84-#551 - 12476.

ASSESSMENT REPORT

GEOLOGICAL/PROSPECTING WORK

ON THE FOLLOWING CLAIMS

LUCKY RIVER M.C. #1689(3) JUTLAND M.C. #1691(3)

LOCATED 40 KM NORTHWEST OF UCLUELET, B.C.

LATITUDE 49° 8' LONGITUDE 125° 25'

92 F 3W

ALBERNI MINING DIVISION VANCOUVER ISLAND, B.C.

WORK BETWEEN OCTOBER 28 AND NOVEMBER 9, 1983

ON BEHALF OF

ASSESSMENT ASSING DESCRIPTION.

ARCHAEAN RESOURCES CORP. 152 - 890 WEST PENDER STREET VANCOUVER, B.C.

JULY 30/84

TABLE OF CONTENTS

| | | PAGE |
|-----------|--------------------------------------------|-------------|
| INTRODUCT | TION | |
| Α. | Property-Location, Access and Physiography | 1 |
| В. | Status of Property | |
| C. | History | |
| D. | References | |
| Ε. | Summary of Work Done | |
| GEOLOGICA | AL/PROSPECTING REPORT | |
| Α. | Regional Geology | 4 |
| В. | Prospecting Observations/Property Geology | 5 |
| C. | Discussion/Conclusion | 6 |
| APPENDIX | I Work Cost Statement | |
| APPENDIX | <pre>II Certificate</pre> | |
| APPENDIX | III Assay Certificate | |
| | ILLUSTRATIONS | |
| | | |
| Figure 1 | Location Map | Report Body |
| Figure 2 | Claims Map | Report Body |
| Figure 3 | Geology and Traverse Map | Map Pocket |

A. Property - Location, Access and Physiography

The Lucky River and Jutland claims are two to three km northwest of the outlet of Kennedy River into Kennedy Lake, straddling both sides of the Tofino highway which runs down the Kennedy River valley. Claim area is accessed via the highway, or by a short logging road going easterly from the highroad just north of the claims, thereafter by foot traverse. Physiography is cliffy to benchy, with a 500 m high, rounded hill on the northern part of the Lucky River claim. Topography is glacially sculptured. Vegetation is cedar-spruce-hemlock rain forest and windfall over huckleberry and salal; grass swamps with stunted jackpine and yellow cedar on flats and on rock benches are a common feature. Traversing is rugged due to bush and cliffs, which slows but does not restrict access. Kennedy River locally downcuts recent gorges through resistant ribs in the bottom of its glacial valley; elsewhere it flows through moraine/river gravel, forming a gorge and pool type course. Creeks are V-notched and steeply incised, choked with logs and boulders. Rainfall is in excess of 200 inches per year. Property is below current snow level. Rapid rise of creeks and rivers during deluges can make stream crossings dangerous when boulders begin to run in the gorges.

Nearest town is Ucluelet, located approximately 40 km to the southeast, along the Tofino highway. Refer to Fig. 1 for Location Map.

B. Status of Property

The Lucky River and Jutland claims are presently owned by Jasmine Resources Ltd. of #400-905 West Pender Street, Vancouver. Relevant claim information is summarized below:

| Claim Name | Record No. | Dimensions | No. of Units |
|-------------|------------|------------|--------------|
| Lucky River | 1689(3) | 3N × 2E | 6 |
| Jutland | 1691(3) | 3N x 6W | 18 |

The claims are situated in the Alberni Mining Division. They are shown on Fig.

C. History

Fine beach and placer gold in the stretch of Kennedy River between Kennedy Lake and Tofino Inlet attracted early placer mining activity. About 1895 a peak number of 50 men were employed in a dredging/hydraulicking operation on the lower river. Prospectors had located several gold-quartz sulphide veins in fracture zones in the Karmutsen metabasalts by 1902; thereafter several small producers were recorded, and a stamp mill on the Tommy property handled some of the local quartz ore.

