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## NORSEMONT MINING CORPORATION

WHITE MOUNTAIN RESOURCE CORPORATION

NOR CLAIMS

CLINTON MINING DIVISION LAT. 51<sup>0</sup>07' LONG. 122<sup>0</sup>40 N.T.S. 920/2E



HORSE CLAIMS

CLINTON & LILLOOET MINING DIVISIONS LAT. 51°05' LONG. 122°34' N.T.S. 920/2E

ASSESSMENT REPORT

FOR

NORSEMONT MINING CORPORATION

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WHITE MOUNTAIN RESOURCE CORPORATION

MARCH 4, 1982

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BY EDWARD W. GROVE, Ph.D., P.Eng.

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SUBMITTED MARCH 12, 1982

– E. W. Grove Consultants Ltd. –

# **SEPARATOR SHEET 8796**

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## INTRODUCTION

Mineral claims called the NOR, and the HORSE were staked respectively at Quartz Mountain and Big Dog Mountain in February 1981 as a joint project of Norsemont Mining Corporation and White Mountain Resource Corporation.

A detailed geochemical and prospecting proposal to investigate the mineral potential of the two claim groups during 1981 was hampered and severely curtailed by abnormal weather conditions. A late spring with heavy snow was followed by cold, wet and snowy conditions in July and August. Because of the isolated nature of the area, and the almost continuous snowfall during the field work the project was limited to gathering stream sediment samples below the snow line. Prospecting was also limited to the peripheral areas. Geological mapping on the claim groups was impossible because of snow during the time allowed.

Results of the area stream sediment program were not followed up with detailed sampling and prospecting because of continuous bad weather in the area.

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#### LOCATION

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The NOR claims are located at Quartz Mountain and the HORSE claims nearby on the north slope of Big Dog Mountain about 60 kilometers northwest of Lillooet (Figure 1), at the northerly end of the Shulaps Range. The Yalokom River and its tributaries drain the east slopes of the Shulaps while Marshall and Tyaughton creeks drain the westerly slopes into the Bridge River. The claim areas are well suited to detailed stream sediment sampling because of the close drainage pattern.

The NOR claims lie mainly on the northeasterly slope of Quartz Mountain which at 6,780 feet (2066.5m) forms the highest point in the northern Shulaps. Poison Mountain, where considerable exploration activity has taken place in the last few years, lies five kilometers northeast of Quartz Mountain.

The HORSE claims lie about eight kilometers south of the Poison Mountain development on the north flank of Big Dog Mountian. The area encompassed by these claims rises from about 5,000 feet (1524m) at the Yalokom River to 8,939 feet (2725m) at the summit of Big Dog.

The lower portions of the Shulaps Range below timberline are generally precipitous and covered with heavy forest. Above timberline the slopes are more rounded indicating extensive overburden.

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#### ACCESS

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Access to the north and east sides of Big Dog and Quartz mountains is possible by way of the secondary road from Lillooet along the Yalokom River (about 80 km). From this main road one old mine road at Blue Creek provides limited access to the south side of Big Dog Mountain. This was not passable during the field program in June and July because of snow. Several old horse trails in the alpine areas also provide access to portions of the Quartz-Big Dog ridge in good weather.

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The westerly portion of the main ridge can be reached on foot with difficulty from both the Mud Creek and Noaxe Creek roads. However the best means of accessing the area is by the helicopter based at Pemberton.

#### PROPERTY

## NOR Group

The NOR group of staked mineral claims includes the NOR 1 to 3 comprising 52 units (Figure 2). These claims are currently owned jointly by Norsemont Mining Corporation and White Mountain Resource Corporation.

#### HORSE Group

The HORSE group of staked mineral claims includes the HORSE 1 to 4 and HORSE 6 and comprises 89 units.

