K-ELK RIVER 76(2)B

OPEN FILE

EVALUATION OF

EXPLORATION AND TESTWORK

JULY 1975 - APRIL 1976

ON THE

ELK RIVER COAL PROPERTY

VOLUME II

APPENDIX 1

MAPS & DRAWINGS

MINING RECORDS

CALGARY / DUSSELDORF

MAY 1976

274

ELCO MINING LIMITED

EVALUATION OF
EXPLORATION AND TESTWORK
JULY 1975 - APRIL 1976
ON THE
ELK RIVER COAL PROPERTY

VOLUME II
APPENDIX 1

MAPS & DRAWINGS

CALGARY/DUSSELDORF
MAY 1976

GEOLOGICAL BRANCH
ASSESSMENT REPORT

RECEIVED and RECORDED
M.R.
VICTORIA, B. C.

00274

VOLUME II

APPENDIX I - MAPS AND DRAWINGS

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Figure 4	Surface Geology (1 map-sheet) 7": 800' (ca. 7: 9,600)
Figure 5	Surface Geology (2 map-sheets) 7": 400' (ca.7" 4,800)
Figure 6	Section 110 + 00 (Big Weary Ridge) 7": 400' (ca.7" 4,800)
Figure 7	Section 180 + 00 (Big Weary Ridge & West Side) 7": 400' (ca.7" 4,800)
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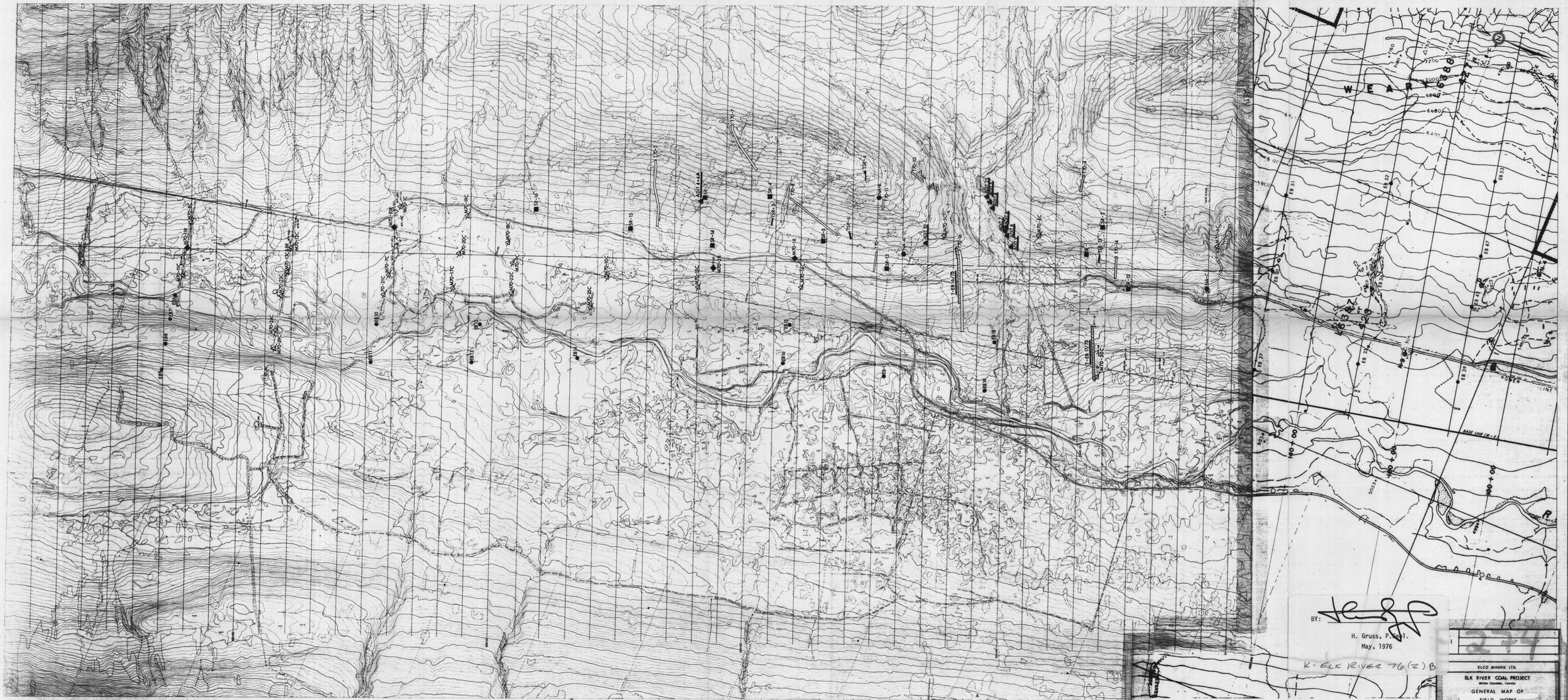
BULK SAMPLE LEGEND
TSR - SERIES - SCURRY-RAINBOW TRENCH
T-70 - SERIES - 1970 TRENCHES
ADIT - SERIES - BULK SAMPLE ADITS (1973)
T-EB - SERIES - ELCO MINING TRENCHES (1975)
DRILLHOLE LEGEND
NA - SERIES - NORTH AMERICAN COAL COMPANY DRILLHOLE
SR - SERIES - SCURRY-RAINBOW DRILLHOLE
M-70-"R" SERIES - ROTARY DRILLHOLE (1970)
M-70-"C" SERIES - CORED DRILLHOLE (1970)
EB - SERIES - EXPLORATION UND BERGBAU DRILLHOLE (1975)
WEARY CREEK
BASE LINE I-I
BY:
H. Gruss, P.Eng.
May, 1976
K-ELK RIVER 76(2)B
ELCO MINING LTD.
ELK RIVER COAL PROJECT
BRITISH COLUMBIA, CANADA
GENERAL MAP OF
FIELD WORKS
APPROX.
TECHNICAL LTD.

