

0830

ASSESSMENT REPORT

SANANTA COPPER MINE

MI 092K-013

N.T.S. 92K03E

PROSPECTING REPORT 1987/88

Dave Javorsky

RECEIVED

GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,256

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M.R. # _____ \$ _____
VANCOUVER, B.C.

Record Information

The 20 unit Modified Grid Quadra mineral claim; record # 2756 expiring on August 17, 1988, is staked over the ten Reverted Crown Granted mineral claims collectively known as the Santana Copper Mine. For assessment work purposes these claims were all grouped June 28, 1988 as the Quadra Group.

Santana # 1,	L-1340,	Rec. # 2735,	Expires July 23, 1989
Santana # 2,	L-1341	Rec. # 2736,	July 23, 1989
Santana # 3,	L-1342,	Rec. # 2737	July 23, 1989
Santana # 4,	L-1343,	Rec. # 2738	July 23, 1989
Santana # 5,	L-1344,	Rec. # 2739,	July 23, 1989
Gem	L-1350,	Rec. # 2740,	July 23, 1989
Bonanza,	L-1351,	Rec. # 2741,	July 23, 1989
Quadra (20 units)		Rec. # 2756,	August 17, 1988
Santana # 6,	L-1345,	Rec. # 2882,	March 1, 1989
Santana # 7,	L-1346,	Rec. # 2883,	March 1, 1989
Santana # 8,	L-1347,	Rec. # 2884,	March 1, 1989

Work done for Assessment Physical Prospecting

During September 1987, three days were spent on the property by Jim Scott (FMC# 217350) and family, doing prospecting.

In March 1988 and again in June 1988, a total of six days was spent prospecting on this ground by David Javorsky (FMC# 299400).

Roads and trails were walked, the showings were inspected, outcrops were checked and a total of 25 prospecting samples were taken.

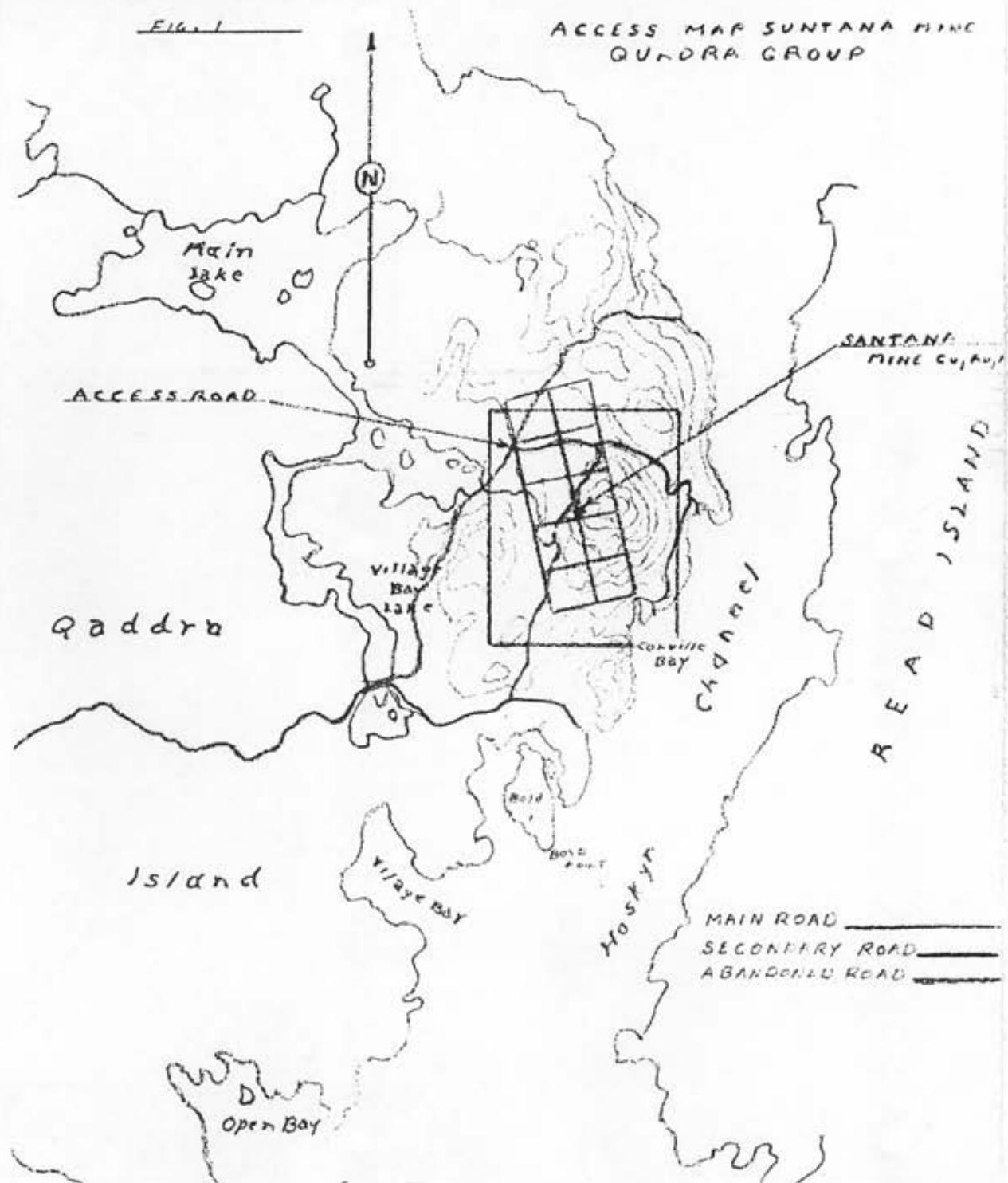
No attempt was made to sample the old dump which contains quite a few hundred tones of chalcopyrite, or to sample the obvious chalcopyrite that exists in the workings, all of which would assay over one percent copper.

