# GEOLOGICAL BRANCH ASSESSMENT REPORT



on the

DIV #2 thru 6 Claims ANNUAL WORK APPROVAL NUMBER KAM 93 - 0400338 - 2130

Osoyoos Mining Division

British Columbia

North Latitude 49°00'42" West Longitude 119°,20'29

NTS 82E/OME 3W

Prepared for

JOE. FALKOSKI Bridesville . B.C.

Prepared by

R.E. Miller B.Eng. Sci. Crownex Resources Ltd. P.O. Box 2941 7087 - 17th Street Grand Forks, B.C. VOH 1HO

June 1993

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1993 GEOLOGICAL REPORT

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KAM 93 - 0400338 - 2130

**Osoyoos Mining Division** 

British Columbia

North Latitude  $49^{\bullet}$  00' 42" West Longitude  $119^{\bullet}$  30'

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INTRODUCTION

Private company geologic and geophysical data from 19971 and 1974. covering the Dividend-Lakeview mining camp of South Central B.C. in the Osoyoos Mining Division. was used as a basis for investigation of the DIV claims that lie within the old mining camp and are owned by Mr. Joe Falkoski of Bridesville, B.C.. (Figure #1)

Most of the 1993 work was of a reconnaissance nature.

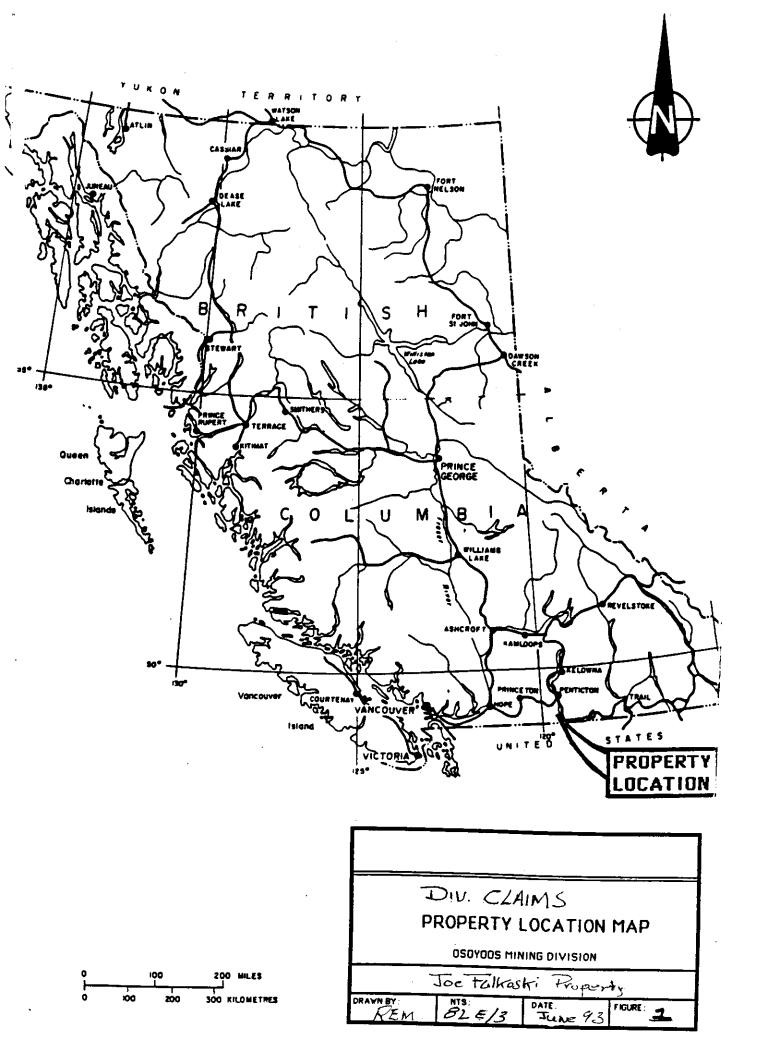
