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TITLE PAGE
DRILLING REPORT
1999 MAY 31 - JUNE 30

RECEIVED
GOVERNMENT AGENT
NELSON
OCT 26 1999
NOT AN OFFICIAL RECEIPT
TRANS #.....

Drilling was on Claim No. Jackhammer 256754 of Claim Group No. 3122095 Dated July 24, 1998 in the Slokan Mining District.

Location NTS 82 - f - 10W
Lat. 49° - 41' North, Long. 116° - 56' West

Owner Jordon Hunter
Operator Leonard Ogilvie

Author of Report: Leonard Ogilvie

Date of Report & Details: OCTOBER 25 1999

Report prepared by Leonard Ogilvie - Prospector, 11 years experience with Jordon Hunter who studied under George Addie, Geologist.

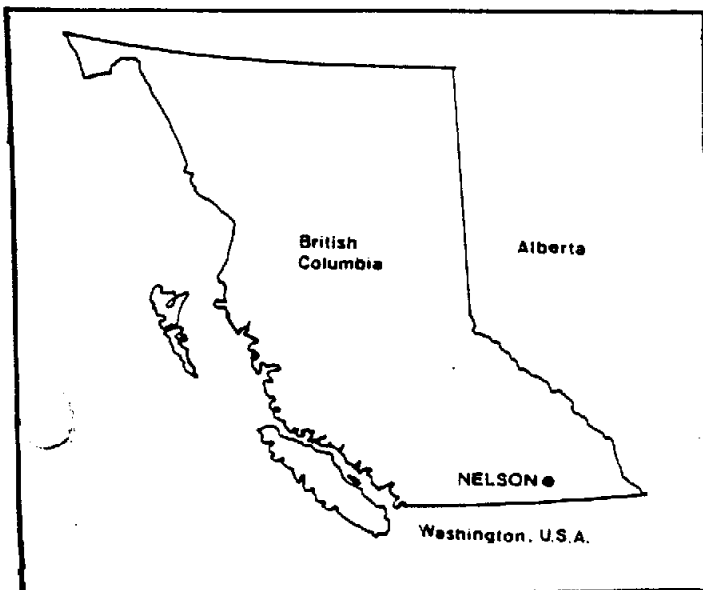
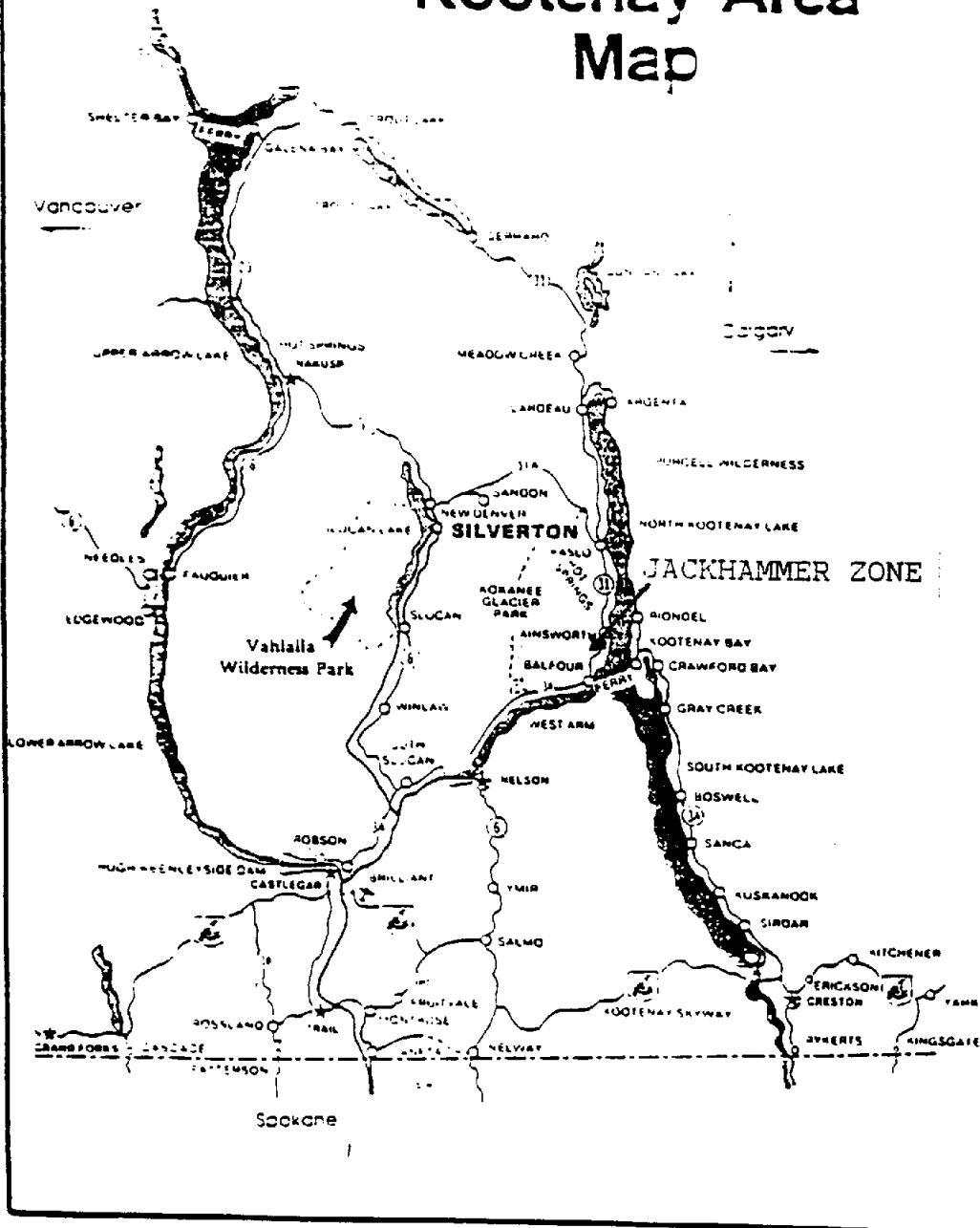
GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

