# AN ASSESSMENT OF THE PLACER CLAIMS OF

### THIRTEEN MILE RESOURCES LTD

FEBRUARY, 1988

WLLIAM OLSSON, P. GEOL

### SUMMARY

The field program carried out on Thirteen Mile Resources in 1987 delineated over 350,000 cubic yards of gravel containing approximately 1400 ounces of gold. At an average daily miming rate of 1200 cubic yards, the above figure equates to just under 3 years of reserves.

When compared to the rate at which Ten Mile Creek has been mined over the past ten years, it is estimated that Thirteen Mile Creek has approximately 7 years of reserves within the main drainage system.

Through a detailed sampling program combined with an effective production plan, there is a high probability that the placer claims owned by Thirteen Mile Resources will be profitable for the company.

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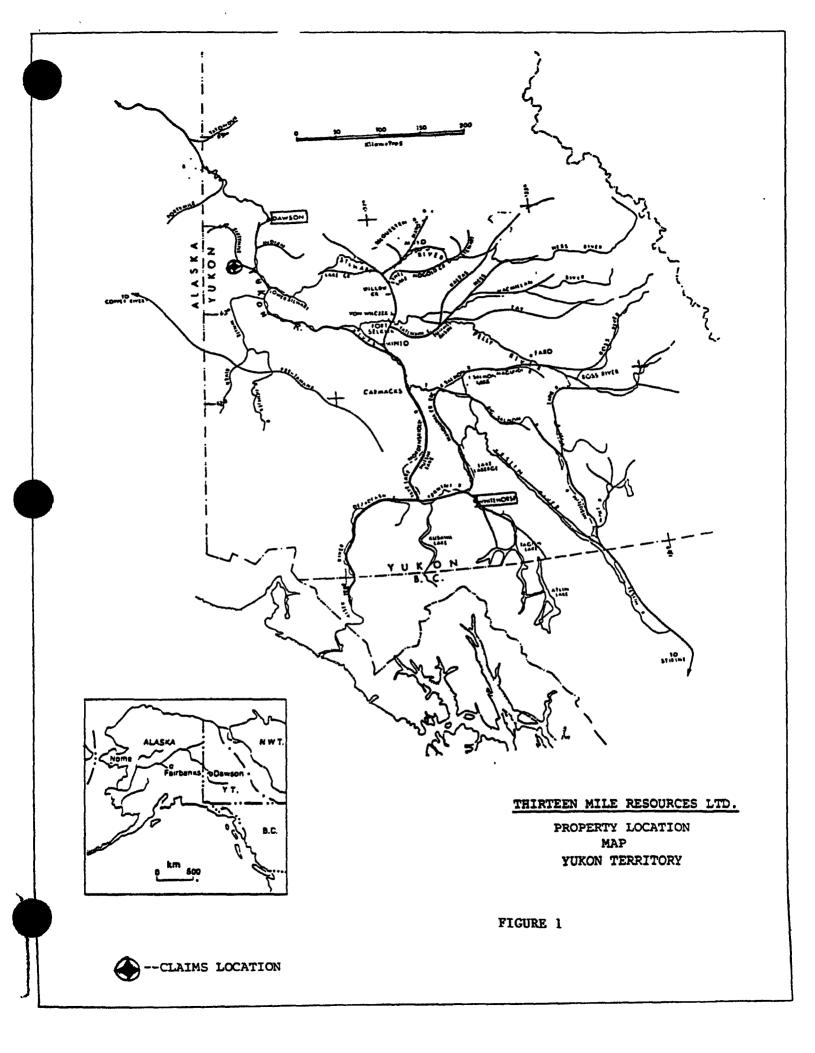
### **APPENDIX**

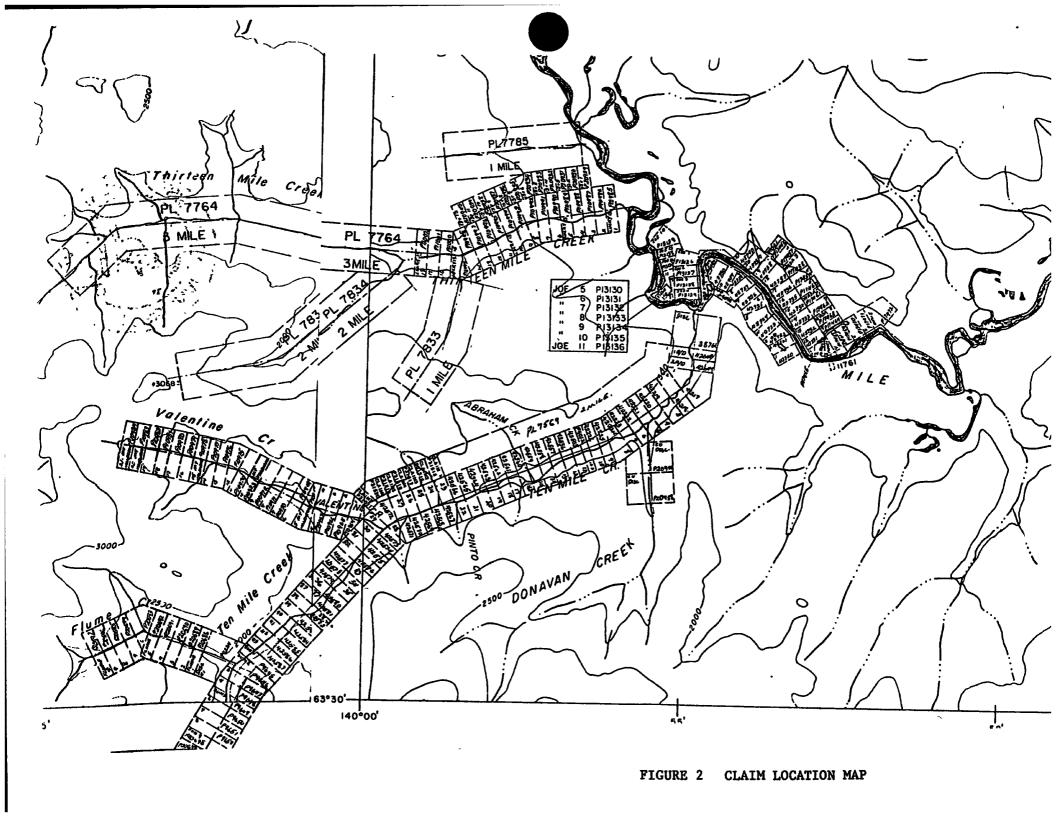
REPORT FOR THIRTEEN MILE RESOURCES LTD.

