REPORT ON THE

SUNNYBOY 1 TO 8, SUNNYBOY 9 FR.,

SHANNON 1, SPITFIRE 1 & 2, REVERTED

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CROWN GRANTED MINERAL CLAIMS AND THE

IOTA I TO VI, G & GI, WIND #1,

LAKE I AND TOR MINERAL CLAIMS

NICOLA MINING DIVISION NTS 921/2E

Latitude 50⁰07'30"N Longitude 120⁰33'W

FOR

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IOTA EXPLORATIONS LTD. Suite #5, 440 Victoria Street Kamloops, B.C. V2C 2A7

BY

J. PAUL SORBARA, M.SC., F.G.A.C. J.P. Sorbara & Associates 6703 Nicholson Road Delta, B.C. V4E 2T2



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SUMMARY

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Iota Exploration Ltd. holds title to a block of 22 contiguous mineral claims totalling 127 units near Merritt, B.C. in the Nicola Mining Division. The property is predominantly underlain by epidotized red and green andesitic volcanics of the Nicola formation that are cut by dike-like dioritic intrusions and quartz veins.

Surface exposures of several southeast striking quartz veins in one area of the property have returned numerous gold assays ranging up to 50 oz Au/ton. Two kilometers southwest of the vein area quartz and calcite veined volcanics that are intensely sheared had some diamond drilling in a search for copper in 1961. One of these holes returned 46 ft. grading 0.11 oz Au/ton and 0.96 oz Ag/ton. Another returned 6 ft. grading 0.3 oz Au/ton.

The subject property is deemed to have excellent potential for both vein-hosted and volcanic hosted gold and silver mineralization.

The property has excellent location, access, topography and climate, which are positive factors in determining it's economic viability. A thorough exploration program to define the potential of this property is definitely warranted and is highly recommended by the writer.



INTRODUCTION

This summary and evaluation of the 12 listed reverted crown-granted mineral claims and 10 located mineral claims herein referred to as the "Iota Explorations Property" is done at the request of Iota Explorations Ltd. The purpose is to evaluate the potential of the property for hosting precious metal deposits, and to propose an exploration program designed to test that potential.

This evaluation is based on a review of the data from reports of previous work on the property as well as regional government geological reports and maps. The writer examined the subject property along with Mr. Bryan Elliott and Mr. Larry Ovington on March 29 and 30, 1987.

PROPERTY AND OWNERSHIP

The Iota Explorations property comprises 12 reverted Crown-granted mineral claims, 9 modified grid located mineral claims and 1 2-post mineral claim, all of which are contiguous lots (Figure 2). These claims lie within the Nicola Mining Division of British Columbia and title to them is held by Iota Explorations Ltd.

A list of these claims, numbers and other pertinent data is given below:

	Reverted Crown Grant			
<u>Claim Name</u>	or Modified Grid	<u>Lot #</u>	<u>Units</u>	<u>Record #</u>
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Sunnyboy 1	RCG	5190	l	1323
Sunnyboy 2	RCG	5191	1	1324
Sunnyboy 3	RCG	5192	1	1325

	Reverted Crown Grant			
<u>Claim Name</u>	or Modified Grid	Lot #	<u>Units</u>	<u>Record #</u>
Sunnyboy 4	RCG	5193	1	1326
Sunnyboy 5	RCG	5194	1	1327
Sunnyboy 6	RCG	5195	1	1328
Sunnyboy 7	RCG	5198	1	59322
Sunnyboy 8	RCG	5199	1	59323
Sunnyboy 9	FR. RCG	5200	Frac.	1329
Shannon 1	RCG	5201	l	1330
Spitfire 1	RCG	5202	1	59325
Spitfire 2	RCG	5203	1	59326
IOTA I	MG		16	1724(8)
IOTA II	MG		15	1725(8)
IOTA III	MG		9	1726(8)
IOTA IV	MG		8	1738(9)
IOTA V	MG		8	1739(9)
IOTA VI	MG		16	1740(9)
G&G I	MG		18	1737(9)
Wind #1	2Post		l	1754(11)
Lake I	MG		6	1755(11)
Tor	MG		_18	1411(6)
	Total Number	of Units	127	

LOCATION AND ACCESS

The subject property is located 9.5 kilometers southeast of Merritt, B.C., eastern slope of Sugarloaf Mountain, which is south of Nicola Lake. The property lies on NTS map sheet 92I/2 and is centered at latitude 50°07'30"N and longitude 120°33'W.

