RD.	(MPH)
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REPORT ON GEOLOGICAL MAPPING, AND ROCK AND STREAM SEDIMENT SAMPLING OF THE OENIC GROUP (DAR 6, 8 AND 9 CLAIMS)

ALBERNI MINING DIVISION, BRITISH COLUMBIA NTS 92C/11, 92C/14 48°46'N LAT, 125°04'W LONG FOR INTERNATIONAL CHEROKEE DEVELOPMENTS LTD. DECEMBER 19, 1987 GORDON J. ALLEN, P.GEOL.

FILMED

GEOLOGICAL BRANCH ABREETINT REPORT



SUMMARY

This investigation of the Oenic property was conducted on December 16, 1987, on behalf of International Cherokee Developments Ltd. Geological mapping was conducted and rock, stream sediment and panned stream sediment samples were collected.

The property has not been geological mapped in any detail but appears to be underlain by diorite of the Jurassic (?) Westcoast Complex and by granite of the Jurassic Island Intrusions. Marble and slate or phyllite float in creek beds suggest that a metamorphosed sedimentary package may also occur in the area.

Flakes of gold were obtained by panning sediment trapped in moss on bedrock on the banks of Michigan Creek and a tributary of the Darling River. The gold flakes are generally angular suggesting a local source.

A Phase I reconnaissance exploration program consisting of geological mapping, prospecting, and rock and stream sediment (panned concentrate) sampling is recommended. This program is estimated to cost approximately \$21,000.



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	CERTIFICATE Gordon J. Allen, P.Geol.	
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1.0 INTRODUCTION

This report on assessment work conducted on the Oenic property (Dar 6, 8, and 9 Claims) has been prepared by MPH Consulting Limited at the request of International Cherokee Developments Limited.

The fieldwork was conducted on December 16, 1987. Work consisted of geological mapping at a scale of 1:50,000; and rock, silt and panned stream sediment sampling.

All work was performed by or under the supervision of MPH Consulting Limited staff.



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2.0 PROPERTY LOCATION, ACCESS, TITLE

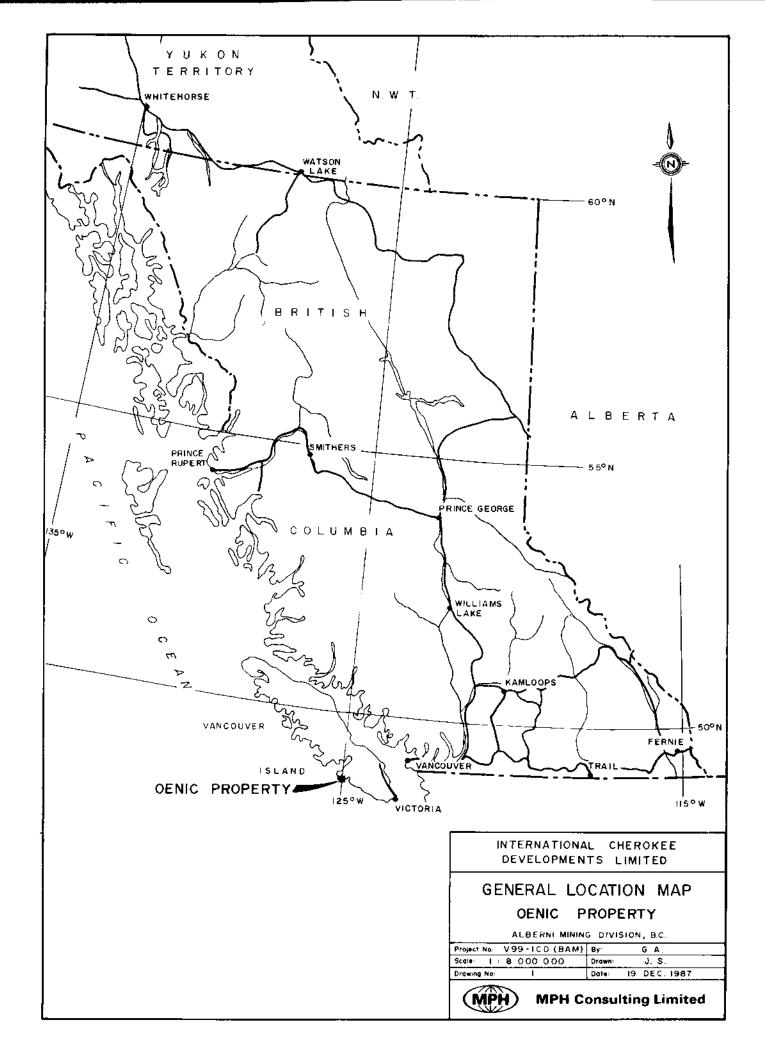
The Oenic property is located in the Somerset Range, approximately 9 km southeast of the village of Bamfield, and lies immediately north of Pacific Rim National Park. It is in the Alberni Mining District, on Vancouver Island, British Columbia.

