

**Report on the Geological Reconnaissance Program
on the Fen Property**

(Fen 1, Fen 1 Fr., Fen 2, Fen 2 Fr., Tsalit 4, Tsalit 5, Tsalit 6, Tsalit 7, Tsalit 8)

54° 10' North 126° 57' West

GEOLOGICAL SURVEY BRANCH ASSESSMENT REPORTS
DATE RECEIVED APR 01 1996

93-L/2 W

Omineca Mining Division,

Operator:

Consolidated Samarkand Resources Inc.

Owner:

Baril Developments Ltd.

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VANCOUVER, B.C.

by Charlie X. Cheng, Ph.D.

February, 1996

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

24,359

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1. Introduction

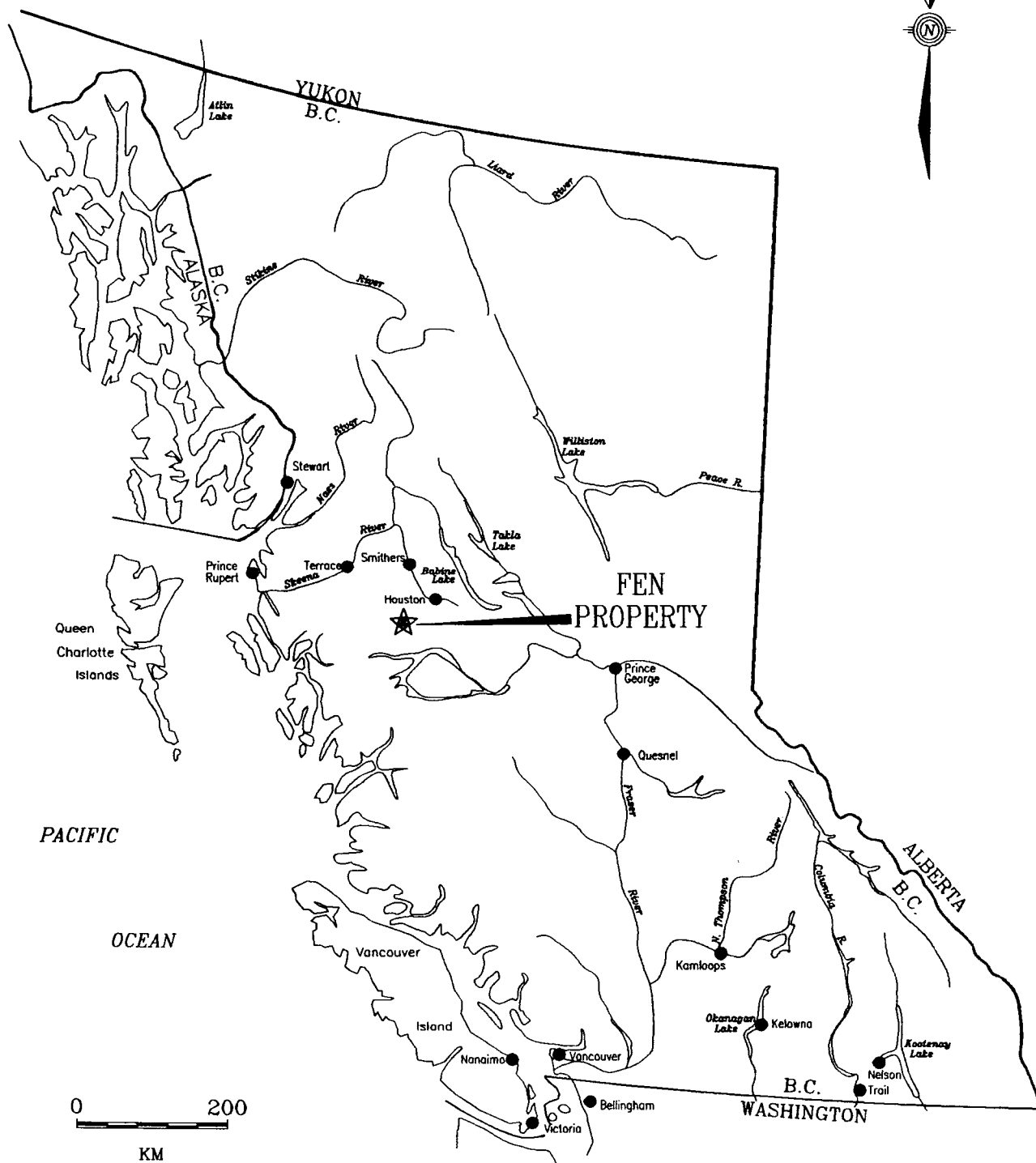
The Fen property is located in central British Columbia, about 33 kilometers southwest of the town of Houston and 70 kilometers south of Smithers. The geographic center of the property is at 54°10' north and 126°57' west (fig 1). The area was once heavily wooded, but now is being extensively logged. Access is via the Morice River forest road (30 km, well maintained and driving speed up to 80 km/hour) to Fenton Creek, then via the Fenton Creek gravel logging road (7 km, 4x4 truck can drive up to 30 km/hour) to Mineral Hill which is the center of the property. There is a network of old and new logging roads of variable quality to clear-cut blocks covering different parts of the property (fig 2).

The Fen property was originally staked in 1965 in response to a regional geochemical stream sediment silver, lead and zinc anomaly in Code Creek. Since then several operators have worked on parts of the property. Work has included stream sediment geochemistry, soil geochemistry, airborne and ground EM surveys, overburden drilling, and bedrock drilling using both rotary diamond and percussion equipment. Thirty core and twenty two percussion holes are known to have been drilled. Results show a large zinc, silver and lead soil geochemical anomaly stretching over 5 km east-west and 1.3 km north-south. A large coincident alteration zone has been outlined by geological mapping. Within the anomalous area a float boulder was found in a trench that returned assays of 0.6 oz/ton gold, 31 oz/ton silver, 18% zinc, 7% lead, and 0.6% copper. The eastern-most drill holes contain disseminated zinc, silver and lead over 43 meters in strongly altered pyroclastic rock units. While metal values found to date have been sub-economic, the potential of discovering a Kuroko type massive sulfide deposit or a hydrothermal Ag-Au-Cu deposit analogous to Equity Silver is thought to exist.

Consolidated Samarkand Resources Inc. has recently optioned the Fen property and contracted the author to do a geological reconnaissance program as the prologue to an aggressive exploration project. This program consists of two parts: (i) previous data compilation and (ii) field geological reconnaissance investigation from July 6 to 16, 1995. The investigated area is over an 80 km² (6x14 km) strip of sloping terrain of modest relief lying just south of Morice River (elevation range mostly from 2,700 to 3,500 feet).

2. Exploration History

The exploration history of the Fen property is compiled as follows. The key references for this compilation include Church (1972), Dawson (1985) and Ronning (1995).



CONSOLIDATED SAMARKAND RESOURCES INC.

