

GAMMA RAY SPECTROMETRIC SURVEY ON THE LEAH MARIE CLAIM

OMINECA MINING DIVISION, BC

NTS 93 0/4

Latitude: 55° 07'N

Longitude: 123° 51'W

OWNER: Dave Forshaw Box 419 Mackenzie, B.C. V0J 2C0

> BY: Dave Forshaw

OPOLOGICAL SURVEY BRANCH ageogr

June 1999.

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LOCATION AND ACCESS

The property is located approximately 140 kilometers northwest of Prince George and 78 kilometers west of Windy Point, B.C. The Leah Marie claim is centered on 55° 07' north latitude and 123° 51' west longitude on NTS sheet 93 0/4. It is accessible by the north branch of the Finlay Philip Forest Service Road at kilometer 60 from spring to fall or by helicopter from Mackenzie year-round.

TOPOGRAPHY AND VEGETATION

The topography of the area is rolling hills ranging in elevation from 980 meters (2990 ft.) above sea level (ASL) to 1250 meters (3800 ft.) ASL covered with economic stands spruce and fir and poplar trees. The best exposure of bedrock is usually found in logging cuts and along road cuts.

PROPERTY STATUS

The property consists of one 4 - post mineral claims.

CLAIM NAME	RECORD NO.	UNITS	EXPIRY DATE	OWNER
Leah Marie	363605	20	June 28, 1999	D. Forshaw

HISTORY

The property is located east of Placer Dome's Mt. Milligan copper/gold porphyry deposit. It was originally staked by D.L.Cooke and Associates Ltd. to cover part of a small aeromagnetic anomaly which occurs approximately 4.5 kilometers east of the Mt. Milligan copper-gold deposit. Reconnaissance induced polarization and resistivity survey, geological mapping, rock and soil sampling were done over the western part of the property in August of 1991.

A single drill hole tested part of the magnetic anomaly and is reported to have encountered pyritic black argillites (R. Shives, pers. comm.).

In 1991 the Geological Survey of Canada (GSC) conducted a high resolution airborne gamma ray spectrometric (AGRS) survey over the Mt. Milligan area (Shives et al, 1991). This survey delineated potassic halo "bulls-eyes" over the Mt. Milligan, Taylor, Wit, Chuchi, and other known deposits and identified several new targets, one of which lies mostly under the Lac 1 claim. The anomaly under the Lac 1 claim is known as the "K5".

The Lac 1 and 2 claims were allowed to lapse in 1994 and the Lac 1 claim was restaked by D. Forshaw, who optioned the claim to Pacific Mariner Explorations Ltd. which was renamed Abitibi Mining Corp. in 1995. Under Pacific Mariner the property was explored by soil sampling over the heart of the main AGRS potassic anomaly, sampling that mostly duplicated D.L.Cooke's earlier work. The results returned were somewhat better than Cooke's, defining a weak northeast trending copper anomaly along a topographic lineament.

Abitibi Mining Corp. dropped the Lac 1 claim. In 1998, the property was restaked by D. Forshaw who renamed it the Leah Marie. A ground survey, on the west side of the property, was done using a 256 channel gamma ray spectrometer. This was done in order to get more specific information to determine the exact boundaries of the anomaly. Forty-four readings were done on a 100m x 75m grid.

REPORT OF WORK - LEAH MARIE CLAIM - 1998

The Geological Survey of Canada did an Open File 2535 Airborne Geophysical Survey of the Mt. Milligan Area, B. C., September 1991. Airborn Gamma Ray Spectrometry is a remote sensing, geophysical technique which provides information about the distribution of K, U, and Th that is directly interpretable in terms of surface geology. A single AGRS measurement provides an averaged surface concentration for an area of several thousand square metres, composed of variable proportions of bedrock, overburden, soil moisture, water and vegetation. The flight lines were spaced at 500 m, and gamma ray flux decreases exponentially with distance from the source.

