

**OPEN FILE**

GULF CANADA RESOURCES INC.

COAL DIVISION

GOODRICH GEOLOGICAL REPORT

1981

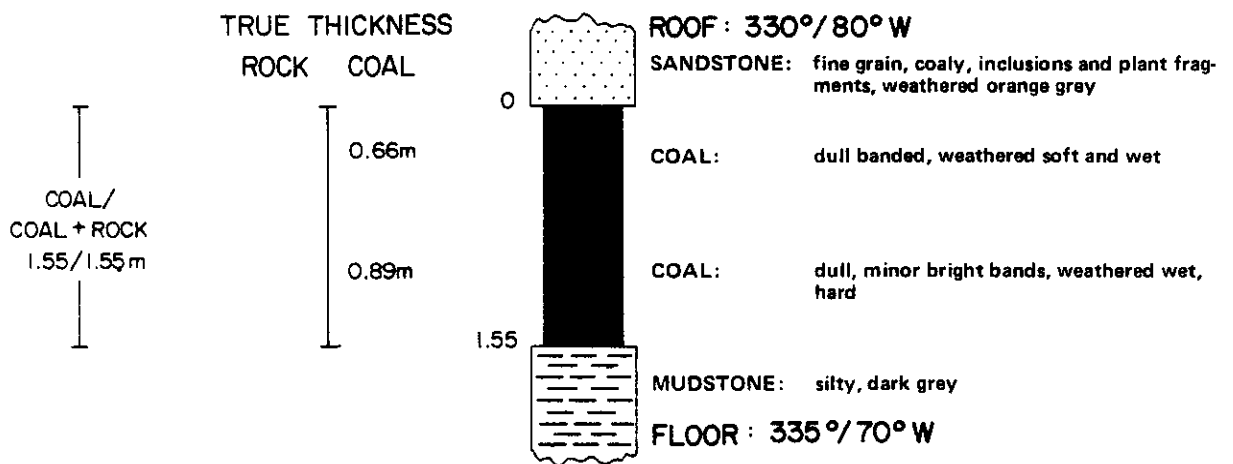
APPENDIX D

COAL TRENCH LOGS

# COAL SEAM TRENCH LOGS

## Table of Contents

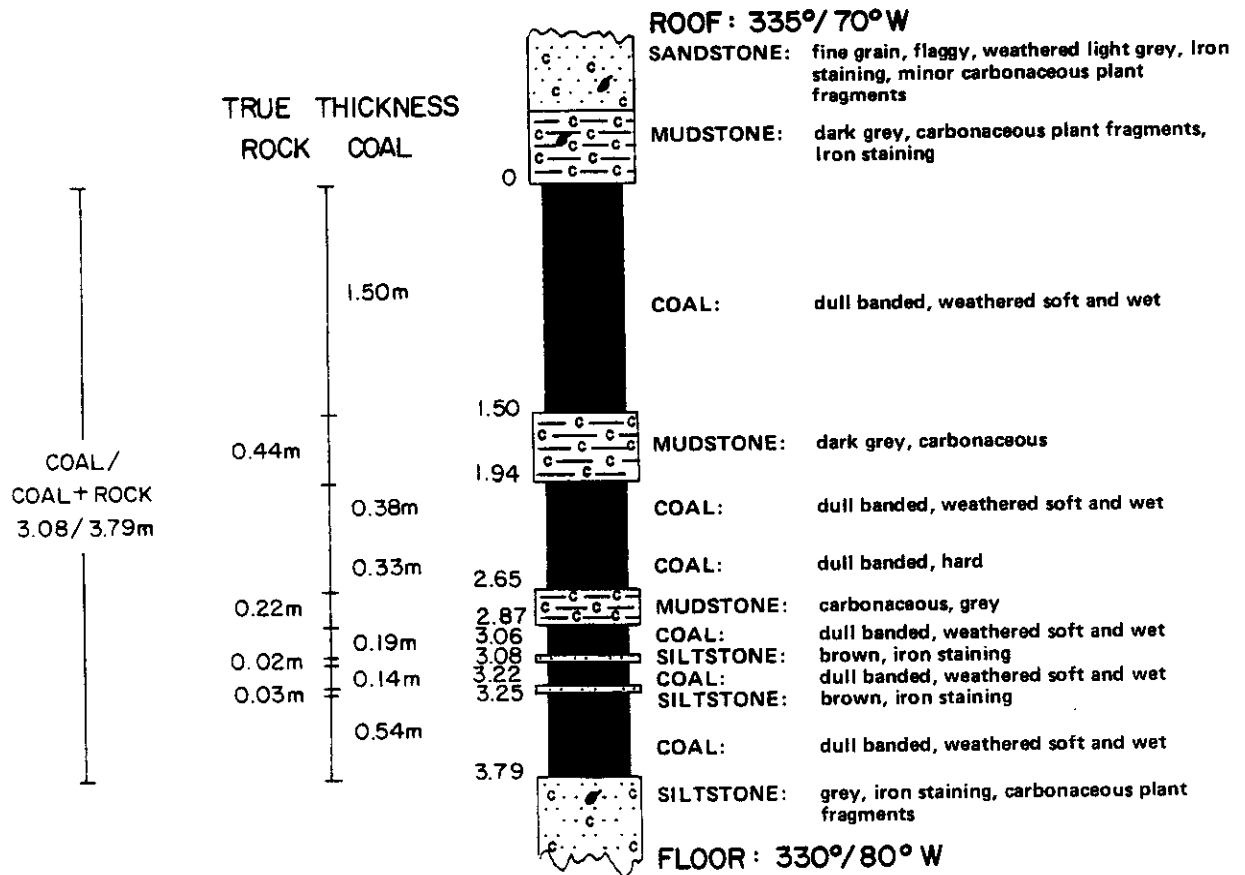
<u>Section</u>	<u>Abbreviation</u>	<u>Area</u>
1	WR	White Rabbit Block
2	GNPL	Goodrich Central Block (formerly Goodrich North Block) Power Line
3	GNN	Goodrich Central Block (formerly Goodrich North Block)
4	MB	Moberly Block
5	BCET	Beaudette Creek East Area (Goodrich Central Block)
6	BCWT	Beaudette Creek West Area (Goodrich Central Block)
7	MSE	Mount Stephenson Area (Goodrich-Lossan Block)
8	LB	Goodrich-Lossan Block
9	BCN	Brazion Creek North Block
10	BC	Brazion Creek Area
11	HCW	Hassler Creek West Area
12	CRT	Canfor Road
13	GDE	Goodrich East Block
14	MGN	Mount Gilliland North Area (Goodrich South Block)
15	GCT	Mt. Goodrich Cirque (Goodrich South Block)
16	GPS	Goodrich Peak South
17	NBRT	North Burnt River



5810

FORMATION : GETTING  
 UTM COORDINATES : 186 190 N, 515 670 E  
 MAP CARD NUMBER :  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 0.27 m  
 TRENCH WIDTH : 0.5 m  
 TRENCH LENGTH : 4.5 m  
 TRENCH BEARING : 050°  
 TRENCH SLOPE : 10°

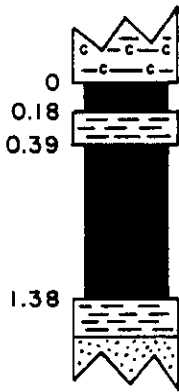
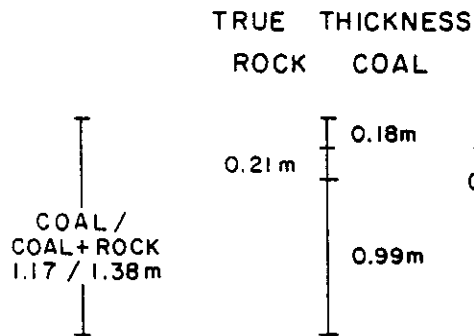
<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>WR-81-601</b>		
DRAWN BY: W. MASTWIJK		SCALE: 1:50
LOGGED BY: V. TAPLEY		DATE: OCT./81
APPROVED BY: H. ZSCHACH		



5810

FORMATION : GETTING  
 UTM COORDINATES : 186 220 N, 515 655 E  
 MAP CARD NUMBER :  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 0.16 m  
 TRENCH WIDTH : 0.5 m  
 TRENCH LENGTH : 3.7 m  
 TRENCH BEARING : 050 °  
 TRENCH SLOPE : Horizontal

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>WR - 81 - G02</b>		
DRAWN BY: <b>W. MASTWIJK</b>	SCALE: 1:50	
LOGGED BY: <b>V. TAPLEY</b>	DATE: <b>OCT./81</b>	
APPROVED BY: <b>H. ZSCHACH</b>		



ROOF: 325°/70° E

SANDSTONE: fine grain, flaggy, carbonaceous plant fragments, Iron staining

COAL: dull, weathered soft and wet

CLAYSTONE: weathered orangey-brown

COAL: dull, weathered soft and wet

MUDSTONE: carbonaceous, dark grey

SANDSTONE: fine grain, iron staining, brown in color

FLOOR: 335°/70° E

FORMATION :GETHING

UTM COORDINATES :186 195 N, 515 645 E

MAP CARD NUMBER :

AIR PHOTO NUMBER :

TRENCH DEPTH :0.20 m

TRENCH WIDTH :0.5 m

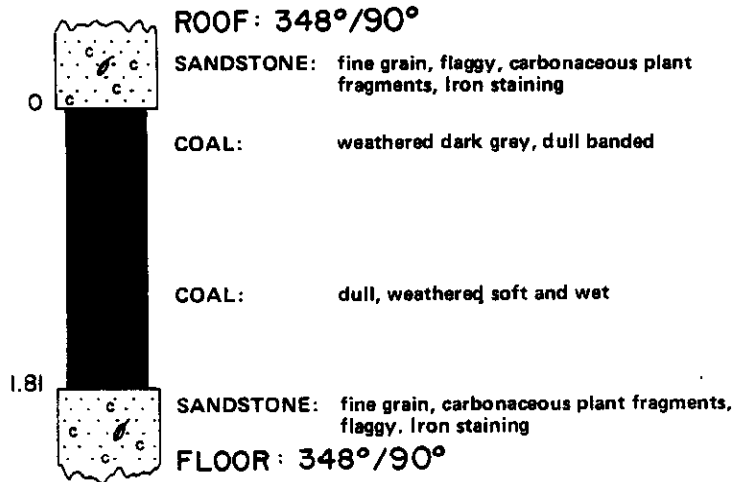
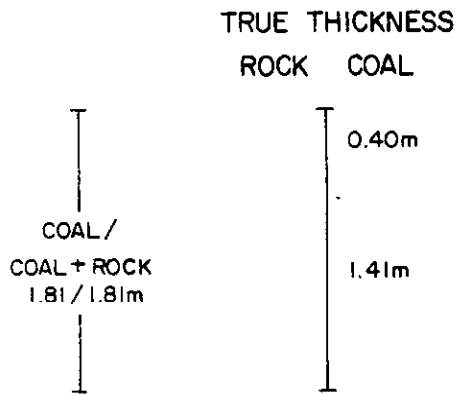
TRENCH LENGTH :1.5 m

TRENCH BEARING :050°

TRENCH SLOPE :Horizontal

5810

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>WR - 81 - G03</b>		
DRAWN BY: M. ANDERSON		SCALE 1:50
LOGGED BY: V. TAPLEY		DATE OCT. /81
APPROVED BY: ZSCHACH		



5811

FORMATION : GETTING

UTM COORDINATES : 186 200 N, 515 570 E

MAP CARD NUMBER :

AIR PHOTO NUMBER :

TRENCH DEPTH : 0.23 m

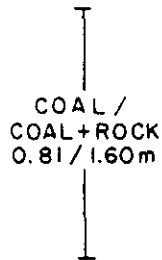
TRENCH WIDTH : 0.50 m

TRENCH LENGTH : 2.40 m

TRENCH BEARING : 067 °

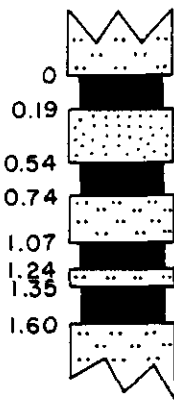
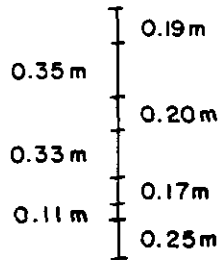
TRENCH SLOPE : Horizontal

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>WR - 81 - G04</b>		
DRAWN BY: W. MASTWIJK	SCALE	1 : 50
LOGGED BY: V. TAPLEY	DATE	OCT. / 81
APPROVED BY: H. ZSCHACH		



TRUE THICKNESS

ROCK COAL



ROOF: 335°/75°W

- SILTSTONE: dark grey, iron staining, carbonaceous plant fragments
- COAL: dull, hard, weathered wet
- SANDSTONE: weathered orange, grey carbonaceous plant fragments, beds from 1-10 cm
- COAL: dull banded, weathered soft and wet
- SILTSTONE: weathered light grey, iron staining, carbonaceous plant fragments
- COAL: dull banded, weathered soft and wet
- SILTSTONE: weathered light grey, iron staining, carbonaceous plant fragments
- COAL: dull banded
- SILTSTONE: weathered light grey, iron staining, carbonaceous plant fragments

FLOOR: 335°/75°W

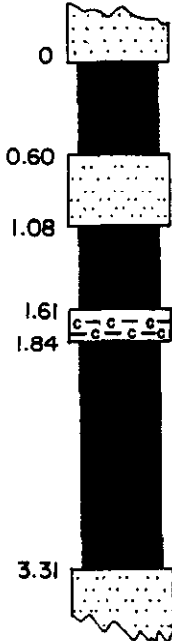
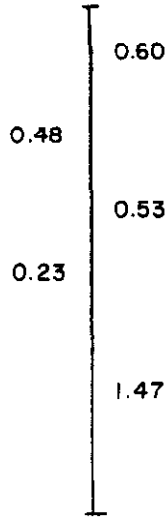
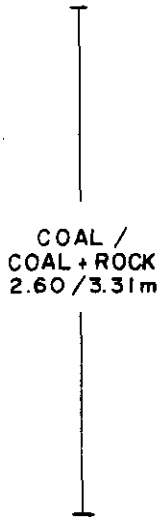
FORMATION :GETHING  
 UTM COORDINATES :186 335 N, 515 405 E  
 MAP CARD NUMBER :  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH :0.19 m  
 TRENCH WIDTH :0.5 m  
 TRENCH LENGTH :2.0 m  
 TRENCH BEARING :070°  
 TRENCH SLOPE :0°

5810

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>WR - 81 - G05</b>		
DRAWN BY: M. ANDERSON		SCALE 1:30
LOGGED BY: V. TAPLEY		DATE OCT. /81
APPROVED BY: H. ZSCHACH		

TRUE THICKNESS  
ROCK COAL

ROOF: 335° / 75° W



SANDSTONE: fine grain, light grey  
COAL: dull, weathered soft and wet  
SILTSTONE: weathered orange brown  
COAL: dull, bright, soft and wet  
MUDSTONE: iron staining, dark grey carbonaceous  
COAL: dull, bright, dull, wet, iron staining on cleats  
SILTSTONE: light grey, weathered orange

FLOOR: 335° / 75° W

FORMATION :GETHING  
UTM COORDINATES :186 350 N, 515 355 E  
MAP CARD NUMBER :  
AIR PHOTO NUMBER :  
TRENCH DEPTH :0.5 m  
TRENCH WIDTH :0.5 m  
TRENCH LENGTH :3.0 m  
TRENCH BEARING :040°  
TRENCH SLOPE :0°

5811

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>WR - 81 - G06</b>		
DRAWN BY: <b>A. BAILLIE</b>		SCALE: 1: 50
LOGGED BY: <b>V. TAPLEY</b>		DATE: <b>OCT. / 81</b>
APPROVED BY: <b>H. ZSCHACH</b>		



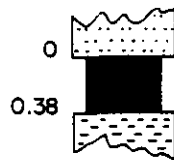
COAL /  
COAL + ROCK

TRUE THICKNESS

ROCK COAL

0.38 / 0.38 m

0.38 m



ROOF: 330° / 60°W

SILTSTONE: weathered, orange brown


COAL: dull, soft, powdery

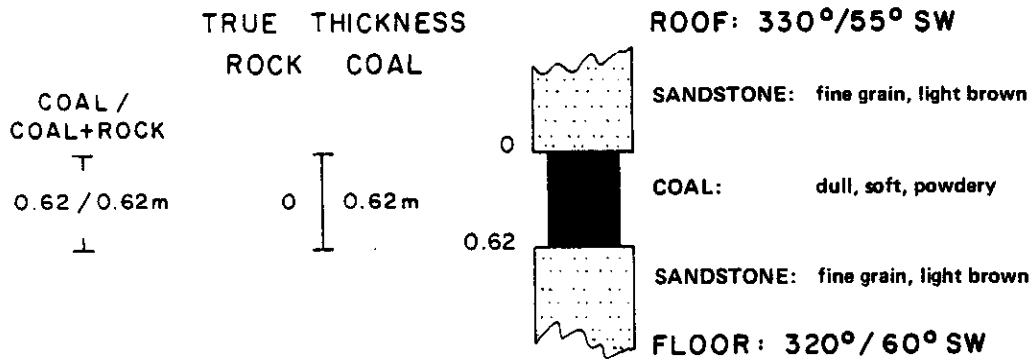
MUDSTONE: dark grey, carbonaceous

FLOOR: 330° / 60°W


FORMATION : BRENOT  
 UTM COORDINATES : 187 035 N, 513 285 E  
 MAP CARD NUMBER :  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 0.5 m  
 TRENCH WIDTH : 0.5 m  
 TRENCH LENGTH : 2.0 m  
 TRENCH BEARING : 060°  
 TRENCH SLOPE : 0°

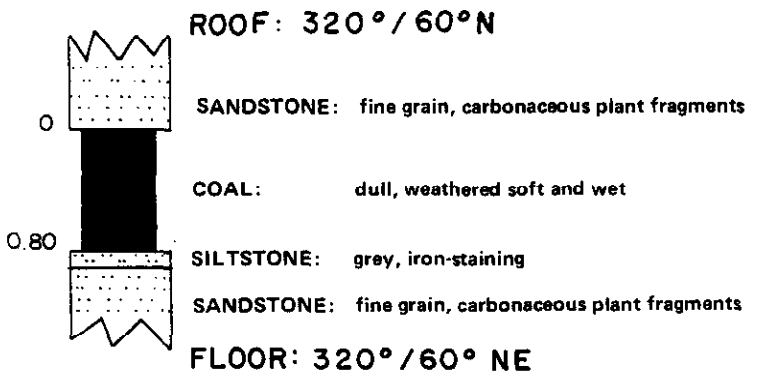
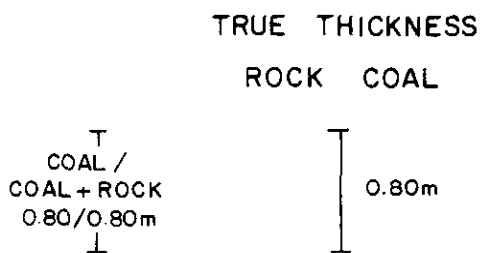
5821

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>WR - 81 - B07</b>		
DRAWN BY: <b>A. HENCZEL</b>	SCALE: 1:50	
LOGGED BY: <b>V. TAPLEY</b>	DATE: OCT. / 81	
APPROVED BY: <b>H. ZSCHACH</b>		



FORMATION : BRENOT  
 UTM COORDINATES : 187 370 N, 513 420 E  
 MAP CARD NUMBER :  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 1.0 m  
 TRENCH WIDTH : 0.5 m  
 TRENCH LENGTH : 0.2 m  
 TRENCH BEARING : 085°  
 TRENCH SLOPE : 0°

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>WR - 81 - B08</b>		
DRAWN BY: A. HENCZEL		SCALE 1: 50
LOGGED BY: V. TAPLEY		DATE OCT. / 81
APPROVED BY: H. ZSCHACH		



FORMATION : BRENOT

UTM COORDINATES : 187 470 N, 513 490 E

MAP CARD NUMBER :

AIR PHOTO NUMBER :

TRENCH DEPTH : 0.5 m

TRENCH WIDTH : 0.75 m

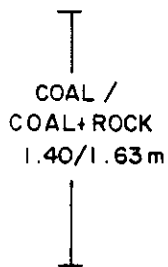
TRENCH LENGTH : 0.2 m

TRENCH BEARING : 040°

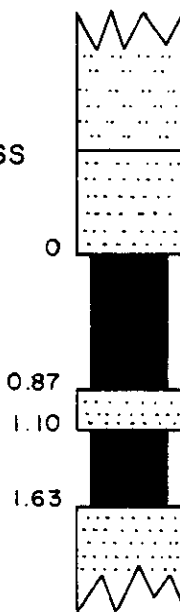
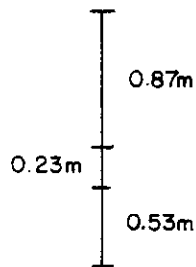
TRENCH SLOPE : 0°

5813

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>WR - 81 - B09</b>		
DRAWN BY: C. BARNES	SCALE	1:50
LOGGED BY: V. TAPLEY	DATE	OCT. /81
APPROVED BY: H. ZSCHACH		



TRUE THICKNESS  
ROCK COAL



ROOF : 330° / 60° N

SANDSTONE: fine grain, weathered orangy-brown

SILTSTONE: carbonaceous plant fragments

COAL: dull, weathered soft and wet

SILTSTONE: grey, carbonaceous plant fragments, Fe-staining

COAL: dull, weathered orangy brown

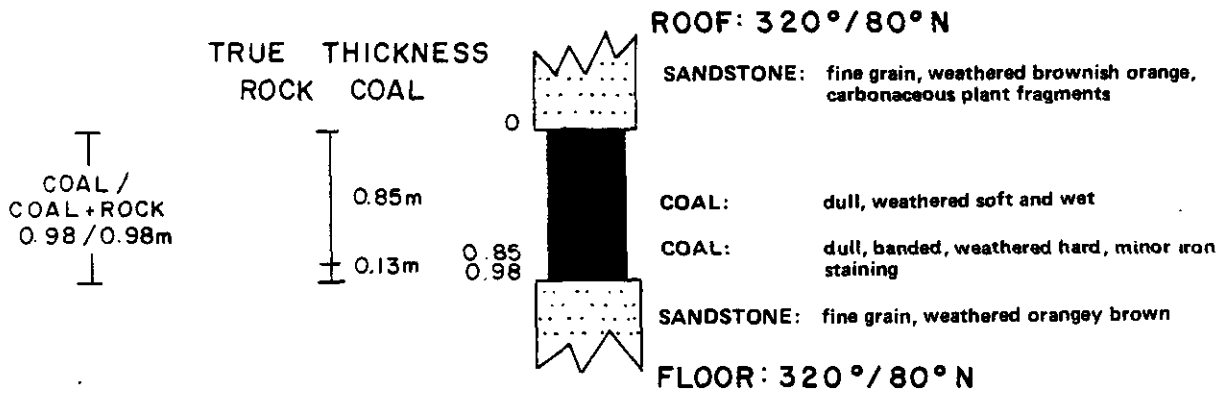
SANDSTONE: fine grain, weathered orangy brown, carbonaceous plant fragments

FLOOR : 330° / 60° N

5813


FORMATION : BRENOT  
 UTM COORDINATES : 187 515 N, 513 500 E  
 MAP CARD NUMBER :  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 0.5 m  
 TRENCH WIDTH : 0.5 m  
 TRENCH LENGTH : 1.5 m  
 TRENCH BEARING : 058°  
 TRENCH SLOPE : 0°

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>WR - 81 - B 10</b>		
DRAWN BY: C. BARNES		SCALE: 1:50
LOGGED BY: V. TAPLEY		DATE: OCT. / 81
APPROVED BY: H. ZSCHACH		



FORMATION : BRENOT  
 UTM COORDINATES : 187 640 N, 513 550 E  
 MAP CARD NUMBER :  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 0.60m  
 TRENCH WIDTH : 0.60m  
 TRENCH LENGTH : 1.60m  
 TRENCH BEARING : 060°  
 TRENCH SLOPE : 0°

5813

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b> <b>TRENCH LOG</b> <b>WR - 81 - B11</b>		
DRAWN BY: C. BARNES	SCALE: 1:50	
LOGGED BY: V. TAPLEY	DATE: OCT / 81	
APPROVED BY: H. ZSCHACH		

TRUE THICKNESS  
ROCK COAL  
0.30+ m




ROOF: 325°/50°N

SANDSTONE: fine grain, weathered orange brown,  
carbonaceous plant fragments

Note: trench is slumped, cannot dig deep enough  
0.30+ m coal – did not log

FORMATION : DRESSER  
UTM COORDINATES : 187 820 N, 513 650 E  
MAP CARD NUMBER :  
AIR PHOTO NUMBER :  
TRENCH DEPTH : 1.0 m  
TRENCH WIDTH : 0.75 m  
TRENCH LENGTH : 2.5 m  
TRENCH BEARING : 050°  
TRENCH SLOPE : 5°

5813

<b>GULF CANADA RESOURCES INC.</b> Coal Division		
CALGARY	ALBERTA	
<b>GOODRICH COAL PROJECT</b> <b>TRENCH LOG</b> <b>WR - 81 - D12</b>		
DRAWN BY: C. BARNES		SCALE: 1:50
LOGGED BY: V. TAPLEY		DATE: OCT./81
APPROVED BY: H. ZSCHACH		

COAL/  
COAL+ROCK  
0.66/0.66m

TRUE THICKNESS  
ROCK COAL

0.66m



ROOF: 325°/65° NE

SANDSTONE: fine grain, weathered orange brown,  
carbonaceous plant fragments


COAL: dull, soft and wet

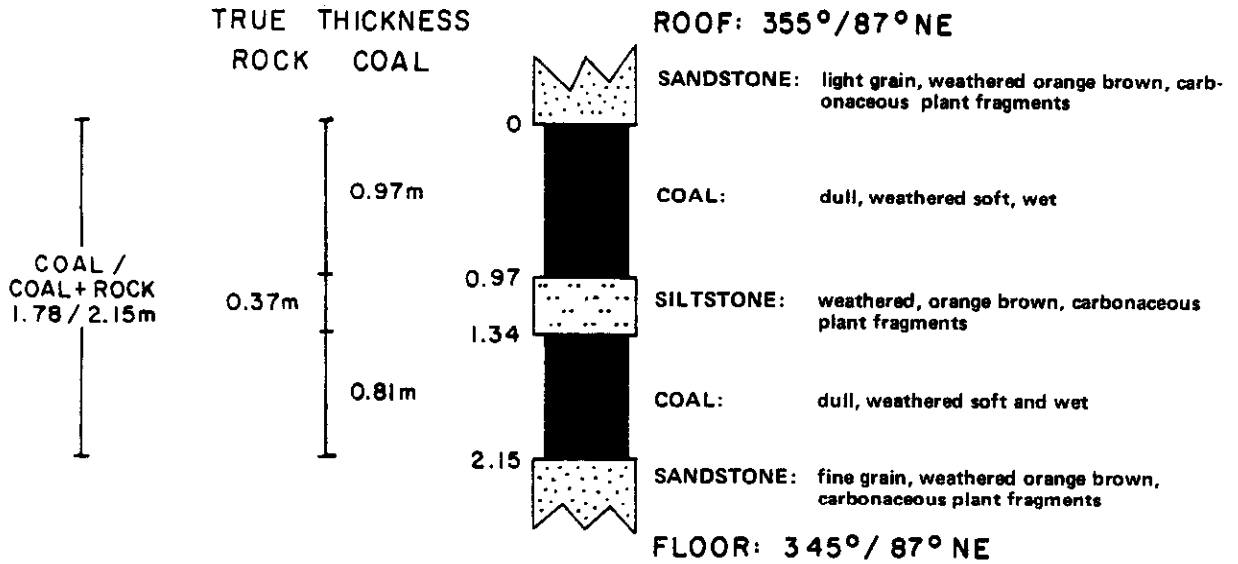
SANDSTONE: fine grained, weathered orange brown,  
carbonaceous plant fragments

FLOOR: 325°/65° NE

FORMATION : DRESSER  
UTM COORDINATES : 187 910 N, 513 680 E  
MAP CARD NUMBER :  
AIR PHOTO NUMBER :  
TRENCH DEPTH : 0.5 m  
TRENCH WIDTH : 0.5 m  
TRENCH LENGTH : 1.5 m  
TRENCH BEARING : 235°  
TRENCH SLOPE : 0°

5813

<b>GULF CANADA RESOURCES INC.</b>		
Coal Division		
CALGARY	ALBERTA	
<b>GOODRICH COAL PROJECT</b> <b>TRENCH LOG</b> <b>WR - 81 - D 13</b>		
DRAWN BY: C. BARNES	SCALE	1: 50
LOGGED BY: V. TAPLEY	DATE	OCT. / 81
APPROVED BY: H. ZSCHACH		



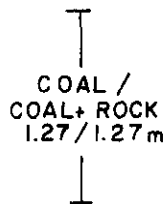
5813

FORMATION :GETHING  
 UTM COORDINATES :187 960 N, 513 710 E  
 MAP CARD NUMBER :  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH :0.50 m  
 TRENCH WIDTH :0.75 m  
 TRENCH LENGTH :2.0 m  
 TRENCH BEARING :080 °  
 TRENCH SLOPE :0°

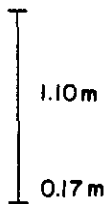
<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>WR - 81 - G14</b>		
DRAWN BY: M. ANDERSON		SCALE 1:50
LOGGED BY: V. TAPLEY		DATE OCT. /81
APPROVED BY: H. ZSCHACH		



**TRUE THICKNESS**



ROCK COAL



**ROOF: 320° / 35° SW**

**SANDSTONE:** quartzitic light grey, carbonaceous plant fragments

**COAL:** dull, weathered soft and wet, minor bright bands throughout


**COAL:** dull, banded, weathered hard

**MUDSTONE:** carbonaceous, weathered light gray

**SILTSTONE:** brown, carbonaceous plant fragments

**FLOOR: 320° / 35° SW**

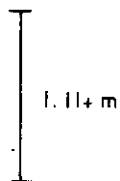
FORMATION : GETHING  
 UTM COORDINATES : 172 570 N, 522 300 E  
 MAP CARD NUMBER :  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 0.70 m  
 TRENCH WIDTH : 0.66 m  
 TRENCH LENGTH : 1.75 m  
 TRENCH BEARING : 046 °  
 TRENCH SLOPE : 0°

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>WR - 81 - G15</b>		
DRAWN BY: <b>A. BAILLIE</b>	SCALE: <b>1:50</b>	
LOGGED BY: <b>V. TAPLEY</b>	DATE: <b>OCT. / 81</b>	
APPROVED BY: <b>H. ZSCHACH</b>		

TRUE THICKNESS  
ROCK COAL

ROOF: 330° / 60° SW

T  
COAL /  
COAL + ROCK  
1.11 / 1.11 + m  
⊥



SANDSTONE: light grey, carbonaceous plant fragments,  
fine grained

COAL: dull banded, weathered soft

Trench too deep. Floor not found.

FORMATION :GETHING  
UTM COORDINATES :172 490 N, 522 350 E  
MAP CARD NUMBER :  
AIR PHOTO NUMBER :  
TRENCH DEPTH :1.0 m  
TRENCH WIDTH :0.75 m  
TRENCH LENGTH :2.0 m  
TRENCH BEARING :060°  
TRENCH SLOPE :10°

GULF CANADA RESOURCES INC.

CALGARY

Coal Division

ALBERTA



GOODRICH COAL PROJECT  
TRENCH LOG

WR - 81 - G16

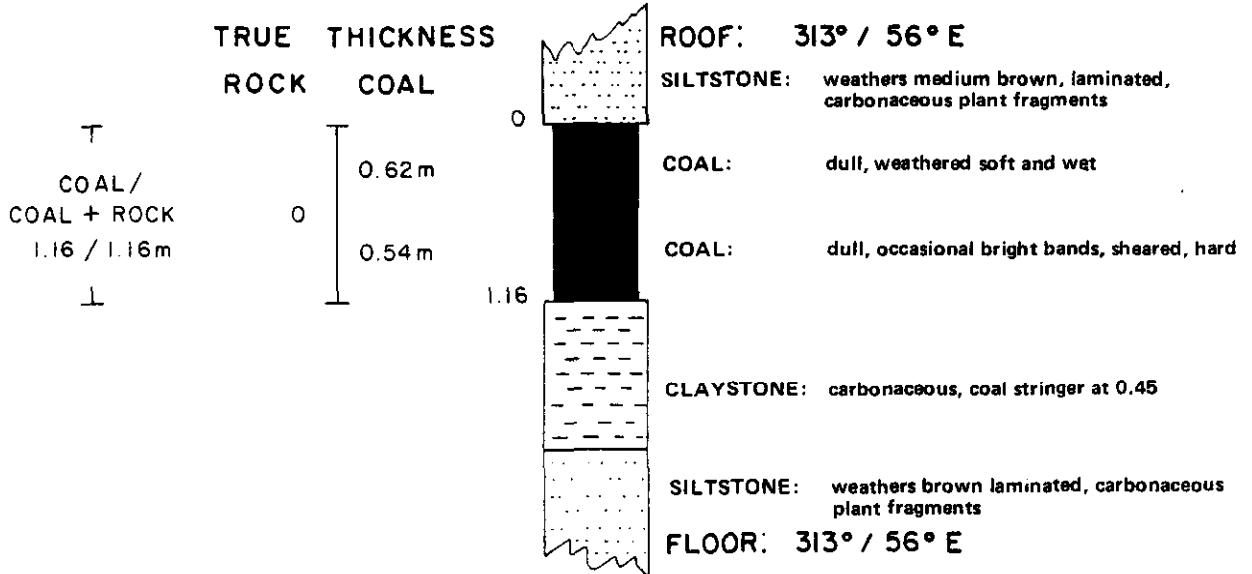
DRAWN BY: A. HENCZEL

SCALE 1:50

LOGGED BY: V. TAPLEY

DATE OCT. / 81

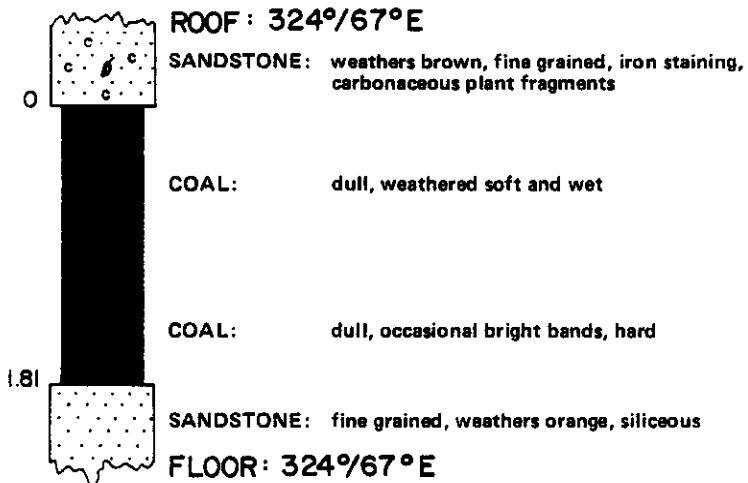
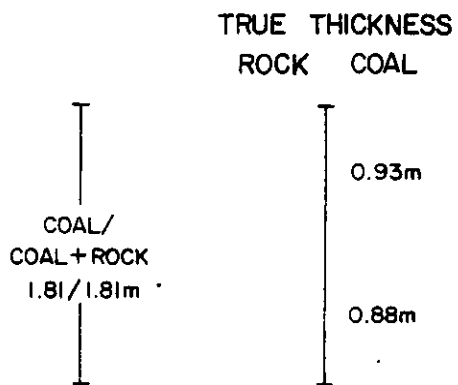
APPROVED BY: H. ZSCHACH



5817

FORMATION : DRESSER  
 UTM COORDINATES : 177 295 N, 518 160 E  
 MAP CARD NUMBER :  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 0.5 m  
 TRENCH WIDTH : 0.5 m  
 TRENCH LENGTH : 2.7 m  
 TRENCH BEARING : 220°  
 TRENCH SLOPE : 0°

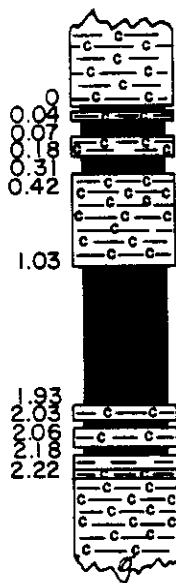
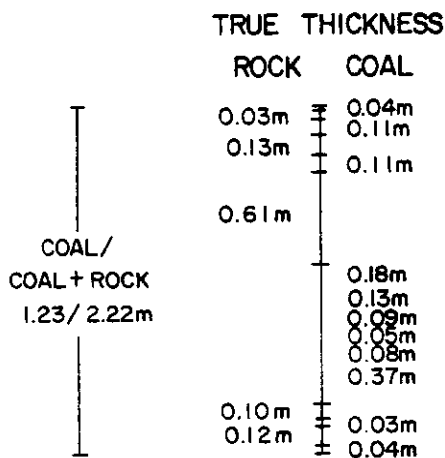
<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>WR - 81 - D17</b>		
DRAWN BY: A. HENCZEL		SCALE: 1:50
LOGGED BY: V. TAPLEY		DATE: OCT. / 81
APPROVED BY: H. ZSCHACH		



5817

FORMATION : DRESSER  
 UTM COORDINATES : 177 255 N, 518 190 E  
 MAP CARD NUMBER :  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 1.0 m  
 TRENCH WIDTH : 0.75 m  
 TRENCH LENGTH : 2.64 m  
 TRENCH BEARING : 208 °  
 TRENCH SLOPE : 0 °

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>WR - 81 - D18</b>		
DRAWN BY: <b>W. MASTWIJK</b>		SCALE: 1 : 50
LOGGED BY: <b>V. TAPLEY</b>		DATE: OCT. / 81
APPROVED BY: <b>H. ZSCHACH</b>		



ROOF : 326° / 84° E

MUDSTONE: carbonaceous, dark grey,  
COAL: dull, weathered hard, highly sheared  
MUDSTONE: dark grey, carbonaceous, sheared  
COAL: dull, sheared, weathered soft and wet  
MUDSTONE: dull, carbonaceous plant fragments  
COAL: dull, weathered hard, highly sheared

MUDSTONE: dark grey, carbonaceous

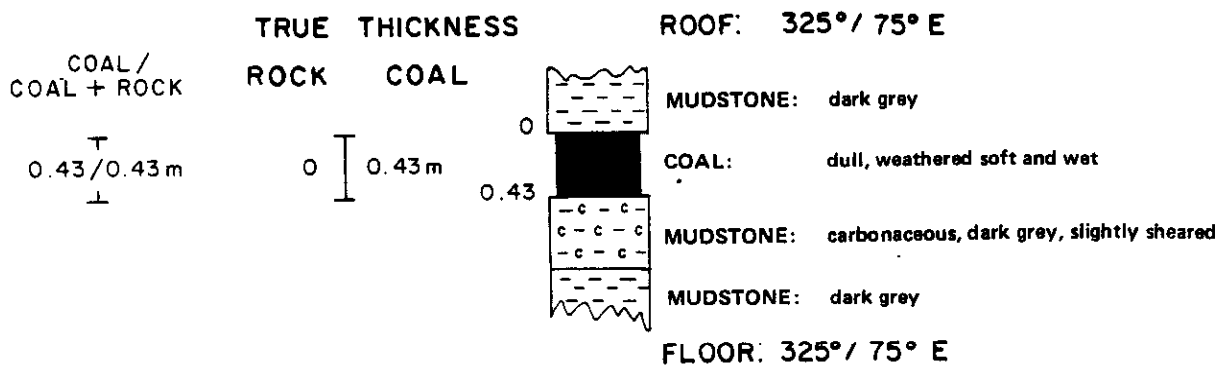
COAL: dull, weathered soft and wet  
COAL: dull banded, weathered hard  
COAL: dull and bright, weathered hard  
COAL: dull, weathered soft and wet  
COAL: dull and bright, weathered hard, oxidized  
COAL: dull banded, weathered soft and wet  
MUDSTONE: dark grey, carbonaceous, coaly inclusions, sheared  
COAL: dull, weathered soft and wet  
MUDSTONE: dark grey carbonaceous, coaly inclusions, sheared  
COAL: dull banded  
MUDSTONE: dark grey  
MUDSTONE: carbonaceous, sheared  
dark grey, carbonaceous plant fragments

