Geological and Geochemical Assessment
of the
ARIEL-RICKW-WALD-WIT claims

ARIEL 502486, January 12, 2005, 422.3 ha
RICKW 502632, January 12, 2005, 337.7 ha
WALD 507106, February 14, 2005, 506.7 ha
WIT 509221, March 18, 2005, 126.7 ha

Alberni Mining Division

NTS 92F/2
Geographic centre of claim block
Lat: 49°11'45"
Long: 124°43'00"

Owner: Bitterroot Resources (75%), P.E.M. Becherer (25%)
Operator: Bitterroot Resources Ltd.

Author: Hardolph Wasteneys Ph.D.

Date submitted: April 5, 2006

Event 4062539

Table of Contents

Table of Figures

Introduction

Location and Access

The claim is 6 km SE of Port Alberni (Fig. 1) and is accessed from the south along the China Creek Road, in the west by Cameron Main, in the north by Rifle Road (CAM 100) which runs from Cameron Main north of Bainbridge Lake or from the east by roads traversing the western crest of McLaughlin Ridge. New logging road networks access much of the area below 500 m. All of the land is private timberland owned by Island Timberlands (western 2/3) and Timberwest (eastern third).

The claim block covers 1393.4 ha and was staked using the online staking routine (Mineral Titles Online) at various dates between January 12 and March 18, 2005 by P.E.M. Becherer. The claims are under option to Bitterroot Resources and is currently held 75% Bitterroot/25% P.E.M. Becherer.

The ground has been previously staked as part of the BAIN 1-4 claims. There are no recorded mineral deposits or occurrences within the claim area. MINFILE reports include the BAIN showing (MINFILE# 92F-492) which consists of disseminated chalcopyrite at the margin of a dioritic intrusion.

Geography

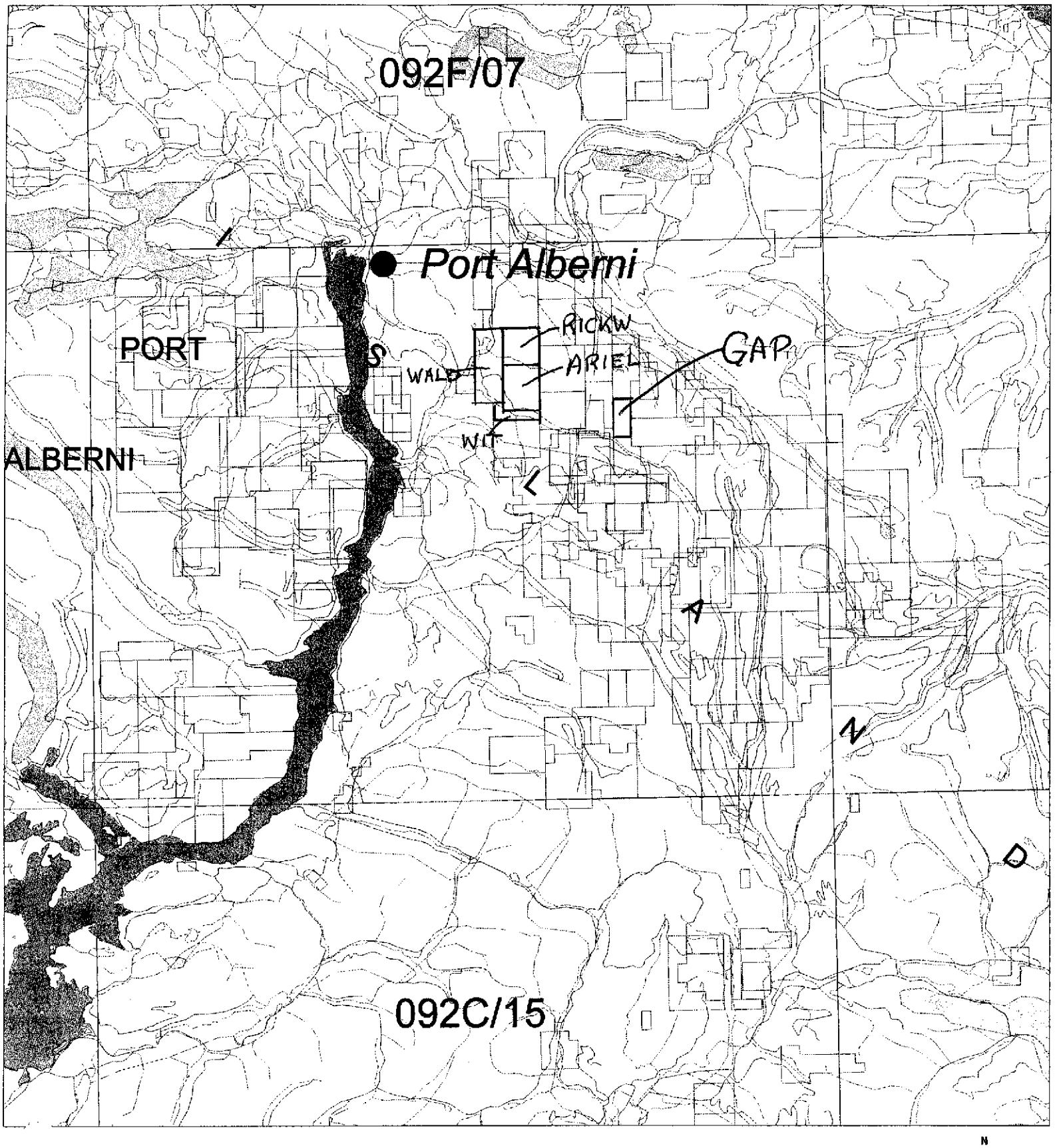
The ARIEL group of claims covers the southern part of the west and SW facing slope of McLaughlin Ridge and the lowlands to the west and extending from Bainbridge Lake at the NW corner to China Creek (Fig. 2). Elevations vary from 150 m near Bainbridge Lake and the west side of the claims block to about 900 m on the west end of McLaughlin Ridge. Below 400m the forest cover is entirely second growth Douglas fir and alder which is currently being logged. The western slopes of McLaughlin Ridge are bluffy with slopes to 30°and covered by second growth timber of various ages including isolated old growth remnants currently (November 2005) being logged by helicopter extraction.

Summary of work done

The present work involved 6 man-days of geological mapping, sampling and prospecting which focused on the west end of McLaughlin Ridge. Rocks were mapped and compiled at a scale of 1:10,000 utilizing a combination of hand-held GPS and barometric altimeter for geographic control. Exploration within the claim group took place on October 18, 19, 20, 26 and November 11, 2005. Heavy snow on October 28 curtailed access from the roads on McLaughlin Ridge. Two man-days, in addition to field days were spent on sample preparation, shipping and administrative matters.

