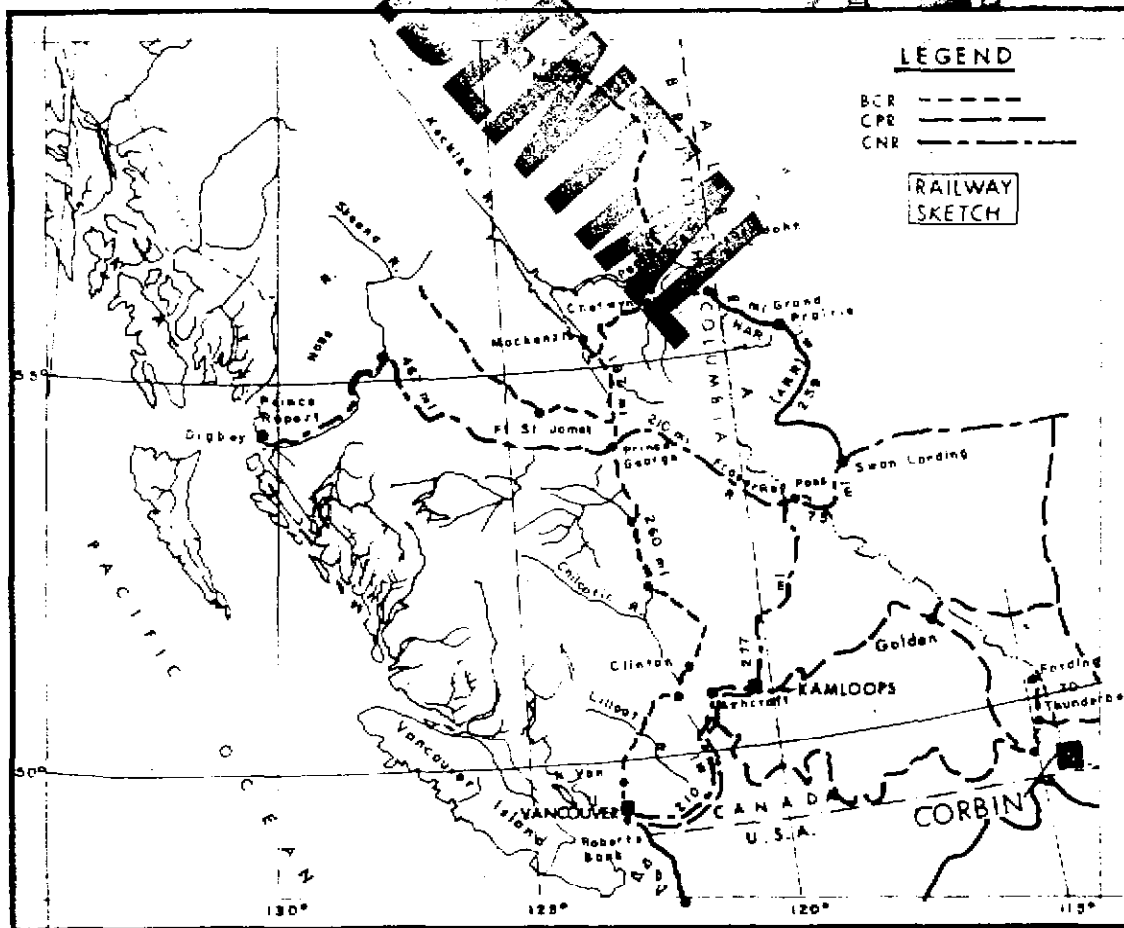


K-Skill-Tent Mt. 80(1)A

82617
 00
 444B
 452
 Chalmers
 K. S. Chalmers
 April 30, 1981
 Chalmers Resource Ltd.

452

CORBIN-TENT MOUNTAIN PROPERTY



Report on Coal Licence 413 Group 6
 Kootenay Land District, British Columbia on work
 done in June-October, 1980

Held by: SHELL CANADA RESOURCES LIMITED
 Operated by: CROWS NEST RESOURCE LIMITED
GEOLOGICAL REPORT
 Lot: 49° 31' to 49° 33' Long: 114° 39' to 114° 42'
 N.T.S. 82.G.7

April 30, 1981

Author
 Patrick C. Gilmar
 Kevin Sharma
 Geologists
 Crow's Nest Resources Ltd.

OPEN FILE 52



PROFESSIONAL VERIFICATION OF REPORT

Entitled: Corbin-Tent Mountain (Middle Mountain) Property
Kootenay Land District, B.C.
B. C. Coal Licence 413

Patrick C. Gilmar planned and supervised the 1980 geological field program on Corbin, B.C. Coal Licences held by Shell Canada Resources Ltd. and operated by Crows Nest Resources Ltd. Kevin Sharman did the field work and compiled the geological information for this report. Frank Martonhegyi supervised the activity of this program under the general direction of the undersigned.

Pat Gilmar, B. Sc., graduated in Geology from the University of Calgary in 1978. Kevin Sharman, B.Sc., graduated in Geology from the University of Calgary in 1979.


Frank Martonhegyi, M. E., graduated in Mining Geological Engineering from the University of the Heavy Industry, Hungary, in 1962; and received post-graduate training at the University of Saskatchewan, Saskatoon, in 1969-1971. His experience in Western Canadian coal exploration since 1971 includes positions with:

- CanPac Minerals Ltd., Calgary, Alberta
- Shell Canada Resources Ltd., Calgary, Alberta
- Crows Nest Resources Ltd., Calgary, Alberta

His prior experience includes underground coal mining geology, geotechnical engineering and geochemistry in Hungary, Austria and Canada.

He currently holds the position of Manager, B. C. Projects for Crows Nest Resources Ltd. supervising coal exploration in British Columbia.

I consider both the aforementioned geologists to be well qualified to undertake responsibilities they were assigned on this project. I am satisfied that the attached report dated March 20, 1981 has been competently prepared and justly represents the information obtained from this project.



J. J. Crabb, P. Eng.

CONTENTS

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1.0 SUMMARY	1
2.0 LOCATION	3
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ENCLOSURES

<u>NO.</u>		<u>PAGE</u>
1	LOCATION MAP	following p. 3
2	LOCATION MAP	following p. 3
3	COAL LICENCE LOCATION MAP	following p. 4
4	STRATIGRAPHIC TABLE	following p. 7

APPENDICES

	<u>SCALE</u>
APPENDIX A - LAND TENURE	
APPENDIX B - LAND MAP	1:50 000
APPENDIX C - APPLICATION TO EXTEND TERM OF LICENCE	
APPENDIX D - HAND TRENCHING SUMMARIES	
APPENDIX E - LOCATION SURVEYS REPORT AND TRAVERSE MAP	1:5 000
APPENDIX F - GEOLOGY MAP	1:5 000
APPENDIX G - GEOLOGY CROSS SECTIONS	1:5 000

1.0 SUMMARY

The Corbin-Tent Mountain (Middle Mountain) property (Coal Licence No. 413) covers approximately 259 hectares of Crown land north of Coal Mountain and south of Tent Mountain. Coal mining activities have taken place in the Corbin area since 1908.

The property lies 4 km directly west of the Alberta-British Columbia boundary, 56 km directly north of the United States border, and 28 km east of Fernie, B.C. The Byron Creek mine access road runs along the west and south sides of the property, providing access to Highway 3 near Sparwood, B.C., a distance of 23 km by road from Corbin townsite. A 20 km rail spur to Corbin townsite from the CP Rail line at McGillivray has been constructed by Byron Creek Collieries Limited which is presently producing coal from the northern end of Coal Mountain.

The property lies within the Rocky Mountains and is an outlier of the Fernie coal basin. The property contains strata of the lower

Kootenay Group (Gibson, 1979) along strike with those mined at Coal Mountain and Tent Mountain.

The strata of the Corbin-Middle Mountain property (C.L. 413) have been folded into a south plunging, N-S trending anticline-syncline pair, and are repeated by west-dipping thrust faults.

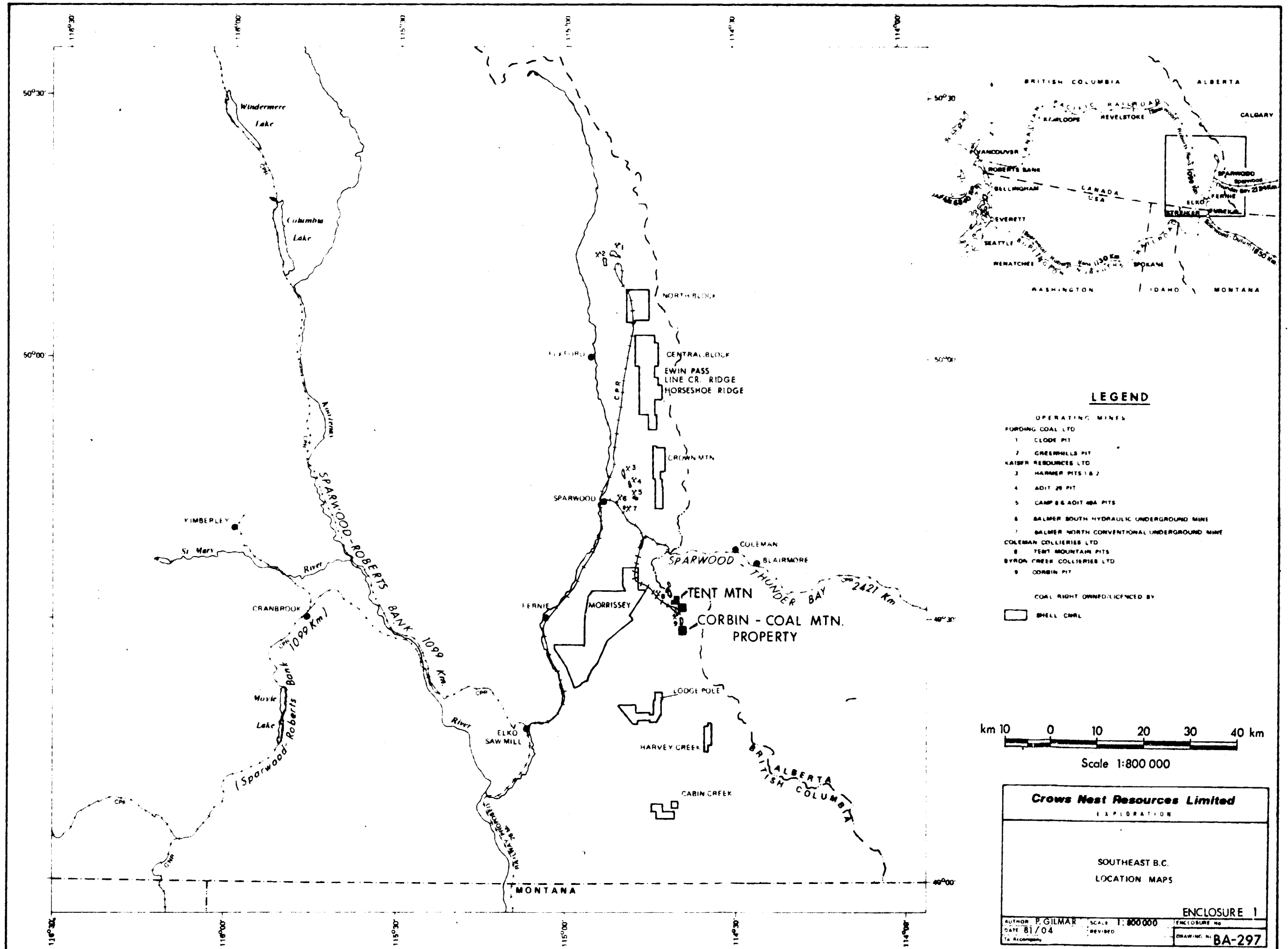
Two coal occurrences on the property are believed to be the same seam. This seam is approximately 7.5 m thick and rests directly on the Moose Mountain Member of the Morrissey Formation.

