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Report on the  
Placer Mining Claims  
Otter Creek,  
Atlin Mining Division  
Atlin, B.C.

for

Genie Resources Ltd.  
112C-255 West First Street,  
North Vancouver, B.C.  
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by

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April 14, 1986  
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SUMMARY

The Genie Resources Ltd. placer group of 21 claims and fractions is located along Otter Creek about 12 miles east of Atlin in Northwestern British Columbia. Genie Resources along with associated groups has 100% interest in the mineral rights of these placer leases.

The Atlin gold placer camp like the Klondike gold fields has enjoyed success of variable extent and over disjointed periods of time. It is ranked next to the successful Klondike camp in placer production since 1898. The Otter Creek placer operation ranks 6th in production from the Atlin area which has produced 745,800 ounces of raw gold to 1981.

A hammer drill program by the company during the 1983 season successfully identified drill indicated mineral reserves of 1,405,000 cubic yards. Grade of the drill identified zones averaged 0.052 and may, considering gold losses in the drilling, run as high as 0.070 ounces gold per cubic yard. Reserve estimates show a gold content of better than 100,000 ounces in the small amount of creek area tested. It is estimated that large volumes of pay gravel exist in the untested section of the 2 kilometer length of creek within the Genie Resources ground.

In 1874 Genie Resources, having consolidated their land position on Otter creek with the acquisition of downstream claims, undertook a modified stripping and mining operation. A total of 456,000 cubic yards of waste overburden was removed and some 150,000 cubic yards of pay gravels put through the sluice boxes. The average recovery grade was 0.022 ounces gold per cubic yard. Taking sluice losses and waste dilution material into account the writer has calculated an initial grade of 0.064 ounces of gold per cubic yard. Based on the 1984 wash plant results Genie Resources Ltd. have opted to purchase an operating plant available within the area. It is expected that recovery from this unit will be in the projected recovery grade.

Genie Resources Ltd. have prepared a pro-forma projection chart based on a mining grade of 0.07 ounces gold per cubic yard. In addition, this mine plan includes capital expenditures and mining cost breakdowns. A total recovery of some 25,200 ounces of gold is projected for 1986 and at a U.S. \$330 per ounce gold may yield a pre-tax profit of about \$3,254,500.

RECOMMENDATIONS

It is recommended that the company make available funds of a sufficient nature to allow a full season of stripping (750,000 cubic yards) and mining (360,000 cubic yards) of the Otter Creek gravel beds for the purpose of generating cash flows from gold sales to carry subsequent operations upstream on Otter Creek.

It is also recommended that the policy of "exploration in advance of production" be adhered to by instituting a drill campaign testing the gravels well beyond the advancing pit face.

It is also recommended that intense monitoring of the new wash plant and in particular, the tailings rejects be closely supervised.

Respectfully submitted

W.G. Hainsworth, P. Eng.

April 14, 1985

COSTS ESTIMATES

1986 PRE-PRODUCTION, START-UP AND FIRST 30 DAYS PRODUCTION

PRE-PRODUCTION:

1. Required for part-payment 1984 stripping contract	450,000.	
2. Accounts Payable-including legal, audit, and office expenses	35,000.	
3. Interest re Loans - bank, unit-holders, Royalty-holders	335,000.	
4. Public Offering costs - Legal, accounting, printing	<u>30,000.</u>	850,000.

START-UP:

1. New gold-recovery unit (replacement)	300,000.	
2. Equipment mobilization	150,000.	
3. Mining Camp set-up	<u>7,500.</u>	457,500.

FIRST 30 DAYS OPERATING:

1. Stripping contract - 100,000 cu. yds @ \$2.25	225,000.	
2. Clean out and extend settling ponds	50,000.	
3. Supervision and recovery labour	45,000.	
4. Engineer/geologist	10,000.	
5. Excavating & pay-dirt hauling to recovery plant- 52,500 Cu. Yds @ \$5.00	<u>262,500.</u>	592,500.

CONTINGENCY

100,000.  
2,000,000.

OPERATIONS SCHEDULE 1986

REVENUE:	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	TOTALS
Gold Sales - (Production Data - Schedule 1, Line 1)	-	1,000,000.	2,000,000.	2,000,000.	2,000,000.	1,000,000.	8,000,000.
<b>REDUCED COSTS:</b>							
DIRECT MINING - (Schedule 2)	-	580,000.	810,000.	815,000.	452,500.	-	2,657,500.
PREPARATION AND CLEAN UP - (Schedule 3)	220,500.	-	-	-	-	168,000.	388,500.
ADMINISTRATIVE AND GENERAL - (Schedule 4)	57,000.	39,500.	24,500.	23,000.	32,000.	31,500.	207,500.
	<u>277,500.</u>	<u>619,500.</u>	<u>834,500.</u>	<u>838,000.</u>	<u>484,500.</u>	<u>199,500.</u>	<u>3,253,500.</u>
NET PROFIT, (LOSS) BEFORE DEPRECIATION AND INCOME TAXES	(277,500.)	380,500.	1,165,500.	1,162,000.	1,515,500.	800,500	4,746,500.

SOURCE AND APPLICATION OF FUNDS - 1986

<b>FUNDS RECEIVED FROM:</b>		
PUBLIC OFFERING - PRIMARY, NET - 1,000,000 SHARES @ \$2.00		2,000,000.
OPERATIONS		<u>4,746,500.</u>
		6,746,500
<b>FUNDS APPLIED TO:</b>		
MACHINERY ACQUISITION		300,000.
DEBT RETIREMENT		3,142,000.
ADMIN. AND GENERAL COSTS - POST OPERATING SEASON		<u>50,000.</u>
		3,492,000.
<u>CASH AVAILABLE BEFORE PAYMENT OF INCOME TAXES</u>		<u>\$ 3,254,500</u>

OPERATING SCHEDULE 1986

PRODUCTION DATA: (Schedule 1.)	For 120 Days Production				Sale Value (CDN)			
	Recovery Per day	Raw Gold	Fine Gold @ 76.6%	Royalty @ 10%	Disposable Gold	@ \$460.	@ \$500.	@ \$550.
ASSUME 3,000 cu. yds. (2 shifts)								
RECOVERY RATE - 1. @ .07 oz. = 210 oz.*		25200 oz.	19303	(1930)	17373 oz.	7,991,500.	8,686,500.	9,555,000.
2. @ .08 oz. = 240 oz.		28800 oz.	22060	(2206)	19854 oz.	9,132,800.	9,927,000.	10,919,700.
3. @ .09 oz. = 270 oz.		32400 oz.	24818	(2482)	22336 oz.	10,274,500.	11,168,000.	12,284,800.
4. @ .10 oz. = 300 oz.		36000 oz.	27576	(2758)	24818 oz.	11,416,300	12,409,000.	13,649,900.

DIRECT MINING COSTS (Schedule 2.)

	JUNE	JULY	AUGUST	SEPTEMBER	TOTALS
STRIPPING (CONTRACT) - Av. 6,000 cu. yds. @ \$2.25 per c.y.	225,000.	337,500.	337,500.	-	900,000.
HAULING PAY-DIRT TO RECOVERY UNIT-3,000 cu. yds. @ \$5.00 per c.y.	262,500.	375,000.	375,000.	375,000.	1,387,500.
RECOVERY LABOUR (Av. 25 days per month):					
STAFF PERSONNEL \$1600.00					
ADD FRINGE COSTS AND BOARD <u>500.00</u> \$2100 x 25 days	52,500.	52,500.	52,500.	52,500.	210,000.
DRILLING AND GEOLOGY	25,000.	25,000.	25,000.	-	75,000.
EQUIPMENT RENTAL AND REPAIR	15,000.	20,000.	25,000.	25,000.	85,000.
	<u>580,000.</u>	<u>810,000.</u>	<u>815,000.</u>	<u>452,500.</u>	<u>2,657,500.</u>

OPERATING SCHEDULE 1986

RATION AND CLEAN-UP COSTS: (Schedule 3)

	<u>MAY</u>	<u>OCTOBER</u>	<u>TOTAL</u>
Mobilization of equipment to mine-site	150,000.		150,000.
Clean cut and extend settling ponds	50,000.		50,000.
Camp start-up costs	7,500.		7,500.
Staff salaries	13,000.	13,000.	26,000.
Demobilization from mine-site		150,000.	150,000.
CAMP SHUT-DOWN AND WINTER WATCHMAN		<u>5,000.</u>	<u>5,000.</u>
	<u>220,500.</u>	<u>168,000.</u>	<u>388,500.</u>

OPERATING SCHEDULE 1986

ADMINISTRATIVE AND GENERAL COSTS: (Schedule 4)

	<u>MAY</u>	<u>JUNE</u>	<u>JULY</u>	<u>AUGUST</u>	<u>SEPTEMBER</u>	<u>OCTOBER</u>	<u>TOTAL</u>
Accounting and Secretarial Services	500.	500.	500.	500.	500.	500.	3000.
Insurance	1500.	-	-	-	-	5500.	7000.
Interest	24000.	24000.	19000.	15500.	15500.	15500.	113500.
Legal and Audit	20000.	10000.	-	-	10000.	-	40000.
Office	500.	500.	500.	500.	500.	500.	3000.
Printing and Mailing	2000.	-	-	2000.	-	2000.	6000.
Promotion and Shareholder Relations	5000.	2000.	2000.	2000.	3000.	5000.	19000.
Rent	500.	500.	500.	500.	500.	500.	3000.
Taxes and Licences	1500.	-	-	-	-	-	1500.
Telephone	1000.	1000.	1000.	1000.	1000.	1000.	6000.
Travel	500.	1000.	1000.	1000.	1000.	1000.	5500.
	<u>57000.</u>	<u>39500.</u>	<u>24500.</u>	<u>23000.</u>	<u>32000.</u>	<u>31500.</u>	<u>207500.</u>

## INTRODUCTION

The writer was commissioned by Mr. K. O'Connor to review all data on the Atlin placer claims of Genie Resources Ltd. and submit a report concerning recommendations advanced by prior authors plus incorporating considerations of the writer.

The writer visited the Atlin claims on March 28th and 29th, 1986. Although covered by a foot of snow, the large hydraulic pit, operational camp and surface topographical features were visited and a background feeling was obtained. Various historical reports by consultants including those of the project geologist of the past 3 years, Mr. M. D. Kierans P. Eng., were made available. Mr. Kierans reports contain a wealth of information and the writer has freely drawn on his observation and recommendations.

The company has organized its corporate policies during 1985 and is readying itself to explore and mine the 21 placer leases under its control in the upcoming season.



**GENIE RESOURCES LTD.**

ATLIN, B.C.

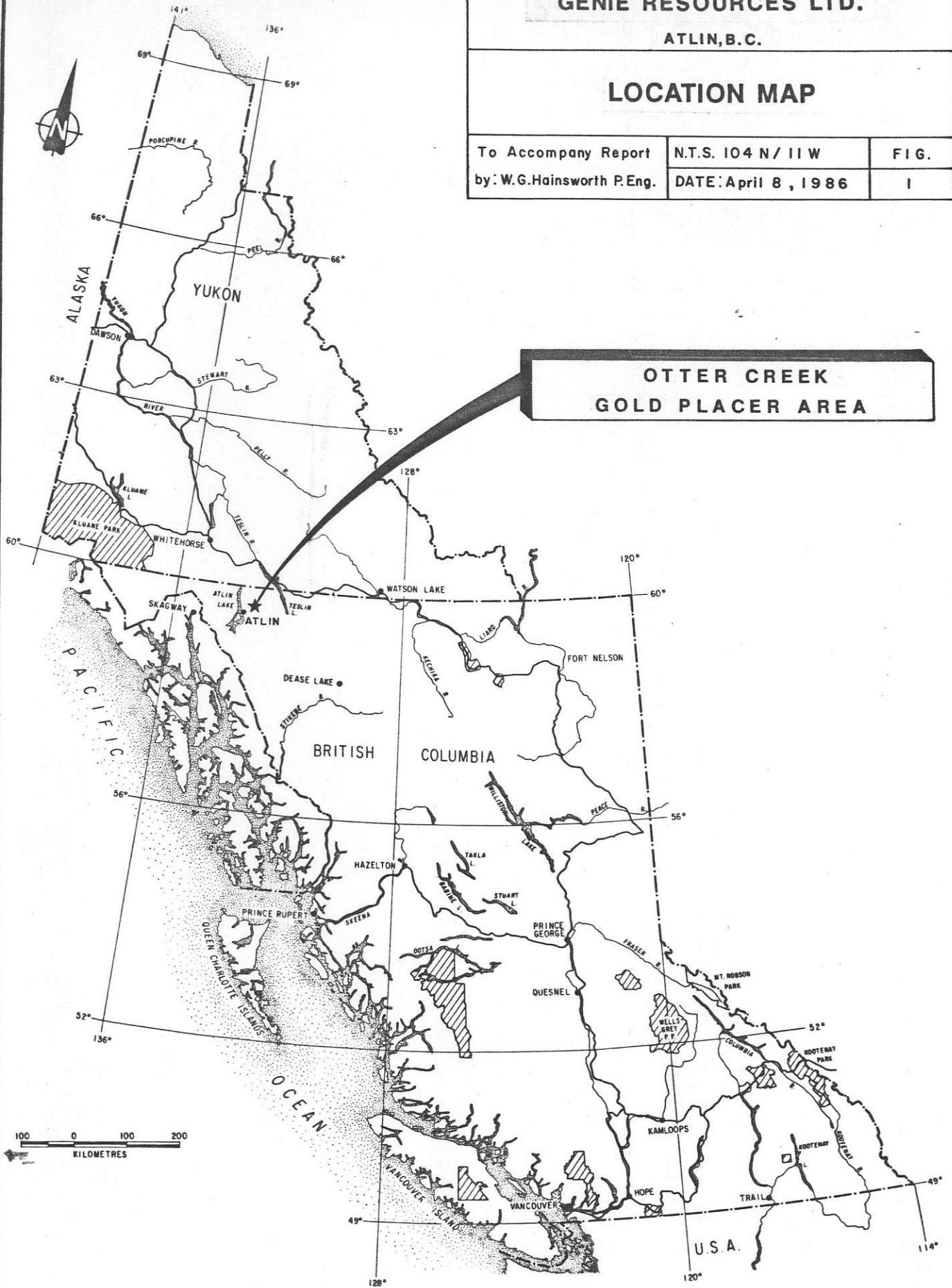
**LOCATION MAP**

To Accompany Report  
by: W.G.Hainsworth P.Eng.

