MAP NO.:	ASSESSMENT REPORT	X	DOCUMENT NO: 092673
	PROSPECTUS		MINING DISTRICT: Dawson
116 C 7	CONFIDENTIAL	X	TYPE OF WORK: Geology, Geochemistry
	OPEN FILE		

REPORT FILED UNDER: Homestake Mineral Development Co. Ltd

DATE PERFORMED: Aug - Sept 1988 DATE FILED: December 20,1988

LOCATION: LAT.: 64° 27' N AREA: Fortymile

LONG.: 140° 32' W VALUE $: 28 100.00

CLAIM NAME & NO.: OGIL 1-36 YB 04633-YB 04664
OGIL 40 YB 04665
FMR 1-126 YB 17256-YB 17379

WORK DONE BY: D. McIvor

WORK DONE FOR: Homestake Mineral Development Co. Ltd

DATE TO GOOD STANDING:	REMARKS: #100 ROSE

OFFICE OF THE REGIONAL MANAGER
MINERAL RIGHTS
DEC 20 1988
WHITEHORSE
YUKON TERRITORY

1988 SUMMARY REPORT
THE RESULTS OF A GEOLOGICAL MAPPING AND LITHOGEOCHEMICAL SAMPLING PROGRAM ON THE FORTYMILE PROPERTY,

(OGIL 1-20,OGIL 25-36,OGIL 40,FMR 1-67,FMR 70-126 CLAIMS)
DAWSON MINING DIVISION, YUKON TERRITORY

RECEIVED
DEC 15 1988
MINING RECORDER
DAWSON, Y.T.
I.A. & N.D.

NTS:	116C.7
LATITUDE:	64,27'N
LONGITUDE:	140,32'W
OWNER:	HOMESTAKE MINERAL DEVELOPMENT COMPANY LIMITED
OPERATOR:	HOMESTAKE MINERAL DEVELOPMENT COMPANY LIMITED
BY:	DUNCAN MCIVOR
DATE:	DECEMBER 1988
DATE WORK PERFORMED:	AUGUST-SEPTEMBER 1988



This report has been examined by the Geological Evaluation Unit under Section 53 (4) Yukon Quartz Mining Act and is allowed as representation work in the amount of $ 28,100.00.

for Regional Manager, Exploration and Geological Services for Commissioner of Yukon Territory.

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1. SUMMARY AND RECOMMENDATIONS

The Fortymile property, consisting of 157 quartz claims, is located approximately 70 kilometers northwest of Dawson, Yukon Territory, on NTS Map Sheet 116C/7. All claims are situated in the Dawson Mining Division of Yukon.

In 1988, Homestake Mineral Development Co. Ltd. completed a program of reconnaissance scale geological mapping and lithogeochemical sampling over the property, in an effort to assess its gold potential.

The mapping, completed at a scale of 1:5000, involved some one hundred and twenty five kilometers of geological traverses. In the course of the mapping program, 476 samples were collected and subsequently analyzed for gold and a suite of 30 additional elements.

The mapping indicated that the property was predominantly underlain by Nasina Series metasediments, a package of interbedded limestones and schists of variable composition. Thrust emplaced into this series of rocks, was a suite of ultramafic and associated mafic intrusive rocks, some of which exhibited intense hydrothermal alteration to a silica-carbonate-mariposite assemblage commonly referred to as listwanite.

Also present on the property, was a series of young basaltic flows, which unconformably overlay all other rocks on the property.

Several economically attractive zones were delineated on the property during the course of the mapping, primarily zones of silica-carbonate-mariposite hydrothermal alteration in ultramafic rocks, and silica-carbonate-sericite alteration in schists of the Nasina Series. The latter often contained mineralized (arsenopyrite, pyrite, galena, sphalerite) quartz-carbonate veins.

Of the 476 samples collected from the property, only 26 returned weakly anomalous gold values of greater than 100 parts per billion. None returned values approaching economic grades.

The presence of this weak Au enrichment, however, and the widespread presence of highly anomalous pathfinder trace elements such as Ag, As, Sb, Cu, Pb, and Zn, define the property as one warranting a more detailed evaluation.

A combination of geophysical methods (I.P., VLF, Magnetics) and soil geochemical surveys should be utilized to further evaluate those areas in which anomalous gold and associated pathfinder trace elements have been defined. Targets defined by this work should be tested using a combination of surface trenching and diamond drilling.

2. INTRODUCTION

2.1 SCOPE OF REPORT

This report serves to summarize the results of a preliminary geological mapping and lithogeochemical sampling program on the Fortymile Property, completed by Homestake Mineral Development Co. Ltd. during the period of August through September, 1988.

2.2 PROPERTY DEFINITION

The Fortymile Property consists of 157 claims, all located on NTS Map Sheet 116C.7, in the Dawson Mining District of the Yukon Territory. The claims are registered as follows;

GRANT NO.	CLAIM NAME	GROUP NO.	RECORDING DATE
YB04633	OGIL 1	8	DECEMBER 18, 1987
YB04634	OGIL 2	8	DECEMBER 18, 1987
YB04635	OGIL 3	8	DECEMBER 18, 1987
YB04636	OGIL 4	8	DECEMBER 18, 1987
YB04637	OGIL 5	8	DECEMBER 18, 1987
YB04638	OGIL 6	8	DECEMBER 18, 1987
YB04639	OGIL 7	8	DECEMBER 18, 1987
YB04640	OGIL 8	8	DECEMBER 18, 1987
YB04641	OGIL 9	8	DECEMBER 18, 1987
YB04642	OGIL 10	8	DECEMBER 18, 1987
YB04643	OGIL 11	6	DECEMBER 18, 1987
YB04644	OGIL 12	6	DECEMBER 18, 1987
YB04645	OGIL 13	6	DECEMBER 18, 1987
YB04646	OGIL 14	6	DECEMBER 18, 1987
YB04647	OGIL 15	7	DECEMBER 18, 1987
YB04648	OGIL 16	7	DECEMBER 18, 1987
YB04649	OGIL 17	7	DECEMBER 18, 1987
YB04650	OGIL 18	7	DECEMBER 18, 1987
YB04651	OGIL 19	7	DECEMBER 18, 1987
YB04652	OGIL 20	7	DECEMBER 18, 1987
YB04653	OGIL 25	8	DECEMBER 18, 1987
YB04654	OGIL 26	9	DECEMBER 18, 1987
YB04655	OGIL 27	9	DECEMBER 18, 1987
YB04656	OGIL 28	9	DECEMBER 18, 1987
YB04657	OGIL 29	9	DECEMBER 18, 1987
YB04658	OGIL 30	4	DECEMBER 18, 1987

GRANT NO.	CLAIM NAME	GROUP NO.	RECORDING DATE
YB04659	OGIL 31	5	DECEMBER 18, 1987
YB04660	OGIL 32	4	DECEMBER 18, 1987
YB04661	OGIL 33	5	DECEMBER 18, 1987
YB04662	OGIL 34	5	DECEMBER 18, 1987
YB04663	OGIL 35	5	DECEMBER 18, 1987
YB04664	OGIL 36	5	DECEMBER 18, 1987
YB04665	OGIL 40	4	DECEMBER 18, 1987
YB17256	FMR 1	6	JUNE 23, 1988
YB17257	FMR 2	6	JUNE 23, 1988
YB17258	FMR 3	6	JUNE 23, 1988
YB17259	FMR 4	6	JUNE 23, 1988
YB17260	FMR 5	7	JUNE 23, 1988
YB17261	FMR 6	7	JUNE 23, 1988
YB17262	FMR 7	7	JUNE 23, 1988
YB17263	FMR 8	7	JUNE 23, 1988
YB17264	FMR 9	7	JUNE 23, 1988
YB17265	FMR 10	7	JUNE 23, 1988
YB17266	FMR 11	7	JUNE 23, 1988
YB17267	FMR 12	7	JUNE 23, 1988
YB17268	FMR 13	9	JUNE 23, 1988
YB17269	FMR 14	9	JUNE 23, 1988
YB17270	FMR 15	9	JUNE 23, 1988
YB17271	FMR 16	9	JUNE 23, 1988
YB17272	FMR 17	9	JUNE 23, 1988
YB17273	FMR 18	9	JUNE 23, 1988
YB17274	FMR 19	10	JUNE 23, 1988
YB17275	FMR 20	10	JUNE 23, 1988
YB17276	FMR 21	10	JUNE 23, 1988
YB17277	FMR 22	10	JUNE 23, 1988
YB17278	FMR 23	10	JUNE 23, 1988
YB17279	FMR 24	10	JUNE 23, 1988
YB17280	FMR 25	7	JUNE 23, 1988
YB17281	FMR 26	7	JUNE 23, 1988
YB17282	FMR 27	9	JUNE 23, 1988
YB17283	FMR 28	8	JUNE 23, 1988
YB17284	FMR 29	9	JUNE 23, 1988
YB17285	FMR 30	9	JUNE 23, 1988
YB17286	FMR 31	10	JUNE 23, 1988
YB17287	FMR 32	10	JUNE 23,1988

GRANT NO.	CLAIM NAME	GROUP NO.	RECORDING DATE
YB17288	FMR 33	10	JUNE 23, 1988
YB17289	FMR 34	10	JUNE 23, 1988
YB17290	FMR 35	10	JUNE 23, 1988
YB17291	FMR 36	10	JUNE 23, 1988
YB17292	FMR 37	8	JUNE 23, 1988
YB17293	FMR 38	10	JUNE 23, 1988
YB17294	FMR 39	10	JUNE 23, 1988
YB17295	FMR 40	10	JUNE 23, 1988
YB17296	FMR 41	4	JUNE 23, 1988
YB17297	FMR 42	4	JUNE 23, 1988
YB17298	FMR 43	4	JUNE 23, 1988
YB17299	FMR 44	4	JUNE 23, 1988
YB17300	FMR 45	5	JUNE 23, 1988
YB17301	FMR 46	5	JUNE 23, 1988
YB17302	FMR 47	5	JUNE 23, 1988
YB17303	FMR 48	5	JUNE 23, 1988
YB17304	FMR 49	4	JUNE 23, 1988
YB17305	FMR 50	4	JUNE 23, 1988
YB17306	FMR 51	4	JUNE 23, 1988
YB17307	FMR 52	4	JUNE 23, 1988
YB17308	FMR 53	4	JUNE 23, 1988
YB17309	FMR 54	4	JUNE 23, 1988
YB17310	FMR 55	3	JUNE 23, 1988
YB17311	FMR 56	3	JUNE 23, 1988
YB17312	FMR 57	3	JUNE 23, 1988
YB17313	FMR 58	3	JUNE 23, 1988
YB17314	FMR 59	2	JUNE 23, 1988
YB17315	FMR 60	2	JUNE 23, 1988
YB17316	FMR 61	2	JUNE 23, 1988
YB17317	FMR 62	2	JUNE 23, 1988
YB17318	FMR 63	1	JUNE 23, 1988
YB17319	FMR 64	1	JUNE 23, 1988
YB17320	FMR 65	1	JUNE 23, 1988
YB17321	FMR 66	1	JUNE 23, 1988
YB17322	FMR 67	4	JUNE 23, 1988
YB17323	FMR 70	9	JUNE 23, 1988
YB17324	FMR 71	4	JUNE 23, 1988
YB17325	FMR 72	4	JUNE 23, 1988
YB17326	FMR 73	3	JUNE 23, 1988
YB17327	FMR 74	3	JUNE 23, 1988

GRANT NO.	CLAIM NAME	GROUP NO.	RECORDING DATE
YB17328	FMR 75	3	JUNE 23, 1988
YB17329	FMR 76	3	JUNE 23, 1988
YB17330	FMR 77	2	JUNE 23, 1988
YB17331	FMR 78	2	JUNE 23, 1988
YB17332	FMR 79	2	JUNE 23, 1988
YB17333	FMR 80	2	JUNE 23, 1988
YB17334	FMR 81	1	JUNE 23, 1988
YB17335	FMR 82	1	JUNE 23, 1988
YB17336	FMR 83	1	JUNE 23, 1988
YB17337	FMR 84	1	JUNE 23, 1988
YB17338	FMR 85	6	JUNE 23, 1988
YB17339	FMR 86	6	JUNE 23, 1988
YB17340	FMR 87	3	JUNE 23, 1988
YB17341	FMR 88	3	JUNE 23, 1988
YB17342	FMR 89	3	JUNE 23, 1988
YB17343	FMR 90	3	JUNE 23, 1988
YB17344	FMR 91	2	JUNE 23, 1988
YB19345	FMR 92	2	JUNE 23, 1988
YV17346	FMR 93	2	JUNE 23, 1988
YB17347	FMR 94	2	JUNE 23, 1988
YB17348	FMR 95	1	JUNE 23, 1988
YB17349	FMR 96	1	JUNE 23, 1988
YB17350	FMR 97	1	JUNE 23, 1988
YB17351	FMR 98	1	JUNE 23, 1988
YB17352	FMR 99	6	JUNE 23, 1988
YB17353	FMR 100	6	JUNE 23, 1988
YB17354	FMR 101	6	JUNE 23, 1988
YB17355	FMR 102	6	JUNE 23, 1988
YB17356	FMR 103	6	JUNE 23, 1988
YB17357	FMR 104	6	JUNE 23, 1988
YB17358	FMR 105	3	JUNE 23, 1988
YB17359	FMR 106	3	JUNE 23, 1988
YB17360	FMR 107	3	JUNE 23, 1988
YB17361	FMR 108	3	JUNE 23, 1988
YB17362	FMR 109	2	JUNE 23, 1988
YB17363	FMR 110	2	JUNE 23, 1988
YB17364	FMR 111	2	JUNE 23, 1988
YB17365	FMR 112	2	JUNE 23, 1988
YB17366	FMR 113	1	JUNE 23, 1988

GRANT NO.	CLAIM NAME	GROUP NO.	RECORDING DATE
YB17367	FMR 114	1	JUNE 23, 1988
YB17368	FMR 115	1	JUNE 23, 1988
YB17369	FMR 116	1	JUNE 23, 1988
YB17370	FMR 117	8	JUNE 23, 1988
YB17371	FMR 118	5	JUNE 23, 1988
YB17372	FMR 119	5	JUNE 23, 1988
YB17373	FMR 120	5	JUNE 23, 1988
YB17374	FMR 121	8	JUNE 23, 1988
YB17375	FMR 122	8	JUNE 23, 1988
YB17376	FMR 123	5	JUNE 23, 1988
YB17377	FMR 124	5	JUNE 23, 1988
YB17378	FMR 125	5	JUNE 23, 1988
YB17379	FMR 126	5	JUNE 23,1988

Figure 2 illustrates the location of these claims, in their respective groupings.

2.3 LOCATION, ACCESS, AND PHYSIOGRAPHY

The Fortymile Property is located 70 kilometers northwest of Dawson City, in the west central Yukon Territory (see Figures 1 and 2).

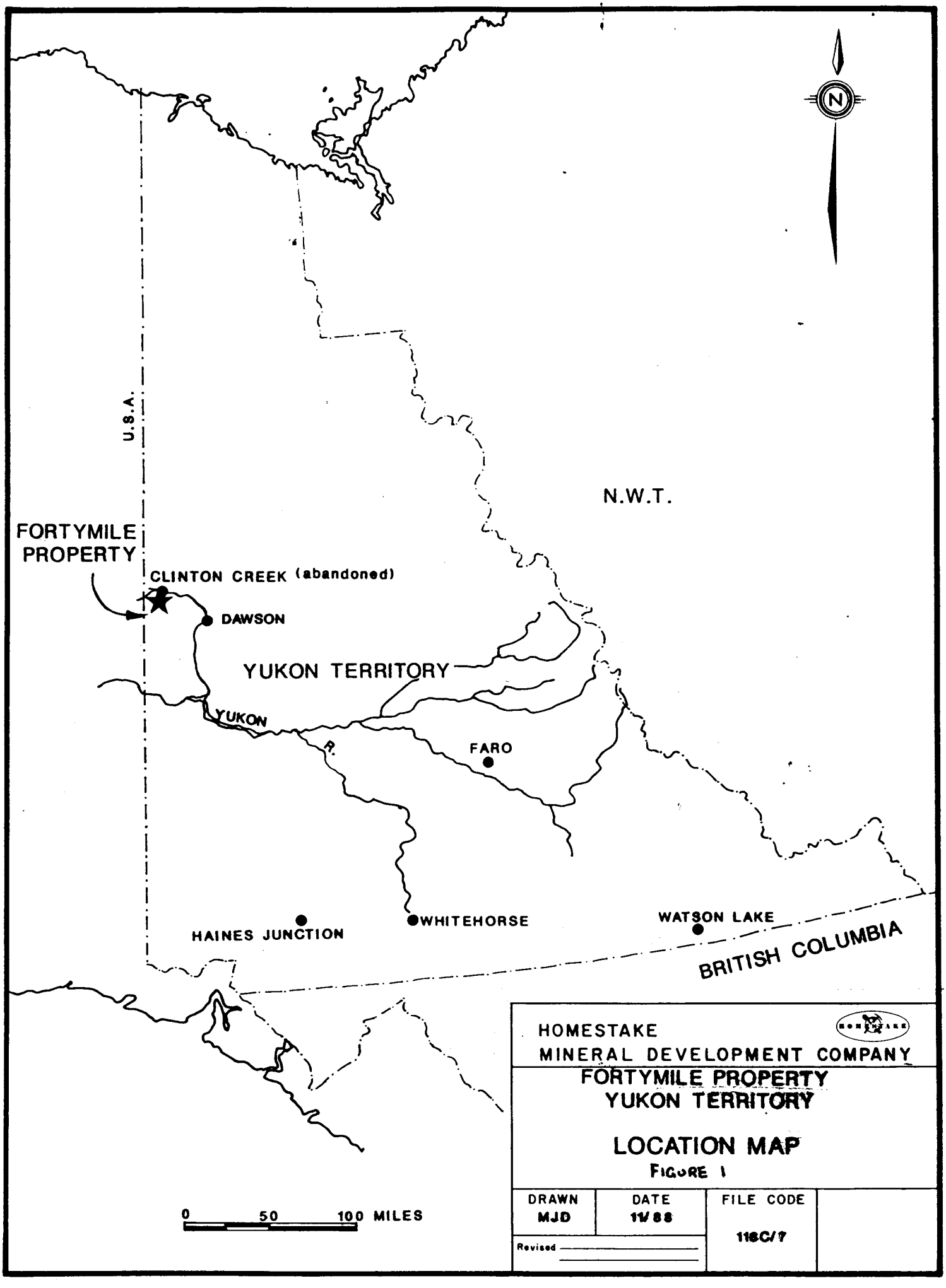
The property straddles the Fortymile River, from its confluence with the Yukon River, to a point 9 kilometers west and upstream.

Access to the property is via the seasonal Clinton Creek Mine road, which extends north from the Top of the World Highway, to the now abandoned Clinton Creek asbestos mine, located 6 kilometers northwest of the property. The road trends northwest through the center of the property, from which a series of secondary bush roads provide additional access to several other ares of the property.

The Fortymile River flows northwest through the center of the property, providing excellent access to most areas of outcrop exposure. The river is generally navigable from late May to early October.

The property encompasses the now abandoned Clinton Creek townsite, that was dismantled in 1978 after the asbestos mine closed. On the eastern boundary of the property, the historic Fortymile Townsite is located, one of the first settlements in the Yukon Territory. Both these areas have now been withdrawn from staking under Order in Council PC1985-2065, pending resolution of the Native Land Claims issue. Also withdrawn under the same order is a large area of land immediately east of the property, along the eastern shores of the Yukon River.

The property is one of moderate relief, rising to a maximum of 200 meters above the Fortymile River. Most relief occurs along the shores of the Fortymile River, and along small secondary creeks, which have deeply incised the surrounding plateaus.



HOMESTAKE MINERAL DEVELOPMENT COMPANY

FORTYMILE PROPERTY YUKON TERRITORY

LOCATION MAP

FIGURE 1

DRAWN	DATE	FILE CODE
MJD	11/88	118C/7

Revised

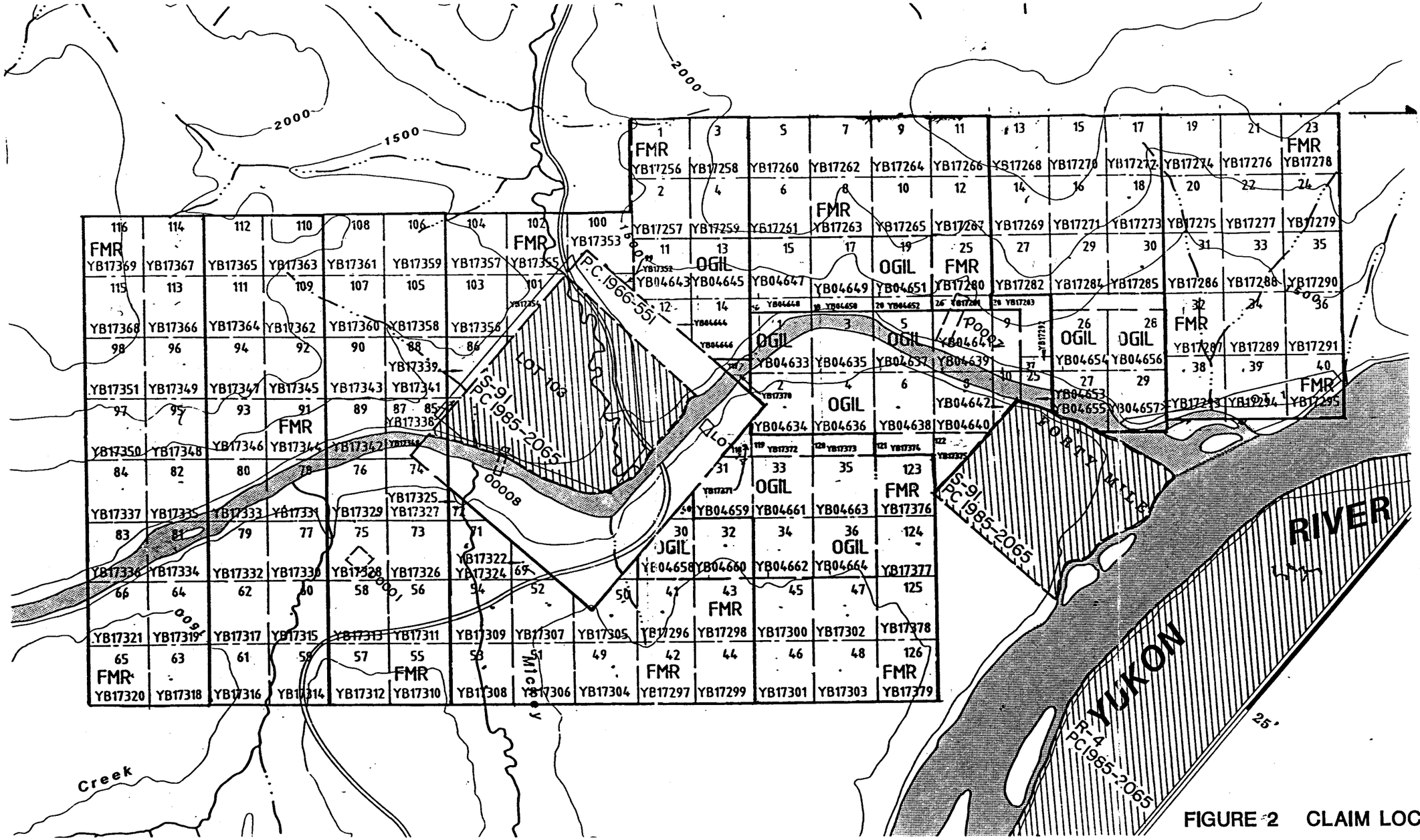


FIGURE 2 CLAIM LOCATION MAP

FORTYMILE PROPERTY

1: 30,000

The area was not affected by the last continental glaciation, and as such there is deep soil development and very little outcrop exposure. Most exposure on the property occurs along the shores of the Yukon and Fortymile Rivers, along creeks, and rarely along ridge tops. Exposure constitutes less than 5% of the ground, the remainder having, as mentioned, a well developed soil cover. It is possible, in some places, to map underlying lithologies by examining boulders and bedrock chips in the soil profile.

A large open swamp occupies most of the area south of the Fortymile River, in the southeast section of the property. This swamp sits on flood plain gravels of the river, which can reach depths of 20 to 30 meters.

Vegetation along the banks of the Fortymile River is predominantly poplar and spruce. Higher elevations are covered by stunted spruce, and willow scrub.

2.4 GENERAL GEOLOGIC SETTING, AND PRELIMINARY ECONOMIC ASSESSMENT

The Fortymile Property is situated in an area of strongly deformed and metamorphosed rocks southwest of the Tintina Trench that have been variously called the Yukon Group (Green,1972), the Yukon Crystalline Terrane (Templeman-Kluit,1976), the Yukon Cataclastic Complex (Templeman-Kluit,1979), the Yukon-Tanana Terrane (Monger and Berg,1984, Mortensen,1988), and the Kootenay Terrane (Wheeler,1987).