Present access is gained by a dirt road some 13 km in length leading eastward from Highway 5 - Highway 8 intersection in Merritt.

J.P. Sorbara & Associates

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PROPERTY HISTORY, GEOLOGY AND MINERALIZATION

The history of the area of the Iota Explorations property dates back to the early part of the century. In 1922, F.J. Crossland, P.Eng., is reported to have sampled a two to four foot wide quartz vein near the west border of the Ensign claim, which lies just west of the northwest corner of the IOTA IV claim (Figure 2). The assays gave an average gold value of .852 oz/ton for 22 samples, including one assay of 9 oz/ton. Omitting this highest value, the average gold value was 0.43 oz/ton. Silver averaged 3.85 oz/ton and copper about 1.96%.

This vein was developed by trenching and tunneling and several other veins were later worked by Quilchena Mining. Samples from underground workings on the later developed number 3 and 4 veins ran from 3.63 to 3.70 oz Au/ton and 9.0 to 15.0 oz Ag/ton across 3 feet of vein material.

On the Camperdown claim (lot 4789), just north of the Sunnyboy claims (Figure 2), a northwest striking diorite dike that is about 9 feet wide carries copper-gold mineralization extending into the wallrocks. A grab sample from this dike ran 2.51 oz Au/ton, 8.35 oz Ag/ton and 3.9% copper.

Within the Iota Explorations property itself, gold showings were reported on the Sunnyboy claims as early as 1948, when W.E. Cockfield mentions them in his report on the Nicola map area. On the Sunnyboy 7 (Figure 2) claim, now held by Iota. Renshaw (1961) uncovered at least 7 quartz veins that have a northwest strike (Az 300°) and dip 80° to the northeast. These were traced at least 700 feet along strike and returned values of 0.49, 0.61, 1.01 and 1.62 oz Au/ton in grab and short channel samples.

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Additional discoveries were made just south of the Camperdown claim in 1964 on what is now the Iota II claim (Figure 2). In this location a rust-stained vein returned 0.24 oz Au/ton, .15 oz Ag/ton and 0.07% copper. A parallel vein 400 meters north of Sunnyboy 7 assayed .14 oz Au/ton, .14 oz Ag/ton and .15% copper.

Further exploration was conducted by Renshaw in 1965 on the Sunnyboy 6 (Figure 2). Two trenches were blasted for a total length of 525 feet and showed altered bedrock of red andesite with a northwesterly strike. The main mineralization is reported to lie between two faults, striking N50[°]W with vertical dip, and N40[°]W with 60[°]SW dip. Copper, in the form of malachite and chalcocite was seen in the floor of the trench. Renshaw concluded that the width and thickness should increase to the south.

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Three hundred feet north of this vein, another showing was exposed and designated the Roy vein. It is a quartz vein, 6 inches to a foot wide with copper mineralization and some free gold reported. The vein is reported by Kelly (1986) to be narrow, but persistent and appears to be widening with depth. It had been traced over a length of 150 feet and a vertical distance of 110 feet. Renshaw recommended further drilling and trenching in this area.

The 1967 Annual Report of the B.C. Minister of Mines, mentions the Cat No. 1 showing located a short distance north of the Sunnyboy 6, consisting of bornite and chalcopyrite in spotty quartz veins.

The Cliff showing, close to the middle of the NW boundary of the Sunnyboy 7 is reported to consist of spaced joints and narrow quartz veins intersecting andesitic rocks cut by a NW trending dike of porphyritic diorite. Chip

samples in the volcanic and intrusive rocks were reported to have yielded low silver, copper and gold values. A drillhole failed to intersect economic mineralization.

Renshaw also reported results of stripping and trenching on a vein he had discovered earlier, on the Joe 18 That has now been found in the NW corner of the G&G claim. I claim (Figure 2). It was stripped and trenched in 1961, exposing a 30 foot width of banded quartz and sheared andesite. Assays across the 30 foot width gave 0.10 oz Au/ton, 0.25 oz Ag/ton and 0.70% copper. A drill hole at 45° returned 0.30 oz Au/ton, 1.20 oz Ag/ton and 0.25% copper over a length of 6 feet. The core from a hole at 65° gave weighted average assays over a length of 46 feet of 0.11 oz Au/ton, 0.98 oz Ag/ton and 0.24% copper. A steeper hole, at 78°, showed quartz-calcite veining, heavy shearing and traces of gold, silver and copper, according to Renshaw, but was not assayed.