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The claims and relevant data are listed in the following:

Name		<u>Units</u>	Record	<u>M.D.</u>	Expiry Date
NOR	1	12	989	Clinton	March 13, 1982
NOR	2	20	990	II	March 13, 1982
NOR	3	20	991	11	March 13, 1982
HORSE	1	9	992	ri -	March 13, 1982
HORSE	2	20	993	11	March 13, 1982
HORSE	3	20	678	Lillooet	March 13, 1982
HORSE	4	20	679	31	March 13, 1982
HORSE	6	20	681	11	March 13, 1982

#### HISTORY

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Emergence of the Poison Mountain Copper-Gold-Molybdenum porphyry deposit as a potential producer of major size and of the nearby Fish Lake porphyry deposit in the last few years has given some reason to examine and reexamine areas which may be geologically favorable to other porphyry gold mineralization.

In 1920 McKenzie noted pyrite and native gold in quartz veins cutting "birds eye" porphyry at both Poison Mountain and Big Dog Mountain. In 1941 Bralorne Mines Limited explored the Elizabeth group of claims at Blue Creek on Big Dog Mountain. Extensive surface and underground work was performed to explore gold-quartz veins between 1941 and 1949. Other quartz veins were discovered in the same general area

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but none were as thoroughly explored.

In the Quartz Mountain area a number of cinnabar deposits were located and explored between 1937 and 1942. Little work of note has been recorded for this area since 1946.

#### GEOLOGY

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## General Geology

Portions of the general area were mapped by Drysdale (1915-1917), McCann (1922), McKenzie (1920), Walker (1934), Cairnes (1937), Leech (1953), and Tipper (1978). Most of this work has been incorporated into G.S.C. Map 1386A "Fraser River" (1979).

Generally, various members of the mainly sedimentary Bridge River Group, Relay Mountain Group, and Jackass Mountain Group form the main country rocks. These have been variably folded, extensively faulted and intruded by a variety of plutons of several ages. In the Shulaps Range the older country rocks have been intruded by the Triassic (or older) Shulaps gabbro-peridotite complex. This and younger country rocks have in turn been intruded by Tertiary granodiorite plutons and quartz diorite dikes.

The general area shows a mosaic of faults of which the Fraser and Yalokom appear to have been the most

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significant. At the smaller scale northwesterly and east-west faults disturb the strata.

## Local Geology

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The only detailed study of the Quartz Mountain and Big Dog Mountain area was produced by G. B. Leech (1953). Leech's map is partly reproduced here (Figure 3). In this area a variety of sedimentary and volcanic rocks have been deformed and intruded by the Shulaps gabbro-peridotite complex and by younger porphyritic quartz diorite plutons. The porphyritic quartz diorite units mentioned by McKenzie (1920) were named Blue Creek porphyries by Leech. Similar porphyritic quartz diorite plutons localized at Poison Mountain have been shown to be closely related to the Cu-Au-Mo mineralization at the Poison Mountain mineral deposit (Brown and Grove, 1981).

#### MINERALOGY

Mineral exploration at Big Dog Mountain was entirely centered on gold bearing quartz veins cutting the Blue Creek porphyries. The gold was first reported by McKenzie (1920) but serious examination did not take place until 1941. Several fissure-type quartz veins and stringers containing erratic free gold cutting the porphyry and altered peridotite were explored but no commercial deposits were developed.

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To date the only mineralization located on Quartz Mountain has been several showings of cinnabar. These occur in sheared, altered peridotite within the Yalokom fault zone. Some production was recorded from this area in 1941-42. Cinnabar was also noted in conglomerates south of the summit of Quartz Mountain (Leech).

# 1981 EXPLORATION PROGRAM

# Geochemical Survey

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Stream sediment sampling was started in the Big Dog - Quartz mountains area in late June and continued through until late July. Because of rain and heavy snow access was generally limited to the lower slopes where access was by foot from the nearest road or by helicopter. The crew consisted of one prospector, and an assistant (short term) supervised by the company consultant.