No attempt was made to size or grade this deposit.

During June of 1988 the focus was on trying to find nickel-copper minerals that might carry platinum type values. None have so far been found.

The following are the maps and notes of James Scott, an Experienced Prospector, who held title to part of this group of claims until June 1988.

FIG. 1



I

REPORT TO REGIONAL GEOLOGIST A.M.E.
PROGRAM ON QUADRA ISLAND PROSPECTS
BY JAMES SCOTT SEPT. OCT. 1987

QUADRA ISLAND

THIS ISLAND ENCOMPASSES A CONSIDERABLE NUMBER OF PROPERTIES WITH COMMERCIAL MINERAL POTENTIAL AND HISTORICAL SIGNIFICANCE, HOWEVER AS THE MAJORITY OF THE PROPERTIES ARE UNDER CLAIMS I FOUND IT NECESSARY TO LIMIT MY PROGRAM TO WHAT WAS IMMEDIATELY DESIGNATED AS OPEN GROUND, AND PROPERTY UNDER MY JURISDICTION.

ACCESS TO THE ISLAND PRESENTS NO PROBLEM, AS THERE IS HOURLY FERRY SERVICE WITH VEHICLE AND PASSENGER CARRYING CAPACITY, CONNECTING WITH THE ISLAND HIGHWAY AT CAMBELL RIVER FROM QUATHIASKO COVE ON THE SOUTHWEST SIDE OF THE ISLAND. THERE IS A GOOD ROAD SYSTEM ON THE ISLAND, A GOOD DEAL OF IT PAVED, WITH A GOOD SECONDARY ROAD SYSTEM MAKING MOST MINERAL OCCURRENCES EASILY ACCESSIBLE.

175011.5 THE PRIMARY LOCATION PROSPECTED IS THE NG 12509.5 QUADRA GROUP OF 20 UNITS, HELD BY LOCATION EV. 100 ENCOMPASSING TEN REVERTED CROWN GRANTS AND TWO FORMER CROWN GRANTS REMOVED FROM SURVEY. I HOLD TITLE BY APPLICATION TO SEVEN OF THESE REVERTED CROWN GRANTS INCLUSIVE OF THE SANTANA MINESITE.
 1K 3 EAST HISTORICALLY THE GROUP COMPRISED THE SANTA ANNA, EURAKA, GREEN MEADOW, SAN LUCAS, LUCKY JACK AND HAPPY CHANCE MINERAL CLAIMS OPERATED BY THE SANTA ANNA MINING COMPANY OF VANCOUVER, AND DURING 1917 WAS OPERATED UNDER LEASE BY JOHN McCONNILLE AND MATTHEW AND ISSAC LITTLE. THIS GROUP WAS ABANDONED AND RE-STAKED AS THE SANTANA GROUP OF TWENTYSIX CLAIMS IN 1930 BY A SYNDICATE, WITH JOHN McCONNILLE IN CHARGE OF OPERATIONS. THE OLD WORK CONSISTED OF A TUNNEL ABOUT 85 FEET LONG DRIVEN ON THE VEIN -

~~JUNCTION CONNOLLY BAY
ROAD & MINES ROAD -
DESIGNATED
ADIT~~

01
C

01

II

- FROM WHICH A SHIPMENT OF 174 TONS WAS MADE IN 1917
BIB.

RPT. TO 462 OZ. OF SILVER AND 10,535 LBS. OF COPPER.

MINISTER THE OUTCROPPINGS REPRESENT SEVERAL LENSES OF
1917 ORE THAT OCCUR IN THE CONTACT BETWEEN LIMESTONE

1930 AND GRANITE WITH GNEISSIC STRUCTURE. THE GRANITE

01,
E B.C.D.M PROMINENT FAULTS OCCURS CUTTING ACROSS AN ADIT
OPEN FILE THAT WAS STARTED AS A PRIFT ALONG THE ABOVE
MENTIONED ORE BODY. THE FAULT APPEARS TO HAVE
CUT OFF THE ORE ABOUT 20 FT. FROM THE PORTAL OF THE
ADIT.

