



Crows Nest Resources

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October 2, 1985

Ministry of Energy, Mines & Petroleum Resources
525 Superior Street
Victoria, B.C.
V8V 1T7

Dear Sirs:

Enclosed please find our report on the Cedar River Project.

This report has been prepared by Mr. B. McKinstry, an employee of Crows Nest Resources Limited.

Mr. B. McKinstry, M.Sc., graduated in Geology from Carleton University, Ottawa in 1971. Prior to graduation, Mr. McKinstry worked as an assistant for a major mining firm and after graduation as a geologist with a mining firm, a research assistant at Carleton University and as a geologist with a consulting firm. Mr. McKinstry has been employed by Crows Nest Resources Limited as a Staff Geologist, since 1981.

Mr. McKinstry's work was carried out under the supervision of our Manager, Geology, Dr. Barry Ryan.

I consider the aforementioned geologists to be well qualified to undertake the responsibilities they were assigned on this project. I am satisfied that the attached report has been competently prepared and justly represents the information obtained from this project.

Yours very truly

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

Enclosure

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

00 700



MEMORANDUM

TO: *Claudia*

FROM: *Kim*

SUBJECT: *Cedar River Report*

DATE: *85-12-20*

- For Your Information
- Please O.K. and Return
- Please Discuss With Me
- Per Your Request
- For Your Signature
- Please Process
- Return With More Details
- Investigate and Report
- Please Answer
- For Your File

These licenses have forfeited. Please let me know if the report is OK. Thanks.

Kim Rob.

REPLY:

WRITE YOUR REPLY AND RETURN THIS SHEET

Fold Here for Window Envelope

Fold Here for Window Envelope

OPEN FILE

CEDAR RIVER
TELKWA COALFIELD
1984-85 GEOLOGICAL REPORT

PRINCE RUPERT MINING DISTRICT, BRITISH COLUMBIA
B.C. COAL LICENCE NUMBERS: 7967 - 7980 INCLUSIVE
OWNER: SHELL CANADA RESOURCES LTD.
OPERATOR: CROWS NEST RESOURCES LTD.

NTS 103 I/15
LONGITUDE 128° 55'E
LATITUDE 54° 54' N

REPORT PREPARED BY: B. MCKINSTRY, STAFF GEOLOGIST
OCTOBER, 1985

GEOLOGICAL BRANCH
ASSESSMENT REPORT

00 700

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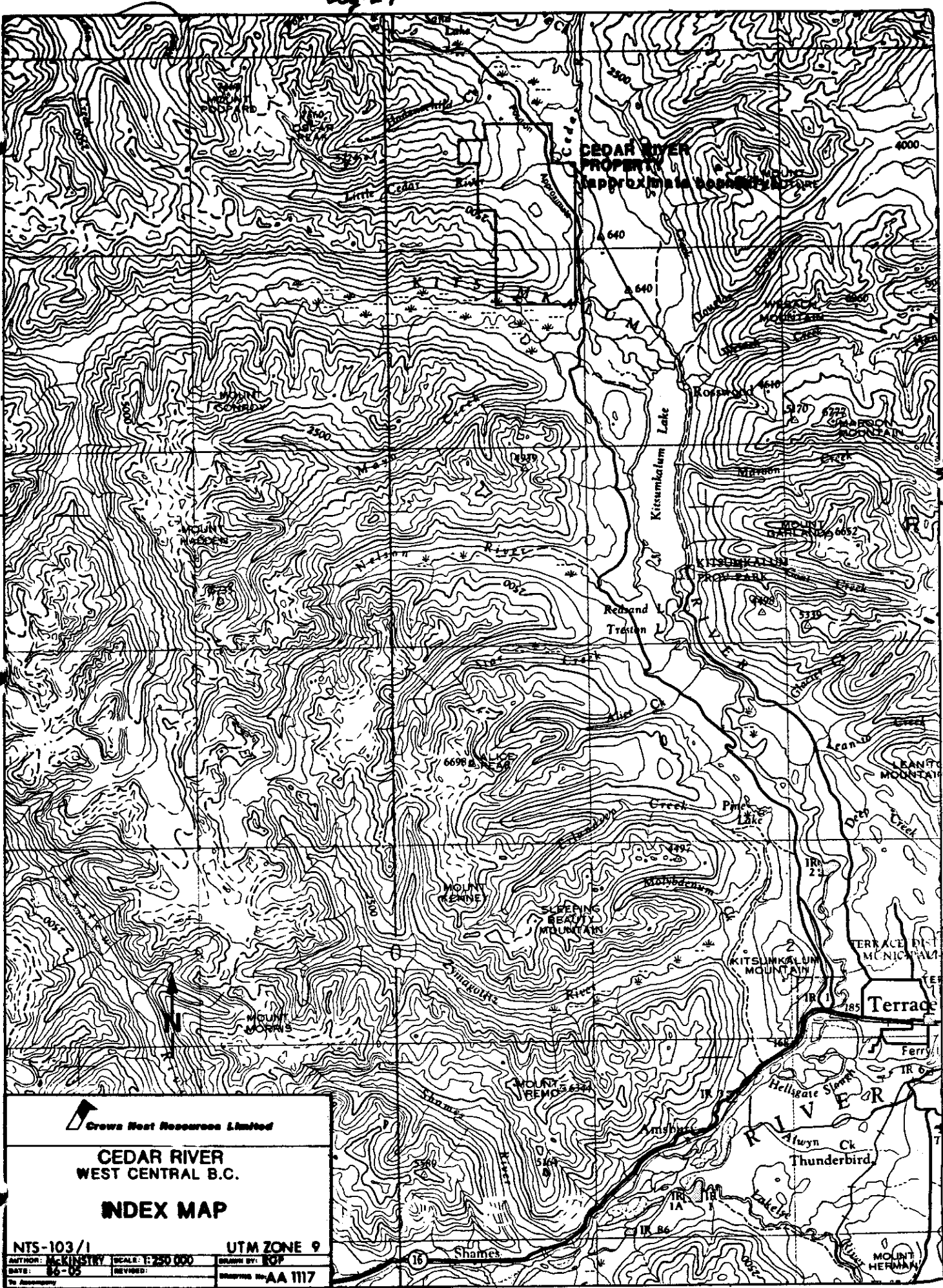
LIST OF ENCLOSURES


