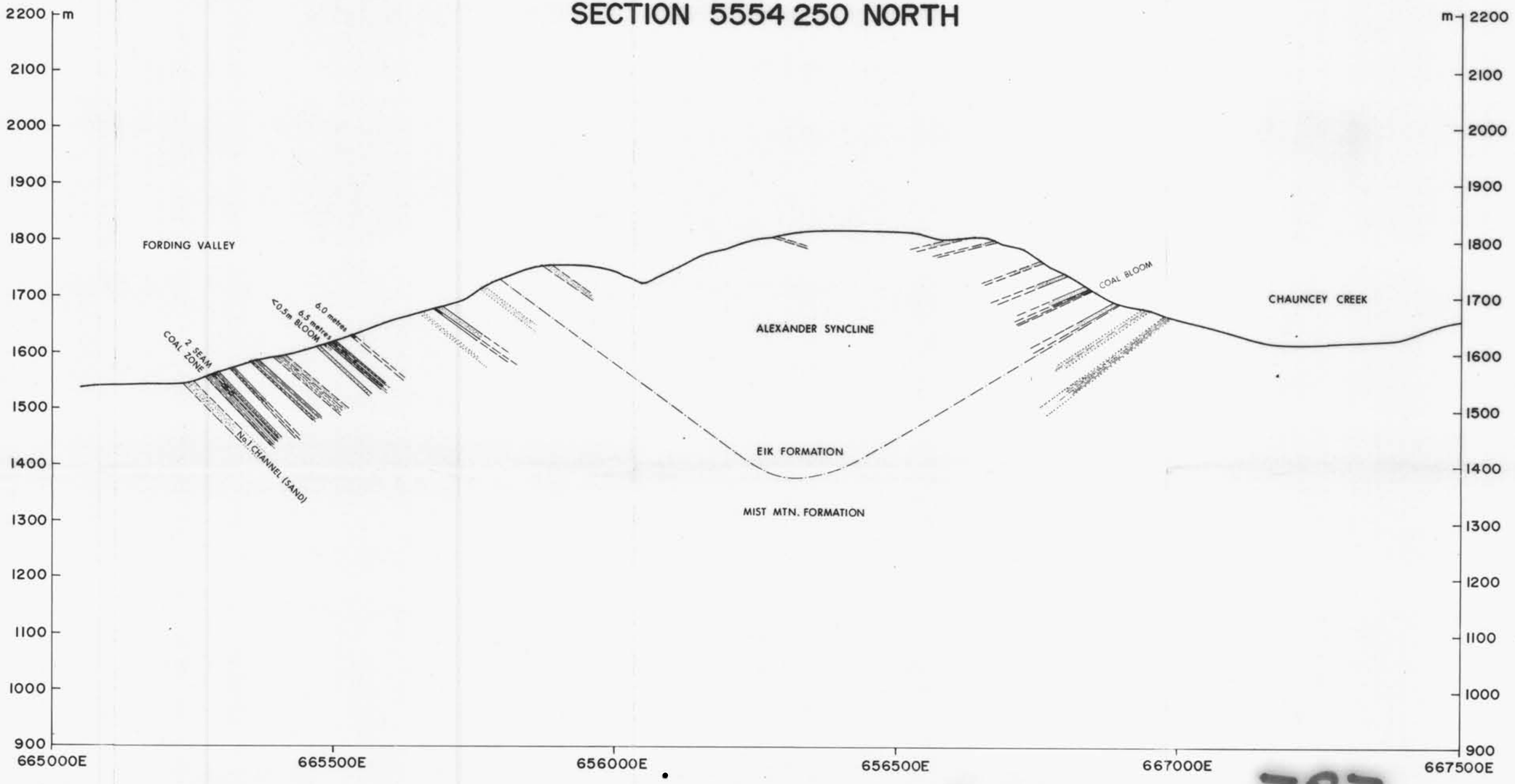

LEGEND

ROCK TYPE		CONTACTS	
CONGLOMERATE		KNOWN	———
SANDSTONE		PROBABLE	– – – – –
SILTSTONE		INFERRED	·····
MUDSTONE - SHALE		ELK/MIST MTN.	– – – – –
COAL		THRUST FAULT	

SCALE 1:5000

100 0 100 200 300 metres

NO VERTICAL EXAGGERATION

383

Shell G
K Chauncey Ridge 81(2)A

Crows Nest Resources Limited
EXPLORATION

CHAUNCEY CREEK PROSPECT
S.E. BRITISH COLUMBIA

GEOLOGICAL SECTION
SECTION 5554 250 NORTH

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DATE 81 11 30	REVISED	
To Accompany		DRAWING No HD-93A

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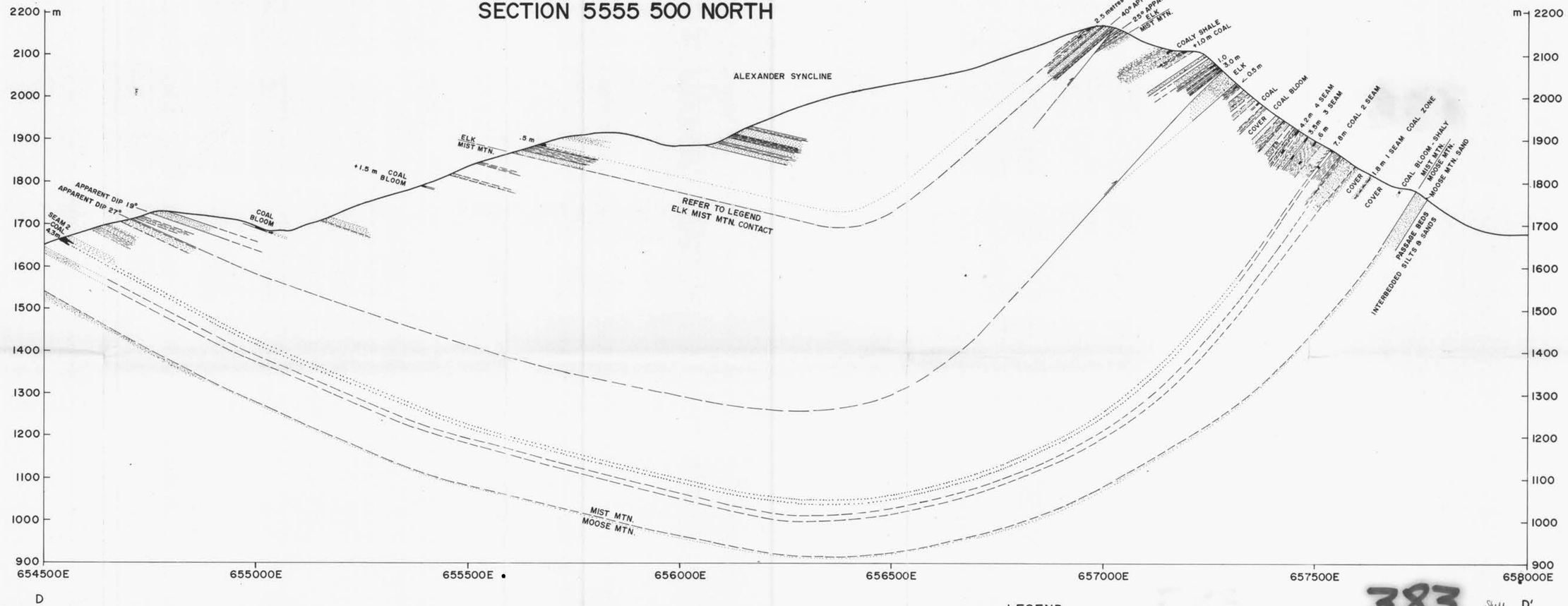