N.T.S. 104 N/11 W  
DATE: April 8, 1986

FIG.  
1

**OTTER CREEK  
GOLD PLACER AREA**



LOCATION AND ACCESS

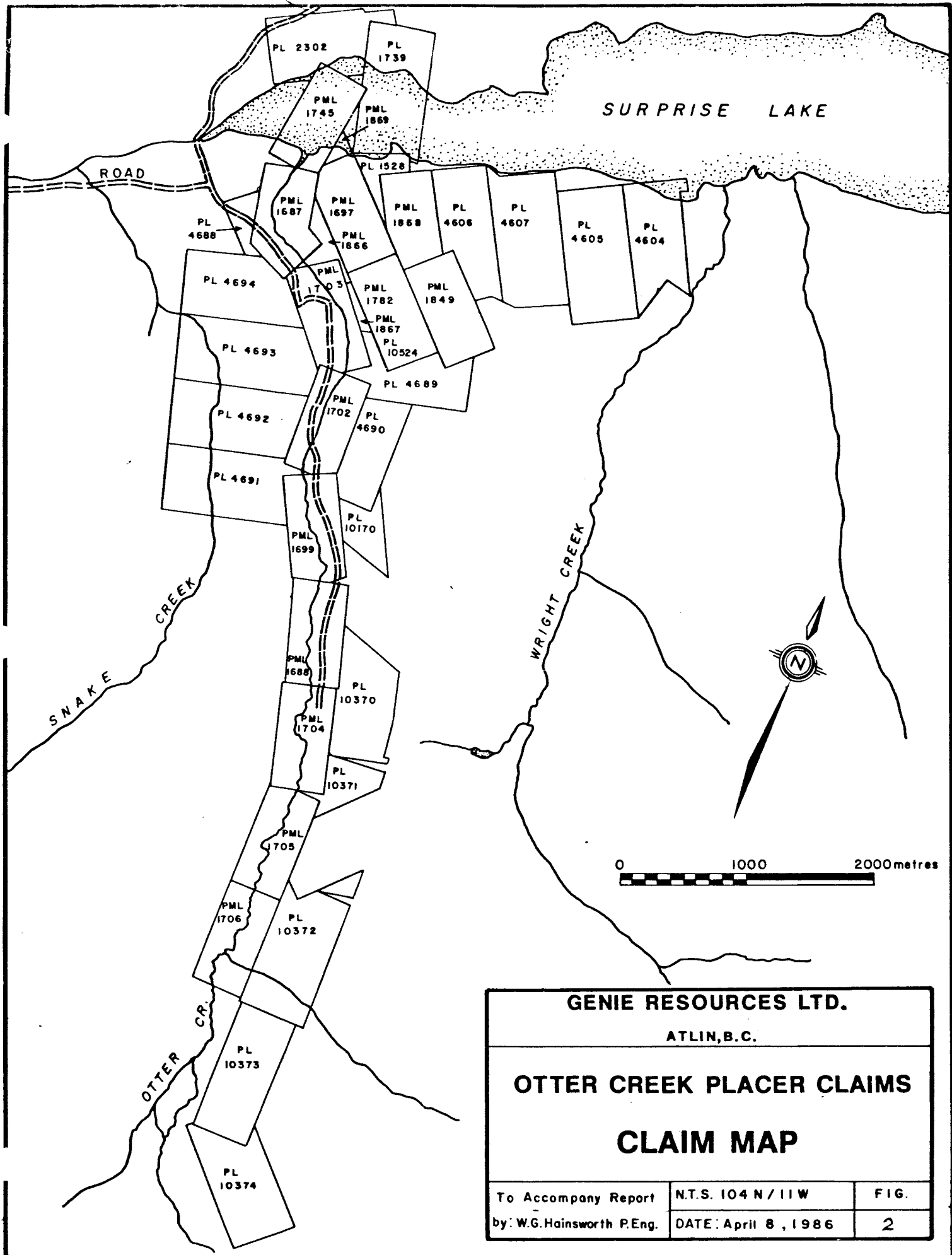
The placer claim group of Genie Resources Ltd. is located about 12 miles (20 Kilometers) east of the town of Atlin in Northwestern British Columbia.

Atlin, some 115 miles south of Whitehorse in the Yukon Territory, is best reached by paved highway cutting off from the Alaska Highway at Jakes Corner, 62 miles south of Whitehorse.

A new airstrip recently opened east of Atlin is available to light aircraft.

Access within the placer claims is achieved through a series of dirt roads extending southward on both sides of Otter Creek.

See figures 1.



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**OTTER CREEK PLACER CLAIMS**

**CLAIM MAP**

To Accompany Report	N.T.S. 104 N/11W	FIG.
by: W.G. Hainsworth P.Eng.	DATE: April 8, 1986	2

PROPERTY

The 21 claims and fractions constituting the placer group of Genie Resources Ltd. are contiguous, extending in a north-south configuration over a distance of 1.2 miles (2 kilometers) from the north shore of Surprise Lake to the upper reaches of Otter Creek.

The claim group is located in the Atlin Mining Division of British Columbia and is centered on latitude 59deg. 37' north and longitude 133deg. 23'west. Its N. T. S. location is 104N/11W. See figure 2.

The following claims constitute the group:

<u>Number</u>	<u>Expiry Date</u>
PML 1697	OCT. 12/89
PL 1528	OCT. 12/89
PL 1739	OCT. 12/89
PL 2302	OCT. 12/89
PL 4604	OCT. 28/89
PL 4605	OCT. 28/89
PL 4606	OCT. 28/89
PL 4607	OCT. 28/89
PML 1745	OCT. 12/87
PML 1869	OCT. 12/87
PML 1687	SEPT. 30/87
PL 4688	OCT. 17/87
PML 1866	OCT. 12/87
PML 1868	OCT. 12/87
PML 1849	OCT. 12/87
PML 1867	OCT. 12/87
PML 1702	SEPT. 30/87
PML 1703	SEPT. 30/87
PML 1782	OCT. 12/87
PL 4689	OCT. 17/87
PL 4690	OCT. 17/87

## HISTORY

The history of Atlin Placer mining is interwoven with the Klondike gold finds. When the great rush of 1898 was in progress into the gold fields of the Klondike, two prospectors discovered gold in Pine Creek several miles east of Atlin. The resulting swell of placer miners led to further discoveries in adjoining creeks. A combination of small size placer claims plus easily worked Quaternary gold gravel soon resulted in an exhaustion of the then known finds. The buried channels of the earlier Tertiary era were not known or considered in these early days.

Otter Creek was subjected to its first mining in 1901 when prospectors panned, rocked, sluiced and hydraulically mined sections midway up the nine mile length of the creek. A small but continuous hydraulic operation in 1905 is testified by the present Rose Pit outline in PL 1702. In 1908, a French financed operation began hydraulically mining the gravels near the mouth of the creek but this proved financially unsound. A French engineer later concluded that the ancient creek channel was located about a half a mile east along the shoreline with the result that operations spread to this area. Hydraulic operations over a period of eight seasons resulted in weak values and it is considered that most of their operation was done in the gravels overlying the ancient Tertiary channel. The hydraulic cut was continued up the creek until 1922 at which time underground mining was carried out intermittently for some six years.

In 1928 a new French backed company was formed to continue the hydraulic work and in the ensuing years continued the cut up the ancient channel while exposing three gold-bearing gravel horizons. During these operations bedrock was never exposed. A shaft, termed as "Strand" was sunk in the bottom of the cut in 1932 and upon encountering bedrock on the right limit began drifting procedures in values reported to run 0.048 ounces of gold per cubic yard. Two years later an inclined shaft, (refer to figure 4) developed at the face of the cut, encountered the true bedrock trough at bedrock level with values running as high as one half ounces per cubic yard. Further prospecting from the cut disclosed a higher pay horizon lying some 30 feet above the bedrock floor. This was termed the Moran Level. Later investigations resulted in another pay zone called the Suoboda Level which was discovered above the previous levels. Extensive drifting operations were carried out on these four levels from the cut face. (See figure 4). From 1934 to 1938 practically all production resulted from drift mining. Hydraulic mining during part of this period still continued the cut upstream, principally in the overlying non-productive glacial till material.

Downstream efforts both underground and in the cut by hydraulic methods following these productive levels were unsuccessful with the result that in 1943 tracks and pumps were pulled and the drifts abandoned.

Prior to 1939 several other shafts had been put down in the higher reaches of Otter Creek. One shaft, known as the Berthard, was sunk to 100 feet without reaching bedrock. Another shaft on the opposite limit of the claim, close to the Berthard shaft, also failed to reach bedrock at its 40 foot depth. In August, 1939 the "Main" shaft located 8000 feet upstream from Surprise Lake was put down to a depth of 103 feet before encountering water problems. A vertical drill hole from the shaft bottom is reported to have cut bedrock and values at 24 feet. No locations have been established on these upcreek workings.

Over the 1939 - 1940 winter prospect drilling was initiated with fourteen holes being completed on three section lines. In the spring of 1940, a further nine holes were put down. The prospect drilling was organized to locate the upstream extension of the old Tertiary channel. No logs or co-ordinates are available for these holes.

Work was suspended during the war but resumed with three more drill holes in 1945.

A bedrock profile utilizing an electrical resistivity survey proved of little advantage when undertaken in 1939.

From 1946 until 1976 little work was done on Otter Creek. In 1978 hydraulic activity was again initiated in the old cut.

In early 1983, some 13 placer claims lying south (up stream) of the hydraulic cut were acquired by Genie Resources Ltd. of Vancouver, B. C. The new owners ran a location survey of the claims and to assist future mining operations, an overburden drilling program. The drill program consisted of 86 vertical holes aggregating 6092.1 feet of overburden material.

Total cost of the two phase drilling program was \$392,564.33. As a result of these programs reserves of placer ore were assigned along the located and presumed sections of the old channel. Approximately 1,500,000 cubic yards of channel pay with approximately 103,000 ounces of fine gold were assigned in reserves of various categories on the property.

After reviewing the results of the Phase I and II exploration programs and drilling 14 holes for a total of 705 feet in the Drain Lease Mine pit, the management of Genie decided to acquire the Drain Lease Mine located downstream and adjacent to Genie's Otter Creek Property. The Drain Lease Mine is a fully operational mine that had been in continuous production since 1978. The cost of the Drain Lease operation was \$3,250,000. The acquisition included the property, camp, earth moving equipment, gold recovery plant and gold cleaning equipment.

During 1984 the major emphasis of Genie's Otter Creek program was to consolidate the overall mine plan, re-evaluate the previous operations on the Drain Lease and redesign and upgrade pit operations, and strip and prepare ground for the 1984 and 1985 mining operations. In particular, the state of development of the Drain Lease pit resulted in a major time and cash commitment to redesign the pit access, berms and sideslopes to provide greater efficiency with a larger operation. Production from the Drain Lease recommenced about July 15th and ended for the season on October 12th, 1984.

A total of 456,000 cubic yards of overburden was stripped during 1984 leaving sufficient pay gravels exposed for the 1984 mining season and the majority of the 1985 mining season. Stripping was performed by an earth moving contractor at a cost of \$2.25 per cubic yard.

A total of 150,000 cubic yards of material was mined and sluiced during 1984. Of this, approximately 80,000 cubic yards of material known to be of marginal grade was sluiced because it had to be removed to clean up the pit and it was anticipated that the recovery would pay the cost of removal, which it did. Another 30,000 cubic yards of low grade material from above the west side of the channel was mined because the previous operator, who did not have the advantage of drilling information, stripped this area thinking there was a split in the tertiary channel, and it became necessary to move this material to keep the pit properly organized (there was no split at this location). Gold recovery from this area was much less than the average grade assigned to the deposit but because there was no stripping cost incurred by Genie in this area mining and sluicing this material more than paid for the cost of processing. Mining was performed by the same earth moving contractor who performed the stripping at a cost of \$5.00 per cubic yard.

Near the end of the 1984 season the stripping program had exposed the main channel and the mining operation was conducted directly in the tertiary channel. Gold recovery was consistent with the drill indicated grade which provided Genie management with confidence in the results of the 1983 drill program. The majority of gold recovered during 1984 was from this main tertiary channel area.

In total 3290 ounces of gold were produced during 1984. Gold production was less than was projected for the year because of a late start and the necessity to remove large amounts of material from the pit that was not tertiary channel material (waste material that was left in the pit and sloughage from the pit walls).

During 1985 the Drain Lease Mine was not in operation due to delays in negotiating the major financing required to place the property in full large scale production. Work on the property consisted of a stripping program on the upper leases of the property which consisted of removing 350,000 cubic yards of overburden worth approximately \$800,000.00, a bulk sample test on the upper leases and construction of a groundwater drain. Results from the bulk sample test on the upper leases of the property were very encouraging. The test indicated that gold recovery from a simulated production situation utilizing a recovery plant similar to the new unit proposed by the Company was higher than the drill indicated grade. This information is important for two reasons: (1) it again confirms the drill results and indicates that the grade of the tertiary channel is consistent throughout the entire structure, and (2) a unit similar to the proposed new recovery plant works very efficiently when processing material from the Otter Creek tertiary channel.

At this time, development of the Otter Creek project is very far advanced. A great deal of ground preparation, in the form of stripping and pit reorganization, has been completed and the management of Genie Resources Ltd. feels that the property is properly prepared for an efficient large scale open pit mining operation.



## GEOLOGY

From 1896 to 1981 the total recorded production from the Atlin Placer camp is stated as 745,738 crude ounces of gold. In effect this was 19.1 % of the total British Columbian placer production. Otter Creek itself is recognized as producing, up to 1945, some 22,135 ounces of gold ranking #6 among the Atlin Placer producers.

The geological record of deposition begins with schists and gneisses of the Yukon group of Pre-Permian times. Following folding and metamorphism, bodies of quartz monzonite intruded the metamorphosed formations. Overlying these altered rocks are sedimentary rocks of the Cache Creek group thought to have been emplaced during the Permian era and folded into the traditional northwest trend. The Atlin ultramafic intrusions are simultaneous or slightly later than the Cache Creek rocks.

Following several marine depositions, the Coast intrusions were emplaced followed closely by the Surprise Lake batholith of Jurassic times.

Locally the favourable bedrock consisting of argillites, quartzites and altered limestone interbeds are referred to as the "Gold Series." These favourable formations underlie the placer claims of Genie Resources Ltd.

## Atlin Placer Geology

The Atlin placer camp is here compared with the world recognized Klondike gold camp.

- 1) The Klondike produced about 10 million ounces in some 90 years of relatively continuous activity. Atlin within the same span of time but with more intermittent production recorded 750,000 ounces from a much smaller productive area.
- 2) The average Klondike pay gravel has been estimated at about 0.01 ounces gold per cubic yard, as opposed to the presumed 0.05 to 0.08 gravels of the Atlin camp.
- 3) Klondike creeks have not undergone glaciation therefore the pay loads are relatively shallowly buried. Atlin creeks were glaciated with the result that the old Tertiary channels are found at 50' to 200' depths below the later gravels.
- 4) Klondike gravels are in permafrost while Atlin gravels are relatively unfrozen.
- 5) At Atlin the pay gravels contain large numbers of good size boulders while the Klondike gravels include very few large boulders.
- 6) Klondike gold is much finer than that at Atlin but larger nuggets have been recorded from the Atlin camp. Little or no flour gold is known in the Atlin camp.
- 7) Dredging in the Atlin camp was unsuccessful due to the boulder concentration while the Klondike dredges made large recoveries.
- 8) In the Klondike creeks, the prime underlying rock formation was a homogeneous "Klondike Schist" formation. In the Atlin creeks the rocks are more varied and the layered rocks act as natural riffles in the entrapment of the heavy gold particles.

