

1982 GEOLOGICAL REPORT

BURNT RIVER
East Zone
(93 P/5)

licence # 5 7093-7113

Lat 55°20'
Long 121°40'

by
B. I. McClymont
for
TECK CORPORATION

CONFIDENTIAL

OPEN FILE

September 15th 1982

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

00 491

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INTRODUCTION

In July 1981, Teck Corporation acquired 21 coal licences in the Sukunka River area of northeastern British Columbia. These licences cover coal measures of Lower Cretaceous age along a structural trend between the Burnt River property and British Petroleum's Sukunka property.

Field work commenced in August 1981 and was completed in July 1982. The work program consisted of diamond drilling and field mapping, and was under the direction of Teck Explorations Limited. The geological and drilling crews were based in Chetwynd for the duration of the project.

The objectives of the program were:

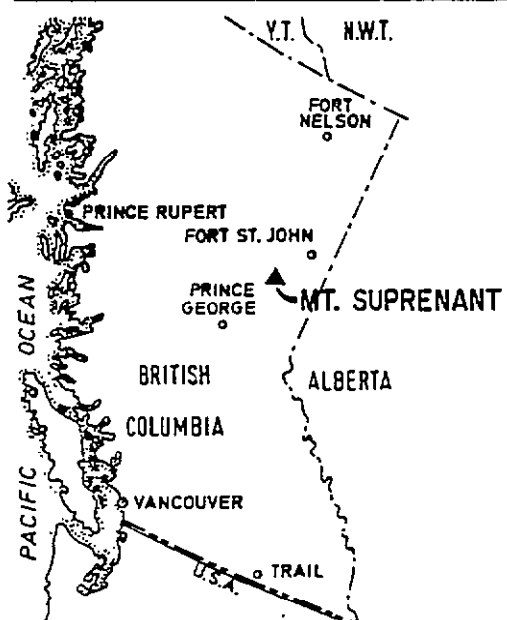
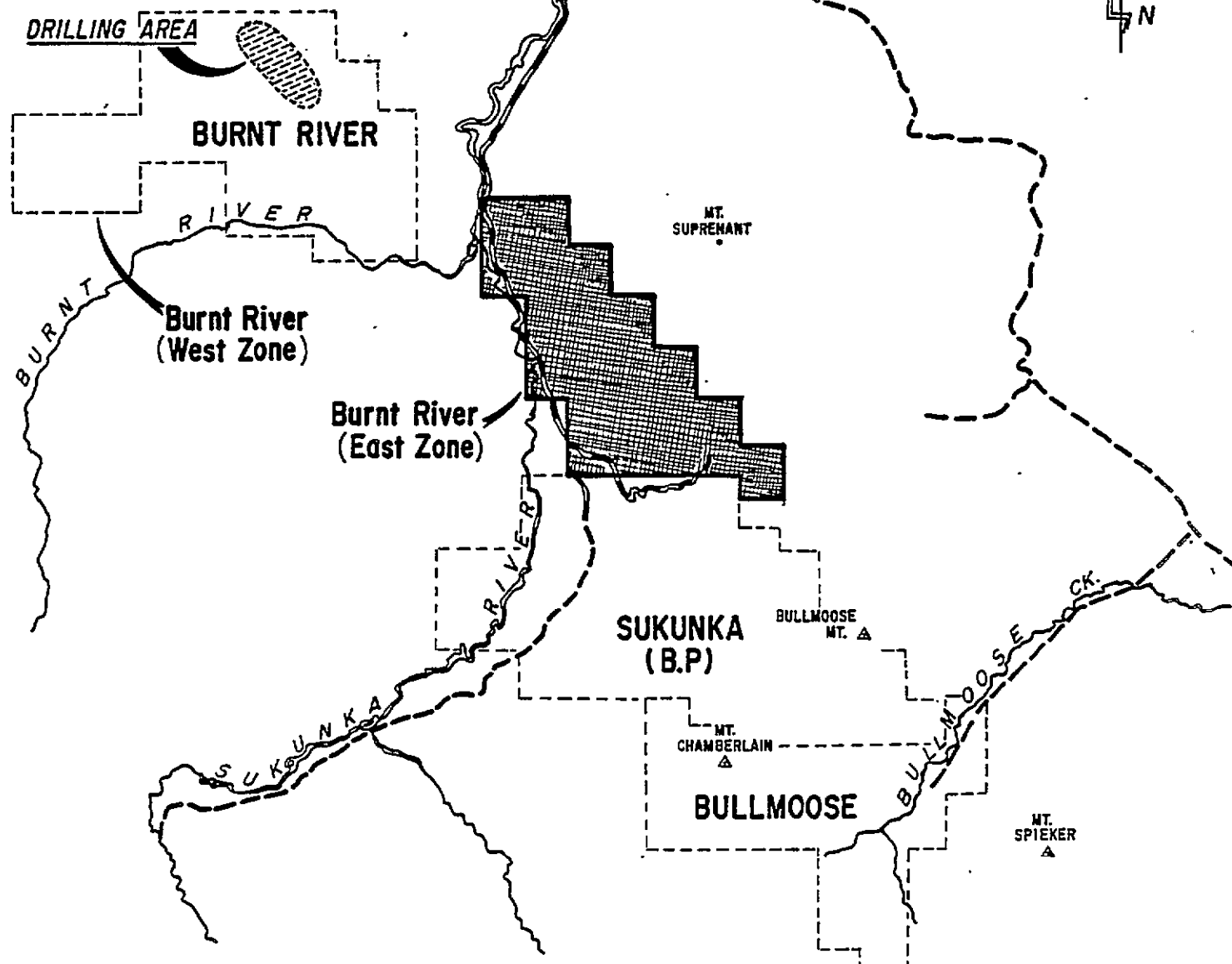
- a) map the formational boundaries and structural setting of the coal measures within the licence boundaries; and
- b) identify the coal zones and test by short diamond core holes the areas that may lend themselves to surface mining.

This report has been prepared for internal use by Teck Corporation and Teck Explorations Limited. An edited copy has been submitted to the B.C. Department of Mines to cover assessment work.

