GEGLOGICAL BRANCH ASSESSMENT REPORT

10.872

GEOLOGICAL AND GEOCHEMICAL REPORT

NATCH MINERAL CLAIMS NATCH #1 - #4

NEW WESTMINSTER MINING DVISION

NAHATLATCH CREEK, BOSTON BAR, B.C.

NTS 921/4E

LATITUDE 50°02'N LONGITUDE 121°05'W

DATES OF WORK: Aug. 30, 1981 - Sept 28, 1982

owner

J. S. Christie

operator JMT Services Corp.

by

W. A. Howell, B.Sc.

J. S. Christie, Ph.D.

December 23, 1982

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GEOCHEMCIAL ASSAY REPORTS		

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INTRODUCTION

Silt samples collected during a prospecting programme in the area were highly anomalous for gold and arsenic along the lower slopes of the ground covered by the claim block. Claims were staked in late August of 1981. Further silting and soil sampling was done in the fall of 1981 and 1982. A total of 99 samples were collected of which 84 were soil samples, 6 were rock samples and 9 were silt samples. The results of this work have indicated areas of anomalous gold geochemistry worthy of more detailed evaluation.

LOCATION AND ACCESS

The claims are situated on a south facing mountain slope north of the Nahatlach River and east of Log Creek about three km west of the Fraser River 20 km north of Boston Bar. Access to the property can be made by two wheel drive vehicle along 30 km of good gravel logging road from North Bend which can be reached by an aerial ferry over the Fraser River one km north of Boston Bar.

Access can also be made by four wheel drive vehicle from Lytton via a ferry 2 km north of town to the west bank of the Fraser River and then over 50 km of dirt road.

An access road to a B. C. Forest Service forest fire lookout station at 4200 feet elevation provides access to much of the upper slopes.

