2850 E
2875 E
2900 E
2925 E
2950 E
2975 E
3000 E
2025 N.
2000 N.
1975 N.
1950 N.
1925 N.
H55
H65
H50, 51
H52
H53
H54
H56
H58
H59
H60
SHAFT
RTP 2
HOIST HOUSE
LAYDOWN PAD
SHOP
COMPRESSORS
ELEC CONTROLS
GEN. SETS
EXISTING RAISE
PORTAL
TP11
TP2
PTP4
L= 46.8m
V= 31.6m³
Rib Grade 7.88%
L= 30m
V= 31m³
15.8% Gr
ORE OUTLINES

NOVAMIN RESOURCES INC.

RUNDLE MINE

SURFACE

63.5219

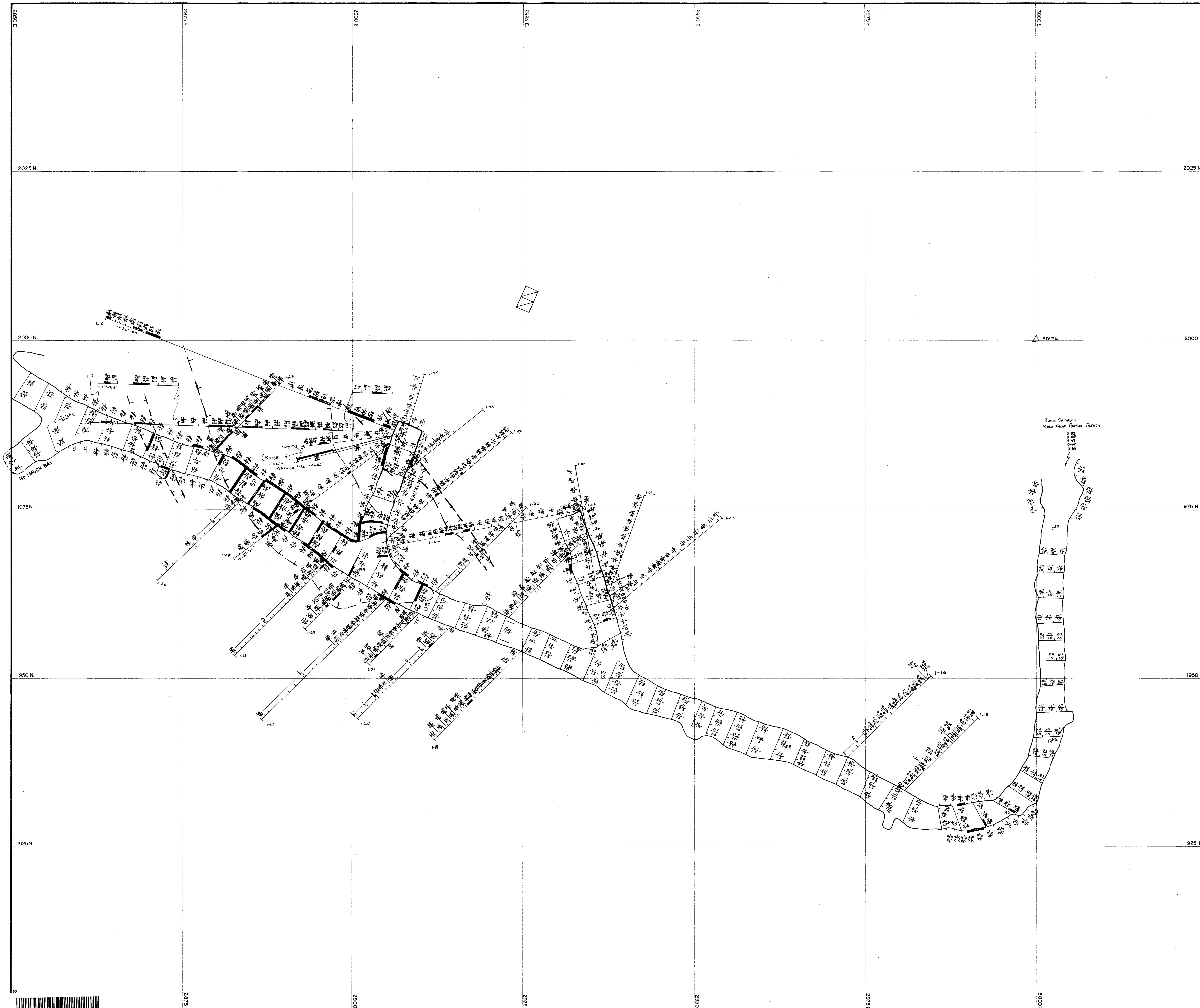
BLOCK No.: 6 (1900 N. - 2850 E.)	SCALE: 1:200
DRAWN BY:	REVISED BY:
CHECKED BY:	CHECKED BY:
DATE:	DATE:

4101659W0001 63.5219 DALE

200

OM87-5-L-092

Fig 4a



LEGEND

922 ≥ 7·0 grams/tonne

918 3·5–7·0 grams/tonne

913 1·0–3·5 grams/tonne

ORE OUTLINES

NOVAMIN RESOURCES INC.
RUNDLE MINE

ASSAY PLAN: CHIP SAMPLE
DECLINE LEG I

63.5219

BLOCK No. 6 (1900 N - 2850 E)	SCALE 1:200
DRAWN BY C.P. ZORZI	REVISED BY S. Walker
CHECKED BY	CHECKED BY
DATE September 1987	DATE March, 1988

210

0M87-5-L-092

Fig 4 b

2875 E. 2900 E. 2925 E. 2950 E. 2975 E. 3000 E. 3025 E.

2025 N. 2025N

2000N

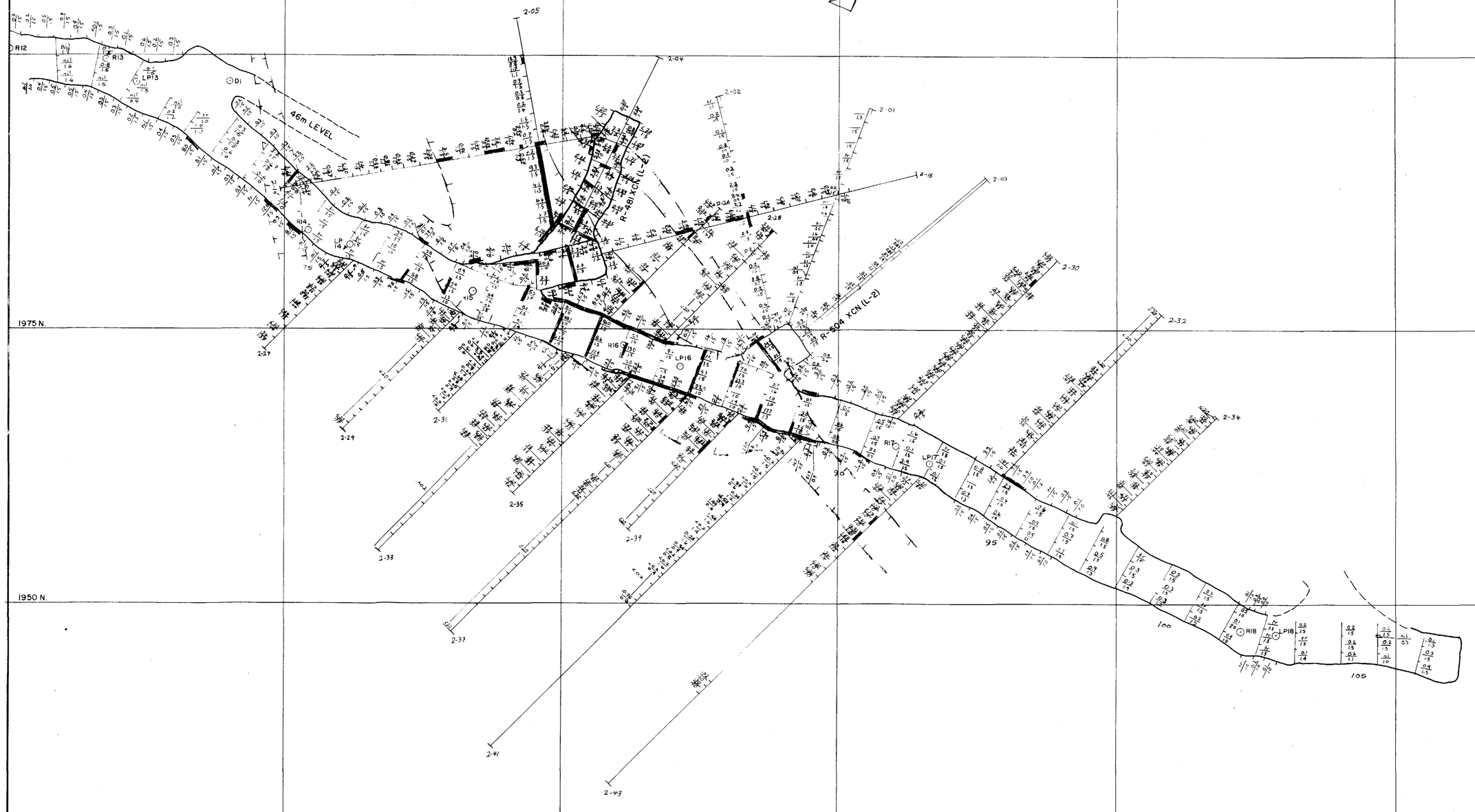
1975 N. 1975N

1950 N. 1950N

1925 N. 1925N

2875E 2900E 2925E 2950E 2975E 3000E 3025E

2900N



NOVAMIN RESOURCES INC.

RUNDLE MINE

ASSAY PLAN CHIP SAMPLE

DECLINE LEG II

63.5219

BLOCK No. 6 (1900N : 2850E)	SCALE 1:200
DRAWN BY	REVISED BY S. Walker
CHECKED BY	CHECKED BY
DATE	DATE March, 1988

0M87-5-L-092

2850 E
2875 E
2900 E
2925 E
2950 E
2975 E
3000 E

2025 N
2000 N
1975 N
1950 N
1925 N
1900 N

2-446 ACCESS DRIFT
R26
FLP 26
FLP 23
BLP23
BLP22
R-496 XCS (L-3)
R-514 XCS (L-3)
BLP20
FLP19
BLP19
R18
FLP18
2-22A

ORE OUTLINES

NOVAMIN RESOURCES INC.
RUNDLE MINE

ASSAY PLAN-CHIP SAMPLE

DECLINE LEG III

63.5219

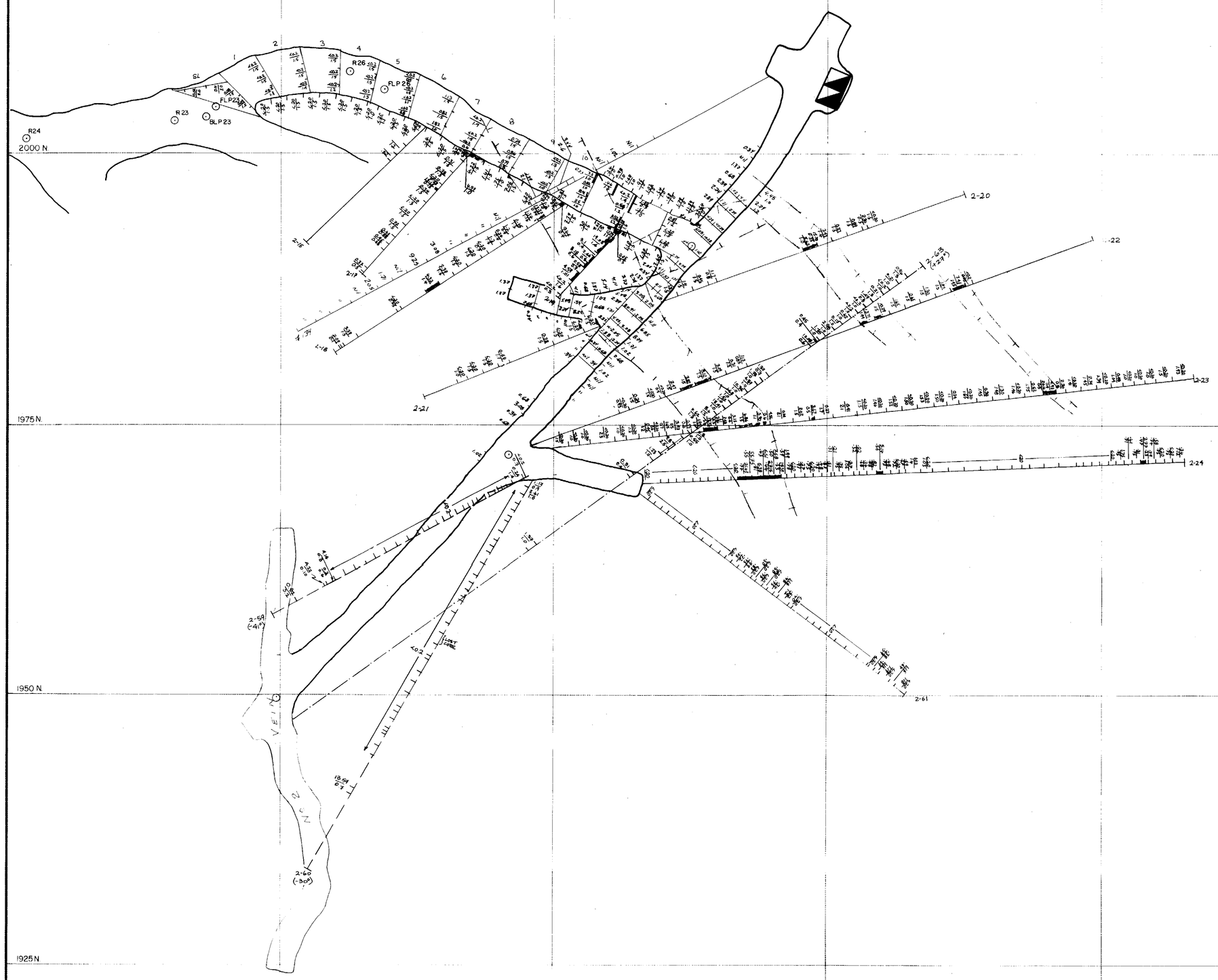
BLOCK No.: 6 (1900 N. - 2850E.)	SCALE: 1:200
DRAWN BY:	REVISED BY:
CHECKED BY:	CHECKED BY:
DATE: January, 1988	DATE:

OM87-5-L-092

Fig # d

2850 E
2875 E
2900 E
2925 E
2950 E
2975 E
3000 E

2025 N
2000 N
1975 N
1950 N
1925 N



ORE OUTLINES

1900 N

2850 E
2875 E
2900 E
2925 E
2950 E
2975 E
3000 E

NOVAMIN RESOURCES INC.

RUNDLE MINE

ASSAY PLAN CHIP SAMPLE
91m (300') LEVEL

63.5219

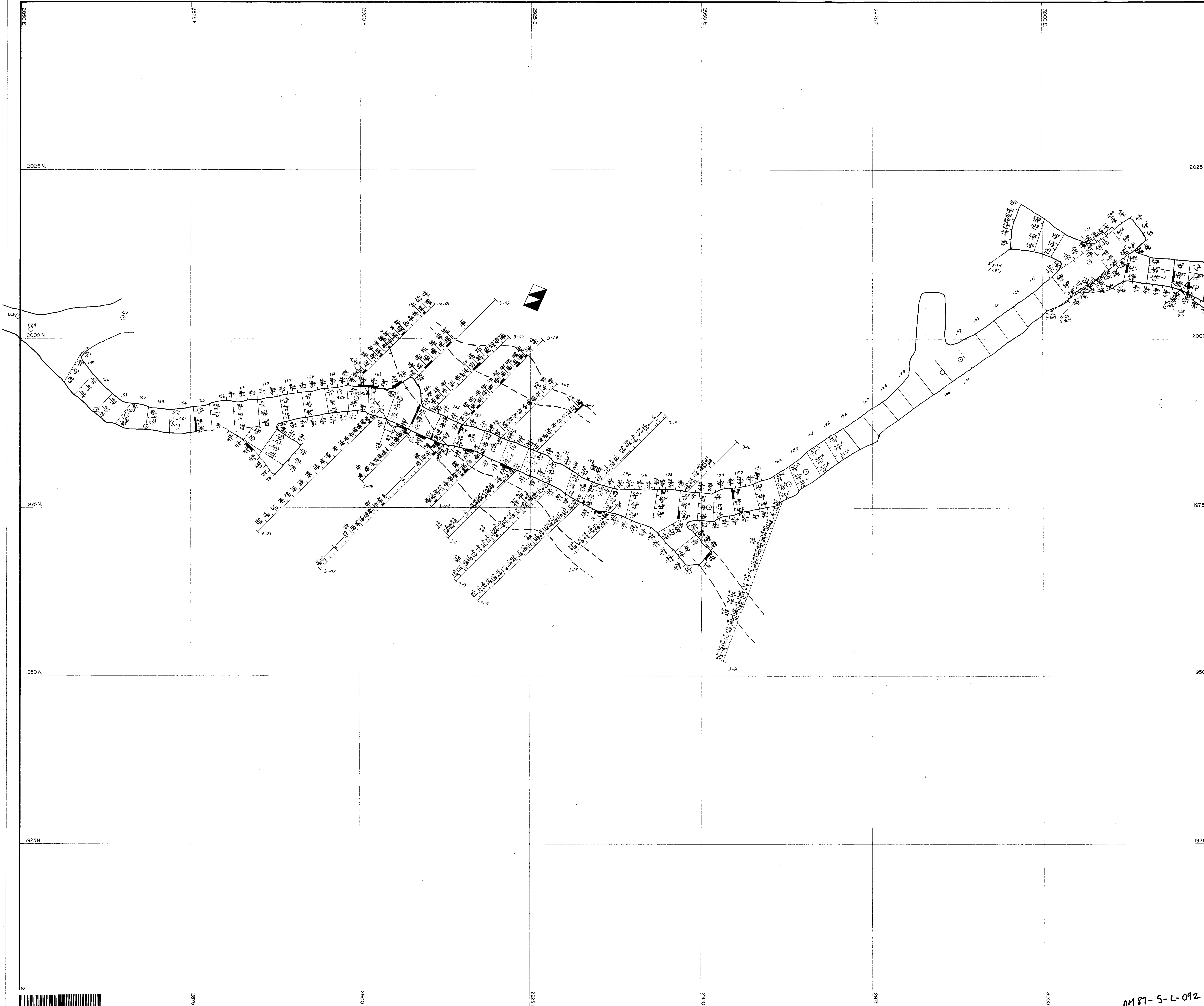
BLOCK No. 6 (1900 N. - 2850E.)	SCALE : 1: 200
DRAWN BY	REVISED BY:
CHECKED BY	CHECKED BY:
DATE January, 1988	DATE

OM 87-5-L-092

Fig 4e

28.

240



NOVAMIN RESOURCES INC.

RUNDLE MINE

ASSAY PLAN - CHIP SAMPLE
DECLINE LEG IV

63.5219

BLOCK No. 6 (1900 N - 2850 E)	SCALE: 1:200
DRAWN BY:	REVISED BY:
CHECKED BY:	CHECKED BY:
DATE:	DATE:

0M87-5-L-092

Fig 4 F

250

2

2850 E | 2875 E | 2900 E | 2925 E | 2950 E | 2975 E | 3000 E

2025 N

2000 N

1975 N

1950 N

1925 N

R-490 XCN (L-I)

R-529 XCN (L-I)

back fit 6.3 g/t

13.40m 35.50m

LEGEND

- Average grade — g/t
- Estimated tonnes in round
- Bulk muck average assay
- 922 ≥ 7 grams/tonne
- 918 3.5–7.0 grams/tonne
- 913 1.0–3.5 grams/tonne

NOVAMIN RESOURCES INC.

RUNDLE MINE

ASSAY PLAN MUCK SAMPLE

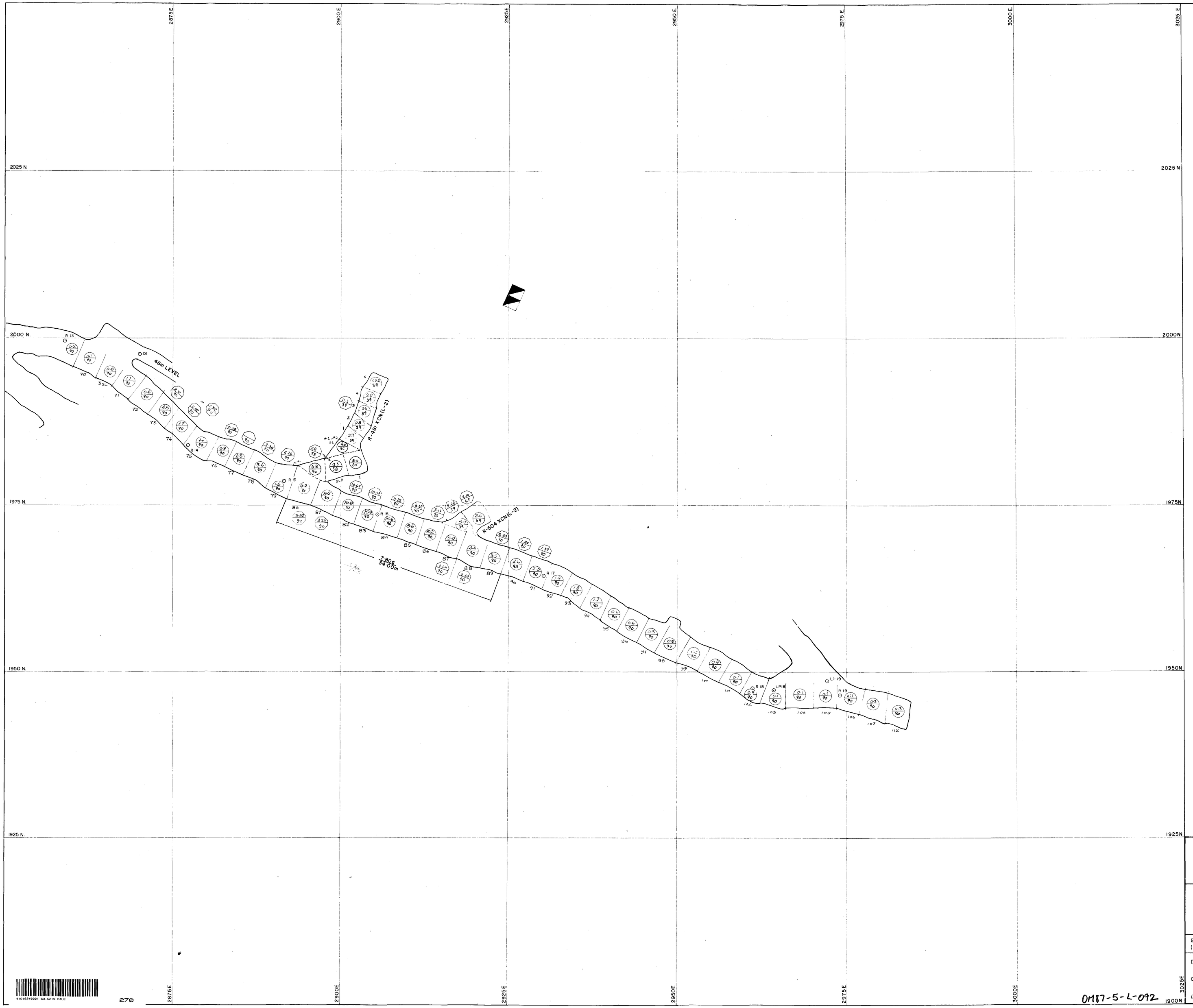
DECLINE LEG I

63.5219

BLOCK No.: 6 (1900 N. - 2850E.)	SCALE: 1 200
DRAWN BY: C.P. ZORZI	REVISED BY:
CHECKED BY:	CHECKED BY:
DATE: September 1987	DATE:

OM87-5-L-092

Fig 5a



EXPLANATION

- Average grade in grams/tonne
- Estimated tonnes in round
- Bulk muck average assay
- ≥ 7.0 grams/tonne
- 3.5 - 7.0 grams/tonne
- 1.0 - 3.5 grams/tonne

NOVAMIN RESOURCES INC.

RUNDLE MINE

ASSAY PLAN MUCK SAMPLE

DECLINE LEG II

63.5219

BLOCK No: 6 (1900N. 2850E.)

SCALE: 1:200

DRAWN BY:

REVISED BY: A.W. Beecham

CHECKED BY:

CHECKED BY:

DATE: March, 1988

DATE

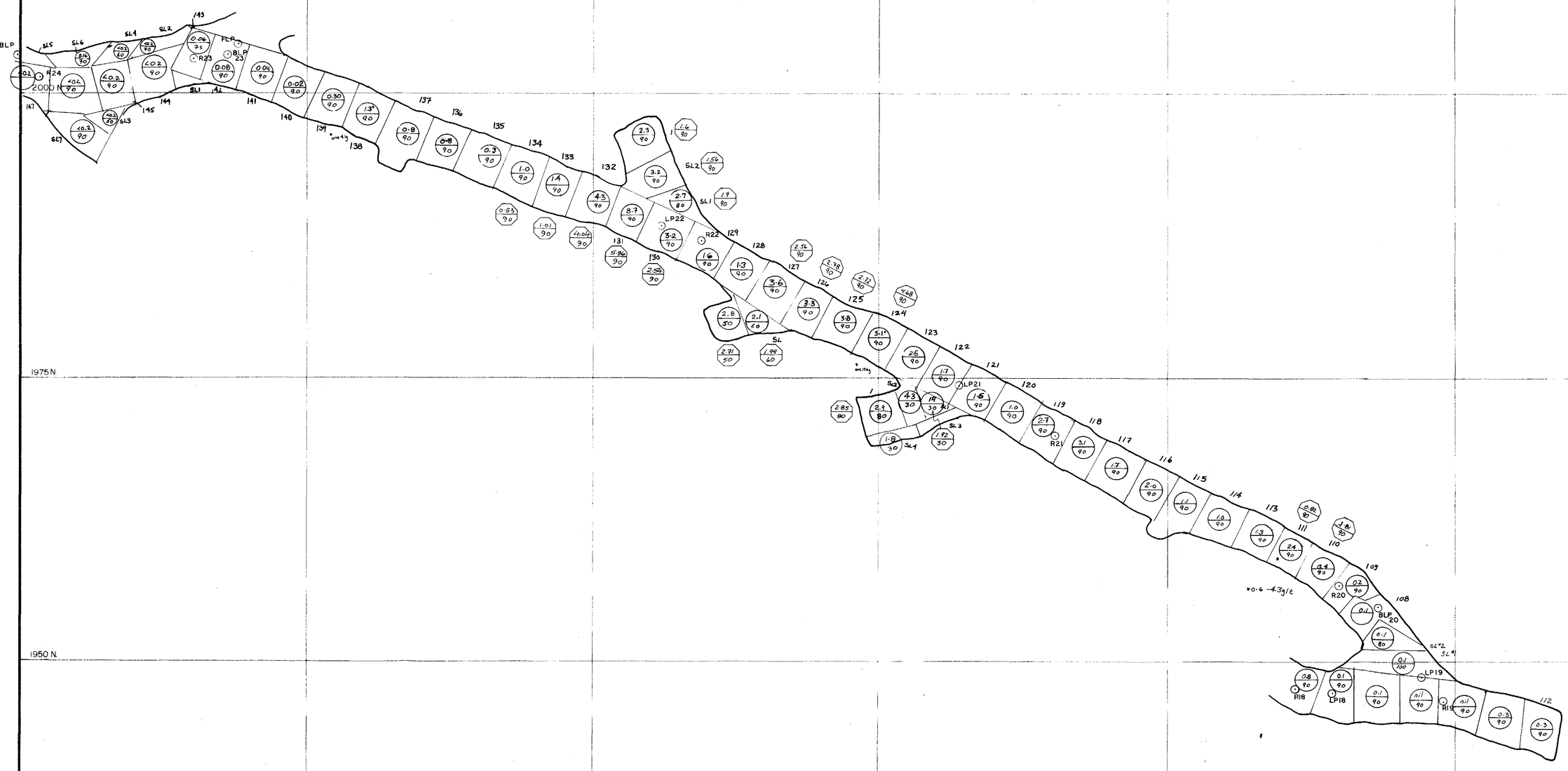
OM87-5-L-092

Fig 54

270

2850 E
2875 E
2900 E
2925 E
2950 E
2975 E
3000 E

2025 N.
2000 N.
1975 N.
1950 N.
1925 N.
1900 N.



EXPLANATION

- Average grade in grams/tonne
- Estimated tonnes in round
- Bulk muck average assay
- ≥ 7·0 grams/tonne
- 3·5 - 7·0 grams/tonne
- 1·0 - 3·5 grams/tonne

NOVAMIN RESOURCES INC.

RUNDLE MINE

ASSAY PLAN - MUCK SAMPLE

DECLINE LEG III

63 5219

BLOCK No. 6 (1900 N. - 2850 E.)	SCALE : 1:200
DRAWN BY :	REVISED BY:
CHECKED BY :	CHECKED BY:
DATE : January, 1988	DATE :

OM87-5-L-092

fig 5c

280

2850E | 2875 E | 2900 E | 2925 E | 2950E | 2975 E | 3000E

2025 N

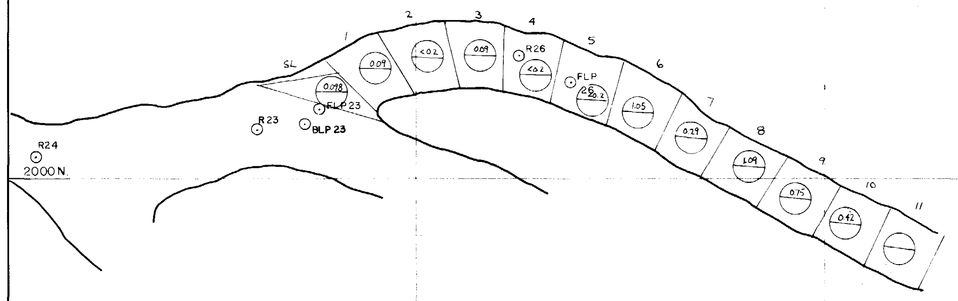
2000 N

1975 N

1950 N

1925 N

1900 N



EXPLANATION

- 58 / 95 — Average grade in grams/tonne; Estimated tonnes in round
- 58 / 95 — Bulk muck average assay
- ≥ 7.0 grams/tonne
- 3.5 - 7.0 grams/tonne
- 1.0 - 3.5 grams/tonne

NOVAMIN RESOURCES INC

RUNDLE MINE 63.5219

ASSAY PLAN MUCK SAMPLE

91 m (300') LEVEL

BLOCK No.: 6 (1900 N 2850 E)

SCALE: 1:200

DRAWN BY: _____

REVISED BY: _____

CHECKED BY: _____

CHECKED BY: _____

DATE: January, 1988

DATE: 1/13, 88

OM87-5-L-092

182

290

4101639001 63.5219 DALE

fig 5 d

2850 E
2875 E
2900 E
2925 E
2950 E
2975 E
3000 E
2025 N
2000 N
1975 N
1950 N
1925 N
BLP
R24
R23
R25
R28
R27
R29
FLP27
FLP29
SL#1
SL#2
SL#3
mixed with muck from SL N of R4. 164.

EXPLANATION

- Average grade in grams/tonne
- Estimated tonnes in round
- Bulk muck average assay
- ≥ 7·0 grams / tonne
- 3·5 - 7·0 grams/tonne
- 1·0 - 3·5 grams /tonne

NOVAMIN RESOURCES INC.

RUNDLE MINE

63.52A

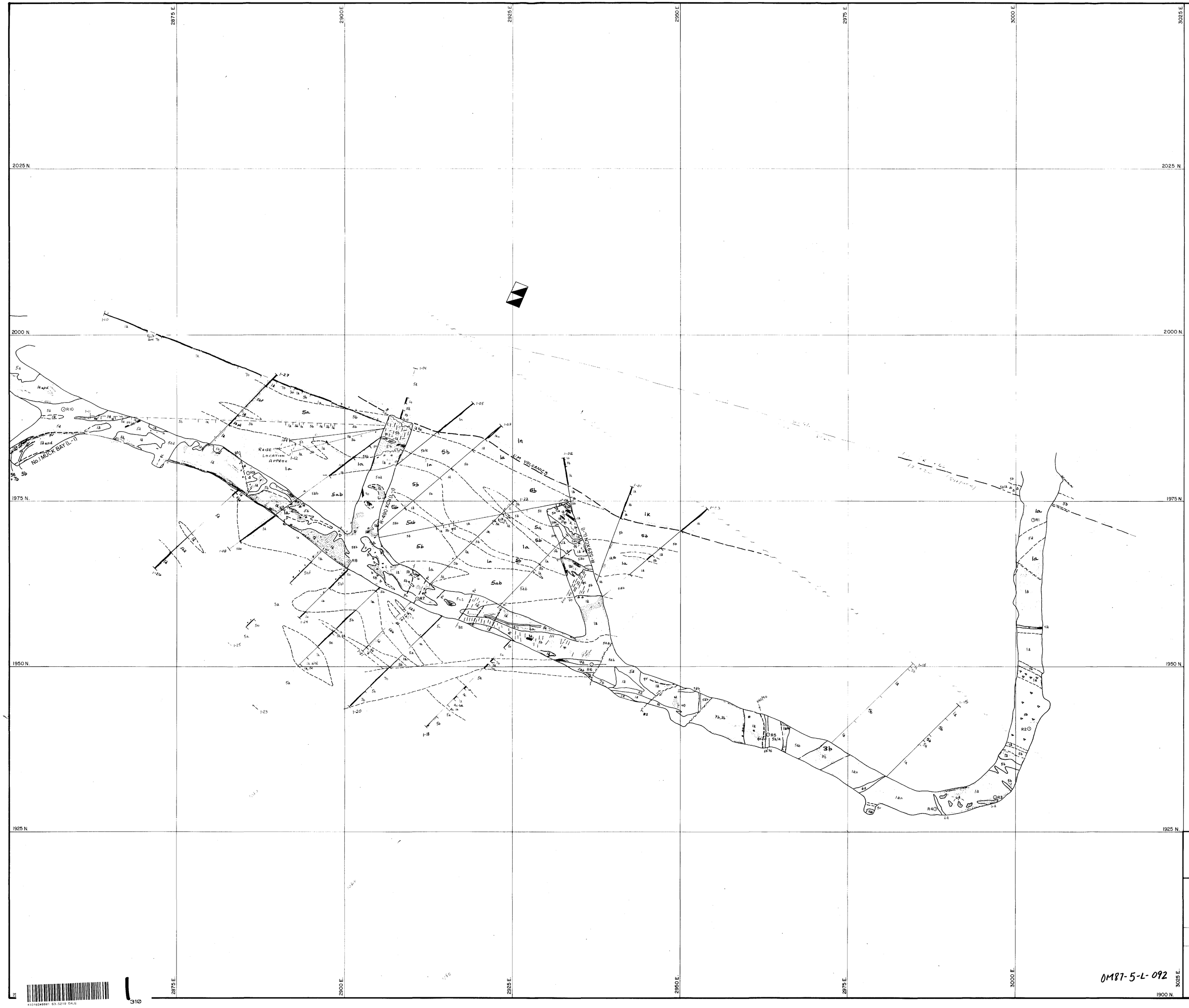
DECLINE LEG IV
ASSAY PLAN MUCK SAMPLE

BLOCK No. 6 (1900 N. - 2850E.)
SCALE: 1:200
DRAWN BY:
REVISED BY: A.W. Beecham
CHECKED BY:
CHECKED BY:
DATE:
DATE: March, 1988.

OM87-5-L-092

300

Fig 5c



LEGEND

- 1a Mafic volcanics
- 1d Pillowed
- 1b Sheared mafic volcanics
- 1c Coarse grained mafic volcanics
- 1k Ultramafic volcanics
- 1n Talc - chlorite - carbonate schist
- 3a Fine grained mafic dykes
- 3b Gabbro
- 3c Metadiabase
- 3d "Dacite" dyke
- 4a Argillite - siltstone
- 4b Greywacke - massive; amphibolitized
- 4c Chert
- 4e Exhalite
- 5a Grey feldspar porphyry
- 5b Altered, red feldspar porphyry
- 5c Fine grained felsic dyke, aplite
- 5e Hornblende, feldspar porphyry
- 5i "Hybrid" rock, intrusive breccia of 5a or 5b + 1a
- 6a Feldspar rock, jasperite
- 6b Carbonate rock, carbonatized ultramafic
- 6c Sericite schist
- 7a Late diabase
- 7b Lamprophyre (biotite, hornblende)
- q.v. Quartz vein
- q.v.s. Quartz vein stockwork
- q.c. Quartz carbonate

ABBREVIATIONS

alt	Altered
bio	Biotite
chl	Chlorite
cp	Chalcopyrite
epid	Epidote
F.P.	Feldspar porphyry
gf	Graphite(ic)
hem	Specular hematite
mt	Magnetite
pl	Pillowed
py	Pyrite
ser	Sericite
sil	Silicified
sx	Spinifex
V.G.	Visible gold

SYMBOLS

- Sulphides >2%
- Sulphides >10%
- Light grey alteration
- Carbonatization
- Sericite
- "Hybrid rocks" (intrusive breccia)
- Contacts
- Outline of mineralization or values
- Pillows
- Fault
- Fractures

NOVAMIN RESOURCES INC.

RUNDLE MINE

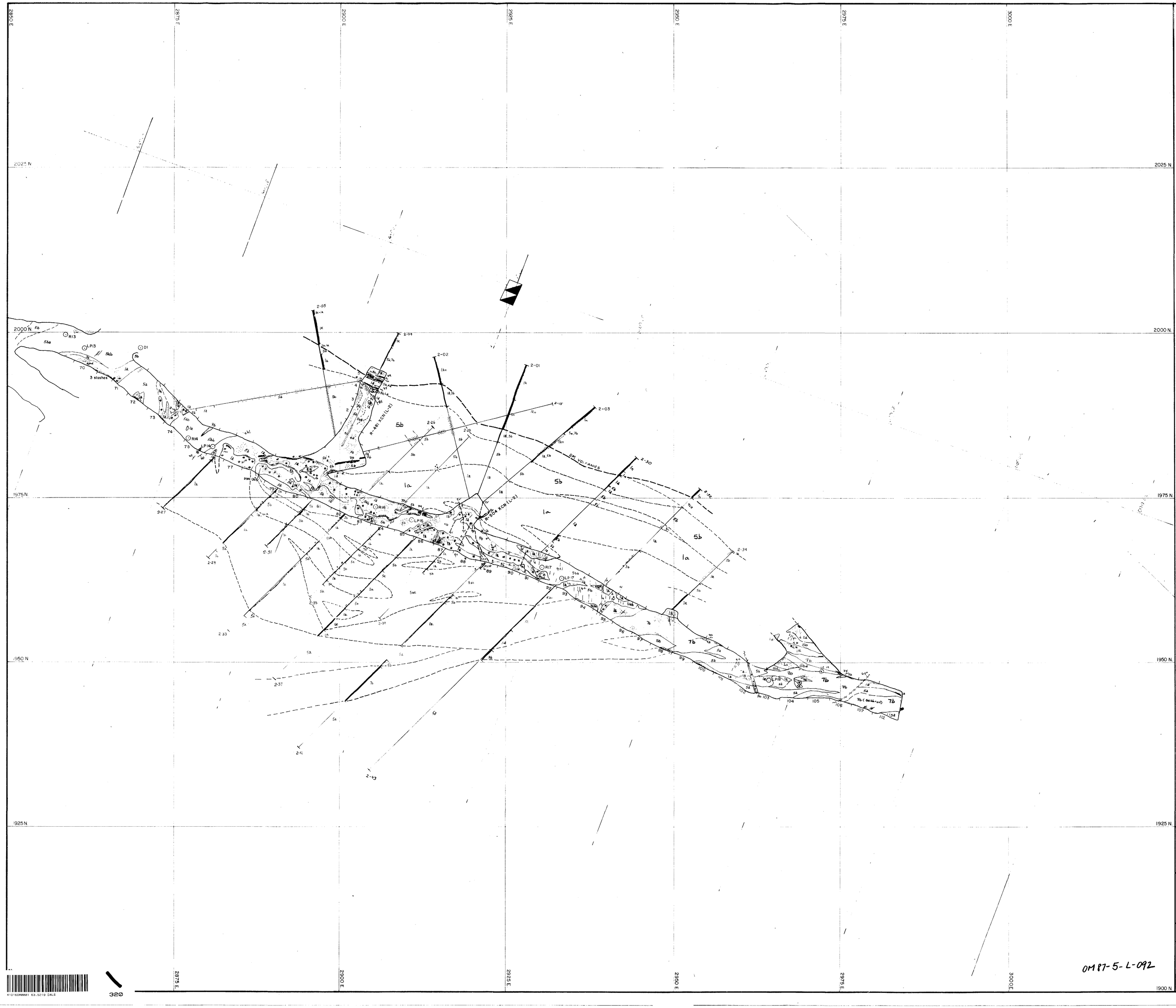
GEOLOGY 63.5219

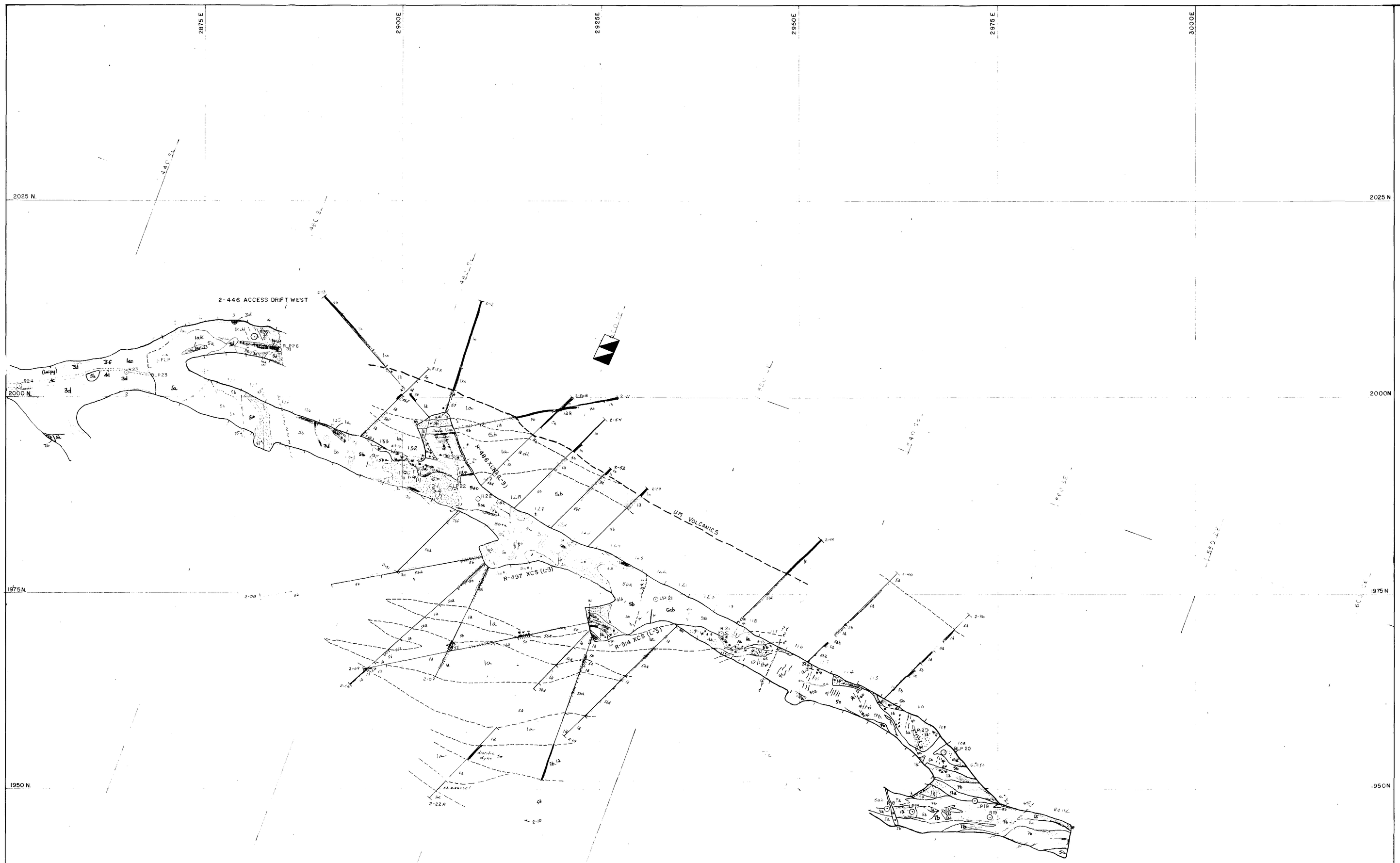
DECLINE - LEG I

BLOCK No: 6 (1900 N - 2850 E)	SCALE: 1:200
DRAWN BY:	REVISED BY:
CHECKED BY:	CHECKED BY:
DATE: January, 1988	DATE:

OM87-5-L-092

Fig 6a


2850 E
2875 E
2900 E
2925 E
2950 E
2975 E
3000 E
2025 N
2000 N
1975 N
1950 N
1925 N
1900 N
R13
LP13
D1
R14
LP14
R15
LP15
R16
LP16
R17
LP17
2-01
2-02
2-03
2-04
2-05
2-24
2-25
2-26
2-27
2-28
2-29
2-30
2-31
2-32
2-33
2-34
2-35
2-36
2-37
2-41
2-43
R-481 XCM (L-2)
R-504 XCM (L-2)
3 slashes
1a
5b
7b
NOVAMIN RESOURCES INC.
RUNDLE MINE
63.5219
GEOLOGY
DECLINE LEG II
BLOCK No. 6 (1900 N. - 2850E.)
SCALE 1: 200
DRAWN BY C.P.ZORZI
REVISED BY:
CHECKED BY:
CHECKED BY:
DATE September 1987
DATE March, 1988
OM87-5-L-092
320



NOVAMIN RESOURCES INC.

RUNDLE MINE

63.5219

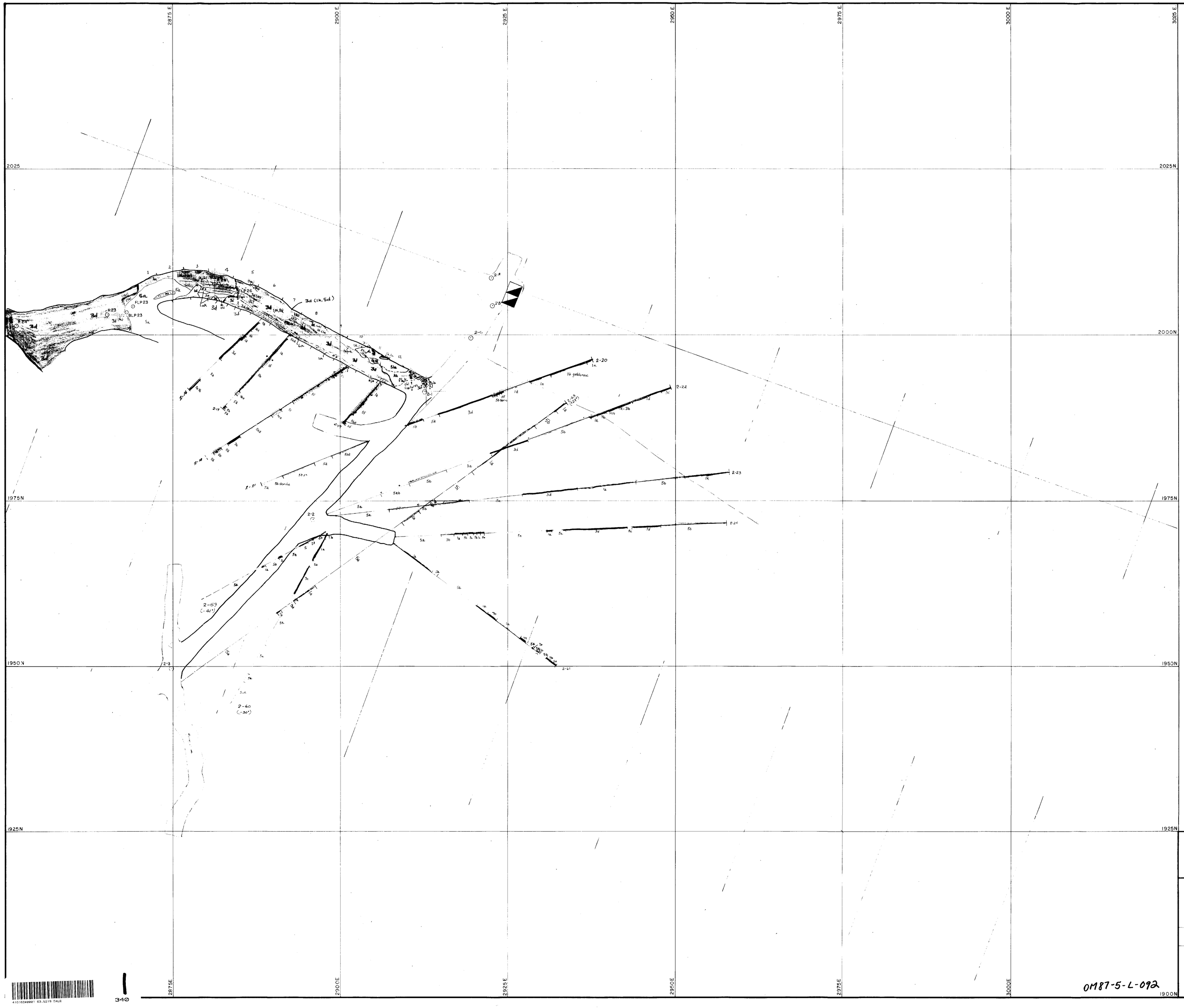
DECLINE LEG III

GEOLOGY

BLOCK No. 6 (1900N. 2850E.)	SCALE: 1:200
DRAWN BY:	REVISED BY:
CHECKED BY:	CHECKED BY:
DATE: September 1987	DATE: March, 1988

OM87-5-L-092

330



LEGEND

- 1a Mafic volcanics
- 1d Pillowed
- 1b Sheared mafic volcanics
- 1c Coarse grained mafic volcanics
- 1k Ultramafic volcanics
- 1n Talc - chlorite - carbonate schist
- 3a Fine grained mafic dykes
- 3b Gabbro
- 3c Metadiabase
- 3d "Dacite" dyke
- 4a Argillite - siltstone
- 4b Greywacke - massive; amphibolitized
- 4c Chert
- 4e Exhalite
- 5a Grey feldspar porphyry
- 5b Altered, red feldspar porphyry
- 5c Fine grained felsic dyke, aplite
- 5e Hornblende, feldspar porphyry
- 5i "Hybrid" rock, intrusive breccia of 5a or 5b + 1a
- 6a Feldspar rock, jasperite
- 6b Carbonate rock, carbonatized ultramafic
- 6c Sericite schist
- 7a Late diabase
- 7b Lamprophyre (biotite, hornblende)
- q.v. Quartz vein
- q.v.s. Quartz vein stockwork
- q.c. Quartz carbonate

ABBREVIATIONS

alt	Altered
bio	Biotite
chl	Chlorite
cp	Chalcopyrite
epid	Epidote
F.P.	Feldspar porphyry
gf	Graphite(ic)
hem	Specular hematite
mt	Magnetite
pl	Pillowed
py	Pyrite
ser	Sericite
sil	Silicified
sx	Spinifex
V.G.	Visible gold

SYMBOLS

- Sulphides >2%
- Sulphides >10%
- Light grey alteration
- Carbonatization
- Sericite
- "Hybrid rocks" (intrusive breccia)
- Contacts
- Outline of mineralization or values
- Pillows
- Fault
- Fractures

NOVAMIN RESOURCES INC.

