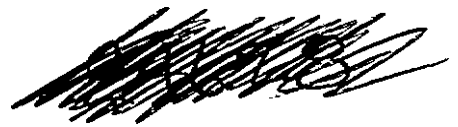


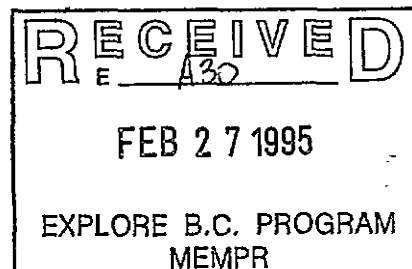
830



TECHNICAL SUMMARY
1994
EXPLORATION PROGRAM

EXPLORE B.C. GRANT 94-95/A-30

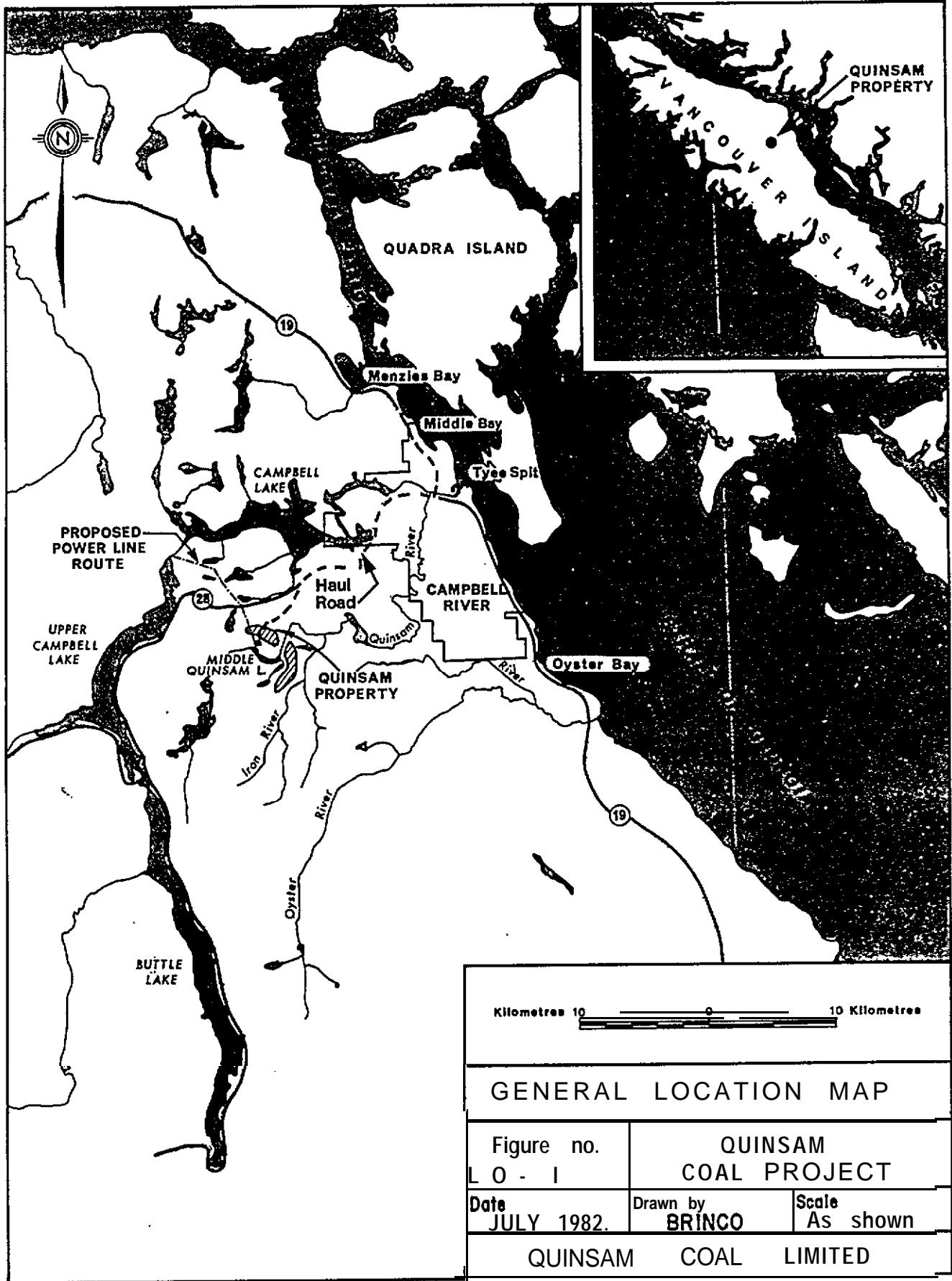
QUINSAM COAL CORPORATION
CAMPBELL RIVER
BRITISH COLUMBIA



Prepared by:
S. GARDNER
February 1995

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- SECTION 1. TECHNICAL SUMMARY AND WRITE-UP
- SECTION 2. COST DATA
- SECTION 3. LITHOLOGY LOGS
- SECTION 4. GEOPHYSICAL LOGS
- SECTION 5. CORELOG DESCRIPTIONS
- SECTION 6. CEMENTING RECORDS



Kilometres 10  10 Kilometres

GENERAL LOCATION MAP

| | | |
|-----------------------|-------------------------|-------------------|
| Figure no. L O - 1 | QUINSAM COAL PROJECT | |
| Date JULY 1982. | Drawn by BRINCO | Scale As shown |
| QUINSAM COAL LIMITED | | |

QUINSAM COAL CORPORATION, CAMPBELL RIVER, B. C.
TECHNICAL SUMMARY, 1994 EXPLORATION PROGRAM

A program of exploration drilling and coring was undertaken on the Quinsam Coal Property in 1994. The exploration consisted of two phases:

1) Step-out drilling of three holes (94-001 to 94-003) to confirm the existence of a mineable seam of coal down the dip of the formation. These holes were installed at selected locations which would confirm seam quality and thickness within the 15 year development boundary, but for which there was no previous drillhole intersections. (June, 1994).

2) In-fill drilling of 9 holes in the 2N area immediately ahead of current mining development and 8 holes in the 2S area immediately ahead of current mining development. The holes in the 2N area were cored for coal quality and detailed structural interpretation. The holes in the 2S area were not cored. (Nov., 1994).

Table 1. entitled "1994 Drillhole Location Summary" lists pertinent information relating to the drillholes and the No.1 Coal Seam intersections.

TABLE 1 .0 – 1994 DRILLHOLE LOCATION SUMMARY

QUINSAM COAL MINE

1994 EXPLORATION PROGRAM

| HOLE NUMBER | CORED (X) | CO-ORDINATES | | ELEV. (metres) | m e t r e s | | | TOTAL DEPTH |
|----------------|--------------|--------------|------------|-------------------|------------------|--------|-------|----------------|
| | | NORTHING | EASTING | | #1 SEAM DEPTH | THICK. | ELEV. | |
| 94-001 | X | 104340.599 | 101060.738 | 301.20 | 113.20 | 2.90 | 188.0 | 130.0 |
| 94-002 | X | 103665.033 | 100707.509 | 304.03 | 120.60 | 3.45 | 183.4 | 129.0 |
| 94-003 | X | 103358.058 | 100955.926 | 283.10 | 126.05 | 3.80 | 157.1 | 138.0 |
| 94-004 | X | 103789.649 | 100095.982 | 318.96 | 72.70 | 3.60 | 246.3 | 80.0 |
| 94-005 | X | 103952.832 | 100236.391 | 306.17 | 66.10 | 3.40 | 240.1 | 80.0 |
| 94-006 | X | 103868.323 | 100174.262 | 314.17 | 73.65 | 3.35 | 240.5 | 80.0 |
| 94-007 | X | 103800.456 | 99899.553 | 320.22 | 57.50 | 3.60 | 262.7 | 66.5 |
| 94-008 | | 101267.216 | 97859.632 | 354.46 | 60.80 | 1.20 | 293.7 | 66.5 |
| 94-009 | | 101228.280 | 97992.465 | 353.47 | 68.45 | 2.90 | 285.0 | 80.0 |
| 94-010 | | 101306.342 | 97887.201 | 351.46 | 57.45 | 3.50 | 294.0 | 66.5 |
| 94-011 | | 101362.967 | 97805.504 | 351.13 | 55.90 | 2.60 | 295.2 | 62.0 |
| 94-012 | | 101364.610 | 97964.474 | 349.68 | 57.90 | 3.35 | 291.8 | 67.0 |
| 94-013 | | 101306.418 | 97950.877 | 348.49 | 55.85 | 3.45 | 292.6 | 62.5 |
| 94-014 | | 101332.527 | 97781.897 | 352.55 | 57.80 | 3.50 | 294.8 | 68.5 |
| 94-015 | | 101315.921 | 97852.815 | 352.20 | 59.75 | 3.75 | 292.5 | 69.0 |
| 94-016 | X | 103077.271 | 100658.555 | 322.93 | 151.50 | 3.60 | 171.4 | 160.0 |
| 94-017 | X | 103316.184 | 100572.900 | 327.02 | 140.20 | 3.30 | 186.8 | 152.0 |
| 94-018 | X | 103239.682 | 100466.394 | 324.03 | 126.00 | 3.25 | 198.0 | 135.0 |
| 94-019 | X | 103402.235 | 100408.417 | 323.67 | 114.50 | 3.10 | 209.2 | 122.5 |
| 94-020 | X | 102824.453 | 100444.030 | 305.69 | 119.50 | 3.00 | 186.2 | 129.0 |

Note : All holes geophysically logged.

TOTAL METRES: 1944

Table 2. entitled "**1994 Corehole** Information" lists the intervals cored in the 20 holes completed during 1994.

As the tables indicate, a total of 1944 metres of drilling was completed in the 1994 program. Of this total, 182 metres were cored.

Figure 1. (in pocket) entitled "**Quinsam** Mine, Drillhole Locations" identifies the new 1994 drillhole locations within the area of the Minesite.

TABLE 2.0 – 1994 COREHOLE INFORMATION

QUINSAM COAL MINE

1994 EXPLORATION PROGRAM

| HOLE NUMBER | m e t r e s C O R E D | | I N T E R V A L Thickness |
|----------------|--------------------------|--------|------------------------------|
| | From.. | To.. | |
| 94-001 | 109.72 | 118.87 | 9.15 |
| 94-002 | 111.86 | 127.1 | 15.24 |
| 94-003* | 126.65 | 129.4 | 2.75 |
| 94-004 | 60.04 | 81.38 | 21.34 |
| 94-005 | 53.64 | 71.93 | 18.29 |
| 94-006 | 68.58 | 77.72 | 9.14 |
| 94-007 | 32 | 62.48 | 30.48 |
| 94-008 | — | — | 0 |
| 94-009 | — | — | 0 |
| 94-010 | — | — | 0 |
| 94-011 | — | — | 0 |
| 94-012 | — | — | 0 |
| 94-013 | — | — | 0 |
| 94-014 | — | — | 0 |
| 94-015 | — | — | 0 |
| 94-016 | 152.39 | 155.44 | 3.05 |
| 94-017** | 143.56 | 149.66 | 6.1 |
| 94-018 | 92.96 | 135.29 | 42.33 |
| 94-019 | 105.16 | 120.41 | 15.25 |
| 94-020 | 115.82 | 124.88 | 9.06 |

Total: 182.18

Note : All holes geophysically logged.

* : Technical difficulties in this hole caused the loss of the core string.
Core and all tools were recovered in damaged condition.

** : Drill cuttings and hole slough material resulted in malfunction
in the geophysical tool through the coal horizon in this hole.

DESCRIPTION OF WORK METHODS

The drill rig employed in the 1994 Program was contracted from Drillwell Enterprises Ltd. of Cowichan Bay. It was a wheel-mounted Drilltech 25 equipped with the following:

- 850 CFM/350 PSI Gardner Denver Compressor
- Bucyrus Erie Casing Hammer
- Ingersoll Rand 6 in. Downhole Hammer
- Christiensen Conventional 6 in. Core (Split Tube Assembly)

Casing was set through the glacial till material and surficial soils with the Casing Hammer assembly. When bedrock was encountered, the downhole percussion hammer was employed for open hole drilling to a pre-determined corepoint.

The core interval, which generally includes roof rock above the coal seam plus the coal seam itself, is recovered in 3 metre runs by removing all the drill pipe out of the hole and extracting the 7.6 cm diameter core out of the inner split tube barrel. A tungsten carbide step core bit is used on the end of the core assembly.

Following the removal of the drilling and coring tools from the hole, a geophysical unit mounted in a 4 wheel drive vehicle is used to run a wireline tool in the hole. This tool produces a standard log suite including gamma, resistance, density and caliper curves down the length of the hole. The geophysical logs provide

information on seam thickness, parting thickness, and roof and floor characteristics, particularly for sections which were not cored.

The core is logged and described by a geologist, and the coal intervals are sampled and sent to a laboratory for coal quality analysis. Core log descriptions are compared with the geophysical log curves for thickness determination and parting resolution. Uniaxial compressive strength tests on the coal are conducted as part of a pillar design program.

Following all in-hole surveys, holes are cemented from bottom to top with a neat slurry designed to prevent groundwater migration between horizons and into future mine workings, and to prevent methane gas from escaping into the atmosphere. Three of the holes in the 2N area have been left open with special permission from the Chief Inspector of Mines in order to evaluate roof caving characteristics prior to and after de-pillaring operations. Hole completion reports for the remaining 17 holes are included in this technical summary.

The following is a list of contractors and suppliers which were used during the 1994 drill program:

- Drillwell Enterprises Ltd.
Cowichan Bay, British Columbia

- Electrolog Services Ltd.
Calgary, Alberta

- Jim Lehtinen, Geological and Supervision
Courtenay, British Columbia

- Venus Creek Contracting Ltd.
Campbell River, British Columbia

- Island Ready Mix Ltd.
Campbell River, British Columbia

- Western Supplies Ltd.
Campbell River, British Columbia

- Loring Laboratories Ltd.
Calgary, Alberta

CONCLUSIONS

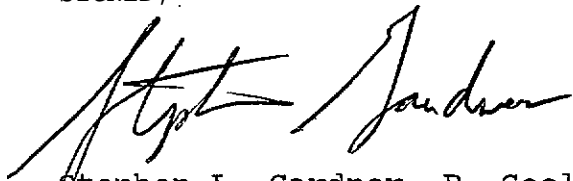
As a result of the program, the following general conclusions are drawn:

- 1) Continuation of the coal seam down the dip of the formation between the 2N and 3N areas has been defined as far as the limit of the current 15 year mine plan using a 300 metre Radius of Investigation around drillhole data points. (see Figure 94-QC-154, Drillhole Location Plan). More holes are required in the 3N area to the north of Hole 94-001 to more accurately define the extent of No. 1 Seam deposition in this direction.
- 2) The coal seam between the 2N and 3N areas remains at a consistent 2.75 plus metres, in some holes reaching thicknesses of 3.75 metres.
- 3) Coal quality remains good in most locations, with sulphur contents averaging 0.5 %. There is deterioration of the coal seam evident in Hole 94-001, where significant **mudstone** parting intervals have been defined. The coal seam is still economic here, although its economic limit **downdip** from 94-001 is in question.
- 4) Major geologic structures are not evident as a result of the program, however, faulting which may complicate mine planning and layouts has been defined. Follow-up seismic work and/or additional drilling is contemplated to further identify the nature and extent of these structures.

COST SUMMARY

Table 3 is a Cost Summary for the 1994 Program. Total laboratory and analytical expenditures are not yet complete, however, the costing necessary to qualify for maximum grant monies available has already been exceeded. To year-end 1994, a total of \$158,155.64 has been spent on the program. This does not include internal wage costs for survey and management staff. Final reclamation costs have also been deferred until the drier summer period.

SIGNED,

A handwritten signature in black ink, appearing to read "Stephen L. Gardner". The signature is written in a cursive, flowing style with some loops and flourishes.

Stephen L. Gardner, P. Geol.

QUINSAM COAL CORPORATION
EXPLORATION DRILLING 2N & 3N - PHASE I & II
JOB NO. 94003

COST DETAIL TO DECEMBER 31; 1994

| <u>DATE</u> | <u>REF</u> | <u>SUPP CODE & PO NO</u> | <u>SUPPLIER</u> | <u>AMOUNT</u> |
|-------------|------------|------------------------------|------------------------|---------------|
| Dec31/94 | PJ1339 | DDEQ01 #N9401079 | D & D EQUIPMENT | \$187.50 |
| Jul27/94 | PJ1069 | DRIL01 #N9401029 | DRILLWELL ENTERPRISES | \$23,464.00 |
| Nov02/94 | PJ1183 | DRIL01 #N9401040 | DRILLWELL ENTERPRISES | \$3,624.13 |
| Dec30/94 | PJ1302 | DRIL01 #N9401055 | DRILLWELL ENTERPRISES | \$80,316.25 |
| Jun22/94 | PJ1030 | ELEC02 #N9401030 | ELECTROLOG SERVICES | \$5,696.68 |
| Dec22/94 | PJ1286 | ELEC02 #N9401058 | ELECTROLOG SERVICES | \$5842.20 |
| Dec31/94 | PJ1336 | ISLA05 #N9401072 | ISLAND READY MIX | \$614.26 |
| Dec31/94 | PJ1336 | ISLA05 #N9401072 | ISLAND READY MIX | \$1,593.25 |
| Dec31/94 | PJ1336 | ISLA05 #N9401075 | ISLAND READY MIX | \$3,064.48 |
| Dec31/94 | PJ1336 | ISLA05 #N9401078 | ISLAND READY MIX | \$919.34 |
| Oct25/94 | PJ1172 | ISLAND READY MIX | ISLAND READY MIX | \$3,242.19 |
| Jun17/94 | PJ1023 | JIMLOI #N9401031 | JIM LEHTINEN | \$1,749.00 |
| Dec07/94 | PJ1260 | JIMLOI #N9401059 | JIM LEHTINEN | \$3,791.00 |
| Nov23/94 | PJ1231 | LORI01 #N9401034 | LORING LABORATORIES | \$4,833.00 |
| Nov10/94 | PJ1208 | REVE02 #N9401060 | REVELSTOKE HOME CENTRI | \$464.77 |
| Dec22/94 | PJ1285 | REVE02 #N9401066 | REVELSTOKE HOME CENTRI | \$274.78 |
| Dec31/94 | GJ061242 | TIMBERWEST ACCRUAL | SURFACE DISTURBANCE | \$6,485.28 |
| Jul20/94 | PJ1057 | VENU01 #N9401028 | VENUS CREEK CONTRACTIN | \$4,830.00 |
| Dec30/94 | PJ1302 | VENU01 #N9401052 | VENUS CREEK CONTRACTIN | \$8,985.00 |
| Dec30/94 | PJ1302 | VENU01 #N9401064 | VENUS CREEK CONTRACTIN | \$4,620.00 |
| Dec30/94 | PJ1302 | VENU01 #N9401067 | VENUS CREEK CONTRACTIN | \$2,820.00 |
| Dec22/94 | PJ1287 | VENU01 #N9401069 | VENUS CREEK CONTRACTIN | \$455.00 |
| Dec31/94 | GJ061225 | VENUS CREEK ACCR | VENUS CREEK CONTRACTIN | (\$12,381.91) |
| Jul07/94 | PJ1044 | WEST25 #N9401033 | WESTERN SUPPLIES | \$901.50 |
| Nov04/94 | PJ1190 | WEST25 #N9401042 | WESTERN SUPPLIES | \$256.80 |
| Dec22/94 | PJ1287 | WEST25 #N9401071 | WESTERN SUPPLIES | \$1,507.14 |
| | | | | \$158,155.64 |

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TABLE 3.

EXPENDITURES (N.B. Please provide actual all-inclusive costs, including salaries and wages, equipment and machinery rental, supplies, services, transportation and accommodation directly attributable to the field program.)

(a) For the following, the full cost (100% of expenditures) are eligible:

| Geological Surveys, Map and Report Preparation and Related Costs | | |
|--|----|------------------|
| Geophysical Surveys (line-kilometres) | | |
| Ground | | |
| Magnetic | \$ | |
| Electromagnetic | \$ | |
| Induced Polarization | \$ | |
| Radiometric | \$ | |
| Seismic | \$ | |
| Other DOWNHOLE GEOPHYSICAL LOGGING | \$ | 11538.88 |
| Airborne | \$ | |
| | \$ | <u>11538.88</u> |
| | | <u>11538.8</u> |
| Geochemical Surveys (No. of samples analysed _____) | | |
| Soil | | |
| Silt | \$ | |
| Rock | \$ | |
| Other | \$ | |
| | \$ | <u>0</u> |
| | | <u>0</u> |
| Drilling | | |
| Surface 1944 m @ \$.55.25 = | \$ | |
| Underground m @ \$ = | \$ | 107404.38 |
| | \$ | <u>107404.</u> |
| Related Technical Surveys | | |
| Sampling/Assaying | | |
| Petrographic | \$ | 4833.00 |
| Mineralogic | \$ | |
| Metallurgic | \$ | |
| | \$ | <u>4833.00</u> |
| | | <u>4833.</u> |
| Preparatory/Physical | | |
| Line/Grid (kilometres) 4 Km. | \$ | 9328.09 |
| Trenching (metres) | \$ | ! |
| | \$ | <u>9328.09</u> |
| | | <u>9328</u> |
| Other Exploration Costs (attach detailed schedules) | | |
| Hole cementing supplies | \$ | 13026.01 |
| Surface Disturbance Payment (Timberwest) | \$ | 6485.28 |
| Geological Services and Supervision | \$ | 5540.00 |
| | \$ | <u>25051.29</u> |
| | | <u>5051.</u> |
| Total Eligible Expenses | | |
| | \$ | <u>58155.6</u> |
| (b) For the following activities only 25% of total costs are eligible: | | |
| Tunneling, Drifting, Other Lateral Excavation, Shaft Sinking (25% of total expenses are eligible) | | |
| m @ \$ = x 25% = | \$ | |
| m @ \$ = x 25% = | \$ | |
| | \$ | <u>0</u> |
| (c) TOTAL ELIGIBLE EXPENDITURES: | | |
| | \$ | <u>158155.64</u> |

SUPPLEMENTARY INFORMATION: The following information is **required** in order to help us determine the contribution which mineral exploration activity makes to the **economy**, and relates to the utilization of B.C. **vs** outside **labour** and services. Only **figures** directly **attributable to the funded** program should be included (**approximate figures** acceptable, but please be as accurate as possible).

(a) Employment, wages and **salaries**

| Type | No. Employed | | No. Person-Days | | Salaries/Wages Paid | |
|---------------------|--------------|---------|-----------------|---------|---------------------|---------|
| | B.C. | Outside | B.C. | Outside | B.C. | Outside |
| Prospectors | | | | | | |
| Linecutters | 2 | | 10 | | 2000 | |
| Technicians | 2 | 2 | 10 | 15 | 2250 | 2625 |
| General Labourers | | | | | | |
| Drillers/Helpers | 3 | | 129 | | 32250 | |
| Equipment Operators | 1 | | | | | |
| Geologists | 1 | | 20 | | 5540 | |
| Geophysicists | | 1 | | 18 | | 3600 |
| Geochemists | | | | | | |
| Engineers | | | | | | |
| Supervisory | 1 | | 15 | | 3750 | |
| Consulting | | | | | | |
| Secretary | | | | | | |
| Managerial | 1 | | 8 | | 2800 | |
| Legal | | | | | | |
| Accounting | | 1 | | 8 | | 2000 |
| Others (specify) | | | | | | |
| Others (specify) | | | | | | |
| Totals | 11 | 4 | 192 | 41 | 48590 | 8225 |

(b) Goods and Services

| Description | Expenditure | |
|--|---------------|--------------|
| | B.C. | Outside |
| | \$ | \$ |
| Meals, Groceries, etc. | — | — |
| Camping Supplies, Equipment, etc. | — | — |
| Accommodation | — | — |
| Transportation - Scheduled Air | — | — |
| - Air Charter | — | — |
| - Vehicle Rentals | 1500 | |
| - Vehicle Operating and Maintenance | 500 | |
| - Other (specify) | | |
| Equipment Rentals - Trenching, etc. | | |
| - Geophysical, etc. | | 11,538.88 |
| - Other (specify) <i>Drill site Access</i> | 21,710.00 | |
| Drilling | 107,404.38 | |
| Consultant Services | 5,540.00 | |
| Assays and Analyses | 4,833.00 | 4,833.00 |
| Communications | | |
| Other (specify) | | |
| Totals | \$ 141,487.38 | \$ 16,371.88 |

Impact of Explore BC Grant

(a) Please indicate what level of expansion of your project was attributable to receiving an Explore BC grant.

\$ 39,000 25 %

Per 58-Days of employment

(b) Please indicate what you feel to be the main achievement of this Explore BC funded program.

Confirmed mineable thickness of coal in the
area of the immediate 15 years of mine
life.

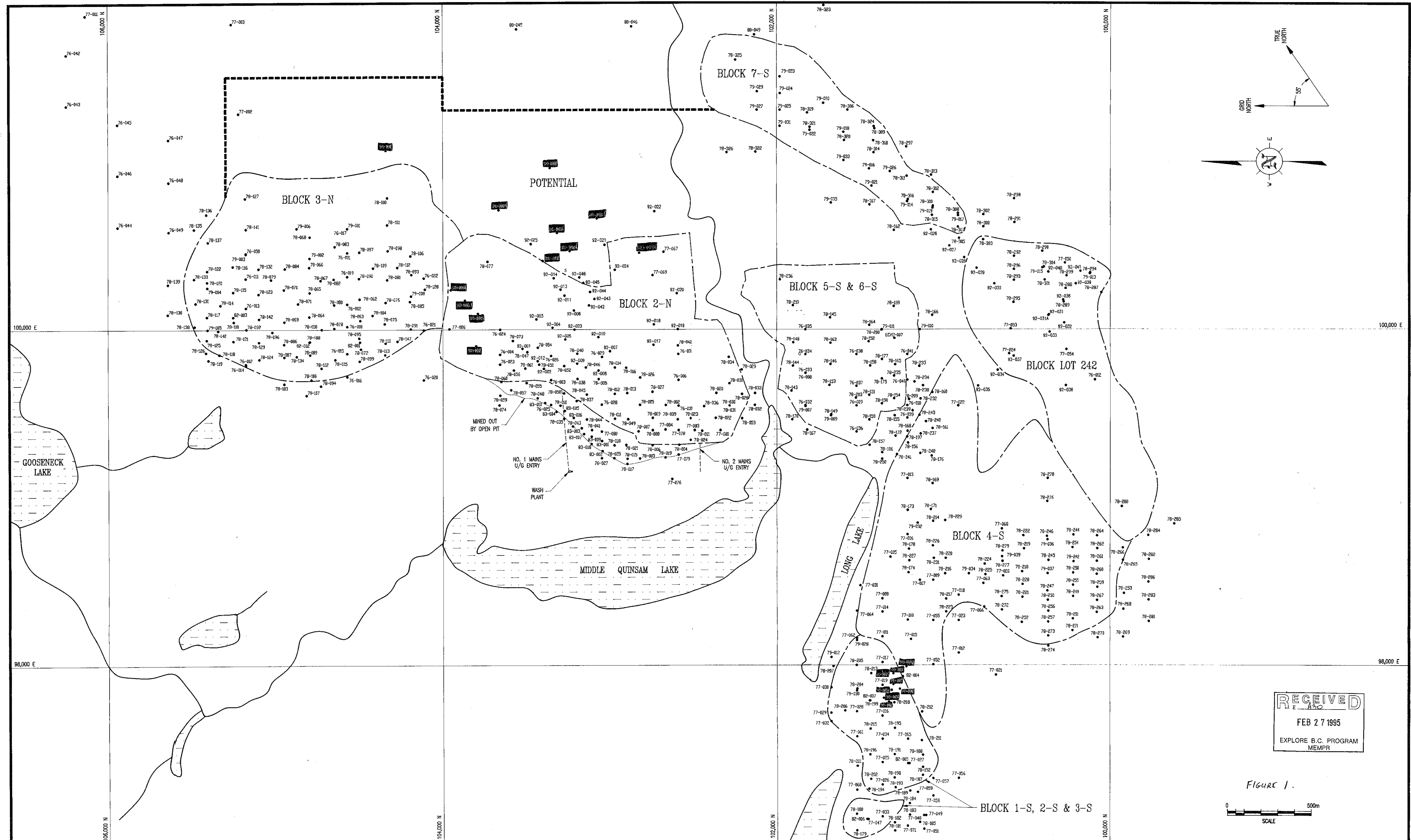


FIGURE 1.

