

82-589-10536 b

REPORT ON
THE 1981 DIAMOND DRILLING PROGRAM
ON THE
BARBIE CLAIM

Lat. 53°31'N

Long. 132°13'W

NTS 103F/9E
SKEENA M.D.
QUEEN CHARLOTTE ISLANDS, B.C.

for
Assessment work requirements
on the Neck Group

by
K.G. Sanders, P. Eng.

September 17, 1982

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
10536
NO. _____

TABLE OF CONTENTS

	Page
Introduction	2
Location and Access	2
Claim Data	2
Claim Geology	2-4
Diamond Drill Program	4
Drill Hole Location Plan	5
Diamond Drill Logs and Assays	6-13
Cost Statement	14-15
Certificate	16



KENNEDY RESOURCES INC.
VANCOUVER, B.C.

BARBIE CLAIM
QUEEN CHARLOTTE ISLANDS, B.C.
SKEENA M.D.
NTS 103 R / 9E

LOCATION MAP

SCALE IN KILOMETRES

0 24 48 72 96

Introduction: During the summer and fall of 1981, 6 diamond drill holes totalling 984 metres were drilled by Calar Developments of Vancouver B.C. on the Barbie property for Kennedy Resources Ltd. of Vancouver B.C. under an option agreement with Al Morrow of North Vancouver B.C. The property is located on Graham Island in the Queen Charlotte Group and is comprised of 20 claim units. The operator of the diamond drill program was Kennedy Resources Ltd. for the owner Al. Morrow.

Location and Access: The centre of the Barbie claim has coordinates $53^{\circ}31'N$ Lat., $132^{\circ}13'W$ Long. Access is approximately 40km by private logging roads from Queen Charlotte City or Port Clements B.C. on Graham Island in the Queen Charlotte Group.

Claim Data: The Barbie claim record number is 1771 Sept. The claim is comprised of 20 claim units registered in the name of Al Morrow of 648 E 2nd North Vancouver B.C. The Barbie claim comprises part of the Neck Group for assessment purposes. Other claims in the Neck Group are Bridge 792 Oct., Colin 1 790 Oct., Colin 11 791 Oct., and Neck 1406 June for a total of 74 units. The Barbie claim is under option to Kennedy Resources Ltd. of 1001 - 1166 Alberni St. Vancouver B.C.

Claim Geology: The Barbie Claim is thought to cover a portion of the same geological structures occurring on the property of Consolidated Cinola Mines Ltd., that lies about 3 km to the north west. In this section of the Barbie claim there is virtually no outcrop. The Cinola mineral deposit lies along the unconformity contact between

DRILLED ORE
CONS. CINOLA MINES

40 km.
To PORT CLEMENTS
B.C.

MUTUAL RESOURCE

MAR 1

MAR 3

MAR 2

BARBIE
1771(9)

1981 SURVEY

COLIN I CLAIM

COLIN II CLAIM

KELLY GOLD MINES

NECK CLAIM

SHELL UNION MINIERE

BRIDGE CLAIM

To be SURVEYED

1980 SURVEY

ASHCROFT JRLINGTON

EX LTD.

Accuracy not guaranteed.

*K.D. Sanders
Sept. 17/82*

KENNEDY RESOURCES, INC.
VANCOUVER, B.C.