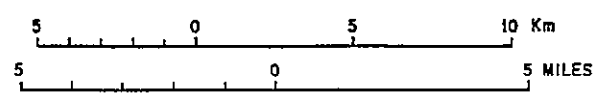
PROPERTY, LOCATION, ACCESS

The coal licences occur along the eastern foothills of the Rocky Mountains, 50 kilometres south of Chetwynd, B.C. (Figure 1). Access is via the Sukunka forestry road by four-wheel drive vehicle. The property is cross-crossed by seismic lines, natural gas pipelines and several kilometres of road from previous natural gas and coal exploration programs.

17 MILES TO CHETWYND



BURNT RIVER PROJECT
 (EAST ZONE)
 LIARD MINING DIVISION, B.C.



The original licence group (July 1981) consisted of 21 licences covering some 5,500 hectares. Based on the 1981-82 mapping and drilling programs, only two licences will be maintained (Figure 2).

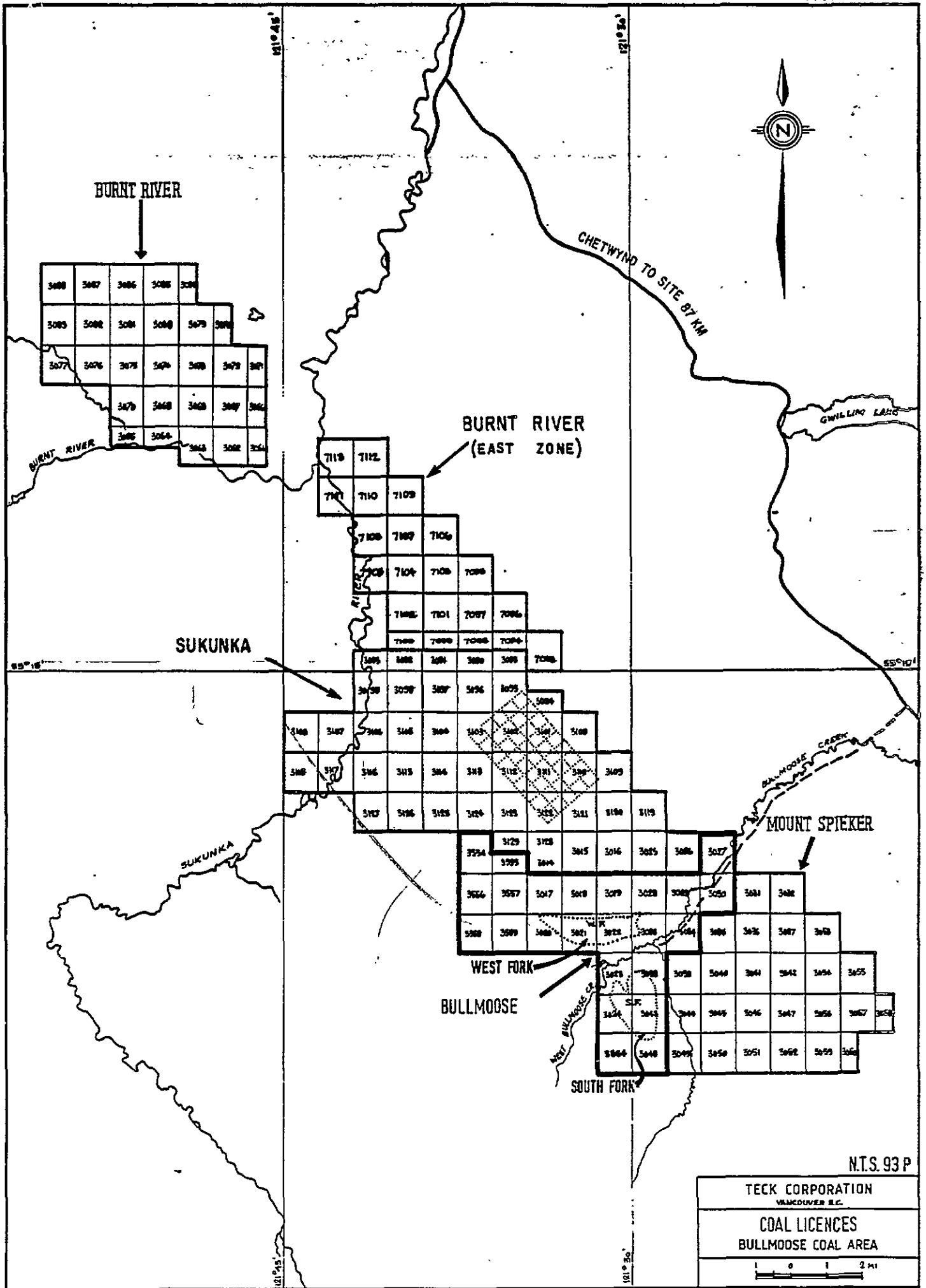
PREVIOUS EXPLORATION

Manalta Coal Ltd. and their subsidiary, Master Explorations Ltd., conducted geological work on the property from 1971 to 1978. In early 1979, they optioned the ground to B.P. Exploration Canada, Coal Division. B.P. dropped their option on the licence group east of the Sukunka River, and these were allowed to lapse in 1981. B.P. still maintains the option on the coal licences west of the Sukunka River, with Manalta's interest reduced to a royalty payable on coal production. The licences held by Teck Corporation on the "east bank" are free and clear, with neither B.P. nor Manalta maintaining any interest.

During September to October 1971, Master Explorations Ltd. carried out some geological mapping accompanied by drilling of 21 rotary holes aggregating 706 metres and some backhoe trenching. The results are contained in a report by T.N. Yoon.

The 1975 program consisted of further mapping, drilling of 21 rotary holes totalling 1,041 metres and excavating 30 trenches totalling 3,432 horizontal metres. Seven of the 12 1971 boreholes were geophysically logged (general scale) by Roke Oil Ltd.

During August to September 1978, eight rotary holes totalling 560 metres were completed. Six of the eight holes were geophysically logged by BPB Instruments Ltd. at both a general scale (1:200) and detail scale (1:20) for the coal intervals exceeding one metre in thickness. The general logs consisted of gamma ray, neutron, density and capiler, while the detail scale included natural gamma



NTS. 93 P

TECK CORPORATION
VANCOUVER B.C.

COAL LICENCES
BULLMOOSE COAL AREA

0 1 2 mi

1:214667

and BRD. Some additional mapping was done, and a report prepared by G.W. Jackson.