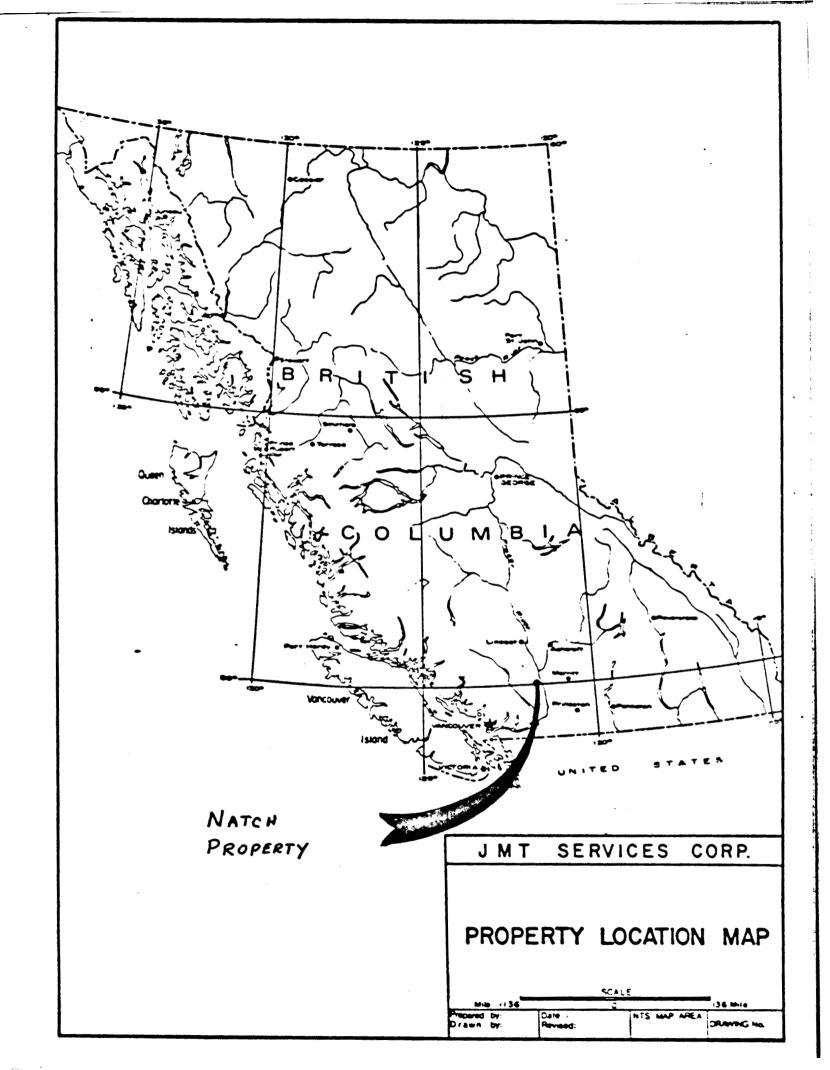
MINERAL CLAIMS

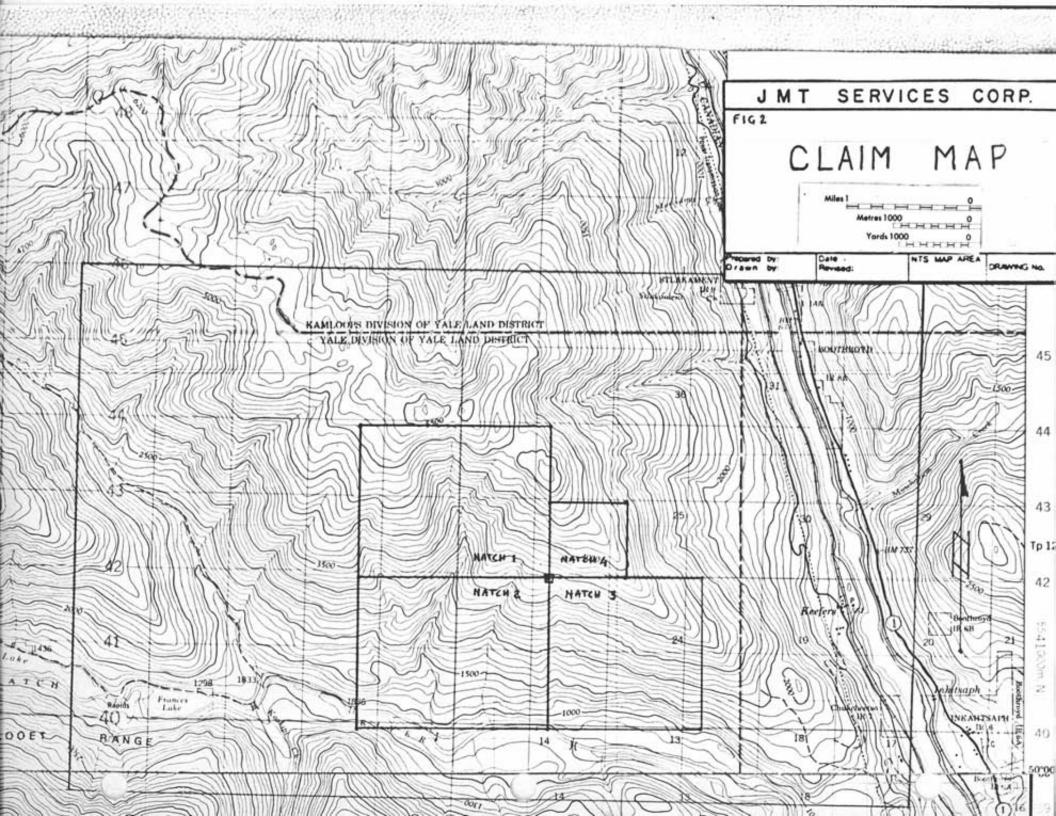
The following four claims in the New Westminster Mining Division make up the property.

NAME	RECORD NO.	RECORD DATE	UNIT	OWNER
NATCH #1	1288	Sept. 28/81	20	J. S. Christie
#2	1289	••	20	n
#3	1290	**	20	•
#4	1291		4	•

GEOLOGY

J. W. Monger (1969) has described the regional geology immediately south of the Natch property as follows.





"The rocks are mainly dark grey, thinly laminated micaceous and graphitic phyllites with irregular finely crystalline quartzite layers oriented parallel to the phyllitic laminations... These rocks are intruded by Tertiary granitic rocks and evidence little contact metamorphism. The age of the phyllites is unknown but lithologically they have more in common with Mesozoic than Paleozoic rocks in the northwest of the (Hope) map area".

"The relative homogeneity of the unit and the absence of metavolcanic rocks indicates that these rocks are probably Mesozoic rather than Paleozoic."

To the southeast of the claims, on the east side of the Fraser River, "the Jurassic Ladner Group...consists of uniformly laminated phyllite, whereas the Paleozoic Hozameen to the southeast comprises volcanic rocks, chert and argillite."

The above description applies to the belt of rocks as it appears to the south of the claims on the Hope mapsheet but is in agreement with the description by Duffel & McTaggert (1952) who studied the continuation of the rocks to the northwest in the Ashcroft map area.

