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Gold Commissioner's Office VANCOUVER, B.C.

Assessment Report

Prospecting Report on the Holy Cross Property

Holy 1 Mineral Claim

Omineca Mining Division British Columbia NTS 93F15 53⁰ 47.5' North Latitude 124⁰ 58' West Longitude

> Owner: Geoffrey Goodali

January 8, 2001

by

Global Geological Services Inc. Geoffrey Goodall, B.Sc., P.Geo. 1315 Arborlynn Drive North Vancouver, BC

GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

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SUMMARY

The Holy Cross Gold Property consists of a single 20 unit, 500 hectare claim, located in the Omineca Mining Division of north central British Columbia. It is located approximately 145 kilometres west of Prince George and is readily accessed by a network of forest service and secondary logging roads from the village of Fraser Lake, 33 kilometres to the north. A prospecting program was undertaken on the property between October 30 and November 3, 2000.

The claim area is underlain by andesite flows of the middle Jurassic Hazelton Group which are overlain by upper Cretaceous Kasalka Group rhyolite, rhyodacite and tuff. The rhyolite occurs in a series of three northwesterly trending domes that outcrop between Bentzi Lake and the peak of Holy Cross Mountain. Minor sedimentary rocks of the Cretaceous Skeena Group and Eocene Endako Group basalts locally cap the older units.

Gold mineralization on the Holy Cross prospect was discovered in 1987 by Noranda Exploration. They identified several areas of silicificied quartz veined rhyolite with gold concentrations up to 1.0 g/t over 8.5 metres. Other companies, including Kennecott Canada, Cogema Resources and Phelps Dodge Canada, have subsequently conducted limited exploration in the vicinity of the prospect. The identification of additional areas of gold mineralization has resulted from increased exploration of the Holy Cross prospect.

It is recommended herein to conduct a detailed evaluation of the Holy Cross prospect through compilation of the existing geological database and onsite inspection of the mineralized zones. A budget of \$25,000 is required to support this initial investigation.

1.0 Introduction

This report provides a review of the geological setting and history of mineral exploration of the Holy Cross epithermal gold prospect and a summary of the results of a prospecting program conducted on the Holy Cross property between October 30 and November 3, 2000.

2.0 Property Description and Location

The Holy Cross property consists of the 20 unit, 500 hectare Holy 1 mineral claim located on NTS map sheet 93F/15W within the Omineca Mining Division of north central British Columbia (Figure 1). The Holy Cross property is located approximately 145 kilometres west of Prince George, BC and 33 kilometres south of the village of Fraser Lake. The claim is centered over a small hill at 53° 47.5' north latitude, 124° 58' west longitude, between Bentzi Lake and Holy Cross Mountain (Figure 2).