On Otter creek in the Atlin area the bedrock, according to M.D. Kierans, consists of highly foliated and altered peridotite, layered sediments, argillites, cherts and baked limestones. This foliation reacting to water pressure would fracture and form natural riffles which trapped the gold to rock depths as much as twelve feet. Other pay gravels are composed of three and, in some places, four layers of cobble - pebble till, crudely stratified and separated by coarse sand layers of variable thicknesses. These layers are below a heavy clay zone of some forty feet thickness. Above the clay is another forty to fifty feet thickness of unsorted cobble-pebble till of unaccounted gold content, but presumed to be low.

The buried Tertiary deposits lie to the east of the present day channel but appear to coincide with the present Otter Creek channel approximately a mile and a quarter upstream from the lake.

## PROSPECT DRILLING

The first drilling on Otter Creek was carried out during 1939-1940 by Atlin Placers Ltd. In a series of six sectional fences the company covered a distance of 9500 feet of upstream placer channel. The first series of holes was some 400 feet upstream from the underground drifting area. Prior to the drilling, prospecting had taken the form of shaft sinking with variable successes. Refer to Figure 3 for approximate locations.

The drilling, was initiated using a Union Drill with 6 3/8" OD shoe and 4 7/8" ID casing but finished with a Keystone 71 drill using a 7 1/2" shoe and 6" ID casing.

The first line -A- had 5 drill holes across it which failed to show a continuation of values either in the upper gravels or on bedrock, however uncertainty exists as to whether bedrock was reached in some of the holes.

Line 3 Extra, some 2100 feet further up creek from Line A had a single hole which aggregated 0.028 oz. gold across its 83 foot length.

Line 3, 385 feet further upstream, had a group of 9 holes cover a span in excess of 200 feet. The section indicates a definite bedrock channel with hole # 6A having the highest value of 0.026 oz. gold over its 108 foot depth.

Drill line # 1, located 1000 feet upstream from the # 3 line or 3900 feet from the drifting operation, consisted of 5 holes all penetrating through to bedrock. Hole # 5 was the most successful cutting 0.074 ounces gold through its 85 foot length. Over 90 % of the values in the form of coarse gold were concentrated at bedrock elevation.

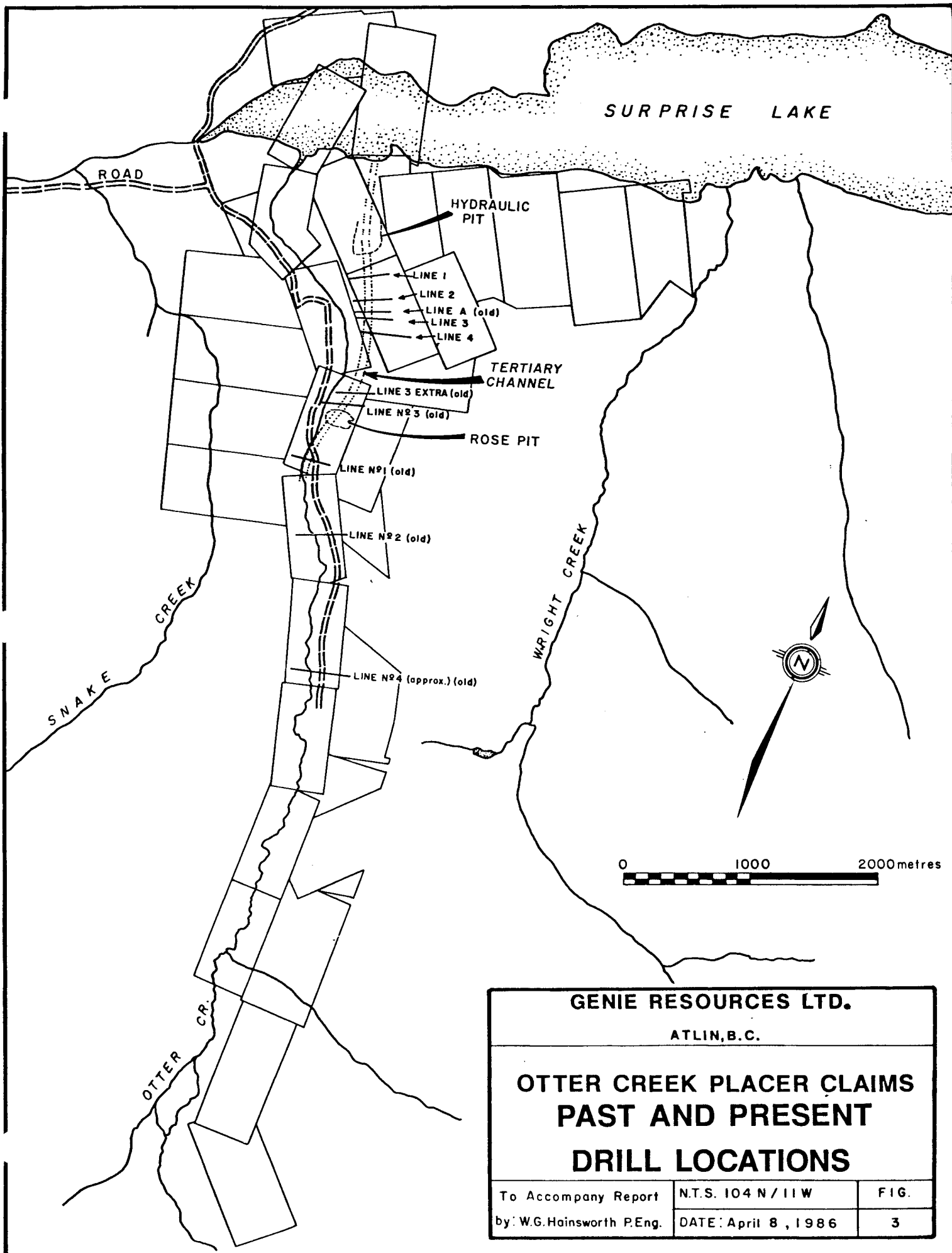
Lines 1 & 3 are in the PML 1702 area and it is likely that the small hydraulic Rose pit lies closeby.

Drilling on line # 2, 1100 feet further upstream, proved inconclusive. The values as light as they were, were also consistent through to a depth of 44 feet. A second hole 400 feet west on this line was seemingly out of the Tertiary channel.

A sixth line termed line #4 is thought to be better than 1000 feet further upstream. 8 holes showed sporadic and irregular values with concentrations again lying close to or on bedrock.

The 1939-40 drilling shows concentrations of values existing in a narrow bedrock channel for a distance of 2500 feet, across the PML 1702 claim and upstream well into PML 1699. In addition there were located irregular intermediate pay horizons.

The war and subsequent downturn in gold mining kept activity quiet until the 1970's.



<b>GENIE RESOURCES LTD.</b>		
ATLIN, B.C.		
<b>OTTER CREEK PLACER CLAIMS PAST AND PRESENT DRILL LOCATIONS</b>		
To Accompany Report	N.T.S. 104 N/11W	FIG.
by: W.G. Hainsworth P.Eng.	DATE: April 8, 1986	3

Prior to acquiring the bulk of the claims on Otter Creek, Genie Resources Ltd. opened a strong overburden drilling campaign in 1983. A total OF 86 vertical holes aggregating 6092 feet probed some 650 feet of channel lying within claim 1782 and investigated the rim and benches of the hydraulic pit in PML 1697. In addition five section lines were drilled in PML 1702. In each of the lines difficulty was experienced with boulders, bent casings and bad ground with the result that 41 holes (48%) aggregating 3312.6 feet (54%) achieved their target of penetrating through to bedrock.

All overburden penetrated was sampled normally in 6 feet lengths, weighed, screened to minus 1/4" and then sluiced in a pulsating riffle box before being panned to the final result. The resulting gold collection was weighed, calculated to ounces per cubic yard and then factor adjusted (1.5) as is prevalent in the Atlin area. The final figure was not reconciled for fineness (800 in the Atlin placers).

It is obvious from the drilling that a good amount of gravel overlies the variable bedrock topography and that several pay horizons lie throughout these thicknesses, in addition to existing at the bedrock contact. The assay logs do not refer to the glacial till depths. See drill logs, schedule A.

Line 1, located 180 feet south from the pit edge had 6 holes of the attempted 13 holes reach bedrock. The holes aggregated 125.5 feet of pay horizon at a grade of 0.10012 ounces gold per cubic yard.

Line 2, 275 feet upstream from the first line had 4 of the 12 holes reach their target depth - bedrock. A total of 80.5 feet of pay horizons resulted in a 0.0102 ounces of gold per cubic yard.

Line 3, lying a further 200 feet upstream had 4 of the 7 holes penetrate pay horizons through to bedrock. The holes aggregated 69.5 feet of values for a grade of 0.0233 ounces of gold per cubic yard.

Line 4, the last of the drill fences, cut across the Tertiary channel at a point 200 feet south of line 3 or some 850 feet from the pit edge. Seven holes cross sectioned the channel with 3 being located on the channel rim and 2 being stopped on boulders, well above the suspected bedrock depth. The two pay holes averaged 0.0258 ounces of gold per cubic yard with one of the holes being stopped in six feet of pay dirt grading 0.0536 ounces of gold per cubic yard.

The four cross sectioned drill lines averaged 0.0516 ounces of gold per cubic yard in placer mineral lease #1782.

A section of drill holes was spotted 160 feet North of the boundary line inside placer mineral lease #1697. The holes, collared on the shelves and the rims of the pit, intercepted some 183 feet of pay zones grading 0.0536 ounces of gold per cubic yard.

In the adjoining southern placer claim, #1702, where the small Rose hydraulic pit was located, five section lines representing 32 drill holes (1869.1 feet) followed the Tertiary channel which was swinging westward to underly the present day creek bed. 14 of the holes reached bedrock with 5 of them showing exceptionally weak results (rim?) in line 3. The intercepts of the five lines are:

line 1 - 94 feet of 0.0475  
line 2 - 56 feet of 0.0542  
line 3 - 24 feet of 0.0428  
line 4 - 56 feet of 0.0638  
line 5 - 18 feet of 0.0075

The resultant average of the drilling in this lease is 0.0493 ounces of gold per cubic yard.

The 1983 drilling has demonstrated a grade in the pay gravels of 0.052 ounces of gold per cubic yard. Mr. Kierans uses a figure of 0.10 in his reserve calculations, but he does not qualify it. The writer believes 0.052 to be a more realistic grade. It should be understood that this figure does not include compensation for the fineness of the gold, nor does it include refining costs of the sluiced product. On the bonus side are revenues over the average pay-outs for nugget sizes.

It is appreciated that production results in placer deposits normally exceed drill grades due to losses in drilling. On this basis the average of the drilled-off areas will, in all likelihood, vary between 0.045 to 0.070 ounces of gold per cubic yard. From past indications the higher grade would be the most likely to appear.

## PAST PRODUCTION

It is virtually impossible to put a definite figure on past production from placer deposits due to the poor quality, or absolute lack of bookkeeping in the early years by small operators or leasors. For security reasons and for tax purposes the published results did not usually coincide with production from sluice boxes. Placer deposits are notorious for the disappearance of small nuggets and percentages of sluiced gold. On this basis it is difficult to evaluate a placer deposit on past performances

No figures appear on the Otter Creek deposit until 1928 when a French backed company was formed to work the hydraulic cut. During the period of 1928 to 1932, hydraulicing of the cut produced:

600,000 cubic yards = 2250 ounces of gold (0.0038oz per C.Y.)

In 1932 when the first shaft was sunk from the bottom of the cut to bedrock and subsequent mining operations became underground, the report of production from 1933 to 1934:

1580 ounces of gold from unstated amounts of gravel.

The period from 1935 to 1939 when most of the production was obtained from the underground with minor amounts of hydraulic sluicing, reports state:

28,310 cubic yards = 5662 ounces of gold (0.20 oz/C.Y.)

Operations for the next few years were sporadic with prospecting by surface drilling taking precedence. It is reported that from 1939 until 1943:

1000 ounces of gold were produced from an unstated amount of gravel. During this period downstream operations from the pit by underground and hydraulic methods produced in 1941:

8000 cubic yards = 130.75 ounces of gold (0.016oz/C.Y.).

Upstream efforts, principally hydraulic in 1941 reported:

1060 cubic yards = 61.55 ounces of gold (0.058oz/C.Y.).

In 1942, a report stated:

20,000 cubic yards = 140 ounces of gold (0.007oz/C.Y.).

Activity on the creek quieted during the war and remained at a low ebb until 1980 when hydraulic action in the old cut was revived.

In the last five years three major operations in the Atlin camp have accounted for 2/3 of the camps production. An operation on Boulder Creek, another on upper Pine Creek and the previous owner of Genie Resources hydraulic pit claim, each are reputed to have accounted for 10,000 ounces of gold per year. Some 15,000 ounces of raw gold are generated by the numerous smaller operations throughout the camp.

In 1984 after acquiring the downstream placer claims Genie Resources undertook a stripping and mining operation originating in the old hydraulic pit of PML #1697, earlier referred to as the Drain lease. Some 456,000 cubic yards of overburden were stripped exposing the underlying pay gravels. Sluicing operations saw a total of 148,646 cubic yards put through the wash plant of which approximately 80,000 cubic yard were known to be marginal but were run through on expectations of paying their removal and processing charges. 3289.78 ounces of raw gold were collected during the nine clean up periods. The calculated grade from the total throughput was 0.022 ounces of gold per cubic yard. It was considered that the marginal material (80,000) contained sufficient grade to pay for its removal (\$3.00 = 0.007oz/cy). A certain amount of gold is lost in the sluice boxes to the tailings. The writer has assumed a 50% loss in the 1984 operation.

148,646 c.y. at 0.022oz/c.y. yielded 3289.78. Some 80,000 c.y. waste at 0.007/c.y. provided 546.70 ounces gold. Therefore 68,646 c.y. of pay gravels at 0.040/c.y. supplied 2743.08 ounces of raw gold.

Lost in sluice box to tailings (50%):

Waste = 80.000 c.y. at .007 at 50% = 280 ounces

Pay gravels = 68,646 c.y. at 0.040 at 50% = 1372.92 ounces.

Total lost gold = 1652.92 ounces

Therefore total gold in gravels  
= 2743.08 (Recovered) Plus 1652.92 (Lost)  
= 4396.0 Ounces

Initial grade of pay gravels =  $4396.0/68,646 = 0.064$  ounces of gold/c.y.