FEN PROPERTY
LOCATION MAP

NTS: 93L/2

Date: Feb. 1996

Figure:

In 1965 the property was discovered as a result of a regional stream sediment sampling program. Soil sampling carried out by Julian Mining Company was performed over the entire property. A silver-lead-zinc geochemical anomaly was revealed and 20 claims were staked.

In 1966 the property came under the control of Anaconda American Brass Ltd. and from 1966-1971 an extensive program of exploration was carried out including geological mapping, magnetometer and induced polarization surveys, geochemical soil sampling, trenching and diamond drilling.

In 1972 Helicon Explorations Ltd. picked up where Anaconda left off with more induced polarization work and geochemical surveys. Helicon bored 25 drill holes totaling 3,350 meters. Most of the drilling was carried out in the eastern part of the current claim block. In 1973 this company carried out further drilling and trenching.

In 1975 Sullivan and Rogers acquired the Red claim (part of the current property) for Vital Pacific Resources. In 1976 this company conducted electromagnetic, induced polarization and magnetometer surveys as well as drilling 2 core holes on this property.

In 1976 Vital Pacific staked the Jay claim (part of the current property) and carried out geochemical soil sampling as well as an induced polarization survey.

In 1977-1978 Vital Pacific optioned its property to Mattagami Lake Exploration Ltd. and three diamond drill holes were bored on the Jay claim.

In 1979 Mattagami optioned the Code-Fen claims from Anaconda. During 1979-1981 Vital Mines Ltd. and Mattagami Lake Exploration carried out extensive detailed geophysical work including induced polarization, Crone-Shootback EM, Radem and EM 16R ground surveys, an airborne magnetic and electromagnetic survey as well as a 1,691 meter diamond drilling program.

In 1983 Mattagami terminated its agreement and a new option agreement was reached between Vital, Anaconda and Cominco Ltd.

In 1984 Cominco carried out induced polarization, magnetic and electromagnetic surveys and did 1,411 meters of percussion drilling in 22 holes. Cominco failed to find any Equity-type mineralization and concluded that the overburden layer anomalous in Pb, Zn and Ag may have

originated to the eastern segment of the property where a disseminated sulfide zone grading 22 g/t Ag over a thickness of 40 m was intersected by drilling. Cominco dropped its option in early 1985.

During the 1985 field season Vital performed soil sampling, magnetometer and VLF electromagnetic surveys on three separate grids and bored six diamond drill holes aggregating 824 meters.

In 1986-1994 Baril Developments Ltd. the present owner of the Fen property, resumed the exploration activity on this property. Geochemical (including: heavy minerals geochemistry, soil, silt sediment, float boulder and rock from outcrop) and geophysical (mainly VLF-EM survey) survey were undertaken.

3. Significant Previous Work

In brief, the achievements and remaining problems of the exploration work in the past has been summarized as follows:

3.1. Geochemical Surveys

Soil geochemical surveys reveals a zone in which zinc in soils exceeds 300 ppm situated in the central part of the claim group. It extends 4.9 km east-west, 1.3 km north-south and covers 280 hectares. Within the zinc anomaly is a smaller zone in which lead exceeding 40 ppm is coincident with silver exceeding 1.5 ppm in soils. The lead-silver zone is 1.35 km by 0.5 km and covers 27 hectares. Within the anomalous zone, float boulders were found in a trench that returned assays of 0.6 oz/ton gold, 31 oz/ton silver, 18% zinc, 7% lead and 0.6% copper.

3.2. Geophysical Surveys

Geophysical techniques have been consistently applied to the exploration of the Fen property because thick overburden covers most of the property and causes a paucity of outcrop. A 1980 helicopter electromagnetic and magnetic survey was done by Aerodat Ltd. (Sutherland, 1980). This survey covered the whole Fen property and its peripheral area (about 100 km²). The total field magnetic map shows features similar to those of the Equity and Silver Queen mine areas. The high gamma readings of the peripheral area coincide with the least altered volcanic rocks and intrusive stock. The low readings area coincides with hydrothermally altered rocks and includes the geochemical anomalous zone. Multiple north-northeast trending linear conductive features indicated by airborne EM may represent structure zones such as water filled shear zones. The IP survey done by Mattagami Lake Exploration Ltd. (Sutherland, 1981) revealed seven

zones. Of them, zone F is the strongest IP anomaly encountered in the survey, but results from test drill holes were not encouraging. The IP survey undertaken by Cominco Ltd. (Klein, 1984) concluded that the chargeability and resistivity results did not reveal values one would expect from an Equity-type deposit. The most recent geophysical work was VLF-EM survey operated by Zastavnikovich (Bzdel, 1991; Visser, 1993; Ballantyne, 1995). These VLF-EM surveys have delineated numerous VLF anomalies. However, it is not clear to what degree mineralization is responsible for the anomalies delineated (Ballantyne, 1995).

3.3. Geological Surveys and Drilling

The most comprehensive geological map is by Church (1972). According to Church(1972), "the bedded units are mainly volcanic comprising rocks thought to be part of the Hazelton assemblage, and cover rocks equivalent to the Tip Top Hill, Buck Creek, and younger Tertiary formations (Church later named it as Fenton Creek Formation). Igneous intrusions consist of a granite stock, a small gabbroic intrusion, and an assortment of dykes". The detailed descriptions about these rock units are given in Table 1.

Table 1. Lithological Units of Fen Property and its Peripheral Area

Bedded Rocks	
Tertiary	Fenton Creek volcanic rocks ? rhyolite and trachyte breccia and glassy lava
	Buck Creek volcanic rocks 48.2±1.6 Ma mainly fresh brown aphanitic andesite
Upper Cretaceous	Tip Top Hill volcanic rocks 75.5 to 77.1 Ma dacitic pyroclastic rocks and lavas
	Sedimentary rocks ? mainly sandstone, locally rust-colored
Lower or Middle Mesozoic	Hazelton Group ? mainly maroon and brown andesitic and dacitic pyroclastic rocks and epidote-bearing mottled grey- greenish andesite and basalt and minor rhyolite
Igneous Intrusions	
Tertiary	Owen Hill granite medium grained leucocratic granite
Mesozoic	small gabbro stock medium grained gabbro

After B. N. Church (1972) and Church and Barakso (1990)

In general, Mineral Hill, in the center of the property is believed to be underlain by Hazelton Group andesitic pyroclastic rocks subcropping through a window of Tertiary Fenton Creek rhyolitic and dacitic rocks and Buck Creek andesite (cf. Church, 1972). However, the property has sparse outcrop. No continuous outcrop profile shows any unconformable or structural contact around the so called "window". It seems that the boundary of the Hazelton "window" is deduced based on the soil anomaly.

Interpretations of the direction of glacial transport are conflicting. Church (1972) mapped the direction of glacial transport was from west to east. Rutter (1979) got the same conclusion based on aerial photographic study of glacial land forms. However, Sorbara (1985) concluded that transport was from east to west based on the assumption that the anomalous overburden is derived from the mineralization encountered in diamond drill holes located at the eastern segment of the property.