LEGEND

ROCK TYPE		CONTACTS	
CONGLOMERATE		KNOWN	
SANDSTONE		PROBABLE	
SILTSTONE		INFERRED	
MUDSTONE - SHALE		ELK / MIST MTN.	
COAL		THRUST FAULT	

SCALE 1:5000

100 0 100 200 300 metres

NO VERTICAL EXAGGERATION

383

Skeena D'
K, Chauncey Ridge 81 G/3 A

Crows Nest Resources Limited
EXPLORATION

CHAUNCEY CREEK PROSPECT
S.E. BRITISH COLUMBIA

GEOLOGICAL SECTION
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AUTHOR	SCALE AS SHOWN	ENCLOSURE No. 13
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To Accompany		

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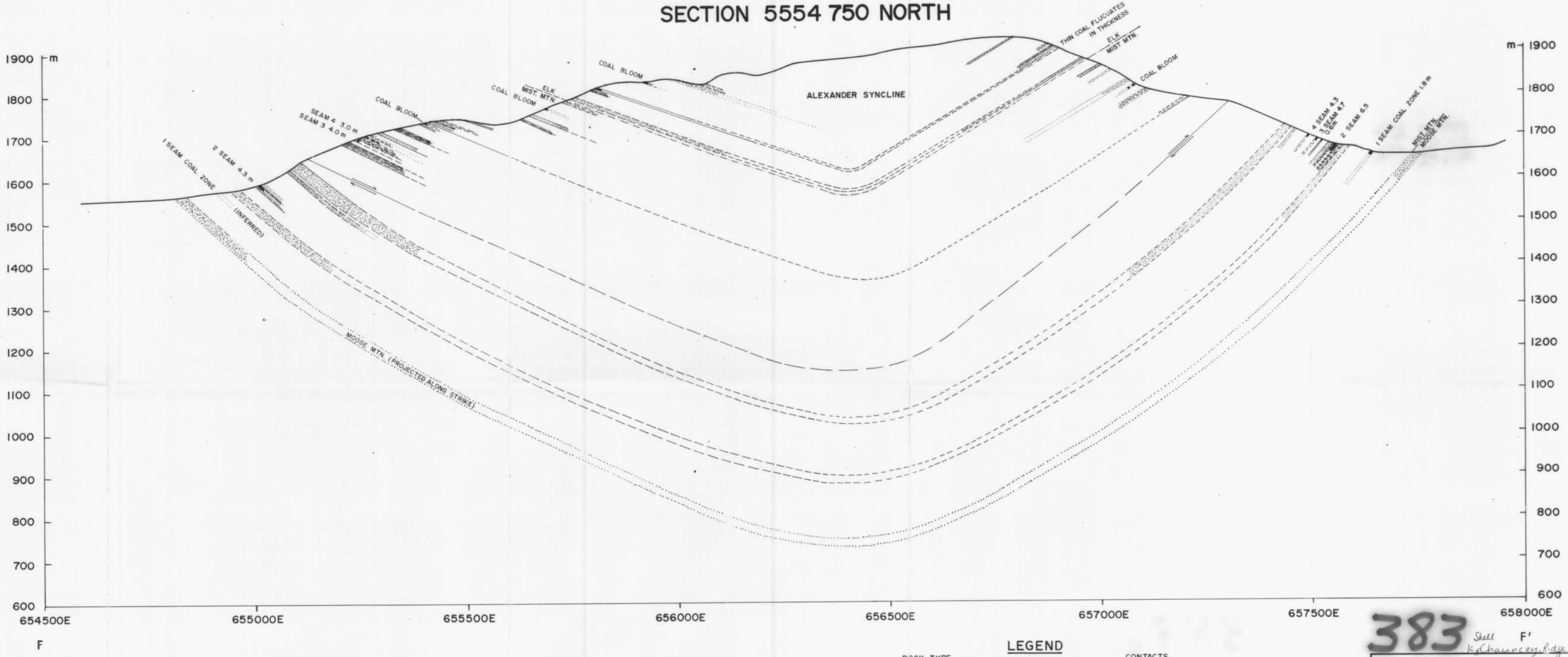

LEGEND

ROCK TYPE	CONTACTS
CONGLOMERATE	KNOWN
SANDSTONE	PROBABLE
SILTSTONE	INFERRED
MUDSTONE-SHALE	ELK/MIST MTN.
COAL	THRUST FAULT

SCALE 1:5000

100 0 100 200 300 metres

NO VERTICAL EXAGGERATION

383 Shell F' K/Chauncey Ridge 81(2)A

Crows Nest Resources Limited
EXPLORATION

CHAUNCEY CREEK PROSPECT
S.E. BRITISH COLUMBIA

GEOLOGICAL SECTION
SECTION 5554 750 NORTH

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DATE 81 11 30	REVISED	DRAWING No. HD-93C
To Accompany		

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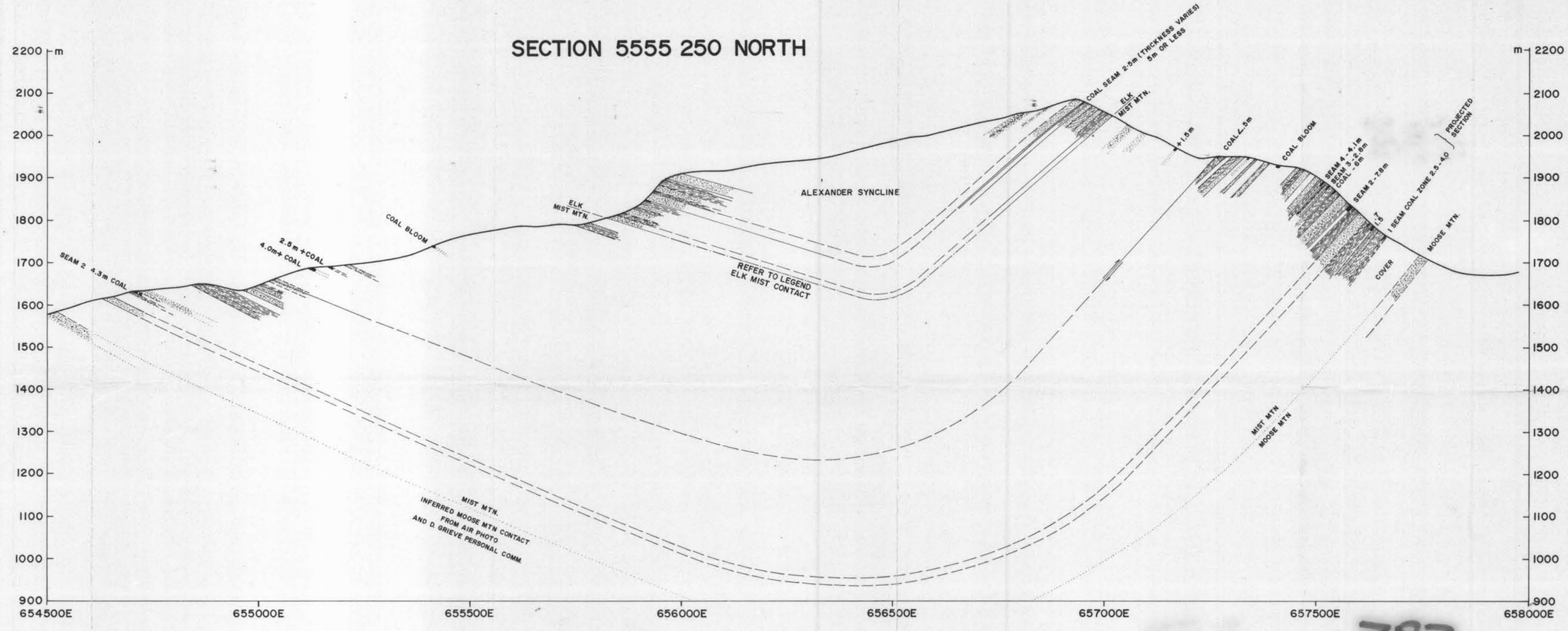

