BRITISH COLUMBIA The Best Place on Earth		T STATE T
Ministry of Energy, Mines & Petroleum Resources Mining & Minerals Division BC Geological Survey		Assessment Report Title Page and Summary
TYPE OF REPORT [type of survey(s)]: Airphoto Interpretation	OTA	AL COST: \$4 126.70 3400
AUTHOR(S): J. T. Shearer, M.Sc., P.Geo.	SIGNATURE(S):	A chearry
NOTICE OF WORK PERMIT NUMBER(S)/DATE(S):		YEAR OF WORK: 2014
STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S):	5484753	/
PROPERTY NAME: Patsey Cove Silica Deposit		
CLAIM NAME(S) (on which the work was done): 25382	9 + 253830	
COMMODITIES SOUGHT: <u>SILICA</u> MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN:		
MINING DIVISION:	• 02 '40 "	
OWNER(S): 1) J. T. Shearer	<u>0240</u> (at centr 2)	re of work)
MAILING ADDRESS: Unit 5 - 2330 Tyner Street Port Coquitlam, BC		
V3C 2Z1		
OPERATOR(S) [who paid for the work]: 1) Same as above	2)	
MAILING ADDRESS: Same as above		
PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, Parce quarter blow out hos for in dowite - quarter manzonit	alteration, mineralization, size and at	titude): 141ca 5 Karn tomat Complete
		y y y
REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT R	EPORT NUMBERS: AS SEGAL	unt Rpt 28,230
		Next Page

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground, mapping			10 3400
Photo interpretation			\$1126.70
GEOPHYSICAL (line-kilometres)			0
Ground			
Magnetic			
Electromagnetic		-	
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
GEOCHEMICAL (number of samples analysed for)			
Soil			
Silt			
Rock			
Other			
DRILLING (total metres; number of holes, size)			
Core			
Non-core			
RELATED TECHNICAL			
Sampling/assaying			
Petrographic			
Mineralographic			
Metallurgic			
PROSPECTING (scale, area)			
PREPARATORY / PHYSICAL			
Line/grid (kilometres)			
Topographic/Photogrammetric (scale, area)			
Legal surveys (scale, area)	letter i destal de l'		
Road, local access (kilometres)	/trail		
Trench (metres)			
Underground dev. (metres)			
Other			
		TOTAL COST:	\$4,120.00

AIRPHOTO INTERPRETATION REPORT on the PATSEY COVE SILICA DEPOSIT (Margaret and Henrietta Reverted Crowngrants) DONALDSON CREEK AREA BANKS ISLAND, BC

NTS 103G/8 Latitude 58°28'10"/Longitude 130°02'40" Event # 5484753

for

Homegold Resources Ltd. Unit 5 – 2330 Tyner Street, Port Coquitlam, BC V3C 2Z1 Phone: 604-970-6402 Fax: 604-944-6102

by

J. T. Shearer, M.Sc., P.Geo. Unit 5 – 2330 Tyner Street, Port Coquitlam, BC V3C 2Z1 Phone: 604-970-6402

BC Geological Survey Assessment Report 34524

February 15, 2014

Fieldwork completed between June 1, 2013 and January 12, 2014

CONTENTS

		Page
LIST OF ILLUSTRATIONS	and TABLES	ii
SUMMARY		iii
INTRODUCTION		
LOCATION and ACCESS		7
CLAIM STATUS		
HISTORY		
FIELD PROCEDURES		
REGIONAL GEOLOGY		
LOCAL GEOLOGY and 19	93 DIAMOND DRILL RESU	LTS 18
AIRPHOTO INTERPRETA	TION 2014	22
CONCLUSIONS		
RECOMMENDATIONS		
REFERENCES		
APPENDICES		
APPENDIX I	Statement of Qualificati	ons
APPENDIX II	Statement of Costs	
APPENDIX III	Airphotos	
APPENDIX IV	Assay Certificates	

LIST of ILLUSTRATIONS and TABLES

ILLUSTRATIONS and PHOTOS

Page

Frontispiece	Black & White Airphoto	v
FIGURE 1	Location Map, 1:500,000	2
FIGURE 2	Detail Location and Topography	3
FIGURE 2a	Water Depths Off Patsey Cove	4
FIGURE 2b	Detail Topography Map, 1:50,000	6
FIGURE 2c	Google Image of Patsey Cove 2011	8
FIGURE 3	Claim Map, 1:50,000	9
FIGURE 4	Regional Geology, 1:300,000 1	6
FIGURE 5	Silica Zone Sketch Map, 1:500 1	7
FIGURE 6	Cross Section A-B Drill Holes PC93-1+2 and Assays, 1:500 2	0
FIGURE 7	Airphoto Key Map 2	1
FIGURE 8	Airphoto No. 6/12 2	3

TABLES

	<u> </u>	age
TABLE I	List of Claims	10
TABLE II	Time Chart	15

SUMMARY

- 1. This report documents the Airphoto Interpretation done in 2014.
- 2. The Patsey Cove Silica Deposit is located on Central Banks Island, 105 km south of Prince Rupert, British Columbia (700 km northwest of Vancouver). Access is by float plane or boat. Recent logging roads have been constructed to the Silica Zone.
- 3. Mineralization was first discovered in the Patsey Cove area before the turn of the century by prospector A. V. Donaldson. The Margaret and Henrietta claims were crown granted in 1907.
- 4. Banks Island occurs on the western flank of the Coast Plutonic Complex and is characterized by northwest trending granitic bodies, mainly granodiorite-quartz monzonite and quartz diorite which are occasionally separated by narrow but persistent belts of metasedimentary rocks.
- 5. The Patsey Cove silica Deposit is hosted by foliated quartz diorite within which an extensive massive, white quartz-phase skarn zone has developed partly replacing a large inclusion of metasediments. An alteration assemblage of chlorite and actinolite surround and are intercalated with the margins of the quartz zone. Nearby, but spatially separate, skarn related sulfides consist mainly of pyrrhotite with amounts of magnetite, chalcopyrite and pyrite.
- 6. Exploration has consisted of surface prospecting, detailed geological mapping, hand trenching and surface diamond drilling. Two diamond drill holes were completed in August 1993 totalling 245 feet (74.7m).
- 7. Drill hole PC-93-1 (-50º) intersected a core length of 112 ft. (34.14 metres) of silica alternating with siliceous chlorite-actinolite skarn starting at a depth of 94 ft. (28.65m) below surface. Drill hole PC-93-2 (-90º) intersected pure quartz to a depth of 39 ft. (11.9m) with some sulfide zones. The deepest intersection of massive white quartz in Hole PC-93-1 is 57 metres (187 ft.) vertically below the collar elevation of PC-93-2. Assays in 2005 ranged up to 98.8% SiO₂.
- 8. Based on a minimum central zone of massive quartz (without the intercalated actinolite-chlorite skarn margin) with dimensions of 250 feet length x 140 feet width x 200 feet depth, a reasonable preliminary resource inventory of high grade silica is 540,000 tons. Including 50% of the skarn margin in the event that sorting is a viable option increases the inventory to about 700,000 tons of high grade silica. There is considerable potential to increase reserves both along strike and at depth.
- 9. In the Coast Plutonic Belt the early structures of the terranes are largely obliterated. However, the Work Channel Lineament and/or the western edge of the Central Gneiss Complex probably originated as the suture of Alexander terrane against Stikinia. The discovery of gold mineralization in the early 1960's resulted from an aircraft assisted prospecting program designed to investigate north coast lineaments (McDougall, 1972). Banks Island has an unusual density of faults, fractures and lineaments. The Island is bounded by deep seated, major faults that are assumed to have right-lateral displacement.

Blanchet (1983) has carried out a preliminary analysis of airphoto linears. Two major, right lateral faults with an average trend of 310° are recognized: A very common direction for linears is 045° which Blanchet attributes to the movement along the 310° trending faults. Left lateral faults trend 090°.

 Surface diamond drilling, trenching and detailed geological mapping is recommended to define the high grade silica core zone to depth. Appropriate drill sites are outlined in this report. A minimum of 2,000 feet is recommended. An environmental baseline should be established. This work, Stage II, will cost \$102,000.
 Contingent on encouraging results from Phase II, Phase III would entail a 10,000 ton bulk sample for pilot plant testing. 11. The objective of the surface diamond drill program is to increase ore reserves to a point where profitable mining can begin in the near future. Further metallurgical tests will be required. The concept of a portable shipping facility located at Patsey Cove should be investigated.

Respectfully submitted,

J.T. Shearer, M.Sc., P.Geo. Geologist February 15, 2014



Frontispiece – Black & White Airphoto

INTRODUCTION

Work in 2014 focussed on Airphoto Interpretation.

The Patsey Cove Silica Deposit was discovered before the turn of the century and the claims crowngranted in 1907. The Margaret Claim was located by A.D. Donaldson on May 27, 1897, and surveyed in 1899.

The quartz zone outcrops about 300 metres from saltwater at Patsey Cove. Donaldson Creek has cut through the main part of the zone. The east side of the quartz body appears vertical. On the west side the quartz body is not so well defined and is largely covered by overburden. The central area of the main exposure of the pure white quartz has a width of more than 20 metres. A sample from this dome ran greater than 99.5 percent silica. To the south, and spacially separate, the quartz body is in contact with a small area of iron-copper minerals and actinolite. Quartz continues southward with a width of about 3 metres. On the southside the quartz is covered by debris, on the north by swampy ground. The quartz appears to be free from sulfides on the surface.

Quarrying could be carried out without extensive development. A tram about 240 metres long, a wharf for scows and bunkers to hold several tons is all that is necessary to start shipping. There is plenty of small timber from 6 to 15 inches for camp purposes. From the lake down to Patsey Cove the ground slopes ideally for a tram, and a small water power is available.