FLOOR : 326°/84° E

5817


FORMATION : DRESSER  
UTM COORDINATES : 177 285 N, 518 230 E  
MAP CARD NUMBER :  
AIR PHOTO NUMBER :  
TRENCH DEPTH : 0.5 m  
TRENCH WIDTH : 0.5 m  
TRENCH LENGTH : 2.6 m  
TRENCH BEARING : 220 °  
TRENCH SLOPE : 0°

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>WR - 81 - D19</b>		
DRAWN BY: <b>W. MASTWIJK</b>		SCALE: 1:50
LOGGED BY: <b>V. TAPLEY</b>		DATE: <b>OCT./81</b>
APPROVED BY: <b>H. ZSCHACH</b>		



S817

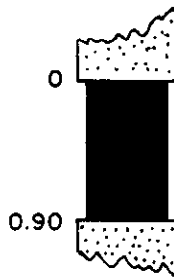
FORMATION : DRESSER  
 UTM COORDINATES : 177 425 N, 518 155 E  
 MAP CARD NUMBER :  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 0.50 m  
 TRENCH WIDTH : 0.60 m  
 TRENCH LENGTH : 2.00 m  
 TRENCH BEARING : 240°  
 TRENCH SLOPE : 0°

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>WR - 81 - D20</b>		
DRAWN BY: A. HENCZEL		SCALE: 1:50
LOGGED BY: F. PEDERSEN		DATE: OCT / 81
APPROVED BY: H. ZSCHACH		

TRUE THICKNESS  
 ROCK COAL

COAL /  
 COAL+ROCK  
 0.90 / 0.90m

0.30m  
 0.14m  
 0.11m  
 0.35m




ROOF : 315° / 70° E

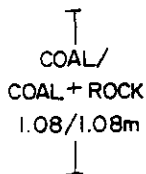
SILTSTONE: weathers brown, iron staining, carbonaceous plant fragments  
 COAL: dull, weathered soft and wet, occasional mudstone partings  
 COAL: dull banded, weathered harder  
 COAL: dull, weathered soft and wet  
 COAL: dull, sheared  
 SILTSTONE: dark grey, carbonaceous plant fragments

FLOOR : 315° / 70° E

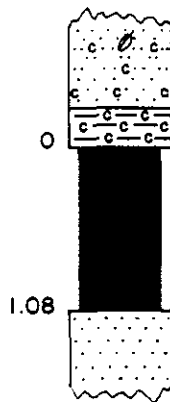
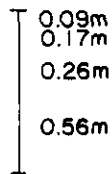
FORMATION : DRESSER  
 UTM COORDINATES : 177 460 N, 518 165 E  
 MAP CARD NUMBER :  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 0.50 m  
 TRENCH WIDTH : 0.50 m  
 TRENCH LENGTH : 1.60 m  
 TRENCH BEARING : 235°  
 TRENCH SLOPE : 0°

5817

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>WR - 81 - D21</b>		
DRAWN BY: <b>A. BAILLIE</b>	SCALE: 1:50	
LOGGED BY: <b>F. PEDERSEN</b>	DATE: OCT/81	
APPROVED BY: <b>H. ZSCHACH</b>		



TRUE THICKNESS  
ROCK COAL



ROOF: 347°/40° E

SILTSTONE: sandstone interbeds, weathered brown, iron staining, carbonaceous plant fragments

MUDSTONE: carbonaceous, dark grey

COAL: dull, weathered soft and wet  
COAL: dull banded, weathered hard and wet  
COAL: dull, bright, hard  
COAL: dull, weathered soft and wet

SANDSTONE: fine grain, iron staining, weathered orange

FLOOR: 347°/40° E

5817

FORMATION : DRESSER  
UTM COORDINATES : 177 530 N, 518 210 E  
MAP CARD NUMBER :  
AIR PHOTO NUMBER :  
TRENCH DEPTH : 1.00m  
TRENCH WIDTH : 0.55 m  
TRENCH LENGTH : 2.10m  
TRENCH BEARING : 270°  
TRENCH SLOPE : 28°

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>WR - 81 - D22</b>		
DRAWN BY: <b>W. MASTWIJK</b>	SCALE: 1:50	
LOGGED BY: <b>F. PEDERSEN</b>	DATE: <b>OCT. / 81</b>	
APPROVED BY: <b>H. ZSCHACH</b>		

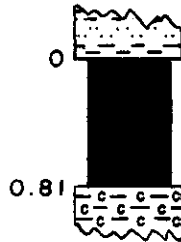


TRUE THICKNESS  
ROCK COAL

ROOF: 344° / 38° E

COAL /  
COAL+ROCK  
0.81 / 0.81m

0.70m  
0.11m



SANDSTONE: interbedded, siltstone  
MUDSTONE: weathered orange brown, carbonaceous  
plant fragments


COAL: dull banded, weathered hard, sheared

COAL: dull, weathered soft and wet

MUDSTONE: dark grey, carbonaceous

FLOOR: 344° / 38° E

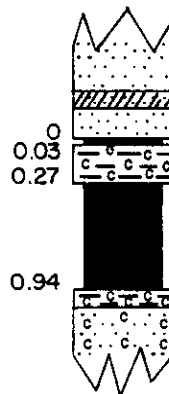
FORMATION : DRESSER  
UTM COORDINATES : 177 555 N, 518 220 E  
MAP CARD NUMBER :  
AIR PHOTO NUMBER :  
TRENCH DEPTH : 0.7 m  
TRENCH WIDTH : 0.6 m  
TRENCH LENGTH : 2.1 m  
TRENCH BEARING : 247 °  
TRENCH SLOPE : 30 °

<b>GULF CANADA RESOURCES INC.</b>		
<small>Coal Division</small>		
<small>CALGARY</small>	<small>ALBERTA</small>	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>WR - 81 - D23</b>		
<small>DRAWN BY:</small> <b>A. BAILLIE</b>	<small>SCALE:</small> 1:50	
<small>LOGGED BY:</small> <b>M. CASSIDY</b>	<small>DATE:</small> <b>OCT. /81</b>	
<small>APPROVED BY:</small> <b>H. ZSCHACH</b>		

COAL/  
COAL+ROCK  
0.70/0.94m

TRUE THICKNESS  
ROCK COAL

0.24m  
0.03m  
0.33m  
0.34m



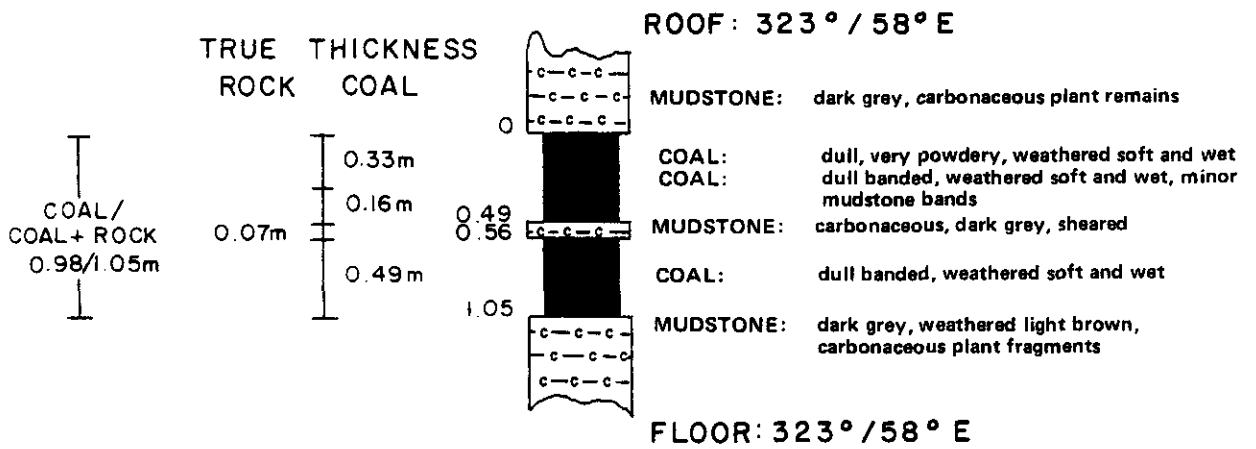
ROOF : 330°/32° SE

- SILTSTONE: fine grain, weathered orange & brown, siliceous
  - IRONSTONE: light brown, very hard, carbonaceous plant fragments
  - SILTSTONE: weathered orange brown, carbonaceous plant fragments
  - COAL: dull, weathered soft and wet
  - MUDSTONE: dark grey, carbonaceous
  - COAL: dull banded, weathered soft and wet
  - COAL: dull banded, hard, sheared
  - MUDSTONE: dark grey, carbonaceous, iron staining, coal inclusions
  - SILTSTONE: weathered orange brown, carbonaceous plant fragments
- FLOOR : 330°/32° SE

FORMATION : DRESSER  
UTM COORDINATES : 177 580 N, 518 200 E  
MAP CARD NUMBER :  
AIR PHOTO NUMBER :  
TRENCH DEPTH : 1.0 m  
TRENCH WIDTH : 0.75m  
TRENCH LENGTH : 2.0 m  
TRENCH BEARING : 260°  
TRENCH SLOPE : 0°


5817

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>WR - 81 - 024</b>		
DRAWN BY: W. MASTWIJK	SCALE	1 : 50
LOGGED BY: V. TAPLEY	DATE	OCT. / 81
APPROVED BY: H. ZSCHACH		



5817

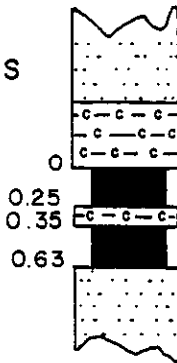
FORMATION : DRESSER  
 UTM COORDINATES : 177 605 N, 518 180 E  
 MAP CARD NUMBER :  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 1.0m  
 TRENCH WIDTH : 0.5m  
 TRENCH LENGTH : 2.2m  
 TRENCH BEARING : 215°  
 TRENCH SLOPE : 0°

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>WR - 81 - D25</b>		
DRAWN BY: C. BARNES	SCALE: 1:50	
LOGGED BY: V. TAPLEY	DATE: OCT. / 81	
APPROVED BY: H. ZSCHACH		

COAL /  
COAL + ROCK  
0.53/0.63m

TRUE THICKNESS  
ROCK COAL

0.10m  
0.25m  
0.53m



ROOF: 323° / 43° SW

SANDSTONE: medium grained, salt and pepper, light grey calcite veining

MUDSTONE: dark grey, carbonaceous, coaly inclusions

COAL: dull, weathered soft and wet

MUDSTONE: dark grey, carbonaceous, coaly inclusions


COAL: dull, weathered soft and wet

SANDSTONE: medium grained, salt and pepper, light grey calcite veining

FLOOR: 323° / 43° SW

5817

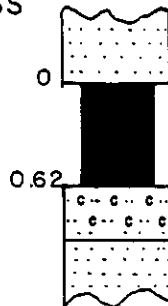
FORMATION : DRESSER  
UTM COORDINATES : 177 630 N, 518 200 E  
MAP CARD NUMBER :  
AIR PHOTO NUMBER :  
TRENCH DEPTH : 0.5 m  
TRENCH WIDTH : 0.5 m  
TRENCH LENGTH : 1.2 m  
TRENCH BEARING : 215°  
TRENCH SLOPE : 10°

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>WR-81-G26</b>		
DRAWN BY: C. BARNES		SCALE: 1:50
LOGGED BY: F. PEDERSEN		DATE: OCT. / 81
APPROVED BY: H. ZSCHACH		

COAL /  
COAL + ROCK  
0.62 / 0.62 m

TRUE THICKNESS  
ROCK COAL

0.62 m



ROOF: 335° / 62° SE

SANDSTONE: medium grained, salt and pepper, orange brown

COAL: dull banded, weathered soft and wet


SILTSTONE: grey, carbonaceous plant fragments

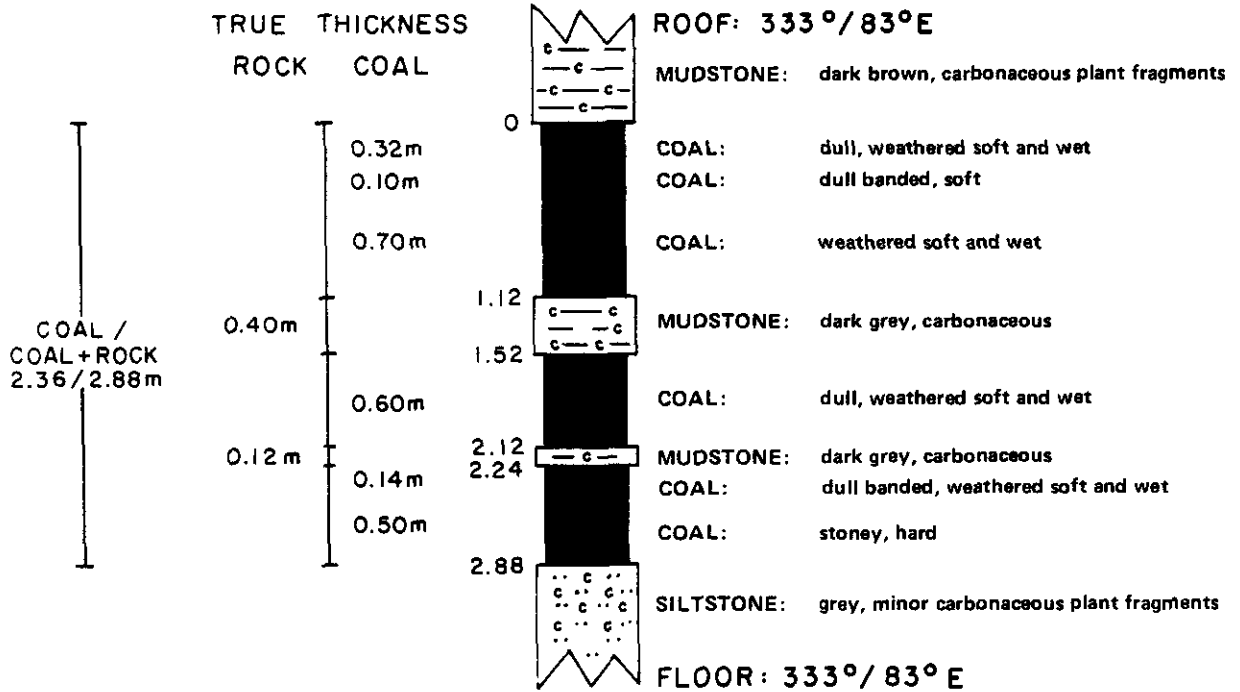
SANDSTONE: weathered orange brown, fine grained, siliceous

FLOOR: 335° / 62° SE

5817

FORMATION : DRESSER  
UTM COORDINATES : 178 060 N, 518 400 E  
MAP CARD NUMBER :  
AIR PHOTO NUMBER :  
TRENCH DEPTH : 0.65 m  
TRENCH WIDTH : 0.7 m  
TRENCH LENGTH : 1.9 m  
TRENCH BEARING : 025  
TRENCH SLOPE :

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>WR - 81 - D27</b>		
DRAWN BY: C. BARNES		SCALE: 1:50
LOGGED BY: V. TAPLEY		DATE: OCT. /81
APPROVED BY: H. ZSCHACH		



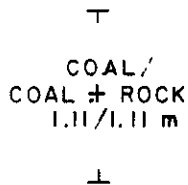
FORMATION : DRESSER  
 UTM COORDINATES : 178 175 N, 518 455 E  
 MAP CARD NUMBER :  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 0.9 m  
 TRENCH WIDTH : 0.6 m  
 TRENCH LENGTH : 2.2 m  
 TRENCH BEARING : 255 °  
 TRENCH SLOPE : 0°

*outside CL*

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>WR - 81 - D28</b>		
DRAWN BY: M. ANDERSON	SCALE: 1:50	
LOGGED BY: F. PEDERSEN	DATE: OCT. /81	
APPROVED BY: H. ZSCHACH		

**TRUE THICKNESS**

**ROCK COAL**



0.63m

0.48m



**ROOF: 325° / 70° SE**

**SILTSTONE:** weathered orange brown, plant fragments

**COAL:** dull banded, weathered soft and wet


**COAL:** dull and bright, slightly harder

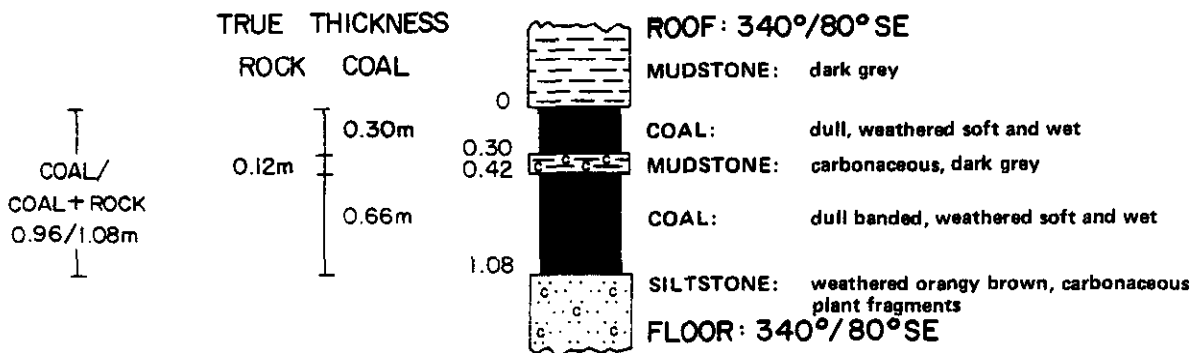
**SANDSTONE:** fine weathered, orange brown, plant fragments

**FLOOR: 325° / 70° SE**

FORMATION : DRESSER  
 UTM COORDINATES : 178 380 N, 518 785 E  
 MAP CARD NUMBER :  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 0.7 m  
 TRENCH WIDTH : 0.6 m  
 TRENCH LENGTH : 1.5 m  
 TRENCH BEARING : 240°  
 TRENCH SLOPE : 0°

*outside CL*

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>WR - 81 - D29</b>		
DRAWN BY: A. HENCZEL		SCALE: 1:50
LOGGED BY: V. TAPLEY		DATE: OCT. / 81
APPROVED BY: H. ZSCHACH		



FORMATION : DRESSER  
 UTM COORDINATES : 178 400 N, 518 800 E  
 MAP CARD NUMBER :  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 0.70 m  
 TRENCH WIDTH : 0.77 m  
 TRENCH LENGTH : 1.90 m  
 TRENCH BEARING : 230 °  
 TRENCH SLOPE : 15 °

*outside CC*

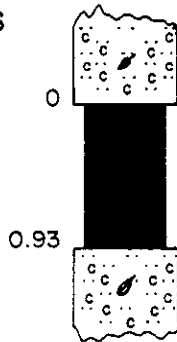
<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>WR-81-D30</b>		
DRAWN BY: W. MASTWIJK		SCALE: 1:50
LOGGED BY: V. TAPLEY		DATE: OCT./81
APPROVED BY: H. ZSCHACH		



TRUE THICKNESS  
ROCK COAL

COAL/  
COAL+ROCK  
0.93/0.93m

0.93m



ROOF: 345°/60° SE

SILTSTONE: carbonaceous plant fragments, weathered orange brown


COAL: dull, minor bright bands, weathered soft and wet

SILTSTONE: carbonaceous plant fragments, weathered orange brown

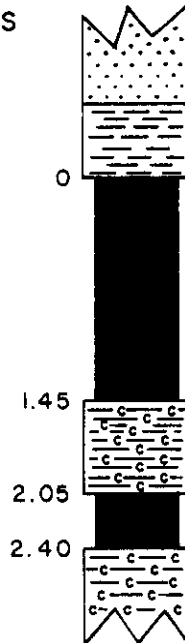
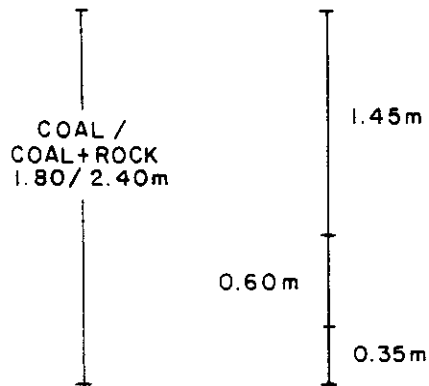
FLOOR: 345°/60° SE

FORMATION : DRESSER  
 UTM COORDINATES : 178 400 N, 518 830 E  
 MAP CARD NUMBER :  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 0.70 m  
 TRENCH WIDTH : 0.70 m  
 TRENCH LENGTH : 1.48 m  
 TRENCH BEARING : 280 °  
 TRENCH SLOPE : 0 °

*outside CL*

<b>GULF CANADA RESOURCES INC.</b> <small>Coal Division</small>		
CALGARY	ALBERTA	
<b>GOODRICH COAL PROJECT</b> <b>TRENCH LOG</b> <b>WR-81-D31</b>		
DRAWN BY: W. MASTWIJK		SCALE: 1:50
LOGGED BY: V. TAPLEY		DATE: OCT./81
APPROVED BY: H. ZSCHACH		

TRUE THICKNESS  
ROCK COAL



ROOF: 305 ° / 80 ° N

SANDSTONE: fine grain, silty, dark grey

MUDSTONE: dark grey

COAL: dull banded, sheared at top  
COAL: bright banded  
COAL: dull banded

COAL: dull banded, very highly sheared

CLAYSTONE: dark grey, slickensides, carb.

COAL: dull banded, very high sheared  
COAL: dull and bright, very highly sheared

CLAYSTONE: carb, dark grey, plant fossils

FLOOR: 315 ° / 80 ° N

FORMATION :GETHING  
UTM COORDINATES :179 195 N, 521 125 E  
MAP CARD NUMBER :  
AIR PHOTO NUMBER :  
TRENCH DEPTH :0.4 m  
TRENCH WIDTH :0.6 m  
TRENCH LENGTH :2.3 m  
TRENCH BEARING :215 °  
TRENCH SLOPE :

GULF CANADA RESOURCES INC.

CALGARY

Coal Division

ALBERTA



GOODRICH COAL PROJECT

TRENCH LOG

WR 81 G 32

DRAWN BY: M. ANDERSON

SCALE 1: 50

LOGGED BY: G. HOFFMAN

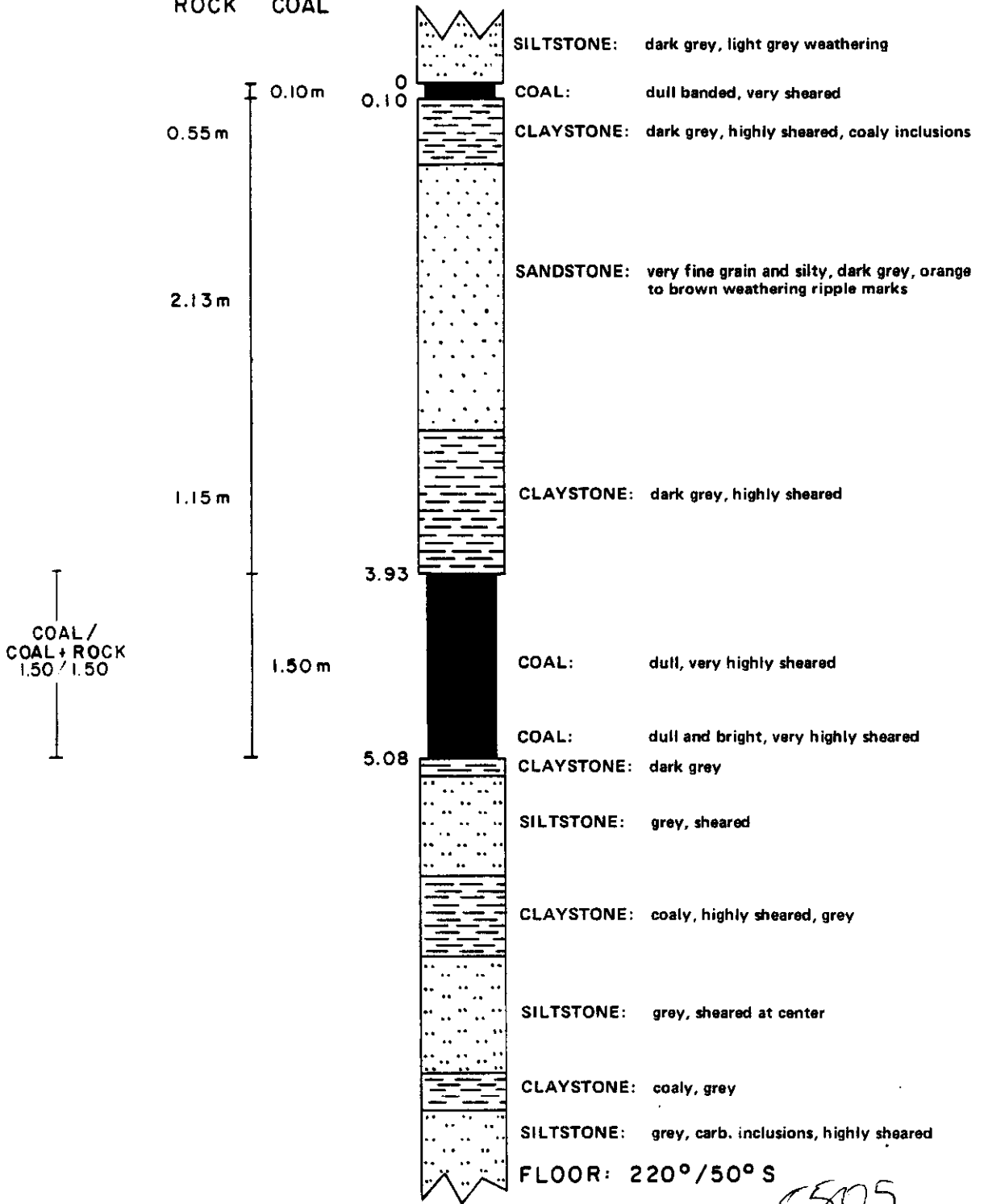
DATE OCT. / 81

APPROVED BY: H. ZSCHACH

5805

TRUE THICKNESS  
ROCK COAL

ROOF: 240°/50°S

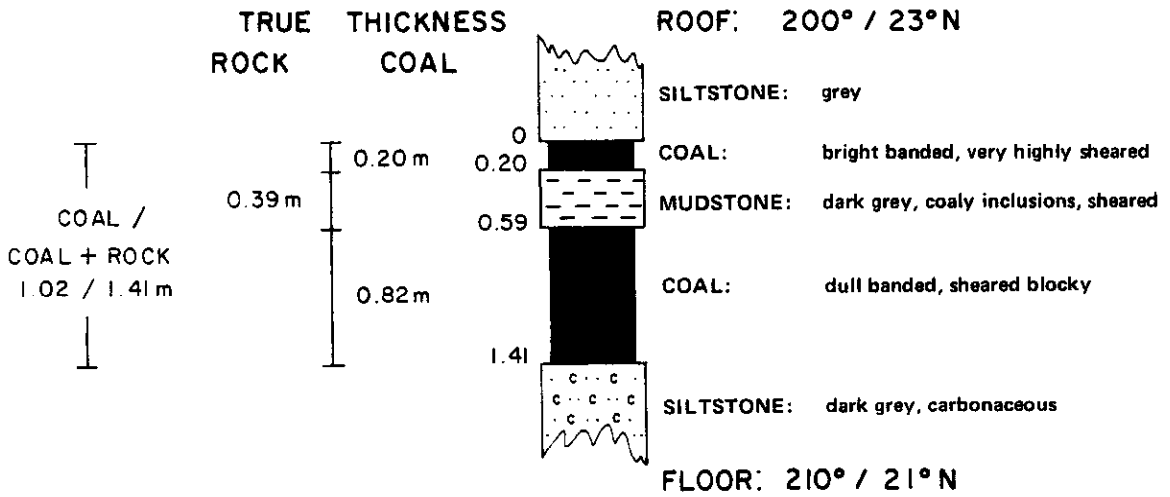


FLOOR: 220°/50°S

5805


FORMATION : GETTING  
 UTM COORDINATES : 179 150 N, 521 100 E  
 MAP CARD NUMBER :  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 0.5 m  
 TRENCH WIDTH : 0.70 m  
 TRENCH LENGTH : 5.50 m  
 TRENCH BEARING :  
 TRENCH SLOPE : 0°

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>WR-81-G 33</b>		
DRAWN BY: M. ANDERSON	SCALE	1: 50
LOGGED BY: G. HOFFMAN	DATE	OCT. / 81
APPROVED BY: H. ZSCHACH		



FORMATION :GETHING  
 UTM COORDINATES :179 105 N, 521 005 E  
 MAP CARD NUMBER :  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH :0.3 m  
 TRENCH WIDTH :0.4 m  
 TRENCH LENGTH :2.6 m  
 TRENCH BEARING :  
 TRENCH SLOPE :0 °

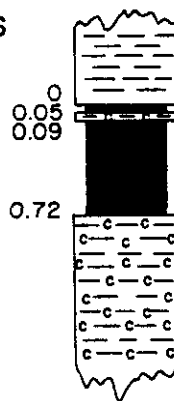
5805

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>WR - 81 - G34</b>		
DRAWN BY: A. HENCZEL	SCALE: 1:50	
LOGGED BY: G. HOFFMAN	DATE: OCT. / 81	
APPROVED BY: H. ZSCHACH		

T  
COAL/  
COAL + ROCK  
0.68/0.72m  
⊥

TRUE THICKNESS  
ROCK COAL

0.04m  
0.05m  
0.17m  
0.05m  
0.06m  
0.35m



ROOF: 309°/31° W

MUDSTONE: dark grey

COAL: dull banded, weathered, soft and wet  
MUDSTONE: dark grey, very carbonaceous, slickensides  
COAL: bright-banded  
COAL: bright, hard  
COAL: dull bright, weathered, soft and wet  
COAL: dull bright, very hard, slightly sheared

MUDSTONE: very carbonaceous with coaly inclusions, grading to a dark grey mudstone. Sheared

FLOOR: 309°/31° W

FORMATION : GE THING  
UTM COORDINATES : 188 310 N, 511 300 E  
MAP CARD NUMBER :  
AIR PHOTO NUMBER : 80027 - 39 (1: 30000)  
TRENCH DEPTH : 0.4 m  
TRENCH WIDTH : 0.4 m  
TRENCH LENGTH : 1.2 m  
TRENCH BEARING : 220 °  
TRENCH SLOPE : 30 °

*outside*  
GULF CANADA RESOURCES INC.

CALGARY Coal Division ALBERTA



GOODRICH COAL PROJECT  
TRENCH LOG

WR - 81 - G 35

DRAWN BY: W. NASTWIJK

SCALE 1: 50

LOGGED BY: F. PEDERSON

DATE OCT./81

APPROVED BY: H. ZSCHACH

↑  
COAL /  
COAL + ROCK  
0.85 / 0.85 m  
↓

TRUE THICKNESS

ROCK COAL

0.16 m  
0.39 m  
0.08 m  
0.04 m  
0.18 m



ROOF: 331° / 70° W

MUDSTONE: dark grey, carbonaceous, coaly inclusions

COAL: bright banded, hard and brittle, weathered

COAL: dull and bright, hard, sheared

COAL: dull and bright, soft and weathered

COAL: bright, soft and weathered


COAL: dull, soft and weathered, wet

SANDSTONE: very fine grain, light brown, laminated

FLOOR: 330° / 70° W

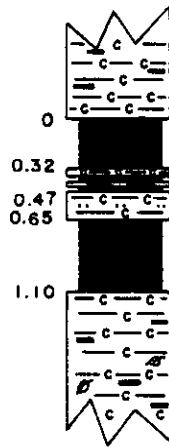
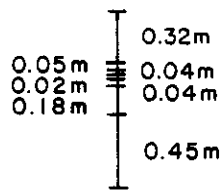
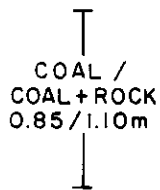
5806

FORMATION : GETTING  
UTM COORDINATES : 179 250 N, 519 300 E  
MAP CARD NUMBER :  
AIR PHOTO NUMBER :  
TRENCH DEPTH : 0.5 m  
TRENCH WIDTH : 0.70 m  
TRENCH LENGTH : 4.0 m  
TRENCH BEARING : 244°  
TRENCH SLOPE : 90°

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>WR-81-G36</b>		
DRAWN BY: <b>A. BAILLIE</b>		SCALE: 1 : 50
LOGGED BY: <b>F. PEDERSEN</b>		DATE: <b>OCT./81</b>
APPROVED BY: <b>H. ZSCHACH</b>		

TRUE THICKNESS

ROCK COAL



ROOF: 334° / 18° W

MUDSTONE: dark grey, carbonaceous, coaly inclusions

COAL: dull, soft and weathered

COAL: bright banded, hard

COAL: bright, hard

MUDSTONE: dark grey

COAL: bright, hard

MUDSTONE: dark grey, carbonaceous

COAL: dull and bright, slightly sheared

MUDSTONE: dark grey, carbonaceous,  
carbonaceous plant fragments, coaly  
inclusions

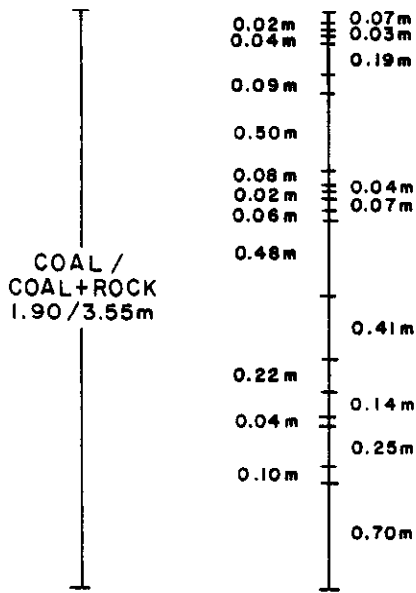
FLOOR: 334° / 18° W.

CL 5827

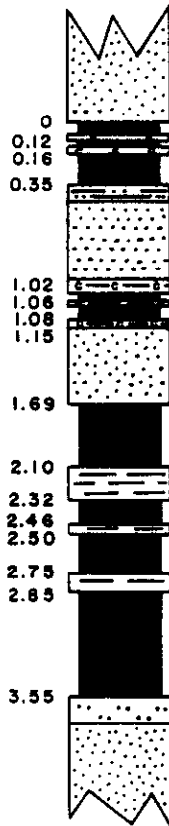
FORMATION : BRENOT  
 UTM COORDINATES : 182 985 N, 518 130 E  
 MAP CARD NUMBER :  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 0.27 m  
 TRENCH WIDTH : 0.60 m  
 TRENCH LENGTH : 2.00 m  
 TRENCH BEARING : 244°  
 TRENCH SLOPE : 90 °

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>WR - 81 - B 37</b>		
DRAWN BY: M. ANDERSON	SCALE: 1:50	
LOGGED BY: F. PEDERSEN	DATE: OCT. / 81	
APPROVED BY: H. ZSCHACH		

TRUE THICKNESS  
ROCK COAL



ROOF: 310°/65° N



**SANDSTONE:** Fine grain, light grey, Fe staining, blocky, plant frags  
**COAL:** dull banded, weathered, soft  
**MUDSTONE:** dark grey, carb., Fe staining  
**COAL:** dull banded, weathered soft  
**MUDSTONE:** dark grey, carb. Fe staining  
**COAL:** dull banded, Fe staining along cleats, weathered soft  
**SILTSTONE/MUDSTONE:** interbanded, carb. plant frags, dark grey, coaly inclusions, Fe staining  
**SANDSTONE:** Fine grain, light grey, Fe staining, blocky, carb. plant frags.  
**MUDSTONE:** dark grey, carb., Fe staining  
**COAL:** dull, weathered soft  
**MUDSTONE:** dark grey, Fe staining, carb.  
**COAL:** dull, weathered soft  
**MUDSTONE:** dark grey, Fe staining, carb.  
**SANDSTONE:** Fine grain, carb. plant frags, light grey, Fe staining, blocky  
**COAL:** dull banded, Fe staining along cleats, weathered soft and wet  
**MUDSTONE:** dark grey, carb. plant frags, coaly parting, Fe staining  
**COAL:** dull banded  
**MUDSTONE:** dark, carb plant frags, Fe staining  
**COAL:** dull banded, Fe staining along cleats, weathered soft  
**MUDSTONE:** dark grey, carb. plant frags  
**COAL:** dull banded, Fe staining along cleats, weathered soft  
**COAL:** dull, weathered soft and wet  
**COAL:** dull banded, Fe staining along cleats, weathered soft, possibly sheared  
**SILTSTONE:** grey, Fe staining, carb., minor coaly inclusions  
**SANDSTONE:** fine grain, weathered light grey, Fe staining, carb. plant frags.

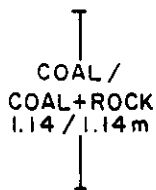
FLOOR: 315°/62° N

FORMATION :GETHING  
 UTM COORDINATES :160 585 N, 540 935 E  
 MAP CARD NUMBER :  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH :0.21 m  
 TRENCH WIDTH :0.75 m  
 TRENCH LENGTH :3.67 m  
 TRENCH BEARING :240°  
 TRENCH SLOPE :0°

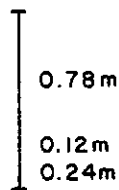
6711

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b> TRENCH LOG  <b>GNPL - 81 - 601</b>		
DRAWN BY: M. ANDERSON		SCALE: 1:50
LOGGED BY: V. TAPLEY		DATE: OCT. / 81
APPROVED BY: H. ZSCHACH		





TRUE THICKNESS  
ROCK COAL



ROOF: 322°/75° N.

SANDSTONE: Fine grained, light grey, carb. plant frags, Fe staining, blocky

COAL: dull banded, weathered soft  
COAL: dull, weathered soft, pulverized  
COAL: weathered soft, possibly sheared

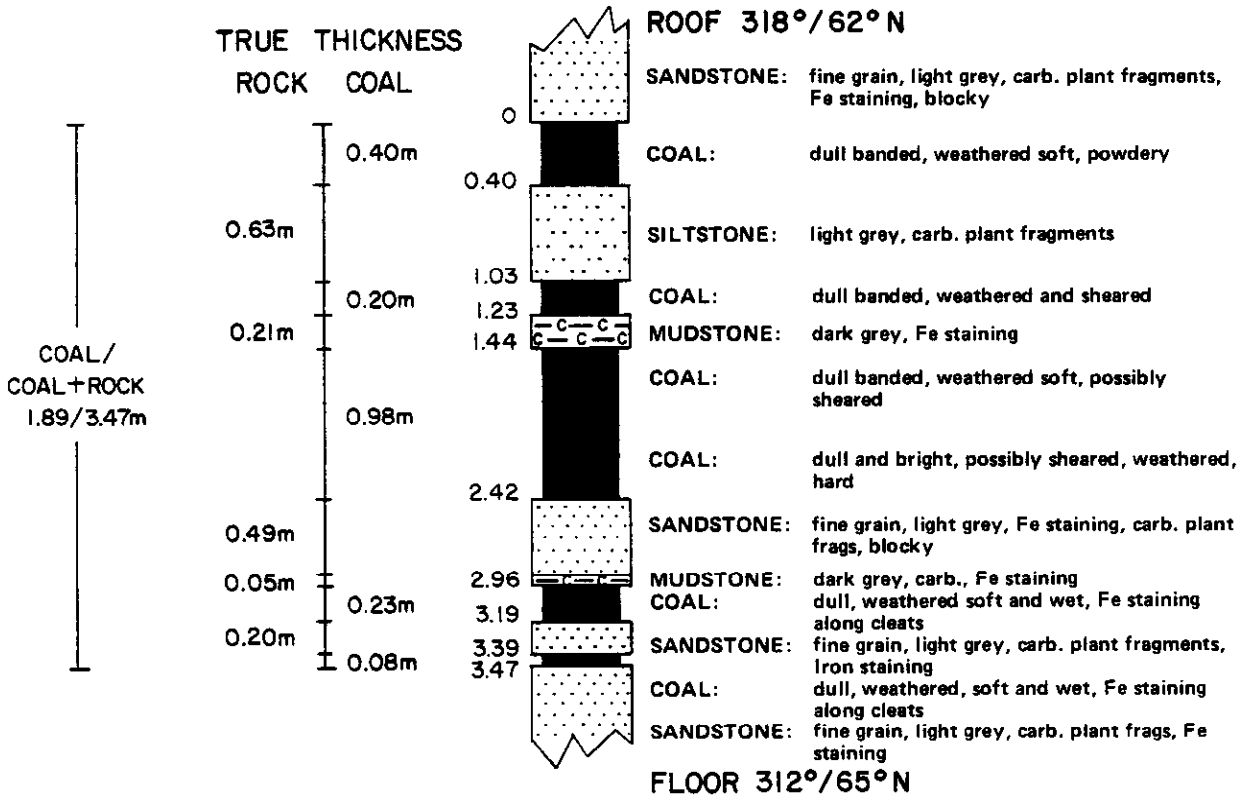
SANDSTONE: fine grained, light grey, carb. plant frags, Fe staining

FLOOR: 310°/75° N.