BY GEORGE MASON, NOVEMBER, 1987

### **LIST OF FIGURES**

Figure 1: Property Location Map
Figure 2 : Claim Location Map





### **CERTIFICATE OF QUALIFICATION**

I, WILLIAM OLSSON OF CALGARY, ALBERTA, CANADA, DO HEREBY

#### **CERTIFY:**

1- THAT I AM AN INDEPENDENT PROFESSIONAL GEOLOGIST WHO DID PREPARE A REPORT ON THE 1987 FIELD WORK BY THIRTEEN MILE RESOURCES LTD. ON THE COMPANY'S PLACER CLAIMS IN THE YUKON.

2-THAT I DID NOT PERSONALLY VISIT THE PROPERTY WHILE THE WORK WAS BEING DONE, BUT INSTEAD, RELIED ON THE VIDEO AND PHOTOGRAPHIC RECORDS PREPARED BY THE COMPANY DURING THE COURSE OF THE WORK AS WELL AS ON THE REPORT PREPARED BY AN INDEPENDENT CONSULTANT, G. MASON OF WHITEHORSE, WHO DID PERSONALLY VISIT THE PROPERTY IN 1987.

3-THAT I HAVE NO DIRECT OR INDIRECT INTEREST, NOR DO I EXPECT TO RECEIVE ANY DIRECT OR INDIRECT INTEREST IN ANY PROPERTIES OR SECURITIES OF THIRTEEN MILE RESOURCES LTD.

4-THAT I ATTENDED QUEEN'S UNIVERSITY IN KINGSTON, ONTARIO, CANADA, AND GRADUATED WITH A BACHELOR OF SCIENCE DEGREE FROM THE FACULTY OF APPLIED SCIENCE IN 1973, AND WITH A MASTERS OF BUSINESS ADMINISTRATION IN 1983 FROM THE SCHOOL OF BUSINESS.

5-THAT I AM A PROFESSIONAL GEOLOGIST, REGISTERED WITH THE ASSOCIATION OF PROFESSIONAL ENGINEERS, GEOLOGISTS AND GEOPHYSICISTS OF ALBERTA AND HAVE FIFTEEN YEARS OF EXPERIENCE IN GEOLOGICAL AND RELATED EVALUATIONS.

6-THAT IN ADDITION TO MY TECHNICAL EXPERIENCE, I HAVE THREE YEARS OF COMMERCIAL BANKING EXPERIENCE INVOLVING LOANS TO THE MATTER RESOURCE INDUSTRY.

February, 1988

#### INTRODUCTION

### 1.1 Background

Thirteen Mile Resources is the registered owner of 51 placer gold leases located on Thirteen Mile Creek and on Valentine Creek both of which are situated in the Sixty Mile River area of the Yukon Territory. In addition, the company has staked some eight miles of placer leases in the same area.

The 51 placer gold claims alluded to above were originally staked by Harvest Resources Limited of Whitehorse, Yukon. In early 1987, Thirteen Mile Resources Ltd. issued shares on the Alberta Stock Exchange with some 8,400,000 common shares given to the owners of the 51 placer gold claims in return for the ownership of those claims. Harvest Resources maintains a royalty position on any production generated by the property.

The purpose of this report is to provide Thirteen Mile Resources Ltd. with an independent assessment of the work performed on the property in 1987. It should be noted this author did not personally view the work this past season. However, the company did provide a video of the work taken while it was being done as well as numerous photographs taken throughout the season. In addition, Mr. George Mason, a consultant based in Whitehorse, did visit the property on two occassions and submitted a report to the company (a copy of which is appended to this report). The author has relied on the evidence described above as well as on his own experience gained from working in the area of the claims.

#### 1.2 Location and Access

The placer gold claims are located approximately 45 miles south west of Dawson City in the Yukon Territory. The largest group, comprising 18 placer claims and 12 bench claims, lies along the lower stretches of Thirteen Mile Creek, a tributary of the Sixty Mile River. These claims are located at approximately 139 degrees 57 minutes West Longtitude and 63 degrees 35 minutes North Latitude on NTS Map Sheet 115 0 12. The second claim group consists of placer claims staked along Valentine Creek and is located at approximately 140 degrees 02 minutes West Longtitude and 63 degrees 32 minutes North Latitude on NTS Map Sheet N 9.

The properties can be accessed by air from Dawson City. An airstrip allowing light aircraft to land under VFR conditions is located one mile from the camp. Helicopters can readily land at the campsite. Alternately, boat access via the Yukon River to the mouth of the Sixty Mile River can be used to mobilize heavy equipment. From the landing four-wheel drive vehicles are used to access the camp.

#### 1.3 Previous Work

The Sixty Mile River and its tributaries were first prospected for gold in the year 1897. Following the discovery of the gold on Bonanza Creek, miners deserted the area for the Klondike Gold Field. Later on prospectors once again began to examine the Sixty Mile River Valley in their search for gold. Significant amounts of the metal have been found in tributaries of the Sixty Mile River in Alaska. In recent years Matson Creek and Ten Mile Creek are some of the tributaries on the Yukon side of the border that have been shown to yield significant amounts of gold to mining companies. Thirteen Mile Creek is adjacent to Ten Mile Creek while Valentine Creek flows into Ten Mile Creek where active placer mining is taking place.

Thirteen Mile Creek was once mined by an individual around the turn of the century. An old cabin with caved-in, hand-dug shafts nearby are the only signs of previous work on the property. In 1979 Harvest Resources staked several placer leases on the creek. Assessment work in 1980 allowed the leases to be converted to claims. additional work was carried out on the property in the years 1981 through 1986 inclusive.

The bench claims were investigated with a D6-C cat. Terraced river gravels were exposed at this time and samples were collected and submitted for analysis. The analytical results proved to be inconclusive and the property owners decided to raise funds large enough to determine whether or not any gold exists on the property.

