

SEP 1 7 2001

Gold Commissioners Office Technical Report VANCOUVER, B.C.

On Field Work Done

Between Sep. 12 2000 and Oct. 6 2000

On

The Palomino Mineral Claims

Located Northeast of Perow B. C.

Omineca Mining Division, B. C.

NTS Map 93 L/9 Zone 9

Grid Coordinates	60 6	48 750 North 67 450 East
Latitude	54	deg. 33 min.
Longitude	126	deg. 24 min.

Owner Steve Bell

Ву

Steve Bell

September 2001

GEOLOGICAL SURVEY BRANCH

<u>Preface</u>

This report summarizes work done on the Palomino group of claims. The work is preliminary to a proposed program which will include diamond drill testing of the Jack Rabbit shear zone and associated magnetic rocks. The target is copper-gold porphyry style mineralization. Preliminary work included stripping the Jack Rabbit shear zone at is only known exposure to collect analysis. A core drill was utilized to reach samples for unoxidized material and to extract larger than normal samples nugget effect that gold sometimes reducing the potential displays. The results suggest that gold values are associated with the metallic sulphides chalcopyrite and pyrite. Valuable information was obtained regarding the ability to core the altered vein material with surface set diamond bits and single tube core barrels. Satisfactory core recovery indicates that a fast portable diamond drill could be used to test the zone light depth. The second target is a large aeromagnetic anomaly at centered on Palomino 10. A Sharpe MF-1 magnetometer which measures changes in the vertical component of the magnetic field was used to locate its exact position on the ground. Soil samples were then collected across its trace to see if potential mineralization associated with the anomaly could be detected in overlying soils. No residual anomaly was detected directly the sampling is not over the anomaly and further soil planned. However a detailed magnetometer survey is planned to delineate the magnetic anomaly. From this data drill sites will be chosen to test the magnetic rock for mineralization.

Table of Contents

•

	Page
Introduction	1
Exploration History	4
Claims and ownership	6
Prospecting target and general geology	8
Economic assessment	10
Summary of work program (A)	11
Observations	13
Photos Jack Rabbit shear zone sample locations	13 a,b,c,d
Summary of work program (B)	14
Air photo Palomino claim group	15
Observations	16
Magnetic profile across aeromagnetic high	18
Conclusions	19
Statement of work	20
Cost statement	21
Geochemical and assay data	Appendix

د

Introduction

The following is a record of the exploration work performed on the Palomino mineral claims between September 12, 2000 and October 6, 2000. The property may host porphyry style copper-gold and shear related copper-gold mineralization.

(i) <u>Position/Physiography</u>

The claims are located on a branch stream of Johnny David creek in the Nechako plateau region 6 km north east of Perow B. C. Ice has overroad the entire area and has produced a glaciated topography at 950 meters elevation. This topography has been cut by numerous streams which are entrenched up to 30m into the plateau. The claims cover a mineralized shear zone which has been exposed by this erosion.

Glacial drift is widespread and residual soils are confined to creek valleys. Till cover varies between a few meters to over 30m. and bedrock exposures are scarce. Recent work by Levson (1997) indicates that local ice flow directions were to the south west. The south west corner of the Palomino 3 claim is located at:

Latitude 54 deg. 33 min. Longitude 126 deg. 24 min.

On NTS map 93 L/9 Zone 9 at grid coordinates:

60 48 750 North 6 67 450 East

See figure (1) for map sheet location.

(ii)

<u>Access</u>

Access is by motor vehicle from Houston via. highway 16 turning north at Perow. Follow the Byman forest road to the North road. Turn right on the North road and travel to the Johnny David creek forest service road. Follow this road to its end at the 6 km mark near a large clearcut. The distance is 44km. Proceed south by foot about 700m to Johnny David creek.



Exploration History

The Jack Rabbit shear zone was first staked in 1927 by Mathew Sam. Early exploration was performed by Sam near the original showing and along Johnny David creek where there is reported to be widespread weak copper mineralization in intrusive and volcanic rocks. These showings where stripped and a short adit was driven on the Jack Rabbit shear where it is exposed on the south bank of Johnny David creek. A sample taken here in 1928 returned one of the highest gold grades recorded in the Smithers area. The high grade nature of the shear was confirmed by S.Bell in 1997 when a 40 cm chip sample across the shear returned 32.42 g/tonne Au. Early work was focused on exposures of mineralized zones along the creek and no work was done to test the extent of the shear beyond the valley.

In 1970 the Tagus Syndicate (Assessment # 2738) conducted a geophysical and geochemical survey on claims located north west of the Jack Rabbit shear. Mag, EM and IP surveys were done on widely spaced lines (1000 ft.) to test the porphyry copper potential. Cu, Zn and Mo were tested for with negative results.

In 1973 Phelps Dodge Corp. (Assessment #4760) conducted a magnetometer survey over the Jack Rabbit shear to define lithologic trends to aid in mapping the underlying bedrock. (An IP survey was recommended).