SCALE 1:5000

100 0 100 200 300 metres

NO VERTICAL EXAGGERATION

LEGEND

ROCK TYPE		CONTACTS	
CONGLOMERATE		KNOWN	
SANDSTONE		INFERRED	
SILTSTONE		PROBABLE	
MUDSTONE - SHALE		ELK/MIST MTN.	
COAL		THRUST FAULT	

383

Shelly E'
K Chauncey Report 81(2)A

Crows Nest Resources Limited
EXPLORATION

CHAUNCEY CREEK PROSPECT
S.E. BRITISH COLUMBIA

GEOLOGICAL SECTION
SECTION 5555 250 NORTH

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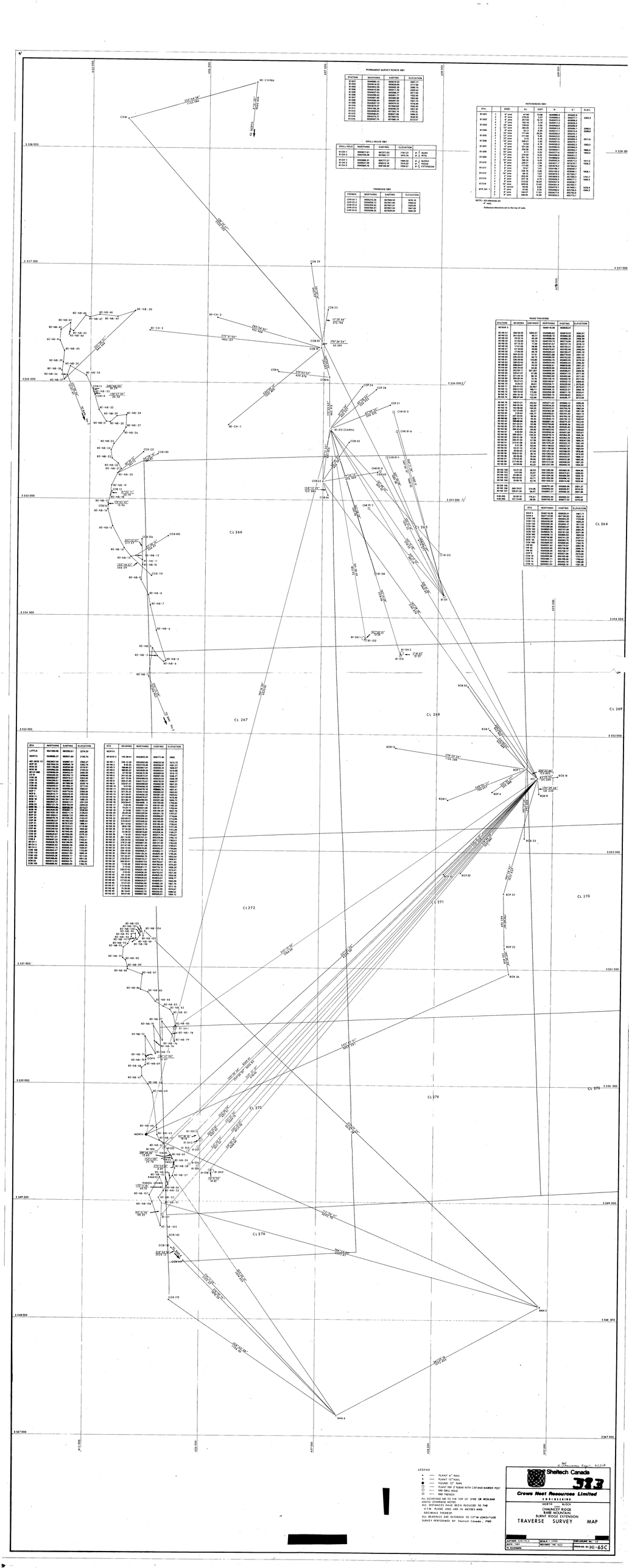
To Accompany		



PERMANENT SURVEY POINTS 1981

STATION	NORTHING	EASTING	ELEVATION
B1 S01	5554961.32	0558439.20	2317.61
B1 S02	5554963.12	0558439.05	2317.61
B1 S03	5554962.98	0558552.28	2320.10
B1 S04	5554962.87	0558552.41	2320.10
B1 S05	5554627.62	0558598.27	2317.56
B1 S06	5554298.40	0558851.77	2322.08
B1 S07	5554298.40	0558851.77	2322.08
B1 S08	5554268.40	0558947.45	2321.10
B1 S09	5554267.72	0559175.52	2318.94
B1 S10	5554267.72	0559175.52	2318.94
B1 S11	5554186.28	0559438.23	2317.29
B1 S12	5553868.92	0559824.14	2318.42
B1 S13	5553868.92	0559824.14	2318.42
B1 S14	5553437.75	0559868.19	2315.07

DRILL HOLES 1981

DRILL HOLE	NORTHING	EASTING	ELEVATION	
B1-DH 1	5553811.61	0557211.82	1761.21	8" BARE
B1-DH 2	5553730.08	0557651.17	1816.36	8" W/Tk
B1-DH 3	5550988.21	0557177.21	1944.22	8" BURNT
B1-DH 4	5549021.06	0557372.76	1916.32	8" RIDGE
B1-DH 5	5549384.56	0561381.08	1843.51	8" EXTENSION

TRENCHES 1981

TRENCH	NORTHING	EASTING	ELEVATION
CHR B1-1	5555272.30	0557664.50	1876.18
CHR B1-2	5554936.12	0557651.20	1768.52
CHR B1-4	5553764.51	0557821.41	1820.04
CHR B1-5	5553394.28	0557838.60	1852.29
CHR B1-6	5553394.28	0557838.60	1852.29