Seven rock samples collected from altered fracture zones and foliated shear zones were analysed for Au and 41 elements available by ICP-ES. A single moss mat sample was collected from a creek on the south slope of McLaughlin Ridge. Analytical costs for Au and 41 element ICP-ES were $29.00 per sample totaling $232.00. Rental truck and

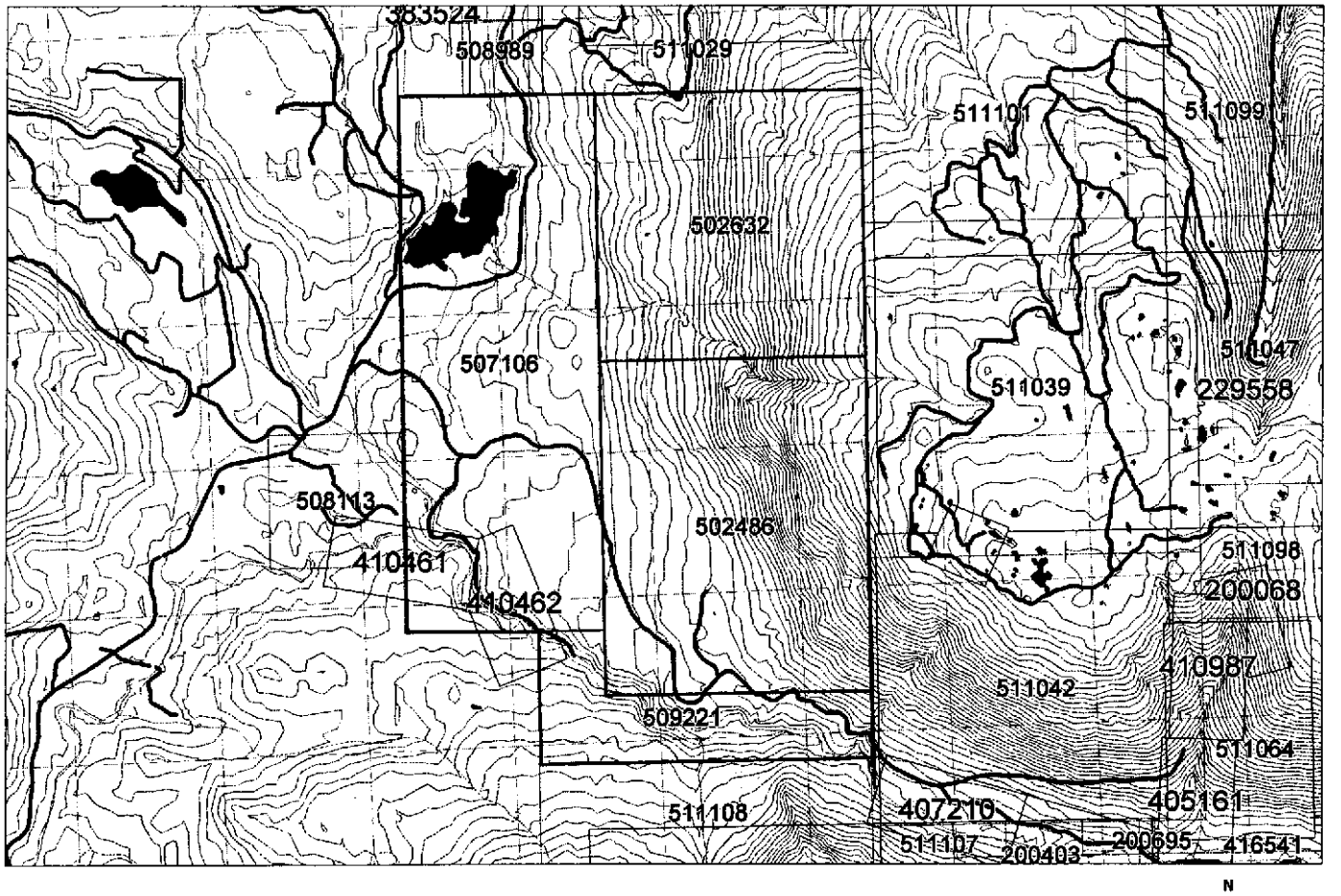
Figure 1: Claim location map



http://webmap.em.gov.bc.ca/mapplace/maps/minpot/bcgs.MWF

Tuesday, April 04, 2006 5:06 PM

Figure 2: Claim group physiography 1:50,000



page 3

fuel costs averaged over this and associated programs cost $137.72 per day for a total of $688.60. Sample shipping and handling amounted to $278.00. Food and accommodation cost amounted to $417.00. Professional fees for 5 field days plus three report-writing days at $400/d plus 3 days at $500/d amounted to $4700. The total cost of exploration work including field work, analytical work and report writing is $6315.60. These expenses are shown in Table 1.

Local and regional geology

McLaughlin Ridge is principally underlain by an uplifted block of deformed and metamorphosed Devonian Sicker Group volcanic rocks of ocean ridge evolving-to island arc origin, bounded by steeply inclined east verging Cenozoic thrust faults which structurally juxtapose Jurassic Karmutsen Formation mafic oceanic flood volcanics and Cretaceous Nanaimo Group clastic sedimentary rocks against the Sicker Group. Fault bounded slivers of the Permian Buttle Lake Group consisting of bioclastic limestones and fine grained argillaceous sediments sporadically occur on the margins of the Sicker Group rocks and below the Karmutsen Formation. Formational subdivisions of the Sicker Group recognized on McLaughlin Ridge include the basal Duck Lake Formation which typically consists of pillowed basaltic breccias and marked by a transition to tuffs and marine sediments with oxide-facies iron formation lenses near the top, the Nitinat Formation characterized by pyroxene-phyric basaltic flows and breccias and crystal-lithic volcaniclastics and the McLaughlin Ridge Formation characterized by well-bedded volcaniclastic sedimentary rocks displaying turbiditic upward fining sequences ranging from conglomerates to finely laminated cherty siltstones.

The dominant structural trend in the area is NW consisting of open folds observable in finely laminated volcaniclastic sedimentary rocks of the Sicker Group and penetrative cleavages variably developed as discrete shear zones mostly west of Mineral Creek. North-south and NNW - trending carbonate-altered fractures are typically found throughout the area with the most prominent being the Mineral Creek-Yellows Creek system that has been the focus of much previous exploration and is the locus of several secondary-structure gold-bearing veins in part coinciding with oxide-facies iron formations and cherts.

Summary of mineralization

No occurrences of economic interest were discovered during the current work. The MINFILE report on the BAIN (Minfile 92F-292) occurrence describes minor chalcopyrite disseminated in mafic volcanic rocks at the margin of a dioritic intrusive within the area most intensively mapped, but this showing was not located.

Claim Group Geology

Within the ARIEL claim group elements of the Duck Lake and Nitinat Formations of the Devonian Sicker Group, Cretaceous clastic sediments of the Naniamo Group, mafic volcanics of the Jurassic Karmutsen Formation, intrusive sills of the Eocene Mt Washington granitoid suite and intrusions of the Jurassic Island Intrusive Suite were recognized.

