GEOPHYSICL, GEOCHEMICAL AND CORE RESEARCH ON THE JERSEY PROPERTY NELSON MINING DIVISION SALMO, B.C. NTS 82 F 03E /

ON BEHALF OF
SULTAN MINERALS INC.

BY

A. G. TROUP, P.ENG.
ARCHEAN ENGINEERING LTD.

AUGUST 1994

CLAIMS WORKED

CLAIM NAMES	UNITS	TENURE NUMBERS	ANNIVERSARIES
JERSEY 1	20	319025	JUNE 23
JERSEY 2	20	318817	JUNE 14
JERSEY 3	20	319026	JUNE 23
JERSEY 4	20	318816	JUNE 13
STANDARD FR.	1	L 9072	JULY 02
EMARAL	1	L 9073	JULY 02
DODGER	1	L12083	JULY 02
MARK TAPLEY	1	L12117	JULY 02

LOCATION: 49° 06′ North Latitude ✓
117° 13′ West Longitude ✓
OWNERS: Llyod Addie, Robert bourdon, Sultan Minerals Inc.
OPERATOR: Sultan Minerals Inc.
CONTRACTORS: Archean Engineering Ltd., Peter E. Walcott & Associates Geophysics Ltd. and P&L Geological Services

GEOPHYSICAL GEOCHEMICAL AND GEOLOGICAL ON THE JERSEY PROPERTY NELSON MINING DIVISION SALMO, B.C.

SUMMARY:

In October 1993, **SULTAN MINERALS INC.** obtained an option on a block of 28 crown granted mineral claims, four 2-post claims and 80 mineral units, encompassing approximately 1,700 hectares in the Nelson Mining Division. The claims overlie the former Jersey and Emerald lead, zinc and tungsten mines operated by Placer Dome from 1947 to 1972.

The Jersey property is located in southeastern British Columbia approximately 10 kilometres south of the community of Salmo. A network of gravel mine roads provides good access to much of the property from the Salmo-Creston Highway which passess along the west side of the property.

During the summer of 1993 a prospecting program completed by the property owners discovered free gold in the tungsten tailings and eventually identified three parallel gold bearing zones on the property.

Between October 22, 1993 and February 28, 1994 Sultan Minerals Inc. inspected, sorted and catalogued mine records regarding some 100,000 metres of diamond drill core stored at the mine site, took 26 rock chip samples over the three known gold showings, ran several reconnaissance magnetometer and VLF-EM lines over the zones known to be gold bearing and contracted a Dighem airborne geophysical survey of the entire property. Inspection of the Diamond drill logs revealed that during previous development drilling of the property only four samples were assayed for gold. The four assays averaged 0.12 oz/ton gold. Chip samples taken by Sultan Minerals Inc. over three reported gold zones, confirmed the zones and returned values of up to 0.36 oz/ton gold. Reconnaissance magnetometer and VLF-EM lines run over two of the zones by Sultan showed the gold bearing zones to give both a magnetic and electromagnetic response. The Dighem Survey successfully defined several unexplored geophysical targets with magnetic and electromagnetic signatures similar to the known gold bearing zones.

These preliminary results are encouraging and suggest that the Jersey property may have potential for gold mineralization that was not recognized during the property's mining history.

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GEOPHYSICL, GEOCHEMICAL AND CORE RESEARCH ON THE JERSEY PROPERTY NELSON MINING DIVISION SALMO, B.C.

1.0 INTRODUCTION:

On October 20, 1993, **SULTAN MINERALS INC.** obtained an option on a block of 28 crown granted mineral claims, four 2-post claims and 80 mineral units, encompassing approximately 1,700 hectares in the Nelson Mining Division. The claims overlie the former Jersey and Emerald lead, zinc and tungsten mines operated by Placer Dome from 1947 to 1972.

Archean Engineering Ltd. was retained to carry out a detailed examination of the property and assess its potential for hosting economic gold mineralization. Between October 22, 1993 and February 28, 1994 Archean completed a thorough literature review of the property and inspected and sampled the known gold bearing zones. Additionally, Archean retained Peter E. Walcott & Associates Limited to carry out test geophysical surveys over the property, and retained P&L Geological Services Ltd. to review the diamond drill core stored on the property. In December 1993 Dighem Surveys Inc were contracted to perform an airborne geophysical survey over the property. This report summarizes the previous history of the property and discusses the results of the current examinations.

1.1 LOCATION AND ACCESS:

The prospect is located in southeastern British Columbia at 49° 06'N, 117° 13'W (NTS 82 F/3E), 10 kilometres southeast of the community of Salmo (Figure 1). The claims cover an area of appoximately 20 square kilometres between the Salmo River on the west and the top of Nevada Mountain on the east, and are bounded on the north by Sheep Creek, and on the south by Lost Creek (Figure 2).

The property is accessible via Highway 6 between Salmo and the Highway 3 turn off to Creston. A network of good quality gravel mine roads provide excellent access to the centre of the property from Highway 6 which is situated along the west edge of the property.

1.2 TOPOGRAPHY, CLIMATE, AND PHYSIOGRAPHY:

The property area is situated in a rugged mountainous physiographic division known as the Selkirk Mountains. In the vicinity of the claims relief is on the order of 4,000 feet between the floor of Salmo Creek at 2,000 feet and the crest of Nevada Mountain at 6,100 feet. Slopes vary from flat and

SULTAN MINERALS INC.