#### SUMMARY

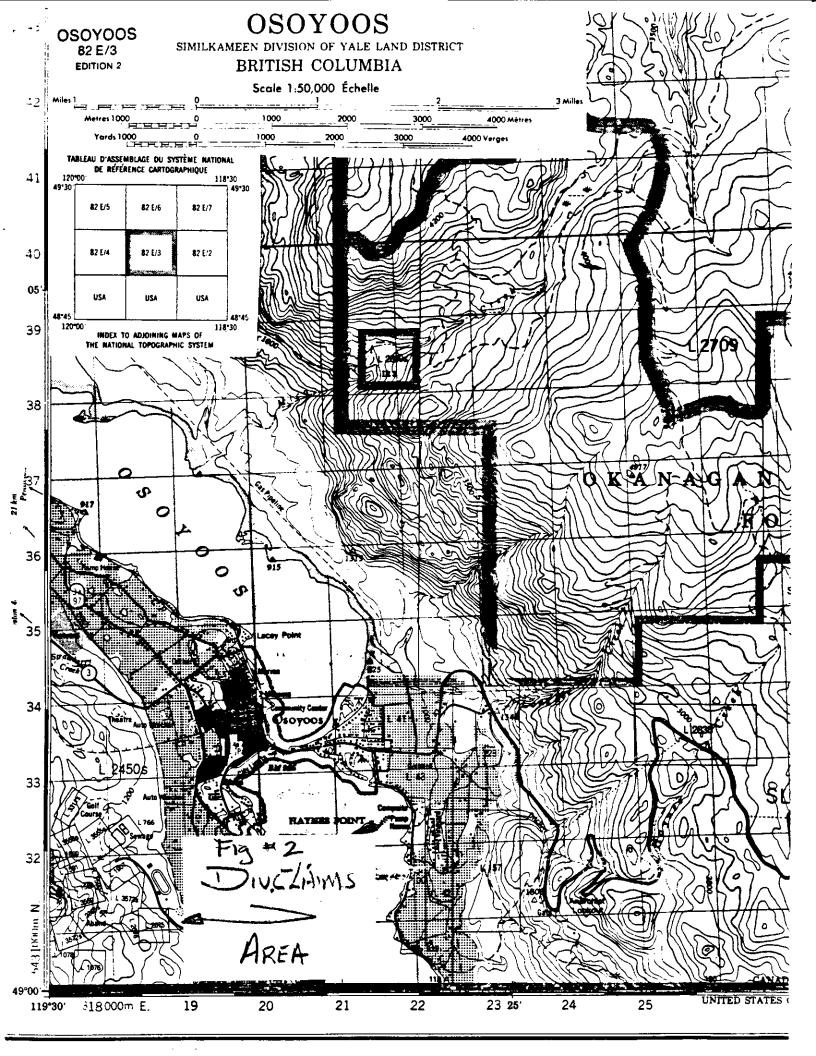
The DIV claims consist of five (5) two post claims located in the Osoyoos Mining Division some three kilometers south west of the town of Osoyoos B.C. near the Canada-U.S.A. border.

Access to the property is via paved residential roads to the eastern edge of the claim block and from there numerous bush roads service scrub brush lands, pasture areas and tree covered plateaus at high elevations. (Figure #2)

Permian Anarchist Group greenstone, phyllite. slate, limestone, and quartzite are intruded by Jurassic-Cretaceous diorite and minor quartz monzonite and syenite probably of Coryell age.

Exploration began in the Dividend-Lakeview area





around the turn of the century with minor production from a copper gold skarn deposit commencing in 1907 and essentially ending in 1940. Continued active exploration is still on-going.

### PROPERTY AND OWNERSHIP

The properties are comprised of five (5) two postclaims located in the Osoyoos Mining Division near the Old Dividend-Lakeview mining camp some 3 km south west of Osoyoos, B.C.. The claims were located and are owned by Mr. Joe Falkoski of Bridesville, B.C.. (Figure #3 and #4)

