

86-892-15624



Province of  
British Columbia

Ministry of  
Energy, Mines and  
Petroleum Resources

ASSESSMENT REPORT  
TITLE PAGE AND SUMMARY

| TYPE OF REPORT/SURVEY(S) | TOTAL COST  |
|--------------------------|-------------|
| Core & Rotary Drilling   | \$73,761.00 |

AUTHOR(S) ... Alfred R. Allen, P.Eng. SIGNATURE(S) ... *Alfred R. Allen*

DATE STATEMENT OF EXPLORATION AND DEVELOPMENT FILED ... October 17/86 ... YEAR OF WORK ... 86

PROPERTY NAME(S) ... R.H. Stanfield

COMMODITIES PRESENT ... Cu ... Au ... Ag

B.C. MINERAL INVENTORY NUMBER(S), IF KNOWN

MINING DIVISION ... Fort Steele ... NTS ... 82G/6W

LATITUDE ... 49°-29' ... LONGITUDE ... 115°-23'

NAMES and NUMBERS of all mineral tenures in good standing (when work was done) that form the property [Examples: TAX 1-4, FIRE 2 (12 units); PHOENIX (Lot 1706); Mineral Lease M 123; Mining or Certified Mining Lease ML 12 (claims involved)]:

Aspen 9 (787), Aspen 10 (788), Aspen 10A (2576)

OWNER(S)  
(1) R.H. Stanfield (2)

MAILING ADDRESS  
350 - 4723 1st Street S.W.  
Calgary, Alberta, T2G 0A1

OPERATOR(S) (that is, Company paying for the work)  
(1) R.H. Stanfield (2)

MAILING ADDRESS  
same

15,624

SUMMARY GEOLOGY (lithology, age, structure, alteration, mineralization, size, and attitude):  
On the east side of the Rocky Mountain Trench on and near the major northwesterly trending fault. Outcrops are evident to the west and are composed of Rundel limestone. Similarly to the east Precambrian Aldridge quartzite and argillite are exposed. The Bull River mine open pits are a short distance to the northeast.

REFERENCES TO PREVIOUS WORK G.S.C. paper 58-10-G, B. Leech Reports. Reports 1967-86 A.R. Allen, Int. Congress Canada 1972 A-15 - C-15 Guidebook, M. Chiang, Surface Geology, Bull River Area, 1972.

FILMED

(over)

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**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

COSTS STATEMENT /

CERTIFICATE ✓

15,624

maps; MAPS:

1. Location ✓
2. Claims & Drill Holes R1-4 ✓
3. Claims & Topography /

\* \* \* \* \*

|  |
|--|
| MINISTRY OF ENERGY, MINES<br>AND PETROLEUM RESOURCES |
| Rec'd<br>JAN 13 1987                                 |
| SUBJECT: _____                                       |
| FILE _____   |
| VANCOUVER, B.C.                                      |

A. INTRODUCTION

A drilling programme was conducted on the northeasterly area of the Aspen #9 mineral claim including two deep vertical rotary holes, with short sections cored and two short test holes.

The four holes were drilled a short distance east of the Bull River fault.

This important fault, near the east boundary of the Rocky Mountain Trench, forms the contact between the Palaeozoic and Precambrian formations on the Stanfield property.