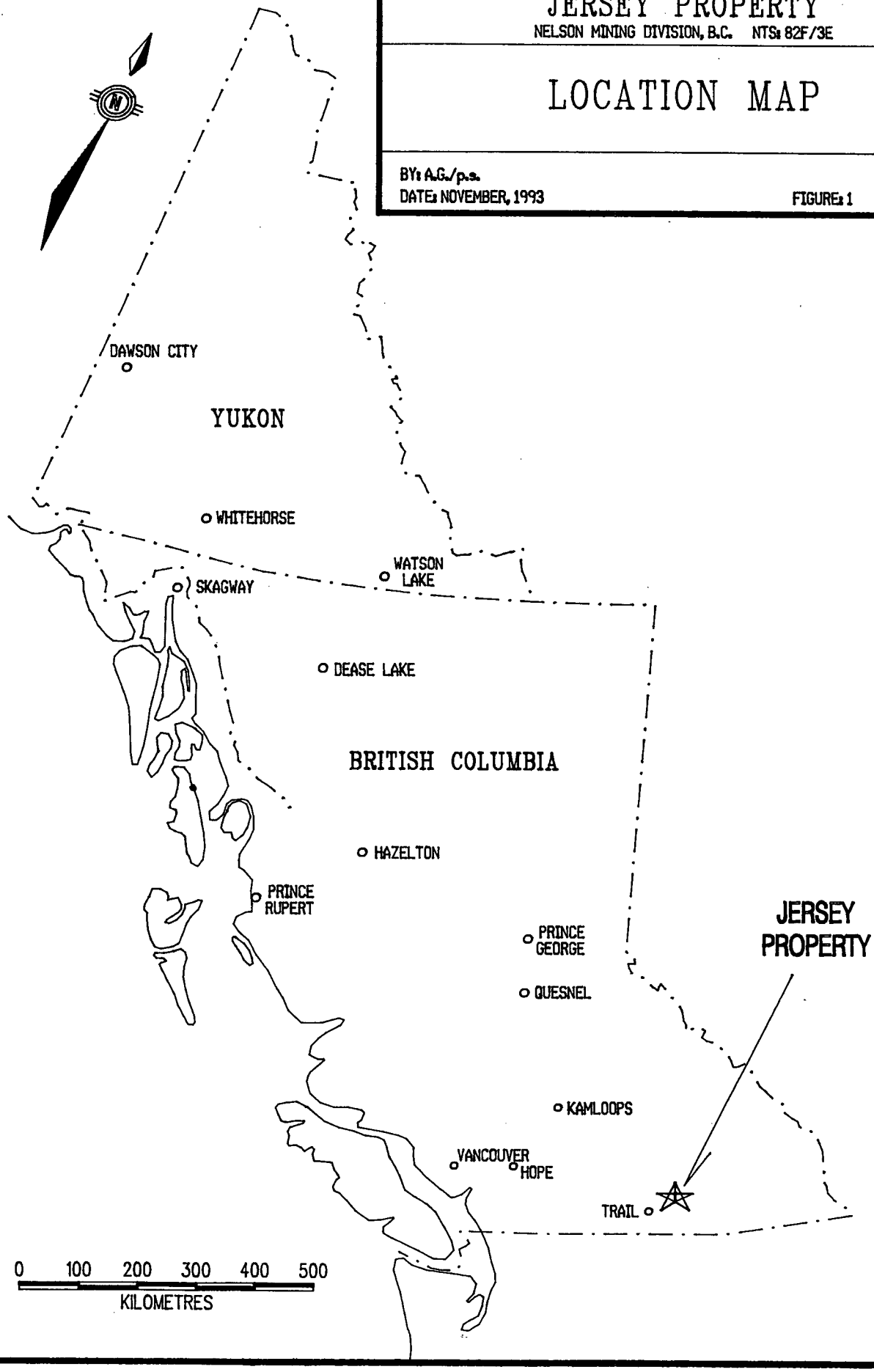
JERSEY PROPERTY

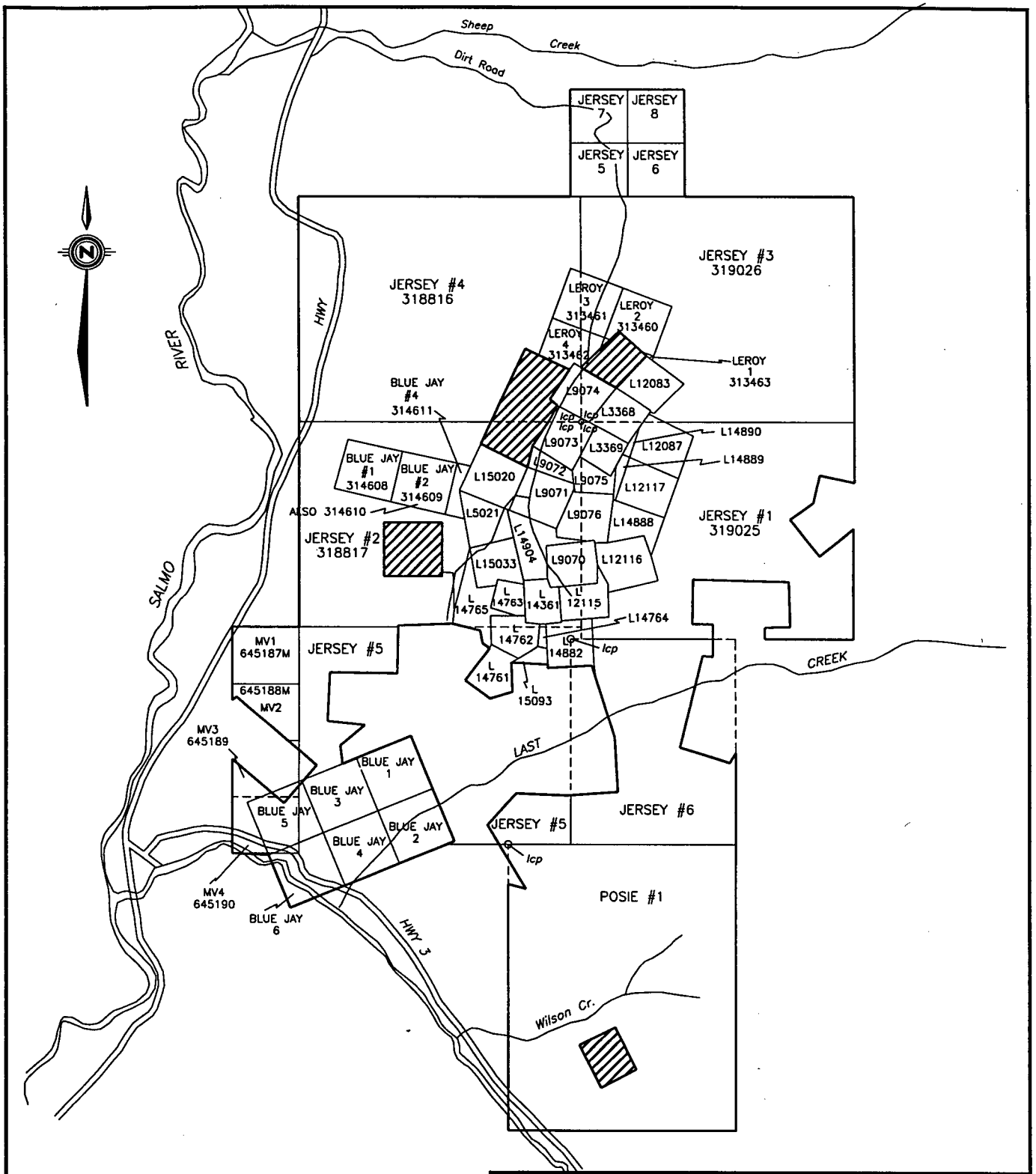
NELSON MINING DIVISION, B.C. NTS: 82F/3E

LOCATION MAP

BY: A.G./p.s.
DATE: NOVEMBER, 1993

FIGURE: 1





SULTAN MINERALS INC.

JERSEY PROPERTY

NELSON MINING DIVISION, B.C.

CLAIM MAP

DATE: SEPT.,1994
BY:

FIGURE:2

rolling over the centre of the claims to moderately steep along the east and west margins.

Much of the area has been logged or burned previously and vegetation now consists of small diameter stands of larch, balsam, fir, jackpine and mountain alder. In many areas second growth vegetation is extremely dense making movement through the forest difficult. Several areas of the extensive outcrop occur over and immediately north of the Jersey mine site but most of the property is covered by a veneer of glacial till. Till cover varies in thickness from 1 to 2 metres on the slopes to more that 20 metres in valley bottoms.

Salmo enjoys a pleasant summer climate with August temperatures averaging 25°C and moderate precipitation. Winter tempertaures average -10°C in January with moderate snowfall. Total annual precipitation is on the order of 750 millimetres of moisture with much of this falling during the rainy season from April to June. The property is not in a heavy snow belt but up to four feet or more can be expected at the mine site during the winter months. Snow free conditions can be expected from early April to late November.

1.3 PROPERTY STATUS:

The property currently consists of a block of 28 crown granted, eighteen 2-post, and seven 4-post (132 units) mineral claims, comprising approximately 2,700 hectares in the Nelson Mining Division. The claims, tenure numbers, number of units, and anniversary dates are listed in Table I.

TABLE I

LIST OF CLAIMS

CROWN-GRANTED MINERAL CLAIMS

CLAIM NAME	LOT NUMBER	CLAIM NAME	LOT NUMBER
KING ALFRED	3368	COMET	14761
KING SOLOMAN	3369	CONTRACT	14762
JERSEY	9070	CALCITE	14763
GOLD STANDARD	9071	STAN FR.	14764
STANDARD FR.	9072	SCOTT FR.	14765
EMARAL	9073	HILLSIDE	14881
EMERALD FR.	9074	BIG DICK	14882
MORNING	9075	VICTOR FR.	14888
SUNSHINE	9076	REX FR.	14889
DODGER	12083	BRUCE FR.	14890
PICKWICK	12087	COPPERFIELD	14904
ROYAL CANADIAN	12115	HAL NO. 1	15020
LAST CHANCE	12116	HAL NO. 2	15021
MARK TAPLEY	12117	SUNSHINE NO. 2	15033

LOCATED MINERAL CLAIMS

CLAIM NAME	TENURE	UNITS	ANNV.	CLAIM NAME	TENURE	UNITS	ANNV.
BLUE JAY 1	322324	1	OCT 24	LEROY 1	320993	1	SEP 20
BLUE JAY 2	322325	1	OCT 24	LEROY 2	320994	1	SEP 20
BLUE JAY 3	322326	1	OCT 24	LEROY 3	320995	1	SEP 20
BLUE JAY 4	322327	1	OCT 24	LEROY 4	320996	1	SEP 20
BLUE JAY 5	322328	1	NOV 07	LEROY 5	322859	1	NOV 20
BLUE JAY 6	322329	1	OCT 24	LEROY 6	322860	1	NOV 20
JERSEY 1	319025	20	JUN 23	LEROY 7	322861	1	NOV 20
JERSEY 2	318817	20	JUN 14	LEROY 8	322862	1	NOV 20
JERSEY 3	319026	20	JUN 23	MV 1	325259	1	APR 23
JERSEY 4	318816	20	JUN 13	MV 2	325260	1	APR 23
JERSEY 5	325269	20	APR 24	MV 3	325261	1	APR 23
JERSEY 6	325270	12	MAY 01	MV 4	325262	1	APR 24
				POSIE 1	329070	20	JUL 25

1.4 HISTORY AND PREVIOUS EXPLORATION:

The earliest record of exploration in the area dates to 1895 when gossanous areas on the south side of Iron Mountain attracted the attention of prospectors. The area was initially explored for gold and the 1896 Ministry of Mines Report states that assays as high as $70.00 per ton in gold (about 3.5 oz/t) were obtained from the area.

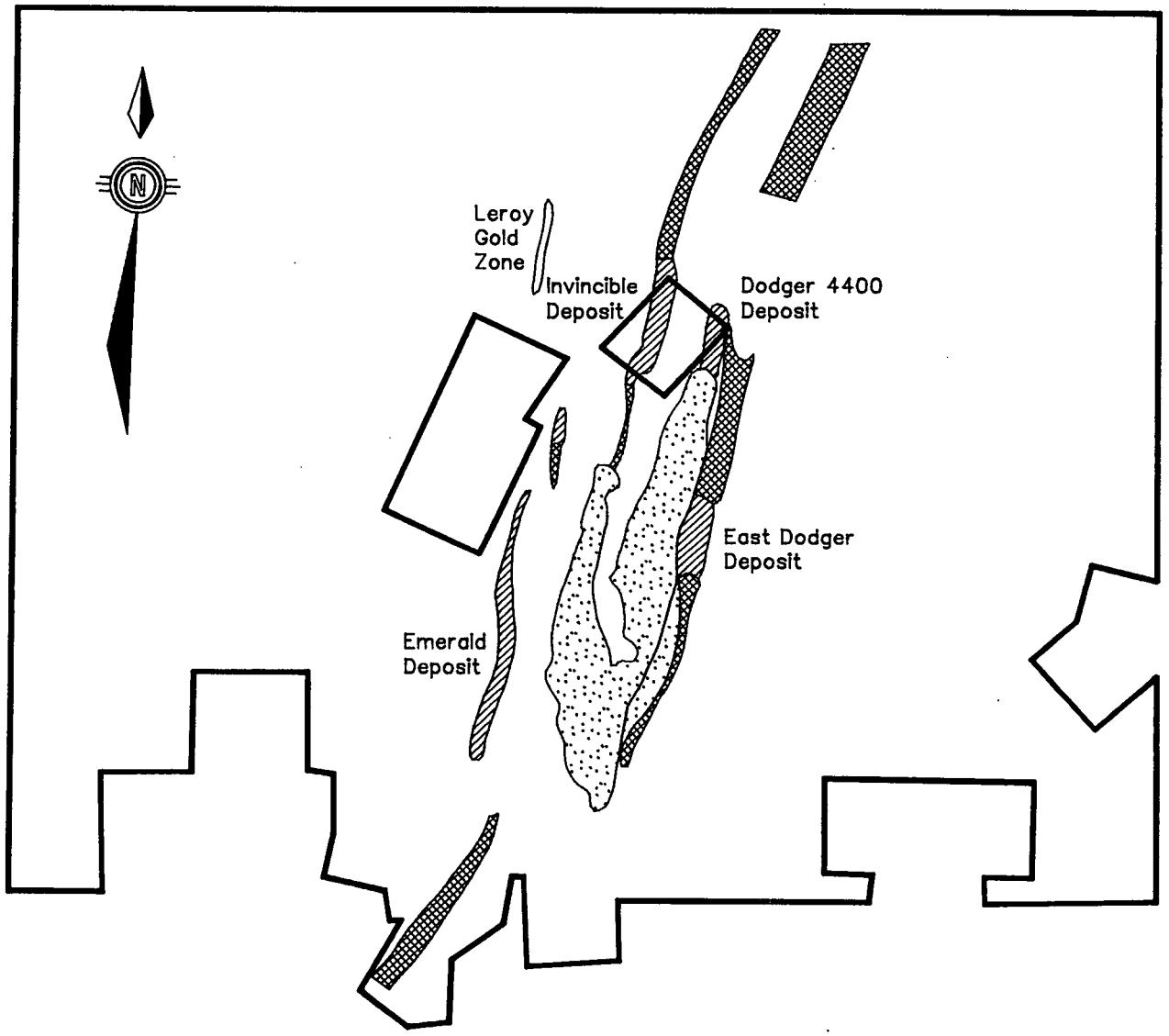
Prospecting continued and in 1906 lead mineralization was discovered on the Emerald claims. Several small, high-grade ore shipments were made and in 1910 Iron Mountain Ltd. was formed by Pacific Coast Steel of San Francisco to develop the property. A 25 ton mill was erected in 1919 and operated until 1926 when low metal prices forced closure. In 1934 the mill was destroyed by a major forest fire.