Exploration History (cont.)

In 1985 P. Ogryzlo a geologist at Bell mine 1972-1977 (Assessment # 13845) mapped the geology in the vicinity of the principle mineral showings. (An IP survey was recommended and a closely spaced geochemical survey where residual soils overlie bedrock to assist in tracing the shear.

In 1987 Rosalie Resources Ltd. (Assessment # 16071) repeated a magnetometer survey over the shear and performed a VLF-EM survey. (A soil sampling program was recommended over the entire claim group with samples taken every 10m along lines spaced 100m apart. Samples being tested for both Au and pathfinder elements.

In 1998 S. Bell reviewed previous work and performed a self potential survey over the trace of the shear. A closely spaced soil sampling program was then performed where samples were taken along east-west grid lines north and south of the Jack Rabbit showing.

In 2000 S. Bell stripped and sampled the Jack Rabbit shear. Exploration of the terrain north of the Jack Rabbit shear was begun in the vicinity of a large aero magnetic anomaly. The palomino property consists of 13 one unit claims which are owned and operated by S. Bell of Houston B. C.

<u>Claim Na</u>	<u>me</u>	<u>Tenure</u> #
Palomino	1	365552
Palomino	2	365553
Palomino	3	365554
Palomino	4	365555
Palomino	5	365556
Palomino	6	365557
Palomino	7	366277
Palomino	8	366278
Palomino	9	366279
Palomino	10	366280
Palomino	11	380715
Palomino	12	380716
Palomino	13	

.1

See Figure (2) for claim post locations.



v) Prospecting target

i) Commodity: Cu, Au

ii) Deposit type: Vein copper and related copper-gold porphyry

vi) General geology:

The claims are underlain by Hazelton Group volcanics of the Lower Jurassic Telkwa formation. Ogryzlo describes the volcanic rocks as variegated volcanic breccias and tuff of intermediate to felsic composition. Anhydrite being common on partings with calcite filling cavities and veins. He notes that epidote is present and appears to be more abundant near the mineralized showings.

There is an elliptical aero magnetic high of 100 gammas relief shown on map 5312 G Topley which is centered over the claim group. The anomaly trends in a northerly direction and is over 1km in length. The Jack Rabbit shear is located on its south east boundary.

Mineralization:

Volcanic rocks are cut by quartz feldspar porphyry dykes at three locations. The dykes contain angular laths of bleached feldspar and rounded quartz eyes. The bleaching appears to be caused by sericitization and kaolinization of the dykes. Copper values across one dyke located 20m east of the Jack Rabbit shear average 1000 ppm copper.

Mineralization cont.

The rocks which host the Jack Rabbit shear are described by Ogryzlo as andesitic fragmentals, rhyolitic pyroclastics and tuff. The feldspar laths in the volcanic rocks have been epidotized and the ground mass contains both greenish epidotized fragments and rounded black fragments (magnetite ?). The shear is 4m wide and contains zones of fault breccia cemented with quartz and clay. The gouge is bleached pale green and carries traces of specular hematite.

The only visible sulphide mineralization is pyrite and chalcopyrite which appear in about equal proportions. There are disseminations throughout the zone. Massive sulphide small sulphides occur in narrow 1cm sub parallel veins and small replacement type lenses up to 15 cm in diameter. Near surface oxidation has converted the sulphides to reddish brown limonite. The rocks adjacent to the shear are highly magnetic and the shear contains magnetic breccia fragments, Disseminated itself chalcopyrite with k-feldspar and epidote are present in the hanging wall and foot wall rocks near the shear. There are limited exposures beyond Johnny david creek where till conceals the bedrock.

A strong argument can be made for the mineral potential of the terrain at the Palomino claims.

At a claim group scale Favorable exploration criteria at Palomino include.

- Intermediate to felsic rocks indicate favorable bi-modal volcanism.
- 2) Felsic intrusive rocks in the form of quartz feldspar porphyry dykes peripheral to a large aeromagnetic anomaly could be related to a sub-volcanic porphyry system.
- Volcanic rocks associated with mineralization are magnetic and coincident with the areomagnetic anomaly.
- Lithogeochemical anomalies are present in both intrusives and Hazelton volcanics.
- 5) There are anomalous copper values in propylitized float rock found near the aeromagnetic anomaly.
- 6) The Jack Rabbit Fault may provide local structural control for high grade Cu-Au mineralization.
- 7) Geochemical data indicates elevated copper values in till.

vii)

Description of work

Two programs were undertaken at the Palomino location in order to achieve the following two objectives.

- A) Determine the gold distribution across the Jack Rabbit shear zone.
- B) Investigate the northern half of the aeromagnetic anomaly

<u>Summary of work</u> (Program A)

The Jack Rabbit shear zone has been sampled before. The chip and grab samples collected however do not indicate how the gold values are distributed. A detailed sampling program was carried out in order to make this determination. A series of rock core samples were taken across the shear in order to provide uniform samples of unoxidized material from precise locations. The samples were then used to provide information about the relative abundance of gold and copper across the shear. The site was first prepared by stripping 20 cubic meters of loose rock and overburden from the shear to reveal the footwall of a collapsed adit.