### II GEOLOGICAL SETTING

### 2.1 Geomorphology

The Dawson Range is one of the few areas in Canada that escaped the effects of the Pleistocene Ice Age. Consequently, the area is characterized by a thick cover of residual soil. As a result of this, heavy vegetation covers most of the mountains which are best described as rolling hills that are drained by V-shaped valleys. The major valleys reflect underlying structures and are up to one kilometer in width. These rivers tend to be mature meandering drainages. The unglaciated nature of the Dawson Range is major reason placer gold deposits are so prevalent in the area.

### 2.2 Regional Geology

The area around the Sixty Mile River is underlain by a sequence of rocks comprised of older schists and gneisses, acidic intrusives, volcanic/sedimentary units and remnants of a late period of volcanic activity.

Proterozoic so ast gneiss is the oldest rock unit in a vicinity of the claims. Quartz veins in this rock are considered to be one of the sources for the gold in the area.

Cretaceous granodiorite and quartz monzonite are the next oldest rocks in the vicinity of the company's properties. They are readily found underlying mountains having an elevation in excess of 3,600 feet.

Following a period of intrusive activity and regional uplifting, a sequence of sedimentary rocks were deposited over the area. This was followed by an extensive period of volcanism during the Tertiary Era. The gold bearing "White Channel Gravels" characteristic of the Klondike Goldfields were deposited in Tertiary rivers.

Quarternary volcanic caps can be found on many peaks that lie between Matson Creek and the Yukon River. These rocks vary in composition from andesites and basalts to rhyolites.

### 2.3 Property Geology.

The claims are covered by stream gravels intermixed with clay horizons. The bedrock has been exposed through trenching and intersected by drilling. All evidence suggests the property is underlain by Proterozoic schits and gneisses.

#### III 1987 PROGRAM

### 3.1 Background

The 1987 field program was focused on the objective of test sluicing the property to determine whether economic quantities of placer gold exist within the gravels. As well, the company intended to evaluate the Thirteen Mile and Valentine Creeks as well as the bench claims noted previously. Finally, the company intended to drill selected areas of the property provided a sonic drill could be found. The purpose of this phase of the program was to evaluate the buried gravels at a minimum cost to the company.

In order to complete the program, the company bought a second hand D-9 Cat. However, prior to mobilizing the equipment to the property, a complete check-up of it had to be made with repairs performed where warranted. Due to the time it took for this work to be completed, the execution of the 1987 program was somewhat delayed. This became more of a factor when it came time to test sluice the gravels since by then sub-freezing temperatures were being experienced in the area.

### 3.2 Stripping, Trenching and Drilling

Approximately 30 acres of brush were cleared and 15 acres of gravel deposits exposed by the cat work in 1987. A test pit with a depth of about 30 feet was dug in the gravel in order to evaluated the thickness of the gravel deposits. In addition, a diversion dam and culvert system was constructed to allow the company to assess the creek bed without the interference of the active stream affecting the work.

There were a total of 18 potential drill sites identified for testing with the sonic drill which was on a fixed rate contract with Goldmark Minerals Ltd. Numerous equipment problems were encountered with this portion of the program such that only 9 holes were completed. Some portions of the core were flown to Dawson for transport to Calgary for analysis. The remainder were left on the property and can be examined and tested next summer.

### 3.3 Sluicing

In late October, half of the sluice box was placed on the upstream side of the cleared area in order that the gravels could be tested. Time constraints did not permit the full sluice-box to be put in place. Approximately 20 cubic yards of gravel were processed, however, due to the freezing conditions, many large pieces of frozen gravel fell into the box and did not break up properly. The sluice box was returned to camp for cleaning, however, once again freezing temperatures created havoc and only half of the material could be removed. Some of the most promissing gravels had to be left in the sluice box, frozen until next year.

The concentrate from the sluicebox along with samples from the drill program were sent to Calgary for analysis by Loring Laboratories Ltd. Copies of the analytical reports are appended to this report,

### 3.4 Staking

While the company did not intend to pick up any additional ground at the start of the summer, the activities of other companies in the area plus the development work on the property has resulted in an additional 8 miles of leases being staked. The end result is the entire Thirteen Mile drainage system is now controlled by Thirteen Mile resources. Some staking on adjacent streams was also done to secure a good land position for the company.

#### IV DISCUSSION OF RESULTS

Unfortunately due to the equipment problems encountered early in the season, the company did not commence actual field operations until mid-august or some three months late. By the time the ground was properly prepared for testing, colder weather forced the company to take certain shortcuts that, from a technical viewpoint, affected the quality of the data obtained from the property. However, not all is lost in that it has now been proven that gold does exist in the gravels of Thirteen Mile Creek. This fact is important in that up to this point in time, the question of gold on the property has been one of conjecture.

The test pit has exposed four separate gravel horizons according to Mr. Mason's report. Each horizon is separated by a either a band of black muck or blue clay. Unfortunately, these horizons were not individually sampled for gold apart from Mr. Mason's panning on site and reporting "gold colours" having been observed. Had a sample of constant size been removed from each horizon and tested for gold, the data from the test pit would have been more usefull as it would have identified which horizon(s) has the greatest potential for producing gold.

Placer gold is found primarily in the gravels that are closest to the bedrock. The sampling done to date has not fully assessed these gravels. It is suggested the company do so as soon as possible. Furthermore, it is advisable the company does not overlook the first foot of bedrock. There are areas of the Klondike Gold Field where some of the richest paydirt was found in the top several inches of weathered bedrock.

The drill program has identified a gravel deposit that is approximately 650 yards long, 90 yards wide and 6 yards thick. The gravel has not been fully delineated and remains open on both the upstream and downstream directions.

The sampling of the drill core was not totally effective. Gold should concentrate in gravels that are immediately overlying the bedrock. Hence, sampling of the first two or three feet immediately above the bedrock is the desired horizon for testing for gold. However, since gravels higher up in the profile were tested and the 14x60 fraction was shown to have up to .006 oz./ton of gold in them, it bodes well for what gold values one can expect from the lower horizons.

As mentioned previously, the test sluicing was done under adverse conditions. The concentrate recovered from the sluice was separated into sub-samples according to sieve size.

