



ELK VALLEY COAL CORPORATION  
FORDING RIVER OPERATIONS  
P.O. Box 100  
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FORDING 2003

April 13, 2004

# 986

Mineral Titles  
Ministry of Energy & Mines  
3<sup>rd</sup> Floor, 1810 Blanshard Street  
PO Box 9322 Stn Prov Govt  
Victoria, BC  
V8W 9N3

**ATTN: Mrs. Kim Stone, Coal Administrator**

Dear Mrs. Stone:

Please find enclosed one copy of the report entitled "Summary Report - 2003 Exploration Program."

I trust that this submission will fulfil the requirements under the Coal Act and Coal Act Regulations.

Yours truly,

K.A. Komenad, P. Eng.  
Senior Geologist

KAK:jjn

Enclosure

**Fording River Operations**

**Summary Report**

**2003 Exploration Program**

#

886

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## **List of Appendices**

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## Statements of Author's Academic and Professional Qualifications

The author of this report, K.A. Komenac, in 1973 received the degree of Bachelor of Science (Geology Major) from the University of British Columbia, and is registered as a Professional Engineer with the Association of Professional Engineers and Geoscientists of the Province of British Columbia. The author has been an employee of Fording Coal Limited at the Fording River Operation since November of 1973, as Assistance Pit Geologist, Exploration Geologist, Senior Exploration Geologist, and since 1989 Senior Geologist.



# SCHEDULE C

PROVINCE OF  
BRITISH COLUMBIA

MINISTRY OF  
ENERGY AND  
MINES

TITLE PAGE OF  
ASSESSMENT REPORT

GENERAL NATURE OF WORK

TOTAL COST

Exploration \$120,000.00

Author of Landsman \_\_\_\_\_ Signature (s) 

K.A. Komenac (P. Eng.)

Date report filed April 13 / 04 Year of work 2003

Property Name Fording River Operations

Coal type (if applicable) Medium to High Volatile Bituminous

Mining Division Fort Steele Longitude 114° 52'

Latitude 50° 12'

Coal Licence Numbers; Coal Leases; Freehold Freehold Lot #4588

BC Coal Lease #9

Owner (s)

(1) Elk Valley Coal Corporation

PO Box 100, Elkford, BC V0B 1H0

Operator (s)

(a)

Same

References to Previous Work

Annual Assessment Reports Since 1970

**Fording River Operations**  
**Summary Report**  
**2003 Exploration Program**

I. Introduction

1. **General Geography and History**

The Fording River Coal property is located in the Fording River and Upper Elk Valleys, approximately 25 kilometres north of Elkford, BC. Access is by paved road north from Elkford along the Fording River Valley, or north along the Elk River Valley via the Forestry Service gravel road or the Kan-Elk Powerline road.

The Fording River minesite is situated within the front range of the southern Canadian Rocky Mountains. At least ten major coal seams, generally greater than four metres thick, are contained in the Mist Mountain Formation of the Kootenay Group.

The Elk River portion of the property was actively explored by the Canadian Pacific Railway Company in the period 1902 - 1908. Until 1947, the property was comprised of 10,276 hectares in 40 Crown Granted Lots. In that year, the holdings were reduced to 2,979 hectares in 15 Crown Granted Lots. In 1967 and 1968, Canadian Pacific Oil and Gas reacquired part of the coal lands which had been abandoned in 1947. An additional nine Coal Licences located at the south end of the property were acquired in 2001. At the present time, the Fording River Property consists of 22,635 hectares, held on seven Coal Leases, 9 Coal Licences, and 15 Crown Granted Lots.

Mining operations which commenced in 1971, have produced more than 163.5 million tonnes of clean metallurgical and thermal coal for markets in North and South America, Africa, Europe and Asia. Of this total, 8.9 million tonnes were produced in 2003.

Reference:

- i) Illustration No. 1A: Index Map - Coal Properties



2. **Geology**

i) **Stratigraphy**

The general stratigraphic succession on the Fording River Property is summarized in the following table:

Period	Litho-Stratigraphic Units		Principal Rock Types
Recent			Colluvium
Quaternary			Clay, silt, sand, gravel, cobbles
Lower Cretaceous	Blairmore Group		Massive bedded sandstones and conglomerates
Lower	K O O	Elk Formation	Sandstone, siltstone, shale, mudstone, chert pebble conglomerate, minor coal
		Mist Mountain Formation	Sandstone, siltstone, shale, mudstone, thick coal seams
Cretaceous to Upper	T E N A Y	Moose Mountain Member	Medium to coarse grained quartz-chart sandstone
		Wearry Ridge Member	Fine to coarse grained, slight ferruginous quartz-chart sandstone
Jurassic	G R O U P	M F O O R R M I A S T S I E O Y N	
Jurassic	Fernie Formation		Shale, siltstone, fine-grained sandstone
Triassic	Spray River Formation		Sandy shale, shale quartzite
	Rocky Mountain Formation		Quartzite
Mississippian	Rundle Group		Limestone

The oldest rocks present on the Fording River property are the Rundle Group limestones, located on the west bank of the Fording River, near the southern property boundary. They are in faulted contact with the Kootenay Group to the west, and unconformable contact with Rocky Mountain Formation quartzites to the north. The latter are best exposed on the eastern slope of the Brownie Creek Valley.

The Fernie Formation shales occur throughout the area, generally along the sides of the valleys on the lower flanks of the mountains. The shales are recessive and, therefore, poorly exposed. The Fernie Formation is in conformable contact with the Morrissey, through the "Passage Beds," which are a transitional zone from marine to non-marine sedimentation.

The Morrissey Formation, which is the "basal sandstone" of the Kootenay Group, is a prominent cliff-forming marker horizon in many locations. On the Fording River Property, the top of the Moose Mountain member (Morrissey Formation) is in sharp contact with #1 or A seam, the lowermost bed of the Mist Mountain Formation.

The Mist Mountain Formation contains all of the economic coal seams, and is the most widely occurring formation on Fording River Property. This economically important formation is an interbedded sequence of sandstones, siltstones, silty shales, mudstones, and medium to high volatile bituminous coal seams. The volatile content of the coal increases up section, with decreasing rank. Lenticular sandstones comprise about 1/3 of the Mist Mountain sediments at Fording River, but very few laterally extensive sandstone beds exist.

The sandstone above and below seam #4 (B) and above #9 (F), are the most persistent units, and are often cliff-forming marker horizons.

The Mist Mountain Formation is generally overlain conformably by strata of the Elk Formation. On the Fording property, this formation is commonly a succession of sandstones, siltstones, shales, mudstones, chert pebble conglomerates and sporadic, thin, high volatile bituminous coal seams. The coal seams are characterized by a high alginate content and referred to as "Needle" coal. The Elk Formation is observed near the tops of the mountains, mainly on the east side of the Elk Valley on the Greenhills Range, and northward to the Mount Tuxford areas.

The top of the Elk Formation marks the upper boundary of the Kootenay Group, which is unconformably overlain by the basal member of the Blairmore Group. This thick bedded, cliff-forming sandstone and conglomerate unit is observed on the upper slopes of Mount Tuxford.

## ii) **Structure**

Subsequent to deposition, the sediments were involved in the mountain building movements of the late Cretaceous to early Tertiary Laramide orogeny. The major structural features of the Fording River property are the north-south trending synclines with near horizontal to steep westerly dipping thrust faults, and a few high angle normal faults. Some of the thrust faults probably were folded late in the tectonic cycle.

The formation of the major fold structures began early in the tectonic cycle. In the current mining area, two asymmetric synclines are evident; the Greenhills Syncline to the west, and the Alexander Creek Synclines to the east of the Fording River.

The thrust faulting (ie: the Ewin Pass and Brownie Ridge Thrusts), was probably contemporaneous with the later stages of folding. The intervening anticline was subsequently faulted (Ericson Fault), then eroded.

The Alexander Creek Syncline can be traced from the southern property boundary on Castle Mountain to the northern end of the property on Weary Ridge. The strata of the west limb, on the west face of Eagle Mountain, dips easterly at 20 to 25<sup>o</sup>, decreasing gradually to zero as the axis is approached. The east limb, however, attains a 20<sup>o</sup> westerly dip within a much shorter (500m) distance of the axis. This asymmetry is possible due, at least in part, to the influence of the Ewin Pass Thrust which subcrops 600 to 800 metres east of the synclinal axis.

Further to the east, on Brownie Ridge, the strata dips westerly at a mean dip of  $42^{\circ}$ . The Brownie Ridge Thrust, which subcrops near the crest of the ridge, probably contributes to this steepening.

Within the mining area, the axis of the Alexander Creek Syncline plunges to the north at an average of  $4^{\circ}$ . Turnbull Mountain exhibits a localized series of an echelon fold structures, plunging both to the north and south. These subsidiary folds may be related to thrust faulting. From the south end of Mount Tuxford, the synclinal axis continues north-northwest along the base of Mount Veits and into the Elk River Valley near Aldridge Creek.

On Mount Tuxford, the beds exposed are those of the Elk Formation and the overlying (non-coal bearing) Cadomin Formation. The area has not been extensively explored. The stratigraphic sequence of the east limb, in the more extensively explored Mist Mountain strata near Aldridge Creek (Elco property), closely resembles the east limb strata found on Henretta Ridge, ten kilometres to the south.

On the northwest corner of Eagle Mountain, the lower Kootenay-upper Fernie section is the locus for a zone of near horizontal thrust faulting. The effect is to cause a double repetition of the lower coal seams and basal sandstone on the west synclinal limb. This fault zone is synclinal in form, and continuous with the Ewin Pass Thrust zone found the east limb.

The Greenhills Syncline in the mining area, is essentially a "mirror-image" of the Alexander Creek structure. The east limb of the asymmetric syncline dips westerly at  $15$  to  $25^{\circ}$ , except in areas near the Ericson Fault, where  $45$  to  $55^{\circ}$  dips are common. The west limb exhibits much steeper dips; commonly in the  $35$  to  $45^{\circ}$  range. The Greenhills Syncline plunges northward ( $340$  to  $350^{\circ}$ ), at less than  $5^{\circ}$ , then apparently dies out to the north in the area of the Osborne Creek Depression.

The Ericson Fault, which locally runs along the base of the Greenhills Range west of the Fording River, is one of the major regional faults. From south to north, this westerly dipping (40 to 70°) normal fault, brings Mist Mountain strata progressively into contact with Rundle, Rock Mountain, Spray River, Fernie and Morrissey strata. The downthrown block is to the west.

Near the south end of Lake Mountain, the Ericson Fault beings to "splay" into two zones. The main fault runs along the eastern margin of Lake Mountain, and the subsidiary fault runs to the west, and appears to "die out" northward. The steep northward dip exhibited in the Lake Mountain strata could be due to influence from these flanking "splays" of the fault. The flat lying region to the north of Lake Mountain (Osborne Creek Depression area) is completely void of outcrop, and the Ericson Fault has not been traced either through or to the north of this area.

Reference:

- i) Illustration No. 1b: General Geology Map

3. **Summary of Work Done in 2003**

Six reverse circulation drill holes were completed for a total of 1,600 metres. Geological field mapping was conducted by staff geologists on Turnbull Mountain.

Rotary drilling was done by SDS Drilling using an Ingersol Rand TH100 truck mounted rig.

All holes were geophysically logged through the rods using the gamma-neutron method. Holes that remained open after the rods were pulled were logged for hole deviation, and selected holes were logged for gamma-density. Logging was done by Electrolog Services Inc.

Coal seams encountered by rotary drilling were samples in 0.5m intervals. Representative composite samples for each coal seam encountered in the hole were prepared at Fording's Process Plant Laboratory. Each seam composite was tested for proximate analysis, % Sulphur and Free Swelling Index. Samples from selected seam composites were sent to David E. Pearson and associates for petrographic analysis.

Fording staff laid out the access roads and drillsite locations. Pre-logging was done by Raymond Myles Contracting Limited. Road and drillsite construction was done by Elkford Industries Ltd. Staff surveyors provided the required survey control and drillhole pickups.

The following table shows the drillhole locations with respect to Coal Lease and Licence boundaries:

<u>Lease / Licence</u>	<u>Drillholes</u>
BC Coal Lease #9	RH # 2805 - 2810 inclusive

Reference:

- i) Illustration No. 2
  - a. 2003 North Turnbull Mountain Exploration Program

## **II. Individual Area Programs**

### **1. North Turnbull Mountain Area**

#### **i) Objective**

The objective of the fill-in drilling program on the northwest corner of Turnbull Mountain was to obtain the additional seam location, thickness and quality data required to upgrade the geological confidence of reserves in the area.

