GEOPHYSICAL REPORT

SILVERTON PROJECT

LOWER SHEAR AND UPPER CAP ZONES

NTS 82F/14W LAT. 49° 54'N. LONG. 117°20'W.

FOR

THE LUCKY DOG PROSPECTING SYNDICATE

BY

DELTA GEOSCIENCE LTD

GEOLOGICAL SURVEY BRANCH G.A. HENDRICKSON, P.GEO.



NOVEMBER 13, 1999.



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GRANT A. HENDRICKSON, P.GEO.

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LUCKY DOG GROUP

Assessment Expense Summary

<u>Geophysical</u>

- Delta Geoscience Ltd September 13, 1999 Invoice	\$ 10,736.24
- Delta Geoscience Ltd November 15, 1999 Invoice	1,575.00
 Paid to Gerry Bennett & Ralph Wilson Local field assistants for Delta Geoscience - September 2-9, 1999 	2,000.00
Diamond Drilling	
- Mob. & Demob. Drill to site - Galena Contractors Ltd.	945.00
- Prepare and reclaim drill sites - Canyon Development Ltd.	205.00
John Deere 190 Excavator - 10 hours at \$82.50	825.00
Mob. & Demob. Excavator - 4 hours at 307.50	270,00
- Diamond drilling as per report	10,923.75
тс	TAL \$ 27,274.9

We wish to apply three (3) years to:

		ASSESSMENT	\$ 26,400.00
- Lucky	Dog #9 1 Unit Tenure #361055 @ \$100.00/yr 1 x 100 x 3		300.00
- Lucky	Dog #6 1 Unit Tenure #369054 @ \$100.00/yr 1 x 100 x 3		300.00
- Lucky	Dog #5 1 Unit Tenure #369053 @ \$100.00/yr 1 x 100 x 3		300.00
- Lucky	Dog #4 3 Units Tenure #369052 @ \$100.00/yr 3 x 100 x 3		900.00
- Lucky	Dog #1 18 Units Tenure #369051 @ \$100.00/yr 18 x 100.00 x 3		5,400.00
- B.W.	12 Units Tenure #256909 @ \$200.00/yr 12 x 200 x 3		7,200.00
- B E.	20 Units Tenure #256908 @ \$200.00/yr 20 x 200 x 3		12,000.00

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INTRODUCTION

At the request of the Lucky Dog Prospecting Syndicate, Delta Geoscience Ltd has conducted detailed Induced Polarization and Resistivity surveys on a property located approx. 5 kilometers south of the town of Silverton. This small village is located in southeastern British Columbia (NTS: 82F/14W), Lat. 49° 54', Long. 117° 20' W.

The property is thought to be underlain by granitic rocks of the Jurassic age Nelson Batholith. The major Slocan Lake fault, a 35° to 40° east-dipping detachment of Eocene age, lies just to the west of the property. The discovery by the Syndicate of a silver-rich small fractured quartz vein contained within an apparent shear zone and the occurrence of a large area of silica alteration, lead to the staking of the property. The claims are called the Baby claims after a creek in the area.

The purpose of the geophysics was to map out the extent of the vein systems and to find the vent structure responsible for the extensive area of quartz flooding. The small size of the targets, plus the very low sulphide levels, made it essential that very high resolution I.P/Resistivity techniques be used, while maintaining excellent signal to noise levels.

The survey took place during the period September 2 - 9, 1999. During this time approx. 10 kilometers of induced polarization/resistivity surveying was completed.

Topography of the survey area is relatively moderate for this area of B.C., however there are some very steep slopes just outside the survey area. The grid is tree covered and some selective logging has taken place recently. Access to the grid is excellent from a forestry road, the Silverton Alwin, approx. 4 kilometers south of Silverton.

The Willa deposit, a significant intrusive breccia-hosted gold-copper-silver deposit, occurs approx. 4 kilometers to the south of this survey.

LOCATION MAP





PERSONNEL

Grant Hendrickson - Senior Geophysicist Jan Dobrescu - Geophysicist Martin Zahorec - Geologist

In addition, the Lucky Dog Prospecting Syndicate provided the following two local experienced helpers (from Silverton) to assist with the survey. Their cheerful assistance and hard work was appreciated.