RECEIVED
 FEB 27 1995
 EXPLORE B.C. PROGRAM
 MEMPR

0 500m
 SCALE

| | | | | | | | | | | | | | | | | | | | | | | | |
|----------|-------------------|----------|-------------------|-----|-------------------------|------|----|-----|-------------------------|------|----|-----------|-----------|------|-----------------|------|-----------|--------|------|-----------|--------------------------------------|--|--------------------------------|
| DWG. NO. | REFERENCE DRAWING | DWG. NO. | REFERENCE DRAWING | NO. | DESCRIPTION OF REVISION | DATE | BY | NO. | DESCRIPTION OF REVISION | DATE | BY | APPROVED: | FEB 16/95 | E.P. | SCALE: 1:10,000 | DATE | DESIGNED: | DRAWN: | E.P. | SEP 12/94 | QUINSAM MINE DRILL HOLE LOCATIONS | QUINSAM COAL CORPORATION BRAMPTON, ONT. DWG. NO. 94-QC-154 | CAMPBELL RIVER, B.C. REV. 1 |
|----------|-------------------|----------|-------------------|-----|-------------------------|------|----|-----|-------------------------|------|----|-----------|-----------|------|-----------------|------|-----------|--------|------|-----------|--------------------------------------|--|--------------------------------|

QUINSAM COAL CORPORATION - DRILLER'S LITHOLOGY LOG

DRILLING COMPANY: Drillwell Enterprises Ltd.
 HOLE NUMBER : QU - 94 - 01
 CO-ORDINATES 104340.599 N. - 101060.736 E.
 ELEVATION : 301.2 m
 DATE DRILLED : June 7.1994

| DEPTH (m) | | DESCRIPTION |
|-----------|-------|--------------------------------|
| From | TO | |
| 0.0 | 2.1 | Sand and Gravel, brown |
| 2.1 | 4.3 | Sandstone, grey |
| 4.3 | 5.2 | Sandstone, brown |
| 5.2 | 5.8 | Sandstone, grey |
| 5.8 | 6.6 | Sandstone, brown |
| 8.5 | 22.3 | Sandstone, grey |
| 22.3 | 24.7 | Sandstone, shale stringers |
| 24.7 | 25.9 | Shale, brown |
| 25.9 | 27.7 | Sandstone, grey |
| 27.7 | 31.7 | Sandstone, green |
| 31.7 | 34.6 | Sandstone, brown |
| 34.5 | 35.4 | Sandstone, white, 15 gpm water |
| 36.4 | 38.1 | Sandstone, grey |
| 38.1 | 39.0 | Sandstone, black |
| 39.0 | 40.2 | Sandstone, grey |
| 40.2 | 41.5 | Sandstone, brown |
| 41.5 | 42.1 | Sandstone, green |
| 42.1 | 42.7 | Sandstone, black |
| 42.7 | 44.2 | Sandstone, green |
| 44.2 | 45.4 | Sandstone, black |
| 45.4 | 46.6 | Sandstone, green |
| 46.6 | 47.0 | Sandstone, brown |
| 47.0 | 47.6 | Sandstone, green |
| 47.6 | 47.9 | Sandstone, brown |
| 47.9 | 51.5 | Sandstone, green |
| 51.5 | 52.1 | Conglomerate |
| 52.1 | 53.4 | Sandstone, green |
| 53.4 | 56.1 | Sandstone, brown |
| 56.1 | 57.9 | Sandstone, greenish grey |
| 57.9 | 59.6 | Sandstone, brown |
| 59.6 | 60.1 | COAL |
| 60.1 | 60.4 | Siltstone, brown |
| 60.4 | 61.0 | Siltstone, green |
| 61.0 | 62.5 | Sandstone, grey |
| 62.5 | 64.3 | Sandstone, white |
| 64.3 | 66.8 | Sandstone, grey |
| 66.6 | 68.0 | Sandstone, white |
| 66.0 | 70.4 | Sandstone, brown |
| 70.4 | 71.6 | Sandstone, white, 20 gpm water |
| 71.6 | 72.9 | Sandstone, green |
| 72.9 | 63.6 | Siltstone, brown |
| 83.8 | 66.0 | Sandstone, green |
| 66.0 | 87.5 | Sandstone, brown |
| 87.5 | 67.6 | Conglomerate |
| 67.8 | 89.6 | Sandstone, grey |
| 89.6 | 93.4 | Siltstone, brown |
| 93.4 | 94.7 | COAL |
| 94.7 | 96.3 | Siltstone |
| 96.3 | 96.6 | COAL |
| 96.6 | 97.9 | Siltstone, grey |
| 97.9 | 105.5 | Sandstone, grey |
| 105.5 | 105.8 | Siltstone, brown |
| 105.8 | 109.6 | Sandstone, grey, 25 gpm water |
| 109.8 | 112.7 | Siltstone, brown |
| 112.7 | 116.2 | COAL, NO. 1 SEAM |
| 116.2 | 121.6 | Siltstone, grey |
| 121.6 | 122.6 | Sandstone, grey |
| 122.8 | 123.7 | Conglomerate |
| 123.7 | 124.0 | Siltstone, brown |
| 124.0 | 125.9 | Siltstone, red |
| 125.9 | 126.5 | Sandstone, green |
| 126.5 | 128.0 | Siltstone, red |
| 128.0 | 129.9 | Sandstone, green: END OF HOLE |

QUINSAM COAL CORPORATION - DRILLER'S LITHOLOGY LOG

DRILLING COMPANY : Drillwell Enterprises Ltd.
 HOLE NUMBER : au - 94 - 02
 CO-ORDINATES : 103665.033 N - 100707.509 E
 ELEVATION : 304.03
 DATE DRILLED : June 8, 1994

| DEPTH (m) | | DESCRIPTION |
|-----------|-------|-----------------------------------|
| From | TO | |
| 0.0 | 1.8 | Sand & Gravel Fill, brown |
| 1.8 | 12.8 | Till, grey |
| 12.8 | 18.3 | Till, grey |
| 18.3 | 26.2 | Sand, trace of gravel. brown |
| 28.2 | 30.5 | Sand, brown |
| 30.5 | 34.5 | Silt, grey |
| 34.5 | 39.0 | Till, brown |
| 39.0 | 39.9 | Sandstone, whiteish |
| 39.9 | 42.7 | Sandstone, grey |
| 42.7 | 43.9 | Sandstone, whiteish |
| 43.9 | 50.3 | Sandstone, grey |
| 50.3 | 53.7 | Sandstone, whiteish, 2 gpm water |
| 53.7 | 89.1 | Sandstone, grey |
| 59.1 | 59.5 | COAL |
| 59.5 | 81.9 | Sandstone, brown |
| 81.9 | 63.4 | Sandstone, green |
| 83.4 | 54.3 | Sandstone, brown |
| 54.3 | 65.9 | Sandstone, whiteish |
| 85.9 | 70.7 | Sandstone, grey |
| 70.7 | 74.1 | Sandstone, whiteish |
| 74.1 | 77.7 | Sandstone, grey |
| 77.7 | 81.7 | Sandstone, greenish-grey |
| 81.7 | 83.2 | Sandstone, green |
| 83.2 | 87.2 | Sandstone, grey |
| 87.2 | 88.1 | Sandstone, brown |
| 88.1 | 95.7 | Sandstone, green |
| 95.7 | 98.3 | Siltstone, brown |
| 96.3 | 97.3 | COAL |
| 97.3 | 99.1 | Siltstone, brown |
| 99.1 | 99.7 | COAL |
| 99.7 | 100.3 | Siltstone, brown |
| 100.3 | 101.2 | Sandstone, grey |
| 101.2 | 111.9 | Sandstone, green |
| 111.9 | 127.1 | As above |
| 127.1 | 128.7 | Shale, reddish brown: END OF HOLE |

QUINSAM COAL CORPORATION - DRILLER'S LITHOLOGY LOG

DRILLING COMPANY : Drillwell Enterprises Ltd.
 HOLE NUMBER : Q U - 9 4 - 0 3 A *
 CO-ORDINATES : 103358.058 N - 100095.982 E
 ELEVATION : 283.1
 DATE DRILLED : June 11. 1994

| DEPTH (m) | | DESCRIPTION |
|-----------|--------|--|
| From | TO | |
| 0.0 | 1.6 | Fill, brown, some wood |
| 1.8 | 2.7 | Sand & Gravel, brown |
| 2.7 | 12.6 | Gravel & Sand. silty grey, water bearing |
| 12.8 | 29.0 | Silt, grey |
| 29.0 | 36.9 | Sand & gravel, very silty brown. boulders. water bearing |
| 36.9 | 41.8 | Sandstone. whiteish |
| 41.8 | 44.2 | Sandstone. whiteish brown. |
| 44.2 | 46.3 | Sandstone. white |
| 46.3 | 48.6 | Sandstone, grey |
| 46.5 | 51.6 | Sandstone. whiteish brown |
| 51.8 | 63.7 | Sandstone. brownish grey |
| 53.7 | 57.9 | Sandstone. grey |
| 57.9 | 60.4 | Coal and Shale. brown |
| 60.4 | 62.6 | Siltstone, brown |
| 62.8 | 64.0 | COAL |
| 64.0 | 65.2 | Siltstone, brown |
| 65.2 | 67.1 | Sandstone. brown |
| 67.1 | 68.9 | Sandstone, grey |
| 66.9 | 70.1 | Sandstone. white |
| 70.1 | 72.3 | Siltstone & Coal, brown |
| 72.3 | 82.3 | Sandstone & Coal |
| 82.3 | 84.5 | Sandstone & Siltstone, brown |
| 64.6 | 107.3 | Sandstone. whiteish grey |
| 107.3 | 108.2 | COAL |
| 108.2 | 111.6 | Siltstone, brown |
| 111.6 | 111.9 | COAL |
| 111.9 | 113.4 | Siltstone, brown |
| 113.4 | 114.6 | Sandstone. brown |
| 114.6 | 120.7 | Siltstone, brown |
| 120.7 | 126.6 | Sandstone & Siltstone, brown |
| 125.6 | 126.2 | COAL |
| 126.2 | 129.66 | COAL (see notes) |

Note 1: Hole abandoned due to lost drilling tools. Lost 73 metres drill pipe plus core barrel and took Skidded hole 4 metres (94-03B)

Note 2: Recovered lost core string June 30/94. Core of coal seam also retrieved. Hole bottomed at 129.66 metres in coal.

Note 3: Checked hole July 3. 1994. Flowing to surface. approx. 1/4 gpm and moderate gas.

QUINSAM COAL CORPORATION -- DRILLER'S LITHOLOGY LOG

Drillwell Enterprises Ltd.

HOLE NUMBER :

QU - 94 - 04

CO-ORDINATES :

103789.649 N = 100095.982 E

ELEVATION :

318.96

DATE DRILLED :

Nov.1, 1994

DEPTH (m)

From TO

DESCRIPTION

| | | |
|------|------|-----------------------------|
| 0.0 | 0.9 | Sandy Topsoil, trace gravel |
| 0.9 | 2.1 | Sandstone, brown |
| 2.1 | 3.7 | Sandstone, white |
| 3.7 | 4.3 | Sandstone, grey |
| 4.3 | 6.4 | Sandstone, white |
| 6.4 | 7.3 | Sandstone, grey |
| 7.3 | 23.2 | Sandstone, grayish brown |
| 23.2 | 24.4 | Sandstone, white & black |
| 24.4 | 25.0 | Sandstone, greyish brown |
| 25.0 | 29.0 | Sandstone, white & black |
| 29.0 | 36.9 | Sandstone, greyish brown |
| 36.9 | 49.1 | Sandstone, grey |
| 49.1 | 50.3 | Siltstone, grey |
| 50.3 | 50.8 | COAL siltstone |
| 50.8 | 59.8 | Siltstone, grey |
| 59.8 | 68.9 | Sandstone, grey |
| 58.9 | 75.2 | Sandstone, siltstone |
| 75.2 | 78.4 | COAL |
| 78.4 | 81.4 | siltstone; END OF HOLE |

QUINSAM COAL CORPORATION - DRILLER'S LITHOLOGY LOG

Drillwell Enterprises Ltd.

HOLE NUMBER :

QU - 94 - 03 B

CO-ORDINATES :

103358.058 N - 100955.926 E

ELEVATION :

283.10

DATE DRILLED :

June 14.1994

DEPTH (m)

From TO

DESCRIPTION

| | | |
|-------|-------|--|
| 0.0 | 0.0 | Pill, Brown. some wood |
| 0.0 | 0.0 | Sand & Gravel, brown |
| 0.0 | 0.0 | Gravel & Sand, silty grey, water bearing |
| 0.0 | 0.0 | Silt, grey |
| 0.0 | 0.0 | Sand & gravel. very silty brown, boulders. water bearing |
| 0.0 | 0.0 | Sandstone. whiteish |
| 0.0 | 0.0 | Sandstone. whiteish brown |
| 0.0 | 0.0 | Sandstone. white |
| 0.0 | 0.0 | Sandstone. grey |
| 0.0 | 0.0 | Sandstone. whiteish brown |
| 0.0 | 0.0 | Sandstone. brownish grey |
| 0.0 | 0.0 | Sandstone. grey |
| 0.0 | 0.0 | Coal and Shale. brown |
| 0.0 | 0.0 | Siltstone, brown |
| 0.0 | 0.0 | COAL |
| 0.0 | 0.0 | Siltstone, brown |
| 0.0 | 0.0 | Sandstone. brown |
| 0.0 | 0.0 | Sandstone. grey |
| 0.0 | 0.0 | Sandstone, white |
| 0.0 | 0.0 | Siltstone & Coal, brown |
| 0.0 | 0.0 | Sandstone & Coal |
| 0.0 | 0.0 | Sandstone & Siltstone, brown |
| 0.0 | 0.0 | Sandstone, whiteish grey |
| 0.0 | 0.0 | COAL |
| 0.0 | 0.0 | Siltstone, brown |
| 0.0 | 0.0 | COAL |
| 0.0 | 0.0 | Siltstone, brown |
| 0.0 | 0.0 | Sandstone, brown |
| 0.0 | 0.0 | Siltstone, brown |
| 0.0 | 125.9 | Sandstone & Siltstone, brown |
| 125.9 | 129.5 | COAL |
| 129.5 | 132.9 | Siltstone, grey |
| 132.9 | 135.9 | Siltstone. red |
| 135.9 | 138.1 | Sandstone, conglomerate, green |

QUINSAM COAL CORPORATION -- DRILLER'S LITHOLOGY LOG

Drillwell Enterprises Ltd.

HOLE NUMBER :

QU - 94 - 05

CO-ORDINATES :

103952.832 N - 100236.391 E

ELEVATION :

306.17

DATE DRILLED :

Nov.4, 1994

DEPTH (m)

From TO

DESCRIPTION

| | | |
|------|------|--|
| 0.0 | 1.8 | Sandy Brown Topsoil |
| 1.6 | 17.7 | Gravel & Sand, Very silty brown |
| 17.7 | 22.3 | Till, grey |
| 22.3 | 24.4 | Sand, brown. waterbearing |
| 24.4 | 27.4 | Sand. grey, very silty |
| 27.4 | 29.9 | Silt, grey |
| 29.9 | 34.5 | Till. brown |
| 34.5 | 36.6 | Sandstone. grey |
| 36.6 | 39.6 | Fracture zone, sandstone brown. very broken. water 20GPM |
| 39.6 | 41.5 | Sandstone. grey |
| 41.5 | 45.7 | COAL, siltstone |
| 45.7 | 50.6 | Siltstone. grey, soft |
| 50.6 | 58.5 | Sandstone, grey |
| 58.5 | 66.5 | Sandstone. grey, mix silt |
| 66.5 | 69.5 | COAL |
| 69.5 | 75.0 | Siltstone, brownish grey; END OF HOLE |

QUINSAM COAL CORPORATION - DRILLER'S LITHOLOGY LOG

Drillwell Enterprises Ltd.

HOLE NUMBER : QU - 94 - 06G
 CO-ORDINATES : 103368.323 N -- 100174.232 E
 ELEVATION : 314.17
 DATE DRILLED : Nov.6, 1994

| DEPTH (m) | | DESCRIPTION |
|-----------|------|------------------------------|
| From | TO | |
| 0.0 | 1.4 | Gravel & Sand Topsoil, brown |
| 1.4 | 4.9 | Sandstone, grey |
| 4.9 | 10.7 | Sandstone, brown |
| 10.7 | 27.1 | Sandstone, grey |
| 27.1 | 28.4 | Sandstone, whiteish |
| 26.4 | 31.1 | Sandstone, green |
| 31.1 | 31.7 | Sandstone, brown |
| 31.7 | 36.0 | Sandstone, white, grey |
| 33.0 | 44.3 | Sandstone, grey |
| 44.8 | 51.6 | Sandstone, whiteish |
| 51.8 | 52.7 | COAL, Siltstone |
| 52.7 | 61.9 | Siltstone, black |
| 61.9 | 72.0 | Sandstone, greenish |
| 72.0 | 73.3 | Siltstone, grey |
| 73.6 | 77.1 | COAL |
| 77.1 | 80.5 | Mudstone, grey; END OF HOLE |

Remarks: Hole makes 1 GPM of water

QUINSAM COAL CORPORATION -- DRILLER'S LITHOLOGY LOG

Drillwell Enterprises Ltd.

HOLE NUMBER:

Q U - 9 4 - 0 7 G

CO-ORDINATES :

103800.456 N = 99899.553 E

ELEVATION :

320.22

DATE DRILLED :

Nov.7, 1994

DEPTH (m)

From TO

DESCRIPTION

| | | |
|------|------|------------------------------|
| 0.0 | 0.9 | Gravel&Sand Topsoil, brown |
| 0.9 | 9.6 | Sandstone, greenish |
| 9.8 | 14.3 | Sandstone, dark green |
| 14.3 | 21.6 | Sandstone, light green |
| 21.6 | 22.9 | Sandstone, grey |
| 22.9 | 23.5 | Sandstone, light green |
| 23.5 | 29.9 | Sandstone, grey |
| 29.9 | 31.7 | Sandstone, light green |
| 31.7 | 32.0 | Sandstone, grey |
| 32.0 | 32.3 | COAL |
| 32.3 | 36.3 | Siltstone, grey |
| 36.3 | 39.6 | Sandstone, light green |
| 39.6 | 43.0 | Siltstone, grey |
| 43.0 | 45.7 | Sandstone, light green |
| 45.7 | 48.5 | Siltstone, grey |
| 48.5 | 48.8 | COAL |
| 43.3 | 57.3 | Siltstone, grey |
| 57.3 | 60.1 | COAL |
| 60.1 | 67.4 | Siltstone, grey; END OF HOLE |

Remarks: Hole makes 1 GPM of water

QUINSAM COAL CORPORATION -- DRILLER'S LITHOLOGY LOG

Drillwell Enterprises Ltd.

HOLE NUMBER :

au - 94 - 08

CO-ORDINATES :

101267.216 N - 97859.632 E

ELEVATION :

354.46

DATE DRILLED.:

Nov.9, 1994

DEPTH (m)

From TO

DESCRIPTION

| | | |
|------|------|-------------------------------|
| 0.0 | 2.7 | Sandstone. brown |
| 2.7 | 22.0 | Sandstone. green |
| 22.0 | 31.7 | Sandstone. greenish brown |
| 31.7 | 37.8 | Sandstone, grey |
| 37.8 | 45.1 | Sandstone, greensih brown |
| 45.1 | 47.6 | Sandstone. grey |
| 47.6 | 48.2 | Siltstone, grey |
| 46.2 | 46.4 | COAL |
| 49.4 | 56.4 | Siltstone, grey |
| 56.4 | 57.0 | Sandstone. grey |
| 57.0 | 61.6 | Siltstone, gray |
| 61.6 | 65.9 | Coal layered siltstone |
| 65.9 | 66.9 | Siltstone, brown: END OF HOLE |

Remarks: Hole makes 3 GPM of water

QUINSAM COAL CORPORATION - DRILLER'S UTHOLOGY LOG

Drillwell Enterprises Ltd.

HOLE NUMBER :

QU - 94 - 09

CO-ORDINATES :
ELEVATION :

101228.280 N - 97992465 E
353.47 m.

DATE DRILLED :

Nov.10, 1994

DEPTH (m)

From TO

DESCRIPTION

| | | |
|------|------|------------------------------|
| 0.0 | 0.9 | Road fill |
| 0.9 | 2.4 | gravel & sand brown |
| 2.4 | 4.3 | Sandstone. brown |
| 4.3 | 23.2 | Sandstone. light green |
| 23.2 | 31.4 | Sandstone. dark green |
| 31.4 | 39.6 | Sandstone. greenish brown |
| 39.6 | 47.6 | Sandstone. light green |
| 47.6 | 54.3 | Sandstone. light grey |
| 54.3 | 55.5 | Siltstone, grey |
| 55.5 | 56.1 | COAL |
| 56.1 | 66.3 | Siltstone, grey |
| 66.3 | 74.4 | COAL |
| 74.4 | 76.6 | Coal layered siltstone |
| 76.8 | 60.6 | Siltstone, grey; END OF HOLE |

Remarks: Hole makes 2 GPM of water

QUINSAM COAL CORPORATION - DRILLER'S LITHOLOGY LOG

Drillwell Enterprises Ltd.

HOLE NUMBER :

QU - 94 - 10

CO-ORDINATES :
ELEVATION :

101306.342 N = 97887.201 E
35, 46

DATE DRILLED :

Nov. 14, 1994

DEPTH (m)

From TO

DESCRIPTION

| | | |
|------|------|-------------------------------|
| 0.0 | 2.4 | Sand & gravel. boulders |
| 2.4 | 7.0 | Sandstone, light green |
| 7.0 | 11.3 | Sandstone. greenish brown |
| 11.3 | 18.6 | Sandstone. light green |
| 18.6 | 31.1 | Sandstone. greenish brown |
| 31.1 | 41.5 | Sandstone, grey |
| 41.5 | 42.7 | COAL |
| 42.7 | 57.3 | Siltstone, grey |
| 57.3 | 62.5 | COAL |
| 62.5 | 66.2 | Siltstone, grey |
| 66.2 | 37.4 | Sandstone. white: END OF HOLE |

Remarks: Hole makes 4 GPM of water

QUINSAM COAL CORPORATION - DRILLER'S LITHOLOGY LOG

Drillwell Enterprises Ltd.

HOLE NUMBER :

QU - 94 - 11

CO-ORDINATES :

101362.967 N - 97805.504 E

ELEVATION :

351.13

DATE DRILLED :

Nov.10, ,994

DEPTH (m)

From TO

DESCRIPTION

| | | |
|------|------|------------------------------|
| 0.0 | 1.2 | Sand & gravel. topsoil |
| 1.2 | 2.7 | Sandstone. brown |
| 2.7 | 25.3 | Sandstone, light green |
| 26.3 | 34.6 | Sandstone. greenish brown |
| 34.8 | 36.9 | Sandstone, light grey |
| 36.9 | 37.6 | Siltstone, grey |
| 37.8 | 39.0 | COAL |
| 39.0 | 65.9 | Siltstone, grey |
| 55.9 | 69.1 | COAL |
| 59.1 | 60.1 | Siltstone, layered coal |
| 60.1 | 62.6 | Siltstone, grey; END OF HOLE |

Remarks: Hole makes 1 GPM of water

QUINSAM COAL CORPORATION -- DRILLER'S LITHOLOGY LOG

Drillwell Enterprises Ltd.

HOLE NUMBER : au - 94 - 12

CO-ORDINATES : 101364.610 N - 97964.474 E
 ELEVATION : 349.68

DATE DRILLED : Nov.15, 1994

| DEPTH (m) | | DESCRIPTION |
|-----------|------|--------------------------------------|
| From | To | |
| 0.0 | 1.5 | Mine rock fill |
| 1.5 | 4.6 | sand & gravel. brown |
| 4.6 | 5.8 | Sandstone. light green |
| 5.8 | 12.2 | Sandstone, greenish brown |
| 12.2 | 12.8 | Sandstone. light green |
| 12.8 | 29.6 | Sandstone, greenish brown |
| 29.6 | 34.5 | Sandstone. light green |
| 34.5 | 39.9 | Sandstone. greenish brown |
| 39.9 | 40.9 | Siltstone, grey |
| 40.9 | 41.8 | Coal, siltstone, black |
| 41.8 | 57.9 | Siltstone, grey |
| 57.9 | 61.6 | COAL |
| 61.6 | 65.9 | Siltstone, grey |
| 65.9 | 67.1 | Sandstone, whitish grey; END OF HOLE |

Remarks: Hole makes 10 GPM of water

QUINSAM COAL CORPORATION -- DRILLER'S LITHOLOGY LOG

Drillwell Enterprises Ltd.

HOLE NUMBER :

Q U - 9 4 - 1 3

CO-ORDINATES :
ELEVATION :

101306.418 N -- 97950.877 E
348.49

DATE DRILLED :

Nov.16, 1994

DEPTH (m)

From TO

DESCRIPTION

| | | |
|------|------|------------------------------|
| 0.0 | 2.4 | Sand & gravel, brown |
| 2.4 | 8.2 | Sandstone, light green |
| 8.2 | 11.0 | Sandstone, greenish brown |
| 11.0 | 11.9 | Sandstone, light green |
| 11.9 | 13.1 | Sandstone, greenish brown |
| 13.1 | 14.3 | Sandstone, light green |
| 14.3 | 17.7 | Sandstone, greenish brown |
| 17.7 | 20.7 | Sandstone, light green |
| 20.7 | 26.5 | Sandstone, greenish brown |
| 26.5 | 36.9 | Sandstone, grey |
| 35.9 | 39.6 | Sandstone, greenish brown |
| 39.6 | 42.7 | Sandstone, grey |
| 42.7 | 43.3 | Siltstone, grey |
| 43.3 | 44.8 | COAL |
| 44.8 | 55.9 | Siltstone, grey, black |
| 55.9 | 59.5 | COAL |
| 59.5 | 62.8 | Siltstone, grey; END OF HOLE |

Remarks: Hole makes 3 GPM water

QUINSAM COAL CORPORATION - DRILLER'S LITHOLOGY LOG

Drillwell Enterprises Ltd.

HOLE NUMBER :

QU - 94 - 14

CO-ORDINATES :
ELEVATION :

101332.527 N - 97781.897 E
352.55

DATE DRILLED :

Nov.17, 1994

DEPTH (m)

From TO

DESCRIPTION

| | | |
|--------|------|------------------------------|
| 0.0 | 0.6 | Sandstone. brown |
| 0.6 | 16.5 | Sandstone, light green |
| 16.5 | 19.2 | Sandstone. green grey |
| 19.2 | 26.0 | Sandstone. light grey |
| 28.0 | 36.9 | Sandstone, greenish brown |
| 36.9 | 41.6 | Sandstone. light green |
| 41.8 | 42.4 | Siltstone, grey |
| 42.4 | 43.6 | COAL |
| (43.6 | 57.9 | Siltstone, grey |
| - 57.9 | 61.3 | COAL |
| 61.3 | 61.7 | Siltstone, black |
| 61.7 | 62.2 | COAL |
| 62.2 | 67.1 | Siltstone, grey |
| 67.1 | 66.6 | Sandstone. grey; END OF HOLE |

QUINSAM COAL CORPORATION - DRILLER'S LITHOLOGY LOG

Drillwell Enterprises Ltd.

HOLE NUMBER :

QU - 94 - 15

CO-ORDINATES :
ELEVATION :

101315.921 N - 97852815 E
352.20

DATE DRILLED :

Nov.17, 1994

DEPTH (m)

From TO

DESCRIPTION

| | | |
|------|------|------------------------------|
| 0.0 | 2.4 | Sand & gravel. brown |
| 2.4 | 9.1 | Sandstone, light green |
| 9.1 | 11.0 | Sandstone, grey |
| 11.0 | 16.9 | Sandstone. light green |
| 15.9 | 23.7 | Sandstone. greenish brown |
| 26.7 | 35.4 | Sandstone. grey |
| 35.4 | 41.2 | Sandstone. greenish brown |
| 41.2 | 42.1 | Siltstone, grey |
| 42.1 | 43.6 | COAL |
| 43.6 | 59.6 | Siltstone, grey |
| 59.8 | 62.5 | COAL |
| 62.6 | 63.7 | Siltstone, Coal |
| 63.7 | 66.9 | Siltstone, grey; END OF HOLE |

QUINSAM COAL CORPORATION - DRILLER'S LITHOLOGY LOG

Drillwell Enterprises Ltd.

HOLE NUMBER:

QU - 34 - 16

CO-ORDINATES :
ELEVATION :

103077.271 N - 100658.555 E
322.93

DATE DRILLED :

Nov.18, 1994

DEPTH (m)

From TO

DESCRIPTION

0.0 7.3
7.3 17.7
17.7 13.3
15.3 22.4
22.4 66.4
36.4 83.6
89.6 92.4
92.4 93.2
93.2 100.3
100.3 100.6
100.6 129.6
129.6 130.6
130.6 131.6
131.6 147.3
147.3 147.4
147.4 152.4
152.4 155.5
155.5 160.1

Till
Grey, Silty sand
Till
Till
Bedrock. sandstone
COAL
Mudstone
COAL
Sandstone
COAL
Sandstone
Sandstone
COAL
Mudstone & sandstone layered
COAL
Sandstone
COAL
Mudstone: END OF HOLE

QUINSAM COAL CORPORATION - DRILLER'S LITHOLOGY LOG

Drillwell Enterprises Ltd.