#### **ii) Summary of Work Done**

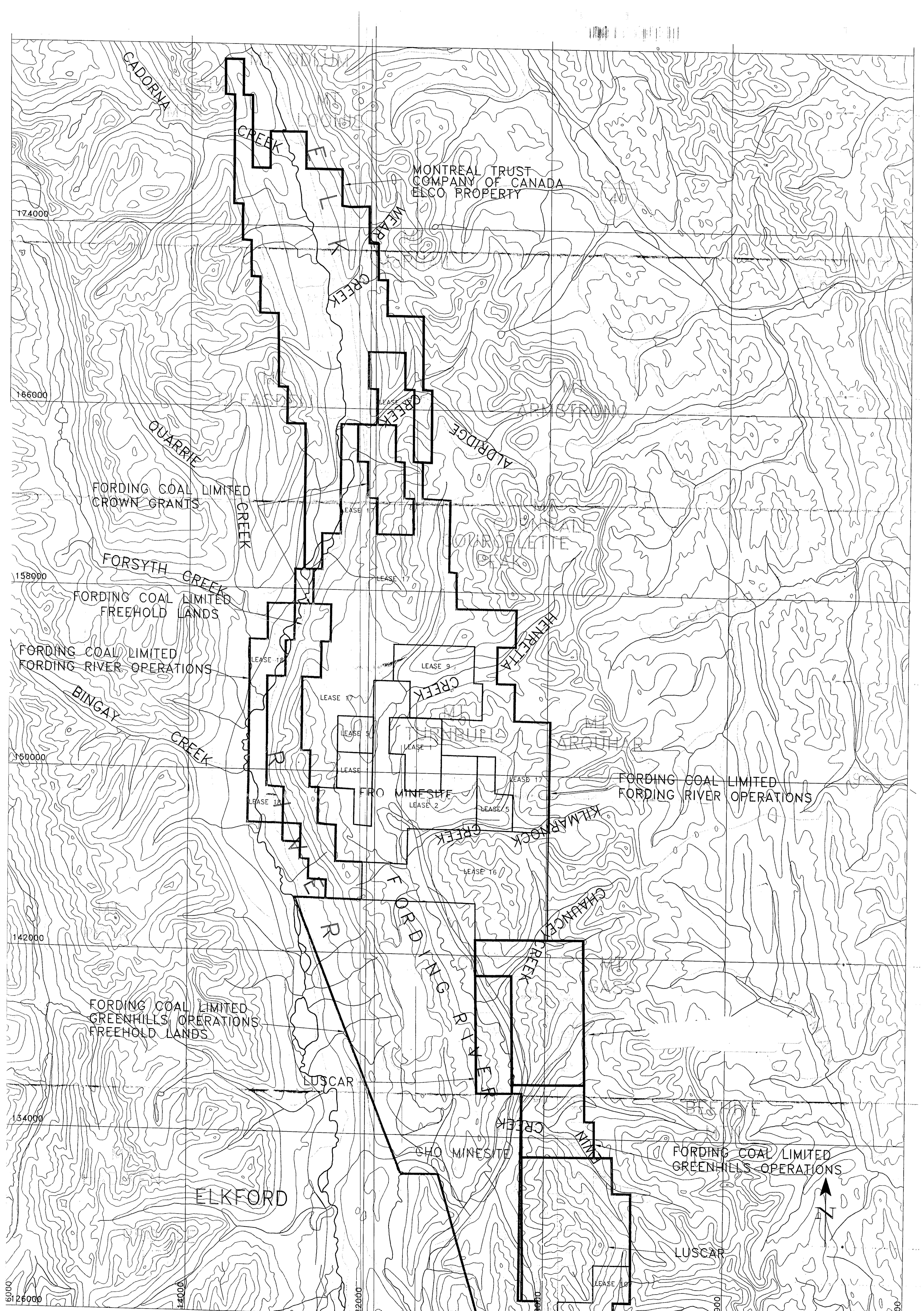
Six reverse circulation rotary holes were drilled for a total of 1,600 metres. All holes were gamma-neutron logged through the drill pipe and four of the holes were open hole logged for hole deviation and gamma-density. Two of the holes were caved and could not be open hole logged. Rock and coal exposures on all new access roads were mapped and surveyed (GPS).

#### **iii) Results and Conclusions**

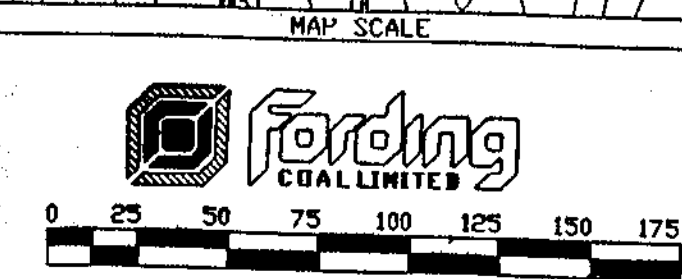
The six holes completed in 2003 intersected strata from the upper half of the Mist Mountain Formation. Seam 130, the uppermost economically significant seam in the area, was intersected in four of the holes. Average thickness of 130 is approximately 5.5 metres. Seams 121 and 115, two economically important seams located stratigraphically below 130, average 3.2 and 7.3 metres thick respectively. These seams were intersected in all six drillholes. Results from the 2003 North Turnbull Mountain drilling program provide the geological confidence required to upgrade Turnbull North Pit from the probable to proven reserves category.

#### Reference:

- i) Illustration 2a: North Turnbull Mountain Exploration Program
- ii) Appendix 1: Drillhole logs
- iii) Appendix 2: Sample Assays



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MINING AREAS



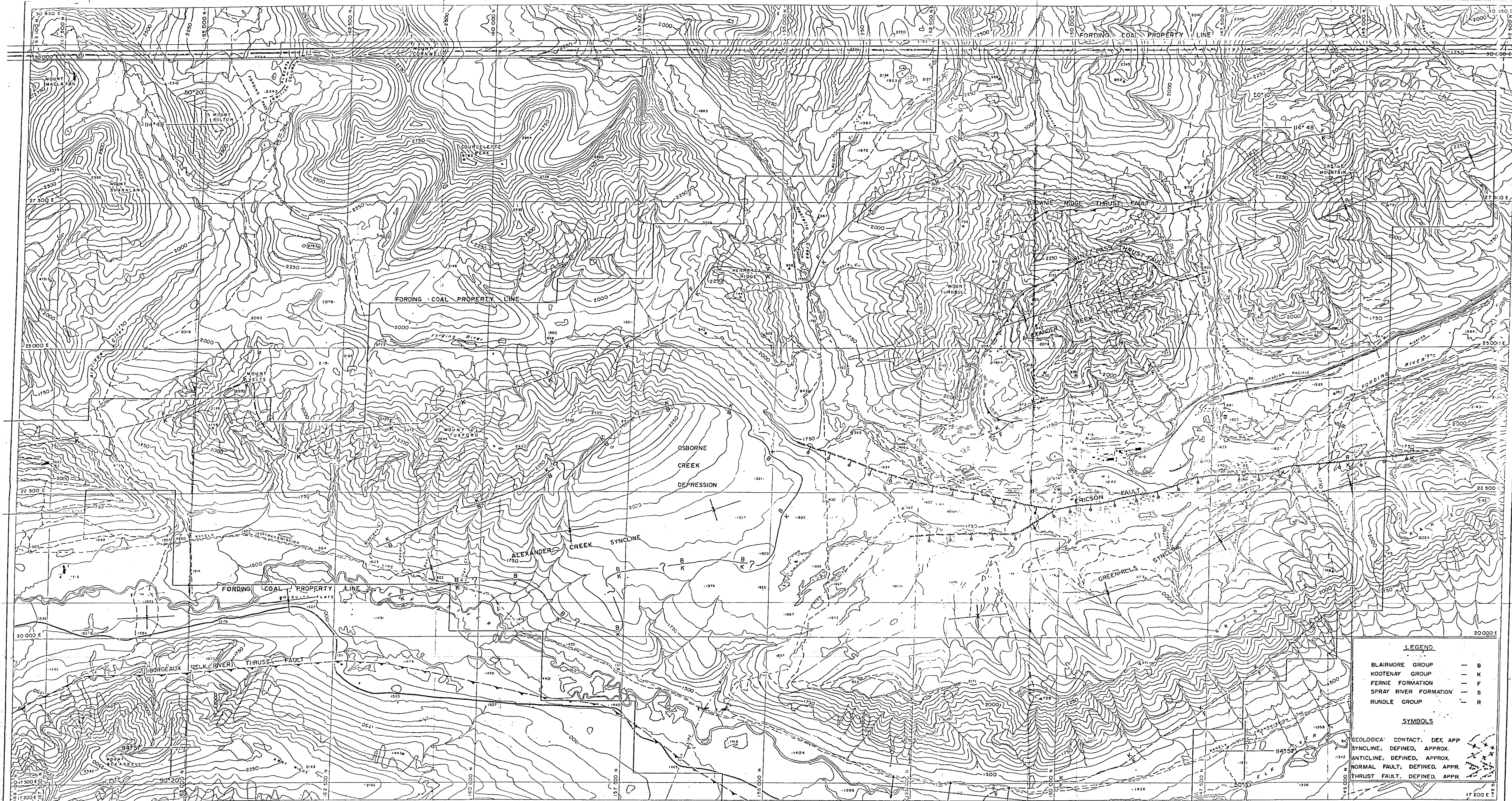
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2			
3			
4			
5			

DATE				DRAWN BY				CHECKED				APPROVED			
29-06-00															
MAP INDEX NUMBER								SCALE							
								1:50000							
DRAWING NUMBER															

ILLUSTRATION NO. 1A

FORDING COAL LIMITED  
UPPER ELK VALLEY COAL TENURE





**LEGEND**

BLAIRMORE GROUP	— B
KOOTENAY GROUP	— K
FERNIE FORMATION	— F
SPRAY RIVER FORMATION	— S
RUNDLE GROUP	— R

**SYMBOLS**

GEOLGICAL CONTACT	—
DEF. APP. SYNCLINE	—
DEF. APP. ANTICLINE	—
DEF. APP. NORMAL FAULT	—
DEF. APP. THRUST FAULT	—

Job No. 06333-7 Date Plotted August 1977  
 McELHANNAY SURVEYING & ENGINEERING LTD.  
 1:25,000

Function:	
Activity:	
Section:	
Job:	

Drawn by: J.S. JUNE 1983  
 Checked by: Design Eng.  
 Approved: Proj. Eng.

