COMINCO LTD.

EXPLORATION NTS: 82L/4E

WESTERN DISTRICT January 30, 1981

ASSESSMENT REPORT ON

A SOIL AND ROCK GEOCHEMICAL

SURVEY AND GEOLOGICAL

MAPPING OF THE WIT PROPERTY

(Lock 1 to 5 Mineral Claims)

WHITEMAN CREEK, VERNON M.D., B.C.

(work performed between August 7-31, 1980)

LATITUDE: 50⁰12'N

LONGITUDE: 119034'W

REPORT BY:

D.T. MEHNER

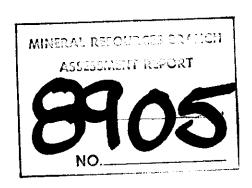


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SUMMARY

The Wit property is a porphyry molybdenum prospect underlain by altered, tertiary granites and quartz latite porphyries about 25 km west-southwest of Vernon, B.C. Preliminary geological mapping and soil geochemical sampling was carried out on the property in 1979 and was followed up with additional soil sampling combined with more detailed geological mapping and rock geochem sampling in 1980. The results of the work indicate the most likely area for mineralization on the property occurs on Loch 5, adjacent to the Whit claims. Trace element contents of the volcanics south and west of Martin Lake suggest mineralization may also exist here at depth in underlying intrusives. Taking into consideration previously discovered Mo silt and soil anomalies, and the presence of fault structures coincident with alteration zones and favourable geology, a detailed magnetometer survey, further mapping and prospecting and ten percussion holes are recommended to test the property at depth.

INTRODUCTION

The Wit property is a porphyry molybdenum prospect that was staked in January, 1979 to cover a number of moly stream silt anomalies associated with altered granites belonging to a Coryell intrusive.

Initial work on the property was carried out in 1979 and consisted of preliminary geological mapping and wide spaced soil geochem sampling. This was followed up in 1980 by additional soil sampling carried out by D. Fediuk and M. McDonagh during the period August 7-16 and by more detailed geological mapping and rock geochem sampling by M. Fawcett and D. Mehner from August 7-31.

LOCATION AND ACCESS

The Wit property is located on the south side of Whiteman Creek, approximately 25 km west-southwest of Vernon, B.C. (Plate 1). Access to the property is easily obtained by truck or car by heading west from the Westside road along the Whiteman Creek Main and South Whiteman Creek logging roads that are controlled by Crown Zellerbach of Armstrong, B.C.

TOPOGRAPHY AND VEGETATION

The property is situated along an E-W trending ridge and steeply dipping, north facing slope between 760 m and 1430 m elevation.

Despite the steepness of the property, outcrop exposure along most of the north facing slope and ridge is poor, with glacial till and vegetation covering much of the area.

The most common trees are spruce and pine, some of which has been logged out in the past along the plateau region. Devil's club is common along the creek valleys.

Water for drilling is available from Martin Lake or one of the nearby creeks.

PROPERTY AND OWNERSHIP

The Wit property is located in the Vernon Mining Division and is 100% owned by Cominco Ltd. At the time the work was carried out, the property consisted of the following claims:

CLAIM	RECORD NUMBER	NUMBER OF UNITS	DUE DATE
Loch 1	593	12	Jan. 25/82
Loch 2	594	18	Jan.25/82
Loch 3	595	9	Jan.25/82
Loch 4	596	3	Jan.25/82
Loch 5*	870	8	June13/83

^{*} Loch 5 is a relocation of Loch 5(8 units), record number 699.

In December, 1980 a number of claims were reduced in size (Plate 1). The revised claim holdings are:

CLAIM	RECORD NUMBER	NUMBER OF UNITS
Loch 1	593	4
Loch 2	594	12
Loch 3	595	6
Loch 4	596	3
Loch 5	870	6
		Total 31

PREVIOUS WORK

The first recorded work carried out in the area was that conducted by Noranda Mines in 1967 when they carried out some Cu-Mo soil geochemical sampling to follow up a number of Mo stream silt anomalies(assessment report 1039). Six short diamond drill holes totalling 75 meters were drilled before the property lapsed and was acquired by Cominco Ltd. in 1970. Cominco carried out further silt and soil geochemical sampling before dropping the property in 1972. In 1977 Canadian Occidental staked the central part of the property and have since carried out geological mapping and silt and soil geochem sampling(assessment reports 5692, 6052, 6572). Kennco then staked ground to the immediate west of the Canadian Occidental ground in 1977 and carried out rock, silt and soil geochemical sampling(assessment report 6738). This ground was subsequently optioned to U.S. Steel who did an IP survey in 1979 and have since drilled at least one hole.

REGIONAL GEOLOGY

The Wit property lies along the eastern boundary of the Intermontane belt in an area where the oldest rocks are Mississippian or older metamorphosed sediments of the Chapperon Group, and ultramafics belonging to the Old Dave intrusions(Okulitch, 1979). These are overlain by metasediments and metavolcanics of the Carboniferous to possibly Lower Triassic, Thompson Assemblage. Intruding these older, metamorphosed assemblages are Jurassic, Nelson and Valhalla plutonic rocks that collectively are referred to as the Okanagan intrusives and the Pennask Lake Batholith(Peto and Armstrong, 1976). The youngest intrusives in the area, one of which underlies the Wit property, are the syenites, monzonites and granites of the Paleocene or Eocene Coryell Group. Overlying and probably coeval with the Coryell plugs are volcanic flows and pyroclastics of the Kamloops Group. Miocene and or Pliocene plateau lavas can be found capping many of the rocks in the area(Plate 2).

PROPERTY GEOLOGY

The Wit property is underlain by Paleozoic to possibly Triassic metasediments that were intruded by mafic monzonites and quartz monzonites of Jurassic age and then intruded by granitic rocks of Tertiary age. Coeval volcanics that are associated with and intruded by the Tertiary, Coryell plutonic rocks overly much of the southern area of the property.

Recent age dating on the intrusives has yielded a K/Ar date of 45.8±2.5 MY (Okulitch, 1979) and a Rb/Sr date of 56±2 MY(Cominco files). These are both in close agreement with similar volcanics dated by Church(1979) at Terrace Mountain on which a date of 52±2 MY was obtained, thereby supporting the belief that the intrusives and volcanics are coeval and that the intrusives likely represent the source "vents" or "feeders" for the overlying volcanics.