26,059

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Kootenay Area Map



JACKHAMMER PROPERTY

NELSON MINING DISTRICT

82F/10W

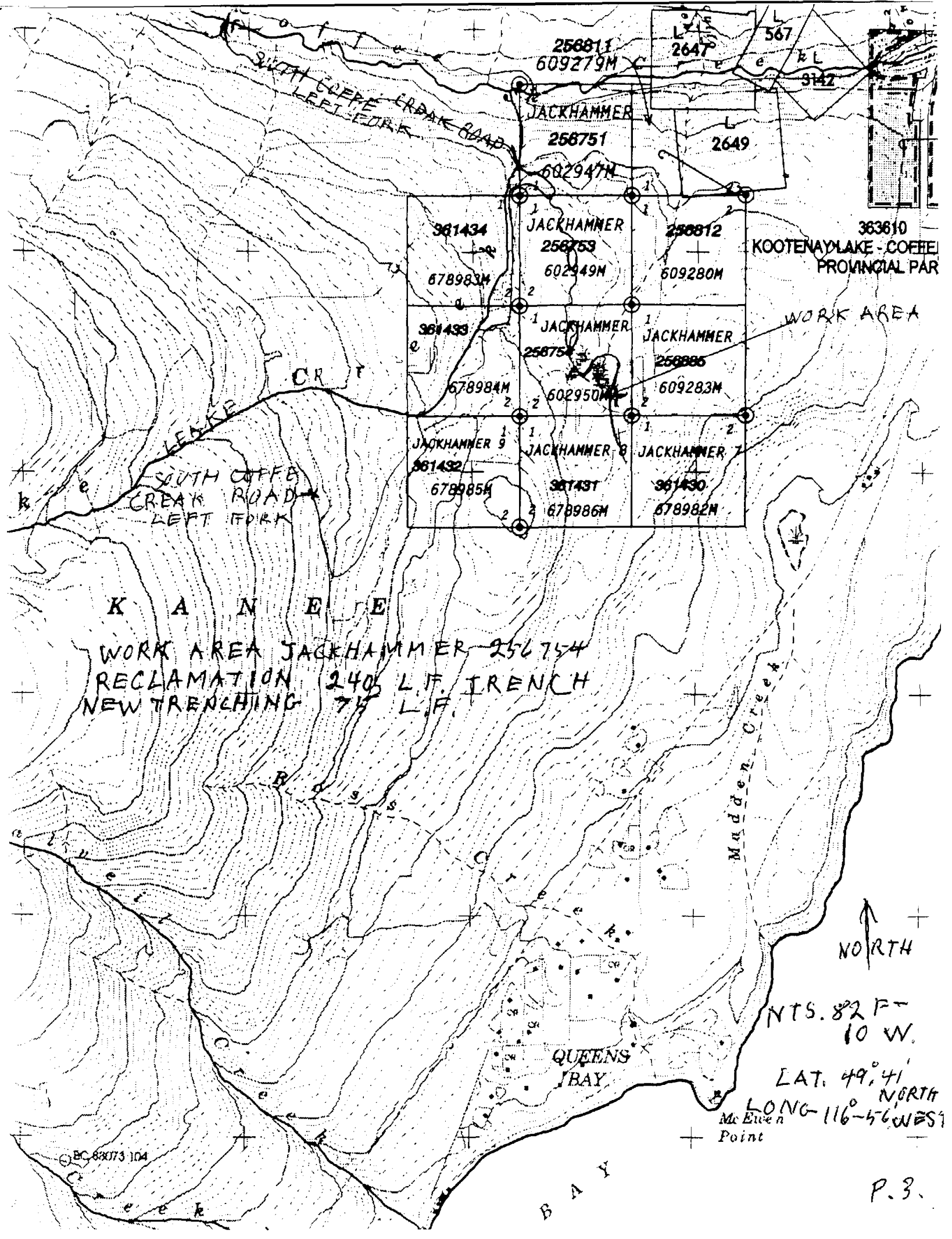
AINSWORTH, BC

P. 1

LOCATION & ACCESS

The Jackhammer claim group is located on the west side of Kootenay Lake and south of Coffee Creek, starting at Coffee Creek Bridge on Highway 31, proceeding west on Coffee Creek road and cross the second bridge proceeding on the left fork of the road to the south-east. Follow the road until it comes near Leak Creek, going west and make a turn to the south. Stop here. The initial post for claim No. Jackhammer 256-753 is 50 m to your left on a hill visible from the road.

To get to the drill site, come back down the road approximately 700 m. to the side road to the south east, and follow to the end of the road. You will now be on the south-east portion of Jackhammer #256754.



256811 609279M
2647 567
3142

JACKHAMMER
256751 2649
602947M

361434 678983M
JACKHAMMER 256753 602949M
256812 609280M
363610 KOOTENAY LAKE - COFFEE PROVINCIAL PARK

361433 678984M
1 JACKHAMMER 256754 602950M
1 JACKHAMMER 256885 609283M

JACKHAMMER 9 361432 678985M
1 JACKHAMMER 8 361431 678986M
1 JACKHAMMER 7 361430 678982M

WORK AREA JACKHAMMER 256754
RECLAMATION 240 L.F. TRENCH
NEW TRENCHING 74 L.F.

NORTH

NTS. 82 F - 10 W.

LAT. 49° 41' NORTH

LONG 116° 56' WEST

McEwen Point

BC 88073 104

P. 3.

HISTORY

Jackhammer claims were staked starting August 24, 1989 and added to over the next three years as more sulfide zones were uncovered. The main sulfide zone is in a silicified and brecciated mineralized zone, 100 feet + wide at the surface and standing between 650 and 850 dipping southwest and striking between 400 and 450 west, and carries ZN, PB, AG sulfides at or near the foot wall (northeast side of the zone).

In the spring of 1992 it was decided to diamond drill perpendicular to the zone at 500 to better understand the ore body.

In 1998 after consulting a mining exploration geologist, 5 short holes were drilled in 3 locations (MAP 6). All encountered mineralization to 3.4% in surface altered rock. Hole No. 98-01 being the most interesting.

In 1999 more short holes were fan drilled in area of 1998 drill hole No. 98-01.