Access to the property is via McMillan Bloedel's all weather Darling Main road and foot trails.

The Oenic property consists of 3 mineral claims as listed below:

Claim	Record Number	<u>Units</u>	<u>Anniversary Date</u>	Year Registered
Dar 6	2932	20	July 2, 1988	1986
Dar 8	2933	20	July 2, 1988	1986
Dar 9	2934	20	July 2, 1988	1986
	Total	60 Uni	ts	

All claims are owned by Paul Demontigny of Bamfield, B.C. The claims were grouped as the Oenic Group by Notice to Group no. 1242 dated June 27, 1987.

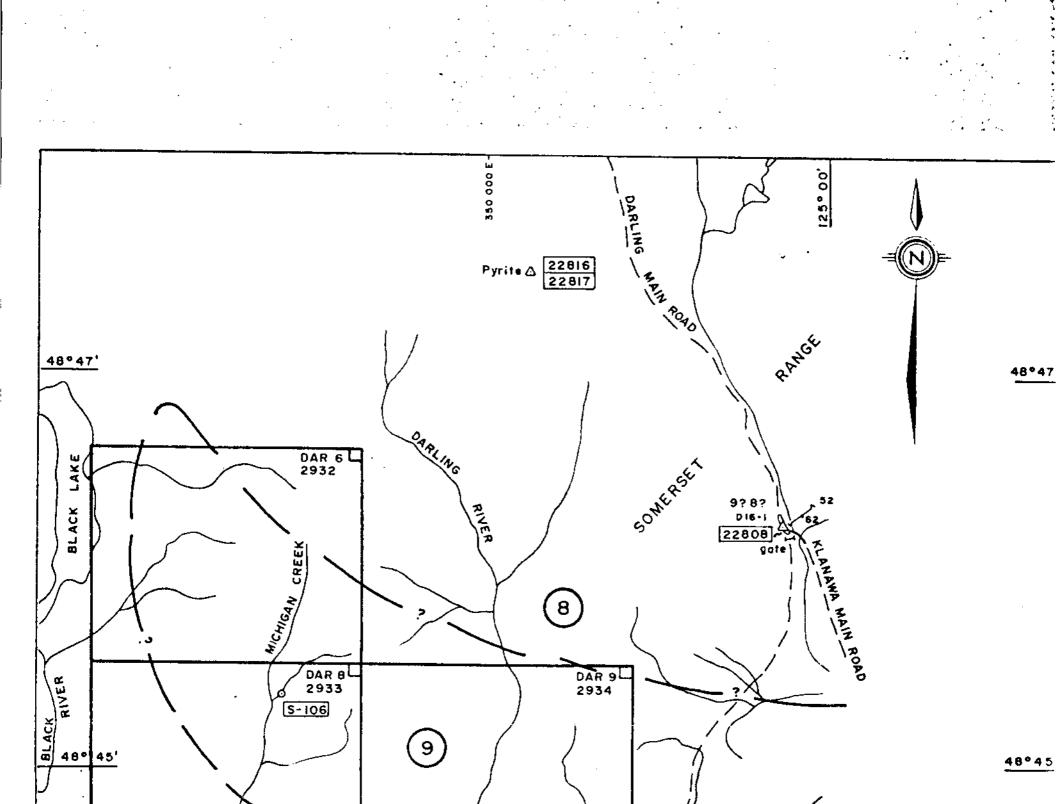




3.0 PREVIOUS WORK

The Bamfield area was mapped by Sutherland Brown et al. (1986) as part of the Lithoprobe 1 survey.