Figure 1

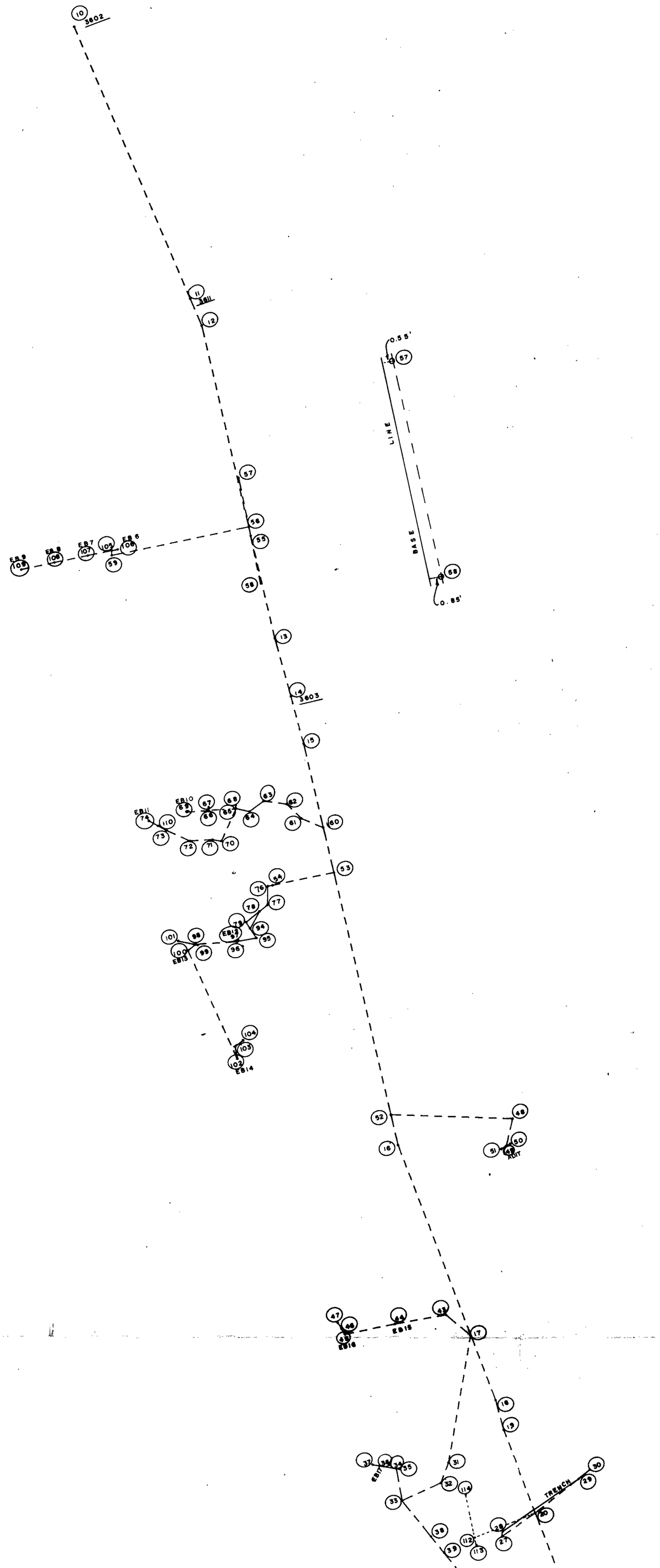

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Figure 2

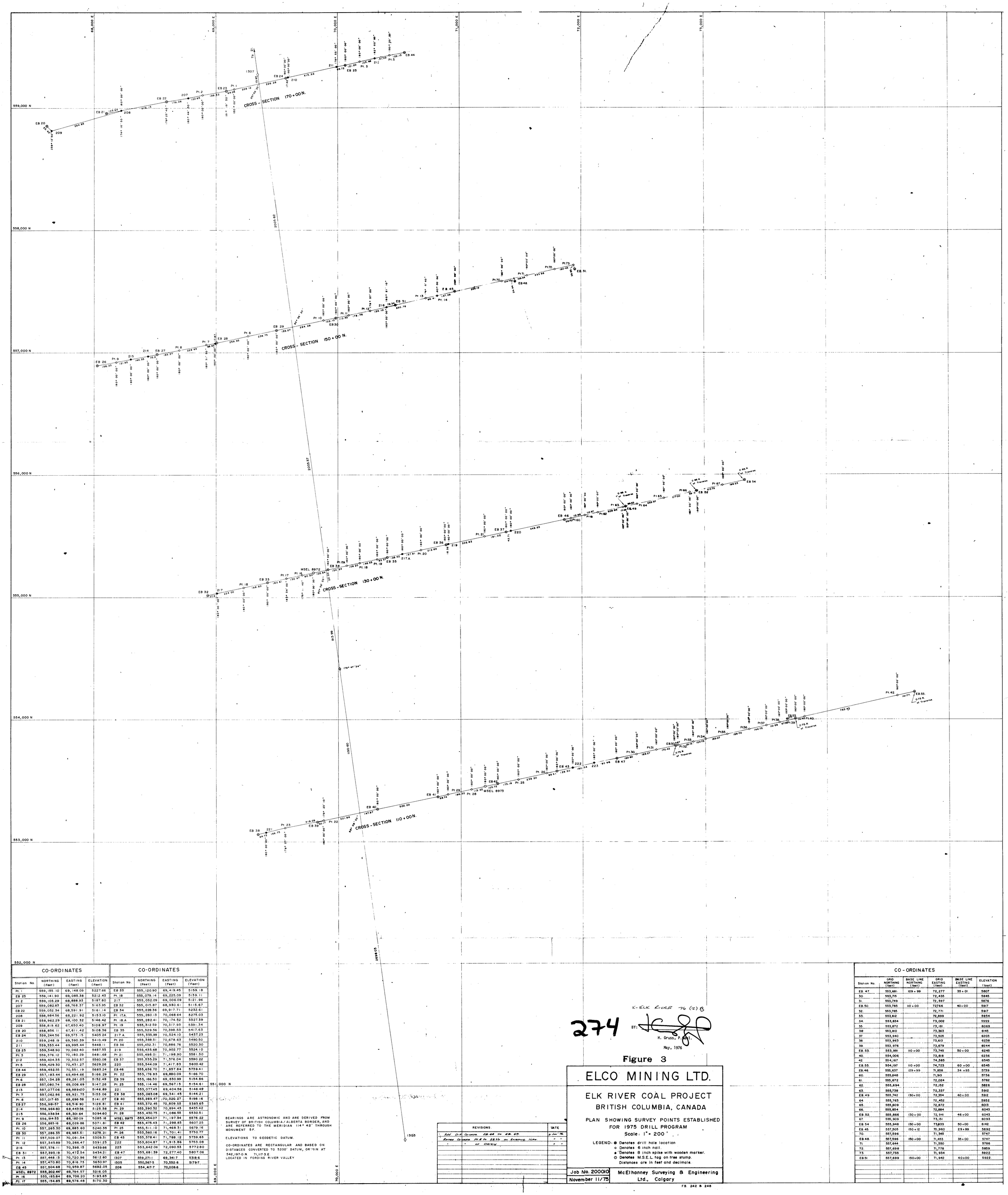
ELCO MINING LTD.

ELK RIVER COAL PROJECT

BRITISH COLUMBIA, CANADA

MAP OF LOCATIONS SURVEYED

Scale: 1" = 1000'	FIG. 2
Date: JULY, 1975	
BURNETT RESOURCES SURVEY LTD.	