This terrane is one of the first "suspect" or allochthonous terranes, believed to have been accreted on to the North American Continental Margin by mid-Cretaceous time. The original accretion suture has been overprinted by the Tintina Fault. This structure, which extends from well inside Alaska to the southeastern Yukon, where it is en-echelon with the northwest end of the Rocky Mountain Trench, experienced approximately 450 kilometers of dextral displacement during the late Cretaceous to early Tertiary. Figure 3 illustrates the position of the Fortymile Property, in relation to the tectonic assemblages of the Yukon Territory.

Within the Yukon-Tanana Terrane, there are five interleaved but recognizable lithological assemblages (Mortensen,1988).

ASSEMBLAGE 1 - Penetratively deformed, typically well foliated, medium grade (upper greenschist to lower amphibolite facies) metasedimentary and metaigneous rocks.

ASSEMBLAGE 2 - Massive to weakly foliated "greenstone" and ultramafic rocks, and their altered equivalents.

ASSEMBLAGE 3 - Weakly deformed and metamorphosed sedimentary and volcanic rocks.

ASSEMBLAGE 4 - Unaltered olivine basalts.

ASSEMBLAGE 5 -A variety of undeformed mafic to felsic intrusions.

ASSEMBLAGE 1

The majority of rocks in the immediate Fortymile area belong to assemblages 1, 2, and 4, the most common being rocks of the first assemblage.These penetratively deformed metasedimentary and metaigneous rocks are believed to be of Upper Paleozoic, and probably Permian age.

These rocks can be further subdivided, again based on lithological assemblages. Green (1972) proposed a three-fold subdivision;

GROUP A - metamorphic rocks of a sedimentary origin, characteristically with a large carbonaceous component.

GROUP B - non carbonaceous muscovite, quartz-muscovite, and chlorite schists.

GROUP D - granitic gneisses.

These subdivisions correspond to those proposed by McConnel (1905), of the Nasina Series, Klondike Schist, and Pelly Gneiss, respectively.

GROUP A - NASINA SERIES

The majority of rocks in the immediate Fortymile area belong to this subdivision of Assemblage 1, the term Nasina Series being utilized in this report.

Lithologies include variably carbonaceous quartz-muscovite, quartz-chlorite, and quartz-mica schists, quartzites, fine to coarsely crystalline limestones and marbles, and chlorite schists that in places approach amphibolite.

These rocks are strongly foliated, typically breaking into chips or flags. Foliation surfaces are generally parallel to original bedding, as indicated by primary compositional banding in the rocks, but in some places a cross cutting foliation has cut bedding in to a series of S shaped remnants. Often one or two crenulation cleavages can be observed, usually parallel to the axial planes of tight, small scale folds.

Lenses and veins of milky to gray quartz are common throughout the Nasina Series rocks, to the degree that they are useful in identifying this group.

GROUP B - KLONDIKE SCHIST

The Klondike Schist is common in the Klondike and Sixtymile areas, and is comprised predominantly of non-carbonaceous muscovite, quartz-muscovite, and chlorite schists. Earlier workers (McConnel,1905) have ascribed an igneous protolith for the Klondike Schist, however Green(1972) has suggested a metasedimentary origin.

GROUP D - PELLY GNEISS

Granitic gneisses are common in the Sixtymile area, and consist predominantly of quartz, feldspar, and biotite, with in some cases a minor hornblende component.

ASSEMBLAGE 2

In-thrust in to this sequence of penetratively deformed metamorphic rocks are massive to weakly foliated greenstone and ultramafic rocks of assemblage 2.

These rocks are widespread throughout the area southwest of the Tintina Fault, though volumetrically they constitute only a minor component of the area.

The most common lithology is serpentinized peridotite, with its progressively altered equivalents of talc-chlorite schist, talc-carbonate schist, and a silica-carbonate-mariposite assemblage commonly referred to as listwanite.

Associated with the ultramafics are some epidote rich mafic metavolcanics, or "greenstones", and mafic intrusive rocks ranging from gabbroic to pyroxenitic in composition.

The majority of rocks of this assemblage are considerably less deformed than the host metasediments, suggesting that they were emplaced post-deformation. Evidence that these rocks were thrust faulted into place, as oppose to truly intrusive, includes the presence of strong shearing along the margins of these bodies, as well as the presence of often intense hydrothermal alteration within these rocks, while the surrounding metasediments show little sign of the same alteration.It is probable that the observed alteration took place pre-emplacement. Time of emplacement is debatable, but is probably late Paleozoic (Permian) to early Mesozoic (Triassic).

ASSEMBLAGE 3

These rocks, rare in the Fortymile area, consist of thinly bedded shales, argillite, limestone, and some sandstone. They are believed to be mid to late Triassic in age, based on conodont fragments found in the Clinton Creek area (Mortensen, 1988).

ASSEMBLAGE 4

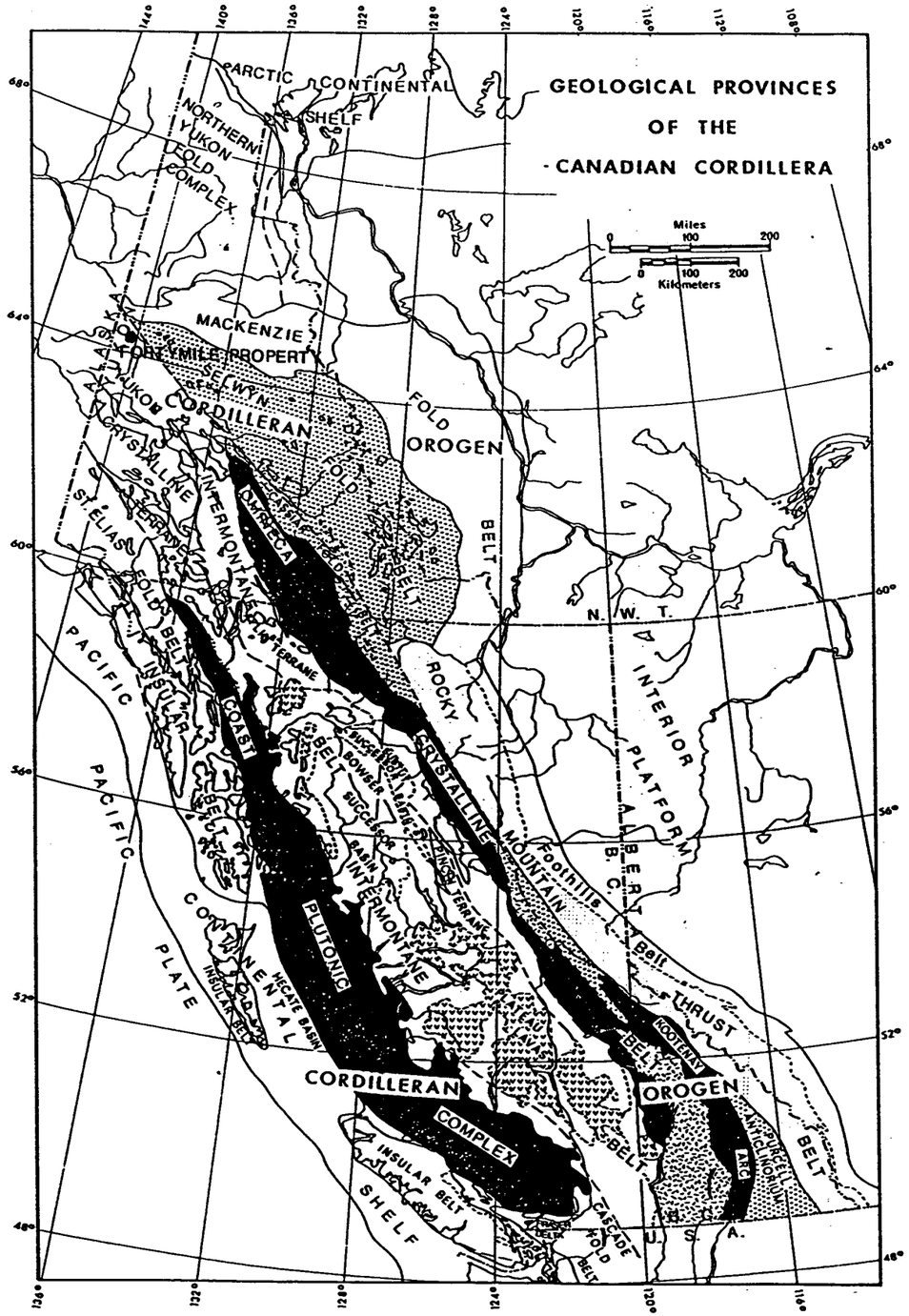
Olivene basalts of Tertiary to Quaternary age are present throughout the map area, as small localized flows. They are characteristically porphyritic, with up to 30% olivene phenocrysts in an aphanitic to very fine grained groundmass.

ASSEMBLAGE 5

Undeformed intrusive rocks form narrow dykes, sills, and small plugs throughout the area southwest of the Tintina Fault, though not common in the Fortymile area . The intrusives range in composition from quartz-feldspar porphyry, to diabase. These intrusive rocks are believed to be Tertiary in age.

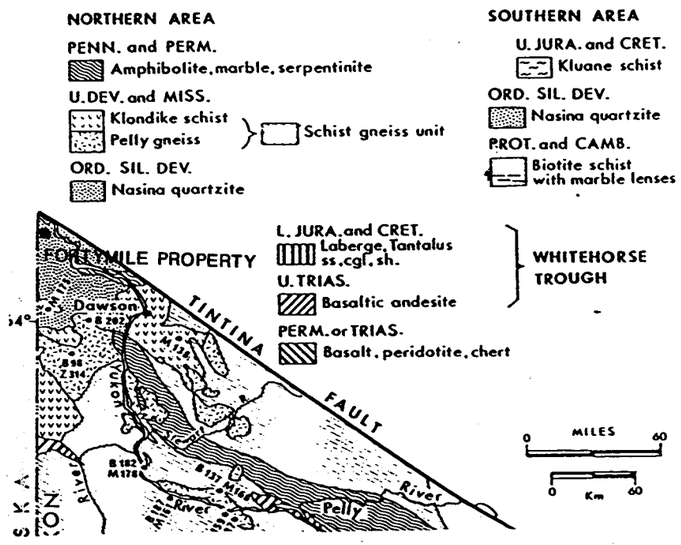
A detailed description of the Fortymile Property geology appears in Section 3 of this report.

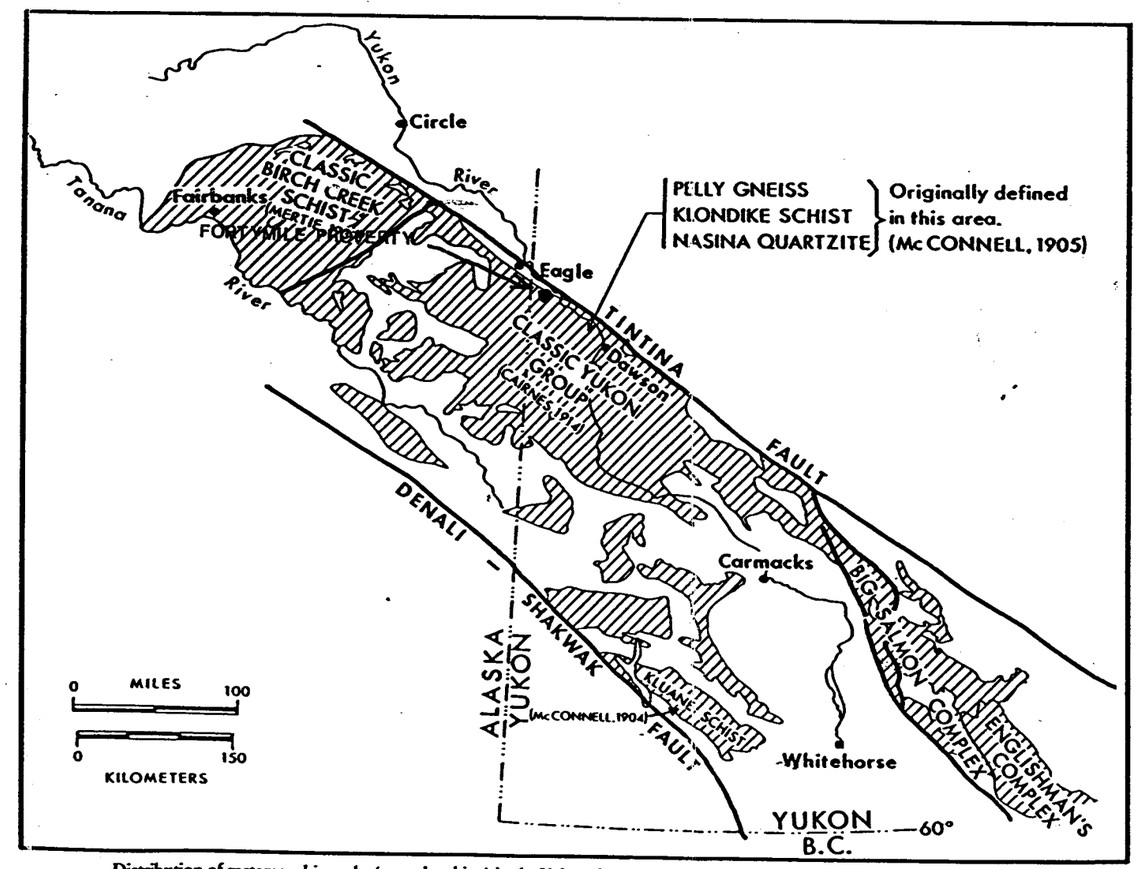
FIGURE 3 GEOLOGICAL SETTING OF THE FORTYMILE PROPERTY



Tectonic subdivisions of the Canadian Cordillera, showing the disposition of the Yukon Crystalline Terrane relative to the Omineca Crystalline Belt, the Intermontane Belt, and the Coast Plutonic Complex (after Gabrielse, 1976).

D. J. TEMPELMAN-KLUIT





Distribution of metamorphic rocks (cross-hatching) in the Yukon Crystalline Terrane. The diagram shows the localities from which some of the pseudostratigraphic terms used in the region have originated.

FIGURE 4 PROGRESSIVE ALTERATION IN ULTRAMAFIC ROCKS

MAJOR CHEMICAL CHANGES

1. SERPENTINIZATION

OLIVENE PERIDOTITE
ASSUME END MEMBERS PRESENT

WATER RELEASED DURING REGIONAL METAMORPHISM

$$Mg_2SiO_4 + MgSiO_3 + 2H_2O = Mg_3Si_2O_5(OH)_4$$

FORSTERITE ENSTATITE WATER SERPENTINE

2. TALC-CARBONATE ALTERATION

HYDROTHERMAL FLUID

$$2\,Mg_3Si_2O_5(OH)_4 + 3\,CO_2 = Mg_3Si_4O_{10}(OH)_2 + 3\,MgCO_3 + 3\,H_2O$$

SERPENTINE CARBON DIOXIDE TALC MAGNESITE WATER

3. SILICA-CARBONATE ALTERATION (WITH MARIPOSITE)

HYDROTHERMAL FLUID

$$Mg_3Si_4O_{10}(OH)_2 + 2MgCO_3 + 3CO_2 = 5MgCO_3 + 4SiO_2 + H_2O$$

TALC MAGNESITE CARBON DIOXIDE MAGNESITE SILICA WATER

Currently, there are no producing mines in the Fortymile area, though the Clinton Creek asbestos mine produced over 1,000,000 tonnes of asbestos fibre between 1967 and 1978. Other styles of mineralization in the area include (Mortensen, 1988);

- W-Mo in quartz-feldspar porphyries
- Cu-Pb-Ag skarn mineralization
- syngenetic, stratabound base metal occurrences in carbonaceous schists
- galena-arsenopyrite, and galena-sphalerite veins cutting metamorphic rocks of the Nasina Series

While there are a variety of styles of mineralization in the area, few significant bedrock hosted gold occurrences are known in the area. There are, however, some strong similarities, geologically, to gold camps in northwestern British Columbia, where listwanite altered ultramafic rocks are spatially related to gold mineralization (Atlin, Cassiar). For that reason, and because there was a documented low grade gold occurrence on the property, the ground was acquired in late 1987.

2.5 EXPLORATION HISTORY

In 1890, R.G. McConnell (McConnell,1890) described a "lode of argentiferous galena" located at the mouth of the Fortymile River, making it one of the first documented "lode" occurrences in the Territory. The showing, reported to him by William Ogilvie, assayed 38.6 OPT Ag, and trace gold.

Two old shafts are reported on the property (Archer, Cathro, and Associates, 1972), for which no history is known. Earliest staking records in the area are for the Isabella M. Healy claim (795), in August, 1896, and the Queen of the North claim (7257), in SEptember, 1905. The reported workings were probably completed in that era, given the presence of primitive steam powered equipment located proximal to one of the shafts.

No recorded exploration work took place again on the property until 1972, when the ground was staked by the Teslin Joint Venture Syndicate (Cassiar Asbestos, Cominco Ltd., and Exploram), who were primarily involved in asbestos exploration. No assessment work was filed by that syndicate on ground that now constitutes the Fortymile Property.

In 1986 and 1987, Canada Tungsten Corp. had options on placer claims covering much of the property, and completed programs of rotary drilling and test trenching of the fluvial gravels along the shores of the Fortymile River. They did not renew the option in 1988.

Jim Mortensen, a geologist for the Geological Survey of Canada, completed a reconnaissance scale mapping program in the Dawson Map Sheet area, in 1987. That program included a brief examination of the Fortymile area, and of the historically reported mineralization.

In late 1987, Homestake Mineral Development Co. Ltd. staked 33 claims over the Known mineral occurrences on the property. In early 1988, after an initial examination of the property, an additional 124 claims were staked. This report outlines the results of a preliminary exploration program on the 157 claims that comprise the Fortymile Property.

2.6 WORK COMPLETED

During the period August 15 through September 20, 1988, Homestake Mineral Development Co. Ltd. completed a program of 1:5000 scale geological mapping and lithogeochemical sampling over the 157 claims that comprise the Fortymile Property.

In the course of that program, approximately 125 line-kilometers of mapping traverses were completed on the property. During those traverses, 476 rock samples were collected, and forwarded to Bondar-Clegg for geochemical gold analysis, and to Acme Analytical for 30 element ICP analysis. The results of this work are summarized in the following sections of this report.

3. DETAILED TECHNICAL DATA

3.1 GEOLOGICAL MAPPING

3.1.1 METHODS EMPLOYED

Geological mapping was completed over the property, at a reconnaissance scale of 1:5000. This involved approximately 125 line-kilometers of mapping traverses, employing a hip chain and compass for control.

The traverses were designed so as to cross areas of known or suspected outcrop exposure, as well as provide a first pass coverage of the entire claim block. In the first case, traverses were completed along all the river banks, all streams, all road cuts, and the tops of all prominent ridges, the areas in which outcrop was most likely to occur. In the latter case, traverses were completed along most claim lines, and at 500 meter intervals between claim lines, in order to cover most of the property. (Traverse locations appear as continuous dashed lines on the enclosed 1:5000 Geology Plan Maps, in Appendix 1).

All traverses began and ended at known physiographic or topographic features, allowing for accurate traverse location control. In addition, flagged lines were established along both sides of the Fortymile River, for its entire length through the property, with control stations marked at 100 meter intervals. This provided additional traverse control, as well as accurate control for detailed geological mapping completed along the Fortymile River.

A 1:5000 scale base map was constructed from aerial photographs, the 1:30,000 NTS 116C_7 Claim Map, and from our own flag line measurements. All geologic information, including detailed notations as to outcrop lithology, alteration, mineralization, structure, and stratigraphy, were plotted on this map, which, for the sake of ease of handling, has been divided into an east and west sheet. Sample locations, and sample descriptions, also appear on the maps, as do all pertinant topographic and physiographic features such as roads, claim posts, streams, etc.. The 1:5000 scale Geology Plan Maps (East and West Sheets) appear in Appendix 1 of this report. Note that for the sake of reference, perimeter grid coordinates appear along the margins of these map sheets.

In addition to the 1:5000 scale geologic mapping, several areas that exhibited promising appearing geology were mapped at a scale of 1:1000. These areas appear as insets on the 1:5000 scale Geology Maps, and on the enclosed (Appendix 2) Additional Insets Map.

Finally, a 1:10,000 Geological Compilation Map was constructed, to provide an uncluttered and simplified summary of the property geology (Appendix 3).

3.1.2 RESULTS AND INTERPRETATION

Very little outcrop was encountered in the course of the mapping program, the majority of exposure occurring along the shores of the Fortymile River. Below is a summary of the lithologies encountered, and their structural and stratigraphic setting.

LITHOLOGIES

Three major lithological groups were encountered, as outlined in the legend that appears on the enclosed 1:5000 Geology Maps in Appendix 1. The legend appears below, for reference purposes.

PERMIAN OR YOUNGER

5. OLIVENE BASALT

CARBONIFEROUS - PERMIAN

MAFIC TO ULTRAMAFIC INTRUSIVE ROCKS

4A. SERPENTINITE
4B. TALC/CHLORITE/CARBONATE SCHIST
4C. SILICA - CARBONATE -MARIPOSITE ALTERED ULTRAMAFIC (LISTWANITE)
4D. GABBRO/DIABASE
4E. BASALT (FIELD TERM)

PALEOZOIC

NASINA SERIES
(UPPER GREENSCHIST FACIES METASEDIMENTS)

3. OXIDE FACIES IRON FORMATION
2. LIMESTONE
1. INTERBEDDED SCHISTS, UNDIFFERENTIATED
1A. QUARTZ-SERICITE SCHIST
1B. GRAPHITIC SCHIST
1C. QUARTZ-GRAPHITE SCHIST/ GRAPHITIC SILICEOUS ARGILLITE
1D. GRAPHITE-CHLORITE SCHIST
1E. CHLORITE SCHIST
1F. QUARTZ-CARBONATE-SERICITE SCHIST (HYDROTHERMAL ALTERATION ASSEMBLAGE)
1G. SILTSTONE/GRAYWACKE

UNIT 5. OLIVENE BASALT

These rocks outcrop on the west map sheet, in the vicinities of grid coordinates 27+50E-12+50S, 20+00E-16+00S, 14+00E-21+00S,and 3+00E-40+00S.

They are characteristically very fresh appearing, and undeformed, consisting of up to 25% small 1 - 3 mm. olivene phenocrysts in a black, aphanitic to very fine grained groundmass. Flow textures were not observed, though exposure was poor, primarily rubble crop on the tops of ridges. These volcanics, believed to be Tertiary or Quaternary in age, were probably much more extensive, and we are only seeing the uneroded remnants.

The basalts rest unconformably on both rocks of the Nasina Series, and on ultramafic rocks. Their orientation is relatively flat lying, or conforming to the paleo-topography. There is little in the way of economic potential in this unit.

UNIT 4. MAFIC TO ULTRAMAFIC INTRUSIVE ROCKS

Lithologies of this group outcrop sporadically throughout the both the east and west map sheets. Five distinct lithologies are included in the group, three of which are alteration products of an ultramafic, probably peridotitic protolith, and two of which are mafic members that may be differentiation products, or associated lithologies in-thrust with the ultramafic rocks.

As discussed in Section 2.4,the rocks of this group are believed to be thrust emplaced, based on the following evidence;

- the absence of the pervasive deformation that affects the surrounding host Nasina Series rocks.

- the presence of shearing at the contacts between rocks of this group, and the host Nasina Series rocks.

- in many places, the presence of intense hydrothermal alteration within this group of rocks, where the surrounding host Nasina Series rocks exhibit little or no evidence of having been affected by the same alteration. This implies that the observed alteration took place pre-emplacement.

- similar, well documented occurrences of thrust emplaced ultramafics, elsewhere in the Yukon-Tanana Terrane (Templeman-Kluit,1979).

4A. SERPENTINITE

Serpentinite outcrops in the vicinities of grid co-ordinates 55+00E-7+50S, 77+50E-21+00S, 60+00E-34+00S, and 48+00E-24+00S. The large body shown on the east map sheet, is based on interpretation of the regional airborne magnetic data (Geological Survey of Canada Map 4270G).

The altered ultramafic is characteristically bright green, and intensely serpentinized, the serpentine content typically between 70 and 100% of the rock. The rock is locally sheared, but at highly variable orientations, typical of a serpentinite. The rock is usually strongly magnetic, with up to 10% fine disseminated magnetite. Fractures are commonly infilled with chrysotile, which in places approaches economic quality and grade.

The serpentinite, proximal to the contacts with rocks of the Nasina Series, becomes, in many places, progressively altered to units 4B and 4C.

Apart from the asbestos potential, the serpentinites hold little economic potential. No nickel sulphide mineralization was observed, nor was any significant primary magmatic differentiation, making the platinum group metal potential negligible.

4B. TALC/CHLORITE/CARBONATE SCHIST

Several occurrences of talc, talc-chlorite, and talc-carbonate schist outcrop on the property, usually proximal to serpentinites and silica-carbonate-mariposite altered ultramafics, as an intermediate alteration assemblage between the two.

The rock is characterized by its soft, punky nature, bright light green to yellow colour, and greasy feel. The carbonate mineral, where present, is usually magnesite, though some calcite and ferroan dolomite was observed. As with the serpentinites, the talc rich "schists" exhibited local intense shearing, but at highly variable orientations, not reflecting the regional foliation. Where encountered, the talc rich schists were systematically sampled, as elsewhere in the Cordilleran there is an association between talc rich shear zones in ultramafic rocks and gold mineralization.