No recorded mineral exploration work was conducted prior to 1986. Since the staking of the claims foot trails have been constructed and several of the creeks have been prospected for placer gold. Small quantities of fine-grained placer gold were discovered on Michigan Creek near the south side of the Dar 8 claim and on a tributary of the Darling River on the Dar 9 claim (Figure 2).



BAM No.

S-104

35 ppb Au S-105

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RAIL

PARK

TRAIL

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016-3 炮

20.79

/t Au

5 400 000 N

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22813 22814

22815

NATIONAL

COAST

OCEAN

8

126

<u>GEOLOGY</u>

PACHENA

POINT LIGHTHOUSE

JURASSIC

22809 22810

22811

22812

5-102

5-1

PACIFIC

850 ppb Au 5-101

4780 ppb Au S-103

5 400 000 N

016-2

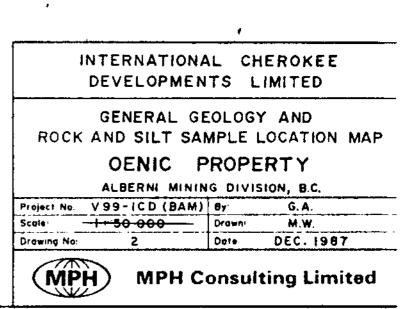
RIM

WEST

PACIFIC

65

. 9 islan	d Intrusions granite, quartz diorite
8 West	Coast Complex diorite, amphibolitic metasediment
SYMBOLS	NOTE: Geology in part from G.S.C. O.F. 1272 (Sutherland Brown et al 1986)
D16-1	Field note location
<u>مم</u>	Shear
·	Geological contact
<u>ه</u> '	Rock sample location (from outcrop)
×	Rock sample location (from float)
o	Stream sediment sample location
↓ . ★	Placer Gold occurrence
·	- Claim boundary and L.C.P. (Fřam Mineral Claim Maps 92C/H(M) and 92C/H(M)



1 km

2 km

125°00'



6

4.0 REGIONAL GEOLOGY

This part of the southern west coast of Vancouver Island is predominantly underlain by Jurassic intrusive and volcanic rocks which are part of Wrangellia Terrane.

4.1. Westcoast Complex

The Westcoast Complex consists of heterogeneous amphibolitic country rock (metasediments which may in part be paleozoic), diorite, and migmatite (a mixture of the first two). Recent studies by Isachsen (1987) suggest that the dioritic component of the complex was emplaced in Jurassic time, and many by a deeper crustal equivalent of the Island Intrusions and Bonanza Group volcanics.

4.2 Island Intrusions

These stocks are of Jurassic age and consist of diorite, quartz diorite, granodiorite and granite. They are coeval with Bonanza Group volcanics (Massey, 1987).

4.3 Bonanza Group

The Bonanza Group stratigraphy varies considerably from place to place, as it represents parts of several different eruptive centres of a volcanic arc. It is composed of basaltic, rhyolitic and lesser amounts of andesitic and dacitic lava and volcaniclastics with intercalated beds and sequences of marine argillite and greywacke.



5.0 1987 ASSESSMENT WORK

5.1 Work Completed

Fieldwork for this assessment report was conducted by one geologist on December 16, 1987. Approximately 3 km of road and trail were geologically mapped at a scale of 1:50,000. A total of 7 rock samples, 1 silt sample and 6 panned concentrate samples were collected on the property. Three rock samples and one panned concentrate sample were collected on the periphery of the property.

5.2 General Geology of the Oenic Property

The Oenic property is apparently predominantly underlain by diorite of the Jurassic Westcoast Complex and granite of the Jurassic Island Intrusions.

Dioritic rocks are medium-grained and composed of 25-30% biotite, 70% medium bluish-grey plagioclase and traces of fine-grained disseminated pyrite. The rock is commonly weakly magnetic.

A stock of granitic rocks intrudes the diorite. These granitic rocks are medium-grained and composed of 40-50% light pinkish-brown feldspar, 40% light greenish-brown feldspar, 5-10% quartz and up to 5% biotite.

Judging from abundant float material found in Michigan Creek, it is probably that part of the property is underlain by fine-grained marble, chert and dark blue-grey phyllite or slate. These rocks are likely part of the West Coast Complex.

Much of the property is overlain by massive to coarsely bedded bouldery glacial till.