CO-ORDINATES				CO-ORDINATES			
Station No.	NORTHING (Feet)	EASTING (Feet)	ELEVATION (Feet)	Station No.	NORTHING (Feet)	EASTING (Feet)	ELEVATION (Feet)
Pt. 1	559,155.10	69,148.09	5227.66	EB 33	555,120.90	69,419.45	5159.18
EB 23	559,141.90	69,085.38	5212.43	Pt. 18	555,079.14	69,225.09	5139.11
Pt. 2	559,105.29	68,888.93	5187.80	217	555,032.09	69,006.09	5121.96
207	559,082.83	68,768.37	5163.95	EB 32	555,015.87	68,930.61	5115.67
EB 22	559,052.34	68,591.91	5161.14	EB 34	555,228.36	69,917.71	5232.61
208	558,984.56	68,221.92	5153.10	Pt. 17A	555,260.13	70,068.64	5275.03
EB 21	558,962.29	68,100.32	5146.42	Pt. 18A	555,282.41	70,174.52	5327.39
209	558,819.62	67,650.40	5108.97	Pt. 19	555,312.59	70,317.93	5391.34
EB 20	558,856.11	67,611.42	5108.36	EB 35	555,329.56	70,398.53	5417.63
EB 24	559,244.56	69,573.15	5405.24	217.A	555,355.99	70,524.10	5437.23
210	559,248.19	69,590.39	5410.49	Pt. 20	555,388.51	70,678.63	5490.50
211	559,333.44	69,995.44	5448.11	EB 36	555,432.31	70,886.76	5520.30
EB 25	559,348.90	70,062.40	5457.33	219	555,435.68	70,902.77	5524.10
Pt. 3	559,376.12	70,180.29	5481.68	Pt. 21	555,498.01	71,198.90	5581.30
212	559,404.35	70,302.57	5560.08	EB 37	555,535.29	71,376.04	5590.22
Pt. 5	559,429.30	70,431.27	5629.26	220	555,544.09	71,417.83	5600.42
EB 44	559,452.55	70,551.19	5685.24	EB 46	555,636.70	71,857.84	5739.41
EB 29	557,183.44	69,494.66	5166.29	Pt. 22	553,176.83	69,880.09	5166.70
Pt. 6	557,134.28	69,261.05	5152.49	EB 39	553,166.50	69,830.99	5154.86
EB 28	557,080.74	69,006.69	5147.26	Pt. 23	553,114.46	69,587.15	5154.61
213	557,077.06	68,989.20	5146.89	221	553,077.45	69,404.56	5146.49
Pt. 7	557,062.86	68,921.75	5153.06	EB 38	553,063.08	69,341.45	5144.21
Pt. 8	557,017.65	68,696.58	5141.07	EB 40	553,269.47	70,320.27	5198.16
EB 27	556,981.57	68,516.90	5128.81	EB 41	553,372.45	70,809.55	5383.65
214	556,966.80	68,443.36	5125.58	Pt. 29	553,390.32	70,894.45	5435.42
215	556,938.34	68,301.64	5094.60	Pt. 28	553,430.75	71,086.55	5530.51
Pt. 9	556,914.33	68,182.09	5085.16	MSEL 8973	553,454.07	71,197.34	5576.22
EB 26	556,883.16	68,026.86	5071.81	EB 42	553,475.43	71,298.83	5607.25
Pt. 10	557,265.30	69,883.60	5240.35	Pt. 25	553,511.10	71,468.31	5679.16
EB 30	557,286.33	69,983.51	5278.21	Pt. 26	553,560.16	71,701.41	5730.77
Pt. 11	557,309.07	70,091.54	5309.51	EB 43	553,578.41	71,788.12	5739.63
Pt. 12	557,345.89	70,266.47	5391.23	222	553,604.87	71,913.86	5753.08
216	557,376.11	70,398.15	5439.66	223	553,642.06	72,090.53	5772.80
EB 31	557,393.19	70,472.54	5434.21	EB 47	553,681.39	72,277.40	5807.06
Pt. 13	557,448.13	70,720.96	5612.60	1307	559,271.11	69,341.7	5318.6
Pt. 14	557,470.80	70,816.73	5650.97	1305	550,567.5	70,552.6	5179.7
EB 45	557,504.68	70,959.87	5692.05	206	554,417.7	70,008.6	
MSEL 8972	555,302.44'	69,794.57	5216.05				
Pt. 16	555,183.84	69,706.20	5193.65				
Pt. 17	555,154.65	69,576.48	5170.30				

BEARINGS ARE ASTRONOMIC AND ARE DERIVED FROM SURVEY OF BRITISH COLUMBIA/ALBERTA BORDER, AND ARE REFERRED TO THE MERIDIAN 114° 42' THROUGH MONUMENT 5F.

ELEVATIONS TO GEODETIC DATUM.

CO-ORDINATES ARE RECTANGULAR AND BASED ON DISTANCES CONVERTED TO 5200' DATUM, ORIGIN AT 542,197.0 N. 71,117.3 E. LOCATED IN FORDING RIVER VALLEY

REVISIONS	DATE
Add D.H. Co-ords. EB 44 to EB 47.	9 Jun '76
Revise Co-ords. Pt 8 to EB 26 on Existing Info.	" "
" " " EB 47	" "

K-ELK RIVER 76 (2) B

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BY: H. Gruss, P. Eng.

May, 1976

Figure 3

ELCO MINING LTD.

ELK RIVER COAL PROJECT
BRITISH COLUMBIA, CANADA

PLAN SHOWING SURVEY POINTS ESTABLISHED FOR 1975 DRILL PROGRAM

Scale: 1" = 200'

LEGEND: ⊕ Denotes drill hole location
o Denotes 6 inch nail.
● Denotes 8 inch spike with wooden marker.
⊙ Denotes M.S.E.L. tag on tree stump.
Distances are in feet and decimals.