In 1938 tungsten and molybdenite mineralization was discovered in skarn beds at the site of the long abandoned gold workings on the Emaral, Emerald Fraction and Gold Standard claims. In 1942 the Emerald Tungsten Mine was put into production for the war effort by Wartime Metals Corp., a Federal Government Agency. Operations were suspended in 1943 when the war demand for tungsten eased.

The property remained inactive until 1947 when Canadian Exploration Ltd. (now Placer-Dome Ltd.) purchased the property of Iron Mountain Ltd. Placer eventually purchased the government held tungsten reserves and tungsten mill in 1952. Tungsten production recommenced in 1947 and lead-zinc in 1949. Lead and zinc concentrate was produced from two zones: the Jersey and the Emerald Pb-Zn deposits. Tungsten concentrate was produced from four zones: the Emerald, Feeney, Invincible and Dodger deposits. Production continued until September 1973 when the mine was closed due to low metal prices, and depleted lead, zinc and tungsten reserves. Over the mine life 7,968,080 tons of lead-zinc ore grading 1.95% Pb and 3.83% Zn, and 1,597,802 tons of tungsten ore grading 0.76% WO_3 were mined and milled.

The Jersey property has remained inactive since closure of the mine in 1973. In 1990 the property was sold to Nu-Dawn Resources Inc. Nu-Dawn hoped to salvage pillars from the underground workings but because of prolonged low prices for lead and zinc the property was sold in 1993 to the present owners, Llyod Addie and Bob Bourdon, both of Nelson, B.C. In October 1993 the property was optioned by Sultan Minerals Inc.

In 1993 the present owners found that fine particles of free gold could be panned from the tungsten tailings. A prospecting and litho-geochemical sampling program was therefore initiated over the known tungsten zones. This work lead to the discovery of significant bedrock gold values over the Dodger, Emerald and Leroy zones.



SCALE 1:30,000

0 0.5 1 2

KILOMETRES

LEGEND

- Lead-Zinc Workings
- Tungsten Workings
- Possible & Probable Tungsten Reserves

SULTAN MINERALS INC.

JERSEY PROPERTY

NELSON MINING DIVISION, B.C.

MINE WORKINGS & POTENTIAL RESERVES

BY: A.T./p.s.
DATE: NOVEMBER, 1993

FIGURE: 3

1.5 WORK DONE BY SULTAN MINERALS INC. IN 1993-4:

The following field work was carried out by Sultan Minerals Inc. during the period from October 22, 1993 to February 28, 1994:

1) Reconnaissance magnetometer and VLF-EM lines were run over the Leroy and Dodger zones and along the Dodger 4200 crossut and Dodger 4200 haulway.

2) Twenty-six rock chip samples were taken over the Leroy, Emerald and Dodger gold zones.

3) The legal corner post for the Jersey 1-4 mineral claims was located and inspected.

4) Mining records and core stored at the mine site were inspected, sorted, catalogued and summarized by P&L Geological Services.

5) An airborne electromagnetic/resistivity/magnetic/VLF survey (510 line-km) was flown over the property by Dighem during the period December 17, 1993 to January 16, 1994.

2.0 GENERAL GEOLOGY:

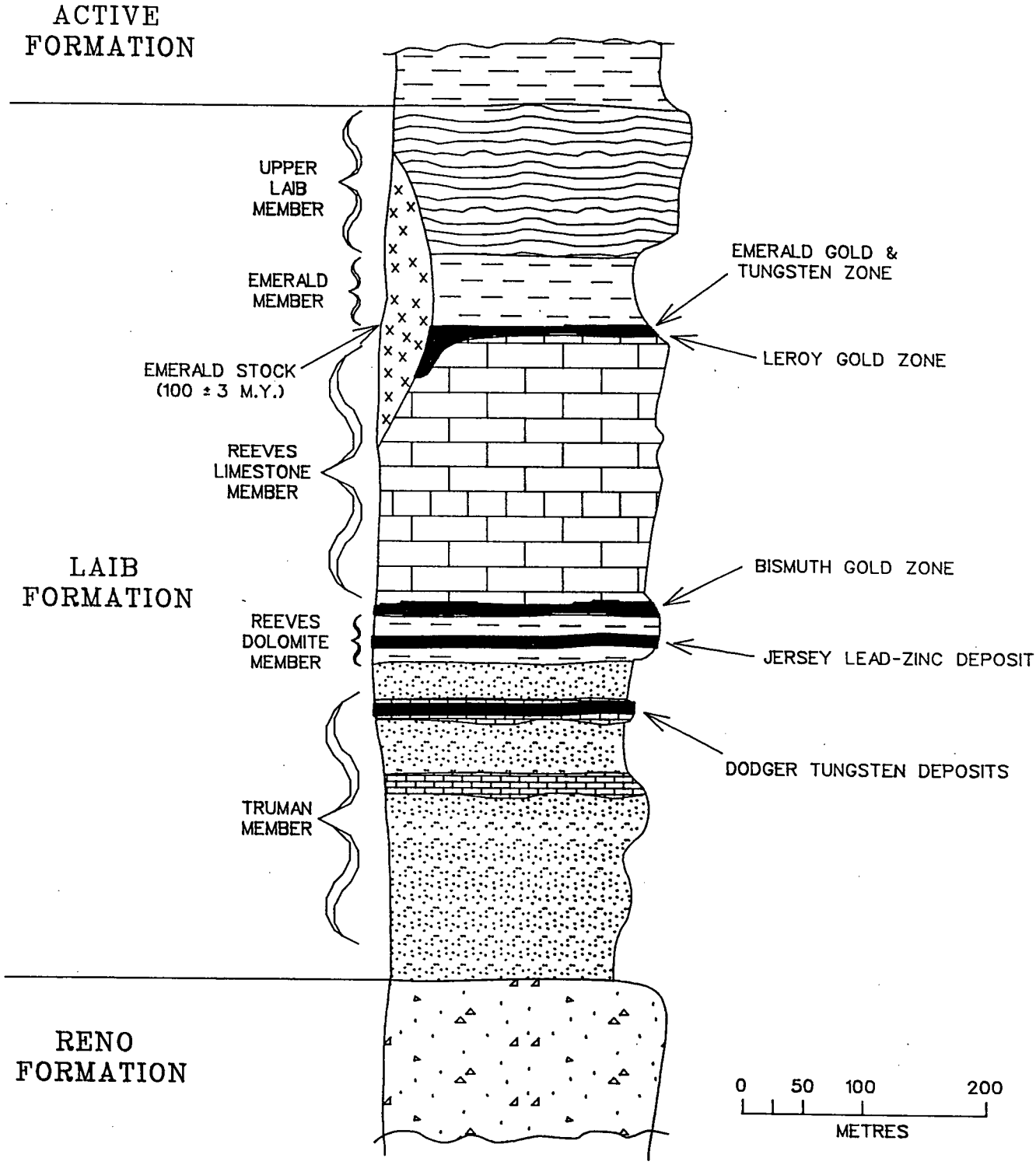
The Jersey property lies near the south end of the Kootenay Arc, a narrow arcuate tectonic belt of Palaeozoic miogeosynclinal and transitional rocks. To the east, these rocks are infolded with clastic and minor volcanic rocks of Late Proterozoic age, while to the west they are in complex structural contact with Upper Palaeozoic and Mesozoic eugeosynclinal argillites and volcanics.

The property is underlain by rocks of the Cambrian Laib formation (Figure 4). This is a sequence of transitional rocks comprised of mixed carbonates and pelites (Little, 1960). In the vicinity of the property the Laib formation has been further subdivided into the Truman Member, comprised of interbedded thin grey and white locally dolomitic limestone; the Emerald Member, a black argillite unit; and the upper Laib formation, comprised of green phyllites and micaceous quartzites (Figure 5).

The Laib formation has been deformed by three phases of folding all at least of local significance. Within the mine area structure is dominated by a major north-northeast trending anticline known locally as the Jersey anticline.

Three small stock-like bodies of Cretaceous, biotite granite, elongate parallel with the local foliation, intrude the Jersey anticline and locally cut the ore-zones near the Jersey mine. From south to north these are the Jersey, Emerald and Dodger stocks. Potassium-argon age dates obtained from biotite from the Dodger stock give a date of 100 $\pm$ 3.0 m.y. One km west of the Jersey mine the Laib sediments are intruded by a small circular body of Tertiary, augite monzonite refered to as the

LAIB FORMATION STRATIGRAPHY



Idealized stratigraphy of the Laib Formation in the vicinity of the Jersey Mine.

Figure: 5

Salmo River stock. Biotite from this stock gave a potassium-argon age of 50.6 ± 1.5 m.y.

2.1 ECONOMIC GEOLOGY:

Mineralization on the Jersey property is associated with the east limb of a complex major anticlinal structure referred to locally as the Jersey anticline and regionally as the Salmo River anticline. The H.B. lead-zinc mine located four km to the north and the Reeves MacDonald lead-zinc mine located ten km to the south are also associated with this major structure.

2.1.1 JERSEY LEAD-ZINC DEPOSIT:

The **Jersey Lead-Zinc Deposit** occurs in dolomite near the base of the Reeves limestone member. Five ore bands, ranging in thickness from 0.3 to 9.0 metres were mined. These bands in order of stratigraphic sequence were: 1) Upper Lead Band; 2) Upper Zinc Band; 3) Middle Zinc Band; 4) Lower Zinc Band; and 5) Lower Lead Band. The five ore bands are locally very close together and in the A Zone frequently have been mined as a unit up to 24 metres thick. Ore mineralization consists of fine-grained sphalerite and galena with pyrite, pyrrhotite and minor arsenopyrite. Cadmium is associated with sphalerite and silver with galena. Iron content of the sphalerite is low, about 6%. The overall grade for the 7,968,080 tons milled averaged 3.83% zinc and 1.95% lead. Mining ceased in 1970 with unmined reserves of 106,000 tons grading 3.1% zinc and 0.80% lead.

Near the Jersey mine skarn-type tungsten mineralization occurs where the Cretaceous intrusions are in contact with either of the calcareous Truman or Reeves members. Tungsten was mined from two distinct zones on the property: The Emerald zone comprised of the Emerald, Feeney and Invincible deposits located along the west side of the Jersey lead-zinc zone, and the Dodger zone located along the east side of the lead-zinc deposit.