5.3 Geology of Part of the Michigan Creek Area

Placer gold was discovered in Michigan Creek near the south side of the Dar 8 claim. This area is underlain by medium-grained diorite typical of the Westcoast Complex. It is cut by abundant (5-10/m) apparently randomly oriented 1-2 mm calcite-filled fractures. The rock is also cut by several northeasterly to southeasterly striking and southerly dipping shear zones up to 2 m wide. These zones are composed of sheared diorite, gouge (up to 30 cm wide), and in some places calcite stringers up to 2 cm wide. The shear zones occur at 2 to 3 m intervals and actually define a larger zone of shearing greater than 15 m wide. No mineralization was observed in the shears.

A 1 m wide, fine-grained hornblende feldspar porphyry dyke striking easterly (parallel to shearing) cuts the diorite in this area. The dyke contains traces of pyrite.

5.4 Rock Sampling

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The 7 rock samples (22809 - 22815) collected on the property are from the Michigan Creek area where placer gold has been discovered. The material sampled includes diorite; clay-rich gouge, sheared diorite and carbonate stringers from shear zones; and quartz vein, pyritic marble and pyritic siltstone (?) float. Descriptions of the rock samples are given in Appendix II. Sample locations are shown on Figure 2.

5.5 Stream Sediment Sampling

One standard stream sediment sample and three panned concentrate samples of stream sediment (S-1, S-101, S-102, S-103) were collected from Michigan Creek near the south side of the Dar 8 claim. The creek in this area flows over sheared diorite of the



Westcoast Complex.

Samples S-101 and S-103 were panned concentrates (3-4 pan-fulls per sample) of soil(?) and stream sediment trapped in moss growing on outcrop in the stream bed. This material contained abundant magnetite sand and one or two grains of gold per pan. The gold occurs as very thin, angular to subrounded flakes up to 0.5 mm in diameter across their largest dimension. Samples S-101 and S-103 contained 850 ppb Au and 4780 ppb Au respectively.

Sample S-102 was a panned concentrate sample of sand and silt from the stream bed. This material contained very little magnetite sand and no apparent gold (5 ppb).

Soil from 2-3 m up the bank of the creek was also panned. It contained no magnetite sand and no apparent gold. This material was not sampled.

Sample S-106 was a panned concentrate of stream sediment (from moss ?) collected by the Demontignys from a small tributary to Michigan Creek ('Third Ravine') on the Dar 8 claim. The area was not investigated during this program. It is apparently underlain by glacial till. Sample S-106 contained only 5 ppb Au.

Samples S-104 and S-105 (sample S-105 previously collected by Demontigny) are panned concentrates of sediment trapped in moss in a small tributary creek of the Darling River. The creek is located east of the Darling River on the Dar 9 claim, in an area apparently underlain by granitic rocks of the Jurassic Island Intrusions (Figure 2). A previously obtained panned concentrate sample (Bam No. 5) of material reportedly collected from this creek contained abundant magnetite sand and one flake of gold. Sample Bam No. 5 was analysed by Rossbacher Laboratory Ltd. (certificate no. 87667.A, October 3, 1987) and was found to contain 20.79 g/t



(0.437 oz/T) Au. Sample S-104 contained only 5 ppb Au. Due to its size, sample S-105 was divided into four parts, each part being analysed separately. One part contained 35 ppb Au. The other three parts contained only 5 ppb Au.

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Sample S-107 was collected by the Demontignys. It is reported to be a panned concentrate of stream sediment trapped in moss from a creek crossing the Darling Main road east of the property. Sample S-107 contained 5 ppb Au.



6.0 CONCLUSIONS

Small amounts of placer gold have been found in two creeks (Michigan Creek and a tributary of the Darling River) draining the south flank of the Somerset Range. Michigan Creek is underlain by sheared diorite and possibly by granitic and metamorphosed sedimentary rocks. The tributary of the Darling River is apparently underlain by granitic rocks. Both creeks have large volumes of glacial till in their drainage basins.

Possible sources of the gold are from bedrock (ie. veins, shears, or possibly disseminated throughout a limestone host) or from the glacial till. The gold, however, is quite jagged in form suggesting a short distance of transportation in its free state, and therefore a probable bedrock source.

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Both creeks found to contain placer gold drain into Pacific Rim National Park. The close proximity of the property to the park would make mining in this area difficult. More work, however, is warranted to define the nature and extent of the gold mineralization on the property before obstructions to production are considered.