The shear zone is 4m wide (true width) and dips toward the west at an angle of 70-75 degrees. Vertical 70 cm long core samples were taken at 20 cm intervals across the shear. Each sample corresponds to an equivalent 20 cm sample taken across the true width of the shear.

Program A cont.

The drilling was done with a hand held packsack style core drill. A four foot XRT rod with a short core barrel and a XRP thin walled diamond bit were used with the drill to provide a 1 inch diameter core.

Twenty five core samples were extracted. The samples were put in labeled sample bags and sent to Assayers Canada for analysis. The drill holes were then plugged and marked for photographic documentation.

Sample taking proceeded across the strike of the shear from hanging wall (west) to the footwall (east) as follows.

- a) Samples JR-1 to JR-7 were taken from vertical holes and are equivalent to a sample taken across a 20cm true width.
- b) Samples JR-8 and JR-9 were drilled at an angle and depth to test a true width equivalent of 40 cm each.
- c) Samples JR-10 to JR-19 were taken from vertical holes and are equivalent to a sample taken across a 20cm true width.
- d) Samples JR-20 and JR-21 were taken from holes drilled at an inclination of 60 degrees and test a zone of replacement style mineralization over true width equivalent to 50cm.
- e) Samples JR-22 to JR-25 were drilled into the footwall at an angle of 45 degrees to a depth of 50cm. Hole spacing is 50 cm. The samples represent true widths of 45cm.



 Johnny David creek valley looking north west along trace of Jack Rabbit shear zone.



2) Jack Rabbit shear zone toward south east direction.



3) Jack Rabbit shear zone showing sample locations 1 to 22



4) Jack Rabbit shear zone foot wall side.



 Jack Rabbit shear zone with sub parallel sulphide replacements in altered andesite.



6) Sample hole 22 - 25 in foot wall of collapsed adit.



7) Typical drill core Jack Rabbit shear zone.

Observations (Program A)

Gold values range from background levels to a high of 6.5 g/tonne at JR-6. Cooresponding copper values are from 71 ppm to +10,000 ppm. Average gold values are low since the gold content is directly related to the sulphide content. Where massive sulphide mineralization was intersected higher gold values were obtained (samples of massive sulphide mineralization consistently assay over 32 g/tonne gold). The core samples include larger proportions of barren gangue which reduces the overall grade.

The shear is unusually deficient in lead, zinc and pathfinder elements. There is however a slight enrichment of molybdenum from sample JR-1 to JR-6 which probably marks the transition from hanging wall rock. Samples JR-9 to JR-12 contain only anomalous amounts of copper and gold. These samples test a large block which has moved from the hanging wall into the shear zone. At this location part of the shear has been faulted into the footwall. The original workings appear to have followed the hanging wall contact and are centered on the higher grade mineralization at JR-6. The excavation was stopped just where this mineralization has been displaced into the footwall.

Discussion (Program A)

A geophysical survey is required to detect sulphide mineralization along the trace of the Jack Rabbit shear. Where sulphides are indicated a diamond drill can be employed to test for economic concentrations.

Drill Log Jack Rabbit Shear/vein

True Width CM % CU PPB AU Description

JR-1 20 .10 71 Hanging wall, hematized reddish brown altered andesite with grayish patches, minor fracturing with light brown carbonate and minor porcellaneous quartz, contains 1-2 % specular hematite ?

JR-2 20 .32 23 Hanging wall, moderately hematized reddish brown to buff colored altered andesite with minor quartz and carbonate veins minor hematite < 1% visible sulfide pyrite ?

JR-3 20 .40 35 ... Hanging wall, lightly hematized in patches, buff colored to light bluish grey, altered tuffaceous andesite ? slightly fractured with minor light reddish brown carbonate and guartz veinlets, carbonate dominates, slightly more silicious, minor malachite stain. < 1% isolated grains of sulphide visible in matrix of host.

JR-4 20 .18 16 Light bluish grey, silicious altered andesite, numerous 1-2 mm carbonate veinlets, slightly pyritic.

JR-5 20 .40 140 Light greenish (chlorite ?) grey sheared volcanic, several clay filled slips and partings, sub-parallel carbonate and guartz veinlets with minor associated pyrite/chalcopyrite, < 1% combined sulphide.

JR-6 20 > 1% 5734 Pale green/tan clay altered fault/vein material, numerous carbonate filled fractures with massive chalcopyrite and pyrite, minor blue copper carbonate, approximately 3 % pyrite and 5% chalcopyrite.

JR-8 40 .17 169 Hanging wall block ? (appears to be a block of hanging wall which moved toward the footwall during formation of the shear, slightly hematized, slight clay alteration, slightly pyritic.

