



**1985 SUMMARY REPORT**  
on the  
**PIRATE MINERAL CLAIMS**  
**McQUESTEN GOLD PROJECT**  
**091847**

**Stewart Crossing, Yukon Territory**  
**Dawson Mining District**  
**NTS 115 P/ 6**  
**63° 16.5' N Latitude**  
**137° 03' W Longitude**

**Prepared for:**

**MIRAMAR ENERGY CORPORATION**

**Prepared by:**

**D. A. Caulfield, Geologist**  
**C. K. Ikona, P.Eng.**

**June, 1986**

**091847**

This report has been examined by  
the Geological Evaluation Unit  
under Section 53 (4) Yukon Quartz  
Mining Act and is allowed as  
representation work in the amount  
of \$ 8000.00.

*D. G. Emend*

*for* Regional Manager, Exploration and  
Geological Services for Commissioner  
of Yukon Territory.

**McQUESTEN GOLD PROJECT  
SUMMARY REPORT, June 1986**

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## 1.0 INTRODUCTION

Pamicon Developments Ltd. carried out three programs at the request of Miramar Energy Corporation on the McQuesten Gold Project located near Stewart Crossing, Yukon Territory. Interest in the area was sparked by the new discovery of placer gold in a tributary of Lake Creek by Alex Black, a prospector. The programs were initiated to check the possibility of finding lode gold occurrences. Background information on the project is described in a private report by the writers, entitled "Report on Gold Exploration Project" dated April 1985, and in an earlier letter, "Engineering Summary", addressed to Miramar Energy Corp. and dated March 22, 1985.

## 2.0 LOCATION, ACCESS & PHYSIOGRAPHY

The area is located some 20 km southwest of Stewart Crossing, Yukon Territory, on NTS 115 P/6. Coordinates of the property are 63° 16.5 N latitude and 137° 03' W longitude (Figure 1).

Access to the Discovery Creek is by helicopter out of Stewart Crossing on the Klondike Highway. There is not a helicopter stationed at Stewart Crossing, but bases do exist at Mayo, Dawson and Carmacks.

Elevations range from 640 m (2100 ft) at Lake Creek to over 1400 m (4600 ft) at the top of Tonsure Mountain. The topography is relatively gentle throughout the property except for the steep areas in the vicinity of Lake Creek.

A major portion of the coniferous forest cover has been destroyed by a recent fire. Thick alder and willow growth occupy the creek bottoms and higher elevations are covered by subalpine vegetation.

## 3.0 LIST OF CLAIMS

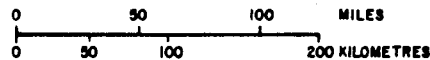
A one-mile lease to prospect and 144 quartz mineral claims were staked in 1985 to cover possible placer and lode deposits. The mineral claims were staked in two stages: 24 claims in June and a further 120 claims in July. Claim names and grant numbers are as follows (see Figure 2):

<u>Mineral Claims</u>	<u>Grant Numbers</u>	<u>Record Date</u>
Pirate 1 to 24	YA87446 - YA87469	June 19, 1985
Pirate 25 to 144	YA87520 - YA87639	July 17, 1985
Larry	7198	June 25, 1985

The lease to prospect and mineral claims all lie within the Dawson Mining District.

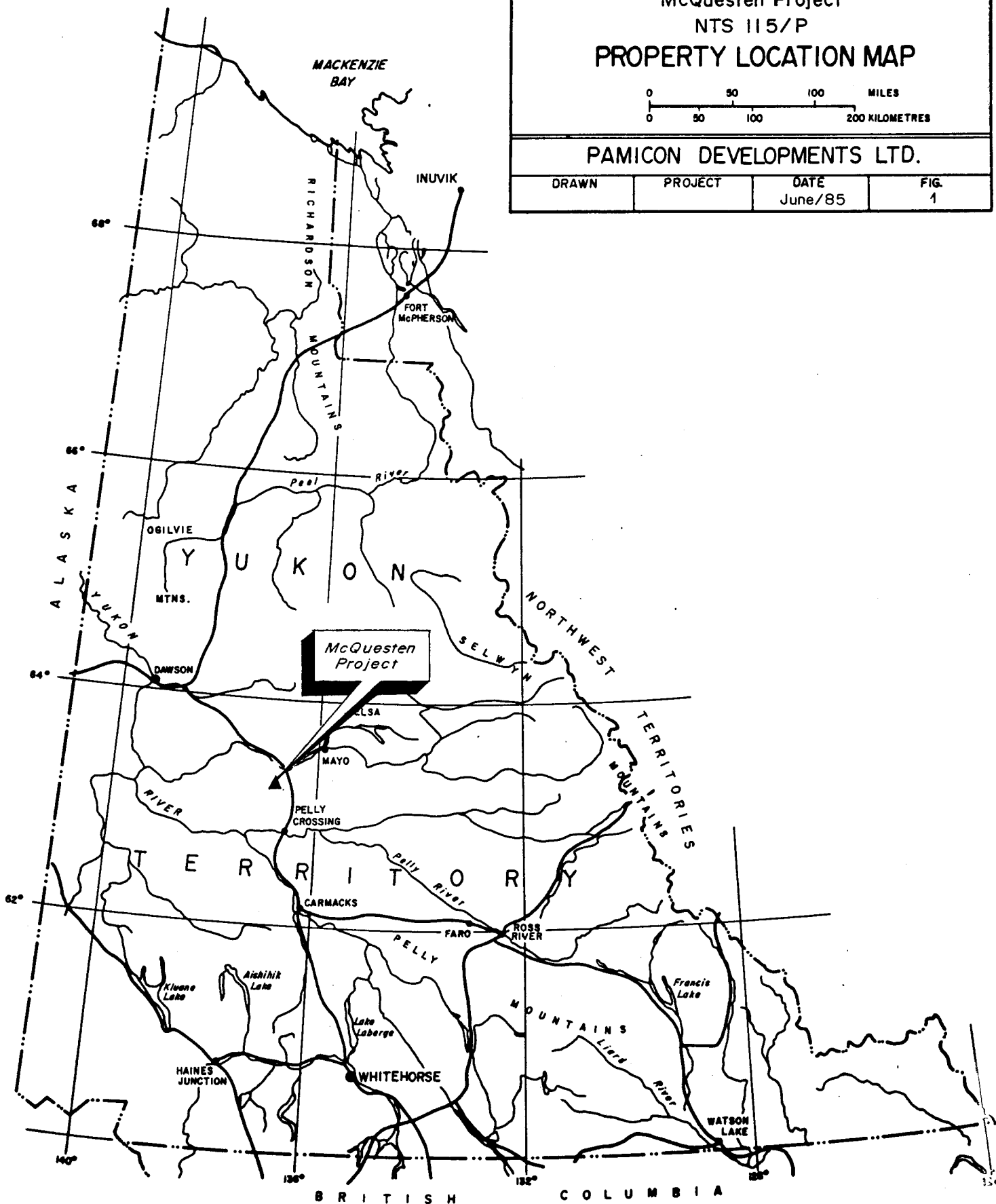
MIRAMAR ENERGY LTD.