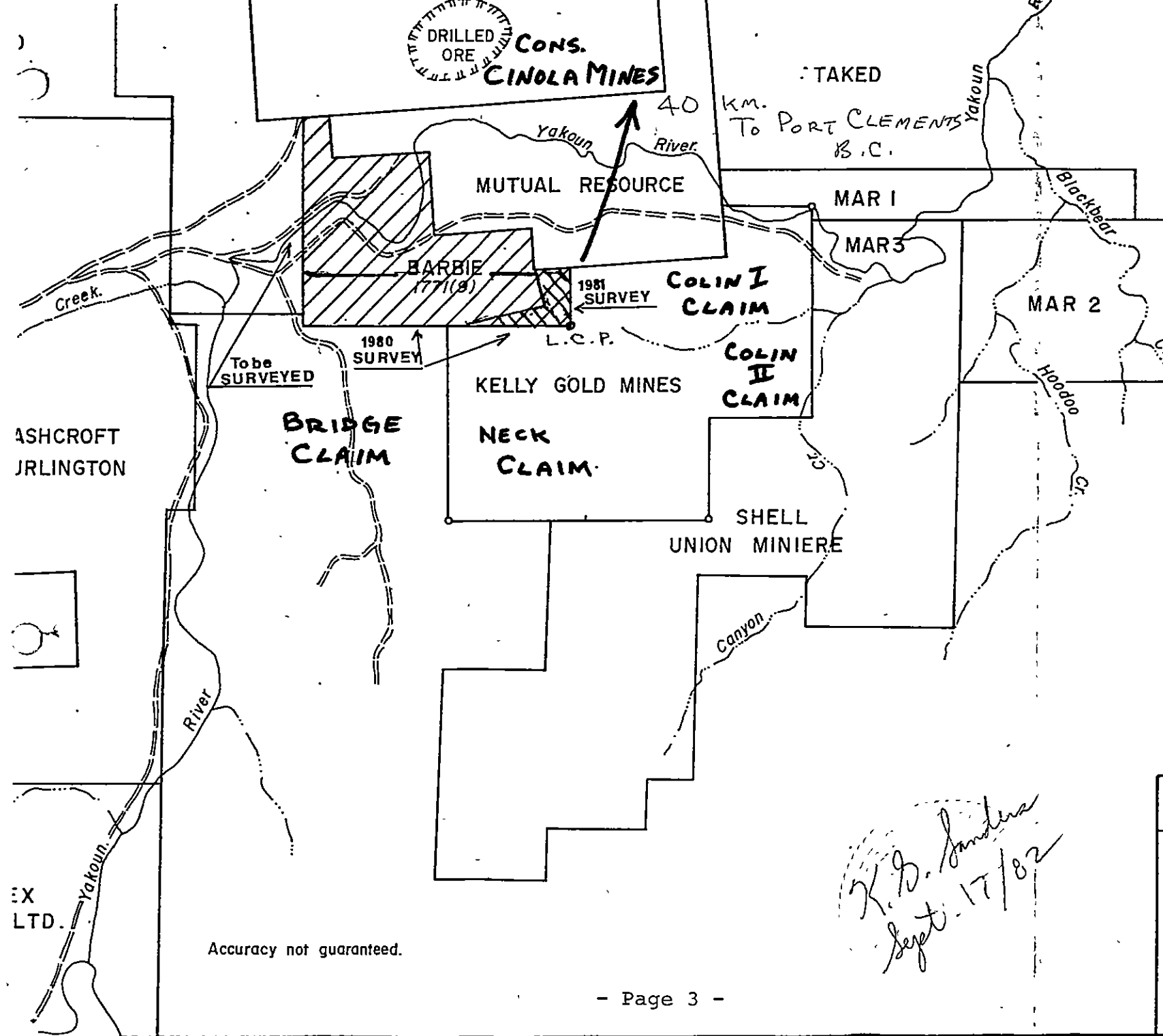
BARBIE CLAIM

QUEEN, CHARLOTTE ISLANDS, BC.
SKEENA M.D.

NTS 103 F / 9 E.