Ralph Wilson - 250-358-2814 Gerry Bennett - 250-358-2202

EQUIPMENT

- 2 IRIS Instruments IP-6 Receivers
- 2 IRIS Instruments VIP-4000 Transmitters
- 6 Motorola Portable VHF Radios
- 1 Toshiba Field Computer
- 1 Hewlett Packard 250C Colour Plotter
- All the necessary wire and electrodes
- 4x4 Ford F250 Truck

DATA PRESENTATION

All of the geophysical data is presented at a scale of 1:2000.

Data is presented as contoured plans and as posted data. Specific portions of the grid were studied in detail with geophysical sections, to provide further insight into the spatial position of mineralised bodies.

Although the grid itself is contiguous (one co-ordinate system), the two zones are presented separately. These zones are called the Lower Shear Zone and the Upper Cap Zone. This separation helps to emphasise the features of each zone without bias, which is important since anomaly amplitudes are small (typical of veins). Note however that the grid southeast corner of the Lower Shear zone overlaps with the grid northwest corner of the Upper Cap zone.

Delta Geoscience Ltd established the grid on the property as the survey progressed. Line separation is 40 meters with survey stations established every 10 meters. Pickets were placed along the two baselines 5000E and 5400E at all the line crossings.

The orientation of the baselines is N40°E, with the cross lines bearing 130°.

SURVEY PROCEDURE

The small target size and trace amounts of sulphides observed in the mineralized zones required high resolution surveying, thus a dense network of grid lines and survey stations was established.

The gradient electrode array was chosen for the survey, since it is capable of excellent horizontal resolution, in conjunction with a deep depth of investigation.

The current electrode separation (AB) for the Lower Shear zone was 600 meters, with the potential electrode separation (MN) set at 10 meters. The focus to the depth of investigation for this array size is the 60 to 130 meter range.

The current electrode separation (AB) for the Upper Cap zone was increased slightly to 660 meters, with the potential electrode separation (MN) again set at 10 meters.

It is good practice to keep the potential electrode separation (MN) as small as signal levels and grid station chaining accuracy will allow, in order to achieve the best possible horizontal resolution of anomalies.

The induced polarization/resistivity sections that are included within this report were constructed by re-surveying those lines where significant responses were detected with smaller size gradient arrays (AB's), each focused at shallower exploration depths. The current electrode separations were varied down from 600m to 400m to 200m. The focus depth for these arrays is considered largely to be a function of the current electrode separation (AB) and to a lesser extent the resistivity of the rock and/or overburden. The depth of investigation of an electrode array can normally be accurately determined from the simultaneous inversion of chargeability and resistivity depth sounding data (when available), in conjunction with detailed geologic knowledge of the stratigraphy from borehole and/or surface outcrops. An array's depth of investigation parameters obtained from detailed analysis of one survey area can generally be applied to similar geological settings elsewhere. Merging the data from the various electrode separations allows us to view the data in section format.

The apparent depth scale shown on the I.P/Resistivity sections contained within this report, is the depth below the ground surface and assumes flat topography. When complete detailed topographic information is available, the geophysical data can be draped with the topography. This step is considered essential when working with shallow dipping or flat lying mineralised zones in steep terrain. The relatively moderate topography of this survey area was not a significant problem.

The geophysical survey work so far described was designed to evaluate the property in a very cost-effective manner. Again, the prime goals or targets for this relatively shallow, high-resolution survey were as follows:

- a) structurally controlled sulphide mineralization (spatial position and strength, since there is a correlation between sulphides and high-grade silver).
- b) assistance in geological mapping of the lithologies and alterations.
- c) delineation of the structural fabric.

DISCUSSION OF THE DATA

Lower Shear Zone:

The occurrence of a significant amount of silver mineralization contained within a fractured quartz vein at approx. 2050N, 4998E, encouraged this work.

The induced polarization data appears to have defined a series of weakly mineralized fractures oriented N, N40°E and N78°E. These apparent fracture sets and their intersections likely created sufficient porosity and permeability to allow the deposition of minor sulphides from circulating silica rich hydrothermal fluids. The fracture sets themselves are likely related to the regional tectonic history.

The north trending structures appear to be the youngest, however the I.P. data also suggests minor sulphides were deposited in all three of the structural orientations mentioned above. The N40°E orientation appears the best mineralised, thus remains the most promising structure. Significant zones of high resistivity on the grid east side of the I.P. anomalies may be related to silicification.

The steep grid west facing slope that begins at 4975E on the west side of the grid contribute to the appearance of an approx. 75 deg west dip to the N40°E trending weak I.P. response. In reality, the dip is probably closer to vertical.

