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Barrington River Placer Gold Project

Qualifying Report for Integrated Resources Ltd.

January 31, 1990

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1. Summary:

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Integrated Resources Ltd. of Edmonton, Alberta is evaluating a placer gold property located in the Liard Mining district on the Barrington River in northwestern British Columbia. The property consists of one Placer Mining Lease and four Placer Leases which are subject to an option agreement and four Placer Leases owned by the Company. All Leases are contiguous.

The Company has developed an access road and most of the infrastructure necessary for a bulk sampling operation. In 1989, the Company processed approximately 3,350 cubic yards of alluvium to recover 89.2 ounces of refined gold and has gained experience on the property in the application of trenching and drilling to delineate auriferous alluvium and in differentiating waste from pay alluvium

In 1989, bulk sampling confirmed the presence of a zone of higher gold concentration in the alluvium in the northwest corner of Placer Mining Lease 840. The dimensions of this zone have not been determined.

Two test pits were sampled in 1989. In Pit # 1 the average recovered grade of the gold is 0.026 ounces per bank cubic yard. In Pit # 2 the average recovered grade of gold is 0.038 ounces per bank cubic yard.

The average value of gold recovered at Cdn \$500 per ounce of gold is \$13.00 per bank cubic yard in Pit # 1 and \$19.00 per bank cubic yard in Pit # 2. Operating costs per bank cubic yard of alluvium washed cannot be estimated at this time.

The results of the exploration and bulk sampling since 1987 indicate that significant quantities of alluvium occur on the property containing variable concentrations of gold. Some of the areas tested in 1988 and 1989 contain economically eignificant gold values and additional work is recommended to determine the gold concentration in the alluvium of these areas.

Integrated Resources Ltd. intends to carry out an exploration program over Placer Mining Lease 840 and all or most of the remaining Placer Leases to determine whether sufficient reservee exist to justify establishing a full scale production plant.

2. INTRODUCTION:

2.1 Terms of Reference:

The writer has received instructions from Robert Linttell Vice-President of Integrated Resources Ltd. to provide a qualifying report for submission to a Canadian Securities Commission. Integrated Resources Ltd. is seeking approval for a prospectus which will include a report on the Barrington River Placer gold property located in the Liard Mining District in northwestern British Columbia and the proposed exploration program to be carried out thereon (Figure-1).

2.2 Company's Intent:

The Barrington River property comprises granted Placer Mining Lease 840 and eight granted Placer Leases. Almost all of the past work has been confined to Placer Mining Lease 840. The Company intends to carry out an exploration program over all or most of those leases that have not been previously explored to determine if a sufficient reserve is present to justify establishing commercial production.

3. THE PROPERTY:

3.1 Description and Land Status:

The Placer leases comprising the Barrington River Placer Gold Property are listed below;

Placer Lease <u>Number</u>	Area in Square Meters (Approximate)	Date of Issue of Lease	Term of Lease in <u>Years</u>	Expiry Date based on Work Recorded
PML 840	337,7 38	Aug 29/1968	20	Aug 29/1991
PL 9893	500,000	Jul y 5 /1983	10	July 5/ 1991
PL 6945	500,0 00	Nov. 17/1981	10	Nov. 17/1990
PL 8259	500,000	Dec 31/1981	10	Dec.31/1990
PL 8260	500,000	Dec 31/1981	10	Dec 31/1990
PL 12596	475,000	Dec 31/1986	10	Dec 31/ 1990
PL 12597	475,000	Dec 31/1986	10	Dec 31/1990
PL 20064	475,000	Dec 31/1986	10	Dec31/1990
PL 20065	475,000	Dec 31/1986	10	Dec31/1990

Integrated Resources Ltd have a 100% working Interest in the above listed claims subject to a 2% Net Smelter Royalty payable to Mr. John Hope. Placer Mining Lease 840, and Placer Leases 6945, 8259, 8260, and 9893 were optioned in 1986 from Mr. Wayne Eberg. Placer leases 2596, 12597, 20064 and 20065 were transferred to the company on April 28, 1987 by John Hope.