McQuesten Project  
NTS 115/P  
PROPERTY LOCATION MAP



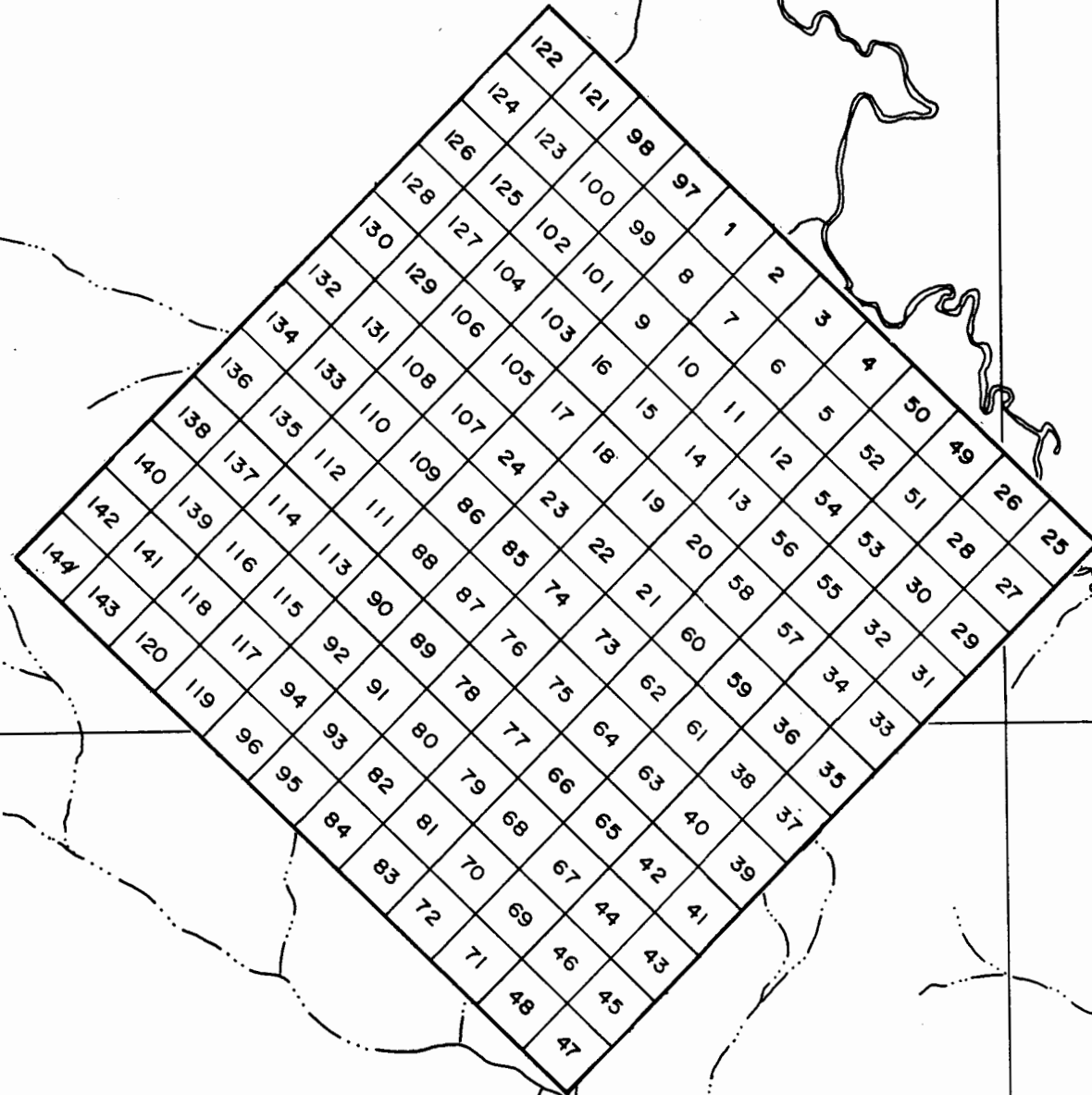
PAMICON DEVELOPMENTS LTD.

DRAWN	PROJECT	DATE	FIG.
		June/85	1





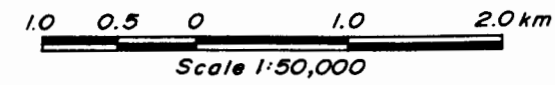
TONSURE  
MOUNTAIN  
X



137°00'

63°15'

Lake Creek



*Miramar Energy Corp.*  
**Claim Map**  
**PIRATE CLAIMS**  
NTS: 115 P/6  
Dawson Mining District  
Yukon Territory  
April, 1986 Figure 2  
Pamicon Developments Ltd.

#### 4.0 GEOLOGY

The area of interest lies within the Yukon Cataclastic Terrane to the southwest of a prominent structural break: the Tintina Trench. Federal government mapping of the area was completed by H. S. Bostock and was presented in published form in 1964 as GSC Map No. 1143A - McQuesten (1:250,000).

Prospecting revealed that very little outcrop exists. Most of the land surface is covered by a thick Tertiary alluvial blanket.

Two rock types were located during the field investigation. Both units are intrusive in nature and are distinguished by different compositional makeup. One of these units is a basic intrusive of dioritic or gabbroic composition. It is dark green in colour, with a strong mafic component that has been altered to epidote and chlorite. Outcrop of this type is confined to the most northeasterly creek prospected and to the high knobs at the head of the other two drainages.

The second unit is a granodiorite which underlies most of Tonsure Mountain and forms the steep terrain near Lake Creek. The weathered outcrops of this rock type crumble easily and are stained a rusty brown colour from the decomposition of biotite grains. Exposures below the camp exhibit ghost-like xenoliths within the matrix of granodiorite, indicating an apparent close proximity to the intrusive margin.

#### 4.1 Rock Geochemistry

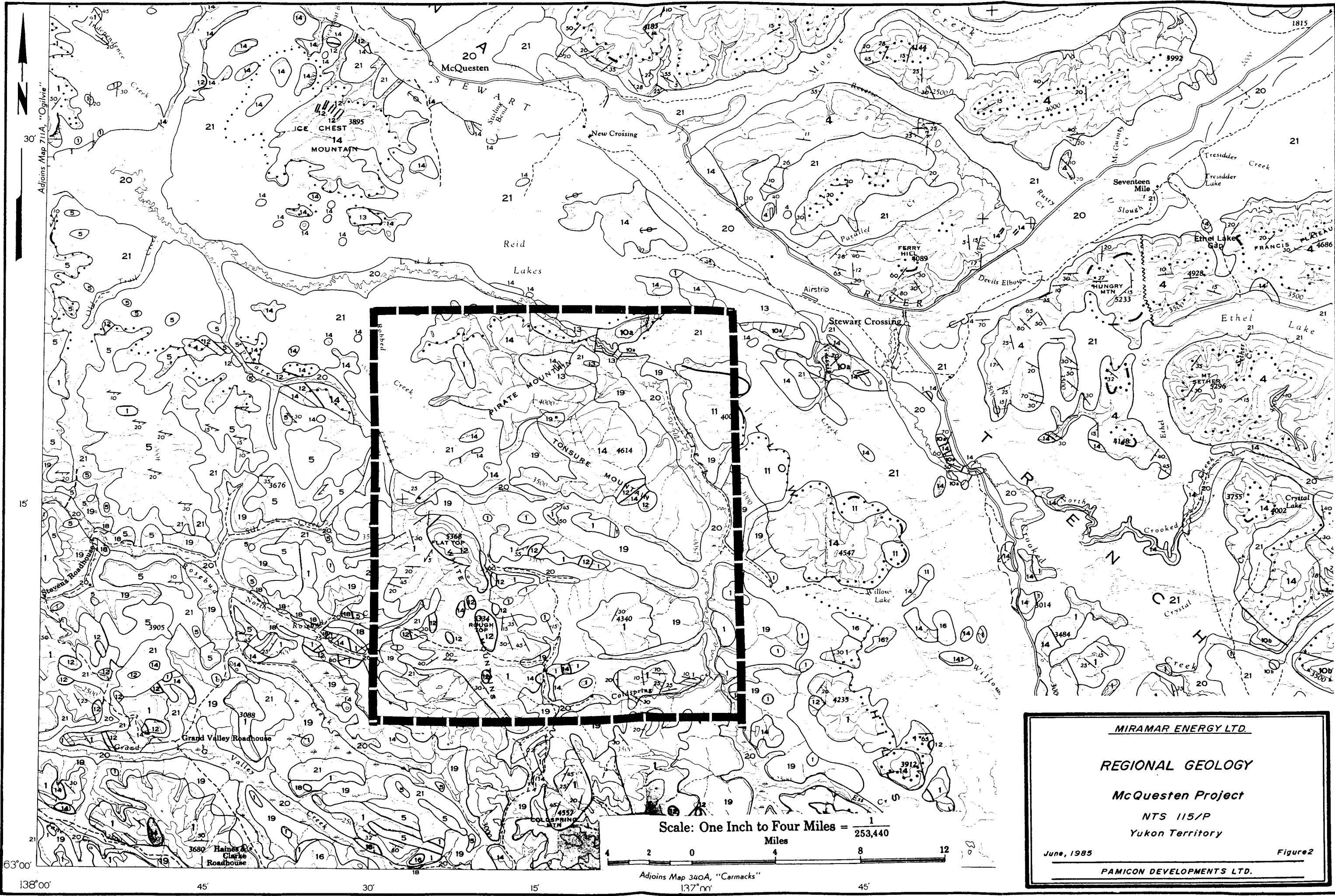
Eleven rock samples were collected from exposures of the two units in the general area. Gold and ICP analysis of the grab samples did not reveal any economic metal values above the expected background levels. Minor disseminated pyrite was observed in both rock types. Sample descriptions are tabled in Appendix I.

