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# AN ASSESSMENT REPORT OF DIAMOND DRILLING AND ROCK SAMPLING

### **CAMP CLAIM GROUP**

OMINECA MINING DIVISION

N.T.S. 93N/2E LAT./LONG. 124° 34'W, 55° 05'N

BY

MAX H. HOLTBY

SILVER STANDARD RESOURCES INC.

for

MUTUAL RESOURCES LTD. 400 - 1199 West Hastings Street Vancouver, B. C. V6E 3T5

May 1991

GEOLOGICAL BRANCH ASSESSMENT REPORT

GEOL\CAMP-91

21,295 Part 1 of 2

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#### 2. <u>INTRODUCTION</u>

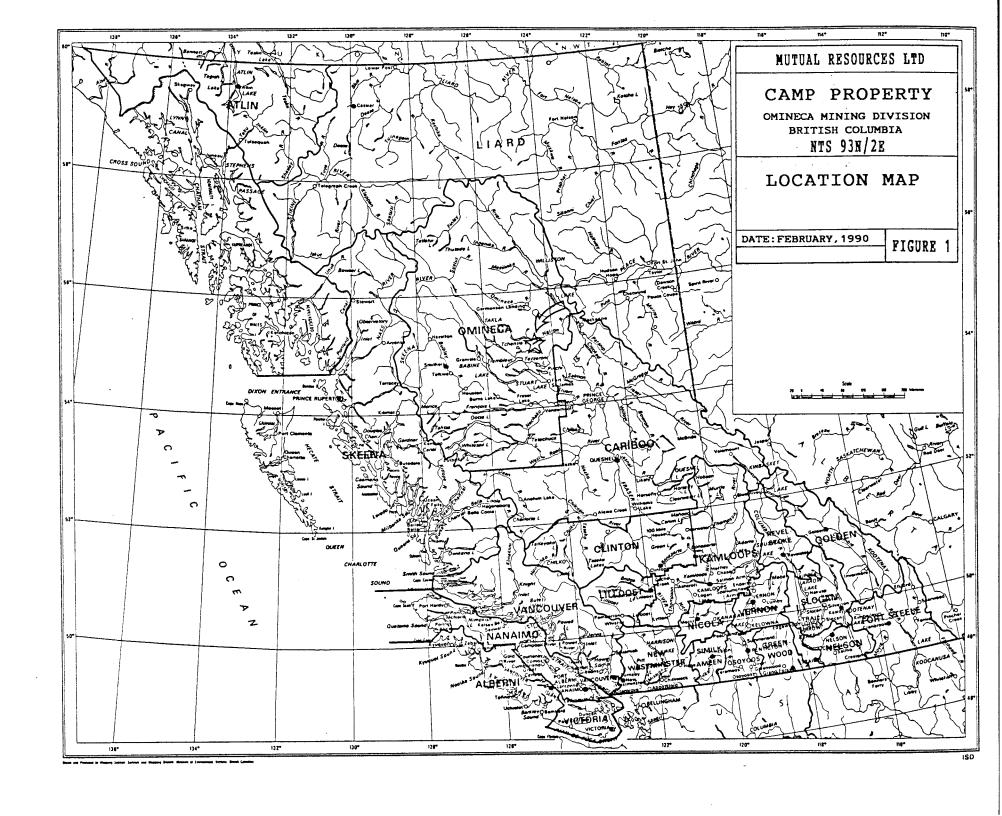
This report describes a prospecting and rock sampling programme and subsequent diamond drilling programme conducted on the Camp property. Prospecting and rock sampling were carried out from August 23 to September 13, 1990 by veteran prospector A.R.C. Potter. Camp construction for the drill programme was undertaken from November 25 to December 10, 1990. Diamond drilling and the accompanying road construction were carried out from January 26 to March 8, 1991. The final phase of reclamation was carried out from May 3 to May 10, 1991. The field programme was carried out by Silver Standard Resources Inc. personnel under contract from Mutual Resources Ltd.

#### 2.1 Location and Access

The Camp property lies near the southwest end of Witch Lake about 8 km south of Chuchi Lake. It is 35 km west of the Mt. Milligan property and approximately 74 km north-northwest of the community of Fort St. James.

Access during all phases of work carried out in 1990 was by aircraft. Helicopters were used from Northern Mountain Helicopters bases in Fort St. James and Tchentlo Lake.

A tote road was constructed in January and February 1991 to provide access for the diamond drilling programme. From Fort St. James to the campsite on Campbell Lake is approximately 109 km by road; 101 km to the end of Apollo Forest Products logging roads - via the Leo Creek Forestry, 100, 500 and J roads, and 8 km from the J logging road to the campsite. A further 3 km of road extends from the camp to the drillsites.



### 2.2 Physiography

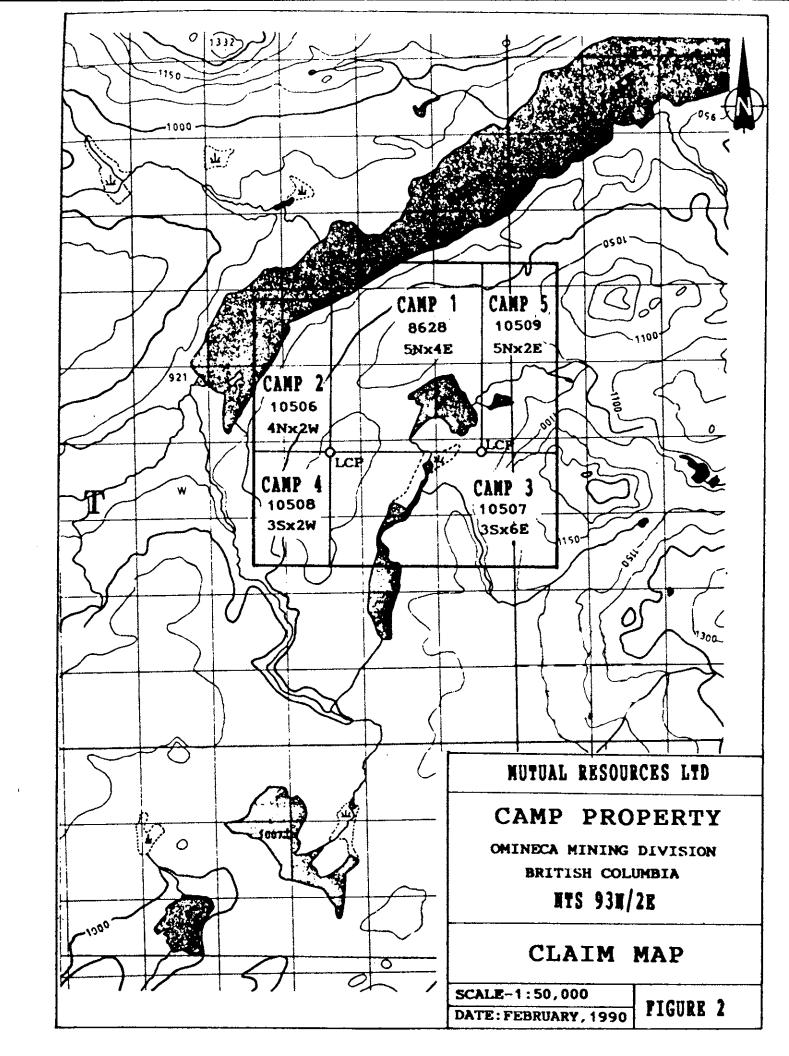
The property lies within the Nechako Plateau physiographic division which is characterized by broad flat-bottomed valleys and low rounded hills. The maximum relief on the property is 330 m rising gently from an elevation of 920 m at the shore of Witch Lake to 1250 m at the highest crest in the centre of the property.

The area was extensively glaciated during the Pleistocene. The Cordilleran ice-sheet moved generally eastward across this portion of the Nechako Plateau (Armstrong, 1965). Drumlins and parallel groovings in the till plain indicate northeastward ice movement in the vicinity of the Camp property during the last episode of glaciation. The property is largely covered by a thick mantle of glacial and glacio-lacustrine overburden.

The claims are forested and have never been logged. Outcrops are sparse and occur mainly near the centre of the property on the east and southeast sides of the hill immediately north of Campbell Lake.

#### 2.3 Claims

The property is located in the Omineca Mining Division and consists of the five Camp claims, comprising 62 units in total, that cover an area of 1,550 hectares. The claims are under option to Mutual Resources Ltd. from Indata Resources Ltd.



Claim Name	Record Number	<u>Units</u>	Anniversary Date	Expiry*
Camp 1	8628	20	July 31	2001
2	10506	8	May 23	2001
3	10507	18	May 24	2001
4	10508	6	May 26	2001
5	10509	10	May 25	2001

<sup>\*</sup> Based upon assessment credit for the work reported herein.

### 2.4 History

The property was originally staked in 1970 by Mr. C. Campbell after finding copper mineralization while following up stream sediment geochemical anomalies. Porphyry copper style mineralization was uncovered in four trenches dug by Mr. Campbell. In 1970 Imperial Oil Enterprises Ltd. optioned the property.

Imperial Oil carried out ground magnetic, IP and soil geochemical surveys over a 370 hectare area centred on the four trenches. Three drill holes totalling 453 m were also drilled.

In 1988 Mr. Campbell collected 60 soil samples on the 1970 grid. These soil samples were analyzed for gold.

In 1990 Mutual Resources optioned the claims. In addition to the work reported herein, Mutual Resources carried out a 1,681 sample soil survey on 40.97 m of line cut in a 17 line grid, a 37 line-km total field magnetic survey and a 27.5 line-km I.P. survey.

### 2.5 <u>1990-1991 Work Programme</u>

The subject of this report is the prospecting and rock sampling phase of the 1990 work programme and the 1991 diamond drilling and road construction work.

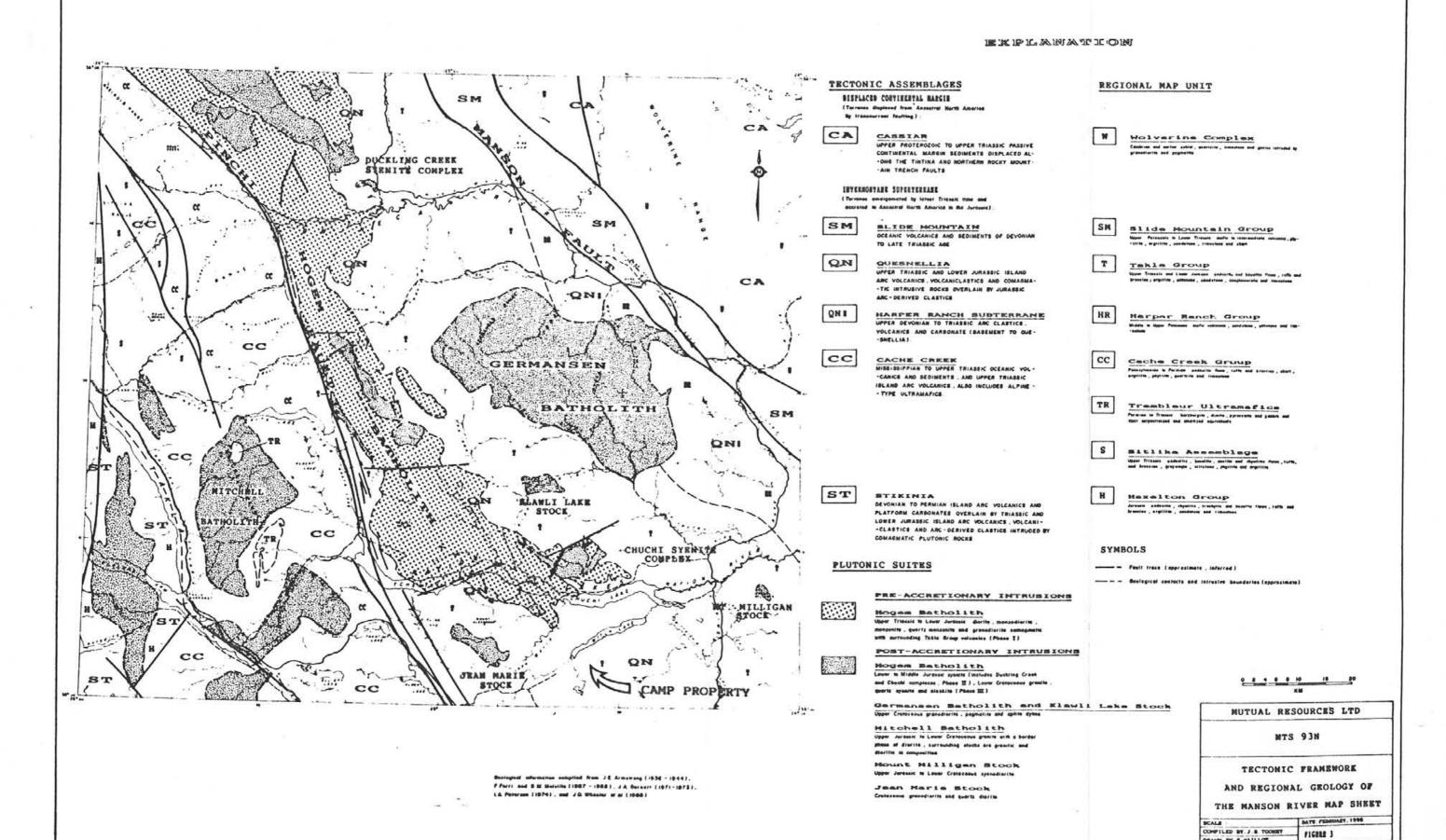
Prospecting and rock sampling was undertaken by prospector A.R.C. Potter between August 23 and September 13, 1990. The camp, for the later diamond drilling programme, was constructed between November 25 and December 10, 1990 by Silver Standard Resources Inc. personnel. Road construction was carried out by Silverton Drilling Ltd. starting January 26, 1991 and extending through the drilling programme. The tote road averages 4 m in width and totals approximately 11 km. Silverton Drilling Ltd. also carried out the drill programme. A total of 890.63 m in seven holes were drilled. The field programme was completed May 10, 1991.

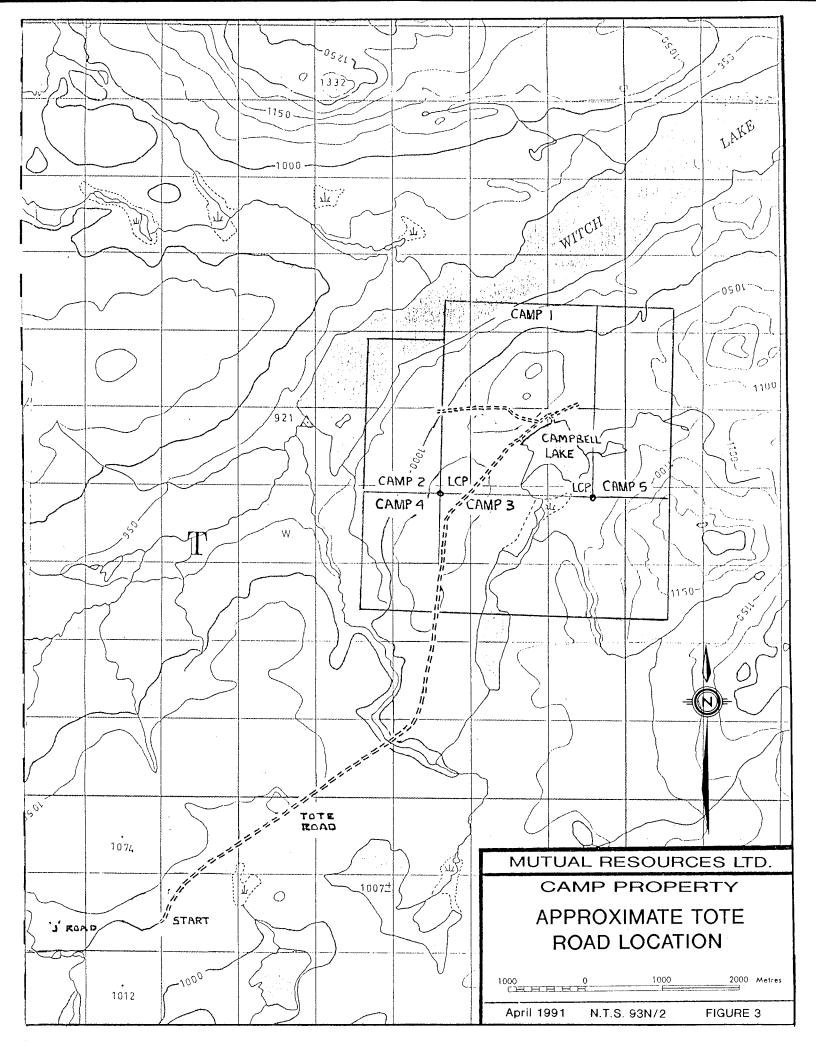
The work programme was managed by Silver Standard Resources Inc. under contract from Mutual Resources Ltd.

#### 3. GEOLOGY

### 3.1 Regional Geology

The property lies within the Quesnellia Terrane which extends as a narrow northwestward-trending belt over most the length of the Canadian Cordillera. It is comprised of Upper Triassic and Lower Jurassic island arc volcanics, volcaniclastics and comagmatic intrusive rocks overlain by Jurassic arc-derived clastics. The western boundary of Quesnellia in the Nation Lakes area (its boundary with the Cache Creek Terrane) is the Pinchi Fault which lies 25 km to the southwest of the property. Its





eastern boundary (that with the Slide Mountain Terrane) is the Manson Fault which is 55 km to the northeast.

In this region, Quesnellia is represented by the Takla Group volcanic and sedimentary succession and by early phases of the Hogem Batholith. The Late Triassic to Early Jurassic Takla Group comprises a thick sequence of predominantly andesitic and basaltic pyroclastics and massive flows with interbedded epiclastics and limestones.

The Hogem Batholith, exposed 7 km to the northwest of the property, is a large composite body of alkaline and calc-alkaline plutons. It is elongate in shape, extending for a length of 150 km northward from Chuchi Lake and varies in width up to 25 km. The batholith is in intrusive contact with Takla Group volcanics along all of its eastern, southern and northern margins. To the west, it is truncated by the Pinchi Fault and it is in fault contact with rocks of the Cache Creek Terrane along most of its western margin.

The mid-Triassic to mid-Cretaceous Hogem Batholith is differentiated into four distinct plutonic suites and is divided into three distinct phases. Chemical affinities suggest volcanic/plutonic equivalence between Takla Group volcanics adjacent to the Hogem Batholith and intrusive varieties of Phase I, the oldest and most dominant phase.

The Southern Hogem Batholith and its satellite intrusions are host to a large number of porphyry copper and copper-molybdenum prospects, many of which were explored extensively between 1969 and 1975. Generally, only minor occurrences of disseminated pyrite and chalcopyrite are genetically related to the earliest phase basic suite. Significant porphyry copper occurrences are spatially associated with Phase II syenites of the Duckling Creek and Chuchi complexes. Showings generally occur where syenites intrude Phase I basic suite intrusives or Takla Group volcanics. The major prospects of this class

include the Lorraine, Tam, Rem, Misty, Chuchi and Col properties. With the Mt. Milligan copper-gold deposit discovery these prospects have been re-evaluated in recent years for their copper-gold potential.

Porphyry copper-molybdenum mineralization is spatially-related to the latest phase granitic bodies. It occurs with quartz-flooding in fractured zones and in aplite and alaskite dykes. The more important prospects of this type include the Kwanika and Jean properties.

### 3.2 Property Geology

No geological mapping of the property was carried out during this work programme. This property geology section is based upon prospecting notes, drill core examination and correlation with geophysical surveys.

The most striking geologic feature on the property is a strong magnetic anomaly under and north of Campbell Lake. This magnetic anomaly, as defined at the 58,200 nT contour, extends 1,200 m in a northwest-southeast direction and remains open to the southeast. The anomaly is about 450 m wide at its northwestern end and widens out to 1,050 m width at the southeastern end of the surveyed area. Interpretation and modelling of the ground magnetic survey data suggests the magnetic anomaly is fault bounded and those faults dip outward (i.e. the northeastern boundary fault dips northeastward and the southwestern boundary fault dips southwest), indicating a magnetic feature that widens with depth. No outcrops were found in the area of the magnetic anomaly but two holes were drilled in the anomaly. Drill hole 91-4 was drilled in the centre of the anomaly and drill hole 91-3 was drilled across the eastern margin of the anomaly. The magnetic

anomaly is the result of a high magnetic content in propylitically altered Takla volcanics intruded and probably underlain by syenite.

Magnetite contents are up to 25% and this magnetite appears to be hydrothermal in origin. Propylitic alteration is primarily pervasive and strong chloritization but also includes sections of pervasive and strong epidotization. Biotitization, potassic alteration, is marked by very fine grained pervasive interstial biotite. Up to 25% biotite occurs over short intervals. Carbonate alteration is widespread. Calcite fracture fillings, commonly with magnetite, average 1% to 3% and are up to 5%, over 1 m intervals. Pyritization is weak with approximately 0.1% to 0.3% as disseminations and fracture fillings. The highest pyrite concentrations are in calcite fracture fillings. Shearing is common in the altered volcanics. Crushed magnetite and carbonate and/or quartz veinlets indicate post-alteration shearing.

In hole 91-4 short intervals (up to 5 m) of weakly epidotized syenite were intersected. Epidote occurs mainly as fracture fillings with very minor pervasive patches. Within these syenite intercepts occur hornfelsed volcanic sections and, commonly, thin very fine-grained dark green diabase dykes. Hole 91-4 bottomed in syenite.

Interpretation of the magnetic survey suggesting that the magnetic anomaly is bounded by faults is borne out by results of drill hole 91-3. This hole commenced inside the magnetitic anomaly and cut across its northeastern margin. The hole cut 40 m of sheared and altered volcanics and a possible diorite unit. Assuming an interpreted 60° to 70° northeast dip to the bounding fault the true thickness of the fault is 10 m to 20 m. (This fault is lineament L1 in the magnetic survey interpretation report.) Within the sheared interval a dioritic appearing unit was intersected. This unit has a mottled appearance, is strongly and pervasively chloritized, contains pyrite fracture fillings with quartz and

calcite, 1% hematite fracture fillings, and syenite as thin veinlets (<1 cm). Pervasive and weak potassic alteration occurs adjacent to a number of syenite veinlets. The syenite veinlets contain up to 10% epidote as fracture fillings and 0.2% pyrite as fracture fillings with hematite, and/or quartz and/or calcite.

Assays of core intercepts within the magnetic anomaly are generally not anomalous for copper or gold. Hole 91-4 averaged 112 ppm Cu and 7 ppb Au over 56.39 m. Hole 91-3 averaged from 21.95 m to 99.47 m (bedrock surface through the bounding fault) 122 ppm Cu and 13 ppb Au, with the best interval assaying 1,158 ppm Cu and 11 ppb Au over 3 m of altered volcanic.

Three I.P survey chargeability anomalies are the second geologic feature of interest. The largest anomaly (main zone) forms a northwest trending arc 1,300 m long by 400 m wide, roughly parallel to the magnetic anomaly and about 600 m northeast of the northeast margin of the magnetic anomaly. Drill hole 91-1 was drilled in the centre of the main zone chargeability anomaly on line 5000N.

In the western corner of the grid a strong chargeability anomaly (west zone) trends north with the strongest I.P. response towards the west. Drill hole 91-7 was drilled on this anomaly. The third chargeability anomaly (south zone) occurs on the southwestern side of the magnetic anomaly and trends north, parallel to the interpreted west fault boundary of the southern portion of the magnetic anomaly (as defined at the 58,200 nT contour). Hole 91-5 was drilled in the south zone. All three I.P. chargeability anomalies were found to be caused by graphitic sediments.

If the chargeability anomaly trends accurately reflect the general strike of the graphitic sediments then it would appear that units to the northeast of the magnetic anomaly strike northwest while units to the southwest of the magnetic anomaly strike north. An apparent southward bend in the main zone chargeability anomaly in the vicinity of Campbell Lake suggests rock units under the lake strike northerly.

