

R. McGuin & Office



MOUNT KLAPPAN COAL PROPERTY
TRIAL CARGO
May, 1985

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GULF CANADA RESOURCES INC.

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TRIAL CARGO

May, 1985

PREAMBLE

By submission of this proposal, Gulf Canada Resources Inc. requests approval in principle to amend under amended Reclamation Permit C-160 for 60 000 tonnes dated October 22, 1984 for the extraction and processing of the balance of 40,000 tonnes of anthracite from the Lost-Fox Area through a pilot plant assembled on site at Mount Klappan. The pilot plant will be used to process coal from various seams to obtain size consist, recovery factors and washability data required for marketing. The data obtained will then be used to design a coal preparation plant for a 1.5 million tonne per year mine operation.

This submission comprises test pit plans, a general description of the proposed extraction and transportation of the coal to the port of Stewart, as well as environmental protection and reclamation considerations.

An application for additional tonnage of approximately 50 to 60 000 tonnes will be submitted at a later date, subsequent to the Stage I Submission.

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Part II

Notice of Work on a Coal License - Form 6
Reclamation Program - Form 7

LIST OF MAPS

1:500 000	NORTHWEST BRITISH COLUMBIA
1:250 000	LICENCE MAP
1: 10 000	SITE PLAN
1: 2 500	TEST PIT PLAN
1: 500	CROSS SECTIONS: 2700 N 2750 N 2800 N 2850 N 2900 N 2950 N 3000 N 3050 N
N.T.S.	FLWSHEET MODULAR WASHING FACILITY
1/16":1'-0"	ALTERNATIVE PLANT & EQUIPMENT LAYOUT
1/8":1'-0"	GENERAL ARRANGEMENT OF PACKAGE WASHING UNITS
3/8":1'-0"	HI-GRADE COAL WASHER PLANT

SUMMARY

Gulf Canada Resources Inc. proposes to produce 90 000 tonnes (approximately) of coal, largely from one seam, in a test pit on the Mount Klappan Coal property. The coal will be processed in a dense medium pilot plant from which a number of anthracite products will be produced and shipped to Canada, Europe and Korea for test marketing. In addition, 400 tonne bulk samples of 4 to 5 seams, occurring within the proposed 1.5 million tonne Lost Fox Mine, (Stage I submission) will also be test washed in the pilot plant.

It is anticipated that overburden removal will commence in late June, 1985, followed by coal mining and coal processing in late July. With the exception of trucking, which will continue until March 1986, all other operations should be completed by late October, 1985.

Gulf will be the Project Manager and most probably operator for the coal extraction and coal processing. Overburden removal is expected to be contracted out.

As the test pit, waste dumps and plant facility are all located within the same area to be occupied by the proposed 1.5 million tonne per year operation, no reclamation is planned unless the project is abandoned by Gulf.

2.0 INTRODUCTION

2.1 Location and Physiography

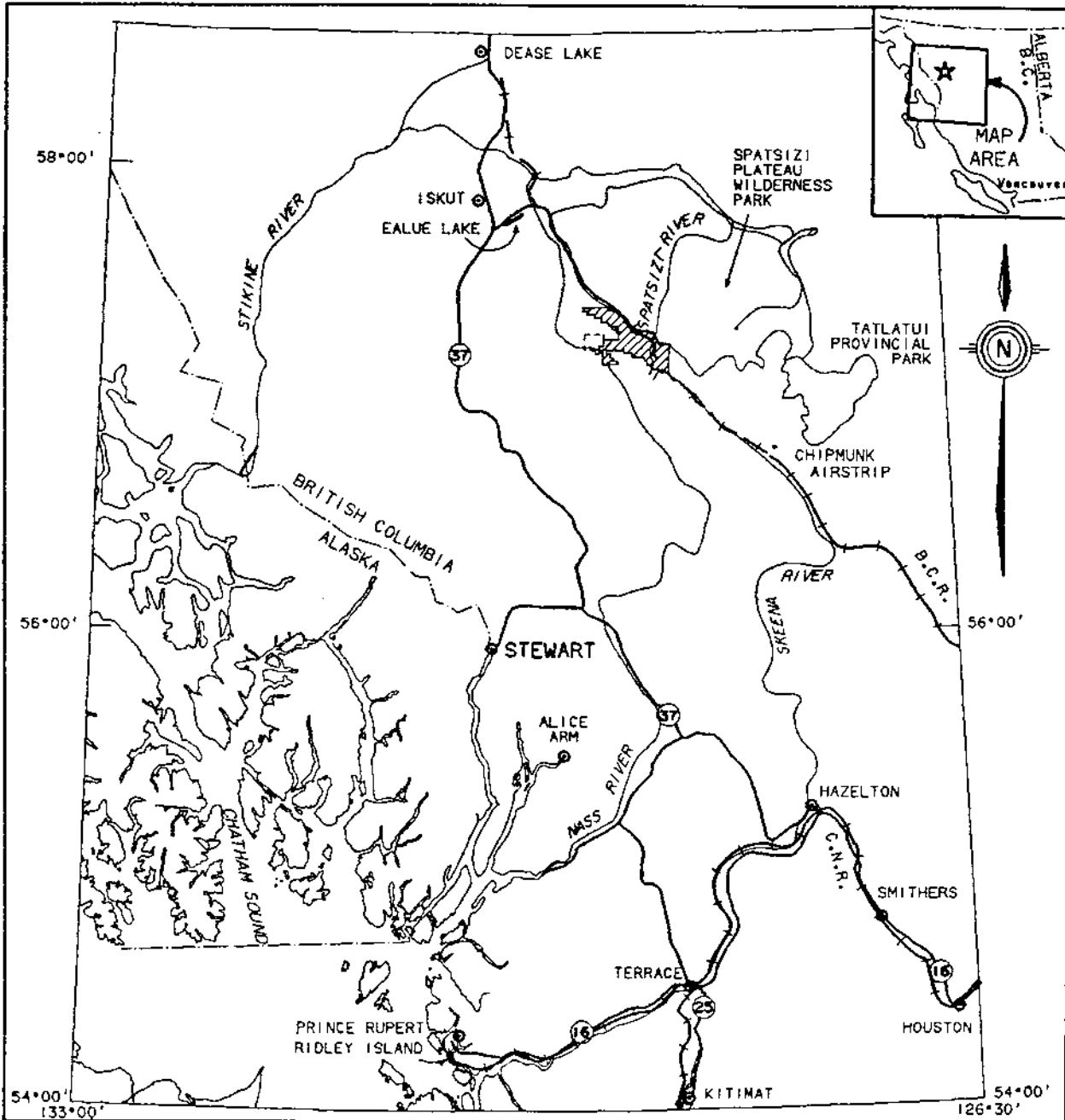
The Mount Klappan coal licenses are located in northwestern British Columbia, approximately 150 kilometres northeast of Stewart (population 1 445) and 530 kilometres northwest of Prince George (population 69 300). See Figure 1.

The nearest community is the village of Iskut (approximate population 500) which lies 100 kilometres to the northwest of Mount Klappan on the Stewart-Cassiar Highway.

The property is located in the Skeena Mountains physiographic region at the headwaters of the Little Klappan and Skeena Rivers between 57° 06' and 57° 22' north latitude and 128° 37' and 129° 09' west longitude. Locally the topography is characterized by broad open valleys and generally subdued mountains, with elevations ranging from 1100 to 2000 metres above sea level. Scattered coniferous forest interspersed with grass, shrubs, meadows and shallow bogs occur below the tree line, which is at 1500 metres of elevation. Above the tree line, alpine meadows give way to weathered bedrock at higher elevations.

The coal will be excavated mainly from one pit located on the top of Lost Ridge some 8 km by road from the British Columbia Railway subgrade in the Fox Creek area.

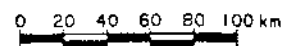
MOUNT KLAPPAN COAL PROPERTY PROPERTY LOCATION MAP



LEGEND

- ROAD ACCESS
- EXISTING RAILWAY
- EXISTING RAILWAY SUBGRADE
- MT. KLAPPAN LICENCE AREA

SCALE



GULF CANADA RESOURCES INC.
12/02/85



2.2 Access

The Mount Klappan property straddles the partially completed British Columbia Railway line between Prince George and Dease Lake. Prior to cessation of work on the construction of the line, steel was laid to within 85 kilometres of the property, and, with the exception of a short stretch south of the licenses, the subgrade was constructed through and beyond the property to the Stikine River just south of Dease Lake.

At present, the property is accessed from Highway 37 along the Ealue Lake road and hence down the subgrade to the licenses. A 1000 metre gravel airstrip is located on the property.

2.3 Land Use, Present and Future

The Mount Klappan property is situated in a remote, unpopulated area of British Columbia. The nearest permanent settlement is Iskut, approximately 100 kilometres to the north.

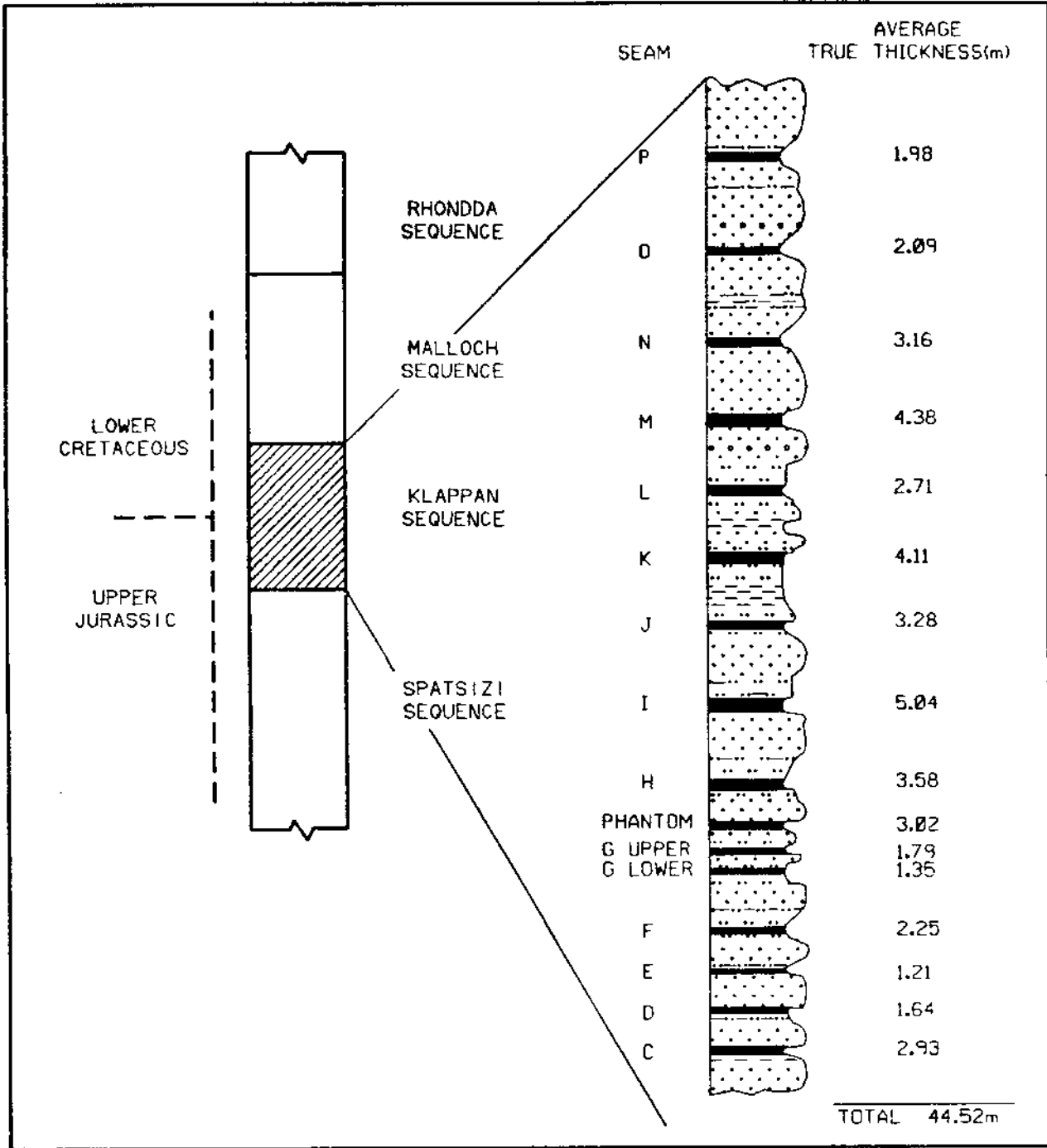
There are no commercial timber or agricultural areas on the property, and within the region in general, only 0.9 percent of the land is deemed arable. No livestock is kept on or in the immediate vicinity of the Mount Klappan Coal Property, although outfitters using domestic horses pass through the area on hunting trips.

Within the exception of the Spatsizi Plateau Wilderness Park, no park facilities exist or are currently planned for the areas in close proximity. Recreational activities are provided in the area through hunting, hiking, etc. Outfitting, commercial hunting and trapping activities are present in the larger region. Area useage by

ungulates during the winter is nil and very few mammals such as foxes and wolves pass through during the winter months.

The larger region contains previously identified mineral deposits and has potential for mineral development.

MOUNT KLAPPAN COAL PROPERTY STRATIGRAPHY OF THE KLAPPAN SEQUENCE LOST-FOX MINE AREA



SCALE: NTS

GULF CANADA RESOURCES INC.
13/05/85



3.0 GEOLOGY

The property is underlain by Upper Jurassic and Lower Cretaceous sediments which Gulf geologists have subdivided into the Klappan, Malloch and Rhondda Sequences. The Klappan Sequence, which is the main coal-bearing sequence, underlies the test pit area.

Although 11 seams, labelled in ascending order from A to K, have been intersected by drilling, one seam, designated the I seam, will be extracted, with limited tonnage from other seams.

The seam has been intersected by rotary and diamond drill holes, backhoe trenches and an adit, within the pit itself; as well as by diamond drill holes in the immediate area.

Within the pit area, seam I varies between 3.13 m and 5.12 m in thickness. The seam outcrops on the north and east sides of the pit. Overburden is comprised of unconsolidated glacial till and a roof rock of sandstone/siltstone/mudstone.

4.0 TRIAL CARGO EXTRACTION

The test pit, from which the entire tonnage of coal is to be mined, is located within the proposed 1.5 million tonne per year Lost Fox mine (Stage I) on the top of Lost Ridge. Covering an area of 2.65 hectares, the pit measures approximately 70 metres by 370 metres and attains a maximum depth of 31 metres near its mid point. (Trial Cargo Pit Plan and Cross Sections) Approximately 405 000 bank cubic metres of overburden will be removed and 90 000 tonnes of coal products. Due to coal loss and out of seam dilution, the actual amount of coal mined, to achieve the required tonnage of each product, may vary within 10%.

An estimated 40 men, as outlined in the following schedule, would be involved in overburden removal, coal extraction, and coal haul to the processing plant. Gulf will provide the Project Management for the Project. The project will operate 2 shifts, 24 hours per day, 7 days a week.

WASTE AND COAL EXTRACTION MANPOWER SCHEDULE

	<u>Manpower</u>	
	<u>Dayshift</u>	<u>Nightshift</u>
Manager	1	0
Foreman	1	1
Loader Oper.	2	1
Truck Driver	13	9
Driller	1	0
Blaster	1	0
Dozer Oper.	2	2
Mechanic/Welder	1	1
Grader Oper.	1	1
Laborer	<u>1</u>	<u>1</u>
Subtotal	24	16

TOTAL 40

At the same time some 19 various pieces of equipment as shown in the following schedule would be required to execute the waste and coal extraction and coal hauling activities.

TEST PIT EQUIPMENT SCHEDULE

No.	Machine
1	150mm Rotary Drill
2	201 kw Front End Loaders
13	45.4 t Trucks
2	250 kw Dozers with Rippers
1	124 kw Grader

* Exact equipment specifications will be finalized when contracts are in place.

4.1 Waste Removal

Although topsoil is virtually nonexistent on Lost Ridge, a thin surficial veneer of material will be dozed and piled nearby for future use.

The glacial till, which averages approximately 1.27 m, will be excavated by a 250 kw dozer loader by 201 kw front end loader and hauled by 45.4 tonne trucks, or larger. The roof rock, a composition of sandstone, siltstone and mudstone will be ripped with the 250 kw dozers as much as possible. The balance will be drilled with a 150 mm rotary drill on a 6 m spacing, blasted and loaded by 201 kw front end loader into trucks.