7.0 RECOMMENDATIONS

7.1 Recommended Work Program

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- The property should be prospected and mapped at a scale of 1:10,000.
- 2) Panned concentrate samples of stream sediment trapped in moss should be collected every 200 m along the entire length of all major drainages (including both creeks with placer gold occurrences).
- 3) Panned concentrate samples of stream sediment trapped in moss should be collected at the mouths of all tributary drainages.
- 7.2 Proposed Phase I Budget

FIELDWORK

875

875

Personnel	No.	Days	Rate	Cost	
Geologist	1	7	425	2,975	
Field Assistants	2	5	150	1,500	
Total Person	nnel	Cost		4,475	4,475
Accommodation 17 mandays (9 55				935
Equipment Rental:	No.	Days	Rate	Cost	
4 x 4 Truck	1	7	110	770	
Rock Saw	1	7	15	105	

Total Equipment Rental



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No.	Rate	Cost			
50	14.00	700.00			
50	13.30	665.00			
10	6.75	67.50			
ytical	Cost	1,432.00	1,433		
phic M	ap		2,500		
			100		
			100		
Subtot	al		4,133		
(15%)			620		
Total			4,753	4,753	
Fieldwork Subtotal					
(15%)				1,656	
tal				12,694	\$12;694
	50 50 10 ytical ophic M Subtot (15%) Total btotal (15%)	50 14.00 50 13.30 10 6.75 Sytical Cost ophic Map Subtotal (15%) Total btotal (15%)	50 14.00 700.00 50 13.30 665.00 10 6.75 <u>67.50</u> Sytical Cost 1,432.00 aphic Map Subtotal (15%) Total btotal (15%)	50 14.00 700.00 50 13.30 665.00 10 6.75 67.50 sytical Cost 1,432.00 1,433 sphic Map 2,500 100 Subtotal 4,133 (15%) 620 Total 4,753 btotal (15%)	50 14.00 700.00 50 13.30 665.00 10 6.75 67.50 sytical Cost $1,433$ sphic Map $2,500$ 100 100 100 100 Subtotal $4,133$ (15%) 620 Total $4,753$ btotal $11,038$ (15%) $1,656$

CONSULTING

Personnel	No.	Days	Rate	Cost			
Geological Consultant	1	l	500	500		500	
Accommodation							
1 day @ 55						55	
Equipment Rental:	NO.	Days	Rate	Cost			
4 x 4 Truck	l	1	110	110		110	
Miscellaneous					100		
Administration (•				15		
Disbursements To	tal				115		
Consulting Sub	tota	1				780	
Contingency (1	5%)					117	
Consulting Tot	al					897	\$ 897

REPORT

Personnel	No.	Days	Rate	Cost
Geologist	1	8	425	3,400
Geologist (Proofing)	1	l	500	500
Geologist (Office Ass	l s't)	1	250	250
Total	Personnel	Cost		4,150

Disbursements

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Drafting Supplies	50		
Drafting	600		
Copying, Reproductions, Binding	400		
Typing	300		
Miscellaneous	100		
Disbursements Subtotal	1,450		
Administration (15%)	218		
Disbursements Total	1,668	1,668	
Report Subtotal		5,818	
Contingency (15%)		873	
Report Total		6,691	\$ 6,691
Estimated Total Proje	ect Cost		\$20,282
Or approximately	7		\$21,000



7.3 Summary of Recommendations

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A reconnaissance-type Phase I exploration program on the Oenic property is recommended. The program should consist of geological mapping, prospecting, and rock and stream sediment (panned concentrate) sampling. This program is estimated to cost approximately \$21,000.00.

Respectfully submitted MPH CONSULTING LIMITED

Gordon J. Allen

Duncan, B.C. December 19, 1987 Gordon J. Allen, P.Geol.



CERTIFICATE

I, Gordon J. Allen, do hereby certify;

- I am a graduate in geology of the University of British Columbia (B.Sc. 1975).
- I have practised as a geologist in mineral exploration for twelve years.
- 3) I am a member in good standing of the Association of Professional Engineers, Geologists and Geophysicists of Alberta.
- Opinions, conclusions and recommendations contained herein are based on fieldwork performed by myself on December 16, 1987.
- 5) I own no direct, indirect, or contingent interests in the subject property, or shares or securities of International Cherokee Developments Limited or associated companies.