Outcrops in the low relief, glacial overburden-covered western half of the claim block are dominantly volcanic rock of the upper Triassic Karmutsen Formation. These have been intruded by diorites and granodiorites of the Jurassic Island Intrusive Suite which appear in outcrop south and east of Bainbridge Lake. West of Bainbridge Lake a vertically jointed sill of crumbly medium-grained brown-weathering biotite quartz-diorite of the Eocene Mt Washington suite is intrusive into silicious argillites of the Cretaceous Haslam Formation. These Mesozoic and Cenozoic strata and intrusions are structurally separated from the Paleozoic Sicker Group by a N-S trending fault system that forms an escarpment above the 450 m contour along the western slope of McLaughlin Ridge.

East of this fault the slope steepens and is mainly underlain by Paleozoic rocks. The most distinctive feature of the eastern part of the claim block is a sequence of siltstones, argillites and tuffaceous siltstone that appears to extend for 3 km across the SW slopes of McLaughlin Ridge between the 800 m and 500 m contours. These rocks may correlate with the upper section of the Duck Lake Formation and appear to be conformably overlain by massive pyroxene-phyric flows and breccias representative of the Nitinat Formation. However, elsewhere the upper sections of the Duck Lake Formation commonly contain jasper lenses and magnetite iron formation which were not found here. Also different from the formational descriptions of Massey et al. (1991) was the occurrence of dolomitic siltstone and, in one well-exposed creek canyon section, bioclastic limestone containing abundant crindoid stems. This latter occurrence is more typical of the Mt Mark Formation of Permian Buttle Lake Group which occurs elsewhere as thrust slices. The limestone-bearing section overlies tuffaceous siltstones, massive volcanic flows and volcaniclastics. A similar stratigraphic section was noted on the Bethea claims 10km SE (Shearer, 2001; ARIS# 26778).

Above the sedimentary units in the southern part of the claim are pyroclastic and volcaniclastic units possibly of the Nitinat Formation. On the SW facing slopes above China Creek these rocks are intruded by sills of gabbro and coarse-grained basalt which contain large clinopyroxene phenocrysts. To the north the volcanic rocks are predominantly crystal-lithic tuffs and breccias also intruded by dioritic and gabbroic sills. The larger gabbro-diorite intrusion near the crest of McLaughlin Ridge has been previously assigned to the Jurassic Island Intrusive Suite (Massey et al., 1991). The agmatitic marginal breccias and reactions zones around xenoliths are consistent with this assignment.

The Paleozoic sedimentary rocks east of the fault are deformed into upright open folds with axes trending NNW at 320° parallel to variably-developed foliations observed in some tuffaceous volcanic rocks. If the strata are continuous the outcrop pattern may reflect the emergence of the west limb of a syncline along the SW facing slope of the ridge which is parallel to the strike of the fold hinge and the gradual emergence of several

folds where the slope turns north across strike. This structural pattern is consistent with the folding observed in the mineralized chert and iron formation units which have been mapped in detail in the "900" zone on the east side of Mineral Creek about 1.5 km to the SE. However, the dolomitic siltstones and crinoidal limestones which occur in some section of the ARIEL claim do not correlate well with the units in the "900" zone nor indeed with the Duck Lake Formation. This may be the result of previously undocumented lateral facies changes but the lithologic similarity to the Mt Mark Formation of the Buttle Lake group suggests that rocks of the Sicker Group were thrust over the Buttle Lake Group resulting in the folding seen in the sedimentary strata along the SW slope of McLaughlin Ridge. The exact dip and extent of the thrust fault is not clear; minor offsets along N-S structures may account for discontinuities in the strike of the sedimentary strata.

Geochemical Analyses

Rock chip samples were geochemically analysed by ICP-AES for a suite of 41 major and trace elements and for Au by AA-23 at ALS Chemex Labs in Vancouver. Samples were prepared and shipped by Mike Becherer P.Geo. The analyses are listed in Table 1 and the rock types described in Table 2. Five of the rock chip samples of carbonate-altered veins and host rock and orange weathering dolomitic siltstones were collected from rock outcrops and creek bed boulders in a single creek on the SW slope of McLaughlin Ridge that dissects the sedimentary section described above. A single moss mat sample was also collected from this creek near the China Creek road. Of the remaining two rock chip samples one was collected from Bainbridge creek within a sedimentary section and the other from altered joints and veins in Triassic Karmutsen Formation volcanics west of McLaughlin Ridge. Results for Au in the rock chips range from below detection limit of 5 ppb to 109 ppb (Appendices 2 and 4). Arsenic concentrations range from less than 2 ppm to 25 ppm. The only anomalous result in the rock samples represented the gold concentration in a boulder in the SW creek that was composed of epidote-altered basalt containing up 3% fine grained pyrite.

The moss mat sample yielded 7.51 ppm gold which indicates placer concentration in the moss. Interpretation of this result is ambiguous because of the unknown degree of placer concentration although it does indicate that gold occurs in the creek. Two other moss mat samples collected during the same exploration program but on the Gap claim yielded similar concentrations of gold and all other analyzed elements and remain inexplicable apart from the conclusion that gold is present in the stream.

Interpretation and Conclusions

The western part of the claim block below the 400m elevation on McLaughlin Ridge is underlain by Triassic Karmutsen Group mafic volcanic rocks which are overlain unconformably by clastic sediments of the Naniamo Group. Near Bainbridge Lake the clastic sediments consist of black argillites of the Haslam Formation and have been intruded by Eocene Mt Washington Suite biotite dioritic sills. These Mesozoic and

Cenozoic rocks are juxtaposed against Paleozoic rocks of the Sicker and probably the Buttle Lake Groups along a N-S lineament on the western slope of McLaughlin Ridge that is interpreted as a fault of subvertical orientation and unknown offset.

The Sicker Group rocks display open folding on various scales with intermittent development of penetrative fabrics associated with fold axes and trending at 334° with steep dips. Sedimentary rocks correlated with the Buttle Lake Group Mt Mark Formation outline an open fold pattern along the western slope of McLaughlin Ridge that may reflect deformation during overthrusting by Sicker Group Nitinat Formation rocks. The trend of the folding is, however, similar to that seem in the mineralized "900" zone near Mineral Creek 1.5 km SE of the claim block which bears some lithologically similar cherty siltstone but which is distinctive in the presence of lean magnetite-jasper iron-formation and the absence of the crinoidal limestone. The presence of crinoidal limestone within this section of folded siltstones is interpreted to correlate these rocks with the Mt. Mark Formation of the Permian Buttle Lake Group and accordingly thrust faults are inferred to separate the sedimentary strata from the overlying volcanic rocks of the Devonian Nitinat Formation (Fig. 3) and the underlying volcanic rocks of the upper Triassic Karmutsen Formation which was identified, mainly, in quarry outcrops along the China Creek road. The northerly extent of the thrust faults in uncertain: probably they are truncated by the N-S linear fault separating the Paleozoic rocks from the Mesozoic rocks to the west mentioned above. However, the continuity of the Buttle Lake Group north of the probable Jurassic age Island Intrusive Suite pluton shown on BCGS maps is uncertain. Folded sedimentary strata are present in Bainbridge Creek which, if originally coextensive with the crinoidal limestone – bearing section inferred to represent the Mt Mark Formation, indicate some mechanism of apparent right lateral or up to-the-north offset.