The recent geological mapping done by P. A. Ronning (1995) indicated that altered rocks lie north of a poorly constrained "alteration front" with a roughly arcuate shape. 150 meters beyond the alteration front to the north, bedrock disappears beneath overburden and swampy ground. Relatively little exploration has been done north of the alteration front, due to the paucity of outcrop. Ronning (1995) stated: "potential exists to find more alteration, and possibly mineralization, north of the altered outcrops".

Drilling to date has not explained the soil anomalies. The eastern most drill holes intersected a disseminated zinc, silver and lead sulfide zone which gave assays of 27 ppm of silver, 0.68% zinc and 0.49% lead over 40 meters. This type of disseminated sulfides and sulfide veinlets could be the source for the soil anomaly but can not be explained as the source of the high grade massive sulfide boulders. In six of the 1984 percussion drill holes located at the western segment of the property, values of Cu, Pb, Zn and Ag were found to be background despite the fact that most of the holes exhibit moderate to intense clay-sericitic alteration. However, overburden sampling showed the presence of a relatively thin layer of residual overburden with low geochemical values, overlain by a thicker transported overburden layer that is anomalous in lead, zinc and silver (up to 404 ppm, 1060 ppm and 2.5 ppm, respectively).

4. Geology

4.1. Lithologic Units

According to author's field investigation of 1995, the pyroclastic rocks distributed around Mineral Hill (Hazelton Group) and those around Silicic Hill (Fenton Formation; fig. 3) have the more features in common than in contrast. Both consist dominantly of andesitic pyroclastic rocks plus various amount of rhyolite. Recent extensive clear cut logging has exposed relatively abundant outcrops on the northwest gentle slope of Silicic Hill. This provides an opportunity to examine the relationship between the Hazelton Group and the Fenton Creek Formation. Their apparent difference looks likely to be caused by hydrothermal alteration (this will be discussed in detail in a later section). Therefore, it is suggested that the locally derived name Fenton Formation be dropped and these rocks classified as Hazelton Group, as there is insufficient evidence to separate them into their own group.

Another different opinion on the lithologic units at the property area is about "Buck Creek" aphanitic andesite. This unaltered to weakly altered, fine grain to aphanitic andesite is analogous to the host rock microdiorite and its extrusive equivalent - andesite (K-Ar age of 75 Ma) at Silver Queen mine (Church and Barakso, 1990 and Leitch et al., 1991, 1992). This rock unit belongs to the Tip Top Hill formation.

In brief, the lithological units at the Fen property and its peripheral area belong to terrestrial explosive and extrusive volcanic rocks and it is suggested to simplify them from old to young into one pyroclastic unit (Hazelton Group), one andesitic lava unit (Tip Top Hill) and one intrusive unit (Owen Hill granite). All of them are pre-mineralization.

4.2. Structural Geology

According to Church (1972), the Fen property and its peripheral area is characterized by a reticulate pattern of small valleys and draws which evidently mark a system of important fractures. The reticulate blocks are bounded by two sets of lineaments: (i) NW 340° and (ii) NE 050°. The exact positions of these lineaments are redrawn on Figure 3 by the author according to the results of the 1980 airborne geophysical survey (Figure 3, after Sutherland, 1980).

In addition, the airborne survey indicates the existence of west-north-west lineaments, striking about WNW 290° (Sutherland, 1980). The most recent VLF-EM geophysical survey also defined several VLF anomalies trending WNW which are thought to be the response of through-going structures (Ronning, 1995).

According to author's field investigation, the two sets of lineaments mapped by Church (1972) are a conjugate structure which is quite consistent with the conjugated joints developed in this area. Of them, the NW structure is relative more compressive and the NE structure is relatively more tensile. The structure trending WNW is probably younger than this set of conjugate fractures. Similar to the NE relative tensile structure zone, the WNW structure seems quite tensile too. The Morice River seems to have developed its course along these two relatively tensile structure zones.

The horizontal displacement along these structure zone is hard to estimate but the vertical displacement is possible to deduce because: (i) the volcanic sequences are well understood, (ii) the volcanic sequences seems not to be disturbed, i.e. the attitude of bedded tuff remains gently dipping and no intense folding was observed. The Fen property and its peripheral area has been divided into several relatively up and down blocks bounded by fractures as follows (refer to fig 3):

- (i) Tsalit Mountain block is up relative to the blocks around it;
- (ii) Owen Hill block is down relative to Tsalit Mountain block but up relative to the block on its west side;
- (iii) Black Quartz Hill block is down relative to its neighbor blocks except its NW block (NW Fenton Creek block);
- (iv) NW Fenton Creek block is down relative to all its neighboring blocks
- (v) Mineral Hill-Silicic Hill block is up relative to the surrounding blocks;
- (vi) Argillic Hill block is down relative to the surrounding blocks except the block on its north; and
- (vii) the blocks west of Pimpnel Creek are up relative to the blocks east of the Creek.

4.3. Alteration

The spatial variation of the type and intensity of hydrothermal alteration is usually used as a guide to discovering exploration targets. Unfortunately, no one has described the distribution pattern of hydrothermal alteration across the property even though several types of alteration including propylitic, argillic and silicic have been described in many old reports on the Fen property.

Recently, Ronning (1995) found the intensity of hydrothermal alteration of pyroclastic rock units increased from west and southwest to north and northeast in a small strip area (about

0.5x1 km) east of the Mineral Hill. An "Alteration Front" was roughly delineated as an arcuate shape open toward the north.

The author spent most of his time investigating the property and its peripheral areas during the period of his field work trying to deduce whether the intensity and type of alteration around Mineral Hill is the most favorable for discovering mineralization.

Alteration mapping shows that (i) an elliptical argillic alteration halo (about 20 km²) covers most of the currently claimed property and is surrounded by propylitically or unaltered andesite and andesitic tuff/breccia; (ii) a smaller silicic alteration halo (around Silicic Hill and Black Quartz Hill and about 6 km²) can be delineated within the argillic alteration halo (Figure 3). Another interesting thing about the alteration is that the outcrops along the Tsalitpn Lake fracture zone are more intensively altered. For example, rock samples Fen 95-21 and Fen 95-29 are intensely propylitically altered in comparison with other unaltered andesite distributed beyond the argillic alteration halo; Silicic Hill and Black Quartz Hill are intensely silicically plus argillically altered whereas the southern part of Mineral Hill and Argillic Hill are only argillically altered.

4.4. Glaciation

One of the most encouraging features on the Fen property is a Ag-Zn-Pb soil anomaly around Mineral Hill area. The failure to find a satisfying source for this anomaly by drilling raises the question of which direction the last episode of glaciation moved. Church (1972) thought the last pulse of regional Pleistocene glaciation moved easterly across the area scraping the high bedrock exposures leaving a mean striation direction of 94 degrees. But he also mentions that a period of local valley glaciation which postdated the last regional ice advance affected the area westward from Owen Hill and Tsalit Mountain.