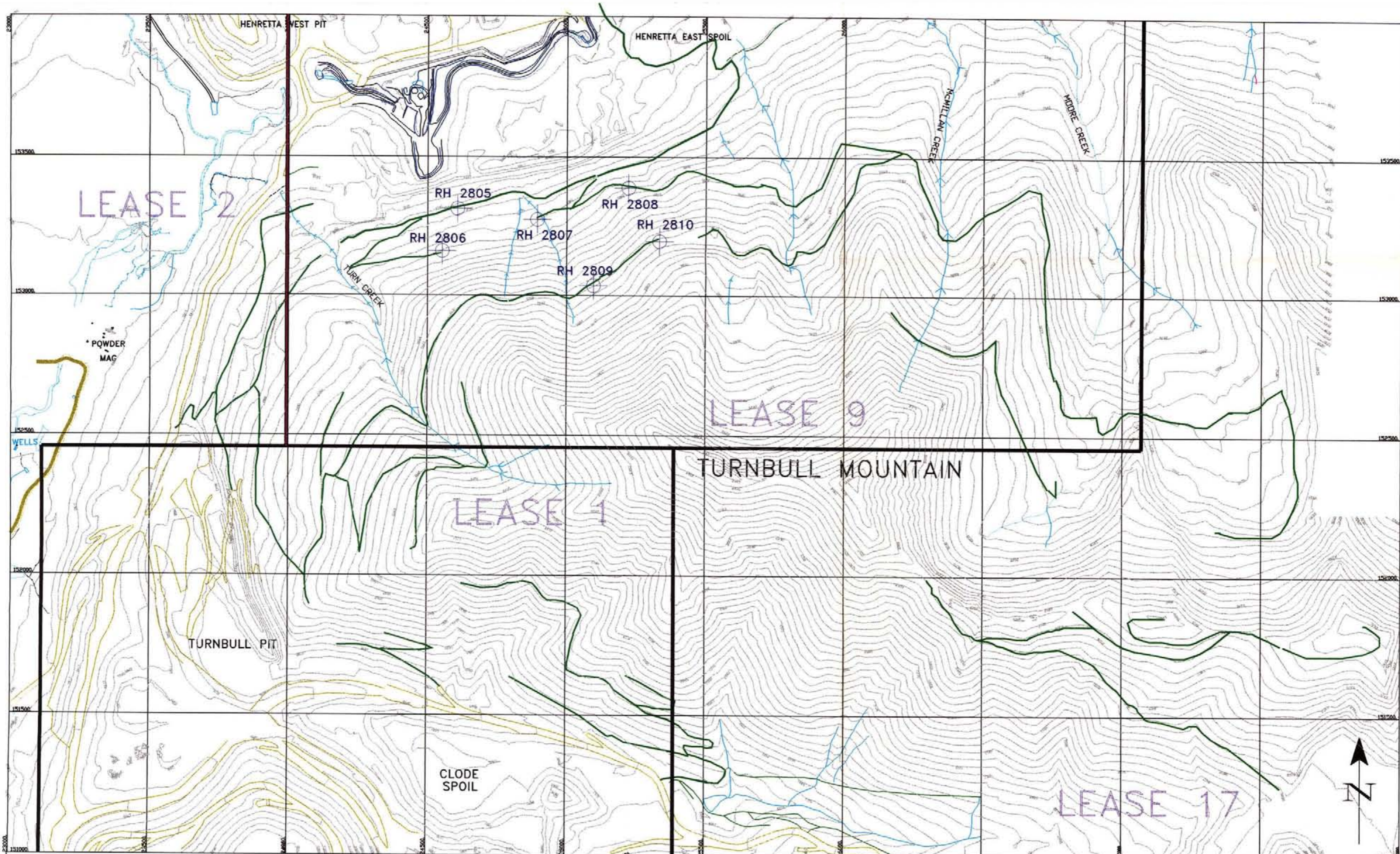
Revisions:

No.	Made by	Date	Description

GEOLOGY MAP — ILLUSTRATION 1b



Metric Scale: 0 200 400 600 800 1000  
 1:25,000



LEGEND  
 EXISTING ROAD ———  
 COMPLETED 2003 ROTARY DRILLSITE ○

NO.	DATE	MADE BY	DESCRIPTION
1			
2			
3			
4			
5			

2003 COMPLETED EXPLORATION PROGRAM  
 TURNBULL MOUNTAIN NORTH EXTENSION

DATE	DRAWN BY	CHECKER	APPROVER	MAP INDEX NUMBER	SCALE	DRAWING NUMBER
MAY 5, 2004	BYB				1:10,000	EXP-9-76



RVCS INC.

**GAMMA-RESISTANCE  
DENSITY-CALIPER**

HEET N. W.  
LIBERTIA  
6459

COMPANY **ELK VALLEY COAL CORPORATION**

WELL **R2285**

LOCATION **TURNBULL**

FIELD **FORDING RIVER**

PROVINCE **B.C.**

**2805**

SD. SEC. TWP.

REG. W.

Other Services  
GR-N,DIR.

ELEV. KB.

Above Form Datum:

CSG.  
O.L.

From:

DNE

25 JULY 83

191.4

2.8

189.8

191.5

192.8

5.8

5.8

97.8

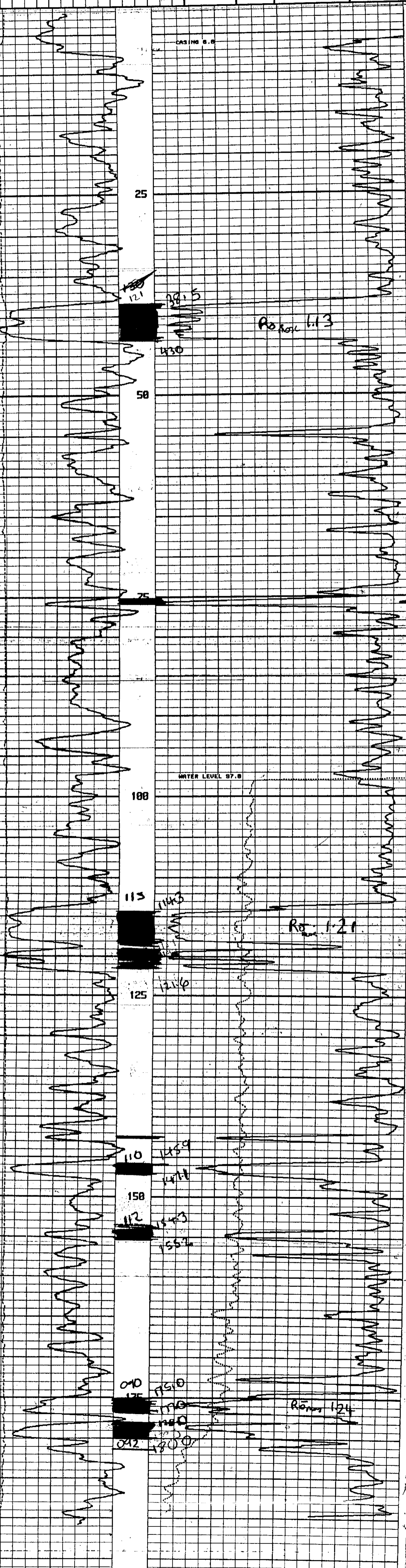
134MM

1 HR.

TWO

SIN

246071 F	
533138 K	
1820.7 m	



Witnessed By

K. KEMEREC

2109 - 1 STREET S.W.  
CALGARY, ALBERTA  
(403) 276-6459

FILE NO. \_\_\_\_\_

COMPANY: ELK VALLEY OIL CORPORATION  
WELL: RZ2806  
LOCATION: TURNBULL  
FIELD: FORDING RIVER  
PROVINCE: B.C.

2806

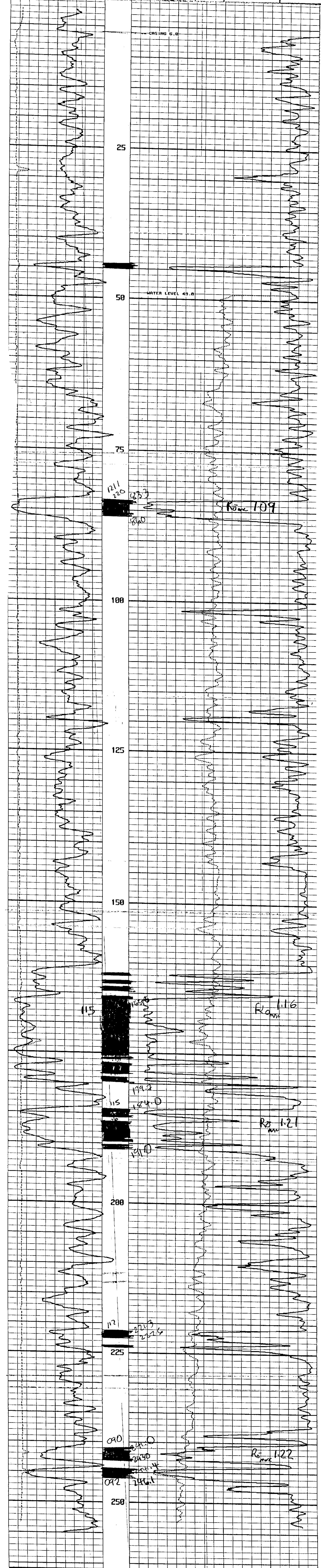
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GR-N-DIR.

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Last Reading 2.0  
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Depth Reached 255.7

Depth Driller 258.8  
Casing Electrolog 5.8  
Casing Driller 5.8  
Fluid Type WATER  
Liquif Level 49.8  
Min. Diameter 134MM  
Operating Time 1 HR.  
Truck No. TAD

Recorded By: B. SIM  
Witnessed By: K. KOWENOC



2109 - 1 STREET N.W.  
CALGARY, ALBERTA  
(403) 276-6459

FILE NO. COMPANY ELK VALLEY OIL CORPORATION  
WELL RZ2807  
LOCATION THIRBULL  
FIELD FORDING RIVER  
PROVINCE B.C.

2807

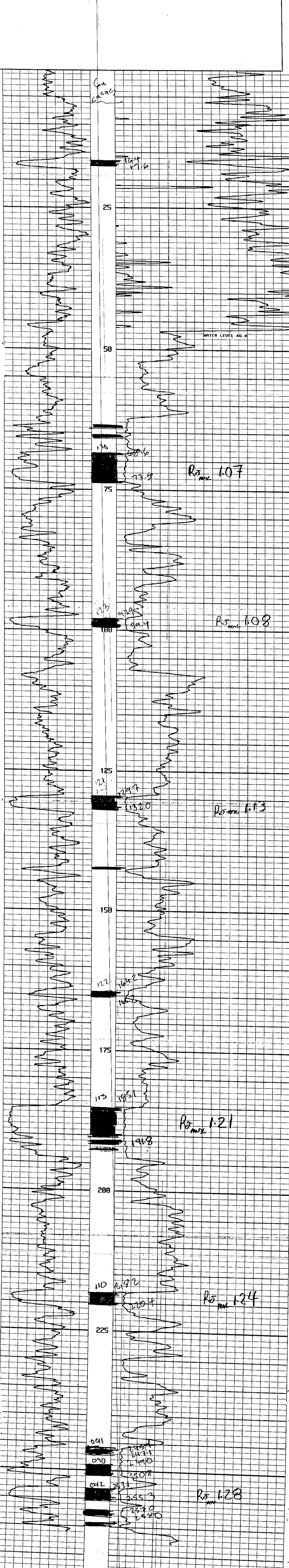
LSD. SEC. TWP. RGE. S. 10 10 10 10  
M V V V

Other Services  
SEE REMARKS

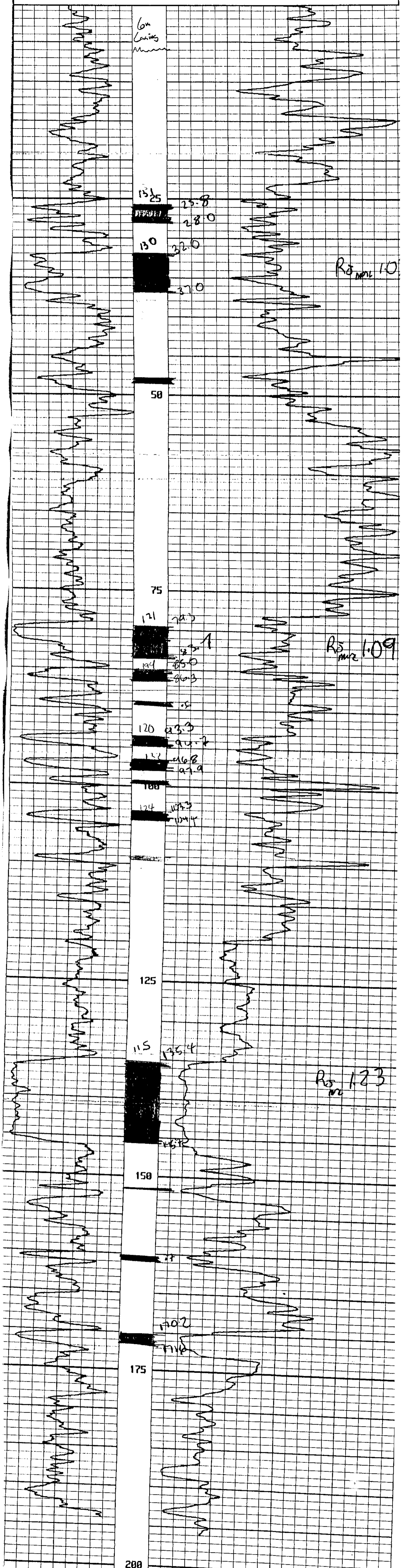
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Log Measured From: CL Above Perm Datum: CSC.  
Well Depth Measured From: G.L.