REFERENCES 1981

STA.		DESC.	Az.	DIST.	N	E	ELEV.
B1-S01	1	8" pins	81-45	13.58	5548880.8	0558552.9	
	2	8" pins	279-52	2.27	5548880.9	0558277.1	2302.3
B1-S02	1	8" pins	357-45	10.72	5549473.2	0558598.3	
	2	8" pins	177-45	2.00	5549473.0	0558552.4	
B1-S03	1	8" pins	124-01	2.82	5549268.2	0558598.2	
	2	8" pins	304-01	2.82	5549268.4	0558598.4	2306.4
B1-S04	1	8" pins	124-22	2.82	5548951.9	0558598.1	2308.8
	2	8" pins	304-22	2.82	5548952.1	0558598.3	2308.8
B1-S05	1	8" pins	171-44	2.82	5548627.6	0558598.1	
	2	8" pins	351-44	2.82	5548627.4	0558598.3	
B1-S06	1	10" pins	9-16	4.95	5548427.0	0558598.1	2311.8
	2	10" pins	189-16	4.95	5548426.8	0558598.3	
B1-S07	1	8" pins	351-08	2.06	5548403.8	0558598.2	2312.2
	2	8" pins	171-08	2.06	5548403.6	0558598.4	2308.8
B1-S08	1	8" pins	4-11	2.82	5548298.2	0558598.2	2308.8
	2	8" pins	274-09	6.33	5548298.8	0558591.2	
B1-S09	1	8" pins	184-09	6.33	5548298.6	0558605.2	
	2	8" pins	180-36	4.82	5548177.6	0558571.3	2312.2
B1-S10	1	8" pins	259-31	2.06	5548278.7	0558598.1	1858.3
	2	8" pins	79-31	2.06	5548278.9	0558598.3	
B1-S11	1	8" pins	139-01	1.41	5548144.7	0558598.2	
	2	8" pins	306-16	2.00	5548108.2	0558598.1	1858.1
B1-S12	1	8" pins	26-16	2.00	5548108.4	0558598.3	
	2	8" pins	203-05	2.00	5548003.0	0558598.2	1761.2
B1-S13	1	8" pins	23-05	2.00	5548002.8	0558598.4	1858.1
	2	8" pins	312-52	10.82	5548277.7	0558577.1	
B1-S14	1	8" pins	132-52	10.82	5548277.5	0558577.3	
	2	8" pins	314-01	2.00	5548277.9	0558598.1	
BTE DH 1	1	8" pins	89-45	5.30	5550988.4	0557705.0	1938.3
	2	8" pins	269-45	5.30	5550988.2	0557772.7	1940.1

NOTE:- All coordinates are 4" rods.
- Reference elevations are to the top of rods.

ROAD TRAVERSE

STATION	BEARING	DISTANCE	NORTHING	EASTING	ELEVATION
BS BAN 3			5548118.58	0558528.21	
B1-N8-S1	284-50-08	2843.41	5548980.82	0558718.32	2362.31
B1-N8-S2	284-50-08	2843.41	5548980.82	0558718.32	2362.31
B1-N8-S3	272-52-16	49.28	5548980.91	0558668.69	2366.08
B1-N8-S4	272-52-16	49.28	5548980.91	0558668.69	2366.08
B1-N8-S5	417-52-00	111.34	5549073.72	0558716.54	2370.06
B1-N8-S6	417-52-00	111.34	5549073.72	0558716.54	2370.06
B1-N8-S7	1-10-00	94.36	5549169.19	0558716.21	2369.61
B1-N8-S8	1-10-00	94.36	5549169.19	0558716.21	2369.61
B1-N8-S9	17-06-00	44.78	5549220.22	0558736.27	2369.19
B1-N8-S10	17-06-00	44.78	5549220.22	0558736.27	2369.19
B1-N8-S11	339-54-52	51.51	5549266.73	0558714.25	2369.19
B1-N8-S12	339-54-52	51.51	5549266.73	0558714.25	2369.19
B1-N8-S13	338-28-58	105.85	5549403.72	0558653.26	2370.39
B1-N8-S14	338-28-58	105.85	5549403.72	0558653.26	2370.39
B1-N8-S15	358-02-07	51.01	5549454.51	0558650.80	2369.23
B1-N8-S16	358-02-07	51.01	5549454.51	0558650.80	2369.23
B1-N8-S17	358-28-00	94.30	5549548.80	0558648.38	2369.27
B1-N8-S18	358-28-00	94.30	5549548.80	0558648.38	2369.27
B1-N8-S19	359-19-02	47.80	5549596.59	0558647.57	2369.24
B1-N8-S20	359-19-02	47.80	5549596.59	0558647.57	2369.24
B1-N8-S21	359-19-02	94.41	5549690.98	0558645.96	2369.24
B1-N8-S22	359-19-02	94.41	5549690.98	0558645.96	2369.24
B1-N8-S23	359-19-02	94.41	5549785.37	0558644.35	2369.24
B1-N8-S24	359-19-02	94.41	5549785.37	0558644.35	2369.24
B1-N8-S25	359-19-02	94.41	5549879.76	0558642.74	2369.24
B1-N8-S26	359-19-02	94.41

K-Shell Chauncey Ridge 81(3)A

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K-Shell Chauncey Ridge 81(3)A

GEOLOGICAL BRANCH
ASSESSMENT REPORT

00 383

OPEN FILE

CONFIDENTIAL

LOCATION OF COAL SEAMS OVER 1 METER

TRENCH NO	LENGTH	LOCATION HANGING WALL NORTHING	LOCATION HANGING WALL EASTING	PLUNGE AZIMUTH	TRUE COAL THICK	SUMMARY-(LITHOLOGY-QUALITY ETC.)
CHR-81-1	16.8	5555373.36	657544.50	116/31	7.8	SEAM 2
CHR-81-2	18.7	5554936.12	657604.80	148/32	6.23	SEAM 2
CHR-81-3	19.0 m	5554443.0	655187	068/33	6.52 m	SEAM 2
CHR-81-4 A) B)	58.3	5555254.02	657491.41	085/37	4.12 2.8	4 SEAM 3 SEAM
CHR-81-5	52	5555764.41	657601.50	090 /30	.96 1.54 3.1	1 SEAM COAL ZONE
CHR-81-6	7.1	5555594.25	657629.58	150/18	1.81	1 SEAM COAL ZONE

HAND TRENCHES CHAUNCEY RIDGE

4/BXc.2

LOCATION OF COAL SEAMS OVER 1 METER

TRENCH NO	LENGTH	COAL SEAM H.W. NORTHING	COAL SEAM H.W. EASTING	PLUNGE AZIMUTH	TRUE COAL THICK	SUMMARY DESCRIPTION
CHRT-1-81	17	5555879.5	655040.7	173/04	3.5 Calculated	Mainly Shaly and dull but with a bright hard band in centre showing good cleat. Ave.bed = 100/15 Upper Seam
CHRT-2-81	52	5555118.77	655185.83	193/-7.5	~3.0 m	4 Seam
	39.5	5554959.7	655141.62	188/-3.5	~2.5 to 4.0 m	3 Seam
CHRT-3-81	40	5554431	655467	200/07	8.0 m	Coal-overlain by Silty Mdst; fine, powdery with mud bands. 4 Seam
	23	5554360.97	655452	186/06	6.5	Coal-powdery - w/dull bands, some bright bands. 3 Seam
CHRT-4-81	15.8	5554093	655528.9	170/03	1.57 m (Calculated)	b) 345/48 coal-poorly exposed - powdery w/dull and bright bands, small bands of Carb. Mdst. 3 Lower Seam

