

ASSESSMENT REPORT FOR: Elkhorn 3
Elkhorn 4
Elkhorn 5
Elkhorn 6
Elkhorn 7
Elkhorn 8
Elkhorn 9
Elkhorn 10
Elkhorn 11
Elkhorn 12
Elkhorn 13
Elkhorn 14
Elkhorn 15
Creek 1
Creek 2
Creek 3
Creek 4
Creek 5
Creek 6
Creek 7
Creek 8
Creek 9
Creek 10 Mining Claims

(Part of Elkhorn Group)

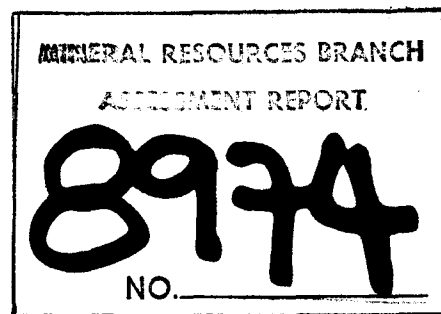
Golden Mining Division

NTS Grid Reference: 800 923 - 82J5
Latitude: 50° 28', 49" N
Longitude: 115° 52', 16" W

- Owners: 1) Westroc Industries Limited
2650 Lakeshore Rd. W.
Mississauga, Ontario
- 2) R.J. Willox
Box 217
Invermere, B.C.
- 3) R.B. Clarke
6715 Ogden Dale Rd. SE
Calgary, Alberta

Operator: Westroc Industries Limited

Author: G.G. Clow, P. Eng.
Mining Engineer



Date: March 12, 1981

G.G. Clow

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MAP POCKET

Map 1 - Index map - Elkhorn Group
31-002-2041A - Locator Map - Elkhorn Group
31-009-2020 - Elkhorn Claims - Diamond Drillhole location

A) INTRODUCTION

These 23 claims form a part of the Elkhorn group, The group is located in the Windermere Creek valley, generally on the south side and in the valley bottom. Access to the start of the claims (Creek 1) is by a 10 km. private haulage road from B.C. Provincial Highway 95/93. A 5 km. forestry road runs along Windermere Creek and crosses a number of the claims. Map 1 shows the relation of the group to other features in the area. Map 31-001-2041A shows the same information on a larger scale.

Westroc Industries Ltd., which operates a gypsum quarry on the north side of the Windermere Creek valley, is the operator of exploration work done on the Elkhorn group. The first claims in the group were staked in 1959 with others being added in subsequent years to bring the current total to 28 units.

The group covers a number of gypsum occurrences which are being actively investigated by Westroc.

The work which is being submitted to fulfill the assessment requirements for these claims was actually performed on Elkhorn 2, Elkhorn and Blue Bottle mining claims.

Summary of Work Done

Diamond Drilling: Hole size - 50 mm.
Number of holes - 17
Total meters drilled - 884.45 M

B) DETAILS OF DIAMOND DRILLING

The locations of the diamond drill holes are shown on drawing 31-009-2020. Also shown on this drawing are holes drilled during previous years. The logs and assays are included in Appendix One. The logging was done by the Drill Foreman, J. Denby, and checked by the author. The core is stored in the core shed at Westroc Industries' property near Windermere, British Columbia.

Previous drilling on the Elkhorn claims has confirmed the presence of a gypsum deposit on the south slope of Windermere Creek Valley, covering approximately 14.2 hectares. The purpose of this year's work was to establish more detailed information to permit mine plans to be developed. Specific information required was the purity distribution of the gypsum, the thickness of the overburden cover and the exact limits of the deposit in various locations.

The gypsum occurs in tabular form, conforming to the slope of the side of the mountain. It varies in thickness from 12 meters to 70 meters. The deposit is cut off on the uphill side by a buff coloured limestone which ranges from massive to very thinly bedded. In all other directions the gypsum is either absent, apparently due to washing, or is of such low purity to be eliminated from consideration for extraction at this time. Underlying the deposit is a sequence composed mainly of anhydrite with some limestone and gypsum bands intermixed. The presence of anhydrite indicates that this deposit was probably formed as a result of hydration of the upper portion of the anhydrite by surface water.