FORMATION : GETTING  
UTM COORDINATES : 160 585 N, 540 900 E  
MAP CARD NUMBER :  
AIR PHOTO NUMBER :  
TRENCH DEPTH : 0.18 m  
TRENCH WIDTH : 0.75 m  
TRENCH LENGTH : 1.8 m  
TRENCH BEARING : 240°  
TRENCH SLOPE : 0°

6711

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<p><b>GOODRICH COAL PROJECT</b></p> <p>TRENCH LOG</p> <p><b>GNPL - 81 - G 02</b></p>		
DRAWN BY: M. ANDERSON		SCALE: 1:50
LOGGED BY: V. TAPLEY		DATE: OCT. / 81
APPROVED BY: H. ZSCHACH		



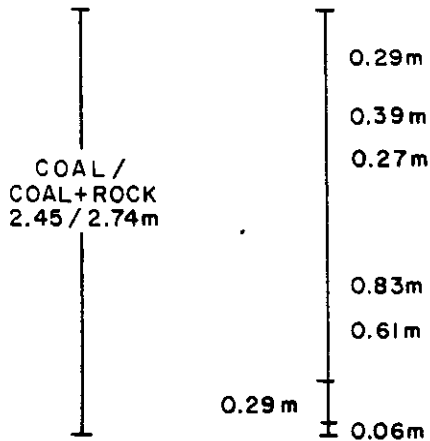
FORMATION : GETHING  
 UTM COORDINATES : 160 555 N, 540 855 E  
 MAP CARD NUMBER :  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 0.24 m  
 TRENCH WIDTH : 0.75 m  
 TRENCH LENGTH : 4.00 m  
 TRENCH BEARING : 240°  
 TRENCH SLOPE : 0°

60731

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>GNPL-81-G03</b>		
DRAWN BY: W. MASTWIJK		SCALE: 1:50
LOGGED BY: V. TAPLEY		DATE: OCT./81
APPROVED BY: H. ZSCHACH		

TRUE THICKNESS  
ROCK COAL

ROOF: 320°/50° N



SANDSTONE: fine grain, light grey, carb. plant fragments, Fe staining,

COAL: dull banded, weathered hard, sheared

COAL: dull and bright, weathered hard, sheared

COAL: dull banded, weathered hard

COAL: dull, minor bright bands, weathered soft

COAL: dull, weathered soft, pulverized

MUDSTONE: dark grey, carbonaceous, sheared

COAL: dull, weathered soft, pulverized

MUDSTONE: carbonaceous, dark grey, sheared  
SILTSTONE: grey, carbonaceous plant fragments, coaly inclusions, Fe staining

FLOOR: 315°/60° N

FORMATION :GETHING  
UTM COORDINATES :160 525 N, 540 825 E  
MAP CARD NUMBER :  
AIR PHOTO NUMBER :  
TRENCH DEPTH :0.33 m  
TRENCH WIDTH :0.75 m  
TRENCH LENGTH :3.1 m  
TRENCH BEARING :222°  
TRENCH SLOPE :4°

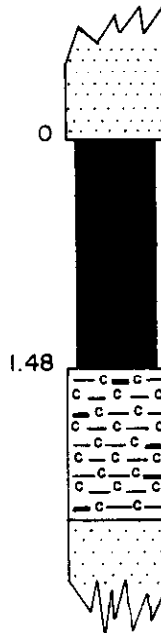
6711

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>GNPL-81-G04</b>		
DRAWN BY: M. ANDERSON		SCALE 1:50
LOGGED BY: V. TAPLEY		DATE OCT. / 81
APPROVED BY: H. ZSCHACH		

COAL/  
COAL + ROCK  
1.48 / 1.48 m

TRUE THICKNESS  
ROCK COAL

0.26m  
0.67m  
0.55m



ROOF 250°/20°N

SANDSTONE: medium grained, light grey, Fe staining, blocky

COAL: dull, blocky, oxidized

COAL: dull, minor bright bands, weathered soft, sheared

COAL: dull, weathered soft and wet, powdery

MUDSTONE: dark grey, carbonaceous, coal inclusions, Fe staining

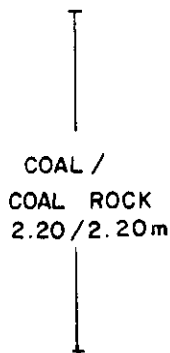
SANDSTONE: medium grained, light grey, carbonaceous plant fragments, Fe staining

FLOOR 260°/10°N

FORMATION : GETTING  
UTM COORDINATES : 160 590 N, 540 795 E  
MAP CARD NUMBER :  
AIR PHOTO NUMBER :  
TRENCH DEPTH : 0.17m  
TRENCH WIDTH : 0.75 m  
TRENCH LENGTH : 1.53m  
TRENCH BEARING :  
TRENCH SLOPE : Vertical

6711

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>GNPL-81-G05</b>		
DRAWN BY: W. MASTWIJK	SCALE: 1:50	
LOGGED BY: V. TAPLEY	DATE: OCT. / 81	
APPROVED BY: H. ZSCHACH		



TRUE THICKNESS  
ROCK COAL

- 0.04
- 0.17
- 0.71
- 0.21
- 0.06
- 0.19
- 0.42
- 0.40



ROOF : 270° / 8° N

- SILTSTONE: brown, carbonaceous plant fragments, minor Fe staining
  - COAL: dull, oxidized, weathered hard
  - COAL: dull, weathered soft
  - COAL: dull, with minor bright bands, weathered hard, blocky
  - COAL: dull, weathered soft, sheared
  - COAL: dull, minor clay bands
  - COAL: dull banded, weathered hard, blocky
  - COAL: dull and bright, hard, blocky
  - COAL: dull banded, hard, blocky
  - MUDSTONE: dark grey, carbonaceous, coaly inclusions
  - SANDSTONE: fine grained, light grey, Fe staining
- FLOOR : 270° / 6° N

FORMATION : GETTING  
 UTM COORDINATES : 160 650 N, 540 845 E  
 MAP CARD NUMBER :  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH :  
 TRENCH WIDTH : 0.75 m  
 TRENCH LENGTH : 3.0 m  
 TRENCH BEARING : 180 °  
 TRENCH SLOPE : Vertical

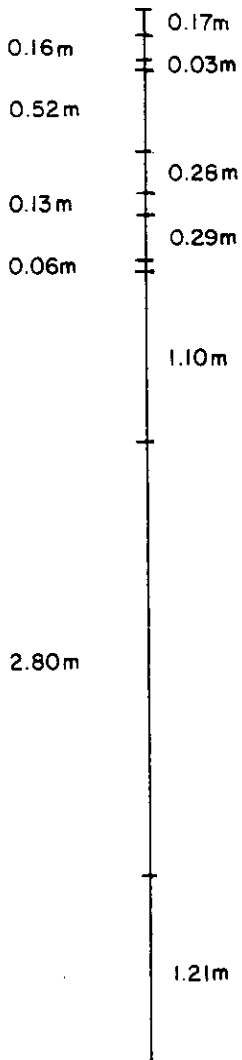
6711

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b> <b>TRENCH LOG</b>  <b>GNPL - 81 - 06</b>		
DRAWN BY: <b>A. BAILLIE</b>		SCALE: 1 : 50
LOGGED BY: <b>VALERIE TAPLEY</b>		DATE: <b>OCT. / 81</b>
APPROVED BY: <b>H. ZSCHACH</b>		

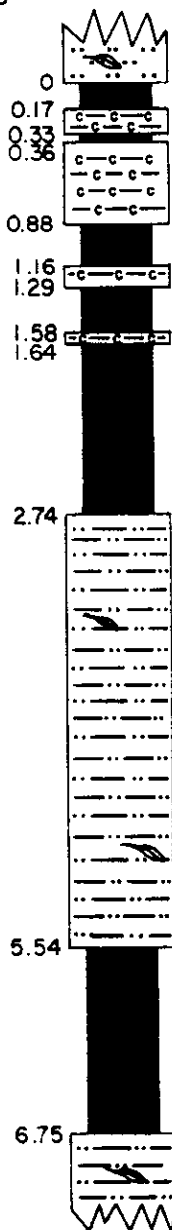
TRUE THICKNESS  
ROCK COAL

ROOF: 345°/85°S

COAL/  
COAL+ROCK  
1.87/2.74 m



COAL/  
COAL+ROCK  
1.21/1.21 m



SILTSTONE: weathered or, carbonaceous plant fragments  
COAL: dull and bright, weathered soft, sheared stony, occasional bright bands  
COAL: stony, occasional bright bands  
MUDSTONE: dark grey, carbonaceous plant fragments, coaly inclusions, iron staining  
COAL: dull banded, weathered, soft and wet  
MUDSTONE: dark grey, carbonaceous plant fragments coaly inclusions, iron staining  
COAL: dull banded with stony partings  
MUDSTONE: dark grey, carbonaceous plant fragments iron staining  
COAL: dull and bright  
MUDSTONE: dark grey, carbonaceous plant fragments, coaly inclusions, iron staining  
COAL: dull and bright, weathered soft and wet

SLTST/MUDST: interbedded, carbonaceous plant fragments iron staining, weathered orange-grey.

Note: Axis of syncline 320°/80°N

COAL: dull banded, weathered, soft and wet  
COAL: stony, minor bright bands  
COAL: dull banded, weathered soft and wet  
COAL: stony

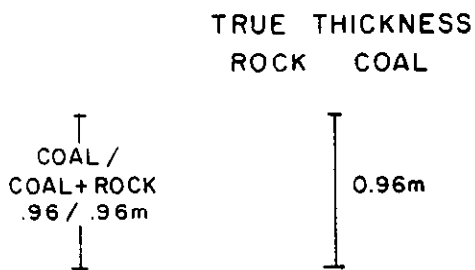
SILTSTONE: mudstone interbed, carbonaceous plant fragments, Fe staining

FLOOR: 340°/80°N

FORMATION :GETHING  
UTM COORDINATES :161 000 N, 531 000 E  
MAP CARD NUMBER :  
AIR PHOTO NUMBER :  
TRENCH DEPTH :0.7 m  
TRENCH WIDTH :0.7 m  
TRENCH LENGTH :7.0 m  
TRENCH BEARING :240°  
TRENCH SLOPE :10°

5607

<b>GULF CANADA RESOURCES INC.</b>		
Coal Division		
CALGARY	ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>GNN - 81 - GOI</b>		
DRAWN BY: B. BISHOP		SCALE: 1:50
LOGGED BY: V. TAPLEY		DATE: OCT./1981
APPROVED BY: H. ZSCHACH		



ROOF: 335°/70°N

SANDSTONE: fine grain, weathered, light brown, siliceous laminated, carbonaceous plant fragments, iron staining

MUDSTONE: dark grey, carbonaceous

COAL: dull, minor bright bands, weathered soft and wet

SANDSTONE: fine grain, weathered light brown, siliceous, carbonaceous plant fragments, iron staining

FLOOR: 315°/84°N

FORMATION : GETTING

UTM COORDINATES : 167 725 N, 528 715 E

MAP CARD NUMBER :

AIR PHOTO NUMBER :

TRENCH DEPTH : 0.65 m


TRENCH WIDTH : 0.60 m

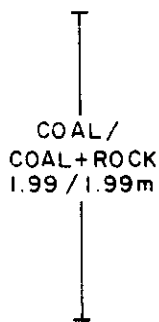
TRENCH LENGTH : 1.26 m

TRENCH BEARING : 220°

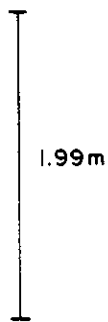
TRENCH SLOPE : 0°

*5619*

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<p><b>GOODRICH COAL PROJECT</b></p> <p><b>TRENCH LOG</b></p> <p><b>GNN - 81 - G 02</b></p>		
DRAWN BY: <b>M. ANDERSON</b>	SCALE: <b>1: 50</b>	
LOGGED BY: <b>V. TAPLEY</b>	DATE: <b>OCT. / 81</b>	
APPROVED BY: <b>H. ZSCHACH</b>		



TRUE THICKNESS  
ROCK COAL



ROOF: 315° / 75°W

SANDSTONE: fine grain, siliceous, laminated, carbonaceous plant fragments

MUDSTONE: dark grey, carbonaceous

COAL: dull, minor bright bands, weathered soft and wet

SANDSTONE: fine grain, siliceous, iron staining, carbonaceous plant fragments

FLOOR: 315° / 75°W

FORMATION : GETHING  
 UTM COORDINATES : 167 645 N, 528 870 E  
 MAP CARD NUMBER :  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 1.0 m  
 TRENCH WIDTH : 0.75m  
 TRENCH LENGTH : 3.0 m  
 TRENCH BEARING : 210 °  
 TRENCH SLOPE : 10 °

5619

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>GNN - 81 - G03</b>		
DRAWN BY: M. ANDERSON		SCALE 1: 50
LOGGED BY: V. TAPLEY		DATE OCT. / 81
APPROVED BY: H. ZSCHACH		



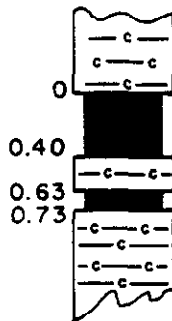
TRUE THICKNESS  
ROCK COAL

COAL/  
COAL+ROCK  
0.50/0.73m

0.23

0.40m

0.10m



ROOF: 300°/65°N.

MUDSTONE: dark grey, carbonaceous plant fragments, iron staining

COAL: dull, minor bright bands, weathered soft and wet

MUDSTONE: dark grey, carbonaceous plant fragments, iron staining

COAL: dull, weathered, soft and wet

SANDSTONE: fine grained, weathered light brown, iron staining, carbonaceous plant fragments

FLOOR: 300°/65°N.

FORMATION :GETHING

UTM COORDINATES :167 625 N, 528 975 E

MAP CARD NUMBER :

AIR PHOTO NUMBER :

TRENCH DEPTH :0.6m


TRENCH WIDTH :0.5m

TRENCH LENGTH :1.5m

TRENCH BEARING :220°

TRENCH SLOPE :20°

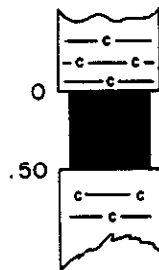
5619

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>GNN - 81 - G04</b>		
DRAWN BY: M. ANDERSON		SCALE: 1:50
LOGGED BY: V. TAPLEY		DATE: OCT. / 81
APPROVED BY: H. ZSCHACH		

COAL /  
COAL+ROCK  
0.50 / 0.50 m

TRUE THICKNESS  
ROCK COAL

0.50 m



ROOF: 315°/15° N.E.

MUDSTONE: Light grey, carbonaceous plant fragments,  
iron staining


COAL: weathered, dull and soft, minor bright bands

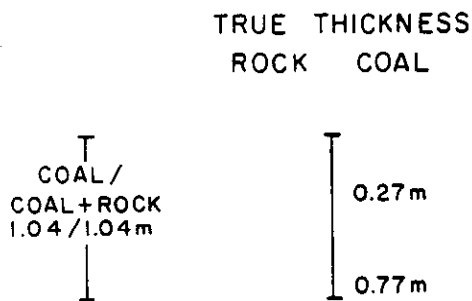
MUDSTONE: Light grey, carbonaceous plant fragments

FLOOR: 315°/15° N.E.

FORMATION :GETHING  
UTM COORDINATES :168 130 N, 529 855 E  
MAP CARD NUMBER :  
AIR PHOTO NUMBER :  
TRENCH DEPTH :0.7 m  
TRENCH WIDTH :0.5 m  
TRENCH LENGTH :2.0 m  
TRENCH BEARING :Vertical  
TRENCH SLOPE :-

5619

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>GNN - 81 - G05</b>		
DRAWN BY: M. ANDERSON		SCALE 1:50
LOGGED BY: V. TAPLEY		DATE OCT. / 81
APPROVED BY: H. ZSCHACH		



ROOF: 330°/25°N.E.

- SILTSTONE: light brown, iron staining
- MUDSTONE: dark grey
- COAL: dull, minor bright bands, weathered soft
- COAL: dull banded, hard

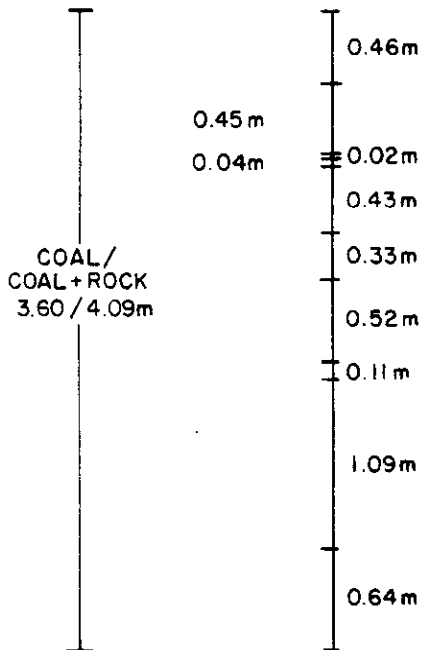
NOTE: Floor not found here. Floor is mudstone light grey, carbonaceous plant fragments

FORMATION : GETHING  
 UTM COORDINATES : 168 115 N, 529 775 E  
 MAP CARD NUMBER :  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 1.5 m  
 TRENCH WIDTH : 0.5 m  
 TRENCH LENGTH : 7.0 m  
 TRENCH BEARING : Vertical  
 TRENCH SLOPE : -

5619

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>GNN-81-G06</b>		
DRAWN BY: M. ANDERSON		SCALE: 1/30
LOGGED BY: V. TAPLEY		DATE: OCT. / 81
APPROVED BY: H. ZSCHACH		

**TRUE THICKNESS**  
ROCK COAL



ROOF: 343° / 62° SW

- MUDSTONE: fissile, grey brown on weathered surface with coaly plant fragments, iron staining, same colour for fresh surf., mudstone is carbonaceous in places with thin carb. lenses
- COAL: weathered, dull and soft
- COAL: dull with minor bright bands and carb. claystone lenses with bright coal in thin slivers 1-2 mm thick
- MUDSTONE: with plant fragments and slightly sty., light grey to grey brown
- COAL: powdery, dull, weathered
- CLAYSTONE: carbonaceous
- COAL: weathered, bright?, sheared at top
- COAL: weathered, dull with few bright bands
- COAL: weathered, blocky dull with some thin bright coaly bands up to 3mm thick
- COAL: sheared zone
- COAL: weathered, dull, blocky
- SILTSTONE: argillaceous, medium grey, weathered, iron staining with minor carbonaceous lenses

FLOOR: 314° / 36° SW

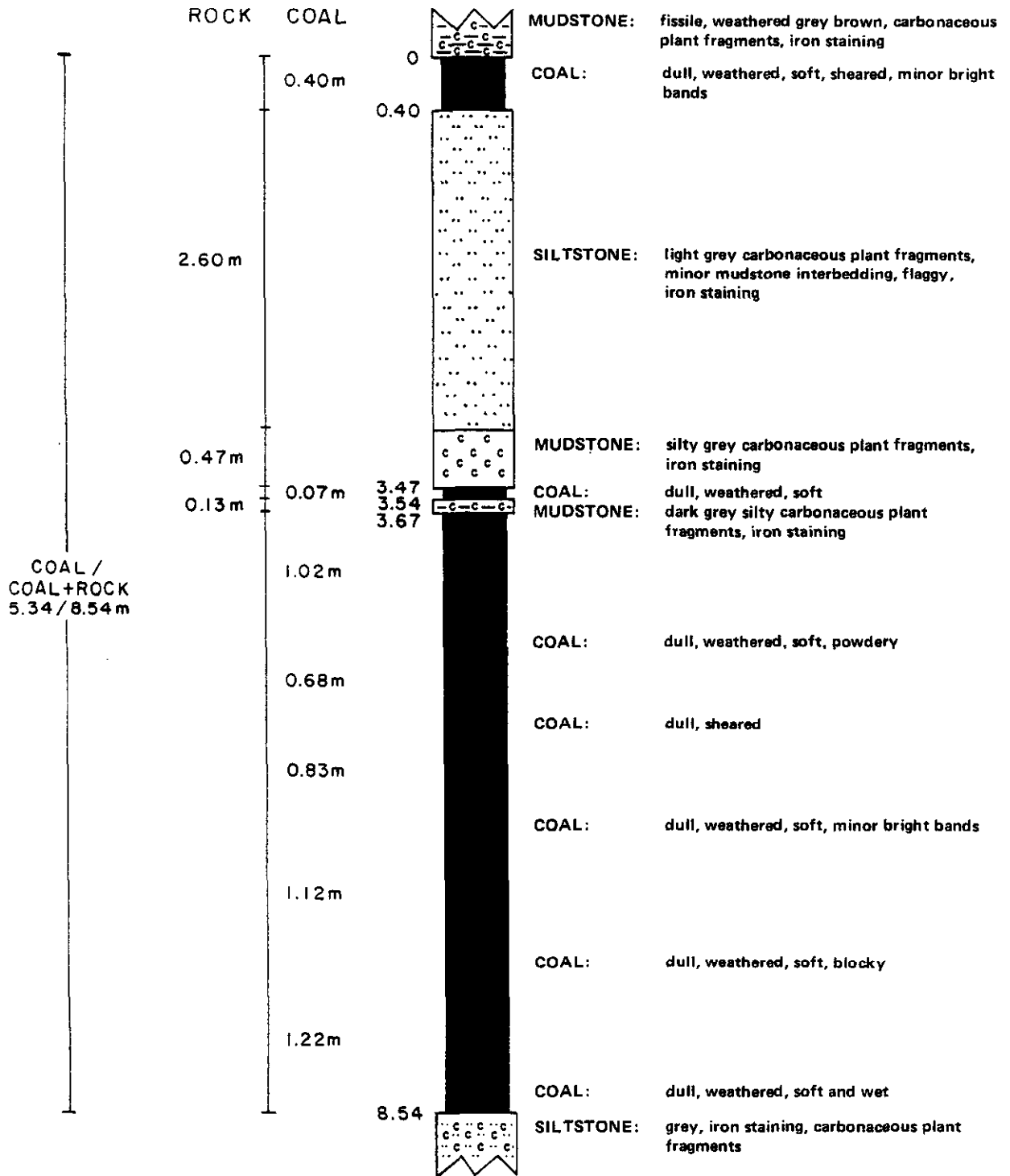
5759

FORMATION :GETHING  
 UTM COORDINATES :174 770 N, 540 755 E  
 MAP CARD NUMBER :  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH :0.31 m  
 TRENCH WIDTH :0.53 m  
 TRENCH LENGTH :4.62 m  
 TRENCH BEARING :218 °  
 TRENCH SLOPE :10 °

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>MB - 81 - 001</b>		
DRAWN BY: B. BISHOP		SCALE 1:50
LOGGED BY: BRAD DAVIDSON, HANS ZSCHACH, DATE OCT. / 1981		
APPROVED BY: H. ZSCHACH		


TRUE THICKNESS  
ROCK COAL

ROOF: 340°/60° SW



FLOOR: 315°/38° SW ?

FORMATION :GETHING  
UTM COORDINATES :174 800 N, 540 870 E  
MAP CARD NUMBER :  
AIR PHOTO NUMBER :  
TRENCH DEPTH :0.70m  
TRENCH WIDTH :0.75 m  
TRENCH LENGTH :9.00 m  
TRENCH BEARING :215°  
TRENCH SLOPE :10°

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>MB - 81 - G02</b>		
DRAWN BY: <b>M. ANDERSON</b>		SCALE: <b>1:50</b>
LOGGED BY: <b>V. TAPLEY</b>		DATE: <b>OCT. /81</b>
APPROVED BY: <b>H. ZSCHACH</b>		

COAL /  
COAL+ROCK  
0.86 / 1.35 m

TRUE THICKNESS

ROCK	COAL
0.26 m	0.22m 0.11m 0.16m
0.11 m	0.24 m
0.12 m	0.09 m 0.04 m



ROOF: 322°/60° S.W.

MUDSTONE: coaly, gy fresh with coal partings, weathered reddish brown  
 COAL: bright, brittle, sheared, hard  
 COAL: dull, blocky, hard  
 COAL: sheared, bright, brittle  
 MUDSTONE: very carbonaceous  
 COAL: bright, hard  
 MUDSTONE: carbonaceous  
 COAL: bright, shiny, with iron staining  
 MUDSTONE: medium grey  
 COAL: bright, brittle  
 MUDSTONE: carbonaceous with coal partings

FLOOR: 322°/60° S.W.

FORMATION :GETHING  
 UTM COORDINATES :171 020 N, 538 325 E  
 MAP CARD NUMBER :  
 AIR PHOTO NUMBER :HA131080 - 4 - 43 (1:30000)  
 TRENCH DEPTH :0.18 m  
 TRENCH WIDTH :0.31 m  
 TRENCH LENGTH :1.62 m  
 TRENCH BEARING :232 °  
 TRENCH SLOPE :0°

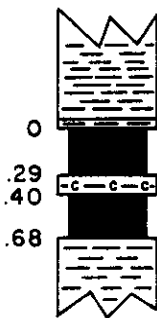
5764

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b> <b>TRENCH LOG</b>  <b>MB - 81 - G03</b>		
DRAWN BY: M. ANDERSON	SCALE 1:50	
LOGGED BY: B. DAVIDSON	DATE OCT. / 81	
APPROVED BY: H. ZSCHACH		

TRUE THICKNESS  
ROCK COAL

COAL /  
COAL+ROCK  
0.57 / 0.68m

0.11 | 0.29m  
| 0.07m  
| 0.21m



ROOF: 236°/19° S E

MUDSTONE: grey, fresh, and grey-brown weathered surface

MUDSTONE: carbonaceous  
COAL: blocky, dull


MUDSTONE: carbonaceous  
COAL: dull and powdery  
COAL: bright, brittle and sheared

MUDSTONE

FLOOR: 236°/19° S E

FORMATION : DRESSER  
UTM COORDINATES : 171 215 N, 538 460 E  
MAP CARD NUMBER :  
AIR PHOTO NUMBER : HA131080 - 4 - 43 (1:30000)  
TRENCH DEPTH : 0.14 m  
TRENCH WIDTH : 0.33 m  
TRENCH LENGTH : 0.76 m  
TRENCH BEARING : 146°  
TRENCH SLOPE : 0°

5764

<b>GULF CANADA RESOURCES INC.</b>		
Coal Division	ALBERTA	
CALGARY		
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>MB - 81 - D04</b>		
DRAWN BY: M. ANDERSON		SCALE 1:50
LOGGED BY: B. DAVIDSON		DATE OCT./81
APPROVED BY: H. ZSCHACH		

TRUE THICKNESS  
ROCK COAL

ROOF: 325° / 83° W

COAL /  
COAL+ROCK  
1.245 / 1.745m

0.50m  
0.165m  
0.10m  
0.52m  
0.15m  
0.31m  
1.745




MUDSTONE: with carbonaceous plant fragments, dark brown  
COAL: dull, brittle  
MUDSTONE: silty  
COAL: dull and blocky with brittle lenses  
COAL: dull, blocky and brittle with bright lenses  
COAL: bright, hard and wet  
COAL: dull and blocky  
MUDSTONE: grey, fissile, flakey  
MUDSTONE: medium brown

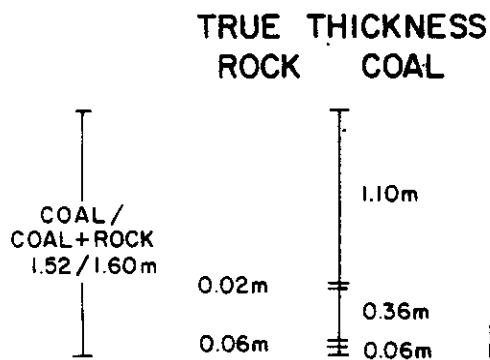
FLOOR: 325° / 83° W

FORMATION : GETHING  
UTM COORDINATES : 176 310 N, 541 500 E  
MAP CARD NUMBER :  
AIR PHOTO NUMBER :  
TRENCH DEPTH : 0.15 m  
TRENCH WIDTH : 0.75m  
TRENCH LENGTH : 2.2 m  
TRENCH BEARING : 233°  
TRENCH SLOPE : 0°

5758

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>MB - 81 - G05</b>		
DRAWN BY: <b>M. ANDERSON</b>		SCALE: <b>1:50</b>
LOGGED BY: <b>J.B. DAVIDSON</b>		DATE: <b>OCT. / 81</b>
APPROVED BY: <b>H. ZSCHACH</b>		





ROOF: 336° / 85° W

MUDSTONE: light grey turning to light brown, mudstone further up section

COAL: dull and powdery

MUDSTONE: dark grey

COAL: dull, powdery

MUDSTONE: dark grey

COAL: dull, powdery

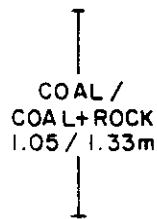
MUDSTONE: grey, slightly fissile

FLOOR: 336° / 85° W

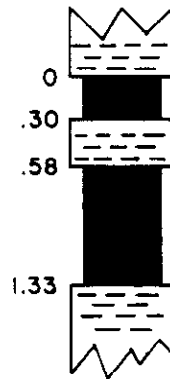
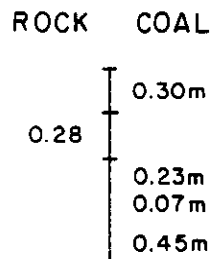
FORMATION : GETTING  
 UTM COORDINATES : 176 035 N, 541 350 E  
 MAP CARD NUMBER :  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 0.10 m  
 TRENCH WIDTH : 0.12 m  
 TRENCH LENGTH : 1.60 m  
 TRENCH BEARING : 216°  
 TRENCH SLOPE : 0°

5758

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>MB - 81 - G06</b>		
DRAWN BY: <b>B. BISHOP</b>	SCALE: <b>1:50</b>	
LOGGED BY: <b>J. BRAT DAVIDSON</b>	DATE: <b>OCT. / 1981</b>	
APPROVED BY: <b>H. ZSCHACH</b>		



**TRUE THICKNESS**




**ROOF: 327°/34° N.E.**

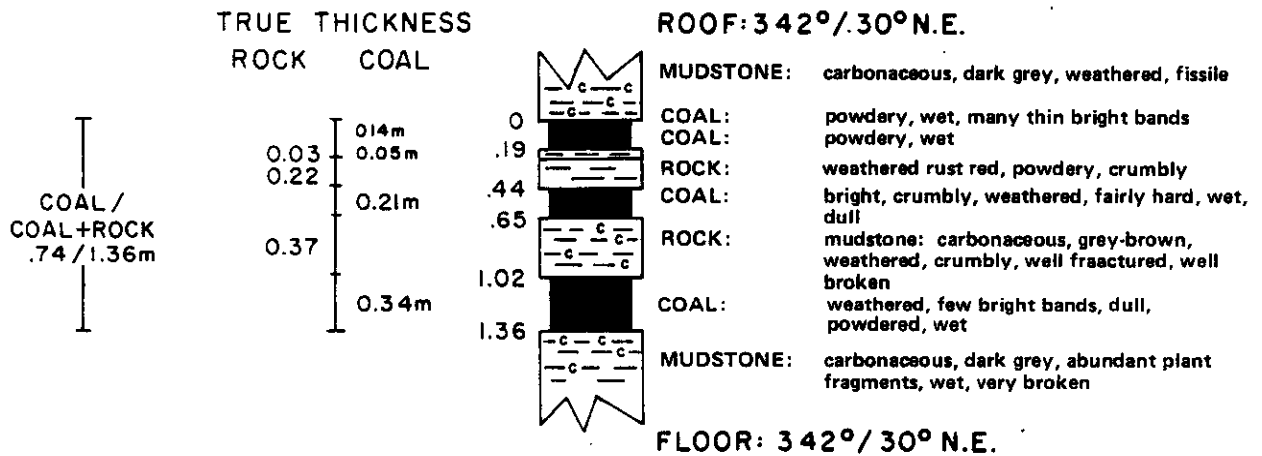
- MUDSTONE:** dark gray, well weathered, well fractured, thin bedding
- COAL:** dull, soft, powdery
- ROCK/MUDSTONE:** broken, fractured, dark gray, weathered, obscure contacts
- COAL:** dull, soft, powdery soft chunks
- COAL:** muddy, flat, flakey pieces, well weathered, rust brown, damp
- COAL:** soft, crumbly chunks
- MUDSTONE:** very well weathered, orange rust-brown, well fractured

**FLOOR: 327°/34° N.E.**

**FORMATION** : GETTING  
**UTM COORDINATES** : 170 510 N, 538 750 E  
**MAP CARD NUMBER** :  
**AIR PHOTO NUMBER** :  
**TRENCH DEPTH** : 0.45 m  
**TRENCH WIDTH** : 0.34 m  
**TRENCH LENGTH** : 1.7 m  
**TRENCH BEARING** : 237°  
**TRENCH SLOPE** : 0°

5761

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>MB - 81 - G07</b>		
<b>DRAWN BY: M. ANDERSON</b>		<b>SCALE 1:50</b>
<b>LOGGED BY: A. PETZOLD</b>		<b>DATE OCT. / 81</b>
<b>APPROVED BY: H. ZSCHACH</b>		

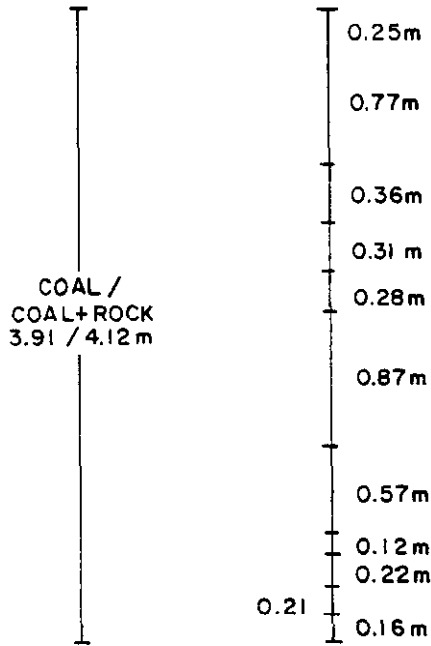


FORMATION : GETHING  
 UTM COORDINATES : 170 555 N, 538 750 E  
 MAP CARD NUMBER :  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 0.34 m  
 TRENCH WIDTH : 0.27 m  
 TRENCH LENGTH : 1.73 m  
 TRENCH BEARING : 252 °  
 TRENCH SLOPE : 0 °

*576d*

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b> <b>TRENCH LOG</b>  <b>MB - 81 - G08</b>		
DRAWN BY: M. ANDERSON		SCALE: 1:50
LOGGED BY: B. DAVIDSON		DATE: OCT. 7/81
APPROVED BY: H. ZSCHACH		

**TRUE THICKNESS**  
ROCK COAL



**ROOF : 319° / 60° N.E.**

- MUDSTONE: dark grey, carbonaceous, silty, well fractured
- COAL: dull, powdery, soft, damp
- COAL: blocky, hard, bright thin stringers, very weathered
- COAL: dull, soft, dirty, weathered
- COAL: blocky pieces, easily broken, well weathered
- COAL: damp, dull, soft
- COAL: dull, well weathered, soft, infrequent chunks, easily broken
- COAL: dull, hard, blocky pieces, well weathered
- COAL: dull, dirty, soft, weathered orange-brown throughout, frequent mudstone pieces
- COAL: dull, soft, fine bright pieces, flecks, damp
- MUDSTONE AND COAL: dull, dirty, well weathered, carbonaceous, fissile
- COAL: dull, soft, powdery, damp
- MUDSTONE: very well weathered, dark brown, carbonaceous, abundant plant fragments + hash throughout

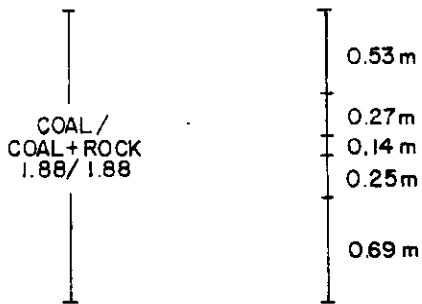
**FLOOR: 319° / 66° N.E.**

FORMATION : GETTING  
 UTM COORDINATES : 170 660 N, 578 750 E  
 MAP CARD NUMBER :  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 0.43 m  
 TRENCH WIDTH : 0.62 m  
 TRENCH LENGTH : 4.20 m  
 TRENCH BEARING : 229°  
 TRENCH SLOPE : 0°

5761

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>MB - 81 - G09</b>		
DRAWN BY: M. ANDERSON		SCALE: 1:50
LOGGED BY: A. PETZOLD		DATE: OCT. / 81
APPROVED BY: H. ZSCHACH		

TRUE THICKNESS  
ROCK COAL



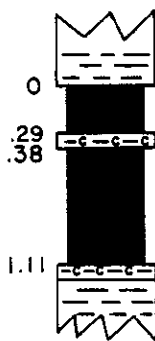
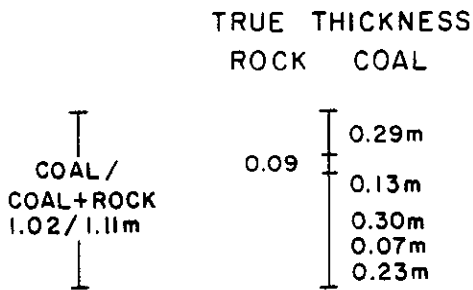
ROOF: 317°/36° SW

- MUDSTONE: carbonaceous, dark grey, very broken, weathered light brown
  - COAL: well weathered, blocky, brown staining, dull, brittle
  - COAL: blocky, hard, abundant bright bands, moderately weathered
  - COAL: powdery, few bright bands, soft
  - COAL: blocky, hard, dull
  - COAL: blocky, hard, abundant bright bands, clean
  - MUDSTONE: carbonaceous, abundant plant hash, grey-black
- FLOOR: 317° / 36° SW

FORMATION : GETTING  
 UTM COORDINATES : 170 245 N, 538 860 E  
 MAP CARD NUMBER :  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 0.24 m  
 TRENCH WIDTH : 0.32 m  
 TRENCH LENGTH : 2.06 m  
 TRENCH BEARING : 227°  
 TRENCH SLOPE : 0°

5701

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>MB-81-G10</b>		
DRAWN BY: S. DAMSTROM		SCALE 1:50
LOGGED BY: A. PETZOLD		DATE OCT. / 81
APPROVED BY: H. ZSCHACH		



ROOF: 328°/65° N.E.

MUDSTONE: dark grey, broken, well weathered

COAL: blocky, dull weathered

ROCK: MUDSTONE: carbonaceous, dark grey, very broken

COAL: soft, fissile, somewhat bright

COAL: soft, dull, few bright bands

COAL: soft, dull, powdered, abundant fine red streaks, mudstone pieces

COAL: soft, powdered, dull

ROCK: MUDSTONE: carbonaceous, few coaly inclusions

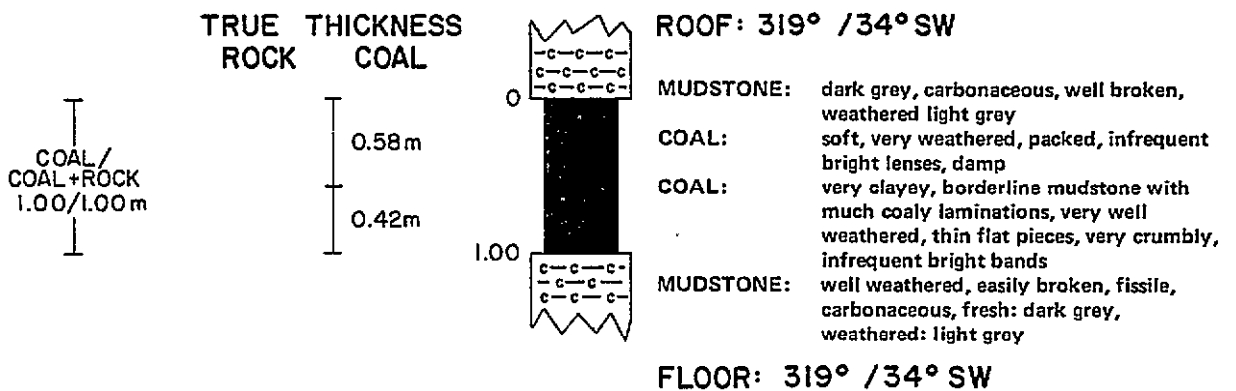
MUDSTONE: brown, weathered very well

FLOOR: 328°/65° N.E.