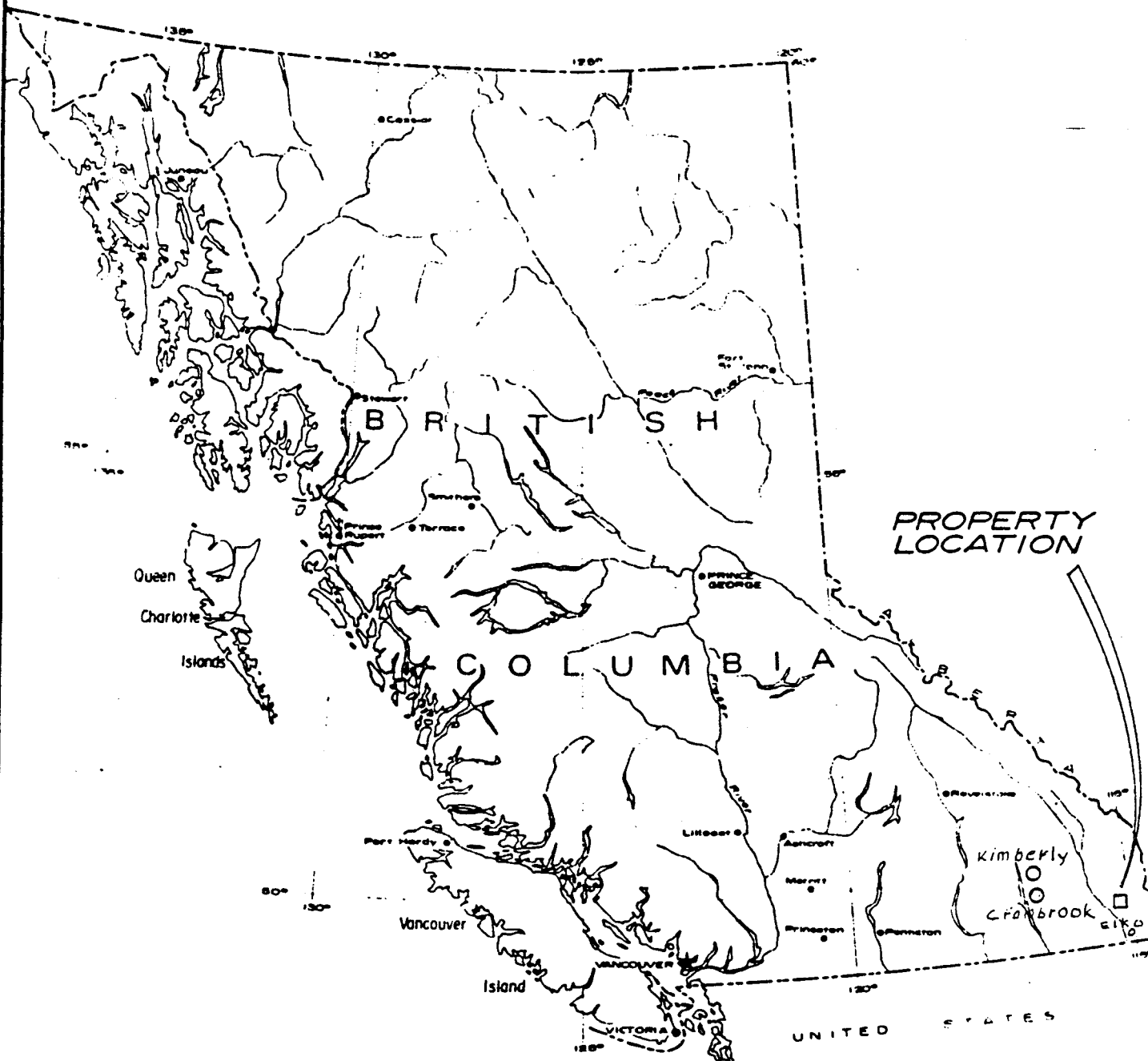
B. LOCATION

The four drill holes are located in the northeasterly area of the Aspen 9 claim, on the north side of the westerly flowing Bull River, about 6 kilometres up river from the town of Bull River, and 600 metres southeasterly from the Bull River Mine.

C. PROPERTY

The property, comprising Group 1-A, includes the following mineral claims located in the Fort Steele Mining Division. Aspen 9, record no. 787(10), Aspen 10, record no. 788(10) and Aspen 10A, record no. 2576(2).

These claims are shown on the Department of Mines and Petroleum Resources M 82G/6W.



# LOCATION MAP

SCALE: 1" = 136 Mls.

|            |         |                                      |
|------------|---------|--------------------------------------|
| Drawn by   | Date    | Allen Geological<br>Engineering Ltd. |
| Checked by | Drg no. |                                      |
| ARA        | 1       |                                      |

#### D. PHYSIOGRAPHY

The claims are located in the valley of the Bull River about 820 metres above sea level. The river flows southwesterly into the Rocky Mountain Trench and Kootenay River at 730 metres above sea level.

Burnbridge Creek flows into the Bull River from the north near the north boundary of the Aspen #9 claim.