The geophysical sections for lines 2040N and 2020N (Figs. #11-14) give the best insight into how these apparent structurally controlled weak I.P. anomalies occur at depth and therefore should be used to guide any drill program. There is some indication in the data that the amount of sulphides will improve with depth

Upper Cap Zone:

Extensive areas of this portion of the granitic host rock appear to have been flooded with silica to give the appearance of a silica cap. Locating the vent area (main fracture?) for the source of silica was the focus of the survey, since there is a chance that precious metals would be associated with minor amounts of sulphide in the vent area.

The narrow linear weak I.P. anomaly trending N40°E and centered at 5420E, 1770N, does appear to be the centre of the silica flooded area, therefore is of prime interest. Note that the strongest of the weak apparent sulphide zones defined by the I.P., again tend to be oriented N40° to 50°E. A prominent fault described below cuts this zone off to the grid north. The geophysical sections, (Figs. #17-20) clearly define this zone.

Narrow structures defined by the geophysics appear to be oriented either N or N40°E. The north trending structures (very weak I.P. response) appears to be the youngest. The slickensided surface of one of the major north trending structures can be observed along the road at approx. 1820N/5450E. This fault plane dips approx. 50° to the northeast at this location. The geophysics suggests there has been significant strike slip movement and observation of the slickensides suggests relative movement was down to the east. Abundant manganese mineralization is present within the structure.

The swarm of relatively strong, near surface I.P. responses (only partially defined by this survey), that exists on the east side of the grid, are of interest. They may be indicative of a significant change in geology, or a major tectonic zone lying to grid east. Although these eastern anomalies are the strongest I.P. responses, most are still typical of vein-type targets. The geology and geochemistry of the eastern half of the grid is unknown due to a thin overburden cover in a heavily forested and swampy area. The geophysical sections (Figs. #21-26) of the eastern area show several vertical zones typical of veins, but there is also a near surface flat lying component, perhaps indicative of a mineralized flat fault or thrust. It's possible that remnants of the Rossland Volcanics or breccia zones (known to occur on the east side of the nearby Willa deposit) extend into this area.

The relatively undefined east zone of the Willa deposit is described in the literature as an extensive series of closely adjacent east-west oriented fracture zones. Very significant copper and gold mineralization is reported from the drilling of these fractures.

Some exploration features related to previous work were noticed during the progress of this survey. They are listed below:

- old large trench (blasted) at 1550N, 5375E.
- short vertically oriented drill hole noted at approx. 1725N, 5437E.
- reports of old short drill hole at approx. 5472E, 1755N. Collar was not located.

CONCLUSION AND RECOMMENDATIONS

A limited drill program is warranted to evaluate the apparent weakly mineralized structures defined by the survey. The weak I.P. anomalies outlined are quite typical of vein-type responses. The anomaly amplitude correlates very well with the type of response seen over some of the known vein deposits in the Cordillera.

Further geological and geochemical work may provide more information on the significance of these relatively shallow anomalies, particularly those on the east side of the Upper Cap zone.

Some consideration should be given to extending the Upper Cap zone grid to the grid east and south, to tie in with the information available on the adjacent Willa property.

Suggested drill collar locations are as follows:

Lower Shear Zone:

#1. Collar at 4925E/2040N. A -45° hole, azimuth grid east (130°) , length minimum 130m. May want to continue the hole to 190m, to test second zone. This hole will test the known silver vein.

#2. Recognising that the known vein has a N40°E orientation suggests testing the apparent continuity of this structural orientation to the north. Collar at 5030E/2080N. A -45° hole, azimuth grid west (310°), length 150m.

Upper Cap Zone:

Three drill holes are tentatively recommended to test a variety of the best geophysical responses. Hole #1 is the best defined target at this time and will test the area of intense silica alteration. Drilling of holes #2 and #3 would be contingent on results for #1 and further geological/geochemical information.

#1. Collar 5525E/1760N, -45°, Azimuth Grid West (310°), for at least 185 meters.

#2. Collar 5550E/1680N, -45°, Azimuth Grid West (310°), for 80 meters.

#3. Collar 5585E/1720N, -80°, Azimuth Grid West (310°), for 60 meters.

Grant A. Hendrickson P.Geo.