It is appreciated that this grade is low but in reality the gravel collection was obtained from areas where underground workings of the late 1930's had high-graded the four pay zones in the gravels. Were it not for these prior operations the grade of the pay gravels could run considerably above the calculated grade.

The calculated mining grade (0.064) is in the higher range of the drill calculated grade and substantiates this percentile grouping.



PAST EXPENDITURES

The company in 1984 conducted a trial mining operation on their placer leases. During 1985, little work was done due to a policy and organizational adjustment. The following operating expenses have been supplied by the company.

Exploration, Development & Mining Expenditures

	<u>1984</u>	<u>1985</u>
Engineering & Geological Reports	40,300.38	10,714.85
Equipment Rental and Storage	60,304.60	700.00
Equipment Repairs	16,921.45	-----
Field Expenses	23,800.90	390.00
Licences & Assessments	3,700.00	1,975.00
Stripping & Mining Contract *	1,914,954.42	-----
Camp Supplies	4,638.58	-----
Travel	18,125.50	3,464.06
Wages	169,066.33	-----
	-----	-----
	2,251,812.16	17,243.91

\* (Including deferred portion \$1,548,374.71. For breakdown of these figures see Appendix "B".)

## MINERAL RESERVES

In the true sense none of the reserves calculated for the Genie Placer claims can be interpreted as being proven ore. That particular area in which underground mining has been carried out could be classified as probable ore in that only one of the three dimensions (length) has been defined. By definition, reserves are materials from which tonnage is computed from dimensions revealed in outcrops, trenches, workings and drill holes and for which the grade is computed from the results of sampling. Furthermore, the material must be demonstrably mineable at a profit, requiring an accurate knowledge of feasible mining methods and costs, processing expenses and recoveries. The data from which ore reserves are estimated must meet certain standards of quality and detail.

The writer suggests that there is not enough data from operations of the past either on Otter Creek specifically or Atlin area generally, to apply certain criteria to these specific mineral reserves. As a consequence the mineral reserves on Otter Creek must be entered into the drill-indicated category. Areas lacking drilling but appearing to have geological continuity are applied to the possible or geologically inferred category. (Refer to figure 3a).

### Drill Indicated Reserves - Placer Mineral Lease 1782.

This claim had four fences of vertical cross sectional drill holes completed in 1983. Line 1, because of the southward extensions of the underground workings, could be categorized as "proven ore". For reasons of consistency the writer placed it, as with the other drill lines, in the "drill-indicated" category.

From the pit edge to 100 feet south (upstream) from line 4 in this claim, a length of 960 feet, drilling has shown an average width of pay gravels of 60 feet to exist. The Tertiary channel width may vary but for calculations has been standardized at 150 feet.

In claim 1782 there is a total of drill-indicated reserves of 320,000 cubic yards.

### Placer Mineral Lease 1702

Five fences of drill holes presumably covered a minimum quarter length of this claim or 800 feet. Drilling identified 2 pay horizons in the gravels, one at bedrock and another lying up to 40 feet above bedrock.

A drill-indicated reserve of 125,000 cubic yards of material lie within this section.

### Placer Mineral Lease 1697

This is the original hydraulic area which also contains the underground drift work. From the pit North (downstream) drilling has identified values lying at bedrock elevation and extending up into overlying gravels.

The depth and width of the old channel is as previously outlined but its lateral extent is materially shortened due to lack of supporting data. The strike length of 200 feet contains a 60 foot gravel depth in the 150 foot wide channel.

Drill-indicated reserves in PML 1697 approximate 70,000 cubic yards.

Tailings Pile

In a memorandum dated June 17, 1984, the project geologist M. D. Kierans, comments on their sampling of this large rock pile. Some 43 samples averaging 125 pounds indicated from his sampling a values "as high as \$15.00/C.Y." This is a grade of 0.033 at \$460 gold Canadian. He hesitates to put a definite grade figure on the pile while advocating drilling of the gravel mass. From figures advanced in the memo, the dimensions of 850 feet, 50 foot depth and 100 feet of width would allow a volume of 150,000 cubic yards to be assigned to this tailings pile.

During the 1984 mining operation, it is estimated that some 125,000 cubic yards was added to this reserve.

Possible Reserves

Placer Mineral Lease 1782

From the end line (line 4) of the 1983 hammer drilling to the end of this claim is an extent of some 1100 feet of possible channel gravels. Utilizing the same dimensions as previously, this makes for some 400,000 cubic yards of possible pay gravels.

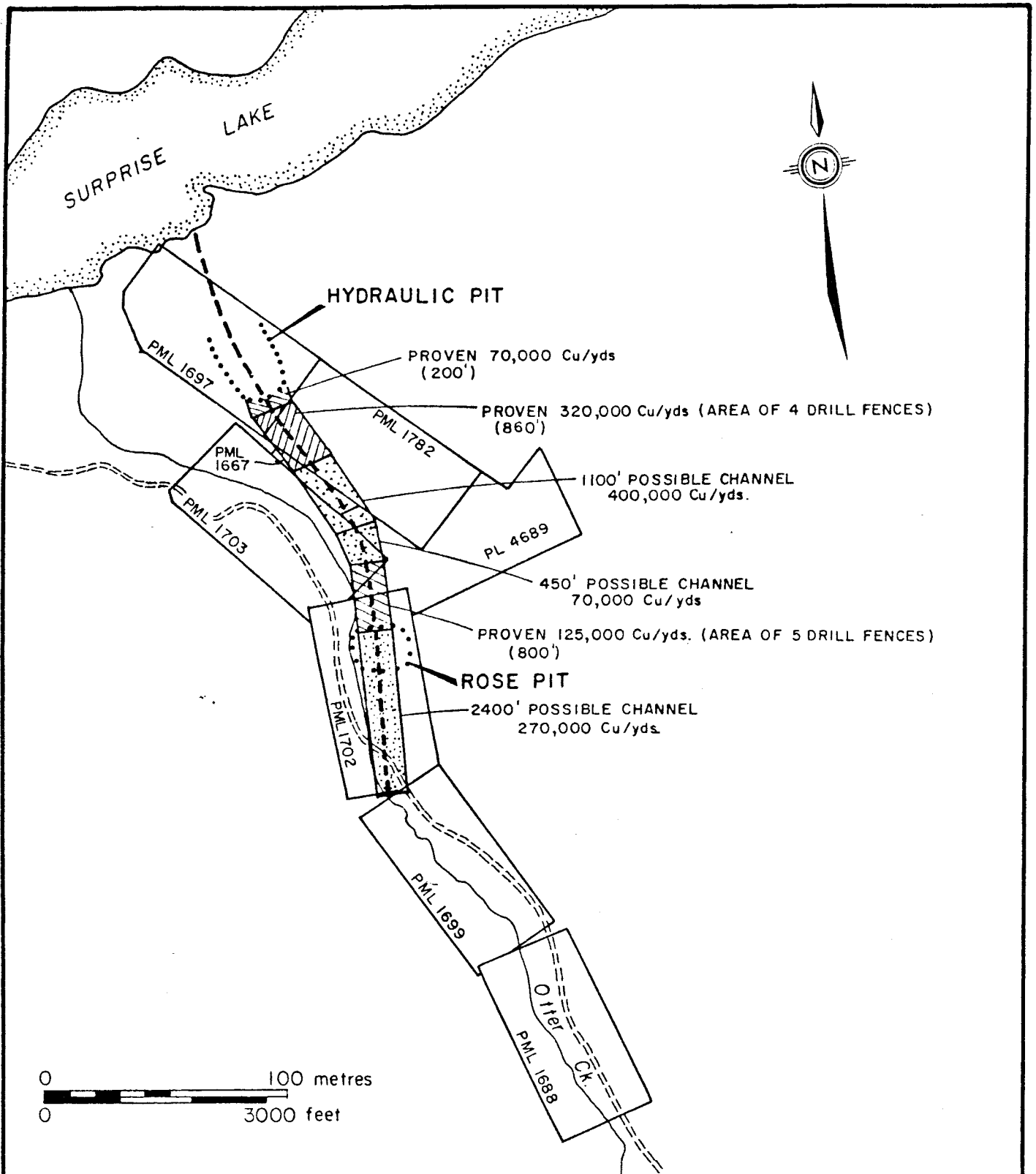
Placer Mineral Lease 1702

North - A section of possible channel material, some 450 feet in length, is wedged between claims 1702 and 1782. There is a possible volume of 70,000 cubic yards.

South - As only 1/3 of this claim was drilled off, a possible channel length of 2400 feet exists where the old Tertiary channel swings back to underlie the present day channel. The uncertainties which exist here as to depth of pay gravels and width of the channel allow for a certain trepidation in allotting the yardage. Leaning to the conservative side, the writer allocates a 30 foot thickness and 100 foot channel width. This indicated a geologically promising zone of possibly 270,000 cubic yards.

Summary of Reserves

<u>Block</u>	<u>Drill Indicated</u>	<u>Possible</u>	<u>Grade</u>	<u>Ounces</u>
1782	320,000		.080	25,000
		400,000	.078	31,200
1702	125,000		.075	9,375
		340,000	.075	25,500
1697	70,000		.080	5,600
Stock Pile	175,000		.033	5,775
Total		1,530,000 C.Y.		103,050



NOTE: SEE RESERVE SUMMARY

**PROVEN & DRILL INDICATED**

REVISED SEPT., 1986

**GENIE RESOURCES LTD.**  
ATLIN, B.C.

**OTTER CREEK PLACER CLAIMS  
PROVEN AND  
POSSIBLE RESERVES**

To Accompany a Report N.T.S. 104 N/11W FIG.  
BY W.G. Hainsworth P.Eng. DATE: April 8, 1986 3a

## MINING PLAN

The 1984 operation developed from the hydraulic pit saw some 400,000 cubic yards of overburden and glacial till debris stripped in advance of planned mining operations. See Figure 4.

It is proposed to continue stripping in the coming season with mining following behind. Stripping rates of 6000 cubic yards per day and mining production rates up to 3000 cubic yards per day are projected, the latter during a 100 day season. Stripping will begin earlier under a contractor.

The company's projections show that mining and processing of the proposed 250,000 to 300,000 cubic yards of pay gravels should return a recovery of 15,000 to 20,000 ounces of placer gold. Immediately available to the company is 20,000 cubic yards of pre-stripped pay gravel near the boundary of the hydraulic pit claim and the adjoining upstream leases.

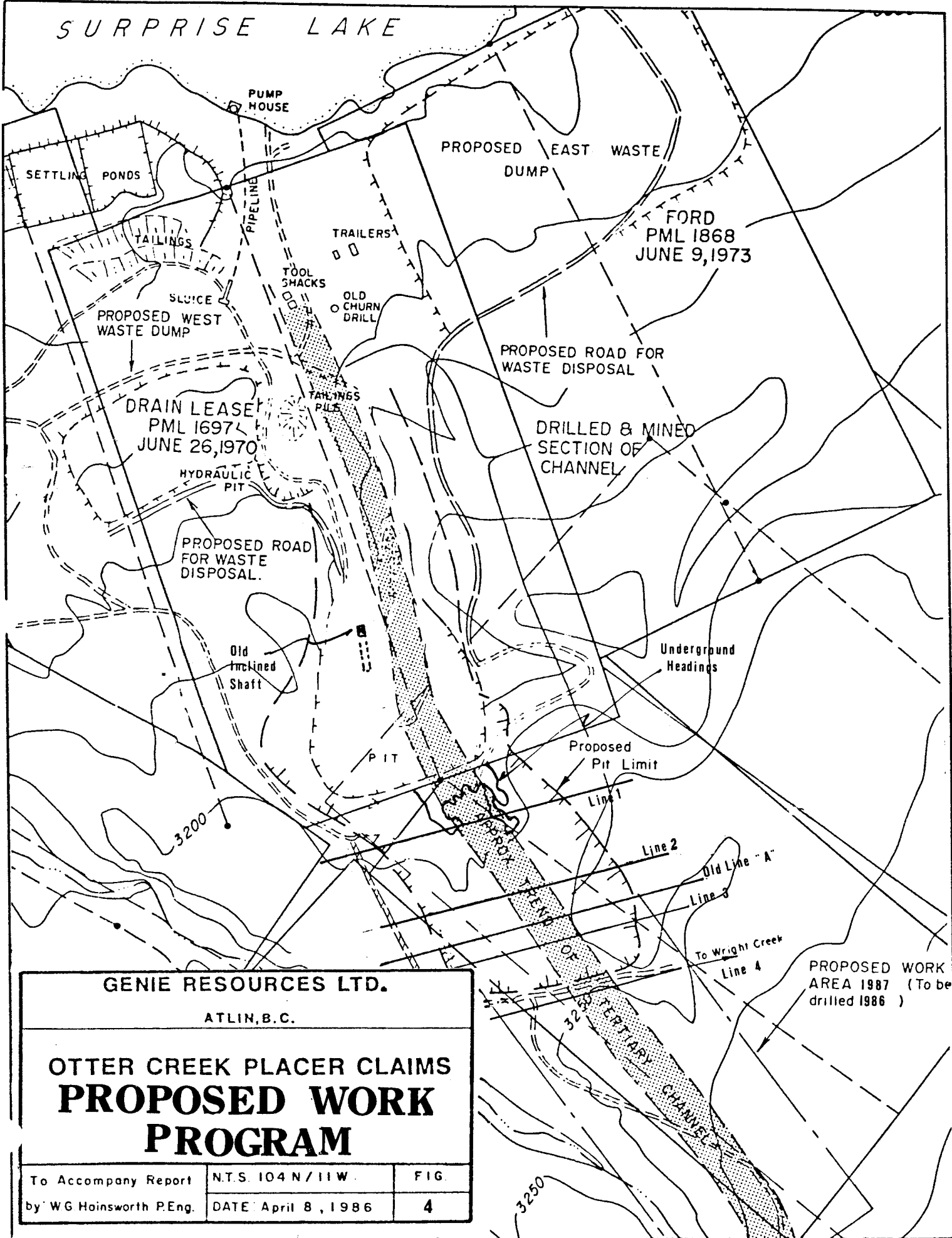
In addition the proposal advances the intention of the company to contract out the mining of the pay gravels to the point of delivery of the washing plant hopper.

It is the intention of the company to acquire a local operational recovery plant and install it in place of the present, poorly designed system. This should lead to improved recovery grades.

The washing plant will consist of a grizzly, with pulsating water jets, which will separate the minus four inch material from the oversize and send the smaller size to a screen arrangement where it will be sorted into two sizes, the minus 1 inch and the minus 1/4 inch. The more coarse, minus 1 inch will go into a short sluice box designed to retain gold nugget sizes. To accommodate the large amounts of minus 1/4 inch material there will be three sluice boxes with pulsating riffles.