4C. SILICA-CARBONATE-MARIPOSITE ALTERED ULTRAMAFIC ROCK

Commonly referred to as "listwanites", silica-carbonate-mariposite/fuchsite altered ultramafic rocks are spatially associated with gold deposits in the Atlin and Cassiar areas of northwestern British Columbia. They form as an intense hydrothermal alteration product of a parent ultramafic rock, usually along major structural features that act as conduits for the hydrothermal fluids. The major chemical changes involved are illustrated in Figure 4.

Several occurrences of listwanite outcrop on the property, notably at grid co-ordinates 27+50S-46+00E, 57+50E-12+50S, 70+00E-20+00S, 82+50E-22+50S, and 24+00E-24+00S.

For the most part, the occurrences are thin, intensely altered, stratabound sheet like features, encompassed in the surrounding, host, Nasina Series schists. These thin horizons are envisioned as being thrust emplaced slices of ultramafic rocks that were altered either prior to or during emplacement. That emplacement is believed to have occurred during the late Paleozoic (Permian) to early Mesozoic (Triassic).

In some cases, the listwanites occur as larger sill like features, notably at 27+50S-46+00E, where a thick (30M.) section is exposed on a prominent scarp face known locally as Cone Hill. This occurrence is intriguing, as it is both overlain and underlain by graphitic schists that exhibit no evidence of hydrothermal alteration, and it is obvious that listwanite was not formed/altered in-situ.

The listwanites, typically, are very hard, massive, bright green to white rocks, that weather a very characteristic bright orange to red. They are composed predominantly of carbonate (magnesite), silica, and mariposite/ fuchsite. The silica can be present as disseminated pervasive mineralization, or as thin distinct bands cutting a carbonate-mariposite rich rock. In several places on the property, the listwanites contained up to 50% thin, often chalcedonic silica bands, that usually were bright green in colour.

The listwanites also often contain up to 5% small disseminated chromite blebs. Magnetite has been completely destroyed by the alteration, and as such the rock is non-magnetic, in sharp contrast to the usually proximal serpentinites.

Minor amounts of finely disseminated pyrite and millerite are common in the rocks, though rarely approaching 1% by volume.

These listwanites were the primary target of the exploration program, and as such were extensively sampled. The geochemical results are discussed in the following section of this report.

4D. GABBRO/DIABASE

This unit was only observed at one location on the property, in the vicinity of 81+00E-22+50S, on the east map sheet. There, a variably fine to coarse grained crystalline gabbroic rock is in contact with both serpentinized and silica-carbonate-mariposite altered ultramafic rocks. The gabbro, locally a relatively thick unit, does not appear to be cutting the ultramafics in a dyke like manner, but rather appears to be an integral part of the package of rocks. It may be a product of primary magmatic differentiation, or more probably a related sill that was thrust emplaced with the ultramafic rocks. The gabbro is not deformed, and does in places exhibit a weak silica-carbonate alteration similar to the alteration seen in the adjacent ultramafic rocks, suggesting the aforementioned association between the two units.

4E. BASALT

This lithology also occurs in spatial association with the ultramafic rocks, in the vicinities of 81+00E-22+50S, and 15+00E -22+50S. The basalt, typically, is a massive, dark green, often weakly epidote altered aphanitic to very fine grained rock. It may be an extremely fine grained equivalent of the gabbro/diabase, as no flow textures were observed. The rock is undeformed, and is clearly a part of the package of thrust emplaced mafic and ultramafic intrusive rocks.

NASINA SERIES

The majority of the property is underlain by interbedded metasediments of the Nasina Series, as described below.

UNIT 3. OXIDE FACIES IRON FORMATION

This lithology was encountered at only one location, in the vicinity of grid co-ordinates 96+00E-9+00S. There, a poor exposure of semi-massive magnetite, interbedded with thin sucrosic quartz bands, was noted. Within the sequence, a thin (50 cm.) intensely oxidized, gossanous interbed, that may be a local sulphide rich horizon, was also noted, though no recognizable sulphide mineralization was observed.

UNIT 2. LIMESTONE

Limestone was noted throughout the property, as an integral component of the Nasina Series. The limestone occurs as interbeds within the schists that comprise most of the Nasina Series,ranging in thickness from afew centimeters to up to 100 meters. The rock is usually fine to coarsely crystalline, and composed almost exclusively of calcite. The limestones are weakly carbonaceous in several places.

The limestones commonly exhibit intense deformation, with small scale tight folding, and strong crenulation cleavages. Foliations in the limestones appear, for the most part, to parallel original bedding, though in some locations, clearly cross cutting schistosities were noted.

Characteristic of the limestones is a high secondary calcite - quartz vein content, with veins often several meters thick and comprising 30% of the rock, by volume. These veins are usually developed along schistosity and bedding planes, and are usually boudined into discontinuous pods both along strike and down dip. The veins were usually barren, carrying little or no associated sulphide mineralization. They were, however, systematically sampled, in an effort to assess their potential. A discussion of the geochemical results appears in the following section of this report.

UNIT 1. INTERBEDDED SCHISTS; UNDIFFERENTIATED

Specific descriptions of the various types of schists that comprise the Nasina Series will be discussed below. This map unit was employed when various types of schists were thinly interbedded, to the degree that individual units could not be differentiated on the scale of mapping used in the program.

The schists discussed below are classified based on their major mineralogical components, though there are gradational units between these members, typical of a metamorphosed sedimentary package. All the units described below exhibit signs of very strong deformation, with strong schistosities, crenulation cleavages, and local, tight small scale folding. Schistosities, for the most part, appear to parallel original bedding planes, as evidenced by primary compositional layering within the schists.

UNIT 1A. QUARTZ - SERICITE SCHIST

Quartz - sericite schists are a major component of the Nasina Series, and outcrop throughout the property. They are commonly a very fine grained, white to pink to light green, hard, very siliceous rock, with a quartz content ranging from 50% to 90%, the remainder of the rock being sericite. The rocks are commonly banded, with sericite rich versus quartz rich layers, the sericite rich layers occurring along schistosity/bedding planes.

Disseminated cubic pyrite is common in this unit, though rarely approaching 1% by volume in the rock. This unit often occurs as megaboudins within the less competent graphitic and chloritic schists.

UNIT 1B. GRAPHITIC SCHIST

This unit is also a major component of the Nasina Series, and is common throughout the property. It is characteristically a jet black, soft, very carbonaceous/graphitic rock, the graphite content ranging between 50% and 90%. This high graphite content is what differentiates this unit from the underlying, more siliceous "quartz - graphite" schist.

This unit is characteristically very strongly foliated, with smearing of graphite along schistosity planes lending a highly visible "shiny" appearance to the rock. Cubic pyrite is common, in the order of 1 to 2% by volume.

UNIT 1C. GRAPHITIC - QUARTZ SCHIST

This unit differs from the above graphitic schists in that it has a significant quartz component, ranging from 30 to 80% of the rock. The rock is usually dark gray, relatively hard, and less intensely foliated than the graphitic schists. Characteristic of the unit is the presence of abundant secondary, barren appearing sucrosic quartz veins, commonly comprising 20% of the rock. These veins are usually developed along schistosity planes, and are commonly boudined into lenses and discontinuous pods.

UNIT 1D. GRAPHITIC - CHLORITIC SCHIST

This unit, relatively common throughout the property, is characteristically a soft, punky, dark green to black, intensely foliated rock, composed predominantly of chlorite, but with a significant graphite component in the 10 to 30% range. Smeared graphite and chlorite along schistosity planes lend a "shiny" appearance to the unit.

Secondary quartz veins are common, again predominantly barren and sucrosic. Disseminated cubic pyrite is common in this unit, to 1 to 2%.

UNIT 1E. CHLORITE SCHIST

This unit, only a minor component of the Nasina Series, is typically a dark green, relatively hard, moderately foliated rock composed of 30 to 60% chlorite, the remainder being quartz. It is unusually homogenous in comparison to the other schists that comprise the Nasina Series, and may have a volcanic protolith.

UNIT 1F. QUARTZ - CARBONATE - SERICITE SCHIST (HYDROTHERMAL ALTERATION ASSEMBLAGE)

This term is used to describe any of the preceding schist units that exhibit significant alteration, primarily to a quartz - carbonate - sericite assemblage. This alteration is relatively common on the property, occurring along thin shear zones that cut all the preceding Nasina Series units. The most significant exposure of this "unit" is in the vicinity of 67+50E-21+00S, where almost 100 meters of alteration was noted, in what probably was a graphitic-chloritic schist.

The rock is typically buff to gray in colour, and strongly bleached appearing, with varying degrees of silica, carbonate, and sericite alteration. Thin secondary iron carbonate veins, occasionally with some associated quartz, are common in the alteration zones, in places the alteration clearly occurring as halos on the veins. Minor amounts of pyrite, arsenopyrite, sphalerite, and galena were noted at several locations throughout the property, as mineralization associated with the secondary veins, or as fracture filling in the alteration zones. These alteration zones, where encountered, were extensively sampled, and a discussion of the geochemical results appears in the following section of this report.

1G. SILTSTONE - GRAYWACKE

A very minor component of the Nasina Series, this unit consists of thin interbeds within the schists in which recognizable, or preserved clastic textures can be seen. Nowhere on the property does it comprise a lithology unto itself, but rather occurs as thin isolated interbeds within several of the schistose units.

STRATIGRAPHY

With only limited outcrop exposure on the property, it is difficult to construct an accurate stratigraphic section through the area. Structural overprinting of stratigraphy also makes interpretation difficult. Given, however, that most schistosities observed appear to parallel primary compositional banding in the rocks, and thus bedding, it can be said that the property is, for the most part, underlain by a thick sequence of northeast trending, southeast dipping metasediments, that have undergone intense post depositional deformation.

STRUCTURE

With local variations, the majority of rocks of the Nasina Series that underlie the property are strongly schistose, often tightly folded on a small scale, and exhibit evidence of multiphase deformation as illustrated by strong crenulation cleavages in most outcrops.

Most do, however, exhibit a general northeast trend, dipping gently to the southeast (10 to 40 degrees), an orientation that reflects original bedding in the thick package of deformed metasediments. There are some local variations to this trend, suggesting that some larger scale folding and warping of the sequence has taken place, notably in the vicinity of 52+00E-15+00S, along the northwest shore of the Fortymile River.

The sequence of Nasina Series sediments has also been extensively thrust faulted, resulting in emplacement of allochthonous ultramafic and associated mafic intrusive rocks. For the most part, it would appear that the thrust faulting is conformable to the stratigraphy, the faults having utilized existing planes of weakness within the sedimentary succession.

3.2 LITHOGEOCHEMICAL SAMPLING

3.2.1 METHODS EMPLOYED

In the course of geological mapping, 476 rock samples were collected for analysis. These samples were forwarded to Bondar-Clegg for geochemical gold analysis, employing a standard fire assay and atomic absorption technique. The sample pulps were then forwarded to Acme Analytical Laboratories, for 30 element ICP analysis.

All sample locations appear plotted on the enclosed 1:5000 Geology Map (East and West Sheets), as are all the resultant gold values, in parts per billion.

Appendix 3 contains all the raw geochemical data, both the gold results from Bondar-Clegg, and the ICP results from Acme Analytical.

The purpose of the widespread sampling program was, obviously, to assess the potential of the property for hosting significant concentrations of gold mineralization.

In addition to the gold analyses, the wide spectrum of elements analyzed for by the ICP method, provides some very useful trace element geochemical data. Gold mineralization often occurs with highly elevated concentrations of other metals, specifically As, Ag, and Sb, and in some cases, the base metals Cu, Pb, and Zn. Elevated contents of these metals, even in the absence of anomalous gold values, can often serve as pathfinders to gold mineralization.

Below is a brief summary and discussion of the results of the sampling program.

3.2.2 RESULTS AND INTERPRETATION

Of the 476 samples collected from the property, only 26 returned significantly anomalous gold values of $\geq$100 parts per billion. No ore grade mineralization was encountered on the property, the highest gold analysis being 2,610 ppb.(0.076 OPT). All significantly anomalous samples appear as "stars" on the enclosed geology maps, with detailed sample descriptions.

The majority of anomalous values were returned from thin quartz veins that carried significant concentrations of arsenopyrite, pyrite, galena, or sphalerite, and there is a definite association between these sulphides and the presence of elevated gold values. Below is a chart summarizing the 26 anomalous samples;

SAMPLE	Au (PPB)	DESCRIPTION NO.
FM28807	151	gossan stained quartz breccia, hosted in limestone.
FM28808	299	gossan stained quartz breccia, with trace pyrite and sphalerite, hosted in limestone.
FM28850	247	locally pyritic (5%) 5 cm. siliceous interbed, hosted in undifferentiated schists.
FM28858	492	locally pyritic (10%) gossanous graphitic schist interbed.
FM28876	276	mineralized (arsenopyrite, sphalerite, galena, pyrite) brecciated quartz - carbonate vein, hosted in limestone.
FM28877	286	mineralized (arsenopyrite, pyrite, galena, sphalerite, chalcopyrite) brecciated quartz-carbonate vein, hosted in quartz - sericite schist.
FM28879	150	mineralized (arsenopyrite, pyrite, sphalerite, galena, chalcopyrite) brecciated quartz - carbonate vein, hosted in limestone.
FM28881	207	mineralized (arsenopyrite, pyrite, galena, sphalerite) brecciated quartz - carbonate vein, hosted in quartz-sericite schist.
FM28882	166	same as FM28881
FM28883	141	shear zone cutting quartz-sericite schist, minor disseminated arsenopyrite and pyrite.
FM29014	182	strongly gossan stained quartz-sericite schist, with trace sphalerite.
FM29023	133	pyritic (10%) shear zone in quartz-sericite-carbonate altered schist.
FM29030	178	pyritic (20%) shear zone in quartz-sericite-carbonate altered schist.
FM29031	110	quartz-sericite-carbonate altered schist.
FM29032	107	quartz-sericite-carbonate altered schist.
FM28816	204	gossan stained quartz breccia in graphite-chlorite schist.
FM28817	202	same as FM28816

SAMPLE	Au (PPB)	DESCRIPTION NO.
FM23873	396	graphitic schist from waste pile, shaft area.
FM28767	267	mineralized (arsenopyrite, galena, sphalerite) quartz vein in quartz-sericite schist.
FM28984	223	mineralized (arsenopyrite, sphalerite) quartz vein in quartz-sericite schist.
FM28994	197	mineralized (arsenopyrite) quartz vein, in quartz-sericite schist
FM28996	204	mineralized (arsenopyrite) quartz vein, in quartz-sericite schist.
FM29130	2610	mineralized (5% arsenopyrite) quartz boulder, not located in place.
FM29503	753	mineralized (sphalerite, galena) quartz vein material, from the waste pile, shaft area.
FM29521	145	mineralized (arsenopyrite) quartz vein, in quartz-sericite schist.
FM29528	320	mineralized (arsenopyrite) quartz vein, in quartz-sericite schist.

While several of these anomalies are interesting, none approach economic grades over economic widths and present themselves as clear targets for continued detailed exploration work. They do indicate, however, a weak widespread enrichment in gold, and there is potentially an as of yet undiscovered area where mineralization has been concentrated to economic grades.

The trace element geochemical data also indicated widespread enrichment in metals often associated with gold mineralization, namely As, Ag, Sb, Cu, Pb, and Zn. Of the 476 samples collected from the property, 233, almost half, carried anomalous values for at least one of these trace element geochemical pathfinders. The trace element geochemical data appears in Appendix 3.

5. ITEMIZED COST STATEMENT, AND ALLOCATION OF EXPENDITURES

A) SALARIES

PETER RONNING (SUPERVISOR) - 3 DAYS, AT $200.00/DAY .....$ 600.00

DUNCAN MCIVOR (PROJECT GEOLOGIST) -
FIELD WORK, AUGUST 20 - SEPTEMBER 17, 29 DAYS
-DRAFTING AND REPORT PREPARATION,
DECEMBER 1 - DECEMBER 15, 15 DAYS
- 44 DAYS, AT $120.00/DAY.....$ 5,280.00

JOANNE BOZEK (GEOLOGIST) -
FIELD WORK, AUGUST 20 - SEPTEMBER 17, 29 DAYS
-DRAFTING, DECEMBER 1 - 10, 10 DAYS
- 39 DAYS, AT $90.00/DAY.....$ 3,510.00

KATHIE JAWORSKI (GEOLOGIST) -
FIELD WORK, AUGUST 30 - SEPTEMBER 17, 18 DAYS
-DRAFTING, DECEMBER 1 - 2, 2 DAYS
-20 DAYS, AT $100.00/DAY.....$ 2,000.00

CHRISTOPHER MARTEN (FIELD ASSISTANT)
- FIELD WORK, AUGUST 30 - SEPTEMBER 17, 18 DAYS
- DRAFTING, SEPTEMBER 18, SEPTEMBER 19 (PARTIAL), 1.5 DAYS
- 19.5 DAYS, AT $80.00/DAY..... .....$ 1,560.00

SUB-TOTAL.....$12,950.00
PLUS 20% BENEFITS AND ADMINISTRATION COSTS.....$ 2,590.00

TOTAL SALARIES $15,540.00

B) ANALYTICAL COSTS

476 SAMPLES, Au ANALYSIS (BONDAR-CLEGG), AT $10.00/SAMPLE .....$ 4,760.00
ICP ANALYSIS (ACME ANALYTICAL), AT $6.25/SAMPLE .....$ 2,975.00
SHIPPING COSTS.....$ 255.00

TOTAL ANALYTICAL COSTS.....$ 7,990.00

C) FIELD SUPPORT COSTS

1) FOOD AND ACCOMMODATION (INCLUDING CAMP RELATED EXPENSES)

DAYS, AT $25.00 PER DAY..... .....$ 2,350.00

2) VEHICLE COSTS (INCLUDING MOBILIZATION AND DEMOBILIZATION)

29 FIELD DAYS, AT $25.00 PER DAY PER VEHICLE, X 2 VEHICLES.....$ 1,450.00

3) HELICOPTER SUPPORT

1 HOUR, AT $550.00 PER HOUR, PLUS FUEL .....$ 603.75

4) MISCELLANEOUS CONSUMABLE EQUIPMENT AND SUPPLIES

SAMPLE BAGS, SAMPLE TAGS, FLAGGING TAPE, TOPOFIL,
DRAFTING SUPPLIES, ETC.....$ 500.00

TOTAL PROGRAM COSTS.....$28,434.75

These costs are to be applied as per the enclosed Certificates of Work.

PERSONNEL

Names and addresses of personnel involved in this project:

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Peter Ronning	-	c/o #1000 - 700 West Pender Street Vancouver, B.C. V6C 1G8

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STATEMENT OF QUALIFICATIONS

NAME: DUNCAN FORBES MCIVOR

PROFESSION: GEOLOGIST

EDUCATION: H.B.Sc., APPLIED GEOLOGY, UNIVERSITY OF WATERLOO

EXPERIENCE: 1974 - 1981, FIELD GEOLOGIST,AND GEOLOGICAL ASSISTANT
ESSO MINERALS CANADA,
UTAH MINES LTD.
- summers, and through the Co-op program at the University of Waterloo, with experience throughout the Abitibi, and in Nova Scotia.

1981 - 1987, GEOLOGIST
UTAH MINES LTD.
- experience throughout eastern Canada, with some exposure to South America

1987 - PRESENT, GEOLOGIST
HOMESTAKE MINERAL DEVELOPMENT CO. LTD.
- experience in the northern Cordilleran.

I hereby state that the information contained in this report is true and accurate.

DUNCAN MCIVOR

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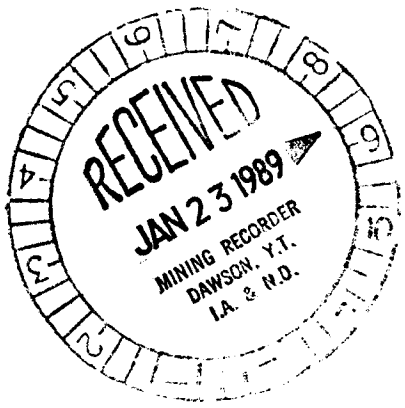
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Duncan McIvor

DUNCAN MCIVOR


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JAN 23 1989
MINING RECORDER
DAWSON, Y.T.
I.A. & N.D.

APPENDIX 1

PC-1985-2065
WITHDRAWN FROM STAKING PENDING NATIVE LAND CLAIMS SETTLEMENT.

INSET C
1:1000

INSET D
1:1000

INSET A
1:1000

INSET B
1:1000

INSET E
1:1000

PC-1985-2065
WITHDRAWN FROM STAKING
PENDING NATIVE LAND CLAIMS SETTLEMENT

YUKON RIVER
DAWSON CITY, 82 KM (WATER)

FORTY MILE TOWNSITE (ABANDONED)

LEGEND

LITHOLOGIES

PERMIAN OR YOUNGER

5 — 5. OLIVINE BASALT

CARBONIFEROUS – PERMIAN

MAFIC TO ULTRAMAFIC INTRUSIVE ROCKS

4a. 4a SERPENTINITE
4b. b TALC ± CHLORITE ± CARBONATE SCHIST
4c. c SILICA - CARBONATE-MARIPOSITE ALTERED ROCK
4d. d GABBRO - DIABASE
4e. e BASALT (FIELD TERM)

PALEOZOIC

NASINA SERIES
(UPPER GREENSCHIST FACIES METASEDIMENTS)

3 — 3. OXIDE FACIES IRON FORMATION
2 — 2. LIMESTONE
1. — 1. INTERBEDDED SCHISTS, UNDIFFERENTIATED
1a — 1a. QUARTZ - SERICITE SCHIST
1b — 1b. GRAPHITIC SCHIST
1c — 1c. GRAPHITIC - QUARTZ SCHIST / GRAPHITIC SILICEOUS ARGILLITE
1d — 1d. GRAPHITE - CHLORITE SCHIST
1e — 1e. CHLORITE SCHIST ± QUARTZ
1f — 1f. QUARTZ - CARBONATE - SERICITE SCHIST (ALTERATION ASSEMBLAGE)
1g — 1g. SILTSTONE - GREYWACKE

SYMBOLS

- GEOLOGIC CONTACT (OBSERVED / ASSUMED)
- S_0 SCHISTOSITY
- S_2 SCHISTOSITY
- SCHISTOSITY WITH PLUNGE
- BEDDING
- JOINTING
- QUARTZ VEIN
- FOLIATION (UNDEFINED)
- HORIZONTAL FOLIATION
- BRECCIATION
- FAULT (OBSERVED / ASSUMED)
- FM SAMPLE POINT
- TOPOGRAPHIC / GEOMORPHOLOGICAL FEATURE
- ROAD / TRAIL
- STREAM
- CLAIM POST
- SAMPLE LOCATION, CARRYING > 100 PPB Au.

0 100 200 300 400 500 (METERS)
(1:5000)

HOMESTAKE
MINERAL DEVELOPMENT COMPANY

FORTY MILE PROPERTY, YUKON TERRITORY
EAST SHEET

GEOLOGY

WITH SAMPLE LOCATIONS AND GOLD GEOCHEMISTRY

DRAWN	DATE	FILE CODE
REVISED		D926

INSET J 1:500 SECTION FACING WEST

SERPENTINE ± TALC SKIST
Pale grn to brn, v fg, schistose, commonly vn to pt stockwk and bxl; 10YR weathering, vn to pt extensively subcrystalline, fine-grained, crumbly, locally massive, commonly with relict pyroxene and olivine texture of mesh / interpenetrating textures (serpentine), 10% talc

GRAPHITIC SCHIST
Black, vn bearing, 80% graphite, 15% sericite/quartz, 5% pyrite, fg, v graphitic, v soft, v fissile, thick, platy, flakey, locally v wt etc

VERY STRONGLY FE-CARBONATE VEINED, SILICIFIED SERPENTINITE, TALC SCHIST AND SERPENTINITE
Variably pervasively silicified, fe-carb altered, serpentinite, talc schist and serpentinite. Fe-carb veining and alteration is controlling unit. Predominantly fg, vn to pt stockwk and bxl; 10YR weathering, locally v rusty, fe-carb veins to 5cm, fe-carb alteration veins (stkwk). Rare fe-carbonate talc stockwork veins (stkwk). Rare fe-carbonate talc stockwork veins (stkwk). Rare fe-carbonate talc stockwork

INSET I 1:5000

FM-29165 a/c grab Qtz.-Ser.-Graphitic Schist (Intensely Qtz. Veined Graphitic Argillite
90% of sample is: 60% 0.2-1.5cm wide ribbons of white qtz. parallel to schistosity, 30% remainder host rock is qtz. stringers & fine grained material laminated. Overall 5% graphite, moderate fine schistosity.
10% of sample is: qtz.-sericite schist 2 80% white to rusty 0.2-1.5cm qtz. stringers with interbedded graphitic schist, few pieces with 1% disk, .5-1.5mm dia. out by cash. (<5 ppb Au)

FM-29166 grab of rock stumped off rd.
Qtz.-Mica Gtz. Typically Lenticular, Intensely Silicified Argillite
Sample is 100% qtz. Massive white qtz. is 60% of sample, heavily rusty. Small vugs throughout & qtz. is fractured in the qtz. Overall 10% of 0.2mm pyrite disseminated in qtz. 2 layer.
(<5 ppb Au)

FM-29167 a/c grab Intensely Qtz.-Ribboned Silicified Graphitic Argillite
Laminated qtz. with strong rusty sulphides ave. 85%, 2-5mm ribbons of qtz. 10% sericite, 5% graphite. (<ppb Au)

FM-29181 a/c grab Fe Oxide Stained Quartz-Sericite Schist
Note: 0.2mm lamellae of white qtz. 10% inter-qtz. layers of 0.6-1mm rusty brown to silvery white sericite. Strong Foliation on sericite folia. planes. Hand-Flexible. Intensely foliated to schistose. Breaks into 0.5-2cm thick slabs. Possible elsewhere, are out by casts on rdn. Sample from 0.7m thick stn-ser layer in qtz-ser-graphitic schist (< 5 ppb Au)

FM-29182 a/c grab Intensely Silicified Pyritic Quartz-Sericite Graphitic Argillite
85% white to lt grey densely packed lenticular lamellae (1-2mm) of qtz. or silicified host rock; 10% inter-qtz. lamellae of lt grey-green sericite, 5% very rust-10mm py. stain/ped stringers along highly/intensely foliated & well developed fracture. Elsewhere, is tuff. Very hard-difficult to break with Hammer. (< 5 ppb Au)

GRAPHITIC ARGILLITE (QTZ-GRANITE-SER. SCHIST) WITH QTZ-SER. SCHIST INTERBEDS
Grey, fg grained, vwr to lt brownish grey, laminated to schistose, 1-2 mm thick, qtz-poor rock w/discrete stringers & lenses, 1-2 cm thick, qtz-poor, graphitic schist. Local 10-15cm layers of 30-50% 1-2mm thick lamellae. 5% pyrite in intervals of white, weathered rusty vnr & qtz.-ser. schist, 10% qtz-ser. sericite, 1% graphite. Local v. heavily rusty vnr layers 10-15 cm, sporadic py, mainly 1-2mm dia. Trace of galena. Overall, is a stratiform, bedded and banded, fine-med. stratiform white qtz. layers.