Drill holes 91-1, 5 and 7 did not solely intersect graphitic sediments. Clastic sediments and tuffaceous sediments, both hornfelsed and chloritized, were minor components in these holes and in the section of hole 91-3 northeast of the magnetic anomaly. Trachyte dykes were intersected in hole 91-7. Hole 91-1 intersected minor hornfelsed (biotitic altered) volcanics.

All drill holes in graphitic sediments (black clastic unit) contain little copper. No anomalous values were intersected. Hole 91-1 averaged 104 ppm Cu and 5 ppb Au over 146.30 m. Hole 91-5 averaged 113 pm Cu and 35 ppb Au over 54.86 m. Hole 91-7 averaged 70 ppm Cu and 7 ppb Au over 41.15 m. The higher average gold content in hole 91-5 may reflect the higher pyrite content in quartz-carbonate veinlets in this hole compared to pyrite contents in holes 91-1 and 7.

Soil samples collected in May 1990 detected a zone anomalous for copper and gold on lines 5000N and 4900N between the magnetic anomaly and the main zone chargeability anomaly. The best copper and gold values in rock samples collected during the 1990 programme were in the same area. This geochemical anomaly was tested by drill holes 91-2 and 6.

Drill hole 91-2 intersected a series of augite/hornblende (secondary after augite?) porphyries, minor hornfels, very minor andesite and diabase dykes. Augite porphyry units are common to the Witch Lake Formation of the Takla Group throughout the region. The upper 22 m of hole 91-2 contains 50% hornfels and 50% augite/hornblende

porphyry. These porphyry units appear andesitic to latitic in composition when fairly fresh. Porphyries contain 10% to 15% augite/hornblende that is usually chloritized. Biotite comprises 2% to 3%, is light brown to bronze coloured and is often sericitized. Pyrite, pyrrhotite and chalcopyrite occur as fracture fillings with/or without calcite and quartz. From bedrock surface to 25.30 m this hole averaged 426 ppm Cu and 2 ppb Au over 22.25 m.

In hole 91-2 after 25.30 m the porphyries are much more siliceous in appearance and the biotite is strongly sericitized. Sericitization of feldspar is occasionally visible. The porphyries in this portion of hole 91-2 appear to be dacitic in composition but this is probably an alteration effect rather than an original composition change. Augite porphyries, hornfels and andesite are all copper bearing from 25.30 m to the end of the hole (152.70 m). This interval averages 1,823 ppm (0.18%) Cu and 33 ppb Au over 127.40 m, including 25.30 m to 47.85 m (22.55 m) grading 0.21% Cu and 72.13 to 152.70 m (80.57 m) grading 0.19% Cu. The lowest copper grades are over two intervals with fine grained diabase dykes (629 ppm Cu over 1.84 m and 132 ppm Cu over 2.03 m).

Drill hole 91-6 intersected 30% augite porphyries and 70% hornfels from 6.10 m to 35.07 m. These porphyries are dacitic in appearance; the mafics have been moderately to strongly sericitized and are less visible than in hole 91-2. This interval averages 466 ppm Cu and 14 ppb Au over 28.99 m. From 35.07 m to 45.97 m the augite porphyry has an andesitic appearance as the mafics are chloritized rather than sericitized. This interval averages 139 ppm Cu and 3 ppb Au over 10.90 m. From 45.97 m to 213.36 m (end of the hole) averages 507 ppm Cu and 27 ppb Au over 167.39 m. Over this interval a series of augite porphyries of dacitic appearance, chert or cherty sediment, hornfels or fine grained massive sediment were intersected. Higher copper values tend to be in

sections with more calcite veining or pyrite fracture filling with associated chalcopyrite. These higher values are found in dacitic porphyry, hornfels and cherty intervals. Gold values in hole 91-6 increase with depth. The final 30.36 m, from 183.00 m to 213.36 m, average 86 ppb Au; including a 3 m zone with 506 ppb Au.

Both holes 91-2 and 91-6 have extensive chloritization, silicification, carbonatization (as calcite fracture fillings) sericitization and biotitization with weak pyritization. Alteration of mafics (augite) in hole 91-6 suggests and overprinting of successive alteration phases, chloritization followed by biotitization followed by sericitization.

### 4. GEOCHEMICAL AND GEOPHYSICAL SURVEYS

Results of soil geochemical and Induced Polarization and ground magnetic geophysical surveys carried out for Mutual Resources in 1990 may be found in separate reports as referenced in section 9.

The soil geochemical survey totalled 1,681 samples collected on 17 grid lines and on two lines on the southern side of the claims. Most copper values above 100 ppm and gold values above 20 ppb are located on the north side of Campbell Lake between 5500E and 6300E north, from the lakeshore to line 5000N. Copper values range up to 2,213 ppm and gold values range up to 710 ppb in this area.

Most remaining copper values above 100 ppm occur on lines 5500N to 6100N from 5800E to 6900E, as northwest striking zones that average 25 m to 75 m wide and 200 m to 400 m long. The highest copper value in this area is 889 ppm and the highest gold value is 150 ppb.

An Induced Polarization survey was carried out by Wood Geophysical Consulting. Resistivity data was not found to be diagnostic with respect to the chargeability anomalies detected by this survey. Three chargeability anomalies were detected. The main zone extending over 1,300 m in length and about 450 m in width is located about 600 m northeast of the magnetic anomaly. In the extreme western corner of the I.P. survey area the west zone has a northerly trend with the strongest chargeability response towards the west. A north trending zone (south zone) extends parallel to the western boundary of the south portion of the magnetic anomaly. These chargeability anomalies were found to be caused by graphitic sediments of the Takla Group.

A ground magnetic survey was conducted over the grid and over Campbell Lake by Silver Standard Resources Inc. and reported upon and interpreted by Interpretex Resources Inc. A strong anomaly was detected extending under and north of Campbell Lake. The anomaly is characterized by total field values of over 66,000 nT in a background on the order of 57,800 nT.

The magnetic anomalous area was interpreted by Interpretex to be composed of separate magnetic rock units. Interpretex interpreted the anomaly to be both bounded by faults and cut by faults. Drilling results indicate the magnetic anomaly is caused by a high magnetite content in propylitically altered Takla Group volcanics intruded by syenite. Bounding faulting was also confirmed by drilling results.

A correlation of geophysical and geochemical surveys with drilling results may be found in section 3.2, Property Geology.

### 5. PROSPECTING AND ROCK SAMPLING

Prospector A.R.C. Potter prospected and collected rock samples from August 23 to September 13, 1990. A total of 14 rock samples and two soil samples were collected and sent to Min-En Laboratories for analysis. All rocks and soils were analyzed for gold and by 31 element I.C.P. Two rocks were also analyzed for Pt and Pd. Sample locations with copper and gold values are plotted on Figure 91-1. Assays certificates may be found in Appendix 2.

The majority of outcrop found during prospecting the property were Takla Group volcanics and sediments. Volcanic units included tuffs, andesite porphyry, dacite tuffs, basalt and pyroxenite. Sediments include marl, black clastics and chert; hornfels is common. Intruding Takla Group rocks are trachytic dykes. A small area of monzonite intrusive was found on line 5300N at 5550E.

Alteration noted during prospecting was predominantly hornfels with minor skarnification. Quartz-calcite veinlets with minor chalcopyrite and pyrite were found cutting marls. Other than a sheared tuff with minor silica-pyrite-chalcopyrite, on line 5100N at 6270E, most sulphide mineralization was found in chert, cherty units or trachyte dykes. Chalcopyrite and pyrite were found as disseminations and on fractures in trachyte or more commonly in chert or cherty sediment.

Sample No.	Location	Cu ppm	Au <u>ppb</u>	<b>Description</b>
333267	5000N-5990E	3089	70	Trachyte - disseminated chalcopyrite
333268	5010N-5925E	1085	20	Hornfels - quartz-calcite filled breccia, copper stain
333269	4858N-5910E	1885	60	Chert-pyrite, chalcopyrite, neodosite
333270	4880N-5940E	2650	140	Chert - chalcopyrite
333271	5850N-6450E	189	20	Cherty - green, leached sulphides
333272	5025N-5900E	770	150	Marl - 15 cm silica breccia strikes north, vertical dip
333273	4860N-4505E	92	30	Marl - calcite veinlets, pyrite
333274	4860N-4540E	102	20	Silicified, pyrite in quartz veinlets
333275	4815N-3610E	73	30	Marl - brecciated, brown carbonate alteration and veining
333276	4815N-3580E	107	10	Hornfels - silicified, pyrite
333277	5020N-3760E	73	30	Hornfels - 1% disseminated pyrrhotite
333278	5100N-6270E	75	20	Tuff - chalcopyrite, pyrite, silica on slickensides
333279	5350N-6325E	55	10	Monzonite - minor pyrrhotite
333280	5350N-6330E	520	20	Skarn - gossanous

### 6. **DIAMOND DRILLING**

Diamond drilling was contracted to Silverton Drilling Ltd. of Smithers, B.C. A total of 890.63 m (2,922 feet) NQ sized core was drilled in seven holes between February 15 and March 4, 1991.

Drill Hole	Azimuth Inclination		<u>Length</u> (metres)	Co-ordinates
91-1	225°	-60°	149.35	4985N-6250E
91-2	225°	-55°	152.70	5000N-5980E
91-3	45°	-45°	152.40	5000N-5625E
91-4		-90°	66.14	5300N-5500E
91-5	45°	-60°	84.43	5400N-5250E
91-6	225°	-60°	213.36	4900N-5975E
91-7		-90°	72.24	5940N-4950E

Hole locations are plotted on map 91-1 and drill hole logs may be found in Appendix 1.

Hole 91-1 was drilled to test the main zone chargeability anomaly.

Hole 91-2 was drilled to test the area of coincident anomalous copper and gold values on line 500N, as found in the 1990 soil sampling survey.

Hole 91-3 was drilled on the east margin of the magnetic anomaly to test that feature.

Hole 91-4 was drilled in the centre of the magnetic anomaly.

Hole 91-5 was drilled in the south zone chargeability anomaly. It was drilled to test this chargeability anomaly and the west contact of the magnetic anomaly; however, the hole was stopped before the magnetic units were intersected.

Hole 91-6 was drilled to the south of hole 91-2 in an area with moderately anomalous copper values in soil samples and to test beneath an outcrop with one of the highest copper and gold values detected in the 1990 rock sampling (sample 333270 with 2,650 ppm Cu and 140 ppb Au).

Hole 91-7 was drilled to test the west zone chargeability anomaly.

A discussion of drilling results may be found in section 3.1, Property Geology.

### 7. CONCLUSIONS AND RECOMMENDATIONS

It is concluded that the magnetic anomaly is caused by hydrothermal magnetite introduced into strong and pervasively propylitically altered Takla Group (Witch Lake Formation) volcanics. These altered volcanics have been intruded and may be underlain by syenite. The magnetic anomaly is bounded and cut by both northwest and north trending faults. No significant copper or gold values were intersected by two diamond drill holes within the magnetic anomaly.

It is concluded that the three Induced Polarization chargeability anomalies are caused by graphitic sediments of the Takla Group (Inzana Lake Formation?). Chargeability anomaly trends suggest a northwest strike to units northeast of the magnetic anomaly and a north strike to units southwest of the magnetic anomaly.

In graphitic units and intercalated tuffs and clastic sediments (hornfelsed) copper values average 70 to 113 ppm. Gold values in holes 91-1 and 7 averaged 5 to 7 ppb but hole 91-5, with a higher pyrite content in quartz-carbonate veinlets, averaged 35 ppb Au.

It is concluded that the gold and copper in soils anomaly lying on lines 4900N and 5000N between the magnetic anomaly and the main zone chargeability anomaly, reflects copper and gold mineralization in augite porphyries, cherty and hornfelsed clastic sediments. Alteration of these rock types is typical of alkaline copper-gold porphyry deposits; namely, pervasive propylitic as chloritization, epidotization, carbonatization (calcite veinlets) and potassic as biotitization. Silicification and sericitization of augite/hornblende porphyry units is common, however, the intensity of alteration is not directly correlated with copper grades. Porphyry units in drill hole 91-6 were more intensely silicified and sericitized than in hole 91-2 but copper grades were higher throughout hole 91-2.

The overburden depths in holes 91-7, 5 and 4 indicate the northwestern half of the grid is overlain by 10 m to 30 m of glacial till. This till is about 10 m thick on the ridge top north of Campbell Lake and increases in thickness north of the ridge. Such till depths suggest that soil geochemical survey results in that area may be unreliable. The sporadic high copper values detected in the northern quarter of the grid may represent copper mineralization located to the southwest, i.e. up glacial ice-movement direction.

Drilling results suggest that zone of 300 m to 400 m width by up to 1,500 m length, lying on the northeast side of the magnetic anomaly, is a good target for copper-gold porphyry type mineralization. Drill holes 91-2 and 6 drilled in the southeastern portion of this target area have detected such mineralization with accompanying alteration typical of such an environment. The copper values in soil samples on the northern quarter of the grid

may represent such mineralization transported from the northwestern portions of this target area.

It is recommended that a re-examination, including geological mapping, of the ground lying between the magnetic anomaly and the main zone chargeability anomaly be undertaken. The possibilities of trenching northward at least from drill hole 91-2 to the ridge top should be reviewed during this re-examination. If trenching is not feasible due to the overburden depths then a series of drill holes would be necessary to test this target zone.

### 8. COST STATEMENT

### **Prospecting and Rock Sampling**

Labour:	Labour: A.R.C. Potter, Prospector August 23 - September 13, 1990, 22 days @ \$150			
Truck Renta	l including mileage		1,246.50	
Food and Ad	ecommodation		326.30	
Northern Mo	buntain Helicopters: #48213 August 25 \$45193 September 13	\$714.45 \$653.75	1,368.20	
Min-En Lab	s: Invoice 18523D 14 rock-31 element ICP, Au @ \$18.2 2 rock-Pt, Pd @ \$20.00 2 soils-31 ICP, Au @ \$14.50	5 \$255.50 \$ 40.00 \$ 29.00	324.50	
Subtotal			\$6,565.50	
Camp Cons	Camp Construction (for Drilling Programme)			
Labour:	M. Holtby, Geologist November 25 - December 6, 1990 12 days @ \$245 including benefits	\$2,940	\$5,116.00	
	J. Bacon, Labourer November 25 - December 10, 1990 16 days @ \$136 including benefits	\$2,176		
Food and Ad	ecommodation 28 man-days @ \$30		840.00	
Camp Supplies (Wood, nails etc)			1,878.51	

Transportati	on Smithers Truck Rental Northern Mountain Helicopters #55216, November 28, 1990 #57729, December 4, 1990	\$ 956.18 \$2,660.85 \$ 665.40	4,282.43
Subtotal			\$12,116.94
Road Const	ruction		
Labour	K. Chubb, Mining Technologist January 26 - March 8, 1991 41 days @ \$144 including benefits		\$5,904.00
Bulldozer	Silverton Drilling Ltd.		14,505.00
Slashing Cr	ew J. Cromarty Contracting		6,894.00
Meals and A	Accommodation Total 60 man-days @ \$30		1,800.00
Truck Renta	al		848.21
Fuel			774.41
Reclamation	n Seed		160.88
Subtotal			\$30,886.50
<b>Drilling</b>			
Labour	M. Holtby, Geologist February 3 - March 4, 1991 30 days @ \$245	\$7,350	\$17,882.00

	J. Bacon, Labourer January 31 - March 8, 1991 37 @ \$160 including benefits	\$5,032	
	B. Wiersbitzky, Cook February 3 - March 8, 1991 34 @ \$160 including benefits	\$5,440	
Meals and A	SSR, Drillers and Slashing Crew Total 210 man-days @ \$30		6,300.00
Drill Contract	ctor Silverton Drilling Ltd.		62,026.64
Assays	Acme Analytical Laboratories 291 core samples for 30 element ICP and Gold @ \$15.44		4,493.40
Aircraft	Tsayta Aviation		2,090.00
Fuel			8,001.65
Equipment	Deakin Jaycox Industries Vancal Telephone Miscellaneous supplies Radios	\$ 373.12 \$ 90.10 \$ 136.44 \$ 19.71 \$1,563.74 \$ 300.00	2,483.11
Freight	Russell Transfer		1,032.85
Reclamation	Seed		160.87
Subtotal			\$104,410.52
TOTAL			<u>\$153,979.46</u>

### 9. REFERENCES

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### 10. STATEMENT OF QUALIFICATIONS

- I, Max Holtby, residing at 103 1026 Queens Avenue, New Westminster, B. C. hereby certify that:
- 1. I graduated from the University of British Columbia in 1972 with a B.Sc. in Honours Geology.
- 2. I am a Geological Association of Canada Fellow and Geological Society of Malaysia Member in good standing.
- 3. The work described herein was done under my direct supervision.
- 4. I have worked since 1971 as an exploration geologist and in mine management in Canada, U.S.A., Malaysia and Liberia, West Africa.

Max H. Holtby, F.G.

M. H. HOLTBY

# APPENDIX 1

### Diamond Drill Hole Logs

### Abbreviations used in Logs

apnc	aphanitic
bott	biotite
CA	core axis
clct	calcite
ср	chalcopyrite
dsmn	disseminated
epdt	epidote
fcfg	fracture filling
fgmt	fragment
hmtt	hematite
mgnt	magnetite
po	pyrrhotite
ру	pyrite
qtz	quartz
smas	same as
sp	sphalerite
tr	trace
v	very
<,>	less than, greater than
≤,≥	less or equal to, greater or equal to
<<,>>	much less than, much more than

## APPENDIX 2

Rock, Soil and Drill Core Sample

Assay Certificates and Analytical Techniques

# **APPENDIX 1**

### **Diamond Drill Hole Logs**

### Abbreviations used in Logs

apnc	aphanitic
bott	biotite
CA	core axis
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dsmn	disseminated
epdt	epidote
fcfg	fracture filling
fgmt	fragment
hmtt	hematite
mgnt	magnetite
po	pyrrhotite
ру	pyrite
qtz	quartz
smas	same as
sp	sphalerite
tr	trace
v	very
<,>	less than, greater than
≤,≥	less or equal to, greater or equal to
<<,>>	much less than, much more than

### SILVER STANDARD RESOURCES INC.

DRILL HOLE LOG

HOLE	NO.	91-1	

SHEET 1 OF 7

PROPERTY: CAMP	LENGTH: 149.35 m	CORE SIZE: Ng
LOCATION: $\mathcal{B} \cdot \mathcal{C}$ .	BEARING INCLINATION	COMMENCED: FEB. 15, 199/
ELEVATION:	COLLAR 225° -60°	COMPLETED: FEB. 18, 1991
COORDINATES: 4985 N		LOGGED BY: M. HOLTBY
6250E		SAMPLED BY: J. BIFCON
core stored at: On property	at 4975N - 5575E	

Γ			RECOVERY			SAMPL	ES		ASSAYS				
FROM 2x1	TO M	DESCRIPTION	RUN	%	NO.	FROM	T0 <b>7n</b>	LENGTH	Cuppm	Flu pp6			
	3.05	Casing - no core	0	To					//	,,			
3.05	17.05		3.05	0	173 15/	3.05	5.18	2.13	7/	1			
		core very broken up	5.18	26	152	5.18	9.75	457	93	3			
		first few fants - majic vlcc tiff	8.23	6	153	9.75	11.28	1.53	100	14			
		-25 / feldapara	9.75	20	154	11.28	14.28	3.00	174	5			
		- mofile - chloritized, 2 mm - 4 mos	11.28	78	155	14.28	17.05	2.77	263	2			
			14.33										
			17.37				<u> </u>						
l		malica.	19.82										
		8.0m - toffaceous figueto, darla grey to brownish											
			22.56										
			24.69	94									
		18/1	26.52										
		with chlorite at and clet and Imm-1.5mm		Ī									
		- alar in I mm fefg without other minerals.	1										
		cp - trace at 4.0 m.	32-00	64									
			33.83										
		1 . 4 ()	35.66										
		13.9-16.3m - 5% aty- det fefg, up to 1 cm	37.19	84									

#### SILVER STANDARD RESOURCES INC.

DRILL HOLE LOG

HOLE NO. 9/-/ SHEET 2 OF 7

FROM	1	TO DESCRIPTION	RECO	VERY		SAMPLE	E S		ASSAYS				
7n	m	DESCRIPTION	RUN	%	NO.	FROM	T0	LENGTH	Cuppm	PHU			
		but avy 1-2 mm.	.38.71	108					7 7				
		ay≤0. 12 in at - det fela	41.15	100									
		ath-det fetg predominantly 50-70	44.zo	89									
		to C.A. but can be any longitation	45.72	74	P - 11 - W1 -								
17.05	24.65	Flugite perphyry	47.85		156	17.05	19.81	2.76	65	6			
		med grey, softah.	48.77	92	157	19.81	22.35	2.54	31	1			
		5% musconite-books, any 1/2 mm, alar	50.90	103		i i		2.30					
		Imm latho.	53.04	93									
		vague feldapara and majics.	34.56	47									
		- apric and non-descript to about 18,3	56.39	98									
		at fofg - 12%	58.52	70	·								
		py - 0.17 to 0.2% dsmn, upto 1/2% fofg.	59.14	140									
		cp - rare to. down with py	60.97	60	_								
		por - trace to sportly 0.1 % with py.	64.02	93									
		after 18.3m - less sericitized	65.54	90									
			68.59	97					<u> </u>		<u>.</u>		
		py fety > down 0. 2%, occasional	69.20	108									
		1% over 2 to 5 cm sections.	71.64										
			74.69	103									
			75.91	95									
		22.35-24.65m - again strongly sencitized.	78.35										
24.65	50.15	Black clastic - Graphitic	80.18	7	159	24.65	27.65	3.00	159	6			
		darla grey to blada, apric to very fine-grained.	83.23	100	•			1.92	·				
			83.84			i i		2.43					
			86.89					3.66					

#### SILVER STANDARD RESOURCES INC.

DRILL HOLE LOG

HOLE NO. 9/-/ SHEET 3 OF 7

FROM TO		RECOVERY			SAMPL	ES		ASSAYS					
TRUM	7 <b>n</b>	DESCRIPTION	RUN	%	NO.	FROM m	T0	LENGTH m	Cu	Au ppb			
		ut 28.37m - 4 mm band py-minos po, 40° to C.A.	89.32	95		1	i		, ,	8			
			92.37			38.71	41.15	2.44	94	6			
		- occasional Thin clet fefg, ang < Imm, 1/2/2 to 1/2	93.59	86	165	41.15	44.20	3.05	127	7			
		- rare at fefy, and 2 mm.	9662	102	166	44.20	47.20	3.00	90	3			
			99.67	103	167	47.20	50.15	2.95	87	5			
		40.33-41.15 m - med grey, no graphite	102.72			<u> </u>	ļ						
		-42.17m-1mmaty-clet-py-cp fef 30° to C.F.	104.55	73		<b> </b>							
		cuts bending at 70	105.77	102			ļ						
		cuts bending at 70  cp - as dry fetg for 1 cm out from at -de  41.15-50.15m - clet-at fetg 17-270, with py.  Clastic Sediment	1206.98	86			<u> </u>						
		41.15-50.15m - clat-at fety 17-270 with py.	108.81	1//			-						
5015	59.10	Clastic Sediment	111.56	72	168	50.15	53.04	2.89	99	2			
<u></u>		med grey	112.78	63			Ī	3.01		1			
<u></u>			114.91	16	170	56.05	59.10	3.05	105	2			
		py ≤ 0.10 fefy 4 damin	116.43	59			<u> </u>						
		minor graphite on a few fractures.	117.96			-							
			119.79	94								,	
ļ			12283				<u> </u>						
ļ		and black fragments up to 1 cm.											
		59.10 m cntc, sharp 30 to C.FT.	126.19										
59.10	62.00	Black Clastic - Eraphitic	127.71		<b>?</b> 7/	59.10	62.00	2.90	100	7			
			130.15			<u> </u>				<u> </u>			
		ay - 0.2/2 to 0.5/6, mainly on dry fractures											
		alar with aty-clet felg and on dry frectures	133.20	66		<u> </u>	-	ļ					
		12 metre - occassional black and brown fonts	13564	94			<u> </u>		ļ				
		60.90-62.00m - transition from black	137.77	90			<u> </u>						<u> </u>