Previous sampling of the Patsey Cove Silica Deposit indicated that it meets the quality specifications required by the silicon metal industry. Nearby at Kitimat are inexpensive and reliable energy resources, natural gas and electricity and a stable and skilled work force.

Opportunities in the general silica industries exist in:

- flat glass, fibreglass (insulation) and reinforcing fibreglass production.
- quartz crystal and vitreous quartz production
- ferrosilicon
- silicon metal
- silicon metal based chemicals and semiconductor silicon
- metal matrix composites

In 1966 M.E. Hertel, of Stearns-Rodger Canada Ltd., completed a preliminary report covering the possibility of mining and processing the Patsey Cove Silica Deposit. His market survey included seven silica users, transportation costs and a brief mine plan. For the production of ferrosilicon and silicon metal the requirements are in the range of -4" + 1" with no fines. For the production of silicon carbide -2" + 80 mesh is required.

On the commodity market silicon metal is traded, based on purity, in three grade classifications (Siewert 1990b):

- 96-98% Si (metallurgical grade)
- 98-99.7% Si (chemical and electronic grade)
- over 99.7% Si (high purity).

The most commonly traded chemical or electronic grade silicon metal has a minimum purity of 98.5% Si with maximum impurities of 0.5% Fe, 0.4% Al and 0.3% Ca. For the purpose of the pre-feasibility study the production of 98.5% Si metal was being considered.

Most of the silicon metal produced in the world is consumed in two major fields:

- metallurgical and alloying applications (54%)
- chemical and electronic applications (45%)



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

Tuesday, April 18, 2006 8:34 PM

Figure 1 Location Map



Figure 2 Detail Location and Topography



Figure 2a Map Showing Water Depths off Patsey Cove

The aluminum industry is the major consumer of metallurgical grade silicon metal. It is used as an additive in aluminum castings and as an alloying agent in aluminum silicon alloys. In the aluminum die-casting industry, silicon metal improves the fluidity of molten aluminum and increases the hardness of the finished product. With increasing production of cast aluminum engines the demand for silicon metal will increase significantly. The Alcan aluminum smelter at Kitimat presently imports its silicon requirements from Eastern Canada. The anticipated completion of the Kemano II power project in the near future will provide low cost electrical power.

The use of silicon metal as an alloying agent extends into the field of tertiary aluminum – silicon alloys with magnesium and copper. Smaller amounts of silicon are added to copper alloys, for example, brasses and bronzes. Only a small quantity of metallurgical grade material is consumed in the steel industry as an alloying or deoxidizing agent.

In its metallic state silicon has a vital role in the electronics industry as a semiconductor material. It is the basic raw material for the production of polycrystalline silicon, single crystal silicon and silicon wafers for semiconductors and integrated circuits.

In the chemical industry silicon metal is an essential feed material for the production of silanes, silicones and other silicon based organic and inorganic chemicals.



Figure 2b Detail Topographic Map 1:50,000

LOCATION and ACCESS

The Claim Group is situated on east central Banks Island, 105 km south of Prince Rupert (Figure 1). Banks Island is about 70km long by 20km wide. The nearest communities are Hartley Bay, 60km east on the mainland, Kitkatla, 52km to the north and Trutch, 45km southeast. Kitimat is 120km northeast of the property. Directly west is Sandspit on the Queen Charlotte Islands, a distance of 110km.

Bonilla Island Weather Station is located off the northwest side of Banks Island. BC Telephone has maintained a close network of repeater stations to service the commercial fishing fleet and local villages. The best communication on Banks Island is via the Noble Mountain FM channel, although satellite receivers have been phased in over the last few years.

Access is mainly by float-equipped, fixed-wing aircraft to the Patsey Cove at high tide, or by relatively small boats (Figure 2). Helicopter transportation has been important in the past and there are natural open spots suitable for landing.

Recently, logging has established several haul roads in the area, one road in particular bisects the claims and is very close to the surface outcrop of the Silica Zone (see Figure 8, page 23).

Banks Island is characterized by coastal muskeg over the granitic rocks and by lush cedar-hemlock forests over the narrow metasedimentary belts. The claims cover mostly undulating lowlands (Hecate lowland) with relief generally less than 50m. To the west and north the terrain becomes progressively more rugged towards the Carlo Range, whose high point, on Mount Gransell, is 676m.



Figure 2C Google Image of Patsey Cove, 2011

00



9 Airphoto Interpretation Report on the Patsey Cove Silica Deposit February 15, 2014

CLAIM STATUS

The property consists of two reverted crowngranted mineral claims, as shown in Table I, Figure 3. These claims were crowngranted in 1907.

	TABLE I				
Claim Name	Tenure	Area	Location Date	Current Expiry Date	Registered Owner
Margaret (Lot 109)	253829	25.0	March 22, 1990	January 20, 2020	J. Shearer
Henrietta (Lot 110)	253830	25.0	March 22, 2990	January 20, 2020	

* With assessment work credit documented in this report.

Under the present status of mineral claims in British Columbia, the consideration of industrial minerals requires careful designation of the product end use. An industrial mineral is a rock or naturally occurring substance that can be mined and processed for its unique qualities and used for industrial purposes (as defined in the *Mineral Tenure Act*). It does not include "Quarry Resources". Quarry Resources includes earth, soil, marl, peat, sand and gravel, and rock, rip-rap and stone products that are used for construction purposes (as defined in the *Land Act*). Construction means the use of rock or other natural substances for roads, buildings, berms, breakwaters, runways, rip-rap and fills and includes crushed rock. Dimension stone means any rock or stone product that is cut or split on two or more sides, but does not include crushed rock.

Cash may be paid in lieu if no work is performed. Following revisions to the Mineral Tenures Act on July 1, 2012, claims bear the burden of \$5 per hectare for the initial two years, \$10 per hectare for year three and four, \$15 per hectare for year five and six and \$20 per hectare each year thereafter.

HISTORY

The Margaret Claim was located by Mr. A.D. Donaldson on May 27, 1896, and was crowngranted in 1907. The Henrietta Claim was staked by F.C. Pell at about the same time. Attention focussed on chalcopyrite in massive sulfides associated with skarn formation. The property was examined by J. Cummings of the B.C. Department of Mines in the 1930's, and his brief notes refer to a quartz deposit of more than 10,000 tons visible assaying 98.8 to 99.3 percent silica. Modern exploration began when Falconbridge Nickel Mines Ltd. (formerly Ventures Ltd.) prospectors M. Hepler and S. Bridcut, under the direction of J.J. McDougall, located the Banker 1-4 Claims to cover the Discovery Zone in 1960. Initial exploration focussed along the metasedimentary belts in the vicinity of intersecting airphoto lineaments. Little work was done on Banks Island in 1961 or 1962 due to commitments at the Catface porphyry copper deposit. Several important discoveries were made in 1963 by Falconbridge, including the Kim, Bob, Englishman, Keech and Crossbreak Zones.

The Tel 23 to 32 two-post claims were located by J.W. MacLeod on July 1, 1963 (recorded July 12, 1963), for McIntyre Porcupine Mines Ltd. Mr. MacLeod had been attracted to Banks Island as a result of high grade gold values intersected by Falconbridge Nickel Mines Ltd. in the April 1963 diamond drilling on the Discovered Deposit. Holy LY-2 on Discovery Zone averaged 0.719 oz/ton gold, 1.86 oz/ton silver and 0.25 percent copper over 50.0 feet (15.24m). McIntyre had recently purchased a controlling interest in Falconbridge and was thus privy to such confidential information.

Prior to locating the Main Tel Zone, J.W. MacLeod staked two other groups as tie-on to the Falconbridge ground. These were Tel 1-10 (North Group) to cover ground along the expected strike of the central metasedimentary belt north of Gladys Lake and along the east shore of West Banks Lake. Tel 11-22 (East Group) were located between Crazy Lake and Kim Zone. As a wordplay on the Bank-Banker claims, MacLeod chose Teller (as in cashier).

Field work on the Banks Island Claims by Trader Resource Corp. started on February 18, 1984. An overall geological map at 1:2500 was produced of the entire property in conjunction with 1:500 mapping around the main showings. The majority of 1975 drill core was relogged by J. Shearer. This core was subsequently moved to the main store storage facilities at Beaver Lakes. Much of the initial work focussed on locating and defining the source of airborne (Dighem) geophysical anomalies, the results of a survey flown in March 1984. To complement the geological mapping, soil samples were collected over the entire area and analyzed for gold.

The major phase of work on the Patsey Cove Silica Deposit was in the early 1960's by Alfred R. Allen, P.Eng., for the Canadian Western Syndicate. E.J. Stephen wrote a report describing the Patsey Cove area, mineral deposits, and the proposed road-barge loading facilities.

In the later 1960's, ownership of the claims was acquired by Crippen & Associates, who commissioned a first order prefeasibility study by M.E., Hertel of Stearns-Rodger Canada Ltd. No further work was done until the mid-1980's when the property passed to individuals associated with the Trader Resource Corp. programs on central Banks Island encompassed by the Yellow Giant property.

The purity, in conjunction with the location, of the Patsey Cove silica deposit with respect to Kitimat, B.C., allows for the opportunity of the production of a high purity silicon carbide powder. There is a market, both at Kitimat (Alcan), as well as with other consumers in which the end use is in the manufacturing of high density advanced ceramics.

An environmentally safe process has been developed by the Materials and Metallurgical Engineering Department of Queens University in which silicon carbide powders can be produced without the use of hydrofluoric leaching and in which only limited milling is required.

The price of this type of silicon carbide can be highly competitive and depending on the size of the market, the product can be priced as low as \$10/kg. The current price of this quality silicon carbide is presently between \$30 and \$60/kg.

At present, Alcan imports all of its silicon carbide needs from eastern Canada. Also there is no competitively functioning micro9 silicon carbide producer for west coast users that is located with an area that is transportation sensitive, nor are there any upgraded facilities that could compete with the quality of material that could be produced as sub-micro size powders of silicon carbide with the wide range of applications as the possible Patsey Cove product.

