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PAMOREX MINERALS INC. TIMMINS DIVISION REGIONAL EXPLORATION DEPT. MURDOCH CREEK J.V. PROJECT (0519) YEAR END TECHNICAL REPORT - 1990

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JUN 2 5 1992

MINING LANDS BRANCH

Submitted by:

L (NOV

Paul Coad, Senior Project Geologist, Regional Exploration Dept.

February, 1991



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MINING LANDS BRANCH

APPENDICES

Appendix A	Regional Geology
Appendix B	"Geology and Prospecting Report" (August, 1990) on the Murdoch Creek Property by B. Leonard

NOTE: The writer was not directly involved with this project, but was asked to put together this year end technical report for 1990.

COMMODITIES

Au, Ag, Cu and Zn.

DEPOSIT TYPE

Epigenetic vein-type gold and volcanogenic massive sulphides.

LOCATION 32D/SW (48° 09'50N; 79°54'E)

The property is located approximately 8 km east-northeast of Kirkland Lake, Ontario, at the junction of Morissette, Lebel and Arnold Townships.

PROPERTY

The property contains 73 contiguous unpatented mining claims. A claim status report is summarized in Table 1.

OWNERSHIP

Queenston Mining Inc. has the option to earn a 100% interest in the property from Glenn Mullen by spending \$130,000 on payments and exploration expenditures over a five year period. Pamorex Minerals Inc. has the option of earning 51% and operatorship from Queenston. The agreement includes a 2% Net Smelter Royalty to Glenn Mullen.

MINERAL INVENTORY

None.

EXPLORATION EXPENDITURES

Expenditures for 1990 are tabulated in Table 2.



TABLE 1

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MURDOCH UNEEK (0519) CLAIM STATUS REPORT

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			RECORDED	DAYS WORK	DAYS WORK		
CLAIM NO.	TOWNSHIP	STATUS	DATE	COMPLETED	FILED	WORK REQUIRED	DUE DATE
L981926	LEBEL	STAKED	06/22/8/	200	04/1//89-D.D.	LEASE EXTENS.	06/22/93
L981927	LEBEL	STAKED	06/22/8/	200	04/1//89-D.D.	LEASE EXTENS.	06/22/93
L981928	LEBEL	STAKED	06/22/8/	200	04/1//89-D.D.	LEASE EXTENS.	06/22/93
L981929		STAKED	06/22/8/	200	04/17/89-D.D.	LEASE EXTENS.	06/22/93
L981930		STAKED	06/22/8/	200	04/1//89-D.D.	LEASE EXTENS.	06/22/93
L981931		STAKED	06/22/8/	200	04/17/89-D.U.	LEASE EXTENS.	06/22/93
L901932		STAKED	06/22/8/	200	04/17/89-D.D.	LEASE EXTENS.	00/22/93
1001034		STAKED	00/22/0/	200	04/17/09-D.D.	LEASE EXTENS.	00/22/93
1001025		STAKED	00/22/0/	200	04/17/89-U.U.	LEASE EXTENS.	06/22/93
L901933		STAKED	00/22/8/	200	04/17/89-0.D.	LEASE EXTENS.	06/22/93
L901930		STAKED	06/22/8/	200	04/17/89-D.D.	LEASE EXTENS.	00/22/93
1001030		STAKED	00/22/8/	200	04/1//89-D.D.	LEASE EXTENS.	00/22/93
L981938		STAKED	06/22/8/	200	04/1//89-D.D. 04/17/80 D.D.	LEASE EXTENS.	06/22/93
1002310		STAKED	00/22/0/	200	04/1//09-0.D. 04/17/00 D.D.	LEASE EXTENS.	06/22/93
1002320		STAKED	00/22/0/	200	04/17/89-D.D.	LEASE EXIENS.	06/22/93
L902320		STAKED	00/22/0/	10/	04/1//89~D.D.	53 (200 TOTAL)	00/22/92
1082222		STAKED	00/22/07	140	12/10/09-U.U. 04/26/80 SEC 77	50 (200 TOTAL)	00/22/92
1002322		STAKED	00/22/0/	200	04/20/09-3CC //	LEASE EXTENS	00/22/92
L902323		STAKED	00/22/0/	200	04/1//09-D.D. 12/10/80 D.D.	LEASE EXIENS.	06/22/93
1082325		STAKED	06/22/07	101 20	14/10/09-D.D. 04/25/00_550 77	20 (200 101AL)	06/22/92
1082325		STAKED	00/22/07	101.20	13/19/90-D D	30.72 (140 TOTAL)	06/22/91
1002320		STAKED	00/22/07	100	12/10/09-D.D. 12/19/00.D.D.	40 (140 TOTAL)	00/22/91
1082328		STAKED	06/22/07	100	12/10/09-0.0.	40 (140 TOTAL)	06/22/91
1002320		STAKED	00/22/0/	100	13/20/05-0EUL.	40 (140 TOTAL)	06/22/91
1083330		STAKED	00/22/0/	100	12/10/09~D.D. 12/19/90D.D	40 (140 TOTAL)	06/22/91
1982331		STAKED	00/22/0/	100	12/10/09-0.0. 12/10/00.D D	40 (140 TOTAL)	06/22/91
1083333		STAKED	00/22/0/	100	12/10/03°D.D.	40 (140 TOTAL)	00/22/31
1082333		STAKED	00/22/0/	100	12/10/03~U.U. 12/10/00 D D	40 (140 TOTAL)	06/22/91
1082334	LEBEL	STAKED	06/22/07	100	12/10/09-0.0. 12/19/80-D D	40 (140 TOTAL)	06/22/31
1982335	IFAFI	STAKED	06/22/87	100	12/18/89_D D	40 (140 TOTAL)	06/22/91
1982336	I FRFI	STAKED	06/22/87	100	12/10/09-0.0. 12/18/80-D D	40 (140 TOTAL)	06/22/91
1982337	I FRFI	STAKED	06/22/07	100	12/18/80_D D	40 (140 TOTAL)	00/22/31
11111536	I FRFI	STAKED	00/22/07	61	01/04/90_GEOPH	39 (100 TOTAL)	08/10/92
11111537	I FRFI	STAKED	08/10/89	61	01/04/90-GEOPH	39 (100 TOTAL)	08/10/92
1982338	MORRISETTE	STAKED	06/22/87	100	03/20/89-6501	AO (140 TOTAL)	06/22/01
1982339	MORRISETTE	STAKED	06/22/87	100	03/20/89-6F0I	40 (140 TOTAL)	06/22/01
1982340	MORRISETTE	STAKED	06/22/87	100	03/20/89-GEDI	40 (140 TOTAL)	06/22/91
L982341	MORRISETTE	STAKED	06/22/87	100	03/20/89-GEDI	40 (140 TOTAL)	06/22/91
L982342	MORRISETTE	STAKED	06/22/87	100	03/20/89-GEOL	40 (140 TOTAL)	06/22/91
L982346	MORRISETTE	STAKED	06/22/87	100	03/20/89-GEOL	40 (140 TOTAL)	06/22/91
L1111524	MORRISETTE	STAKED	08/10/89	61	01/04/90-GEOPH.	39 (100 TOTAL)	08/10/92
L1111525	MORRISETTE	STAKED	08/10/89	61	01/04/90-GEOPH.	39 (100 TOTAL)	08/10/92
L1111913	MORRISETTE	STAKED	08/10/89	61	01/04/90-GEOPH.	39 (100 TOTAL)	08/10/92
L1111914	MORRISETTE	STAKED	08/10/89	61	01/04/90-GEOPH.	39 (100 TOTAL)	08/10/92
L1111915	MORRISETTE	STAKED	08/10/89	61	01/04/90-GEOPH.	39 (100 TOTAL)	08/10/92
L1111916	MORRISETTE	STAKED	08/10/89	61	01/04/90-GEOPH.	39 (100 TOTAL)	08/10/92
L1111917	MORRISETTE	STAKED	08/10/89	61	01/04/90-GEOPH.	39 (100 TOTAL)	08/10/92
L1111918	MORRISETTE	STAKED	08/10/89	61	01/04/90-GEOPH.	39 (100 TOTAL)	08/10/92
L1111919	MORRISETTE	STAKED	08/10/89	61	01/04/90-GEOPH.	39 (100 TOTAL)	08/10/92
L1111924	MORRISETTE	STAKED	08/10/89	61	01/04/90-GEOPH.	39 (100 TOTAL)	08/10/92
L1111925	MORRISETTE	STAKED	08/10/89	61	01/04/90-GEOPH.	39 (100 TOTAL)	08/10/92
L1111926	MORRISETTE	STAKED	08/10/89	61	01/04/90-GEOPH.	39 (100 TOTAL)	08/10/92
L1111927	MORRISETTE	STAKED	08/10/89	61	01/04/90-GEOPH.	39 (100 TOTAL)	08/10/92
L1111928	MORRISETTE	STAKED	08/10/89	61	01/04/90-GEOPH.	39 (100 TOTAL)	08/10/92
L1111929	MORRISETTE	STAKED	08/10/89	61	01/04/90-GEOPH.	39 (100 TOTAL)	08/10/92
L1111930	MORRISETTE	STAKED	08/10/89	61	01/04/90-GEOPH	39 (100 TOTAL)	08/10/92
L1111931	MORRISETTE	STAKED	08/10/89	61	01/04/90-GEOPH.	39 (100 TOTAL)	08/10/92
L1111932	MORRISETTE	STAKED	08/10/89	61	01/04/90-GEOPH.	39 (100 TOTAL)	08/10/92
L1137044	MORRISETTE	STAKED	12/14/89	61	01/04/90-GEOPH.	39 (100 TOTAL)	12/24/92
L1111920	ARNOLD	STAKED	08/10/89	61	01/04/90-GEOPH.	39 (100 TOTAL)	08/10/92
L1111921	ARNOLD	STAKED	08/10/89	61	01/04/90-GEOPH.	39 (100 TOTAL)	08/10/92
L1111922	ARNOLD	STAKED	08/10/89	61	01/04/90-GEOPH.	39 (100 TOTAL)	08/10/92
L1111923	ARNOLD	STAKED	08/10/89	61	01/04/90-GEOPH.	39 (100 TOTAL)	08/10/92