B.P. Coal began re-mapping the Manalta property early in 1979. They report that it became rapidly obvious that the geology plotted was incompatible with the well-established stratigraphy of the Sukunka area. Teck Explorations' appraisal of the Manalta data (open-file B.C.D.O.M.) confirms B.P.'s conclusions. Geological units were mis-identified, resulting in an erroneous map from both a stratigraphic and structural viewpoint.

In 1979, B.P. drilled two diamond core holes and re-mapped the entire licence group. Both drill holes collared in the Lower Gething Formation were drilled to the Cadomin Formation.

In August 1981, Teck Explorations acquired from B.P. Canada their reports, maps and drill results.

B.P.'s stratigraphic analysis and correlation of coal zones was for the most part excellent. However, using our geological data from the Burnt River property to the north and the Sukunka property to the south, it became evident that B.P.'s structural analysis of the property was in error. Teck Explorations' objective was then to:

- a) check B.P.'s stratigraphic data by field examination;
- b) establish the true structural setting of the coal measures;
and
- c) delineate coal zones with regard to their potential for surface mining by hand-trenching and diamond drilling.

GEOLOGY

Regional Setting

The property is underlain by Lower Cretaceous sediments up-lifted and deformed during the Laramide Orogeny. These sediments are exposed along a northwest structural trend between Teck's Burnt River property and B.P.'s Sukunka property. The coal-bearing sediments of economic interest along this portion of the eastern foothills occur within the Gething Formation. The Lower Cretaceous sediments found on the property are both marine and continental in origin and relate to shallow deposition in an ancient delta environment. Rock types include sandstones, siltstones, conglomerates, mudstones and coal seams deposited in low to moderately high energy environments. The geology is poorly exposed, and most of the mapping information was gained from seismic lines and access roads.

Stratigraphy

The Table of Formations (Figure 3) illustrates the geological sequence occurring on the property. South of the Sukunka property, the Gates member of the Commotion Formation is of major economic importance (i.e. Bullmoose/Quintette). However, north of the Bullmoose, the Gates coal measures pinch out rapidly. The Gates is reduced to less than 200 metres of section with only coaly horizons evident.

The remaining members and formations of the Ft. St. John Group are found on the property east of the Bullmoose thrust fault. They are of limited importance since they are highly contorted and contain no economic coal seams. Therefore they will not be described in this report.

The Moosebar Formation occurs stratigraphically above the Gething. It is lithologically consistent with that recorded on neighbouring

TABLE OF FORMATIONS

| GROUP/FORMATION | | THICKNESS (m) | LITHOLOGY | |
|---|---|-------------------|--|--|
| Lower Cretaceous | Fort St. John Group comprising Moosebar, Commotion and Hasler Formation | 775-910 | Marine and non-marine siltstones, shales, sandstone; conglomerate, numerous coaly zones/horizons. | |
| | Bullhead Group | Gething Formation | 395-405 | Sandstones, quartzose, cherty, calcareous, fresh water/marine siltstones/mudstones, carbonaceous mudstone, coal, conglomerate. |
| | | Cadomin Formation | 20-30 | Massive conglomerate, sandstones, minor mudstones. |
| Strong regional unconformity bevelling strata of successively older age northward and eastward. | | | | |
| Jurassic | Minnes Group | ?1500-1800 | Massive quartzose sandstone interbedded fine-grained calcareous sandstone and mudstone. Coal zones in top sediments. | |

properties and needs no special definition. It is composed totally of homogeneous marine mudstones some 70 to 90 metres thick.

The Cadomin Formation underlying the Gething is well exposed across the licence group. It is a readily-mappable unit composed of massive fluvial conglomerate. The upper contact is well defined and contrasts sharply with the finer-grained Gething. This massive unit consists of well-cemented (silicified) pebbles, cobbles and boulders of chert and quartz composition. In some areas, the Cadomin is a multi-component unit with finer-grained massive sandstone and/or mudstone. In all cases, the Cadomin is easily distinguishable from the conglomerates that occur in the Gething Formation.

Stratigraphically below the Cadomin lies the Minnes Group. The non-marine coal-bearing units in the upper Minnes are now referred to as the Bickford Formation in most areas (Stott, 1981). In the Burnt River East Zone, this Formation consists of carbonaceous mudstones with minor coal zones, sandstone and siltstones.

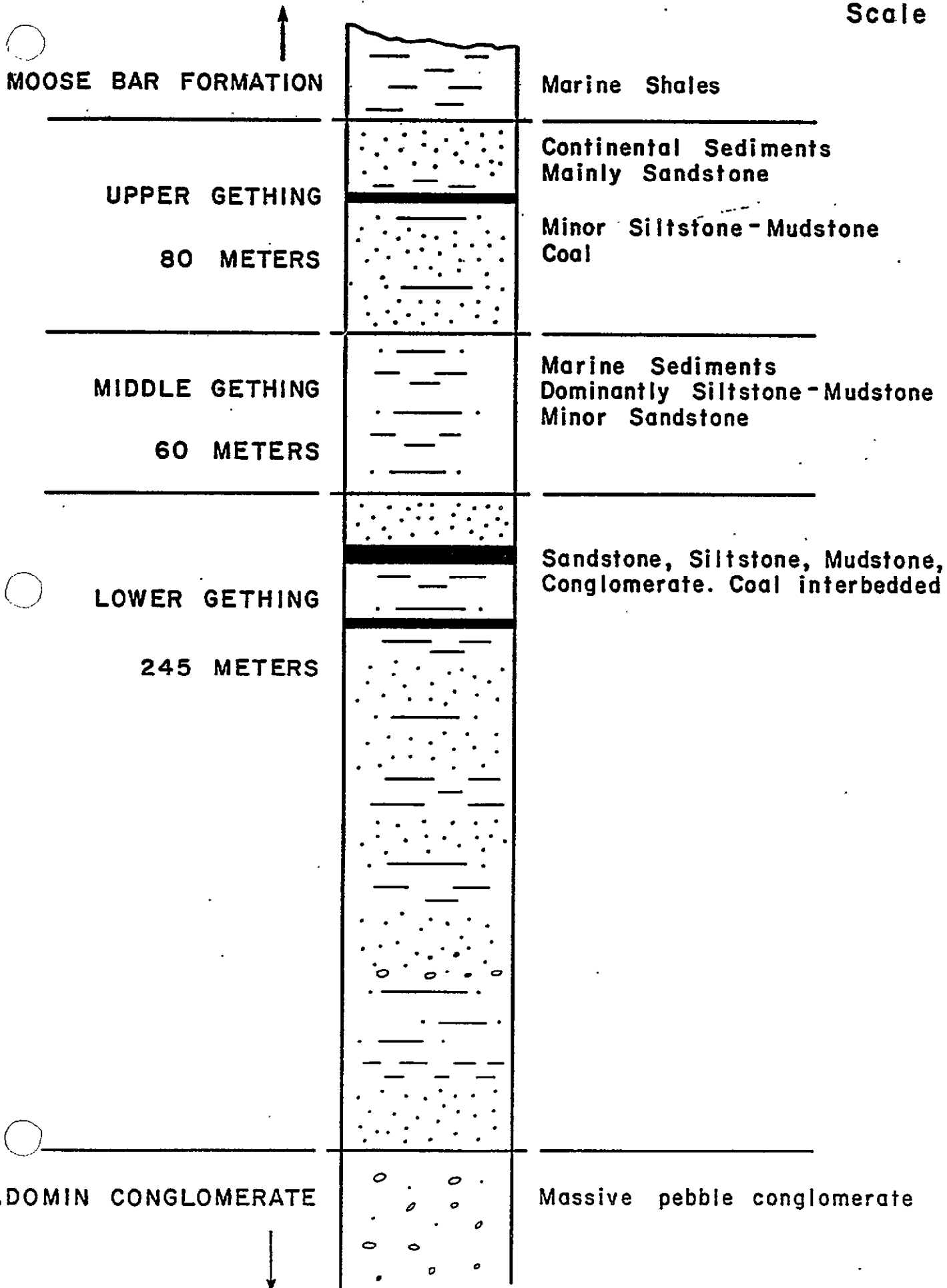
Previous work on the Gething Formation has shown the total thickness of Gething to be in the order of 400 metres. Using the known stratigraphy of the area, B.P. Coal sub-divided the Gething into three units (as was done at Sukunka): (see Figure 4).