According to author's field investigation, the possibility that local valley glaciation advanced northwestward from Nadina Mountain, which is the highest mountain in this region, can not be excluded.

5. Mineralization Potential

It is almost certain that the potential of discovering a Kuroko type massive sulfide ore deposit on the Fen property does not exist simply because the Fen property is in a terrestrial volcanic setting rather than a submarine volcanic setting.

As introduced in exploration history, the Fen property was discovered through geochemical stream sediment and soil surveys. Geological work has been hindered because of the

scarcity of outcrop. Therefore, geochemical and geophysical approaches have been used as the key means to explore this property in the past. However, the Ag soil anomaly at Fen property is smaller and weaker than that at Equity mine. The former has a size of 1500×800 m delineated with 1.5 ppm of Ag in soil. The latter is 2200×1000 m with 3 ppm of Ag in soil (cf. Ney et al. 1972, Figure 3.). This difference may be interpreted as the possible ore deposit at Fen might be buried deeper than the Equity ore deposit. But this interpretation contrasts with the high grade massive sulfide boulder found within the anomalous area which indicates the possibility of a high grade ore body near surface.

A comparison of the lithogeochemical data from the Fen property with that around Equity mine and Silver Queen mine is helpful to evaluate the mineralization potential of the Fen property. According to Church and Barakso (1990), arsenic and silver are excellent pathfinder elements for locating zones of alteration and ore typical of the Buck Creek area; clusters of anomalous arsenic and silver values, greater than 5 and 2 ppm respectively, coincide with known mineral deposits and prospects. Whereas the most recent lithogeochemical data from the Fen property (Ronning, 1994) shows that of 37 samples collected around Mineral Hill one has arsenic and three have silver values above 5 and 2 ppm respectively. Using the above reasoning this indicates that the potential of discovering an ore deposit around the Mineral Hill area similar to that of Equity or Silver Queen in terms of grade and tonnage is quite slim. The potential of finding other mineralization zones peripheral to Mineral Hill still exists, such as the areas around Silicic Hill and Black Quartz Hill.

The area around Silicic Hill and Black Quartz Hill is a relatively new area for exploration. This area might be a good exploration target justified by the favorable petrological, structural and alteration setting described in the sections above. The advantages of exploring this area include: (i) even with limited geochemical data; results indicate some of the highest values from rock samples collected in this area, such as sample 104R and 105R have 2.2 and 1.7 g/t Ag, respectively; J-06 and J11 give 10 and 18 ppb Au, respectively (Zastavnikovich, 1991); (ii) the results of the helicopter electromagnetic and magnetic survey show that there is a EM conductor axis and a total field magnetic low anomaly in this area; (iii) this area has recently been clear-cut logged and there is new logging road to access this area; (iv) the overburden in this area seems much thinner than around Mineral Hill, therefore more geological information is available and geochemical results likely reflect the underlying bedrock.

6. Conclusions and recommendations

The lithological units at the Fen property and its peripheral area belong to terrestrial explosive and extrusive volcanic rocks and are suggested to be named as three units: (i) pyroclastic unit (Hazelton Group), (ii) andesite units (Tip Top Hill) and (iii) intrusive unit (Owen Hill granite) in a temporal sequence. All of them are pre-mineralization.

The Fen property and its peripheral area has been divided into several relatively up and down blocks bounded by a set of conjugate fractures. Of them, one is striking toward NW 340° and is compressive; the other strikes toward NE 50° and is tensile. A younger tensile fracture system trending WNW 290° exists in this area too.

The results of alteration mapping shows that (i) an elliptical argillic alteration halo (about 20 km²) covers most of the currently claimed property and is surrounded by propylitic or unaltered andesite and andesitic tuff/breccia; (ii) a smaller silicic alteration halo (around Silicic Hill and Black Quartz Hill and about 6 km²) can be delineated within the argillic alteration halo; (iii) the outcrops along the Tsalitpn Lake fracture zone are more intensively altered.

The possibility that local valley glaciation advanced northwestward from Nadina Mountain can not be excluded.

It is almost certain that the potential of discovering a Kuroko type massive sulfide ore deposit in the Fen property does not exist simply because the Fen property is in a terrestrial volcanic setting rather than submarine volcanic setting.

The potential of discovering an ore deposit around the Mineral Hill area analogous to that of Equity or Silver Queen in terms of grade and tonnage is quite slim. The potential of finding other mineralized zones peripheral to Mineral Hill still exists, such as the areas around Silicic Hill and Black Quartz Hill.

Exploration of Silicic Hill and Black Quartz Hill area should apply geological, geochemical and geophysical approaches integrally. Since this area has a thin overburden and is recently clear-cut logged, a trenching program following the geochemical and geophysical survey will reduce exploration cost significantly.

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Schedule A**Located Mineral claims**

<u>Claim name</u>	<u>Number of units</u>	<u>Tenure number</u>	<u>Expiry Date</u>
Fen 1	20	242780	Sept. 25/97
Fen 1 Fr.	1	318278	June 19/97
Fen 2	20	241036	June 25/97
Fen 2 Fr.	1	318279	June 19/97
Tsalit 4	14	243216	March 21/96
Tsalit 5	16	243217	March 21/96
Tsalit 6	1	243218	March 21/96
Tsalit 7	1	243219	March 21/96
Tsalit 8	1	243220	March 21/96

STATEMENT OF QUALIFICATIONS

I, X. Charlie Cheng, of the City of Vancouver, Province of British Columbia, hereby certify:

1. THAT I am a geologist residing at 5529 President Row, Vancouver, British Columbia, Canada, V6T 1L5.
2. THAT I obtained a Bachelor of Science (Engineering) degree in Geology from Wuhan Institute of Geology at Wuhan, P.R. China in 1982.
3. THAT I obtained a Master of Science degree in Economic Geology from China University of Geosciences at Wuhan, P. R. China in 1985.
4. THAT I obtained a Ph. D. degree in Economic Geology from The University of British Columbia at Vancouver, British Columbia, Canada in 1995.
5. THAT I am applying for certification as a registered Professional Geologist with the Association of Professional Engineers and Geoscientists of British Columbia.
6. THAT this report is based upon the results of a thorough review of published and printed reports and maps on the subject properties and the surrounding areas.
7. THAT I have no interest in the properties or securities of Consolidated Samarkand Resources Inc., nor do I expect to receive any such interest.
8. THAT I consent to the use of this report by Consolidated Samarkand Resources Inc. in a prospectus of Statement of Material Facts for the purpose of private or public financing.

Dated in Vancouver, British Columbia, this 15th day of February, 1996.