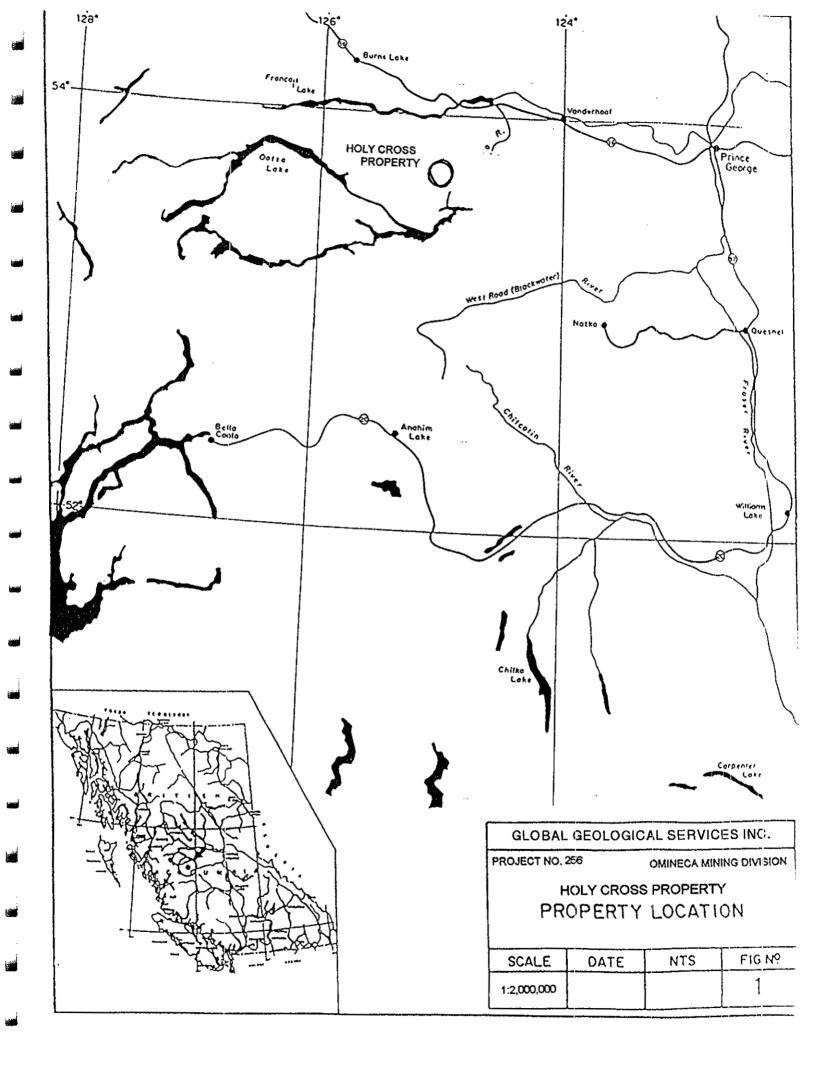
i	CLAIM NAME	TENURE NUMBER	EXPIRY/DATE: //	UNITS
	Holy 1	374497	February 24, 2001	20

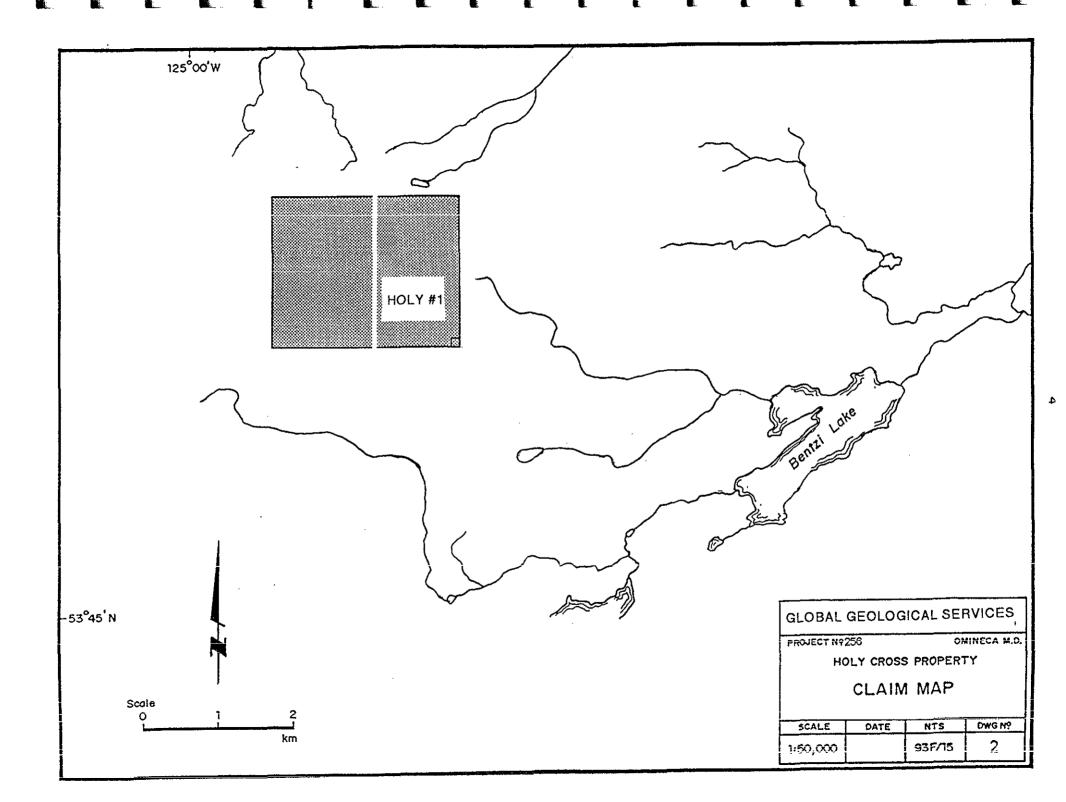
The Holy Cross property is located within a resource development designated area and there are no known Native Land Claims issues. There are logging operations active throughout the property. Disturbance from previous exploration activities has been reclaimed and there are no known environmental concerns on the property. Prior to conducting any exploration program, a Mineral Exploration permit must be granted by the Ministry of Energy and Mines. A Free Use permit will be required from the Ministry of Forests should disturbance of timbered areas exceed the allowance in the MinEx permit.