## Sample Collection

Stream sediment samples were collected from almost all the streams draining the NOR and HORSE claim areas during the periods of free flow. Sites were marked on air photographs and located on the ground with numbered survey ribbons. Sample site data was transferred to the only available map of the area at the scale of 1:50,000. At each location the stream sediment sample comprised a composite of at least four sites within a

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few meters of each other. The standard kraft paper bags were completely filled with sand and silt-sized material taking care to exclude organic matter. The samples were all air dried before being shipped to the laboratory.

#### Laboratory Procedure

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The dried, numbered stream sediment samples were sent to the laboratory in batches. All samples were analysed for six elements which were expected to represent the best mobile to immobile pathfinders for the type of deposits suggested by the geological parameters. As usual the laboratory utilized the -80 mesh size fraction for analysis. Analysis of the samples was by atomic absorption, colourimetric and fire assay/AA methods.

## Data Presentation

The stream sediment sample location sites and the results of the analyses have been plotted on base topographic maps (scale 1:50,000) which display the approximate claim boundaries, streams, trails, and roads. Sample sites are shown by the number which corresponds to the laboratory number (Appendix). The geochemical results expressed as parts per million (Cu, Pb, Zn, As, Sb, Hg, W) or parts per billion (Au) are shown on the map with the sample number.

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All 87 stream sediment samples, as well as check samples, were analysed for copper, lead, zinc, arsenic, tungsten, and gold. Mercury and antimony were analysed on about half of the samples.

Histograms utilizing three cycle graph paper were constructed for copper, lead, zinc, mercury and arsenic (Appendix II). The results did not warrant plotting gold, antimony and tungsten values. Calculated background and threshold values as well as value ranges for the elements follow:

Element	Range	Background Value	Threshold Value	
Cu	9-67	26	60	
Pb	ND(2) - 140	5	20	
Zn	20-176	71	100	
As	ND(2)-90	5	15	
Нд	10-1110	200	800	
W	2-15	2	-	
Au	ND-40ppb	<5ppb	-	
Sb	ND		-	

Significant anomalous values are marked on the accompanying map.

# Discussion of Stream Sediment Results

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Results of the reconnaissance stream sediment sampling in the Quartz Mountain and Big Dog Mountain appear to typically display the results expected from a multiple population. In this instance from a complex group of rocks

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which have been variably deformed, altered and erratically mineralized. As a result the stream sediment geochemical values must be interpreted in light of the known local geology.

Analyses of the samples leading east from the NOR 3 claim strongly suggest the presence of mercury (cinnabar) mineralization south and east of the summit. From reports cinnabar is known to be present in conglomerates near the peak and in altered peridotite north of the peak. It is very likely that mercury mineralization with some slight sulfides (Zn) is more widespread than previously known.

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The samples from the Noaxe Creek and Noaxe Lake area show anomalous zinc. Rocks in this area include a variety of sedimentary strata as well as intercalated altered volcanics. The several anomalous zinc values on this creek as well as on the shoulder of Quartz Mountain probably reflect certain rock units in the sequence. The possibility of strata bound mineralization cannot be ignored however.

Anomalous lead in two sediment samples from Evelyn Creek (north of HORSE 4) are from a dominantly sedimentary terrain. No known mineralization exists in the area, but the lack of coincident anomalous zinc (etc) downgrades the priority for immediate follow-up.

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#### CONCLUSIONS

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In general the general lack of coincident gold, mercury, antimony, and (or) tungsten tends to lower the probability of other Poison Mountain copper-gold porphyry-type deposits in the Quartz Mountain - Big Dog Mountain area. It is fairly certain that mercury mineralization (cinnabar) is more widespread than previously known and certain zinc or lead zinc may occur in the complex sedimentary/volcanic packages.

No attempt was made to locate new chromite occurrences during this program.