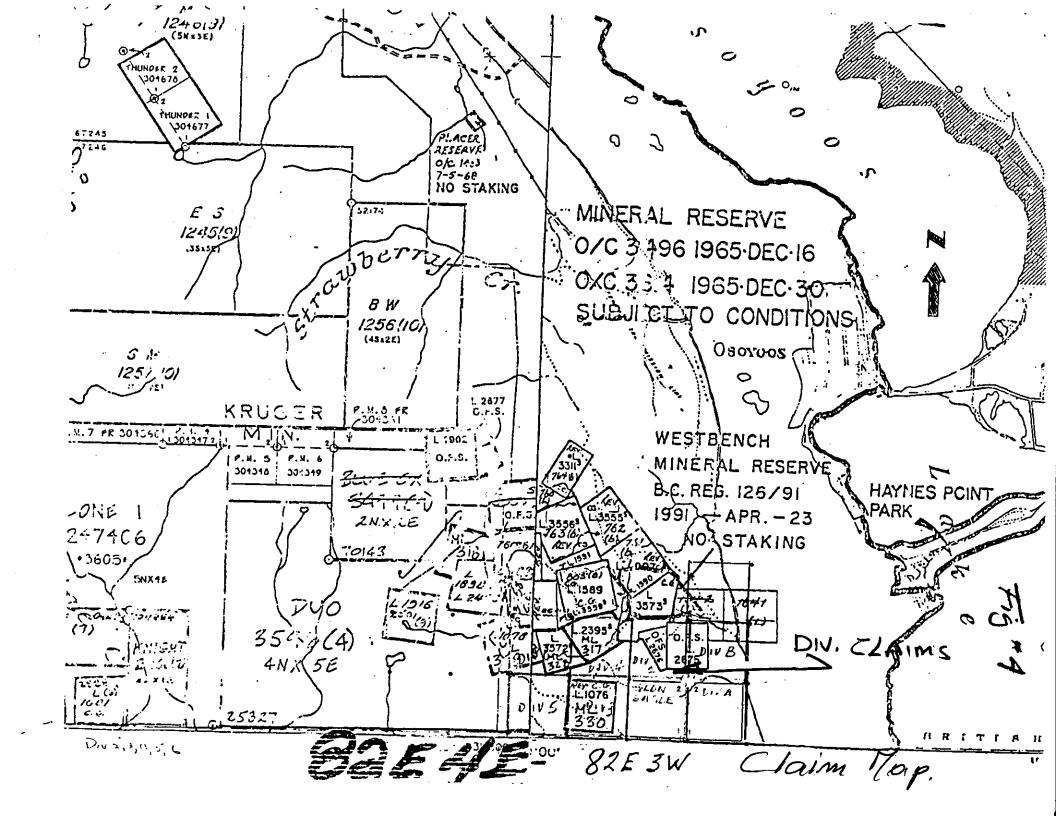
Claim Name	Record Number	Expiry Date
DIV #2	310159	June 1, 1994*
DIV #3	310160	June 1. 1994*
DIV #4	310161	June 1. 1994*
DIV #5	310162	June 1, 1994*
DIV #6	310163	June 1, 1994*

\*Pending acceptance of this report

#### LOCATION AND ACCESS

The properties fall within map sheets 82E 3W and 82E 4E and lie along the eastern slope of Kruger Mountain approximately 3 kilometers south west of Osoyoos, B.C..

Access is excellent via paved roads leading south west from Osoyoos to the race track, golf course, and a new residential housing development. Various dirt roads provide internal access to the DIV claims.



Arid conditions prevail and vegetation consists of dry grass lands with scrub brush suitable for pasture.

#### HISTORY

Between 1907 and 1940, 504 kilograms of gold. 88 kilograms of silver, 73 tonnes of copper, 71 kilograms of lead and 71 kilograms of zinc were produced from 111,250 tonnes of ore at the Dividend-Lakeview Mine adjacent to. and just north of the DIV #4 claim. Numerous prospect pits, shallow shafts and evidence of trenching are found within the DIV claims indicating evidence of long term exploration interests. (Figure #5 and #6)

## GENERAL GEOLOGY AND MINERALIZATION

Intrusive Jurassic-Cretaceous Nelson batholithic quartz diorite to diorite rocks outcrop on the property where they intrude Triassic? to Permian? Anarchist Group or Kobau Group, greensstone, phyllite, slate, and limestone.

The Dividend-Lakeview Mine workings are located within Pyrrhotite, pyrite, chalcopyrite, magnetite, and arsenopyrite skarn which preferentially replaces marble. Although the mineralized trend at the Dividend-Lakeview Mine appears to trend east-west similar geology and anomalous geophysical signatures can be found south of the mine on the DIV claim group. (Figure #7)