JR-9 40 .07 9 Same as JR-8 slightly less altered with visible isolated grains of specular hematite.

JR-10 20 .007 3 Same as JR-9

JR-11 20 .008 4 Tan colored (clay mineral alteration ?) hanging wall block, minor carbonate, slightly pyritic.

JR-12 20 .03 401 Pale bluish-green/tan clay altered fault/vein material, numerous carbonate filled fractures, slightly silicious, minor pyrite. Drill Log Jack Rabbit Shear/vein

True Width CM % CU PPB AU Description Pale greenish/tan altered JR-13 20 .33 658 Pale greenish/tan altered material similar to JR-12 slightly more bleached, minor chalcopyrite. JR-14 20 .93 1910 Light tan with darker bluish grey silicious bands, slightly brecciated, narrow parallel to sub-parallel quartz/carbonate veins /replacements, approx. 3% massive chalcopyrite. JR-15 20 ,44 144 Similar to JR-14 less brecciation, slightly less clay alteration. JR-16 20 .18 167 Similar to JR-15 less altered, more silicious, 2 cm white guartz veinlet. JR-17 20 .08 67 Slightly less silicious, darker, minor carbonate. Mildly bleached transitional JR-18 20 .15 15 from vein/shear to footwall rock, minor isolated grains of disseminated chalcopyrite. Slightly altered footwall JR-19 20 .07 3 andesite, dark grey slightly fractured, no visible mineralization ______ Total 4.20 m JR-20 50 .20 1106 Zone of replacement style massive sulphide mineralization, pale greenish blue to tan, bleached and silicified zones with replacements of massive pyrite and chalcopyrite. JR-21 50 > 1% 2974 Similar to JR-20 with minor quartz, chalcopyrite > pyrite. JR-22 45 .23 98 Footwall of collapsed adit, slightly bleached and silicious hematized andesite slightly pyritic. JR-23 45 .32 78 Similar to JR-22 JR-24 45 .40 53 slightly bleached and silicitied andesite with fine carbonate veinlets, visible disseminated sulphide. JR-25 45 .44 48 Similar to JR-24

13 B

<u>Summary of work</u> (Program B)

The focus of previous exploration has been largely centered upon the Jack Rabbit shear zone and the potential for structurally controlled precious metal mineralization. Little attention has been given to the aeromagnetic anomaly and its potential connection to intrusive rocks which may host porphyry copper-gold mineralization.

Ground based magnetometer surveys have been conducted in the vicinity of the Jack Rabbit shear and the nearby guartz feldspar porphyry dyke. The mineralization here is clearly related to magnetic rock. Magnetite was probably created in the country rock during the emplacement of the felsic intrusion. Other alteration assemblage minerals, K-feldspar, epidote, calcite, anhydrite and chalcopyrite are present. The known mineralization occurs near the southern end of the aeromagnetic anomaly.

A Sharpe MF-1 magnetometer was used to detect the aeromagnetic anomaly on the ground close to its northern periphery. An east west sample line which crosses the magnetic anomaly at right angles was then established. Fifteen standard "B" horizon soil samples were collected along this line at 30 m intervals. The samples are labeled P+60 to P+420. These were sent to Assayers Canada along with two pieces of mineralized float rock which were found during the survey.

PALOMINO CLAIMS







Observations (Program B)

The ground based magnetic anomaly is approximately 300 meters wide and is about 1250 meters long in a north-south direction. It has a maximum relief of about 1250 gammas (see fig. 3). Anomalous metals were not detected in soils however the thick overburden may prevent the development of residual anomalies.

Anomalous copper was observed in boulders found lying on the south west slopes of a small hill located 200 meters north-west of the magnetic anomaly. The entire area is covered by a blanket of till and the depth to bedrock is unknown. However the boulders form a train which appear to be locally derived. They range in size from several kg to several tonnes.

The rock is a green colored volcanic of andesitic composition. Propylitic alteration assemblage minerals are present. Epidote dominates the ground mass and feldspar laths have been epidotized. Accessory minerals include calcite, quartz and chalcopyrite. A sample (# P27) with visible chalcopyrite assayed 650 ppm copper. The rock is non magnetic.

In the ditch of a logging road which crosses the magnetic anomaly several chalcopyrite bearing pieces of float were found. The float rock is highly magnetic and of andesitic composition. This float is similar to P27. However the ground mass contains darker minerals which have not been epidotized.

Observations (Program B) cont.

Potassic alteration assemblage minerals dominate. A bright pink feldspar is present and the feldspar laths have a pinkish hue. Granular masses and radiating crystals of epidote are associated with the the K-feldspar. Accessory minerals include magnetite, quartz and chalcopyrite. A sample of this magnetic rock (# P36) assayed 1994 ppm copper.

Both types of float rock are remarkably similar to the andesitic rock which hosts the mineralization at the Jack Rabbit shear zone.