DRILL HOLE LOG

HULE NO. 9/-/ SHEET 4 OF 7

FROM	то	DESCRIPTION	RECO\	'ERY		SAMPLE	ES			Þ	ISSAYS		
75/1.	m	DESCRIPTION	RUN	%	NO.	FROM	T0 <b>2n</b>	LENGTH 카리	Cu	PPA			
		graphitic to med grey cleatic.	13868	34						,,			
		graphitic to med grey cleatic.  sportty 5/0 (over 20 cm) clet fefy.	140.21	75						_			
200	74.90	Tuff.	140.8Z	49	172	62.00	6500	3.00	99	/_			
		Missive appearance	141.73		173	65.00	68.00	3.20	110	,			
		angular fragmento-up to 5mm, avg 0.1 tro 2mm	142.34 m	57	174	68.00	71.00	3.00	109	Z			
		black to dark grey, all agence to	143.87		175	71.00	74.00	3.00	121	1			
		blacks to dark you, all agence to	14539	34				<del></del>					
		very fine grained, larger fragmen	0										
		concentrated at start of section 3%.			<del></del>								
		and decrease downhole.	146.00	23									
		Matrix - blackish	147.52	76		<u> </u>			<u> </u>				
		py-0-1 %, on dry fractures, demn in 27-clat felg	149.35	60	<del></del>								
		co - rare trace down and in at- clit fety.	EΛ	D			ļ. <u> </u>		ļ <u>.</u>				
		Do - trace demn and in als - clit feta:			·				<u> </u>				
		73.71-73.94m - black, banded, graphitic, 40 to C.	7							_			
		py 0.2% fife on dry fractures.											
7.90	76.70	Black Clastic - Eraphitic			176	74.00	76.70	2.70	126	6			
		very fine grained.											
		py on dry fractures and in gt-clet fofg							<u> </u>				
		py on dry fractures and in gt-clet fefg											
		-mainly on dry fractures.			,								
70	84.75	Tuff (Sediment)			177	76.70	79.70	3.00	112	2			
		med, gruy			.178	79.10	81.57	1.87	103	14			
		similar to 62.00-74.90 m but more				1		3.18		1 1			
		black fights and many are angular up to 5 cm	h.									\	

DRILL HOLE LOG

HOLE NO. 9/-/ SHEET 5 OF 7

FROM	то	DESCRIPTION	RECOV	ERY		SAMPL	ES			ρ	SSAYS	<del></del>	
m	1	DESCRIPTION	RUN	%	NO.	FROM	T0	LENGTH	Cu	Au opb			
		brownish fragmento - up to 3 cm. very fine-							77	11			
		brownish fragments - up to 3 cm, very fine- grained, angular with wunded corners.											
		Dy < 0.1% in att-clet fety. Jama and										-	
		py <0.1% in att-clet fefg, down and											
		80.40-81.00 m - Augite porphyry									-		
		med. grey, 3% large chloritized mapies											
		up to 5mm, py 0.12-0.2 / demn											
		and in st-det fefg.							·				
		and in st-det fefg. 40° to C.F. entes.											
		81.39-81.57m - fault											
		83.19-83.84m. black, graphitic											
84.75	91.29	Augite Porphysis (?)			180	84.75	81.75	3.00	20	2			
		strongly and servasively chloritized						3.54		/			
		darla Grey to black		İ									
		matics - vaguely visible, chloritized,											
		1 mg to 4 mm.											
		feldspara - vaguely visible	·										
		at - clet fely of clet hely and Imm. < 0.5)	1										
		at - clet forg or clet forg, and Imm. < 0.59											
		91.29m - fault 46 to C.A.											
91.29	110.85	Feldepa Porphyry			182	91.29	94.30	3.01	9	2			
		Larla grey , similar to unit in hole 91-4, 9.75-14.8	7m.					3.00		12			
		5% bronze colored liotite books.						3.00					
		mainly fellapara.						3.00		2			
		mafied - interatial, fine grained (secondary biotal	?)					2.57		3			

FROM	TO	DESCRIPTION	RECO	/ERY		SAMPLI	ES			ASS	SAYS	
m	m	DESCRIPTION	RUN	%	NO.	FROM	T0	LENGTH	Cu	Au		
		py- to to 0.1% damn, on dry fractures, in			Į .			2.94	, ,	1 • 1		
		clet- at sefa			188	108.81	110.85	2.04	33	6		
		clet fof a clet- of fof 12%										
		clet fife & clet-of fife 1/2/2 cp - rare tr. with py in clet-of fife.										<u> </u>
		104.60-105.87 m - light to med gry.										
		- brite alteration (homfelsing)		-								
0.85	117.68	Black Clastic - Graphitic						1.93				
		very fine grained			l		i i	3.02		1 }		-
		cliff- gty fefg - haviling to Imm.			191	115.80	117.60	1.80	162			
	1-11-4	py-tr. on dry fratures > dann.					10000	7		7		+
7.60		- Laska grey, 5% black sections.						3.00				_
		-brownish tint (birtite prinfelaring?)						3.00				+
		Common					i i	3.00		1 1		
		By in clet fefg > on dry fefg or damn.						1.46		1 1		
		130.20-134.00 m - very broken up fault.						3.54		4		
34.60	145.95	Black Clastic - Graphitic					i	2.94		1		
		very fine grained			199	137.54	140.21	2.67	125	3		-
		det to fefy 1%, decreasing downhole			200	140.21	14387	3.66	106	5		
		py - 0.1% on dry fractures > damn > in clet fifg			201	143.F7	145.95	2.08	98	35		-
		35°-40° to C. A.										
		137.04-137.54m Dyke										
		light brown, fine grained, hard, 35th C. F.										
		py to down; 0.2% det fefg with tr. py.										

DRILL HOLE 1.0G

HOLE NO. 9/-/ SHEET Z OF Z

FROM	то	DESCRIPTION	RECOV	/ERY		SAMPLI	ES			А	SSAYS		
777]	m	DESCRIP-LON	RUN	%	NO.	FROM	T0	LENGTH m	Cuppm	And			
459£	146.39	Hornfelo			202			0.50					
		Greenish grey											
		let fely with tr. py - 0.17-0.2%											
	.,	greenish grey  let fefg with tr. py - 0.17-0.2%  146.37 m - 2 cm aty - det (minor) fefg with  10% py tr cp, 0.2% chlorite, 50 to C.  Mud - 60 to C. F.											ļ
		10 % py to cp, 0.2% chlorite, 50 to C.	Ħ.										
6.39	146.45	Mud - 60 to c.A.				<u></u>							<u> </u>
1645	147.57	Black chaptie - Oraphilic			203	14645	147.57	1.12	101	5			
<del>17. 5</del> 7	149.12	17 ngite Porphyny greenish grey, apric matrix			204	147.57	/4955	1.78	135	3		<u>.</u>	
		greenish grey, apric matrix											<u> </u>
		15% chloritized matics, up to 1 cm											_
		Dy - 0.1 % mainly in chit fety											
:		pt-tr dama											<u> </u>
19.12	13/9.35	15% chloritized mafics, up to 1cm py - 0.1% mainly in clat fefg pt - to down Black Chatic - Graphitis				ļ							L
		/											<u> </u>
					·				·				_
								-					ļ
								<u> </u>					
	_				<del></del>								<u> </u>
												<u> </u>	_
													_
ĺ								ļ					
											<u>.</u> .	 	

## DRILL HOLE LOG

HOLE NO. 91-2 SHEET 1 OF 7

PROPERTY: CAMP	LENGTH: 152.70 m	CORE SIZE: NQ
LOCATION: B.C.	BEARING INCLINATION	COMMENCED: FEB. 18, 1991
ELEVATION:	COLLAR 225° -55°	COMPLETED: FEB. 20, 199/
COORDINATES:	152.70 <sub>m</sub> 53.5°	LOGGED BY: M. HOLTBY
5980E		SAMPLED BY: J. BACON
CORE STORED AT: On the property at	4975N - 5575E	
/_//		

FROM	то	DESCRIPTION	RECO\	ERY		SAMPL	ES				ASSAYS	
m	m	BESONTI TON	RUN	%	NO.	FROM	T0	LENGTH	Cu	Fu		
0	3.05	Casing - No core	0	To					//	,,,		
3.05			3.05	0	173205	3.05	6.00	2.95	302	2		]
		// <sub>4</sub>			206	,	i			1		
		matica - pyroseng 10/2 to 15/2, subhedral										
		chloritized, up to 1. 2cm, avg. 3 to 4 mm.										
		l	11.89									
		light brown to bronze who	14.33	102								]
		clet - minor gty fefy, up to 5 mm, ang 1 to 2m	17.37 m	99								
		margly barren - also with py + po + cps	20.42	101						<u> </u>		
		By total 0.17 to 0.27 with clet + ate	23.47	98								
		By - total 0.17 to 0.27 with clit # gtr fcfg > on dry fractures > down.	26.52	96								
		po - total 0.24. 0.3%, damn > with clet Fcfg \$	29.57	96								
			32.61									
		Cp-0.1% occasionally 0.3% or 0.4% over									_	
			38.71									
		- often associated with su of so	41.76	101								
		fofg ± clot ± gt > on dry tretteres > damn	41.88	Box								
		forg ± clot ± gt > on dry frutures > demn 9.03m cnte - sharp but irregular	41.88 47.85	SPILLE	<b>,</b>							
			50.90	89								

## DRILL HOLE LOG

HULE NO. 91-2 SHEET 2 OF 7

FROM	TO	DESCRIPTION	RECOV	'ERY		SAMPLE	ES			F	ASSAYS	
	ĺ .	DESCRIPTION	RUN	%	NO.	FROM	T0 <b>m</b>	LENGTH	Cuppm	Au pp6		
9.03	15.20	Hornfels	53.93	99		l			201	′′		
		Brownish grey, apric, few black patches	57.00	103	208	12.03	15.70	3.17	206	2		
			59.44									 $\Box$
		po - total 6.1%, avelymore, domn >	6248	10/								
		fofy ± clot = qty	65.53	103								
		py - total <0.1%, fcfg > down,	68.58	93	-							 _
		on dry fractures > clot-gty fcfg.	70.41	90								4
		cp - traces, fcfg + damn	72.24	87								 _
		12.16-12.30m augite porphyry.	75.29	106								 
		12.54-13.18 m similar to 3.05-9.03 m but	78.03	93								 _
			78.64	77								 _
		15.20m ento sharp but irregular.	81.38	99								 
15.20	20.66		82.91	81	209	15.20	18.00	2.80	422			 
			84.43	99	210	18.00	20.66	2.66	52/	3		 _
		-less bronze color both-looks more	87.48	100								 
			90.53	100								 _
		- much less sulphides.	93.57	100								 _
20.66	25.30	Hornfels	96.62	96	211	20.66	23.47	2.81	466	2		_
		similar to 9.03-15.20m but fewer sulphides	98.76	97	2/3	23.47	25.30	1.83	824	3		 _
		gty-det fcfg≤/2/2	101.80	104			-					 
25.30	30.74	Augite Porphyry	103.33	44	213	25.30	28.30	3.00	2741	13		
		similar to 3. 85- 9.03 but	104.24	64	214	28.30	30.74	2.44	1793	6		_
		almost no bronze word both except	105.46	25								
		at 30.4-30.55m.	106.07	21								
		cp - 0.3% - 0.4%, associated with po	106.68	46								

### DRILL HOLE LOG

HOLE NO. 9/-2 SHEET 3 OF 7

FROM	то	DESCRIPTION	RECOV	ERY		SAMPL	ES			ļ.	SSAYS	 
<u>m</u>	711	DESCRIPTION	RUN	%	NO.	FROM	T0	LENGTH	Cu	Hy		
		-damn > fofg	107.59	7/			<u> </u>		//	//		 
		mapies - less chloritization	108.81	30	a							 
		po - 0.2% dama > fcfg	110.33	80		<u></u>						
		- on dry forg + gty-det forg	//1.25	128			ļ		<b></b>			
			111.86	111								
		hornfela 25.4-25.5m, 26.05-26.16m	113.39	84					~			 
		29.06-29.7/m also other esteles formine	116.43	96			Ĺ					 ·,
		less than whole core thickness!	119.48									_
274	34.90	Hornfels	/22-53	100	215	30.74	326/	1.87	1917	24		 
		brownish grey	124.66	94	216	32.61	34.90	2.29	1697	13		
		po and up in aty-clet fefy, each ≤ 0.5%	126-19	101								
		Little py	12924	102		<u> </u>						 
4.90	47.85	Hugite Porphyry.	131.37	102	217	34.90	38.40	3.50	2044	24		 _
		similar to 3.05-9.03m but	133.20	78	218	38.40	4/.88	3.44	3/08	9		
[		no bronze colored both to 36.3m.	135.94	9/	219	41.88		<u></u>	1398	5		 
		up and por in aty-clet fefg	138.99	90	220		47.85		1492	13		 
		cp, so and sy on dry fractures, sy > so > cp.	141.12	92								
		cp : 0.4% \$0.5%	144.17	93								 
		after 36.3m - bronze bott ≤ 2%	147.22	100								 
		after 38.5m - gty clet felo decreasing.	149.35	98								 
		samples 219 and 220 aux spilled box 8.	150.57	99								 
		- all same wich type last 30 cm of	152.70	97								 
		soupl 220 not spilled.	En	J								
7.85	50.40	Hornfels			221	47.83	3040	2.55	544	11		
		provnish grey									Ţ	

DRILL HOLE LOG

HOLE NO. 9/-2 SHEET 4 OF 7

FROM	TO	DESCRIPTION	RECOV	ERY		SAMPL	ES			А	SSAYS		
m	m	DESCRIPTION .	RUN	%	NO.	FROM	T0	LENGTH	Cu	Aug			
		1% gtg-clet fcfg, avg/mm, uptr 4cm.  -trace por 0.1% cp.							//	//			
		- Trace por , 0.1% cp.			<del></del>	<u> </u>							
50.40	64.70	Hugele Porphyry						3.00					
		similar to 3.05-9.03m				1	l	3.00		i i		$\rightarrow$	
		po ≤ 0.2 to 0.3%, dsmn ≤ fcfg					ļ	3.04	[	1			
		cp 0.19tr 0.3%, dsmn >fcfg			225	59.44	62.45	3.01	1622	19			
		clet-ate fefg, 1/2 To, and 1-2 mm.			226	62.45	64.70	2.25	2015	28			
		after 54.0m - co mainly lon dry fofg ± po ± py after 64.0m - decrease in po and increase											
		1 <i>11</i>											
64.70	66.54	Diabase (?) Dyke			227	64.70	66.54	1.84	629	8			
		fine grained.											
		fine grained.  1% clet- gt fcfg, ang 1-2mm  py > po 0:14% py.											
		py > po 0!14% py.											
	<u> </u>	po traces											<del></del>
66.54	70.10	med. grey. Augitt Forphyry			228	66.54	70.10	3.56	1291	13			
		similar to 3.05-9.03-m											
		majors chloritized but otherwise has											
		fresh appearance.											
70.10	12.13	cp > py > pr, cp 0.2%. Diabase(?) Dyke	-		229	70.10	72.13	2.03	132	6			
		similar to 64.70-66.54m but feldspars visible											
		2% barren gtz-det fofg											

### DRILL HOLE LOG

HOLE NO. 9/-2 SHEET 5 OF 7

		DECONDITION	RECOV	/ERY	<del>"</del>	SAMPLE			_		SSAYS	 
FROM 1001	70 7n_	DESCRIPTION	RUN	%	NO.	FROM <b>M</b>	T0	LENGTH M	Cuppm	HA		
		trace py > por , down + fofg							, ,	, ,		 
<i>72.1</i> 3	<i>75.</i> 15	Augite Pornhyry			230	72.13	75.15	3.02	1576	16		 
		med grey similar to 3.05-9.03m but										
		maples and gleaspar principles sericitized, alignment Johnscrypta	-									 
		py-forg Jamen total = 0.5%										
		po - trace with py fofg										 
75.15	78.81	Hornfels with pyfcfg especially	/		231	75.15	78.31	3.66	156/	21		
		brown, fine grained.			- u							
	-	gty folg- 27th 3%, ang. histing to Imm,										
		py-fefg-0.5/tr 0.6 %, dry fefg > with aty										
		fefy alav domn.										
		pr-trace foty										
		cp - 0.2% -0.8% fcfg with atz. 75.58-71.22 - Hugite porphyry smas 72.13-75.15										
78.81	82.15	Augite Porphyry			232	78.81	82.15	3.34	1994	37		
		similar to 72:13-75.15m but										
		nefico chloritized short sections (few cm)										
		py - 0. 3 to 0.4 %, Samm, on dry fratures, with one	e fa									
		up - 0.3% damin, on dry fractives, with at fe	Fg <sup>T</sup>									
8215	83.94	Hornfels			233	82.15	83.94	1.79	1816	27		
		I drown				<u> </u>	<u></u>					L

FROM	то	DESCRIPTION	RECOV	'ERY		SAMPL					ASSAYS	
m	m	DESCRIPTION	RUN	%	NO.	FROM m	T0	LENGTH	Cuppm	Au ppb		
		By fofg >> down fotg as dry coatings and			·	ļ			//	/ /		
		with clet- et 0.2%-0.4%										 
		cp 0.3% fofy with clot.				ļ						 
<del>  </del>		clet = qty fefy - larger fefy usually karren	<b>.</b>						·			
		83.11 - 83.54m - Frigite douphyry - amas 72.13-75.1	5m.		<del></del>							
83.94	85.32	Andesite (Augite polphyry?).  Jine grained, med to dark grey!			234	83.94	85.32	1.38	1452	23		 
		fine grained, med to dark grey.										
<u> </u>		- looks very much like augite porphyry										
		but fine grained, ferver mafices and										 
		mafies are smaller, and 2mm.										
		mapies - chloritized.										
		py 014 % damn & Jefy-dry felg tin aty-clet	fefg.									
		as 0.2% with a few sections of 0.4%	110									 
		as fofg ± gt ± clet.										
25.32	87.18	Hornfelo - brown			235	85.32	87.18	1.86	3567	67		
		By 0.3% down on dry fractures in at-det	fefg.									
		co 0.2%-0.3%, damn, ondry fractures, in	N NO									
		at-clet folg.										
87.18	102.00	Anderite (Augite purphyry?)			236	87.18	90.18	3.00	1642	50		
		smas 83.44-85.32m, fine grained.						3.00				
		malian often serictized						3.00				
		Cp 0,2%-0.3%					1	300				
		93.53-93.84m - silica flooding, both white				1		2.82		1		
		and grey silica =0.1 To py				1,7			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
		gradual change to hornfels, increasing silica and sein	citie	4								 

DRILL HOLE LOG

HOLE NO. 91-2 SHEET 7 OF 7

FROM	10	DESCRIPTION	RECOV	/ERY		SAMPL	ES			ASS	SAYS	
7~1	m	DESCRIPTION	RUN	%	NO.	FROM	T0	LENGTH	Cu	Au		
,	106.85	Hornfelo - prown				1	1	2.24	, ,	1' 1		
						i	,	2.61		1 1		
		2 large gty veins with trace py, 4cm + 12 cm	wide									
		cp - 0.12-0.2%										
		cp - 0.1/2 0.2%										
106.85	152.70	Andesite (Augite Porphyry?)			243	106.85	109.85	3.00	1526	26		
		Andesite (Augite Porphyry?) similar to 83.94-85.32m			244	109.85	//3.39	3.54	1803	38		
		med-darla grey			245	//337	116.43	3.04	1516	20		
		By =0.2/0.3% Somm > fcfg (dry)			246	11643	119.48	3.05	2543	66		
		cp 0. 25-0.3%, down, on dry fractiones an	_		247	119.48	/zz53	3.05	26 56	8-5		
		in gty-clet fefg.			248	/22.53	12553	3.00	3054	6/		
		cp 0. 2-0.3%, down on dry fractiones an in aty-clet fefy.			249	12533	12854	3.0/	1827	43		
		po-traceo damo			250	12854	131.37	2.83	2598	53		
		V			251	131.37	134.37	3.00	1964	58		
		short (20 cm-30 cm) sections, hornfelaic			252	134.37	137.35	2.98	1890	46		
		appearance - appears to be hornfelsed augite purphyry - total 2m in first			253	137.35	140.35	3.00	1659	40		
		augite purphyry total 2m in first			254	140.35	143.35	3.00	2482	38		
		10 m of interval.			255	14335	146.35	3.00	1660	4/		
		ofter 130.60m - occasional epot selvages with sty-clet fefg.			256	146.35	149.35	3.00	1506	36		
		with gty-clet fefg.		-	257	149.35	152.70	3.35	/93/	50		
		V U U V V										
									••-			

#### DRILL HOLE LOG

HOLE NO. 9/-3

SHEET 1 OF\_4

 PROPERTY:
 CPMP
 LENGTH:
 152.40 m

 LOCATION:
 BEARING
 INCLINATION

 ELEVATION:
 COLLAR
 45°
 -45°

 COORDINATES:
 5000 N
 152.40m
 -46°

COMMENCED: FEB. 20, 199/
COMPLETED: FEB. 22, 199/
LOGGED BY: M. HOLTBY

SAMPLED BY: J. BACON

CORE SIZE:

CORE STORED AT: On the property at 4975N-5575E

FROM	TO	DESCRIPTION	RECOV	ERY		SAMP	ES			-	ASSAYS	
77/	<b>7</b> 77	DESCRIPTION	RUN	%	NO.	FROM	TO 211	LENGTH	Cuppm	Au ppb		
0	21.95	Casing - no core	0	To					,,	, ,		
21.95	69.86	Volcasio - Chlorite Alteration	21.95	0	173 258	21.95	24.69	2.74	83	7		
		Dark blackish green	22.56	20	259	2469	27.69	3.00	39	4		
		Magnetite - damn 10/2 to 20+/2	24.69	9/	260	27.69	30.70	3.01	7	3		
			25.9/	61	261	30.70	33.70	300	20	6		
		py - domn traces, fcfg 0.17 to 0.2%	28.35	93	262	33.70	31.70	3.00	8		<u></u>	
	_		3/.39	99	263	36.70	39.70	3.00	1158	11		
		c/ct - fcfg ± mgnt 1/2 to 3/2, occasione	34.44	98	264	39.70	42.70	3.00	119	9		
		5% over Im intervalo	<i>37.4</i> 9	102	265	42.70	45.70	3.00	30	5		
		- highest py concentrations are in	39.32	102	266	45.70	48.70	3.00	12	4		
		clet fily	41.45	100	267	48.70	50.95	2.25	69	33		
		28.65-32.0 m - oleassional epdt with clet	44.50	94	268	50.95	52.54	1.59	53	4		
		fefg and pervasine epit as aftered	in .		269	52.54	55.54	3.00	81	9		
		of feldanna.	47.55	100	270	55.54	57.30	1.76	8-8	11		
		after 32.0m - occassional epdt alteration	50.29	93	27/	57.30	39.18	1.88	57	4		
		of feldapara.	53.34	100	272	39.18	62.17	2.99	165	18		
		52.54-55.54 m - fault, crushed - rock magnetite	56.39	98	273	62.17	65.17	3.00	150	32		
		det; slickensides	57.44	100	274	6517	67.36	2.19	59	7		
		58.85m - 5 cm syenite fragment	62.48	98	275	67.36	69.86	2.50	30	3		