- Areas of little or no outcrop
- INTRUSIVE ROCKS**
- Hornblendite
- Porphyritic granodiorite
- Granitic sills and lenses
- GREEN VOLCANIC AND ASSOCIATED INTRUSIVE AND SEDIMENTARY ROCKS**
- Interlayered chert, argillite, and green volcanic rocks
- Massive green phyllite
- Green phyllite, metadiarite, and interlayered slate, chert and argillite
- Hornblende schists and gneisses
- CARBONATE ROCKS**
- Mainly fine-grained grey dolomite
- Fine-grained grey limestone
- Blue-grey limestone and black argillite
- Fine-grained grey fetid limestone (Star and No. 1 Limestone)
- Grey and white crystalline limestone: 3b Lower Ainsworth; 3c Upper Ainsworth; 3d Kraa; 3e Dictator
- Calcareous hornblende gneiss
- ARGILLITES, QUARTZITES, AND MICA SCHISTS**
- Purplish grey massive argillite
- Mainly black argillite
- Grey knotted schist
- Dark grey slate, argillite, and limestone
- Interlayered argillite, quartzite, and blue-grey limestone
- Grey fine-grained mica schist
- Grey to brown micaceous quartzite, fine grained mica schist, minor limestone
- Garnet mica schist (Princess Formation)
- Calcareous mica schist and silicate marble (Early Bird Formation)
- Geological contact defined
- approximate
- assumed
- Fault defined
- approximate
- assumed
- Vein showing attitude
- Attitude of foliation
- Plunge of lineations and minor folds
- Adit portal
- Underground working
- Shaft
- Prospect or old working
- Main road
- Side road
- Trail
- Building
- Fossil locality

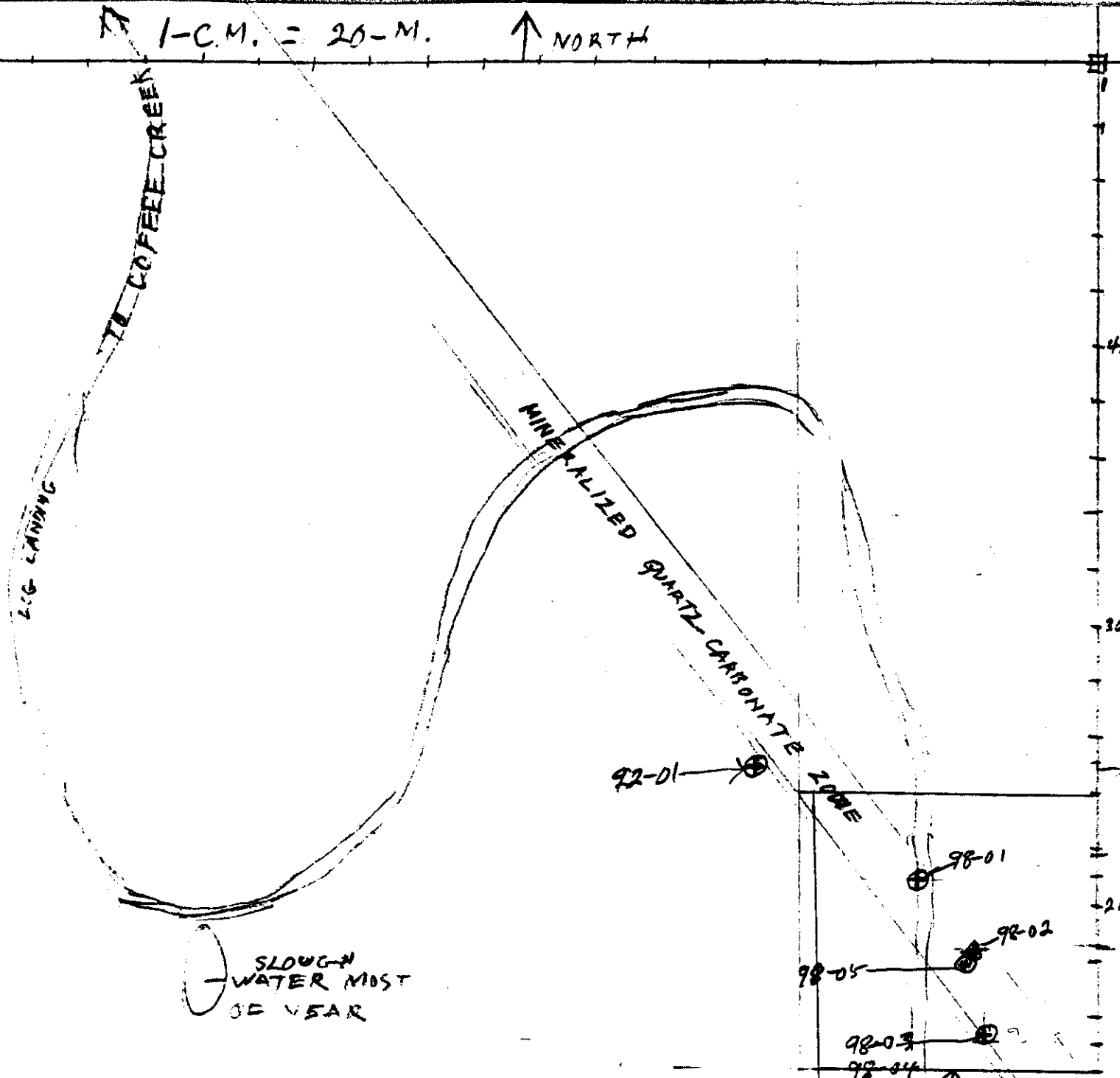


GEOLOGICAL MAP
OF THE
AINSWORTH-KASLO AREA
Geology by James T. Fyles 1960-1964
AND LOCATION OF JACKHAMMER
CLAIMS AND MINERALIZED
ZONE
① LOCATION OF WORK.

Scale 1000 0 1000 2000 feet
Contour interval 250 Feet

SHEET 1

JACKHAMMER 3614 34
JACKHAMMER 3614 33
JACKHAMMER 3614 32
JACKHAMMER 3614 31
JACKHAMMER 3614 30
JACKHAMMER 3614 29
JACKHAMMER 3614 28
JACKHAMMER 3614 27
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JACKHAMMER 3614 13
JACKHAMMER 3614 12
JACKHAMMER 3614 11
JACKHAMMER 3614 10
JACKHAMMER 3614 9
JACKHAMMER 3614 8
JACKHAMMER 3614 7
JACKHAMMER 3614 6
JACKHAMMER 3614 5
JACKHAMMER 3614 4
JACKHAMMER 3614 3
JACKHAMMER 3614 2
JACKHAMMER 3614 1



1998 - DRILL COLLAR LOCATIONS
 ALL MEASUREMENTS ARE FROM
 FINAL POST OF JACKHAMMER 256885 CLAIM
 AND ARE LOCATED ON
 JACKHAMMER 256754 CLAIM

| ID | NORTH (M) | WEST (M) | DRILLING STATUS |
|-------|-----------|----------|-------------------------|
| 98-01 | 209.4 | 65.9 | DRILLED VER. |
| 98-02 | 185.1 | 42.2 | VER. |
| 98-03 | 153 | 40 | VER. |
| 98-04 | 153 | 40 | -10° N.E. |
| 98-05 | 183 | 42.1 | VER. |
| 92-01 | 244.3 | 110.2 | NORTH -40° N.E. WEST |