#### E. PREVIOUS WORK

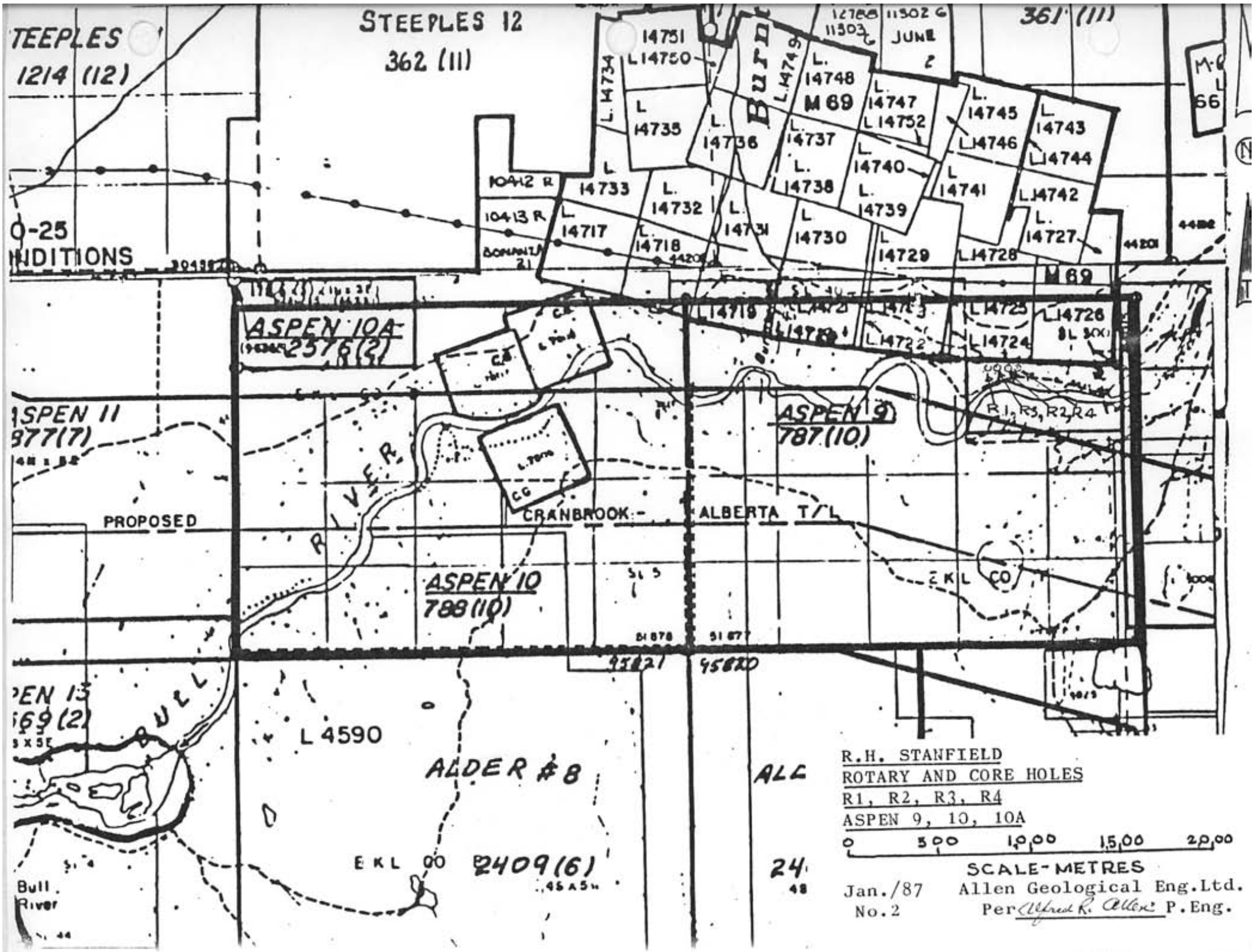
- Leech, G.B., G.S.C. Paper 58-10, 1958  
 " " " Paper 66-14, pp 307-329, 1966  
 " " Bulletin Canadian Petroleum Geol.C10,  
 pp 396-407, 1962  
 International Geological Congress Field Excurions  
 A15 - C15, 1972  
 Allen, A.R., Property Reports 1967 - 1986.

#### F. GEOLOGY

The four drill holes, near the northeast corner of the Aspen #9 claim, are within a disturbed area traversed by the major Bull River fault and a series of cross faults.

Devonian and Mississippian limestone and dolomite formations outcrop on the westerly side of the fault. Precambrian argillite and argillaceous quartzite of the Aldridge formation are located on the easterly side.