Descriptions of the various rock units shown on Plate 3 are as follows:

Metasediments - (Unit 1)

These are the oldest rocks on the property and are a metamorphosed assemblage of highly foliated and silicified pyritic argillites, minor limestone and comglomerate. They trend 035° and dip 40° to the northwest.

Mafic Monzonite - (Unit 2)

The mafic monzonite is medium to coarse grained, strongly to moderately foliated and contains an abundance of epidote veins. It consists of 35% plagioclase, 35% K-spar, 20% hornblende and 10% opaques, mainly magnetite.

Quartz Monzonite - (Unit 3)

The quartz monzonite is a medium grained, often pink coloured, weakly to strongly porphyritic plutonic rock. It consists of about 25% interstitial quartz, 20-30% K-spar, including phenocrysts and groundmass, 30-40% plagioclase and 10-15% mafics and opaques, which are predmoninantly hornblende with some replacement by chlorite and magnetite. K-spar phenocrysts range up to 1 cm in size.

Mafic to Intermediate Volcanic Flows and Volcaniclastics - (Unit 4)

Overlying the Jurassic intrusive rocks are dark to light grey or greenish grey coloured basaltic to andesitic flows and fragmentals, mainly lapilli tuffs and tuff breccias. Interbedded with the greyish coloured volcanics are at least one red coloured pyroclastic unit with andesitic clasts ranging up to 30 cm in size.

Porphyritic Granite to Quartz Latite Porphyry - (Unit 5B)

In outcrop this unit varies from a pink coloured, strongly porphyritic granite to a fine to medium grained, pink to greyish coloured quartz latite porphyry with varying amounts of phenocrysts. The granite averages 25-40% interstitial quartz, 30-50% K-spar both as groundmass and phenocrysts, 20-30% plagioclase both as groundmass and phenocrysts and 5-7% mafics and opaques, which include hornblende, biotite, magnetite and some pyrite. Phenocrysts make up to 30% of the granite phase with 70% of the phenocrysts being K-spar crystals up to 15 mm long and the remaining 30% being plagioclase crystals up to 7 mm in length. Typically the phenocrysts are rounded and many have K-spar cores with plagioclase borders. Throughout the unit a moderate intensity, widespread replacement of plagioclase crystals by a greenish grey clay is present. This alteration seems to increase in intensity towards the west.

The quartz latite porphyry phase of the unit appears to grade into the previously described granite with no contacts between the two units observed. Compositionally the quartz latite porphyry contains 30-35% phenocrysts, most of which are K-spar, set in a fine grained groundmass. A high percentage of the phenocrysts are rounded with many having K-spar cores and plagioclase borders. Commonly the phenocrysts occur in clusters and provide a glomeroporphyritic texture. As in the granites, clay(possibly kaolinite?) replacement of plagioclase does exist

and seems to increase in intensity toward the western portion of the property along Whiteman Creek. Rounded xenoliths are common in at least two localities within the quartz latite porphyry. They appear to be fine grained diorites to monzonites with 10-15% hornblende.

Feldspar Porphyry Dykes - (Unit 5A)

The feldspar porphyry dykes are found intruding the volcanic rocks and the older Jurassic and Paleozoic rocks but not the porphyritic granites to quartz latite porphyries. Based on this plus a similarity with the Tertiary plutonic rocks it is believed that they are part of the Coryell intrusive suite.

Compositionally the dykes average 10-15% feldspar(K-spar plus minor plagioclase) phenocrysts set in a very fine grained to aphanitic dark medium grey to light grey groundmass. Minor occurrences of dykes containing 40% phenocrysts have been found. Phenocrysts all tend to have perthitic K-spar cores with plagioclase borders although rare phenocrysts with plagioclase cores and K-spar borders have been found.

The groundmass contains an undetermined amount of plagioclase and K-spar, quartz and mafics(hornblende \pm pyroxene \pm biotite \pm hematite) plus opaques (magnetite).

Mafic Dyke - (Unit 6)

Cutting the porphyritic granite to quartz latite porphyry is at least one mafic dyke 3 meters wide. Although younger than the Tertiary stock, its exact age is uncertain.

ALTERATION AND MINERALIZATION

Localized intense fracturing with associated alteration occurs throughout the area of the stock and is particularily evident on the east side of the Wit property where a zone measuring 1000×400 m contains highly sericitized and kaolinized quartz latite porphyry. Most of the alteration appears to occur along narrow shears measuring 30cm in width or within highly altered sericite-kaolinite \pm quartz veins that are common in some areas underlain by volcanic flows and pyroclastics. Also within the altered zone is an area of brecciation that contains rounded fragments ranging from 1 mm - 30 mm in diameter. Surrounding the sericitized area is a pyrite-epidote-chlorite halo of undetermined size. Both the sericite-kaolinite and epidote-chlorite zones extend onto the Canadian Occidental ground, making an alteration system at least 4 x 2.5 km in size.

Mineralization consists primarily of weak(5%) disseminated and stringer controlled pyrite along with traces of MoS2 in the main altered sericite-kaolinite zone and of varying amounts of disseminated stringer and fracture controlled pyrite along other fault related alteration zones. No visible MoS2 has been found in these other altered areas.

STRUCTURE

To date no detailed structural analysis of the property has been undertaken, however a number of strong topographic features including those occupied by Kennco, Whiteman and South Whiteman Creeks likely represent major faulting in the area (Plate 1).

SOIL GEOCHEMISTRY

In order to fill in the widely spaced sampling done in 1979, and to put parameters on any anomalies that appeared open, additional soil sampling was carried out during August, 1980.

A total of 216 samples were collected at 50 meter intervals along two grid lines and three contour lines. The grid lines were put in with the aid of a compass and hip chain and were tied into the grid established in 1979. Control for the contour sampling was established with the use of altimeters and previously cut claim lines.

All the samples were analyzed for Mo and Zn by Cominco's laboratory in Vancouver. Results are listed in Appendix "A" and sample locations along with contoured values are given in Plate 4. All samples were collected from the "B" horizon where it was developed, but in many instances the soil consisted largely of organics with a high percentage of coarse rubble and only minor silt. All samples were air dried then sieved through 80 mesh screens. In geochemical analyses were made using a hot nitric acid(20%NHO) digestion followed by atomic absorption. Mo was determined by a method using nitric acid-perchloric acid(HNO3-HClO4) digestion followed by a colorimetric procedure. Coefficients of variation are 10-15%.