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# COST STATEMENT 1981 EXPLORATION PROGRAM

1.	Personnel Involved:		
	E. W. Grove Consultants Ltd.	Overall field : stream sedimen:	supervision, t survey,
		prospecting, re	eports.
	Norsemont Mining Corporation	Vehicle, equip	nent, materials
2.	Costs - Stream Sediment Progra	m	
	Photos, maps & materials:		\$100.00
	Wages: : T. Archibald, 34 days @ \$100/ : R. Campagna, 5 days @ \$50/day	'day '	3,400.00 250.00
	Vehicle: 1 - 4x4 3/4ton GMC 36 days @ including gas & oil	\$43/day	1,548.00
	Helicopter:		1,462.00
	Camp costs: including hotel/motel		1,288.32
	Laboratory Fees:		1,088.76
	Tools & Supplies: 34 days @ \$50/day Including shovels, picks, ro pack boards, packs, compass	ock hammers, moils, , belt chain, rope	
	chain, and chain saw		1,700.00
	Consulting fees & expenses:		2,600.00
	Report Compilation:		1,000.00
	TOTAL	1981 EXPENDITURES	\$14,437.08

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#### REFERENCES

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- Brown, Robert F. & Grove, Edward W. (1981): Alteration and Geochemistry of the Poison Mountain Cu-Au-Mo Porphyry Deposit, Exploration Geochemistry Symposium, Soc. Expl. Geochemists, Vancouver, abst.
- Cairnes, C. E. (1943): Geology and Mineral Deposits of Tyaughton Lake Map-Area, Brit. Col., G.S.C. Paper 43-15.

Drysdale, C. W. (1917): Bridge River Map-Area, G.S.C. Sum. Rept. 1916.

Leech, G. B. (1953): Geology and Mineral Deposits of the Shulaps Range, B.C. Dept. of Mines, Bull. No. 32.

McKenzie, J. D. (1920): Taseko Lake, G.S.C. Sum. Report 1920.

Tipper, H. W. (1978): Taseko Lake, G.S.C., O.F. Report 534.

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#### CERTIFICATE

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I, Edward Willis Grove, of the Municipality of Central Saanich, do hereby certify that:

- I am a consulting geologist with an office at 6751 Barbara Drive, Victoria, British Columbia.
- 2. I am a graduate of the University of British Columbia (1955) with a Master's degree, Honours Geology (M.Sc. Hon. Geol.) and a graduate of McGill University (1973) with a doctorate in Geology (ph.D.).
- 3. I have practiced my profession continuously since graduation while being employed by such companies as The Consolidated Mining & Smelting Co. of Canada Ltd., British Yukon Exploration Ltd., Quebec Dept. of Natural Resources, and British Columbia Ministry of Energy, Mines and Petroleum Resources. I have been in private corporate practice since January 1981.
- 4. I am a director and shareholder of both Norsemont Mining Corporation and White Mountain Resource Corporation.
- 5. I am a member in good standing of the Association of Professional Engineers of the Province of British Columbia.

March 4, 1982

Victoria, B.C.

Edward W. Grove, Ph.D., P.Eng.

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APPENDIX I

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# Geochemical Lab Report





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S-11		34	3	80	0.2	2	מא	8	175	ND		
+ 17		16	ND	29	0.2	2	5	8	50	DИ		
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2-15		16	2	52	0.2	2	15	5	30	ND		
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5-20		13	ND	32	0,2	2	ND	7	85	ЛИ	•	
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S-22		17	ND	47	0.2	2	ND	6	30	ND	4	
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5 24		30	2	75	0.2	3	ND	5	150	ND		
S-25		13	ND	64	0.2	3	ND	8	325	ND	,	
5-26		40	3	75	0.2	7	5	12	(1110)	งก		
5-27		36	4	78	0.2	5	15	10	150	NT		
S-28		36	3	(100)	0.2	$\tilde{2}$	ĩõ	10	260	นั้ง		
> 29		26	<u>`</u> 3	73	0.2	2	NB	10	160	ND		
5-30		39	4	71	0.2	3	5	18	305	DN		