Current resurgence of interest reflects improved access, EM-16 and stream sediment geochemical prospecting for locating quartz-sulphide veins, and high gold prices. Much of the original prospecting was by following up stream float of the quartz-sulphide veins. Multinational Resources Ltd. are presently developing an east-west striking vein system on a stock contact just east of the present property, which has helped spur some of the local interest in the area.

No previous mining activity is known to have taken place on either the Lucky River or Jutland claims.

D. References

| 1 | CLATUIED | Can I | Λ. | Winiston | ~ F | Minor | Donant | 1027 | 000242 |
|----|-----------|--------|----|----------|-----|-------|---------|-------|---------|
| 1. | CLOTHIER. | Geo. A | ٠. | Minister | 01 | mines | Report. | 1941. | PPC343. |

- GALLOWAY, John D. Lode Gold Deposits of British Columbia, B.C. Department of Mines Bull. No. 1, 1932 pp 133, 134.
- BANCROFT, M.F. Gold-Bearing Deposits of the West Coast of Vancouver Island betweeen Esperanza Inlet and Alberni Canal, G.S.C. paper 68-50.
- 4. CARSON, D.J.T. Geology and Mineral Deposits of Alberni.
- MULLER, J. Map Area, Vancouver Island and Gulf Islands, British Columbia G.S.C. paper 68-50.

CARSON, D.J.T.

The Plutonic Rocks of Vancouver Island, G.S.C. paper 72-44.

7.

B.C. Minister of Mines Reports: 1917, 1914, 1935, 1924, 1899, 1912, 1913, 1902.

8.

Geological Survey of Canada Summary Report 1919
Part A.

9. BROWN, C.J., P.Eng.

Report on Kennedy River Claims Alberni Mining Division, British Columbia 92F/3W for Rich Lode Corporation November 1982.

PASIEKA, C.J., P.Eng.

A Property Report on the Au Claims, Kennedy Lake Area, Alberni Mining Division, Vancouver Island, British Columbia, for Multinational Resources Inc., March 14, 1983.

 VARLEY, Carl G. and VINCENT, J.S., P.Eng.

Reconnaissance Geological and Geochemical Report on the Kennedy Lake claims: Addendum (Captain Hook, Mojo Claims, Au claims), 1983.

12.

Kennedy Lake Gold Property (1 page map) published through Multinational Resources Inc., 1983, George Cross News Letter.

13.

Personal communications with W. Edjtel, K. Gourley (assay sheets, old reports on Kennedy River area.)

14.

Ore Deposits at the Myra Falls Minesite, R.R. Walker, Explorations Manager, Westmin. Western Miner, May 1983.

15.

1:50,000 Scale Topography Map. "Effingham River", Clayquot Land District Map, 40 m. contours.

E. Summary of Work Done

Work was undertaken on October 28 and November 9, 1983, consisting of traverses over portions of the property. The work is best characterized as being both of a prospecting and geological nature.

Personnel included W.D. Groves, Ph.D., P.Eng. and Ken Gourley, prospector. Samples taken (just off the property) were analysed by Acme Analytical Laboratories of Vancouver.

Geological contacts and traverse locations are shown on Fig. 3, infra.

GEOLOGICAL/PROSPECTING REPORT

A. Regional Geology

The main rock unit exposed in the Kennedy River Valley (formerly called the Elk River) is a thick platform of Mesozoic submarine metabasalts, the Karmutsen volcanics. This is at lower greenschist facies of regional metamorphism. Goldbearing quartz-sulphide veins and parallel veinlet systems mark several sets of

rectilineal, steeply dipping ray-fractures through the flows. The unit behaved brittly during the fracturing event.

The Karmutsen is broken by major faults in north-northeast, and northwest by west directions, and intruded by Cretaceous and Tertiary age stocks. Locally, a Tertiary ring dyke system arcs northwest just south of the southern four units of the Lucky River claim. In the northeast corner, a stock of probably Tertiary alaskite cuts the Karmutsen. A set of northerly/steep parallel fractures in the Karmutsen projects southwestward across the northern edge of the property. On the Multinational Resources Au claims east of the Lucky River claim (see Fig. 3), a stock-basalt contact is marked by eastwesterly shears bearing auriferous quartz-sulphide vein-veinlets. Float in upper Black Rose Creek (See Fig. 2) cuts comes from a vein in a shear in this same stock, (Sample BQ-1, Assay Sheet) adding interest to the geology of this intrusion's western margin on the Lucky River Claim.