RUN	IIME:	00:31	:00

INERAL	RESOURCES DIVISION -	GEOLOGICAL	SURVEY	BRANCH
	MINFILE - REPORT			

Fig #5

MINFILE ND.: 082ESW001 NATIONAL MINERAL INVENTORY NO.: 82E-3.4 AU 2/-NAME(S): DIVIDEND-LAKEVIEW(L. 1589, 1899).GEM STATUS: Past Producer MINING DIVISION: Osoyoos N.T.S.: 082E04E 49 00 UTM ZONE: LATITUDE: 42 11 5431545 LONGITUDE: 119 30 00 UTM NORTHING: ELEVATION 0600 Metres UTM EASTING: 317188 COMMENTS: SOUTH WEST OF GRAND FORKS. LOCATION ACCURACY: Within 500 M COMMODITIES: Gold Silver Copper Lead Zinc SIGNIFICANT MINERALS: Chalcopyrite Magnetite Arsenopyrite AGE OF MINERALIZATION: Unknown DEPOSIT CHARACTER: Unknown DEPOSIT CLASS.: Replacement DOMINANT HOST ROCK: PRODUCTION: \*\* ALL METRIC VALUES ARE IN KILOGRAMS EXCEPT PRECIOUS METALS WHICH ARE IN GRAMS \*\* **\*\* ALL IMPERIAL VALUES ARE IN POUNDS EXCEPT PRECIOUS METALS WHICH ARE IN DUNCES \*\*** YEAR Tonnes Tonnes Zinc Copper Mined Nilled Gold Silver Lead 5,350 71 71 1949 35 280 0 1941 11 0 933 156 1940 8.352 8.352 25, 193 7,558 7.812 26.676 1939 46,609 41.696 167.054 25,442 13,160 1938 135.951 23.470 18.723 18.382 1937 21,121 16.090 58,971 9.393 11.685 1936 6,804 6,450 49.329 13.250 10.654 1935 1,691 3.266 3,220 21,088 6.003 1933 36 0 902 124 299 31 37 1932 0 684 201 33 1916 9 0 280 62 1915 34 0 560 1914 3.701 123 0 337 1913 821 0 30,450 1.493 1912 307 0 6.501 797 1908 902 25 O 1907 28 0 1,617 170 **METRIC TOTAL:** 111,252 94.531 504,396 71 87.244 71 73,351 IMPERIAL TOTAL: Tons Tons 156 161.711 122.634 104,202 16.216 2.804 156

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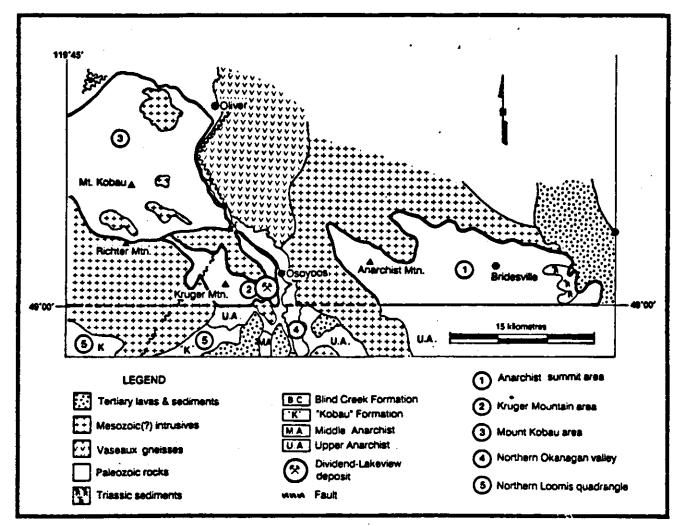
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RUN DATE: 89/05/06	MINISTRY OF ENERGY. MINES AND PETROLEUM RESOURCES	PAGE :	2
RUN TIME: 00:31:00	MINERAL RESOURCES DIVISION - GEOLOGICAL SURVEY BRANCH FIG #6		
COMMENTS FOR 1941:	Ore mined is only clean-up material.		×
COMMENTS FOR 1940:	Mine closed down in March. Ore milled does not include 4860 tons tailings retreated.		
COMMENTS FOR 1939: COMMENTS FOR 1938:	Ore milled does not include 41,209 tons tailings retreated.		
	IRREGULAR HIGH TEMPERATURE REPLACEMENT DEPOSITS IN		
REDLOGY :	LIME BEDS OF THE ANARCHIST SERIES AND IN ALTERED		
	VOLCANICS OF THE SAME SERIES WHICH CONTAIN CONSI-		
	DERABLE LIME WHICH HAS BEEN INTRUDED BY THE		
	OSDYOOS BATHOLITH. TYPICAL SKARN MINERALS CONSI- STING OF GARNET, EPIDOTE, DIOPSIDE, WOLLASTONITE		
	AND POSSIBLY OTHERS HAVE BEEN DEVELOPED WITH THE		
	METALLIC MINERALS CONSISTING OF PYRRHOTITE AND		
	MAGNETITE WITH VARYING AMOUNTS OF CHALCOPYRITE AND ARSENOPYRITE.		
BIBLIOGRAPHY:	EMPR PF (GEM LOT NO 33115) EMPR AR 1900-990, 1901-1074,1158, 1902-185, 1903-176, 1906-165,168,		
	1907-215, 1908-248, 1910-125, 1912-182,323, 1913-172,174, 1914-511,		
	1915-202, 446, 1916-518, 1917-215, 1927-237, 1930-218, 1931-135, 1932-134, 1933-164, 1934-D13, 1939-75, 1938-D34, 1963-65, 1964-109,		
	1932-134, 1933-164, 1934-013, 1939-75, 1938-884, 1965-88, 1997		
	EMPR ASS RPT 658, 808		
	EMPR BULL 1-88, 20-III-18		
	BC DEPT LANDS WIN REF MAP 7,1934 GSC MEM 179-20		
	GSC SUM RPT 1912-211		
	GSC P 37-21-38		
	GSC MAP 37-21, 539A, 541A Emr MP corpfile (osoydos mines of canada LTD.)		
	EMR MRB INVEST RPT 771, 639		
	EMPR ASS RPT 8188, 9180 CODED BY: GSB FIELD CHECK: NO		
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General geology of the Osoyoos district showing location of the Dividend-Lakeview deposit (from Peatfield, 1978).