Gordon J. Allen

Duncan, B.C. December 19, 1987

Gordon J. Allen, P.Geol.



REFERENCES

- Brandon, M.T., Orchard, M.J., Parrish, R.R., Sutherland Brown, A., and Yorath, C.J. 1986. Fossil ages and isotopic dates from the Paleozoic Sicker Group and associated intrusive rocks, Vancouver Island, British Columbia; in Current Research, Part A, Geological Survey of Canada, Paper 86-1A, pp 683-696.
- Carson, D.J.T. 1968. Metallogenic Study of Vancouver Island with Emphasis on the Relationships of Mineral Deposits to Plutonic Rocks; Ph.D. Thesis, Carleton University.
- Gunnex Ltd. 1966. Mineral Occurrences (Mines, Surface Workings and Showings), E & N Land Grant, Vancouver Island, B.C.; internal company report.
- Isachsen, C. 1984. Geology, Geochemistry, and Geochronology of the Westcoast Crystalline Complex and Related Rocks, Vancouver Island, British Columbia; UBC M.Sc. Thesis, September 1984.
- Isachsen, C. 1987. Geology, Geochemistry and Cooling History of the Westcoast Crystalline Complex and related rocks, Meares Island and vicinity, Vancouver Island, British Columbia; Canadian Journal of Earth Sciences, Volume 24, pp 2047-2064.
- Massey, N. 1987. Geology of the Cowichan Lake Area, NTS 92C/16; Province of British Columbia, Ministry of Energy, Mines and Petroleum Resources, Open File 1987/2.
- Muller, J.E. 1977. Geology of Vancouver Island (West Half); GSC Open File 463.



- Muller, J.E. 1980a. The Paleozoic Sicker Group of Vancouver Island, British Columbia; GSC Paper 79-30.
- Muller, J.E. 1980b. Geology, Victoria Map Area, Vancouver Island and Gulf Islands, British Columbia; GSC Open File 701.
- Muller, J.E. 1981. Insular and Pacific Belts; GAC-MAC-CGU, Annual Meeting, 1981, Calgary. Field Guides to Geology and Mineral Deposits; pp 316-334.
- Muller, J.E. 1982. Geology of Nitinat Lake Map Area, British Columbia; GSC Open File 821.
- Muller, J.E. and Carson, D.J.T. 1969. Geology and Mineral Deposits of Alberni Map-Area, British Columbia (92F); GSC Paper 68-50.
- Neale, T. 1984. Compilation of Mineral Occurrences of the Sicker Group, Vancouver Island, British Columbia; for MPH Consulting Limited.
- Sutherland Brown, A. and Yorath, C.J. 1985. Lithoprobe Profile Across Southern Vancouver Island: Geology and Tectonics, in Field Guides to Geology and Mineral Deposits in the Southern Canadian Cordillera, Geological Society of America, Cordilleran Section Meeting, Vancouver, B.C., May 1985.
- Sutherland Brown, A., Yorath, C.J., Anderson, R.G., and Dom, K. 1986. Geological Maps of Southern Vancouver Island, Lithoprobe 1. Geological Survey of Canada, Open File 1272.
- Walker, R.R. 1983. Ore Deposits at the Myra Falls Minesite; Western Miner, May 1983, pp 22-25.



APPENDIX I LIST OF PERSONNEL AND STATEMENT OF EXPENDITURES

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LIST OF PERSONNEL AND STATEMENT OF EXPENDITURES

The following expenses have been incurred on the Oenic property as defined in this report for the purposes of mineral exploration between the dates of December 16 and December 19, 1987.

PERSONNEL

G.J. Allen, P.Geol.			
Project Manager			
2 1/2 Days @ 425	1,204.17		
J. Getsinger, Ph.D.			
Geologist			
2 Hrs. (est) @ 50	100.00		
Geologist			
3 Hrs. (est) @ 35	115.00		
Total Personnel Costs	1,419.17		1,419.17
Equipment Rental			
4 x 4 Truck 1.5 @ 90	135.00		
Rock Saw 1 day @ 15	50.00		
	150.00		150.00
Accommodation			
1 1/2 days @ 55			82.50
Disbursements			
Analyses:			
10 Rock (Au, ICP) @ 14.00	140.00		
8 Silt (Au, ICP) @ 13.30	106.40		
	246.40	246.40	
Gas		24.98	
Courier and Freight		12.50	
Photocopies, etc.		6.19	