PAMOREX MINERALS INC. STATEMENT OF 1990 APPROVED EXPENDITURES BY PROJECT AND PROPERTY

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PROJECT NAME:	VICTORIA LAKE	PAMOREX % INTEREST (VESTED):	0%
PROPERTY NAME:	MURDOCH CREEK	PAMOREX % INTEREST (EARNING):	51%
REFERENCE NO.:	0519	<pre>% EXPENDITURES APPLIED:</pre>	100%

ACCT. NO.	DESCRIPTION OF MAJOR	ACTIVITY MINOR	DEC. 31 YTD TOTAL
5513	MANAGEMENT	FEES/LICENCES/TAXES	34.56
5535 5536 5537 5540 5541	GEOLOGY	SALARY/LABOUR TRAVEL/EXPENSES FIELD SUPPLIES FUEL ASSAYS	8,630.01 392.28 58.48 500.00 505.10
5543 5545 5546 5548	TRENCHING	SALARY/LABOUR FIELD SUPPLIES FIELD EQUIPMENT ASSAYS	2,366.82 1,880.71 407.43 660.80
5555	GEOCHEM	WHOLEROCK	545.00
5601	DRILLING	ASSAYS	20.00
TOTAL D	IRECT EXPENDITURES		16,001.19 /
GENERAL	OVERHEAD & ADMIN	ISTRATIVE SERVICES FOR:	
ALL DIR TOTAL 1	ECT EXPENDITURES 990 APPROVED EXPEN	(10% OF \$16,001.19) NDITURES	\$ 1,600.12 \$17,601.31

OPTION PAYMENTS	\$15,000.00 <i>1</i>
TOTAL 1990 APPROVED EXPENDITURES & C	OPTION PAYMENTS \$32,601.31
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APPROVED BY: Acch	APPROVED BY: Kess 1.
NAME: P.G. ROCK GREEN	NAME: <u><i>RFBULAS</i></u>
TITLE: CONTROLLER	TITLE: MILLE PRESIDENT

INTRODUCTION

The earliest recorded holder of the property was Kenacott Gold Mines in 1936.

In 1947, Ronal Red Lake Mines Limited held the grounds, followed by Toranado Mines Limited in 1972.

Rosario Resources Canada Limited performed exploration on the property from 1979-1981.

Queenston Gold Mines held a portion of the claim group in 1980.

Glenn Mullen staked the property in 1988 and optioned it to Exploration Brex for a short period.

In 1990, the property was optioned to Queenston Mining Inc. who joint ventured it to Pamorex Minerals Inc.

A brief description of the regional geological setting in which the Murdoch Creek property is located is included in the appendix to this report. The actual property is located within the Gauthier Group, which has been correlated with the Skead pyroclastics, which mark the uppermost volcanic group in the Lower Supergroup (Jolly, 1978).

WORK DONE

In 1936, Kenacott Kirkland Gold Mines performed 3,000 feet of diamond drilling and 25 feet of shaft sinking.

In 1947, Ronal Red Lake Mines Limited conducted mapping, stripping, trenching and diamond drilling (1,133 feet in 8 holes).

Toranado Mines Ltd. conducted magnetometer and HLEM surveys in 1972.

From 1979-1981, Rosario Resources performed VLF-EM and magnetometer surveys with geological mapping, sampling and diamond drilling (2,409 feet in 7 holes.

In 1980, Queenston Gold Mines drilled 1,297 feet in 2 holes.

In 1988, Exploration Brex conducted geological mapping, magnetic and I.P. surveys, and one drill hole of 452 feet.

In 1989, Glenn Mullen had airborne VLF-EM and magnetometer surveys done. This was followed by one drill hole of 460 feet.

In the summer of 1990, Pamorex Minerals Inc. performed mechanical stripping and detailed mapping/sampling of the main showings that include the Ronal Red Lake Showing and the Murdoch Creek Fault Zone Showing.

RESULTS

Results historically were poor, however, Pamorex sampling returned 0.07 o.p.t. Au over 3.4 feet, over a total length of 35.0 feet at the Ronal Red Lake Showing. A more detailed summary of the 1990 work program is appended in the "Geology and Prospecting Report" (August, 1990) on the Murdoch Creek Property by B. Leonard.

FUTURE WORK

A detailed work proposal and budget for the Murdoch Creek property have not been finalized, however, a tentative plan is to complete additional linecutting, mapping and stripping in the vicinity of the Ronal Red Lake and Murdoch Creek Fault Zone showings.

REFERENCES

Jensen, L.S. and Langford, F.F. (1985)

Geology and Petrogenesis of the Archean Abitibi Belt in the Kirkland Lake Area, Ontario, O.G.S. M.P. 123

Jolly, W.T. (1978)

Metamorphic History of the Archean Abitibi Belt, G.S.C. Paper No. 78-10

REGIONAL GEOLOGY

The stratigraphy in the eastern portion of the Abitibi Belt has been subdivided into two supergroups by Jensen and Langford (1985) - see Figure 1 and Table 1. The two supergroups represent successive volcanic cycles from ultramafic komatiitic volcanism to acid calc-alkalic volcanism. Each cycle is topped by a dominantly sedimentary-tuffaceous sequence which reflects relative quiescence in volcanic activity.

The tectonic regime in which the majority of these rocks are located is one of regional subsidence. The formation of a broad, east-trending synclinal basin is attributed to this subsidence. The Destor-Porcupine Fault Complex forms the north boundary of this basin, and the south side is marked by the Larder Lake Fault Complex (Figure 1).

Late intrusives locally dissect the volcanic/sedimentary stratigraphy. Compositionally, these intrusive rocks range from ultramafic, pyroxenite, diabase and lamprophyre, to diorite, granite and syenite. The mafic and ultramafic varieties tend to be found as sills and/or dikes, whereas the intermediate and felsic varieties form as stocks or batholiths.

Kirkland Lake gold mines are hosted by the Timiskaming Group which is the upper alkalic part of the second cycle. It is comprised of both volcanic, intrusive and sedimentary rocks. Gold mineralization is associated with a steeply dipping, easterly trending structural discontinuity known as the Larder Lake Break. In the Kirkland Lake area the Larder Lake Break is at or close to the south edge of the Timiskaming Group.