3.0 Access and Physiography

Access to the Holy Cross property is provided by a network of logging roads that leave highway 16 east of Fraser Lake. At 38 Kilometre on the Holy Cross Forest Service Road, a branch road leads west onto the Holy 1 claim. Trails provide access to the various zones of mineralization on the property.

The Holy Cross property is located within the Interior Plateau region of central British Columbia. The claim covers an area of forested and logged hillsides ranging in elevation from 1150 to 1400 metres, with local ponds and streams draining the hills.





4.0 Exploration History

The Holy Cross prospect was discovered in 1987 by Noranda Exploration Company during a reconnaissance exploration program. The original claims were staked after rock samples collected from a rhyolite dome returned anomalous concentrations of gold. Noranda explored the property during 1988-89 with geological mapping, extensive soil sampling, trenching and geophysical surveys (IP, magnetometer). They identified several areas of pervasively silicificied, quartz veined rhyolite with anomalous gold concentrations. Trench 1, excavated on silicificied rhyolite breccia, returned 1.0 g/t gold over 8.5 metres.

The prospect area was simultaneously staked in 1994 by Kennecott Canada and Cogema Resources, resulting in a claim dispute. Prior to conceding the ground, Kennecott conducted geological mapping and geochemical surveys. During October 1994, Cogema Resources conducted reconnaissance rock and soil sampling. The property was optioned to Phelps Dodge Corporation of Canada in 1995 who conducted additional geological mapping and geochemical surveys.

The claims covering the key showings at the Holy Cross property lapsed in 1999. The Holy 1 claim was staked in February, 2000 to cover the main area of gold mineralization.