Summary of Exploration Work

The ARIEL claim block has been explored by geological traverses along all available logging roads, major creek beds and logging slashes in conjunction with rock and moss mat geochemistry involving six man-days of field work. No evidence of economic mineralization was discovered apart from the highly anomalous gold content of the single moss-mat sample. However, if stratigraphic correlation of a crinoidal limestone – bearing section of sedimentary strata with the Permian Buttle Lake Formation is correct, then that part of the area may be less prospective for shear zone-related gold veins than if the rocks were Duck Lake Formation. This would be related to the observed relationship of epigenetic gold mineralization to cherts and magnetite-jasper iron formation of the Duck Lake Formation. Conversely, there may be potential for skarn mineralization near the Jurassic Island Intrusive Suite rocks.

References

Watkins, J.J. 2001. Report on the mine potential and recommendations for work: HV Mineral Claim Group, Alberni Mining Division, NTS 92F/2. Assessment report #26743 submitted to the Geological Survey Branch 13 pp.

Shearer, J.T., 2001. Geological and Prospecting Report on the Bethea 1-4 Claims, tenure #382530 – 382533 (Villalta Area) Labour Day Lake – Nanaimo Lakes Area, Vancouver Island. GSB assessment report # 26778, 31 pp.

Massey, N.W.D. and Friday, S.J., 1988. Geology of the Alberni – Nanaimo Lakes Area, Vancouver Island (92F/1W, 92F/2E and pt. 92 F/7). In BC MEMPR, Geological Fieldwork Paper 1989-1 pp. 61-74.

Massey, N.W.D., Friday, S.J., Riddell, J.M., and Dumais, S.J., 1991. Geology of the Port Alberni – Nanaimo Lakes Area; BC Ministry of Energy, Mines and Petroleum Resources, Geoscience Map 1991-1.

APPENDICES

APPENDIX 1: Statement of Qualifications

I, Hardolph A. Wasteneys, resident at Strathcona Park Lodge, km 40 Highway 28, PO Box 2160, Campbell River, BC make the following statement of qualification:

1. 1. I hold two degrees in geological sciences from Queen's University, Kingston: B.Sc. in Geological Engineering, 1979, Mineral Resources option; and Ph.D. in Geology 1990 based on research related to ore deposits.
2. I have 12 seasons of field experience in geological mapping and mineral exploration in various parts of Canada, Australia and Peru.
3. I have extensive experience in U-Pb Geochronology as a Research Associate at the Royal Ontario Museum completing diverse projects on ore deposits and high grade regional metamorphism and publishing several papers in refereed international journals between 1990 and 1999.
4. I developed and delivered numerous educational workshops for Toronto region public schools between 1996 and 1999.
5. My knowledge of the geology of the region and Sicker Group rocks was gained through an exploration contract for Westmin Resources Ltd in 1987 on part of the Debbie-Sicker project on McLaughlin Ridge east of Mineral Creek; employment as a mine geologist at Myra Falls in 2004 and 2005 and 21 days of field work on these and adjacent claims on McLaughlin Ridge for Bitterroot Resources during October and November 2005.
6. I hold no beneficial interest in the Ariel group of claims, nor in any other claims in the Port Alberni area.

Signed this 2nd day of April 2006.

Hardolph Wasteneys, Ph.D.

APPENDIX 2: Itemized cost statement

unit cost	units		
$500.00	3	geological mapping and administration	$1,500.00
$400.00	5	geological mapping	$2,000.00
$400.00	3	report writing	$1,200.00
$29.00	8	analytical costs ALS Chemex 41 el ICCP ES	$232.00
$137.72	5	truck rental and fuel cost averaged over 21 days	$688.60
$278.00	1	sample shipping and preparation	$278.00
$57.50	6	accomodation	$345.00
$12.00	6	food	$72.00
		TOTAL	**$6,315.60**

APPENDIX 3: Sample descriptions, locations and Au-As

SAMPLE#	UTM zone 10, NAD 83 Easting	North		Au-AA23 Au ppm	ME-ICP41 As ppm
B368652	376327E	5448648N	orange weathering calcareous volcanic	0.008	9
B368653	376327E	5448648N	dolomitic siltstone; orange weathering	<0.005	24
B368654	376327E	5448648N	olive green breccia in 1m wide shear zone in creek bed	0.015	16
B368655	376366E	5448630N	creek float	<0.005	25
B368656	376641E	5448137N	large boulders in ravine, basalt, epidote altn 3% vfg to cg pyrite	0.106	<2
B368657			Moss-mat sample at 5 km mark on China Creek Main	7.510	16
B368663	375139E	5451900N	orange weathering bleached mafic volcanic; Fe dolomite/Ankerite veining	0.006	<2
B368664	375650E	5450590N	dolomitic siltstone; orange weathering in sequence of maroon and green chert	0.010	<2

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **BITTERROOT RESOURCES LTD.**
101-1590 BELLEVUE AVE
WEST VANCOUVER BC V7V 1A7

Finalized Date: 9-NOV-2005
Account: LJD

CERTIFICATE VA05095239

Project: Mineral Creek

P.O. No.:

This report is for 11 Rock samples submitted to our lab in Vancouver, BC, Canada on 3-NOV-2005.

The following have access to data associated with this certificate:

MIKE BECHERER	MICHAEL CARR	

SAMPLE PREPARATION

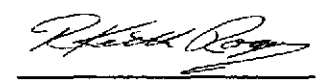
ALS CODE	DESCRIPTION
CRU-QC	Crushing QC Test
PUL-31	Pulverize split to 85% <75 um
SPL-21	Split sample - riffle splitter
CRU-31	Fine crushing - 70% <2mm
LOG-22	Sample login - Rcd w/o BarCode

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au-AA23	Au 30g FA-AA finish	AAS
ME-ICP41	34 Element Aqua Regia ICP-AES	ICP-AES

To: **BITTERROOT RESOURCES LTD.**
ATTN: MIKE BECHERER
1698 CONSTITUTION RD
BLACK CREEK BC V9J 1G2

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature: 

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **BITTERROOT RESOURCES LTD.**
101-1590 BELLEVUE AVE
WEST VANCOUVER BC V7V 1A7