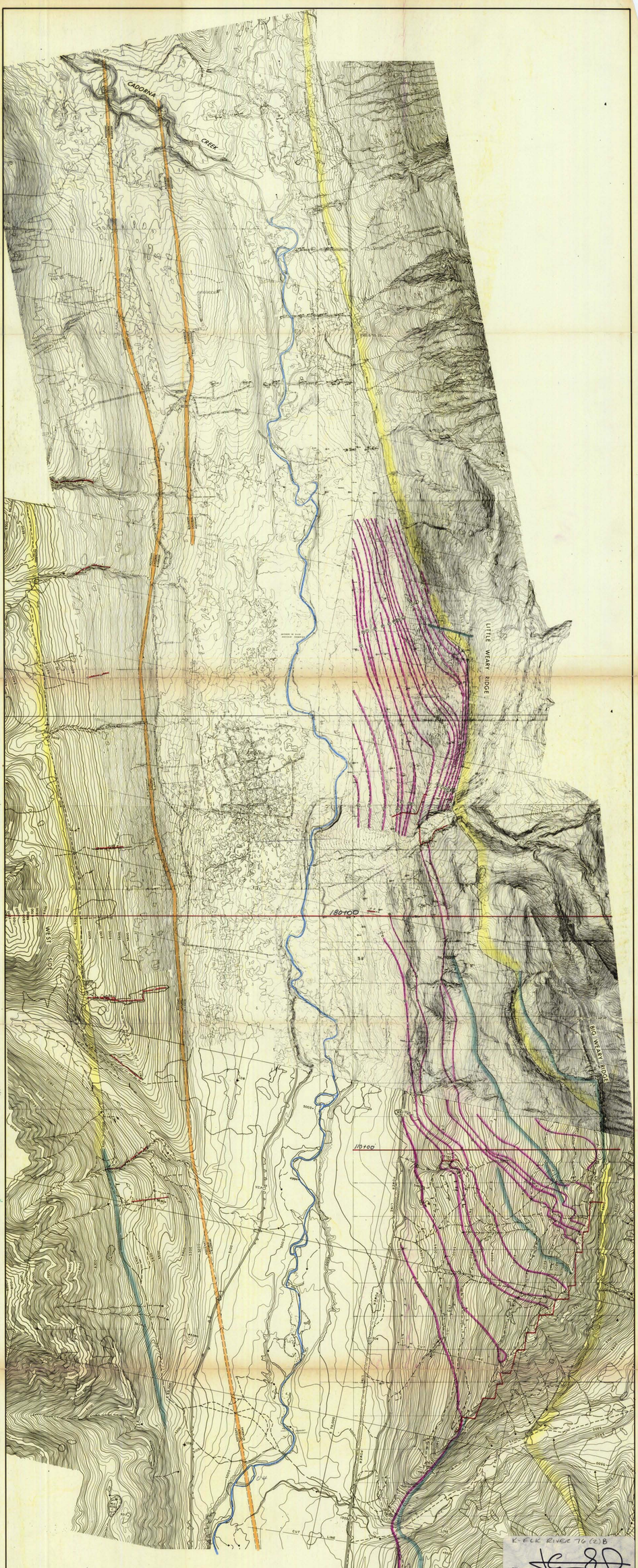
Job No. 20001O

November 11/75

McElhanney Surveying & Engineering Ltd., Calgary

F.B. 242 & 248

CO-ORDINATES						
Station No.	GRID NORTHING (feet)	BASE LINE NORTHING (feet)	GRID EASTING (feet)	BASE LINE EASTING (feet)	ELEVATION (feet)	
EB. 47	553,681	109 + 99	72,277	35 + 01	5807	
30	553,715		72,435		5845	
31	553,749		72,597		5876	
EB.50	553,785	110 + 00	72766	40 + 00	5917	
32	553,785		72,771		5917	
33	553,812		72,899		5954	
34	553,834		73,002		5999	
35	553,872		73,181		6069	
36	553,910		73,363		6145	
37	553,940		73,505		6203	
38	553,963		73,613		6238	
39	553,976		73,679		6244	
EB.53	553,991	110 + 00	73,745	50 + 00	6245	
40	554,006		73,816		6256	
42	554,167		74,585		6545	
EB.55	554,197	110 + 00	74,723	60 + 00	6545	
EB.46	555,637	129 + 99	71,858	34 + 93	5739	
60	555,648		71,913		5756	
61	555,672		72,024		5782	
62	555,694		72,132		5826	
63	555,738		72,337		5912	
EB.49	555,742	130 + 00	72,354	40 + 00	5912	
64	555,763		72,452		5952	
65	555,809		72,672		6013	
66	555,854		72,884		6043	
EB.52	555,866	130 + 00	72,941	46 + 00	6043	
67	555,909		73,151		6093	
EB.54	555,948	130 + 00	73,333	50 + 00	6142	
EB.45	557,505	150 + 12	70,960	29 + 99	5692	
70	557,596		71,345		5747	
EB.48	557,596	150 + 00	71,453	35 + 00	5747	
71	557,644		71,550		5786	
72	557,698		71,778		5859	
73	557,735		71,934		5922	
EB.51	557,699	150+00	71,942	40+00	5922	



ROCK UNITS

BLAIRMORE GROUP
- Undifferentiated Blairmore
- Cadomin formation

KOOTENAY FORMATION
- Undifferentiated Kootenay coal measures
- Basal Sandstone

Rock unit contact
Coal Seam outcrop with seam identification, approx., predicted
Strike and dip, normal, overturned, vertical and horizontal
Anticline, Syncline, showing plunge

Fault
Coal outcrop with true coal thickness if over 6'
Coal show
Drillsite with identification
Measured section
Line of Section

K-ELK RIVER 76 (2) B

BY: H. Gruss, P.Geol

May, 1976

ELCO MINING LTD.
CALGARY, ALBERTA

METALLURGICAL COAL DEVELOPMENT
SURFACE GEOLOGY
ELK RIVER VALLEY, B.C.

0 1000 2000 3000 Feet
0 500 1000 Metres

DATE: Dec., 1975

PAUL DYSON CONSULTANTS

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Figure 4

ROCK UNITS

BLAIRMORE GROUP
- UNDIFFERENTIATED BLAIRMORE
- CADOMIN FORMATION

KOOTENAY FORMATION
- UNDIFFERENTIATED KOOTENAY COAL MEASURES
- BASAL SANDSTONE

- Rock unit contact
- Coal Seam outcrop with seam identification; approx., predicted
- Strike and dip; normal, overturned, vertical and horizontal
- Anticline, Syncline, showing plunge
- Fault
- Coal outcrop with true coal thickness if over 4'
- Coal show
- Drillsite with identification
- Measured section
- Line of Section

INDEX MAP

DATE: DECEMBER, 1975

PAUL DYSON CONSULTANTS LTD.

K-ELK RIVER 76 (E) B

BY: H. Gruss, P.Geol.
May, 1976

ELCO MINING LTD. 274
CALGARY, ALBERTA

METALLURGICAL COAL DEVELOPMENT
SURFACE GEOLOGY
ELK RIVER VALLEY, B.C. **Figure 5**

CADORNA CREEK

KOOTENAY CADOMIN BLAIRMORE

BLAIRMORE CADOMIN KOOTENAY

BASAL SANDSTONE

OUTCROP OF BASAL SAND AS PREDICTED FROM M70 (#C 50C-53C)

CONGLOMERATE BOULDERS

ISOLATED CONGLOMERATE

OUTCROPS IN RIVER KOOTENAY FORMATION

MUSKEG

FOOTWALL

LITTLE WEARY RIDGE

SANDSTONE

WEST SIDE

E 55,000

6300

6200

6100

6000

6400

3609

ROCK UNITS

BLAIRMORE GROUP
- UNDIFFERENTIATED BLAIRMORE
- CADOMIN FORMATION

KOOTENAY FORMATION
- UNDIFFERENTIATED KOOTENAY COAL MEASURES
- BASAL SANDSTONE

- Rock unit contact
- Coal Seam outcrop with seam identification; approx., predicted
- Strike and dip; normal, overturned, vertical and horizontal
- Anticline, Syncline, showing plunge
- Fault
- Coal outcrop with true coal thickness if over 4'
- Coal show
- Drillsite with identification
- Measured section
- Line of Section

INDEX MAP

DATE: DECEMBER, 1975

0 400 800 1200 FEET

0 METRES 400

PAUL DYSON CONSULTANTS LTD.