The property is regarded as a thermal prospect. No quality analysis has been done but medium Volatile Bituminous coal is expected. Initial work indicates some open pit potential. Further exploration is needed before coal reserves can be estimated on this grass roots project.

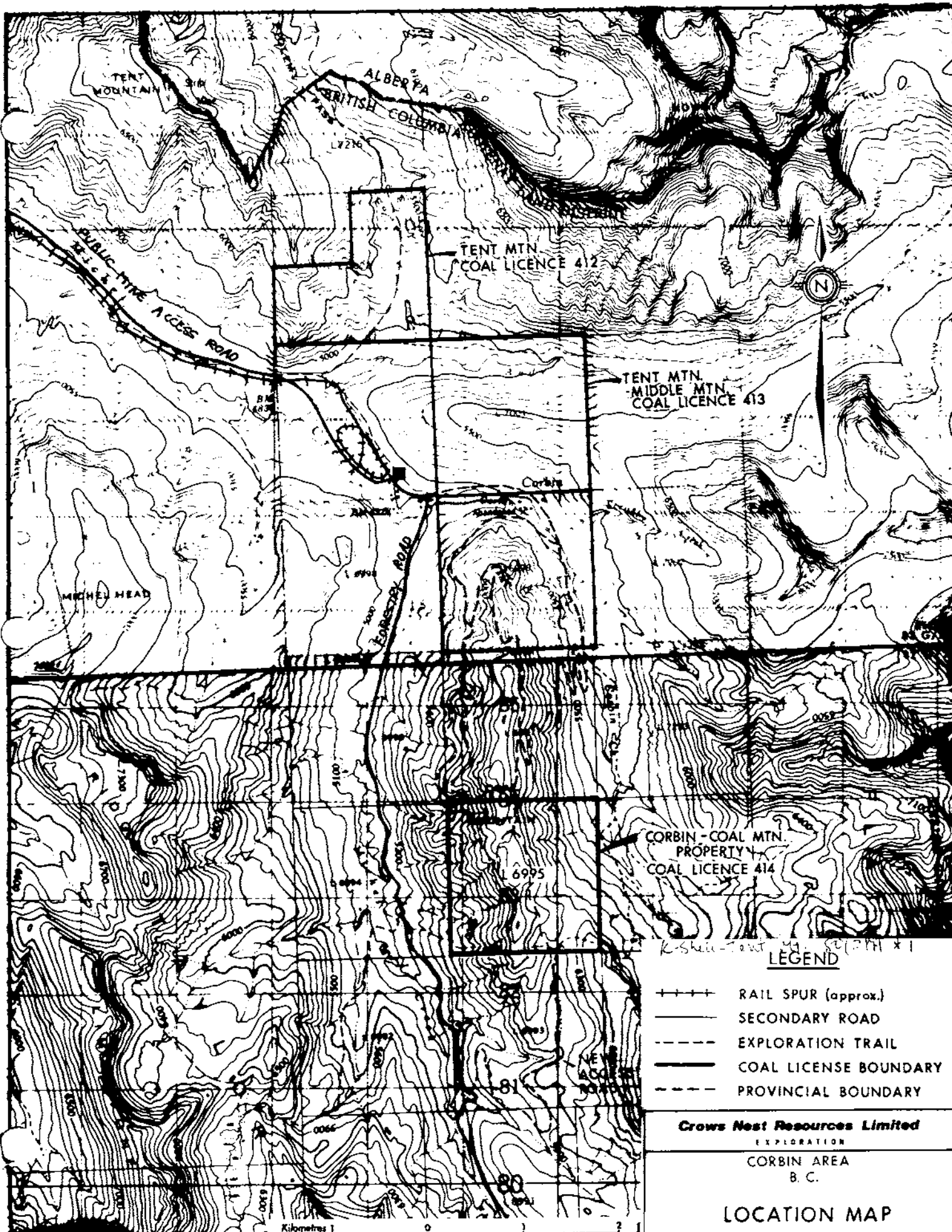
2.0 LOCATION

The Corbin-Tent Mountain (Middle Mountain) property is located on B.C. Coal Licence No. 413 covering 259 hectares. It is in southeastern British Columbia and lies 4 km directly west of the Alberta-British Columbia boundary, 56 km directly north of the United States border, and 28 km east of Fernie, B.C. (Enclosure 1).

It lies south of Andy Good Creek and north of Corbin Creek (Enclosure 2). Byron Creek Collieries is presently producing thermal coal from a surface mine on the northern end of Coal Mountain. Loadout facilities are adjacent to the Middle Mountain licence.



K-Still Tent Mt. SC(2)A *1



K. Shier - cont. 44, 50 (PH. X 1)

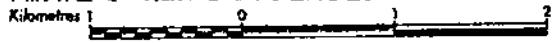
LEGEND

++++	RAIL SPUR (approx.)
— — — —	SECONDARY ROAD
- - - - -	EXPLORATION TRAIL
— — — —	COAL LICENSE BOUNDARY
- - - - -	PROVINCIAL BOUNDARY

Crows Nest Resources Limited
EXPLORATION

CORBIN AREA
B. C.

LOCATION MAP

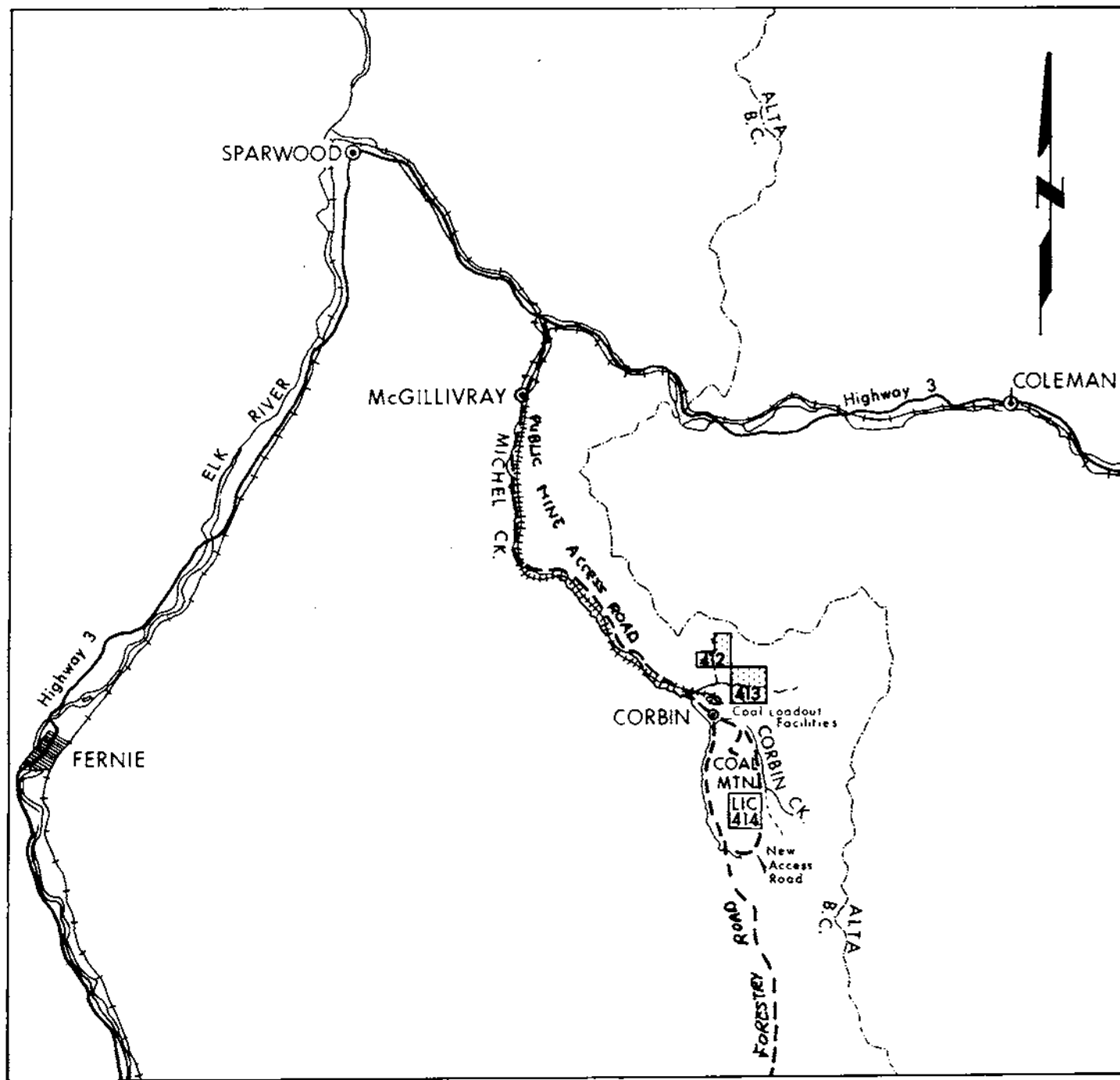


Scale 1:50000

3.0 ACCESS

The Byron Creek mine access road runs along the west and south boundaries of the property, providing access to Highway 3 near Sparwood, B.C., a distance of 23 km by road from the Corbin townsite. From this main road a four-wheel drive road branches eastward through the north end of the coal licence along Andy Good Creek.

A rail spur from Corbin townsite to the CP Rail Line at McGillivray, B.C. has been constructed by Byron Creek Collieries Limited (Enclosure 3). It is 20 km long and follows Michel Creek, paralleling a newly built public road which extends south, from Highway No. 3. Unit trains are presently hauling coal from Corbin to Thunder Bay, Ontario, a distance of 2125 km. The rail distance from Corbin to Vancouver is 1140 km.



LEGEND



Corbin Coal License No. 414

- Highway
- Secondary road
- Main C.P. Rail line
- Spur line
- Provincial boundary

KILOMETERS



*K-Shan Tent for RC(2)A*1*

Crows Nest Resources Limited
EXPLORATION

CORBIN
SOUTHEASTERN B.C.

COAL LICENSE LOCATION

MAP ENCLOSURE 3

EXPLORATION COAL	SCALE 1:250 000	ENCLOSURE NO.
DATE FEB. 79	REVISED	ISSUED BY AA 559

4.0 TENURE

Appendix A - B.C. Land Tenure Standing

Appendix B - Land Map

The B.C. Coal Licences granted to Crows Nest Industries Limited on September 19, 1974, are now held by Shell Canada Resources Limited and operated by Crows Nest Resources Limited. These three coal licences, Nos. 412, 413 and 414, Group No. 6, cover 713 ha. of Crown land.

The Corbin-Tent Mountain (Middle Mountain) property is on C.L. No. 413, covering 259 hectares.