This was don, a order to assess which fraction contact the largest amount of gold. The sieve sizes used were:

- -14 to +60 mesh
- -60 to + 100 mesh
- -100 to + 140 mesh
- -140 to + 200 mesh
- 200 mesh

The gold was found to be concentrated in the -14 to + 60 fraction. This suggests coarse gold is more likely to be found on the property than fine gold flour. This should serve to allow for full recovery of the gold in the gravel. Furthermore, as mining of the creek bed progresses upstream, the size of individual pieces of gold should increase.

The total weight of the sample concentrate obtained from the test sluice, and submitted for analysis was 811 grams. The gold content was 1.06 grams or .04 ozs. The volume of gravel thought to produce this gold was one half of the 20 yards estimated by Mr. Mason in his report. Hence the estimated grade of the gravel is .004 oz. per cubic yard.

As previously noted, the gravel deposited exposed by the cat work has approximate dimensions of 650 yards by 90 yards by 6 yards giving a total volume of 351,000 cubic yards of gravel. At a grade of .004 ozs per yard, this volume suggests there is a total of 1404 ounces of gold within that volume. At \$550 Cdn per ounce, this gold would have a value of \$772,200. Any further extrapolation of the reserves from the above area would be pure conjecture at this point in time without any hard cooborating evidence to support it. This does not mean to suggest additional gold bearing gravels do not occur anywhere else on the property. In fact just the opposite is the likely case. However, dimensions will have to be outlined by drilling before any real estimate of reserves can be made.

It is suggested that the company can average anywhere from 20 to 100 cubic yards of material per hour through the sluice box depending on equipment problems and weather conditions. On a daily basis these rates correspond to 440 to 2200 cubic yards being mined. Table I accompanying this report summarizes the production rates and dollar values that can be anticipated from the property. The 20 yards per hour equates to the most pessimistic scenario while 100 yards per hour can be expected under the most promising conditions. Realistically a mining rate of 60 to 80 yards per hour is what the company can expect to achieve.

Based on an /ard per hour mining rate and a 100 / season, it will take the company close to two and a half years to mine out the gravel deposit outlined to date. Even under the most optimistic mining rate, the company has a year and a half of gravel ready for sluicing.

The life expectancy of the mine will depend on how much gold-bearing gravel is found on the creek. Since the exploration and development work remains to be done before the actual amount of gravel situated on the property is known, the life expectancy of the mine can be estimated from the operation located on Ten Mile Creek. That mine has been in operation for over 10 years. During that period, some 2.3 miles of creek bed have been mined. Hence a rate of .23 miles per year can likely be applicable to Thirteen Mile Creek. On that basis, the mine on Thirteen Mile Creek has a potential life of over 7 years.

The average daily cost for running operations in 1987 amounted to \$2640. For a 100-day season, the cost is estimated to be \$264,000. For a gold price of \$550 per ounce, the company will have to recover 480 ounces in order to cover their operating costs in 1987. With a grade of .004 oz. per yard, 480 ounces converts to 120,000 yards of material which can be achieved at an average hourly rate of 60 yards.

Serious consideration should be given by the company towards the purchase of a front-end loader and a vibrating table. In the first case, a loader will expedite the rate at which the company can process the gravels. A vibrating table will allow the company to save in analytical costs as well as improve the recovery of fine gold from the tailings. In both instances, the capital expenditures are warranted as the benefit of the equipment exceeds the costs involved.

### V CONCLUSIONS

The following conclusions are based on the field work carried out in 1987 on the placer claims located along Thirteen Mile Creek:

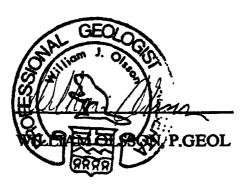
- 1) Fine gold is present in mineable quantities within several gravel horizons located on Thirteen Mile Creek.
- 2) Based on a preliminary drilling program and sluice test, it is estimated that 351,000 cubic yards of gravel with an average grade of .004 ounces per yard have been delineated to date along Thirteen Mile Creek.
- 3) Thirteen Mile Creek is estimated to have sufficient gold-bearing gravel deposits to last through seven years of mining.
- 4) It is estimated operations in 1988 should break-even provided the daily costs are the same as those experienced in 1987 and the operation processes an average of 60 yards of gravel per working hour containing .004 ounces of gold per yard.
- 5) The fine nature of the gold present near the mouth of Thirteen Mile Creek suggests the size of the gold within the gravels should increase as the company mines the higher energy environment located upstream.
- 6) Valentine Creek remains to be assessed. However, since gold is known to be present in Ten Mile Creek (into which Valentine Creek flows) and in Thirteen Mile Creek, it can be said that Valentine Creek's potential has been enhanced by the 1987 field work.
- 7) Sonic drilling is a relatively inexpensive method in which a company can evaluate placer properties.

No. 25

### **RECOMMENDATIONS**

It is recommended that the following be undertaken in 1988 on the placer claims located in the Yukon and owned by Thirteen Mile Resources.

- 1) A detailed sampling program be designed and implemented on the property so as to fully assess the gold content and extent of the multiple gravel horizons that were exposed in 1987 along Thirteen Mile Creek.
- 2) The company should acquire a front end loader and proceed with the mining of the gravels that were exposed with the cat work in 1987.
- 3) Sluicing of the property should commence at the downstream end of the gravel deposit and proceed upstream as the mining progresses.
- 4) A vibrating table should be acquired and inserted into the mining process in order to ensure the maximum recovery of gold from the gravels.
- 5) The evaluation of Valentine Creek and the bench gravels located on Thirteen Mile Creek should be given a high priority for 1988.



