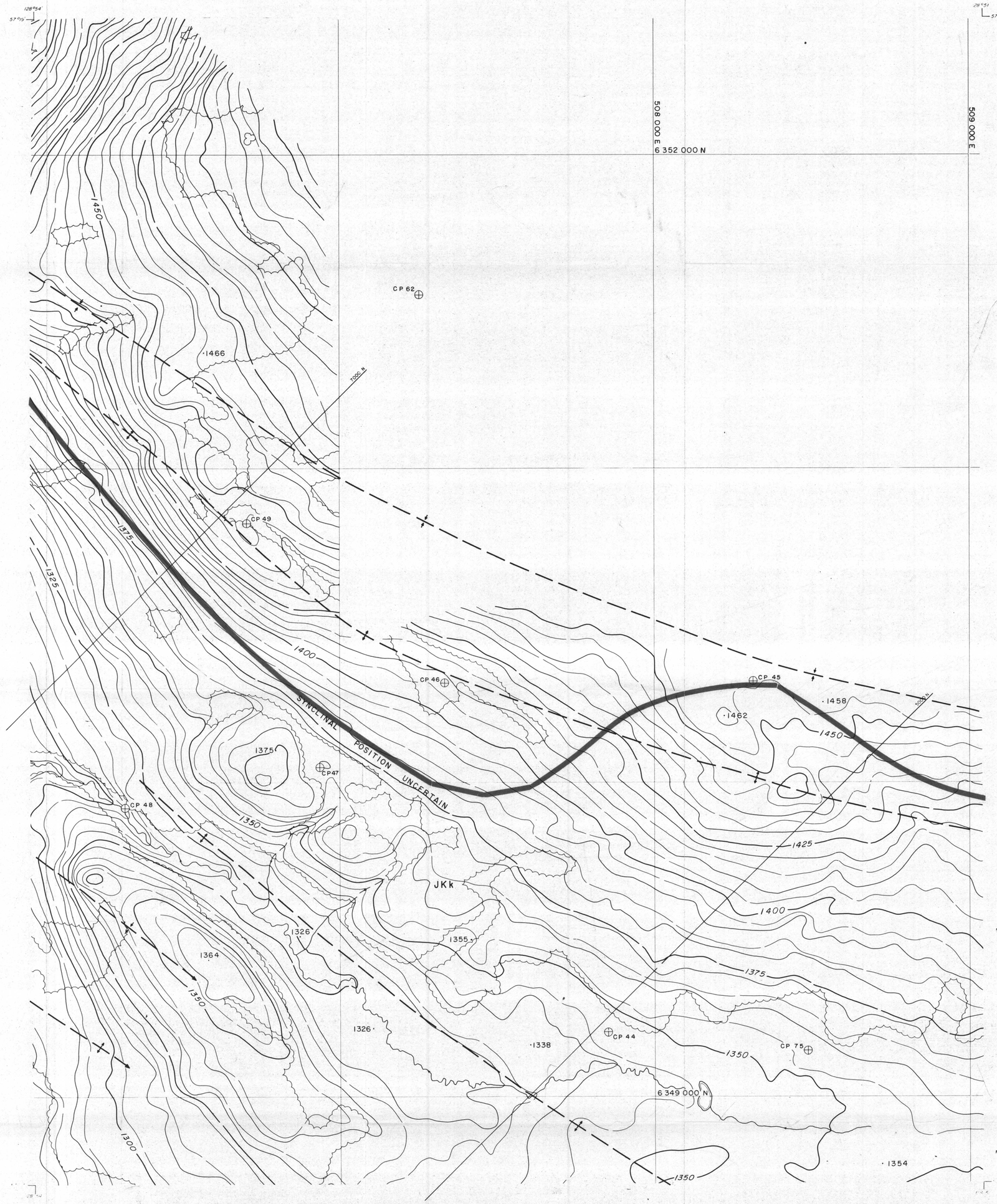


LEGEND

- BUILDING
- ROAD, HARD SURFACE
  - LOOSE SURFACE
  - CART TRACK
  - TRAIL
- RAILROAD BED
- RIVER
- STREAM, DEFINITE
  - APPROXIMATE
  - SPLIT
- LAKE
- WATER LEVEL — EL 505+
- SWAMP
- BEAVER DAM — B.D. B.D.
- TREE LINE
- CUT LINE
- CONTOURS, INDEX — 1250
  - INTERMEDIATE
  - DEPRESSION
  - APPROXIMATE
- SPOT ELEVATION — ·7654
- FORM LINES
- CUT/FILL
- FIELD CONTROL POINT — CP 121
- COAL LICENCE

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 - ±5.0 METERS FOR GROUND NOT OBSCURRED BY TREES OR VEGETATION.

SURVEY CONTROL TAKEN FROM EXISTING PHOTO IDENTIFIABLE GOVERNMENT SURVEY MONUMENTS AND N.T.S. MAPS. MAPPING IS BASED ON UNIVERSAL TRANSVERSE MERCATOR GRID AND GEODETIC DATUM.

RAILROAD BED LOCATION BASED ON SEPT./82 AERIAL PHOTOGRAPHY

COMPILED BY
WESTERN PHOTOGRAMMETRY, A DIVISION OF UNDERWOOD McLELLAN LTD., FROM FEDERAL GOVERNMENT AERIAL PHOTOGRAPHY FLOWN IN AUGUST/67 AT A SCALE OF 1:60 000 (APPROXIMATE)

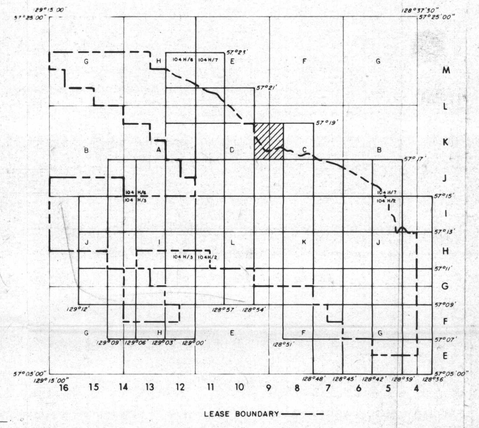
SCALE 1:5000

0 0.25 0.5 MILES

50 0 100 200 300 400 500 METERS

MT. KLAPPAN AREA

INDEX MAP



RHONDDA SEQUENCE

Kr Sequence of thick chert pebble conglomerates and minor gritty sandstones interbedded with an increasing number of siltstones and mudstones towards the basal contact. Large scale trough and tabular cross beds are common. Six species of plant fossils are found at the base of the sequence.

MALLOCH SEQUENCE

Km Thick interbeds of mudstones, argillaceous siltstones, fine grained sandstones and thin interbeds of orange weathering nodular siltstones. Many conglomerate beds display large scale cross bedding and tend to be laterally discontinuous. Thick clean sandstone beds and thin coal seams increase in abundance towards the basal gradational contact. Twenty-three species of plant fossils occur within the sequence.

KLAPPAN SEQUENCE (main coal-bearing unit)

JKk Fine to coarse grained sandstones interbedded with mudstones, siltstones, occasional thin bands of orange weathering calcareous siltstones, conglomerates and abundant coal seams. Conglomerate beds grade laterally into sandstone. Sandstones often display tabular or trough cross bedding. Rhythmites occur in the middle of the sequence. Twenty-three species of bivalves and up to twenty-five species of plants occur throughout. Petrified wood and rare coquina may be present towards the upper contact.

SPATSIZI SEQUENCE

Js Predominantly a marine sequence of interbedded mudstones, siltstones, sandstones and conglomerates. Carbonaceous mudstones, coarsening upward sequences and chert pebble conglomerates are more abundant in the upper part of the sequence. Nineteen species of bivalves are present. Belemnites are rare. Plant debris may occur near the upper gradational contact.