Two previously unreported outcrops of quartz feldspar porphyry were investigated. The outcrops are peripheral to the aeromagnetic anomaly and are exposed in a ravine located 1500m northwest of the Jack Rabbit shear. Both outcrops carry anomalous copper. Visible chalcopyrite was observed in the larger of the two. The porphyry here may be described as the same as that found adjacent to the Jack Rabbit shear. The host rock appears to be a highly altered andesitic tuff ?







Discussion (Program B)

The float rock found near the northern end of the magnetic anomaly is significant. If the float is locally derived it could signal the presence of nearby porphyry style mineralization.

The propylite assemblage produced here may be the result of low-pressure-temperature peripheral alteration effects associated with an ore body. Strong copper lithogeochemistry suggests that bona fide hydrothermal propylitization exists. This is separate from propylitization as a result of regional metamorphism of intermediate volcanic rocks to greenschist facies. The metamorphic type of alteration is commonly encountered in the Hazelton group rocks.

Conclusion / Recommendations

The intrusive rocks are probably genetically related. Since anomalous copper mineralization is associated with the porphyry peripheral to the magnetic anomaly significant mineralization may be found where the intrusive activity was more intense. The locus of the intrusive activity may lie adjacent to the central magnetic anomaly.

A detailed magnetometer survey should be conducted over the northern half of the magnetic anomaly to define its size and shape. The underlying magnetic rock should then be tested for economic mineralization at locations central to it.

Statement of work Palomino claims 2000

.

Location Palomino 1,2,3,4,11 and 12

-

	<u>Date</u>	Activity	<u>Hours</u>
1	Sept. 12	Conventional prospecting Palomino	12
2	Sept. 17	Stripping JR shear/vein	14
3	Sept. 18	Stripping JR shear/vein	12
4	Sept. 19	Stripping JR shear/vein	13
5	Sept. 21	Stripping JR shear/vein	13
6	Sept. 22	Stripping JR shear/vein	12
7	Sept. 23	Stripping JR shear/vein	13
8	Sept. 25	Core drilling JR shear/vein	
9	Sept 26	Core drilling JR shear/vein	
10	Sept. 27	Document samples demob. drill	10
D		07	

Period Sept. 12-27

labor 99

Location Palomino 9, 10 and Palomino

	<u>Date</u>		Activity	<u>Hours</u>
11	Oct.	5	Conventional prospecting	12
12	Oct.	6	Collect 15 "B" horizon soil samples	14
			Magnetometer line 500 m	
				.

Period Oct. 5-6

.

labor 26

Itemized cost Statment Period Sept. 12-27 (2000)

Palomino 1,2,3,4,11 and 12

1)	Labor 99 hours @ \$30/hr.	\$2,970.00
2)	Diamond drilling 17.5 m @ \$65/m	\$1,137.50
3)	Analytical services	\$428.00
4)	Food @ \$14.00/day	\$140.00
5)	Vehicle operation	\$498.97
6)	Supplies / Rentals	\$155.83
7)	Report	\$400.00
Total	L Period Sept. 12-27	\$5,730.30

Itemized cost Statment Period Oct. 5-6 (2000)

Palomino 9,10 and Palomino

Total	Period Sept. 12-27	\$1,314.30
6) 	Report	\$100.00
5)	Supplies / Rentals	\$156.17
4)	Vehicle operation	\$99.79
3)	Food @ \$14.00/day	\$28.00
2)	Analytical services	\$150.34
1)	Labor 26 hours @ \$30/hr.	\$780.00

<u>Detailed</u> Budget

A) Vehicle: Sept. 12 Oct. 6 (2000)

Insurance	\$68.50
Rental	\$462.50
Fuel	\$67.76
Total	\$598.76

B) Supplies / Rental

•

C

1.	Two way radio rental	\$75.00
2.	Geophysical equipment rental	\$125.00
3.	Other:	\$112.00
	hip chain, flagging, deet, field book,	
	sample bags, batteries, postage, etc.	
	Total	\$312.00

Authors Qualifications

This is to certify that I, Steve Bell have graduated from Queen's University, Kingston Ontario with the degree of Bachelor of Science; Mining Engineering on May 25 1985.

In 1989, I completed two years training in the department of Geological Engineering at Queen's University.

I have been employed in the mineral industry as a Mining Engineer and have a variety of experience working in various geology departments. I am now an independent Prospector.

Houston, B.C. Sept. 2001

Steve Bell

APPENDIX A

.

 $\left(\right)$

Steve Bell

Attention: Steve Bell

Project: Palomino

Sample: Rock

Assaye Canada

8282 Sherbrooke St., V ver, B.C., V5X 4R6 Tel: (604) 327-3436 Fax: (604) 327-3423

Report No 0V0447 RJ Date Oct-06-00 .