## DRILL HOLE LOG

HOLE NO. 9/-3
SHEET 2 OF 4

FROM	TO	DESCRIPTION	RECO	VERY		SAMPL	ES			μ	SSAYS		
711	m	5530011 11300	RUN	%	NO.	FROM	T0	LENGTH	Cu	Au			
		59.18-69.86m - fault - crushed roda, magnetite	65.84	103					11	77-			
			67.36	í I									
_		gorge	68.88	101									
69.86	76.67	Diorite	71.32	61	276	69.86	12.54	2.68	115	21			<u> </u>
		dark grey mottled appearance	72.54	54	277	72.54	74.98	2.44	186	5-			
		strong and pervasine chloritization of mafice	74.98	26	278	74.98	76.67	1.69	107	5			
		py - trace down	76.50	66		_					· · · ·		
			78.03	109	1								
	<del></del>	sportly 0:3% in sections of thick fortale	79.55	88									
		not common only over a few cm).	81.08	107									
			82.60	94									ļ
		hmtt - < 17 fetg, sportly, usually ondry	85.04	78									
		padures	87.48	8Z	· · · · · · · · · · · · · · · · · · ·								
			88.09	80							•		
			89.61	25									
		adjacent to syenite.	90.22	25					_				
			90.83	43							·		
		sections (few cm) where often has	92.35	77		-							
		fault or fracture contacts with divite	9388	76								_	
		- epdt fefg up to 10%	9540	88									
	,	- py-0.2% fcfg ± hmtt ±gtg ± clet -demn ≤0.1%	98.15	50									
		' - demn ≤0.1%	99.97	66	*			-			_		
			102.11	58									
			105.16	100									
			108.20	100									

			RECOV	ERY		SAMPLE	E S			A	SSAYS	
FROM 7m	T0	DESCRIPTION	RUN	%	NO.	FROM	T0	LENGTH	Cu	Fu		
	9947	Feldspar Porphyry - Fault Zone	111.25	103	279			2.88	, ,	1''		
	1 /2-11	- similar to unit at start of hole 914	114.30	102	280	79.55	87.60	3.05	200	23		 
		but stronger chloritization	117.35		281	82.60	85.04	2.44	12	5		 
			119.79	89	282	85.04	88.09	3.05	13	6		 
		visible.	12283	93	<b>2</b> 83	88.09	90.83	2.74	25	6		 
	_	- pervasive and strong chloritization	125.88	100	284	90.83	93.88	3.05	67	5		 
		76.67-54.35m (approx.) - pulverized mylonitie	128.93	100	78 <u>5</u>	93.88	96.40	2.52	75	2		 
		-mgnt 57-15%	131.98	100	286	96.40	99.47	3.07	104	16		 
		- py trace	135.03	100								
		81.0-85.0m - most magnetite weathered to	138.07	103								 
		hnitt.; gouge common	141.12	100								 
		- 27. to 3% fights of det tyte forg, up to Ian width.	142.65	95								 
		up to I con width.	145.08	75								 
		84.35-99.47m - mybritic, core very broken my	b,									 
		5% figures clit # gty fofg, karren					<u> </u>					 
		last 75 cm - black fault gonge.	148-13	100			<u> </u>		ļ	-		 
9947	129.40	Hornfels	151.18	102	287	99.47	102.47	3.00	64	9		 
		- starto greenish brown, changes to	15240	102	288	102.47	105.50	3.03	122	10		
		med grey to greenish grey.	E٨	1D	289	105.50	108.50	3.00	140	12		 
		py-tr. to 6,2% down > fcfg (ondry fractive	<u> </u>		290	108.50	111.50	3.00	97	15		 
		discontinuous gty-clet fofg \$3%, barren			271	111.50	114.50	3.00	114	28		 
		very fine grained.	ļ		292	114.50	117.50	3.00	87	28		 
		108.10-108.90 m - fault, youge and crushed rock.			293	117.50	120.5	3.00	127	36		 
		118.75-118.83m-5 10 py, tota along Core.			294	120.50	123.50	3.00	15	7_		 
		121.75-12283m - 25% fault gouge, remained buck	n up		295	123.50	126.50	3.00	135	6		 

DRILL HOLE LOG

HOLE NO. 9/-3
SHEET 4 OF 4

FROM	то	DESCRIPTION	RECOV	ERY		SAMPLI	ΞS			F	ASSAYS		
m.	m	DESCRIPTION	RUN	%	NO.	FROM	T0	LENGTH	Cu	PAU			
		last 4 to 6 m - not as strongly hornfelsed.				Į		3.40	11	,,			
		- very fine-grained sediment.											
129.90	140-68	Black clastic - graphitic sediment			297	129.90	132.90	3.00	64	8			
		very fine grained.			298	132.90	135.90	3.00	73	28			
		very fine grained.  1 set metre transition from grey to black color.			299	/35.90	138.90	3.00	115	8			
		py - to to < 0.1% down and fofquith clet			_								
		elet fefg- 27-3%, discontinuous.											
140.68	141.18	Hornfels			300	138.90	141.18	2.28	58	8			
	,	greenish grey sediment, weak horn felsing											
		very fine grained											
141.18	142.00	Black clastic			301	141.18	145.80	4.62	72	9			
		-5mas 129.40 - 140.68 m.											
142.00	145.80	Hornfels - brownish grey otherwise											
		Smas 140.68-141.18											
14580	152.40	Arkosic Sediment			302	14580	149.10	3.30	56	/			
		Grey, in part hornfelsed			<i>3</i> 03	149.10	152.40	3.30	61	2			
		ary. grain size 0.3-0.5 mm, up to 1 mm.											
		musaine appearance - no banking or bedding										$\longrightarrow$	
		no obvious volcanic fragments but											
		many Jeldopar fragmento			·								
		many feldapar fragmento det foto + a little ett 37-4% with											
		trace py											
		py - rare trace domin											
		150.40 mto end - homfeland											
		151.20m to end - 10 % sportly black color											

#### DRILL HOLE LOG

HOLE NO. 9/-4 SHEET 1 OF 4

PROPERTY:	CAMP	LENGTH: <u>66</u> .	.14 m	CORE SIZE: N/Q
LOCATION:	B.C.	<u>  E</u>	BEARING INCLINATION	COMMENCED: FEB. 22, 199/
ELEVATION:		COLLAR		COMPLETED: FEB. 23, 1991
COORDINATES:	5300N			LOGGED BY: M. HOLTBY
	5500E			SAMPLED BY: J. BACON
<b></b>	0 +	+ 110-11	1	

ASSAYS RECOVERY SAMPLES FROM DESCRIPTION TO LENGTH RUN NO. FROM T0 0 9.75 0 173304 9.75 12.80 3.05 158 305 12.80 14.87 2.07 105 11.28 33 12.80 103 13.72 83 14.33 82 17.37 78 19.81 76 21.64 31 25.60 94 28.96 89 31.39 59 33.53 9/ becoming increasingly less distinct 35.66 98 as overall grain 38.40 95 41.15 84 alteration effect?) amant increases. 44,20 103

			RECOV	ERY		SAMPL	ES			A	SSAYS	
FROM	T0	DESCRIPTION	RUN	%	NO.	FROM	ТО	LENGTH	Cuppm	Aub.		
		14.65-14.87m - barren gtz-miner elet vein	46.02	89					1 1	//		
14.87		$\cdot$	47.55	77	306	14.87	18.00	3.13	13	7		 
		-strongly chloritized biotitized	50.29	7/	307	18.00	21.64	3.64	22	2		
		- mgnt - dsmn 10%-15%.	53.04	80	308	21.64	25.60	3.96	20	7		 
		-bott - not obvious except over a few cm	<i>54.</i> 25	64	309	25.60	27.48	1.88	65	19		 
		with 20%-25%-spotty	56.08	87		ļ <u> </u>						 
		- probable very fine-grained bott over whole interval.	57.61	86			ļ <u>.</u>					
		whole interval.	60.05	74			ļ					 
	i	-chloritization - pervasive & strong.	61.26									 
		py-dsmn, Tr.	63.09	87		ļ						 
27.48	31.39	Feldspar Porphyry - Volcanic	64.01	54	310	27.48	31.39	3.9/	16	3		
			64.62	82		· ·						
		altered appearance - fine-grained	66.14									
		hioTiTe	EN	ID		<u> </u>						 
		start of section - sheared, gouge end of section - youge, poor recovery, fault(?) may have been about /m:				ļ	<u> </u>					 
		end of section - youge, poor recovery,				ļ	<u> </u>					 
		fault (?) may have been about /m.		:	12"		<u> </u>		<u> </u>			
3/.39	33.84	Volcanic - Biotite-Chlorite Alteration			311	31.39	33.89	2.45	165	12		
		smas 14.87-27.48m				<u> </u>	ļ					 
		32.90 - 33.24m - fault gouge, syenite fragments				ļ	<u> </u>					
		+ highly altered material				ļ		ļ <u>.</u>				 
		33.24-33.69m - 75 % c/ct as fctg or veinlets										 
33.84	33.35	Feldspar Porphyry - Volcanic			312	33.84	35.33	1.5/	612	1/		 
		similar to 9.75-14.87m but					-		<u> </u>			 
		strong shearing 40° to C.A.										

DRILL HOLE LOG

HULE NO. 91-4 SHEET 3 OF 4

SAYS	ASSAYS			S	SAMPLE		VERY	RECOV	DECCALDITION		
	Fulppb	Cuppm	LENGTH 211	T0 <b>m</b>	FROM 7M	NO.	%	RUN		10 m	FROM M
	,,								pervasive epidotization		
									weakly magnotic		
	3	37	3.82	39.17	35.35	313			55 Volcanie - Biotite - Chlorite Alteration	45.55	35.35
									similar to 14.87-27.48m		
									blackish grey spotty <1% pervasively epidotized feldspars		
	13	252	3.61	42.78	39.17	314			39.17-39.49m - syenite, pink		
	7	122	2.77	45.55	42.78	315			- net magnetic		
									-py 0.1% dsmn		
									-epdt 1% fcfg + pervasive es		
									envelopes about fifg		
									-c/ct 27-3% fcfg		
								n	40.31-40.95m (approx.) - syenite, smas 39.17-39.49		
								2	42.03-42.78 m- strong pervasive epidotization		
									42.03-42.78 m - strong, pervasive epidotization non-magnetic to weakly magnetic		
	9	525	2.00	47.55	45.55	316			29 Syenite	50.24	4555
	1 1	1 1	2.74	1					Pink, smas 39.17-39.49-m		
									epdt-<1% fcfg & few pervasive patches		
									49.13-49.26-m-strongly biotite-chlorite		
									altered volcanic		
	,	30	3.21	53.50	50.29	3/8			10 Valania - Bistite - Chlorite Filteration	5710	50.24
	1	1	1	i	1 1				i i	21.10	00.27
			· · · ·		7,,,,,	J.,					
			1						mgn1 - 25./0		
	1	1	3.21	i	1 1				Smas 14.87-27.48m  biotite more obvious  mgnt - 25+%	57.10	50.29

		DECONTOTION	RECO'	VERY		SAMPLE	S			A	SSAYS	
FROM	10 m	DESCRIPTION	RUN	%	NO.	FROM M	TO M	LENGTH	Cu	Aub		
		Syenite							113			
		pink, smas 45.55-50.29m										
		57.76-58.30 m - biotite-chlorite altered										 
		volcanic, strongly magnotic 2/3-smas 14.87-27.48m										 
		2/3-smas 14.87-27.48m										 
		3- weaker magnetism, looks more	<u>.                                    </u>									 
		like fine grained diabase(?)										 
		duke.										 
		58.55-59.20m (approx.)										 
		10- 5 mas 14.87-27.48 m										 
		% - weaker magnetism, appears  to be fine grained diabasel?				-						
		to be fine grained diabasel?		ļ		-						
		dyke				ļ						 
		59.95-60.40m(approx.) - diabase (?) dyke, fine				ļ						
					ļ	ļ						
61.26	62.89	Volcanic - Biotite - Chlorite Alteration		<u> </u>	321	60.40	6289	2.49	51	7		
		5mas 14.87 - 27.48 m			ļ	<u> </u>						
62.89	66.14	Syenite			322	62.89	66.14	3.25	147	5		 
L		smas 45.55-50.29m				ļ						 
		64.37-64.75m - very finegrained, dark green  dyke - diabase		ļ		<u> </u>						 
		dyke - diabase		ļ			ļ					 
		V										 
				-		<u> </u>	-					

### DRILL HOLE LOG

HOLE	NO	91	-5	
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SHEET 1 OF 3

PROPERTY: CAMP	LENGTH: 84.	. 43 m	CORE SIZE: NQ
LOCATION: 73.C.	<u> </u>	ARING INCLINATION	COMMENCED: Feb. 23, 1991
ELEVATION:	COLLAR		COMPLETED: Feb 25, 1991
COORDINATES: 5400 N			LOGGED BY: M. HOLTBY
5250E			SAMPLED BY: J. BACON
core stored at: On property at 4	975 N - 5575E		

FROM	то	DESCRIPTION	RECOV	ERY		SAMP	LES				ASSAYS		
m	m	DESCRIPTION	RUN	%	NO.	FROM m	TO m	LENGTH	Cu p.p.m	Au p.p.b.			
0	12.19	Casing - no core	0	To					1 1	/ /			<u> </u>
12.19	25.57	Gravels and boulders	12.19	0									
		Boulders - diorite, syenite, undesite	17.37										
		Overburden & Till.	20.42										
29.57	40.84	Black clastic - graphitic sediment	2347		173323	29.57	32.00	2.43	103	13			
		-very graphitic at start of interval	24.38		324	l	i	1		1 1			
		py - fcfg + dsmn 17, to2%	24.69	avg.	325	1	i	3.00		ł i			
		det- at fefg with py -17/65% up	24.99			į	Ì	1		i I			
		clet- atz fefg with py -17. to 5%, up	26.52	1									
			28.35	+0%									
		32.00 - 33.53m - gravel	29.57										
40.84	47.80	Hornfels	3/.39	<del>]</del>	327	42.50	44.81	2.31	135	20			
		, ,	31.70		i	ĺ	ł	ĺ		1 1			
		horn fels	32.00										
		py - fcfg + dsmn 170 +2%	33.53										
		9/7-c/ct fcf, 27/03%	35.05									-	
		graphite in fractures - minor	35.66										
			38.10										
			38.7/						<del></del>			-	

## DRILL HOLE LOG

HOLE NO. 9/-5SHEET 2 OF 3

ROM	то	DESCRIPTION	RECO'	/ERY		SAMPL	ES			A	SSAYS	
721	m	DESCRIPTION	RUN	%	NO.	FROM	T0	LENGTH	Cu	Au		
		py -0.2/t. 0.4% dsmn >fcfg	40.84	50		i	1	3.00		9		
17.80	62.05	Hornfels - but silicified or originally	41.76	66		Ł	1	3.00	l	12		 
		very siliceous sediment	43.59	1	33/	53.80	56.30	2.50	123	16		
		- pale brown and green	44.20	49	332	56.30	59.30	3.00	100	13		 
			44.81	54	333	59.30	60.05	0.75	87	30		
			46.33	37								 
		total epdt - 17 to 2%.	47.85									 
2.05	64.53	Fault Zone in siliceous hornfols	50.90	102	334	60.05	64.53	4.48	97	89		 · - · · · ·
			53.34									
			55.78	96								
		matrix between siliceous horafels	58.83	100								
		fragments	60.05	//0								
			61.57	98				_				
453	84.43	Hornfels - Brown and Grey Intervals	62.18	70	335	64.53	67.67	3.14	100	23		
		64.53-69.60m - Brown in color mainly	1			67.67	67.60	1.93	83	25		 
		15 metre - spotty chloritization	64.62	90								
		-chlorite-mainly in fofg but	67.67	100								
			69.49									
			7/.32	78								
		sts-clet fefg - 1/3/3/2	7224	90								
		py-1% dsmn + fofg.	74.37	96								
		' U ' (	76.30	88								
		69.60m - grey color, core very broken	78.03	85	337	69.50	72.24	2.64	98	33		
		69.60m- grey color, core very broken up, slickensides en fractures,	8047	96	.338	1	1	ł	1	1 1		
		govge & graphite	83.52	100		74.37	76.73	2.36	103	6		 

DRILL HOLE LOG

HOLE NO. 9/-5

SHEET 3 OF 3

FROM	10	DESCRIPTION	RECO'			SAMPLI					SSAYS	
m		·	RUN	%	NO.	FROM m	T0	LENGTH	Tu ppm	Au pp6		
		76.73-78.33m-fault zone	84.43	109	340	76.73	78.33	1.60	75	24		
		black color core broken-up	EA	ID								
		graphitic especially on fractures										
		slickensides.										
		82.75-83.02 m barren clet veins			341	78.33	81.33	3.00	104	11		
		83.18-83.24m with very minor			342	ì	1	i	ŧ	1		
		83.77 - 83.85m at 1, 45 to C.A.										
		76.73-78.33m-fault zone  black color, core broken-up,  graphitic, especially on fractures,  slickensides.  82.75-83.02m barren clct veins  83.18-83.24m with very minor  83.77-83.85m atz, 45° to C.H.										
									ļ			
						<del> </del>	<u> </u>					
								<u> </u>				 <u> </u>
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			<u> </u>				ļ	ļ				<b></b>

#### DRILL HOLE LOG

HOLE NO. 91-6 SHEET 1 OF 14

PROPERTY: CAMP	LENGTH: 213.36 m	CORE SIZE: NQ
LOCATION: 13.C.	BEARING INCLINATION	COMMENCED: FEB. 25, 199/
ELEVATION:	COLLAR 225° -60°	COMPLETED: #83 28,199/
COORDINATES: 4900 N	213m -56°	LOGGED BY: M. HOLTBY
5975 €		SAMPLED BY:

core stored AT: On property at 4975N-5575E

FROM	70	DESCO LOTTON	RECOV	ERY		SAMPL	.ES				ASSAYS	
FROM	m	DESCRIPTION	RUN	%	NO.	FROM	T0 2n	LENGTH	Cu	Au6		
0	6.10	Casing - no core	0	To					7 7			
6.10	6.18		6.10	0	173343	6.10	9.68	3.58	74	16		
		Frigiti Porphyry (Daritic Fopeanere) grey, matrix-siliceous and apric.	8.23	63								
		mafico - 5%, up to 1.5cm.	9.75		1							
			10.67	104								
		brownish on core Chlackish on	13.72	95							_	
!			17.07	10/								
		feldapara - 2 5+%, vague shapes.	19.51	73								 <u></u>
		py-0,2% damn> folg	22.56	98								
6.18	7.15	feldspars - 25+%, -vague shapes.  py-0:2% damn> fifg Hornfels	23.16	50								
		- moun very success	26.21	96								 
			26.82	85								
		at - det felg 0.25%-0.3%	28.65	90								
		7.15m ente - 45° to C. F. sharp, irregular.	30.18	99								
7.15	9.68		32.61	86								 
		smas 6.10-6.18 m but strong or seintigation	134.44	97				<u></u>				
		1	34.75									
		9.33-9.45m - brecisted	35.66	82		<u> </u>	<u></u>					
9.68	9.42	Hornfels - brown breccented	38.7/	100		<u> </u>						

## DRILL HOLE LOG

HOLE NO. 91-6 SHEET 2 OF 14

EDON	1	DESCRIPTION	RECOV	/ERY		SAMPL	ES				ASSAYS	
FROM m	T0 <b>7</b> /1	DESCRIPTION	RUN	%	NO.	FROM	T0	LENGTH M	Cu	Au		
9.92	10.15	Augite Posphyry (Dairtic Appenance)	41.76	100					//	//		
		ando 7.15-9.88	44.81	99			e .					 
10.15	12.60	Hornfelo - brown	46.63	95	344	9.68	12.60	2.92	274	5		 
		0.13-0.27 py dama and on dry fractures	47.83	76								 
12.60	15.90	Augite Porphyry (Dantic Appearance)	48.46	57	345	12.60	15.90	3.30	70	8		 
		smax 7.15-9.68	49.68	41		ļ						 
<u>-</u>		15.60-15.69m band of brown hounfels	50.29	54								 
15.90	32.15	Hornfels - brown	50.90	85	346	15.90	18.90	3.00	411	3		 
		16.58-16.93m - 50% black color, black material	52.12	69	347	18.90	21.90	3.00	584	26		 P
		is pervasive (non-magnetic) alteration	54.56	9.5	348	21.90	24.90	3.00	1193	14		
			56.08		349	24.90	27.90	3.00	9 78	41		 
		after 21.9m - short black sections, total 5%	<i>57.0</i> 0	43	350	27.90	30.18	2.28	349	17		 
		22.30-22.50m - py, fefg 27-38	37.91	41	35/	30.18	32.15	1.97	411	10		 
		2366-24.08m - Augste Porphyry	59.13	117								 
		- makis biotitized,	60.05	43								
		-contacto appear gradational over 10 cm	60.66	44								 <del></del>
		- fine felted feldaparo nemenhant	6309	103								
		24.65m- cp + aty+det fefg	64.01	96								
		26.80m - 11 11 "1" "1	66.14	97								
		28.98m- po fefy	67.36	95								
		31.70m - pv + qty + clet fefg	70.41	102								
		31.97m- cp forg	72.24	101								
32.15°	34.03	Avgite Porphyry (Dacitic Appearance)	7529	99	<i>35</i> 7	32.15	34.03	1.88	484	1		
		similar to 6.10 6.18 m but	77.72									
			79.86									

DRILL HOLE LOG

HOLE NO. 9/-6
SHEET 3 OF 14

2011	<b>T</b> 0	DESCRIPTION	RECOV	ERY		SAMPL	ES			,	ASSAYS		
m.	T0 <b>711</b>	DESCRIPTION	RUN	%	NO.	FROM	T0	LENGTH	Cu	Aupob			
		32.64-32.84m - mafico strongly sericitized	81.38	89					//	,,		ļ	<u> </u>
		pv - damn, 12 % decreasing down interval	82.60	31									
			84.12	56									<del> </del>
		first 20 cm.	85.65	95							<u></u>	ļ	-
		py - ≤ 0.2% in dry fractures	87.17	103								<u> </u>	_
1.03	<i>35.</i> 07	Hornfelo - brown	88.39	95	353	34.03	35.07	1.04	176	/		<u> </u>	ļ
		rare traces co assur with po	90.53	101								<u> </u>	
07	42.62	Frigite Porphyry (Fridesitic Fippearance)	91.14	89	354	35.07	38.10	3.03	223	Z		<u> </u>	
		mafico - strongly chloritized	93.57	100	<i>35</i> 5	38.10	41.10	3.00	118	/			
		- 5% - 16% weak sportly epidotization	95.10	86		ļ	<u> </u>			ļ			
		- occassional areas appear fragmental but	96.62	107		ļ						ļ	_
_		these may be highly sericitized with barely	99.36	98									╀
			102.41	94		-						-	$\perp$
		por - dann 0.1% -0.3%, higher at start	10363	100						-	12.00	ļ	╀
		py-trues dan po >> py	105.77	101		ļ							╁
		70 70 7	107.29	78		ļ	-			-			-
		after 38.30 m - py >pr  py - demn & in aty-clet fefg	108.81	9/		<u> </u>							-
		py - down or in aty-clet fefg	110.64	95		<u> </u>						<u> </u>	1
		på damn	112.78	98		ļ						<u> </u>	1
		38.40-38.79m-30% att-clet veining	113.69	93		ļ	ļ				ļ	ļ	
		/2 /o py in veino	114.60				ļ					-	-
		42.62 m - conte, sharp, irregular, Brg. 30° to C.H.	115.82	95		ļ				-		-	1
62	45.50		118.26	98	356	41.10	44.44	3.34	108	5			_
		similar to 35.07-42.62m but	121.01	98	357	44.44	45.97	1.53	83	3		-	-
		15 / - 20 / large, strongly chloritized makies	123.44	102		<u> </u>				<u> </u>		<u> </u>	