0121
0+2
0P2

0+2
TRE
SAC
0+3

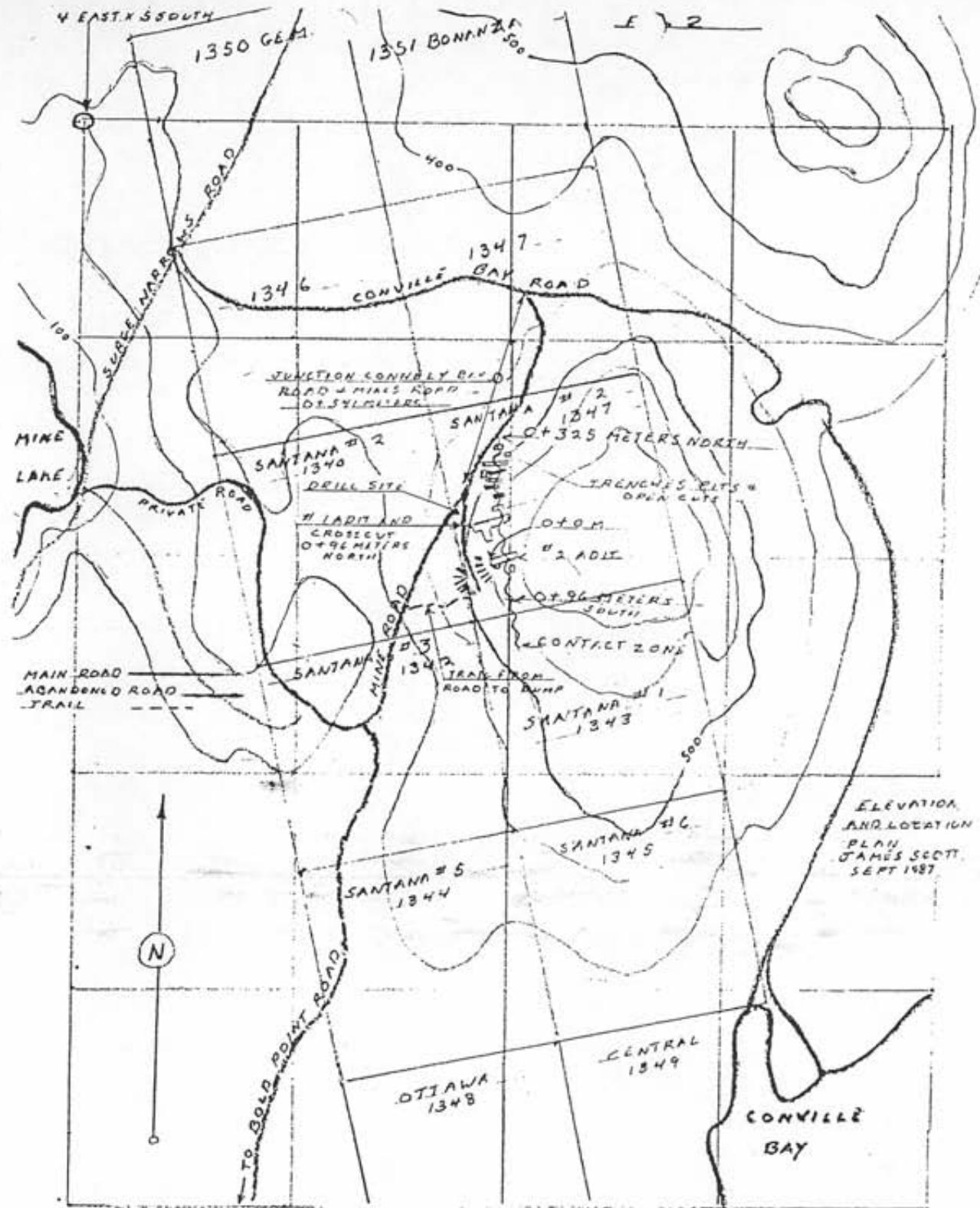
0+32

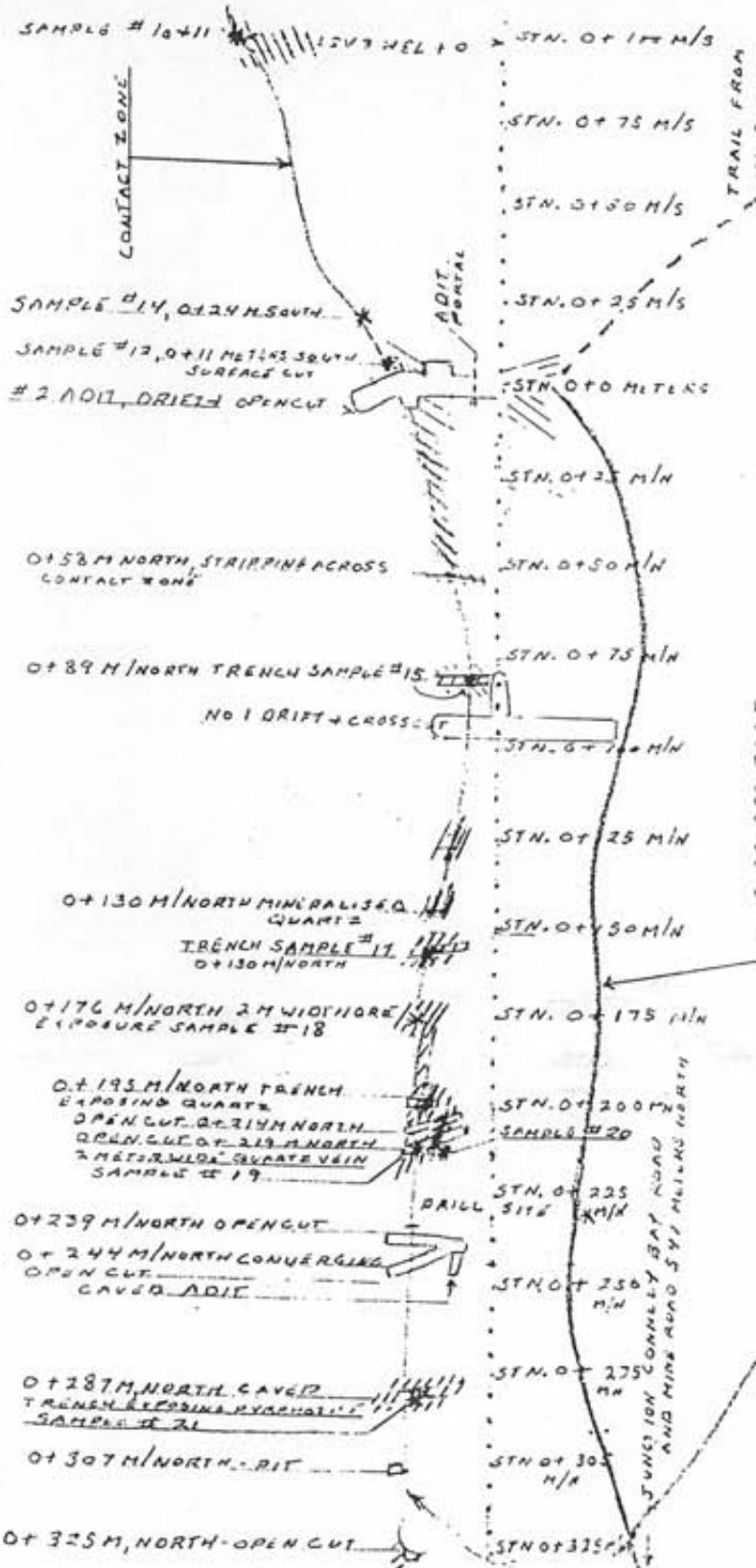
THIS CONTACT ZONE WITH CONSIDERABLE WORKINGS
LOCATED ALONG IT, AS IN FIGURE #3 REPRESENTING
DEVELOPMENT ALONG A DISTANCE OF BETTER THAN
400 METERS OF MINERALISED SKARN CARRYING, CHALCO-
PYRITE, PYRITE AND PYRRHOTITE. THERE ARE NUMEROUS
LENSSES OF MINEABLE SHIPPING GRADE ORE ALONG
THIS ZONE. ALTHOUGH THERE HAS BEEN NUMEROUS