Although provision has been made for an off contour waste dump approximately 1 kilometre west of the pit, it is presently planned to utilize all of the overburden to upgrade the main access road from Lost Ridge to the British Columbia Railway subgrade. If required the waste dump, capable of accomodating the approximately 400,000 bm^3 of overburden, will be constructed by end dumping from the edge of the fridge.

4.2 Coal Extraction

The coal will be excavated and loaded into trucks by a 201 kw front end loader. Due to the nature of the coal and its proximity to the surface, blasting is not expected to be required. However, 201 kw

dozers will be available to rip the coal if necessary. Coal trucks will haul the run of mine coal to the pilot processing plant via an upgraded Lost Fox Access Road, initially constructed in 1984. Access to both the north and south ends of the pit have been provided to expedite coal removal.

Gulf may contract the total mining operation or only a part of it and do the balance of the operation with rented equipment and Gulf employees.

5.0 PILOT PLANT

In order to provide samples representative of the products to be produced in the 1.5 million tonne per year operation, a dense medium pilot plant will be assembled at Mount Klappan. Although the bulk of the coal to be mined is from one seam, 400 tonne samples of the other seams to be mined within the proposed Lost Fox Mine (Stage I) will also be washed to provide essential data to assist in the design of the full scale wash plant.

5.1 Pilot Plant Site

The pilot plant site and tailings pond were located to minimize the amount of disturbance. The pilot plant will be located within the area already designated, in the Stage I submission, for the wash plant and mine site facilities. The tailings pond is located adjacent to the B.C.R. railway subgrade. In total the pilot plant site will cover 4.3 hectares and the tailings pond 7.5 hectares of which approximately 2 hectares will actually be utilized.

5.2 Description of Processing Facilities

Raw coal from the mine will be delivered via truck to a storage stockpile adjacent to the processing facilities. The amount of raw coal anticipated being stored at this location is approximately 10 000 tonnes.

Raw coal will be reclaimed by front end loader from the stockpile and discharge into a hopper incorporated into a portable type screening and crushing unit. A grid incorporated into the feed hopper would retain +350 mm material for reduction by other means.

Typical arrangements of the processing modules and the overall package arrangement are shown on attached layout drawings.

The screening/crushing unit would incorporate a feeder, an incline doubledeck screen, roll crusher and transfer belt conveyors, and would produce raw coal of 55 mm or 12 mm top size.

A portable inclined belt conveyor would transfer the pre-sized raw coal to a horizontal double-deck screen for wet sizing of the material at 6 mm. This would provide the feed to the cleaning units.

The 50 mm x 6 mm over product would discharge to an inclined portable belt conveyor for transfer to the coarse coal Heavy Media Washer. Clean coal from the unit would be drained and rinsed on a horizontal screen prior to discharging to an inclined stacking belt conveyor for stockpiling. The sinks would be removed and dewatered on an inclined spiral screw conveyor discharging to a vibrating screen for magnetite removal and recovery. The unit would be complete with integral tanks, circulating pumps, and a magnetic separator for magnetite recovery. The sinks would pass to stockpile via an inclined stacking belt conveyor.

The sinks from the pass through producing 5% ash clean coal would be retained separately and cleaned at a later date to produce 12% ash clean coal.

The wet screen underflow, 6 mm x 0 raw coal, would pass directly by a collector to the feed tank of two primary hydrocyclones; cyclone underflow would pass via collection tank and pump to a single secondary

hydrocyclone for retreatment. The underflow from the secondary unit would pass over a sieve to remove excess water, the material discharging as high ash material.

The clean coal overflow from the primary and secondary units would pass over sieves for excess water removal, the clean coal overflow passing to a dewatering centrifuge for further moisture removal.

The fine coal and water from the various streams would be collected and passed to clarifying cyclones to minimize the discharge to tailings ponds, and provide a water cycle to reduce the make up requirements.

The clean coal from the centrifuge and the underflow from the sieve would pass to individual inclined stacking belt conveyors for stockpiling. Underflows from the clarifying cyclones would be collected and pumped to a tailings pond for storage.

When sized raw coal is being produced using only the crushing/screening unit, the portable belt conveyor can be radially relocated to keep the stockpiles separated. Similarly when the primary coarse sinks from the 5% ash run being rewashed, the crushing/ screening unit can be relocated to discharge to the coarse coal unit feed belt conveyor.

Reclamation from the various stockpiles would be by a front end loader, discharging to trucks for transportation to the port or to the refuse dump.

Tailings from the plant would gravitate via overland pipeline to an adjacent pond. It is anticipated that clean coal shipments from the

plant will be so coordinated to keep actual plant area storage below 40 000 tonnes of various products.

The pond would initially be filled by bypassing fresh water from an adjacent stream. A pump adjacent to the pond would supply fresh water to the processing operation at the required quantity and pressure. This would minimize the amount of make up water required by allowing for the process water to be recycled. The supply water and recycle water pipelines are indicated on the attached site plan. The supply waterline is gravity fed.

Approximately 21 000 tonnes of 0.6 mm x 0 raw coal would pass untreated to the tailings pond. This is a volume of around 30 000 cu m but the pond has an approximate capacity of 180 000 cu m.

Studies conducted by Hardy Associates (1978) Ltd. in the area indicate that the proposed tailings pond location is covered with silty sand on top of glacial till and underlain by bedrock. Foundation conditions are generally expected to be good.

An estimated 24 men as outlined in the following schedule would be required to operate the pilot plant 12 hour shifts.

PILOT PLANT MANPOWER SCHEDULE

Personnel	Manpower	
	Dayshift	Nightshift
Engineer/Foreman	1	1
Loader Operator(s)	2	2
Plant Operator	1	1
Patrol	1	1
Electrician/Mechanic/ Welder	1	1
Sampler	1	1
Laborer	<u>1</u>	<u>1</u>
Subtotal	8	8
 TOTAL	 16	

Note: One crew of 8 people will swing the other two shifts. This makes a total of 24 employees.

6.0 TEST PIT INFRASTRUCTURE

6.1 Haul Roads

Access to both ends of the pit is proposed for more efficient waste and coal removal. A 10% ramp road 7 metres wide down the highwall is required to gain entrance to the north end of the pit. The south end, however, does not require a ramp. From both pit entrances a haul road 20 metres wide at grades not exceeding 8% will be constructed to the waste dump.

The Lost Fox Access Road constructed in 1984 will be upgraded from Lost Ridge to the British Columbia Railway subgrade and used to truck the run of mine coal to the pilot plant. Blasted rock from the pit will be used to strengthen the base and widen the running surface to 25 metres. Upgrading will also include provision for run-away lanes at suitable locations. Neither cuts nor fills required for the road upgrading are expected to exceed 15 metres.

6.2 Services

Since the operation is small scale and to be undertaken during the summer and fall, maintenance facilities will be minimal. An area on Lost Ridge has been designated for maintenance supplies, fuel and lubricant storage and a chemical sanitation facility for the pit operation. An explosives storage facility has been provided for on Lost Ridge. No additional facilities are required for maintenance and supply storage at the pilot plant.

6.3 Accomodations

Gulf's Didene Creek Camp is available and will provide accommodation for the contractor's personnel as well as Gulf's personnel. The camp capacity will be increased to accommodate up to 84 persons on a single occupancy basis prior to the trial cargo operation. The then upgraded capacity and facilities at the camp are adequate to support the personnel required. Camp facilities will have been inspected by the appropriate ministry.

Class 5 first aid room, supplies, and industrial ambulance are available for the project. Personnel involved in the transport of product coal to the port are expected to be housed at Stewart.

6.4 Power

All electrical power required for the pilot plant and pit area will be generated by on site portable diesel generators.

7.0 COAL TRANSPORTATION

The processed coal will be trucked from the pilot plant site along the railway subgrade, and Ealue Lake road connector to Highway 37 and then to Stewart. Trucking operations are expected to commence in August, 1985 and continue to March 1986.

8.0 ENVIRONMENTAL PROTECTION & RECLAMATION

8.1 Surface Drainage

Based on drilling and trenching in and around the area, the pit is expected to be free of subsurface water. Normal water generation can be expected from surface runoff. This will naturally drain to the south end of the pit where a drainage ditch will direct and dissipate it to the eastern down slope.

Should a waste dump be required, a settling pond will be constructed below the dump to collect the water prior to dissipation onto the surrounding topography.

A 75,000 m² tailings pond will be constructed close to the pilot plant where the British Columbia Railway subgrade will constitute the majority of the embankment. Clean water is planned to be recirculated back to the pilot plant, however, provisions have been made in the tailings dam for bleeding off excess clean water. Alternately, fresh water may be piped directly into the pilot plant.

8.2 Water Disposal

Portable sanitation facilities will be provided at the pit and the pilot plant sites. Fuel, oil, grease and other combustible wastes will be incinerated. Chemicals will be disposed of in accordance with the Waste Management Act.

8.3 Reclamation

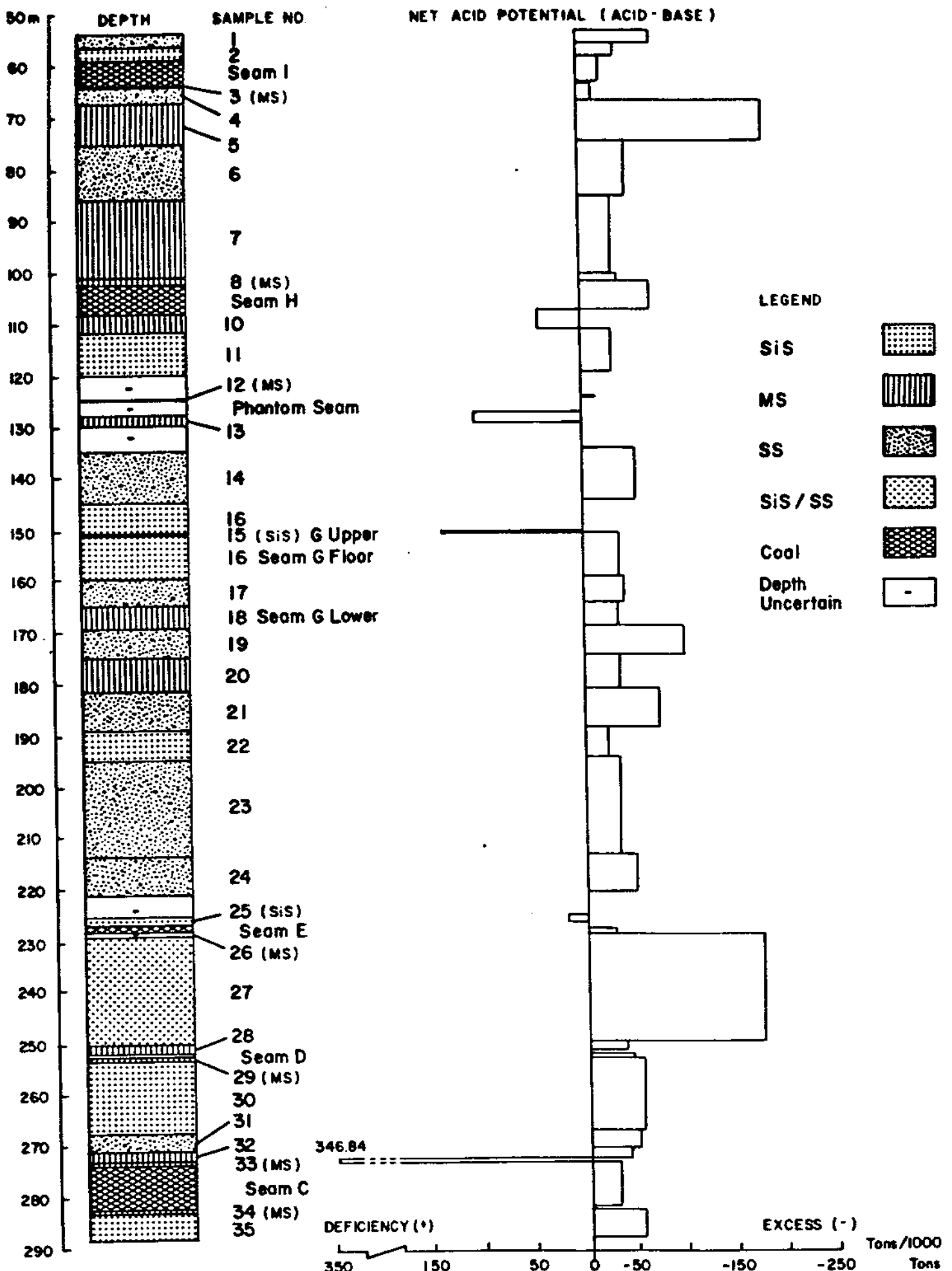
Soil suitability tests for reclamation based on initial plot planting of single species undertaken in the summer of 1984 by Norecol Environmental Consultants Ltd. on Lost Ridge showed good first year germination and indicate that reclamation techniques are available for that area.

Other studies addressing acidity of waste rock in Lost Ridge indicate that the material overlying seam I mined for the trial cargo has no acid producing potential. This fact is illustrated in the following figure reproduced from the Acid Generation Potential Study for Mount Klappan prepared by Norecol Environmental Consultants. No special considerations are therefore required for the reclamation of the trial cargo features utilizing the waste rock as a construction material.

No allowance has been made for settling ponds in connection with access road upgrading since natural filtration through muskeg adjacent to the road will make it unnecessary.

8.3.1 Equipment and Structures

The trial cargo pit and the pilot plant are located within the boundaries of the overall areas planned for those aspects of the permanent mine operation. When the mine proceeds the trial cargo pit will be part of the final pit, and the pilot plant structures and surrounding area will be incorporated into the full scale coal processing plant facility.



Should the project not proceed, all machinery, equipment and buildings used in the extraction and processing of this trial cargo will be removed. All concrete structures would be broken and buried. The Didene Camp site, all building sites and other features disturbed by the trial cargo would be suitably leveled, drained and reclaimed. Any topsoil recovered from the pit area would spread over the pit floor and then reclaimed. Similarly, the tailings pond would be drained, recontoured and reclaimed.

8.3.2 Waste Dump

Although the requirement for a waste dump is not anticipated, should one ever result from this trial cargo, the slopes would be graded to 26 degrees and the entire dump reclaimed.

8.3.3 Topsoil

All topsoil will be recovered and stockpiled for future reclamation purposes.

9.0 SCHEDULE

Initial activities associated with the trial cargo, site clearing for the pilot plant and road maintenance, are anticipated to begin in late May, 1985. Subsequent activities will continue for the next ten months following the general schedule set out below.

LOST FOX TRIAL CARGO

	May 6 13 20 27	June 3 10 17 24	July 1 8 15 22 29	August 5 12 19 26	September 2 9 16 23 30	October 7 14 21 28
Decision to proceed						
Site Cleaning Pilot Plant & Tailings Pond	-----					
Procure, Mobilize, Erect Pilot Plant	-----	-----	-----			
Plant Start Up			-----			
Mobilize Overburden Stripping Equipment		-----				
Overburden Removal			-----	-----	-----	
Coal Mining				-----	-----	
Coal Processing					-----	-----
Coal Transportation						-----*
DEMOBILIZATION						

* Continues until March 31, 1986

PART II



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

MINERAL RESOURCES BRANCH
INSPECTION AND ENGINEERING DIVISION

NOTICE OF WORK ON A COAL LICENCE

(Sections 6 and 28 of the Mines Act)

This notice is to be completed by all companies or individuals carrying out exploration work prior to commencement of work and at cessation of work and forwarded to the Chief Inspector of Mines with a copy to the District Inspector of Mines. If mechanical equipment is used in surface work, Form 7 overleaf must be completed. Items noted * are information collected on behalf of Coal Resources Section, and eliminate the form previously forwarded to the operator for this purpose.