The wash plant will be staffed and operated by the company. The system is designed to process up to 300 cubic yards per hour.

# SURPRISE LAKE



FORD  
PML 1868  
JUNE 9, 1973

DRAIN LEASE  
PML 1697  
JUNE 26, 1970

PROPOSED WORK  
AREA 1987 (To be  
drilled 1986 )

**GENIE RESOURCES LTD.**

ATLIN, B.C.

## OTTER CREEK PLACER CLAIMS PROPOSED WORK PROGRAM

To Accompany Report by WG Hoinsworth P.Eng.	N.T.S. 104 N/11W	FIG
	DATE April 8, 1986	4

CONCLUSION

During the 1984 operations, the company successfully offset some of its costs through gold revenues while getting "the feel" of mining the Tertiary channel beds. The weak returns from the sluice boxes underscored the importance of establishing a dependable processing plant. This has been rectified with the intended purchase of a modern, viable wash plant from one of the local operations.

Genie Resources Ltd. is now well placed to develop Otter Creek, with 1984 being regarded as the start-up phase. Careful supervision by well qualified personnel is recommended to make the venture a success.

The grade (0.07) developed by the earlier drilling (0.052) plus that due to drill loss (0.018) should allow the company to mine gravels from which a profit can be won.

There are enormous amounts of untested gravels lying upstream from the present workings.

Respectfully submitted,

W. G. Hainsworth, P.Eng.

CERTIFICATE

I, W.G. Hainsworth, P. Eng., Vancouver, British Columbia do hereby certify:

- (1) That I am a Consulting Geologist residing at 836 West 13th Avenue Vancouver, British Columbia.
- (2) That I am a graduate of the University of Western Ontario, London, Ontario, Bachelor of Science Degree, Honours Geology.
- (3) That I have practiced my profession for some 30 years.
- (4) That I have been a continuous member of the Association of Professional Engineers of British Columbia since 1965 and am a Professional Geologist registered with the Association of Professional Engineers, Geologists and Geophysicists of Alberta since 1979.
- (5) That I have no financial interest, direct or indirect, in GENIE RESOURCES LTD., and do not expect to obtain any such interest.
- (6) That the information contained in this report is based on a March 28th-29th 1986 visit to the ATLIN property of GENIE RESOURCES LTD. and perusal of all pertinent data pertaining to the past and present operations.
- (7) That consent is herewith given to GENIE RESOURCES LTD to use any or all material from this report in information circulars, offerings or shareholders brochures.

To Accompany:  
Report on the Otter Creek  
Gold Placer Claims  
Surprise Lake Area  
Atlin Mineral Division, B.C.  
for GENIE RESOURCES LTD  
North Vancouver, B.C.  
April 14, 1986  
Amended October 5, 1986

W.G. Hainsworth P. Eng. (B.C.)  
P. Geol. (Alta)



## REFERENCES

- G.S.C. Memoir 307-Atlin Map Area - J.D. Aitken 1959  
Report on Otter Creek Placers - Arthur F. Dailey 1946  
Preliminary Report, Otter Creek, Atlin - D.L. Davie 1974  
Report on Placer Prospects, Atlin - W.M. Sharp 1973  
Letter Report - W.M. Sharp 1974  
Mineral Evaluation Report, Otter Creek - M.D. Kieran 1982  
Mineral Evaluation Report, Otter Creek - M.D. Kieran Aug. 1983  
Mineral Evaluation Report, Otter Creek - M.D. Kieran Dec. 1983  
Mineral Evaluation Report, Otter Creek - M.D. Kieran Feb. 1985  
Proposal for Gold Sale Contract - Genie Resources Ltd 1985  
G.S.C. Memoir 284 Select Field Reports of G.S.C. - Bostock 1957  
B.C. Dept of Mines Annual Report 1936 B39-55

## APPENDIX A

## DRILL SAMPLER SLUICING AND PANNING RESULTS : OTTER CREEK DRILLING PROJECT

FROM FEET	TO FEET	INTERVAL FEET	CUMUL'TE INTERVAL	MOISTURE RELATIVE	SAMPLE WEIGHT LBS	GOLD WT. MILLIGMS	WT. OF GRAVEL LBS/C.Y.	ADJUSTED GOLD WT. GRAMS	ADJUSTED GOLD WT. OZ./C.Y.	FEET*GRADE	INTRVL GRADE OZ./C.Y.	FACTOR ADJUSTED GRADE OZ./C.Y.
SO-83-1A												
14	24	10	10	N/A	240	17.3	3500	.2522917	.0080986	.0809856		
24	34	10	20	N/A	240	4.6	3500	.0670833	.0021534	.0215337		
34	44	10	30	N/A	240	43.7	3500	.6372917	.0204571	.2045706		
44	54	10	40	N/A	240	.2	3500	.0029167	9.362E-5	9.362E-4		
54	64	10	50	N/A	240	1.8	3500	.0262500	8.426E-4	.0084262		
64	74	10	60	N/A	240	35	3500	.5104167	.0163844	.1638437		
74	84	10	70	N/A	240	71.6	3500	1.044167	.0335177	.3351775		
84	88	4	74	N/A	100	12.8	3500	.448	.0143808	.0575232		
0	88	88	88							.8729969	0	0
64	88	24	24							.5565444	.0231894	.0347840
SO-83-2												
52	56	4	4	DAMP	58	14.2	3500	.8568966	.0275064	.1100255		
56	68	12	16	DAMP	191	.1	3500	.0018325	5.882E-5	7.059E-4		
68	76	8	20	DAMP	192	2.8	3500	.0510417	.0016384	.0131075		
76	86	10	30	DAMP	221	10	3500	.1583710	.0050837	.0508371		
86	94	8	38	DAMP	240	56.4	3500	.8225000	.0264022	.2112180		
86	94	8	8							.211218	.0264022	.0396033
SO-83-3A												
100	102	2	2	DRY	45	.8	3500	.0622222	.0019973	.0039947		
102	104	2	4	DRY	18	.2	3500	.0388889	.0012483	.0024967		
104	106	2	6	DRY	40	.2	3500	.0175	5.618E-4	.0011235		
100	106	6	6							.0076148	.0012691	.0019037
90-83-4A												
70	74	4	4	DRY	54	6.2	3500	.4018519	.0128994	.0515978	.0128995	.0193492
SO-83-5A												
60	64	4	4	WET	88	.1	3500	.0039773	1.277E-4	5.107E-4		
64	68	4	8	DRY	99	.5	3500	.0176768	5.674E-4	.0022697		
68	72	4	12	DRY	140	421.2	3500	10.53	.338013	1.352052		
72	76	4	16	DRY	104	3	3500	.1009615	.0032409	.0129635		
76	80	4	20	DRY	123	2.9	3500	.0825203	.0026489	.0105956		
80	81.5	1.5	21.5	DRY	62	2.1	3500	.1185484	.0038054	.0057081		
68	81.5	13.5	13.5							1.435697	.1063479	.1595219

## DRILL SAMPLE SLUICING AND PANNING RESULTS : OTTER CREEK DRILLING PROJECT

FROM FEET	TO FEET	INTERVAL FEET	CUMUL'TE INTERVAL	MOISTURE RELATIVE	SAMPLE WEIGHT LBS	GOLD WT. MILLIGMS	WF. OF GRAVEL LBS/C.Y.	ADJUSTED GOLD WT. GRAMS	ADJUSTED GOLD WT. OZ./C.Y.	FEET*GRADE	INTRVL GRADE OZ/C.Y.	FACTOR ADJUSTED OZ/C.Y.
SO-83-5												
60	64	4	4	WET	87	1.3	3500	.0522989	.0016788	.0067152		
64	68	4	8	DAMP	97	2.4	3500	.0865979	.0027798	.0111192		
68	72	4	12	DRY	104	.9	3500	.0302885	9.723E-4	.0038890		
72	76	4	16	DRY	114	313.2	3500	9.615789	.3086668	1.234667		
60	76	16	16							1.256391	.0785244	.1177866
SO-83-6												
52	58	6	6	DRY	152	1.2	3500	.0276316	8.870E-4	.0053218		
58	64	6	12	DRY	241	.2	3500	.0029046	9.324E-5	5.594E-4		
64	70	6	18	DRY	132	.9	3500	.0238636	7.660E-4	.0045961		
70	76	6	24	DRY	150	2.3	3500	.0536667	.0017227	.0103362		
76	82	6	30	DRY	228	4	3500	.0614035	.0019711	.0118263		
82	86	4	34	DRY	81	1.5	3500	.0648148	.0020806	.0083222		
86	92	6	40	DRY	50	.6	3500	.042	.0013482	.0080892		
52	92	40	40							.0490513	.0012263	.0018394
SO-83-7												
56	62	6	6	DRY	201	.5	3500	.0087065	2.795E-4	.0016769		
62	68	6	12	DRY	184	.1	3500	.0019022	6.106E-5	3.664E-4		
68	72	4	16	DRY	107	1.1	3500	.0359813	.0011550	.0046200		
72	74.5	2.5	18.5	DRY	101	6.2	3500	.2148515	.0068967	.0172418		
56	74.5	18.5	18.5							.0239051	.0012922	.0019382
SO-83-8A												
56	68	12	12	DRY	255	2.1	3500	.0288235	9.252E-4	.0111028		
68	80	12	24	DRY	327	8.4	3500	.0899083	.0028861	.0346327		
80	86	6	30	DRY	167	.3	3500	.0062874	2.018E-4	.0012110		
86	92	6	36	DRY	127	7.7	3500	.2122047	.0068118	.0408706		
92	94	2	38	DRY	66	.8	3500	.0424242	.0013618	.0027236		
56	94	38	38							.0905407	.0023827	.0035740
86	94	8	8							.0435943	.0054493	.0081739
SO-83-9A												
90	93	3	3	DRY	75	4.5	3500	.2100000	.0067418	.0202230		
93	98	5	8	DAMP	106	6	3500	.1981132	.0063594	.0117972		
98	102	4	12	DAMP	96	33.3	3500	1.214062	.0389714	.1558856		
102	106	4	16	DAMP	77	63.2	3500	2.872727	.0922145	.3688582		
106	108	2	18	DAMP	64	14.8	3500	1.903125	.0610903	.1271806		
90	108	18	18							.6989446	.0388303	.0582454

## DRILL SAMPLE SLUICING AND PANNING RESULTS : OTTER CREEK DRILLING PROJECT

FROM FEET	TO FEET	INTERVAL FEET	CUMUL'TE INTERVAL	MOISTURE RELATIVE	SAMPLE WEIGHT LBS	GOLD WT. MILLIGMS	WT. OF GRAVEL LBS/C.Y.	ADJUSTED GOLD WT. GRAMS	ADJUSTED GOLD WT. OZ./C.Y.	FEET*GRADE	INTRVL GRADE OZ./C.Y.	FACTOR ADJUSTED OZ./C.Y.
SO-83-9B												
82	88	6	6	DRY	108	.2	3500	.0064815	2.081E-4	.0012483		
88	94	6	12	DRY	195	68.1	3500	1.222308	.0392361	.2354165		
94	100	6	18	DRY	122	53.2	3500	1.526230	.0489920	.2939518		
100	107	7	25	DRY	245	85.8	3500	1.225714	.0393454	.2754180		
107	112	5	30	DRY	209	56.1	3500	.9394737	.0301571	.1507855		
112	118	6	36	DRY	137	4.7	3500	.1200730	.0038543	.0231261		
118	124	6	42	DRY	109	25.6	3500	.8220183	.0263868	.1583207		
124	130	6	48	DRY	86	29.5	3500	1.200581	.0385387	.2312320		
130	135.5	5.5	53.5	DRY	234	164.1	3500	2.454487	.0787890	.4333397		
135.5	140	4.5	58	DRY	49	153.7	3500	10.97857	.3524121	1.585855		
140	146	6	64	DRY	53	103.9	3500	6.861321	.2202484	1.321490		
146	154	8	72	DRY	165	123.1	3500	2.611212	.0838199	.6705593		
154	160	6	78	DRY	43	15	3500	1.220930	.0391919	.2351512		
160	166	6	84	DRY	95	2.5	3500	.0921053	.0029566	.0177395		
88	166	78	78							5.632385	.0722101	.1083151
SO-83-10A												
90	96	6	6	DRY	192	1.5	3500	.0273437	8.777E-4	.0052664		
90	96	6	12							.0052664	.0026332	.0036865
SO-83-11												
94	96	2	2	DRY	47	.2	3500	.0148936	4.781E-4	9.562E-4		
94	96	2	2							.0009562	.0004781	7.172E-4
SO-83-12												
104	106	2	2	DRY	58	3.8	3500	.2293103	.0073609	.0147217		
106	108	2	4	DRY	43	.4	3500	.0325581	.0010451	.0020902		
108	112	4	8	DRY	132	.3	3500	.0079545	2.553E-4	.0010214		
112	114	2	10	DRY	36	.6	3500	.0583333	.0018725	.0037450		
104	114	10	20							.0215783	.0021578	.0032367
SO-83-13												
96	101.5	5.5	5.5	DRY	141	72.8	3500	1.807092	.0580077	.3190421		
96	101.5	5.5	5.5							.3190421	.0580077	.0870115
SO-83-14												
100	104	4	4	DRY	113	44.5	3500	1.378319	.0442440	.1769761		
104	106	2	6	DRY	108	8	3500	.2592593	.0083222	.0166444		
100	106	6	6							.1936206	.0322701	.0484051