DRILLING PROGRAMS AND A LONG CROSSCUT TUNNEL
DRIVEN ACROSS THE CONTACT ZONE, TO DETERMINE DEPTH
OF ORE, THE DRILL CORE RESULTS ARE NOT AVAILABLE
TO ME AT THIS TIME. HOWEVER I AM OF THE OPINION
THAT BETTER THAN 30,000 TONS OF ORE IS EXPOSED
AND ALTHOUGH THE DEPTH OF ORE IS QUESTIONABLE AN
OPEN PIT OPERATION ALONG THE STRIKE OF THE CONTACT
ZONE, WOULD BE FEASIBLE. CONSIDERING THE
EASY ACCESSABILITY, AND COUPLED WITH POTENTIAL
ADDITIONAL PROPERTY AQUISITIONS WITH ADDITIONAL
TONNAGE POTENTIAL, A VIABLE MINING SITUATION EXISTS.

THE INVESTIGATION OF THE OTHER HISTORIC SITES
SUCH AS THE, INCA GROUP AT HYACINTHE BAY, THE
COPPER BELL, DAWN AND SLAVIN IN THE GOWLAND
HARBOUR AREA WAS DISAPPOINTING BECAUSE OF THE
URRAN SPRAWL AND ITS ABANDONMENT.

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SANTANA #2 WORKINGS PLAN
QUADRA MINE, QUADRA ISLAND

FIGURE #3

TRENCH		GRANITE	
OPEN CUT		GRANITE	
ADIT		GRANITE	
STRIPPING		GRANITE	

ROCK SAMPLES

The samples were prospecting samples in nature. They were not taken to determine size and grade, but to determine what type of values can be expected from what type of rock and associated with what type of mineralization.

The 25 prospecting samples were sent to Quanta Trace Labs at Burnaby, B. C. for multi-element ICP plus fire assay gold silver, platinum, palladium, and rhodium.

Rock samples identified as limey or limestone were field tested by fizzing with acid. This limestone is grey to blueish black in appearance, scratches creamy white and is soft and fizzes easily with acid. The cooked up metamorphosed limestone is Darkbrownish, rusty, quite often heavily mineralized, and has the messed up appearance of a skarn rock. The Granit is a darkish granodiorite with a gneissic structure. It appears to have been squeezed. Quartz were field tested by knife blade to determine hardness. Pyrites, pyrhotites and chalcopyrites were identified by experience and if any question arose it was just labeled as mineralized or sulfides.

Sample Discription

Sample Number 1) A bluishgrey cooked limestone, mineralized and rusty from above Alex Meadow. Copper 133 ppm.

2.) Bluish-grey limestone mineralized with bright green and blue rust, Malachite stain from Santana #2. No visible copper mineralization other than the rust. some small pyrites. Copper 1260 ppm. Calcuium 33 %

3.) Bluishgrey limey, disiminated pyrites from Alexks Knob. # 1 drift, from crosscut on North wall. Santana #4. Copper 87 ppm.

4.) 0 Station +7m, Crosscut #1 North Wall. Bluishgrey Limey. Copper 112 PPm .

5.) Mineralization at face M.N. Drift #1, Santana #1. Limey. $\frac{1}{2}$ inch to 1 inch stringers mineralized Bluish to Blackish. Copper 29 ppm.

6.) Crystaline limestone with $\frac{1}{2}$ inch calcite crystals, footwall at 0+26, Santana #2. Pegmatite zone. Copper 364 ppm.

7.) Disiminated mineralized limestone. Very small blackish minerals. Santana #2. Main Drift. 0+26m+5m. Copper 925 ppm.

8.) Quartz 2inch vein, hanging wall, mineralized with blebs of chalcopyrite, up to 1 inch in size. Would make a good clean fluxing rock form 0+19m Santana #2. Copper 5.6 %

9.) Rusty Quartz, mineralized as #8, main drift Santana #2, at 0+19m+2m. Copper 4.3 %

10.) Santana contact zone, Baseline south 0+96m east. Possible breccia, malachite stain in whitish and tanish, limey rock. Silvery metalics in bunches have black scratch. Copper 1 %

11.) Contact Zone, baseline 0+96mE , mineralized quartz vein, plus contact rock, minor malchite (copper rust) on the quartz. Copper .5760 ppm carring 1.5 ounce per ton silver.