Duffel & McTaggert note that "under the microscope, the phylittes are seen to consist of a series of thin subparallel layers composed of sericite and opaque argillaceous matter, probably graphitic, separating and surrounding impure lenticles of quartz, minor albite, and a little tourmaline."

Within the claims the regional description of the rocks applies very well. A dioritic to monzonitic body underlies the prominent ridge from the fire look-out to the north west. This body is in apparent fault contact with grey-green to black phyllitic rocks to the west. The contact appears to cross the ridge below the lookout but at this point becomes locally obscure in tills and glacial drift. The phyllite are locally sheared and fractured and may have local silicification accompanied by carbonate alteration (?ankeritic?).

The extent of geological mapping is not advanced to where a meaningful geological map can be produced at this time.

GEOCHEMISTRY

Sample traverses were designed to test the geochemical response for gold and arsenic in the area of the projected fault contact between the intrusive body exposed on the ridge crest and the phyllites exposed to the west.

Soil samples were collected every 100 meters along the traverse from pits excavated to B horizon or nearest approximation. On the steep sidehills a readily defined B horizon is often lacking. In these instances, a mineral soil or "C" horizon was ampled. Soil pits were usually 10 to 30 cm deep. Silt samples were collected from active silts. Rock samples usually consisted of 3 to 5 chips.

All samples were placed in appropriately identified kraft sample bags in readiness for shipment to the assay lab.

Samples were usually 300 to 500 grams in size, larger if coarse soils or silts were encountered.

The 1981 samples (P and JM series) were analysed by Chemex Labs, 212 Brooksbank Avenue, North Vancouver, B.C. Gold values were determined using a fire assay preconcentration followed by neutron activation analysis.

Arsenic values were determined using a perchloric-nitric acid digestion extraction followed by a standard atomic absorption hydride finish. Gold results are reported in parts per billion (ppb) and arsenic results are reported in parts per million (ppm).

A value of 10 ppb Au or greater is generally considered geochemically significant

A value of 50 ppm has arbitrarily been chosen as geochemically anomalous for arsenic. The results for both 1981 and 1982 programmes are presented on Figure 3 enclosed in the pocket of this report.

The 1982 samples (B & C series) were shipped to U.S. Borax Research Corp. (U.S.B.R.C.), 412 Crescent Wy., Anaheim Calif. U.S.A. 92801 for geochemical analysis for gold and arsenic. Gold was determined using a concentrated HBr/Br digestion followed by a solvent extraction and atomic absorption finish. Arsenic was determined using a perchloric-nitric acid extraction followed by a standard atomic absorption hydride finish.

The results are shown in Appendix III and plotted on Figure 3 enclosed in the pocket appended to this report.

The small number of samples and the lack of mutually assayed samples make correlation of the 1982 Au analyses with previous Au analyses difficult. A value of .05 ppm (50 ppb) has arbitrarily been chosen as the 1982 anomalous threshold value for Au. (The writer intuitively feels this is a high threshold value but notes that it does provide a level of discrimination

when viewed on the plotted samples.)

Arsenic values agree very well and direct correlation between 1982 and previous data may be made.

The response for arsenic ranged from less than 2 ppm to 298 ppm. A value of 50 ppm is considered anomalous for arsenic. The response for gold ranged from less than .02 ppm to .24 ppm.

The samples are almost all anomalous for gold with arsenic being less widely distributed, the opposite of the expected situation. There are several low Au values of less than .02 ppm Au which is strongly indicative that the generally high values encountered during the program are realistically reflecting the time nature of the samples and not a generally enhanced value due to differing analytic techniques. It is of particular note that the extent of anomalous Au has not been defined by the sampling to date.

CONCLUSIONS

Regional and reconnaissance surveys have shown geochemically anomalous amounts of gold to be present in the area of the Natch mineral claims. Preliminary soil sampling has shown an area of phyllitic rocks, locally silicified and/or carbonate altered, and in fault contact with intrusive rocks of diorites to monzonitic composition to have geochemically anomalous values for gold or arsenic over an area roughly 500 m by 1000 m. The limits of the anomalous gold have not yet been determined. The host lithologies are similar to known gold bearing rocks 30 to 40 km to the southeast along the regional structural and tectonic trends.

RECOMMENDATIONS

Further geochemical sampling combined with geological mapping should be undertaken to establish the limits of the anomalous gold. In addition more detailed sampling and mapping should be undertaken in the vicinity of the known anomalous values. Future programmes should be prepared to evaluate not only the recent geochemical values resulting from the 1982 programme, but also to follow up on anomalous results obtained by previous reconnaissance within the claim block.