- 1. NAME OF PROPERTY MOUNT KLAPPAN
Coal Licence Numbers 7151, 7152, 7162, 7166, 7169, 7170, 7172, 7173
2. LOCATION CASSIAR LAND DISTRICT NTS map sheet no. 104. H-2
Lat. 57.14 Long. 128.44 Access via Highway 37/Ealue Lake Road
British Columbia Railway Subgrade
3. OWNER'S NAME GULF CANADA RESOURCES INC. (Coal Division)
Address P.O. Box 130, Calgary, Alberta T2P 2H7 Telephone no. (403) 233-3925
4. OPERATOR'S NAME Same as above
Address Telephone no.
5. ESTIMATED DURATION OF WORK: From May 1985 to March 31, 1986
OR: ACTUAL DATE WORK COMPLETED: From to
6. DESCRIPTION OF WORK (Use metric measure - 1 metre = 3.3 feet.) (Show on 1:50 000-scale map.)
Linecutting (distance, width, method)
Clearing of timber Some clearing of non-commercial timber required 139 000 ha.
(a) Road Construction: Total length m Approximate width m Area m^2
(b) Test Pits: No. 1 Maximum dimensions: Width 75 m Length 375 m Depth 31 m
*Sum total length 375 m Total disturbed area of test pits 26,500 m^2
(c) Drilling: No. of D.D.H. Size No. of R.D.H. Size Max. hole length
*Sum total depth m Total disturbed area of drillsites m^2
*Down hole geophysics: types
(d) Adits: No. rising at is No. level No. dipping at
Maximum length of adit m Total disturbance
*Sum total length
(e) Trenches: No. 5 Maximum dimensions: Width 19 m Length 40 m Depth 6 m
*Sum total length 200 m Total disturbed area of trenches 3800 m^2
(f) Other (for example, please specify underground work): Upgrade existing 8 km access road
Waste Dump and Top Soil Storage, Plant Site, Tailings Pond, maintenance yard
explosive storage water lines.
* (g) If mapping done, forward description of area and scale to Coal Resources Section, Victoria.
GRAND TOTAL OF AREA DISTURBED 536,500 m^2
53.65 ha
(h) Approximate number of men employed 50-70

*7. OTHER: an estimate of approximate exploration expenditure is requested to be forwarded to Coal Resources Section, Victoria, after work is complete
SIGNATURE OF APPLICANT Laurence Pituloy TITLE Coal Developer
PRINT NAME Laurence S. Pituloy DATE May 15, 1985

NOTE: Owner, agent, or manager is responsible for ensuring the Contractor complies with pertinent regulations [see section 27(2), Mines Act]. Pursuant to section 30, of the Mines Act, where the employment of mechanical equipment is likely to disturb the surface of the land in clearing, stripping, trenching, or any other operation, the reclamation program on the reverse side is also to be submitted.



Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources
MINERAL RESOURCES BRANCH
INSPECTION AND ENGINEERING DIVISION

RECLAMATION PROGRAM

(Sections 7 and 30 of the *Mines Act*)

This form is to be completed when exploration work is done with mechanical equipment. Submission is required prior to commencement of work and at completion of work. One copy is to be sent to each of the following:

- | | |
|--|--|
| *Senior Reclamation Inspector, Victoria | Regional Manager, Ministry of Forests |
| *Inspector of Mines and Resident Engineer | Regional Manager, Water Management Branch |
| *Inspector of Mines Technician (Reclamation) | Regional Manager, Lands Branch |
| Regional Manager, Fish and Wildlife Branch | Regional Manager, Ministry of Agriculture and Food |

For advice on procedure and reclamation methods, see booklet entitled, 'Guidelines for Coal Exploration.'

- THIS IS: A proposed reclamation program a completed reclamation program .
- PRESENT STATE OF LAND ON WHICH EXPLORATION WILL BE DONE IS:
Canada Land Inventory (where possible)
Present Land Use (ranching, timber, etc.) COMMERCIAL HUNTING
Type of Vegetation Stunted Spruce and Grass Meadows
Access Road (present use, condition) Highway 37 to B.C.R. Subgrade
- EQUIPMENT TO BE USED FOR EXPLORATION (List size, capacity, and number.)
(a) Truck & Front-End Loader (d) Trucks to transport coal
(b) Operation or Truck & Shovel for (e) Screen and Crusher
 excavation (f) Heavy media coal processing plant
- RECLAMATION EQUIPMENT TO BE USED (for example, resloping, harrowing, or specialty equipment):
(a) Tractors (b) Land Leveler (c) Truck and Loader
- GENERAL DESCRIPTION OF PROTECTIVE MEASURES PURSUANT TO SECTION 7

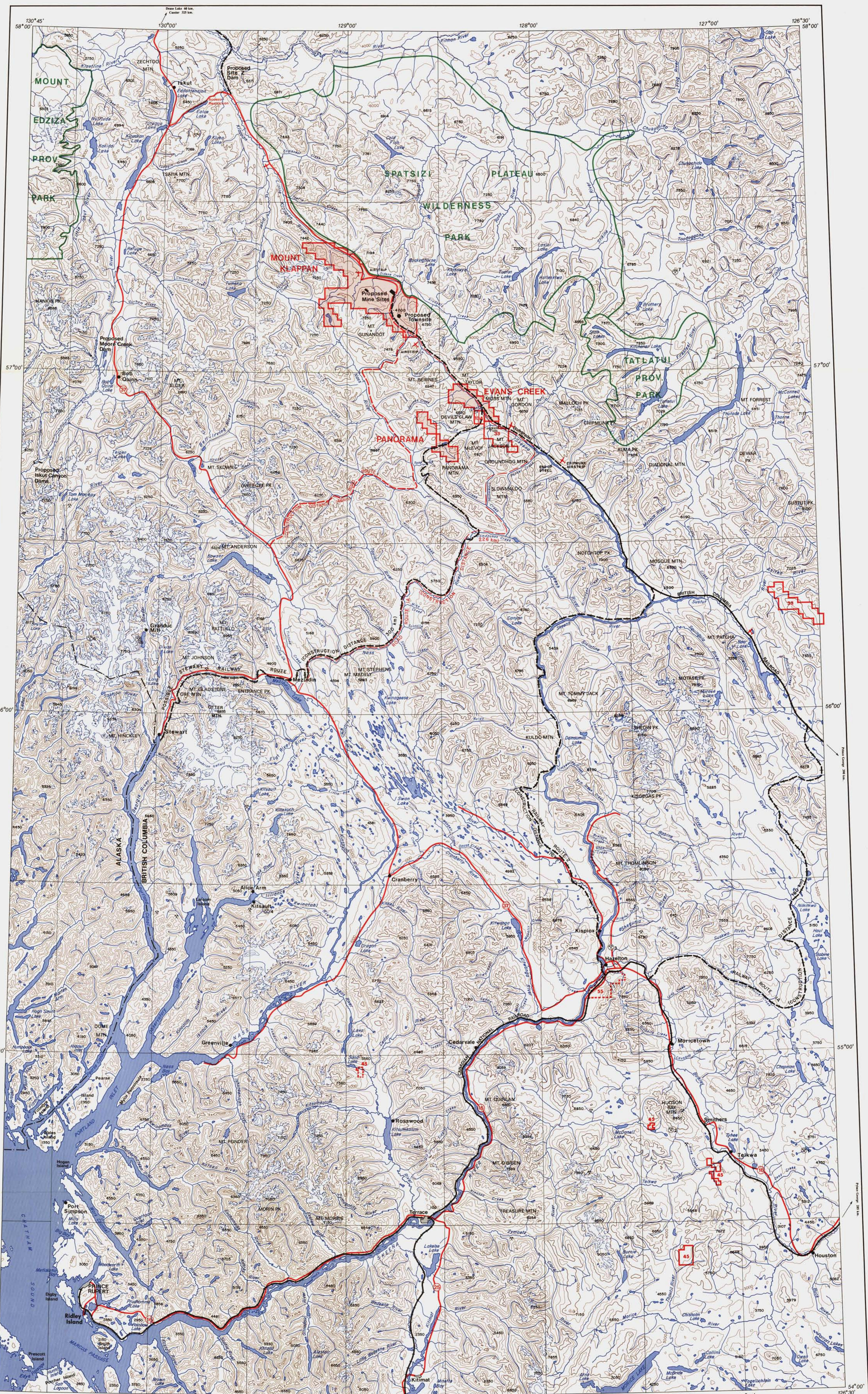
(Show work and reclamation on 1:50 000 scale map and include with full distribution noted above.) [*For proposed work programs include with submissions to Ministry of Energy, Mines and Petroleum Resources documentation on 1:10 000 (approximate scale) air photograph or air photograph overlay.]

As this test pit and dump area lies within a proposed full-scale production pit reclamation will only be undertaken if no further development of the area is undertaken by Gulf.

- SUMMARY OF AREA DISTURBANCE AND RECLAMATION
Area disturbed current year Previous years 2.61 ha Total to date 4.48 ha
Area reclaimed current year Previous years (final) Total to date
- RECLAMATION MANAGER'S NAME GERALD D. CHILDS
Address P. O. Box 130, 401 - 9th Avenue S.W., Calgary, Alberta T2P 2H7

DATE May 15, 1985 SIGNATURE

*When geotechnical and reclamation work have been completed for the calendar year a final reclamation report should be submitted to the three Ministry of Energy, Mines and Petroleum Resources personnel noted at the top of this form. For details see the booklet entitled, 'Guidelines to Coal Exploration.'



Produced jointly by GULF CANADA DRAFTING DEPT.
and HARDY ASSOC. (1978) LTD., MAPPING SECTION.
Revised to June, 1984.

LEGEND

Highway	
Road, possible	
Road, alternate	
Railway	
Possible Railway Route	
Proposed Dam Site	
Proposed Pk. Mt. Klappan property	
Proposed Townsite, Mt. Klappan property	
Boundary, Park or Reserve	
Boundary, International	
Spot Elevation (feet above sea level)	
Contours (1000 Foot Interval)	
Mine (see separate list)	
Prospect	
City, Town	

COAL PROPERTIES

	GULF CANADA RESOURCES INC.
	SUNCOR INC.
	GROUNDHOG COAL LTD.
	SHELL CANADA RESOURCES LTD.
	D. GROOT LOGGING LTD.
	COAL LICENCES UNDER APPLICATION

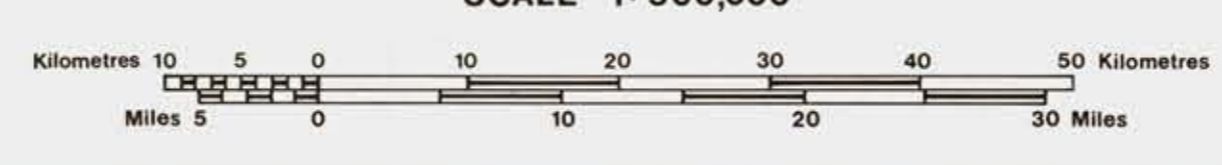
MINES

1	DOME MOUNTAIN — Ag, Pb, Zn
2	DUTHIE — Ag, Pb, Zn, Au, Cd, Cu
3	SILVER STANDARD — Ag, Pb, Zn, Au, Cu
4	KITSALT — Au
5	SCOTTIE GOLD — Au, Ag
6	GRANDUC — Cu, Ag, Au
7	BAKER — Au, Ag



NORTHWEST BRITISH COLUMBIA

SCALE 1:500,000



REFERENCE NOTE

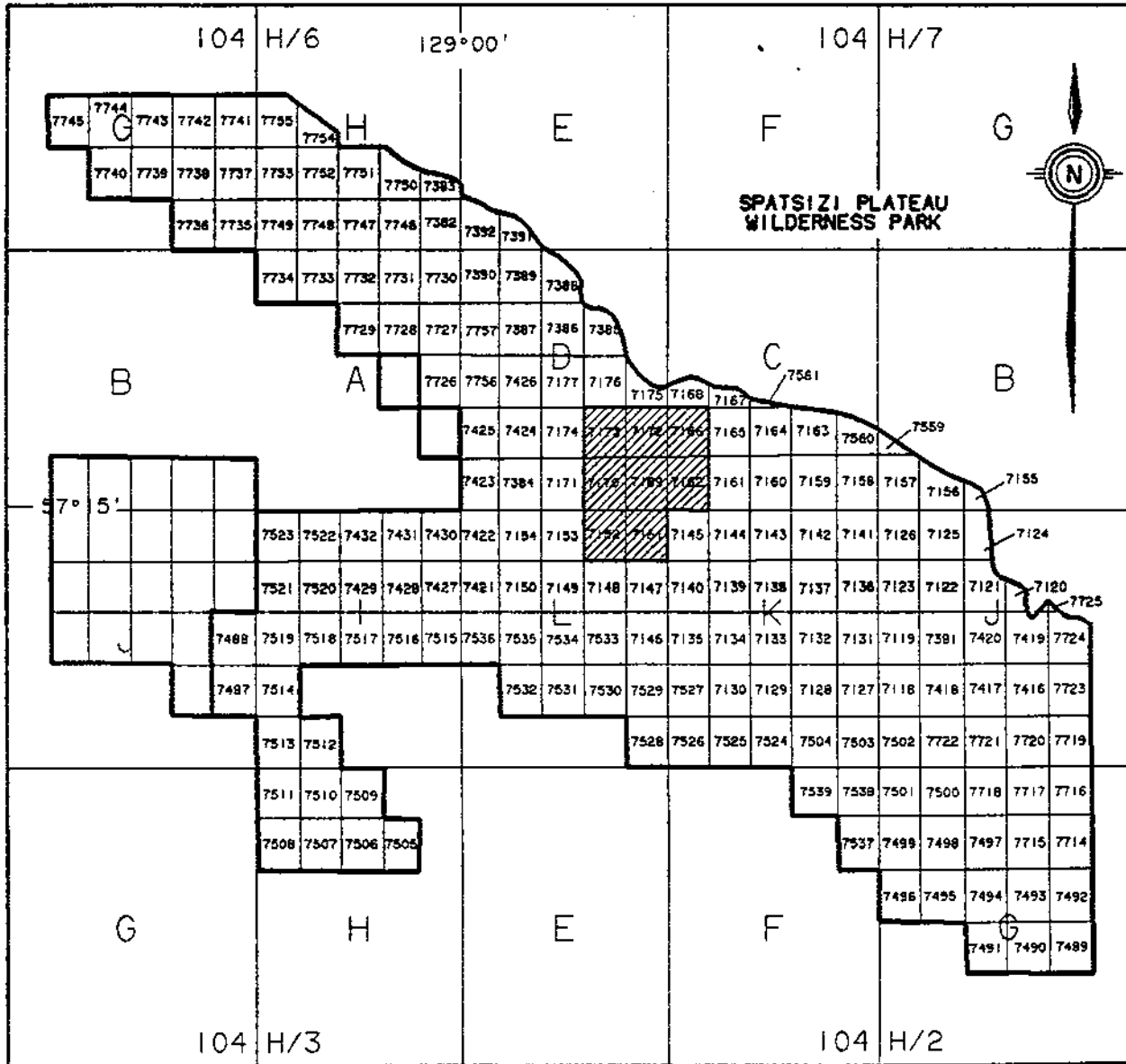
Mines: from The Northwest Region — B.C. Regional Economic Survey, 1982.
Prospects: from Kitimat-Sitkine Regional District — 1:500,000 Regional Resource Map, 1981.
Base Map: from Dept. of Energy, Mines and Resources, Surveys and Mapping Branch, current N.T.S. series maps.