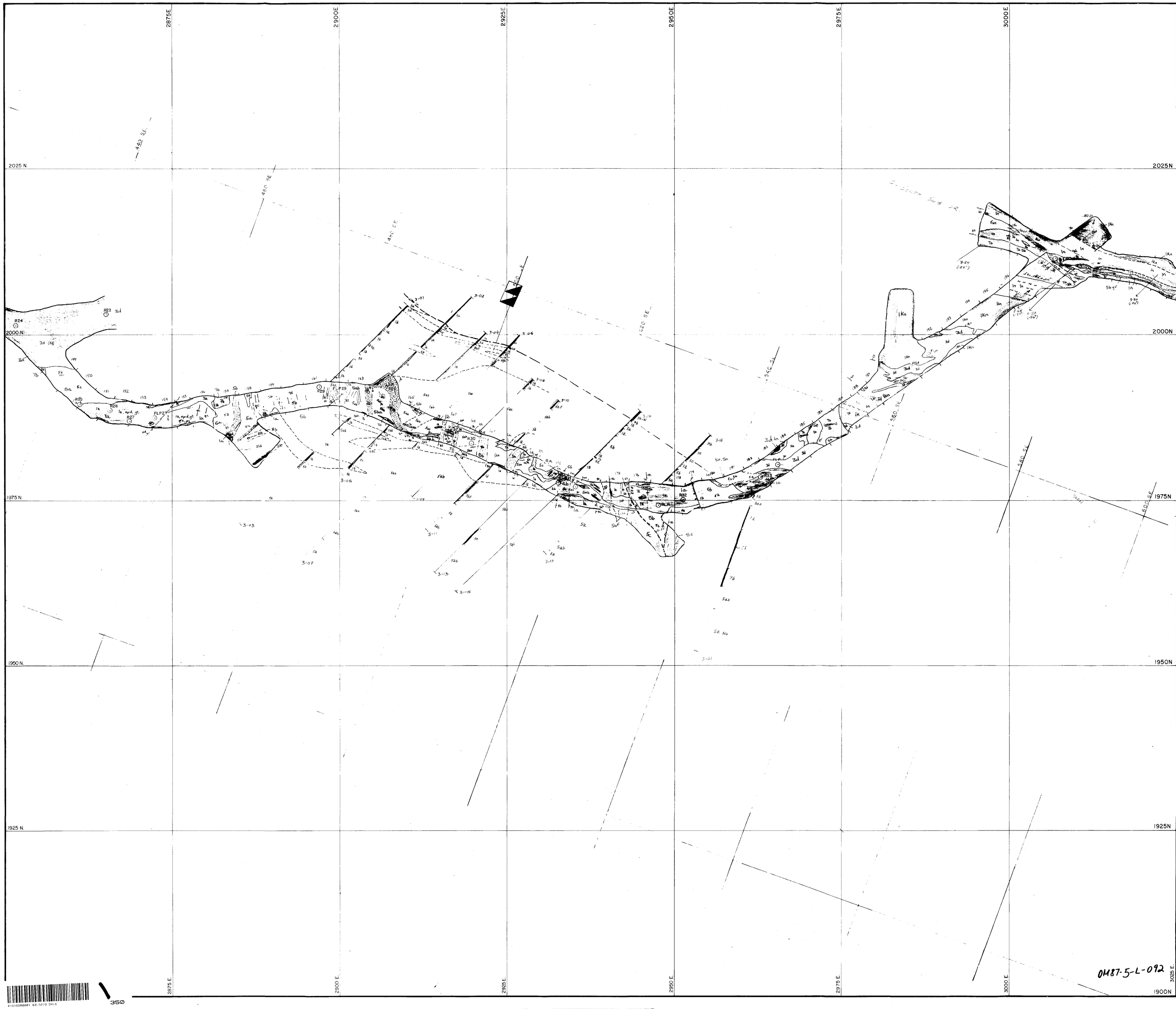
RUNDLE MINE

91m (300') LEVEL

GEOLOGY 63.5219

BLOCK No. 6 (1900 N - 2850 E.)	SCALE 1: 200
DRAWN BY:	REVISED BY:
CHECKED BY:	CHECKED BY:
DATE: January, 1988	DATE:

OM87-5-L-092



LEGEND

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- 1d Pillowed
- 1b Sheared mafic volcanics
- 1c Coarse grained mafic volcanics
- 1k Ultramafic volcanics
- 1n Talc - chlorite - carbonate schist
- 3a Fine grained mafic dykes
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- 3c Metadiabase
- 3d "Dacite" dyke
- 4a Argillite - siltstone
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- 4c Chert
- 4e Exhalite
- 5a Grey feldspar porphyry
- 5b Altered, red feldspar porphyry
- 5c Fine grained felsic dyke, aplite
- 5e Hornblende, feldspar porphyry
- 5i "Hybrid" rock, intrusive breccia of 5a or 5b + 1a
- 5p Feldspar rock, jasperite
- 5q Carbonate rock, carbonatized ultramafic
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- 7a Late diabase
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V.G.	Visible gold

SYMBOLS

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- Light grey alteration
- Carbonatization
- Sericite
- "Hybrid rocks" (intrusive breccia)
- Contacts
- Outline of mineralization or values
- Pillows
- Fault
- Fractures

NOVAMIN RESOURCES INC.

RUNDLE MINE

DECLINE LEG IV
GEOLOGY

63.5219

BLOCK No: 6 (1950 N - 2850 E)	SCALE: 1:200
DRAWN BY:	REVISED BY:
CHECKED BY:	CHECKED BY:
DATE: January, 1988	DATE:

OM87-5-L-092

350

2700E 2600E 2500E 3600E 3100E

2200N 2100N 2000N 1900N

3382-14A 3382-14 3382-18 3382-15 3382-35 3382-22-A 3382-36 3382-47 3382-58 3382-42 3382-68 3382-17 3382-45 3382-21 3382-59 3382-53 3382-54 3382 34 3382-75 3382-61 3382-69 3382-60 3382-64 3382-57 3382-62 3382-63 3382-65 3382-48 3382-85 3382-84 3382-44 3382-76 3382-56 3382-72 3382-86 3382-75 3382-12

TP-89 TP-90 TP-92 TP-91 TP-88 TP-87 TP-86 TP-71 TP-102 TP-101 TP-100 TP-16 TP-33 TP-74 TP-73 TP-77 TP-97 TP-48 TP-67 TP-73 TP-78 TP-83 TP-84 TP-85 TP-60 TP-95

WATER SOURCE FOR DRILLING

3382#9 3382#8 3382#7 3382#6 3382#5 3382#3 3382#4 3382#2 3382#1 3382#24 3382#30 3382#29 3382#28 3382#33

S.H.E. LINE

4.6 S.E. 4.8 S.E. 5.0 S.E. 5.6 S.E. 6.4 S.E. 7.0 S.E. 7.6 S.E. 8.2 S.E. 8.8 S.E. 9.4 S.E. 10.0 S.E. 10.6 S.E. 11.2 S.E. 11.8 S.E. 12.4 S.E. 13.0 S.E. 13.6 S.E. 14.2 S.E. 14.8 S.E. 15.4 S.E. 16.0 S.E. 16.6 S.E. 17.2 S.E. 17.8 S.E. 18.4 S.E. 19.0 S.E. 19.6 S.E. 20.2 S.E. 20.8 S.E. 21.4 S.E. 22.0 S.E. 22.6 S.E. 23.2 S.E. 23.8 S.E. 24.4 S.E. 25.0 S.E. 25.6 S.E. 26.2 S.E. 26.8 S.E. 27.4 S.E. 28.0 S.E. 28.6 S.E. 29.2 S.E. 29.8 S.E. 30.4 S.E. 31.0 S.E. 31.6 S.E. 32.2 S.E. 32.8 S.E. 33.4 S.E. 34.0 S.E. 34.6 S.E. 35.2 S.E. 35.8 S.E. 36.4 S.E. 37.0 S.E. 37.6 S.E. 38.2 S.E. 38.8 S.E. 39.4 S.E. 40.0 S.E. 40.6 S.E. 41.2 S.E. 41.8 S.E. 42.4 S.E. 43.0 S.E. 43.6 S.E. 44.2 S.E. 44.8 S.E. 45.4 S.E. 46.0 S.E. 46.6 S.E. 47.2 S.E. 47.8 S.E. 48.4 S.E. 49.0 S.E. 49.6 S.E. 50.2 S.E. 50.8 S.E. 51.4 S.E. 52.0 S.E. 52.6 S.E. 53.2 S.E. 53.8 S.E. 54.4 S.E. 55.0 S.E. 55.6 S.E. 56.2 S.E. 56.8 S.E. 57.4 S.E. 58.0 S.E. 58.6 S.E. 59.2 S.E. 59.8 S.E. 60.4 S.E. 61.0 S.E. 61.6 S.E. 62.2 S.E. 62.8 S.E. 63.4 S.E. 64.0 S.E. 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995.8 S.E. 996.4 S.E. 997.0 S.E. 997.6 S.E. 998.2 S.E. 998.8 S.E. 999.4 S.E. 1000.0 S.E.

1000 NE 1000 SE

* NOTE: Starting point for drill-section reference line, section 578.00 S.E. of 1980.00N; 3100.00 E.

Diamond drill hole, casing in place and surveyed

Diamond drill hole — casing not in place, or not located. Location approximate

Shaft

Raise

Permanent survey point

63.5219

SULPETRO MINERALS LIMITED
TORONTO, CANADA

RUNDLE SOUTH PROPERTY

SURFACE DIAMOND DRILLING PLAN
CENTRAL SHEET

SCALE 1:500 NEWTON TWP., ONT.

APPROX LAT & LONG. OF LOWER RT COR OF DWG
° ' " LATITUDE
° ' " LONGITUDE

PROJECT NO. 3382 SHEET NO. — OF —

REPORT NO. —

N.T.S. 52 P/2

OM87-5-L-092

Figure

3000E 3100E 3200E 3300E 3400E

2100 N

2000 N

1900N

1800N

NB Starting point for drill-section reference line section 578.50SE at 1980.00N, 3000.00E

EXPLANATION

- Diamond drill hole, casing in place and surveyed
- Diamond drill hole casing not in place or not located. Location approximate
- Shaft
- Pits
- Permanent survey point
- Turning point

63.5219

DRAWING RECORD AND STATUS

NAME	DRAWN / APPROVED	DATE	REVISION NO.
A LABINE	REDRAWN	14 10 86	

novamin
Resources Inc
TORONTO CANADA

RUNDLE SOUTH PROPERTY Newton Twp Ontario

Surface Diamond Drilling Plan EAST SHEET

SCALE 1:500

APPROX LAT & LONG OF LOWER RT COR OF DWG
LATITUDE
LONGITUDE

PROJECT NO 3382

REPORT NO

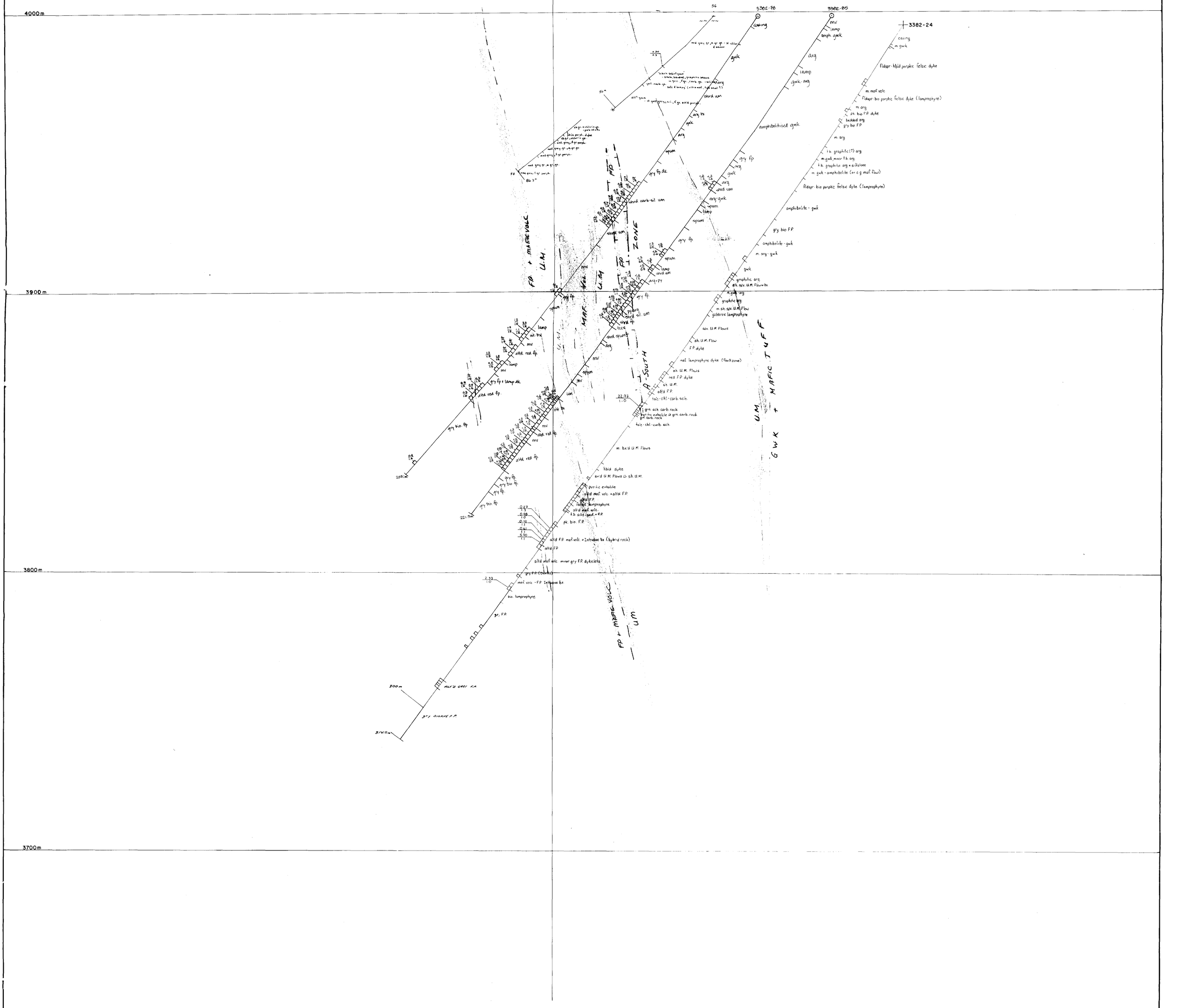
SHEET NO OF

NTS 41 O 16

OM87-5-L-092

Fig 70

370



63.5219

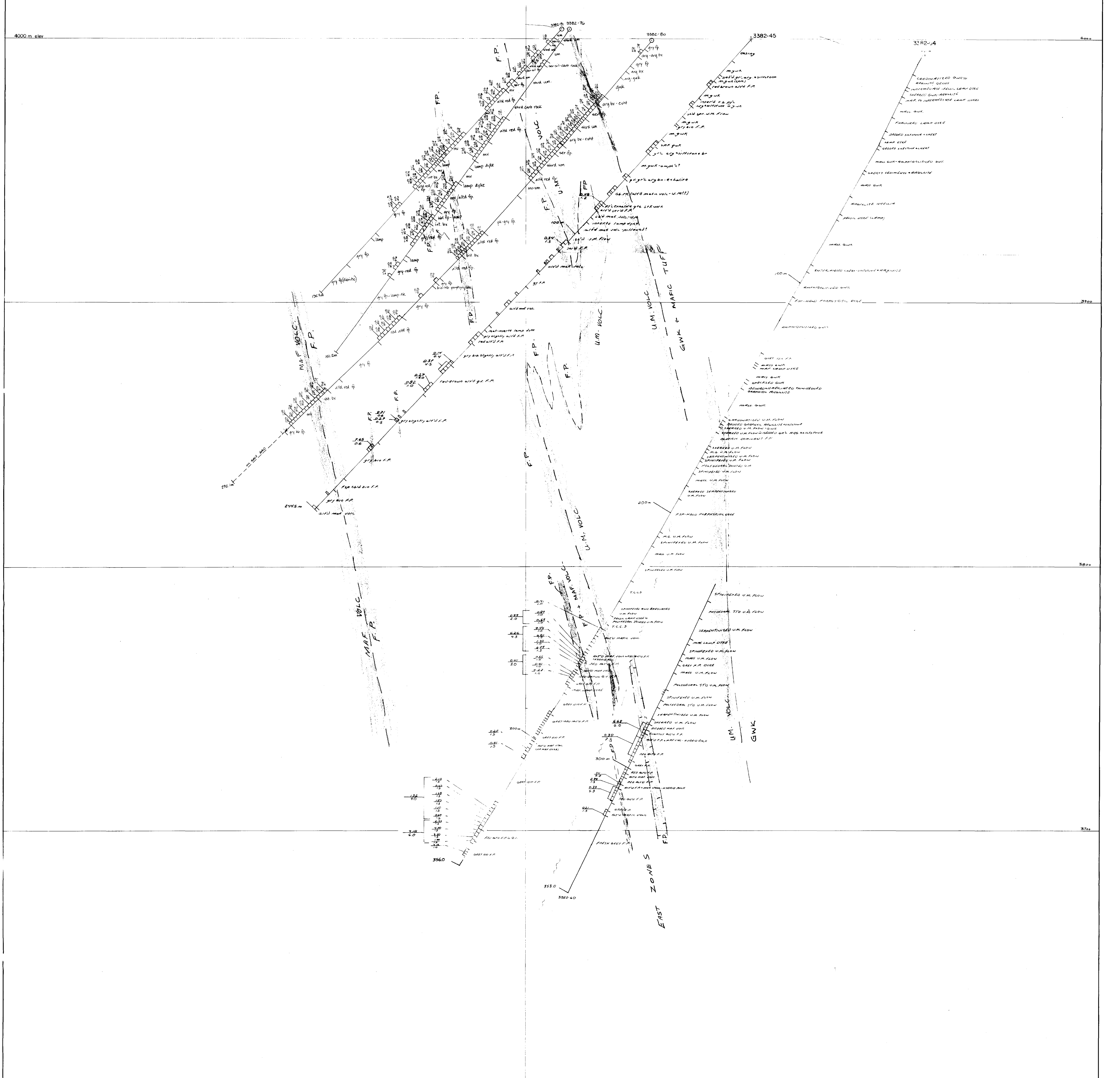
SECTION 620 SE
fig 8a

OM87-5-L-092

63.5219

SECTION 640 SE
Fig 86

0M87-5-L-092

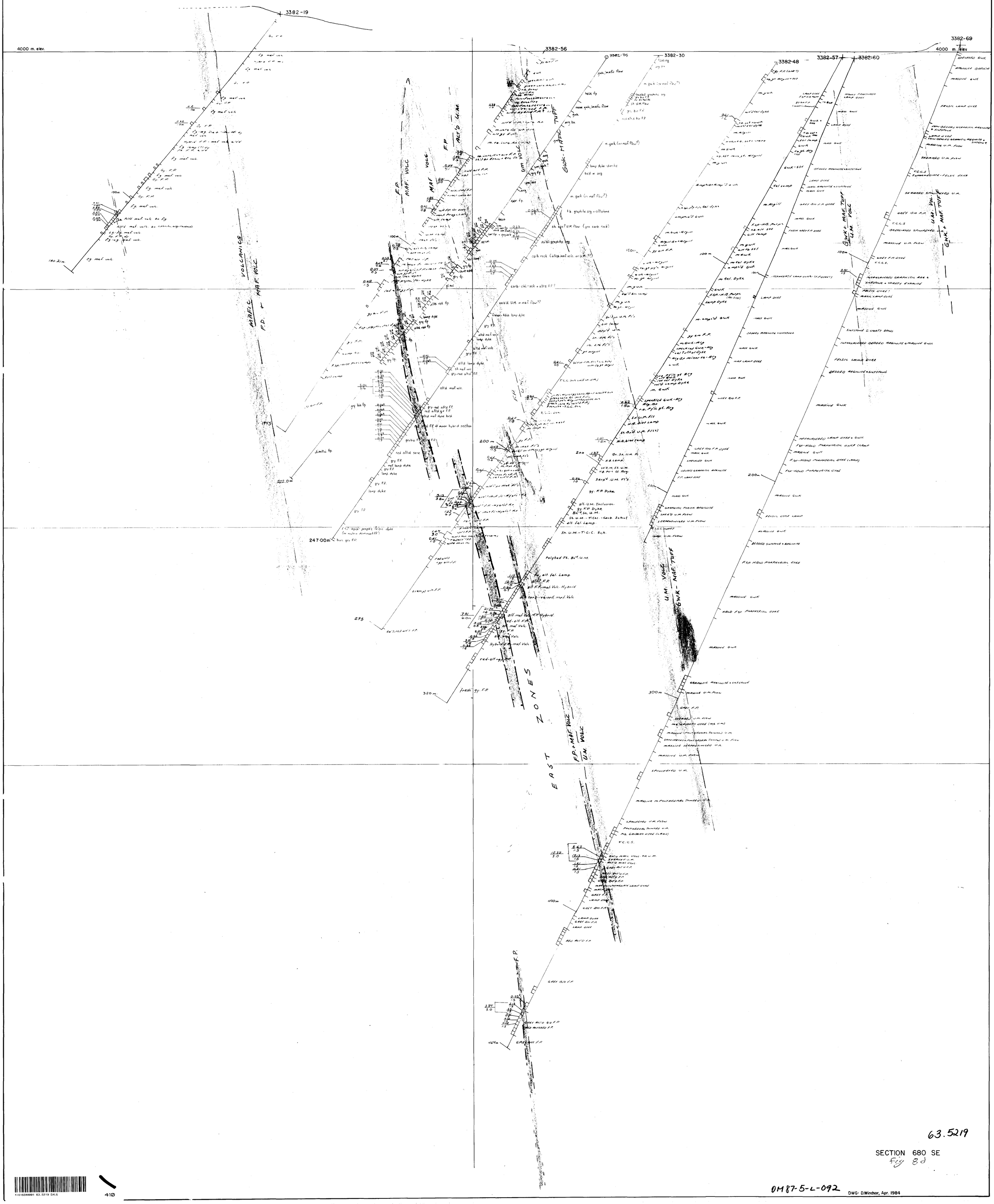


63.5219

SECTION 660 SE
Fig 8c

0M87-5-L-092

400



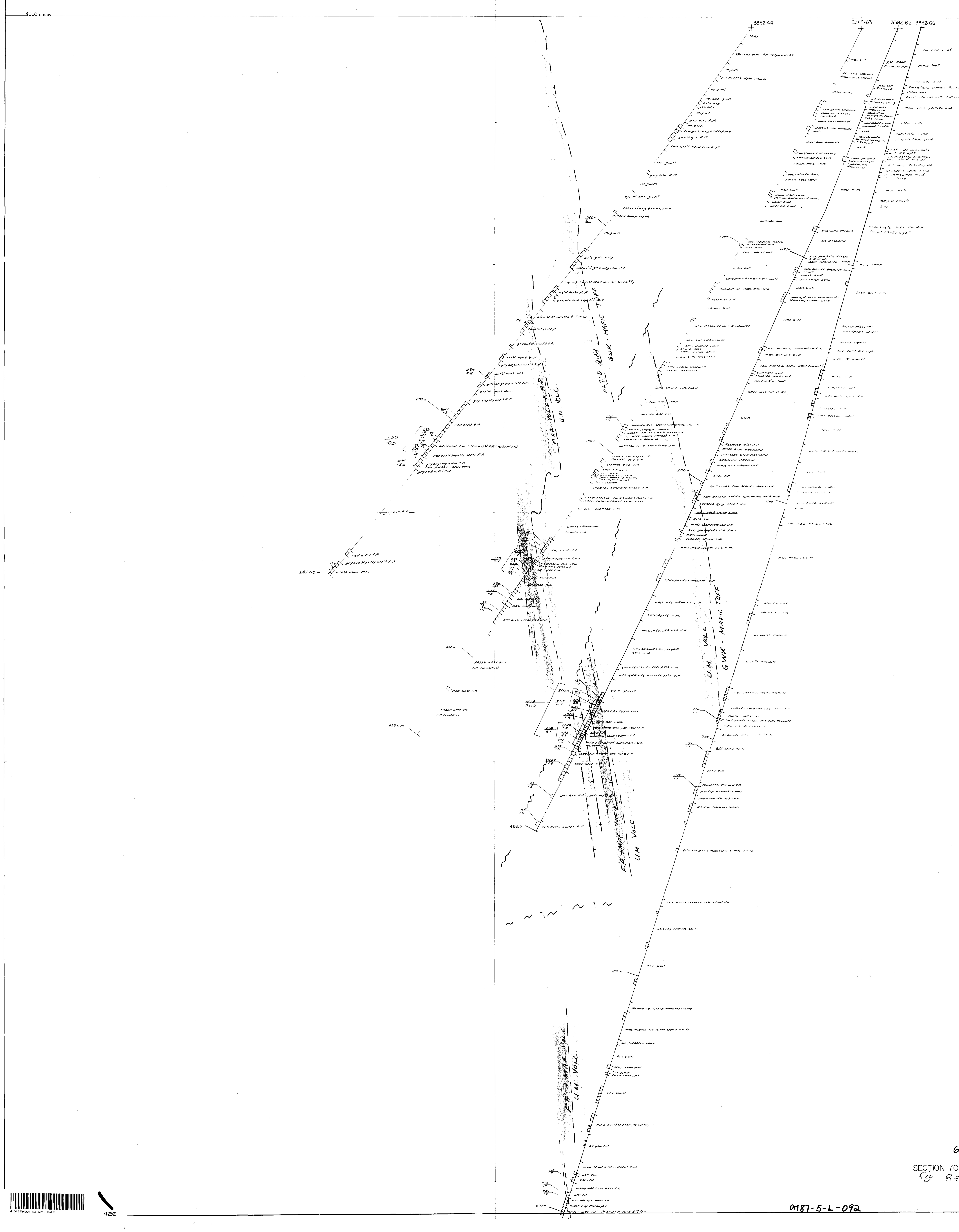
63.5219

SECTION 680 SE
Fig 8d

410

DM87-5-L-092

DWG: D.Windsor, Apr. 1984



63.5219

SECTION 700 SE
fig 8e

0M87-5-L-092

4000m

3382-31

casing
grv F.P.
amphd gwk or (qtz bearing) e.g. mafic flow or meta diabase)
fldspr. hbld porph.
amphd gwk (or qtz bearing e.g. maf. flow or meta diabase)
grv F.P.
meta diabase
DIABASE
epidotic amphite. (meta-gwk or volc)
grv F.P. dyke
e.g. amphite. meta-gwk or e.g. flow
100
fldspr-hbld porphic dyke ('amp)
grv F.P.
fldspr-hbld porph ('amp)
m. gwk or maf volc.
grv dior. F.P. dyke
ampn. gwk or volc
grv bio. F.P.
m. gwk (or qtz porphic maf volc)
altd bio. F.P.
200m
sericitic q.v. F.P.
4 banded grv parb-rich rock
graphitic argl + qv stockwork
4 banded grv carb w minor graphitic arg.
banded bx'd silic'd rock, fault zone
grv banded rock - altd sh. maf. volc.
altd F.P.
altd maf volc
red altd maf volc
altd hybrid zone
intrusive bx. F.P. maf volc
red altd F.P.
grv F.P.
altd F.P.
grv bio. F.P.
grv dior. F.P.
maf. lamp. dyke
284·00 m
F.P. + MAF VOL CARB ROCK (ALT'D U.M.)
GWK-TF + MAFIC FL'S

3382-67

GREY F.P. (FELDSPAR PORPHYRY DYKE)
AMPHIBOLITE
GREY F.P. DYKE
AMPHIB'D GWK
GREY ALT. F.P. DYKE
AMPHIBOLITIZED GWK
THIN BEDDED GRAPHITIC ARGILLITE & SILTSTONE TO MASSIVE SILTSTONE
MASSIVE GWK
GREY F.P. DYKE
AMPHIBOLITIZED GWK
GREY GREY & SILTSTONE
GREY F.P.
AMPHIB'D GWK & M.G.-F.S.P. PORPH
M.G.-F.S.P. PORPH
MASSIVE GWK
ALTD M.G.-F.S.P. PORPH
100m
DIABASE DYKE
MASSIVE AMPHIBOLITE
M.G.-F.S.P. PORPHY
MASSIVE AMPHIBOLITE
ALTD M.G.-F.S.P. PORPH
GREY FOLD F.P.
AMPHIBOLITIZED GWK - ARGILLITE
DACITE DYKE
AMPHIB'D GWK
GREY-BAT F.P. DYKE
200m
MASSIVE GWK (?)
SPECKLED GWK
GREY BAT F.P.
SPECKLED-MASSIVE GWK
ARGILLITE ARGILLA
MASSIVE GWK
MASSIVE AMPHIBOLITE
MASSIVE AMPHIBOLITIZED GWK
ALTD MASSIVE GWK-SILTSTONE OR MIXED MAFIC FLOW
MAFIC GRAPHITIC ARGILLITE
ALT'D MASSIVE GWK-SILTSTONE OR MAFIC FLOW
F.G.D VEINED C.G.-PY^TE ARGILLITE
MASSIVE PALE GREEN CARBONATE ROCK
F.G.D VEINED C.G.-PY^TE ARGILLITE
ALTD TO BUFF CARBONATE ROCK
ALT'D FOLIATED GREY F.P.
ALT'D THIN BEDDED SEDIMENTS
300m
MASSIVE PALE GREEN CARBONATE ROCK
GREY F.P.
ALTD MAFIC VOLCANICS
SILICIFIED SEDIMENTS (CLOSE)?
GREY ALT'D F.P. (OR M.G.-F.S.P. PORPH)?
SILICEOUS SCHIST - SHEARED ALT'D SEDIMENTS
ALT'D GREY-GREEN CARBONATE-RICH SCHIST
ALT'D SERICITIZED F.P. + ALT'D VOLC (?)
ALT'D MAFIC VOLC (?) OR VOLC F.P. HYBRID (?)
GREY F.P.
ALT'E MAFIC DYKE
ALTD MAFIC VOLC - F.P. HYBRID
QUARTZ VEIN
ALTD F.P. MAFIC VOLC. HYBRID
RED ALTD TO GREY F.P.
SERICITIZED RED ALTD F.P.
ALT'D GREY F.P.
MAFIC FLOW (LOVER?)
400m
RED ALT'D F.P.
RED ALT'D F.P. = ALT'D
ALT'D GREY F.P.
GREY ALT'D F.P.
+220m
MAFIC DYKE (HYBRID F.P.)
MAF. VOL. + F.P.
CARB. ROCK (ALT'D U.M.)
GWK TF + MAFIC FL'S

3382-82 4000f

gwk
hb. fp. dk.
gwk
hb. fp. dk.
gwk
hb. fp. dk.
gwk
hb. fp. dk.
gwk
hb. fp. dk.
shrd. um
hb. fp. dk
ampn. gwk
grv fp
amph. gwk
grv fp
arg
grv fp
plmv
hb. fp. dk
mv/gwk
hb. fp. dk.
plmv
arg
ampn. gwk
arg chrt exht
lamp dk
ampn. gwk
lamp ?
ampn. gwk
diab
DIABASE
GWK TF + MAFIC FL'S
grv fp
ampn. gwk
grv fp - lamp
ampn. gwk
hbl bio fp dk (lamp)
mass gwk - ampn. gwk
grv bio fp
gwk
arg lox.
ampn gwk
gwk
arg lox.
gwk - arg
lamp
gwk - arg
grv hb bio fp
ampn gwk + mv
lamp
tects
um
tects
um - spum
tects
altd red fp
lamp
grv fp
see section 860

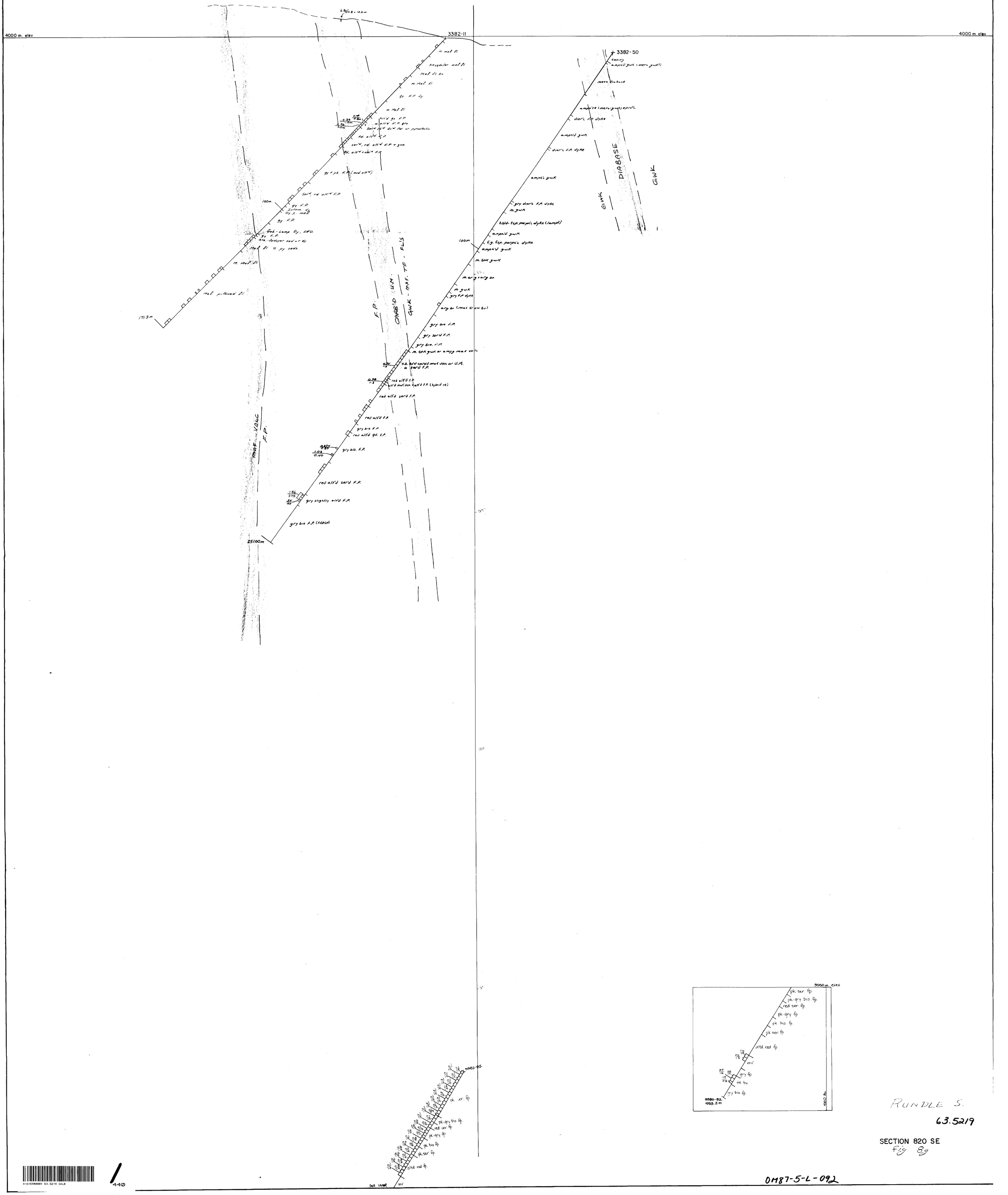
RUNDLL S.

63.5219

430

OM87-5-L-092

Fig 84
SECTION 800 SE



RUNDLE S.

63.5219

SECTION 820 SE

Fig 89

OM87-5-L-092

4000m

3900m

3800m

3382-51

3382-32

3382-33

4000m

MAF. VOLC.

F.P.

GWK

DIABASE

100m

200m

230m

272m

see inset.

3382-33
5821.5m

3500m elev.

1000 Ft.

RUNDLE S.

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SECTION 880 SE
fig 8A

OM87-5-L-092

March '89

4000m

4000m El.

3382-40

casing
m.ampb'd gwk
diabase
ampb'd gwk
gry F.P. (matrix dominant
ampb'd gwk
carb'd gwk (Faulkner)?
ampb'd gwk
gry. F.P.
mg wk (mul 4/10u)
mgt. to int. ramp dyke (gry F.P.)
altd gry F.P.
carb. U.M. flow
ugly carb. UM - altd F.P.
altd U.M. (mgt. voic)
altd lamp dyke (porphyritic)
altd mgt volc.
altd altd F.P.
gry bio F.P.
altd mgt volc. altd F.P. hybrid volc
altd gry ash carb'd mgt volc. int. lamp dyke
altd mgt volc.
239.00m

MAF. VOL. F.P.
F.P. CARB'D U.M.
GWK - TF MAF FLS
MAF. VOL. F.P.
F.P. CARB'D U.M. GWK - TP

3382-39

gwk
dac. dk/lamp
gwk/mv
arg
plmv
gry fp
plmv
hb. fp dk
gwk
gry bio. fp.
ampb. gwk
gry bio. fp.
gwk.
gry fp.
gwk
hb. fp dk
lamp + gwk
gry fp.
diab dk
fg. fel. dk
hb. fp.
gry fp.
gwk
hb fp dk
gwk
hb fp dk
hb fp dk
ampb. gwk
gry fp
ampb gwk
ampb. gwk/plmv?
gry fp
arg. gwk
gry fp
ampb. gwk
arg-gwk
bxtd arg
ampb. gwk
specked arg
strd. sil carb rk
bio. fp
pk altd fp
gry fp
mv
gry fp + lamp
gry fp
pk fp
int. bx
pk altd fp
pk fp
int. bx
pk gry fp
gry fp
lamp
gry fp
thoritic fp
lamp
gry fp
mv
gray fp
mv + fp dk.
lamp
hem. altd. fp + lamp dk.
mv
rem. bxd gry fp/mv
mv
502.2m

GWK - TS
DIABASE
GWK - TS
GWK - TS
DIABASE
GWK - TS

Kumbel S.

63. 5219

SECTION 860 SE
Fig 9.

OM87-5-L-092

4000

3975

3950

3925

3900

3875

3850

3825

75 N.E.

SHAFT

N-52

N-61

Greenstone

Gabbro

46m Level

91m Level

145m Level

LEG I

LEG II

LEG III

LEG IV

1-25

2-33

2-26

2-06

2-54

2-63

3-07

3-06

80.40m

N-S Vein

F.P. + MAF Volc. U.M.

3382-1

3382-3

3382-5

3382-52

3382-7

ZONE

SECTION: 1020SE.

SCALE: 1:200

635219

0M87-5-L-092

Fig 9a

1060

4000

3975

3950

3925

3900

3875

3850

3825

1000 NE

LEG I

R529 XCN

H-53

greenstone

graphitic zone

carbonated lava

diorite

porphyritic lava

H-66

hybrid F.P

3382-55

1K

sh'd 5x 1K + 1n

4a

sh'd 1K + 1n

7b

5a

1n

N-59

calcsilt

greenstone

LEG II

LEG III

LEG IV

2-43

2-10

2-44

3-16

3-24

on section 1040E

3382-2

F.P dyke

1n

1K

5a

1n

5a

mafic biotite lamprophyre

DACITE

Possible DYKED out

3382-4

Int. dyke

alt 1a

1a

1aK

5a

1K

F. P. + MAFIC VOLC.

U. M. VOLC.

3382-26

Sh'd 1K

1a, 7b

Sh'd 1K

gabbroic 7b

Sh'd 1K

1n

80.72m

3382-49

3382-33 (displaced 6m+)

1K breccia

felsic 7b

F.P dyke

bx'd 1K

bx'd 5x. 1K

alt. F.P.

63.5219

ZONE

SECTION: 1050 SE.

SCALE: 1:200

OM87-5-L-092

480

41016SW0001 63.5219 DALE

1000 NE

1060 00

4000

3975

3950

3925

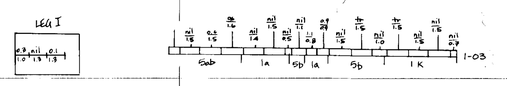
3900

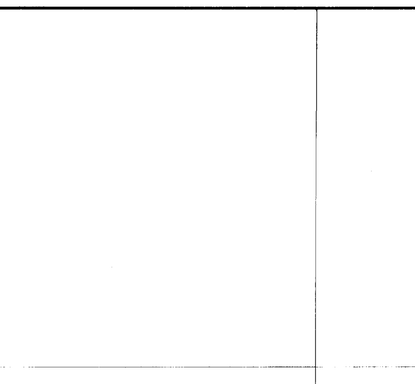
3875

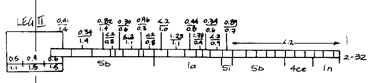
3850

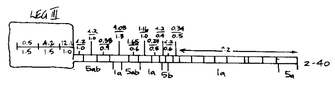
3825

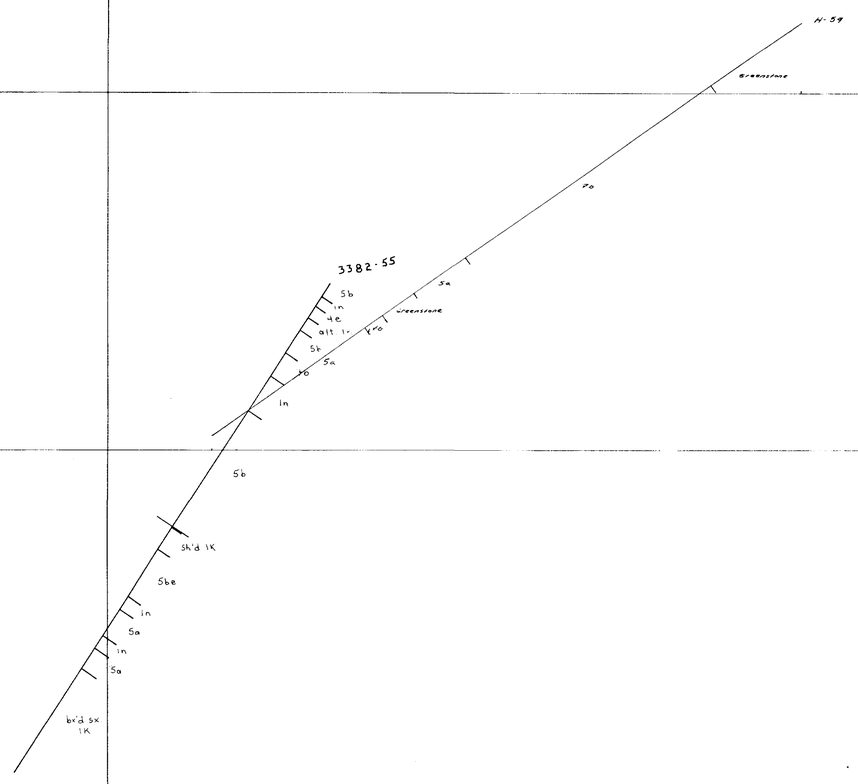
LEG I

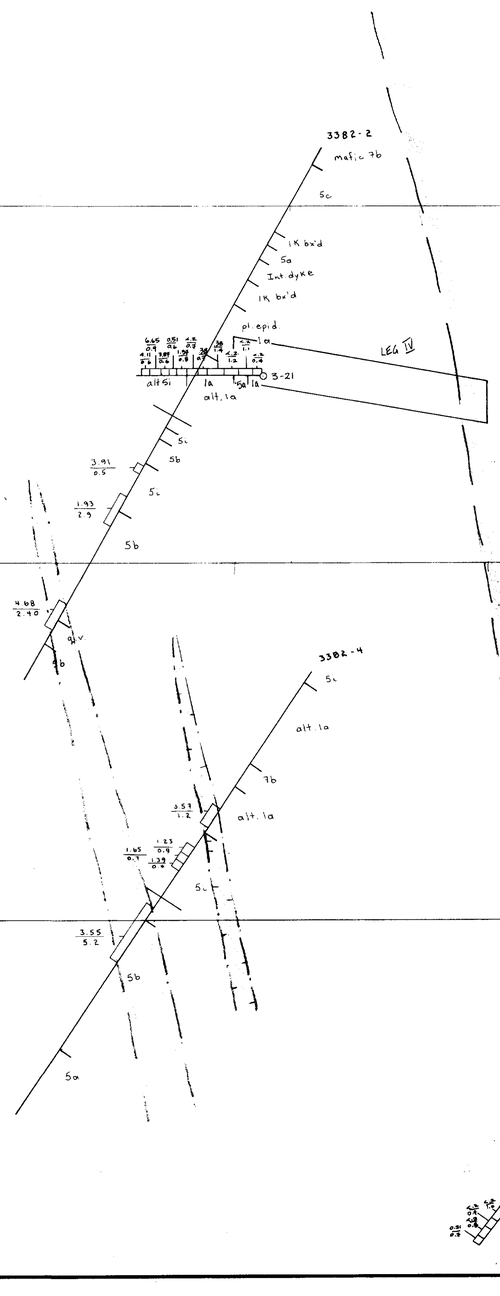












125m. 548. LEVEL

63.5219

ZONE

SECTION: 1060 SE.

SCALE: 1:200

OM87-5-L-092

Fig 9c

4000

3975

3950

3925

3900

3875

3850

3825

54 H

greenstone

1070 NE

1070

LEG I

Ail 1.4 | nil 1.5 | nil 1.4

LEG II

LEG III

3382.55

bx'd sx. 1K

epidotic 1a

5a, 1K

bx'd 1K

alt. 5c

alt. 1K

alt. 5c

epidotic 1a

5a

1a

5a

3d

1a

3382.26

5a

sh'd bx'd u.m.

mafic lamp dyke

sh'd bx'd u.m.

5a

sh'd bx'd u.m.

5b

3382.4

5a

3-25

3-27

1K

1K

Hi Sonic Zone

63.5219

ZONE

SECTION: 1070 SE.

SCALE: 1:200

0M87-5-L-092

4000

3975

3950

3925

3900

3875

3850

3825

1060

1000 mE

H-54

greenstone

cherty greenstone

reddish F.P.

F.P. + MAF. VOLC.

U.M. VOLC.

LEG I

0.1	0.5	0.5	0.1
1.5	1.4	1.6	1.0

LEG II

0.4	2.1	0.6
1.0	2.0	1.0

LEG III

nil	nil	tr
1.5	1.6	1.0

porphyritized Lava

5a

H-59

5a

Greenstone

7a

Greenstone

5a

Greenstone

Porphyritized Lava

3382-27

4b

5ab

4b

4a

4b

4a

1n

1n

7b

1K

U.M. VOLC.

GWK - TS

3382-55

1a

5a

5b

1.30 / 1.0

5b

bio 9b

5a

7b

5a

7b

2.09 / 1.0

3.09 / 0.7

5b

2.67 / 1.5

5ba

F.P. + MAF Volc.

U.M. Volc.

3382-26

5b

5a

2.13 / 1.0

1a

5.92 / 4.0

5b

bio 5a

125m Sub-Outfit

3-30

1K

5b

4a

1a

1K

Hi South Zone

U.M. VOLC.

GWK - TS

3382-28

4b

4a+1n

1K

5x. 1K

ZONE

SECTION: 1080 SE.

SCALE: 1:200

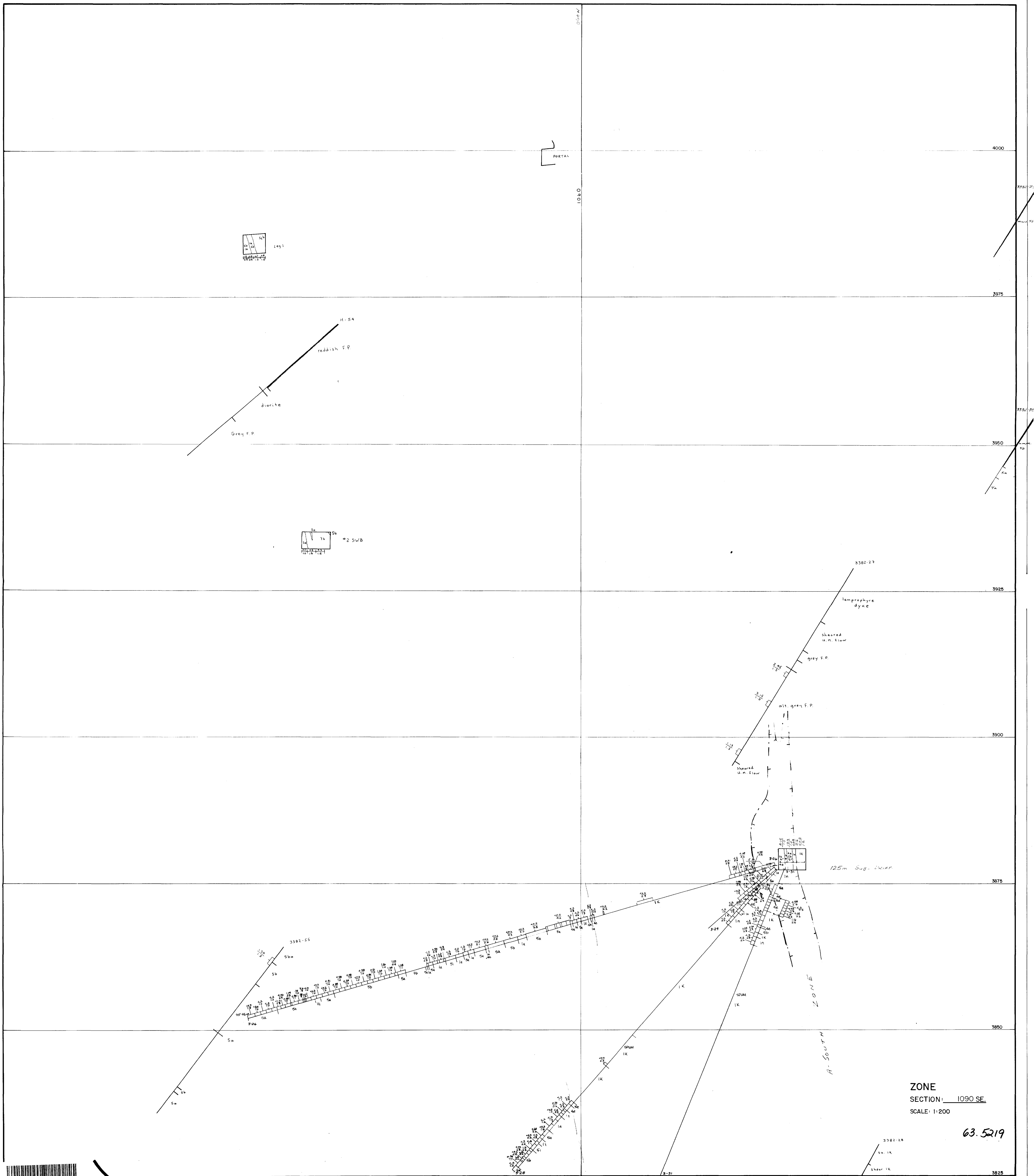
63.5219

0M87-5-L-092

Fig 9a

510

41016348881 63.5219 DALE



ZONE

SECTION: 1090 SE.