FORMATION :GETHING  
 UTM COORDINATES :170 700 N, 538 740 E  
 MAP CARD NUMBER :  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH :0.20 m  
 TRENCH WIDTH :0.31 m  
 TRENCH LENGTH :1.21 m  
 TRENCH BEARING :238°  
 TRENCH SLOPE :0°

5761

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>MB - 81 - G11</b>		
DRAWN BY: <b>M. ANDERSON</b>	SCALE: 1:50	
LOGGED BY: <b>B. DAVIDSON</b>	DATE: <b>OCT. / 81</b>	
APPROVED BY: <b>H. ZSCHACH</b>		



FORMATION :GETHING *538*

UTM COORDINATES :171 270 N, *188* 720 E

MAP CARD NUMBER :

AIR PHOTO NUMBER :

TRENCH DEPTH :0.31 m

TRENCH WIDTH :0.21 m

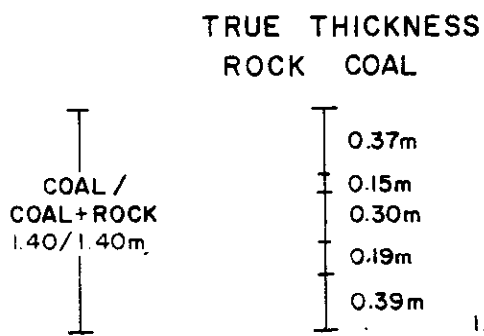
TRENCH LENGTH :1.32 m

TRENCH BEARING :*233*°

TRENCH SLOPE :11°

*5104*

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>MB-81-G12</b>		
DRAWN BY: B. BISHOP	SCALE	1:50
LOGGED BY: ANDREA PETZOLD	DATE	OCT./1981
APPROVED BY: H. ZSCHACH		



ROOF: 330 ° / 27 ° SW

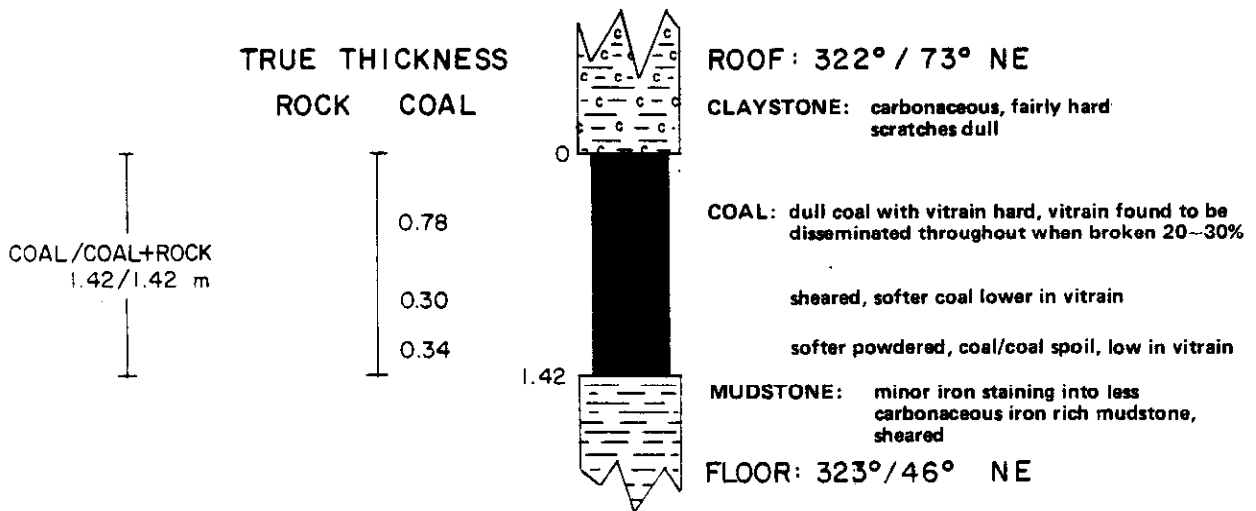
- SILTSTONE: with sandy laminations, very fine grained, dark grey to carbonaceous, fissile thinly bedded, weathered light brown
- COAL: Vitrain, very bright, hard blocky, pieces
- COAL: Vitrain, very bright, small pieces, well weathered light brown
- COAL: Vitrain, very bright, very hard, chunky pieces
- COAL: Vitrain, very bright, hard blocky pieces, occasional light rust brown minor iron staining
- COAL: Vitrain, very bright, hard blocky pieces, occasional weathered light rust brown
- MUDSTONE: Soft, earthy, fine carbonaceous lenses, well weathered, greenish brown

FLOOR: 330 ° / 27 ° SW

FORMATION : BRENOT  
 UTM COORDINATES : 148 495 N, 546 370 E  
 MAP CARD NUMBER : 1T45 - 5(1:5000)  
 AIR PHOTO NUMBER : BC 7177-270  
 TRENCH DEPTH : 0.50m  
 TRENCH WIDTH : 0.50m  
 TRENCH LENGTH : 1.70m  
 TRENCH BEARING : 060°  
 TRENCH SLOPE : 0°

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>BCET - 81 - 801</b>		
DRAWN BY: C. BARNES	SCALE: 1:50	
LOGGED BY: A. PETZOLD	DATE: OCT. / 81	
APPROVED BY: H. ZSCHACH		





CL 5560

FORMATION : GETHING  
 UTM COORDINATES : 147 645 N, 540 450 E  
 MAP CARD NUMBER : 1V45 - 10 (1:5000)  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 0.7m  
 TRENCH WIDTH : 0.5m  
 TRENCH LENGTH : 2.4m  
 TRENCH BEARING : 055°  
 TRENCH SLOPE : 015°

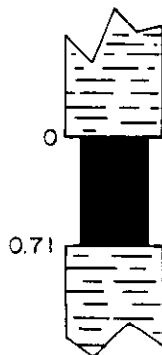
<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>BCWT - 81 - GOI</b>		
DRAWN BY: W.H. ACOSTA		SCALE 1:50
LOGGED BY: D. DAUPHINEE		DATE OCT. / 1981
APPROVED BY: H. ZSCHACH		

COAL/COAL+ROCK  
0.71/0.71 m

TRUE THICKNESS

ROCK COAL

0.71



ROOF: 325° / 67° NE

CLAYSTONE: tan, weathers orange hard sheared


COAL: soft, weathered, coal, vitrain  
hard coal one large bed, soft on surface vitrain  
soft coal, vitrain

MUDSTONE: tan, broken up, minor iron stains

FLOOR: 324° / 67° NE

FORMATION : GETTING  
UTM COORDINATES : 147 460 N, 540 470 E  
MAP CARD NUMBER : 1V45 - 10 (1:5000)  
AIR PHOTO NUMBER :  
TRENCH DEPTH : 1.0m  
TRENCH WIDTH : 1.0m  
TRENCH LENGTH : 2.0m  
TRENCH BEARING : 063°  
TRENCH SLOPE : 0°

5560

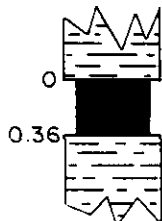
<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>BCWT - 81 - G02</b>		
DRAWN BY: W. H. ACOSTA		SCALE 1:50
LOGGED BY: D. DAUPHINEE		DATE OCT. / 1981
APPROVED BY: H. ZSCHACH		

TRUE THICKNESS

ROCK COAL

COAL / COAL+ROCK  
0.36 / 0.36 m

0.36



ROOF : 336° / 61° NE

CLAYSTONE: orange weathering, green-brown fresh


COAL: uniform soft weathered, 40-50% vitrain

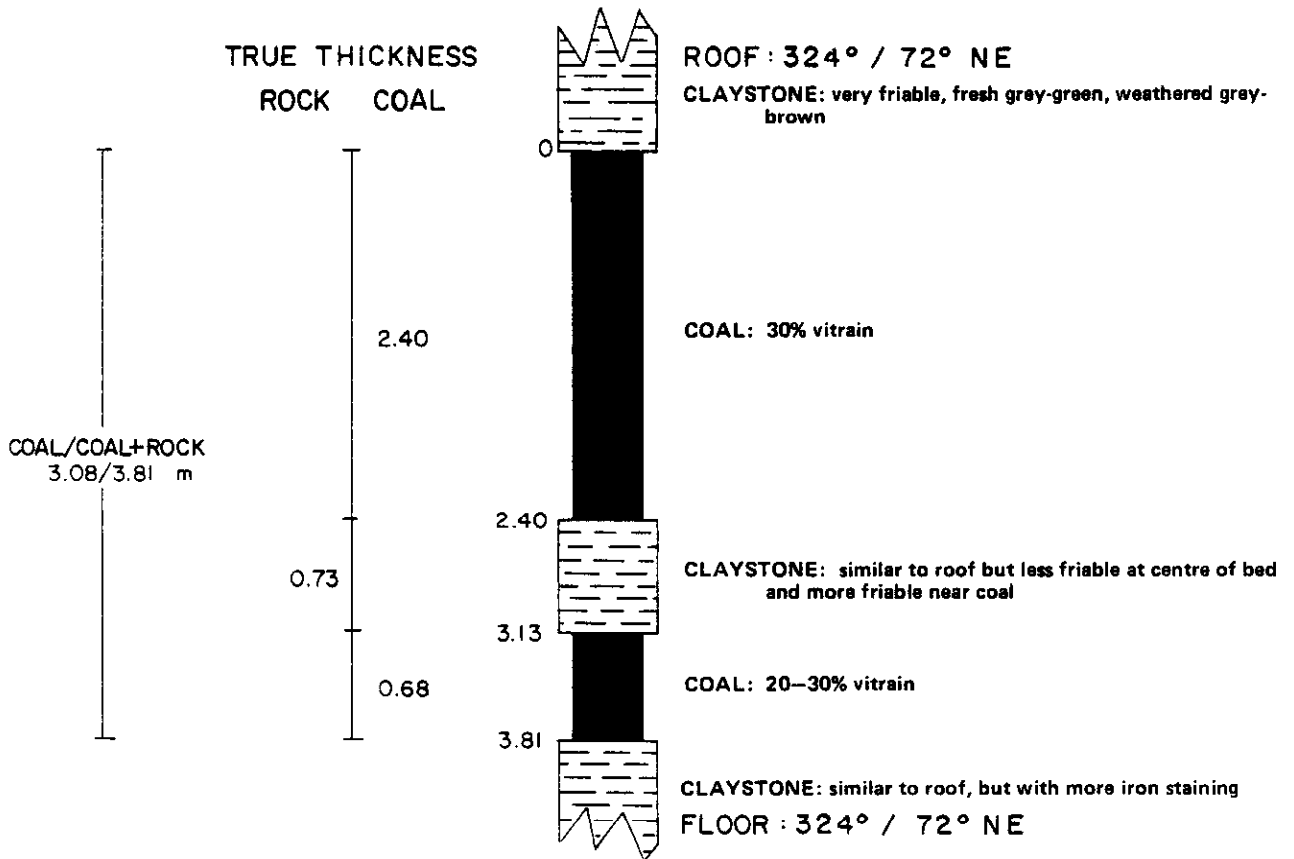
CLAYSTONE: like roof, plant fossils, iron staining

FLOOR : 336° / 61° NE

5560

FORMATION : GETTING  
 UTM COORDINATES : 147 650 N, 540 510 E  
 MAP CARD NUMBER : 1V45 - 10 (1: 5000)  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 1.0m  
 TRENCH WIDTH : 0.5 m  
 TRENCH LENGTH : 1.5 m  
 TRENCH BEARING : 064 °  
 TRENCH SLOPE : 0°

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>BCWT - 81 - G03</b>		
DRAWN BY: W. H. ACOSTA		SCALE 1 : 50
LOGGED BY: D. DAUPHINEE		DATE OCT. / 1981
APPROVED BY: H. ZSCHACH		



FORMATION : GETHING  
 UTM COORDINATES : 147 680 N, 540 520 E  
 MAP CARD NUMBER : 1V45 - 10 (1: 5000)  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 1.0 m  
 TRENCH WIDTH : 1.5 m  
 TRENCH LENGTH : 5.0 m  
 TRENCH BEARING : 074°  
 TRENCH SLOPE : 0°

5560

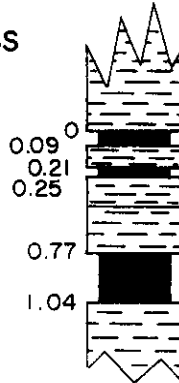
<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT TRENCH LOG</b>		
<b>BCWT - 81 - G04</b>		
DRAWN BY: W.H. ACOSTA		SCALE: 1: 50
LOGGED BY: D. DAUPHINEE		DATE: OCT. / 1981
APPROVED BY: H. ZSCHACH		

COAL/COAL+ROCK  
0.40/1.04 m

TRUE THICKNESS

ROCK COAL

0.12 0.09  
0.17 0.04  
0.35  
0.27



ROOF : 324° / 85° SW

CLAYSTONE:

COAL:

CLAYSTONE: slightly friable

COAL: iron stained contact at upper and lower contacts

CLAYSTONE: friable

MUDSTONE: coaly, pale green-yellow band adjacent to the underlying coal

COAL:

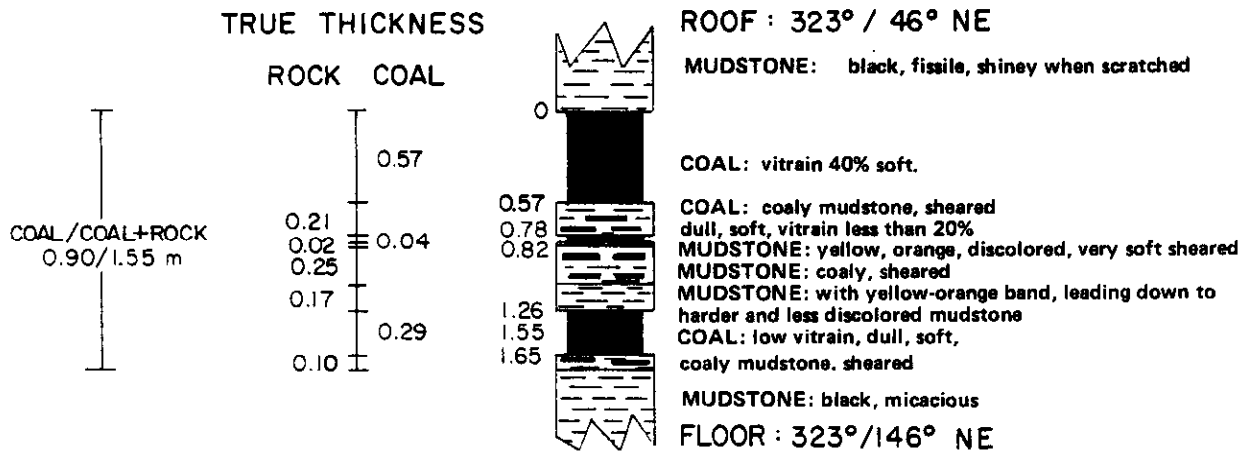
CLAYSTONE: friable

FLOOR : 326° / 90° SW

FORMATION : GETHING  
UTM COORDINATES : 147 700 N, 540 540 E  
MAP CARD NUMBER : 1V45 - 10(1:5000)  
AIR PHOTO NUMBER :  
TRENCH DEPTH : 1.0m  
TRENCH WIDTH : 1.5m  
TRENCH LENGTH : 2.0m  
TRENCH BEARING : 055°  
TRENCH SLOPE : 0°

5560

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>BCWT - 81 - G05</b>		
DRAWN BY: W. H. ACOSTA	SCALE: 1:50	
LOGGED BY: D. DAUPHINEE	DATE: OCT. / 1981	
APPROVED BY: H. ZSCHACH		



FORMATION : GETHING

UTM COORDINATES : 147 750 N, 540 620 E

MAP CARD NUMBER : 1V45 - 10 (1:5000)

AIR PHOTO NUMBER :

TRENCH DEPTH : 1.0 m

TRENCH WIDTH : 1.0 m

TRENCH LENGTH : 3.0 m

TRENCH BEARING : 075°

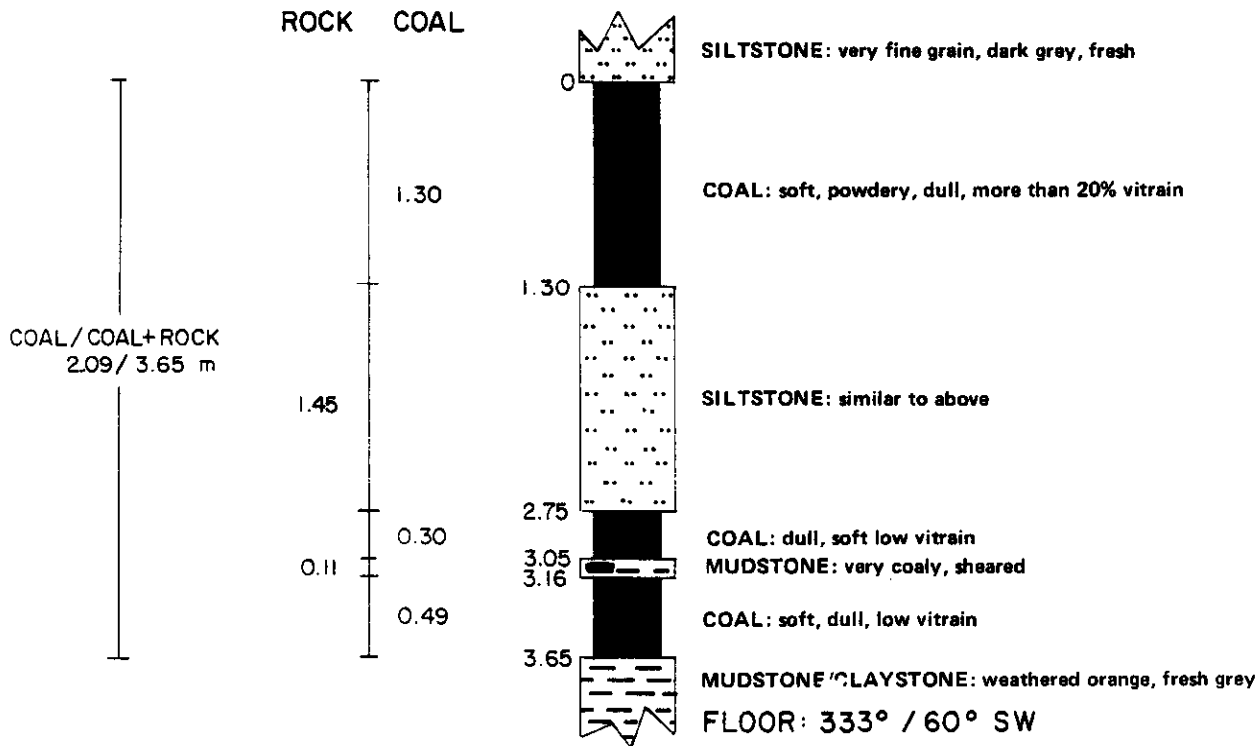
TRENCH SLOPE : 0°

*5560*

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<p><b>GOODRICH COAL PROJECT</b></p> <p><b>TRENCH LOG</b></p> <p><b>BCWT - 81 - G06</b></p>		
DRAWN BY: W. H. ACOSTA		SCALE 1: 50
LOGGED BY: D. DAUPHINEE		DATE OCT. / 1981
APPROVED BY: HANS ZSCHACH		

TRUE THICKNESS

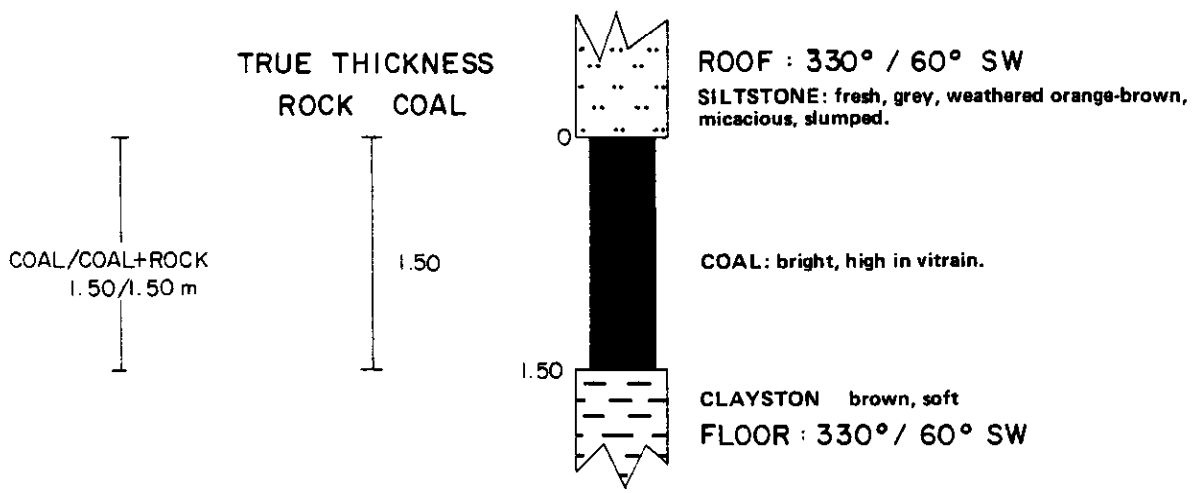
ROOF : 333° / 60° SW



5560

FORMATION : GETHING  
 UTM COORDINATES : 147 770 N, 540 645 E  
 MAP CARD NUMBER : 1V45 - 10 (1:5000)  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 1.0m  
 TRENCH WIDTH : 1.0m  
 TRENCH LENGTH : 4.0m  
 TRENCH BEARING : 105°  
 TRENCH SLOPE : 0°

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>BCWT - 81 - G07</b>		
DRAWN BY: W. H. ACOSTA		SCALE 1: 50
LOGGED BY: D. DAUPHINEE		DATE OCT. / 1981
APPROVED BY: H. ZSCHACH		



5560

FORMATION : GETTING  
 UTM COORDINATES : 147 780 N, 540 665 E  
 MAP CARD NUMBER : 1V45 - 10 (1:5000)  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 1.0 m  
 TRENCH WIDTH : 1.0 m  
 TRENCH LENGTH : 2.0 m  
 TRENCH BEARING : 058°  
 TRENCH SLOPE : 0°

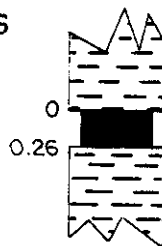
<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>BCWT - 81 - G08</b>		
DRAWN BY: W. H. ACOSTA		SCALE   : 50
LOGGED BY: D. DAUPHINEE		DATE OCT. / 1981
APPROVED BY: HANS ZSCHACH		



COAL/COAL+ROCK  
0.26/0.26 m

TRUE THICKNESS  
ROCK COAL

I 0.26



ROOF: 312° / 51° SW

MUDSTONE: very coaly, fissile, sheared

COAL: bright, high in vitrain

MUDSTONE: micaceous, coaly

FLOOR: 312° / 51° SW

FORMATION : GETHING  
UTM COORDINATES : 147 800 N, 540 695 E  
MAP CARD NUMBER : IV45 - 10(1:5000)  
AIR PHOTO NUMBER :  
TRENCH DEPTH : 1.0 m  
TRENCH WIDTH : 0.5 m  
TRENCH LENGTH : 1.0 m  
TRENCH BEARING : 080°  
TRENCH SLOPE : 0°

5560  
GULF CANADA RESOURCES INC.

CALGARY

Coal Division

ALBERTA



GOODRICH COAL PROJECT  
TRENCH LOG

BCWT - 81 - G09

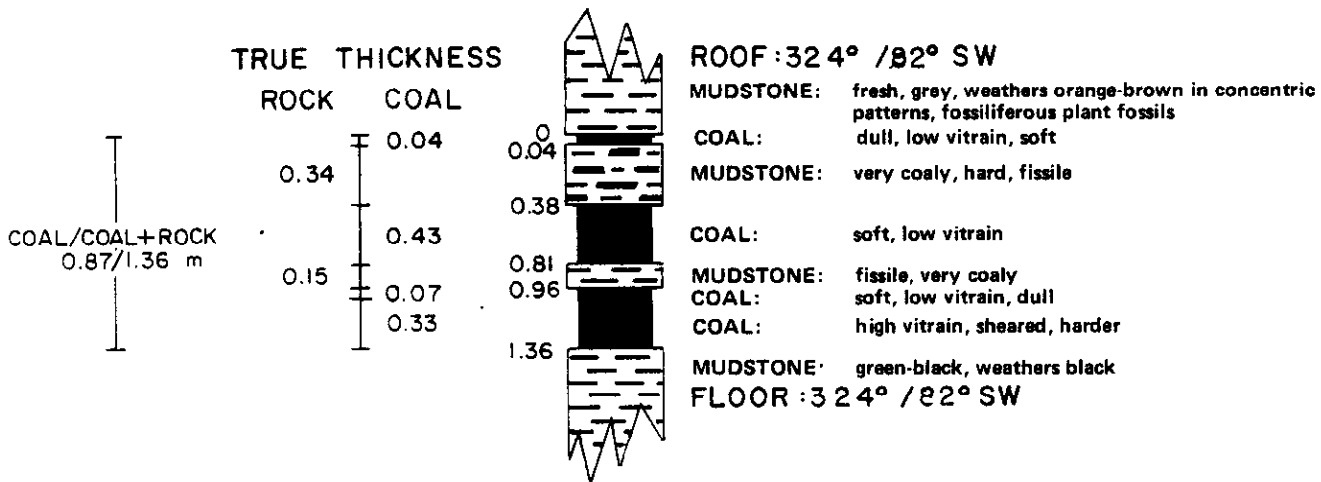
DRAWN BY: W.H. ACOSTA

SCALE | : 50

LOGGED BY: D. DAUPHINEE

DATE OCT. / 1981

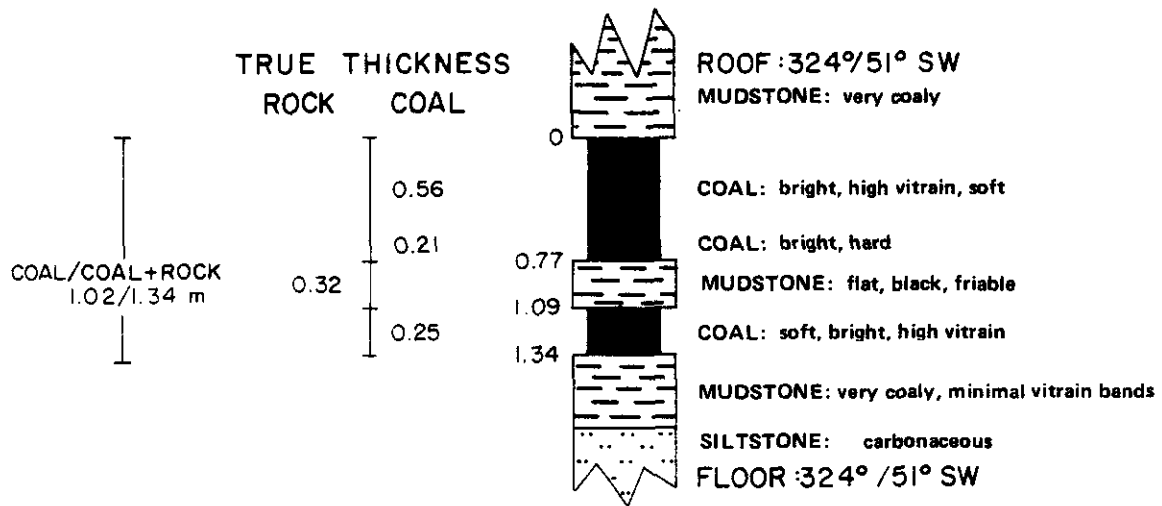
APPROVED BY: H. ZSCHACH



*SS600*

FORMATION : GETHING  
 UTM COORDINATES : 147 835 N, 540 720 E  
 MAP CARD NUMBER : IV45 - 11(1:5000)  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 1.0m  
 TRENCH WIDTH : 0.5m  
 TRENCH LENGTH : 1.0m  
 TRENCH BEARING : 082°  
 TRENCH SLOPE : 0°

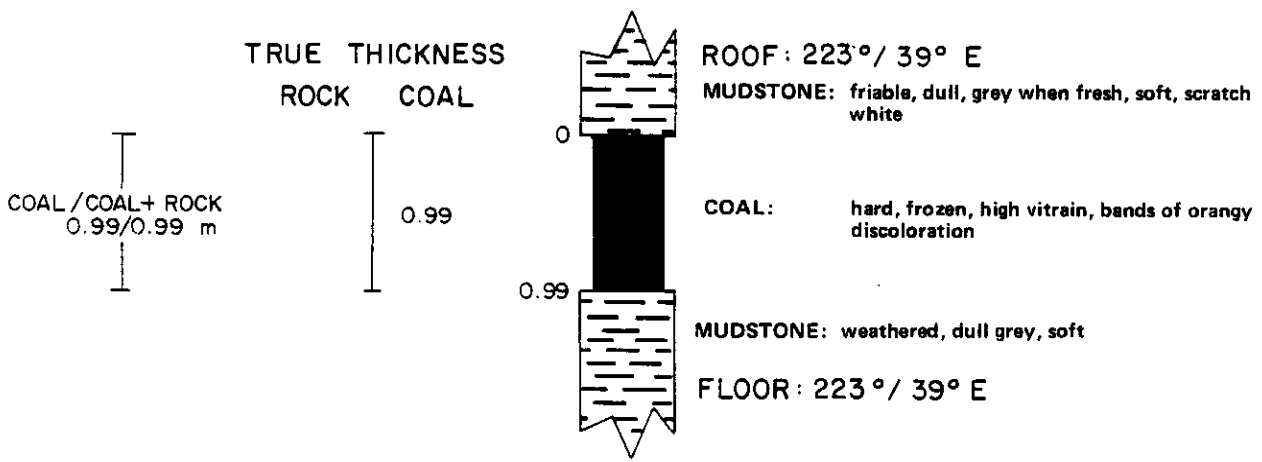
<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>BCWT - 81 - G10</b>		
DRAWN BY: W. H. ACOSTA		SCALE 1:50
LOGGED BY: D. DAUPHINEE		DATE OCT. /1981
APPROVED BY: H. ZSCHACH		



FORMATION : GETHING  
 UTM COORDINATES : 147 940 N, 540 880 E  
 MAP CARD NUMBER : 1V45 - 11 (1:5000)  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 1.5m  
 TRENCH WIDTH : 1.0m  
 TRENCH LENGTH : 3.0m  
 TRENCH BEARING : 055°  
 TRENCH SLOPE : 0°

5560

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>BCWT - 81 - G11</b>		
DRAWN BY: W. H. ACOSTA		SCALE 1: 50
LOGGED BY: D. DAUPHINEE		DATE OCT. / 1981
APPROVED BY: H. ZSCHACH		



5560

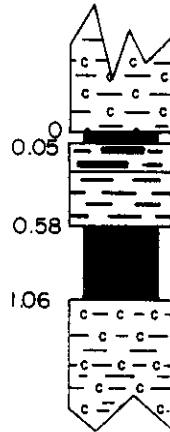
FORMATION : GETHING  
 UTM COORDINATES : 147 940 N, 540 955 E  
 MAP CARD NUMBER : 1V45 - 11 (1: 5000)  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 0.5 m  
 TRENCH WIDTH : 0.5 m  
 TRENCH LENGTH : 1.5 m  
 TRENCH BEARING : 130°  
 TRENCH SLOPE : 0°

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>BCWT - 81 - G12</b>		
DRAWN BY: W.H. ACOSTA		SCALE 1 : 50
LOGGED BY: D. DAUPHINEE		DATE OCT/1981
APPROVED BY: H. ZSCHACH		

COAL/COAL+ROCK  
0.53/1.06 m

TRUE THICKNESS  
ROCK COAL

0.18 0.05  
0.35  
0.48



ROOF: 330° / 57° NE

MUDSTONE: carbonaceous, soft

COAL: dull, powdery, soft  
very coaly mudstone

MUDSTONE:

COAL: powdery soft

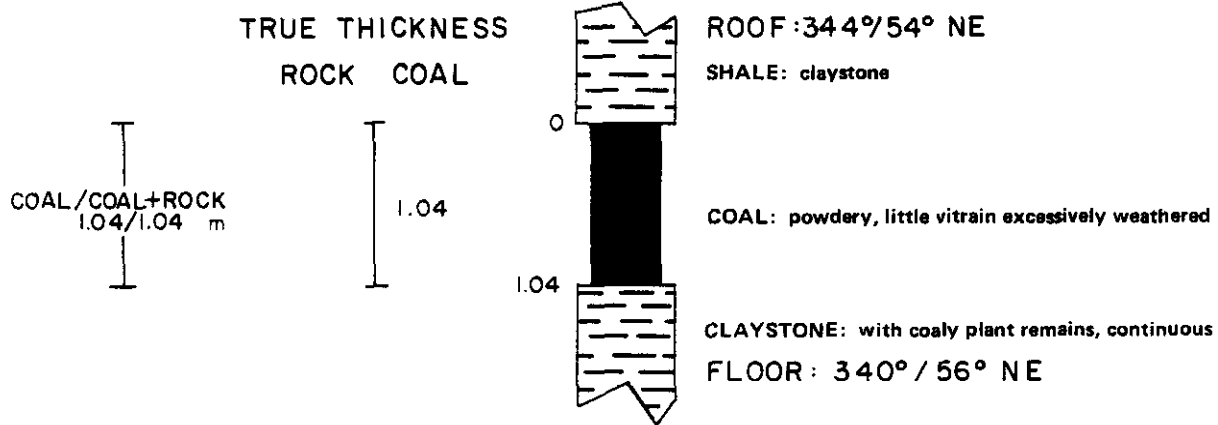
MUDSTONE: carbonaceous, soft

FLOOR: 330° / 57° NE


FORMATION : GETTING  
UTM COORDINATES : 150 116 N, 539 348 E  
MAP CARD NUMBER : 1V45 - II (1:5000)  
AIR PHOTO NUMBER :  
TRENCH DEPTH : 0.5 m  
TRENCH WIDTH : 0.5 m  
TRENCH LENGTH : 3.0 m  
TRENCH BEARING : 065°  
TRENCH SLOPE : 0°

5569

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>BCWT - 81 - G13</b>		
DRAWN BY: W. H. ACOSTA		SCALE: 1:50
LOGGED BY: D. DAUPHINEE		DATE: OCT. / 1981
APPROVED BY: H. ZSCHACH		



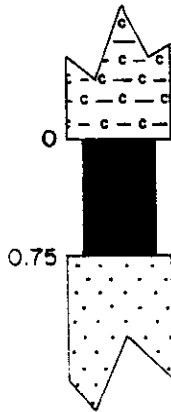
FORMATION : GETTING  
 UTM COORDINATES : 148 025 N, 539 245 E  
 MAP CARD NUMBER : 1V46 - 3 (1:5000)  
 AIR PHOTO NUMBER : HA 131080 - 2 - 131 (1:30000)  
 TRENCH DEPTH : 0.75 m  
 TRENCH WIDTH : 0.5 m  
 TRENCH LENGTH : 2.0 m  
 TRENCH BEARING : 260°  
 TRENCH SLOPE : 0°

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>BCWT - 81 - G14</b>		
DRAWN BY: W. H. ACOSTA		SCALE 1:50
LOGGED BY: D. DAUPHINEE		DATE OCT. / 1981
APPROVED BY: H. ZSCHACH		

COAL/COAL+ROCK  
0.75/0.75 m

TRUE THICKNESS  
ROCK COAL

0.75



ROOF : 32° / 60° SW

MUDSTONE: very carbonaceous, dull black weathers grey black, semi-friable, hard


COAL: soft, mostly dull laminated

MUDSTONE: soft friable, brown weathered, iron stained

FLOOR : 32° / 60° SW

FORMATION : GETHING  
 UTM COORDINATES : 150 880 N, 537 800 E  
 MAP CARD NUMBER : 1W46 - 6 (1:5000)  
 AIR PHOTO NUMBER : BC 7177 191  
 TRENCH DEPTH : 0.70m  
 TRENCH WIDTH : 0.70m  
 TRENCH LENGTH : 1.00m  
 TRENCH BEARING : 075°  
 TRENCH SLOPE : 0°

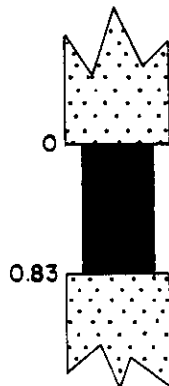
5576

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>BCWT - 81 - G15</b>		
DRAWN BY: W. H. ACOSTA		SCALE 1: 50
LOGGED BY: D. DAUPHINEE		DATE OCT./1981
APPROVED BY: H. ZSCHACH		

COAL/COAL+ROCK  
0.83/0.83 m

TRUE THICKNESS  
ROCK COAL

0.83



ROOF : 322° / 86° NE

SANDSTONE: fine grained, weathered orange, brown, carbonaceous, plant fragments


COAL: dull banded, weathered soft and wet

SANDSTONE: fine grain, weathered brownish grey, carbonaceous, plant fragments

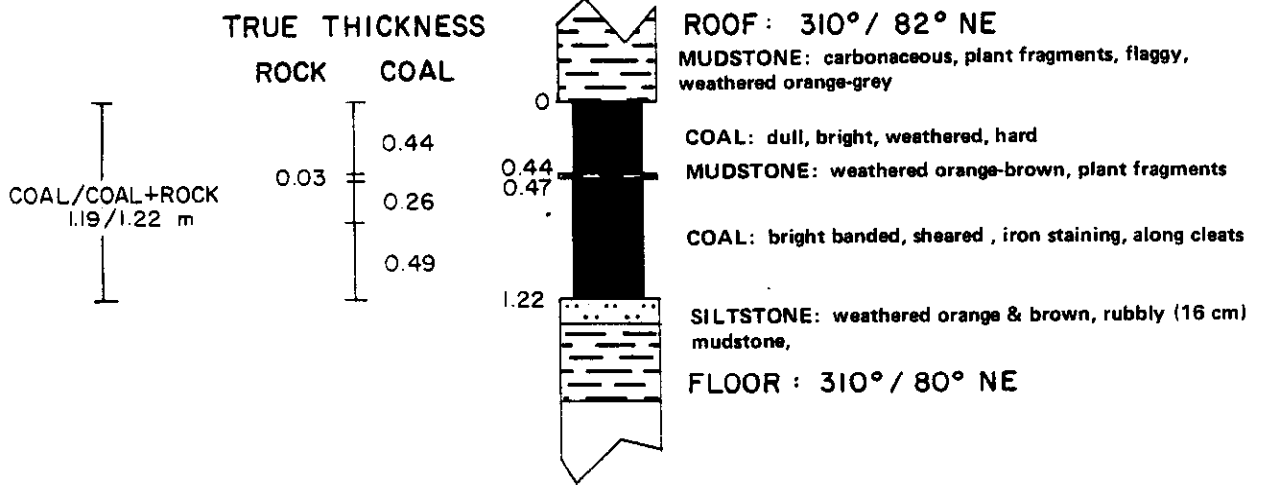
FLOOR : 310° / 80° NE

5556

FORMATION : BRENOT  
 UTM COORDINATES : 145 856 N, 541 506 E  
 MAP CARD NUMBER : 1U44 - 10 (1:5000)  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 0.70 m  
 TRENCH WIDTH : 0.5 m  
 TRENCH LENGTH : 1.4 m  
 TRENCH BEARING : 050°  
 TRENCH SLOPE : 0°