B. Prospecting Observations/Property Geology

Approximate geological contacts and traverse locations have been sketched on a 100 m interval contour map reproduced in this report as Fig. 3 - Traverse Map (map pocket). Contours were traced from a standard N.T.S. topographic map for the region. Sample locations are approximate and have been charted according to field altimeter readings. Geological information presented in Fig. 3 was based both on field examinations and reference to J. Muller's G.S.C. geology map for the area (Ref. 5).

The southern portion of the claim is underlain by a fine-grained dacite lopolith fed from a steeply-dipping, northwest-striking Tertiary rhyolite to dacite set of ring dykes. These outcrop in the highway cut on the Center Line claim abutting south of the Lucky River. Conchoidal fracture, red, green, and grey-purple color, later dykes containing fragments of earlier ones, fish-eye high temperature quartz eyes in a red rhyolite unit, and total lack of shearing or

schistose texture identifies the Tertiary. The dacite unit forms the surface and cliffy west side of the benchy 1,000 foot high knoll north of the "Au" creek. The dacite is unsheared, has a characteristic pale grey, soft surface weathering. One or both directions of the "net" of fine fracture-fillings of pale yellowish quartz-epidote-carbonate weather "up" as ribs on the surface. These strike northwest/steep and or northeast/steep. Epidote-rimmed altered inclusions or "bombs" up to one foot in diameter, and one or two quartz-epidote-carbonate tension veins or lenses up to six inches wide and twenty feet long were also noted on surface exposure. On the Jo Jo fraction, just northwest of the Lucky River claims, a crackle-veined greenish fine-grained unit crosses Kennedy River. The net veining is believed to be a more extreme example of the same alteration.

Both an alaskite stock, locally with pale grey fine-grained shear textures carrying low temperature quartz-carbonate sulphide veinlets, as well as the Karmutsen, are cut by quartz-sulphide veins. However, the latter are in ray-fractures and the former are in cross cutting and marginal shears through the stock and parallel to its margins. (Float Sample BS-1, Black Rose Creek, below BQ-1 off property: See Fig. 2). The stock is in the northeast corner of the property. The Karmutsen exists on the west margin of the north side of the claim, and is cut by the southwestern extension of the vein system reported and sampled by C. Brown on the northerly adjoining Esther property (See Ref. 9). A strong, two foot, 25% sulphide, quartz-sulphide vein, whose fresh float was found in Black Rose Creek northeast of the Lucky River claim, is in a shear in the alaskite. Detailed mapping of the north-south vein system, the stock and dacite/Karmutsen contacts is required to further define the behaviour of these units.

C. Discussion/Conclusions

The Tertiary lopolith on the southern portion of the claim is probably post quartz-vein in age. Steep fracture-faulting in the Karmutsen unit and shear-faulting in the stock both host quartz-sulphide veins: these constitute the main

target for further prospecting on the property. Extremely thick jungle precludes discounting a given area until is has been prospected in detail.

A program of auger-soil geochem, prospecting and VLF-EM-16 geophysical prospecting on the north and east portions of the property is recommended, plus blast-trenching of the veinlet system extending south onto the northern edge of the property from the system mapped and sampled by Brown on the Esther claims (which showed gold values, (Ref. 9). Should, in particular the "Brown" vein system (Ref. 9) or western stock Karmutsen contact areas prove to be of sufficient interest on the Lucky River Claim, a small drill program, as a contingent second stage is recommended as a follow-up.

Respectfully Submitted,

William D. Groves.

W.D. Groves, Ph.D., P.Eng.