HOLE NUMBER :

w - 9 4 - 1 7

CO-ORDINATES :

103316.184 N - 100572.900 E

ELEVATION :

327.02

DATE DRILLED :

Nov.21, 1994

DEPTH (m)

From TO

DESCRIPTION

| | | |
|-------|-------|----------------------------|
| 0.0 | 2.1 | Brown Silty Gravel |
| 2.1 | 6.5 | Grey Silty Gravel |
| 6.5 | 15.4 | Gray Silty Sand |
| 15.4 | 16.8 | Bedrock. Brown Sandstone |
| 16.8 | 61.0 | Sandstone. dark&light grey |
| 61.0 | 63.7 | Sandstone. black |
| 63.7 | 63.8 | Thin coal seam |
| 63.8 | 65.2 | Sandstone. black |
| 65.2 | 65.3 | Thin coal seam |
| 65.3 | 66.8 | Sandstone. black |
| 66.8 | 66.8 | Thin coal seam |
| 66.8 | 67.4 | Sandstone. black |
| 67.4 | 68.0 | Thin coal seam |
| 68.0 | 68.3 | Mudstone |
| 68.3 | 70.1 | Mudstone |
| 70.1 | 70.4 | COAL |
| 70.4 | 122.6 | Sandstone. light & dark |
| 122.6 | 123.0 | C O A L |
| 122.9 | 140.5 | Sandstone. light & dark |
| 140.5 | 143.6 | COAL |
| 143.6 | 146.6 | Mudstone; END OF HOLE |

Remarks: Water. 3 GPM at365

QUINSAM COAL CORPORATION - DRILLER'S LITHOLOGY LOG

Drillwell Enterprises Ltd.

HOLE NUMBER :

QU - 94 - 18 G

CO-ORDINATES :

103239.682 N - 100466.394 E

ELEVATION :

324.03

DATE DRILLED :

Nov.23-27, 1994

DEPTH (m)

From TO

DESCRIPTION

| | | |
|-------|-------|-----------------------------------|
| 0.0 | 4.9 | Brown Silty Sand & Gravel |
| 4.9 | 10.1 | Brown Silty Sand |
| 10.1 | 11.6 | Grey Silty Sand |
| 11.6 | 12.5 | Brown Soft Sandstone |
| 12.5 | 14.9 | Sandstone. brown |
| 14.9 | 44.2 | Sandstone. light&dark |
| 44.2 | 45.4 | Sandstone |
| 45.4 | 46.9 | COAL |
| 46.9 | 48.9 | Sandstone |
| 48.9 | 49.4 | COAL |
| 49.4 | 49.7 | Sandstone |
| 49.7 | 50.6 | COAL |
| 50.6 | 50.9 | Sandstone |
| 50.9 | 53.7 | COAL |
| 53.7 | 54.0 | Sandstone |
| 54.0 | 55.6 | COAL |
| 55.6 | 56.7 | Sandstone |
| 56.7 | 69.1 | COAL |
| 69.1 | 69.4 | Sandstone |
| 69.4 | 101.8 | COAL |
| 101.8 | 102.1 | Sandstone & Shale Layers |
| 102.1 | 111.3 | Sandstone |
| 111.3 | 123.5 | Shale |
| 123.6 | 126.5 | COAL |
| 126.5 | 129.9 | Mudstone & Siltstone; END OF HOLE |
| 129.9 | 135.7 | |

NOTE 1, HOLE LEFT OPEN FOR GEOTECHNICAL STUDIES

QUINSAM COAL CORPORATION -- DRILLER'S LITHOLOGY LOG

Drillwell Enterprises Ltd.

HOLE NUMBER :

QU - 94 - 19

CO-ORDINATES :
ELEVATION :

103402.235 N - 100408.417 E
323.67

DATE DRILLED :

Nov.28-30, 1994

DEPTH (m)

From TO

DESCRIPTION

| | | |
|-------|-------|----------------------------|
| 0.0 | 3.0 | Brown Sand & Gravel |
| 3.0 | 9.1 | Grey silty sand |
| 9.1 | 10.9 | Grey till |
| 10.6 | 31.1 | Bedrock, Sandstone |
| 31.1 | 31.4 | COAL |
| 31.7 | 32.0 | COAL |
| 37.6 | 36.1 | COAL |
| 44.2 | 46.4 | COAL |
| 45.4 | 66.9 | Sandstone |
| 66.9 | 67.7 | COAL |
| 67.7 | 97.7 | Sandstone |
| 97.7 | 96.0 | COAL |
| 96.0 | 105.2 | Sandstone & Dark siltstone |
| 105.2 | 114.9 | Sandstone. broken factured |
| 114.9 | 117.4 | COAL |
| 117.4 | 117.7 | COAL |
| 117.7 | 116.9 | Siltstone |
| 118.9 | 123.5 | Mudstone: END OF HOLE |

Remarks: Water, 2-3 GPM at 140'

QUINSAM COAL CORPORATION - DRILLER'S LITHOLOGY LOG

Drillwell Enterprises Ltd.

HOLE NUMBER :

QU - 94 - 20

CO-ORDINATES :
ELEVATION :

102824.453 N. - 100444.030 E.
305.69 m.

DATE DRILLED :

Nov.30, ,994

DEPTH (m)

From TO

DESCRIPTION

| | | |
|-------|-------|-------------------------|
| 0.0 | 0.6 | Overburden |
| 0.6 | 1.2 | soft bedrock |
| 1.2 | 38.1 | Sandstone. light & dark |
| 38.1 | 55.5 | Sandstone. light&dark |
| 55.5 | 56.1 | COAL |
| 56.1 | 57.3 | Sandstone |
| 57.3 | 57.6 | COAL |
| 57.6 | 58.5 | Sandstone |
| 58.5 | 58.8 | COAL |
| 58.8 | 59.5 | Sandstone |
| 59.5 | 59.8 | COAL |
| 59.8 | 91.8 | Sandstone |
| 91.8 | 92.7 | COAL |
| 92.7 | 100.6 | Sandstone |
| 100.6 | 100.8 | COAL |
| 100.8 | 117.1 | Sandstone |
| 117.1 | 117.4 | COAL |
| 117.4 | 119.8 | Sandstone |
| 119.8 | 122.0 | COAL |
| 122.0 | 125.0 | Ran one core |
| 125.0 | 129.6 | Drilled; END OF HOLE |

Remarks:Water, 10 GPM at 255

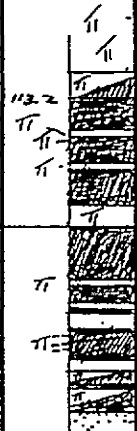
HOLE
94-01.

Depth From
Surface
metres
110

Total Seam
4.78 m

112.85

117.63



Main Seam
2.90 m
(includes 0.62 m
parting)

Basal Unit
1.53 m.
numerous partings

120

FR

110

94.02

metres

TOTAL SEAM THICKNESS 3.45 m.

(includes 0.25 m parting)

120.60

120.60

123.0

123.0

123.25

123.25

124.05

124.05

124.15

124.15

124.15

124.15

124.15

124.15

124.15

124.15

124.15

124.15

FR

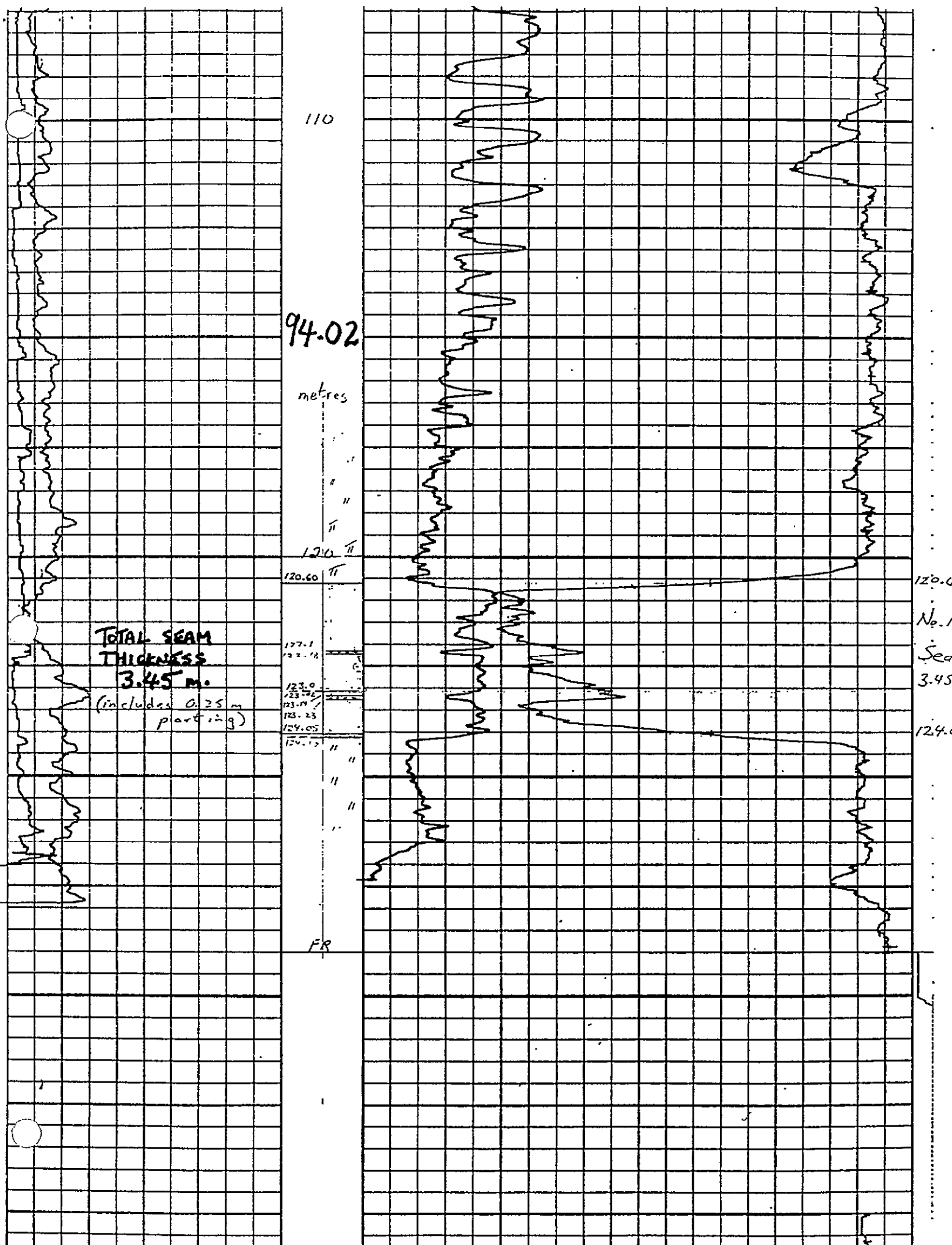
120.6

No. 1

Seam

3.45

124.0



120
126.05

120

HOLE
94-03

126.05

126.70
126.80

127.20
127.36

128.50
128.55

129.85
130

Total Seam
Thickness
3.8 m
(includes
0.39 m
parting)

2.63 m Main Seam

1.17 m Basal Unit (Dirty)

FR

94-04

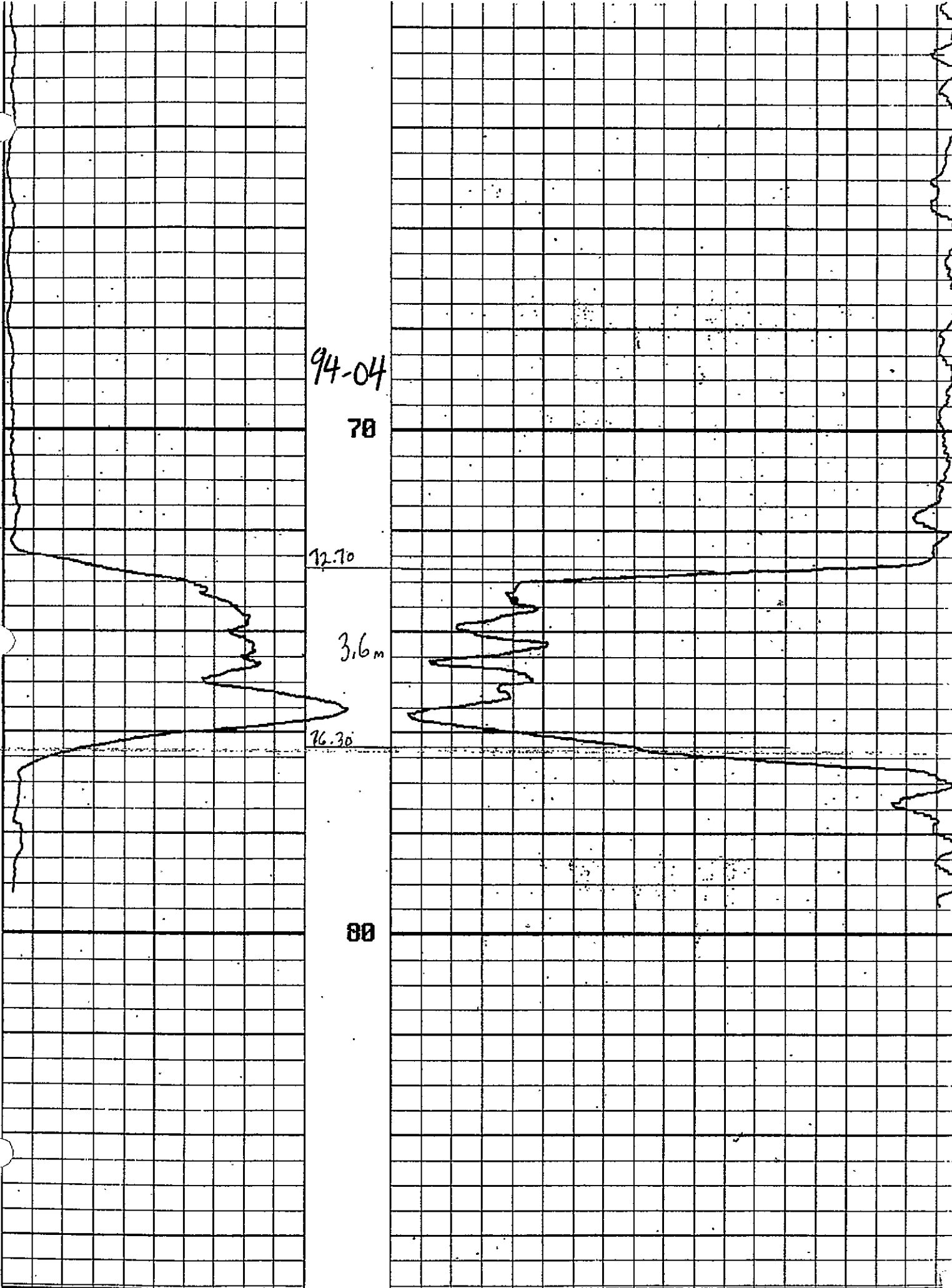
78

72.70

3.6 m

76.30

80



94-05

66.10

3.4 m.

69.50

70

CASING COLLAR LOCATOR

100.0 GAMMA-RAY API 100

DEPTH

900.0 DENSITY API

PULSE RUN # 8
11/23/84
14:10:47

94 05

DEPTH: 3.20 TO 74.32
RES: 0.05 M
SCALE:

94-06

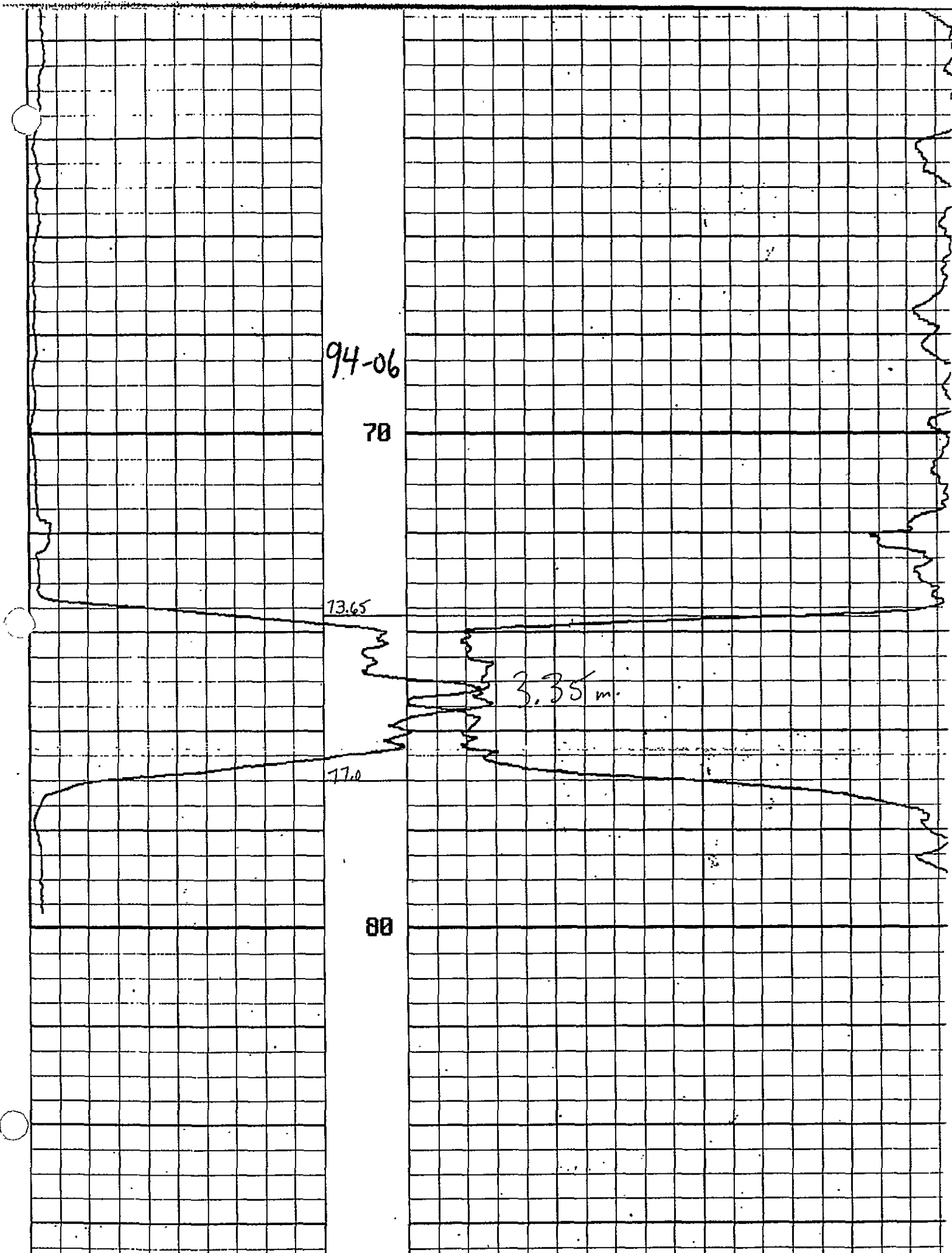
70

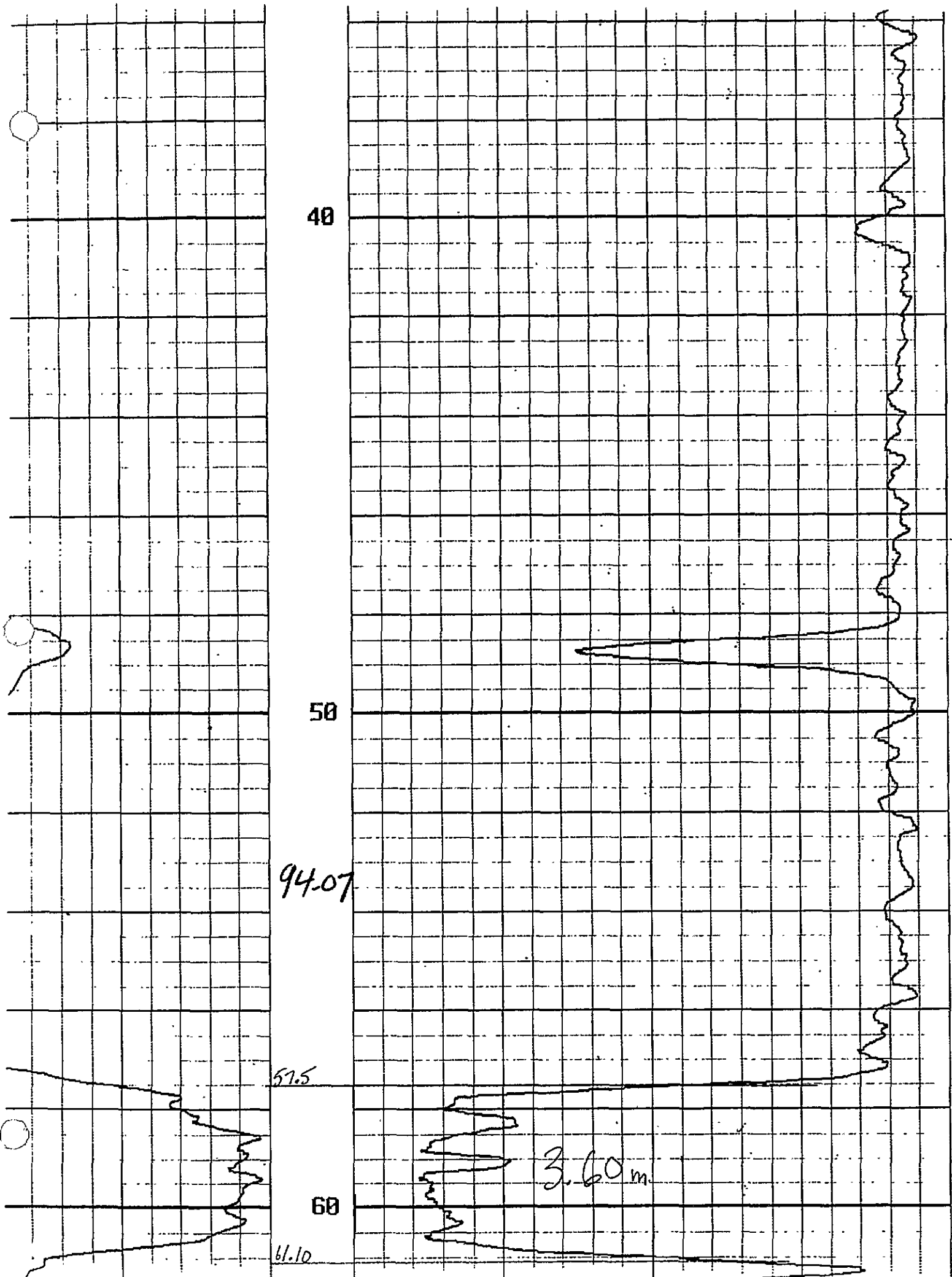
73.65

3.35 m.

