

A2C12NW0150 17 MOLSON LAKE

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# **Diamond Drilling**

Area Molson Lake

Report Nº 17

# Work performed by: Bel-Air Resources Ltd.

Cla	im Nº	Hole NQ	Footage	Date	Note
ΤВ	624275	BA-1	136.20m	Aug/82	(1) ()
		BA-2	150.10m	Sept/82	(1) (2)
TB	624270	BA-3	137.49m	Sept/82	(1) (2)
TB	624269	BA-4	188.06m	Sept/82	(1) (2)
		BA-5	106.90m	Sept/82	(1) (2)
		BA-6	105.77m	Sept/82	(1) (2)
TB	624267	BA-7	73.76m	Sept/82	(1) (2)
		BA-8	121.00m	Sept/82	(1) (2)

Notes: (1) #28-83 Also submitted as #4-83 - Sault St. Marie (2) OMEP Submittal: OM82-4-C-47



2012NW0150 17 MOLSON LAKE

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PROGRESS REPORT OF BEL-AIR RESOURCES LTD HEMLO AREA

DISTRICT OF THUNDER BAY

ONTARIO

Timmins, Ontario December 20, 1982

By: David R. Bell, B. Sc., F.G.A.C. Consulting Geologist

# SUMMARY

-1-

Bel-Air Resources Limited owns a 36 claim gold prospect in the Hemlo area of Ontario. Two apparently economically viable gold discoveries have been made in the area within the past year. These discoveries are believed to be stratigraphically controlled and are associated with sulphide mineralization.

The Bel-Air property is mapped as being located on the same volcanic-sedimentary belt as hosts the two discoveries. The property is underlain by a series of mafic to felsic volcanics and sediments similar to those on the discovery properties.

A geophisycal survey has been completed on the Bel-Air claim group with two good V.L.F. electromagnetic conductors. These conductors were drilled, but failed to reveal any mineralization of economic significance.

It is proposed herein, to carry out a detailed geological and geochemichal survey over the Bel-Air claim group.

### INTRODUCTION

David R. Bell Geological Services Inc. was commissioned by Bel-Air Resources Ltd., through Miss Nell Dragovan, to prepare a report on their 36 claim mining property located at Hemlo, in the District of Thunder Bay, Province of Ontario. The subject property is a gold prospect staked as a result of the recent discovery of potentially ecomomic gold deposits by Long Lac Mineral Exploration, Goliath Gold Mines and International Corona Resources Limited in the area.

Relatively little is known of the detailed geology of this claim group. However, from examination of published geology maps by the Ontario Geological Survey (Map 2452, "Hemlo"), it appears that the claims are underlain in part by a volcanogenic-sedimentary series similar to those hosting the aforementioned discoveries.

This report is based on extensive knowledge of the Internatinal Corona and Goliath Gold gold deposits, examination

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of the files of the Ministry of Natural Resources in Thunder Bay and several days of logging core during the diamond drill program on the Bel-Air property.

# PROPERTY

# 1. Location & Local Services

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Location of the Bel-Air claim group is one mile south of the Trans Canada Highway (Ontario Highway 17). The main Canadian Pacific Railway runs east-west across the property.

A 115,000 volt transmission line of Ontario Hydro is situated one mile. north of the property.

Timber is cut for dimension lumber in the immediate area. Water for exploration and development should be available from numerous creeks and lakes on the property, while water for potential mining-milling requirements would probably have to be piped from Cache Lake located on the south half on the Bel-Air property.

Labour and housing could be available in the towns of Marathon, 25 miles to the west, White River 30 miles to the east or Manitouwadge 35 miles to the north.

# 2. Topography

The topography of the claim group is fairly rugged with maximum elevation varations of two-three hundred feet. Rock exposures are good with, it would appear, moderate depths of overburden between outcrops. The terrain appears to be well drained.

Vegetation is dense consisting mainly of poplar, fir, spruce and jack pine along with alder and second growth maple.

# 3. Status

The Bel-Air Resources property consists of 31 Crowngranted mineral claims. They are located in the Thunder Bay and Sault Ste-Marie Mining Divisions Ontario. Claim Number

TB 624241 to TB 624256 inclusive August 20th, 1983 TB 624261 and TB 624262 August 20th, 1983 TB 624267 to TB 624370 inclusive August 29th, 1983 TB 624273 to TB 624280 inclusive Augsut 20th, 1983 SSM 624263 to SSM 624266 inclsive August 20th, 1983 SSM 624271 and SSM 624272 August 20th, 1983

Assessment credits for 1019.3 meters (3344 feet) of diamond drilling will be accredited towards the above claims advancing the work due date towards 1985.

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# HISTORY OF EXPLORATION

There is no known previous record of work performed on Bel-Air Resources claims. The writer researched the records in the office of the Resident Geologist (O.M.N.R.)in Thunder Bay and found no record of any work on file.

Considering the ease of access ot the property it is probable that some cursory prospecting has been done in the general vicinity. It is almost certain that the volcanic belt within which the property is situated has been covered by airborne geophysical surveys, however any results apparently are not on public record.

Gold was first discovered in the region in 1927 when a C.P.R. employee, Mr. Lecour, is reported to have found gold within a few hundred feet of the railway. (ref. C.M.J. June 1982). The next recorded gold discovery was made in 1945 near Moose Lake some 6 miles south of the Vulcan property.

The original discovery ground west of Moose Lake (the Ollman-Williams claims) is under option to Long Lac Mineral Exploration Ltd.. This Company announced recently (Northern Miner, Augsut 19, 1982) that a diamond drill program had resulted

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Next Assessment Work Due Date

in outlining a deposit containing 1.8 million tonnes averaging o.146 oz. Au./Ton over an average width of 77.7 ft. to a depth of 492 ft. below surface.

The area adjoining east of this gold discovery was explored by a number of companies, including Lake Superior Mining Corp., Teck Exploration Co. Ltd. and Ardel Explorations Ltd., in the period from 1947 to 1973 with encouraging but not then economic mineralization located. In 1980-81, this area east of Moose Lake was extensivley developed by Corona Resources Ltd. (now International Corona Resources) who drilled over 80,000 ft. 175 holes to the end of 1981. This program resulted in outlining a deposit containing 1.3 million tons at a grade of 0.226 oz. Au./Ton (Company report). The Corona property was subsequently optioned to Teck Corporation Ltd. who are carrying out a feasibility study with a veiw to placing the deposit into production.

More recently, the Molson Lake Joint Venture (Golden Sceptre Resources and Goliath Gold Mines) adjoining to the north of the Long Lac Mineral ground, have announced that they have located the down-dip continuation of the Long Lac ore-body on the Goliath claims. Impressive widths and grades of mineralization have been encountered with 2 holes reported to have intersected 0.256 oz. Au./Ton & 0.169% MoS<sub>2</sub> and 0.318 oz. Au./Ton & 0.126%MoS<sub>2</sub> over true widths of 88.5 feet and 68 feet, respectively. The most recent published report on the Goliath deposit estimated 2.5 million tons of drill-indicated reserves at a grade of 0.249 oz. Au/Ton.

Noranda Exploration Co. Ltd. have agreed recently to bring the Goliath deposit into production within two years at a rate of 1000 tons per day.

Staking and exploration activity is intense in the area with several companies reported to be diamond drilling or about to start drilling.

Geophysical E.M. and Mag. surveys were completed on the Bel-Air group along with stripping and trenching, earlier reported by H.D. Carlson, 1981.

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1. Regional Geology

The general geology of the Hemlo area is shown on Map 2220, "Manitouwadge-Wawa Sheet", published in 1972, scale: one inch to two miles (O.M.N.R.). In 1978, the southern portion of the area was mapped by Muir and Lafleur and is shown on O.M.N.R. Map 2452, scale: one inch to  $\frac{1}{2}$  mile, and described in O.M.N.R. Open File Report (O.F.R.) 5280. The northern portion of the group was mapped and reported on by V.G. Milne (1968) in O.D.M. Geological Report 72, "Geology of the Black River Area".

The dominant rock types appear to be a series of conformably intercalated volcanic formations, as follows:

- 1. Mafic metavolcanics consisting of flows and their associated pyroclastic units.
- Intermediate to Felsic metavolcanics mainly pyroclastic
- Metasedimentary units consisting of siltstones, argillites, laminated clastic wackes, etc., mainly derived from volcanic source areas.

Medium to high grade metamorphism has sufficiently recrystallized these formations and as a result, reliable top determinations are difficult to identify. In general, the rock formations strike east-west and dip steeply to the north. Four identifiable intermediate to felsic intrusive plutons have been named by Muir (et al), the Cedar Lake Pluton, Heron Bay Pluton, Gowan Lake Pluton, and Pukaskwa Gneissic Complex. These plutons have played a major part in the regional metamorphic finger printing of the volcanic suite, as well as locally deforming and fracturing the volcanics with numerous more or less pronounced topographical lineaments, criss-crossing the region in a variety of directions. One of these major lineaments has been called locally the "Hemlo Fault" or "Lake Superior Shear Zone". A portion of the "Lake Superior Shear Zone" has been delineated by diamond drilling on the Corona Resources Ltd. property and has been identified as an altered siliceous, sericitized, tuffaceous agglomerate horizon containing auriferous pyrite zones, with minor amounts of fuchsite, tourmaline and molybdenite, and trace amounts of sphalerite, chalcopyrite and native gold.

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Feldspar porphyry and quartz porphyry sill-like masses intrude the volcanic and sedimentary belt locally, and quartz diabase mafic intrusives cross-cut all units in a north-south pattern.

The areomagnetic maps of the region define the general position and trend of the metasedimentary-volcanic belts and distinguish them from the felsic plutons.

# 2. Local Geology

The local geology is herein described by H.D. Carlson: "More than 80% of the property is underlain by a generally east west trending sequence of intercalated mafic to sialic volcanic flows and pyroclastic horizons with subordinate bands and discontinuous lenses of volcaniclastic sedimentary rocks, These formations dip steeply north. Small amounts of plutonic granitoid rocks and complex quartzofeldspathic gneisses outcrop in the northwestern and southeastern corners of the claim group, respectively. A number of small quartz - feldspar dikes and sills cut the interlayered volcanic and sedimentary assemblages, as do a number of north trending diabase dikes. Compositional banding in the tuffs and sedimentary rocks is noticeable, but in most rock exposures shearing is not pronounced. Narrow quartz veining parallel to bedding planes in the sediments, and irregular rusty patches in tuffaceous members, appear to be relatively common. One narrow zone of intense shearing was seen in a dark chloritic volcanic rock along a rock cut on the gravel road to the micro-wave tower in the northeastern part of the property."

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# Discussions of the Diamond Drilling

A diamond drill program was carried out on the Bel-Air Resources Ltd. property to identity anomalies earlier outlined by geophysical surveys, described by H.D. Carlson, 1981.

The drilling was contracted to Morisette Diamond Drill Co., starting August 31, 1982, completing eight (8) holes for a total of 1019.3 meters (3344 feet), and ending on September 22, 1982.

Enclosed herein, are logs, sections and a plan indicating hole locations for the individual logs.

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The core recovery was excellent with minimal loss. Mineralized zones and zones, of silicification were split, with the split cores tagged and sent for chemical analysis. Assay values are recorded on the logs with values in gold as grams per metric tonne.

# CONCLUSIONS

The anomalous zones as tested by the above diamond drill program were identified as mafic bands of volcaniclastic sediments consisting of varying amounts of disseminated pyrite, with the occasional layer of graphite. Secondary silicification and minor sericite alteration is common.