5.0 WORK DONE

5.1 Prior to 1980

No work was done on Middle Mountain by Crows Nest Resources Ltd. prior to 1980. However, a sizeable pile of coal spoil was found downhill from one of the coal outcrops, indicating excavation in the past. The date of this excavation is not known.

5.2 1980 Exploration Program

Appendix C - Application to Extend Term of Licences

Appendix D - Hand Trenching Summaries

Appendix E - Location Surveys Report

Field work on the Middle Mountain property in 1980 consisted of reconnaissance and detailed geological mapping, hand trenching of coal exposures, and flagging of a route for a proposed access road.

Sheltech Canada set up eight geological control stations in the area using control stations set up for Corbin-Coal Mountain.

6.0 GEOLOGY

6.1 Regional

Coal deposits of the Corbin area occur within the Kootenay Group of Jurassic-Cretaceous age. These have been mined at Tent Mountain, 4 km NW of Middle Mountain, and have been mined since 1908 at Coal Mountain, 1 km to the south. The Kootenay Group is underlain by shales, siltstones, and fine sandstones of the Fernie Formation.

Structurally, the area is within the Front Ranges of the Rocky Mountains. Numerous closely spaced thrust faults and tight folds have been observed on Coal Mountain and Tent Mountain. These structures have caused intense deformation of the coal seams, in some cases resulting in structural thickening.

6.2 Regional Stratigraphy

The Corbin area is underlain by strata of the upper portion of the Fernie Formation and the lower portion of the Kootenay Group (Table 1). The Fernie Formation is Jurassic in age. The Kootenay Group spans the Jurassic-Cretaceous boundary but the portion of this group which is present at Corbin is probably all of Jurassic age. The Kootenay Group is subdivided into three formations

STRATIGRAPHY OF THE CORBEN COAL LICENCES

ENCLOSURE 4

PERIOD	FORMATION	MEMBER	BEDS	LITHOLOGY	THICKNESS
	KOOTENAY GROUP		Upper Sandstone and Shale Series	Interbedded sandstone, silty sandstone and mudstone; minor carbonaceous horizons	Greater than 190 m
			Upper Mammoth Seam	Coal, with discontinuous lenses and interbeds of claystone	Up to 35 m
			Lower Mammoth Seam	Claystone, with thin discontinuous lenses and interbeds of coal and stoney coal	Up to 58 m
	HORRISSELY FORMATION	Moose Mountain Member		Sandstone, medium to coarse-grained, highly resistant	70 - 80 m
		Weary Ridge Member		Sandstone, very fine to coarse-grained, slightly ferruginous, commonly argillaceous - carbonaceous	
	FERNIE FORMATION			Gray and black marine shales with sideritic concretions and glauconitic beds; abundant interbeds of siltstone and sandstone at top; base marked by a thin phosphatic unit	200 m (approximate)

(Gibson, 1979), which in ascending order are Kohnssey, Mist Mountain, and Elk (not present). In this report the coal-bearing Mist Mountain Formation is subdivided into the Lower Mammoth Seam and the Upper Sandstone and Shale Series.

Fernie Formation

The Fernie Formation consists of a thick sequence of marine sediments. This formation is recessive in nature and is very poorly exposed on the Corbin coal licences.

In the Corbin area the base of the Fernie Formation is marked by a few feet of phosphatic shale and oolitic phosphate rock. This is overlain by grey and black shales containing abundant spherical sideritic concretions and some glauconitic beds. Interbeds of siltstone and mudstone become increasingly common in the upper portion of the formation as the gradational contact with the basal sandstone of the Kootenay Group is approached. The transition from the Fernie Formation to the Kootenay Group is called the Passage Beds. The Fernie Formation is estimated to be in the order of 200 meters thick in the Corbin area.

Morrissey Formation

The Morrissey Formation of the Kootenay Group is a cliff-forming quartz-chert sandstone which conformably overlies the Fernie Formation. The lower portion, the Weary Ridge Member, consists of slightly ferruginous, fine to coarse grained sandstone, commonly argillaceous and carbonaceous. The upper portion, the Moose Mountain Member, is medium to coarse grained and is more resistant.

The Morrissey Formation is approximately 70 to 80 meters thick in the Corbin Area. Its exact thickness has not been determined due to structural complexity and poor exposure of the lower contact.

Mist Mountain Formation

In the Corbin area only the lower part of the Mist Mountain Formation is present. It has been divided into the coal-bearing Mammoth Seam and the Upper Sandstone and Shale Series.

The Mammoth Seam is comprised of coal with discontinuous lenses and interbeds of shale. Because of structural complexity, the thickness of this unit is hard to establish.

The Upper Sandstone and Shale Series consist of interbedded sandstone, siltstone, and shale. While this unit occurs on Coal Mountain, it has not been found on the Tent Mountain property.

6.3 Detailed Stratigraphy

Outcrops of Fernie Formation and Kootenay Group rocks have been found on Middle Mountain. Due to forest cover on most of the property, outcrop is poor. The main area of outcrop is along the ridgetop on the east side of the property, and on the SW facing slopes below the ridge. The section exposed here starts in brown shales of the Fernie Group and passes upward through interbedded sandstones, siltstones, and shales of the Passage Beds. Overlying this is orange-brown weathering sandstone of the Weary Ridge Member of the Morrissey Formation. On top of this is light grey, medium grained massive sandstone of the Moose Mountain Member of the Morrissey Formation. The Moose Mountain Member is anomalously thin here, being only about 20 meters compared to about 80 meters on Coal Mountain to the south. It is overlain by a coal seam at least 7.5 meters thick. The upper contact of the seam was not found.

On the west end of Middle Mountain, a cut into the hillside above Byron Creek Collieries Ltd.'s loadout exposes fine greenish to purplish sandstones thought to belong to the Fernie Formation.

2.4 Detailed Structure

APPENDIX F - Geology Map

APPENDIX G - Geology Cross Sections

The main structure of the area is a N - S trending anticline-syncline pair. These folds plunge steeply S at about 35°. Their shape is defined by nearly continuous outcrops of the Moose Mountain Member. To the SW of these folds are two other panels of Moose Mountain Member which have been thrust over them in an imbricate fashion.

Two separate bodies of coal were found. The first sits directly on the Moose Mountain Member, and wraps around the folds. It is cut out to the NW by the thrust at the base of the middle panel of Moose Mountain Member. The second body sits on top of the middle Moose Mountain Member panel, and is bounded to the SW by the thrust at the base of the westernmost Moose Mountain Member panel. Since both coal occurrences are in the same stratigraphic position, it seems likely that they are the same seam.

The seam that wraps around the south-plunging folds should be found at depth in the SE part of the property, since the 35° plunge of the folds is greater than the angle of the slope.

The steep S plunge of the folds on Middle Mountain is opposite to the plunge of folds on Coal Mountain, immediately to the South. There, N - S trending folds plunge N at 10° - 20° . This plunge reversal might be explained by the inferred existence, from airphoto interpretation, of an E - W trending tear fault in the valley of Andy Good Creek. If there is another tear fault between Middle Mountain and Coal Mountain, Middle Mountain could be a panel of opposed plunge (Dahlstrom, 1970).

Small isolated outcrops of Moose Mountain Member about 200 m south of the main outcrop area may connect with the main Moose Mountain panels. If this is so, perhaps the seam that lies directly on the Moose Mountain Member is present in this area. Small outcrops of fine brown sandstone also occur here. These may be higher in the stratigraphic section than the main outcrop area.

If the sandstones exposed in the cut at the west side of Middle Mountain Member belong to the Fernie Formation, a thrust must separate them from the Kootenay Group outcrops to the east. The presence or absence of coal-bearing Kootenay Group rocks dipping westward under the thrust would depend on how fast the thrust cut upsection.

6.3 Coal Reserves and Quality

Initial work indicates some open pit potential for the Middle Mountain coal licence (No. 413). The coal reserves cannot be estimated at this time due to incomplete exploration and evaluation even on a grass roots level.

No coal quality testing has been done on the Property. A Coal Mountain or Tent Mountain type coal quality (Medium Volatile Bituminous) is expected on this thermal prospect.

7.0 BIBLIOGRAPHY

DAHLSTROM, C.D.A. (1970) - STRUCTURAL GEOLOGY IN THE EASTERN MARGIN

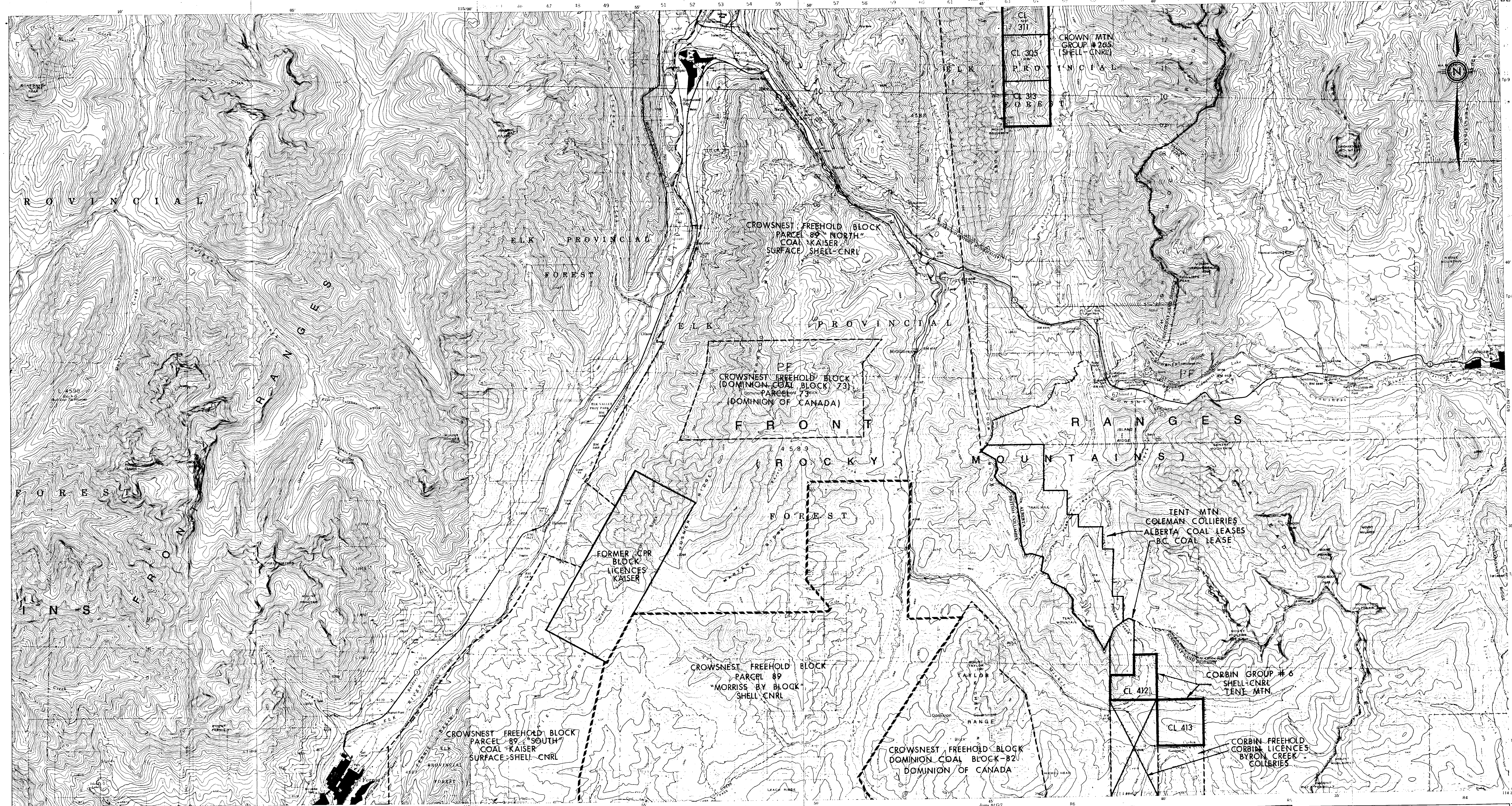
OF THE CANADIAN ROCKY MOUNTAINS, Bull. Can. Petrol. Geol., V. 18,
No. 3, pp. 332 - 410.