SCALE: 1:200

63.5219

0M87-5-L-092

FIG 9F

1100 NE

4000

3975

3950

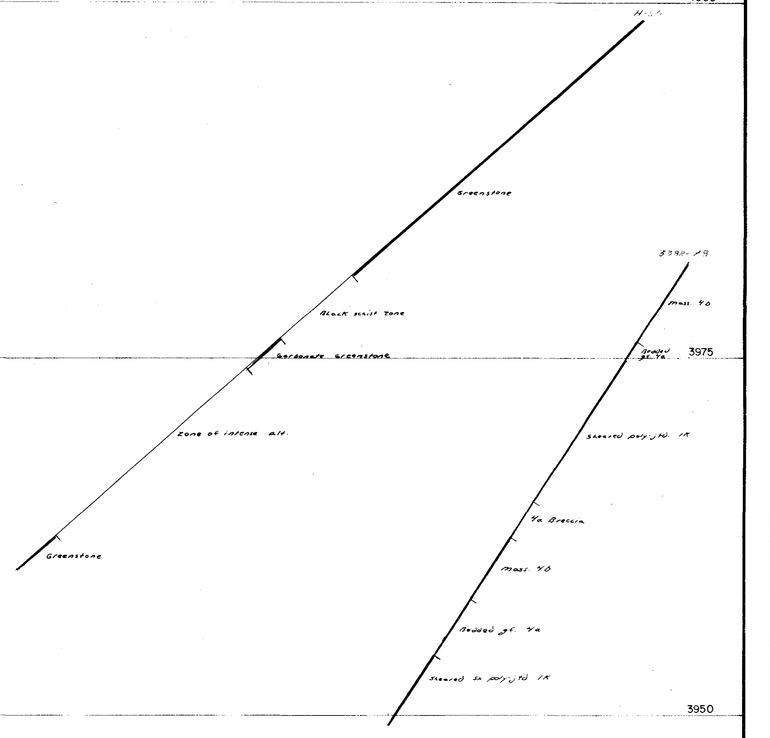
3925

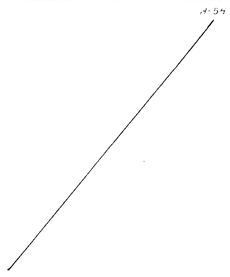
3900

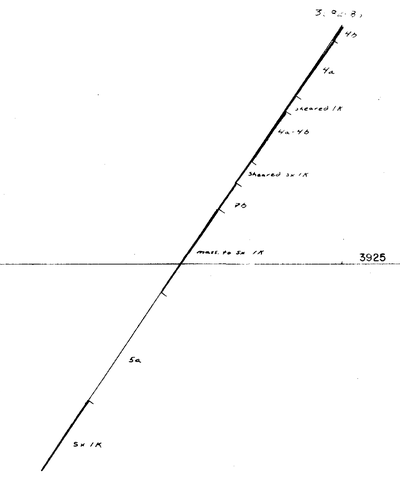
3875

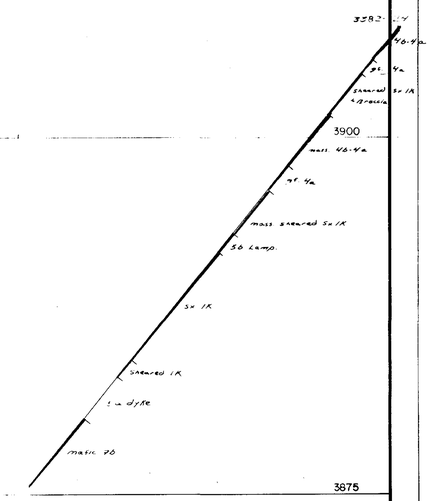
3850

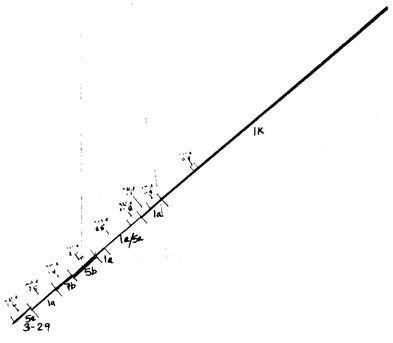
3825











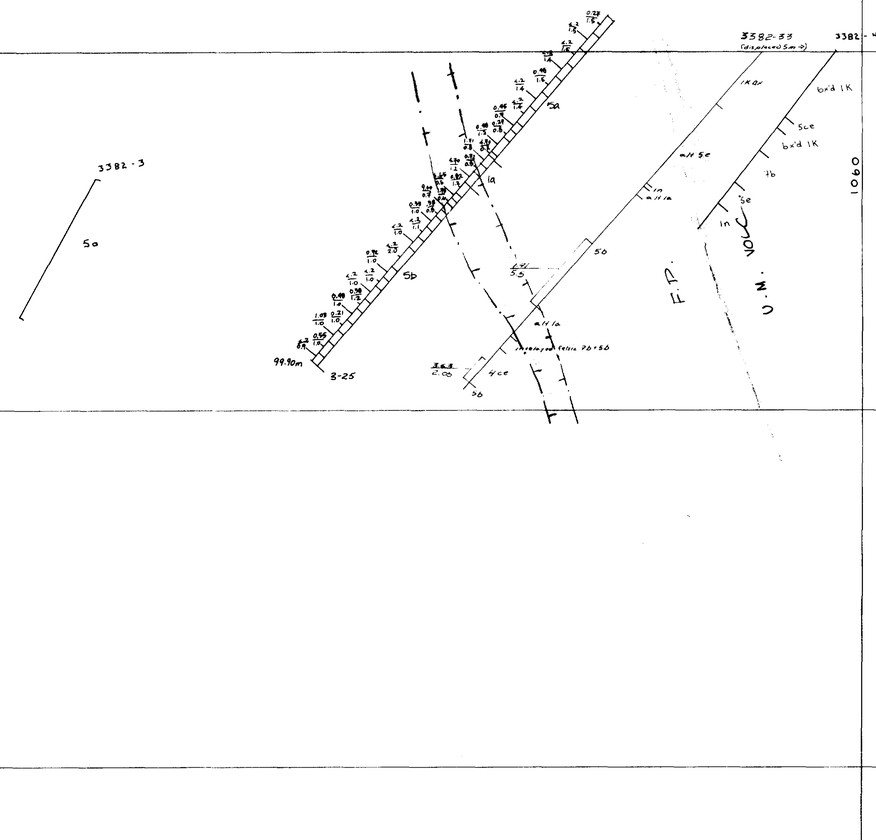
ZONE

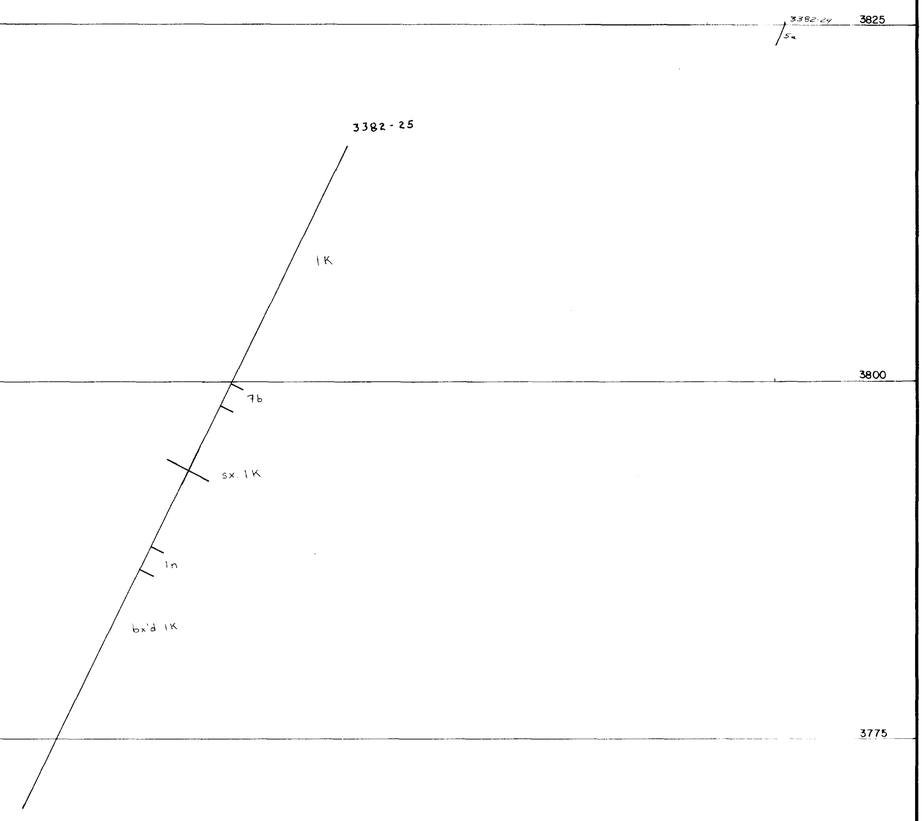
SECTION: 1100 SE.

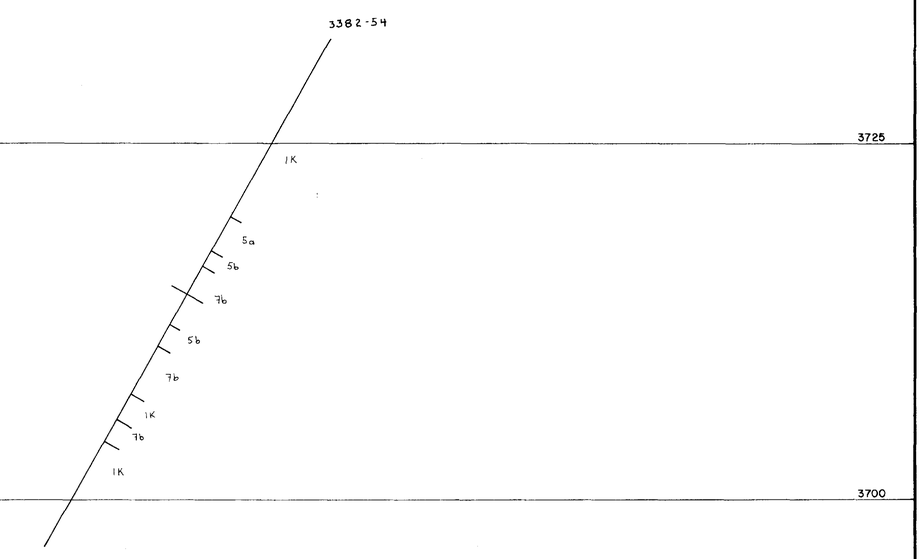
SCALE: 1:200

63.5219

530







3825
3800
3775
3750
3725
3700
3675
3650

ZONE
SECTION: 1050 S.E.
SCALE: 1:200

63.5219

540

OM87-5-L-092

RUNDLE MINE

ZONE

SECTION: 1060 SE.

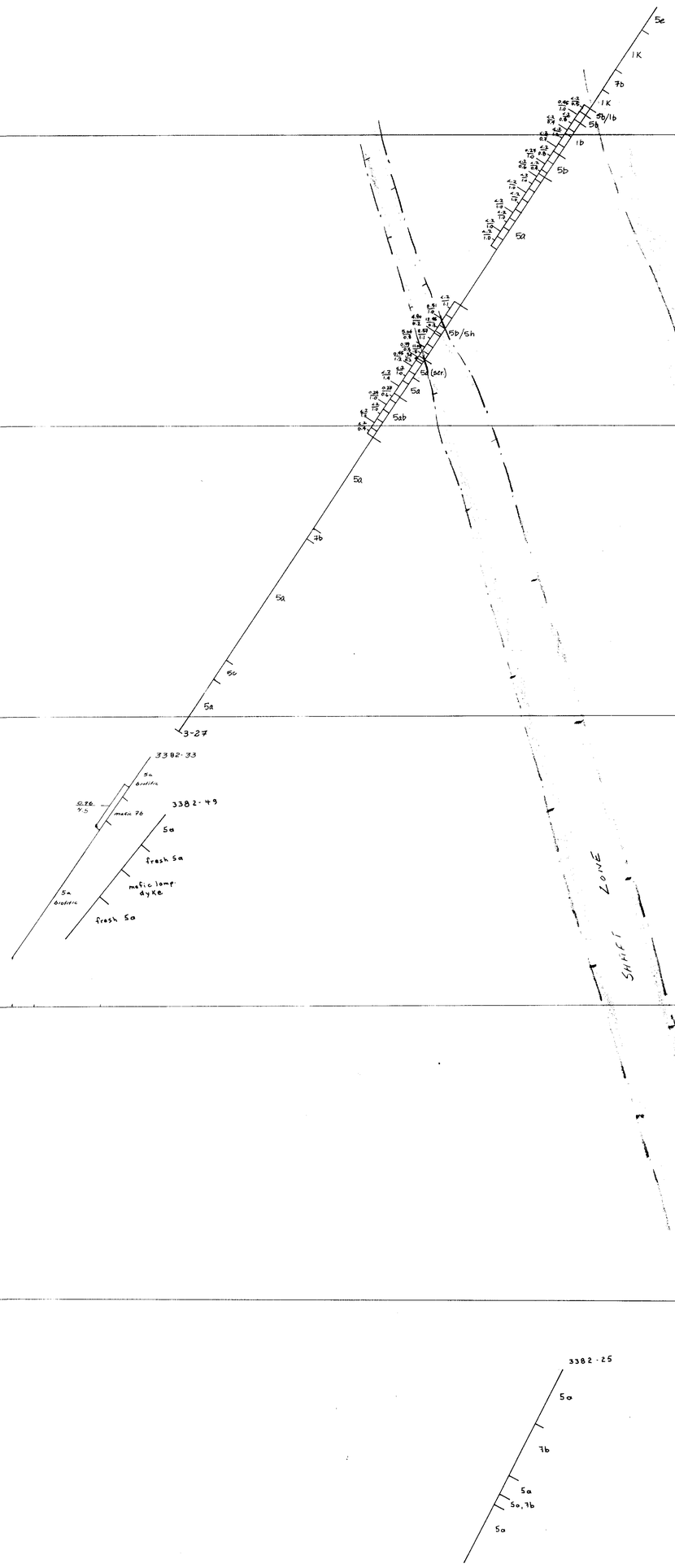
SCALE: 1:200

63.5219

550

OM87-5-L-092

Fig 9.1



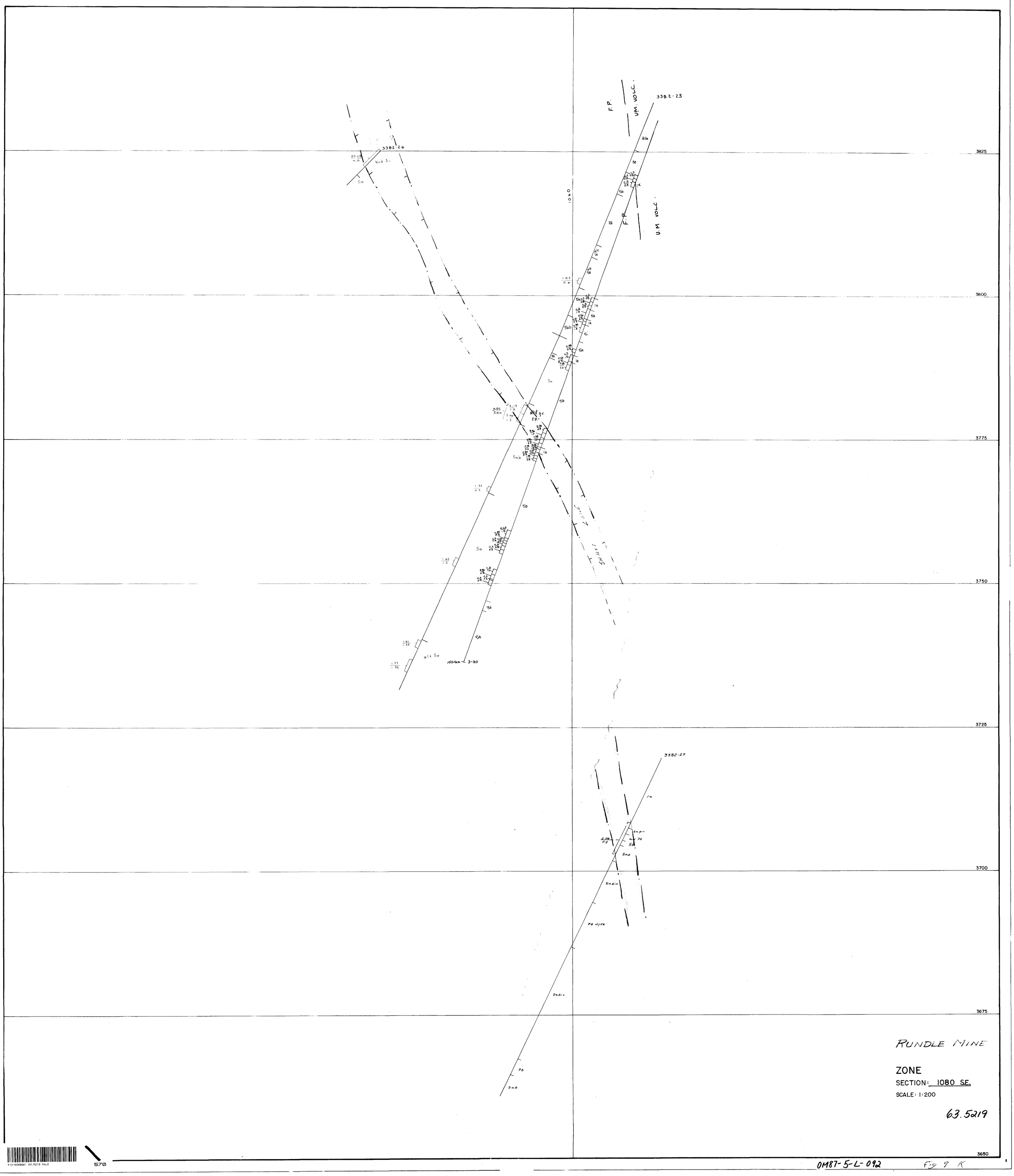
RUNDLE MINE

ZONE

SECTION: 1070 SE.

SCALE: 1:200

63.5219



RUNDLE MINE

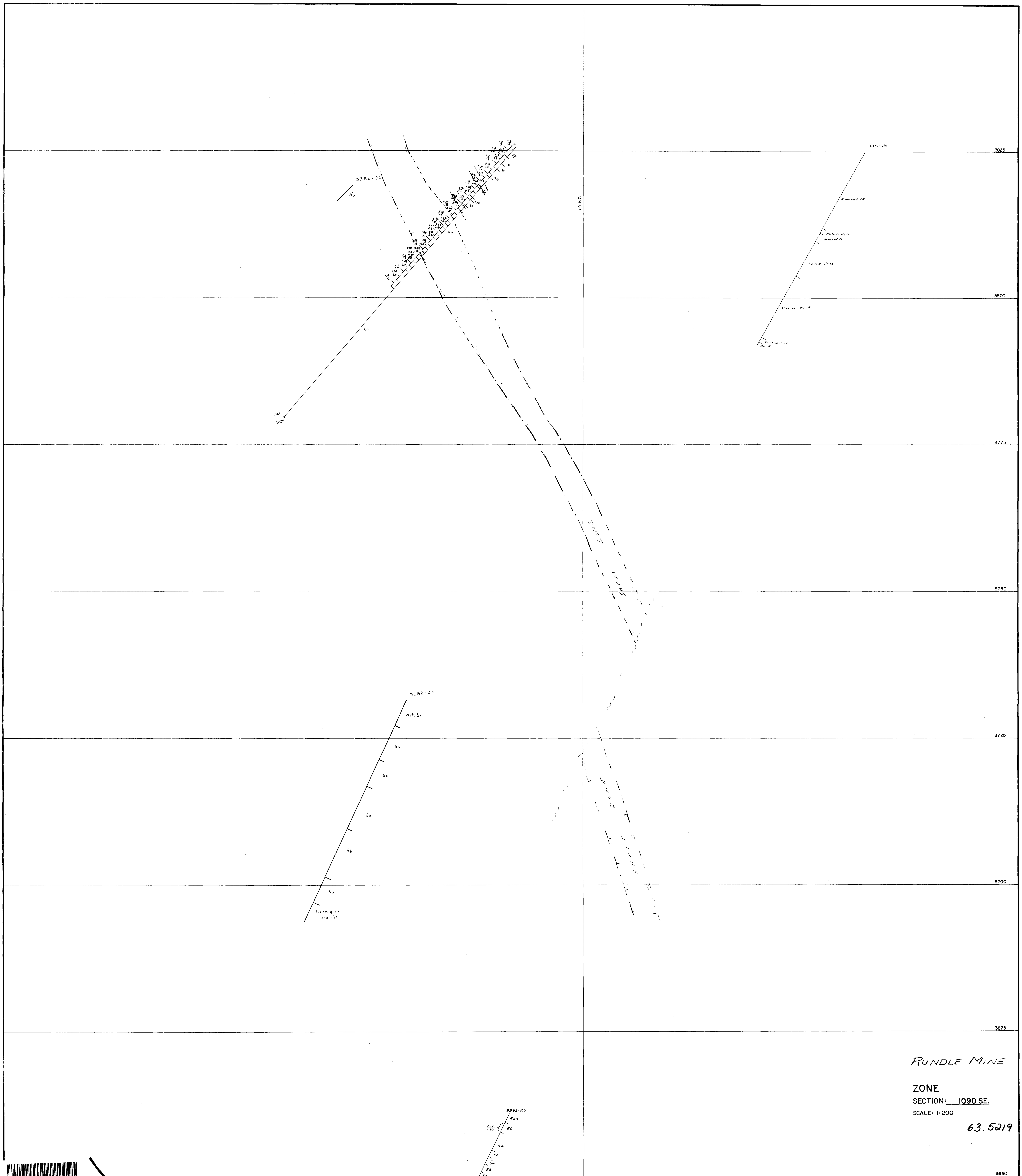
ZONE

SECTION: 1080 SE.

SCALE: 1:200

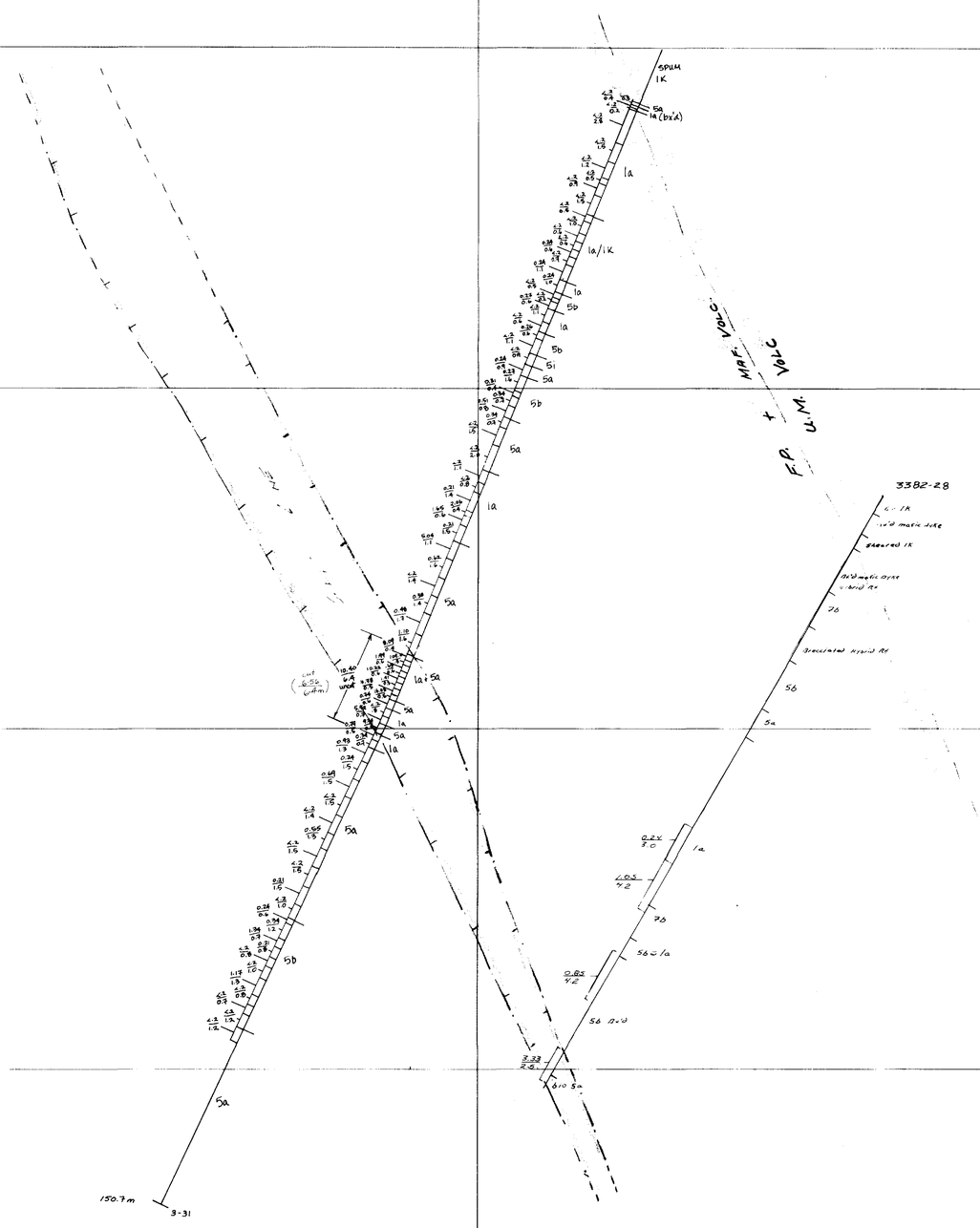
63.5219

OM87-5-L-092 Fig 9 K



OM87-5-L-092

Fig 9L



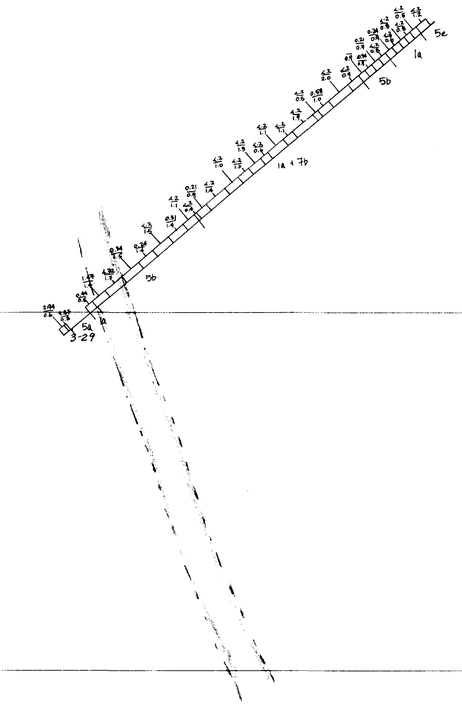
RUNDLE MINE

ZONE

SECTION: 1100 SE.

SCALE: 1:200

63.5219

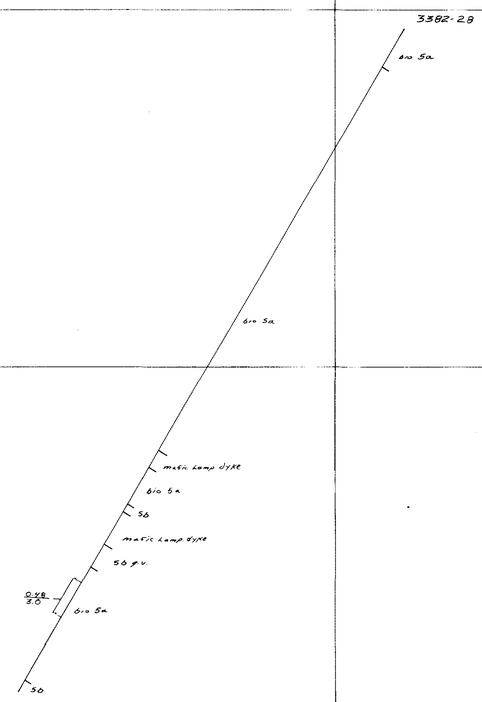


3825

3800

3775

3750



3725

3700

3675

RUNDLE MINE

ZONE

SECTION: 1110 SE.

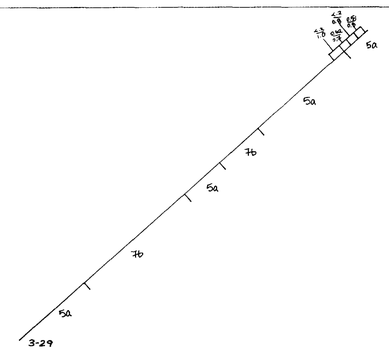
SCALE: 1:200

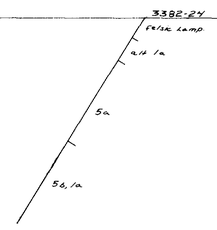
63.5219

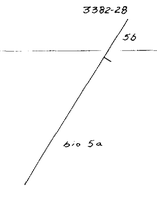
3650

600

OM87-5-L-092 Fig 9.12







3825

3800

3775

3750

3725

3700

3675

RUNDLE MINE

ZONE

SECTION: 1120 SE.

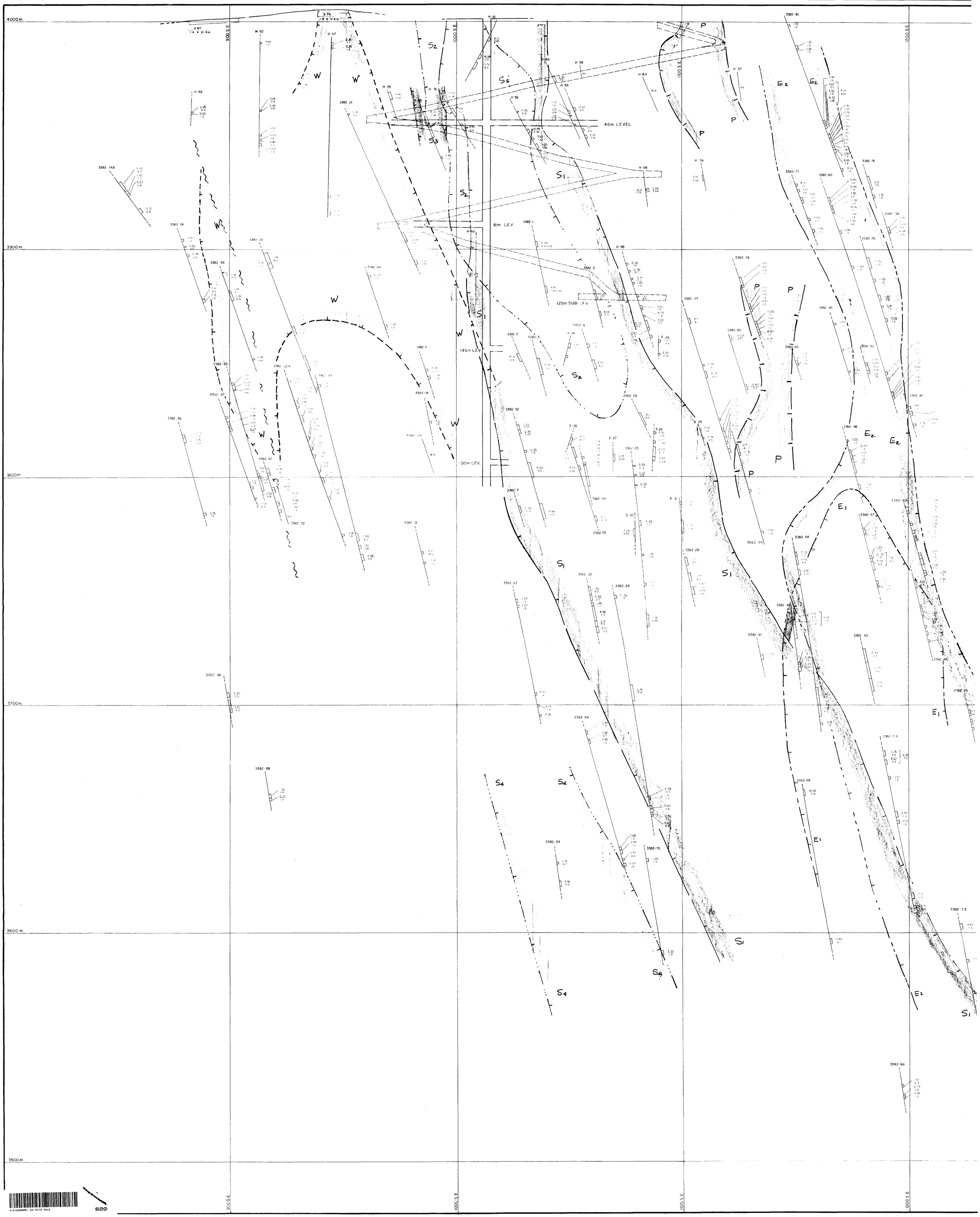
SCALE: 1:200

63.5219

3650

0M87-5-L-092

Fig. 9 0


4000 m.
3900 m.
3800 m.
3700 m.
3600 m.
3500 m.
900 S.E.
1000 S.E.
1100 S.E.
1200 S.E.
46m LEVEL
91m LEV.
125m SUB-LEV.
145m LEV.
195m LEV.
S1
S2
S3
S4
E1
E2
P
W
N.V.
3382-1
3382-2
3382-3
3382-4
3382-5
3382-6
3382-7
3382-8
3382-9
3382-11A
3382-13
3382-14A
3382-18
3382-21
3382-22A
3382-23
3382-24
3382-25
3382-26
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3382-34
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3382-36
3382-42
3382-44
3382-45
3382-46
3382-47
3382-48
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3382-50
3382-52
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3382-84
3382-85
H-52
H-55
H-56
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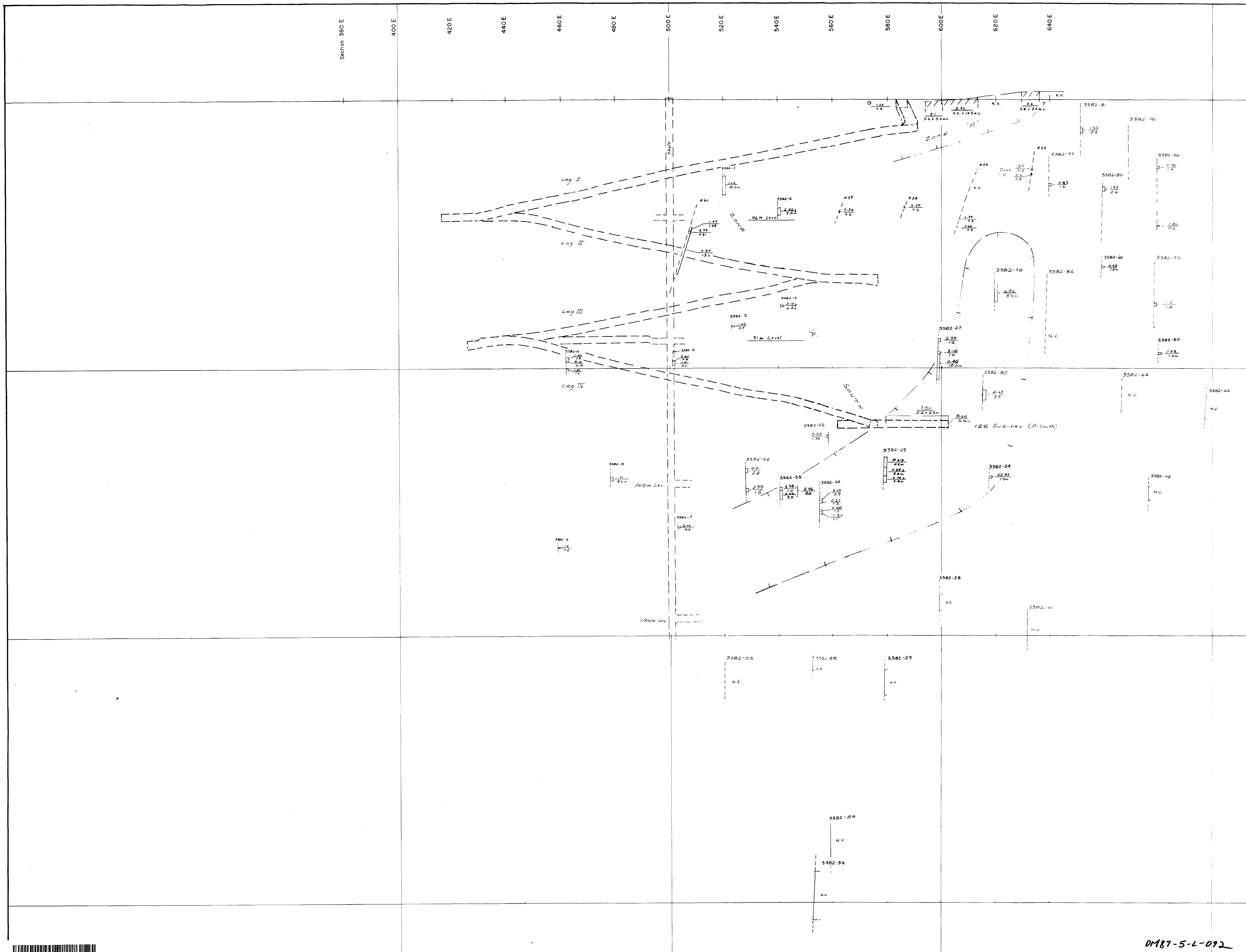
H-58
H-59
H-60
H-61
H-62
H-63
H-64
H-66
H-67



DRAWING RECORD & STATUS				
WORK CATEGORY	NAME	DESCRIPTION	DATE	REVISION NO
	WINDSOR	1965 drilling (section drafted 1963)	24/4/85	
	A.W. Beecham	1986-87 D.D. + u/c work's	18/8/88	

LEGEND

Surface trench — showing Au assays gm/tonne avg. width x length in metres

Projection of drill hole; intersection of zone, showing assays and core length of intersection

n.v — no values

n.x. — zone not exposed

tw — true width

NOTES

Section is vertical at 110°. Data is projected normal to section.

63.5219

SULPETRO MINERALS LIMITED
TORONTO CANADA

RUNDLE MINE
S.E. Newton Twp., Ontario
LONGITUDINAL SECTION ZONE A-SOUTH
Looking N.NE.

SCALE 1:500

APPROX LAT & LONG OF LOWER RT COR OF DWG — LATITUDE — LONGITUDE

PROJECT NO 3382

REPORT NO

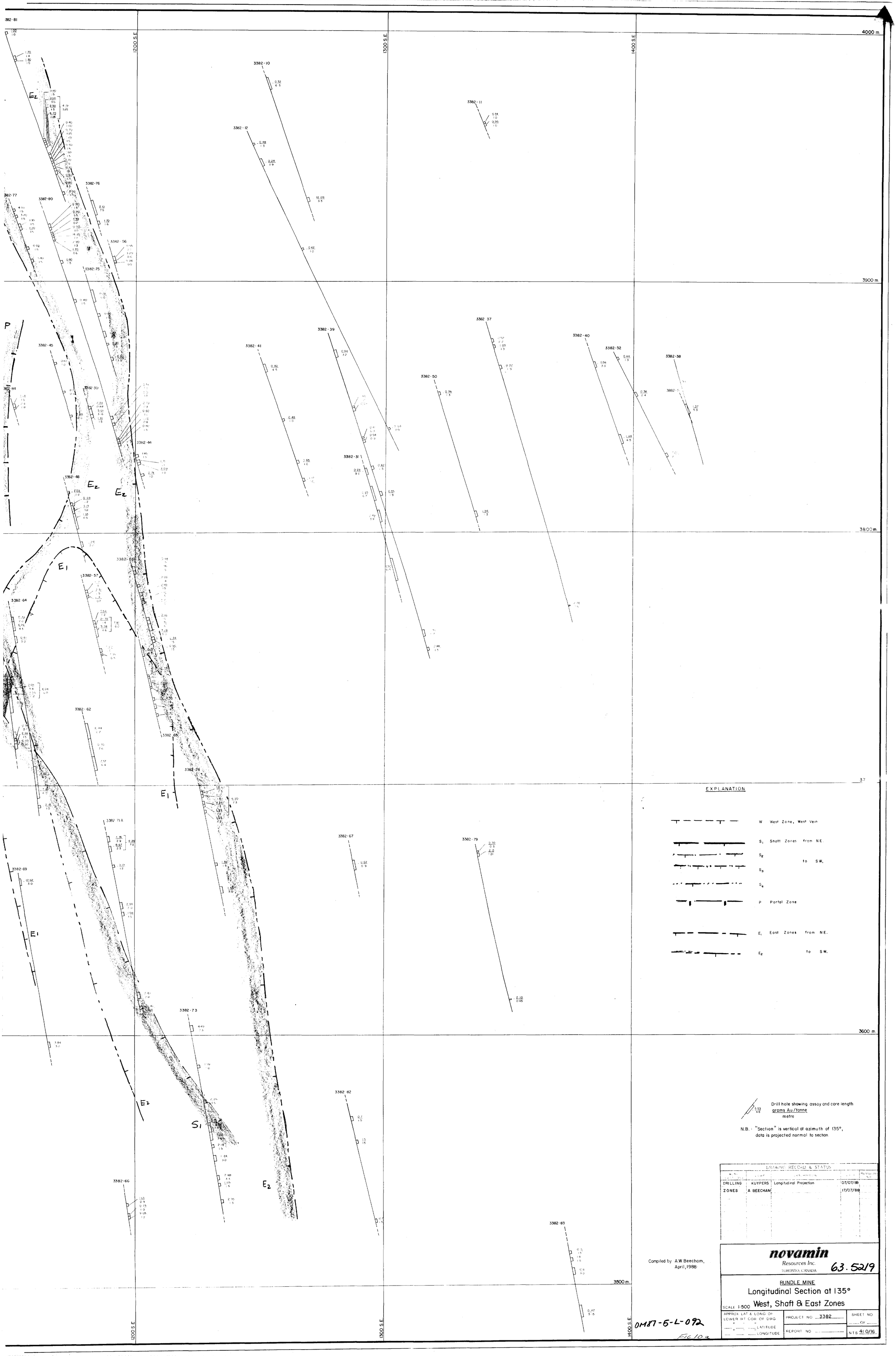
SHEET NO — OF —

N.T.S 41-O-16

OM87-5-L-092

A.W. Beecham, March '83

630



EXPLANATION

- W West Zone, West Vein
- S_1 Shaft Zones from N.E.
- S_2 to S.W.
- S_3
- S_4
- P Portal Zone
- E_1 East Zones from N.E.
- E_2 to S.W.

Drill hole showing assay and core length
grams Au/tonne
metre

N.B.: "Section" is vertical at azimuth of 135°, data is projected normal to section.

DRAWING RECORD & STATUS				
W. N.	NAME	AS PLOTTED	DATE	REVISION NO.
DRILLING	KUYPERS	Longitudinal Projection	07/07/88	
ZONES	A. BEECHAM		17/07/88	

Compiled by A.W. Beecham, April, 1988.

novamin Resources Inc. TORONTO, CANADA 63.5219

RUNDLE MINE

Longitudinal Section at 135°

SCALE 1:500 West, Shaft & East Zones

APPROX LAT & LONG OF LOWER RT COR OF DWG
° ' " LATITUDE
° ' " LONGITUDE

PROJECT NO 3382 | SHEET NO ___ OF ___

REPORT NO ___ | NTS 41 O/16

OM87-5-L-092

Fig 10a

NOVAMIN RESOURCES INC.

REPORT FOR O.M.E.P.

SOUTH RUNDLE UNDERGROUND EXPLORATION

AND SURFACE DIAMOND DRILLING

MAY 1987 - JUNE 1988

Newton Township, District of Sudbury, Ontario

By: A.W. Beecham &

C.B. Cunningham-Dunlop

NTS. 41-O-16

Date: 9 July 1988

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Underground Diamond Drill Hole Logs:

First Level	1-001 to 1-012; 1-015, 1-016; 1-018 to 1-027;
Second Level	2-001 to 2-024; 2-026 to 2-037 2-039 to 2-041; 2-043, 2-044, 2-047; 2-050 to 2-052; 2-054, 2-056B, 2-057; 2-059 to 2-61; 2-063;
Third Level:	3-001 to 3-011; 3-013 to 3-017; 3-021; 3-024 to 3-031;
Fourth Level:	4-001, 4-002;

LIST OF ILLUSTRATIONS

LIST OF ILLUSTRATIONS (Continued)

INTRODUCTION AND SUMMARY

The South Rundle gold property is located 105 km.SW of Timmins in the southeastern part of Newton Township in the District of Sudbury. It lies 44 km. almost due south of the village of Foleyet. From a point on Highway 101, 10 km. east of Foleyet it is accessible along some 60 km of all weather gravel roads.

The South Rundle property, since the discovery and initial exploration by Hollinger G.M. in 1940, has been known to contain significant gold deposits. After a second phase of exploration from 1981 until May 1987 by Novamin and predecessor company, Sulpetro Minerals, in which a drill indicated mineral inventory of 0.500 million tonnes at a grade of 7.0 g/t was established, a decision was made to undertake underground exploration. The purpose of this programme was (1). to under-cut, map and bulk sample and thus establish the grade of the mineralization in the shaft sector with a 5-leg decline; (2) explore the West Zone by extending the decline westward; (3) under-cut and sample both the Shaft Zones and the East Zones on the 250m level and (4) to establish a drill platform on the 250m level and drill test the Shaft and East Zone down to 600m.

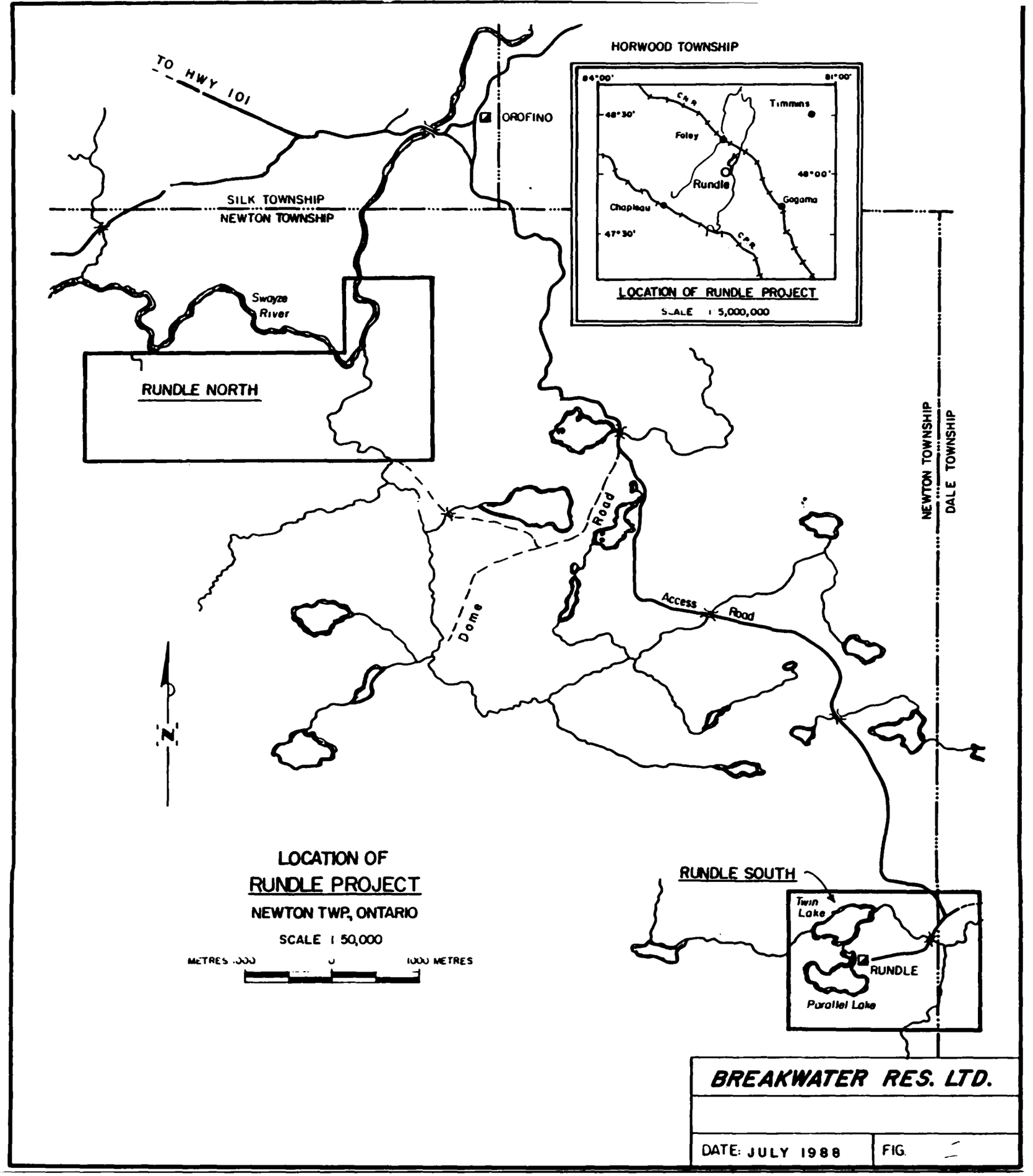
It was decided by management that the shaft sector ore would be examined and sampled by a decline which would be, as much as possible driven through the ore. This was to circumvent the long lead time required to carry out the programme entirely through the existing small shaft and thus bring forward the time for a production decision.

This phase of the work started in late May 1987 with upgrading of the 24 km of access road from the forestry road to the property. Work on the decline started the end of June.

A surface diamond drilling programme was started 22 July and completed 27th September. Shaft re-habilitation was started early in the work and sinking was completed 2 December. The decline, which started late in June was completed in late November. The underground diamond drilling programme started in September was completed in mid December.

The initial sampling of the ore zone in legs I and II of the decline produced anticipated good grade. However, in legs 3 and 4, grades dropped and the tonnage per vertical metre decreased. It was therefore decided to curtail the programme. The planned 5th leg of the decline and the decline to the west zone were cancelled. Instead of driving leg V, the decline was driven to the NE. to the A-South Zone and part of the zone undercut. As well as partly testing the A-South structure,

2/...


TO HWY 101
OROFINO
HORWOOD TOWNSHIP
SILK TOWNSHIP
NEWTON TOWNSHIP
Swayze River
RUNDLE NORTH
Road
Dome
Access Road
NEWTON TOWNSHIP
DALE TOWNSHIP
N
84°00'
81°00'
48°30'
48°00'
47°30'
CNR
CPR
Timmins
Foley
Rundle
Gogama
Chapleau
LOCATION OF RUNDLE PROJECT
SCALE 1:5,000,000
LOCATION OF
RUNDLE PROJECT
NEWTON TWP, ONTARIO
SCALE 1:50,000
METRES 500
0
1000 METRES
RUNDLE SOUTH
Twin Lake
RUNDLE
Parallel Lake
BREAKWATER RES. LTD.
DATE: JULY 1988
FIG.

this provided a drilling platform for file-in drilling on the Shaft Zone down to below 200m. Shaft sinking was cut off just below the 195m level and the planned drifting on, and the deep drill testing from the 250m level was cancelled.