ELCO MINING LTD.
CALGARY, ALBERTA

METALLURGICAL COAL DEVELOPMENT
SURFACE GEOLOGY
ELK RIVER VALLEY, B.C.

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K-ELK RIVER 76 (2)B

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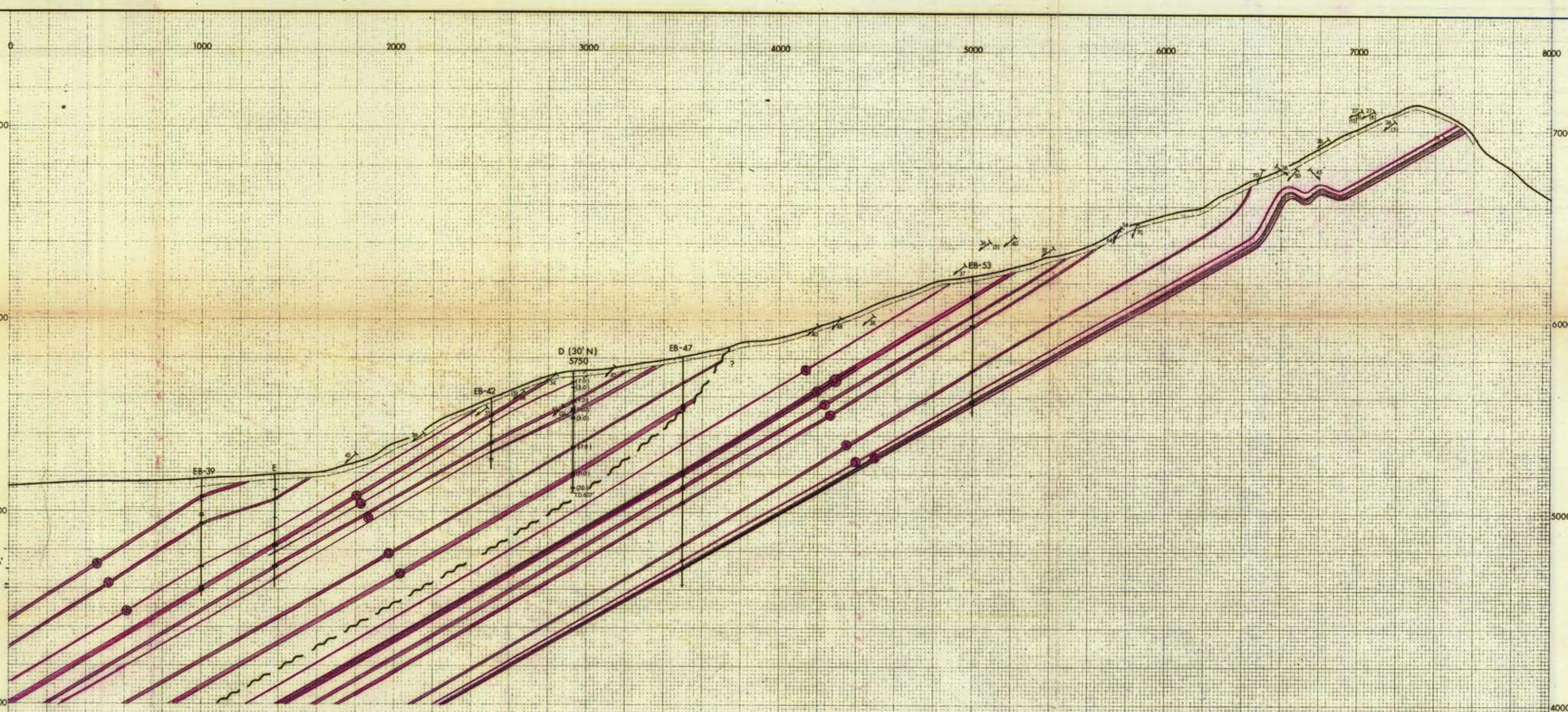
May, 1976

Figure 5



K-ELK RIVER 76(2)B

BY: H. Gruss, P.Geol.

May, 1976

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NOTES:
1. "COAL ZONES" SHOWN MAY INCLUDE SIGNIFICANT ROCK PARTINGS
2. MINOR STRUCTURAL INCONSISTENCIES BETWEEN CROSS-SECTION AND STRUCTURE MAPS ARE A RESULT OF ALTERNATE METHODS OF PROJECTING THE BORE HOLES ONTO THE CROSS-SECTIONS
3. SURFACE STRIKE / DIPS WHICH OCCUR ABOVE OR BELOW TOPOGRAPHIC PROFILE ARE PROJECTED, THEN PLOTTED AT RELATIVE ELEVATIONS
4. COAL SEAM THICKNESSES ARE BRACKETTED NUMBERS
5. SEAM SEQUENCE CORRESPONDS TO WEARY RIDGE SECTION (SECTION 75-A). CORRELATION TO "D" IS UNCERTAIN.