Respectfully submitted

J. S. Christie, Ph.D.

APPENDIX

STATEMENT OF COSTS

TIME		
B. Price	August 30, 1981 \$	225.00
John Mustard	August 30, 1981	125.00
J. S. Christie	August 30/81, Sept 3/82 2 days @ \$225.	450.00
W. A. Howell	August 30/81, Sept 3/82 2 days @ \$225	450.00
Meals	7 mandays @ \$25.00	175.00
Camp		20.00
Truck rental - 1981		150.00
- 1982		150.00
Geochem - 1981		437.00
- 1982		756.40
Field supplies		100.00
Report, drafting, typing	g, reproductions	2,000.00
	\$	5,038.40

APPENDIX II

STATEMENT OF QUALIFICATIONS

- I, WILLIAM A. HOWELL, do hereby certify that:
- I am a professional geologist working in British Columbia and residing at 10611 Ainsworth Crescent, Richmond, B.C. V7A 3V5
- I am a graduate of the University of British Columbia, Bachelor of Science (Geology) 1971.
- 3. I have been employed in the mineral exploration industry since 1967 and have practiced my profession as a geologist since 1971.
- 4. I am a member of the Geological Association of Canada.
- 5. This report is based on my personal knowledge of the district and the mapping and sampling done on the property.

W. A. Bowell, B.Sc.

STATEMENT OF QUALIFICATIONS

I, James S. Christie of Vancouver, British Columbia do hereby certify that,

- I am a Professional Geologist residing at 3921 West 31st Avenue, Vancouver, B.C., V6S 1Y4
- I am a graduate of the University of British Columbia
 B. Sc., Honours Geology 1965; Ph.D. Geology 1973
- 3. I have practised my profession as a mining exploration geologist, continuously since 1965.
- I am a Fellow of the Geological Association of Canada.
- 5. I am a Member of the Geological Society of America.
- 5. This report is based on my personal knowledge of the district, and magging of the geology at the propert

James S. Christie, Ph.D.

APPENDIX III

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COBRC Geochemical Analysis --- NW82HA13 --- 27-DCT-52

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Field	AU	AG	AS

HA-82B-1429	0.03	1.2	29.
HA-828-1430	0.05	0.7	34.
HA-32B-1431	< 0.02	0.7	28.
HA-82B-1432	< 0.02	0.7	142.
HA-82B-1433	< 0.02	1.2	86.
HA-828-1434	0.03	1.9	40.
84-82B-1435	0.03	1.1	61.
74-821-1436	< 0.02	0.3	20.
HA-00B-1437	0.03	0.B	1á.

USBRC Geochemical Analysis --- NW82HA14 --- 27-CCT-82

Field	AU	AG	AS
Number	FPDI	55B	೯೯೫
HA-82B-1438	0.08	1.1	. 6.
HA-82B-1588	0.03	1.0	√ 2.
HA-82B-1439	0.03	0.7	4.
HA-82B-1440	. 0.05	1.0	25.
HA-82B-1441	INS	8.0	9.
HA-82B-1442	< 0.02	0.7	5.
HA-82B-1443	0.05	0.9	10.
HA-32B-1444	0.05	6.8	38.
HA-82B-1445-	0.03	0.9	28.
HA-82B-1446	0.05	0.6	26.
HA-828-1447	0.59	6.8	27.
HA-82B-1448	0.03	0.6	23.
HA-82B-1449	< 0.02	0.7	4.
HA-82B-1450	0.03	0.8	11.
HA-82B-1451	0.06	0.7	17.
FA-325-1452	0.03	0.7	14.
MA-82P-1453	0.03	0.7	1E.
HA-82B-1454	< 0.02	0.9	9.
HA-82B-1455	0.03	0.8	₹•
MA-83B-1456	0.24	0+7	5.
HA-82B-1457	0.03	0.9	8.
HA-82B-1458	0.03	1.0	11.
HA-52B-1459	0.05	0.8	29.