A preliminary economic viability study was made in late December, (See Beecham and C-Dunlop, and Dunlop Dec. 1988). This preliminary study indicated that mining of the material in the shaft zones above the 195m level (the proven and drilled indicated reserves) would not be economically viable. Since that study, some data from the underground programme which was not available when the study was made, has been assessed and tonnages have been slightly increased. As well, it is now evident that the ore zones on legs II, III and IV are still open to the southeast. Further, a programme of check assaying (re-assaying of sample pulps) to date indicates that at least the bulk sample grades are a little higher than indicated by the original data. Check assaying of drill core is yet to be completed. A second viability study is planned with completion of the check assaying. and it is anticipated that overall, grades and tonnages will increase slightly.

SUMMARY OF WORK TO DATE, HISTORY

1940: The discovery of the main occurrences was made by prospector Claude Rundle working for Hollinger G.M. in the process of regional gold prospecting programme.

1940-1941: During this period mapping and extensive trenching was done and 23 surface drill holes put down near the site of the present shaft.

1941-1942: A two compartment shaft was sunk to a depth of 114m and 2 levels were established. On the 46m level work consisted of 259m of drifting and cross-cutting, 69m of raising and 955m of diamond drilling. On the 91m level, 151m of drifting and cross-cutting and 76m of diamond drilling were done.

During 1942, operations were shut-down because of war time conditions.

At the end of this work, Hollinger estimated 91,000 tonnes at a grade of 9.94 g/t of proven and probable reserves had been established.

1946: In 1946 (records vary from 1945 to 1948) the surface plant was destroyed by a forest fire.

1946-1981: Except for some geophysical surveys by Hollinger G.M., no significant work was done during this period.

3/...

1980-May 1987: In 1980, St. Joseph Explorations Ltd. started negociating an agreement with Rundle Gold Mines Ltd. whereby St. Joseph would earn a 50% interest in the property for the expenditure of $500,000 in work on this and the North Rundle property (a second block of patented mining lands in the northwest corner of Newton Township). Successor company, Sulpetro Minerals Ltd. signed an agreement with Rundle G.M. early in 1981. During the period from 1981 to 1985, intermittent work programmes were undertaken consisting of surface geological, geochemical and geophysical surveys, construction of a dry season and winter access road and some trenching and drilling of 23 surface diamond drill holes. Although this work indicated the main 'ore' zones at the shaft continued to depth, the thicknesses had decreased considerably from those encountered in the shallow workings

In May 1986 Novamin Resources, a successor company to Supetro Minerals undertook a further diamond drilling programme to investigate a possible new structure known as the A-South Zone to the northeast of the shaft zones. Although this programme did not appreciably extend the A-South Zone, the holes were extended southwest beyond the A-South structure where good values were encountered in the Shaft Zone. South east of the shaft, drill hole 3383-25 cut 8.20 g/t over 9.20m and drill hole 3382-26 cut 13.1 g/t over 8.0 metres. This indicated the Shaft Zones, although becoming narrow just below the old workings, they did 'open up' again at depth. Continued drilling resulted in the discovery of the West Zone in July 1986 and the East Zones in January 1987. At the conclusion this programme in May 1987, an additional 51 holes had been drilled,(3382-24 to 3382-74) and the drill indicated plus probable and proven reserves stood at about 500,000 tonnes at a grade of 7.0 g/t.

In May 1987 a decision was made to proceed with underground exploration of the deposits.

PROPERTY DESCRIPTION

The South Rundle property consists of 324 hectares of Patented Mining Lands made up of Parcel 9124 SWS in Newton Township and Parcel 10,879 SWS in Newton and Dale Townships, District of Sudbury.

The property is owned jointly by:

Novamin Resources Inc. &
Rundle Gold Mines Ltd.,

4/...

wholly owned subsidiaries of

Novamin Inc.
Suite 400
118 Eglinton Ave. West
TORONTO, Ontario, M4R 1A3

which in turn is a wholly owned subsidiary of

Breakwater Resources Ltd.
Suite 1440
625 Howe Street
VANCOUVER, B.C. V6C2T6.

BLOCK SYSTEM, BASE LINES, SECTIONS

The area around the deposit is divided up into blocks representing the 1:200 scale plans. The blocks are 175m east-west by 150m north-south. Block B covers the West Zone, Block VI covers the Shaft Zones and Block VII covers the East Zones.

During the surface diamond drilling stage, the ore shoots were interpreted to strike at about 110 deg. Hence a 110 deg. base line was set up sections with sections at 200 deg. The 500SE section of this system passes through the shaft. Later underground mapping, as noted below, indicated that the ore shoots to have a 135 to 140 deg. trend. A new system was then set up about a 135 deg. base line. The 1000NE and 1000SE point on this new system is at survey coordinate 2000N/3000E.

Surface drill section shown are plotted with respect to the 110 deg. system whereas sections for underground holes are plotted on the 135 deg. system.

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GEOLOGY OF THE SOUTH RUNDLE DEPOSITS

Geological Setting: The Rundle properties lie in the Swayze greenstone belt. The south Rundle part is underlain by a south-facing, north to south sequence of

1/ mafic, pillowed flows;
2/ intermediate pyroclastics;
3/ mafic tuffs and greywackes with minor flows;
4/ a 50 to 100m thick unit of ultramafic flows (chemically basaltic komatiites)
5/ fine grained, pillowed and coarse grained mafic flows;

Dips are steep to the north (i.e. overturned) and the regional strike is east-west.

A more or less E-W shear disrupts the sequence. In the area of the deposits, the shear coincides more or less with the south contact of the ultramafic (UM.) unit. A feldspar porphyry stock, some 2300m long and up to 180m thick intrudes along this shear. The intrusion is at a point where the flows south of the UM. from a local 'S' fold (either a drag fold or cross fold) and the porphyry itself has the shape of a flattened, open 'S'. The contacts of the stock, particularly the northern contact, are characterized by numerous slices and inclusions of mafic volcanics and sections of intrusive breccia.

A zone of strong deformation passes through the mid to northern parts of the property affecting the ultramafics and the tuff-greywacke unit to the north. In the ultramafics deformation is concentrated in zones of talc-chlorite-carbonate schist. South the the UM., the flows are generally undeformed.

A number of 160 deg. and 020 to 050 deg faults disrupt the formations. The porphyry and surrounding mafic volcanics are intensely fractured and many minor faults are recognized.

Description of Deposits: The important S. Rundle gold deposits lie at the north contact of the eastern portion of the feldspar porphyry (FP.) intrusive . They consist of networks of fine mineralized fractures and fracture controlled pyritic alteration and fine quartz veins. The interpretation of the main ore zones prior to exposure in the decline was that they were developed in 2 or more mineralized shear zones, known as the B-North and the B-South zones, which more or less paralleled the FP-UM. contact at 110 deg. Underground mapping, however, revealed that the control was actually oblique cross-fractures at a preferred orientation of about 160 deg. and a less prominent set at 020 deg.

The ore shoots consist of zones of mineralized fractures which as a unit trend mostly 135 to 150 degrees. The shoots

6/...

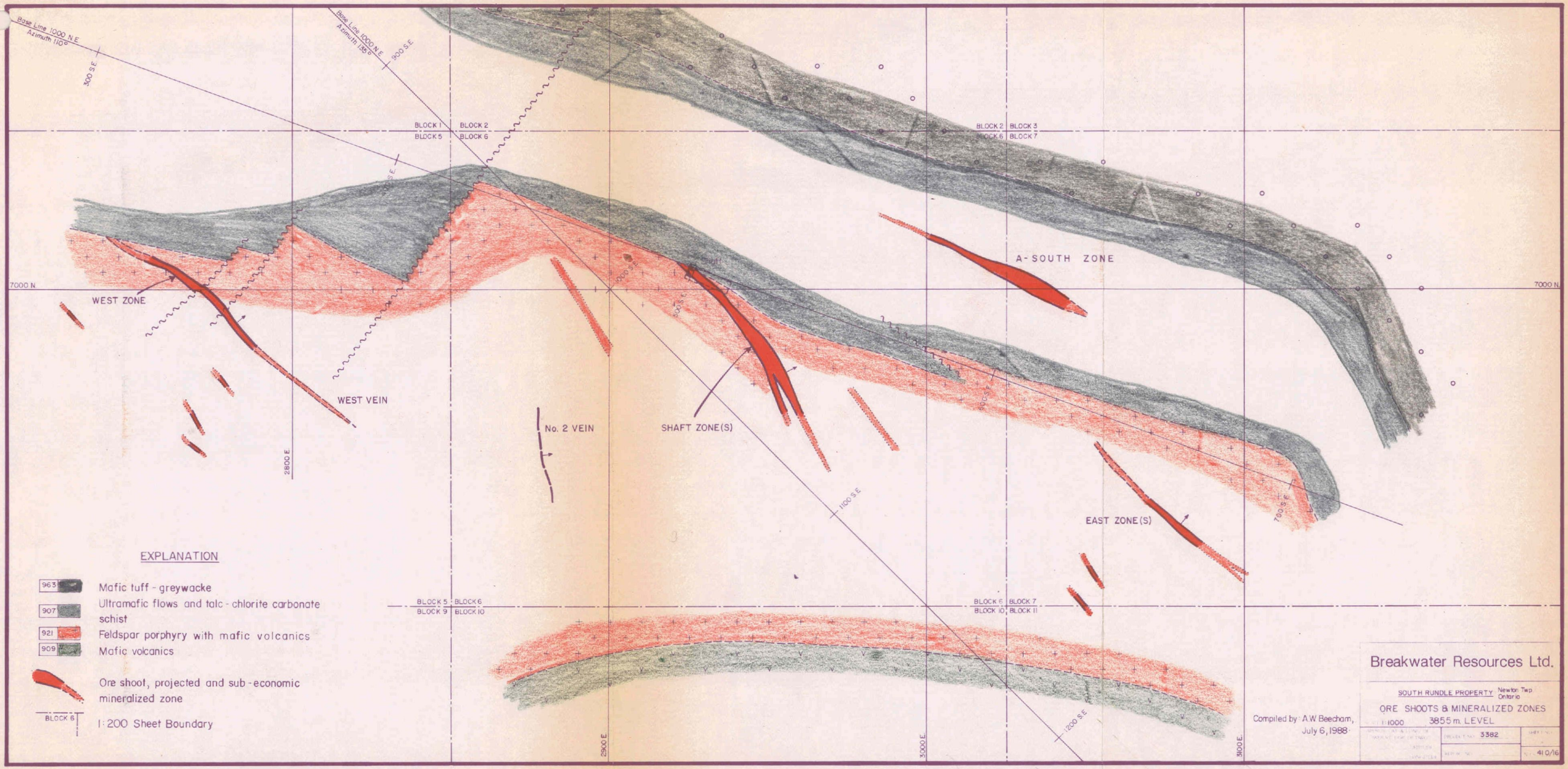
Base Line 1000 N.E
Azimuth 110°
300 S.E.
Base Line 1000 N.E
Azimuth 135°
900 S.E.
BLOCK 1
BLOCK 5
BLOCK 2
BLOCK 6
BLOCK 2
BLOCK 6
BLOCK 3
BLOCK 7
7000 N.
WEST ZONE
WEST VEIN
2800 E
No. 2 VEIN
SHAFT ZONE(S)
A-SOUTH ZONE
EAST ZONE(S)
1100 S.E.
700 S.E.
BLOCK 5
BLOCK 9
BLOCK 6
BLOCK 10
BLOCK 6
BLOCK 10
BLOCK 7
BLOCK 11
1200 S.E.
2900 E
3000 E
3100 E
EXPLANATION
963 Mafic tuff - greywacke
907 Ultramafic flows and talc - chlorite carbonate schist
921 Feldspar porphyry with mafic volcanics
909 Mafic volcanics
Ore shoot, projected and sub-economic mineralized zone
BLOCK 6
1:200 Sheet Boundary
Breakwater Resources Ltd.
SOUTH RUNDLE PROPERTY Newton Twp Ontario
ORE SHOOTS & MINERALIZED ZONES
1:1000 3855 m. LEVEL
Compiled by: A.W. Beecham, July 6, 1988.
3382
410/16

Fig 2

have strike lengths of 30 to 80m but appear to be continuous down dip over 100's of metres. The main control of the mineralization appears to be the intersection of the dominant 160 deg. fractures set with a strong shear zone along the south contact of the UM. The fractures are mineralized only a short distance (30 to 80m) SE of the UM. To the north within the UM. they are not recognized at all.

Mineralization and Alteration: Gold values occur with quartz-carbonate (Fe dolomite) altered, silicified or finely quartz-veined rocks. In the porphyry, the good values are in pale grey, bleached material with a few percent pyrite. Red altered porphyry with minor pyrite, specular hematite and fine magnetite occurs peripherally and contains only low values. Pervasive, red alteration of the porphyry extends far beyond ore grade values and in general affects the north 50m of the stock. Fine sericite is present eastward from the shaft area, but it is not closely associated with gold values.

In the mafic volcanics, good gold values occur in pyritic, light grey alteration. This is a distinct, fine quartz-carbonate fracture controlled alteration. Pyrite contents are from a few % up to 15 or 20 %. Some of the best ore concentrations are in intrusive breccias of mafic volcanics and porphyry (hybrid rocks). Mafic volcanics in large areas peripheral to the gold deposits contain epidote, pyrite and fine magnetite.

Minor amounts of scheelite occurs away from gold values in calcite-epidote-garnet veinlets. Although not usually seen megascopically, in polished section small amounts of auriferous chalcopyrite have been observed in the shaft zone by Love.

Shaft Zones: These are the largest ore concentrations found to date. The zones are exposed on the 46m and 91m levels and in the 4 legs of the decline. They have been traced from surface down to 400m.

Where best developed, on leg I of the decline and the 46m level, some 4 to 5, 140 deg. to 150 deg. trending fracture zones are present. These coalesce to from a mining unit up to 15m thick. The shaft zones simplify downward with 2 dominant zones from leg III to about 175m depth. Below this, the widely-spaced surface drill data suggests only one zone. However,this single structure does appears to lengthen considerably at depth, possibly up to 110m.

No. 2 Vein: This is a narrow quartz vein with a few percent pyrite and with red alteration of the wall rocks. It lies entirely within the porphyry about 40 to 50m SW of the Shaft Zones. The vein makes ore over a strike length of about 25m. It has been opened up on the 46m and 91m levels. Two holes of this programme tested the vein below the 91m level. Previous surface holes, H-60 and 3382-8 intersected the vein at depths of 160m and 225m respectively.

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West Zone, West Vein: These structures were not tested in this programme. However, recent compilation of diamond drill level plans has produced a new interpretation. This is that the West Zone as seen in dh. 3382-35, and the West Vein (the quartz vein explosed on the surface) are one and the same structure.

The West Zone as seen in DH. 3382-35 is typical pyritic, altered volcanics and porphyry the same as the Shaft Zones, while the West Vein part is a quartz vein or stockwork in altered porphyry the same as the No. 2 Vein.

East Zones: The East Zones are located about 150m SE of, and have a very similar setting to the Shaft Zones. However, at depths down to 200m they consist of only a single, short shoot. The East Zones are only well developed, containing 2 or more zones, below 200m. The zones have been traced from near surface to a depth of 400m. As noted in underground diamond drilling, 2 holes drilled from the 195m level helped to substantiate the interpretation based on surface drilling that the shoots strike about 135 deg.

A-South Zone: This structure (See fig.2) is distinctly different than the West, Shaft or East Zones. The shoot is developed within a conformable shear zone within the ultramafic flows and strikes about 110 deg. Gold values are associated with quartz veining at the pinch-out of a feldspar porphyry sill where the sill intrudes a thin, cherty, pyritic interflow sediment. The shoot appears to plunge westward. As noted in surface drilling it was tested with several surface drill holes. As well a sub level was developed from the decline at about 120m depth. Chip and muck assays are shown on the assay plans. The eastern part of the sub level carries moderate values over a 16m length, and in the last face, some visible gold is present and a combination of chips and drill core samples indicate a 5.5m section assaying 8.65 g/t gold.

S.E. Vein Cluster: These zones are developed in mafic volcanics south of the porphyry stock. The cluster lies more or less on strike with the Shaft and East Zones and the fractures have the same preferred strikes. Although very well exposed on surface, only low grade material over minimum mining widths is outlined. No work was done on the SE. Vein Cluster in this programme.

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SURFACE AND UNDERGROUND INSTALLATIONS (by C.B. C-Dunlop)

ROAD CONSTRUCTION

On May 25th 1987, J.S. Redpath Ltd. the selected mining and engineering contractor, began the supervision of the Leo Alarie and Sons Ltd. on the upgrading of the 27 km road into the Rundle mine site. The upgrading, widening and straightening to allow year round access was partially funded by a N.O.R.D. grant and was a joint effort by Novamin, Dome and Northgate Exploration. The work was completed by mid July 1987, following several modifications ordered by the Ministry of Natural Resources and the N.O.R.D. committee.

The first part of the road (from just west of the Swayze River to the Dore forestry road) was later by-passed and shortened by Northgate Exploration so that the present distance from the forestry road to the Rundle site is now about 24 km.

SITE AND SURFACE FACILITIES

Site slashers began brush clearing on June 19th and by June 30th, 1987 the site was clear of all trees and undergrowth, including a 50 FT (minimum) cleared fire break around all proposed buildings or installation locations.

GENERAL FACILITIES

To support the underground exploration program, a 45-man camp was rented from and installed under the supervision of J.S. Redpath Ltd. The camp was supported by an approved septic system and a registered Land fill site. Potable water was pumped via a burried/heat traced line from nearby Pond No. 1. During peak periods, additional trailers, capable of housing 20 men, were brought in on demand.

Energy equipment, such as generators, compressors and the main electrical sub-station were trailered to the site as mobile, self contained units.

During the excavation of the old shaft collar and hoist foundations, equipment was retained to establish primary and secondary retention ponds, lined with clay, of approximatly 40 FT by 40 FT by 7 FT deep dimensions. The polished overflow was eventually discharged through a swamp to Pond No. 2.

A laydown area of approximately 90m by 50m was cleared and leveled to receive rounds of broken muck awaiting assay results, while traversing the mineralized zones.

9/...

DECLINE SUPPORT FACILITIES

A 60 FT x 40 FT tent with a slab concrete floor, served as the mechanical shop during the decline excavation. Warehousing of machine parts and other consumables were contained within 2 forty-foot highway trailers. Fuel for the underground trackless equipment was bled from a 1000 gallon tank, separate from the main generator bunker.

As the demand for additional electrical power increased, 3 sked-mouonted 600kva generators, were brought in and housed under a tent similar to the mechanical shop, to replace the two 500 KVA units housed in a highway van.

SHAFT SUPPORT FACILITIES

In order to dewater, rehabilitate and deepen the existing 372 FT deep, 2 compartment shaft, a headframe and hoist were required. Novamin selected a 1928, 5 FT, double drum Ingersol Rand hoist which was available at it's O'Brien Division at Cadillac, Quebec. Redpath removed the hoist from O'Brien, rehabilitated it and installed it under a 40 FT by 50 FT steel clad, Butler type building. R and W Mining and Milling Ltd. of Timmins was sub-contracted through Redpath to erect a 70 FT, 2 compartment timber headframe, from which shaft muck was dumped directly to the ground and removed with a loader, as a bin was not required for exploration purposes. The headframe, although suitable for sinking, is not approved for production, due to construction deficiencies.

DECLINE EXCAVATION

Excavation for the portal location began June 24th 1987 and by July 13th, 40FT of portal was complete and secure and the decline underway.

The 10 FT by 13FT exploration decline was designed to traverse the mineralized zones at -20%, bulk sampling and exposing the mineralization for detailed mapping and grade analysis. The four traversing legs of the decline were to provide, in conjunction with detailed diamond drilling, sufficient information to determine and establish the nature and mode of gold mineralization in the upper part of the Shaft Zone. Results of this displayed on the 3 sets of decline and level plans, Fig. 4,5 and 6.

By Nov. 14 1987, 3600.97 FT (1,097.5) of exploration development had been completed. Of the total footage, 407.64 FT (124.2m) was cross-cuts to the hanging or footwall of the mineralized zone, which also served as remuck bays, diamond drill stations and explosive magazines. To access the 46m and 91m

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levels 264.4 FT (80.5m) was developed in the form of flat drifts. The ultimate vertical depth achieved by the decline was 392.06FT (119.5m).

The four legs of the decline bulk sampled a total of 472.44FT (143.9m) of the upper Shaft Zone mineralization and 196.85 FT (59.9m) of the A-South Zone.

SHAFT DEWATER, REHABILITATION AND EXCAVATION

Shaft dewatering began July 15 th 1987 and by August 17th, the shaft was dewatered and rebabilitated to 308.4 ft (94m) below the collar.

Rehabilitation, primarily consisted of replacing the manway, ladders, pipe, and in places re-nailing or re-blocking the tight lining. The shaft timber was in excellent condition and professionally installed.

On October 8th 1987, the first bench was blasted following a lengthy hoist installation, due to a lack of electrical components. By Dec. 1 1987, 304.79 FT, (92.9m) of shaft had been sunk, bringing the deepened shaft bottom to 680.5 FT, (207.4m). Two partial stations were excavated at 145m and 195m from surface. Lip pocket excavations were made 35 FT, (10.7m) below each of the 2 new levels in anticipation of exploration drifting to establish drill platforms. The 195m level lip pocket raise of 42 FT was driven to break through in the station. As no development was carried out on the 2 new levels, the mechanical pockets were not installed.

STANDBY PERIOD

Following the Dec. 1st completion of the shaft, diamond drills werre moved into the decline for deliniation drilling and into the 120m sub level for fill-in drilling of the shaft zone from 140m to 225m depth. An electric drill was set up in the 195m shaft station for deep testing of the East Zone. Diamond drilling was completed Dec. 18 1987 and all crews and contractors demobilized by Jan. 20 1988.

11/..

SURFACE DIAMOND DRILLING

During the early part of the underground work, a programme of surface drilling, totalling 3188.4m in 11 holes, was undertaken. This programme had two objectives. The first was to define the East Zones at shallow depths. (The previous work had tested these zones from about 100m down to 400m.).

The second objective was to test the SE. part of the main porphyry intrusive at depth. (Most of the gold deposits at the Rundle are located at the NE. contact of a NW-SE striking, altered feldspar porphyry intrusive. See Fig.10a). The hypothesis was that the low grade values known to exist in this area (SE of the main occurrences) at depths down to 200m, were simply leakage haloes indicating better grade material at depth. Three holes were drilled to test this hypothesis, but results were negative.

East Zones and A-South Zone:

Six holes, 3382-75, 76, 77, 78, 80 and 81 tested for an upward extension of the East Zones between sections 620SE and 680SE on 110 deg. base line. Several significant intersections were made and it appears that one of the East Zone shoots extends upward at least to within 50 m of surface. However, the strike length of the shoot is only about 20 to 25m at this point.

One of the holes testing the East Zones, 3382-78 cut significant values, 6.92 g/t over 8.3m core length in Zone A-South (in the hangingwall of the East Zones and within the ultramafic unit;). See Fig. 10b, (Longitudinal section Zone A-South). Two fill-in holes 3382-84 and 85 were therefore drilled . As listed below, #85 cut 4.76 g/t Au over 3.7m directly below #78.

Significant values for the East Zones and A-South Zone are listed below:

DH. #	SECT.	FROM	TO	LENGTH	g/t Au	VERT. DEPTH	ZONE
75	680SE	129	130.5	1.5	2.2		East
		145.5	148.5	3.0	6.05		"
76	670SE	50	51.5	1.5	2.4		
		88.5	94.5	6.0	2.3		East
77	640SE	93.0	97.5	4.5	2.4		
		112.5	114.0	1.5	4.6		East
		119.0	120.5	1.5	3.4		

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78	620SE	82.0-90.3	8.3m	6.92	70m+-	A South
		137.9-139.3	1.5	3.2		East
		167.5-169.0	1.5	8.8		East
80	660SE	42.96-43.88	0.96	2.7	34m	Zone A South
		106.3-110.4	4.1	8.4	82	East
81	660SE	65.5-68.25	2.75	4.41	45	East
85	620SE	126.0-129.7	3.7m	4.67g	105	Zone A South

Southeast Part of Porphyry:

Three drill holes 3382-79, 82, and 83 tested for deep potential in this area. See Longitudinal projection, Fig.__. Values, however, instead of increasing with depth, as hypothesized appear to decrease with depth. Only minor values were encountered as listed below:

DH	SECT.	FROM	TO	LENGTH	G/T Au	VERT. DEPTH	REMARKS
#79	850SE	365.0	366.21	1.21	2.0		Carb. UM.
		439.2	439.7	0.5	1.0		In FP stock
#82	800SE	459.8	460.7	0.9	1.1	417	N edge stock

UNDERGROUND DIAMOND DRILLING

Between 4 Sept. 1987 and 16 Dec. 1987, 103 holes were drilled for a total meterage of 3435.36. The drilling was done from the 4 legs of the decline, from the 91m level of the old workings and from the shaft station of the 195m level.

Drilling from the decline was to sample and determine the extent of the shaft zones and to explore favourable ground both to the SE and the NW of the Shaft Zones which could readilly be reached from the decline. Due to the erratic nature of the gold values it was found necessary to drill as close as 10 and even 5m in order to determine continuity of the zones.

On the 91m one hole was drilled to test continuity of values between the 2nd and 3rd leg of the decline and 2 down holes tested the downward extension of the No. 2 Vein which lies SW of the Shaft Zones.

Fill-in drilling of the Shaft Zones between depths of 140 and 225m was done from the 120m Sub Dr. on the A-South Structure. The purpose was to establish better continuity in this important ore block.

In an attempt to better establish the attitude of strike of the east zones, two relatively long holes were drilled to the SE from the 195m level shaft station.

While driving was in progress, no drilling could be done from the decline itself. However, during this time, some horizontal fans were drilled from the short cross-cuts on legs I to III. After early November, drill sites were available for continuous drilling, at first on the 91m level and then in the decline. With the completion of the decline, and the 120m Sub level in mid November, drilling was accelerated with up to 4 machines at work (2 bazookas, 1 JVA and 1 large electric drill.). Drilling was completed 18 December, but core logging and sampling extended into January 1988.

Decline Leg I Diamond Drilling: Some 24 short holes were drilled from the leg I and cross-cuts. Results are plotted on the Leg I Assay Plan.

Combined with face and wall chip samples, the drilling data outline a 45m by 15m ore lens for the main Shaft Zone. This lens strikes about 145 deg. Values are somewhat erratic, even in this, the best sector of ore outlined to date and very detailed drilling was necessary. A second, parallel zone lies 5 to 10m to the NE. This is lower grade, narrow and values are discontinuous. West of the main Shaft Zone a short ore grade lens is outlined by chip sampling and drilling.

About 70m east of the Shaft Zones 2 drill holes, 1-15 and 1-16 indicate an extension of the Portal Zone to the NW of the Decline.

Based on drill intersections, and bulk sampling in the

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decline and a few chips samples, the 3 Shaft Zone lenses are calculated to contain 2160 tonnes per vertical metre at at grade of 6.07 g/t.

Decline Leg II Diamond Drilling: Here, 21 holes were drilled to explore for and sample mineralized zones adjacent to the Decline. Three ore lenses parallel to those outlined on Leg I above are indicated. Again, on the basis of drilling and bulk sampling, a total of 1450 tonnes/vert. m. at 5.92 g/t was outlined. Drilling to the SE of the Shaft Zones although some values were intersected, did not outline any ore zones.

Decline Leg III Diamond Drilling: On the third leg, 19 short holes were drilled. Grades here are generally lower and values less continuous decreasing the certainty of the ore blocks. Two zones are outlined south of the shaft. They have trends of 140 to 155 degrees. A third zone to the north, trending about 115 deg. (about parallel to the porphyry-ultramafic contact) appears at this elevation. (It is not evident higher up.).

Based, again on diamond drilling plus bulk sampling, and chip sampling, the 3 zones here are estimated to contain 910 tonnes/vert. m. at a grade of 5.14 g/t gold. However, the main structure is open to the southeast (beyond dh. 2-47).

Three holes tested interesting values to the SE of the Shaft Zones. However, no 'ore' seems to be developed here.

91m Level Diamond Drilling; Ten flat holes were fanned from locations in the old workins and from the access drift joining the decline and the old workings. As with leg III, most of the values are in 2 zones trending 140 to 145 deg. The SW zone, based on 6 drill holes and some chip sampling by Hollinger, appears to have good, consistent values, much better than for leg III only 10m above. The NE zone is outlined by 2 holes and chip samples. An unusual NE trending zone forms a 'ladder rung' between the 2 NW-SE trending zones. Theses three zones total 930 tonnes/vert. m. at a grade of 6.92 g/t gold.

A near horizontal dacite dyke obscures and cuts off the NE zone and the NW end of the SW zone. Further drilling would almost certainly extend these ore zones.

One up-hole, 2-63 was drilled from the 91m level cross-cut at a point about 75m SW of the shaft. This tested the shaft zones for vertical continuity between the 2nd and 3rd legs of the decline. Two ore-grade zones which correspond more or less to the 2 main shaft zones were cut as follows:

From	To	Core Length m	g/t Gold
47.0	49.5	2.5	9.81
52.84	59.0	6.16	7.59

Other drilling on the 91m consisted of 2 short down holes,

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2-59 and 2-60, to test the down dip extension of the No. 2 Vein. On section 1010SE (135 BL) dh. 2-59 cut sub-economic values. On section 1030SE, dh. 2-60 cut 13.6 g/t over 0.7m in the No. 2 Vein.

Decline Leg IV Diamond Drilling: Seventeen, 5 to 10m spaced, horizontal holes were drilled on this leg. The SW Shaft Zone is reasonably well defined by drilling and some chip sampling. The NE band here, is not continuous. These 2 bands make up 820 t/vert. m. at 5.5g/t. Both of the bands are open to the SE.

Shaft Zones Diamond Drilling, 140 to 225m Depth: Eight down holes ere drilled from the 120m sub-level drift on the A-South structure. Results of these are best viewed on the longitudinal. The effect of these holes has been to confirm the reserves previously assumed on the basis of widely-spaced surface drill holes. As is apparent on the 4 legs of the decline, the SW Shaft Zone decreases in importance with depth while, on the other hand, the NE Shaft Zone which is discontinuous at higher elevations, becomes the dominant ore structure below about the 145m level. (i.e. the zones are en echelon stepping northeastward with depth.).

Holes from the 120 sub-drift on the A-South Zone cut values near the collars in the footwall of the A-South Zone.

The better values for both the Shaft and A-South Zones are tabulated below:

DH.	Sect(SE)	Elev.	From	To	Length	Assay(g/t)	Zone
3-24	1050	3857	56.8	62.5	5.7	4.46	NE. Shaft
		3853	71.95	75.1	3.15	9.18	SW Shaft
3-25	1050	3816	83.15	85.04	1.89	6.28	NE Shaft
3-26	1090	3876	0	3.36	3.36	5.51	A-South
3-27	1070	3872	6.0	7.0	1.0	12.17	A-South
		3807	83.0	86.29	3.29	6.71	NE Shaft
3-28	1090	3878	1.1	3.3	2.2	3.19	A-South
		3816	82.24	83.49	1.25	3.77	Shaft
		3808	91.42	93.51	2.09	6.33	Shaft
3-29	1090	3877	1.13	3.84	2.71	11.84	A-South
	1110	3821	81.9	83.55	1.65	4.32	Shaft
	1110	3817	87.3	88.2	0.9	4.94	Shaft

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3-30	1080	3873	8.9	9.6	0.7	6.79	A-South
		3775	106.63	111.49	4.86	7.79	SW Shaft
3-31	1100	3876	1.5	4.7	3.2	15.99	A-South
		3778	105.3	111.7	6.4	10.45 (uncut)	Shaft

East Zone Diamond Drilling From 195 Level: Two holes were drilled downward in a southeastern direction from the 195m shaft station. This was done on the advise of management to test the strike of the East Zone. The holes are not only drilled down dip, but also at a small angle to the apparent strike of the zones.

Both holes cut wide sections of good grade material near the collars in the shaft zones. In the East Zones, dh. 4-01, the hole closer to the ultramafic contact, cut a wide zone of good values in the east zones. DH. 4-02 fanned farther south of the ultramafic contact cut only low to moderate values over short lengths. The width of the zones as indicated in core is greatly exaggerated because of the small angles at which the zones are intersected.

The positioning of the East Zone intersections on plan seems to confirm the 135 deg. trend suggested by the surface drilling.

A summary of values cut in holes 4-01 and 4-02 is listed below:

DH.	From	To	Core Length	Assay	Zone
4-01	14.0	21.3	7.3	16.21	Shaft
	31.0	36.1	5.1	11.21	Shaft
	176.5	185.5	9.0	4.04	East
	185.5	198.5	13.0	8.19	East
	204.0	205.5	1.5	10.05	East
4-02	13.67	15.29	1.62	3.89	Shaft
	23.24	39.02	15.78	12.46	Shaft
	47.86	49.3	1.44	10.83	Shaft
	199.58	200.2	0.62	5.38	East
	217.63	219.41	2.0	10.04	East

SAMPLING

Chip Sampling: Systematic face and wall sampling was done on most of the decline and branch headings. In most cases, 3 or 4 samples were taken across each face arranged to define the mineralization and veins. Sample lengths vary from 0.3 to 2.0, but are mostly about 1.5m. Walls through mineralized rocks were sampled at 1.5m intervals or less if necessary. The chip samples ideally consisted of a 0.5m high panels.

Results of this work are shown on the Decline Assay Plans.

Muck Sampling: All mineralized muck was sampled. In the early part of the work, one 10 to 20 lb. sample per round was taken. This was later changed to five, 5 to 10 lb. samples per round. These samples, referred as grab samples were sent for assay immediately to determine (in cases where visual assessment was uncertain). Results of this work are shown on the decline muck assay plans.

Bulk Muck Sampling: One of the main purposes of the programme was to determine the grade of the Shaft Zones by bulk sampling.

Rounds determined, usually visually or by grab sampling, to be ore or near ore were placed on the lay down pad. Here, an approximately 200 lb. sample was taken from each 90 to 100 ton round. Samples were taken with a muck scoop to give a reasonably representative sample with respect to size fraction.

The bulk muck samples were crushed to -1/4 inch, coned and split into 9 sectors for separate assays. Each bulk sample consisted of 2 bags which in most cases became separated so that each bag was often cut into 9 sectors. Hence, many of the samples actually have 18 separate determinations.

Averages of bulk muck assays are shown for each round on the Muck Assay Plans. They are considerably lower than the grab mucks assays. The gold which is mostly contained in the pyrite is apparently concentrated in the fines, as pyrite is more friable than the gangue. The smaller grab samples which were mostly collected with the hand are thought to have preferentially included more fines as compared to the bulk muck sample collected with a muck scoop. However, as the discrepencies are particularly large in the high grade end some comparative assaying was done at other laboratories. This work is presently in progress and is not reported here.

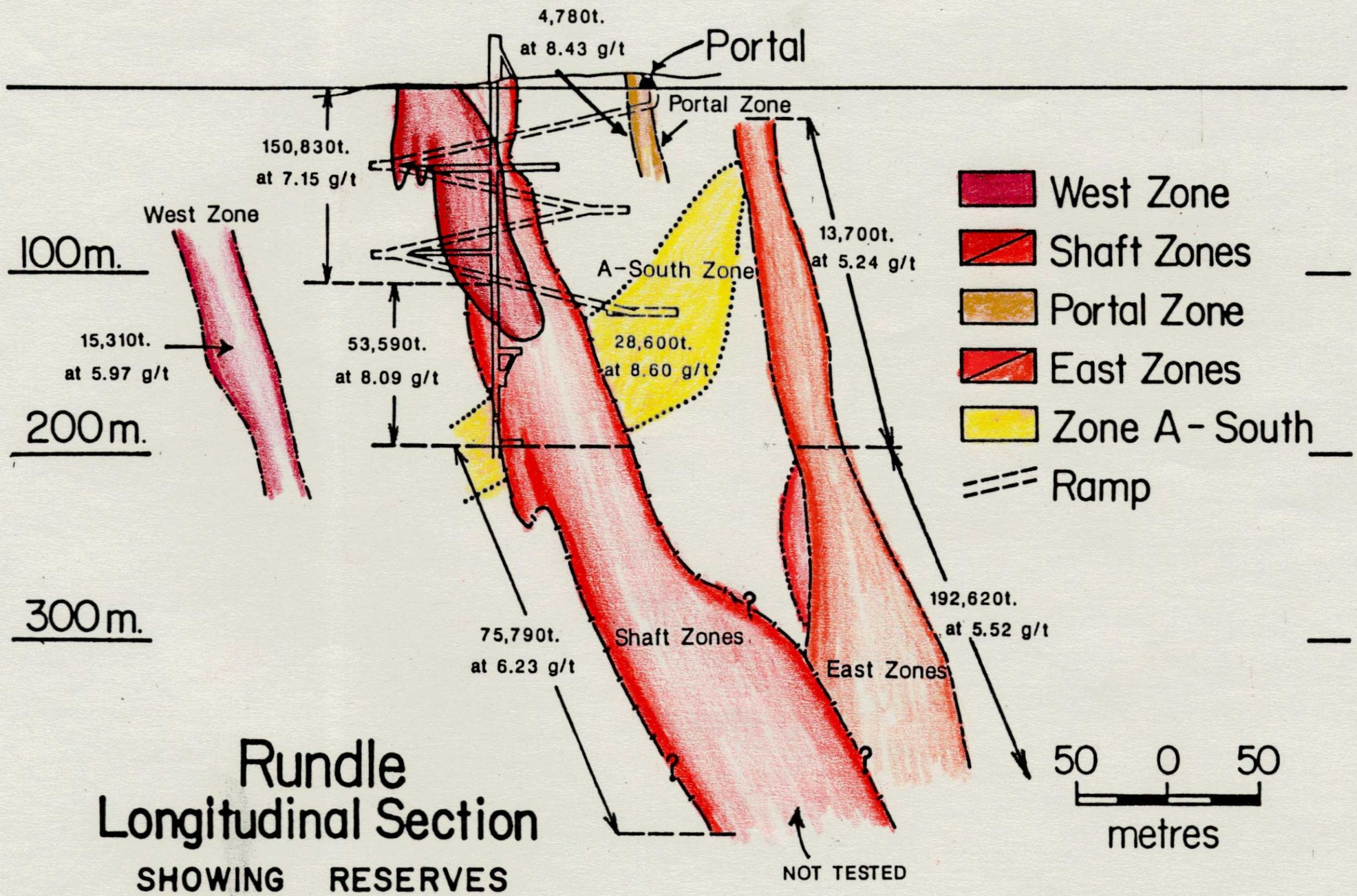
RESERVE INVENTORY

After the shut down of the operations in January, (1988), reserves were updated (Beecham 17 Feb. 1988).

For the upper part of the Shaft Zones which was exposed on the 46 and 91m levels and in the decline, various combinations of bulk mucks, drill core and chip assay data were used.

In the case of the drill indicated and drill inferred reserves, these were calculated from longitudinal projections. A cut off of 3.4 g/t and minimum mining width of 1.5m was used. The area of influence around each hole was made up by projecting up to 10m horizontally and up to 20m or more vertically.

Results from these data are summarized in table form below: A further study of the analytical and sampling techniques and re-interpretation of the ore zones is in progress. Upon completion of this, another reserve figure will be calculated. In light of the data to date, it is expected that both grade and tonnage will increase slightly.



Rundle
Longitudinal Section

SHOWING RESERVES

- tonnes, g/t gold : — —

FEB. 1988

FIG. 3.

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SUMMARY OF MINERAL INVENTORY SOUTH RUNDLE

ZONES	REMARKS	TONNES	GRADE G/T	CATEGORY
Shaft Zones	Surface	13,090	12.0	established by
	Decl L I	45,560	5.89	by detailed u/g
	46m lev.	15,090	7.52	drilling, chip and
	Decl L II	25,250	5.88	muck samples
	Decl L III	16,710	5.17	& raising;
	91m Lev.	9550	7.03	
	Decl.L IV	14,430	5.52	
#2 Vein	Surface high assays cut to 34.386	1900	8.02	"
	46m Level uncut as highs continuous over 9 m;	4440	27.67	"
	91m Level isolated high assays cut to 34.286;	4810	4.04	"
		150,830 t	7.15 g/t	
Shaft Zones 4th Leg Decline to 195m Lev.	NE. Structure based on 9 u/g & surf. dh.	40,790	8.73	Established by dd on approx. 10x20m spacing;
	SW Shaft Structure	12,800	6.06	"
		53,590 t	8.07g/t	
Portal Zone	Surface & Decline Leg I	4,780	8.43	Establish by surf sampling & detailed u/g dd.
TOTAL RESERVES ESTABLISHED BY UNDERGROUND PROGRAMME SURFACE TO 195m LEVEL		209,200 t	7.42 g/t	

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ZONES	REMARKS	TONNES	GRADE g/t	CATEGORY
Shaft Zone(s) 195m Lev. -400m Lev.	8 surf. & 2 u/g dh	75,790	6.23	Drill inferred based on 50m x 20m dh spacing
East Zone surf. to 195m Lev.	6 surf. dh.	13,700	5.24	"
East Zone 195m Lev. to 470m	10 surf. dh.	192,620	5.52	"
West Zone	2 surf. dh 85m to 185m depth;	15,310	5.97	"
Zone A South	4 surf. dh.	28,200	8.60	

TOTAL RESERVE ALL CATEGORIES ABOVE 195M LEV. 266,410 t 7.35 g/t

TOTAL RESERVE BELOW 195m LEVEL 268,410 t 5.72 g/t

GRANDE TOTAL 534,820 t 6.53 g/t

(589,532 sh. tons @ 0.19 opt)

METALLURGICAL TESTING SUMMARY (by C.B. C-Dunlop)

Wright Engineers Ltd. were engaged in conjunction with Lakefield Research to perform preliminary bench test metallurgical investingations. The conclusions of the preliminary investigations are as follows:

1/ Direct cyanidation of the ore results in gold extractions of 95% with low cyanide and lime consumption.

2/ Flotation of a bulk sulphide concentrate can recover 97 % of the gold values into a concentrate containing only 15% cf the feed weight. 95% of the gold in this concenterate can be recovered by cyanidation. This process route therefore can yield 92% overall recovery.

3/ The bond work index of the ore is 20.2 Kwh/metric tonne. This is somewhat higher than was expected from the subjective observations on how the ore reacts to grinding in the laboratory.

4/ Microscopy was preformed to dtermine the mineralïgical association of the gold, but could only detect fine gold in pyrite.

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Date: 15 July 1988

A.W. Beecham,
Senior Geologist
Breakwater Resources Ltd.

Date: 11 July 1988

C.B. Cunningham-Dunlop
Manager of Projects
Breakwater Resources Ltd.

REFERENCES

Beecham A.W. (Feb. 1988) Rundle Mineral Inventory Up-Date, Inter-Office Memo. Novamin Res.

Beecham A.W. & Cunningham-Dunlop C.B. (Dec. 1987) Rundle Project Status (Reserves and economic viability); Inter-office memo. Novamin Res.;

Cunningham-Dunlop C.B. (Dec. 1987) Rundle Mining Concept at a Rate of 200 tpd Shrinkage Method; Inter-office Memo. Novamin Resources;

Love David A. Petrology and Alteration of the Rundle Gold Deposit, Newton Township, Mining District of Porcupine, Ontario; M.Sc. Thesis diss. University of Waterloo;

Salter R.S. et al An Investigation of the Recovery of Gold from Samples of Rundle Ore; Proj. No. LR-3387; by Lakefield Research, submitted by Wright Engineers Ltd.

APPENDIX I

DECLARATION AND QUALIFICATIONS OF WRITERS

D E C L A R A T I O N

This is to state that I, Arthur W. Beecham hold a Bachelor of Science degree (1962) from the Dept. of Geology, Carleton University, Ottawa and a Master of Sciencè degree in Geology (1969) from the School of Graduate Studies, Queen's University Kingston, Ontario. I am a Fellow of the Geological Association of Canada.

Since 1963 I have practised my profession continuously or been engaged in graduate studies.

I am presently employed as Senior Geologist by Breakwater Resources Ltd.

I personally supervised or carried out the work outlined in this report.

9 July 1988

Date

A.W. Beecham

DECLARATION

This is to state that I, C. Bruce Cunningham-Dunlop, hold a Mining Technologist Degree (1981) from the Haileybury School of Mines, Haileybury, Ontario.

Since 1974 I have practised in the mining industry continuously.

I am presently employed as Manager of Projects by Breakwater Resources Ltd.

I personally supervised or carried out the work outline in this report.

July 11, 1988
Date:

C.B. Cunningham-Dunlop

APPENDIX II ASSAY LABORATORIES

At the beginning of the programme, samples were sent to Timmins Analytical Ltd. However, due to long turn around times at Timmins Analytical, the Technical Service Laboratory (TSL.) was used for the latter part of the work.