EXPLANATION

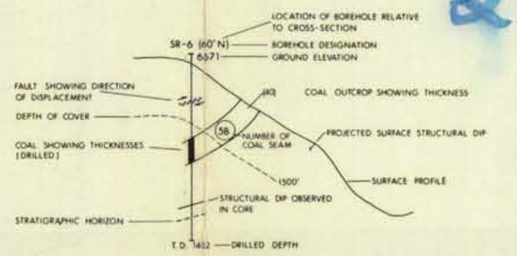

Figure 6

ELCO MINING LTD.
CALGARY, ALBERTA

METALLURGICAL COAL DEVELOPMENT
ELK RIVER VALLEY, B.C.
BIG WEARY RIDGE

SECTION
110+00

0 200 400 600 800
FEET

DATE: NOV. 1975

PAUL DYSON CONSULTANTS

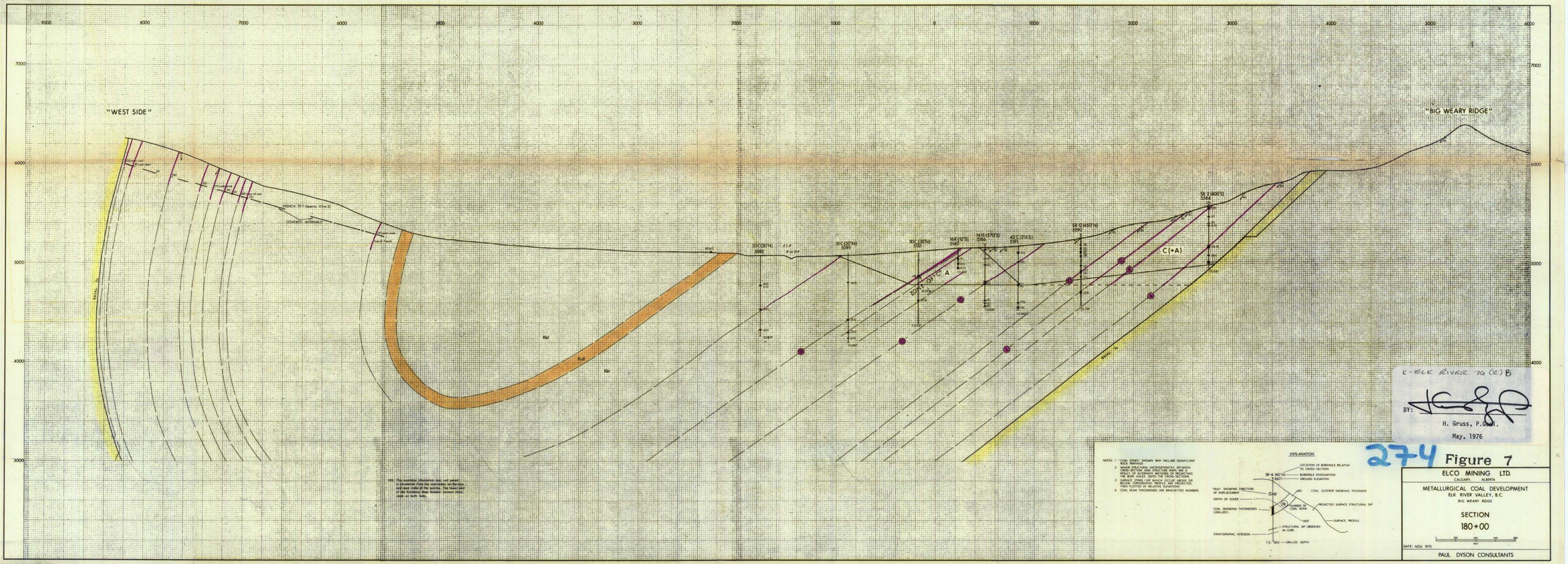
"WEST SIDE"
"BIG WEARY RIDGE"
TRENCH: 75'± (approx. 1/2 ea. S)
COVERED INTERVAL 2'
ROAD
ELK RIVER
35C(20°N) 5080
31C(20°N) 5090
30C (30°N) 5151
46X(10°S) 5160
N19°E(57°S) 5166
40C(25°S) 5191
SR 12(45°N) 5290
SR 7(40°S) 5384
40 ft. DRY C.A
C(+A)
Kbl
Kcll
Klr
MEAS. No
NOTES: 1 "COAL ZONES" SHOWN MAY INCLUDE SIGNIFICANT ROCK PARTINGS
2 MINOR STRUCTURAL INCONSISTENCIES BETWEEN CROSS-SECTION AND ADJACENT PLAN MAPS ARE DUE TO THE INTERPOLATION METHOD USED IN PROJECTING THE BORE HOLES ONTO THE CROSS-SECTIONS
3 SURFACE STRIKE / DIP WHICH OCCUR ABOVE OR BELOW THE CROSS-SECTION ARE PROJECTED, ROTATED, THEN PLOTTED AT RELATIVE ELEVATIONS
4 COAL SEAM THICKNESSES ARE BRACKETTED NUMBERS
EXPLANATION
LOCATION OF BOREHOLE RELATIVE TO CROSS-SECTION
SR-6 (80°N) 5671 BOREHOLE DESIGNATION / GROUND ELEVATION
FAULT SHOWING DIRECTION OF DISPLACEMENT
COAL OUTCROP SHOWING THICKNESS
DEPTH OF COVER
NUMBER OF COAL SEAM
PROJECTED SURFACE STRUCTURAL DIP
COAL SHOWING THICKNESSES (DRILLED)
SURFACE PROFILE
STRUCTURAL DIP OBSERVED IN CORE
STRATIGRAPHIC HORIZON
T.D. 1402 — DRILLED DEPTH
K-ELK RIVER 76(2)B
BY:
H. Gruss, P.Geol.
May, 1976
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Figure 7
ELCO MINING LTD.
CALGARY, ALBERTA
METALLURGICAL COAL DEVELOPMENT
ELK RIVER VALLEY, B.C.
BIG WEARY RIDGE
SECTION
180+00
DATE: NOV. 1975
PAUL DYSON CONSULTANTS