E a

MULTI-ELEMENT ICP ANALYSIS

Aqua Regia Digestion

Sample Number	Ag ppm	AJ %	As ppm	8a ppm	Ве ррт	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ті %	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
JR-01	0.5	0.50	<5	30	0.5	<5	4.50	<1	22	19	1041	7.62	0.22	2.46	1215	20	0.03	15	1630	10	5	10	<10	102	0.01	105	<10	11	82	. 7
JR-02	1.0	0.56	25	40) 0.5	<5	4.48	<1	23	18	3270	6.79	0.31	2.49	1270	34	0.02	16	1570	14	5	11	<10	93	0.01	103	<10	12	89	7
JR-03	1.2	0.63	20	- 40	0.5	<5	3.92	<1	24	19	4075	6.42	0.37	2.28	1050	60	0.03	15	1780	18	\$	10	<10	71	0.01	104	<10	11	97	7
JR-04	0.4	0.50	5	30) 0.5	<5	4.50	<1	17	18	1897	5.83	0.29	2.34	955	86	0.02	13	1570	14	5	9	<10	77	<0.01	99	<10	12	92	6
JR-05	1.2	0.44	20	20) 0.5	<5	4.10	<1	18	21	4001	6.12	0.20	2.15	930	24	0.03	12	1610	20	<5	11	<10	70	<0.01	113	<10	10	135	6
JR-06	27.8	0.47	335	20) 0.5	10	3.98	<1	61	11	>10000	>15.00	0.15	2.93	1365	24	0.02	18	1600	150	5	8	<10	68	<0.01	107	<10	9	336	15
JR-07	1.2	0.63	5	70	0.5	<5	4.80	1	21	16	3359	11.18	0.33	3.59	1595	z	0.02	16	1370	38	5	8	<10	100	0.01	113	<10	13	211	9
)R-08	0.8	0.51	<\$	- 30	0.5	5	3.33	<1	37	19	1757	9.76	0.21	2.07	1380	<2	0.03	21	1600	14	5	12	<10	85	<0.01	135	<10	11	92	9
JR-09	<0.2	0.50	<5	30	0.5	<5	2.69	<1	20	26	775	7.01	0.25	1.60	965	<2	0.03	15	1630	10	5	11	<10	83	<0.01	107	<10	11	49	7
JR-10	<0.2	Q.45	<5	20	0.5	<5	3.94	<1	13	19	71	6.85	0.12	1.56	890	<2	0.04	13	1710	8	5	13	<10	139	0.01	146	<10	12	48	a
JR-11	<0.2	0.52	<5	20) O.S	5	2.66	<1	12	19	81	6.96	0.19	1.28	780	<2	0.04	12	1860	8	5	10	<10	89	0.01	141	<10	10	43	7
)R-12	1.0	0.82	5	90	0.5	<5	4.16	<1	40	21	374	11.56	0.47	2.61	1185	<2	0.03	20	1670	18	5	9	<10	134	0.02	119	<10	13	- 74	10
JR-13	2.2	0.66	S	60	0.5	<5	4.77	<1	39	14	334B	>15.00	0.27	3.48	1520	4	0.02	18	1360	34	5	9	<10	102	0.01	118	<10	12	102	13
JR-14	6.4	0.62	25	40	0.5	5	3.99	1	40	16	9346	11.40	Ö.35	2.14	1000	2	0.0Z	18	1770	38	5	8	<10	85	0.01	97	<10	13	186	10
JR-15	1.8	0.46	35	30	0.5	<5	6.51	<1	28	14	4469	8.04	0,32	3.39	1140	2	0.02	15	1390	26	5	8	<10	125	<0.01	80	<10	13	108	7
JR-16	1.2	0.73	10	70	0.5	<5	5.75	<1	44	14	1804	8.37	0.52	3,23	1075	4	0.02	19	1460	20	5	9	<10	113	0.01	1 02	<10	13	139	5
JR-17	0.4	0.60	<5	50) 1.0	<5	5.99	<1	31	13	806	9.33	0.41	3.53	1375	4	0.02	20	1240	18	5	9	<10	122	0.01	111	<10	13	154	8
JR-18	0.6	0.77	<5	80) 0.5	<5	2.88	<1	21	18	1534	8.11	0,44	1.55	955	22	0.03	18	1720	18	5	12	<10	77	0.01	151	<10	14	108	8
JR-19	0,2	0.55	<\$	20) 0.5	<5	3.11	<1	14	22	780	6.00	0.14	0.97	750	<2	0.03	12	1570	6	<5	13	<10	63	0.01	135	<10	13	36	7
JR-20	2.0	0,57	5	50) 0.5	<5	4,41	<1	37	14	2037	10.10	0.34	2.65	1260	2	0.02	17	1660	26	5	8	<10	93	0.01	108	<10	12	88	9
JR-21	8.6	0.58	40	- 40	0.5	5	3.93	<1	47	16	>10000	12,73	0.19	2.72	1360	4	0.02	18	1490	36	5	10	<10	81	0.01	117	<10	10	77	10
JR-22	0.6	0.93	15	60	0.5	<5	4.02	<1	41	15	2316	14.79	0.39	3.60	1600	12	0.02	22	1710	34	5	13	<10	94	0.01	169	<10	14	206	13
JR-23	1.4	1.54	<\$	260) 0.5	<5	4.19	<1	33	14	3244	11.29	1.00	3,38	1505	24	0.03	19	1760	20	5	12	<10	111	0.04	158	<10	14	91	10
)R-24	0.8	1.14	<5	200	0.5	<5	4.05	<1	29	24	4005	9.58	Q.70	2.87	1390	36	0.02	19	1780	16	5	10	<10	108	0.0Z	134	<10	13	94	8
JR-25	1.2	0.60	5	50	0.5	<5	4.19	<1	21	14	4473	6.75	0.40	2.21	995	48	0.02	13	1810	16	<5	9	<10	96	<0.01	101	<10	12	80	6