The Bull River Mine is located 600 metres northwesterly within the Aldridge formation.



TEEPLES  
1214 (12)

STEEPLES 12  
362 (111)

L. 14751  
L. 14750  
L. 14735  
L. 14736  
L. 14737  
L. 14738  
L. 14739  
L. 14730  
L. 14729  
L. 14728  
L. 14727

BURD  
L. 14749  
L. 14748  
L. 14747  
L. 14745  
L. 14746  
L. 14744  
L. 14743  
L. 14742

12785  
11303  
JUNE  
2

361 (111)

M-6  
L  
66

0-25  
CONDITIONS

10412 R  
10413 R  
DONALD  
21

ASPEN 10A  
2576 (2)

ASPEN 9  
787 (10)

ASPEN 10  
788 (10)

ASPEN 11  
977 (7)

PROPOSED

CRANBROOK

ALBERTA T/L

ASPEN 13  
69 (2)

L 4590

ALDER #8

2409 (6)

Bull.  
River

ALL

R.H. STANFIELD  
ROTARY AND CORE HOLES  
R1, R2, R3, R4  
ASPEN 9, 10, 10A

0 500 1000 1500 2000

24  
48

Jan./87  
No. 2

SCALE - METRES  
Allen Geological Eng. Ltd.  
Per Alfred R. Allen P. Eng.

### G. THEORY

Ore deposits of the mines in this area occur within the Aldridge formation, including the Sullivan, Estella and Bull River.

More detailed stratigraphic and structural information is necessary in order to direct exploratory surveys to investigate the possibility of developing additional orebodies or extensions of the partially developed Bull River mineralized zones.

### H. OBJECT OF THE DRILLING PROGRAMME

The object of the drilling programme was to determine depth of overburden, type and depth of bedrock - Palaeozoic or Precambrian, and mineral content.