TABLE 1

STRATIGRAPHY IN EASTERN ABITIBI BELT

UPPER SUPERGROUP

TIMISKAMING GROUP

BLAKE RIVER GROUP

KINOJEVIS GROUP

STOUGHTON-ROCQUEMAURE GROUP

LOWER SUPERGROUP

PORCUPINE GROUP

Hunter Mine Group (Skead Group Equivalent) Catherine Group

WABEWAWA GROUP

* after Jensen and Langford, 1985

L.S. JENSEN AND F.F. LANGFORD (1985)



Figure ¹. Geological map of the Timmins - Kirkland Lake area.

Approximately 200 feet northeast of the Ronal showing, the Murdoch Creek Fault zone was uncovered by mechanical stripping. Massive pyrite blocks and fragments were found in a 10 to 15 foot thick pyritic section of the fault zone at the western end of the exposure. The massive pyrite is not anomalous in gold or base metals, but the pyritic section of the fault is weakly anomalous in gold.

Northwest of the Ronal showing, a partially infilled shaft was found at the contact between a quartz porphyry intrusive and pillowed mafic volcanics.

The area around the a Ronal Red Lake showing should be mapper in detail, followed by additional mechanical stripping of the Murdoch Creek Fault, the Ronald Red Lake showing and the partially infilled shaft area. Projected costs are estimated at \$10,000.

- 1956: The Ontario Department of Mines published a coloured map (map 53a) at a scale of 1 inch to 100 feet and a geological report (Vol. LIII part 2, 1944) on Lebel Township by A. Maclean.
- 1964: The Ontario Department of Mines published a coloured map (map 2061) at a scale of 1 inch to 1/2 mile and a geological report (GR 29) on Arnold and Katrine Townships by W. A. Hogg.
- 1970: The Ontario Department of Mines published a coloured map (map 2193) at a scale of 1 inch to 1/2 mile and a geological report (GR 84) on Bernhardt and Morrisette Townships by R.J. Rupert and H. L. Lovell.

1972: Toranado Mines Limited

Toronado conducted a fluxgate magnetometer and horizontal loop EM survey in Morrisette and Lebel Townships at the west end of the present claim group. Results were negative.

1979: The area was flown by Questor Surveys Limited at the request of the Ontario

Geological Survey as part of the regional KLIP program at a scale of 1 to 20,000. Maps are available at the mining recorders office in Kirkland Lake.

1979-1981: Rosario Resources Canada Limited

Rosario conducted a large scale reconnaissance program including ground VLF-EM and magnetics, geological mapping, lithogeochemical sampling and diamond drilling over a large block of claims in Morrisette, Arnold and Lebel Townships. 2409 feet of diamond drilling was performed in 7 holes, testing geophysical conductors with negative results. The diamond drill core is available for viewing in the Ministry of Northern Development and Mine's core storage facilities in Swastika, Ontario.

1980: Queenston Gold Mines Limited

Queenston drilled 1297 feet in 2 holes testing airborne EM conductors, just off the east side of the island separating McTavish and Victoria Lakes. Results were negative; no core from this drilling is available.

1988 to present:

The present claim group was staked by Mr. Glenn Mullen who subsequently optioned the block to Exploration Brex Inc. of Val d'Or, P. Q... Brex concluded geological mapping, magnetic and IP geophysical surveys over the property, followed by one diamond drill hole on the property of 452 feet. This hole tested an IP conductor and came up with negative results. The conductor proved to be graphitic

Property

The property consists of 73 contiguous unpatented mining claims in Morrisette, Arnold and Lebel Townships. These claims are subject to an option agreement with Mr. Glenn Mullen where Pamorex can earn 100% interest in the property by payments of \$5000.00 upon signing the agreement; \$10,000.00 on or before 6 months from the date of signing; \$15,000.00 on or before the first anniversary; \$25,000.00 on or before the second anniversary. In addition, a minimum \$75,000.00 expenditure on the property must be made following the second anniversary by spend \$25,000.00 on or before the third, fourth and fifth anniversaries respectively. No over-expenditure can be carried forward to the subsequent year or years.

After the option has been exercised, the vendor (Mr. Mullen) is entitled to a 2% Net Smelter Royalty. If this option agreement is terminated, the property is to be returned good standings for a minimum period of 90 days.

This option agreement is also included in a joint venture agreement between Pamorex Minerals Inc. and Queenston Mining Inc. where Pamorex shall have 51% interest and Queenston shall have 49% interest. Payments made by Pamorex may be charged against the Upper Beaver Joint Venture Agreement. The agreement with Mr. Mullen was signed on March 9, 1990. Claim numbers are listed in Appendix #5.

Exploration History

1936: Kenakott Kirkland Gold Mines Limited

North of McTavish Lake in the eastern parts of Lebel Township, a considerably amount of surface exploration 3,000 feet of diamond drilling and the excavation of a 25 foot deep shaft was performed by Kenakott Kirkland Gold Mines Limited. This exploration work is reported in a note by W. S. Savage (1951) and is described as being along a contact of Keewatin pyroclastics, diorite intrusives and Timiskaming sediments.

1947: Ronal Red Lake Mines Limited

Geological mapping, stripping, trenching and diamond drilling (8 holes totalling 1133 feet) was performed on a northwest trending structure initially uncovered by G. Tough in southeast Morrisette Township. The best reported value was 2.05 oz Au/ton from a grab sample, however no sample locations were documented. The follow up drilling was disappointing. The best result was 0.01 oz Au/ton across 15 feet in sludge. A shaft is located northwest of this showing but no records are available.

M. G. Clarke (date unknown) presented a geological map covering an area 1/2 to 3/4 mile radius from the 1 mile post between Morrisette and Arnold Townships.

Introduction

The Murdoch Creek property, located at the junction of Morrisette, Lebel and Gauthier Townships, Larder Lake Mining Division is controlled and operated 51% by Pamorex Minerals Inc. This property, along with the contiguous Morrisette Creek and Consolidated Thompson-Lundmark West properties form a claim package that is currently under a joint venture agreement with Queenston Mining Inc. This property was acquired to cover a portion of a northwest trending airborne magnetic feature thought to be the contact between the Gauthier Group (calc alkaline felsic pyroclastic rocks) and Kinojevis Group (tholeiitic mafic volcanic rocks) /Timiskaming Group (alkalic felsic volcanic rocks) and sediments). This contact is thought to be a favourable target for either an Upper Beaver type Cu-Au deposit or a volcanogenic massive sulphide deposit. Another favourable exploration target is the northeast trending Murdoch Creek-Kennedy Lake fault zone. This is a splay of the main Kirkland Lake fault and trends through the western part of the property. Several gold showings are located along or adjacent to this structure, but only one, the Ronal Red Lake showing, is covered by the present claim group. This structure has an excellent potential for hosting several gold deposits similar to the Kirkland Lake-Larder Lake area.

The report presents a summary of previous exploration work and results from prospecting, mechanical stripping and sampling on the property. Geological and compilation date are presented on a map at a scale of 1:10,000 included with this report.

Location & Access

The Murdoch Creek property is located at the junction of Morrisette, Lebel and Arnold Townships, Larder Lake Mining Division, Ontario. The west part of the group claim may be accessed by a gravel road running north of the village of King Kirkland, 8 km east of Kirkland Lake. The claims may also be accessed by boat from McTavish Lake at the end of the Bidgood Mine road, approximately 1 km east of King Kirkland.

Topography

Approximately 1/2 of the claim block is covered by McTavish and Victoria Lakes. Of the remaining 2/3, at least half is covered by spruce and alder swamps. The non swamp areas are generally flat to gently rolling hills with local relief of 30 to 40 feet above swamp level.

Stands of spruce, birch and poplar cover most of the higher ground with minor outcrop exposure. Excellent outcrop exposed is present in the southwest end of the property occupied by a large hill.

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APPENDICES

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MAPS

1:10000	Geological Compilation
1:10000	Assay plan to accompany geological compilation
1:10000	Geophysical compilation to accompany geological compilation



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PAMOREX MINERALS INC.

MURDOCH CREEK PROPERTY

MORRISETTE, LEBEL & GAUTHIER TOWNSHIP

LARDER LAKE MINING DIVISION

32-D-4

GEOLOGY AND PROSPECTING REPORT

AUGUST 1990

Qual 2.13841

Submitted by:

Bradly

Bradley C. Leonard, Geologist, Regional Exploration Dept., Pamorex Minerals Inc.