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# **Geochemical Lab Report**

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ELENENT UNITS	Cu PPH	рр Рри	Zn ምቦለ	Ag PPM	W PPH	Au PPB	As Ppm	HS PPB	Sd Ppn			NOTES
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# Geochemical Lab Report

REPORT	121-1925			·		
FRUM: NO	URSEMONT MINING CO	RPORATION	SOBALLI	EU BT: KAARE		
DATE:	21-JUL-81 PROJE	CT: NONE GIVEN				
	LOWER					
ELEMENT	DETECTION LINIT	EXTRACTION	METHOD	SIZE FRACTION	SAMPLE TYPE	SAMPLE PREPARATIONS
Cu	1 FPM	HNO3-HCL HOT EXTR	Atomic Absorption	-80	STREAM SEDIMENTS	SEIVE -80
Pb	2 PFM	HNO3-HCL HOT EXTR	Atomic Absorption	-80		PULVERIZING
211 Asi	L FFM	HNUS-HEL HUT EXTR	Atomic Apsorption Atomic Absorption	-80		
Ŵ	2 FPM	CARBONATE SINTER	Colourimetric	-80		
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REPORT (	COPIES TO: NORSENO	NT MINING CORP.	INVOICE	TO: NORSEMONT MIN	ING CORP.	
REMARKS	POISON MOUNTAIN	PROJECT				
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# **Geochemical Lab Report**

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REPORT	121-1925							<del></del>		FAGE	1	······································	
SAMPLE Number	ELEMENT UNITS	Cu PPM	РЪ РРМ	Zn FPM	Ag PPM	W אסד PPM	ES SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	РЪ Ргм	Zn PPM	요년 Mඅ역	W NOTES PPM
S-37 S-38	SOIL	32 40	140 140	65 71	0.2	2 2	S-68 S-69		32 28	7	60 75	0.2	2 2
5-39		40	7	77	0.2	2	S-70		28	8	70	0.2	2
5-40		50	12	80	0.2	2	S-71		25	6	60	0.2	2
S-41		38	5	68	0.2	2	S-72		25	7	65	0.2	2
S-43		25	8	70	Ō,2	2	S-73		18	6	53	0,2	2
S-44		25	82	65	0.2	2	5-74		24	6	68	0.2	2
5-45		21	5	65	0.2	2	S-75		10	3	36	. 0.2	,2
5-46		34	6	68	0+2	2	S-76		12	4	45	0.2	2
S-47		35	6	66	0.2	2	S-77		16	4	30	0.2	2
S-48		52	6	75	0.2	2	S~78		10	3	20	0.2	2
S-49		44	7	66	0,2	2	5-79		13	3	30	0.2	2
5-50		28	6	82	0.2	2	5-80		15	6	45	0+2	2
5-51		52	5	75	0.2	2	S-81		12	6	40	0.2	2
5~52		32	7	68	0+2	2	S-82		10	4	39	0.2	2
S-53		72	12	107	0+2	2	S-83		9	4	32	0.2	2
S~54		48	11	96	0.2	3	5-84		42	3	70	0.2	2
8~55		60	5	82	0.2	2	S~85		26	3	74	0.2	2
5-56		50	9	75	0+2	2	S-86		67	10	110	0,2	3
5-57		40	6	76	0+2	2	S-87		32	4	65	0+2	2
S-58		44	6	75	0.2	2	PC-39	PC	34	2	65	0:2	2 -
5-59		36	6	25	0.2	15	PC-41		36	2	70	0+2	2
5-60		46	6	75	0.2	2	PC-43		30	6	70	0.2	2
5-61		56	6	80	0.2	2	PC-45		22	4	58	0.2	2
S-62	κ.	35	5	65	0.2	2	PC-46		33	4	60	0.2	. 2
5-63		48	5	79	0.2	2	FC-47		32	4	64	0.2	2
S-64		32	8	73	0.2	2	PC-48		40	2	60	0.2	2
5-65		28	8	66	0.3	2	PC-51		44	2	60	0.2	2
5-66		28	8	· 60	0.2	2	PC-55		53	2	60	0.2	2
5-67	•					:	1* FC~59		29	6	65	0.2	3



