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PROSPECTUS
Oct. 21, 1988.
062302

SUMMARY

REPORT

ON THE

MINTO CREEK GOLD PLACER PROPERTY

MINTO LAKE AREA

MAYO MINING DISTRICT

MAYO, YUKON TERRITORY

115P9E

FOR

GOLDOREX MINERALS INC.

VANCOUVER, BRITISH COLUMBIA

February 19, 1988

Gerhard von Rosen, P.Eng.

FIGURE "A"

INDEX MAP

OF

YUKON TERRITORY

CANADA

0 200
KM

SUMMARY

GOLDOREX MINERALS INC., UNDER SUPERVISION OF THE WRITER, PERFORMED AND COMPLETED IN THE FALL OF 1987, A TEST PIT SAMPLING PROGRAM ON THE MINTO CREEK GOLD PLACER PROPERTY IN THE MAYO, YUKON TERRITORY, AREA.

THE RESULTS OF THE PROGRAM INDICATED THE PRESENCE OF PLACER GOLD CONTENT WITHIN A DEPOSIT OF COARSE BOULDER GRAVEL WHICH IS OF SUFFICIENT INTEREST TO WARRANT THE RECOMMENDATION FOR FURTHER ACTIVITIES TO BE UNDERTAKEN DURING NEXT SEASON'S OPERATIONS.

IT APPEARS POSSIBLE THAT THE PLACER GOLD, ACCUMULATED AS A RESULT OF SUCH AN OPERATION, COULD BE SOLD TO OFFSET AT LEAST SOME OF THE CASH OUTLAYS WHICH WILL BE ENCOUNTERED DURING THE IMPLEMENTATION OF THE RECOMMENDED PROGRAM.

THE AREA, OVERLYING THESE GOLD-BEARING GRAVELS, HAS BEEN STRIPPED OF ORGANIC OVERBURDEN, ALLOWING THE EARLY COMMENCEMENT OF BULK PROCESSING OPERATIONS IN THE SPRING.

THE "PHASE ONE" PROGRAM IS RECOMMENDED TO ENTAIL BULK SAMPLING AND TEST PITTING OF THE PAY GRAVEL IN THE 'HEITMAN BENCH', "A", "B", & "C" SECTORS, CULMINATING IN THE DECISION TO COMMENCE "PHASE TWO", COMPRISED OF BULK EXTRACTION OF PRECIOUS METALS, MAINLY PLACER GOLD, FROM THE DEPOSIT OF COARSE BOULDER GRAVEL, EXPECTED TO BE COMMERCIALLY-INTERESTING IN ALL THREE SECTORS.

IT IS ANTICIPATED THAT THE "PHASE ONE" PROGRAM, BUDGETED AT $150,000., WILL INDICATE THE PRUDENCE OF CONTINUING WITH "PHASE TWO", ESTIMATED TO COST $310,000., THE PLACER GOLD PROCEEDS OF WHICH SHOULD SERVE TO REPLACE A SIZEABLE PORTION OF THE BUDGETED EXPENSES.

TABLE OF CONTENTS

INTRODUCTION

The present report serves to summarize the information at hand todate, while providing a concise rendition of the recommendations included in a recent report by the writer to Goldorex Minerals Inc. (von Rosen, December 19, 1988)

The undersigned has gained comprehensive personal knowledge of portions of the subject property while providing engineering supervision of a test pitting program of the "Heitman Bench", carried out during the period of September-October, 1987.

The abovementioned report described this work, gave the method and results in detail, and, based on the favourable outcome of the tests, included recommendations for a bulk sampling program. This information is reiterated in the subject report.

PLACER CLAIMS

CLAIM NAME	GRANT NO	ANNIVERSARY
Hugo No: 1-3 Cr. Cls.	P2954-P2956	Sept. 3, 1988
Ken Creek Claim	P15740	Oct. 15, 1988
Estelita Creek Claim	P15741	Oct. 15, 1988
Frank Creek Claim	P15742	Oct. 15, 1988
Christina Bench Claim	P15131	Sept. 3, 1988
Pete No: 1-4 Cr. Cls.	P2830-P2833	Sept. 3, 1988
Creek Claims No: 1-2	P15498-P15499	Aug. 9, 1988
Fische #2 Creek Claim	P2106	Sept. 3, 1988
Casten Creek Claim	P15934	Sept. 18, 1988

The claims are recorded in the Mayo Mining District at the Mayo, Yukon Territory, Mining Recorder's office of the Department of Northern Affairs and National Resources.

They lie within map number 115P9E of the National Topographic System. The Hugo, Ken, Estelita, Frank, and Christina claims occur near McIntyre creek near its confluence with Minto creek. The Pete, Fische, Casten, and Creek claims lie on Minto creek.

Considerations regarding the surveys, ownership, and contractual relationships, with respect to the claim holdings, lie beyond the scope of this report.

LOCATION & ACCESS

$63^{o}43'N$ $136^{o}07'W$ 115P9E

The property is easily accessible from Mayo, Y.T. by traveling northward along the Mayo-Elsa-Keno two lane gravel highway, a distance of 11.5 miles to the Minto junction. Then following the dirt road westward, a distance of 9.3 miles, to the Highet junction. Taking the left fork, a distance of 2.2 miles to the property along the Minto creek road until the workings are reached.

Mayo, Y.T. lies about central to the Yukon Territory. It can be reached via the Klondike highway from Whitehorse, Y.T., which is on the Alaska highway. Mayo has an airport with scheduled flights.

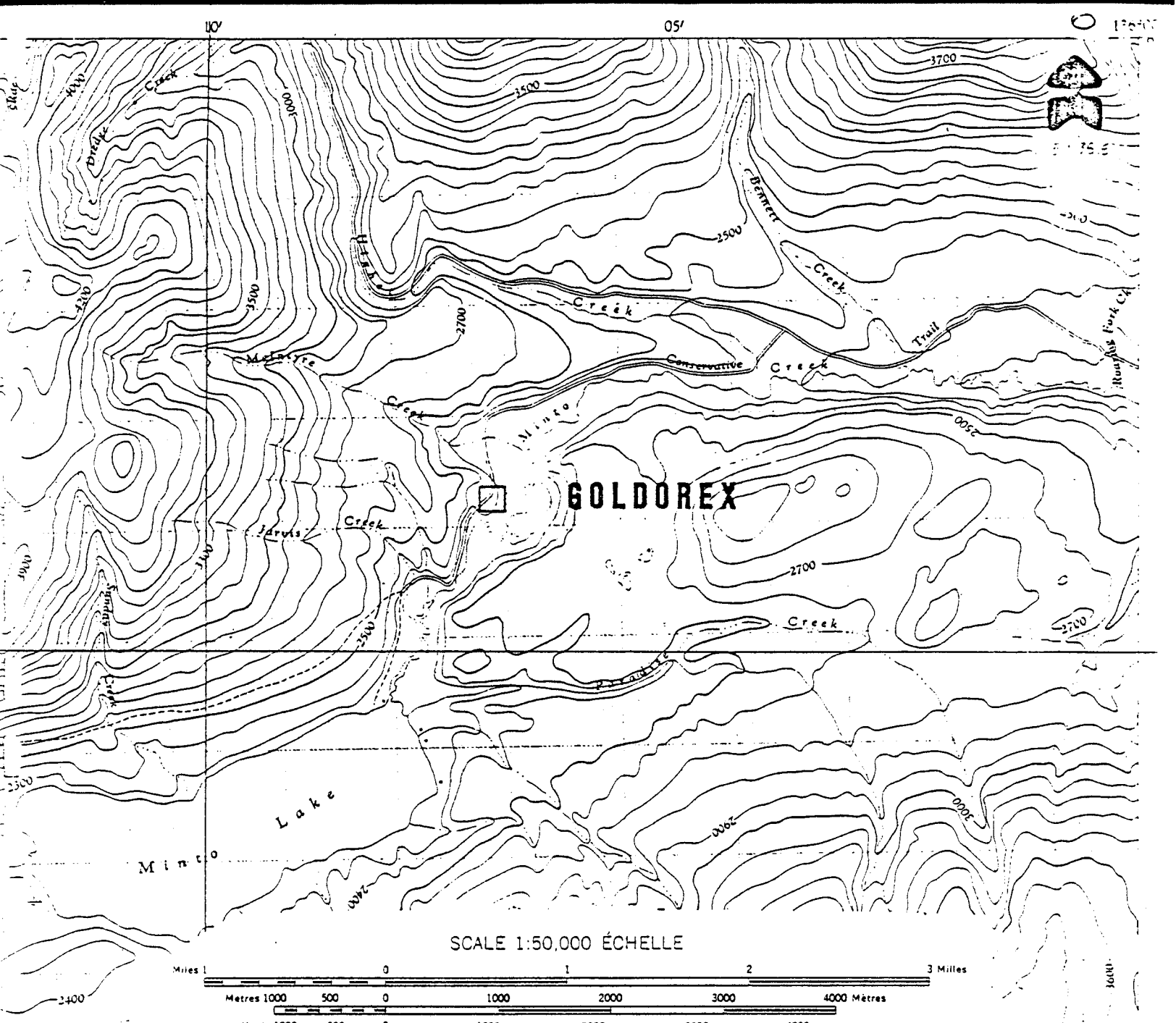


FIGURE B

MINTO LAKE GOLD PLACERS

PROPERTY LOCATION MAP

Mayo, Yukon Territory

115P9E

Mayo Mining Division

GEAREX ENGINEERING mission bc

PHYSIOGRAPHY, VEGETATION & CLIMATE

Minto creek, as it empties out of Minto lake (2200'ASL), resembles a brook meandering in the valley extension of the lake along the sides of which several benches remain at different levels, signifying higher detrital terraces.