GIBSON, D.W. (1979) - THE MORRISSEY AND MIST MOUNTAIN FORMATIONS - NEWLY

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GROUP, ALBERTA AND BRITISH COLUMBIA, Bull. Can. Petrol. Geol, V. 27,
No. 2, pp. 183 - 208.

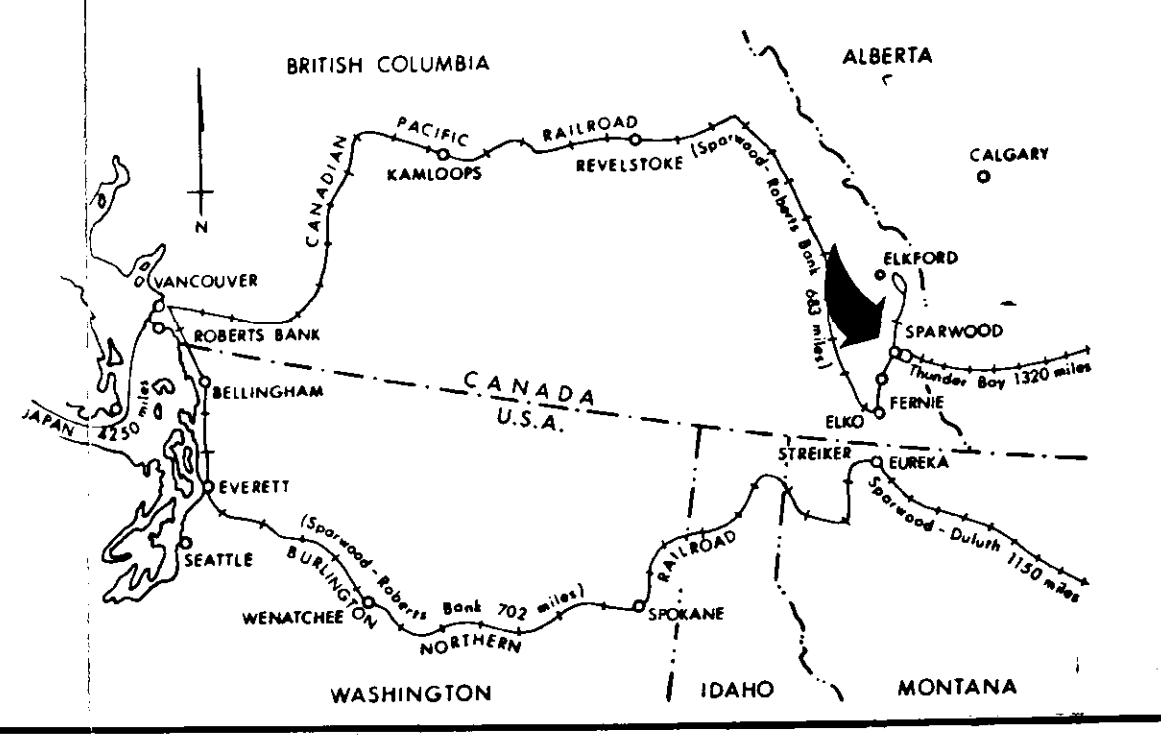
HOFFMAN, G. (1979) - 1979 CORBIN GEOLOGICAL REPORT, CROWS NEST RESOURCES LTD.

NORRIS, D.K. AND PRICE, R.A. (1956) - GSC MAP 4-1956 COAL MOUNTAIN,
BRITISH COLUMBIA.



COMPANY COLOR CODE

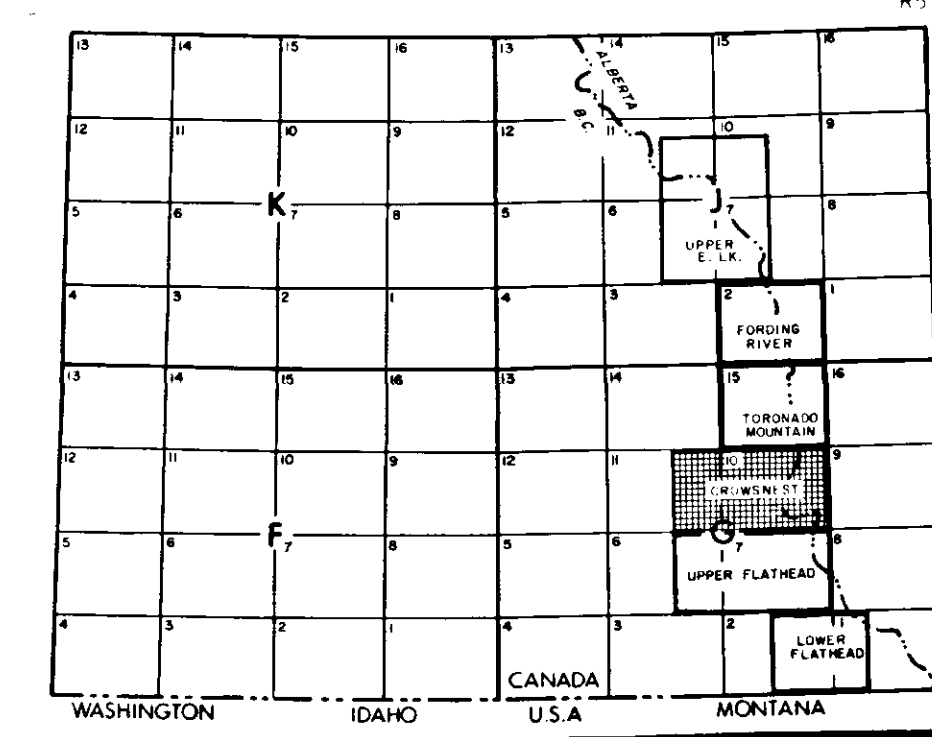
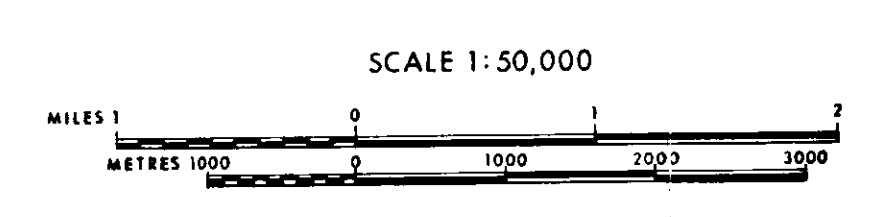
[White box]	SHELL - CNRL
[Light grey box]	SAGE CREEK COAL LTD.
[Medium grey box]	KAISER RESOURCES LTD.
[Dark grey box]	DOMINION OF CANADA
[Black box]	BYRON CREEK COLLIERIES LTD.
[White box]	COLEMAN COLLIERIES LTD.
[White box]	FORDING COAL LTD AND OTHER CP COMPANIES
[White box]	ELCO MINING LTD.



COAL LAND TENURE

[Solid line]	FREEHOLD
[Dashed line]	LICENCES
[Dotted line]	BORDER OF SHELL-CNRL GROUPS BLOCK ETC.
[Dash-dot line]	APPLICATION FOR ABOVE
[Long-dash line]	OUTLINE OF HOLDINGS BY OTHER THAN SHELL-CNRL
[Short-dash line]	APPLICATION FOR BC COAL LICENCE BY OTHER THAN SHELL-CNRL
[Thick solid line]	BC COAL LICENCE BORDER SHELL-CNRL ONLY

NOTE
 B.C. COAL LICENCES WERE ISSUED AND REVOKED COVERING MOST PARTS OF THE DOMINION COAL BLOCK PARCELS. ALL OF PARCELS TO THESE OLD LICENCES ARE NOT SHOWN ON THE MAP.



SHELL CANADA RESOURCES LIMITED
 COAL DEVELOPMENT

CROWSNEST
 KOOTENAY LAND DISTRICT
 SOUTHEASTERN B.C.

LAND MAP

SCALE 1:50,000
 DATE: MAY 1977
 REVISED: MARCH 1982

APPENDIX B

REMAINING OVERLAYS IN V124

452



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

APPLICATION TO EXTEND TERM OF LICENCE

I, Bolton Agnew agent for Shell Canada Resources Limited
(Name) (Name)
P.O. Box 100
(Address) (Address)
Calgary, Alberta, T2P 2H5.
 Valid FMC No. 207568

hereby apply to the Minister to extend the term of Coal Licence(s) No(s). 412, 413, 414
3 Licences; 713 Hectares
 for a further period of one year.

2. Property name Corbin - Coal Mountain - Tent Mountain; Group #6, Kootenay Land District

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 January 30, 1980 to
January 31, 19 81 work to the value of at least \$ 516,206.13

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

CATEGORY OF WORK	Licence(s) No(s).	Apportioned Cost
Geological mapping	<u>412, 413, 414</u>	<u>\$63,286.93</u>
Surveys: Geophysical		
Geochemical		
Other - Location	<u>412, 413, 414</u>	<u>15,713.33</u>
Road construction	<u>414</u>	<u>43,937.10</u>
Surface work	<u>414</u>	<u>8,725.23</u>
Underground work		
Drilling	<u>414</u>	<u>339,863.76</u>
Logging, sampling, and testing	<u>414</u>	<u>29,055.63</u>
Reclamation	<u>414</u>	<u>8,449.65</u>
Other work (specify)		
Off-property costs to date		<u>7,175.00</u>


5. I wish to apply \$ 516,206.13 of this value of work on Coal Licence(s) No(s). 412, 413, 414

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 Corbin-Coal Mountain
Geological Report '80 and Corbin-Tent Mountain Geological Report '80 will
be submitted in ninety days.

1981.01.28

(Date)


(Signature)

Land Supervisor
(Position)

TRENCHES

TM-80-1

TH

hanging wall suboutcrop of grey medium gr. ss (Moose Mountain)
7.30 m - COAL clean, dull
0.20 - shale, dark grey, carbonaceous
0.88 - COAL clean, dull 134/54SW
footwall - grey medium gr. ss (Moose Mountain)

TM-80-2

TH

hanging wall - grey and medium gr. ss (Moose Mountain) 120/50S
1.45 - COAL clean
0.95 - shale, dark grey, carbonaceous partings 115/38S
3.05 - COAL hard, blocky
0.25 - COAL soft, crumbly (FAULT ?)
0.60 - COAL hard, very blocky
1.20 - COAL clean, flaky 101/42S
footwall - grey medium gr. ss (Moose Mountain)

TM-80-3

TH

end of trench - large ss boulders
0.8 - COAL
1.0 - shale dark grey carbonaceous 163/39W
2.4 - COAL soft
overburden

TM-80-4

TH (incomplete)

end of trench
4.5 m - COAL soft, weathered
start of trench (5 m from exposure of grey medium gr. ss footwall
(Moose Mountain) - 086/30S)

NOTE: THIS TRENCH SHOULD BE EXTENDED AT BOTH ENDS.