X. Charlie Cheng

CONSOLIDATED SAMARKAND RESOURCES INC									
Field program from July 6- 16, 1995									
FEN PROPERTY									
Date	Description	Assay & Analysis	Equipment Rental	Food/ Lodging	Reports Drafting	Transport & Travel	Supplies	Personnel Misc	Total
6/7/95	Ibex Drafting Services								
	Inv. # 95-021				152.00				152.00
7/5/95	Neville Crosby- supplies								
	Inv. # 27098						111.50		111.50
7/5/95	C. Cheng expenses								
	Motel, gas, food, etc.			570.98		391.65	54.58		1,017.21
7/20/95	C.Cheng: Geologist								
	20 days @ \$250/day							5,000.00	5,000.00
7/17/95	Daljit Rai: Assistant								
	60 Hours @ \$9/hr.							540.00	540.00
7/30/95	Laptop Computer rental								
	2 weeks @ \$125/wk		267.50				23.87		291.37
7/30/95	Truck rental 2 weeks @ \$500/wk					1,000.00			1,000.00
8/31/95	Ibex Drafting Services								
	Inv. # 95-036				70.00				70.00
10/10/95	Acme Analytical Laboratories								
	Inv. # 95-3760								
	6 ICP analysis @ \$13.90	83.40							83.40
	6 Rock preparation @ \$3.96	23.76							23.76
3/20/96	Report Preparation				1,000.00				1,000.00
	SUBTOTAL	107.16	267.50	570.98	1,222.00	1,391.65	189.95	5,540.00	9,289.24
									9,289.24

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GEOCHEMICAL ANALYSIS CERTIFICATE

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Consolidated Samarkand Resources Inc. File # 95-3760 Page 1

P.O. Box 11569, 450 - 650, Vancouver BC V6B 4N8

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 %	Al %	Na %	K %	W ppm	Zr ppm	Sn ppm	Y ppm	Nb ppm	Be ppm	Sc ppm	B* ppm
Fen95-2	3	14	29	73	<.5	7	5	580	2.33	12	<10	<.4	9	113	<.4	18	<5	42	.10	.060	16	10	.13	1286	.25	7.40	.14	3.37	<4	101	8	7	22	1	6	54
Fen95-3	3	20	203	673	1.9	7	3	1208	3.81	175	<10	<.4	10	83	2.4	39	9	43	.07	.071	20	9	.23	968	.18	7.90	.09	3.96	6	94	24	8	21	1	6	62
Fen95-4	2	6	24	30	<.5	5	<2	59	.72	16	<10	<.4	13	254	<.4	22	<.5	23	.90	.030	17	4	.10	1325	.19	7.75	2.06	3.19	<4	78	6	5	22	1	4	24
Fen95-10	2	4	24	17	<.5	<2	2	175	.77	5	<10	<.4	13	237	<.4	23	<5	22	.66	.042	19	5	.12	1336	.23	7.51	2.07	3.02	<4	58	7	4	23	1	4	24
Fen95-11	9	12	17	590	<.5	12	7	7229	19.81	54	11	<.4	5	193	2.1	10	21	33	.39	.019	12	5	.06	4544	.10	4.10	.85	1.48	<4	47	3	12	12	3	10	15
Fen95-13	<2	7	25	40	<.5	4	2	117	.65	<5	<10	<.4	12	171	<.4	19	<5	33	.55	.043	19	6	.27	1160	.30	7.84	1.17	2.97	<4	90	8	8	23	<1	7	12
RE Fen95-13	<2	7	22	40	<.5	3	<2	107	.65	<5	<10	<.4	11	174	<.4	20	<5	32	.57	.043	19	7	.27	1157	.30	8.04	1.16	2.98	<4	91	9	8	23	<1	7	18
RRE Fen95-13	<2	8	31	56	<.5	6	2	96	.72	<5	<10	<.4	11	177	<.4	21	<5	35	.60	.052	20	10	.28	1226	.30	8.84	1.28	3.27	<4	96	11	9	26	<1	7	14
Fen95-15	<2	11	22	46	<.5	6	3	336	1.84	<5	<10	<.4	9	280	<.4	20	<5	26	1.39	.069	14	11	.23	1396	.26	7.28	2.33	2.73	4	83	8	7	21	<1	5	9
Fen95-17	5	47	31	103	<.5	25	16	996	5.52	6	<10	<.4	6	889	<.4	21	5	140	2.78	.309	36	7	.41	2055	.83	9.29	2.56	2.84	<4	171	26	18	28	1	15	13
Fen95-19	5	4	26	35	<.5	6	<2	654	.55	8	<10	<.4	10	76	.4	19	<5	2	.64	.011	9	4	.10	395	.04	6.71	2.41	3.53	<4	47	2	9	26	2	3	31
Fen95-20	3	<2	25	35	<.5	<2	<2	723	.48	5	<10	<.4	11	76	.4	18	<5	<2	.65	.008	9	2	.10	398	.03	6.50	2.36	3.43	<4	45	2	9	25	2	3	37
Fen95-24	<2	<2	24	25	<.5	<2	<2	319	.41	<5	<10	<.4	9	1040	<.4	19	<5	2	1.11	.007	8	<2	.22	380	.03	5.94	1.83	1.46	<4	37	2	10	24	1	3	17
Fen95-25	<2	2	24	34	<.5	<2	<2	186	.40	<5	<10	<.4	11	48	.5	20	<5	<2	.36	.009	8	<2	.12	371	.03	7.02	1.62	4.01	<4	38	3	9	26	1	3	12
Fen95-26	2	2	25	26	<.5	<2	<2	204	.31	<5	<10	<.4	10	289	<.4	17	<5	<2	1.20	.008	10	2	.08	314	.03	6.13	.69	2.86	<4	46	2	6	25	1	3	16
Fen95-28	4	8	31	23	<.5	3	<2	55	.70	11	<10	<.4	10	290	<.4	26	<5	37	.98	.081	21	22	.08	1824	.32	8.59	2.49	4.13	<4	135	11	5	25	1	6	17
STANDARD CT	16	50	41	130	6.1	64	27	1034	4.29	26	17	<.4	36	214	17.6	35	25	100	1.16	.110	36	96	1.23	830	.31	6.75	1.58	1.87	19	53	25	10	22	1	14	-

ICP - .250 GRAM SAMPLE IS DIGESTED WITH 10ML HClO₄-HNO₃-HCL-HF AT 200 DEG. C TO FUMING AND IS DILUTED TO 10 ML WITH DILUTED AQUA REGIA. THIS LEACH IS PARTIAL FOR MAGNETITE, CHROMITE, BARITE, OXIDES OF AL, ZR & MN AND MASSIVE SULFIDE SAMPLES. AS, CR, SB, AU SUBJECT TO LOSS BY VOLATILIZATION DURING HClO₄ FUMING. B* - BY FUSION, ANALYSIS BY ICP.