## DRILL HOLE LOG

HOLE NO. 91-6 SHEET 4 OF 14

[		DESCRIPTION	RECOV	ERY		SAMPLI	ES			А	SSAYS		
FROM 7M	T0 m	DESCRIPTION	RUN	%	NO.	FROM M	T0	LENGTH	Cuppm	Au pp6			
		py * pv - tracer domn	126.49	98						,,			
		45.50 m - ente 20° to C. FT. sharp	128.32	105									<del></del>
45.50	45.97	17 vaite Porphyry (Andesitic Fapearence)	131.37	94									
		17 rgite Porphyry (Andesitic Papearance) makin 5% at start decreasing to 2% at	132.89	94									
		end of interval, decrease lineycaler.	13594	96									
			138.99	1									
45.97	67.12		139.29	117	358	45.97	48.46	2.49	232	2			
			142.34	101	359	48.46	50 90	2.44	15/	4			
		gtr +minor clet + por + py lety & 2%	145.39	90	360	50.90	53.90	3.00	636	4			
		gty + minor clet + por + py fefy \le 2%	146.00	49									
		sy fely >7 damn 0.370.4%	146.91	27			:						
		occassional bando of heavy damn pot/or fefy	14783	35									
		plus py and cpo:	149.05	14									
			149.46	23								_	
		2 cm hand of 20%-25% por + 1% cp.	150.88	64									
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	133.01	70	361	53.90	57.10	3.20	169	1			
		53.25m - 5% por fety +1% py + to cp	153.62	98									
		53.25m-5% por fefy +1% py + to cp 54.86m-1cm band 25%-30% por +1% cp	155.45	107									
		up - occurs as down with por or indry	157.28	93									
			160.02		-								
		56.85 - 57.00 m - fault - breciated	163.07	100									
		58.90m - I mm discontinuono por fefg + cp	166.12		362	57.10	60.03	2.95	272	3			
			169.16			i	1	2.28	l	1 1			
		blacks (non-magnetic) meterial also	172.21										
		as pervasive alteration envelopes.	175.26	100									

		DESCRIPTION	RECOV	ERY		SAMPLI	ES			А	SSAYS		
FROM <b>M</b>	10 m	DESCRIPTION	RUN	%	NO.	FROM	T0	LENGTH	Cuppm	Fu ppb			
		61.26m - po Jely along C.A. Jr 5cm, 25%-30% po	178.31	98					11	//			
		61.26m - po fefa along C.A. for 5cm, 25%-30% po	179.22	73									
			181.97		364	62.33	62.94	0.61	<i>5</i> 54	3			
		siliceons apric matting	183.49	94					-				
		10 To mafice chloritized, up to 1 cm	185.3Z	87									
			18593	108									
			188.06	103								<del></del>	<u> </u>
		27-3% bott-sericities	189.89	96				<u> </u>					ļ
		po-0.2%-0.3%, 0.1% cp	193.24	96									
		62.94m ente sharp but very irregular	195.07	73								-	ļ
		63.42m - 2cm patch por with runor cp	196.60	100	365	62.94	65.94	3.00	571	8		· · · · · · · · · · · · · · · · · · ·	ļ
		65. 22m - 5 cm patch with 5% por felg + 2/0 cp			366	65.94	67.12	2.18	618	16			ļ
		65.68m - 2 cm area with 2 % por fefg & 1/4 /2 cp	200.25	100				1				<u> </u>	_
7.12	82.60	Hugite Porphyry (Davitic Haplarance)	201.78	88			ļ						ļ
			203.30	54	367	67.12	69.85	2.71	1042	26			-
			204.22	65		ļ							-
		pro 4 cp > py, down and ondry fractures	Z05.13	87		<u> </u>							
		after 67.94m - black, very fine grained material in	207.57	74	-								<del>                                     </del>
		hairline fife and pervasive contention envelope	209.40	99									<u> </u>
		after 69.85 m - matico rapidly change to	211.84		368	69.83	7283	3.00	686	18			
			213.36	100	369	72.83	7583	3.00	745	19			<u> </u>
		15/2-20/2 large mafices, up to 1 cm.	EΛ	'D									
		pr 0.1%-0.2%, cp 0.1%-0.2%, higher						<u> </u>					<del> </del>
		procp as fefg auther than damn											-
		py < C. 2 as felg > down, with clet										<u></u>	<u></u>

DRILL HOLE LOG

HOLE NO. 9/-6 SHEET 6 OF 14

FROM	Τ0	DESCRIPTION	RECOV	ERY		SAMPL	ES			A	SSAYS	 <del></del>
701	70 <b>m</b>	DESCRIPTION	RUN	%	NO.	FROM	T0	LENGTH	Cu	Au pp6		
		after 75.83 m - mapies rapidly change to sericitized							530			
		for availlacion afteration.										
		(soft, white to cream word)										
		- few random con with chloritized melico										
		78.15-78.63m - mixture of sheared and breceight			37/	78.83	82.60	3.77	412	22		
		chest with lesson duitie-augite purphys	y									
		chest with leason duitie-augite purphys 3 cm clet vein 80° to C. F. ut and Jaction	7		· · · · · · · · · · · · · · · · · · ·							
		79.10 - 80.55 m - mafies more chloritized than scricitize										
		last 25 cm core very broken up.					<u> </u>					 
82.60	117.15	Cherty Sedimento (Hornfelo)			372	82.60	85.60	3.00	293	14		
		Burn			373	85.60	88.60	3.00	135	3		
		-somewhat like chertaint 45.97-67.12m but			374	88.60	91.60	3.00	343	10		
		noticably softer; some hard, siliceous chart section	no		,							 
		at ± clot fely 3%-4% = pv + py + cp										
		at ± clet fefy 3%-4% ± pr + pr + cp po - 0.2% - 0.4% fefy >> Jamn, less than in chest unit 45.97-67.12 m										 
		in chest unit 45.97-67.12m										
		py - 0.2%-0.4% fefg; more than in chert am 45.97-67.12m	+				ļ					
		45.97-67.12m										
		110 - ≤ 0.1% fefg					ļ					
		1/2 /2 black material (non magnetic) inhairline										
		fractures and as pervasive attention envelopes										 
		88.13-88.39m - quartite, rounded to subhedie	/									 
		grains, up to 0.3 mm.										
		brown.										
												i

5004		DESCRIPTION	RECOV	ERY		SAMPL					SSAYS	 
FROM 771	10 m	DESCRIPTION	RUN	%	NO.	FROM	T0	LENGTH	Cu	Au ppb		
• • •		94.60m - 1 cm gty vein, 20 to C.A., 10% por,			37 <u>5</u>	91.60	94.60	3.00	609	6		
		30% by mainly as selvages			376	94.60	97-60	3.00	509	5		
		-general decrease in sulphides down interval			377	97.60	100.60	3.00	400	4		 
		-often greyish anther than brown who			378	100.60	103.60	3.00	212	3		 
		after 100 m, grey not as cherty.			379	103.60	106-60	3.00	313	3		 
		- banding 60 - 70 to C. Ft color bando that a	v_		380	106.60	109.60	3.00	349	4		 
		generally irregular in outline				l	i		30/	1		 
		- generally as much po as py by co assoc			382	112-60	115.60	3.00	390	13		 
		- generally as much po as py by co associ			383	115.60	117.15	1.55	210	/		 
17.15	119.16	Clastic Sediment - grey			384	117.15	119.16	2.01	64	1		 
	-	Clastic Sediment - grey  1/2 let = gtr fefg plus trace por										
1		100 - 0.1/0-0.2/0 Num										
119.16	119.71	Frigite Porphyry (Daitie Poplarance)			<i>38</i> 5	119.16	1/9.7/	0.55	290	2		 
		2mar 67.12-69.85m		<u> </u>								
	-	mafice - very strongly serialized, light brown					<u> </u>	= -				 
		po 0.2%, cp 0.1%, py 0.2%-0.3% fefg Hornfelo -brown										
19.71	120.41	Hornfelo - brown			386	1/9.7/	120.41	0.70	411	6		
-		5% of interval cherty										 
		2%-3% clet felg with py a por py 0,2%-0.3% felg; sprtty at 0.1%										
		or 0.26-0.36 fely; sortly at 0.1/0										
20.41	120.79	Flight Porphyry (Daille Heplarance)		!	387	120.41	120.79	0.38	704	//_		
		first 14 cm highly sericitized-smar 67.12-69.852	1						-			
		remainder - mafice strongly chloritized						ļ	-			 
		sulphides mainly in chloritized section	1						-			
		eclet- gty reinleto with py, po, cp, sp-243mm	lach			<u> </u>		<u> </u>	<u>L</u>	<u> </u>	l	 

## DRILL HOLE LOG

HOLE NO. 91-6 SHEET 8 OF 14

FROM	то	DESCRIPTION	RECOV	ERY		SAMPLE	E S			A	SSAYS	
2013	m		RUN	%	NO.	FROM Jun	T0 <b>2</b> m	LENGTH ንሗ	Cu	Au ppb		
		py 0.3%, cp 0.2%, sp 0.1% Clastic Sidiment					<del></del>		, ,			 
120.79	125.00	Clastic Sediment			388	120,79	123.44	2.65	375	17		 
		very fine grained, grey and brown sections			389	123.44	125.00	1. 56	3 <i>95</i>	3		 
	-	120.79 - 120.95 m - brown										 
		120.87m - 3 mm clet-gty fefg, 45°tr C.F.									1	 
		py, sp, cp, pv	_							_		 
		120.95-122.82-m-gry						<u> </u>				 
	· ·	122.82-125.00 m - Wown, 5 /6 grey										
		1%-2% po domn, 0.2%-0.3% fofg										 
		py - 0.17 - 0.2%										 
		py - 0.1% - 0.2% cp - ≤0.1%, esp over last 40 cm.										 
125 m	126.00	Frigite Porphyry - (Davitic Foregrame)			390	12500	124.00	1.00	780			 
!		Augite Porphyny - (Dacitic Appearance) apn, silicons matrix										
!		mafics - strongly chloritized			: 							
		pv0.5+% damn with assve. cp 0.1%-0.2%				_						
		last 10 cm mapies strongly sericitized, py 0.5%										
		lefa: by > po > cp										
		fefg; by > po > cp 126.00 m ente - 45° tr. C. Ft.										
126.00	133.14	Cherty Sediment			391	126.00	129.00	3.00	8-11	13		
		brown, white and gray sections			392	129.00	132.00	3.00	370	4		
- 1		por felg > Jann, 1+ %; assoc cp 0.1%-0.2%			393	13200	133.14	1.14	878	8		
		129.00-129.17m - white band, apric silicous	ļ	ļ								
		natix with very fine grained feldapard?	)									
1.33.14	140.34	Clastic Sediment			394	13314	136-14	3.00	.39 <i>5</i>	15		
	4-4	fine grained; mainly brown but alar grey down in	terral	<i>'</i> .					524			

DRILL HOLE LOG

HULE NO. 91-6 SHEET 9 OF 14

		1	RECOV	ERY		SAMPLI	ES			А	SSAYS	 
FROM <b>M</b>	70 m	DESCRIPTION	RUN	%	NO.	FROM	TO	LENGTH 7m	Cu	Au ppb		
		grains avg. O. 1 mm - O. 2 mm							,,	//		
		fine grained matics (1/2) in matain			# · · · · · · · · · · · · · · · · · · ·							
		po - damn 0.1%, fefg 0.2%							,			
		cp-with pr fefg ≤ 0.1%							-			
		clet fefg 1/2% py fefy 0.2%			1							
		after 139.82m - cherty, brown			396	/39.14	140.34	1.20	548	4		
		py>pr>cp; py 0.5% fefg										
10.34	143.04	Hugite Porphyny (Daitic Appearance)			397	140.34	143.04	2.70	78	5		
		making - chloritized and sericitized (could also										
		be argillaciono alteration).										
		po 0.1% down > lety, rare tr.cp										
		py 50.1% on dry fractures										
		2 % clit patches up to 4 mm										_
		20% angularto rounded white siliceous										
		fragmento, ang 1 mm, a few look like fel	span	ð								
13.04	143.7/	Cherty Brecia - brown			398	14304	144.75	1.70	33	5		 
		fragmento avg. 3 cm.										
		trace by fing										
13.7/	144.40	Trace by fifa  Frigite Porphyry - (Davitic Fpearance)  Do - traces down										
		po-traces damn										
44.40	15865	Cherty - brown			399	144.74	147.8	3.09	226	28		 
		144.40-153.65 m - fault (?) chert breise			400	147.83	150.8	3.05	520	8		
		144.40-144.74m- tr. cp domn					İ	2.96		i i		
		144.60-144.71m - clet- gty veining										
		core very broken up, breccia appearance in larger	ارر	2 pier								

FROM	Ι	DESCRIPTION	RECOV	ERY		SAMPLI	ES	•			SSAYS		
FROM m	10 m	DESCRIPTION	RUN	%	NO.	FROM 7/1	TO m	LENGTH	Cuppm	17u ppb			
		py, po & cp - all to fefy & damn							17	,,			
		black, very fine-grained-material (non-magnetic)					ļ 		<u> </u>				
		as harriene Jefy and permaine attention envelopes.											
		total 173-29.	·						) 				
		after 153.65m - massive appearance				<u> </u>							
		153.84-154.24m - DU 4 CD 0.2% leto			402	15384	155.98	2.14	1312	39			
		157.18-158.33m-10% clet + black material fof a			463	155.98	158.63	2.67	1080	8-9			
		158.33-158.48m - 20% clet # clay fofg											
15865	161.53	Frigite Porphyry (Dantie Fpearance)			404	158.65	161.53	2.88	421	59			
		apma, siliceous matrix		-					ļ				
		mafice - strong, pervasine biolitization				-	<u> </u>		}	-		-	
		po + cp felg & demn; po 0.2-0.3%, cp ≤ 0.2%											
		py-sportly 0.2% felg				ļ <u>.</u>				ļ			
-		159.12-154.23m-gorge, clet, py, sp				-							
		py-sportly 0.2% fefg 159.12-154.23m-garge, clet, py, ap clet 40%, py 15%, ap 0.5%	/	<u> </u>	<u> </u>					-			
		last melae majus chlorily ad more than brothy				<del> </del>							
161.53	163.80	Charty 1			405	161.53	163.80	2.27	575	1.8	-		
		whitish brown with 10% brown sections				<u> </u>			<del> </del>	<del> </del>			
-		portop fefg, por \$0.3%, up 0.1% associath	po.					<u> </u>		<del>                                     </del>			
-		py-fety, 0.27,-0.3%	<u></u>	-		<del>                                     </del>							-
		majies					1111	772	15.11	-			
16380	166.53	High Porphyry (Dacitic Fippearance)			406	163.80	106.23	4.73	184	1 2			
		apone, silicono matrix	)			<del>                                     </del>				<u> -</u>			
		mafies largely sericitized (after birtitization ?)	/			-	-					•	
L		- munit churunged mafiles.		L	<u></u>	<u> </u>	<del></del>	L	<del> </del>	<del></del>			

DRILL HOLE LOG

HOLE NO. 91-6 SHEET 11 OF 14

FROM	TO	O DESCRIPTION	RECOV	ERY		SAMPL	ES			ASSAYS				
m	<b>7</b> 20	DESCRIPTION	RUN	%	NO.	FROM	T0	LENGTH	Cu	Auph				
		pv+cp damn po ≤0.2%, cp <0.1%												
		py fela 0.27-0.3%												
		165.23-165.32m - gouge, fault 65 to C.FT.												
6.53	172.74	py fets 0.27, -0.3% 165.23-165.32m - gouge, fault 65° to C.FT. Clastic Sediment			407	166.53	169.53	3.00	1009	32				
		grey with white sections.			408	169.53	172.74	3.21	403	26				
		clet folg - 27-5%, generally barren												
		py >> po > co												
		py fefy >down, 0.4%-0.6% occasionally much	4		a									
		higher, eg 168.49-168.84m 5 % py folg												
		higher, eg 168.49-168.84m 5% py fofg												
		170.90-172.74m - fault gouge and crushed rock	γ.											
2.74	177.13	Augite Porphyry (Dacitic Appearance) majics - pervasive and strong birtitization			409	172.74	175.79	3.00	1142	39				
		makies - pervasive and strong biolitization			410	175.74	/77.13	1.39	191	5				
		and sericityation; occasional 10-150	m											
		with chloritized mapies partially birtitized	/											
		1 2 - 1-1- >7 Somme and 0. 220:42 South 0.72												
		por-domn > feta arg <0,2%												
		cp - assoc.pv ! ≤0, 2%												
77.13	178.65	cp-assoc.pv <0,2%  Hornfelo-brown			411	177.13	178.65	1.52	141	8				
		clet fefg 1/2 %, py 0.27, pv ≤0.1% in fefg.												
		clet fefg 1/2 %, py 0.2%, pv ≤0.1% in fefg.	nee											
8.65	180.00	· · · · · · · · · · · · · · · · · · ·			412	178.63	180.0	1.35	43	8				
		Augite Porphyry - (Dacitic Fopearance) soft, grey, fine grained vague mafice outlines - sincitized completely clot fefa 18												
		vague matico outlines - sincitized completely												
		clot lets 12												

### DRILL HOLE LOG

HOLE NO. 91-6 SHEET 12 OF 14

FROM 1		DESCRIPTION	RECOVERY			SAMPL	ES		ASSAYS					
FROM 771	T0 <b>711</b>		RUN	%	NO.	FROM M	T0 <b>m</b>	LENGTH	Cu	Au ppb.				
		py dsmn >fofg ≤0.2%							,,					
		178.65-179.22m - fault, one very broken up												
		189.00m ente - 50 to C. 17. sheard surface												
180.00	194.32	Augite Porphyry (Dacitic Appearance)			413	180.00	183.00	3.00	87	19				
		apric, silicono matrix			414	183.00	186.00	3.00	154	26				
		makes - biotitization overprint on chloritiza	him		415	186 00	189.00	3.00	251	5/				
		py-damn > fefg 0.3%			416	189.00	192.00	3.00	445	506				
		cp-down traces			417	192.00	194.32	2.32	248	44				
		185.45m-4 mm cletvein 85° to C.A. with												
		cp, py and 50% fine grained black material												
		187.38-187.57m - smas 178.65-180.00 m												
		- 55° tr c.A.												
		190.18-190.21m - 3 cm clot + green clay rein												
		20° to C.A. to py of cp.		1		-								
		190.90-194.32 m - mafico chloritized, only 30/0 bis	titige											
		cp ≤ 0.1 % 190.56-190.61m - clet vein 40 tr c.A., 5 % epdt, tr.	cp											
194.32		Projete Porphyry (Dacitic Fippearance)			418	194.32	195.66	1.34	97	20				
		194.32-194.55m-V. fine grained, smap 178.65-180.00m												
		194.55-194.82m - orft, groundmass grains 0.1-0.3ms 570 majics 1-2mm, attend feldepers	n (?)											
		194.82-195.59m - increasety 20 % largomatics, up to 16												
		195.59-195.66m-smas 194.32-194.55m						-		1				
		- each zone grades into next zone.							-	<u> </u>				

DRILL HOLE LOG

HOLE NO. 9/-6

CDOM	7.0	DESCRIPTION	RECOV	ERY		SAMPL	ES		ASSAYS				
FROM <i>TVI</i>	70 741		RUN	%	NO.	FROM	T0	LENGTH	Cu	PH			
•	198-08	Clastic Sediment - grey							77				
		The saint of Alasana			419	195.66	198.08	2.42	295	10			
		clet fefg /2 with to py, po, cp py down > fefg total 0.27-0.3%											
		py damn > fely total 0,27-0.3%											
198.08	204.22	Cherty			420	198.08	201.08	3.00	506	36			
		grey, few brownish sections			421	201.08	204.22	3.14	486	23			
		py fifg > down 0.3%-0.4%											
		por - starta as truce damn, after 199.40m-1%											
<b>4.</b> 4.		po - starta as truce domn, after 199.40m-1% mainly in patches with cp & 0.2%											
		198.49-198.53m - 50 Tolet reining, 45° to C.F.											
						<u> </u>						$\longrightarrow$	
204.72	213.36	Hugite Porphyry (Daistic Appearance)											
		highly attend.											
		204.22-205.17m - makies just visible - highly british	el		422	204.22	207.22	3.00	2746	82			
		and spicitized			<u>-</u>								
		- core highly fractured, often pulverized					-			<u> </u>			
<u></u>	<u> </u>	-py 0,3%				ļ	ļ			-			
		205.17-208.85m - matics visible, 30% chloritized	_,_		423	207.22	208,33	1.63	1950	53			. <u></u>
		70 % birtitized and weakly sericitize py ≤0.3%	d			<u></u>	<u> </u>	·	] 				
		py ≤0.3%			_								
		clet = eput fefg 1/2 %				ļ							
		groundmeso softish.	-			ļ	<u> </u>						
		208.83-209.40 m- smas 194.32-194.55m but			424	208,83	211.52	2.67	587	3.3			
		does have less attered appearance,			,								
		slightly harder.											

## DRILL HOLE LOG

HULE NO. 91-6 SHEET 14 OF 14

FROM	т0	DESCRIPTION	RECOV	/ERY		SAMPL	S		ASSAYS					
7M	אק אק		RUN	%	NO.	FROM	T0	LENGTH	Cuppm	Auph				
	<del></del>	209.40-211.52m- similar to 194.82-195.59m but			_				7 /	,,				
	<b></b>	30 To laye mefice up to Zcm:  - py damn 0.1%  - last 35 cm progressively finer grain  and fewer mefice  211.52-213.36 m smap 208.85-209.40 m.				ļ		-						
		- py damn 0.15	,										<u></u>	
		- last 35 cm progressively finer grain	d			<b>-</b>							<del></del>	
	• • • • • • • • • • • • • • • • • • • •	and ferver mafics										_	<del></del>	
		211.52-213.36 m - smap 208.85-209.40 m.			425	211.52	213.36	1.84	1524	60	· 		ļ- <del></del>	
		py -0.1%												
		clet ± epdt fefg with cp, po, py						ļ					<u> </u>	
		····			<del> </del>								<u> </u>	
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# SILVER STANDARD RESOURCES INC.