TM-80-5 (incomplete)

Linear Distance

0-12.8 m COAL soft

NOTE: THIS TRENCH SHOULD BE EXTENDED AT BOTH ENDS.

TM-80-6

TH

6.0 - grey medium gr. ss (Moose Mountain)
COAL
grey medium gr. ss (Moose Mountain)

120/50SW

086/39S

3-2/ab.6

DATE: December 3, 1980
TO: CROWNEST RESOURCES LIMITED (CNRL)
FROM: Sheltech Canada
SUBJECT: Location Survey
CORBIN (COAL MTN.) 4051 K
CORBIN (TENT MTN.) 4051 L

All survey work done in the Corbin (Coal Mtn.) area was taken from Quest and Squaw Mtn. using the 1979 Doppler Satellite data as the datum. From these two stations, two more control stations were established (Flat and Pin) with a relative precision of 1/200,000.

Using these control stations, 121 traverse points were surveyed from which 12 drill holes were picked up. Using these traverse points approximately 11.6 km of new and old road was surveyed with all road traverses being tied to the control network with excellent results.

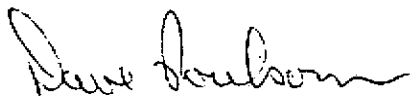
Using the control stations set up for Corbin (Coal Mtn.), 8 geological control stations were established in the Corbin (Tent Mtn.) area.

Conventional survey methods using both 1" and 20" theodolites and electronic distance measuring equipment were used to obtain x,y,z values for the above mentioned points.

All calculations were done using the UTM system with both distances and bearing reduced to plane and being referenced to 117° W. The results were given to CNRL personnel in both tabular and plan form.


The cost attributed to Corbin (Coal Mtn.) was approximately \$13,300.

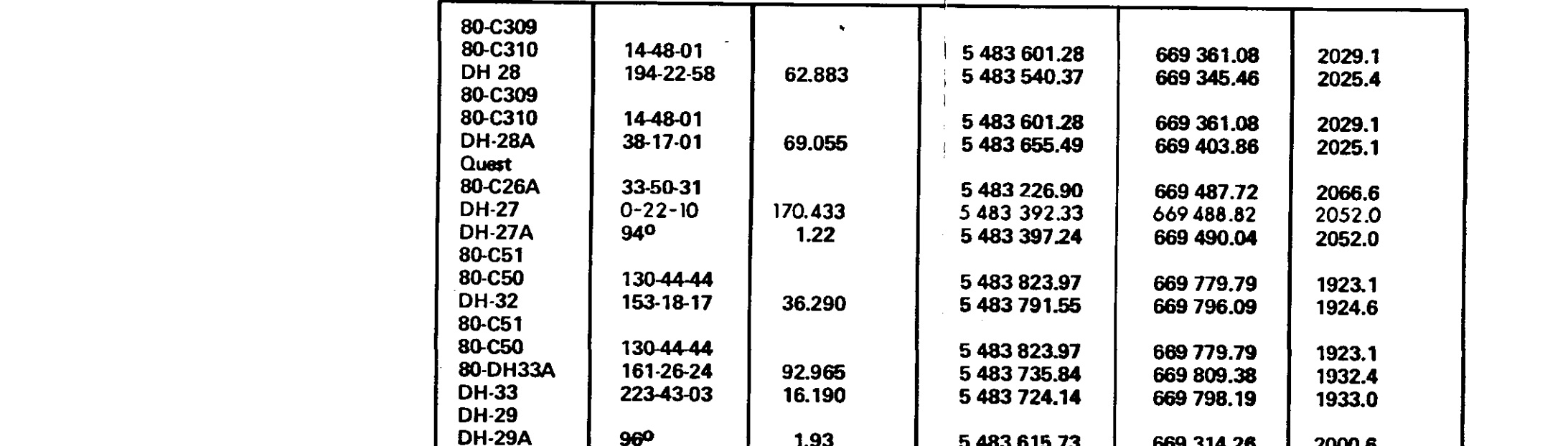
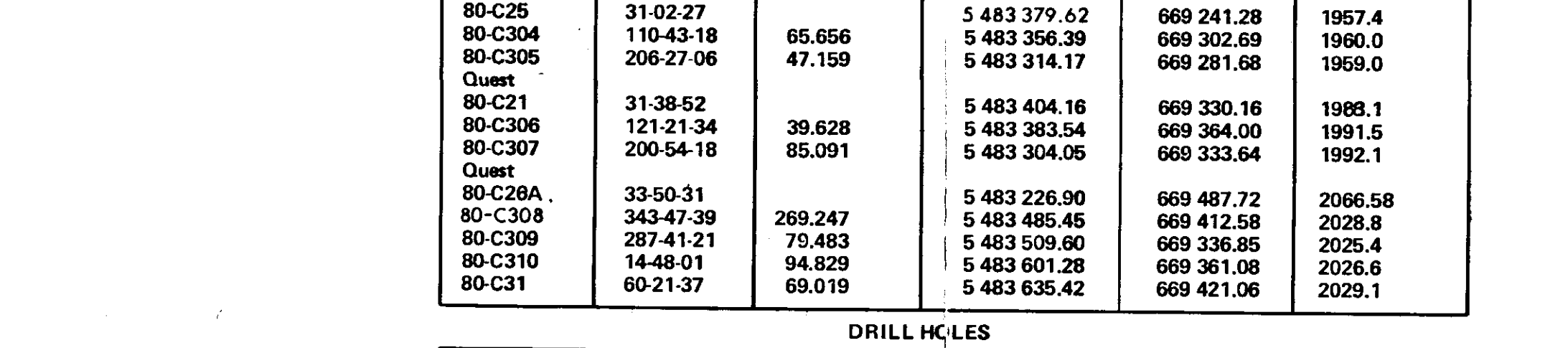
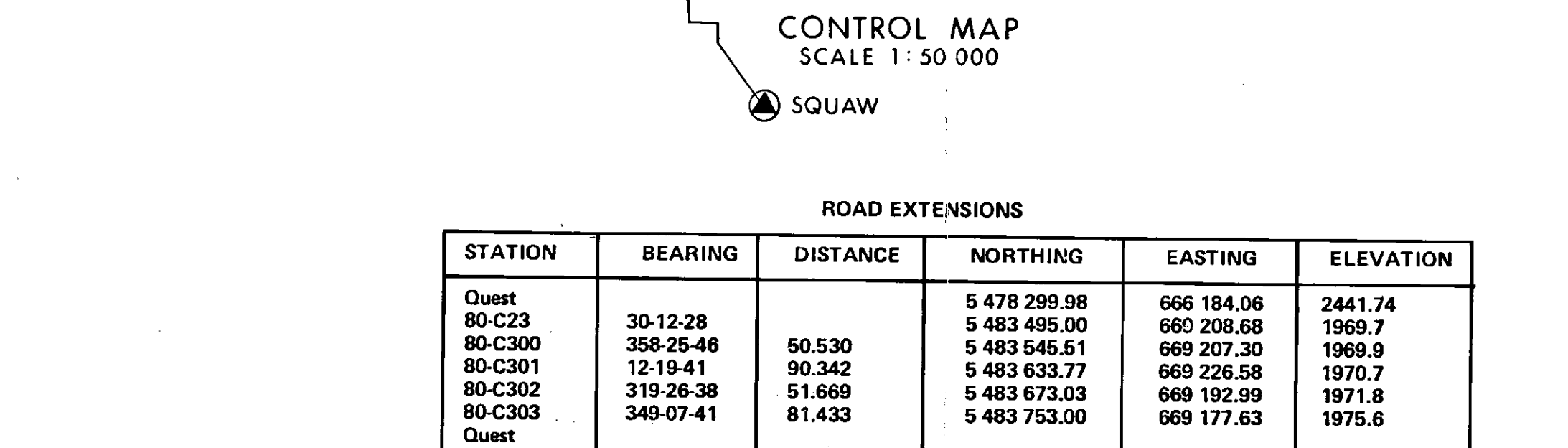
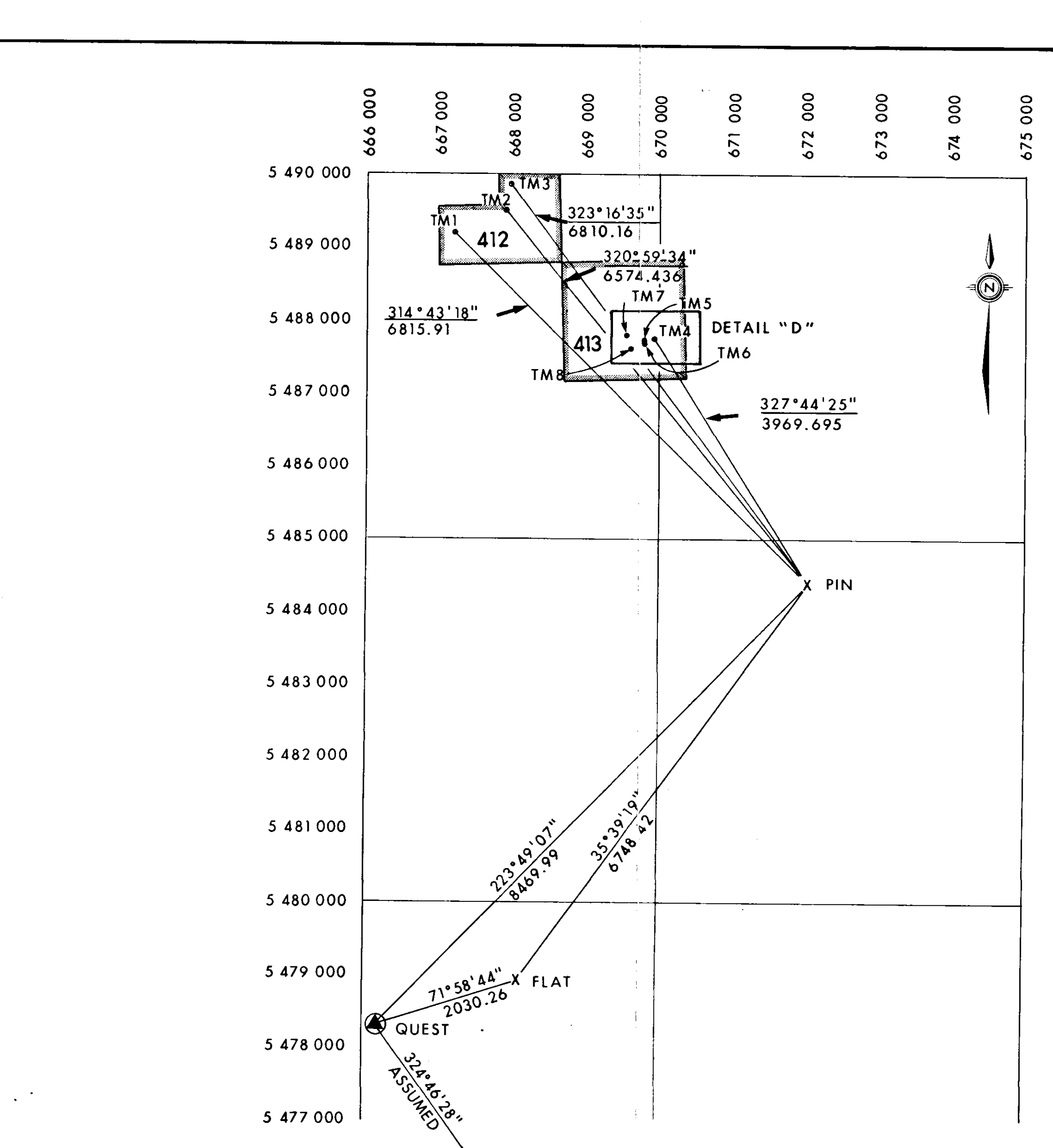
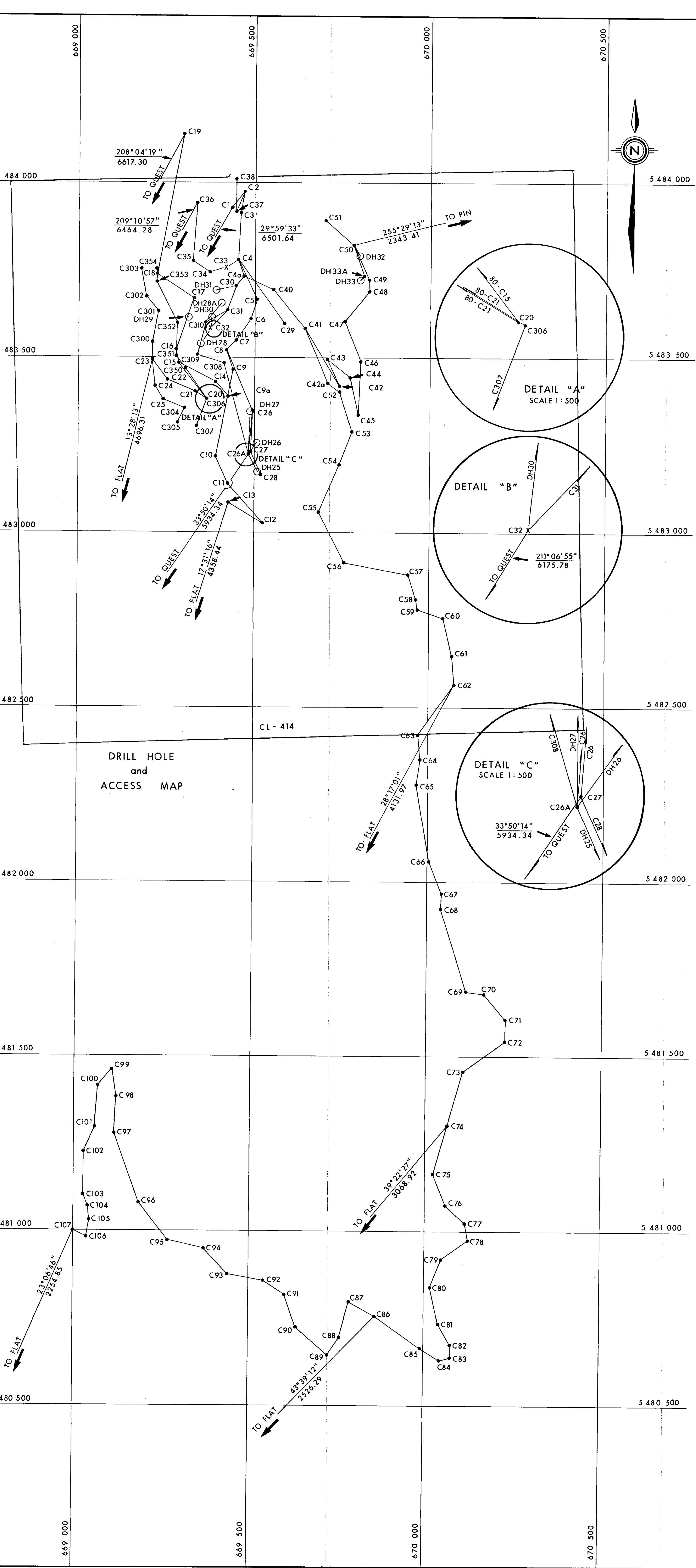
The cost attributed to Corbin (Tent Mtn.) was approximately \$1,400.