Approximate areas of the workings and drilling programmes covered by each laboratory are listed below:

Timmins Analytical Ltd. McIntyre Road Schumacher, Ont. P0N 1G0	1/ All surface drilling, holes 3382-75 to 3382-85; 2/ chip and grab muck samples in the decline and cross-cuts from surface to end of Leg III (Round 143)
T.S.L. Ltd. 2031 Riverside Dr. Unit 2 Timmins, Ontario P4N 7C3	1/ All bulk muck assays 2/ All underground drilling; 3/ Chip sampling & grab muck samples for Leg IV of decline (Round 144 onward), 91m access drift, 125m A-South Sub. Dr., 4/ Shaft muck;

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-001 SHEET 1 OF 2

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
Rundle South	Newton Twp	20.06	04/09/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		0.0	05/09/87		
Claim No.	Co-ordinates:	Length	Drilled By:		
1st level	1961.453 N	16.8	N Morissette Can.		
Grid No.	2937.080 E	Collar Elev.	Logged By:		
		3976.238	A.W.Beecham		

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-B Zone East of Shaft Shoots						
0	2.4	ALTD FP	10401	0	1.5	1.5	tr	0.1
		-orange red; mod. fr and qc 5%	10402	1.5	2.8	1.3	tr	0.2
		-tr Py						
2.4	7.9	ALTD MAF. VOLC AND ALTD FP	10403	2.8	3.1	0.3	1	0.3
		- dk green, fg, fine wispy texture	10404	3.1	3.9	0.8	tr	0.7
		- foliated sections (possibly dykes)fol'n at 65'	10405	3.9	4.6	0.7	5	0.5
		- 2.9m -1cm lt grey qtz-Py trcp at 45'; minor qc	10406	4.6	5.6	1.0	.5-1	0.8
		- .5% diss Py except: 3.9-4.5 15% Py with lt grey	10407	5.6	6.9	1.3	1-2	1.3
		altn in 20cm and 10cm bands	10408	6.9	7.9	1.0	3	4.2
		4.5-6.0 1% diss and streakds						
		6.0-7.9 1-3% Py with strong calcite						
		F.P. dykes 3.0-3.2; 3.5-3.8						
7.9	11.7	ALTERED F.P.	10409	7.9	9.3	1.4	tr-.5	0.1
		-as 0-2.4 and minor wisps mafic volc at top	10410	9.3	10.7	1.4	tr-.5	-
		-strong orange red altn; minor qc veinlets;	10411	10.7	11.7	1.0	tr-.5	-
		qtz blebs at 10.7;						
		-tr .5% diss Py						
11.7	12.9	ULTRAMAFIC FLOW						
		-soft talcose, chl, spinifex and bx	10412	11.7	12.9	1.2	-	0.1
			10413	12.9	14.4	15	1	-
			10414	14.4	15.7	1.3	1	-
			10415	15.7	16.77	1.07	-	-

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-001 SHEET 2 OF 2

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
12.9	15.6	LAMPROPHYRE - dk grey bown- calcitic -mafic chel'd mafic phenocrysts; -cts 65-75'; 1% diss Py						
15.6	16.77	U.M. FLOW - as above						
	16.8	EOH Core size: Whole core sampled NOTE: Error in length rods corrected						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-002 SHEET 1 OF 2

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
Rundle South	Newton Twp	350.40	5/09/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		0.	6/09/87		
Claim No.	Co-ordinates:	Length	Drilled By:		
1st level	1961.392 N	20.4	N Morissette Can.		
Grid No.	2936.125 E	Collar Elev.	Logged By:		
#1 Sub Level Drift Ramp		3976.350	A.W.Beecham		

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-Zone B East of Shaft Shoots						
0.2	1.8	RED ALTD FP -stronge orange-red alt, 5% q.c. -up to 1% Py/ 10cm tr. overall	10416	0.2	1.7	1.5	tr	0.9
1.8	4.5	GREY-PINK FP -texture preserved 20% 2-5mm fsp and finer fsp in matrix; a little chl'd biotite - minor qtz -calcite with chl. veinlets; sections mod red alt; tr Py - 2.1-2.5 2, 15m sections foliated mafic inclusions	10417 10418	1.7 3.2	3.2 4.5	1.5 1.3	tr	0.2 0.3
4.5	8.4	ALTD MAFIC VOL. -dk grey-black, ard, fine grained, strongly mag't -strong fract comented with 5-10% calcite 7.3-7.6 lt grey-white qtz; bx veins, 20% qtz and 5% Py over 30cm; diss and scatterd grains Py	10419 10420 10421 10422	4.5 6.0 7.2 7.7	6.0 7.2 7.7 8.4	1.5 1.2 0.5 0.7	 ·0.5 	0.3 nil 3.9 0.2
8.3	11.7	ALTD FP AND ALTD MAFIC VOLC -as above - fine augen struct; mod-strong fr. with qc veinlets; tr-minor diss Py in fp esp with strong red altn adjacent to qc veinlets 9.1-9.4 -4% Py with a little calcite lt grey altn 10.88-11.09 3% Py in int of bx mafic volcainc	10423 10424 10425 10426 10427	8.4 9.1 9.8 10.6 11.2	9.1 9.8 10.6 11.2 11.7	0.7 0.7 0.8 0.6 0.5	 3-4 tr 6-7 .5-1	0.2 0.1 0.2 0.1 0.1

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-002 SHEET 2 OF 2

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
11.7	14.3	RED ALTD FP -mg red altd fp -locally few relict feldspars visible -few fg bio flakes -traces pale grey alteration with f.g. Py - .5-1% f.g. diss Py	10428 10429	11.7 13.2	13.2 14.3	1.5 1.1		0.1 ncl
14.3	16.0	ALTD MAFIC VOLCANICS -grey f.g. mafic volcanics -shot thru by a network of white dol veins; some calcite; .5-1% f.g. Py -FP dyke 15.57-15.72	10430 10431	14.3 15.0	15.0 16.0	0.7 1.0		0.6 0.5
16.0	19.05	ULTRAMAFIC VOLC -massive to locally spnifex u.m. -locally sheared - FP dyke 17.73-18.1	10432 10433	16.0 17.5	17.5 19.0	1.5 1.5		ncl "
19.05	20.06	LAMP DYKE -dk greenish grey lamp dyke 1-2% fg diss PY	10434	19.0	20.4	1.4		"
20.06	20.40	TALC CHLORITE CARBONATE SCHIST -green, schistosity at 60'						
	20.40	EOH Core size LTK46 whole core sampled NOTE: originally shown as 68'-adjusted for 1.5m Rods vs 5ft to give length of 20.4m						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-003 SHEET 1 OF 2

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
Rundle South	Newton Twp	49.81	06/09/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		0.	07/09/87		
Claim No.	Co-ordinates:	Length	Drilled By:		
1st level	1960.066 N	21.4	N Morissette Can.		
Grid No.	2937.819 E	Collar Elev.	Logged By:		
		3976.65	A.Soever		

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-B Zone East of Shaft Shoots						
0.0	6.06	ALTD PINK TO GREY F.P.	10435	0	1.5	1.5	.5-1.5	nil
		- pink to grey mg.g altd f.p.;	10436	1.5	3.0	1.5	.5-1.5	"
		- ghosts of relict feldspars visible	10437	3.0	4.5	1.5	.5-1.5	0.6
		- locally few flakes chloritic biotite	10438	4.5	6.1	1.6	.5-1.5	0.6
		-weak frabric at roughly 50'						
		- 1-2% white dol-qtz veins as infilling of hairline fractures; also a few scattered veins up to .5cm wide; 5%cm scale white doland qtz veins 4.2-6.06;						
		.5-1.5 % f.g. diss Py scattered throughout						
		-small mafic inclusion 4.06-4.11						
		-lamp dyke 4.94-5.05 cts at 45'; lower ct at 45'						
6.06	9.45	ALTD MAFIC VOLC	10439	6.1	7.5	1.4	1	nil
		med grey f.g. mafic volc	10440	7.5	9.0	1.5	1	"
		-wispy ro massive texture-magnetic	10441	9.0	9.45	0.45	1	"
		-pervasive calcitic altn, giving wispy texture; becomes dolomitic below 9.0m; 2% Py assoc with calcitic alt. 2% Py with qtz-carb alt 9.00-9.45						
		-some weak pale grey alt. in this section						
		- 2cm q.v. at 45; 8.09-8.11; red altd porphyry						
		6.46-6.62 cts at 40'; lower ct at 55'						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-003 SHEET 2 OF 2

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
9.45	10.50	ALTD F.P. -pale greyish pink altd f.p. -pervasive pale grey qtz-carb altn; wisps chlorite -qtz carbonate alt -no relict feldspars - .5% v.f.g. diss Py - lower ct irregular	10442	9.45	10.50	1.05	.5	nil
10.5	12.22	QTZ-CARB ALTD MAFIC VOLCANICS -mafic volc; pervasiv pale grey qtz carb altn -fractured, cut by network of patches of pale grey qtz-carb on altn- breccia zone with brecc. altd fp and volc 11.40-11.57 - 5% white dol veinlets 10.5-11.2 - 4-5% fg to vfg diss Py assoc with qtz-carb altn - lower ct sheared at 50'; this section represents good ore; patch red altd fp 11.30-11.37	10443 10444	10.50 11.30	11.0 12.20	0.8 0.9	4-5 4-5	1.1 0.9
12.22	16.22	RED ALTERED F.P. - red mg altd fp- ghosts relict feldspar visible - 3-4% hairline fractures healed with dol-qtz - becomes less altd towards base grading to grey fp from 15.50-16.62	10445 10446 10447	12.20 13.70 15.20	13.7 15.20 16.20	1.5 1.5 1.0	tr tr tr	nil tr nil
16.22	21.40	U.M. VOLCS -pale grey green ultramafic volcanics - locally possibly spinifexed -altd brown grey Py from 19.4-19.60 adjacent to lamp dyke from 19.3-19.40	10448 10449 10450 10451	16.20 17.7 19.2 20.7	17.70 19.2 20.7 21.4	1.5 1.5 1.5 0.7	tr tr tr tr	tr nil -" -"
	21.40	EOH Core size LTK46 Whole core sampled						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-004 SHEET 1 OF 2

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
South Rundle	Newton Twp	17.37	07/09/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		0.	08/09/87		
Claim No.	Co-ordinates:	Length	Drilled By:		
1st level	1980.618 N	15.	N Morissette Can.		
Grid No.	2906.100 E	Collar Elev.	Logged By:		
#1 -XCut North		3969.369	A.Soever		

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-B North Zone north of ramp						
0.0	1.0	ALTD MAFIC VOLCANIC - fg grey green mafic volcanic - calcitic with 3-4% stringers calcite - 2% f.g. diss Py	10452	0	1.0	1.0	2	nil
1.0	6.5	RED ALTERED PORPHYRY - faint relict feldspars - good grey qtz-carb altn and porphyry 2.36-2.60 and 4.6-5.3 and 5.9-6.0 - well min'd altd mafic volc inclusions with qtz-carbonate altn- 2.60-2.89, 4.63-4.66 and 4.68-4.70, 4.90-5.10, 5.44-5.99; 2-5% fg to vfg diss Py assoc with grey altn in porphyry - up to 15-20% Py in highly altd sections - est15% Py in inclusion from 2.60-2.89 other inclusions est 5% Py; 2% Py in porphyry 2.9-4.6; -fracture subparalell to core 3.20-4.60	10453 10454 10455 10456 10457 10458	1.0 2.4 2.9 3.9 4.6 5.9	2.4 2.9 3.9 4.6 5.9 6.5	1.4 0.5 1.0 0.7 1.3 0.6	tr 10 2 1 4 tr	nil 26.2 3.6 1.5 3.4 -
6.5	7.4	SHEARED U.M. -sheared um- grading towards talc-chl carb shist towards base; schistosity at 70°	10459	6.5	7.4	0.9	tr	nil
7.4	8.5	LAMP DYKE -fg to mg lamp dyke -5% biotite; - 2% f.g. diss Py	10460	7.4	8.5	1.1	2	nil

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-004 SHEET 2 OF 2

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
8.5	9.6	GREY TO PINK F.P. -grey to pink m.g. F.P. - 1-2% f.g. diss Py	10461	8.5	9.6	1.1		nil
9.6	10.5	TALC CHLORITE CARBONATE SCHIST -sheared ultramafics -schistosity at 80' -some qtz segregation	10462	9.6	10.5	0.9	-	"
10.5	15.0	HEMATITIC CHLORITIC HORNBLENDE F.P. - m.g. dark reddish grey hbde f.p. altered bright red with no relict fp 10.5-11.4 - rest of unit is chloritic and hematitic giving it redish colour -heavy white dolomite veining 10.6-10.9 - qtz flooding 10.9-11.0 - 1-2% diss Pyalong joint surfaces	10463 10464 10565	10.5 12.0 13.5	12.0 13.5 15.0	1.5 1.5 1.5	- - 	" " "
	15.0	EOH whole core sampled core size LTK 46						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-005 SHEET 1 OF

Property Rundle Mine	TP. or Area Newton Twp	Azimuth 50.67	Date Started 8/09/87	Corrected Dip Tests
Project 3382	Lot. & Conc.:	Dip 0.	Date Completed 9/09/87	
Claim No.	Co-ordinates: 1980.057 N	Length 15.4	Drilled By: N Morissette Can.	
Grid No. R-490XCN(L-I)	2907.111 E	Collar Elev. 3969.432	Logged By: A.Soever	

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-to test B-north zone north #1XC N 1st leg						
			10483	0	1.5	1.5	1	1.0
0.0	8.5	ALTERED RED F.P. WITH INCLUSIONS OF MAFIC VOLC.	10484	1.5	2.3	0.8	5	9.7
		0.0-1.54 red altd FP-many fine fractures with	10485	2.3	3.8	1.5	.5-1	3.4
		wihite dolomite 1% f.g. diss Py	10486	3.8	4.5	0.7	.5	NC
		1.54-2.32-sell min'zd mafic volc. inclusion	10487	4.5	5.6	1.1	3	-
		-extensive pale grey to beige qtz-carb altn	10488	5.6	6.8	1.2	2	0.6
		with f.g. diss Py est 5% Py 2.18-2.32-'est20% Py	10489	6.8	7.4	0.6	.5	-
		2.32-3.80 -porphyry is tinged pale beige dut to	10490	7.4	8.1	0.7	tr	tr
		qtz-carb alt .5-1% f.g. diss Py	10491	8.1	8.5	0.4	tr	-
		3.80-4.50 -less pyrite and qtz-carb alt'n						
		4.50-4.63 -small weakly min'zd inclusion of mafic volcanics; 2-3% vfg diss Py						
		4.63-5.34 -red porphyry, pale beige alt'n with 1-2% Py 51.4-5.34						
		5.34-5.49 -well mineralized mafi c inclusion-good qtz-carb alteration with 5% Py						
		5.49-5.60 -brick red porphyry -network of fine qtz veins and fg Py est 5% Py						
		5.60-6.84 -section of grey fg mafic volcanics 3% mm scale dol infilling of fractures, finer fractures healed with calcite; 2% f.g. diss Py						
		6.84-7.12 -bright red altd prophyry; 1% diss Py						
		7.12-7.41 -mafic volcanic inclusion-cut by mm scale fractures filled with dol and finer fractures with calcite ; .5% Py						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-0 SHEET OF

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
0.0 (CONTINUED)	8.5	7.41-8.11 -red altd F.P. trace vfg diss Py 8.11-8.50 -mafic volc inclsion -cut by network of dolomite veins infilling fractures						
8.5	15.4	TALC-CHLORTE CARBONATE SCHIST -grey green talc chlorite carboate schist -many stringers calcite -locally faint relict spinifex texture; - 12.73-12.83 -band of f.g. red altd f.p. at 40'; 14.77-14.92 -vein of dolomite qtz at 15.20'	10492	8.5	10.0	1.5	tr	0.3
	15.4	EOH core size LTK-46 whole core sampled						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-006 SHEET 1 OF 3

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
Rundle Mine	Newton Twp	79.704	18/10/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		2.58°	20/10/87		
Claim No.	Co-ordinates:	Length	Drilled By:		
	1969.585 N	29.65	N Morissette Can.		
Grid No.	2905.427 E	Collar Elev.	Logged By:		
R-490XCN(L-I)		3969.62	A.Soever		

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-to test northeastern extent of mineralization on leg 1 east of the 490XCN						
0.0	8.6	PALE PINK TO RED ALTD F.P.	10575	0	1.5	1.5	tr	<.20
		-pale pink to pale grey highly altd f.p.	10576	1.5	3.0	1.5	tr	<.20
		-very hard, qtz flooded	10577	3.0	4.5	1.5	tr	0.82
		-weak fabric at ~30'; 3-4% hairline fractures	10578	4.5	6.0	1.5	tr	<.20
		healed with qtz-dolomite: veins-above hairline	10579	6.0	6.7	0.7	tr	<.20
		hairline fractures; 1% on scale qtz veins	10580	6.7	7.7	1.0	1-2	<.20
		-tr Py 0.0-6.0, 1-2% f.g. diss Py with reddish	10581	7.7	8.6	0.9	1-2	<.20
		fp with hairline fractures 0.7-8.6						
		-mafic inclusions 3.56-3.68 and 6.48-6.65						
		-below 6.0 development of 2ndary feldspars						
		and more redish hematitic colour to porphyry						
		-also porphyry is cut by numerous fine <1mm						
		scale qtz veinlets						
8.6	9.7	ALTD MAFIC VOLCANICS	10582	8.6	9.5	0.9	3-4	8.19
		-grey f.g. mafic volcanics	10583	9.5	9.8	0.3	15-20	51.51
		-pervasive pale grey brown qtz carb altn						
		-hairline fractures healed with qtz dvl.						
		-narrow 7mm qv at 20' at 9.2-9.3						
		-well min'd band of pale brown grey altn						
		at 70' along lower ct 9.53-9.63						
		- 3-4% f.g. diss Py assoc with pale grey altn						
		-fine fractures throughout with specular hematite						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-006 SHEET 2 OF 3

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
9.7	10.5	RED ALTD FP -m.g. pink altd f.p. -good relict feldspars - 1-2% f.g. diss Py; finely fract'd in qtz-carb altn; -lower ct. unertain as ground core 10.5-11.25 -few chips mafic volcs and red altd FP	10584	9.8	10.5	0.7		0.89
10.25	11.25	GROUND CORE -gew chips mafic volanics and F.P.	10585	10.5	11.25	0.75		0.69
11.25	16.5	MAFIC VOLCANICS -grey f.g. mafic volcs; magnetic -very weakly chloritic, weakly calcitic; -massive, 1-2% hairline fract. healed with calc - 2-3% Py assoc. with patchy pale grey altn 11.25-13.00; tr-1% Py in rest; sections broken blocky core; lost core:0.30m from 12.2-13.00 and 0.6m from 13.9-15.50; lower ct sharp at 65'	10586 10587 10588 10589 10590	11.25 12.25 13.0 14.5 15.5	12.25 13.0 14.5 15.5 16.5	1.0 0.75 1.5 1.0 1.0		7.47 1.75 <.20 <.20 <.20
16.5	17.7	GREY F.P. DYKE -f.g. to m.g. grey FP - 35% feldspar phenocrysts; 5% biotite - weakly magnetic; weakly hematite; few felspar phenocrysts; lower ct sharp at 60-65'	10591	16.5	17.7	1.2		<.20
17.7	18.9	MAFIC VOLCANICS -as from 11.25-16.5 -not altd; 1-2% m.g. diss Py	10592	17.7	18.9	1.2		<.20
18.9	22.4	WEAKLY ALTD GREY F.P. -weakly altd grey mbg bio F.P; weakly altd red -altd increases to base as approach gradational -conatact with next unit -flooded by fine grey qc-dolomitic altn,18.9-19.25 -2% f.g. to vfg diss Py 18.9-19.25; tr-1% Py with rest; -lost core 21.3-21.4, 0.1m; 21.4-23.0, 0.2m	10593 10594 10595	18.9 19.3 20.8	19.3 20.8 27.4	0.4 1.5 1.6		1.34 <.20 <.20

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-006 SHEET 3 OF 3

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
22.4	26.9	HYBRID ZONE -red altd F.P. with inclusions of altd mafic volcs; 23.3-23.46-well altd inclusion of mafic volcanics with white dolomite veins and pale grey altn 8-9% diss Py; 24.26-24.47-inclusion of altd mafic volcanics with fractures filled with spec. hematite 2-3% fg diss Py; 24.86-25.36 fractured red FP with specular hematite along fractures 25.36-25.76- mafic inclusion, weakly altd tr Py 26.36-26.87- felsic lamp. dykek	10596 10597 10598	22.4 23.9 25.4	23.9 25.4 26.9	1.5 1.5 1.5		<.20 <.20 <.20
26.9	29.65	RED ALTD F.P. -red mg altd FP; structure weakly foliated at 70' fine fractures healed with qtz-dolomite; tr fg diss Py	10599 10600	26.9 28.4	28.4 29.65	1.5 1.25		<.20 <.20
	29.65	EOH core size LTK-46 split core sampled core lost						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-007 SHEET 1 OF 2

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
Rundle Mine	Newton Twp	48.87	20/10/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		2.75	21/10/87		
Claim No.	Co-ordinates:	Length	Drilled By:		
	1970.714 N	24.2	N Morissette Can.		
Grid No.	2905.209 E	Collar Elev.	Logged By:		
R-490XCN(L-I)		3969.62	A.Soever		

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t	
		OBJECTIVES:-to test mineralization West of the R-490XCN(L-I)							
0.0	5.0	PALE PINK TO GREY ALT'D FP	10601	0.0	1.0	1.0	1	1.30	
		-f.g. to m.g. pale pink to grey F.P.	10602	1.0	1.7	2.4	0.7	0.24	1.10
		-no relict feldspars	10603	1.7	2.4	0.7	1	1.10	
		-pale grey very silicious dolomitic alt'n	10604	2.4	3.4	1.0	tr	<.20	
		-massive structure, hairline fractures healed	10605	3.4	4.4	1.0	tr	<.20	
		with qtz-dolomite; 1-2% vmm scale qtz carb veins	10606	4.4	5.0	0.6	tr-1	1.44	
		- 3-4% f.g. diss Py assoc with pale grey brown alt'n in mafic inclusions 0.0-0.2, 1.0-1.2, 1.46-1.66,2.14-2.37; 1-2% Py in q.c. alt'n 4.95-5.0; prophyry becomes darker red to base							
		-lower ct sharp at 50'							
5.0	6.7	ALT'D MAFIC VOLCANICS							
		-grey f.g. mafic volcanics	10607	5.0	6.0	1.0	3-4	6.78	
		-pervasive pale grey ore altn along fractures	10608	6.0	6.7	0.7	3-4	0.72	
		-fairly prominent structure at 5.1m at 50'							
		-extensive altn along dykelets of red FP 5.47-5.67							
		-prominent structure with alt. at 45-60' 6.4 -6.5							
		-alt'n dolomite; 3-4% f.g. to v.f.g. diss Py assoc with altn							

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-007 SHEET 2 OF 2

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
6.7	12.0	RED ALTED F.P.	10609	6.7	8.2	1.5	1-2	0.30
		-red altd FP; traces F phenocrysts;well dev.	10610	8.2	9.7	1.5	1-2	0.58
		flazure struct. at 45';fract.with 2-3% hairline	10611	9.7	10.3	0.6	2-3	7.34
		fract. healed white qtz-dolomite;	10612	10.3	11.3	1.0	1-2	0.89
		-qtz vein with traces Py at 60' from 10.10-10.26	10613	11.3	12.0	0.7	1-2	0.38
		1-2% vfg to fg diss Py in porphyry-5% fg						
		diss Py assoc. with altn adj.to qv; pale grey green						
		fel.dykes; 8.97-9.07, 9.25-9.49,10.68-10.82,11.00-11.16						
12.0	14.20	ALTD MAFIC VOLCANICS	10614	12.0	13.0	1.0	4-5	1.26
		-f.g. grey mafic volc.;alt'n intensely altd,	10615	13.0	14.2	1.2	4-5	0.34
		-fractured in pale grey;weakly calcitic qtz-carb						
		alt'n; veins- qu with Py at ~45' 12.19-12.21						
14.2	18.4	RED ALTD FP	10616	14.2	14.6	0.4	1-2	0.20
		-m.g. brick red altd FP; faint relict feldspar	10617	14.6	15.0	0.4	5	4.62
		phenocrysts; massive structure, fractured with	10618	15.0	16.4	1.4	1-2	2.02
		3-4% hairline fractures filled with qc	10619	16.4	17.2	0.8	3	2.26
		-pervasive pale grey gr. altn along hairline	10620	17.2	18.4	1.2	1-2	<.20
		fractures; 1-2% f.g. diss Py assoc with q.c.						
		altn throughout unit; structure with intense						
		grey altn at 75' 14.66-14.87; 5% Py assoc with						
		this structure; qtz veining and assoc altn.						
		17.07-17.30-est 3-4% Py assoc in this section						
18.4	20.9	ALTD MAFIC VOLCS	10621	18.1	19.2	0.8	2-3	<.20
		-f.g. grey alt mafic volcs; fractured with 3-5%	10622	19.2	20.0	0.8	1-2	0.92
		hairline fractures healed with qtz-dolomite	10623	20.0	20.9	0.9	1-2	<.20
		-good grey ore altn 18.4-19.2; 2-3% f.g. Py assoc						
		with altn 18.4-19.2; 1-2% f.g. Py in rest of unit						
		-patchy red FP 20.5-20.9						
20.9	24.2	TALCOSE CHLORITIC SPINIFEXED ULTRAMAFIC VOLCANICS	10624	20.9	21.9	1.0	tr	<.20
		-talcose, chl., carb. rich u.m. volc;blocky core	10625	21.9	23.0	1.1	tr	<.20
		lost 0.25m 21.7-24.2; narrow band shat'd red altd	10626	23.0	23.30	0.3	5	<.20
		FP with pale grey-brown qc altn at 70'23.00-23.14	10627	23.3	24.2	0.9	tr	<.20
		qv from 23.24-23.27; 5% Py 23.00-23.14						
	24.2	EOH; CORE SIZE LTK46; SPLIT CORE SAMPLED LOST:0.1m from 9.65-9.85;0.25m from 21.7-24.2						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-008 SHEET 1 OF 2

Property Rundle Mine	TP. or Area Newton Twp	Azimuth 233.109	Date Started 23/10/87	Corrected Dip Tests
Project 3382	Lot. & Conc.:	Dip +12.6	Date Completed 24/10/87	
Claim No.	Co-ordinates: 1984.710 N	Length 28.36	Drilled By: N Morissette Can.	
Grid No. R-490 XCN(L-1)	2905.618 E	Collar Elev. 3969.40	Logged By: A.Soever	

Location sketch

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-to test leg 1 mineralization W of the R-490XCN(L-1)						
0.0	2.2	RED ALT'D F.P.	10628	0.0	1.1	1.1	tr	5.42
		-bright red alt'n FP ;only faint relict feldspar	10629	1.1	2.2	1.1	tr	0.20
		phyrocrysts						
		-hematitic alt'n -becomes less intense to 2.2						
		-massive, 1-2% fine fractures healed with dol-qtz						
		-broken blocky core narrow band of mafic volcanics 2.2-2.3 at ct with next unit						
2.2	5.2	PINK TO GREY WEAKLY ATLD FP	10630	2.2	3.2	1.0	tr	<.20
		-m.g. pinkish grey m.g. to c.g. FP; good relict	10631	3.2	4.4	1.2	tr	<.20
		feldspars, minor biotite; alt'n becomes red and	10632	4.4	5.2	0.8	tr	<.20
		quite alt'd 4.4-5.2; massive,3-4% hairline frac. healed with dol-qtz with chloritic patches						
		-faint trace f.g. Py						
		-lower ct sharp at 45'						
5.2	9.7	ALTD MAFIC VOLCANICS	10633	5.2	5.8	0.6	2	<.20
		-grey f.g. to m.g. altd mafic volcanics	10634	5.8	7.0	1.2	1-2	<.20
		-very calcitic; massive structure, 1-2% hairline	10635	7.0	7.6	0.6	5-10	5.66
		fractures healed in calcite; vein or band dark	10636	7.6	8.6	1.0	1-2	<.20
		grey qtz 2-3% Py 9.17-9.33	10637	8.6	9.7	1.1	1-2	<.20
		- 1-2% f.g. diss Py -section with pale brown grey "ore altn" and 5-10% Py 7.0-7.6; pale grey qtz vein with mass. Py 7.22-7.26; broken blocky core 5.2-5.8						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-008 SHEET 2 OF 2

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
9.7	17.4	PALE PINK HIGHLY ALTD FP	10638	9.7	11.2	1.5	tr-1	0.38
		-highly altd very pale pink m.g. fp; no relicit F	10639	11.2	12.7	1.5	tr-1	0.78
		-alt'n -pervasive pale beige qtz-carb alt'n;	10640	12.7	14.2	1.5	tr-1	0.58
		extremely intense below 14.5	10641	14.2	14.5	0.3	30	36.10
		-highly fractured struct.with hairline fractures	10642	14.5	15.5	1.0	2-3	7.26
		healed with qtz-dol and chl	10643	15.5	16.5	1.0	2-3	8.64
		-intense band of pale beige altn at at 35-45'	10644	16.5	17.4	0.9	2-3	6.10
		- 12.3-12.4, patch at 14.8 and band at 15.0-15.1						
		-tr-1% f.g. diss Py 9.7-14.2 except 2-3% in altd						
		structure 12.30-12.40; massive Py in completley	AVG	14.2	17.4	3.2		9.95
		altd mafic incl'n 14.2-14.5; 2-3% f.g. to v.f.g.	AVG	7.0	15.5	8.5		2.62 N of ramp
		diss Py in altd F.P. below 14.2						
17.50	26.38	ALT'D MAFIC VOLCANICS WITH PALE PINK ALT'D FP	10645	17.50	18.50	1.0	.5-1	1.68
		-med grey, f.g. magnetic; sheared	10646	18.50	19.25	0.75	3-5	2.43
		-lt grey alt'n in select places may be repres've	10647	19.25	20.00	0.75	tr	0.44
		of x-structures; numerous thin lt. grey qc veins	10648	20.00	21.50	1.5	2-3	4.35
		oriented at 30'	10649	21.50	22.55	1.05	3-5	6.72
		-patches with 15-20% f.g. diss Py probably about	10650	22.55	23.30	0.75	tr-.5	3.94
		1-2% f.g. Py in volcanics	10651	23.30	24.80	1.50	.5-1	1.06
		F.P.: 17.5-18.15, 19.25-20.05,22.55-23.30,	10652	24.80	26.38	1.58	tr-.5	<.20
		23.93-24.40;best section 20.00-22.55,18.50-19.25	10653	26.38	27.38	1.00	tr	<.20
26.38	28.36	GREY SLIGHTLY ALT'D F.P.	AVG	20.0 - 28.3		3.80m		5.01
		- dull grey red, m.g., magnetic						
		-moderate shearing; tr-nil Py						
		EOH						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-009 SHEET 1 OF 1

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
Rundle Mine	Newton Twp	262.87	30/10/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		0	30/10/87		
Claim No.	Co-ordinates:	Length	Drilled By:		
	1985.985 N	14.05	N Morissette Can.		
Grid No.	2905.491 E	Collar Elev.	Logged By:		
R-490 XCN L-1		3969.05	C.P.Zorzi		

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t	
		OBJECTIVES:-							
0.00	10.65	RED ALT'D FP							
		-red, f.g. to m.g., non-magnetic to slight mag.	10654	0.0	1.5	1.5	tr-.5	1.82	
		-highly sheared and fractured with sections of	10655	1.5	3.0	1.5	tr-.5	0.30	
		broken blocky and ground core	10656	3.0	4.5	1.5	tr-.5	0.41	
		-good red cb alt'n with numerous thin lt. grey	10657	4.5	6.00	1.5	tr-.5	2.22	
		qtz-cb veinlets in the 1st 0.5m a few 0.5-1cm	10658	6.0	7.5	1.5	tr-.5	<.20	
		and one 10cm lt.grey q.v. minor sericite alt'n	10659	7.5	9.00	1.5	tr-.5	.2	0.3m ground
		- .5-1% diss Py overall with patches of 2-3% Py	10660	9.00	9.57	0.57	tr-.5	<.20	
		- mineralized mafic inclusion 9.57-10.00 with	10661	9.57	10.65	1.08	5-8	18.72	
		5-10% f.g. diss Py							
10.65	14.05	GREY BIO F.P.	10662	10.65	11.90	1.25	tr	0.2	
		-grey red, m.g. biotitic, slightly sericitic	10663	11.90	12.06	0.16	1-2	6.78	x-struct?
		only tr Py	10664	12.06	13.06	1.0	tr	0.58	
14.05	15.50	EMPTY SPACE							
		BROKE INTO VENT RAISE							

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-010 SHEET 1 OF 3

Property	TP. or Area	Azimuth	Date Started	Corrected depth	Dip	Tests	Location sketch
Rundle Mine	Newton Twp	291.438	12/11/87	48.3	+21	acid	
Project 3382	Lot. & Conc.:	Dip 20.153	Date Completed 14/11/87				
Claim No.	Co-ordinates: 1986.650 N	Length 48.3	Drilled By: N Morissette Can.				
Grid No. R-490 XCN(L-1)	2906.242 E	Collar Elev. 3969.964	Logged By: A.Soever				

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-to test west edge of mineralizatin between surface and the first level						
0	9.3	RED ALTERED F.P.	10734	0	0.6	0.6	tr-1	<.20
		-bright brick red m.g. completely alt'd	10735	0.6	1.9	1.3	3	6.41
		-no relict feldspar prophyroblasts	10736	1.9	3.4	1.5	2-3	1.95
		-massisve with 1-2% fine fairline fractures	10737	3.4	4.8	1.4	1-2	3.77
		- lealed in qtz-dolomite	10738	4.8	5.5	0.7	2-3	14.54
		-extensive pale beige qtz-carbonate alt'n	10739	5.5	7.0	1.5	2-3	9.39
		- 0.0-0.6 blocks of ass'd alt'd volc pale beige	10740	7.0	7.8	0.8	2-3	9.43
		- 0.6-1.9 highly alt'd F.P. with complete pale	10741	7.8	9.3	1.5	1-2	<.20
		beige alt'n; alt'n at about 20' TCA. less alt'd but still in pervasive pale beige alt'n 1.9-3.4	AVG	0.6	7.8	7.2		6.71
		-patchy pale beige alt'n 4.8-5.5, 5.7-7.8						
		-alt'n ends at bed at 30'TCA at 7.75-7.8						
		-3% Py assoc with alt'd section 0.6-1.9- some subvassive Py assoc. with inclusions 0.6-1.0						
		- 2-3% Py in alt'd section; 1.9-3.4 1-2% Py						
		- 3.4-4.8 2-3% Py assoc. with pale beige alt'n 4.8-5.5; 5.7-7.8; qtz vein stockwork 2.12-2.25						
		-brigt brick red 3.4-4.8m, 7.8-9.3 -ct in next unit at 30' TCA						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-010 SHEET 2 OF 3

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
9.3	12.9	ALT'D MAFIC VOLCANICS	10742	9.3	10.7	1.4	1-2	<.20
		-med grey f.g. mafic volcanics-weakly magnetic	10743	10.7	12.1	1.4	1-2	5.38
		-fractured with network of fine hairline frac.	10744	12.1	12.9	0.8	2-3	8.57
		healed in calcite						
		- alt'n-calcitic, dolomitic 12.1-12.9						
		-fractures with pale brown q-c. alt'n Py 12.1-12.9						
		- 1-2% f.g. diss Py assoc. with calcite in fractures						
		- 2-3% Py assoc with q.c. alt'n 12.1-12.9						
12.9	14.3	ALT'D F.P.	10745	12.9	14.3	1.4		5.55
		-brick red alt'd F.P.						
		-no relict feldspar porphyroblasts	AVG	10.7	14.3	3.6		6.16
		-highly fractured extensive qc beige alt'n	AVG	0.6	14.3	13.7		5.15
		-completely assimilated inclusions, stringers						
		submassive Py 12.9-13.1, 13.3-13.4 and on one						
		side of core 14.05-14.10 -Py stringers at 15-20'						
		-veins- fractures healed in hem at 13.75-13.9						
		-gradational contact with next unit						
14.3	15.7	ALT'D MAFIC VOLCANICS	10746	14.3	15.7	1.3		1.65
		-grey highly alt'd mafic volcs, magnetic						
		-highly fractured hairline fractures healed						
		with calcite- foliated at 40' due to shearing						
		-calcitic alt'n - pale brown qe alt'n along						
		fractures 14.3-15.0						
		- 2-3% f.g. diss Py; 3-5% Py assoc with brown						
		q/c alt'n along fractures						
		-f.g. pk aplite dyke 15.4-15.5						
15.7	16.3	CHLORITIC TALCOSE U.M.	10747	15.7	17.2	1.5	1-2	<.20
		-green chloritic talcose um -weakly magnetic						
		-spinifex						
16.3	18.6	HORNBLENDE LAMP DYKE						
		-med beige green -15% hornblende- non-magnetic						
		1 1-2% f.g. diss Py						
		-lower contact at 30'						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-010 SHEET 3 OF 3

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
18.6	21.4	SPINIFEXED U.M. -dk grey spinifex to massive um flow -fractured with q/calcite veins at about 20' -narrow F.P. dyke 20.48-20.63						
21.4	25.4	LAMP DYKE -pale beige green m.g. lamp dyke -calc. -weakly magnetic -trace Py -lower ct at 30'						
25.4	38.3	SPINIFEX U.M. -massive to spiifexed um -narrow 1cm qvs at 45' at 39.0-40.0 -fractured subparalell 32.2-33.4 -34.12-34.40 -broken blocky core also from 36.3-37.2						
38.3	39.3	LAMP DYKE -brown m.g. lamp dyke						
39.3	40.9	FAULT ZONE -sh'd talc. shist -extensive qtz-dolomite veining -fractured brecciated -schistosity at 40'	10756	39.3	40.9	1.6		5.55
40.9	48.3	ALT'D MAFIC VOLCANIC -pale grey f.g. mafic volc. - 40.9-41.7 -pervasive pale grey alt'n, bt'd 5% f.g. diss Py - 41.7-42.3 -red alt'd porphyry-good beige qc alt'n 3% Py - 42.3-45.1 -grey alt'd volcs- 2-3% dol-qtz veins -minor pale beige alt'n along frac. -dolomitic - 1-2% Py; good alt'n 45.0-45.1 at ct with alt'd FP; 45.1-46.1 as from 41.7-42.3; -below 46.1 -volcanics less alt'd -tr Py, calc. -weakly alt'd dolomitic section minor pale brown alt'n; 2-3% Py 46.8-47.5	10748 10749 10750 10751 10752 10753 10754 10755 AVG AVG	40.9 41.7 42.3 43.8 45.1 46.1 46.8 47.5 39.3 39.3	41.7 42.3 43.8 45.1 46.1 46.8 47.5 48.3 45.1 48.3	0.8 0.6 1.5 1.3 1.0 0.7 0.7 0.8 5.8 9.0	4-5 3 1-2 1-2 3 tr 2-3 tr	5.18 2.16 4.35 3.05 0.93 1.23 2.16 6.86 4.28 3.73
48.3		EOH; CORE RECOVERY ~100%; CORE SIZE AQ; SPLIT CORE SAMPLED						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-011 SHEET 1 OF 3

Property	TP. or Area	Azimuth	Date Started	Corrected depth	Dip	Tests type	Location sketch
Rundle Mine	Newton Twp	272.021	14/11/87	45.0m	-16	acid	
Project 3382	Lot. & Conc.:	Dip 11.569	Date Completed 16/11/87				
Claim No.	Co-ordinates: 1986.367 N	Length 45.0	Drilled By: N Morissette Can.				
Grid No. R-490 XCN(L-1)	2906.114 E	Collar Elev. 3969.830	Logged By: C.P.Zorzi				

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
0.00	7.55	RED ALTERED F.P. -red, m.g., very hard very slightly magnetic, slightly magnetic, slightly bt'c -sheared -red alt'n throughout numberous 1-4mm, lt.grey qc veins - 1-2% f.g. diss Py, locally up to 5% diss Py	10798 10799 10800 10801 10802	0.0 1.5 3.0 4.5 6.0	1.5 3.0 4.5 6.0 7.5	1.5 1.5 1.5 1.5 1.5	2-3 1-2 .5-1 .5-1 tr-.5	2.33 4.18 1.95 2.40 1.25
7.55	8.10	ALT'D MAFIC VOLCANICS -lt to med grey, f.g., magnetic -sheared -lt. grey cb alt'n, cherty band over 1st 10 cm -numerous thin lt.grey qc veins - .5-1% f.g. diss and wispy Py	10803	7.50	8.10	0.6	.5-1	0.41
8.10	9.05	RED ALT'D F.P. -as above 0-7.55 -chloritic patches	10804	8.10	9.05	0.95	.5-1	0.27
9.05	10.36	ALT'D MAFIC VOLC -as above 7.55-8.1 -alt'n and min'n becomes stronger -exhalite band at top 10cm -about 1-2% Py	10805	9.05	10.36	1.31	1-2	6.51

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-011 SHEET 2 OF 3

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
10.36	12.45	RED ALT'D F.P.	10806	10.36	11.50	1.14	1-2	2.06
		-as above	10807	11.50	12.45	0.95	1-2	<.20
12.45	13.15	ALT'D MAFIC VOLCANICS	10808	12.45	13.15	0.70	2-3	19.47
		-as above						
		-cherty exhalite over top 3-3cm						
13.15	14.06	RED ALT'D F.P.	10809	13.15	14.06	0.91	1-2	4.01
		-as above						
14.06	15.07	ALT'D MAFIC VOLC	10810	14.06	15.07	1.01	5-7	23.11
		-as above						
		-exhalite band from 14.45-15.07						
		-best cb alt'n thus far						
15.07	25.90	ORE PORPHYRY	10811	15.07	16.50	1.43	2-3	2.26
		-beige red, m.g., hard fsp's may have regrown	10812	16.50	18.00	1.50	2-3	3.39
		-highly sheared	10813	18.00	19.50	1.5	2-3	2.61
		-good beige cb alt'n, minor to mod, sericite	10814	19.50	21.00	1.5	2-3	8.74
		-numerous 1-4mm qc and qv veins throughout	10815	21.00	22.50	1.5	3-5	7.20
		- 2-3% f.g. diss Py	10816	22.50	24.0	1.5	3-5	<.20
		- alt'd min'zd structures 22.40-22.55	10817	24.0	25.5	1.5	3-5	8.40
		25.26-25.33	10818	25.5	26.0	0.5	5-10	10.35
		25.56-25.82						
25.90	28.60	ALT'D MAFIC VOLCANICS						
		-as above	10819	26.0	27.5	1.5	2-3	4.42
		-good cb alt'd bands 26.15-26.4	10820	27.5	29.0	1.5	1-2	<.20
		26.65-26.86						
		27.00-27.15	AVG	9.05	32.0	22.95		5.11
		-bands show good grey cb alt'n with 5-8% f.g. diss'n Py						
		-cherty jasperite 25.9-26.15						
28.60	36.20	RED ALT'D F.P.	10821	29.00	30.5	1.5	tr-.5	1.95
		-as above	10822	30.50	32.0	1.5	2-3	1.47
		-some sections showstronger Py conc.	10823	32.00	33.50	1.5	tr-.5	0.55
		-overall 1-2% Py	10824	33.50	35.0	1.5	tr	<.20
			10825	35.0	36.2	1.2	tr-.5	0.38

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-011 SHEET 3 OF 3

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
36.20	38.64	ALT'D MAFIC VOLCANIC	10826	36.20	37.50	1.30	1-2	3.98
		-as above	10827	37.50	38.64	1.14	2-3	8.98
		-good structures 38.23-38.64						
		-narrow 5-10cm bands of alt'n throughtout	Avg	36.2	-38.64	2.44	—	6.88
38.64	41.10	GREY BIO. F.P.						
41.10	43.35	ALT'D MAFIC VOLCANICS	10828	41.10	42.0	0.90	tr-.5	1.06
		-good mineralized bands 42.1-42.40; 10-15% Py	10829	42.00	43.35	1.35	2-3	4.52
		-otherwise calcitic with tr-.5% Py		41.1	-43.35	2.25		3.14
43.35	45.00	GREY BIO. F.P.						
		EOH						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-012 SHEET 1 OF 2

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
Rundle Mine	Newton Twp	256.324	17/11/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		0.745	18/11/87		
Claim No.	Co-ordinates:	Length	Drilled By:		
	1986.031 N	14.3	N Morissette Can.		
Grid No.	2906.411 E	Collar Elev.	Logged By:		
R-490 XCN (L-1)		3969.579	C.P.Zorzi		

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
			10861	0.0	0.15	0.15	2-3	3.22
0.0	8.84	RED ALT'D FP	10862	0.15	0.35	0.20	1-2	3.46
		-med, m.g.,slighltly magnetic	10863	0.35	0.74	0.39	1-2	2.09
		-sheared; good red to brown cb alt'n with	10864	0.74	1.50	0.76	.5-1	3.15
		numerous qc and qtz veins, areas that have	10865	1.50	1.80	0.30	2-3	2.57
		been flooded with qtz, minor sericite	10866	1.8	3.0	1.2	.5-1	0.41
		tr-.5% Py overall area with 3-5% Py	10867	3.0	3.76	0.76	.5-1	<.20
			10868	3.76	3.87	0.11	1-2	0.89
			10869	3.87	4.5	0.63	tr-.5	0.65
			10870	4.5	6.0	1.5	tr	1.20
			10871	6.0	7.5	1.5	tr	0.45
			10872	7.5	8.84	1.34	tr	0.21
8.84	10.75	ALT'D MAFIC VOLCANIC						
		-med grey, f.g., m.g.	10873	8.84	8.94	0.10	5-10	15.94
		-minor shearing	10874	8.94	9.50	0.56	tr	1.54
		-minor bands with lt.grey cb alt'n; otherwise	10875	9.50	10.22	0.72	tr	1.85
		unalt'd;	10876	10.22	10.32	0.10	3-5	8.19
		-few thin qc veinlets	10877	10.32	10.53	0.21	tr	1.65
		- tr-1% Pyrite	10878	10.53	10.75	0.22	2-3	51.60
10.75	12.08	RED ALT'D F.P.	10879	10.75	10.90	0.15	1-2	45.88
		-as above	10880	10.90	12.08	1.18	tr-.5	4.11
		- tr-.5% Py	10881	12.08	12.25	0.17	3-5	14.33

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-012 SHEET 2 OF 2

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
12.08	14.30	ALT'D MAFIC VOLCANIC						
		-as above with longer sections of mineralization						
		and alteration	10882	12.25	12.76	0.51	tr-.5	1.92
		-good min'd and alt'd bands 12.75-12.85	10883	12.76	12.86	0.10	5-7	47.62
		13.00-13.10	10884	12.86	12.96	0.10	1-2	15.39
		13.73-14.10	10885	12.96	13.06	0.10	5-10	1.03
		EOH	10886	13.06	13.62	0.56	tr-.5	8.09
			10887	13.62	14.10	0.48	3-5	10.70
			10888	14.10	14.30	0.20	.5-1	5.01
			AVG	8.84	14.3	5.46		8.89

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-015 SHEET 1 OF 2

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
Rundle Mine	Newton Twp	045'	/11/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		0	/11/87		
Claim No.	Co-ordinates:	Length	Drilled By:		
	1933.0 N	15.23	N Morissette Can.		
Grid No.	2981.3 E	Collar Elev.	Logged By:		
Ramp (Leg I)	Section:	3986.7	R.E.Norman		
	1095 SE				

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t	
		OBJECTIVES:-							
			9813	0	0.47	0.47		<.20	
0	6.93	MAFIC VOLCANICS	9814	0.47	1.94	1.47		1.41	
		-fine grained; dk green	9815	1.94	2.69	0.75		<.02	
		-strongly calcitic, no sig'n veining or alt'n	9816	2.69	4.04	1.35		<.02	
		-deep red alt'n (Jasperite?) from 0.47 to 1.94	9817	4.04	6.46	1.85		<.02	-Note:1.2
		with .5% diss'nd and wisps of Py; bx'd and	9818	6.46	6.93	0.47		<.02	lost cor
		purplish to pale cream green alt'n 0.47 to 0.67;							
		brecciated							
6.93	7.75	ALT'D FP	9819	6.93	7.75	0.82		2.91	
		-fine grained; lt tan to beige							
		-up to 1% fine diss'd Py							
		-no sig'n veining; brecciated locally							
7.75	8.96	RED ALT'D PORPHYRY	9820	7.75	8.96	1.21		0.58	
		-fine grained; red							
		-minor fracturing with beige-carb in-filling							
		locally;							
		- .5-1% fine diss'd Py in places							

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-015 SHEET 2 OF 2

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
8.96	15.23	MAFIC VOLCANICS AND FP	9821	8.96	9.98	1.02		0.55
		Feldspar Porphyry:	9822	9.98	10.55	0.57		0.31
		9.98- 10.55: pink-red, fine grained; minor	9823	10.55	11.08	0.53		0.83
		veins and min'zn	9824	11.08	11.56	0.48		0.69
		11.08-11.56: pink, med. grained; minor alt'n	9825	11.56	11.49	0.93		3.33
		sparse pyrite						
		11.79-12.49: fine grained, beige-grey carb'n						
		sparse Py						
		12.49-15.23: alt'd mafic vocanics; normally	9826	12.49	13.49	1.00		3.87
		dark green with bands of bt'd grey alterations	9827	13.49	14.49	1.00		0.34
		in fractured and qtz-carb filled zones; very	9828	14.49	15.23	0.74		0.34
		sparse Py (specks)	AVG	11.56	13.49	1.93		3.61
		-generally no sig min'zn and non-calictic						
		EOH						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-016 SHEET 1 OF 1

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
Rundle Mine	Newton Twp	045	9/11/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		0	15/11/87		
Claim No.	Co-ordinates:	Length	Drilled By:		
	1938.4 N	17.06	N Morissette Can.		
Grid No.	2972.6 E	Collar Elev.	Logged By:		
Ramp (Leg I)	Section:	3980.0	C.P.Z.		
	1105 SE				

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
0.0	4.70	MAFIC VOLCANICS	12231	0.0	1.0	1.0	tr	<.20
		-dk grey, f.g. magnetic	12232	1.0	2.0	1.0	tr	<.20
		-minor to moderat fracturing	12233	2.0	3.0	1.0	tr	<.20
		-unalt'ed with calcite veins	12234	3.0	4.0	1.0	tr	<.20
			12235	4.0	5.0	1.0	tr	0.41
4.70	10.10	RED ALT'D FP						
		-red, m.g. slighlty magnetic	12236	5.0	6.0	1.0	tr	<.20
		-good beige red alt'n with numerous thin lt.	12237	6.0	7.0	1.0	tr	<.20
		grey qc veinlets, chl. infillings	12238	7.0	8.0	1.0	.5-1	0.48
		-tr-.5% Py over all 1-2% Py 8.00-9.00	12239	8.0	9.0	1.0	1-2	3.05
			12240	9.0	10.10	1.1	.5-1	0.69
10.10	15.96	ALT'D MAFIC VOLC.						
		-lt to med. grey, f.g., magnetic	12241	10.10	11.00	0.9	3-5	0.93
		-sheared; good grey cb alt'n with numerous thin	12242	11.00	12.00	1.0	3-5	5.18
		qc veinlets	12243	12.00	13.00	1.0	1-2	1.30
		- 2-3% Py overall with local sections +10%	12244	13.00	14.00	1.0	.5-1	0.45
		-F.A. incl. 13.5-14.00	12245	14.00	14.96	0.96	3-5	12.51
15.96	16.40	RED ALTERED F.P.	12246	14.96	16.00	1.04	tr-.5	3.63
		-as above;well alt'd with .5%Py	12247	16.00	16.40	0.40	tr-.5	2.45
16.40	17.06	ALT'D MAFIC VOLCANICS	12248	16.40	17.06	0.66	3-5	30.17
		-as above; well alt'd and min'zd with 3.5% Py	AVG	11.0	14.0	3.0		2.31
			AVG	14.00	17.06	3.06		11.99
		EOH;EXET core drilled; whole core sampled						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-018 SHEET 1 OF 3

Property Rundle Mine	TP. or Area Newton Twp	Azimuth 224.292	Date Started 23/11/87	Corrected Dip Tests
Project 3382	Lot. & Conc.:	Dip 0	Date Completed 24/11/87	
Claim No.	Co-ordinates: 1953.959 N	Length 18.20	Drilled By: N Morissette Can.	
Grid No. Ramp (Leg I)	2924.753E	Collar Elev. 3975.014	Logged By: R.E.N.	

Location sketch

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
0	1.53	FELDSPAR HBLD PORPHYRY -med. grain; purplish grey -mod. magnetic and calcitic -no sig'n veining or min'zn	13624	0	1.53	1.53	tr	<.20
1.53	3.80	GREY FELDSPAR PORPHYRY -med. to coarse grain, granular texture -no sig'n min'zn, veining or alt'n -tr pyrite -several mafic fragments	13624	1.53	3.80	2.27	tr	<.20
3.80	4.40	LAMPROPHYRE DYKE -fine to med. grained; purplish grey -strongly calcitic and magnetic -no min'zn	13626	.80	4.40	0.60	tr	<.20
4.40	4.90	FELDSPAR PORPHYRY -grey-pink; med. grained -a few biotite and hbld specks -minor py min'zn	13627	4.40	4.90	0.50		<.20
4.90	5.78	LAMPROPHYRE DYKE - as 3.80-4.40	13628	4.90	5.78	0.88		<.20

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
5.78	9.65	GREY BIOT. HBLD FELDSPAR PORPHYRY - med to coarse grain; pinkish bands locally -weak veining and pink-grey alt'n with .5% diss'nd pyrite min'zn at 7.45 to 7.72 and 8.07 to 8.54 -mod'ly calcitic locally	13629 13630 13631 13632 13633	5.78 6.53 7.45 8.07 8.54	6.53 7.45 8.07 8.54 9.65	0.75 0.92 0.62 0.47 1.11		<.20 0.55 0.45 0.62 <.20
9.65	10.10	MAFIC VOLCANICS -grey-green; fine grained; -minor qtz-carb veining; -strongly calcitic and magnetic -3% pyrite as diss'n and narrow stringers and veinlets	13634	9.65	10.10	0.45	3	<.20
10.10	11.71	CHERT -banded locally, pinkish, purplish grey bands; bands 75-80' to LCA -fairly abundant mmw qtz veins predominantely 45' to LCA -strongly magnetic generally - 2-3% diss'nd, blebs and minor strgs. of Py - white-grey qtz veinat 11.18-11.38, 5' to patches of hte; 3% diss'nd Py at contact	13635 13636 13637 AVG	10.10 11.08 11.38 10.10	11.08 11.38 11.71 11.71	0.98 0.30 0.33 1.61	3 2 3 2.6	3.70 2.57 3.12 3.37
11.71	12.30	MAFIC VOLCANICS -fine greained; grey-green -strongly magnetic and calcitic; chloritic along fractures -minor qtz-carb veining - 2-3% diss'nd and blebs of Py, veinlets or strgs.	13638	11.71	12.30	0.59		0.27
12.30	13.62	CHERT-JASPERITE HORIZON AND MAFIC VOLCr HYBRID - 12.30-13.16: highly fract'd marble-like texture or apple greens, pinks and browns - 13.16-13.62: deep red, hematitic chert(jasper) -minor grey-white qtz blebs and veins -generally sparse diss'nd Py; minor Py blebs in jasper zone	13639 13640	12.30 13.16	13.16 13.62	0.86 0.46	tr tr	0.34 <.20

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-018 SHEET 3 OF 3

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
13.62	14.00	HYBRID CHERTY AND MAFIC VOLCANICS -lt green, fine grain; 80% mafics; gradational from previous -minor veining and y min'zn -moderately calcitic and magnetic	13641	13.62	14.00	0.38		<.20
14.00	15.98	GREY HBLD-FELDSPAR PORPHYRY -fine to med. grained; lt grey, frequent lg mafic fragments up to 1.0cm -granular texture locally -mo'ly calcitic and magnetic - 2-3cm qtz-carb vein at in-contact- no min'zn - no sig'n min'zn	13642 13643 13644	14.00 14.65 15.27	14.65 15.27 15.98	0.65 0.62 0.71		<.20 <.20 <.20
15.98	18.20	PINK ALT'D FELDSPAR PORPHYRY -gradational from above-similar porphyry as above -pink-grey -no sig'n, min'zn, alt'n -mod. magnetic; very weakly calcitic -back into grey porphyrey at 18.00-18.20 EOH	13645 13646 13647	15.98 16.73 17.49	16.73 17.49 18.20	0.75 0.76 0.71	tr tr tr	<.20 <.20 1.37

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-019 SHEET 1 OF 2

Property Rundle Mine	TP. or Area Newton Twp	Azimuth 43.81	Date Started 24/11/87	Corrected Dip Tests
Project 3382	Lot. & Conc.:	Dip 0	Date Completed 24/11/87	
Claim No.	Co-ordinates: 1958.991 N	Length 15.10	Drilled By: N Morissette Can.	
Grid No. Ramp (Leg I)	2922.785 E	Collar Elev. 3974.193	Logged By: R.E.N.	