Gold values within these zones were very low with the highest value assaying at 0.21 gm. per metric tonne (0.006 oz. Au./Ton).

VIII RECOMMENDATIONS

VII

Although assay results on the Bel-Air property appear to be discouraging, it is the author's opinion that a detailed geological mapping, geochemical sampling and test Induced Polarization program herein be recommended in two phases.

# PHASE 1

1. A detailed outcrop geological mapping of the Bel-Air claim group, on a scale of 1 inch= 200 feet.

2. Concurrent with the mapping, prospect and sample the outcrops and shallow overburden areas, paying particular attention to areas of silicification, sulphide mineralization, and other alteration, notably sericitization, fuchsite and tourmaline.

3. A reconnaissance geochemical survey for gold be carried out over portions of the property anticipated to be most favourable as revealed by 1 and 2 above. Samples to be taken at 100 foot intervals on the control grid.

4. Run trial induced polarization ("I.P.") surveys over any of the areas of interest disclosed by 1, 2 and 3 above.

5. Strip, trench and sample all areas of interest disclosed by 1,2,3 and 4 above.

# PHASE 11

Assuming that the results of Phase I reveals areas of promising gold mineralization, an allowance is made for diamond drilling of favourable targets.

1. An allowance of 5000 feet of A.Q. drilling.

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# ESTIMATED COST OF RECOMMENDED PROGRAMS

# Phase I

1.	Detailed geological mapping: 36 miles @ 400.00 per mile	\$14,400.00
2.	Prospecting & Sampling: 1 prospector for one month 200 samples @ \$20.00 each	3,000.00 4,000.00
3.	Geochemical survey: 1 sampler for one month 800 samples @ \$9.00 each	3,000.00 7,200.00
4.	IP Survey Trail 7 miles @ \$1000.00 per mile	7,000.00
5.	Stripping, trenching, sampling: Stripping & trenching : 2,000 feet @ \$5.00 per foot Sampling: 1,000 feet @ \$3.00 per foot Assaying : 200 @ \$20.00 each	10,000.00 3,000.00 4,000.00
6.	Supervision, drafting, reports and overhead	12,000.00
7.	15% Contingencies Total Cost Phase I	<u>10,140.00</u> \$ <u>77,740.00</u>
Phase	<u>11</u>	
1.	Diamond Drilling 5,000 feet @ \$25.00 per foot	\$125,000.00
2.	Assaying 400 samples @ \$20.00 each	8,000.00

3. Engineering, supervision, & Reports 30 days @ \$400.00 per day 12,000.00

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Respectfully submitted

Laur An

David R. Bell, F.G.A.G Consulting Geologist.

Timmins, Ontario December 20, 1982

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### BIBLIOGRAPHY

Phase I - Progress Report Corona Bell, David R. Resources Limited, Hemlo Property May 5, 1981. District of Thunder Bay, Ontario. Phase II - Progress Report Corona Bell, David R. Resources Limited, Hemlo Property December 21, 1981 District of Thunder Bay, Ontario. Memorandum on Property of Lake Greer, W.L.C. Superior Mining Corporation, June 24, 1949. Hemlo, Ontario. Greer, W.L.C. Report on the property of Ardel Explorations Ltd., in Township May 8, 1973 73, Near Hemlo in the Thunder Bay Mining Division, Ontario, unpublished report. Lyons, Edward M. R. Newman Hemlo Gold Property July 6, 1977 West Group, Molson Lake Area Thunder Bay Mining Division, Ontario. R.E. Schaaf & Associates Inc., Geological, Geophysical and Geochemical Surveys, unpublished report. Muir, T.L. Hemlo Area, District of Thunder Bay, Summary of Field Work, 1978, Ontario 1978 Geological Survey, Miscellaneous Paper 82 pp. 90-93. Muir, T.L. Geology of the Hemlo Area, District of Thunder Bay, Ontario, Ontario 1980 Geological Survey O.F.R. 5280. Newbury, M. Report on the Property of Ardel June 3, 1974 Explorations Ltd., Hemlo, Ontario. unpublished report. Page, T.W. Dec. 20, 1947 A Report on the Ollmann-Williams Group of Claims, Hemlo, Ontario. Page, T.W. A report on the property of Lake April 1, 1948 Superior Mining Corporation Ltd., Hemlo Area, Ontario. unpublished report. Outline of Diamond Drilling Results Page, T.W. March 8, 1950 on Hemlo, Ontario Property.



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Page, Trevor W August 21, 1950	A report on the property of Lake Superior Mining Corporation Limit Hemlo Area, Ontario Unpublished report
Page, Trevor W. June 25, 1951	A report on the property of Lake Superior Mining Corporation Limite Hemlo, Ontario unpublished report
Esson D.W. Sept., 1981	Report on Sampling, Assaying and Recording Procedures and Results of Special Check Samples for Corona Resources Ltd., Hemlo Project, Ont. unpublished
Gryba, C. Esson, D.W.	Preliminary Report on Ore Reserve: Feasability & Exploration Develop for Corona Resources Limited, Hem Project, Ontario

### MAP REFERENCES

Unpublished.

## Preliminary Map No. P 494

Manitouwadge Sheet Ontario Department of Mines Districts of Thunder Bay and Algoma Scale: 1" to 2 miles

# Map 2220

Geological Compiliation Series Manitouwadge - Wawa Sheet Ministry of Natural Resources - Ontario Scale: 1" to 4 miles

Preliminary Map No. P 2304

Geological Series Hemlo Area (Northern Half) Ontario Geological Survey Scale: 1" to ½ mile

# Map 2452, Hemlo

Pre-Cambrian Geology Series Ontario Geological Series Scale: 1" to ½ mile

# CERTIFICATE

- I, David R. Bell, hereby certify:
  - that I am a consulting geologist employed by by David R. Bell Geological Services Inc., Suite 6,251 Third Avenue, Timmins, Ontario.
  - That I am a graduate of Carleton University, Ottawa Ontario, with a degree Bachelor of Science (B.Sc.) in geology, 1973.
  - 3. That I have been practicing my profession as a geologist continuously since 1973.
  - 4. That I am a Fellow of the Geological Association of Canada (1981), and a Member of the Canadian Institute of Mining and Metallurgy.
  - 5. That I do not have, nor do I expect to receive, neither directly or indirectly any interest in the properties described in this Report, nor in the securities of Bel-Air Resources Limited.
  - 6. That this Report is based on an examination of the property area in the fall of 1981, on extensive work in the area during 1981 and 1982 as consulting geologist for a number of Companies including, Bel-Air Resources Ltd., Corona Resources, and the Molsor Lake Joint Venture (Goliath Gold Mines Limited and Golden Sceptre Resources Limited), and that a diliger effort has been made to obtain all records and technical data pertinent to the property.

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David R. Bell, (B.Sc.) Consulting Geologist.

Timmins, Ontario December 20, 1982

Drill	Hole	BA-1 Drilled by Morrisette Logged by R.	Kemp		:242	275 Page <u>1</u>	
Latitu	de <u>48</u>	+ 00West Bearing 180° Elevation Surf	ace		Date Start	Aug. 31	/82
Depart	ure <u>1</u> 2	$2 + 10$ South Dip $-50^{\circ}$ 60.0m = $-35^{\circ}$ Length 136.2	20 metro	es	Date Finish	ed Sept. 2	/82
FROM	то	DESCRIPTION	SAMPLE	WIDTH	ASS	AY VALUES	
			N 0.		Au.	From	То
0	0.6	Casing.					, ,
0.6	15.77	Intermediate Volcanic					
		- Thinly foliated unit, foliation expressed by quartz carbonate veins. Less than 1% pyrite, disseminated. Quartz carbonate random throughout section, ie. 14.74 - 14.84 m Feldspar porphyry (chalk white) in a fine grained mafic groundmass (green) - lapilli tuff. ie. 15.66 - 15.77 m. sulphide concentration evident @ lower content.					
15.77	16.78	Sediment					
		<ul> <li>Dark, fine grained argillaceous unit, pyrite, pyrrhotite, as blebs and dissemination along hair- line fracture parallel to bedding.</li> </ul>	21632	1.01	Trace	15.77	16.78
16.78	19.31	Sediment		u			
		Pyrite & pyrrhotite approximately 5% concentration heavily towards upper contact as blebs & lenses occurring along hairline fracture, lower contact is fractured & filled by quartz carbonate.	21622 21633 21634	0.53 1.00 1.00	Trace Trace Trace	16.78 17.31 18.31	17.31 18.31 19.31
19.31	20.36	Intermediate Volcanic					
		- Green fine grained, interbedded lapilli tuff (feldspar phenocrysts - lapilli?) Foliation 65°. Pyrite, pyrrhotite less than 1% as dissemination.	21635	1.05	0.07	19.31	20.36
20.36	21.21	Sediment					
		- Fine grained, choritized argillaceous sediment 5-10% pyrite, pyrrhotite as stringers, blebs, dissemination.	21623	0.85	Trace	20.36	21.21

Drill	Hole	BA-1 Drilled by Morrisette	Logged by	R. Kemp			Page 2	
Latitu	de	Bearing	Bearing Elevation			Date Sta	irted	
Departure		DIp	Length			Date Fin	ished	
FROM	то	DESCRIPTION		SAMPLE	WIDTH	A \$	SAY VALUES	
				N O.		Au.	From	n To
21.21	21.46	Intermediate Volcanic						
		- Interbedded felsic tuff bands and intermediate volcanic zones. Trace disseminations.	chloritized pyrite as					
21.46	22.98	Sediment						
		- Pyrite, pyrrhotite accumulation, stringers, blebs & dissemination. W unit intermittent quartz carbonate	5-10% as ell foliated zones.	21624	1.52	Trace	21.4	6 22.98
22.98	27.68	Intermediate Volcanic						
		22.98 - 26.15 - angle foliation to	core 70°, less	21636	1.00	0.07	22.9	8 23.98
		26.15 - 26.29 - heavily laden zone,	, pyrrhotite. 30% pyrite,	21625	0.14	Trace	26.1	5 26.29
		26.29 - 27.68 - green, medium grain volcanic with intermittent carbonate.	ed, intermediate swirls of quartz					
27.68	29.57	Sediment						
		27.68 - 28.17 - quartz stringers & 27.68 - 27.73, blebs of pyr within vein material	veinlets @ ite & wall rock					
		28.17 - 29.57 - alternating mafic & less than 1 cm. thick, schi axis = 70°. Fine disseminat to 0.03%.	felsic banding stosity to core ed pyrite 0.01					
29.57	46.91	Intermediate Volcanic						
		29.57 - 36.48 - fine grained, faint 0.01% pyrite. 36.48 - 36.55 - mafic tuff.	schistosity,					