2.1.2 EMERALD TUNGSTEN DEPOSIT:

The Emerald Tungsten Zone occurs along the contact of the Reeves limestone member with the Emerald argillite member. The zone is located along the west side of the Emerald Stock. Within the deposits four distinct types of mineralization are recognized. skarn, sulphide, greisen, and quartz ores. The **skarn-type** of ore occurs mainly along or near the limestone-argillite contact. It consists of garnet, diopside, calcite and quartz with lesser amounts of pyrrhotite, pyrite, scheelite and molybdenite. The **sulphide-type** of ore is often spacially associated with the skarn mineralization. It consists of irregularly shaped "replacement" bodies in limestone and dolomite, consisting of pyrrhotite, calcite, biotite and scheelite. locally quartz, pyrite, molybdenite and chalcopyrite may be present. The

greisen-type of ore occurs in altered granite and extends up to 12 metres into the granite from the limestone contact. The ore consists of potash feldspar - in some places completely kaolinized, abundant quartz, sericite, pyrite, tourmaline and scheelite. Locally, calcite, ankerite, apatite, pyrrhotite or molybdenite may be present. The **quartz-type** ore in many places grades into greisen. It consists of silicified limestone cut by numberous veins of quartz with ankerite, scheelite, minor molybdenite and apatite. The veins are enveloped by disseminated mineralization comprised of scheelite, pyrite, pyrrhotite and tremolite.

Scheelite is the main tungsten mineral but minor powellite and wolframite was also recovered. Most of the Scheelite ore was recovered from lenticular skarn zones developed along the contact between the Emeral argillite and the Reeves limestone.

The Emerald Tungsten Zone was mined intermittently from 1943 to 1973. Grades ranged from 0.5 to 1.5% WO_3 and averaged 0.86% WO_3 for the entire 1,076,779 tons of production. Mining ceased in 1973 due to low tungsten prices leaving recoverable reserves of 34,800 tons grading 0.73% WO_3. Extensive reserves were believed to exist north of the Invincible and south of the Emerald deposits but due to low tungsten prices there was no incentive to explore and develop these potential reserves.

2.1.3 DODGER TUNGSTEN DEPOSIT:

The **Dodger Tungsten Zone** is located along the east side of the Jersey lead-zinc mine. The orebody is comprised of three zones of fine, disseminated scheelite grains in light brown to green garnet-diopside skarn. The conformable deposits occur in a skarnified limestone unit near the top of the Truman member. The mineralized zones are separated by a tongue of granite believed to be an appendage of the Dodger Stock.

Scheelite is accompanied by some pyrrhotite, biotite, quartz, molybdenite and minor powellite. The ore zones ranged from 2.0 to 9.0 metres in width and averaged 3.0 metres.

The Dodger Tungsten Zone was mined intermittently from 1951 to 1973 and averaged 0.56% WO_3 for 521,023 tons of production. Production ceased in 1973 leaving unmined reserves of 42,500 tons grading 0.45% WO_3. During the final year of operation extensive reserves of low grade ore (< 0.40% WO_3) were found to the north and south of the East Dodger deposit. These could not be developed due to low tungsten prices.

2.1.4 BISMUTH GOLD ZONE:

The **Bismuth Gold Zone** is located along the east side of the Jersey Lead-Zinc Zone at the contact between the Reeves limestone and the underlying Reeves dolomite. Gold mineralization was initially recognized here in 1963 when

Placer-Dome obtained 0.12 oz/ton gold from four samples assayed from an extensive native bismuth and arsenopyrite bearing zone. The zone was intersected while exploring the Jersey lead-zinc deposit and the underlying East Dodger tungsten zone. The zone was rediscovered in 1993 by the present property owners while inspecting the Placer-Dome drill logs. The gold mineralization occurs in a silicified horizon with pyrite, pyrrhotite, arsenopyrite, stibnite and native bismuth. Underground samples assays up to 0.28 oz/ton across widths of 96.0 cm. Placer-Dome drill logs suggest that this silicious zone may be 20 metres or more in thickness. It was intersected in four surface drill holes along a strike length of 300 metres.

2.1.5 EMERALD GOLD ZONE:

The **Emerald Gold Zone** was first recognized in 1895 and is coincident with the Emerald Tungsten Zone. The zone was prospected for gold from 1895 to 1906 and assays up to 3.5 oz/ton were reported. After the lead-zinc potential of the property was recognized in 1906 and later with discovery of tungsten mineralization over this area the gold potential of this zone was forgotten. The zone was rediscovered in 1993 when the current property owners found that free gold could be panned from the tungsten tailings. Gold mineralization has been found to be associated with the pyrrotite rich sections of the skarn and sulphide-type tungsten zones. Two chip samples taken across the pyrrotite zones by Sultan during the present program gave gold assays of 0.10 oz/ton across 4.0 metres and 0.156 oz/ton across 1.0 metres. The tungsten content of the two samples was 0.26% and 0.14% respectively.

2.1.6 LEROY GOLD ZONE:

The **Leroy Gold Zone** is located approximately one km north of the Emerald gold and tungsten zone. Gold mineralization was discovered here in the late 1890's and the zone was explored with a series of pits, adits and hand trenches along a 300 metre strike length. Gold exploration ceased with the discovery of lead-zinc in 1906. Over the Leroy zone gold mineralization is associated with pyrrhotite, pyrite and native bismuth in a skarnified and silicified horizon at the contact between the Reeves limestone member and the Emerald argillite member. Recent chip samples across this zone gave gold grades up to 0.17 oz/ton across a true width of 3.0 metres.

3.0 ROCK CHIP SAMPLING PROGRAM:

Twenty-six rock chip samples were taken over and in the vicinity of the Leroy, Emerald and Bismuth showings. Samples were taken by hand using hammers and chisels. Wherever possible the samples were taken perpendicular to the strike of the mineralized zones. On exposed faces the weathered surface rock was removed prior to sampling in order to minimize the affect of surface leaching.

The samples were sent to Chemex Laboratories Ltd. in North Vancouver, B.C. where they were assayed for gold by standard fire assay methods. Twelve samples that assayed higher than 0.05 on/ton gold were checked for coarse free gold content by metallic fire assay. Analyses for an additional 24 elements were obtained by conventional ICP methods.

The gold assays for the 26 samples are given in Table II and the sample locations are shown on Figure 6. The results confirm the presence of gold mineralization over all three zones. Gold assays for the 26 samples, including wall rock samples, range from trace to 0.36 oz/ton. The higher gold grades were obtained from silicified zones associated with or immediately adjacent to zones of pyrrhotite or arsenopyrite mineralization. Unmineralized wall rock samples, pyrite zones, bull quartz veins, and quartz veins with pyrite as the only associated sulfide returned only trace gold values. Metallic assays for individual samples varied from the original assays by as much as 30% but the overall grade for the 12 samples did not change.

ICP analyses are given in Appendix A. These results show that only bismuth has a consistent association with gold over the three zones. Bismuth values range up to 4200 ppm with the higher bismuth values associated with the highest gold grades. Over the Bismuth Zone silver and arsenic show a consistent association with gold with one sample carrying up to 200 ppm silver. Tungsten is conspicuous by its absence from the Bismuth Zone samples. Over the Emerald Zone tungsten shows a consistent association with gold, averaging greater than 0.1% in the mineralized samples. Over the Leroy Zone metal associations are erratic but all samples containing greater than 0.1% tungsten carry significant gold concentrations, These results suggest there are two distinct types of gold mineralization: tungsten related and non tungsten related.

TABLE II

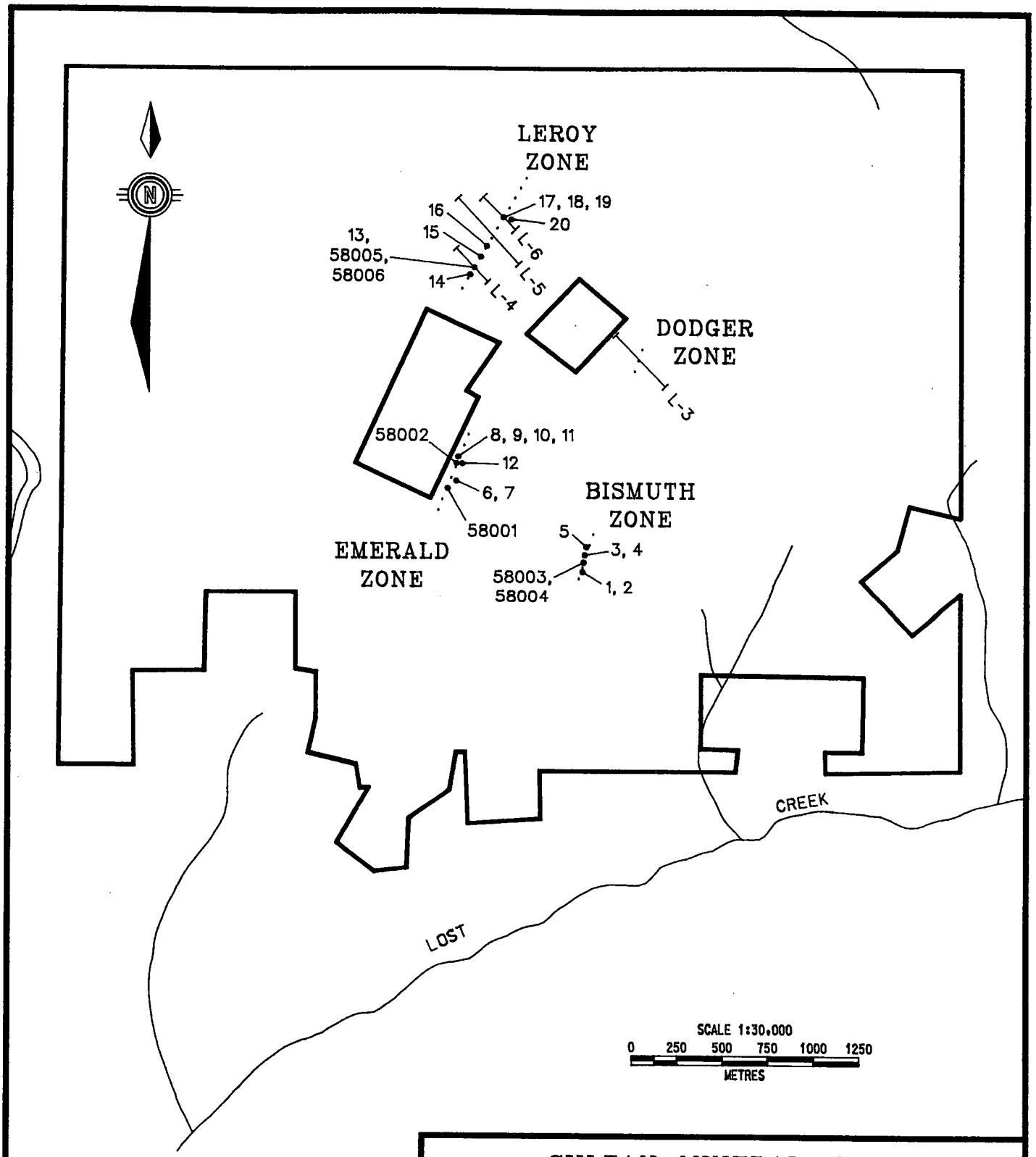
ROCK SAMPLE DESCRIPTIONS AND GOLD ASSAYS