CLAIM MAP

SCALE IN KILOMETRES
0 0.5 2



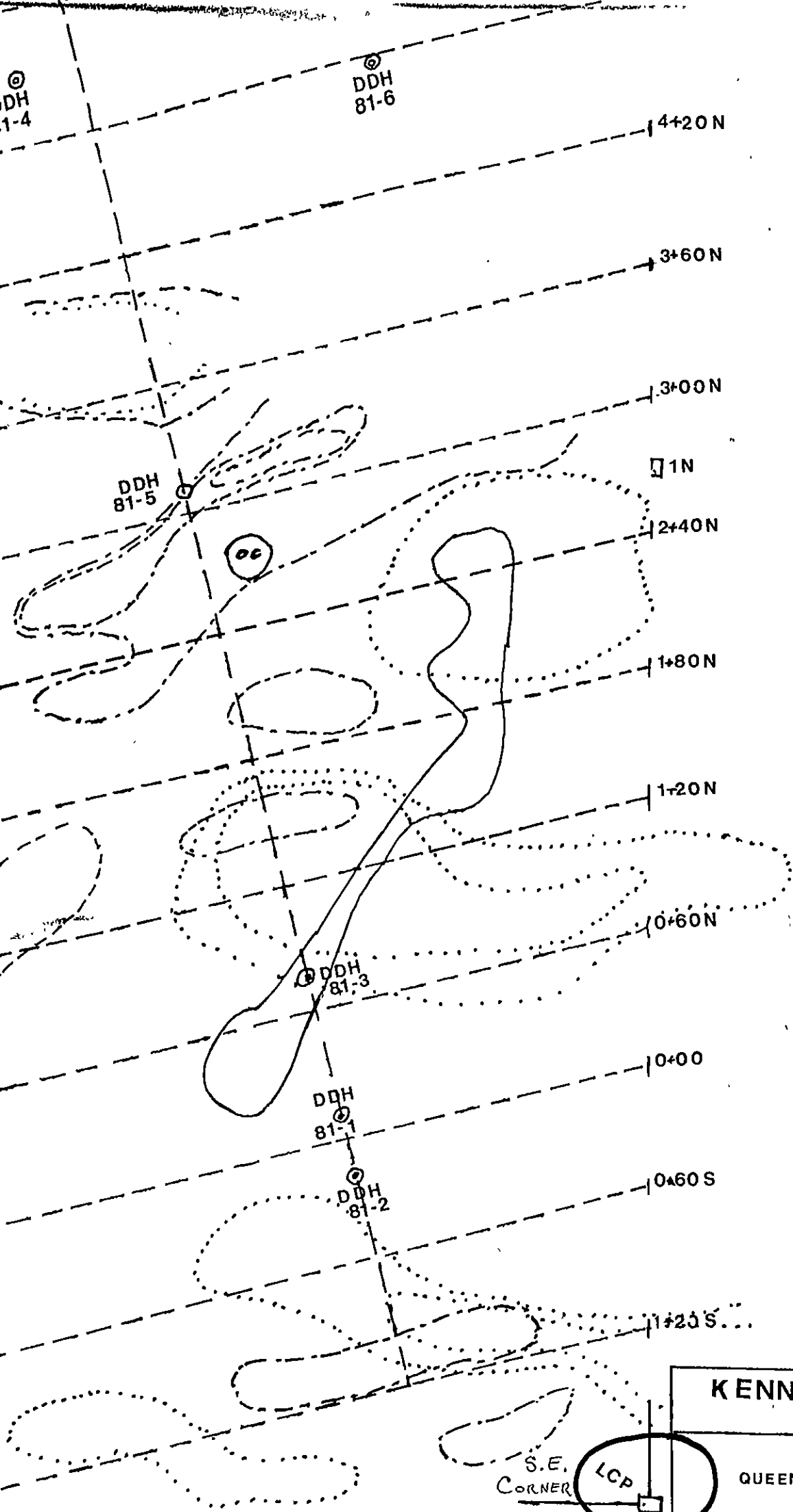
Skonun sediments on the east and Haida mudstones on the west. None of these formations are exposed on the Barbie claim but could occur under overburden on the eastern side of the claim. This eastern part of the Barbie claim has been the location of previous geochemical and geophysical surveys performed by the Strato Geological of Vancouver, B.C.