*line 1*

## DRILL SAMPLE SLUICING AND PANNING RESULTS : OTTER CREEK DRILLING PROJECT

FROM FEET	TO FEET	INTERVAL FEET	CUMUL'TE INTERVAL	MOISTURE RELATIVE	SAMPLE WEIGHT LBS	GOLD WT. MILLIGMS	WT. OF GRAVEL LBS/C.Y.	ADJUSTED GOLD WT. GRAMS	ADJUSTED GOLD WT. OZ./C.Y.	FEET*GRADE	INTRVL GRADE OZ./C.Y.	FACTOR ADJUSTED OZ./C.Y.
SO-83-13A												
92	97	5	5	DRY	195	.1	3500	.0017949	5.762E-5	2.881E-4		
97	102	5	10	DRY	226	58.2	3500	.9013274	.0289326	.1446631		
102	108	6	16	DRY	194	2.6	3500	.0469072	.0015057	.0090343		
108	114	6	22	DRY	132	.1	3500	.0026515	8.511E-5	5.107E-4		
114	120	6	28	DRY	224	.8	3500	.0125	4.013E-4	.0024075		
120	126	6	34	DRY	222	35.5	3500	.5596847	.0179659	.1077953		
126	132	6	40	DRY	162	12.3	3500	.2657407	.0085303	.0511817		
132	138	6	46	DRY	90	.7	3500	.0272222	8.738E-4	.0052430		
138	144	6	52	DRY	93	.1	3500	.0037634	1.208E-4	7.248E-4		
144	150	6	58	DRY	111	.1	3500	.0031532	1.012E-4	6.073E-4		
150	156	6	64	DRY	57	.1	3500	.0061404	1.971E-4	.0011826		
156	162	6	70	DRY	169	.1	3500	.0020710	6.648E-5	3.989E-4		
162	168	6	76	DRY	83	.1	3500	.0042169	1.354E-4	8.122E-4		
168	174	6	82	DRY	114	1.6	3500	.0491228	.0015768	.0094611		
174	180	6	88	DRY	64	.9	3500	.0492188	.0015799	.0094795		
180	183.5	3.5	91.5	DRY	79	2.3	3500	.1018987	.0032709	.0114483		
97	132	35	35							.3155925	.0105198	.0157796
132	183.5	51.5	51.5							.0393577	7.642E-4	.0011463
114	132	18	18							.1613844	.0089658	.0134487
SO-83-15												
98	104	6	6	DRY	185	4.2	3500	.0794595	.0025506	.0153039		
104	112	8	14	DAMP	77	.4	3500	.0181818	5.836E-4	.0846691		
112	118	6	20	DAMP	125	2.8	3500	.0784	.0025166	.0150998		
118	122	4	24	DRY	174	23.2	3500	.4666667	.0149800	.0599200		
98	122	24	24							.0949928	.0039580	.0059371
SO-83-16A												
48	54	6	6	WET	146	.4	3500	.0095890	3.078E-4	.0018468		
54	60	6	12	DRY	214	3.4	3500	.0556075	.0017850	.0107100		
60	66	6	18	DRY	202	1.8	3500	.0311881	.0010011	.0060068		
66	72	6	24	DRY	231	1.6	3500	.0242424	7.782E-4	.0046691		
72	78	6	30	DRY	201	.7	3500	.0121891	3.913E-4	.0023476		
78	84	6	36	DRY	214	1.3	3500	.0212617	6.825E-4	.0040950		
84	90	6	42	DRY	250	.9	3500	.0126	4.045E-4	.0024268		
90	92	2	44	DRY	80	10.7	3500	.468125	.0150268	.0300536		
SO-83-17												
86	92	6	6	DRY	232	.4	3500	.0060345	1.937E-4	.0011622		
92	96	4	10	DRY	140	3.8	3500	.095	.0030495	.012198		

## DRILL SAMPLE SLUICING AND PANNING RESULTS - OTTER CREEK DRILLING PROJECT

FROM FEET	TO FEET	INTERVAL FEET	CUMUL'TE INTERVAL	MOISTURE RELATIVE	SAMPLE WEIGHT LBS	GOLD WT. MILLIGMS	WT. OF GRAVEL LBS/C.Y.	ADJUSTED GOLD WT. GRAMS	ADJUSTED GOLD WT. OZ./C.Y.	FEET*GRADE	INTRVL GRADE OZ./C.Y.	FACTOR ADJUSTED GRADE OZ./C.Y.
SO-03-18A												
SPECIAL A+B 2.3												
SPECIAL 1,2,3. 39.7												
38	44	6	6	DRY	101	.6	3500	.0207921	6.674E-4	.0040046		
44	50	6	12	DRY	104	.1	3500	.0033654	1.080E-4	6.482E-4		
50	56	6	18	DRY	185	.5	3500	.0094595	3.036E-4	.0018219		
56	62	6	24	DRY	161	1.4	3500	.0304348	9.770E-4	.0058617		
62	68	6	30	DRY	165	.2	3500	.0042424	1.362E-4	8.171E-4		
68	74	6	36	DRY	206	1.4	3500	.0237864	7.635E-4	.0045813		
74	78	4	40	DRY	270	10.5	3500	.1361111	.0043692	.0174767		
38	78	40	40							.0352114	8.803E-4	.0013204
SO-03-18C												
70	76	6	6	DRY	153	3.9	3500	.0892157	.0028638	.0171829		
76	82	6	12	DRY	223	13	3500	.2040359	.0065496	.0392973		
82	88	6	18	DRY	217	308.8	3500	4.980645	.1598787	.9592723		
88	94	6	24	DRY	242	465.2	3500	6.728099	.2159720	1.295832		
94	100	6	30	DRY	263	8.1	3500	.1077947	.0034602	.0207613		
70	100	30	30							2.332346	.0777449	.1166173
SO-03-19												
78	84	6	6	DRY	115	.3	3500	.0091304	2.931E-4	.0017585		
84	90	6	12	DRY	147	.1	3500	.0023810	7.643E-5	4.586E-4		
90	96	6	18	DRY	276	3	3500	.0380435	.0012212	.0073272		
96	102	6	24	DRY	234	22.3	3500	.3335470	.0107069	.0642412		
78	102	24	24							.0737854	.0030744	.0046116
SO-03-20												
0	10	10	10	DRY	177	.7	3500	.0138418	4.443E-4	.0044432		
10	18	8	18	DRY	125	2.5	3500	.07	.002247	.017976		
18	24	6	24		120	.1	3500	.0029167	9.362E-5	5.617E-4		
24	30	6	30	DAMP	115	4.9	3500	.1491304	.0047871	.0287225		
30	36	6	36	DRY	170	2.1	3500	.0432353	.0013879	.0083271		
36	42	6	42	DAMP	190	9.5	3500	.1750000	.0056175	.0337050		
42	48	6	48	DAMP	160	79.9	3500	1.747813	.0561048	.3366287		
48	52	4	52	DAMP	204	47.3	3500	.8115196	.0260498	.1041991		
52	58	6	58	DRY	164	12.5	3500	.2667683	.0085633	.0513796		
58	64	6	64	DRY	115	1.3	3500	.0395652	.0012700	.0076203		
64	66	2	66		80	.1	3500	.004375	1.404E-4	2.809E-4		
66	70	4	70	DRY	75	.1	3500	.0046667	1.498E-4	5.992E-4		
70	76	6	76	DRY	184	26.3	3500	.5002717	.0160587	.0963523		
76	80	4	80	DRY	259	15.3	3500	.2067568	.0066369	.0265476		
0	80									.7173432	.0089668	.0134502
24	64	40	40							.5705821	.0142646	.0213968

## DRILL SAMPLE SLUICING AND PANNING RESULTS : OTTER CREEK DRILLING PROJECT

FROM FEET	TO FEET	INTERVAL FEET	CUMUL'TE INTERVAL	MOISTURE RELATIVE	SAMPLE WEIGHT LBS	GOLD WT. MILLIGMS	WT. OF GRAVEL LBS/C.Y.	ADJUSTED GOLD WT. GRAMS	ADJUSTED GOLD WT. OZ./C.Y.	FEET*GRADE	INTRVL. FACTOR GRADE ADJUSTED OZ/C.Y.
SO-83-21											
68	74	6	6	DRY	289	.1	3500	.0012111	3.888E-5	2.333E-4	
SO-83-22											
0	7	7	7	DRY	24	.1	3500	.0145833	4.681E-4	.0032769	
7	10	3	10		60	.1	3500	.0058333	1.872E-4	5.617E-4	
10	16	6	16	DRY	142	1.4	3500	.0345070	.0011077	.0066461	
16	22	6	22	DRY	77	.1	3500	.0045455	1.459E-4	8.755E-4	
22	28	6	28	DRY	188	.8	3500	.0148936	4.781E-4	.0028685	
28	34	6	34	DRY	174	23.4	3500	.4706897	.0151091	.0906548	
34	40	6	40	DRY	305	90.7	3500	1.040820	.0334103	.2004619	
40	46	6	46	DRY	149	11	3500	.2583893	.0082943	.0497658	
46	54	8	54	DRY	109	7.5	3500	.2408257	.0077305	.0618440	
54	60	6	60	DRY	187	.5	3500	.0093583	3.004E-4	.0018024	
60	66	6	66	DRY	159	2.5	3500	.0550314	.0017665	.0105991	
66	73	7	73	DRY	331	3.7	3500	.0391239	.0012559	.0087911	
0	73	73	73							.4381477	.0060020 .0090030
28	54	26	26							.4027265	.0154895 .0232342
SO-83-23											
0	14	14	14	DRY	110	.1	3800	.0034545	1.109E-4	.0015525	
14	22	8	22	DRY	138	4.4	3800	.1211594	.0038892	.0311137	
22	28	6	28	DRY	149	151.6	3800	3.866309	.1241085	.7446511	
28	34	6	34	DRY	176	52.2	3800	1.127045	.0361782	.2170690	
34	40	6	40	DRY	252	47.6	3800	.7177778	.0230407	.1382440	
40	46	6	46	DRY	189	53.8	3800	1.081693	.0347223	.2083341	
46	52	6	52	DRY	102	43.5	3800	1.620588	.0520209	.3121253	
52	58	6	58	DRY	151	5	3800	.1258278	.0040391	.0242344	
58	64	6	64	DAMP	240	.5	3800	.0079167	2.541E-4	.0015247	
64	70	6	70	DAMP	272	.2	3800	.0027941	8.969E-5	5.381E-4	
70	76	6	76	DAMP	108	.1	3800	.0035185	1.129E-4	6.777E-4	
76	80	4	80	DAMP	114	.1	3800	.0033333	1.070E-4	4.280E-4	
80	86	6	86		120	.1	3800	.0031667	1.016E-4	6.099E-4	
86	92	6	92	DRY	293	1.6	3800	.0207509	6.661E-4	.0039966	
92	98	6	98	DRY	302	2674.3	3800	33.65013	1.080169	6.481016	
0	98	98	98			(F.G+NUG)				8.166115	.0833277 .1249916
0	92	92	92							1.685099	.0183163 .0274744
22	52	30	30							1.620423	.0540141 .0810212

## DRILL SAMPLE SLUICING AND PANNING RESULTS : OTTER CREEK DRILLING PROJECT

FROM FEET	TO FEET	INTERVAL FEET	CUMUL'TE INTERVAL	MOISTURE RELATIVE	SAMPLE WEIGHT LBS	GOLD WT. MILLIGMS	WT. OF GRAVEL LBS/C.Y.	ADJUSTED GOLD WT. GRAMS	ADJUSTED GOLD WT. OZ./C.Y.	FEET GRADE	INTRVL GRADE OZ./C.Y.	FACTOR ADJUSTED GRADE OZ./C.Y.
SO-83-24												
38	44	6	6	DRY	176	1.4	3800	.0302273	9.703E-4	.0058218		
44	50	6	12	DRY	151	.1	3800	.0025166	8.078E-5	4.847E-4		
50	56	6	18	DRY	260	.1	3800	.0014615	4.692E-5	2.815E-4		
56	62	6	24	DRY	203	.1	3800	.0018719	6.009E-5	3.605E-4		
62	68	6	30	DRY	243	1.4	3800	.0218930	7.028E-4	.0042166		
68	74	6	36	DRY	216	.1	3800	.0017593	5.647E-5	3.388E-4		
74	80	6	42	DRY	185	.6	3800	.0123243	3.956E-4	.0023737		
80	82	2	44	DRY	145	12.1	3800	.3171034	.0101790	.0203580		
82	84	2	46	DRY	108	.7	3800	.0246296	7.906E-4	.0015812		
84	88	4	50	DRY	301	4.7	3800	.0593355	.0019047	.0076187		
SO-83-26												
0	14	14	14	DRY	85	1.1	3800	.0491765	.0015786	.0220999		
14	22	8	22	DRY	89	.1	3800	.0042697	1.371E-4	.0010964		
22	28	6	28	DRY	125	.5	3800	.0152	4.879E-4	.0029275		
28	34	6	34	DRY	170	.3	3800	.0067059	2.153E-4	.0012916		
34	40	6	40	DRY	159	24.1	3800	.5759748	.0184888	.1109328		
40	46	6	46	DRY	202	.7	3800	.0131683	4.227E-4	.0025362		
46	52	6	52	DRY	173	5.3	3800	.1164162	.0037370	.0224218		
52	58	6	58	DRY	492	8.1	3800	.0625610	.0020082	.0120492		
58	64	6	64	DRY	183	.8	3800	.0166120	5.332E-4	.0031995		
64	70	6	70	DRY	230	2.9	3800	.0479130	.0015380	.0092281		
70	72	2	72	N/A	N/A	N/A						
72	74	2	2	N/A	N/A	.1						
0	70	70	70							.1877829	.0026826	.0040239
SO-83-27												
34	40	6	6	DRY	177	5.6	3800	.1202260	.0038593	.0231555		
40	46	6	12	DRY	69	10.6	3800	.5837681	.0187390	.1124337		
46	52	6	18	DRY	166	.8	3800	.0183133	5.879E-4	.0035271		
52	58	6	24	DRY	357	45.6	3800	.4853782	.0155806	.0934838		
58	64	6	30	DRY	295	.9	3800	.0115932	3.721E-4	.0023229		
64	70	6	36	DRY	558	.1	3800	6.810E-4	2.186E-5	1.312E-4		
34	70	36	36							.2349642	.0065268	.0097902
SO-83-28												
0	6	6	6	DRY	46	3.5	3500	.2663043	.0085484	.0512902		
6	20	14	20	DRY	103	4.8	3500	.1631068	.0052357	.0733002		
20	23	3	23	DRY	132	9.7	3500	.2571970	.0082560	.0247681		
0	23	23	23							.1493585	.0064938	.0097408