Further studies should be undertaken to determine local and distant market potential with the assistance of industry and governmental partners to assess both the short and long term economics of a project of this nature.

FIELD PROCEDURES

Several very old claim posts were noted in the general area of the main silica zone but no tags have survived. Drill stations were spotted using compass and hip chain measurements.

Drilling was completed in 1993. Each hole was logged in a preliminary fashion before splitting, and percentage of core recovery was calculated against the drilling interval, marked on wooden blocks. Final logging was carried out after the core was split. Drilling was done in feet and converted to metres for logging and sampling using the conversion 1 foot = 0.3048 metres. Core recovery was consistently high in the quartz diorite but variable in the quartz zone.

Each wooden core box was labelled with a metal Dymo strip showing hole number, box number and contained interval. All core is presently stored at Unit 5 – 2330 Tyner Street, Port Coquitlam.

The distinctive elements of the drill logs include a visual pattern log with symbols for rock type and other columns for: (1) alteration such as silica, sericite, chlorite and calcite; (2) fracturing; (3) sulfide content; (4) box number; (5) drilling interval; and (6) associated core recovery for each interval. A normal written log accompanies the appropriate part of the visual log.

The drillcore was securely stored since 1993 and was carefully spit and assayed at ALS Chemex Labs in 2005. Assays from 2005 are shown in Appendix IV

REGIONAL GEOLOGY

Regional geological features have been compiled by Roddick (1970) as Map 23-1970, Figure 4, mainly from field work conducted by the Geological Survey of Canada in 1963 along coastal exposures and in 1964 by very wide spaced landings with a helicopter on interior sites.

Banks Island lies along the western edge of a long, relatively narrow belt of plutonic and metamorphic rocks called the Coast Plutonic Complex. This forms one of the major geological components of British Columbia, extending from northern Washington through the Coast Mounts into southeast Alaska and Yukon Territory. General descriptions of the Complex have been given by Roddick and Hutchinson (1974) and Woodsworth and Roddick (1977). The following overview is taken mainly from these sources.

Recent interpretations of the western Cordillera (Monger and Irving, 1980) have identified several major terranes which have been accreted to the North American craton by transcurrent faulting and subduction. Banks Island metasedimentary rocks belong to the Alexander terrane.

The Alexander terrane in adjacent less deformed southeast Alaska is composed of Carboniferous carbonate and clastic sediments unconformably overlain by Upper Triassic limestone and Lower and Middle Jurassic felsic to intermediate volcanic rocks.

The Coast Plutonic Complex consists largely of intermediate and basic discrete and coalescing granitoid plutons, bodies of gneiss – migmatite and pendants (septa) of metasediments and volcanics. It is an asymmetric array, with a central gneiss core flanked by diorite and dioritic migmatites, most plentiful in the west, and granodiorite and quartz monzonite, most common in the east. Metamorphic intensity increases from greenschist facies in the eastern part of the belt to amphibolite (locally granulite) facies in the central and east-central parts. Woodsworth and Roddick (1977) suggest that most of the plutons in the Coast Mountains have been emplaced as diapiric solids, analogous to glacier flow and salt domes. Many contacts between plutons and pendants are faults or drag fold formed during formation of the igneous bodies. Some faults have been healed by re-crystallization. The clearest examples of "solid" movement of plutons are the several "tadpole"-shaped intrusions that have gradational to intricate contacts along their "tails". When the rock was more solid, movement could only take place by re-crystallization flowage, and this gave rise to internal foliation within the pluton. The quartz diorite and granodiorite are rarely uniform over broad areas. Zones of migmatite and small, lensoid amphibolitic inclusions are ubiquitous but variable in abundance.

The main intrusive period lasted through most of the Cretaceous from about 120 Ma (million years ago) to 85 Ma, but was followed by two discrete later pulses at 70 \pm 10 Ma, and 50 \pm 5 Ma. The plutonism is widely regarded as evidence of heat generation on collision and suturing of the outboard terranes (Wrangellia and Alexander) on the inboard (Stikinia). Study of the metamorphic hosts, now evident as pendants and inliers, and which may be both intruded and protolith, enable tentative identification through the ghost stratigraphy of the terrane of origin. In the central coast area most inliers south of Burke Channel can be assigned a Wrangellian origin. North of Burke Channel and west of Work Channel lineament, inliers and pendants are fairly certainly part of the Alexander terrane whereas east of the lineament they appear to be part of Stikinia. The prominent Central Gneiss Complex (Tracy Arm) may be a highly deformed and metamorphosed amalgam of Stikinia and Alexander terranes unconformably overlain by an overlap assemblage equivalent to the Gramina-Nutzotin rocks of southeast Alaska.

Roddick (1970) reports that contact relationships everywhere indicate the more felsic plutonic rock to be younger than any more mafic plutonic rock in contact with it, but isotopic ages are related to the position of the plutons across the best. Isotopic ages range from Early Cretaceous in the west to Late Cretaceous near the axis of the crystalline belt to Tertiary on the east side. The following time chart has been compiled to assist in correlation of the mineralizing events.

The central part of Banks Island is underlain by Unit 10b, Figure 4, a biotite-hornblende quartz monzonite. Surround rocks are hornblende-biotite granodiorite (unit 9c). To the east and west are large bodies of hornblendebiotite quartz diorite (unit 8b). Basic, gneiss-diorite-migmatite complexes (unit 5b) flank the quartz diorite. This outward zoning from a felsic core to progressively more basic rocks supports a conclusion from detail petrographic work that intrusive rocks on Banks Island are inter-related and are part of the same zoned pluton. Small scale irregularities reflect the complexities along the contacts between major phases.

Metasedimentary rocks are exposed over about 7% of Banks Island. They probably correlate with either the Dunira Formation of Early to Middle Pennsylvanian age (Woodsworth and Orchard, 1985) or Upper (Norian) Triassic Randall Formation exposed on the less metamorphosed islands northwest of Prince Rupert. On Banks Island the metasedimentary rocks are contained mainly in long, narrow northwesterly trending belts. The longest metasedimentary belt, from Banks Lake to Keecha Lake, is 18 km in length. North of Waller Lake this Banks-Keecha belt splits into two arms which is the probable result of large scale folding.

TIME CHART

TIME	NAME or EVENT	REMARKS
Upper Tertiary to Recent	Isostatic rebound	Oxidation of sulfides
Glaciation		
50 Ma	Intrusive event	
Eocene	Uplift of Coast Mountain core oblique	Northeast dipping thrust faults
	subduction	
70Ma	Intrusive event	
Tertiary		
85 Ma (80 Ma:k/Ar date on	Sericite from Surf Inlet associated with minera	lized shear zone)
Upper Cretaceous	Major transcurrent fault movement of up to	Major faulting/drag folding
	300 km, right lateral	
Cretaceous	Formation of Coast Plutonic Complex. Major	Intrusion of diorite/monzonite
	intrusive event	
120 Ma (123 Ma;-Zircon date	e of Tel Zone diorite sill and k/Ar date of Kim Zo	ne sericite – associated with late-stage
quartz-pyrite veining	3)	
Jurassic	Randall Formation limestone-dolostone	
	Upper Triassic intrusives (Windy-Craggy)	Possible first phase pyrite
		mineralization in Tel Zone
Triassic-=Jurassic	Suture of Alexander and Wrangellia	
	terranes into one superterrane	
Early Triassic	Erosional unconformity	(possibly karst/solution collapse at Tel
		Zone)
Early to Middle Pennsylvanian	Dunira Formation equivalent. Marble and	Deposition of Tel Zone host rocks
	shale	



Figure 4 Regional Geology 1:300,000



possibly some modification

Figure 5 Silica Zone Sketch Map, 1:500

LOCAL GEOLOGY and 1993 DIAMOND DRILL RESULTS

The general geological setting of the Patsey Cove area (Figures 5 and 6), is composed of a northwest trending slightly foliated quartz diorite.

Several outcrops of pure white quartz occur on the northwest side of Donaldson Creek (Figure 6). The outcrops define a northeasterly trending body exposed over an area measuring at least 70 metres in width by 30 metres in length. Contacts are not exposed. The quartz is usually massive, coarse-grained and milky white, but minor amounts of smoky quartz are present. Some zones are intensely fractured with the fracture surfaces being clean or rust-stained. Orange-weathering quartz, with a slightly granular texture, occurs in one place.

Two other small bodies of quartz are exposed in Donaldson Creek to the southwest of the main group of outcrops. This quartz is white weathering, coarse-grained and massive. It contains veinlets of magnetite as well as amphibolitic inclusions and is therefore less pure than the quartz in the main outcrops. The inclusions are rich in actinolite and are mineralized with pyrite, pyrrhotite and magnetite. Smoky quartz is associated with the inclusions. A larger body of mineralized amphibolite measuring 6 by 18 metres occurs further to the east in the creek (J. Pell, 1982).

A chip sample taken over approximately 7 metres along the south face of a cliff was collected by the Geological Survey Branch in 1982 by J. Pell. The sample was comprised mainly of clean white vein quartz with minor amounts of smoky and rust-stained quartz. It assayed as follows:

•		
SiO ₂	99.26	percent
AI_2O_3	<0.04	percent
Fe_2O_3	<0.05	percent
MgO	<0.03	percent
CaO	<0.03	percent
Na ₂ O	<0.04	percent
K ₂ O	<0.02	percent
TiO ₂	<0.02	percent
MnO	<0.002	percent
LOI	<0.1	percent

In one place there, the contact between quartz and granodiorite is exposed, striking 264° and dipping sub-vertically to the north.

In the creek, last of these outcrops is a large body of mineralized amphibolite. It is presumably a megaxenolith within the quartz diorite (Fig. 6).