LEGEND

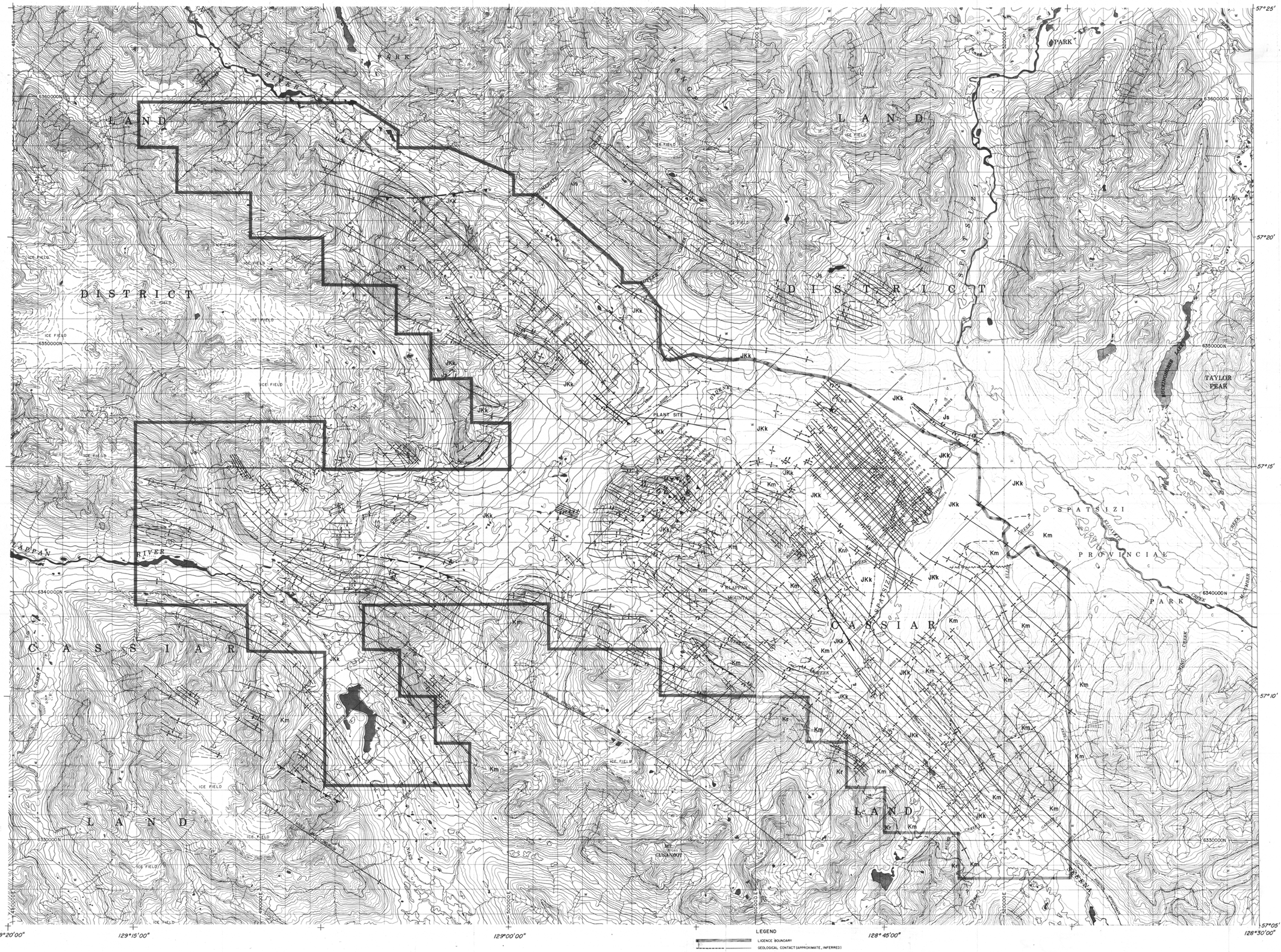
- LICENCE BOUNDARY
- GEOLOGICAL CONTACT (APPROXIMATE, INFERRED)
- COAL SEAM (DEFINED, INFERRED)
- ANTICLINE (DEFINED, APPROXIMATE) ARROW INDICATES PLUNGE DIRECTION
- SYNCLINE (DEFINED, APPROXIMATE) ARROW INDICATES PLUNGE DIRECTION
- OVERTURNED ANTICLINE (DEFINED, APPROXIMATE)
- OVERTURNED SYNCLINE (DEFINED, 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 UPTHRUST SIDE
- FAULT (DEFINED, APPROXIMATE) UPTHROWN, DOWNTHROWN SIDE
- FAULT (DEFINED, APPROXIMATE) SHOWING RELATIVE MOVEMENT
- ADIT — TRC84001 — TRENCH — SP — COAL SPOIL
- DIAMOND, ROTARY, WINKIE DRILL HOLE (VERTICAL, INCLINED WITH SURFACE PROJECTION) — DDH RDH WKD
- MEASURED SECTION — OTC 84001
- SURVEY CAIRN — SC-17
- CROSS SECTION LINE — 3000 N

723

GULF CANADA CORPORATION
Coal Division
CALGARY ALBERTA

MT. KLAPPAN COAL PROPERTY
1986
GEOLOGY MAP
LOST-FOX AREA
MAP K-9

PREPARED BY: E.S.		SCALE 1:5000
APPROVED BY: E.S.	DATE: MAR. 1987	DRAWING No. KPN86LF-70



LEGEND

ROADS AND RELATED FEATURES

HARD SURFACE, ALL WEATHER
LOOSE SURFACE
CART TRACK, WINTER ROAD, UNDER CONSTRUCTION
TRAIL, CUTLINE, PORTAGE
BUILT UP AREA
RAILWAY, SIDING, STATION, STOP
BRIDGE
SEAPLANE BASE, ANCHORAGE

LANDMARK FEATURES

HOUSE, BARN
CHURCH, SCHOOL
POST OFFICE
HISTORICAL SITE
TOWERS: FIRE, RADIO
WELL: OIL, GAS
TANK: OIL, GASOLINE, WATER
TELEPHONE LINE
POWER TRANSMISSION LINE
MINE
CUTTING, EMBANKMENT
GRAVEL PIT

BOUNDARIES AND CONTROL

INTERNATIONAL, PROVINCIAL, BOUNDARY MONUMENT
COUNTY, DISTRICT
TOWNSHIP PARISH — SURVEYED — UNSURVEYED
TOWNSHIP, DLS — SURVEYED — UNSURVEYED — SECTION CORNERS
MUNICIPALITY
INDIAN RESERVE, PARK, ETC.
HORIZONTAL CONTROL POINT
BENCH MARK — BM 995
SPOT ELEVATION, ELEVATION APPROXIMATE — 390 — ±721

DRAINAGE AND RELATED FEATURES

STREAM, SHORELINE: INDEFINITE
DIRECTION OF FLOW
LAKE: INTERMITTENT
INUNDATED, FLOODED LAND
MARSH OR SWAMP (WOODED)
DRY RIVER BED WITH CHANNELS
SAND, ABOVE, IN WATER
STRING BOG — SB
TUNDRA PONDS, POLYGONS — TP — PP
RAPIDS
FORESHORE FLATS — FF
ROCK
DAM
WHARF
DITCH

RELIEF FEATURES

CONTOURS — 500
APPROXIMATE CONTOUR — 125 — 100 — 75
DEPRESSION
ESKER
PINGO — 125
SAND, SAND DUNES — SAND
PALSA BOG — PB
WOODED AREA — W — C

SCALE 1:50,000

0 1 2 3 MILES
0 1 2 3 4 5 KILOMETERS

104H/11	104H/10	104H/9
104H/14		104H/8
104H/15		104H/1
104A/14	104A/15	104A/16

57°45' 56°45' 129°30' 128°00'

LEGEND

LICENCE 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 UPTHRUST SIDE
FAULT (DEFINED, APPROXIMATE) UPTHROWN, DOWNTHROWN SIDE
FAULT (DEFINED, APPROXIMATE) SHOWING RELATIVE MOVEMENT
ADIT TRENCH COAL SPOIL
DIAMOND, ROTARY, WINKIE DRILL HOLE (VERTICAL, INCLINED WITH SURFACE PROJECTION)
MEASURED SECTION
SURVEY CAIRN
CROSS SECTION LINE

RHONDDA SEQUENCE

Kr Sequence of thick chert pebble conglomerates and minor gritty sandstones interbedded with an increasing number of siltstones and mudstones towards the basal contact. Large scale trough and tabular cross beds are common. Six species of plant fossils are found at the base of the sequence.