#### 5.0 ALLUVIAL TESTING

Three testing programs were initiated during the summer of 1985. The first property examination was committed to investigating the lode gold possibilities due to the nature of the placer gold discovered by the prospector, Alex Black. Heavy overburden cover negated the use of standard hard rock prospecting techniques so the next programs were devoted solely to confirming the initial promising results. A review of all three of the programs is listed below:

##### June 7 thru 17, 1985

The discovery pit (Pit #2) at camp and a second area 500 m upstream were examined. Despite the heavy ice accumulations over the creek, permafrost and poor equipment set-up, a number of spectacular gold-laced quartz fragments (+20 mesh) and angular nugget pieces were recovered from the upper area (Pit #4). The largest quartz fragment



**MIRAMAR ENERGY LTD.**  
**REGIONAL GEOLOGY**  
**McQuesten Project**  
 NTS 115/P  
 Yukon Territory  
 June, 1985 Figure 2  
**PAMICON DEVELOPMENTS LTD.**

Scale: One Inch to Four Miles =  $\frac{1}{253,440}$   
 Miles

138°00'      45'      30'      15'      137°00'      45'

## LEGEND

	<b>QUATERNARY POST-GLACIAL</b>		
	20	Stream deposits, alluvium	
			21
			Surficial deposits undivided
	<b>TERTIARY AND LATER PLIOCENE(?) AND LATER</b>		
	19	Stream deposits, alluvium; 19a, "White Channel gravel"	
	<b>SELKIRK GROUP</b>		
	18	Basalt, andesite	
CENOZOIC	<b>TERTIARY LATE TERTIARY</b>		
	17	17a, rhyolite, trachyte; 17b, granite and syenite porphyries, trachyte	
	<b>EOCENE(?) OR LATER CARMACKS GROUP</b>		
	16	Andesite, rhyolite, trachyte, dacite	
	<b>EOCENE(?)</b>		
	15	Conglomerate, arkose, sandstone, silt, clay	
	<b>JURASSIC AND/OR CRETACEOUS COAST INTRUSIONS (13, 14)</b>		
	14	Granite, granodiorite, quartz monzonite	
	13	Syenite, monzonite	
	12	Gabbro, peridotite, serpentine, diorite	
MESOZOIC	<b>CARBONIFEROUS (?) TO (?) CRETACEOUS</b>		
	11	Andesite, trachyte	
	10	10a, conglomerate, chert, tuff, slate; 10b, phyllite, quartzite; 10c, quartzite, chert, phyllite, limestone	

	5	<b>KLONDIKE GROUP</b> Schist, orthogneiss	
	4	<b>YUKON GROUP (1-4)</b> Schist, quartzite, phyllite, limestone	
	3	Schist, quartzite, limestone	1
	2	Quartzite, schist	Paragneiss, quartzite, schist, phyllite, limestone
PROTEROZOIC			

<p>Geological boundary (approximate, assumed) </p> <p>Limestone of various ages </p> <p>Bedding, tops known (inclined, overturned) </p> <p>Bedding, tops unknown (horizontal, inclined, vertical) </p> <p>Schistosity, foliation (inclined, vertical) </p> <p>Fault (defined, approximate, assumed) </p> <p>Anticline </p> <p>Glacial striae </p> <p>Drumlin (direction of ice movement known) </p> <p>Limit of last glacial advance (defined, approximate) </p>	
--	--

Geology by H. S. Bostock, 1946-1949

Cartography by the Geological Survey of Canada, 1963

<p>Main road </p> <p>Winter road or cart track </p> <p>Trail or portage </p> <p>Bridge </p> <p>Horizontal control point </p> <p>Warm spring, temperature indicated </p> <p>Intermittent stream </p> <p>Marsh </p> <p>Contours (interval 500 feet) </p>	
--	--

Base-map compiled and drawn by the Surveys and Mapping Branch

Mean magnetic declination, 33° 00' East, decreasing 3.9' annually. Readings vary from 31° 42' in the SW corner to 33° 18' in the NE corner of the map area

measures 1 inch (2.54 cm) and weighs approximately 1/3 troy ozs (about 10 gms). Despite finding these larger pieces, there was a definite lack of fine (-20 mesh) gold grains. Those examined were well flattened and rounded.

One day was spent investigating an adjacent creek immediately to the north. Gravels from the creek bottom (Pit #5) and material from a bench high on the north side of the creek were tested. Less than 10 fine colours in total were collected from both areas. A creek lease to prospect (one mile) and the Pirate 1 to 24 lode mineral claims were staked at this time.

### **July 2 thru 6, 1985**

Three days were expended retesting Pits #2 and #4 to confirm the excellent results found during the two previous investigations. A jackknife sluice box made of aluminum construction was utilized for ease of set-up and portability. Features include:

- o washbox with 2½" grizzly and a 3" suction dredge attachment
- o two 4' X 14" boxes equipped with Hungarian riffles and Astroturf (upper box), indoor/outdoor matting (lower box)
- o entry to lower box screened to -3/8"
- o 2" discharge water pump driven by 5 hp Briggs & Stratton motor.

Recovered gold from the three days of testing was disappointing and amounted only to a few fine gold colours. Further claim staking was contracted at this time, bringing the total of lode claims to 144.

### **August 23 thru September 3, 1985**

A final detailed program was commissioned to examine four areas on Discovery Creek from the mouth of the creek up to Pit #4. The same portable sluice operation as utilized during the July program was used. Test material was entered into the sluice system by both shovelling and dredging. No coarse gold nuggets were recovered from any of the areas tested. Descriptions of the pit runs are as follows:

#### **Pit #1**

Testing was conducted where the gradient of Discovery Creek flattens, near its confluence with Lake Creek.