In several locations there are constrictions in the valley, where apparently bedrock spurs, draped with detrital deposits, have caused the water flow to detour around them.

Most of the terrain is covered by conifers interspersed with aspen and other deciduous trees.

The work area, in question, has reportedly been stripped of vegetation since the writer's visit to the property, in readiness for next season's operation.

Permafrost occurs in those areas that are sheltered from the sun, and where muskeg provides insulation. Stripping of this overburden material from the working area during one season generally causes thawing of this layer, in preparation for the next working period.

During the freezing weather which set in after the subject test pitting program, Mr. Frank Erl organized the stripping operations whereby the organic layer covering the Heitman bench was removed. This fact, along with early snow removal, should allow for an earlier start of the recommended bulk sample program next spring.

The extremely cold weather is to be expected at this latitude during the winter months, when some snow fall provides the necessary runoff in the spring. Summer months are warm, and generally dry.

The placer operating season can be expected to last about 120 days, from around May 15th to September 15th. Operations can actually start earlier if the insulating muskeg and overburden has been stripped in the previous season, and also when snow is ploughed off the workings in the spring.

The working season can, of course, extend further into the fall, as for example this year, when working conditions were excellent at the beginning of October. The effective season was therefore extended to about 150 days.

Commencement of the 1988 field season should be planned with an earlier starting date due to the preparations that have already been made.

LOCAL AMENITIES

Descriptions of various items of equipment, and similar amenities related to placer operations, utilized during the subject sampling operation, follow. It is assumed that some of these considerations would apply to future operations, as well.

BUILDINGS

A useable cabin exists on the tailings area.

MACHINERY

A two-hopper, hydraulic grizzly, combination screen deck, with a conveyor feeding system, was utilized to supply the AEC999. (An innovative live-belt concentrator, capable of winning heavy-metal concentrates from sand at a throughput rate of one cubic yard per minute).

POWER SOURCE

Power for a larger operation needs to be supplied by generators, although the existing sampling plant does include a diesel generation set suitable for batch sampling operations.

EQUIPMENT

A Cat 950 rubber-tired loader was also available, although this item needs to be replaced with more up-to-date equipment when bulk sampling operation are envisaged.

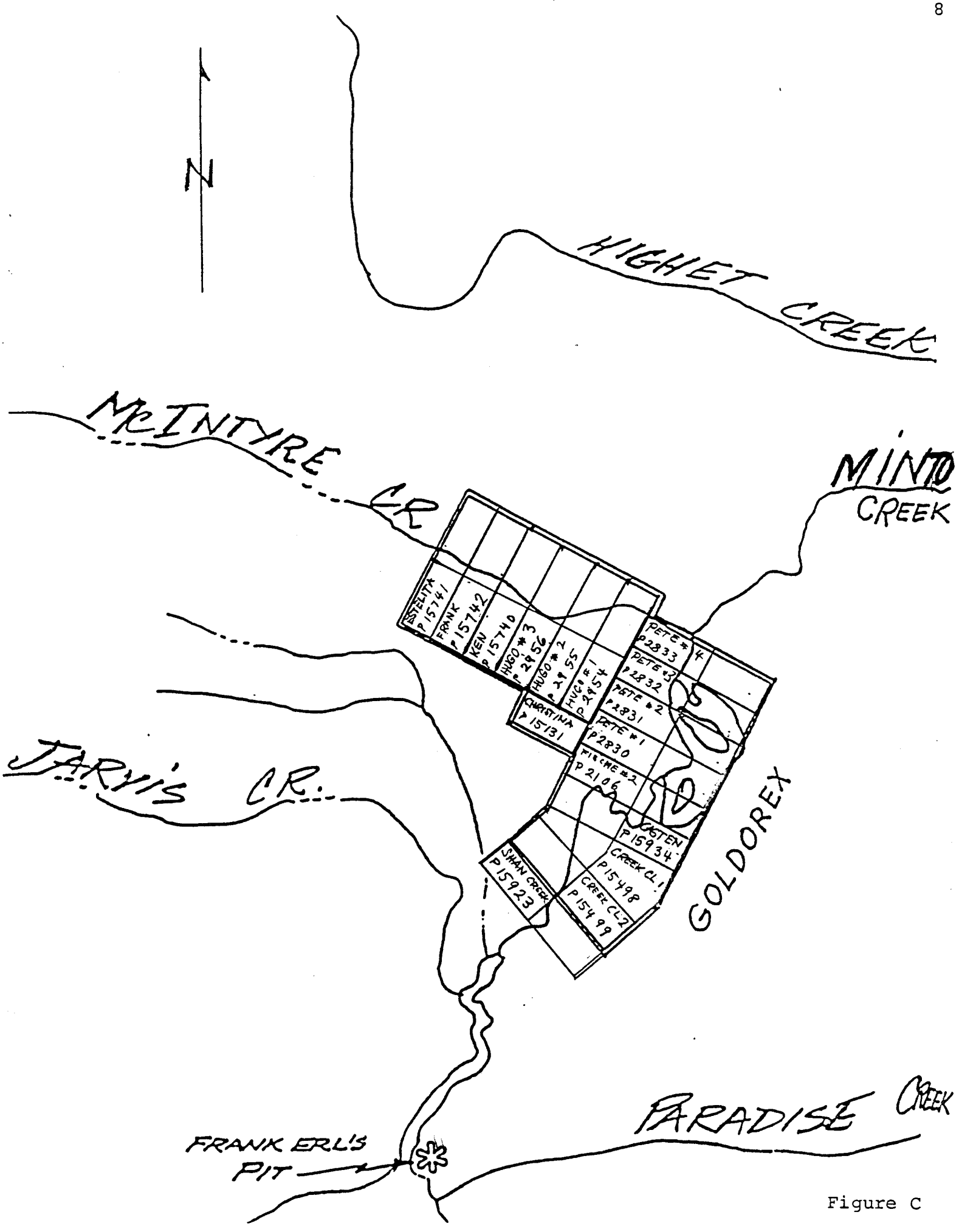

N
HIGHET CREEK
McINTYRE CR
MINTO CREEK
JARVIS CR.
GOLDOREX
ESTELITA P15741
FRANK P15742
KEN P15740
HUGO #3 P2956
HUGO #2 P2955
HUGO #1 P2954
CHRISTINA P15131
PETE #4 P2833
PETE #3 P2832
PETE #2 P2831
PETE #1 P2830
FISCHE #2 P2106
JOSTEN P15934
CREEK CL.1 P15498
CREEK CL.2 P15499
SHAW CREEK P15923
FRANKERL'S PIT
PARADISE CREEK

Figure C

WATER

Water supply is available from a nearby pond which is fed by Minto creek. Another source, supplying gravity fed water, is being upgraded along McIntyre creek.

WORK SPACE

Plenty of disposal area for tailings and for sediment ponds is available. Two settling ponds, remaining from previous operations, may, if warranted, actually be updated with very little preparatory work.

ENVIRONMENTAL CONSIDERATIONS

It appears likely that water sufficient for next year's bulk sampling operation will be available either from pump extraction of the plentiful ground water of the Minto creek valley, or by gravity from an earth-filled dam on McIntyre creek.

As there are several natural catchment areas available in the near vicinity, there should be no difficulty in the construction of suitable filtering banks surrounding tailings and sediment ponds, which are expected to provide water reclamation in accordance with the regulations.

HISTORY

1903

The earliest historic mention of work in the immediate area is recorded by Keele (1906). The Minto creek area was first staked in the spring of 1906 after fine-grained gold was found on the valley bottom bars within a narrow section of the valley, about one mile below Minto lake.

Winrows of boulders extricated from coarse gravel beds lying at varying elevations, remain as signs of the old timers explorations, and some of these may date back to these times.

1903 - 1904

The bars and flood plains at, or a short distance above Minto creek were worked by sluicing. Water was supplied from McIntyre creek. Testing was done to about 8 feet.

Keele (1905) reports that some shafts were sunk in the Minto creek valley bottom to as much as 100 foot depths, without hitting bedrock.

Robinson (1981) quotes Keele (1905) when he states that "...During 1903 and 1904 the "bars" or "flood plains" at or a short distance above the level of upper Minto creek were worked through sluicing with water supplied from McIntyre creek. Testing is said to have been done to depths "of about eight feet" with yields of "three to five cents to the pan". On the whole, those figures seem exceptionally high. At 140 pans per cubic yard, the figures given, calculate to $4.20 to $7.00/ cubic yard with gold then at about $20.00/Troy ounce. Under $600.00/Troy ounce gold ((approximately the price used in the subject report)) the values stated are on the order of C$125.00 to C$200/cubic yard..."