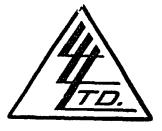
### TABLE I

## PRODUCTION RANGE THIRTEEN MILE RESOURCES LTD. YUKON PLACER PROJECT

		========				=======
	DAILY PRO	DUCTION 1	RATES. <sup>∞</sup>	*		
	20	======== 40			400	
CUBIC YARDS PER HR. CUBIC YARDS PER DAY	20 400	40 800	1200	80 1600	100 2000	
	700 =========					
•	PRODUCTION	N OF GOL	D IN 100	DAY' SEAS	ON	
=======================================		=======	=======		==========	======
GRADES (OZ/TON):			Mr. Mas			
0.004	160	320	480		800	
0.006	240	480	720	960	1200	
0.008 0.010	320	640		1280		
0.010	400	800	1200	1600	2000	
	VALUE OF (	COT.D PPOI	DIICTTON			#======
=======================================	, to doday :eeeeeeeee		2222222 Docitor		=========	======
PRICE OF GOLD (CDN)						
	\$80,000 \$10	60,000 \$3	240,000 \$	320,000	\$400,000	
	\$120,000 \$2					
	\$160,000 \$3					
	\$200,000 \$4	00,000 \$0	600,000 \$	\$800,000	\$1,000,000	
4 550	400 000 444	~	064 000 4		*440 000	
\$ 550	\$88,000 \$1° \$132,000 \$2°					
	\$176,000 \$2					
	\$220,000 \$4					
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\$ 600	\$96,000 \$19	92.000 \$3	288.000 \$	\$384.000	\$480,000	
¥ 333	\$144,000 \$2					
	\$192,000 \$3					
	\$240,000 \$48					



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	Calgar	y, Albe	erta.	12R 1	9
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	ATTN:	Bill E	lake		***



File No. 30783

Date January 11, 1988

Samples Drill Cuttings

Sectificate of

### LORING LABORATORIES LTD.

Page # 1

SAMPLE No.	OZ./TON GOLD 14x60 Fraction	OZ./TON GOLD -60 Fraction	TOTAL DRY WEIGHT GRAMS
Hole # 1			
0 - 3'	.002	-	19,123.0
3 - 5½'	.004	.002	13,958.0
Hole # 4			
18'	.004	.002	5,876.0
17 - 19'	.002	-	8,903.0
19 - 20'	.006	.002	13,776.0
19 - 21'	.004	Trace	11,438.0
Hole # 5			
18 - 20'	.004	Trace	10,389.0
24½ - 25'	.006	.004	9,270.0
26'	.002	.002	6,990.0
Hole # 6			
19½ - 23½	lrace	•	23,299.0
23½ - 25½	.002	•	9,812.0
<u>Hole # 7</u>			
14½ - 16'	.004	Trace	9,606.0
		TITY THAT THE ABOVE RESULTS AR	

Rejects Retained one month.

Pulps Retained one month
unless specific arrangements
made in advance.

Lost Dum Assayer

To: THIRTE	EN MILE	RESOURCE	S LlD.
210, 33	3 - 11th	Avenue	S.W.,
Calgary,	Alberta	T2R 1L	9
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File No. 30783

Date January 11, 1988

Samples Drill Cuttings

ATTN -	Rill	Blake		
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### LORING LABORATORIES LTD.

Page # 2

		Page # Z	,
SAMPLE No.	0Z./TON GOLD 14x60 Fraction	OZ./TON GOLD -60 Fraction	TOTAL DRY WEIGHT GRAMS
Hole # 9			
11'	Trace	-	7,617.0
15'	Trace	-	6,580.0
<u>Hole # 9</u>			
25 - 27'	.004	Trace	10,070.0
#17? 15'	Trace	-	9,030.0
	Il Thereby Cler	tify that the above results ar	RE THOSE
		JPON THE HEREIN DESCRIBED SAMPL	

Rejects Retained one month.

Pulps Retained one month unless specific arrangements made in advance.

Assayer .

BY PRIORITY POST

April 7th, 1988.

Thirteen Mile Resources Ltd., 1210, 333 - 11th Avenue S.W., Calgary, Alberta.

Economic Development

Mines & Small Business

T2R 1L9

Yukon Economic Development, Mines & Small Business, Box No. 2703, Whitehorse, Yukon. Y1A 2C6

Attention: Dave Downing:

Dear Dave:

RE: REPORT ON 1987 WORK PROGRAMME
THIRTEEN MILE RESOURCES LTD.

Attached please find one (1) copy of a report prepared by Mr. George Mason of Mason Research and Development Ltd. regarding our 1987 work programme and progress. We have also attached the assay results on several cores that we had analyzed early in 1988.

Should there be any questions or should you require additional data, please contact Mr. Bill Blake at 290-0585 or the undersigned at 262-3355.

Yours very truly,

THIRTEEN MILE RESOURCES LTD.,

Executive Vice President.

RLS/ldr Encl:

cc. B. Clarke

46/Incent-3

### REPORT FOR 13 MILE RESOURCES LTD.

by

GEORGE MASON

of

MASON RESEARCH and DEVELOPMENT LTD.

EXPLORATION and MINING CONSULTANTS
411 Black Street, Whitehorse, Yukon Y1A 2N2

NOVEMBER 1987

411 Black Street, Whitehorse, Yukon Y1A 2N2

403 667-6439

December 3, 1987

I, George Mason of Whitehorse, Yukon, do hereby state that I have no interest in or ever have had in the 13 Mile-Creek or the Valentine Creek properties.

That I have carried on the business of exploration and placer consulting for the last 12 years, specializing in the electromagnetic energy spectrum (remote sensing) and surficial geology.

Attached is a list of firms and individuals that can atest to my qualifications.

Yours sincerely,

George Mason

Attch.

403 667-6439

#### REFERENCES

Mr. Bradley Gemmer GemSteel Edmonton Ltd. 7290 A 18th Street Edmonton, Alberta T6P 1N8

Telephone: 403 440-4465 Bus

403 467-6392 Res

Mr. Bob Gowin Gowin Foundation Edmonton, Alberta

Telephone: 403 484-7171 Bus

Mr. Ken Campbell, Manager Alberta Remote Sensing Centre Edmonton, Alberta

Telephone: 403 427-2381 Bus

Mr. Bill Bruce, Head Training and Geology Unit Canada Centre for Remote, Sensing 2464 Sheffield Road Ottawa, Ontario

Telephone: 613 952-0500

Mr. Wayne Patrie, P. Eng. Edmonton, Alberta

Telephone: 403 422-6161 Bus

403 458-9687 Res

### OBJECTIVE

To do an evaluation of the work to date on the property and to evaluate the results of the gold return.

I visited the camp on 13 Mile Creek on two occasions. The first was in the last week of September, 1987 and the second visit was in the last week of October, 1987.

### First Visit - September 1987

### Conditions of Camp

The camp site was well chosen, with good drainage, warm bunk houses, adequate washing facilities, good food preparation and eating areas, and efficient work and storage facilities. It should be noted that this camp is completely non-alcoholic.