Dave Poulson

DP/eh





ROAD EXTENSIONS

STATION	BEARING	DISTANCE	NORTHING	EASTING	ELEVATION
Quest	30-12-28		5 478 299.98	666 184.06	2441.74
80-C23	30-12-28	50.530	5 483 496.00	666 208.68	1969.7
80-C300	12-19-41	90.342	5 483 633.77	666 207.30	1969.9
80-C302	319-28-38	51.669	5 483 673.03	669 192.99	1971.8
80-C303	349-07-41	81.433	5 483 753.00	669 177.63	1975.6
80-C25	31-02-27	65.656	5 483 379.62	669 241.28	1957.4
80-C304	110-43-27	65.656	5 483 356.38	669 202.69	1960.0
80-C305	206-27-06	47.159	5 483 314.17	669 281.68	1959.0
Quest	31-38-52		5 483 404.16	669 330.16	1988.1
80-C306	121-21-34	39.628	5 483 383.54	669 364.00	1991.5
80-C307	200-54-18	85.091	5 483 304.06	669 333.64	1992.1
80-C28A	33-50-31		5 483 226.30	669 487.72	2066.6
80-C308	343-47-39	269.247	5 483 486.46	669 412.58	2028.8
80-C309	287-41-21	79.483	5 483 509.60	669 336.85	2025.4
80-C310	14-48-01	94.829	5 483 601.28	669 361.08	2026.6
80-C31	90-21-37	69.019	5 483 635.42	669 421.06	2029.1

DRILL HOLES

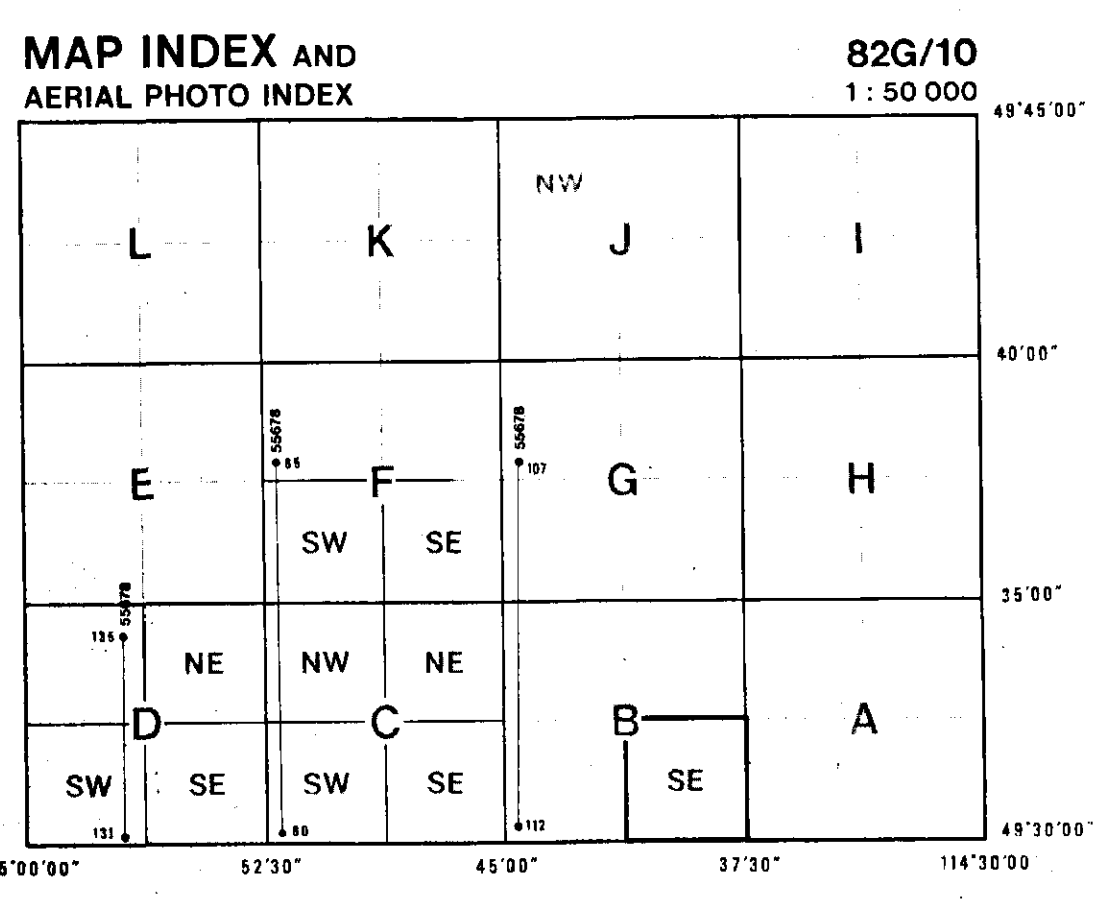
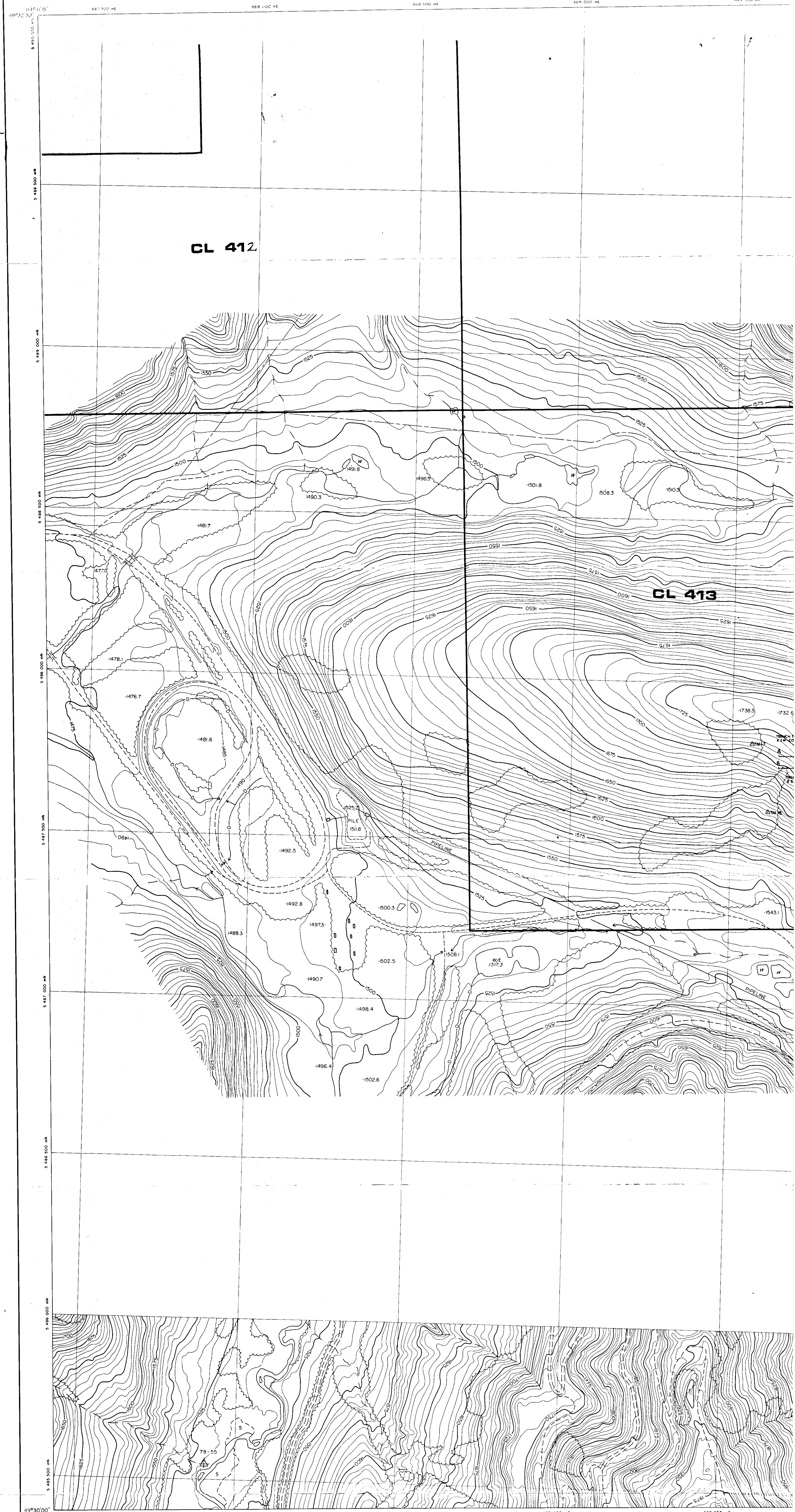
STATION	BEARING	DISTANCE	NORTHING	EASTING	ELEVATION
80-C308	14-48-01		5 483 601.28	669 361.08	2029.1
80-C310	194-22-58	62.883	5 483 540.37	669 346.46	2026.4
80-C309	14-48-01		5 483 601.28	669 361.08	2029.1
80-C310	14-48-01		5 483 601.28	669 361.08	2029.1
DH-28A	38-17-01	69.056	5 483 656.49	669 403.88	2026.1
Quest	33-50-31		5 483 226.30	669 487.72	2066.6
80-C28A	33-50-31		5 483 226.30	669 487.72	2066.6
DH-27	0-22-10	170.433	5 483 392.33	669 484.82	2032.0
DH-27A	94°	1.22	5 483 397.24	669 490.04	2052.0
80-C51	130-44-44		5 483 823.97	669 778.79	1923.1
DH-32	153-18-17	36.290	5 483 791.56	669 796.09	1924.6
80-C51	130-44-44		5 483 823.97	669 778.79	1923.1
80-C50	130-44-44		5 483 823.97	669 778.79	1923.1
80-DH33A	223-45-03	92.965	5 483 736.84	669 809.38	1932.4
DH-29	223-45-03	16.190	5 483 724.14	669 796.19	1933.0
DH-29A	96°	1.93	5 483 616.73	669 314.26	2006.6