FM-29180 a/c chip 1.5m Intensely Quartz-Pyrite Veined Qtz.-Ser. Schist
Host rock is lt grey to white, hard, intensely silicified. 80% 1-3mm qtz. lamellae with interlaminated 20% sericite. 5% silicified host rock 1-2mm dia. 1-3mm vnr out py casts. Lower section of chip has veins 2-25cm rusty qtz veins & 2% remnant py. Main contact & schistosity. Upper section of chip has 15% 1mm rusty vnly pyrite qtz. veins. Shallowly crosscutting schistosity. (<5 ppb Au)

FM-29184 a/c grab Very Strongly Silicified Graphitic Argillite (Qtz.-Sericite-Graphite Schist)
Grey, fg grained, hard, 1-2mm lenticular lamellae of grey siliceous host rock. 15% sericite between qtz. Fine laminae of graphite, locally up to 10% locally, up to 1-2mm thick in rusty qtz. lamellae. Strong schistosity, 5mm spacing. Foliation is 0.5-1mm thick slabs. Elsewhere, is laminated to schistose. Silicified zones 1cm spaced/fracture cleavage & folia.

Samples FM-29171 to FM-29178 a/c in relative stratigraphic succession: top (FM-29178) to bottom (FM-29171)

FM-29178 silumped a/c grab Fe Oxide Stained Quartz-Sericite Schist
White to very, very lt brown, massive, almost lamellar qtz. with 15% sericite, host rock is laminated to schistose. Stained, massive to breaks up to 4-10cm thick slabs. Fe-stained vnr & fractures along folia. (<5 ppb Au)

FM-29177 a/c grab from 3 separate veins
Quartzite (vuggy) Veins
Sampled 3 1.25m thick, stratiform, moderately boudinaged qtz. layers in a qtz-sericite (ser. schist) Qtz. is massive, white to strongly rusty in many areas often along inclined 1-3 inch thick fabric 2-5m vnr out 1-3mm dia. Elsewhere, 5% out 3mm wide stringers 10 per cash. 1.25 ppb Au out.
Very similar rusty qtz. veining over 2m strat. section.

FM-29176 a/c grab 3 same site qs. FM-29177
Quartz - Graphite - Sericite Schist
(Intensely Qtz. Ribboned and Silicified Graphitic Argillite)
Lt grey, fg v. strong rusty vnr. Strongly Boudied/Lenticular Qtz. Veins 1-3cm thick, 10-20cm long, qtz. overall/by schistosity. 20% inter-qtz. fgr. Sericite 40% vnr out py casts on rdn. Sample from 0.7m thick stn-ser layer in qtz-ser-graphitic schist

FM-29179 a/c grab Qtz.-Ser.-Schist and Intensely Qtz. Veined Qtz.-Ser. Schist
50% of sample is: 10% 2-7mm white qtz. bands/veins, 1-2cm thick, hard, rock is white to cream coloured, hard, 1-2mm laminae of qtz & 2% interlaminae, sericite. (<5 ppb Au)

Samples FM-29171 to FM-29174 cover a 10m stratigraphic interval.

FM-29173 a/c grab Sericite - Quartz. Schist
Lt greenish grey, vwr to grey with wk rusty coloring. 45% lenticular bands of 1-5mm wide qtz. 35% sericite 20% 1mm-1.5mm thick of white, skull (sutured, semi-opaque mineral - possibly py/as). V. strongly schistose. Very crumbly. (<5 ppb Au)

FM-29172 a/c grab 10cm Rusty Qtz.-Fe-carb Layer in Sericite Schist
Massive, white qtz. locally strongly rusty wx on fractures, 20% 1-3mm irregular and stringers of Fe-carbonate. (< 5 ppb Au)

FM-29171 a/c grab Graphitic Schist
(Silicified Graphitic Schist?)
Dk. grey to black, wx to grey with rusty tints, but flaky/friable, 10cm wide bands of strong rusty staining. Medium hardness grey, poorly fractured 1mm wide qtz. rich lenticular bands. 55% inter-banded graphite. Moderate to strong schistose on subhorizontal planes. V. strongly schistose. WE, crenulation of schistosity. Elsewhere, is laminated to schistose. Fe-stained vnr & qtz are graphitic schistose. (<5 ppb Au)

FM-29174 a/c grab Intensely Qtz. Banded Graphitic - Sericite Schist
Predominantly lt grey almost white, finely laminated almost massive qtz. with some sericite, fg graphite. Interbeds of some graphitic 'rock' 1-5mm qtz layers, 1-2mm dia. Fe-carbonate veinlets & qtz are graphitic schistose. (<5 ppb Au)

PYRITIC QTZ VEINED QTZ-SER-GRAPHITE SCHIST WITH QTZ-SER SCHIST INTERLAYERS AND MINOR GRAPHITE SCHIST ?)
Lt grey, vwr to brownish grey with strong rusty weathering. 50% 1-2mm thick qtz-ser. sericite. 15-10% graphite with local 20cm interlayers of graphite schist.
35% 0.5-2m interlayers of Qtz.-Ser. Schist. White to cream coloured vwr to buff, fg grained. Hard. Massive. 80% 1-2mm thick, laminae. 10% sericite & silvery sericite.
5% Graphitic Schist. 0.5-2.0m interlayers. Black, >60% graphite. Minor 25cm thick white q.v.

FM-29824 a/c grab Fe-Oxide Stained Sericite - Quartz. Schist
Lt greenish grey vwr to grey. Strong rusty brown Fe-oxides staining 30% of sample. 40% of is qtz. veins 1-2mm long flat qtz. lenses, 1-2mm thick, fg-vfg. Strong Fe-oxide on folia. 30% sericite. 10% 1-2mm thick of white, skull (sutured) qtz. veins conformable to schistosity. Tr. py. in qtz.

TALC-SERICITE-QUARTZ-GRAPHITE SCHIST WITH GRAPHITE SCHIST INTERBEDS
Grey, fg grained, vwr to grey. 40% strong grey, sericite. 20% 1-2mm thick, irregular, locally up to 10-20cm thick lamellae & lenses of white to lt grey qtz & strongly foliated. Talc-sericite schist. 10% graphite. E local 25cm thick interbeds of 1-2% graphitic. V. strongly schistose.

FM-29825 a/c grab Sericite - Talc - Quartz. Schist
Lt greenish grey vwr to lt grey & light dusting of white chalky-like talc. 70% strong grey, sericite. 20% 1-2mm dia. lenticular talc, 10% / 1-2mm thick lenticular lamellae of white to lt grey qtz & strongly foliated. Weakly incompetent. (<5 ppb Au)

FM-29175 a/c grab Intensely Qtz.-Fe-carb Veined, Intensely Silicified Graphitic Argillite
50% 1-5cm white qtz. veins, folded and crenulated. 15% 1-5mm wide brown and rhombohedral Fe-carb casts, dominantly in qtz's. Matrix is laminated lt grey, fg grained, siliceous graphitic rock. Strong schistose. Fe-stained locally, up to 5%. Locally 5% to 5% sericite, where graphite is high. (<5 ppb Au)

INSET O 1:1000 SECTION FACING NORTH

INTERBEDDED SERICITE-QUARTZ SCHIST AND QUARTZ-CHLORITE-SERICITE SCHIST
2-100cm alternating interbeds of
Sericite - Quartz Schist
Buff wx to buff to white, 60% sericite, 5% 1-2mm qtz, 35% Fe-Carb streaks along 1mm. Intensely qtz-bearing. Soft - recessive unit
Chlorite - Sericite Schist
Grey, wx. to grey, V. strong, schistose, 60% 1/2cm to 1cm thick bands of 1-2mm qtz. & 5% Fe-Carb as 1-2mm thick veinlets, 30% sericite. Strongly schistose. Local 10cm thick qtz. veins/lets.

FM-28982 a/c grab Interbedded Qtz-Ser and Siliceous Graphitic Schist
Lt to dk. grey, fg, massive, thinly bedded, hard, siliceous, 5% fine sericite beds very weak Fe-Carb stained. (<5 ppb Au)

FM-28984 a/c 1m ccs of a strongly weathered schist - 10% pyrite, fg stained and laminate combed. (<100 ppb Au)

QUARTZ GRECCIA
Lt grey, vwr to tawny. Fine grained, soft, grey graphitic qtz. matrix and 10-15% fragments, commonly subangular, 5mm / 2-3mm dia. Competely v. strongly bound by matrix. Locally rusty vnr, yellow staining, possibly from vnr. of arsenopyrite

FM-28986 a/c grab 1/2 m grey qtz. matrix, wkly silicified granular text. 15% rounded qtz fragments 4mm-1cm across & 5% weathed out voids / vnr lines at 60° coating + voids and on surface. (228 ppb Au)

PYRITE AND ARSENOPYRITE BEARING SHEAR/ QUARTZ BRECCIA ZONE
1m wide SHEAR @ 094/63S. Gossanous, grey-brown qtz. breccia. Matrix is grey, fg, strongly graphitic hard with 2-4% 2-4mm wkly to v. rusty vnr. 30% dense, packed, angular, 1-7mm subrounded qtz fragments and 60% dissaggregating 1cm cubic to 1-2cm thick qtz. vnr zone. 20% arsenopy. in South contact is 2cm wide zone of 5% 1-2mm dia. arsenopy. in qtz. (FM-28985). Strongly fracture/jointed throughout entire shear. Arsenopy. 1-2mm pyr. in matrix.

FM-28983 a/c grab Quartz Breccia? lt grey, fg - granular tabl., 1dc. strongly oxidized 5mm oxidized brown stain on surfaces, 1% py. to 4mm dia. (No ppb Au)

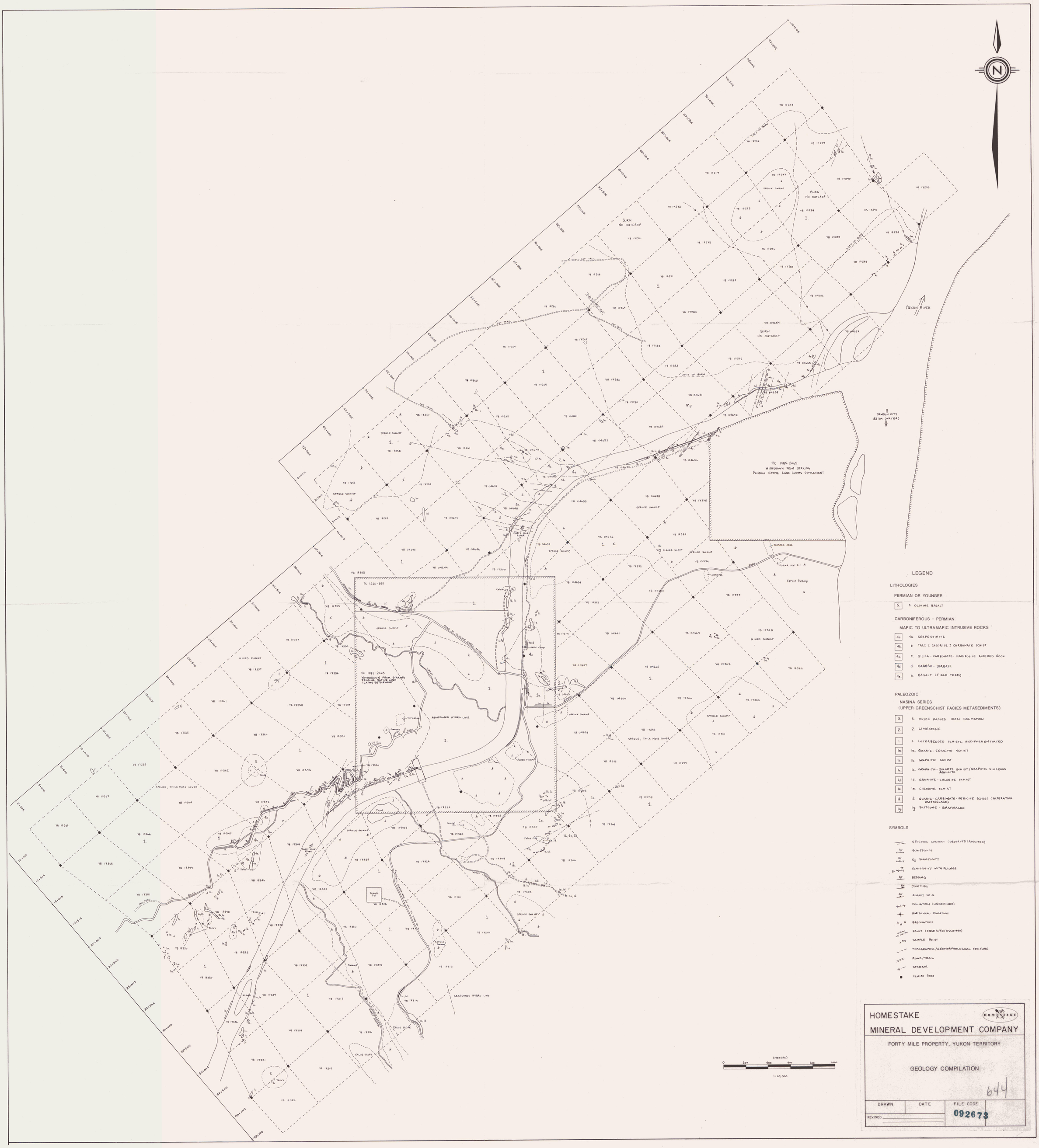
FM-29528 a/c grab Arsenopyrite Bearing Qtz. Breccia
Light grey, fg brecciated quartz matrix 70% 2-3 mm subrounded qtz. fragments. Wk. rusty orgnal wx. possibly trace 2cm dia. fine grained yellow wx. iron stn. Massive to diss. asp. (320 ppb Au)

MASSIVE FE-CARBONATE - MARIPOSITE - PYRITE ALTERED (ULTRAMAFIC?)
Typified by FM-28965, FM-28665, FM-28667
Pale/buff grey, fg, massive, glassy, dense, granular protolithic include - chlorite schist and chloritic, greywacke.

FM-28657 a/c grab Massive Fe Carbonate with Quartz and Mariposite
Densely packed, massive, fg, fine grained, 10% 1-2mm irregular to angular qtz. fragments within the Fe-carbonate matrix. Sericite, between 1-2% Fe carb veins, 1-2mm thick, irregular, locally veined approximately at 90° to drill borehole. Pale green mariposite. Strongly fracture/jointed on a small scale. (<5 ppb Au)

FM-28665 a/c grab Massive Bleached Fe Carbonate - Mariposite Rock
Almost 100% strongly bleached Fe-carbonate-qtz veins, 2-35mm wide, 30% - 45mm subparallel qtz veins, with v. strong alteration envelopes. Pale green mariposite. Strongly fracture/jointed, 1-2mm thick, irregular, locally 1-2cm spaced, 1-2mm thick, 1-2 fracture sets. Fe-carb. veins are

APPENDIX 2



LEGEND

LITHOLOGIES

PERMIAN OR YOUNGER

- 5. 5. OLIVINE BASALT

CARBONIFEROUS – PERMIAN

MAFIC TO ULTRAMAFIC INTRUSIVE ROCKS

- 4a. 4a. SERPENTINITE
- 4b. b. TALC ± CHLORITE ± CARBONATE SCHIST
- 4c. c. SILICA - CARBONATE - MARIPOSITE ALTERED ROCK
- 4d. d. GABBRO - DIABASE
- 4e. e. BASALT (FIELD TERM)

PALEOZOIC

NASINA SERIES
(UPPER GREENSCHIST FACIES METASEDIMENTS)

- 3. 3. OXIDE FACIES IRON FORMATION
- 2. 2. LIMESTONE
- 1. 1. INTERBEDDED SCHISTS, UNDIFFERENTIATED
- 1a. 1a. QUARTZ - SERICITE SCHIST
- 1b. 1b. GRAPHITIC SCHIST
- 1c. 1c. GRAPHITIC - QUARTZ SCHIST/GRAPHITIC SILICEOUS ARGILLITE
- 1d. 1d. GRAPHITE - CHLORITE SCHIST
- 1e. 1e. CHLORITE SCHIST
- 1f. 1f. QUARTZ - CARBONATE - SERICITE SCHIST (ALTERATION ASSEMBLAGE)
- 1g. 1g. SILTSTONE - GRAYWACKE

SYMBOLS

- GEOLOGIC CONTACT (OBSERVED/ASSUMED)
- Sn SCHISTOSITY
- Sz SCHISTOSITY
- Sn SCHISTOSITY WITH PLUNGE
- Sz BEDDING
- Jn JOINTING
- Qz QUARTZ VEIN
- FOLIATION (UNDEFINED)
- HORIZONTAL FOLIATION
- BRECCIATION
- FAULT (OBSERVED/ASSUMED)
- SAMPLE POINT
- TOPOGRAPHIC/GEOMORPHOLOGICAL FEATURE
- ROAD/TRAIL
- STREAM
- CLAIM POST

HOMESTAKE
MINERAL DEVELOPMENT COMPANY

FORTY MILE PROPERTY, YUKON TERRITORY

GEOLOGY COMPILATION

644

DRAWN	DATE	FILE CODE
REVISED		092673

APPENDIX 3

Bondar-Clegg & Company Ltd.
130 Pemberton Ave.
North Vancouver, B.C.
V7P 2R5
(604) 985-0681 Telex 04-352667

BONDAR-CLEGG

Geochemical Lab Report

MASTEN
NTS: FORTY MILE MAP.
11.YK.116.07
PAR.

HOMESTAKE MINERAL DEVELOPMENT COMPANY
MR. PETER RONNING
640 - 1380 BURRARD STREET
VANCOUVER, B.C.
V6Z 2H3

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SEP 21 1988
H.M.D.C.

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BONDAR-CLEGG

Geochemical Lab Report

REPORT: V88-06873.0 (COMPLETE)

REFERENCE INFO:

CLIENT: HOMESTAKE MINERAL DEVELOPMENT COMPANY
PROJECT: FM-5710

SUBMITTED BY: D. McIVOR
DATE PRINTED: 26-SEP-88

ORDER	ELEMENT		NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au	Gold - Fire Assay	202	5 PPB	FIRE-ASSAY	Fire Assay AA

SAMPLE TYPES		NUMBER	SIZE FRACTIONS		NUMBER	SAMPLE PREPARATIONS	NUMBER
R	ROCK OR BED ROCK	202	2	-150	202	CRUSH AND SPLIT	202
						GEOCHEM PULVERIZING	202

REPORT COPIES TO: MR. PETER RONNING
MR. DUNCAN McIVOR

INVOICE TO: MR. PETER RONNING

Bondar-Clegg & Company Ltd.
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North Vancouver, B.C.
V7P 2R5
(604) 985-0681 Telex 04-352667

BONDAR-CLEGG

Geochemical Lab Report

REPORT: V88-06873.0 | PROJECT: FM-5710 | PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au PPB	SAMPLE NUMBER	ELEMENT UNITS	Au PPB
R2 28548		<5	R2 28876		276
R2 28549		<5	R2 28877		286
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R2 28801		<5	R2 28879		150
R2 28802		19	R2 28880		28
R2 28803		<5	R2 28881		207
R2 28804		<5	R2 28882		166
R2 28805		11	R2 28883		141
R2 28806		45	R2 28884		31
R2 28807		151	R2 28885		<5
R2 28808		299	R2 28886		58
R2 28809		<5	R2 28887		<5
R2 28810		<5	R2 28888		<5
R2 28811		<5	R2 28889		<5
R2 28850		247	R2 28890		16
R2 28851		<5	R2 28891		<5
R2 28852		8	R2 28892		17
R2 28853		<5	R2 28893		<5
R2 28854		<5	R2 28894		40
R2 28855		<5	R2 28895		6
R2 28856		8	R2 28896		<5
R2 28857		8	R2 28897		29
R2 28858		492	R2 28898		<5
R2 28859		<5	R2 28899		32
R2 28860		78	R2 28900		<5
R2 28861		<5	R2 29001		<5
R2 28862		<5	R2 29002		<5
R2 28863		6	R2 29003		<5
R2 28864		5	R2 29004		<5
R2 28865		<5	R2 29005		<5
R2 28866		<5	R2 29006		<5
R2 28867		<5	R2 29007		34
R2 28868		<5	R2 29008		<5
R2 28869		<5	R2 29009		<5
R2 28870		<5	R2 29010		<5
R2 28871		<5	R2 29011		<5
R2 28872		<5	R2 29012		<5
R2 28873		<5	R2 29013		<5
R2 28874		<5	R2 29014		182
R2 28875		63	R2 29015		<5

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Geochemical Lab Report

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SAMPLE NUMBER	ELEMENT UNITS Au PPB	SAMPLE NUMBER	ELEMENT UNITS Au PPB
R2 29016	<5	R2 29056	7
R2 29017	6	R2 29057	32
R2 29018	<5	R2 29058	6
R2 29019	41	R2 29059	5
R2 29020	57	R2 29060	5
R2 29021	<5	R2 29061	<5
R2 29022	<5	R2 29062	15
R2 29023	133	R2 29063	6
R2 29024	<5	R2 29064	7
R2 29025	<5	R2 29065	<5
R2 29026	<5	R2 29066	<5
R2 29027	<5	R2 29067	<5
R2 29028	<5	R2 29068	<5
R2 29029	80	R2 29069	<5
R2 29030	178	R2 29070	<5
R2 29031	110	R2 29071	<5
R2 29032	107	R2 29072	<5
R2 29033	6	R2 29073	<5
R2 29034	8	R2 29074	<5
R2 29035	<5	R2 29075	<5
R2 29036	<5	R2 29076	<5
R2 29037	<5	R2 29077	<5
R2 29038	<5	R2 29078	12
R2 29039	6	R2 29079	<5
R2 29040	<5	R2 29080	<5
R2 29041	<5	R2 29081	<5
R2 29042	<5	R2 29082	<5
R2 29043	<5	R2 29083	<5
R2 29044	<5	R2 29084	<5
R2 29045	70	R2 29085	23
R2 29046	9	R2 29087	<5
R2 29047	6	R2 29088	<5
R2 29048	6	R2 29089	<5
R2 29049	<5	R2 29090	<5
R2 29050	7	R2 29091	<5
R2 29051	5	R2 29092	<5
R2 29052	6	R2 29093	<5
R2 29053	7	R2 29094	<5
R2 29054	11	R2 29095	<5
R2 29055	8	R2 29096	<5

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Geochemical Lab Report

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SAMPLE NUMBER	ELEMENT UNITS	Au PPB	SAMPLE NUMBER	ELEMENT UNITS	Au PPB
R2 29097		<5	R2 29178		<5
R2 29098		<5	R2 29179		<5
R2 29099		<5			
R2 29100		<5			
R2 29101		<5			
R2 29102		<5			
R2 29103		<5			
R2 29104		<5			
R2 29105		<5			
R2 29106		<5			
R2 29107		<5			
R2 29108		<5			
R2 29109		74			
R2 29151		<5			
R2 29152		<5			
R2 29153		<5			
R2 29154		<5			
R2 29155		<5			
R2 29156		8			
R2 29157		<5			
R2 29158		<5			
R2 29159		6			
R2 29160		<5			
R2 29161		<5			
R2 29162		<5			
R2 29163		<5			
R2 29164		<5			
R2 29165		<5			
R2 29166		<5			
R2 29167		6			
R2 29168		<5			
R2 29169		<5			
R2 29170		<5			
R2 29171		11			
R2 29172		<5			
R2 29173		6			
R2 29174		<5			
R2 29175		<5			
R2 29176		<5			
R2 29177		21			