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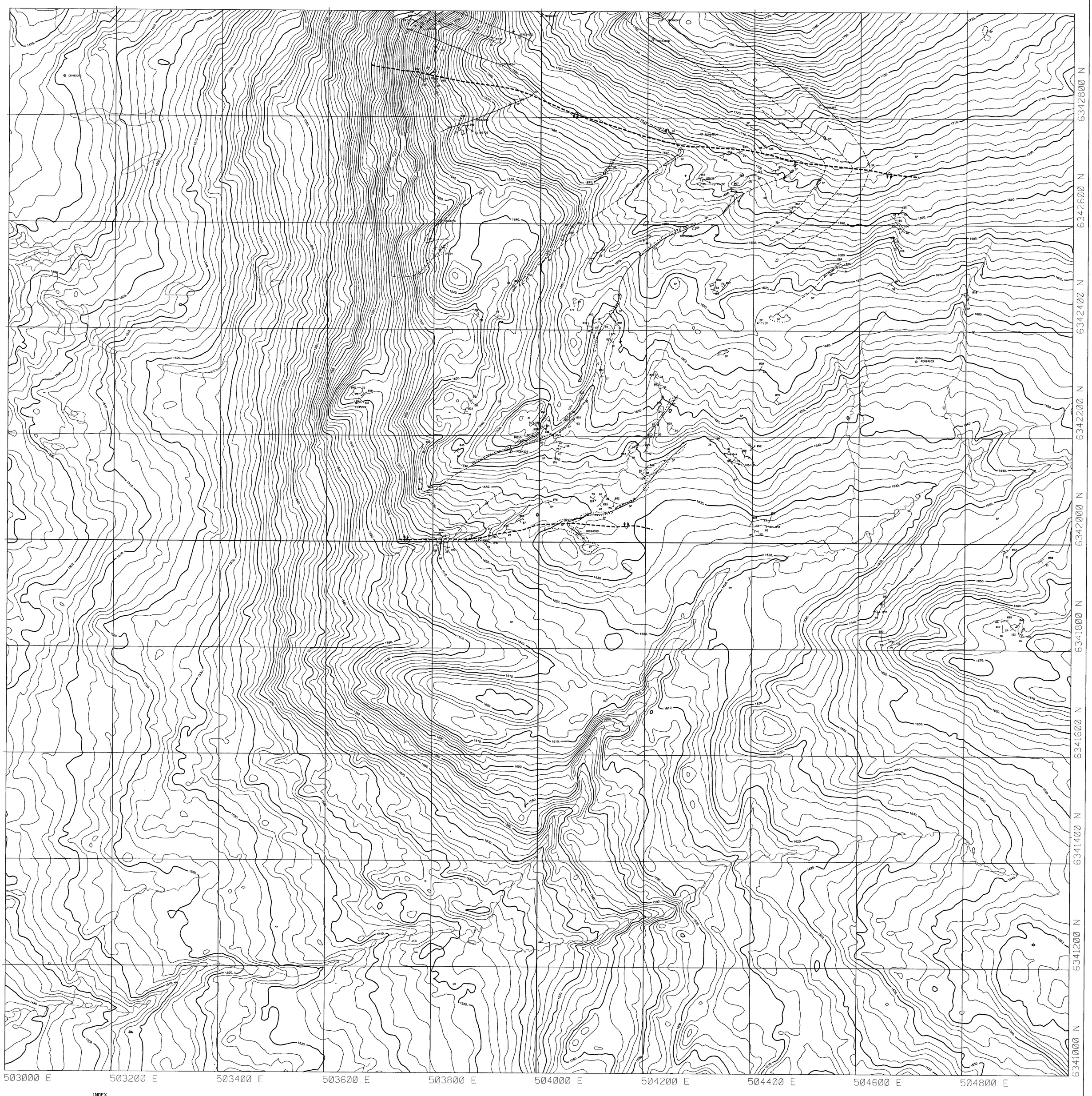
723

GULF CANADA RESOURCES INC.
Coal Division
CALGARY ALBERTA

MT. KLAPPAN COAL PROPERTY
1986
GEOLOGY MAP

PREPARED BY: A.P., E.S.	DRAWING No. KPN86001
APPROVED BY: E.S., K.J. DATE: APR. 1987	



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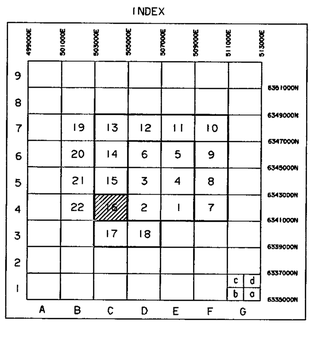


SCALE

0 25 50 100 150 200 250 METRES

LEGEND

- LICENCE BOUNDARY
- GEOLOGICAL BOUNDARY (APPROXIMATE, ASSUMED)
- COAL SEAM (DEFINED, APPROXIMATE, ASSUMED)
- BEDDING (HORIZONTAL, INCLINED, VERTICAL, UPRIGHT, OVERTURNED)
- 045 30 BEDDING, STRIKE AND DIP
- CLEAVAGE (HORIZONTAL, INCLINED, VERTICAL, SECOND GENERATION)
- JOINT (HORIZONTAL, INCLINED, VERTICAL)
- LINEATION (HORIZONTAL, INCLINED, VERTICAL)
- L; 045/30 L; LINEATION, DIRECTION AND PLUNGE
- 045/30 MINOR FOLDS WITH AXIAL ATTITUDE
- ANTICLINE (DEFINED, APPROXIMATE, OVERTURNED)
- SYNCLINE (DEFINED, APPROXIMATE, OVERTURNED)
- ANTICLINE, SYNCLINE (ARROW INDICATES PLUNGE DIRECTION)
- THRUST FAULT (DEFINED, ASSUMED, TEETH ON UPTHRUST SIDE)
- NORMAL FAULT (DEFINED, ASSUMED, WITH DOT ON DOWNTHROWN SIDE)
- 090/90 FAULT (SHOWING RELATIVE MOVEMENT AND ATTITUDE)
- TRC 86001 TRENCH (SHOWING COAL-CENTRED BAR WHERE KNOWN)
- SP/K COAL SPOIL (WITH SEAM DESIGNATION WHERE KNOWN)
- OUTCROP AREA, OUTCROP, PROBABLE OUTCROP, FLOAT
- 045 GLACIAL STRIAE (DIRECTION OF GLACIAL MOVEMENT KNOWN, UNKNOWN)
- DDH RDH DIAMOND, ROTARY DRILL HOLE (WITH SURFACE PROJECTION)
- DTC 86001 3000 N MEASURED SECTION
- CROSS SECTION LINE (MINING GRID)
- FR6001 FOSSIL LOCATION (WITH CATALOGUE NUMBER)
- ALB-1 SC-1 SURVEY STATION, SURVEY CAIRN
- SWAMP
- MH MARKER HORIZON
- SEVERELY DEFORMED, SHEARED