KEY MAP

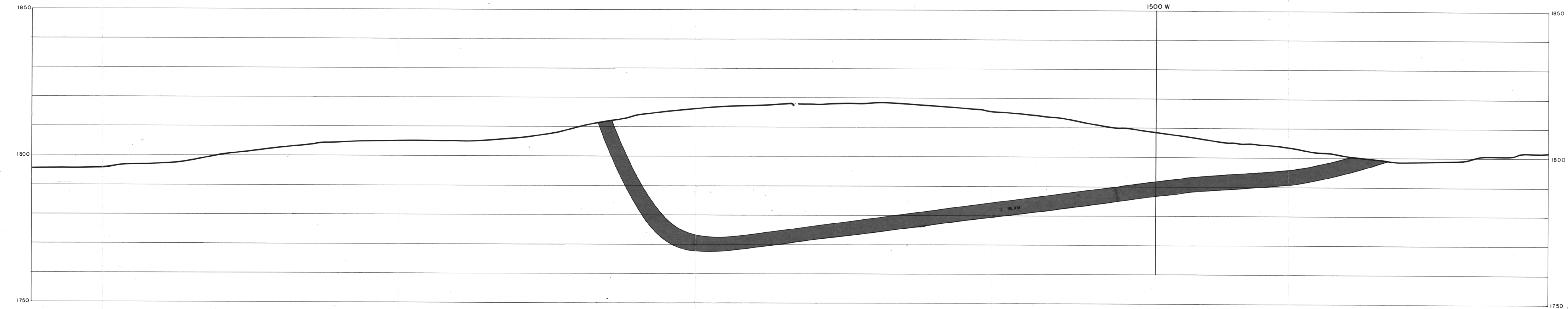


1869


MOUNT KLAPPAN COAL PROPERTY LICENCES

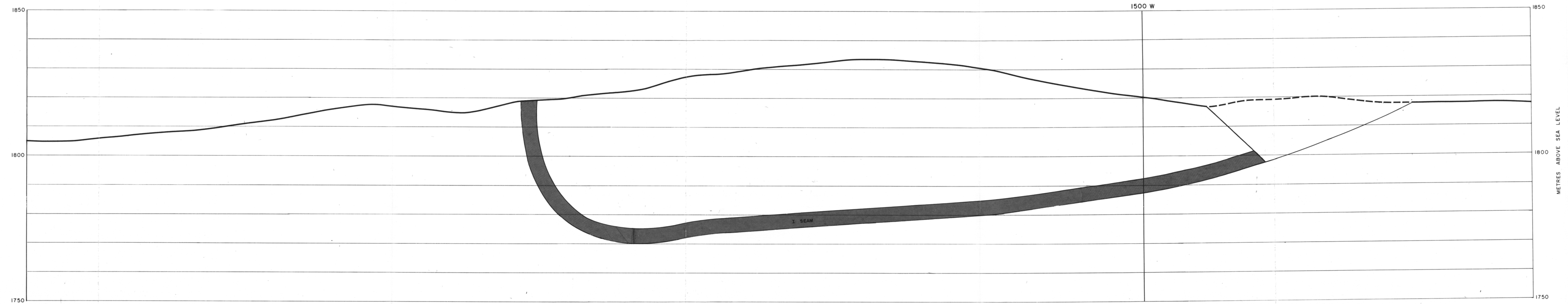



<p>LEGEND</p> <p>— LICENCE AREA</p> <p>7386 LICENCE NUMBER</p> <p> UNDER APPLICATION</p> <p> LICENCES COVERING TEST PIT ACTIVITIES</p>	<p>SCALE</p> <p style="text-align: center;">0 1 2 3 4 5 km</p> <p style="text-align: center;"></p> <p style="text-align: right;">GULF CANADA RESOURCES INC. 01/03/85 </p>
---	--

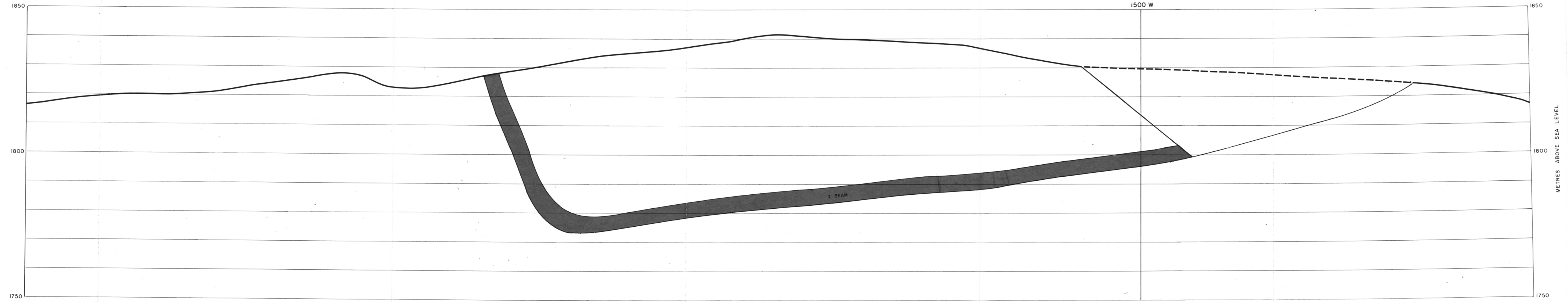


#869


GULF CANADA RESOURCES INC.		
Coal Division		
CALGARY	ALBERTA	
MOUNT KLAPPAN COAL PROPERTY		
1985		
LOST FOX AREA		
TRIAL CARGO		
CROSS SECTION 2700 N		
PREPARED BY: B. LEECE	SCALE: 1:500	
APPROVED BY: L. PITULEY	DATE: MAY 1985	DRAWING No.

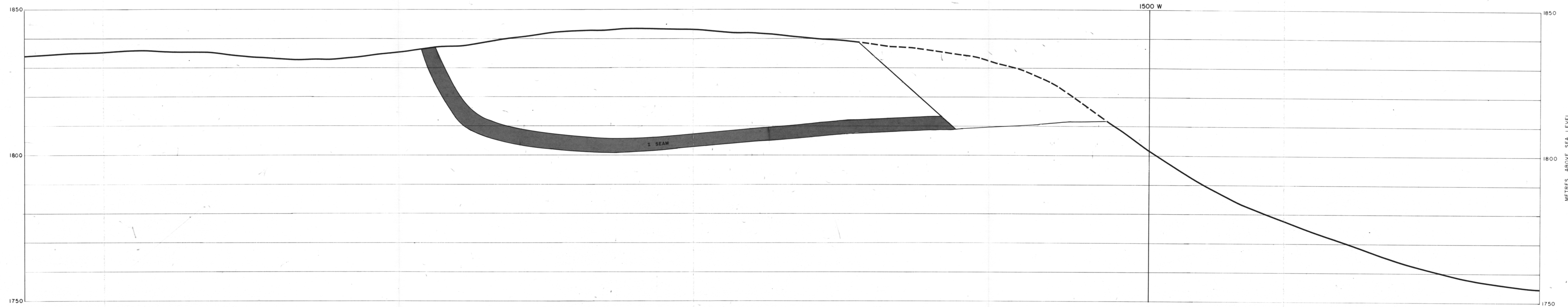


GULF CANADA RESOURCES INC.		
CALGARY	Coal Division	
MOUNT KLAPPAN COAL PROPERTY		
1985		
LOST FOX AREA		
TRIAL CARGO		
CROSS SECTION 2750 N		
PREPARED BY: B. LEECE	SCALE: 1:500	
APPROVED BY: L. PITULEY	DATE: MAY 1985	DRAWING No.



#869

GULF CANADA RESOURCES INC.		
Coal Division	ALBERTA	
CALGARY		
MOUNT KLAPPAN COAL PROPERTY 1985 LOST FOX AREA TRIAL CARGO CROSS SECTION 2800 N		
PREPARED BY: B. LEECE	SCALE: 1:500	
APPROVED BY: L. PITULEY	DATE: MAY 1985	DRAWING No.



#869

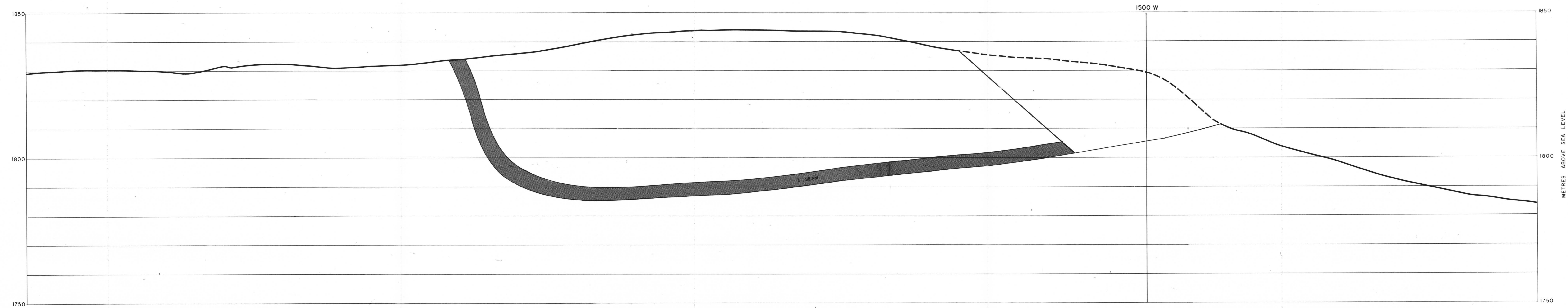
GULF CANADA RESOURCES INC.

Coal Division
CALGARY ALBERTA




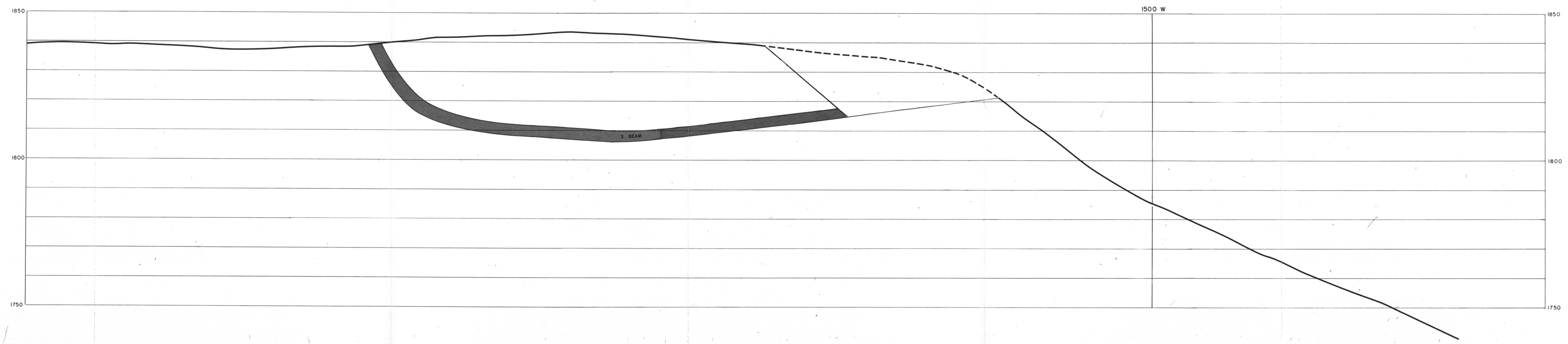
MOUNT KLAPPAN COAL PROPERTY
1985
LOST FOX AREA
TRIAL CARGO
CROSS SECTION 2900 N

PREPARED BY: B. LEECE	SCALE: 1:500
APPROVED BY: L. PITULEY	DATE: MAY 1985
	DRAWING No.




#869

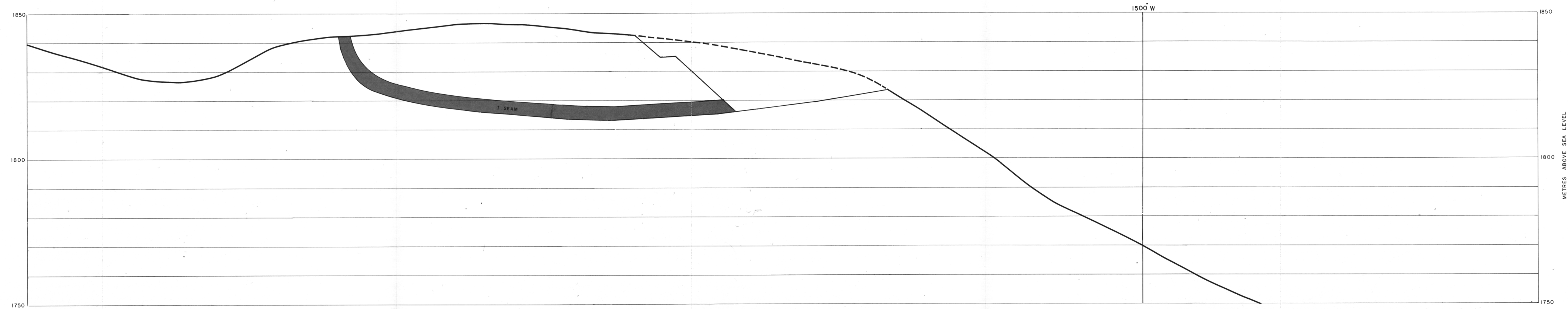
GULF CANADA RESOURCES INC.		
Coal Division	ALBERTA	
CALGARY	MOUNT KLAPPAN COAL PROPERTY	
1985		
LOST FOX AREA		
TRIAL CARGO		
CROSS SECTION 2850 N		
PREPARED BY: B. LEECE	SCALE: 1:500	
APPROVED BY: L. PITULEY.	DATE: MAY 1985	DRAWING No.




#869

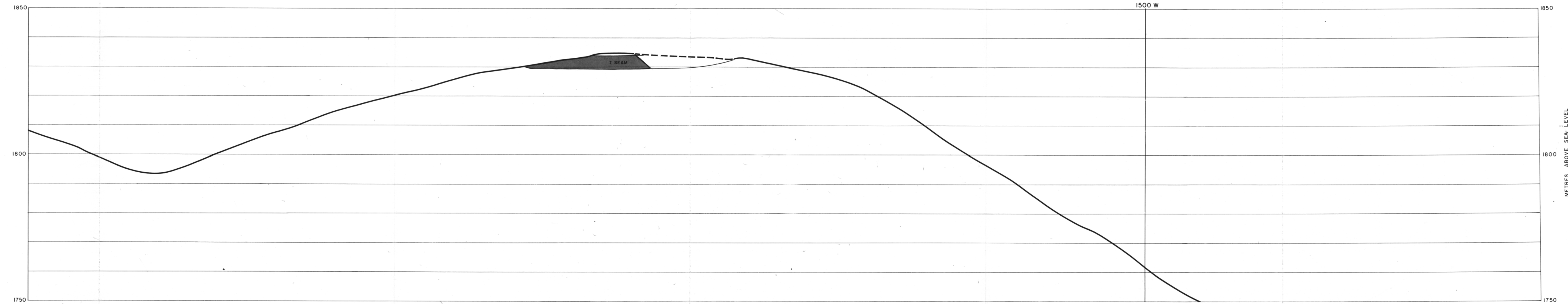
#869

GULF CANADA RESOURCES INC.		
CALGARY	Coal Division ALBERTA	
MOUNT KLAPPAN COAL PROPERTY 1985 LOST FOX AREA TRIAL CARGO CROSS SECTION 2950 N		
PREPARED BY: B. LEECE	DATE: MAY 1985	SCALE: 1:500 DRAWING No.
APPROVED BY: L. PITULEY		




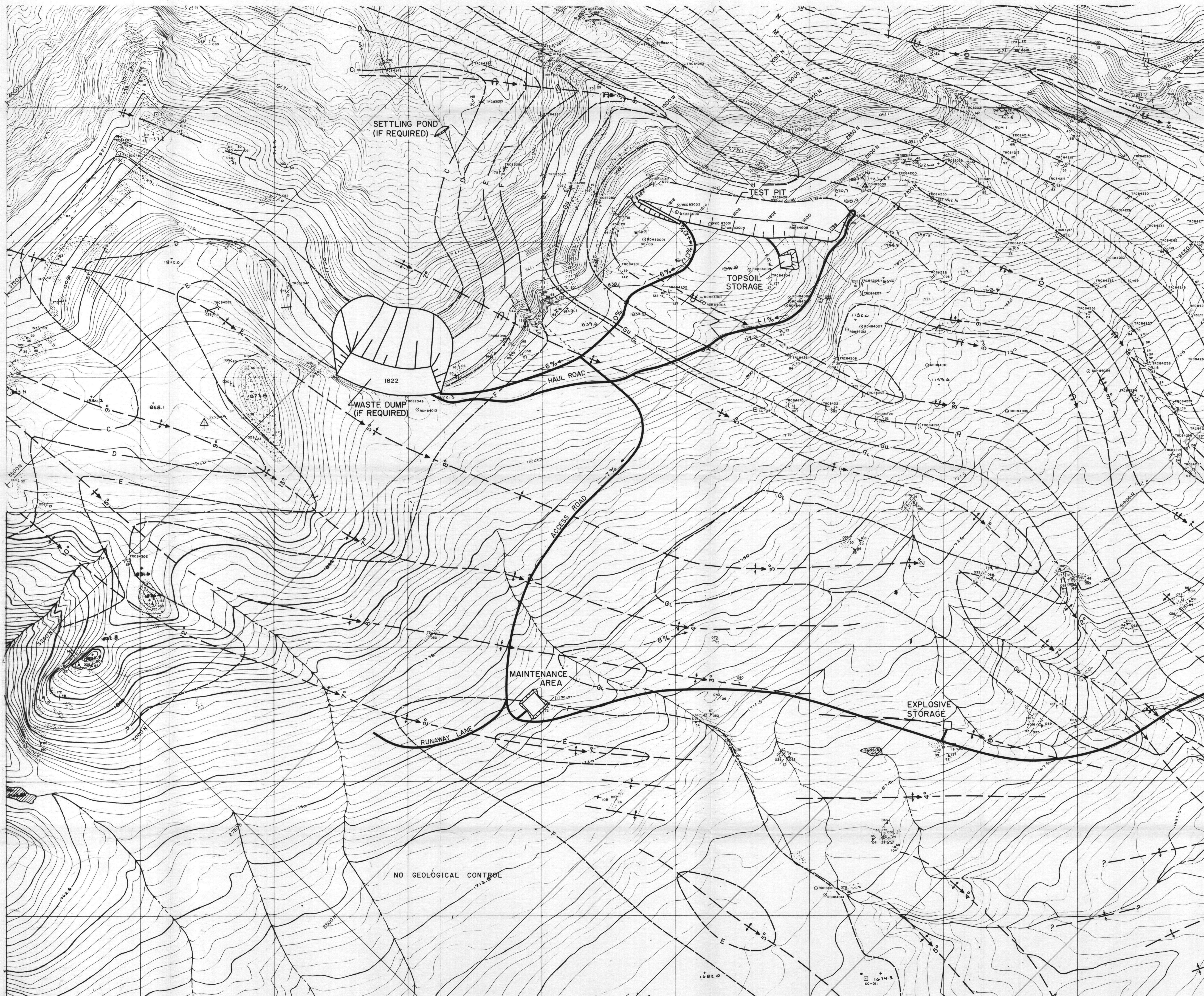
#869

GULF CANADA RESOURCES INC.		
CALGARY	ALBERTA	
Coal Division MOUNT KLAPPAN COAL PROPERTY 1985 LOST FOX AREA TRIAL CARGO CROSS SECTION 3000 N		
PREPARED BY: B. LEECE	SCALE: 1:500	
APPROVED BY: L. PITULEY	DATE: MAY 1985	DRAWING No.