All of the above leases are contiguous and covers most of the ground which contains recognized placer potential in the area (Figure-2).



Integrated Resources Ltd. Barrington River Project Property Location Map

NTS 104G-12W



Integrated Resources Ltd. Barrington River project Claim Location Map

NTS 104G-12W

3.2 Location:

The property is located within the Liard Mining District of British Columbia on the Barrington River approximately 25 miles southwest of the settlement of Telegraph Creek at 57 44" North Latitude and 131 46" west Longitude on NTS grid 104-G-12W. The property occurs within the Boundary Range of the Coast Mountains.

3.3 Accessibility:

Access to the property is by a gravel road maintained by the Department of highways from Telegraph Creek to the former settlement of Glenora and then by 15 miles of ungraded road constructed by the company.

Access to the property can also be achieved by either fixed wing aircraft or helicopter to a 2,500 feot gravel airstrip constructed approximately 0.5 miles from the camp. Fixed wing aircraft are based in Telegraph Creek and both fixed wing aircraft and helicopters are available in Dease Lake.

3.4 Climate:

The property is situated between the Coast Range and the Stikine Plateau. The Coast Range is wet with heavy annual precipitation but relatively mild temperatures. Annual precipitation ranges from 200 centimeters to 400 centimeters and temperatures are rarely colder than - 20 Celsius.

The Stikine Plateau is dry with low annual precipitation and exhibits a wide range in annual temperature. Annual precipitation is in the order of 25 centimeters and temperatures as low as -45 Celsius have been reported.

4. PROPERTY HISTORY:

4.1 Previous Work:

Prospecting and sluicing the gravels of the Barrington River for gold has occurred since the turn of the century. Larger scale mining did not take place until the 1930's when S.D. Barrington reportedly used a Keystone drill and a bucket dredge and a drag line to process the auriferous alluvium in the area. The dredge was not as successful as the drag line and was reportedly moved to another location after one season.

The total gold production from the Barrington River between 1906 and 1941 is reported to be 1,355 ounces, the most of which was produced in the 1930's. After 1941, activity appears to have been extremely limited until Integrated Resources Ltd. acquired the mineral rights to this area in 1986.

4.2 Work Performed By Integrated Resources Ltd.:

In 1986, Integrated Resources Ltd. negotiated an option agreement on Placer Mining Lease 840 and four additional placer leases from Mr. W Eberg. In addition the company was granted four additional placer Leases. The company under the technical supervision of Mr. M. Wetherley carried out a helicopter supported testing program on parts of Placer Mining Lease 840 and Placer Lease 9893 to determine if additional sampling and construction of a road to the property was justified. A total of 38 samples for a combined total volume of 5.7 cubic yards were obtained with a small backhoe and processed with a Denver Gold Saver which had a trommel and a vibrating sluice box.

Based on the results of the sampling program Mr. Wetherley concluded that further work was justified. An area that was stripped in the 1930's was selected to be the first area tested. Nearby areas were selected as secondary targets.

The sampling program was not considered to be of sufficient extent to allow the company to calculate reserves.

In 1987, Integrated Resources Ltd. obtained the necessary permits from the regulatory authorities to complete construction of approximately 15 miles of new road, upgrade an additional 5 miles of road from Glenora, to establish a 12 man trailer camp and a permanent telephone connection using the British Columbia Telephone system via the Meehaus Tower. A fuel depot, storage sheds, waterlines and other various infrastructure including a 2,500 foot gravel airstrip were established.

A dam was constructed to divert the Barrington River back to its natural course to allow sampling of the primary target area.

Bulk sampling was completed under the direction of Mr. M. Wetherley. A super sluice was used to process larger samples in an attempt to determine an accurate grade of the alluvium in the Barrington River channel system. Several thousand cubic yards of alluvium was stockplied for processing at a later date.

In 1988, the company reported washing 24,761 cubic yards of alluvium from Placer Mining Lease 840 and processing the alluvium that was stockpiled in 1987 to produced 224.1 ounces of refined gold and 39.6 punces of refined silver. This yielded an average recovered grade of gold of 0.009 ounces of gold and 0.001 ounces of silver per cubic yard of alluvium.