77.0

80





40

50

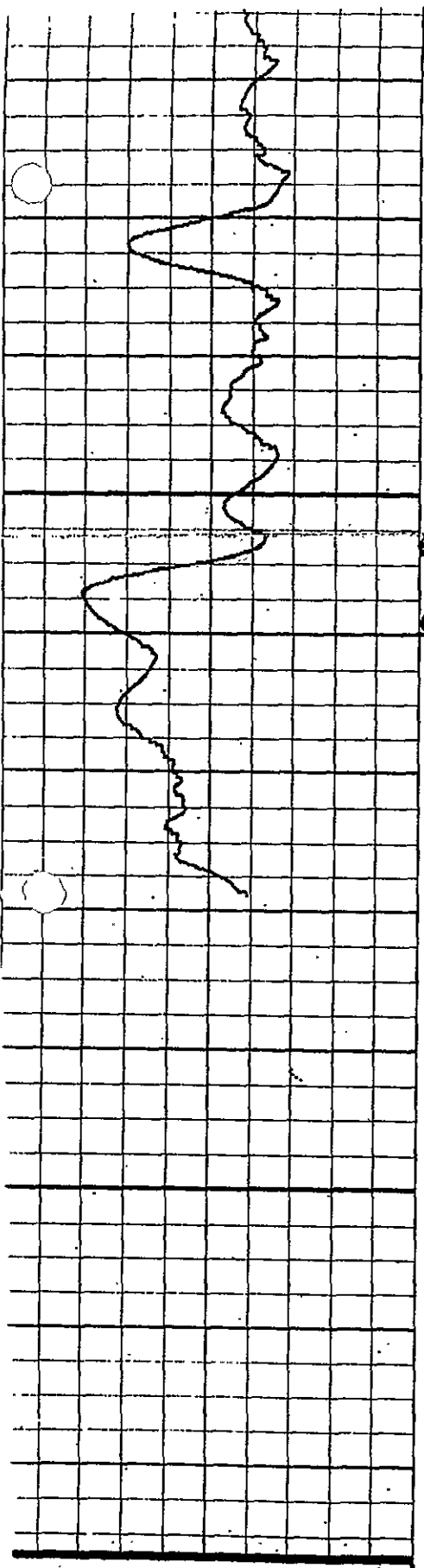
94.07

57.5

60

61.10

3.60 m



94-08

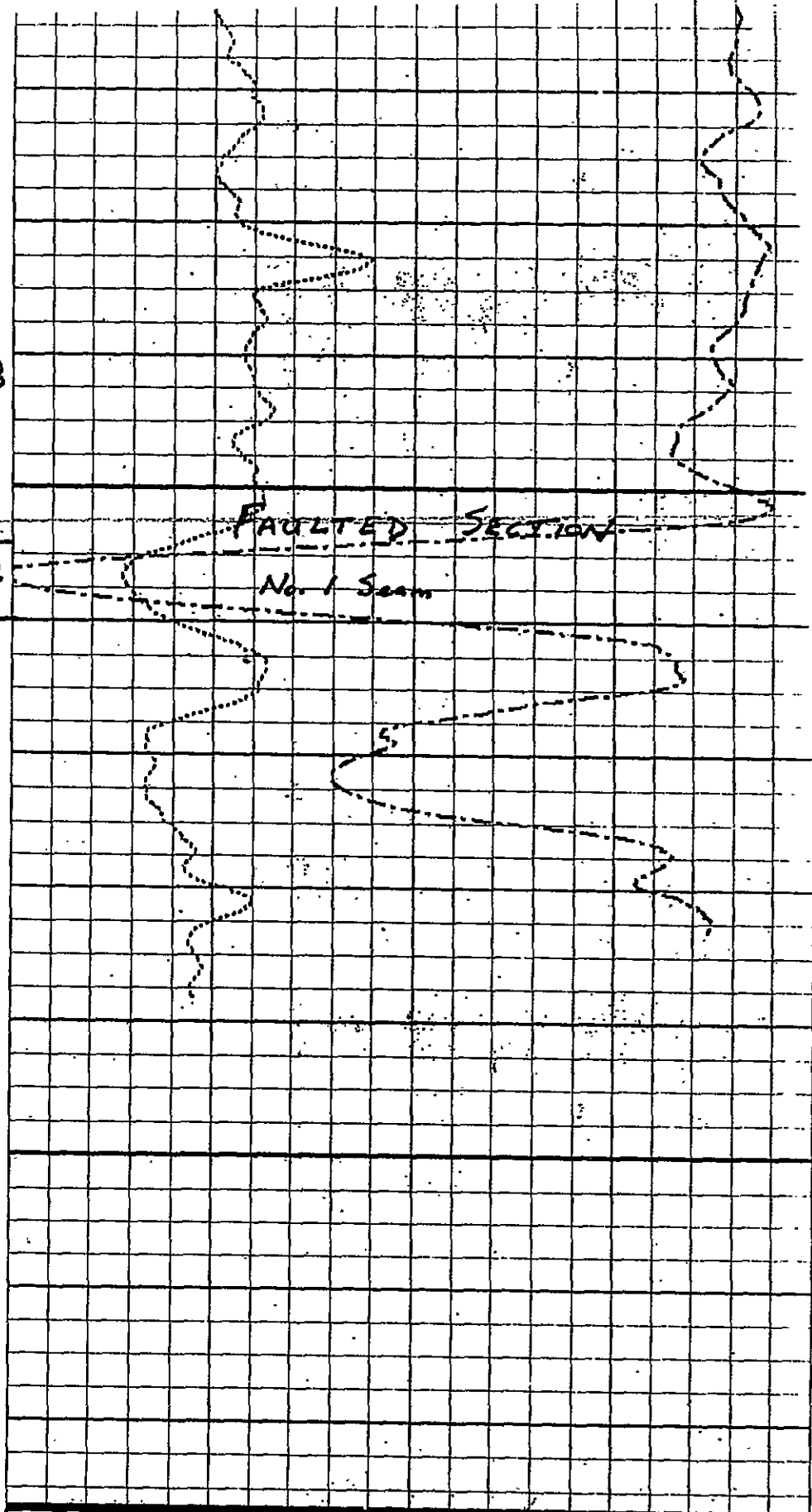
68

60.8

1.2

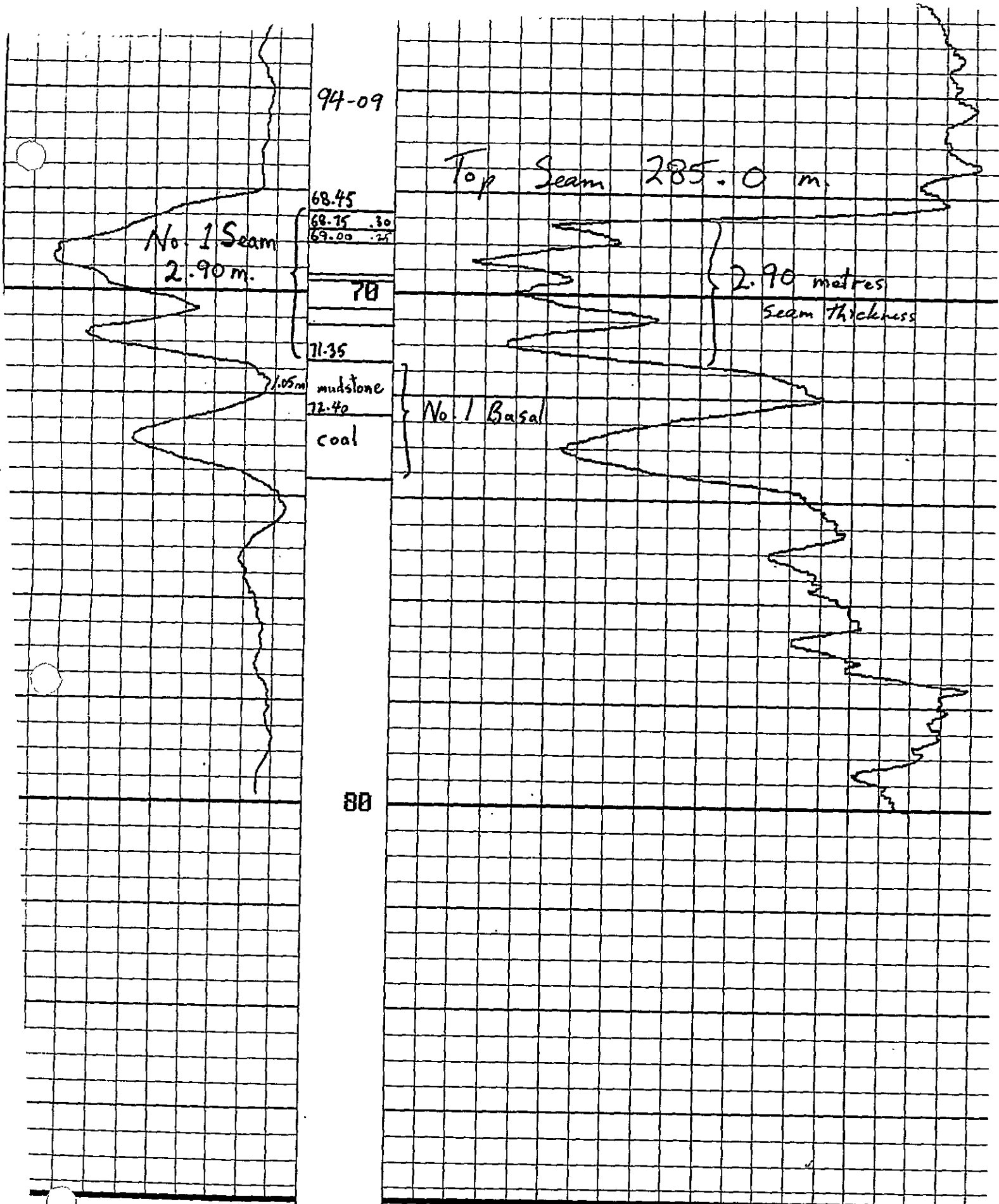
62.0

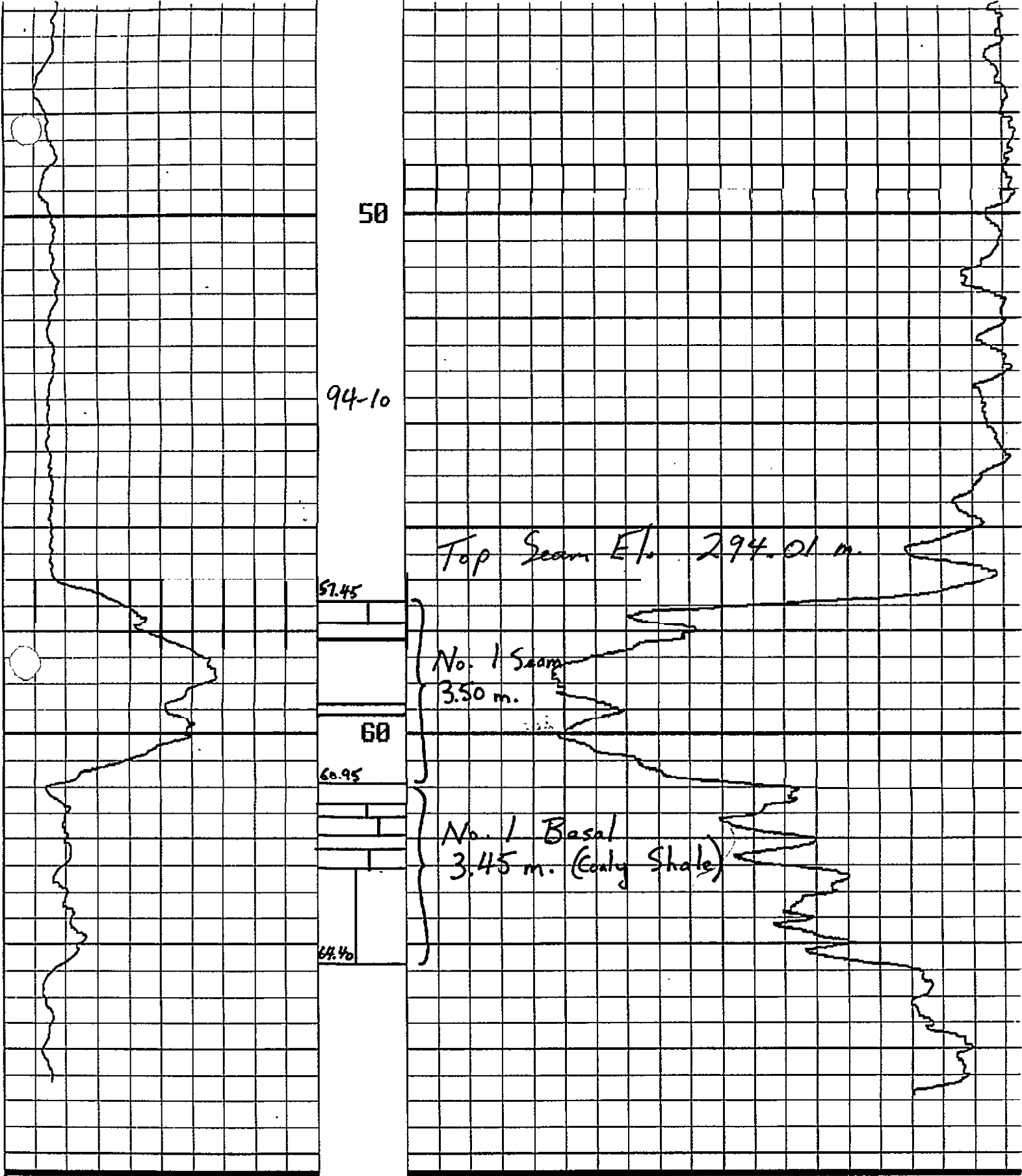
78



FAULTED SECTION

No. 1 Seam





50

94-10

Top Seam El. 294.01 m.

57.45

No. 1 Seam
3.50 m.

60

60.95

No. 1 Basal
3.45 m. (Early Shale)

64.40

○ CASING COLLAR LOCATOR
0.0 GAMMA-RAY 100
API

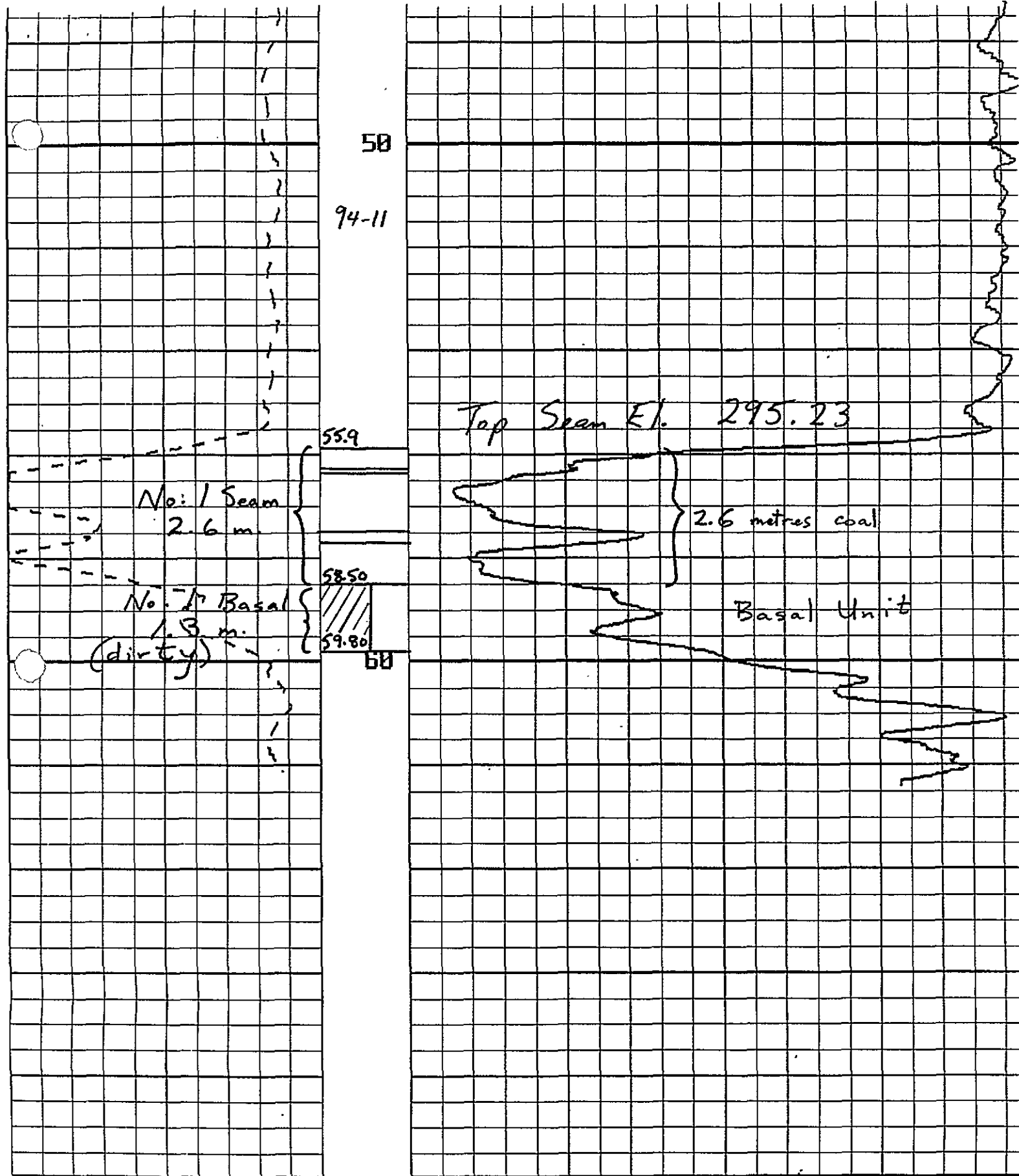
DEPTH

900.0 DENSITY 150
API

11/23/94
14:10:47

94 010

RES: 0.05 METE
SCALE: 96:



CASING COLLAR LOCATOR

100 GAMMA-RAY 0

API

DEPTH

900.0 DENSITY 150

API

PULSE RUN # 22
NOV 21 1994
17:51:08

94-11

DEPTH: 3.30 TO 63.78 (UP:
RES: 0.05 METERS
SCALE: 96::

Top Seam k/l. 291.8 m.

5790

No. 1 Seam
3.35 m.

coaly shale parting

coal

60.15 60.3

61.25

70

CASING COLLAR LOCATOR
0.8 GAMMA-RAY 100
API

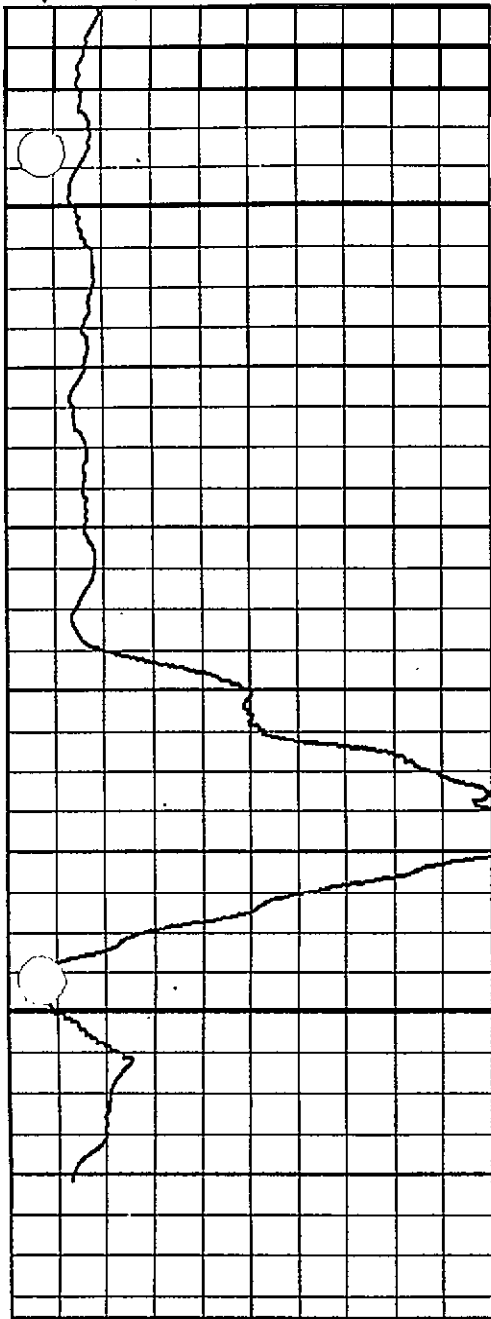
DEPTH ← 900.0

DENSITY 15
API

PULSE RUN # 5
11/23/94
14:10:47

94 012

DEPTH: 3.30 TO 68.32 (U
0.05 MET
RES SCALE: 96



50

Top Seam El. 292.7 m.

55.85

No. 1 Seam
3.50 m.

59.30

60

No. 1 Basal (Coaly Shale)
2.45 m.

61.75

← CASING COLLAR LOCATOR
 0.0 GRMHR-RAY 100
 API

DEPTH

900.0

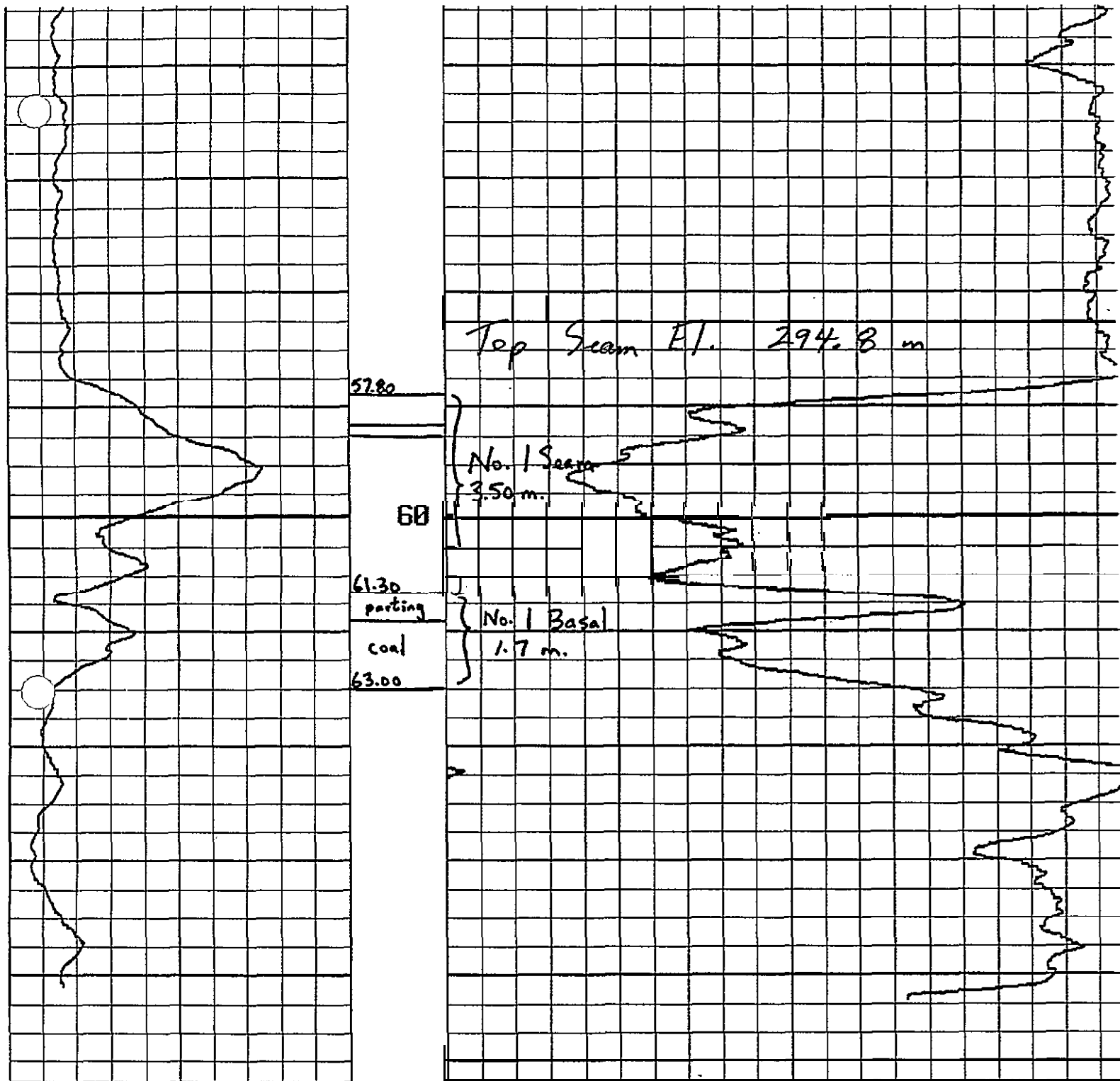
DENSITY
API

150

11/23/94
14:18:47

94 013

RES: 0.05 METE
SCALE: 96:



← CASING COLLAR LOCATOR

0.0 GAMMA-RAY 100

API

DEPTH

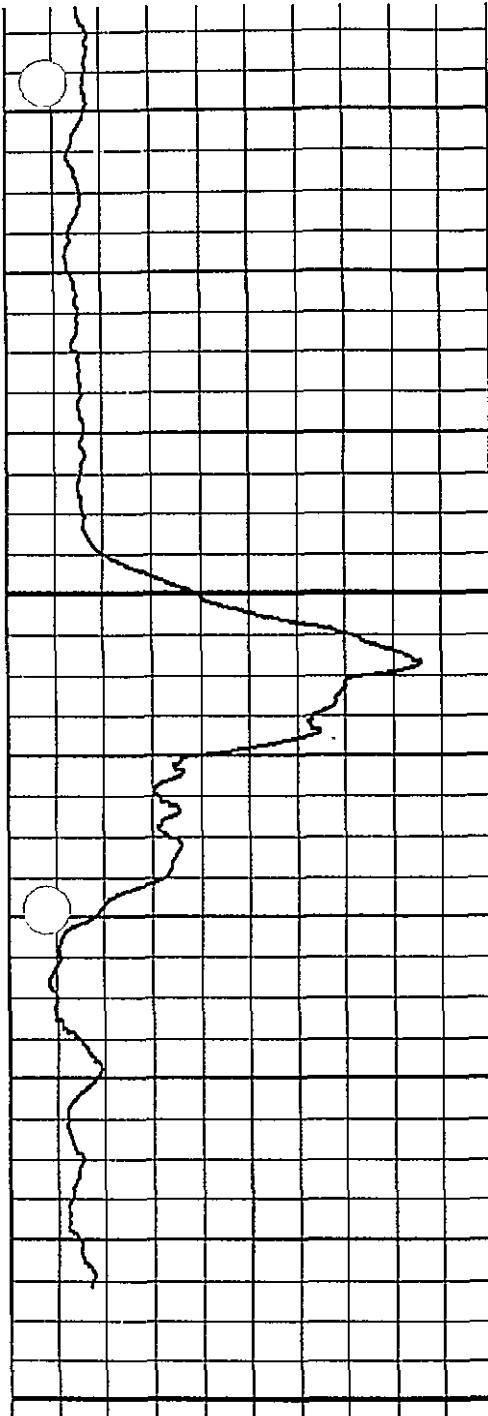
900.0 DENSITY 150

API

11/23/94
14:10:47

94 014

RES: 0.05 METERS
SCALE: 96::



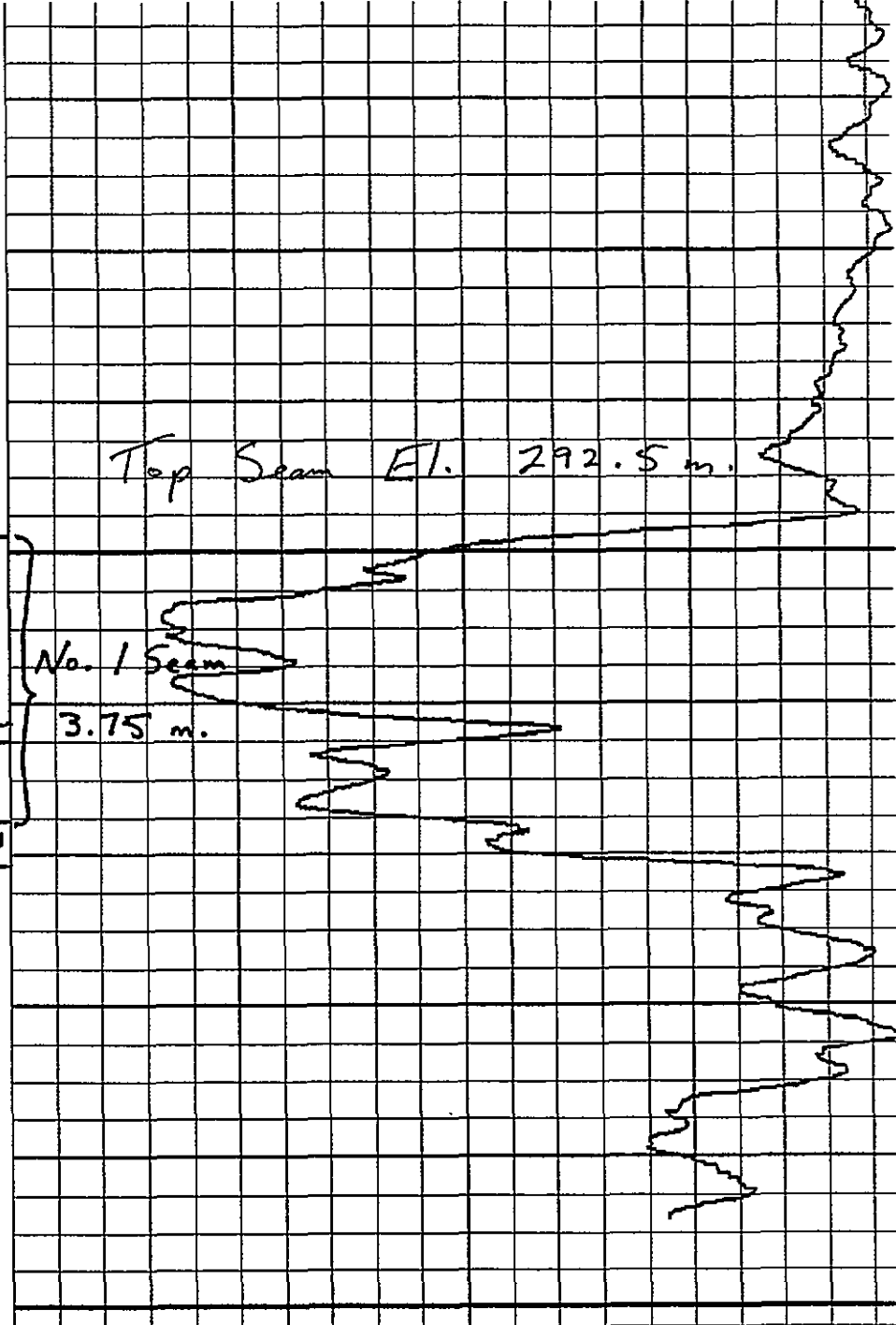
59.75
60
62.25
62.50
63.50
64.15

dirty coal

Top Seam El. 292.5 m.