#869

GULF CANADA RESOURCES INC.		
CALGARY	ALBERTA	
Coal Division		
MOUNT KLAPPAN COAL PROPERTY		
1985		
LOST FOX AREA		
TRIAL CARGO		
CROSS SECTION 3050 N		
PREPARED BY: B. LEECE	SCALE: 1:500	
APPROVED BY: L. PITULEY	DATE: MAY 1985	DRAWING No.



LEGEND

BUILDING	[Symbol]
ROAD, HARD SURFACE	[Symbol]
ROAD, LOOSE SURFACE	[Symbol]
RAILROAD TRACK	[Symbol]
RAILROAD BED	[Symbol]
RIVER, DEFINITE	[Symbol]
RIVER, APPROXIMATE	[Symbol]
SPLIT	[Symbol]
LAKE	[Symbol]
WATER LEVEL	[Symbol]
SWAMP	[Symbol]
BEAVER DAM	[Symbol]
TREE LINE	[Symbol]
CUT LINE	[Symbol]
CONTOUR, INTERMEDIATE	[Symbol]
CONTOUR, INTERMEDIATE APPROXIMATE	[Symbol]
SPOT ELEVATION	[Symbol]
CUT FILL	[Symbol]
DEPRESSION	[Symbol]
FORM LINE	[Symbol]
FORM LINE APPROXIMATE	[Symbol]
FIELD CENTER POINT	[Symbol]
COAL LICENSE	[Symbol]

NOTES

MAPPING PRODUCED FROM PHOTOGRAPHIC ENLARGEMENTS OF 1:10,000 NEGATIVES

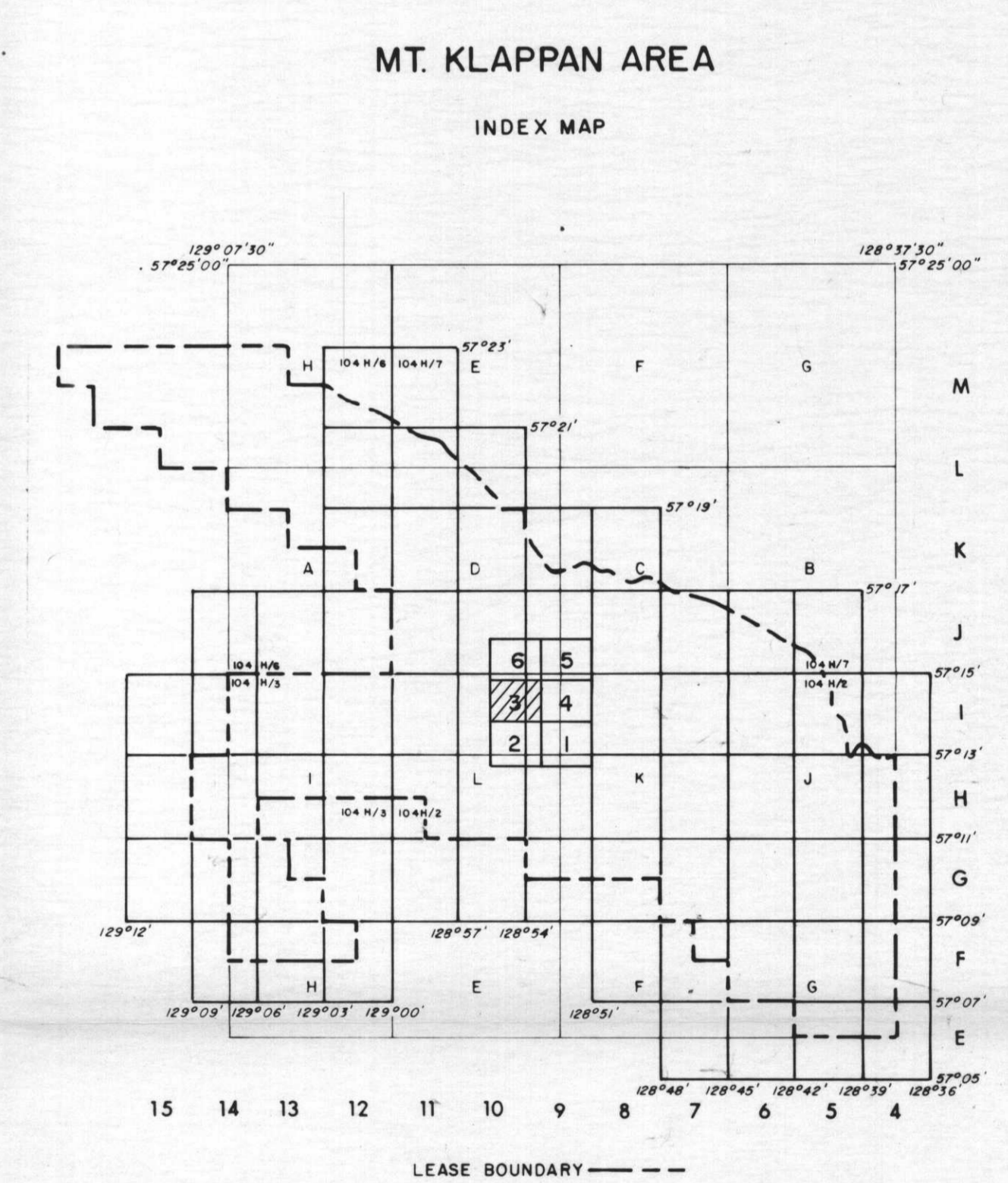
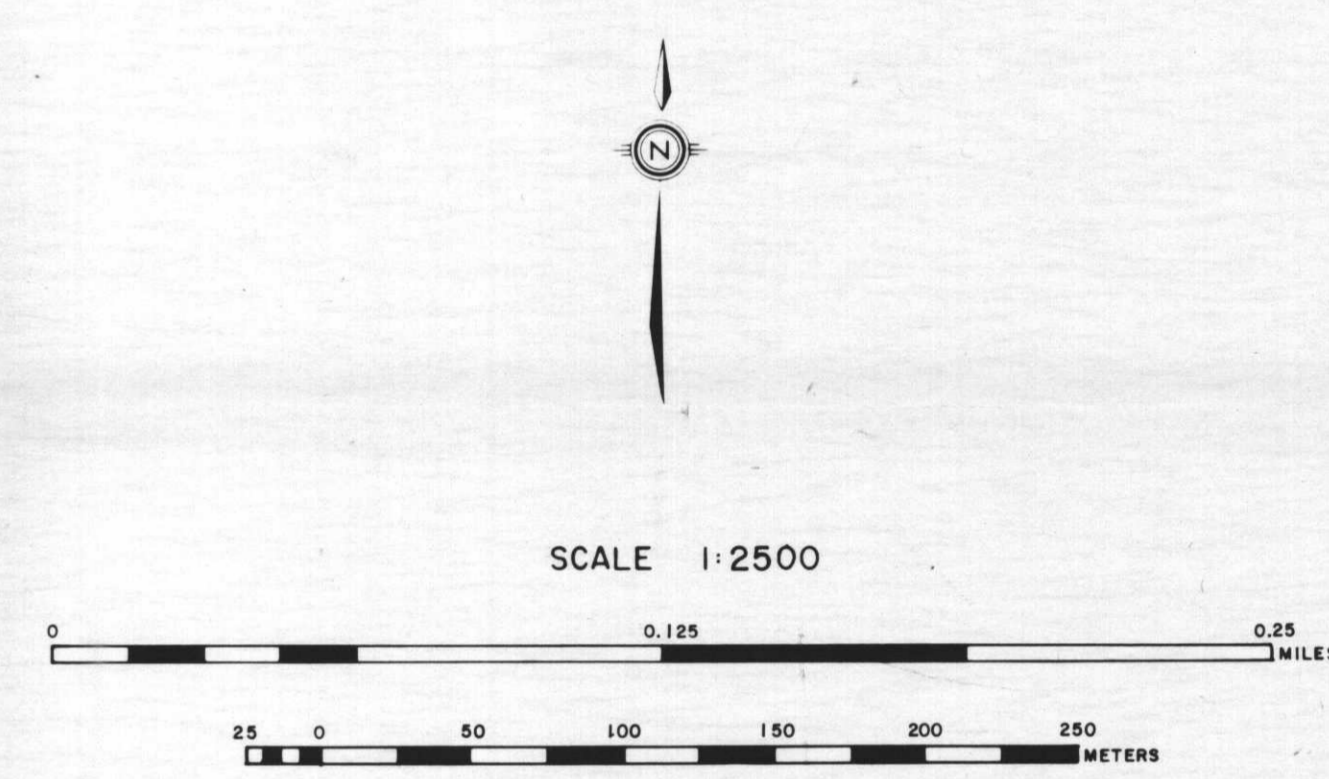
CONTOUR INTERVAL: 10M, WITH FORM LINES INTERVAL: 5M

ACCURACY OF 5M FORM LINES IS EQUAL TO THE ACCURACY OF THE 10M CONTOURS - 45.0 METERS FOR GROUND NOT OCCURRED BY TREES OR VEGETATION

SURVEY CONTROL TAKEN FROM EXISTING PHOTOGRAPHIC GOVERNMENT SURVEY MONUMENTS AND N.T.S. MARKS. MARKINGS BASED ON UNIVERSAL TRANSVERSE MERCATOR GRID AND GEODETIC DATUM

RAILROAD BED LOCATION BASED ON SEPT 1962 AERIAL PHOTOGRAPHY

COMPILED BY: WESTERN PHOTOGRAMMETRY, A DIVISION OF UNDERWOOD MULLER & LTD. FROM FEDERAL GOVERNMENT AERIAL PHOTOGRAPHY FLOWN IN AUGUST 1967 AT A SCALE OF 1:60,000 (APPROXIMATE)



#869

#869

LEGEND

---	LICENSE BOUNDARY
- - - -	GEOLOGICAL CONTACT (APPROXIMATE, INFERRED)
- - - -	COAL SEAM (DEFINED, INFERRED)
--->---	ANTICLINE (DEFINED, APPROXIMATE) ARROW INDICATES PLUNGE DIRECTION
---<---	SYNCLINE (DEFINED, APPROXIMATE) ARROW INDICATES PLUNGE DIRECTION
--->---	OVERTURNED ANTICLINE (DEFINED, APPROXIMATE)
---<---	OVERTURNED SYNCLINE (DEFINED, APPROXIMATE)
--- ---	MONOCLINE (DEFINED, APPROXIMATE)
--- ---	BEDDING (HORIZONTAL, INCLINED, OVERTURNED, VERTICAL, UPRIGHT, ESTIMATED)
--- ---	FOLIATIONS (INCLINED, VERTICAL, HORIZONTAL)
--- ---	JOINTS (INCLINED, VERTICAL, HORIZONTAL)
--- ---	THRUST FAULT (DEFINED, APPROXIMATE) TEETH INDICATE UPTHROW SIDE
--- ---	FAULT (DEFINED, APPROXIMATE) UPTHROW, DOWNTOWN, SIDE
--- ---	ADIT TRENCH COAL SPILL
--- ---	DIAMOND, ROTARY, WINKIE DRILL HOLE (VERTICAL, INCLINED WITH SURFACE PROJECTION)
--- ---	MEASURED SECTION
--- ---	SURVEY CAIRN
--- ---	CROSS SECTION LINE

RHONDA SEQUENCE

[JKr] Sequence of thick massive conglomerates and minor gritty sandstones interbedded with an increasing abundance of siltstones and mudstones towards the basal contact

MALLOCH SEQUENCE

[JKm] Thick interbeds of mudstones, argillaceous siltstones, fine grained argillaceous sandstones and thin beds of orange weathering siliceous nodular siltstones. Conglomerate beds tend to be laterally discontinuous. Thick clay sandstone beds and thin coal seams increase in abundance towards the basal gradational contact. Sequence can contain petrified wood and plant fossils. Bivalves are rare.

KLAPPAN SEQUENCE (main coal-bearing unit)

[JKk] Sequence of fine to coarse grained sandstones interbedded with mudstones, siltstones, occasional thin beds of orange weathering siliceous siltstones, conglomerates and abundant coal seams. Conglomerate beds grade laterally into sandstone. Sandstones often display tabular or trough cross-bedding. Several species of pelecypods and plants are common. Bellerophonites and ammonites are rare.

SPATSIZI SEQUENCE

[Jsk] Presumably a marine sequence comprised of beds of mudstones, siltstones and lesser amounts of sandstones and conglomerates. The upper contact is defined as the first occurrence of a non-marine bed. Discontinuous massive conglomerate beds lie in the upper portion of the sequence. Bivalves are abundant and bellerophonites are rare.

GULF CANADA RESOURCES INC.