1. Upper Gething: The Upper contact is placed at the base of the Bluesky Formation. This same contact is used regionally (e.g. Bullmoose). The Bluesky is a thin glauconitic marine sandstone directly below the Moosebar shales.

This "Upper" sequence is described by B.P. to be 70 to 80 metres thick and consists of two cycles dominated by a sandstone facies. Our field work concurs with the description, which is partly illustrated in drill logs BRE-1 to BRE-4. The unit is basically

STRATIGRAPHIC COLUMN

Scale 1:20



fine- to coarse-grained, clean, cross-bedded sandstone. The sandstones are commonly calcareous, carbonaceous and abundant in worm burrows. The floor of the Chamberlain seam is identical to that found on the Sukunka-Bullmoose properties, however, the roof rocks are predominantly sandstone in the study area. Of interesting note is a conglomerate unit which exists 40 to 50 metres below the Chamberlain seam, and apparently thickens to the north (nine metres). It is discernable from the Cadomin that the pebbles are smaller, loosely cemented with siliceous mud, and contain carbonaceous detritus, which could represent a fluvial storm channel.

2. Middle Gething: This unit is 55 to 60 metres thick and is composed mainly of nondescript mudstones, siltstones and small amounts of sandstone. B.P. reports that a glauconitic sandstone (0.5 metres) is present and was noted throughout the property. Due to the recessive nature of the Middle Gething, exposures were limited and confined to areas of low overburden and steep topography. The exposures observed by the author can be described as rubbly, mudstone-siltstone facies that are fine-grained, thin bedded and free of bioturbation and carbonaceous matter. The Middle Gething has not been observed at Burnt River and may be absent.
3. Lower Gething: The contact between the Middle and Lower Gething is characterized by a pebble sandstone-conglomerate three to six metres in thickness. The Lower Gething is reported to be 220 to 245 metres thick, with a gradual thickening to the northwest. At Burnt River, this unit is known to be at least 240 metres thick.

The Lower Gething is composed of sandstones, siltstones, mudstones, coal and conglomerate with a slight dominance of sandstone. Observations in the field and in drill core (BRE-5) show these sediments to be dark grey, carbonaceous, siliceous to calcareous, and thin- to thickly-bedded. Bedding ranges from flaser ripple to

convoluted, which suggests low to medium energy deposition.

The upper portion of the Lower Gething has three distinct mappable horizons. These include the A/B sandstone splintery shale, and the "B" Zone coal horizon. The A/B sandstone is five to 10 metres thick and occurs directly below the base of Middle Gething. It has a light-brown weathering, strongly calcareous, thick-bedded sandstone with concoidal fracturing in outcrop. The "splintery shale" unit is approximately six to eight metres thick and occurs directly below the A/B sandstone in most cases. The "B" Zone coal horizon lies five to 10 metres below the shale and has been split into upper and lower units. The upper unit contains coal of commercial thickness and is described in more detail in the following "coal seam" section.

In the area of the East Zone property, the Gates Formation is exposed east of the Bullmoose fault. It has thinned to under 200 metres in thickness and contains thin coal seams of uneconomic proportions. Locally, the Gates strata are steeply dipping and tightly folded. As at Bullmoose, the strata is partly marine and consists of the same general rock types.

Structure

The most predominant structural feature is the Bullmoose thrust fault that crosses the licence group in a northwest to southeast direction. This fault has been traced from the Mt. Spieker property to the north end of the Burnt River property. Rock units east of this fault are mainly those of the Ft. St. John Group comprising the Moosebar and Commotion Formations, and have been tightly folded and contorted with dips exceeding 50°.

The coal measures of the Gething Formation lie to the west of the Bullmoose fault on the upper plate. This upper plate has an echelon

of northwest trending thrust faults of lesser displacement which dip to the southwest. This "stacking" of Gething thrust plates is generally tightly folded with fold axes striking to the northwest. Folding is typically asymmetrical in nature.

North of Muster Creek, an erosional remnant of Middle and Upper Gething rocks has preserved a section of the upper unit of Lower Gething.

This area has been drilled by Manalta and B.P. and contains the potential reserves of "B" Zone coal. The coal occurs on the limbs of an asymmetrical synclinal structure.