### Mining Area

A 2000 ft. diversion drain was in place, as was a diversion dam. About 30 acres of brush had been cleared and approximately 15 acres of black muck and clay was stripped to the first gravel level. A pit had been dug to what was thought, at the time, to be bedrock.

### o Pit Content - General (See Cross Section)

The pit bottom was 14 ft. below the diversion drain and clay layer. This pit bottom consisted of approximately 6 ft. of equally sized ballast of angular and rounded gravels. Below this gravel layer was a small lens of black muck, 1 ft. in depth. The next layer contained 2 ft. of angular and rounded gravels. This gravel layer covered approximately 3 ft. of mixed black muck and gravels. Below was another layer of gravels which were more angular in shape than the gravels which preceded. These angular gravels ran to a depth of approximately 2 ft. We then encountered, what we thought at the time to be, bedrock. This final layer appeared fractured and comprised unidentified fine grained, oxidized materials. Cat work ceased at this point.

### ° 'Pit Content - Pan Test

o In pan testing I found showings of fine gold in all levels of gravel in the pit and in many areas along the drainage canal. There is a possibility that the fine silver substance in all gravel layers upon assay may prove to be platinum.

### Second Visit - October 1987

### Progress

In the lapse of a month extensive work had taken place. The drain had been further excavated to the depth of the pit bottom. (See photo page one, bottom, and photo page two). The diversion dam had been extended and fortified. (See photo pge four, top). All materials, gravels and black muck, had been removed from the pit and stockpiled. (See photo page three, bottom). The sluice had been positioned. (See photo page four, bottom). All camp roads as well as the camp as a whole had been greatly improved and were in very good condition. (See photo page five.)

### Test Holes (See claims sheet)

Mr. Bill Blake, Mr. Bob Solc, Mr. Keith Dye and I walked both 13 Mile and Valentine Creeks to establish the test hole sites to be drilled. We were ascertaining the flow patterns of pay channels which we then mapped for Goldmark Drilling Co. on the claims sheet in black dots. Goldmark Drilling did not drill Valentine Creek and only drilled 9 out of 17 sites on 13 Mile Creek. Assay reports are yet to be received from the 9 sites drilled on 13 Mile Creek.

- Test Sluice (See Loring Laboratories Certificates of Assay)
  - Approximately 15 25 cubic yards of the stockpiled gravels, from the pit, were sluiced. It should be noted that the gravels were frozen prior to sluicing, making the task extremely difficult. We encountered the following problems during this test sluice:
    - o no grizzly on the sluice;
    - frozen lumps of gravel would not break up properly;
    - o due to the lateness of the season and the rush to sluice, the box was difficult to regulated for tilt and water supply.
  - After only two hours the sluice was pulled back to camp for cleanup. The box was frozen solid which allowed for only one half of the contents to be washed, showing fine gold and small nuggets.
  - We took samplings from the washed materials and provided the samples to Loring Laboratories Ltd. In spite of the extremely poor conditions the test sluice was carried out under, you will note upon reviewing the Certificates of Assay that the results are exceptionally good, showing 316.26 oz/ton recovered gold. In my opinion, this test sluice is dramatic in its showings.

The adverse conditions do not allow for a totally accurate assay at this time but I am confident that a test sluice carried out during the summer months will prove this ground to be exceptionally productive.

### RECOMMENDATIONS

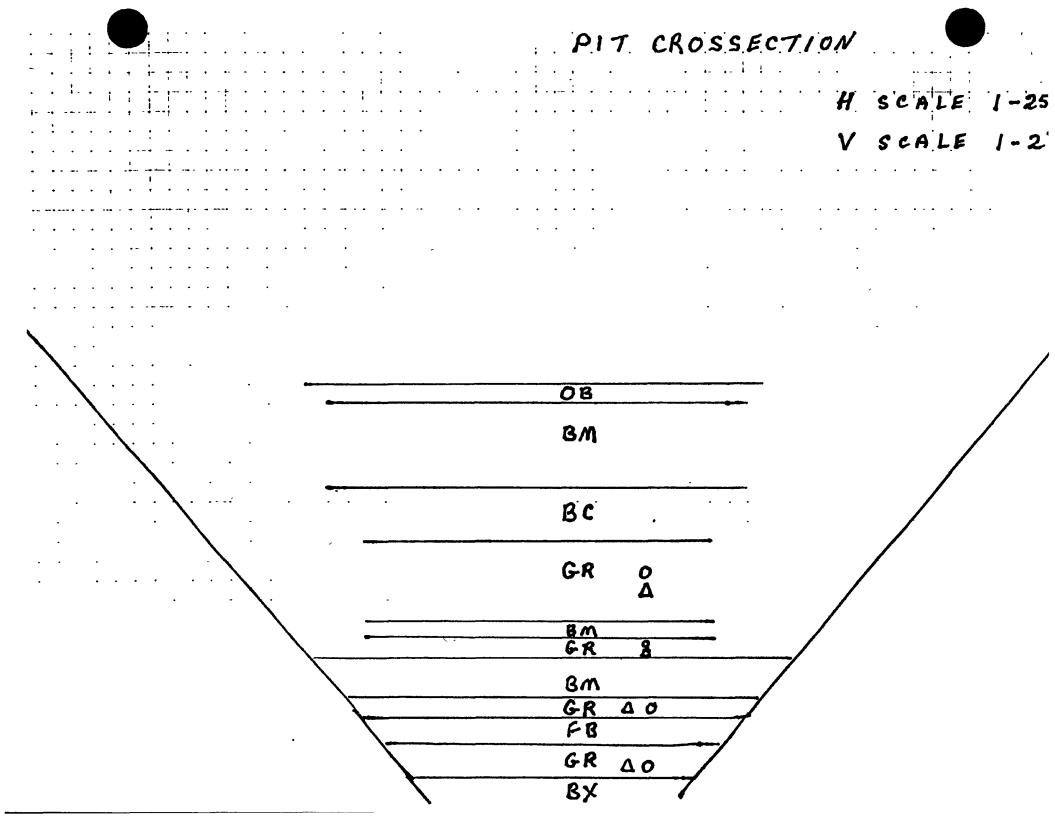
- o I respectfully make the following recommendations in order of priority:
  - A trommel or a derocker be installed at the head of the sluice box, allowing an improved material flow which will facilitate greater gold recovery.
  - Airstrip on site or vehicles designed for rough river crossings should be provided.
  - Portable generator suitable for powering tools, lights and in camp water system.
  - Test holes be drilled on Valentine Creek, as specified on claims sheet.
  - Additional test holes be drilled on 13 Mile Creek and tributaries as specified on claims sheet.
  - ° Camp yard gravelled to expedite a much needed clean base.