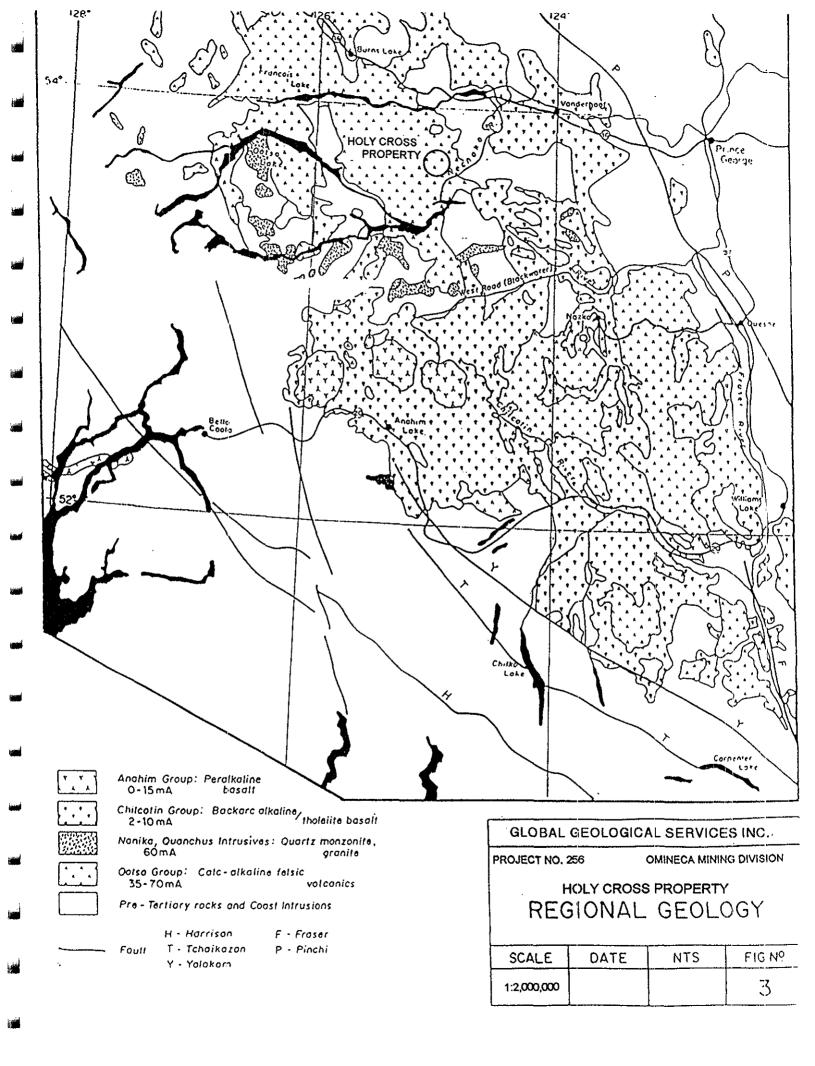
5.0 Geological Setting

5.1 Regional Geology

The Holy Cross property is situated in the Interior Plateau region of central British Columbia within the Intermontane Belt which locally consists of late Paleozoic to late Tertiary sedimentary and volcanic rocks belonging to the Stikinia, Cache Creek and Quesnellia Terranes. The Yalakom and Fraser fault systems bound the plateau to the northeast and southwest. A third, northerly fault has been inferred from oil exploration to bisect the plateau. The Anahim Volcanic Belt, which crosses the plateau in an east west direction, is composed of a series of alkaline and peralkiline volcanic centres of Miocene to Quaternary age which young from west to east.

The Holy 1 claim lies centrally in the Stikinia Terrane and hosts three groups of volcanic-sedimentary rocks ranging in age from upper Cretaceous to Miocene. An extensional tectonic event resulted in basin and range style topography and is associated with epithermal, volcanic-hosted gold mineralization.

Lane, 1994 indicates the Holy Cross property to be underlain by middle Jurassic age Hazelton Group andesite and reworked crystal tuff (Figure 3). These rocks are conformably overlain by Cretaceous Skeena Group chert pebble conglomerate, minor argillite, conglomerate, sandstone, mudstone and Kasalka Group hornblende phyric andesite flows. Eocene to Late Cretaceous Ootsa Lake Group maroon flow banded rhyolite, rhyolite breccia and andesite unconformably overlie the older rocks in the area. Flat lying Eocene to Oligocene Endako Group andesite and basalt locally overlie all rocks in the area. Immediately north of the property, biotite quartz monzonite has intruded and metamorphosed Hazelton Group rocks. Plugs of diorite and gabbro are locally associated with the Endako Group.



5.2 Property Geology

The Holy Cross property is underlain by Mesozoic and Cenozoic volcanic, sedimentary and intrusive rocks. Jurassic intermediate volcanic rocks are cut by middle Jurassic intrusions which are unconformably overlain by Cretaceous sedimentary rocks and intermediate volcanic flows. These underlying rocks are capped by intermediate to felsic volcanics of the Ootsa Lake and Endako Groups.

Banded rhyolite, rhyolite breccia, andesite and tuff outcrop on the Holy 1 claim. Previous work has described these rocks as belonging to the Eocene Ootsa Lake Group; however it is possible that they are older, upper Cretaceous Kasalka Group or Jurassic Hazelton Group. These rocks are overlain by Eocene Endako Group basalt.

The banded rhyolite is dark purple to maroon where unaltered, light purple, tan, buff or cream where argillically altered. They form thin, 1 to 2 mm wide bands, and commonly develop slaty cleavage.

Rhyolite breccias appear to be syn-depositional. They comprise 1 mm to 5 cm angular to subangular fractured fragments of light purple, buff, tan, and cream coloured banded rhyolite in a dark purple-maroon fine grained matrix. They are typically matrix supported where fragments are small and fragment supported where fragments are larger.