1916

Cairnes (1916) reported that hydraulic mining operations had been active during the past few years.

At McIntyre creek, as well as at Jarvis creek (closer to Minto lake) white cliffs can be seen standing as remnants of the hydraulic miners' work who fetched water via flumes and ditches, with

an aggregate length of about eight and one quarter miles from McIntyre, McLagan, and Turnip creeks, in order to mine the auriferous layers known to be included in some of the present cliff exposures. The resultant hydraulic tailings fans can still be noted to this day.

Cairnes notes a 20 foot thick bed of gravel which was considered to be pay in 1915.

1965

Mr. Frank Erl, shift boss at Keno Hill mines, explored and staked parts of the Minto lake and creek area. He also upgraded the Conservative trail to an access road. He worked a low bench containing coarse boulder gravels near the exit of Minto creek from the lake, using sluicing methods. Having experienced problems in retaining the flakey gold in the sluice box, he employed a jig in the system. The black sands thus retained contained gold upon amalgamation.

1968-1972

Mssrs. Gus Heitman and Walter Hinnek worked some of the upper bench (present area of interest) utilizing a belly scraper and a sluice box. An estimated 1,000 cubic yards of coarse gravels appear to have constituted the production.

Some of the operational problems included the reported inability of the machine to pick up the boulder gravels, while the large amount of water washing the material down a steeply inclined 3 foot sluice box did not improve the recovery of the flakey and fine grained gold comprising the pay in the deposit.

A further reason for the apparently-inadequate production profits may be the possibility, as suggested by the subject test results, that that portion of the bench (approximately: area "B") includes placer gold grades lower than those found near the northern sector of the bench (area: "A").

1972

Mr. Fred Schomig staked some of the northeast portion of the Heitman bench, as well as lower bench gravels to the north. He reportedly recovered 12 ounces of crude placer gold from about 700 cubic yards of coarse gravels processed at, or near creek level. (approximately C$10.00/bankrun cubic yard)

1979

Wild Boar Enterprises Ltd. and Mr. Fred Schomig coalesced their properties and the latter operated for the group during part of the 1980 season.

1980

Wild Boar Enterprises Ltd. mined the coarse gravels of the Heitman bench and processed the material through Gold Dust Minerals' "Millspex" - type centrifugal drum concentrator. An undefined quantity of material was processed to produce the approximately 150 ounces of crude placer gold which were reportedly recovered.

The operations commenced in July and ended about September 20th, the same year.

1981

The 1981 operation began in June and was stopped in early August due to lack of operating capital. The gold price had plunged from the previous year's high of about US$800 per ounce to the US$300 level, making previously interested investors withdraw their interest.

The combined production for both years is reported to have been about 18,000 cubic yards of material, producing around 365 refined ounces of gold. A reconnaissance of the tailings area shows a tailings volume ranging from 18,000 to 21,000 cubic yards. The gold value per bankrun cubic yard, therefore, calculates out (same parameters as elsewhere in this report) at around C$12.

1987

Mr. Rolf Harms, of Goldorex Minerals Inc., established a sampling plant, utilizing the AEC999 on the lower Schomig bench, for the main purpose of carrying out a pit-sampling program of the property.

During the period before the writer arrived to conduct the sampling program, while setting up and streamlining the testing plant, Mr. Harms processed a volume of about 150 cubic yards of head feed, resulting in a dore gold recovery of 68 grams. The gold value, likewise per bankrun cubic yard, therefore, calculates out (same parameters) at around C$8.

In addition to, and following the test program, a further approximate volume of 33 cubic yards of gravel, obtained from various sites on the property, were run through the system and about 36 grams of dore gold was therefrom obtained. This calculates out to around C$20/bankrun cubic yard. Source material was selected from the richer gravel deposits, defined by the subject test pitting program as being the grey, coarse boulder, gravels. This work was performed after the writer had left the property.

The writer personally carried out and supervised a 34-pit sample program. The sample sites were laid out in such a manner that an approximate grid spacing of 200 feet was approached for the distance between holes.

Gold extracted from about 32 bankrun cubic yards, obtained solely from eight pits within the northern portion of the bench (area "A"), weighed 19.8 grams of dore. Calculated back this is about C$11/bankrun cubic yard.

The program will be described further on in the subject report.

Considerable work with a D8 dozer was carried out after the subject pit sampling operations were terminated due to inclement weather. The Heitman bench was totally stripped of vegetation and other cover. This clearing commences at the Minto lake road and places the lower half of the bench in readiness for further definitive work, planned for the spring of 1988.

A road has also been rehabilitated leading up the south slope of McIntyre creek valley, to the old hydraulic workings. In digging for proper gravels to use for the construction of a dam across McIntyre (to be utilized as the source of next year's gravity water supply) a layer of coarse gravels was discovered. No testing was done due to the cold weather conditions, however, as such coarse gravels are held to be signs for the discovery of placer gold, this is an interesting development, representing a prime target to be explored during the coming season.

The writer prepared a progress report, dated December 08, 1987, in which the 1987 test work was described in detail.

LOCAL GEOLOGY

Glaciation has played a major role in the positioning of the auriferous detrital deposits of the Mayo placer mining area.

BEDROCK

Bedrock exposures were observed by the writer to consist of phyllitic schist at several localities.

At least three pits bottomed in this type of bedrock material.

COARSE BOULDER GRAVEL: HEITMAN BENCH

Sediments deposited upon bedrock comprised of phyllitic schists within the area of study, consisted of coarse boulder gravels (considered to be the "pay" gravels in the area), on the upper surface of the Heitman bench, while more finer-grained sands and gravels constitute most of the sedimentary section to be encountered at the abrupt drop-off, near the edge of the bench. Indeed, it appears as though a sequence of deposition has draped gravels over a bedrock knoll, providing very little top cover (as this consists mainly of boulder gravel), while the sides of the bench consist of several tens of feet of bedded sands and gravels.

This material consists of well-washed, poorly sorted coarse sand, intermixed with pebbles,

cobbles, and boulders ranging in size to over two feet in diameter. The polished round boulders may originate in an area farther east of this vicinity, as the local rocks appear to be mostly schists.

A very evident positive aspect of these gravel deposits is that they appear to be devoid of fine silt and clay, thereby alleviating the problem of scrubbing of the headfeed, and silting of the tailings area.

FLOW DIRECTION

The imbricate structure in the smaller-sized gravels indicate a south- west-ward direction of water flow.

OVERBURDEN

A veneer of some finer grained gravels overlie the boulder gravels in the sequence at Heitman bench. Overlying these is an 'overburden' layer consisting of 'dirty' buff-coloured sands and silts, which appear to gain in thickness towards the west, starting approximately at the Minto lake road. At the base of the hill to the west these may accrue to 10 or 20 feet in thickness. It is highly possible that the coarse boulder gravels still underlie this material near the base of the hill.

COARSE BOULDER GRAVELS

Similar coarse, grey gravels were excavated at the water pit on the Schomig bench level.

Other cobble, and boulder gravel layers are said to occur at intervals at higher levels within the sedimentary sequence comprising the hills to the west.

MCINTYRE CREEK

HYDRAULIC SHOWINGS

The buff-coloured scars of the oldtimer's hydraulic operations can be seen on the southern side, right side, of McIntyre creek, about 1/2 mile upstream from the Minto lake road. The sedimentary section here looks similar to that of the hydraulic workings near Jarvis creek, closer to Minto lake. It consists of silt, sand mixtures, which are interbedded with gravel.

A boulder layer, consisting of large boulders, reportedly up to 4 feet in diameter, has been uncovered at the base of this section. It is plausible that the old timers were attempting to cut down into this deposit by using the hydraulic methods employed elsewhere in the region. Coarse boulder gravels, in the general area of Minto lake, are historically good indicators of placer gold deposition, hence this discovery is a potentially important one.

TEST PIT SAMPLING PROGRAM

A sampling program, consisting of test pitting and analysis of the excavated samples for gold, was carried out during the fall of 1987 over the "Heitman Bench", which consists of a near-surface layer of auriferous 'coarse boulder gravels'.

The test pits were made by a 960 F.E. loader to a nominal depth of ten feet. The pits were spaced at about 250 foot spacings.

The samples, which consisted of 'pay gravel', where possible, had a volume of about four bank-run cubic yards.

The samples were concentrated on a 'live belt concentrator', termed the "ORLON AEC999". The concentrates were tabled in Vancouver. The table 'supercons' were screened to capture +12 mesh gold flakes (which were collected by hand picking), the remainder was subjected to amalgamation. After acidizing, the gold was cupelled, and the dore gold bead weighed.

The combined weights of particle gold plus dore gold were used in calculating the gold value per unit in-situ cubic yard.

RESULTS OF PLACER TESTING PROGRAM

The presentation of the results of the testing program, depicted on table #1, shows the total weight of gold obtained for each sample, for two categories, based on the screen size of the gold particles. Those remaining on an approximately 12 mesh screen were hand picked and weighed; those passing through the screen were amalgamated and collected in a dore button.