Positive K anomolies and patterns are directly related to ore zones, such as the Mt. Milligan deposit. Three unexpected K anomolies were picked up with the AGRS, Mt. Milligan survey. One of these, the K5 anomoly, is mostly covered by the Leah Marie Claim.

After consulting with Rob Shives, of the Geological Survey of Canada, in Ottawa, we started a ground survey using an Exploranium DISA 400A spectrometer, ser, # ND-067, and Exploranium gamma ray detector xl, ser. # ND-078. Sensitivties are K = 215.3 cpm% U = 21.9 cpm/ppm, Th = 8.76 com/ppm. The stripping Ratio, alpha - 0.76, bata - 0.67 gamma - 0.96, a - 0.036. This was done in order to get more specific information to determine the exact boundaries of the anomaly. We took 44, one minute readings on a grid 100m x 75m. this year. It was since recommended, by Rob Shives, that we take two minute readings on a 50m x 25m grid. This will be our objective for the 1999 season. This information will be used to deliniate accurately, the K5 anomaly.

Dave Forshaw





LEGEND

LAYERED ROCKS	
UNCONSOLIDATED GLACIAL TILL 4-D ALLUMUM	
CUATERNARY -	
OLMINE BEARING BASALI	
Est AND BASALT	
UPPER TRIASSIC (JURASSIC?)	
TAKLA GROUP	
UTICL CHUCH LAKE FORMATION: (A) GREEN AND MARDON RETERDITIES AGGLOACRATE; (B) PLAGOOLASE POHPHYRY TRAGHTE FLOWS AND BAECCAS; (C) INTERVOLCANIC SEGUINT	
UTINC WITCH LAKE FORMATION (A) AUGITE (: PLAGROCLASE : HORMBLENDE) PORPHYRT AGGLOMERATE, LAPILU TUFF AND EPICLASTIC SEDMENTS; (B) TRACHTE FLOWS AND TUFF- BRECOUSS; (C) PLAGROCLASE (: AUGITE) PORPHYRT LATITE FLOWS AND AGGLOMERATES; (D) EPICLASTIC SEDMENTS (SANDSTONES AND SULTIONS) AND METAMORAL MODALOIDAL IRRACHTE FLOWS; (C) AUPRING METAMORAL MODALOIDAL IRRACHTE FLOWS; (C) AUPRING METAMORAL MODALOIDAL	
ALCOTE PORPHORY FLOWS, LAPLLI TUFF, ACGLOMERATE \$1.0 SECONFERTS	
UTAL INZANA LAKE FORMATION VOLCANIC SAVIDSTONE, SILISTONE, MUDSTONE, AGRILLE LAPILLI TUFF AND SEDUKATASK RASCOLL	
RAINBOW CREEK FORMATION: GREY SLATE, THIN BEDDED	
SILTSTOKE, MIMOR VX CAN'S SEDIMENTS	
INTRUSIVE ROCKS	
LATE CRETACEOUS-EARLY TERTURY?	
1 GRANITE: (10) AMODACITE/DACITE	
LATE TRIASSIC-EARLY JURASSIC	
2 SYENITE: (28) COOMDED PLACHOLASE PORPHYRITIC SYENITE; (20)	
MEGACRISTIC STENTTE MONZONITE SUITE: (JA) COARSE TO MEDUM GRAINED,	
EOURGRANDLAR MOVEONITE: (36) ORONDED PLAGOOLASE PORPHYRITIC MONZONITE: (30) MEGLORISTIC PLAGOOLASE	
MONZONITE; (DD)SPARSELY PORPHIRITIC LATITE	
EQUIGRAMMUR DORITE/MONZODORITE; (48) CROWDED PLACIOCLASE PORPHYRITIC DIORITE; (40) MEGACRYSTIC	
PLAGIOCLASE (: AUGITE) PORIMIRITIC DIORITE; (4D) SPARSELY PORPHYRITIC ANDESITE	
CABBRO PUONZOCABBRO SUTTE: (SA) COARSE TO MEDIUM GRAINED. ECURORANILAR CABBRO MONCOCABBRO	
Geology Sources	
93 N/2E BC-MEMPR of 1992-1994 JL Nelson et. d	
93 N/1 BC-MEMPR of 1391-1993 JL. Nelson et. a.	
93 O/4W BC-MEMPR Celogical Highway Map No. 3	
David Forshaw	
Leah Marie Claim	
OMINICA M. D., BC NTS 93-0-4	ſ
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Regional Coology	
Regional Geology	
Scale 1 : 100, 000	
Date: June/1999	
By: D. F. Figure 3	
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PORTABLE GAMMA RAY SPECTROMETER SURVEY.