Fig #7

1993 EXPLORATION PROGRAM

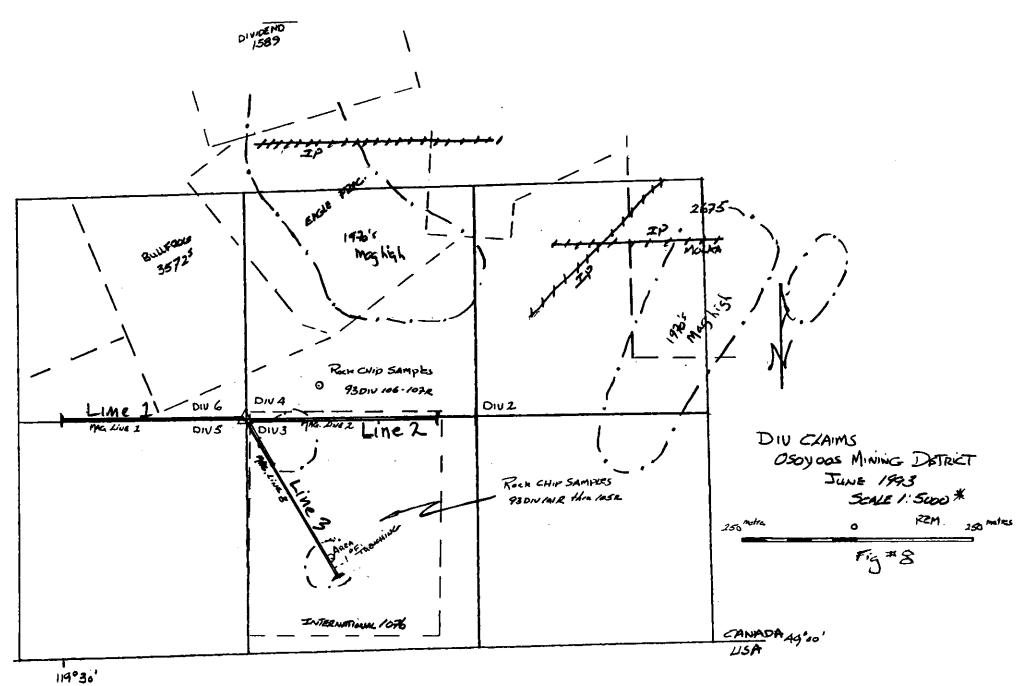
Company held geologic data from the 1970's with detailed IP and magnetometry covering mainly the U.S.A. side of the border but extending north on the Canadian side to the Dividend-Lakeview Mine. was obtained by Mr. Falkoski and investigated in a reconnaissance fashion during 1993.