The weight of both, the flakes and the button, are shown, in addition to the total weight of placer gold retained during the process of concentration.

The following points were considered when the in-situ (bank run) volume, shown, of retained gold was calculated: (1) a swell factor of 120%, and (2) a fineness factor of 82%. The only other factor applied was when the front end loader buckets were considered to be less than 'struck full'. No efficiency factor was introduced to reflect the gold losses.

The price of gold is here taken at US$450/fine troy ounce; the currency exchange rate is taken at US$1.00=C$1.30.

The values extracted from the samples, after taking the correction factors into consideration, ranged between about C$4 and C$15 of fine gold per 'bank run' cubic yard, for the coarse, grey, boulder gravels. These are considered to be the 'pay gravels'.

Similarly, the extracted values for the overlying materials ranged from less than one dollar to around C$2 per 'bank run' cubic yard. For those materials below the pay gravels, gravels showed comparable values, but several samples, from the lower cliff face, gave values between C$2 abd C$3.

Table 2 is a presentation of all evaluations, available to the writer, made on materials obtained from the various zones of the Heitman bench and surroundings. It includes some large volume extractions, as well as pan sample results.

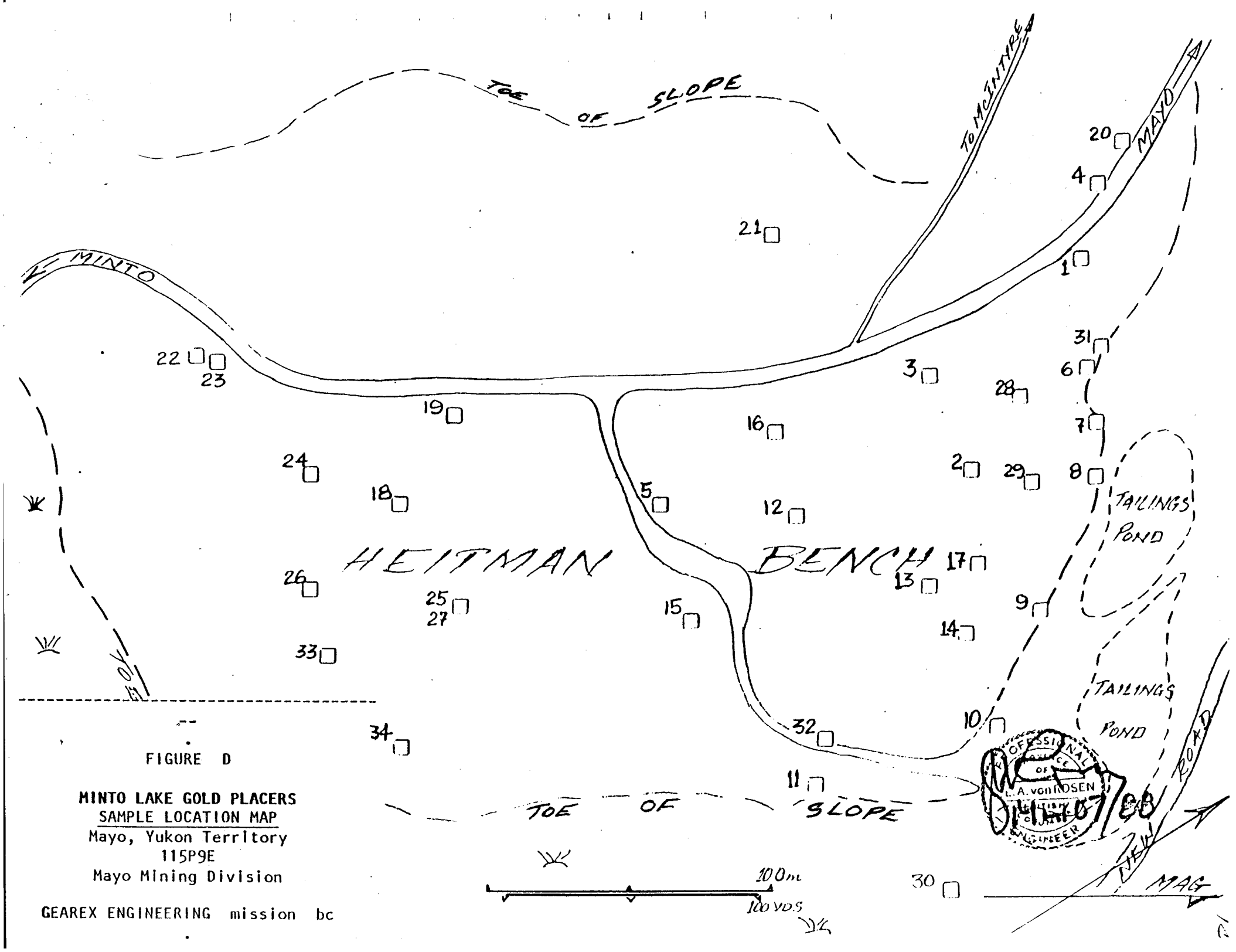


FIGURE D

MINTO LAKE GOLD PLACERS
SAMPLE LOCATION MAP
Mayo, Yukon Territory
115P9E
Mayo Mining Division

GEAREX ENGINEERING mission bc

TABLE 1

RESULTS OF PIT TESTING PROGRAM

Sample #	AREA	Particle Weight grams	Bead Weight grams	Total Dore grams	Volume cuyds	Grade C$/yd
1	A	0.260	1.669	1.929	4	7.44
2	A	0.527	1.711	2.238	4	8.63
3	A	0.875	3.098	3.973	4	15.32
4	A	0.162	1.601	1.763	4	6.79
5	A	0.499	1.822	2.321	4	8.95
6	I	0.098	0.652	0.750	4	2.89
7	I	0.000	0.050	0.550	4	2.35
8	I	0.070	0.665	0.735	4	2.83
9	I	0.092	0.402	0.494	4	1.91
10	I	0.019	0.193	0.212	4	0.81
11	J	0.058	2.417	2.475	4	9.55
12	A	0.465	2.785	3.250	4	12.53
13	A	0.313	2.651	2.964	4	11.43
14	I	0.028	0.587	0.615	4	2.37
15	B	0.053	0.211	0.264	3	1.36
16	A	0.545	1.006	1.551	4	5.98
17	I	0.068	0.172	0.240	4	0.93
18	B	0.427	0.599	1.026	4	3.95
19	B	0.137	0.793	0.930	3.5	4.09
20	A	0.085	0.718	0.803	4	3.10
21	C	0.187	0.277	0.464	4	1.79
22	B	0.661	0.594	1.255	4	4.84
23	F	0.052	0.658	0.710	4	2.75
24	B	0.394	0.719	1.113	4	4.29
25	H	0.029	0.209	0.238	3.5	1.05
26	L	0.000	0.162	0.162	4	0.62
27	H	FA	FA	0.099	4	0.39
28	I	FA	FA	0.170	4	0.66
29	I	0.000	0.084	0.084	4	0.32
30	J	0.099	0.876	0.975	4	3.76
31	I	0.000	0.093	0.093	4	0.36
32	I	0.047	0.559	0.606	4	2.34
33	H	0.000	0.586	0.586	4	2.26
34	K	0.044	0.259	0.303	4	1.16

NOTES:

Sample Number: chronologic order of pit samples
Area: sector of Heitman bench.
Particle Weight: particles larger than passing through 12 mesh were manually separated, counted and weighed.
Bead Weight: the dore bead cupelled from the amalgam was weighed.
Total Dore: particle weight + bead weight. (about 82% gold)
Volume: bankrun volume after considerations like, swell factor (120%), etc. were applied.
Grade: Canadian dollars of fine gold per bankrun cubic yard.
Parameters used were: price of pure gold = US$450 per troy ounce; US$1.00=C$1.30; 1 troy ounce = 31.103 grams; the fine-ness of this placer gold (dore gold) is about 820 (82% pure).