Interbedded with rhyolite and volumetrically less important are lapilli and ash tuffs, feldspar porphyritic andesite flows and andesitic tuffs. Lapilli tuffs are associated with the banded rhyolite, rhyolite breccia and feldspar phyric andesite. The lapilli tuffs exhibit a dark purple matrix usually with preferentially clay altered clasts. More significant clay or silica alteration results in a light purple, light green or light grey matrix and clasts.

Andesite is the most common rock type on the Holy Cross property. It is dark purple to grey where unaltered and light purple, tan or cream where clay altered. Ash tuff comprises thin interbeds in the andesite sequence and are light green to light grey in colour, fine grained and locally foliated.

Endako Group basalts are dark grey, blocky and often form steep bluffs. They are locally vesicular olivine phyric with epidote infilling the vesicles. The lapilli tuff is light grey and contains angular lithic fragments up to 2 cm.

6.0 Deposit Types and Styles of Mineralization

Several styles and intensities of alteration have been observed on the Holy Cross property. Argillic alteration is widespread within the Ootsa Lake volcanic rocks and is locally overprinted by 1 cm to 10 metre wide zones of silicification. Areas of secondary brecciation, drusy quartz development in open cavities and quartz healed breccias occur locally within the altered areas. Banded quartz with jasper and chalcedony veins indicate several episodes of brecciation. Disseminated sulphides, primarily pyrite, vary from 1 to 5% throughout the argillic altered rocks. Minor arsenopyrite and pyrhotite have also been observed. Gold and silver mineralization is associated with banded, vuggy quartz veinlets and in silicified volcanic rocks. The area of

alteration has been mapped over a three km by four km area, and is centered on the resistant knoll in the middle of the Holy 1 claim.

The main mineralized showings are presented in Figure 4. At the Discovery showing, Trench 1, up to 10 cm wide veins of quartz banded with jasper contain 10 to 15% disseminated pyrite within the quartz. Massive grey chalcedony and intense silicification are immediately adjacent to the vein and form part of an argillic alteration haloe that extends for tens of metres.

Sampling of the epithermal alteration at Trench 1 by Noranda returned an average of 1.0 g/t gold over 8 metres and local grab samples to 12.4 g/t(Barber, 1989). These values have been confirmed by subsequent exploration programs. Most recently, Phelps Dodge re-sampled Trench 1 which returned an average of 1.8 g/t gold over four metres from silicified rhyolite breccia.

Other samples collected from the within the large area of argillic and siliceous altered volcanic rocks have also returned significant concentrations of gold and pathfinder elements. Sampling by Phelps Dodge to the southwest of the main Holy Cross showing returned 9.6 g/t gold with elevated concentrations of silver (9.4 ppm), antimony (2.4 ppm) and mercury (23 ppb) within a banded grey and white quartz/chalcedony altered rhyolite. A large package of argillic and siliceous altered rhyolite tuff and breccia is mapped by Kennecott Canada (personal communication) along the access road north of the main showings.

7.0 Data Corroboration

This report relies on information collected from numerous sources including Geological Survey of Canada memoirs, BC Geological Survey bulletins, the BC Ministry of Mines database of annual reports, assessment reports and Minfile records and personal knowledge.

8.0 2000 Work Program

A prospecting program was conducted on the Holy 1 claim by Geoffrey Goodall, P.Geo. between October 30 and November 3, 2000. The work program consisted of prospecting traverses and rock geochemical sampling of areas peripheral to the known showings. Traverses totaled 12 kilometres. Six rock samples were collected. Figure 4 outlines the traverses and rock sample locations. The work program was terminated due to heavy snow fall November 3, 2000.

9.0 Results

Prospecting near the known areas of mineralization at Holy Cross confirmed the presence of a large system of hyrdrothermally altered rocks. Silicification and argillic alteration is most apparent in the felsic volcanic members and occur as prominent, resistant knolls and hilltops. Recent road construction on the north side of Holy Cross Mountain has exposed additional zones of strong epithermal altered rhyolite and dacite.

Of the six samples collected, only sample 74610 returned anomalous concentrations of gold (50 ppb) and silver (3.4 ppm). All other samples appear to contain background levels of indicator elements.