Driii I	Hole B	A-1 Drilled by Logge	d by	,,,		Page	3	<u>-</u>		
Latitu	de	Bearing Elevat	on	Date Started						
Depart	ure	DipLengti	l	Date Finished						
FROM	то	DESCRIPTION				ASSAY VALUES				
			N 0.		Au.					
		<ul> <li>36.55 - 37.59 - mafic fine grained</li> <li>37.59 - 37.73 - as above with quartz carbon veining.</li> <li>Angle foliation to core axis = 75°.</li> </ul>	ate							
46.91	48.54	Agillaceous Sediment			1					
		- Very fine grained, well foliated, express light & dark banding. Angle bedding to core = 75°. Several mafic tuff beds occur throug 47.07 - 47.11, $47.28 - 47.30$ , $47.34 - 47.3747.62 - 47.64$ , $48.47 - 48.54$ .	ed by axis hout '							
48.54	50.67	Intermediate Volcanic								
		- Dark, -medium to fine grained, interbedde tuffs & guartz carbonate veins & fractures.	d mafic							
50.67	50.91	Quartz Feldspar Porphyry								
		- Pyrite less than 1%, porphyritic, less th in size.	an 1 mm.							
50.91	51.58	Intermediate Volcanic	ł							
		- Mafic/ massive / many cross-cutting carbo fractures, very slightly magnetic. Quartz vein @ 50.98 - 51.05.	nate							
51.58	52.11	Quartz Feldspar Porphyry								
52.11	58.38	Intermediate Volcanic								
		- Greenish grey in color/fine to medium gra interbedded (thinly) quartz feldspar porphy quartz carbonate veining.	ined with ry &							
58.38	80.25	Intermediate Volcanic								

Drill	Hole	BA-1 Orilled by	Logged by		·		Page _	4	
Latitu	de	Bearing	Elevation	···-		Date Sto	arted		
Depart	parture Dip Dat Dat			Date Fin	ished				
FROM	то	DESCRIPTION		SAMPLE	WIDTH	A 9	SSAY VA	LUES	
		- Hematized quartz carbonate veining	plus hematized	N Q.		<u>Au</u> .			
80.25	136.2	wallrock. 0.01% pyrite, fine graine Intermediate Volcanic	èd.			ļ			
		- Hematized intermediate volcanic a fracture. 111.85 - 112.51 - feldspar porphyry	along hairline 7.						
						-			

Drill Hole BA-2			Drilled by	Morrisette	Logged by R.	Kemp		62427> Page _1			
Latltu	de <u>9</u> -	+ 41 South	Bearing	180°	ElevationSur	face		Date St	arted	Sept.	3/82
Depart	ure40	+ 00West	Dip <u>60.9</u>	6M.(200') -38.5°	Length150.	10 met	res	Date Fir	nished	Sept.	4/84
FROM	то		Coll Descrip	ar -45° PTION		SAMPLE	WIDTH	Δ	SSAY N	ALUES	<u></u>
						N 0.		Au.			
0	5.49	Casing.									
5.49	38.61	Bedded Sedim	nents			1					
		several mm. alternating tuff horizon are commonly of the darke Quartz carbo bedding. Sma randomly. Th due to hemat red color to fractures, o quite common common in th 7.10 - 7.62 16.55 - 16.7 16.16 - 16.2 15.62 - 15.4 15.28 - 15.3 20.64 - 20.6 26.52 - 26.6 28.06 - 28.1 20.42 - 28.7 alte 28.74 - 29.7 fels	to 7 cm., felsic tu as and dar a less tha er bands a bands a bands to aller hair dese range cization. the core cross-cutt to these he same ma - hematiz 1 - quart 2 - quart 3 - chlor 4 - zone eration al 2 - well sic beds. 5 - zone cline frac	bedding express ffaceous horizon ker arkosic unit n 5 mm. The mafi re biotite and a s occur randomly line fractures c from white to p Hematization als obliterating an ing hairline fra zones. Chloriti nner. ed. z carbonate vein z carbonate vein z carbonate vein z carbonate vein z carbonate vein itic quartz carb itic quartz carb of chloritic & h ong hairline fra bedded alternati Angle of bedding of chloritic alt ture removing al	ed by ed by s; lapilli s. Lapilli c constituent mphibole. parallel to ross-cut inkish-red o imparts a y previous ctures are zation is ing. ing. ing. ing. onate veining. onate veining. ematite ctures ng mafic and to core =70°. eration along l original						

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Drill Hole BA-2		-2 Drilled by Logged	Logged by			Page				
Latitud	1e	BearingElevati	on	Date Started						
Depart	ure	Dip Length		Date Finished						
EROM	то	DESCRIPTION	SAMPLE	WIDTH	ASSAY VALUES					
			N 0,		Au,					
		<pre>fractures, ie. bedding. Angle of bedding to = 70°.</pre>	core							
		30.63 - 31.46 - hematized zone, red in colo quartz carbonate vein - chloritized	r with							
		31.46 - 33.36 - chloritized hairline fractu 33.29 - 33.36 - chloritic quartz ca vein.	re zone. rbonate							
		33.96 - 34.89 - faint presence of quartz feldspaths tuff zones, beds commonly less than 3 cm. Angle of bedding to core = 70°.		2						
		35.58 - 36.44 - mafic unit with minor quart carbonate veining.	z							
		36.44 - 37.41 - chloritized hazy section, n hairline fractures and wisps of car	umerous ponate.							
		37.41 - 38.61 - bedded sediment, thinly bed	ded.							
38.61	39.27	Feldspar Porphyry		}						
		- Phenocrysts less than 5 mm. in size makin 1-2% of total unit, quartz carbonate vein a 39.20 - 39.27. Minor hematization of phenoc and groundmass.	g up t rysts							
39.27	39.77	Ghost relics of feldspar phenocrysts faintl present.	Y							
39.77	49.60	Intermediate Volcanics				ł				
		- Massive in appearance, light green in col- to the presence of amphibole. Chlorite occu interstitially. Occasional quartz feldspath (white phenocrysts, 1-5 mm. in size) Hema	or due rs ic units tization							

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Drill	Hole	BA-2 Drilled by Logged	by			Page	3			
L atitu	de	BearingElevation	Elevation			Date Started				
Depar	ture	Dlp Length	DIp Length			Date Finished				
FROM	ROM TO DESCRIPTION		SAMPLE	WIDTH	A	SSAY V	ALUES			
			N O.		Au.		From	То		
		<pre>is local and associated to hairline fractures commonly cross-cutting the foliation. 40.19 - 40.22 - quartz carbonate vein. 43.11 - 43.80 - quartz carbonate vein @ high to core axis. 45.53 - quartz carbonate vein.</pre>	, angle							
49.16	49.60	Transition Zone								
		- Chloritized zone, bedding (?) broken, inter ed with quartz carbonate swirls. Zone increas in the intensity of fracturing with depth.	swirl- es							
49.60	52.82	Disheveled & Fractured Zone with intercalated carbonate injections. First sign of sulphide concentration @ 49.90 and continues throughou section as blebs, lenses and disseminations o pyrite & pyrrhotite. Less than 5% sulphides. Quartz veining @ 50.90 (5cm. wide) Quartz veining @ 52.16 - 52.23	quartz 21626 21627 t 21628 f	1.22 1.03 0.99	Trace Trace Trace		49.60 50.82 51.83	50.82 51.83 52.82		
52.82	54.78	Faintly laminated but obscurred by wispy chlo alteration cross-cutting foliation.	ritic							
54.78	57.00	Feldspar porphyry, phenocrysts less than 5 mm making up 3% of total zone.	•							
57.00	57.48	Falling out of porphyry unit - ghost relics o feldspar faintly present.	f							
57.48	58.48	Fine grained argillaceous unit, chloritized, sulphides occur as fine dissemination and alo fracture parallel to bedding. Pyrite & pyrrho less than 3%.	ng tite	1.00	Trace		57.48	58.48		
58.48	61.10	Argillaceous Sediments with interbedded chert zones providing a sense of foliation, minor	y 21630	1.16	Trace	ł	58.48	59.64		

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Drill	BA Hole	Drilled by	Logged by				Page4				
Latitu	de	Bearing	Elevation			Date Star	ted				
Depar	ture	Dlp	Length			Date Finished					
FROM	то	DESCRIPTION		SAMPLE	WIDTH	ASSAY VALUES					
			· · · · · · · · · · · · · · · · · · ·	N 0.		Au.	From	То			
		sulphides less than 1%, pyrite & pyrr ring as lenses, blebs and disseminati	hotite occur- ons.								
61.10	61.80	Thinly bedded argillaceous sediments. 2% sulphides, pyrite & pyrrhotite occ disseminations, blebs & small lenses.	21631	0.76	0.07	61.10	61.86				
61.86	64.85	<pre>inly laminated argillaceous sediment, trace rite, pyrrhotite. .94 - 63.04 - quartz carbonate veining with trace pyrite, pyrrhotite.</pre>									
64.85	71.16	Darker, fine to medium grained sedime beds of calcitic material provides a foliation. 67.01 - 67.08 - quartz carbonate vein pyrite, pyrrhotite. 67.17 - 67.27 - quartz carbonate vein pyrite, pyrrhotite. 68.56 - 68.61 - quartz carbonate vein pyrite, pyrrhotite. 69.61 - 69.63 - quartz carbonate vein pyrite, pyrrhotite. 69.73 - 69.76 - quartz carbonate vein pyrite, pyrrhotite.	nt, minor sense of ing with trace ing with trace ing with trace ing with trace ing with trace								
71.16	87.47	Mafic in composition, coarser grained & biotite exist providing a more mafic Biotite commonly occurs in coarser gra Hairline fractures of calcitic materia foliation. Feldspar porphyry occur with phenocry pinkish-white in color. Less than 3 m 72.93 - 73.93 - feldspar porphyry.	, amphibole c looking zone ained horizons al cross-cut sts. White to m. in size.								

and allow and allow allow allow allow allow allow allow allow allow

Drill	Hole	BA 2 Drilled by	Logged by		P	age 5		
Latitu	de	Bearing	Elevation		Date Started	d t		
Depart	ure	DIp	Length		Date Finished	d		
FROM	то	DESCRIPTION	SAN	WPLEWIDTH	ASSAY	VALUES	; ;	
		<ul> <li>74.10 - 74.35 - feldspar porph</li> <li>74.86 - 75.06 - coarser graine</li> <li>76.50 - 76.54 - quartz carbona</li> <li>77.14 - 77.25 - feldspar porph</li> <li>77.34 - 77.68 - coarser graine</li> <li>78.38 - 78.69 - hematized zone</li> <li>fractures. Quartz car</li> <li>hematized.</li> <li>82.14 - 83.53 - hematized &amp; ch</li> <li>cross-cutting hairline</li> <li>a greenish red color t</li> <li>85.14 - 86.31 - strongly chlor</li> <li>ly altered with some h</li> <li>86.31 - 87.47 - zone of interm</li> <li>a te veining, altered s</li> </ul>	yry. d, biotite rich zone te veining yry d, biotite rich zone along hairline bonate vein slightly loritized zone along fractures, imparting o zone. itized zone complete- ematization. ittent quartz carbon- lightly by hematization.	10.	Αυ.			
87.47	90.32	Fine grained, mafic in color, with biotite & amphibole.	massive in appearance					
90.32	92.41	Transition to a coarser graine noticeable increase in amphibo veining occurs with 0.01% pyri magnetite occurring within gan material within quartz carbona flakes & books of biotite pres quartz carbonate zones. ie. @	d member with a le. Quartz carbonate te, pyrrhotite and gue and wall rock te veining. Large ent adjacent to 91.19 - 91.32.					
92.41	94.17	Feldspar porphyry with phenocr and slightly hematized.	ysts less than 2 mm.					
94.17	95.40	Fine grained unit with laths o preferred dimensional orientat of foliation. Cross-cutting h hematized and impart a reddish slightly magnetic due to disse	f amphibole showing ion providing a sense airline fractures are hue to section - minated pyrrhotite.					