TABLE 2

SUMMARY TABLE OF GOLD ANALYSES

Sample	Area	Description	Sample Size (cuyd)	C$/cuyd
0632	HeitA	Top-old road cut	-1	5.00
GX01	HeitA	Pit-coarse gravel	4	7.44
GX02	HeitA	Pit-coarse gravel	4	8.63
GX03	HeitA	Pit-coarse gravel	4	15.32
GX04	HeitA	Pit-coarse gravel	4	6.79
GX05	HeitA	Pit-coarse gravel	4	8.95
GX12	HeitA	Pit-coarse gravel	4	12.53
GX13	HeitA	Pit-coarse gravel	4	11.43
GX16	HeitA	Pit-coarse gravel	4	5.98
GX20	HeitA	Pit-coarse gravel	4	3.10
BULK	HeitA	18,000 cuyd/365tr.oz.	18,000	12.00
BULK	HeitA	150 cuyd/68g.dore	150	8.00
BULK	HeitA	33 cuyd/36g.dore	33	20.00
TEST	HeitA	32 cuyd/19.8g.dore	32	11.00
0628	HeitB	Wall-long cut	-1	0.25
GX15	HeitH	Pit-coarse gravel?	3	1.36
GX18	HeitB	Pit-coarse gravel	4	3.95
GX19	HeitB	Pit-coarse gravel	3.5	4.09
GX22	HeitB	Pit-coarse gravel	4	4.84
GX23	HeitF	Pit-finer gravel	4	2.75
GX24	HeitB	Pit-coarse gravel	4	4.29
0640	HeitD	Bank cut	-1	2.53
GX21	HeitC	Pit-coarse gravel?	4	1.79
GX25	HeitH	Pit-finer gravel	3.5	1.05
GX27	HeitH	Pit-finer gravel	4	0.39
0626	HeitH	Pit dump	-1	0.22
0627	HeitH	Fines bench cut	-1	0.24
GX06	HeitI	Pit-finer gravel	4	2.89
GX07	HeitI	Pit-finer gravel	4	2.35
GX08	HeitI	Pit-finer gravel	4	2.83
GX09	HeitI	Pit-finer gravel	4	1.91
GX10	HeitI	Pit-finer gravel	4	0.81
GX14	HeitI	Pit-finer gravel	4	2.37
GX17	HeitI	Pit-finer gravel	4	0.93
GX28	HeitI	Pit-finer gravel	4	0.66
GX29	HeitI	Pit-finer gravel	4	0.32
GX31	HeitI	Pit-finer gravel	4	0.36
GX32	HeitI	Pit-finer gravel	4	2.34
0633	SchoJ	Road cut-opp.sluice	-1	2.78
0634	SchoJ	Back of cut	-1	56.66
0635	SchoJ	Cut-wall layer	-1	0.24
0636	SchoJ	Base of cut	-1	0.71
0637	SchoJ	Cut-boulder layer	-1	0.71
0638	SchoJ	Internal road cut	-1	39.01
0639	SchoJ	Internal road cut	-1	-
GX11	SchoJ	Pit cut into base of slope	4	9.55
GX30	SchoJ	Bottom of water supply pond	4	3.76
GX34	HeitK	Pit-finer gravel	4	1.16
0629	HeitL	Fines above bedrock	-1	0.17
0630	HeitL	Southwest excavation	-1	1.07
0631	HeitL	Fines on bedrock	-1	0.34
GX26	HeitL	Pit-in phyllite bedrock	4	0.62
GX33	HeitL	Pit-finer gravel	4	2.26

NOTES: GX=Gearex, Schom=Schomig, Heit=Heitman, A=area A, C$/cuyd at C$585fine bankrun; the tabulation, shown above, combines the writer's observations with values shown on table 4, page 10 (Robinson, 1981)

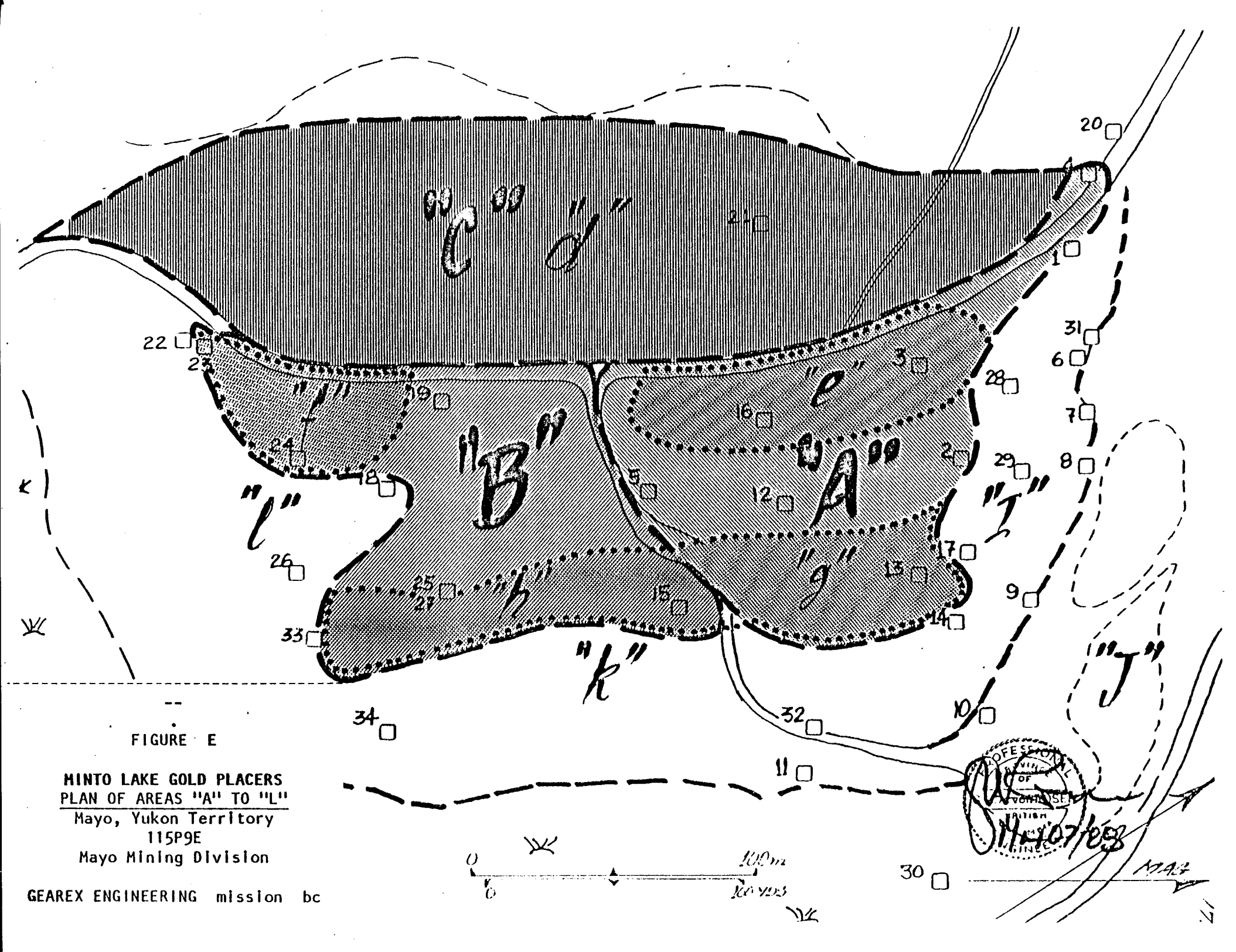


FIGURE E

MINTO LAKE GOLD PLACERS
PLAN OF AREAS "A" TO "L"
Mayo, Yukon Territory
115P9E
Mayo Mining Division

GEAREX ENGINEERING mission bc

VOLUME & GRADE OF AURIFEROUS GRAVELS

Table #3 exhibits the area/volume/grade measurements obtained by compiling the pit testing results with a string/compass survey of the Heitman bench.

The 'pay gravels', for the purpose at hand, are to be found with high certainty within areas "A" and "B", and with less certainty within area "C". Overburdened areas are designated "D", "E", "F", "G".

The thickness of the 'pay gravels' are judged to be approaching 15 feet.

At a nominal depth of 10 feet for the coarse, grey, boulder (pay) gravel, the available volume is about 42,300 cubic yards for area "A", and the same for area "B".

The west half of the Heitman bench ("C/D"), still basically unexplored, has the potential of doubling the volume of 'pay gravels' in this proximate zone.

A summation of the evaluation follows:

TABLE 3
VOLUME/VALUE: AURIFEROUS GRAVELS

SECTOR		"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
AREA	(yd2)	14,112	14,112	251,160	251,160	4,784	2,751	4,306	4,425
DEPTH	(yd)	3.3	3.3	?	?	2.0	2.0	3.0	3.0
VOLUME	(yd3)	46,572	46,572	?	?	9,568	5,502	12,917	13,276
GRADE	(C$/yd3)	9.62	4.46	?	?	2.00	2.00	2.00	2.00
VALUE		C$448,000	207,700	?	?	19,100	11,000	25,800	26,500

NOTE FACTORS USED: fine gold at US$450, US$1=C$1.30; 1 gram dore = 0.8 gram fine; 1 cubic yard, bankrun = 1.20 cubic yard, loose.

The area investigated during the subject operation comprises about 100,000 square yards. The total area claimed (14 creek claims; one bench claim) encompasses about 1.6 million square yards.

ECONOMICS: ORE/WASTE EQUATION

Although some of the parameters, needed to prepare a complete ore/waste equation, are not available at this stage of exploration, it is still possible to offer a pro forma estimate of the outcome if the bulk extraction were carried out.