STATEMENT OF QUALIFICATIONS

Grant A. Hendrickson

- B.Science, University of British Columbia, Canada, 1971. Geophysics option.
- For the past 28 years, I have been actively involved in mineral exploration projects throughout Canada, the United States, Europe, Central and South America and Asia.
- Registered as a Professional Geoscientist with the Association of Professional Engineers and Geoscientists of the Province of British Columbia, Canada.
- Registered as a Professional Geophysicist with the Association of Professional Engineers, Geologists and Geophysicists of Alberta, Canada.
- Active member of the Society of Exploration Geophysicists, European Association of Geoscientists and Engineers, and the British Columbia Geophysical Society.

Dated at Delta, British Columbia, Canada, this 13 day of NoV, 1999.

& Handre

Grant A. Hendrickson, P.Geo.



REFERENCES

- Barker, Ron, Blunk, Inken, and Smith, Ian, Jan, 1996: Geophysical Considerations in the Design of the U.K. National Resistivity Sounding Database: First Break, Vol. 14, No. 2, February, 1996.
- Battacharya, B.B., and Dutta, I., 1982: Depth of Investigation Studies for Gradient Arrays over Homogeneous Isotropic Half-Space: Geophysics, Vol. 47, 1198-1203.
- Coggon, J.H., 1973: A Comparison of I.P. Electrode Arrays: Geophysics, Vol. 38, 737-761.
- Langore, L., Alikay, P, and Gjovreku, D., 1989: Achievement in Copper Sulphide Exploration in Albania with I.P. and E.M. Methods: Geophysical Prospecting 37, 975-991.
- Malmqvist, L., 1978: Some Applications of I.P. Technique for Different Geophysical Prospecting Purposes: Geophysical Prospecting 26, 97-121.
- Ward, Stanley H., 1990: Resistivity and Induced Polarization Methods: Geotechnical and Environmental Geophysics, Vol. 1, Investigations in Geophysics 5, 147-190.
- Paper 25, Copper-Gold Mineralization in the Willa Breccia Pipe, southeastern British Columbia, by R.H. Wong and C.D. Spence, from the publication "Porphyry Deposits of the Northwestern Cordillera of North America".









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DELTA GEOSCIENCE LTD

Fig # 16











 ± 0 ~ **-**50 COLOGICLE SURVEY BRANCH Scale 1:2000 Don 50 75 - - 100 (meters) - + 4 - X. 4 - 4 Sect. 1 10.00 LUCKY DOG PROSPECTING SYNDICATE SILVERTON PROJECT, UPPER CAP ZONE INDUCED POLARIZATION SECTION, LINE 1800N SLOCAN LAKE AREA, BRITISH COLUMBIA contour interval 0.2 mV/VGradient arrays, AB = 660-400-200m, MN = 10mIris instruments Sept. 1999

DELTA GEOSCIENCE LTD

Fig # 19













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CT, UPPER CAP IN SECTION, LI A, BRITISH COI	Y ZONE NE 1680N LUMBIA
erval 0.2 mV/V 660-400-200m. truments 1999	MN = 10m
LTD	Fig # 25