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Geochemical Lab Report

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SAMPLE NUMBER	ELEMENT UNITS	Au PPB	SAMPLE NUMBER	ELEMENT UNITS	Au PPB
R2 28601		<5	R2 28840		<5
R2 28602		<5	R2 28841		<5
R2 28603		<5	R2 28842		<5
R2 28604		84	R2 28843		<5
R2 28605		<5	R2 28844		<5
R2 28606		26	R2 28845		<5
R2 28607		5	R2 28846		<5
R2 28608		<5	R2 28913		<5
R2 28609		<5	R2 28914		<5
R2 28610		<5	R2 28915		<5
R2 28611		<5	R2 28916		<5
R2 28612		49	R2 28917		<5
R2 28812		<5	R2 28918		<5
R2 28813		<5	R2 28919		<5
R2 28814		<5	R2 28920		<5
R2 28815		<5	R2 28921		<5
R2 28816		214	R2 28922		<5
R2 28817		202	R2 28923		<5
R2 28818		51	R2 28924		<5
R2 28819		<5	R2 28925		<5
R2 28820		<5	R2 COMP 28926+28928		<5
R2 28821		<5	R2 28929		17
R2 28822		<5	R2 28930		<5
R2 28823		<5	R2 28931		<5
R2 28824		<5	R2 28932		<5
R2 28825		<5	R2 28933		<5
R2 28826		<5	R2 28934		<5
R2 28827		<5	R2 28935		<5
R2 28828		<5	R2 28936		<5
R2 28829		<5	R2 28937		<5
R2 28830		<5	R2 28938		<5
R2 28831		<5	R2 28939		<5
R2 28832		<5	R2 28940		<5
R2 28833		49	R2 29180		<5
R2 28834		<5	R2 29181		<5
R2 28835		<5	R2 29182		<5
R2 28836		<5	R2 29183		<5
R2 28837		<5	R2 29184		<5
R2 28838		<5	R2 29185		<5
R2 28839		<5	R2 29186		<5

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Geochemical Lab Report

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SAMPLE NUMBER	ELEMENT UNITS	Au PPB	SAMPLE NUMBER	ELEMENT UNITS	Au PPB
R2 29187		<5			
R2 29188		<5			
R2 29189		<5			
R2 29190		<5			
R2 29191		<5			
R2 29192		<5			
R2 29193		<5			
R2 29194		<5			
R2 29195		<5			
R2 29196		<5			
R2 29197		13			
R2 29198		<5			

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Certificate of Analysis

REPORT: V88-06808.6 | PROJECT: YR 5710 | PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	WT G	WT-100 G	WT+100 G	AU DUP OPT	AU DUP OPT	Au AVG OPT	Au+100 OPT	Au+100 MG	Au TOT OPT
R6 28545		29.17	896	27.00	0.023	0.027	0.025	0.56	0.518	0.041

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Geochemical Lab Report

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SAMPLE NUMBER	ELEMENT UNITS	Au PPB	SAMPLE NUMBER	ELEMENT UNITS	Au PPB
R2 23872		52	R2 28652		26
R2 23873		396	R2 28653		7
R2 28614		<5	R2 28654		<5
R2 28615		<5	R2 28655		<5
R2 28616		<5	R2 28656		45
R2 28617		<5	R2 28657		<5
R2 28618		6	R2 28658		<5
R2 28619		<5	R2 28659		6
R2 28620		<5	R2 28660		8
R2 28621		<5	R2 28661		<5
R2 28622		<5	R2 28662		<5
R2 28623		<5	R2 28663		14
R2 28624		5	R2 28664		7
R2 28625		<5	R2 28665		<5
R2 28626		6	R2 28666		<5
R2 28627		7	R2 28667		<5
R2 28628		<5	R2 28754		15
R2 28629		5	R2 28755		23
R2 28630		<5	R2 28756		69
R2 28631		<5	R2 28757		33
R2 28632		7	R2 28758		<5
R2 28633		5	R2 28759		<5
R2 28634		8	R2 28760		<5
R2 28635		16	R2 28761		23
R2 28636		37	R2 28762		<5
R2 28637		6	R2 28763		68
R2 28638		14	R2 28764		6
R2 28639		11	R2 28767		267
R2 28640		7	R2 28768		60
R2 28641		5	R2 28769		<5
R2 28642		13	R2 28770		<5
R2 28643		6	R2 28847		<5
R2 28644		18	R2 28848		13
R2 28645		7	R2 28849		12
R2 28646		14	R2 28941		<5
R2 28647		9	R2 28942		5
R2 28648		11	R2 28943		<5
R2 28649		17	R2 28944		23
R2 28650		9	R2 28945		6
R2 28651		8	R2 28946		9

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Geochemical Lab Report

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SAMPLE NUMBER	ELEMENT UNITS Au PPB	SAMPLE NUMBER	ELEMENT UNITS Au PPB
R2 28947	<5	R2 28987	6
R2 28948	17	R2 28988	5
R2 28949	7	R2 28989	37
R2 28950	22	R2 28990	<5
R2 28951	<5	R2 28991	10
R2 28952	6	R2 28992	5
R2 28953	<5	R2 28993	96
R2 28954	78	R2 28994	197
R2 28955	<5	R2 28995	<5
R2 28956	<5	R2 28996	204
R2 28957	<5	R2 28997	6
R2 28958	6	R2 28998	14
R2 28959	<5	R2 28999	<5
R2 28960	18	R2 29000	<5
R2 28961	<5	R2 29110	<5
R2 28962	<5	R2 29111	<5
R2 28963	<5	R2 29112	<5
R2 28964	<5	R2 29113	11
R2 28965	<5	R2 29114	<5
R2 28966	<5	R2 29115	6
R2 28967	<5	R2 29116	5
R2 28968	<5	R2 29117	6
R2 28969	<5	R2 29118	9
R2 28970	11	R2 29119	8
R2 28971	<5	R2 29120	<5
R2 28972	41	R2 29121	15
R2 28973	10	R2 29122	<5
R2 28974	37	R2 29123	5
R2 28975	16	R2 29123	<5
R2 28976	10	R2 29124	9
R2 28977	5	R2 29125	5
R2 28978	7	R2 29126	8
R2 28979	<5	R2 29127	<5
R2 28980	20	R2 29128	11
R2 28981	<5	R2 29129	6
R2 28982	7	R2 29130	2610
R2 28983	21	R2 29132	6
R2 28984	223	R2 29133	80
R2 28985	28	R2 29134	5
R2 28986	25	R2 29135	<5

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Geochemical Lab Report

REPORT: V88-07914.0 | PROJECT: FM-5710 | PAGE 3

SAMPLE NUMBER	ELEMENT UNITS	Au PPB	SAMPLE NUMBER	ELEMENT UNITS	Au PPB
R2 29136		6			
R2 29137		40			
R2 29138		<5			
R2 29139		8			
R2 29502		71			
R2 29503		753			
R2 29517		<5			
R2 29518		<5			
R2 29519		6			
R2 29520		9			
R2 29521		145			
R2 29522		<5			
R2 29523		21			
R2 29524		<5			
R2 29525		10			
R2 29526		14			
R2 29527		<5			
R2 29528		320			

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Certificate of Analysis

REPORT: V88-07914.6 (COMPLETE)

REFERENCE INFO:

CLIENT: HOMESTAKE MINERAL DEVELOPMENT COMPANY
PROJECT: FM-5710

SUBMITTED BY: D. McIVOR
DATE PRINTED: 25-OCT-88

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	WT Test Weight	1	0.01 G		
2	WT-100 -100 Pulp Weight	1	1 G		
3	WT+100 +100 Pulp Weight	1	0.01 G		
4	AU DUP Gold duplicate -100	1	0.002 OPT		
5	AU DUP Gold duplicate -100	1	0.002 OPT		
6	Au AVG Average of -100 Au	1	0.002 OPT		
7	Au+100 Gold in +100 mesh.	1	0.01 OPT		
8	Au+100 Gold in +100 mesh	1	0.001 MG		
9	Au TOT Au in total sample.	1	0.002 OPT		

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
R ROCK OR BED ROCK	1	6 -100	1	ASSAY PREP	1

REPORT COPIES TO: MR. PETER RONNING
MR. DUNCAN McIVOR

INVOICE TO: MR. PETER RONNING

Bondar-Clegg & Company Ltd.
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Certificate of Analysis

REPORT: V88-07914.6 | PROJECT: EM-5710 | PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	WT G	WT-100 G	WT+100 G	AU DUP OPT	AU DUP OPT	Au AVG OPT	Au+100 OPT	Au+100 MG	Au TOT OPT
R6 29130		29.17	725	35.33	0.077	0.081	0.079	0.06	0.068	0.078

·ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

MASTEN
NTS: FORTY-MILE
11.YK.116.07
PAR.

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 AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: ROCK PULP

DATE RECEIVED: SEP 27 1988 DATE REPORT MAILED: Sept 30/88 ASSAYER. C. Leong .D.TOYE OR C.LEONG, CERTIFIED B.C. ASSAYERS

HOMESTAKE MINERAL DEV. CO. File # 88-4818 Page 1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM
28548	1	19	5	25	.3	734	43	427	2.53	41	6	ND	1	420	2	82	3	16	13.56	.001	2	475	8.34	272	.01	5	.10	.01	.02	1
28549	1	15	74	58	.4	31	14	283	3.95	27	5	ND	6	13	1	2	2	8	.23	.028	15	51	.42	57	.01	3	.88	.01	.14	2
28800	1	6	12	19	.1	9	2	667	.67	32	6	ND	1	994	1	3	2	2	23.97	.009	5	39	.30	34	.01	4	.06	.01	.04	1
28801	1	2	11	16	.1	4	2	596	.68	105	5	ND	1	1180	1	2	2	1	23.41	.005	4	62	.18	14	.01	6	.03	.01	.01	1
28802	1	45	18	97	.3	37	22	670	4.00	2321	5	ND	2	669	1	2	3	13	16.20	.307	17	40	.62	63	.01	13	.38	.01	.13	2
28803	3	77	29	405	.4	94	50	283	15.79	180	9	ND	5	185	5	17	2	94	3.03	.516	44	60	3.07	48	.01	5	4.82	.01	.07	14
28804	1	24	15	26	.3	15	12	795	2.02	1086	10	ND	2	1363	1	2	2	5	27.39	.039	10	35	.56	20	.01	5	.12	.01	.04	3
28805	1	35	22	679	.2	71	19	1726	2.84	1012	5	ND	15	68	17	2	3	5	2.29	.033	22	98	.09	122	.01	7	.77	.01	.17	2
28806	1	45	13	193	.5	30	13	732	2.44	841	5	ND	11	69	2	2	2	4	.84	.018	24	64	.06	72	.01	8	.36	.01	.23	1
28807	2	19	149	470	1.2	38	7	208	1.95	318	5	ND	2	30	1	3	2	6	.08	.033	7	219	.02	124	.01	15	.14	.01	.05	1
28808	2	65	170	1167	2.5	110	25	1365	3.27	1015	5	ND	2	30	4	25	2	7	.25	.068	7	222	.03	181	.01	6	.24	.01	.09	1
28809	1	72	15	82	.6	28	7	1884	1.67	45	5	ND	1	55	1	2	2	7	.49	.018	6	103	.18	379	.01	6	.22	.01	.11	1
28810	1	136	17	57	.5	30	7	8764	1.43	34	5	ND	1	225	1	2	2	3	3.00	.025	2	138	.78	171	.01	5	.07	.01	.03	1
28811	1	10	3	11	.1	10	3	1009	.64	6	5	ND	1	29	1	2	2	2	.49	.002	2	250	.20	45	.01	3	.11	.01	.02	1
28850	3	116	3	85	.1	34	6	3773	5.20	7	5	ND	1	96	1	2	2	13	.52	.048	2	106	.15	52	.01	4	.15	.01	.02	1
28851	1	38	21	41	.3	27	3	1194	.81	8	5	ND	1	169	1	2	2	2	.96	.007	2	173	.34	138	.01	2	.05	.01	.04	1
28852	1	76	2	51	.2	37	10	2905	1.92	62	5	ND	1	287	1	2	2	5	1.55	.008	4	78	.62	142	.01	3	.23	.01	.15	1
28853	1	9	3	7	.1	5	1	535	.48	2	5	ND	1	24	1	2	2	4	.11	.030	5	219	.01	135	.01	3	.08	.01	.03	1
28854	2	16	9	9	.2	4	2	63	1.23	26	5	ND	2	132	1	2	2	7	.05	.055	7	204	.02	286	.01	3	.14	.01	.08	1
28855	1	4	2	3	4.2	4	2	50	.31	2	5	ND	1	16	1	2	2	4	.01	.003	3	175	.01	1488	.01	3	.11	.01	.07	1
28856	1	99	32	19	6.5	10	1	105	.63	12	6	ND	1	7	1	2	2	4	.01	.009	2	220	.01	164	.01	6	.11	.01	.04	1
28857	1	31	2	15	.2	8	2	1243	1.46	54	5	ND	1	13	1	2	2	6	.02	.002	4	170	.01	203	.01	5	.13	.01	.07	1
28858	12	287	15	166	1.9	23	14	28450	16.04	2183	8	ND	2	420	3	2	2	8	2.24	.171	2	90	.35	19	.01	12	.12	.01	.03	1
28859	2	44	9	187	.2	42	7	6108	1.73	17	5	ND	1	116	1	2	3	7	.53	.003	4	205	.08	280	.01	11	.07	.01	.03	1
28860	1	683	20	329	1.3	54	17	12696	21.23	700	18	ND	2	338	3	21	4	15	.91	.505	5	69	.03	26	.01	14	.30	.01	.07	4
28861	2	73	10	48	.3	25	6	5900	2.41	17	5	ND	1	110	1	3	2	6	1.27	.002	2	241	.07	162	.01	7	.09	.01	.04	1
28862	1	30	8	14	.2	7	2	416	.61	8	5	ND	1	22	1	2	2	2	.12	.014	4	217	.01	103	.01	3	.04	.01	.03	1
28863	1	8	14	36	.9	782	44	1722	3.25	1078	5	ND	2	559	1	619	2	14	9.93	.003	2	416	7.35	63	.01	8	.09	.01	.03	2
28864	3	320	7	252	.3	194	17	1600	1.29	60	7	ND	2	75	2	17	2	16	1.47	.013	6	114	.43	447	.01	4	.34	.01	.07	2
28865	1	365	9	161	.1	129	8	1560	1.42	18	5	ND	3	15	2	2	2	9	.08	.008	9	135	.07	508	.01	5	.48	.01	.10	2
28866	1	5	14	13	.1	7	4	474	1.36	22	6	ND	3	1353	1	4	2	2	25.96	.018	11	12	.32	18	.01	3	.15	.01	.08	1
28867	1	19	5	31	.1	15	8	576	2.54	245	5	ND	4	470	1	2	2	3	11.22	.025	12	41	.70	51	.01	2	.21	.01	.12	1
28868	1	27	12	33	.1	21	11	1283	2.62	54	5	ND	2	754	2	2	2	4	17.79	.023	11	20	.44	29	.01	2	.23	.01	.11	1
28869	1	24	5	51	.1	15	7	687	2.57	252	5	ND	2	673	1	2	2	3	14.24	.021	7	33	.68	31	.01	2	.20	.01	.10	1
28870	1	8	4	14	.1	6	1	577	1.37	295	5	ND	1	925	1	2	2	2	22.17	.015	7	39	.43	24	.01	2	.07	.01	.03	1
28871	1	104	18	44	.6	28	14	388	3.85	111	5	ND	9	79	1	3	2	9	1.36	.031	27	116	.61	51	.01	6	.96	.01	.14	4
STD C	19	63	42	133	7.3	73	32	1037	4.27	44	23	7	40	51	20	21	24	60	.46	.096	39	57	.91	183	.07	33	1.95	.06	.14	11

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM
28872	1	17	97	20	.8	12	5	631	1.72	409	5	ND	8	143	1	2	2	3	4.41	.014	14	98	.51	89	.01	2	.23	.01	.08	2
28873	1	8	17	13	.1	7	5	850	1.50	22	5	ND	8	159	1	2	3	3	9.03	.017	15	67	.38	308	.01	3	.36	.01	.09	1
28874	1	4	34	10	.1	4	2	776	.90	34	5	ND	2	197	1	2	2	1	6.31	.005	3	127	.61	25	.01	3	.08	.01	.03	1
28875	1	4	454	259	1.1	5	6	3108	2.57	12267	6	ND	3	390	2	2	3	2	11.97	.009	6	70	1.74	33	.01	13	.07	.01	.04	1
28876	1	4	1934	357	5.0	10	9	1677	4.15	47631	5	ND	4	208	3	16	2	2	5.34	.008	4	84	1.01	44	.01	10	.14	.01	.07	1
28877	1	5	4320	2262	11.8	12	10	2041	3.40	46713	5	ND	5	228	21	44	2	2	5.33	.014	6	63	1.37	75	.01	7	.28	.01	.11	2269
28878	1	68	41	70	.2	25	14	614	2.96	242	5	ND	10	67	1	2	2	5	1.58	.026	24	110	.37	90	.01	3	.85	.01	.18	14
28879	1	2	47	29	.6	8	6	2092	2.23	34331	5	ND	4	707	2	3	2	2	15.48	.015	5	53	.44	61	.01	7	.12	.01	.08	9
28880	1	3	13	8	.1	1	2	747	1.61	8482	5	ND	1	1418	1	2	2	1	23.53	.002	8	53	.64	22	.01	2	.03	.01	.02	1
28881	1	3	16	50	.3	9	7	762	1.97	26983	5	ND	3	52	1	2	2	2	1.59	.005	4	114	.43	52	.01	9	.13	.01	.07	188
28882	1	4	10	90	.3	6	4	1117	1.73	11356	5	ND	3	107	1	3	2	2	3.25	.005	3	109	.86	68	.01	13	.11	.01	.04	396
28883	1	14	26	40	.2	11	5	902	1.97	3323	5	ND	6	107	1	2	2	2	5.89	.014	9	119	.39	72	.01	2	.23	.01	.11	4
28884	1	5	1130	17	8.5	4	4	1103	1.59	4483	5	ND	1	68	1	2	24	1	3.97	.068	2	129	.90	32	.01	8	.18	.01	.05	3
28885	1	25	16	81	.1	28	10	487	2.73	145	5	ND	13	41	1	2	2	6	1.15	.025	35	86	.24	62	.01	5	.45	.01	.14	2
28886	1	16	27	53	.4	31	13	910	2.99	2867	5	ND	11	56	1	2	3	4	1.40	.017	22	105	.36	317	.01	18	.40	.01	.18	4
28887	1	5	4	13	.1	4	2	523	.47	20	5	ND	1	28	1	2	2	1	.93	.008	2	211	.13	25	.01	9	.17	.01	.08	1
28888	1	21	6	15	.1	9	5	890	1.04	37	5	ND	1	39	1	3	3	1	1.28	.003	3	183	.36	146	.01	12	.05	.01	.01	1
28889	3	15	18	65	.1	43	20	696	3.91	17	5	ND	9	48	1	2	2	9	.92	.035	26	44	.81	49	.01	2	1.59	.01	.18	2
28890	1	182	10	61	.6	36	24	6172	4.89	157	5	ND	4	153	1	2	2	6	5.02	.015	9	73	1.64	45	.01	3	.63	.01	.14	1
28891	1	10	5	99	.1	46	23	1008	3.87	13	5	ND	1	39	1	2	2	9	1.25	.012	5	129	1.12	39	.01	5	1.57	.01	.05	1
28892	1	9	5	61	.1	36	14	844	2.05	7481	5	ND	9	42	1	2	2	3	1.77	.033	13	53	.56	92	.01	18	.33	.01	.16	1
28893	1	64	19	201	.2	43	21	1175	3.58	323	5	ND	10	54	2	2	2	10	1.65	.031	25	85	.69	319	.01	5	.51	.02	.18	3
28894	1	4	18	16	.2	21	13	892	1.54	17315	5	ND	5	41	1	2	2	2	1.20	.016	13	116	.40	115	.01	24	.20	.01	.10	1
28895	1	29	11	319	.1	65	21	1453	3.71	1372	5	ND	12	55	1	2	2	8	.95	.029	37	110	.47	112	.01	8	.63	.01	.28	1
28896	1	4	93	35	.1	8	10	3125	1.54	32	5	ND	1	139	1	13	2	2	3.45	.043	2	142	1.40	103	.01	4	.10	.01	.05	1
28897	1	45	10	38	.2	36	16	364	3.49	979	5	ND	8	27	1	2	2	6	.36	.041	26	122	.18	97	.01	21	.64	.01	.30	1
28898	1	25	9	110	.1	26	14	659	3.31	53	5	ND	9	133	1	2	2	8	4.13	.021	19	94	.89	40	.01	2	.40	.01	.08	1
28899	1	10	104	33	.2	21	12	1086	1.72	12539	5	ND	11	57	1	2	2	4	2.27	.023	23	73	.71	76	.01	40	.40	.01	.17	1
28900	1	11	44	90	.1	19	9	1849	2.21	57	5	ND	7	175	2	2	2	4	4.58	.026	14	83	.61	33	.01	4	.66	.01	.09	2
29001	2	46	36	57	.1	32	9	241	3.53	32	5	ND	7	27	1	2	2	15	.61	.092	19	61	.42	76	.01	4	1.03	.01	.15	1
29002	1	32	26	85	.1	25	11	949	3.89	15	5	ND	8	93	1	2	2	10	1.87	.028	24	63	.76	60	.01	2	1.84	.01	.16	1
29003	1	13	252	32	.3	13	5	2116	1.66	15	5	ND	2	369	1	2	2	3	8.76	.020	5	101	.32	127	.01	2	.51	.01	.05	1
29004	1	8	82	32	.1	16	6	2031	1.72	7	5	ND	3	313	1	2	2	4	6.88	.012	7	118	.38	513	.01	2	.50	.01	.06	1
29005	1	27	75	76	.1	26	14	1333	3.52	16	5	ND	7	136	1	2	2	7	2.54	.028	24	66	.76	64	.01	2	1.54	.01	.07	3
29006	1	9	9	54	.1	11	3	1649	1.10	8	5	ND	1	424	1	2	2	4	11.87	.004	2	80	.48	134	.01	2	.31	.01	.02	1
29007	1	17	41	17	.1	11	6	2108	2.31	8	5	ND	3	186	1	2	2	3	6.33	.005	5	93	1.90	168	.01	2	.14	.01	.04	1
STD C	18	63	42	133	6.9	68	31	1020	4.11	44	22	8	38	49	19	17	24	60	.49	.095	40	55	.97	180	.07	33	1.95	.06	.13	13