MACHINE TRENCHES CHAUNCEY RIDGE

4/BXc.1

TRENCH DESCRIPTIONS
Chauncey Ridge

CHR - 1-81
Book: HK-1
Pg : 89

Total Thickness (m)	Measured Thickness (m)	Azimuth	Plunge	S/D	True Thick (m)	Description
0-1.4	1.4	116	31	166/44	1.16	SST -
1.4-2.7	1.3				1.07	MDST - Silty, black, massive massive
2.7-4.7	2.0				1.65	Coal - Dull w/bright lenses, soft, highly weathered
4.7-7.1	2.4				1.98	Coal - harder bright w/dull bands; more fissile
7.1-7.4	.3				.25	Coal - Shaly, dull, fissile and polished
7.4-8.0	.6				.50	MDST - Dk grey, Carb, blocky fracture, weathers buff colour
8.0-10.3	2.3				1.90	Coal - hard, bright, with conchoidal fracture; some Pyrite blebs
10.3-12.6	2.3				1.90	Coal - dull w/slicks; shaly fissile
12.6-13.0	.4				.33	MDST - Shaly at base, Hard & blocky
13.0-14.3	1.3				1.07	Coal - very hard, 1/2 dull, 1/2 bright; vitrious lustre on Conchoidal fracture
14.3-15.0	.7				.57	MDST - Massive, black w/coaly wisps, highly polished w/abundant slicks End of Trench
15.0-16.8	1.8	Total Thickness = 13.9 Coal Thickness = 7.8			1.52	SLST - (170/42) to vfg SST weathers it grey; thin Planar bedding
16.8-33.5	16.7				14.1	Interbedded SLST - MDST sequence
	at 33.5			163/35	AVBD = 166/40	SST - Lowest Channel SST

TRENCH DESCRIPTIONS
Chauncey Ridge

CHR - 2-81
Book: HK-BK-1
Pg : 49

Total Thickness (m)	Measured Thickness (m)	Azimuth	Plunge	S/D	True Thick (m)	Description
0-.3	.3	148	32	164/43	.16	Shale - black carbonaceaous - coaly
.3-1.1	.8				.44	Shale - coaly, fissile, black
1.1-2.9	1.8				.98	Coal - dull, soft, earthy
2.9-5.0	2.1				1.15	Coal - shaly, dull, soft, very few bright bands
5.0-5.1	.1				.05	Shale - Carb.; med grey weathers lt. brown blocky
5.1-6.2	1.1				.60	Coal - Dull, fissile, earthy
6.2-6.8	.6				.33	Coal - Dull w/bright bands; some cleat
6.8-7.5	.7				.38	Shale - coaly, black, fissile
7.5-11.0	3.5				1.91	Coal - dull w/bright bands, soft, highly fractured - can be powdered in fingers, abundunt polished surfaces
11.0-12.6	1.6				.88	Coal - dull, soft, very earthy
12.6-14.2	1.6			156/38	.88	Shale - Coaly w/bright lenses of coal, fissile & black, polished bedding planes
14.2-15.7	1.5				.82	MDST - black - weathers brown, blocky
15.7-18.7	3.0			164/43	1.64	SLST - fine gr. at top getting coarser toward base, finely laminated, Carb
		END OF TRENCH				
					Total TRENCH = 10.22 Coal Thickness = 6.23	

A1/BQb.2

TRENCH DESCRIPTIONS
Chauncey Ridge

CHR - 3-81
Book: HK-BK-1
Pg : 45

Total Thickness (m)	Measured Thickness (m)	Azimuth	Plunge	S/D	True Thick (m)	Description
				360/51		Logged bottom to top but Calculated Thickness top to bottom
19.0-18.5	.5	248	33		.47	MDST - fissile, coaly, R2
18.5-15.0	2.5				2.36	Coal - R1, to S5, mainly dull w/shaly lenses, and bright lenses
15.0-14.3	.7				.66	MDST - Carb, fissile, R2; Med. grey on fresh surface, weathers buff colour
14.3-12.5	1.8				1.7	Shaly Coal to Coaly Shale
12.5-11.5	1.0				.95	MDST - Carb - blocky at base, fissile at top Dk. grey on Fresh Weathers lt. brown
11.5-11.2	.3				.28	Coal - Shaly, dull, highly fractured
11.2-10.0	1.2			355/51	1.1	Shale - Carb to coaly; fissile, highly fractured & polished, questionable, bedding
10.0-7.0	3.0				2.8	MDST - Carb, blocky at base fissile at top, Dk. grey, Weathers lt. brown
7.0-6.1	.9				.85	Shale - very coaly, highly polished
6.1-5.8	.3				.28	Coal - dull to bright, fissile
5.8-5.5	.3				.28	Shale - dull, fissile, Carb. to Coaly
5.5-3.5	2.0				1.9	Coal - Shaly, fissile, dull, highly polished & fractured, R2

(con't)

TRENCH DESCRIPTIONS
Chauncey Ridge

CHR - 3-81 (con't)
Book: BK-1
Pg : 45

Total Thickness	Measured Thickness	Azimuth	Plunge	S/D	True Thick	Description
3.5-1.3	2.2				2.08	MDST - dk. grey, blocky, w/coaly bands
1.3-0	1.3		AV Bd 357/51		1.2	MDST - Shaly at base, blocky at top, Carb., weathers lt.
			END OF TRENCH Total Thickness = 16.91			Coal Thickness - 4.82

TRENCH DESCRIPTIONS
Chauncey Ridge

CHR - 4-81
Book: HK-BK-1
Pg : 91

Total Thickness	Measured Thickness	Azimuth	Plunge	S/D	True Thick	Description
0-6.5	6.5	085	37	168/44	6.39	SLST - lt. grey; thinly bedded
6.5-19.0	12.5				12.3	MDST - Med grey, massive, blocky carb, weathers buff colour
19.0-20.0	1.0				.98	Shale - black, coaly, fissile
20.0-20.8	.8				.78	Coal - hard, bright
20.8-22.7	1.9		Sample CHR-4-81A		1.86	Coal - soft, dull, highly weathered, appears shaly
22.7-23.0	.3				.3	MDST - slicks, black coaly w/ plant fragments
23.0-24.5	1.5				1.48	Coal - hard w/conchoidal fracture; mainly dull w/bright lenses
24.5-28.1	3.6				3.54	MDST - silty, dk. grey, black massive, blocky
28.1-34.0	5.9			170/45	5.8	SLST - very fine gr. SST, finely laminated w/ small scale trough x-bedding
34.0-35.8	1.8				1.788	MDST - dk. grey, black, massive, becoming fissile, and coaly at base
35.8-37.3	1.5				1.5	Coal - Soft, highly weathered w/dull & bright bands
37.3-37.7	.4		Sampled as CHR-4-81B		.4	MDST - dk. brown, massive, weather H. brown
37.7-38.0	.3				.3	Coal - hard, bright, fissile
38.0-39.5	1.5				1.5	MDST - silty, dk. grey, to black
39.5-40.5	1.0				1.0	Coal - dull, shaly, semi-hard End of coal seam (con't)

TRENCH DESCRIPTIONS
Chauncey Ridge

CHR - 4-81 con't
Book:
Pg :

Total Thickness	Measured Thickness	Azimuth	Plunge	S/D	True Thick	Description
40.5-44.3	3.8	085	37		3.8	MDST - black - carbonaceous, w/plant fragments
44.5	.2				.20	MDST - Dk. brown, weathers lt. brown, massive, blocky fracture
44.5-48.8	4.3				4.3	MDST - Dk. grey to black, silty becoming fissile
48.8-49.4	.6				.6	Coal - Dull, shaly
49.4-52.9	3.5				3.5	MDST - silty, dark grey to black
52.9-58.3	5.4				5.4	MDST - H. grey on fresh surface, carb.; weathers lt. brown
	END OF TRENCH			156/41		Underlain by SLST lt. grey, hard, black on fresh surface
				Total Thickness		= 54.3
				Coal Thickness		= 7.52
						Ave. Bed. - 164/43