One interesting outcrop occurs close to the south east corner of the Barbie claim and is roughly one hundred metres long in a north westerly direction. The rock has been classified as rhyolite breccia. It is unlike any of the rock units mapped on the Cinola claims. It does however return consistent but low gold values in a range up to 0.01 oz. gold per ton.

A diamond drill program was recommended in 1981 by Strato and was carried out by Calar Developments, of Vancouver B.C.

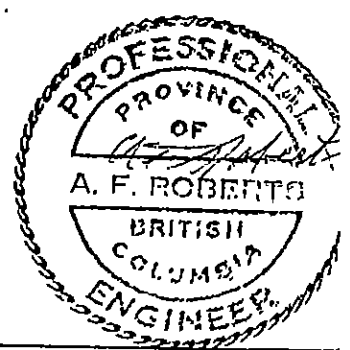
Diamond Drill Program: Six holes totalling 984 metres were completed in the summer and fall of 1981 and are shown on the drill plan included in this report. All holes were vertical and were sampled on a systematic pattern at ten foot intervals. It is proposed to use the first 111 metres of hole number KR 81 - 1 for the purposes of this assessment report to a value of \$8,400.00.

The following is a summary of all the drilling and in particular hole number KR 81 - 1. The drill holes were logged and sampled by Steve Lacy, BA Sc, an engineer in training, and also an employee of Cinola Operating Co. Ltd. The work was supervised by K.G. Sanders P. Eng, the author of this report.



- ⊙ OUTCROP
- CLAIM POST
- ⊙ DDH
- GOLD ANOMALY +10 P
- ⊖ SILVER ANOMALY +0.7
- ⊖ ARSENIC ANOMALY +17
- ⊖ MERCURY ANOMALY +30
- ↔ AXIS, FRASER FILTE CONDUCTOR

*K. P. Anderson
 September 17, 1982*



KENNEDY RESOURCES
 VANCOUVER, B.C.

BARBIE CLAIM
 QUEEN CHARLOTTE ISLANDS, B.C.
 SKEENA, M.D.
 NTS 103 F/9E

COMPOSITE
 VLF-EM, GEOCHEM.

Drawn by: *ash*
 Scale: 1cm=25m **1/2500**
 Date: Nov. 16, 1981.
 To Accompany Report by A.F. Roberts, P.Eng
 dated November 16, 1981.

DRILL HOLE PLAN
1981 PROGRAM

Diamond Drill Logs
and Assays

DDH KR 81-1 Location - on base line at 10m North
Dip - Vertical
Drilled by - Calar Developments
Started - June 7, 1981
Completed - June 15, 1981
Core size - B Q
Depth - 500 feet

0 - 4.0' Casing

4.0 - 46.5' Rhyolite

- buff to grey color
- aphanitic
- strong pyrite, disseminated tiny cubes
- cut by steeply dipping stockwork calcite veinlets up to 3 mm, sometimes showing movement
- local brecciation at 10 - 11' and healed breccia at 42 - 46.5'

46.5 - 47.5' Rhyolite-Diorite Contact

- not a sharp contact
- possible shear zone
- Quartz flooded with white quartz

47.5 - 497.0' Diorite

- light grey - dark grey, salt and pepper
- medium grained, anhedral grains averaging 2mm, mostly plagioclase
- occasional clusters of well-developed potash feldspar lathes, giving core a lighter appearance
- strong disseminated pyrite and occasional pyrite stringers
- strong calcite veining
- core usually broken at 45-60° to c/a
- possible minor shearing throughout, but strong shearing at 468 - 475'
- slight and occasional kaolin alteration, and talcy fractional planes
- harder core at 80 - 90'

497.0 - 500.0' Rhyolite Porphyry

- light grey
- aphanitic with white feldspar lathes, and occasional quartz phenocrysts
- strong disseminated pyrite
- hard core