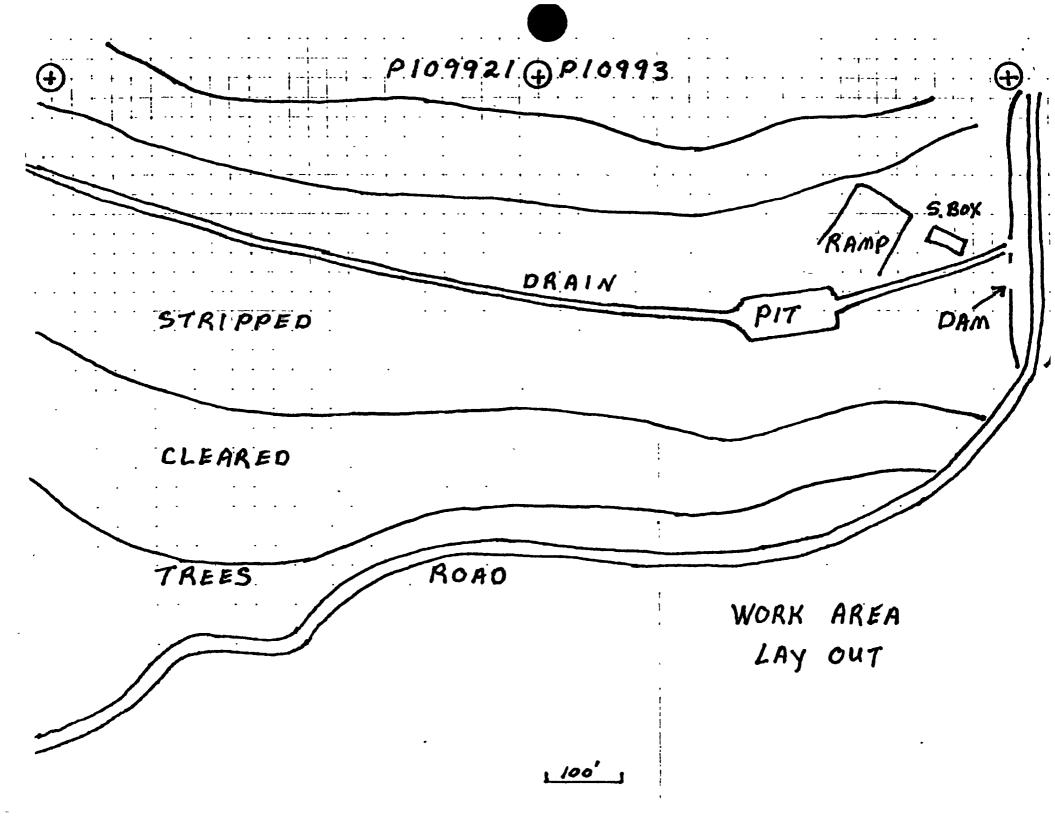
### SUMMARY

- The crew is to be highly commended for their work, work ethics, co-operation and overall production to date.
- This report is submitted with the intention that the above noted recommendations will be carried out at the beginning of the 1988 mining season to allow for the full potential of the site to be realized.
- It is my opinion that 13 Mile Creek and Valentine Creek are well worth extensive exploration and development to maximize potential worth.

Should you decide to continue operations as efficiently as the work to date, I would expect very good recovery in both creeks.

5 WMSon

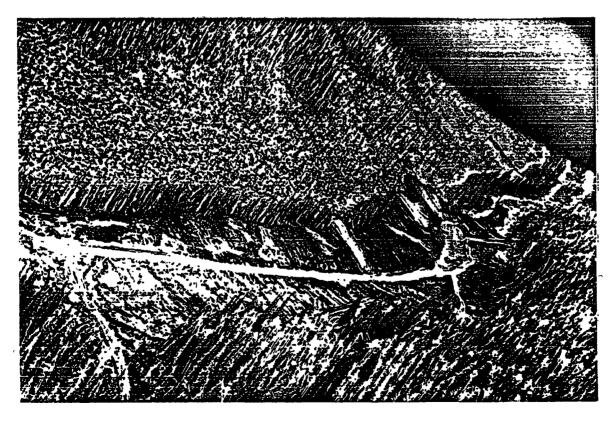




### PHOTOGRAPHS PAGE ONE



AERIAL PHOTOGRAPH VIEWING WEST ONTO THIRTEEN MILE CREEK. SIXTY MILE RIVER IN FOREGROUND.



AERIAL PHOTOGRAPH ABOVE THIRTEEN MILE CREEK SHOWING EXTENT OF OVERBURDEN 'STRIPPING' AND 'BED-ROCK' DRAIN.



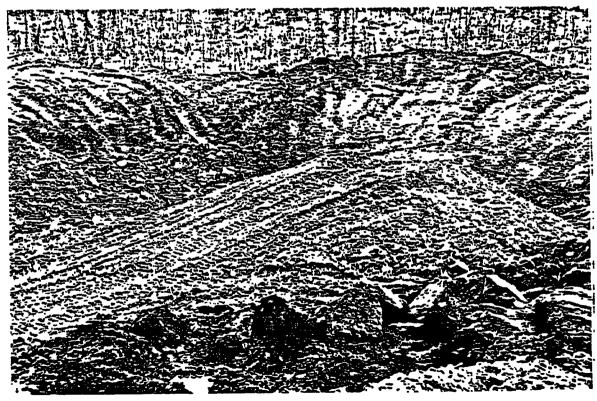
THIRTEEN MILE CREEK VIEWING DOWNSTREAM AND TO THE EAST WITH D-9 CATERPILLAR RIPPING GRAVEL DEPOSIT.