AREA ENLARGED
 ON MAP 7
 PAGE 7
 FOR 1999 DRILL
 PROGRAM

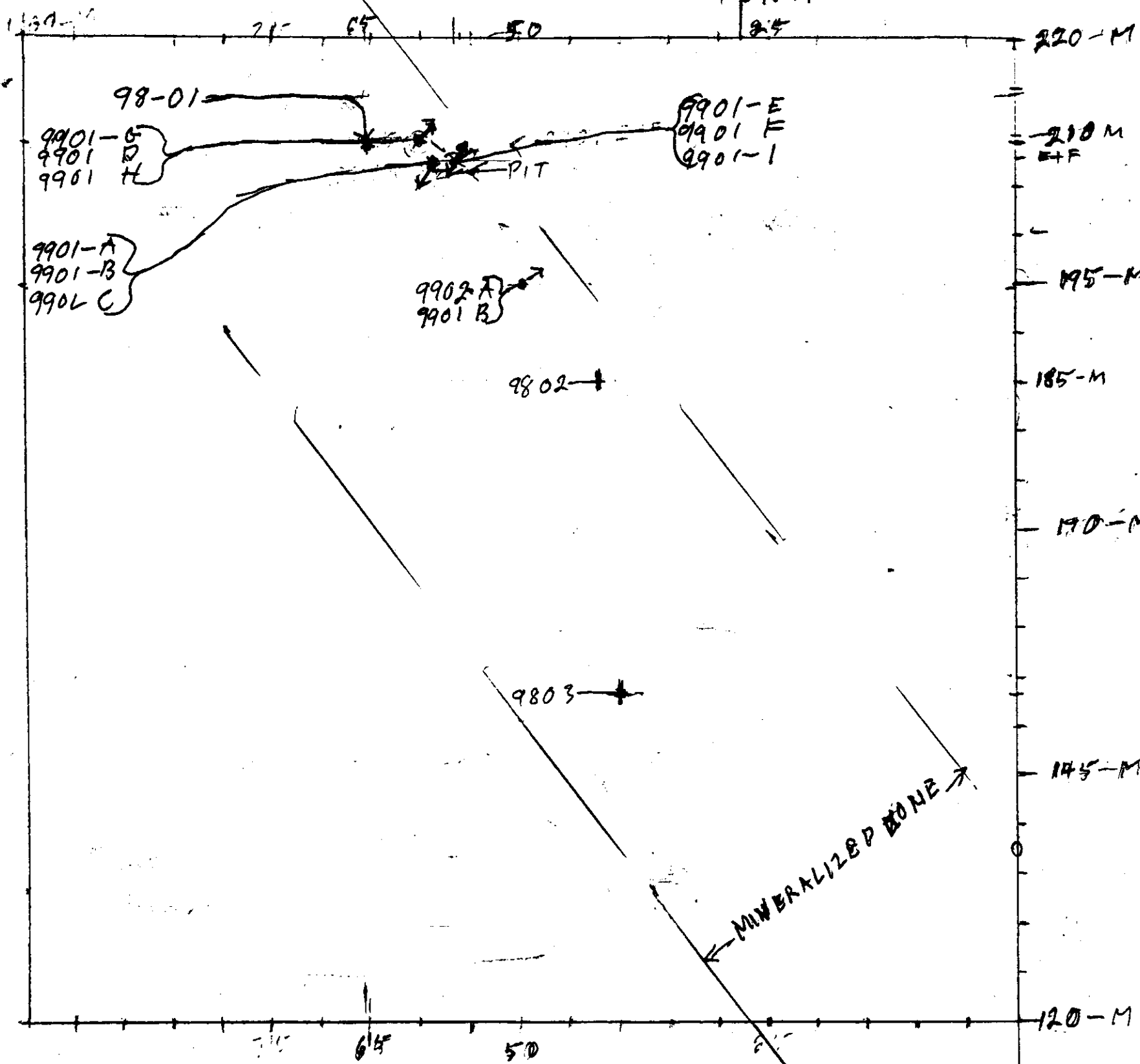
JACKHAMMER 6109/256754
 JACKHAMMER 361431 - (8)

JACKHAMMER
 6240
 256885 FINAL POST
 JACKHAMMER
 361430 (7)

↑ NORTH
 JACKHAMMER CLAIMS
 NTS 82-F-10 W
 LAT. 49° 41' NORTH
 LONG. 116° 56' WEST
 SCALE 1-C.M. = 20. M.

SCALE 1 CM. = 5 M.

NORTH



ENLARGED AREA OF MAP-6
 1999 DRILL COLLAR LOCATIONS
 ALL MEASUREMENTS ARE FROM
 FINAL POST OF JACKHAMMER
 256 885 CLAIM
 AND ARE LOCATED ON
 JACKHAMMER 256 754 CLAIM

- 220-M
- 210-M
- 195-M } 9901-E } 207.7 M. NORTH
 9901-F } 56.8 M. WEST
 9901-L
- 185-M } 9901-A } 207.7 M. NORTH
 9901-B } 58.8 M. WEST
 9901-C
- 170-M } 9901-G } 210.6 M. NORTH
 9901-D } 58.8 M. WEST
 9901-H
- } 9902-A } 194.6 M. NORTH
 9902-B } 42.2 M. WEST

9901-G MARKED WITH IRON
 POST 20' DUE NORTH
 OF COLLAR

9901 E MARKED WITH IRON
 POST 20' DUE NORTH
 OF COLLAR

NTS- 82-F -10 WEST
 LAT 49° 41' NORTH
 LONG 116° 56' WEST

SCALE 1-CM = 5-M.
 MAP-7

SUMMARY OF 1999 WORK PROGRAM

A pit was dug by backhoe Apprx. 8' deep to rock x 15' long x 8' wide for a drill sight. 8 diamond drill holes were drilled in this pit and fanned N.E. and Vert. and southwest by pack sack drill E.W. size 1".

Drill holes were numbered 99-01 A to H and completed from May 31/99 to June 30/99.

A, B & C drilled in center of pit and fanned Vert. to 76o S.W.

D, G & H drilled in North West corner of pit and fanned N.E. 83o to 76o.

E & F were drilled in N.E. corner of pit and fanned S.W. 84o + N.E. 86o.

All were short holes to 22'.

Holes numbered 99-02 A to B were drilled 50' down strike to S.E. and were angled N.E.