	5150E	5200E	5250E	5300E	5350E	5400E	5450E	5500E	5550E	5600E	5650E
2000N -	-	-			-	-				~	-
1950N -		<u>n</u> <u>6</u>						5 5 6 6 5 5 5 5 5 5 5 5 5 5	6 0 0 0 0 0		6 ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
1900N ~		- 30 50 60 50 	5 4 4 4 4 5 4 4 4 5 4 4 4	<u>9</u> 4 4 4 4		3 N L L C		ب در مة مر در 			7 + 72
1850N -		4 5 5 9 N 5	4 0 0 4 U 6 2 5 U 0 2 5 U	4 U D 4 4 7 8 - 7 8	4 5 4 4 5 7 10 4 10	5 03 4 -1 5 33 40		 03 4 4 4 4 N 3 10 8 8 8	5 4 8 6	6 0	
1800N -		3. 5. 5. 9. 6. 7. 9. 6. 7.	* * 5 * * 2 5 - 3		5 4 6 4 6 - N U - 5	5 5 7 7 8 5 3 2 2	2 00 00 07 <u>8</u> 00 00 00 00 00 00 00 00 00 00	6 4 4 2 5 5 4 6 4 1 2 2 4	38 65 65 68 7 10 7 7 3 3 10 7 7 3 3	6 5 5 7 1 8 8 2 1 1 9 8 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	D
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1950N -	+	1983	22329	1711 1454 1564 1780 2577 3	2155 2175 2175 1 907	2846	1185 1185 2186 2294	1016 1751 2 701 1 1909	4603 9013 947 1148	783 1203 1900 1900	755 t
1900N -	-	149 988 283 1900 1922	192 192 192 192 1503	18:22 2337 2131 2311 2311 2235 2655	1108 1807 1927 1987 1987 1480	787 1430 1764 1765 2147 1837 1838 1938	865 694 781 1691 1890 2371 2371 1941	766 2022 1161 1653 1417 1534 1172 1117 1172 1117 1172 1117	886 990 7736 1145 1181 756 1434	350 063 3253 3253 2817 2817 1716	2249
1850N -	- 31.	1704 1704	1761 1791 1226	1794 2621 1969	1903 1977	1611 1664 1217	2140 1840 1813	997 988 989	2468 2254 1214	4121 32299 1419	4
1800N ~	-	1638 1755 1289	1111 1308 1637 1724	1847 1841 2755 2329	1198 584 1221	1165 1534 1176 1066	1685 1516 1110 1300	1245 1093 1016 1718	1006 1206 1219 1179	1484 1242 1428 1428	1793
1750N -	. 	1500 1513	2743 1904 1483	1291 - 1465 - 3154 -	1074 807 1278	1255 1095	1385 1248	1257.5 1397.5 1072 1155.5	20778 11355	1423 1423	-
1700N -		2572 2868 2302 1658	1936 2267 2336 3294 2141 3510 2722 2407 2783 3007	3011 2909 4346 3074 3006 2006	752 1118 2014 13377 1401 2315 2803 3436 3436	1124 1373 1373 1375 1215 1215 1106 1105 1105 1105 1105	1157 1210 1070 785 1284 1979 1485 1851 1487 1449	2148 1555 1875 1298 1430 1577 1321 577 1321 577 516	1220 829 731 1627 1184 1370 1483 1903 1283 1795	1122 1010 1049	-
1650N -	-	3101	2848 2940 2009	2028 25 99 26 71	1128 2157 3096	1509 1332 1124 1121	710 787 1831	895 972 1736 816	1655 1657 2170 1743	824 1223	-
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- - 50 GEOLOGICAL SURVEY BRANCH Scale 1:2000 EPORT 50 75 100 25 125 150 25 (meters) • 9 --150 1. P 177 t 173 12 LUCKY DOG PROSPECTING SYNDICATE SILVERTON PROJECT, UPPER CAP ZONE INDUCED POLARIZATION SECTION, LINE 1800N SLOCAN LAKE AREA, BRITISH COLUMBIA posted data Gradient arrays, AB = 660-400-200m, MN = 10m Iris instruments Sept. 1999 Fig # 31 DELTA GEOSCIENCE LTD

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GEOLOGICAL SURVEY BRANCH Scale 13000 PORT 25 50 75 100 125 -100(meters) TRUCK -150 -202.344 10-200 LUCKY DOG PROSPECTING SYNDICATE SILVERTON PROJECT, UPPER CAP ZONE RESISTIVITY SECTION, LINE 1800N SLOCAN LAKE AREA, BRITISH COLUMBIA posted data Gradient arrays, AB = 660-400-200m, MN = 10mIris instruments Sept. 1999 DELTA GEOSCIENCE LTD Fig # 32

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									SILVERTON PROJECT, UPPER CAP ZONE INDUCED POLARIZATION SECTION, LINE 1720N SLOCAN LAKE AREA, BRITISH COLUMBIA
									posted data Gradient arrays, AB = 660-400-200m, MN = 10m Iris instruments Sept, 1999
									DELTA GEOSCIENCE LTD Fig # 35

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	5450	5500	5550	5600	5650	5700	5750		LUCKY DOG PROSPECTING SYNDICATE SILVERTON PROJECT, UPPER CAP ZONE RESISTIVITY SECTION, LINE 1720N SLOCAN LAKE AREA, BRITISH COLUMBIA posted data Gradient arrays. AB = 660-400-200m, MN = 10m Iris instruments Sept. 1999

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									postec Gradient arrays, AB = 66 Iris insti Sept,
									DELTA GEOSCIENCE LI



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		-	- •	#				
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SPECTING SYNDICATE
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ted data 660-400-200m. MN = 10m nstruments pt. 1999
LTD Fig # 38