- SAMPLE TYPE: ROCK Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: SEP 25 1995 DATE REPORT MAILED: *Oct 11/95* SIGNED BY: *[Signature]* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

AA
LL

WHOLE ROCK ICP ANALYSIS

AA
LL

Consolidated Samarkand Resources Inc. File # 95-3760 Page 2

P.O. Box 11569, 450 - 650, Vancouver BC V6B 4N8

SAMPLE#	SiO2	Al2O3	Fe2O3	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO	Cr2O3	Ba	Ni	Sr	Zr	Y	Nb	Sc	LOI	SUM
	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%
Fen95-8	56.21	17.14	6.42	1.29	5.12	4.37	2.61	.86	.60	.12	.002	1180	31	691	184	19	14	<10	4.5	99.56
Fen95-21	50.71	16.18	8.52	6.39	6.25	5.24	.09	1.62	.42	.14	.023	261	98	901	143	22	<10	19	4.7	100.47
Fen95-29	49.40	16.12	7.65	3.87	11.73	2.92	.31	.54	.09	.15	.012	279	41	306	55	<10	<10	22	6.6	99.49
Fen95-33	75.70	12.82	1.02	.16	.59	3.72	4.71	.13	.02	.02	<.001	410	14	82	54	<10	<10	<10	.2	99.18
Fen95-34	51.82	15.79	9.17	5.80	7.06	3.26	1.18	1.53	.53	.16	.018	940	95	895	195	20	<10	15	3.7	100.33
Fen95-35	70.91	14.55	2.50	.70	1.56	4.26	3.68	.37	.08	.05	.002	1385	17	271	157	12	<10	<10	1.0	99.96
RE Fen95-35	70.72	14.52	2.47	.70	1.54	4.26	3.67	.38	.09	.05	.001	1387	15	269	172	10	<10	<10	1.0	99.70
RRE Fen95-35	71.72	14.58	2.32	.61	1.35	4.36	3.69	.39	.10	.05	<.001	1382	11	271	170	11	<10	<10	.8	100.26
Fen95-37	54.74	18.49	7.02	1.88	6.28	4.43	2.07	1.01	.54	.15	.004	1113	15	833	150	18	10	<10	3.5	100.43
STANDARD SO-15	49.38	12.67	7.21	7.29	5.82	2.41	1.92	1.62	2.83	1.30	1.057	2225	97	387	735	18	19	<10	5.9	99.95

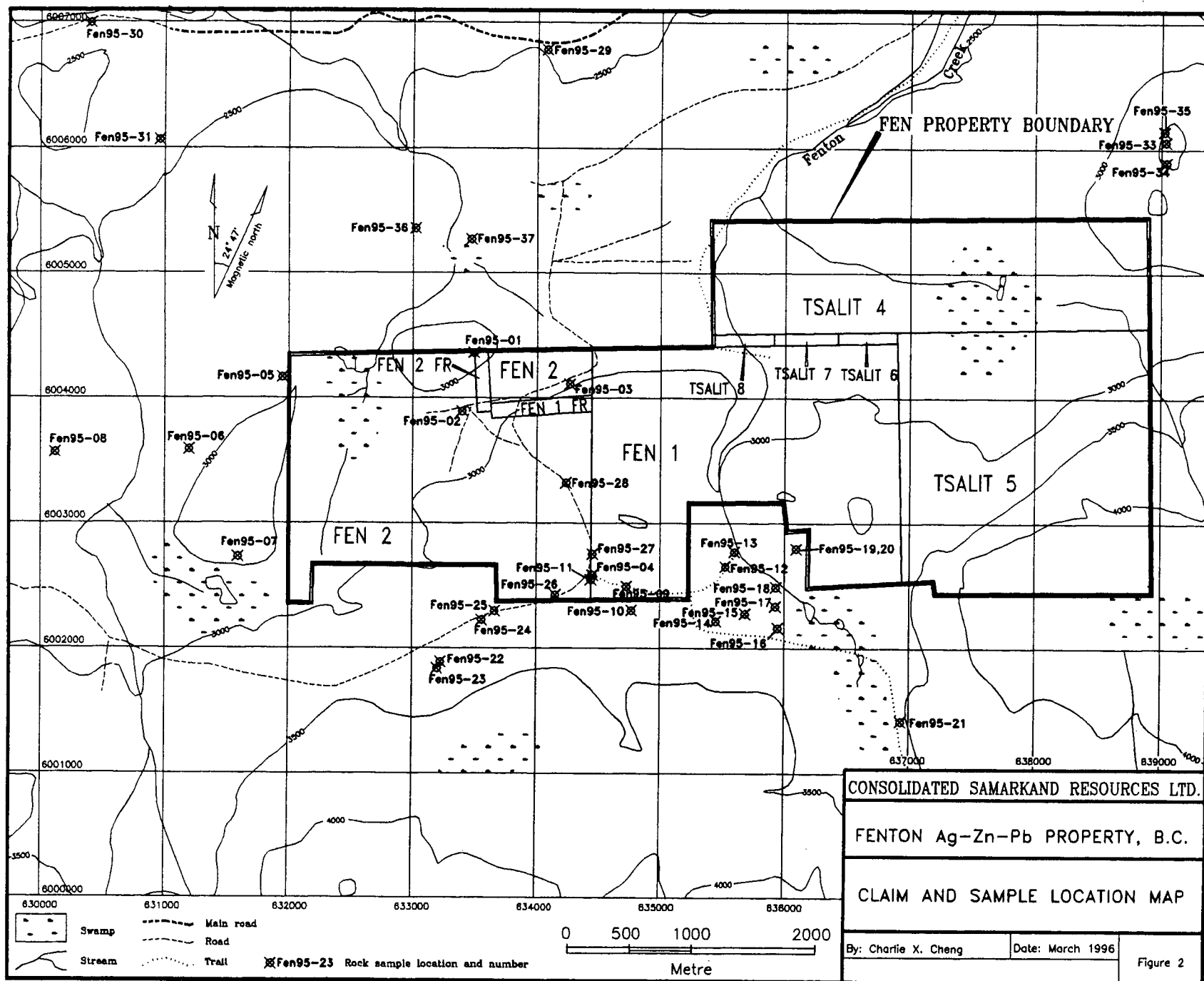
.200 GRAM SAMPLES ARE FUSED WITH 1.2 GRAM OF LIBO2 AND ARE DISSOLVED IN 100 MLS 5% HNO3. Ba IS SUM AS BaSO4 AND OTHER METALS ARE SUM AS OXIDES.