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Sanders inspected the Sunnyboy claims in 1974 and sampled trench exposures on the Sunnyboy 5, 6, 7 and Spitfire 2. A summary of his findings is taken from Kelly, 1986:

"A quartz vein, the "Main Vein" on Sunnyboy 7, which is prominently exposed in a road-cut on the old access road (from Quilchena), sampled across 6 in., yielded 50.53 oz Au/ton and 2.80 oz Ag/ton. It showed visible gold. A trench 5 feet west on the same vein, sampled across 4.8in. gave 7.82 oz Au/ton and 0.64 oz Ag/ton. Another trench 15 feet farther west, sampled across 9.6 in. of vein, assayed 7.54 oz Au/ton and 1.58 oz Ag/ton. Thirty feet west, a 4.8 in. sample across the vein yielded 0.64 oz Au/ton and 0.15 oz Ag/ton. This quartz vein contains some visible gold plus minor chalcopyrite and galena; it cuts through andesitic volcanics."

Several hundred feet west along strike from the above, a pit had been blasted on the vein. A sample across 9.6 in. assayed 0.81 oz Au/ton and 0.18 oz Ag/ton. Sanders calls this a "second vein".

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A "third vein" was sampled about 1,000 ft. west of the first sampling. Across 8.4 in. it assayed 2.62 oz Au/ton and 2.20 oz Ag/ton; across 4.8 in., 20 feet further west, it assayed 0.32 oz Au/ton and 0.08 oz Ag/ton. A grab sample of chalcopyrite and quartz yielded 1.26 oz Au/ton and 0.93 oz Ag/ton.

These three locations, which occur along strike from each other over a distance of 1,000 ft., may well represent the same vein. This trend is open at both ends with the better values reported on the eastern end. The sum of the measured samples taken by Sanders indicated an overall grade of 3.94 oz Au/ton over 6.9 inches.

K.G. Sanders, P.Eng., concluded that "the gold assays obtained from this property to date are above average and would be hard to duplicate elsewhere. Further exploration on this property is herewith advised".

All of the exploration activities described above were conducted when the price of gold was much lower (\$32.00 to \$150.00 per ounce) than today. The current gold price of roughly \$400.00 US per ounce gives the subject property much more economic potential.

CURRENT EXPLORATION

The subject property was acquired in 1986 by Iota Explorations Ltd. who conducted the most recent assessment of the claims. This included a 424 sample soil geochemical survey conducted over 2 grids located on the Iota I and Sunnyboy claims (Figure 3), as well as a re-analysis by D. Moraal of data from magnetometer surveys conducted in the same area by F. Hemsworth, P.Eng. (1966) and F. Price, P.Eng. (1970).

In addition, Magnetometer and VLF-EM surveys were conducted on the G&G I claim where two diamond drill holes totalling 802 feet were completed during January 1987.

The results of the recent soil sampling are believed to be inconclusive and/or unreliable. A soil sample taken over a high grade vein ran only 12 ppb Au, which implies that the overburden may not be totally residual.

The re-massaging of the early magnetic data showed anomalous zones coinciding with some of the trench areas and part of the G&G claim. However, the writer believes that the interpretation of a geophysical survey can be no more reliable than the original data, which in this case gave generally flat results. A new survey covering the entire property using much more accurate modern instruments is recommended.

The results of the recent magnetometic and VLF-EM surveys and the subsequent diamond drilling were supervised by D.C. Miller, P.Eng. A summary of this work was written by Miller on February 17, 1987 as is given below:

"I have reviewed the results of VLF and magnetometer surveys carried out by Dirk Moraal on the G & G I claim, NTS 92I/2E, in the Nicola Mining Division, during January 4 to January 15, 1987.

Instruments employed were a SABRE VLF-EM and a SCINTREX MF-1 VERTICAL FIELD FLUX-GATE MAGNETOMETER. A total of

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6.8 km of crosslines and 1 km of baseline were surveyed at 25 meter station.