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SUMMARY

The Murdoch Creek property, located at the junction of Morrisette, Lebel and Gauthier Townships is controlled and operated by Pamorex Minerals Inc. The 73 claim package was acquired to cover a portion of a northwest trending airborne magnetic feature thought to be the contact between the Gauthier Group and Kinojevis Group of volcanics in the search for an Upper Beaver Cu-Au type deposit or a volcanogenic massive sulphide deposit.

The Kirkland Lake area is underlain by an east plunging synclinorium comprised of two complete and one incomplete cycles of volcanism. This synclinorium is cut by two major fault systems; the Destor-Porcupine and the Kirkland Lake-Larder Lake Breaks. The latter is host for the major gold deposits in the Kirkland Lake area.

The property is underlain by Keewatin volcanics (subdivided into the Kinojevis Group and Gauthier Group). Timiskaming trachytes and Timiskaming metasediments. Structurally, three trends are present; a northeast trend, represented by the Murdoch Creek Fault zone; a north northeast trend, represented by the Long Lake Fault zone; and a northwest trend, represented by the structure at the Ronal Red Lake showing. The northwest trend appears to be the favourable direction for gold mineralization.

The present survey consisted of reviewing all government assessment data, prospecting and mechanical stripping.

Prospecting, lithogeochemical sampling and airborne geophysical interpretation indicate the presence of a package of rocks under most of Victoria Lake similar to the Gauthier Group of pyroclastic rocks found further east at the Upper Beaver Mine. Due to lack of exposure and geophysical response of the proposed contact area, this portion of the Gauthier Group has a low potential for massive sulphide or Upper Beaver type deposits.

A cluster of airborne EM anomalies on the west part of the claim group has been adequately drill tested by Rosario Resources and Brex Exploration and found to be graphitic horizons in graphitic mafic volcanic breccia host rocks. No further work in this area is required.

Mechanical stripping and detailed mapping of the Ronal Red Lake showing uncovered 0.18 oz Au/ton over 3 feet from a northwest trending shear zone. This same shear averages 0.07 oz Au/ton across 3 to 4 feet for approximately 35 feet before it is cut off northward by a north-northeast fault zone and is covered southward by overburden. shales. Core is presently stored in Val D'or and is available for viewing (contact Mr. Mullen). The property was then returned to Mr. Mullen who conducted airborne magnetics and VLF-EM over the property followed by a diamond drill hole totalling 460 feet, no samples were taken. The core is available for viewing at the MNDM'S core storage facilities in Swastika, Ontario. In March, 1990 the property was optioned by Queenston Gold Mines Inc., who subsequently joint ventured the property with Pamorex Minerals Inc.

Regional Geology

The property lies within part of the Abitibi Orogen consisting of metamorphosed Early Precambrian volcanic, sedimentary and intrusive rocks in an east-plunging synclinorium between the Abitibi and Round Lake Batholiths. Two major east-west trending fault zones cut the northern and southern units of the synclinorium; the Destor-Porcupine Fault Zone and the Kirkland Lake-Larder Lake Fault Zone respectively. The gold deposits of the Kirkland Lake area are related to the latter structure. Regional metamorphism is generally sub-green schist facies.

According to Riddler, 1970, the belt is comprised of two complete and one incomplete cycles of volcanic and plutonic rocks. The oldest rocks (Lower Supergroup) occur near the outer margins. To the southeast of Kirkland Lake these rocks consists of komatiitic, tholeiitic and calc-alkaline volcanics of the Wabawewa, Catherine and Skead Groups respectively, with a basal unit of Pacaud tuffs. The younger, Upper Supergroup volcanic cycle is comprised of komatiitic lavas of the Larder Lake Group, tholeiitic rocks of the Kinojevis Group and calc-alkaline rocks of the Blake River Group. A northwestsoutheast trending wedge of rhyolitic pyroclastic rocks is located east of Victoria Lake, and is thought to be a rhyolitic portion of the Blake River Group called the Gauthier Group. These are unconformably overlain by the important alkaline igneous regional geology rocks of the Timiskaming Group. The Blake River, Kinojevis and Timiskaming Groups are separated by sedimentary rocks comprising chert-carbonate-iron formation, (the Boston iron formation), conglomerate, sandstone and argillites. Trachytic and phonolitic compositions predominate the Timiskaming volcanics which cap the second volcanic sequence. possible third, incomplete volcanic package unconformably overlies the Timiskaming Group, known as the Highway 11 basalts. These volcanics are a relatively thin sequence of tholeiitic pillow lavas and associated gabbroic phases, localized southwest of Kirkland Lake. Algoman intrusive rocks, including dykes and stocks of syenite, monzonite and quartz monzonite cut the volcanic-sedimentary pile. The sequence is south facing, south dipping and is cut by numerous vertical strike faults and crossfaults.

The following represents a list of the most significant producers in the Kirkland Lake camp:

PAST PRODUCERS	TONS	GRADE (Au)
Toburn	1,186,316	0.48 oz/ton
Sylvanite	5,049,446	0.33 oz/ton
Wright Hargreaves	9,934,427	0.48 oz/ton
Teck Hughes	9,565,302	0.39 oz/ton
Kirkland Lake Gold	3,141,651	0.37 oz/ton
Upper Canada	4,735,532	0.32 oz/ton
Chesterville	3,260,439	0.12 oz/ton
Omega	1,615,081	0.14 oz/ton
Bidgood	586,367	0.29 oz/ton
Upper Beaver	558,000	0.23 oz /ton & 1.01% Cu
Lake Shore	16,630,000	0.51 oz/ton

CURRENT PRODUCER

Macassa

6,465,635

0.44 oz/ton

Property Geology

The claim group is underlain by Keewatin volcanic rocks in the north and west part of the property and by Timiskaming volcanics and sediments to the south and east. The contact between these units is interpreted to trend northwest-southwest. Numerous bodies of mafic and felsic intrusives occur throughout the property. There are several major structures cutting the Timiskaming and Keewatin sequences, namely the northeast trending Murdoch Creek-Kennedy Lake fault zone, which is northeast extension of the Kirkland Lake Main Break, plus the north northeast trending Long Lake fault zone.

Keewatin Volcanics

The Keewatin volcanics are present in most areas of the property. These volcanics may be divided into two groups based on textural appearances, the Kinojevis and Gauthier Groups.

The Gauthier Group of rocks are strongly foliated sericite schists with abundant carbonate alteration covering the south eastern portion of the volcanics on the property. This unit weathers light green to buff colour and is exposed on the south shore of McTavish Lake, the island between McTavish and Victoria Lakes and on the point along the north shore of Victoria at the Morrisette, Arnold Township line (previously termed the Misema Lake-Mist Lake fault zone on OGS map 2193. Geochemistry reveals this unit to be chemically similar to the Gauthier Group of rocks found at the Upper Beaver Mine. The Kinojevis Group of volcanic rocks makes up the majority of the exposed Keewatin volcanics. These rocks are typically Fe-tholeiitic pillowed mafic volcanic flows brecciated pillowed flows and hyaloclastites. They are usually dark green massive with minor carbonate and trace to 3% pyrite, usually associated in pillow rims. Pillow top determinations made from prospecting the property appear to be northwest. As these volcanics become more altered in the vicinity of major structures such as the Murdoch Creek fault, the rock becomes strongly foliated and brecciated with the addition of graphitic material along pillow rims and in the breccia matrix.

Timiskaming Volcanics

The Timiskaming volcanics are comprised of generally east-west trending, alkaline, massive and porphyritic trachytic flows. These rocks are generally massive, fine grained, hard, dark red to purple in colour with minor dark green augite crystals, minor white to pink feldspar laths, up to 5% disseminated hematite and nil to 2% disseminated pyrite. These rocks are usually weakly to moderately carbonated weather white to light pink and show the typical trachytic texture of bladed feldspar crystals. The porphyritic phase of the trachytes are anhedral rounded leucite crystals that are white to light pink in colour.

Timiskaming Metasediments

The Timiskaming metasediments are composed of interbedded greywackes, argillites and conglomerates. Bedding is generally 125 degrees, dipping steeply northeast. The interbedded greywackes and argillites are often moderately foliated and have minor to moderate carbonate alteration and weather buff to rusty brown depending on the carbonate content. The argillites show strong sericite alterations in the higher schistose areas. The conglomerates often have red jasper pebbles. There is generally trace to 1% finely disseminated pyrite and chalcopyrite.