Calgary Coal Division Alberta

MT. KLAPPAN COAL PROPERTY

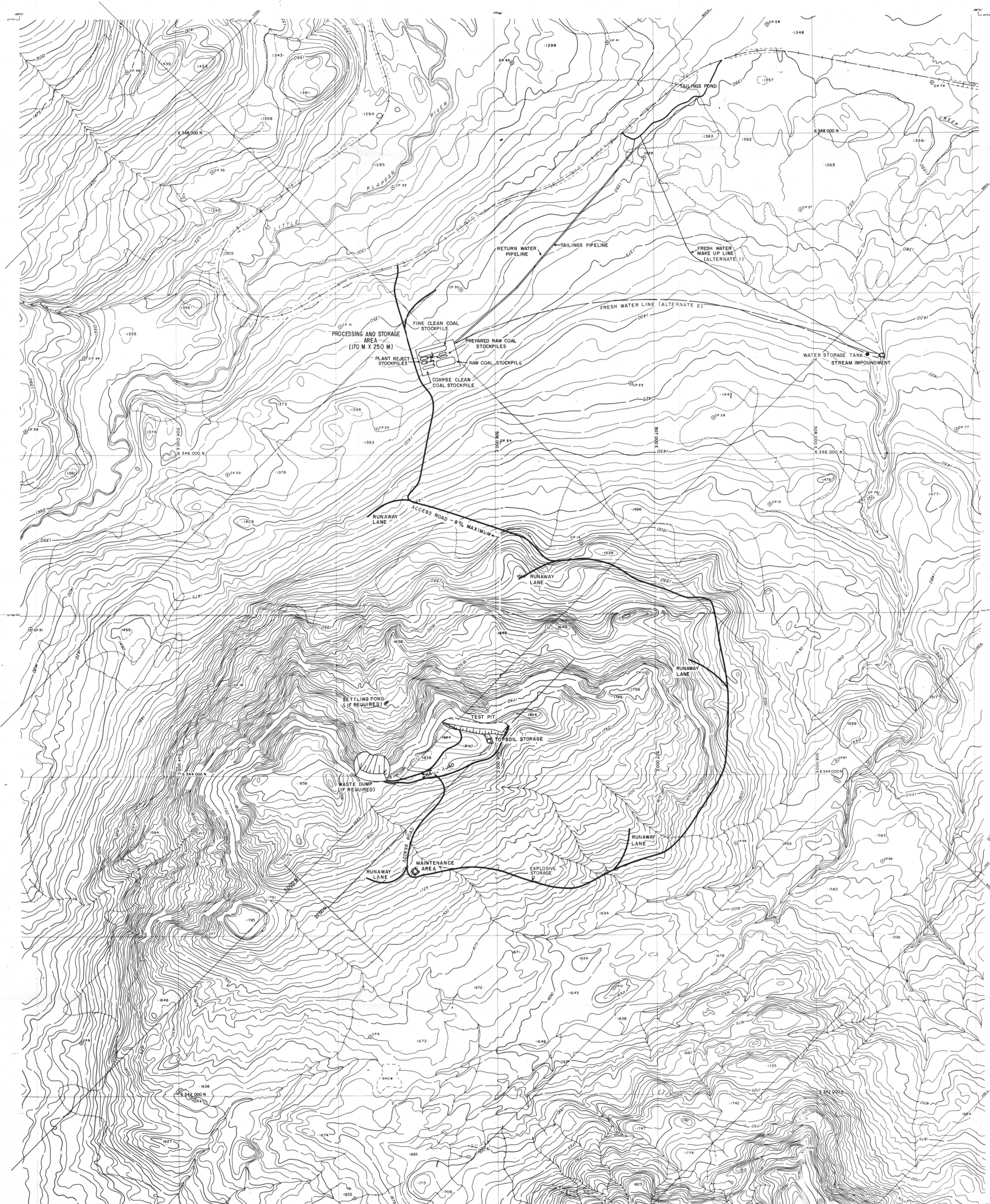
LOST FOX AREA

TRIAL CARGO

TEST PIT PLAN

PREPARED BY: B. LEECH SCALE 1:2500

APPROVED BY: L. PITULEY DATE: MAY 1985 DWG. NO.



LEGEND

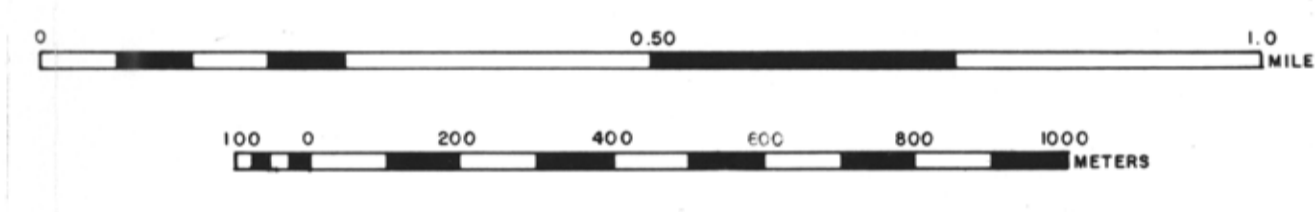
BUILDING	[Symbol]
ROAD, HARD SURFACE	[Symbol]
LOOSE SURFACE	[Symbol]
CART TRACK	[Symbol]
TRAIL	[Symbol]
RAILROAD BED	[Symbol]
RIVER	[Symbol]
STREAM, DEFINITE	[Symbol]
APPROXIMATE	[Symbol]
SPLIT	[Symbol]
LAKE	[Symbol]
WATER LEVEL	[Symbol]
SWAMP	[Symbol]
BEAVER DAM	[Symbol]
TREE LINE	[Symbol]
CUT LINE	[Symbol]
CONTOURS, INDEX	[Symbol]
INTERMEDIATE	[Symbol]
DEPRESSION	[Symbol]
APPROXIMATE	[Symbol]
SPOT ELEVATION	[Symbol]
FORM LINES	[Symbol]
CUT/FILL	[Symbol]
FIELD CONTROL POINT	[Symbol]
COAL LICENCE	[Symbol]

NOTES

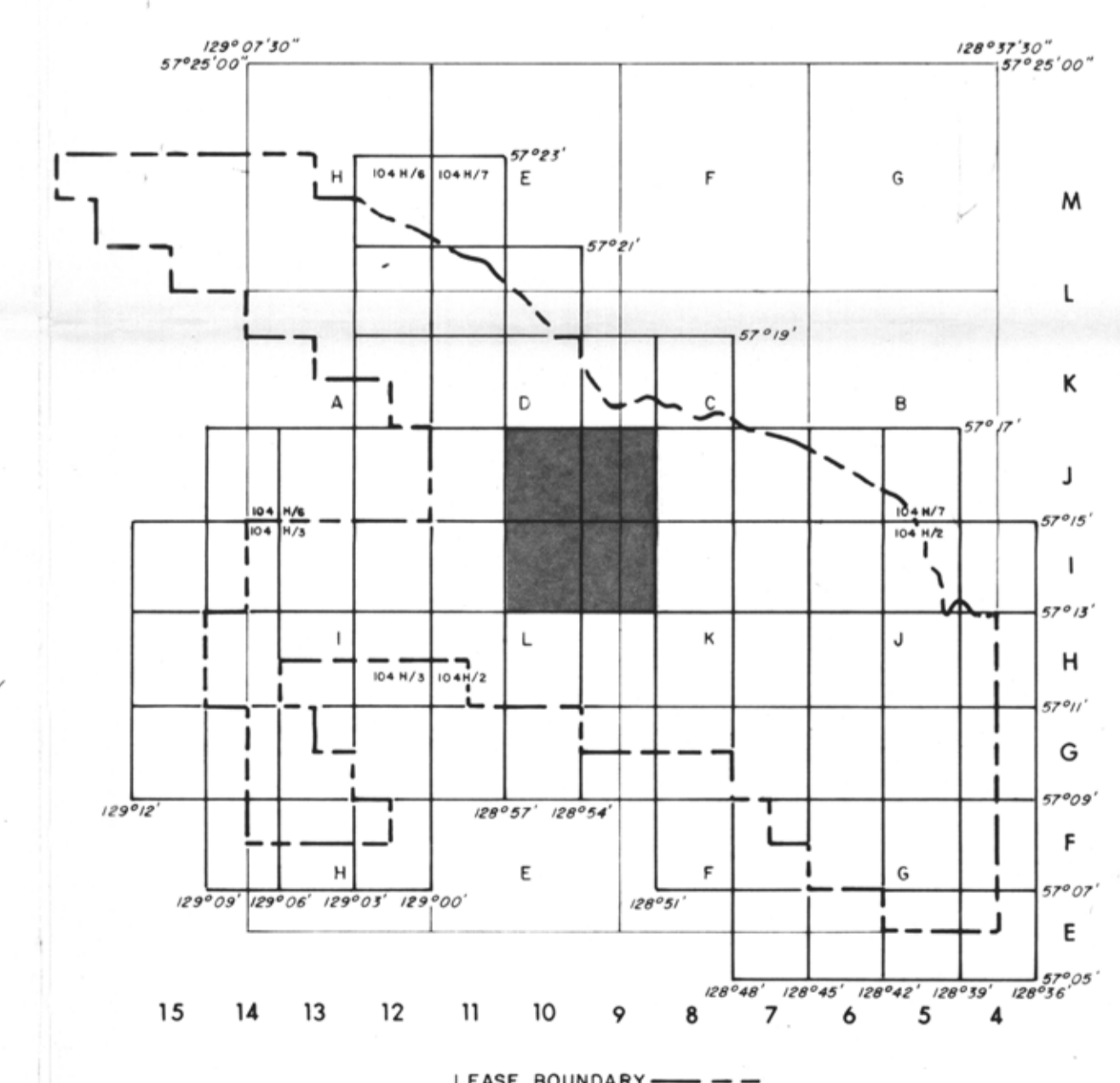
MAPPING PRODUCED FROM PHOTOGRAPHIC ENLARGEMENTS OF 1:10,000 NEGATIVES.
 CONTOUR INTERVAL: 10 M, WITH FORM LINES INTERVAL: 5 M.
 ACCURACY OF 5M FORM LINES IS EQUAL TO THE ACCURACY OF THE 10M CONTOURS - 15.0 METERS FOR GROUND NOT OCCURRED BY TREES OR VEGETATION.
 SURVEY CONTROL TAKEN FROM EXISTING PHOTO IDENTIFIABLE GOVERNMENT SURVEY MONUMENTS AND N.T.S. MAPS. MAPPING IS BASED ON (NAD 83) DATUM. HORIZONTAL CONTROL IS GEODETIC DATUM.
 RAILROAD BED LOCATION BASED ON SEPT/82 AERIAL PHOTOGRAPHY.
 COMPILED BY WESTERN PHOTOGRAMMETRY, A DIVISION OF UNDERWOOD MCELLEAN LTD., FROM FEDERAL GOVERNMENT AERIAL PHOTOGRAPHY FLOWN IN AUGUST/67 AT A SCALE OF 1:60,000 (APPROXIMATE).



SCALE 1:10,000

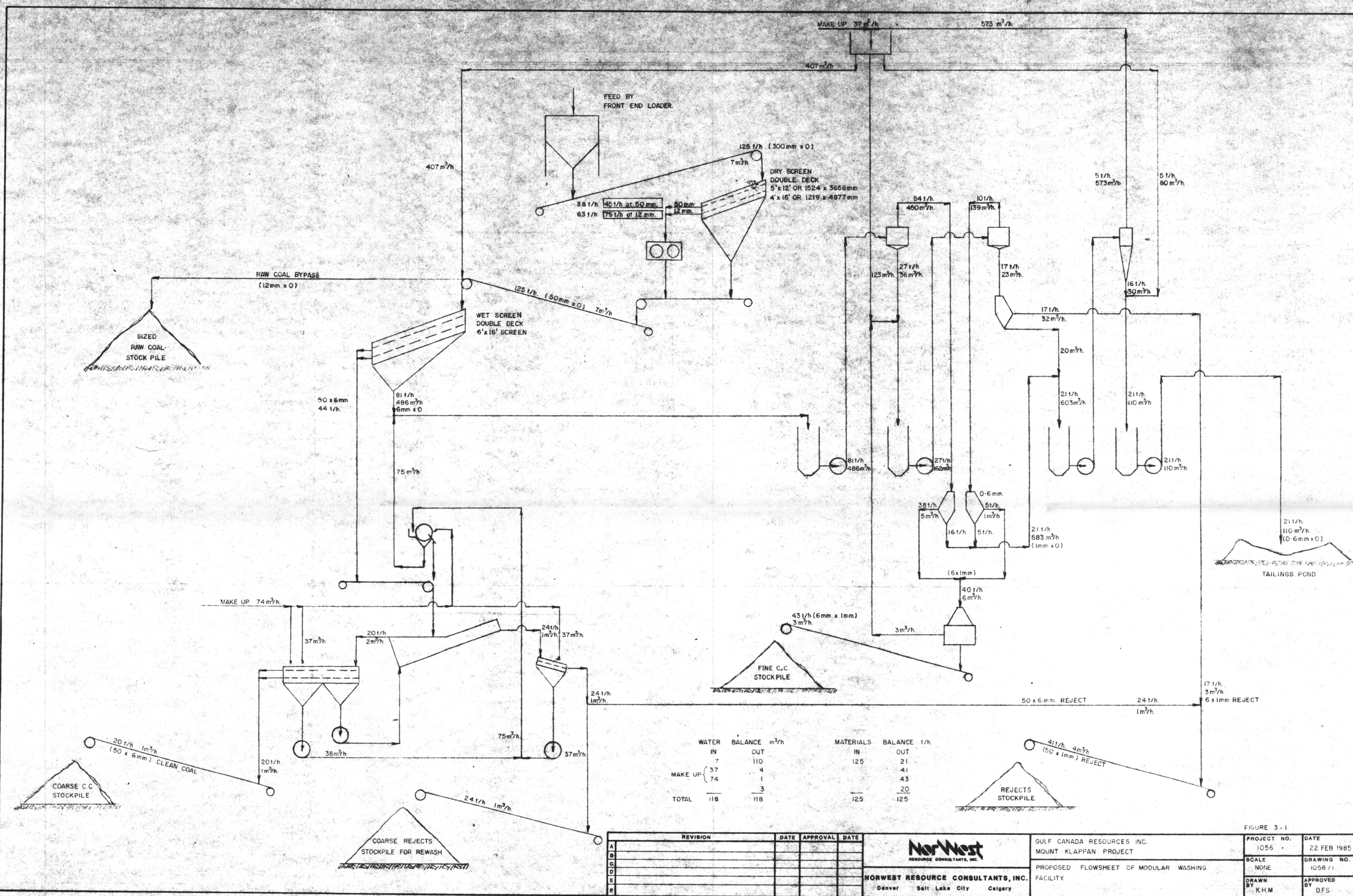


MT. KLAPPAN AREA
INDEX MAP



GULF CANADA RESOURCES INC.		
Coal Division		
CALGARY	ALBERTA	
MT. KLAPPAN COAL PROPERTY LOST FOX AREA TRIAL CARGO SITE PLAN		
PREPARED BY: B. LEECE	DATE: MAY 1985	SCALE 1:10,000
APPROVED BY: L. PITULEY		DRAWING No.

#869



WATER		BALANCE		m³/h		MATERIALS		BALANCE		t/h	
IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
7	110	7	110	125	21	125	21	125	21	125	21
37	4	37	4		41		41		41		41
74	1	74	1		43		43		43		43
TOTAL	118	TOTAL	118		20		20		20		20