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A number of VLF-EM anomalies on crosslines spaced 100 meters apart. Both holes intersected 2-8% disseminated pyrite in the projected position of these anomalies. Low grade gold mineralization occurs just east of and in the hanging wall of the VLF-EM anomalies which dip steeply eastward.

It is the writers opinion the preceding described geophysical surveys were carried out in a workman like manner and the results can be used in correlation with geology and geochemistry in planning further drilling or trenching on the property.

It should be pointed out that some of the VLF-EM anomalies may represent water saturated ground.

The magnetometer anomalies may in part be related to sulphide mineralization but in general only reflect the structural grain and magnetite content of underlying rocks."

During the writers visit to the subject property, property samples were collected from the Master Vein area and a newly discovered showing was examined. A sample of a weather sulfide-rich material from the Master Vein assayed 27.43 oz Au/ton and 1.95 oz Ag/ton over 10 inches. Barren bull quartz from the same area ran only 0.001 oz Au/ton. A sample of the microdiorite adjacent to the north side of the Master Vein ran 0.048 oz Au/ton and 0.01 oz Ag/ton over 12 inches.

The new showing was located only a few days before the writers visit. It lies south of the site of the 1987

drilling and is believed by the writer to be very significant. At this site massive bornite fills fractures in highly epidotized red andesite over a length of 2 to 3 meters. This material was sampled and returned values of 0.210 oz Au/ton, 25.67 oz Ag/ton, 44.85% Cu and 65 ppm tin.

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Apart from the high grades, which occur over narrow widths, this new showing is of important significance because it indicates a mineralization system affecting the volcanics along fracture systems; a system different from the high grade quartz veins. The area of greatest fracture density runs from the quartz vein area to the bornite showing. All of this ground is considered by the writer as a prime exploration target for larger tonnage, volcanic hosted mineralization.

CONCLUSIONS

The Iota Explorations Ltd. claim group near Merritt, B.C. has an ideal location, access and climate for mineral exploration. The property is predominantly underlain by red and green andesitic volcanics with extensive epidotization of the Triassic Nicola Formation that are cut by dioritic and microdioritic intrusions. Several southeast striking quartz veins that dip 80° northeast lie in the northeast part of the property and are exposed in surface trenches and in outcrop along an east facing slope. These veins contain variable amounts of sulphides, mostly pyrite, as well as gold values which range up to 50 oz Au/ton in vuggy (weathered sulfide) exposures.

The veins have an intermittently exposed strike length of several hundred feet but more trenching is required to define their true length. The east-facing slope which the veins intersect would allow for relatively low-cost mining by adit. A diamond drill hole completed in 1961 approximately 2 kilometers southwest of the vein exposures returned an intersection of 46 feet grading 0.11 oz Au/ton and .96 oz Ag/ton in quartz-calcite veined and intensely sheared red and green andesitic volcanics and associated dioritic intrusions. A recent hole drilled a few meters away was unable to repeat this intersection. Some problems occurred in the lab during the first analysis of this recent hole. Resampling and assaying by a different lab has been recommended.

A newly discovered showing of fracture filling bornite located approximately 200m south of the recent drill hole returned assay values of 25.67 oz Ag/ton, 0.210 oz Au/ton, 44.85% copper and 65 ppm tin.

Very little of the Iota Exploration Ltd. property has been covered by modern geophysical surveys and most of the property is covered by overburden which does not appear to lend itself to surface geochemistry.

The data from all of the precious and recent work on the subject property was reviewed by S. Kelly (P.Eng.) who concluded that the property "is evidently one of great merit and I urgently recommend a continuing program of intensive exploration".

The writer agrees that the Iota Exploration Ltd. property has the potential to host both high grade, low tonnage vein gold deposits as well as larger tonnage, lower grade gold and silver mineralization hosted in volcanic and intrusive rocks. A thorough exploration program covering the entire property is warranted and is highly recommended by the writer.

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RECOMMENDATIONS

In order to properly evaluate the Iota Explorations Ltd. property a thorough and comprehensive exploration program is required. The previous style of localized efforts on small grids should be abandoned. The property should have one large grid with 100m spaced lines that cover most of the area west of the Quilchena fault. This would require roughly 180 line kilometers.