723

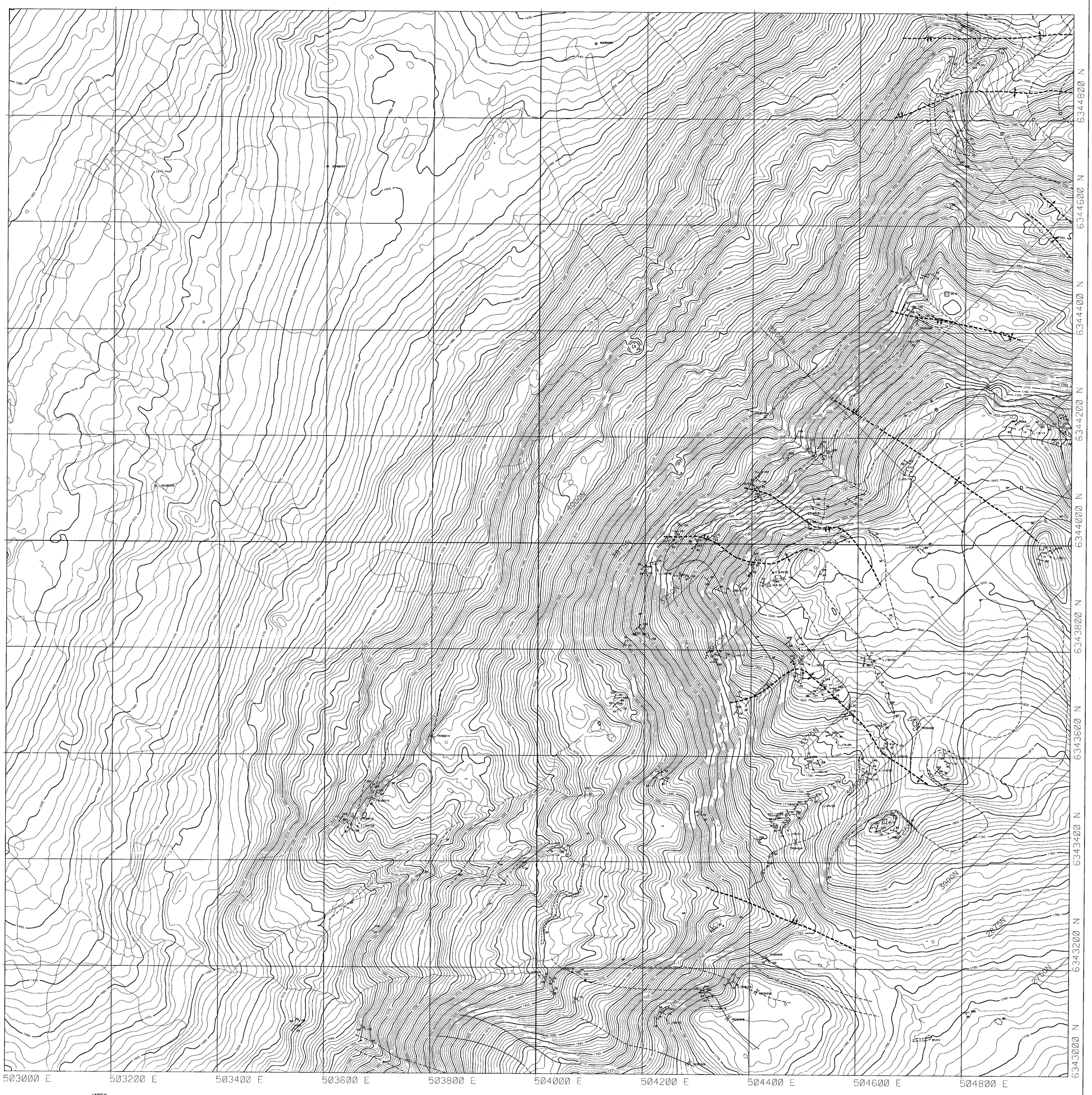
GULF CANADA CORPORATION KLAP:[205057]851083016.MAP

MT. KLAPPAN COAL PROPERTY

MAP AREA C-4

DRAWING NO. KPNBLF-19

SCALE: 1:2000 C.I. = 2m DATE: OCT. 1986



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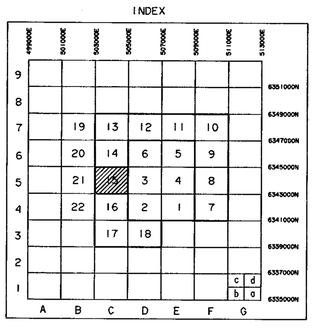


SCALE

0 25 50 100 150 200 250 METRES

LEGEND

- LICENCE BOUNDARY
- GEOLOGICAL BOUNDARY (APPROXIMATE, ASSUMED)
- COAL SEAM (DEFINED, APPROXIMATE, ASSUMED)
- BEDDING (HORIZONTAL, INCLINED, VERTICAL, UPRIGHT, OVERTURNED)
- 045 / 30 — BEDDING, STRIKE AND DIP
- CLEAVAGE (HORIZONTAL, INCLINED, VERTICAL, SECOND GENERATION)
- JOINT (HORIZONTAL, INCLINED, VERTICAL)
- LINEATION (HORIZONTAL, INCLINED, VERTICAL)
- L; 045/30 — L; LINEATION, DIRECTION AND PLUNGE
- 045/30 — MINOR FOLDS WITH AXIAL ATTITUDE
- ANTICLINE (DEFINED, APPROXIMATE, OVERTURNED)
- SYNCLINE (DEFINED, APPROXIMATE, OVERTURNED)
- ANTICLINE, SYNCLINE (ARROW INDICATES PLUNGE DIRECTION)
- THRUST FAULT (DEFINED, ASSUMED, TEETH ON UPTHRUST SIDE)
- NORMAL FAULT (DEFINED, ASSUMED, WITH DOT ON DOWNTHROWN SIDE)
- 090/80 — FAULT (SHOWING RELATIVE MOVEMENT AND ATTITUDE)
- TRC 86001 — TRENCH (SHOWING COAL-CENTRED BAR WHERE KNOWN)
- SP/XX — COAL SPOIL (WITH SEAM DESIGNATION WHERE KNOWN)
- OUTCROP AREA, OUTCROP, PROBABLE OUTCROP, FLOAT
- 045 — GLACIAL STRIAE (DIRECTION OF GLACIAL MOVEMENT KNOWN, UNKNOWN)
- DDH RDH — DIAMOND, ROTARY DRILL HOLE (WITH SURFACE PROJECTION)
- CTC 86001 — MEASURED SECTION
- 3000 N — CROSS SECTION LINE (MINING GRID)
- F86001 — FOSSIL LOCATION (WITH CATALOGUE NUMBER)
- ALS-1 SC-1 — SURVEY STATION, SURVEY CAIRN
- SWAMP
- MW — MARKER HORIZON
- SEVERELY DEFORMED, SHEARED

723

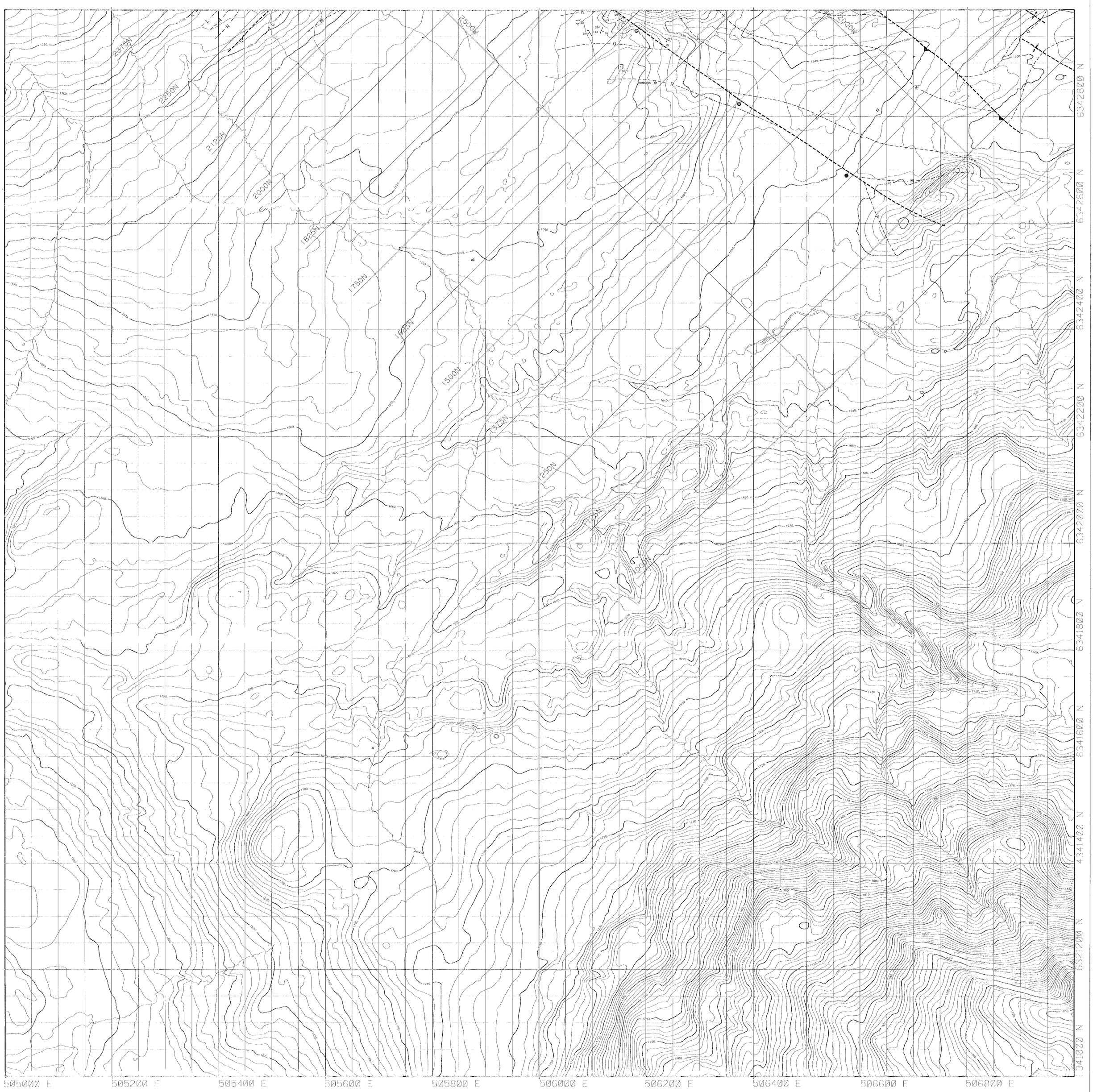
GULF CANADA CORPORATION — KLAP:[205057]851083015.MAP