No. 1 Seam

3.75 m.



ak

CASING COLLAR LOCATOR
0.0 GAMMA-RAY 100
API

DEPTH

900.0

DENSITY
API

150

11/23/94
14:10:47

94 015

RES: 0.05 METE
SCALE: 96:

140

94-016

150
Soft roof
conditions
1.5m
151.5

153.8
154.0

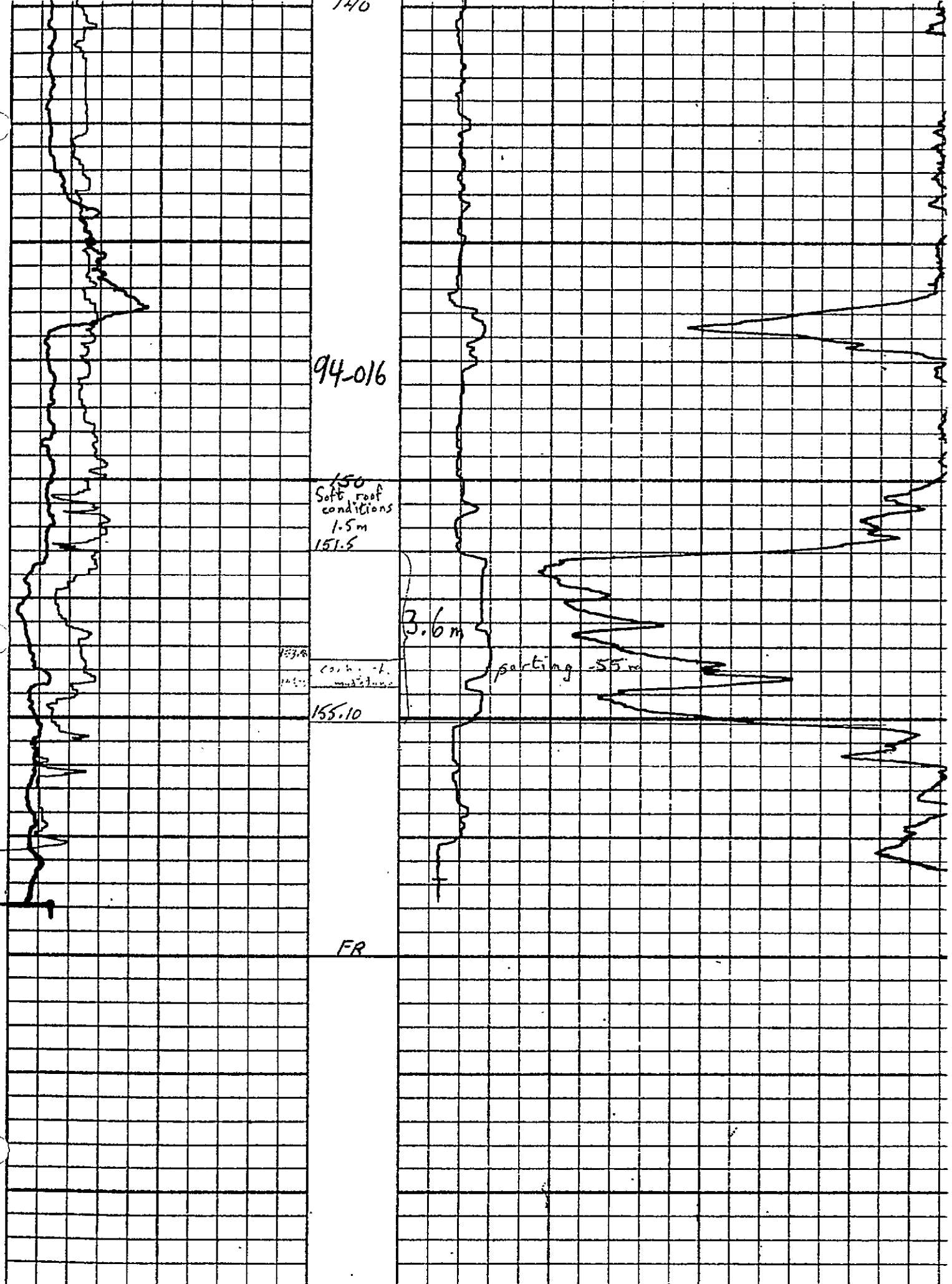
con. - t.
mudstone

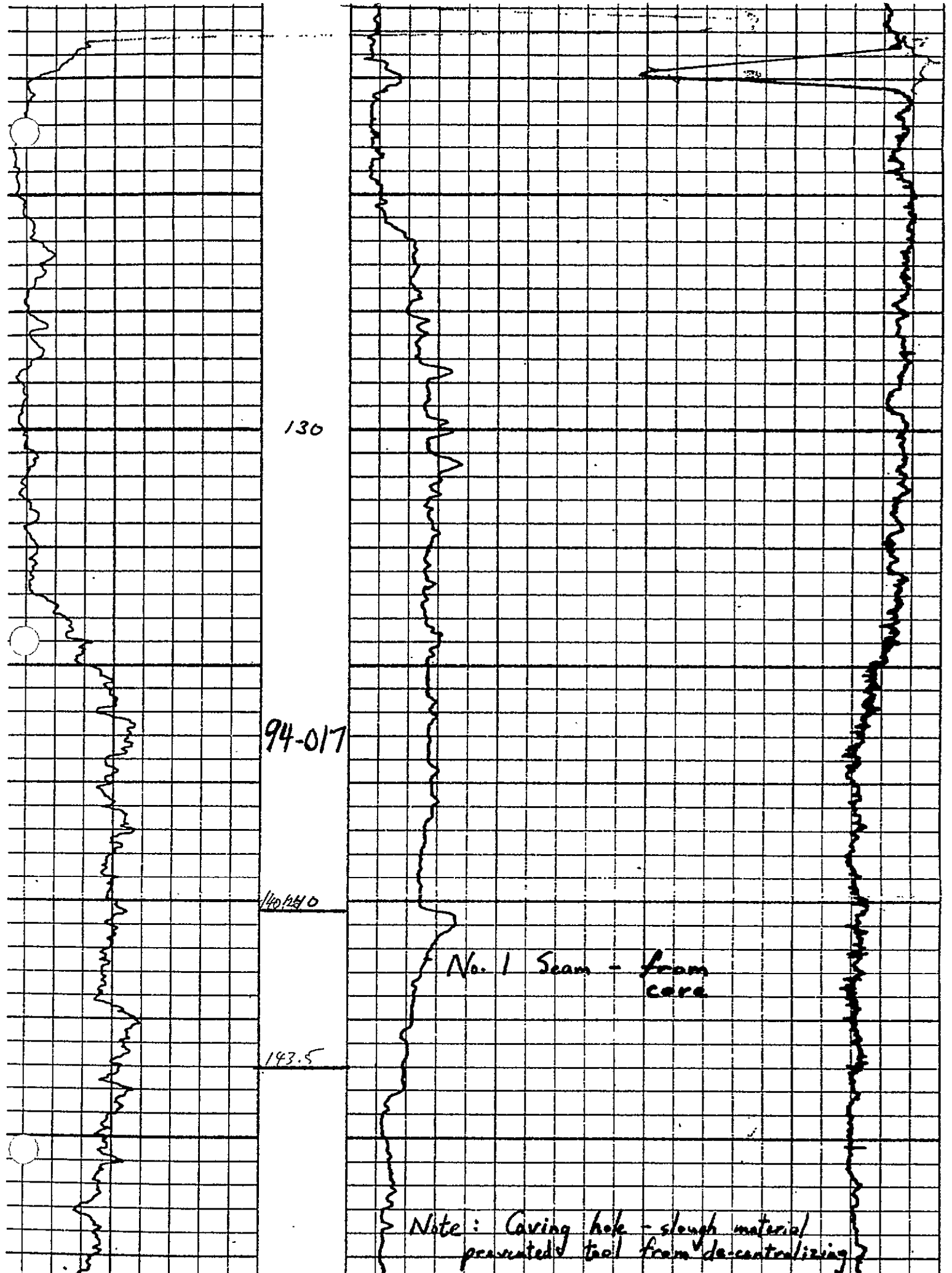
155.10

FR

3.6m

parting - 55m





130

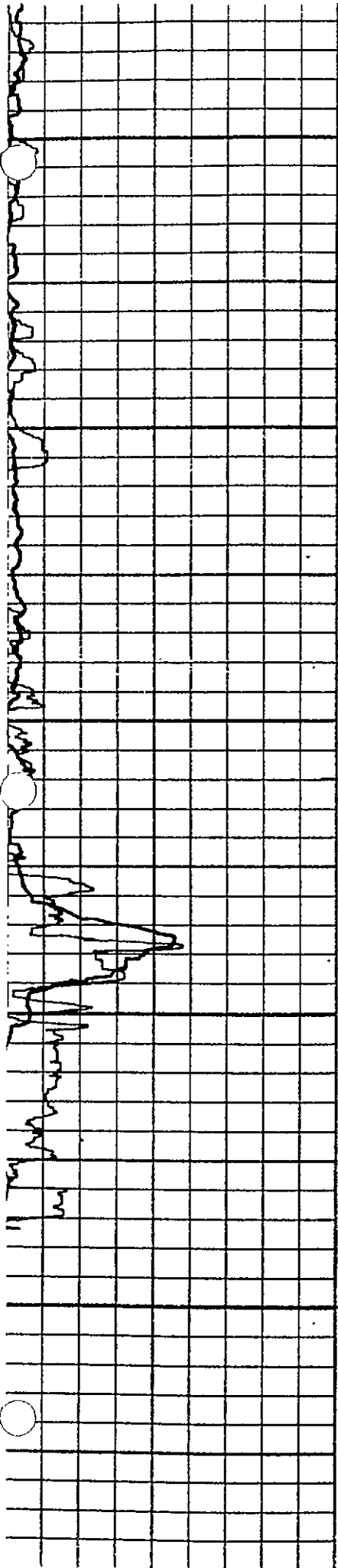
94-017

140.440

143.5

No. 1 Seam - from core

Note: Caving hole - slough material prevented tool from de-centralizing



120

94-18

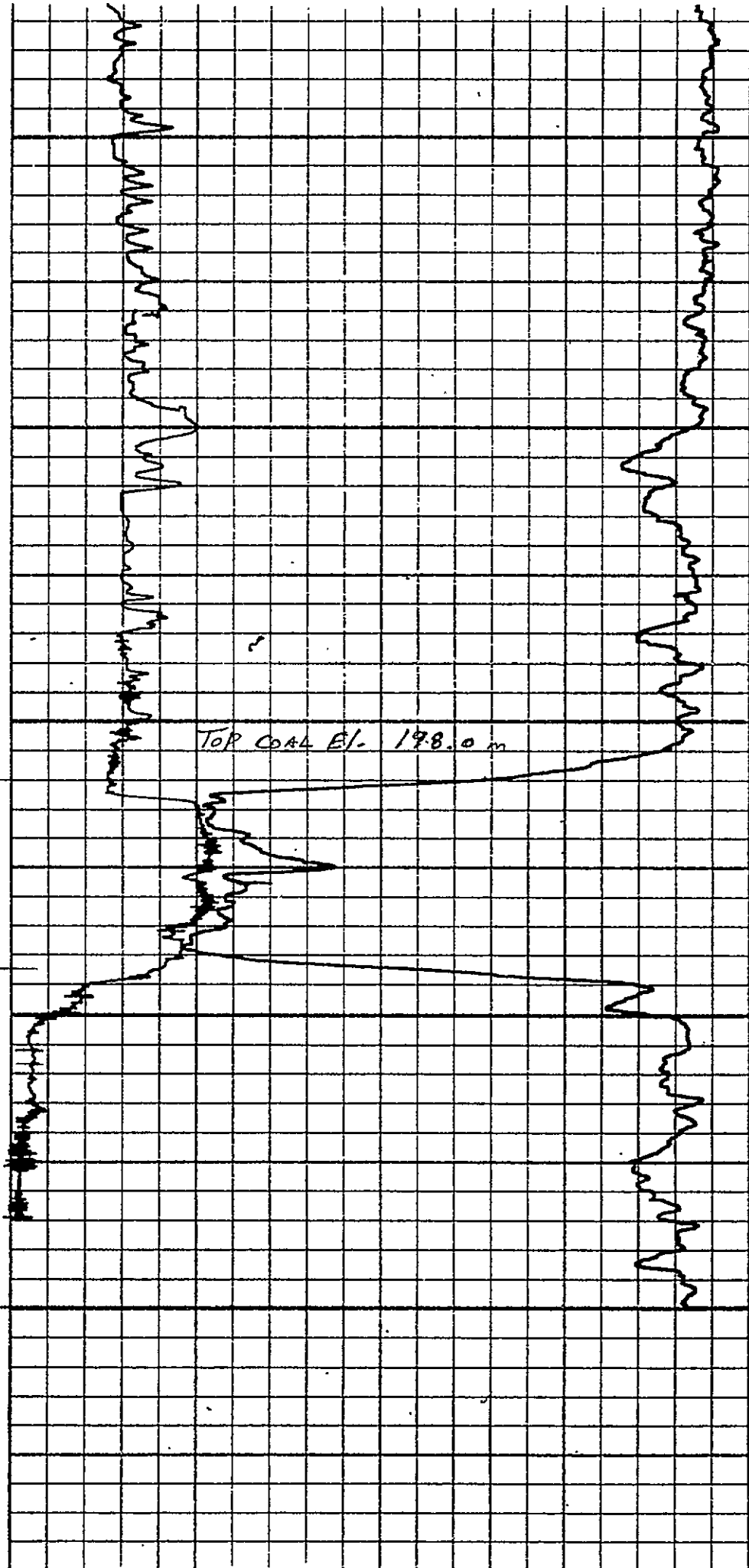
126.0

3.25

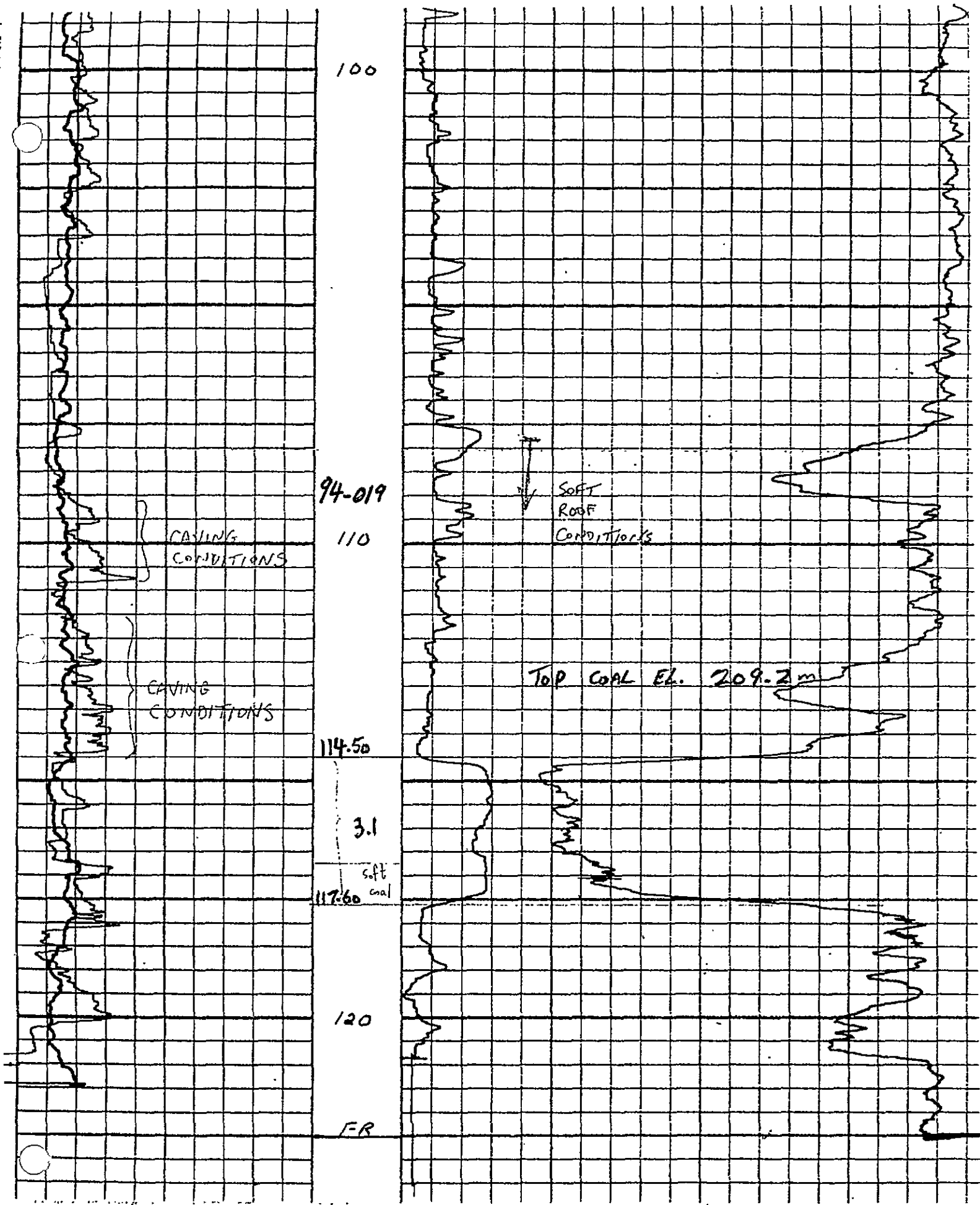
129.25

130

FR



TOP COAL EL. 126.0 m



100

94-019

110

CAVING
CONDITIONS

CAVING
CONDITIONS

114.50

3.1

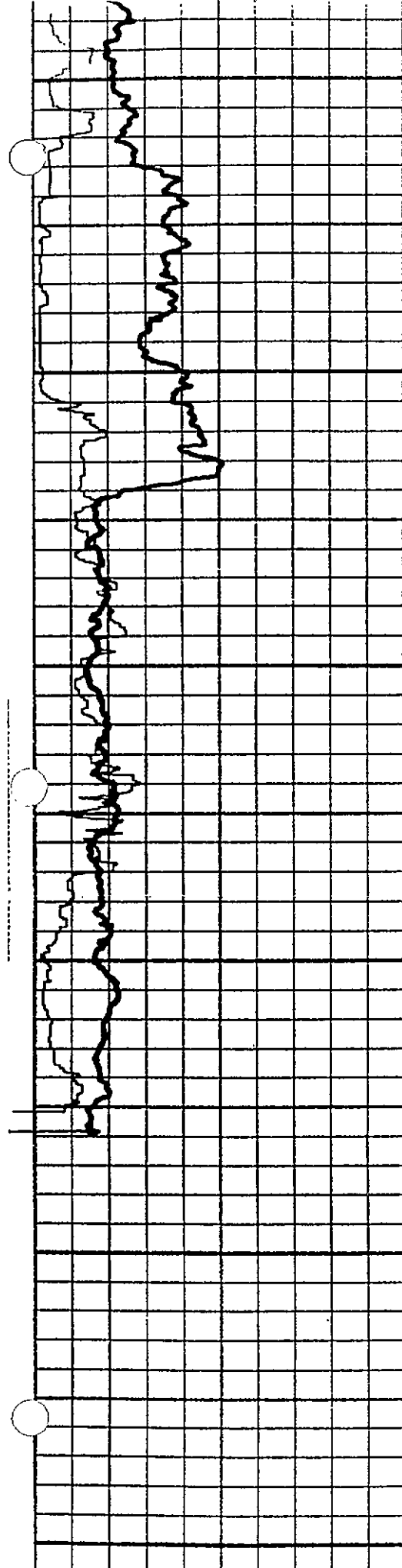
117.60
soft
coal

120

F-R

SOFT
ROOF
CONDITIONS

TOP COAL EL. 209.2m



110

94-20

116.70

117.45 .75

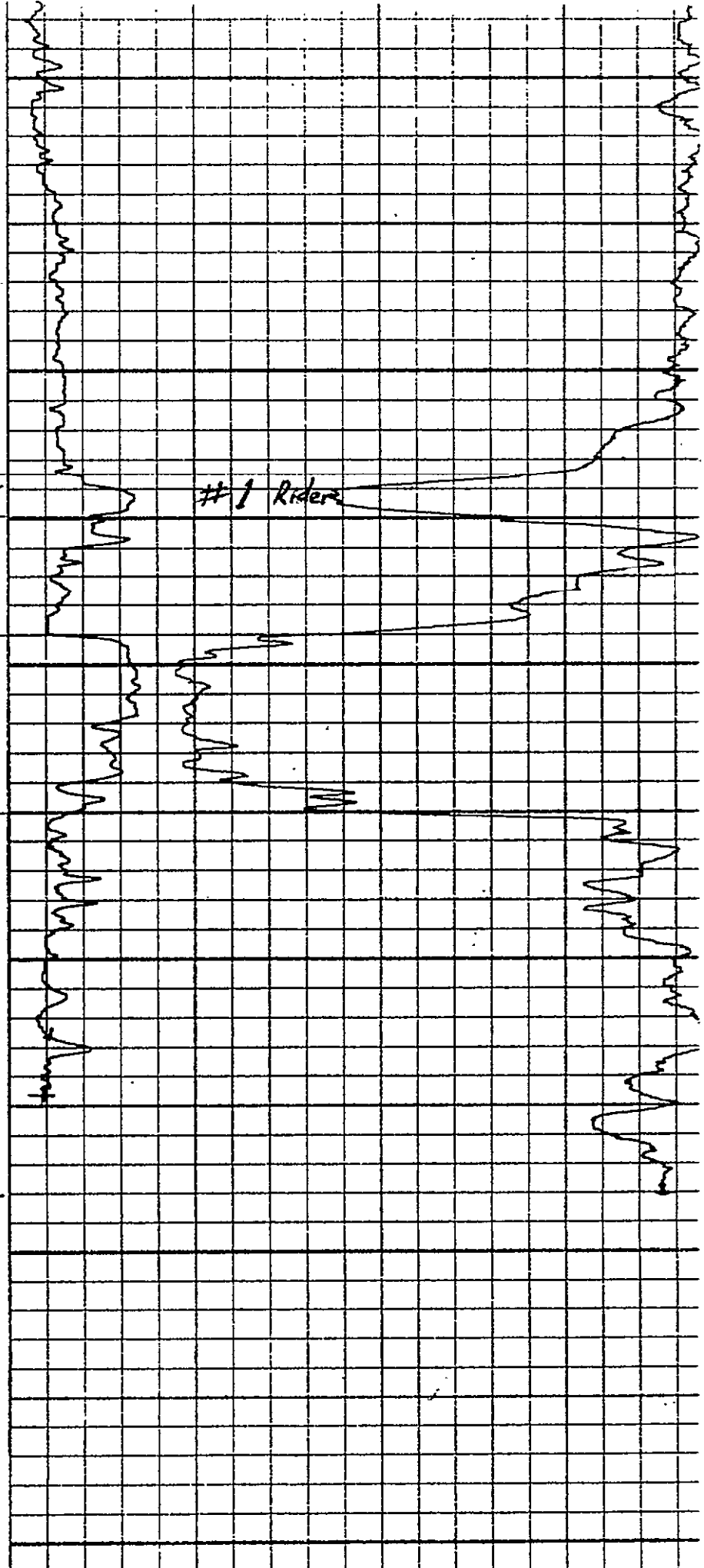
119.50

120

3.0

122.5

FR



#1 Riders



COAL LIMITED

COREHOLE LOG

HOLE NUMBER: 94-01

PAGE 1 OF 4

Logged By: J. Lehtinen

| CORE No. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE ALTERATION WETNESS CONTAMINATION. | TRUE DEPTH |
|----------|----------------|--------|-------|-----------|-------|---|------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| X | X | X | | X | | | |
| 1 | 109.72 | 112.77 | 3.205 | 3.07 | | | |
| | Run # 1 | | | | | | |
| | Boxes 1, 2 & 3 | | | | | | |
| | 109.72 | 111.55 | | 1.83 | 1.83 | Muddy Siltstone | 109.78 |
| | | | | | | - Dark grey muddy siltstone | 111.61 |
| | | | | | | - Mottled light to med. grey-brown irregular shaped concretions. Concretions all < 5cm. Calcareous CaCO ₃ ± FeCO ₃ | |
| | | | | | | - Wispy bedding laminae commonly with calcareous material | |
| | | | | | | - Bedding 85° TCA @ 110.27m | |
| | | | | | | - Fracturing (parting along bedding laminae ≈ 70-90° TCA | |
| | | | | | | - Soft core - Poorly lithified | |
| | 111.55 | 112.56 | | 1.01 | 2.84 | Mudstone | 111.61 |
| | | | | | | 111.55-112.24 Dark brown-grey mudstone | 112.30 |
| | | | | | | - Soft with exception of calcareous ironstone (FeCO ₃ ?) concretions - moderately hard, med. beige-grey. | |
| | | | | | | - Irregular wispy bedding laminae | 112.30 |
| | | | | | | - 112.24-112.42 - Carbonate concretion | 112.48 |
| | | | | | | med. beige grey, minor carbonaceous material + calcite stringer (<1mm) | 112.48 |
| | | | | | | - 112.42-112.56 ^(0.14) - Carbonaceous | 112.62 |
| | | | | | | content increasing in mudstone | |
| | | | | | | Minor lenses and coalified material < 1mm | |
| X | TOTALS | | | X | | ÷ x 100 = % REC. | SEAM |
| | | | | | | ÷ x 100 = % TOTAL REC. | SEAM(S) |

COREHOLE LOG

HOLE NUMBER: 94-01

PAGE 2 OF 4

| CORE No. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|--------|-------|-----------|-------|---|------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| X | X | X | | X | | | |
| | 112.56 | 112.79 | | 0.23 | 3.07 | Mudstone | 112.62 |
| | | | | | | - Med Brown-grey, 1-3% Coal laminae | 112.85 |
| | | | | | | - Core broken along laminae @ 80-90° TCA | |
| | | | | | | 20-25 fractures / m | |
| | | | | | | - Minor resin on coal laminae | |
| | Run # 2 | | | | | | |
| | 112.77 | 115.82 | 3.05 | 2.91 | | | |
| | Boxes 4 + 5 | | | | | | |
| | 112.79 | 113.14 | | 0.35 | 0.35 | Carbonaceous Mudstone / Mudstone | 112.85 |
| | | | | | | - Interbedded | 113.2 |
| | | | | | | - 12 cm Muddy Coal | |
| | | | | | | - 3 cm Mudstone | |
| | | | | | | 8 cm Coaly Mudstone | |
| | | | | | | 12 cm Mudstone - Med-dk grey | |
| | | | | | | Strongly broken 80-90° TCA - Minor | |
| | | | | | | fault polishing. Broken core | |
| | | | | | | 30 fractures / m. | |
| | 113.14 | | | | | Coal No. 1 Seam | |
| | 113.14 | 113.62 | | 0.48 | 0.83 | - Coal - Weakly broken along bedding | 113.2 |
| | | | | | | 84° TCA. Calcite < 1%, Pyrite < 1% | 113.68 |
| | | | | | | < 3 mm mud bands | 113.68 |
| | | | | 0.09 | 0.92 | - Mudstone - med beige-grey. Minor | 113.77 |
| | | | | | | fault polishing @ 50 & 90° TCA. | |
| | | | | 0.02 | 0.94 | - Coal | 113.77 |
| | | | | 0.02 | 0.96 | - Carbonaceous Mudstone | 113.79 |
| | | | | | | | 113.81 |
| X | TOTALS | | | X | | ÷ x 100 = % REC. | SEAM |
| | | | | | | ÷ x 100 = % TOTAL REC. | SEAM(S) |

COREHOLE LOG

HOLE NUMBER: 94-01

PAGE 3 OF 4

| CORE No. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|--------|-------|-----------|-------|---|--------------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| X | X | X | | X | | | |
| | | | | 0.32 | 1.28 | Coal - Hard banded coal. Banding 85° TCA Calcite on cleat ≈ parallel TCA Calcite < 1% | 113.81 - 114.13 |
| | | | | 0.08 | 1.36 | Mudstone - Dark grey-brown, carbonaceous | 114.13 - 114.21 |
| | | | | 0.50 | 1.86 | Coal - Hard banded coal. Banding 83-85° TCA. "Crackle" texture CaCO ₃ in < 2cm bands | 114.21 - 114.71 |
| | | | | 0.38 | 2.24 | Mudstone - Gradational from carbonaceous into beige-grey, very soft mud in centre of interval. Strongly broken, friable, gradational basal contact | 114.71 - 115.09 |
| | | | | 0.67 | 2.91 | Coal - Bright, banded. Banding 85° TCA Calcite on cleat ≈ parallel TCA and within "crackle" texture bands. Calcite < 1%. Minor < 2mm mudstone bands near base of interval. | 115.09 - 115.76 |
| | 115.82 | 118.87 | 3.05 | 2.91 | | | |
| | Run # | 3 | | | | | |
| | | | | 0.05 | 0.05 | Mudstone - dark grey flakey, weak fault polishing | 115.76 - 115.81 |
| | | | | 0.26 | 0.31 | Coal - Dull, blocky. 3% Calcite within 3cm band of "crackle" texture. Muddy, fault polished, 89° TCA. within 3cm base of interval. | 115.81 - 116.07 |
| | | | | 0.07 | 0.38 | Mudstone - Light beige-grey. Minor coaly lenses, fault polishing on irregular fault plane 70° TCA. | 116.07 - 116.14 |
| X | TOTALS | | | X | | ÷ x 100 = % REC. SEAM ÷ x 100 = % TOTAL REC. SEAM(S) | X |

COREHOLE LOG

HOLE NUMBER:
PAGE 4 OF 4

| CORE NO. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|----|-------|-----------|-------|---|------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| X | X | X | | X | | | 116.14 |
| | | | | 0.06 | 0.44 | Coal - minor calcite Bedding 85° TCA | 116.20 |
| | | | | 0.08 | 0.52 | Carbonaceous Mudstone - dark brown | 116.28 |
| | | | | 0.17 | 0.69 | Mudstone - Light beige-grey - minor coal lenses | 116.45 |
| | | | | 0.08 | 0.77 | Muddy Coal - fractured on bedding | 116.53 |
| | | | | 0.06 | 0.83 | Coaly Mudstone - beige grey with variable carbonaceous material. Weak fault polishing | 116.59 |
| | | | | 0.06 | 0.89 | Coal - minor calcite on cleat | 116.65 |
| | | | | 0.02 | 0.91 | Mudstone * | 116.67 |
| | | | | 0.18 | 1.09 | Coal - Banded 80° TCA. Calcite. 1-2% in "crackle" texture | 116.85 |
| | | | | 0.21 | 1.30 | Carbonaceous Mudstone - Variably dark brown to grey-brown. | 117.06 |
| | | | | 0.15 | 1.45 | Muddy Coal - Brown-black, banded @ 84° TCA. Weak polishing on banding planes | 117.21 |
| | | | | 0.09 | 1.54 | Mudstone - Light beige-grey. Minor coal lenses. | 117.30 |
| | | | | 0.33 | 1.87 | Carbonaceous Mudstone - Interbedded coal/mudstone laminae. Very friable & flakey core | 117.63 |
| | | | 1.5/3 | 0.28 | 2.15 | Siltstone - Light beige-grey, soft core. Moderately broken. Weak fault polished planes @ 75-90° TCA | 117.91 |
| | | | | 0.31 | 2.46 | Sandstone - Green-grey, poorly sorted. Med grained. Weak fault plane 63° TCA. | 118.22 |
| | | | | 0.45 | 2.91 | Siltstone - Green-grey to beige-grey. Strongly broken to very incompetent at base of interval. | 118.67 |
| | | | | | | Core loss @ end of Kern | |
| X | TOTALS | | | X | | ÷ x 100 = % REC. SEAM | X |
| | | | | | | ÷ x 100 = % TOTAL REC. SEAM(S) | X |