The results of the survey produced no new anomalous areas but they confirm the presence of most Mo anomalies found in 1979 and in most cases aided in defining the size of the anomaly. By far the most interesting areas are those at the headwaters of Kennco Creek, south west of Martin Lake and the area covered by the mineral claim, Loch 5(Plate 4). Both of these areas are associated with significant topographic features that likely represent faulting and are associated with appreciable sericite-kaolinite + pyrite development.

ROCK GEOCHEMISTRY

A number of rock samples were analyzed for various elements in an attempt to pick out anomalous areas and possibly outline alteration halos. Analysis included 50 determinations for Mo and F, 37 determinations for Cu,Zn and Mn, 12 determinations for Ba, Sr and Rb and 12 specimens analyzed for 11 major and minor elements. All results are listed in Appendices "8" and "C" and sample locations are given in Plate 3.

Results of this work indicate that the Tertiary granitic rocks have a similar chemistry to the feldspar porphyry dykes that are seen cutting the older country rocks, and the overlying but probably contemporaneous basaltic to andesitic volcanic rocks. This is particularly evident on the alkalis vs. silica variation diagram(Plate 5) where the feldspar porphyry dykes and the Tertiary granitic rocks plot in a relatively small area within the sub-alkaline field.

To date, the rock sampling for trace elements has not been sufficent to develop any alteration aureoles but occurrences of relatively high F and Mn contents are found in areas peripheral to or on strike of the zones believed to be most intensely altered. The Cu and Zn values are generally quite low and show no real systematic relationship with respect to rock type or locality. Sr contents are fairly high for all the Jurassic or older rocks while the Rb contents tend to be low for all lithologies except the feldspar porphyry dykes or porphyritic granites to quartz latite porphyry. Ba contents are quite high for both the mafic dyke and the intermediate volcanics but so far are unexplained.

CONCLUSIONS

The results of the most recent soil sampling have been somewhat discouraging in that the Mo values are lower than those found in the stream silts sampled by previous workers(assessment reports 5692,6572). However, the consistency of high values obtained in those stream silts suggests soil sampling may be giving low background values due to a number of factors including poor soil development, an abundance of organics and possibly the steepness of much of the property. The occurrence of fault zones associated with extensive sericite-kaolinite rock alteration, trace MoS2, weak Mo soil anomalies and high Mo silt anomalies along the creeks draining the property still strongly suggests molybdenum mineralization may occur beneath the overburden covering the property, particularily beneath the Loch 5 mineral claim.

RECOMMENDATIONS

- 1. In an attempt to outline both the hydrothermally altered areas and associated fault zones it is recommended a detailed magnetometer survey be conducted.
- 2. Along with the magnetometer survey additional detailed rock sampling and prospecting is warranted in order to more fully understand the process and magnitude of the alteration and mineralization.
- 3. Subsequent to the above surveys, bulldozer trenching and ten percussion holes should be drilled to test the more geologically promising areas.

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APPENDIX "A"

Zn AND Mo VALUES FOR SOILS COLLECTED FROM THE

WIT PROPERTY

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KELÜKTTIKE	DATE 4 SEP 1	784			SAMPLE	FIELD NUMBER	TYPF	Zn	Ho
					NUMBER	1 ILLE MONDER	,,,,	PPN	PPM
SAMPLE	FIELD NUMBER	TYPE	Zn	Ho					
NUMBER			PPK	PPM					
					580 44720	1.5N 1900 E	S	36	4
					S80 44721	1.5N 1950 E	S	30	3
80 44682	1.5N 0 E	S	173	₹2	580 44722	1.5N 2000 E	S	30	2
80 44683	1.5N 50 E		88	 i -	S80 44723	1.5N 2050 E	<u> </u>	24	5
60 44684	1.5N 100 E	S	55	2	S80 44724	1.5N 2100 E	Š	20	2
80 446B5	1.5N 150 E	S	53	3	580 44725	1.5N 2150 E	S	26	5
80 44686	1.5N 200 E	S	75	5	580 44726	1.5N 2200 E	Š	33	3
80 44687	1.5N 250 E	S	82	3	SB0 44727	1.5N 2250 E	S	34	3
80 44688	1.5N 300 E	S	9 5	7	580 44728	1.5N 2300 E	Š	53	5
80 44689	1.5N 350 E	5	95	4	S80 44729	1.5N 2350 E	5	48	- -
80 44690	1.5N 400 E	S	87	4	S80 44730	1.5N 2400 E	Š	76	3
80 44691	1.5N 450 E	S	29	6	SB0 44731	1.5N 2450 E	S	34	7
80 44692	1.5N 500 E	S	67	8	\$80 44732	1.5N 2500 E	Š	65	2
80 44693	1.5N 550 E	S	79	5	SB0 44733	1.5N 2550 E	Š	58	5
80 44694	1.5N 600 E	S	112	6	S80 44734	1.5N 2600 E	S	28	3
	1.5N 650 E		- 98 -	8	\$80 44735	1.5N 2650 E	- -	54	— - -
80 44696	1.5N 700 E	S	114	7	S80 44736	1.5N 2700 E	Š	22	6
80 44697	1.5N 750 E	S	96	4	SB0 44737	1.5N 2750 E	S	29	4
80 44698	1.5N 800 E	Š	80	2	S80 44738	1.5N 2800 E	S	44	4
80 44699	1.5N 850 E	S	52	2	S80 44739	1.5N 2850 E	S	46	5
80 44700	1.5N 900 E	S	26	6	S80 44740	1.5N 2900 E	S	35	Ā
80 44701	1.5N 950 E	- 5	48		S80 44741	1.5N 2950 E	<u> </u>	35	
80 44702	1.5N 1000 E	S	39	4	S80 44742	1.5N 3000 E	Š	46	3
80 44703	1.5N 1050 E	S	8	2	S80 44743	1.5N 3050 E	Š	37	2
80 44704	1.5N 1100 E	S	16	7	S80 44744	1.5N 3100 E	S	39	2
80 44705	1.5N 1150 E	S	22	,	S80 44745	1.5N 3150 E	S	39	2
80 44706	1.5N 1200 E	S	70	7	S80 44746	1.5N 3200 E	Š	43	2
80 44707	1.5N 1250 E	5 -	03		580 44747	1.5N 3250 E	5	44	(2
B0 44708	1.5N 1300 E	S	28	7	\$80 44748	1.5N 3300 E	S	97	2
80 44707	1.5N 1350 E	S	95	3	SB0 44749	1.5N 3350 E	S	159	3
80 44710	1.5N 1400 E	S	97	4	S80 44750	1.5N 3400 E	S	46	
80 44711	1.5N 1450 E	S	6 5	5	SB0 44751	1.5N 3450 E	S	43	3
	1.5N 1500 E	Š	60	4	S80 44752	1.5N 3500 E	S	35	6
	1.5N 1550 E	- 5	76		S80 44753			55 55	- 1
	1.5N 1600 E	S	85	5	580 44754	1.5N 3550 E 1.5N 3600 E	5 5	76	2
	1.5N 1650 E	S	89	2	580 44755 \$80 44755	1.5N 3650 E	S	80 80	2
	1.5N 1700 E	\$	79	Ž.	580 44756 \$80 44756		S	69	3
		S	57	2	580 44757 S80 44757		S	67 59	3
		S	37 44	3	38V 11 /3/	1.5N 3750 E	3	J7	J.
71/FF VOC	1.5N 1800 E	Ş	77	J					