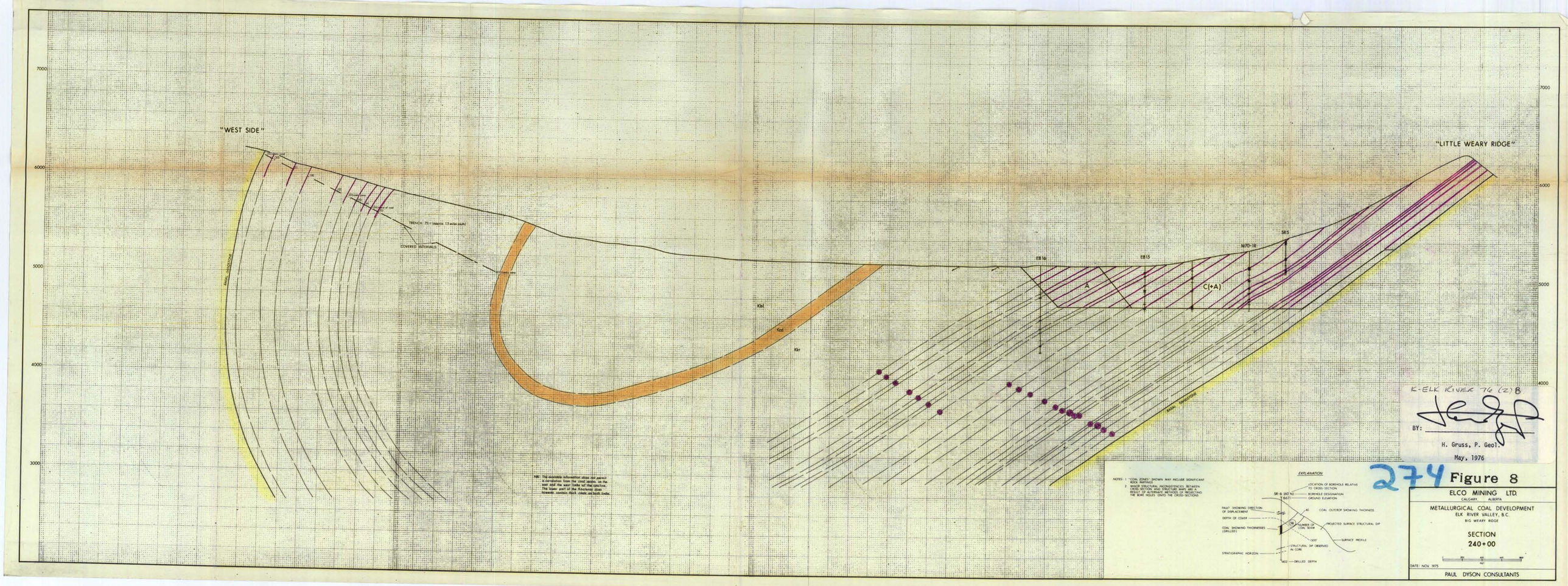
"WEST SIDE"
"LITTLE WEARY RIDGE"
7000
6000
5000
4000
3000
TRENCH: 25+ blasts, 1.3 miles south
COVERED OUTCROPS
MAIN SANDSTONE
Kbl
Kcl
Kle
EB 16
EB15
N70-18
SB5
A
C(+A)
MAIN SANDSTONE
NB: The stratabic lithological units are gained in correlation from the coal seams on the west side. the west limbs of the syncline. The lower part of the Kootenay does not contain thick coals on both limbs
NOTES: 1. "COAL ZONES" SHOWN MAY INCLUDE SIGNIFICANT ROCK PARTINGS
2. MINOR STRUCTURAL INCONSISTENCIES BETWEEN BORE HOLES MAY BE APPARENT AS A RESULT OF ALTERNATE METHODS OF PROJECTING THE BORE HOLES ONTO THE CROSS-SECTIONS
EXPLANATION
LOCATION OF BOREHOLE RELATIVE TO CROSS-SECTION
SB-6 (612.74) 647.1
BOREHOLE DESIGNATION
GROUND ELEVATION
FAULT SHOWING DIRECTION OF DISPLACEMENT
DEPTH OF COVER
COAL SHOWING THICKNESSES (DRILLED)
40
COAL OUTCROP SHOWING THICKNESS
18
NUMBER OF COAL SEAMS
PROJECTED SURFACE STRUCTURAL DIP
1500
SURFACE PROFILE
STRUCTURAL DIP OBSERVED IN CORE
STRATIGRAPHIC HORIZON
1402
DRILLED DEPTH
K-ELK RIVER 76 (2) B
BY:
H. Gruss, P. Geol.
May, 1976
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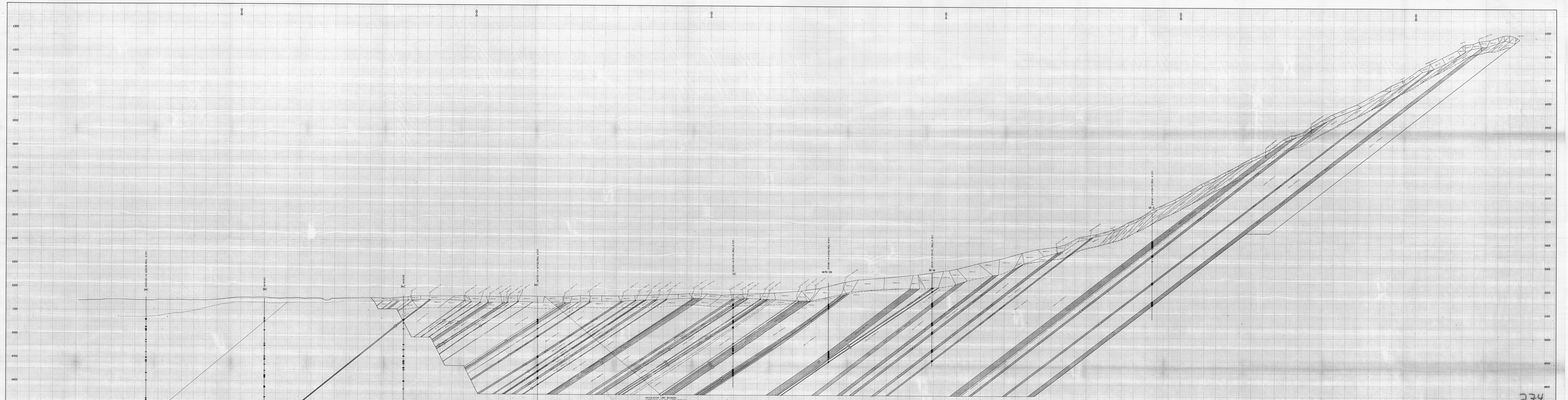
Figure 8
ELCO MINING LTD.
CALGARY, ALBERTA
METALLURGICAL COAL DEVELOPMENT
ELK RIVER VALLEY, B.C.
BIG WEARY RIDGE
SECTION
240+00
DATE: NOV. 1975
PAUL DYSON CONSULTANTS



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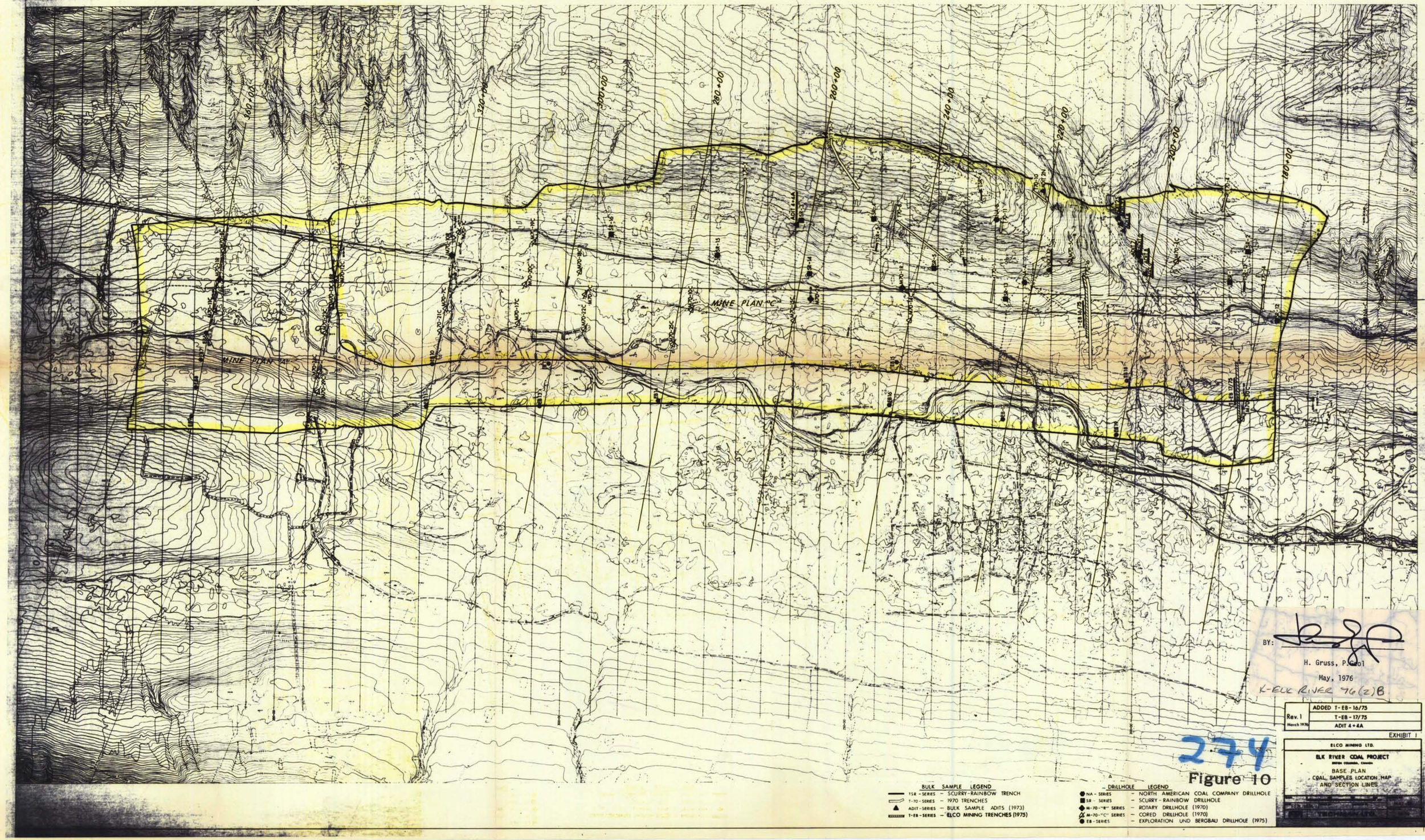
ELCO MINING LTD.
Elkview