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| ENCLOSURE 1 | COAL LAND DISPOSITION MAP, CEDAR RIVER
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Log 1290

CEDAR RIVER
PROPERTY
Approximate boundaries

467
455



 Crows Nest Resources Limited

**CEDAR RIVER
WEST CENTRAL B.C.
INDEX MAP**

NTS-103/1	UTM ZONE 9
AUTHOR: M. KINSLEY	SCALE: 1:250 000
DATE: 85-05	REVISED:
DRAWN BY: ROP	DRAWING NO: AA 1117

SUMMARY

The Cedar River property is located within British Columbia Coal Licences 7967 - 7980 inclusive covering some 3756 hectares of land. The licences are located in the Kitsumkalum River Valley approximately 50 kilometers north of Terrace, B.C. Access to the property is obtained via paved highway between Terrace and Stewart, B.C. Total rail distance between the property and Ridley Island, Prince Rupert is estimated to be 200 kilometers.

The coal licences were applied for in 1984 by Shell Canada Resources Limited with operations carried out in 1984 by its wholly-owned subsidiary, Crows Nest Resources Limited. Exploration to date has included an airborne photographic survey and preliminary geological mapping at a 1:10000 scale. The licences were surrendered to the Crown in 1985.

Geology within the area of interest is dominated by the Coast Range intrusive complex to the west. The intrusions have overprinted a hornfelsic texture to the sedimentary rocks. In addition, there is evidence of intense faulting and associated folding. It was reported (Monckton, 1914) that anthracite occurred in Jurassic Bowser sediments in and about Little Cedar River. To date, little evidence has been obtained to substantiate this. No estimate as to thickness of the Bowser Group is possible due to extent of overburden and complex structure.

1.0 INTRODUCTION

1.1 Location and access: NTS 103 I/15W

The Cedar River coal prospect is located within the Kitsumkalum River Valley east of the main Coast Range mountains.

The property is 50 kilometers north of the town of Terrace, B.C. and is accessed by a newly (1984) paved highway from Terrace to Stewart along the east side of Kitsumkalum Lake. The Port of Prince Rupert with the Ridley Island coal handling facilities is approximately 200 kilometers by rail from the property. Most of the area has been extensively logged, providing a dense network of roads. These roads have been utilized for access and surface mapping.

1.2 Geography and Physiography:

Topography on the Little Cedar River area is of moderate relief ranging from 240 meters in the Kitsumkalum Valley to 1200 meters along the ridges north and south of Little Cedar River. However, to the west, relief is more extreme rising to 1800 meters in the Coast Ranges with attendant glaciers and rugged topography. Extensive logging operations have removed a substantial percentage of forest vegetation near the junction of Little Cedar River drainage with Cedar River drainage.

1.3 Tenure of Land and Coal Rights

The Cedar River property consists of 14 B.C. coal licences, held by Shell Canada Resources Limited, with operations conducted by Crows Nest Resources Limited, a wholly-owned subsidiary of SCRL. The licences, occupying some 3756 hectares of land were acquired by SCRL in 1984. Enclosure #1 details the position of licence boundaries with respect to topographic features. These licences have since been surrendered to the Crown.

2.0 Work

2.1 Scope and Objectives of 1984 Program

A 1914 coal assessment report from the open files of the Ministry of Energy, Mines and Petroleum Resources provided sufficient incentive to conduct a preliminary geological study of the Little Cedar River area. Objectives included mapping observable outcrop at a scale of 1:1000, prospecting for anthracite showings and pending these results, identifying and locating possible trench and drill hole sites.

2.2 Work Accomplished

With the exception of a small part of the Little Cedar drainage, the property was completely mapped at a scale of 1:10000 (enclosure #3). In addition the east-west trending ridge immediately south of Little Cedar River was prospected into the Coast Range intrusives.

To facilitate the mapping, airborne photography at a scale of 1:15,000 and 1:30,000 was conducted over the property in June, 1984. Due to seasonal fluctuations of water level in the stream drainage, mapping was completed in four stages between the months of April - September, 1984, and in April, 1985.