CHR - 5-81
Book: I.P. #1
Pg : 8-10

TRENCH DESCRIPTIONS
Chauncey Ridge

Total Thickness	Measured Thickness	Azimuth	Plunge	S/D	True Thick	Description
0-.7	.7	090	30	160/52°	.67	MDST - Carb. becoming coaly at base, Some Slickensides
.7-1.7	1.0	CHR-5-81a			.46	Coal - hard, bright highly fractured
1.7-2.2	.5			162/56	.48	MDST - Carb w/plant fragments and coal 'blebs' becoming silty at base
2.2-6.1	3.9				3.75	SLST - MDST - Intercalated, thin irregular lamination, poor o/c, sandy at base
6.1-7.1	1.0				.96	Sandstone - Med. gr. some Fe-staining, massive
7.1-8.1	1.0			165/55	.96	Mudstone - Silty w/K-spar weathering out
8.1-10.3	2.2			165/52	2.1	Siltstone - Banded, massive, highly fractured
10.3-11.8	1.5				1.44	Mudstone - highly fractured
11.8-14.8	3.0			163/51	2.89	Siltstone - Resistant, massive, brownish grey
14.8-18.7	3.9				3.75	Mudstone/siltstone intercalated, fractured
18.7-19.5	.8				.77	Coal
19.5-19.7	.2	CHR-5-81b			.2	MDST - split, grey colour
19.7-20.5	.8				.77	Coal
20.5-28.0	7.5	090	30		7.2	Mudstone - greyish, and fractured. Some slicks
28.0-31.3	3.3				3.2	Sandstone - massive
31.3-41.6	10.3				9.9	Mudstone - Carb.
41.6-46.8	5.2				5.0	Mudstone - Carb coaly at base (con't)

TRENCH DESCRIPTIONS
Chauncey Ridge

CHR - 5-81 (con't)
Book:
Pg :

Total Thickness	Measured Thickness	Azimuth	Plunge	S/D	True Thick	Description
46.8-52.0	3.2				3.1	Shale - Coaly - w/plant fragments, Coal zone (lowest seam)

Total True Thickness = 48.1 m
Coal Thickness = 5.6 m

Ave. Bed. = 163/53

TRENCH DESCRIPTIONS
Chauncey Ridge

CHR - 6-81
Book: HK-BK-1
Pg : 93

Total Thickness	Measured Thickness	Azimuth	Plunge	S/D	True Thick	Description
0-2.5	2.5	150	18	180/48	1.40	MDST - Carb. dk grey, weather lt. grey, abrupt contract w/coal
2.5-4.1	1.6				.90	Coal - bright w/dull bands, hard
4.5-5.5	1.4				.80	Coal - Shaly, dull w/bright lenses
5.5-5.7	.2				.11	Shale - Fissile, Coaly
5.7-5.9	.2				.11	Coal - Soft, highly weathered, bright w/dull bands
5.4-7.1	1.2				.672	MDST - Dk. grey - to black
			END OF TRENCH			
				Total Thickness	= 3.97	
				Coal Thickness	= 1.81	

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Stell
K-Chauncey Ridge 81C/7A

STRATIGRAPHIC SECTION

DESIGNATION:

PART 1 OF 1

PROJECT: CHAUNCEY CREEK

AUTHOR: H. KUCERA DATE: 1981

AREA: S.E. B.C.

SOURCE OF DATA: CHR-1-81

LOCATION: NORTH BLOCK

SCALE	CONTROL POINT	INTERVAL	LITHOLOGY	STRIKE & DIP	DESCRIPTION MAIN	DESCRIPTION AMPLIFIED	SAMPLE
						Scale 1:20	1:20
[m]							
0		0.0 bedding		166/44	Sandstone		
		1.0			Mudstone	Silty, black massive	
		2.0			COAL	Dull with bright lenses soft and highly weathers.	
		3.0					
		4.0			COAL	Harder, bright with dull bands more fissile	
		5.0					
		6.0			COAL	Shaly, dull, fissile and polished	
					Mudstone	Dark grey, carbonaceous, blocky fracture, weathers buff colour	
		7.0			COAL	Hard, bright with conchoidal fracture; some pyrite blebs	
		8.0					
					COAL	Dull with slicks, shaly and fissile	
		9.0					
		10.0					
					Mudstone	Shaly at base, hard and blocky	
					COAL	Very hard for coal - 1/2 dull 1/2 bright vitreous lustre on conchoidal fracture	
		11.0					
					Mudstone	Massive, black, with coaly wisps highly polished with abundant slickensides	
		12.0		170/42	Siltstone	To very fine grain Sandstone. Weathers light grey thin planar bedding (170/42)	
		13.0					
		14.0					

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STRATIGRAPHIC SECTION

DESIGNATION: Shell K-Chauncey Ridge-81(3)A

PROJECT: CHAUNCEY CREEK		TRENCH LOG	PART 1 OF 1
AREA: S. E. B. C.		AUTHOR: H. Kucera	DATE: 19 81
LOCATION:		SOURCE OF DATA: HAND TRENCH #CHR-2	

Scale 1:20

SCALE	CONTROL POINT	INTERVAL	LITHOLOGY	STRIKE & DIP	DESCRIPTION: MAIN	DESCRIPTION: AMPLIFIED	SAMPLE
[m]							
0		0.0		164/43	Shale	Black carbonaceous - Coaly	
					Shale	Coaly, fissile and black	
					COAL	Dull, soft earthy	
		1.0					
					COAL	Shaly, dull, soft, very few bright bands	
		2.0					
					Shale	Carbonaceous, medium grey, weathers light brown blocky	
		3.0			COAL	Dull, fissile, earthy	
					COAL	Dull with bright bands. Displays some cleat	
					Shale	Coaly, black, fissile	
		4.0			COAL	Dull with bright bands: soft, highly fractured abundant polished surfaces. Can be powdered in fingers	
		5.0					
		6.0			COAL	Dull, soft, very earthy	
		7.0			Shale	Coaly with some bright lenses of coal, fissile and black. Polished bedding	
				156/38			
		8.0			Mudstone	Black, weathers brown, blocky	
				164/43	Siltstone	fine grained at top becoming coarser silt at base; finely laminated carbonaceous	
		9.0					
		10.0					

VQ-24 A

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STRATIGRAPHIC SECTION

DESIGNATION: Well K-Chauncey Ridge 81(L)J9

PROJECT: Chauncey Creek

AREA: SOUTH EAST, B.C.

LOCATION: NORTH BLOCK

PART 1 OF 1

AUTHOR: Hunt, Sc. Ba

DATE: 1981

SOURCE OF DATA: Hand Trench 78K-3-81

SCALE 1:20

SCALE	CONTROL POINT	INTERVAL	LITHOLOGY	STRIKE & DIP	DESCRIPTION MAIN	DESCRIPTION AMPLIFIED	SAMPLE
(m)							
0							
		0.0		360/51	Mudstone	Fissile, coaly R 2	
					COAL	S5 to R1 mainly dull with shaly lenses and bright lenses	
		1.0					
		2.0					
		3.0			Mudstone	Carbonaceous, fissile, R2; medium grey on fresh surface weathers buff colour	
					Shale	Coaly shale to shaly coal	
		4.0					
		5.0					
					Mudstone	Carbonaceous, blocky at base, fissile at top. Dark grey weathers light brown	
		6.0					
					COAL	Shaly, dull, highly fractured	
				355/51	Shale	Carbonaceous to Coaly; fissile, highly fractured and polished	
		7.0					
					Mudstone	Carbonaceous, blocky at base, fissile at top Dark grey, wathers light brown	
		8.0					
		9.0					
		10.0					
					Shale	Very coaly, highly polished	
		11.0			COAL	Dull to bright, fissile	
					Shale	Dull, fissile, carbonaceous to coaly	
		12.0			COAL	Shaly, fissile, dull, highly polished and fractured, R2	
					Mudstone	Dark grey, blocky with coaly bands	
		14.0					
		15.0					
		16.0			Mudstone	Shaly at base, blocky at top, carbonaceous weathers light brown	
		17.0					

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K-Chauncey Ridge 81(2)A

STRATIGRAPHIC SECTION

DESIGNATION: TRENCH LOG | PART 1 OF 1

PROJECT: CHAUNCEY CREEK

AREA: S. E. B. C.