<u>Sample Number</u>	<u>Interval [feet]</u>
KR1-1	0 - 10
KR1-2	10 - 20
KR1-3	20 - 30
KR1-4	30 - 40
KR1-5	40 - 50
KR1-6	50 - 60
KR1-7	60 - 70
KR1-8	70 - 80
KR1-9	80 - 90
KR1-10	90 - 100
KR1-11	100 - 110
KR1-12	110 - 120
KR1-13	120 - 130

<u>Sample Number</u>	<u>Interval [feet]</u>
KR1-14	130 - 140
KR1-15	140 - 150
KR1-16	175 - 185
KR1-17	210 - 220
KR1-18	245 - 255
KR1-19	280 - 290
KR1-20	315 - 325
KR1-21	350 - 360
KR1-22	385 - 395
KR1-23	420 - 430
KR1-24	455 - 465
KR1-25	490 - 500

DDH KR 81-2

Logged August 11, 1981
By S.C. Lacy

- | | | |
|---------------|------------|---|
| 0.0 - 6.0' | Casing | |
| 6.0 - 16.0' | Rhyolite | <ul style="list-style-type: none"> - remnant aphanitic rhyolite flooded by quartz - healed breccia - vuggy - limonite stained - crossed by black veinlets |
| 16 - 21.0' | Shear zone | <ul style="list-style-type: none"> - only 1 ft. recovered, most core missing - soft core |
| 21.0 - 76.0' | Diorite | <ul style="list-style-type: none"> - dark grey - fine to medium grained - silica flooded in places especially hard and vuggy at 32 - 46' - locally brecciated - irregular calcite veins, distorted in places - irregular black veinlets - some limonite staining - pyrite, disseminated in tiny veinlets - hard core |
| 76.0 - 142.0' | Diorite | <ul style="list-style-type: none"> - softer core, possible shearing zone - brecciated - strong distorted calcite veinlets - strong disseminated pyrite and black veinlets |

DDH KR 81-2 [Cont'd]

142.0 - 370.0' Diorite

- moderately hard
- calcite veining
- disseminated pyrite throughout, especially strong in bands
- fractures commonly between 45-60° to c/a
- 6 inch white quartz flood at 359.5-360.0'

370.0 - 500.0' Diorite

- healed breccia
- often soft broken core
- some quartz flooding, especially at 441-444', 449.5-452.5', 460-470'
- disseminated pyrite throughout
- local steel-grey, platy, metallic mineral, possibly graphite in white quartz at 460-470'
- invasion of Rhyolite Porphyry at 452.5 - 454.5', 459.0 - 460.0', 470.0 - 476.0'
- buff rhyolite porphyry with feldspar lathes

Sample Number

Interval [feet]

Sample Number

Interval [feet]

KR2-1	0 - 10'	KR2-15	140 - 150
KR2-2	10 - 20	KR2-16	175 - 185
KR2-3	20 - 30	KR2-17	210 - 220
KR2-4	30 - 40	KR2-18	245 - 255
KR2-5	40 - 50	KR2-19	280 - 290
KR2-6	50 - 60	KR2-20	315 - 325
KR2-7	60 - 70	KR2-21	350 - 360
KR2-8	70 - 80	KR2-22	385 - 395
KR2-9	80 - 90	KR2-23	420 - 430
KR2-10	90 - 100	KR2-24	440 - 450
KR2-11	100 - 110	KR2-25	450 - 460
KR2-12	110 - 120	KR2-26	460 - 470
KR2-13	120 - 130	KR2-27	470 - 480
KR2-14	130 - 140	KR2-28	490 - 500

September 2, 1981
S.C. LACY

KR #3

0 - 9' Overburden

9 - 500' Diorite

- greenish grey
- medium grained, finer grain from 365 - 500'
- surface bleaching to 50'
- high pyrite, disseminated and in veinlets and on fracture surfaces
- cut by calcite stringers
- moderately hard core except at 206 - 230', where it is badly broken [shear zone]
- excellent core recovery
- fractures of 45 - 60° at c/a

KR #4 [incomplete]