THIRTEEN MILE CREEK VIEWED FROM 'BED-ROCK' DRAIN AND LOOKING DOWNSTREAM AND TO THE EAST.



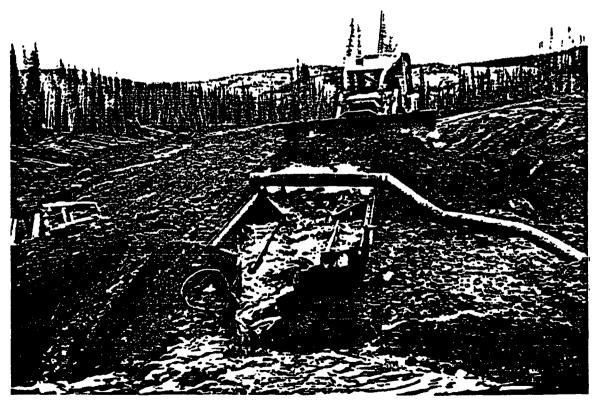
VIEW UPSTREAM AND TO THE WEST SHOWING PREPARATION OF AREA TO BE TEST SLUICED AND DIKE CONSTRUCTION WITH D-9 AND D-6 CAT.



PARTIALLY UNTHAWED GRAVEL PILE TO BE SLUICED.



VIEWING TO NORTHWEST ONTO TEST SLUICE OPERATION WITH 10-INCH WATER PUMP LOCATED ON DIKE AND D-6 PUSHING GRAVEL INTO DUMP BOX.



D-6 PUSHING GRAVELS INTO SLUICE BOX. THE BOTTOM RUN OF THE SLUICE BOX WAS NOT ATTACHED DURING THE TEST SLUICE OPERATION.

### PHOTOGRAPHS PAGE FIVE



MINE CAMP INCLUDING 1 COOKHOUSE, 2 BUNKHOUSES, TRAILER, TOOL SHACK AND MISCELLANEOUS EQUIPMENT.

	TEEN MILE I		
Calgary	, Alberta	T2R 1L	.9
		****	· · · · ·
AITN:	W.G. Blake	*********	



File No	30585
Date	October 27, 1987
Samples	_Conc

*******	xifica,

### LORING LABORATORIES LTD.

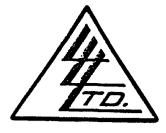
SAMPLE No.	Main Conc		Conc # 2	
O/IIII EE 110.	Total Wt. (g)	%	Total Wt. (g)	<u>%</u>
			_	•••
Sieve Analysis" *				
+ 14 Mesh	17.95	4.88	30.22	6.81
- 14 + 60 Mesh	85.36	23.22	349.24	78.72
- 60 +100 Mesh	177.52	48.29	61.51	13.8
-100 +140 Mesh	65.72	17.88	2.07	.47
-140 +200 Mesh	18.06	4.91	.28	.06
-200 Mesh	3.01	.82	.29	.07
	-	•		
	<b>±</b> 1	I.S. Standard Si	ove Comics	
	I Hereby (	Certify that the Me upon the herei	ABOVE RESULTS ARE THOSE N DESCRIBED SAMPLES	

Rejects Retained one month.

Pulps Retained one month
unless specific arrangements
made in advance.



To: THI	RTEEN MILE	RESOURCES LTD.,
1210,	333 - 11t	n Avenue S.W.,
Calgar	y, Alberta	T2R 1L9
ATTN:	W.G. Blak	2



File No.	30585
Date	October 27, 1987
Samples	

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Servificate

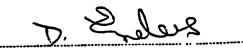
### LORING LABORATORIES LTD.

### Page # 2

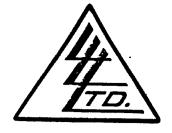
SAMPLE No.	OZ./TON GOLD
	-
"Assay Analysis"	,
ASSAY AMATYSTS	
Tailings	.033
	•
	•
,	
	I Hereby Certify that the above results are those assays made by me upon the herein described samples

Rejects Retained one month.

Pulps Retained one month
unless specific arrangements
made in advance.



To:THI	RTEEN	MILE	RESOL	IRC	ŁS.	<u>L</u> TD	٠,
1210,	<u> 333 - </u>	11th	Avenu	ıe_	S.W	<u>و .</u>	
Calgary	, Albe	rta	T2R	<u>1L</u>	9		



File No.	30585-1	
	November 3, 1987	
Samples	_	• • •

ATTN: W.G. Blake

Sextificate

ASSAY

### LORING LABORATORIES LTD.

CANCIE NI	MAIN (		CONC	
SAMPLE No.	Total Wt (g)	Total Au (mg)	Total Wt (g)	Total Au (mo
BAccos Analysial				
" <u>Assay Analysis</u> "				
- 14 + 60 Mesh	*	*	349.24	7.35
- 60 +100 Mesh	177.52	92.47	61.51	.02
-100 +140 Mesh	65.72	16.57	2.07	.01
-140 +200 Mesh	18.06	7.79	.28	.07
-200 Mesh	3.01	2.75	.29	.32
		•		
	* Amalgamation	n Test to Follow.		
	- No visual i	ndication of Pt Pre	sent.	
	7 Thanaba	Mortify that the A	BOVE RESULTS ARE THOSE	<u>.</u>
			DESCRIBED SAMPLES	

Rejects Retained one month.

Pulps Retained one month
unless specific arrangements
made in advance.

45

To: THIRTEEN MILE RESURCES LTD.,
1210, 333 - 11th Avenue S.W.,
Calgary, Alberta T2R 1L9
•••••••••••••
ATTN: W.G. Blake



File No	30585-1	
Date	November 3,	1987
Samples .	Conc	



### LORING LABORATORIES LTD.

Page # 2

SAMPLE No.	TOTAL WT.	TOTAL Au RECOVERED (mg)	Au IN TAILS (mg)	
"AMALGAMATION TEST"				
MAIN CONC				
-14 +60 Mesh	85.36	925.6	2.26	
-		,		
		ar sample would calculate out to 31	5.26 oz/ton	
	of -14 +60 mesh concentrate.			
	I Hereby Certify that the above results are those assays made by me upon the herein described samples			

Rejects Retained one month.

Pulps Retained one month
unless specific arrangements
made in advance.