Bank measure: 1 yd<sup>3</sup>  
Recovery: 4 - 5 fines

#### **Pit #2**

Location of original discovery pit.

Bank measure: 3 yd<sup>3</sup>, of which 90% was less than 3/8"  
Recovery: 16 fines

**Pit #3**

This location is where the creek makes a strong southerly flexure. Testing was confined to creek bottom as the bank material consisted mainly of sand.

Bank measure: 1.5 yd<sup>3</sup>

Recovery: 6 - 8 fines

**Pit #4**

This 'upper' pit is the area where the large gold-bearing quartz fragments were found earlier in June.

Bank measure: 5 yd<sup>3</sup>

Recovery: 4 fines.

A section of the surficial deposit tested is best exposed in Pit #4. The excavation uncovered approximately 2 m of interbedded sand and gravel layers exhibiting waterlain, graded, and cross bedding textures. The particulars of the exposed section is described below:

organic cover	
grey sand & organics	0.5 m
weakly oxidized sand, <u>pebble</u> and minor cobbles	0.4 m
grey sorted silt, sand and organics	0.25 m
rusty, oxidized cobbles, pebbles well-rounded exotic material	0.30 m
grey green, pebbles, cobbles mainly of gabbroic composition grading into similar but fine-grained material & permafrost, strong decaying odor.	0.5 m
	organic layer

Panning concentrates were characterized by a low magnetite content and an abundance of red garnet, olivine and pyroxene minerals. The last two minerals are likely derived gabbroic intrusions nearby. Pyrite, often cubic, was only sulphide identified.

## 6.0 STREAM GEOCHEMISTRY

Four tributaries of Lake Creek were investigated by using conventional silt and heavy mineral concentrate sampling techniques. A detail study was conducted on the Discovery Creek and the next tributary north by taking silt samples every 200 m and heavy mineral concentrates at 1000 m spacings as conditions permitted.

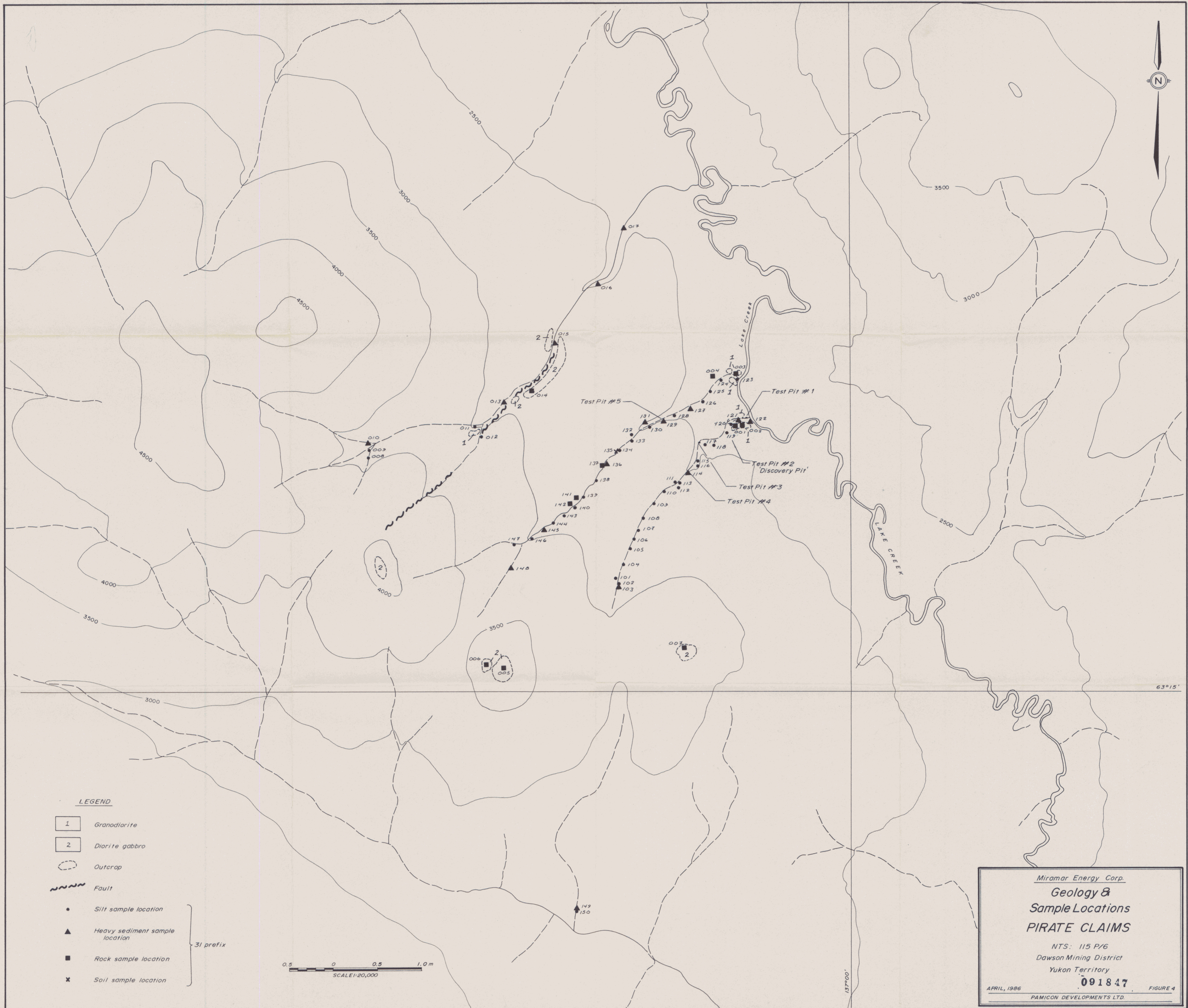
Heavy mineral concentrates were utilized to mechanically eliminate the effect of dilution by more common rock-forming silicate minerals. The resulting concentrate will contain more of the higher specific gravity minerals (ie. gold) that may be resistant to chemical and mechanical destruction, therefore being missed in conventional silt sampling. The sample medium was collected by screening to -20 mesh and panning beneath the water surface, after which the heavy fraction was placed in clear plastic sample bags. Further treatment was completed before ICP analysis in which the magnetic portion was removed at VanGeochem Laboratories Ltd. (Vancouver, BC).

None of the geochemical results indicated any anomalies for the major metal groups (Appendix II). All values including gold were within expected background levels considering the bedrock and surficial geology.

## 7.0 DISCUSSION AND RECOMMENDATIONS

The assessment of the Pirate claims to date has proven to be quite frustrating in that the earlier, promising results could not be repeated during later follow up programs. Rock and stream geochemistry have not indicated the source of the gold found by the prospector or uncovered during the first field program. The gold was extremely angular, occasionally crystalline, and associated with quartz vein material. They were, however, located in or on a thick blanket of Tertiary alluvium, consisting of mature mixed sand and gravel layers. In this type of environment, one would not expect to find such coarse rough-edged gold nuggets. Additionally, the small amount of fine gold recovered was scaly in nature, indicating a considerable distance of transport. Another perplexing aspect of the occurrence is that no base metal anomalies were revealed by the heavy mineral concentrate despite the fact that galena grains were identified in the original concentrate supplied by the prospector (Appendix III).