Sample No.	Gold oz/ton	Description
		Bismuth Gold Zone
1	0.080	Jersey workings at 5,650N 8,700E 110cm wide silicious horizon with native bismuth, strike 020/30°E
2	0.136	90cm aresenopyrite band adjacent to sample 1, strike 020/30°E
3	0.003	30cm quartz vein with minor py 60m north of sample 1, strike 015/35°E
4	0.046	30cm arsenopyrite band above sample 3, strike 015/35°E
5	0.252	sample of silicious rubble with As & native Bi, 91m north of station 1
58003	0.080	37cm arsenopyrite band 49m north of station 1, strike 015/30°E
58004	0.280	96cm silicious horizon with Py & native Bi adjacent to 58003
		Emerald Gold Zone
6	0.002	Emerald workings at 7,300N 6,250E 130cm chip sample across pyrite rich skarn zone
7	0.008	130m chip sample adjacent to station 6
8	0.062	100cm sample across Pyrrotite (Po) zone 130m north of station 6
9	0.113	100cm sample across Po zone, adjoins station 8 to the west
10	0.080	100cm sample across Po zone, adjoins station 9 to the west
11	0.081	100cm sample across Po zone, adjoins station 10 to the west

TABLE II (Continued)

ROCK SAMPLE DESCRIPTIONS AND GOLD ASSAYS

Sample No.	Gold oz/ton	Description
12	0.001	200cm sample across quartz-pyrite zone, 15m southeast of station 11
58001	0.156	100cm sample across Po zone 60m south of station 6
58002	0.045	grab sample of coarse grained pyrrhotite 120m north of station 6
		Leroy Gold Zone
13	0.001	45cm chip across silicified argillite, along the east margin of the Leroy zone
14	0.174	300cm wide silicified limestone contact, 5m south of station 13
15	0.018	47cm quartz-pyrite zone on limestone contact 65m north of station 13
16	0.074	58cm quartz-pyrite zone on limestone contact 160m north of station 13, strike 030/85°W
17	0.363	40cm quartz-pyrite zone along limestone contact 300m north of station 13, strike 015/90°
18	0.054	55cm chip across marble unit along the west side of station 17
19	0.170	grab sample of silicious dump material at station 17
20	0.002	100cm chip of silicified argillite 20m east of station 17
58005	0.010	30cm chip of pyrrotite zone on the west side of station 58006
58006	0.316	80cm chip of quartz-pyrite zone



LEGEND

- Geophysical Line
- 12 — Rock Chip Sample
- 58001 — Rock Chip Sample

SULTAN MINERALS INC.

JERSEY PROPERTY

NELSON MINING DIVISION, B.C.

GEOPHYSICAL LINES & ROCK CHIP SAMPLE LOCATIONS

BY: A.T./p.s.
DATE: NOVEMBER, 1993

FIGURE: 6

4.0 GEOPHYSICS:

Mine records show that geophysical exploration methods were never attempted over the Jersey property. In order to determine if geophysical methods could be used to locate the pyrrhotite rich zones associated with the gold-tungsten mineralization, Sultan decided to run test lines of magnetometer and VLF-EM instrumentation over several selected targets.

In October 1993, Peter E. Walcott & Associates Limited was contracted to carry out these surveys. The work was supervised by Archean Engineering Ltd. and was completed over the ten day period from October 22 to October 31. Field work was carried out by a two person crew working from a hotel in Nelson, B.C.

The surveys were carried out simultaneously using an EDA Omni Plus magnetometer-VLF-EM unit. Survey lines were run across the Leroy Zone, the north end of the Dodger 4400 Zone, and underground along the Dodger 4200 crosscut, and the Dodger 4400 drift (Figure 7). Due to the presence of steel pipes, rock bolts, ore bins, underground electric cables, etc., the underground survey results proved too noisy to be useful.

4.1 MAGNETOMETER RESULTS:

Magnetometer profiles for four surface lines run over the Dodger 4400 Tungsten Zone and the Leroy Gold Zone are shown on Figure 8. The survey results successfully detected the two zones on three of the four survey lines. The results suggest that a detailed magnetometer survey with readings taken at 10 metre intervals along 30 metre spaced lines would be adequate to outline the near-surface trace of the pyrrhotite rich zones.

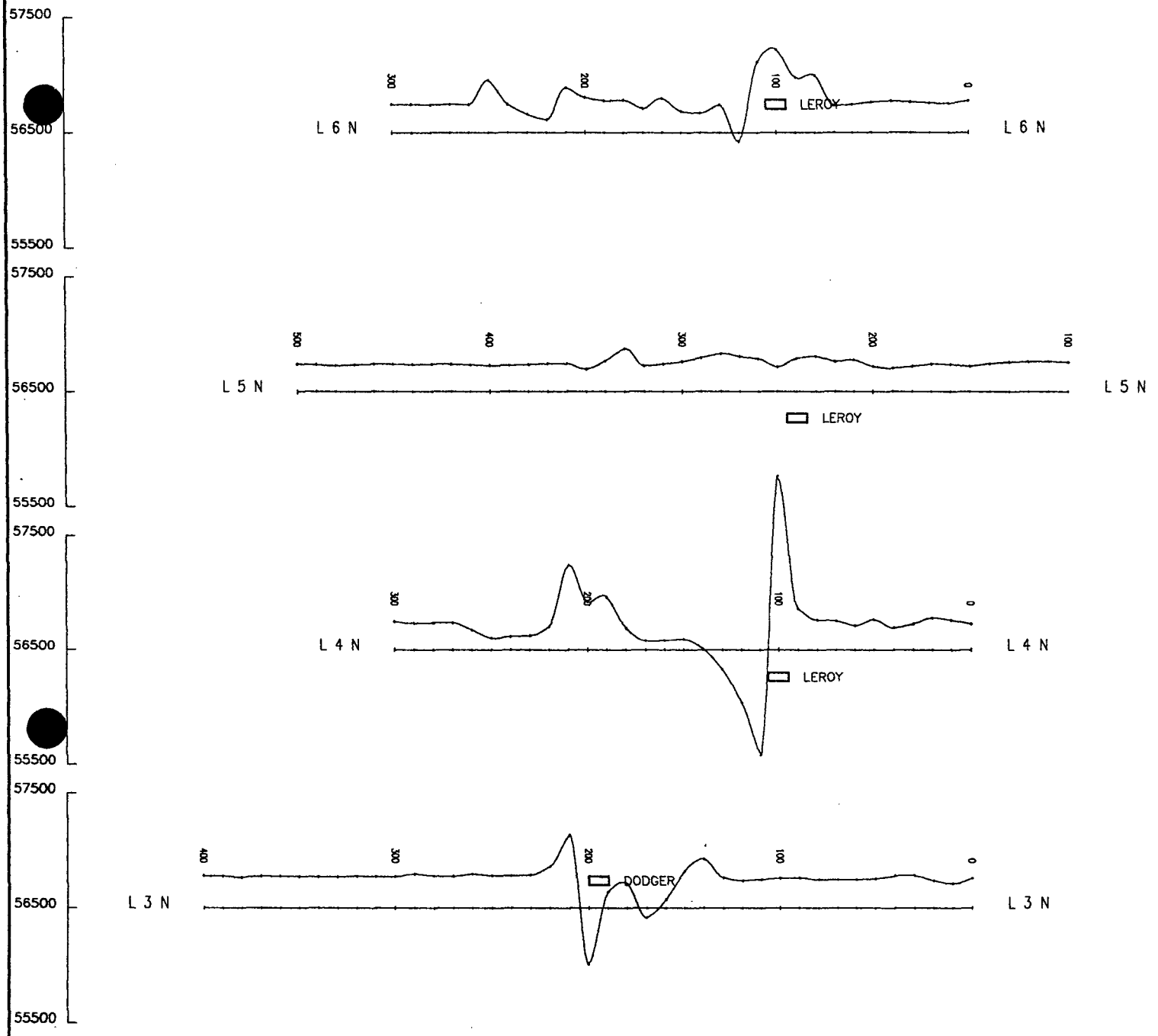
4.2 VLF-EM RESULTS:

VLF-EM profiles for the above four surface lines are shown on Figure 9. The survey results show weak to moderate conductors coincident with the surface trace of the Dodger 4400 and Leroy zones. The results suggest that the pyrrhotite rich zones are conductive and therefore may be traced with a detailed electromagnetic survey.

4.3 DIGHEM SURVEY RESULTS:

Between December 17, 1993 and January 16, 1994 Dighem carried out a 510 line km airborne geophysical survey over the Jersey property. The survey was accomplished using a five frequency electromagnetic system, supplemented by a high sensitivity Cesium magnetometer and a four-channel VLF receiver.

Results of the survey are discussed in detail in a separate report by Dighem geophysicist Paul A. Smith. The survey successcully defined several unexplored geophysical targets with magnetic and electromagnetic signatures similar to the known gold bearing zones.