MT. KLAPPAN COAL PROPERTY

MAP AREA C-5

DRAWING NO. KPNBLLF-20

SCALE: 1:2000 — C.I. = 2m — DATE: OCT. 1986



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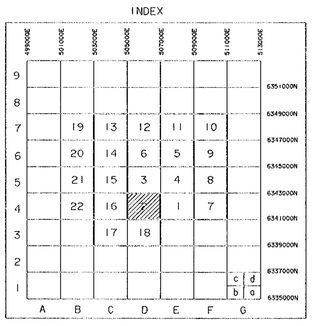


SCALE

LEGEND

- LICENCE BOUNDARY
- GEOLOGICAL BOUNDARY (APPROXIMATE, ASSUMED)
- COAL SEAM (DEFINED, APPROXIMATE, ASSUMED)
- BEDDING (HORIZONTAL, INCLINED, VERTICAL, UPRIGHT, OVERTURNED)
- BEDDING, STRIKE AND DIP
- CLEAVAGE (HORIZONTAL, INCLINED, VERTICAL, SECOND GENERATION)
- JOINT (HORIZONTAL, INCLINED, VERTICAL)
- LINEATION (HORIZONTAL, INCLINED, VERTICAL)
- L1 045/30 — L1 LINEATION, DIRECTION AND PLUNGE
- 045/30 — MINOR FOLDS WITH AXIAL ATTITUDE
- ANTICLINE (DEFINED, APPROXIMATE, OVERTURNED)
- SYNCLINE (DEFINED, APPROXIMATE, OVERTURNED)
- ANTICLINE, SYNCLINE (ARROW INDICATES PLUNGE DIRECTION)
- THRUST FAULT (DEFINED, ASSUMED, TEETH ON UPTHRUST SIDE)
- NORMAL FAULT (DEFINED, ASSUMED, WITH DOT ON DOWNTHROWN SIDE)
- 055/85 — FAULT (SHOWING RELATIVE MOVEMENT AND ATTITUDE)
- PRE 80001 — TRENCH (SHOWING COAL-CONTRED BAR WHERE KNOWN)
- SPVK — COAL SPOIL (WITH SEAM DESIGNATION WHERE KNOWN)
- 045 — OUTCROP AREA, OUTCROP, PROBABLE OUTCROP, FLOAT
- 045 — GLACIAL STRIAE (DIRECTION OF GLACIAL MOVEMENT KNOWN, UNKNOWN)
- DDH, RCH — DIAMOND, ROTARY DRILL HOLE (WITH SURFACE PROJECTION)
- OTC 86001 — MEASURED SECTION
- 2000 N — CROSS SECTION LINE (MINING GRID)
- F86001 — FOSSIL LOCATION (WITH CATALOGUE NUMBER)
- ALB-1, SC-1 — SURVEY STATION, SURVEY CAIRN
- SWAMP
- MARKER HORIZON
- SEVERELY DEFORMED, SHEARED

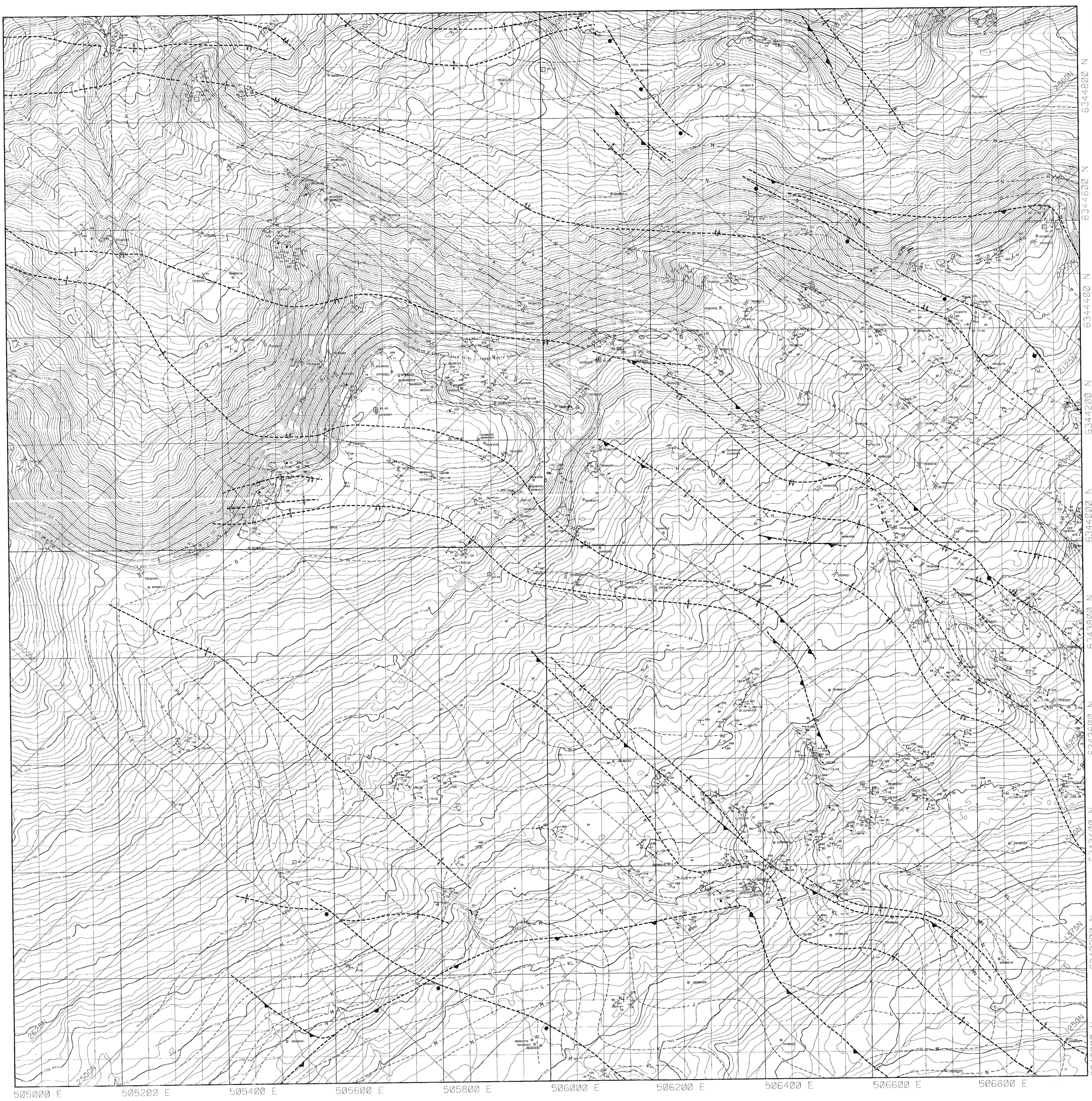
GULF CANADA CORPORATION	KLAP:[205057]851083002.MAP