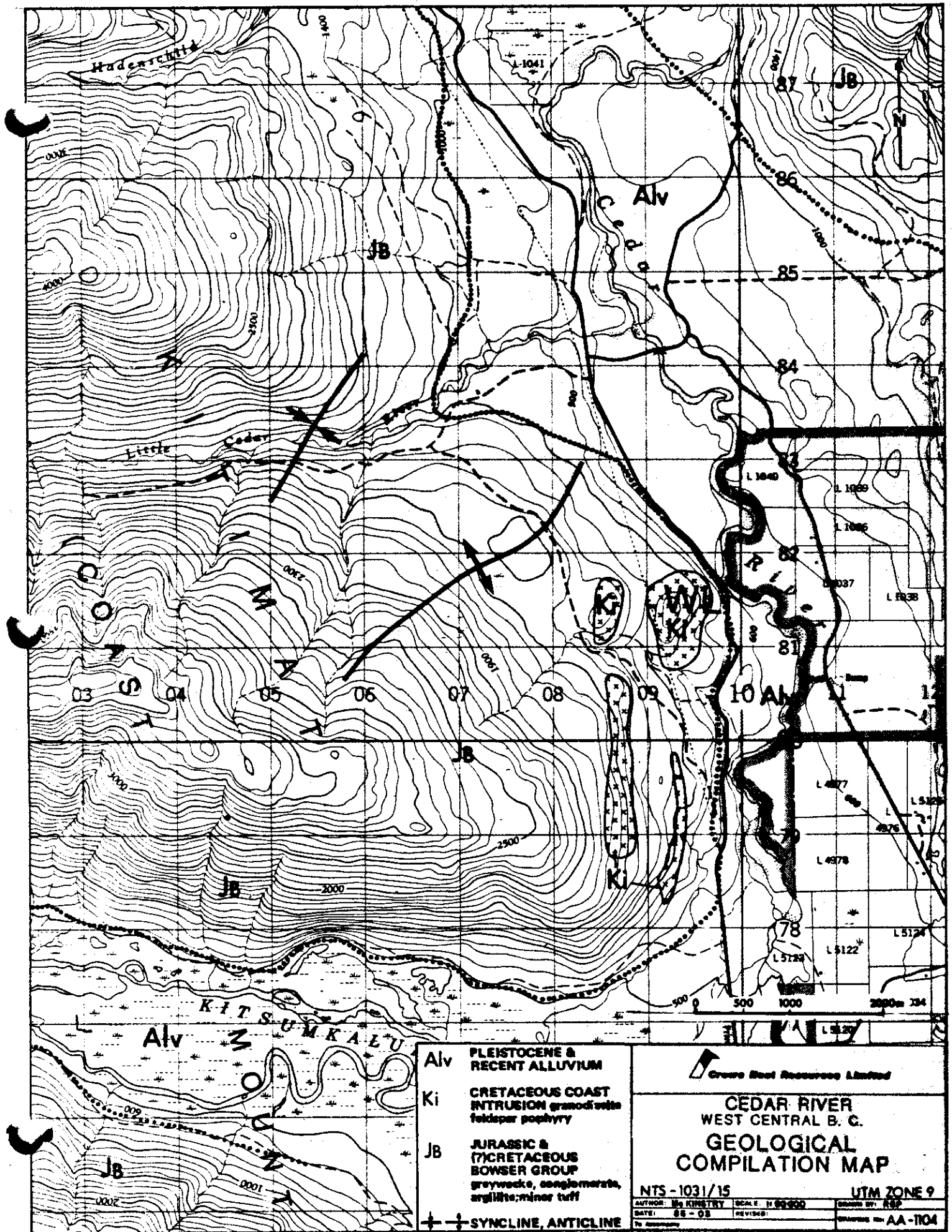
2.3 Costs of Work Done:

A decision was made to forfeit the licences in 1985 and an application to extend term of licences and cost summary has been omitted from this report.

3.0 Geology

3.1 Regional Geology

Duffell & Souther,(1963) indicated that most of the strata north of Kitsumkalum Lake consist of greywacke, conglomerate, argillite and minor tuff of the Jurassic-Cretaceous Bowser Group meta-sediments. Isolated quartz monzonite and granodiorite dykes and plutons intrude the Bowser group throughout the area (enclosure #2). The regional trend is north to northeast accentuated by anticline - syncline pairs. This style of folding as well as complicated and intense faulting dominate the geology within the property.



+ + SYNCLINE, ANTICLINE
 + + + + +

Crowl Resources Limited
CEDAR RIVER
WEST CENTRAL B. C.
GEOLOGICAL
COMPILATION MAP
 NTS - 1031/15 UTM ZONE 9
 AUTHOR: J.S. KIRSTEY SCALE: 1:50,000 DRAWN BY: RSP
 DATE: 88-08 REVISED: DRAWING NO: AA-1104

3.2 Cedar River Stratigraphy

Almost the entire area of coal licences is underlain by the Bowser Group sediments (enclosure #3) with the exception of isolated dyke-like feldspar porphyry and granodiorite masses trending northeastward in the southeast corner of the map area. Unlike much of the adjacent areas, the Bowser sediments near Cedar River are only weakly metamorphosed. The exception to this is near intrusive dykes where a pervasive hornfelsic texture is overprinted on the rocks along with moderate to intense pyritization.