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Last Reading 0.0  
Voltage Logged 253.8  
Depth Reached 253.5  
Casing Driller 254.8  
Casing Driller 5.8  
Fluid Type WATER  
Fluid Level 45.4  
Cin. Diameter 138MM  
Operating Time 1 HR.  
Truck No. TMD  
Recorded By D. SIM  
Witnessed By K. KOMIENIC

LOGGED THROUGH DRILL RODS  
OPEN HOLE BRIDGED 58 M



RH 2808



FILE NO. \_\_\_\_\_  
COMPANY **ELK VALLEY OIL CORPORATION**  
WELL **R2883**  
LOCATION **TURNBULL**  
FIELD **FORDING RIVER**  
PROVINCE **B.L.**

LOG. SEC. \_\_\_\_\_  
TWP. \_\_\_\_\_  
RGE. \_\_\_\_\_

OTHER SERVICES  
GR-N \_\_\_\_\_

W. \_\_\_\_\_  
N. \_\_\_\_\_

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Elev. \_\_\_\_\_

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Well Depth Measured From: \_\_\_\_\_  
G.L. \_\_\_\_\_

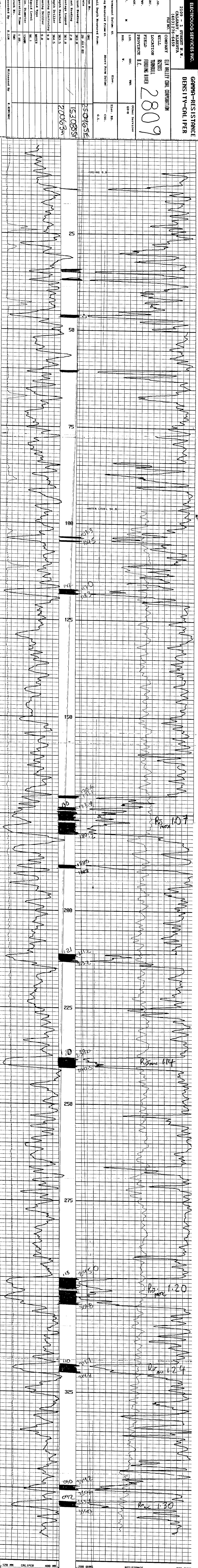
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Depth Reached **363.5**

Depth Driller **364.5**  
Casing Electrolog **9.8**  
Casing Driller **9.8**  
Fluid Type **WATER**  
Liquid Level **96.1**  
Min. Diameter **134MM**  
Operating Time **1 HR.**  
Truck No. **T40**

Recorded by **D. SIM**  
Witnessed by **K. KEMMENC**

**2809**



2109 - 1 STREET N.W.  
CALGARY, ALBERTA  
(403) 276-6459

FILE NO. COMPANY ELK VALLEY OIL CORPORATION

WELL NO. DRC818

LOCATION TURNBULL

FIELD FORDING RIVER

PROVINCE B.C.

2810

LOG. SEC. TWP. OTHER SERVICES  
DIR. GR-N

PERMANENT DATUM: CL Elev. Elev. M.B.  
Log Measured From: CL Above Perm Datum: C.S.G.  
Well Depth Measured From: G.L.

DATE 22 JULY 83

Run No. ONE 253338E

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Last Reading 2.9 1551979K

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Depth Reached 317.8

Depth Driller 318.8

Casing Electrolog 11.8

Casing Driller 12.8

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Liquid Level 148.1

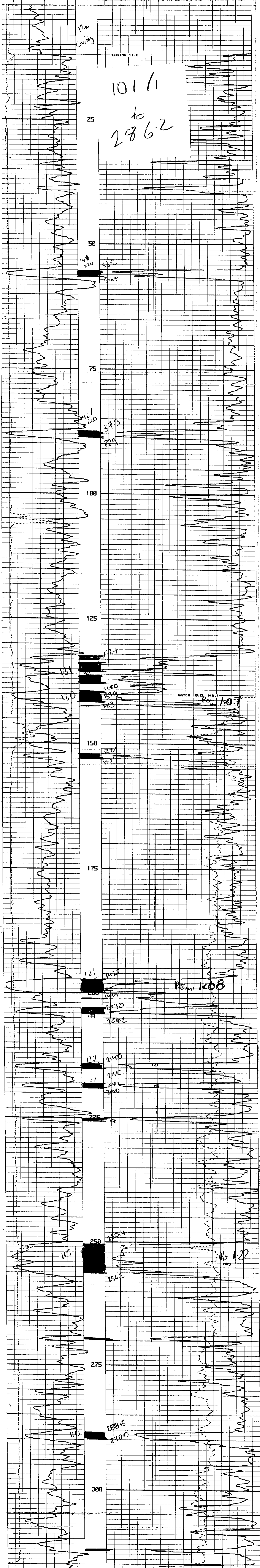
Min. Diameter 134MM

Operating Time 1 HR.

Truck No. TMD

Recorded By D.SIM

Witnessed By K. KIMBENC





2109 - 1 STREET N.W.  
CALGARY ALBERTA  
T2C 1A7 403-276-6459

WELL: **DH2810**  
LOCATION: **TUMBUILL**  
FIELD: **FONDING RIVER**  
PROVINCE: **B.C.**

COMPANY: **ELK VALLEY OIL CORPORATION**

LOG: **LOG** SHEET: **001** OF: **018**

DATE: **22 JULY 03**

LOG NO: **001**

LOG TYPE: **LOG**

LOG SCALE: **316.5**

LOG DATE: **08 04**

LOG TIME: **08 04**

LOG BY: **ELK VALLEY OIL CORPORATION**

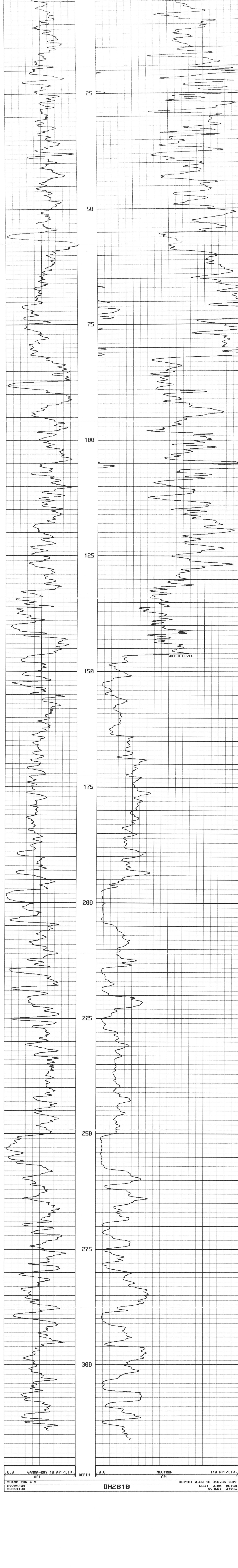
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LOG DATE: **08 04**

LOG TIME: **08 04**

LOG BY: **ELK VALLEY OIL CORPORATION**

LOGGED THROUGH DRILL RODS



2109 - 1 STREET N.W.  
CALGARY, ALBERTA  
(403) 276-6459

FILE NO. COMPANY ELK VALLEY OIL CORPORATION

LSD. WELL RH2805

SEC. LOCATION TURNBULL

TWP. FIELD FORDING RIVER

RGE. PROVINCE B.C.

W. N

ROPE. N

Permanent Datum: CL

Log Measured From: CL

Well Depth Measured From:

Run No. ONE

Date 24 JULY 83

First Reading 189.8

Last Reading 0.0

Footage Logged 189.8

Depth Reached 189.4

Depth Driller 192.8

Casing Electrolog

Casing Driller 6.0

Fluid Type WATER

Liquid Level

Min. Diameter 134MM

Operating Time 1 HR.

Truck No. TWO

LSD. SEC. TWP. Other Services

W. N

ROPE. N

Elev. KB.

Above Perm Datum:

Elev. KB.

CSC.

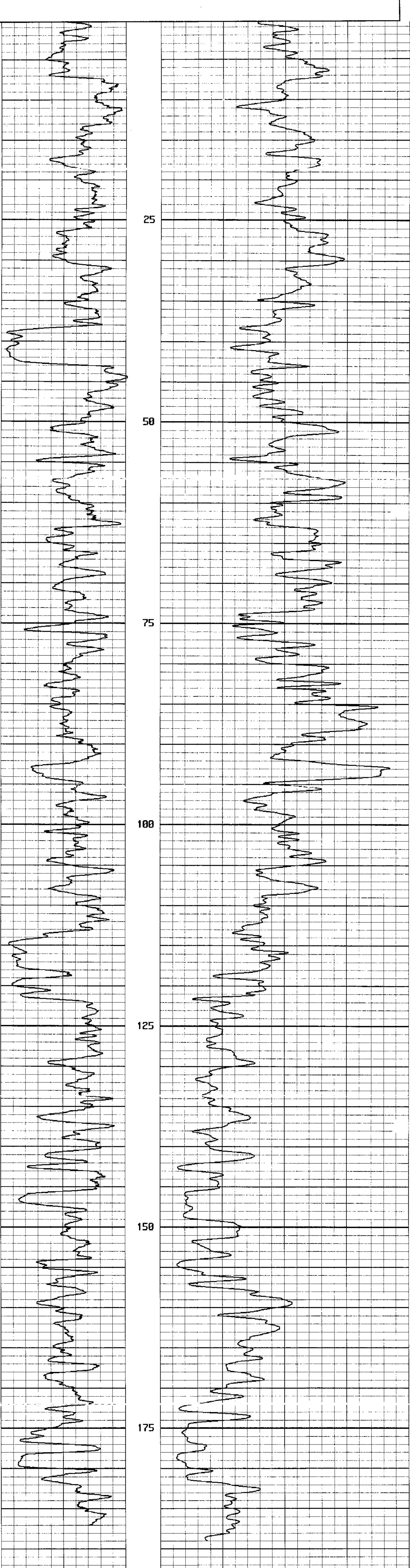
G.L.

Witnessed By K. KIMENEC

Recorded By D. SIM

LOGGED THROUGH DRILL RODS

\*\*\*\*\*REMARKS\*\*\*\*\*



2109 - 1 STREET N.W.  
 CALGARY ALBERTA  
 (403) 276-6459

FILE NO. \_\_\_\_\_ COMPANY **ELK VALLEY COAL CORPORATION**

WELL **RH2806**

LOCATION **TUMMILL**

FIELD **FONDING RIVER**

PROVINCE **B.C.**

Other Services

PERM. DATUM: **GL** Elev. **ELV. NO.**

LOG MEASURED FROM: **GL** Above Perm Datum: **CSG.**

WELL DEPTH MEASURED FROM: **GL**

RUN NO. **ONE**

DATE **29 JULY 83**

FIRST READING **249.8**

LAST READING **8.8**

POSTAGE LOGGED **249.8**

DEPTH REACHED **249.6**

DEPTH DRIFFER **258.8**

CASTING ELECTROLOG

CASTING DRILLING

FLUID TYPE **WATER**

LIQUID LEV. **134MM**

MIN. DIAMET. **1 HR.**

OPERATING TL. **TWO**

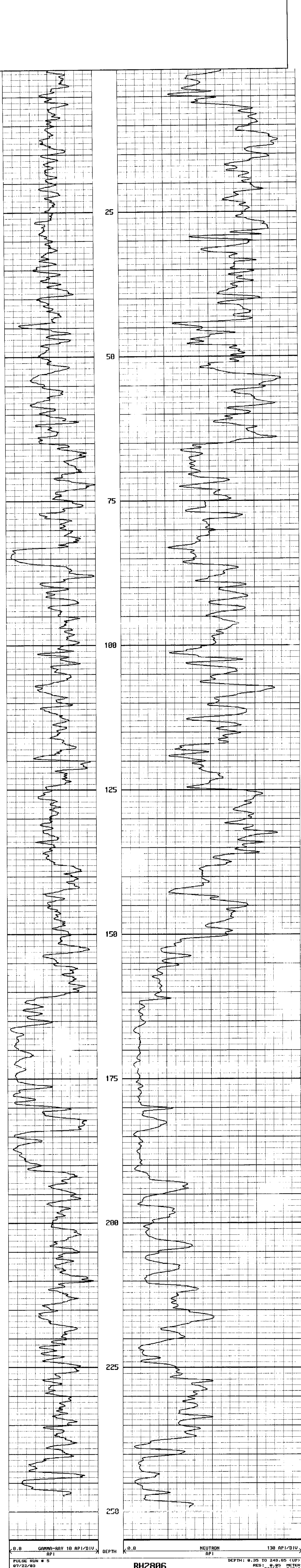
TRUCK NO. **B.SIM**

RECORDED BY **K. KIMMENC**

WITNESSED BY \_\_\_\_\_

\*\*\*\*\*REMARKS\*\*\*\*\*

LOGGED THROUGH DRILL RODS



**ELECTROLOG SERVICES INC. GAMMA-NEUTRON**

2109 - 1 STREET, N.W.  
 CALGARY, ALBERTA  
 (403) 276-6459

FILE NO. COMPANY ELK VALLEY COAL CORPORATION

WELL NO. WE111 R42389

LOCATION THORNHILL

FIELD FORDING RIVER

PROVINCE B.C.