### I. ROTARY AND CORE DRILLING

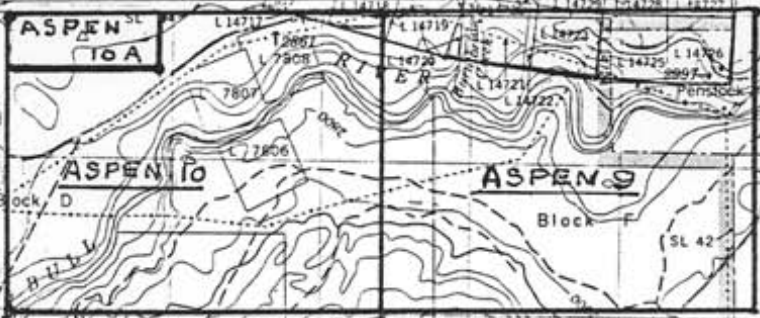
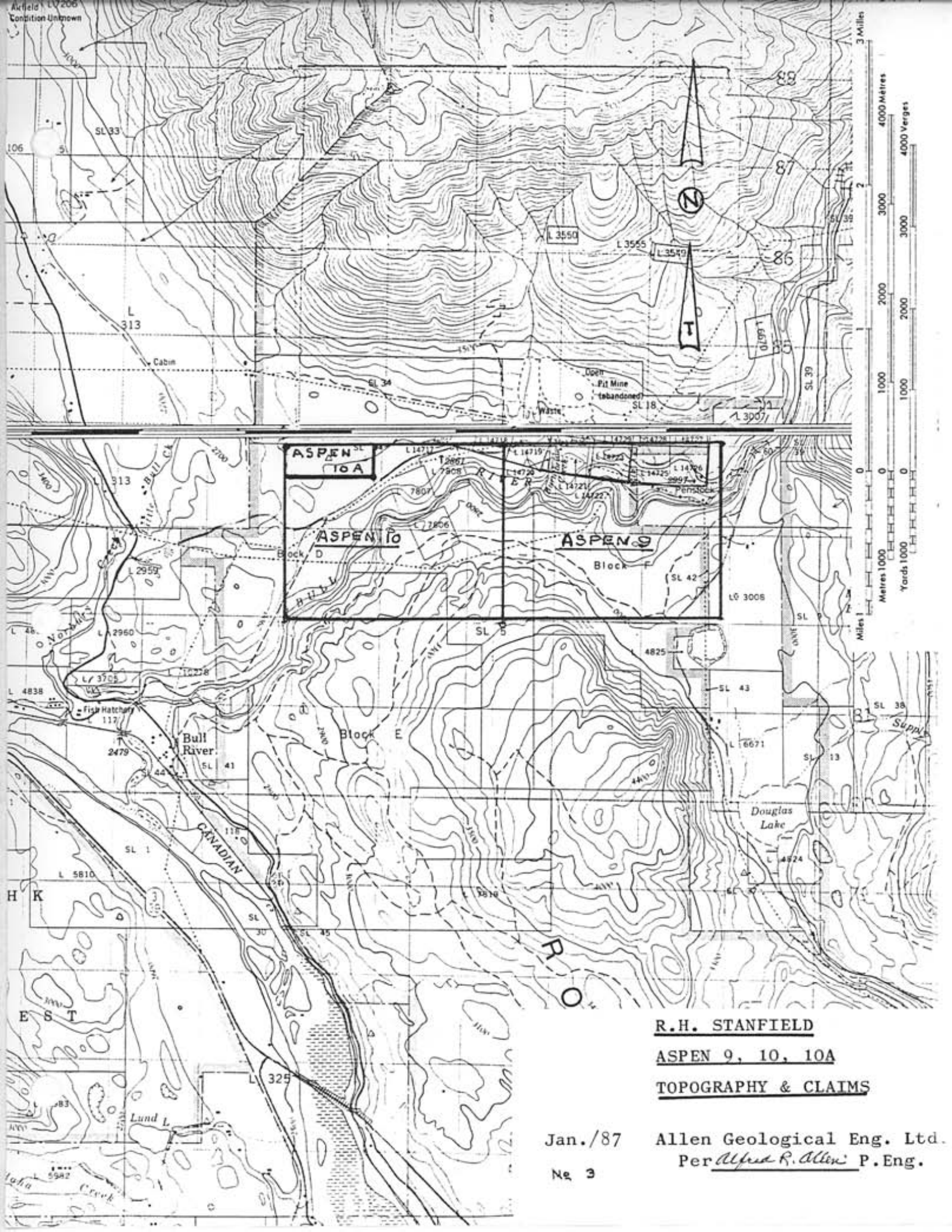
During July 14-16, 1986, the drill sites were examined by the writer. Assisted by Ross Stanfield Jr. the cuttings and core was logged and stored in the core house at the Stanfield camp.

The following equipment was contracted from Strathmore, Alberta:

1. Drill Rig, I.R. Cyclone Rotary Air-mud TH60
1. #5,000 truck with mud supply
1. Compressor mounted on International S-2300 truck
1. 3-Axle, 30-foot Rods trailer
1. G.M.C. 4x4 Cyclone transport
1. Ford 3-ton 4x4 1,200 gallon Water truck

Supplied by Stanfield:

1. H.D. 15 Bulldozer and operator
- Support crew of four employees  
 All vertical drilling  
 Diameters 21.6 cm, 14.2 cm  
 Coring where required, 3.5 metres



**R.H. STANFIELD**  
**ASPEN 9, 10, 10A**  
**TOPOGRAPHY & CLAIMS**

Jan./87  
 No 3

Allen Geological Eng. Ltd.  
 Per Alfred R. Allen P.Eng.



J. DRILLING RESULTS

| <u>Drill Hole Numbers</u> | <u>Depth-m.</u> | <u>Logs -m.</u>  |
|---------------------------|-----------------|--|
| R-1                       | 177             | 0-9 overburden<br>9-95 Black argillite<br>95-146 " "<br><u>cored</u> 146-149 " "<br>minor quartz veins<br>149-156 Black argillite<br>156-177 " " |
| R-2                       | 276             | 0-7 overburden<br>7-275.5 Black argillite<br><u>cored</u> 275.5-276 " "  |
| R-3                       | 6               | Overburden   |
| R-4                       | 6               | Overburden   |
| Total 4                   | 463 m.          | All Aldridge Argillite   |

## K. DISCUSSION

The drilling programme was directed towards establishing the western boundary of the Aldridge formation near the Bull River Mine. This boundary is where the Bull River fault brings the Aldridge formation into contact with the Devonian and Mississippian limestone and dolomite formations.