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SAMPLE	FIELD NUMBER	TYPE	Zn	Mo	SAMPLE	FIELD NUMBER	TYPE	ZH	Mo
NUMBER			PPM	PPH	NUMBER	±		PPR	PPH
80 44758	1.5N 3800 E	ŝ	68	4	S80 44796	4.5N 1700 E	S	73	2
80 44759	1.5N 3850 E	S	65	2	S80 44797	4.5N 1750 E	S	85	3
80 44760	1.5N 3950 E	S	155	4	580 44798	4.5N 1800 E	S	93	4
80 44761	1.5N 4000 E	5	71	4-	SB0 44799		5	ól	4
80 44762	4.5N 0 E	S	92	3	S80 44800		S	38	5
BO 44763	4.5N 50 E	S	720	4	S80 44801		S	42	3
80 44764	4.5N 100 E	S	148	4	580 44802		Š	53	4
BO 44765	4.5N 150 E	S	165	3	580 44803		S	80	3
80 44766	4.5N 200 E	S	111	6	580 44804		S	62	4
	4.5N 250 E	<u> </u>	56	2	SB0 44805		5	31	4
80 44768	4.5N 300 E	Š	107	B	580 44806		Š	128	6
80 44769	4.5N 350 E	S	110	8	SB0 44807		Š	69	4
80 44770	4.5N 400 E	Š	84	4	580 44808		Š	47	4
80 44771	4.5N 450 E	S	79	4	SB0 44809		S	55	5
	4.5N 500 E	S	124	4	SB0 44810		S	84	7
	4.5N 550 E	S	77		S80-44811		5	- 81	;
80 44774	4.5N 600 E	S	15 4	11	S80 44812		S	48	11
	4.5N 650 E	S	25 <i>6</i>	5	S80 44B13		S	64	5
80 44776	4.5N 700 E	Š	225	4	S80 44814		Š	44	5
80 44777	4.5N 750 E	S	209	5	SB0 44815		S	63	4
80 44778	4.5N 800 E	S	122	3	S80 44816		\$	46	5
80 44779		-5	60	- 4	S80 44817		5	81	- 6
80 44780	4.5N 900 E	S	93	4	580 44818 S80 44818		S	51	11
80 44781	4.5N 950 E			8	580 44819 S80 44819		S	43	9
		S	122		580 44820		S	43 60	6
80 44782	4.5N 1000 E	S	107	4	580 44821		S	27	В
80 44783	4.5N 1050 E	S	61 440	Á			S	33	5
80 44784	4.5N 1100 E	<u> </u>	112	8	\$80 44822		_	- 33 - 18	3
80 44785	4.5N 1150 E	5	8	4	580 44823		5	37	4
89 44786	4.5N 1200 E	S	110	4	S80 44824		\$ e	3/ 45	5
80 44787	4.5N 1250 E	S	89	5	SB0 44825		S		7
89 44788	4.5N 1300 E	S	140	4	\$80 44826		S	36	4 7
80 44789	4.5N 1350 E	S	89	4	S80 44827		S	41	2
B0 44790	4.5N 1400 E	5	74	3		4.5N 3350 E	S	32	2
	4.5N 1450 E	5	87	5		4.5N 3400 E	s	37	5
80 44792	4.5N 1500 E	Ş	79	4	\$80 44830		Ş	31	4
80 44793	4.5N 1550 E	S	76	5		4.5N 3500 E		31	2
80 44794	4.5N 1600 E	S	79	6		4.5N 3550 E		52	9
30 44795	4.5N 1650 E	S	67	5	580 44B33	4.5N 3600 E	S	121	7