Location sketch

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
			13499	0	1.29	1.29		0.65
0	7.07	FELDSPAR PORPHYRY	13500	1.29	2.04	0.75		0.58
		-med. grained; mod'ly alt'd; pink to pinkish-grey	13501	2.04	2.76	0.72		0.41
		-weakly to mod'ly magnetic	13502	2.76	3.50	0.74		<.20
		- 5-10% qtz-carb thin vein and veinlets at 30° to	13503	3.50	4.17	0.67		<.20
		LCA - in 2 direcions (2 sets) locally	13504	4.17	4.92	0.75		<.20
		- sparse diss'nd Py	13505	4.92	5.60	0.68		<.20
			13506	5.60	6.35	0.75		0.55
			13507	6.35	7.07	0.72		0.38
7.07	7.40	MAFIC VOLCANIC	13508	7.07	7.40	0.33		0.55
		-fine grained; dk green; chloritic						
		-minor veining; occ'n speck of Py						
		-no sig'n alt'n						
		-calcitic; magnetic						
7.40	8.44	PINK ALT'D FELDSPAR PORPHYRY	13509	7.40	8.44	1.04	tr	1.65
		-fine to med. grained;						
		-minor 1-2cm fractured zones in-filled with qtz						
		beige carbonate and minor Py						
		-generally sparse diss'nd py						
		-non-calcitic						
		-in contact at 45°						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-019 SHEET 2 OF 2

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
8.44	10.41	MAFIC VOLCANICS	13510	8.44	9.08	0.64	1-2	1.10
		-fine to med. grained gery-green to grey	13511	9.08	9.74	0.66	.5-1	2.47
		-mod. grey alt'n; fractured locally	13512	9.74	10.41	0.67		0.21
		-fault breccia with light in-filling 9.45-9.55						
		-abundant qtz-carb healing fractures and blebs of grey-white qtz						
		- 1-3% Py locally; minute stringers, veinlets and diss'nd; pyrite most abund from 8.44-8.83						
		- 2-3cm thick white-grey qtz vein with 3% diss'nd Py at 8.47 at 45'						
		- in contact 50-60' to LCA						
10.41	13.06	PINK FELDSPAR PORPHYRY	13513	10.41	11.35	0.94	tr	0.41
		-med. grained; weak to mod. pink alt'n; greyish locally; a few thin mafic vol. bands	13514	11.35	12.00	0.65	tr	0.86
			13515	12.00	12.20	0.20	tr	0.38
		-band of mafic volcanics 12.00-12.20 with tr Py	13516	12.20	13.06	0.86		30.21
		-weakly magnetic; non-calcitic						
		-occ'n diss'd pyrite (sparse)						
13.06	15.10	MAFIC VOLCANICS	13517	13.06	13.50	0.44		<.20
		-fine grained; dk grey-green	13518	13.50	14.33	0.83		<.20
		-typical veinlets and stringers of qtz-calcite	13519	14.33	15.10	0.77		<.20
		-strong pervasive calcite alt'n; chloritic and and strongly magnetic						
		-minor pink-brown alt'n along qtz-calcite veining at 14.53 with 50-60% hematite and 1% Py; veining 65-70° to LCA and 2-3cm thick						
		-generally occ'n bleb and strigers of Py 1% Py overall						
		EOH						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-020 SHEET 1 OF 2

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
Rundle Mine	Newton Twp	225.177	24/11/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		0	25/11/87		
Claim No.	Co-ordinates:	Length	Drilled By:		
	1957.653 N	19.40	N Morissette Can.		
Grid No.	2914.439 E	Collar Elev.	Logged By:		
Ramp (Leg I)		3972.939	R.E.N.		

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
0	4.37	HYBRID-F.P. AND MAFIC VOLCS	13901	0	0.60	0.60	tr	2.4
		- fine to med grained	13902	0.60	1.80	1.20		<.20
		-puplish grey porphyry with bands of white-grey	13903	1.80	2.24	0.44		<.20
		mafics to 2.52; mafics well foliated at 40-45'	13904	2.24	2.52	0.28		<.20
		-fairly abund. qtz-carb veins(up to 2mm) at 35-50'	13905	2.52	3.32	0.80		<.20
		-a white grey qtz carb vein with a few specks of	13906	3.32	3.54	0.22	1	0.89
		yellowish sub-parallel to LCA at mafic-porphyry	13907	3.54	4.37	0.87	2	5.83
		contact at 2.24-2.52; similar veining with 2% Py						
		and up to 7mm thick runs 5-10' to LCA at 3.32-3.54						
		this vein occurs in a beige carb-sericitic shear						
		which cuts veins at 45 to LCA. Also similar						
		veining sub-parallel(in and out or ca) from						
		3.50-4.37 in greyish altered mafic with up to 2%						
		diss'nd and stringer Py-vein up to 1.5 cm thick						
4.37	6.47	MAFIC VOLCANICS						
		-fine to med. grained; dk grey green	13908	4.37	5.17	0.80	1.5	0.55
		-minor qtz-carb veining;	13909	5.17	5.87	0.70	1	<.20
		- weak to strongly calcitic and magnetic	13910	5.87	6.47	0.60	1	<.20
		- 1-2% Py as diss'n and stringers						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-020 SHEET 2 OF 2

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
6.47	8.20	FELDSPAR PORPHYRY -grey, mottled texture to 6.97; purplish grey, med grained to 8.20; -no sig'n veinging, alt'n or min'zn; magnetic Note: 1% diss'nd pyrite with grey qtz veining at 6.97 at contact between grey and purplish porophyry	13911 13912	6.47 7.30	7.30 8.20	0.83 0.90		<.20 <.20
8.20	9.07	MAFIC VOCANICS -green to grey-green; fine grained; -abundant hairline anastomosing grey-pink qtz-calcite veinlets and stringers - 2-3% fine diss'nd and stringer Py - One 2 cm grey qtz veining, with minor Py at 5' -magnetic	13913	8.20	9.07	0.87		<.20
9.07	10.91	RED ALT'D FELDSPAR PORPHYRY -med to c.g.; red feldspar in grey matrix -trace pyrite; -no significant min'zn, veins or alt'n - in-contact brecciated and irregualar; out-contact at 5-10'	13914	9.07	10.91	1.84		0.21
10.91	15.00	LAMPROPHYRE DYKE -fine to med. grained; grey-brown to pink-grey; -mod to strongly pervarine calcite -strongly magnetic -2 sets of qtz-carb veins 45' to LCA and at 90' to each other -sparse pyrite locally -out-contact 20' to LCA	13915 13916 13917 13918 13919 13920	10.91 11.25 12.00 12.58 13.33 14.00	11.25 12.00 12.58 13.33 14.00 15.00	0.34 0.75 0.58 0.75 0.67 1.00		<.20 <.20 0.62 0.41 0.21 0.34
15.00	16.10	RED ALT'D FELDSPAR PORPHYRY -as 9.07-10.91	13921 13922	15.00 15.50	15.50 16.10	0.50 0.60		<.20 <.20
16.10	19.40	LAMPPROPHYRE DYKE -as 10.91-15.00 EOH	13923 13924	16.10 18.32	18.32 19.40	2.22 1.08		<.20 <.20

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-021 SHEET 1 OF 3

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
Rundle Mine	Newton Twp	223.901	25/51/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		1.6694	25/11/87		
Claim No.	Co-ordinates:	Length	Drilled By:		
	1959.451 N	10.4	N Morissette Can.		
Grid No.	2909.625 E	Collar Elev.	Logged By:		
Ramp (Leg I)		3972.022	R.E.N.		

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
0	1.45	PINK ALT'D FELDSPAR PORPHYRY	13784	0	0.75	0.75		0.68
		-fine to med. grained, pink to pink-grey	13785	0.75	1.45	0.70		0.27
		-weakly magnetic, non-calcitic;						
		-3% qtz-carb veins 40-45'						
		-3 cm white qtz vein at 0.10 with a few Py blebs						
		-generally tr Py; out-contact at 60-70°						
1.45	1.81	MAFIC VOLCS.						
		-fine grained; green to grey-green	13786	1.45	1.81	0.36		0.30
		-weakly calcitic, strongly magnetic						
		3% qtz-carb veining 30'						
		- 1-2% blebs and stringer of Py at out-contact						
		where there is a weak grey alt'n						
		-minor pink porphyry inclusion						
1.81	2.38	PINK ALT'D FELDSPAR PORPHYRY						
		-fine grained; pink to pale-pink; contacts 25-30'						
		-alt'n looks like bleached ore porphyry						
		-brecciated-fractured from 1.81-2.01 (contact	13787	1.81	2.03	0.22		4.42
		with mafics) with fragment of carbonded mafic	13788	2.03	2.38	0.35		0.21
		infilled with white qtz and pink porphyry; 1%						
		diss'nd Py in this section						
		-sparse pyrite and 3% qtz-carb veining 2.03 ot 2.38						
		-non-calcitic and non-magnetic						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
2.38	3.41	MAFIC VOLCANICS -green to grey-green; fine grained -strongly calcitic and magnetic -minor qtz-carb veins, usually with 3% diss'nd pyrite in marginal mafics -a few bands of Py, f.g. porph with 1 % Py -generally weak alt'n and Py min'zn	13789	2.38	3.41	1.03		0.34
3.41	4.21	GREY FELDSPAR PORPHYRY -grey; med. grained -minor qtz-carb veins -trace Py; weakly agnetic -strongly calcitic	13790	3.41	4.21	0.80		0.24
4.21	6.1	PINK-GREY FELDSPAR PORPHYRY -weak pink alt'n gererally; med. grained	13791	4.21	5.21	1.00		0.20
		5% qtz-carb veining and up to 1% diss'nd Py,	13792	5.21	5.82	0.61	1	1.61
		mostly assoc'd to veining	13793	5.82	6.10	0.28		3.05
		-non-calcitic, weakly mag. in greyer sections	13797	6.10	6.33	0.23		<.20
6.1	9.05	MAFIC VOLCANICS -genreally green, fine grained; alt'd to pinkish beige in sections						
		alt'd sections: 6.33-6.8:purplish alt'n; 10%	13794	6.33	6.80	0.47	3	3.05
		qtz-carb veing; 3% diss'nd and veinlets of Py	13795	6.80	7.84	1.04	1	1.98
		Py usuall as blebs in qtz veins 5% to L.C.A.	13796	7.84	8.48	0.64	1	<.20
		7.69-7.84: fractured and veined 3-5% diss'nd and stringer Py						
		8.48-9.05: pinkish beige along fractures-80% alt'd; 3% diss'nd Py in patches and as veinlets	13798	8.48	9.05	0.57	3	8.46
			AVG	6.80	9.05	2.72		3.06
		-rock is strongly calcitic outside altered sections and weakly calcitic in alt'd zones Note: alt'n and veinlets appear at 40-45'						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-021 SHEET 3 OF 3

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
9.05	9.57	RED ALT'D FELDSPAR PORPHYRY - fine to med. grained; red; -irregular contacts -5-10% qtz-carb veining sub-parallel to parallel - no sig'n min'zn; tr. Py	13799	9.05	9.57	0.52	tr	0.44
9.57	10.4	ALT'D MAFIC VOLCANICS -grey to grey green; weak alt'd -3-5% diss'nd and stringer Py locally; -5% qtz-carb stringers and veins locally EOH-may justify deepening	13800 13801	9.57 9.97	9.97 10.40	0.40 0.43	3.5	1.20 0.89

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-022 SHEET 1 OF 3

Property Rundle Mine	TP. or Area Newton Twp	Azimuth 225.177?	Date Started 24/11/87	Corrected Dip Tests	Location sketch
Project 3382	Lot. & Conc.:	Dip 0	Date Completed 25/11/87		
Claim No.	Co-ordinates: 1957.653 N	Length 18.0	Drilled By: N Morissette Can.		
Grid No. Ramp (Leg I)	2914.439 E	Collar Elev. 3972.939	Logged By: R.E.N.		

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
0	3.70	MAFIC VOLCANICS	13941	0	0.70	0.70	.5	<.2
		- grey green; fine to med. grained	13942	0.70	1.45	0.75	.5-1	<.2
		- abund. narrow veins and veinlets of qtz-carb at 45-50'	13943	1.45	1.85	0.40	.5	<.2
			13944	1.85	2.09	0.24	tr	<.2
		- strongly magnetic and calcitic	13945	2.09	2.82	0.73	1	<.2
		- up to 3% locally of pyrite as diss'ns, blebs or stringers	13946	2.82	3.70	0.88	1-2	<.2
		- pink-grey feldspar porphyry 1.85 to2.09 with sparse Py						
3.70	5.62	PINK ALT'D FELDSPAR PORPHYRY	13947	3.70	4.25	0.55	tr	<.2
		- med. toarse grained; pink to pink-grey	13948	4.25	4.85	0.60	tr	<.2
		- minor thin weak shears locally	13949	4.85	5.62	0.77	.5-1	1.17
		- generally trace pyrite; some diss'nd and stringers or pyrite associated with qtz-carb veining 4.9-5.62;						
		- generally weak alt'n						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
5.62	8.70	MAFIC VOLC.	13950	5.62	6.38	0.76		<.2
		-green to green-grey; fine to med. grainded	13951	6.38	7.08	0.70		<.2
		-strongly magnetic and calcitic	13952	7.08	7.73	0.65		<.2
		-7.73 to 8.17: grey altered bx'd zone with some	13953	7.73	8.17	8.57	2-3	7.03
		grey-beige alt'n and 2-3% diss'nd and blebs of	13954	8.17	8.57	0.40		0.72
		pyrite - ab. cut by 1 to 2cm white and grey qtz vein 50-60' with 2% diss'nd Py and possibly a minute speck of V.G.						
		-8.57 to 8.70: weakly altered fractured zone	13955	8.57	8.70	0.13	2-3	5.66
		with 3-5% diss'nd and stringers of pyrite; abund. wisps, stringers and veinlets of qtz-carb						
		-other than described; mafic's are generally weakly min'zd with occ'n blebs and stringers						
8.70	10.08	PINK ALT'D FELDSPAR PORPHYRY						
		-pink to pink-grey; med.grained	13956	8.70	8.82	0.12	tr	0.51
		-8.82to 9.23:screen of grey alt'd mafic volcs	13957	8.82	9.23	0.41	3-5	10.29
		with 0.1 metre thick qtz vein, with 3-5% Py,	AVG	7.73	9.23	1.5		5.6
		at contact with porphry						
		-sparse min'zn generally	13958	9.23	10.08	0.85	tr	<.2
10.08	13.05	MAFIC VOLC.						
		-fine grained; green to grey-green	13959	10.08	11.20	1.12	1-2	<.2
		-strongly calcitic and magnetic	13960	11.20	11.95	0.75	1-2	2.13
		-minor fracturing locally with stringers and	13961	11.95	13.05	1.10	1-2	<.2
		veinlets of Py						
		-no sig'n alt'n or veining						
		-irregular out-contact, 85'						
		- 1-2% Py min'zn						
13.05	13.56	GREY FELDSPAR PORPHYRY						
		-fine to med. grained; grey-brown	13962	13.05	13.56	0.51		0.24
		-occ'n pyrite stringers						
		-minor veining						
13.56	15.12	MAFIC VOLC.						
		-as 10.08 to 13.05	13963	13.56	15.12	1.56		0.44
		-out contact at 45'						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-022 SHEET 3 OF 3

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
15.12	15.56	GREY FELDSPAR PORPHYRY -no sig'n mineralization, veining or alt'n -sparse Py	13964	15.12	15.56	0.44		0.62
15.56	17.22	INTERBANDED FELDSPAR PORPHYRY AND MAFIC VOLC. -porphyry pink-grey, fine to med. grained -mafic bands are highly brecciated and fractured and in-filled with qtz-calcite and 1-2% diss'nd and blebs of Py; fragments are alt'd to pinkish-brown to beige and light greenish -zone probably a fault intruded by porphyry	13965 13966	15.56 16.60	16.60 17.22	1.04 0.62		2.26 <.20
17.22	18.0	PINK ALT'D PORPHYRY -med. grained; salmon pink -sparse diss'nd Py -fractured and infilled with dk grey siliceous material -5% qtz-carb veins and veinlets	13967	17.22	18.0	0.78		0.34

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-023 SHEET 1 OF 3

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
Rundle Mine	Newton Twp	225.647	26/11/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		0	26/11/87		
Claim No.	Co-ordinates:	Length	Drilled By:		
	1961.917 N	25.8	N Morissette Can.		
Grid No.	2905.124 E	Collar Elev.	Logged By:		
Ramp (Leg I)		3970.974	R.E.N		

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
0	0.63	PINK ALT'D FELDSPAR PORPHYRY - med. grained; salmon-pink to pink grey; - minor veining; - .5- 1% diss'd Py - out-contact irregular	13802	0	0.63	0.63		3.22
0.63	4.72	MAFIC VOLCANICS - green to grey-green; fine grained - strongly calcitic and magnetic - 1 cm shear at 2.58 with 5-10% Py -generally up to 1 % diss'nd and veinlets of pyrite - minor veining infilling fracture zone - out contact- 35 to 40'	13803 13804 13805 13806 13807 AVG	0.63 1.50 2.25 3.00 4.00 0	1.50 2.25 3.00 4.00 4.77 4.77	0.87 0.75 0.75 1.00 0.77 4.77		2.36 0.34 2.06 0.30 1.58 1.55
4.77	8.77	PINK ALT'D FELDSPAR PORPHYRY - fine to med. grained; generally pink; red alt'n 7.9 - 8.6 - minor qtz-carb veins 40-50' - weak, beige carb alt'n 5.2-5.4 - generally, no significant min'n, veining or alt'n; occ'n weak diss'n Py	13808 13809 13810 13811 13812	4.77 5.75 6.50 7.20 7.95	5.75 6.50 7.20 7.95 8.87	0.98 0.75 0.70 0.75 0.92		0.44 0.62 1.68 0.38 0.34

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
8.87	9.37	MAFIC VOLCANICS - fine grained; freen; - minor qtz-carb veining 45' -.5-1% diss'nd, blebs, wisps, and stringers -contacts 35-40' -weak pinkish alt'n along shears - strongly magnetic; non-calcitic	13813	8.87	9.37	0.50		0.68
9.37	9.85	RED ALT'D PORPHYRY (GASPERITE?) - fine grained to aphanitic; - fracture and bx'd one in-filled with qtz-carb grey-white mat'l (hematitic) - subparallel -.5-1% blebs and stringer pyrite locally	13814	9.37	9.85	0.48		2.74
9.85	12.83	HBLD-FELDSPAR PORPHYRY - grey to pruplish grey; med to c.g. - range from a grey phase with large 1 cm hbld crystals to a finer grained purplish phase -no sig'n min'n, alt'n, or veining	13815 13816 13817 13818	9.85 10.65 11.40 12.15	10.65 11.40 12.15 12.83	0.80 0.75 0.75 0.68		<.2 <.2 <.2 <.2
12.83	15.10	MAFIC VOLCANIC - green; fine grained; - strongly calcitic and magnetic - med. abund. insig'n qtz-carb veins and veinles - minor pyrite mineralization	13819 13820	12.83 14.25	14.25 15.10	1.52 0.85		<.2 <.2
15.10	16.50	ALT'D MAFIC VOLCANICS - very fine grained; pinkish green alt'n, brecciated locally with yellow-green alt'd aphanitic frags; sili'd hematitic alt'n - minor wisps and stringer pyrite locally - fairly abund insig'n qtz-carb and veining at 45'	13821 13822	15.10 15.75	15.75 16.50	0.65 0.75		<.2 <.2
16.50	16.9	HYBRID-M.V. AND APLITE - pink to red hematitic alt'n; cherty eplite - strongly brecciated; - insig'n min'n or veining	13823	16.50	16.90	0.40		<.2

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-023 SHEET 3 OF 3

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
16.9	25.8	GREY FELDSPAR PORPHYRY	13824	16.90	18.65	1.75		<.2
		- grey; med. to coarse grain	13824	18.65	20.00	1.35		<.2
		- weak pink alt'n from 24.2 to 25.8 with minor	13824	20.00	21.50	1.50		<.2
		shearing and carb alt'n	13824	21.50	23.00	1.50		<.2
		-no sig'n min'n but fairly abund qtz-carb veins	13824	23.00	24.20	1.2		<.2
		at 30'	13824	24.20	24.95	0.75		<.2
		- specks of biotite t.o.	13824	24.95	25.80	0.80		<.2
		-weakly magnetic locally						
		- strong pervasive calcite t.o. but weak in the alt'd section 24.2-25.8						
		- generally unaltered massive porphyry						
		NOTE: Alteration in last 5.0 ' may warrant extension of hole						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-024 SHEET 1 OF 2

Property Rundle Mine	TP. or Area Newton Twp	Azimuth 225.323	Date Started 26/11/87	Corrected Dip Tests
Project 3382	Lot. & Conc.:	Dip 0	Date Completed 26/11/87	
Claim No.	Co-ordinates: 1964.692 N	Length 10.3	Drilled By: N Morissette Can.	
Grid No. Ramp (Leg I)	2900.433 E	Collar Elev. 3969.912	Logged By: R.E.N	

Location sketch

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
0	1.62	PINK-RED ALT'D PORPHYRY - med. crained; red-grey alt'd - minor qtz-carb veining; - weakly magnetic; non-calcitic - no. signif. min'n generally; 1-2% fine Py near out-contact	13925	0	1.62	1.62		0.75
1.62	3.98	PINK ALT'D FELDSPAR PORPHYRY (ORE PORPHYRY) - med. to coarse grained; pink with greyish hue due to silicification - minor qtz-carb veining; - 1 to 3% fine diss'd pyrite t.o.	13926	1.62	2.26	0.64		3.43
			13927	2.26	2.90	0.64		6.86
			13928	2.90	3.32	0.42		8.23
			13929	3.32	3.98	0.66		6.17
			AVG	2.26	5.06	2.8		7.11
			AVG	1.62	5.76	4.14		5.81
			AVG	0	5.76	5.76		4.39
3.98	8.96	MAFIC VOLCANICS - fine grained; green to green grey -alt'd to grey and beige. from 3.98 to 5.06 along fractures with qtz-carb veinlet and 1-3% diss'nd and, stringer pyrite. Intensely alt'd beige-rey 3.98 to 4.38 at contact with 5% diss'nd, bleb and stringer pyrite - non-calcitic in alt'd and mineralized sections	13930	3.98	4.38	0.40		13.37
			13931	4.38	5.06	0.68		3.87
			1392	5.06	5.41	0.35		0.96
			1392	5.41	5.76	0.35		4.63
			AVG	2.26	5.76	3.50		6.25
			AVG	1.62	5.76	4.14		5.81

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-024 SHEET 2 OF 2

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		- From 5.56 to 8.96 only; minor alt'n and min'n with strong pervasive calcite and strongly magnetic	13934	5.76	6.51	0.75		1.03
			13935	6.51	7.24	0.73		1.95
			13936	7.24	7.99	0.75		1.2
			13937	7.99	8.96	0.97		1.44
8.96	10.3	HBLD- FELDSPAR PORPHYRY - med.grained; purplish grey; -strongly calcitic; med; magnetic -trace pyrite	13938	8.96	10.30	1.34		0.48
	10.3	E.O.H.						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-025 SHEET 1 OF 2

Property Rundle Mine	TP. or Area Newton Twp	Azimuth 224.878	Date Started 26/11/87	Corrected Dip Tests
Project 3382	Lot. & Conc.:	Dip 0	Date Completed 27/11/87	
Claim No.	Co-ordinates: 1967.416 N	Length 19.5	Drilled By: N Morissette Can.	
Grid No. Ramp (Leg I)	2896.432 E	Collar Elev. 3968.719	Logged By: R.E.N.	

Location sketch

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
0	2.18	ALT'N MAFIC VOLCANIC - fine grained; normal green in patches; mostly alt'd to beige and grey carb'nd along fractures in-filled with qtz-carb veins and veinlets	13693	0	0.67	0.67	1	<.2
			13964	0.67	1.50	0.83	3-5	6.86
			13965	1.50	2.18	0.68		22.70
		- generaly 3-5% diss. and stringer pyrite						
		- non-calcite; strongly magnetic	AVG	0.67	2.81	2.14		10.80
		- altered pink Feldspar Porphyry 1.5 to 1.65 with .5 - 1% Py						
2.18	6.58	PINK ALTERED FELDSPAR PORPHYRY - fine to med. grained; salmon-pink	13696	2.18	2.81	0.63		3.15
			13697	2.81	3.09	0.28		0.69
		- non-calctic; weakly magnetic	13698	3.09	3.73	0.69		3.05
			13699	3.73	4.55	0.82		2.43
		- abund qtz-carb veins and veinlets 45-50'	13700	4.55	5.30	0.75		<.20
			13701	5.30	5.76	0.46		0.24
		- no significant min'n (tr. pyrite) generally	13702	5.76	6.58	0.82		0.21
		NOTE: Ore Porphyry alt.(pale pink sili'n) at 2.81 to 3.09 with 1% fine diss'd Py. Alt'n appears to be 40-45'	AVG	0.0	4.55			5.99

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-025 SHEET 2 OF 2

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
6.58	11.78	GREY FELDSPAR PORPHYRY						
		- med. to coarse greained; grey; pinkish grey locally	13703	6.58	7.20	0.62		0.21
			13704	7.20	7.95	0.75		<.2
			13705	7.95	8.72	0.77		<.2
		- weakly calcitic locally	13706	8.72	9.47	0.75		<.2
			13707	9.47	10.28	0.81		<.2
		- mod. magnetic	13708	10.28	11.15	0.87		<.2
			13709	11.15	11.75	0.60		<.2
		- abund. qtz-carb veinlets and veins 40-50%						
		- fractural and very weak alt'n 10.68 to 10.78 with hematidic qtz-carb vein and tr. pyrite						
		- generally no sit'n, alt'n, or mineralization						
11.78	14.33	GREP F.P. CONT'D	13831	11.75	12.55	0.80		<.2
		- grey F.P. m.g. to c.g.	13832	12.55	13.40	0.95		<.2
		- 20% secondary feldspar prphyro blasts	13833	13.40	14.30	0.90		<.2
		- weakly magnetic						
		- few fine fractures healed with calcite						
		- weakly henatitic						
14.33	15.96	RED ALT'D F.P.						
		- red alt;d version of above unit	13834	14.30	14.90	0.60		<.2
		- hematitic - fractures healed with white	13835	14.90	15.5	0.60		<.2
		dolomite at 60' at 14.40 -14.46	13836	15.5	15.65	0.15		<.2
		- fractured with chl.-qtz stockwork 15.20-15.31	13837	15.65	16.00	0.35		<.2
		- fracture zone with pale beige alt'n tr. f.g. Py at 55-60' 15.50-15.66						
15.65	19.5	GREY F.P.						
		- grey F.P., m.g. -faint relict feldspars	13838	16.0	17.0	1.0		<.2
		- weakly hematitic chloritic	13839	17.0	18.0	1.0		<.2
		- few fine fractures healed with calcite	13840	18.0	19.0	1.0		<.2
		- few narrow dykes of hbde F.P. 16.8-16.9	13841	19.0	19.5	0.5		<.2
		- 0.1 m ground core at 16.9						
		-quartz calcite vein with frags. of F.P. at 55' at 18.22-18.29						
	19.5	E.O.H. Core size ltk-46 whole core sampled						

Hole No.	1-026	Northing		Grid Orient	0	Depth	Dip	Azimuth	Test	Depth	Dip	Azimuth	Test	Started	27-11-87	Logged by	A. SOEVER
Property	RUNDLE MINE	Easting		Grid Azim.	226.3									Finished	27-11-87	Checked by	
Section		Elevation	3965.313	Length (M)	17.1									Drill Co.	M.MORISSETTE	Core	LTK-47
Claim No.		Survey N.	1976.648	Dip-Collar	-3.5									Drill No.		Comments:	
Target		Survey E.	2884.088	Comp Bearing	226.3									Drill For.			

FROM	TO	DESCRIPTION	SAMPLE	FROM	TO	WIDTH	EST PCT PY	AU IN GPT
0.00	0.50	MAFIC VOLCANICS dark grey fine-grained mafic volcanics; weakly calcitic, magnetic; trace fine-grained disseminated pyrite; lower contact at 40 to core axis	13745	0.00	0.50	0.50	0.00	0.00
0.50	1.20	ALTERED RED FELDSPAR PORPHYRY dark green grey pink; relict feldspar; fractures chloritic hematitic; 1% disseminated pyrite; weak PALE GREY BEIGE ORE ALTERATION						
		0.50 - 1.20 $ ALTN_VEINS weak 1; MINERALISATION py=1;	13746	0.50	1.20	0.70	1.00	0.30
1.20	9.56	GREY BIOTITE FELDSPAR PORPHYRY fine-grained LAMPROPHYRE DYKE dykes 5.2-5.7,7.92-8.09, chloritic slips at low angle to core axis 6.2-6.5,7.56-7.77 narrow bleached zone 7.0-7.14	13747	1.20	2.20	1.00	0.00	0.00
			13748	2.20	3.20	1.00	0.00	0.00
			13749	3.20	4.20	1.00	0.00	0.00
			13750	4.20	5.20	1.00	0.00	0.00
			13751	5.20	6.20	1.00	0.00	0.00
		7.00 - 7.14 $ ALTN_VEINS bleached zone;	13752	6.20	7.20	1.00	0.00	0.00
			13753	7.20	8.20	1.00	0.00	0.00
			13754	8.20	9.40	1.20	0.00	0.00
9.56	10.37	MAFIC VOLCANICS dark grey; fine-grained; weakly calcitic; minor fine-grained pyrite	11724	9.56	10.37	0.81	0.00	0.00
10.37	13.68	GREY BIOTITE FELDSPAR PORPHYRY as from 1.2-9.56						
13.68	17.10	MAFIC VOLCANICS dark green medium-grained; diabase or coarse-grained flow; massive; magnetic; weakly calcitic.	11725	13.68	15.00	1.32	0.00	< 0.00
17.10	17.10	END OF HOLE						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-027 SHEET 1 OF 2

Property Rundle Mine	TP. or Area Newton Twp	Azimuth 045	Date Started 03/12/87	Corrected Dip Tests	Location sketch
Project 3382	Lot. & Conc.:	Dip 0	Date Completed 03/12/87		
Claim No.	Co-ordinates: 1983.7 N	Length 14.48	Drilled By: N Morissette Can.		
Grid No. Ramp Leg I	2879.8 E	Collar Elev. 3963.4	Logged By: C.P.Zorzi		

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
0.0	4.03	ALT'D MAFIC VOLC:- med. grey, f.g., magnetic	11756	0.0	0.35	0.35	10-15	11.55
			11757	0.35	0.60	0.25	2-3	1.44
			11758	0.60	1.00	0.40	15-20	35.62
		STRUCTURE:-sheared	11759	1.00	1.75	0.75	3-5	9.63
			11760	1.75	2.50	0.75	10-15	17.35
		ALT'N AND VEINS:-strong lt.grey cb alt'n throughout with numberous thin lt. grey quartz carbonate veilets randomly oriented	11761	2.50	3.25	0.75	2-4	11.55
			11762	3.25	4.03	0.78	5-7	12.82
			AVG	0.0	4.03	4.03		14.28
		MINERALIZATION:- 10-15% f.g. wispy and diss. Py						
4.03	5.98	RED (PINK)ALTERED F.P. WITH VOLC. INCL.:- pink, m.g., slightly magnetic						
		STRUCTURE:- sheared	11763	4.03	4.68	0.65	tr-.5	2.71
			11764	4.68	4.82	0.14	5-10	7.82
		ALTERATION AND VEINS:- pink colour, numerous, q.c. veins	11765	4.82	5.50	0.68	tr	0.24
			11766	5.50	5.98	0.48	tr-.5	0.75
		MINERALIZATION: tr Py						
		REMARKS:- good alteredvolc,inclusion 4.68-4.82						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 1-027 SHEET 2 OF 2

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
5.98	7.45	ALTERED MAFIC VOLCANIC:- as above,overall alt'n and min'n not as good but local patches just as good	11767	5.98	6.72	0.74	tr-.5	2.81
			11768	6.72	7.25	0.53	10-15	31.10
			11769	7.25	7.45	0.20	tr-.5	7.95
7.45	12.10	RED ALT'D F.P. (ORE PORPHYRY):-med to beige, slightly mag.						
			11770	7.45	8.00	0.55	tr-.5	0.96
		STRUCTURE:- highly sheared	11771	8.00	8.63	0.63	5-7	10.87
			11772	8.63	9.02	0.39	3-5	24.17
		ALT'N AND VEINS:- good beige red alt'n,	11773	9.02	9.26	0.24	5-7	4.11
		numerous thin lt. grey qc veins	11774	9.26	9.63	0.37	tr-.5	0.55
			11775	9.63	10.25	0.62	5-7	5.49
		MINERALIZATION:- overall 5-7% f.g.-m.g. diss Py	11776	10.25	11.00	0.75	7-8	3.77
			11777	11.00	11.70	0.70	1-2	4.25
		REMARKS:- cherty exhalite band 8.63- 9.02	11778	11.70	12.10	0.40	1-2	3.29
		11.70-12.10						
12.10	14.48	MAFIC VOLCANIC:- dk. grey, f.g. magnetic	11779	12.10	12.75	0.65	tr	0.27
			11780	12.75	13.74	0.99	tr-.5	0.82
		STRUCTURE:- sheaered	11781	13.74	13.95	0.21	3-5	6.79
			11782	13.95	14.48	0.53	tr-.5	1.03
		ALT'N AND VEINS:- strongly calcitic with numberous thin lt. grey calcite veins						
		MINERALIZATION:- tr. Py						
		REMARKS:- red alt'd f.p. inclusion 13.74-13.95 with 3-5% Py	AVERAGES	0.0	4.82	4.82		12.53
				4.82	5.98	1.16		0.45
		LKT 47 core		5.98	12.10	6.12		7.95
		-whole core sampled						
			or	0.0	12.10	12.10		9.06

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-001 SHEET 1 OF 2

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
Rundle Mine	Newton Twp	20.44	09/09/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		0.	10/09/87		
Claim No.	Co-ordinates:	Length	Drilled By:		
2nd level	1975.559 N	20.8	N Morissette Can.		
Grid No.	2920.702 E	Collar Elev.	Logged By:		
#2 DDST		3942.836	A.Soever		

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-test B North zone north of second leg of rays						
0.0	4.5	ALTD MAFIC VOLCANICS	10466	0.0	1.5	1.5		0.7
		-massive fg grey mafic volc.	10467	1.5	3.0	1.5		tr
		-3-4% fine hairline fractures healed with calcite	10468	3.0	4.3	1.3		tr
		-minor pale grey qtz-carb altn; breccia zone	10469	4.3	4.7	0.4		-
		with cm scale fragments of volcanics in a pyritic qtz-apatike matrix; 2.52-2.70 -narrows qtz-apatike vein 3.63-3.72; 1% fg diss Py; 1-2% fg diss Py assoc with with qtz-carb altn; 3-4% fg to vfg diss Py with sheared contact zone 4.32-4.48; -patch of dk grey porphyry 3.83-3.92 -sheared zone intermixed sheared volcanic and porphyry; 4.32-4.48 -hematic-chloritic						
4.5	8.5	RED ALTD FP	10470	4.7	6.0	1.3		1.1
		-red mg altd fp	10471	6.0	7.0	1.0		1.1
		-only faint relict feldspars	10472	7.0	8.0	1.0		1.1
		-hematitic-chloritic-becomespaler in colour due	10473	8.0	8.5	0.5		1.6
		to increase in qtz-carb altn towards base	AVG	4.7	8.5	3.8		1.2
		-few hairline fractures healed with qtz-calc-dolomite; .5-1% fg Py- FP 7.0-8.5; only traces Py above this; 5% Py in sheared section 4.5-4.7 -4.5-4.7 -sheared section with streaky chl. inclusions of mafic volc						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-001 SHEET 2 OF 2

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
0.0 (CONTINUED)	4.5	-lower ct marked by narrow 2cm band of grey qtz-carb altn with 10% Py						
8.5	10.6	HYBRID ROCK	10474	8.5	10.0	1.5	tr	0.7
		-altd mafic volcanics and red altd prophyry	10475	10.0	10.6	0.6	tr	0.5
		-extensive pale grey-beige-qtz carbonate altn but very little Py						
		-sections broken blocky core 8.8-9.5,10.0-10.1						
10.6	15.3	TALC CHLORTE-CARBONATE SCHIST	10476	10.6	12.0	1.4		-
		dk grey -green talc-chlorite carbonate schist	10477	12.0	13.5	1.5		0.2
		with stringers white calcte -inclusion sheared	10478	13.5	15.0	1.5		tr
		fractured red FP 12.83-12.95;						
		-lamp dykes from 14.14-14.20, 14.44-14.79						
15.3	20.8	MASSIVE U.M.	10479	15.0	16.5	1.5	tr-1	tr
		-dk grey massive u.m. flow	10480	16.5	18.0	1.5	1-2	
		-slightly talcose-chloritic; tr-1% Py	10481	18.0	19.5	1.5	1-2	0.2
		-2% Py 17.30-18.70; red fg fp dykes 19.33-19.70,	10482	9.5	20.8	1.3	tr-1	
999		19.94-20.33						
		EOH						
		Core Size LTK46						
		split core sampled						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-002 SHEET 1 OF 2

Property Rundle South	TP. or Area Newton Twp	Azimuth 345.25	Date Started 10/09/87	Corrected Dip Tests	Location sketch
Project 3382	Lot. & Conc.:	Dip 0.0	Date Completed 11/09/87		
Claim No. 2nd level	Co-ordinates: 1975.047 N	Length 21.9	Drilled By: N Morissette Can.		
Grid No. #2 DDST	2919.393 E	Collar Elev. 3942.747	Logged By: A.Soever		

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-to test B North zone north of ramp						
0.0	5.2	ALTERED MAFIC VOLCANICS	10493	0	1.5	1.5	1-2	0.1
		-grey f.g. altered mafic volc.	10494	1.5	3.0	1.5	1-2	0.6
		-strongly magnetic	10495	3.0	4.5	1.5	1-2	0.2
		-calcitic, weakly chloritic hematitic	10496	4.5	5.2	0.7	1-2	2.8
		-network of hairline fractures healed with calcite assoc with calcitic alteration 1-2% vfg to fg diss Py						
5.2	14.3	RED ALTERED FP	10497	5.2	6.7	1.5	tr-1	0.2
		-brightr red alted fp	10498	6.7	8.2	1.5	tr-1	0.2
		-no relict feldspars seen	10499	8.2	9.7	1.5	tr-1	2.7
		-alteration hematitc, weakly chloritic;	10500	9.7	11.2	1.5	1-2	3.5
		-massive structure, few hairline healed with	10501	11.2	12.4	1.2	1-2	2.3
		dolomite qtz; tracte to 1% PY -locally at	10502	12.4	12.8	0.4	5-6	8.6
		9.3-9.4,11.18-11.37; 2% vfg Py assoc with pale	10503	12.8	14.3	1.5	3-4	2.3
		brown altn- 3-4% Py 12.8-14.3 in well altd porp.						
		12.44-12.80 -well min'd inclusion of mafic volcs	AVG	8.2	14.3	6.1		3.1
		-porphyry adjacent to inclusion is also min'd 5-6% Py; lamp dykes from 7.35-7.88, 7.98-8.02						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. J-002 SHEET 2 OF 2

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
14.3	17.8	HYBRID ZONE -inclusions of mafic volcanic with highly altd porphyry; mafic volcanics cut by netwofk of dolomite-qtz veins -dolmitic, weakly hematitic-chloritic; tr-.5% vfg to fg diss Py -narrow band talc-chloritic carbonate schist 17.06-17.36	10504 10505 10506	14.3 15.8 16.8	15.8 16.8 17.8	1.5 1.0 1.0	tr tr tr	0.3 0.1 0.2
17.8	21.9	TALCOSE-CHLORITIC U.M. -dk green talcose chloritic um -not talc-chlorite -carbonate schist -relict spinifex texture easily discernable -narrow alt. porphyry dyke 18.76-18.83	10507 10508 10509	17.8 19.3 20.8	19.3 20.8 21.9	1.5 1.5 1.1	tr tr tr	0.1 0.2 tr
	21.9	END OF HOLE						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-003 SHEET 1 OF 2

Property Rundle Mine	TP. or Area Newton Twp	Azimuth 49.17	Date Started 11/09/87	Corrected Dip Tests
Project 3382	Lot. & Conc.:	Dip 0.0	Date Completed 13/09/87	
Claim No. 2nd Leg	Co-ordinates: 1974.535 N	Length 22.00	Drilled By: N Morissette Can.	
Grid No. #2 DDST	2921.598 E	Collar Elev. 3942.843	Logged By: C.P.Zorzi	

Location sketch

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-to test B North Zone North of Ramp						
0.00	4.9	MAFIC VOLCANICS	10522	0	1.0	1.0	tr	tr
		-dk green to black,f.g.,magnetic	10523	1.0	2.5	1.5	tr-.5	0.1
		-highly fractured with broken blocky core	10524	2.5	4.0	1.5	tr-.5	0.5
		-relatively unaltered calcitic veinlets throughout with patches of garnet	10525	4.0	5.5	1.5	tr-.5	1.6
		- tr-.5% fg diss Py throughout						
4.90	9.60	RED ALT'D FP	10526	5.5	7.0	1.5	tr-.5	0.5
		-red to pink fg with mg fsp phenos, magnetic in places, chloritc and some hbld crystals	10527	7.0	8.5	1.5	tr-.5	0.2
		-sheared; good red cb alt'n numerous qtz-cb veins and calc veins; tr fg diss PY	10528	8.5	9.6	1.1	tr-.5	0.9
9.6	12.68	ALT'D MAFIC VOLC	10529	9.60	11.00	1.4	1-2	0.7
		-as above 0-4.90, becoming cherty ~11.50-11.85	10530	11.00	11.80	0.85	2-3	1.2
		-highly fractured; minor lt; grey cb alt'n with numerous thin 1mm qtz-cb veins; .5-1% fg diss Py overall with short sections containing up to 2% Py	10531	11.85	12.68	0.83	2-3	1.2
		Red F.P. 10.50-10.93 11.85-12.20						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-003 SHEET 2 OF 2

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
12.68	15.90	SHEARED SPINIFEXED U.M. -dk green to black, fg, soft, chloritic, talcose, magnetic; sheared and spinifexed, schitosity~60° -numerous thin calcite and few thin qv						
15.90	17.47	HBLD FSP PORPHYRITIC DYKE (LAMP?) -purple red, f.g. with few sparse f.g. fsp phenos and 10-15% f.g. hbld, also very choritic; sheared -numerous thin lt grey calcite veins						
17.47	22.00	MASSIVE TO PLYHEDRAL JOINTED U.M. -dk green to black, fg, soft, talcose, choritic, slightly magnetic; polyhedral jointing in places and massive -numerous thin lt grey calcite veins						
	22.00	END OF HOLE Core Size LTK-46 Split Core sampled						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-004 SHEET 1 OF 2

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
Rundle Mine	Newton Twp	26.22	14/09/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		0.0	14/09/87		
Claim No.	Co-ordinates:	Length	Drilled By:		
2nd Leg	1982.742 N	19.10	N Morissette Can.		
Grid No.	2900.299 E	Collar Elev.	Logged By:		
#1 DDST		3947.71	C.P.Zorzi		

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
0.0	3.85	RED BROWN ALTD FP	10532	0	1.5	1.5	5	15.8
		-brown red fg matrix with mg to cg pheos of fsp	10533	1.5	3.0	1.5	5	5.3
		non-magnetic, possibly secondary fsp; sheared	10534	3.0	3.85	0.85	3-5	3.7
		- good red brown altn with numerous thin lt						
		grey qtz-cb veinlets; 5-7% fg diss Py overall	AVG	0	3.85	3.85		9.04
3.85	10.30	RED ALTD FP	10535	3.85	5.00	1.15	1	0.4
		-red, fg mg with mg fsp phenos, non-magnetic	10536	5.00	6.50	1.5	.5-1	1.3
		with fg bt and hbld, chl. slips; sheared	10537	6.50	8.00	1.5	.5-1	2.2
		-red cb altn, numerous paper thin cb veinlets	10538	8.00	9.50	1.5	.5-1	1.5
		- tr-1% fg diss Py; cherty exhalite 0.2cm at	10539	9.50	10.3	0.8	.5-1	5.2
		lower ct	AVG	9.5	11.50	2.0		4.00
			AVG	0.0	11.5	11.5		4.41
10.30	12.20	ALTED MAFIC VOLC AND CHERTY EXHALITE						
		-dk grey to black, fg, magnetic in places with	10540	10.3	11.50	1.2	.5-1	3.2
		short 10-20cm exhalite near upper ct;	10541	11.50	12.40	0.9	tr-.5	0.8
		-highly fractured but infilled with qtz/cb						
		veinlets; purple grey cb in volc with red cb	AVG	9.5	11.50	2.0		4.0
		altn in exhalites; numerous paper thin to 2mm						
		qtz cb veins; .5-1% fg diss Py overall, exhalite						
		bands contain slightly greater amounts of Py						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
12.20	16.68	HBLD FSP PORPHYRITIC DYKE (LAMP?) -purple grey, fg, with mg mafic crystals, chloritic infillings; mod shearing and fracturing -numerous thin 1-5mm calcite veins; strong pervasive calcite; 15.35-15.90 polyhedral jointed U.M.						
16.68	19.10	POLYHEDRAL JOINTED U.M. -dk green to black, soft, chloritic talcose; good jointing and spx						
	19.10	END OF HOLE Core Size LTK-46 Split Core sampled						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-005 SHEET 1 OF 2

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
Rundle Mine	Newton Twp	349.79	14/09/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		0.0	15/09/87		
Claim No.	Co-ordinates:	Length	Drilled By:		
2nd Leg	1981.23 N	20.97	N Morissette Can.		
Grid No.	2899.87 E	Collar Elev.	Logged By:		
R-481-XCN(L-2)		3947.72	C.P.Zorzi		

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
0.0	12.10	RED ALT'D FP	10510	0	1.5	1.5	3-5	5.7
		-med to beige red, fg matrix with fg to mg fsp	10511	1.5	3.0	1.5	3-5	4.4
		phenos; highly sheared but later silicified	10512	3.0	4.5	1.5	3-5	4.1
		-good red with lt grey to beige cb altn; highly	10513	4.5	6.0	1.5	5-7	9.3
		silicified; numerous thin 1-3mm lt grey qtz and	10514	6.0	7.5	1.5	7-10	7.3
		qtz-cb veinlets; minor infillings of chlorite and	10515	7.5	9.0	1.5	.5-1	0.7
		specularite; good altn fades near end of section;	10516	9.0	10.50	1.5	3-5	1.5
		3-5% f.g. diss Py throughout	10517	10.50	11.90	1.4		0.2
			AVG	0	7.5	7.5		6.69
12.10	14.30	MAFIC DYKE VOLCANIC						
		-fracture with minor fractures throughout;	10518	11.90	12.50	0.60	2-3	0.5
		numerous thin lt grey qtz-qtz/calc veinlets;	10519	12.50	14.00	1.50	.5-1	0.3
		tr-.5% fg wispy Py; cherty exhalite 11.90-12.20						
		with hands of f.g. Py						
14.30	15.10	RED ALTD FP	10520	14.00	15.10	1.1	.5-1	1.7
		-red, fg with <.5% med grained fsp phenos;sheared						
		good red cb altn with few thin 1mm to 5mm lt grey						
		cb altn; tr-.5% fg diss Py						
15.10	15.90	RED ALTD FP WITH CLASTS OF MAFIC VOLCANICS	10521	15.10	15.90	0.8	5	12.3
		-red brown, fg, magnetic; highly sheared with bx	AVG	14.0	15.9	1.9		6.2
		blocks 5cm of mafic volc; red cb altn with thin						
		lt grey calcite veins; strong pervasive calcite						
		5-7% f.g. diss and patchy Py						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-005 SHEET 2 OF 2

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
15.90	20.05	SHEARED SPINIFEXED U.M. -green-black f.g. talcose, soft, magnetic; highly sheared and fractured with blocky core and ground sections; silicified in places with patchy qtz and qtz veins; numerous thin lt grey calcite veins						
20.05	20.97	MAFIC U.M. VOLCANIC (GABBROIC DYKE?) -med green to dk grey, mg to cg, non-magnetic with clasts from 1mm to 3mm(mafic); massive; few wispy pink calcite veinlets, strong pervasive calcite						
	20.97	END OF HOLE Core Size LTK-46 Split Core sampled						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-006 SHEET 1 OF 2

Property Kundie Mine	TP. or Area Newton Twp	Azimuth 330.	Date Started 10/10/87	Corrected Dip Tests
Project 3382	Lot. & Conc.:	Dip 0.0	Date Completed 11/10/87	
Claim No.	Co-ordinates: 1978.9 N	Length 33.0	Drilled By: N Morissette Can.	
Grid No. R-49/XCS(1-3)	2910.5 E	Collar Elev. 3947.71	Logged By: C.P.Zorzi	

Location sketch

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
0.0	4.77	RED ALTD FP -reddish brown, mg, slightly magnetic; sheared -good reddish brown cb altn throughout becoming weak near the end; numerous 3-5mm lt grey qc veins at 45',minor sericite altn here and there -upper 1.5 m with 3-5% f.g. diss Py; remainder of section 1-2% fg diss Py	10350 10351 10352	0.0 1.5 3.0	1.5 3.0 4.5	1.5 1.5 1.5	3-5 1-2 .5-1	3.26 0.91 <.20
4.77	7.85	GREY SLIGHTLY ALT FP -grey-red, magnetic, minor up to 5% fg bio; -moderate shearing; numerous 1-2mm lt grey qc veins at 45'; very vague red cb altn; tr-.5% fg diss Py	10353	4.5	6.0	1.5	tr-.5	<.20
7.85	10.23	MAFIC VOLCANICS -med. grey-green, fg, magnetic; moderate shearing and fracturing; numerous paper thin calcite veins randomly oriented, one set is distinct at ~25-30' -strong pervasive calcite; 1-2% fg patchy Py	10354	8.00	9.50	1.5	1-2	<.20
10.23	12.30	GREY SLIGHTLY ALTD FP -as above 4.77-7.85						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-006 SHEET 2 OF 2

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
12.30	14.45	MAFIC VOLCANICS -as above 7.85-10.23; slight amt of lt grey cb altn; 1-2% fg patchy Py	10355	13.00	14.45	1.45	1-2	<.20
14.45	16.47	GREY SLIGHTLY ALTD FP -as above 4.77-7.85 -slightly better reddish pk cb altn						
16.47	17.24	RED ALTD FP AND ALTD MAFIC VOLCANICS -lt grey, fg, magnetic, small patches of red altd FP; highly sheared and bx'd; good lt grey cb altn numerous paer thin lt grey cb veins; .5-1% vfg-fg diss Py	10356	16.47	17.24	0.77	.5-1	1.27
17.24	18.84	ALTD MAFIC VOLCANICS -fg grey altd mafic volcs, magnetic, quite calcitic, 1-2% hairline fractures healed with calcite; 2% fg diss Py 17.70-18.60	10397	17.24	18.84	1.6		2.37
18.24	20.24	GREY FP -pale grey mg FP; 20-30% cg relict feldspars - 3-4% fg diss bro.; massive; tr-1% diss Py	10398	18.84	20.24	1.4		0.24
20.24	23.00	MAFIC VOLCANICS -dk grey mg mafic volcanics; massive, 2% fine hairline fractures healed by qtz-calcite +/- epidote and pyrite; short section red altd Fp 21.27-23.31						
	23.00	END OF HOLE						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-007 SHEET 1 OF 2