July 30, 1984

APPENDIX I -- WORK COST STATEMENT

FIELDWORK

Field Personnel:

| W.D. Groves, P.Eng., Ph.D. | 4 444 | |
|---------------------------------------------------------------------------|---------------|---|
| Oct. 28, Nov. 9, 1983 2 days @ \$350/day | \$ 700 | |
| Ken Gourley, Prospector and Assistant | 12 4/4 | |
| Oct. 28, Nov. 9, 1983 2 days @ \$150/day | 300 | |
| Travel Time: Vancouver/Port Alberni/Vancouver Two Trips: 1/2 day each way | | |
| 20% of \$1,000 | 200 | |
| Food Allowance: 4 man-days @ \$30/man-day | 120 | |
| Accommodation: 2 days @ \$48/day | 96 | |
| Truck Rental: 2 days @ \$25/day | 50 | |
| Mileage Charge: 480 miles @ \$0.20/mile | 96 | |
| Ferry Costs: | 88 | |
| Supplies and Miscellaneous: | 25 | |
| Report Preparation: | | |
| Compilation, research reference material, map | | |
| preparation W.D. Groves, P.Eng., Ph.D. | 0.20.00202020 | |
| 3 days @ \$350/day | 1,050 | |
| Rough Typing 3 hrs @ \$10/hr | 30 | |
| Word Processor 3 1/2 hrs @ \$25/hr. | 88 | |
| Map blow-ups, xerox, jackets, etc. | 45 | |
| Draughting G. Toop, 8 hrs. \$15/hr. | 120 | |
| | \$3,008 | |
| | 0 4 | 1 |
| | \$3,008 | |
| | | |

CERTIFICATE

- I, William D. Groves, do hereby certify that:
- I, William D. Groves am a consulting engineer (geological) with an office at 152-890 West Pender Street, Vancouver, B.C.,
- I am a graduate of the University of British Columbia, (B.A. Sc. in Geological Engineering, 1960). I am a graduate of the University of Alberta, B.Sc., in Chemical Engineering in 1962, and of the University of British Columbia with a Ph.D. in Chemical Engineering in 1971.
- I am a registered Professional Engineer in the Province of British Columbia.
- I have practiced my profession since 1960.
- I have examined the Lucky River claim on October 8, 1983 and November 9, 1983, taken samples for study and for assay, and also reviewed Regional geology and the B.C. Ministry of Mines and Geological Survey of Canada reports and other consultants' recent publications on neighboring properties in the area.
- 6. I have not recieved directly or indirectly, nor do I expect to receive any interest, direct or indirect, in the Lucky River claims, nor do I beneficially own, directly or indirectly, any securities of Jasmine Resources Ltd. nor do I expect to receive any such interests.

Respectfully submitted.

William D. Groves.

W.D. Groves, Ph.D., P.Eng.

July 30, 1984

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS, VANCOUVER B.C. PH: 253-3158 TELEX: 04-53124

DATE RECEIVED OCT 25 1983

DATE REPORTS MAILED OF 28/83

ASSAY CERTIFICATE

SAMPLE TYPE : ROCK - CRUSHED AND PRULVERIZED TO -100 MESH.

ASSAYER __ DEAN TOYE, CERTIFIED B.C. ASSAYER

ARCHAEAN RESOURCES FILE # 83-2690

PAGE# 1

| SAMPLE | AG OZ/TON | AU OZ/TON |
|--------------------------------------------|--------------|---------------|
| S(T-1 | . 29 | .089 |
| \$\\\ 1-3\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | 3.02 | . 431 |
| 10 [T-5 | 1.62 5.04 | .852 2.751 |

ROSE CR. OFF FLOAT BS-1

2.23 .402 - SILVER-INK SMILLED

FOR CROSE CR. OFF FLOAT BS-1

2.23 .402 - SILVER-INK SMILLED

FLOAT DELOW BQ-1.

Notes-- Samples T-1 to T-5 are off-property
PK-1 is off-property

See Fig. 2: Samples E-1,BQ-1, and BS-1 are also off-property, but because of proximity are of regional interest. (Assay costs have not been charged to the work program).

WDG Sample