MT. KLAPPAN COAL PROPERTY

MAP AREA D-4

DRAWING NO. KPN.B&LF-21

SCALE: 1:2000 C.I. = 2m DATE: OCT. 1986



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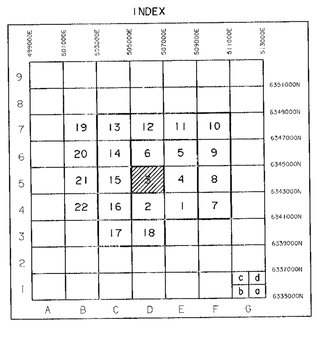


SCALE

0 25 50 100 150 200 250 METRES

LEGEND

- LICENCE BOUNDARY
- GEOLOGICAL BOUNDARY (APPROXIMATE, ASSUMED)
- COAL SEAM (DEFINED, APPROXIMATE, ASSUMED)
- BEDDING (HORIZONTAL, INCLINED, VERTICAL, UPRIGHT, OVERTURNED)
- BEDDING, STRIKE AND DIP
- CLEAVAGE (HORIZONTAL, INCLINED, VERTICAL, SECOND GENERATION)
- JOINT (HORIZONTAL, INCLINED, VERTICAL)
- LINEATION (HORIZONTAL, INCLINED, VERTICAL)
- L, LINEATION, DIRECTION AND PLUNGE
- MINOR FOLDS WITH AXIAL ATTITUDE
- ANTICLINE (DEFINED, APPROXIMATE, OVERTURNED)
- SYNCLINE (DEFINED, APPROXIMATE, OVERTURNED)
- ANTICLINE, SYNCLINE (ARROW INDICATES PLUNGE DIRECTION)
- THRUST FAULT (DEFINED, ASSUMED, TEETH ON UPTHRUST SIDE)
- NORMAL FAULT (DEFINED, ASSUMED, WITH DOT ON DOWNTHROWN SIDE)
- FAULT (SHOWING RELATIVE MOVEMENT AND ATTITUDE)
- TRENCH (SHOWING COAL-CENTRED BAR WHERE KNOWN)
- COAL SPOIL (WITH SEAM DESIGNATION WHERE KNOWN)
- OUTCROP AREA, OUTCROP, PROBABLE OUTCROP, FLOAT
- GLACIAL STRIAE (DIRECTION OF GLACIAL MOVEMENT KNOWN, UNKNOWN)
- DIAMOND, ROTARY DRILL HOLE (WITH SURFACE PROJECTION)
- MEASURED SECTION
- CROSS SECTION LINE (MINING GRID)
- FOSSIL LOCATION (WITH CATALOGUE NUMBER)
- SURVEY STATION, SURVEY CAIRN
- SWAMP
- MARKER HORIZON
- SEVERELY DEFORMED, SHEARED

723

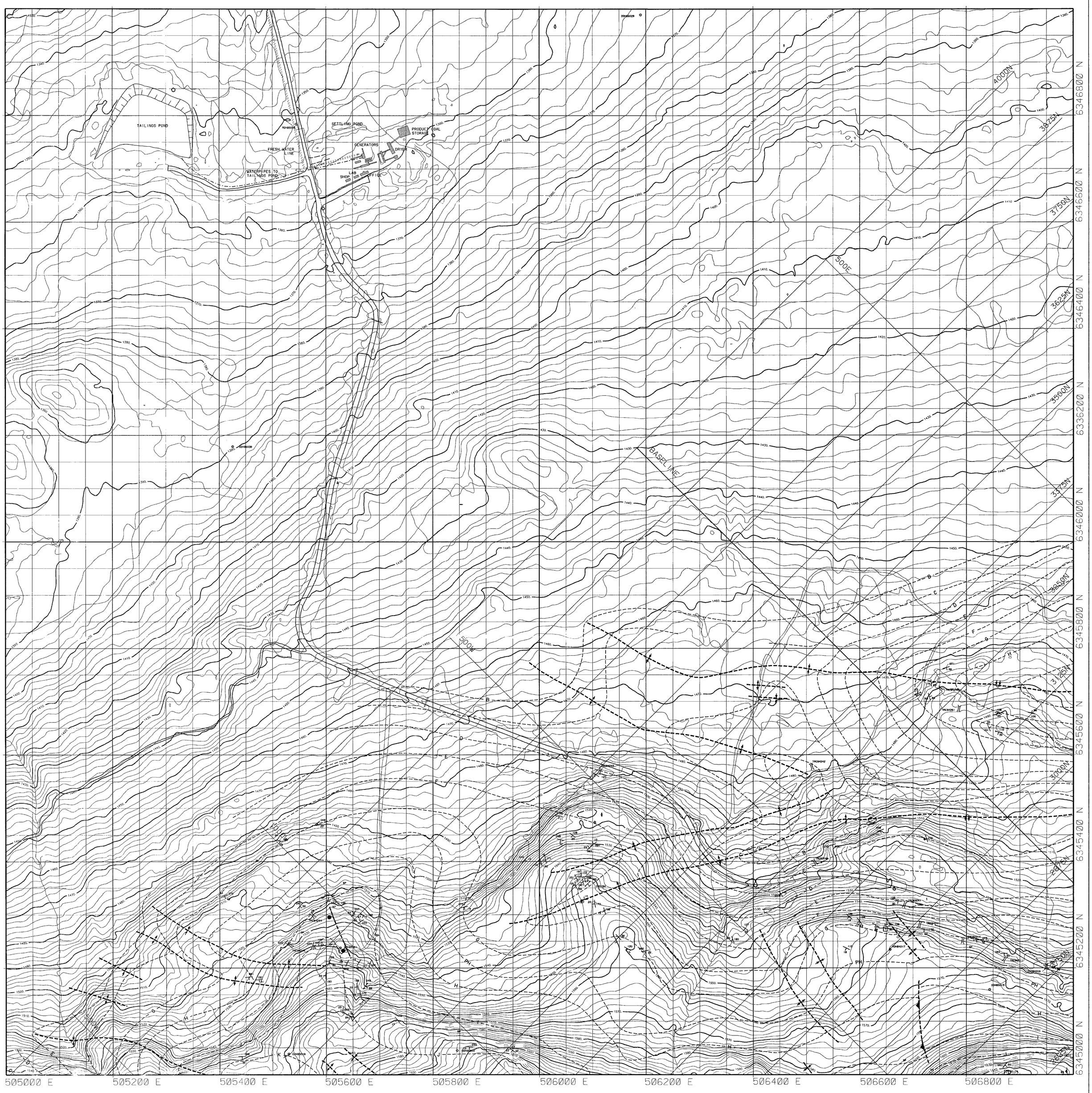
GULF CANADA CORPORATION

MT. KLAPPAN COAL PROPERTY

MAP AREA D-5

DRAWING NO. KPNBELF-22

SCALE: 1:2000 C.I. = 2m



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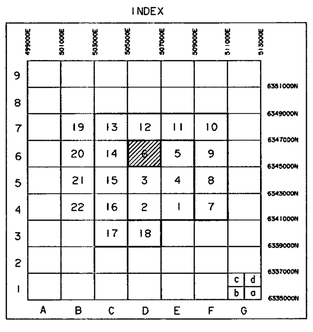