As a consequence of overburden at this location on the Aspen #9 claim, the position of the Bull River fault has been mapped by projection.

Drill holes R1 - R4 are located 600 metres from the Bull River Mine and at least 240 metres from the projected location of the Bull River fault zone.

The drilling results have established the presence of the Aldridge formation at least 600 metres, and probably close to 840 metres from the Bull River Mine.

The Aldridge formation is at least 270 metres thick at this location.

L. SUMMARY

Four vertical holes have been drilled near the northeast corner of the Aspen #9 mineral claim, between the Bull River Mine and the Bull River fault. Because of lack of outcrops in this area, the exact location of the fault has been projected from exposures some distance away.

Palaeozoic limestone and dolomite strata of the Upper Devonian and Mississippian formations have been shifted downward against the Precambrian Aldridge argillites and argillaceous quartzites by the Bull River fault.

Since the copper, gold and silver ores of the Bull River Mine occur within the Aldridge formation, the western boundary marks the termination of ore potential, and for the purpose of exploration and mining must be rather closely located.

The drilling has provided the necessary data upon which detailed explorations may be planned over this important western area of the property.

Respectfully submitted,

ALLEN GEOLOGICAL ENGINEERING LTD.

Per Alfred R. Allen P.Eng.  
Alfred R. Allen

January 1987.

BULL RIVER MINERAL CORPORATION

COSTS STATEMENT

ROTARY AND CORE DRILLING REPORT ASPEN #9/86

R.H. Stanfield

BY CONTRACT

Jan 2 -Jan 14, 1986

LOCATION: Aspen #9 claim, 1036m A.S.L.

DIRECTION: Vertical

LENGTH: Hole R-1 176m. cored 146.3m - 149.3m.  
R-2 276m. cored 275.5m - 276.0m.  
R-3 6m.  
R-4 6m.

Total 463m @ \$147/m \$68,061.00

EQUIPMENT:

I.R. T-H-60 Cyclone Drill  
and Auxiliary Equipment  
Water truck - 5 Ton  
Float-Truck, Drill Stem  
Pick-up Truck 4x4 3/4 ton 10 days 500.00

CREW:

Don Murray, driller, Strathcona, Alberta  
Duane Bocek, " " "  
Jim Jessey, helper, Langton, "  
R. Bjorglund, Foreman, 80 hrs@\$15 1,200.00  
A.R. Allen, Consulting & Reporting 1,000.00  
Room & Board, 50 man days @\$60/day 3,000.00

Total \$73,761.00

Cuttings & Core stored at Stanfield Camp

Assessment recorded, Cranbrook Oct. 17, 1986.

Aspen 9, 10, 10A, 2 years.

REFERENCES

- Leech G.B., Fernie Map Area, West Half,  
G.S.C. Paper 58-10, Map 20, 1958
- Leech G.B., Internatoonal Geological Congress  
Twenty-fourth Session, Canada 1972  
Field Excursion A03 - Co3 pp 21-26
- Leech G.B., T CIMM V LX11 pp154-174  
Southern Rocky Mountain Trench
- Allen, A.R., The Bull River Copper-Silver-Gold Mine  
June 7, 1976
- Chiang, M.C.1 Placid Oil Company, Reports, 1973-1976
- Allen, A.R., R.H. Stanfield, Rotary Drilling  
Bull River 1985

\* \* \* \* \*

702 - 2025 Bellevue Avenue  
West Vancouver, B.C.  
V7v 1B9

CERTIFICATE

January 12, 1986.

I, Alfred R. Allen, certify that:

I am a graduate of the University of British Columbia and hold the following degrees therefrom:

BASc Geological Engineering 1939

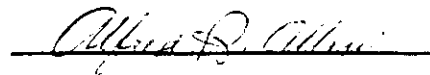
MASc Geological Engineering 1941

I am a Life Member of the Association of Professional Engineers of the Province of British Columbia.

I have practised my profession for the past forty years.

I hold no interest in the properties or securities of R.H. Stanfield, or affiliates thereof, nor do I expect to receive any directly or indirectly.

The report on the Core and Rotary Drilling programme on the Aspen 9, Aspen 10, Aspen 10A claims, Fort Steele M.D., B.C., is based on an examination of the property by the writer July 14 - 17, 1986.



Alfred R. Allen, P.Eng.