The Bowser sediments can be divided into a lower and upper series. On the east half of the licences, dominant rock types encountered include carbonaceous shale, mudstone (with identifiable Belemnite zones), siltstone and minor sandstone. This can be referred to as the lower series. Overlaying this to the west is the upper series consisting of fine-medium grained sandstones, grey-green siltstones, carbonaceous shales and minor coal. Rocks in this series are more pervasively metamorphosed such that argillite and greywacke rock-types are common.

A representative stratigraphic column could not be constructed due to deformation and limited outcrop exposure.

As previously noted, fine-grained feldspar porphyry and medium-grained granodiorite dykes trending northeast, intrude the lower series. Within tens of meters of the contact, shales and siltstone have been metamorphosed to slates and argillites respectively.

3.3 Structural Geology

Although outcrop is limited to stream drainages and man-made borrow pits in the lower elevations, there is sufficient exposure to indicate that faulting is more intense on the western margin of the property. Some creek drainages display continuous, abrupt changes in strata attitudes over small distances. This coupled with the large scale anticline-syncline fold pair in the center of the licences (enclosure #3) imply difficult correlation problems within the Bower sediments in the licence area. At the higher elevations to the west, the pattern of alternating syncline-anticline fold pairs persists but faulting is much less evident and small feldspar porphyry, lamprophyre and granodiorite dykes are much more prevalent.