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM
29008	1	38	22	99	.2	40	20	657	5.06	16	5	ND	9	38	1	2	4	15	.67	.065	29	54	.84	133	.01	6	1.69	.01	.17	5
29009	2	17	16	70	.3	575	36	731	3.66	70	5	ND	1	156	1	20	3	29	3.54	.003	3	261	8.46	70	.01	8	.30	.01	.01	3
29010	2	52	41	166	.3	78	15	640	2.96	37	5	ND	6	44	2	2	4	38	.48	.018	17	74	1.83	293	.01	5	.50	.01	.04	2
29011	2	21	5	84	.2	637	38	710	3.03	93	5	ND	1	68	1	2	4	20	1.63	.006	4	474	7.56	77	.01	6	.25	.01	.01	2
29012	2	41	10	104	.2	90	14	849	3.52	7	5	ND	5	62	1	2	3	31	1.26	.074	17	82	2.28	129	.01	3	.42	.01	.04	2
29013	1	37	12	103	.1	48	12	893	3.06	7	5	ND	4	49	1	2	2	12	.91	.108	20	73	.81	213	.01	11	.37	.01	.11	2
29014	1	18	195	293	1.2	118	20	4119	11.24	2158	5	ND	2	73	4	4	5	12	3.07	.005	2	190	1.56	26	.01	4	.18	.01	.06	1
29015	1	99	25	126	.1	66	32	1118	8.33	9	5	ND	1	113	2	2	2	192	4.53	.073	6	43	3.11	116	.01	2	1.40	.01	.01	1
29016	1	109	9	128	.3	77	33	1100	7.88	10	5	ND	1	125	1	2	2	186	4.48	.067	5	39	3.39	113	.01	6	.74	.01	.01	1
29017	1	175	1521	2154	5.9	30	8	954	1.59	75	5	ND	1	43	17	2	2	8	.86	.013	5	110	.67	119	.01	2	.21	.01	.10	1
29018	1	57	7	100	.1	74	23	913	5.69	8	5	ND	1	190	2	2	2	128	7.68	.051	4	66	4.46	181	.01	2	.55	.01	.01	1
29019	1	115	90	329	1.0	71	24	3357	5.82	612	5	ND	1	140	3	3	2	61	5.61	.045	2	31	2.77	131	.01	2	.40	.01	.12	1
29020	1	85	102	248	.9	44	17	6373	5.11	1934	5	ND	1	111	2	2	2	28	6.00	.008	2	22	2.74	45	.01	2	.25	.01	.13	1
29021	1	40	48	209	.3	511	27	1118	2.91	432	5	ND	1	246	2	2	2	26	7.93	.008	2	179	7.14	175	.01	2	.21	.01	.04	1
29022	1	4	5	77	.1	524	33	999	2.81	100	5	ND	1	100	1	2	2	11	3.42	.001	2	296	9.67	79	.01	2	.12	.01	.01	1
29023	1	14	21	41	.8	38	20	7605	6.05	3138	5	ND	1	155	2	2	2	19	9.54	.033	2	14	3.27	35	.01	5	.23	.01	.15	1
29024	1	69	2	100	.1	68	29	1220	7.73	15	6	ND	1	136	2	2	4	148	6.41	.052	5	44	3.60	281	.01	2	1.54	.01	.03	2
29025	1	63	7	109	.4	80	35	1180	8.32	23	5	ND	1	101	2	2	4	160	4.01	.054	5	53	3.09	255	.01	2	1.99	.01	.02	8
29026	1	82	13	105	.3	84	37	1265	8.46	24	5	ND	2	117	2	3	2	161	4.51	.069	5	50	3.19	255	.01	2	2.00	.01	.03	5
29027	1	59	15	104	.3	90	38	1250	8.26	19	6	ND	2	134	3	2	3	165	4.59	.061	6	74	3.34	311	.01	3	1.94	.01	.05	7
29028	1	42	15	116	.3	76	28	1085	6.31	14	9	ND	3	154	2	2	2	122	6.38	.056	7	59	3.43	358	.01	7	.94	.01	.04	5
29029	1	74	92	384	.9	68	30	5822	6.03	2340	5	ND	2	107	4	4	3	47	5.08	.059	2	19	2.22	49	.01	7	.37	.01	.18	1
29030	1	54	50	259	.9	92	37	3824	9.44	2758	8	ND	2	128	3	13	2	70	4.98	.057	3	30	2.14	35	.01	10	.72	.01	.11	3
29031	1	68	103	205	1.1	63	35	3283	8.74	1934	9	ND	2	125	3	13	2	88	5.67	.054	3	28	2.98	32	.01	7	.66	.01	.09	3
29032	1	65	461	582	2.2	47	29	3462	7.32	2792	9	ND	1	182	6	14	2	68	7.56	.039	3	32	3.54	36	.01	4	.78	.01	.08	2
29033	1	66	8	111	.3	59	32	1250	7.66	47	5	ND	1	162	2	2	2	95	5.25	.054	3	24	2.99	147	.01	3	.50	.01	.09	1
29034	1	55	9	99	.4	58	32	1140	7.34	33	8	ND	2	140	3	4	2	126	6.19	.034	3	29	3.47	166	.01	4	.72	.01	.05	4
29035	1	51	2	90	.1	48	21	1005	5.46	10	5	ND	1	187	2	2	2	83	8.91	.039	3	26	3.78	186	.01	4	.39	.01	.05	1
29036	1	59	7	331	.1	46	26	1087	7.39	55	5	ND	1	179	4	2	2	84	5.82	.053	3	15	3.17	365	.01	2	.40	.01	.10	1
29037	1	40	58	135	.2	10	3	1021	1.97	5	5	ND	2	105	2	2	2	7	5.21	.031	5	68	1.69	141	.01	2	.16	.01	.05	1
29038	2	38	12	173	.1	35	10	503	3.11	14	5	ND	6	66	1	2	2	15	1.67	.082	17	59	.71	83	.01	2	.30	.01	.13	1
29039	1	10	5	16	.1	2	3	1136	3.70	8	5	ND	1	158	1	2	2	19	15.02	.004	2	28	6.00	117	.01	2	.16	.01	.05	1
29040	1	63	3	93	.1	44	19	1027	5.73	7	5	ND	1	161	1	2	2	91	3.93	.077	8	43	1.83	95	.01	2	.61	.01	.02	1
29041	1	27	8	40	.1	38	10	726	3.19	5	5	ND	1	328	1	2	2	57	12.29	.012	2	44	6.30	202	.01	2	.29	.01	.01	1
29042	1	39	32	67	.3	396	18	1896	2.96	93	5	ND	2	141	1	2	2	36	4.21	.014	5	902	3.61	67	.01	2	.87	.01	.01	1
29043	1	25	6	38	.2	751	35	2120	2.69	90	5	ND	1	315	1	2	2	14	9.79	.001	2	821	6.08	82	.01	2	.43	.01	.01	3
STD C	21	62	44	132	7.4	72	32	1054	4.12	45	22	7	40	52	20	18	23	60	.47	.095	39	56	.93	182	.07	31	2.00	.06	.14	13

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM
29044	1	76	8	88	.3	50	27	1226	6.05	9	8	ND	2	170	2	2	2	154	5.38	.015	3	46	4.69	229	.01	4	.44	.01	.01	3
29045	1	511	67	56	1.0	860	59	2951	3.30	125	5	ND	2	280	2	2	2	26	9.16	.007	5	813	4.09	46	.01	2	.39	.01	.01	2
29046	1	87	11	32	.2	32	6	486	1.23	5	5	ND	1	39	1	2	2	9	1.09	.002	2	60	.66	175	.01	2	.18	.01	.05	1
29047	1	15	173	46	.8	479	28	1773	2.37	233	5	ND	1	290	1	6	2	23	5.96	.007	2	637	5.04	28	.01	2	.72	.01	.01	1
29048	1	8	4	12	.1	16	2	805	1.60	18	5	ND	1	176	1	2	2	8	6.28	.001	2	87	2.88	42	.01	6	.08	.01	.01	1
29049	1	14	2	67	.1	960	46	1151	3.00	47	5	ND	1	246	1	2	2	30	6.61	.001	2	711	4.45	141	.01	7	.39	.01	.04	1
29050	1	52	7	156	.3	1385	82	1375	5.76	1068	5	ND	3	115	1	158	2	48	6.03	.024	4	438	3.13	374	.01	2	.37	.01	.09	1
29051	1	25	5	34	.2	258	16	2526	1.94	333	5	ND	1	349	1	19	2	5	10.68	.002	2	147	5.67	196	.01	2	.06	.01	.03	1
29052	1	4	3	28	.1	28	3	490	1.11	8	5	ND	1	25	1	2	2	4	.71	.011	5	154	.61	40	.01	2	.09	.01	.02	1
29053	1	8	2	14	.1	18	3	1022	3.37	198	5	ND	1	226	1	2	2	8	15.95	.001	2	31	6.61	40	.01	2	.08	.01	.01	3
29054	1	73	13	31	1.3	642	35	1062	2.12	1047	5	ND	1	213	1	212	2	6	11.68	.001	2	339	5.12	47	.01	2	.05	.01	.02	1
29055	1	19	45	21	.1	13	5	1349	1.54	4	5	ND	2	197	1	2	2	3	4.07	.040	7	104	.54	18	.01	12	.29	.02	.05	1
29056	1	23	37	9	.1	16	4	793	.84	4	5	ND	1	100	1	2	2	1	2.33	.003	2	150	.18	13	.01	12	.07	.01	.01	1
29057	1	53	31	103	.1	72	44	1812	8.56	85	5	ND	2	199	2	2	2	7	7.36	.072	10	31	2.75	34	.01	2	.14	.01	.10	1
29058	3	52	32	104	.2	30	13	1163	3.94	13	5	ND	8	80	1	2	2	15	1.86	.092	19	100	.76	88	.01	4	.80	.01	.11	3
29059	1	4	63	18	.2	7	3	1882	1.74	4	5	ND	2	133	1	2	2	3	3.52	.032	4	133	1.07	34	.01	7	.14	.02	.03	2
29060	2	245	34	40	.4	32	18	708	1.78	6	5	ND	3	107	1	2	5	2	2.39	.010	18	175	.11	45	.01	3	.16	.01	.03	1
29061	1	9	23	41	.1	16	7	1470	1.47	3	9	ND	5	435	1	2	2	5	13.05	.034	10	55	.53	44	.01	3	.25	.01	.04	3
29062	1	5	204	13	.2	161	13	481	1.99	13	5	ND	1	53	1	73	4	8	.99	.003	2	117	12.06	12	.01	5	.02	.01	.01	2
29063	1	2	7	9	.3	495	24	875	2.66	865	6	ND	2	1859	1	159	3	12	17.23	.002	2	333	7.84	125	.01	4	.04	.01	.02	2
29064	1	27	10	74	.2	1254	73	592	3.63	952	5	ND	1	374	2	200	2	17	2.28	.005	2	329	11.01	35	.01	4	.13	.01	.01	2
29065	1	2	5	13	.1	402	21	690	2.45	93	5	ND	1	287	1	112	2	7	3.51	.001	2	114	13.23	28	.01	2	.02	.01	.01	3
29066	1	8	63	10	.2	183	11	775	1.76	291	5	ND	1	1983	1	123	2	6	13.17	.001	2	163	7.09	101	.01	2	.02	.01	.01	1
29067	1	8	6	12	.1	405	22	168	1.84	55	5	ND	1	313	1	79	2	3	2.02	.003	2	151	12.01	32	.01	2	.02	.01	.01	1
29068	1	9	7	17	.1	234	12	285	1.86	66	5	ND	1	246	1	34	2	6	2.62	.003	2	120	9.09	34	.01	2	.05	.01	.02	1
29069	1	1	10	4	.1	1	1	331	.69	3	5	ND	1	1315	1	2	2	1	29.25	.008	4	12	.30	11	.01	2	.02	.01	.01	1
29070	1	3	15	3	.1	6	2	362	.63	3	5	ND	1	739	1	2	2	1	20.69	.004	4	41	.17	23	.01	3	.08	.01	.01	1
29071	1	18	3	68	.1	26	11	460	3.34	2	5	ND	13	383	1	2	2	3	6.59	.028	28	14	.35	57	.01	2	.13	.01	.07	1
29072	1	1	7	2	.1	2	1	337	.33	2	5	ND	1	1335	1	2	2	1	28.14	.004	3	22	.17	11	.01	2	.02	.01	.01	1
29073	1	6	23	21	.1	10	4	466	.94	9	5	ND	9	102	1	2	2	1	2.79	.021	17	43	.11	26	.01	2	.10	.01	.06	1
29074	1	3	8	9	.1	4	2	246	.37	11	5	ND	1	104	1	2	2	1	1.98	.003	2	89	.06	3	.01	2	.06	.01	.01	1
29075	1	5	2	17	.1	7	3	726	1.58	34	5	ND	1	94	1	2	3	1	2.54	.037	2	66	.70	28	.01	6	.05	.02	.01	1
29076	4	29	8	91	.6	26	5	796	.94	5	6	ND	2	192	1	2	3	8	13.43	.108	3	30	2.64	46	.01	12	.17	.01	.07	1
29077	1	51	23	5	.3	5	2	859	1.07	23	5	ND	2	63	1	2	4	6	2.60	.005	4	80	1.07	130	.01	5	.08	.01	.05	1
29078	14	87	25	61	1.0	43	10	272	3.16	39	5	ND	3	29	1	3	3	13	.29	.024	12	69	.05	218	.01	2	.13	.01	.07	1
29079	3	20	9	23	.1	13	2	127	.47	6	5	ND	3	28	1	2	2	3	.30	.008	11	61	.11	201	.01	4	.10	.01	.05	2
STD C	18	62	44	131	6.8	70	31	1023	3.83	44	21	8	38	49	19	18	19	61	.48	.096	40	53	.93	182	.07	33	1.85	.06	.13	11

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM
29080	1	19	13	32	.2	26	6	898	1.83	33	5	ND	3	136	1	3	2	8	3.89	.002	2	100	1.67	164	.01	2	.12	.01	.06	1
29081	7	63	20	28	.3	26	7	692	1.49	30	5	ND	2	48	1	4	2	5	1.94	.001	3	85	.74	82	.01	2	.06	.01	.03	1
29082	1	29	9	31	.1	27	8	1138	2.60	62	5	ND	3	128	1	3	2	11	5.14	.004	2	80	2.22	75	.01	10	.07	.01	.02	1
29083	1	2	12	36	.2	557	39	553	2.85	51	5	ND	3	235	1	15	2	11	7.68	.002	2	412	10.32	142	.01	3	.08	.01	.01	1
29084	1	4	48	45	.2	913	62	1158	6.06	113	9	ND	4	218	3	85	2	21	13.01	.001	2	636	7.12	398	.01	3	.26	.01	.01	2
29085	1	4	2	22	.1	809	85	750	2.46	97	5	ND	1	83	1	62	2	17	3.14	.002	2	927	9.05	76	.01	5	.30	.01	.01	1
29087	1	4	6	19	.1	782	41	586	3.36	44	5	ND	1	81	1	2	2	20	2.91	.001	2	630	11.89	63	.01	7	.38	.01	.01	1
29088	1	5	41	13	.2	438	25	371	2.61	156	5	ND	1	173	1	103	2	11	1.54	.001	2	279	11.97	30	.01	2	.04	.01	.01	1
29089	1	14	7	26	.2	1197	60	530	5.12	50	5	ND	3	175	2	3	2	20	7.02	.002	2	470	12.78	86	.01	2	.12	.01	.01	1
29090	1	12	3	29	.1	1503	69	783	5.19	67	7	ND	3	313	2	5	5	16	11.76	.001	2	547	8.78	687	.01	2	.11	.01	.01	1
29091	1	8	10	22	.2	1231	67	549	3.88	68	5	ND	1	90	1	4	2	18	2.31	.001	2	1003	12.81	1005	.01	6	.22	.01	.02	2
29092	1	9	51	72	.3	160	19	1702	3.31	37	5	ND	5	111	1	2	2	29	4.27	.026	10	126	1.99	126	.01	4	.29	.01	.04	1
29093	1	140	14	34	.6	24	6	1180	1.79	71	5	ND	3	83	1	3	2	5	1.82	.009	6	63	.90	116	.01	4	.11	.01	.07	1
29094	1	34	8	24	.2	20	6	1751	1.16	5	5	ND	2	145	1	3	2	8	3.95	.013	4	99	.43	95	.01	3	.40	.01	.03	1
29095	1	5	17	113	.3	362	41	1622	6.30	38	5	ND	1	68	2	4	2	90	3.03	.020	2	433	4.70	97	.01	2	2.53	.01	.01	8
29096	8	164	28	119	.1	91	33	981	2.71	7	5	ND	4	44	1	2	2	20	1.64	.039	20	59	.30	152	.01	3	.16	.01	.03	1
29097	1	82	9	49	.2	46	22	1612	4.23	16	5	ND	1	153	1	2	2	96	6.00	.026	3	157	3.15	28	.01	2	2.93	.01	.01	2
29098	1	5	8	10	.1	10	3	1079	.70	4	6	ND	4	358	1	2	2	11	15.48	.004	2	53	.35	19	.01	2	.29	.01	.01	1
29099	1	29	4	71	.2	74	18	3136	3.95	15	5	ND	1	248	1	2	2	55	8.56	.024	2	142	2.70	32	.01	2	2.62	.01	.01	1
29100	1	68	2	48	.2	28	14	999	3.89	9	5	ND	1	138	1	2	2	68	4.96	.036	8	31	1.67	26	.01	2	2.01	.01	.01	1
29101	1	14	6	40	.1	9	3	104	1.19	4	5	ND	3	6	1	2	2	25	.13	.046	13	72	.28	145	.03	2	.54	.01	.26	1
29102	1	10	64	25	.1	7	4	190	1.21	2	5	ND	8	7	1	5	2	10	.13	.023	11	48	.20	41	.04	2	.44	.01	.08	1
29103	3	43	14	113	.1	257	41	959	6.40	7	5	ND	3	100	1	2	2	50	.92	.230	27	80	4.92	173	.44	4	2.24	.39	.71	3
29104	1	17	119	40	.1	13	4	108	.79	3	5	ND	5	4	1	5	3	17	.14	.051	7	68	.13	38	.01	2	.46	.01	.13	1
29105	1	7	23	33	.1	15	6	1279	1.90	12	6	ND	10	524	1	2	2	3	16.42	.023	20	15	.52	17	.01	2	.75	.01	.06	2
29106	1	13	10	49	.1	22	9	452	2.94	16	6	ND	10	289	1	2	5	3	7.55	.013	17	30	.83	27	.01	2	.14	.01	.06	1
29107	1	4	4	12	.2	11	4	144	.90	3	5	ND	1	31	1	2	2	1	.80	.004	2	139	.14	12	.01	2	.03	.01	.01	1
29108	1	21	8	57	.3	36	11	289	3.44	141	5	ND	5	51	1	3	3	6	2.12	.004	4	51	.07	64	.01	5	.17	.01	.07	1
29109	1	6	15	34	.7	18	7	416	2.55	104	5	ND	9	62	1	4	2	3	1.45	.008	9	80	.33	69	.01	2	.12	.01	.08	1
29151	3	44	53	485	.2	78	15	283	13.66	16	5	ND	6	13	1	5	2	7	.02	.171	7	45	.01	99	.01	4	.27	.01	.05	1
29152	1	3	4	21	.1	6	2	90	.57	3	5	ND	1	2	1	2	2	1	.01	.005	2	92	.01	21	.01	2	.06	.01	.02	1
29153	1	94	17	368	.1	92	15	303	10.48	15	5	ND	3	28	1	5	2	15	.01	.104	7	50	.01	146	.01	2	.35	.01	.05	1
29154	1	10	17	84	.2	8	20	793	6.01	30	5	ND	5	144	1	2	2	31	3.64	.049	8	18	2.15	200	.01	5	.40	.01	.12	1
29155	1	5	18	162	.1	15	9	1322	2.42	37	5	ND	2	183	1	2	5	6	4.51	.030	2	66	2.06	149	.01	4	.15	.01	.02	1
29156	1	37	9	22	.3	17	2	196	.56	23	5	ND	1	13	1	2	2	9	.10	.006	5	84	.04	385	.01	7	.15	.01	.07	1
29157	1	10	2	73	.1	9	18	930	5.00	13	5	ND	6	135	1	2	2	58	2.79	.073	16	17	2.43	150	.01	6	.88	.02	.08	2
STD C	18	59	38	132	6.6	67	29	1026	4.12	43	22	7	36	47	18	20	22	57	.45	.090	38	55	.90	171	.06	33	1.83	.06	.13	13

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM
29158	1	42	2	98	.1	218	31	891	6.15	5	5	ND	2	135	1	2	2	79	.89	.191	22	146	4.17	172	.61	2	2.94	.71	1.22	1
29159	1	46	5	44	.1	13	4	1204	1.38	6	5	ND	2	215	1	2	2	12	5.00	.033	8	27	.58	214	.01	2	.73	.01	.12	1
29160	1	76	10	69	.1	26	11	1312	1.95	7	5	ND	2	59	1	2	2	18	1.26	.047	12	29	1.28	514	.01	2	1.24	.01	.11	1
29161	1	17	3	9	.1	15	4	229	.79	6	5	ND	1	7	1	2	2	3	.21	.011	3	159	.07	43	.01	4	.16	.01	.05	1
29162	1	21	2	19	.1	9	5	640	.71	2	5	ND	1	126	1	2	2	3	3.34	.018	4	35	.41	1821	.01	2	.37	.01	.04	1
29163	1	36	2	44	.1	16	7	311	1.60	2	5	ND	2	22	1	2	4	6	.35	.025	9	60	.67	1081	.01	2	.75	.01	.10	1
29164	1	20	6	38	.1	20	6	291	1.50	3	5	ND	8	9	1	2	2	10	.11	.032	23	52	.41	482	.01	5	.88	.01	.18	1
29165	1	8	22	1	.2	5	1	35	.49	8	5	ND	1	4	1	2	4	3	.01	.008	4	102	.01	222	.01	2	.13	.01	.07	1
29166	1	6	3	1	.2	7	2	50	.62	7	5	ND	1	5	1	2	2	2	.01	.010	2	158	.01	58	.01	3	.08	.01	.02	1
29167	1	42	10	7	.2	13	4	89	1.05	7	5	ND	2	5	1	3	3	4	.01	.020	5	98	.01	135	.01	2	.17	.01	.08	1
29168	3	25	9	68	.2	29	5	113	1.72	7	5	ND	5	14	1	3	2	16	.09	.023	15	76	.58	225	.01	2	.87	.01	.19	1
29169	1	14	9	32	.1	21	10	466	3.11	15	5	ND	2	334	1	2	3	8	4.34	.220	6	62	1.62	78	.01	9	.15	.03	.08	1
29170	1	15	10	90	.1	9	5	578	3.00	14	5	ND	5	16	1	3	2	16	.12	.053	17	48	1.70	70	.01	3	1.61	.01	.08	4
29171	1	35	18	73	.1	18	5	188	2.73	6	5	ND	8	9	1	2	2	9	.02	.064	27	56	.04	357	.01	2	.30	.01	.20	1
29172	1	6	49	7	.2	10	2	42	3.52	15	5	ND	10	121	1	2	2	5	.09	.090	8	140	.05	161	.01	2	.30	.17	.08	1
29173	1	3	28	1	.2	4	1	18	.72	4	5	ND	8	36	1	2	2	8	.01	.048	26	57	.04	460	.01	2	.35	.01	.20	1
29174	1	3	156	1	.5	4	1	16	.27	6	5	ND	3	6	1	2	2	2	.01	.014	10	57	.01	153	.01	3	.09	.01	.07	1
29175	1	15	7	1	.1	5	1	32	.37	2	5	ND	2	2	1	2	2	2	.01	.009	7	56	.01	43	.01	2	.08	.01	.06	1
29176	1	18	40	1	5.5	4	1	15	.42	12	5	ND	4	3	1	2	2	2	.01	.013	15	41	.01	240	.01	5	.09	.01	.07	1
29177	1	8	56	8	22.0	4	1	98	.44	133	5	ND	2	4	1	15	2	3	.01	.011	7	143	.01	157	.01	2	.13	.01	.09	1
29178	1	37	71	10	.7	3	1	26	.45	8	5	ND	1	2	1	2	2	2	.01	.005	5	45	.01	237	.01	2	.06	.01	.04	1
29179	1	11	1953	12	1.8	2	1	28	.35	8	5	ND	3	7	1	3	4	4	.01	.022	11	112	.02	490	.01	7	.20	.01	.09	1

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

MASTER
NB: Forty-Mile
11.YK.116.07
PAR

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 AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: ROCK PULP