DRILL HOLE LOG

HOLE	NO	91-	7		_
	<b>SH</b>	FFT 1	ΩF	2	

PROPERTY:	CAMP	LENGTH:	72.24 m	<del></del>	CORE SIZE: NB
LOCATION:	B.C.		BEARING	INCLINATION	COMMENCED: MARCH 3,199/
ELEVATION:		COLLAR		<u>-90°</u>	COMPLETED: MARCH 4,1991
COORDINATES:	5940N	<u></u>			LOGGED BY: M. HOLTBY
	4950E				SAMPLED BY: J. BIFCON
CORE STORED AT	: On property	at 4975N-557	5 E		

FROM	то	DESCRIPTION	RECO'	/ERY		SAMPI	_ES				ASSAYS		
742	m	DESCRIPTION	RUN	%	NO.	FROM 771	T0	LENGTH	Cu	Au ppb			
0	3/.09	Casing - no core	0	TO									
		Trachyte	31.09	0	173426	31.09	32.92	1.83	68	3			
		med. green color	32.00	68									
		py - 0.1% dsmn	32.92	47									
		py - 0.1% dsmn dct ± epdt fcfg 0.2% to 0.5%	33.22	20									
		epdt - weak pervasive alteration	35.66	6									
32.92	40.23	Black clastic - Graphitic Sediment	36.58	7	427	32.92	36.58	3.66	59	11			
	(approx.)	black, very graphitic atz ± clct veins - 3%	37.80	94	428	36.58	40.23	365	69	5			
		gtz ± clct veins -3%	38.40	63									
		py - dsmn 0.2% to spotty 0.5%	40.54	29									
40.23	41.90	Trachyte	41.45	87	429	40.23	41.90	1.67	26	1			
	(approx)	med. green	4267	57									
		py = 0.1% dsmn	43.28	44									
		noor core recovery	43.89	<i>Z5</i>								!	
41.90	43.28	Black clastic - Graphitic Sediment	44.50	95	430	41.90	43.28	1.38	86	/_		ı	
		atu + clct veins 3%	45.42	79									
		py - up to 170 dsmn + fefy	46.33	62									
4328	45.30	Trachyte	1	i	431	4328	45.30	2.02	31	/			
		med. green	48.46	1									

# SILVER STANDARD RESOURCES INC.

DRILL HOLE LOG

HULE NO. 91-7 SHEET 2 OF 2

EDON	70	DESCRIPTION	RECO	/ERY		SAMPL	ES		<u> </u>		SSAYS	
FROM m	T0 <b>3</b> m	DESCRIPTION	RUN	%	NO.	FROM	T0	LENGTH	Cu	Au		
		trachytic texture only visible in about	49.38	87					/ /	, ,		
		trachytic texture only visible in about	51.82	33								
		last 25 cm chilled margin fine grained	53.04	9								
45.30	46.29	Bluck clastic - Graphitic Sediment	55.47	9	432	45.30	46.29	0.99	61	6		
		py - 17. to 2% fofg > dsmn	5700									
46.29	47.55	Clastic sediment	57.91	82	433	46.29	47.55	1.26	48			
		-grey, fine grained	59.44	29								
		py - tr. dsmn	61.26	32			ļ	ļ				
		c/ct - 1% fofg & veins	62.48									
47.55	61.79	Black Clastic - Graphitic Sediment	64.62	25	434	47.55	49.38	1.83	86	4		
	appres)	Black Clastic - Graphitic Sediment smas 45.30-46.29m	67.06	5	435	49.38	53.04	3.66	62	8		
		2% grey clastic sediment	67.97			53.0%	56.76	3.72	68	6		
61.79	6 2.56	Trachyte	69.80	50	437	56.76	59.44	2.68	74	2		
<u> </u>		-poor recovery, mainly pebbles	72.24	29	438	59.44	61.79	2.35	54	5		
62.56	72-24	-poor recovery mainly pebbles Black Clastic - Graphitic Sediment	EN	'D	439	61.79	62.56	0.77	63	/		
		smas 32.92-40.23m but			440	62.56	64.73	2.17	102	15		
		gtz ± clct fofg + veining 5%			441	64.73	12.24	7.5/	92	11		
		64.73 to 72.24 m - brecciated - fault(?)	!									
				į								
											***	

# APPENDIX 2

Rock, Soil and Drill Core Sample

Assay Certificates and Analytical Techniques

# GEOCHEMICAL ANALYSIS CERTIFICATE

Silver Standard Resources Inc. PROJECT M1006 File # 91-0551 Page 1 400 - 1199 W. Hastings St, Vancouver BC V6E 3T5 Submitted by: MAX HOLTBY

SAMPLE#	1			Zn ppm	W 70			Mn		As ppm	ppm ppm			Sr ppm				V ppm	Ca %		La ppm				Ti 2			Na %				Sample ut. 15
D-173151	1	71	2	77	.2	31	23	1236	4.64	2	5	ND	2	67	.2	4	2	128	1.05	107	3	37	2.31	424	.20	2	3.07	.18	.85	1	1	5
D-173152	1 1	93	2	92	.1	80	24	1824	3.98	7	5	ND	1		.2		8	103	2.15	.097				413		3	3 23	21	1.21	1	3	5
D-173153		100							3.92			ND	1		.4	4	_		1.31					295				.10		00000000	_	8
D-173154	1 1	174		145					4.16			ND		77	.2				1.30		ź			188								_
	1 1																									_		.07		10000000	_	
D-173155	1	263	3	272	2	142	19	2053	3.89	237	5	ND	2	250	.8	10	8	16	3.74	.008	7	9	1.12	2 47	.01	2	1.06	.02	. 14	1	2	14
D-173156	1	65							4.78			ND		82	.2				2.03					125				.07		1	6	
D-173157	1	31	18	134	.7	17	18	1305	5.32	2	- 5	ND	3	55	.3	4	2	129	1.21	. 174	2	22	1.85	128	.14	5	2.32	.08	.37	1	1	12
D-173158	2	60	4	83	.3	15	18	1141	4.57	2	5	ND	1	77	.7	5	2	136	2.13	176	2	22	2.06	125	11	4	2.12	.06	-24	1	3	13
D-173159	1 -	159							3.60					86	1.9	4			2.83					276			2.14		.54	00000000	6	11
D-173160	1 -	196		96					4.06	5			1		.2	6			1.97					215		_		.16		300000TD	10	10
0-173160	3	170	10	70		12,1	23	1011	4.00		•	NU	,	74	••		10	100	1.77	*037	,	40	1.00	217	• 12	0	2.03	. 10	.00		10	10
D-173161		202		81						20		ND		91	.2		2		3.15					150				.11				11
D-173162	3	197	11	147	.4	167	22	2500	3.51	- 5	5	ND	2	95	2	2	6	78	2.62	.039	2	37	1.13	224	. 15	2	2.81	.23	.74	1	13	21
D-173163	2	102	7	119	1	129	21	2433	3.40	2	5	ND	2	118	-6	2	2		3.48					3 262		2	2.60	.20	.67	1	8	20
D-173164	1	94	À		100 100 100				3.33	7	14	ND	1	99	.9	5	5	91	13.95	094	2	62	1.26	170	14		2.55		.59	3	6	15
D-173165	1 '	127							3.52	1.55		ND		77	.7		7		2.70					108				.10		- 4000 Table	7	
U-173103	'	12;	4	12	.0	43	10	1033	3.72			NU	-	• • •		•	•	60	2.70	.067	_	20	1 - 2-	, 100		_	2.04	. 10	,50		•	10
D-173166	2	90	5	75	.1	62	17	1376	3.60	2	5	ND	1	117	.4	2			1.46	.041				261		2	2.41	.17	.74	1	3	
D-173167	1	87	11	65	.2	58	15	1253	3.41	2	5	ND	2	69	.5	3	2	79	2.10	.043	2	50	1.00	120	.14	5	1.81	.12	.44	1	5	17
D-173168	1 1	99	8	81	20	132	29	2169	5.23	2	5	ND	1	143	.4	2	2	163	5.66	-110	2	254	3.40	565	.21	6	4.08	.17	1.29	1	2	15
D-173169	1	96		74		143			5.04	2	_			102	.2				4.52					545	15 TO 17	ž	3 40	03	1.18	1	3	12
D-173170	1 -	105							4.64	2		ND		114	.2				2.11					485	75 1 1 10				1.31	100000000000000000000000000000000000000		
-173170	'	103	2	70		132	27	1142	4.04	-		ND.	'	3 1 🖛		_	,	121	<b>C</b> . 1 1		_	277	3.10	703	000000	_	J. 10	.05	1,3;	9 93	_	
D-173171	1	100	7	113	.1	106	22	1011	4.12	2	5	ND	1	73	.5	2	5	117	2.69	.092	2	136	2.38	129	.23	6	2.15	.04	1.33	1	7	17
D-173172	1	99	,						3.96	7		ND	2	149	.2	2	2	102	3.74	2111	2	260	3.05	237	22	7	2.56	.05	.62	1	1	16
D-173173	1	110							4.09	2		ND		66	.2	2			2.17						20			.04		4 40 6 40 7 7 6 4 6 7	1	
	1 -										5					5			2.39										.54	300000000	ż	
D-173174		109	6						4.20	3		ND		121	.2															000000000000000000000000000000000000000	1	19
D-173175	1	121	2	62		214	51	635	3.98	2	5	ND	1	63	.2	2	2	86	1.19	1119	2	239	3.40	370	.19	21	2.18	.07	1.08	1	,	19
D-173176	1	126	3	111	.3	115	20	1254	3.81	2	5	ND	3	85	.4	2	4	100	5.05	.078	3	94	1.92	138	.20	13	1.85	.04	1.08	1	6	14
D-173177	1	112	4	96	1	214	32	1607	5.27	2	10	ND	1	211	.2	2	2	121	3.01	-114	2	232	4.31	402	.21	2	3.75	-04	1.86	1	2	16
D-173178	1 '	103							4.63	10		•		111	.6	2			2.65				_	166	9 9	2	2 80	.04	.83	1	14	11
	1 .				2.00									114	.2	2			1.73						21			.03		000000000	4	17
D-173179	1 .	95	2						5.13	4.15																				000000 90		
D-173180	1	20	3	44	1	29	17	717	3.52	2	5	ND	1	126	.4	2	2	108	3.19	.207	2	51	1./6	118	.34	4	2.10	.14	.32	000 P	2	10
D-173181	1	39	2	72	.1	33	16	680	3.22	4	5	ND	1	180	.2	2	5	99	3.73	.201	2	50	1.66	118	.12	2	2.20	.13	.34	1	1	16
D-173182	1		2						3.62		_	ND	-	166	.2	2			3.60					144				.07		1	2	20
D-173183	1			53					4.03	8		ND		214	.2	2			3.75					242			2.39		.61	- 00000000	12	
	( '														:2				2.77					106			2.51		.22	5500 F11	5	
D-173184	1	_	2						4.50	7		ND		133		2														200000	2	
D-173185	1	63	2	478	.2	26	23	1009	4.96	2	5	ND	2	106	4.1	2	2	164	3.72	. 145	5	56	5.03	85	.35	2	2.77	.04	_18	1	4	19
D-173186	1	293	2	96	8	25	19	922	4.24	2	5	ND	2	76	.8	3	4	156	3.24	.180	2	33	2.27	90	.21	2	2.31	.05	.17	1	3	12
STANDARD C/AU-R															19.0				.49											13	474	-
SIMMUMKU U/MUTK	ا د ا	01	+2	124	1.3	: 3	JE	1000	J.77	72	17	_ ′	→U	24	17.0	17	<u>- 1</u>	70	.77	.073	70	٠,	• • • • •	110		20			4			

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND ALZ AU DETECTION LIMIT BY ICP IS 3 PPM. - SAMPLE TYPE: CORE AU\*\* ANALYSIS BY FA\ICP FROM 10 GM SAMPLE.

DATE RECEIVED:

D-173187	** Sample
D-173188	4 17
D-173199	6 8
D-173190	5 12
D-1731992	3 10
D-173195	7 12
D-173194	3 18
D-173194	3 18
D-173195	3 20
D-173196	11 18
D-173198	6 6
D-173198	4 21
D-173200	1 18
D-173201	3 13
D-173201	5 20
D-173203	35 8
D-173203	13 5
D-173204	5 7
0-173205   5 302   2 33	3 8
D-173206	2 16
D-173208   5 206	4 20
D-173208   5 206	2 20
D-173219 D-173210 D-173211 D-173211 D-173211 D-173211 D-173211 D-173212 D-173212 D-173212 D-173213 D-173213 D-173214 D-173215 D-173215 D-173216 D-173216 D-173216 D-173217 D-173217 D-173217 D-173217 D-173217 D-173218 D-173217 D-173219 D-173219 D-173219 D-173219 D-173210 D-173210 D-173210 D-173210 D-173210 D-173211 D-173211 D-173212 D-173212 D-173213 D-173214 D-173215 D-173215 D-173215 D-173216 D-173216 D-173216 D-173217 D-173217 D-173217 D-173218 D-173217 D-173217 D-173218 D-173218 D-173219 D-173219 D-173219 D-173210 D-173210 D-173210 D-173211 D-173211 D-173211 D-173212 D-173212 D-173212 D-173213 D-173214 D-173215 D-173216 D-173216 D-173216 D-173217 D-173217 D-173217 D-173218 D-173217 D-173218 D-173217 D-173219 D-173219 D-173219 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-1	2 19
D-173210 D-173211 D-173212 D-173212 D-173213 D-173214 D-173214 D-173214 D-173215 D-173214 D-173215 D-173215 D-173216 D-173216 D-173216 D-173217 D-173217 D-173218 D-173217 D-173218 D-173218 D-173219 D-173219 D-173219 D-173219 D-173219 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173210 D-173220 D-173220 D-173220 D-173220 D-173220 D-173220 D-173221	1 18
D-173212	3 18
D-173213   2 2741   3 153 3.0   39   24   504 2.69   5   5   ND   2   85   1.6   2   17   100   4.29   122   4   61   1.34   55   14   2   1.82   .09   .15   1   D-173215   4 1917   2   85   .5   80   19   630   3.71   11   5   ND   1   46   1.8   2   21   111   2.48   .087   5   195   2.21   25   .22   2   1.99   .04   .12   1   D-173216   6   1697   6   91   1.2   86   20   691   4.10   11   5   ND   2   83   1.6   4   20   134   3.62   .096   6   226   2.43   45   .18   2   2.23   .05   .35   1    D-173217   2   2044   2   100   1.0   26   15   441   2.27   2   5   ND   1   75   1.1   2   8   95   4.16   .130   3   41   1.32   40   .13   2   1.59   .07   .13   1   D-173218   3   3   3   3   2   159   2.8   24   24   435   2.58   6   5   ND   1   66   2.3   2   17   103   3.83   .139   3   36   1.40   52   .16   2   1.82   .07   .14   1   D-173219   6   1398   6   78   2.0   33   26   512   2.86   7   10   ND   1   108   1.2   2   15   110   4.44   .135   4   41   1.56   96   .14   4   1.98   .07   .19   1   D-173220   7   1492   5   87   1.6   27   26   445   2.64   10   5   ND   1   60   1.2   2   5   102   3.57   .142   3   37   1.41   54   .17   2   1.88   .08   .14   1   D-173221   6   544   2   42   .3   130   20   481   4.07   9   5   ND   1   70   1.4   2   2   110   1.93   .081   5   239   2.89   70   .19   2   2.52   .05   .67   1	2 16
D-173213	3 11
D-173215   6 1793	13 18
D-173215	6 14
D-173216 6 1697 6 91 1.2 86 20 691 4.10 11 5 ND 2 83 1.6 4 20 134 3.62 .096 6 226 2.43 45 .18 2 2.23 .05 .35 1  D-173217 2 2044 2 100 1.0 26 15 441 2.27 2 5 ND 1 75 1.1 2 8 95 4.16 .130 3 41 1.32 40 .13 2 1.59 .07 .13 1  D-173218 3 3108 2 159 2.8 24 24 435 2.58 6 5 ND 1 66 2.3 2 17 103 3.83 .139 3 36 1.40 52 .16 2 1.82 .07 .14 1  D-173219 6 1398 6 78 2.0 33 26 512 2.86 7 10 ND 1 108 1.2 2 15 110 4.44 .135 4 41 1.56 96 .14 4 1.98 .07 .19 1  D-173220 7 1492 5 87 1.6 27 26 445 2.64 10 5 ND 1 60 1.2 2 5 102 3.57 .142 3 37 1.41 54 .17 2 1.88 .08 .14 1  D-173221 6 544 2 42 .3 130 20 481 4.07 9 5 ND 1 70 1.4 2 2 110 1.93 .081 5 239 2.89 70 .19 2 2.52 .05 .67 1	24 13
D-173218	13 16
D-173218	24 26
D-173219 6 1398 6 78 2.0 33 26 512 2.86 7 10 ND 1 108 1.2 2 15 110 4.44 .135 4 41 1.56 96 .14 4 1.98 .07 .19 1 D-173220 7 1492 5 87 1.6 27 26 445 2.64 10 5 ND 1 60 1.2 2 5 102 3.57 .142 3 37 1.41 54 .17 2 1.88 .08 .14 1 D-173221 6 544 2 42 .3 130 20 481 4.07 9 5 ND 1 70 1.4 2 2 110 1.93 .081 5 239 2.89 70 .19 2 2.52 .05 .67 1	9 20
D-173220 7 1492 5 87 1.6 27 26 445 2.64 10 5 ND 1 60 1.2 2 5 102 3.57 142 3 37 1.41 54 .17 2 1.88 .08 .14 1 D-173221 6 544 2 42 .3 130 20 481 4.07 9 5 ND 1 70 1.4 2 2 110 1.93 .081 5 239 2.89 70 .19 2 2.52 .05 .67 1	5 16
D-173221 6 544 2 42 .3 130 20 481 4.07 9 5 ND 1 70 1.4 2 2 110 1.93 .081 5 239 2.89 70 .19 2 2.52 .05 .67 1	13 20
n-173222	11 15
	9 20
STANDARD C/AU-S 20 59 39 134 6.6 73 32 1128 3.92 42 20 7 40 53 18.8 15 19 58 .48 .091 40 58 .87 181 .08 34 1.87 .06 .13	-

SAMPLE#	Мо	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	L	J Au	Th	Sr	Cd	Sb	Bi	٧			La	Cr	Mg	Ва					K			Sample
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	x	ppm	ppn	n ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	*	ppm	ppm	*	ppm	*	ppm	*	*	*	ppm	ppb i	1t. 16
D-173223	4	1544	2	92	1.6	29	15	513	2.40	3	5	ND.	1	88	1.4	2	5	108	5.96	. 165	5	42	1.57	50	.15	6	2.39	.10	.15	1	13	18
D-173224	3	893	2	65	1.1	33	19	787	3.41	11	5	ND.	2	164	1.0	3	7	164	7.63	.161	6	96	2.51	69	.07	2	2.32	.05	.16	1	11	19
D-173225	3	1622	4	82	1.7	35	21	648	3.37	10	5	ND	1	142	1.1	2	8	142	5.93	158	6	84	2.17	78	.10	3	2.37	.07	.17	1	19	16
D-173226	1	2015	2	78	2.2	32	22	583	3.46	2	5	ND	1	87	1.0	3	10	117	5.14	.147	5	67	2.06	45	19	2	2.37	.10	.12	1	28	13
D-173227	1	629	4	71	.8	19		943	5.30	6	5	ND	3	168						105			2.53		.13	2	3.05	.03	.14	1	8	10
D-173228	2	1291	2	50	1.7	25	17	552	2.93	2	5	ND.	1	97	1.0	2	7	119	6.33	.133	4	57	1.79	69	.16	2	2.16	.08	.14	1	13	16
D-173229	1 1	132	2	75	10	33	29	1178	6.17	3	5	ND.	1	90	.6	2	2	196	4.35	.118	9	43	2.82	42	.27	4	3.20	.03	.06	1	6	11
D-173230	3	1576	6	47	. 9	23	22	534	3.38	2	5	ND.	1	133	. 2	2	13	113	4.39	.161	5	45	1.66	79	.11	3	2.01	.08	.21	1	16	21
D-173231	2	1561	2	36	1.2	25	24	498	3.86	9	5	ND.	2	142	.6		4	105	3.55	.103	7	47	1.49	35	.15	4	1.87	.07	.14	1	21	18
D-173232	2	1999	3	37	.5	25	28	462	3.83	2	5	ND	1	83			9	133	4.56	.150	5	51	1.66	78	.24	6	2.36	.10	.17	1	37	23
D-173233	5	1816	2	46	.8	30	26	855	4.07	15	6	S ND	2	174	.6	5	12	133	8.35	.139	7	63	2.23	42	.06	2	2.31	.03	. 15	1	27	10
D-173234	10	1452	2	28	.4	15	17	360	2.79	2	5	ND.	1	95	1.2	4	4	122	3.61	.150	4	20	2.01	68	.21	9	2.10	.08	.20	1	23	12
D-173235	6	3567	2	32	.7	19	19	370	2.90	2	5	ND.	1	73	. 6	7	20	121	4.16	.113	7	20	1.27	25	.23	3	1.66	.08	.08	2	67	12 18
D-173236	3	1642	3	26	.6	16	16	430	3.08	2	. 5	ND.	1	100	. 9	2	15	125	4.07	.151	5	26	1.80	52	14	7	1.94	.06	.15	1	50	18
D-173237	13	1831	2	36	.7	22	19	540	3.47	3	5	ND	1	189	.9	2	9	126	6.97	.142	4	33	1.73	166	.17	2	2.13	.06	.17	1	37	18
D-173238	2	1482	3	186	1.1	25	18	785	3.22	19	5	ND	1	232	2.2	2	2	99	7.84	.130	6	51	1.45	50	208	2	1.58	.04	.16	1	93	16
D-173239	3	2221	2	44	. 8	35	24	681	4.06	17	5	ND	4	127	1.1	6	18	155	6.24	.180	9	81	2.20	44	.17	3	2.24	.06	- 15	2	45	16
D-173240	2	2327	3	43	.6	33	24	637	3.74	- 5	5	NO	1	145	1.2	4	17	147	5.02	.173	8	74	2.50	87	18	4	2.30	.08	. 19	1	42	16
D-173241	3	1774	3	38	.5	25	21	711	3.69	4	5	ND.	2	163	1.0	2	7	108	6.37	.199	17	47	2.05	95	.15	3	2.21	.04	.11	1	35	8
D-173242	3	1639	2	42	.7	25	23	759	6.57	8	5	ND.	3	106	1.8	3	13	124	5.61	.088	7	64	1.33	33	.18	2	1.63	.06	-09	1	60	6
D-173243	2	1526	2	36	.6	30	23	663	3.61	5	5	ND	3	147	1.5	7	2	147	7.07	181	8	58	2.12	70	.23	5	2.35	.09	.18	1	26	15
D-173244	2	1803	7	53	.5	27		778	4.14	2	6	ND.	2	139	.9	4	14	138	6.01	.153	8	50	2.03	43	24	5	2.70	.06	.12	• •	38	24
D-173245		1516	8	56	1.00				4.38	8	5			109	erent a	9				.161	9	45	2.15	43	.30	5	2.90	.10	.12	3	20	17
D-173246		2543	2	39	.7				3.26	7.575	5	ND	1	136	1.3	3	16	139	3.90	.171	8	56	1.87	49	. 29	7	2.24	.07	.10	1	66	20
D~173247		2656	3	55	.4	29			3.29		5		1		1.6	4				-166	7	48	1.48	36	24	7	1.99	.05	.09	2	85	18
D-173248	3	3054	2	41	.4	40	20	424	3.20	5	6	ND	1	115	1.6	5	19	126	4.12	.147	6	51	1.50	35	.25	4	1.87	.06	-11	2	61	15
D-173249	2	1827	2	38	.3	31	17	404	3.19	2	5	ND	1	89	.8	2	8	141	3.23	.160	7	47	1.63	41	29	5	2.05	.07	.14	1	43	18
D-173250		2598	7	52		38	15		3.32		5		1	71	1 4	2	20	140	2,92	.131	6	55	1.51	30	27	3	1.81	.04	-11	1	53	17
STANDARD C/AU-R	20	59	36	134	7.2	74	32	1051	3.91	37	18	7	38	53	19.0	19	20	59	.47	_091	39	58	.85	182	00	35	1.85	.07	.14	13	480	-

### GEOCHEMICAL ANALYSIS CERTIFICATE

Silver Standard Resources Inc. PROJECT M1006 File # 91-0552 Page 1
400 - 1199 W. Hastings St, Vancouver BC V6E 3T5 Submitted by: MARX HOLT BY