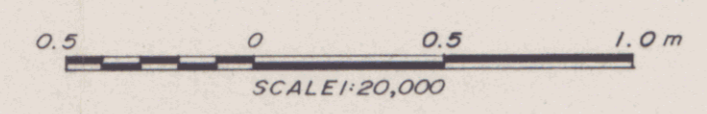
A single explanation concerning the mode and source of this gold is offered to account for uniqueness of this occurrence. A gold-bearing quartz pebble must have travelled to the discovery area relatively intact before disintegrating into a number of smaller, angular pieces. The unusual nature of the gold and the isolated occurrence suggests the bedrock source may not be close at hand.



LEGEND

- 1 Granodiorite
- 2 Diorite gabbro
- Outcrop
- ~~~~ Fault
- Silt sample location
- ▲ Heavy sediment sample location
- Rock sample location
- ✕ Soil sample location

} 3l prefix



Miramar Energy Corp.  
**Geology & Sample Locations**  
**PIRATE CLAIMS**  
 NTS: 115 P/6  
 Dawson Mining District  
 Yukon Territory  
**091847**  
 APRIL, 1986 PAMICON DEVELOPMENTS LTD. FIGURE 4

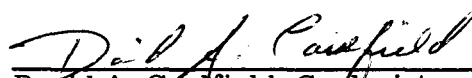
63°15'

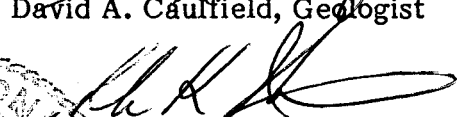
137°00'

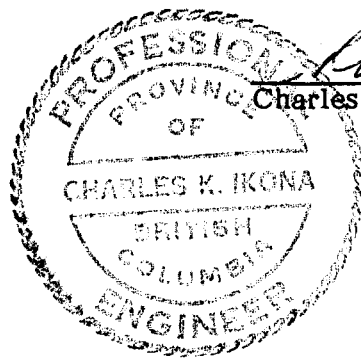
No further hardrock exploration is recommended at this time as preliminary exploration studies have not generated any encouraging results. The gold occurrences are so erratic that usual sampling techniques have failed to produce consistent results.

Any further work contemplated on the property should aim towards locating the source of this material, although, given the extensive overburden cover and the low possibility of identifying the source area with any degree of accuracy, it is difficult to envision any sort of cost effective exploration program to accomplish this.

Respectfully submitted,

  
\_\_\_\_\_  
David A. Caulfield, Geologist

  
\_\_\_\_\_  
Charles K. Ikona, P.Eng.



June 1986  
Mrmr#1:pab

**APPENDIX I**

**ROCK SAMPLE DESCRIPTIONS**



**APPENDIX II**

**GEOCHEMICAL CERTIFICATES**



# VANGEOCHEM LAB LIMITED

MAIN OFFICE  
1521 PEMBERTON AVE.  
NORTH VANCOUVER, B.C. V7P 2S3  
(604) 986-5211 TELEX: 04-352578

BRANCH OFFICE  
1630 PANDORA ST.  
VANCOUVER, B.C. V5L 1L6  
(604) 251-5656

REPORT NUMBER: 85-01-029

JOB NUMBER: 85110

PANICON DEVELOPMENTS LTD.

PAGE 1 OF 1

SAMPLE #	Au	Pb
31001	5	
31002	nd	
31003	nd	
31004	5	
31005	nd	
31006	nd	
31007	5	
31014	nd	
31137	5	
31141	5	
31142	5	

} all rock samples

DETECTION LIMIT

5

nd = none detected

-- = not analysed

is = insufficient sample



# VANGEOCHEM LAB LIMITED

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BRANCH OFFICE  
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(604) 251-5656

REPORT NUMBER: 85-01-030

JOB NUMBER: 85111

PAMICON DEVELOPMENTS LTD

PAGE 1 OF 2

SAMPLE #	Au
	000
31008 (SILT)	nd
31009 (SILT)	10
31010 (HEAVY SED)	nd
31011 (SILT)	nd
31012 (SILT)	nd
31013 (HEAVY SED)	nd
31015 (HEAVY SED)	15
31016 (HEAVY SED)	nd
31017 (HEAVY SED)	nd
31114 <del>(SILT)</del> (HEAVY SED)	nd
ED001SS-31101E (SILT)	nd
ED002SS-31102 (SILT)	nd
ED003HS-31103 (HEAVY SED)	nd
ED004SS-31104 (SILT)	nd
ED005SS-31105 (SILT)	nd
ED006SS-31106 (SILT)	nd
ED007SS-31107 (SILT)	nd
ED008SS-31108 (SILT)	nd
ED009SS-31109 (SILT)	nd
ED010SS-31110 (SILT)	nd
ED011SS-31111 (SILT)	nd
ED012SS-31112 (SILT)	nd
ED013SS-31113 (SILT)	nd
ED015SS-31115 (SILT)	nd
ED016SS-31116 (SILT)	nd
ED017SS-31117 (SILT)	nd
ED018SS-31118 (SILT)	nd
ED019SS-31119 (SILT)	nd
ED021SS-31120 (SILT)	nd
ED022HS-31121 (HEAVY SED)	nd
ED023HS-31122 (HEAVY SED)	nd
ED024SS-31123 (SILT)	nd
ED025SS-31124 (SILT)	nd
ED026SS-31125 (SILT)	nd
ED028SS-31126 (SILT)	nd
ED029HS-31127 (HEAVY SED)	10
ED030SS-31128 (SILT)	10
ED031HS-31129 (HEAVY SED)	nd
ED032SS-31130 (SILT)	nd

DETECTION LIMIT 5

nd = none detected

-- = not analysed

is = insufficient sample



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(604) 251-5656

REPORT NUMBER: 85-01-030

JOB NUMBER: 85101

PAMICON DEVELOPMENTS LTD

PAGE 2 OF 2

SAMPLE #	Au
	000
ED033HS-31131 (HEAVY SED)	nd
ED034SS-31132 (SILT)	20
ED035SS-31133 (SILT)	nd
ED036SS-31134 (SILT)	nd
ED037SOIL-31135	nd
ED038HS-31136 (HEAVY SED)	nd
ED040SS-31138 (SILT)	nd
ED041SS-31139 (SILT)	nd
ED042SS-31140 (SILT)	10
ED045SS-31143 (SILT)	nd
ED046SS-31144 (SILT)	nd
ED047HS-31145 (HEAVY SED)	nd
ED048SS-31146 (SILT)	nd
ED049SS-31147 (SILT)	nd
ED050SS-31148 (SILT) (HEAVY SED)	nd
ED051HS-31149 (HEAVY SED)	nd
ED052SS-31150 (SILT)	nd

DETECTION LIMIT

5

nd = none detected

-- = not analysed

is = insufficient sample

MAIN OFFICE: 1500 BOMBORTON AVE., WASHINGTON, D.C. 20005  
 BRAND OFFICE: 1600 SANDRA ST., WASHINGTON, D.C. 20005

ICAP GEOCHEMICAL ANALYSIS

A .5 GRAM SAMPLE IS DIGESTED WITH 5 ML OF 30% HCL TO ACID TO RED AT 95 DEG. C FOR 30 MINUTES AND IS DILUTED TO 50 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR SA, NA, FE, CA, P, CR, MG, BA, PE, AL, NA, K, W, PT AND SR. AL AND PE DETECTION IS 3 PPM.  
 IS= INSUFFICIENT SAMPLE, ND= NOT DETECTED, NA= NOT ANALYZED

COMPANY: PAMICON DEVELOPMENT LTD.  