On the Leah Marie claim, number 20992. Located 63 Km south west of Mackenzie, B.C. The L.C.P. is located 5.1 Km north, 2.47 Km west of eastern tip of Philip Lake (lat. 55 degrees, 04 minutes, and long 123 degrees, 49 minutes, 38 seconds)

September 5, 13, 20, 1998,

•	Column 1	Column 2	<u>Column 3</u>	<u>Column 4</u>
	Total Count	Potasium	Uranium	Thorium
LM98-400N,	mossy, org	ganic, ridge, sp	pruce.	
	4297	336	98	22
LM98-500N,	mossy, org	ganic, spruce,		
	5373	434	98	26
LM98-600N,	mossy, sar	ndy loam, flat,	pine,	
	3867	284	69	24
LM98-700N,	mossy, sa	ndy loam, flat,	pine,	
	4016	296	86	20
LM98-800N,	rusty sand	ly gravel, flat,	lichen, pine,	
	5221	338	151	47
LM98-900N,	tan grave	ly loam, ridge	lichen, pine,	
	5039	385	136	32
LM98-1000N,	tan grave	ly loam, small	hill, lichen, pi	ne,
	3362	308	55	18
LM98-1100N,	rusty san	dy gravel, ridg	e, spruce,	
	4454	389	90	33
LM98-800N-75	E, tan fine s	and, wet area,	spruce,	20
	3586	281	56	30
LM98-800N-150	OE, gray sand	ly loam, flat, sj	pruce, pine,	20
	4397	440	61 .	38
LM98-800N-22	5E, rusty san	dy gravel, ridg	e, spruce, pine	24
	4714	453	96	34
LM98-800N-30	0E, organic,	flat, spruce,		10
	1338	51	23	12
LM98-800N-37	5E, brown sa	indy loam, flat	spruce,	27
	3479	286	69	·)/
LM98-800N-45	0E, brown sa	indy gravel; to	bolder, 20%	grade, spruce,
	4919	500	98	30
LM98-800N-52	5E, kakie till	, spruce, 20 de	gree slope	27
	4043	497	49 00 de sere el	27
LM98-800N-60	00E, brown c	lay soil, spruce	$\frac{1}{7}$	ope, 12
	4183	491	0/ 20 decrea al	42
LM98-800N-67	75E, brown c	lay soil, spruce	20 degree si	ope, 20
	3941	445	43	29
LM98-800N-75	50E, kakie til	i, alder spruce,	50	38
	4176	520	ر مەربىمە 3 m	ta steen slane
LM98-800N-82	25E, light bro	wn sandy ioan	1, spruce, 5 m	. to steep stope
	4036	403	47	<i>ч</i> ,