3.4 Coal Geology

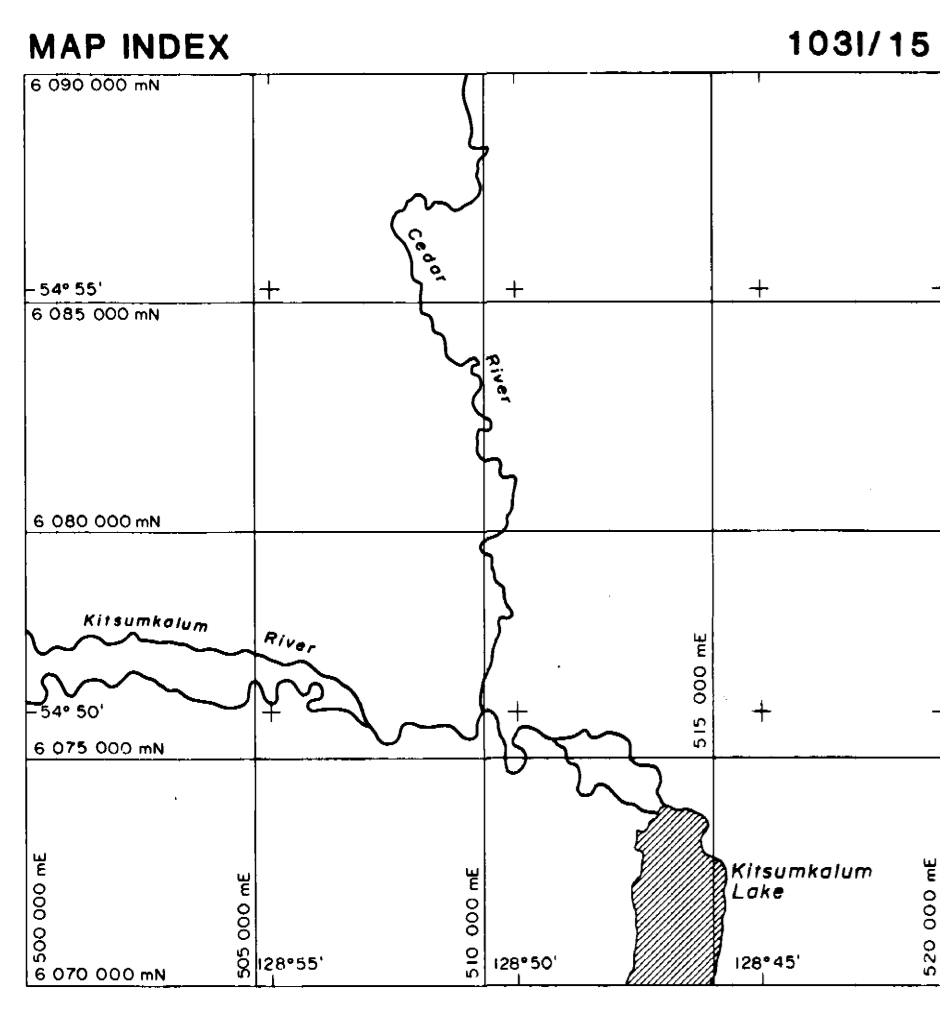
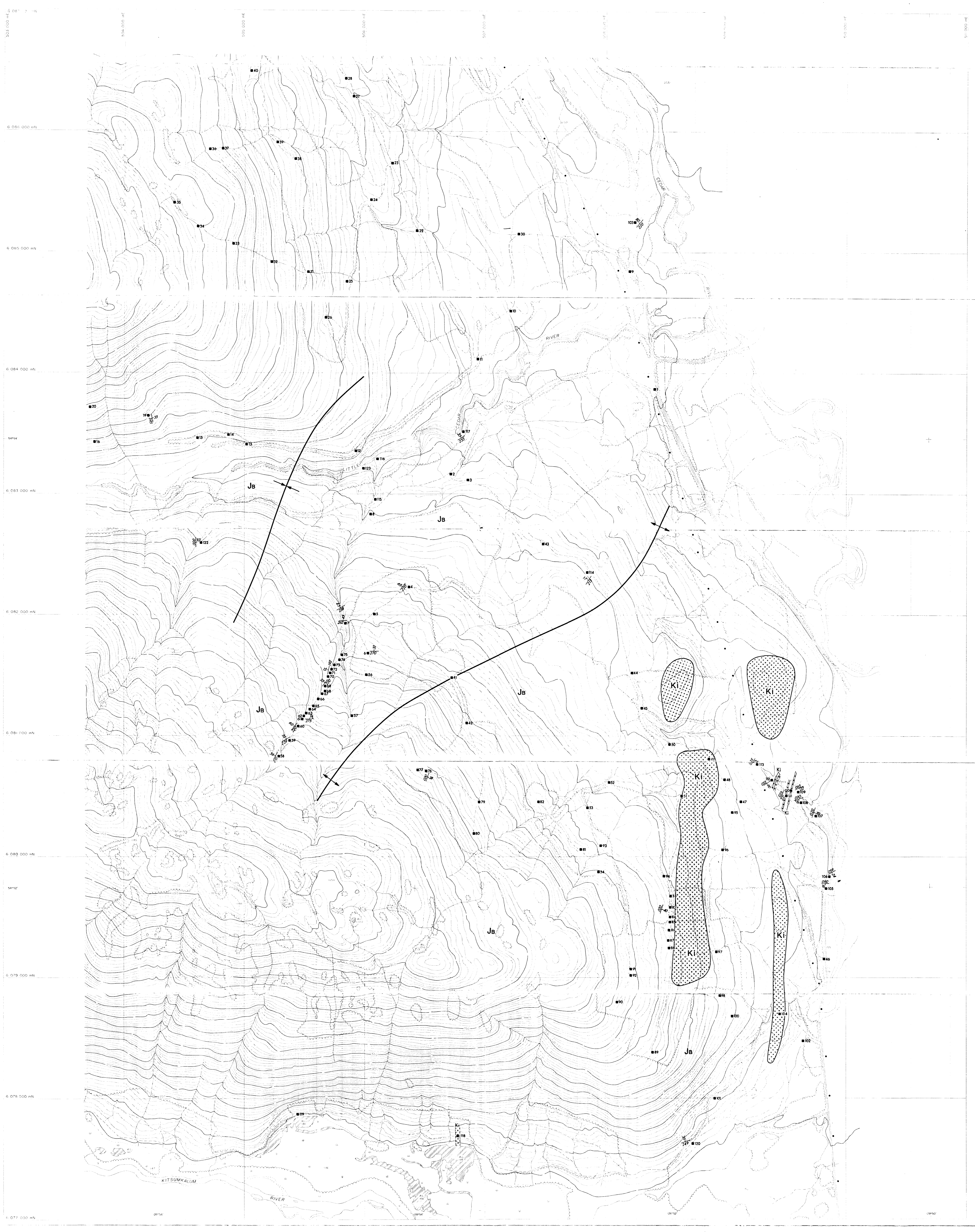
Coal float was observed in a small tributary south of Little Cedar River. In addition, thin (up to .5 meter) coal bands occur in structurally disturbed strata at the western extremity of the licences in the Little Cedar River canyon. The seams thicken, thin and pinch out and appear to act as glide planes in the faulting process. The coal is thus finely powdered and ashy. Some of the canyon exposure was inaccessible due to the high water conditions in 1984 and was examined in April, 1985. In summary, insufficient occurrences of coal on the property to date impose strong limitations on economic potential for this property.

4.0 Recommendations for Further Work:

Further exploration work on the Cedar River project is not warranted due to a lack of significant coal occurrences. There are no recommendations for further work.

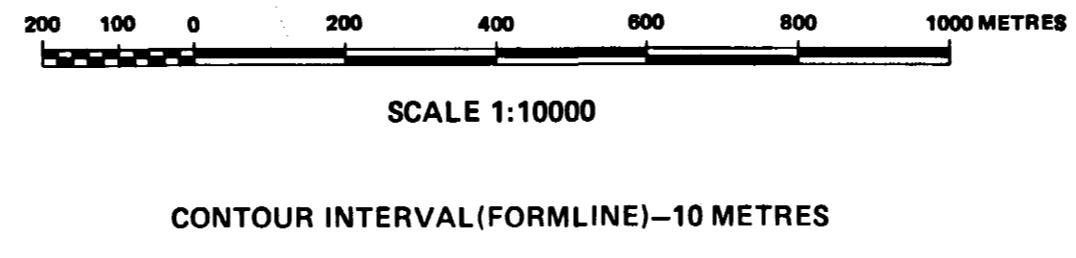
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LEGEND

MAIN ROAD		RIVER	
BRIDGE		INTERMITTENT STREAM	
TRACK OR TRAIL		LAKE	
SPOT HEIGHT		SWAMP	
CONTOURS		SAND	
DEPRESSION		TREES	



LEGEND

	CRETACEOUS COAST INTRUSIONS
	Granodiorite, Feldspar porphyry
	JURASSIC BOWSER GROUP
	Siltstone, Sandstone, Shales and Hornfels equivalents
	BEDDING ATTITUDE
	SYNCLINE AXIS
	ANTICLINE AXIS
	DATA STATION

700

Crows Nest Resources Limited

CEDAR RIVER
WEST CENTRAL B.C.