Two diamond drillholes were completed on the property during August of 1993. A total of 245 feet (74.7m) of IAX core was produced from holes PC-93-1 and PC-93-2. The holes were drilled along a north/south section (Section A-B, Fig. 7) to cut the lithologic units perpendicular to their strike. The holes were designed to ascertain the thickness of the high grade silica zone exposed on surface as well as geometry of deposit.

Drill hole PC-93-1 was drilled at an angle of -50° toward the south (Fig. 7). The hole intersected 94 feet (28.65m) of coarse grained massive chloritized quartz diorite. A 7-feet (2.1m) thick dike of fine grained porphyritic diorite was intersected at 12 feet (3.65m) within the coarse grained quartz diorite unit. From 94 feet (28.65m) the drill hole intersected intercalated zones of massive white quartz and quartz-flooded actinolite skarn. Dark green massive chlorite clots scattered throughout white massive quartz patches characterize the appearance of these quartz-flooded skarn zones. Minor amounts of pyrrhotite are disseminated throughout the skarn zone while specular hematite occasionally rims the chlorite-rich patches. Carbonate alteration is of weak to moderate intensity in the skarn and chlorite-rich patches. The hole bottomed in the massive milky white quartz at 206 feet (62.78m). Hole PC-93-1 intersected a total core length of 112 feet (34.14m) of silica alternating with siliceous chlorite-actinolite skarn.

Drill hole PC-93-2 was drilled at -90 and is located 78 metres south of hole PC-93-1 near Donaldson Creek (Fig. 2). The hole collared in the massive milky white quartz zone. The hole remained in the massive quartz zone to a depth of 39 feet (11.9m). Strong fracturing caused significant core loss and drilling difficulties, thus preventing the hole from continuing into the quartz-actinolite zone. Minor amounts of chlorite-rich clots were found within this massive zone. Between 33 and 35 feet (10m and 10.67m) several fractures at 50° to core axis carried traces of magnetite, pyrite and chalcopyrite films. Assays from the core spit in 2005 are plotted on Figure 7.

From the surface geology exposure and the 1993 diamond drilling a preliminary resource inventory of high grade silica can be estimated. Based on a minimum central zone of massive quartz (excluding the intercalated actinolite-chlorite skarn margin) with dimensions of 250 feet length (76.2m) by 140 feet width (42.67m) by 200 feet depth (60.96m), the possible inventory of high grade silica is 540,000 tons. The inclusion of 50 percent of the skarn margin, in the event that sorting can be readily accomplished, increases the inventory to about 700,000 tons of high grade silica. With the limited amount of drilling and considerable surface exposure remaining untested, there is considerable potential to increase reserves both along strike and at depth.



ii.



Figure 7 Airphoto Key Map

AIRPHOTO INTERPRETATION 2014

A total of 16 colour airphotos were received on digital DC format (consisting of external hard drive). Each photo was greater than 1 GB of data. A selection of low digital scans of the printed product are contained in Appendix III. Each photo was plotted on standard airphoto size as to 9 inch by 9 inch and grouped to the flight lines.

The most important series are: Flight line Photo 1, Photo 2, Photo 3, Photo 4 Flight line Photo 5, Photo 6, Photo 7, Photo 8 Flight line Photo 9, Photo 10, Photo 11, Photo 12

A transparent overlay was attached and the prominent geological features as mapped were noted. Each stereo pair was examined in detail using a Gordon stereoscope type F-71 serial #9466. Detailed attention was given to the mapped location of the known phosphorite horizons.

In the Coast Plutonic Belt the early structures of the terranes are largely obliterated. However, the Work Channel Lineament and/or the western edge of the Central Gneiss Complex probably originated as the suture of Alexander terrane against Stikinia. The discovery of gold mineralization in the early 1960's resulted from an aircraft assisted prospecting program designed to investigate north coast lineaments (McDougall, 1972). Banks Island has an unusual density of faults, fractures and lineaments. The Island is bounded by deep seated, major faults that are assumed to have right-lateral displacement.

Blanchet (1983) has carried out a preliminary analysis of airphoto linears to the west of the Patsey Cove Property. Two major, right lateral faults with an average trend of 310° are recognized: A very common direction for linears is 045° which Blanchet attributes to the movement along the 310° trending faults. Left lateral faults trend 090°.

Many of the linears on Figure 8 are almost east-west with an intersecting set trending northeast-southwest.



Figure 8 Airphoto No. 6/12

CONCLUSIONS and RECOMMENDATIONS

The Patsey Cove Silica Deposit is hosted by foliated quartz diorite within which an extensive massive, white quartzphase skarn zone has developed as a partial replacement of a large inclusion of metasediments. Chlorite and actinolite alteration assemblages surround and are intercalated with the margins of the quartz zone. Sulfides consisting of pyrrhotite, magnetite, chalcopyrite and pyrite are found within skarns near the quartz zone.

The massive milky quartz zones that contain no skarn material contamination assay greater than 99 percent SiO_2 and present desirable, high quality product potential. Assays done in 2005 support these surface sampling ($SiO_2 + Fe_2O_3$)

The surface exposure and limited diamond drilling carried out in 1993 based on a minimum central zone of massive quartz measuring 250 feet (76.2m) long by 140 feet (42.67m) width by 200 feet (60.96m) depth, yields a reasonable possible resource inventory of 540,000 tons of high grade silica. By including 50 percent of the silicarich skarn margin (should sorting be a viable option), the inventory increase to approximately 700,000 tons of high-grade silica, it can be observed that even a small amount of additional drilling will add to this inventory.

Respectfully Submitted,

J. T. Shearer, M.Sc., P.Geo. February 15, 2014

RECOMMENDATIONS

It is recommended that further work be carried out on the Patsey Cove Silica Deposit to better define and outline the high-grade silica core zone. This work would explore the geometry and geologic parameters of the deposit at depth as well as increase the ore reserves to a level where profitable mining can begin in the near future. A Phase II program of diamond drilling, trenching and geological mapping is required to meet the above objectives. Appropriate drill sites are shown of Figure 6. A minimum of 2,000 feet (609.6m) of diamond drilling is recommended. Further drilling would be dependent on the results of this secondary program.

It is recommended that an environmental baseline study be initiated prior to or during the drilling program. Part of this environmental assessment should include initiating liaisons with appropriate agencies and a marine biological assessment.

Transit surveying of the drill sites and other topographic features should be done to aid in the preparation of control maps which will be required for production development and environmental assessments.

Metallurgical testing of several drill samples and surface samples of high-grade silica zone material and silica-rich skarn margin material is recommended to assess sorting and upgrading of material that will be potentially mined.

Investigation of the feasibility and cost of establishing a portable shipping facility at Patsey Cove is recommended. The cost of this Stage II work program will cost \$102,000.00. With encouraging results form the Stage II program, a Phase III program entailing the extraction of a 10,000 ton bulk sample should be initiated.

RECOMMENDATIONS

PHASE I Geological mapping, surveying diamond drilling, marine biological assessment, Quarry prospectus preparation

PHASE II

Geological mapping and Drill Supervision + GST	\$ 9,500.00
Transportation	
Port Hardy – Prince Rupert	500.00
Prince Rupert – Patsey Cove	2,000.00
Vancouver – Prince Rupert	1,000.00
Drill Mobilization and Demob	5,000.00
Analytical 200 Samples @ \$25 ea	5,000.00
Camp Costs and Food (above contract price)	1,500.00
Communications (Radio phone)	300.00
Contract Diamond Drilling – 2,000 feet @ \$16/ft	32,000.00
Move Costs (above the 8 hour per move)	5,000.00
Field Supplies – Core Boxes: 80 boxes @ \$10 ea	800.00
Report Preparation	2,500.00
Word Processing – Reproduction	500.00
Marine Biological Assessment	8,000.00
Quarry Prospectus Preparation	6,000.00
Transit Survey	9,000.00
Fuel for Drill and Camp	2,000.00
GST on Contract Drilling	1,400.00
Contingencies (10%)	10,000.00
Grand Total	102,000.00
Bond for Drill Program (refundable)	1,500.00
Approximately	\$103,500.00
PHASE III Contingent on favourable results of Phase II	
Geological Supervision and Government Liaison	\$10,000.00
Surveying Contract`	8,000.00
Transportation	2,500.00
Communications	500.00
Further Marine Biological Assessment	6,000.00
Camp Costs and Food	2,000.00
Quarry Mine Plan Preparation	6,000.00
Word Processing – Reproduction	1,000.00
Legal Survey of Claims	10,000.00
Contingencies (15%)	7,000.00
Grand Total	\$53,000.00
PHASE IV	

Bulk Sample Shipment 10,000 tonnes and Quarry Development

\$200,000.00

Respectfully submitted,

J. T. Shearer, M.Sc., P.Geo. Consulting Industrial Mineral Geologist

REFERENCES

Allen, A.R., 1936a:

The Campania Island Silica Deposits for the Canadian Western Syndicate, April 1963, 16pp.

1963b:

Preliminary Report on the Mineral Deposits near Patsey's Cove, Banks Island, for the Canadian Western Syndicate, April 1963, 6pp.

1963c:

Patsey Cove Silica, for the Canadian Western Syndicate, May 1963.

Blanchet, P.H.T.:

An Initial Photo-Structural Analysis of a Portion of the Yellow Giant Property, Trader Pre-Feasibility Study, 4pp.

Buchan, 1976:

Rock Classification of samples from Banks Island, B.C., Falconbridge Nickel. Miens, June 13, 1976.

Candy, C. and White, G.E., 1978:

Banks Island Electromagnetic and Induced Polarization Survey, Hecate Gold Corp., April 10, 1978, 3pp. and 30 figures.

Champigny, N., 1984a:

Reserve Calculation of the Kim Deposit, International Geosystems Corp., November 22, 1984, 1p.

1984b:

Reserve Calculation of the Bob Deposit, International Geosystems Corp., November 30, 1984, 1p.

Charteris, 1964:

Notes on Banks Island, July 6, 1964, Falconbridge Nickel Mines, 3pp.