TABLE 4

PRO FORMA PROFIT ANALYSIS

SECTOR	AREA	VOLUME	GRADE	VALUE
"A" "ORE"	14,100	46,600	(+) C$9.62	C$448,000
"E" "WASTE"	4,800	9,600	(-) C$1.00	C$ 9,600
"G" "WASTE"	4,300	12,900	(-) C$1.00	C$ 12,900
"E + G"	9,100	22,500	(-) C$1.00	C$ 22,500
"A-(E+G)"	5,000			C$ 425,500
"A" SCREENING (5:1)		46,600	(-) C$2.00	C$ 93,200
"A" CONCENTRATING		9,300	(-) C$5.00	C$ 46,600
"A" SUNDRY		46,600	(-) C$1.00	C$ 46,600
"A" DIRECT COSTS				C$ 186,000
"A" BALANCE		NIL		(+) C$ 239,500

"B" "ORE"	14,100	46,600	(+) C$4.46	C$ 207,700
"F" "WASTE"	2,800	5,500	(-) C$1.00	C$ 5,500
"H" "WASTE"	4,400	13,300	(-) C$1.00	C$ 13,300
"F + H"	7,200	18,800	(-) C$1.00	C$ 18,800
"B-(F+H)"	6,900	27,800		C$ 188,900
"B" SCREENING (5:1)		46,600	(-) C$2.00	C$ 93,200
"B" CONCENTRATING		9,300	(-) C$5.00	C$ 46,600
"B" SUNDRY		46,600	(-) C$1.00	C$ 46,600
"B" DIRECT COSTS				C$ 186,000
"B" BALANCE		NIL		(+) C$ 2,900

DISCUSSION

Several points should be discussed relative the merits of the property. They are as follows:

A) The subject test pitting program focussed entirely on testing the coarse, grey, boulder-gravel layer found on the Heitman bench, for the purpose of providing indications of the placer gold values, reported therein, by previous operators, as for example:

1) The 1980-1981 operation processed approximately 20,000 cubic yards of gravel from the northern portion of the same bench, selling 365 ounces of fine gold. This calculates at about C$12/bank run cubic yard (using the subject-report conversion factors).

2) The 1987 batch sampling operation, as reported by Mr. Harms, returned about 68 grams of dore gold from 150 cubic yards, obtained from mainly the northern portion of the bench. This calculates at about C$8/bank run cubic yard.

3) The 1987 pit testing program, supervised by the writer, focussed on defining the grade and volume of the Heitman bench deposit. Its results highlighted the northern portion of the 'pay gravel' deposit, which averaged about C$9, while also indicating an adjoining sector, to the south, that averages about C$4/bank run cubic yard.

4) The second 1987 batch run, as reported by Mr. Harms, returned about 36 grams of dore gold from 33 cubic yards, obtained mostly from the better sites as reported from the test pit results. This calculates at C$20/bank run cubic yard.

It is probable that more gold is captured during the process of bulk sampling and carrying out actual production runs, than that collected during a test pit sampling operation. Hence, the writer's values may be conservative.

B) Alluvial materials above this 'pay' gravel, as well as beneath it, were also tested in order to explore the possibility of mining the total height of the bench.

C) A distinct drawback of the subject testing program was the inability to sample the total section of 'pay gravel' in one pass. A large backhoe, necessary for such an arrangement, was not available. The next year's recommended 'bulk sample' program will be able to overcome several problems encountered during the subject test program by:

1) excavating the 'pay zone' to its full vertical extent, and by:

2) increasing the efficiency of the operation by treating much greater volumes of material per sample (bulk sampling.)

The Heitman bench could supply head feed from a height of about 60 feet above the level of the valley bottom. The 'pay gravels', however, comprise a layer of about 15 feet, covering the top of the bench.

D) The results of the project indicate that adequate grades of placer gold exist, within the 'pay gravels', to provide enough incentive to support the recommendation for further work on the property.

E) The 'pay gravels' in question, specifically those on the 'Heitman bench', have the following positive attributes:

1) They are clean-washing; i.e. low sliming/silting factor.

2) Medium- to fine-grained gold has been documented to occur within the 'pay gravels', ranging in grade from around C$4 to C$15 per bankrun cubic yard, in both overburden and non-cover areas, with estimated depths from a few feet to possibly 15 feet.

The very approximate total of contained placer gold within the Heitman bench (A+B) has a present in-situ value of around $650,000.

3) "Overburden" contains gold, as well. The decision of the overburden economics needs to be made at a future date.

4) Accessibility to the property is ideal. No roads need to be built for access.

5) Water exists nearby. Stored, gravity-water may be available from McIntyre creek. Water from Minto creek can be pumped.

6) Environmental considerations have not shown any causes detrimental to a placer operation. The area to be tested has already been stripped, ready for excavation. The tailings ponds, used in previous operations, are still in existence.

7) A future operation needs only a camp, a power generation system, a screening plant, a fine-grained gold concentrator, rolling stock, ancillary equipment, etc., and labour, to start a bulk sampling program. The writer has been advised, by the management of your company that the AEC999 is available for next season's operation. The writer is familiar with this device, and expects it to be a most-suitable adjunct to the flow sheet.

F) These encouraging results together with the ideal layout of the situation, provide sufficient incentive for further work, the recommendations for which, to be detailed later.

G) As previously mentioned, the 'Heitman bench', with its documented gold occurrence within the 'pay gravels', represents a prime target for development. A program of bulk testing of these gravels, as well as of any other deposits that appear of interest in the vicinity, will indicate the actual tenor of the 'pay', as well as providing grade indications of prospective deposits, in a more definitive manner than small batch, test pit determinations, herein described. Test pitting is still a viable method, and suggested for use on some portions of this property.

H) The volume of the 'pay' gravels, as defined by the 'Heitman bench' is admittedly small, however, the simple logistics of mining and treatment of this gravel layer, in addition to the indicated gold values therein contained (the subject report indicates that the gold content of areas "A" + "B" could range around C$655,000.), make this an ideal situation for a season's bulk processing program which promises the return on some, if not all, of the investment.

This gold is contained in a near-surface gravel deposit, (but mining and stripping costs need, of course, to be considered), provide the possibility of recapturing a sizeable portion of the venture capital necessary to fund next season's explorations.

Perusal of Table #3 will show that of the two 'pay gravel' blocks, Area **"A"** and **"B"**, Area **"A"** is certainly the one to start bulk extraction from, once a closer approximation of the tenor is established by further bulk testing.

I) The total area explored in the subject project measured about 100,000 square yards. As the fifteen claims, in question, comprise a total area of around 1.6 million square yards, it is evident that there is ample room for further explorations.

As only a small portion of the claimed area has been prospected with modern-day mechanical equipment, one can surmise that the placer gold production potential of the area has not, as yet, been exhausted.

J) Complementary to the foregoing is the following information which was reported to the undersigned by Mr. Frank Erl, who supervised the bulldozer work (carried out subsequent to the writer's stay at the property): after freeze- up, during the recent stripping operation at the Heitman bench, the dozer worked on the dam some distance up McIntyre creek. An exposure of coarse boulder gravel was discovered. The news of this discovery is certainly interesting, and provides a prime target for exploration which could be undertaken as an adjunct to the planned bulk sample program of the known gravels.

K) There are several other areas within the claimed area, that have, as yet, not been explored. As the flow direction of the streams depositing many of the gravel beds, investigated in the pits, appears to be in the southwestern direction, it would seem interesting to explore those areas 'upstream' of the Heitman bench. This possibility is further enhanced by the knowledge that some of the placer gold is decidedly hackly, suggestive of a short stay in the tumultuous streams which must have moved the gravels.

Similarly, the 'Pete' claims, to the north, have not been studied by the writer, however coarse gravel has been reportedly been discovered by the stripping crew, on a hillock located a short distance to the north of the Schomig bench. It seems reasonable to anticipate this gravel sequence to continue northward at the same elevation. Further exploration is warranted.

CONCLUSIONS

1) Although the results of the subject test pitting program are encouraging, it should be noted that they do not suggest that the reserves are proven. Neither do the grade calculations necessarily reflect the true grade of the deposit. (There is a good chance that the true grade will increase over the figures quoted in this report, this fact, will, however, only be known when the bulk extraction has been completed.)

By the same token, it is evident that the values are attractive, and that the possibility exists that, at the very least, a major portion of the production outlays can be recaptured from the proceeds of the bulk sample production.

As the information on Table #3 suggests, area **"A"** is the block to start excavating from initially. If the results are better than indicated with the information at hand, then the operation can move into area **"B"**.

2) It was evident from observation of the tabling operation, that a large proportion of fine grained gold was concentrated by the AEC999. With further refinements of the test pit sampling program, it is entirely possible that an even greater amount of this fine grained gold could have been secured.

3) The "pay gravels" of the Heitman bench can be divided into three sections.

i) As shown on Table #3, areas **"A"** & **"B"** encompassing the now-stripped bench, east of the Minto lake road, which comprises about 90,000 cubic yards of gravel underlying an area of about 28,000 square yards. The thickness of this bed is expected to reach possibly 15 feet. The average thickness has not been determined. Some sections are covered with low-paying material ($2/yd).

The grade of the gravels (US$450/1.30Can), on the average, may be about C$4.50 per in-situ cubic yard for area **"B"**, and in the area of C$9.50 per in- situ cubic yard for area **"A"**.

Other operations, with a higher throughput of similar gravels, have reported higher gold receipts. It is possible that the grade calculated on the receipts of gold, obtained from a bulk extraction operation, will be found to improve on the pit sample results.

ii) The third area **"C"**, consisting of the adjoining land to the west, with possibly 250,000 square yards of area, may, upon exploration, prove to harbour similar coarse gravels. This possibility needs to be explored by deep-pit trenching.