 ATTENTION: MR. DON PENNER  
 PROJECT: MIRAYAP

REPORT#: 85-01-030  
 JOB#: 85111  
 INVOICE#: 8657

DATE RECEIVED: 85/06/02  
 DATE COMPLETED: 85/06/25  
 COPY SENT TO: PAMICON

ANALYST *W. Rums*

PAGE 1 OF 2

SAMPLE NAME	AG PPM	AL %	AS PPM	AR PPM	BA PPM	BI PPM	CA %	CD PPM	CE PPM	CR PPM	CU PPM	FE %	K %	MG %	NA PPM	ND PPM	NI PPM	P %	PE PPM	PD PPM	PT PPM	SB PPM	SN PPM	SR PPM	U PPM	V PPM	ZN PPM
31008	.1	1.31	ND	ND	138	ND	.07	.1	5	23	9	1.79	.05	.50	165	ND	.05	14	.06	5	ND	ND	ND	ND	ND	ND	44
31009	.1	1.38	7	ND	198	ND	.07	.1	3	22	11	1.73	.06	.34	199	1	.16	11	.05	8	ND	ND	ND	ND	ND	ND	38
31010	.2	1.47	ND	ND	169	ND	.08	.2	8	17	14	1.96	.06	.49	295	1	.16	9	.05	6	ND	ND	ND	ND	ND	ND	41
31011	.2	1.24	3	ND	176	ND	.06	.1	6	19	5	1.70	.08	.38	327	1	.14	11	.06	9	ND	ND	ND	ND	ND	ND	46
31012	.1	.71	ND	ND	134	ND	.05	.1	1	15	3	.91	.04	.26	93	ND	.08	6	.05	4	ND	ND	ND	ND	ND	ND	27
31013	.2	.83	ND	ND	127	ND	.08	.1	3	14	4	1.18	.05	.28	169	ND	.10	5	.05	5	ND	ND	ND	ND	ND	ND	29
31015	.1	.99	3	ND	113	ND	.05	.1	6	15	6	1.63	.06	.33	360	1	.10	6	.05	6	ND	ND	ND	ND	ND	ND	48
31016	.1	.88	5	ND	138	ND	.02	.1	7	16	8	1.63	.06	.33	387	1	.08	8	.05	7	ND	ND	ND	ND	ND	ND	36
31017	.2	.62	6	ND	118	ND	.09	.1	3	13	5	1.09	.06	.23	179	ND	.09	6	.06	6	ND	ND	ND	ND	ND	ND	38
31114	.2	.68	5	ND	198	ND	.08	.1	5	59	7	1.26	.08	.32	210	1	.14	17	.10	8	ND	ND	ND	ND	ND	ND	42
ED00155-31101E	.1	.88	3	ND	186	ND	.03	.1	2	20	9	1.32	.05	.26	122	ND	.11	9	.07	3	ND	ND	ND	ND	ND	ND	27
ED00255-31102E	.1	.82	ND	ND	248	ND	.01	.1	2	20	6	1.09	.05	.25	105	1	.05	8	.07	4	ND	ND	ND	ND	ND	ND	31
ED00345-31103E	.1	.56	ND	ND	162	ND	.07	.1	1	12	2	.75	.04	.20	76	ND	.07	5	.07	2	ND	ND	ND	ND	ND	ND	28
ED00445-31104E	.2	.57	ND	ND	155	ND	.07	.1	1	15	2	.81	.05	.21	62	ND	.08	5	.06	3	ND	ND	ND	ND	ND	ND	22
ED00555-31105E	.1	.65	5	ND	165	ND	.05	.1	3	19	5	1.21	.05	.24	111	ND	.09	8	.08	2	ND	ND	ND	ND	ND	ND	26
ED00655-31106E	.2	.92	ND	ND	272	ND	.04	.1	4	21	8	1.24	.07	.31	153	1	.10	10	.07	4	ND	ND	ND	ND	ND	ND	41
ED00755-31107E	.1	.72	4	ND	170	ND	.03	.1	3	17	6	1.16	.05	.26	118	1	.08	8	.06	4	ND	ND	ND	ND	ND	ND	33
ED00855-31108E	.1	.72	5	ND	170	ND	.04	.1	3	17	6	1.16	.04	.27	121	1	.07	8	.06	3	ND	ND	ND	ND	ND	ND	33
ED00955-31109E	.1	.54	ND	ND	154	ND	.03	.1	3	24	4	1.28	.05	.24	149	1	.09	7	.08	3	ND	ND	ND	ND	ND	ND	26
ED01055-31110E	.1	.64	5	ND	167	ND	.02	.1	3	17	5	1.11	.05	.25	130	1	.07	10	.06	3	ND	ND	ND	ND	ND	ND	31
ED01155-31111E	.1	.56	5	ND	179	ND	.09	.1	3	10	5	1.20	.05	.28	177	ND	.07	22	.06	3	ND	ND	ND	ND	ND	ND	37
ED01255-31112E	.2	.62	6	ND	211	ND	.08	.2	5	31	11	1.91	.09	.40	275	ND	.12	16	.10	3	ND	ND	ND	ND	ND	ND	44
ED01355-31113E	.2	.74	ND	ND	267	ND	.06	.2	5	37	10	2.34	.06	.38	242	1	.13	17	.09	4	ND	ND	ND	ND	ND	ND	44
ED01455-31115E	.3	.56	5	ND	194	ND	.01	.2	4	40	9	2.12	.06	.34	200	ND	.13	16	.09	7	ND	ND	ND	ND	ND	ND	40
ED01655-31116E	.1	.57	3	ND	197	ND	.08	.3	2	25	5	1.31	.06	.27	154	ND	.09	11	.07	3	ND	ND	ND	ND	ND	ND	33
ED01755-31117E	.3	.54	1	ND	237	ND	.06	.3	4	41	9	2.32	.09	.33	201	ND	.13	16	.09	5	ND	ND	ND	ND	ND	ND	39
ED01855-31118E	.2	.53	3	ND	188	ND	.02	.2	4	33	9	1.84	.07	.35	197	ND	.05	17	.08	4	ND	ND	ND	ND	ND	ND	44
ED01955-31119E	.1	.71	4	ND	207	ND	.03	.1	4	23	9	1.60	.06	.32	238	2	.10	12	.08	4	ND	ND	ND	ND	ND	ND	39
ED02155-31120E	.2	.54	ND	ND	168	ND	.03	.1	3	25	7	1.49	.07	.31	176	ND	.09	12	.07	3	ND	ND	ND	ND	ND	ND	34
ED02255-31121E	.1	.58	3	ND	177	ND	.02	.1	3	15	7	1.11	.06	.31	177	ND	.10	12	.07	3	ND	ND	ND	ND	ND	ND	26
ED02345-31122E	.2	.58	ND	ND	141	ND	.06	.1	2	13	5	1.01	.05	.24	145	ND	.07	7	.05	2	ND	ND	ND	ND	ND	ND	27
ED02455-31123E	.1	.67	ND	ND	140	ND	.01	.1	3	18	6	1.21	.06	.26	164	ND	.09	9	.06	3	ND	ND	ND	ND	ND	ND	31
ED02555-31124E	.2	.68	ND	ND	140	ND	.04	.1	3	19	6	1.27	.06	.26	164	ND	.10	8	.07	3	ND	ND	ND	ND	ND	ND	31
ED02655-31125E	.1	.62	4	ND	134	ND	.02	.1	3	17	6	1.17	.06	.25	151	ND	.10	9	.07	3	ND	ND	ND	ND	ND	ND	29
ED02855-31126E	.2	.58	ND	ND	127	ND	.08	.1	2	17	5	1.14	.06	.24	147	ND	.10	7	.06	3	ND	ND	ND	ND	ND	ND	28
ED02945-31127E	.2	.54	3	ND	133	ND	.08	.1	2	13	5	1.05	.05	.22	148	ND	.10	7	.07	3	ND	ND	ND	ND	ND	ND	27
ED03055-31128E	.3	.68	4	ND	196	ND	.07	.1	4	25	12	1.71	.07	.33	221	ND	.12	18	.09	4	ND	ND	ND	ND	ND	ND	41
ED03145-31129E	.2	.57	11	ND	93	ND	.07	.2	11	15	16	2.16	.06	.26	367	ND	.11	11	.12	3	ND	ND	ND	ND	ND	ND	42
ED03255-31130E	.3	.64	4	ND	152	ND	.01	.1	3	21	4	1.13	.07	.24	127	ND	.11	7	.07	5	ND	ND	ND	ND	ND	ND	41

SAMPLE NAME	AG PPM	AL %	AS PPM	AL PPM	BA PPM	SI PPM	CA %	CO PPM	CO PPM	CR PPM	CL PPM	FE %	K %	MG %	PK PPM	NO PPM	NA %	N1 PPM	P %	PE PPM	PO PPM	PT PPM	SG PPM	SI PPM	SP PPM	T PPM	W PPM	ZN PPM
ED033HS-31131E	.1	.50	4	ND	128	ND	.17	.3	5	10	9	1.24	.04	.15	435	ND	.06	6	.2-	5	ND	ND	ND	ND	13	ND	ND	27
ED034SS-31132E	.1	.89	4	ND	197	ND	.33	.3	6	18	9	1.63	.05	.33	416	ND	.09	9	.27	5	ND	ND	ND	:	23	ND	ND	36
ED035SS-31133E	.1	.69	ND	ND	178	ND	.29	.2	4	16	7	1.16	.03	.28	161	ND	.07	9	.05	2	ND	ND	ND	ND	24	ND	ND	33