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REPORTING DATE 4 SEP 1980

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REPORTING DATE 4 SEP 1980

					- "				********	
SAMPLE	FIELD NUMBER	TYPE	Zn	Кo	SAMPLE	FIELD NUMBER	TYPE	Zn	Mo	
NUMBER			PPH	PPK	NUMBER			PPR	PPK	
	4.5N 3650 E		87	4		3250- 850		64	2	
	4.5N 3700 E		5 2	5	S80 44873		S	49	3	
	4.5N 3750 E		46	5		3250- 750	S	55	2	
	4.5N 3800 E		45			3250- 700	S	29	3	
	4.5N 3850 E	-	55			3250- 650	S	65	2	
	4.5N 3900 E	-	44 47	5	S80 44877		Ş	179	2	
	4.5N 3950 E		43	5	580 44878		S	50	(2	
	4.5N 4000 E		81 17	7.	980 44879		S	72	(2	
580 44842		- S	163	3	580 44880		S	77	2	
580 44843 500 44044		- 3	97	3 -	580 44881		S	58	2	
	2750- 100	S	73	2		4250- 1300	S	70	3	
	2750- 150	S	85	(2	SB0 44883		S	55	3	
	2750- 200	S	102	3	580 44884		S	154	7	
	2750- 250	S	99	Á		4250- 1150	S	74	3	
		S	94	4		4250- 1100	S	57	3	
	2750- 350	5	634	(2		4250- 1050	5	19	5	
S80 44B50		S	2068	2	S80 44888		S	41	8	
S80 44851		S	336	2	S60 44889		S	45	4	
580 44852	2750- 500	S	195	2	\$80 44890	4250- 900	S	14	2	
	2750- 550	S	200	5	580 44891	4250- 850	S	18	2	
S80 44654		S	348	10	580 44892	4250- 800	S	13	2	
	2750- 650	3	294	4		4250- 750	S	17	+	
	2750- 700	S	89	2		4250- 700	S	12	5	
S80 44857	2750- 750	S	154	۲2		4250- 650	S	13	2	
	2750- 800	S	136	(2		4250- 600	Š	19	4	
	2750- 850	Š	156	2		4250- 550	S	24	5	
	2750- 900	Š	60	В	-			_	-	
	2750- 950	<u>-</u> -5	44	(2						
S80 44862		Š	127	⟨2	! NHER!	F ANALYSIS REQU	ESTED	RUT NO VALI	IES SHOWN	NO RESULTS ARE TO FOLLO
580 44863		S	76	(2		1 1 M 1 1 M 1 M 1 M 1 M 1 M 1 M 1 M 1 M	/ 10 4 4 4 4 4		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	2750- 1100	Š	65	₹2	•					
	3250- 1200	S	30	2	ANALY	TICAL METHODS				
	3250- 1200 3250- 1150	S	16	15	ZN	20% HNO3 DIGES	TTOM /	ΔΔ		
	3250- 1100 3250- 1100	5	163	— <u>fi</u> –	- Ho	HNO3 - HCLO4			SYMETRIC	
		S	72	5	Inv	migg none.	# LUL	IUR / LULL.	IAMETICAL	
	3250- 1000 3250- 1000	S	221	2						
	3250- 1000 3250- 95 0	S	104	⟨2						
		S	28	2						
280 44871	3250- 900	ð	28	2						

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APPENDIX "B"

TRACE ELEMENT CONTENTS OF SOME ROCK SAMPLES

FROM THE WIT PROPERTY

					s in pp			
ROCK TYPE	Си	Zn	Mn	Мо	F	Ва	Sr	Rb
MAETO DVVC								
MAFIC DYKE 199				2	700	1214	392	72
122				2	700	1214)/L	12
INTERMEDIATE								
VOLC.								
114	3	44	316	2	105			
134	11	56	954	2	800			
135	8	62	628	2	620			
136	15	75	812	2	2000			
142	16	78	1122	2	700			
145	16	278	2380	2	1250			
167	5	63	514	2	1200			
1 76	19	76	719	2	900			
178A				2	900	1664	1089	127
180				3	510	1072	701	158
181				2	560	1092	769	160
,								
Average	11.6	91.5	930.6		867.	7 1276	853	148.3
FELDSPAR PORPH. DYKES								
105	95	67	640	2	560			
125	3	39	561	2	700			
132	8	44	654	2	780			
170	4	95	856	6	1220			
172	28	72	992	2	1150			
174	19	50	475	5	800			
182				2	200	488	246	234
183				2	170	167	91	214
Average	26.2	61.2	696		697.	5 327.	5 168.5	224
QT ₂ LATITE-			•					
GRANITE								
119	2	62	924	2	1150			
133	1	38	435	4	802			
146	11	71	636	3	680			
150	3	31	214	2	600			
192	_	<i>~</i> 1		2	1050	703	208	220
200				2	880	1257	448	184
200				_	500	1271	770	, G = 7
Average	4.25	50.5	552.25		860	980	328	202

ROCK TYPE	Cu	Zn	Mn	Мо	F	Ва	Sr	RЬ
QT2 MONZONITE								
122	12	65	747	2	420			
124A	8	48	501	2	400			
128 B	4	56	687		400			
127	5	33	678	2	660			
128	15	66	704	2 2 2	840			
131	4	59	599	2	395			
152A	2	62	871	2	602			
1 52B	55	11	416	2	380			
1 53	3	31	345	2	130			
154	3 3	9	147	2	165			
158	14	51	382	4	900			
189				2	580	862	919	102
191				2 2	540	716	796	69
Average	11.4	39.3	552.5		477.8	789	857.5	85.5
MAFIC MONZONITE								
108	36	54	568	2	840			
186			-	2 2 2	700	686	1183	122
188				2	695	723	1261	125
Average	36	54	568		745	704.5	1222	123.5
METASEDIMENTS								
110	41	64	382	2	100			
113	13	8	96	2	92			
Average	27	36	239		96			
<u> </u>					· -			

NOTE: All analysis were determined at Cominco's research laboratory in Vancouver, B.C. Cu, Zn and Mn were determined using aqua regia digestion followed by atomic absorption. Mo values were obtained by HNO3-HClO4 digestion followed by a colorimetric technique and Ba, Rb and Sr were determined by X-ray flourescence. F was determined by specific ion techniques.

APPENDIX "C"