Report Preparation:			
Drafting 3 Hrs. @ 20	60.00		
Typing 20 pgs. @ 5 (est.)	100.00		
Copying and Binding Report (est.)	50.00		
Total Report Disbursements	210.00	210.00	
Miscellaneous		16.26	
Disbursements Subtotal		516.33	
Administration (15%)		77.45	
Total Disbursements		593.78	593.78
Total Project Cost			2,245.45

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APPENDIX II ROCK SAMPLE DESCRIPTIONS AND LITHOGEOCHEMICAL RESULTS

ROCK SAMPLE DESCRIPTIONS AND LITHOGEOCHEMICAL RESULTS

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Sample Number		Description	Au ppb	Ag ppm	As ppm
22808	Location: Rock Type: Material Sampled and Sample Type: Occurrence Size:	Darling Main Road near Klanawa Main Rd. Gabbro Outcrop, Grab 2 m wide zone	5	0.1	3
	ish-grey pyroxene medium greenish- disseminated pyrit 2 mm in diameter, be a dyke hoste	estalline aggregate of stubby dark green- e (?) up to 0.5 cm in diameter (50%), grey plagioclase, 2-3% fine-grained e, 3-4% earthy hematite in masses up to and magnetite (%?). The rock appears to ed in medium-grained granodiorite. Some wide are sheared to a greenish gouge. 53/63 SE.			
22809	Location: Rock Type: Material Sampled and Sample Type: Occurrence Size:	Michigan Creek, South part of Dar 8 Claim Hornblende Feldspar Porphyry Dyke Outcrop, Grab 1 m (<u>+</u>)	5	0.1	3
	2 mm euhedral feld subhedral hornble (largely altered t	ey aphanitic groundmass with 15-20% 0.5- lspar phenocrysts and 10% anhedral to ende phenocrysts up to 1 mm in diameter to chlorite). The rock contains traces a-grained diorite hosts the dyke.			
22810	Location: Rock Type: Material Sampled and Sample Type: Occurrence Size:	Michigan Creek, South Part of Dar 8 Claim Diorite . Outcrop, Grab Greater than 20 m wide zone	5	0.1	2
	crystals up to 1 plagioclase and	trusive rock with 25-30% biotite in mm in diameter, 70% medium bluish-grey traces of fine-grained disseminated is cut by many (several per metre) 1- ed fractures.			MPH

Sample Number	Description	Au ppb	Ag ppm	As ppm	
22811	Rock Type: Sheared Diorite Material Sampled and Sample Type: Outcrop, Grab Occurrence Size: 1 m wide zone	outh Part of Dar 8 Claim	5	0.1	5
	Diorite cut by two shears at 96/70 SE a zone approximately 1 m wide of sof flooded with irregular carbonate st width. The carbonate contains traces	t greenish-grey gouge ringers up to 2 cm in			
22812	Location: Michigan Creek, So Rock Type: Sheared Diorite Material Sampled and Sample Type: Outcrop, Grab Occurrence Size: 30 cm wide zone	outh Part of Dar 8 Claim	5	0.1	4
	Sheared, gougy diorite. Rock alte clay-rich material. Shear orient 126/47 SW.	ered to greenish-grey ation: 93/65 SE and			
22813	Location: Michigan Creek, So Rock Type: Quartz Vein Material Sampled and Sample Type: Float, Grab Occurrence Size: 10 cm cobble	uth Part of Dar 8 Claim	5	0.4	8
	Vuggy, white to dark grey, coarse fine-grained dark blue-grey serici		ppb r 8 Claim 5 forming y gouge 2 cm in 5 r 8 Claim 5 sh-grey SE and 5 r 8 Claim 5		