As a consequence of this year's work, mining plans have been developed for a quarry which will provide from 3.3 million to 4.0 million tonnes of gypsum, depending on stripping economics, which are being finalized at this time. The maximum amount of stripping will be 1.7 million cubic meters over the life of the quarry. The purity is expected to average 80%.

C) ITEMIZED COST STATEMENT

Labour Cost:

Period - June 24 to October 6, 1980

Number Man Hours: 1963.5
Cost Per Man Hour: \$11.54 (includes benefits and overtime)
Total Labour Cost: \$22,658.79

Material Cost:

(includes drill maintenance and supplies)

Cost per meter: \$30.92
Meters drilled: 884.45
Total Material Cost: \$27,347.19

TOTAL DRILLING COST: \$50,005.98

D) AUTHOR'S QUALIFICATIONS

The author is a Registered Professional Engineer in British Columbia and Ontario. He holds Bachelor degrees in Mining Engineering and Geological Engineering from Queen's University. He has been employed in various aspects of the mining industry for the past seven years in British Columbia, the Northwest Territories and Ontario.

E) APPENDIX ONE

DIAMOND DRILL LOGS

and

ASSAYS

10/6/80

WESTROC INDUSTRIES LIMITED**BOREHOLE LOG**

PRIVATE & CONFIDENTIAL

LOCATION Elkhorn - Windermere ELKHORN QUARRY
 SECTION LOT _____ TWP. _____ RANGE _____ PROV. _____
 ELEVATION 4240 ANGLE DIRECTION vertical
 GRID REFERENCE 315E/9990S E
 DATE STARTED Sept. 8/80 DATE COMPLETED Sept. 16/80
 DRILLED BY Polier LOGGED BY Denby

BOREHOLE NUMBER EL44 DEPTH OF CASING 10'
 DEPTH OF HOLE 335'

DEPTH		THICKNESS	Core Recov.	DESCRIPTION
FROM	TO			
0	10	10	0	set up on soft gypsum
10	22.5	12.5	10	soft gypsum and clay seams
22.5	32.5	10	10	dark grey gypsum
32.5	42.5	10	10	grey mottled gypsum, some limestone
42.5	53	10.5	10	" "
53	63	10	10	gypsum, light grey, mottled
63	73	10	10	" " "
73	83	10	10	" " "
83	94	11	10	gypsum, soft, washing
94	104	10	10	gypsum, light grey, some limestone
104	114	10	10	" " "
114	124	10	10	" " "
124	134	10	10	" " "
134	144	10	10	" " "
144	151	7	7	gypsum
151	157	6	3	gypsum, broken pieces
157	168	11	10	gypsum
168	179	11	10	"
179	189	10	10	"
189	199	10	10	"
199	208	9	9	"
208	218	10	10	"
218	228	10	10	gypsum soft, perforated (in water?)
228	238	10	10	gypsum
238	248	10	10	gypsum
248	258	10	10	gypsum
258	270	12	10	gypsum
270	290	20	10	broken gypsum, could be waterwashed, looks weathered
290	303	13	10	broken to 295 gypsum

BOREHOLE CHEMICAL ANALYSIS

INVERMERE, B.C.