SAMPLE#	Мо						Co	Mn		As		Au			0.0000	Sb			Ca	100000000110000	La				11			Na		Au** S	
	ppm	bbu	bbu	ppm	ppn	bbu	ppm	ppm	%	bbm	ppm	ppm	ppm	bbu	bbu	bbu	ppm	ppm	%		ppm	ppm	*	bbu	*	ppm	%	%	% ppm	ppb w	it. 15
D-173251	2	1964	4	57	.6	31	17	628	3.59	5	5	ND	1	112	1.3	2	14	150	4.33	.139	5	51	1.84	53	.26	5	2.15	.04	.12 1	58	20
D-173252	1	1890	4	48	. 8	28	17	730	3.72	. 2	5	ND			1.2		6	149	6.86	.135	5	56	2.05	38	.23		2.11			46	18
D-173253		1659			247.5				3.90	6	5				1.3				3.93				2.26		.28		2.17		500,000	40	22
D-173254		2482						801	3.72	- 0.00 T P	9			255	1.6			144		.126			2.18		7.7		2.23		2000	,	16
D-173255		1660			200000		18		3.70	2		ND			1.0					.156			1.91				2.24			41	18
0-173233	1 '	1000	'	رر		- 50	10	J0 1	3.70		0	NU	•	117	1.0	_	,,	100	4.05	, 1,00	-	٠,	1.71	40		٥	2.24	.04	• • • • • • • • •	41	10
D-173256	1	1506	7	44	. 3	23	20	626	4.13	2	5	ND	1	135	1.0	2	7	152	3.89	.132	4	46	1.92	56	.28	4	2.17	.04	.10	36	20
D-173257	1	1931	39	987	1.6	26				5	5	ND	2	138	5.1	2	18	170	6.31	.149	6	63	2.23	43	.25	16	2.11	.04	.11 4	50	21
D-173258	1			65		81			12.46	4	7				2.0			568		.001			2.14		.30		1.23		989886		13
D-173259	i	39		66		88			13.43		5				2.2								2.32				1.24		7 - 1000000	2	22
D-173260	1		_						12.57		5				1.7				2.40				2.54						.01 2		21
0-113200	1	•	ر	00	- (3.00 pt	7.3	72	101	12.57	•	,	NU	•	103	1.0	۔ د	0	<b>JJ</b> 4	2.40	.001	2	03	2.34	26		•	1.30	.03	.01		۷۱
D-173261	1	20	8	64	. 1	90	56	600	13.00	2	5	ND	1	129	1.1	2	13	545	2.65	.001	2	58	2.09	203	.25	2	1.13	.04	.03 1	6	20
D-173262	1	8	2	59	.2	78	45	1193	10.13	10	5	ND	1	317	2.4	2	2	454	10.58	.001	2	51	2.46	158	.24	5	1.19	.05	.02 1	1	20
D-173263	1	1158	4	57	. 8	- 68			9.27	15	5	ND			2.0				13.45				2.44				1.36		2000000	11	19
D-173264		119	2			83			12.03	6	5				2.0	_		-	7.82	N	_		3.07		450 1100	_	1.61		2000000	4	21
D-173265	li								12.20	2	5				1.4		_		6.13				3.15				1.54			2	20
D 175205	'	20	,	• • •		,,	40	701	12.20		,	ND	•	211		-	٥	,,,	0.15	.002	_	,,,	3.17	72	100	-	1	.01	.04		20
D-173266	1	12	14	76	1	81	49	1228	11.06	7	6	ND	1	316	2.2	2	3	462	9.73	.002	2	70	3.41	38	.33	8	1.77	.06	.02 1	4	21
D-173267	1	69	7	59	.1	70	49	1165	10.01	11	5	ND	1	350	1.7	2	7	410	10.50	.001	2	25	3.35	130	.26	3	1.90	.06	.01	33	20
D-173268	1	53	10	- 66	2	67	65	983	11.05	- 5	5	ND	1	308	2.0	2	3	442	7.57	.002	2	26	3.30	38	.30	2	1.69	.08	.01 1	4	10
D-173269	4	81	6						7.31	6	11				2.3				17.06				2.73				1.48		0.000000	9	20
D-173270	1	88	-						9.49			ND			1.7				13.23				3.23				1.72		(0.00000000	11	13
	1	-	•	-	98.3	-		10,,,	,.,,		-		•			. <b>-</b>	-				_					_					
D-173271	1	57	4	59	. 1	64	51	1054	11.08	8	5	ND	1	311	2.2	2	8	494	9.11	.002	2	43	2.94	127	.28	5	1.40	.06	.02 1	4	11
D-173272	1	165	5	53	. 2	61	67	1654	7.11	15	5	ND			1.4		2	336	19.48	.001	2	26	2.57	46	18	4	1.56	.04	.01	18	17
D-173273	1	150	2	56					7.99	9	5	ND			1.6		_	_	14.42	1.1			2.63			2	1.51	.04	.01 1	32	19
D-173274	1	59	2						8.97		5				2.2				17.13				2.71				1.80		549500		10
D-173275	1		4						9.13	5	-	ND	•		1.5				14.15				2.73			_	1.53		300000	4	14
0 113213	'	50	•	٠,			74	1437	7.13		_	NO	•	347		_	-	310	14.12		-	~		50		_			.00		
D-173276	1	115	2	46	.1	17	52	1050	6.16	8	5	ND	1	217	1.4	2	3	174	7.84	.091	5	7	2.26	54	.10	7	2.05	.03	.09 1	21	10
D-173277	1	186	3	66	.2	18	29	1227	6.30	2	5	ND	1	217	.9	2	6	181	7.00	. 152	8	8	2.69	45	.05	2	2.77	.03	.15	5	6
D-173278	1	107	2	52				1006	6.03	6	5	ND	1	210	.9	2	5	172	5.36	.178	8	6	2.62	47	.03	3	2.78	.03	.16	5	7
D-173279	i	271	11			58		1195	8.53	4	6				2.3				9.91				3.41			_	2.01		20,000,000,00	97	19
D-173280	1 '	200	ż		35.4				6.14	2	-	ND			1.0				10.22				2.79				2.16			34	20
D-175200	٢	200	2	50		77	27	747	0.14		,	ND	•	340		_	_		10.22		-	20	6 1 /			-	2.10		.03		
D-173281	1	12	2	60	.1	60	41	1045	7.85	5	5	ND	1	281	1.5	2	6	362	12.14	.008	2	57	3.52	18	.03	3	1.76	.01	.01 3		15
D-173282	1	13	2	55	.2	50	38	1112	7.62	6	5	ND	1	276	1.0	2	2	341	13.30	.004	2	46	4.16	13	.03	4	1.40	.01	.01	6	18
D-173283	1	25	6	62	. 2	74	55	1064	10.69	6	5	ND	1	369	2.0	2	3	470	12.55	.001	2	68	3.68	22	.03	2	1.94	.01	.01	6	7
D-173284	1	67	2	71	2.7			1460	8.91	4	- 5		1	310	2.2				13.60	4.4	2	41	4.32	13	.03	2	1.92	.01	.01 1	5	16
D-173285	1	75	5					1370	8.95	12	5				2.9				14.28				2.62				1.94		2000 20	2	13
D 113603	1 '	, ,	,		14004		72	,5,5	0.,,		,	,,,,,	•	J/L		-	_	J / 4	.4.20		-			-5		-	, •			_	
D-173286	6	104	11	86	.1	52	36	1134	7.62	16	5	ND	1	376	1.4	2	6	223	7.45	.067	6	75	3.88	207	.01	3	4.45	.04	.24 1	16	12
STANDARD C/AU-R	21								3.91																	37	1.85	.07	.15 11	471	-

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.

THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AP. AU DETECTION LIMIT BY ICP IS 3 PPM.

- SAMPLE TYPE: CORE AU\*\* ANALYSIS BY FA\ICP FROM 10 GM SAMPLE.

0-173288	SAMPLE#	1				- 100 T		Co	Mn ppm		As ppm	U ppm	Au ppm							Ca %		La		Mg %		Ti %	ррп В	Al %	Na %				SAMPLE
0-173288	D-173287	2	64	10	66	.1	14	22	1387	5.04	23	5	ND	1	228	.4	2	2	137	7.68	.079	6	21	2.04	23	.04	2	2.27	.03	.10	1	9	21
D-1732899	D-173288	1	122	7	94	. 1	17	26	1591	5.64	8	5	ND	1	190	.4	2	3	149	5.61	.079	5	27	2.20	18	.02	3	2.62	.02	.09		10	
0-173290	D-173289	2	140	11	86		13	26	1510	5.33	19	5	ND	1	232	.8	7	6	122	6.78	.073	6	16	1.98	13	.02	12	2.57	.03	.14	2000 JOH		
0-1732992		1 -									W. W. C. C.	_	•	-		1,000,000,000		_								6.1							
D-173292		1 -		_								_				10000071700		_								77.1							
D-173297	0-173291	٦	114	•	47		10	10	دره	4.04		,	ND		107		_	2	110	4.10	.000	11	23	1.73	40		د	1.71	.04	.07	600000 200000 200000	20	21
D-173297	D-173292	2	87	10	96	.3	24	15	1092	3.76	36	5	ND	1	233	.4	2	2	64	5.28	.080	10	24	1.58	30	.01	5	1.84	.02	.18	1	28	19
D-173294		1	127	8	68				1160	4.94	7.					100000000000000000000000000000000000000		3	116							T. 2 11					1000		
0-173296		1 *		_							2000							_			1,4 1										600000000000000000000000000000000000000		1/
D-173297  1 64 3 87 1 15 16 1108 4.40 2 5 ND 1 188 66 6 2 53 4.18 .069 6 14 1.11 35 .01 4 1.57 .04 .13 1 13 18  D-173298  1 73 2 82 1 19 18 1076 4.57 6 5 ND 1 249 5 2 124 6.38 .075 8 11 .61 2.01 2.25 .03 .11 1 8 17  D-173299  2 115 4 91 3 22 23 905 4.55 15 5 ND 1 249 5 2 124 6.38 .071 8 31 1.61 24 .01 2.24 .04 .07 1 28 17  D-173300  1 72 2 83 1 1 23 1037 5.06 2 5 ND 2 198 .4 2 2 113 5.58 .082 9 25 2.27 39 .01 4 2.71 .03 .08 1 8 28  D-173301  1 72 2 75 1 1 23 1037 5.06 2 5 ND 1 205 .4 3 2 148 5.25 .076 8 25 .076 8 25 .076 .00 4 .07 1 9 18  D-173303  1 56 2 77 1 18 28 1156 5.69 8 5 ND 1 240 .8 3 2 177 6.32 .066 8 27 2.61 79 .16 3 2.80 .04 .05 1 2 13  D-173303 1 61 2 81 .1 19 27 1023 5.89 2 5 ND 1 225 .4 4 2 176 4.70 .066 8 28 2.82 36 .01 3 3.05 .04 .05 1 2 13  D-173305 1 165 2 77 .2 53 37 1054 5.11 2 8 ND 1 225 .4 4 2 176 4.70 .066 8 28 2.82 36 .01 3 3.05 .04 .05 1 2 13  D-173305 1 105 4 57 .2 53 37 1054 5.11 2 8 ND 1 129 .6 2 5 165 13.76 .003 2 147 3.59 72 .06 2 2.69 .01 .14 1 6 15  D-173307 1 1 22 2 38 .1 50 32 795 5.85 2 5 ND 1 184 4 2 2 215 13.76 .003 2 147 3.59 72 .06 2 2.69 .01 .14 1 6 15  D-173309 1 1 67 7 53 .4 62 38 .77 5 5.55 5 2 5 ND 1 184 4 2 2 2 2 17 7 .78 .001 2 228 2.61 58 .20 2 2 1.21 .00 .09 1 7 19  D-173309 1 1 67 7 53 .4 62 38 .78 5 .55 5 2 5 ND 1 184 4 2 2 2 2 7 4.77 .001 2 2 28 2.61 58 .20 2 2 1.21 .00 .09 1 7 19  D-173309 1 1 67 7 53 .4 62 38 .78 7 .75 6 .5 5 .5 5 .2 5 ND 1 184 4 2 2 2 2 7 4.77 .001 2 2 28 2.61 58 .20 2 2 1.21 .00 .09 1 7 19  D-173310 1 1 6 7 53 .4 62 38 .2 4 638 .33 2 7 .47 6 5 ND 1 139 1.1 2 3 40 .00 2 2 2 2 2 1.91 .00 2 2 2 2 2 1.91 .00 .00 .00 1 7 1 9 10  D-173311 1 16 7 55 .4 6 4 7 4 9 1 3 2 2 5 5 ND 1 185 .1 2 2 2 2 2 2 1.91 .00 2 2 2 2 2 2 1.91 .00 .00 .00 1 7 1 9 10  D-173311 1 1 16 7 5 7 .00 2 2 2 2 2 2 1 9 13 253 2 .40 2 8 ND 1 127 .4 2 2 2 2 7 7 .70 .00 2 2 2 2 2 2 2 1.90 .00 .00 .00 1 7 1 9 10  D-173311 1 1 16 7 5 7 .1 6 6 46 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	J										700000 00																				-0.00 to 10.00 to 10.00 to		
D-173297		1 .		_		11, 77, 7																				7.7.						_	
D-173208	0-173296	'	29	2	43	• 1	12	13	<del>9</del> 54	3.00		>	ND	1	188	0	٥	2	22	4.18	.069	٥	14	1.11	35	.01	4	1.57	.04	.15		13	18
D-173208	D-173297	1	64	3	87	1	15	16	1108	4.40	2	5	ND	1	212	.4	2	2	101	4.80	.075	7	27	1.67	35	.01	2	2.35	.03	.11	<b>1</b>	8	17
D-173300	D-173298	1	73	2	82	. 1	19	18	1076	4.57	6	5	ND	1	249	5	2	2	124	6.38	.071	8	31	1.61	24	.01						28	
D-173300		خ ا										_		_																			
D-173301		1									V00000 10	_														5 St 5 St							28
D-173302																300000000000000000000000000000000000000															-04040400 4040		
D-173303	U-173301	1	12	2	13	**	14	23	1114	3.10		)	NU	1	203	- 900 <b>*.*</b>	3	2	140	5.23	.076	٥	23	2.39	21	.01	-	2.09	.04	.07		y	10
D-173304	D-173302	1	56	2	77	.1	18	28	1156	5.69	8	5	ND	1	240	.8	3	2	177	6.32	.066	8	27	2.61	79	.16	3	2.80	.04	.05	1	1	
D-173304	D-173303	1	61	2	81	. 1	19	27	1023	5.89	2	5	NĐ	1	225	.4	4	2	176	4.70	.066	8	28	2.82	36	.01	3	3.05	04	.05	. 1	2	13
D-173306	D-173304	1 1	158	2	52			39	742	4.90		5	ND			******* ***		5	149	4.57	.011	2	160	3.64	92	12	2	2.38	.02	.11			
D-173306		1 1	105	_		10.7								1	429																	6	
D-173307																4.00																_	
D-173308	113300	'	1.3	-	70		7:	34	713	1.21		,	N	•	231		-	_	717	7.50	.000	_	100		73		-	1.07	.02	•••	3.000 3.000 3.000 3.000	•	
D-173308	D-173307	1	22	2	37		41	29	638	5.55	2	5	ND	1	143	.4	4	2	211	3.34	.007	2	350	1.93	79	.19	2	.84	.03	.10	1	2	16
D-173319		1 '		_														_				_				4.00	_				2000		
D-173310 D-173311 D-173311 D-173312 D-173313 D-173313 D-173313 D-173313 D-173313 D-173314 D-173315 D-173315 D-173315 D-173316 D-173316 D-173316 D-173317 D-173317 D-173317 D-173318 D-173318 D-173318 D-173318 D-173318 D-173318 D-173318 D-173318 D-173319 D-173319 D-173319 D-173319 D-173317 D-173317 D-173317 D-173318 D-173318 D-173318 D-173318 D-173318 D-173318 D-173319 D-173319 D-173319 D-173319 D-173310 D-173310 D-173310 D-173310 D-173310 D-173311 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173310 D-173320 D-1		1 -										-					. –														660000760		
D-173311		1 .		_								_																					30
D-173312  1 612 2 38 .2 43 24 638 3.33 2 5 ND 1 334 1.0 2 2 147 5.40 .013 2 64 2.55 1024 .14 3 2.64 .04 .08 1 11 10 D-173313  1 37 3 60 .1 66 46 647 10.17 4 5 ND 1 195 1.7 2 5 479 4.04 .004 2 117 2.42 49 .33 4 1.39 .07 .03 1 3 22 D-173314  1 252 5 47 .1 65 45 537 7.22 2 5 ND 1 166 1.0 2 2 299 4.22 .014 4 116 1.87 22 .23 3 1.29 .05 .02 1 13 20 D-173315  1 122 2 58 .1 65 40 433 9.63 2 5 ND 1 108 .4 2 9 427 1.35 .004 2 145 1.75 24 .26 2 1.20 .07 .03 1 7 18 D-173316  D-173317  4 125 2 22 .2 19 13 253 2.40 2 8 ND 6 127 .4 2 2 83 2.59 .022 3 22 1.15 92 .13 2 1.04 .05 .10 1 9 10 D-173318  1 30 6 64 .3 86 60 463 12.03 5 5 ND 1 153 2.1 8 2 489 1.13 .006 2 148 2.18 46 .24 5 1.09 .08 .05 2 1 20 D-173319  1 9 4 57 .1 84 55 479 11.30 4 5 ND 1 117 .4 5 6 478 1.11 .004 2 183 1.86 31 .27 2 1.09 .06 .03 1 5 19 D-173320  1 113 2 34 .1 30 25 395 4.56 4 5 ND 1 123 1.2 2 2 176 2.30 .051 7 56 1.31 106 .23 2 1.26 .12 .14 1 6 15 D-173321  4 147 2 28 .2 16 15 321 2.74 2 5 ND 5 76 .4 3 2 83 1.46 .050 9 24 .97 65 .16 2 .90 .04 .07 1 5 22																		_								CO. 100					2007/2007 200	_	
D-173313	U-1/3311	1	100	2	57		- 04	38	588	7.39	13	)	NU	1	219	1.6	4	8	<b>34</b> I	0.47	1001	-	220	1.90	41	-20		1.08	.02	.00		12	14
D-173313	0-173312	1	612	2	38	-2	43	24	638	3.33	2	5	ND	1	334	1.0	2	2	147	5.40	.013	2	64	2.55	1024	. 14	3	2.64	.04	.08	3	11	10
D-173314	D-173313	1	37	3	60	1	66	46	647	10.17	4	5	ND	1	195	1.7	2	5	479	4.04	.004	2	117	2.42	49	.33	4	1.39	.07	.03	1	3	22
D-173315		,		-							1.0	-					_	-								·					2000 00000		20
D-173316	· ·			-								_																			20000 101		
D-173317																100000000000000000000000000000000000000		_			77	_									C0000000000000000000000000000000000000		
D-173318	173316	4	525	2	32	2	24	42	310	2.85	~	3	NU	4	170			4	63	2.59	.022	,	22	1.15	92	. 13		1.04	.05	. 10		7	10
D-173318	D-173317	4	125	2	22	.2	19	13	253	2,40	2	8	ND	6	127	.4	2	2	76	1.56	.022	13	27	.79	44	. 13	2	.77	.06	.09	1	2	12
D-173319		1										_																					
D-173320		1 4										_																			400 400 400		
D-173321 1 51 5 54 :1 74 49 497 10.06 2 5 ND 1 98 1.6 6 2 447 1.63 .008 3 140 1.77 29 .24 2 1.16 .08 .04 1 7 16 D-173322 4 147 2 28 .2 16 15 321 2.74 2 5 ND 5 76 .4 3 2 83 1.46 .050 9 24 .97 65 .16 2 .90 .04 .07 1 5 22			-								40.00	_																			2.22	_	
D-173322 4 147 2 28 .2 16 15 321 2.74 2 5 ND 5 76 .4 3 2 83 1.46 .050 9 24 .97 65 .16 2 .90 .04 .07 1 5 22											200																: -				2007	_	
	υ-1/3321	1	51	>	<b>)</b> 4	• 1	74	49	497	10.06	۷.	>	ND	1	78	1.0	٥	2	44/	1.65	,uV8	د	140	1.//	29	. 24	2	1-10	-05	.04	919.	,	10
	D-173322	4	147	2	28	.2	16	15	321	2.74	2	5	ND	5	76	.4	3	2	83	1.46	.050	9	24	.97	65	. 16	2	.90	.04	.07	. 1	5	22
	STANDARD C/AU-R			_																						7	. –	1.88	.07	. 15	11	494	-

												-							000			**			,,,					49E	-
SAMPLE#	Мо ррпі					Ni ppm			Fe %	As ppm							Bi ppm		Ca %		La ppm				T i			Na %	к % р	W AU*	* SAMPLE b wt.  b
D-173323	5	103	8	135	.4	36	14	1012	3.27	51	5	ND	1	235	.8	4	2	33	10,42	.080	6	21	1.25	86	.05	9	.59	.03	.18	1 1	3 20
D-173324									4.01			ND			.4				11.11				1.42				.30			20120	1 10
D-173325						41			4.77	10.00		ND			1.3				10.91				1.51				.31			1 14	
D-173326	1				.8				3.89	10 pt 1000		ND			1.1				11.73				1.64				.29			1 3	
D-173327		135							3.56			ND							11.38				1.52				.32			1 2	
0 115521	1	133	,	:37		74	1,5	1316	3.50		,	NO		274		_	_	17	11130		ŭ		1.32	,,		7		.01	.17	<b>.</b>	0 10
D-173328	4	219	59	194	1.3	35	14	1693	4.03	90	5	ND	1	255	5		12	14	11.94	.085	5	14	1.53	54	.01	2	.29	.02	.13	1 11	
D-173329	2	59	3	117	.2	18	9	1015	2.53	18	5	ND	1	285	.5	2	2	33	12.01	.072	7	24	1.11	196	.01	3	.70	.02	.15	1	9 21
D-173330	1	118	6	120	.3	22	14	1243	4.78	27	5	ND	1	239	.2	2	4	54	8.53	.090	8	24	2.29	55	.01		1.67			1 1	2 20
D-173331	3	123	6	137	.7	19	14	1283	3.56	51		ND	1	170	.5		2	66	13.61	.095	6	38	1.30	85	.06	4	1.38	.02	.05	1 1	
D-173332		100							2.10			ND		145	.5				14.03	10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to 10 to			.92						.11	25 12	3 16
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D-173333	1	87	9	123	.7	14	11	1040	2.50	33	5	ND	1	254	.8	2	4	13	14.30	.080	5	11	1.08	50	.01	2	.25	.02	.12	1 3	0 17
D-173334	3	97	62	247	1.4	30	12	1052	3.17	104	5	ND	1	269	1.9	4	2	12	11.64	.079	4	10	1.11	66	01	2	.37	.01	.15	1 8	9 14
D-173335	1 2	100							2.77			ND		134	.8	2			8.77				1.17		100,000	4	1.05	.02	.12	1 2	3 20
D-173336	2	83							3.03			ND		182					10.74				1.34				.44				5 12
D-173337	2	98							2.82			ND		279		2			12.71				1.10				31		-000		3 15
0 113331	-	,,	-				•	, , ,			-		•	_, ,		_	-							•		_	•••	•••	•••		
D-173338	8	135	2	101	25	54	18	1058	3.70	97	5	ND	1	220	.6	2	2	15	10.91	.099	6	18	1.70	74	.01	2	.31	.02	.16	1 1	4 13
D-173339	3	103			.5				3.46	60.00	5			186					10.48				1.50				.84			, Tel (00)	6 14
D-173340	š	75							3.73						1.5				11.38				1.51				.36				4 8
D-173341	2	104							3.16		6			195		3			13.11				1.26				1.14			1 1	1 18
D-173342	1 2	53							2,17			ND							17.89				.91				1.32			00000	5 20
	-		_	-					••••		_		•			_			**		-	-				_		•			•
D-173343	2	74	4	70	.3	12	17	1008	4.66	3	5	ND	1	87	.4	2	2	94	3.95	.084	8	21	1.65	38	.08	3 3	2.36	.05	.09	1 1	6 15
D-173344	4		11		44.7	37			4.60	400.7	_	ND		114	.7	2			4.06				1.71		100		2.26			1	5 16
D-173345	1 2	70		69					5.26		_				.6				5.00				1.86				2.71		2000	1	8 20
D-173346	1 1	411				33			4.22		5		1		.5				3.22				1.87			6	2.08	.03	.06	1	3 16
D-173347	1	584				54			3.87				1		1.0				3.20				1.49				1.52			1 2	6 16
			Ī						••••		-			-,		_	_				_	- •		-	20 July 53 July	-			580	2008 2504	
D-173348	3	1193	2	67	1.7	54	21	501	4.03	15	5	ND	1	71	1.3	3	6	78	2.65	.062	5	37	1.56	38	.04	2 '	1.74	.03	.13	2 1	4 19
D-173349	_	978	_			44			3.47			ND			1.0		8		4.47				1.30				1.56			1 4	
D-173350	_	349			.4				4.21		19				.4	2			2.94				1.99				2.07			<b>1</b> 1	
D-173351		411		39		60			3.99						3				2.43				1.81				1.99		2000	1 1	0 17
D-173352	1 -	484							4.56					105		4			4.41				1.69			_	2.24		56.0	o 500 - 7	1 14
D 113332	"	707	_	3,			_,	707	7.70		_	110	•	105		•	-		7,71		•		,	,,		., ,		•••		6: <b>7</b> .0 300 3 300 3	
D-173353	3	176	2	30	_ 1	82	12	466	4.00	2	5	ND	2	64	.2	2	2	83	1.25	.046	16	51	1.82	29	.05	2 :	2.04	.07	.07	1	1 12
D-173354	_	223	_		200	40			6.17		12			150					4.70				2.22				2.96		2000	2	2 19
D-173355	_	118		85					6.61		5			130	.9				4.28				2.45				3.20				1 18
D-173356	1	108	_		.1				5.18		5	ND			1.4				4.48				2.17				3.11		6.0	1	5 20
D-173357	3	83	_	52					4.90						.3				4.51				2.26				2.72	-	2000		3 17
	,	0.5	2	26					7.70	180 7	,		•	.50		_	-		7001		•					- '		<del>-</del>			
D-173358	9	232	11	38	2	107	19	436	3.51	14	.8	ND	1	55	.3	2	2	79	2.35	.036	9	51	1.43	29	.11	2	1.70	.04	.09	1	2 13
STANDARD C/AU-R	20												39	52	17.9	14	21	59	.48	.094	40								.15		
A CONTRACTOR WALLED IN	,		7.5	,																											