LOCATION:

AUTHOR: H. Kucera | DATE: 19 81

SOURCE OF DATA: HAND TRENCH # CHR - 4

1:200

SCALE	CONTROL POINT	INTERVAL	LITHOLOGY	STRIKE & DIP	DESCRIPTION MAIN	DESCRIPTION AMPLIFIED	SAMPLE
[m]							
0							
		0.0		168/44	Siltstone	Light grey; thinly bedded	
					Mudstone	Medium grey, massive, blocky, carbonaceous weathers buff colour	
		10.0					
					Shale	Black, coaly, fissile	
		20.0			COAL	Hard, bright	
	Sampled as CHR - 4 - 81A				COAL	Soft, dull, highly weathered appears shaly	
					Mudstone	Slickensides, black coaly with plant fragments	
					COAL	Hard with conchoidal fracture mainly dull with bright lenses	
					Mudstone	Silty, dark grey to black, massive, blocky	
				170/45			
					Siltstone	To very fine grained Sandstone, finely laminated with small scale trough cross bedding	
		30.0					
					Mudstone	Dark grey to black, massive, becoming R2 fissile and coaly at base	
					COAL	Soft, highly weathered with dull and bright bands	
	Sampled as CHR - 4 - 81B				Mudstone	Dark brown and massive-weathers light brown R3	
					COAL	Hard, bright, fissile	
					Mudstone	Silty, dark grey to black	
		40.0			COAL	Dull, Shaly, Semi-hard	
					Mudstone	Black, carbonaceous, with plant fragments	
					Mudstone	Dark grey to balck, silty, becoming fissile at base	
					COAL	Dull - Shaly (not sampled)	
		50.0			Mudstone	Silty, Dark grey to black	
					Mudstone	Light grey on fresh surface, carbonaceous weathers light brown	
				156/41	Siltstone	Light grey, hard, black on fresh surface	
		60.0					

VQ-24A

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Shell
K-Chauncey-Ridge 81(3)A

STRATIGRAPHIC SECTION

DESIGNATION: TRENCH LOG | PART 1 OF 1

PROJECT: CHAUNCEY CREEK

AUTHOR: H. Kucera | DATE: 19 81

AREA: S. E. B. C.

LOCATION:

SOURCE OF DATA: HAND TRENCH #CHR-4-81A

Scale 1:20

SCALE	CONTROL POINT	INTERVAL	LITHOLOGY	STRIKE & DIP	DESCRIPTION MAIN	DESCRIPTION AMPLIFIED	SAMPLE
[m]							
0		0.0		168/44			
					Mudstone	Medium grey massive, blocky, carbonaceous weathers buff colour	
		1.0					
		2.0			Shale	Black, coaly, fissile	
		3.0			COAL	Hard, bright	
		4.0			COAL	Soft, dull, highly weathered, appear shaly	
		5.0					
					Mudstone	Slickensided, black and coaly with plant fragments	
		6.0			COAL	Hard with conchoidal fracture mainly dull with bright bands	
		7.0					
					Mudstone	Silty, dark grey to black, massive and blocky	
		8.0					
		9.0					
		10.0					

VQ-24 A

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K-Shell
K-Chauncey Ridge 81(31)A

STRATIGRAPHIC SECTION

DESIGNATION: TRENCH LOG | PART 1 OF 1

PROJECT: CHAUNCEY CREEK

AUTHOR: H. Kucera | DATE: 1981

AREA: S. E. B. C.

SOURCE OF DATA: HAND TRENCH #CHR-A-81-B

LOCATION:

SCALE	CONTROL POINT	INTERVAL	LITHOLOGY	STRIKE & DIP	DESCRIPTION MAIN	DESCRIPTION AMPLIFIED	SAMPLE
							1:20
[m]							
0		0.0		170/45	Mudstone	Dark grey to black, massive, becoming fissile, and coaly at base	
		1.0					
		2.0			COAL	Highly weathered with dull and bright bands	
		3.0					
					Mudstone	Dark brown, massive, weathers light brown	
					COAL	Hard, bright and fissile	
		4.0			Mudstone	Silty, Dark grey to black	
		5.0					
					COAL	Dull shaly, Semi hard	
		6.0					
					Mudstone	Black carbonaceous with plant fragments	

VQ-24 A

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Hall
K-Chauncey Ridge - 81(3)A

STRATIGRAPHIC SECTION

DESIGNATION: TRENCH LOG | PART 1 OF 1

PROJECT: CHAUNCEY CREEK | AUTHOR: H. KUCERA | DATE: 19 81

AREA: S. E. B. C. | SOURCE OF DATA: HAND TRENCH #CHR - 6

LOCATION:

SCALE	CONTROL POINT	INTERVAL	LITHOLOGY	STRIKE & DIP	DESCRIPTION: MAIN	DESCRIPTION: AMPLIFIED	SAMPLE
							1:20
[m]							
0		0.0		180/48	Mudstone	Carbonaceous, dark grey, weathers light grey abrupt lower contact with coal	
		1.0			COAL	Bright with dull bands hard	
		2.0					
	Sampled as CHR - 6 - 81				COAL	Shaly, dull with bright bands	
		3.0			Shale COAL	Fissile and Coaly Soft, highly weathered, bright with dull bands	
					Mudstone	Dark grey to black massive	
		4.0					

VQ - 24 A

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Shell
K - Chauncey Ridge 81(3)A

STRATIGRAPHIC SECTION

DESIGNATION: TRENCH LOG | PART 1 OF 1

PROJECT: CHAUNCEY CREEK

AUTHOR: H. Kucera | **DATE:** 19 81

AREA: S. E. B. C.