As mentioned, the folding is fairly tight and few areas of the property are potentially mineable due to the steepness of the coal seams relative to the topography. This situation is best depicted on Cross-Sections 1 to 3.

Coal Seams (Gething)

Coal measures are found only in the Upper and Lower Gething strata. The Upper Gething near the south end of the licences showed the occurrence of the Skeeter and Chamberlain seams; the Bird Seam is reported by B.P. to have pinched out and is represented by a carbonaceous mudstone unit. Only one drill hole (BRE-4) intersected the Skeeter Seam, so it also has pinched out a short distance northward. The Chamberlain Seam is characteristic of that found on the Sukunka property to the south, however, it has thinned considerably and is of little economic interest.

The Lower Gething coal measures exhibit several coal zones. The potential reserve potential is in the "B" Zone stratigraphically located in the upper 60 metres of the Lower Gething. B.P. Coal

divided the "B" Zone into an upper and lower unit based on a bentonitic marker bed. The lower coal unit is separated from the upper unit by approximately 25 metres of sediments, and contains in the order of one to two metres of coal.

The upper "B" Zone contains three to six metres of coal over a stratigraphic interval of approximately four to 10 metres with a marked thickening to the northwest. The mining potential therefore lies within the upper "B" Zone. The sediments enclosing the coal seams in this "Zone" are characteristically carbonaceous shale overlain by an interbedded sandstone unit.

The remainder of the coal Zones "C" to "H" are basically carbonaceous horizons that develop locally into coal sections of minor thickness and poor quality.

B.P. Coal reports that the Minnes Group has minimal coal potential in this area.

REFERENCES

- | | |
|-----------------------|--|
| Jackson, G.W. (1975): | Sukunka River Area, 1975 Exploration Report; Master Explorations Ltd. |
| Jackson, G.W. (1978): | Sukunka River Area, 1978 Exploration Report; Master Explorations Ltd. |
| Chowdry, M.A. (1980): | Sukunka North Report, 1979 Exploration Program; B.P. Exploration Canada, Coal Division. |

1982

BURNT RIVER EAST ZONE

| <u>Hole</u> | <u>Licence No.</u> | <u>Co-Ordinates</u> | <u>Collar Elevation</u> |
|-------------|--------------------|------------------------|-------------------------|
| BRE 1 | 7094 | 6,125,103N 589,142E | 1,330 m |
| BRE 2 | 7094 | 6,124,530N 589,752E | 1,281 m |
| BRE 3 | 7094 | 6,124,613N 589,680E | 1,292 m |
| BRE 4 | 7094 | 6,124,680N 580,589E | 1,300 m |
| BRE 5 | 7099 | 6,124,525N 585,932E | 894 m |

TECK CORPORATION

STRATIGRAPHIC LOG

OF

BRE 1

VERTICAL SCALE: 1:100

491

| | |
|---|------------------------------------|
| PROJECT BURNT RIVER EAST | LOCATION SUKUNKA |
| HOLE NO BRE 1 CORE SIZE 1AX | DATUM G.L. |
| CO-ORDINATES _____ N _____ E | DATE STARTED June 20, 1982 |
| COLLAR ELEVATION _____ METRES | DATE FINISHED June 21, 1982 |
| HOLE ANGLE -90° TOTAL DEPTH 14.63 M | LOGGED BY B.I.M. |

| SERIES | FORMATION | MEMBER | DISTANCE FROM DATUM | COLUMNAR SECTION | LITHOLOGIC DESCRIPTION |
|---------|-----------|-------------------|---------------------|------------------|---|
| | | | 0 | ○ ○ ○ ○ ○ | OVERBURDEN |
| | | | 1.22 | | |
| | | | 5 | | SANDSTONE - THICK BEDDED, CLEAN, LT GREY, MED - COARSE GRAINED. CONGLOMERATE 8.84 - 8.90 m. 55° TO CORE. APPEARS TO FINE UPWARDS. |
| | | | 8.90 | ■ | COAL - CLEAN, BRIGHT, FRIABLE, 1.28/.43 |
| | | CHAMBERLAIN SEAM. | 10 | | |
| | | | 10.18 | | SANDSTONE - MASSIVE, HARD, BLUE-GREY, TO MED. GREY. MED-COARSE GRAINED. COAL WISPS @ 10.18 - 10.63 (rooted), CLEAN, CROSS BEDDED. |
| | | | 14.63 | → | END OF HOLE |
| | | | 15 | | - NOT SAMPLED - |
| FACIOUS | | | 20 | | |

PC Burnt River 82(3)A (4)

TECK CORPORATION STRATIGRAPHIC LOG OF BRE 2

VERTICAL SCALE: 1:100

491

PROJECT BURNT RIVER EAST LOCATION SUKUNKA
 HOLE No BRE 2 CORE SIZE IAX DATUM G.L.
 CO-ORDINATES N E DATE STARTED June 22, 1982
 COLLAR ELEVATION METRES DATE FINISHED June 25, 1982
 HOLE ANGLE 90° TOTAL DEPTH 32.25 M LOGGED BY B.I.M.

| SERIES | FORMATION | MEMBER | DISTANCE FROM DATUM | COLUMNAR SECTION | LITHOLOGIC DESCRIPTION |
|--------|-----------|--------|---------------------|------------------|---|
| | | | 0 | | OVERBURDEN |
| | | | 4.68 | | SANDSTONE - CLEAN, COARSE GRAINED, VERY HARD, GREY TO GREY-BLUE, CARBONACEOUS, TYPICAL CHAMBER-LAIN SEAM FLOOR. |
| | | | 7.62 | | SANDSTONE - CLEAN, GREY, CROSS-BEDDED, MASSIVE, HARD FINING DOWNWARDS CYCLE |
| | | | 10 | | |
| | | | 15 | | |
| | | | 20 | | |
| | | | 20.78 | | FINE GRAINED SANDSTONE, MUDSTONE THINLY INTERBEDDED 68°-70° TO CORE, MUDSTONE WISPS, CONVOLUTED BEDDING. |
| | | | 22.19 | | SANDSTONE - CLEAN, MASSIVE, FINE GRAINED, CROSS-BEDDED, GREY, HARD, SAME AS 7.62 - 20.78 m. |
| | | | 25 | | |
| | | | 28.71 | | |
| | | | 30 | | SANDSTONE, MUDSTONE - 50-80 THIN TO MEDIUM INTERBEDDING, FINE GRAINED, CONVOLUTED BEDDING, 68° TO CORE, MUDSTONE VERY WEATHERED @ 28.0 m. |
| | | | 32.25 | | END OF HOLE |