4) A recently-discovered layer of boulder gravel occurs up McIntyre creek, about 1/2 mile up from the road. This discovery, including the intervening area, needs to be explored, and constitutes one of the primary exploration targets for next season.

5) A small portion of the total claimed area has been explored during the subject sampling program. (About 6%).

RECOMMENDATIONS

GENERAL

Further exploration expenditures are recommended on this property. As the suspected commercial status of the **"A"** portion of the Heitman bench is as yet, not confirmed, a phased work program is hereby suggested, in which the first phase will focus on substantiating these indicated reserves, while also investigating the **"B"** and **"C"** sectors.

In the event that the outcome of the first phase is favourable, a further phase, during which a large portion of the Heitman bench will be excavated and processed for precious metal content, will, hopefully provide a sizeable return of the capital outlays, in the form of retrieved placer gold.

In addition to this (Phase Two) operation, there will be further attention given to the "B" and "C" sectors, the result of which should give reserve indications for those areas of the Heitman bench.

OVERVIEW: PHASE ONE

Work on the property should consist of:

a) bulk sampling of the north end of area "A" of the Heitman bench, focussing on the pay gravels, but including the overburden, and the bench deposit below the pay gravel.

b) in addition to bulk sampling, further test pitting of area "B" of the Heitman bench, including the overburden and the gravels underlying the pay gravel.

c) test pitting of area "C" of the Heitman bench; this again should include the testing of the overburden. Follow-up by bulk sampling.

OVERVIEW: PHASE TWO

Based on results, encouraging further work, the following may be recommended:

a) perform bulk extraction of precious metals from the pay gravels found on the "A" portion of the Heitman bench.

b) continue with testing, if necessary, of the "B" and "C" zones. Such work would include test pitting, bulk sampling, and similar procedures. The decision to expand the bulk extraction operation onto area "B" and/or "C" will be made during this phase. Hence, it is possible that bulk extraction will become a continuous operation progressing from one area to the next, starting with "A" and ending with "C".

It is hereby recommended that this activity can be carried out in a logical manner, somewhat along the following lines:

LOGISTICS: PHASE ONE & TWO

PREAMBLE

The change over from the first phase into the second phase, can in reality occur very smoothly, as the evaluation of both, batch, and bulk samples, can generally be made by performing an on-the-spot qualitative analysis of the black sand concentrates, as they are collected at the end of the AEC999.

It is anticipated that based on the on-site decision of the engineer-in-charge the transition from one phase to the next will occur without disruptive interruption of the operation.

PREPARATION

1) In anticipation of the execution of the following program recommendations, it is adviseable to strip the roads and work areas of snow, in the spring, several weeks in advance of the actual work commencement on the property.

2) Excavation of the 'pay gravels', especially near the north edge of the Heitman bench, area "A", could commence immediately. These same gravels, in other sectors of the bench, are covered with a few, to several feet of overburden which will have to be contended with. Those overburden-covered areas within about 100 yards of the bench edge, could conceivably be stripped by dozing the waste gravels over the edge. This material can be useful as road fill for the construction of the new road which has been started around the base of the Heitman bluff.

The overburden in other areas can be simply be stripped into the mining excavation, as the work-face proceeds.

BULK TESTING

1) A bulk testing program should be undertaken, as soon as practicable, consisting of a wet screening operation, capable of handling up to 60 cubic yards per hour of screened material, feeding onto an AEC999 (the AEC999 has a rated capacity of handling 60+ cubic yards of -1/4" head feed, per hour).

2) In the event that the gold-winnings are of economic interest, the decision can be made, on-site, to excavate and treat the rich gravels on a continuous basis. This scenario is expected to occur on area "A" of the Heitman bench; the commencement of this work would signify the change over into "Phase Two" operations.

3) Certain periods can be set aside for the treatment of batch tests which will be delivered from the outlying exploration programs.

4) At a maximum production rating (Phase Two operations), during a nominal 10 hour shift, about 500 cubic yards of screened material will have been handled. Depending on the screening ratio, this may project to an operation capable of handling about 2,000 cubic yards of bankrun materials per day. It is anticipated, however, that the average production throughput will not reach this amount.

This is not to suggest, therefore, that this (peak) production rating is to be the norm, as there will be periods when actual production will be interrupted due to sample site changes, break downs, etc. As the working quite short (when the days are counted), it is advisable, however, to be able to operate at peak capacity, whenever possible. On the other hand, the fact that the duration of the daylight hours is very long, again serves to 'extend' the working season.

5) This property has been shown to contain commercially-interesting gold concentrations in the smaller gold sizes; a problem for normal-gravity gold concentrators, which, while handling large volumes of feed, must be able to retain the finer gold fractions. The AEC999, used during the subject program, was shown to have retained a portion of this fine grained gold. Hence, considering its capacity, it is a suitable fine-grained-gold saving device to be used in a project such as the one recommended herein.

6) This program should be established in such a manner that the full thickness of the 'pay' gravel, plus some of the underlying material, can be run through the system. Extreme care in the handling of the concentrate will allow the retention of that very fine-grained gold fraction, noted during the subject program.

EXPLORATION: TEST PITTING

This work will commence during the "Phase One" program, and continue during the "Phase Two" expansion of the project.

A test pitting program should be undertaken at the same time, utilizing a backhoe with over 20 foot reach, this should be focussed on the following sectors of the property:

1. Area "B".
2. Area "C".

SEQUENCE

1. The bulk sample and test pitting programs can be run concurrently, and separately of each other.

2. The bulk-screening operation will produce the minus 1/4 inch sand which can be stockpiled. The AEC999 will can be supplied from these piles.

3. It is adviseable to commence excavation at the northern edge of the bench, that is, the northern edge of area "A". A volume of over 46,000 cubic yards is available from area "A", with an average grade of over C$9.00.

4. The process of screening area "A" gravels (over 46,000 yd3), at a nominal rate of 2000 cubic yards per day, would take around 23 days, at maximum throughput. The AEC999 should encounter no problems in dealing with this production rate, however, as the plant will be handling batch work in addition to this, the overall rate is difficult to predict with certainty.

5. It is anticipated that, after a relatively short period of time, the decision can be made on the commercial sense of commencing "Phase Two" bulk extraction operations of the area "A" gravels. Continued testing will also indicate the viability of continuing into areas "B" & "C". area "B", where the grade appears to be less.

6. While the actual bulk extraction is continuing, there will be times for 'batch work' set aside, when the otherwise continuous concentration process of the bulk screening undersize is interrupted, while the samples, trucked in from the test pit diggings, are treated as 'batches'.

7. As an evaluation of the tenor of the test pit results can be made continuously, while the samples are processed over the AEC999, decisions can immediately be made to decide upon the upgrading of the sampling method. In other words, if the newly-explored area shows encouragement, one can proceed to excavate a bulk sample from the site.

8. It is necessary that the first phase program needs to be carried out in order to 1) define the commercial extractibility of placer gold from the "A" and "B" portions, and 2) to investigate the very intriguing possibility of finding coarse "pay gravels" on the "C" portion of the same bench.

In the manner that the operation is planned, a gradual and smooth transition from one phase to the next can be accomplished, without curtailing the precious field season. Thereby allowing the possibility of entering into a cash-flow mining operation without losing too much time.

OPERATIONS SCHEDULE

Early commencement of operations is possible for reasons stated before. The installation of facilities can therefore start late in April, depending on weather conditions.

Immediate use of the AEC999 facility is visualized because this operation is independent of the bulk screening plant. Batch testing of, for example, test pit samples, is possible at any time, because the facility can be cleaned with relative ease to allow the 'switch-over'.

The operation should be able to, immediately after plant installation, produce a black sand concentrate from which the placer gold can be extracted.

Table #4, on the following page, is intended to provide an approximate overview of the operations schedule during next season:

TABLE 5
SCHEDULE OF OPERATIONS

Working Season	May	June	July	August	Sept	October	Novem
	PHASE ONE			PHASE TWO			
1. Procurement	.....		.				
2. Camp Installation and Mobile Equipment on site	.....		.				
3. Installation of Screening Plant	.....		.				
4. Installation of AEC999 facility	.....		.				
5. Screening of Bulk Samples	.....		.	. . . . .			
6. Operation of AEC999	.....		.	. . . . .			
7. Stripping of Overburden			...	.....	...	...	... ...
8. Sampling of Test Pits	. . . . .		.				
9. Processing of Samples & Concentrates	.....		.	.....			
10. Screening of Bulk Samples (new discoveries)			.....	.....	.....		
11. Processing of Bulk Concentrates Gold Winning	.....		.	.....		...	...
12. Processing of Batch Concentrates	. . . . .		.	. . . . .			
13. Engineering Supervision	. . . . .		...	. . . . .			
14. Demobilization			.				. . . .
15. Engineering Documentation			.				.....

EQUIPMENT, SUPPLIES, & MANPOWER

Excepting possibly manpower (some may be available in Mayo), nearly all of the equipment and supplies must be procured either in Whitehorse, Y.T., or points south.