LOCATION:

SOURCE OF DATA: HAND TRENCH #CHR-5

SCALE	CONTROL POINT	INTERVAL	LITHOLOGY	STRIKE & DIP	DESCRIPTION: MAIN	DESCRIPTION: AMPLIFIED	SAMPLE
						1:200	
[m]		1 Channel Sand					
0		0.0		160/52°	Mudstone	Carbonaceous, becoming coaly at base some slickensides	
					COAL	Hard, bright, highly fractured	
				162/56	Mudstone	Carbonaceous with plant fragments and coal blebs	
					Siltstone	Intercalated with mudstone, thin irregular lamination poor O.C., sandy at base	
					Sandstone	Medium grain, massive, some Ironstone stain	
				165/55	Mudstone	Silty with K-spar weathering out	
				165/52	Siltstone	Banded, massive, highly fractured	
		10.0			Mudstone	Highly fractured	
				153/51	Siltstone	Resistant, massive, brownish-grey	
					Mudstone	-Siltstone intercalated, fractured	
					COAL		
					Mudstone	Grey	
		20.0			COAL		
					Mudstone	Greyish, fractured with some slickensides	
					Sandstone	Massive	
		30.0			Mudstone	Carbonaceous	
		40.0			Mudstone	Coaly at base	
					Shale	Coaly with plant fragments Coal zone, (possibly lowest seam)	
		50.0				Cover	
		60.0					

VQ-24 A

STRATIGRAPHIC SECTION

PROJECT: CHURCH TROUT BAY NORTH	LOCATION:
MEASURED BY: [illegible]	PAGE: 1 of 1
DATE: [illegible]	DRAWN BY: [illegible]
	CHECKED BY: [illegible]
	SCALE OF METRE:

DESCRIPTION					
FT. FROM TOP OF CLIFF	METRES	LITHOLOGY	STRUCTURE	BEDS	SAMPLES
0	0				
			Siltstone - Massive dark grey to black, weathers light grey.		
			Sandstone - Fine grey, thinly laminated.		
			Siltstone/		
			Mudstone -		
			Siltstone/		
			Mudstone -		
			Sandstone/ - Fine grey, thinly, laminated light brown		
			Mudstone		
			Shale - Black, friable, with silty beds		
			Sandstone - Fine grey well sorted, thin to thickly bedded, occasional thin pebble conglomerate lenses consisting of fine, rose quartz pebbles in grey, fine sandstone matrix		
			Mudstone		
			Siltstone - Black, massive grades down into very fine grey sandstone to siltstone beds, weathers dark grey to black.		
			Mudstone		
			Sandstone - Very fine grained to fine grain sandstone, thinned (1cm) bedd ripple cross-laminated, silty friable weathers light grey, with soft sediment deformation at base locally common		
			Siltstone - Black, massive, hard		
			Sandstone - Fine to medium grained with small scale cut-and-fill structures, sandstone beds/ply grey with rose fly coarsening upwards		
			Mudstone - Massive at top becoming friable & shale at base		
			COAL Seam - Bright coal, with minor friable mud partings.		
			Shale - Dark, friable at top, becoming massive and shaley at base		
			Sandstone - To very fine sandstone, weathers fr. grey		
			Sandstone - Fine grain with thin bedded lamination		
			Siltstone - Grades up into interlying sandstone		
			Mudstone - Dark grey on fresh surface, with fr & wh. ~ ripples weather light grey and mottled.		
		Coal			
			Siltstone - Very hard, diagenetic light grey on fresh surface weathers light grey with dark grey mottling, abundant pebbly to coarse sandstone. Thickness unknown.		
		Coal			
			Sandstone - Medium grey, massive, with CALC shale, very thinly interbedded, weathers light grey.		
			Siltstone/		
			Mudstone -		
			COAL - Needs more investigation.		
			Sandstone - Thinly bedded, with abundant medium scale trough cross-laminations, fine grained white, quartz sandstone, has rose CALC shale.		
			Sandstone - Very fine grain thinly bedded but rose stain.		
			Siltstone - Thinly laminated with very small scale ripple cross-laminations		
			Mudstone -		
			Siltstone - Dark grey on fresh surface weathers medium brown rose, trace fossil bioturbation.		
			Sandstone/ -		
			Shale -		
			COAL - Projected from shaft 3-47		
			Shale -		
			Siltstone -		
			Shale -		
			COAL SEAM.		
			Sandstone - Fine grain of low, medium part of hard, thin planar beds of low, medium dip, medium fine-medium, rose, fine sandstone, fine grain, hard, thinly bedded.		
			Siltstone - Bedded to bed grey, thinly bedded to thinly laminated, slight bioturbation.		
			Sandstone - Very fine grained to fine grained sandstone, standard cut-and-fill structures, thin pebble conglomerate lenses, ripply, massive and mostly broken.		
			Sandstone - Fine to medium grained sandstone - well sorted fine coal laminae at base with no trough x-bedding - 2 layer of bioturbated at upper section		
		Coal			
			Mudstone - Interbedded with Siltstone - very hard grey on fresh surface and rose on old fracture, bioturbation massive and shaley in places		
			Mudstone/		
			Sandstone - Siltstone to very fine grain sandstone		
			Mudstone/		
		Coal			
			Sandstone - Fine to medium grained sandstone, sandstone massive with small scale cut-and-fill structures, sandstone fragments at base		
			COAL SEAM - Bright, blocky coal,		
			Sandstone - Fine, well sorted, medium to coarse grained sandstone, massive beds. Medium scale trough cross-bedding - low angled, sandstone.		

STRATIGRAPHIC SECTION

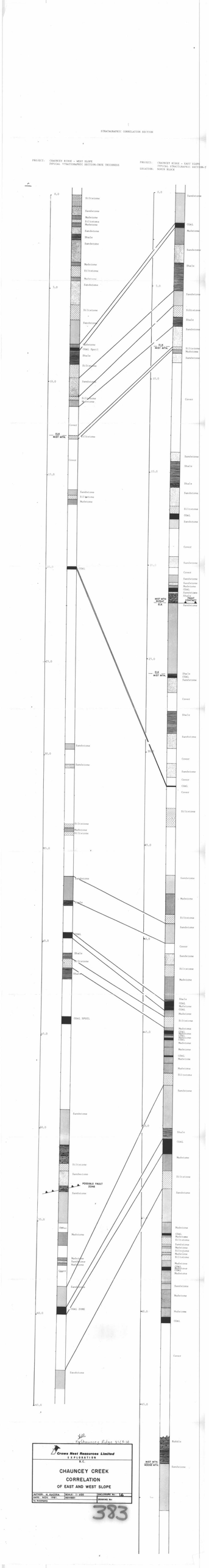
PROJECT:		LOCATION/AREA:	
SECTION:		SECTION BY:	DATE:
SECTION:		SECTION BY:	DATE:
SECTION:		SECTION BY:	DATE:

STRATIGRAPHIC SECTION							
	LITHOLOGY	GRAIN SIZE	Notes	LITHOLOGIC DESCRIPTION			SAMPLE
0.0			Topsoil/clay	Dark to medium grey/brn, stony clayey bedding material, mixed with topsoil			
0.5							
1.0							
1.5			Chert	Med. fine/gry, bedding plane at base			
2.0			Mudstone	Organic, thick, with carbonaceous shale			
2.5							
3.0			Sandstone	Fine to med fine grained sandstone thinly laminated, bedding plane cross shale interbedded			
3.5							
4.0			Shale	Black, friable, poorly fossil			
4.5							
5.0							
5.5							
6.0							
6.5							
7.0							
7.5			Mudstone	Grey green/gry, very, bedding/ grades at base to fine sandstone, with laminated sandstone/ shale interbedded			
8.0							
8.5							
9.0							
9.5							

STRATIGRAPHIC CORRELATION SECTION

PROJECT: CHAUNCEY RIDGE - WEST SLOPE
TYPICAL STRATIGRAPHIC SECTION-TRUE THICKNESS

PROJECT: CHAUNCEY RIDGE - EAST SLOPE
LOCATION: NORTH BLOCK



Crows Nest Resources Limited
EXPLORATION
B.C.

CHAUNCEY CREEK
CORRELATION
OF EAST AND WEST SLOPE

AUTHOR: H. KUCERA | SCALE: 1:400 | DRAWING No: L6
DATE: OCT. 1981 | REVISED: | DRAWING No:
for Antimony

Kgh
Kelowna Ridge 81-8-16

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