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LM98-800N-900E,	redish brow	n sandy loam,	pine spruce	
	3973	512	51	36
I M98-900N-075E.	rusty fine sa	ndy soil, spru	ce, soil sample	е
Livi>0 > 001 + 1 =	4681	663	46	32
I M98-900N-150E.	sandy clay l	oam, spruce,		
Livi)0 90011 100_,	1667	151	27	15
I M98-900N-225E	rusty tan til.	pine spruce,	soil sample,	
Livi50 5001 2202,	4215	496	71	29
LM98-900N-300E.	dark brown	soil bog, bal	sum spruce, s	oil sample,
	2155	185	33	22
LM98-900N-375E,	dark brown	soil, spruce p	oine, soil samp	ble,
	3911	448	70	36
LM98-900N-450E,	tan sandy ti	II, 1inch grave	el dispersed,	
	4148	528	50	27
LM98-900N-525E,	brown tan s	sandy till, 1 in	ch gravel disp	ersed,
	4422	571	52	26
LM98-900N-600E,	brown tan	sandy till, spri	uce alder,	
	4231	479	64	33
LM98-900N-675E,	tan clay till	, spruce pine,		
	4307	490	66	29
LM98-900N-750E,	tan till, spr	uce alder,		
	4546	531	64	38
LM98-900N-825E,	tan till, ass	orted size cob	ble, pine spru	ce,
	4164	655	60	28
LM98-900N-900E,	redish brov	wn sandy loan	n, cobles, pine	· · · · · · · · · · · · · · · · · · ·
<i></i>	5361	750	65	40
LM98-900N-975E,	, kakie loan	n containing b	roken basault,	, spruce,
	5315	763	57	27
LM98-900N-1050I	E, rusty sand	y loam, cobles	s, spruce,	
	3889	492	44	28
LM98-900N-1125	E, light brow	n sandy loam,	, spruce,	
	3899	479	53	37
LM98-1000N-050	E, grey sand	y mixed with g	gravel, spruce	pine, soil sample,
	4452	521	53	38
LM98-1000N-150	E, dark brow	n soil, spruce	pine,	10
	1732	121	22	12
LM98-1000N-225	E, light brow	vn sandy clay	soil, rocky, so	bryce akder,
	4294	518	58	29
LM98-1000N-300	E, light brov	vn sandy loam	, spruce,	22
	3482	359	37	32
LM98-1000N-375	E, dark brov	vn soil,		14
	1247	75	20	14
LM98-1000N-450)E, 1m. deep	black soil the	n rusty sandy	son mixed with lock, spidle,
	5432	677	86	00

LM98-1000N-525E, dark brown soil, spruce, 3137 335 43 32 LM98-1000N-900E, light rusty sandy soil, contains broken basalt, spruce 3926 485 51 34 LM98-1000N-975E, rusty sandy loam, pine spruce, 4584 604 69 28

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Leah Marie CLAIM - EXPENDITURES

SALARIES

Dave Forshaw - 3 mandays @ \$180/day	440
3 Workers - 3 mandays @ \$140/day	740
Report preparation - Valerie & David Forshaw	180
LOGISTICAL COSTS	
Food and lodging	450
Vehicle fuel and maintenance	300
EQUIPMENT COSTS 256 Channel Gamma Ray Spectrometer	300
Chain Saw	150
FILING FEES	200
SUBTOTAL	2760
Administration Fee (15%)	414
TOTAL	\$ 3174

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STATEMENT OF QUALIFICATIONS

- 1. Twenty years active prospecting experience.
- 2. I have completed courses in the following: Basic Prospecting, Advanced Prospecting, Drift Prospecting, Radiometrics, Geochemical, Placer, and Industrial Minerals. I have attended the Cordilleran Roundup mining convention in Vancouver and the Minerals North Conference each year. I have also attended a great number of talks given by specialists in the mining field.
- 3. I have assisted with eight Basic Prospecting Courses, one Advanced Prospecting Course, and one Placer Course.
- 4. I am the mining consultant for the Mackenzie Economic Development Commission.
- 5. I represented the B. C. & Yukon Chamber of Mines in the Mackenzie L.R.M.P. process.
- 6. I assist teachers in Mackenzie and Prince George Elementary and High Schools with their Geology related subjects, in the classroom and on field trips. I now do this through the CAST program.
- 7. I am a member of the Omineca Exploration Group and actively work to bring the prospectors in our area educational courses, field trips, and interesting speakers from all aspects of the mining field.
- 8. I have also taken courses in Holistic Forestry and other forest related courses to further my understanding of our environment and for reclamation purposes, if ever needed.
- 9. The work on these claims has been monitored and done in close conjunction with Rob Shives of the Geological Survey of Canada, and his work in our area. He keeps records of our findings for his information.

Dave Forshaw