Both drill locations were drilled in mineralized carbonate zone of formation.

Trenching & reclamation was completed in fall of 1998 from October 1/98 to October 15/98

COMMENTS

3 holes numbered 99-01 A+B+C were drilled in center of backhoe dug pit and angled from Vert. to -76° S.W. Hit large cavities to 5 feet, but were uninteresting.

3 holes numbered 99-01 D+G+H were drilled in N.W. corner of pit and angled from 83° to 76° N.E. All 3 holes hit mineralization (ZN + PB).

3 holes drilled in N.E. corner of pit angled 84° S.W. Vert. + 86° N.E. Intercepted ZN + PB mineralization from surface, then intercepted a clay layer.

This pit location was down strike to S.E. from 98-01 drill location, which intercepted 11 feet of ZN + PB mineralization in Vert. hole.

All were short holes under 23 feet.

D+G+H showed a mineralization ZN + PB vein 2' 6" true width striking parallel to main zone dipping 80° S.W.

Drilling and Trenching to date shows 3-ZN PB veins from 1' 6" to 2' 6" striking N.W. parallel to main Quartz zone and dipping from 80° S.W. to 70° S.W.

A rock dug up by backhoe with small area of good rock in center, showed good mineralization. A sample from the center was assayed as a grab sample; AU p.p.m. 120, AG p.p.m. 22, CD p.p.m. 640, PB p.p.m. 802, ZN p.p.m. 76100. Assay and balance of rock kept.

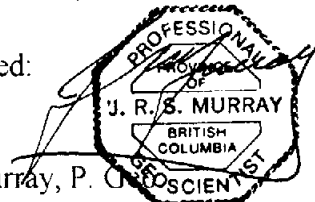
As this mineralization zone cuts across the Ainsworth formations including the lime stones which produced good mines. And a limestone formation striking south from this zone with a caved in audit + crusher waist which shows PB & ZN mineralization. I believe this zone warrants more investigation.

STATEMENT OF QUALIFICATIONS

J. MURRAY, P. Geo.,
519 W. Innes,
Nelson, B.C.,
V1L 3J2.

1. I am a graduate Mining Technician of Haileybury School of Mines.
2. I am a graduate B.Sc.(Geology), University of Manitoba, 1974.
3. I am a registered member in good standing of the Association of Professional Engineers and Geoscientists of British Columbia.
4. I practice as a geologist at the above address.
5. I have practiced as a geologist continuously since 1974, having worked in Manitoba, Saskatchewan, Ontario, and British Columbia for a number of large and small companies, including INCO Metals and LAC Minerals.
6. I have no interests in any of the properties described, nor in any within 10 kilometres of the property.
7. My sole remuneration is the professional fee charged for this service.
8. I hereby consent to the use of these diamond drill logs by Len Ogilvie of Ogilvie & Sons Construction in an Assessment Report.

Signed:



J. Murray, P. Geoscientist
date: October 21st, 1999

DIAMOND DRILL LOG

Hole No. JH 99-01 B

COMPANY: Ogilvie & Sons Construction
SECTION:
DIP: Vertical
AZIMUTH: N/A
DRILLER: L. Ogilvie
LOGGER: J. Murray, P.Geo.
DIP TESTS:

PROPERTY: Jackhammer
DEPTH: 5.03 m
NORTHING:
CORE SIZE: EW
DATES DRILLED:
DATE LOGGED: August 26/99

ELEVATION:
LOCATION: 1.07 m SW of 99-01A
EASTING:
PURPOSE: testing continuity

REMARKS: Poor to moderate core recovery.

| Intersection (Metres) | | Description | Sample # | From | To | Ag ppm | Pb ppm | Zn ppm | Cu ppm | Fe % | Ca % |
|--------------------------|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|----|-----------|-----------|-----------|-----------|---------|---------|
| From | To | | | | | | | | | | |
| 0.0 | 2.13 | Overburden | | | | | | | | | |
| 2.13 | 5.03 | ALTERED LIMESTONE(?) (Ferrocarb?) Rusty, Limonitic, fine-grained, soft, good acid reaction, occasional stringers carbonate, occasional reddish brown mineral (ZnS?) Rare black mineral with red streak. 4.2-5.03: mainly all cavity, save for a 0.12 m section of broken core near toe. | | | | | | | | | |
| 5.03 | | FOH | | | | | | | | | |

DIAMOND DRILL LOG

Hole No. JH 99-01C

COMPANY: Ogilvie & Sons Construction
SECTION:
DIP: - 76°
AZIMUTH: 225°
DRILLER: L. Ogilvie
LOGGER: J. Murray, P.Geol.
DIP TESTS:

PROPERTY: Jackhammer
DEPTH: 5.18 m
NORTHING:
CORE SIZE: EW
DATES DRILLED:
DATE LOGGED: August 26/99

ELEVATION:
LOCATION: Collared beside 99-01B
EASTING:
PURPOSE: testing continuity

REMARKS: Driller reports 5.03 m drilled.

| Intersection (Metres) | | Description | Sample # | From | To | Ag ppm | Pb ppm | Zn ppm | Cu ppm | Fe % | Ca % |
|--------------------------|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|----|-----------|-----------|-----------|-----------|---------|---------|
| From | To | | | | | | | | | | |
| 0.0 | 2.13 | Overburden | | | | | | | | | |
| 2.13 | 4.90 | HIGHLY ALTERED DIRTY LIMESTONE? Rusty, Limonitic, fine-grained, soft, very strong acid reaction, occasional concentrations manganese, pitted, leached appearance, carbonate stringers, occasional almost brecciated appearance. 2.83 - 4.39 (?) CAVITY/NO CORE | | | | | | | | | |

DIAMOND DRILL LOG

Hole No. JH 99-01 D

COMPANY: Ogilvie & Sons Construction
SECTION:
DIP: - 76°
AZIMUTH: 045°
DRILLER: L. Ogilvie
LOGGER: J. Murray, P.Geo.
DIP TESTS:

PROPERTY: Jackhammer
DEPTH: 7.47 m
NORTHING:
CORE SIZE: EW
DATES DRILLED:
DATE LOGGED: August 26/99

ELEVATION:
LOCATION: collared 1.07 m SW of 99-01G
EASTING:
PURPOSE: testing continuity