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# Geochemical Lab Report

REPORT:	121-1925			·				PAGE	2	
SAMPLE NUMBER	ELEMENT UNITS	Cu PPK	ይ ይ	Zn FFM	a⊴ FPM	W NOTES PPM				
PC-67 PC-69 PC-70 PC-72 PC-79		27 25 24 23 13	4 4 4 4 4	60 61 60 60 30	0.2 0.2 0.2 0.2 0.2	2 2 2 2 2	,			
FC-84		33	、 4	61	0.2	2				
(										

# BONDAR-CLEGG & COMPANY LTD.

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# Geochemical Lab Report

125 OF T:	<u>; .1+15.1</u>	<u> </u>				
FROM: NO	REEMONT MIVING CO	IRFORATIO*	SUBMITT	ED BY: GAARE		
DATE:	17-AUG-81 PROJE	CT: NONE GIVEN				
	LOWER					
ELEMENT	BETECTION LIMIT	EXTRACTION	KETHOD	SIZE FRACTION	SAMPLE TYPE	SAMPLE PREPARATIONS
Ըս	1 FPM	HNO3-HCL HOT EXTR	Atomic Absorption	-80	STREAM SEDIMENTS	SEIVE -80
Pb	2 PPM	HNO3-HCL HOT EXTR	Atomic Absorption	-80		PULVERIZING
Zri	1 FPM	HNOJ-HCL HOT EXTR	Atomic Absorption	-80		
Ag	•1 PPM	HNO3-HCL HOT EXTR	Atomic Absorption	-80		
As	2 PPM	NITRIC PERCHLOR DIG	Colourimetric	-80		
Au	5 PPB	AQUA REGIA	Fire Assay AA	-80		
W	2 PFM	CARBONATE SINTER	Colourimetric	-80		
REPORT C	OPIES TO: NORSEMO	NT MINING CORP.	INVOICE	TO: NORSEMONT MIN	ING CORF.	
REMARKS:	POISON MOUNTAIN	PROJECT	DETE 20	CTION LIMITS FOR ( gram sample:	GOLD 5 ppb.	
	1 NO SAMPLE SUB	MITTED	10	gram sample: 1	0 220.	-
			1	gram sample: 10	0 225.	
			Same	le Wt. 20 s. unle	ss otherwise state¢.	
			NOTE Ch fo	; eck concentration, r effective detect	∕sample wei⊴ht ratio tion level.	



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# Geochemical Lab Report

SEPORT:	<u>. 11 - 17 5</u>							-	 
SAMPLE NUMBER	ELEMENT UNITS	ርս ዮዮለ	Pb PPM	Zn PPM	Ag PPM	As PPM	Au PPB	и Ррм	NOTES
5-37	SOIL	32	140	65	0.2	7	מא	2	
S-38		40	140	71	0.2	5	ND	2	
S-39		40	~ 7	77	0.2	5	ND	2	
S-40		50	12	80	0.2	7	ND	2	
5-41		38	5	68	0.2	7	ND	2	
5-43		25	8	70	0.2	5	מא	2	
S-44		25	89	65	0.2	7	ND	2	
S-45		21	`5	65	0.2	6	NB	2	
S-46		34	6	68	0.2	8	ND	2	
5-47		35	6	66	0.2	8	םא	2	
S-48		52	6	75	0.2	3	מא	2	
S-49		44	7	66	0.2	2	ND	2	
\$-50		28	- 6	82	0.2	12	ND	2	
S-51		52	5	75	0.2	5	ND	2	
S-52		32	7	68	0.2	5	ND	2	
S-53		72	12	(109)	0.2	(23)	ND	2	
S~54		48	11	96	0.2	(II)	ND	3	
S~55		60	5	82	0.2	6	ND	2	
S~56		50	9	75	0.2	_5	ND	2	
S-57		40	6	76	0.2	(15)	ND	2	
S-58		44	6	75	0.2	2	ND	2	
S-59		36	6	75	0,2	10	ND	(15)	
S-60		46	6	75	0.2	6	מא	2	
S-61		56	6	80	0.2	5	ND	2	
S-62		35	5	65	0.2	3	ND	2	
5-63		48	5	79	0.2	2	ND	2	
S-64		32	8	73	0.2	6	מא	2	
S-65		28	8	66	0.3	4	NE	2	
5-66		28	8'	60	0.2	7	ND	2	
S-67							מא		1*