GEOLOGY MAP

UTM ZONE 9

NTS-1031/15	SCALE: 1:10000	DRAWN BY: RGP
AUTHOR: MCKINSTRY	REVISOR:	DRAWING No: CE3U01
DATE: 85-03		
To Accompany		

Encl 4

CEDAR RIVER

STATION DESCRIPTION

<u>STATION</u>	<u>ATTITUDE</u>	<u>DESCRIPTION</u>
1		- Initiate truck traverse at road intersection with Kitsumkalum-Stewart road Odom @ 465.3 km.
2		- Intersection with new logging road Odom @ 467.4 km.
3		- Odom @ 467.6 km.
4	220/65	- Burrow Pit for B.C. highways <u>North side of Pit</u> - Siltstone, Fe stained interbedded with black, fissile shale - also aphanitic, grey-green intrusive dyke with disseminated pyrite (15m wide) - up to 1" Calcite veins - weathers hematite red- to yellow to grey-green <u>South side of Pit</u> - more black shale with excellent leaf and plant imprints - strata more contorted and sheared
5		- Odom @ 470.5 km Intersection in upper log landing
6		- Odom @ 471.7 km - 590m elevation - start point for traverse west to creek
		<u>TRAVERSE DOWN CREEK</u>
	265/55 250/58	- Structure very complex with contorted bedding - No indication of coal to 518m - Large slide area @ 518m in creek
7	262/45	Exposure of interbedded siltstone shale in creek - 5m of exposure

<u>STATION</u>	<u>ATTITUDE</u>	<u>DESCRIPTION</u>
	238/45	- Downstream @ 506m elevation - Structurally complex @ 491m elevation
	275/36	- 485m elevation in creek - @ 457m elevation got out of creek due to high water level and returned to truck @ station 6 via logged out area
8		- Intersection of creek with lower logging road
9		- Intersection of Stewart-Kitsumkalum road with logging road north of Little Cedar River - Odom @ 593.0 km
10		- Creek crossing @ 594.7 km
11		- Hairpin intersection @ 595.2 km
12		- Burrow Pit @ 596.5 km - Hornfels, aphanitic to finegrained, grey-green - also black, carbonaceous, siltstone/sandstone - Abundant plant fragments - Ironstaining on weathered surfaces
13		- "V" junction @ 597.5 km - East edge of new cut area - Following up road west into cut area
14		- Another "V" junction @ 597.7km
15		- Burrow Pit @ 598.0 km - Hornfels, grey-green
16		- "V" junction @ 598.9 km - Following lower road
17		- End of road @ 599.4 km

<u>STATION</u>	<u>ATTITUDE</u>	<u>DESCRIPTION</u>
18		- Followed upper road from station 16 to 600.2 km to west edge of cut area - All sediments are Hornfels
19	345/33	- Returned to station 14 and followed upper road to Burrow Pit @ station 19 - Carbonaceous, black siltstone/sandstone as at station 12 - Pit also contains finegrained plate, grey sandstone/siltstone
20		- Jointed Hornfelsic sandstone - Grey, fine -medium grained, platy weathered
21		- Beyond station 20 westward to west edge of cut area
22		- Returned to Station 11 and followed upper road to log landings - Creek crossing @ station 22
23		- Road intersection, taking left fork
24		- Creek crossing with bridge washed out
25		- Burrow Pit with grey-green, aphanitic Hornfels
26		- End of driveable road
27		- Returned to station 23 and took north fork - Creek crossing @ station 27
28		- Grey-green, aphanitic Hornfels on west side of road
29		- End of road
30		- Attempted to prospect lower roads but no outcrop and overgrown

<u>STATION</u>	<u>ATTITUDE</u>	<u>DESCRIPTION</u>
31		<ul style="list-style-type: none">- From station 26, traversed up creek to higher elevations- At station 31, grey-green Hornfels with small clasts. Rock is hard, blocky- Creek has mini-waterfalls of 1m drop exposing rock out cut
32		<ul style="list-style-type: none">- No outcrop above station 31 and creek disappears below surface @ 597m- Followed another creek further up topography. Creek flows underground @ 628m elevation
33		<ul style="list-style-type: none">- Found new creek north from previous ones and continued to climb uphill westward- Small cascades of water provide outcrop exposure of Hornfels on creek bottom- Snow cover @ 753m
34		<ul style="list-style-type: none">- Plateau in snow @ 805m- Proceeded north on contour to traverse down stream to north
35		Clearing @ 813m
36		<ul style="list-style-type: none">- Commence down new stream- Outcrop of Hornfels at 683m
37		<ul style="list-style-type: none">- Outcrop @ 655m- Hornfels, grey-green, aphanitic weathering dark brown-white
38		<ul style="list-style-type: none">- Stream crosses upper road- Hornfels on west side of road in stream bed- Proceeded north along logging road
39		<ul style="list-style-type: none">- Outcrop @543m elevation across road- Silty shale to very finegrained siltstone- Friable weathering- Fractured to broken to rubbly