0 - 52 Overburden & broken core

52 - 61 Rhyolite

- aphanitic
- grey
- calcite veinlets
- no pyrite

61 - 195 Diorite

- greenish grey
- calcite veins
- pyrite abundant
- fracture zone 136 - 150'
- fairly hard core
- contact at 45°, irregular [upper and lower contact]

195 - 240

[and on] Mudstone

- Haida shales
- black argillite
- easily broken
- calcite stringers
- pyrite on fracture planes and in occasional vugs, and in blebs

September 24, 1981
STEPHEN LACY

KR #81-5

- | | |
|--------------|--|
| 0 - 93.5' | - overburden |
| 93.5 - 94.0' | - finely laminated siltstone-sandstone |
| | - light and dark brown |
| | - quite soft core |
| | - basal contact with unconsolidated gravel |
| 94.0 - 94.5' | - possible diabase |
| | - feldspar lathes with biotite |
| | - some pyrite present |
| 94.5 - 96.5' | - unconsolidated gravel |
| 96.5 - 500' | - sandstone, possibly Haida sandstone |
| | - medium to fine grain, dark grey - greenish grey |
| | - massive appearance although possible bedding evidence at horizontal |
| | - local colour changes grading to cream colour with no apparent lithological change |
| | - some disseminated pyrite, with possible increase in cream coloured zones |
| | - cut by stockwork type calcite veins, usually at steep angles |
| | - from 481 - 493', sharp contact at 481' to feldspar porphyry, grading [?] [seemingly] back to Haida sandstone at 493' |

KR #81-6

October 8, 1981
STEPHEN C. LACY

0 - 56' Overburden

56 - 323' Sandstone [Haïda]

- dark grey to medium grey
- fine to medium grained
- massive, homogeneous, except evidence of bedding at 20° from horizontal from 275' - 278'
- wispy lignite throughout
- cut by calcite veinlets
- low pyrite content from 56' - 213'
- high disseminated pyrite from 213' to 600'
- rare pebbly sections <10 cm, composed of mainly argillite pebbles <3 cm, at 150', 190', 213', 255-256', 274-275'
- fine grain conglomerate at 313-315 composed of semi-rounded pebbles of argillite and siltstone <1 cm
- soft rock at 304', 322-323'
- broken core at 142-146'

323 - 600' Diorite

- grey, massive
- calcite and pyrite veins
- high pyrite content in veins and disseminated
- introduction of hornblend and small green speckles at 496 - 600'
- quartz veins <3m with some included pyrite, cutting across at 45-70° from horizontal, at 560 - 569', and 588 - 590'
- soft core at 397 - 420'
- broken core at 553'



General Testing Laboratories

A Division of SGS Supervision Services Inc.

1001 EAST PENDER ST., VANCOUVER, B.C., CANADA, V6A 1W2
 PHONE (604) 254-1847 TELEX 04-507514 CABLE SUPERVISE

TO:
 MR. N. PETERSON
 402 - 595 Howe Street
 Vancouver, B.C.

CERTIFICATE OF ASSAY

No.: 8100-1459. DATE: Oct. 6/81

We hereby certify that the following are the results of assays on: **Ore**

MARKED	GOLD	SILVER	XXX	XXX	XXX	XXX	XXX	XXX
	oz/st	oz/st						
001	0.002	trace						
002	0.002	trace						
003	0.002	trace						
004	0.002	trace						
005	0.002	trace						
006	0.002	trace						
007	0.002	trace						
008	0.002	0.02						
009	0.002	0.09						
010	0.002	0.20						
KR1-11	0.002	0.16						
KR1-12	0.002	0.05						
KR1-13	0.002	0.04						
KR1-14	0.002	trace						
KR1-15	0.002	trace						
KR1-16	0.002	0.08						
KR1-17	0.002	0.06						
KR1-18	0.002	0.10						
KR1-19	0.002	0.09						
KR1-20	0.002	0.13						
KR1-21	0.002	0.09						
KR1-22	0.002	0.10						
KR1-23	0.002	0.02						
KR1-24	0.002	0.07						
KR1-25	0.002	0.16						
KR2-001	0.002	0.15						
002	0.002	0.16						
003	0.002	0.20						
004	0.002	0.08						
005	0.002	0.03						
006	0.002	trace						
007	0.002	0.07						
008	0.002	trace						
009	0.002	trace						
010	0.002	trace						