The company carried out a gardiometer magnetometar survey on parts of Placer Mining Lease 840 and Placer Lease 9893 to delineate area of higher than background magnetite content which may indicate the presence of alluvium with higher gold content. The surveys showed that no correlation exists between the gold grade and magnetite content and failed to locate areas of gravel with higher gold concentrations.

4.3 1989 Program

4.3.1 Drilling:

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From February 24 to March 26, 1989 the company contracted the services of Interex Minerals Ltd to complete a five hole rotary drill program for a total of 134.7 meters on Placer Mining Lease 840 (Figure-3). Spiral concentrates of minus 10 mesh drill cuttings were panned and the final concentrates retained.



The weight of the gold was not determined which precluded estimating the grade of the gold in the alluvium. The drilling intersected several zones of higher than background gold concentration in the alluvium (Figure-4).

The drilling program was supervised by Mr. John Hope President of Integrated Resources Ltd.

4.3.2 Summer Bulk Sampling program:

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From July 20 to October 18th 1989, the company carried out a bulk sampling program on Placer Mining Lease 840. Mining and washing operations commenced on August 1 and was carried on intermittently until October 18th 1989.

Two test pits were sampled to determine the grade of the auriferous material (Figure-3). Company records indicate that a total of 197 hours of work was recorded during the sampling program of which 157 hours were dedicated to bulk sampling and washing alluvium and 40 hours to stripping overburden. A total of three men were employed. The wash plant operated at approximately 21 bank cubic yards per hour due to the limited availability of alluvium delivered to the wash plant.

Pit-1 was excavated to determine the grade of the gold in the alluvium intersected by the winter drilling program and measures 15 yards by 18 yards by 23 yards. A total of 6,210 cubic yards of alluvium were taken from the pit of which 3,110 cubic yards was washed. The material in this pit ranged in size from clay to boulders up to six feet in diameter. A total of 79.56 ounces of gold was recovered from this pit which indicates an average recovered grade of 0.026 ounces of gold per bank cubic yard. Figure-5 shows a section and description of the alluvium exposed in Pit-1. The estimated stripping ratio of waste to pay alluvium is approximately 1:1.

Pit-2 measures 3 yards by 6.5 yards by 13 yards and yielded a total of 300 cubic yards of material of which 240 yards was washed to yield 9.04 ounces of fine gold. The average recovered grade of the pay alluvium in this area is 0.038 ounces of gold per bank cubic yard. The material in this pit consists of sand and loose coarse gravel to a depth of 4 yards. Figure-6 shows a section and description of the material in the wall of Pit-2. Based on the information gained in 1989 the stripping ratio of waste to pay alluvium is estimated to be less than 1:1 in this area.

Total fine gold production from the bulk sampling program was 88.6 ounces of fine gold.

4.3.3 Estimated Grade:

The recovered grade for Pit-1 is 0.026 fine ounces of gold and for Pit-2 is 0.038 ounces of gold per bank cubic yard. These grades are considered to be close to the true grade of the alluvium in these areas because during washing operations, the gold occured mainly in the first six riffles of the first sluice box



Pit-1 Cross Section



1.

Waste, Gravel and Sand, 5 Feet thick

Pay Zone, Coarse Gravel, 10 feet thick.

Waste, Sand, 5 feet thick.

Waste, Grey Clay and Silt, 12 feet thick.

Pay Zone, Compacted Gravel and large boulders, 12 feet thick.

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Integrated Resources Ltd. Barrington River project Pit-1 Section

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Waste, Sand and Gravel, 2 feet thick.

Pay Zone, Coarse Gravel, 8 feet thick

Waste, Sandy gravel, minimum thickness 12 feet

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Integrated Resources Ltd. Barrington River Project Pit-2 Section

NTS 104G-12W

and the cospicuous absence of gold in the gold trap at the end of the second sluice box.