12.). Disminated metalics (pyrites?), small 1/8 inch gas pockets with native copper ? looking crystals. Blackish stain could be zinc-blackjack. 11Meters south of main adit . Looks like grey rusty skarn rk. Copper 7130 ppm, 0.9 oz/ton Ag. Zinc 1.5%.

13.) Massive sulfide, again tan to pinkish felspars? in contact and mixed up with blackish (biote) rock forming minerals. Brown rusty. North face open cut. Santana main drift. 0+42m South of contact face. Copper 5.1%, Silver 1.2 oz/ton.

14.) Heavy massive sulfides. Santana main drift. 0+24 meters south. On surface above main drift. Copper 2.1% Silver 2.3 oz/t.

15.) Mineralized Skarn, with malachite stain, Limestone. 0+89m a 30 meter long trench. Well mineralized. Copper 4.96%, Silver 1.86 oz/t. Gold 0.05 oz/t.

16.) Rusty massive sulfides, scratches black, with brassy chalcopyrite. Trench 5 m x 5m. 108 meters N. Copper 12.0 % Silver 5.9 oz/tn. Gold 0.01 Oz/tn.

17.) Massive Sulfide, very rusty, scratches black, vis.chalcopyrite. Lots of cooked up blackish (biotes?) rock forming minerals Copper 8.4 % , Silver 3.6 oz/ton. (at 0+152mE.)

18.) Massive Sulfides, scratches black, very rusty, 0+176 m.E. contact zone. Copper 4.2% Cu. Silver 3.6 Oz/tn.

19.) Contact massive sulfides, Heavy rusty, 0+214m N. Note; other than weight and rust there is no distinguishing mineral visible to justify a copper value. Copper 4.5%, Silver 2.1 Oz/t.

20.) North face. Quadra sample #2 drill site. Alecks Hill. Mineralized Granit?. Sample of Drill Core. Copper 911 ppm.

- 21.) Pinkish to brassy looking contact skarn rock, Rusty.
At 0+287m N. Copper 1100 ppm
- 22.) Pyrhotite ? Massive sulfides. A ledge at 0+214m. N.
Copper 1.3 % Silver 0.3 Oz/tn.
- 23.) Massive Sulfides. Rusty weathered on Road N.E. of September lake.
Copper 947 ppm.
- 24.) Rusty Limestone Skarn. Contact zone on Surge Narrows Road.
Gem #1; Copper 1170 ppm.
- 25.) Clay Taken from road cut on surge narrowsroad. Copper
150 ppm. 3% iron, 3% Aluminum.

Geology

The rocks containing minerals (Copper) of value are chiefly metamorphosed limestone which contacts with granodiorite having a gneissic structure. The line of contact is well defined and has generally a N.W. strike. Mineralization (that includes copper sulfides assaying over 5% Cu.) occurs at the contact of the limestone and the granodiorite rocks. This Skarn goes for over 2000 feet in a northwesterly direction outcropping of chalcopyrite occurs, associated with iron pyrites.

Conclusion

- 1) There is some very high grade copper mineralization exposed on the surface in outcrop, and in the underground workings of the Santana Copper Mine. Samples can easily be obtained carrying one to ten percent copper. The extent of these various exposures is over 2000 feet in a northwesterly direction. The mineralization in some cases is over 15 feet wide. The depth is unknown, however at the main adit, mineralization appears to continue from the adit through to the surface 100 feet above. However much of this 2000 feet is covered by brush and needs to be cleared off, to see if the exposure is continuous.
- 2) Silver values up to 5 ounces per ton are found with the higher copper values.
- 3) From the samples taken there does not appear to be any platinum, palladium, or rhodium in this deposit.

- 4) Gold; a 0.03 ounce per ton gold value was the best that 2 gold looking prospectors could find.
- 5) The shipping grade copper ore was clean. There was no Mercury arsenic, antimony , cadmium or uranimun to cause problems to the smelter. It would appear to be self fluxing for a smelter.
- 6) The surface exposure of the mineralization appears to be completely covered by the Reverted Crown Grants.

Physical Assessment Work

9 man days ; J. Scott & D. Javorsky @ 150/day	1350.00
9man days food @ 35./day + 3 nights motel,6 camp	435.00
4x4 Truck, 9 days usage on ground + 3 days travle	300.00
Equipment, Hardware, fuel, bags, ribbon tape, batteries, Under-ground lights.	173.00
Travle, BC Ferries, vancouver to Quadra Island, and to and from Vancouver Island, Plus Truck fuel.	231.00
Assaying Cost, 25 samples @ 30. each	750.00
Maps, Zeroking, printing of report.	82.00
Total	\$3321.00

STATEment of Qualifications.

The Author of this assessment report states as follows;

- 1) I was directly involved in the performance of the forgoing work and I did check all work done by experience prospector James Scott.
- 2) I have completed the qualifications to obtain a B.C. prospectors assistance grant.
- 3) I have worked in the development of mineral properties for the past 22 years as a prospector, miner or millwright.


 David Javorsky
 FMC# 299400
 Box 806, Stewart, B.C.

Supplement Information.

quanta trace laboratories inc.