MAJOR, MINOR AND TRACE ELEMENT VALUES

					<u>F(</u>	OR SOME	WIT PF	OPERTY I	ROCKS				т.		-1	- L - /	>
	\sin_2	Al ₂ 0 ₃	Fe ₂ 0 ₃	Fe0	TiO ₂	Мд0	Ca0	Na ₂ 0	к ₂ 0	P ₂ 0 ₅	*L0I	TOTAL	Mo		lemer Sr	Rb	F
MFR-178A	58.84	16.10	3.14	2.72	.93	2.98	5.23	3.48	3.84	.54	1.83	99.63	2	1664	1089	127	900
MFR-180	50.28	14.40	3.53	5.43	1.10	8.53	8.54	1.92	3.74	.53	1.98	99.97	3	1074	701	158	510
MFR-181	52.15	13.45	3.20	5.15	.97	8.56	7.67	2.50	3.43	.52	1.30	98.90	∢ 2	1092	769	160	560
MFR-182	71.81	14.08	.95	1.00	.40	.01	.78	2.91	6.80	.04	1.16	99.94	4 2	488	246	234	200
MFR-183	72.03	14.04	.79	1.00	.38	•01	.78	3.74	6.19	.03	1.17	100.16	∢ 2	167	91	214	170
MFR-186	52.45	14.41	4.19	6.29	.74	4.19	7.13	3.71	4.36	.71	1.78	99.96	∢ 2	686	1183	122	700
MFR-188	52.83	14.64	4.55	5.86	.75	4.25	7.01	3.42	4.80	.71	•98	99.80	2	723	1261	125	695
MFR-189	65.08	17.09	1.74	1.29	.38	•66	4.06	3.80	3.29	.15	1.54	99.08	2	862	919	102	580
MFR-191	64.66	17.14	.87	3.00	.45	.68	3.72	3.61	3.14	.18	1.53	98.98	2	716	798	69	540
MFR-192	72.41	14.18	1.29	.86	.41	.01	.86	4.01	5.31	.09	•62	100.05	∢ 2	703	208	220	1050
MFR-199	58.81	15.08	2.25	3.00	.76	2.08	5.15	3.32	3.04	.36	6.00	99.85	2	1214	392	72	700
MFR-200	67.28	15.61	2.02	1.14	.55	•50	1.50	4.14	5.11	.20	1.20	99.25	∢ 2	1257	448	184	880

FeO determined by acid digestion/volumetric

LOI determined gravimetrically; F specific ion; Ba,Rb and Sr by X-ray flourescence; Mo by HNO3-HC104 digestion/colorimetric; all other elements by Li borate fusion /XRF.

Sample locations are give on Figure 3.

All analysis conducted by Cominco Ltd. research Lab, Vancouver, B.C.

^{*} LOI = Loss On Ignition. Includes H5O, H5O, CO2

APPENDIX "D"

STATEMENT OF EXPENDITURES

FOR WORK ON THE WIT PROPERTY

GEOL	0 G γ
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GEOLUGY		
SALARIES		
D.T. Mehner	7 days field @ \$134/day (August 7-31,1980) 5 days office @ \$98/day	\$ 938.00 490.00
M.D. Fawcett	22 days field @ \$100/day (August 7-31,1980)	2,200.00
GEOCHEMISTRY		
SALARIES		
M. McDonagh	10 days field @ \$75/day (August 7-16,1980)	750.00
D. Fediuk	10 days field @ \$75/day (August 7–16)1980)	750.00
<u>ASSAYS</u>	216 soil samples analyzed for Mo, Zn, @ \$3.45/sample	745.00
	50 rock samples analyzed for Mo & F @ \$7.00/sample	350.00
	37 rock samples analyzed for Cu, Zn & Mn @ \$2.80/sample	103.00
	12 rock samples analyzed for Ba, FeO Sr and Rb @ \$15.75/sample	189.00
	12 rock samples analyzed for 11 major and minor elements @ \$23.30/sample	280.00
MISCELLANEOUS	(sample bags, flagging, shipping, phones, map blow up, etc.)	175.00
TRANSPORTATION	1 truck 10 days @ \$35/day 1 truck 25 days @ \$30/day	350.00 750.00
DOMICILE	20 man days @ \$30/man day 25 man days @ \$45/man day	600.00 1,125.00

Signed

D.T. Mehner Geologist 1

TOTAL

\$ 9,795.00

APPENDIX "E"

COMINCO LTD.