Finalized Date: 9-NOV-2005
Account: LJD

Project: Mineral Creek

CERTIFICATE OF ANALYSIS VA05095239

Sample Description	Method	Au-AA23	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
	Analyte	Au	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga
	Units	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm
	LOR	0.005	0.2	0.01	2	10	10	0.5	2	0.01	0.5	1	1	1	0.01	10
B368658		0.006	<0.2	0.17	15	<10	50	<0.5	<2	0.03	0.6	4	66	16	14.9	<10
B368659		0.033	<0.2	1.77	4	10	50	<0.5	<2	10.30	<0.5	18	5	36	4.88	<10
B368660		<0.005	<0.2	2.18	5	<10	140	0.5	<2	6.64	<0.5	19	8	52	5.09	<10
B368661		0.032	<0.2	0.17	<2	<10	10	<0.5	<2	0.47	<0.5	2	21	5	3.97	<10
B368662		<0.005	<0.2	0.37	<2	<10	40	<0.5	<2	8.15	<0.5	9	47	17	2.81	<10
B368663		0.006	<0.2	0.39	<2	10	20	<0.5	<2	13.90	<0.5	30	22	32	7.53	<10
B368664		0.010	<0.2	0.61	<2	10	70	<0.5	<2	2.48	<0.5	15	18	62	3.19	<10
B368665		0.015	<0.2	1.78	5	<10	50	<0.5	<2	6.96	<0.5	15	5	42	4.39	<10
B368666		<0.005	<0.2	1.76	8	10	80	0.7	<2	3.32	<0.5	7	9	15	5.05	<10
B368667		0.005	0.3	0.68	18	10	150	0.5	<2	5.39	<0.5	12	4	51	3.79	<10
B368668		<0.005	<0.2	0.07	6	<10	10	<0.5	<2	0.06	<0.5	1	71	32	0.57	<10

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **BITTERROOT RESOURCES LTD.**
101-1590 BELLEVUE AVE
WEST VANCOUVER BC V7V 1A7

Finalized Date: 9-NOV-2005
Account: LJD

Project: Mineral Creek

CERTIFICATE OF ANALYSIS VA05095239

Sample Description	Method	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
	Analyte	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sr	Ti
	Units	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	%
	LOR	1	0.01	10	0.01	5	1	0.01	1	10	2	0.01	2	1	1	0.01
B368658		<1	0.04	<10	0.04	46	3	0.01	11	210	2	0.23	<2	1	3	0.02
B368659		1	0.26	10	1.12	1150	<1	0.04	10	1340	2	0.06	<2	6	130	<0.01
B368660		2	0.23	10	0.93	999	<1	0.04	10	1930	<2	0.02	<2	11	72	<0.01
B368661		<1	0.01	<10	0.08	281	<1	0.01	4	60	3	0.04	<2	<1	9	<0.01
B368662		<1	0.18	10	1.43	746	<1	0.02	43	1110	5	0.09	<2	8	152	<0.01
B368663		1	0.14	<10	4.31	1425	<1	0.02	40	90	7	0.07	18	12	317	<0.01
B368664		1	0.17	10	0.86	845	<1	0.03	12	930	2	0.40	<2	4	62	<0.01
B368665		2	0.14	20	0.92	861	<1	0.09	8	1940	3	0.02	<2	9	104	<0.01
B368666		1	0.30	10	0.67	339	<1	0.04	7	4030	7	0.01	<2	5	204	0.15
B368667		<1	0.26	10	0.13	943	<1	0.03	11	1620	3	0.02	4	7	29	<0.01
B368668		1	0.02	<10	0.01	102	<1	<0.01	3	70	<2	0.01	18	<1	4	<0.01

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **BITTERROOT RESOURCES LTD.**
101-1590 BELLEVUE AVE
WEST VANCOUVER BC V7V 1A7

Finalized Date: 9-NOV-2005
Account: LJD

Project: Mineral Creek

CERTIFICATE OF ANALYSIS VA05095239

Sample Description	Method / Analyte / Units / LOR	ME-ICP41 Tl ppm 10	ME-ICP41 U ppm 10	ME-ICP41 V ppm 1	ME-ICP41 W ppm 10	ME-ICP41 Zn ppm 2
B368658		<10	<10	84	<10	4
B368659		<10	<10	43	<10	67
B368660		<10	<10	62	<10	69
B368661		<10	<10	8	<10	5
B368662		<10	<10	30	<10	33
B368663		<10	<10	101	<10	110
B368664		<10	<10	33	<10	38
B368665		<10	<10	64	<10	64
B368666		<10	<10	94	<10	60
B368667		<10	<10	36	<10	45
B368668		<10	<10	4	<10	7

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **BITTERROOT RESOURCES LTD.**
101-1590 BELLEVUE AVE
WEST VANCOUVER BC V7V 1A7

Finalized Date: 31-OCT-2005
Account: LJD

CERTIFICATE VA05092738

Project: Mineral Creek

P.O. No.:

This report is for 1 Soil sample submitted to our lab in Vancouver, BC, Canada on 27-OCT-2005.

The following have access to data associated with this certificate:

MIKE BECHERER	MICHAEL CARR	

SAMPLE PREPARATION

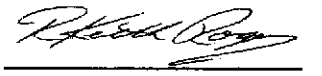
ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
SCR-41	Screen to -180um and save both

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au-AA23	Au 30g FA-AA finish	AAS
ME-ICP41	34 Element Aqua Regia ICP-AES	ICP-AES

To: **BITTERROOT RESOURCES LTD.**
ATTN: MIKE BECHERER
1698 CONSTITUTION RD
BLACK CREEK BC V9J 1G2

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature: 

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **BITTERROOT RESOURCES LTD.**
101-1590 BELLEVUE AVE
WEST VANCOUVER BC V7V 1A7

Finalized Date: 31-OCT-2005
Account: LJD

Project: Mineral Creek

CERTIFICATE OF ANALYSIS VA05092738

Sample Description	Method / Analyte / Units / LOR	WEI-21 Recvd Wt. kg 0.02	ME-ICP41 Ag ppm 0.2	ME-ICP41 Al % 0.01	ME-ICP41 As ppm 2	ME-ICP41 B ppm 10	ME-ICP41 Ba ppm 10	ME-ICP41 Be ppm 0.5	ME-ICP41 Bi ppm 2	ME-ICP41 Ca % 0.01	ME-ICP41 Cd ppm 0.5	ME-ICP41 Co ppm 1	ME-ICP41 Cr ppm 1	ME-ICP41 Cu ppm 1	ME-ICP41 Fe % 0.01	ME-ICP41 Ga ppm 10
B368657		0.24	4.5	3.11	16	<10	260	0.5	<2	0.58	<0.5	29	98	127	4.76	10

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: BITTERROOT RESOURCES LTD.
101-1590 BELLEVUE AVE
WEST VANCOUVER BC V7V 1A7