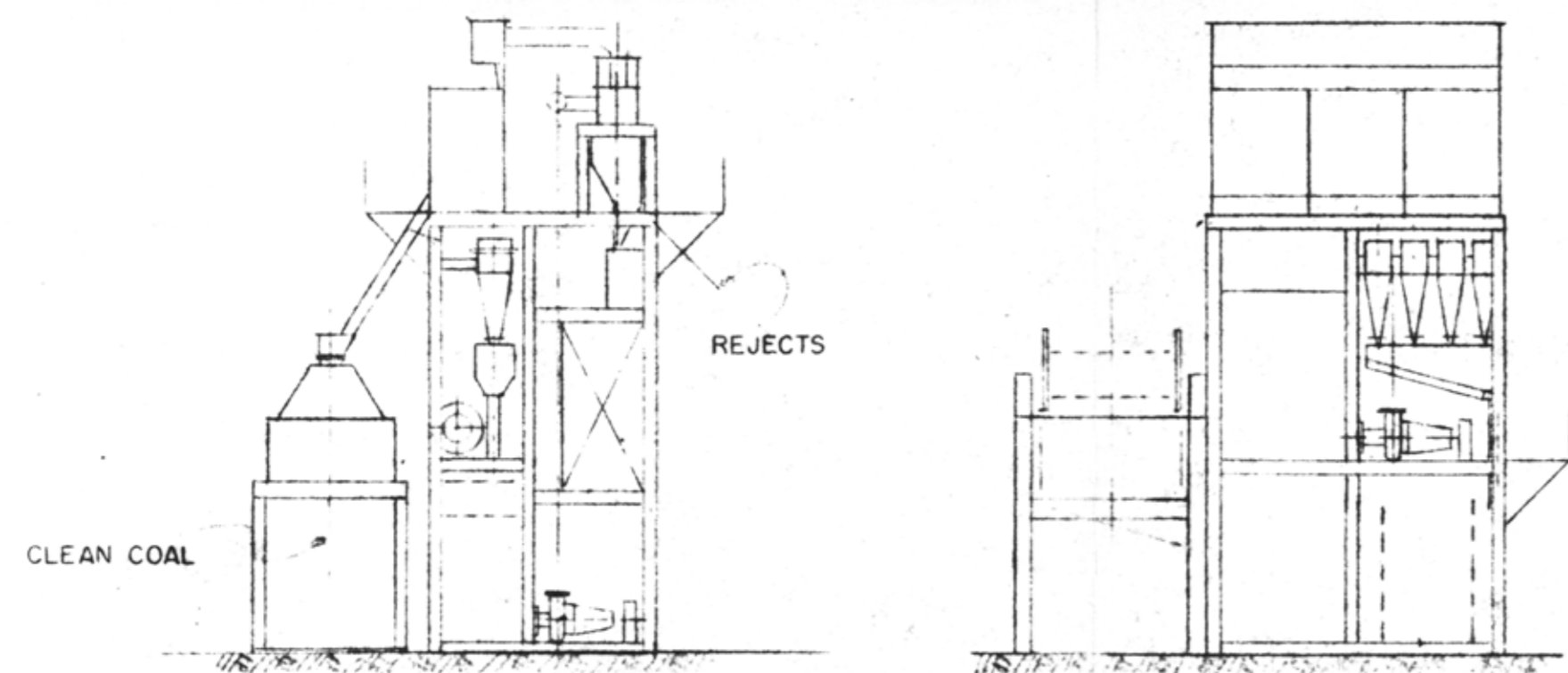
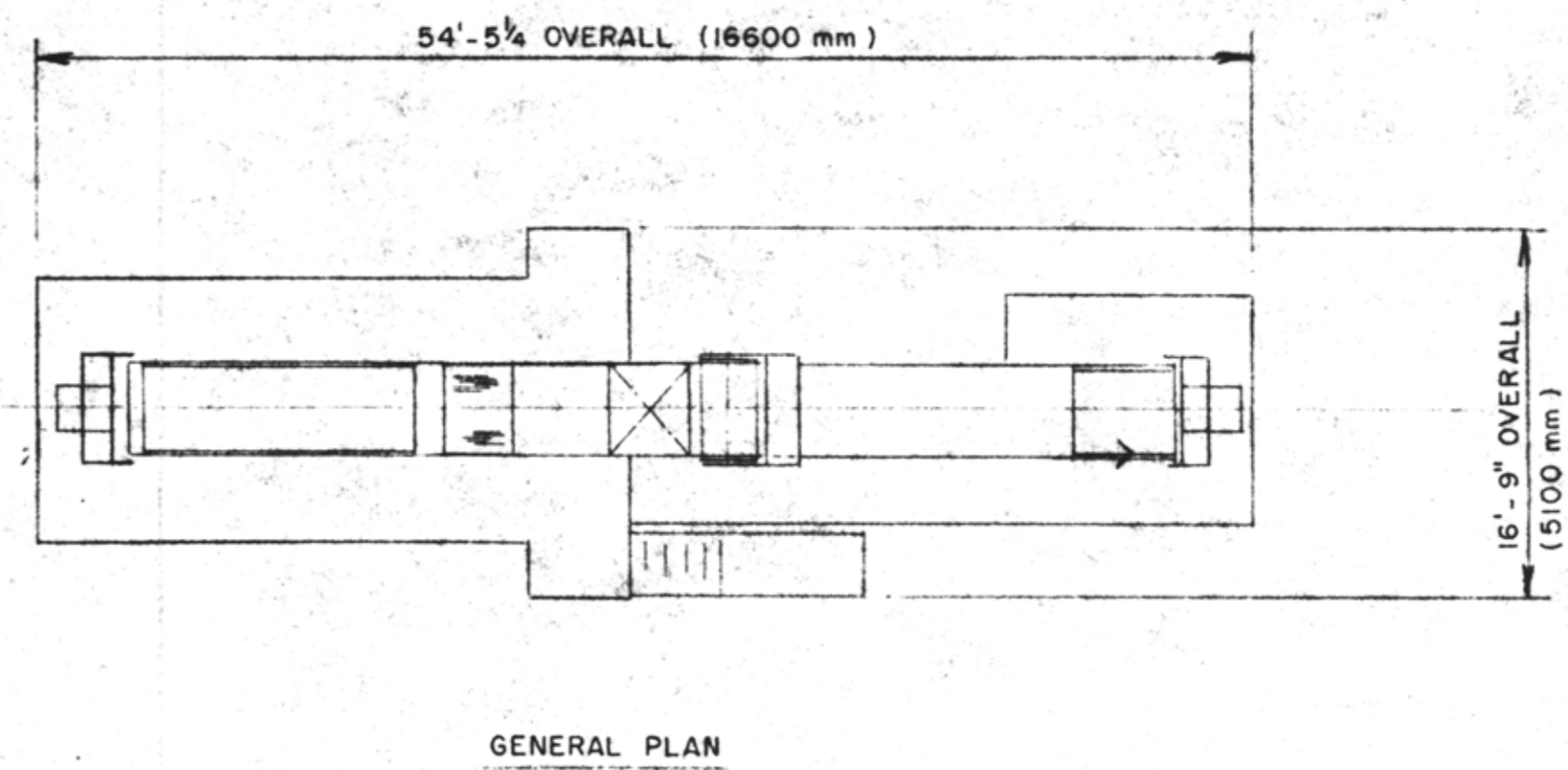
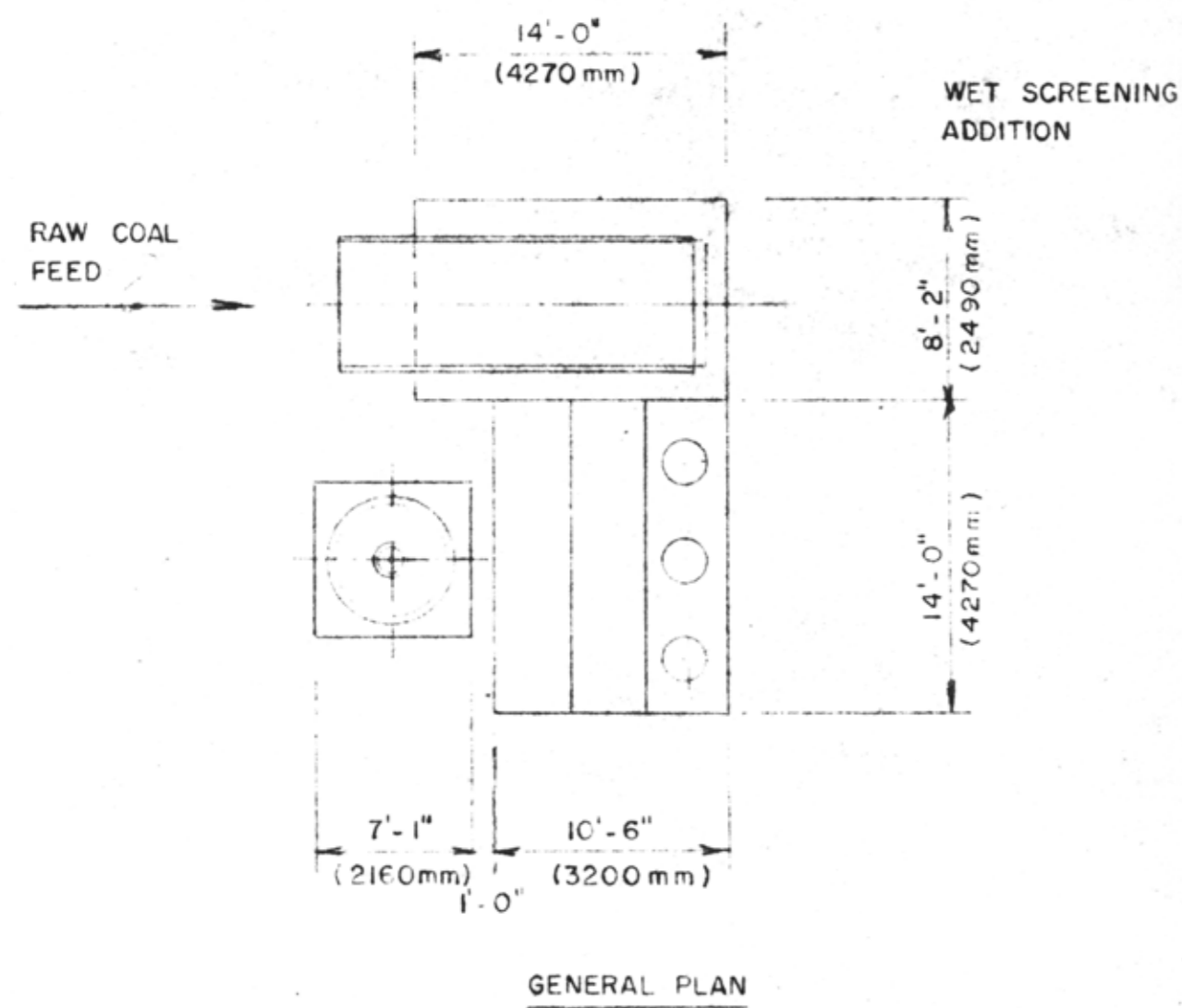
REVISION	DATE	APPROVAL	DATE
A			
B			
C			
D			
E			
F			

NorWest
RESOURCE CONSULTANTS, INC.
NORWEST RESOURCE CONSULTANTS, INC.
Denver Salt Lake City Calgary

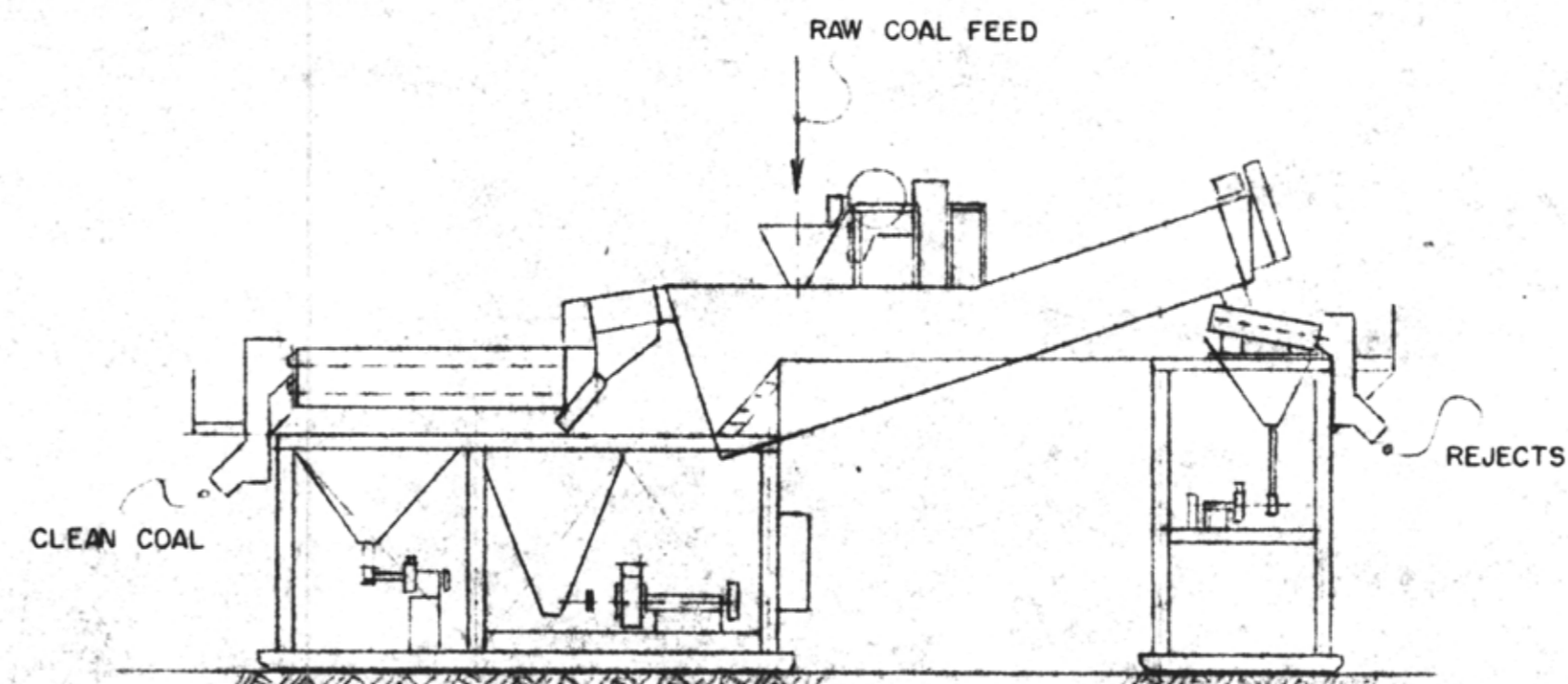
GULF CANADA RESOURCES INC.
MOUNT KLAPPAN PROJECT
PROPOSED FLOWSHEET OF MODULAR WASHING FACILITY.