rock up to 1 cm in diameter. Barren



Sample Number		Au ppb	Ag ppm	As ppm	
22814	Location: Rock Type: Material Sampled and Sample Type: Occurrence Size:	Michigan Creek, South Part of Dar 8 Claim Altered Tuff? Float, Grab 20 cm cobble	5	0.1	2
	(probably mostly light greenish-gre irregular masses	green aphanitic very hard groundmass quartz) hosting indistinctly bounded by grains (?) up to 0.5 mm in diameter, of fine-grained chlorite and 1-2% fine- ced pyrite. The rock could be silicified volcanic rock.			
22815	Location: Rock Type: Material Sampled and Sample Type: Occurrence Size:	Michigan Creek, South Part of Dar 8 Claim Marble (?) Float, Grab 30 cm boulder	5	0.4	2
	irregular rounded (chert?) up to 2	ey fine-grained crystalline calcite with l light green fine-grained hard zones cm in diameter. Up to 2% fine-grained te most commonly associated with the			
22816	Location: Rock Type: Material Sampled and Sample Type: Occurrence Size:	Somerset Main Road, Seabird Claim Siltstone Outcrop, Grab ?	5	0.1	4
	be a shear zone. very fined-grained	ollected by the Demontignys from what may The rock is a medium to dark blue-grey, I soft material with up to 20% fine to tite in irregular masses up to 2 cm in			A

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Sample Number		Description	Au ppb	Ag ppm	As ppm
22817	Location: Rock Type: Material Sampled	Somerset Main, Seabird Claim Rhyolite	5	0.2	<u>69</u>
	and Sample Type: Occurrence Size:	Outcrop, Grab ?			

Light brownish-grey aphanitic groundmass with 5-10% euhedral quartz phenocrysts up to 0.5 mm in diameter. The rock is strongly gossanous on fracture surfaces.





APPENDIX III CERTIFICATES OF ANALYSIS AND ASSAYS ROSSBACHER LABORATORY LTD.

CERTIFICATE OF ANALYSIS

TO : MPH CONSULTING LTD. #2406-555 W.HASTINGS ST. (BOX 12092) VANCOUVER B.C. PROJECT: V99-ICD BAM

TYPE OF ANALYSIS: GEOCHEMICAL

CERTIFICATE#: 87888.A INVOICE#: 80338 DATE ENTERED: 87-12-30 FILE NAME: MPH87888.A PAGE # : 1

RE										Ē	
IX	SAMPLE NAME	Au	I Au	IIAu	III	Au I 	vwt.	gmAu	PPB		
A	22608		S								
A	22809		5								
A	228t0		5								
Δ	22811		5								
A	22812		5								
A	22813		1							_	
A	22814		5								
A	22815		5								
A	22818		5								
é)	22917		5								
Ĥ	51		5								
X	S101	- 33	50				149	9.2			
Х	SICZ		5				141	7.1			
X	S103	478	3O				109	2.9			
Х	<u>\$104</u>		5				-	<u>3.3 _</u>			
X	S105	÷	5	5	55		3 373		15		
X	S106	÷	5	ទ			S15	5.0	5		
Х	£107	¥	5	5	5		401	7.1			
* D	UE TO SIZE OF SAMPLES	5. FRA0	TIONS	WERE		E 96	PARAT	FELY.	Αu	VALUES	HAVE

CERTIFIED BY :

2225 S. SPRINGER AVENUE BURNABY, B.C. V5B JN1 TEL : (604) 299 - 6910

852 E. HASTINGS ST. VANCOUVER B.C. VAA IRA

PHONE (604) 253-3159 FAX (604) 253-1716

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GEOCHEMICAL ANALYSIS CERTIFICATE

LCP - .500 GAAN SAMPLE IS DIGESTED HITH 3ML 3-1-2 HCL-HHC3-HC2 AT YS JEC. C FOR DME HOUR AND IS DILHTED TO ID ML HITH WATEA. THIS LEACH IS PARTIAL FOR NO FE CA P LA CR NG BA TI D ID AND LIBITED FOR NA 8 AND AL. AN DETECTION LIBIT DY ICP IS 3 PPR. - SAMPLE TYPE: SALITION

DATE RECEIVED: JO M 1990 DATE REPORT MAILED: JAN 7, 1988 ASSAYER. ASSAYER. ASSAYER

ROSSBACHER LAD. LTD. PROJECT-07088 File # 80-0012 Page 1 V99

0	SAMPLES	MQ PP5	CU PPN	28 275	ZH PPN	AG PPH	NJ PPN	C1 29%	191 PPN	FE 1	A\$ 29%	U 2011	AN PPR	Tit PPN	SA PPR	rte PFS	53 1999	əi PPR	4 999	CA 1	P I	LA PPH	CR P711	76 1	84 2991	7] 1	9 1915	AL Z	NA 1	K I	16 7911
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