EXPLORATION

WESTERN DISTRICT

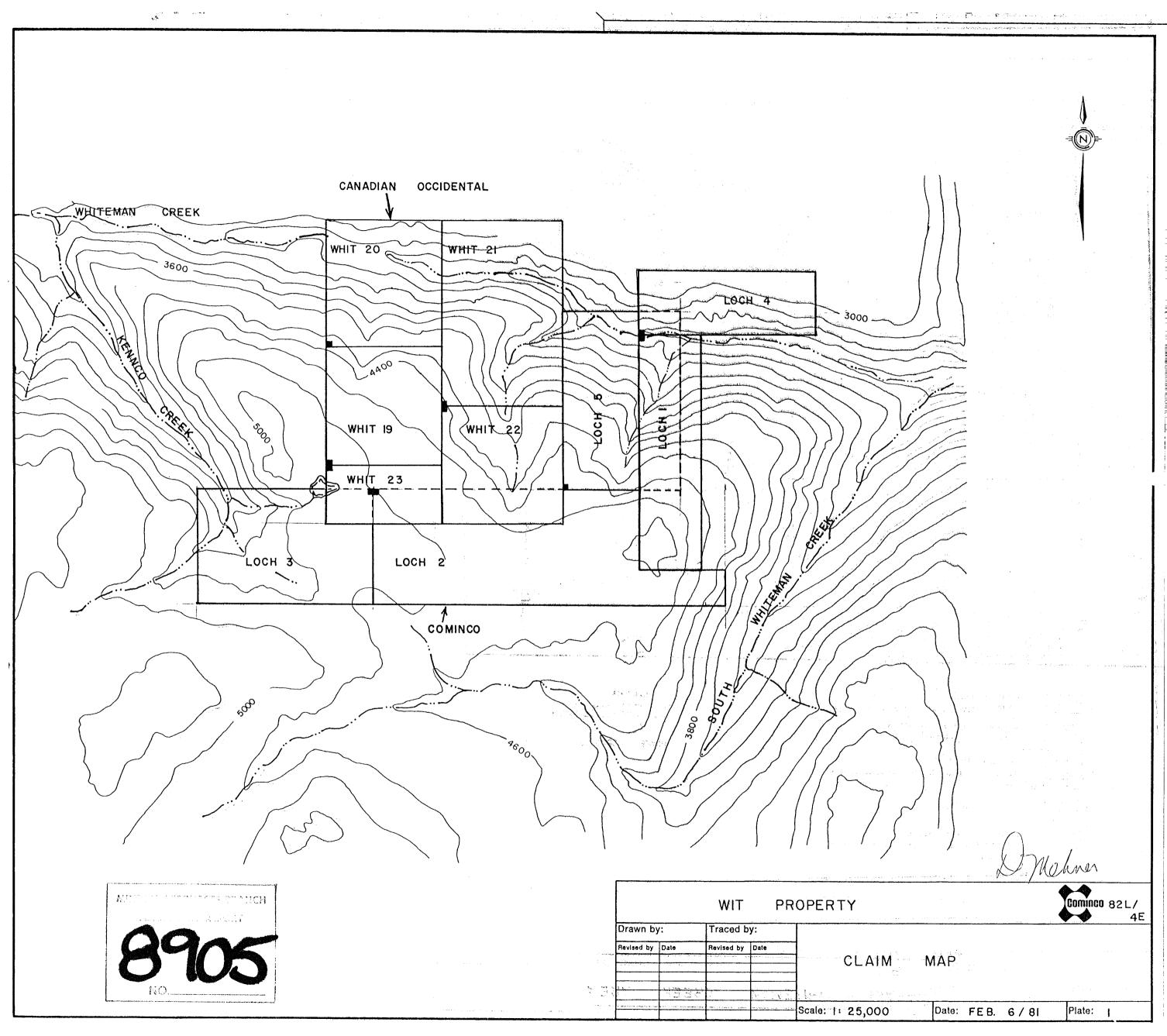
STATEMENT OF QUALIFICATIONS

- I, DAVID T. MEHNER, OF THE CITY OF VERNON, BRITISH COLUMBIA, HEREBY CERTIFY:
- That I Am A Geologist Residing At 206-4100 Alexis Park Drive, Vernon, British Columbia, With A Business Address At 4405 - 28 Street, Vernon, British Columbia.
- 2. That I Graduated With A B.Sc. Hon. Degree In Geology From The University of Manitoba In 1976.
- 3. That I Have Practised Geology With Cominco Ltd. From October 1979 To Present And As Such Have A Personal Knowledge Of The Facts Which I Hereinafter Depose.

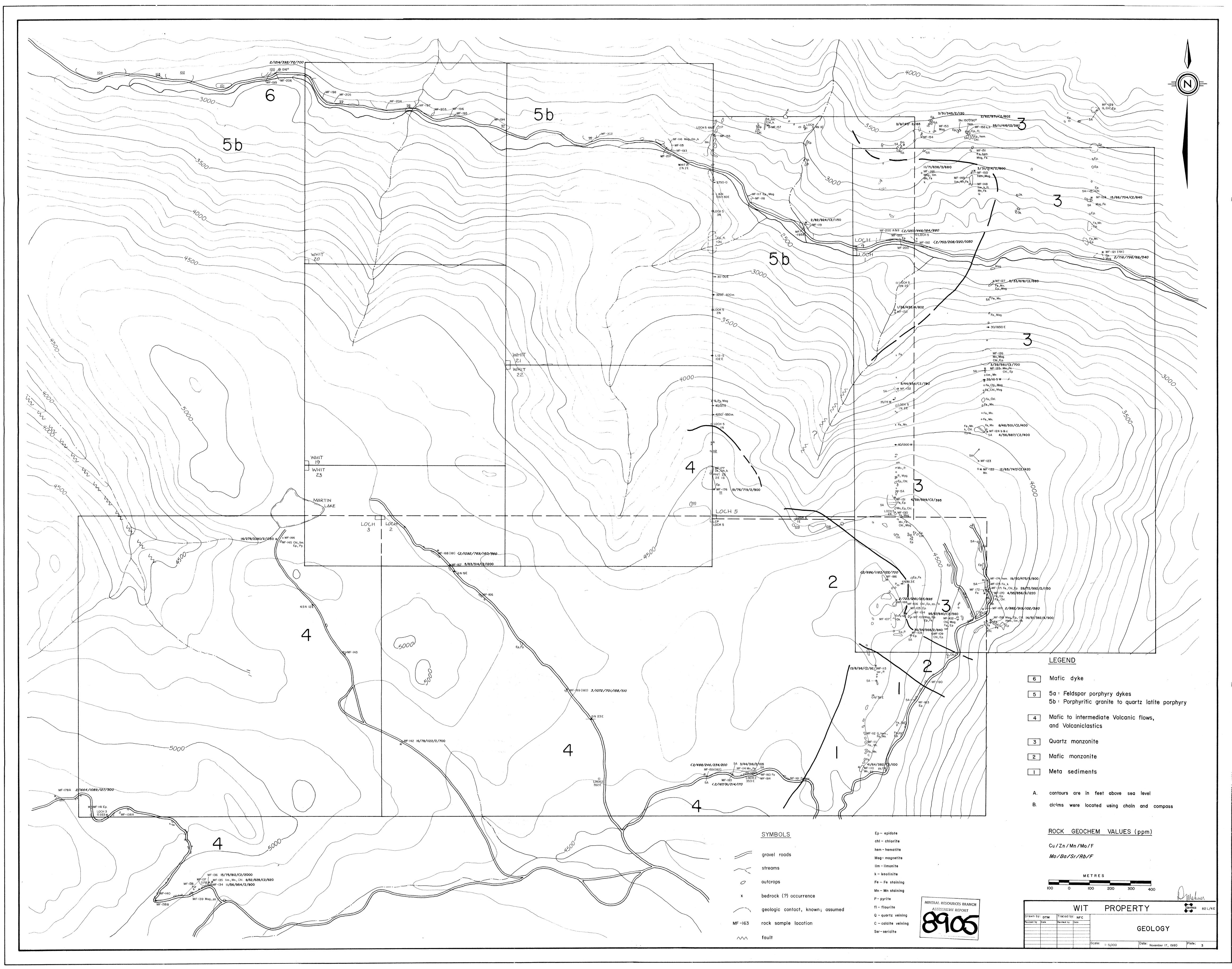
Dated This 30th day of January 1981.