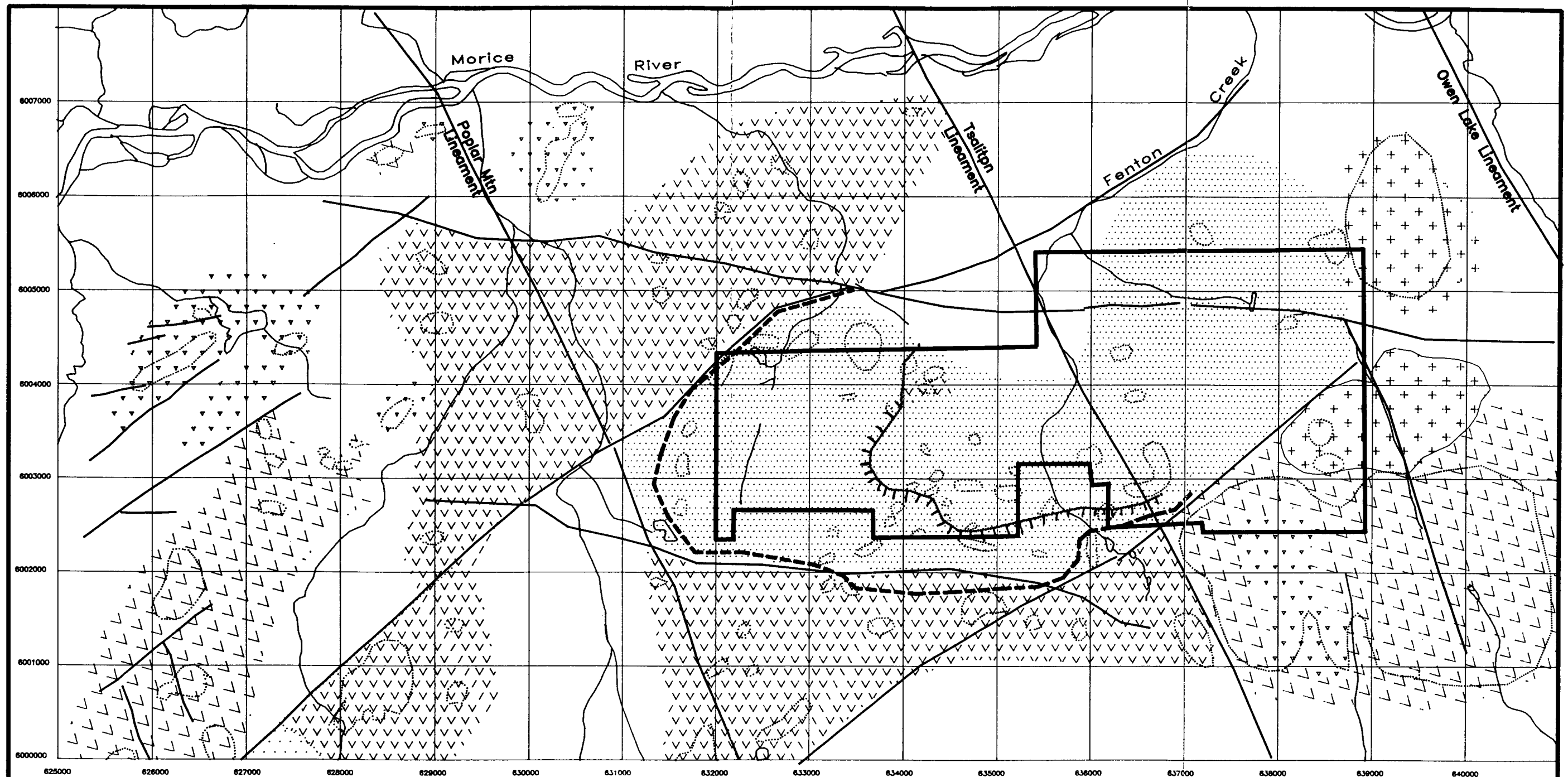
- SAMPLE TYPE: ROCK Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: SEP 25 1995

DATE REPORT MAILED:

SIGNED BY *[Signature]* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS





Legend

Tertiary Igneous intrusions

+ + Owen Hill granite

Upper Mesozoic

Tip Top Hill volcanic rocks: fresh aphanitic andesite, andesitic pyroclastic rocks.

Lower/middle Mesozoic: Hazelton Group

Crystal and lithic tuff: rocks are argillically and silicically altered to various extents. The primary composition could vary from andesite to rhyolite

Epidote-bearing mottled grey-green andesite

Marron and brown andesitic breccia

Outcrop

Lineament or deduced fault

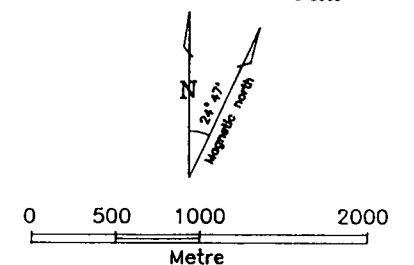
Argillic alteration front

Silicic alteration front

Claim boundary

Stream

Lake



CONSOLIDATED SAMARKAND RESOURCES LTD

Fenton Ag-Zn-Pb Property, B.C.

Geology of the Fenton Creek Area

By: Charlie X. Cheng

Date: March 1996

Figure 3.

Table 2. Description of Samples Collected in 1995

Sample Id	Rock type	Alteration	Location	UTM coordinate		Description
				east	north	
Fen95-1	Andesite	silicic and argillic	Top of Mineral Hill	633489.2	6004358.8	White, chalky. Primary porphyritic texture remains. Phenocrysts (mainly plagioclase) are altered to clay mineral. Secondary quartz present in the form of flood in matrix and stringer veinlets. Alteration seems structurally controlled. Outcrop at SE side of Mineral hill as a cliff appears more weakly altered. Check sample is random grab from the rubble under the tree. cf. PRF-08*.
Fen95-2	crystal and lithic tuff	argillic	South of Mineral hill, in ditch beside the main access road to the property	633743.5	6003979.5	White sub-millimetric feldspar crystal in grey, cryptocrystalline groundmass. Check sample is chipped from outcrop. cf. PRF-04
Fen95-3	crystal and lithic tuff	silicic and argillic	SEE of Mineral hill, in ditch beside the main access road to the property	634264.3	6004144.9	Reddish brown on weathered surface, apple green on fresh surface, hard, dense, irregular sulfide veinlets are observed. Check sample is grabbed from the outcrop. cf. PRF-01, 02.
Fen95-4	crystal and lithic tuff	silicic and argillic	road cross at SW of Silicic hill	634450.0	6002583.5	Similar to Fen95-3 but the grain size is coarser and no sulfide veinlets found. sample is random grab.
Fen95-5	crystal and lithic tuff	argillic	North of Argillic hill, roadcut of logging road	631945.7	6004164.3	Lithologically as Fen92-2. Sample is random grab.
Fen95-6	andesite	unaltered	West slope of Argillic hill, outcrop beside the logging road.	631196.1	6003588.8	Dark green, greenish dark grey, hard, magnetic, no reaction with diluted acid, fine grain to aphanitic texture. Sample is random grab.
Fen95-7	crystal and lithic tuff	argillic and oxidizing	South slope of Argillic hill	631589.2	6002730.0	Dark brown, non magnetic, no reaction with diluted acid, thick Mn-Fe oxide coating probably caused by oxidization of disseminated sulfide. Sample is chipped from an outcrop.
Fen95-8	andesite	unaltered	Andesite hill	630117.3	6003561.4	Lithologically as Fen95-6. Sample is random grab.
Fen95-9	crystal and lithic tuff	silicic and argillic	South of Silicic hill, roadcut of old logging road	634724.6	6002490.7	White, chalky, quartz banding. Sample is random grab.
Fen95-10	crystal and lithic tuff	argillic	South of Silicic hill, roadcut of new logging road	634765.0	6002301.1	Lithologically as Fen95-2. Sample is chipped from outcrop.