OTHER SERVICES

W. N. RGS. M. SEC. TWR. W. RGS. M.

Permanent Datum: G.L. Elev. Elev. KB.

Log Measured From: G.L. Above Perm Datum: CG. G.L.

Well Depth Measured From: G.L.

Run No. ONE

Date 17 JULY 63

First Reading 388.8

Last Reading 8.8

Footage Logged 388.8

Depth Reached 388.3

Depth Driller 364.5

Casing Electrolog 9.8

Casing Driller 9.8

Liquid Level WATER

Min. Diameter 134MM

Operating Time 1 HR.

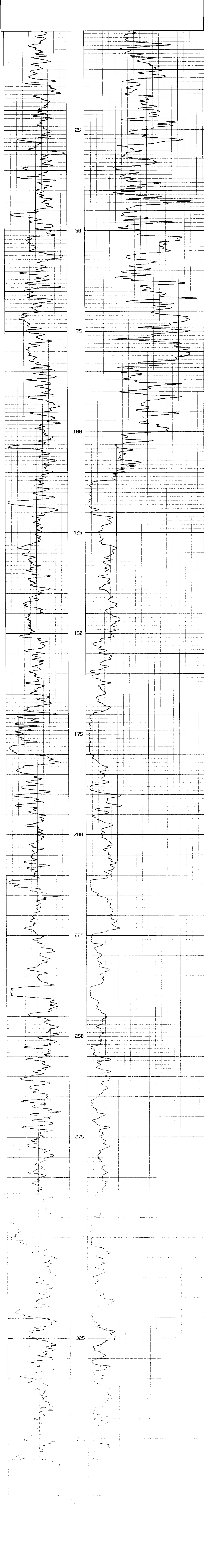
Truck No. TND

Recorded By D.S.M

Witnessed By K.MORNIC

\*\*\*\*\*REMARKS\*\*\*\*\*

LOGGED THROUGH DRILL RODS



# ELECTROLOG DIRECTIONAL SURVEY

SERVICES INC.

2109 - 1 STREET N.W. CALGARY, ALBERTA T2M 4P8 Tel: (403) 276-6459



+19° Decl.

COMPANY ELK VALLEY COAL CORPORATION  
 DRILLHOLE DH2810  
 LOCATION TURNBULL  
 FIELD FURDING RIVER  
 PROVINCE B.C.

LATITUDE \_\_\_\_\_  
 DEPARTURE \_\_\_\_\_  
 ELEVATION \_\_\_\_\_  
 MAGNETIC DECLINATION 19°  
 CORRECTION OF \_\_\_\_\_

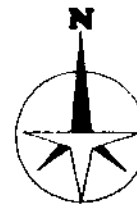
DATE SURVEYED 22 July 03  
 SURVEY BY Jim  
 WITNESSED BY KOMENAC  
 CALCULATIONS BY \_\_\_\_\_  
 FOR \_\_\_\_\_ GRID

Number	Cable Depth	Slant Angle	Slant Angle Bearing	Number	Cable Depth	Slant Angle	Slant Angle Bearing	Number	Cable Depth	Slant Angle	Slant Angle Bearing
0	0	.05		11	110	1.57	56.5	22	220	.79	359.0
1	10	.36		12	120	1.58	34.4	23	230	1.23	87.6
2	20	1.03	167.7	13	130	2.25	65.2	24	240	1.97	55.2
3	30	1.57	115.8	14	140	2.69	67.6	25	250	1.96	75.2
4	40	1.93	341.2	15	150	3.40	71.0	26	260	1.96	71.0
5	50	1.94	145.1	16	160	2.42	62.7	27	270	1.05	81.1
6	60	1.93	378.8	17	170	3.77	57.3	28	280	1.97	76.1
7	70	1.57	21.4	18	180	2.68	68.5	29	290	1.97	80.5
8	80	1.93	199.8	19	190	1.95	55.1	30	300	.54	80.0
9	90	1.94	356.4	20	200	1.60	72.3	31	310	1.06	85.2
10	100	1.58	29.4	21	210	.38	51.4	32			

# ELECTROLOG DIRECTIONAL SURVEY

SERVICES INC.

2109 - 1 STREET N.W. CALGARY, ALBERTA T2M 4P8 Tel: (403) 276-6459



+ 19° Dec

COMPANY ELK VALLEY COAL CORPORATION  
 DRILLHOLE DH 2809  
 LOCATION TURNBULL  
 FIELD FORDING RIVER  
 PROVINCE B.C.

LATITUDE \_\_\_\_\_  
 DEPARTURE \_\_\_\_\_  
 ELEVATION \_\_\_\_\_  
 MAGNETIC DECLINATION 19  
 CORRECTION OF 20° APPROX

DATE SURVEYED 22 July 03  
 SURVEY BY SIM  
 WITNESSED BY KOMENAC  
 CALCULATIONS BY \_\_\_\_\_  
 FOR \_\_\_\_\_ GRID

Num-ber	Cable Depth	Slant Angle	Slant Angle Bearing	Num-ber	Cable Depth	Slant Angle	Slant Angle Bearing	Num-ber	Cable Depth	Slant Angle	Slant Angle Bearing
0	0	.03		11	110	2.66	55.9 30.9	22	220	7.94	114.4
1	10	.06	346.1	12	120	2.47	81.6	23	230	8.62	115.7
2	20	.07	347.0	13	130	3.21	68.5	24	240	8.82	122.6
3	30	.05	329.2	14	140	3.39	68.8	25	250	10.21	133.4
4	40	.06	335.9 316.7	15	150	3.77	74.9	26	260	11.30	138.5
5	50	.08	343.6 304.6	16	160	4.47	88.9	27	270	12.55	142.5
6	60	.17	36.6	17	170	4.65	92.8	28	280	13.83	143.4
7	70	1.02	58.0	18	180	5.02	93.7	29	290	14.07	147.9
8	80	1.57	64.1	19	190	6.46	94.9	30	300	13.82	143.6
9	90	1.43	75.2	20	200	6.50	94.4	31	310	13.63	144.6
10	100	1.02	84.9	21	210	7.36	102.2	32	320	12.74	141.4

# ELECTROLOG DIRECTIONAL SURVEY

SERVICES INC.

2109 - 1 STREET N.W. CALGARY, ALBERTA T2M 4P8 Tel: (403) 276-6459



COMPANY ELK VALLEY COAL CORPORATION  
 DRILLHOLE DH2809  
 LOCATION TURNBULL  
 FIELD FORDING RIVER  
 PROVINCE B-C

LATITUDE \_\_\_\_\_  
 DEPARTURE \_\_\_\_\_  
 ELEVATION \_\_\_\_\_  
 MAGNETIC DECLINATION \_\_\_\_\_  
 CORRECTION OF \_\_\_\_\_

DATE SURVEYED 22 July 03  
 SURVEY BY SLM  
 WITNESSED BY KUMENOC  
 CALCULATIONS BY \_\_\_\_\_  
 FOR \_\_\_\_\_ GRID

Num-ber	Cable Depth	Slant Angle	Slant Angle Bearing	Num-ber	Cable Depth	Slant Angle	Slant Angle Bearing	Num-ber	Cable Depth	Slant Angle	Slant Angle Bearing
0	330	12.91	143.66	11				22			
1	340	12.74	136.88	12				23			
2	350	12.74	136.88	13				24			
3	360	12.28	139.33	14				25			
4				15				26			
5				16				27			
6	300			17				28			
7	250	10.05	111.0	18				29			
8	200	6.53	76.8	19				30			
9	150	3.79	61.0	20				31			
10				21				32			

# ELECTROLOG DIRECTIONAL SURVEY

SERVICES INC.

2109 - 1 STREET N.W. CALGARY, ALBERTA T2M 4P8 Tel: (403) 276-6459



+19° Decl

COMPANY EIR VALLEY COAL CORPORATION  
 DRILLHOLE RH 2806  
 LOCATION TURNBULL  
 FIELD FORDING RIVER  
 PROVINCE B.C.

LATITUDE \_\_\_\_\_  
 DEPARTURE \_\_\_\_\_  
 ELEVATION \_\_\_\_\_  
 MAGNETIC DECLINATION +19°  
 CORRECTION OF \_\_\_\_\_

DATE SURVEYED 24 July 03  
 SURVEY BY S117  
 WITNESSED BY RDH/ENC  
 CALCULATIONS BY \_\_\_\_\_  
 FOR \_\_\_\_\_ GRID

Number	Cable Depth	Slant Angle	Slant Angle Bearing	Number	Cable Depth	Slant Angle	Slant Angle Bearing	Number	Cable Depth	Slant Angle	Slant Angle Bearing
0	0	.04		11	110	.05	75.1	22	220	.05	325.4
1	10	.05	352.8	12	120	.04	79.1	23	230	.04	251.8
2	20	.10	312.2	13	130	.05	94.9	24	240	1.07	379.1
3	30	.09	27.8	14	140	.04	131.5	25	250	.65	288.8
4	40	.07	23.4	15	150	.04	163.3	26			
5	50	.05	20.2	16	160	.04	116.1	27			
6	60	.05	11.1	17	170	.05	151.2	28			
7	70	.05	4.9	18	180	.04	123.6	29			
8	80	.05	43.2	19	190	.04	131.8	30			
9	90	.06	39.3	20	200	.03	102.8	31			
10	100	.08	45.4	21	210	.03	140.8	32			



# ELECTROLOG DIRECTIONAL SURVEY

SERVICES INC.

2109 - 1 STREET N.W. CALGARY, ALBERTA T2M 4P8 Tel: (403) 276-6459



+ 19° Decl

COMPANY FIK VALLEY COAL CORPORATION  
 DRILLHOLE R112A05  
 LOCATION TURBIDITY  
 FIELD FORDING RIVER  
 PROVINCE BC

LATITUDE \_\_\_\_\_  
 DEPARTURE \_\_\_\_\_  
 ELEVATION \_\_\_\_\_  
 MAGNETIC DECLINATION 19.0  
 CORRECTION OF \_\_\_\_\_

DATE SURVEYED 25 July 03  
 SURVEY BY S.M.  
 WITNESSED BY K. HENAO  
 CALCULATIONS BY \_\_\_\_\_  
 FOR \_\_\_\_\_ GRID

Num-ber	Cable Depth	Slant Angle	Slant Angle Bearing	Num-ber	Cable Depth	Slant Angle	Slant Angle Bearing	Num-ber	Cable Depth	Slant Angle	Slant Angle Bearing
0	<del>00</del>	.03		11	110	3.76	330.1	22			
1	<del>00</del>	.05	33.6 7.46	12	120	3.40	324.8	23			
2	20	.05	70.4 5.71	13	130	3.77	321.5 8.075	24			
3	30	.07	90.8 7.78	14	140	4.12	321.0	25			
4	40	.05	44.3 2.53	15	150	3.58	315.1 2.771	26			
5	50	.07	29.5 2.05	16	160	3.02	299.8 2.80	27			
6	60	.45	20.5	17	170	2.66	296.7 2.707	28			
7	70	.47	343.5 3.275	18	180	3.21	298.4 2.784	29			
8	80	1.57	341.2 3.322	19	190	2.95	295.7 2.707	30			
9	90	1.58	331.9 3.274	20				31			
10	100	1.94	322.1 3.251	21				32			

COM	2003	EXPLORATION	GEOLOGY	DRILL	HOLE	LOCATIONS
GEOL	2808	25221.697	153389.250	1894.269		
GEOL	2807	24894.449	153275.516	1858.025		
GEOL	2805	24607.111	153313.828	1820.657		
GEOL	2806	24552.545	153161.422	1875.167		
GEOL	2809	25096.490	153035.484	2006.258		
GEOL	2810	25333.793	153197.906	2030.683		