#401-3700 Gilmore Way, Burnaby, B.C., Canada V5G 4M1

Tel: (604) 438-5226

To: Mr. D. Javorsky

W/D: 9609 Page 2

Sample type	Rock	Rock	Rock	Rock	Rock	Rock
Lab Reference #	9609-001	9609-002	9609-003	9609-004	9609-005	
Analyzed by Plasma Emission Spectroscopy (ICAP)						
Method used	Acqua regia soluble					
Aluminum	Al 18300	520	44400	26800	24700	
Antimony	Sb < 10.	< 10.	< 10.	< 10.	< 10.	
Arsenic	As < 30	< 30	< 30	< 30	< 30	
Barium	Ba 387.	223.	21.	19.	30.	
Beryllium	Be < 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Boron	B < 1.0	2.	< 1.0	< 1.0	< 1.0	
Cadmium	Cd < 0.3	6.9	< 0.3	< 0.3	< 0.3	
Calcium	Ca 12400	336000	28800	31300	15000	
Chromium	Cr 57.1	< 0.5	13.3	65.9	27.9	
Cobalt	Co 8.	< 1.0	17.	11.	12.	
Copper	Cu 133.	1260	87.	112.	29.	
Iron	Fe 30300	3500	65200	21200	42300	
Lead	Pb 7.	< 5.	< 5.	< 5.	< 5.	
Lithium	Li < 100	< 100	< 100	< 100	< 100	
Magnesium	Mg 4100	990	27300	3200	11200	
Manganese	Mn 190.	163.	819.	205.	364.	
Mercury	Hg < 10.	< 10.	< 10.	< 10.	< 10.	
Molybdenum	Mo 4.	< 3.	< 3.	< 3.	< 3.	
Nickel	Ni 7.7	7.7	7.0	1.7	< 0.5	
Phosphorus	P 1300	400	400	< 200	300	
Potassium	K < 500	< 500	< 500	700	< 500	
Selenium	Se < 10.	< 10.	< 10.	< 10.	< 10.	
Silicon	Si 1410	550	1190	720	2900	
Sodium	Na 1800	< 100	< 100	400	700	
Strontium	Sr 82.	2040	58.	35.	81.	
Thorium	Th < 5.	< 5.	< 5.	< 5.	< 5.	
Titanium	Ti 648.	182.	1790	130.	1130	
Uranium	U < 30	< 30	< 30	< 30	< 30	
Vanadium	V 26.1	20.1	53.9	18.3	95.8	
Zinc	Zn 64.	178.	95.	21.	40.	
Zirconium	Zr < 10.	< 10.	< 10.	< 10.	< 10.	
Results in	ppm	ppm	ppm	ppm	ppm	
Precious Metals by Fire Assay						
Silver	Ag < 0.1	< 0.1	0.1	0.2	< 0.1	
Gold	Au 0.004	0.032	0.001	0.001	0.001	
Palladium	Pd 0.0005	0.0005	0.0005	< 0.0004	0.0004	
Platinum	Pt < 0.0004	< 0.0004	< 0.0004	< 0.0004	< 0.0004	
Rhodium	Rh < 0.001	< 0.001	< 0.001	< 0.001	< 0.001	
Results in	oz/T	oz/T	oz/T	oz/T	oz/T	

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Quanta trace laboratories inc.

#401-3700 Gilmore Way, Burnaby, B.C., Canada V5G 4M1

Tel: (604) 438-5226

To: Mr. D. Javorsky

W/D: 9609 Page 3

Sample type Lab Reference #	Rock 9609-006	Rock 9609-007	Rock 9609-008	Rock 9609-009	Rock 9609-010
Analyzed by Plasma Emission Spectroscopy (ICAP)					
Method used	Acqua regia soluble				
Aluminum	Al 20400	21200	1080	14200	10100
Antimony	Sb < 10.	< 9.	< 10.	< 9.	< 10.
Arsenic	As < 30	< 30	< 30	< 30	< 30
Barium	Ba 46.	34.	< 5.	8.	< 5.
Beryllium	Be < 0.10	< 0.09	< 0.10	< 0.09	< 0.10
Boron	B < 1.0	< 0.9	< 1.0	< 0.9	< 1.0
Cadmium	Cd < 0.3	< 0.3	300.	182.	984.
Calcium	Ca 67800	44300	3900	29400	27600
Chromium	Cr 16.5	22.4	131.	85.8	80.3
Cobalt	Co 2.	17.	39.	23.	14.
Copper	Cu 364.	925.	56500	43600	10500
Iron	Fe 50800	55100	59100	56000	22200
Lead	Pb < 5.	< 5.	5.	6.	1830
Lithium	Li < 100	< 90	< 100	< 90	< 100
Magnesium	Mg 11900	11800	200	1200	3700
Manganese	Mn 1380	1020	116.	2050	1690
Mercury	Hg < 10.	< 9.	< 10.	< 9.	10
Molybdenum	Mo 25.	4.	79.	135.	214.
Nickel	Ni 2.6	23.3	68.2	42.3	26.9
Phosphorus	P 500	600	< 200	300	300
Potassium	K 2200	1400	< 500	< 500	< 500
Selenium	Se < 10.	< 9.	230	120	270
Silicon	Si 1120	880	330	580	1660
Sodium	Na 100	300	< 100	300	< 100
Strontium	Sr 115.	99.6	12.	27.	54.
Thorium	Th < 5.	< 5.	< 5.	< 5.	< 5.
Titanium	Ti 88.	200.	8.	679.	144.
Uranium	U < 30	< 30	< 30	< 30	< 30
Vanadium	V 99.2	107.	2.0	341.	80.9
Zinc	Zn 59.	60.	4060	2670	14200
Zirconium	Zr < 10.	< 9.	< 10.	10	< 10.
Results in	ppm	ppm	ppm	ppm	ppm
Precious Metals by Fire Assay					
Silver	Ag < 0.1	< 0.1	2.03	1.46	2.75
Gold	Au 0.001	0.003	0.027	0.046	0.003
Palladium	Pd 0.0005	0.0006	0.0006	0.0006	0.0006
Platinum	Pt < 0.0004	0.0007	0.0009	0.0004	0.0007
Rhodium	Rh < 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Results in	oz/T	oz/T	oz/T	oz/T	oz/T

Quanta trace laboratories inc.