COAL LIMITED

COREHOLE LOG

HOLENUMBER: 94-02
PAGE 1 OF 4

Logged By: J. Lehtinen

| CORE No. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|--------|-------|-----------|-------|---|------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| X | X | X | | X | | | |
| | | | | | | | |
| | Run # 1 | | | | | | |
| | 111.86 | 114.90 | 3.04 | 2.94 | 2.94 | Sandstone | 111.74 |
| | | | | | | - Med grey green | 114.68 |
| | | | | | | - Poorly sorted & varying from fine to med. grained - predominantly med. | |
| | | | | | | - Wispy (carbonaceous) bedding at 2.38 - 2.65 m - 60° TCH - fault. | |
| | | | | | | polished, 70° TCH = Bedding | |
| | | | | | | Competent throughout - 5 fractures/m at 80-90° TCH. | |
| | | | | | | | |
| | Run # 2 | | | | | | |
| | 114.90 | 117.95 | 3.05 | 3.09 | | | |
| | | | | 0.48 | 0.48 | Sandstone - as above. | 114.68 |
| | | | | | | Basal contact 85° TCH - Sharp | 115.16 |
| | | | | 2.61 | 3.09 | Siltstone | 115.16 |
| | | | | | | - Med - dark green grey | 117.77 |
| | | | | | | - Med - fine grained - with muddy content variable | |
| | | | | | | - Minor ironstone (FeCO ₃ , CaCO ₃) concretions - Hard brown-grey | |
| | | | | | | 2.28 - 2.38 - Calcite stringers/breccia | |
| | | | | | | - Minor fault polishing | |
| | | | | | | - Weak fracturing at 80-90° TCH 5/m | |
| X | TOTALS | | | X | | ÷ x 100 = % REC. | SEAM |
| | | | | | | ÷ x 100 = % TOTAL REC. | SEAM(S) |

COREHOLE LOG

HOLE NUMBER: 94-02

PAGE 2 OF 4

| CORE NO. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|--------|-------|-----------|-------|---|------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| X | X | X | | X | | | |
| | | | | | | - Bedding 80° TCA @ 2.00m | |
| | Run # 3 | | | | | | |
| | 117.95 | 121.00 | 3.05 | 3.04 | | | |
| | | | | 2.83 | 2.83 | Siltstone / Mudstone | 117.72 |
| | | | | | | - Med-dark green-grey + brown-grey | 120.60 |
| | | | | | | - Very fine grain. siltstone becoming increasingly muddy at base of interval | |
| | | | | | | - Minor lighter mottled "Ironstone" (FeCO ₃ or CaCO ₃) concretions. | |
| | | | | | | - Bedding variable at 80-85° TCA | |
| | | | | | | - weak fault, 63° TCA - strikes at 0.43m | |
| | | | | | | - Fractures/parting common along carbonate laminae | |
| | | | | | | - Sharp basal contact. 83° TCA. | |
| | | | | 0.21 | 3.04 | Coal No. 1 Seam | 120.60 |
| | | | | | | Blocky, Hard coal. | 120.81 |
| | Run # 4 | | | | | | |
| | 121.00 | 124.65 | 3.05 | 3.24 | | | |
| | | | | 1.29 | 1.29 | Coal - Clean, bright. Banded @ ~80° TCA | 120.81 |
| | | | | | | Calcite in discrete bands as "crackle" texture + along cleat. Calcite 41% | 122.1 |
| | | | | | | Pyrite locally to 2%. Overall 1% | |
| | | | | | | (cont'd) | |
| X | TOTALS | | | X | | ÷ x 100 = % REC. | SEAM |
| | | | | | | ÷ x 100 = % TOTAL REC. | SEAM(S) |

COREHOLE LOG

HOLE NUMBER: 94-02

PAGE 3 OF 4

| CORE No. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|----|-------|-----------|-------|--|-------------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| | | | | | | - Fracturing along banding & weakly at 50° TCA. | |
| | | | 0.08 | 137 | | Mudstone / Mud Top & bottom of interval of mudstone sandwiching mud @ center of interval - Med brown-grey Contact ±80-85° TCA. | 122.1- 122.18 |
| | | | 0.82 | 2.19 | | Coal - Blocky, banded Banding @ 82° TCA - Resin common along banding as thin < 0.5mm wisps - Fractures weak along banding | 122.18- 123.0 |
| | | | 0.02 | 2.21 | | Carbonaceous Mudstone | 123.0- 123.02 |
| | | | 0.12 | 233 | | Coal - banded, blocky Top Contact: 83° TCA Bottom Contact: 2 intersecting fault slips - splashed @ 84° & 47° TCA Minor calcite along banding & cleat | 123.02- 123.14 |
| | | | 0.09 | 242 | | Mudstone: med brown-grey, numerous fault slips (no preferred orientation) | 123.14- 123.23 |
| | | | 0.82 | 324 | | Coal Weak to moderately broken. Banding @ 85° TCA - Top of interval strongly broken - Bottom = crushed, friable coal. - Resin common along banding - Weak fracturing in coal @ 35° TCA @ 0.25m of interval | 123.23- 124.05 |
| | TOTALS | | | | | ÷ x 100 = % REC. SEAM ÷ x 100 = % TOTAL REC. SEAM(S) | |

COREHOLE LOG

HOLE NUMBER: 94-02

PAGE 4 OF 4

| CORE NO. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|--------|-------|-----------|-------|--|---------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| X | X | X | | X | | | |
| | Run # | 5 | | | | | |
| | 124.05 | 127.10 | 3.05 | | | | |
| | | | | 0.05 | 0.05 | Coaly Mudstone | 124.05 |
| | | | | | | - Crushed(?) friable, brown-black | 124.10 |
| | | | | 2.80 | 2.85 | Siltstone | 124.10 |
| | | | | | | - Med-dark green-grey | 126.95 |
| | | | | | | - Fine grained siltstone to muddy siltstone. | |
| | | | | | | Top 0.6m - minor fractures with polished, weak fault planes at erratic orientation | |
| | | | | | | Poorly bedded @ $\approx 85^\circ$ to H. | |
| | | | | | | - Basal 3.5 cm of red/green siltstone | |
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| | | | | | | | |
| X | TOTALS | | | X | | ÷ x 100 = % REC. | SEAM |
| | | | | | | ÷ x 100 = % TOTAL REC. | SEAM(S) |

COREHOLE LOG

HOLE NUMBER: 94-04
PAGE 1 OF 5

Logged By: J. Lehtinen

| CORE NO. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|-------|-------|-----------|-------|---|------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| X | X | X | | X | | | |
| 1 | 60.04 | 63.09 | 3.05 | 2.92 | 2.92 | <p>Sandstone</p> <ul style="list-style-type: none"> - Med grained, med to light grey - Well cemented - Moderately hard - Clasts dominantly Feldspar, volcanic (chloritized matrix) minor quartz - Bedding wispy @ 78° TCA @ 2.107m - Minor Carbonaceous material as bedding parallel laminae - Minor light brown mottling due to calcareous (FeCO₃, CaCO₃) concretions - Generally - weakly calcareous - Concretion zones - strongly calcareous - Fracturing parallel to weak bedding @ 75-80° TCA, 5-7 fractures/metre | |
| 2 | 63.09 | 66.14 | 3.05 | 3.10 | 3.10 | <p>Sandstone</p> <ul style="list-style-type: none"> - As above - Bedding 75° TCA @ 2.10m - Concretion zones increasing toward base of interval. Intersection width up to 6cm. - Thin < 1mm Calcite stringer 10° TCA @ 1.45m - Weakly calcareous - Fracturing sub-parallel to bedding @ 75-80° TCA. - Fracturing 5-7 fractures /m | |
| X | TOTALS | | | X | | $\div \times 100 =$ % REC. SEAM $\div \times 100 =$ % TOTAL REC. SEAM(S) | X |

COREHOLE LOG

HOLE NUMBER: 74-04
 PAGE 2 OF 5

| CORE No. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION <small>LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION.</small> | TRUE DEPTH |
|----------|---------------|-------|-------|-----------|-------|---|------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| | × | × | | × | | | |
| 3 | 66.14 | 69.19 | 3.05 | 2.88 | | | |
| | | | | 2.03 | 2.03 | Sandstone - As Above - Sandstone becoming coarser grained near base of interval - Increased carbonate content - Moderately calcareous overall - Light brown mottled zones (concretion) with increased calcareous content - Fracturing increased to 7 to 10 fractures/m, sub-parallel to bedding - Bedding 72° TCA @ 1-15 m - Basal contact sharp with carbonaceous material - 275-80° TCA | |
| | | | | 0.25 | 2.88 | Siltstone - Med-dk brown-gray - Finely bedded to laminated - Bedding 80-90° TCA - Carbonaceous material along laminae - Weakly calcareous | |
| × | TOTALS | | | × | | $\div \quad \times 100 =$ % REC. SEAM $\div \quad \times 100 =$ % TOTAL REC. SEAM(S) | × |

COREHOLE LOG

HOLE NUMBER: 94-04
PAGE 3 OF 5

| CORE No. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|-------|-------|-----------|-------|---|------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| 4 | 69.19 | 72.23 | 3.04 | 2.91 | 2.91 | <p>Siltstone</p> <ul style="list-style-type: none"> - Med-dk brown-gray - Finely bedded to laminated in sandy to muddy laminae - Bedding @ 79°, 82°, & 84° TCA Avg. 82° - Minor carbonaceous material - Variably calcareous; moderate in coarse siltstone & non-calcareous in muddy siltstone - Calcareous med. brown concretionary zones. (moderately calcareous) - Fracturing sub-parallel to bedding at 75-85° TCA ≈ 15 fractures/m | |
| 5 | 72.23 | 75.28 | 3.05 | 2.25 | 2.25 | <p>Siltstone / Mudstone</p> <ul style="list-style-type: none"> - Top 0.66m of interval = muddy siltstone grading down section into silty mudstone. Basal 0.45m = Mudstone - Carbonaceous material in varying quantity throughout - Moderate to strong fracturing along bedding & carbonaceous laminae @ 80-90° TCA. Fracturing 25-30/m - Minor slip with calcite @ 1.1m - Weakly calcareous in Top 0.66m - Non calcareous in Basal 0.45m mudstone - Minor calcareous concretions, (brown) - all < 3cm from 0.66 - 1.71m. | |
| | TOTALS | | | | | <p>÷ x 100 = % REC. SEAM</p> <p>÷ x 100 = % TOTAL REC. SEAM(S)</p> | |

COREHOLE LOG

HOLE NUMBER: 94-04
PAGE 4 OF 5

| CORE No. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|-------|-------|-----------|-------|--|----------------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| | | | | | | | |
| | Cont'd | | | | | | |
| 5 | 72.23 | 75.28 | 3.05 | 2.25 | | Cont'd. | |
| | | | | 2.16 | 2.16 | Basal contact - soft, strongly broken mudstone | |
| | | | | | | (core loss) in coal? | |
| | | | | 0.09 | 2.25 | Coal No. 1 Seam | |
| | | | | | | - Broken top contact | |
| | | | | | | - Broken, bright coal | |
| 6 | 75.28 | 78.33 | 3.05 | 2.32 | 2.32 | | |
| | | | | 0.30 | 0.30 | Coal - Blocky - Hard - Broken by drilling | |
| | | | | | | - Calcite along cleat | |
| | | | | | | - Minor amber along banding planes | |
| | | | | | | - Banding $\approx 85^\circ$ TCA | |
| | | | | 0.01 | 0.31 | Silty coal | |
| | | | | 0.24 | 0.55 | Coal - Banded, hard - | |
| | | | | | | Banding $\approx 2^\circ$ TCA | |
| | | | | 0.02 | 0.57 | Silty Coal - Thinly laminated silt + coal | |
| | | | | 0.02 | 0.59 | Coal Minor calcite | |
| | | | | 0.03 | 0.62 | Silty Coal | |
| | | | | 0.05 | 0.67 | Coal | |
| | | | | 0.01 | 0.68 | Mudstone | |
| | | | | 1.46 | 2.14 | Coal - Moderate to strongly broken | |
| | | | | | | - Banded @ 86° TCA | |
| | | | | | | - Calcite along cleat | |
| | | | | | | - Minor resin on banding surfaces | |
| | | | | | | - Fracturing parallel to banding | |
| | | | | | | | |
| | | | | | | | |
| X | TOTALS | | | X | | | |
| | | | | | | \div | |
| | | | | | | $\times 100 =$ | % REC. SEAM |
| | | | | | | \div | |
| | | | | | | $\times 100 =$ | % TOTAL REC. SEAM(S) |

COREHOLE LOG

HOLE NUMBER: 94-04
PAGE 5 OF 5

| CORE No. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|-------|-------|-----------|-------|---|------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| X | X | X | | X | | | |
| 6 | Cont'd. | | | 0-02 | 2-16 | Coaly mudstone | |
| | | | | 0-10 | 2-20 | Coal - platy coal - very friable | |
| | | | | 0-02 | 2-28 | Muddy Coal - with calcite stringers | |
| | | | | 0-04 | 2-32 | Coal - minor slip surfaces at top & bottom of interval | |
| (7) | 78-33 | 81-32 | 3-05 | 2-91 | | | |
| | | | | 2-30 | 2-30 | Mudstone Silty Mudstone | |
| | | | | | | - Med green-grey to brown-grey | |
| | | | | | | - Soft - weak parting sub-parallel to bedding | |
| | | | | | | - Minor slips & polishing in weakly foliated core within 15 cm of coal-contact. Weak fracture 50° TCA | |
| | | | | | | - Coalified material erratic throughout - < 1% coalified material | |
| | | | | | | - Very light effervescence - along weak fractures | |
| | | | | | | - Polished slip & strongly broken core of 0.53 to 0.85 m | |
| | | | | | | Polished planes at 55° & 52° TCA | |
| | | | | | | - Minor < 1 cm light beige concretions of unknown composition (non-calcareous) | |
| | | | | | | - Gradational basal contact | |
| | | | | 0-61 | 2-91 | - Mudstone Silty Mudstone | |
| | | | | | | - As above with colour change to red/grey mottling | |
| | | | | | | End of Core | |
| X | TOTALS | | | X | | ÷ x 100 = % REC. | SEAM |
| | | | | | | ÷ x 100 = % TOTAL REC. | SEAM(S) |

Polished slip 80-90° TCA @ 1.65 m

COREHOLE LOG

HOLE NUMBER: 94-05
PAGE 1 OF 6

Logged By: J. Lehtinen

| CORE No. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|-------|-------|-----------|-------|---|------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| X | X | X | | X | | | |
| 1 | 53.64 | 56.69 | 3.05 | 2.92 | | | |
| | | | | 2.92 | 2.92 | Sandstone | |
| | | | | | | - Very coarse grained to pebbly | |
| | | | | | | - Med to light green-grey | |
| | | | | | | - Faint bedding @ 75-85° TCA | |
| | | | | | | Measured @ 62° TCA @ 2.15 m | |
| | | | | | | - Clast dominantly mafic, chloritized volcanics | |
| | | | | | | also prominent calcite as clasts & cement | |
| | | | | | | Minor quartz | |
| | | | | | | - Very calcareous | |
| | | | | | | - Fracturing in core ≈ 75-85°, commonly | |
| | | | | | | on minor laminae of finer sandstone, | |
| | | | | | | silt or carbonaceous material | |
| | | | | | | - Fracturing @ 8-10 / m (due in part | |
| | | | | | | to drilling - see gauge of core | |
| | | | | | | from 5.5 to 7.0 mm) | |
| 2 | 56.69 | 59.74 | 3.05 | 2.97 | | | |
| | | | | 1.08 | 1.08 | Sandstone | |
| | | | | | | - As above. With minor mudstone | |
| | | | | | | bands all < 1.0 cm. | |
| | | | | | | - Banding 76° TCA & 79° TCA | |
| | | | | | | - Fracturing parallel to & along mudstone | |
| | | | | | | beds | |
| | | | | | | - Basal contact sharp at ≈ 70° TCA | |
| X | TOTALS | | | X | | ÷ x 100 = % REC. | SEAM |
| | | | | | | ÷ x 100 = % TOTAL REC. | SEAM(S) |

COREHOLE LOG

HOLE NUMBER: 74-05
PAGE 2 OF 6

| CORE No. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|----|-------|-----------|-------|---|------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| X | X | X | | X | | | |
| 2 | | | | 0-73 | 1-81 | <p>Interbedded Sandstone / Mudstone</p> <ul style="list-style-type: none"> - Gradational zone between coarse grained upper unit & fine grained lower unit - Gradational due to interbeds + possibly soft sediment deformation of lower mudstone / siltstone - Bedding erratic - Calcareous in coarse units | |
| | | | | 1-11 | 2-92 | <p>Siltstone</p> <p>Med - dark green-grey</p> <p>Silt with minor fine sandstone + minor carbonaceous / clay laminae</p> <ul style="list-style-type: none"> - Finely bedded - Bedding 87° - 0.09m 84° - 0.60m 86° - 0.74m Avg 86° TCA - Fracturing parallel to bedding 10 / m - Mottled intervals - light-brown beige-grey (concretionary) - Calcareous concretions - moderate - Non calcareous in mudstone / siltstone | |
| X | TOTALS | | X | | | <p>÷ x 100 = % REC. SEAM</p> <p>÷ x 100 = % TOTAL REC. SEAM(S)</p> | X |

COREHOLE LOG

HOLE NUMBER: 94-05
PAGE 3 OF 6

| CORE No. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|-------|-------|-----------|-------|--|------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| X | X | X | | X | | | |
| 3 | 59.74 | 62.79 | 3.05 | 3.16 | 3.16 | <p>*Note Over recovery on this run caused extreme fracturing of the core. (Core loss from Cores 1 & 2 recovered in this run.)</p> | |
| | | | | 3.16 | 3.16 | <p>Siltstone As above, with minor increase in mudstone content - Med beige-grey calcareous ($CaCO_3, FeCO_3$) "Ironstone" concretions comprising 10% of section - Non calcareous in siltstone/mudstone - Bedding $80^\circ @ 0.60m, 83^\circ @ 0.90m$ Avg $82^\circ TCA$ - Fracturing along bedding @ 6-10/m * Note see above - Fractures due to compression of core in core tube</p> | |
| 4 | 62.79 | 65.83 | 3.04 | 3.01 | 3.01 | <p>Siltstone - As above with increasing mudstone at base - "Ironstone" concretions as bands up to 7cm. Also as irregular shaped masses. - Concretions 10-15% of section strongly calcareous - Bedding $75^\circ @ 0.38m, 85^\circ @ 2.17m$ Avg $80^\circ TCA$</p> | |
| X | TOTALS | | | X | | <p>÷ x 100 = % REC. SEAM ÷ x 100 = % TOTAL REC. SEAM(S)</p> | X |

COREHOLE LOG

HOLE NUMBER: 94-05
PAGE 4 OF 6

| CORE No. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|-------|-------|-----------|-------|---|------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| 4 | | | | | | - Fracturing commonly along bedding planes @ 10-15/m. * along carbonaceous / coaly material | |
| 5 | 65.83 | 68.88 | 3.05 | 2.89 | 2.89 | | |
| | | | | 0.58 | 0.58 | Mudstone Gradational contact with fine siltstone above - Med-dk green-grey, homogeneous - Minor < 1cm med beige-grey concretions of unknown composition - Non calcareous - Fracturing (parting along indistinct bedding) at 85-90° TCA; approx. 15/m - Sharp basal contact with coal at 85-90° TCA. | |
| | | | | 0.63 | 1.21 | Coal No. 1 Seam - Banded, bright coal - Banding 87° TCA - Minor calcite on cleat. - Fracturing 20/m along banding | |
| | | | | 0.02 | 1.23 | Mud - Med beige-grey mud band. | |
| | | | | 0.81 | 2.04 | Coal - Strongly bedded, brittle coal. Parting 85-90° TCA - Fractures along banding 20-25/m - Calcite along cleat & as weak "crackle texture" - Calcite < 0.1% | |
| X | TOTALS | | | X | | ÷ x 100 = % REC. SEAM ÷ x 100 = % TOTAL REC. SEAM(S) | X |

COREHOLE LOG

HOLE NUMBER: 94-05
PAGE 5 OF 6

| CORE No. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|-------|-------|-----------|-------|--|------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| 5 | | | | 0.06 | 2.10 | <p>Bone Coal</p> <ul style="list-style-type: none"> - Gritty, silty Brown-black interval with coaly lenses - Bands at 85-87° TCA | |
| | | | | 0.79 | 2.89 | <p>Coal</p> <ul style="list-style-type: none"> Banded, blocky coal - Banding 85-90° TCA. - Amber on bedding planes. - Calcite very minor on cleat. more commonly as "crack texture" within discrete bands. Re. from 0.78-0.79m - Fracturing along bedding 15-25° | |
| 6 | 68-88 | 71-93 | | 3.05 | 2.36 | | |
| | | | | 0.74 | 0.74 | <p>Coal</p> <ul style="list-style-type: none"> - Very broken core. - Coal fragments dominantly hard & blocky, fractured along bedding - Banding near base of interval - 83° TCA - Bottom 5 cm of friable, blocky coal + carbonaceous mudstone. | |
| | | | | 1.62 | 2.36 | <p>Mudstone</p> <ul style="list-style-type: none"> - Med green-grey, soft - Lighter beige grey concretions < 1cm (possibly worm burrows?) - Weakly calcareous concretions | |
| TOTALS | | | | | | <p>÷ x 100 = % REC. SEAM</p> <p>÷ x 100 = % TOTAL REC. SEAM(S)</p> | |

COREHOLE LOG

HOLE NUMBER: 94-05
PAGE 6 OF 6

| CORE No. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|----|-------|-----------|-------|---|------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| X | X | X | | X | | | |
| 6 | | | | | | mudstone (cont'd.) - Mudstone non-calcareous. - Top contact with coal broken over 5-10 cm. - Upper 80 cm of soft mudstone with crush zone at 70-80 cm. with minor slips - Core becoming more competent down section - Faint weak bedding at 85-90° TCR End of core. | |
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| | | | | | | | |
| X | TOTALS | | | X | | ÷ x 100 = % REC. SEAM ÷ x 100 = % TOTAL REC. SEAM(S) | X |

COREHOLE LOG

HOLE NUMBER: 94-06

PAGE 1 OF 3

Logged By: J. Lehtinen

S.S.
1.0m

| CORE No. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH | |
|----------|---------------|-------|-------|-----------|-------|---|--------------|---------|
| | DRILLED | | | RECOVERED | | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | | |
| X | X | X | | X | | | | |
| 1 | 68.58 | 71.62 | 3.04 | 3.08 | 3.08 | | | |
| | | | | 3.08 | 3.08 | Sandstone | | |
| | | | | | | Med-light green-grey | | |
| | | | | | | - Coarse grained, minor pebbly sections | | |
| | | | | | | - Minor carbonaceous mud laminae | | |
| | | | | | | < 1.0 cm | | |
| | | | | | | - Clast composition dominantly | | |
| | | | | | | doleritized mafic volcanics. | | |
| | | | | | | - Distinct white calcite clasts + pebbles | | |
| | | | | | | - Calcareous cement | | |
| | | | | | | - Overall = Moderate to strongly | | |
| | | | | | | calcareous. | | |
| | | | | | | - Carbonaceous laminae 79° TCA @ 0.75m | | |
| | | | | | | 68° TCA @ 1.90m 72° TCA @ 2.50m | | |
| | | | | | | - Fracturing (Parting) commonly along | | |
| | | | | | | mud/sand contacts + along | | |
| | | | | | | indistinct bedding @ ≈ 80-90° TCA | | |
| | | | | | | 10 fractures/m. | | |
| 2 | 71.62 | 74.67 | 3.05 | 2.89 | 2.89 | | | |
| | | | | 0.29 | 0.29 | Sandstone | | |
| | | | | | | - As above | | |
| | | | | | | - Basal 5 cm - med-light brown-grey | | |
| | | | | | | (FeCO ₃ ? cement) + carbonaceous inclusions | | |
| | | | | | | - Sharp contact with - coal. | | |
| | | | | 0.07 | 0.36 | Coal | | |
| | | | | | | Bright hard coal inclusion | | |
| | | | | | | Top contact ≈ 70-75° TCA | | |
| | | | | | | - Calcite on fractures | | |
| X | TOTALS | | | X | | ÷ x 100 = | % REC. | SEAM |
| | | | | | | ÷ x 100 = | % TOTAL REC. | SEAM(S) |

COREHOLE LOG

HOLE NUMBER: 94-06

PAGE 2 OF 3

| CORE No. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|----|-------|-----------|-------|--|------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| X | X | X | | X | | | |
| 2 | | | | 1.56 | 1.92 | <p>Siltstone</p> <p>med-dark green-grey</p> <p>Fine grained siltstone to mudstone</p> <p>- Broken top contact with minor slips</p> <p>- Faint bedding 75° TCA @ 0-20m</p> <p>Bedding becoming indistinct downsection</p> <p>- Incompetent core, fractures easily across core axis. Fractures 20-25/m to 73°</p> <p>- Minor brown concretions</p> <p>- Basal: 30 cm of platy/fragile mudstone with minor slip surfaces</p> <p>- Sharp basal contact - 78° TCA</p> <p>- Non-calcareous</p> | |
| | | | | 0.97 | 2.89 | <p>Coal No. 1 Seam</p> <p>Blocky hard coal.</p> <p>- Banding at 85° TCA.</p> <p>- Calcite on cleat & in minor "cracklet texture" zone Calcite < 0.1%</p> <p>- Weak Fault polishing @ 57° TCA @ 0.73m</p> <p>- Broken coal 0.64 - 0.97m</p> | |
| | | | | | | * Mud band 1.0 cm 0.65 - 0.66cm | |
| X | TOTALS | | | X | | <p>÷ x 100 = % REC. SEAM</p> <p>÷ x 100 = % TOTAL REC. SEAM(S)</p> | X |

COREHOLE LOG

HOLE NUMBER: 94-06

PAGE 3 OF 3

| CORE No. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|-------|-------|-----------|-------|---|------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| X | X | X | | X | | | |
| 3 | 74.67 | 77.72 | 3.05 | 2.45 | 2.45 | | |
| | | | | 1.18 | 1.18 | Coal | |
| | | | | | | Strongly broken coal over top 0.68 m becoming moderately broken over balance of section. | |
| | | | | | | - Calcite on cleat & in "crackle texture" in discrete bands up to 3.0 cm. | |
| | | | | | | - Amber common @ 0.35 - 0.60 m | |
| | | | | 0.03 | 1.21 | - Bone Coal | |
| | | | | | | - Gritty, silty coal. | |
| | | | | 0.57 | 1.76 | Coal | |
| | | | | | | - Broken along banding - 85-90° TCA @ 730/m | |
| | | | | | | - Calcite on cleat & weak crackle texture | |
| | | | | | | - Weak fault polished slip @ 83° TCA @ 0.54 m | |
| | | | | 0.07 | 1.80 | Bone Coal | |
| | | | | 0.19 | 1.99 | Coal | |
| | | | | | | - Minor fault slip @ 0.10 m @ 77° TCA | |
| | | | | | | - Calcite in crackle texture along cleat | |
| | | | | | | - Basal contact sharp with carbonaceous mudstone 85-90° TCA. Pkly contact | |
| | | | | 0.46 | 2.45 | Mudstone grading downsection to S. Helene | |
| | | | | | | - Med green grey. | |
| | | | | | | - Minor slips in broken core | |
| | | | | | | - Most prominent slip @ 25° TCA. | |
| | | | | | | - Non-Calcareous | |
| X | TOTALS | | | X | | ÷ x 100 = % REC. | SEAM |
| | | | | | | ÷ x 100 = % TOTAL REC. | SEAM(S) |

COREHOLE LOG

Logged By: J. Lehtinen

HOLE NUMBER: 94-07

PAGE 1 OF 11

| CORE No. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|-------|-------|-----------|-------|--|------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| X | X | X | | X | | | |
| 1 | 32.00 | 35.05 | 3.05 | 2.79 | | | |
| | | | | 0.33 | 0.33 | Muddy Coal - Basal Portion #2 Seam - Dirty coal with numerous mudstone bands from 1mm to 2cm: (top of core) - Banding 80° TCA + 78° TCA - Calcite on float. | |
| | | | | 0.05 | 0.38 | Coaly Mudstone Dark carbonaceous mudstone with < 3mm coal bands - Upper + Lower contacts @ 83° TCA | |
| | | | | 2.41 | 2.79 | Mudstone - Med brown-grey - Soft - Bedding poorly defined or disrupted - Coal lenses & laminae along bedding at 78° + 82° TCA. Lenses up to 2cm - Pyrite (Marcasite?) throughout as fracture infill & replacement(?) as nodules < 0.5 cm. - Pyrite content from 0-3% - Strongly broken zone from 0.37 to 0.57 m. Showing fault slips - Core competency poor from 0-1.10 m moderate from 1.10 - 2.41 m - Core broken along coal bands & laminae @ ≈ 80° TCA. | |
| X | TOTALS | | X | | | ÷ x 100 = % REC. SEAM ÷ x 100 = % TOTAL REC. SEAM(S) | X |