A .5 gm sample is digested with 5 ml 3:1 HCI/HNO3 at 95c for 2 hours and diluted to 25ml with D.I.H20.

.

Signed:



Assayers Canada 8282 Sherbrooke St. Vancouver, B.C. V5X 4R6 Tel: (604) 327-3436 Fax: (604) 327-3423

Quality Assaying for over 25 years

Geochemical Analysis Certificate

0V-0447-RG1

Oct-11-00

Company: Steve Bell Project: Palomino Attn: Steve Bell

Steve Bell

We hereby certify the following geochemical analysis of 24 rock samples submitted Sep-27-00 by Steve Bell.

Sample Name	Au PPB	Au g/t	·
JR-01	71		
JR-02	23		
JR-03	35		
JR-04	16		
JR-05	140		
JR-06	5734	6.50	
JR-07	328		
JR-08	169		
JR-09	9		
<u>JR-10</u>	E		
JR-11	4		
JR-12	401		
JR-13	658		
JR-14	1910	1.96	
JR-15	144		
JR-16	167		
JR-17	67		
JR-18	15		
JR-19	3		
<u>JR-20</u>	1106	1.28	· · · · · · · · · · · · · · · · · · ·
JR-21	2978	2.94	
JR-22	98		
JR-23	78		
JR-24	53		

Au Certified by



Assayers Canada 8282 Sherbrooke St. Vancouver, B.C. V5X 4R6 Tel: (604) 327-3436 Fax: (604) 327-3423

Quality Assaying for over 25 Years

Geochemical Analysis Certificate

0V-0447-RG2

Oct-11-00

Company:Steve BellProject:PalominoAttn:Steve Bell

We hereby certify the following geochemical analysis of 1 rock sample submitted Sep-27-00 by Steve Bell.

Sample Name	Au PPB	
JR-25	48	

Du

Steve Bell Attention: Steve Project: Palo.,Sta) Bell ur.,Mc()ua. I	.FT 1	East						8282 T	Shert el: (60	As 5700ko (4) 32	saye St., 7 7-343	2 °C V(16 Fa	' ana 'µver, x: (60	da B.C., 4) 321	V5X 7-342	4R6 3							Rep Date	ort No	0 () 0V O	0464 :t-24-	L2 00
Sample: SOIL										Μ	JLTI	-EL Aq	EMF jua Ro	ENT : egia D	ICP igesti	ANA on	LYS	SIS												
Sample Number	Ag ppm	A1 %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Со ррт	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ti %	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
																												4		
									·																					
P+00	<0.2	1.34	<5	160	<0.5	<5	0.35	4	B	23	27	2.76	0.05	0.51	420	<2	0.02	14	400	8	<5	4	<10	36	0.08	58	<10	6	75	3
P+30W P+90W P+120W P+150W P+1 80W	<0.2 <0.2 <0.2 0.2 0.2 <0.2	1.18 1.37 1.11 1.21 1.36 1.19	<5 <5 <5 <5 <5 <5	140 120 150 220 170	<0.5 <0.5 <0.5 <0.5 0.5 <0.5	<5 <5 <5 <5 <5	0.30 0.26 0.31 0.78 0.32	<1 <1 1 <1 <1	8 6 8 7	21 25 21 20 31 27	30 31 20 23 54 25	2.87 2.47 2.36 3.25 3.07	0.05 0.05 0.05 0.08 0.08	0.61 0.46 0.43 0.71 0.43	385 375 295 310 490 290	<2 <2 <2 <2 <2 <2 <2	0.02 0.01 0.02 0.02 0.02 0.02	12 18 13 13 22 15	330 520 440 390 700 250	6 54 6 8 8	<5 <5 <5 <5 <5 <5	3 4 3 8 4	<10 <10 <10 <10 <10 <10	36 25 30 57 29	0.07 0.08 0.08 0.08 0.06 0.09	53 57 51 52 64 68	<10 <10 <10 <10 <10 <10	6 4 4 16 6	63 66 65 94 95 76	3 4 3 2 4 5

A .5 gm sample is digested with 5 ml 3:1 HCVHNO3 at 95c for 2 hours and diluted to 25ml with D.1.H20.