ROAD EXTENSIONS

STATION	BEARING	DISTANCE	NORTHING	EASTING	ELEVATION
80-C21	121-21-34		5 483 383.54	669 364.00	1991.5
80-C350	325-04-16	107.80	5 483 471.92	669 302.28	2000.8
80-C351	322-34-07	43.60	5 483 506.54	669 275.78	1997.9
80-C352	2-47-51	94.26	5 483 600.69	669 280.38	1999.4
80-C353	332-41-12	130.57	5 483 716.70	669 220.47	1995.1
80-C354	2-33-00	37.52	5 483 754.19	669 222.13	2000.9

ACCESS ROAD COORDINATES

STATION	BEARING	DISTANCE	NORTHING	EASTING	ELEVATION
Squaw	324 46 28		5 483 930.79	669 434.14	2060.0
80-C1	29 59 33	6501.64	5 483 975.68	669 469.66	2052.1
80-C2	38 21 11	57.24	5 483 912.33	669 467.41	2049.8
80-C3	170 35 56	64.33	5 483 816.71	669 452.91	2038.2
80-C4	181 54 41	134.37	5 483 778.23	669 506.98	2034.9
80-C5	154 20 20	124.83	5 483 665.71	669 506.98	2034.9
80-C6	157 58 48	57.86	5 483 616.71	669 489.15	2038.2
80-C7	214 11 02	73.70	5 483 549.70	669 447.74	2041.6
80-C8	227 05 45	38.96	5 483 523.16	669 419.22	2037.1
80-C9	159 58 58	52.73	5 483 467.05	669 436.70	2030.0
80-C10	190 54 05	254.02	5 483 217.62	669 391.66	2017.4
80-C11	167 04 02	64.35	5 483 139.93	669 424.53	2069.1
80-C12	138 01 00	149.87	5 483 028.53	669 524.78	1993.6
80-C13	299 34 44	112.31	5 483 083.97	669 427.10	1982.5
80-C14					
80-C9					
80-C9a	189 32 17	79.09	5 483 389.05	669 426.59	2018.2
80-C14	319 30 12	155.89	5 483 430.91	669 389.56	2011.3
80-C15	297 35 32	116.48	5 483 484.87	669 286.33	2000.1
80-C16	348 40 54	39.45	5 483 523.55	669 278.59	1999.2
80-C17	18-36-58	153.97	5 483 669.46	669 327.74	2062.3
80-C18	303 30 33	125.04	5 483 738.49	669 223.48	2001.7
80-C19	10 32 11	406.86	5 484 138.47	669 298.00	2022.2
80-C15					
80-C20	142 55 42	126.85	5 483 384.37	669 362.25	1991.0
80-C21	301 39 28	37.70	5 483 431.16	669 320.15	1988.1
80-C22	293 00 21	84.75	5 483 437.28	669 252.15	1977.5
80-C23	222 50 15	72.14	5 483 494.89	669 208.72	1970.2
80-C24	172 30 41	75.42	5 483 420.11	669 215.55	1961.4
80-C25	150 41 46	48.43	5 483 379.82	669 241.28	1957.4
80-C7					
80-C8					
80-C26	156 00 20	190.77	5 483 348.88	669 496.80	2056.3
80-C27	124 00 49	120.49	5 483 336.66	669 486.72	2066.6
80-C28	195 50 55	69.35	5 483 166.38	669 517.09	2069.8
80-C4					
80-C29	155 41 26	199.43	5 483 596.48	669 535.02	2049.5
80-C1					
80-C2					
80-C37	200 52 42	56.85	5 483 922.56	669 449.40	2056.67
80-C38	389 47 29	90.64	5 484 013.20	669 449.07	2061.70
80-C3					
80-C4					
80-C4a	160 32 32	47.07	5 483 733.85	669 468.60	2029.1
80-C30	215 20 52	34.47	5 483 706.73	669 456.66	2029.8
80-C31	201 28 31	75.55	5 483 635.41	669 421.04	2029.1
80-C32	223 03 40	66.51	5 483 586.82	669 376.63	2032.0
80-C3					
80-C4					
80-C34	241 25 57	37.59	5 483 760.26	669 419.91	2039.3
80-C34	252 46 37	49.34	5 483 745.65	669 372.78	2039.5
80-C36	305 22 49	54.73	5 483 779.66	669 324.89	2034.0
80-C38	3 52 44	164.11	5 483 943.30	669 336.90	2037.4
80-C4					
80-C40	114 04 37	91.48	5 483 696.53	669 552.12	2034.0
80-C41	141 00 23	144.74	5 483 584.04	669 643.20	2022.3
80-C42	149 10 51	190.51	5 483 400.44	669 740.82	2004.1
80-C43	335 11 24	87.07	5 483 499.47	669 704.28	1995.4
80-C44	128 50 00	86.35	5 483 443.91	669 772.97	1985.2
80-C45	167 02 51	102.58	5 483 336.06	669 577.91	1975.7
80-C46	2 05 24	153.30	5 483 491.29	669 602.90	1961.6
80-C47	337 18 11	120.87	5 483 602.90	669 756.26	1940.0
80-C48	38 45 04	110.98	5 483 589.35	669 625.73	1936.2
80-C49	358 46 07	35.56	5 483 724.90	669 824.97	1928.6
80-C50	338 27 39	106.74	5 483 823.82	669 779.80	1923.4
80-C51	310 44 44	106.80	5 483 853.53	669 698.99	1922.1
80-C41					
80-C2a	157 43 47	105.54	5 483 429.92	669 706.31	2012.0
80-C52	126 58 33	47.04	5 483 401.82	669 743.88	2006.0
80-C53	164 00 33	117.83	5 483 288.54	669 776.29	2002.7
80-C54	200 50 13	96.94	5 483 197.84	669 741.80	1978.5
80-C55	202 18 49	152.44	5 483 066.82	669 663.03	1968.0
80-C56	151 48 43	159.81	5 482 916.24	669 759.32	1960.1
80-C57	102 06 19	153.53	5 482 877.80	669 630.71	1943.1
80-C58	158 50 37	72.48	5 482 810.21	669 964.54	1936.0
80-C59	176 41 37	27.95	5 482 782.30	669 966.55	1933.3
80-C60	111 42 48	78.50	5 482 752.84	670 040.41	1926.0
80-C61	168 33 28	198.98	5 482 646.90	670 086.75	1910.7
80-C62	175 07 24	90.90	5 482 566.29	670 072.62	1897.1
80-C63	158 25 25	176.82	5 482 422.81	669 910.19	1882.6
80-C64	173 12 00	73.29	5 482 349.84	669 978.87	1879.4
80-C65	188 29 43	72.17	5 482 278.46	669 988.21	1870.2
80-C66	170 58 53	72.17	5 482 069.62	670 002.94	1858.3
80-C67	157 25 28	100.30	5 481 967.00	670 041.45	1854.2
80-C68	184 55 04	45.74	5 481 921.43	670 037.53	1851.8
80-C69	161 43 43	245.15	5 481 688.64	670 114.29	1851.1
80-C70	99 29 34	60.8	5 481 680.26	670 164.49	1851.9
80-C71	141 24 50	97.61	5 481 603.96	670 225.31	1853.5
80-C72	180 59 15	61.19	5 481 542.78	670 225.31	1853.5
80-C73	234 09 44	144.28	5 481 458.31	670 107.35	1852.3
80-C74	196 17 36	164.48	5 481 300.45	670 061.20	1851.6
80-C75	196 23 36	138.40	5 481 166.49	670 022.25	1848.2
80-C76	158 16 20	99.44	5 481 074.11	670 059.06	1847.1
80-C77	132 24 42	76.25	5 481 022.69	670 115.36	1842.5
80-C78	167 57 08	49.30	5 480 974.47	670 125.55	1837.2
80-C79	234 10 38	95.72	5 480 918.45	670 048.03	1835.2
80-C80	201 38 49	84.02	5 480 840.35	670 017.04	1832.6
80-C81	167 54 43	109.12	5 480 733.65	670 039.89	1822.6
80-C82	151 16 22	69.01	5 480 673.14	670 073.06	1822.1
80-C83	177 26 55	53.67	5 480 605.50	670 073.06	1818.9
80-C84	252 35 26	31.34	5 480 630.12	670 044.56	1811.3
80-C85	301 14 49	65.36	5 480 604.43	669 988.76	1806.2
80-C86	305 14 00	159.57	5 480 756.10	669 835.42	1791.9
80-C87	299 53 43	85.46	5 480 798.33	669 784.51	1779.3
80-C88	193 19 27	104.85	5 480 696.39	669 790.35	1769.1
80-C89	211 15 09	11.32	5 480 643.88	669 728.53	1753.6
80-C90	310 37 33	123.17	5 480 724.07	669 635.05	1757.6
80-C91	341 40 21	100.22	5 480 819.21	669 603.54	1753.8
80-C92	302 22 38	72.42	5 480 857.99	669 545.26	1750.3
80-C93	279 23 32	104.81	5 480 875.09	669 438.97	1747.8
80-C94	317 41 46	100.69	5 480 940.58	669 371.20	1744.7
80-C95	281 45 47	106.30	5 480 971.23	669 261	