Instrument : EDA OMNI PLUS

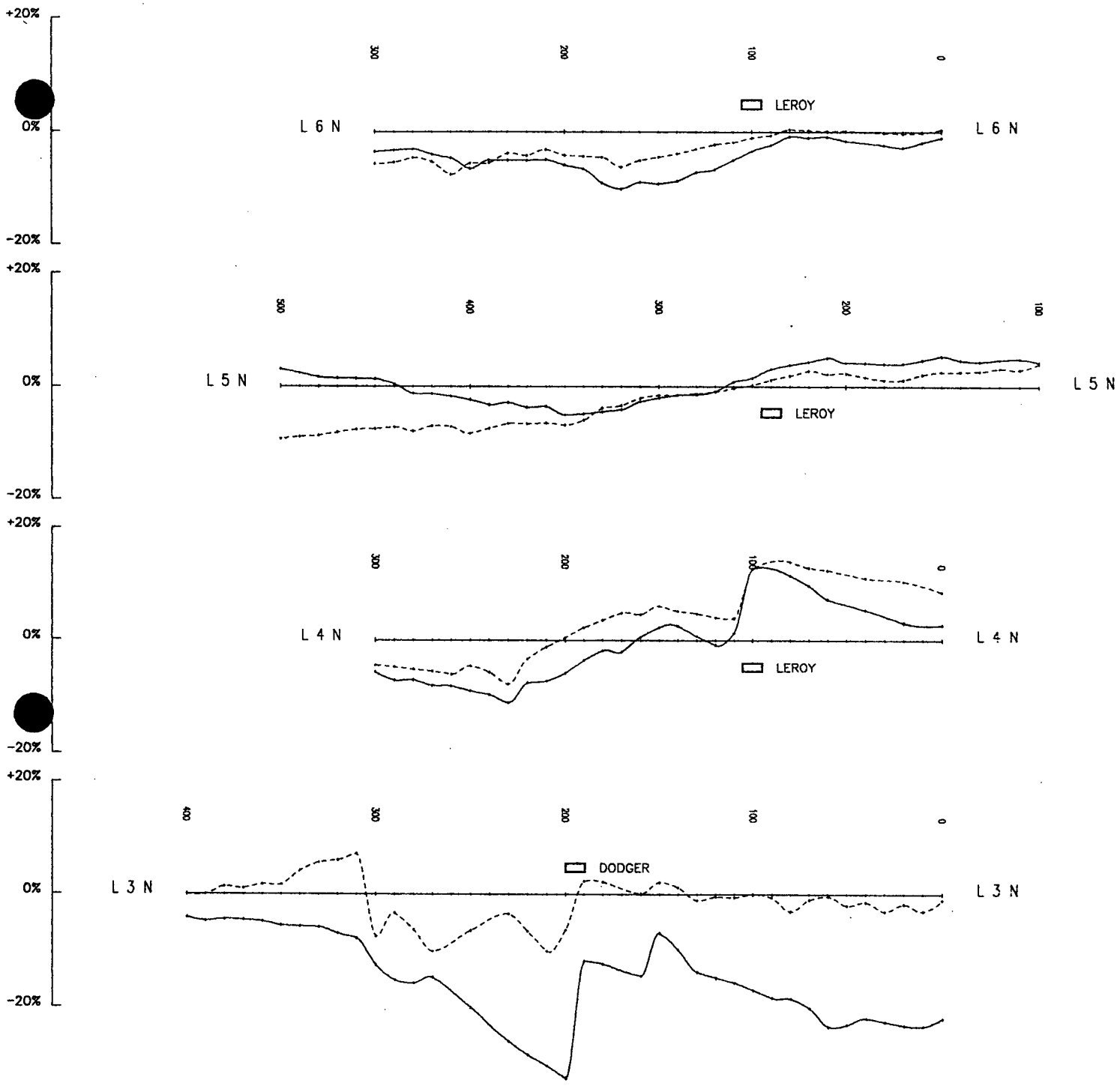
50 0 50 100 150 200 250
(meters)

SULTAN MINERALS INC.

MAGNETOMETER SURVEY
PROFILES OF TOTAL FIELD INTENSITY
IN NANOTESLAS

DODGER & LEROY ZONES
SALMO AREA, BRITISH COLUMBIA
OCTOBER 1993

FIGURE 7 JANUARY 1994
PETER E. WALCOTT & ASSOC. LTD.



LEGEND

IN PHASE ————
QUADRATURE - - - - -
Tx Location : Seattle, Wash. (NLK 24.8 kHz)
Instrument : EDA OMNI PLUS

50 0 50 100 150 200 250
(meters)

SULTAN MINERALS INC.

VLF ELECTROMAGNETIC SURVEY
PROFILES OF INPHASE & QUADRATURE
IN PORDER

DODGER & LEROY ZONES
SALMO AREA, BRITISH COLUMBIA
OCTOBER 1993

FIGURE 8 JANUARY 1994
PETER E. WALCOTT & ASSOC. LTD.

5.0 DIAMOND DRILL CORE INSPECTION:

In February 1994, P & L Geological Services was contracted to research mine records and drill logs from the Jersey and Emerald mines. This work involved sorting, catalogueing and compiling more than 1,500 mine plans, and logs for more than 3,000 diamond drill holes currently stored in Nelson, B.C.. Results of this program are summarized in Appendix "B".

This research showed that Placer Dome recognized the Bismuth Gold Zone in drill holes that tested a 3,000 foot section of the Dodger Tungsten Deposit. Pyrrhotite and arsenopyrite intersections over this zone ranged from 5 to 20 metres in thickness. Placer assayed four 1.2 metre sections from drill holes D32, D40, D68 and D76 drilled along a 300 metre section of the zone. The holes returned assays that ranged from 0.08 to 0.16 oz/t gold. At the time the zone was intersected gold was $35.00/oz and the values were therefore considered to be too low to be of any importance.

6.0 DISCUSSIONS AND CONCLUSIONS:

The results of the present property work may be summarized as follows:

1) These preliminary investigations have confirmed the presence of gold mineralization on the Jersey property and indicate potential for economic gold concentrations that were not recognized during previous mining operations.

2) Three gold bearing zones have presently been identified. These are the Bismuth Gold Zone, the former Emerald Tungsten Zone and the Leroy Gold Zone.

3) Geochemical results show that gold mineralization may be classified as non-tungsten related, e.g., the Bismuth Zone, and tungsten related, e.g., the Emerald and Leroy zones.

4) Mine records show that when mining ceased on the Jersey property, large reserves of low grade tungsten mineralization were known to exist in the vicinity of the Dodger Zone, and extensive reserves were suspected to occur south of the Emerald and north of the Invincible deposits. These low grade tungsten zones could host important gold mineralization.

5) Results of the reconnaissance geophysical work indicate that magnetometer and electromagnetic surveys may prove useful in detecting the pyrrhotite rich zones associated with areas of tungsten related gold mineralization.

6) The Dighem airborne survey results successfully defined several unexplored geophysical targets with magnetic and electromagnetic signatures similar to the known gold bearing zones.

These preliminary results are extremely encouraging and suggest that additional work is warranted. Future gold exploration programs should involve drill testing the Bismuth Gold Zone, sampling and drill testing the known low grade tungsten zones, completing detailed geophysical surveys to locate the Dighem airborne anomalies, and researching existing drill logs to locate silicious horizons with characteristics similar to the Bismuth Zone.

Respectfully submited at Vancouver, British Columbia, this 30th day of August 1994.

A.G. Troup, P.Eng.

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA TROUP

7.0 REFERENCES:

Ball, C.W., 1954; The Emerald, Feeney and Dodger Tungsten Ore-bodies, Salmo, B.C.: Economic Geology, Vol. 49, No. 6, p.625

Fyles, J.T., and Hewlett, C.G., 1959; Stratigraphy and Structure of the Salmo LeadZinc Area: B.C.D.M., Bulletin No. 41.

Grunenberg, P., 1994; Summary of Research on the Jersey Property, Nelson M.D.: Unpublished Report for Sultan Minerals Inc., 5pp.

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Minfile 1991; Emerald Tungsten Property, Minfile Number 082FSW010: Ministry of Energy Mines and Petroleum Resources, Mineral Resources Division Minfile Master Report 1991, p.21.

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Smith, P.A., 1994; Dighem^{V} Survey for Sultan Minerals Inc., Salmo Property, British Columbia, NTS 82F/3, 115pp.

Stevenson, J.S., 1943; Tungsten Deposits of British Columbia: B.C.D.M., Bulletin No. 10.

Troup, A.G., 1994; Report on the Jersey Property, Nelson Mining Division, B.C.: Sultan Minerals Inc. Unpublished Report, 32pp.

8.0 STATEMENT OF QUALIFICATIONS:

I, Arthur G. Troup, do hereby certify that:

1) I am a consulting geologist with Archean Engineering Ltd. of 3605 Creery Avenue, West Vancouver, B.C.

2) I am a graduate of McMaster University in Hamilton, Ontario with an M.Sc. in Geology.

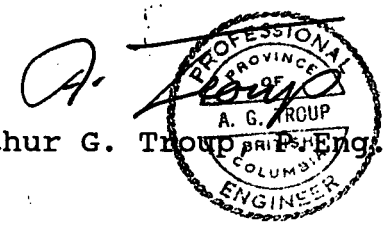
3) I am a registered member of the Association of Professional Engineers of the Province of British Columbia.

4) I have practiced my profession in Canada and abroard since 1964.

5) I have based this Report on work done by myself or under my supervision. I was physically on the property for the purpose of geochemical sampling and geophysical surveys from October 28 to October 31, 1993. Data obtained from the Geological Survey of Canada, B.C. Department of Mines, Assessment Reports, Peter E. Walcott Geophysics Ltd., Dighem and P&L Geological Services and other support documents provided by Sultan Minerals Inc. were also used as background and reference data.

Dated at Vancouver, British Columbia,

this 30th day of August 1994.



Arthur G. Troup P. Eng.

9.0 COST STATEMENT
JERSEY MINE PROPERTY
25 October 1993 - 28 February 1994

GENERAL

Food & Accommodation: 34 mdays @ $58.21		$ 1,979.05
Fuel:		498.31
Supplies & Sundry:		1,303.21
Shipments:		106.68
Rentals:		
AGL Jimmy, 10 days @ $60.13	$ 601.33	
Redhawk Blazer, 1 day	152.79	
P&L Pickup, 20 days @ $39.20	783.70	1,537.82
Consultant Fees: D.L. Cooke & Assocs.		428.00
Report Preparation:		2,800.00
Total General Cost:	Apportioned	$ 8,653.07

AIRBORNE GEOPHYSICAL SURVEY

Dighem: 510 1km	A.R. 23384 already approved	~~$44,993.50~~ T.K.

GROUND GEOPHYSICAL SURVEYS

P.E. Walcott & Assocs.: 4 mdays	$ 2,387.59
Archean Engineering Ltd.: 5 mdays	1,543.75
General Cost Apportioned: (9/34 X $8,653.07)	2,290.52
Total Ground Geophysical Surveys Cost:	$ 6,221.86

GEOCHEMICAL SURVEY

Archean Engineering Ltd.: 5 mdays		$ 1,543.75
Assays & Analyses - Chemex Labs:		
20 Rocks for Au,As & 24-el. ICP @ $39.63	$ 792.55	
12 Pulps for Au metalics @ 27.45	329.35	
6 Rocks for Au & 24-el. ICP @ $39.06	234.33	1,356.23
General Cost Apportioned: (5/34 X $8,653.07)		1,272.51
Total Geochemical Survey Cost:		$ 4,172.49

CORE RESEARCH (FIELD)

P&L Geologial Survices: 20 mdays	$ 3,000.00
Mobilization:	400.00
Consultant Fees: Archean Engineering	4,802.75
General Cost Apportioned: (20/34 X $8,653.07)	5,090.04
Total Core Research (Field) Cost:	$13,292.79

$ 23 687.14

APPENDIX A

GEOCHEMICAL ANALYSES CERTIFICATES

Chemex Labs Ltd.