Felsic Intrusives

The quartz and quartz feldspar porphyry intrusives are found in the vicinity of the Ronal Red Lake showings north of Victoria Lake and in the western part of the property close to diamond drilling by Rosario Resources and Brex Exploration. These intrusives are commonly light beige-grey in colour, sericitic and silicious with 10 to 15% anhedral to subhedral light translucent grey quartz phenocrysts up to 5/8 inches in size. There is minor carbonate and generally 1 to 2% fine grained disseminated pyrite. Locally there can be up to 20% subhedral white feldspar phenocrysts up to 3/8 inches long.

Mafic Intrusives

Several gabbroic intrusives are found on the claim block; one on the west boundary, north of the proposed Keewatin-Timiskaming contact, one east of the Long Lake fault zone on a peninsula of land on the west side of Victoria Lake and one on the north side of the Misema Lake-Mist Lake fault. These rocks are dark green coarse grained, moderately to strongly magnetic, with 10-20% disseminated magnetite and trace to 1% fine pyrite. Most of the gabbroic body north of the Misema Lake-Mist Lake fault is lighter green with white to light green feldspar and has no magnetite. These bodies are marked by airborne magnetic highs on the OGS KLIP airborne maps.

Structure

Several major fault zones are present superimposed on a subsidiary fold of the main Kirkland Lake-Larder synclinorium. This fold, known as the Spectacle Lake Anticline, trends northwest from the Upper Beaver mine in Gauthier and McVittie Townships to the east shore of Victoria Lake. This structure is also interpreted to be occupied, in part, by the Gauthier Group of pyroclastic rocks (Roberts and Morris 1982).

Three major structural trends cover the rocks of the property. The east-northeast system has the best development and is represented by the Murdoch Creek-Kennedy Lake fault zone. The Murdoch Creek fault zone is a splay from the main Kirkland Lake Break and generally trends 070 degrees.

The second fault system trends north-northeast (approximately 030 degrees) and is represented by the Long Lake fault system. It is uncertain whether the Long Lake fault merges with or is offset by the Murdoch Creek fault.

The third fault system is northwest southeast trending (approximately 120 degrees) and appears the favourable host for gold mineralization. Work done by Ronal Red Lake in the mid 1930's found gold values in association with northwest trending shear zones. There appears to be another structural direction of north-northwest (approximately 345-165 degrees), but it is not as evident as the other structural trends.

Mineralization

The only gold showing on the property, the Ronal Red Lake showing, reported gold values of up to 2 oz. Au/ton in a northwest trending shear zone. There is generally trace to 2% fine pyrite and a narrow 2" to 4" boudinaged quartz vein in a fissile sericite-chlorite-carbonate host. Surface rocks are extremely broken and schistose. No other gold or base metal showings have been reported on the property.

Discussion of Results

Prospecting the property was performed in June and July. Numerous outcrop areas, trench areas and mineralized areas were inspected using assessment data submitted by Rosario Resources and Brex Explorations. Diamond drill core submitted by Rosario Resources to the MNDM core library was reviewed and sampled. Two days of mechanical stripping was performed in early August on the Ronal Red Lake showing and an area approximately 200 feet northeast of the Ronal showing (the Murdoch Creek stripped area). All trench areas examined were overgrown, and sampling was done by scrutinizing the adjacent rock dumps for the most promising samples. Aa total of 95 samples were collected from prospecting drill core sampling plus detailed sampling of the stripped areas and were analyzed for gold, base metals and major elements oxides. Most of the samples collected were analyzed for gold, but only selected samples were analyzed for base metals and major oxide lithogeochemistry. Lithogeochemical results are plotted on the accompanying Jensen diagram for comparison to lithogeochemical results from the Upper Beaver project.

Anomalous gold values in the 200 to 600 ppb range were found in a northwest trending shear during prospecting of the Ronal Red Lake showing area. Northwest of the showing, a partially in-filled shaft was found at or near the contact between a quartz porphyry intrusive and pillowed mafic volcanics. Sampling of trench rubble returned no anomalous gold values.

Two hundred feet northeast of the Ronal showing, graphitic, pyritic, brecciated mafic volcanic samples were collected from several trench rock dumps. Analyses were nil in gold but the graphitic and pyritic nature of the samples was encouraging enough to warrant mechanical stripping.

Prospecting over the majority of the claim group failed to uncover additional mineralization or anomalous gold values. One sample collected in the northwest part of the property (sample 8467) returned a value of 2057 ppm barium in a silicified pyritic mafic volcanic host. This occurrence however, is very localized.

Mechanical stripping on the Ronal Red Lake showing revealed complex structural deformation in strongly sheared pillowed, brecciated and hyaloclastic mafic volcanics (photos 2 & 4). In the deformed areas, the rocks are generally sericite chlorite schists with minor to moderate carbonate alteration. The undeformed areas exhibit excellent hyaloclastic sections and pillow structures (photos 3 & 5). There is generally trace to 2% fine disseminated pyrite whole rock analysis of the host rock shows the mafic volcanics have Fe-tholeiitic affinity.

Three main shear directions were mapped on the exposure (see appendix 4) trending approximately 030, 120 and 165 degrees respectively. All trends appear to have a penetrative fabric in that each shear emerges uninterrupted from intersection with another. Dextral offsets, when present, are up to 3" and are present in all structural trends. Gold values of up to 0.18 oz/ton across 3 feet were found associated with the northwest (120 degrees) trend in the souther part of the exposure. Additional sampling indicates this structure averages 0.07 oz Au/ton across 3 to 4 feet for an exposed length of 35 feet. It is cut off to the north by a 1 to 2 foot wide north northeast (030 degree) structure and plunges into overburden covered to the south.

Stripping at the Murdoch Creek area 200 feet northeast revealed the same rock type as the Ronal showing. As before, host rocks are pillowed, brecciated mafic volcanics (photo 6) altered to strongly sheared sericite, chlorite schists with minor to moderate carbonate alteration and moderate graphitic material.

However, one deformational trend at 070 degree dominates the exposure. At the west end of the stripped area, an intensely sheared section was uncovered, sericitized moderately graphitic and carbonated with 10 to 15% pyrite as blebs, masses and fragments. The largest fragment is 2 feet wide and at least 6 feet long, and follows the foliation. Photo 7 shows a smaller massive pyrite fragment. Photo 8 is a close up-view of the general appearance of the pyrite in the sheared host.

Two samples were collected from the large massive pyrite block and are not anomalous in gold or base metals. Samples from the sheared pyritic rock around the pyrite blocks returned weakly anomalous gold (100 ppb range) and no anomalous base metals. Samples from other parts of the stripped area are not anomalous in gold. Towards the eastern part of the exposed area, a zone of emerald green mica development (fuchsite?) is present, evidently at the southeast edge of the 070 degree trending structural zone. Samples collected from this area are not anomalous in gold. Whole rock analyses from this area shows the samples in the Komatiitic field and are not a true representation of the original undeformed host rock chemistry (see accompanying Jensen plot). This structural zone corresponds to the Murdoch Creek fault zone and is at least 120 feet wide and is open to the west. Diamond drill core inspected in the MNDM core library submitted by Rosario Resources drill tested a group of airborne EM anomalies in the western part of the property. The EM responses are caused by graphite zones up to 10 feet wide in graphitic brecciated pillowed mafic volcanics. The graphite content in the breccia matrix increases towards the graphite zones. Quite often the graphite zones will have up to 10% pyrite as rounded nodules, angular fragments and disseminations. Pyrite content in the surrounding host rocks vary from trace to 5%. Samples taken from these sections are not anomalous in gold or base metals.

Prospecting and lithogeochemical sampling of the Island dividing Victoria and McTavish Lakes plus the area identified as the Misema Lake-Mist Lake fault are comparable chemically and textually to the Gauthier Group of pyroclastic rocks found at the Upper Beaver Mine. These rocks are commonly pale buff to rusty brown weathered surface, moderately to strongly foliated with trace pyrite, moderate carbonate and abundant sericite. Photo 1 shows the weathered surface on the Island in VIctoria Lake. On the north central side of the Island, a narrow east-west trending graphitic-chlorite shear is present in schistose sheared sericitized rocks. This graphitic shear trends into an area of airborne EM conductors located east of the Island. Drilling by Queenston Gold Mines in the area describe the anomalies as graphite horizons and graphitic breccia units in a felsic pyroclastic host. Surface samples taken from the Island and Misema Lake-Mist Lake fault are not anomalous in gold.