LOWER CRETACEOUS
GETTING

TECK CORPORATION STRATIGRAPHIC LOG OF BRE 3

VERTICAL SCALE: 1:100

491

| | | | |
|------------------|-------------------------|---------------|----------------------|
| PROJECT | <u>BURNT RIVER EAST</u> | LOCATION | <u>SUKUNKA</u> |
| HOLE NO | <u>BRE 3</u> | CORE SIZE | <u>1 AX</u> |
| CO-ORDINATES | <u>N</u> <u>E</u> | DATUM | <u>G.L.</u> |
| COLLAR ELEVATION | <u> </u> METRES | DATE STARTED | <u>June 26, 1982</u> |
| HOLE ANGLE | <u>-90°</u> | DATE FINISHED | <u>June 28, 1982</u> |
| TOTAL DEPTH | <u>16.95</u> M | LOGGED BY | <u>B. I. M.</u> |

| SERIES | FORMATION | MEMBER | DISTANCE FROM DATUM | COLUMNAR SECTION | LITHOLOGIC DESCRIPTION |
|--------|-----------|--------|---------------------|------------------|---|
| | | | 0 | | |
| | | | 0-5 | | OVERBURDEN |
| | | | 6.43 | | SANDSTONE - FINE GRAINED, OVERBURDEN? |
| | | | 6.50 | | COAL - CLEAN CHIPS .13/03 CHAMBERLAIN SEAM (eroded) |
| | | | 6.71 | | SANDSTONE - CLEAN, VERY CARBONACEOUS, HARD, D GREY, MASSIVE, COARSE GRAINED, CHAMBERLAIN FLOOR, ROOTED. |
| | | | 7.32 | | SANDSTONE - CARBONACEOUS, SALT & PEPPER, HARD, MASSIVE, COARSE GRAINED. |
| | | | 9.75 | | |
| | | | 10 | | SANDSTONE - CLEAN, HARD, CROSS BEDDED, FINE - MEDIUM GRAINED, MEDIUM TO LT. GREY, WORM BURROWS, MINOR MUD CLASTS, FINING DOWNWARDS. |
| | | | 15 | | |
| | | | 16.95 | | END OF HOLE |
| | | | 20 | | |
| | | | 25 | | |
| | | | 30 | | |

LOWER CRETACEOUS
GETHING

TECK CORPORATION
 STRATIGRAPHIC LOG
 OF
 BRE 4

VERTICAL SCALE: 1:100

491

PROJECT BURNT RIVER EAST LOCATION SUKUNKA
 HOLE NO BRE 4 CORE SIZE IAX DATUM G.L.
 CO-ORDINATES N E DATE STARTED June 29, 1982
 COLLAR ELEVATION METRES DATE FINISHED July 2, 1982
 HOLE ANGLE -90° TOTAL DEPTH 23.44 M. LOGGED BY B.I.M.

| SERIES | FORMATION | MEMBER | DISTANCE FROM DATUM | COLUMNAR SECTION | LITHOLOGIC DESCRIPTION |
|--------|-----------|--------|---------------------|------------------|---|
| | | | 0 | | OVERBURDEN |
| | | | 1.34 | | SANDSTONE - SILTY, MED. GRAINED, MINOR WORM BURROWS 60° TO CORE |
| | | | 2.26 | | |
| | | | 5 | | SANDSTONE - CLEAN, HARD, MED.-COARSE GRAINED, 60° TO CORE FINE CARBONACEOUS WISPS, SALT & PEPPER, VERY LT. GREY, THICKLY BEDDED TO MASSIVE. |
| | | | 9.50 | | |
| | | | 10 | | MUDSTONE - DARK GREY, CARBONACEOUS, CRUSHED TO BLOCKY, POOR RECOVERY, BADLY BROKEN 9.80-11.20 m. INTERBEDDED SANDSTONE 13.80-14.20 m. |
| | | | 14.20 | | |
| | | | 14.66 | | SANDSTONE - CARBONACEOUS, MEDIUM GRAINED |
| | | | 15 | | |
| | | | 16.41 | | COAL - CLEAN, BRIGHT, BROKEN, ROUNDED CHIPS, MINOR SANDSTONE PARTING WITH 10% PYRITE 1.95/0.24 |
| | | | 16.95 | | MUDSTONE - VERY CARBONACEOUS. |
| | | | 18.07 | | FINE GRAINED SANDSTONE, MUDSTONE THINLY INTERBEDDED. |
| | | | 18.56 | | SANDSTONE - CLEAN, MEDIUM GRAINED. |
| | | | 19.81 | | MUDSTONE - DARK GREY, COAL PARTINGS, POOR RECOVERY. |
| | | | 20 | | |
| | | | 20.82 | | COAL - CLEAN, BRIGHT, BLOCKY 1.01/.73 |
| | | | 23.44 | | SANDSTONE - CLEAN, LT. GREY, MED.-COARSE GRAINED, TYPICAL CHAMBERLAIN FLOOR, COAL WISPS 20.82-21.50 (rooted) FINING DOWNWARDS CYCLE. |
| | | | 25 | | END OF HOLE |
| | | | 30 | | - NO SAMPLES TAKEN - |