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>BCWT - 81 - B16</b>		
DRAWN BY: W. H. ACOSTA		SCALE 1:50
LOGGED BY: V. TAPLEY		DATE OCT. / 1981
APPROVED BY: H. ZSCHACH		





FORMATION : DRESSER  
 UTM COORDINATES : 145 922 N, 541 610 E  
 MAP CARD NUMBER : 1U44 - 10(1:5000)  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 0.50 m  
 TRENCH WIDTH : 0.5 m  
 TRENCH LENGTH : 2.1 m  
 TRENCH BEARING : 066°  
 TRENCH SLOPE : 0°

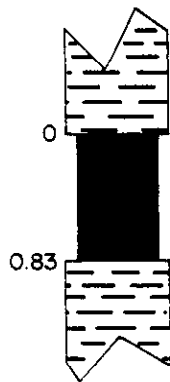
5556

<b>GULF CANADA RESOURCES INC.</b>		
<small>Coal Division</small>		
<small>CALGARY</small>	<small>ALBERTA</small>	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>BCWT - 81 - D17</b>		
<small>DRAWN BY: W. H. ACOSTA</small>		<small>SCALE 1:50</small>
<small>LOGGED BY: V. TAPLEY,</small>		<small>DATE OCT. / 1981</small>
<small>APPROVED BY: H. ZSCHACH</small>		

COAL/COAL+ROCK  
0.83/0.83 m

TRUE THICKNESS  
ROCK COAL

0.83



ROOF: 315°/85° NE

MUDSTONE: carbonaceous plant fragments, weathered light grey, flaggy, iron staining


COAL: dull banded weathered soft and wet

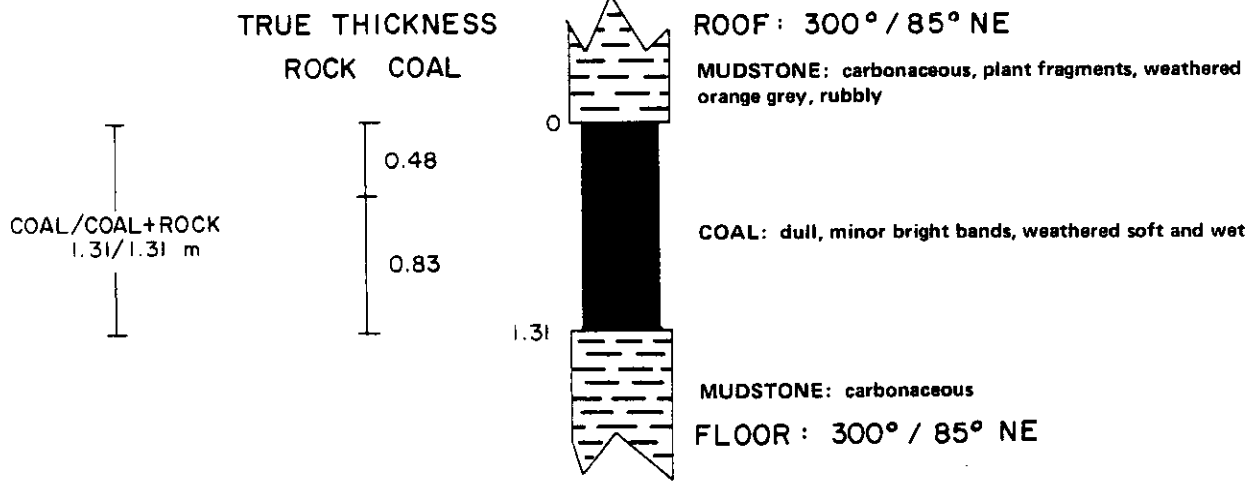
MUDSTONE: carbonaceous plant fragments, iron staining, flaggy

FLOOR: 315°/85° NE

FORMATION : DRESSER  
UTM COORDINATES : 145 930 N, 541 616 E  
MAP CARD NUMBER : 1U44 - 10 (1:5000)  
AIR PHOTO NUMBER :  
TRENCH DEPTH : 0.5 m  
TRENCH WIDTH : 0.5 m  
TRENCH LENGTH : 1.3 m  
TRENCH BEARING : 063°  
TRENCH SLOPE : 0°

*5556*

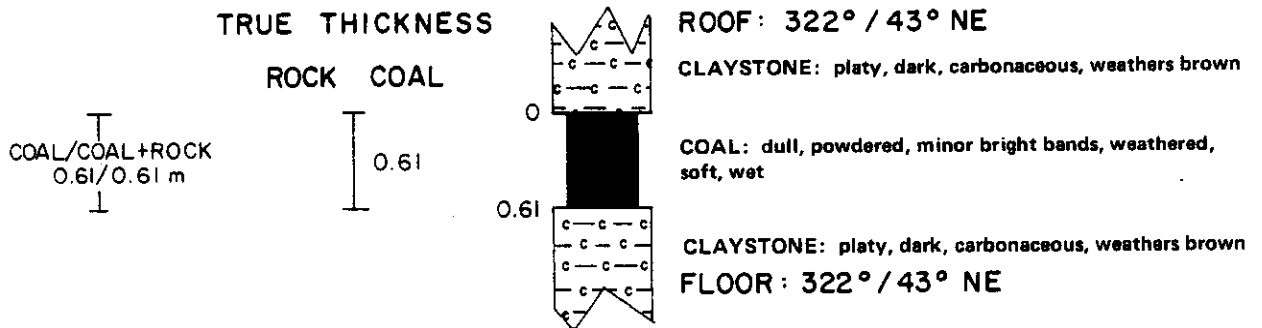
<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>BCWT - 81 - D18</b>		
DRAWN BY: W. H. ACOSTA		SCALE 1: 50
LOGGED BY: V. TAPLEY		DATE OCT. / 1981
APPROVED BY: H. ZSCHACH		



FORMATION : DRESSER  
 UTM COORDINATES : 145 750 N, 541 654 E  
 MAP CARD NUMBER : 1U44 - 10 (1:5000)  
 AIR PHOTO NUMBER:  
 TRENCH DEPTH : 0.7 m  
 TRENCH WIDTH : 1.5 m  
 TRENCH LENGTH : 1.6 m  
 TRENCH BEARING : 028°  
 TRENCH SLOPE : 0°

5556

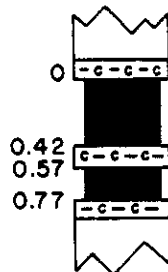
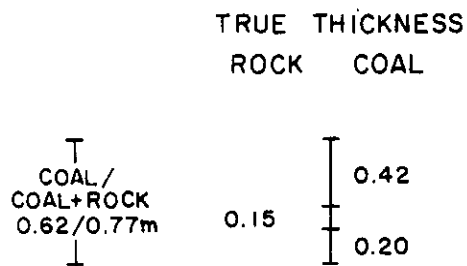
<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>BCWT - 81 - D19</b>		
DRAWN BY: W. H. ACOSTA		SCALE 1: 50
LOGGED BY: V. TAPLEY		DATE OCT. / 1981
APPROVED BY: H. ZSCHACH		



FORMATION : BRENOT  
 UTM COORDINATES : 150 648 N, 538 140 E  
 MAP CARD NUMBER : 1V46 - 3 (1:5000)  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 0.6 m  
 TRENCH WIDTH : 0.5 m  
 TRENCH LENGTH : 1.9 m  
 TRENCH BEARING : 050°  
 TRENCH SLOPE : 0°

5575

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<p><b>GOODRICH COAL PROJECT</b></p> <p><b>TRENCH LOG</b></p> <p><b>BCWT - 81 - B20</b></p>		
DRAWN BY: W. H. ACOSTA		SCALE 1: 50
LOGGED BY: V. TAPLEY		DATE OCT./1981
APPROVED BY: H. ZSCHACH		



ROOF : 320° 72° SW

CLAYSTONE: shaly, dark, carbonaceous

COAL: dull, weathered, soft, wet, minor bright bands

MUDSTONE: shaly, carbonaceous


COAL: dull, weathered, soft, wet

CLAYSTONE: shaly, carbonaceous

FLOOR : 320° / 72° SW

FORMATION : BRENOT  
 UTM COORDINATES : 150 820 N, 538 584 E  
 MAP CARD NUMBER : 1V46 - 3 (1: 5000)  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 0.4 m  
 TRENCH WIDTH : 0.6 m  
 TRENCH LENGTH : 1.1 m  
 TRENCH BEARING : 072°  
 TRENCH SLOPE : 10°

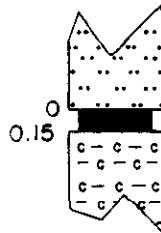
5575

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<p><b>GOODRICH COAL PROJECT</b></p> <p><b>TRENCH LOG</b></p> <p><b>BCWT - 81 - B 21</b></p>		
DRAWN BY: W. H. ACOSTA	LOGGED BY: V. TAPLEY	SCALE 1 50
APPROVED BY: H. ZSCHACH		DATE OCT. / 81

COAL/COAL+ROCK  
0.15/0.15 m

TRUE THICKNESS  
ROCK COAL

I 0.15



ROOF: 328° / 67° NE

SILTSTONE: friable, iron staining, finely laminated,  
minor carbonaceous material


COAL: dull, powdery

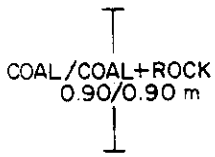
MUDSTONE: carbonaceous, sheared, minor iron staining,  
coaly stringers

FLOOR: 328° / 67° NE

FORMATION : BRENOT  
UTM COORDINATES : 150 855 N, 537 982 E  
MAP CARD NUMBER : IV46 - 3 (1:5000)  
AIR PHOTO NUMBER :  
TRENCH DEPTH : 0.5 m  
TRENCH WIDTH : 0.5 m  
TRENCH LENGTH : 1.5 m  
TRENCH BEARING : 060°  
TRENCH SLOPE :

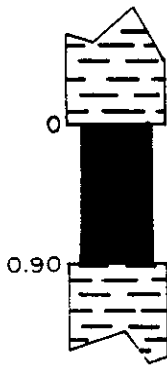
5575

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>BCWT - 81 - B 22</b>		
DRAWN BY: W. H. ACOSTA		SCALE 1" = 50'
LOGGED BY: D. DAUPHINEE		DATE OCT. / 1981
APPROVED BY: H. ZSCHACH		



**TRUE THICKNESS**

ROCK	COAL
	0.10
	0.20
	0.30
	0.30



ROOF: 306° / 80° SW

CLAYSTONE: shaley

COAL: clayey, shaley claystone, weathered

COAL: shaley

COAL: hard, vitrain, weathered

COAL: shaley coal

CLAYSTONE: brown shaley

FLOOR: 306° / 80° SW

FORMATION : GETHING  
 UTM COORDINATES : 151 200 N, 537 094 E  
 MAP CARD NUMBER : 1W46 - 1 (1:5000)  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 0.4 m  
 TRENCH WIDTH : 0.6 m  
 TRENCH LENGTH : 1.5 m  
 TRENCH BEARING : 034°  
 TRENCH SLOPE : 0°

5576

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>BCWT - 81 - G23</b>		
DRAWN BY: W.H. ACOSTA		SCALE 1: 50
LOGGED BY: V. TAPLEY		DATE OCT./1981
APPROVED BY: H. ZSCHACH		

TRUE THICKNESS

COAL/COAL+ROCK  
0.60/0.60 m

0.60



ROOF : 334° / 44° SW


CLAYSTONE: weathered with pebble rubble

COAL: vitrain weathered coal

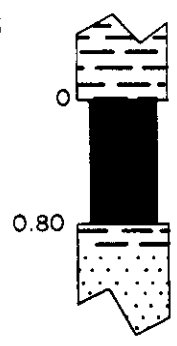
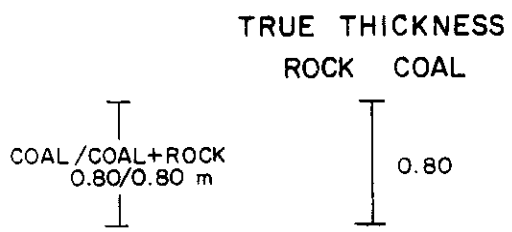
CLAYSTONE: weathered with sandstone pebble rubble

FLOOR : 334° / 44° SW

FORMATION : BRENOT  
 UTM COORDINATES : 150 816 N, 537 860 E  
 MAP CARD NUMBER : 1W46 - 1 (1: 5000)  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 0.6 m  
 TRENCH WIDTH : 0.4 m  
 TRENCH LENGTH : 1.8 m  
 TRENCH BEARING : 044°  
 TRENCH SLOPE : 0°

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>BCWT - 81 - B24</b>		
DRAWN BY: W.H. ACOSTA		SCALE: 1" = 50'
LOGGED BY: V. TAPLEY		DATE: OCT. / 1981
APPROVED BY: H. ZSCHACH		





ROOF: 340° / 50° SW

CLAYSTONE: blocky, weathered

COAL: dull, weathered, powdery

CLAYSTONE: blocky, weathered (10 cm), sandstone, fine grain (10 cm)

FLOOR: 340° / 50° SW

FORMATION : BRENOT

UTM COORDINATES : 150 832 N, 537 878 E

MAP CARD NUMBER : 1W46 - 1 (1:5000)

AIR PHOTO NUMBER :

TRENCH DEPTH : 0.70m

TRENCH WIDTH : 0.50m

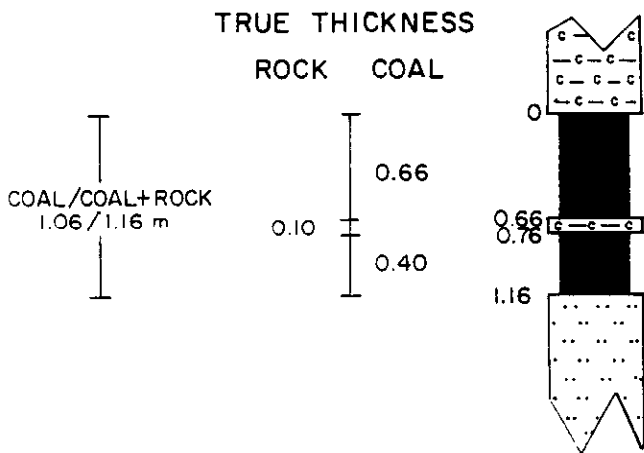
TRENCH LENGTH : 1.90m

TRENCH BEARING : 084°

TRENCH SLOPE : 0°

5575

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>BCWT - 81 - B25</b>		
DRAWN BY: W. H. ACOSTA		SCALE: 1:50
LOGGED BY: V. TAPLEY,		DATE: OCT. / 1981
APPROVED BY: H. ZSCHACH		



ROOF : 316°/ 71° NE

CLAYSTONE: platy to shaley, dark, carbonaceous

COAL: dull, very weathered, shaley, powdery, wet

CLAYSTONE: shaley, carbonaceous  
claystone interbeds


COAL: shaley, powdered and wet, minor  
claystone interbeds

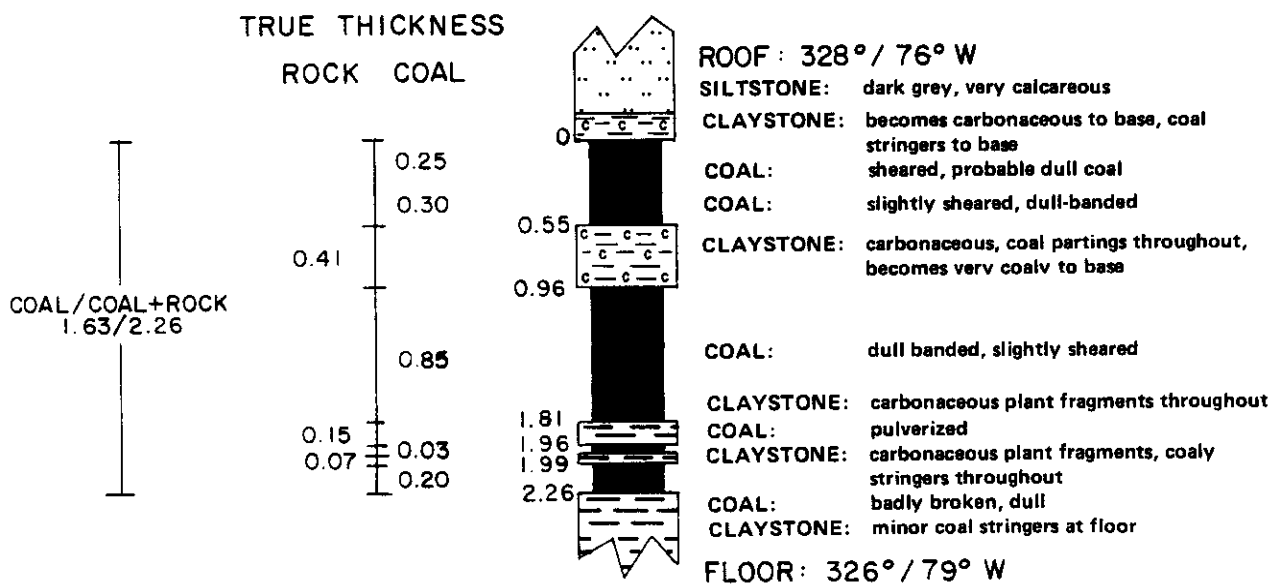
SILTSTONE: very hard, grey to brown

FLOOR: 330°/64° NE

FORMATION : DRESSER  
 UTM COORDINATES : 15I 020 N, 537 980 E  
 MAP CARD NUMBER : 1V46 - 3(I: 5000)  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 0.9m  
 TRENCH WIDTH : 0.5m  
 TRENCH LENGTH : 1.5 m  
 TRENCH BEARING : 068°  
 TRENCH SLOPE : 0°

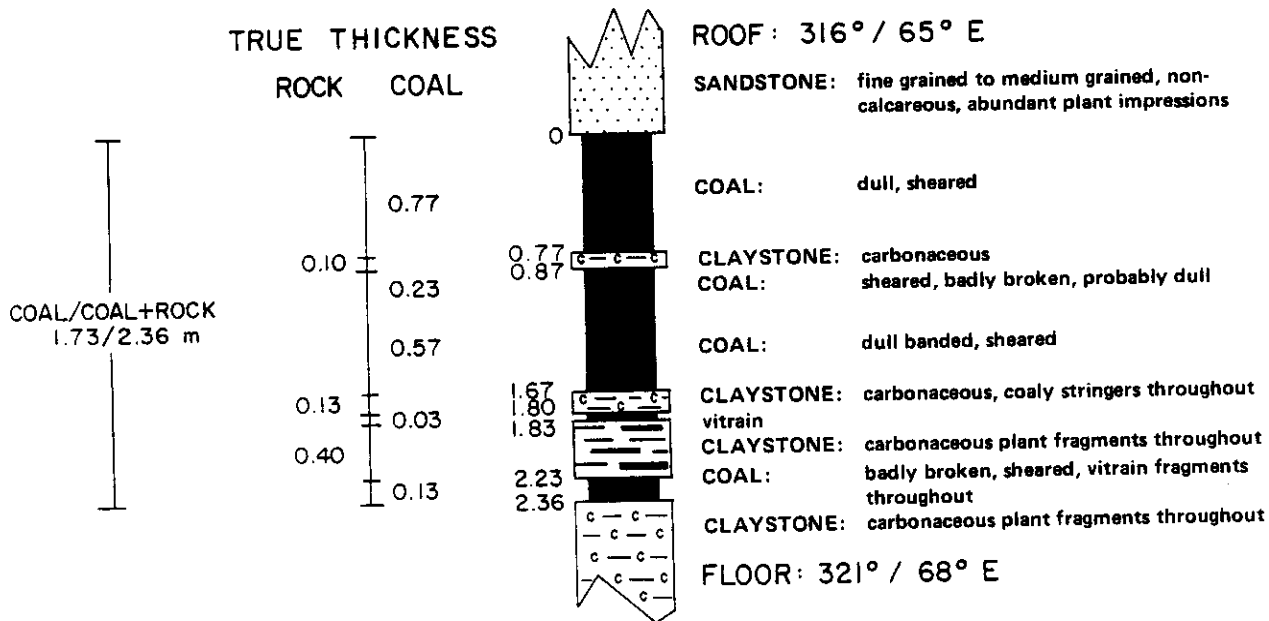
5572

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>BCWT - 81 - D26</b>		
DRAWN BY: W. H. ACOSTA		SCALE 1: 50
LOGGED BY: V. TAPLEY, W. PEDERSEN		DATE OCT./1981
APPROVED BY: H. ZSCHACH		



FORMATION : GETHING  
 UTM COORDINATES : 148 582 N, 539 475 E  
 MAP CARD NUMBER : 1V45-8 (1:5000)  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 0.75 m  
 TRENCH WIDTH : 0.75 m  
 TRENCH LENGTH : 2.6 m  
 TRENCH BEARING : 244°  
 TRENCH SLOPE : 0°

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
GOODRICH COAL PROJECT TRENCH LOG  BCWT - 81 - G27		
DRAWN BY: W. H. ACOSTA		SCALE 1 : 50
LOGGED BY: G. SEVE		DATE OCT./1981
APPROVED BY: H. ZSCHACH		



FORMATION : GETHING  
 UTM COORDINATES : 148 646 N, 539 569 E  
 MAP CARD NUMBER : IV45 - 8 (1:5000)  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 0.75 m  
 TRENCH WIDTH : 0.75 m  
 TRENCH LENGTH : 2.50 m  
 TRENCH BEARING : 243°  
 TRENCH SLOPE : 0°

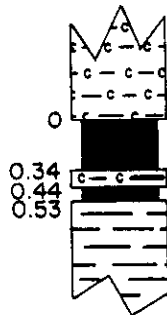
<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>BCWT - 81 - G28</b>		
DRAWN BY: W.H. ACOSTA		SCALE 1: 50
LOGGED BY: G. SEVE		DATE OCT. / 1981
APPROVED BY: H. ZSCHACH		

COAL/COAL+ROCK  
0.43/0.53 m

TRUE THICKNESS

ROCK COAL

0.10 | 0.34  
| 0.09



ROOF: 33 4° / 75° E

CLAYSTONE: carbonaceous

COAL: sheared, pulverized

CLAYSTONE: carbonaceous, coal stringers throughout


COAL: sheared

CLAYSTONE: dark grey, minor carbonaceous plant fragments

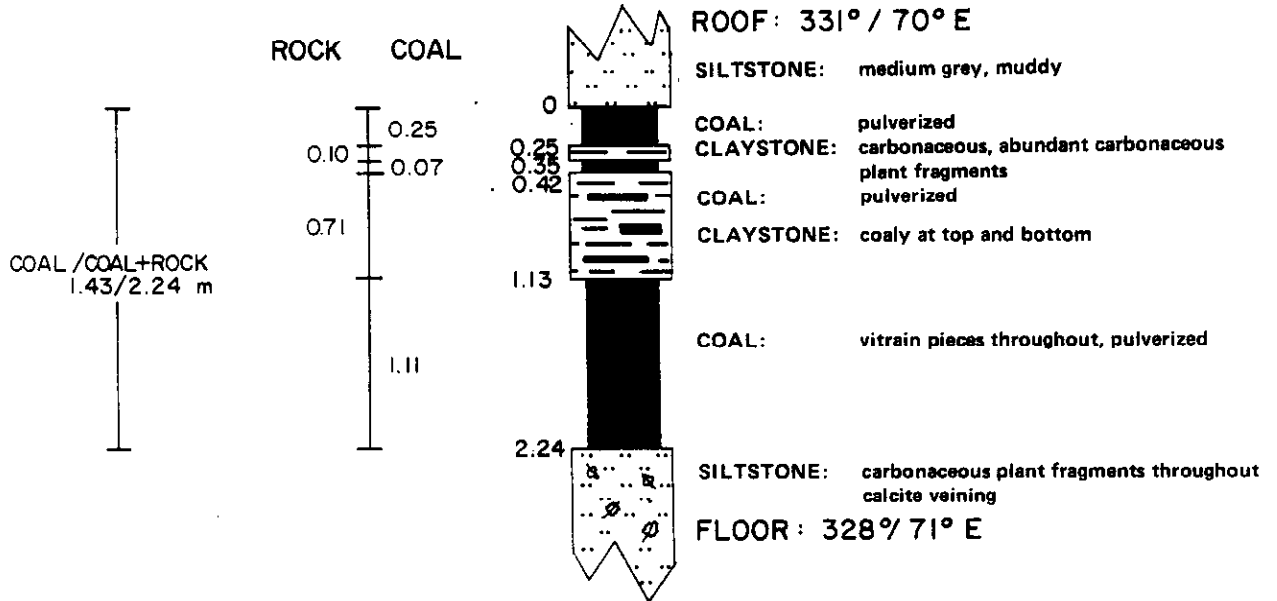
FLOOR: 329° / 77° E

FORMATION : GETHING  
 UTM COORDINATES : 148 740 N, 539 710 E  
 MAP CARD NUMBER : 1V 45 - 8 (1:5000)  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 0.5 m  
 TRENCH WIDTH : 0.75 m  
 TRENCH LENGTH : 1.0 m  
 TRENCH BEARING : 255°  
 TRENCH SLOPE : 0°

5565


<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>BCWT - 81 - G 29</b>		
DRAWN BY: W. H. ACOSTA		SCALE 1:50
LOGGED BY: G SEVE		DATE OCT. / 1981
APPROVED BY: H. ZSCHACH		

TRUE THICKNESS



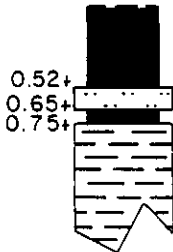
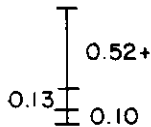
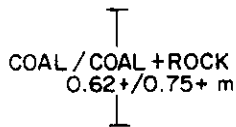
FORMATION : GETHING  
 UTM COORDINATES : 149 510 N, 540 644 E  
 MAP CARD NUMBER : 1V45 - 7 (1:5000)  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 0.75 m  
 TRENCH WIDTH : 0.75 m  
 TRENCH LENGTH : 2.53 m  
 TRENCH BEARING : 232°  
 TRENCH SLOPE : 0°

5565

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	ALBERTA	
Coal Division		
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>BCWT - 81 - G30</b>		
DRAWN BY: W.H. ACOSTA	SCALE 1: 50	
LOGGED BY: G. SEVE	DATE OCT. / 1981	
APPROVED BY: H. ZSCHACH		

TRUE THICKNESS

ROCK COAL



ROOF: unknown, all slump, digging unsafe.

COAL: powdered, moves up into mixture of overburden and coal.


SILTSTONE: dark grey, broken

COAL: powdered

FLOOR: 295° / 40° W  
CLAYSTONE

FORMATION :GETHING  
 UTM COORDINATES :149 530 N, 540 664 E  
 MAP CARD NUMBER :1V45 - 7 (1:5000)  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH :0.75 m  
 TRENCH WIDTH :0.75 m  
 TRENCH LENGTH :1.0m  
 TRENCH BEARING :125°  
 TRENCH SLOPE :0°

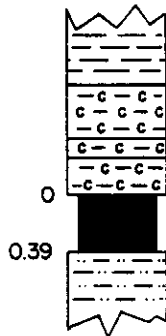
5505

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>BCWT - 81 - G31</b>		
DRAWN BY: W. H. ACOSTA		SCALE 1: 50
LOGGED BY: G. SEVE		DATE OCT. / 1981
APPROVED BY: H. ZSCHACH		

TRUE THICKNESS  
ROCK COAL

COAL/  
COAL+ROCK  
0.39/0.39 m

┆ .10  
┆ .09  
┆ .20



ROOF : 300°/67° S

MUDSTONE:

COALY MUDSTONE: grey/black, minor coaly lenses.

COALY MUDSTONE: grey/black orange weathered.

COALY MUDSTONE: grey/black, minor coaly lenses.

COAL: powdery, black.

COAL: shiny, brittle, vitreous

COAL:

SILTSTONE:

FLOOR : 300°/67° S

FORMATION : GETTING  
UTM COORDINATES : 141 055 N, 547 799 E  
MAP CARD NUMBER : S43 - 4 (1:5000)  
AIR PHOTO NUMBER :  
TRENCH DEPTH : 0.4 m  
TRENCH WIDTH : 0.4 m  
TRENCH LENGTH : 1.7 m  
TRENCH BEARING : 025°  
TRENCH SLOPE : 0°

5704  
GULF CANADA RESOURCES INC.

CALGARY

Coal Division

ALBERTA



GOODRICH COAL PROJECT  
TRENCH LOG

MSE - 81 - G 01

DRAWN BY: W. H. ACOSTA

SCALE 1:50

LOGGED BY: B. DAVIDSON

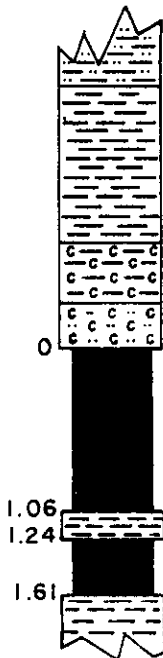
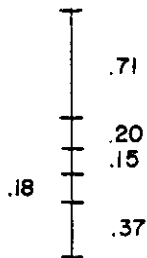
DATE OCT./1981

APPROVED BY: H. ZSCHACH



TRUE THICKNESS  
ROCK COAL

COAL/  
COAL+ ROCK  
1.43/1.61 m



ROOF: 29 8°/85°S

SILTSTONE: orange, weathered

Interbedded, grey brown mudstone

COALY MUDSTONE: very minor coaly lenses carbonaceous, siltstone, resistant, grey

coaly partings

COAL: brittle, bright, easily oxidized

COAL: loose, powdery

COAL: brittle

MUDSTONE:

COAL: bright, brittle, carbonaceous mudstone

MUDSTONE: grey, orange, weathered

FLOOR: 29 8°/85°S

FORMATION : GETHING  
 UTM COORDINATES : 141 040 N, 547 765 E  
 MAP CARD NUMBER : S43 - 4(1:5000)  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 0.8 m  
 TRENCH WIDTH : 0.5 m  
 TRENCH LENGTH : 4.0 m  
 TRENCH BEARING : 025 °  
 TRENCH SLOPE : +10

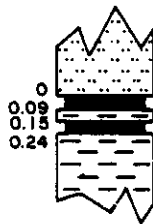
5704

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>MSE - 81 - G02</b>		
DRAWN BY: <b>W.H. ACOSTA</b>		SCALE: 1:50
LOGGED BY: <b>BRAD DAVIDSON</b>		DATE: OCT./1981
APPROVED BY: <b>H. ZSCHACH</b>		

TRUE THICKNESS  
ROCK COAL

COAL/  
COAL + ROCK  
0.18/0.24 m

0.06  0.09  
0.09



ROOF: 305°/90°

SILTSTONE


COAL  
MUDSTONE  
COAL

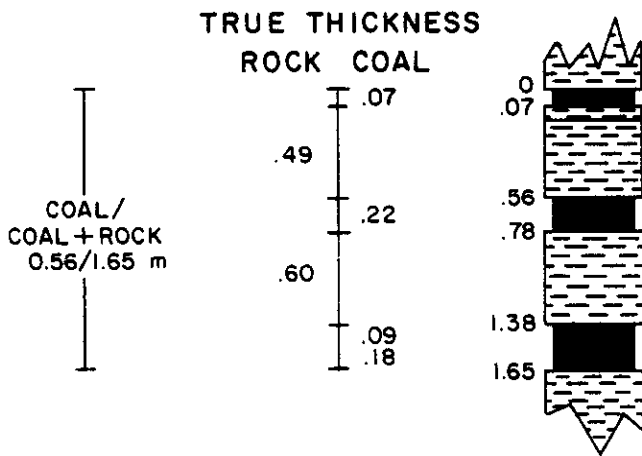
MUDSTONE

FLOOR: 305°/90°

FORMATION : GETHING  
UTM COORDINATES : 141 020 N, 547 700 E  
MAP CARD NUMBER : IS43 - 4 (1:5000)  
AIR PHOTO NUMBER :  
TRENCH DEPTH : 0.6 m  
TRENCH WIDTH : 0.5 m  
TRENCH LENGTH : 1.0 m  
TRENCH BEARING : 025 °  
TRENCH SLOPE : 0 °

5704

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>MSE - 81 - G03</b>		
DRAWN BY: <b>M. JOHNSON</b>		SCALE 1:50
LOGGED BY: <b>BRAD DAVIDSON</b>		DATE <b>OCT./81</b>
APPROVED BY: <b>H. ZSCHACH</b>		



**ROOF: 305°/90°**

**MUDSTONE:** carbonaceous

**COAL:** powdery

**COALY MUDSTONE** and Vitrain

**MUDSTONE:** carbonaceous with minor coaly bands,  
and brown-white mudstone

**COAL:** brittle, clean

**MUDSTONE:** fresh grey and weathered orange

**COAL:** dull, powdery

**COAL:** bright, brittle

**GREY MUDSTONE:**

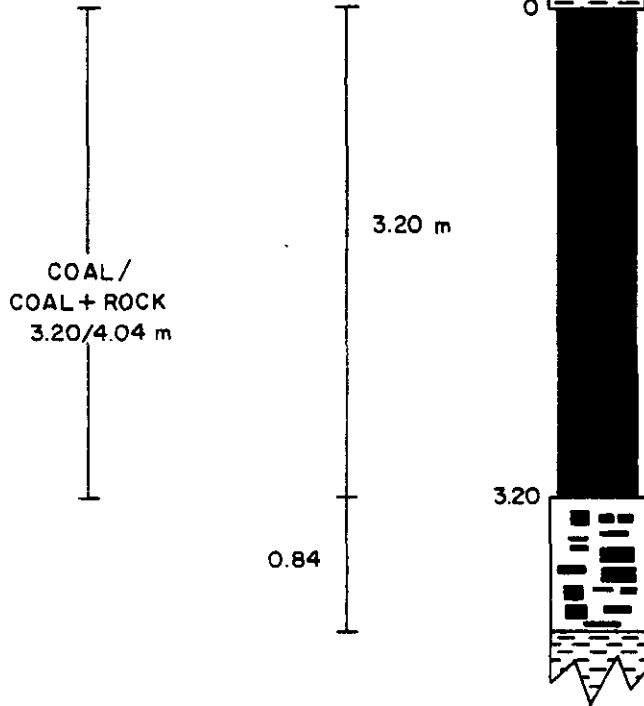
**FLOOR: 305°/90°**

FORMATION : GETHING  
 UTM COORDINATES : 141 000 N, 547 690 E  
 MAP CARD NUMBER : IS43 - 4 (1:5000)  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 0.5m  
 TRENCH WIDTH : 0.5m  
 TRENCH LENGTH : 1.2 m  
 TRENCH BEARING : 025°  
 TRENCH SLOPE : 0°

5704

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>MSE - 81 - G04</b>		
DRAWN BY W. H. ACOSTA		SCALE   50
LOGGED BY: BRAD DAVIDSON		DATE OCT./81
APPROVED BY: H. ZSCHACH		

TRUE THICKNESS  
ROCK COAL



ROOF: 305°/74°S  
MUDSTONE: grey

COAL: minor thin bands of coaly mudstone, wet

MUDSTONE: coaly

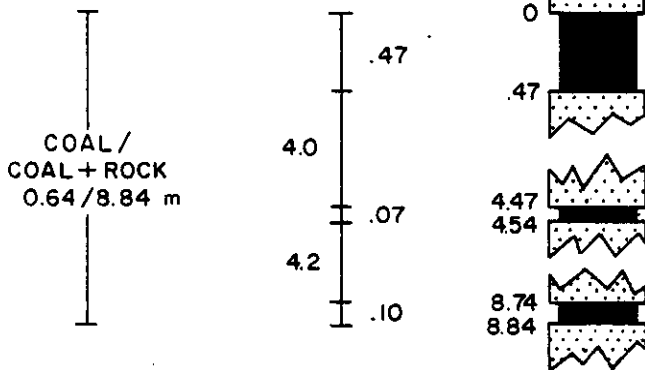
MUDSTONE: grey  
FLOOR: 305°/74°S

5704

FORMATION : GETTING  
UTM COORDINATES : 140 995 N, 547 689 E  
MAP CARD NUMBER : 1S43 - 4 (1:5000)  
AIR PHOTO NUMBER :  
TRENCH DEPTH : 0.8m  
TRENCH WIDTH : 0.4 m  
TRENCH LENGTH : 5.0m  
TRENCH BEARING : 020°  
TRENCH SLOPE : 0°

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>MSE - 81 - G05</b>		
DRAWN BY: W. H. ACOSTA		SCALE: 1:50
LOGGED BY: BRAD DAVIDSON		DATE: OCT./81
APPROVED BY: H. ZSCHACH		

**TRUE THICKNESS  
ROCK COAL**



**ROOF : 292°/90°**

**SILTSTONE: grey**

**COAL: clean**

**SILTSTONE: with orange weathering interbedded mudstone and siltstone**


**COAL: brittle, poor**

**SILTSTONE**

**COAL  
SILTSTONE  
FLOOR: 292°/90°**

FORMATION : GETTING  
 UTM COORDINATES : 140 570 N, 548 198 E  
 MAP CARD NUMBER : IS43 - 4 (1:5000)  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 1.0 m.  
 TRENCH WIDTH : 0.70 m.  
 TRENCH LENGTH : 9.0 m  
 TRENCH BEARING : 022°  
 TRENCH SLOPE : 0°

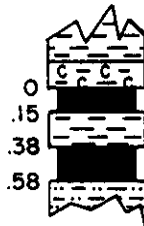
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<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT TRENCH LOG</b>		
<b>MSE - 81 - G06</b>		
DRAWN BY: W. H. ACOSTA		SCALE   : 50
LOGGED BY: BRAD DAVIDSON		DATE OCT. / 81
APPROVED BY: H. ZSCHACH		

**TRUE THICKNESS  
ROCK COAL**

COAL /  
COAL + ROCK  
0.35 / 0.58 m

.23 | .15  
|  
| .20



**ROOF: 292°/90°**

SHALE  
MUDSTONE: carbonaceous, dark grey  
coal with coaly mudstone

MUDSTONE: brown  
COAL: with coaly mudstone  
SILTSTONE and mudstone  
**FLOOR: 292°/90°**

FORMATION : GETTING  
UTM COORDINATES : 140 540 N, 548 160 E  
MAP CARD NUMBER : 1S43 - 4(1:5000)  
AIR PHOTO NUMBER :  
TRENCH DEPTH : 0.50 m  
TRENCH WIDTH : 0.50 m  
TRENCH LENGTH : 1.00 m  
TRENCH BEARING : 022°  
TRENCH SLOPE : 0°

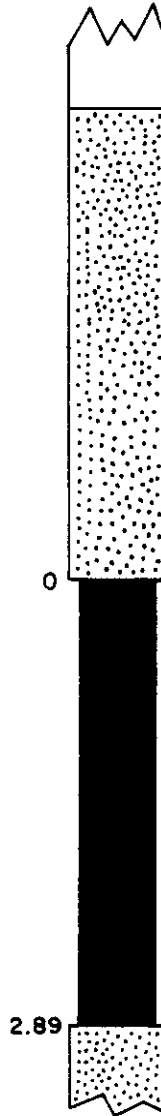
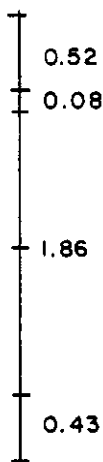
5704

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOC</b>		
<b>MSE -81- G07</b>		
DRAWN BY: W. H. ACOSTA		SCALE 1:50
LOGGED BY: BRAD DAVIDSON		DATE OCT. /81
APPROVED BY: H. ZSCHACH		

TRUE THICKNESS  
ROCK COAL

ROOF: 335°/ 37° SW

COAL/  
COAL+ROCK  
2.89/2.89 m



**SANDSTONE:** Light fine grained bed, 30 cm thick bedding with thinner interbeds of sandstone, near base thin coal parting. Weathers light grey to orange-red, mirror movement in lower beds possible (Thickness true).