Sample ID	Romax %	Hole	Seam
001	1.13	2805	121
002	1.21	"	115
003	1.24	"	090
004	1.09	2806	120
005	1.16	"	115
006	1.21	"	115
007	1.22	"	090
008	1.07	2807	130
009	1.08	"	123
010	1.13	"	121
011	1.21	"	115
012	1.24	"	110
013	1.28	"	092
014	1.03	2808	130
015	1.09	"	121
016	1.23	"	115
017	1.07	2809	130
018	1.14	"	120
019	1.20	"	115
020	1.24	"	110
021	1.30	"	092
022	1.07	2810	130
023	1.08	"	121
024	1.22	"	115

**ROTARY DRILL HOLE SAMPLING RECORD**

HOLE NUMBER:		2805	AREA:	TURNBULL				FORDING RIVER OPERATIONS				
FROM	TO	DESCRIPTION	SAMPLE NUMBER	WIDTH	ASH	V.C.M.	I.M.	F.C.	F.S.I.	S	PHOS	REMARKS
39.3	40		174740	0.7	6.3							
40	40.5		174741	0.5	16.4							Ro max
40.5	41		174742	0.5	8.7							S.G. WASH
41	41.5		174743	0.5	10.3							P.A. & P2O5 ON FLOAT
41.5	42		174744	0.5	4.7							
42	42.5		174745	0.5	5.8							
42.5	43		174746	0.5	5.2							
43	43.5		174747	0.5	10.6							
43.5	44		174748	0.5	17							
44	44.5		174749	0.5	78.3							
55.3	56		174750	0.7	16.2							
56	56.5		175201	0.5	74.6							
76.3	77		175202	0.7	22.1							
77	77.5		175203	0.5	60.3							
77.5	78		175204	0.5	81.9							
		compo	228	121	9.0	26.85	0.62	63.53	8	0.66	3.67	

**ROTARY DRILL HOLE SAMPLING RECORD**

HOLE NUMBER:		2805	AREA:	TURNBULL				FORDING RIVER OPERATIONS				
FROM	TO	DESCRIPTION	SAMPLE NUMBER	WIDTH	ASH	V.C.M.	I.M.	F.C.	F.S.I.	S	PHOS	REMARKS
114	114.5		175205	0.5	62.3							
114.5	115		175206	0.5	63.3							
115	115.5		175207	0.5	33.1							Ro max
115.5	116		175208	0.5	29.2							S.G. WASH
116	116.5		175209	0.5	31.5							P.A. & P2O5 ON FLOAT
116.5	117		175210	0.5	36.6							
117	117.5		175211	0.5	25.7							
117.5	118		175212	0.5	10.9							
118	118.5		175213	0.5	11.1							
118.5	119		175214	0.5	8.1							
119	119.5		175215	0.5	31.7							
119.5	120		175216	0.5	69.2							
120	120.5		175217	0.5	19.0							
120.5	121		175218	0.5	9.6							
121	121.5		175219	0.5	8.7							
121.5	122		175220	0.5	49.4							
122	122.5		175221	0.5	17.2							
122.5	123		175222	0.5	37.1							
123	123.5		175223	0.5	84.8							
138	138.5		171551	0.5	72.9							
138.5	139		171552	0.5	87.1							
		compo	229	115	27.5	19.87	0.66	51.97	5.5	0.50	1.31	

**ROTARY DRILL HOLE SAMPLING RECORD**

HOLE NUMBER:		2805	AREA:	TURNBULL				FORDING RIVER OPERATIONS				
FROM	TO	DESCRIPTION	SAMPLE NUMBER	WIDTH	ASH	V.C.M.	I.M.	F.C.	F.S.I.	S	PHOS	REMARKS
143	143.5		171553	0.5	26.3							
143.5	144		171554	0.5	38.8							
144	144.5		171555	0.5	85.3							
147	147.5		171556	0.5	54.1							
147.5	148		171557	0.5	25.4							
148	148.5		171558	0.5	61.5							
148.5	149		171559	0.5	76.1							
149	149.5		171560	0.5	79.4							
149.5	150		171561	0.5	75.6							
150	150.5		171562	0.5	88.4							
155	155.5		171563	0.5	28.7							
155.5	156		171564	0.5	42.1							
156	156.5		171565	0.5	47.9							
156.5	157		171566	0.5	73.7							
157	157.5		171567	0.5	84.1							
158	158.5		171568	0.5	63.7							
158.5	159		171569	0.5	80.9							
159	159.5		171570	0.5	85.8							
		compo	230	199	33.0	19.24	0.54	47.22	5.5	0.71		
		compo	231	112	36.0	19.09	0.49	44.42	5.5	0.71		

**ROTARY DRILL HOLE SAMPLING RECORD**

HOLE NUMBER:		2805	AREA:	TURNBULL	FORDING RIVER OPERATIONS							
FROM	TO	DESCRIPTION	SAMPLE NUMBER	WIDTH	ASH	V.C.M.	I.M.	F.C.	F.S.I.	S	PHOS	REMARKS
173	173.5		171571	0.5	74.8							
173.5	174		171572	0.5	49.5							
174	174.5		171573	0.5	87.8							
175.5	176		171574	0.5	30.8							Ro max
176	176.5		171575	0.5	39.7							
176.5	177		171576	0.5	19.0							
177	177.5		171577	0.5	21.1							
177.5	178		171578	0.5	14.8							
178	178.5		171579	0.5	55.7							
178.5	179		171580	0.5	86.4							
179	179.5		171581	0.5	27.4							
179.5	180		171582	0.5	13.5							
180	180.5		171583	0.5	21.8							
180.5	181		171584	0.5	25.1							
181	181.5		171585	0.5	52.5							
181.5	182		171586	0.5	62.5							
182	182.5		171587	0.5	90.1							
182.5	183		171588	0.5	56.2							
183	183.5		171589	0.5	90.6							
		compo	232	90	26.1	19.81	0.56	53.53	4.5	0.59		
		compo	233	92	22.5	20.20	0.56	56.74	4.5	0.55		

**ROTARY DRILL HOLE SAMPLING RECORD**

HOLE NUMBER:		2806	AREA:	TURNBULL				FORDING RIVER OPERATIONS				
FROM	TO	DESCRIPTION	SAMPLE NUMBER	WIDTH	ASH	V.C.M.	I.M.	F.C.	F.S.I.	S	PHOS	REMARKS
45.5	46		174701	0.5	78.2							
46	46.5		174702	0.5	77							
46.5	47		174703	0.5	78.2							
47	47.5		174704	0.5	86.5							
84.6	85		174705	0.4	16.6							Ro max
85	85.5		174706	0.5	12.9							S.G. WASH
85.5	86		174707	0.5	11.3							P.A. & P2O5 ON FLOAT
86	86.5		174708	0.5	14							
86.5	87		174709	0.5	17.6							
87	87.5		174710	0.5	81.6							
102.5	103		174711	0.5	73.1							
103	103.5		174712	0.5	45.3							
119.7	120		174713	0.3	28.5							
120	120.5		174714	0.5	35.8							
120.5	121		174715	0.5	74.1							
121	121.5		174716	0.5	86.5							
143.7	144		174717	0.3	74.5							
144	144.5		174718	0.5	74.1							
144.5	145		174719	0.5	89.4							
		compo	234	121	15.6	26.13	0.72	57.55	8	0.52	2.62	
		compo	235	199	32.4	22.46	0.56	44.58	6.5	0.72		





**ROTARY DRILL HOLE SAMPLING RECORD**

HOLE NUMBER:		2806	AREA:	TURNBULL	FORDING RIVER OPERATIONS							
FROM	TO	DESCRIPTION	SAMPLE NUMBER	WIDTH	ASH	V.C.M.	I.M.	F.C.	F.S.I.	S	PHOS	REMARKS
177	177.5		174775	0.5	28.8							
177.5	178		174776	0.5	11							
178	178.5		174777	0.5	9.7							
178.5	179		174778	0.5	51.7							
179	179.5		174779	0.5	27.6							
179.5	180		174780	0.5	11.9							
180	180.5		174781	0.5	79							
180.5	181		174782	0.5	38.5							
181	181.5		174783	0.5	55.8							
181.5	182		174784	0.5	84.5							
182	182.5		174785	0.5	25.2							
182.5	183		174786	0.5	38.2							
		compo	236	199	40.3	22.03	0.55	37.12	2.5	0.38		
		compo	237	115	16.1	21.97	0.75	61.18	4.5	0.43	0.76	
		compo	238	115	33.1	18.85	0.67	47.38	5.5	0.42		

**ROTARY DRILL HOLE SAMPLING RECORD**

HOLE NUMBER:		2806	AREA:	TURNBULL	FORDING RIVER OPERATIONS							
FROM	TO	DESCRIPTION	SAMPLE NUMBER	WIDTH	ASH	V.C.M.	I.M.	F.C.	F.S.I.	S	PHOS	REMARKS
185	185.5		174787	0.5	9.7							
185.5	186		174788	0.5	9.5							Ro max
186	186.5		174789	0.5	9.4							
186.5	187		174790	0.5	8.9							
187	187.5		174791	0.5	52.2							
187.5	188		174792	0.5	26.1							
188	188.5		174793	0.5	16.4							
188.5	189		174794	0.5	41.5							
189	189.5		174795	0.5	17.4							
189.5	190		174796	0.5	15.9							
190	190.5		174797	0.5	18.6							
190.5	191		174798	0.5	14.6							
191	191.5		174799	0.5	56.2							
191.5	192		174800	0.5	18							
192	192.5		171501	0.5	73.7							
192.5	193		171502	0.5	78.7							
193	193.5		171503	0.5	79.1							
193.5	194		171504	0.5	83.2							
207.5	208		171505	0.5	72.9							
208	208.5		171506	0.5	83.8							
		compo	239	115	23.6	20.91	0.64	54.85	5.5	0.61		

**ROTARY DRILL HOLE SAMPLING RECORD**

HOLE NUMBER:		2806	AREA:		TURNBULL				FORDING RIVER OPERATIONS			
FROM	TO	DESCRIPTION	SAMPLE NUMBER	WIDTH	ASH	V.C.M.	I.M.	F.C.	F.S.I.	S	PHOS	REMARKS
222	222.5		171507	0.5	67.6							
222.5	223		171508	0.5	53.8							
223	223.5		171509	0.5	48.3							
223.5	224		171510	0.5	40.9							
224	224.5		171511	0.5	82.5							
225	225.5		171512	0.5	66							
225.5	226		171513	0.5	86.1							
239	239.5		171514	0.5	83.7							
239.5	240		171515	0.5	55.4							
240	240.5		171516	0.5	46.2							
240.5	241		171517	0.5	86.5							
241	241.5		171518	0.5	31							Ro max
241.5	242		171519	0.5	50.4							
242	242.5		171520	0.5	24							
242.5	243		171521	0.5	14.9							
243	243.5		171522	0.5	25.3							
243.5	244		171523	0.5	22.1							
244	244.5		171524	0.5	82.6							
244.5	245		171525	0.5	84.7							
		compo	240	090	29.7	20.77	0.57	48.96	4	0.59		



ROTARY DRILL HOLE SAMPLING RECORD										ELKVALLEY COAL CORP.		
HOLE NUMBER:		2807		AREA:		TURNBULL				FORDING RIVER OPERATIONS		
FROM	TO	DESCRIPTION	SAMPLE NUMBER	WIDTH	ASH	V.C.M.	I.M.	F.C.	F.S.I.	S	PHOS	REMARKS
18	18.5		171526	0.5	19.8							
18.5	19		171527	0.5	16.9							
19	19.5		171528	0.5	71.3							
70	70.5		171529	0.5	36.9							Ro max
70.5	71		171530	0.5	33.6							S.G. WASH
71	71.5		171531	0.5	35.7							P.A. & P2O5 ON FLOAT
71.5	72		171532	0.5	25.2							
72	72.5		171533	0.5	53.4							
72.5	73		171534	0.5	16.5							
73	73.5		171535	0.5	9.9							
73.5	74		171536	0.5	14.6							
74	74.5		171537	0.5	16.9							
74.5	75		171538	0.5	23.0							
75	75.5		171539	0.5	75.5							
99	99.5		171541	0.5	16.9							Ro max
99.5	100		171542	0.5	14.5							
100	100.5		171543	0.5	15.2							
100.5	101		171544	0.5	34.3							
101	101.5		171545	0.5	48.3							
101.5	102		171546	0.5	81.0							
131	131.5		171547	0.5	17.0							Ro max
131.5	132		171548	0.5	10.0							
132	132.5		171549	0.5	17.2							
132.5	133		171550	0.5	11.2							
133	133.5		171601	0.5	12.8							
133.5	134		171602	0.5	75.5							
134	134.5		171603	0.5	51.5							
		compo	242	199	18.7	27.83	0.62	52.85	7.5	0.73		
		compo	243	130	27.0	24.25	0.54	48.21	7.5	0.58	2.16	