<u>STATION</u>	<u>ATTITUDE</u>	<u>DESCRIPTION</u>
40		- Grey-green aphanitic Hornfels @ 573m elevation - Weathers chalky-white
41		- From station 5 proceeded southeast on main forestry road - Southeast end of first cut area
42		- End of driveable road
43		- Intersection of roads
44		- South edge of cut area
45		- End of driveable road
46		- Across to south landings - Intersection of Stewart road with logging road
47		- Road intersection
48		- Feldspar porphyry intrusion weathering buff to chalky
49		- Creek Crossing
50		- Road intersection - Proceeding south
51		- Road intersection - Proceeding west
52		- Creek crossing - Aplite dyke?, pink, aphanitic, hard - Old drill hole location Azim of hole 110° plunge of hole 35°
53		- End of driveable road
54		- Feldspar porphyry intrusive forming a ridge - Weathers chalky white
55		- Returned to station 51 and traversed south road to end of driveable part

<u>STATION</u>	<u>ATTITUDE</u>	<u>DESCRIPTION</u>
56		- Point of departure of ground traverse for upper creek system @ 630m elevation
57		- 750m elevation in first creek in snow but heading along contour to second creek to west
58	210/35 210/36	- Start of traverse down creek - 805m elevation - Good creek wall exposure or outcrop with hard shale at base grading into siltstone/silty shale to hard, black shale at top of cliff - Shale is well laminated and there are some carbonaceous shale beds with plant fragments
59	239/35	- @ 770m elevation - Shale overlain by grey fine grained sandstone - No coal - Creek cuts parallel to strike
60	220/60	- Cliff face on east side @ 740m - Shale weathering grey-tan - Very friable - Shale is capped by medium grained grey sandstone
61	265/32	- Interbedded waxy shale with very hard, dark grey-black silty shale/siltstone sequence - @ 722m elevation
62		- @ 701m elevation - grey-green finegrained sandstone with thin interbeds of waxy, highly lustrous coal - However no shale
63	010/55	- 700m elevation - Complex structure with possible fault zone - Waxy black shale beds to 2m thick

<u>STATION</u>	<u>ATTITUDE</u>	<u>DESCRIPTION</u>
64	160/27	<ul style="list-style-type: none">- 688m elevation- very complex structures- Strata on east side of creek dips north while on west side dip is to west
65	235/51	<ul style="list-style-type: none">- @ 675m elevationInterbedded finegrained sandstone/siltstone and coaly shale- Slightly downstream is a creek confluence. Sandstone outcrop here which is medium grained, medium grey
66	230/46 235/30 235/26	<ul style="list-style-type: none">- Grey ironstained siltstone interbedded with coaly shale
67	050/14	<ul style="list-style-type: none">- Cliff exposure on east side of creek @ 645m elevation- Fault zone dipping 50° north with flat lying siltstone/sandstone sequence juxtaposed against 14° dipping sandstone/siltstone strata- No indication of relative movement
68	240/80	<ul style="list-style-type: none">- @ 640m- Ironstained siltstone/silty shale underlain by coaly shale
69	220/55	<ul style="list-style-type: none">- @ 635m- Change in attitude- Strata undulates on west side of creek
70		<ul style="list-style-type: none">- @ 612m- Good exposure of ironstained black shale
71	192/15	<ul style="list-style-type: none">- 630m elevation- Blocky, massive, medium grained sandstone @ top grading down to siltstone/silty shale high on west bank- Weathers grey-tan

<u>STATION</u>	<u>ATTITUDE</u>	<u>DESCRIPTION</u>
72		<ul style="list-style-type: none">- 600m elevation- Structurally disturbed with strike changing on either side of the creek- East side is 255/70 (silty shale)- West side numerous attitudes but 230-240 Azim and approximately 40° dip
73		<ul style="list-style-type: none">- 595m elevation- Grey medium grained, sandstone grading down into silty shale
74		<ul style="list-style-type: none">- 585m elevation- Grey medium grained sandstone weathers tan-grey- Gently folded
75		End of traverse at slide area @ 556m elevation
76	020/38	<ul style="list-style-type: none">- East-west trending Burrow Pit- Medium grained, grey, blocky sandstone with laminations
77		<ul style="list-style-type: none">- Up road from station 76- Burrow Pit- Fine-medium grained, grey-green to brown, weathered Hornfels
78		<ul style="list-style-type: none">- End of west road
79		<ul style="list-style-type: none">- Intersection of west and south roads
80		<ul style="list-style-type: none">- 763m elevation- End of south road
81		<ul style="list-style-type: none">- 580m elevation- Feldspar porphyry ridge immediately to left
82		<ul style="list-style-type: none">- End of Hairpin road- No outcrop
83	020/40	<ul style="list-style-type: none">- Black Hornfelsic shale with disseminated Pyrite throughout