## DRILL SAMPLE SLUICING AND PANNING RESULTS : OTTER CREEK DRILLING PROJECT

FROM FEET	TO FEET	INTERVAL FEET	CUMUL'TE INTERVAL	MOISTURE RELATIVE	SAMPLE WEIGHT LBS	GOLD WT. MILLIGMS	WT. OF GRAVEL LBS/C.Y.	ADJUSTED GOLD WT. GRAMS	ADJUSTED GOLD WT. OZ./C.Y.	FEET*GRADE	INTRVL. GRADE OZ./C.Y.	FACTOR ADJUSTED GRADE OZ./C.Y.
SO-83-29												
0	6	6	6	DRY	77	1.5	3500	.0681818	.0021886	.0131318		
6	14	8	14	DRY	11	.6	3500	.1909091	.0061282	.0490255		
14	18	4	18		80	.6	3500	.02625	8.426E-4	.0033705		
18	24	6	24	DRY	70	51.6	3500	2.58	.082818	.496908		
24	32	8	32	DRY	269	25.5	3500	.3317844	.0106503	.0852022		
0	32	32	32							.6476380	.0202387	.0303580
SO-83-30												
0	6	6	6	DRY	37	.1	3500	.0094595	3.036E-4	.0018219		
6	12	6	12	DRY	46	1.6	3500	.1217391	.0039078	.0234470		
12	20	8	20		160	1.6	3500	.035	.0011235	.008988		
20	26	6	26	DRY	41	34.5	3500	2.945122	.0945384	.5672305		
26	32	6	32	DRY	137	10.4	3500	.2656934	.0085288	.0511726		
32	38	6	38	DRY	136	13.6	3500	.3500000	.0112350	.0674100		
38	44	6	44	DRY	156	38.9	3500	.8727564	.0280155	.1680929		
44	50	6	50	DRY	146	56.1	3500	1.344863	.0431701	.2590206		
50	56	6	56	DRY	169	13.6	3500	.2816568	.0090412	.0542471		
56	62	6	62	DRY	190	16.7	3500	.3076316	.0098790	.0592498		
62	70	8	70	DRY	343	58.9	3500	.6010204	.0192928	.1543420		
0	70	70	70							1.415022	.0202146	.0303219
20	70	50	50							1.380766	.0276153	.0414230
SO-83-30A												
0	6	6	6	DRY	48	1.7	3500	.1239583	.0039791	.0238744		
6	12	6	12	DRY	48	10.5	3500	.7656250	.0245766	.1474594		
12	18	6	18	DRY	17	4.3	3500	.0852941	.0284179	.1705076		
18	24	6	24	DRY	45	18	3500	1.400000	.0449400	.2696400		
24	30	6	30	DRY	80	16.9	3500	.739375	.0237339	.1424036		
0	30	30	30							.7538850	.0251295	.0376943
SO-83-31												
0	4	4	4	DRY	10	.1	3500	.035	.0011235	.004494		
4	10	6	10	DRY	154	4.3	3500	.0977273	.0031370	.0188223		
10	16	6	16	DRY	107	1.8	3500	.0588785	.0018900	.0113400		
16	22	6	22	DRY	88	4.1	3500	.1630682	.0052345	.0314069		
22	28	6	28	DRY	178	8.4	3500	.1651685	.0053019	.0318115		
28	34	6	34	DRY	242	.71	3500	.0102686	3.296E-4	.0019777		
0	34	34	34							.0998524	.0029168	.0044053

## DRILL SAMPLE SLUICING AND PANNING RESULTS : OTTER CREEK DRILLING PROJECT

FROM FEET	TO FEET	INTERVAL FEET	CUMUL'TE INTERVAL	MOISTURE RELATIVE	SAMPLE WEIGHT LBS	GOLD WT. MILLIGMS	WT. OF GRAVEL LBS/C.Y.	ADJUSTED GOLD WT. GRAMS	ADJUSTED GOLD WT. OZ./C.Y.	FEET*GRADE	INTRVL GRADE OZ./C.Y.	FACTOR ADJUSTED GRADE OZ./C.Y.
SO-83-32												
0	4	4	4	DRY	31	.3	3500	.0338710	.0010873	.0043490		
4	10	6	10	DRY	131	4.9	3500	.1309160	.0042024	.0252144		
10	16	6	16	DRY	153	.9	3500	.0205882	6.609E-4	.0039653		
16	22	6	22	DRY	118	6.7	3500	.1987288	.0063792	.0382752		
22	28	6	28	DRY	224	75.8	3500	1.184375	.0380184	.2281106		
28	34	6	34	DRY	267	.5	3500	.0065543	2.104E-4	.0012624		
34	40	6	40	DRY	244	.5	3500	.0071721	2.302E-4	.0013814		
40	46	6	46	DRY	271	N/A						
0	40	40	40							.3025583	.0075640	.0113459
SO-83-33												
0	8	8	8	DRY	140	13.1	3500	.3275	.0105128	.084102		
8	14	6	14	DRY	207	7	3500	.1183575	.0037993	.0227957		
14	19	5	19	DRY	215	.4	3500	.0065116	2.090E-4	.0010451		
0	19	19	19							.1079428	.0056812	.0085218
SO-83-34												
36	42	6	6	DRY	212	.1	3500	.0016509	5.300E-5	3.180E-4		
42	48	6	12	DRY	158	.2	3500	.0044304	1.422E-4	8.533E-4		
48	54	6	18	N/A	184	.2	3500	.0038043	1.221E-4	7.327E-4		
54	60	6	24	N/A	225	.4	3500	.0062222	1.997E-4	.0011984		
60	66	6	30	N/A	206	.2	3500	.0033981	1.091E-4	6.545E-4		
66	72	6	36	N/A	225	.2	3500	.0031111	9.987E-5	5.992E-4		
72	78	6	42	N/A	222	.1	3500	.0015766	5.061E-5	3.036E-4		
0	42	42	42							.0046597	1.109E-4	1.664E-4
SO-83-35												
52	58	6	6	N/A	199	.5	3500	.0087940	2.823E-4	.0016937		
58	64	6	12	N/A	174	4	3500	.0804598	.0025828	.0154966		
64	70	6	18	N/A	193	.1	3500	.0018135	5.821E-5	3.493E-4		
70	76	6	24	N/A	192	3.9	3500	.0710937	.0022821	.0136927		
52	76	24	24							.0312322	.0013013	.0019520
SO-83-36												
60	66	6	6	N/A	148	.1	3500	.0023649	7.591E-5	4.555E-4		
66	69	3	9	N/A	139	.6	3500	.0151079	4.850E-4	.0014549		
60	69	9	9							.0019104	2.123E-4	3.184E-4

## DRILL SAMPLE SLUICING AND PANNING RESULTS : OTTER CREEK DRILLING PROJECT

FROM FEET	TO FEET	INTERVAL FEET	CUMUL'TE INTERVAL	MOISTURE RELATIVE	SAMPLE WEIGHT LBS	GOLD WT. MILLIGMS	WT. OF GRAVEL LBS/C.Y.	ADJUSTED GOLD WT. GRAMS	ADJUSTED GOLD WT. OZ./C.Y.	FEET*GRADE	INTRVL GRADE OZ./C.Y.	FACTOR ADJUSTED OZ./C.Y.
SO-83-37												
54	60	6	6	N/A	134	BLACKSAND		0	0	0		
60	66	6	12	DAMP	134	.2	3500	.0052239	1.677E-4	.0010061		
SO-83-39												
0	16	16	16	N/A	147	7	3500	.1666667	.0053500	.0856000		
						(0-6 + 0-16)						
16	24	8	24	N/A	128	.5	3500	.0136719	4.389E-4	.0035109		
24	30	6	30	N/A	205	1.3	3500	.0221951	7.125E-4	.0042748		
30	36	6	36	N/A	204	.1	3500	.0017157	5.507E-5	3.304E-4		
36	41	5	41	N/A	144	.1	3500	.0024306	7.802E-5	3.901E-4		
0	41	41	41								.0085063	2.075E-4 3.112E-4
SO-83-40												
0	16	16	16	N/A	44	10	3500	.7954545	.0255341	.4085455		
16	22	6	22	N/A	101	137.3	3500	4.757921	.1527293	.9163755		
22	42	20	42	N/A	322	293.6	3500	3.191304	.1024409	2.048817		
THE ABOVE VALUES ARE SUMS OF THE FOLLOWING SAMPLES: 22-28, 28-36, 36-42, AND 20-40(SPECIAL).												
42	48	6	48	N/A	84	36.4	3500	1.516667	.0486850	.2921100		
48	54	6	54	N/A	225	24.6	3500	.3826667	.0122836	.0737016		
54	60	6	60	N/A	185	1.9	3500	.0359459	.0011539	.0069232		
60	65	5	65	N/A	207	.2	3500	.0033816	1.086E-4	5.428E-4		
0	65	65	65								3.747016	.0576464 .0864696
16	42	26	26								2.965193	.1140459 .1710688

APPENDIX A  
DRILL SAMPLE SLUICING AND PANNING RESULTS : OTTER CREEK DRILLING PROJECT

FROM FEET	TO FEET	INTERVAL FEET	CUMUL'TE INTERVAL	MOISTURE RELATIVE	SAMPLE WEIGHT LBS	GOLD WT. MILLIGMS	WT. OF GRAVEL LBS/C.Y.	ADJUSTED GOLD WT. GRAMS	ADJUSTED GOLD WT. OZ./C.Y.	FEET*GRADE	INTRVL GRADE OZ./C.Y.	FACTOR ADJUSTED OZ./C.Y.
SO83-18A												
0	7	7	7	DRY	85	.2	3500	.0082353	2.644E-4	.0018505		
7	18	11	18	DRY	51	.9	3500	.0617647	.0019826	.0218091		
18	26	8	26	DRY	94	.1	3500	.0037234	1.195E-4	9.562E-4		
26	32	6	32	DRY	100	.2	3500	.007	.0002247	.0013482		
32	38	6	38	DRY	211	1.9	3500	.0315166	.0010117	.0060701		
0	38	38	78							.0320341	8.430E-4	.0011381
SO83-19												
0	8	8	8	DRY	40	.6	3500	.0525	.0016853	.013482		
24	30	6	--	DRY	82	.2	3500	.0085366	2.740E-4	.0016441		
36	42	6	6	DRY	115	.7	3500	.0213043	6.839E-4	.0041032		
42	48	6	12	DRY	74	.1	3500	.0047297	1.518E-4	9.109E-4		
48	54	6	18	DRY	125	.1	3500	.0028	8.988E-5	5.393E-4		
54	60	6	24	DRY	283	.5	3500	.0061837	1.985E-4	.0011910		
60	66	6	30	DRY	232	4.7	3500	.0709052	.0022761	.0136563		
66	72	6	36	DRY	369	9.1	3500	.0863144	.0027707	.0166241		
72	78	6	42	DRY	96	.2	3500	.0072917	2.341E-4	.0014044		
36	78	42	42							.0384293	9.150E-4	.0012352
SO83-21												
7	14	7	7	DRY	147	1.1	3500	.0261905	8.407E-4	.0058850		
14	18	4	11	DRY	110	.31	3500	.9863636	.0316623	.1266491		
18	24	6	17	DRY	244	2.5	3500	.0358607	.0011511	.0069068		
42	48	6	6	DRY	249	.1	3500	.0014056	4.512E-5	2.707E-4		
54	60	6	6	DRY	259	.1	3500	.0013514	4.338E-5	2.603E-4		
SO83-24												
0	7	7	7	DRY	90	.1	3500	.0038889	1.248E-4	8.738E-4		
14	20	6	6	DRY	181	2.3	3500	.0444751	.0014277	.0085659		
26	32	6	6	DRY	224	74.3	3500	1.160938	.0372661	.2235966		
32	38	6	12	DRY	158	3.1	3500	.0686709	.0022043	.0132260		
26	38	12	12							.2368226	.0197352	.0266425
SO83-25												
0	10	10	10	DRY	59	BL. SAND	3500	0	0	0		
10	18	8	18	DRY	127	.4	3500	.0110236	3.539E-4	.0028309		
18	24	6	24	DRY	118	11.8	3500	.3500000	.0112350	.0674100		
24	30	6	30	DRY	163	1.1	3500	.0236196	7.582E-4	.0045491		
30	36	6	36	DRY	155	1.1	3500	.0248387	7.973E-4	.0047839		
0	36	36	36							.0795739	.0022104	.0029840

APPENDIX A  
DRILL SAMPLE SLUICING AND PANNING RESULTS : OTTER CREEK DRILLING PROJECT

FROM FEET	TO FEET	INTERVAL FEET	CUMUL'TE INTERVAL	MOISTURE RELATIVE	SAMPLE WEIGHT LBS	GOLD WT. MILLIGMS	WT. OF GRAVEL LPS/C.Y.	ADJUSTED GOLD WT. GRAMS	ADJUSTED GOLD WT. OZ./C.Y.	FEET*GRADE	INTRVL GRADE OZ./C.Y.	FACTOR ADJUSTED GRADE OZ./C.Y.
SO83-25A												
0	10	10	10	DRY	75	.1	3500	.0046667	1.498E-4	.0014980		
10	18	8	18	DRY	89	.3	3500	.0117978	3.787E-4	.0030297		
18	24	6	24	DRY	138	22.7	3500	.5757246	.0184808	.1108846		
24	30	6	30	DRY	142	10.2	3500	.2514085	.0080702	.0484213		
30	38	8	38	DRY	336	9	3500	.0937500	.0030094	.0240750		
0	38	38	37							.1879085	.0049450	.0066757
SO83-25B												
0	14	14	14	DRY	77	2.4	3500	.1090909	.0035018	.0490255		
14	22	6	20	DRY	78	3.1	3500	.1391026	.0044652	.0267912		
22	28	6	26	DRY	123	6.3	3500	.1792683	.0057545	.0345271		
28	34	6	34	DRY	157	1.3	3500	.0289809	9.303E-4	.0055817		
34	40	6	40	DRY	142	10.7	3500	.2637324	.0084658	.0507949		
0	40	40	40							.1667203	.0041680	.0056268
SO83-25C												
0	18	18	18	DRY	61	.5	3500	.0286885	9.209E-4	.0165762		
18	24	6	24	DRY	172	8.5	3500	.1729651	.0055522	.0333131		
24	30	6	30	DRY	126	1.7	3500	.0472222	.0015158	.0090950		
30	36	6	36	WET	126	1.4	3500	.0388889	.0012483	.0074906		
36	42	6	42	WET	252	55.2	3500	.7666667	.0246100	.1476600		
42	48	6	48	DAMP	230	105.5	3500	1.605435	.0515345	.3092067		
48	54	6	54	DAMP	165	42.4	3500	.8993939	.0288705	.1732233		
54	60	6	60	DRY	241	46.5	3500	.6753112	.0216775	.1300649		
60	66	6	66	WET	420	.5	3500	.0041667	1.337E-4	8.025E-4		
66	72	6	72	WET	124	.1	3500	.0028226	9.060E-5	5.436E-4		
72	78	6	78	WET	115	.7	3500	.0213043	6.839E-4	.0041032		
78	84	6	84	WET	141	4.1	3500	.1017730	.0032669	.0196015		
36	60	24	24							.7601549	.0316731	.0427587
SO83-27												
0	14	14	14	DRY	72	.2	3500	.0097222	3.121E-4	.0043692		
14	22	6	20	DRY	104	.3	3500	.0100962	3.241E-4	.0019445		
22	28	6	28	DRY	149	3.3	3500	.0775168	.0024883	.0149297		
28	34	6	34	DRY	188	1.5	3500	.0279255	8.964E-4	.0053785		
0	34	34	34							.0266219	7.830E-4	.0010570