SAMPLE#	Mo mag	Çu		Zn			Со	Mn ppm		As ppm	U maa	-			Cd ppm				Ca %	20000000000	La ppm		<i>T</i> .	8a pom	Ti X	B	Al %		22004000		AMPLE
	F	FF	FF	F-1	FF'3.		FF	PP		10000	P P ···	P P	FF	FF···	50 505		F F			200 go 1		F F		FF	00000 GH				9000-10	pp.	10
D-173359	3	151	2	21	. 1	131	14	31 <del>9</del>	2.88	41	5	ND	1	55	.8	2	2	62	1.97	.024	15	35	1.13	22	.03	3	1.30	.03	.13	4	10
D-173360	2	636	3	31	.9	87	17	376	3.61	6	5	ND	3	56	.9	2	2	89	2.33	.046	18	50	1.42	36	.11	2	1.56	-05	.16 1	4	20
D-173361	6	169	2	20	. 1	104	12	289	2.87	12	5	ND	1	64	.6	2	2	73	2.00	.049	14	38	1.39	30	.05	2	1.44	-04	.14	1	15
D-173362	2	272	4	28	.4	57	17	379	3.76	6	5	ND	2	85	1.2	2	2	96	2.10	.052	7	76	1.96	66	.13	2	2.01	.06	.14	3	14
D-173363	11	281	3	21	.4	81	13	328	2.83	15	5	ND	2	72	.8	2	2	89	3.03	.040	7	49	1.22	19	.17	4	1.28	.04	.07 1	2	12
D-173364	3	554	2	25	.6	24	31	75/	3.73			ND	4	71	1.0	2	7	124	7 70	.135	,	15	1.54	oE	20	7	2.15	04	40	7	,
1			2							40	7		1		1897/7.7	_	_			.053	10				000000		1.37		7 17 2000	3	20
D-173365	18	571	2	26	200	117			3.30	18	2	ND	4	62	1.0	- 1				100 mm			1.36		1000					8	20
D-173366	14	618		23					3.27		2	ND	1	66	8					.040			1.56		.18		1.62		100,000,000	16	21
D-173367	_	1042	2		1.3				3.25		5	ND	1	120	1.4	_				.124			1.77		.08		2.11		- 1 - 100000000000000000000000000000000	26	21
D-173368	11	686	2	29	.7	19	18	390	3.05	2	,	ND	1	95	.9	2	2	150	3.7/	.144	4	24	1.63	04	•17	2	2.09	-09	.15	18	23
D-173369	8	745	2	28	.8	22	24	436	3.33	5	5	ND	. 1	141	1.1	2	2	112	3.73	129	4	27	1.57	75	.14	2	1.99	.08	.17 1	19	22
D-173370	5	530	2	30		28	25	534	4.07	7	5	ND	1	145	1.5	2	2	127	3.52	.124	4	60	2.00	51	.03	2	2.05	-03	.15	13	20
D-173371	5	412	4	25	.5	21	26	509	3.46	2	5	ND	1	116	1.2	2	2	120	3.39	.121	3	29	1.88	49	.08	2	2.10	.04	.12 1	22	20
D-173372	4	293	6	38			18	799	4.09	19	5	ND	1	100	1.3	5	2	138	3.51	.093	7	215	2.75	36	.02	2	2.47	.03	.08 1	14	18
D-173373	1	155	2	20	.1	77	16	460	3.56	5	5	ND	2	106	1.1	3	2	121	2.23	.074	6	150	2.43	39	.22	2	2.19	.07	.08 1	3	15
D-173374	3	343	7	18	.3	78	19	782	3.48	15	5	ND	2	72	1.3	2	2	106	2 17	.042	5	71	1.79	20	.21	2	1.80	0/-	ns t	10	20
D-173375	17	609	6	22	. 6	:			4.27	40000	5	ND	2		1.3		_			.061			1.98		17		2.04		6505075	6	23
	13	509	۰	28		72			3.41	70.7	5	ND	_		1.6	_				.066			1.95		.13		1.79			5	23
D-173376	13											ND	-	75	1.3	3				059			1.82		21		1.56			,	16
D-173377	2	400	2		100.7					1000	2		1			2									2.5				1,00000110	7	17
D-173378	8	212	6	20	.1	74	19	213	4.13		5	ND	'	03	1.2	۷.	2	117	۲.22	.086	•	01 ک	2.43	17		~	2.01	.04	•11 2	3	11
D-173379	2	313	3	14	.2	86	20	423	3.55	4	5	ND	1	61	.9	2	2	96	2.04	.073	5	141	1.62	18	.25	2	1.43	.06	.04 1	3	19
STANDARD C/AU-R	20	58	42	135	7.3	72	32	1120	4.02	37	18	8	40	54	19.0	15	21	60	.49	.092	40	59	.89	183	.09	34	1.97	.06	.14 12	481	-

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# GEOCHEMICAL ANALYSIS CERTIFICATE

Silver Standard Resources Inc. PROJECT M1006 File # 91-0624 Page 1 400 - 1199 W. Hastings St, Vancouver BC V6E 3T5 Submitted by: M. HOLTBY

SAMPLE#	Мо						Ni ppm		Mn ppm		As	57				Cd ppm				Ca %	000 0 6 6	La ppm			Ва				Na %	K %	100 %		Sample wt. Hs
173380	2	34	9	4	32	.3	100	19	653	3.82	10	5	ND	1	81			2	110	3.12	.083	6	168	2.03	37	.22	4	1.84	.07	.06	1	4	18
173381	2	30	11	42	131	. 3	84	20	977	4.25	14	8	ND	1	84	.5	2	2	123	4.71	1085	6	186	2.43	32	-21	4	2.14	.06	.11	1	13	15
173382	1	39	20	12	36	.5	97	26	546	4.69	11	5	ND	1	71	. 2	3	2	113	4.00	.109	5	223	2.47	31	.29	5	2.00	.08	.27	3	13	16
173383	2	2.	0	10	33	.2	88	23	621	4.44	6	5	ND	1	66	.6	2	2	109	2.96	.099	- 6	204	2.32	57	.28	3	2.12	.13	.38	1	1	9
173384	1	_	4	15	68	1000	18			5.82	100000		ND	2	105						.137		51	1.94	46	.26	2	2.82	.08	.15	1	1	11
173385	1	29	20	13	37	.7	21	25	666	3.76	10	5	ND	3	103	.5	5	3	139	6.38	. 137	4	36	2.21	42	_12	6	2.17	.03	.20	1	2	3
173386	1	4	1	2	39	.6	104	26	729	5.06	28	5	ND	1	155	.2	2	2	142	8.33	.090	5	244	2.82	25	.06	3	2.49	.05	.15	1	6	10
173387	1	70	)4	2	624	0.00	26		602	3.64	. 8	5	ND	1	147	19.2		7	102	6.59	.121	3	27	1.65	56	.08	3	1.59	.04	.21	5	11	3
173388	Ż			-	754	30.7.7	120			5.30			ND			23.9	23				.106			3.71		.30	2	2.75	.10	.18	1	17	12
173389		39				10.00	104			3.60		0	ND		63	<ul> <li>a contratt</li> </ul>					.097			2.37		4.0		1.64			2		11
173390	2	78	30	15	37	.8	29	30	480	3.89	6	5	ND	1	73	.3	2	2	130	3.69	. 133	3	32	1.94	83	.18	6	2.16	.08	.23	1	5	6
173391	4	8	1	7	48	7000000	108		393	3.77	21	5	ND	1	50	1.1	2	3			.045		62	1.53	28	.14	2	1.55	.04	.08		13	15
173392	7	37		4	33	0.00	114	_		2.71		75	ND	1	43			2			.042		67	1.21	12	. 15	6	1.30	.06	.07	1	4	17
173393	6		-			200	122			4.19				1		1000 00 000	٠.	_			.046			1.84		.21	_	1.77			1	8	8
173394	_	39	_	8		17 - 2 - 14	124			4.69	44, 14	· -	ND	1		10000 11000					.098			3.34				2.56			•	15	14
173395	2	52	24	2	37	.4	172	30	716	5.19	18	5	ND	1	169	1.1	2	2	110	6.05	.081	5	260	3.68	26	.20	3	2.81	.05	.15	1	7	23
173396	4	54	8	3	32	.3	174	32	482	4.88	9	5	ND	1	73	.7	2	3	100	2.28	.078	6	210	3.03	24	.20	5	2.47	.08	.07	1	4	4
173397	1	7	78	13	60	.3	15	25	1021	5.34	10	5	ND	2	133	1.4	4	2	119	6.11	.081	5	21	2.13	35	.21	7	2.74	.05	.11	2	5	15
173398	2	3	3	8	47	.1	34	12	766	3.56	6	5	ND	1	149	.4	2	2	112	5.54	.068	6	80	2.07	44	.06	2	2.28	.05	.11	1	5	9
173399	6	22	6	11	40	.3				2.95			ND	1	62	10.000000000000000000000000000000000000		2	70	2.46	.043			1.54		.04	3	1.66	.05	.11	1	28	9
173400	18	52	20	2	37	.6	41	14	385	2.68	10	6	ND	1	61	.7	2	2	83	3.40	.075	6	50	1.36	38	.19	5	1.50	.06	.11	1	8	6
173401	15	21	7	5	34	.4	45	10	415	2.68	14	5	ND	1	58	1.2		2	90	3.54	.060	5	69	1.65	27	.16	2	1.65	.05	.07	2	30	15
173402		131		5	52					2.87				1							.057			1.49	_	.20	_	1.61			1	39	13
173403	1 -	108			57					3.40			ND	1		1000	_	4			.071			1.55		.07	_	1.75			1	89	16
173404					385			30		4.79			ND		127						.134			2.27				2.34			1	59	18
173405	2	57	5	2	33	.8	50	31	727	3.88	6	5	ND	1	101	.9	7	2	77	7.77	_068	5	85	1.24	25	.04	4	1.44	-05	-07	. 1	18	13
173406	1 1		-	Ž	32	.2				3.71	12				133	00000000000					.120			2.11		.10		2.26		.20	1	3	17
173407	1 -	100		_	232		114			6.73		V			170	66.500.00					.055			1.95		A 100 GO		1.76			•	32	18
173408	1 '	40		_	42	.6				5.20					163	.7					.095			2.20		.03	_	2.37			1		16
173409		114	-	8			44			5.50			ND			1.5					.155			2.76				2.57			1		19
173410	7	19	1	13	38	×	60	25	628	4.54	17	5	NĎ	2	118	1.5	4	2	152	4.00	.163	۵	07	2.96	101	22	3	2.57	_04	. 16	2	5	8
173411	1 4	14	•				131			5.44					108	1.7					110			4.20		.17	_	3.29			1	_	9
173412	1		3	_		.3				5.08	200 000 000				129						.137					.05		2.61			2	_	12
173412	1		7		37					3.79	200.00				127	.8					.128					700 1000	_				1		13
	1 -					400	2				50000000	¥.												2.00		.11		2.23			200000000000000000000000000000000000000		
173414	1	15	¥	4	36	··I	11	18	720	3.29	6	•	ND	1	121	.7	2	3	88	J. 18	.133	3	15	1.60	58	.05	3	1.93	.05	.21	1	26	16
173415	1	25	•	-			13			3.29		5				1.5					.122			1.54				1.83			1		13
STANDARD C/AU	'-R   20	5	0	44	15/	1.2	/2	32	1107	5.99	4.5	37	- 7	28	24	Jo.U	14	17	28	.49	.091	39	60	.89	182	. 09	33	1.89	.Uo	. 14	15	480	-

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HN03-H20 AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND ALO AU DETECTION LIMIT BY ICP IS 3 PPM. - SAMPLE TYPE: CORE

DATE RECEIVED:

SAMPLE#	Мо	Cu			Ag			Mn		As		Au						v	Ca			Cr					Αl	Na	K			Sample
	pon	ppm	pon	ppm	pom	ppm	ppm	ppm		ppm.	ppm	ppm	ppm	ppm	ppm	ppm	pom	ppm	<u>ہ</u>	* %	ppm	pom		ppm	<b>.</b> .	ppm	- %	*		pom:	ppo	wt. ib
173416	2	445	3	51	. 5	50	25	678	4.94	17	5	ND	1	119	.2	2	11	120	6.69	141	5	103	3.11	40	. 12	7	2.81	.03	. 11	1	506	8
173417	2	248	_	34			24		3.91	4	5			124	2.11.7.7				6.37		-		2.93		18		3.03			3	44	-
173418	1	97				11	31		6.71	2	5			138			_	170		094			2.70		.34		3.43			- 1	20	•
173419	1 2	295	_			185	24		4.66		5			104	7000000		-	101	2.74				4.58		.30		2.84			1	10	-
173420	3		_			61	25		4.70	- 0.0 C T 0.0	5		-	105	5.27 7.1	_			4.17					43			2.09			200000000000000000000000000000000000000	36	
173421	2	486	2	20	. 3	27	28	405	5.10	10	5	ND	2	175	.7	4	5	128	6.99	087	7	/,8	2.79	30	.16		2.43	11	07	4	23	5
173422		2746	_		1.2		24		4.76	4.1	5			162	4.1			170					2.49		.28		2.92	-		3,130	82	
173423	1 -	1950	_				20		4.68	200	5		-	146									2.58		.32		3.12			20/20/2004	53	
173424	4	587	_				25		4.99		5			145	100000000000000000000000000000000000000			137					2.06		.31		2.95			Mar. 15.11	33	
	1 -	1524	_						3.95		_			103		_			3.35					54	7/4		2.70		-	100000000000000000000000000000000000000	60	
173425	٥	1724	2	44	.7	25	18	432	2.95	×	5	NU	1	102	11.1	· 🤈	10	142	3.33	:13/		20	1.73	- 54	- 32	11	2.10	. 10	. 13		ы	•
173426	1	68	2	81	.2	8	23	1093	5.17	4	5	ND	2	234	.4	3	7	94	6.03	.110	8	3	2.27	195	.03	8	2.99	.03	.17	1	3	
173427	2	59	4	116	. 2	20	7	1107	2.32	7	9	ND	3	330	1.1	2	2	45	12.37	.252	7	19	.72	48	.01	2	1.14	.03	. 15	4	11	
173428	5	69	10	116	1	51	11	895	2.80	26	5	ND	3	260	. 8	6	2	38	7.72	.041	8	28	1.28	71	.01	4	1.65	.01	.16	1	5	6
173429	1	26	8	80	. 1	6	22	1109	5.58	2	5	ND	3	373	.6	2	2	83	10.18	.106	6	2	1.67	267	.02	6	2.99	.04	.21	1	1	6
173430	9	86	11	134	.5	39	13	545	3.70	5	5	ND	1	101	1.1	3	2	57	2.69	.059	5	38	.92	69	.01	2	1.40	.04	-14	1	1	5
173431	1	31	2	79	2	5	19	1052	6.63	6	5	ND	2	154	.7	2	2	108	5.83	.118	6	6	2.20	275	.01	4	3.42	.04	.23	1	1	9
173432	29	61	5	165	1		11		3.35	2	5	ND	1	135	1.7		5	78	7.41	.049	4	16	.69	133	.01	4	1 14	.03	.16	1	6	10
173433	2	48	3	30	. 2	8	16		3.80	3	5	ND	4	303			2	71	15.10	.080	6	4	1.84	201	.01	6	2.19	.03	.20	1	1	10 8 8
173434	30	86	5	389			14		3.79	11	5	ND	1	106	and the second		2	140	4.88	.061	4	21	.81	68	.01	2	1.12	.03	.16	1	4	8
173435	40	62	_	174	007.70		13		3.63	11	5			149					4.49		5			59			1.05		-	500	8	
173436	28	68	2	101	4	37	13	676	3.94	12	5	ND	1	89	.2	2	2	54	4.25	-067	5	18	1.32	96	.07	8	1.52	.02	. 16	1	6	6
173437	31	74		113	- 20 - 30		13		3.89	7	5	ND	ż	39	70.27 /4 1 1 1		2							84			1.46			10.00	2	
173438	23	54		136	2007		8	-	2.18	10	5	ND	2	81	1.7		2		2.02		3			69			. 74			4	5	9
173439	1	63	_		1007	,	_	1000		9	5	ND	_	220	4.5.7.7.2.2	. –	_	126	6.74		6			125	. 2000		3.43			4	1	6
173440	7	102	_		0.000	4		840			5			375		_	2		8.95					134			.96			i	15	6
173441	27	92	2	67		39	10	688	2 80	11	5	ND	1	251	.5	10	2	23	7.11	064	4	8	55	80	.01	7	.98	ກວ	14	4	11	7
	19	61			- W - 13	69				45.00					18.8			23 57		.088		_			100 100					12		
STANDARD C/AU-R	117	01	- 20	131	I U	07	_ 22	1071	3.92	42	11	- 1	37	25	10.0	14	17		.40	- 000	JY	20	.00	102	. 09	.54	1.03	.00	- 14	12	490	•

COMP: SILVER STANDARD

PROJE CAMP

#### MIN-EN LABS - ICP REPORT

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

FILE NO: 0S-0516-P.11 DATE: 90/10/03

ATTN: BOB QUARTERMAINE (604)980-5814 OR (604)988-4524 \* ROCK \* (ACT: F31) SAMPLE RA RF RI CO CH FF NA NI р PR SR AG ΑŁ AS R CA 1 7 SP TH 11 7 N GA SN W CR PPM PPM PPM PPM PPM PPM PPM PPM PPM PPM PPM PPM PPM PPM PPM PPM PPM PPM PPM PPM NUMBER PPM PPM PPM PPM PPM PPM PPM PPM PPM PPM PPM 2.5 27650 7 23960 25 3089 35910 2870 980 333267 11 17910 353 24 2080 11 165.4 73089 35910 2870 1085 29310 1340 1885 27700 880 2650 24240 970 189 32650 3930 41 1060 15 1050 13 13 8 1.7 18780 34 25 3 20450 17 21000 320 333268 1.1 563 19 128.6 42 2 139 1.9 15720 2.2 16100 1.9 19630 99.4 333269 5 20500 .1 21 8 11630 367 860 41 40 35 43 3 . 1 333270 21320 6 9910 358 910 11 1330 50 281 7 20750 21 7 15950 494 18 970 52 333271 2480 43 .1 1 108.8 41 770 26560 1460 92 39340 920 33 11 10 75.4 333272 2.4 13940 26 630 21 1110 65 1.0 3 19210 10 11 14190 190 110 333273 1.7 31990 126 7 29760 2Ž 16 16700 617 630 13 147.6 58 58 24 1130 27 550 23 920 333274 1.5 31830 52 6 29110 21 102 35400 910 16 12920 620 15 48 .5 469 1 126.3 57 333275 .9 20480 36 123 .8 2 59530 7 19500 . i 39 32190 1640 10 20830 1886 80 12 144 87.4 33 58 1 15 56 333276 1.8 22020 .5 18 107 32840 1420 11 11130 558 1 1100 11 1 100.0 1 43 367 33 24 25 5 .2 59 333277 1.9 21210 8 14330 73 51720 2880 13 15350 830 6 840 6 33 147.9 8 75 41580 840 16 1260 52 333278 2.0 30470 1.0 5 24710 22 34590 721 2380 132.6 3 2 210 333279 .4 10740 Ċ 48 .8 3 13140 .ė. 55 13300 1180 3 3130 260 960 470 ŏ 39.0 14 6 42 333280 15 .8 6 26130 .1 24 520 51420 970 7 6910 544 1 650 12 910 13 17 1 1.5 26600 1 114.0 1 31

COMP: SILVER STANDARD

PROJ: CAMP

### MIN-EN LABS - ICP REPORT

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

ATTN: BOB QUARTERMAINE

(604)980-5814 OR (604)988-4524

DATE: 90/10/03 \* SOIL \* (ACT:F31)

SAMPLE NUMBER PPM 1 1 77 .6 3 4600 .1 7 18 16530 680 7 4800 181 1 190 15 380 14 1 16 1 1 64.0 33 1 1 1 21 1 2 194 1.7 4 8140 .1 28 109 61670 1210 19 10450 822 1 460 13 1640 27 1 64 1 1 162.4 162 2 1 1 4 46NX66.25E 64+50E 58+50N 1.2 12620 1.3 23320



# SPECIALISTS IN MINERAL ENVIRONMENTS

CHEMISTS . ASSAYERS . ANALYSTS . GEOCHEMISTS

VANCOUVER OFFICE: 705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2 TELEPHONE (604) 980-5814 OR (604) 988-4524 FAX (604) 980-9621

# THUNDER BAY LAB.:

TELEPHONE (807) 622-8958 FAX (807) 623-5931

SMITHERS LAB.: TELEPHONE/FAX (604) 847-3004

# Assay Certificate

OS-0516-RA1

Company:

SILVER STANDARD

Date: OCT-03-90

Project:

CAME

Copy 1. SILVER STANDARD, VANCOUVER, B.C.

Attn:

BOB QUARTERMAINE

2. AL POTTER, BURNABY, B.C.

He hereby certify the following Assay of 14 ROCK samples submitted SEP-15-90 by AL POTTER.

Sample Number	AU g/tonne	AU oz/ton	PT g/tonne	PT oz/ton	PD g/tonne	PD oz/ton	
373267	.07	.002	.01	,001	.01	.001	,,
333 <b>268</b>	.02	.001					
33 <b>3269</b>	.06	.002					
333270	.14	.004	.01	.001	.01	001	
333271	02ء	.001					
333272	.15	.004					
333273	.03	.001					
333274	.02	.001					
333275	, 02	.001					
333276	" O1 <sub>6</sub>	.001					
333277	.03	.001					
333278	.02	.001					
<b>3</b> 332 <b>79</b>	.01	.001					
333280	.02	.001					

Certified by\_

MIN-EN LABORATORIES