COREHOLE LOG

HOLE NUMBER: 94-07

PAGE 2 OF 11

| CORE NO. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|-------|-------|-----------|-------|---|------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| 2 | 35.05 | 38.10 | 3.05 | 2-84 | | | |
| | | | | 0.38 | 0.38 | Mudstone | |
| | | | | | | As above. | |
| | | | | | | - Gradational contact into siltstone below | |
| | | | | | | - weak slips & polishing along carbonaceous laminae @ 86° TCA | |
| | | | | 0.57 | 0.95 | Siltstone | |
| | | | | | | - med-dk drab green grey | |
| | | | | | | - weakly bedded with coal laminae ~ 85-90° TCA. | |
| | | | | | | - non calcareous | |
| | | | | | | - Basal contact faulted @ 38° TCA. | |
| | | | | | | - 4.5cm fault zone with weak slides on discrete fault plane | |
| | | | | 1.30 | 2.25 | Sandstone | |
| | | | | | | - Med green grey | |
| | | | | | | - Fine grained to silty becoming coarser grained down section | |
| | | | | | | - Gradational basal contact into coarser sandstone. | |
| | | | | | | - Numerous beds + mottled sections due to muddy sandstone bands and "ironstone" concretions | |
| | | | | | | - Overall = moderately calcareous | |
| | | | | | | - Bedding 81° TCA | |
| | | | | | | - Weak fault Plane 27° TCA, @ 0.56m | |
| | TOTALS | | | | | ÷ x 100 = % REC. | SEAM |
| | | | | | | ÷ x 100 = % TOTAL REC. | SEAM(S) |

COREHOLE LOG

HOLE NUMBER: 74-07
PAGE 3 OF 11

| CORE No. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|-------|-------|-----------|-------|---|------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| X | X | X | | X | | | |
| 2 | cont'd | | | 0-59 | 2-84 | <p>Sandstone</p> <ul style="list-style-type: none"> - med-light grey - med grained - Minor coaly mudstone & mudstone laminae @ 79+81° Avg. 80° TCF. - Coarser sandstone = moderately calcareous. | |
| 3 | 38.10 | 41.15 | 3.05 | 2-89 | 1-57 | <p>Sandstone</p> <ul style="list-style-type: none"> - med-light grey, green-grey - Grading downsection from med. to coarse grained. - Minor pebbles near basal contact. - Clasts dominantly - altered chloritized volcanic tuffaceous quartz, feldspar? & clay altered material - Cement = Calcite - Med to strongly calcareous - Distinct calcite pebbles & coarse clasts in basal section - Sharp basal contact, irregular - Weak parting along carbonaceous laminae | |
| | | | | 1-32 | 2-89 | <p>Siltstone</p> <ul style="list-style-type: none"> - Drab med-dark green-grey silty mudstone & siltstone - Core of poor competency. Zones strongly broken with fault slips from 0.0 - 0.48m | |
| X | TOTALS | | | X | | <p>÷ x 100 = % REC. SEAM</p> <p>+ x 100 = % TOTAL REC. SEAM(S)</p> | X |

COREHOLE LOG

HOLE NUMBER: 74-07

PAGE 4 OF 11

| CORE No. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|-------|-------|-----------|-------|---|------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| X | X | X | | X | | | |
| 3 | cont'd | | | | | - weakly calcareous "Ironstone" concretions - Brown-grey in color up to 4cm width | |
| 4 | 41.15 | 44.19 | 3.05 | 3.00 | | | |
| | | | | 1.81 | | Siltstone - med green-grey with darker brown-grey beds + laminae of muddy-silt/or "ironstone" concretion zones - Weak to moderately calcareous in coarser units - Muddy silt in top 0.5 m grading into sandy silt toward base of interval - Minor carbonaceous material - Bedding avg = 75° TCA. - Core broken @ 10-15/m - Basal Contact appears ≈ 85-90° TCA. | |
| | | | | 1.19 | 3.00 | Sandstone - Med-light green-gray - med-coarse grained - Clasts dominantly chloritized mafic volcanics with lesser feldspar, quartz, clay altered fragments, sedimentary fragments, calcite - Calcite cement - Strongly calcareous - Core broken along very minor carbonaceous material @ 8/m. | |
| X | TOTALS | | | X | | ÷ x 100 = % REC. SEAM ÷ x 100 = % TOTAL REC. SEAM(S) | X |

COREHOLE LOG

HOLE NUMBER: 94-07

PAGE 5 OF 11

| CORE No. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|-------|-------|-----------|-------|---|------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| X | X | X | | X | | | |
| 5 | 44.19 | 47.24 | 3.05 | 2.87 | | | |
| | | | | 1.30 | 1.30 | Sandstone - Med-light green-grey - Med-coarse grained - See description above - Core broken @ 10-15 fractures/m commonly along carbonaceous inclusions or laminae - Strongly calcareous - Calcareous cement - Basal contact gradational with soft sediment loading structures | |
| | | | | 1.32 | 2.62 | Siltstone med-dark drab green-grey with brown-grey mottled sections - Mottling = Ironstone concretions - Silt grading from fine to coarse from bottom to top of section - Weak bedding @ 81° TCB @ 1.22m - Coal Broken along carbonaceous laminae @ ~10 fractures/m - Weakly calcareous | |
| | | | | 0.25 | 2.87 | Mudstone - med-dark drab green-grey silty mudstone - Strongly broken core - Minor mud slip planes | |
| X | TOTALS | | | X | | ÷ x 100 = % REC. SEAM ÷ x 100 = % TOTAL REC. SEAM(S) | X |

COREHOLE LOG

HOLE NUMBER: 94-07

PAGE 6 OF 11

| CORE No. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|-------|-------|-----------|-------|---|------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| X | X | X | | X | | | |
| 6 | 47.24 | 50.29 | 3.05 | 2.86 | | | |
| | | | | 1.30 | 1.30 | Mudstone | |
| | | | | | | Med-dark drab green-grey -grading down section into med-dark brown-grey. Color change relates to carbonaceous content. | |
| | | | | | | - Minor silt throughout | |
| | | | | | | - Basal 25 cm with increasing coal inclusions + laminae | |
| | | | | | | - laminae @ 81° TCA | |
| | | | | | | - Basal contact sharp @ 87-90° TCA | |
| | | | | | | - Med. competent core, broken @ 8-10 fractures/m | |
| | | | 0.50 | 1.80 | | Coal | |
| | | | | | | Well banded, bright coal, muddy laminae in top 10 cm. | |
| | | | | | | - Banding @ 88° TCA | |
| | | | | | | - Mudstone band from 0.42 - 0.44 m | |
| | | | | | | - Broken along banding 15-20 fract/m | |
| | | | | | | - Minor calcite on cleat | |
| | | | | | | - Basal contact irregular plane with fault polishing (minor slip) | |
| | | | | 1.06 | 2.86 | Mudstone | |
| | | | | | | - Med brown-grey | |
| | | | | | | - Coal laminae + lenses common | |
| | | | | | | - Soft core | |
| | | | | | | - Core broken along carbonaceous laminae @ 10-15/m | |
| | | | | | | - Minor fault slip @ 82° TCA @ 0.57m | |
| X | TOTALS | | | X | | ÷ x 100 = % REC. | SEAM |
| | | | | | | ÷ x 100 = % TOTAL REC. | SEAM(S) |

COREHOLE LOG

HOLE NUMBER: 94-07

PAGE 9 OF 11

| CORE No. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|-------|-------|-----------|-------|---|------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| X | X | X | | X | | | |
| 9 | 56.39 | 59.43 | 3.04 | 2.60 | | | |
| | | | | 0.94 | 0.94 | Mudstone - Silty - As above - Commonly broken along carbonaceous laminae. - Carbonaceous material irregularly occurring along bedding at 85-90° TCA - Coalified lenses with "crackle" texture, fine calcite stringers - Ironstone concretions - lighter brown-gray - Mudstone non-calcareous - Overall = weakly calcareous - Core broken along bedding laminae @ 2.5 to 7.30 fractures/m - Basal contact sharp but broken core | |
| | | | | 1.23 | 2.17 | Coal No. 1 Seam - Brittle, Bright coal - Extremely broken during core recovery - Calcite prominent along cleat and in "crackle" texture bands. Also minor (< 1mm) discontinuous stringers in fractures sub-parallel TCA. - Bedding 86° TCA | |
| | | | | 0.06 | 2.23 | - Bone Coal - silty - gritty appearance coal + silt. clasts - Basal contact 84° TCA. | |
| X | TOTALS | | | X | | ÷ x 100 = % REC. SEAM ÷ x 100 = % TOTAL REC. SEAM(S) | X |

7.5

COREHOLE LOG

HOLE NUMBER: 94-07

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| CORE No. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|-------|-------|-----------|-------|---|------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| X | X | X | | X | | | |
| 9 | Cont'd. | | | 0-02 | 2-25 | Coal | |
| | | | | 0-06 | 2-31 | Coaly Mudstone Interbedded coal & mudstone laminae - Polished slip surfaces along mudstone - coal contact. | |
| | | | | 0-29 | 2-60 | Coal - Bright, banded. - Banding @ 83° TCA. - Calcite common on cleat surfaces - weak fault slip in coal @ 25° TCA near base of interval. | |
| 10 | 59-43 | 62-48 | 3-05 | 1-75 | 1-75 | | |
| | | | | 0-41 | 0-41 | Coal - Bright, Brittle, banded - Banding @ 86° TCA - Commonly broken along banding - weak fault slip along banding @ 0.08m - Calcite common on cleat surfaces & in crackle texture - Minor amber in basal section | |
| | | | | 0-01 | 0-42 | Mudstone | |
| | | | | 0-02 | 0-44 | Coal | |
| | | | | 0-03 | 0-47 | Mudstone | |
| | | | | 0-82 | 1-29 | Coal Bright, brittle - moderately broken along banding and along weak slips @ 0.51m - 63° TCA & 0.66m ~ 90° TCA - Calcite common on cleat. | |
| X | TOTALS | | | X | | ÷ x 100 = % REC. SEAM | X |
| | | | | | | ÷ x 100 = % TOTAL REC. SEAM(S) | X |

COREHOLE LOG

HOLE NUMBER: 94-07
 PAGE 11 OF 11

| CORE No. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|----|-------|-----------|-------|--|-----------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| X | X | X | | X | | | |
| 10 | Cont'd | | | | | - Broken basal contact with carbonaceous mudstone | |
| | | | | 0.06 | 1.35 | Mud Unlithified light beige-grey mud | |
| | | | | 0.27 | 1.62 | Mudstone Med green-grey - Severely crushed | |
| | | | | 0.13 | 1.75 | mudstone - Med-light brown to brown-grey - Coal lenses + inclusions - Extremely broken into discs with fault polishing ^{+ slickensides} on all fracture surfaces - Fault slips at approximately 70-90° to D | |
| X | TOTALS | | | X | | ÷ x 100 = % REC. ÷ x 100 = % TOTAL REC. | SEAM SEAM(S) |

COREHOLE LOG

HOLE NUMBER: 94-016

PAGE 1 OF 3

Logged By: J. Lehtinen

| CORE No. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|--------|-------|-----------|-------|---|------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| X | X | X | | X | | | |
| D | | | | | | Note: Top of No. 1 seam percussion drilled → No Core | |
| D | 152.39 | 155.44 | 3.05 | 2.81 | | | |
| | | | | 0.85 | 0.85 | Coal | |
| | | | | | | Blocky, brittle coal | |
| | | | | | | - Banding @ 85-90° TCB. | |
| | | | | | | - Calcite common on cleat & along | |
| | | | | | | 1mm stringers at 10-20° TCB. | |
| | | | | | | Calcite in bands of "crackle texture" | |
| | | | | | | - Core broken along banding | |
| | | | | | | - 0.5 cm mudstone band 1cm above base | |
| | | | | | | - Basal contact sharp & interbedded with mudstone | |
| | | | | 0.07 | 0.92 | Mudstone | |
| | | | | | | - Med-dark grey-brown | |
| | | | | | | - Minor coal inclusions | |
| | | | | | | - Basal contact fault polished 85° TCB. | |
| | | | | 0.98 | 1.90 | Coal | |
| | | | | | | - Blocky, brittle | |
| | | | | | | - Banded @ 83° TCB. | |
| | | | | | | - Fine amber along bedding (0.5mm) | |
| | | | | | | - Calcite common on cleat surfaces | |
| | | | | | | (cont'd.) | |
| X | TOTALS | | | X | | ÷ x 100 = % REC. | SEAM |
| | | | | | | ÷ x 100 = % TOTAL REC. | SEAM(S) |

COREHOLE LOG

HOLE NUMBER: 94-016

PAGE 2 OF 3

| CORE No. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|----|-------|-------------------|-------|--|---------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| ⊗ | ⊗ | ⊗ | | ⊗ | | | |
| ① | Cont'd | | | 0.98 (cont'd.) | 1.90 | Faulting @ 57° TCA @ 0.68 m @ 38° TCA @ 0.94 m. Polished fault planes & minor associated faults - Calcite stringing - greatly increased below upper fault. - Basal contact 83° TCA | |
| | | | | 0.24 | 2.14 | Mudstone - Med-light grey-brown mudstone - Minor coal lenses & laminae - Soft, relatively incompetent - Strongly broken along carbonaceous laminae | |
| | | | | 0.05 | 2.19 | Coal fault across basal contact - @ 38° TCA. | |
| | | | | 0.06 | 2.25 | Mudstone Coaly mudstone - dark brown-black - Friable, platy basal contact | |
| | | | | 0.48 | 2.73 | Coal - Blocky coal - Fine mud laminae near top. - Calcite common on cleat - Minor amber | |
| ⊗ | TOTALS | | | ⊗ | | ÷ x 100 = % REC. SEAM ÷ x 100 = % TOTAL REC. SEAM(S) | ⊗ |

COREHOLE LOG

HOLE NUMBER: 94-016
PAGE 3 OF 3

| CORE No. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|----|-------|------------------|-------|--|---------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| X | X | X | | X | | | |
| | | | | 0-48 (Cont'd) | | - Crackle texture calcite stringing - Thinly bedded basal 2cm. - Interbedded basal contact with carbonaceous mudstone. | |
| | | | | 0-04 | 2-77 | Carbonaceous Mudstone. - Thin bedded carbonaceous mudstone broken into carbonaceous mud near basal contact | |
| | | | | 0-04 | 2-81 | Mudstone - light - med. grey brown - Flakey, broken, incompetent | |
| X | TOTALS | | | X | | ÷ x 100 = % REC. SEAM ÷ x 100 = % TOTAL REC. SEAM(S) | X |

COREHOLE LOG

HOLE NUMBER: 94-17
PAGE 1 OF 1

Logged By: M. Cullen

| CORE No. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|--------|-------|-----------|-------|---|------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| X | X | X | | X | | | |
| | 143.56 | 146.61 | 3.05 | 2.50 | 2.50 | | |
| | | | | 6.15 | 6.15 | COAL - SILTY | |
| | | | | | | THIN UNDLATING BEDDING FRIABLE | |
| | | | | | | V. BROKEN | |
| | | | | 2.35 | 3.05 | SILTSTONE MED GREY HARD | |
| | | | | | | MEDIUM EFFERESCENCE | |
| | | | | | | CARBONACEOUS BEDDING TOP 0.2M | |
| | | | | | | JOINTS 70° TLA 0.3M SPACING | |
| | | | | | | BEDDING BREAKS ~ 0.25M (MANY DRILLING INDICED) | |
| | | | | | | 2 JOINTS 11 TLA | |
| | | | | | | POSSIBLE FAULT OR SOFT SILTSTONE | |
| | 146.61 | 149.66 | 3.05 | 2.70 | 2.70 | COAL #1 SEAM | |
| | | | | | | HARD BLOCKY | |
| | | | | | | BREAKS ~ 0.1M SPACING | |
| | | | | | | WELL DEVELOPED CLEFT | |
| | | | | | | CALCITE ON CLEFT AND BEDDING | |
| | | | | | | BEDDING 85° TLA | |
| | | | | | | CALCITE INCREASING WITH DEPTH | |
| | | | | | | BELOWING, SILTY BOTTOM 0.5M | |
| | | | | | | OR SLICKENSIDES | |
| | | | | | | 1 JOINT 45° TLA AT 2.7 m | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| X | TOTALS | | | X | | ÷ x 100 = % REC. SEAM | |
| | | | | | | ÷ x 100 = % TOTAL REC. SEAM(S) | X |

COREHOLE LOG

HOLE NUMBER: 94-18G
PAGE 1 OF 7

Logged By: S. Gardner

| CORE No. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|--------|-------|-----------|-------|--|------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| X | X | X | | X | | | |
| 1 | 92.96 | 96.01 | 3.05 | 3.05 | | Sandstone: Med. grey; silty near top; coarsening downward (fine to medium grained). Moderately effervescent throughout. Calcareous detrital zones at 93.8 - 95.14, especially at base of this unit: siltstone clasts near base at 95.0 - 95.14; Medium grained sandstone unit at base is lithic, with greenish tinge (chloritic). Core is broken along bedding planes; sandstone is medium hard. | |
| 2 | 96.01 | 99.03 | 3.02 | 2.88 | | Sandstone: Med. grey; medium grained; coarsening near base; core is broken along bedding planes but no structures indicated; slight to moderate effervescence throughout; lithic (as above unit); clasts of root material at 98.49 (pyritized). Occasional small siltstone clasts. | |
| 3 | 99.03 | 101.00 | 2.98 | 3.08 | | Sandstone: Same as above; med. grey, uniform; only very slight effervescence; Mudstone: Dark brown to black; coaly stringers and carbonaceous zones throughout; no effervescence | |
| | | | | 2.35 | | | |
| | | | | .32 | | | |
| X | TOTALS | | | X | | ÷ x 100 = % REC. SEAM | |
| | | | | | | ÷ x 100 = % TOTAL REC. SEAM(S) | X |

COREHOLE LOG

HOLE NUMBER: 94-18G
PAGE 2 OF 7.

| CORE No. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|--------|-------|-----------|-------|--|------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| X | X | X | | X | | | |
| | | | | .37 | | medium brown streak ; soft sections ; fissile ; COAL : No. 2 SEAM Blocky and bright ; very minor pyritic laminae ; calcite on cleat surfaces ; occasional nodules of amber up to 2 mm. Conchoidal fractures near base ; | |
| 4 | 102.11 | 104.87 | 2.76 | 2.72 | | | |
| | | | | .04 | | Lost core at top | |
| | | | | 1.15 | | Mudstone : Med. brown with some lighter coloured zones (silty) ; thin carbonaceous intervals with coaly laminae ; no effervescence ; pyritic laminae evident ; | |
| | | | | 1.57 | | Siltstone : medium grey ; muddy sections ; some coaly clasts ; no effervescence ; pyritic nodules evident throughout ; slightly harder than above unit but minor fracturing along fissile sections. | |
| 5 | 105.16 | 108.20 | 3.04 | | | | |
| | | | | 1.74 | | Siltstone : as above ; no effervescence ; some brownish sections ; occasional coal clasts ; High angle fracture at 106.90 m. with minor slickensides | |
| X | TOTALS | | | X | | ÷ x 100 = % REC. SEAM | |
| | | | | | | ÷ x 100 = % TOTAL REC. SEAM(S) | X |

COREHOLE LOG

HOLE NUMBER: 94-18G
PAGE 3 OF 7

| CORE NO. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|--------|-----------|-----------|-------|---|------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| X | X | X | | X | | | |
| | | | | 0.99 | | Siltstone: Med. brownish grey; very muddy sections; softer; fractured, slickensided intervals near base; no effervescence; | |
| | | | LOST CORE | 0.28 | | | |
| | | | | 0.13 | | Siltstone: Harder; Slight effervescence; Medium grey. | |
| 6 | 108.20 | 111.25 | 3.05 | | 3.10 | | |
| | | | | .85 | | Siltstone: Same as above; hard with lighter coloured greenish tinge; slight effervescence; | |
| | | | | 1.42 | | Siltstone: Muddy sections; med grey to brownish; occasional coal clasts with abundant calcite; wet zones | |
| | | | | .25 | | Mudstone: Soft; med brown to black; carbonaceous; highly fissile; no effervescence. | |
| | | | | .58 | | Siltstone: med. grey; fairly hard; slight to moderate effervescence. | |
| 7 | 111.25 | 114.3 | 3.05 | | 2.9 | | |
| | | | | .25 | | SILTSTONE: MED GREY NO EFFERVESCENCE | |
| | | | | .68 | | MUDSTONE: SOFT BROWN-BLACK CARBONACEOUS FISSILE, CALCITE ON CLEFT, V. BROKEN | |
| | | | | 1.97 | | SILTSTONE: MED GREY, 0-SLIGHT EFFERVESCENCE BEDDING 75° TCA CARBONACEOUS BANDING ON BEDDING UPTO 0.02m OIL CALCITE VEINS IN CARBONACEOUS BANDING | |
| X | TOTALS | | | X | | ÷ x 100 = % REC. SEAM ÷ x 100 = % TOTAL REC. SEAM(S) | X |

COREHOLE LOG

HOLE NUMBER: 94-18 G
PAGE 4 OF 7

Logged By : M. Cullen

| CORE No. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|--------|-------|-----------|-------|---|------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| X | X | X | | X | | | |
| 8 | 114.3 | 117.35 | 3.05 | | 3.05 | | |
| | | | | .6 | | SANDY SILTSTONE MED GREY BEDDING 80-85° TCA NO EFFERVESCENCE CORE BREAKS ON BEDDING AND 90° TCA TYP 5-10 CM SPACING | |
| | | | | .11 | | SANDSTONE: LT GREY BROWN, MED GRAIN MED-GOOD EFFERVESCENCE CONTACT AT 70° TCA | |
| | | | | 2.85 | | SILTY SANDSTONE: GREEN-GREY WITH OIL BROWN RED BANDING, FINE GRAIN NO EFFERVESCENCE BEDDING 75-85 TCA CORE BREAKS 90° TCA @ 10-15 CM INTERVALS | |
| | | | | .06 | | SANDSTONE: LT BROWN GREY MED-GOOD EFFERVESCENCE | |
| | | | | 1.43 | | SANDSTONE: FINE-MED. GRAIN, SIZE INCREASING WITH DEPTH, 0 - SLIGHT EFFERVESCENCE BEDDING 80-85° TCA BEDDING THICKNESS .005 - .005 DARK GREY WITH OIL. RED-BROWN BEDS | |
| 9 | 117.35 | 127.4 | 3.05 | | 3.00 | SANDSTONE: MED GREY OIL LT BROWN DK. GREY BANDING, MED GRAIN, GRAIN SIZE INCREASING WITH DEPTH OIL. CALCITE BANDING GOOD EFFERVESCENCE LT BROWN BANDS EFFERVESCENCE 85% OF CORE CORE BREAKS ON BEDDING: 90° TCA 5-15 CM BEDDING 80-85° TCA | |
| X | TOTALS | | | X | | ÷ x 100 = % REC. SEAM ÷ x 100 = % TOTAL REC. SEAM(S) | X |

COREHOLE LOG

HOLE NUMBER: 94-186
PAGE 5 OF 7

| CORE No. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|--------|-------|-----------|-------|---|------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| X | X | X | | X | | | |
| 10 | 121.4 | 124.45 | 3.05 | .2 | 3.05 | | |
| | | | | .56 | | SANDSTONE: MED GREY OIL DK GREY; BROWN AND LT BROWN BANDS. MED GRN EFFERVESCENCE LT BROWN ONLY | |
| | | | | | | BEDDING 85° TLA MED HARD | |
| | | | | | | CORE BREAKS 85°-90° TLA 5-10 cm SPACING | |
| | | | | 2.46 | | SILTY SANDSTONE: DARK GREY WITH BROWN, LT GREY, BLACK BANDING | |
| | | | | | | EFFERVESCENCE LT. BROWN ONLY (10% CORE) | |
| | | | | | | HARD | |
| | | | | | | CORE BREAKS 80-90° TLA 3-15 cm SPACING | |
| | | | | | | 1 JOINT 25° TLA @ 2.04 | |
| 11 | 124.45 | 127.5 | 3.05 | | 3.00 | | |
| | | | | .19 | | SILTY SANDSTONE | |
| | | | | | | AS ABOVE, INCREASING SILT | |
| | | | | .39 | | SILTSTONE: MED-DK GREY MED HARD | |
| | | | | | | SLIGHT EFFERVESCENCE | |
| | | | | | | 2 JOINTS 25° TLA | |
| | | | | | | BEDDING 85° TLA | |
| | | | | .43 | | SILTSTONE + GOUGE FAULT ZONE | |
| | | | | | | BUBBLE, SLICKENSIDES | |
| | | | | 2.04 | | SILTSTONE: MED GREY, MED HARD | |
| | | | | | | OIL CARBON ACEOUS + CALCITE ON BEDDING | |
| | | | | | | SLIGHT EFFERVESCENCE | |
| | | | | | | 2 JOINTS 45° TLA @ 1.7 1.85 GOUGE + SLICKS | |
| | | | | | | BEDDING 85° TLA | |
| | | | | | | CORE BREAKS MOSTLY 90° TLA | |
| X | TOTALS | | | X | | ÷ x 100 = % REC. | SEAM |
| | | | | | | ÷ x 100 = % TOTAL REC. | SEAM(S) |

COREHOLE LOG

HOLE NUMBER: 94-186
PAGE 6 OF 7

| CORE No. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|--------|-------|-----------|-------|---|------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| X | X | X | | X | | | |
| 12 | 126.49 | 129.54 | 3.05 | 2.20 | 2.20 | COAL #1 SEAM | |
| | | | | 0.06 | 0.06 | V. SILTY CONTACT PROBABLE CORE LOSS | |
| | | | | 2.0 | 2.06 | COAL - HARD - BRIGHT CALCITE ON CLEFT CALCITE ON BEDDING BEDDING ~ 86° TLA FRAC. ON BEDDING ~ 0.1m SPACING | |
| | | | | 0.1 | 2.16 | CARBONATIOUS MUDSTONE SOFT, SILICIFIED | |
| | | | | 0.04 | 2.20 | COAL DULL BONEY BASAL CONTACT ~ 85 TLA | |
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| X | TOTALS | | | X | | ÷ x 100 = % REC. SEAM + x 100 = % TOTAL REC. SEAM(S) | X |

COREHOLE LOG

HOLE NUMBER: 94-186
 PAGE 7 OF 7.

| CORE No. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|--------|-------|-----------|-------|--|-----------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| X | X | X | | X | | | |
| 13 | 129.54 | 135.29 | 3.05 | ? | 2.20 | | |
| | | | | 0.30 | | SILTSTONE MED BROWN - GREY RUBBLE, ALL SMOOTH (SLICKED) SURFACES NO EFFERESCENCE | |
| | | | | 0.5 | | SILTSTONE LT BROWN - GREY BEDDING 85° SLA ALL POLISHED (SLICKED) SURFACES V. FINE BEDDING, - NO EFFERVESCEANCE FRAC ON BEDDING ~ 0.07M SPACING | |
| | | | | 1.20 | | SILTY SANDSTONE, HARD, MED GREY SLIGHT EFFERVESCEANCE BROKEN ON BEDDING - ROUGH, IRREGULAR | |
| | | | | 0.40 | | SILTSTONE GREY BROWN BROKEN ON BEDDING - INDICATING ROUGH NO EFFERVESCEANCE | |
| 14 | | | | | | | |
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| X | TOTALS | | | X | | ÷ x 100 = % REC. ÷ x 100 = % TOTAL REC. | SEAM SEAM(S) |

COREHOLE LOG

HOLE NUMBER: 94-29
PAGE 1 OF 2

Logged By: M. Cullen

| CORE No. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|--------|-------|-----------|-------------|--|------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| X | X | X | | X | | | |
| 1 | 105.16 | 108.21 | 3.05 | | 2.49 | SANDSTONE MEDIUM GRAIN MAFIC MINERALS MEDIUM-STRONG EFFERESCENCE OIL SILT CLAST UNCLASTING BEDDING 70-85° TCA V. FRAC SUB-PARALLEL TO BEDDING OIL AREAS OF RUBBLE AND SANDY GORGE FRAC SURFACES ROUGH IRREGULAR PROBABLY DUE TO POOR DRILLING | |
| 2 | 108.21 | 111.26 | 3.05 | | EST 2.30 | SANDSTONE MEDIUM GRAIN THIN BEDDING AT, DR, MD. MEDIUM-STRONG EFFERESCENCE TR. CALCITE IN BEDDING (25-90° TCA) CALCITE STRINGS 2mm - 11 TCA @ 1.3m CORE V. BROKEN AND WORN - PROBABLY DUE TO DRILLING TECHNIQUE CROSS BEDDING 45° TCA AT 1.15m | |
| 3 | 111.26 | 114.31 | 3.05 | | 1.15 | SANDSTONE, GRADING TO SANDSTONE WITH THINLY INTERBEDDED SILT, GRADING TO SILTSTONE (PRIMARY GORGE) NOT POSSIBLE TO DETERMINE DEPTH BOUNDARIES CORE V. BROKEN AND WORN. DUE TO DRILLING TECHNIQUE AND PROBABLE FAULT (UP TO 1.2m THICK) AT END OF RUN | |
| X | TOTALS | | | X | | ÷ x 100 = % REC. SEAM ÷ x 100 = % TOTAL REC. SEAM(S) | X |