SCALE

0 25 50 100 150 200 250 METRES

LEGEND

- LICENCE BOUNDARY
- GEOLOGICAL BOUNDARY (APPROXIMATE, ASSUMED)
- COAL SEAM (DEFINED, APPROXIMATE, ASSUMED)
- BEDDING (HORIZONTAL, INCLINED, VERTICAL, UPRIGHT, OVERTURNED)
- BEDDING, STRIKE AND DIP
- CLEAVAGE (HORIZONTAL, INCLINED, VERTICAL, SECOND GENERATION)
- JOINT (HORIZONTAL, INCLINED, VERTICAL)
- LINEATION (HORIZONTAL, INCLINED, VERTICAL)
- L; 045/30 — L; LINEATION, DIRECTION AND PLUNGE
- 045/30 — MINOR FOLDS WITH AXIAL ATTITUDE
- ANTICLINE (DEFINED, APPROXIMATE, OVERTURNED)
- SYNCLINE (DEFINED, APPROXIMATE, OVERTURNED)
- ANTICLINE, SYNCLINE (ARROW INDICATES PLUNGE DIRECTION)
- THRUST FAULT (DEFINED, ASSUMED, TEETH ON UPTHRUST SIDE)
- NORMAL FAULT (DEFINED, ASSUMED, WITH DOT ON DOWNTHROWN SIDE)
- 090/80 — FAULT (SHOWING RELATIVE MOVEMENT AND ATTITUDE)
- TRC 86001 — TRENCH (SHOWING COAL-CENTRED BAR WHERE KNOWN)
- SP/K — COAL SPOIL (WITH SEAM DESIGNATION WHERE KNOWN)
- OUTCROP AREA, OUTCROP, PROBABLE OUTCROP, FLOAT
- 045 — GLACIAL STRIAE (DIRECTION OF GLACIAL MOVEMENT KNOWN, UNKNOWN)
- DDH, RDH — DIAMOND, ROTARY DRILL HOLE (WITH SURFACE PROJECTION)
- DTC 86001 — MEASURED SECTION
- 3000 N — CROSS SECTION LINE (MINING GRID)
- F86001 — FOSSIL LOCATION (WITH CATALOGUE NUMBER)
- ALS-1, SC-1 — SURVEY STATION, SURVEY CAIRN
- SWAMP
- MH — MARKER HORIZON
- SEVERELY DEFORMED, SHEARED

723

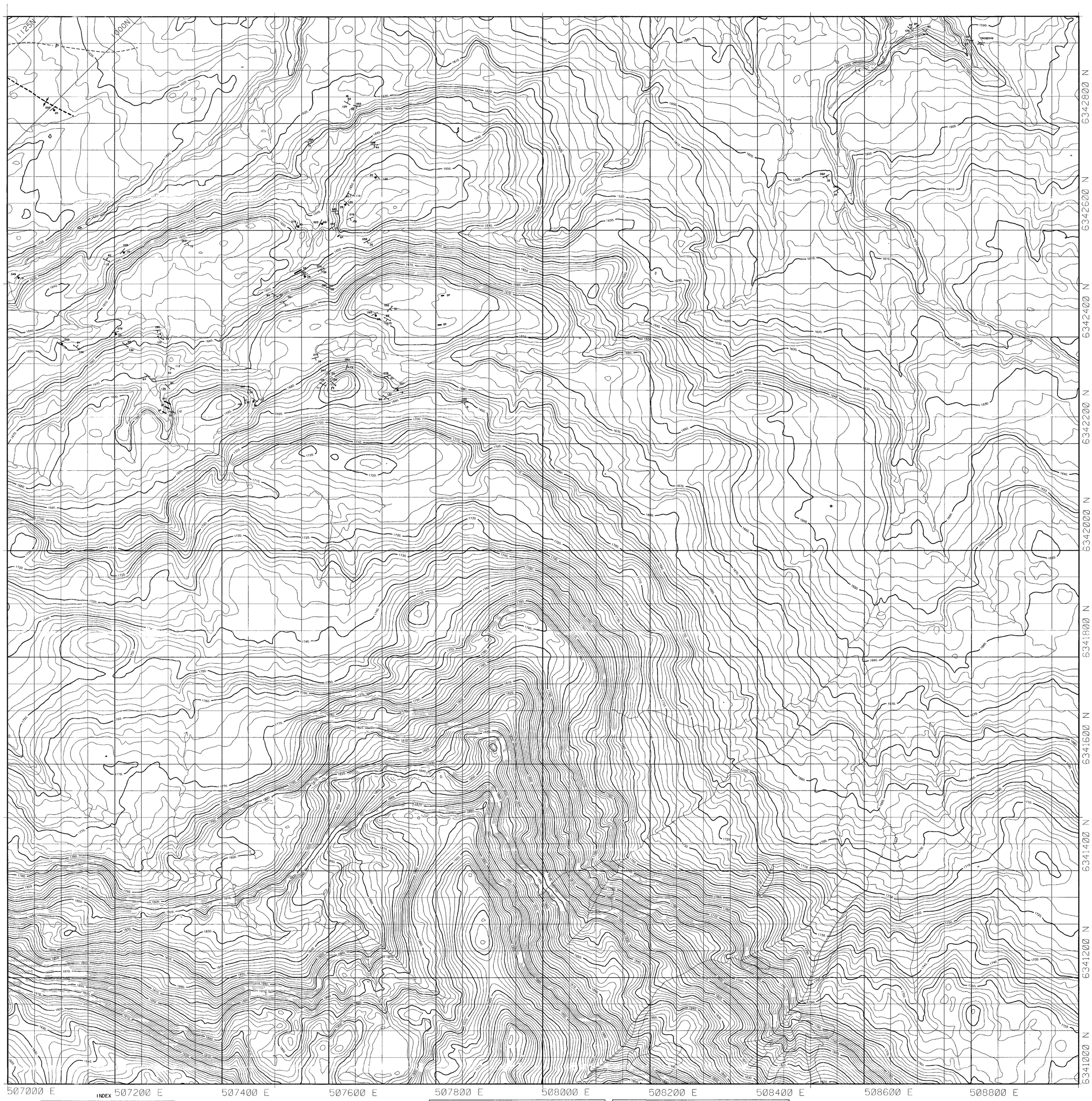
GULF CANADA CORPORATION — KLAP:I2050571851083006.MAP

MT. KLAPPAN COAL PROPERTY

MAP AREA D-6

DRAWING NO. KPNBLLF-23

SCALE: 1:2000 — C.I. = 2m — DATE: OCT. 1986



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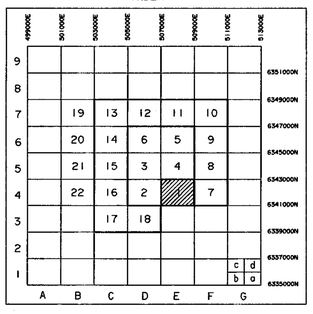

SCALE

0 25 50 100 150 200 250 METRES

LEGEND

- LICENCE BOUNDARY
- GEOLOGICAL BOUNDARY (APPROXIMATE, ASSUMED)
- COAL SEAM (DEFINED, APPROXIMATE, ASSUMED)
- BEDDING (HORIZONTAL, INCLINED, VERTICAL, UPRIGHT, OVERTURNED)
- BEDDING, STRIKE AND DIP
- CLEAVAGE (HORIZONTAL, INCLINED, VERTICAL, SECOND GENERATION)
- JOINT (HORIZONTAL, INCLINED, VERTICAL)
- LINEATION (HORIZONTAL, INCLINED, VERTICAL)
- L; LINEATION, DIRECTION AND PLUNGE
- 045/30 MINOR FOLDS WITH AXIAL ATTITUDE
- ANTICLINE (DEFINED, APPROXIMATE, OVERTURNED)
- SYNCLINE (DEFINED, APPROXIMATE, OVERTURNED)
- ANTICLINE, SYNCLINE (ARROW INDICATES PLUNGE DIRECTION)
- THRUST FAULT (DEFINED, ASSUMED, TEETH ON UPTHRUST SIDE)
- NORMAL FAULT (DEFINED, ASSUMED, WITH DOT ON DOWNTHROWN SIDE)
- 090/80 FAULT (SHOWING RELATIVE MOVEMENT AND ATTITUDE)
- TRENCH (SHOWING COAL-CENTRED BAR WHERE KNOWN)
- SP/X COAL SPOIL (WITH SEAM DESIGNATION WHERE KNOWN)
- OUTCROP AREA, OUTCROP, PROBABLE OUTCROP, FLOAT
- GLACIAL STRIAE (DIRECTION OF GLACIAL MOVEMENT KNOWN, UNKNOWN)
- DDH, RDH DIAMOND, ROTARY DRILL HOLE (WITH SURFACE PROJECTION)
- MEASURED SECTION
- CROSS SECTION LINE (MINING GRID)
- FOSSIL LOCATION (WITH CATALOGUE NUMBER)
- SURVEY STATION, SURVEY CAIRN
- SWAMP
- MARKER HORIZON
- SEVERELY DEFORMED, SHEARED