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# Geochemical Lab Report

Litter I.	1-1922								<u> </u>	
SAMPLE NUMBER	ELEKENT Units	Cu PPM	РЪ Ррн	Zn PPN	94 К99	Ås PPM	AU PPB	W PPM		NOTES
S-68		32	7	60	0.2	11	đи	2		
5-69		28	9	75	0.2	(16)	аи	2		
S-70 S-71		28	8	70	0.2	11	ינא	2		
5-71		20	0 7	80 (F	0.2		NU	2		
5-72		23	/	60	0.2	/	14 U	2		
5-73		18	6	53	0.2	6	ND	2		
5-74		24	6	68	0.2	5	ND	2		
5-75		10	3	36 • F	0.2	,2	םא	2		
5-77		12.	4	43	0.2	2	5	2		
<i><i>u</i>, <i>i</i>, <i>i</i>, <i>i</i>, <i>i</i>, <i>i</i>, <i>i</i>, <i>i</i>, <i>i</i></i>		10	1	30	0+2	2	ц'n	2	,	•
S-78		10	3 -	20	0.2	13	ND	2		
S-79		13	3	30	0.2	ND	סא	2		
5-80		15	6	45	0.2	2	יםא	2		
5-81		12	6.	40	0.2	2	מא	2		
5-82		10	4	39	0.2	ND	NÞ	2		
S-83		9	4	32	0.2	ND	(10)	2		
5-84		42	3	70	0.2	6	ทธั	2		
5-85		26	3	74	0.2	5	סא	2		
5-86		(تې		(10)	0.2	(34)	ינא	3		
5-87		32	4	65	0.2	(14)	ND	2		
PC-39	PC	34	2	65	0.2	5	би	2		·
PC-41		36	2	70	0.2	5	ND	2		N .
FC-43		30	6	70	0.2	10	יםא	2		•.
PC-45 PC-44		22	4	58	0.2	5	ND	2		
FC-40		33	4	60	0.2	ó	סא	2		
PC-47		32	4	64	0.2	6	аи	2		
FC-48		40	2	60	0.2	6	-ND	2		
FC-51		44	2	60	0.2	6	(10)	2		
FC-35		53	2	60	0.2	5	`NT	2		
ru-59		29	ó	65	0.2	6	ØМ	3		
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# Geochemical Lab Report

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<u>KEPOKI, 121</u>	-1925								<u> </u>
SAMPLE NUMBER	ELEMENT UNITS	Cu PPM	РЪ Ррм	Zn PPM	As PPM	As PPN	Au PPB	W PPM	NOTES
PC-67 PC-69 PC-70 PC-72 PC-79		27 25 24 23 13	4 4 4 4 4	60 61 60 60 30	0.2 0.2 0.2 0.2 0.2 0.2	7 11 10 7 ND	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	2 2 2 2 2 2	
PC-84		33	4	61	0.2	9	סא	2	

APPENDIX II

— E. W. Grove Consultants Ltd.-

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