Analytical Chemists • Geochemists • Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: ARCHEAN ENGINEERING LIMITED

3605 CREERY AVE.
WEST VANCOUVER, B.C.
V7V 2M3

Project : JERSEY
Comments: CC: ART TROUP

Page Number : 1-A
Total P[illegible] : 1
Certific[illegible]ate: 22-OCT-93
Invoice No. : I9322813
P.O. Number :
Account : KQ

CERTIFICATE OF ANALYSIS A9322813

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580001	258	292	0.156	15.0	0.73	10	9.5	1365	2.99	< 0.5	185	115	927	>25.0	0.04	0.62
580002	258	292	0.045	2.0	3.85	30	18.5	238	4.17	< 0.5	104	126	731	>25.0	0.25	0.49
580003	258	292	0.080	2.0	4.49	300	< 0.5	28	1.62	< 0.5	101	77	10	19.15	1.86	1.75
580004	258	292	0.280	34.0	0.18	10	< 0.5	3130	3.89	< 0.5	23	225	176	6.81	0.06	1.85
580005	258	292	0.010	3.0	0.71	70	< 0.5	16	0.64	< 0.5	209	64	643	>25.0	0.21	0.17
580006	258	292	0.316	19.0	0.19	40	< 0.5	1370	0.19	< 0.5	6	368	16	2.30	0.05	0.06

CERTIFICATION: Hart Bechler

Chemex Labs Ltd.

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Project : JERSEY
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Account :KQ

CERTIFICATE OF ANALYSIS A9322813

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580003	258	292	2600	1	0.08	24	800	< 1	54	0.15	47	90	116			
580004	258	292	2840	2	0.01	21	490	345	58	< 0.01	11	110	212			
580005	258	292	320	< 1	0.01	238	2010	< 1	23	0.01	47	< 10	52			
580006	258	292	165	19	0.01	19	310	377	7	< 0.01	9	80	< 2			

CERTIFICATION: Stan Butler

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
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Comments: CC: ART TROUP

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Account : CH

CERTIFICATE OF ANALYSIS A9324065

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02	208	274	0.136	38.6	25.0	0.47	20	< 0.5	870	1.80	2.0	21	79	4	>25.0	0.06
03	208	274	0.003	0.32	3.0	0.09	< 10	< 0.5	30	2.45	1.0	8	193	88	4.15	0.01
04	208	274	0.046	22.3	2.0	0.22	10	< 0.5	26	10.00	< 1.0	3	39	< 1	20.5	0.04
05	208	274	0.252	7.80	>200	0.78	70	< 0.5	4260	1.48	4.0	85	298	38	7.48	0.31
06	208	274	0.002	0.03	2.0	7.76	150	2.0	40	0.22	< 0.5	1	166	5	1.43	1.32
07	208	274	0.008	< 0.01	< 1.0	5.20	150	13.5	48	1.16	< 0.5	92	163	227	14.20	1.52
08	208	274	0.062	0.03	1.0	1.14	60	< 0.5	364	3.66	0.5	228	93	934	>25.0	0.51
09	208	274	0.113	0.08	3.0	0.95	40	< 0.5	672	4.28	0.5	196	139	652	>25.0	0.30
10	208	274	0.080	0.82	5.0	0.70	20	< 0.5	398	2.23	1.5	211	203	567	>25.0	0.28
11	208	274	0.081	< 0.01	1.0	1.29	50	19.5	460	9.22	< 0.5	110	85	399	22.2	0.50
12	208	274	0.001	< 0.01	< 1.0	5.33	270	1.0	14	0.15	< 0.5	6	263	21	2.37	2.69
13	208	274	< 0.001	< 0.01	< 1.0	8.54	4900	0.5	8	7.39	< 0.5	19	145	55	3.66	3.95
14	208	274	0.174	< 0.01	22.0	0.31	60	< 0.5	988	0.16	< 0.5	3	471	14	1.75	0.14
15	208	274	0.018	< 0.01	2.0	0.54	310	< 0.5	152	3.48	< 0.5	188	155	1695	>25.0	0.14
16	208	274	0.074	< 0.01	2.0	0.61	220	< 0.5	588	0.22	< 0.5	16	403	61	3.71	0.25
17	208	274	0.363	< 0.01	5.0	0.54	230	< 0.5	2780	1.81	< 0.5	34	401	180	5.78	0.23
18	208	274	0.054	< 0.01	1.0	0.84	1690	< 0.5	320	>25.0	0.5	12	127	86	2.69	0.43
19	208	274	0.170	< 0.01	5.0	0.27	210	< 0.5	1060	2.76	< 0.5	17	322	182	4.38	0.13
20	208	274	0.002	0.01	< 1.0	8.51	1980	< 0.5	30	8.35	< 0.5	6	151	60	4.34	2.46

CERTIFICATION: Stuart Buchler

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
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To: HUGHES LANG EXPLORATIONS LTD.

1000 - 1177 W. HASTINGS ST.
VANCOUVER, BC
V6E 2K3

Project : SULTAN-JERSEY
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03	208	274	0.78	7140	2	0.03	19	40	33	32	< 0.01	10	< 10	66		
04	208	274	3.44	>10000	< 1	0.03	9	110	40	87	< 0.01	24	< 10	128		
05	208	274	0.94	2170	48	0.04	5	450	1450	54	< 0.01	56	< 10	112		
06	208	274	0.07	135	74	3.89	< 1	200	45	72	0.03	2	20	6		
07	208	274	0.17	805	394	1.39	21	2890	< 8	43	0.04	19	1120	44		
08	208	274	0.85	3190	4	0.08	36	260	< 8	22	0.07	32	3910	80		
09	208	274	0.60	3980	10	0.05	27	160	< 8	48	0.05	32	2350	66		
10	208	274	0.36	2330	11	0.05	31	110	< 8	47	0.03	24	3220	78		
11	208	274	2.00	>10000	480	0.08	18	280	8	44	0.08	97	1880	160		
12	208	274	0.07	115	14	2.01	9	80	40	26	0.01	5	130	< 2		
13	208	274	2.16	910	6	0.57	35	970	10	507	0.39	126	120	74		
14	208	274	0.02	145	14	0.04	8	710	379	8	0.01	23	470	2		
15	208	274	0.19	1315	1	0.04	81	660	< 8	34	0.02	27	1250	38		
16	208	274	0.06	410	4	0.03	43	920	23	7	0.02	26	2710	4		
17	208	274	0.10	2180	7	0.04	108	1180	59	22	0.02	31	380	12		
18	208	274	0.64	1890	4	0.07	63	1100	27	154	0.05	64	70	22		
19	208	274	0.13	2560	7	0.04	74	530	21	25	0.01	17	180	12		
20	208	274	1.96	745	< 1	1.23	21	750	< 8	560	0.38	81	10	64		

CERTIFICATION: Stan Bichler

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
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VANCOUVER, BC
V6E 2K3

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Certificate Date: 24-NOV-93
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P.O. Number :
Account : CH

CERTIFICATE OF ANALYSIS A9325009

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02 RESPLIT	207	234	0.151	0.149	0.137	252	22.42
05 RESPLIT	207	234	0.335	0.338	0.105	206	11.09
08 RESPLIT	207	234	0.061	0.062	0.016	167	11.74
09 RESPLIT	207	234	0.144	0.142	0.079	287	11.28
10 RESPLIT	207	234	0.115	0.116	0.053	297	16.26
11 RESPLIT	207	234	0.079	0.081	0.012	275	9.69
14 RESPLIT	207	234	0.104	0.105	0.021	245	8.98
16 RESPLIT	207	234	0.101	0.102	0.010	241	6.12
17 RESPLIT	207	234	0.313	0.300	0.215	239	9.81
18 RESPLIT	207	234	0.040	0.037	0.038	226	12.10
19 RESPLIT	207	234	0.176	0.178	0.078	192	15.16

CERTIFICATION:

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

To: ARCHEAN ENGINEERING LIMITED

3605 CREERY AVE.
WEST VANCOUVER, B.C.
V7V 2M3

Project : JERSEY
Comments: CC: ART TROUP

Par[illegible]mber : 1-A
Tot[illegible] : 1
Certific[illegible]ate: 22-OCT-93
Invoice No. : I9322813
P.O. Number :
Account : KQ

CERTIFICATE OF ANALYSIS A9322813

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580001	258	292	0.156	15.0	0.73	10	9.5	1365	2.99	< 0.5	185	115	927	>25.0	0.04	0.62
580002	258	292	0.045	2.0	3.85	30	18.5	238	4.17	< 0.5	104	126	731	>25.0	0.25	0.49
580003	258	292	0.080	2.0	4.49	300	< 0.5	28	1.62	< 0.5	101	77	10	19.15	1.86	1.75
580004	258	292	0.280	34.0	0.18	10	< 0.5	3130	3.89	< 0.5	23	225	176	6.81	0.06	1.85
580005	258	292	0.010	3.0	0.71	70	< 0.5	16	0.64	< 0.5	209	64	643	>25.0	0.21	0.17
580006	258	292	0.316	19.0	0.19	40	< 0.5	1370	0.19	< 0.5	6	368	16	2.30	0.05	0.06

CERTIFICATION: Stuart Buchler

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3605 CREERY AVE.
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Total Pages :1
Certificate Date: 22-OCT-93
Invoice No. :I9322813
P.O. Number :
Account :KQ

CERTIFICATE OF ANALYSIS A9322813

SAMPLE	PREP CODE		Mn ppm (ICP)	Mo ppm (ICP)	Na % (ICP)	Ni ppm (ICP)	P ppm (ICP)	Pb ppm AAS	Sr ppm (ICP)	Ti % (ICP)	V ppm (ICP)	W ppm (ICP)	Zn ppm (ICP)			
580001	258	292	4750	62	0.04	53	440	< 1	42	0.03	53	1440	78			
580002	258	292	>10000	209	0.22	25	340	< 1	15	0.05	189	1310	58			
580003	258	292	2600	1	0.08	24	800	< 1	54	0.15	47	90	116			
580004	258	292	2840	2	0.01	21	490	345	58	< 0.01	11	110	212			
580005	258	292	320	< 1	0.01	238	2010	< 1	23	0.01	47	< 10	52			
580006	258	292	165	19	0.01	19	310	377	7	< 0.01	9	80	< 2			

CERTIFICATION: Stewart Buchan

APPENDIX B

DIAMOND DRILL CORE RESEARCH

P & L GEOLOGICAL SERVICES
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FEBRUARY 23, 1994

SUMMARY OF RESEARCH ON THE JERSEY PROPERTY, NELSON M.D.
FOR SULTAN MINERALS INC.