Drill	Hole <u> </u>	BA-2 Drilled by to	ogged by		*	Page	6	
Latitu	de	BearingEi	evation		Date Sta	rted		
Depart	ture	Dip Li	ength		Date Fini	shed		
FROM	то	DESCRIPTION	SAMPL	E WIDTH	AS	SAY VA	ALUES	
			N 0.		Au.			
95.40	96.59	Fine grained, fresher looking intermedia volcanic unit, minor cross-cutting hair fractures of hematized material.	ine					
96.59	97.03	Fine grained hematized & chloritized zor cross-cutting hairline fractures of cark	ne with ponate.					
97.03	97.21	Same as 95.40 - 96.59.	Į					
97.21	97.76	Feldspar porphyry with phenocrysts less	than 3 mm.	1				
97.76	107.17	Pristine intermediate volcanic with seven hematized cross-cutting fractures, with quartz carbonate veins containing 0.01% pyrrhotite, magnetite in gangue and wall material adjacent & within quartz carbor 99.83 - 100.03 - hematized quartz carbor 98.78 - 98.82 - hematized quartz carbor 104.50 - 104.59 - hematized quartz carbor	eral intervening pyrite, rock ate veining ate veining ate veining onate veining					
107.17	107.1	9 Feldspar porphyry.	• • • • • • • • • • • • • • • • • • •					
107.19	123.75	Intermediate volcanic with interbedded h quartz carbonate veining. 109.57 - 109.79 - hematized zone. 114.61 - 114.08 - quartz carbonate veini 119.57 - 119.75 - hematized zone. 121.00 - 121.22 - hematized zone.	ematized					
123.75	150.10	Intermediate Volcanic 124.45 - 125.02 - feldspar porphyry. 125.61 - 125.70 - quartz carbonate veini 127.26 - 127.63 - mafic tuff.	.ng.					
	150.10	END OF HOLE #2						

							62	42	70	
Drill	Hole	BA-3	Drilled byMorrisette	Logged by	R. Ke	emp		Pag	•1	
Latitu	ide8	+ 90S.	180° (N-S) Bearing	ElevationSurf	ace	,	Date Sta	arted_	Sept.0	5/82
Depar	ture36	+ 00W	$\frac{\text{Collar} - 45^{\circ}}{60.96} - 41^{\circ}$	$\frac{\text{Collar} - 45^{\circ}}{60.96 - 41^{\circ}}$ Length <u>137.49 metres</u>		<u>s</u>	Date Fin	ished _	Sept.	07/82
FROM	то		121.92 - 36° DESCRIPTION		SAMPLE	WIDTH	Δ.	SSAY	VALUES	
					N 0.		Au.			
0	3.04	Casing.								
3.04	31.35	Intermedi	ate Volcanic							
	(3.04 - 21.16)	- Green i tuffaceou beds on t 16.38 - 1 18.09 - 1 18.25 - 1 3.54 - 3. Minor cro Angle bed 21.16 - 2 9 23.05 - 2 1 26.32 - 3 5 5 5 5 6 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7	<pre>In color alternating with lie is horizons commonly less that the order of 1-2 cm. wide. 6.41 - quartz carbonate vein mematized. 8.11 - quartz carbonate vein 8.33 - quartz carbonate vein wirled wall rock. 58 - quartz carbonate vein. 58 - quartz carbonate vein. 58 - quartz carbonate vein. 58 - quartz carbonate vein. 59 - quartz carbonate vein. 59 - quartz carbonate vein. 50 - fine grained, dark gr 50 - fine grained, dark gr 50 - fine grained, dark gr 50 - slightly chloritized 51 - fine grained, dark gr 51 - fine grained, dark gr 52 - chloritized zone; with 53 - slightly chloritized 53 - slightly chloritized 54 - 25.52 - quartz carbor 55 - 25.52 - quartz carbor 55 - 25 - 25 - quartz carbor 55 - 25 - 25 - quartz carbor 55 - 25 - 25 - quartz carbor 56 - 25 - 25 - quartz carbor 56 - 25 - 25 - quartz carbor 56 - 25 - 25 - quartz carbor 57 - 25 - 25 - quartz carbor 50 - 25 - 25 - quartz carbor 50 - 25 - 25 - quartz carbor 51 - 25 - 25 - 25 - quartz carbor 51 - 25 - 25 - 25 - 25 - 25 - 25 - 25 -</pre>	ghter (felsic) an 3 cm. wide, hing, slightly h plus inter- e fracture. ceen in color, irred by zone, fine th faint in color), fractures which c). hate vein. s lower contact o foliation, edding, is calcitic & ine fracture						

Drll	H 01e	BA-3 Drilled by	Logged by	·····			Page	2
Latitu	de	Bearing	Elevation			Date Sta	irted	
Depart	ure	DIp	Length			Date Fin	ished	
FROM	то	DESCRIPTION		SAMPLE	WIDTH	AS	SAY VALU	ES
				N 0.		Au.		
		cross-cutting foliation.						
31.35	31.80	Sediment						
		- Very fine grained, bluish-black in or stringers & lenses of pyrite, approxim hairline cross-cutting fracture toward contact.	color with nately 1%, ls lower	21650	0.45	Trace		
31.80	42.37	Intermediate Volcanic						
		<pre>31.80 - 39.32 - bedded intermediate va alternating felsic tuff horizo mafic zones. Felsic zones less with mafic zones less than 4 o Zones highly chloritized ie. 33.02 - 33.07 - quartz carbona 33.72 - 33.76 - """ 34.68 - 34.33 - """ 35.10 - 35.14 - """ 36.59 - 36.61 - """"</pre>	olcanic ons & darker s than 3 cm. cm. 38.70 - 39.01 ate vein. " " "					
		Angle to bedding = $70^{\circ}$ .						
		39.32 - 42.37 - becoming more argillad nature towards bottom of sects 42.23 - 42.27 - quartz carbona partially chloritized with ble & pyrrhotite in quartz vein, a disseminated in wall rock.	eous in on. te vein, ebs of pyrite is well as					
42.37	45.84	Meta-Sediment						
		- Well foliated, thinly bedded argilla bedding, less than 1 cm. thick, alterr	aceous sedimen ating mafic					

Drill	Hole	BA-3	Drilled by	Logged by				Page	3	
Latitu	ide		Bearing	Elevation			Date Sta	arted		
Depar	ture	······	. Dip	Length		Date Fini		nished		<u> </u>
FROM	то		DESCRIPTION		SAMPLE	WIDTH	Δ <u>ι</u>	SSAY V	ALUES	
45.84	47.51	<pre>&amp; slight 43.15 - Sulphide parallel less that Intermed - Darker approxim occurrir 42.09 - 43.09 - 43.09 - 45.09 - 45.84 - Meta-Sed - Thinly horizons 48.81 - 50.20 - 52.38 - 52.84 - 53.51 -</pre>	tly more felsic carbon 43.28 - fault zone, p material. es occur as very fine to bedding & blebs o an 3% sulphides. diate Volcanic r green in appearance, mately 3% sulphides of ng as stringers lenses 43.09 44.09 45.09 45.84 47.51 diment y bedded with calcareo 50.20 - zone of quart pyrite, pyrrhotite 2% 52.38 - more massive less evident. 52.84 - zone of quart plus interbedded argi Less than 1% pyrite, 53.51 - similar to 50 1% pyrite, pyrrhotite 54.93 - zone of quart & calcareous horizons sulphides 2-3%.	aceous horizons. Dinky ground up dissemination, lenses of pyrite, pyrrhotite, faintly foliated pyrite, pyrrhotite, & blebs. Dus zones & silicified z carbonate injections pristine zone, bedding z carbonate injection llaceous material. pyrrhotite. .20 - 52.38. Less than z carbonate injections blebs & lenses of	21637 21638 21639 21640 21641	1.00 1.00 1.00 0.75 1.67	Trace Trace Trace Trace Trace			

Drill Hole BA-3		BA-3 Drilled byMorrisette	Drilled by Morrisette R. K				Page _	4		
Latitud	de	Bearing	Elevation			Date Sta	rted			
Depart	ure	Dip	Length	<del></del>	(	Date Fini	ate Finished			
FROM	то	DESCRIPTION	SA	MPLE	WIDTH metres	A S Au.	SAY VA	LUES		
		<ul> <li>54.93 - 56.15 - similar to 50.20 - 52. 0.01% sulphides. 55.09 - quartz carbonate vein pyrite, pyrrhotite.</li> <li>56.15 - 57.54 - very fine grained argi with finely disseminated sulph lenses of pyrite, pyrrhotite.</li> <li>57.54 - 60.36 - similar to 50.20 - 52. sulphides.</li> <li>60.36 - 60.64 - quartz carbonate vein blebs of pyrite, pyrrhotite.</li> <li>60.64 - 61.03 - medium grey in color, crystal tuff.</li> </ul>	<pre>38. with minor llaceous zone ides to 38, trace with a few intermediate</pre>							
		47.51 - 48.81 48.81 - 50.20 50.20 - 50.90 52.38 - 52.84 52.84 - 53.51 53.51 - 54.91 56.15 - 57.54 60.36 - 60.64	21 21 21 21 21 21 21 21 21	1642 1643 1644 1645 1646 1647 1648 1649	1.30 1.39 0.70 0.46 0.67 1.40 1.39 0.28	0.07 0.07 Trace Trace Trace Trace Trace				
61.03	65.71	<pre>Intermediate Volcanic 61.03 - 65.17 - dark green, massive, p intermediate volcanic. 65.17 - 65.51 - coarser grained, chlor intermediate volcanic. 65.51 - 65.71 - similar to 61.03 - 65. quartz carbonate veining at 61 (3 cm. wide)</pre>	ristine, itized, 17 .65 & 61.74							
65.71	67.60	Feldspar Porphyry.								