Finalized Date: 31-OCT-2005
Account: LJD

Project: Mineral Creek

CERTIFICATE OF ANALYSIS VA05092738

Sample Description	Method	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
	Analyte	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sr	Ti
	Units	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	%
	LOR	1	0.01	10	0.01	5	1	0.01	1	10	2	0.01	2	1	1	0.01
B368657		1	0.05	10	1.82	2280	1	0.01	53	810	8	0.01	<2	9	36	0.08

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **BITTERROOT RESOURCES LTD.**
101-1590 BELLEVUE AVE
WEST VANCOUVER BC V7V 1A7

Finalized Date: 31-OCT-2005
Account: LJD

Project: Mineral Creek

CERTIFICATE OF ANALYSIS VA05092738

Sample Description	Method	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	Au-AA23
	Analyte	Tl	U	V	W	Zn	Au
	Units	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	10	10	1	10	2	0.005
B368657		<10	<10	95	<10	75	7.51

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **BITTERROOT RESOURCES LTD.**
101-1590 BELLEVUE AVE
WEST VANCOUVER BC V7V 1A7

Finalized Date: 31-OCT-2005
Account: LJD

CERTIFICATE VA05092737

Project: Mineral Creek

P.O. No.:

This report is for 6 Rock samples submitted to our lab in Vancouver, BC, Canada on 27-OCT-2005.

The following have access to data associated with this certificate:

MIKE BECHERER	MICHAEL CARR	

SAMPLE PREPARATION

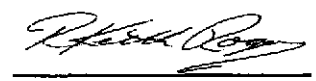
ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
PUL-31	Pulverize split to 85% <75 um
SPL-21	Split sample - riffle splitter
CRU-31	Fine crushing - 70% <2mm
LOG-22	Sample login - Rcd w/o BarCode

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au-AA23	Au 30g FA-AA finish	AAS
ME-ICP41	34 Element Aqua Regia ICP-AES	ICP-AES

To: **BITTERROOT RESOURCES LTD.**
ATTN: MIKE BECHERER
1698 CONSTITUTION RD
BLACK CREEK BC V9J 1G2

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature: 

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **BITTERROOT RESOURCES LTD.**
101-1590 BELLEVUE AVE
WEST VANCOUVER BC V7V 1A7

Finalized Date: 31-OCT-2005
Account: LJD

Project: Mineral Creek

CERTIFICATE OF ANALYSIS VA05092737

Sample Description	Method / Analyte / Units / LOR	WEI-21 Recvd Wt. kg 0.02	ME-ICP41 Ag ppm 0.2	ME-ICP41 Al % 0.01	ME-ICP41 As ppm 2	ME-ICP41 B ppm 10	ME-ICP41 Ba ppm 10	ME-ICP41 Be ppm 0.5	ME-ICP41 Bi ppm 2	ME-ICP41 Ca % 0.01	ME-ICP41 Cd ppm 0.5	ME-ICP41 Co ppm 1	ME-ICP41 Cr ppm 1	ME-ICP41 Cu ppm 1	ME-ICP41 Fe % 0.01	ME-ICP41 Ga ppm 10
B368651		0.80	0.5	0.19	<2	<10	50	<0.5	<2	0.10	<0.5	4	169	281	3.29	<10
B368652		0.88	<0.2	2.65	9	<10	130	<0.5	<2	0.43	<0.5	18	76	192	4.69	10
B368653		0.74	<0.2	0.13	24	<10	130	<0.5	<2	0.01	<0.5	1	117	18	1.65	<10
B368654		0.74	0.3	0.20	16	<10	340	<0.5	<2	0.02	<0.5	1	86	14	0.60	<10
B368655		0.78	<0.2	0.09	25	<10	60	<0.5	<2	0.02	<0.5	2	94	15	1.63	<10
B368656		0.42	<0.2	2.49	<2	<10	40	<0.5	<2	1.67	<0.5	27	217	93	3.05	<10

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **BITTERROOT RESOURCES LTD.**
101-1590 BELLEVUE AVE
WEST VANCOUVER BC V7V 1A7

Finalized Date: 31-OCT-2005
Account: LJD

Project: Mineral Creek

CERTIFICATE OF ANALYSIS VA05092737

Sample Description	Method	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
	Analyte	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sr	Ti
	Units	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	%
	LOR	1	0.01	10	0.01	5	1	0.01	1	10	2	0.01	2	1	1	0.01
B368651		1	0.03	<10	0.05	576	3	<0.01	7	130	5	0.08	<2	<1	6	<0.01
B368652		1	0.19	<10	1.84	1170	<1	0.03	22	430	3	0.01	<2	11	27	0.03
B368653		1	0.04	<10	0.01	101	5	<0.01	8	100	5	0.02	<2	1	1	<0.01
B368654		<1	0.08	<10	0.02	55	8	0.01	7	30	9	0.03	3	1	3	<0.01
B368655		<1	0.02	<10	0.02	148	3	<0.01	8	90	5	0.35	<2	<1	1	<0.01
B368656		<1	0.17	<10	2.17	635	<1	0.05	87	1040	3	0.11	<2	6	73	0.41

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **BITTERROOT RESOURCES LTD.**
101-1590 BELLEVUE AVE
WEST VANCOUVER BC V7V 1A7

Finalized Date: 31-OCT-2005
Account: LJD

Project: Mineral Creek

CERTIFICATE OF ANALYSIS VA05092737

Sample Description	Method	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	Au-AA23
	Analyte	Tl	U	V	W	Zn	Au
	Units	ppm	ppm	ppm	ppm	ppm	ppm
	LOR	10	10	1	10	2	0.005
B368651		<10	<10	22	<10	40	0.040
B368652		<10	<10	88	<10	57	0.008
B368653		<10	<10	8	<10	35	<0.005
B368654		<10	<10	8	<10	6	0.015
B368655		<10	<10	4	<10	11	<0.005
B368656		<10	<10	89	<10	44	0.106

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **BITTERROOT RESOURCES LTD.**
101-1590 BELLEVUE AVE
WEST VANCOUVER BC V7V 1A7

Finalized Date: 13-DEC-2005
Account: LJD

CERTIFICATE VA05106728

Project: Mineral Creek

P.O. No.:

This report is for 28 Rock samples submitted to our lab in Vancouver, BC, Canada on 5-DEC-2005.

The following have access to data associated with this certificate:

MIKE BECHERER	MICHAEL CARR	

SAMPLE PREPARATION

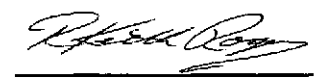
ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-QC	Crushing QC Test
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-ICP41	34 Element Aqua Regia ICP-AES	ICP-AES
Au-AA23	Au 30g FA-AA finish	AAS

To: **BITTERROOT RESOURCES LTD.**
ATTN: MIKE BECHERER
1698 CONSTITUTION RD
BLACK CREEK BC V9J 1G2

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature: 

ALS Chemex

EXCELLENCE IN ANALYTICAL CHEMISTRY

ALS Canada Ltd.