NOTE: REJECTS RETAINED ONE MONTH PULPS RETAINED THREE MONTHS. ON REQUEST PULPS AND REJECTS WILL BE STORE FOR A MAXIMUM OF ONE YEAR

ALL REPORTS ARE THE CONFIDENTIAL PROPERTY OF CLIENTS. PUBLICATION OF STATEMENTS IN CONCLUSION OR EXTRACTS FROM OR REGARDING OUR REPORTS IS NOT PERMITTED WITHOUT OUR WRITTEN APPROVAL. ANY LIABILITY ATTACHED THERETO IS LIMITED TO THE FEE CHARGED

[Signature]
 PROVINCIAL ASSAYER

Analytical and Consulting Chemists, Bulk Cargo Specialists, Surveyors, Inspectors, Samplers, Weighers

MEMBER American Society For Testing Materials • The American Oil Chemists Society • Canadian Testing Association
 REFEREE AND/OR OFFICIAL CHEMISTS FOR: National Institute of Oilseed Products • The American Oil Chemists' Society
 OFFICIAL WEIGHMASTERS FOR: Vancouver Board Of Trade

Cost Statement: The following page is an excerpt from a report by A.F. Roberts, P. Eng. for Kennedy Resources entitled Report on The Geophysical, Daimond Drilling Program on the Barbie Claim, and dated November 16, 1981. The total costs billed by Calar Developments include 984 metres of B Q diamond drilling and all camp and project supervision costs. The figure used for assessment purposes is \$76 per metre for the B Q diamond drilling.

*K. B. Sanders
September 17, 1982*

COSTS

The dense second growth timber in the area, combined with rather extensive slash, makes the area difficult to work. Line cutting and surveying is slow work, increasing the costs considerably.

The actual amounts expended and for which the writer examined the receipts, is as follows:

Strato Geological Ltd.	\$122,241.29
Magnetometer, VLF-EM, Turam, I.P. Surveys, with line cutting, rentals, reports, etc.	
Calor Diamond Drilling	157,966.31
General Testing Labs Ltd., Assaying	1,565.50
Travel, Room and Board	1,293.30
Astro Auto - Vehicle maintenance	19,604.41
Miscellaneous Expenses, re travel, room and board, for crews	2,768.79
Total	<u>\$305,439.60</u>

*\$2400.00
apportioned
to DDH KR81-1
TEK*

The writer is very familiar with the area and believes that the expenditures were justified, although high, are similar to those of other properties in the area.

CONCLUSIONS

The 1981 geophysical surveys were successful in tracing the geology of the area to the north.

The diamond drilling located a diorite sill intruded into the sedimentary-flow rock sequence, and which carried low gold values. This intrusive may be