Fen95-11	breccia boulder	oxidizing	Southwest of Silicic hill and road cross, near the sample site of Fen95-4	634437.9	6002547.2	Reddish brown, heavy, angular fragment cemented by barite-oxidized sulfide material. The boulder has been crushed and its original size is about 20x20x20 cm. Sample is grab.
Fen95-12	crystal and lithic tuff	silicic and argillic	Southeast slope of Silicic hill and roadcut of old logging road.	635524.0	6002652.1	Lithologically as Fen95-9. Sample is grab.
Fen95-13	crystal and lithic tuff	silicic and argillic	Southeast slope of Silicic hill, roadcut of old logging road, west of Fenton creek.	635600.7	6002769.1	Lithologically as Fen95-9. Sample is grab.
Fen95-14	crystal and lithic tuff	weak argillic	South of Silicic hill, roadcut of new logging road.	635419.7	6002117.9	Purplish gray, non magnetic and no reaction with diluted acid. Plagioclase and mafic mineral crystals basically remain unaltered, fine grain matrix material is argillically altered. Sample is grab.
Fen95-15	crystal and lithic tuff	weak argillic	South of Silicic hill, roadcut of new logging road, 300 m east of Fen95-14.	635714.1	6002081.4	Lithologically as Fen95-14. Sample is grab.
Fen95-16	andesitic breccia	propylitic	West of Fenton Lake, roadcut of new logging road	636043.1	6002119.2	Purplish brown and green, weakly magnetic, no reaction with diluted acid, primary mafic minerals have altered to epidote and chlorite. Sample is grab.
Fen95-17	Feldspar porphyry	argillic or weathered	West of Fenton Lake, roadcut of new logging road	636004.4	6002220.4	Semi-weathered, phenocrysts consist of plagioclase, K-feldspar, hornblende, their size ranges from 2 - 5 mm, matrix is fine grained to aphanitic. Sample is grab.
Fen95-18	crystal and lithic tuff	argillic	Northwest of Fenton Lake, roadcut of new logging road	636024.6	6002385.8	Lithologically as Fen95-10. Sample is grab.
Fen95-19	Quartz vein?		West slope of Black Quartz hill	636093.2	6002797.4	Boulder, size about 1x1x1 m, black, almost pure shattered quartz characterized by conchoidal fracture and graphite (?) and unknown metallic mineral coating. Its outcrop is found at the top to the Black Quartz hill. Sample is chipped.
Fen95-20	Quartz vein?		West slope of Black Quartz hill	636093.2	6002797.4	Duplicate sample of Fen95-19.
Fen95-21	andesite	propylitic	Southeast of Fenton Lake, west of Taslit Mt., roadcut of new logging road	636933.8	6001422.6	Dark green, porphyritic texture, non magnetic, reacts with diluted acid. Sample is grab.

Fen95-22	andesite	argillic	Southwest of Silicic hill, outcrop south of the logging road	633227.2	6001890.4	Buff grey, non magnetic and no reaction with diluted acid. Sample is chipped.
Fen95-23	andesite	oxidized	30 m south of Fen95-22	633199.7	6001840.9	Intensely fractured, dark grey on fresh surface, reddish brown on weathered surface, weakly magnetic, no reaction with diluted acid. Sample is chipped.
Fen95-24	tuff	silicic and argillic	Southwest of Silicic hill, roadcut of the logging road	633557.7	6002226.2	White, porcelaineous, primary pyroclastic texture is hard to recognize, no reaction with diluted acid. Sample is chipped.
Fen95-25	lithic breccia	argillic	Southwest of Silicic hill, roadcut of the logging road, about 100 m east of Fen95-24	633662.3	6002297.7	White, soft, chalky, no sulfides. Sample is grab.
Fen95-26	lithic tuff	silicic and argillic	Southwest of Silicic hill, roadcut of the logging road, about 500 m east of Fen95-25	634152.5	6002424.3	White, semi-porcelaineous, primary pyroclastic texture is still recognizable. no oxidized sulfide. Sample is grab.
Fen95-27	crystal and lithic tuff	silicic and argillic	West slope of Silicic hill, roadcut of the main access road to the property	634450.0	6002753.0	Lithologically as Fen95-9. Sample is grab.
Fen95-28	crystal and lithic tuff	silicic and argillic	Northwest slope of Silicic hill, roadcut of the main access road to the property	634236.1	6003321.9	Lithologically as Fen95-9. Sample is grab.
Fen95-29	andesite	propylitic and carbonatic	Roadcut of the gravel road to Morice Lake, about 2 km east of Code Creek	634072.0	6006784.0	Green, dark green, intensely propylitically altered, non magnetic, reacts with diluted acid, abundant carbonate-quartz veins fill the irregular fractures. Primary mafic minerals have altered to epidote and chlorite. Sample is grab.
Fen95-30	lithic breccia	unaltered	Roadcut of the gravel road to Morice Lake, about 2 km west of Code Creek	630400.7	6006996.4	Maroon, brown, hard, non magnetic, no reaction with diluted acid; breccias have various compositions, size ranges from a few centimetres to over ten centimetres, matrix is aphanitic. Sample is grab.
Fen95-31	lithic breccia	oxidized	About 1 km southeast of Fen95-30	630958.4	6006064.6	Reddish orange-brown, other features are similar to those of Fen95-30. Sample is grab.

Fen95-32	andesite	unaltered	Roadcut of the logging road	627329.0	6004749.0	Purplish dark grey, no magnetic, no reaction with diluted acid, the size of plagioclase phenocryst ranges from 1 to 2 mm, matrix is aphanitic. Sample is grab.
Fen95-33	apalite dike	unaltered	Top of Owen Hill	639032.9	6006059.0	Occurs as a dike intruded into Owen Hill granite, its width varies from 5 to 20 cm, strikes northeast, en echelon. Sample is chipped.
Fen95-34	Diabase dike	unaltered	Top of Owen Hill	639038.7	6005895.4	Occurs as a dike intruded into Owen hill granite, dark grey, fine grained. Sample is grab.
Fen95-35	granite	unaltered	Top of Owen Hill	639021.3	6006143.7	It consists mainly of quartz, K-feldspar, plagioclase, biotite. granitic texture, grain size ranges from 2 to 5 mm. Sample is grab.
Fen95-36	andesite	unaltered	North of Mineral hill, West of Code Creek, outcrop beside the logging road	633019.1	6005356.0	Black, magnetic, no reaction with diluted acid, porphyritic texture, phenocrysts consist mainly of plagioclase and hornblende, size ranges from 0.5-1 mm, matrix is aphanitic. Sample is grab.
Fen95-37	andesite	unaltered	North of Mineral hill, east of Code Creek, outcrop beside the logging road	633469.8	6005268.1	Lithologically as Fen95-36. Sample is grab.

* PRF-## is the sample collected and analyzed by Peter Ronning (Ronning 1995).