212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **BITTERROOT RESOURCES LTD.**
101-1590 BELLEVUE AVE
WEST VANCOUVER BC V7V 1A7

Finalized Date: 13-DEC-2005
Account: LJD

Project: Mineral Creek

CERTIFICATE OF ANALYSIS VA05106728

Sample Description	Method / Analyte / Units / LOR	WEI-21 Recvd Wt. kg 0.02	Au-AA23 Au ppm 0.005	ME-ICP41 Ag ppm 0.2	ME-ICP41 Al % 0.01	ME-ICP41 As ppm 2	ME-ICP41 B ppm 10	ME-ICP41 Ba ppm 10	ME-ICP41 Be ppm 0.5	ME-ICP41 Bi ppm 2	ME-ICP41 Ca % 0.01	ME-ICP41 Cd ppm 0.5	ME-ICP41 Co ppm 1	ME-ICP41 Cr ppm 1	ME-ICP41 Cu ppm 1	ME-ICP41 Fe % 0.01
B368671		0.86	0.011	0.2	2.86	7	10	50	<0.5	<2	0.83	<0.5	21	8	38	4.68
B368672		0.48	0.007	<0.2	2.28	3	<10	50	<0.5	<2	1.18	<0.5	18	45	112	2.96
B368673		0.72	<0.005	<0.2	0.17	2	<10	20	<0.5	<2	0.09	<0.5	1	10	7	0.66
B368674		0.86	0.023	0.3	1.13	5	<10	60	<0.5	<2	6.20	<0.5	14	17	70	3.82
B368675		0.80	0.006	<0.2	4.17	9	10	80	<0.5	<2	6.27	<0.5	21	27	153	5.60
B368676		0.44	0.011	<0.2	3.01	31	20	20	0.8	<2	6.88	<0.5	31	157	40	5.19
B368677		1.38	0.316	<0.2	0.64	>10000	10	40	<0.5	<2	1.12	<0.5	17	34	42	3.40
B368678		0.76	0.015	<0.2	1.15	136	20	30	0.5	<2	8.01	<0.5	28	107	61	4.03
B368679		0.50	0.010	<0.2	2.10	114	<10	50	<0.5	<2	0.75	<0.5	15	60	75	2.87
B368680		1.02	0.007	<0.2	0.23	11	<10	20	<0.5	<2	0.18	<0.5	1	38	11	0.81
B368681		0.70	0.005	<0.2	1.22	10	<10	200	<0.5	<2	1.56	<0.5	5	6	174	1.02
B368682		0.86	0.005	<0.2	0.94	7	10	210	<0.5	<2	1.36	<0.5	2	9	33	1.70
B368683		0.82	0.007	<0.2	1.21	13	10	240	<0.5	<2	2.41	<0.5	4	3	132	1.74
B368684		0.68	0.007	<0.2	0.81	142	<10	30	<0.5	<2	4.62	<0.5	6	43	15	2.47
B368685		1.04	0.021	0.2	0.65	201	<10	20	<0.5	<2	0.14	<0.5	10	26	76	6.34
B368686		1.42	0.372	0.5	0.98	392	<10	40	<0.5	<2	0.45	<0.5	13	44	128	9.01
B368687		1.10	0.017	<0.2	0.68	17	10	120	<0.5	<2	5.09	<0.5	8	13	44	2.62
B368688		0.80	0.300	0.3	0.14	17	<10	10	<0.5	<2	0.24	<0.5	2	36	188	4.79
B368689		1.04	0.019	<0.2	0.60	11	<10	20	<0.5	<2	3.99	<0.5	4	23	18	19.8
B368690		0.86	0.005	<0.2	0.10	2	<10	10	<0.5	<2	0.27	<0.5	1	11	4	5.87
B368691		0.88	0.006	0.3	1.55	3	<10	130	<0.5	<2	0.60	<0.5	5	28	45	8.26
B368692		1.42	<0.005	<0.2	1.55	42	20	70	0.9	<2	5.40	<0.5	29	82	124	5.31
B368693		1.14	0.005	<0.2	2.40	50	10	210	<0.5	<2	11.65	<0.5	25	104	73	4.01
B368694		1.40	<0.005	0.2	2.54	2	10	70	<0.5	<2	8.31	<0.5	21	39	57	3.87
B368695		1.26	<0.005	<0.2	1.43	28	20	160	0.7	<2	4.67	<0.5	19	12	49	4.54
B368696		1.18	<0.005	<0.2	2.16	31	10	130	1.1	<2	0.46	<0.5	28	15	98	8.70
B368697		0.84	0.036	0.4	0.22	5	<10	40	<0.5	2	0.15	<0.5	2	5	141	3.46
B368698		0.32	0.141	2.9	0.30	1825	140	30	<0.5	<2	0.02	<0.5	3	15	65	2.61

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **BITTERROOT RESOURCES LTD.**
101-1590 BELLEVUE AVE
WEST VANCOUVER BC V7V 1A7