BOREHOLE NUMBER EL-44

SAMPLE NO	DEPTH		THICK-NESS	GYPSUM	INSOL. ANHYD.	INSOL. IN HCL	CaCO ₃	MgCO ₃	TOTAL	CL ⁻
	FROM	TO								
1	10'	16'	6'	90.31						
2	16'	22'6"	6'6"	91.91						
3	22'6"	27'6"	5'	92.22						
4	27'6"	32'6"	5'	90.03						
5	32'6"	37'6"	5'	88.89						
6	37'6"	42'6"	5'	93.10						
7	42'6"	47'	4'6"	92.17						
8	47'	53'	6'	87.96						
9	53'	58'	5'	91.62						
10	58'	63'	5'	91.28						
11	63'	68'	5'	93.30						
12	68'	73'	5'	92.67						
13	73'	78'	5'	88.87						
14	78'	83'	5'	90.65						
15	83'	89'	6'	91.74						
16	89'	94'	5'	93.42						
17	94'	99'	5'	93.31						
18	99'	104'	5'	91.87						
19	104'	109'	5'	89.07						
20	109'	114'	5'	89.65						
21	114'	119'	5'	88.90						
22	119'	124'	5'	89.73						
23	124'	129'	5'	91.43						
24	129'	134'	5'	89.23						
25	134'	139'	5'	89.34						
26	139'	144'	5'	93.27						
27	144'	150'	6'	92.13						
28	150'	157'	7'	93.03						
29	157'	163'	6'	91.55						
30	163'	168'	5'	92.82						
31	168'	174'	6'	93.92						
32	174'	179'	5'	94.51						
33	179'	184'	5'	93.64						
34	184'	189'	5'	91.67						
35	189'	194'	5'	93.68						

BOREHOLE CHEMICAL ANALYSIS

INVERMERE, B.C.

BOREHOLE NUMBER EL-44

SAMPLE NO	DEPTH		THICK-NESS	GYPSUM	INSOL. ANHYD.	INSOL. IN HCL	CaCO ₃	MgCO ₃	TOTAL	CL ⁻
	FROM	TO								
36	194'	199'	5'	92.74						
37	199'	204'	5'	92.02						
38	204'	208'	4'	92.27						
39	208'	213'	5'	91.75						
40	213'	218'	5'	93.67						
41	218'	223'	5'	94.55						
42	223'	228'	5'	90.48						
43	228'	233'	5'	90.87						
44	233'	238'	5'	91.88						
45	238'	243'	5'	92.70						
46	243'	248'	5'	91.15						
47	248'	253'	5'	86.74						
48	253'	258'	5'	90.30						
49	258'	264'	6'	92.52						
50	264'	270'	6'	88.96						
51	270'	280'	10'	86.38						
52	280'	290'	10'	85.04						
53	290'	297'	7'	91.94						
54	297'	303'	6'	89.57						
55	303'	309'	6'	90.85						
56	309'	314'	5'	89.54						
57	314'	323'	9'	89.37						
58	323'	331'	8'	89.01						
59	331'	335'	4'	88.30						
COMPOSITE SAMPLES										
A	10'	58'	48'	90.59	0.37	1.39	3.27	3.29	98.91	Nil
B	58'	104'	46'	90.95	2.91	1.30	1.37	2.82	99.35	Nil
C	104'	157'	53'	92.93	0.20	2.66	1.75	3.13	100.67	Nil
D	157'	208'	51'	92.54	1.40	1.21	2.16	1.57	98.88	Nil
E	208'	270'	62'	90.72	1.55	1.69	2.52	3.13	99.61	Nil
F	270'	335'	65'	88.28	2.45	1.40	3.46	3.60	99.17	Nil

WESTROC INDUSTRIES LIMITED

BOREHOLE LOG

PRIVATE & CONFIDENTIAL

LOCATION Elkhorn Group, Lost Lake ELKHORN QUARRY
 SECTION LOT _____ TWP. _____ RANGE _____ PROV. _____
 ELEVATION 4280 ANGLE DIRECTION Vertical
 GRID REFERENCE 330E/10,190S
 DATE STARTED Aug. 1/80 DATE COMPLETED Aug. 11/80
 DRILLED BY R. Hunt LOGGED BY J. Denby

BOREHOLE NUMBER EL 47 DEPTH OF CASING 6
 DEPTH OF HOLE 246

DEPTH		THICKNESS	Core Recov.	DESCRIPTION
FROM	TO			
0	6	6	0	Set up on Gypsum Tricone No Core
6	43	37	8	50 ft. Gypsum & Gypsite
43	63	20	8	Broken Gypsum
63	73	10	8	Broken Gypsum
63	83	10	8	Broken Gypsum
83	91	8	8	Gypsum
91	101	10	8	Gypsum
101	109	8	8	Gypsum
109	117	8	8	Gypsum
117	127	10	8	Gypsum Soft Layers
127	137	10	8	Gypsum
137	145	8	8	Gypsum
145	153	8	8	Gypsum
153	163	10	8	Gypsum Soft Layers
163	167	4	4	Gypsum
167	176	9	4	Gypsum Soft & Broken Gypsum
176	185	9	8	Gypsum
185	193	8	8	Gypsum
193	202	9	8	Gypsum
202	210	8	8	Gypsum
210	218	8	8	Gypsum
218	222	4	4	Gypsum
222	226	4	4	Gypsum Limestone Bands
226	234	8	8	Gypsum Limestone Bands
234	238	4	4	Gypsum & Limestone
238	242	4	4	Anhydrite
242	246	4	4	Anhydrite