1965a:

Geochemical Surveys, Banks Island – 1964, May 18, 1965, Falconbridge Nickel Mines.

1965b:

Summary Report on Banks Island – 1964, Falconbridge Nickel Mines, April 12, 1965, 4pp.

Collings, R.K. and Andrews P.R.A., 1986:

Canadian Silica Resources: A study of the Processing of Ontario Potsdam Sandstone for Glass and Foundry Sand. CIM Bulletin, Vol. 79, No. 887, March 1986, pp. 87-92.

Cummings, J., 1930:

Patsey Cove Silica, B.C. Minister of Mines Annual Report, p.68.

Dadson, 1976:

Banks Island, Property Review, Falconbridge Nickel Mines Ltd., May 12, 1967, 2pp.

Elliott, I.L., 1975a:

Geochemical Report on the Yellow Group – Bank Mineral Claims, Falconbridge Nickel Mines Ltd., June 20, 1975, 4pp.

1975b:

Geochemical Assessment Report on Yellow, Blue, Green and Gro Groups, Bank and Banker Mineral Claims, Falconbridge Nickel Mines Ltd., November 26, 1975.

Elliott, I.L. and Brown, D.H., 1974:

Geochemical Report, Banks Island, Banker Mineral Claim, Yellow/Blue/Green Groups, Falconbridge Nickel Mines Ltd., May 8, 1974.

Foye, G., 1987:

Silica Occurrences in British Columbia; B.C. Ministry of Energy, Mines and Petroleum Resources, Open File 1987-15.

Gamble, A., 1965:

Prospecting Banks Island, September-October 1965, Falconbridge Nickel Mines Ltd., November 8, 1965, 3pp.

Giroux, G.H., 1986:

A Geostatistical Study of Trader Resource Ltd., Tel Deposit, Montgomery Consultants Ltd., June 9, 1986, 25pp.

Harris, J., 1985a:

Petrographic Study of Gold Occurrence from the Kim, Discovery and Bob Deposits, TRM Engineering Ltd., 10pp.

1983b:

Geochemistry in Exploration for Gold at the Yellow Giant Property, TRM Engineering Ltd., September 1985, 9pp.

1984a:

Recommendation for Geochemical Programmes at Yellow Giant Property, TRM Engineering Ltd., April 1984, 8pp.

1984b:

A Proposed Programme of Soil Geochemistry in a Belt Centred on Quartz Hill, TRM Engineering Ltd., May 1984, 4pp.

1984c:

A Geochemical Orientation Study at Yellow Giant Property, TRM Engineering Ltd., June 1984, 14pp.

Hawthorn, G.W., 1986a:

Progress Report #1, Metallurgical Evaluation of Tel Deposit, Banks Island, B.C., May 1986, 20pp.

1986b:

Progress Report #2, Metallurgical Evaluation of Tel Deposit, Banks Island, B.C., July 1986, 20pp.

Hertel, M.E., 1966:

The Banks Island Quartz Deposit for Crippen & Associates Ltd., May 5, 1966, 7pp.

Hubacheck, W.A., 1963:

Visit to Banks Island, B.C., Memo, McIntyre Mines Ltd., November 22, 1963, 3pp.

Hutchinson, W.W., 1982:

Geology of the Prince Rupert-Skeena Map Area, B.C., Geological Survey of Canada, Memoir 394.

Kidlark, R.G., 1984a:

Report on Geology, Yellow Giant Property, TRM Engineering Ltd., August 13, 1984, 21pp.

1984b:

Progress Report, Banks-Barge Linear, TRM Engineering Ltd., September 19, 1984, 4pp.

Laker, E.T., 1986:

Preliminary Report on Mineral Inventory Assessment by H.A. Simons Ltd. for TRM Engineering Ltd., May 30, 1986, 7pp. and 10 attachments.

Lakefield Research Reports – Banks Island Project:

1 Microscopic Examination May 1, 1973 (Scobie & Bigg) 2 Recovery of Gold & Silver June 5, 1973 (Scobie & Bigg)

Laznicka, P., 1974:

Lithotheque, A system of rock and mineral specimens arrangement in Geological Education Documentation and Exploration Publication No. 5, Centre for Precambrian Studies, University of Manitoba, 1972, 32pp.

1975:

Exploring with Lithotheque, Western Miner, February 1975, pp. 32-39.

Lloyd, J., 1983:

Geophysics in exploration for Gold at the Yellow Giant Property, TRM Engineering Ltd., September 12, 1983, 5pp.

Magee, J.B. and Seraphim, R.H., 1977:

Bank, Banker and Tel Claims, Banks Island, Sproatt Silver Mines Ltd., April 19, 1977.

1977:

Progress Report, Banks Island, Hecate Gold Corp., November 8, 1977, 7pp.

1978:

Banks Island Project, Tel Proposal, Hecate Gold Corp., February 6, 1978, 8pp.

Manchuk, B., 1976:

Geological Report on Banks Island, Falconbridge Nickel Mines, March 31, 1976, 18pp plus maps.

1977:

Final Report on Banks Island Gold, Falconbridge Nickel Mines, February 28, 1977, 6pp. plus drill logs.

McClaren, M., and McDougall, J.J., 1983:

Geological Report, Yellow Giant Project in Pre-feasibility Report by TRM Engineering Ltd. for Trader Resource Corp., 30pp.

MacLeod, J.W., 1964a:

Memo on Self-Potential test and No. 4 Zone, McIntyre Porcupine Mines Ltd., April 4, 1964, 2pp.

1964b:

Memo on Geology of West No. 1 Area, McIntyre Porcupine Mines Ltd., May 11, 1964, 2pp.

1964c:

Review of Banks Island Claims, B.C., McIntyre Porcupine Mines Ltd., June 25, 1964, 5pp.

1964d:

Letter to W.H. Hubacheck, North Group, McIntyre Porcupine Mines Ltd., June 112, 1964, 1p.

1964e:

Report on Banks Island Claims, McIntyre Porcupine Mines Ltd., October 5, 1964, 10pp.

McDougall, J.J., 1961:

Banks Island Gold, Falconbridge Nickel Mines Ltd., January 10, 1961.

1963:

Banks Island Gold, Falconbridge Nickel Mines Ltd., December 1963.

1964a:

Geochemical Report, Banker Claims, Banks Island – 1964.

1964b:

Banks Island Gold, Falconbridge Nickel Mines Ltd., April 21, 1964, 29pp.

1965a:

Geophysical Report, Waller Claims, Banks Island – 1964.

1965b:

Geochemical Report, Banker Claims, Banks Island – 1965.

1972:

The Relationship between Lineaments & Mineral Deposits on Banks Island, Programme and Abstracts, Geological Association of Canada Symposium of faults, fractures, linemeaments & related mineralization in the Canadian Cordillera.

Mitchell, J.G.B., 1986:

Tel Deposit, Banks Island (Mining), TRM Engineering Ltd., February 28, 1986, 15pp.

Presunka, S., and Elliott, I.L. and Brown, D.H., 1973:

Geophysical and Geochemical Assessment Report on Gro Group, Falconbridge Nickel Mines Ltd., July 12, 1973.

Roddick, J.A., 1970:

Douglass Channel – Hecate Strait Map Area, B.C., Geological Survey of Canada, Paper 70-41, 56pp.

Roddick, J.A., 1983:

Geophysical Review and Composition of the Coast Plutonic Complex, South of Latitude 55°N Circum-Pacific Plutonic terraines. Geological Society of America, Memoir 159, pp. 91-108.

Roddick, J.A. and Hutchinson, W.W., 1974:

Setting of the Coast Plutonic Complex, B.C. Pacific Geology, V. I, pp. 91-108.

Salt, D.J., 1962:

Geophysical and Survey, Banks Island, Falconbridge Nickel Mines Ltd., November 23, 1962.

1965:

Geophysical Survey, Banks Island, Falconbridge Nickel Mines Ltd., January 11, 1965.

Seraphim, R.H., 1975a:

Tel Claims, Banks Island, Sproatt Silver Mines Ltd., June 6, 1975, 6pp.

1975b:

Tel Claims, Banks Island, Sproatt Silver Mines Ltd., October 23, 1975, 7pp.

1975c:

Tel Claims, Banks Island, Sproatt Silver Mines Ltd., October 30, 1975, 8pp.

Shearer, J.T., 1984a:

Geological Progress Report No. 1, Petrology, Lithotheque Library and Major Rock Types, TRM Engineering Ltd., July 20, 1984, 25pp.

1984b:

Memo File, March-December 1984, TRM Engineering Ltd.

1985a:

Bob Deposit, Banks Island, TRM Engineering Ltd., January 15, 1985, 23pp.

1985b:

Report on the Yellow Giant Project, Banks Island, February 15, 1985, 85pp plus 101 figures.

1986:

Tel Zone, Banks Island, Trader Resource Corp.

1994:

Diamond Drilling Assessment Report on the Patsey Cove Silica Deposit, March 1, 1994, 40pp.

2006:

Assessment Report on the Patsey Cove Silica Deposit, February 28, 2006, 49pp.

Shearer, J.T., and Seraphim, R.H., 1985:

Bob Deposit, Banks Island, Trader Resource Corp., February y, 1985, 22pp.

Shore, G., 1985:

Interim Report of E-Scan Survey Progress, Tel Group, TRM Engineering Ltd., Premier Geophysics, June 15, 1986, 6pp.

Siewert, P.W.G., 1990a:

Business Opportunities in Silicon-based Manufacturing in British Columbia. Prepared by Cominco Engineering Services Ltd., Project X36.1, April 16, 1990, 23pp. 1990b:

Pre-Feasibility Study of a Silicon Metal Product Plant in British Columbia Cominco Engineering Ltd., December 1990, 38pp & Appendix A to C.