The Phase I program should include Magnetometer and VLF surveys, using modern instruments (preferably gradiometer magnetics and 2-station VLF) conducted over the entire grid. The areas of interest, based on presently known results as well as those of the comprehensive Mag and VLF surveys, should also be covered by an Induced Polarization survey. This is important as precious metals appear to be associated with disseminated sulfides which would be detected by this method.

In conjunction with the geophysical work, Phase I should include a program of geological mapping, trenching of the known vein exposures and stripping of covered areas along strike from known exposures. The purpose of this part of Phase I is to get a better idea of the strike length and the grade (across mineable widths) of these veins.

Phase II exploration, which would be contingent upon the results of Phase I should be composed of a combination of percussion and diamond drilling. Diamond drilling should be conducted to test the down dip grades of the high grade veins as well as in the area of the 46 foot intersection of .11 oz Au/ton. Percussion drilling, and perhaps some diamond drilling, should be done over geophysical targets.

An estimated cost breakdown for this work is given in Appendix I.

Respectfully submitted,

g. Paul Sorten

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J. Paul Sorbara, M.Sc., F.G.A.C.



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APPENDIX I

Estimated Costs of Proposed Exploration Program

<u>Phase I</u>

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Grid Preparation (180 km @ \$150.00/km)		\$ 27,000.00
Magnetometer & VLF-EM Surveys (180 km @ \$350.00/km)		63,000.00
Induced Polarization Survey (est. 100 km @ \$800.00/km)		80,000.00
Trenching and Mapping		50,000.00
Domicile Costs		15,000.00
Truck Rental and Fuel		5,000.00
Project Management and Supervision		20,000.00
Contingencies		10,000.00
	TOTAL:	\$265,000.00

Phase II

Diamond Drilling (1500m @ \$100.00/m)	\$150,000.00
Percussion Drilling (3000m @ \$ 20.00/m)	60,000.00
Assays	20,000.00
Truck Rental and Fuel	5,000.00
Project Management and Supervision	20,000.00
Contingencies	20,000.00



TOTAL: <u>\$275,000.00</u>

APPENDIX II

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Statement of Qualifications

STATEMENT OF QUALIFICATIONS

I, J. PAUL SORBARA, of the Municipality of Delta, in the Province of British Columbia, hereby certify:

- 1. THAT I am a geologist residing at 6703 Nicholson Road, in the Municipality of Delta, in the Province of British Columbia.
- 2. THAT I graduated with a B.Sc. in geology from the University of Toronto, in the City of Toronto,, in the Province of Ontario, in 1976, and with a M.Sc. in geology from the University of Toronto in 1979.]
- 3. THAT I have practiced geology professionally from 1979 to 1987.
- 4. THAT I am a registered Fellow of the Geological Association of Canada.
- 5. THAT I do not have, nor do I expect to receive any material interest in the Iota Explorations Ltd., Mineral Claims that are the subject of this report.
- 6. THAT I consent to the use of this report in a Prospectus or Statement of Material Facts for the purpose of a private or public financing.

Signed:

J. Paul Sorbara, M.Sc., F.G.A.C.

April 8, 1987

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J.P. Sorbara & Associates

PROSPECTUS

IOTA EXPLORATIONS LTD. (the "Issuer")

(Incorporated under the laws of British Columbia)

NATURAL RESOURCE ISSUER

The Offering Price of the securities offered herein was established by negotiation between the Issuer and the Agent. The Offering Price of \$0.68 per Common Share exceeds the net tangible book value per Common Share by \$0.4361, after giving effect to this Offering, representing a dilution of 64.13%. Reference is made to "Dilution". An investment in the securities offered herein should be regarded as speculative. Reference is made to "Risk Factors".

THERE IS NO MARKET THROUGH WHICH THESE SECURITIES MAY BE SOLD.

500,000 Common Shares @ \$0.68 per share

Price to
PublicNet Proceeds to
be received by
IssuerPer Share
Total\$0.68
\$340,000\$0.068
\$34,000\$0.612
\$306,000*

NAME AND ADDRESS OF AGENT:

DAVIDSON PARTNERS LIMITED (669-6797 & 681-8497) Suite 900, 580 Hornby Street Vancouver, B.C. V6C 3G6 Attention: John Bothwell

NEW ISSUE

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وأواجعه والعادية والعاق والعممة والمروحة

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