WESTROC INDUSTRIES LIMITED

BOREHOLE CHEMICAL ANALYSIS

INVERMERE, B.C.

BOREHOLE NUMBER EL-47

SAMPLE NO	DEPTH		THICKNESS	GYPSUM	INSOL. ANHYD.	INSOL. IN HCL	CaCO ₃	MgCO ₃	TOTAL	CL ⁻
	FROM	TO								
1	6'	26'	20'	89.49						
2	26'	43'	17'	88.63						
3	43'	53'	10'	86.65						
4	53'	63'	10'	84.03						
5	63'	68'	5'	88.54						
6	68'	73'	5'	92.38						
7	73'	78'	5'	91.78						
8	78'	83'	5'	93.30						
9	83'	88'	5'	87.07						
10	88'	92'	4'	90.32						
11	92'	96'	4'	85.14						
12	96'	101'	5'	88.52						
13	101'	105'	4'	92.79						
14	105'	109'	4'	91.01						
15	109'	113'	4'	93.46						
16	113'	117'	4'	94.25						
17	117'	123'	6'	91.64						
18	123'	127'	4'	92.22						
19	127'	132'	5'	94.04						
20	132'	137'	5'	94.34						
21	137'	141'	4'	91.74						
22	141'	145'	4'	90.11						
23	145'	149'	4'	91.28						
24	149'	153'	4'	91.27						
25	153'	158'	5'	92.23						
26	158'	163'	5'	93.27						
27	163'	167'	4'	90.87						
28	167'	176'	9'	89.02						
29	176'	180'	4'	91.48						
30	180'	185'	5'	88.90						
31	185'	189'	4'	89.25						
32	189'	193'	4'	91.30						
33	193'	197'	4'	87.65						
34	197'	202'	5'	89.00						
35	202'	206'	4'	90.50						

WESTROC INDUSTRIES LIMITED

BOREHOLE LOG

PRIVATE & CONFIDENTIAL

LOCATION Elkhorn Group - Windemere ELKHORN QUARRY
 SECTION LOT _____ TWP. _____ RANGE _____ PROV. B.C.
 ELEVATION 4315 ANGLE/DIRECTION Vertical
 GRID REFERENCE 180E/10,080S
 DATE STARTED July 16, 1980 DATE COMPLETED July 25, 1980
 DRILLED BY R. Hunt LOGGED BY J. Denby

BOREHOLE NUMBER EL 48

DEPTH OF CASING 4'
 DEPTH OF HOLE 261'

DEPTH		THICKNESS	REC.	DESCRIPTION
FROM	TO			
0	4'	4'	0	Tricone in Gypsum
4'	22'	18'	8'	Soft Layered Gypsum Washing
22'	24'	2'	1'	Soft Gypsum, Appears to be Broken Gypsum w/ Gypsi
24'	34'	10'	0	Void
34'	44'	10'	4'	Gypsum & Gypsite (Gypsite Washes Away)
44'	54'	10'	3'	Gypsum & Gypsite (Gypsite Washes Away)
54'	64'	10'	1'	Gypsum & Gypsite (Gypsite Washes Away)
64'	73'	9'	7'	Gypsum & Gypsite (Gypsite Washes Away)
73'	81'	8'	8'	Gypsum
81'	89'	8'	8'	Gypsum
89'	103'	14'	8'	Gypsum - Broken & Soft
103'	119'	16'	8'	Gypsum - Broken & Soft
119'	136'	17'	8'	Gypsum - Broken & Soft
136'	147'	11'	8'	Gypsum
147'	157'	10'	8'	Gypsum
157'	165'	8'	8'	Gypsum
165'	173'	8'	8'	Gypsum
173'	181'	8'	8'	Gypsum
181'	189'	8'	8'	Gypsum
189'	197'	8'	8'	Gypsum, Limestone Bands
197'	205'	8'	8'	Gypsum
205'	213'	8'	8'	Gypsum
213'	221'	8'	8'	Gypsum
221'	229'	8'	8'	Gypsum
229'	238'	9'	8'	Gypsum
238'	242'	4'	4'	Gypsum
242'	246'	4'	4'	Gypsum & Anhydrite
246'	261'	15'	15'	Anhydrite