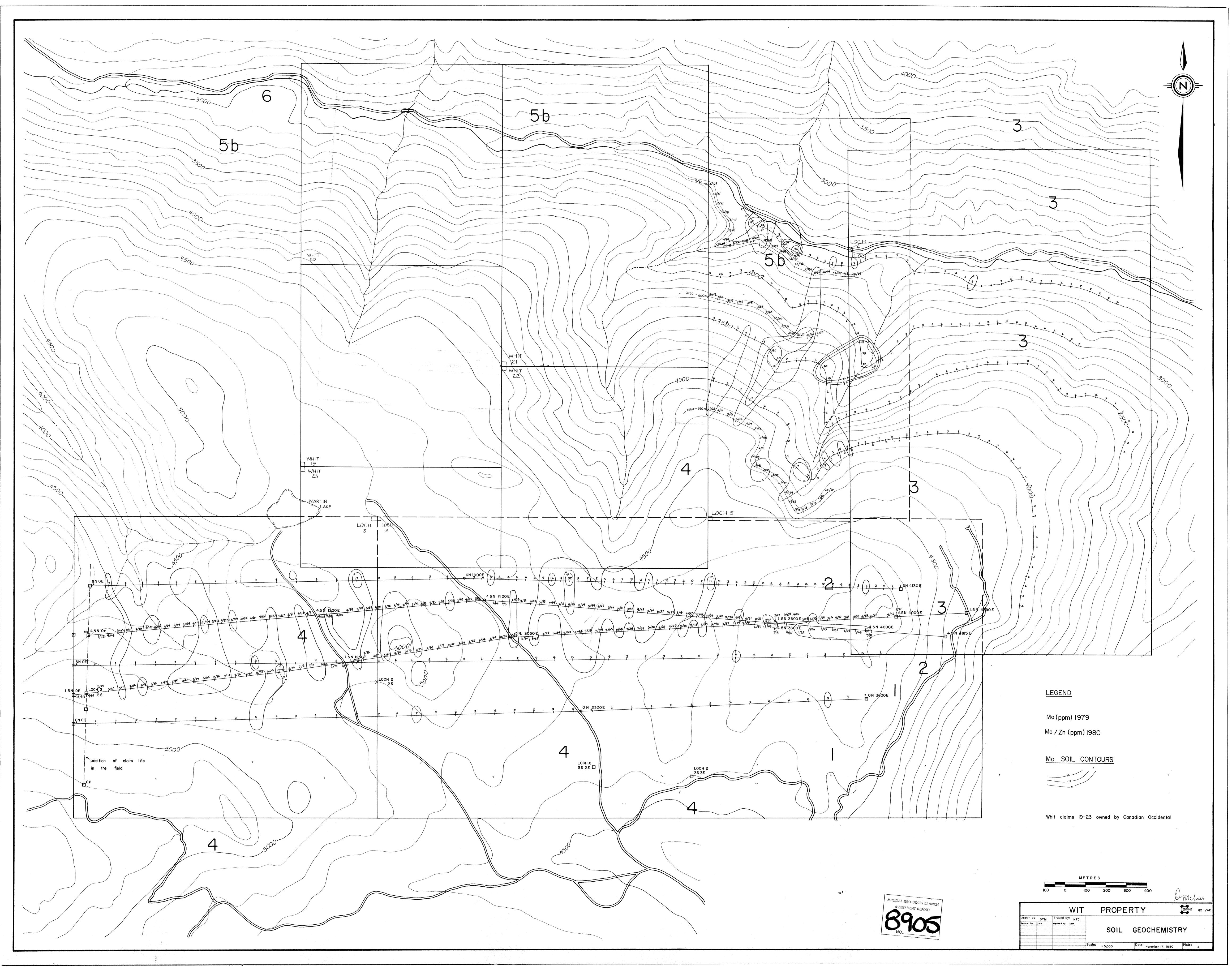
Signed

David T. Mehner

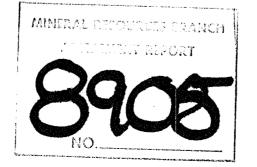


REGIONAL **GEOLOGY** OF THE WHITEROCKS MOUNTAIN - WHITEMAN CREEK AREA OF SOUTH-CENTRAL B.C. modified Okulitch (1979) from Mehner Triassic & Jurassic trjnv Nicola Group: volcanics, sediments Carboniferous & Permian ± Triassic Tertiary: Miocene 8/or Pliocene MILLER TOTAL TOTAL CARON Thompson : undivided cpta m t v plateau lava, olivine basalt, andesite flows-ash Assemblage argillite, sandstone, limestone Eocene & (?) Oligocene cptas Kamloops : andesite, basalt, dacite, trachyte etkv flows, pyroclastics Group limestone, chert cptac etks : sediments greenstone, tuff cptav Paleocene or Eocene Coryell syenite, granite, minor monzonite, intrusives shonkinite pty cptacg conglomerate Late Jurassic SCALE 1: 250,000 Mississippian or Older Valhalla : granodiorite, granite, minor gabbro, diorite, qtz. diorite Old Dave Intrusions: ultramatics pub ljgd diorite, qtz. diorite qtz. diorites, granodlorite, diorite, Nelson Chapperon Group: phyllites, schistspcv ejqd kilometers Intrusives grante, gabbro, ultramafics Whiteman cptas etkv Q OD(A Creek Domp Stock 🖈 utrns etkv Chapperon ljgd cptac Lake ljgd elkv ljgd etkv etkv etkv cptac ljgd cptav) etkv **O**etkv utrns LAKE Terrace etkv Mtn, \pcv ljgd REFERENCE MAP ljgd 1: 17,000,000 ρ¢ν eptay reptac 🎤 etky 4 NAGI area mapped BRITISH 4 by Jones, (1959) Mm ¥ 9 miy 2 COLUMBIA ljgd 50°00' area mapped optos by Little (1961) c ptas e jqd ljgd 55000 OKANAGAN etkv INTRUSIVE COMPLEX KELOWNA Whiterocks ejqd Mountain etkv trjnv & Kelowna etks 4£50 119030 120000





VARIATION DIAGRAM SHOWING THE CLASSIFICATION OF ROCKS FROM THE WIT OF TOTAL ALKALIS VS. BASIS PROPERTY ON THE Si O₂ O MAFIC DYKE 15 VOLCANIC . FLOWS FELDSAR PORPHYRY DYKES PORPHYRITIC GRANITE TO QUARTZ LATITE PORPYRY QUARTZ MONZONITE Alkaline MAFIC MONZONITE $K_2 O + N O_2 O$ (wt. %) 10 -**200** 178A سبر ∆ا9اپ O 199 **6** 180 5 BASIC INTERMEDIATE basalts andesites trachytes granodiorites granites 45 50 55 65 70 adopted from Si O2 (wt. %) Carmichael, Turner and Verhoogen (1974)



WIT PROPERTY

Drawn by: DTM Traced by: NFC

Revised by Date Revised by Date ROCK GEOCHEM

Scale: Date: FEB. 5, 1981 Plate: 5