**COAL:** dull banded, hard 1 cm, soft 11 cm of dull to bright banded coal, 3 cm bright coal brittle, 25 cm dull banded. Light orange claystone laminations (0.08)

**COAL:** Dull coal with occasional thin bands of bright coal and lenses, hard. The bright bands up to 0.5 cm thick. Rock is slightly damp hard "ledges" of coal, behind ledges - slightly stoney coal. Claystone Laminated - not along bedding planes (oblique) Dull with orange brown weathered claystone parting oblique to bedding

**CLAYSTONE:** Claystone becoming sandy towards base. Carbonaceous.

**SANDSTONE:** Very fine grained, coal specks, plant remains slightly carbonaceous

FLOOR: 335°/ 37° SW

FORMATION : GETHING  
 UTM COORDINATES : 142 190 N, 550 330 E  
 MAP CARD NUMBER : IS 43 - 12 (1:5000)  
 AIR PHOTO NUMBER : HA 131080 - 4 - 57 (1:30000)  
 TRENCH DEPTH : 0.39 m  
 TRENCH WIDTH : 0.50 m  
 TRENCH LENGTH : 3.00 m  
 TRENCH BEARING : 230°  
 TRENCH SLOPE : 43° E

*5672*

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>LB 81 - 001</b>		
DRAWN BY: W. H. ACOSTA		SCALE 1: 50
LOGGED BY: HANS ZSCHACH		DATE OCT. / 81
APPROVED BY: H. ZSCHACH		

TRUE THICKNESS  
ROCK COAL

ROOF: 315°/45° SW

COAL /  
COAL+ ROCK  
2.84/2.84

0.30  
1.14  
1.4

2.84



SILTSTONE: Massive, med. grey, argillaceous, plant fragments, occasional iron stone, concretions, undulating surface between siltstone and coal bed about 0.20 m intervals.

MUDSTONE: Silty, carbonaceous, abundant plant fragments

COAL: 0.09 m dull, 0.04 m bright, 0.03 m dull, sheared, soft, (flakey), 0.14 m dull claystone parting, orange-brown weathered, sheared, 1.14 dull, hard with occasional bright coal (bands). Ledges 5-10 cm measurement to water level (.4) looks like last unit above

SANDSTONE: very fine grained, brown grey, slightly carbonaceous, laminations, plant fragments

FLOOR: 320°/23° SW

FORMATION : GETTING  
UTM COORDINATES : 142 290 N, 550 300 E  
MAP CARD NUMBER : 1S 43 - 12 (1:5000)  
AIR PHOTO NUMBER : HA 131080 - 4 - 57 (1:30000)  
TRENCH DEPTH : 0.37 m  
TRENCH WIDTH : 0.50 m  
TRENCH LENGTH : 1.42 m  
TRENCH BEARING : 230°  
TRENCH SLOPE : 0°

5672

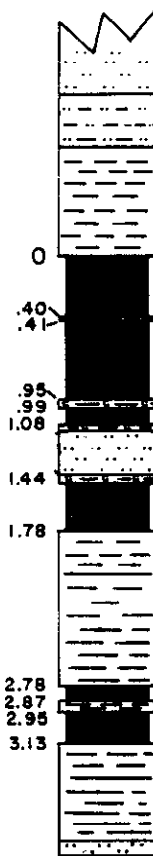
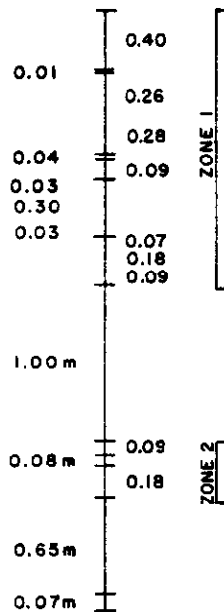
<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>LB-81-G02</b>		
DRAWN BY: M. ANDERSON		SCALE: 1:50
LOGGED BY: JANINE LAMARRE		DATE: OCT. / 81
APPROVED BY: H. ZSCHACH		



COAL /  
COAL+ROCK  
1.37/1.78m

C/C+R  
0.27/0.35

TRUE THICKNESS  
ROCK COAL



ROOF: 302° / 26° SW

SILTSTONE:

MUDSTONE: Silty, grey

MUDSTONE: Gray with ironstone concretions, contact with coal is irregular, undulating

COAL: Dull, soft with occasional bands of bright coal

CLAYSTONE: Partings  
COAL: Bright, hard, with occasional dull bands  
COAL: Dull with occasional bright coal, looks sheared

MUDSTONE: Carbonaceous parting with iron staining  
COAL: Soft, dull, sheared with occasional bands of bright coal

MUDSTONE: Carbonaceous with iron stained partings  
SILTSTONE: Brown with plant fossils  
MUDSTONE: Carbonaceous

COAL: Dull, soft  
COAL: Hard shiny with occasional dull bands  
COAL: Very shiny, hard with bands of shiny coal

MUDSTONE: With coaly partings, plant fossils with iron staining

COAL: Very shiny, hard and very sheared

MUDSTONE: With coaly partings, plant fossils

COAL: Very shiny, hard, sheared

MUDSTONE: Coaly partings, plant fossils

SILTSTONE: Light grey, weathers to a buff colour

FLOOR: 300° / 36° SW

FORMATION : GETTING  
UTM COORDINATES : 144 795 N, 545 560 E  
MAP CARD NUMBER : 1T44 - 8(1:5000)  
AIR PHOTO NUMBER : HA 131080 - 3-82(1:30000)  
TRENCH DEPTH : 0.2m  
TRENCH WIDTH : 0.5m  
TRENCH LENGTH : 6.0m  
TRENCH BEARING : 212°  
TRENCH SLOPE : 45° E

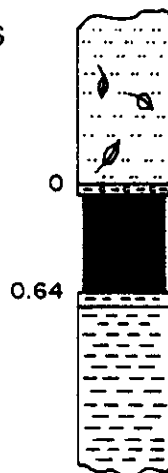
5551

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>LB - 81 - 03</b>		
DRAWN BY: M. ANDERSON		SCALE: 1:50
LOGGED BY: JANINE LAMARRE		DATE: OCT. / 81
APPROVED BY: H. ZSCHACH		

TRUE THICKNESS  
ROCK COAL

COAL/  
COAL+ROCK  
0.64/0.64m

0.11m  
0.41m  
0.12m



ROOF: 310° / 28° SW

SILTSTONE: Dark grey with coal partings, abundant plant fossils, weathers an orange colour

MUDSTONE: Carbonaceous with coal partings, mudstone, concretions

COAL: 11 cm dull, soft, occasional shiny bands  
COAL: 41 cm hard, shiny with a few dull bands, sheared surface

COAL: Dull, hard with some shiny bands  
MUDSTONE: Sheared with plant fragments

MUDSTONE: Carbonaceous with coal partings 1 cm thick then into siltstone same as above roof

FLOOR: 305° / 22° SW

FORMATION : GETHING  
UTM COORDINATES : 144 905 N, 545 610 E  
MAP CARD NUMBER : 1T44 - 8(1:5000)  
AIR PHOTO NUMBER : HA 131080 - 3 - 82(1:30000)  
TRENCH DEPTH : 0.20m  
TRENCH WIDTH : 0.15 m  
TRENCH LENGTH : 2.8m  
TRENCH BEARING : 220°  
TRENCH SLOPE : 52°

GULF CANADA RESOURCES INC.

Coal Division

CALGARY

ALBERTA



GOODRICH COAL PROJECT  
TRENCH LOG

LB - 81-G04

DRAWN BY: M. ANDERSON

SCALE 1:50

LOGGED BY: JANINE LAMARRE

DATE OCT. / 81

APPROVED BY: H. ZSCHACH

COAL /  
COAL+ROCK  
60 / 63m

TRUE THICKNESS  
ROCK COAL

0.03 m | 0.07m  
| 0.04m  
| 0.22m  
| 0.04m  
| 0.23m



ROOF: 317°/53°E

MUDSTONE: Carbonaceous plant fragments, concretions

MUDSTONE: Silty, grey

COAL: Dull, soft, iron stained

CLAYSTONE: Parting, iron stained

COAL: Dull, soft

COAL: Dull, hard with occasional bands of shiny coal

COAL: Hard, shiny band

COAL: Hard, dull with occasional bands of shiny coal

MUDSTONE: With concretions

SILTSTONE: Grey with carbonaceous plant fossils

FLOOR: 317°/53°E

FORMATION : GETHING  
UTM COORDINATES : 144 080 N, 543 900 E  
MAP CARD NUMBER : 1U44 - 6 (1:5000)  
AIR PHOTO NUMBER : HA 131080 - 3 - 83 (1:30000)  
TRENCH DEPTH : 0.2 m  
TRENCH WIDTH : 0.25 m  
TRENCH LENGTH : 0.95 m  
TRENCH BEARING : 227°  
TRENCH SLOPE :

5652

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<p style="font-size: 1.2em; margin: 0;"><b>GOODRICH COAL PROJECT</b></p> <p style="margin: 0;">TRENCH LOG</p> <p style="font-size: 1.2em; margin: 10px 0 0 0;"><b>LB - 81 - G05</b></p>		
DRAWN BY: M. ANDERSON		SCALE 1: 50
LOGGED BY: JANINE LAMARRE		DATE OCT. /81
APPROVED BY: H. ZSCHACH		

TRUE THICKNESS  
ROCK COAL

T  
COAL /  
COAL+ROCK  
0.66/0.66 m  
I

I 0.10m  
I 0.33m  
I 0.13m  
I 0.10m



ROOF: 315°/76°E

SILTSTONE: Brown with plant fragments

MUDSTONE: Carbonaceous, iron stained  
COAL: Dull, soft, with occasional bands of bright hard coal

COAL: Hard, dull, with bright shiney bands up to 1 cm thick

COAL: Hard, shiney coal

COAL: Soft, dull coal

MUDSTONE: Grey, carbonaceous with carbonaceous plant fossils

FLOOR: 318°/75°E

FORMATION : GETHING  
UTM COORDINATES : 144 120 N, 544 005 E  
MAP CARD NUMBER : 1U44 - 6 (1:5000)  
AIR PHOTO NUMBER : HA 131080 - 3 - 83 (1:30000)  
TRENCH DEPTH : 0.20 m  
TRENCH WIDTH : 0.30 m  
TRENCH LENGTH : 1.0 m  
TRENCH BEARING : 225°  
TRENCH SLOPE : 5° NE

5652  
GULF CANADA RESOURCES INC.

CALGARY

Coal Division

ALBERTA



GOODRICH COAL PROJECT  
TRENCH LOG

LB - 81 - G06

DRAWN BY: M. ANDERSON

SCALE: 1:50

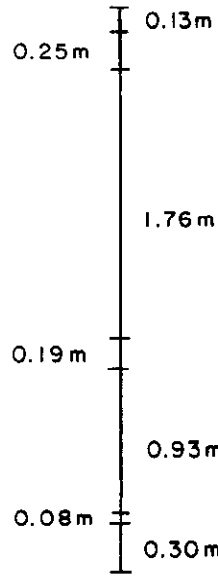
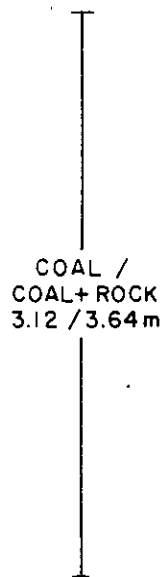
LOGGED BY: JANINE LAMARRE

DATE OCT./81

APPROVED BY: K. ZSCHACH

TRUE THICKNESS  
ROCK COAL

ROOF: 325°/50°W



SANDSTONE: Fine grained, weathered light brown, bedding 2-10 cm rubbly carbonaceous plant fragments,  
MUDSTONE: Carbonaceous plant fragments

MUDSTONE: Carbonaceous plant fragments, bright stringers, weathers brown

COAL: Weathered soft, and wet, dull, with minor bright bands

SILTSTONE: Weathered, light grey, carbonaceous plant fragments

COAL: Dull, weathers soft and wet

COAL: Dull, banded hard, weathered wet

SILTSTONE: Weathered, light brown, iron staining

COAL: Dull, weathered, soft and wet

COAL: Dull, slightly harder than unit above

MUDSTONE: Carbonaceous, weathers brown

COAL: Dull, weathered, soft and wet

MUDSTONE

FLOOR: 325°/50° W

FORMATION : GETHING  
UTM COORDINATES : 141 710 N, 548 270 E  
MAP CARD NUMBER : 1S 43 - 9 (1:5000)  
AIR PHOTO NUMBER : HA 131080 LINE 2 SE 81  
TRENCH DEPTH : 0.26 m  
TRENCH WIDTH : 0.5 m  
TRENCH LENGTH : 3.73 m  
TRENCH BEARING : 235 °  
TRENCH SLOPE : 0°

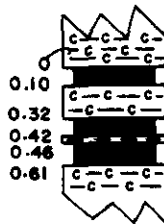
<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>LB - 81 - 607</b>		
DRAWN BY: M. ANDERSON		SCALE 1: 50
LOGGED BY: V. TAPLEY		DATE OCT. / 81
APPROVED BY: H. ZSCHACH		

TRUE THICKNESS  
 ROCK COAL

COAL/  
 COAL + ROCK  
 0.35/0.61 m

0.22 m  
 0.04 m

0.10 m  
 0.10 m  
 0.15 m




ROOF: 300°/10° N

SANDSTONE: Weathered orange, bedding 3 cm to 30 cm carbonaceous fragments, bright coal partings weathered light grey  
 COAL: Dull, weathered, soft, wet, Carbonaceous  
 MUDSTONE: Carbonaceous  
 COAL: Dull, weathered, soft, wet, minor bright bands  
 MUDSTONE: Sheared, bright bands  
 COAL: Dull banded  
 MUDSTONE: Weathered orange, carbonaceous plant fragments

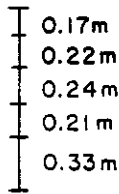
FLOOR: 300°/20° N

FORMATION : GETHING  
 UTM COORDINATES : 142 190 N, 548 635 E  
 MAP CARD NUMBER : IS43 - 10(1:5000)  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 0.19m  
 TRENCH WIDTH : 0.30 m  
 TRENCH LENGTH : 1.0 m  
 TRENCH BEARING :  
 TRENCH SLOPE : 0°

5676

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	ALBERTA	
Coal Division		
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>LB - 81 - G08</b>		
DRAWN BY: M. ANDERSON		SCALE   : 50
LOGGED BY: V. TAPLEY		DATE OCT. / 81
APPROVED BY: H. ZSCHACH		

TRUE THICKNESS  
ROCK COAL



ROOF: 310° / 33°W

SANDSTONE: Mostly covered, fine grain, light grey, thinly bedded (2-6 cm, ironstone, nodules embedded in sandstone, thin interbeds of mudstone)

MUDSTONE: Weathered, light gray, rubbly

COAL: Dull, wet, soft, weathered, occasional iron staining on cleats  
 COAL: Dull, hard, minor iron staining  
 COAL: Dull, banded, claystone laminations on cleats  
 COAL: Dull, minor bright bands, hard  
 COAL: Bright banded, hard, weathered, wet

MUDSTONE: Carbonaceous, iron staining

FLOOR: 300° / 50°W

FORMATION : BRENOT  
 UTM COORDINATES : 140 830 N, 553 390 E  
 MAP CARD NUMBER : 1R43 - 6 (1:5000)  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH :  
 TRENCH WIDTH : 1.13m  
 TRENCH LENGTH : 1.42m  
 TRENCH BEARING :  
 TRENCH SLOPE : 90°

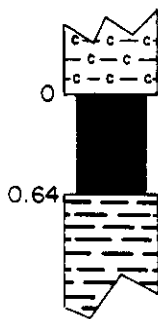
*S102*

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>LB - 81 - B09</b>		
DRAWN BY: M. ANDERSON		SCALE 1:50
LOGGED BY: V. TAPLEY		DATE OCT. / 81
APPROVED BY: H. ZSCHACH		

COAL/COAL+ROCK  
0.64/0.64 m

TRUE THICKNESS  
ROCK COAL

0.05  
0.05 0.10  
0.17  
0.27



ROOF: 303°/62° W


SILTSTONE: Carbonaceous plant fragments

COAL: Dull and bright banded, weathered soft, wet

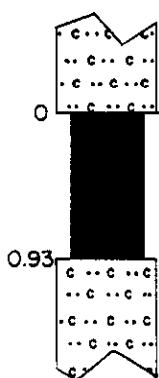
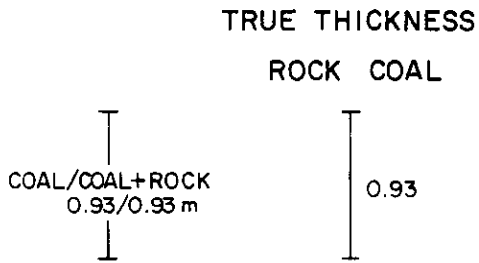
SILTSTONE: Weathered orange, carbonaceous plant fossils

FLOOR: 303°/62° W

FORMATION : GETHING  
UTM COORDINATES : 140 235 N, 551 200 E  
MAP CARD NUMBER : IR 43 - 4 (1:5000)  
AIR PHOTO NUMBER :  
TRENCH DEPTH : 0.18 m  
TRENCH WIDTH : 0.6 m  
TRENCH LENGTH : 1.2 m  
TRENCH BEARING : 20°  
TRENCH SLOPE : 0°

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>LB - 81 - 10</b>		
DRAWN BY: WANDA H. ACOSTA		SCALE 1: 50
LOGGED BY: V. TAPLEY		DATE OCT. / 1981
APPROVED BY: H. ZSCHACH		





ROOF: 303°/62° W

SILTSTONE: Carbonaceous plant fragments.

COAL: Dull and bright banded, weathered, soft, wet.

SILTSTONE: Weathered, orange, carbonaceous plant fossils

FLOOR: 303°/62° W

FORMATION : GETHING

UTM COORDINATES : 140 345 N, 551 200 E

MAP CARD NUMBER : 1R43 - 4 (1:5000)

AIR PHOTO NUMBER :

TRENCH DEPTH : 0.20 m

TRENCH WIDTH : 0.6 m

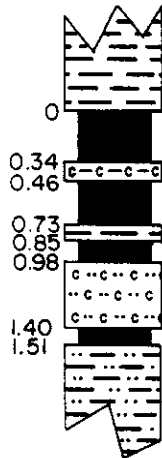
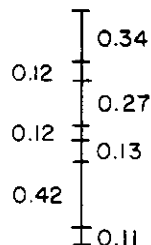
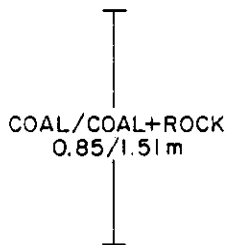
TRENCH LENGTH : 1.4 m

TRENCH BEARING : 20°

TRENCH SLOPE : 0°

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>LB - 81 - G11</b>		
DRAWN BY: W. H. ACOSTA	SCALE 1: 50	
LOGGED BY: V. TAPLEY	DATE OCT./1981	
APPROVED BY: H. ZSCHACH		

TRUE THICKNESS  
ROCK COAL



ROOF: 310°/73° W

MUDSTONE: Flaggy, medium grey

COAL: Dull banded, weathered soft and wet, iron staining

MUDSTONE: Medium grey, carbonaceous

COAL: Dull banded, weathered soft and wet, iron staining on cleats

MUDSTONE: Weathered grey, soft & wet

COAL: Dull light bands, weathered soft & wet

SILTSTONE: Weathered orange brown, carbonaceous plant fragments

COAL: Dull banded

SILTSTONE: Interbedded mudstone, weathered orange, flaggy

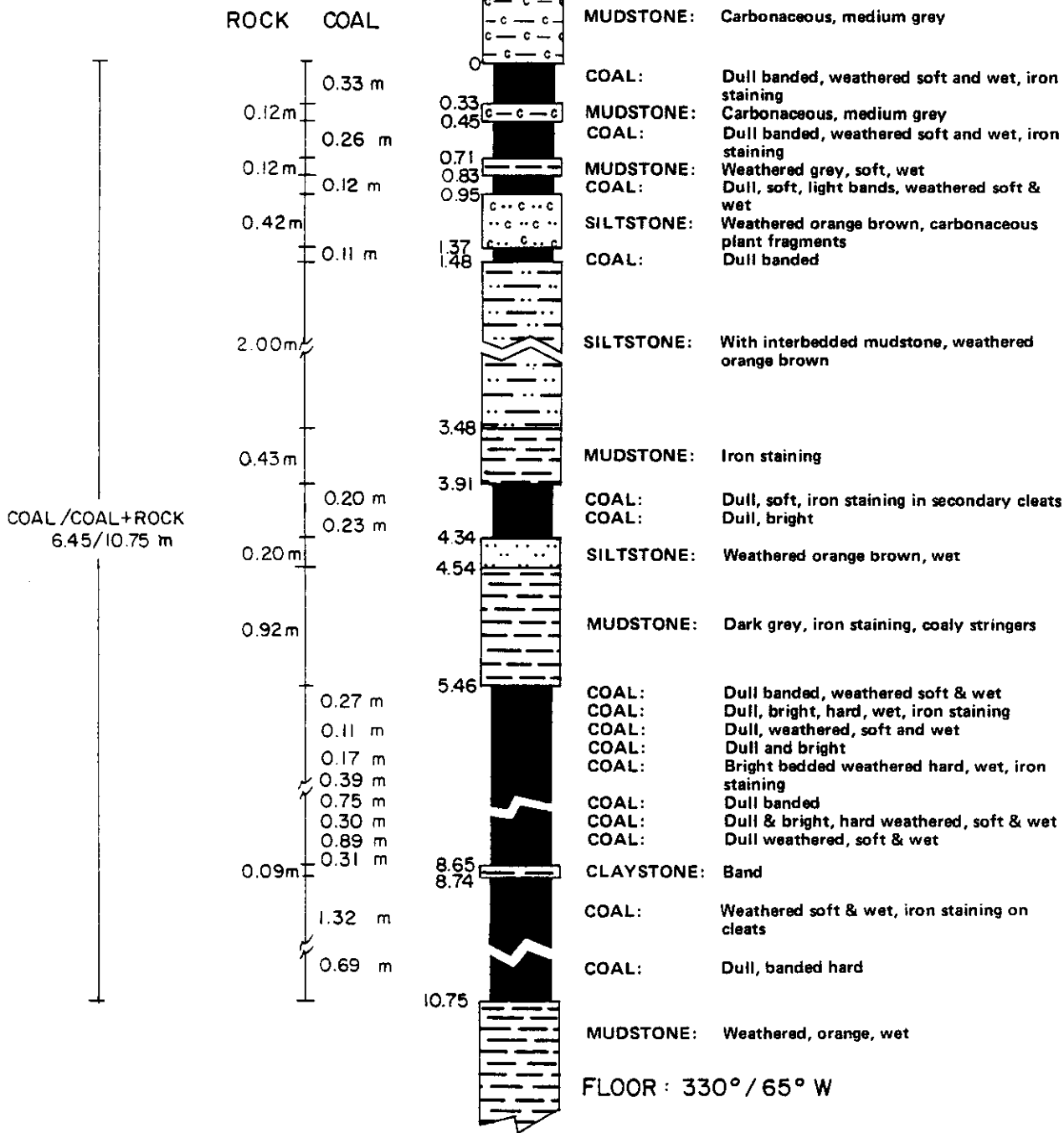
FLOOR: 330°/65° W

FORMATION : GE THING  
UTM COORDINATES : 140 250 N, 549 960 E  
MAP CARD NUMBER : IS43 - 1 (1:5000)  
AIR PHOTO NUMBER : HA 131080 LINE 2 SE-79  
TRENCH DEPTH : 1.0 m  
TRENCH WIDTH : 0.7 m  
TRENCH LENGTH : 1.3 m  
TRENCH BEARING : 226°  
TRENCH SLOPE : 0°

5671

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>LB-81-G12</b>		
DRAWN BY: W.H. ACOSTA		SCALE 1:50
LOGGED BY: V. TAPLEY		DATE OCT./1981
APPROVED BY: H. ZSCHACH		

TRUE THICKNESS



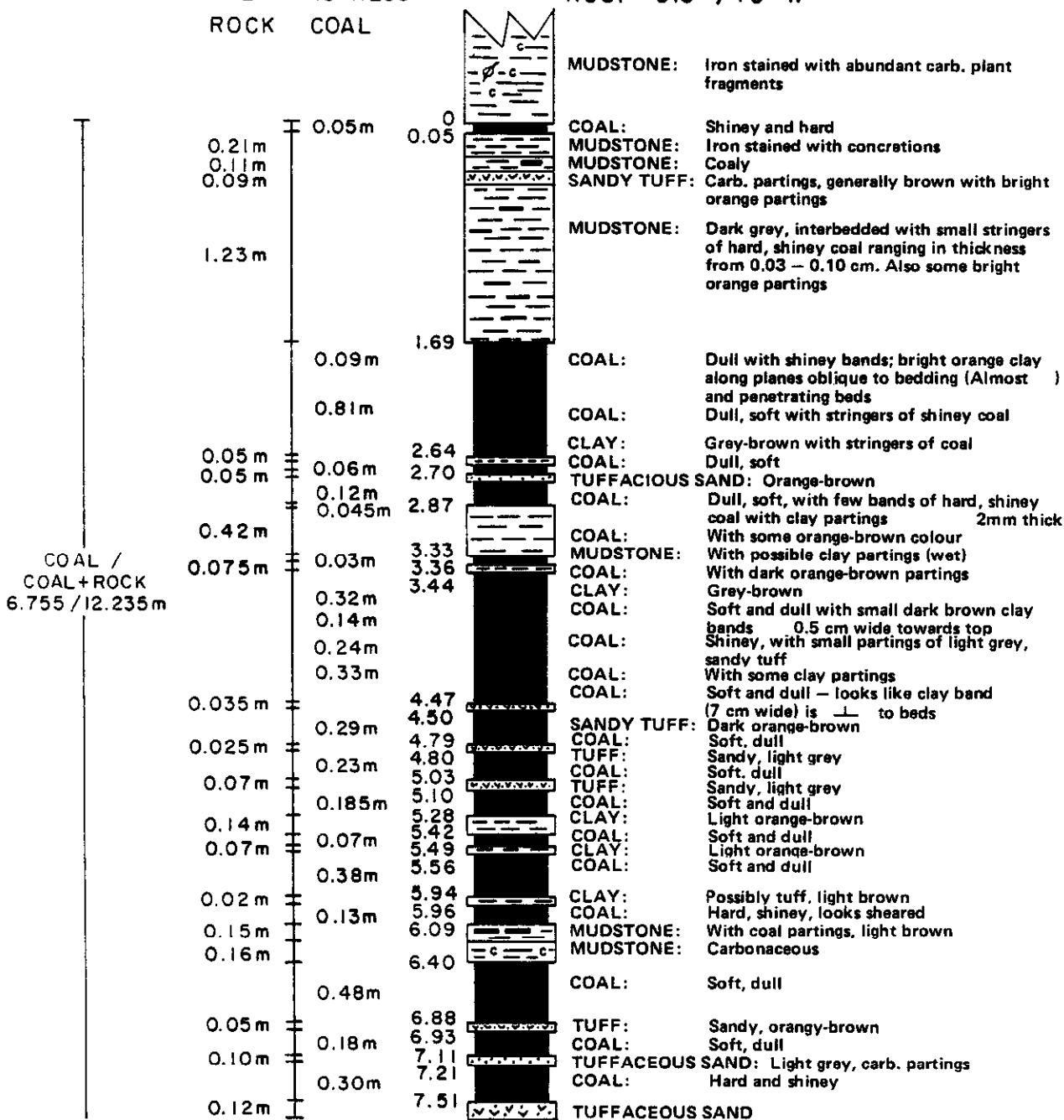
FORMATION : GETHING  
 UTM COORDINATES : 140 245 N, 549 880 E  
 MAP CARD NUMBER : IS 43 - 1 (1: 5000)  
 AIR PHOTO NUMBER : HA 131080 LINE 2 SE - 79  
 TRENCH DEPTH : 1.00 m  
 TRENCH WIDTH : 1.00 m  
 TRENCH LENGTH : 11.00 m  
 TRENCH BEARING : 220°  
 TRENCH SLOPE :

5671

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>LB - 81 - G13</b>		
DRAWN BY: W. H. ACOSTA		SCALE 1: 100
LOGGED BY: V. TAPLEY		DATE NOV. / 1981
APPROVED BY: H. ZSCHACH		

TRUE THICKNESS  
ROCK COAL

ROOF: 315°/75°W



COAL /  
COAL+ROCK  
6.755 /12.235 m

CONTINUED ON PAGE 2 of 2.

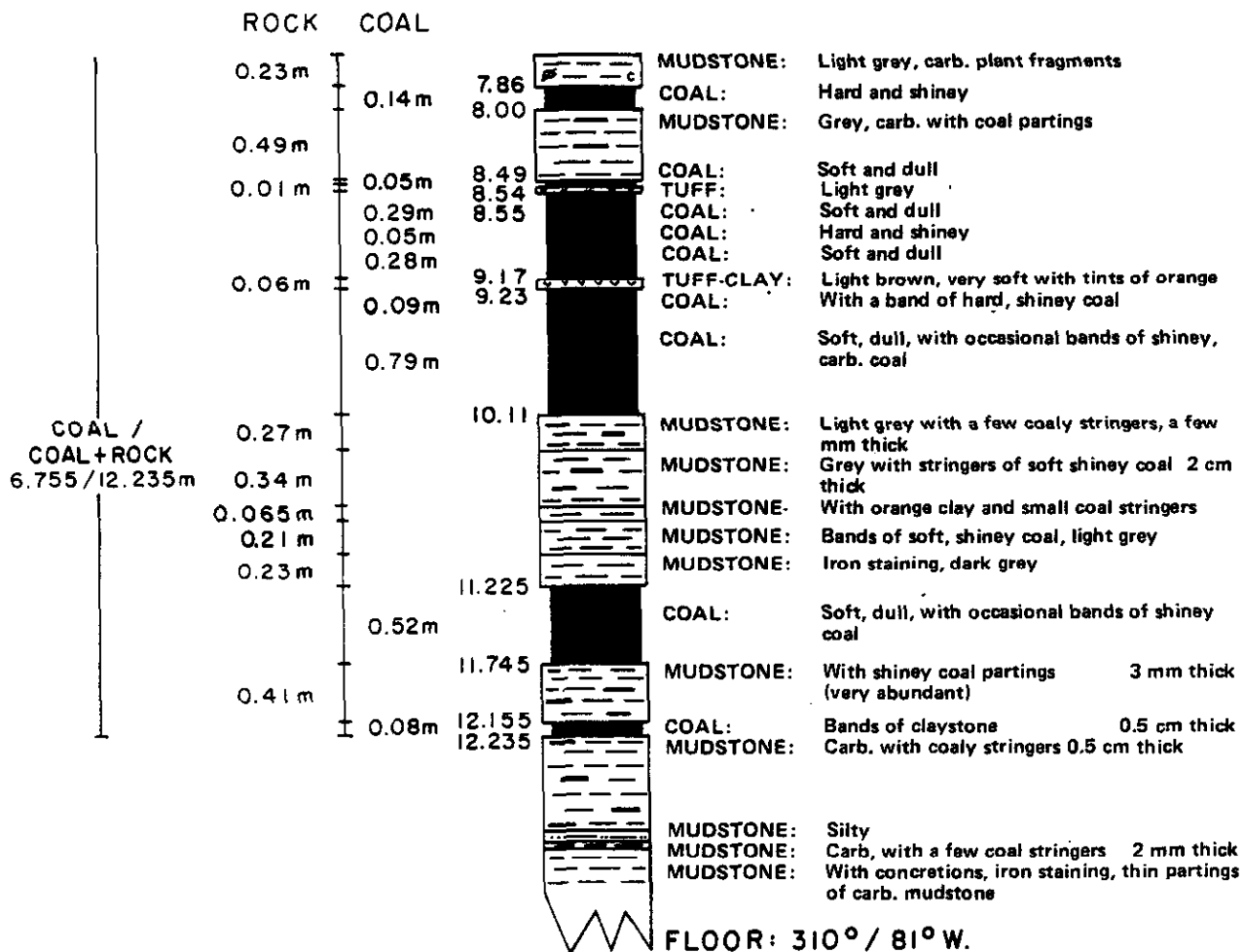
5671

FORMATION : GETHING  
UTM COORDINATES : 139 450 N, 550 330 E  
MAP CARD NUMBER : 1S43 - 1 (1:5000)  
AIR PHOTO NUMBER : HA 131080 - 3 - 81  
TRENCH DEPTH : 1.3 m  
TRENCH WIDTH : 1.0 m  
TRENCH LENGTH : 17.0 m  
TRENCH BEARING : 230°  
TRENCH SLOPE : 0°

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>LB-81-G14</b>		
PAGE 1 of 2		
DRAWN BY: M. ANDERSON		SCALE: 1:50
LOGGED BY: J. LAMARRE		DATE: OCT. /81
APPROVED BY: H. ZSCHACH		

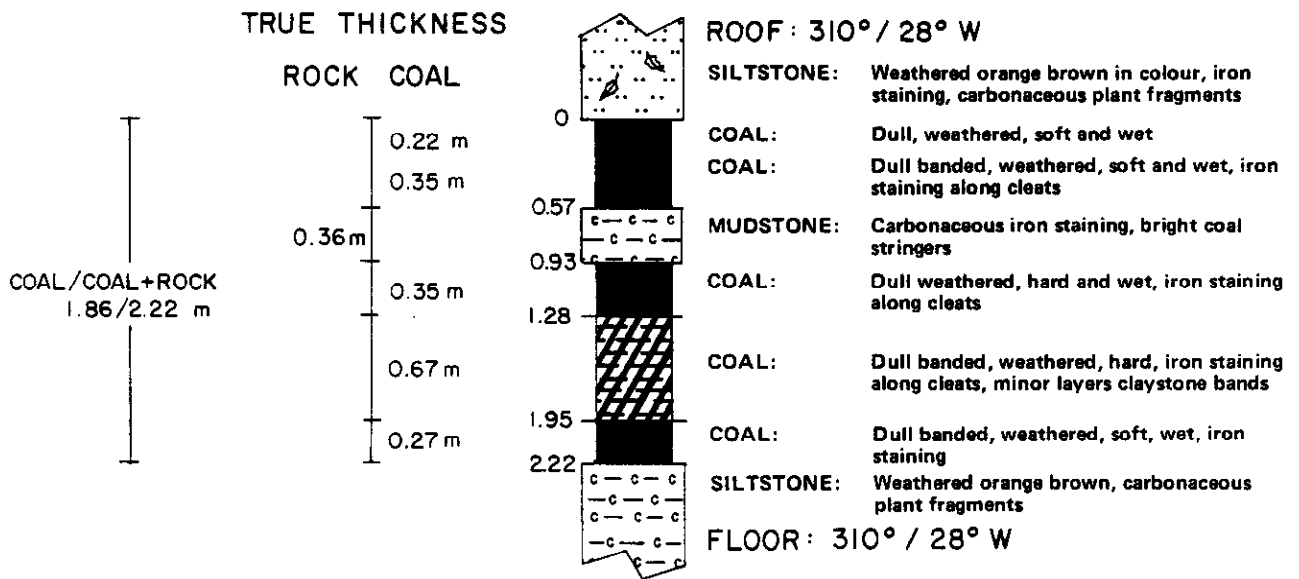
TRUE THICKNESS

CONTINUED FROM PAGE 1 of 2



FORMATION : GETHING  
 UTM COORDINATES : 139 450 N, 550 330 E  
 MAP CARD NUMBER : IS43 - 1(1:5000)  
 AIR PHOTO NUMBER : HA 131080 - 3 - 81  
 TRENCH DEPTH : 1.3 m  
 TRENCH WIDTH : 1.0 m  
 TRENCH LENGTH : 17.0 m  
 TRENCH BEARING : 230°  
 TRENCH SLOPE : 0°

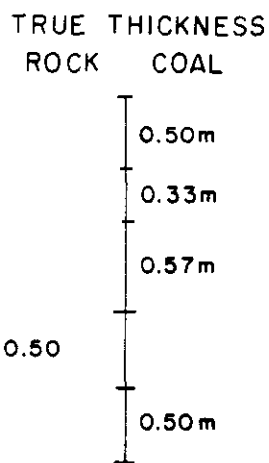
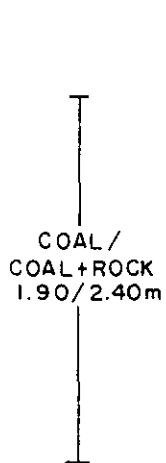
<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>LB - 81 - G14</b>		
PAGE 2 of 2		
DRAWN BY: M. ANDERSON		SCALE 1: 50
LOGGED BY: J. LAMARRE		DATE OCT. / 81
APPROVED BY: H. ZSCHACH		



**FORMATION** : GETHING  
**UTM COORDINATES** : 142 230 N, 548 700 E  
**MAP CARD NUMBER** : IS43 - 10 (1:5000)  
**AIR PHOTO NUMBER** :  
**TRENCH DEPTH** : 0.50 m  
**TRENCH WIDTH** : 0.85 m  
**TRENCH LENGTH** : 3.0 m  
**TRENCH BEARING** :  
**TRENCH SLOPE** : vertical

*5676*

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b> <b>TRENCH LOG</b>  <b>LB - 81 - G15</b>		
DRAWN BY: W. H. ACOSTA		SCALE 1: 50
LOGGED BY: V. TAPLEY		DATE NOV. / 1981
APPROVED BY: H. ZSCHACH		




ROOF: 295°/12°S

- SILTSTONE: Weathered orange, carbonaceous plant fragments
- MUDSTONE: Carbonaceous
- COAL: Dull, bright, hard, iron staining along cleats
- COAL: Dull banded, weathered wet, iron staining along cleats
- COAL: Bright, banded, iron staining, hard, wet
- CLAYSTONE: Weathered, orange brown
- COAL: Weathered, soft, wet, dull

FLOOR: NOT FOUND

FORMATION : GETHING  
 UTM COORDINATES : 142 220 N, 548 575 E  
 MAP CARD NUMBER : IS43 - 10 (1:5000)  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 1.5 m  
 TRENCH WIDTH : 0.50m  
 TRENCH LENGTH : 2.40 m  
 TRENCH BEARING :  
 TRENCH SLOPE : vertical

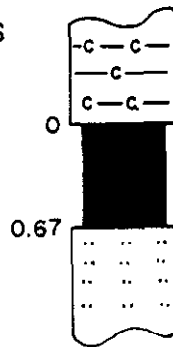
*5676*

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b> <b>TRENCH LOG</b> <b>LB - 81 - G16</b>		
DRAWN BY: <b>W. H. ACOSTA</b>		SCALE: <b>1:50</b>
LOGGED BY: <b>V. TAPLEY</b>		DATE: <b>NOV./1981</b>
APPROVED BY: <b>H. ZSCHACH</b>		

T  
COAL/  
COAL+ROCK  
0.67/0.67 m  
I

TRUE THICKNESS  
ROCK COAL

0.67m



ROOF: 330°/50°E

MUDSTONE: Carbonaceous, sheared, iron staining


COAL: Dull, bright, iron staining along cleats

SILTSTONE: Carbonaceous plant fragments, weathered orange

FLOOR: 330°/50°E

FORMATION : GETHING  
UTM COORDINATES : 141 095 N, 549 985 E  
MAP CARD NUMBER : S43 - 6 (1:5000)  
AIR PHOTO NUMBER :  
TRENCH DEPTH : 0.5 m  
TRENCH WIDTH : 0.5 m  
TRENCH LENGTH : 1.0 m  
TRENCH BEARING : 70°  
TRENCH SLOPE : 0°

5671

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>LB - 81 - G17</b>		
DRAWN BY: M. ANDERSON		SCALE 1: 50
LOGGED BY: V. TAPLEY		DATE OCT. / 81
APPROVED BY: H. ZSCHACH		



TRUE THICKNESS  
ROCK COAL

T  
COAL/  
COAL+ROCK  
0.34/0.55m

0.21 | 0.17  
| 0.17




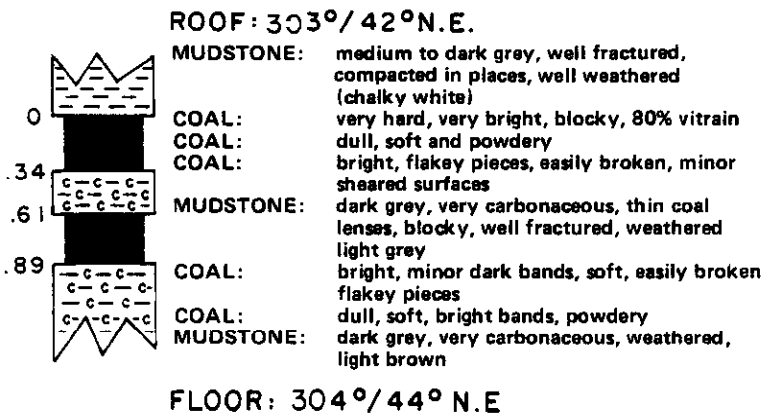
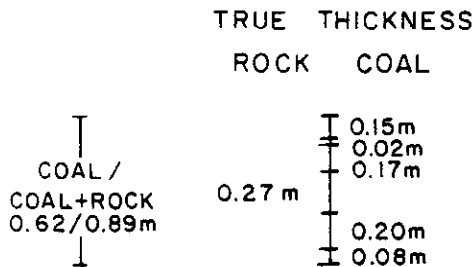
ROOF : 320°/78° S

MUDSTONE  
COAL: fissile, bright  
MUDSTONE: grey, iron staining, slickensides  
COAL: coal, powdery, dull  
MUDSTONE: brown

FLOOR : 320°/78° S

FORMATION : BRENOT  
UTM COORDINATES : 140 120 N, 555 580 E  
MAP CARD NUMBER : 1Q43 - 2 (1:5000)  
AIR PHOTO NUMBER : HA 131080 - 84 - 60 (1:30000)  
TRENCH DEPTH : 0.5 m  
TRENCH WIDTH : 0.5 m  
TRENCH LENGTH : 0.70 m  
TRENCH BEARING : 230°  
TRENCH SLOPE : 0°

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>BCN - 81 - B01</b>		
DRAWN BY:	SCALE 1: 50	
LOGGED BY: B. DAVIDSON	DATE OCT., / 81	
APPROVED BY: H. ZSCHACH		



FORMATION : GETHING  
 UTM COORDINATES : 134 870 N, 571 125 E  
 MAP CARD NUMBER :  
 AIR PHOTO NUMBER : HA 80780 7-218 (1:30000)  
 TRENCH DEPTH : 0.16m  
 TRENCH WIDTH : 0.31m  
 TRENCH LENGTH : 0.89m  
 TRENCH BEARING : 033°  
 TRENCH SLOPE :

6633

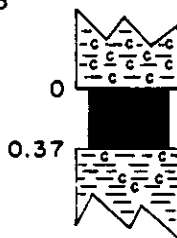
<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>BC - 81 - 001</b>		
DRAWN BY: M. ANDERSON		SCALE: 1:50
LOGGED BY: A. PETZOLD, D. DOLPH		DATE: OCT. / 81
APPROVED BY: H. ZSCHACH		

COAL /  
COAL+ROCK  
0.37/0.37m



TRUE THICKNESS  
ROCK COAL

0.06 m  
0.16 m  
0.10 m  
0.05 m



ROOF: 303°/37° N.E

MUDSTONE: dark grey, very carbonaceous, weathers light brown

COAL: dull with bright bands, soft

COAL: very hard, dull

COAL: soft, small, shiny pieces, easily broken

COAL: very hard, dull, blocky

MUDSTONE: dark gray, thin carbonaceous lenses, weathered dark brown

FLOOR: 304°/44° N.E.