<u>STATION</u>	<u>ATTITUDE</u>	<u>DESCRIPTION</u>
84		- 521m elevation - Rocktype as above but much more blocky and massive
85		- 524m elevation - as above
86		- 525m elevation - White feldspar porphyry with feldspar crystals to 15mm in size - Matrix grey-green
87		- 525m elevation - Same rocktype as at station 83
88		- 527m elevation - as above
89		- 531m elevation - End of road - Traverse upslope to upper road
90		- 637m elevation - South end of upper logging road
91		- 628m elevation - School bus located here with communication equipment for logging outfits - Outcrop of rock as at station 83
92		- 625m elevation - Rocktype as at station 83 - Glacial Striae - Planar surfaces dip @ 24° East - Sulphide layers
93		- 550m elevation - Junction west Hairpin Road
94		- Feldspar porphyry as at station 86 in blow-down area

<u>STATION</u>	<u>ATTITUDE</u>	<u>DESCRIPTION</u>
95		- Start point for traverse along lower road
96		- 350m elevation - Creek crossing - No outcrop apparent but road bed is primarily the feldspar porphyry as at station 86
97		- 375m elevation - Second creek crossing - Outcrop upstream - Feldspar porphyry weathers chalky white
98		- 387m elevation - Creek crossing - Contact of feldspar porphyry and black pyrite hornfelsic shale as per station 83 - Contact is at 150°Azim / 55° West
99		- Creek crossing @ 427m elevation
100		- Location approximately due to trees - Feldspar porphyry intrusive rubble on road cut
101		- Black hornfelsic shale
102		- Feldspar porphyry ridge-forming dyke
103	218/80 222/70 216/82	- 4 km north of Little Cedar River bridge - Shale/siltstone sequence - Fissile to blocky
104	140/27 160/32	- Medium grained white weathering feldspar porphyry intrusive dyke - Intrudes pale grey-green hornfelsic siltstone (GYWKE?)

<u>STATION</u>	<u>ATTITUDE</u>	<u>DESCRIPTION</u>
105	090/16	<ul style="list-style-type: none">- Dark grey-black siltstone and tan to light grey siltstone- Concretions in siltstone- Strongly jointed
106	059/24	<ul style="list-style-type: none">- Similar rocktype to station 105
107	020/70	<ul style="list-style-type: none">- Small drainage/canyon 4.3 km north of Kitsumkalum River- Can see feldspar porphyry dykes further up in canyon- Outcrop is siltstone/shale sequence which is dark and carbonaceous
108	070/29	<ul style="list-style-type: none">- Black, fissile rusty weathering shale with Belemnite fossils
109	065/22	<ul style="list-style-type: none">- Same rocktype as station 108- First major bend in river
110	025/30	<ul style="list-style-type: none">- Close to Feldspar porphyry dyke
112		<ul style="list-style-type: none">- Feldspar porphyry dyke trending 055/90
113	035/65	<ul style="list-style-type: none">- Power line- Black fissile shale which is broken and faulted- Also, another porphyry dyke cuts sediments beneath power line- Dykes average 10-15m in width
114	237/17	<ul style="list-style-type: none">- Burrow Pit exposes dark grey black shaly siltstone- Friable weathering and quartz veining- Curved and folded bedding planes- Occasional finegrained dark tan sandstone interbeds
115	340/65	<ul style="list-style-type: none">- anthracite float in creek bottom- 10m downstream is outcrop of dark grey shaly siltstone

<u>STATION</u>	<u>ATTITUDE</u>	<u>DESCRIPTION</u>
116		- Extreme structural disturbance in siltstone/shale sequence
117	233/33	- Alternate sequence of sandstone and shale - Very prominent fault with associated folding just upstream
118		- Feldspar porphyry grading into flow banded Dacite or Rhyolite - Pale green, weathering white - Possible isolated dyke
119		- Large talus slope from overlying cliffs - Talus of plant imprinted dark grey-black slate and feldspar porphyry intrusive
120	249/35	- Black shale which is slightly metamorphosed but bedding still evident
121	198/47 201/63 192/43	- Grey hornfelsic shales on ridge-top - 335m elevation
122	360/33	- Grey-green siltstone with blocky thick bedding features - Lots of plant fragments - Weathers pale green - Local shear planes move along and across bedding planes - Approximately 1m thick bedding
<u>123</u>		- Coal zone in Little Cedar River - .6m thick, soft, crushed and contorted - Outcrop strongly faulted and folded - Coal acting as a glide mechanism - Much faulting with associated drag folds

<u>STATION</u>	<u>ATTITUDE</u>	<u>DESCRIPTION</u>
124	235/58 220/49 253/80 Further East	- Grey-green, finegrained, weakly banded argillite - Somewhat massive and jointed - Quartz veining
125	210/72 215/70	- Grey- green argillite as at station 124 - Good bedding - Lots of granodiorite, lamprophyre and diorite dyking - Quartz veining
126	207/61	- Finegrained, laminated argillite
127	344/71	- Graphitic hornfels - Pyrite bands - Close to granodiorite intrusion contact
<u>128</u>	192/45	- Coal 3" thick in sandstone and dark grey-black siltstone sequence - Coal is powdery and strongly weathered
129	010/30	- Massive sandstone with units up to 30m thick - Very thin coaly shale underlies thick sandstone and appears to be a glide plane.