Smith, A., 1947:

Control of Ore by Primary Igneous Structures, Pocher Island, B.C., Bulletin Geological Society of America, V. 58, pp. 245-262.

Smith, P.A., 1984:

Dighem III Survey of the Yellow Giant Property, Banks Island, TRM Engineering Ltd., Dighem Ltd., May 11, 1984, 60pp. plus maps.

Symons, D.T.A., 1977:

Paleomagnetism of Mesozoic Plutons in the Westernmost Coast Complex of B.C., Canadian Journal of Earth Sciences, V. 14, No. 9, pp. 2127-2139.

Varrey, G.A., 1973:

Banks Island Gold Review, Falconbridge Nickel Mines Ltd., May 2, 1973, 18pp.

Warren, H.V. and Cummings, J.M., 1936:

Mineralogy of the Surf Point and Hunter Veins, Canadian Institute of Mining and Metallurgy, June 1936.

White, G.E., 1975:

Induced Polarization Survey, Tel Deposit, Sproatt Silver Mines Ltd., November 1975, 1p. plus maps.

Wrigglesworth, L.A., 1977:

Hecate Gold Corp., Banks Island, B.C., Falconbridge Nickel Mines Ltd., Memo November 23, 1977, 3pp.

Wiswall, G., 1981:

Banks Island Review, Moneca Mine Development, June 1, 1981.

Woodsworth, G.J. and Roddick, J.M., 1977:

Mineralization in the Coast Plutonic Complex of BC., south of latitude 55°N, Geological Society of Malaysia, Bulletin 9, pp. 1-16.

Woodsworth, G.J. and Orchard, M.J., 1985:

Upper Palaeozoic to Lower Mesozoic strata and the conodonts, Western Coast Plutonic Complex, B.C., Canadian Journal of Earth Sciences, Fol. 22, No 9. pp. 1329-1344.

Yorath, C.J. and Chase, R.L., 1981:

Tectonic History of the Queen Charlotte Islands and Adjacent Areas – a Model, Canadian Journal of Earth Sciences, V. 18, No. 1, November 1981.

Zastavnikovich, S., 1975:

Geochemical Report, Banks Island Summary of Soil Sampling 1963-1664 and 1973-1974, Falconbridge Nickel Mines Ltd., May 1975.

1976:

Summary of Work Done on Banks Island in 1975, Falconbridge Nickel Mines Ltd., March 1976.

Appendix I

Statement of Qualifications

February 15, 2014

10.0 STATEMENT OF QUALIFICATIONS J. T. Shearer, M.Sc., P.Geo.

I, Johan T. Shearer of 3572 Hamilton Street, in the City of Port Coquitlam, in the Province of British Columbia, do hereby certify:

- 1. I graduated in Honours Geology (B.Sc., 1973) from the University of British Columbia and the University of London, Imperial College, (M.Sc. 1977).
- 2. I have practiced my profession as an Exploration Geologist continuously since graduation and have been employed by such mining companies as McIntyre Mines Ltd., J.C. Stephen Explorations Ltd., Carolin Mines Ltd. and TRM Engineering Ltd. I am presently employed by Homegold Resources Ltd.
- 3. I am a fellow of the Geological Association of Canada (Fellow No. F439). I am also a member of the Canadian Institute of Mining and Metallurgy, and the Geological Society of London. I am a member in good standing of the Association of Professional Engineers and Geoscientists of British Columbia (P.Geo., Member Number 19,279) and an elected fellow of the Society of Economic Geologists (SEG) Fellow #723766.
- 4. I am an independent consulting geologist employed since December 1986 by Homegold Resources Ltd. at Unit #5 2330 Tyner Street, Port Coquitlam, British Columbia.
- 5. I am the author of the report entitled "Airphoto Interpretation Report on the Patsey Cove Silica Deposit, Donaldson Creek Area, February 15, 2014".
- 6. I visited the property in 1993 and collected the samples for assay and further conducted an Airphoto Interpretation in February 2014. I am familiar with the regional geology and geology of nearby properties. I have become familiar with the previous work conducted on the Gordon-Manning Creeks Property by examining in detail the available reports, plans and sections, and have discussed previous work with persons knowledgeable of the area.

Dated at Port Coquitlam, British Columbia, this 15th day of February, 2014.

Respectfully Submitted

J.T. Shearer, M.Sc., F.G.A.C., P.Geo. February 15, 2014

Appendix II

Statement of Costs

February 15, 2014

Appendix II STATEMENT of COSTS 2014 DONALDSON CREEK AREA PATSEY COVE AREA CLAIMS

	Total without HST
J. T. Shearer, M.Sc., P.Geo., 2 day2 @ \$700/day, Airphoto Interpretation	1,400.00
Airphotos - Colour, Digital – 12 Photos (CRM) (GeoBC) x \$20.25	243.00
Printing Photos (Vector)	65.00
Report Preparation by J. Shearer	1,400.00
Word Processing and Reproduction	300.00

Total \$ 3,408.00

 Event #
 5484753

 Date Filed
 January 12, 2014

 Work Filed
 \$ 3,400.00

 PAC Filed
 \$ 726.70

 Total Filed
 \$ 4,126.70

Appendix III

Airphotos

February 15, 2014







Appendix IV

Assay Certificates

February 15, 2014

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

CERTIFICATE VA05022646

Project: Patsey Cove

P.O. No.:

This report is for 17 Rock samples submitted to our lab in Vancouver, BC, Canada on 29-MAR-2005.

The following have access to data associated with this certificate:

JOE SHEARER

UNIT 5, 2330 TYNER ST PORT COQUITLAM BC V3C 2Z1	

HOMEGOLD RESOURCES LTD.

~

Page: 1 Finalized D. 4-APR-2005 Account: MWE

	SAMPLE PREPARATION	
ALS CODE	DESCRIPTION	
WEI-21	Received Sample Weight	
LOG-22	Sample login - Rcd w/o BarCode	
CRU-31	Fine crushing - 70% <2mm	
SPL-21	Split sample - riffle splitter	
PUL-31	Pulverize split to 85% <75 um	
	ANALYTICAL PROCEDUR	ES
ALS CODE	DESCRIPTION	INSTRUMENT
ME-ICP41	34 Element Aqua Regia ICP-AES	ICP-AES
ME-ICP06	Whole Rock Package - ICP-AES	ICP-AES
OA-GRA05	Loss on Ignition at 1000C	WST-SEQ

To: HOMEGOLD RESOURCES LTD. ATTN: JOE SHEARER UNIT 5, 2330 TYNER ST PORT COQUITLAM BC V3C 2Z1 103G 023

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: Presed Com

EXCELLENCE IN ANALYTICAL CHEMISTRY ALS Canada Ltd.

212 Brooksbank Avenue North Vancouver BC V7J 2C1 Phone: 604 984 0221 Fax: 604 984 0218 HOMEGOLD RESOURCES LTD. UNIT 5, 2330 TYNER ST PORT COQUITLAM BC V3C 2Z1 Page: 2 - A Total # ⊢ages: 2 (A - D) Finalized Date: 4-APR-2005 Account: MWE

10 A. A.

Project: Patsey Cove

CERTIFICATE OF ANALYSIS VA05022646

CHARLE SUBJECTION MERCANNER INCOMENCEMENT CONTRACTOR

Sample Description	Method	WEI-21	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06	ME-ICP06
	Analyte	Recvd Wi	SiO2	Al2O3	Fe2O3	CaO	MgO	Na2O	K2O	Cr2O3	TiO2	MnO	P2O5	SrO	BaO	LOI
	Units	kg	%	%	%	%	%	%	%	%	%	%	%	%	%	%
	LOR	0.02	0.01	0.01	0 01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
PC-93-1-95-100 PC-93-1-100-105 PC-93-1-105-110 PC-93-1-105-120 PC-93-1-140-150		2.28 1.38 0.60 1.30 2.50	98.2 98.8 98.5 97.4 97.7	0.46 0.24 0.16 0.26 0.54	0.67 0.51 0.61 0.62 0.86	0.31 0.18 0.18 0.61 0.38	0.23 0.14 0.11 0.14 0.37	0.01 0.02 <0.01 <0.01 0.05	0.01 0.01 <0.01 0.01 0.01	0.01 0.03 0.01 0.04 0.01	0.02 0.01 <0.01 <0.01 <0.01 0.01	0.01 0.01 0.01 0.01 0.01 0.02	0.01 <0.01 <0.01 <0.01 <0.01 <0.01	<0.01 <0.01 <0.01 <0.01 <0.01	<0.01 <0.01 <0.01 0.01 <0.01	0.14 0.15 0.00 0.58 0.49
PC-93-1-150-160		2.82	97.4	0.43	0.75	0.42	0.29	0.04	0.02	0.03	0.01	0.01	0.03	<0.01	<0.01	0.34
PC-93-1-160-170		1.50	96.3	0.22	0.61	0.26	0.14	0.02	<0.01	0.01	0.01	0.01	<0.01	<0.01	<0.01	0.23
PC-93-1-170-176		1.04	97.6	0.40	0.81	0.51	0.36	0.05	0.01	0.04	0.01	0.02	<0.01	<0.01	<0.01	0.39
PC-93-1-176-182		1.56	89.6	1.74	2.23	1.82	1.56	0.26	0.08	0.01	0.08	0.06	0.02	<0.01	<0.01	2.02
PC-93-2-0-5		1.40	98.5	0.05	0.31	0.01	<0.01	0.01	0.01	0.03	<0.01	<0.01	<0.01	<0.01	<0.01	-0.05
PC-93-2-5-10		1.52	98.4	0.05	0.38	0.01	<0.01	0.01	<0.01	0.01	<0.01	<0.01	0.01	<0.01	<0.01	-0.06
PC-93-2-10-15		1.20	98.6	0.19	0.40	0.02	<0.01	0.01	0.02	0.03	0.01	<0.01	0.02	<0.01	<0.01	-0.13
PC-93-2-15-20		0.84	98.6	0.08	0.42	0.02	<0.01	0.01	0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	-0.20
PC-93-2-20-25		0.86	96.9	0.13	0.41	0.09	0.01	0.01	0.01	0.04	<0.01	<0.01	<0.01	<0.01	<0.01	-0.32
PC-93-2-25-30		0.48	96.9	0.11	0.55	0.29	<0.01	0.01	<0.01	0.01	<0.01	0.01	0.01	<0.01	0.01	0.17
PC-93-2-30-35		0.32	96.0	0.31	2.26	0.58	0.07	0.02	0.01	0.04	0.01	0.01	<0.01	<0.01	<0.01	0.15
PC-93-2-35-39		0.18	97.4	0.07	0.78	0.43	<0.01	0.01	0.01	0.02	<0.01	0.01	0.01	<0.01	<0.01	0.26

EXCELLENCE IN ANALYTICAL CHEMISTRY ALS Canada Ltd.