Conclusions and Recommendations

Prospecting, lithogeochemical sampling and aeromagnetic interpretation have shown a mass of volcanic rocks beneath Victoria Lake, nosing out westward towards the peninsula between McTavish and Victoria Lakes to be similar to the Gauthier Group of Volcanic rocks at the Upper Beaver Mine. Only one contact of these Gauthier looking rocks was observed in the field and has been termed the Misema Lake-Mist Lake fault zone on OGS map 2193 of Bernhardt and Morrisette Townships. Due to the lack of exposure and lack of geophysical magnetic and EM response with the margins of this package of rocks, this area has a low potential for base metal and Upper Beaver Cu-Au type deposits.

Drill testing of airborne EM anomalies north and east of the island in Victoria Lake by Queenston Gold Mines found the conductors to be graphitic shears and brecciated zones in a felsic (sericitic) fragmental host. These conductors were not adequately drill tested by Queenston, because they appeared to drill almost down dip with core axis angles at 10 to 30 degrees on all foliation and structures. Exploration potential for gold remains good (see report on Consolidated Thompson-Lundmark West Property).

The airborne EM conductors on the west end of the property have been adequately explained by diamond drilling from Rosario Resources and Brex Explorations as graphitic zones and graphitic brecciated mafic pillowed volcanics. No further work is required in this area. Mechanical stripping performed at the Ronal Red Lake showing uncovered a northwest trending shear zone with strongly anomalous gold values over 3 to 4 feet width in a pillowed brecciated pillowed and hyaloclastic mafic volcanic host.

Exploration potential for gold deposition in this area remains good. Detailed channel sampling and outcrop trenching is required to further delineate the structure. Additional mechanical stripping of 2 to 3 days should be performed to locate fault offsets and other similar structures.

Mechanical stripping performed at the Murdoch Creek area uncovered the Murdoch Creek fault zone. Weakly anomalous gold values are associated with a 10-15 foot wide sulphide rich (pyrite) portion of the fault zone. Blocks of massive pyrite with this section are not anomalous in gold or base metals, but are of interest because they may represent part of a massive sulphide deposit somewhere along trend. Exploration potential for gold deposition is good.

Additional mechanical stripping (2 to 3 Days) is required to expose more of the sulphide rich section and western limit of the fault zone. As part of this work, 1 to 2 days mechanical stripping should be done at the old shaft area, northwest of the Ronal showing to explore the gold potential of the contact between the quartz porphyry intrusive and host pillowed mafic volcanics. Detailed mapping should be done over a 3 or 4 claim area surrounding these stripped areas at a scale of 1'' = 100'.

PROPOSED BUDGET

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Line cutting	5 miles @ \$400.00/mile	\$ 2,000.00
Geology mapping	5 days @ \$200.00/day	1,000.00
Mechanical stripping	5 days @ \$880.00/day (10 hours per day)	4,500.00
Washing, sampling, assaying		2,000.00
Subtotal		\$ 9,500.00
Contingencies		500.00
TOTAL		\$10,000.00

REFERENCES

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eres a

Ridler R. H.

1970: Relationship of Mineralization to Volcanic Stratigraphy in the Kirkland-Larder Lakes

Areas, Ontario;

Geological Association of Canada Proceedings Volume 21, P33-42.

Jensen, L. S.; Langford, F. F.

1985: Geology and Petrogenesis of the Archean Abitibi Belt in the Kirkland Lake Area, Ontario Ontario Geology Survey Miscellaneous paper 123.

CERTIFICATE OF QUALIFICATIONS

I, Bradley C. Leonard of 260 Queen's Quay West, Apt. 1502 in the City of Toronto, in the Province of Ontario do hereby certify that:

- 1) I am a graduate of the University of Toronto (1983) with a bachelor of Science degree (B.Sc.) with honours in geological sciences.
- 2) I have been practising my profession as a geologist since 1983.
- 3) I am employed as a Staff Geologist by Pamorex Minerals Inc. and have no interest, directly or indirectly, in the property, Pamorex Minerals Inc. or any of its Joint Venture Partners.
- 4) This report was prepared by me using government maps and reports; miscellaneous data on file in the files of the resident geologist, Ministry of Northern Development and Mines, Kirkland Lake, Ontario, and time spent examining the property.

Bradley C. Leonard B.Sc., Staff Geologist, Pamorex Minerals Inc., Kirkland Lake, Ontario.

August 30, 1990.





FIGURE 2





APPENDIX #1

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Photo 1 Gauthier Group volcanics on Island in Victoria Lake

na Na Na



Photo 2 Intersection of shear structure at Ronal Red Lake stripped area



Photo 3 Pillowed volcanics and hyaloclastite at Ronal Red Lake stripped area



Photo 4 Shear structure at Ronald Red Lake stripped area



Photo 5 Hyaloclastite breccia at the Ronal Red Lake showing



Photo 6 Shearing and deformation at Murdock Creek stripped area



Photo 7 Sulphide blocks in sheared rock Murdock Creek Fault Zone (Murdock Creek stripped area)



Photo 8 Close up of sulphides in Murdock Creek stripped area

APPENDIX #2

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Page 1 of 2

Geochemical Analysis Certificate

0W-0819-RG2

Company: PAMOREX MINERALS INC. Project: 0519 Attn: B. LEONARD

Date: JUN-20-90 Copy 1. HOLD COPY FOR KIRKLAND LAKE 2. FAX RESULTS TO TIMMINS 267-2332

We hereby certify the following Geochemical Analysis of 33 ROCK samples submitted JUN-15-90 by B. LEONARD.

Sample	Au Au	check			
Number	ppb	ppb			
8410 WRA	3				
8411	9	5			
8412	Ni l				
8413	Ni l				
8414	5				
8415	3				
8416	7				
8417	669				
8418	244				
9419	465	360			
6420	2				· · · · · · · · · · · · · · · · · · ·
8421	5				
8422	115	118			
8423	57				
8424	Nil				
8425	77	70			· · · · · · · · · · · · · · · · · · ·
8426	17				
8427	2				
8428 WRA	3				
8429	3				
8430	14				
8431	2				
8432	5				
8433	Ni l				
8434	3				
8435	48	65			
8436 WRA	2				
8437	5				
8438	Ni l				
8439	Nil				
Au was determined usi	ng 1 AT fusions				
	-		H	A.I.	
		Certified by		_mm/	

G. Lebel / Manager

P.O. Box 10, Swastika, Ontario P0K 1T0

Tolophono (705) 649 2944 EAV (705) 649 2900



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Geochemical Analysis Certificate

0W-0819-RG2

Company:PAMOREX MINERALS INC.Project:0519Attn:B. LEONARD

Date: JUN-20-90 Copy 1. HOLD COPY FOR KIRKLAND LAKE 2. FAX RESULTS TO TIMMINS 267-2332

We hereby certify the following Geochemical Analysis of 33 ROCK samples submitted JUN-15-90 by B. LEONARD.

Sample Number p	Au Au pb	check ppb	
8440 N 8441 N			
8442 3	93	225	

Au was determined using 1 AT fusions

Certified by

G. Lebel / Manager

P.O. Box 10, Swastika, Ontario P0K 1T0 Telephone (705) 642-3244 _____FAX (705) 642-3300



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Geochemical Analysis Certificate

0W-0901-RG1

Company:	PAMOREX MINERALS INC
Project:	0519
Attn:	BRAD LEONARD

Date: JUL-04-90 Copy 1. HOLD COPY (567-5056) 2. FAX TO TIMMINS 267-2332

We hereby certify the following Geochemical Analysis of 2 ROCK samples submitted JUN-29-90 by BRAD LEONARD.