METALLURGICAL COAL DEVELOPMENT
ELK RIVER VALLEY, B.C.

SECTION
360+00 Figure 9
COAL AND WASTE VOLUMES
CALCULATIONS



BULK SAMPLE LEGEND

- TSR - SERIES – SCURRY-RAINBOW TRENCH
- T-70 - SERIES – 1970 TRENCHES
- ADIT - SERIES – BULK SAMPLE ADITS (1973)
- T-EB - SERIES – ELCO MINING TRENCHES (1975)

DRILLHOLE LEGEND

- NA - SERIES – NORTH AMERICAN COAL COMPANY DRILLHOLE
- SR - SERIES – SCURRY - RAINBOW DRILLHOLE
- M-70-"R" SERIES – ROTARY DRILLHOLE (1970)
- M-70-"C" SERIES – CORED DRILLHOLE (1970)
- EB - SERIES – EXPLORATION UND BERGBAU DRILLHOLE (1975)

BY:

H. Gruss, P.Geol

May, 1976

K-ELK RIVER 76(2)B

Rev. 1 March 1976	ADDED T-EB-16/75
	T-EB-17/75
	ADIT 4+4A

EXHIBIT I

ELCO MINING LTD.

ELK RIVER COAL PROJECT

BRITISH COLUMBIA, CANADA

BASE PLAN
COAL SAMPLES LOCATION MAP
AND SECTION LINES

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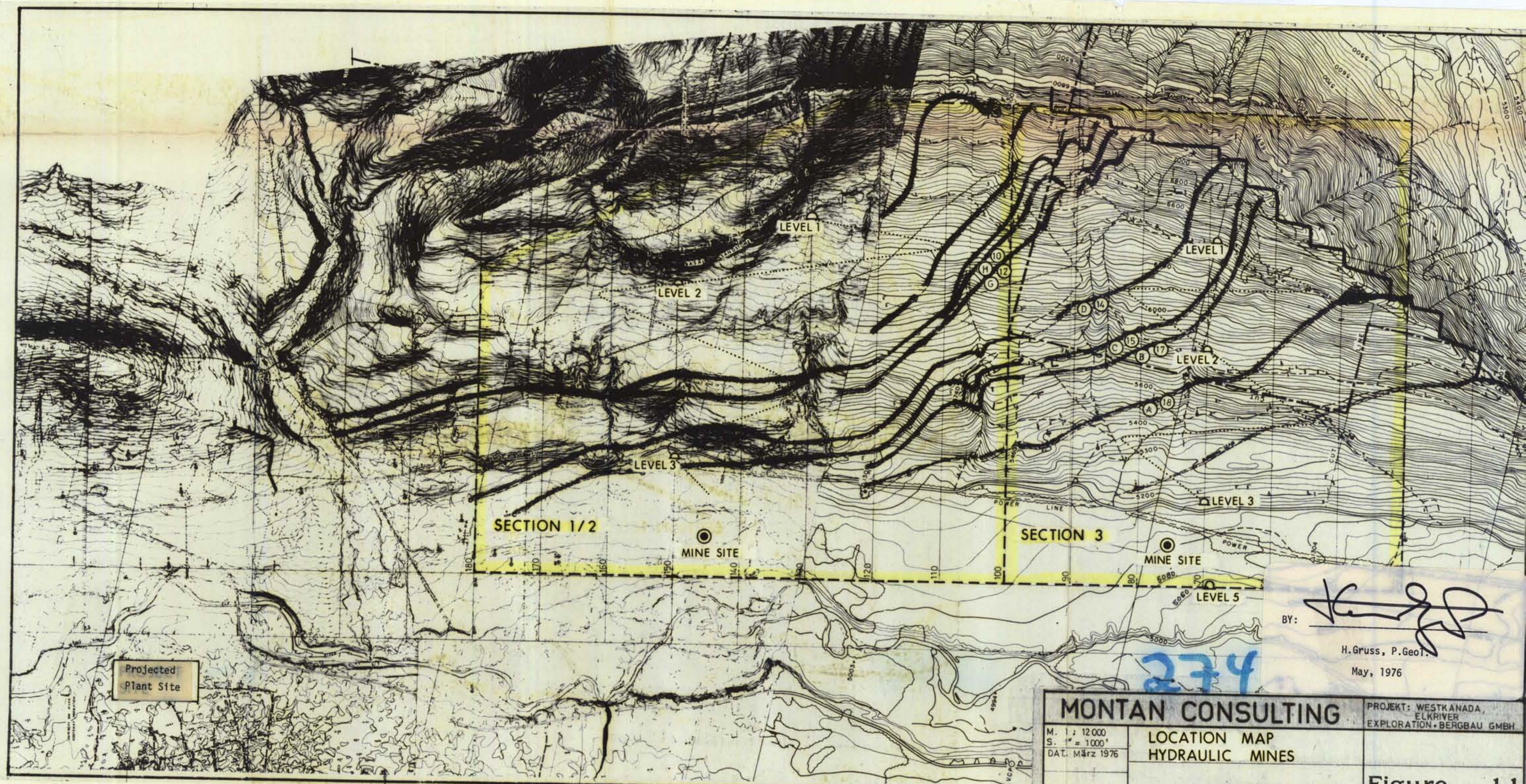
Figure 10



BY:

H.Gruss, P.Geol.

May, 1976

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MONTAN CONSULTING		PROJEKT: WESTKANADA, ELKRIVER EXPLORATION • BERGBAU GMBH
M. 1 : 12 000 S. 1" = 1000' DAT. März 1976	LOCATION MAP HYDRAULIC MINES	
	K - ELK RIVER 76(2)B	Figure 11