At an average gold price of \$Cdn 500 per fine ounce this would place a recovered gold value of \$13.00 per bank cubic yard in Pit#1 and \$19.00 per bank cubic yard in Pit # 2.

4.3.4 Operating Costs:

According to company records the total cost incurred by Integrated Resources to complete the bulk sampling program was \$36,926.27. This amount does not include the salary and other costs of Mr. John Hope. This indicates that the total cost to complete the bulk sampling exceeded that indicated above and until the costs attributed to Mr. Hope's involvement in the bulk sampling are included the actual operating costs per bank cubic yard of alluvium washed cannot be estimated.

5. GEOLOGY OF THE PROPERTY:

5.1 Valley Profile:

The property lies in a U-shaped glaciated valley. Wetherley (1989) was of the opinion that the bedrock base is higher at the north end of Placer Mining Lease 840 than at the southern portion of the lease.

The valley measures approximately 275 yards across in the northern part and approximately 500 yards in the main valley.

5.2 Bedrock Geology:

The bedrock underlying the placer leases are Permian limestones while the head of the valley is underlain by silicified Triassic volcanics.

Recent glacial sediment have formed five benches that range in height from one to ten yards on the property. Exposures of the alluvium close to the present river level display a pattern of channel and bar deposition. The channels are filled with boulders while the bars are typically made up of sandy gravel. In several area, finer grained sediments consisting of dark grey clay occur in the river channel.

5.3 Minerals:

The only mineral of economic interest in the alluvium is native gold which contains approximately 15% silver. The gold occurs with considerable quantities of magnetite and minor pyrite and native copper. Most of the gold is flat which suggests a long distance of transport whereas some of the gold occurs as irregular shapes.

The gold tends to resist amalgamation but this is readily overcome by treating the gold with nitric acid prior to amalgamation.

5.4 Reserves:

Wetherley (1989), states that "The writer has presented qualitative estimates of possible reserves in other reports to the company, based on drilling results contained within "Report of the Minister" from the 1930's. Sampling by Integrated Resources Ltd. in 1989 has cast serious doubt upon the reliability of this data in terms of both grades and description of material encountered, and it is the conclusion of the writer that future reserve calculations should be based only upon the company's own determinations.

No proven, probable or possible reserves are claimed in this report. The company intends too carry our an exploration program over parts of the property that have not yet been investigated to determine their economics potential for placer gold. The company has determined, and the writer can confirm, that placer gold can be panned from river bars throughout the length of the claims, and that signs of small scale placer mining activities from the past occurs in several places along the river. The leases contain a significant quantity of alluvium probably amounting to tens of millions of cubic yards, but it has not been determined if any of it can be mined profitably. A small part of the total might contain ore. The reminder would be waste, to be either stripped or bypassed by any mining operation".

According to company records, the recovered gold grades for each of the test pits sampled prior to 1989 are expressed in ounces per washed yard and not bank cubic yard. The recovered grade per yard washed would tend to understate the true grade of the alluvium due to a swell factor which was not calculated at that time. In addition the company has modified the wash plant and appears to have been successful in increasing the gold recovery rate.

The results of the 1989 bulk sampling and restating the recovered grade for each of the test pits in ounces per bank cubic yard suggests that areas of higher gold grades occur on the property than was previously thought. Because the swell factor cannot be accurately determined the true gold grade of the alluvium in the test pits sampled prior to 1989 cannot be estimated.

Based on the limited sampling in 1989 and the unknown true grade of the gold in the alluvium for the areas sampled prior to 1989 no reserves can be calculated for the property.