REMARKS: Elevated strontium (~1500 ppm), manganese (~ 3200 ppm), arsenic (~ 175 ppm), barium (~416 ppm)

| Intersection (Metres) | | Description | Sample # | From | To | Ag ppm | Pb ppm | Zn ppm | Cu ppm | Fe % | Ca % |
|--------------------------|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|-----|-----------|-----------|-----------|-----------|---------|---------|
| 0.0 | 2.44 | Overburden. | | | | | | | | | |
| 2.4 | 2.66 | LIMESTONE (?) dirty, altered, light brown, soft, strong acid reaction, crystalline (sugary) appearance on fresh surface (siderite?), thin seams of reddish brown mineral - no 'zinc zap' reaction. | | | | | | | | | |
| 2.66 | 2.90 | LIMESTONE (?) Dirty, altered, light brown, somewhat siliceous; carbonate - good acid reaction. | 169906 | 2.66 | 2.9 | 0.7 | 346 | 257 | 34 | 2.56 | 22.61 |
| 2.90 | 4.61 | ALTERED LIMESTONE(?) Moderately soft, good acid reaction, light to rusty brown, limonitic, occasional thin seams, veinlets brownish (dark) mineral with brownish streak, seams, stringers carbonate; also very thin seams, specks black mineral. Fragmental appearance. | | | | | | | | | |
| 4.61 | 5.0 | ALTERED DIRTY LIMESTONE(????) Quite red-brown, soft, good acid reaction, well mineralized, good red 'zinc zap' reaction. Limonitic, (sideritic?) | 16907 | 4.61 | 5.0 | 1.0 | 143 | 1849 | 6 | 3.4 | 34.71 |

| | | |
|------|------|--------------------------------------------------------------------------------------------------|
| 5.0 | 7.47 | Mostly LOST CORE. some chunks core toward toe, mud etc. Chunks are pitted, leached etc. (Fault?) |
| 7.47 | | FOH |

DIAMOND DRILL LOG

Hole No. JH 99 - 01 E

COMPANY: Ogilvie & Sons Construction
SECTION:
DIP: - 86°
AZIMUTH: 045
DRILLER: L. Ogilvie
LOGGER: J. Murray, P.Geo.
DIP TESTS:

PROPERTY: Jackhammer
DEPTH: 3.61 m
NORTHING:
CORE SIZE: EW
DATES DRILLED:
DATE LOGGED: August 26/99

ELEVATION: Collared 2.13m E of 99-01A
LOCATION:
EASTING:
PURPOSE: testing continuity

REMARKS:

| Intersection (Metres) | | Description | Sample # | From | To | Ag ppm | Pb ppm | Zn ppm | Cu ppm | Fe % | Ca % |
|--------------------------|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|------|-----------|-----------|-----------|-----------|---------|---------|
| From | To | | | | | | | | | | |
| 0.0 | 1.09 | Overburden | | | | | | | | | |
| 1.09 | 1.83 | Highly altered, brecciated, (siliceous) LIMESTONE? Iron rich, rusty brown, soft- medium hard, fine-grained, good acid reaction. Sphalerite present, occasional quartz stringer, patch. | 169903 | 1.09 | 1.83 | 7.6 | 2073 | 23696 | 42 | 2.69 | 24.16 |
| 1.83 | 2.18 | CAVITY - no core; driller reports clay-filled. (Fault?) | | | | | | | | | |
| 2.18 | 3.61 | Highly altered dirty LIMESTONE (?), moderately soft, Strong acid reaction, brown (salmon coloured on fresh surface) to dark brown, limonitic, pitted, leached, carb stringers, occasional vuggy veinlet with calcite crystals, occasional 'honey-comb' appearance. | | | | | | | | | |
| 3.61 | | FOH | | | | | | | | | |

DIAMOND DRILL LOG

Hole No. JH 99 - 01 F

COMPANY: Ogilvie & Sons Construction
SECTION:
DIP: - 84°
AZIMUTH: 225°
DRILLER: L. Ogilvie
LOGGER: J. Murray, P.Geo.
DIP TESTS:

PROPERTY: Jackhammer
DEPTH: 3.16 m
NORTHING:
CORE SIZE: EW
DATES DRILLED:
DATE LOGGED: Aug 26/99

ELEVATION:
LOCATION: same setup as 99-01E
EASTING:
PURPOSE: testing continuity

REMARKS:

| Intersection (Metres) | | Description | Sample # | From | To | Ag ppm | Pb ppm | Zn ppm | Cu ppm | Fe % | Ca % |
|--------------------------|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|----|-----------|-----------|-----------|-----------|---------|---------|
| From | To | | | | | | | | | | |
| 0.0 | 0.91 | Overburden | | | | | | | | | |
| 0.91 | 3.16 | Highly altered, rusty, fine-grained, vuggy, pitted, leached, brecciated appearance, numerous carbonate stringers. 0.91 -1.12 : Good red 'zinc zap' reaction. Segment begins with 0.2m section well mineralized, black, very fine-grained mineral, (very red reaction). | | | | | | | | | |
| 3.16 | | FOH | | | | | | | | | |

DIAMOND DRILL LOG

Hole No. JH 99 - 01 G

COMPANY: Ogilvie & Sons Construction
SECTION:
DIP: -76°
AZIMUTH: 045°
DRILLER: L. Ogilvie
LOGGER: J. Murray, P.Geo.
DIP TESTS:

PROPERTY: Jackhammer
DEPTH: 5.64 m
NORTHING:
CORE SIZE: EW
DATES DRILLED:
DATE LOGGED: August 26/99

ELEVATION:
LOCATION: Collared 2.13 m N of 99-01A
EASTING:
PURPOSE: testing continuity

REMARKS: Only 2/3rds core recovery. Elevated Strontium (~ 1200 ppm)

| Intersection (Metres) | | Description | Sample # | From | To | Ag ppm | Pb ppm | Zn ppm | Cu ppm | Fe % | Ca % |
|--------------------------|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|------|-----------|-----------|-----------|-----------|---------|---------|
| From | To | | | | | | | | | | |
| 0.0 | 2.74 | Overburden | | | | | | | | | |
| 2.74 | 2.82 | LIMESTONE, off-white to light brown, fine-grained, moderately soft, strong acid reaction, somewhat mottled appearance. | | | | | | | | | |
| 2.82 | 3.86 | ALTERED LIMESTONE?? Segment begins in light coloured, whiteish, limestone, with black mineralized (PbS/ZnS) specks, somewhat more red, Fe-rich towards 3.8. Quite well mineralized (5-7%) toward toe. | 169905 | 2.82 | 3.86 | 1.6 | 1348 | 8689 | 33 | 2.74 | 23.90 |
| | | | reassay | | | 1.7 | 1344 | 8652 | 33 | 2.8 | 24.35 |
| 3.86 | 4.88 | "Dropped", LOST CORE. | | | | | | | | | |
| 4.88 | 5.64 | Broken, chunky core, light brown, soft, (limestone?) altered, unremarkable. | | | | | | | | | |
| 5.64 | | FOH | | | | | | | | | |