DATE RECEIVED: OCT 5 1988 DATE REPORT MAILED: Oct 7/88 ASSAYER. C. Leong .D.TOYE OR C.LEONG, CERTIFIED B.C. ASSAYERS

HOMESTAKE MINERAL DEV. CO. File # 88-5015 Page 1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM
28601	1	10	8	22	.1	846	32	731	3.17	13	5	ND	1	34	1	2	2	11	.72	.001	2	860	17.59	289	.01	9	.12	.01	.01	2
28602	1	5	2	24	.1	1255	53	444	3.77	11	5	ND	1	2	1	2	4	15	.06	.002	2	1484	13.98	11	.01	22	.26	.01	.01	1
28603	1	5	7	46	.1	663	41	1415	3.66	79	5	ND	1	313	1	4	2	26	19.47	.002	2	928	8.07	619	.01	3	.12	.01	.01	2
28604	1	4	2	31	.1	584	34	1696	3.60	95	5	ND	1	355	1	2	2	16	18.15	.002	2	677	9.26	216	.01	4	.09	.01	.01	1
28605	1	152	40	146	.2	754	12	1006	2.51	140	5	ND	2	115	1	6	2	36	.92	.076	16	83	.50	838	.01	4	.37	.01	.10	1
28606	1	4	3	36	.1	911	44	814	2.99	166	5	ND	1	99	1	4	2	17	1.36	.003	2	1187	13.63	125	.01	7	.19	.01	.01	1
28607	1	43	28	68	.3	373	11	3080	2.32	51	5	ND	1	355	1	2	2	48	6.43	.050	8	75	5.15	383	.01	4	.32	.01	.03	1
28608	1	4	30	33	.1	637	33	940	3.13	425	5	ND	1	173	1	7	2	14	2.05	.002	2	403	15.37	167	.01	3	.08	.01	.02	2
28609	1	9	23	21	.1	26	5	483	1.12	7	5	ND	1	32	1	2	5	5	1.35	.010	5	117	.65	43	.01	2	.28	.01	.04	2
28610	1	3	2	55	.1	171	12	3928	3.09	286	5	ND	1	679	1	104	4	10	14.82	.004	2	263	5.61	78	.01	4	.08	.01	.02	1
28611	1	28	7	84	.1	35	7	1772	2.34	42	5	ND	3	170	1	4	2	16	4.97	.079	14	87	1.59	523	.01	4	.35	.01	.15	1
28612	1	5	4	72	.1	953	58	764	3.97	672	5	ND	1	154	1	32	2	8	2.60	.003	2	319	15.26	77	.01	5	.08	.01	.01	1
28613	1	1	4	12	.1	587	44	397	3.03	438	5	ND	1	7	1	4	2	3	.14	.001	2	305	10.03	22	.01	7	.06	.01	.01	1
28812	1	29	2	41	.1	70	14	1456	1.47	22	5	ND	1	50	1	2	2	23	1.18	.019	6	74	.66	1577	.01	6	.45	.01	.15	1
28813	1	32	8	120	.1	52	31	1188	8.47	10	5	ND	2	151	1	2	2	114	12.65	.149	24	60	3.41	812	.01	4	.79	.02	.01	1
28814	2	66	16	93	.1	25	6	5004	2.20	3	5	ND	1	58	2	2	2	16	3.88	.065	4	148	.91	147	.01	5	.17	.01	.04	1
28815	1	30	18	34	.2	14	3	1583	3.29	58	5	ND	1	317	1	2	2	10	11.71	.019	5	41	2.94	251	.01	7	.23	.01	.07	1
28816	1	111	5	234	.2	22	10	5026	22.16	20	5	ND	2	38	1	15	2	99	1.82	.022	4	40	.44	20	.01	3	.36	.01	.01	1
28817	1	34	29	152	.4	23	7	5837	12.77	846	5	ND	2	70	1	15	2	58	3.43	.019	4	42	.57	53	.01	5	.27	.01	.03	1
28818	6	75	32	102	.2	19	7	966	13.05	27	5	ND	2	25	1	21	2	68	.92	.018	5	72	.07	69	.01	4	.36	.01	.03	1
28819	1	20	6	36	.1	970	56	676	4.64	75	5	ND	1	59	1	33	3	10	1.22	.002	2	802	15.87	90	.01	7	.06	.01	.01	2
28820	1	26	4	23	.3	1134	50	292	3.07	968	5	ND	1	65	1	112	2	6	.76	.002	2	328	12.86	26	.01	12	.04	.01	.01	1
28821	1	6	4	12	.2	199	15	299	2.42	86	5	ND	1	470	1	78	3	4	15.68	.003	2	144	10.80	147	.01	4	.04	.01	.01	1
28822	1	9	3	16	.1	457	23	332	3.40	18	5	ND	1	346	1	2	2	9	8.44	.001	2	296	14.94	205	.01	2	.15	.01	.01	1
28823	1	5	2	16	.1	470	22	369	2.19	13	5	ND	1	224	1	16	2	8	4.87	.001	2	682	10.22	44	.01	2	.20	.01	.01	1
28824	3	32	55	21	.5	25	5	389	1.87	4	5	ND	2	29	1	2	2	8	.82	.027	11	113	.87	255	.01	5	.95	.01	.21	1
28825	1	4	2	16	.1	380	25	361	2.02	12	5	ND	1	206	1	2	2	3	4.24	.002	2	388	6.69	1101	.01	2	.07	.01	.01	2
28826	1	15	2	17	.1	808	57	472	2.71	50	5	ND	1	74	1	2	2	3	2.45	.002	2	570	8.26	152	.01	8	.03	.01	.01	1
28827	2	27	230	31	1.2	34	10	466	2.22	4	5	ND	2	24	1	2	2	7	.94	.032	17	142	.93	219	.01	3	1.11	.01	.19	1
28828	2	13	27	79	.1	20	4	409	1.42	4	5	ND	5	678	3	2	4	19	28.77	.069	7	23	.81	95	.01	2	.95	.01	.10	1
28829	1	5	2	31	.1	928	46	178	2.59	54	5	ND	1	169	1	118	4	24	5.54	.001	2	1486	6.95	164	.01	2	.50	.01	.01	1
28830	1	3	9	17	.1	312	15	603	2.34	26	5	ND	1	406	1	88	5	13	20.61	.001	2	372	9.50	740	.01	3	.18	.01	.01	1
28831	1	8	9	32	.1	270	15	165	2.07	8	5	ND	1	296	1	8	2	10	6.14	.004	2	93	8.71	88	.01	5	.11	.01	.01	1
28832	1	2	2	16	.1	346	23	483	2.33	19	5	ND	1	521	1	13	5	8	17.19	.003	2	272	10.72	226	.01	5	.12	.01	.01	1
28833	1	4	6	10	.2	124	12	339	2.06	8	5	ND	1	512	1	2	4	3	22.04	.003	2	179	8.92	609	.01	4	.04	.01	.01	1
28834	2	8	90	7	.5	20	3	1011	1.23	7	5	ND	1	35	1	2	3	3	3.86	.007	2	169	.38	44	.01	4	.07	.01	.02	1
STD C	18	61	40	132	6.8	67	29	1024	4.17	41	17	7	38	48	18	19	24	60	.49	.097	40	53	.93	180	.07	33	1.95	.06	.13	11

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM
28835	1	93	2	23	.3	31	6	1364	1.75	83	5	ND	2	83	1	2	2	7	1.36	.005	7	81	.69	636	.01	4	.34	.01	.22	1
28836	1	4	6	4	.1	10	1	148	.48	5	5	ND	1	16	1	2	2	2	.27	.002	2	384	.13	58	.01	4	.03	.01	.02	1
28837	2	516	21	209	.1	137	8	195	3.87	96	5	ND	4	71	1	2	2	10	.21	.063	5	126	.09	599	.01	4	.94	.01	.09	1
28838	1	22	20	14	.1	9	2	40	.73	19	5	ND	2	17	1	2	2	9	.10	.019	9	193	.05	694	.01	8	.28	.01	.13	1
28839	1	10	8	3	2.5	9	1	63	.53	21	5	ND	1	25	1	2	2	2	.04	.008	2	334	.03	85	.01	6	.05	.01	.03	1
28840	2	72	7	46	.1	32	5	203	1.53	39	5	ND	2	25	1	2	2	7	.30	.017	6	267	.05	489	.01	3	.23	.01	.09	1
28841	1	4	2	33	.1	5	1	58	.40	6	5	ND	1	9	1	2	2	2	.10	.003	2	321	.03	46	.01	2	.02	.01	.01	2
28842	1	6	13	27	.1	2201	91	301	5.77	28	5	ND	1	2	1	7	2	29	.03	.002	2	3125	19.92	10	.01	84	.52	.01	.01	1
28843	2	76	13	52	.1	33	6	419	1.95	55	5	ND	4	9	1	2	2	14	.06	.012	11	168	.10	862	.01	4	.44	.01	.15	1
28844	2	68	6	33	.1	17	5	91	1.08	21	5	ND	2	17	1	2	2	10	.02	.005	5	204	.05	724	.01	6	.30	.01	.10	1
28845	1	6	2	31	.1	661	35	708	3.45	74	5	ND	1	120	1	21	2	14	1.65	.005	2	787	15.14	49	.01	6	.30	.01	.02	1
28846	1	5	2	3	.1	14	1	74	.46	3	5	ND	1	8	1	2	2	3	.09	.001	2	327	.16	179	.01	2	.08	.01	.03	1
28913	2	21	22	18	.2	27	4	285	1.29	13	5	ND	1	4	1	2	3	7	.08	.024	4	189	.10	31	.01	4	.20	.01	.03	1
28913A	3	21	19	17	.2	23	4	276	1.30	8	5	ND	1	3	1	2	2	7	.07	.025	5	188	.08	34	.01	2	.19	.01	.03	1
28914	1	19	32	21	.1	30	6	279	1.06	45	5	ND	5	12	1	2	2	13	.68	.068	16	203	.08	106	.01	4	.37	.01	.15	1
28915	1	11	2	10	.1	649	40	392	2.55	76	5	ND	1	7	1	2	2	7	.17	.002	2	607	7.16	3	.01	2	.16	.01	.01	1
28916	1	12	6	15	.1	875	39	957	3.21	95	5	ND	1	158	1	2	2	12	4.69	.004	2	869	13.66	30	.01	2	.21	.01	.01	1
28917	1	9	2	6	.1	21	1	65	.36	3	5	ND	1	3	1	2	2	2	.04	.002	2	173	.20	62	.01	2	.11	.01	.03	1
28918	1	17	12	7	.1	23	3	148	.74	4	5	ND	1	6	1	2	2	6	.13	.005	3	298	.18	22	.01	6	.15	.01	.05	1
28919	1	51	2	20	.1	29	5	1005	1.16	17	5	ND	2	6	1	2	3	7	.03	.008	6	181	.12	68	.01	4	.35	.01	.10	1
28920	1	13	2	18	.1	21	4	648	1.01	8	5	ND	1	7	1	2	2	4	.03	.006	3	302	.16	36	.01	2	.31	.01	.03	1
28921	1	28	2	29	.1	32	9	235	1.06	9	5	ND	1	19	1	2	2	7	.01	.008	3	206	.05	75	.01	2	.18	.01	.06	1
28922	1	11	2	22	.1	14	2	216	1.21	2	5	ND	1	2	1	2	2	6	.01	.005	5	291	.52	67	.01	7	.63	.01	.10	1
28923	1	4	4	2	.1	4	1	52	.38	9	5	ND	1	5	1	2	2	2	.01	.026	2	195	.02	40	.01	2	.10	.01	.03	1
28924	1	32	13	98	.2	38	12	1106	4.95	6	5	ND	7	31	1	2	2	36	.25	.088	24	75	.75	133	.01	2	.88	.01	.11	1
28925	1	5	16	30	.1	7	1	265	.84	3	5	ND	8	36	1	2	2	3	1.20	.006	25	105	.59	149	.01	2	.55	.01	.12	1
28926/28928	1	31	2	65	.1	39	24	908	4.97	15	5	ND	1	103	1	2	2	103	4.06	.085	9	112	2.47	96	.14	3	2.52	.01	.06	1
28929	1	9	5	10	.1	25	4	648	.93	2	5	ND	1	302	1	2	2	10	23.44	.001	2	50	.90	68	.01	3	.74	.01	.01	1
28930	1	53	48	69	.1	29	14	445	4.51	19	5	ND	9	45	1	2	2	9	1.31	.032	29	56	.17	89	.01	2	.65	.01	.14	1
28931	1	25	2	40	.1	17	7	751	2.36	8	5	ND	1	75	1	2	2	6	4.21	.008	3	91	.57	33	.01	2	.35	.03	.02	1
28932	1	3	18	6	.1	3	2	1382	1.01	7	5	ND	3	629	1	2	2	1	25.70	.010	5	7	.16	55	.01	5	.08	.01	.04	1
28933	1	59	6	60	.1	294	36	1692	5.16	23	5	ND	1	414	1	2	2	83	17.37	.053	9	603	2.81	170	.01	2	1.52	.01	.01	1
28934	1	28	4	35	.1	34	8	427	2.93	85	5	ND	8	44	1	2	2	7	2.01	.022	16	89	.43	76	.01	8	.47	.02	.16	2
28935	1	61	3	122	.3	110	35	636	5.02	167	5	ND	4	257	1	2	2	24	4.27	.054	18	59	2.09	425	.01	2	.68	.01	.15	1
28936	1	9	2	28	.1	10	4	327	1.92	31	5	ND	9	29	1	2	2	3	.94	.011	15	91	.26	55	.01	3	.34	.02	.13	1
28937	1	3	12	8	.1	3	1	317	.65	7	5	ND	3	1122	1	2	2	1	33.92	.011	3	14	.17	18	.01	2	.06	.01	.03	1
STD C	18	61	38	132	6.9	69	30	1014	4.23	42	18	8	38	49	19	20	18	59	.49	.096	40	58	.93	181	.07	33	2.07	.06	.13	12

HOMESTAKE MINERAL DEV. CO. FILE # 88-5015

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM
28938	1	25	15	100	.1	114	32	884	6.43	65	5	ND	6	177	1	2	2	31	5.38	.150	26	91	1.68	200	.01	9	.66	.03	.12	2
28939	1	15	33	42	.3	27	6	579	2.26	28	5	ND	2	266	1	2	3	13	3.47	.049	8	90	1.38	268	.01	2	.26	.01	.10	1
28940	1	20	14	91	.1	64	23	1037	6.21	104	5	ND	3	233	1	15	2	38	3.90	.045	8	121	1.96	573	.01	8	.46	.01	.15	2
29180	1	24	16	10	.1	7	2	54	1.06	10	5	ND	4	12	1	4	3	7	.06	.027	13	158	.03	192	.01	6	.29	.01	.15	1
29181	1	20	15	7	.2	4	1	37	.74	7	5	ND	2	7	1	2	2	5	.03	.008	6	132	.02	202	.01	2	.17	.01	.09	1
29182	1	27	6	7	.2	7	1	51	.76	7	5	ND	2	9	1	3	2	6	.04	.010	7	162	.03	153	.01	3	.21	.01	.12	1
29183	1	20	11	8	.3	7	1	42	1.00	5	5	ND	2	34	1	3	3	7	.03	.024	3	173	.02	193	.01	2	.17	.01	.08	1
29184	1	16	8	27	.1	11	2	72	.95	8	5	ND	1	31	1	3	2	5	.05	.024	6	146	.02	139	.01	2	.15	.01	.11	1
29185	1	46	9	87	.1	167	35	671	6.55	6	5	ND	4	84	1	2	2	105	1.39	.227	26	132	2.98	39	.37	6	2.80	.88	.24	1
29186	1	80	9	36	.2	109	26	422	2.75	5	5	ND	3	99	1	2	2	70	1.14	.060	10	337	3.39	25	.26	2	2.93	.02	.01	4
29187	1	10	9	100	.1	79	39	826	5.39	18	5	ND	5	41	1	14	2	84	.38	.171	22	65	.11	250	.01	10	.98	.01	.15	5
29188	1	133	14	96	.1	31	24	1179	8.16	13	5	ND	9	13	1	12	2	176	.46	.209	39	24	.07	192	.01	6	1.31	.01	.01	3
29189	1	146	16	72	.1	63	42	1417	7.79	15	5	ND	5	46	2	20	2	160	.33	.167	25	85	.09	322	.01	10	1.25	.01	.03	8
29190	1	13	3	8	.1	11	4	185	.98	3	5	ND	1	4	1	4	2	18	.04	.013	3	163	.03	28	.01	2	.35	.01	.02	1
29191	1	89	2	38	.1	91	26	554	3.92	6	5	ND	1	34	1	2	2	73	2.59	.092	9	77	3.00	27	.16	2	4.41	.02	.02	2
29192	17	93	28	171	.2	55	9	171	5.41	21	5	ND	10	17	2	23	2	38	.05	.065	28	67	1.29	148	.01	5	2.33	.01	.15	5
29193	1	20	11	39	.3	15	5	151	.73	8	5	ND	2	37	1	2	2	12	.63	.242	7	76	.17	137	.01	5	.60	.01	.18	2
29194	1	27	5	85	.2	31	9	152	3.32	11	5	ND	15	30	1	3	2	15	.16	.057	41	49	.58	79	.01	4	1.51	.02	.14	1
29195	1	28	19	48	.1	42	13	424	2.74	6	5	ND	7	40	1	4	2	14	.62	.050	52	166	.60	172	.01	6	1.46	.02	.12	4
29196	1	30	7	26	.1	21	8	177	1.73	10	5	ND	5	7	1	2	2	12	.07	.023	24	144	.33	82	.01	5	.79	.03	.08	1
29197	1	15	3	22	.1	554	59	927	4.31	18	5	ND	1	37	1	3	2	10	1.35	.003	3	1018	9.86	46	.01	15	.22	.01	.01	1
29198	1	5	7	27	.1	973	78	469	4.11	30	5	ND	1	2	1	14	2	7	.04	.001	2	699	16.38	11	.01	29	.05	.01	.01	1
STD C	19	63	42	135	6.9	72	31	1041	4.32	41	18	8	40	50	20	21	21	61	.48	.098	39	57	.93	186	.07	34	2.06	.06	.14	13

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

MASTER
NTS: Forty-Mile
11.YK.116.07
PAR

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 AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: ROCK PULP

DATE RECEIVED: OCT 12 1988 DATE REPORT MAILED: Oct. 19/1988 SIGNED BY Bernard Chan D.TOYE, C.LEONG, B.CHAN, J.WANG; CERTIFIED B.C. ASSAYERS

HOMESTAKE MINERAL DEV. CO. File # 88-5149 Page 1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM
23872	1	339	2140	2041	18.5	13	2	1014	1.70	94	5	ND	1	153	17	194	2	4	3.47	.009	2	85	1.42	86	.01	5	.09	.01	.06	1
23873	6	114	882	1933	5.5	46	10	773	3.46	249	5	ND	5	119	15	32	2	14	2.90	.023	7	43	1.04	16	.01	6	.39	.01	.15	1
28614	1	35	22	63	.1	21	5	1154	.76	4	5	ND	2	129	1	2	2	5	7.15	.015	10	32	.06	1610	.01	2	.23	.01	.13	1
28615	1	4	17	53	.1	32	10	942	1.14	5	5	ND	6	40	2	2	2	7	.27	.026	13	40	.44	2185	.01	3	.52	.02	.18	1
28616	1	56	9	50	.1	16	6	2230	1.53	2	5	ND	2	359	1	2	2	12	7.66	.029	9	20	.56	457	.01	5	.76	.01	.21	1
28617	2	24	14	141	.2	31	16	573	3.25	7	5	ND	4	45	1	3	2	25	.47	.049	9	52	2.57	97	.15	3	2.18	.01	.14	1
28618	1	13	10	76	.2	17	3	212	2.15	4	5	ND	3	75	3	2	2	19	.46	.039	6	65	1.77	105	.14	4	1.71	.01	.10	1
28619	1	7	26	11	.3	14	2	161	.71	4	5	ND	1	7	2	2	2	4	.15	.013	3	129	.08	24	.01	7	.16	.01	.05	1
28620	1	10	16	8	.3	19	5	163	.79	2	5	ND	2	6	1	2	2	5	.08	.014	6	77	.05	45	.01	3	.20	.01	.09	1
28621	2	28	12	36	.3	7	1	145	1.84	2	5	ND	7	8	1	2	2	16	.06	.022	10	68	.29	88	.01	2	.67	.01	.22	1
28622	1	4	6	75	.1	11	4	468	2.75	7	5	ND	6	23	1	2	2	16	.20	.060	8	41	2.27	73	.01	2	1.83	.02	.25	1
28623	1	2	5	84	.1	7	4	428	3.43	3	5	ND	7	13	1	3	2	16	.12	.062	13	43	2.17	96	.01	2	1.71	.01	.16	1
28624	1	34	2	76	.1	24	7	305	3.19	6	5	ND	11	17	1	2	5	12	.05	.037	36	45	.63	39	.01	3	1.47	.01	.21	2
28625	1	45	16	92	.1	35	18	1345	4.39	16	5	ND	11	33	1	2	3	10	.59	.019	24	34	1.00	51	.01	2	1.73	.01	.31	1
28626	1	15	17	86	.1	10	6	350	2.81	5	5	ND	6	90	1	2	2	13	.90	.049	19	41	1.13	86	.01	7	.92	.02	.09	1
28627	1	28	8	66	.1	29	12	592	3.28	4	5	ND	11	15	1	2	2	8	.26	.016	25	30	.59	106	.01	2	.71	.01	.24	1
28628	1	39	20	72	.1	30	11	1129	3.01	7	5	ND	13	46	1	3	2	7	.97	.022	17	33	.44	92	.01	3	.44	.01	.23	1
28629	1	44	5	74	.3	31	10	687	2.34	6	5	ND	10	11	2	2	2	8	.14	.013	20	35	.42	192	.01	2	.36	.01	.17	1
28630	1	45	18	58	.1	18	6	1253	1.94	6	5	ND	4	51	1	2	2	9	2.33	.025	13	37	.66	228	.01	2	.34	.01	.16	1
28631	1	25	41	168	.3	7	1	50	.57	4	5	ND	1	13	3	2	2	3	.05	.006	4	95	.03	257	.01	4	.10	.01	.06	1
28632	1	135	42	207	.5	23	7	95	.93	22	5	ND	2	9	2	2	2	5	.05	.009	8	62	.04	407	.01	4	.24	.01	.11	1
28633	1	17	18	39	.1	14	4	619	1.86	3	5	ND	3	57	1	2	2	5	2.29	.009	7	90	.89	52	.01	2	.14	.01	.08	1
28634	1	15	24	78	.1	19	8	837	2.86	9	5	ND	16	47	1	2	2	6	1.57	.025	29	23	.67	93	.01	3	.42	.01	.21	1
28635	1	11	604	1475	.9	9	2	110	.39	8	5	ND	1	9	5	2	3	2	.17	.005	3	104	.07	236	.01	2	.08	.01	.04	1
28636	1	39	17	66	.1	160	22	142	1.94	115	5	ND	7	65	1	2	2	23	.76	.107	20	68	1.07	153	.08	8	.96	.02	.34	1
28637	1	6	8	8	.1	6	2	1944	.47	5	5	ND	1	35	1	2	2	1	1.50	.005	2	90	.57	36	.01	2	.08	.01	.04	1
28638	1	11	12	17	.1	16	7	1321	2.15	12	5	ND	9	403	1	2	2	2	12.84	.011	20	18	.33	151	.01	3	.20	.01	.11	3
28639	1	9	3	20	.1	8	3	557	1.54	5	5	ND	5	77	1	2	2	2	2.06	.016	16	76	.48	144	.01	2	.14	.01	.07	1
28640	1	12	9	22	.1	10	4	632	2.32	7	5	ND	2	73	1	2	2	1	2.78	.008	4	78	.60	70	.01	2	.09	.01	.04	1
28641	1	48	14	29	.4	31	16	71	1.15	258	5	ND	13	14	2	2	2	3	.21	.008	27	32	.09	324	.01	8	.27	.02	.16	1
28642	1	10	17	9	.1	36	16	413	1.95	26	5	ND	8	263	1	2	2	1	6.84	.013	2	25	.16	18	.01	2	.15	.01	.09	1
28643	1	2	21	2	.1	9	3	83	.32	7	5	ND	1	25	1	2	2	1	.65	.001	5	105	.03	61	.01	3	.03	.01	.01	1
28644	1	12	17	12	.1	11	5	33	.63	26	5	ND	9	10	1	2	2	2	.15	.011	22	35	.02	357	.01	4	.32	.01	.18	1
28645	1	13	7	20	.1	13	5	528	1.18	25	5	ND	4	38	1	2	2	1	1.27	.004	12	54	.15	197	.01	2	.18	.01	.10	1
28646	1	34	14	88	.1	45	13	272	3.82	12	5	ND	23	43	1	2	2	4	1.16	.022	58	20	.15	269	.01	2	.25	.01	.12	1
28647	1	6	9	17	.1	10	3	391	1.02	3	5	ND	3	44	1	2	2	2	2.15	.005	12	97	.17	129	.01	3	.12	.01	.04	1
STD C	19	59	42	132	6.8	68	30	1021	4.01	43	21	7	38	48	17	16	24	60	.47	.089	40	55	.88	179	.07	32	1.90	.06	.15	11