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6. Conclusions:

Based on the results of the 1989 bulk sampling program the following conclusions can be made:

a) Areas of higher gold values have been identified on Placer Mining Lease 840 by drilling and verified by the 1989 bulk sampling. The extent of these zones have not been determined

b) Over the past three years the bulk of the work performed was completed on Placer Mining lease 840. Little or no information has been gained on the other placer Leases downstream from Placer Mining Lease 840.

c) The operating capacity of the wash plant is estimated to be approximately 35 cubic yard per hour which is far less than the 100 cubic yards advertised.

d) The recovery efficiency of the wash plant appears to be high in that most of the recovered gold occurs in the first six riffles of the box and the gold trap at the end of the second sluice box contained no gold.

e) An additional piece of equipment is required on site to remove tailing from the wash plant. This will maximize the efficency of the other equipment in removing waste and loading and hauling pay alluvium.

f) The equipment used to extract the gold from the sluce box concentrate is cumbersome and time consuming and should be upgraded.

g) Correlation of the glacial stratigraphy exposed in the test pits excavated to date is impossible due to the lack of topographic control and detailed mapping of the alluvium exposed in each of the pits.

7. Recommendations:

a) The 1989 bulk sampling results are sufficiently encouraging to warrant establishing a bulk sampling program with a designed capacity of 35 cubic yards per hour.

b) In order to maintain a constant supply of alluvium to the wash plant and to maximize the efficiency of the equipment on site an additional loader will have to be purchased.

c) The equipment used to extract the gold from the sluice box concentrate should be upgraded to reduce the time required to clean up the daily sluice product. The purchase of a Knelson Concentrator is recommended.

d) The sluice boxes should be cleaned at the end of the day in order to determine the average grade of the material washed in order to help direct the bulk sampling operation and avoid washing of low grade or waste material.

e) Manpower on site should be increased to six full time employees. This will allow maximum use and proper maintenance of the equipment and a gold clean up on a daily basis.

f) Modifications to the wash plant should be made in order to reduce the need for a full time operator. The addition of wash bars would possibly solve this problem.

g) Additional bulk sampling should be completed on the other placer lease downstream form Placer Mining Lease 840 to determine the existenance of economically significant gold concentrations.

h) The company should prepare detailed base maps of the property at various scales to provide accurate topographic control and for stratigraphic correlation of the alluvium exposed in the individual test pit. Detailed mapping of the alluvium in each test pit should be completed.

8. Proposed Program:

Based on the results of the 1989 bulk sampling on the Barrington River Placer Gold Property outlined below are the estimated cost to achieve the proposed recommendations set out above.

Equipment: Loader Knelson Concentrator Spray Bars Parts Inventory	\$60,000 \$12,000 \$ 5,000 \$10,000
Exploration: Orthomaps Surveying Bridge Building Road Construction Bulk Sampling	\$ 8,000 \$10,000 \$20,000 \$20,000 \$150,000
	\$208,000
Total estimated Cost	\$295,000

* The amount of money available for the proposed bulk sampling will depend on the amount of money spent on the preparation for the exploration program and the installation of the bridge and roads to access other parts of the property. ** The cost of the bulk sampling includes labour, fuel, accomodations,travel and maintenance of the equipment.

REFERENCES CITED:

1. Memorandum from Elmer Stewart, director of Integrated Resources Ltd.. Re: 1989 drilling Barrington River Project, 1 May 1989 to M. Wetherley.

2. Wetherley & Associates Ltd., Barrington River Placer Gold Project Qualifying Report for Integrated Resources Ltd. 22 May 1989.

3. Daily Records and accompanying map by John Hope, President of Integrated Resource Ltd. Re; 1989 Bulk Sampling information.

CERTIFICATE OF THE AUTHOR

1. I am a professional geologists and a member of the Association of Professional Engineers, Geologists & Geophysicists of Alberta(APEGGA).

2. I am a graduate of Acadia University, in Wolfville Nova Scotia and have B.Sc. with honours in Geology 1975 and a M.Sc. degree in Geology 1978.

3. I have practiced my profession for the past 12 years in various capacities and am familiar with the evaluation of placer projects and with placer mining activities.

4. I have made several visits to the Barrington River property from July to September 1989 which is the subject of this report.

5. I have beneficial ownership of 7,231 common shares of Integrated Resources Ltd. of which 3,616 shares are lettered and become free trading on March 22, 1990. These shares were received as part of a settlement of outstanding debts arranged by Integrated Resources Ltd. for services in lieu of cash payment. I do not expect to receive additional securities of Integrated Resources Ltd.

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