Approximately 1.5 kilometers of ground magnetometry was completed and seven rock chip samples were collected. (Figure #8)

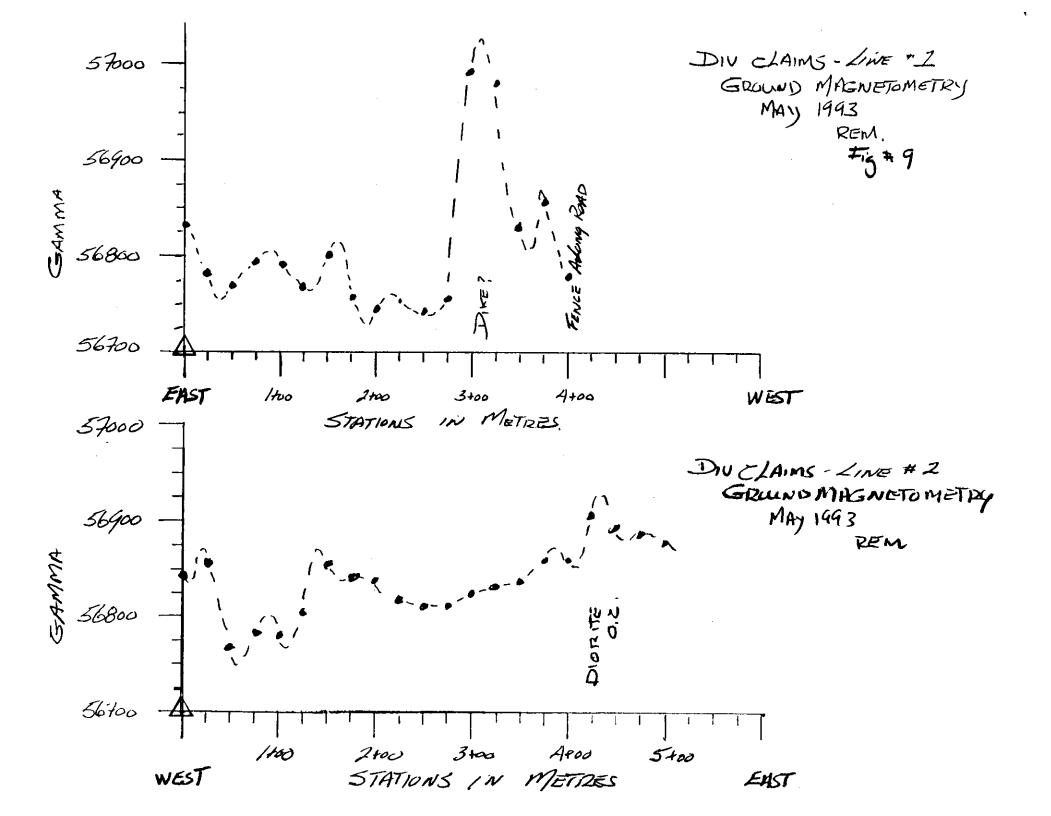
A Geometrics hand held proton magnetometer was used to conduct the ground mag program. The coincidental ground mag and IP anomalies from the 1970's work were located as a reconnaissance program on the MOLKA (2675) claim Div #2 and on the EAGLE FRAC (2395) DIV #4 claim. Three ground mag lines were started from the common claim post to DIV 3. 4. 5, and 6. Line #1 was run out 405 meters to the west. line #2 was completed to the east for 510 meters and a third line was surveyed S30<sup>9</sup> E for 415 meters. Three readings were taken at each 25 meter station and averaged. (Figure #9 and #10)