212 Brooksbank Avenue North Vancouver BC V7J 2C1 Phone: 604 984 0221 Fax: 604 984 0218 HOMEGOLD RESOURCES LTD. UNIT 5, 2330 TYNER ST PORT COQUITLAM BC V3C 2Z1 Page: 2 - B Total # jes: 2 (A - D) Finalized Date: 4-APR-2005 Account: MWE

Project: Patsey Cove

CERTIFICATE OF ANALYSIS VA05022646

The second second strength water states

Sample Description	Method Analyte Units LOR	ME-ICP06 Total % 0.01	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 1D
PC-93-1-95-100 PC-93-1-100-105 PC-93-1-105-110 PC-93-1-110-120 PC-93-1-140-150		100.0 100.0 99.6 99.7 100.5	<0.2 <0.2 <0.2 <0.2 <0.2 <0.2	0.06 0.06 0.05 0.07 0.15	<2 <2 <2 <2 <2 2	<10 <10 <10 <10 <10	<10 <10 <10 <10 <10	<0.5 <0.5 <0.5 <0.5 <0.5 <0.5	<2 <2 <2 <2 <2 <2 <2	0.15 0.11 0.12 0.40 0.24	<0.5 <0.5 <0.5 <0.5 <0.5	<1 <1 1 <1 <1	40 120 44 148 47	243 51 25 20 4	0.46 0.36 0.49 0.42 0.59	<10 <10 <10 <10 <10
PC-93-1-150-160 PC-93-1-160-170 PC-93-1-170-176 PC-93-1-176-182 PC-93-2-0-5		99.8 97.8 100.0 99.5 99.0	<0.2 <0.2 <0.2 <0.2 <0.2	0.12 0.08 0.14 0.62 <0.01	3 4 2 2 <2	<10 <10 <10 <10 <10	<10 <10 <10 10 <10	<0.5 <0.5 <0.5 <0.5 <0.5	<2 <2 <2 <2 <2 <2	0.27 0.19 0.36 1.26 0.01	<0.5 <0.5 <0.5 <0.5 <0.5	1 <1 1 4 <1	131 48 131 37 118	5 1 1 1 <1	0.53 0.47 0.55 1.44 0.26	<10 <10 <10 <10 <10
PC-93-2-5-10 PC-93-2-10-15 PC-93-2-15-20 PC-93-2-20-25 PC-93-2-25-30		98.9 99.4 99.4 97.9 99.2	<0.2 <0.2 <0.2 <0.2 <0.2 <0.2	<0.01 <0.01 <0.01 <0.01 <0.01 0.01	3 <2 <2 <2 <2 2	<10 <10 <10 <10 <10	<10 <10 <10 <10 <10	<0.5 <0.5 <0.5 <0.5 <0.5	<2 <2 <2 <2 <2 <2 <2	0.01 0.01 <0.01 0.07 0.21	<0.5 <0.5 <0.5 <0.5 <0.5	<1 <1 <1 <1 <1	46 135 48 162 46	<1 17 <1 1 <1	0.31 0.32 0.33 0.34 0.43	<10 <10 <10 <10 <10
PC-93-2-30-35 PC-93-2-35-39		99.5 99.0	<0.2 0.2	0.04 0.01	2 5	<10 <10	<10 <10	<0.5 <0.5	<2 <2	0.32 0.32	<0.5 <0.5	4 <1	149 54	20 8 17	1.52 0.57	<10 <10

EXCELLENCE IN ANALYTICAL CHEMISTRY ALS Cenada Ltd.

212 Brooksbank Avenue North Vancouver BC V7J 2C1 Phone: 604 984 0221 Fax: 604 984 0218 HOMEGOLD RESOURCES LTD. UNIT 5, 2330 TYNER ST PORT COQUITLAM BC V3C 2Z1

A CONTRACTOR OF A CONTRACTOR O

Page: 2 - C Total # . _ges: 2 (A - D) Finalized Date: 4-APR-2005 Account: MWE

Project: Patsey Cove

CERTIFICATE OF ANALYSIS VA05022646

Sample Description	Method Analyte Units LOR	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	ME-ICP41 Ti % 0.01
PC-93-1-95-100		<1	<0.01	<10	0.06	62	<1	<0.01	1	30	<2	0.02	<2	<1	<1	<0.01
PC-93-1-100-105		<1	<0.01	<10	0.05	46	<1	< 0.01	2	10	<2	0.01	<2	<1	1	<0.01
PC-93-1-105-110		<1	<0.01	<10	0.05	54	<1	<0.01	<1	10	<2	0.02	<2	<1	<1	<0.01
PC-93-1-110-120		<1	<0.01	<10	0.06	80	<1	<0.01	2	<10	<2	0.01	<2	<1	1	<0.01
PC-93-1-140-150		<1	<0.01	<10	0.17	104	<1	<0.01	<1	10	2	0.01	<2	<1	2	<0.01
PC-93-1-150-160		<1	<0.01	<10	0.14	99	1	<0.01	4	20	6	0.01	<2	<1	3	<0.01
PC-93-1-160-170		<1	<0.01	<10	0.08	72	<1	<0.01	<1	<10	2	<0.01	<2	<1	1	<0.01
PC-93-1-170-176		<1	0.01	<10	0.18	118	<1	<0.01	2	<10	<2	<0.01	<2	1	6	<0.01
PC-93-1-176-182		<1	0.05	<10	0.75	405	<1	<0.01	3	30	<2	0.03	<2	1	20	0.03
PC-93-2-0-5		<1	<0.01	<10	<0.01	18	<1	<0.01	3	<10	<2	0.01	<2	<1	<1	<0.01
PC-93-2-5-10		<1	<0.01	<10	<0.01	20	<1	<0.01	<1	<10	<2	0.03	<2	<1	<1	<0.01
PC-93-2-10-15		<1	<0.01	<10	<0.01	18	<1	<0.01	2	<10	<2	0.02	<2	<1	<1	<0.01
PC-93-2-15-20		<1	<0.01	<10	<0.01	21	<1	<0.01	1	<10	<2	<0.01	<2	<1	<1	<0.01
PC-93-2-20-25		<1	<0.01	<10	<0.01	26	<1	<0.01	2	<10	<2	0.01	<2	<1	<1	<0.01
PC-93-2-25-30		<1	<0.01	<10	<0.01	40	<1	<0.01	2	<10	<2	<0.01	<2	<1	<1	<0.01
PC-93-2-30-35		<1	<0.01	<10	0.02	66	1	<0.01	5	<10	<2	0.05	<2	<1	2	<0.01
			-0.01		-0.01				·		~2	-0.01	ŭ		~*	

EXCELLENCE IN ANALYTICAL CHEMISTRY ALS Canada Ltd.

212 Brooksbank Avenue North Vancouver BC V7J 2C1 Phone: 604 984 0221 Fax: 604 984 0218 HOMEGOLD RESOURCES LTD. UNIT 5, 2330 TYNER ST PORT COQUITLAM BC V3C 2Z1 Page: 2 - D Total # j_jes: 2 (A - D) Finalized Date: 4-APR-2005 Account: MWE

Project: Patsey Cove

CERTIFICATE OF ANALYSIS VA05022646

CALLS OF THE COMPANY FOR

	Method Analyte	ME-ICP41 TI	ME-ICP41 U	ME-ICP41 V	ME-ICP41 W	ME-ICP41 Zn	
Sample Description	LOR	ррт 10	ppm 10	1	10	2	
PC-93-1-95-100	_	<10	<10 <10	2	10 ~10	4	
PC-93-1-100-105		<10	<10	2	<10	3	
PC-93-1-110-120		<10	<10	2	10	3	
PC-93-1-140-150		<10	<10	6	10	6	
PC-93-1-150-160		<10	<10	5	<10	12	
PC-93-1-160-170		<10	<10	3	<10	4	
PC-93-1-170-176		<10	<10	5	<10	24	
PC-93-1-176-162 PC-93-2-0-5		<10	<10	25 <1	<10	<2	
PC-93-2-5-10		<10	<10	<1	<10	<2	<u></u>
PC-93-2-10-15		<10	<10	1	<10	<2	
PC-93-2-15-20		<10	<10	<1	<10	<2	
PC-93-2-20-25		<10	<10	<1	<10	<2	
PC-93-2-25-30		<10	<10	1	<10	2	
PC-93-2-30-35		<10	<10	22	<10	4	
PC-93-2-35-39		<10	<10	1	<10	3	

VA05022646 - Finalized

CLIENT : MWE - Homegoid Resources Ltd.

of Samples : 17

DATE RECEIVED : 2005-03-29 DATE FINALIZED : 2005-04-04

PROJECT : Patsey Cove

CERTIFICATE COMMENTS :

PO NUMBER :