Signed:_

J

.

the___

Steve Bell

Attention: Steve Bell

Project: Palo., Star., McQua. L., FT East

Sample: SOIL

Assaye. Canada 8282 Sherbrooke St., V. Jver, B.C., V5X 4R6

Tel: (604) 327-3436 Fax: (604) 327-3423

Report No () 0V0464 SJ Date : Oct-24-00

MULTI-ELEMENT ICP ANALYSIS

Aqua Regia Digestion

Sampie Number	Ag pom	Al %	As Dom	8a pom	Be ppm	Bi Opm	Ca %	Cđ ppm	Co pom	Cr ppm	Cu pom	Fe %	К %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P	Pb ppm	Sb ppm	Sc ppm	Sn	Sr pom	TI %	V pom	W	Y maa	Zn opm	Zr
1101110-01						- -				•••					F.F.								e	FF		FF -		FF	F F	
P+210₩	<0.2	1.95	5	240	0.5	<5	0.55	<1	9	36	61	4.06	0.07	0.69	685	<2	0.02	23	430	10	<5	7	<10	48	0.08	83	<10	13	84	4
P+240W	<0.2	1.34	<5	160	<0.5	<5	Q.40	<1	8	27	24	3.01	0.05	0.56	395	<2	0.02	26	300	8	<5	4	<10	37	0.09	64	<10	7	75	4
P+270W	<0.2	1.19) <5	i 160	<0.5	<5	0.34	<1	8	27	25	3.13	0.04	0.51	350	<2	0.02	15	350	6	<5	- 4	<10	32	0.08	68	<10	15	68	. 3
P+300W	<0.2	1.04	<	160	<0.5	<5	0.25	<1	7	24	24	2.86	0.05	0.34	305	<2	0.01	12	410	8	<5	3	<10	26	0.07	63	<10	5	82	. 3
P+330W	<0.2	1.55	5	i 220	<0.5	<5	0.49	<1	7	29	49	3.13	0.05	0.58	350	<2	0.02	19	530	8	<\$	6	<10	44	0.06	64	<10	14	62	4
P+360W	0.2	1.58	; 5	190	<0.5	<5	0.22	<1	6	28	19	4.00	0.06	0.32	235	<2	0.01	13	2300	10	<5	3	<10	26	0.07	82	<10	3	132	3
P+390W	<0.2	1.38	. 5	i 240	<0.5	< 5	0.46	<1	9	31	42	3.37	0.05	0.52	57\$	<2	0.02	19	440	8	<5	5	<10	40	0.07	70	<10	10	71	3
P+420W	<0.2	1.52	<5	160	<0.5	<5	0.58	1	14	38	47	5.46	Q.07	0.75	1720	<2	0.02	24	1280	12	<5	7	<10	49	0.07	121	≺1 Û	12	119	5

A .5 gm sample is digested with 5 ml 3:1 HCVHNO3 at 95c for 2 hours and diluted to 25ml with D.1.H20.

<u>Kl-</u> Signed: ~

<i>(</i>)											Ass	ay	C	ana	da											$\langle \hat{\gamma} \rangle$	ŧ		
Steve Bell										828	2 Sherl	rooke	St., \	/anco	uver,	B.C.,	V5X	4R6							Rep	ort N	lo :	: OV	0463	RJ
Attention: Steve	Bell									1	[el: (60	4) 327	-343(5 Fa	x: (60	4) 327	7-342	3							Date	e		: 0	ct-24-(00
Project: Palomin	io, Star	dust																												
Sample: rock										M	ULTI	-ELE	ME	NT]	ICP .	ANA	LYS	SIS												
												Aqu	ia Rej	gia D	igestic	on														
Sample Number	Ag ppm	AI %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Ma ppm	Mo pom	Na %	Ni ppm	P ppm	РЬ ррт	Sb ppm	Sc ppm	Sn ppm	Sr ppm	Ti %	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
P26 P27	0.2 0.2	1.40 1.90	<5 <5	70 40	<0.5 <0.5	<5 <5	1.22 1.17	<1 <1	19 22	33 37	1994 650	4.34 3.95	0.03 0.02	1.53 1.88	790 825	<2 <2	0.03	10 12	1990 1940	8 8	<5 <5	3	<10 <10	36 50	0.21 0.19	98 69	<10 <10	· 8	79 108	15 12

.

,

 \sim `

1

the.

-



Assayers Canada 8282 Sherbrooke St. Vancouver, B.C. V5X 4R6 Tel: (604) 327-3436 Fax: (604) 327-3423

Courses Courses for and Means

Geochemical Analysis Certificate

0V-0463-RG1

Oct-24-00

Company:Steve BellProject:Palomino, StardustAttn:Steve Bell

We hereby certify the following geochemical analysis of 6 rock samples submitted Oct-11-00

Sample Name	Au PPB	
P26	10	
P27	5	
•	• •	

Æ.