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Driii	Hole BA	A-3 Drilled by	R Logged by	. Kemp			Page	5	
Latitu	de	Bearing	Elevation			Date Sta	arted		
Depart	ure	Dlp	Length			Date Fin	ished		
FROM	то	DESCRIPTION		SAMPLE	WINTH	A	SSAY V	ALUES	
				N O.		Au.			
67.60	84.03	Intermediate Volcanic							
		- Dark green, massive with minor calc fractures with occasional quartz carb (hematized quartz carbonate vein @ 78	itic beds & onate zones. .70 - 78.78)						
84.03	88.21	Feldspar Porphyry							
		- Coarse grained unit with scattered than 2 mm. in size (fine grained porp	lapilli, less hyry unit?)						
88.21	93.57	Intermediate Volcanic							
		- Dark, massive, minor quartz carbona	te veining.	l					
93.57	96.62	Intermediate Volcanic							
		- Dark, massive, zone of quartz carbo veins & cross-cutting hairline fractu mafic tuff horizons.	nate stringers, re, minor	,					
96.62	101.00	Intermediate Volcanic							
		- Dark green, massive, with minor hai and veins of quartz carbonate materia	rline fracture 1.						
101.0	104.76	Intermediate Volcanic							
		- Brecciated zone, chloritized, no ap	parent sulphide	es.					
		Mafic Volcanic							
		- Dark green mafic in composition with fracture of carbonate and small quart veinlets.	h hairline z carbonate	-					
104.76	137.49	Intermediate Volcanic							
		- Dark green, pristine.							
	137.49	END OF HOLE # 3							

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					6	24;	269		
Drill	Hole BZ	A-4 Drilled by Morrisette	Logged by	R. Kem	p		Page	1	<u> </u>
Latitu	de4 -	56 North Bearing	ElevationS	urface		Date Sta	surted	ept. 0	8/82
Depart	32	+ 00 West 01pCollar -45° 	Length18	8.06 me	tres	Date Fin	isned <u>S</u>	ept. 1	1/82
FROM	то	@121.92 -33° @182.88	3 −28°	SAMPLE	WIDTH	AS	SAY V	ALUES	
				N 0.		Au.			ļ
0 3.04	3.04 35.23	Casing. Mafic Volcanics							
		<pre>3.04 - 13.54 - zone of wispy cross-cut fracture &amp; veinlets of quartz through a dark green matrix. 11.95 - 12.04 - quartz carbona 13.39 - 13.59 - quartz carbona 20.91 - 24.29 - fractured shear zone to volcanic.</pre>	tting hairling carbonate ate vein. ate vein. in mafic	e					
35.23	36.42	Meta-Sediment - Coarser grained arkosic unit.							
36.42	52.46	Meta-Volcanic							
		38.40 - 39.07 - quartz feldspathic por in a dark, fine grained ground phenocrysts euhedral to anhedr stronger towards upper & lower Phenocrysts less than 5 mm.	rphyritic uni 1 mass, cal. Porphyry r contact.	t					
		<pre>(24.29 - 35.23) - zone in which large pyrite &amp; pyrrhotite occur rand euhedral to anhedral in shape 6 mm in size, zone peter's off lower contact as dissemination hairline wisps. 5-7% pyrite, p</pre>	blebs of domly from , less than f towards ns and small pyrrhotite.						
		39.07 - 48.29 - zone where carbonate a carbonate swirls are pervasive chloritization occurring in ca Hematization pervasive towards along cross-cutting hairline sulphides, pyrite, pyrrhotite	and quartz e with arbonate zones s lower contac fracture, occur as	s					

Drill	Hole E	A-4 Drilled by Logged	R. Kemp by			Page	2
Latitu	de	Bearing Elevation	nn		Date Sta	rted	
Depart	ure	DIp Length			Date Fini	shed	
FROM	то	DESCRIPTION	SAMPLE	WIDTH	AS	SAY VALUE	ES
		disseminations and blebs, approximately 3%-9 pyrite, pyrrhotite.	58 58	metres	5 <u>Au</u> .		
		51.21 - 51.30 - quartz carbonate vein.			- -		
		52.00 - 52.46 - sheared zone, disrupted meta canic by cross-cutting hairline frac and veins of quartz carbonate.	a-vol- cture				
52.46	54.55	Meta-Sediment					
		52.46 - 54.55 - fine grained, slightly hemat zone with numerous cross-cutting fra along which pyrite, pyrrhotite accur Cherty in appearance, 6% sulphides. 52.46 - 53.46 53.46 - 54.55	cized actures nulates. 21651 21652	1.00 1.09	Trace 0.07		
55.02	55.59	Meta-Sediment					
		- Fine grained, cherty zone, wispy carbonate lets. Less than 1% pyrite, pyrrhotite. 55.02 - 55.59	e vein- 21653	.57	Trace		
52.46	62.43	Meta-Sediment					
		- Argillaceous to arkosic sediment zone.					
62.43	63.54	Mafic Volcanic					
		- Chloritized mafic volcanic zone. 63.54 - 63.62 - mafic tuff zone.					
63.54	84.34	Intermediate Volcanic	ł				
		- Lighter green in color with wisps & swirls quartz carbonate veins and hairline fracture	s of 2.				
			k		l		

Latitu	de	Bearing Electron	evation		-	Date Sto	arted				
Depart	ure	Dip Le	ngth		<sup>I</sup>	Date Fir	ished				
FROM	то	DESCRIPTION	5	SAMPLE	ASSAY VALL			ALUES	LUES		
				N O.		Au.					
84.34	89.47	Intermediate Volcanic									
		- Continuation of intermediate volcanic	unit.								
89.47	89.54	Meta-Sediment			1				1		
		- Medium grained/arkosic.			1						
89.54	89.74	Intermediate Volcanic			1						
		- Dark green with one barren quartz carb	onate vein								
89.74	91.62	Meta-Sediment	}								
		- Arkosic sediment - medium to coarse gr garnets & staurolite, less than 2 mm.	ained with								
91.62	91.72	Intermediate Volcanic									
		- Dark green intermediate volcanic with carbonate.	wispy								
91.72	93.18	Meta-Sediment									
		- Arkosic sediment.									
93.18	93.27	Intermediate Volcanic		ĺ							
		- Quartz, carbonate vein plus intermedia	te volcanic								
93.27	98.32	Meta-Sediment									
		- Medium grained arkosic sediment with gestaurolite.	arnet &								
98.32	106.06	Intermediate Volcanic					ł				
		- Intermediate volcanic with wisps and s quartz carbonate stringers sub-parallel 2% disseminated pyrite plus l large bleb	wirls of to foliation @ 102.31	1							

0r111 )	Hole	BA-4 Morrise Morrise	tte I Logged by	R. Kem <u>r</u>	)		Pag	e	1
Latitu	de	Bearing	Elevation		_	Date St	arted _		
Depart	ure	Dip	Length	<u> </u>		Date Finished			
FROM	то	DESCRIPTION		SAMPLE	WIDTH	A	SSAY	VALUES	
				N O.		<u>Au</u> .			
106.06	107.66	Meta-Sediment							
		- Arkosic sediment with garnet	& staurolite.						
107.66	108.53	Meta-Volcanic							
		- Green intermediate volcanic w fractures.	ith wispy carbonate						
108.53	108.72	Meta-Sediment							ŝ
		- Arkosic, medium grained sedim pristine.	ent - massive and						
108.72	126.99	Meta-Volcanic				1			
		- Massive to sections with lens carbonate stringers & veinlets. Interbedded mafic tuff zones @	y & wispy quartz 111.55 - 111.60 112.62 - 112.75 117.00 - 117.20 117.76 - 118.20 120.01 - 120.50 121.51 - 121.18 122.68 - 122.76						
126,99	129.76	Meta-Sediment						ļ	ļ
		- Sediment with garnets & staur section, commonly less than 1 m	olite for length of m. in size.					•	
129.76	130.38	Meta-Volcanic				1			
		- Volcanic, chloritized plus ba ate vein.	rren quartz carbon-						
130.38	3131.07	Meta-Sediment							
		- Medium to fine grained sedime	nt with trace garnet	5					

Drill	Hole	A-4 Morrisette Drilled by	Logged by	R. Ke	emp		Page	5	
Latitu	de	Bearing	Elevation			Date Sto	arted		
Depart	ure	Dip	Length		<b></b> i	Date Fin	ished		
FROM	то	DESCRIPTION		SAMPLE	WIDTH	A	SSAY	ALUES	
				N 0.		Au.			 
131.07	131.24	Intermediate Volcanic							
		- Dark green intermediate võlcanio							
131.24	139.79	Meta-Sediment							
		- Arkosic sediment with zones rich andalusite/intermittent quartz car	in garnet & bonate zones						
139.79	139.91	Mafic Tuff							
		- Dark green mafic tuff horizon.							
139.91	141.84	Meta-Sediment							
		<ul> <li>Medium to coarse grained arkosic vasive garnets and staurolite, gar l mm. in size.</li> </ul>	c unit with per- mets less than						
141.84	142.19	Intermediate Volcanic							
		- Mafic tuff to lapilli tuff (with feldspathic lapilli)	n random quartz						
142.19	188.06	Interbedded Mafic Tuff & Intermed	late Volcanic						
		- Dominantly arkosic sediments with beds of mafic tuff to zones domina arkosic beds reflect garnets & sta intermediate volcanics are garnets green in color.	th intercalated antly volcanic: aurolite, while a free & olive						
		<pre>147.83 - 148.08 - bleached zone to color. 150.31 - 150.37 - mafic tuff. 152.96 - 153.02 - mafic tuff. 156.15 - mafic tuff. 157.94 - 158.09 - mafic tuff.</pre>	o a grey-white						

ا متحلة أحمد الجمل التبية عاملة المتعار عندة المحد المحد المحد المحد المحد المحد المحد المحد المحد ا

Drill >	lole	BA-4 Drilled by Morrisette	Logged by	R. Ke	mp		Page	6
Latitu	1e	Bearing	Elevation			Date Sta	rted	
Depart	ure	Olp	Length			Date Fini	ished	<u> </u>
FROM	то	DESCRIPTION	····	SAMPLE	WIDTH	AS	SAY VALU	JES
FROM		159.12 - 159.21 - quartz carbona tuff. 159.58 - 159.66 - mafic tuff. 160.01 - mafic tuff. 161.38 - 161.44 - mafic tuff. 161.59 - 161.69 - mafic tuff. 163.89 - 163.98 - mafic tuff. 165.50 - 165.57 - quartz carbona 166.44 - 166.61 - mafic tuff. 167.13 - mafic tuff. 167.85 - 172.86 - intermediate v green, massive in appear 175.47 - mafic tuff. 175.78 - 178.85 - mafic tuff. 176.23 - 176.30 - mafic tuff. 177.26 - 178.52 - intermediate v olive green with slight1 178.81 - 179.08 - intermediate v 179.80 - mafic tuff. 181.96 - 182.17 - mafic tuff. 184.38 - 184.67 - mafic tuff. 185.64 - 188.06 - intermediate v	te vein plus mafic te vein. olcanic, dark ance. olcanic, dark y chloritized zone olcanic.	N 0.		Αυ.		
		END OF HOLE #4						

anan anang angka a

					6242	.69	
Drill	Hole BA	-5 Drilled by <u>Morrisette</u> Logged by	R. K	emp	F	oage	1
Latitu	de4	+ 56' N Bearing <u>180°</u> Elevation Sur	face		Date Starte	dSept	:. 11/82
Depart	ure32	+ 00 W Dip $-75^{\circ}$ 60.0m = -75° Length 106.	9 Metre	<u>S</u>	Date Finish	dSept	. 12/82
FROM	то	DESCRIPTION	SAMPLE	WIDTH	ASSA	Y VALUE	s
	2.0/		N 0.	ļ	Au.		
0.00	2.94	Casing.					
2.94	33.40	Intermediate to Mafic Volcanic: Intermediate to mafic volcanic. Ranging from a mascive. pristine volcanic unit to zones wispy and fractured by Quartz CO <sub>3</sub> zones and hair line fractures. ie. 6.70 to 8.38 m. generally zone is dark green to olive green in colour. Fine grained, sulphide rich zone. Less than 5% Pyrite, Pyrrhotite. 20.78 - 21.06m. 21.06-33.46 - Pristine zone, olive green in colour. Sheared slightly to strongly. No quartz CO <sub>3</sub> swirls and veinlets. One sulphide zone pyrite, pyrrhotite and magnetite. Less than 30% pyrite, pyrrhotite (28.69 - 28.90		0.28	Tr. 0.21		
33.46	33.94	Felds porphyry: Light coloured phenocrysts (lapplli?) in a darker fine grained ground mass. Phenocrysts orientated parallel to foliation. Less than 3 mm in size.					
33.94	47.51	Intermediate-Mafic Volcanic: Slightly sheared, chloritic and wispy with Quartz CO3. Swirls and cross-cutting hairline fractures. Large blebs of pyrite. Less than lcm in size concentration towards the lower contact.					
47.51	51.43	Intermediate-Mafic Volcanic: Pristine + massive in appearance. Minor swirls of Quartz CO3 material.					
51.43	53.03	Mafic Dyke: Slightly magnetic, medium grained, massive.					