BOREHOLE CHEMICAL ANALYSIS

INVERMERE, B.C.

BOREHOLE NUMBER EL48

SAMPLE NO.	DEPTH		THICKNESS	GYPSUM	INSOL. ANHYD.	INSOL. IN HCL	CaCO ₃	MgCO ₃	TOTAL	CL ⁻
	FROM	TO								
1	4'	12'	8'	90.84						
2	12'	22'	10'	92.08						
3	22'	40'	18'	88.12						
4	40'	64'	14'	91.49						
5	64'	67'	3'	88.82						
6	67'	73'	6'	91.23						
7	73'	77'	4'	89.23						
8	77'	81'	4'	90.25						
9	81'	85'	4'	87.83						
10	85'	89'	4'	88.52						
11	89'	96'	7'	90.35						
12	96'	103'	7'	93.47						
13	103'	111'	8'	94.58						
14	111'	119'	8'	93.46						
15	119'	128'	9'	92.89						
16	128'	136'	8'	90.71						
17	136'	141'	5'	88.33						
18	141'	147'	6'	92.18						
19	147'	152'	5'	92.01						
20	152'	157'	5'	90.59						
21	157'	161'	4'	89.23						
22	161'	165'	4'	88.01						
23	165'	169'	4'	91.04						
24	169'	173'	4'	92.39						
25	173'	177'	4'	90.00						
26	177'	181'	4'	89.36						
27	181'	185'	4'	89.21						
28	185'	189'	4'	87.85						
29	189'	193'	4'	87.26						
30	193'	197'	4'	91.77						
31	197'	201'	4'	91.73						
32	201'	205'	4'	91.86						
33	205'	209'	4'	92.89						
34	209'	213'	4'	95.13						
35	213'	217'	4'	92.83						

82 J/5

1:50,000

Location Map

Map 1

- Elkhorn Claim Group

- 28 Claims

Radium Hot Springs 9 mi 14 km

116°00'

572000m. E.

73

74

75

76

5577

78

79

80

81

82

50'

50°30'