#401-3700 Gilmore Way, Burnaby, B.C., Canada V5G 4M1

Tel:(604)438-5226

To: Mr. D. Javorsky

W/O: 9609 Page 4

Sample type Lab Reference #	Rock 9609-011	Rock 9609-012	Rock 9609-013	Rock 9609-014	Rock 9609-015
Analyzed by Plasma Emission Spectroscopy (ICAP)					
Method used	Acqua regia soluble				
Aluminum	Al 7590	8260	6910	3900	13000
Antimony	Sb < 10.	< 10.	< 10.	< 10.	< 10.
Arsenic	As < 30	< 30	< 30	< 30	< 30
Barium	Ba < 5.	< 5.	20.	< 5.	5.
Beryllium	Be < 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Boron	B 3.	< 1.0	< 1.0	2.	< 1.0
Cadmium	Cd 877.	767.	206.	320.	132.
Calcium	Ca 63700	36500	5300	8500	30000
Chromium	Cr 72.6	59.0	72.5	43.3	43.6
Cobalt	Co 7.	27.	22.	10.	27.
Copper	Cu 5760	7130	51100	21200	49600
Iron	Fe 19300	35900	33200	15400	48000
Lead	Pb 990.	1080	38.	37.	12.
Lithium	Li < 100	< 100	< 100	< 100	< 100
Magnesium	Mg 3200	2000	2100	200	3900
Manganese	Mn 1430	1610	213.	457.	1440
Mercury	Hg < 10.	10	10	40	10
Molybdenum	Mo 15.	< 3.	29.	39.	11.
Nickel	Ni 32.7	49.1	39.3	14.6	51.1
Phosphorus	P 300	400	300	400	300
Potassium	K < 500	< 500	600	< 500	< 500
Selenium	Se 110	50	100	140	100
Silicon	Si 1410	3580	340	520	730
Sodium	Na < 100	< 100	700	< 100	< 100
Strontium	Sr 88.	21.	40.	22.	49.
Thorium	Th < 5.	< 5.	< 5.	< 5.	< 5.
Titanium	Ti 233.	292.	504.	130.	259.
Uranium	U < 30	< 30	< 30	< 30	< 30
Vanadium	V 108.	156.	31.5	128.	190.
Zinc	Zn 12600	15200	2530	3640	2180
Zirconium	Zr < 10.	< 10.	< 10.	< 10.	< 10.
Results in	ppm	ppm	ppm	ppm	ppm
Precious Metals by Fire Assay					
Silver	Ag 1.52	0.98	1.22	2.32	1.86
Gold	Au 0.007	0.003	0.005	0.002	0.003
Palladium	Pd 0.0006	0.0006	0.0006	0.0004	0.0006
Platinum	Pt 0.0012	0.0004	0.0006	0.0004	0.0005
Rhodium	Rh < 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Results in	oz/T	oz/T	oz/T	oz/T	oz/T

Quanta trace laboratories inc.

#401-3700 Gilmore Way, Burnaby, B.C., Canada V5G 4M1

Tel: (604) 438-5226

To: Mr. D. Javorsky

W/O: 9609 Page 5

Sample type Lab Reference #	Rock 9609-016	Rock 9609-017	Rock 9609-018	Rock 9609-019	Rock 9609-020
Analyzed by Plasma Emission Spectroscopy (ICAP)					
Method used	Acqua regia soluble				
Aluminum	Al 21000	13000	5700	2210	32000
Antimony	Sb < 10.	< 9.	< 9.	< 9.	< 9.
Arsenic	As < 30	< 30	< 30	< 30	< 30
Barium	Ba 35.	< 5.	< 5.	< 5.	35.
Beryllium	Be < 0.10	< 0.09	< 0.09	< 0.09	< 0.09
Boron	B < 1.0	< 0.9	< 0.9	< 0.9	< 0.9
Cadmium	Cd 368.	108.	37.8	39.7	1.2
Calcium	Ca 7800	15200	42200	20100	20700
Chromium	Cr 55.4	69.2	29.9	26.1	40.1
Cobalt	Co 86.	15.	13.	13.	23.
Copper	Cu 120000	84100	42900	45200	911.
Iron	Fe 136000	84400	55700	42600	43600
Lead	Pb 54.	10.	5.	9.	< 5.
Lithium	Li < 100	< 90	< 90	< 90	< 90
Magnesium	Mg 5300	800	200	< 90	5300
Manganese	Mn 628.	444.	134.	86.	226.
Mercury	Hg < 10.	< 9.	< 9.	< 9.	< 9.
Molybdenum	Mo < 3.	4.	329.	245.	< 3.
Nickel	Ni 109.	6.0	< 0.5	1.1	6.2
Phosphorus	P 500	300	300	< 200	300
Potassium	K < 500	800	< 500	< 500	1000
Selenium	Se 810	50	20	30	< 9.
Silicon	Si 870	13600	1230	6260	730
Sodium	Na 300	300	< 90	< 90	2900
Strontium	Sr 51.	94.3	6.	7.	114.
Thorium	Th < 5.	< 5.	< 5.	< 5.	< 5.
Titanium	Ti 533.	167.	151.	50.	928.
Uranium	U < 30	< 30	< 30	< 30	< 30
Vanadium	V 248.	122.	104.	33.	67.4
Zinc	Zn 4350	1240	891.	908.	57.
Zirconium	Zr < 10.	< 9.	< 9.	< 9.	< 9.
Results in	ppm	ppm	ppm	ppm	ppm
Precious Metals by Fire Assay					
Silver	Ag 5.95	3.62	3.66	2.01	0.1
Gold	Au 0.012	0.002	0.003	0.002	0.002
Palladium	Pd 0.0004	0.0006	0.0006	0.0004	0.0004
Platinum	Pt 0.0004	0.0006	0.0009	0.0008	0.0008
Rhodium	Rh < 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Results in	oz/T	oz/T	oz/T	oz/T	oz/T

Quanta trace laboratories inc.