Drill H	BA	A-5 Drilled by	Logged by	R. Kem	p		Page	2	<u>-</u>
Latituc	1e	Bearing	Elevation			Date St	arted		- <u></u>
Depart	ure	Dip	Length		Date Finished				
FROM	то	DESCRIPTION		SAMPLE	WIDTH	Δ	SSAY V	ALUES	
				N 0.		<u>Au.</u>			<u> </u>
53.03	56.78	Intermediate to Mafic Volcanic:							I
		-wisps and swirls of Quartz CO3 r smaller Quartz CO3. Hairline frac Cross-cutting foliation.	naterial with cture.						
56.78	58.52	Feldspar Porphyry:							
		White phenocrysts less than lcm : generally orientated parallel to with Quartz CO3. Swirls and vein and lower contact.	in size the foliation lets at upper						
58.52	60.77	Intermediate to Mafic Volcanic:						r	
		<ul> <li>Zone with Quartz CO<sub>3</sub> swirls and fracture, slightly chloritized.</li> </ul>	l hairline						
60.77	66.02	Mafic Volcanic:							
66.02	78.33	<ul> <li>unit chloritized and interswirl CO<sub>3</sub> zone - amphibolized</li> <li>Amphibolized with Quartz CO<sub>3</sub> Sw cross-cutting hairline fracture bedding to core = 45°</li> </ul>	led Quartz virls and e. Angle						
78.33	80.20	- with lenses and pods of pyrite Magnetic to very magnetic. Stan and continues past zone, magnet disseminated magnetite. Less th Pyrite, Pyrrhotite, magnetite	, pyrrhotite. cting @ 78.97 cic due to nan 30% [angle=50°]						

Drill	BA	Drilled by	Logged by				Page	3	
Latitu	de	Bearing	Elevation			Date Sta	rted		
Depart	ure	Dip	Length	······	<del>_</del>	Date Fin	ished		
FROM	то	DESCRIPTION		SAMPLE	WIDTH	AS	SAY VA	LUES	
ļ				N O.		Au.			
80.20	83.91	Enriched, silicified zone. Trace 6% pyrite, pyrrhotite + dissemina sulphides occurring along hairlin cross-cutting foliation. Zone ver interbedded mafic volcanic units	e chalcopyrite, ated magnetite , ne fracture cy magnetic, @82.78-82.83 83.24-83.29 83.65-83.70 83.79-83.86						
		80.20 - 81.06 81.06 - 82.06 82.06 - 83.06 83.06 - 83.91		21657 21658 21659 21660	0.86 1.00 1.00 0.85	0.07 0.07 Tr. Tr.			
83.91	87.90	Olive green in colour, disseminat and magnetite. Section is very m 83.91 - 87.90	ed pyrrhotite nagnetic, from						
87.90	106.90	Arkosic to argillaceous sediment	:			[			-
	·	- Massive, medium to fine gr foliated due to Quartz CO intermittent Quartz CO3 ve	cained, faintly beds, with eins.						
	•								

Drill	Hole BA	R Rorrisette R	R. Kemp		67	242 Page	.69 1	
Latitu Depart	de <u>5 +</u> 	$\frac{45 \text{ N}}{-50^{\circ}} \frac{180^{\circ}}{105.8\text{m}} = -44^{\circ} \text{ Elevation } \frac{511}{105.77}$	rface / metre	 s	Date Sto	arted	Sept. 1 ept. 14	3/82 /82
FROM	то	DESCRIPTION	SAMPLE	WIDTH		SSAY V	ALUES	1
0	2.54	Casing.	<u>NO.</u>		<u>Au.</u>		_	
2.54	6.17	Mafic Volcanic - dark green with hairline fracture, wisps and swirls of Quartz CO3.						
6.17	6.82	Metasedimentary - medium grey, medium grained arkosic unit. slightly magnetic.						· · ·
6.82	8.92	<u>Mafic Volcanic</u> - dark green. Same as 2.54-6.17.						
8.92	9.78	<ul> <li>Metasedimentary         <ul> <li>medium grey, medium grained arkosic unit, slightly to locally very magnetic, due to disseminated magnetite.</li> <li>9.12-9.61:fractured zone with cross-cutting hairline fracture, filled with pyrite, pyrrhotite and quartz CO<sub>3</sub> Less than 5% pyrite, pyrrhotite</li> </ul> </li> </ul>						
9.78	11.88	<u>Meta Volcanic</u> - medium grained, massive, with 1% pyrite 11.66-11.78 Barren quartz CO3 vein [magnetic zone: 8.62 - 10.22]						
11.88	12.42	Sheared zone with Metavolcanic unit, slightly magnetic at top of zone due to pyrrhotite. Pyrite is associated, 1% sulphides. Less than 1%. Zone is very micaceous.						

D+111 +	lole BA-	-6 Drilled by	Logged by			2 Page	) 
Latitu	de	Bearing	Elevation		Date Star	ted	
Depart	ure	Dip	Length	<u></u>	Date Finished		
FROM	то	DESCRIPTION	SAMP	LE WIDTH	ASS	AY VALUE	:S
			N 0.		Au.		
12.42	17.75	Metavolcanic (mafic)					
		- medium grained with minor quartz Similiar to 9.78-11.88: Non magne chloritization to bottom of secti	CO3 swirls. tic, slight on.				
17.75	20.17	Metasedimentary					
		<ul> <li>light grey in colour, fine to med argillaceous(?) unit. With zone c Sulphides @ 19.05: massive pyrite magnetite</li></ul>	ium grained oncentration, & nses of seminated				
20.17	25.04	Mafic Volcanic					
		<ul> <li>chloritized zone, green in colour chlorite.</li> </ul>	with wispy				
25.04	27.43	Sheared Volcanic unit/chloritized.					
27.43	36.14	Mafic Volcanic					
		<ul> <li>chloritized with wisps and swirls quartz CO<sub>3</sub> highly amphibolized.</li> </ul>	of				
36.14	36.26	Metasedimentary					
		- fine grained to medium grained, 1 in colour, Arkose.	ight grey				
		L					

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Drill	Hole	BA-6 Drilled by Logged	by			Page	3	
Latitu	de	BearingElevation			Date Sta	arted		
Depart	ure	Dip Length _			_ Date Finished			
FROM	то	DESCRIPTION	SAMPLE NO.	WIDTH	A.	SSAY V	ALUES	
6.26	36.59	Mafic Volcanic - very similiar to 27.43-36.14.						<u> </u>
6.59	37.32	- strongly amphibolized shear.						
37.32	39.05	Metasedimentary - fine to medium grained, light grey in colour, Arkosic.						
9.05	39.24	Feldspar porphory - with euhedral phenocrysts of feldspar.						
9.24	48.10	<u>Mafic Volcanic</u> - top part of section, pristine feldspar porphyry, but breaks away to amphibolize + quartz CO <sub>3</sub> veining chloritized.	d					
8.10	50.34	Sedimentary - thinly lamination swirled with quartz CO material and slightly chloritized. Magne zone coming is @ 48.10.	3 tic					
50.34	50.84	Silicified & hematized sediment - red hematized and silicified unit, vuggy becoming cherty towards the bottom. Appr imately 10-15% pyrite pyrrhotite & magne zone is highly magnetic. Magnetite occur as large grains.	, ox- tite, s	0.50	0.07			

Drill	tole	BA-6 Drilled by	Logged by			Pag	4 4	
Latitu	de	Bearing	Elevation		Date Started			
Depart	ure	Dip	Length	····	Date	Finished		
FROM	то	DESCRIPTION	SA	MPLE	тн —	ASSAY	VALUES	
			N	N O.	A	u		
50.84	51.96	Sediment						
		<ul> <li>swirled quartz CO<sub>3</sub> throug well bedded tuff horizon</li> </ul>	h zone, becoming towards base.					
51.96	52.21	Amphibolized Arkosic Sediment						
52.21	52.24	Churty unit		•	ľ			
52.24	52.40	Arkosic unit at top of sectio grained, grading downwards to churty zone.	n/medium to coarse fine grained					
52.40	54.68	Sedimentary - fine grained argillaceou by Arkosic amphibolized fine grained ar ie. 54.08-54.17	s sediment. Separated zones. Magnetic. gillaceous zones					
45.68	61.00	Intermediate to Mafic tuff - interbedded tuff horizon amphibolized sediment & interbedded quartz CO <sub>3</sub> . 59.07-59.16 59.19-59.26 59.97-60.05 60.31-60.41 60.55-60.88 [These mafic to contain quartz fragme mafic feldspar porphyry, 60.93-61.00	s separated by chloritized with Mafic tuff @ tuff horizons appear nts. These may be a to tuppilli tuff.]					

Drill	Hole B	A-6 Drilled by	Logged by				Page	5	<u> </u>
Latitu	ide	Bearing	Elevation			Date Sto	arted		
Depar	ture	DIp	Length			Date Finished			
FROM	то	DESCRIPTION		SAMPLE	WIDTH	A \$	SSAY VA	LUES	
			······································	N 0.		Au.			
61.00	89.60	Metasedimentary - fine grained argillaceous sedim quartz CO <sub>3</sub> swirls + intercalate horizons, lower in the section, range from Arkosic to Argillace medium grained, dark grey in co lenses (thin less than lmm) & s quartz CO <sub>3</sub> , section have minor [tuff horizons @: 64.87-64.91/6 79.96-80.04/84.86-84.90]	ent with ed mafic tuff sediment cous, fine to lour. With wirls of chloritization. 5.61-65.85/						
89.60	105.77	<pre>Intermediate Volcanic - light green grey in colour. Wit quartz CO<sub>3</sub> swirls + mafic tuff Quartz CO<sub>3</sub> vein 91.73-92.73 (ba amphibolized &amp; chloritized zone (Amphibolization pervasive)</pre>	h intercalated horizons. rren) s.						
		END OF HOLE #6							

					624	+26	7	
Drill	Hole	A-7 Drilled by <u>Morrisette</u> Logged by <u>R</u>	. Kemp			Page	1	
Latitu Depart	de <u>9</u> +	$ 50 S \qquad Bearing 180^{\circ} \qquad Elevation Sur \\ Collar -45^{\circ} \qquad Dip -39^{\circ}=61.0 m \qquad Length -73.7$	face 6 metre	<u> </u>	Date Sto Date Fin	arted	Sept. 1 Sept. 1	7/82 8/82
FROM	τo	DESCRIPTION	SAMPLE NO.	WIDTH	<u>А</u> : Ац.	SSAY V	ALUES	
0	3.35	Casing						
3.35	35.44	<ul> <li>Mafic Biotitic Sediments <ul> <li>Well to weakly bedded. Beds 1/8-1/4" generally moderately parallel to bedding. Very minor pyrite crystals throughout. Occasional quartz, hematite &amp; epidote veinlets parallel bedding. Light to dark grey</li> <li>9 Bleached with ½" quartz vein, barren.</li> <li>22 - 8.63 Spotted with quartz eyes.</li> </ul> </li> <li>10.52 - 11.39 Interbedded spotted beds with occasional pyrite veinlets. C. A. 70°</li> <li>16.0 - 18.7 Increasingly amphibolitic. Occasional quartz &amp; quartz-calcite veins.</li> <li>20.0 C. A. 80°</li> <li>28.7 - 29.72 Slight hematitic staining</li> <li>30.64 - 30.91 Garnetiferous. Very fine crystals.</li> </ul>	У					
35.44	39.18	<ul> <li>Mafic Argillitic Sediments <ul> <li>-Very dark to black colour. Graphitic.</li> <li>Occasionally light-coloured bed. Pyrite common in veinlets. C. A. 80°. Sheared parallel bedding.</li> </ul> </li> <li>38.54 - 39.18 Almost massive, graphitic argillite shearing C. A. 80°. Occasional light grey pyritiferous beds up to 4". Pyrite 5%+, mainly veinlets, some irregular masses.</li> <li>40.3 - Apparent fault gouge. Black, several inche wide. Seems to contain some quartz veining.</li> </ul>	s					