LOWER CRETACEOUS
 GETHING

SKEETER SEAM

CHAMBERLAIN SEAM

TECK CORPORATION

STRATIGRAPHIC LOG

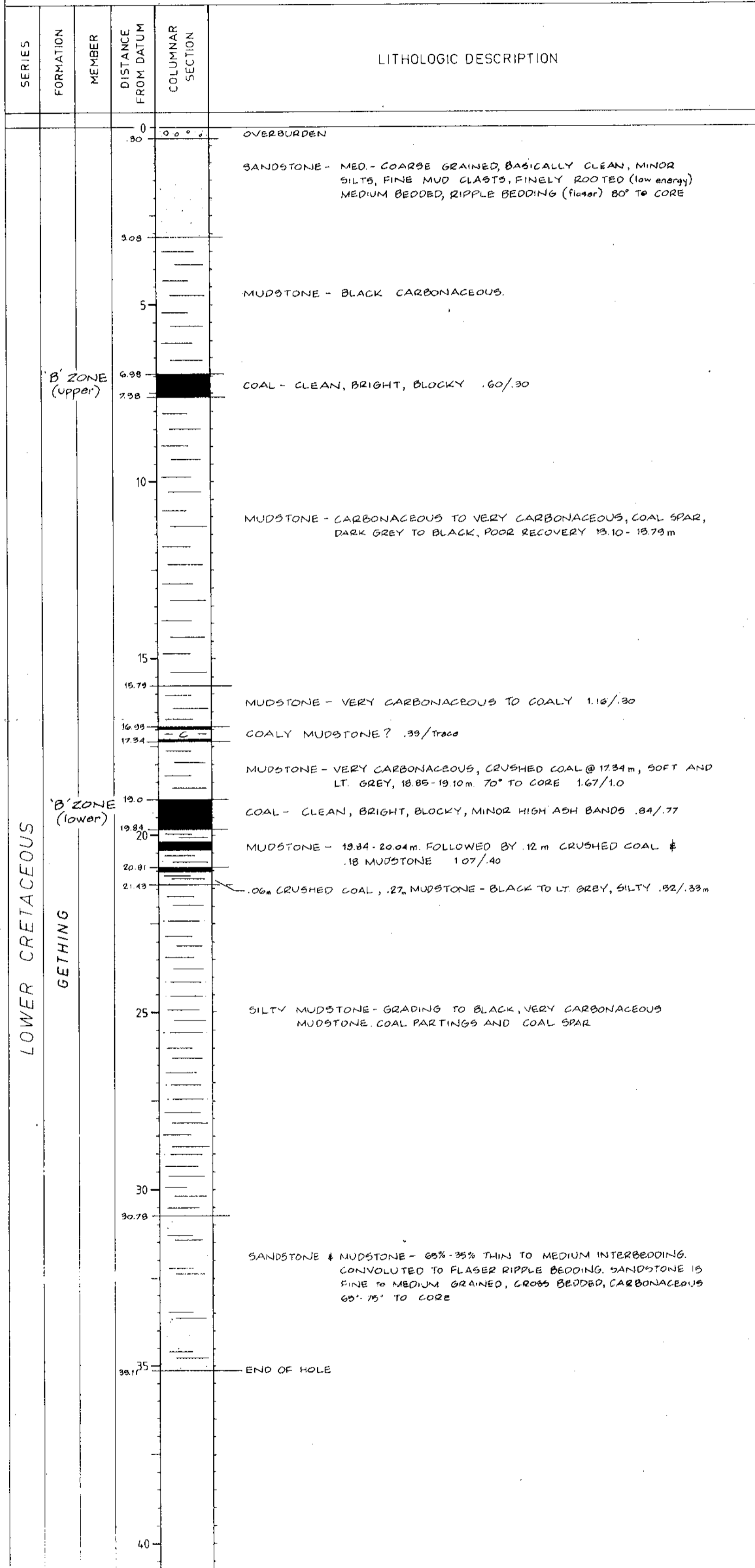
OF

BRE 5

VERTICAL SCALE: 1:100

491

| | |
|--|------------------------------------|
| PROJECT <u>BURNT RIVER EAST</u> | LOCATION <u>SUKUNKA</u> |
| HOLE NO <u>BRE 5</u> CORE SIZE <u>IAX</u> | DATUM <u>G.L.</u> |
| CO-ORDINATES <u>N</u> <u>E</u> | DATE STARTED <u>July 6, 1982</u> |
| COLLAR ELEVATION <u> </u> METRES | DATE FINISHED <u>July 11, 1982</u> |
| HOLE ANGLE <u>-90°</u> TOTAL DEPTH <u>35.11</u> M. | LOGGED BY <u>B.I.M.</u> |

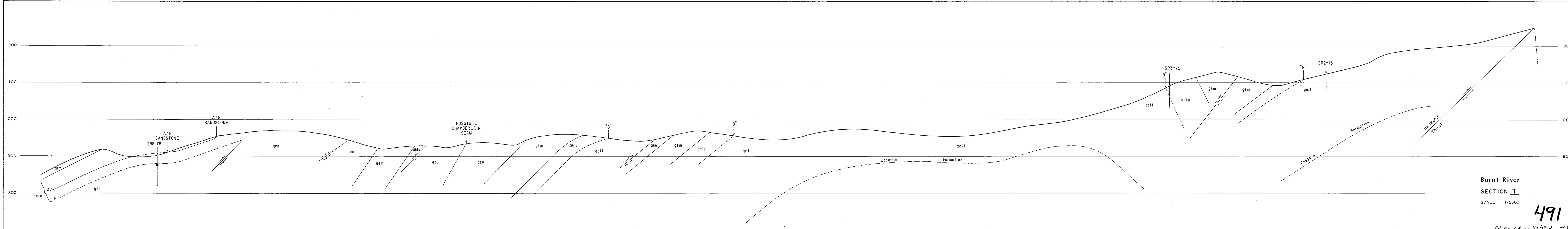


B' ZONE (upper)

B' ZONE (lower)