PROJECT NO.	DATE	SCALE	DRAWING NO.	DRAWN BY	APPROVED BY
1056	22 FEB 1985	NONE	1056/1	K.H.M.	DFS

FIGURE 3-1



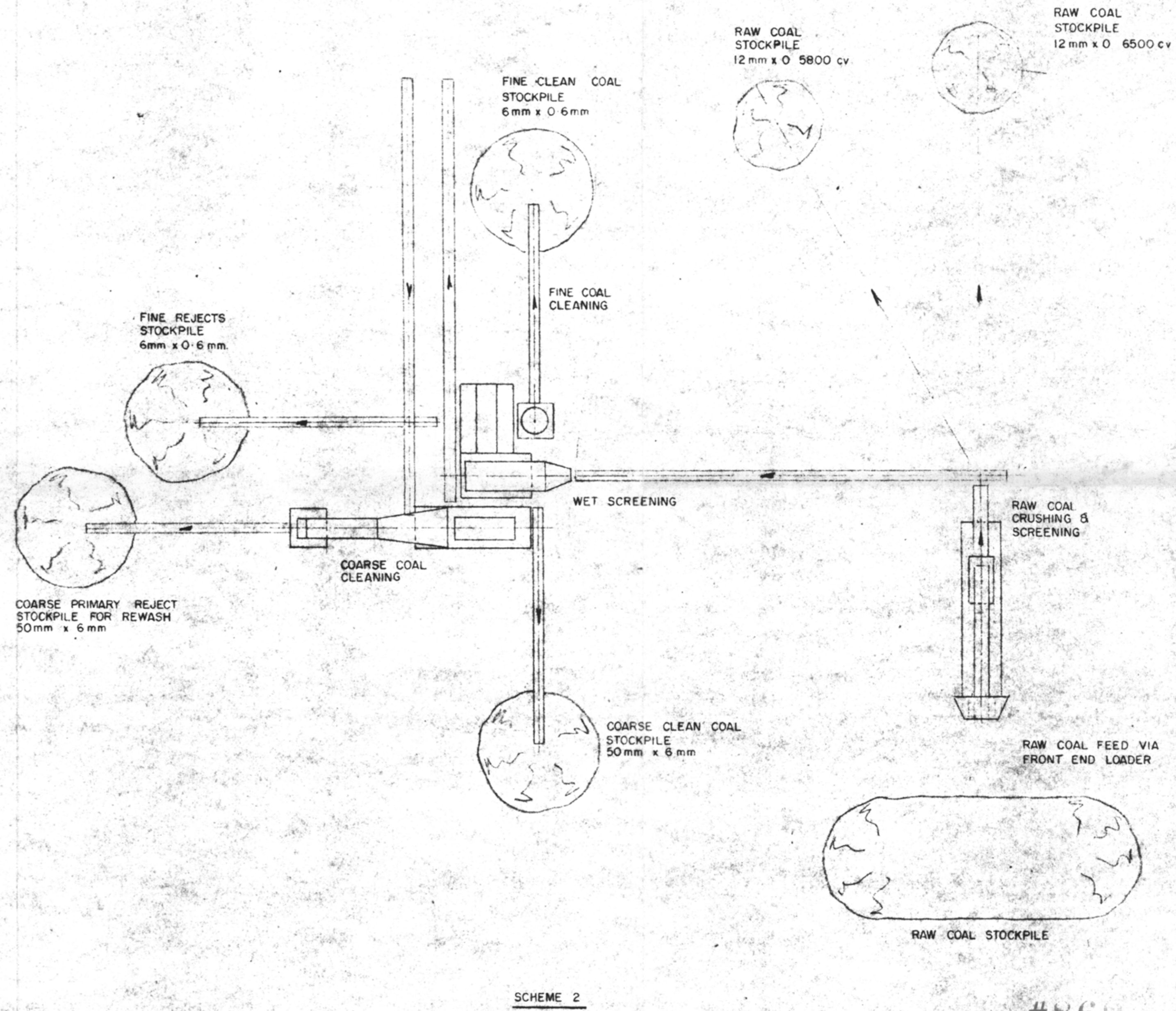
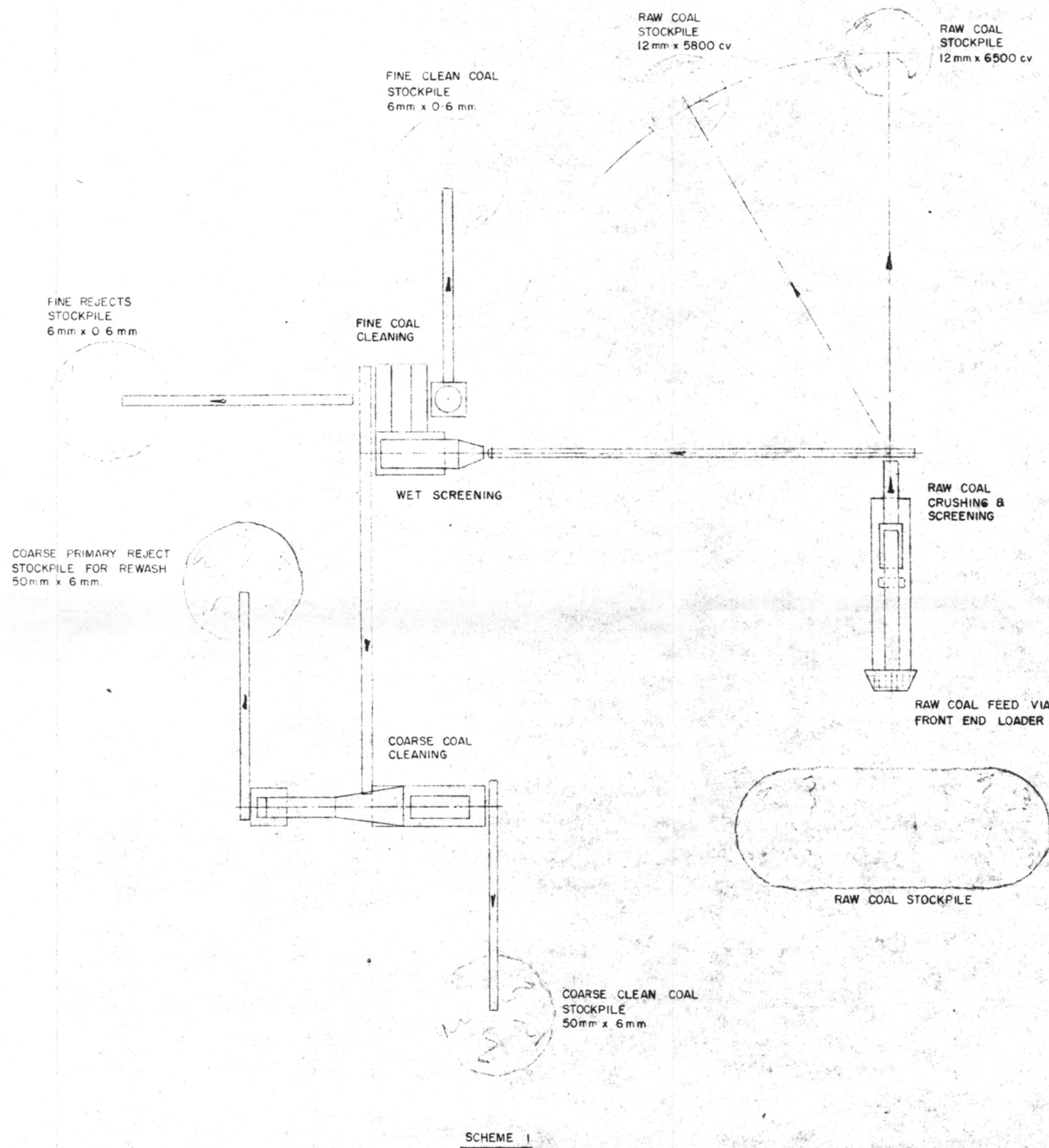
2 - STAGE HYDRANAMIC MULTIMEDIA CLASSIFIED PLANT
CYCLONE PROCESSING EQUIPMENT CO.



HI-GRADE COAL WASHER PLANT
EAGLE IRON WORKS

REVISION	DATE	APPROVAL	DATE	PROJECT NO.		DATE
A				1056		25 FEB 1985
B				SCALE		DRAWING NO.
C				1/8" = 1'-0"		1056 / 3
D				DRAWN BY		APPROVED BY
E				KHM		
F						
				NORWEST RESOURCE CONSULTANTS, INC. Denver Salt Lake City Calgary		GULF CANADA RESOURCES INC. MOUNT KLAPPAN PROJECT GENERAL ARRANGEMENT OF PACKAGE WASHING UNITS

FIGURE 4-1



#869

FIGURE 4-2

REVISION	DATE	APPROVAL	DATE	PROJECT NO.		DATE
A				1056	5 MARCH 1985	
B						
C						
D						
E						
F						

NorWest
RESOURCE CONSULTANTS, INC.

NORWEST RESOURCE CONSULTANTS, INC.
Denver Salt Lake City Calgary

GULF CANADA RESOURCES INC.
MOUNT KLAPPAN PROJECT

PROPOSED ALTERNATIVE PLANT & EQUIPMENT
LAYOUTS

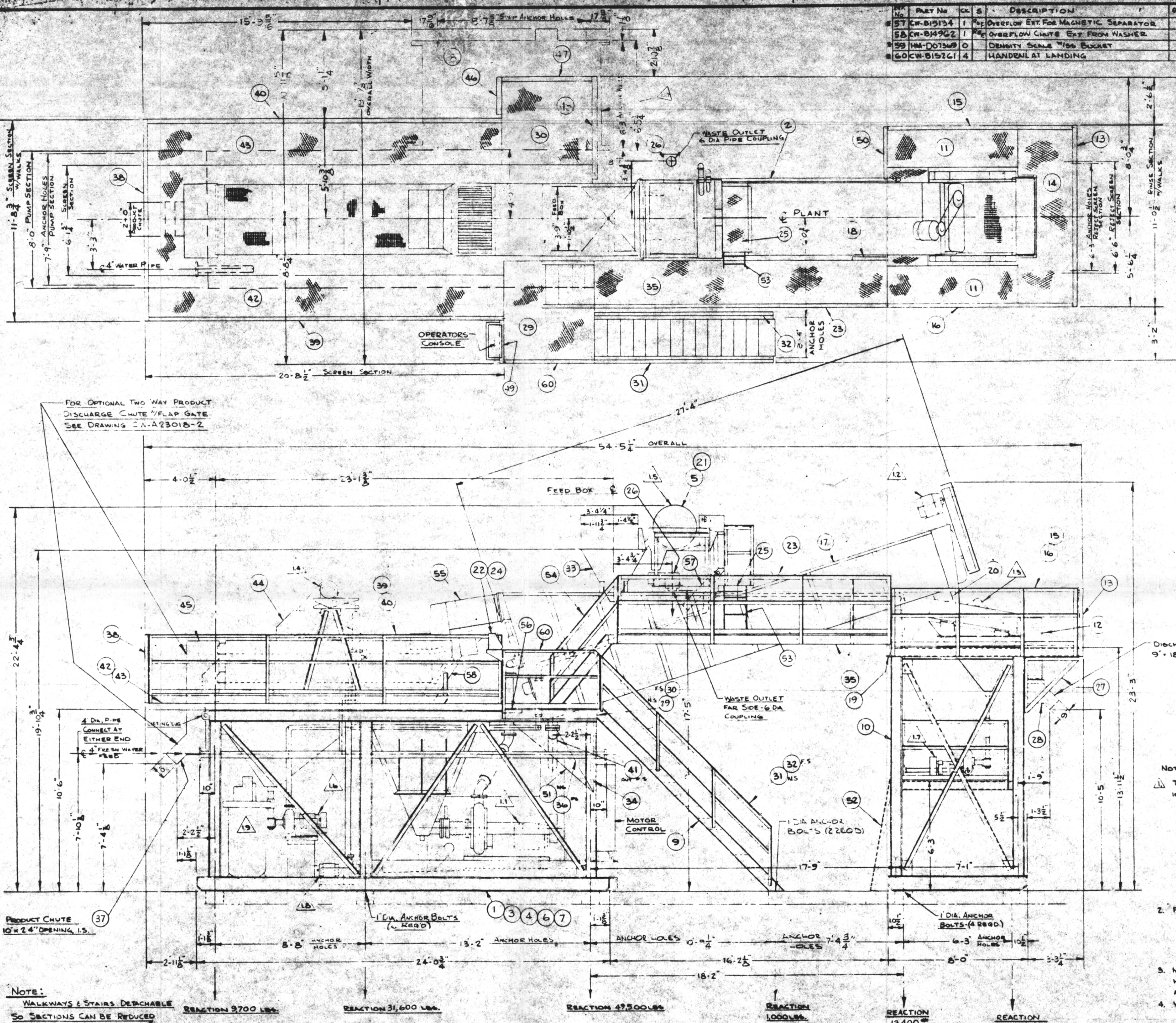
SCALE
1/8" = 1'-0"

DRAWN BY
K.H.M.

DRAWING NO.
1056/4

APPROVED BY

#869



REF. NO.	PART No.	CL.	DESCRIPTION	QTY.	WT.
57	CW-B15134	1	OVERFLOW EXT. FOR MAGNETIC SEPARATOR	1	63
58	CW-B14922	1	OVERFLOW CHUTE EXT. FROM WASHER	1	156
59	HM-D07369	0	DENSITY SCALE W/BS BUCKET	1	11
60	CW-B15261	4	HANDRAIL AT LANDING	1	61

REF. NO.	PART OR MATL. NUMBER	CL.	DESCRIPTION	LENGTH	USE AS CUT	QTY. TO BUILD	WT.
1	CW-A22469	7	PUMP SECTION ASSEMBLY			1	1485
2	CW-A22733	5	MAG. SEPARATOR FEED & RING RETURN			1	198
3	CW-A22497	2	AIR & WATER PIPING PUMPS SCREEN SECTION			1	850
4	CW-A25046	8	ELECTRICAL CONTROL & PLANT WIRING			1	1850
5	CW-A22594	4	MAGNETIC SEPARATOR FEED CHUTE & GRIZELY			1	1700
6	CW-A22165	5	AIR & WATER PIPING WASHERS REJECT SCREEN			1	280
7	CW-A22674	6	MEDIA PIPING			1	980
8	CW-A23159	2	MEDIA STORAGE & RECOVERY SUMP W/ PUMP			1	3300
9	CW-A21959	4	STAIRS			1	572
10	CW-A22315	1	RINSING SCREEN & WASHER SUPPORT ASBY			1	6367
11	CW-B15041	7	WALKWAYS			2	250
12	CW-A22307	1	RINSING SCREEN DISCHARGE CHUTE			1	250
13	CW-B15043	3	END RAIL			1	109
14	CW-A22299	6	PLATFORM			1	904
15	CW-B15042	5	SIDE RAIL FS			1	125
16	CW-B15040	9	SIDE RAIL NS			1	125
17	CW-A22480	8	36" DIA. 25' WASHER ASSEMBLY			1	1480
18	CW-B14970	2	RAILING			1	43
19	CW-B15464	1	WALK SUPPORT CHANNEL			1	123
20	CW-B15049	2	DISCHARGE CHUTE			1	50
21	CW-A22658	4	SEPARATOR MOUNT			1	150
22	CW-B15262	2	CONTROL CONSOLE			1	31
23	CW-B14969	9	RAILING			1	148
24	CW-D28474	7	CONTROL CABLE			1	7
25	CW-A22632	1	PLATFORM & RAILING			1	176
26	CW-B15373	4	FUME			1	156
27	CW-B15044	1	KNEE BRACE			2	98
28	CW-B15050	6	RINSING SCREEN DISCHARGE CHUTE EXTENSION			1	85
29	CW-B14778	5	LANDING NS			1	883
30	CW-B14780	7	LANDING FS			1	303
31	CW-A22553	7	RAILING NS			1	127
32	CW-A21961	8	RAILING FS			1	116
33	CW-A22608	8	FEED HOPPER			1	507
34	CW-B14779	3	BRACE FS NS			2	48
35	CW-A22203	1	WALKWAY			1	608
36	CW-B15921	0	BRACE FS			1	52
37	CW-B15648	2	LOWER CHUTE			1	342
38	CW-B14769	6	END RAIL			1	113
39	CW-B14765	3	RAILING NS			1	198
40	CW-B14781	5	RAILING FS			1	193
41	CW-B14929	0	WASHER DRAIN			REF.	
42	CW-A22661	4	WALKWAY NS			1	629
43	CW-A22662	2	WALKWAY FS			1	629
44	CW-A22012	1	SCREEN SECT ASSEMBLY			1	11819
45	CW-B15615	6	UPPER HALF CHUTE			1	
46	CW-B14785	8	RAILING			1	38
47	CW-B14786	6	RAILING			1	63
48	CW-B14787	4	RAILING			1	60
49	CW-B14784	0	RAILING			1	60
50	CW-B15045	0	END RAIL			1	34
51	CW-B15530	3	BRACE			1	52
52	CW-B15080	8	LADDER			1	62
53	CW-B15055	7	LADDER			1	23
54	CW-B14968	1	STAIR RAIL NS ONLY			1	50
55	CW-A22191	4	WASHER DISCHARGE CHUTE			1	709
56	CW-B14923	1	WALKWAY			1	73

NOTES:

- TOTAL CONNECTED LOAD 119HP @ 125 KW. THESE ITEMS ARE SHIPPED AS INDIVIDUAL PIECES. INCLUDES THE FOLLOWING MOTORS:
 - 1.1 MAIN MEDIA PUMP 6" 1/20HP 1800RPM
 - 1.2 WASHER DRIVE 1/20HP 1800RPM
 - 1.3 4" X 5" REJECT RING SCREEN 1/20HP 1800RPM
 - 1.4 4" X 12" PRODUCT RING SCREEN 1/20HP 1800RPM
 - 1.5 30" DIA. MAGNETIC SEPARATOR 1/15HP 1800RPM
 - 1.6 WASH PUMP 5" 1/7.5HP 1800RPM
 - 1.7 REJECT WASH PUMP 3" 1/7.5HP 1800RPM
 - 1.8 CLEAN-UP PUMP 5" 1/7.5HP 1800RPM
 - 1.9 AIR COMPRESSOR 1/3HP 1800RPM
 - 1.10 MEDIA STORAGE & RECOVERY SUMP 1/10HP 1800RPM
- POWER SERVICE TO MOTOR CONTROL CENTER. CUSTOMER TO PROVIDE AWG #2/0 SERVICED WIRE IN 1/2" CONDUIT OR WEATHEREND FOR 460VOLT/3 PHASE/60 HERTZ POWER. LOCATE AT UPPER RIGHT CORNER, TOP OR SIDE OF ENCLOSURE.
 - 2.1 MOTOR CONTROL ENCLOSURES AND OPERATOR'S CONSOLE HAVE CAPACITY FOR ADDITIONAL CIRCUITS FOR AUXILIARY EQUIPMENT.
 - 2.2 WATER REQUIREMENT EQUALS APPROXIMATELY 300 GPM.

UNIT WT. 70,000 LBS.
LOADED WT. 108,800 LBS.

#869

NOTE: WALKWAYS & STAIRS DETACHABLE. SO SECTIONS CAN BE REDUCED TO 8 FT. OVERALL WIDTH TO TRANSPORT.

REACTION 9700 LBS. REACTION 31,600 LBS. REACTION 49,300 LBS. REACTION 1000 LBS. REACTION 13400 REACTION 3600

REF. A22260-1	NO.	REVISION	DATE	BY	NEXT ASSY	QTY

DEPT.	LO	W	MS	ASB	VR	PAT	PTD	PUR
EAGLE IRON WORKS DES MOINES, IOWA								
HI-GRADE COAL WASHER PLANT W/MEDIA STORAGE & RECOVERY SUMP								
TOLERANCE: DEC. 610 FRAC. 1122 ANG. 11								
DRAWN WHITFIELD DATE 6-5-77								
CHECKED SCALE 3/4" = 1'-0"								
APPROVED CW-A25097 3								