Property Rundle Mine	TP. or Area Newton Twp	Azimuth 200.	Date Started 9/10/87	Corrected Dip Tests	Location sketch
Project 3382	Lot. & Conc.:	Dip 0.0	Date Completed 10/10/87		
Claim No.	Co-ordinates: 1978.4 N	Length 15.50	Drilled By: N Morissette Can.		
Grid No. R-497XCS(L-3)	2910.9 E	Collar Elev. 3920.43	Logged By: C.P.Zorzi		

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-to test southern limit of ore zone from leg 3 of the ramp						
0.00	5.73	RED ALTD FP -red to beige; f.g. matrix, non-magnetic; highly sheared; good red to brown red cb altn; numerous 2-5mm qc veins randomly oriented; 3-5% fg patchy and diss Py, locally up to 10% Py -expect values in 5-10 gpt range	10357 10358 10359 10360	0.0 1.5 3.0 4.5	1.5 3.0 4.5 5.73	1.5 1.5 1.5 1.23	5-7 3-5 3-5 1-2	4.35 1.89 2.33 1.3
5.73	7.80	MAFIC VOLCANICS -dk grey to green, fg, magnetic, vague schist'y at 30'; numerous paper thin calcite veins~30 -strong pervasive calcite	10361 10362	5.73 6.73	6.73 7.80	1.0 1.07	tr tr	1.97 0.56
7.80	10.66	RED ALTD FP -brick red, fg matrix with mg fsp, magnetic, sheared; red cb altn chlorite altn, mod. amt 3-5mm qc veins; tr patchy Py	10363 10364 10365	7.80 8.80 9.70	8.80 9.70 10.66	1.0 0.9 0.96	tr tr tr	0.41 0.46 1.44
10.66	11.60	RED ALTD FP AND ALTD MAFIC VOLCANICS -purple grey, fg, mag., highly sheared and bx'd -good lt grey cb altn in volcanics and FP -few thin qc veins, highly silicified; 5-10% fg diss Py; expect 5-10gpt values	10366	10.66	11.60	0.94	5-10	12.40

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-007 SHEET 2 OF 2

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
11.60	15.50	MAFIC VOLCANIC -as above 5.73-7.80; sections with 3-5% Py have been sampled but section is very calcitic	10367 10368	11.60 12.60	12.60 14.10	1.0 1.5	3-5 3-5	0.82 1.10
	15.50	END OF HOLE LKT-37 core drilled						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-008 SHEET 1 OF 2

Property Rundle Mine	TP. or Area Newton Twp	Azimuth 200.	Date Started 9/10/87	Corrected Dip Tests	Location sketch
Project 3382	Lot. & Conc.:	Dip 0.0	Date Completed 10/10/87		
Claim No.	Co-ordinates: 1978.4 N	Length 15.50	Drilled By: N Morissette Can.		
Grid No. R-497XCS(L-3)	2910.9 E	Collar Elev. 3920.43	Logged By: C.P.Zorzi		

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-to test southern extension of ore zone from leg3 of the ramp						
0.00	2.70	RED ALTD FP -reddish brown,mg,slightly magnetic; highly sheared; good red brown cb altn, numb=erous paper thin lt grey qc veins at ~45'; 5mm qc veins running paralell to core; 5-8% fg diss Py; -expect values 5-8 gpt	10378 10379	0.0 1.5	1.5 3.0	1.5 1.5	5 5	6.03 2.46
2.70	12.90	GREY SLIGHTLY ALTD FP -grey to red, mg, magnetic, sections with 2-3% fg diss bio; minor fracturing; patchy red cb altn with paperthin qc veins in random orientation; tr py overall with short sections with 2-3% Py	10380 10381 10382	3.0 4.5 10.40	4.5 6.0 11.90	1.5 1.5 1.5	.5-1 tr-.5 tr-.5	0.24 <.20 0.51
12.90	19.35	RED ALTD FP -red to pink, mg to fg, slightly magnetic, fsp-phenos are more subhedral than those above; structure sheared; good red cb altn, numerous paper thin cb veins; chloritic and hematitc infillings in the veins and fractures; tr-.5% vfg Py over all with 2-3% Py locally	10383 10384 10385 10386 10387	12.90 14.00 15.50 17.00 18.50	14.00 15.50 17.00 18.50 19.35	1.1 1.5 1.5 1.5 0.85	tr-.5 tr-.5 tr-.5 .5-1 .5-1	0.82 <.20 1.27 0.31 0.34

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-006 SHEET 2 OF 2

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
19.35	28.52	GREY BIOTITE FP -light to med grey, mg, very slightly magnetic with 1-2% fg bio; minor fracturing; few paper thin lt grey calcite veins; pervasive calcite						
	28.52	END OF HOLE LKT-37 Core drilled						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-009 SHEET 1 OF 2

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
Rundle Mine	Newton Twp	260.0	8/10/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		0.0	9/10/87		
Claim No.	Co-ordinates:	Length	Drilled By:		
	1971.4 N	29.00	N Morissette Can.		
Grid No.	2923.6 E	Collar Elev.	Logged By:		
R-514XCS(L-3)		3925.0	C.P.Zorzi		

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t	
		OBJECTIVES:-to test south boundary of ore zone in leg3 of ramp							
0.00	3.00	HBLD FSP PORPHYRY?(INTERMEDIATE DYKE?LAMP?) -dull grey, fg, non-magnetic, mod. fracturing with few <1mm-3mm calcite veins; 3cm qc vein with tr patchy fg Py; vein at 60'	10369	0.8	0.9	0.1	tr	1.28	qcvein
3.00	7.53	GREY SLIGHTLY ALTD FP -grey-red, biotite in places, mg with mg fsp, non-magnetic; sheared; 10% thin lt. grey qc veinlets at predominantly 30'; very thin <1mm qc veinlets in random pattern; weak red cb altn throughout; 1-2% vfg diss Py throughout locally up to 5%	10370	3.00	4.5	1.5	1-2	2.13	
			10371	4.5	6.0	1.5	tr-.5	1.82	
			10372	6.0	7.5	1.5	tr-.5	0.96	
7.53	9.00	ALTD MAFIC VOLC AND RED ALTD FP(HYBRID ROCK) -lt grey and red patches, fg, magnetic; highly sheared; lt grey cb altn in volc with red cb altn in fp; strong silicification throughout - 10-15% fg diss Py; expect excellent values	10373	7.50	9.00	1.5	10-15	9.15	

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-009 SHEET 2 OF 2

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au	
12.12	26.03	ALTD MAFIC VOLC -lt grey, aplite dyke 18.85-19.20,qc21.25-21.47 fg, magnetic, mod. fracturing infilled with calcite and epidote; good epidote and gt altn throughout, numerous <1mm calcite veins; 3-5% fg diss PY, locally up to 20%	10375 10376 10377	15.50 21.25 25.00	17.00 21.50 26.00	1.5 0.25 1.0	3-5 1-2 3-5	1.92 0.58 1.88	 qcalcite
26.03	27.90	GREY PINK FP -pinkish grey, fg matrix with mg fsp phenos, non-magnetic; mod fractures infilled with black chl and thin qc veins							
27.90	29.00	MAFIC VOLC -as above 12.12-26.03							
		drilling notes LKT-37							

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 3-010 SHEET 1 OF 2

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
Rundle Project	Newton Twp	200.0	8/10/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		0.0	8/10/87		
Claim No.	Co-ordinates:	Length	Drilled By:		
	1969.5 N	14.60	N Morissette Can.		
Grid No.	2924.0 E	Collar Elev.	Logged By:		
R-514xCS(L-3)		3925.0	C.P.Zorzi		

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-to test south extension of ore zone in leg3 of ramp						
0.00	1.75	ALTD MAFIC VOLCANICS -med grey to black, fg, strongly magnetic; mod. fractured; lt grey cb altn here and there, numerous thin lt grey qtz and calc veins; 1-2 mm qtz vein rimmed with fg Py; 3-5% fg diss Py throughout, expect low to moderate values; grey bio fp dyke from 0.95-1.34	10388 10389	0.00 1.00	1.00 1.34	1.00 0.34	3-5 tr	<.20 0.58
1.75	2.92	RED ALTD FP -reddish brown, mg, slightly magnetic; sheared; good red altn with numerous 3-5mm qc veins; 2-3% fg diss Py; expect low to mod. values	10390 10391	1.34 2.50	2.50 2.92	1.16 0.42	2-3 2-3	2.57 0.51
2.92	3.85	RED ALTD FP AND ALTD MAFIC VOLCANICS(HYBRID RK) -grey to red, fg to mg, magnetic, altd mafic volc and patches of red altd FP; highly sheared and silicified; good lt grey cb altn in the volcanics with and red cb altn in the FP, numerous thin 2-3mm qc veins; 10-15% fg diss Py, more concen'd in the volcs; expect excellent values	10392	2.92	3.85	0.93	10-15	32.16

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-010 SHEET 2 OF 2

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
3.85	4.60	MAFIC VOLCANICS -med grey green, fg, magnetic; sheared; patchy lt grey cb altn with few 1-2mm calcite veins, strong pervasive calcite; patches with 5-10% Py overall 2-3% Py; expect low values	10393	3.85	4.60	0.75	2-3	5.73
4.60	10.35	GREY SLIGHTLY ALT FP -grey red, mg, slightly magnetic; fractd; minor red altn with few thin lt grey qc veins; tr-.5% vfg to fg diss Py NOTE(by A.S.): well altd 1-2% Py expect values, 7.0-7.5 mafic inclusion with 4-5% Py expect values; 10.35 actually measures 10.72	10570 10571 10572 10573 10574	4.6 6.1 7.0 7.5 9.0	6.1 7.0 7.5 9.0 10.35	1.5 0.9 0.5 1.5 1.35 (1.72)	1-2 1-2 4-5 1-2 tr-1	0.75 0.82 3.74 0.72 <.20
10.35	14.60	ALT'D MAFIC VOCANICS as above; sheared; numerous thin <1mm calcite veins; strong pervasive calcite; few 10cm and 1cm aplite dykes, few 2-3 mm qv; 1-2% fg diss Py; possible low values						
14.60	19.35	LAMPROPHYRE DYKE WITH INCLUSIONS MAFIC VOLCAINCS -grey fg to mg lamp dyke; highly calcitic; 5% biotite non-magnetic, inclusions magnetic grey fg mafic volcanics from 14.85-15.30, 15.70-16.40, 16.60-17.08, 18.06-18.40						
19.35	25.0	FRESH GREY FP -narrow lamp dykes 21,70-21.95, 23.3-23.5 weakly pinkish hematitic 22.0-22.8						
	25.0	END OF HOLE Core: LKT-37						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-011 SHEET 1 OF 2

Property Rundle Mine	TP. or Area Newton Twp	Azimuth 080.0	Date Started 13/10/87	Corrected Dip Tests
Project 3382	Lot. & Conc.:	Dip 0.0	Date Completed 16/10/87	
Claim No.	Co-ordinates: 1995.9 N	Length 21.00	Drilled By: N Morissette Can.	
Grid No. R-486XCS(L-3)	2906.4 E	Collar Elev. 3918.0	Logged By: A.Soever	

Location sketch

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-to test norhtward extension of mineralization on third leg of ramp						
0.0	3.4	RED ALTD FP redish grey to bright red mg fp; highly altd -relict feldspars remain 0.4-1.10; highly altd with qtz-carb alteration producing qtz vein stockword above; massive with 2% fine hairline fractures healed with ; tr to 1% diss Py 0.0-1.6m, 5-6% fg diss Py ssoc with qtz stkwork 1.6-2.3; 1-2% fg diss py assoc with altd refics 2.3-2.8 -1% diss Py 2.8-3.4; inclusions altd mafic volcs 1.93-2.06, 2.30-2.82	10399 10400 10542 10543	0.0 1.6 2.3 2.8	1.6 2.3 2.8 3.4	1.6 0.7 0.5 0.6	tr-1 5-6 1-2 1	5.59 0.75 1.61 1.17
3.4	8.0	ALTD MAFIC VOLCANICS -dk grey to reddish grey hematitic altd mafic volc. mod. to strongly magnetic; massive, 3-4% hairline fractures healed with calcite; quite calcite- locally tinged red hematitic- 7.20-8.0 intensely altd- calcitic and hematitic; 5-7% fg diss PY assoc with cherty exhalite bands 3.40-4.00 1-2%fg diss Py assoc with pale grey calcite altn 4.00-7.20; 6-8% fg diss Py stringers with intensely altd section 7.20-8.00	10544 10545 10546 10547 10548	3.4 4.0 5.0 6.0 7.2	4.00 5.0 6.0 7.2 8.0	0.6 1.0 1.0 1.2 0.8	5-7 1-2 1-2 1-2 6-8	0.51 0.34 <.2 <.2 0.48

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-011 SHEET 2 OF 2

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
8.0	12.7	LAMPROPHYRE DYKE -fg red brown lamp dyke, 5% chl -hbde and bio -weakly magnetic, few feldspar phenocrysts- grading to hbde fdspr porphyry; chloritic-hematic -quite calcitic; massive ; 1% fg diss Py	10549 10550	8.0 9.5	9.5 11.0	1.5 1.5	1 1	<.20 <.20
12.7	15.90	MAFIC TO ULTRAMAFIC VOLCANICS -red green grey mg to fg mafic to ultramafic volcs massive with 2% stringers hem. calcite; chloritic weakly hematitic- calcitic; sections broken blocky core lsot core 0.35 between 13.30-16.60						
15.90	19.30	LAMPROPHYRE DYKE -as from 8.0-12.7; broken blocky core 16.00-16.85 lost 0.3m						
19.30	21.0	POLYHEDRAL JOINTED ULTRAMAFIC VOLCANICS -pale grey green polyhedrally jointed um.; locally spinifex? chloritic, slightly talcose; ground core 0.2m at 19.3-19.5						
	21.00	END OF HOLE						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-012 SHEET 1 OF 1

Property Rundle Mine	TP. or Area Newton Twp	Azimuth 020.0	Date Started 16/10/87	Corrected Dip Tests
Project 3382	Lot. & Conc.:	Dip 0.0	Date Completed 16/10/87	
Claim No.	Co-ordinates: 1998.0 N	Length 14.90	Drilled By: N Morissette Can.	
Grid No. R-486XCN(L-3)	2905.5 E	Collar Elev. 3918.0	Logged By: A.Soever	

Location sketch

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-to test northern extent of mineralization north of R-486 XCN (L-3)						
0.0	3.0	HYBRID ZONE -highly altd red fp with sections of highly altd mafic volcanics; pervasive, pale grey qtz carb. altn, slightly ly hematitic more calcitic to base fractured with flazure structure; 2-3% hairline fractures healed with calcite; breccia zone well defined vein of grey beige qtz carbonate altn at 65' 1.0-1.17; 1-2% fg diss Py with altd volcs 0.0-0.9; 5% Py in band of alteration 1.0-1.17; tr-1% Py in FP 1.2-2.0; 2-3% Py in altd mafic volcs 2.0-3.0; ct-sharp with next unit at ~90'	10551 10552 10553 10554	0.0 0.9 1.2 2.0	0.9 1.2 2.0 3.0	0.9 0..3 0.8 1.0	1-2 5 tr-1 2-3	3.98 0.99 0.62 0.65
3.0	6.0	SHEARED U.M. (TALC CHLORITE CARB SCHIST) -dk grey green talc chlorite carb schist, less schistore to base; tr Py; hbde FP(lamp)dykes 3.12-3.54; 4.87-5.25; unit becomes less schistose to base grading to next unit; narrow 2-5 cm band at 3.0m at ~60-70'	10555 10556	3.0 4.5	4.5 5.3	1.5 0.8	tr tr	<.20 <.20
6.0	14.90	ULTRAMAFIC VOLCANICS -pale grey green mg um volcs; massive to locally polyhedrally jointed to spinifex; broke blocky core 8.8-9.8 lost 0.15m in this section						
	14.90	END OF HOLE						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-013 SHEET 1 OF 2

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
Rundle Mine	Newton Twp	320.0	16/10/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		0.0	17/10/87		
Claim No.	Co-ordinates:	Length	Drilled By:		
	1997.4 N	20.20	N Morissette Can.		
Grid No.	2903.0 E	Collar Elev.	Logged By:		
R-486XCN(L-3)		3918.0	A.Soever		

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	Au g/t
		OBJECTIVES:-to test mineralized structure of R-486 XCN (L-3)						
0.0	2.7	ALTERED MAFIC VOLCANICS	10557	0.0	1.4	1.4	1	<.20
		-dk greenish grey fg mafic volcanics, magnetic	10558	1.4	2.7	1.3	1	0.38
		-clacitic, weakly chloritic, massive 3-4% hairline fractures healed with calcite; 1% fg diss Py; lower ct sharp at 50'						
2.7	3.7	RED ALTERED FP	10559	2.7	3.7	1.0	tr-1	<.20
		-red to pale grey m.g. altd FP; large relict feldspars, minor biotite; tr-1% fg to vfg Py						
3.7	8.4	ALTERED MAFIC VOLCANICS	10560	3.7	4.7	1.0	1-2	.20
		-med greenish grey fg mafic volcanics; mod	10561	4.7	5.2	0.5	5-6	0.41
		magnetic; quite calcitic, shot three with 5-10%	10562	5.2	6.4	1.2	tr-1	<.20
		fine hairline fractures healed with calcite;	10563	6.4	7.6	1.2	tr-1	0.27
		1-2% vfg to fg diss Py; 5-6% fg diss Py with	10564	7.6	8.4	0.8	3-4	3.12
		swirled bands in section red cherty exhalite 4.66-5.23; 3-4% fg diss PY assoc with hematitic altd section 7.6-8.4						
8.4	11.0	SHEARED ULTRAMAFIC(TALC-CHLORITE CARBONATE SCHIST)						
		AND LAMP DYKES	10565	8.4	9.3	0.9	tr	6.00
		-sheared um to talc chlorite carb schist; lamp	10566	9.3	9.9	0.6	1-2	<.20
		dyke 9.3-9.9and 10.4-11.0; 1-2% fg diss Py with	10567	9.9	10.4	0.5	tr	<.20
		lamp dykes; broke blocky core 9.1-9.3	10568	10.4	11.0	0.6	1-2	<.20

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
11.0	17.0	SPINIFEX U.M. VOLC -pale green grey um volcs; massive, locally spinifexed; slightly talcose, chloritic; faint tr Py	10569	11.0	12.5	1.5	tr	<.20
17.0	20.2	LAMP DYKE -massive mg pale green lamp dyke; 5-10% bio and hbde; calcitic;						
	20.2	END OF HOLE						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-014 SHEET 1 OF 2

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
Rundle Mine	Newton Twp	260.0	2/11/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		0.0	4/11/87		
Claim No.	Co-ordinates:	Length	Drilled By:		
	1992.674 N	29.20	N Morissette Can.		
Grid No.	2903.106 E	Collar Elev.	Logged By:		
R-481XCN(L-2)		3947.61	A.Soever		

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-to test mineralization west of R-481 XCN (L-2)	10681	0.0	0.3	0.3	3-4	15.18
			10682	0.3	0.6	0.3	3-4	11.93
0.0	0.3	ALTERED MAFIC VOLCANICS	10683	0.6	1.6	1.0	1-2	2.60
		-dk grey fg altd mafic volcs; good brown ore	10684	1.6	2.8	1.2	1-2	0.72
		altn along fractures and along lower ct;	10685	2.8	3.1	0.3	2-3	<.20
		3-4% fg diss Py assoc with altn	10686	3.1	4.8	1.7	1-2	1.23
			10687	4.8	5.7	0.9	4-5	3.84
0.3	22.5	RED ALTERED FP	10688	5.7	6.9	1.2	1-2	0.54
		-red altd mg to cg fp -altered to various deg.	10689	6.9	7.1	0.2	4-5	3.94
		-0.3-0.6 bright red -extensive qtz-carb altn	10690	7.1	8.5	1.4	1-2	1.95
		along mesh of fine fractures 3-4% fg diss Py	10691	8.5	9.8	1.3	2	3.60
		-0.3-2.8 less altered dk red hematitic- relict	10692	9.8	10.3	0.5	6	10.08
		feldspars; 5-10% biotite-chloritic 1-2% fg diss	10693	10.3	11.8	1.5	2-3	1.44
		Py; missing 0.5m core from 0.0-2.2;	10694	11.8	13.3	1.5	2-3	0.96
		2.8-3.08 -vfg grey to brick red jasperite-fract	10695	13.3	14.8	1.5	2-3	3.50
		at 30° 2-3% fg to vfg Py	10696	14.8	16.3	1.5	2-3	3.29
		3.08-4.8 -as from 0.3-2.8 -fine fractures healed	10697	16.3	17.8	1.5	2-3	0.27
		with qtz-dolo at 30-35° from 3.9-4.8	10698	17.8	18.8	1.0	2-3	0.65
		4.8-5.7 -highly altd red FP -no relict feldspars	10699	18.8	19.9	1.1	2-3	0.75
		-pervasive qtz carb altn along fine meshwork	10700	19.9	21.0	1.1	1	0.54
		of fractures- 4.5% fg to fbg diss Py	10701	21.0	22.5	1.5	1	1.40
		5.7-8.5 -as from 0.3-2.8 section sim. to 4.8-5.7						
		with extensive qc altn and 4-5% Py- qc altn along						
		fracture at 70° at 8.11-8.17						
		8.5-10.3 -highly altd red feldspar porphyry						
		-pervasive qc altn along network fine fractures;						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-014 SHEET 2 OF 2

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
0.3 (CONTINUED)	22.5	-2% fg to vfg diss Py from 8.5-9.8 -6 Py 9.8-10.3 10.3-22.5 -bright red altd FP -mod qc-altn; 2-3% fg diss Py to 19.9 -less altn and only <1% diss Py 19.9-22.5 -mm to cm scale fractures healed with qtz dolomite from 0-30' from 10.3-16.0 sections blocky core 10.3-11.2, 11.7-12.0, 13.0-13.13, 15.2-16.6 -16.73-16.79 and 16.9-16.98 -breccia zones with fine mm frags of FP in a dolomite qtz matrix; lower ct sharp at 45'						
22.5	25.3	MAFIC VOLCANICS -dk grey fg to mg mafic volcanics; magnetic; slightly calcitic 1% fine fairline fract. healed with calcite; epidote healed fractures 24.2-25.2 -speckled with 1-2% mg Py streaked at 30'	10702 10703	22.5 24.0	24.0 25.3	1.5 1.3	1-2 1-2	<.20 0.27
25.3	27.6	GREY FP -grey mg fp; good relict feldspars and 3-5% biotite- few fine fractures healded in calcite -trace to 1% fg diss Py	10704 10705	25.3 26.3	26.3 27.6	1.0 1.4	tr tr	<.20 0.34
27.6	29.2	ALTD GREY FP -fg dk grey fp weakly altd(may be altd grey fp) -10% fainat relict feldspars with pred. fine grained matrix; weak redish altn and assoc qtz dolomite veining 27.8-28.6 1% Py with this sect. -drill hole water secked another ddh at 29.14m	10706	27.60	29.2	1.6	tr	3.26
	29.20	END OF HOLE -core lost 0.5m from 0-2.2 0.1m from 8.5-11.2 0.2m from 11.2-14.5 0.1m from 20-23.10 Core Size LTK-46 Split Core sampled						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-015 SHEET 1 OF 1

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
Rundle Mine	Newton Twp	080.0	31/10/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		0.0	1/11/87		
Claim No.	Co-ordinates:	Length	Drilled By:		
Location	1981.948 N	29.50	N Morissette Can.		
Grid No.	2903.564 E	Collar Elev.	Logged By:		
		3947.37	C.P.Zorzi		

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
0.0	0.9	GREY SLIGHTLY ALTD FP	10665	0.0	1.0	1.0	tr	0.20
0.9	17.65	RED ALTD FP						
		-red, fg to mostly mg, non-magnetic; sheared	10666	1.0	2.5	1.5	.5-1	1.10
		throughout; good red cb altn throughout fractures	10667	2.5	4.0	1.5	tr-.5	1.30
		infilled with qtz cb and chlorite; qtz and qtz-cb	10668	4.0	5.5	1.5	tr-.5	0.20
		veins oriented at 30-45'; 1 calcite vein running	10669	5.5	7.0	1.5	.5-1	0.75
		slighltly sub parallel to core axis; small beige	10670	7.0	8.5	1.5	.5-1	5.93
		altd with slightly greater %PY listed below 2.35,	10671	8.5	10.0	1.5	.5-1	1.98
		2.6m; cherty band 15.3-16.10m; patchy, locally up	10672	10.0	11.5	1.5	.5-1	1.68
		2-3% fg diss Py overall .5-1% Py	10673	11.5	13.00	1.5	1-2	6.51
			10674	13.00	14.50	1.5	.5-1	1.16
			10675	14.50	16.00	1.5	.5-1	1.98
			10676	16.00	17.50	1.5	.5-1	<.20
17.65	29.5	SHEARED U.M. VOLC (T.C.C.S)						
		-black, fg soft magnetic; highly sheared,	10677	17.50	19.0	1.5	tr-.5	<.20
		numerous thin calcite veins with patches of	10678	19.0	20.5	1.5	tr-.5	0.2
		chert in the upper ~3.0m; tr fg patchy Py	10679	20.5	22.0	1.5	1-2	0.48
		-submassive Py in cherty band at 20.7m	10680	22.0	23.0	1.0	tr-.5	<.20
	29.5	END OF HOLE						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-016 SHEET 1 OF 1

Property Rundle Mine	TP. or Area Newton Twp	Azimuth 225.46	Date Started 13/11/87	Corrected Dip Tests
Project 3382	Lot. & Conc.:	Dip 0.0	Date Completed 14/11/87	
Claim No.	Co-ordinates: 2002.757 N	Length 15.30	Drilled By: N Morissette Can.	
Grid No. 2-446ACCESS DRIFT	2887.833 E	Collar Elev. 3910.58	Logged By: C.P.Zorzi	

Location sketch

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
0.0	0.7	GREY FP						
0.7	2.43	MAFIC -ULTRAMAFIC VOLCANICS -grey green, fg, soft, magnetic; fractured, short FP incl 1.33-1.85;						
2.43	3.60	RED ALTD FP -red, mg, slightly mag; highly sheared; good red cb. altn numerous qc veins; tr-1% Py	10796	2.40	3.60	1.2	.5-1	0.34
3.60	4.42	ALATD MAFIC VOLC -med grey,fg, magnetic; sh'd and bx'd; good grey altn with numerous thin lt grey qc veins; 10-15% fg diss Py	10797	3.60	4.42	0.82	10-15	6.72
4.42	8.65	DACITE DYKE						
8.65	13.10	GREY BIO. F.P.						
13.10	15.30	HBLD FSP DYKE (LAMP)						
	15.30	END OF HOLE Core LKT-46						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-017 SHEET 1 OF 2

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
Rundle Mine	Newton Twp	222.14	11/11/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		0.0	12/11/87		
Claim No.	Co-ordinates:	Length	Drilled By:		
	2002.255 N	14.86	N Morissette Can.		
Grid No.	2892.696 E	Collar Elev.	Logged By:		
2-446ACCESS DRIFT		3910.622	C.P.Zorzi		

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
0.0	0.7	GREY RED SLIGHTLY ALTD FP -highly broken and blocky with tr-.5% diss Py						
0.7	4.7	ALTD MAFIC VOLC -lt to med grey, fg, magnetic; sheared; very minor lt grey cb altn here and there, good altn 4.55-4.70; numerous calcite veinlets; moderate pervasive calcite throughout; tr-.5% fg diss and wispy Py, from 4.55-4.70 ~5-10% diss Py; band of alteration 4.55-4.70	10757 10758 10759 10760 10761	0.0 1.0 2.5 4.0 4.55	1.0 2.5 4.0 4.55 4.70	1.0 1.5 1.5 0.55 0.15	tr tr-.5 tr-.5 .5-1 5-10	4.39 0.31 0.38 <.20 15.15
4.70	11.38	RED ALTD FP -red to beinge in places, mg, slightly magnetic; highly sh'd; good red to beige altn throughout, possible re porphyry 4.70-6.40; numerous thin qc veinlets; chl'c and hemt'c infillings; patches with 3-5% fg diss Py, generally .5-1% Py overall	10762 10763 10764 10765 10766	4.70 6.2 7.5 9.0 10.50	6.2 7.5 9.0 10.5 11.38	1.50 1.3 1.5 1.5 0.88	3-5 .5-1 tr-.5 tr-.5 tr-.5	0.34 <.20 <.20 0.72 0.45
11.38	12.03	CHERTY EXHALTIE dk grey, fg, hard, siliceous; band 90' and sheared up; relatively unaltd, numerous qc veinlets infilling fractures; 2-3% patchy, wispy and diss fg Py	10767	11.38	12.03	0.65	2-3	0.96

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-017 SHEET 2 OF 2

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
12.03	14.86	GREY BIO FP -altd structure from 14.3-14.8, red altd FP with .5-1% fg diss Py	10768	14.3	14.8	0.50	.5-1	0.37

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-018 SHEET 1 OF 2

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
Rundle Mine	Newton Twp	237.07	10/11/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		0.0	12/11/87		
Claim No.	Co-ordinates:	Length	Drilled By:		
	1995.484 N	25.20	N Morissette Can.		
Grid No.	2901.371 E	Collar Elev.	Logged By:		
2-446ACCESS DRIFT		3910.648	C.P.Zorzi		

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
0.0	2.84	ALTD MAFIC VOLC.	10717	0.0	0.4	0.4	1-2	9.46
		-lt to med grey, fg, magnetic; sheared throughout	10718	0.4	1.1	0.7	5-7	0.41
		blocky core over ~1.0m; series of lt grey to	10719	1.1	2.1	1.0	.5-1	1.20
		purple grey cb bands with stuby veinlets of qc	10720	2.1	2.84	0.74	5-7	13.37
		and porphyry patches throughout; calcitic						
		usually between bands; stronger 5-10% fg diss Py						
		within bands otherwise 2-3% fg diss Py; bands of						
		altn and min'n from 0.5-0.8, 1.0-1.1, 2.1-2.15,						
		2.3-2.5, 2.56-2.6, 2.67-2.84						
2.84	9.80	ORE PORPHYRY WITH GREY SLIGHTLY ALTD FP	10721	2.84	4.00	1.16	tr-.5	1.34
		ore porphyry: grey to beige red, mg, with fsp	10722	4.00	5.50	1.5	.5-1	0.45
		that may have regrown	10723	5.5	6.40	0.9	3-5	1.20
		grey FP: grey to red, mg with subhedral fsp,	10724	6.4	6.8	0.4	tr	0.24
		with tr bio; both very slightly mag.	10725	6.8	8.3	1.5	2-3	1.30
		highly sheared with veining at 20-30';	10726	8.3	9.0	0.7	.5-1	<.20
		ore porphyry: beige to grey red cb altn in						
		bands; 1-2% spec hmt; moderate						
		sericitization; minor 0.5cm qv						
		at 20-30', qtz flooding in band						
		grey FP: relatively unaltered 5.5-6.4;						
		ore porphyry: within bands 3-5% fg diss Py						
		overall 1-2% Py; grey porphyry: tr-1% fg diss Py;						
		ore porphyry: 5.5-6.4, 6.8-6.9, 7.7-9.0						
		mafic incl. 3.56-3.70						
		bands 5.6,5.65-6.40, 6.8-6.9, 7.7-8.3						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-018 SHEET 2 OF 2

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
9.8	12.0	RED ALTD FP -black red, mg with fsp gradational from mg to fg very slightly magnetic; highly sheared; good red cb altn, minor sericite thin 2-3mm qc veinlets usually 20-30' and paper thin qc veinles minor hematite; tr-.5% Py	10727 10728	9.0 10.5	10.5 12.0	1.5 1.5	tr tr	<.20 <.20
12.0	13.6	CHERTY PYRITIC EXHALITE -med grey, fg, magnetic; faint banding, ~90', fine bx in places; pruple red patches here and th numerous thin qc veinlets throughout; 1-2% fg patchy and streaky Py	10729	12.0	13.6	1.6	1-2	3.39
13.6	19.26	GRADATIONAL RED ALTD FP TO GREY BIO FP -as above 9.0-12.00, becoming unaltered and bt'c between 15.50-16.00m, small 2-3cm aplite dykes here and there running along C.A.; qv section 17.75-18.20 with tr-.5% Py, veins 1cm to 2mm in size	10730 10731	13.6 17.75	15.00 18.20	1.4 0.45	tr-.5 tr-.5	4.32 <.20
19.26	21.37	LAMP DYKE						
21.37	22.53	GREY BIO FP						
22.53	23.93	RED ALTD FP -beige red altn, fg, possibly more sheared (less exhedral fp); sheared; beige red cb altn with thin lt grey qtz cb veinlets, minor sericite; 1-2% fg to vfg diss Py with patches here and there	10732	22.50	24.00	1.5	1-2	3.39
23.93	25.2	GREY BIO FP -small altd structure 24.28-24.35 (red altd with tr-.5% Py)	10733	24.25	24.35	0.10	tr-.5	2.09
	25.2	END OF HOLE						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-019 SHEET 1 OF 1

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
Rundle Mine	Newton Twp	222.66	7/11/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		0.2	8/11/87		
Claim No.	Co-ordinates:	Length	Drilled By:		
	1993.322 N	8.30	N Morissette Can.		
Grid No.	2906.392 E	Collar Elev.	Logged By:		
2-446ACCESS DRIFT		3910.795	C.P.Zorzi		

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
0.0	3.35	ALTD MAFIC VOLC. -lt to med grey, fg, magnetic; sheared throughout series of lt grey to purple grey cb altd bands with narrow 1-2mm of qc; calcitic usually between altd bands: 0.49-0.65, 0.73-0.85, 1.00-1.12, 1.54-2.90; up to 20% fg diss Py in altd bands, usually 10-15%; unaltered sections with 2-3% fg wispy Py	10707 10708 10709 10710	0.0 0.5 1.5 2.90	0.5 1.5 2.90 3.35	0.5 1.0 1.4 0.45	1-2 5-7 10-15 2-3	9.05 11.79 19.03 3.10
3.35	6.43	ORE PORPHYRY -beige red, mg, possible recrystalized fsp, very slightly magnetic; highly sheared; beige red cb altn in bands throughout bands at 90'; veins are paper thin to 3mm qc; within bands 3-5 fg diss Py oveall 1-2% Py bands from 4.17-4.72, 5.42-6.43 4.72-5.42 grey red slightly altd bt FP	10711 10712 10713 10714	3.35 4.17 4.72 5.42	4.17 4.72 5.42 6.43	0.82 0.55 0.70 1.01	tr-1 3-5 tr 3-5	7.44 8.18 0.58 4.59
6.43	8.04	GREY SLIGHTLY ALTD FP -grey red, mg, slightly magnetic; tr-1% fg bt; relatively unaltered with tr diss Py;	10715	6.43	8.04	1.61	tr	<.20
8.04	8.30	ORE PORPHYRY -as above 3.35-6.43; hole broke into old drift on 2nd level	10716	8.04	8.30	0.26	1-2	<.20
	8.30	END OF HOLE						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-020 SHEET 1 OF 2

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
Rundle Mine	Newton Twp	70.05	13/11/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		0.0	14/11/87		
Claim No.	Co-ordinates:	Length	Drilled By:		
	1986.314 N	29.5	N Morissette Can.		
Grid No.	2909.782 E	Collar Elev.	Logged By:		
2nd (91m) Level		3910.047	C.P.Zorzi		

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Tr. % Py	nSSm Au g/t
		OBJECTIVES:-						
0.0	2.82	BEIGE RED ALTD FP -beige red, mg, hard, slightly magnetic; highly sheared; beige to red altn numerous paper thin to 2mm qc veins, main orientation; 1-2% fg to vfg diss Py	10785 10786	0.0 1.5	1.5 3.0	1.5 1.5	1-2 1-2	1.71 1.41
2.82	5.30	GREY BIO FP -slightly red altd with tr-.5% Py	10787 10788	3.0 4.5	4.5 5.3	1.5 0.8	tr tr	0.45 1.17
5.30	13.75	DACITE DYKE -cts: upper 10-15'; lower 10-15'						
13.75	14.75	SERICITIC FP -grey to green mg, sericitic with chl infillings strongly calcitic .5-% fg diss Py	10789	13.75	14.75	1.0	.5-1	5.62
14.75	15.10	BEIGE-RED ALTD FP (ORE PORPH) -as above 0.0-2.82; shows stronger sericitization and higher Py content 3-5% fg diss Py	010790	14.75	15.10	0.35	3-5	15.70
15.10	19.85	ALTD MAFIC VOLCANICS -med grey, fg, magnetic; sheared throughout; grey cb altn here and there, highly silicified; numerous paper thin to 2mm, qc and calcite veins patchy, wispy and dis Py ~5-7% 19.30-19.85 red jasperite	10791 10792 10793 10794	15.10 16.50 18.00 19.50	16.50 18.00 19.50 20.00	1.40 1.50 1.50 0.5	3-5 3-5 2-3 1-2	3.43 0.27 0.89 2.30

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-020 SHEET 2 OF 2

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
19.85	23.00	TALC-CHLORITE CARBONATE SCHIST -soft, black, magnetic, fg; highly sheared, minor siliciation with .5-1% Py	10995	20.00	21.5	1.5	.5-1	<.20
23.00	28.70	GABROIC LAMP DYKE -highly fractured-fault zone						
28.70	29.50	TALC-CHL-CB SCHIST -same as 19.85-23.00						
	29.50	END OF HOLE						

NOVAMIN RESOURCES INC. | DRILL LOG | DRILL HOLE No. 2-021 | SHEET 1 OF 1

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
Rundle Mine	Newton Twp	248.32	12/11/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		0.0	13/11/87		
Claim No.	Co-ordinates:	Length	Drilled By:		
	1983.995 N	20.2	N Morissette Can.		
Grid No.	2904.041 E	Collar Elev.	Logged By:		
2nd (91m) Level		3909.980	C.P.Zorzi		

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-to test mineralization west of cross cut on 91m level						
0.0	6.10	GREY SLIGHTLY ALTD FP	10769	0	1.5	1.5	tr	<.20
		-grey red, mg, slightly magnetic; sh'd throughout	10770	1.5	3.0	1.5	tr	<.20
		pink red cb altn with tin 1-4mm qtz and qc veins	10771	3.0	4.5	1.5	tr	<.20
		one qtz vein 2cm wide; tr fg diss Py; short	10772	4.5	6.0	1.5	tr	0.38
		sections of mafic inclusions that are not min'd and strongly calcitic; 0.75-0.95, 1.15-1.30; 1.45-1.80						
6.10	8.9	GREY BIO FP						
8.9	14.00	PINK FP						
		-bleached pink, mg, magnetic; sh'd; bleached pk, few narrow qc veins; tr f.g. Py, specular hematite infillings throughout;						
14.00	17.06	DIORITIC GREY FP						
17.06	17.52	GREY FP						
		-Core Size LKT-47						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-022 SHEET 1 OF 1

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests		Location sketch
Rundle Mine	Newton Twp	69.39	18/11/87	depth	dip type	
Project	Lot. & Conc.:	Dip	Date Completed			
3382		0.0	19/11/87	54.8	+/- 1-2' acid	
Claim No.	Co-ordinates:	Length	Drilled By:			
	1973.085 N	54.83	N Morissette Can.			
Grid No.	2898.123 E	Collar Elev.	Logged By:			
2nd (91m)Level		3909.980	C.P.Zorzi			

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
0.0	8.57	GREY BIO FP						
8.57	13.1	GREY SLIGHTLY ALTD FP	10830	8.57	9.5	0.93	tr-.5	<.20
		-grey to pink, mg, magnetic, bio'c in places	10831	9.5	11.0	1.50	tr-.5	0.24
		sh'd throughout; minor to mod pk-red altn in	10832	11.0	12.5	1.50	tr-.5	<.20
		bands, qc veins throughout usually at 15-20'	10833	12.5	13.0	0.5	tr-.5	<.20
		-chlorite and specualt hematite infilling						
		fractures; tr-.5% fg diss Py here and there						
		usually in min'd bands; altd and min'd bands						
		8.57-9.00, 11.3-11.7						
13.10	19.0	RED ALTD FP	10834	13.0	14.5	1.5	2-3	2.47
		-med to beige, mg, very slightly magnetic;	10835	14.5	16.0	1.5	2-3	3.87
		sheared; good red beige cb altn numerous,	10836	16.0	17.5	1.5	2-3	8.02
		narrow 1-2mm lt. grey qc veinlets; specular	10837	17.5	19.0	1.5	.5-1	3.09
		hematite and choritic usually infilling fracturs	10838	19.0	20.2	1.2	tr-.5	0.31
		wispy and diss fg Py 2-3%						
19.0	26.17	GREY BIO FP						
		-altd section 20.20-21.05 with only tr-.5% Py	10839	20.20	21.05	0.85	tr-.5	1.13
26.17	32.06	DACITE DYKE						
		-upper ct 10'; lower ct 10'						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-022 2-040 SHEET 2 OF 2

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
32.06	42.45	RED ALTD FP -red to beige, mg, slightly magnetic; red beige and lt grey cb altn, mod. sericite altn, chel and hmt. infillings; tr-.5% overall, some short sections with 2-3% Py	10840	32.06	33.5	1.44	1.2	13.71
			10841	33.5	35.0	1.5	tr-.5	10.29
			10842	35.0	36.5	1.5	tr-.5	1.65
			10843	36.5	38.0	1.5	tr	0.65
			10844	38.0	39.5	1.5	tr	1.30
			10845	39.5	41.00	1.5	tr-.5	1.82
			10846	41.00	42.45	1.45	1-2	7.41
42.45	43.10	ALTD MAFIC VOLC -lt to med grey, fg, magnetic; sheared, lt grey cb altn mod. amt of thin lt grey calcite veins; 3-5% fg diss Py	10847	42.45	43.1	0.55	3-5	<.20
43.10	44.48	LAMP DYKE						
44.48	45.65	SHEARED SPX UM. VOLC (T.C.C.S.)						
45.65	48.70	CG. MAFIC TO UM FLOW OR GABBROIC DYKE						
48.70	53.30	PILLOWED MAFIC VOLC -med grey green, fg, mag, appears to be pillow salvages present; numerous thin calcite veins with minor garnet; tr patchy Py;						
53.30	54.83	SPINIFEXED AND POLYHEDRAL JOINTED UM FLOW						
	54.83	END OF HOLE -aq core drilled and sampled whole						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-022A SHEET 1 OF 2

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
Rundle Mine	Newton Twp	225	17/11/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		0.0	17/11/87		
Claim No.	Co-ordinates:	Length	Drilled By:		
	1970.0 N	29.5	N Morissette Can.		
Grid No.	2923.5 E	Collar Elev.	Logged By:		
R-514XCS(L-3)		3925	C.P.Zorzi		

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
0.0	3.0	ALTD MAFIC VOLCANIC	10777	0.0	1.5	1.5	1-2	3.63
		-med grey, fg, magnetic; fractured blocky core; good bands of lt grey cb altn from 0.8-1.1; essentially calcitic; numerous thin lt grey calcite veins throughout; .5-1% Py overall FP inclusion 0.3-0.8	10778	1.5	3.0	1.5	tr	0.24
3.0	6.20	GREY BIO SLIGHTLY ALTD FP	10779	3.0	4.5	1.5	tr	<.20
		-grey to pink, magntic, bt'c; slight red cb altn few thin lt. grey qc veins; tr Py	10780	4.5	6.0	1.5	tr	0.27
6.20	9.27	ALTD MAFIC VOLC	10781	6.0	7.5	1.5	5-10	19.99
		-as above; good bands of highly altd and min'd volcs; 6.20-6.7, 9.05-9.27;overall min'n 2-3% Py	10782	7.5	9.0	1.5	2-3	<.20
			10783	9.0	9.27	0.27	15-20	24.58
			AVG	6.0	9.27	0.27		11.29
9.27	10.30	GREY SLIGHTLY ALTD FP						
		-as above	10784	9.27	10.3	1.03	tr-.5	0.62
10.30	17.10	GREY BIO FP						
17.10	20.23	MAFIC VOLC						
		-dk grey, fg, mag; mod fract; highly calcitic; chl slips numerous calcitic veins; tr Py						
20.23	22.65	DIORITIC DYKE						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-022A SHEET 2 OF 2

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
22.65	26.55	MAFIC DYKE (VOLC)						
26.55	28.15	BLEACHED BIO FP (SLIGHTLY DIORITIC)						
28.15	29.50	DACITE DYKE						
	29.50	END OF HOLE Bazooka, whole core sampled, core size LKT-47						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-023 SHEET 1 OF 3

Property	TP. or Area	Azimuth	Date Started	Corrected depth	Dip	Tests type	Location sketch
Rundle Mine	Newton Twp	83.67	19/11/87				
Project	Lot. & Conc.:	Dip	Date Completed				
3382		0.0	20/11/87	59.3	0	acid	
Claim No.	Co-ordinates:	Length	Drilled By:				
	1972.910 N	59.3	N Morissette Can.				
Grid No.	2899.324 E	Collar Elev.	Logged By:				
2nd (91m)Level		3910.793	R.E.Norman				

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
0.0	8.0	GREY HBLD FP	10889	0	1.5	1.5		<.20
		-fine to med greained hbld and med to cg feldspar	10890	1.5	2.5	1.0		<.20
		-generally mod to strongly calcitic (pervasively	10891	2.5	3.5	1.0		<.20
		as veinlets and stringers) and pinkish altn in	10892	3.5	5.8	2.3		<.20
		minor short sections with 5-10% qtz-calcite	10893	5.8	6.8	1.0		<.20
		stringers and veinlets pred 35-45';sparse to rare	10894	6.8	8.0	1.2		<.20
		diss Py						
8.0	20.1	RED AND PINK ALTD FP (ORE ZONE)						
		-weak to mod mag. locally t.o.;						
		8.0-9.2: pink grey; minor qtz veining,.5% diss Py	10895	8.0	9.2	1.2	.5	0.45
		9.2-9.5: red altd, fg 10% white-grey qtz veining	10896	9.2	9.8	0.6		<.20
		45'; 1-2% diss blobs and stringer Py						
		9.4-10.3: pink grey porphyry; 2-3% fine diss Py						
		9.9-10.1						
		10.3-10.5: cb,beige altn sheared zone; highly	10897	9.8	10.5	0.7		1.65
		fractured; 3-5% diss Py						
		10.5-12.8: pink-grey, fine to med. grained porp.	10898	10.5	12.0	1.5		3.43
		mod to strongly fractured and infilled with qtz-	10899	12.0	12.8	0.8		0.55
		carb veins, veinlets and stringers(5-10%) 40-70(						
		a few specks of beige leucotone(?) at 11.0;						
		generally weak diss Py but up to 1% locally; grey						
		hematite veins and blebs common						
		12.8-13.9: red-grey altd FP; minor veining, .5%	10900	12.8	13.9	1.1		1.95
		fine diss Py; contacts gradational and at 90'						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
8.0 (CONTINUED)	20.1	13.9-14.9: Pink FP; 40% white med to coarse feld. 1% diss Py; weakly fractured and in-filled with feldspatic qtz veins and stringers	13401	13.9	14.9	1.0		12.72
		14.9-15.2: Red altd FP; as 12.5-13.9	13402	14.9	15.2	0.3		3.81
		15.2-16.3: Pink to pink-grey FP .5% diss Py; minor veining	13403	15.2	16.3	1.1		2.40
		16.3-16.9: Ore Porphyry; pinkish beige-grey altn 2-3% qtz-carb veins and stringers(45-60') 2-3% diss and bleb of Py; in-contact 90';irregualr oc	13404	16.3	16.9	0.6		3.15
		16.9-20.1: Pink altd fp mg; generally 1% diss Py	13405	16.9	18.4	1.5		6.86
		minor thin shears(up to 2cm) of beige altn with	13406	18.4	19.5	1.1		5.90
		diss Py occur locally 45'-85'; rock appears	13407	19.5	20.1	0.6		4.56
		highly fractured and sheared with sericitic and graphitic shears from 19.5-20.1; fractures and shears are infilled with qtz-carb veinlets and stringers at 85'; Out contact 40-45' and grad'l						
20.1	28.1	GREY PINK HBLD PORPHYRY	13408	20.1	22.2	2.1		0.24
		-med. greaind; pink altn starts at 22.2-grad cont.						
		22.2-24.2: pink to pink grey; 1% diss Py gen.;	13409	22.2	23.7	1.5		2.02
		minor shearing with beige-green altn local and up	13410	23.7	24.2	0.5		3.67
		to 2% diss Py; abundant veinlets or qtz-carb loc.	13411	24.2	25.9	1.7		0.27
		at 80-90'; these veinlets are cut by a younger	13412	25.9	28.1	2.1		0.41
		set or qtz-carb veins at 35'; chlortic along	13426	28.10	29.24	1.15		<.20
		fractures locally;	13427	29.24	30.70	1.47		<.20
			13428	30.70	32.22	1.52		<.20
			13429	32.22	33.70	1.50		<.20
			13430	33.70	35.23	1.53		<.20
			13431	35.23	36.40	1.50		<.20
28.1	36.4	DALCITE DYKE						
		-grey to pinkish grey; fine to mg; gen.massive						
			13413	36.40	37.50	1.1		0.24
36.4	45.2	ALTD MAFIC VOLCANICS	13414	37.50	39.15	1.65		<.20
		-grey green, fg, chloritic, minor qtz veinlets;	13415	39.15	40.60	1.45		0.38
		39.1-39.9: grey feldspar porphyry; 1% diss,	13416	40.60	42.08	1.48		1.30
		stringers and blebs of Py throughout; rare blebs	13417	42.08	43.54	1.46		<.20
		of cpy at 44.7	13418	43.54	45.20	1.75		0.62

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-023 SHEET 3 OF 3

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
45.2	52.6	PINK ALTD FP	13419	45.2	45.50	0.3	5	20.16
		-fg to mg, 5-10% qtz-carb veinlets and stringers	13420	45.5	46.40	0.9	tr-.5	4.93
		generally at 70'; generally tr Py; but in-contact	13421	46.5	47.30	0.8	tr	2.30
		for the first 8cm is 15-20% diss Py in layers	13422	47.3	48.71	1.41	tr	<.20
		and blebs; 2-3% diss Py in altd zone to 45.5	13423	48.71	50.16	1.45	tr	2.74
			13424	50.16	51.55	1.39	tr	<.20
			13425	51.56	52.60	1.04	tr	0.40
			13432	52.6	53.6	1.0		<.20
			13433	53.6	54.6	1.0		<.20
			13434	54.6	55.6	1.0		<.20
			13435	55.6	57.1	1.5		<.20
			13436	57.1	59.03	1.93		<.20
52.6	59.3	ULTRAMAFIC VOLCANICS						
		-dk black-green; fine grained; excellent spinifex						
		texture t.o.-parallel to sub-parallel; talcose;						
	59.3	END OF HOLE						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-024 SHEET 1 OF 3