Sample	Au Au	check
Number	ppb	ppb
8466 8467 WRA	10 17	10

Au was determined using 1 AT fusions

Certified by

G. Lebel / Manager

P.O. Box 10, Swastika, Ontario P0K 1T0 Telephone (705) 642 2244 FAX (705) 642 2200



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Geochemical Analysis Certificate

0W-1125-RG1

Company:	PAMOREX MINERALS INC.
Project:	0519
Attn:	B. LEONARD

Date: AUG-10-90 Copy 1. HOLD FOR PICKUP PHONE 567-5056 2. FAX RESULTS TO TIMMINS 267-2332

We hereby certify the following Geochemical Analysis of 4 ROCK samples submitted AUG-07-90 by B. LEONARD.

Sample	Au	Au check	Au 2nd	Au check	Ag	Cu	
Number	ppb	ppb	ppb	2nd ppb	ppm	ppm	
8469	186						
8470	15						
8471	. 2						

Au was determined using 1 AT fusions

Certified by

G. Lebel / Manager

P.O. Box 10, Swastika, Ontario P0K 1T0 Telephone (705) 642-3244 FAX (705) 642-3300



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Geochemical Analysis Certificate

0W-1204-RG1

Company: PAMOREX MINERALS INC. Project: 0519 Attn: BRAD LEONARD Date: AUG-29-90 Copy 1. HOLD COPY

2. FAX TO TIMMINS 267-2332

We hereby certify the following Geochemical Analysis of 44 ROCK samples submitted AUG-20-90 by BRAD LEONARD.

Sampie	Au A	u check	Au 2nd A	u check	Ag	As	Ba	Cu	Рь	Zn	
Number	ppb	ppb	ppb	2nd ppb	ppm	ppm	ppm	ppm	ppm	ppm	
8473	257				0.2	1	108	22	21	22	
8474	38										
8475	1097	789									
8476	1035										
8477	62										
8478	31										
8479	4320	5006	5931	6240							
8480	1371										
8481	29										
9482	521										
6483	106										
8484	213										
8485	55										
8486	273	171									
8487	15										
8488	199										
8489	30				0.7	7	172	127	26	125	
8490	113	204			0.9	12	212	55	36	71	
8491	142				0.9	10	178	105	30	113	
8492	17				0.3	11	226	97	12	114	
8493	104				0.1	3	267	118	5	92	
8494	54										
8495	87										
8496	55										
8497	115										
8498 WRA	130										
8499 WRA	7										
8500 not received											
8501	51										
8502	19										
								•••••	•		

Au was determined using 1 AT fusions

Certified by

G. Lebel / Manager

P.O. Box 10, Swastika, Ontario P0K 1T0

Telephone (705) 649 2944 FAX (705) 649 2200



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Geochemical Analysis Certificate

0W-1204-RG1

PAMOREX MINERALS INC. Company: 0519 Project: **BRAD LEONARD** Attn:

Date: AUG-29-90

Copy 1. HOLD COPY 2. FAX TO TIMMINS 267-2332

We hereby certify the following Geochemical Analysis of 44 ROCK samples submitted AUG-20-90 by BRAD LEONARD.

Sampie	Au Au	check	Au 2nd	Au check	Ag	As	Ba	Cu	Pb	Zn	-
Number	ppb	ррь	ррь	2nd ppb	prm	ppin	ppm	ppm	ppm	ppn	
8503	2										
8504	33										
8505	55										
8506	77	69									
96214 no received											
96215	43										
96216	19										
96217	15										
96218	720	686									
96219	27										
9 6220	31										
96221	7										
96222	33										
96223	40										
96224	19										
96225	7										

Au was determined using 1 AT fusions

Certified by

G. Lebel / Manager

P.O. Box 10, Swastika, Ontario P0K 1T0

TAN (COC) CAO 000 (BOE) 040.0044



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Geochemical Analysis Certificate

0W-1220-RG1

Company: PAMOREX MINERALS INC. Project: 0520 Attn: BRAD LEONARD

Date: AUG-23-90 Copy 1. HOLD COPY AND PHONE 567-5056 2. FAX TO TIMMINS

We hereby certify the following Geochemical Analysis of 5 ROCK samples submitted AUG-21-90 by B. LEONARD.

Sample Number	Au ppb
WR-7 WR-8 WR-10	
WR-11 8500	34

Au was determined using 1 AT fusions WRA results to follow

Certified by

G. Lebel / Manager

P.O. Box 10, Swastika, Ontario P0K 1T0



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Geochemical Analysis Certificate

0W-1187-RG1

Company: PAMOREX MINERALS INC Project: 0519 Attn: B. LEONARD

Date: AUG-20-90 Copy 1. W. SMITH 567-5056 HOLD COPY 2. FAX TO TIMMINS 267-2332

We hereby certify the following Geochemical Analysis of 1 ROCK samples submitted AUG-17-90 by W. SMITH.

Sample	Au	Ag	Cu
Number	ppb	ppm	ppm
C-96214	53/57	0.7	153

Au was determined using 1 AT fusions

Certified by

G. Lebel / Manager

P.O. Box 10, Swastika, Ontario P0K 1T0



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Certificate of Analysis

Ce	rtificate No	<u>0W-0819-R(</u>	G2		Date	Aug. 16, 1990	
Re	ceived Jun	e <u>15,199</u> 0)	3		rock samples	
Su	bmitted by Pam	<u>orex Miner</u>	rals Inc.,	Kirkland Lake,	Ontario	proj#05	19
	Att	ention: B.	. Leonard				
<u></u>			WHOLE I	ROCK ANALYSIS			
	SAMPLE NO:	8410	8428	8436			
5i0 ₂	%	63.64	63.74	60.38			
^{Al} 2 ⁰ 3	%	14.84	15.02	14.81			
Fe ₂ 03	x	8.91	4.87	6.26			
Ca0	%	5.99	4.39	4.44			
ິງ	%	2.27	0.68	1.38			
^{Na} 2 ⁰	%	2.66	2.11	2.11			
к ₂ 0	%	0.01	0.71	0.27			
ti0 ₂	%	0.77	0.71	0.77			
Mn0	%	0.16	0.09	0.09			
P2 ⁰ 5	x	0.07	0.07	0.09			
LOI	%	0.62	7.52	9.27			
Ba	РРМ	221	362	203			
Cr	PPM	123	189	271			
NĐ	PPM	<10	<10	<10			
Sr	РРМ	146	94	157			
Y	PPM	<10	<10	<10			
Zr	РРМ	234	294	223			
10TF	ا ر ۹۵ Slight chro:	SCAND Solde Gau omium cont	thich) amination	due to the use	of		

NOTE: Slight chromium contamination due to the us mard chrome steel pulverizer plates.

G. Lebel, Manager/dg

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P.O. Box 10, Swastika, Ontario P0K 1T0

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Telenhone (705) 642-3244 FAX (705) 642-3300



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Assaying - Consulting - Representation

Certificate of Analysis

Cer	rtificate NoOW	-0901-RG1		DateAug. 16.	1990
Re	ceived_June_2	9, 1990	1	rock sample	2
Sut	omitted byPam	orex Minerals Ind	c, Kirkland Lake,	Ontario	proj#0519
At1	tention: B. L	eonard			
		WHO	LE ROCK ANALYSIS		
	SAMPLE NO:	8467			
Si0 ₂	X	57.94			
A1203	X	15.54			
Fe203	%	7.51			
Ca0	%	2.78			
)	×	4.84			
^{14a} 2 ⁰	z	0.56			
к ₂ 0	%	4.67			
Ti0 ₂	¢	0.69			
Mn0	z	0.07			
P2 ⁰ 5	%	0.06			
LOI	%	5.25			
Ba	PPM	2057			
Cr	РРМ	472			
Nb	PPM	<10			
Sr	РРМ	141			
Y	PPM	18			
Zr	PPM	184			
	off of the		· · · · ·		ſ.

NOTE: Slight chromium contamination due to the use of hard chrome steel pulverizer plates.