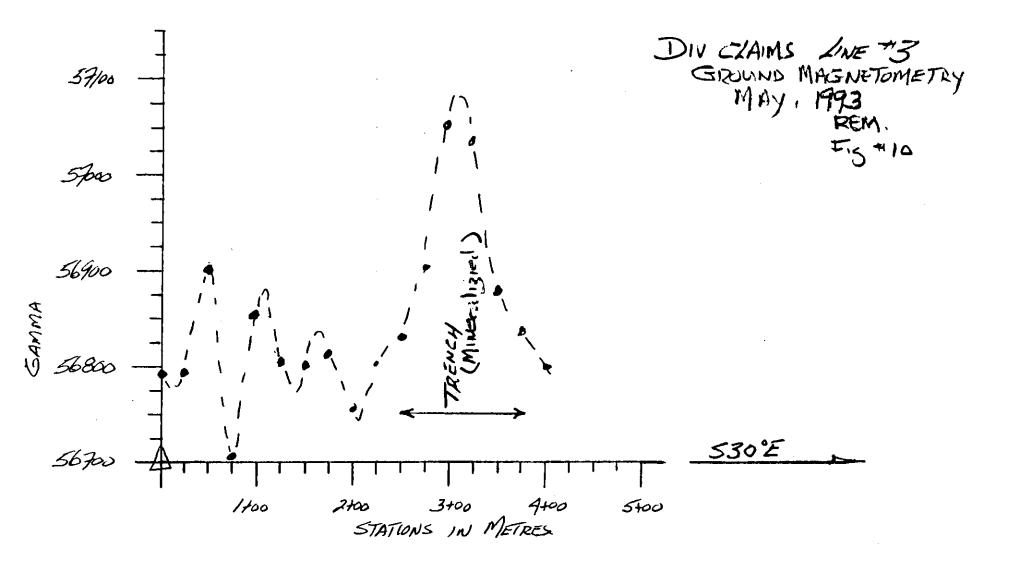
Mineralization was encountered along line #3 from 2+50 meter station to the end of the line at a site of old trenching.

The magnetic high of 570638 gammas, along line #3.was associated with pyrite and chalcopyrite mineralization in a hornfels at a diorite-metasediment



\* REDUCED TO 61% OF TRUE SCALE





Mag high at diorite Melasediment Entact striking NGS°E, contact.

Rock chip samples collected from the trenched area showed elevated copper values to 5140 ppm with weakly anomalous gold values to a high of 120 ppb

Two rock chip samples taken from a mineralized diorite outcrop at 4+25 meters east along line #2 show elevated copper to 5240 ppm copper and anomalous gold to 755 ppb. Sample 93DIV 107R, altered diorite, also assayed 242 ppm moly while sample 93DIV 106R from the same outcrop but with minor quartz veining assayed high in silver at 16.2 ppm. (Figure #11 and #12)

Generally the areas traversed were mineralized and copper oxide staining were common. particularly on dioritic outcrops.

#### CONCLUSIONS

Ground magnetometry will locate on the property. the position of the old 1970's coincidental IP and mag anomalies.

Both the reconnaissance and fixed line ground mag highs were associated with mineralized diorite and diorite-meta sediment contacts. Copper-gold skarns are a viable exploration target and blind deposits similar to the Dividend-Lakeview Mine could be found through careful exploration.



# **Chemex Labs Ltd.**

Analytical Chemists \* Geochemists \* Registered Assayers

212 Brooksbank Ave., North Vancouver British Columbia, Canada V7J 2C1 PHONE: 604-984-0221

To: HALLAUER, MR. W.G.

RT. 1, BOX 35 DAIRY POINT OROVILLE, WASHINGTON U.S.A. 98844

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Page Number :1-A Total Pages :1 Certificate Date: 10-JUN-93 Invoice No. : 19315190 P.O. Number : HA Account

Project :

Comments: ATTN: W. HALLAUER CC: R. MILLER ✓

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SAMPLE	PR CO		ли ррб Гл+лл	λg ppm	A1 *	λs ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppa	Cr ppm	Cu ppa	Fe ۶	Ga ppm	Hg ppm	К %	La pp <b>n</b>	Mg %	Min ppm
93DIV101R 93DIV102R 93DIV103R 93DIV104R 93DIV105R	205 205 205	226 226 226 226 226 226	< 5 120 55	3.4 0.2 5.0 3.0 0.8	1.78 1.02 1.84 1.07 2.66	8 < 2 < 2 6 < 2	10 40 10 20 20	< 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5	< 2 < 2 < 2 < 2 2 < 2	0.69 1.02 1.00 0.54 1.12	< 0.5 < 0.5 < 0.5 < 0.5 < 0.5 < 0.5	12 6 24 39 21	65 50 31 23 25	4590 180 5140 2190 519	3.89 1.42 4.16 6.14 4.64	< 10 < 10 < 10 < 10 < 10 < 10	< 1 < 1 < 1 < 1 < 1 < 1	0.02 0.13 0.04 0.14 0.06	< 10 10 10 < 10 10	1.51 0.68 1.45 0.63 2.27	350 205 415 155 640
93DIV106R 93DIV107R	205 205	226 226	755 515	16.2 6.0	2.04 0.26	18 4	30 < 10	< 0.5 < 0.5	< 2 2	2.15 0.49	1.0 < 0.5	14 21	21 149	5240 4370	9.28 3.71	< 10 < 10	< 1 < 1	0.15 < 0.01	< 10 < 10	1.42 0.11	730 110
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CERTIFICATION:

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# **Chemex Labs Ltd.**

Analytical Chemists \* Geochemists \* Registered Assayers

212 Brooksbank Ave., North Vancouver British Columbia, Canada V7J 2C1 PHONE: 604-984-0221 To: HALLAUER, MR. W.G.

RT. 1, BOX 35 DAIRY POINT OROVILLE, WASHINGTON U.S.A. 98844

Project :

Comments: ATTN: W. HALLAUER CC: R. MILLER

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Fig # 12

				. <b></b>							CERTIFICATE OF ANALYSIS				A9315190		
SAMPLE	PR		No. ppe		Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr pp <b>n</b>	Ti %	T1 ppm	U Egga	V ppm	W	Zn ppm	
3DIV101R 3DIV102R 3DIV103R 3DIV104R 3DIV105R	205 205 205	226 226 226 226 226 226	6 23 1	0.04 0.03 0.04	14 2 9 20 10	1090 660 1690 1010 1290	2 < 2 < 2 < 2 < 2 < 2 < 2	< 2 < 2 < 2 < 2 < 2 < 2 < 2	4 1 4 4 8	67 64 76 82 118	0.21 0.06 0.14 0.17 0.19	10 10 10 < 10 < 10	< 10 < 10 < 10 < 10 < 10 < 10	120 25 107 62 113	< 10 < 10 < 10 < 10 < 10 < 10	52 18 54 24 64	houn fels by thox houn fels by gossan by thox sharm thox diorite by
3DIV106R 3DIV107R	205 205	226 226	4 242	0.02 < 0.01	5 7	800 70	2 < 2	< 2 < 2	6 < 1	64 16 -	0.04 < 0.01	< 10 < 10	< 10 < 10	145 19	< 10 < 10	80 18	diorite W/ 9/3 vertet, l'y & Cuo diorite Cuox.
			-														

**CERTIFICATION:** 

### RECOMMENDATIONS

Installation of ground grid with 100 meter lines and 25 meter stations to facilitate ground magnetometry over the property. Rock chip sampling in areas of magnetic anomalies, followed by a

reverse Circulation drill hole program.

Cost estimated should include exploration of the adjacent properties held by Mr. Joe Falkoski and therefore no real estimate can be made until exploration permits are received in the anomalous areas sensitive to urban advancement. Generally, meaningfull exploration would require an expenditure of \$300,000.00 over two field seasons to cover exploration of Mr. Falkoski's mineral holdings in the area.

#### STATEMENT OF QUALIFICATIONS

1 ROBERT E. MILLER, of Oroville, Washington U.S.A., DO HEREBY CERTIFY:

- THAT I am a geologist with Crown Resources Corporation, with a business address of Star Route 85, Oroville. Washington 98844.
- THAT I am a graduate from Brigham Young University with a Bachelor of Science degree in Geological Engineering (1969).
- 3. THAT I have practised my profession continuously since graduation.
- 4. THAT I personally conducted the 1993 exploration program discussed in this report.

1993. DATED this day of

Robert E. Miller Geological Engineer

## DIV #2 thru 6 - EXPENDITURES

Manpowe	Г		
	Bob Miller 2 man days		
	\$250.00 x 2		\$ 500.00
Vehicle	2 days @ \$65.00/day		\$ 130.00
Geophys	ics		
	Magnetometer rental		
	\$15.00/day x 2		\$ 30.00
Assays	7 x \$15.00 each		\$ 105.00
			<b>u</b> 100.00
Report			\$ 150.00
		Total	\$ 915.00

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### BIBLIOGRAPHY

Falkoski, Joe (1993) Dividend-Lakeview Mine and property exploration history, personal communication.

MINFILE No. 082ESW001

Templeman-Kluit, D.J. (1989) Geology. Penticton. British Columbia. Geological Survey of Canada. Map 17364. Scale 1:250.000.

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