DIAMOND DRILL LOG

Hole No. JH 99-01H

COMPANY: Ogilvie & Sons Construction
SECTION:
DIP: - 83°
AZIMUTH: 045
DRILLER: L. Ogilvie
LOGGER: J. Murray, P.Geo.
DIP TESTS:

PROPERTY: Jackhammer
DEPTH: 9.45m
NORTHING:
CORE SIZE: EW
DATES DRILLED:
DATE LOGGED: August 26/99

ELEVATION:
LOCATION: Collared same set-up as 99-01D
EASTING:
PURPOSE: testing continuity

REMARKS:

| Intersection (Metres) | | Description | Sample # | From | To | Ag | Pb | Zn | Cu | Fe | Ca |
|--------------------------|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|----|-----|-----|-----|-----|----|----|
| From | To | | | | | | | | | | |
| 0.0 | 2.44 | Overburden | | | | ppm | ppm | ppm | ppm | % | % |
| 2.44 | 4.88 | CARBONATE (Limestone?). Altered, rusty, limonitic, good acid reaction, seams brown mineral. | | | | | | | | | |
| 4.88 | 5.75 | as above: strong red 'zinc zap' reaction. | | | | | | | | | |
| 5.75 | 6.47 | as above @ 2.44 - no 'zinc zap' reaction. | | | | | | | | | |
| 6.47 | 6.81 | as @ 4.88: moderate to strong 'zinc zap' reaction. Moderately soft, some silicious patches, rusty, limonitic, manganitic. (Occasional calcite seam. Good acid reaction) | | | | | | | | | |
| 6.81 | 7.8 | As @ 5.75 - no 'zinc zap' reaction. | | | | | | | | | |
| 7.8 | 9.45 | Light-medium brown, medium to fine-grained, quite uniform colour and texture (sugary?) on fracture surface, occasional fleck calcite (?). Some very fine-grained black mineral disseminated; occasional salmon pink/brown. At 8.47 a rough slip @ 60° to core. Some lighter alteration either side. Manganese rich toward toe. | | | | | | | | | |
| 9.45 | | FOH | | | | | | | | | |

DIAMOND DRILL LOG

Hole No. JH 99-01 I

COMPANY: Ogilvie & Sons Construction
SECTION:
DIP: Vertical
AZIMUTH: N/A
DRILLER: L. Ogilvie
LOGGER: J. Murray, P. Geo.
DIP TESTS:

PROPERTY: Jackhammer
DEPTH: 1.52m
NORTHING:
CORE SIZE: EW
DATES DRILLED:
DATE LOGGED: August 26/99

ELEVATION:
LOCATION: 20cm NE 99 - 01 E
EASTING:
PURPOSE: testing continuity

REMARKS: Elevated Strontium (~ 1000 ppm). and Cadmium (~ 215 ppm) levels.

| Intersection (Metres) | | Description | Sample # | From | To | Ag ppm | Pb ppm | Zn ppm | Cu ppm | Fe % | Ca % |
|--------------------------|------|-----------------------------------------------------------------------------------------------------------------------------|----------|------|------|-----------|-----------|-----------|-----------|---------|---------|
| From | To | | | | | | | | | | |
| 0.0 | 1.07 | Overburden | | | | | | | | | |
| 1.07 | 1.52 | LIMESTONE?? Highly brecciated, Fe-rich, highly rusted, (ferrocarbonate?) Seams, stringers, carbonate. Patches quartz. | 169904 | 1.07 | 1.52 | 12.7 | 3803 | 31129 | 61 | 2.67 | 22.95 |
| 1.52 | | FOH | | | | | | | | | |

DIAMOND DRILL LOG

Hole No. JH 99 - 02A

COMPANY: Ogilvie & Sons Construction
SECTION:
DIP: -82°
AZIMUTH: 045°
DRILLER: L. Ogilvie
LOGGER: J. Murray, P.Geo.
DIP TESTS:

PROPERTY: Jackhammer
DEPTH: 3.84 m
NORTHING:
CORE SIZE: EW
DATES DRILLED:
DATE LOGGED: August 26/99

ELEVATION:
LOCATION:
EASTING:
PURPOSE: testing continuity

REMARKS: Poor core recovery; (really only .6 m core in box.)

| Intersection (Metres) | | Description | Sample # | From | To | Ag ppm | Pb ppm | Zn ppm | Cu ppm | Fe % | Ca % |
|--------------------------|------|----------------------------------------------------------------------------------------------------------------------|----------|------|------|-----------|-----------|-----------|-----------|---------|---------|
| From | To | | | | | | | | | | |
| 0.0 | 1.02 | Overburden | | | | | | | | | |
| 1.02 | 1.55 | 'Ferrocarbonate'? Chunky core, somewhat leached, light brown, very fine-grained, acid reactive. | | | | | | | | | |
| 1.55 | 2.99 | LOST CORE | | | | | | | | | |
| 2.99 | 3.41 | poor recovery, (<10%), small rock fragments, ending schistose 'Ferrocarbonate?', subrounded to subangular. | 169901 | 2.99 | 3.41 | 13.6 | 83 | 170 | 10 | 35.48 | 3.5 |
| 3.41 | 3.84 | as @ 1.02 | | | | | | | | | |
| 3.84 | | FOH | | | | | | | | | |

DIAMOND DRILL LOG

Hole No. JH 99 - 02 B

COMPANY: Ogilvie & Sons Construction
SECTION:

PROPERTY: Jackhammer
DEPTH: 8.13 m

ELEVATION:
LOCATION: Drilled parallel to 99-02A;
off-set 0.76 m to avoid cavity.