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Drill	Hole <u>B</u>	A-7 Drilled by Logged by				Page	2
Latitu	de	BearingElevation			Date Sta	irted	
Depart	ure	Dip Length			Date Fin	ished	
FROM	то	DESCRIPTION	SAMPLE	WIDTH	Δ.	SAY VAL	UES
			N 0.		<u>Au</u> .		
		38.4 - 39.4	21662	1.00	0.07		
		39.4 - 40.4	21663	1.00	Tr.		
		40.4 - 41.4	21664	1.00	Tr.		
		41.4 - 42.1	21665	1.07	Tr.		
39.18	45.75	   Mafic Biotitic Sediments			1		
		<ul> <li>Mainly as before but locally somewhat more graphitic. C.A. 80°</li> <li>43.63 Becoming more siliceous, less graphite 1-2% pyrite in veinlets.</li> </ul>					
46.75	49.11	Siliceous Sediments					
		<ul> <li>Light to dark grey. C.A. 80-85°.</li> <li>Little shearing. Pyrite- 1-2% as veinlets and blebs.</li> </ul>					
49.11	49.89	Quartz-feldspar porphory					
	1	- Poorly defined. Light grey, siliceous. Phenocrysts 1/8"±. Massive. 48.45 - 49.11	21668	0.66	Tr.		
49.89	50.36	Siliceous Sediments Same as above.					
50.36	50.67	Mafic Argillitic Sediments					
		- Dark to black, graphitic 50.44 - 50.55 15% pyrite, mainly crystals 50.36 - 50.60	21667	0.24	Tr.		

Drill	Hole BA-	7 Drilled by Le	ogged by			Page	3	
Latitu	de	BearingEI	evation		Date Sto	irted		
Depart	ure	Dip L	ength		Date Fin	ished	<u></u>	<del> </del>
FROM	то	DESCRIPTION	SAMPLE	WIDTH	A	SAY VA	LUES	
	(0.00	M.C. Distinis Coliments	N 0.		Au.			
50.67	60.28	<ul> <li>Maric Biotitic Sediments</li> <li>Bedding generally poor. C.A. 80° Shearing highly developed parallel Occasional graphitic bed to 2". Dark to medium grey. Occasional n bed of quartz-feldspar porphyry.</li> <li>54.3 2" Bull quartz vein. No mineralized</li> </ul>	l to bedding narrow zation.					
60.28	64.56	Mixed Mafic Sediments & Mafic Volcanics - zone shows some bedding character: with other zones of Mafic Volcanic	istics cs as below.					
64.56	73.76	Mafic Volcanics - Tuffaceous. Sheared @ 80°± 5°. Da: Hematitic staining prevalent on fr planes. Occasional hematitic quar Biotitic, chloritic. Slightly car	rk green. racture rtz veins rbonaceous.					
		END OF HOLE # 7						

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Drill	H ole	BA-8 Drilled by Morrissette Logged by	. Kemp		624	267 Page	1	
Latitu	de <u>20</u>	+ 00 W Bearing <u>180°</u> Elevation <u>Sur</u>	face		Date Sta	irted	Sept. 2	0/82
Depar	ture _ 7 +	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	meters		Date Fin	ished	Sept. 2	2/82
FROM	то	DESCRIPTION	SAMPLE	WIDTH	A 5	SAY V	ALUES	·····
			N 0.	<u> </u>	Au.			
0	3.86	Collar.						
3.86	33.61	Intermediate Tuff						
03.61	70.11	<ul> <li>medium grey to grey/ medium grained with interbedded, less than 5cm wide mafic tuff horizons.</li> <li>17.20-17.75: Chloritized zone pervasive, with quartz CO<sub>3</sub> injection. Pyrite less than 0.5%.</li> <li>21.10-21.32: thinly laminated felsic to inter- mediate tuff. Core axis to foliation 70° at 20.42 Locally quartz CO<sub>3</sub> injections paral- lel to sub parllel to foliation.</li> <li>Intermediate Volcanic <ul> <li>green in colour, medium grained with amphiboli blades along foliation planes. Unit is well foliated expressed by alternating beds of white tuffaceous units &amp; medium grained green units. The alternating beds are commonly less than 3cm thick.</li> <li>Hematization occurs where hairline fracture cross-cut foliation To locally alter the zone to a reddish colour. Core axis to foliation at 63.09: 75°</li> <li>46.88-47.57: mafic dyke: coarse grained, magnetite, biotite books</li> </ul> </li> <li>49.65-49.85: quartz CO<sub>3</sub> vein</li> <li>61.01-61.28: massive a mafic dyke very magnetic</li> </ul>	t e					

Drill	HoleBA	-8 Drilled by Log	iged by		P a (	2		
Latitude		BearingEle	vation		Date Started			
Depart	ure	DlpLer	Length		Date Finished			
FROM	то		SAMPLE	WIDTH	ASSAY VALUES			
			N 0.		Au.			
70.11	100.52	Intermediate Tuff - banded appearance alternating felsio	c +					
		mafic horizons. Trace pyrite. 80° angle bedding to core axis. 99.82-100.52	49009	0.70	Tr.			
100.52	105.72	<pre>Graphite horizon     - black, very fine grained, with very     disseminated pyrite 1%-1.5% 100.52-101.52 101.52-102.52 102.52-103.52 103.52-104.70 104.70-105.12: zone with sub angular to     rounded fragments. (Solution brecce     Many cross-cutting hairline fracture     quartz CO3 105.12-105.72</pre>	finely 49010 49011 49012 49013 49013 ia) e of 49015	1.00 1.00 1.18 0.42 0.60	Tr. Tr. Tr. Tr. Tr. Tr.			
105.72	111.91	Intermediate Tuff - massive medium grained & grey in co 1% pyrite with interbedded graphiti (banded) 105.72-106.72 106.72-107.72 107.72-108.81	lour c horizons. 49016 49017 49018	1.00 1.00 1.09	Tr. 0.07 Tr.			
111.01	113.24	Intermediate tuff + quartz CO3 vein - quartz vein occurs at a very high a the core axis, cross-cutting well f	ngle to oliated					

Drill +	tole BA-	-8 Drilled by Log	iged by			3 Page		
Latitude		BearingEle	vation		Date Started			
Depart	ure	Dip Lei	ngth		Date Finish	ed		
FROM	то	DESCRIPTION	SAMPLE	WIDTH	ASSA	Y VALUES		
			N O.		Au.			
111.01	113.24	<pre>continued.    -(bedded) intermediate tuff. Epidoti     occurs throughout but occurs massiv     112.56-113.24, with quartz CO<sub>3</sub> veir     occuring at a high angle to the cor     .03%</pre>	zation vely from ling te axis	0.68	Tr.			
		111.91-112.56	49019	0.05	Ir.			
113.24	114.91	Quartz CO <sub>3</sub> vein - at right angle to core axis with ir intermediate tuff. Fine disseminate (1%) in the intermixed tuff materia quartz vein barren. 113.24-114.24 114.24-114.91 114.51-114.91: Quartz CO <sub>3</sub> vein has a blu possible MoS <sub>2</sub> .	atermixed ed pyrite al while 49021 49022 weish hue,	1.00 0.67	Tr. Tr.			
114.91	121.00	<pre>Intermediate tuff    - dark very fine grained with minor i    graphitic zones. Finely disseminat    occurs along foliation planes. Qua    vein occurs randomly. At high angle    core axis. 114.91-115.82 115.82-116.82 116.82-117.95 117.95-118.95 118.95-119.95 119.95-121.00    END OF HOLE # 8</pre>	Interbedded ed. Pyrite artz CO <sub>3</sub> e to 49023 49024 49025 49026 49027 49028	0.91 1.00 1.13 1.00 1.00 1.05	Tr. Tr. Tr. Tr. Tr. Tr. Tr.			

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6			ANALYTICAL LABOI	RATORIES LTD.
		P.O. BOX 187.	HAILEYBURY, ONTARIO	TEL: 672-3107
		Certifi	cate of Analysis	
NO.	22438		DAT	E: October 8, 1982
SAMPLE	S) OF:	Core (20)	REC	EIVED: October, 1982
SAMPLE	S) FROM	: Mr. B. Durham,	Bel-Air Resources Lto	i.

\_\_\_\_\_

Sample No.	Grams Gold
F49009	Trace
F49010	Trace
11	Trace
12	Trace
13	Trace
14	Trace
15	Trace
16	Trace
17	0.07*
18	Trace
19	Trace
F49020	Trace
21	Trace
22	Trace
23	Trace
24	Trace
25	Trace
26	Trace
27	Trace
28	Trace

\* estimated

IN ACCORDANCE WITH LONG-ESTABLISHED NORTH MERICAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED DTHERWISE GOLD AND SILVER VALUE, PEPORTED ON HESE SHEETS HAVE NOT BEEN ADJUSTED TO COMPEN-TATE FOR LOSSES AND GAINS INHERENT IN THE FIRE ASSAY PROCESS. BELL-WHITE ANALYTICAL LABORATORIES LTD.





Rock (1) SAMPLE(S) OF:

RECEIVED: September, 1982

SAMPLE(S) FROM: Mr. Bruce Durham, Bel-Air Resources Ltd.

Sample No.

% Mo 52

21654

800.0

PER\_ (

IN ACCORDANCE WITH LONG-ESTABLISHED NORTH AMERICAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED OTHERWISE GOLD AND SILVER VALUES REPORTED ON THESE SHEETS HAVE NOT BEEN ADJUSTED TO COMPEN-SATE FOR LOSSES AND GAINS INHERENT IN THE FIRE ASSAY PROCESS

BELL-WHITE ANALYTICAL LABORATORIES LTD.



SAMPLE(S) OF:

Core (7)

**RECEIVED:** September, 1982

SAMPLE(S) FROM: Bruce Durham, Bel-Air Resources Ltd.

Sample No.	Grams Gold
C21662	0.07*
3	Trace
4	Trace
5	Trace
6	Trace
7	Trace
8	Trace

\* estimated

IN ACCORDANCE WITH LONG-ESTABLISHED NORTH AMERICAN CUSTOM, UNLESS IT IS SPECIFICALLY STATED OTHERWISE GOLD AND SILVER VALUES REPORTED ON THESE SHEETS HAVE NOT BEEN ADJUSTED TO COMPEN-SATE FOR LOSSES AND GAINS INHERENT IN THE FIRE ASDAT PROUCDS.