ED036SS-31134E	.1	.59	ND	ND	151	ND	.26	.1	3	14	7	1.02	.04	.24	126	ND	.07	6	.06	3	ND	ND	ND	ND	21	ND	ND	28
ED037SOIL-31135E	.1	.53	3	ND	144	ND	.22	.1	3	14	7	1.15	.04	.20	145	ND	.07	6	.05	5	ND	ND	ND	ND	17	ND	ND	25
ED038HS-31136E	.1	.53	5	ND	145	ND	.25	.1	3	12	9	1.08	.04	.24	144	1	.07	8	.06	2	ND	ND	ND	ND	21	ND	ND	28
ED040SS-31138E	.1	.87	3	ND	195	ND	.26	.3	4	17	8	1.33	.05	.29	162	ND	.08	7	.06	5	ND	ND	ND	ND	23	ND	3	35
ED041SS-31139E	.1	.80	4	ND	174	ND	.27	.1	4	17	7	1.25	.05	.26	158	ND	.09	6	.06	4	ND	ND	ND	:	22	ND	ND	31
ED042SS-31140E	.1	1.02	6	ND	233	ND	.31	.4	7	19	9	2.12	.06	.28	364	1	.11	8	.07	5	ND	ND	ND	ND	25	ND	ND	36
ED043SS-31143E	.1	.99	ND	ND	189	ND	.25	.1	3	18	9	1.46	.04	.28	136	ND	.09	9	.05	5	ND	ND	ND	ND	21	ND	ND	34
ED046SS-31144E	.1	1.09	ND	ND	208	ND	.27	.2	4	20	11	1.26	.05	.29	127	ND	.12	6	.06	5	ND	ND	ND	ND	22	ND	ND	36
ED047HS-31145E	.1	.71	ND	ND	140	ND	.23	.2	3	13	7	1.03	.03	.23	111	ND	.07	5	.05	3	ND	ND	ND	ND	19	ND	ND	25
ED048SS-31146E	.1	.67	9	ND	126	ND	.18	.1	3	18	9	1.60	.04	.18	186	1	.08	5	.24	6	ND	ND	ND	:	13	ND	ND	23
ED049SS-31147E	.1	.98	ND	ND	162	ND	.23	.1	4	18	11	1.31	.05	.27	152	ND	.10	8	.05	5	ND	ND	ND	ND	17	ND	ND	30
ED050SS-31148E	.2	.53	3	ND	173	ND	.59	.5	3	15	12	1.12	.07	.34	157	ND	.09	10	.07	3	ND	ND	ND	ND	32	ND	ND	30
ED051HS-31149E	.1	.53	6	ND	151	ND	.27	.1	2	11	5	.96	.05	.21	104	1	.08	3	.06	2	ND	ND	ND	ND	22	ND	ND	18
ED052SS-31150E	.1	.70	ND	ND	196	ND	.31	.2	3	18	7	1.04	.05	.24	129	1	.08	6	.07	2	ND	ND	ND	ND	26	ND	ND	24

VANGEOCHEM LAB LIMITED

MAIN OFFICE: 1521 PEMBERTON AVE. N. VANCOUVER B.C. V7P 2S3 PH: (604) 666-5011 TELEY: 24-352578  
 BRANCH OFFICE: 1630 PANDORA ST. VANCOUVER B.C. V5L 1L6 PH: (604) 251-5656

ICAP GEOCHEMICAL ANALYSIS

A .5 GRAM SAMPLE IS DIGESTED WITH 5 ML OF 3:1:3 HCL TO HNO3 TO H2O AT 95 DEG. C FOR 90 MINUTES AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR SA, MA, FE, CA, P, CR, MG, BA, PD, AL, NA, K, N, PT AND SR. AU AND PD DETECTION IS 3 PPM.  
 IS= INSUFFICIENT SAMPLE, ND= NOT DETECTED, = NOT ANALYZED

COMPANY: PAMICON DEVELOPMENT LTD.  
 ATTENTION: DON PENNER  
 PROJECT: MIRAMAR

REPORT#: 85-01-029  
 JOB#: 8510  
 INVOICE#: 6653

DATE RECEIVED: 85/06/20  
 DATE COMPLETED: 85/06/21  
 COPY SENT TO: PAMICON

ANALYST W. Reub

PAGE 1 OF 1

SAMPLE NAME	AG PPM	AL %	AS PPM	AU PPM	BA PPM	BI PPM	CA %	CD PPM	CO PPM	CR PPM	CU PPM	FE %	K %	MG %	MA PPM	MO PPM	NA %	N PPM	P %	PB PPM	PD PPM	PT PPM	SB PPM	SA PPM	SR PPM	U PPM	W PPM	ZN PPM
31001	.3	.54	7	ND	54	ND	.30	.1	4	106	1	.67	.07	.27	104	ND	.08	11	.01	12	ND	ND	ND	1	15	ND	ND	19
31002	.4	1.14	5	ND	144	ND	.62	.1	4	132	3	1.43	.14	.35	193	ND	.35	11	.03	6	ND	ND	ND	3	50	ND	ND	22
31003	.1	.01	8	ND	2	ND	.01	.1	ND	261	ND	.29	.01	.01	48	ND	.01	9	.01	4	ND	ND	ND	ND	1	ND	ND	1
31004	.6	.38	26	ND	337	ND	.18	.1	ND	171	ND	.58	.09	.01	92	2	.16	7	.01	22	ND	ND	3	ND	10	ND	ND	15
31005	.2	.87	6	ND	86	ND	.23	.1	3	68	ND	1.14	.07	.22	287	ND	.16	392	.02	53	ND	ND	ND	2	25	ND	ND	74
31006	.1	.88	10	ND	56	ND	.04	.1	1	43	ND	1.04	.08	.07	138	ND	.19	7	.01	10	ND	ND	ND	ND	5	ND	ND	34
31007	.1	1.79	4	ND	46	ND	.77	.3	6	38	3	1.36	.07	.69	207	ND	.11	123	.07	3	ND	ND	ND	ND	29	ND	5	31
31014	.3	.82	11	ND	44	ND	.48	.1	4	68	2	.74	.05	.38	138	ND	.10	13	.01	4	ND	ND	ND	1	24	ND	ND	10
31137	.6	2.53	ND	ND	45	5	1.25	.6	16	44	14	2.04	.10	1.32	455	ND	.10	135	.06	7	ND	ND	ND	5	50	ND	5	40
31141	.8	2.79	ND	ND	308	3	1.06	.4	14	20	17	3.50	.15	1.00	438	ND	.20	4	.07	7	ND	ND	ND	8	55	ND	ND	41
31142	.6	2.00	4	ND	25	ND	1.75	.4	12	79	19	1.00	.10	1.05	324	ND	.06	309	.04	5	ND	ND	ND	3	51	ND	4	27

**APPENDIX III**

**LETTER FROM J. B. KNIGHT**

**dated March 25, 1985**

THE UNIVERSITY OF BRITISH COLUMBIA  
6399 STORES ROAD  
VANCOUVER, B.C. CANADA  
V6T 2B4

DEPARTMENT OF  
GEOLOGICAL SCIENCES

March 25, 1985

Dave Caulfield  
#215 - 543 Granville St.  
Vancouver, B.C.  
C6C 1X8

Dear Dave,

As requested in our telephone conversation of 26 March I am enclosing notes on my observations, to date, on the samples supplied by Larry Barr.

Yours sincerely,



J. B. Knight

## BARR SAMPLES

The sample supplied by Larry Barr contains gold of a wide variety of shapes, from spherical to flat and from angular to smooth. Some of the angular grains contain quartz.

The wide range in shape and the presence of both sulphides (Galena & Pyrite) and Fe oxides indicates that either the sample came from one location with different paystreaks or more likely that the sample is a composite, from different locations in one area. The latter idea was confirmed by Mr. Barr.

The significance of the presence of unoxidized sulphides is unknown because the geology and geomorphology are unknown. The presence of both unoxidized sulphide and Fe oxides suggests that the area is geomorphologically complex.