DIP: - 82°
AZIMUTH: 045°
DRILLER: L. Ogilvie
LOGGER: J. Murray, P.Geol.
DIP TESTS:

NORTHING:
CORE SIZE: EW
DATES DRILLED:
DATE LOGGED: August 26/99

EASTING:
PURPOSE: testing continuity

REMARKS:

| Intersection (Metres) | | Description | Sample # | From | To | Ag ppm | Pb ppm | Zn ppm | Cu ppm | Fe % | Ca % |
|--------------------------|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|------|-----------|-----------|-----------|-----------|---------|------------|
| From | To | | | | | | | | | | |
| 0.0 | 1.22 | Overburden | | | | | | | | | |
| 1.22 | 2.01 | LIMEY QUARTZITE? LIMESTONE? Quite altered, Fe-rich, limonitic, rusty, carbonate stringers, patches manganese, somewhat vuggy. Some segments have brecciated appearance, carb stringers transecting carbonate. | | | | | | | | | |
| 2.01 | 2.74 | as above. Occasional specks ZnS ??, quartz stringers, brecciated. | 169902 | 2.01 | 2.74 | 0.3 | 14 | 35 | | 3 | 2.04 24.46 |
| 2.74 | 2.83 | MASSIVE SULPHIDE, very rusty black chunks 0.64-1.27 cm (occasional yellow sulph shining through), conchoidal fracture, non-magnetic. | | | | | | | | | |
| 2.83 | 3.72 | LIMESTONE. Soft, light yellowish brown, numerous narrow stringers carbonate, flakes, crystals white-clear calcite. Occasional black speck, occasional green tinge. | | | | | | | | | |
| 3.72 | 4.02 | Mainly LOST CORE. Occasional fragments massive sulphide(pyrite). Driller reports mud cavity. | | | | | | | | | |

| | | |
|------|------|---------------------------------------------------------------------------------------------------------------------------------------|
| 4.02 | 4.33 | 60% LOST CORE. Occasional fragments/chunks of sulphide and white yellow-brown, vuggy (limestone?) |
| 4.33 | 6.78 | LIMESTONE. Light brown appearance, numerous narrow white carb stringers, occasional vuggy, occasional lost core, soft, acid reaction. |
| 6.78 | 8.13 | LOST CORE - Driller reports cavity + mud. Fragments at toe are more white, sugary appearance, (subtle schistose layering?) |
| 8.13 | | FOH |

1999 DRILLING RECORDED TIME

| DATE DATE | FORMAN HRS. | DRILLER HRS. | HELPER HRS. | |
|-------------------------|----------------|-----------------|----------------|------------------------------------------------------|
| MAY 31 ST | | | | |
| 31 ST | | | | MOVED DRILL TO SIGHT |
| JUNE | | | | |
| 1 | 4 | 4 | 4 | DRILLED |
| 2 | 5 | 5 | 5 | MOVED DRILL + STATED |
| 3 | 3 | 3 | 3 | KINKED INNER TUBE |
| 4 | 4 | 4 | 4 | GOT NEW TUBE BY NOON |
| 5 | | | | |
| 6 | 8 | 8 8 | | DRILLED |
| 7 | 8 | 8 | | DRILLED |
| 8 | 8 | 8 | 8 | DRILLED |
| 9 ^X | 6 ^X | 8 | 6 ^X | DUG HAND TRENCH |
| 10 | 8 | 8 | | SET UP + DRILLED 5' |
| 11 | 8 | 8 | | DRILLED |
| 12 | 8 | 8 | 8 | DRILLED |
| 13 | 4 | 4 | 4 | DRILLED |
| 15 ^X | 2 ^X | | 2 ^X | MARKED DRILL COLLARS |
| 17 | 4 | 4 | 4 | DRILLED |
| 18 | 3 | 3 | | DRILLED |
| 19 | 4 | 4 | | DRILLED |
| 20 | | | | |
| 21 | 6 | 6 | 6 | DRILLED |
| 22 | 6 | 6 | 6 | DRILLED |
| 23 | 6 | 6 | 6 | DRILLED |
| 24 | 4 | 4 | 4 | DRILLED WITH MOVE |
| 25 | | | | SUNDAY |
| 28 | 6 | 6 | 6 | DRILLED |
| 29 | 6 | 6 | 6 | DRILLED |
| 30 | 6 | 6 | 6 | COMPLETED DRILLING AND MOVED MOST OF EQUIP OUT |
| TOTAL | | 119 | 82 | |
| LESS | | | | |
| 8 HRS | CLAIM | WORK | | |
| 119 HRS | OVER | SEEING | DRILLING | |

Invoice

MURRAY GEOLOGICAL SERVICES
 519 West Innes St.,
 Nelson, BC, V1L 3J2
 250-352-2569
 Fax: 250-352-4641

Invoice Number: OG-001
 Date: August 21, 1998

| | |
|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| To: Mr. Len Ogilvie, Ogilvie & Sons Construction Ltd., Balfour, BC, V0G 1C0. | Terms: Payable Upon Receipt; Interest at 18% compounded monthly after 30 days. |
|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|

| QTY. | DESCRIPTION | UNIT PRICE | TOTAL |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|----------|
| 1 | Geological Services - 1/2 day Core logging, Jackhammer project | \$150.00 | 150.00 |
| 1 | Geological Services - Formatting, typing logs (2 hrs @ \$37.5) | \$ 75.00 | 75.00 |
| 1 | Reimbursable Expenses - Mileage: 66.7 km @ \$0.35/km = \$ 23.25 - Freight (Greyhound) \$ 10.19 - Assays (Acme Labs) \$ 94.48 TOTAL: \$127.92 | \$127.92 | 127.92 |
| 1 | 15% Hidden Expenses | \$ 19.19 | 19.19 |
| 1 | Payment Received - Thank you! | (200.00) | (200.00) |
| | | | 0.00 |
| | | | 0.00 |
| | | SUBTOTAL | 172.11 |
| | | SALES TAX RATE % | |
| | | SALES TAX | 0.00 |
| | | SHIPPING & HANDLING | |
| | | TOTAL DUE | \$172.11 |

THANK YOU FOR YOUR ORDER!

Please make cheque payable to J. Murray

Assessment Work. Copies 10.00
 PRINTING 20.00

Geologist 372.11
 Cost of Report → 402.11
 Claims Renewal for 2 years 250.00

DVORAK EXCAVATING STATEMENT
 RR #3 B11 C1
 NELSON, B.C.
 V1L 5P6
 825-4371

DATE OCT 31 19 98

TAX REG. NO: 1133 98697

LEN OGALVIE

| DATE | DETAILS | DEBIT | CREDIT | BALANCE |
|-----------------------|-------------------|--------|--------|---------|
| | 6 1/2 HRS @ 65 | 422 50 | | |
| | TRUCKING 1/2 @ 65 | 97 50 | | |
| | TOTAL | 520 00 | | |
| | GST | 36 46 | | |
| | TOTAL | 556 46 | | |
| <i>Paid Nov 17/98</i> | | | | |
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