*K. S. Sanders
September 17, 1982*

CERTIFICATE

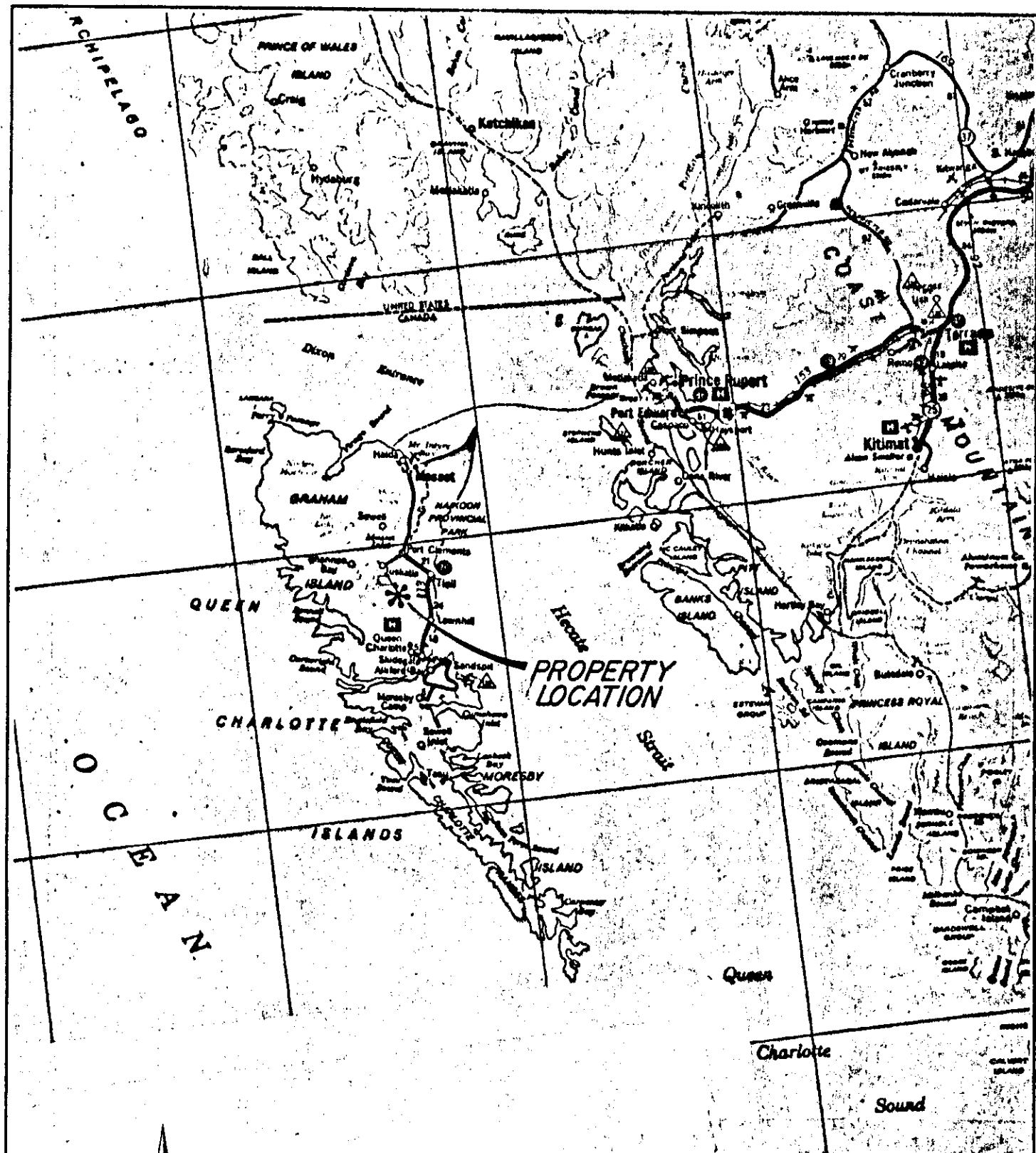
I, Kenneth G. Sanders certify as follows:

1. I am a professional engineer registered in the geological section of the Association of Professional Engineers of B.C. since August 8, 1963.
2. My residence is 13815 - 28th Avenue, Surrey B.C.
3. I personally supervised the diamond drilling program on the Barbie claim in the Skeena Mining Division and which is the subject of this report.

K. G. Sanders

Kenneth G. Sanders
P. Eng.

September 17, 1982



KENNEDY RESOURCES INC.
 VANCOUVER, B.C.

BARBIE CLAIM
 QUEEN CHARLOTTE ISLANDS, B.C.
 SKEENA M.D.
 NTS 103 F / 9E

LOCATION MAP
 SCALE IN KILOMETRES
 0 24 48 72 96