ROTARY DRILL HOLE SAMPLING RECORD										ELKVALLEY COAL CORP.		
HOLE NUMBER:		2807		AREA:		TURNBULL		FORDING RIVER OPERATIONS				
FROM	TO	DESCRIPTION	SAMPLE NUMBER	WIDTH	ASH	V.C.M.	I.M.	F.C.	F.S.I.	S	PHOS	REMARKS
144	144.5		171604	0.5	36.1							
144.5	145		171605	0.5	80.1							
		compo	244	123	21.1	25.90	0.46	52.54	7.5	0.73		
165.5	166		171606	0.5	54.2							
166	166.5		171607	0.5	31.8							
166.5	167		171608	0.5	63.5							
167	167.5		171609	0.5	89.2							
		compo	245	121	14.2	25.17	0.60	60.03	8	0.72		
186.5	187		171610	0.5	38.8							Ro max
187	187.5		171611	0.5	15.9							S.G. WASH
187.5	188		171612	0.5	11.5							P.A. & P2O5 ON FLOAT
188	188.5		171613	0.5	13.6							
188.5	189		171614	0.5	24.5							
189	189.5		171615	0.5	10.9							
189.5	190		171616	0.5	14.2							
190	190.5		171617	0.5	30.0							
190.5	191		171618	0.5	18.1							
191	191.5		171619	0.5	11.5							
191.5	192		171620	0.5	25.5							
192	192.5		171621	0.5	15.9							
192.5	193		171622	0.5	9.4							
193	193.5		171623	0.5	50.2							
193.5	194		171624	0.5	39.6							
194	194.5		171625	0.5	53.7							
194.5	195		171626	0.5	41.4							
195	195.5		171627	0.5	66							
		compo	246	115	25.0	21.43	0.57	53	5	0.55		
		compo	247	115	19.2	22.50	0.59	57.71	5	0.45	2.56	primary

ROTARY DRILL HOLE SAMPLING RECORD										ELKVALLEY COAL CORP.		
HOLE NUMBER:		2807		AREA:	TURNBULL					FORDING RIVER OPERATIONS		
FROM	TO	DESCRIPTION	SAMPLE NUMBER	WIDTH	ASH	V.C.M.	I.M.	F.C.	F.S.I.	S	PHOS	REMARKS
219.5	220		171628	0.5	44.1							
220	220.5		171629	0.5	12							Ro max
220.5	221		171630	0.5	15.2							
221	221.5		171631	0.5	13.6							
221.5	222		171632	0.5	24							
222	222.5		171633	0.5	74.4							
231.1	231.5		171634	0.4	41.8							
231.5	232		171635	0.5	39.4							
232	232.5		171636	0.5	58.2							
232.5	233		171637	0.5	49.5							
233	233.5		171638	0.5	64.8							
233.5	234		171639	0.5	71.4							
234	234.5		171640	0.5	32.4							
234.5	235		171641	0.5	67.7							
		compo	248	110	16.0	19.35	0.52	64.13	1.5	0.68		
		compo	249	199	43.0	16.53	0.53	39.94	4	0.73		
244.7	245		171642	0.3	23.6							
245	245.5		171643	0.5	75.4							
247	247.5		171644	0.5	30.6							
247.5	248		171645	0.5	67.7							
248	248.5		171646	0.5	24.4							
248.5	249		171647	0.5	36.9							
249	249.5		171648	0.5	41.1							
249.5	250		171649	0.5	51.2							
250	250.5		171650	0.5	28.1							
		compo	250	091	40.8	16.90	0.56	41.74	5	0.57		



ROTARY DRILL HOLE SAMPLING RECORD

ELKVALLEY COAL CORP.

HOLE NUMBER:		2807		AREA:	TURNBULL			FORDING RIVER OPERATIONS				
FROM	TO	DESCRIPTION	SAMPLE NUMBER	WIDTH	2	V.C.M.	I.M.	F.C.	F.S.I.	S	PHOS	REMARKS
250.5	251		171651	0.5	13.6							
251	251.5		171652	0.5	32.6							
251.5	252		171653	0.5	22.5							
252	252.5		171654	0.5	83.8							
254.5	255		171655	0.5	17.4							Ro max
255	255.5		171656	0.5	13.4							
255.5	256		171657	0.5	12.3							
256	256.5		171658	0.5	13.5							
256.5	257		171659	0.5	40							
257	257.5		171660	0.5	84.7							
257.5	258		171661	0.5	44.4							
258	258.5		171662	0.5	75.3							
258.5	259		171663	0.5	34.8							
259	259.5		171664	0.5	52.7							
259.5	260		171665	0.5	66.3							
261	261.5		171666	0.5	31.4							
261.5	262		171667	0.5	81.3							
		compo	251	090	23.3	19.32	0.47	56.91	2.5	0.59		
		compo	252	092	20.2	18.65	0.54	60.61	2	0.50		

ROTARY DRILL HOLE SAMPLING RECORD										ELKVALLEY COAL CORP.		
HOLE NUMBER:		2808		AREA:		TURNBULL		FORDING RIVER OPERATIONS				
FROM	TO	DESCRIPTION	SAMPLE NUMBER	WIDTH	ASH	V.C.M.	I.M.	F.C.	F.S.I.	S	PHOS	REMARKS
26	26.5		175151	0.5	44.6							
26.5	27		175152	0.5	33							
27	27.5		175153	0.5	26.5							
27.5	28		175154	0.5	39							
28	28.5		175155	0.5	31.9							
28.5	29		175156	0.5	15.8							
29	29.5		175157	0.5	48							
29.5	30		175158	0.5	42.8							
30	30.5		175159	0.5	88.1							
33	33.5		175160	0.5	20.8							Ro max
33.5	34		175161	0.5	13							S.G. WASH
34	34.5		175162	0.5	14.6							P.A. & P2O5 ON FLOAT
34.5	35		175163	0.5	37.1							
35	35.5		175164	0.5	28.7							
35.5	36		175165	0.5	55.3							
36	36.5		175166	0.5	11.7							
36.5	37		175167	0.5	26.2							
37	37.5		175168	0.5	9							
37.5	38		175169	0.5	13.9							
38	38.5		175170	0.5	67.9							
38.5	39		175171	0.5	39.8							
39	39.5		175172	0.5	88.4							
		compo	253	131	29.8	21.47	1.90	46.83	0	0.69		
		compo	254	130	23.7	24.45	0.66	51.19	7.5	0.66	1.49	

ROTARY DRILL HOLE SAMPLING RECORD										ELK VALLEY COAL CORP.		
HOLE NUMBER:		2808		AREA:		TURNBULL		FORDING RIVER OPERATIONS				
FROM	TO	DESCRIPTION	SAMPLE NUMBER	WIDTH	ASH	V.C.M.	I.M.	F.C.	F.S.I.	S	PHOS	REMARKS
48.5	49		175173	0.5	52.2							
49	49.5		175174	0.5	48.9							
49.5	50		175175	0.5	37.3							
50	50.5		175176	0.5	53.5							
50.5	51		175177	0.5	62.2							
79.1	79.5		175178	0.4	61.2							
79.5	80		175179	0.5	14.9							Ro max
80	80.5		175180	0.5	9.6							
80.5	81		175181	0.5	4							
81	81.5		175182	0.5	5							
81.5	82		175183	0.5	3.1							
82	82.5		175184	0.5	9.7							
82.5	83		175185	0.5	32.3							
83	83.5		175186	0.5	43.6							
83.5	84		175187	0.5	23.4							
84	84.5		175188	0.5	37.8							
84.5	85		175189	0.5	39.3							
85	85.5		175190	0.5	79.1							
85.5	86		175191	0.5	80.2							
86	86.5		175192	0.5	36.6							
86.5	87		175193	0.5	13.4							
87	87.5		175194	0.5	27.7							
87.5	88		175195	0.5	82.7							
		compo	255	121	19.8	23.50	0.66	56.04	7.5	0.59		
		compo	256	199	27.2	21.38	0.65	50.77	7.5	0.83		

ROTARY DRILL HOLE SAMPLING RECORD										ELKVALLEY COAL CORP.		
HOLE NUMBER:		2808		AREA:		TURNBULL		FORDING RIVER OPERATIONS				
FROM	TO	DESCRIPTION	SAMPLE NUMBER	WIDTH	ASH	V.C.M.	I.M.	F.C.	F.S.I.	S	PHOS	REMARKS
94.5	95		175196	0.5	16.7							
95	95.5		175197	0.5	12.1							
95.5	96		175198	0.5	44.3							
96	96.5		175199	0.5	65							
96.5	97		175200	0.5	84.4							
97	97.5		175226	0.5	77.7							
97.5	98		175227	0.5	26.7							
98	98.5		175228	0.5	13.9							
98.5	99		175229	0.5	47.9							
		compo	257	120	15.8	25.16	0.61	58.43	8	0.67		
104.5	105		175230	0.5	72.6							
105	105.5		175231	0.5	45.6							
105.5	106		175232	0.5	55							
106	106.5		175233	0.5	72.4							
106.5	107		175234	0.5	70.3							
		compo	258	122	19.3	23.29	0.65	56.76	8	0.78		
138	138.5		175235	0.5	48.1							
138.5	139		175236	0.5	10.2							Ro max
139	139.5		175237	0.5	7.2							S.G. WASH
139.5	140		175238	0.5	7.6							P.A. & P2O5 ON FLOAT
140	140.5		175239	0.5	6.9							
140.5	141		175240	0.5	6.2							
141	141.5		175241	0.5	7							
141.5	142		175242	0.5	7							
142	142.5		175243	0.5	8.9							
142.5	143		175244	0.5	7.1							
143	143.5		175245	0.5	8.5							
143.5	144		175246	0.5	4.3							
144	144.5		175247	0.5	5.5							

ROTARY DRILL HOLE SAMPLING RECORD										ELKVALLEY COAL CORP.		
HOLE NUMBER:		2808		AREA:		TURNBULL		FORDING RIVER OPERATIONS				
FROM	TO	DESCRIPTION	SAMPLE NUMBER	WIDTH	2	V.C.M.	I.M.	F.C.	F.S.I.	S	PHOS	REMARKS
144.5	145		175248	0.5	11							
145	145.5		175249	0.5	9							
145.5	146		175250	0.5	14.1							
146	146.5		175126	0.5	12.1							
146.5	147		175127	0.5	8.1							
147	147.5		175128	0.5	5.7							
147.5	148		175129	0.5	5.3							
148	148.5		175130	0.5	9.9							
148.5	149		175131	0.5	43.3							
149	149.5		175132	0.5	75.8							
149.5	150		175133	0.5	76.1							
		compo	259	115	9.9	22.83	0.49	66.78	5.5	0.58	2.49	
154.5	155		175134	0.5	66.8							
155	155.5		175135	0.5	81.3							
163.5	164		175136	0.5	65.8							
164	164.5		175137	0.5	87.5							
173.5	174		175138	0.5	25.7							
174	174.5		175139	0.5	29.2							
174.5	175		175140	0.5	41.2							
175	175.5		175141	0.5	79.7							
		compo	260	199	33.4	17.49	0.43	48.68	3	1.15		
190.5	191		175142	0.5	54.7							
191	191.5		175143	0.5	73.1							
191.5	192		175144	0.5	80.2							



ROTARY DRILL HOLE SAMPLING RECORD

HOLE NUMBER:		2809		AREA:	TURNBULL			FORDING RIVER OPERATIONS				
FROM	TO	DESCRIPTION	SAMPLE NUMBER	WIDTH	ASH	V.C.M.	I.M.	F.C.	F.S.I.	S	PHOS	REMARKS
104.1	104.5		174821	0.4	65.8							
104.5	105		174822	0.5	40.7							
105	105.5		174823	0.5	55.3							
105.5	106		174824	0.5	80.1							
106	106.5		174825	0.5	73.9							
106.5	107		174826	0.5	70.9							
107	107.5		174827	0.5	74.2							
107.5	108		174828	0.5	81.4							
114	114.5		174829	0.5	73.2							
114.5	115		174830	0.5	73.3							
116.4	116.5		174831	0.1	76.0							
116.5	117		174832	0.5	61.3							
117	117.5		174833	0.5	74.3							
117.5	118		174834	0.5	78.5							
118	118.5		174835	0.5	72.1							
118.5	119		174836	0.5	32.0							
119	119.5		174837	0.5	25.0							
119.5	120		174838	0.5	51.5							
		compo	261	142	29.8	26.62	0.59	42.99	6	0.7		
121.3	121.5		174839	0.2	64.7							
121.5	122		174840	0.5	74.2							