USBRC Geochemical Analysis --- NW82HA17 --- 5-NOV-62

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HA-82C-147	0.05	0.5	55.
HA-820-148	0.05	0.6	16;
HA-82C-149	0.17	0.4	30.
HA-820-150	0.05	0.3	21.
HA-820-151	0.06	0.9	71.
H4-82C-152	0.06	0.8	39.
HA-830-153	0.12	1.2	57.
HA-520-154	0.05	0.9	58.
HA-820-155	0.05	1.0	19.
HA-82C-156	0.03	0.8	7.
HA-82C-157	0.05	0.8	298.
HA-820-158	0.05	0.9	14.
HA-820-159	0.05	1.0	10.
HA-820-160	0.14	0.9	27.
HA-52C-161	0.06	0.9	23.
HA-820-162	0.05	1.3	135.
HA-820-163	0.05	0.5	42.
HA-820-164	0.03	1.0	15.
HA-820-165	0.24	2.2	227.
HA-820-166	0.03	0.7	27.
HA-82C-167	80.0	0.7	35.
HA-820-168	0.05	0.8	16.
HA-820-169	0.05	0.7	17.

USBRC Geochemical Analysis --- NW82HA20 --- 5-NOV-82

Field	UA	AG	AS .
Number	PPM	PPM	PFB
			:-
HA-82C-134	0.03	1.2	4.
HA-82C-136	0.03	0.7	6.
HA-82C-170	0.05	0.4	ó.
HA-82C-171	0.06	0.6	25.
HA-82C-172	0.15	0.5	26.
HA-82C-173	0.08	0.6	35.
HA-82C-174	0.05	0.8	36.
HA-820-175	0.05	0.8	126.
HA-82C-176	0.05	0.9	36.



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CERTIFICATE OF ANALYSIS

CERT. # : A8113762-001-A

TELEX

INVOICE # : 18113762 DATE : 30-SEP-81

P.O. # : NONE

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TO : JMT SERVICES CORP:

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description code ppm p			Pb	Ag	. AS	AU NAA		
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INVOICE # : 18113767

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INVUILE #

: 30-5EP-81

P.O. #

: NONE

TELEX

02-230

ATTN: BARRY PRICE

TO : JMT SERVICES CORP:

V53 4N1

SEZ7 HUDSON ST:

VANCOUVER. B.C.

Sample	Prep	Pb	Ag	AS	Sp	AU NAA	
description	etoo	ppm	maq	ppm	pom	daa	
-							
				100			
				1			

P-1080	205	1	0.1	67	1.0	<1	
P-1107 NATCA	205	1	0.1	4	0.4	239	
P-1114 NATCH	205	9	0.1	15	0.1	17	

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V63 4N1

CERT. # : A8113762-003-A

INVOICE # : 18113762 DATE : 30-SEP-31

P.C. # : NONE

02-230

ATTN: VARR PRICE

Sample	Prep	Pb	Ag		AS	AU NAA	
description	code	mag	ppm	1	ppm	ppb	
							

P-1078	201	2	0.1	88	9	
P-1079	201	3	0.1	45	5	
P-1081	201	1	0.1	20	22	
P-1082	201	9	0.1	20	65	
P-1083	201	7	0.1	25	17	
P-1084	201	1	0.1	22	4	
P-1085	201	1	0.1	17	<1	
P-1036	201	1	0.1	22	6	
P-1087	201	1	0.1	32	3	
P-1088	201	7	0.1	45	19	
P-1039	201	5	0.1	71	101	
P-1090	201	4	0.1	3.8	26	
P-1091	201	3	0.1	36	9	
P-1092	201	2	0.1	135	30	
P-1093	201	1	0.1	36	3	
P-1094	201	2	0.1	45	22	
P-1095	201	I	0.1	22	<1	
P-1096	201	1	0.1	3.8	35	
P-1097	201	3	0.1	15	1	
P-1098	201	1	0.1	15	<1	
P-1099	201	1	0.1	10	<1	
P-1100	201	17	0.1	110	<u>`i</u>	
P-1101	203	7	0.1	95	3	
P-1102	201	5	0.5	25	<1	
P-1103	201	4	0.1	40	<1	
P-1104	201	2	0.3	30	(1	



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V63 4N1

CERT. # : A8113762-004-A

INVOICE # : 18113762

: 30-SEP-81 DATE P.O. # : NONE

02-230

ATTN: VARR PRICE

Prep	, Pb	Ag	: AS	Au NAA		
code	ppm	maa	mag			
201	5	0.1	75	3		
201	3	0.1	105	<1		
201	5	0.1	105	5		
201	6	0.1	120	10		
201	23	0.5	95	3		
203	7	0.1	50	2		
201	7	0.9	75	<1		
201	5	0.1	135	2		
203	3	0.1	225	2		
201	8	0.3	30	<1		
201	4	0.1	100	11	!	
201	5	0.1	55	9	'	
201	2	0.1	110	11		
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