10.0 Interpretation and Conclusions

The Holy Cross prospect represents a high level, low sulphidation epithermal gold system hosted within Ootsa Lake Group rhyolite volcanic and volcaniclastic rocks. The prospect has received sporadic exploration since discovery in 1987. Each exploration campaign on the property has confirmed the presence of gold mineralization at the discovery showing. Additional areas of gold, silver and pathfinder elements have been detected in argillic and siliceous altered rhyolite flows and breccias on a series of resistant knolls covered by the Holy 1 mineral claim.

Zones of intense silicification and secondary brecciation within banded rhyolite up to 10 metres wide occur within the volcanic package of rocks exposed on the Holy Cross property. Gold concentrations ranging from 1.0 to 12.4 g/t have been returned from sampling of this rock. At least three such areas have been identified to date and the potential for additional prospects to be outlined is considered excellent.

Recent sampling indicates that the alteration systems are widespread, however, gold mineralization occurs in discrete zones or within structural controls as yet unidentified.

11.0 Recommendations

It is recommended that an initial program of data acquisition, review and compilation of historic geological information be undertaken to further assess the Holy Cross property. Geological mapping and further rock geochemical sampling are warranted to further assess the prospect. A budget of \$25,000 is recommended to support this work program.

11.1 Cost Estimate

Cost estimates for the initial phase of exploration on the Holy 1 mineral claim are provided in the table below.

Proposed Year 1 Exploration Budget

Data Acquisiti	on, Compilation	, Review and $^\circ$	Confirmation :	Sampling
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Data Acquisition, review and compilation	\$10,000
Geological mapping - 14 days	6,000
Geochemical analyses - 100 samples	2,500
Travel Expenses – accommodation, board	1,000
Vehicle Rental – 14 days	1,400
Airfare – YVR to Prince George, return	750
Field Supplies, communications	1,250
Report preparation, result compilation	2,000
Miscellaneous	100
Total	\$25,000

12.0 **Disbursements**

A total of \$3,297.24 was spent on the Holy Cross property during the 2000 prospecting program, as tabulated below:

Geoffrey Goodall, P. Geo.	5 days - prospecting, report writing		\$2,000.00
Vehicle and equipment rent	als		\$760.00
Fuel			\$235.81
Accommodation and Board			\$154.73
Analyses			<u>\$146.70</u>
•		Total	\$3,297,24

Prepared by:

Per: Ceoffrey Goodall, E. Scyllander.

January 8, 2001

13.0 BIBLIOGRAPHY

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"Geochemical Report on the Holy Cross Property"; Noranda Exploration Company, Limited, December 1988, Assessment Report Number 19,005.

14.0 CERTIFICATE OF QUALIFIED PERSON

I, Geoffrey N. Goodall, certify to the following:

- 1. I am a consulting geologist residing at 1315 Arborlynn Drive, North Vancouver, BC
- 2. I am a graduate of the University of BC with a Bachelor of Science degree in Geology.
- 3. I am a Professional Geoscientist registered in the Association of Professional Engineers and Geoscientists of British Columbia
- 4. I have been continually engaged in geological work since graduation in 1984.
- 5. I am a "Qualified Person" as defined by National Instrument 43-101.
- 6. I am the author of the report titled "Prospecting Report on the Holy Cross Property" dated January 8, 2001

Geoffrey N. Goodal B. Se. P. Geo. North Vancouver, B. Clen

PROVINCE OF GOODALL

January 8, 2001

APPENDIX 1 GEOCHEMICAL ANALYSES



SAMPLE

74605

74606

74607

74608

74609

74610

PREP

CODE

205 226 205 226

205 226

205 226

205 226

205 226

Au ppb

FA+AA

< 5

< 5

< 5

< 5

50

Ag

ppm

0.8

0.4

0.6

3.4

< 0.2

< 5 < 0.2

Aurora Laboratory Services Ltd. Analytical Chemists * Geochemists * Registered Assayers 212 Brooksbank Ave., British Columbia, Canada North Vancouver

V7J 2C1 PHONE: 604-984-0221 FAX: 604-984-0218

Al

0.24

0.26

0.24

0.30

0.29

0.43

%

λs

DOM

10

88

18

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10

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800

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160

110

40

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ppm

< 0.5

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5 1.50

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+ 2) and CERTIFICATION:___



ALS Chemex

Analytical Chemists * Geochemists * Registered Assayers

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