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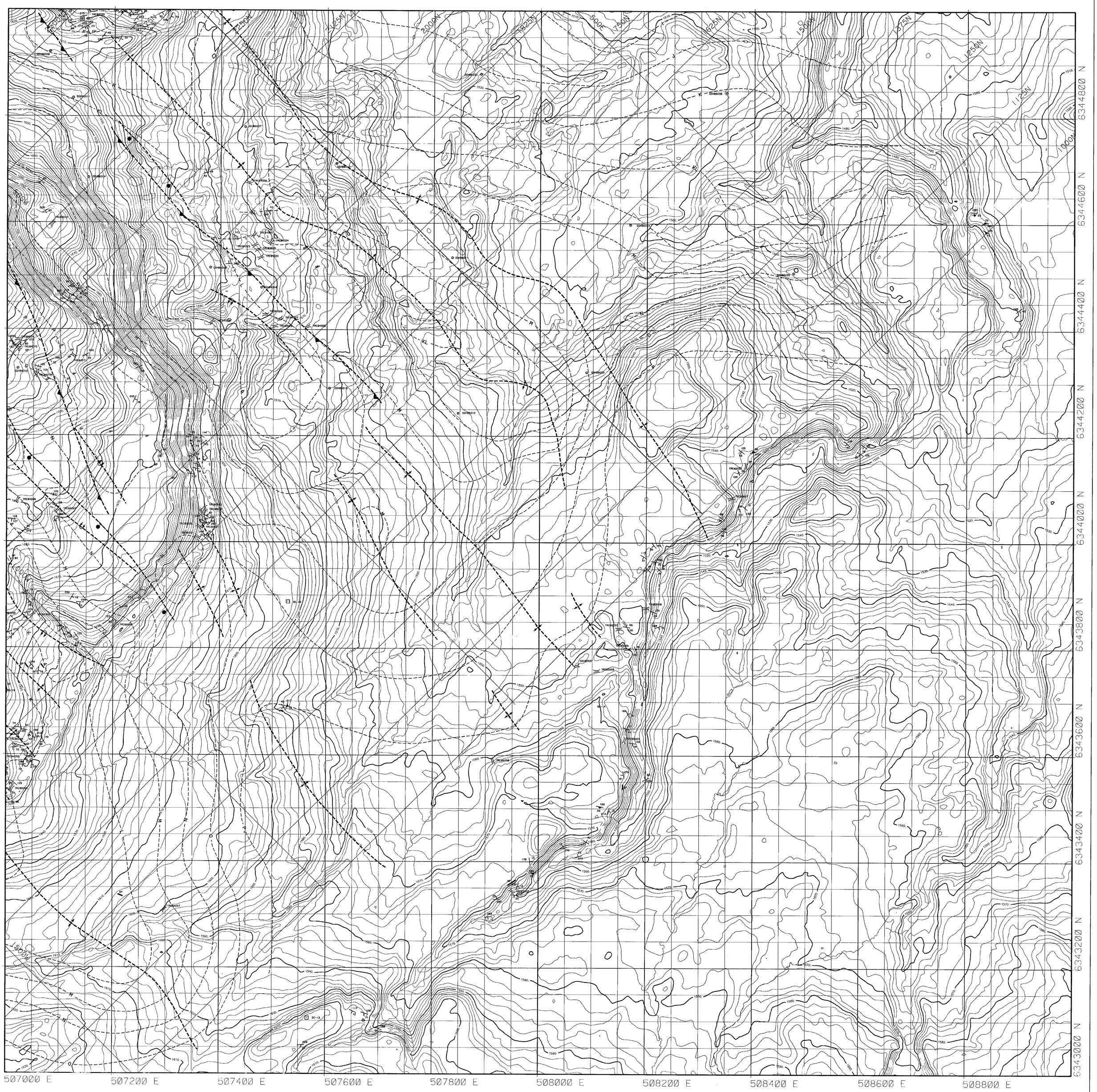
GULF CANADA CORPORATION KLAP:[205057]851083001.MAP

MT. KLAPPAN COAL PROPERTY

MAP AREA E-4

DRAWING NO. NONBLE-24

SCALE: 1:2000 C.I. = 2m DATE: JULY 1986



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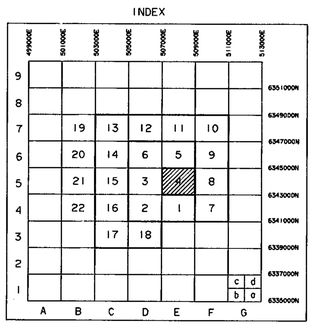

SCALE

0 25 50 100 150 200 250 METRES

LEGEND

- LICENCE BOUNDARY
- GEOLOGICAL BOUNDARY (APPROXIMATE, ASSUMED)
- COAL SEAM (DEFINED, APPROXIMATE, ASSUMED)
- BEDDING (HORIZONTAL, INCLINED, VERTICAL, UPRIGHT, OVERTURNED)
- BEDDING, STRIKE AND DIP
- CLEAVAGE (HORIZONTAL, INCLINED, VERTICAL, SECOND GENERATION)
- JOINT (HORIZONTAL, INCLINED, VERTICAL)
- LINEATION (HORIZONTAL, INCLINED, VERTICAL)
- L_1 045/30 — L_1 LINEATION, DIRECTION AND PLUNGE
- 045/30 — MINOR FOLDS WITH AXIAL ATTITUDE
- ANTICLINE (DEFINED, APPROXIMATE, OVERTURNED)
- SYNCLINE (DEFINED, APPROXIMATE, OVERTURNED)
- ANTICLINE, SYNCLINE (ARROW INDICATES PLUNGE DIRECTION)

- THRUST FAULT (DEFINED, ASSUMED, TEETH ON UPTHRUST SIDE)
- NORMAL FAULT (DEFINED, ASSUMED, WITH DOT ON DOWNTHROWN SIDE)
- 090/80 — FAULT (SHOWING RELATIVE MOVEMENT AND ATTITUDE)
- TRC 86001 — TRENCH (SHOWING COAL-CENTRED BAR WHERE KNOWN)
- SP/K — COAL SPOIL (WITH SEAM DESIGNATION WHERE KNOWN)
- OUTCROP AREA, OUTCROP, PROBABLE OUTCROP, FLOAT
- 045 — GLACIAL STRIAE (DIRECTION OF GLACIAL MOVEMENT KNOWN, UNKNOWN)
- DDH, RDH — DIAMOND, ROTARY DRILL HOLE (WITH SURFACE PROJECTION)
- CTC 86001 — MEASURED SECTION
- 3000 N — CROSS SECTION LINE (MINING GRID)
- F86001 — FOSSIL LOCATION (WITH CATALOGUE NUMBER)
- ALB-1, SC-1 — SURVEY STATION, SURVEY CAIRN
- SWAMP
- MARKER HORIZON
- SEVERELY DEFORMED, SHEARED

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GULF CANADA CORPORATION — KLAP:12050571851083004.MAP

MT. KLAPPAN COAL PROPERTY

MAP AREA E-5

DRAWING NO. KPNBLLE-25

SCALE: 1:2000 — C.I. = 2m — DATE: OCT. 1986