REFERENCE

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

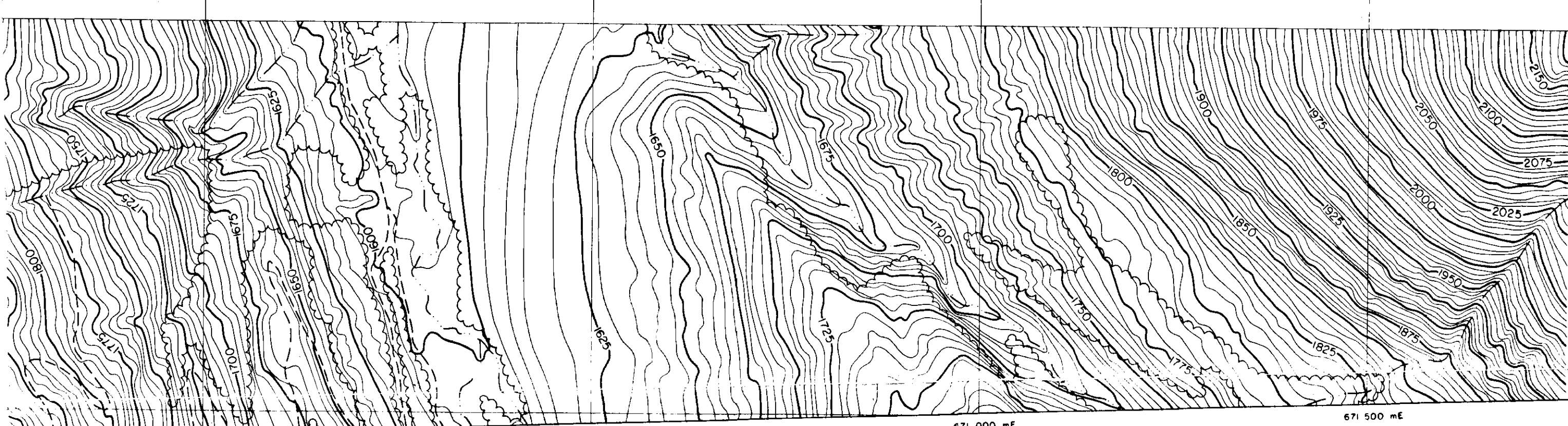
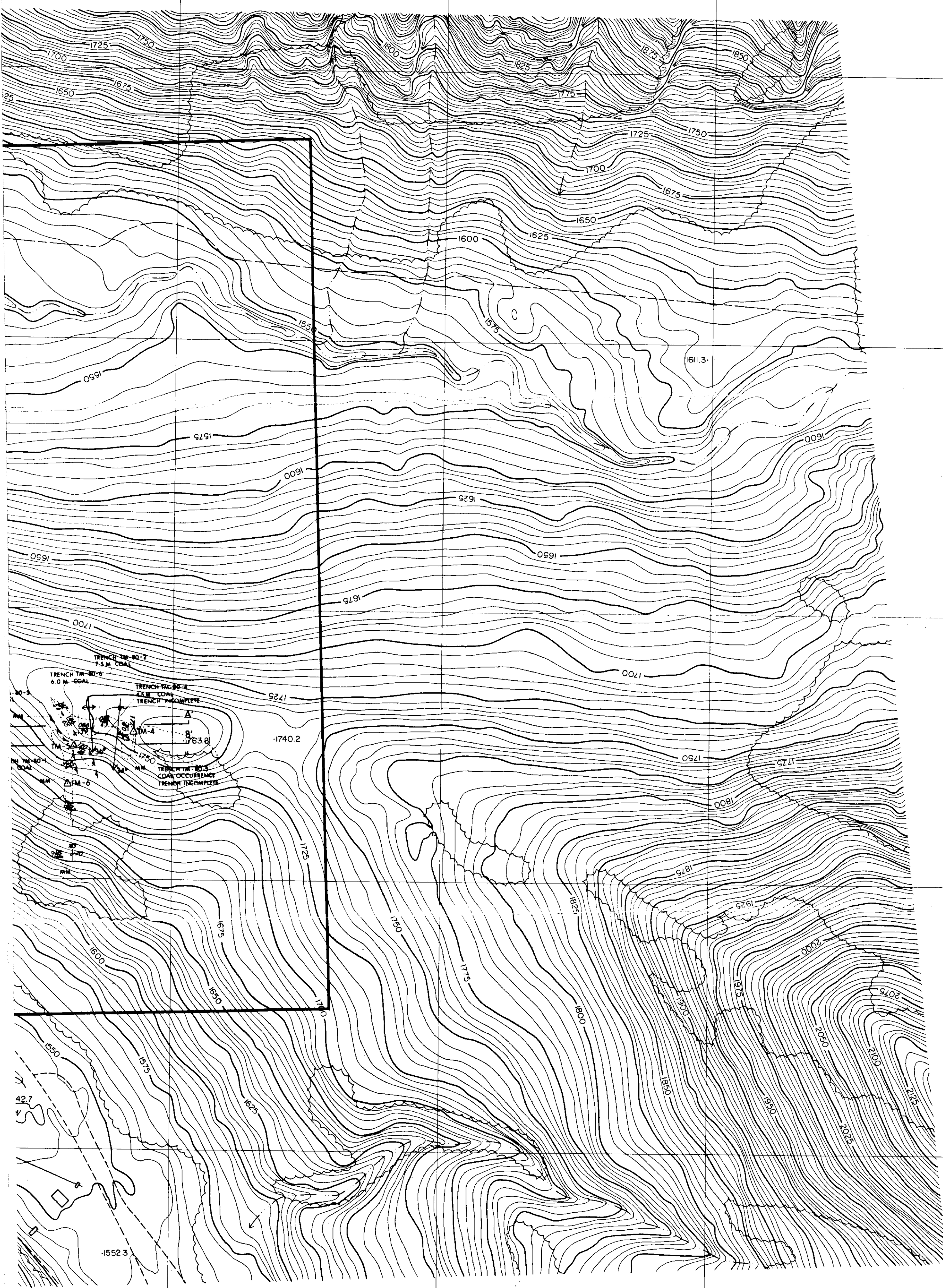
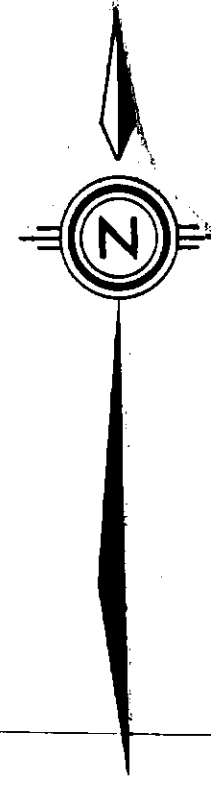
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	BEDDING - INCLINED, OVERTURNED
	ANTICLINE, WITH PLUNGE
	SYNCLINE, WITH PLUNGE
	THRUST FAULT, APPROXIMATE
	SURVEY POINT
	MOOSE MOUNTAIN MEMBER
	FERNIE FORMATION

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

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

JOB NO: 81-138



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K-Shill-Tent Mt 8012A

Crows Nest Resources Limited
EXPLORATION
CORBIN - TENT MOUNTAIN
(MIDDLE MOUNTAIN)
B.C.

GEOLOGY MAP

452

AUTHOR: K SHARMAN	SCALE: 1:5000	ENCLOSURE No:
DATE: 81 04 15	REVISED:	DRAWING No: HJ-73
To Accompany		

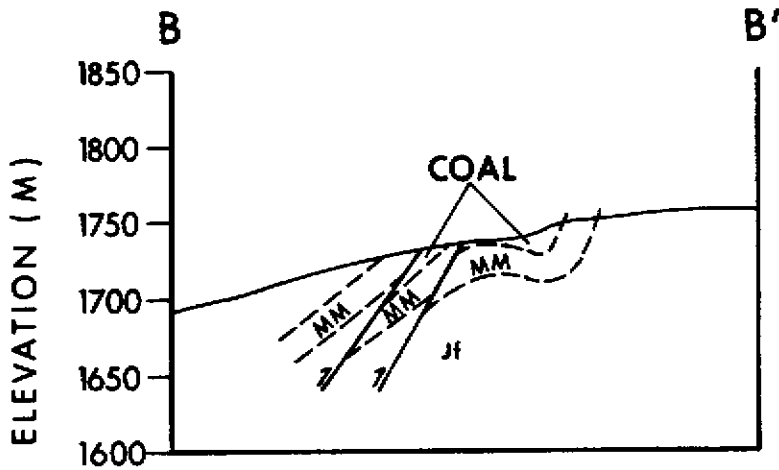
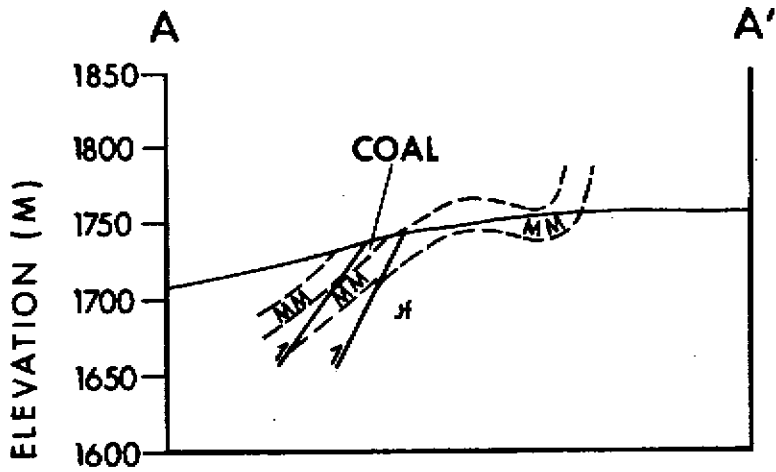
Appendix F.

CROWS NEST RESOURCES LIMITED
SOUTH EAST BRITISH COLUMBIA

METRES 100 50 0 100 200 300 400 500 METRES

SCALE 1 : 5 000
CONTOUR INTERVAL : 5 METRES
DATE OF PHOTOGRAPHY : JUNE/JULY, 1978

82 G 10 SOUTH EAST ZONE B



MM - Moose Mountain Member
 Jf - Fernie Formation

R-Shell Tent Mt. 80631A

Crows Nest Resources Limited EXPLORATION	
CORBIN - TENT MOUNTAIN (MIDDLE MOUNTAIN) B.C.	
CROSS SECTIONS A-A', B-B'	
APPENDIX G	
DATE: 20 04 15	SCALE: 1:5000
BY: [signature]	PROJECT: HJ-73A