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G. Lebel, Manager/dg

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Assaying - Consulting - Representation

Certificate of Analysis

Cer	tificate No()W-1205-RGI			Date	Aug 27,	90
Rec	ceived Aug. 20), 1990		66	·	rock s	amples
Sub	mitted by <u>Pa</u>	morex Mine	rals Inc	Kirkland	<u>Lake, Onta</u>	rio	proj#0519
ATTE	NTION: B. Le	onard					
			WHOLE	ROCK ANALY	'SIS		
	SAMPLE NO:	WR-I	WR-2	WR-3	WR-4	WR-5	WR-6
Si0 ₂	ž	52.65	54.09	49.05	50.31	50.11	48.01
A1203	de Re	13.47	15.07	13.77	17.19	13.92	14.39
Fe203	%	10.89	8.69	8.46	9.59	8.25	6.21
CaO	%	9.09	9.81	7.71	5.82	7.74	7.81
J0	oy Ko	6.79	5.11	6.76	4.34	6.73	5.21
Na ₂ 0	er Ko	2.06	2.35	1.28	2.25	1.15	1.98
к ₂ 0	%	0.01	0.01	0.41	0.32	0.27	0.79
ti0 ₂	%	0.84	0.87	0.71	0.89	0.72	0.71
Mn0	×	0.17	0.14	0.15	0.17	0.14	0.12
P205	%	0.08	0.09	0.06	0.08	0.07	0.13
LOI	×	3.86	3.67	11.49	8.91	10.74	14.45
Ba	PPM	18	12	43	79	76	367
Cr	PPM	1094	644	283	364	288	138
Nb	PPM	42	<10	21	24	26	<10
Sr	PPM	140	145	75	106	82	303
Y	PPM	10	<10	<10	<10	<10	<10
Zr	РРМ	142	132	75	101	72	251

^'OTE: Slight chromium contamination due to the use _rd chrome steel pulverizer plates.

Per G. Lebel, Manager/dg



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Established 1928

Assaying - Consulting - Representation

Certificate of Analysis

Ce	rtificate No	OW-122	0-RG1		Date <u>Aug.2</u>	7, 1990
Re	ceived Au	g. 21, 199	0	4	rock	samples
Su	bmitted by	Pamorex Mi	nerals Inc.	. Kirkland	I Lake, Ontario	proj#0520
<u>.</u>	AT	TENTION: B	. Leonard			
			WHOLE I	ROCK ANALY	SIS	
	SAMPLE NO:	WR-7	WR-8	WR-10	WR-11	
Si02	%	46.35	49.91	45.22	45.29	
A12 ⁰ 3	%	19.36	13.59	15.99	17.38	
Fe ₂ 0 ₃	x	10.11	10.41	10.73	10.17	
CaO	%	1.95	5.76	7.79	8.09	
X	%	9.05	7.54	9.79	10.07	
Na ₂ 0	x	5.37	2.89	2.24	2.71	
к ₂ 0	%	0.01	0.01	0.01	0.01	
Ti0 ₂	x	0.91	0.93	0.69	0.54	
Mn0	%	0.08	0.16	0.16	0.15	
P205	%	0.06	0.06	0.06	0.06	
LOI	x	6.61	8.61	7.19	5.44	
Ba	PPM	55	10	<10	<10	
Cr	PPM	399	279	404	556	
Nb	PPM	<10	10	26	<10	
Sr	PPM	98	87	327	658	
Y	PPM	<10	<10	<10	<10	
Zr	PPM	39	55	32	<10	

NOTE: Slight chromium contamination due to the use hard chrome steel pulverizer plates.

Per G. Lebel, Manager/dg

P.O. Box 10, Swastika, Ontario P0K 1T0

APPENDIX #3

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MBER	Property	Stewning cr	SAMPLE DESCRIPTION	ASSAY + COMMENTS
410	Muldah	ISLAND ISLAND MITAVISH L.	H. gry green shared seriests chlorite schuist me appaunt surprises. a hundant pernaning carlenale V unity appravance (dui to carlenale Shoared neck! GRAR.	SUNS
			4 RAS - graphitic when panet you al are - graphitic when pared and chloric - abundant sericit and chloric - nit ruch in the ice should read - tan set monor our of cut in hillard when	Pres
412			- Composition and a 7' unde the son under another a 7' unde - V achitan under aundre aquipite with alundant contents fraderints south alundant contents fraderints	
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414		Ronal Red Lako Showing	GEAR OF TRENCH RUBBLE briffed green ridering gran rollance ina black hard chilly matrix with S-7% duraminated circl initiae py	

AMPLE' MRER	PROPERTY	S Howind of LOCATION	SAMPLE DESCRIPTION	ASSAY + CONNENTS
15	THE C	Round Pedd Lange	Composite chips acrow 2m shear in morning therein shear when when a same rock as 8414.	· Ford 2:
271			Composite clup acreas 1/2 m. - pall errow hard davitic(?) Volcame - matuine Tr Py poor exported most of reach 's origination	Trunch Juricle L 92E 464504
417			H grein Minister (a. Donato rack wild 1-25 time diadon py. Shawig is apprex 110 Consolit i genete dyle?	End oniginal Ronal Sheuring 169 PPS
418			Composite and an arcivity of saminant same a ser- - Uliached Volcaniet,	Fault auguner soner conner
414			ariand runty material no pris- rock. In acreetie	aut of original Kenne Showing.

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MPLE	Property	SHEWING CR LOCATION	SAMPLE RESCRIPTION	ASSAY + COMMENTS
120	NUKLOCH CREEK	Ronah Red Lolu	-quarty rud-by. -3 quarty rud-by. Faldylan graphyre host.	From Erral Share 2 173
121			Compositio grad abundand Journan quarty contant attuingen attud, Maria Maria valcanic host	Cliff Face Night Racht
52	м •	R45 Frann Ruakott Nivos Mitaunt L.	Quarty French Rupple with Frethe Line presentation (1) maine Jose Source and (1) - der Shand	Sec 5/1
53			Same al 3122	Sau 19
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SANDLE RESCHIPTION	- Sitter RUBBLE - Guard, and Carlored matured a - quard, and Carlored hord nocks. Advanted devian py increase with tr-1% devian py increase	Sandar Stirs	And from In quait Loude Willed of 2 1 m west gut house	Tr st. 1. The sub contract of l	4 2 19.10 1 S.J. 10 Same -
Stowints of Location	KEUKKOTT SHAFT FEEL	>	MIST LARE FAUT ON N. Skert of Lak Vickria		
PROPERTY	"Unigor"			<u>·</u>	
ANDLE	125	426	427	428	

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ASSAY + COMMENTS			Seid 2	1.17	
SAMPLE DESCRIPTION	Junido, materical an 8428 and 8429 1 m chill from overgracen git o hilling chart name with another	aprend brance 21m under which "non-closes approx N-S with the undergod grands and 2 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	Show from large quarter flood around At sample & 930 was talentfrom. A forte inclured is submer and	superite clip acres 3m autorid nucl of makin relance of doute had with munin queri num Tr 2py and py 1 munich Macula hundred reins	Comparity chip-grade across 142m of a number theory and across 142m Variate to will a rock V automat nich nich py
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PROPERTY	Windah Crock				
DLE BR	R	3	25	<u>نې</u> .	t M

	ASSAY + COUNENTS	11 5- 817 4-7-7-7-1- 41/2	Cult which which is the	aur 5 ols trunching 5-PPS	na reard MIL both stand to see with	(tatal)
•	SAMPLE DESCRIPTION	11/2m Chip Sampel scrope when up rusty chloritic scriptic mophe version has - oburidart cb octivation v ariston has tr py	Compasition and of Victorial actuition Juncti acticity accluit - pervanian contrande alteration 1-2% diffund Shear trende 055° diffic Newlicell	Comparit grue of a weak of the formation of the formation of the second and the second of the second	- and assisted marker formare whit aware hear about Town	
	Stewindare Location	THAVERSE IN NAVISTRE		Turnchea on Sucr map #2 (Kimakott Wood showing)		
	PROPERTY	L'ALL L				
	MMPLE	Ŕ	36	37	££.	6

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47		Diamond Luilling Ing Resources Resources	Hole LM-79-3 389-394 [19 pp] much snew volcame kneccia (?) un Unde Sney notes and sidences black medicity and sidences and announcies with occurcled from notes	n sa shakar na fan sa shakar sa
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8			Nor LM-79-4 Zerzez 15 PPL Graphitic James 1.26 modulus and clinice Py.	a - o mar a Shiri a Maria Cala Marida ang an sa

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PROPERTY	Rudel		7	
PLE		20	5	

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APPENDIX #4

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APPENDIX #5

LIST OF CLAIMS

CLAIM NUMBER

981926-981938 982318-982337 1111536-1111537 982338-982342 982346 1111524-1111525 1111913-1111919 1111924-1111932 1137044 1111920-1111923

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