**ROTARY DRILL HOLE SAMPLING RECORD**

HOLE NUMBER:		2809	AREA:	TURNBULL				FORDING RIVER OPERATIONS				
FROM	TO	DESCRIPTION	SAMPLE NUMBER	WIDTH	ASH	V.C.M.	I.M.	F.C.	F.S.I.	S	PHOS	REMARKS
172.1	172.5		174841	0.4	21.0							
172.5	173		174842	0.5	43.1							
173	173.5		174843	0.5	67.6							
173.5	174		174844	0.5	20.7							
174	174.5		174845	0.5	51.1							
174.5	175		174846	0.5	28.7							
175	175.5		174847	0.5	56.3							
175.5	176		174848	0.5	21.7							Ro max
176	176.5		174849	0.5	26.0							S.G. WASH
176.5	177		174850	0.5	17.0							P.A. & P2O5 ON FLOAT
177	177.5		174853	0.5	26.9							
177.5	178		174854	0.5	14.4							
178	178.5		174855	0.5	23.9							
178.5	179		174856	0.5	52.2							
179	179.5		174857	0.5	10.9							
179.5	180		174858	0.5	9.3							
180	180.5		174859	0.5	10.8							
180.5	181		174860	0.5	14.6							
181	181.5		174861	0.5	33.1							
189.3	189.5		174862	0.2	19.3							
189.5	190		174863	0.5	31.0							
190	190.5		174864	0.5	86.3							
		compo	262	130	27.4	23.52	0.60	48.48	7.5	0.62		
		compo	263	130	22.9	25.04	0.60	51.46	7.5	0.61	0.96	
		compo	264	199	28.9	22.08	0.61	48.41	6.5	0.80		



**ROTARY DRILL HOLE SAMPLING RECORD**

HOLE NUMBER:		2809		AREA:	TURNBULL			FORDING RIVER OPERATIONS				
FROM	TO	DESCRIPTION	SAMPLE NUMBER	WIDTH	ASH	V.C.M.	I.M.	F.C.	F.S.I.	S	PHOS	REMARKS
213	213.5		174865	0.5	39.1							
213.5	214		174866	0.5	36.3							
214	214.5		174867	0.5	44.6							
		compo	265	121	41.1	21.64	0.56	36.7	3	0.53		
226	226.5		174868	0.5	75.1							
226.5	227		174869	0.5	58.8							
227	227.5		174870	0.5	73.5							
227.5	228		174871	0.5	69.7							
228	228.5		174872	0.5	71.2							
239.1	239.5		174873	0.4	15.2							Ro max
239.5	240		174874	0.5	49.4							
240	240.5		174875	0.5	18.1							
240.5	241		174501	0.5	16.5							
241	241.5		174502	0.5	46.7							
241.5	242		174503	0.5	36.3							
242	242.5		174504	0.5	82.1							
		compo	266	120	31.2	21.66	0.58	46.56	6	0.48		
254.1	254.5		174505	0.4	54.9							
254.5	255		174506	0.5	82.1							

**ROTARY DRILL HOLE SAMPLING RECORD**

HOLE NUMBER:		2809	AREA:	TURNBULL				FORDING RIVER OPERATIONS				
FROM	TO	DESCRIPTION	SAMPLE NUMBER	WIDTH	ASH	V.C.M.	I.M.	F.C.	F.S.I.	S	PHOS	REMARKS
267.2	267.5		174507	0.3	25.7							
267.5	268		174508	0.5	46.1							
268	268.5		174509	0.5	79.0							
268.5	269		174510	0.5	61.8							
269	269.5		174511	0.5	88.6							
269.5	270		174512	0.5	90.9							
272	272.5		174513	0.5	67.5							
272.5	273		174514	0.5	86.8							
290.5	291		174515	0.5	68.7							
291	291.5		174516	0.5	89.3							
296.6	297		174517	0.4	34.5							Ro max
297	297.5		174518	0.5	15.0							S.G. WASH
297.5	298		174519	0.5	17.8							P.A. & P2O5 ON FLOAT
298	298.5		174520	0.5	14.5							
298.5	299		174521	0.5	13.0							
299	299.5		174522	0.5	10.8							
299.5	300		174523	0.5	21.1							
300	300.5		174524	0.5	20.1							
300.5	301		174525	0.5	33.5							
301	301.5		174526	0.5	13.4							
301.5	302		174527	0.5	13.1							
302	302.5		174528	0.5	32.5							
302.5	303		174529	0.5	45.9							
303	303.5		174530	0.5	23.4							
303.5	304		174531	0.5	76.8							

**ROTARY DRILL HOLE SAMPLING RECORD**

HOLE NUMBER:		2809	AREA:	TURNBULL	FORDING RIVER OPERATIONS							
FROM	TO	DESCRIPTION	SAMPLE NUMBER	WIDTH	ASH	V.C.M.	I.M.	F.C.	F.S.I.	S	PHOS	REMARKS
312	312.5		174532	0.5	75.7							
312.5	313		174533	0.5	89.0							
		compo	267	115	22.0	20.93	0.58	56.49	5	0.54	1.4	
319	319.5		174534	0.5	34.6							Ro max
319.5	320		174535	0.5	21.5							
320	320.5		174536	0.5	17.6							
320.5	321		174537	0.5	28.4							
321	321.5		174538	0.5	49.9							
321.5	322		174539	0.5	69.3							
		compo	268	110	27.2	18.41	0.51	53.88	2.5	0.65		
328.5	329		174540	0.5	68.6							
329	329.5		174541	0.5	81.5							
329.5	330		174542	0.5	84.0							
332	332.5		174543	0.5	50.6							
332.5	333		174544	0.5	52.0							
333	333.5		174545	0.5	81.9							
334.7	335		174546	0.3	48.7							
335	335.5		174547	0.5	65.5							
335.5	336		174548	0.5	68.4							
337	337.5		174549	0.5	70.0							
337.5	338		174550	0.5	88.1							

**ROTARY DRILL HOLE SAMPLING RECORD**

HOLE NUMBER:		2809	AREA:	TURNBULL				FORDING RIVER OPERATIONS				
FROM	TO	DESCRIPTION	SAMPLE NUMBER	WIDTH	ASH	V.C.M.	I.M.	F.C.	F.S.I.	S	PHOS	REMARKS
343.8	344		174551	0.2	31.8							
344	344.5		174552	0.5	82.1							
344.5	345		174553	0.5	78.4							
345	345.5		174554	0.5	72.0							
346.3	346.5		174555	0.2	49.0							
346.5	347		174556	0.5	75.6							
349	349.5		174557	0.5	62.3							
349.5	350		174558	0.5	56.1							
350	350.5		174559	0.5	62.0							
350.5	351		174560	0.5	35							
351	351.5		174561	0.5	23.6							
351.5	352		174562	0.5	37							
352	352.5		174563	0.5	85.9							
355	355.5		174564	0.5	21.5							Ro max
355.5	356		174565	0.5	14.6							
356	356.5		174566	0.5	31.6							
356.5	357		174567	0.5	68.2							
		compo	269	090	32.6	17.83	0.57	49	3	0.60		
		compo	270	092	22.5	18.30	0.50	58.7	3	0.55		
358.7	359		174568	0.3	50.8							
359	359.5		174569	0.5	85.9							



**ROTARY DRILL HOLE SAMPLING RECORD**

HOLE NUMBER:		2810		AREA:	TURNBULL			FORDING RIVER OPERATIONS				
FROM	TO	DESCRIPTION	SAMPLE NUMBER	WIDTH	ASH	V.C.M.	I.M.	F.C.	F.S.I.	S	PHOS	REMARKS
133	133.5		174589	0.5	83.2							
133.5	134		174590	0.5	41.1							
134	134.5		174591	0.5	50.3							
134.5	135		174592	0.5	57.6							
135	135.5		174593	0.5	30.0							
135.5	136		174594	0.5	32.8							
136	136.5		174595	0.5	30.9							
136.5	137		174596	0.5	76.3							
137	137.5		174597	0.5	40.4							
137.5	138		174598	0.5	44.5							
138	138.5		174599	0.5	60.8							
138.5	139		174600	0.5	25.3							
139	139.5		174626	0.5	32.6							
139.5	140		174690	0.5	41.5							
140	140.5		174691	0.5	56.2							
140.5	141		174692	0.5	17.1							Ro max
141	141.5		174630	0.5	7.7							S.G. WASH
141.5	142		174631	0.5	9.5							P.A. & P2O5 ON FLOAT
142	142.5		174632	0.5	12.7							
142.5	143		174633	0.5	68.8							
143	143.5		174634	0.5	30.2							
143.5	144		174635	0.5	88.2							
144	144.5		174636	0.5	73.4							
144.5	145		174637	0.5	79.5							
145	145.5		174638	0.5	88.2							
		compo	272	131	32.3	23.59	0.67	43.44	5.5	0.80		
		compo	273	130	29.6	22.28	0.68	47.44	7	0.57		
		compo	274	130	11.7	27.37	0.66	60.27	8	0.72	2.34	

**ROTARY DRILL HOLE SAMPLING RECORD**

HOLE NUMBER:		2810	AREA:	TURNBULL				FORDING RIVER OPERATIONS				
FROM	TO	DESCRIPTION	SAMPLE NUMBER	WIDTH	ASH	V.C.M.	I.M.	F.C.	F.S.I.	S	PHOS	REMARKS
153.7	154		174639	0.3	26.2							
154	154.5		174640	0.5	68.4							
154.5	155		174641	0.5	82.1							
155	155.5		174642	0.5	87.8							
155.5	156		174643	0.5	70.9							
156	156.5		174644	0.5	87.4							
198.5	199		174645	0.5	32.4							Ro max S.G. WASH P.A. & P2O5 ON FLOAT
199	199.5		174646	0.5	25.4							
199.5	200		174647	0.5	9.7							
200	200.5		174648	0.5	24.6							
200.5	201		174649	0.5	11.7							
201	201.5		174650	0.5	33.7							
201.5	202		174651	0.5	45.8							
202	202.5		174652	0.5	29.0							
202.5	203		174653	0.5	44.7							
203	203.5		174654	0.5	49.9							
203.5	204		174655	0.5	40.8							
204	204.5		174656	0.5	22.8							
204.5	205		174657	0.5	16.5							
205	205.5		174658	0.5	16.0							
205.5	206		174659	0.5	67.7							
206	206.5		174660	0.5	86.7							
		compo	275	121	27.6	23.22	0.59	48.59	6.5	0.47	1.75	
		compo	276	199	25.0	22.77	0.60	51.63	7.5	0.81		





**ROTARY DRILL HOLE SAMPLING RECORD**

HOLE NUMBER:		2810	AREA:	TURNBULL				FORDING RIVER OPERATIONS				
FROM	TO	DESCRIPTION	SAMPLE NUMBER	WIDTH	ASH	V.C.M.	I.M.	F.C.	F.S.I.	S	PHOS	REMARKS
252.1	252.5		174673	0.4	43.6							Ro max
252.5	253		174674	0.5	17.3							S.G. WASH
253	253.5		174675	0.5	21.2							P.A. & P2O5 ON FLOAT
253.5	254		174601	0.5	15.1							
254	254.5		174602	0.5	10.5							
254.5	255		174603	0.5	8.4							
255	255.5		174604	0.5	13.2							
255.5	256		174605	0.5	17.2							
256	256.5		174606	0.5	10.6							
256.5	257		174607	0.5	8.8							
257	257.5		174608	0.5	37.5							
257.5	258		174609	0.5	38.7							
258	258.5		174610	0.5	69.1							
289.7	290		174611	0.3	36.0							
290	290.5		174612	0.5	22.1							
290.5	291		174613	0.5	23.1							
291	291.5		174614	0.5	50.6							
291.5	292		174615	0.5	65.1							
292	292.5		174616	0.5	78.6							
296	296.5		174617	0.5	76.5							
296.5	297		174618	0.5	86.0							
		compo	279	115	20.3	21.22	0.61	57.87	5	0.78	4.15	
		compo	280	110	27.8	18.11	0.48	53.61	1	0.66		