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Tel: (604) 438-5226

To: Mr. D. Javorsky

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Sample type	Rock	Rock	Rock	Rock	Rock	Rock
Lab Reference #	9609-021	9609-022	9609-023	9609-024	9609-025	

Analyzed by	Plasma Emission Spectroscopy (ICAP)					
Method used	Acqua regia soluble	Acqua regia soluble	Acqua regia soluble	Acqua regia soluble	Acqua regia soluble	

Aluminum	Al	12300	18200	21300	25000	36500
Antimony	Sb	< 10.	< 10.	< 10.	< 10.	< 9.
Arsenic	As	< 30	< 30	< 30	< 30	< 30
Barium	Ba	< 5.	55.	9.	55.	228.
Beryllium	Be	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Boron	B	< 1.0	< 1.0	< 1.0	< 1.0	< 0.9
Cadmium	Cd	2.4	5.0	< 0.3	< 0.3	< 0.3
Calcium	Ca	17400	12300	15700	21300	4100
Chromium	Cr	29.1	46.7	44.4	34.3	33.1
Cobalt	Co	17.	156.	40.	58.	12.
Copper	Cu	1100	13200	974.	1170	150.
Iron	Fe	42900	182000	123000	39600	30500
Lead	Pb	< 5.	< 5.	< 5.	< 5.	7.
Lithium	Li	< 100	< 100	< 100	< 100	< 90
Magnesium	Mg	600	600	10700	6200	9400
Manganese	Mn	40.	95.	264.	139.	489.
Mercury	Hg	< 10.	< 10.	< 10.	< 10.	< 9.
Molybdenum	Mo	10.	43.	< 3.	< 3.	< 3.
Nickel	Ni	14.0	109.	81.0	89.7	12.5
Phosphorus	P	400	< 200	500	< 200	500
Potassium	K	700	< 500	< 500	700	4400
Selenium	Se	80	120	< 10.	< 10.	< 9.
Silicon	Si	850	2090	770	1080	400
Sodium	Na	900	200	900	500	300
Strontium	Sr	474.	244.	116.	40.	32.
Thorium	Th	< 5.	< 5.	< 5.	< 5.	< 5.
Titanium	Ti	789.	159.	1860	698.	1950
Uranium	U	< 30	< 30	< 30	< 30	< 30
Vanadium	V	47.7	10.9	112.	83.2	80.8
Zinc	Zn	77.	154.	31.	25.	60.
Zirconium	Zr	< 10.	< 10.	< 10.	< 10.	< 9.
Results in		ppm	ppm	ppm	ppm	ppm

Precious Metals by Fire Assay						
Silver	Ag	0.1	0.3	0.2	< 0.1	0.2
Gold	Au	0.002	0.001	0.004	0.001	0.005
Palladium	Pd	0.0004	0.0004	0.0012	0.0004	< 0.0004
Platinum	Pt	0.0008	0.001	0.0008	0.0007	0.0005
Rhodium	Rh	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Results in		oz/T	oz/T	oz/T	oz/T	oz/T

Assayer: D. Javorsky

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92K 013

4/12/10

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MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES

00020000

RESOURCE DATA SECTION

VERSION 1.1

NAME(S) SANTANA

N.T.S. 092K03E

M1 092K 013

LAT 5011.5
 LONG 12509.5
 ELEVATION 100
 MINING DIVISION NIMD
 LOCATION ACCURACY 1

UTMZ 250
 UTNN CL5561300
 UTME CL0345600
 MINERAL STATUS
 DEPOSIT TYPE
 MINDEPIU 02905

COMMODITIES PRESENT CU
 AG
 AU

MINERALS PRESENT CLEP

CAPSULE GEOLOGICAL COMMENT PYRITE AND CHALCOPYRITE ARE CONTAINED IN A NARROW BELT OF METAMORPHIC ROCKS ON THE CONTACT BETWEEN LIMESTONE AND GRANODIORITE. GENERALLY IN MASSES OR SHORT LENSES.

NATIONAL MINERAL INVENTORY NO. 92K-3 CU 2/-

PUBLISHED PRODUCTION DATA

YEAR	TONNES MINED	TONNES MILLED	GOLD (G)	SILVER (G)	COPPER (KG)	LEAD (KG)	ZINC (KG)	MOLY (KG)	OTHER
1916	001.158	0	93	14,370	4,779	0	0	0	0
OTALS =	158	0	93	14,370	4,779	0	0	0	0
1917	170	0	2	462	10,535	0	0	0	0

BIBLIOGRAPHY - 1 BCDM MMAR 1916-348, 1917-249, 1918-306, 1919-218, 1929-390, 1930-30500

X 2 BCDM OPEN FILE

3 GSC MAP 65A

X 4 EMR MRD CORPFILE (NEW FAR NORTH EXPLORATION LTD.)

2/1

1918-19

Q2