Finalized Date: 13-DEC-2005
Account: LJD

Project: Mineral Creek

CERTIFICATE OF ANALYSIS VA05106728

Sample Description	Method Analyte Units LOR	ME-ICP41 Ga ppm 10	ME-ICP41 Hg ppm 1	ME-ICP41 K % 0.01	ME-ICP41 La ppm 10	ME-ICP41 Mg % 0.01	ME-ICP41 Mn ppm 5	ME-ICP41 Mo ppm 1	ME-ICP41 Na % 0.01	ME-ICP41 Ni ppm 1	ME-ICP41 P ppm 10	ME-ICP41 Pb ppm 2	ME-ICP41 S % 0.01	ME-ICP41 Sb ppm 2	ME-ICP41 Sc ppm 1	ME-ICP41 Sr ppm 1
B368671		10	<1	0.16	<10	1.67	837	<1	0.02	10	1870	<2	<0.01	2	6	46
B368672		<10	<1	0.14	<10	1.42	490	<1	0.08	30	1080	3	<0.01	<2	6	59
B368673		<10	<1	0.03	<10	0.07	140	<1	<0.01	1	110	3	<0.01	<2	<1	5
B368674		<10	<1	0.13	<10	1.75	1035	<1	0.13	17	1080	47	3.76	3	8	140
B368675		10	<1	0.15	10	2.76	1560	1	0.09	22	1700	12	0.79	4	13	185
B368676		10	1	0.41	<10	2.60	923	3	0.02	152	1000	3	0.42	19	10	479
B368677		<10	1	0.27	<10	0.30	403	1	0.01	46	90	28	1.23	38	6	24
B368678		<10	1	0.40	<10	3.16	981	<1	0.02	92	550	6	0.14	12	17	246
B368679		<10	1	0.06	<10	1.80	606	<1	0.01	28	530	<2	<0.01	2	9	115
B368680		<10	<1	0.06	<10	0.10	201	<1	<0.01	4	30	3	<0.01	2	2	6
B368681		<10	1	0.63	10	0.23	285	<1	0.05	2	680	<2	0.48	<2	1	109
B368682		<10	1	0.49	20	0.28	461	<1	0.06	1	680	2	0.23	7	2	37
B368683		<10	1	0.62	20	0.54	458	1	0.06	1	760	4	0.82	27	1	76
B368684		<10	<1	0.17	<10	1.78	943	125	0.01	23	220	5	0.06	2	5	209
B368685		<10	1	0.06	<10	0.33	311	2	<0.01	82	290	<2	3.08	5	1	10
B368686		10	<1	0.01	<10	0.52	261	6	<0.01	140	1230	7	4.37	5	2	10
B368687		<10	<1	0.38	<10	1.37	731	<1	0.01	2	400	5	0.21	9	4	102
B368688		<10	1	<0.01	<10	0.06	169	1	<0.01	6	110	<2	1.72	3	<1	4
B368689		<10	<1	0.08	<10	0.46	378	<1	0.02	13	190	5	0.06	<2	1	45
B368690		<10	<1	0.02	<10	0.05	92	<1	<0.01	5	250	<2	<0.01	2	<1	8
B368691		10	<1	0.04	10	1.34	267	<1	0.01	11	200	6	0.02	2	3	11
B368692		<10	<1	0.61	<10	1.76	856	<1	0.03	66	1150	5	0.13	14	28	159
B368693		<10	1	0.37	<10	2.14	1525	<1	0.02	111	460	5	1.08	15	11	1160
B368694		10	<1	0.39	<10	2.87	1000	<1	0.02	54	380	4	0.06	2	10	223
B368695		<10	<1	0.52	10	1.59	834	<1	0.06	14	1550	3	0.12	6	9	165
B368696		<10	1	0.44	10	0.39	2150	1	0.04	17	1620	2	0.01	14	12	16
B368697		<10	<1	0.05	<10	0.08	306	2	<0.01	3	120	2	0.14	<2	<1	9
B368698		<10	1	0.36	<10	0.02	31	3	0.01	2	50	25	2.13	5	<1	17

ALS Chemex
EXCELLENCE IN ANALYTICAL CHEMISTRY
ALS Canada Ltd.
212 Brooksbank Avenue
North Vancouver BC V7J 2C1
Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

To: **BITTERROOT RESOURCES LTD.**
101-1590 BELLEVUE AVE
WEST VANCOUVER BC V7V 1A7

Finalized Date: 13-DEC-2005
Account: LJD

Project: Mineral Creek

CERTIFICATE OF ANALYSIS VA05106728

Sample Description	Method	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
	Analyte	Ti	Tl	U	V	W	Zn
	Units	%	ppm	ppm	ppm	ppm	ppm
	LOR	0.01	10	10	1	10	2
B368671		0.21	<10	<10	116	<10	71
B368672		0.32	<10	<10	98	<10	41
B368673		0.01	<10	<10	6	<10	4
B368674		0.01	<10	<10	51	<10	53
B368675		<0.01	<10	<10	130	<10	112
B368676		<0.01	<10	<10	103	<10	81
B368677		<0.01	<10	<10	31	<10	147
B368678		<0.01	<10	<10	72	<10	53
B368679		0.17	<10	<10	82	<10	39
B368680		<0.01	<10	<10	9	<10	3
B368681		0.10	<10	<10	12	<10	10
B368682		<0.01	<10	<10	7	<10	16
B368683		<0.01	<10	<10	8	<10	28
B368684		<0.01	<10	<10	28	<10	25
B368685		0.01	<10	<10	48	<10	16
B368686		0.03	<10	<10	93	<10	36
B368687		<0.01	<10	<10	26	<10	38
B368688		<0.01	<10	<10	15	<10	5
B368689		0.01	<10	<10	26	<10	15
B368690		<0.01	<10	<10	29	<10	5
B368691		0.03	<10	<10	72	<10	57
B368692		<0.01	<10	<10	86	<10	61
B368693		<0.01	<10	<10	71	<10	37
B368694		<0.01	<10	<10	72	<10	29
B368695		<0.01	<10	<10	73	<10	53
B368696		<0.01	<10	<10	100	<10	97
B368697		<0.01	<10	<10	22	<10	20
B368698		0.01	<10	<10	4	<10	2

WALD
507106

RICKW
502632

ARIEL
502486

WIT
509221

uDSiN

uTrVK
diorite dykes

KNss

Bainbridge Lake

JIgd

Cameron Main

Bainbridge Creek

JIgd
bi-hb granodiorite

374000 E

377000 E

5452000 N

5450000 N

B63 6 Au <2 As

B64 10 Au <2 As

B67 17 Au 17 As
10 m wide dolomite-ankerite alt. shear zone.

massive undeformed pl-xtal tuff/-bx

fg VC

fg·diorite

diorite

EMJIgd

mJIgb-di

well bedded mafic VC

cg bslt and gabbro altered mafic xenolith

fg bs VC

fg VC

cg basal.

Crinoidal limestone

PY-dol. siltstone

PBL

mafic mlwke

dolomite siltstone

B52

B53

mg meta basalt

China Creek

msv blk pillowed basalt w qtz-epidote amygdules

China Creek Main

Mineral Creek Rd

CHINA CREEK

0 500m 1km

Scale: 1: 10,000

Legend

TMW	Mt Washington intrusive suite; qtz. diorite sills and stocks
KNPB	Nanaimo Gp sediments; Parsons Bay Fm. black argillite, siltstone and shale
EMJIgd	Island Plutonic Suite; bi-hb granodiorite
uTrVK	Vancouver Gp; Karmutsen Fm; pillow basalt and breccia
PMHgb	Mount Hall gabbro
PBL	Buttle Lake Gp. Limestone
uDSiMR	Sicker Gp. McLaughlin Ridge Fm.well bedded and graded volcaniclastic sediments and laminated cherty siltstone
muDSiN	Sicker Gp.; Nitinat Fm: pyrox.- phyric basaltic flows, agglomerates, breccias, crystal tuffs and massive volcaniclastics
mDSiDL	Sicker Gp; Duck Lake Fm; chert, jasper and cherty tuff; maroon and green pillowed basalts and breccias

Symbols

- foliation or cleavage; foliation with mineral lineation
- kink banded foliation; "S"; "Z" folded
- mineral lineation
- shear zone
- bedding plane in sedimentary rocks and volcaniclastics
- pillowed flows
- Fold axis: syncline; anticline; minor folds
- joint or vein: vertical; inclined
- dyke
- Fault: mapped; approx.; inferred
- geological contact: observed; inferred
- sample location and geochem ref. number: rock chip; moss mat

Geology and Geochemistry of the Ariel-RickW-Wald-WIT claim block

McLaughlin Ridge, Alberni Mining Division, BC

Bitterroot Resources Ltd.

Geology by Hardolph Wasteneys Ph.D.
November, 2005