The large nugget from the same locality is anomalous in terms of size. It is much larger (at least 10 x) than the other specimens. The nugget contains quartz and is undamaged indicating a short distance of transport. The nugget appears to be a composite of gold dendrites and drapes around quartz crystals. There is insufficient data to speculate on its origin (lode vs. placer).

The Gold appears to have a diversity of compositions. No detailed work has been done yet.

**APPENDIX IV**

**STATEMENT OF QUALIFICATIONS AND CONSENT**

## STATEMENT OF QUALIFICATIONS AND CONSENT

I, DAVID A CAULFIELD, of 3142 Gambier Avenue, Coquitlam, in the Province of British Columbia, DO HEREBY CERTIFY:

1. THAT I am a Geologist in the employment of Pamicon Development Ltd., with offices at 215 - 543 Granville Street, Vancouver, British Columbia.
2. THAT I am a graduate of the University of British Columbia with a Bachelor of Science Degree in Geology.
3. THAT my primary employment since 1978 has been in the field of mineral exploration.
4. THAT my experience has encompassed a wide range of geological environments and has allowed considerable familiarization with geophysical, geochemical, and diamond drilling techniques.
5. THAT this report is based on property examinations conducted in 1985.
6. THAT I have no interest in the property described herein, nor in securities of any company associated with the property; nor do I expect to acquire any such interest.
7. THAT I consent to the use by Miramar Energy Corporation of this report in any such document as may be required by the Vancouver Stock Exchange or the office of the Superintendent of Brokers.

DATED at Vancouver, British Columbia, this 11 day of AUGUST, 1986.

  
David A. Caulfield

**APPENDIX V**

**ENGINEER'S CERTIFICATE**

**ENGINEER'S CERTIFICATE**

I, CHARLES K. IKONA, of 5 Cowley Court, Port Moody in the Province of British Columbia, DO HEREBY CERTIFY:

1. THAT I am a Consulting Mining Engineer with offices at 215 - 543 Granville Street, Vancouver, British Columbia.
2. THAT I am a graduate of the University of British Columbia with a degree in Mining Engineering.
3. THAT I am a member in good standing of the Association of Professional Engineers of the Province of British Columbia.
4. THAT this report is based on work carried out by D. A. Caulfield, a geologist whom I have known and worked closely with for a number of years, and on a property examination conducted in August 1985.
5. THAT I have no interest in the property described herein, nor in securities of any company associated with the property; nor do I expect to acquire any such interest.
6. THAT I consent to the use by Miramar Energy Corporation of this report in any such document as may be required by the Vancouver Stock Exchange or the office of the Superintendent of Brokers.

DATED at Vancouver, British Columbia, this 12<sup>th</sup> day of Aug, 1986.

  
Charles K. Ikona, P.Eng.



**APPENDIX VI**

**LIST OF PERSONNEL**

**LIST OF PERSONNEL**

**PIRATE CLAIMS**

JULY 2 - 6, 1986

D. Penner #215-543 Granville Street Vancouver, B.C.	Geologist	July 2 - 6
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N. DeBock #215-543 Granville Street Vancouver, B.C.	Prospector	July 2 - 6
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AUGUST 23 - SEPTEMBER 3

D.A. Caulfield #215-543 Granville Street Vancouver, B.C.	Geologist	August 23 - September 3
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N. DeBock #215-543 Granville Street Vancouver, B.C.	Prospector	August 23 - September 3
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**APPENDIX VII**

**AFFIDAVIT**

**AFFIDAVIT**

CANADA ) In the matter of an evaluation program on the Pirate Mineral Claims.

TO WIT ) On behalf of Neil DeBock

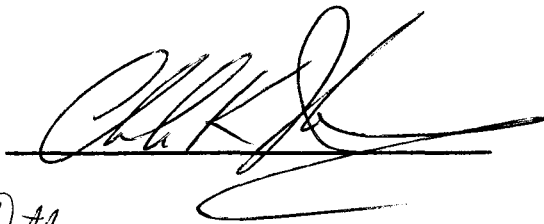
I, C. Ikona for Pamicon Developments Ltd., of 215 - 543 Granville Street, Vancouver, British Columbia do solemnly declare that a program consisting of geological mapping, geochemical surveying and prospecting was carried out on the Pirate Mineral Claims during the periods July 2 - 6, and August 23 - September 3, 1985.

The following expenses were incurred during the course of this work and in the compilation and reporting of the results:

Equipment Rentals	\$ 1,717.40
Expendible Field Supplies	796.62
Supplies	73.96
Food	366.51
Freight	1,211.28
Travel and Accommodation	3,410.10
Wages	10,910.10
Helicopter Support	5,263.00
Assaying and Geochemistry	45.75
Contracting Fees	2,641.85
<b>TOTAL:</b>	<b><u>\$26,436.57</u></b>

And I make this solemn declaration conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath and by virtue of the Canada Evidence Act.

Declared before me at Vancouver )  
in the Province of British Columbia )  
this 19<sup>th</sup> day of August, 1986 )



A Commissioner for Oaths for,  
or Notary Public for the Yukon.