The trailers, comprising the camp, could be assembled from nearer centers.

The rolling stock will probably have to be held under lease for the duration of the season.

The screening operation could likely be contracted out on a volume of undersize production basis. Should this appear uneconomical, the other route would be to lease the plant from equipment suppliers farther south.

EQUIPMENT FOR BULK TESTING OPERATION

The proposal is to:

a) establish a screening plant, capable of wet-screening to provide a 1/4-inch (minus) sand product. The capacity of the plant could be up to 2000 cubic yards per day. The product would be stockpiled separately for each source area. An immediate decision can be made of the approximate grade of the material when it is passed over the AEC999. It will thereby be possible to direct the excavation point of the bulk testing program.

The equipment used for bulk testing can be upgraded to accommodate a bulk processing operation, when the decision is made to continue with the Phase Two recommendations.

b) establish a method whereby exploration pit samples are trucked from site of origin to the AEC999 facility for batch treatment.

c) establish a system that will allow the screening of bulk samples from which the minus-one-quarter sand will be trucked to the AEC999 facility.

On the other hand, the AEC999 facilities can be set up to provide on-site screening.

c) establish an analytical facility which will be able to extract the gold from the above-mentioned samples.

Equipment required for this operation will be:

Trailers, bunkhouse, cookshack, office, shop, gold room, etc.
966D F.E. Loader(s)
Bulldozer
225 Hoe, 20' reach
Dump truck, 12 yd3
Screen deck
Conveyors and stackers
AEC999, fine-grained gold concentrator and screening facility
Genset
Pumps
Spares inventory
Gold recovery building

Depending on arrangements made, screening and other operations could be provided for on a contract basis.

The manpower needed for the project will vary, depending on the aforementioned arrangements, it is probable, however, that possibly 10 people will be employed on site.

Consumables will entail food, fuel, parts, and sundries. Food and fuel will be the greatest items.

Mobilization and demobilization, as well as other transportation costs, as for example small vehicle rental and operation, need to be included in the cost estimate.

ITEMIZED ESTIMATED COSTS

The estimated budget allocations for the recommended Phase One program are as follows:

PHASE ONE

Mobilization, setting up, demobilization	$30,000.
Operation of hoe and dump truck	$25,000.
Operation of screening unit	$20,000.
Operation of AEC999	$30,000.
Operating costs, general	$25,000.
Engineering, supervision, reporting	$20,000.
Total Estimated Costs of Phase One.....	$150,000.

PHASE TWO

The commencement of this phase of the recommendations, is dependent on the favourable outcome of the previous phase results.
For the purpose of this estimate, the costs are approximated according to contract rates, bid on other projects.

BULK SCREENING OPERATION

Taking the Heitman 'pay gravels' into consideration, these are estimated to have a volume for areas "A"+"B" of about 90,000 cubic yards, having a tentative combined value in fine gold of C$656,000. The operation consisting of excavating the gravels, screening them, stockpiling the 1/4" undersize, and removing the waste should cost less than $2.00 to perform, especially if the size of the contract is firm for the 45,000 cubic yards expected to be excavated from area **"A"** during the first stage. It is assumed that around 2,000 bankrun cubic yards per day can be processed in a nominal 10 hour shift. As this is summer time, it should be remembered that the days are long, allowing for longer operation than the normal 10 hours.
The estimated costs for the screening operation is therefore C$90,000.

OPERATION OF AEC999 FACILITY

The throughput capabilities of the AEC999 system are faster, of course, than the screen production of undersize 1/4" sand. The ratio of undersize to bankrun gravel may be something around 1:5 for the coarse gravels.
The AEC999 will be operating on a constant basis, processing the bulk sample fines, as well as the test-pit batch samples. This process of switching between the on-going bulk sample runs, and batch samples, is possible because it takes little time to clean the system between runs, which, of course, is important for the propriety of the tests.
On continuous runs the AEC999 is able, with this kind of clean sand, to handle a throughput of 60 cubic yards per hour. The operation of this facility can, again, be extended due to the length of the northern day.
The daily throughput could, therefore, be more than 600 cubic yards.
The cost per yard of head feed for this system is considered to be around $5.00. This would add about C$1.00/cubic yard to the total mining costs of the bankrun material.
These costs would therefore be estimated at C$45,000.

WASTE DISPOSAL

The Heitman bench, or bluff, upon which the 'pay gravels' are layered, rises about 60 feet above the valley floor, called the Schomig bench.
It is a simple matter to move waste and overburden over the edge of the bluff.
Waste water treatment should be of no problem, as the two tailings ponds, of the original operations, are still intact.
The bankrun cubic yard costs for the overburden removal costs are judged to be less than C$1.00.
Area "A" has about 22,400 cubic yards of overburden, hence the stripping costs should not exceed $23,000 by much.

WATER SUPPLY

Water is plentiful at the level of the Schomig bench, wherefrom it can be pumped to the usage area.
Water is generally also available from McIntyre creek. A dam on this creek, started in the fall of 1987, should be able to supply gravity-fed water to the plant, once the pipes are in.
No extra costs are itemized on the issue of water supply. The costs can be prorated into the other budget areas.

POWER GENERATION

A powerful generation system was an integral part of the AEC999 facility. It is expected that this will again be available.
Power generation for other aspects are, again, prorated into the other budgets.

OPERATIONAL COSTS

Considering that the screening performed under contract, there should be no extra costs involved with this. However, there will be other outlays, wages, fees, expenses, maintenance, repairs, analyses, assays, etc., which need to be considered. A daily expenditure of C$500 per day is anticipated for each of the 100 days during which these outlays could occur.
The total estimated operational costs are C$50,000.

EXPLORATION

An estimate of the extra costs, attributable to explorations of the remainder of the claims, must encompass the hoe and a dump truck. These will, of course, be also be used elsewhere during the operations.
The costs due to explorations is estimated at C$47,000.

SUPERVISION & ENGINEERING

The fees and expenses involved in providing engineering consultation, supervision, and reporting will accrue to about C$55,000.

TOTAL ESTIMATED RECOMMENDED BUDGET

PHASE ONE

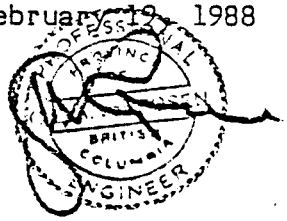
Mobilization, setting up, demobilization	C$	30,000.
Operation of hoe and dump truck	C$	25,000.
Operation of screening unit	C$	20,000.
Operation of AEC999	C$	30,000.
Operating costs, general	C$	25,000.
Engineering, supervision, reporting	C$	20,000.
TOTAL ESTIMATED COSTS OF PHASE ONE PROGRAM.....	C$	150,000.

PHASE TWO

Operation of screening contract	C$	90,000.
Operation of AEC999 facility	C$	45,000.
Operation of waste removal program	C$	23,000.
Operation of exploration program	C$	47,000.
Operating costs, sundry.	C$	50,000.
Engineering, supervision, and report	C$	55,000.
TOTAL ESTIMATED COSTS OF PHASE TWO PROGRAM.....	C$	310,000.

Respectfully submitted,

Gerhard von Rosen, P.Eng.
February 19, 1988



BIBLIOGRAPHY

Bostock, H.S. . 1957 : Yukon Territory: Selected Field Reports of the Geological Survey of Canada 1898 to 1933; Geological Survey of Canada, Memoir 284.

Keele, Joseph . 1905 : "The Duncan Mining District": Geological Survey of Canada, Summary Report for 1904, pp. 25A-29A.

Robinson, M.C., . 1981 : Summary Report, Placer Gold Deposits and Operations, Minto Lake Area, Mayo Mining District, Yukon Territory, With Special Reference to the Properties of Amigo Silver Mines Ltd.

von Rosen, Gerhard . 1987, December 08: Progress Report on a Test Pit Placer Sampling Program performed on the Minto Creek Gold Placer Property for Goldorex Minerals Inc.

von Rosen, Gerhard . 1987, December 19: Progress Report on the Minto Creek Gold Placer Property for Baha Resources Ltd.

von Rosen, Gerhard . 1988, January 21 : Summary Report on the Minto Creek Gold Placer Property for Goldorex Minerals Inc.

von Rosen, Gerhard . 1988, January 26 : Letter report regarding 'short program' of exploration on Minto Creek Gold Placer Property for Goldorex Minerals Inc.

CERTIFICATE OF QUALIFICATIONS

I, Gerhard von Rosen, reside in Mission, British Columbia, at 33176 Richards Avenue.

I have been practicing my profession of consulting geologist since my graduation from the University of British Columbia in 1962 with a Bachelor of Science, and in 1966, with a Master of Science degree in Honours Geology.

I have prepared the subject report from information gained during my visit to the Minto creek property on September 22 - October 5 1987, and from references cited. In the main, it is a summary of a previous report written by the undersigned.

I have received the fees and expenses invoiced regarding the preparation of this report, as this is my sole remuneration. I have no interest in the company, its properties, or its shares, neither do I expect to receive any.

Respectfully submitted,

Gerhard von Rosen, P.Eng.
February 19, 1988