FORMATION : GETHING  
UTM COORDINATES : 134 985 N, 571 165 E  
MAP CARD NUMBER :  
AIR PHOTO NUMBER : HA80780 7-218 (1:30000)  
TRENCH DEPTH : 0.12 m  
TRENCH WIDTH : 0.15m  
TRENCH LENGTH : 0.37m  
TRENCH BEARING : 033 °  
TRENCH SLOPE : 0 °

6633

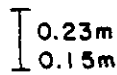
<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>BC-81-G02</b>		
DRAWN BY: M. ANDERSON		SCALE 1:50
LOGGED BY: A. PETZOLD, D. DOLPH		DATE OCT. / 81
APPROVED BY: H. ZSCHACH		

COAL /  
COAL+ROCK  
0.38 / 0.38m



TRUE THICKNESS

ROCK COAL



ROOF: 298° / 30° NE

MUDSTONE: dark grey, carbonaceous, blocky

COAL: dull, soft, minor bright bands, powdery  
COAL: hard, flakey pieces, very dull, minor ironstone weathering

MUDSTONE: dark grey, carbonaceous, blocky

FLOOR: 298° / 30° NE

FORMATION : GETTING  
UTM COORDINATES : 134 990 N, 570 995 E  
MAP CARD NUMBER :  
AIR PHOTO NUMBER : HA80780 7-218 (1: 30000)  
TRENCH DEPTH : 0.11 m  
TRENCH WIDTH : 0.24 m  
TRENCH LENGTH : 0.38 m  
TRENCH BEARING : 028°  
TRENCH SLOPE : 0°

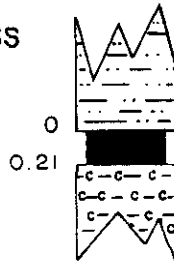
6633

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>BC - 81 - G03</b>		
DRAWN BY: M. ANDERSEN		SCALE 1: 50
LOGGED BY: A. PETZOLD, D. DOLPH		DATE OCT. / 81
APPROVED BY: H. ZSCHACH		

COAL /  
COAL+ ROCK  
0.21 / 0.21m

TRUE THICKNESS  
ROCK COAL

± 0.06m  
± 0.15m



ROOF: 29° / 33° NE

MUDSTONE: silty, dark grey, thinly bedded


COAL: dull, flakey  
COAL: bright, dull bands, flakey pieces, easily broken

MUDSTONE: gradational to mudstone, very carbonaceous, very soft, dark grey to black, weathered medium brown

FLOOR: 29° / 33° NE

FORMATION : GETHING  
UTM COORDINATES : 135 110 N, 570 900 E  
MAP CARD NUMBER :  
AIR PHOTO NUMBER : HA80780-7-218 (1:30000)  
TRENCH DEPTH : 0.41m  
TRENCH WIDTH : 0.27m  
TRENCH LENGTH : 0.21m  
TRENCH BEARING : 021°  
TRENCH SLOPE : 0°

6633

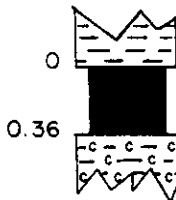
<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>BC-81-G04</b>		
DRAWN BY: C. BARNES		SCALE: 1:50
LOGGED BY: A. PETZOLD, D. DOLPH		DATE: OCT./81
APPROVED BY: H. ZSCHACH		

TRUE THICKNESS

COAL /  
COAL+ ROCK  
0.36/0.36m  
—

ROCK COAL

0.14m  
0.17m  
0.05m



ROOF: 282° / 31° NE

MUDSTONE: dark grey, well weathered, well fractured


COAL: dull, soft, powdery  
COAL: well weathered, dark grey, blocky, fractured  
COAL: dull, soft, powdery

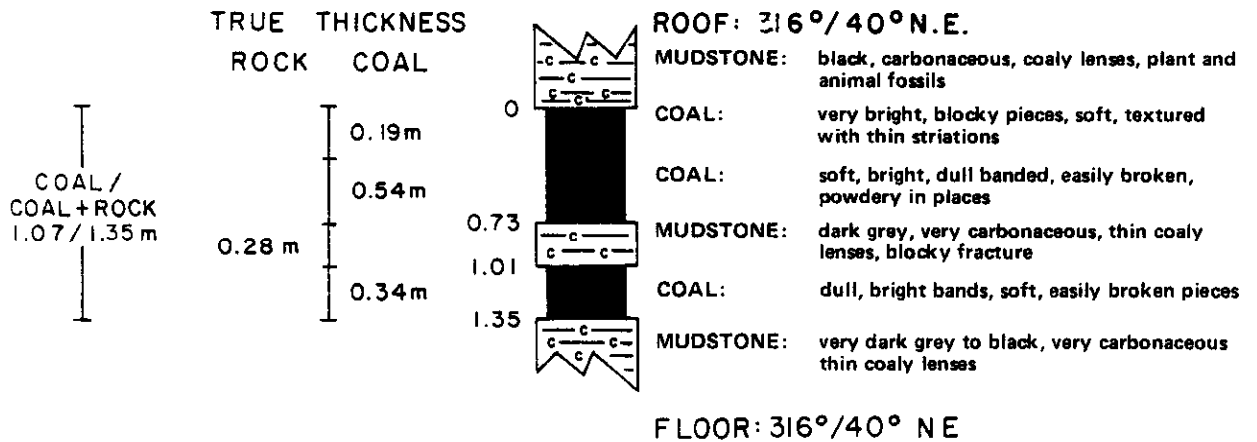
MUDSTONE: carbonaceous, thin coaly lenses, well fractured, well weathered

FLOOR: 282° / 31° NE

6633

FORMATION : GETTING  
UTM COORDINATES : 135 200 N, 570 790 E  
MAP CARD NUMBER :  
AIR PHOTO NUMBER : HA 80780 - 7-218 (1:30000)  
TRENCH DEPTH : 0.12 m  
TRENCH WIDTH : 0.18 m  
TRENCH LENGTH : 0.36 m  
TRENCH BEARING : 012°  
TRENCH SLOPE : 0°

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>BC - 81 - G05</b>		
DRAWN BY: C. BARNES	SCALE: 1:50	
LOGGED BY: A. PETZOLD, D. DOLPH	DATE: OCT. / 81	
APPROVED BY: H. ZSCHACH		



FORMATION : GETTING  
 UTM COORDINATES : 135 270 N, 570 635 E  
 MAP CARD NUMBER :  
 AIR PHOTO NUMBER : HA80780 - 7 - 218 (1:30000)  
 TRENCH DEPTH : 0.14 m  
 TRENCH WIDTH : 0.33 m  
 TRENCH LENGTH : 1.28 m  
 TRENCH BEARING : 046°  
 TRENCH SLOPE : 0°

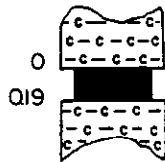
6633

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b> <b>TRENCH LOG</b>  <b>BC-81 - G06</b>		
DRAWN BY: M. ANDERSON		SCALE 1 50
LOGGED BY: A. PETZOLD		DATE OCT. / 81
APPROVED BY: H. ZSCHACH		

COAL /  
COAL+ ROCK  
0.19 / 0.19 m

TRUE THICKNESS  
ROCK COAL

I 0.19m



ROOF: 309° / 56° NE

MUDSTONE: dark grey, carbonaceous, thinly bedded,  
well fractured, weathered brown


COAL: bright, hard, blocky pieces, possibly in a  
sheared zone as contacts are sometimes  
obscure

MUDSTONE: dark grey, carbonaceous, thin coaly lenses,  
well weathered, chalky white

FLOOR: 309° / 56° NE

66.33

FORMATION : GETTING  
UTM COORDINATES : 135 350 N, 570 525 E  
MAP CARD NUMBER :  
AIR PHOTO NUMBER : HA80780 - 7 - 218 (1:30000)  
TRENCH DEPTH : 0.11m  
TRENCH WIDTH : 0.15m  
TRENCH LENGTH : 0.24m  
TRENCH BEARING : 034°  
TRENCH SLOPE : 0°

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>BC - 81 - G07</b>		
DRAWN BY: C. BARNES		SCALE: 1:50
LOGGED BY: A. PETZOLD, D. DOLPH		DATE: OCT / 81
APPROVED BY: H. ZSCHACH		



COAL /  
COAL+ROCK  
0.22 / 0.22 m

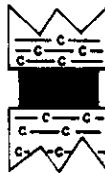


TRUE THICKNESS  
ROCK COAL



0.22m

0  
0.22



ROOF: 328° / 62° NE

MUDSTONE: dark grey, thinly bedded, carbonaceous


COAL: bright, shiney pieces, easily broken

MUDSTONE: dark grey, carbonaceous, thin coaly lenses

FLOOR: 328° / 62° NE

FORMATION : GETHING  
UTM COORDINATES : 135 415 N, 570 405 E  
MAP CARD NUMBER :  
AIR PHOTO NUMBER : HA 80780 - 7 - 218 (1:30000)  
TRENCH DEPTH : 0.20 m  
TRENCH WIDTH : 0.19 m  
TRENCH LENGTH : 0.37 m  
TRENCH BEARING : 058°  
TRENCH SLOPE : 0°

6633

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>BC-81-G08</b>		
DRAWN BY: M. ANDERSON	SCALE: 1:50	
LOGGED BY: A. PETZOLD	DATE: OCT. / 81	
APPROVED BY: H. ZSCHACH		

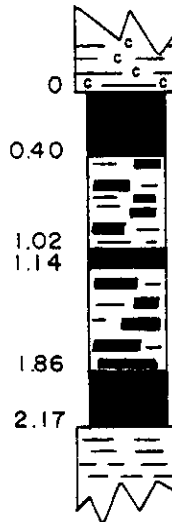
TRUE THICKNESS

ROOF: 314° / 60° NE

COAL /  
COAL + ROCK  
0.83 / 2.17

ROCK COAL

0.40m  
0.62 m  
0.12m  
0.72 m  
0.31m



SHALE/CLAYSTONE: carbonaceous, carbonaceous plant fragments

COAL: dull, powdery, very weathered, some weathered vitrain bands

CLAYSTONE: coaly, platy, shaley, coal is weathered vitrain

COAL: dull, powdery, weathered vitrain

CLAYSTONE: coaly, fissile, up to 5 cm thick bands of coal partings. Coal is weathered vitrain


COAL: dull, weathered, vitrain is weathered

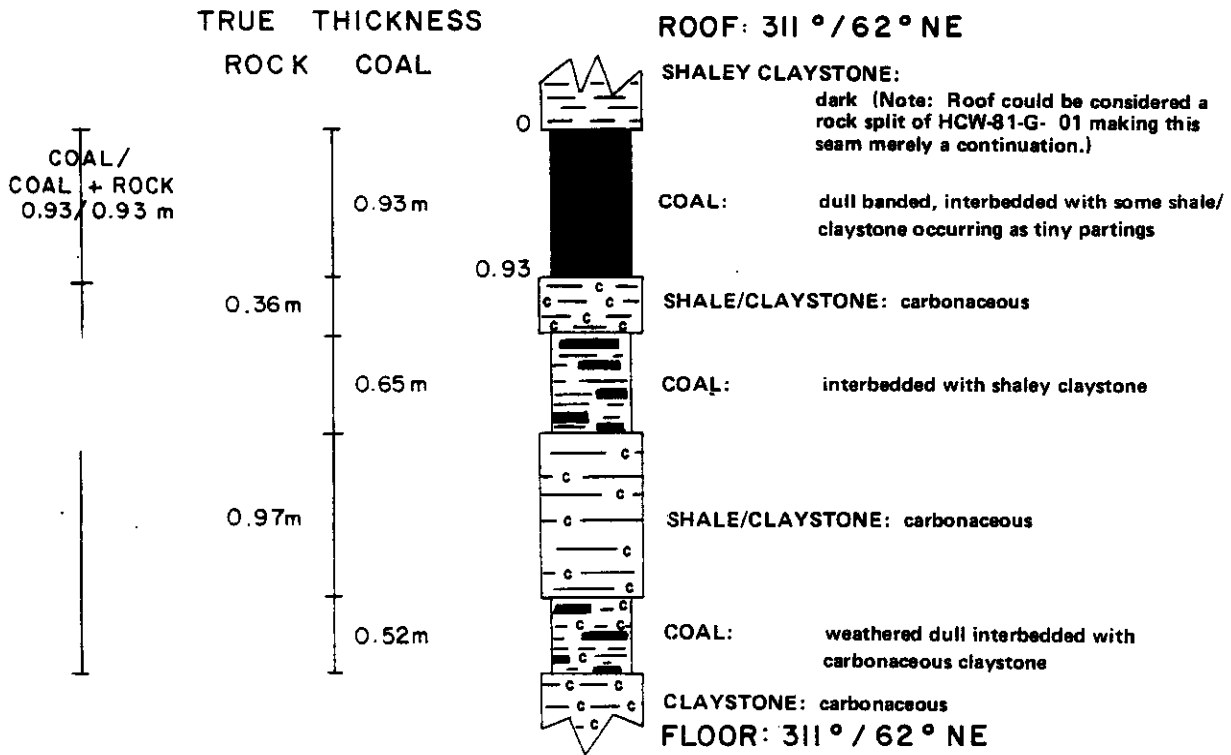
CLAYSTONE

FLOOR: 314° / 60° NE

FORMATION :GETHING  
UTM COORDINATES :142 670 N, 558 620 E  
MAP CARD NUMBER :IP43 - II  
AIR PHOTO NUMBER :HA 131080-5-26 (1:30000)  
TRENCH DEPTH :0.5 m  
TRENCH WIDTH :0.7 m  
TRENCH LENGTH :2.6 m  
TRENCH BEARING :216°  
TRENCH SLOPE :Nearly Horizontal

5720

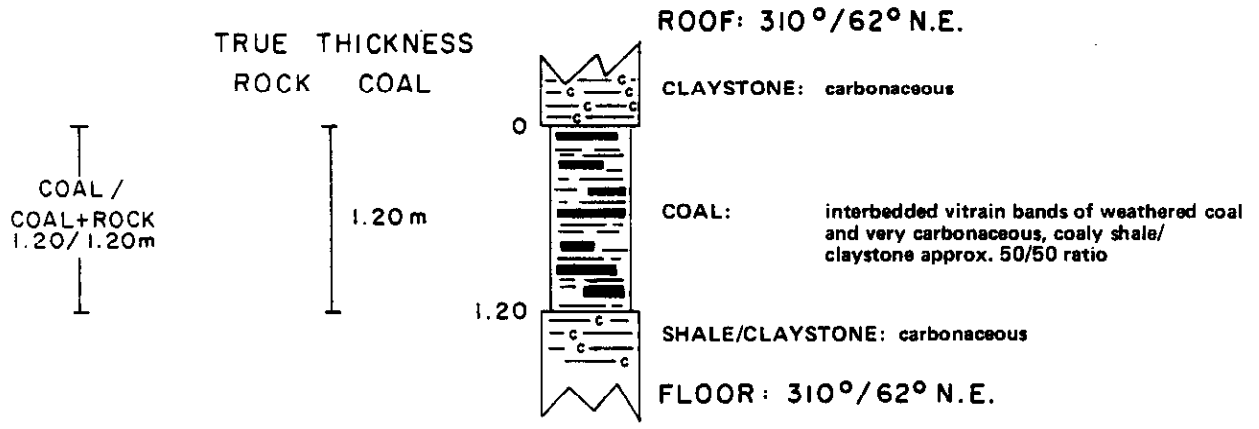
<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	ALBERTA	
Coal Division		
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>HCW - 81 - 601</b>		
DRAWN BY: C. BARNES		SCALE: 1:50
LOGGED BY: W. PEDERSEN, R. McINTOSH		DATE: OCT. /81
APPROVED BY: H. ZSCHACH		



FORMATION :GETHING  
 UTM COORDINATES :142 560 N, 558 715 E  
 MAP CARD NUMBER :1P43 - 11  
 AIR PHOTO NUMBER :HA131080 - 5 - 26 (1: 30000)  
 TRENCH DEPTH :1.6 m  
 TRENCH WIDTH :0.8m  
 TRENCH LENGTH :4.7m  
 TRENCH BEARING :210 °  
 TRENCH SLOPE :Horizontal

5720

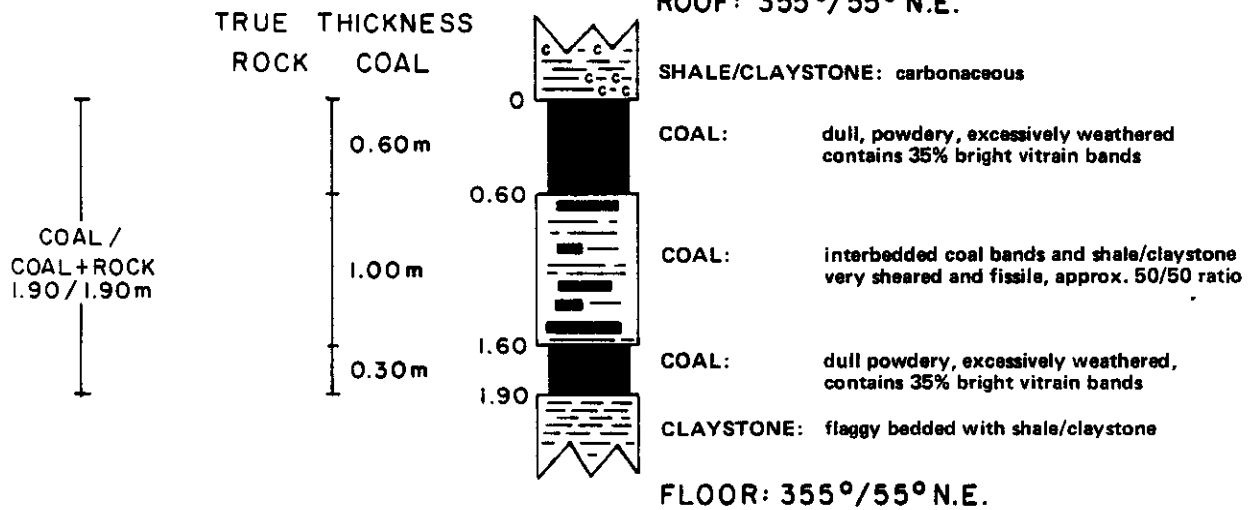
<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<p><b>GOODRICH COAL PROJECT</b></p> <p><b>TRENCH LOG</b></p> <p><b>HCW - 81 - G02</b></p>		
DRAWN BY: C. BARNES		SCALE  : 50
LOGGED BY: W. PEDERSEN, R. McINTOSH		DATE OCT. /81
APPROVED BY: H. ZSCHACH		



FORMATION :GETHING  
 UTM COORDINATES :142 480 N, 558 810 E  
 MAP CARD NUMBER :  
 AIR PHOTO NUMBER :HA131080 - 5 - 26 (1:30000)  
 TRENCH DEPTH :0.8 m  
 TRENCH WIDTH :0.8 m  
 TRENCH LENGTH :2.1 m  
 TRENCH BEARING :210°  
 TRENCH SLOPE :Nearly Horizontal


5720

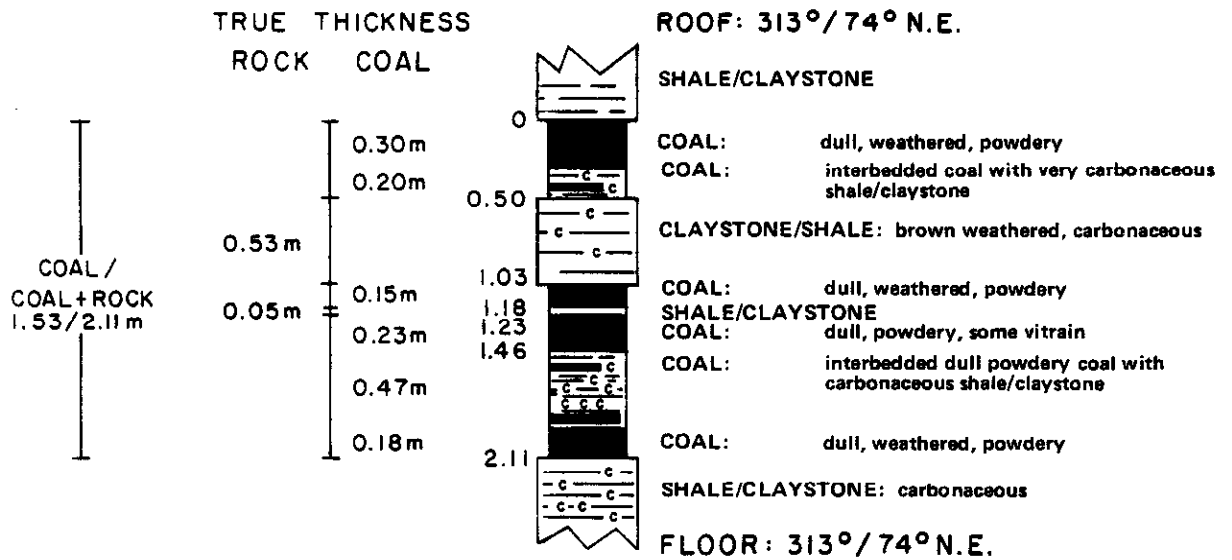
<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>HCW - 81 - G03</b>		
DRAWN BY: M. ANDERSON		SCALE 1:50
LOGGED BY: W. PEDERSEN, R. McINTOSH		DATE OCT. / 81
APPROVED BY: H. ZSCHACH		



FORMATION : GETHING  
 UTM COORDINATES : 142 390 N, 558 895 E  
 MAP CARD NUMBER : IP43 - II  
 AIR PHOTO NUMBER : HA131080 - 5 - 26 (1:30000)  
 TRENCH DEPTH : 1.25 m  
 TRENCH WIDTH : 0.8 m  
 TRENCH LENGTH : 3.2 m  
 TRENCH BEARING : 240°  
 TRENCH SLOPE : -

5720

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>HCW - 81 - G04</b>		
DRAWN BY: M. ANDERSON		SCALE: 1:50
LOGGED BY: W. PEDERSEN, R. McINTOSH		DATE: OCT. / 81
APPROVED BY: H. ZSCHACH		



FORMATION :GETHING  
 UTM COORDINATES :142 275 N, 558 990 E  
 MAP CARD NUMBER :IP43-11  
 AIR PHOTO NUMBER :HA131080 - 5 - 26 (1:30000)  
 TRENCH DEPTH :0.79 m  
 TRENCH WIDTH :0.45 m  
 TRENCH LENGTH :3.2 m  
 TRENCH BEARING :220°  
 TRENCH SLOPE :-

5720

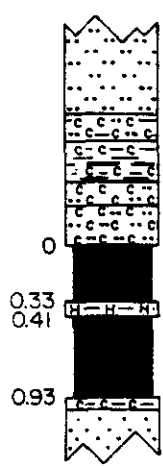
<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b> <b>TRENCH LOG</b>  <b>HCW-81-G05</b>		
DRAWN BY: M. ANDERSON		SCALE: 1:50
LOGGED BY: W. PEDERSEN, R. McINTOSH		DATE: OCT. / 81
APPROVED BY: H. ZSCHACH		



TRUE THICKNESS  
ROCK COAL

COAL/  
COAL+ROCK  
0.85/ 0.93 m

0.08  
0.33  
0.52



ROOF: 305° / 66° NE

- SILTSTONE: dark grey to brown, limonitic stain, small coaly laminae
- MUDSTONE: carbonaceous, silty in part, fine coaly stringers
- COAL and Carbonaceous Mudstone: highly sheared and powdered, badly weathered.
- MUDSTONE: carbonaceous, occasionally silty, black, abundant fine coaly stringers
- MUDSTONE: carbonaceous, silty, black, abundant fine coaly stringers, sheared.
- COAL: Dull/bright; C-3, highly sheared, powdered.
- HEMATITIC BAND: somewhat muddy, very soft.
- COAL: Dull/bright. C-3, highly sheared & powdered, occasional hematic stringers
- MUDSTONE: carbonaceous, black, very fine coaly stringers, occasionally silty
- SANDSTONE: fine grained, dark grey to brown, abundant limonitic staining, carbonaceous and coaly plant fragments throughout

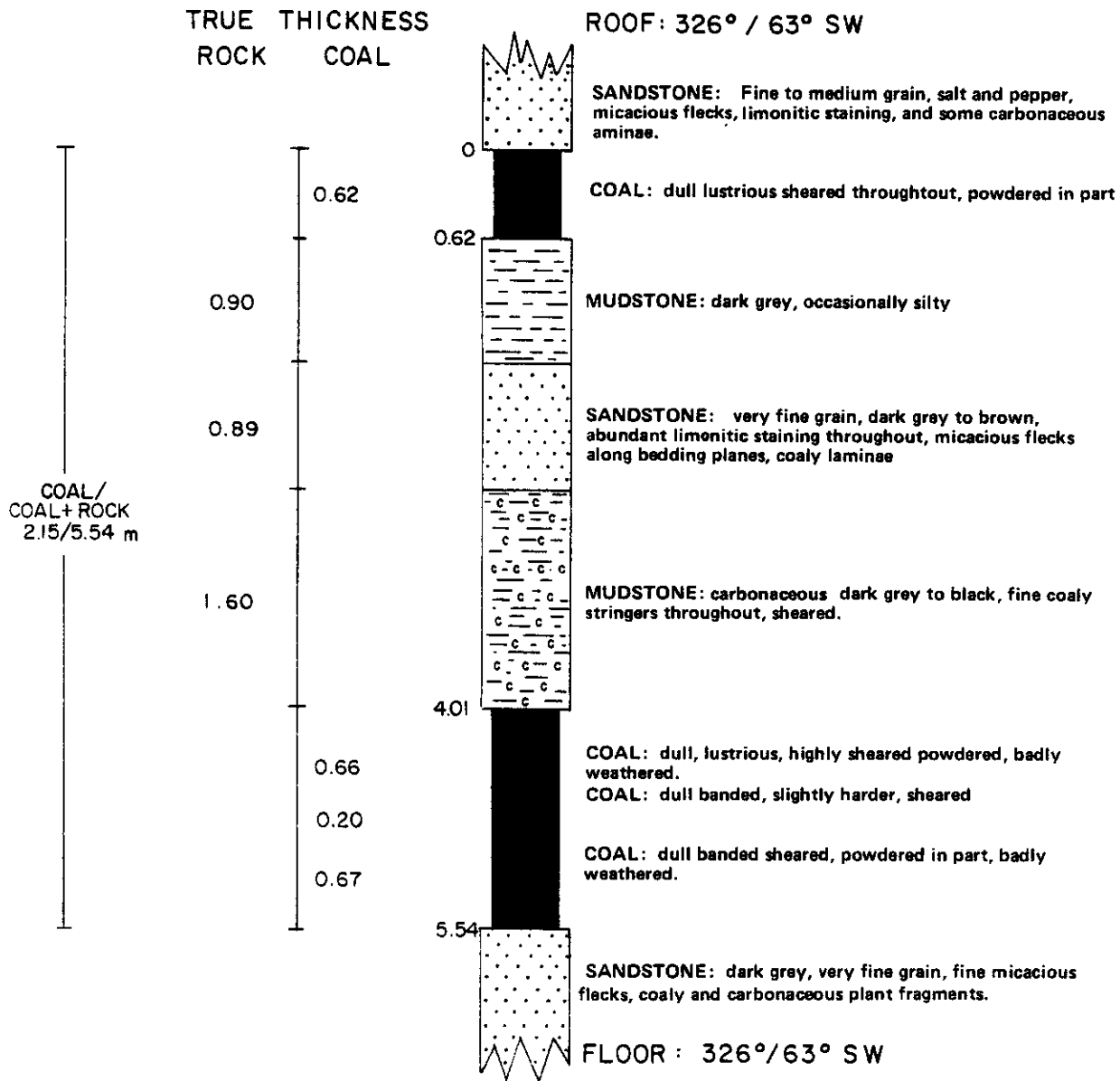
FLOOR: 305° / 66° NE

FORMATION : BRENOT  
 UTM COORDINATES : 135 165 N, 556 685 E  
 MAP CARD NUMBER : IP42 - 3 (1:5000)  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 0.75 m  
 TRENCH WIDTH : 0.75 m  
 TRENCH LENGTH : 2.48 m  
 TRENCH BEARING : 213°  
 TRENCH SLOPE : 0°

5710

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>GDE - 81 - B01</b>		
DRAWN BY: W. H. ACOSTA		SCALE: 1/50
LOGGED BY: J. LOADER		DATE: OCT./1981
APPROVED BY: H. ZSCHACH		





FORMATION : BRENOT  
 UTM COORDINATES : 136 720 N, 553 805 E  
 MAP CARD NUMBER : 1Q42 - 2 (1:5000)  
 AIR PHOTO NUMBER :  
 TRENCH DEPTH : 0.60 m  
 TRENCH WIDTH : 1.0 m  
 TRENCH LENGTH : 7.0 m  
 TRENCH BEARING : 236°  
 TRENCH SLOPE : 0°

5694

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>GDE - 81 - B02</b>		
DRAWN BY: W. H. ACOSTA		SCALE: 1:50
LOGGED BY: J. LOADER		DATE: OCT. / 1981
APPROVED BY: H. ZSCHACH		

TRUE THICKNESS  
ROCK COAL

COAL /  
COAL+ROCK  
0.52/0.52 m

0.52



ROOF : 298° / 20° NE

MUDSTONE: brown


COAL: dull to dull-bright, sheared, slightly powdered, badly weathered

MUDSTONE: carbonaceous, black coaly stringers, weathered, interbedded with siltstone bands, grey carbonaceous plant fragments

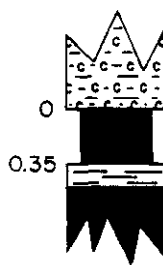
FLOOR : 298° / 20° NE

FORMATION : GETHING  
UTM COORDINATES : 143 720 N, 555 120 E  
MAP CARD NUMBER : 1Q44 1:5000  
AIR PHOTO NUMBER : HA131080 - 526 (1:30000)  
TRENCH DEPTH : 0.5m  
TRENCH WIDTH : 0.5m  
TRENCH LENGTH : 3.0m  
TRENCH BEARING : 025°  
TRENCH SLOPE : 15°

5534

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>GDE- 81 - 03</b>		
DRAWN BY : W. H. ACOSTA	SCALE 1:50	
LOGGED BY : G. HOFFMAN	DATE OCT./ 1981	
APPROVED BY : H. ZSCHACH		

TRUE THICKNESS  
 ROCK COAL  
 COAL/COAL+ROCK  
 0.35/0.35 m



ROOF:

MUDSTONE: carbonaceous, carbonaceous and coaly plant fragments, dark grey, coaly stringers

COAL: sheared, badly weathered, dull

COAL and Mudstone,


COAL: dull bright stringers,

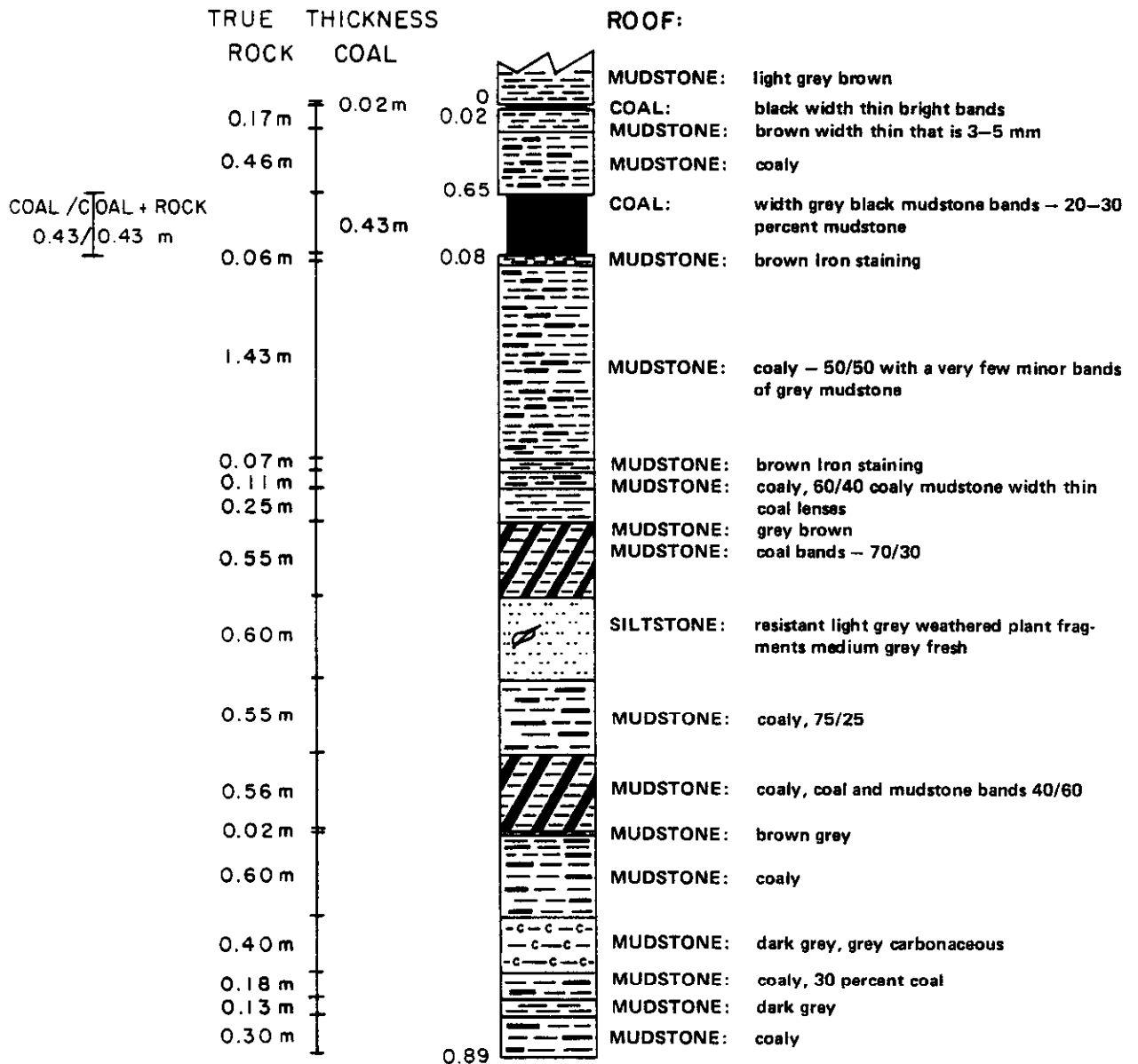
MUDSTONE: dark grey, carbonaceous, abundant coaly stringers, dull-bright dark grey-black.

FLOOR:

FORMATION : GETTING  
 UTM COORDINATES : 143 865 N, 555 180 E  
 MAP CARD NUMBER : 1Q44 - 1:5000  
 AIR PHOTO NUMBER : HA131080 - 526 (1:30000)  
 TRENCH DEPTH : 0.7m  
 TRENCH WIDTH : 0.5m  
 TRENCH LENGTH : 2.5m  
 TRENCH BEARING : 40°  
 TRENCH SLOPE : 5°

5534

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>GDE - 81 - 04</b>		
DRAWN BY: W. H. ACOSTA		SCALE 1: 50
LOGGED BY: G. HOFFMAN, P. HOWIE		DATE OCT. / 1981
APPROVED BY: H. ZSCHACH		



CONTINUED ON PAGE 2

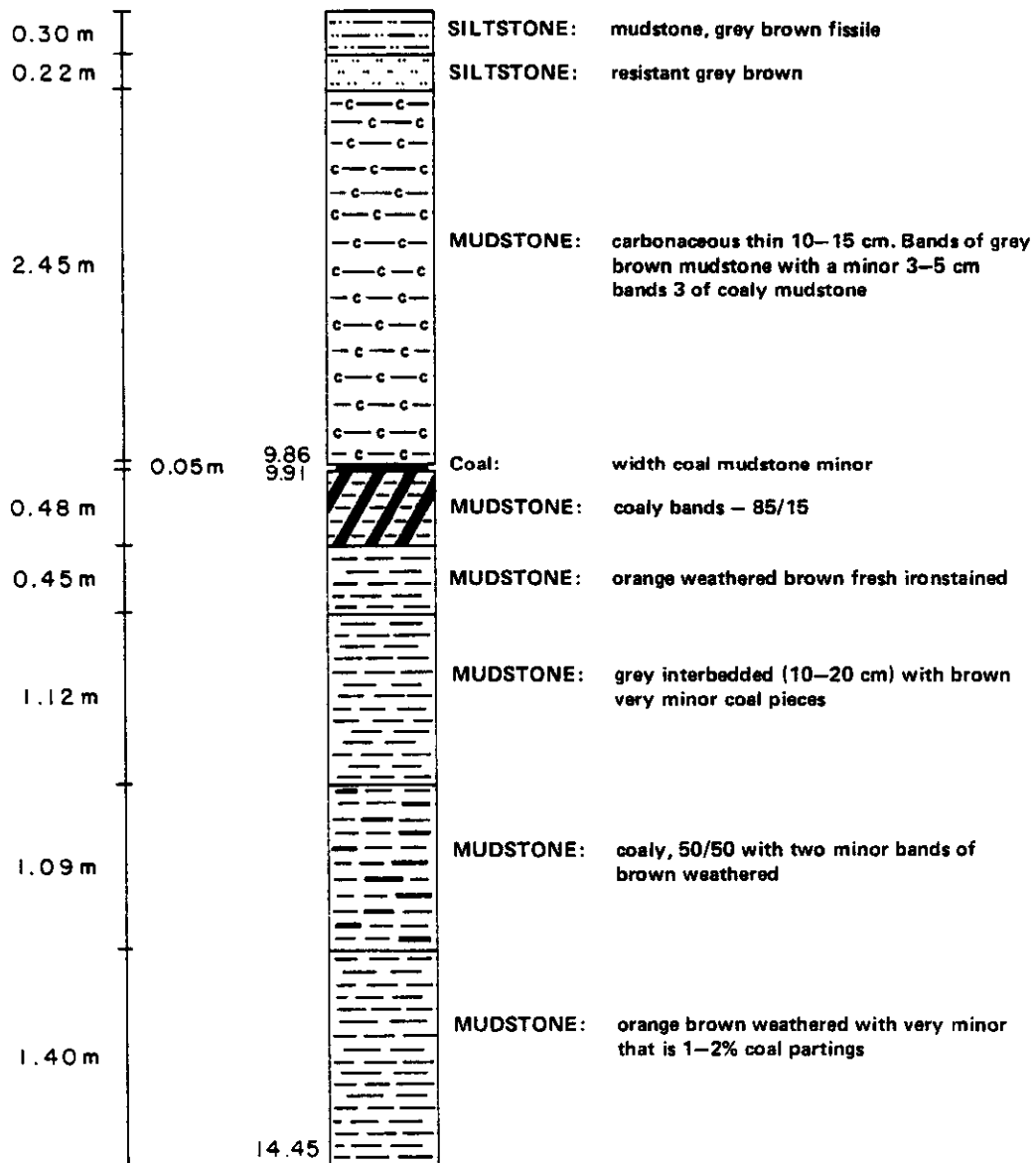
FORMATION : GETHING  
 UTM COORDINATES : 136 220 N 51 230 E  
 MAP CARD NUMBER : 1R 42-3 (1:5000)  
 AIR PHOTO NUMBER : HA 131080-3-78 (1:30,000)  
 TRENCH DEPTH : 0.25 m  
 TRENCH WIDTH : 0.33 m  
 TRENCH LENGTH : 25 m  
 TRENCH BEARING : 230°  
 TRENCH SLOPE : -35°

5096

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>MGN - 81 - 001</b>		
PAGE 1 of 3		
DRAWN BY: M. ANDERSON	SCALE 1: 50	
LOGGED BY: B. DAVIDSON	DATE OCT. / 81	
APPROVED BY: H. ZSCHACH		

TRUE THICKNESS  
ROCK COAL

CONTINUED FROM PAGE 1.