94

93

92

91

90

89

88

87

86

85

84

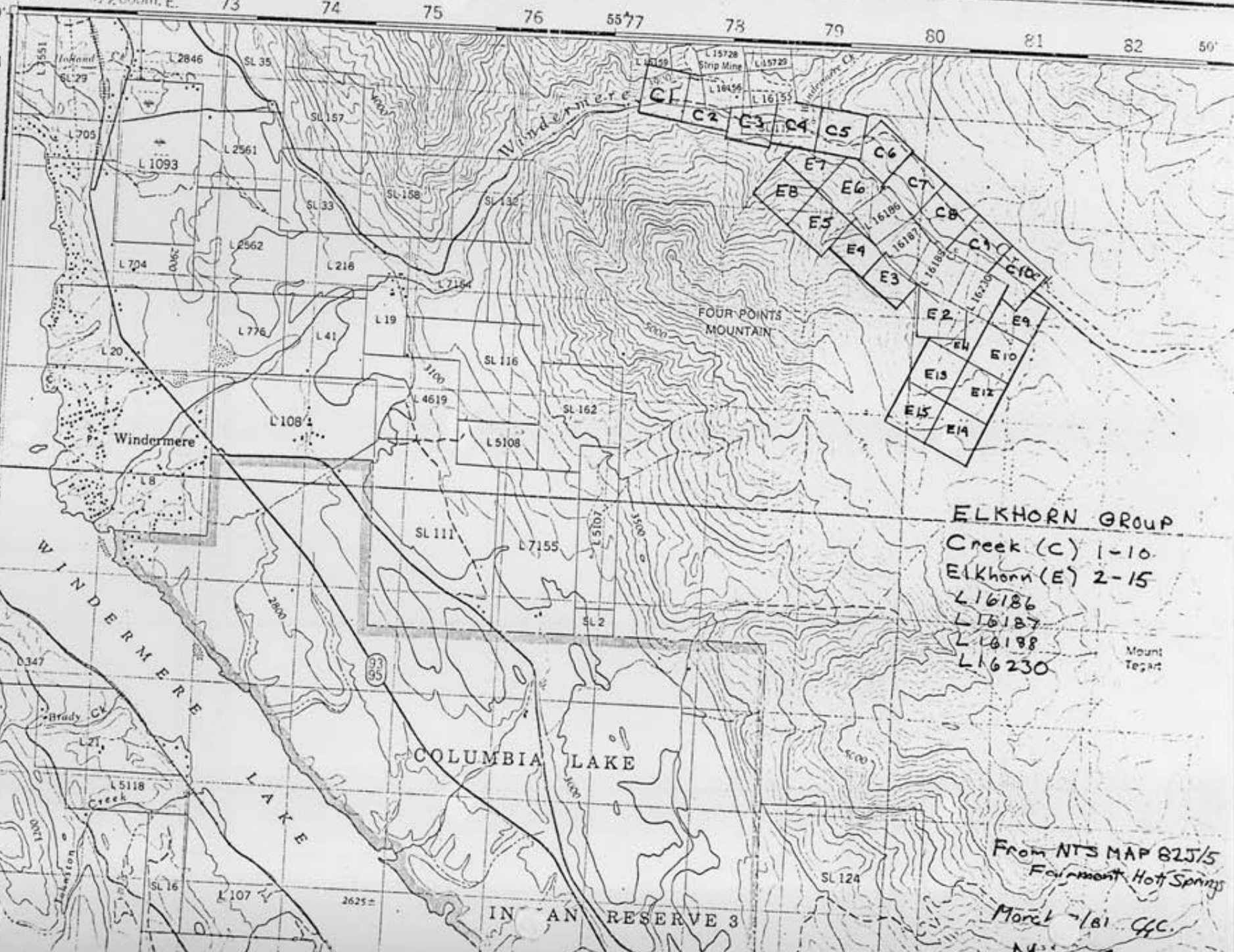
83

82

81

80

Windermere 9 mi 8 km Golden



ELKHORN GROUP

Creek (C) 1-10

Elkhorn (E) 2-15

L 16186

L 16187

L 16188

L 16230

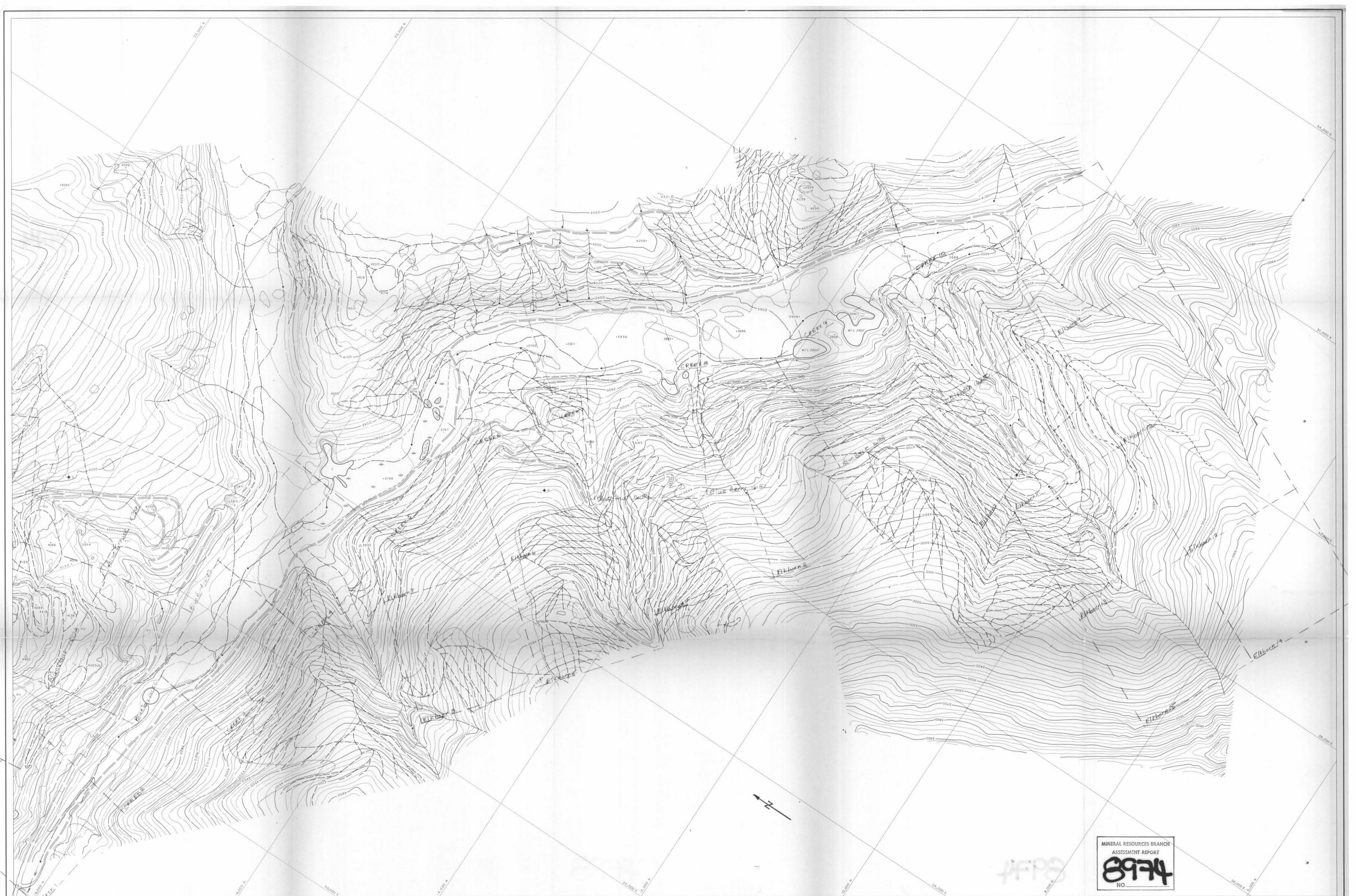
Mount Teget

From NTS MAP 82J/5

Fairmont Hot Springs

March 1/81 G.C.

Map 1



MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
8974
NO.

Note: Corner posts located by air photo and B.C.L.S.
Boundary lines located by pace and compass



Compiled from aerial photography at an approximate scale of 1 inch equals 24,000 feet flown in 1978

WESTROC INDUSTRIES LTD	
WINDERMERE CREEK	
ELKHORN CLAIM GROUP	
Scale - 1" = 400'	Contour Interval - 25 feet
Date - August 1980	Job No. - 05992-1
McElhanney McElhanney Surveying & Engineering Ltd. 1200 West Fender Street, Vancouver B.C., Canada	Sheet No. - 2

TOPOGRAPHIC LEGEND

Main roads	Depression contour	Spot elevation	4038
Secondary roads	Spot elevation	4038	
Horizontal control	4038	Swamp	
Pit	Swamp	Stream	
Pile	Stream	Tree line	
Shoreline	Tree line	Photo centre	
Track	Photo centre		
Contour			



MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
8974
NOTE: CORNER POSTS LOCATED BY AIR PHOTO AND PLS BOUNDARY LINES LOCATED BY PACE AND COMPASS

WESTROC INDUSTRIES LIMITED
TITLE: ELKHORN CLAIMS, DRILL HOLES & QUARRY BASE MAP (2)
DRAWN: H. Henry DATE: Nov 3 1980 CHECKED: SCALE: 1" = 100 FT. DRAWING NO.: 31-009-2020