COREHOLE LOG

HOLE NUMBER: 94-19
PAGE 2 OF 2

| CORE NO. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|---------|-------|-----------|-------|--|------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| X | X | X | | X | | | |
| 3 | 1174.31 | 1173.36 | 3.05 | | 2.6 | | |
| | | | | 0.3 | 0.3 | SILTSTONE, HARD MED GREY OIL SLICKENSIDES V. BROKEN BY DRILLING ≈ 5mm DISCS UNDERLYING BEDDING ≈ 85° TLA | |
| | | | | 0.7 | 2.3 | COAL #1 SEAM BRIGHT BLOCKY V BROKEN BY DRILL. AMBER? 11 TLA TOP 0.8m RUBBLE AT 1.0m AND 2.1m CLEAT WELL DEVELOPED 1.2-2.1 CALCITE ON CLEAT PULL CORE 2.1-2.6 | |
| 4 | 1173.36 | 120.41 | 3.05 | | 0.8 | | |
| | | | | 0.1 | | SILTY COAL SLICKENSIDED RUBBLE | |
| | | | | 0.7 | | SILTSTONE - GOUGE LIKE OIL COALY BANDS SLIGHT EFFERESCENCE | |
| X | TOTALS | | | X | | ÷ x 100 = % REC. SEAM ÷ x 100 = % TOTAL REC. SEAM(S) | X |

COREHOLE LOG

HOLE NUMBER: 94-20

PAGE 1 OF 3

Logged By: M. Cullen

| CORE No. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|--------|-------|-----------|-------|--|---------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| X | X | X | | X | | | |
| 1 | 115.82 | 118.87 | 3.05 | | 2.80 | | |
| | | | | .7 | | SILTSTONE DARK GREY MED. HARD FRAC. ON BEDDING UNDULATING ROUGH BEDDING 90-55° TLA | |
| | | | | .7 | | CARBONACEOUS SILTSTONE GREY-BLACK RUBBLE, SLICKENSIDED MGO EFFERESCENCE | |
| | | | | .4 | | COAL - SILTY RUBBLE SOFT CALCITE ON CLINT, OOL PYRITE | |
| | | | | .2 | | CARBONACEOUS SILTSTONE GREY BLACK RUBBLE SLIGHT EFFERESCENCE SOFT | |
| | | | | 1.2 | | CARBONACEOUS SILTSTONE MED. GREY FAULTS 2.0-0.5m @ 0.3, 0.195 NO EFFERESCENCE BEDDING @ 25° TLA COALY BANDS ON BEDDING OOL, SLICKENSIDE FRAC ON BEDDING 0.05 SPACING | |
| X | TOTALS | | | X | | ÷ x 100 = % REC. SEAM ÷ x 100 = % TOTAL REC. SEAM(S) | X |

COREHOLE LOG

HOLE NUMBER: 94-20
PAGE 3 OF 3

| CORE NO. | CORE FOOTAGES | | | | | GEOLOGICAL DESCRIPTION LITHOLOGY, COLOR, SIZE, TEXTURE, HARDNESS, SHEARING, CONTACTS, BEDDING ANGLE, ALTERATION, WETNESS, CONTAMINATION. | TRUE DEPTH |
|----------|---------------|--------|-------|-----------|-------|---|------------|
| | DRILLED | | | RECOVERED | | | |
| | FROM | TO | TOTAL | SECTION | TOTAL | | |
| X | X | X | | X | | | |
| 3 | 121.83 | 124.88 | 3.05 | | 2.30 | | |
| | | | | .25 | | SILTY COAL RUBBLE (FINE-MED) SLICKENSIDED, GOUGE | |
| | | | | .20 | | SILTSTONE RUBBLE (FINE-MED) SLICKENSIDED, GOUGE | |
| | | | | .15 | | SILTSTONE MED GREY MED-COURSE RUBBLE, SLICKENSIDES MED EFFERVESCENT BEDDING 90-85° TLA | |
| | | | | 1.35 | | SILTSTONE DARK GREY COURSE RUBBLE, POORLY DEV. SLICKS TR. CALCITE ON JOINTS SLIGHT TO MEDIUM EFFERVESCENT BEDDING 85-90 TLA MANY FRACTURES WITH IRREGULAR SURFACES | |
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| X | TOTALS | | | X | | ÷ x 100 = % REC. SEAM | |
| | | | | | | ÷ x 100 = % TOTAL REC. SEAM(S) | X |

Inspection District NANAIMO Date of Report SEPT. 30/94

Company QUINSAM COAL CORPORATION Land District COMEX

Drillhole Number QU-94-01 Licence Number _____

Number of Drillhole. 104340.599 N. - 101060.738 E.

Surface elevation 301.2 m

Type (Vertical, diamond, rotary, size etc.) VERTICAL, 15 cm., ROTARY

Drilled by: Name of Contractor DRILL WELL ENTERPRISES

Name of Exploration Company QUINSAM COAL CORPORATION

Date of completion JUNE 7, 1994

Date of Sealing SEPT. 29/94

Sealed by: Name of Contractor DRILL WELL ENTERPRISES

Name of Exploration Company QUINSAM COAL CORPORATION

(a) Has any casing, drill pipe, drill bits, core barrel, etc. been left in the hole? CASING

(b) If so, give details and location CASING FROM SURFACE TO 2.1 metres.

(a) Was the drillhole sealed in the manner outlined in the Chief Inspectors Instructions? YES

(b) If No, give reasons and details of variation.

(a) Was the sealing effective? Yes

(b) Details of any tests carried out. Visual inspection of concrete at collar.

I certify that the above drillhole has been effectively sealed in accordance with the instructions of the Chief Inspector of Mines.

Signature [Signature]

Designation Driller

Date Sept 30/94

Countersignature [Signature]

Designation MINE MANAGER

Date SEPT. 30/94

Inspection District NANAIMO Date of Report SEPT. 30/94

Company QUINSAM COAL CORPORATION Land District COMOX

Drillhole Number QU-94-02 Licence Number _____

Number of Drillhole. 103665.033 N - 100707.509 E

Surface elevation 304.0 m.

Type (Vertical, diamond, rotary, size etc.) VERTICAL 15cm ROTARY

Drilled by: Name of Contractor DRILL WELL ENTERPRISES LTD.

Name of Exploration Company QUINSAM COAL CORPORATION

Date of completion JUNE 8 /94

Date of Sealing SEPT. 29 /94

Sealed by: Name of Contractor DRILLWELL ENTERPRISES LTD.

Name of Exploration Company QUINSAM COAL CORPORATION

(a) Has any casing, drill pipe, drill bits, core barrel, etc. been left in the hole? YES

(b) If so, give details and location CASING TO 39.1 m.

(a) Was the drillhole sealed in the manner outlined in the Chief Inspectors Instructions? YES

(b) If No, give reasons and details of variation.

(a) Was the sealing effective? yes.

(b) Details of any tests carried out. Visual verification of concrete at collar.

I certify that the above drillhole has been effectively sealed in accordance with the instructions of the Chief Inspector of Mines.

Signature [Signature]

Designation Driller

Date Sept. 30 /94

Countersignature [Signature]

Designation MINE MANAGER

Date SEPT. 30 /94

Inspection District NANAIMO Date of Report SEPT. 30/94

Company QUINSAM COAL CORPORATION Land District COMOX

Drillhole Number QU-94-03 A Licence Number _____

Number of Drillhole. 103558.058 N - 100955.926 E

Surface elevation 283.1 m.

Type (Vertical, diamond, rotary, size etc.) VERTICAL 15cm ROTARY

Drilled by: Name of Contractor DRILLWELL ENTERPRISES LTD.

Name of Exploration Company QUINSAM COAL CORPORATION

Date of completion JUNE 11/94

Date of Sealing SEPT. 30/94

Sealed by: Name of Contractor DRILLWELL ENTERPRISES LTD.

Name of Exploration Company QUINSAM COAL CORPORATION

(a) Has any casing, drill pipe, drill bits, core barrel, etc. been left in the hole? YES

(b) If so, give details and location CASING TO 36.9 m.

(a) Was the drillhole sealed in the manner outlined in the Chief Inspectors Instructions? YES

(b) If No, give reasons and details of variation.

(a) Was the sealing effective? YES

(b) Details of any tests carried out. Arterian Flow Stopped
Visual verification of concrete at collar.

I certify that the above drillhole has been effectively sealed in accordance with the instructions of the Chief Inspector of Mines.

Signature [Signature]

Designation Driller

Date Sept 30/94

Countersignature [Signature]

Designation MINE MANAGER

Date SEPT. 30/94

Inspection District NANAIMO Date of Report SEPT. 30/94

Company QUINNSAM COAL CORPORATION Land District COMOX

Drillhole Number QU-94-03 B Licence Number _____

Number of Drillhole. 103555.0 N - 100952.0 E.

Surface elevation 283.0 m.

Type (Vertical, diamond, rotary, size etc.) VERTICAL ROTARY 15 cm.

Drilled by: Name of Contractor DRILLWELL ENTERPRISES LTD.

Name of Exploration Company QUINNSAM COAL CORPORATION

Date of completion ~~SEPT. 30/94~~ JUNE 14/94

Date of Sealing SEPT. 30/94

Sealed by: Name of Contractor DRILLWELL ENTERPRISES LTD.

Name of Exploration Company QUINNSAM COAL CORPORATION

(a) Has any casing, drill pipe, drill bits, core barrel, etc. been left in the hole? YES

(b) If so, give details and location 36.6 metres of casing from surface.

(a) Was the drillhole sealed in the manner outlined in the Chief Inspectors Instructions? YES

(b) If No, give reasons and details of variation.

(a) Was the sealing effective? Yes.

(b) Details of any tests carried out. Artesian Flow Stopped
Visual inspection of concrete at collar

I certify that the above drillhole has been effectively sealed in accordance with the instructions of the Chief Inspector of Mines.

Signature [Signature]

Designation Driller

Date Sept 30/94

Countersignature [Signature]

Designation MINE MANAGER

Date _____

Report on the Sealing of Drillholes

Inspection District NANAIMO Date of Report Dec. 15, 1994
Company QUINSAM COAL CORPORATION Land District COMOX
Casing by Number _____ Licence Number _____

1. Number of Drillhole. 94-04
2. Surface elevation _____
3. Type (Vertical, diamond, rotary size etc.) six inch, 267ft.
4. Drilled by: Name of Contractor Drillwell Enterprises

Name of Exploration Company _____
5. Date of completion Nov. 1994

6. Date of Sealing Dec. 15, 1994

7. Sealed by: Name of Contractor Drillwell Enterprises
Name of Exploration Company _____

8. (a) Has any casing, drill pipe, drill bits, core barrel, etc. been left in the hole? Yes.
(b) If so, give details and location 6" surface casing to bedrock, 3ft

9. (a) Was the drillhole sealed in the manner outlined in the Chief Inspectors Instructions? Yes.
(b) If No, give reasons and details of variation.

10. (a) Was the sealing effective? Yes.
(b) Details of any tests carried out. Concrete to surface visual inspection.

11. I certify that the above drillhole has been effectively sealed in accordance with the instructions of the Chief Inspector of Mines.

Signature [Signature]
Designation Driller
Date Dec. 15, 1994
Countersignature [Signature]
Designation Mine Manager
Date Dec. 16/94

Report on the Sealing of Drillholes

Inspection District NANAIMO Date of Report Dec. 15, 1994
Company QUINSAM COAL CORP. Land District COMOX
Label by Number _____ Licence Number _____

- 1. Number of Drillhole. 9405
- 2. Surface elevation _____
- 3. Type (Vertical, diamond, rotary, size etc.) 6 inch, 94-05, 246 ft.
- 4. Drilled by: Name of Contractor Drillwell Enterprises

Name of Exploration Company _____

- 5. Date of completion Nov. 1994
- 6. Date of Sealing Dec. 15, 1994
- 7. Sealed by: Name of Contractor Drillwell Enterprises

Name of Exploration Company _____

- 8. (a) Has any casing, drill pipe, drill bits, core barrel, etc. been left in the hole? Yes
- (b) If so, give details and location 6 inch surface casing to bedrock, 113 ft.

- 9. (a) Was the drillhole sealed in the manner outlined in the Chief Inspectors Instructions? Yes
- (b) If No, give reasons and details of variation.

- 10. (a) Was the sealing effective? Yes
- (b) Details of any tests carried out. Concrete to surface. Visual inspection

11. I certify that the above drillhole has been effectively sealed in accordance with the instructions of the Chief Inspector of Mines.

Signature David Glads

Designation Driller

Date Dec. 15, 1994

Countersignature [Signature]

Designation MINE MANAGER

Date Dec. 16 /94

Report on the Sealing of Drillholes

Inspection District NANAIMO Date of Report Dec. 15, 1994
Company Quinson Coal. Land District COMOX
Circled by Number _____ Licence Number _____

- 1. Number of Drillhole. 94-08
- 2. Surface elevation _____
- 3. Type (Vertical), diamond, (rotary), size etc.) 6 inch, 223 ft
- 4. Drilled by: Name of Contractor Drillwell Ent. Ltd.

Name of Exploration Company _____

- 5. Date of completion Dec 1, 1994
- 6. Date of Sealing Dec 15, 1994
- 7. Sealed by: Name of Contractor Drillwell Ent Ltd.

Name of Exploration Company _____

- 8. (a) Has any casing, drill pipe, drill bits, core barrel, etc. been left in the hole? yes.
- (b) If so, give details and location 6" surface casing to rock. 8 ft.

- 9. (a) Was the drillhole sealed in the manner outlined in the Chief Inspectors Instructions? yes
- (b) If No, give reasons and details of variation. _____

- 10. (a) Was the sealing effective? yes.
- (b) Details of any tests carried out. Bentonite to surface
Visual inspection

11. I certify that the above drillhole has been effectively sealed in accordance with the instructions of the Chief Inspector of Mines.

Signature [Signature]

Designation Driller

Date Dec. 15, 1994

Countersignature [Signature]

Designation MINE MANAGER

Date Dec. 16/94

Report on the Sealing of Drillholes

Inspection District NANAIMO Date of Report Dec 15, 1994
Company Quinsam Coal Land District COMOX
Licence Number _____

1. Number of Drillhole. 94-09
2. Surface elevation _____
3. Type (Vertical, diamond, rotary, size etc.) 6 inch, 262 ft.
4. Drilled by: Name of Contractor DRILLWELL ENTERPRISES

Name of Exploration Company _____
5. Date of completion Dec 12, 1994

6. Date of Sealing Dec 12, 1994
7. Sealed by: Name of Contractor DRILLWELL Enterprises.

Name of Exploration Company _____

8. (a) Has any casing, drill pipe, drill bits, core barrel, etc. been left in the hole? yes.
(b) If so, give details and location 6" Surface casing to rock 8 ft.

9. (a) Was the drillhole sealed in the manner outlined in the Chief Inspectors Instructions? yes.
(b) If No, give reasons and details of variation.

10. (a) Was the sealing effective? yes.
(b) Details of any tests carried out. Concrete to surface Visual inspection

11. I certify that the above drillhole has been effectively sealed in accordance with the instructions of the Chief Inspector of Mines.

Signature [Signature]

Designation Driller

Date Dec 15, 1994

Countersignature [Signature]

Designation MINE MANAGER

Date Dec- 16 /94

Report on the Sealing of Drillholes

Inspection District NANAIMO Date of Report DEC. 15/94
Company QUINSAM COAL CORPORATION Land District COMOX
Circled by Number _____ Licence Number _____

- 1. Number of Drillhole. 94-10
- 2. Surface elevation _____
- 3. Type (Vertical) diamond, (rotary) size etc.) 6 inch, 221ft
- 4. Drilled by: Name of Contractor Drillwell Enterprises

Name of Exploration Company _____

- 5. Date of completion Nov. 14, 94
- 6. Date of Sealing Dec. 15, 1994
- 7. Sealed by: Name of Contractor Drillwell Enterprises

Name of Exploration Company _____

- 8. (a) Has any casing, drill pipe, drill bits, core barrel, etc. been left in the hole? Yes
- (b) If so, give details and location 6 inch Surface casing to rock. 8ft.

- 9. (a) Was the drillhole sealed in the manner outlined in the Chief Inspectors Instructions? Yes.
- (b) If No, give reasons and details of variation. _____

- 10. (a) Was the sealing effective? Yes.
- (b) Details of any tests carried out. Concrete to Surface. Visual inspection

11. I certify that the above drillhole has been effectively sealed in accordance with the instructions of the Chief Inspector of Mines.

Signature [Signature]

Designation Driller

Date Dec. 15, 1994

Countersignature [Signature]

Designation MINE MANAGER

Date Dec. 16/94

Report on the Sealing of Drillholes

Inspection District NANAIMO Date of Report DEC. 15/94
Company QUINSAM COAL MINE Land District COMOX
Label by Number _____ Licence Number _____

1. Number of Drillhole. 94-11
2. Surface elevation _____
3. Type (vertical diamond, (rotary) size etc.) 6 inch, 205 ft.
4. Drilled by: Name of Contractor Drillwell Enterprises

Name of Exploration Company _____
5. Date of completion Nov. 10, 1994

6. Date of Sealing Dec. 12, 1994
7. Sealed by: Name of Contractor Drillwell Enterprises

Name of Exploration Company _____
8. (a) Has any casing, drill pipe, drill bits, core barrel, etc. been left in the hole? Yes.
(b) If so, give details and location 6" Surface casing to bedrock. 4 ft.

9. (a) Was the drillhole sealed in the manner outlined in the Chief Inspectors Instructions? Yes.
(b) If No, give reasons and details of variation.

10. (a) Was the sealing effective? Yes.
(b) Details of any tests carried out. Concrete to surface, Visual inspection

11. I certify that the above drillhole has been effectively sealed in accordance with the instructions of the Chief Inspector of Mines.

Signature Dave [Signature]
Designation Driller
Date Dec. 15, 1994
Countersignature [Signature]
Designation MINE MANAGER
Date Dec. 16/94

Report on the Sealing of Drillholes

Inspection District NANAIMO Date of Report DEC 15/94
Company QUINSAM COAL MINE Land District COMOX
Casing by Number _____ Licence Number _____

1. Number of Drillhole. 94-12
2. Surface elevation _____
3. Type (Vertical diamond, rotary size etc.) 6 inch, 220ft.
4. Drilled by: Name of Contractor Drillwell Enterprises

Name of Exploration Company _____
5. Date of completion Nov. 15, 94

6. Date of Sealing Dec. 13, 1994

7. Sealed by: Name of Contractor Drillwell Enterprises
Name of Exploration Company _____

8. (a) Has any casing, drill pipe, drill bits, core barrel, etc. been left in the hole? Yes.
(b) If so, give details and location 6 inch surface casing to bedrock. 16ft.

9. (a) Was the drillhole sealed in the manner outlined in the Chief Inspectors Instructions? Yes.
(b) If No, give reasons and details of variation.

10. (a) Was the sealing effective? Yes.
(b) Details of any tests carried out. Concrete - Bentonite to surface - Visual inspection

11. I certify that the above drillhole has been effectively sealed in accordance with the instructions of the Chief Inspector of Mines.

Signature [Signature]
Designation Driller
Date Dec. 15, 1994
Countersignature [Signature]
Designation MINE MANAGER
Date Dec. 16/94

Report on the Sealing of Drillholes

Inspection District NANAIMO Date of Report Dec. 15, 1994
Company QUINSAM COAL CORP. Land District COMEX
Casing by Number _____ Licence Number _____

- 1. Number of Drillhole. 94-13
- 2. Surface elevation _____
- 3. Type (Vertical, diamond, rotary size etc.) 6 inch, 205
- 4. Drilled by: Name of Contractor Drillwell Enterprises

Name of Exploration Company _____

- 5. Date of completion Nov. 1994
- 6. Date of Sealing Dec. 13, 1994
- 7. Sealed by: Name of Contractor Drillwell Enterprises

Name of Exploration Company _____

- 8. (a) Has any casing, drill pipe, drill bits, core barrel, etc. been left in the hole? Yes
- (b) If so, give details and location Surface casing to bedrock. Less than 10ft.

- 9. (a) Was the drillhole sealed in the manner outlined in the Chief Inspectors Instructions? Yes
- (b) If No, give reasons and details of variation. _____

- 10. (a) Was the sealing effective? Yes
- (b) Details of any tests carried out. Concrete to surface. Visual inspection.

11. I certify that the above drillhole has been effectively sealed in accordance with the instructions of the Chief Inspector of Mines.

Signature [Signature]

Designation Driller

Date Dec, 15, 1994

Countersignature [Signature]

Designation ~~Driller~~ MINE MANAGER

Date Dec. 16/94

Report on the Sealing of Drillholes

Inspection District NANAIMO Date of Report Dec. 15, 1994

Company QUINSAM COAL MINING CO. LTD. Land District COMOX

Call by Number _____ Licence Number _____

1. Number of Drillhole. 94-14

2. Surface elevation _____

3. Type (Vertical) diamond, (rotary) size etc.) 6 inch 225

4. Drilled by: Name of Contractor Drillwell Enterprises

Name of Exploration Company _____

5. Date of completion Nov. 1994

6. Date of Sealing Dec. 13, 1994

7. Sealed by: Name of Contractor Drillwell Enterprises

Name of Exploration Company _____

8. (a) Has any casing, drill pipe, drill bits, core barrel, etc. been left in the hole? Yes.

(b) If so, give details and location Surface casing to bedrock, less than 10 ft.

9. (a) Was the drillhole sealed in the manner outlined in the Chief Inspectors Instructions? Yes.

(b) If No, give reasons and details of variation.

10. (a) Was the sealing effective? Yes.

(b) Details of any tests carried out. Concrete to surface visual inspection

11. I certify that the above drillhole has been effectively sealed in accordance with the instructions of the Chief Inspector of Mines.

Signature (D) Dale

Designation Driller

Date Dec. 15, 1994

Countersignature [Signature]

Designation MINE MANAGER

Date Dec. 16/94

Report on the Sealing of Drillholes

Inspection District NANAIMO Date of Report Dec. 15, 94
Company QUINSAM COAL MINING CO. and District COMOX
Circled by Number _____ Licence Number _____

1. Number of Drillhole. 94-15
2. Surface elevation _____
3. Type (Vertical, diamond, rotary size etc.) 6 inch 225'
4. Drilled by: Name of Contractor Drillwell Enterprises
Name of Exploration Company _____
5. Date of completion Nov. 1994.
6. Date of Sealing Dec. 13, 1994
7. Sealed by: Name of Contractor Drillwell Enterprise
Name of Exploration Company _____
8. (a) Has any casing, drill pipe, drill bits, core barrel, etc. been left in the hole? Yes.
(b) If so, give details and location Surface casing to bedrock. Less than 10ft.
9. (a) Was the drillhole sealed in the manner outlined in the Chief Inspectors Instructions? Yes.
(b) If No, give reasons and details of variation.

10. (a) Was the sealing effective? Yes.
(b) Details of any tests carried out. Visual inspection. Concrete to surface.

11. I certify that the above drillhole has been effectively sealed in accordance with the instructions of the Chief Inspector of Mines.

Signature [Signature]
Designation Driller.
Date Dec. 15, 1994
Countersignature [Signature]
Designation MINE MANAGER
Date Dec 16 /94

Report on the Sealing of Drillholes

Inspection District NANAIMO Date of Report Dec. 15, 1994
Company QUINSAM COAL Land District COMOX
Circled by Number _____ Licence Number _____

1. Number of Drillhole. 94-16
2. Surface elevation _____
3. Type (Vertical, diamond, rotary, size etc.) Six inch, 525 ft.
4. Drilled by: Name of Contractor Drillwell Enterprises
Name of Exploration Company _____
5. Date of completion Nov. 1994
6. Date of Sealing Dec. 15, 1994
7. Sealed by: Name of Contractor Drillwell Enterprises
Name of Exploration Company _____
8. (a) Has any casing, drill pipe, drill bits, core barrel, etc. been left in the hole? Yes.
(b) If so, give details and location. 6 inch surface casing to bedrock. 74 ft.
9. (a) Was the drillhole sealed in the manner outlined in the Chief Inspectors Instructions? Yes.
(b) If No, give reasons and details of variation. _____
10. (a) Was the sealing effective? Yes.
(b) Details of any tests carried out. Visual inspection concrete to surface. Bentonite cap.

11. I certify that the above drillhole has been effectively sealed in accordance with the instructions of the Chief Inspector of Mines.

Signature [Signature]
Designation Driller
Date Dec. 15, 1994
Countersignature [Signature]
Designation MINE MANAGER
Date Dec. 16/94

Report on the Sealing of Drillholes

Inspection District NANAIMO Date of Report Dec 15, 1994
Company QUINSAM COAL Land District COMOX
Label by Number _____ Licence Number _____

1. Number of Drillhole. 94 - 17
2. Surface elevation _____
3. Type (Vertical, diamond (rotary) size etc.) Six inch, 515ft
4. Drilled by: Name of Contractor Drillwell Enterprises

Name of Exploration Company _____

5. Date of completion Nov. 1994
6. Date of Sealing Dec. 15, 1994
7. Sealed by: Name of Contractor Drillwell Enterprises

Name of Exploration Company _____

8. (a) Has any casing, drill pipe, drill bits, core barrel, etc. been left in the hole? Yes
- (b) If so, give details and location Surface casing to Bedrock 51ft

9. (a) Was the drillhole sealed in the manner outlined in the Chief Inspectors Instructions? Yes
- (b) If No, give reasons and details of variation.

10. (a) Was the sealing effective? Yes
- (b) Details of any tests carried out. Visual inspection Concrete into casing. Bertrita cap.

11. I certify that the above drillhole has been effectively sealed in accordance with the instructions of the Chief Inspector of Mines.

Signature [Signature]

Designation Driller

Date Dec. 15, 1994

Countersignature [Signature]

Designation MINE MANAGER

Date Dec. 16/94

Report on the Sealing of Drillholes

Inspection District NANAIMO Date of Report _____

Company QUINSAM COAL MINING CORP. Land District COMOX

Drillhole Number _____ Licence Number _____

1. Number of Drillhole. 94-19

2. Surface elevation _____

3. Type (Vertical, diamond, rotary size etc.) Six inch 405 ft.

4. Drilled by: Name of Contractor Drillwell

Name of Exploration Company _____

5. Date of completion Nov. 1994

6. Date of Sealing Dec 15, 1994

7. Sealed by: Name of Contractor Drillwell Enterprises

Name of Exploration Company _____

8. (a) Has any casing, drill pipe, drill bits, core barrel, etc. been left in the hole? Yes.

(b) If so, give details and locations 6" Surface casing to Bedrock - 36 ft.

9. (a) Was the drillhole sealed in the manner outlined in the Chief Inspectors Instructions? Yes

(b) If No, give reasons and details of variation. _____

10. (a) Was the sealing effective? Yes.

(b) Details of any tests carried out. Concrete to Surface Visual inspection

11. I certify that the above drillhole has been effectively sealed in accordance with the instructions of the Chief Inspector of Mines.

Signature [Signature]

Designation Driller

Date Dec. 15, 1994

Countersignature [Signature]

Designation MINE MANAGER

Date Dec. 16/94

Report on the Sealing of Drillholes

Inspection District NANAIMO Date of Report _____

Company QUINSAM COAL MINING CORP. Land District COMOX

Drillhole by Number _____ Licence Number _____

1. Number of Drillhole. 94-20

2. Surface elevation _____

3. Type (Vertical, diamond, rotary, size etc.) 6 inch 425 ft.

4. Drilled by: Name of Contractor Drillwell Enterprises

Name of Exploration Company _____

5. Date of completion Nov. 1994

6. Date of Sealing Dec. 15, 1994

7. Sealed by: Name of Contractor Drillwell Enterprises

Name of Exploration Company _____

8. (a) Has any casing, drill pipe, drill bits, core barrel, etc. been left in the hole? Yes.

(b) If so, give details and location 6" surface casing to bedrock. 4 ft.

9. (a) Was the drillhole sealed in the manner outlined in the Chief Inspectors Instructions? Yes.

(b) If No, give reasons and details of variation. _____

10. (a) Was the sealing effective? Yes.

(b) Details of any tests carried out. concrete into surface casing. Bestonite cap.

11. I certify that the above drillhole has been effectively sealed in accordance with the instructions of the Chief Inspector of Mines.

Signature [Signature]

Designation Driller

Date Dec. 15, 1994

Countersignature [Signature]

Designation MINE MANAGER

Date Dec. 16/94