041210

PO NUMBI	CK:							
	ME-ICP06							
SAMPLE	SiO2	Al2O3	Fe2O3	CaO	MgO	Na2O	K2O	Cr2O3
DESCRIPT	%	%	%	%	%	%	%	%
PC-93-1-9	98.2	0.46	0.67	0.31	0.23	0.01	0.01	0.01
PC-93-1-1(98.8	0.24	0.51	0.18	0.14	0.02	0.01	0.03
PC-93-1-10	98.5	0.16	0.61	0.18	0.11	<0.01	<0.01	0.01
PC-93-1-1	97.4	0.26	0.62	0.61	0.14	<0.01	0.01	0.04
PC-93-1-14	97.7	0.54	0.86	0.38	0.37	0.05	0.01	0.01
PC-93-1-1	97.4	0.43	0.75	0.42	0.29	0.04	0.02	0.03
PC-93-1-16	96.3	0.22	0.61	0.26	0.14	0.02	<0.01	0.01
PC-93-1-1	; 97.6	0.4	0.81	0.51	0.36	0.05	0.01	0.04
PC-93-1-17	89.6	1.74	2.23	1.82	1.56	0.26	0.08	0.01
PC-93-2-0-	98.5	0.05	0.31	0.01	<0.01	0.01	0.01	0.03
PC-93-2-5-	98.4	0.05	0.38	0.01	<0.01	0.01	<0.01	0.01
PC-93-2-10	98.6	0.19	0.4	0.02	<0.01	0.01	0.02	0.03
PC-93-2-1	98.6	0.08	0.42	0.02	<0.01	0.01	0.01	0.01
PC-93-2-20	(96.9	0.13	0.41	0.09	0.01	0.01	0.01	0.04
PC-93-2-2	98 98	0.11	0.55	0.29	<0.01	0.01	<0.01	0.01
PC-93-2-30	(96	0.31	2.26	0.58	0.07	0.02	0.01	0.04
PC-93-2-3	97.4	0.07	0.78	0.43	<0.01	0.01	0.01	0.02

ME-ICP TiO2 %	06	ME-IC MnO %	P06	ME-IC P2O5 %	CP06	ME-ICP06 SrO %	ME-ICP06 BaO %	ME-ICP06 LOI %	ME-ICP06 Total %	ME-ICP41 Ag	ME-ICP41 Al %
0.	.02		0.01		0.01	<0.01	<0.01	0.14	100	<0.2	0.06
0.	.01		0.01	<0.01		<0.01	< 0.01	0.15	100	<0.2	0.06
<0.01			0.01	<0.01		<0.01	<0.01	0	99.6	<0.2	0.05
<0.01			0.01	<0.01		<0.01	0.01	0.58	99.7	<0.2	0.07
Q .	.01		0.02	<0.01		<0.01	<0.01	0.49	100.5	<0.2	0.15
0.	.01		0.01		0.03	<0.01	<0.01	0.34	99.8	<0.2	0.12
0.	.01		0.01	< 0.01		<0.01	<0.01	0.23	97.8	<0.2	0.08
0.	.01		0.02	< 0.01		<0.01	<0.01	0.39	100	<0.2	0.14
0.	.08		0.06		0.02	<0.01	<0.01	2.02	99.5	<0.2	0.62
<0.01		<0.01		< 0.01		<0.01	<0.01	-0.05	99	<0.2	<0.01
<0.01		<0.01			0.01	<0.01	<0.01	-0.06	98.9	<0.2	<0.01
0.	.01	<0.01			0.02	<0.01	<0.01	-0.13	99.4	<0.2	<0.01
<0.01		<0.01		<0.01		<0.01	<0.01	-0.2	99.4	<0.2	<0.01
<0.01		<0.01		<0.01		<0.01	<0.01	-0.32	97.9	<0.2	<0.01
<0.01			0.01		0.01	<0.01	0.01	0.17	99.2	<0.2	0.01
0.	.01		0.01	<0.01		<0.01	<0.01	0.15	99.5	<0.2	0.04
<0.01			0.01		0.01	<0.01	<0.01	0.26	99	0.2	0.01

| ME-ICP41 |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| As | В | Ba | Be | Bi | Ca | Cd | Co | Cr |
| ppm | ppm | ppm | ppm | ppm | % | ppm | ppm | ppm |
| <2 | <10 | <10 | <0.5 | <2 | 0.15 | <0.5 | <1 | 40 |
| <2 | <10 | <10 | <0.5 | <2 | 0.11 | <0.5 | <1 | 120 |
| <2 | <10 | <10 | <0.5 | <2 | 0.12 | <0.5 | 1 | 44 |
| <2 | <10 | <10 | <0.5 | <2 | 0.4 | <0.5 | <1 | 148 |
| 2 | <10 | <10 | <0.5 | <2 | 0.24 | <0.5 | <1 | 47 |
| 3 | <10 | <10 | <0.5 | <2 | 0.27 | <0.5 | 1 | 131 |
| 4 | <10 | <10 | <0.5 | <2 | 0.19 | <0.5 | <1 | 48 |
| 2 | <10 | <10 | <0.5 | <2 | 0.36 | <0.5 | 1 | 131 |
| 2 | <10 | 10 | <0.5 | <2 | 1.26 | <0.5 | 4 | 37 |
| <2 | <10 | <10 | <0.5 | <2 | 0.01 | <0.5 | <1 | 118 |
| 3 | <10 | <10 | <0.5 | <2 | 0.01 | <0.5 | <1 | 46 |
| <2 | <10 | <10 | <0.5 | <2 | 0.01 | <0.5 | <1 | 135 |
| <2 | <10 | <10 | <0.5 | <2 | <0.01 | <0.5 | <1 | 48 |
| <2 | <10 | <10 | <0.5 | <2 | 0.07 | <0.5 | <1 | 162 |
| 2 | <10 | <10 | <0.5 | <2 | 0.21 | <0.5 | <1 | 46 |
| 2 | <10 | <10 | <0.5 | <2 | 0.32 | <0.5 | 4 | 149 |
| 5 | <10 | <10 | <0.5 | <2 | 0.32 | <0.5 | <1 | 54 |

•

ME-IC	CP41	ME-ICP41 Fe	ME-ICP41 Ga	ME-ICP41 Ha	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
ppm		%	ppm	nom	%	nnm	wg %	nom	nom
PP	243	0.46	<10	<1	<0.01	<10	0.06	62 62	<1
	51	0.36	<10	<1	< 0.01	<10	0.05	46	<1
	25	0.49	<10	<1	< 0.01	<10	0.05	54	<1
	20	0.42	<10	<1	< 0.01	<10	0.06	80	<1
	4	0.59	<10	<1	<0.01	<10	0.17	104	<1
	5	0.53	<10	<1	<0.01	<10	0.14	99	1
	1	0.47	<10	<1	<0.01	<10	0.08	72	<1
	1	0.55	<10	<1	0.01	<10	0.18	118	<1
	1	1.44	<10	<1	0.05	<10	0.75	405	<1
<1		0.26	<10	<1	<0.01	<10	<0.01	18	<1
<1		0.31	<10	<1	<0.01	<10	<0.01	20	<1
	17	0.32	<10	<1	<0.01	<10	<0.01	18	<1
<1		0.33	<10	<1	<0.01	<10	<0.01	21	<1
	1	0.34	<10	<1	<0.01	<10	<0.01	26	<1
<1		0.43	<10	<1	<0.01	<10	<0.01	40	<1
	208	1.52	<10	<1	<0.01	<10	0.02	66	1
	17	0.57	<10	<1	<0.01	<10	<0.01	58	<1

•

ME-ICP41 Na	ME-ICP4 Ni	11	ME-ICP	41	ME-ICP41 Ph	I	ME-IC	:P4 1	ME-ICP41	ME-ICP41	ME-ICF	' 41	ME-IC	CP41
%	ppm		ppm		oom		%		ppm	ppm	nom		%	
<0.01	P.F	1	P P ···	30	<2			0.02	<2	<1	<1		<0.01	
<0.01		2		10	<2			0.01	<2	<1		1	< 0.01	
<0.01	<1			10	<2			0.02	<2	<1	<1		< 0.01	
<0.01		2	<10		<2			0.01	<2	<1		1	< 0.01	
<0.01	<1			10	2	2		0.01	<2	<1		2	< 0.01	
<0.01		4		20	6	3		0.01	<2	<1		3	< 0.01	
<0.01	<1		<10		2	2	<0.01		<2	<1		1	< 0.01	
<0.01		2	<10		<2		< 0.01		<2	1		6	< 0.01	
<0.01		3		30	<2			0.03	<2	1		20		0.03
<0.01		3	<10		<2			0.01	<2	<1	<1		< 0.01	
<0.01	<1		<10		<2			0.03	<2	<1	<1		<0.01	
<0.01		2	<10		<2			0.02	<2	<1	<1		< 0.01	
<0.01		1	<10		<2		<0.01		<2	<1	<1		< 0.01	
<0.01		2	<10		<2			0.01	<2	<1	<1		<0.01	
<0.01		2	<10		<2		<0.01		<2	<1	<1		< 0.01	
<0.01		5	<10		<2			0.05	<2	<1		2	< 0.01	
<0.01		1		40	<2		< 0.01		8	<1	<1		< 0.01	

ME-ICP41	ME-ICP41	ME-ICP41	ME-ICI	P41	ME-ICF	P41
TI	U	V	W		Zn	
ppm	ppm	ppm	ppm		ppm	
<10	<10	2	2	10		4
<10	<10	2	2 <10			3
<10	<10	2	2 <10			3
<10	<10	2	2	10		3
<10	<10	6	5	10		6
<10	<10	ŧ	5 <10			12
<10	<10	3	3 <10			4
<10	<10	ŧ	5 <10			6
<10	<10	25	5 <10			24
<10	<10	<1	<10		<2	
<10	<10	<1	<10		<2	
<10	<10		<10		<2	
<10	<10	<1	<10		<2	
<10	<10	<1	<10		<2	
<10	<10		<10			2
<10	<10	22	2 <10			4
<10	<10	•	<10			3