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM
28648	1	18	4	16	.3	12	8	55	1.35	37	5	ND	13	19	3	2	2	3	.17	.011	31	40	.02	373	.01	10	.27	.01	.14	1
28649	1	45	13	26	.3	55	26	257	4.02	2445	5	ND	10	56	1	3	3	2	1.99	.014	14	16	.08	15	.01	6	.26	.01	.15	1
28650	1	7	9	24	.1	9	4	734	2.25	53	5	ND	7	71	1	2	2	2	2.40	.013	9	49	.59	181	.01	4	.22	.01	.12	1
28651	1	30	11	76	.2	25	14	242	2.80	45	5	ND	9	86	1	3	2	2	1.73	.011	14	54	.71	367	.01	8	.22	.01	.14	1
28652	1	6	19	7	.4	14	5	69	1.04	1744	5	ND	8	23	1	2	2	2	.36	.008	14	31	.05	156	.01	5	.17	.01	.09	1
28653	2	33	14	44	.3	28	16	1240	3.45	1057	5	ND	6	299	1	2	2	1	8.60	.013	5	31	.78	18	.01	2	.15	.01	.10	2
28654	1	32	15	63	.1	38	14	232	2.35	12	5	ND	12	21	1	2	2	4	.49	.028	22	51	.10	391	.01	4	.34	.01	.17	1
28655	1	26	13	51	.1	25	8	597	2.90	152	5	ND	8	63	1	2	2	3	1.68	.014	11	44	.53	35	.01	2	.31	.01	.16	1
28656	1	45	39	13	.4	48	16	969	3.48	34	5	ND	5	89	1	2	2	2	3.52	.027	5	42	.33	20	.01	4	.20	.02	.14	1
28657	1	66	21	22	.4	118	30	2244	5.49	76	5	ND	2	555	1	2	2	48	14.57	.057	11	257	3.50	360	.01	2	.30	.01	.07	2
28658	1	7	16	11	.1	12	6	522	1.37	49	6	ND	5	1140	1	3	2	1	25.00	.014	4	16	.30	158	.01	2	.11	.01	.10	1
28659	1	2	12	56	.1	5	2	769	.82	13	6	ND	2	1054	1	2	2	1	23.99	.004	7	27	.15	52	.01	2	.04	.01	.02	1
28660	1	7	19	375	.1	7	5	1016	1.28	17	5	ND	5	886	1	2	2	1	24.64	.014	7	20	.18	141	.01	2	.12	.01	.09	2
28661	1	55	34	123	.1	28	13	517	3.46	20	5	ND	15	52	1	2	2	5	1.35	.027	33	44	.23	279	.01	6	.36	.01	.17	1
28662	1	47	14	174	.1	30	14	483	3.36	548	5	ND	16	35	1	2	2	5	.63	.045	38	41	.14	292	.01	2	.35	.01	.19	1
28663	1	3	14	11	.1	4	1	24	.39	18	5	ND	5	19	1	2	2	2	.05	.004	23	56	.02	343	.01	3	.30	.01	.15	1
28664	1	17	28	136	.1	13	5	104	1.35	24	5	ND	10	42	1	2	2	2	.31	.017	29	50	.02	431	.01	2	.30	.01	.15	1
28665	1	79	10	62	.3	143	26	1824	6.84	81	5	ND	2	400	1	52	2	51	12.47	.042	9	207	4.57	147	.01	3	.27	.01	.07	3
28666	1	30	8	169	.1	35	11	778	3.29	34	5	ND	10	85	1	2	2	5	1.80	.009	14	45	.67	148	.01	2	.35	.01	.12	1
28667	1	57	2	27	.3	77	18	1376	6.81	93	5	ND	1	431	1	55	2	37	15.40	.022	6	183	4.50	217	.01	2	.15	.01	.07	1
28754	7	33	4	250	.2	589	27	923	10.28	592	5	ND	4	178	1	28	2	34	6.99	.015	2	1003	1.79	58	.01	4	.38	.09	.04	2
28755	13	95	22	762	.6	1167	75	740	22.62	576	7	ND	7	96	1	36	2	30	.37	.007	3	796	.14	115	.01	5	1.79	.03	.15	1
28756	2	1158	9	1021	.4	1449	134	819	19.80	899	5	ND	3	56	1	53	2	216	.42	.037	2	1892	2.26	184	.01	2	1.80	.02	.04	1
28757	6	133	219	114	.6	178	11	165	7.62	4247	5	3	7	483	1	506	2	33	.34	.761	7	470	.13	24	.01	5	.41	.13	.19	2
28758	1	16	3	15	.1	29	3	50	.66	65	5	ND	1	14	1	3	2	4	.10	.005	2	153	.04	105	.01	6	.06	.01	.04	1
28759	1	13	503	6	1.3	19	1	39	.51	66	5	ND	1	23	1	3	2	5	.05	.004	2	154	.07	95	.01	2	.03	.01	.02	1
28760	1	8	16	12	.1	457	24	228	3.30	19	5	ND	1	13	1	2	2	8	.22	.005	2	206	15.97	17	.01	2	.05	.01	.01	1
28761	1	9	6	20	.2	490	27	267	3.75	35	5	ND	1	25	1	2	3	12	.51	.003	2	556	15.32	22	.01	2	.20	.01	.01	1
28762	1	16	14	58	.1	35	10	974	2.80	63	5	ND	2	121	1	2	3	6	4.17	.059	6	62	1.53	144	.01	2	.30	.01	.10	1
28763	1	18	12	115	.1	46	20	975	6.11	367	5	ND	6	135	1	2	2	15	4.13	.065	10	25	1.51	87	.01	7	.44	.01	.18	1
28764	1	8	6	6	.1	17	2	215	.58	669	5	ND	1	12	1	2	2	2	.27	.005	2	134	.11	30	.01	4	.05	.01	.01	1
28767	1	7	18	23	.2	12	13	4356	9.09	38992	5	ND	3	241	1	24	2	5	6.72	.053	2	35	2.27	19	.01	14	.16	.01	.09	2
28768	8	29	47	1324	.1	42	9	605	2.16	474	5	ND	1	76	8	2	2	7	2.53	.064	3	61	.51	14	.01	10	.18	.01	.09	1
28769	1	11	25	36	.4	16	2	110	.58	127	5	ND	2	12	1	2	2	7	.06	.004	4	102	.02	292	.01	8	.12	.01	.05	2
28770	1	4	2	69	.1	5	3	4210	3.17	192	5	ND	1	315	1	2	2	3	7.18	.004	5	129	2.34	196	.01	2	.19	.01	.05	1
28847	1	8	2	47	.1	881	57	935	4.57	49	5	ND	1	60	1	2	2	12	3.63	.003	2	766	13.73	130	.01	2	.21	.01	.01	1
STD C	18	58	38	133	6.8	67	30	1056	4.12	40	23	7	38	47	19	16	22	58	.48	.097	38	58	.89	176	.06	33	2.01	.06	.15	11

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM
28848	1	2	49	118	.2	602	41	793	3.69	56	5	ND	1	297	1	34	2	8	3.21	.004	2	209	14.48	50	.01	4	.05	.01	.04	1
28849	1	44	203	171	.8	28	3	1377	1.05	24	5	ND	1	44	2	2	2	1	1.29	.006	2	75	.60	54	.01	6	.17	.01	.04	1
28941	1	27	2	100	.1	94	23	1014	6.86	10	5	ND	2	726	1	2	3	26	13.88	.114	21	105	1.54	151	.01	3	2.25	.01	.08	1
28942	1	46	8	38	.1	32	15	1287	3.70	33	5	ND	2	777	1	2	2	10	21.52	.142	16	23	1.54	190	.01	2	.28	.01	.04	2
28943	1	19	3	35	.1	25	7	834	3.16	48	5	ND	4	207	1	2	2	8	4.22	.060	13	53	1.60	259	.01	5	.26	.01	.13	1
28944	3	19	24	110	.2	61	9	349	1.74	93	5	ND	3	154	1	2	2	19	2.95	.020	5	68	.87	633	.01	6	.17	.01	.10	1
28945	1	11	3	101	.3	906	47	1531	6.24	457	5	ND	1	864	1	647	3	19	13.05	.001	2	371	5.34	588	.01	2	.07	.01	.05	2
28946	1	28	7	23	.4	248	34	1174	4.73	397	5	ND	1	1108	1	1038	3	11	13.11	.002	2	262	5.62	182	.01	5	.08	.01	.05	1
28947	1	5	2	8	.1	15	3	344	1.05	2	5	ND	11	73	1	2	2	1	2.51	.010	20	63	.02	60	.01	4	.28	.01	.13	1
28948	1	14	7	24	.1	19	6	283	1.89	27	5	ND	9	20	1	2	2	4	.58	.019	20	62	.18	53	.01	2	.44	.01	.10	1
28949	1	21	7	18	.1	13	3	866	1.26	6	5	ND	2	64	2	2	2	13	.73	.008	2	135	.16	390	.01	6	.34	.01	.03	1
28950	1	54	13	109	.1	21	4	62	1.19	127	5	ND	4	10	1	2	3	6	.07	.004	10	80	.05	502	.01	5	.23	.01	.12	2
28951	1	23	2	20	.1	789	47	357	2.97	113	5	ND	1	76	1	3	3	7	2.77	.004	2	402	9.13	53	.01	5	.05	.01	.03	1
28952	1	7	2	10	.9	350	26	722	3.08	472	5	ND	1	398	1	212	3	10	7.12	.002	2	313	7.54	76	.01	4	.05	.01	.04	1
28953	1	4	2	12	.1	357	22	345	2.71	50	5	ND	1	308	1	2	2	5	3.88	.002	2	213	10.99	58	.01	4	.02	.01	.01	1
28954	1	9	2	12	.1	370	25	610	3.72	141	5	ND	1	115	1	2	2	11	2.57	.003	2	667	9.42	12	.01	2	.18	.01	.01	1
28955	1	7	2	12	.1	239	17	1173	3.28	116	5	ND	1	256	1	2	2	11	7.98	.002	2	228	10.15	12	.01	2	.16	.01	.01	2
28956	1	16	3	32	.2	769	48	263	3.30	300	5	ND	1	83	1	3	2	18	3.50	.003	2	809	6.58	144	.01	2	.31	.01	.01	1
28957	1	3	2	12	.1	1	2	2614	1.73	11	5	ND	1	401	1	2	2	5	18.77	.003	2	1	4.89	534	.01	2	.11	.01	.02	2
28958	1	17	33	38	.1	19	5	570	1.89	4	5	ND	13	38	1	2	2	11	2.01	.017	38	60	.60	832	.10	2	1.38	.01	.20	1
28959	1	16	14	40	.1	19	8	494	2.30	6	5	ND	4	20	1	2	2	29	.69	.007	10	82	.85	1063	.08	2	.97	.01	.05	1
28960	1	8	2	23	.1	12	5	820	3.47	46	5	ND	1	295	1	2	2	18	7.65	.008	2	49	2.62	140	.01	5	.09	.01	.03	1
28961	1	29	2	80	.1	52	27	988	7.05	2	5	ND	1	91	1	2	2	108	2.94	.051	2	106	2.08	1433	.16	4	2.15	.02	.06	1
28962	1	6	5	10	.1	6	3	1422	.89	2	5	ND	1	581	2	2	2	17	28.92	.003	2	22	.29	589	.02	2	.32	.01	.01	2
28963	1	3	2	3	.1	5	1	63	.41	2	5	ND	1	4	1	2	2	3	.24	.001	2	136	.05	221	.01	2	.06	.01	.01	1
28964	1	49	5	78	.2	59	27	1150	7.90	2	5	ND	1	145	1	2	2	117	3.89	.033	2	81	2.89	200	.04	4	1.30	.01	.05	1
28965	1	6	2	14	.3	432	27	534	2.61	154	5	ND	1	496	1	121	2	9	13.83	.001	2	293	7.45	124	.01	3	.04	.01	.02	1
28966	1	13	6	17	.4	628	41	871	3.52	178	5	ND	1	501	1	73	2	13	10.37	.002	2	446	9.50	122	.01	3	.05	.01	.03	1
28967	1	11	6	20	.1	508	34	801	3.86	31	5	ND	1	230	1	3	2	11	3.62	.002	2	286	12.95	94	.01	4	.06	.01	.03	1
28968	1	10	2	23	.4	283	28	533	4.45	32	5	ND	1	152	1	2	2	16	1.97	.002	2	347	13.41	102	.01	5	.08	.01	.04	1
28969	1	13	7	206	.1	43	14	25359	2.18	11	5	ND	1	240	1	2	2	17	6.06	.014	3	68	.87	512	.01	5	.07	.01	.02	1
28970	1	627	27	26	.1	25	9	3802	1.61	2	5	ND	2	323	1	2	2	9	1.24	.010	3	55	.55	90	.01	5	.40	.01	.11	1
28971	1	7	5	30	.1	4	2	1753	11.95	2	5	ND	1	103	2	2	3	34	.49	.018	2	25	.09	94	.01	3	.15	.01	.01	1
28972	5	24	86	48	.5	2	2	687	16.25	14	5	ND	1	273	1	2	3	37	11.33	.032	2	15	.02	6	.01	2	.17	.01	.02	2
28973	6	43	41	50	.8	74	4	63	6.51	634	5	ND	9	292	1	40	2	15	.22	.039	5	377	.02	11	.01	11	.26	.22	.28	1
28974	1	1	2	15	.1	296	21	1178	3.63	4	5	ND	1	449	1	2	2	6	10.43	.002	2	292	9.13	329	.01	3	.04	.01	.02	1
STD C	18	57	38	131	7.0	66	29	1059	4.25	37	24	8	39	47	21	18	19	59	.47	.093	39	53	.86	176	.07	31	1.87	.06	.16	12

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM
28975	1	3	5	13	.2	596	34	1084	3.33	5	5	ND	1	17	2	2	3	9	.42	.002	2	476	14.01	155	.01	4	.04	.01	.01	1
28976	1	146	12	32	.6	16	3	213	10.05	20	5	ND	2	645	1	2	2	9	3.32	.156	2	83	.29	9	.01	3	.08	.01	.25	1
28977	2	31	11	14	.3	16	1	60	.93	29	5	ND	1	53	1	2	4	4	.30	.005	4	190	.39	41	.01	4	.12	.01	.11	1
28978	2	40	5	42	.1	36	3	112	1.23	56	5	ND	1	51	1	2	4	8	.15	.024	2	129	.05	435	.01	2	.14	.01	.06	1
28979	1	66	8	96	.5	219	40	1431	6.08	135	5	ND	2	421	1	2	2	64	10.36	.036	4	302	3.24	59	.01	2	.53	.01	.06	1
28980	1	63	10	58	.2	160	28	1131	5.50	81	5	ND	4	267	1	2	2	52	7.11	.020	8	211	3.57	310	.01	2	.33	.01	.07	1
28981	1	57	15	71	1.2	216	38	1613	6.14	1498	5	ND	2	450	1	3	4	47	10.23	.031	2	175	5.18	79	.01	4	.28	.01	.08	1
28982	1	69	6	61	.7	218	42	1855	6.41	240	5	ND	1	457	1	2	2	72	8.85	.019	2	274	5.95	54	.01	2	.47	.01	.03	1
28983	1	25	15	88	.3	151	26	2974	7.44	2858	5	ND	5	473	1	2	2	20	11.55	.022	3	110	3.90	17	.01	2	.22	.01	.11	1
28984	1	6	589	16	2.1	8	2	66	1.74	14754	5	ND	4	29	1	2	3	3	.61	.019	6	87	.09	67	.01	44	.08	.01	.02	1
28985	1	9	15	13	.1	17	7	513	2.50	6774	5	ND	1	100	1	2	2	2	1.70	.004	2	134	.59	24	.01	2	.15	.01	.07	1
28986	1	18	11	15	.2	23	10	457	3.01	2040	5	ND	6	58	1	2	2	3	1.22	.006	6	70	.41	20	.01	5	.31	.01	.13	1
28987	1	41	13	52	.5	168	26	1503	5.43	263	5	ND	4	368	1	2	2	49	8.10	.021	4	220	4.10	113	.01	3	.43	.01	.09	1
28988	1	35	9	39	.3	50	15	711	3.53	290	5	ND	10	65	1	2	2	6	1.63	.014	9	59	.56	49	.01	3	.40	.01	.16	1
28989	1	12	14	28	.3	34	11	1817	5.22	278	5	ND	6	214	1	3	2	15	6.06	.046	3	56	1.79	16	.01	5	.40	.01	.12	2
28990	1	75	9	93	.7	272	50	2390	6.23	297	5	ND	1	254	1	21	2	65	10.36	.042	5	221	4.96	147	.01	4	.25	.01	.05	1
28991	1	20	4	138	.1	93	20	4011	4.46	453	5	ND	2	365	1	2	2	14	12.47	.046	5	80	3.90	89	.01	12	.08	.01	.03	1
28992	1	9	14	16	.1	12	3	674	1.29	25	5	ND	8	106	1	2	2	3	3.54	.011	14	59	.56	84	.01	4	.19	.02	.08	1
28993	1	9	46	138	.8	75	12	1003	5.07	20854	5	ND	8	115	1	2	2	4	2.38	.044	4	49	.63	36	.01	37	.09	.01	.04	1
28994	1	13	18	27	.3	63	22	1128	5.70	31495	5	ND	7	185	1	4	2	3	7.55	.016	2	47	.43	19	.01	2	.12	.01	.12	1
28995	1	6	11	19	.2	18	5	581	2.07	367	5	ND	6	118	1	2	2	5	3.01	.011	9	75	.85	79	.01	4	.28	.01	.10	1
28996	1	7	371	279	1.1	42	18	792	4.05	15243	5	ND	7	83	3	2	4	5	2.64	.013	6	75	.37	13	.01	16	.19	.01	.10	1
28997	1	49	2	121	.3	84	31	1351	9.10	89	5	ND	4	359	1	2	2	115	6.51	.157	14	181	3.74	556	.01	2	.69	.01	.04	1
28998	1	8	6	8	.1	10	3	457	1.22	245	5	ND	3	77	1	2	2	2	1.55	.007	4	147	.39	64	.01	3	.10	.01	.06	1
28999	2	26	18	85	.2	39	8	566	1.80	46	5	ND	4	65	1	2	2	10	2.00	.024	11	140	.81	135	.01	2	.34	.01	.10	1
29000	1	50	10	86	.1	63	19	1100	5.56	24	5	ND	3	220	1	2	4	82	11.69	.133	28	151	3.80	181	.01	2	.60	.01	.04	1
29110	1	47	5	44	.3	136	22	596	2.77	16	5	ND	1	52	2	2	2	61	5.14	.034	2	243	2.60	29	.39	2	2.59	.01	.08	1
29111	1	33	16	33	.1	13	3	84	1.56	13	5	ND	16	30	1	2	2	9	.18	.016	32	50	.09	150	.01	2	.42	.01	.24	1
29112	1	35	2	69	.1	44	22	1043	4.63	3	5	ND	5	127	1	2	2	54	5.07	.047	12	134	3.26	168	.01	2	.88	.01	.18	1
29113	1	63	11	90	.3	46	7	636	2.21	5	5	ND	5	106	1	2	2	11	2.06	.022	13	41	1.66	153	.01	2	1.04	.01	.17	1
29114	1	9	9	46	.1	14	7	245	2.06	6	5	ND	9	31	1	2	2	20	.51	.053	21	85	.88	164	.11	2	1.11	.01	.32	1
29115	2	25	10	35	.1	15	3	52	1.61	21	5	ND	2	16	1	2	2	7	.03	.021	8	50	.02	75	.01	2	.24	.01	.11	1
29116	1	33	17	127	.1	60	27	656	5.18	5	5	ND	2	24	1	3	2	80	1.09	.127	2	114	2.87	39	.44	3	3.09	.01	.08	1
29117	1	49	2	95	.1	33	23	651	4.54	2	5	ND	2	24	1	3	2	90	1.23	.119	3	79	2.69	54	.40	2	2.59	.01	.07	1
29118	18	67	16	234	.5	65	14	463	4.22	22	5	ND	7	235	1	2	2	34	4.24	.064	18	63	1.25	97	.01	2	1.82	.01	.15	2
29119	1	18	26	35	.3	9	3	280	1.08	5	5	ND	8	157	1	2	2	7	2.84	.022	11	99	.16	132	.04	2	.37	.02	.13	1
STD C	19	60	38	132	7.2	70	31	1030	4.03	45	22	8	40	49	19	17	25	61	.48	.088	40	55	.88	181	.07	34	1.91	.06	.16	12

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM
29120	1	16	11	65	.1	20	8	521	2.65	3	5	ND	6	68	1	2	2	20	1.25	.064	18	74	1.26	151	.04	2	1.53	.01	.23	1
29121	1	18	9	46	.4	14	9	561	3.79	43	5	ND	5	271	1	2	2	17	3.82	.018	15	106	2.60	656	.01	5	.45	.01	.18	1
29122	1	16	4	4	.2	6	3	590	.47	4	5	ND	1	31	1	2	2	2	.31	.003	2	116	.17	73	.01	5	.09	.01	.05	1
29123A	1	15	28	15	.3	16	5	37	.94	13	5	ND	3	14	1	2	3	6	.08	.021	10	85	.02	167	.01	6	.25	.01	.16	1
29123B	1	25	3	9	.2	13	4	362	.73	13	5	ND	2	3	1	2	2	3	.09	.004	4	123	.02	52	.01	5	.14	.01	.08	1
29124	2	11	12	166	.3	40	22	871	6.43	155	5	ND	4	675	1	5	2	17	12.35	.444	10	30	2.70	52	.01	5	1.59	.01	.06	1
29125	1	6	9	13	.2	8	4	516	1.30	19	5	ND	4	1211	1	3	2	1	22.31	.012	4	22	.26	40	.01	3	.12	.01	.10	1
29126	1	51	15	160	.5	52	27	656	10.19	622	5	ND	3	503	1	7	2	12	10.59	.696	13	25	2.55	28	.01	8	.61	.02	.18	1
29127	1	1	98	199	.1	2	1	270	.14	8	10	ND	2	1006	1	2	2	1	24.34	.002	2	8	.05	12	.01	2	.01	.01	.01	1
29128	1	60	7	77	.7	74	30	1161	7.75	410	5	ND	3	241	1	6	2	26	7.15	.094	8	62	.55	75	.01	6	.34	.01	.14	1
29129	1	238	22	373	.4	95	20	550	3.34	16	5	ND	5	95	1	4	2	8	1.84	.028	12	34	.03	130	.01	2	.52	.01	.15	1
29130	1	35	1754	212	12.4	20	16	75	24.93	99999	5	4	5	26	3	174	2	3	.20	.101	2	19	.01	3	.01	5	.05	.01	.03	1
29132	1	7	19	129	.4	183	15	1191	5.22	185	5	2	4	319	1	3	2	40	4.77	.055	5	371	3.56	48	.01	4	.77	.01	.07	1
29133	1	3	106	47	.8	30	5	905	2.34	6825	5	ND	2	150	1	2	2	9	2.28	.019	2	213	1.13	26	.01	3	.17	.01	.04	1
29134	1	6	13	65	.5	58	10	2060	3.90	135	5	ND	4	522	1	2	2	19	8.05	.044	5	153	3.90	46	.01	4	.37	.01	.10	2
29135	1	45	6	101	.4	19	3	152	1.05	49	5	ND	2	12	1	2	2	8	.08	.008	5	123	.03	172	.01	5	.20	.01	.13	1
29136	1	31	31	60	.4	59	25	553	3.67	43	5	ND	4	45	1	2	2	51	.94	.059	7	313	2.98	66	.12	3	2.12	.01	.10	1
29137	1	3	3	18	.2	196	31	4214	4.08	6029	5	2	3	275	1	2	2	11	10.84	.011	4	97	4.12	82	.01	11	.13	.01	.06	2
29138	1	76	6	75	.5	273	50	990	8.32	195	5	3	3	380	1	5	2	97	6.55	.055	10	395	7.00	342	.01	3	.60	.01	.04	1
29139	1	23	4	81	.3	96	24	2354	8.86	651	5	ND	9	183	1	7	2	16	8.34	.019	9	53	.83	16	.01	6	.38	.01	.18	1
29502	1	400	9357	4859	19.3	11	2	1682	2.37	75	5	ND	1	123	37	752	3	3	3.80	.007	2	140	1.30	38	.01	4	.06	.01	.03	1
29503	1	1159	16572	3594	106.4	24	3	769	8.49	1015	5	ND	1	170	28	543	2	6	3.61	.007	2	231	1.52	1	.01	3	.14	.01	.08	1
29517	4	26	372	70	1.0	23	8	520	1.19	18	5	ND	2	93	1	6	2	6	2.05	.050	10	130	.79	94	.01	7	.24	.04	.04	1
29518	1	19	236	50	.7	19	4	1086	2.07	17	5	ND	1	145	1	3	2	4	4.53	.072	2	139	1.36	39	.01	3	.18	.01	.01	1
29519	1	4	15	11	.2	12	2	226	.45	10	5	ND	1	23	1	2	2	3	.84	.005	2	176	.38	29	.01	6	.06	.01	.02	1
29520	1	18	65	24	.4	20	7	336	1.13	19	5	ND	1	30	1	2	2	6	.72	.027	5	179	.26	59	.01	3	.19	.01	.02	1
29521	36	5407	2059	20241	3.8	85	80	79	1.12	398	5	ND	4	8	31	3	2	3	.09	.023	14	113	.01	63	.01	4	.24	.01	.16	1
29522	1	48	38	229	.2	4	3	5868	.93	13	5	ND	2	825	1	2	2	1	26.57	.005	6	21	.27	21	.01	2	.02	.01	.01	1
29523	1	28	27	127	.2	15	7	657	1.87	15	5	ND	4	68	1	2	2	6	2.37	.078	9	140	.77	46	.01	2	.44	.01	.06	1
29524	1	22	8	58	.1	33	8	883	3.93	15	5	ND	4	168	1	2	2	24	10.44	.047	11	63	3.79	150	.01	2	.34	.01	.14	2
29525	1	34	15	61	.1	60	21	1808	3.42	225	5	ND	8	140	1	4	2	8	11.28	.007	4	56	.07	17	.01	2	.25	.01	.08	1
29526	1	13	9	57	.2	281	37	3592	4.63	950	5	ND	4	312	1	2	2	5	10.43	.078	6	64	3.40	17	.01	19	.17	.01	.05	1
29527	1	17	6	21	.1	18	7	899	2.89	59	5	ND	7	274	1	2	2	4	7.03	.017	8	96	1.97	59	.01	15	.24	.01	.14	1
29528	1	12	63	10	1.6	14	7	71	7.39	87422	5	ND	9	25	1	30	2	1	.56	.024	2	81	.04	8	.01	23	.06	.01	.01	1
STD C	18	58	38	133	6.7	68	29	1051	4.01	39	18	7	37	48	17	18	19	58	.47	.095	38	57	.87	174	.06	32	1.91	.06	.15	11

—Assay required for correct result for Pb, Zn, As > 1%
Ag > 35 ppm
Sb > 1000 ppm.

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

MASTER
NTS: Forty-Mile
114K.116.07
PAR/Dmc

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 AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: ROCK PULP

DATE RECEIVED: OCT 19 1988 DATE REPORT MAILED: Oct 21/88 SIGNED BY. C. Leong ..D.TOYE, C.LEONG, B.CHAN, J.WANG; CERTIFIED B.C. ASSAYERS

HOMESTAKE MINERAL DEV. CO. File # 88-5310 Page 1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM
29131	1	44	26	105	.4	33	7	511	2.21	15	5	ND	9	43	1	2	2	9	.62	.030	23	60	.26	266	.01	4	.33	.01	.12	1
29199	3	42	12	114	.1	149	30	666	6.08	20	5	ND	3	90	1	5	2	101	1.19	.213	25	119	3.01	18	.54	4	2.98	1.02	.34	4
STD C	18	57	43	132	7.1	68	28	1023	3.96	42	19	8	36	47	17	16	19	56	.48	.089	37	55	.90	174	.06	33	1.96	.06	.13	13