LOWER CRETACEOUS
GETHING

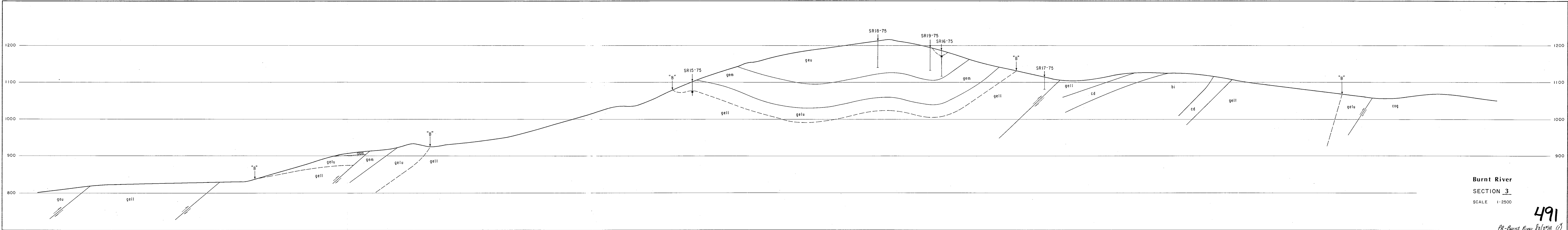
Rock Soil

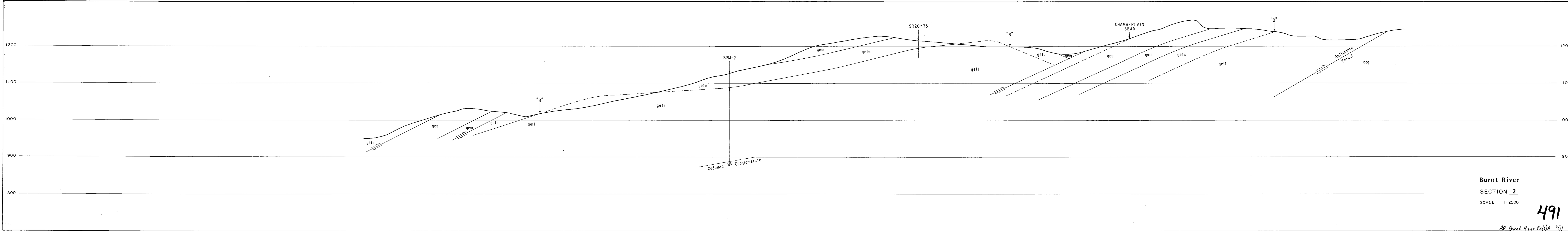


Burnt River
SECTION 1
SCALE 1:2500

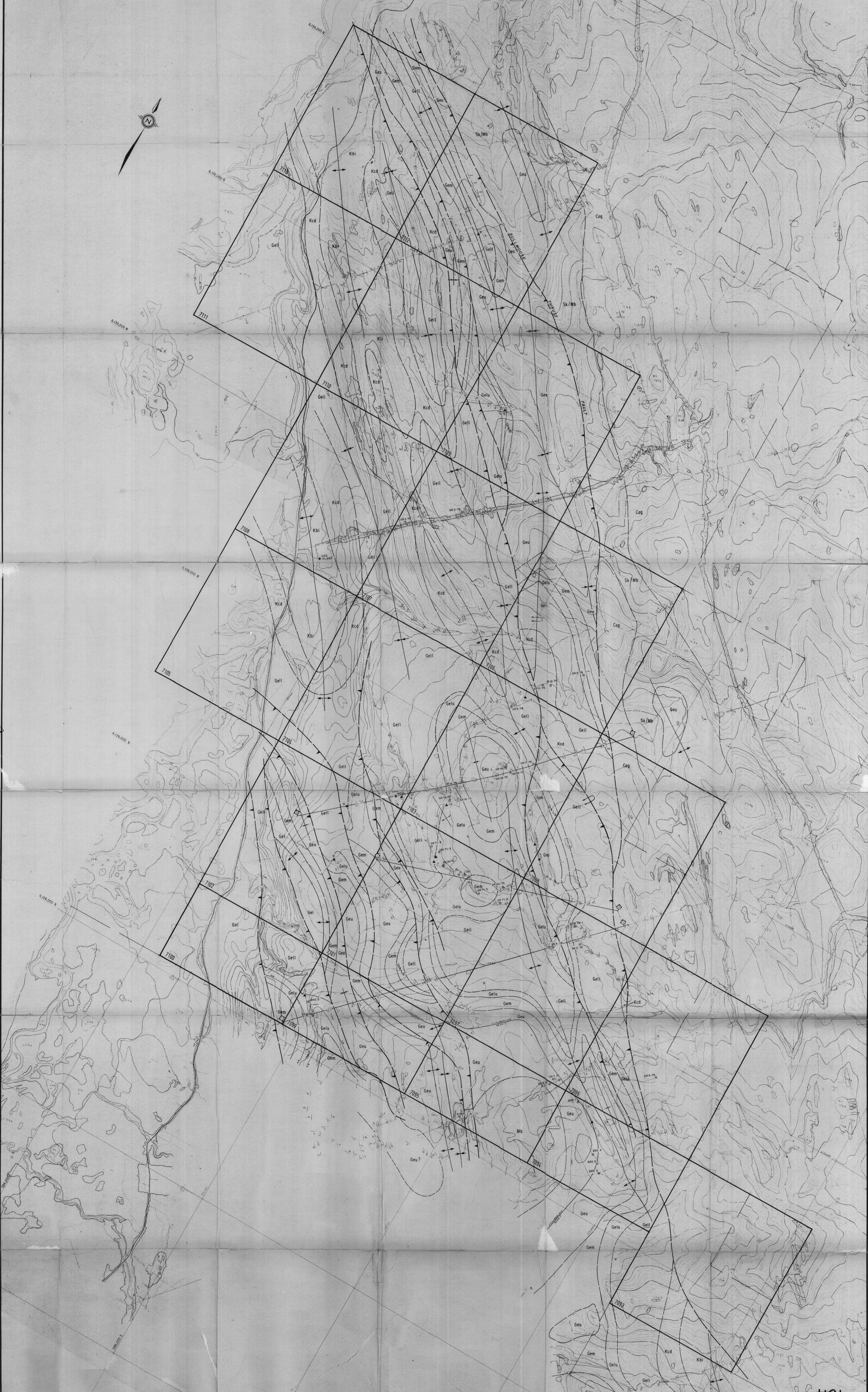
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PR-Burnt River 82(2*)A *6)





Burnt River
SECTION 2
SCALE 1:2500
491
AR-Burnt River 82(2)A *(1)



- DRILL HOLE
- ▲ COAL SEAM OUTCROP
- ▬ (with wavy lines) BEDDING (HORIZONTAL, INCLINED, VERTICAL, OVERTURNED)
- ▬ (with arrows) ANTICLINE, SHOWING DIRECTION OF PLUNGE
- ▬ (with arrows) SYNCLINE, SHOWING DIRECTION OF PLUNGE
- ▬ (with arrows) FAULT
- ▬ (with dashed lines) FORMATION BOUNDARY
- ▬ (with dotted lines) APPROXIMATE FORMATION BOUNDARY

491 FIG. 5

TECK EXPLORATIONS LTD.
200 Burnt River Rd. (1974)

**BURNT RIVER PROJECT
EAST ZONE**

GEOLOGY

1:10,000

MAP SHEET 21W 02N 01E 01S 01E 01S