APPENDIX A  
DRILL SAMPLE SLUICING AND PANNING RESULTS : OTTER CREEK DRILLING PROJECT

FROM FEET	TO FEET	INTERVAL FEET	CUMUL'TE INTERVAL	MOISTURE RELATIVE	SAMPLE WEIGHT LBS	GOLD WT. MILLIGMS	WT. OF GRAVEL LBS/C.Y.	ADJUSTED GOLD WT. GRAMS	ADJUSTED GOLD WT. OZ./C.Y.	FEET*GRADE	INTRVL GRADE OZ/C.Y.	FACTOR ADJUSTED GRADE OZ/C.Y.
SO83-27A												
0	18	18	18	DRY	294	.9	3500	.0107143	3.439E-4	.0061907		
18	24	6	24	DRY	99	2.5	3500	.0883838	.0028371	.0170227		
24	30	6	30	DRY	125	1.7	3500	.0476	.0015280	.0091678		
30	36	6	36	DRY	175	1.2	3500	.024	.0007704	.0046224		
36	42	6	42	DRY	135	129.3	3500	3.352222	.1076063	.6456380		
42	48	6	48	DRY	60	5	3500	.2916667	.0093625	.0561750		
48	54	6	54	DRY	161	15.4	3500	.3347826	.0107465	.0644791		
54	58	4	58	DRY	209	22.6	3500	.3784689	.0121489	.0485954		
58	64	6	64	DRY	309	.6	3500	.0067961	2.182E-4	.0013089		
64	70	6	70	DRY	196	.7	3500	.0125000	4.012E-4	.0024075		
70	73	3	73	DRY	199	.6	3500	.0105528	3.387E-4	.0010162		
36	58	22	22							.8148875	.0370403	.0500045
SO83-41A												
0	10	10	10	DRY	70	.5	3500	.025	.0008025	.008025		
10	20	10	20	DRY	56	.3	3500	.01875	6.019E-4	.0060188		
20	26	6	26	WET	141	SAND	3500	-----	-----	-----		
26	32	6	32	WET	234	BL. SAND	3500	-----	-----	-----		
32	38	6	38	DAMP	212	.3	3500	.0049528	1.590E-4	9.539E-4		
38	44	6	44	DAMP	217	BL. SAND	3500	-----	-----	-----		
44	50	6	50	DAMP	232	BL. SAND	3500	-----	-----	-----		
50	56	6	56	DAMP	218	.1	3500	.0016055	5.154E-5	3.092E-4		
56	60	4	60	DAMP	----	1.3	3500	-----	-----	-----		
SO83-42												
0	10	10	10	DRY	53	12.5	3500	.8254717	.0264978	.2649764		
10	16	6	16	DRY	34	3	3500	.3088235	.0099132	.0594794		
16	22	6	22	DRY	66	.1	3500	.0053030	1.702E-4	.0010214		
22	28	6	28	DRY	94	5.5	3500	.2047872	.0065737	.0394420		
28	34	6	34	DRY	123	13	3500	.3699187	.0118744	.0712463		
34	40	6	40	DRY	241	62.5	3500	.9076763	.0291364	.1748185		
40	46	6	46	DRY	296	371.9	3500	4.397466	.1411587	.8469520		
46	52	6	52	DRY	121	38.6	3500	1.116529	.0358406	.2150435		
52	58	6	58	DRY	276	8.1	3500	.1027174	.0032972	.0197834		
58	66	8	66	DRY	218	104.5	3500	1.677752	.0538558	.4308468		
66	72	6	72	DRY	230	53.4	3500	.8126087	.0260847	.1565084		
72	78	6	78	DRY	160	2	3500	.04375	.0014044	.0084263		
78	86	8	86	DRY			BL. SAND					
86	92	6	92	DRY			BL. SAND					
92	98	6	98	DRY	---	.1	3500					
98	102	4	102	DRY	204	39.6	3500	.6794118	.0218091	.0872365		
34	72	36	36							1.843953	.0512209	.0691482

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FROM FEET	TO FEET	INTERVAL FEET	CUMUL'TE INTERVAL	MOISTURE RELATIVE	SAMPLE WEIGHT LBS	GOLD WT. MILLIGMS	WT. OF GRAVEL LBS/C.Y.	ADJUSTED GOLD WT. GRAMS	ADJUSTED GOLD WT. OZ./C.Y.	FEET*GRADE	INTRVL FACTOR GRADE ADJUSTED OZ/C.Y. GRADE OZ/C.Y.
SO83-43											
0	10	10	10	DRY	76	.3	3500	.0138158	4.435E-4	.0044349	
10	16	6	16	DRY	74	.1	3500	.0047297	1.518E-4	9.109E-4	
16	22	6	22	DRY	79	.1	3500	.0044304	1.422E-4	8.533E-4	
22	34	12	34	DRY	488	1.1	3500	.0078893	2.532E-4	.0030390	
34	52	18	54	DRY	745	BL. SAND	3500	-----	-----	-----	
52	62	10	62	DRY	509	.5	3500	.0034381	1.104E-4	.0011036	
SO83-44A											
0	10	10	10	DRY	37	2.3	3500	.2175676	.0069839	.0698392	
10	16	6	16	DRY	45	.4	3500	.0311111	9.987E-4	.0059920	
16	22	6	22	DRY	120	12.5	3500	.3645833	.0117031	.0702187	
22	28	6	28	DAMP	158	85.4	3500	1.891772	.0607259	.3643553	
28	34	6	34	DAMP	178	13.1	3500	.2575843	.0082685	.0496107	
34	40	6	40	DAMP	130	61.6	3500	1.658462	.0532366	.3194197	
40	46	6	46	DAMP	127	3.8	3500	.1047244	.0033617	.0201699	
46	52	6	52	DAMP	153	4.5	3500	.1029412	.0033044	.0198265	
52	56	5	56	DAMP	141	23.1	3500	.5734043	.0184063	.0920314	
0	56	56	56							1.011463	.0180618 .0243835
22	40	18	18							.8036045	.0446447 .0602703
SO83-45											
0	10	10	10	DRY	49	.5	3500	.0357143	.0011464	.0114643	
10	16	6	16	DRY	23	4.6	3500	.7000000	.0224700	.1348200	
16	22	6	22	DRY	48	.1	3500	.0072917	2.341E-4	.0014044	
22	28	6	28	DRY	55	1.1	3500	.0700000	.0022470	.0134820	
28	34	6	34	DAMP	116	3	3500	.0905172	.0029056	.0174336	
34	40	6	40	DAMP	127	.1	3500	.0027559	8.846E-5	5.308E-4	
40	46	6	46	DAMP	78	7.2	3500	.3230769	.0103708	.0622246	
46	52	6	52	DAMP	148	2.7	3500	.0638514	.0020496	.0122978	
52	58	6	58	DRY	177	6.7	3500	.1324859	.0042528	.0255168	
58	64	6	64	DRY	352	1.6	3500	.0159091	5.107E-4	.0030641	
64	70	6	70	DRY	281	.1	3500	.0012456	3.998E-5	2.399E-4	
70	76	6	76	DRY	164	.1	3500	.0021341	6.851E-5	4.110E-4	
76	83	7	83	DRY	360	100.6	3500	.9780556	.0313956	.2197691	
40	58	18	18							.1000392	.0055577 .0075029

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DRILL SAMPLE SLUICING AND PANNING RESULTS : OTTER CREEK DRILLING PROJECT

FROM FEET	TO FEET	INTERVAL FEET	CUMUL'TE INTERVAL	MOISTURE RELATIVE	SAMPLE WEIGHT LBS	GOLD WT. MILLIGMS	WT. OF GRAVEL LBS/C.Y.	ADJUSTED GOLD WT. GRAMS	ADJUSTED GOLD WT. OZ./C.Y.	FEET*GRADE	INTRVL GRADE OZ/C.Y.	FACTOR ADJUSTED OZ/C.Y.
SO83-46A												
0	10	10	10	DRY	74	5	3500	.2364865	.0075912	.0759122		
10	16	6	16	DRY	63	2.4	3500	.1333333	.0042800	.0256800		
16	22	6	22	DRY	128	BL. SAND	3500	----	----	----		
22	28	6	28	DRY	62	9.8	3500	.5532258	.0177585	.1065513		
28	34	6	34	DRY	119	1.3	3500	.0382353	.0012274	.0073641		
34	40	6	40	DRY	157	6.8	3500	.1515924	.0048661	.0291967		
40	46	6	46	DRY	160	6.7	3500	.1465625	.0047047	.0282279		
46	52	6	52	DRY	159	9.1	3500	.2003145	.0064301	.0385806		
52	58	6	58	DRY	323	.3	3500	.0032508	1.043E-4	6.261E-4		
58	64	6	64	DRY	65	.6	3500	.0323077	.0010371	.0062225		
64	70	6	70	DRY	306	.1	3500	.0011438	3.672E-5	2.203E-4		
70	76	6	76	DRY	315	.5	3500	.0055556	1.783E-4	.0010700		
76	82	6	82	DRY	158	.1	3500	.0022152	7.111E-5	4.266E-4		
82	88	6	88	DRY	158	BL. SAND	3500	---	---	---		
88	93	5	93	DRY	181	.1	3500	.0019337	6.207E-5	3.104E-4		
SO83-47												
0	10	10	10	DRY	99	.8	3500	.0282828	9.079E-4	.0090788		
10	16	6	16	DRY	56	.6	3500	.0375	.0012038	.0072225		
16	22	6	22	DRY	141	.1	3500	.0024823	7.968E-5	4.781E-4		
22	28	6	28	DRY	119	.2	3500	.0058824	1.888E-4	.0011329		
28	34	6	34	DRY	224	60	3500	.9375	.0300938	.1805625		
34	40	6	40	DRY	130	9.6	3500	.2584615	.0082966	.0497797		
40	46	6	46	DRY	88	.1	3500	.0039773	1.277E-4	7.660E-4		
46	52	6	52	DRY	135	1	3500	.0259259	8.322E-4	.0049933		
52	58	6	58	DRY	249	.88	3500	.0123695	3.971E-4	.0023824		
58	62	4	62	DRY	156	7.8	3500	.1750000	.0056175	.0224700		
SO83-48												
0	10	10	10	DRY	112	1.3	3500	.040625	.0013041	.0130406		
10	16	6	16	DRY	26	.1	3500	.0134615	4.321E-4	.0025927		
16	22	6	22	DRY	83	.1	3500	.0042169	1.394E-4	8.122E-4		
22	28	6	28	DRY	211	.2	3500	.0033175	1.065E-4	6.390E-4		
28	33	5	33	DRY	180	4.6	3500	.0894444	.0028712	.0143558		
SO83-55B												
60	66	6	66	DRY	134	.1	3500	.0026119	8.384E-5	5.031E-4		
78	84	6	84	DRY	189	BL. SAND	3500	---	---	---		
84	90	6	90	DRY	299	.6	3500	.0070234	2.255E-4	.0013527		
90	96	6	96	DRY	255	11.66	3500	.1600392	.0051373	.0308236		
96	102	6	102	DRY	189	1.65	3500	.0305556	9.808E-4	.0058850		

*June 1*





APPENDIX A  
DRILL SAMPLE SLUICING AND PANNING RESULTS : OTTER CREEK DRILLING PROJECT

FROM FEET	TO FEET	INTERVAL FEET	CUMUL'TE INTERVAL	MOISTURE RELATIVE	SAMPLE WEIGHT LBS	GOLD WT. MILLIGMS	WT. OF GRAVEL LBS/C.Y.	ADJUSTED GOLD WT. GRAMS	ADJUSTED GOLD WT. OZ./C.Y.	FEET*GRADE	INTRVL FACTOR GRADE* ADJUSTED OZ/C.Y.
SO83-58											
96	102	6	6	FROZEN	173	51.7	3500	1.045954	.0335751	.2014507	
102	108	6	12	FROZEN	185	1.5	3500	.0283784	9.109E-4	.0054657	
108	114	6	18	FROZEN	212	11.7	3500	.1931604	.0062004	.0372027	
114	120	6	24	FROZEN	226	39.6	3500	.6132743	.0196861	.1181166	
120	126	6	30	FROZEN	185	.1	3500	.0018919	6.073E-5	3.644E-4	
126	132	6	32	FROZEN	145	.1	3500	.0024138	7.748E-5	4.649E-4	
132	138	6	38	FROZEN	135	BL. SANDS	3500	---	---	---	
138	144	6	44	FROZEN	90	.1	3500	.0038889	1.248E-4	7.490E-4	
144	150	6	50	FROZEN	139	.26	3500	.0065468	2.102E-4	.0012609	
150	156	6	56	FROZEN	250	88.27	3500	1.23578	.0396685	.2380112	
96	120	24	24							.3622357	.0150932 .0203758
150	156	6	6								.0396685 .0535525
SO83-59											
10	16	6	6	FROZEN	63	9.1	3500	.5055556	.0162283	.0973700	
16	22	6	12	FROZEN	188	2.9	3500	.0539894	.0017331	.0103984	
22	28	6	18	FROZEN	204	31.5	3500	.5404412	.0173482	.1040890	
28	34	6	24	FROZEN	190	.2	3500	.0036842	1.183E-4	7.096E-4	
34	40	6	30	FROZEN	139	.4	3500	.0100719	3.233E-4	.0019399	
40	46	6	36	FROZEN	172	.3	3500	.0061047	1.960E-4	.0011754	
46	52	6	42	FROZEN	249	.3	3500	.0042169	1.354E-4	8.122E-4	
52	58	6	48	FROZEN	225	.6	3500	.0093333	2.996E-4	.0017976	
58	64	6	54	FROZEN	NOT	SLUICED					
64	70	6	60	FROZEN	NOT	SLUICED MUCH					
70	76	6	66	FROZEN	213	.7	3500	.0115023	3.692E-4	.0022154	
76	82	6	72	FROZEN	211	.35	3500	.0058057	1.864E-4	.0011182	
82	88	6	78	FROZEN	217	.1	3500	.0016129	5.177E-5	3.106E-4	
88	94	6	84	FROZEN	193	.2	3500	.0036269	1.164E-4	6.985E-4	
94	100	6	90	FROZEN	378	BL. SANDS	3500	---	---	---	
100	102	2	92	FROZEN	219	.1	3500	.0015982	5.130E-5	1.026E-4	

APPENDIX " B "

SEBREW HOLDINGS LTD.

SUMMARY OF COSTS RE "DAN" CLAIMS

ACQUISITION COSTS:

	\$	\$	\$
1981 - Payments to Milmac Connelly		225,000.00	
1983 - Payments to R.J. Watson		164,000.00	
" to Shirley Connelly		200,000.00	
" to Cypress Consulting		343,243.45	
" for staking costs		4,000.00	936,243.45

DEVELOPMENT AND EXPLORATION COSTS:

(1983)

Development	29,400.75		
Drilling	167,482.14		
Engineering	72,694.70		
Equipment Rentals	121,460.06		
Equipment repairs	968.52		
Field and Camp Costs	30,781.29		
Freight	236.98		
Mapping and Survey	23,181.33		
Wages	76,500.94	522,706.71	

ADMINISTRATIVE AND GENERAL COSTS:

(1983)

Accounting	2,500.00		
Insurance	640.00		
Interest	99,354.64		
Legal	25,534.24		
Taxes	1,224.05		
Telephone	1,406.02	130,658.95	

653,365.66

DEDUCT - Portion applicable to other claims

(41,234.40)

612,131.26

TOTAL COST ACQUIRED BY GENIE RESOURCES LTD.

\$1,548,374.71