### BELL-WHITE ANALYTICAL LABORATORIES LTD.

Per



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DAVID F	R. BELL GEOLOGICAL SERVICES	LT D.
	BELAIR RESOURCES	
	VERTICAL SECTION, looking west SECTION 20+00W BA-8	
~Values	reported in gms / metric ton	

OCTOBER, 1982



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SCALE 1:500

OCTOBER, 1982





DAVID	R.	BELL	GEOL	OGICAL	SER\	/ICES	LTD

-Values reported in gms/metric ton

D.A.B.

SCALE 1:500

OCTOBER, 1982





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BA-3 Collar 8+90 South -45•		NORTH	
xxs	8†00 S	7 <b>+ 00</b> S	
overburden			

intermediate volcanics

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BELAIR RESOURCES

VERTICAL SECTION, looking west

SECTION 32+00W, BA-3

-Values reported in gms/metric ton

OCTOBER, 1982

SCALE 1:500



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DAVID R. BELL GEOLOGICAL	SERVICES LTD.
BELAIR RESOURCES	
VERTICAL SECTION, look SECTION 32+33W, BA-	ing west -4,BA5
-Values reported in gms/metric ton	LÖ LB
SCALE 1:500	OCTOBER, 1982



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DAVID R. BELL GEOLOGICAL SERVICES LT
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BELAIR RESOURCES

VERTICAL SECTION, looking west SECTION 40400W BA-2

-Values reported in gms / metric ton

D.A.B. OCTOBER, 1982

SCALE | 500

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Collar 12+10 South

12+00 S

14+00 S

intermediate volcanics

DAVID	R.	BELL	GEOLOGICAL	SERVICES	LTD.

NORTH

BELAIR RESOURCES

VERTICAL SECTION, looking west SECTION 48+00W, BA-I

---Values reported in gms/metric ton



SCALE 1:500



42C12NW0150 14 BOMBY

DIAMOND DRILLING

Township: Bombay

Report No: 14

WORK PERFORMED FOR: Lac Minerals Ltd.

RECORDED HOLDER: SAME AS ABOVE & ]

: OTHER [ ]

CLA	AIM NO.	HOLE NO.	FOOTAGE	DATE	NOTE
TB (	609035	10072-85-1	60.8m	June/85	(1)
ID (	32157	10072-85-2	60m	June/85	(1)

NOTES: (1) #391-85

### Drill Hole No. - 10072-85-1

Date - June 13/85

# GEOLOGY LOG

0 - 26.30 Light grey quartz eye muscovite schist, 30 percent quartz eyes, sections quite blocky, numerous feldspar porphyry sills throughout.
 8.4 - 9.3 m - very blocky ground
 8.4 m - shear zone

60.86-	09
0.0 - 0.0  m	- 2% pyrite
10.15 m	- 2% tourmaline
16.18 - 19.93 m	- 1% moly in siliceous muscovite schist
16.50 - 16.60 m	- quartz veins
20.60 - 20.68 m	- quartz veins
26.3 - 31.9 m	- siliceous zone, weakly schistose
31.8 m	- dragfold
31.9 - 34.6 m	- 0.5% moly in more siliceous bands, 3%
	biotite, 1.5% pyrite

34.60 - 39.47 Bluish-grey siliceous brecciated rock (ore zone), 10% fracture controlled barite, 8% pyrite, 3% molybdenite, foliated with 2-3% muscovite.

36.52 - 36.58 m - quartz vein 37.25 - 37.40 m - quartz vein

- 39.47 43.13 Massive medium grey feldspar porphyry dyke, 40% subhedral 3-5 mm feldspar phenocrysts, minor carbonate.
- 43.13 46.80 Bluish-grey siliceous laminated brecciated rock, 10% pyrite in lamellations, 4% fracture-controlled barite, 2% diss. MoS<sub>2</sub>. Becomes increasingly more muscovite rich and schistose downhole - gradational contact with next unit.
- 46.80 51.30 Light grey muscovite schist, some biotite and pyrite rich lamellae, 1% diss. barite, TrMoS<sub>2</sub>.
- 51.30 55.35 Light grey muscovite schist, minor cinnabar, realgar, stibnite and barite, 3% diss. MoS<sub>2</sub>, 2% pyrite.

51.68 - 52.05 m - quartz vein, 3% MoS<sub>2</sub>, 1% stibnite, 1% cinnabar 54.00 - 55.55 m - few sulfides present except Py

55.35 - 60.80 Dark purplish-grey banded fine-grained sediments, 20% dark green amphibole-rich bands, 5% Aspy, 2% garnet, 1% kyanite. Core normal angle of banding @ 59.5m is 24°.

60.80 - EOH

VIalus Stephens

DRILL HOLE No. : 10	0072-85-1	ASSAY	-SURVEY	DATA	SH	
NORTHING : EASTING : ELEVATION : SURVEYS :	614.742 N 931.083 E 075.121 A = ACID	ANGLE DIRECTION LENGTH T = TROPAN	$\frac{-11^{\circ}36'}{6^{\circ}22'}$ $\frac{6^{\circ}22'}{6^{\circ}8}$ $\frac{100}{100}$ $\frac{100}{100}$ $\frac{100}{100}$	D C S ( N. MORISSE ( N. MORISSE	ATE ORE SIZE SAMPLE TY TTE DIAMOND D	$\frac{JUNF}{12/8.5}$ $\frac{TT-M}{(1.8'')}$ <b>PE:</b> <u>H-Core</u> RILLING LTD., HAILEYBURY
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			LOCATION 60m	DIP AZM -11° 8° -6° 13°	METHOD	COMMENTS TROPAL, TROPAL
SAMPLE No. FROM TO	WIDTH I <sup>ST</sup> PULI		PULP DUPL.	AVG.		



### GEOLOGY LOG

0 - 30.09

\* **\***.

Interbanded light grey quartz eye muscovite schist and medium grey quartz eye porphyry. Both units contain minor tourmaline and pyritic laminations and have occusional thin intermediate and feldspar porphyry dykes. Core normal angle of foliation roughly  $37^{\circ}$  @ 20.0 m.

6.38 - 6.42 - ground core 12.37 - 12.55 - mafic dyke 13.00 - 13.52 - fracture zone 23.44 - 23.89 - mafic dyke 28.20 - 28.35 - wary foliation - minor dragfolds 29.23 - 30.09 - minor barite and molybdenite, 5% Py

30.09 - 35.12 Bluish-grey siliceous massive rock (ore zone), 20% barite in laminations, 3% MoS<sub>2</sub> & Py. Minor roscoelite (bright green mica), foliated and weakly schistose.

35.12 - 38.52 Medium grey feldspar porphyry dyke, 35% subhedral feldspar phenocrysts.

# 38.52 - 46.94Bluish-grey siliceous massive rock, 10% barite, 5% molybdenite,<br/>15% pyrite, foliated and weakly schistose.

30.09	-	35.12	- 10% MoS <sub>2</sub>	
38.86	-	38.93	- feldspar porphyry dyke	
42.43	-	42.60	- muscovite schist zone with diss.	MoS <sub>2</sub>
43.00	-	46.94	- little barite in this section	
44.76	-	44.79	<ul> <li>semi-massive pyrite band</li> </ul>	

# 46.94 - 51.54 Light grey muscovite schist, 2% stibnite blebs. 46.94 - 47.30 - siliceous schist with MoS<sub>2</sub> & minor Py, transition from lower unit to musc. schist 48.37 - 48.41 - ground core - shear zone (?) 49.76 - 49.79 - quartz vein with MoS<sub>2</sub> & realgar 49.87 - 50.64 - several more siliceous lamellae 50.64 - 51.01 - kyanite rich zone 51.25 - 51.42 - pyrite blebs with black haloes

51.54 - 60.00 Purplish-grey banded sediments with 20% dark green amphibolerich bands and minor kyanite, staurolite and garnet. 51.86 - several coarse arsenopyrite crystals 52.06 - 53.77 - 8% garnet 54.39 - 55.66 - intermediate dyke 55.86 - 57.03 - intermediate dyke 57.15 - 60.00 - 0.5% garnet, 0.5% staurolite & kyanite

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	i L.L.	Mr. Owen	
Ministry of R	Sport 77,391	Instructions - Supply required data o type of work to be re	n a separate form for each corded (see table below)
Ontario Resources Of	Work	<ul> <li>For Geo-technical work of Work (Geological, Ge</li> </ul>	use form no. 1362 "Repor ophysical, Geochemical and
Sele:	09035 The Min	ing Act Expenditures)".	4. Jul, G-317
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KOYAL BAM	242A 1020ATO, ONT,		- m
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for Performance of the follow work. (Check one only)		42C12NW0150 14 BOMBY	900
Manual Work			
Shaft Sinking Drifting c	r (1997)		
Compressed Air, other			
mechanical equip.			
Power Stripping	TB 609035 13.9		
Diamond or other Core drilling	TB 609035 199.5		
Land Survey			
All the work was performed o	n Mining Claim(s): To / 0903 C		A
anticed information and	IDG07035 A	(San Table Polowi)	HSSIGNMONT
equiled information eg.	type of equipment, Names, Addresses, etc		
	† RECEI	Date of Report July 18, 1985- P. Lud	lder or Agent (Signature)
Certification Verifying Rep	port of Work		
I hereby certify that I have or witnessed same during an	a personal and intimate knowledge of the facts s ad/or after its completion and the annexed repor	et forth in the Report of Work annexed hereto, havi t is true.	ng performed the work
Name and Postal Address of P	erson Certifying		
FHILLIF WAL	runi 1307 146 , 1741	Date Certified Certified by (	Signature)
		July 18, 1985. P. ha	ent
able of Information/Atta	chments Required by the Mining Recorder		
Type of Work	Specific information per type	Other information (Common to 2 or more type	) Attachments
Manual Work		1	
Shaft Sinking, Drifting or other Lateral Work	Nii	Names and addresses of men who performed manual work/operated equipment, together with dates and hours of employment.	Work Sketch: these are required to show the location and
Compressed air, other power driven or mechanical equip.	Type of equipment		extent of work in relation to the nearest claim post.
Power Stripping	Note: Proof of actual cost must be submitted within 30 days of recording.	Names and addresses of owner or operator together with dates when drilling/stripping done.	Work Street /
Diamond or other core driffing	Signed core log showing; tootage, diameter of core, number and angles of holes.		above) in duplicate
Land Survey	Name and address of Ontario land surveyer.	Nil	Nit

REFERENCES		<u> </u>
AREAS WITHDRAWN FROM DISPOSITION M.R.O. – MINING RIGHTS ONLY S.R.O. – SURFACE RIGHTS ONLY M + S. – MINING AND SUBFACE RIGHTS		
Description         Order No.         Date         Disposition         File           (R)         SEC. 36/80         W38/81         13/4/81         S.R.O.         145647           (R)         SEC. 36/80         W30/83         26/10/83         SR.4 M.R.         131830           (R)         SEC. 36/80         W30/83         26/10/83         SR.4 M.R.         131830           (R)         SEC. 36/80         W30/84         24/7/84         H.R.O.         18854/	6N 	CLM. 272
SAND & GRAVEL G. H.T.C. Pit 342 G3 Gravel File 145647 G4 Sand & Gravel - Q.P. Nº 16590		ТВ 687609 MIC. AES. 4244249 624270 Hemio 524267 545 515 515 744868 624270 Hemio 524267 545 515 744868 687610
EASEMENTS (E) Lands affected by a rights & easements Order	Е 982 - 5 3м	MILLER'S BASE
of the Mining & Lands Commissioner under SEC. 189 of The Mining Act (R.S.D. 1980) Dated August 3/84.	Ч К Р.	620
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