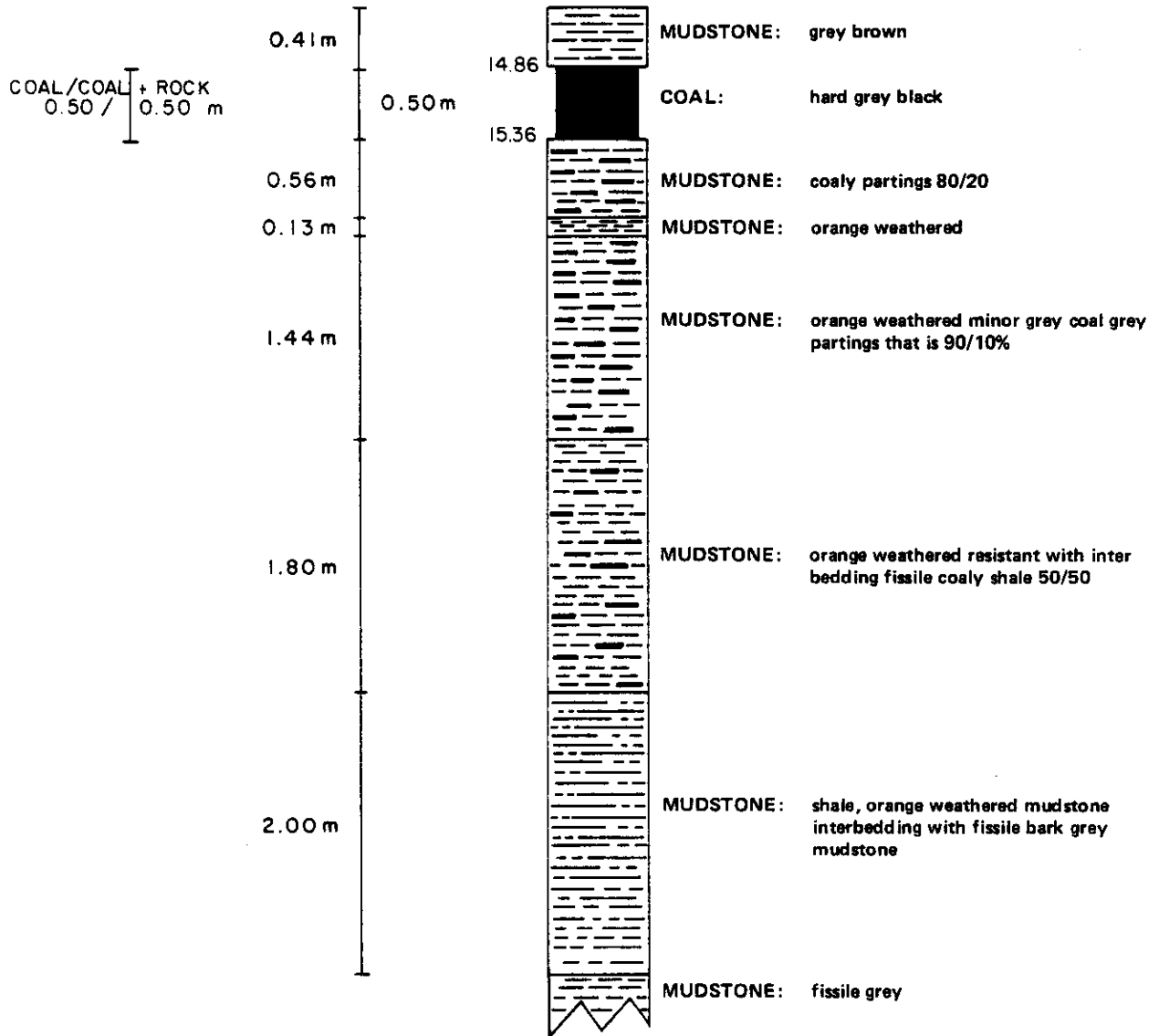
CONTINUED ON PAGE 3.

FORMATION : GETHING  
 UTM COORDINATES : 136 220 N, 51 230 E  
 MAP CARD NUMBER : 1R 42-3 (1:5000)  
 AIR PHOTO NUMBER : HA 131080-3-78 (1:30,000)  
 TRENCH DEPTH : 0.25 m  
 TRENCH WIDTH : 0.33 m  
 TRENCH LENGTH : 25 m  
 TRENCH BEARING : 230°  
 TRENCH SLOPE : 35°

<b>GULF CANADA RESOURCES INC.</b>		
Coal Division		
CALGARY	ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>MGN - 81 - 001</b>		
PAGE 2 of 3		
DRAWN BY: M. ANDERSON	SCALE 1:50	
LOGGED BY: B. DAVIDSON	DATE OCT. / 81	
APPROVED BY: H. ZSCHACH		

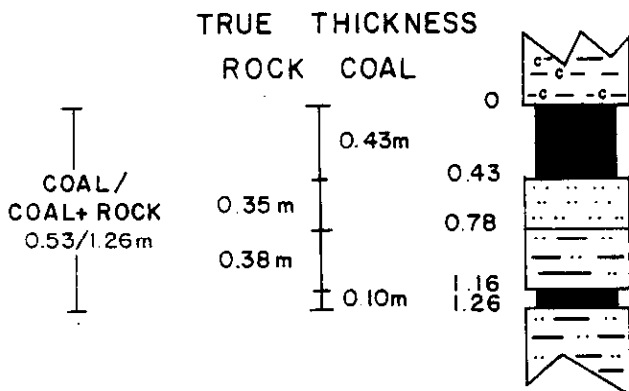
TRUE THICKNESS  
ROCK COAL

CONTINUED FROM PAGE 2.



FORMATION : GETHING  
 UTM COORDINATES : 136 220 N, 51 230 E  
 MAP CARD NUMBER : 1R 42-3 (1: 5000)  
 AIR PHOTO NUMBER : HA 131080-3-78 (1: 30,000)  
 TRENCH DEPTH : 0.25 m  
 TRENCH WIDTH : 0.33 m  
 TRENCH LENGTH : 25 m  
 TRENCH BEARING : 230°  
 TRENCH SLOPE : 35°

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT TRENCH LOG</b>		
<b>MGN - 81 - GOI</b>		
PAGE 3 of 3		
DRAWN BY: M. ANDERSON		SCALE 1: 50
LOGGED BY: B. DAVIDSON		DATE OCT. / 81
APPROVED BY: H. ZSCHACH		



ROOF: 331° / 41°S

MUDSTONE: Dark brown, coaly partings, fissile

COAL: Bright, brittle, brown staining,

MUDSTONE: Partings in coal  
SILTSTONE: Orange weathering

SHALE: Brown, fissile

COAL: Brown staining

SHALE: Fissile, brown

FLOOR: 331° / 41°S

FORMATION : GETTING  
 UTM COORDINATES : 133 235 N, 556 455 E  
 MAP CARD NUMBER : 1Q41 - 6 (1: 5000)  
 AIR PHOTO NUMBER : HA 131080 - 4 - 63 (1: 30000)  
 TRENCH DEPTH : 0.5 m  
 TRENCH WIDTH : 0.5 m  
 TRENCH LENGTH : 3.0 m  
 TRENCH BEARING : 54°  
 TRENCH SLOPE : 0°

CL 6707

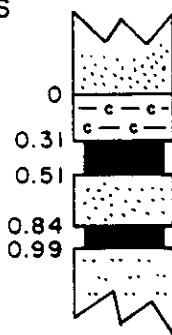
<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>GCT - 81 - 001</b>		
DRAWN BY: C. BARNES		SCALE 1: 50
LOGGED BY: B. DAVIDSON		DATE OCT. / 81
APPROVED BY: H. ZSCHACH		

COAL /  
COAL+ROCK  
0.34/0.99m

TRUE THICKNESS

ROCK COAL

0.31m  
0.20m  
0.33m  
0.15m



ROOF : 292°/67° N

SILTSTONE

MUDSTONE: Coaly

COAL: Very bright, sheared

SILTSTONE:

COAL: very bright, sheared

SILTSTONE: fine grained sandstone

NOTE: Variable thickness of coal

FLOOR : 292°/67° N

FORMATION : GETHING  
UTM COORDINATES : 134 625 N, 555 135 E  
MAP CARD NUMBER : 1Q41 - 8 (1:5000)  
AIR PHOTO NUMBER : HA131080 - 463 (1:30000)  
TRENCH DEPTH : 0.10 m  
TRENCH WIDTH : 0.42 m  
TRENCH LENGTH : 0.90 m  
TRENCH BEARING : 029°  
TRENCH SLOPE : 0°

5692

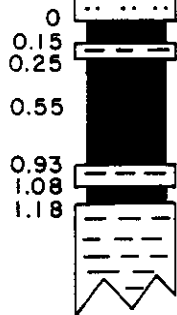
<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>GCT - 81 - G02</b>		
DRAWN BY: <b>M. ANDERSON</b>		SCALE 1 : 50
LOGGED BY: <b>B. DAVIDSON</b>		DATE <b>OCT. / 81</b>
APPROVED BY: <b>H. ZSCHACH</b>		



COAL /  
COAL+ROCK  
0.93 / 1.18m

TRUE THICKNESS  
ROCK COAL

0.10 m | 0.15 m  
| 0.30 m  
| 0.38 m  
0.15 m | 0.10 m



ROOF: 316°/72° S

SILTSTONE: Orange weathering

COAL: Bright, brittle

MUDSTONE: Grey

COAL: Dull, powdery, minor carbonaceous partings

COAL: Bright, brittle, minor coaly partings

MUDSTONE: Grey


COAL: Powdery

MUDSTONE: Siltstone, iron staining

FLOOR: 316°/90°

FORMATION : GETTING  
UTM COORDINATES : 134 585 N, 555 105 E  
MAP CARD NUMBER : 1Q41 - 8 (1: 5000)  
AIR PHOTO NUMBER : HA 131080 - 4 - 63 (1:30000)  
TRENCH DEPTH : 0.21 m  
TRENCH WIDTH : 0.27 m  
TRENCH LENGTH : 2.10 m  
TRENCH BEARING : 046°  
TRENCH SLOPE : 0°

*CL 5692*

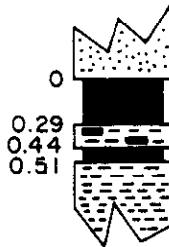
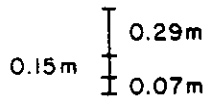
<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>GCT - 81 - G 03</b>		
DRAWN BY: M. ANDERSON		SCALE: 1: 50
LOGGED BY: B. DAVIDSON		DATE: OCT. / 81
APPROVED BY: H. ZSCHACH		

COAL/  
COAL+ROCK  
0.36/0.51m



TRUE THICKNESS

ROCK COAL



ROOF: 312° / 83° S

SANDSTONE: Fine grained

COAL: Dull, powdery to fissile

MUDSTONE: Coaly to Coal, hard, vitrain partings

COAL: Powdery, dull

MUDSTONE: Grey

FLOOR: 312° / 83°

FORMATION : GETHING  
 UTM COORDINATES : 134 545 N, 555 080 E  
 MAP CARD NUMBER : 1Q41 - 8 (1: 5000)  
 AIR PHOTO NUMBER : HA 131080 - 4 - 63(1: 30000)  
 TRENCH DEPTH : 0.15 m  
 TRENCH WIDTH : 0.31 m  
 TRENCH LENGTH : 0.60 m  
 TRENCH BEARING : 042°  
 TRENCH SLOPE : 0°

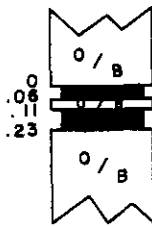
*CL 5692*

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>GCT - 81 - G04</b>		
DRAWN BY: M. ANDERSON		SCALE 1: 50
LOGGED BY: B. DAVIDSON		DATE OCT. / 81
APPROVED BY: H. ZSCHACH		

COAL /  
COAL+ROCK  
0.18 / 0.23 m

TRUE THICKNESS  
ROCK COAL

0.05 m | 0.06 m  
| 0.12 m




ROOF: 316°/83° SW

BROWN DIRT: Some loose rock pieces, well weathered  
COAL: Very soft, powdery, wet rock pieces dark brown carbonaceous  
COAL: Very soft, dull, powdery, wet  
BROWN DIRT: With some rocky pieces, well weathered

FLOOR: 316°/83° SW

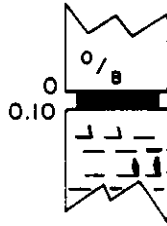
FORMATION : BRENOT  
UTM COORDINATES : 131 300 N, 556 800 E  
MAP CARD NUMBER :  
AIR PHOTO NUMBER : HA131080 - 3 - 75 (1:30000)  
TRENCH DEPTH : 0.21 m  
TRENCH WIDTH : 0.18 m  
TRENCH LENGTH : 0.50 m  
TRENCH BEARING : 046°  
TRENCH SLOPE : 0°

CL 5686

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>GPS-81-B01</b>		
DRAWN BY: M. ANDERSON		SCALE: 1:50
LOGGED BY: A. PETZOLD		DATE: OCT. / 81
APPROVED BY: H. ZSCHACH		

COAL/  
COAL+ROCK  
0.10/0.10m  
I

TRUE THICKNESS  
ROCK COAL  
I 0.10m




**ROOF :**

**BROWN DIRT:** Rocky pieces  
**COAL:** Dull, soft, powdery  
**MUDSTONE:** Pieces not in place, dark gray  
**DIRT:** Brown, small rocky pieces, small coaly pieces  
**COAL:** Dull, soft, powdery, infrequent mudstone chips  
**SANDSTONE:** Extremely well weathered, dark brown

**FLOOR:** 307°/27° SW

FORMATION : BRENOT  
 UTM COORDINATES : I31 200 N, 556 770 E  
 MAP CARD NUMBER :  
 AIR PHOTO NUMBER : HA131080 - 3 - 75 (I: 30000)  
 TRENCH DEPTH : 0.20 m  
 TRENCH WIDTH : 0.15 m  
 TRENCH LENGTH : 0.30 m  
 TRENCH BEARING : 217 °  
 TRENCH SLOPE : 0 °

*CL 5686*

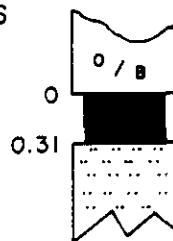
<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	ALBERTA	
Coal Division		
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>GPS - 81 - B 02</b>		
DRAWN BY: M. ANDERSON		SCALE: 1:50
LOGGED BY: A. PETZOLD		DATE: OCT. / 81
APPROVED BY: H. ZSCHACH		

COAL /  
COAL+ROCK  
0.31/0.31m



TRUE THICKNESS  
ROCK COAL

0.31m



ROOF:

DIRT:

Brown, small rocky pieces, small coaly pieces

COAL:

dull, soft, powdery, infrequent mudstone chips

SANDSTONE:

extremely well weathered, dark brown

FLOOR: 320° / 72° SW

FORMATION : BRENOT  
UTM COORDINATES : 131 910 N, 556 315 E  
MAP CARD NUMBER :  
AIR PHOTO NUMBER : HA131080 - 3 - 75 (1:30000)  
TRENCH DEPTH : 0.21 m  
TRENCH WIDTH : 0.41 m  
TRENCH LENGTH : 0.46 m  
TRENCH BEARING : 230 °  
TRENCH SLOPE : 0 °

CL 5686

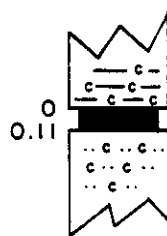
<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT TRENCH LOG</b>		
<b>GPS - 81 - B03</b>		
DRAWN BY: M. ANDERSON		SCALE 1:50
LOGGED BY: A. PETZOLD		DATE OCT. / 81
APPROVED BY: H. ZSCHACH		

COAL/  
COAL+ROCK  
0.11 / 0.11m

I

TRUE THICKNESS  
ROCK COAL

I 0.11m



ROOF: 320°/72° SW

MUDSTONE: dark grey, carbonaceous, fissile. Thinly bedded.


COAL: soft, powdery, tiny pieces, easily broken

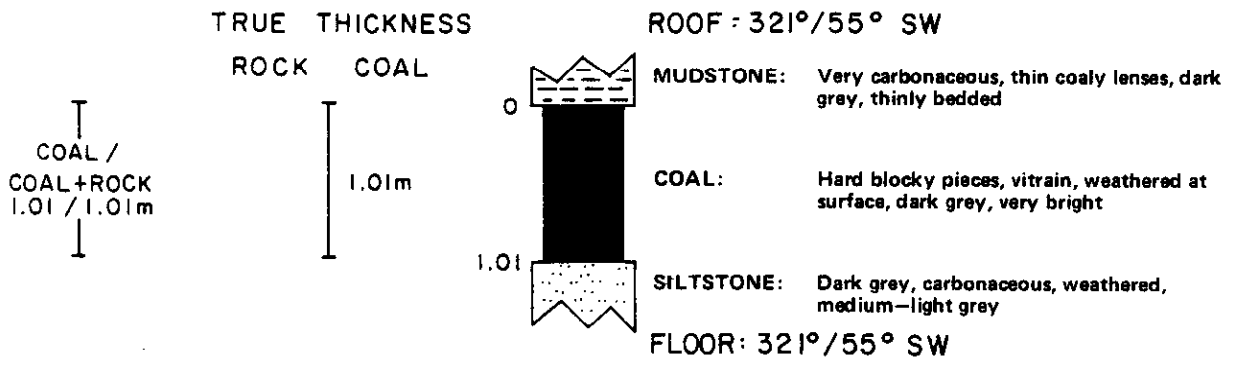
SILTSTONE: dark grey, carbonaceous, thinly bedded, coaly lenses.

FLOOR: 320°/72° SW

FORMATION : BRENOT  
UTM COORDINATES : 130 710 N, 556 190 E  
MAP CARD NUMBER :  
AIR PHOTO NUMBER : HA131080 - 3 - 75 (1:30000)  
TRENCH DEPTH : 0.13 m  
TRENCH WIDTH : 0.20m  
TRENCH LENGTH : 0.30m  
TRENCH BEARING : 230 °  
TRENCH SLOPE : 0°

CL 5686

<b>GULF CANADA RESOURCES INC.</b> Coal Division		
CALGARY	ALBERTA	
<b>GOODRICH COAL PROJECT</b> <b>TRENCH LOG</b> <b>GPS - 81 - B04</b>		
DRAWN BY: M. ANDERSON	SCALE 1: 50	
LOGGED BY: A. PETZOLD	DATE OCT. / 81	
APPROVED BY: H. ZSCHACH		



FORMATION : BRENOT

UTM COORDINATES : 131 505 N, 556 100 E

MAP CARD NUMBER :

AIR PHOTO NUMBER : HA131080 - 3-75 (1:30000)

TRENCH DEPTH : 0.22 m


TRENCH WIDTH : 0.41 m

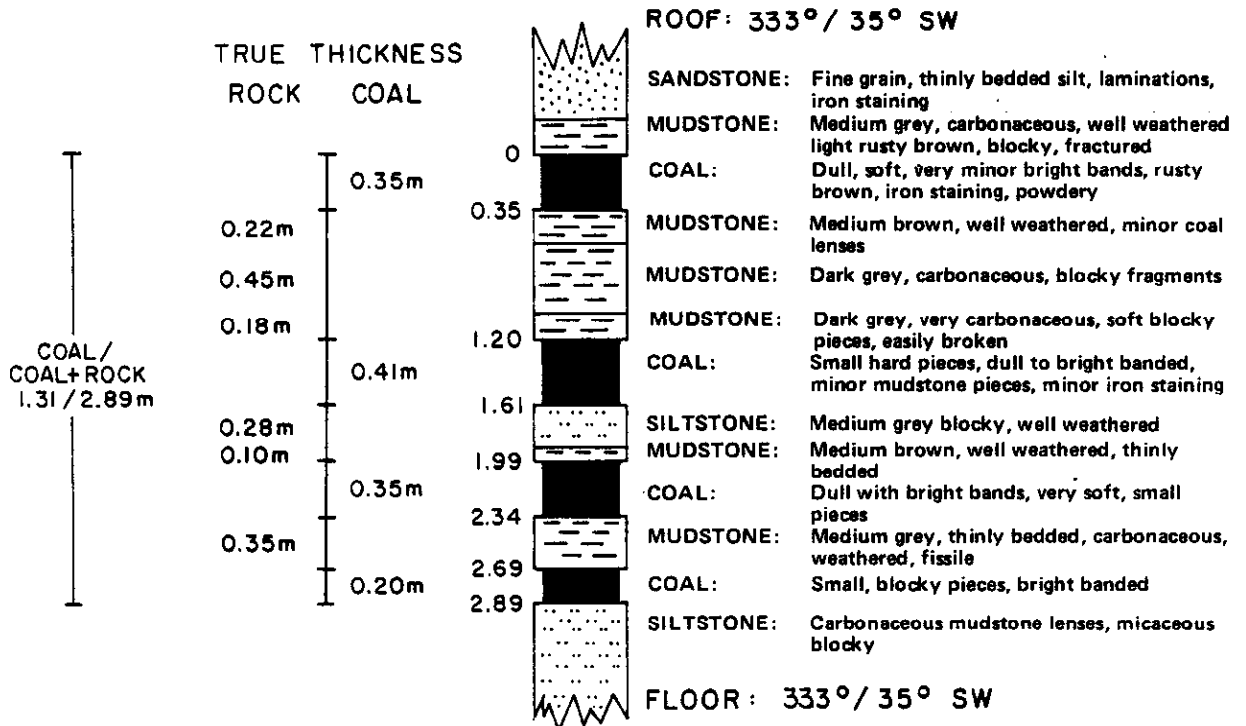
TRENCH LENGTH : 1.52 m

TRENCH BEARING : 231°

TRENCH SLOPE : 0°


*CL 5686*

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<p><b>GOODRICH COAL PROJECT</b></p> <p><b>TRENCH LOG</b></p> <p><b>GPS - 81 - B 05</b></p>		
DRAWN BY: M. ANDERSON		SCALE: 1:50
LOGGED BY: A. PETZOLD		DATE: OCT. / 81
APPROVED BY: H. ZSCHACH		

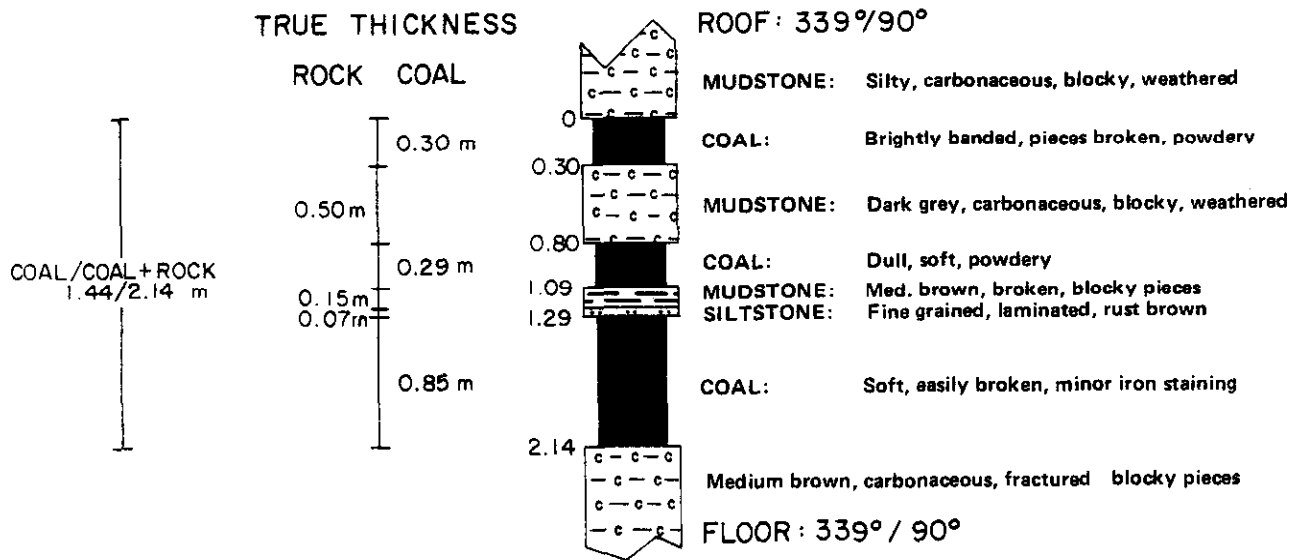


**FORMATION** : BRENOT  
**UTM COORDINATES** : 128 O10 N, 561 735 E  
**MAP CARD NUMBER** :  
**AIR PHOTO NUMBER** : HA 131080 - 4 - 67 (1:30000)  
**TRENCH DEPTH** : 0.5 m  
**TRENCH WIDTH** : 0.75 m  
**TRENCH LENGTH** : 3.5 m  
**TRENCH BEARING** : 63 °  
**TRENCH SLOPE** : 0 °

6660


<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b> <b>TRENCH LOG</b>  <b>NBRT - 81 - B01</b>		
DRAWN BY: <b>M. ANDERSON</b>		SCALE 1: 50
LOGGED BY: <b>A. PETZOLD</b>		DATE <b>OCT. / 81</b>
APPROVED BY: <b>H. ZSCHACH</b>		





**FORMATION** : BRENOT  
**UTM COORDINATES** : 128 060 N, 561 855 E  
**MAP CARD NUMBER** :  
**AIR PHOTO NUMBER** : HA 131080-4-67 (1:30000)  
**TRENCH DEPTH** : 0.55 m  
**TRENCH WIDTH** : 0.70 m  
**TRENCH LENGTH** : 2.50 m  
**TRENCH BEARING** : 49°  
**TRENCH SLOPE** : 0°

*6059*

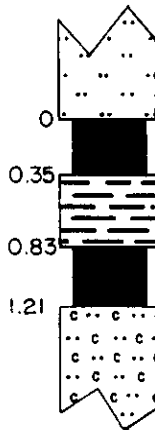
<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	ALBERTA	
Coal Division		
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>NBRT - 81 - B02</b>		
DRAWN BY: W. H. ACOSTA		SCALE: 50
LOGGED BY: A. PETZOLD		DATE: OCT./1981
APPROVED BY: H. ZSCHACH		

COAL/COAL+ROCK  
0.73/1.21 m

TRUE THICKNESS

ROCK COAL

0.35  
0.48  
0.38



ROOF : 307°/57° SW

SILTSTONE: Medium grey, plant fragments, iron staining

COAL: Small bright pieces, soft

MUDSTONE: Dark grey, coaly lenses, blocky fractured, well weathered

COAL: Bright, hard, blocky pieces

SILTSTONE: Medium grey, carbonaceous plant fragments weathers light brown

FLOOR : 307° / 57° SW

FORMATION : BRENOT  
 UTM COORDINATES : 127 985 N, 562 110 E  
 MAP CARD NUMBER :  
 AIR PHOTO NUMBER : HA 131080 - 4 - 67 (1:30000)  
 TRENCH DEPTH : 0.50 m  
 TRENCH WIDTH : 0.50 m  
 TRENCH LENGTH : 1.50 m  
 TRENCH BEARING : 37°  
 TRENCH SLOPE : 0°

6659

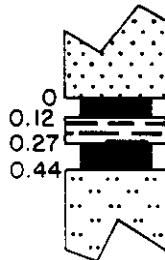
<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>NBRT - 81 - B03</b>		
DRAWN BY: WANDA H. ACOSTA		SCALE 1: 50
LOGGED BY: A. PETZOLD		DATE OCT. / 1981
APPROVED BY: H. ZSCHACH		

**TRUE THICKNESS**

**ROCK COAL**

COAL/COAL+ROCK  
0.29/0.44 m

0.15 | 0.12  
| 0.08  
| 0.09



**ROOF: 305°/05° SW**

**SANDSTONE:** Medium grained dark grey, weathers light brown

**COAL:** Bright with dull bands, small hard pieces

**MUDSTONE:** Dark grey, carbonaceous, blocky


**COAL:** Very hard, dull, blocky pieces, few bright bands

**SILTSTONE:** Dark grey, blocky, fine carbonaceous lenses

**FLOOR: 305°/05° SW**

FORMATION : BRENOT  
 UTM COORDINATES : 127 945 N, 562 205 E  
 MAP CARD NUMBER :  
 AIR PHOTO NUMBER : HA 131080-4 - 67(1:30000)  
 TRENCH DEPTH : 0.5 m  
 TRENCH WIDTH : 0.5 m  
 TRENCH LENGTH : 1.0 m  
 TRENCH BEARING : 35°  
 TRENCH SLOPE : 0°

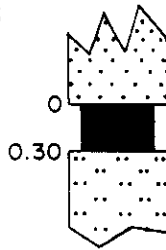
6659

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division ALBERTA	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>NBRT - 81 - B04</b>		
DRAWN BY: W. H. ACOSTA		SCALE: 1:50
LOGGED BY: A. PETZOLD		DATE: OCT./1981
APPROVED BY: H. ZSCHACH		

COAL / COAL + ROCK  
0.30 / 0.30 m

TRUE THICKNESS  
ROCK COAL

0.30



ROOF : 313° / 30° SW

SANDSTONE: Med. grained, light brown, thin carbonaceous


COAL: Bright with dull bands, very hard

SILTSTONE: Dark grey fresh, light grey weathered

FLOOR : 313° / 30° SW

FORMATION : BRENOT  
UTM COORDINATES : 127 875 N, 562 575 E  
MAP CARD NUMBER :  
AIR PHOTO NUMBER : HA 131080 - 4 - 67(1:30000)  
TRENCH DEPTH : 0.5 m  
TRENCH WIDTH : 0.5 m  
TRENCH LENGTH : 0.55 m  
TRENCH BEARING : 43°  
TRENCH SLOPE : 0°

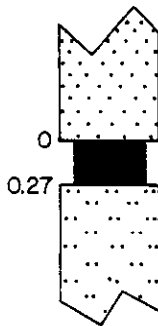
6659

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>NBRT - 81 - B05</b>		
DRAWN BY: W. H. ACOSTA		SCALE 1 : 50
LOGGED BY: A. PETZOLD		DATE OCT / 1981
APPROVED BY: H. ZSCHACH		

COAL/COAL + ROCK  
0.27/0.27 m

TRUE THICKNESS  
ROCK COAL

0.27




ROOF: 32.0° / 27° SW

SANDSTONE: Medium grey, fine laminations, very fine grained, blocky  
 COAL: Bright bands, small hard pieces  
 COAL: Dull, soft, powdery  
 COAL: Small bright pieces, vitrain  
 SILTSTONE: Dark grey, carbonaceous, fractured, weathered brown

FLOOR: 32.0° / 27° SW

FORMATION : BRENOT  
 UTM COORDINATES : 127 890 N, 562 730 E  
 MAP CARD NUMBER :  
 AIR PHOTO NUMBER : HA 131080-4 - 67 (1:30000)  
 TRENCH DEPTH : 0.71m  
 TRENCH WIDTH : 0.71m  
 TRENCH LENGTH : 1.0 m  
 TRENCH BEARING : 50°  
 TRENCH SLOPE : 0°

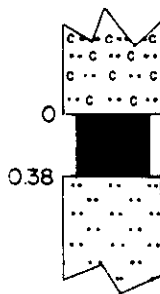
6659

<b>GULF CANADA RESOURCES INC.</b>		
CALGARY	Coal Division	
<b>GOODRICH COAL PROJECT</b>		
<b>TRENCH LOG</b>		
<b>NBRT - 81 - B06</b>		
DRAWN BY: W. H. ACOSTA		SCALE 1: 50
LOGGED BY: A. PETZOLD		DATE OCT. / 1981
APPROVED BY: H. ZSCHACH		

COAL/COAL+ROCK  
0.38/0.38 m

TRUE THICKNESS  
ROCK COAL

0.20  
0.18



ROOF: 300°/60° S.W.

SANDSTONE: Medium grained, carbonaceous lenses,  
medium brown, micaceous

COAL: Bright, hard pieces, easily broken

COAL: Dull, soft, powdery, thin bright, flakes

SILTSTONE: Dark grey, thinly bedded, extremely well  
fractured

FLOOR: 300°/60° S.W.

FORMATION : BRENOT  
UTM COORDINATES : 128 015 N, 562 770 E  
MAP CARD NUMBER :  
AIR PHOTO NUMBER : HA 131080 - 4 - 67 (1:30000)  
TRENCH DEPTH : 0.5 m  
TRENCH WIDTH : 0.5 m  
TRENCH LENGTH : 1.0 m  
TRENCH BEARING : 40°  
TRENCH SLOPE : 0°

6659  
GULF CANADA RESOURCES INC.

CALGARY

Coal Division

ALBERTA



GOODRICH COAL PROJECT  
TRENCH LOG

NBRT - 81 - B07

DRAWN BY: W. H. ACOSTA

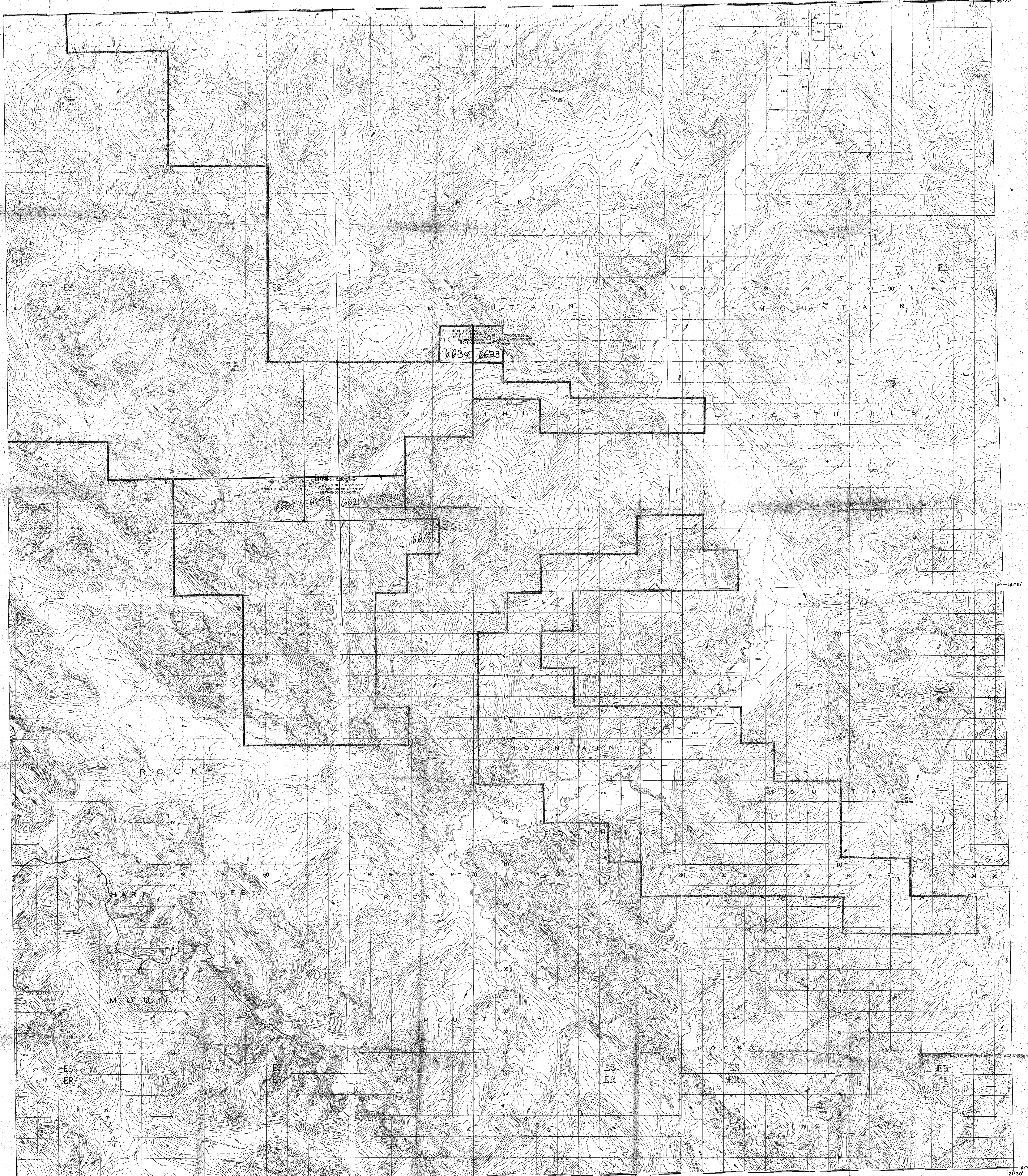
SCALE 1: 50

LOGGED BY: A. PETZOLD

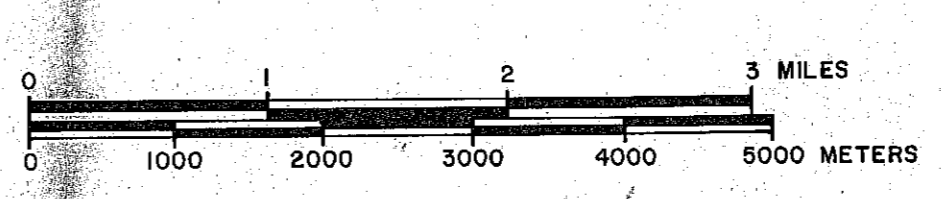
DATE OCT. / 1981

APPROVED BY: H. ZSCHACH





55°00' 122°15' 122°00' 55°15'



APPENDIX D MAP FOLIO

*(1:50,000 11/27/79 4/73) TrunkLog*

**GULF CANADA RESOURCES INC.**  
Coal Division ALBERTA

**GOODRICH COAL PROPERTY**  
1981  
GOODRICH AND WINDFALL  
TRENCH LOCATIONS

SCALE 1:50,000  
PREPARED BY:  
APPROVED BY: DATE: NOV. 81

**532**