Mine records stored at Bob Bourdon residence in Nelson.
Sorting, catalogueing, and compiling of materials took place from Feb. 4 to Feb. 20, 1994.

SUMMARY:

AREA 1 - Bismuth Gold Zone

Located near the Jersey F-zone and Dodger Tungsten deposits. Occurances of arsenopyrite with pyrrhotite stratigraphically above the Jersey Pb/Zn deposit, adjacent to the Dodger granitic stock, discovered to be gold bearing with native bismuth by recent prospecting.

Canex DDH's D32, 40, 68, and 76 intersected arsenopyrite and were assayed at that time, returning 0.08 to 0.16 oz/t gold.

Current reseach of underground and surface diamond drill holes shows that arsenopyrite was noted in several other drill holes in this zone. Drill sections used range from 5300N to 9112N in the F zone. Arsenopyrite occurs intermittently from 5650N to 8797N. Not all of the sections contained drill holes that would have intersected the predicted location of the arsenopyrite Bi/Au zone. Unmined tungsten mineralization extends north and south from the perviously mined reserves. The replacement process which produced the tungsten skarn of the Dodger deposit may also have produced a gold bearing halo slightly farther from the intruding stock.

Fracture filling quartz stockworks are likely important indicators to gold mineralization, as with tungsten. Structural control is provided by numerous faults which strike and dip parallel to the argillite footwall contact of the Dodger deposit. Lamprophyre dykes adjacent to mineralized areas follow these prominent fault structures.

The Dodger trough of mineralizaton formed by the contact between the granitic intrusive and the surrounding sediments is the regional target, where lenticular pods of gold bearing mineralization is expected. Arsenopyrite is found primarily near the Reeves member Limestone/Dolomite contact.

Diamond drill core availability, as per inventory, shows that core from only a few of the Aspy bearing holes are available in the underground storage.

Access to the Bi/Au zone is via the 4200 cross cut to the undergrond workings. The 60F drift cuts Aspy at section 6000N. Short 100-150 foot drill holes fanned from this drift to the east would help block out the gold zone. Working northward past 6585N, access is provided by the N-S Dodger drift. To the north, the zone can also be reached by surface holes of 400 to 600 foot length.

SECTION NOTES - Bi/Au zone

SECTION	NOTES	C O R E AVAILABILITY
5400N	No aspy note, DDH Ju669 passes through target	N/A
5450N	No aspy, no DDH in target area	----
5500N	No aspy, no DDH in target area	----
5550N	No aspy, no DDH in target area	----
5750N	no DDH anywhere near target area	----
5800N	DDH D40 (0.16 oz/t), aspy	N/A
5850N	massive py band near targer area, DDH Ju1455	N/A
5900N	Ju 1698, strong aspy banding	N/A
6000N	Ju 1457, 1606, strong aspy banding	Ju1606 UG row 9
6050N	Ju1611, 1588, strong aspy banding	1588 row 6 1611 row 9
6100N	D32, 68 (0.08 oz/t) aspy intersected	N/A
6150N	no DDH in target area	----
6200N	Du 340 near target area, no aspy noted	N/A
6250N	Ju2243, Su leached at Dol/LS contact	row 9
6585N	D76, aspy, Po,Py (0.16 oz/t)	N/A
7458N	D18, 20, 21, no aspy, abundant Po, py	N/A
7531N	D16, 79, no aspy, abundant Po, py	N/A
7687N	D14, no aspy	N/A
7810N	D25, 11, 80, aspy in D80	N/A
8070N	D26, no aspy noted	N/A
8383N	D34, aspy noted at 621 feet	N/A
8598N	D47, Du471, no aspy noted	N/A
8645N	D10, 52, Du469, 470, no aspy noted	N/A
8797N	D71, 78, Du446, Aspy noted in D71	N/A
8933N	D6, no aspy noted	N/A
9112N	D70, 74, 5, no aspy noted	N/A

AREA 2 - EMERALD GOLD ZONE

The potential for gold in this zone was first revealed in regional silt sampling, where high gold values were returned from a tributary creek, the headwaters of which leads to the Emerald tungsten mine tailings. Panning of these tailings found that fine particles of free gold are present. Rock chip sampling of the Emerald tungsten zone has since returned values to 0.26 oz/t gold. The gold potential therfore lies within the unmined tungsten reserves of the Emerald deposit, and within the Emerald tungsten tailings.

Tungsten mineralization occurs within the Emerald trough, formed by the contact of the west dipping Emerald stock granites and the east dipping Laib formation sediments. Mineralization occurs at the contact, primarily adjacent to and above the Emerald member argillite/Reeves member limestone contact. The granite-sediment contact plunges at an average 15 degrees to the south, and trends northward through the Feeney and Invincible deposits, and southward towards the Tungsten King deposit.

The reserve potential south of the Emerald shaft (south of grid 4000N) was documented by the Canex geologists. They expected an additional 5000 feet of trough existed on their holdings beyond the Emerald shaft towards Lost Creek. One diamond drill hole intesected tungsten at the 2200 foot level (1500 feet below surface) south of the Emerald shaft. This drill hole, and other proposed drill holes, are shown on sections south to 0355N included in the summary. Very few drill holes were collared south of the Emerald shaft. None of the core from these holes is available.

AREA 3 - LOWER SKARN ZONE

A large tonnage of tungsten reserve in the less that 0.2% grade is present in what is referred to as the Lower Skarn band. This band occupies the same stratigraphic position in the Truman member as the Dodger tungsten deposit to the east. The Lower Skarn band was discovered while drilling east of the Invincible deposit, and north of the Emerald and Feeney deposits. It is unknown wether this skarn band is gold bearing as it is adjacent to the Dogder tungsten deposit.

Lower Skarn band mineralization occurs at surface, having been mapped from 8000N to approximately 10,500N. The deposit has been partly cut by Invincible underground workings. Surface access is provided by mine roads which cross over and parallel the skarn band for the majority of it's known strike length.

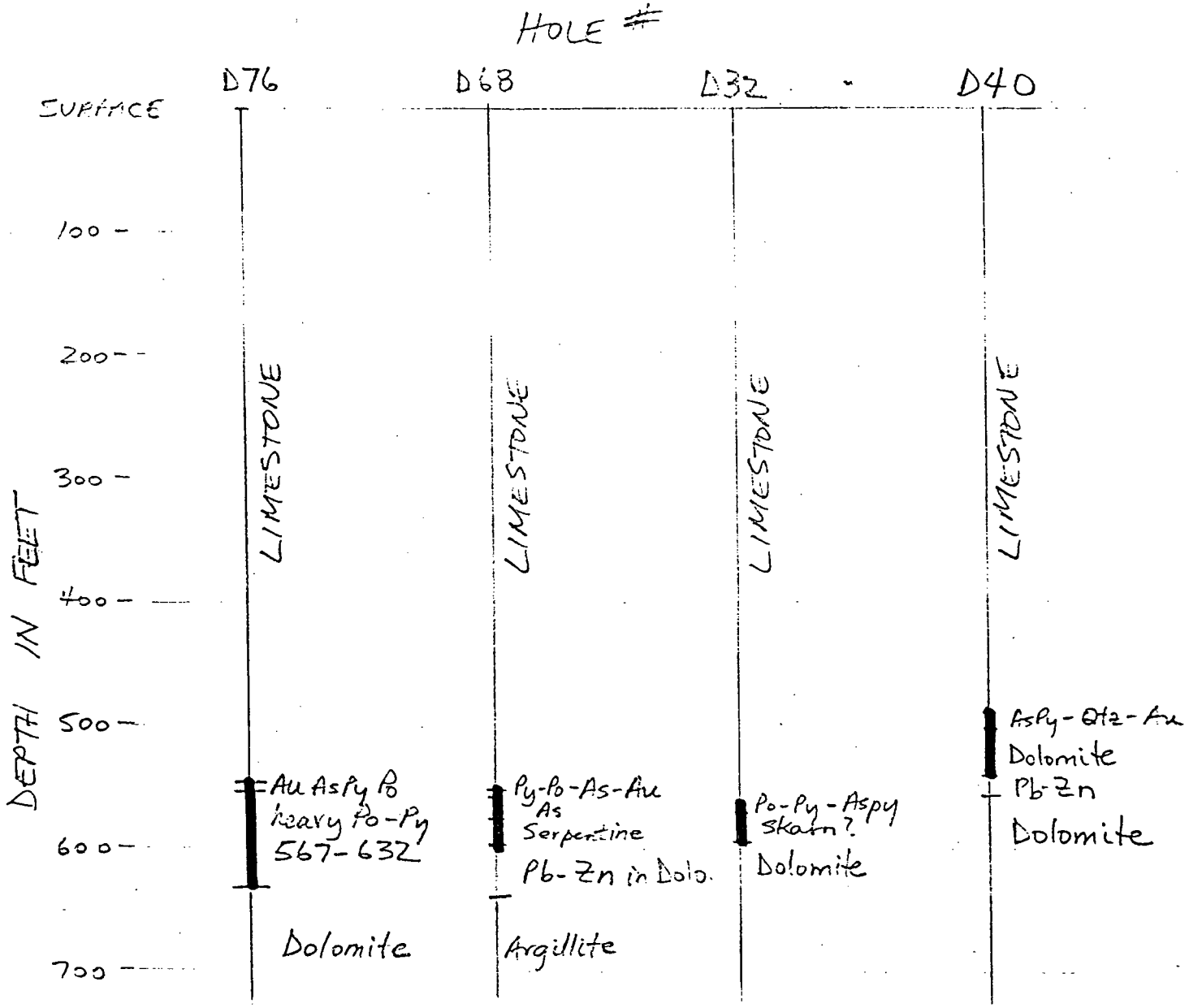
Drill sections showing diamond drill holes into the Lower Skarn band are included in the summary material, with sections ranging from 8114N to 8433N. Of particular interest is section 8114N, showing arsenopyrite mineralization in argillaceous limestone in

hole S4, from 54 feet to 76 feet in the hole, above the tungsten mineralization. Other sections show an oxidized sulfide zone present at the same stratigraphic location. None of the core from the "S" series drill holes is available.

Several 100 foot to 300 foot drill holes collared at, and north of, DDH S4 collar location may provide core for analysis and detection of gold within this lower skarn band.

PERRY GRUNENBERG, P.GEO.

JERSEY PROPERTY
SAMPLE DRILL HOLE SECTIONS FROM DODGER TROUGH



| indicates areas of Au-As-Po-Py intercepts.

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MAP SHOWING LOCATION OF DRILL HOLES AND GOLD ZONES