Property	TP. or Area	Azimuth	Date Started	Corrected depth	Dip dip	Tests type	Location sketch
Rundle Mine	Newton Twp	87.034	20/11/87				
Project	Lot. & Conc.:	Dip	Date Completed				
3382		0.0	22/11/87	49.65	0	acid	
Claim No.	Co-ordinates:	Length	Drilled By:				
	1969.631 N	49.65	N Morissette Can.				
Grid No.	2908.243 E	Collar Elev.	Logged By:				
2nd Level Drift		3910	R.E.Norman				

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
			13520	0	1.56	1.56	tr-.5	<.20
0.0	6.83	GREY FP	13521	1.56	2.28	0.72	tr-.5	<.20
		-mg, weak pinkish altn to 1.34; 3% mm qtz-carb	13522	2.28	3.04	0.76	tr-.5	<.20
		veinlets 25-90'; mod to strongly magnetic; strong	13523	3.04	3.73	0.69	tr-.5	<.20
		pervasive calcite altn; blocky core 0-0.51	13524	3.73	4.53	0.80	tr-.5	<.20
		(40% lost); graadational out-contact	13525	4.53	5.20	0.67	tr-.5	<.20
			13526	5.20	0.67	0.73	tr-.5	<.20
			13527	5.93	6.83	0.90	tr-.5	<.20
6.83	8.67	PINK ALTD FP						
		- pink-grey(weak to mod altn);mg, irregular	13528	6.83	7.40	0.57	tr	<.20
		out contact at 20'; weak to mod calcite locally	13529	7.40	8.06	0.66	tr	<.20
		- mod. veining of qtz-carb one type anasomosing	13530	8.06	8.67	0.61	tr	<.20
		to 50' hairline veins; 2nd type milky white						
		at 45'; tr to .5% Py locally; weak to mod mag.						
8.67	13.16	MINERALIZED ZONE	13531	8.67	9.41	0.74	10	21.43
		8.67-9.96: ALTD MAFIC VOLCS; grey and beige carb	13532	9.41	9.96	0.55.	10	55.75
		altn; altd; sections appear at 45';gen. silicious						
		3-5% qtz-carb veinlets and 1-2mm veins, stringer						
		and blebs; veins at 45-90'; strongly magnetic;						
		non-calcitic; 10% Py as diss, blebs, stringers						
		and veinlets; locally, Py occurs as mm veinlets						
		at 60' and along fractures 90' to these veinlets						
		contracts irregular; in-contact at 20' out at 90'						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		9.96-10.77: PINK ALTD FP-minor qtz veining and carb altn; veining at 45'; general tr to .5% diss Py; 1cm beige grey band at 10.34 with 3% Py; at 60-70'; 3% Py over 7mm of out-contact -weak to mod'ly magnetic	13533	9.96	10.77	0.81	1	6.38
		10.77-11.64: HYBRID MAFIC VOLCS-pink and green and beige grey mottled texture; highly fractured and in-filled with anastomosing qtz-carb veins and veinlets; grey and beige carb altn; generally 5% diss veinlets and stringer Py; up to 10% locally; out-contact 45'; strongly magnetic	13534 13535	10.77 11.20	11.20 11.64	0.43 0.44	3 5	6.51 27.16
		11.64-12.14: PINK ALTD FP-weak to mod altn; .5-1% diss Py; minor grey qtz veining; contacts at 20'	13536	11.64	12.14	0.50		7.68
		12.14-12.67: ALTD MAFIC VOLCANICS-as 8.67-9.96 grey to beige carb altn; minor FP patches; 5% qtz-carb veining; 5-10% diss and stringer Py -irregular out-contact	13537	12.14	12.67	0.53		19.39
		12.67-13.16: PINK-RED ALTD FP-fg to mg; - .5% diss Py; minor veining	13538	12.67	13.16	0.59	.5	1.99
13.16	22.69	GREY TO PINK-GREY FP -med to coarse grained; generally grey with pinkish tinge locally; pink altd sections 19.32-19.84 and 21.41-22.69; grey altd mottled texture 16.35-17.53; tr Py; minor veining; -generally minor qtz-carb veins and veinlets at 50-60'; generally tr to weak Py; .5-1% diss Py in pink altd section 19.32-19.84; weak to strongly magnetic locally; fractured and infilled with qtz and beige carb altn 21.41-21.96 with minor Py (<.5%)	13539 13540 13541 13542 13543 13544 13545 13546 13547 13548 13549 13550 13551	13.16 13.94 14.85 15.60 16.35 17.20 17.51 18.26 19.32 19.84 20.52 21.40 21.96	13.94 14.85 15.60 16.35 17.20 17.51 18.26 19.32 19.84 20.52 21.40 21.96 22.69	0.78 0.91 0.75 0.75 0.85 0.31 0.75 1.06 0.52 0.68 0.88 0.56 0.73	tr tr tr tr tr tr tr tr 1 tr tr <.5 tr	<.20 0.27 <.20 0.48 0.51 0.21 0.75 0.27 0.82 0.34 0.82 5.14 0.48

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-024 SHEET 3 OF 3

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. %	ASSAYS g/t Au
22.69	23.41	MAFIC VOLCS -fine to med. grained; grey; strongly magnetic; 1% diss Py; 3% white to grey qtz veinlets; in-contact at 15'; mod'ly calcitic; out-contact irregular	13552	22.69	23.45	0.72	1	<.20
23.41	25.52	GREY FP	13553	23.45	24.12	0.57		0.69
		-med graind; pinkish tinge locally; calcitic altn minor qtz-carb veining; no significat min'n or altn; contact at 15'	13554	24.12	25.52	1.40		1.03
25.52	34.70	DACITE DYKE	13555	25.52	26.55	1.03		<.20
		-fine to med grained; pinkish grey; massive;	13556	26.55	28.05	1.50		<.20
		contact at 15-20'; no sig'n min'n or altn;	13557	28.05	29.54	1.49		<.20
		minor qtz-carb veining	13558	29.54	31.00	1.46		<.20
			13559	31.00	32.49	1.49		<.20
			13560	32.49	33.83	1.34		<.20
34.70	35.40	GREY FP	13561	33.83	34.70	0.87		
		-mg; well fractured; minor qtz-carb veining;						
		fractures mostly filled with chlorite; pink	13562	34.70	35.40	0.70	tr	<.20
		tinge; no sig'n min'zn or altn						
			13563	35.40	36.77	1.37	-	<.20
35.40	39.78	DACITE DYKE	13564	36.77	38.10	1.33	-	<.20
		-as 25.52-34.70; contacts at 10-15'	13565	38.10	39.78	1.68	-	<.20
39.78	49.65	PINK-RED ALTD FP	13566	39.78	40.35	0.57		<.20
		-fg to mg; pink-red; pink-grey locally; non-	13567	40.35	41.14	0.77		<.20
		calcitic and non-magnetic; 10-15% qtz-carb veins,	13568	41.12	41.87	0.75		<.20
		at 45' to 90'; commonly filling fractures and as	13569	41.87	42.66	0.79		<.20
		gash veins; veins average 2mm in thickness;	13570	42.66	43.38	0.72		<.20
		generally sparse Py; 43.38-44.35: mod. beige-grey	13571	43.38	44.13	0.75	1	1.75
		altn with 1% fine diss PY locally	13572	44.13	44.84	0.71	tr	0.41
		NOTE: 35.78-40.35: contact hybrid area-minor Py	13573	44.84	45.59	0.75	tr	0.31
		-minor beige carb-sericite altn in fractures at	13574	45.59	46.06	0.47	tr	3.77
		46.06-46.29 with .5-1% Py-shear zones- 60% to	13575	46.06	46.29	0.23	.5-1	0.79
		L.C.A.; generally sparse Py min'n	13576	46.29	47.03	0.74	tr	0.58
			13577	47.03	47.78	0.75	tr	<.20
	49.65	END OF HOLE	13578	47.78	48.53	0.75	tr	<.20
			13579	48.53	49.65	1.12	tr	0.34

NOVAMIN RESOURCES INC. | DRILL LOG | DRILL HOLE No. 2-026 | SHEET 1 OF 1

Property Rundle Mine	TP. or Area Newton Twp	Azimuth 45.0	Date Started 30/11/87	Corrected Dip Tests
Project 3382	Lot. & Conc.:	Dip 0.0	Date Completed 30/11/87	
Claim No.	Co-ordinates: 1975.7 N	Length 14.2	Drilled By: N Morissette Can.	
Grid No. Ramp Leg 2	2904.0 E	Collar Elev. 3945.6	Logged By: R.E.Norman	

Location sketch

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
0.0	4.70	ALTD MAFIC VOLCANICS -ore altn; fg; green, chloritic to 1.18 with weaker carb altn; strong carb altn locally imparting a pinkish beige-grey and grey blotchy texture along brecciate shears and fractures 2-5% Py locally as diss and stringers (massive locally) in the fracture; the more sig'n min'n starts at 1.18-4.70 and is interrupted by minor thin bands of chloritic rock; calcitic only in unaltd chloritic positions; strongly magnetic t.o.	12856	0.0	1.18	1.18		0.72
			12857	1.18	1.90	0.72		3.22
			12858	1.90	2.45	0.55		28.66
			12859	2.45	3.35	0.90		2.74
			12860	3.35	4.30	0.95		19.37
			12861	4.30	4.70	0.40		3.50
			AVG	1.18	4.70	3.52		11.46
4.70	14.2	RED ALTD FP -med. grained; red to red grey to 8.4; weak pale pink cors altn in several thin bands (4-12cm in thickness) from 10.26-10.81 with 1% fine diss Py and beige-tan altn; similar altn and min'zn at 13.28-13.38 altn appears at 45'	12862	4.70	6.30	1.60		0.99
			12863	6.30	7.70	1.40		0.27
			12864	7.70	9.58	1.88		0.54
			12865	9.58	10.26	0.68		1.64
			12866	10.26	11.07	0.81		8.54
			12867	11.07	12.50	1.43		0.92
			12868	12.50	13.20	0.70		6.54
			12869	13.20	14.20	1.00		1.47
			AVG	10.26	13.20	2.94		4.36
	14.2	END OF HOLE						

NOVAMIN RESOURCES INC. | DRILL LOG | DRILL HOLE No. 2-027 | SHEET 1 OF 1

Property	Tp. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
Rundle Mine	Newton Twp	225.0	2/12/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		0.0	2/12/87		
Claim No.	Co-ordinates:	Length	Drilled By:		
	1981.3 N	11.27	N Morissette Can.		
Grid No.	2881.2 E	Collar Elev.	Logged By:		
Ramp Leg 2		3951.0	R.E.Norman		

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
			13893	0	1.07	1.07		<.20
0.0	11.27	-fg; green to grey-green; generally, no sig'n	13894	1.07	1.57	0.50		<.20
		min'zn, veining or altn; minor diss Py locally	13895	1.57	2.62	1.05		<.20
		up to 1%; 5% stringer and diss Py at 0.67-0.82;	13896	2.62	3.96	1.34		<.20
		-strongly calcitic to 8.46; from 8.46-11.27- non-	13897	3.96	4.51	0.55		0.27
		calcitic, but occ'n olive green epidote veining;	13898	4.51	5.64	0.93		0.30
		-strongerly magnetic, t.o.; purplish FP at	13899	5.64	7.08	1.44		1.68
		0.30-0.40;, 1.07 to 1.27; 4.11-4.51;	13900	7.08	8.46	1.38		1.64
		2.62-3.96: LAMPROPHYRE DYKE -fine grained;	13901	8.46	9.90	1.44		<.20
		purplish grey; strongly calcitic; weakly magnetic	13902	9.90	11.27	1.37		0.34
	11.27	E. O. H.						

NOVAMIN RESOURCES INC. | DRILL LOG | DRILL HOLE No. 2-028 | SHEET 1 OF 1

Property Rundle Mine	TP. or Area Newton Twp	Azimuth 045.0	Date Started 28/11/87	Corrected Dip Tests
Project 3382	Lot. & Conc.:	Dip 0.0	Date Completed 28/11/87	
Claim No.	Co-ordinates: 1974.1 N	Length 14.2	Drilled By: N Morissette Can.	
Grid No. Ramp Leg 2	2909.6 E	Collar Elev. 3944.3	Logged By: A.Soever	

Location sketch

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
			12785	0.0	0.4	0.4	3-4	18.27
0.0	7.20	ALTD MAFIC VOLCANICS	12786	0.4	0.9	0.5	tr-1	0.51
		-dk to red grey fg altd mafic volcanics; mod mag	12787	0.9	1.9	1.0	tr-1	<.20
		-predominatly calcitic; 1-2% hairline fractures	12788	1.9	2.9	1.0	tr-1	<.20
		healed with calcite; massive; mostly calcitic	12789	2.9	3.9	1.0	tr-1	<.20
		0.0-0.4m -good pale beige altn assoc. with	12790	3.9	4.9	1.0	tr-1	<.20
		fractures 6.88-7.20; patchy pale beige altn	12791	4.9	5.9	1.0	tr-1	<.20
		3-4% Py assoc with pale brown altn 0.0-0.4;	12792	5.9	6.9	1.0	tr-1	1.23
		2% Py associated with patchy pale beige altn	12793	6.9	7.2	0.3	2	2.70
		6.88-7.20; tr-1% Py with rest of berit; ct	AVG	6.9	7.4	0.5	2.78	
		with next unit at ~30'						
7.2	14.2	RED ALTD FP	12794	7.2	7.4	0.2	tr	2.91
		-red altd mg FP, brick red -non-calcitic;	12795	7.4	8.4	1.0	tr	0.51
		locally weakly mag; faint relict feldspars and	12796	8.4	9.4	1.0	tr	<.20
		zone development of secondary feldspar -beige	12797	9.4	10.4	1.0	tr	<.20
		ore altn 7.2-7.36; band at 7.34-7.36 at 65'	12798	10.4	11.4	1.0	tr	0.78
		-weak fabric at ~55'; 1-2% mm to cm scale	12799	11.4	12.4	1.0	tr	0.24
		fractures healed with white qtz dolomite; only	12800	12.4	13.4	1.0	tr	1.34
		local faint tr vfg diss Py; 12p dykes 10.59-10.88	12801	13.4	14.2	0.8	tr	3.77
		11.49-11.70, 11.75-12.02 cts at 60'	AVG	12.4	14.2	1.8		2.42
	14.2	END OF HOLE						
		Core Size LTK-46						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-029 SHEET 1 OF 2

Property Rundle Mine	TP. or Area Newton Twp	Azimuth 225.0	Date Started 26/11/87	Corrected Dip Tests
Project 3382	Lot. & Conc.:	Dip 0.0	Date Completed 26/11/87	
Claim No.	Co-ordinates: 1976.4 N	Length 14.92	Drilled By: N Morissette Can.	
Grid No. Ramp Leg 2	2890.7 E	Collar Elev. 3984.4	Logged By: A.Soever	

Location sketch

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
0.0	0.7	RED ALTD FP -red mg to cg FP; dolomite good development secondary feldspars; fractured hairline fractures to hematite throughout; pale beige altn along hairline fractures 0.0-3.4; only faint tr Py -ct with next unit at irregular at ~45'	12749	0.0	0.7	0.7	tr	0.54
0.7	1.7	ALTD MAFIC VOLCANICS -dk grey altd mafic volcanics; non-calcitic magnetic; many gractures healed in dolomite qtz; pervasive beige altn; 1-2% fg diss Py assoc with beige altn 0.7-1.2 10% Py from 1.2-1.7 .	12750 12751	0.7 1.2	1.2 1.7	0.5 0.5	1-2 10	1.54 9.12
1.7	4.6	RED ALTD FP - red altd FP; intensly altd non-calcitic -no relict feldspasrs; fractured 2-3% fine dol. qtz veins often at 40'; fractures healed in qtz-hematite-Py 3.24-3.37; weak beige altn throughout -intense from 3.50-3.84; generally tr Py; 1-2% vfg diss Py 3.13-5.6 with core altd section -ct with next unit along qc vein at 45'	12752 12753 12754 12755	1.7 2.4 3.1 3.9	2.4 3.1 3.9 4.6	0.7 0.7 0.8 0.7	tr tr 1-2 1-2	0.62 1.10 0.34 <.20

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-029 SHEET 2 OF 2

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
4.6	5.66	ALTD BRECCIATED MAFIC VOLCANIC -med grey mg to fg mafic volc.; non-calcitic magnetic; 2-3% fractures healed with white dol-qtz; pervasive pale beige to off white dol.-qtz flooding; breccia with frags. volcs carb matrix 4.6-4.74; pervasive pale beige altn speckled throughout; 1-2% vfg diss Py; unit end at narrow dyke of red FP 5.57-5.66	12756 12757	4.6 5.2	5.2 5.66	0.60 0.46	1-2 1-2	<.20 <.20
5.66	11.75	MAFIC VOLCANIC -dk grey fg mafic volc, calcitic, magnetic; fine hariline fractures healed with calcite; 10.4-10.55 -1cm qtz epidole vein at 20' 11.3-11.5 broken blocky core 0.1m missing 1% fg diss Py assoc with calc in fractures	12758 12759 12760 12761 12762 12763 12764	5.66 6.00 6.75 7.75 8.75 9.75 10.75	6.00 6.75 7.75 8.75 9.75 10.75 11.75	0.34 0.75 1.0 1.0 1.00 1.0 1.0	1 1 1 1 1 1 1	<.20 <.20 <.20 <.20 <.20 <.20 <.20
11.75	13.35	FRESH GREY FP -some development of secondary feldspar; -broken blocky core 12.18-12.7 lost 0.1m	12765 12766	11.75 12.55	12.55 13.35	0.8 0.8	tr tr	<.20 <.20
13.35	14.92	COARSE GRAINED MAFIC VOLC -mg to cg mafic volc or mafic dyke -extensive epidote 13.74-14.01; ground 0.1 core 13.36-13.46	12767 12768	13.35 14.15	14.15 14.92	0.80 0.77	tr tr	<.20 <.20
	14.92	END OF HOLE Core Size EXT whole core sampled						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-030 SHEET 1 OF 2

Property Rundle Mine	TP. or Area Newton Twp	Azimuth 45.0	Date Started 1/12/87	Corrected Dip Tests
Project 3382	Lot. & Conc.:	Dip 0.0	Date Completed 4/12/87	Location sketch
Claim No.	Co-ordinates: 1966.8 N	Length 20.28	Drilled By: N Morissette Can.	
Grid No. Ramp Leg 2	2930.3 E	Collar Elev. 3939.1	Logged By: R.E.Norman	

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
0.0	1.29	MAFIC VOLCANICS -fine to med grained; grey-green ; strongly calcititc and magnetic; minor qtz-carb veining; .5-1% diss and blebs of Py; FP dykes 0-0.7 and 0.39-0.50;	11726 11727	0 0.73	0.73 1.29	0.73 0.56		<.20 <.20
1.29	2.26	GREY FP -med to coarse grained; slight reddish hue locally; no sig'n min'n or veining	11728	1.29	2.26	0.97		<.20
2.26	3.68	RED ALTD FP -med to coarse grained; no sig'n veining; sparse Py generally;	11729	2.26	3.68	1.52		<.20
3.68	10.40	MAFIC VOLCANICS -fine grained; grey-green to green; strongly calcitic and magnetic, chloritic locally; strongly fractured and healed with qtz-calcite 1-2% diss and blebs of Py generally; minor bands of diss Py in places; weak grey altn with fine diss Py locally to 5.2 with rare pink-beige carb altn	11730 11731 11732 11733 11734 11735 11736 11737 11738	3.68 4.44 5.20 5.90 6.65 7.35 8.10 8.83 9.47	4.44 5.20 5.90 6.65 7.35 8.10 8.83 9.47 10.40	0.76 0.76 0.70 0.75 0.70 0.75 0.73 0.64 0.93		2.67 <.20 <.20 2.16 <.20 <.20 <.20 <.20 0.30

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-030 SHEET 2 OF 2

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
10.40	11.38	HYBRID-MAFIC VOLC AND PORPHYRY -pinkish grey; fine grained; strongly sheared locally; brecciated with purplish grey mafic fragments; in a pink siliceous matrix; .5-1% Py as diss and in fractures;"ore porphyry" altn 11.11-11.38 with 2-3% diss Py	11739	10.40	11.11	0.71		0.34
			11740	11.11	11.38	0.27		0.44
11.38	13.35	RED AND PINK ALTD PORPHYRY -med grained; reddish altn mostly; bx'd with cream-beige altn and minor Py 12.30-12.55; generally occ'n speck of Py; no sign veining	11741	11.38	12.30	0.92		0.24
			11742	12.30	12.55	0.25		0.65
			11743	12.55	13.35	0.80		0.41
			AVG	12.55	14.28	0.80		2.35
13.35	14.28	ALTD MAFIC VOLCANICS -grey to light grey; fine grained; fractured and -sheared with pinkish beige altn and 1-2% diss Py minor qtz-carb veining at 30'	11744	13.35	14.28	0.93		4.01
14.28	14.40	PINK ALTD FP -fine to med. grained; pink altn; weak diss Py -white qtz-veining at contact	11745	14.28	14.40	0.12		0.27
			11746	14.40	15.10	0.70	tr	0.96
14.40	16.54	ALTD MAFIC VOLC	11747	15.10	15.90	0.80	tr	<.20
		-med grey, fg, magnetic; sh'd, minor lt grey altn with numerous 1-2mm qc veinlets; tr Py;	11748	15.90	16.22	0.32	tr-.5	0.30
			11749	16.22	16.41	0.19	tr	0.34
		FP inclusions 15.90-16.22 tr-.5% Py	11750	16.41	16.54	0.13	tr-.5	1.47
		16.41-16.54 tr-.5% Py						
16.54	17.40	CG MAFIC-UM DYKE	11751	16.54	17.00	0.46	tr	<.20
			11752	17.00	17.75	0.75	tr	5.86
17.40	20.28	POLYHEDRAL JOINTED AND SPINIFEXED U.M.	11753	17.75	18.50	0.75	tr	<.20
			11754	18.50	19.25	0.75	tr	<.20
			11755	19.25	20.28	1.03	tr	<.20
	20.28	END OF HOLE LKT 47 core whole core sampled						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-031 SHEET 1 OF 2

Property Rundle Mine	TP: or Area Newton Twp	Azimuth 225.0	Date Started 27/11/87	Corrected Dip Tests
Project 3382	Lot. & Conc.:	Dip 0.0	Date Completed 27/11/87	
Claim No.	Co-ordinates: 1975.0 N	Length 10.00	Drilled By: N Morissette Can.	
Grid No. Ramp Leg 2	2896.0 E	Collar Elev. 3947.1	Logged By: A.Soever	

Location sketch

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
0.0	2.16	RED ALTD FP -red altd FP -mg to cg; non-calcitic; good dev't of secondary feldspars; 0.5-1.10 -pale grey section with cg secondary feldspars; few relict feldspars 1.3-2.16; very silicious; faint tr of vfg diss Py	13968 13969 13970	0.0 0.7 1.4	0.7 1.4 2.2	0.7 0.7 0.8	tr tr tr	<.20 <.20 0.27
2.16	2.95	ALTD MAFIC VOLCANICS -grey fg altd mafic volc.; non-calcitic; weakly magnetic; pale beige altn along fracture at 30' at 2.28, patches altn with 5% Py 2.50-2.62 lower ct at 40'	13971	2.2	2.95	0.75	2	0.86
2.95	5.26	ALTD RED FP -red altd FP mg to cg; pale grey with good dev. secondary feldspars 2.95-3.57 -altd mafic incl. 3.57-3.76 with 3% Py; fine fractures healed with pale grey qtz Py 3.76-3.98 -est 3% Py; tr Py 3.98-5.26	13972 13973 13974 13975 13976	2.95 3.57 3.76 3.98 4.58	3.57 3.76 3.98 4.58 5.26	0.62 0.19 0.22 0.60 0.68	tr 3 3 tr tr	<.20 6.58 1.40 0.51 <.20

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-031 SHEET 2 OF 2

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
5.26	10.00	ALTD MAFIC VOLCANICS	13977	5.26	6.28	1.02		0.62
		-pale to med grey fg mafic volcanics; mod. mag.	13978	6.28	7.07	0.79		5.68
		- non-calcitic 5.26-7.07 below quite calcitic	13979	7.07	8.00	0.93		0.65
		- dykes -red altd FP 6.28-6.50, 6.88-7.07	13980	8.00	9.00	1.00		<.20
		- 5-10% Py assoc with beige altn along fracture	13981	9.00	10.00	1.00		<.20
		at 45' at 5.87; 1-2% diss PY with red FP dykes						
		with mafic inclusions 6.28-6.50 and 6.88-7.07;						
		2-3% in mafic volc speckled with beige altn						
		6.50-6.88; 7.07-90.0 -1% Py assoc with fractures						
		healed with calcite in calcitic mafic volcs						
	10.00	END OF HOLE						
		Core Size EXT						
		Whole core sampled						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-032 SHEET 1 OF 2

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
Rundle Mine	Newton Twp	45.0	30/11/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		0.0	03/12/87		
Claim No.	Co-ordinates:	Length	Drilled By:		
	1961.8 N	13.81	N Morissette Can.		
Grid No.	2939.8 E	Collar Elev.	Logged By:		
Ramp Leg 2		3937.3	R.E.Norman		

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
			12870	0	1.40	1.40		0.41
0.0	7.27	PINK ALTD FP	12871	1.40	2.84	1.44		0.34
		-fg to mg, pink-grey; reddish altn from 6.0-7.27	12872	2.84	4.27	1.43		0.82
		occ'n biot. speck; non-calcitic; weak to mod mag	12873	4.27	4.57	0.30		<.20
		5-10% qtz-carb veining (from hairline to 1cm)	12874	4.57	5.13	0.56		0.3
		at 35-50'; weak beige carb altn and minor Py	12875	5.13	6.25	1.12		<.20
		at 1.3; Fractured and infilled with grey hem.	12876	6.25	6.51	0.26		0.96
		mat'y and 5% diss and blebs of PY at 4.1-4.2	12877	6.51	7.27	0.76		<.20
		-screens of mafic volcs with 2-3% diss and stgr.						
		Py at 4.57-4.85, 5.03 to 5.13, 6.25-6.51;						
		irregular contact at 45-65'						
7.27	12.12	MAFIC VOLCANICS	12878	7.27	8.27	1.00		<.20
		-green, chloritic volc and grey alt'd, sheard	12879	8.27	9.40	1.13		1.23
		sections; 8.27-11.23 -strongly sheared and	12880	9.40	10.23	0.83		0.44
		fractured and locally altnd and in-filled with	12881	10.23	10.66	0.43		1.78
		grey-blue qtz-carb and up to 5% Py; generally	12882	10.66	11.23	0.57		0.34
		1-2% Py t.o.; non-calicitic but strongly calcitic	12982	11.23	12.12	0.89		<.20
		elsewhere; strongly mafnetic t.o.						
12.12	12.84	HYBRID: MAFIC VOLCANICS AND PINK PORPHYRY	13983	12.12	12.84	0.72		0.89
		-fine grained; black; hard sil'd mafic and pink,						
		aphanitic bands; brecciated adn in-filled with						
		grey qtz-carb mat'd; 3% diss Py in bands and						
		patches with hematite;						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
12.84	13.81	PINK ALTD PORPHYRY -salmon-pink; fine grained; bx'd and cut by white bamen qtz veining 12.86-12.98; tr Py	13984	12.84	13.81	0.97		<.20
14.5	16.35	RED ALTD QV FP - red, mg, magnetic; sheared; red altn with few 0.5-1cm qc veins; slightly sericitic; tr-.5% fg diss Py; specularite in some veins	11871	14.5	15.25	0.75	tr-.5	<.20
			11872	15.25	15.85	0.60	tr-.5	<.20
			11873	15.85	16.60	0.75	tr-.5	<.20
16.35	18.63	CHERTY EXHALITE -relatively unaltered, patches of red jasperite here and there; narrow argillite band 18.1-18.30 overall tr Py with local conc up to 5%	11874	16.60	17.25	0.65	tr	<.20
			11875	17.25	18.00	0.75	tr-1	<.20
			11876	18.00	18.63	0.63	1-2	<.20
			11877	18.63	19.25	0.62	tr	<.20
18.63	20.4	POLYHEDRAL JOINTED U.M. -unaltd with tr Py	11878	19.25	20.00	0.75	tr	<.20
			11879	20.0	20.4	0.40	tr	<.20
	20.4	END OF HOLE -LKT 47 core -whole core sampled						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-033 SHEET 1 OF 2

Property Rundle Mine	TP. or Area Newton Twp	Azimuth 225.0	Date Started 27/11/87	Corrected Dip Tests
Project 3382	Lot. & Conc.:	Dip 0.0	Date Completed 27/11/87	
Claim No.	Co-ordinates: 1972.6 N	Length 250.00	Drilled By: N Morissette Can.	
Grid No. Ramp Leg 2	2900.8 E	Collar Elev. 3945.63	Logged By: A.Soever	

Location sketch

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
0.0	0.95	HBDE FP -dk grey hbde FP -highly calcitic-weakly magnetic 20% feldspar porphyroblasts; broken blocky core	12769	0.0	0.95	0.95		<.20
0.95	4.0	ALTD MAFIC VOLCANICS -dk grey mg altd mafic volcs; calcitic; magnetic; -speckled with calcite-epidote spots 0.95-2.6; fractured with hairline fractures healed with calcite below this with pervasive calcitic altn 2-3% fg diss Py with epidote-calcite 0.95-2.6; tr Py 2.6-4.0; fresh FP dyke at 55' at 2.14-2.21	12770 12771 12772 12773	0.95 1.8 2.6 3.3	1.8 2.6 3.3 4.0	0.85 0.80 0.70 0.70	2-3 2-3 2-3 2-3	<.20 <.20 <.20 <.20
4.0	5.8	PINK TO GREY ALTD FP -pink to grey fg altd FP; no relict or secondary FP; non-calcitic; locally very weakly magnetic; traces fg bio; only faint tr Py	12774 12775	4.0 4.9	4.9 5.8	0.9 0.9	tr tr	0.27 1.10
5.8	8.48	ALTD MAFIC VOLCANICS -pale to red grey altd fg to mg mafic volcs - non-calcitic -strongly magnetic; weak patchy pale beige altn throughout; 2% fg diss Py loc'y. patches up to 4% assoc with pale beige altn; better patches 6.09-6.20, 6.85-7.10	12776 12777 12778 AVG	5.8 6.7 7.6 4.9	6.7 7.6 8.48 8.48	0.9 0.9 0.88 3.58	2 2 2	0.96 2.67 1.17 1.48

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-033 SHEET 2 OF 2

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
8.48	9.87	ALTD PINK FP -pink mg to cg FP; fractured; fine fractures lined tr hematite; also few fractures healed with qtz-dol.; tr fg diss Py;	12779 12780	8.48 9.18	9.18 9.87	0.70 0.69	tr tr	<.20 1.34
9.87	20.6	ALTD MAFIC VOLCANICS -dk grey massive fg to mg mafic volcs; predominantly calcitic; magnetic; highly fract'd fractures healed with qtz-calcite+/-dolomite 9.87-10.5 -intense fracturing with pale beige altn and veins white qtz- dol 10.50-10.80; below is calcitic; small patch weakly dolomitic pale brown altn 12.07-12.21; 1-2% Py assoc with calc. altn 9.87-10.50; 2-3% with pale brown altn 10.50-10.80; 2% Py assoc with calc. altn 12.07-12.20; narrow hbde FP dykes 12.85-13.0, 13.7-13.9; blocky core 13.4-14.60; badly broken core in places to 20.6; no sig'n alt'n, min'zn or veining 12.2-20.6	12781 12782 12783 12784 13985 13986 13987 13988 13989 13990	9.87 10.50 10.80 11.60 12.20 13.20 14.8 16.1 17.8 19.1	10.50 10.80 11.60 12.20 13.20 14.8 16.1 17.8 19.1 20.6	0.63 0.30 0.80 0.60 1.00 1.60 1.3 1.7 1.3 1.5	1-2 2-3 1-2 1-2	<.20 0.48 <.20 1.68 <.20 <.20 <.20 <.20 <.20 <.20
20.6	21.75	RED ALTD PORPHYRY -fine to med. grained; no sig'n veining or min'n -occ'n diss or bleb of pyrite	13991	20.6	21.75	1.15		<.20
21.75	25.0	GREY FELDSPAR PORPHYRY -med grained; purplish grey; no sig'n min'zn, veining of altn	13992 13993	21.75 23.8	23.8 25.0	1.05 1.2		<.20 <.20
	25.0	END OF HOLE						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-034 SHEET 1 OF 2

Property Rundle Mine	TP. or Area Newton Twp	Azimuth 45.0	Date Started 2/12/87	Corrected Dip Tests
Project 3382	Lot. & Conc.:	Dip 0.0	Date Completed 3/12/87	
Claim No.	Co-ordinates: 1958.3 N	Length 12.7	Drilled By: N Morissette Can.	
Grid No. Ramp Leg 2	2949.9 E	Collar Elev. 3936.18	Logged By: R.E.Norman	

Location sketch

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
0.0	3.40	MAFIC VOLCANICS	11705	0	0.77	0.77		<.20
		-fg, grey to grey-green; calcitic to 1.95	11706	0.77	1.22	0.45		1.13
		1.95-3.40 -volcanics become strongly sheared	11707	1.22	1.95	0.73		2.71
		and foliated and altered to pink-grey by FP	11708	1.95	2.63	0.68		0.51
		becoming almost a hybrid in places; also	11709	2.63	3.40	0.77		0.62
		non-calcitic; foliation at 30° generally very	AVG	0.77	1.95	1.18		2.11
		weak pyrite min'zn as diss'n in veinlets in						
		beige-grey altd shears; pink grey FP 0.10-0.40						
		and red-grey FP with some PY at 0.77-1.22						
3.40	6.62	FP	11710	3.40	4.18	0.78	tr	1.20
		-pink to red altd fp to 5.05 with abund barren	11711	4.18	5.05	0.97	tr	0.69
		white qtz-carb vein and veinlets up to 5mm thick						
		and at 30°; several brecciated shears zones also						
		in sect'n 3.40-4.28 up to 1.5cm in thickness with	11712	5.05	5.68	0.63	tr	<.20
		beige carb altn and at 30°(parallel in places)	11713	5.68	6.62	0.94	.5	<.20
		no Py min'zn occurs in these zones; generally						
		only occ'n speck of Py t.o.; pinkish to grey						
		FP 5.05-6.62 with minor diss Py in places						
6.62	9.19	MAFIC VOLCANIC	11714	6.62	7.06	0.44	3	0.39
		-fine grained; grey-green; weakly fractured and	11715	7.06	7.94	0.88	1-2	<.20
		infilled by grey qtz-calc veinlets; strongly	11716	7.94	8.52	0.58	1-2	<.20
		calcitic and magnetic; 1-3% diss, blebs and	11717	8.52	9.19	0.67	3	0.25
		veinlets of Py						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-034 SHEET 2 OF 2

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
9.19	12.53	FP	11718	9.19	10.0	0.81		<.20
		-pink to pink-grey altd to 11.50 and fine to	11719	10.0	10.6	0.60		<.20
		med. grained; brecciated and in-filled with	11720	10.6	11.5	0.90		<.20
		grey cherty, aphanitic material at 10.8						
		no sig'n veining and very sparse diss Py t.o.;						
		weakly fractured and in-filled with streaks of						
		dk. green chlorite; becomes increasingly reddish						
		10.6-11.5 and to a deep red altn 11.5-12.53; a	11721	11.5	12.02	0.52		0.42
		couple of bomen white qtz-carb veins 12.2-12.4	11722	12.02	12.53	0.51		<.20
		sparse diss Py; mafic volc 11.65-12.05 intensly						
		brecciated and in-filled with beige-grey material;						
		1-2% diss Py						
12.53	12.70	MAFIC VOLCANICS	11723	12.53	12.70	0.17	.5	<.20
		-fine grained; grey-green; highly fractured and						
		infilled by qtz-carb veins and veinlets; some						
		beige -grey carb'n altn along fractures; minor Py						
	12.70	END OF HOLE						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-035 SHEET 1 OF 2

Property Rundle Mine	TP: or Area Newton Twp	Azimuth 225.0	Date Started 30/11/87	Corrected Dip Tests
Project 3382	Lot. & Conc.:	Dip 0.0	Date Completed 30/11/87	
Claim No.	Co-ordinates: 1970.7 N	Length 15.2	Drilled By: N Morissette Can.	
Grid No. Ramp Leg 2	2906.3 E	Collar Elev. 3944.3	Logged By: R.E.Norman	

Location sketch

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
0.0	2.60	ALTD MAFIC VOLCANICS -intensly altd and carbonated to a purplish beige-brown to 1.6 with 5-10% diss and blebs of Py. 5% qtz-carb veinlets and veins from hairline-1cm non-clacitic min'zn appears sub-parallel to 45' 1.6-2.6: weak to mod altn with 1-3% Py; calcitic -strongly magnetic t.o.	12838	0	0.70	0.70	5-10	32.36
			12839	0.70	1.45	0.75	5-10	7.04
			12840	1.45	2.10	0.65	1-3	12.54
			12841	2.10	2.60	0.50	1-3	4.42
			AVG	0	2.60	2.60		14.72
2.60	4.10	MAFIC VOLCANICS -fine to med. grained; green; chloritic and strongly calcitic, and magnetic; 1% blebs of Py minor thin qtz-calcite veinlets;	12842	2.60	3.50	0.90		0.48
			12843	3.50	4.10	0.60		0.51
4.10	5.00	LAMPROPHYRE DYKE -fine to med. grained; purplish grey; strongly calcitic	12844	4.10	5.0	0.90		<.20
5.00	6.5	MAFIC VOLCANICS -as 2.60-1.83	12845	5.00	6.50	1.5		<.20
6.5	7.83	GREY FP -med to cg; occ'n diss'd Py; minor veining; gradation out-contact						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-035 SHEET 2 OF 2

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
7.83	10.00	PINK ALTD FP -ore porphyry with bands of red altn; generally weak diss'd Py up to 1% locally in pale greyish pink sections; largest continuous altd section from 9.06-10.00	12846 12847 12848 12849	6.50 7.83 8.69 9.06	7.83 8.69 9.06 10.00	1.33 0.86 0.37 0.94		<.20 0.51 0.99 1.95
10.00	11.63	MAFIC VOLCANICS -fine graind; green-grey; non-calcitic; weak to mod beige-pink altn locally; 10% qtz-carb veinlets and wisp; generally weak Py but up to 1% locally of blebs and stringers; strongly magnetic; beige-altd contact 11.48-11.63 with 2% Py stgs and wisps	12850 12851	10.00 11.10	11.10 11.63	1.10 0.53		<.20 0.78
11.63	12.46	PINK ALTD FP -pink-grey; reddish altd feldspar locally; med grained; non sig'n min'zn, altn or veining	12852	11.63	12.46	0.83		0.86
12.46	15.2	GREY FP -fresh; med. grained; hbld phenos t.o.; no sign min'zn, altn or veining	12853 12854 12855	12.46 13.06 14.28	13.06 14.28 15.20	0.60 1.22 0.92		<.20 <.20 <.20
	15.2	END OF HOLE						

NOVAMIN RESOURCES INC. | DRILL LOG | DRILL HOLE No. 2-036 | SHEET 1 OF 2

Property Rundle Mine	TP: or Area Newton Twp	Azimuth 45.0	Date Started 13/12/87	Corrected Dip Tests
Project 3382	Lot. & Conc.:	Dip 0.0	Date Completed 13/12/87	
Claim No.	Co-ordinates: 1970.7 N	Length 15.23	Drilled By: N Morissette Can.	
Grid No. Ramp Leg 2	2906.3 E Section: 1070 SE	Collar Elev. 3930.60	Logged By: R.E.Norman	

Location sketch

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
			12434	0	1.00	1.00		<.20
0.0	4.30	PINK-RED ALTD PORPHYRY	12435	1.00	1.90	0.90		<.20
		fg; reddish pink to 3.45; altd to pale pink	12436	1.90	2.30	0.40		<.20
		3.45-4.30; no sign min'zn occ'n speck of Py	12437	2.30	2.63	0.33		<.20
		-mod. qtz-carb veining; Sections of Mafic Volc:	12438	2.63	3.00	0.37		<.20
		1.90-2.30: grey; 1% diss Py weakly calcitic	12439	3.00	3.45	0.45		<.20
		2.63-3.00: as above	12440	3.45	4.30	0.85		1.41
			AVG	3.45	5.40	1.95		1.99
4.30	5.40	MAFIC VOLCANICS						
		-fine grained; dk grey-green; fractured t.o. and infilled with grey qtz- calctie; 2-3% Py as diss, veinlets and bleds in fractures;	12441	4.30	5.40	1.10		2.44
5.40	6.51	RED ALTD FP	12442	5.40	6.51	1.11		0.21
		-jasperite; fg; red; minor whtie qtz-carb veining; occ'n fine speck of pyrite						
6.51	8.83	MAFIC VOLCANICS	12443	6.51	7.41	0.90		<.20
		-green to grey green; purplish tint in places	12444	7.41	8.31	0.90		0.24
		strongly calcitic and magnetic; chlortic locally; abund hairline veinlets and small veins of qtz-calcite t.o.; occ'n diss Py in veinlets and fractures; generally weak Py min'zn	12445	8.31	8.83	0.52		<.20

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-036 SHEET 2 OF 2

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
8.83	10.39	FP -med. grained; grey to 9.89; reddish altn 9.89-10.39; occ'n minor diss and blebs of Py -no veining or sing altn	12446	8.83	9.89	1.05		<.20
			12447	9.89	10.39	0.50		<.20
10.39	12.46	MAFIC VOLCANICS -as 6.51-8.83; weak to mod diss Py and stgrs locally;	12448	10.39	11.74	1.35		<.20
			12449	11.74	12.46	0.72		<.20
12.46	15.23	GREY FP -med. grained; grey; fresh locally; sporadic diss pyrite	12450	12.46	13.86	1.40		<.20
			12451	13.86	15.23	1.37		<.20
	15.23	E.O.H.						

NOVAMIN RESOURCES INC. | DRILL LOG | DRILL HOLE No. 2-037 | SHEET 1 OF 2

Property: Rundle Mine	TP. or Area: Newton Twp	Azimuth: 225.0	Date Started: 28/11/87	Corrected Dip Tests
Project: 3382	Lot. & Conc.:	Dip: 0.0	Date Completed: 28/11/87	Location sketch
Claim No.	Co-ordinates: 1969.0 N, 2911.5 E	Length: 30.27	Drilled By: N Morissette Can.	
Grid No.: Ramp Leg 2		Collar Elev.: 3943.9	Logged By: A.Soever	

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
			12801	0.0	0.9	0.9	5-8	7.30
0.0	4.2	ALTD MAFIC VOLCANICS	12802	0.9	1.8	0.9	1-2	1.34
		-grey fg altd mafic volcs;	12803	1.8	2.0	0.2	5	5.48
		0.0-0.9 -highly fractured-network of hairline	12804	2.0	2.7	0.7	<1	1.10
		fractures with beige carbonate alteration 5-8%	12805	2.7	3.6	0.9	4-5	11.18
		fg diss Py assoc. with beige carbonate along	12806	3.6	4.2	0.6	1-2	0.65
		fractures-qtz vein along CA and at 30'; voncanics are predominantly non-calcitic						
		0.0-1.8 -few hairline fractues -calcitic <1% Py	AVG	0.0	3.6	3.6		5.48
		2.73-2.79 minor beige ore altn along fractures 2-4% Py						
		2.79-3.56 -well min'zd pervasive beige altn 3%	AVG	0.0	5.3	5.3		4.48
		diss Py culvinates with well defrid altd band with sharp cts at 55'; form 3.49-3.56m -15% Py in this band;						
		3.56-4.2 -partially assimilated volcs. 1-2% Py						
4.20	7.13	RED ALTD FP	12807	4.2	4.6	0.4		3.70
		-red altd FP; completely altd no relict feldspars	12808	4.6	5.3	0.7		3.08
		non-calcitic; massive 3-4% narrow qtz-dol filled	12809	5.3	6.0	0.7		1.37
		fractures often at 30'; pervasive weak qtz carb	12810	6.0	6.6	0.6		1.37
		altn -locally sericitic; 2-3% fg diss Py 4.2-4.6,	12811	6.6	7.15	0.55		1.82
		tr-1% diss Py 4.6-6.0; 1-2% Py assoc with grey qtz flooding 6.0-7.13						

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
7.15	8.79	HORNBLENDE FP (LAMP)	12812	7.15	8.0	0.85		0.27
		-matix dom. hbde bio FP fg with faint relict	12813	8.0	8.8	0.8		<.20
		feldspars -patches milky white qtz 8.52-8.70						
8.79	12.56	MAFIC VOLCANICS	12814	8.8	9.6	0.8		<.20
		-pale to rd grey. fg mafic volcs; calcitic, mag.	12815	9.6	10.4	0.8		<.20
		- below 11.1 less calcitic-weakly altd	12816	10.4	11.1	0.7		<.20
		- tr-1 vfg diss Py assoc with weak qtz dol altn	12817	11.1	11.76	0.66		<.20
		below 11.1 3-5% Py assoc with better altn	12818	11.76	12.56	0.80		1.40
		11.63-11.76; 2-3% Py assoc to patchy beige altn						
		12.20-12.56; hematitic qv at 30' 11.40-11.53;						
		qtz carb veins at 30-40' 12.20-12.56						
12.56	16.18	PINK TO RED ALTD FP	12819	12.56	13.18	0.52		0.96
		-pink to red mg altd FP; non-calcitic -very faint	12820	13.18	14.18	1.00		<.20
		relict feldspars; massive ; 1-2% fine mm scale	12821	14.18	15.18	1.00		<.20
		fractures healed qith qtz-carb 2% fine hairline	12822	15.18	16.18	1.00		<.20
		fractures healed with specular hematite; weak						
		pale beige ore altn; more intense band at						
		13.83-13.86 at 60'; only locally very faint						
		tr vfg diss Py						
16.18	17.23	ALTD MAFIC VOLCANICS	12823	16.18	16.83	0.65		<.20
		-grey altd mafic volcs; dolomite 16.18-16.83	12824	16.83	17.23	0.50		<.20
		- pervasive-no assoc Py <1% Py -calcitic						
		16.96-17.23; dyke red FP 16.83-16.96;						
17.23	19.82	GREY HBDE FP	12825	17.23	18.02	0.79		<.20
		-grey fg hbde bio FP; matrix dominant; 15% secon.	12826	18.02	18.37	0.35		<.20
		feldsparss; weakly magnetic; quite calcitic;	12827	18.37	19.00	0.63		<.20
		gradually becomes more like mai-phase bio FP	12828	19.00	19.82	0.82		<.20
		inclusion of mafic volcs -calcitic 18.00-18.37						
19.82	20.92	MAFIC VOLCS	11801	19.82	20.92	1.1		
		-dk grey fg mafic volcs; calcitic -mod -magnetic;						
		dyke grey FP with qv 20.49-20.65						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-037 SHEET 3 OF 3

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
20.92	30.27	FRESH GREY FP	12829	20.92	22.00	1.08		<.20
		-fresh grey mg bio FP; calcite -locally weakly	12830	22.00	23.00	1.00		<.20
		magnetic; narrow barren qvs 25.61-25.67,	12831	23.0	24.0	1.0		<.20
		26.69-26.74; hematitic weakly chloritic sections	12832	24.0	25.0	1.0		<.20
		24.20-24.40, 27.64-28.06; bleached pale pink	12833	25.0	26.0	1.0		<.20
		section 29.05-29.31;	12834	26.0	27.0	1.0		<.20
			12835	27.0	28.0	1.0		<..20
	30.27	END OF HOLE		28.0	29.0	1.0		
		Core size LTK46		29.0	30.27	1.27		
		Whole core sampled						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-039 SHEET 1 OF 2

Property Rundle Mine	TP. or Area Newton Twp	Azimuth 225.0	Date Started 27/11/87	Corrected Dip Tests
Project 3382	Lot. & Conc.:	Dip 0.0	Date Completed 27/11/87	Location sketch
Claim No.	Co-ordinates: 1967.35 N	Length 14.5	Drilled By: N Morissette Can.	
Grid No. Ramp Leg 2	2915.9 E	Collar Elev. 3942.9	Logged By: A.Soever	

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
0.0	1.73	ALTD MAFIC VOLCANICS -dk grey fg altd mafic volcanics; calcitic-mag. hairline fractures healed with calcite; calcitic 2-3% fg diss PY assoc with calcitic fractures -lower ct at ~45'	12701 12702	0.0 0.9	0.9 1.73	0.90 0.83		1.30 8.09
1.73	2.53	RED ALTD FP -red altd FP- no relict feldspars 15% secondary feldspars non-calcitic; pervasive white dolomite altn 1.73-1.99; 1-2% Py 1.73-1.99 -tr Py with rest; mafic inclusion 1.99-2.11	12703 AVG	1.73 0.9	2.53 2.53	0.80 1.63		2.78 5.48
2.53	4.27	ALTD MAFIC VOLCANICS -pale to med grey mafic volcs.; dominantly calc. -magnetic; highly fractured, fractures healed in calcite; locally patchy weak pale beige altn along fractures; 2-3% Py assoc with patchy pale beige ore altn; 5-7% Py assoc with pervasive altn along lower ct 4.13-4.27;	12704 12705 12706 12707	2.53 3.03 3.53 4.13	3.03 3.53 4.13 4.43	0.50 0.50 0.60 0.30	2-3 2-3 2-3 5	1.06 1.51 4.29 16.63
4.27	5.03	RED ALTD FP -red altd FP; pervasive dolomitic pale beige altn 2-3% fg diss Py	12708 AVG AVG	4.43 3.53 0.0	5.03 5.03 5.03	0.60 1.5 5.03	2-3	4.15 6.7 3.48

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-039 SHEET 2 OF 2

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
5.03	14.5	GREY WEAKLY ALTD HBDE FP	12709	5.03	6.00	0.97		0.48
		-grey fg weakly altd hbde FP; fg matrix with	12710	6.0	7.0	1.00		0.21
		chloritic hbde and bio; 15-20% faint secondary	12711	7.0	8.0	1.0		<.20
		feldspars; 1% qtz calcite veins; grades towards	12712	8.0	9.0	1.0		<.20
		more normal looking bio FP towards base	12713	9.0	10.0	1.0		<.20
			12714	10.0	11.0	1.0		<.20
	14.5	END OF HOLE	12715	11.0	12.0	1.0		<.20
		Core size LTK-46	12716	12.0	13.0	1.0		<.20
		Whole core sampled	12717	13.0	14.0	1.0		<.20
			12718	14.0	14.5	0.5		<.20

NOVAMIN RESOURCES INC. | DRILL LOG | DRILL HOLE No. 2-040 | SHEET 1 OF 2

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
Rundle Mine	Newton Twp	45.0	12/12/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		0.0	12/12/87		
Claim No.	Co-ordinates:	Length	Drilled By:		
	1967.35 N	16.14	N Morissette Can.		
Grid No.	2915.9 E	Collar Elev.	Logged By:		
Ramp Leg 2	Section:	3928.3	R.E.Norman		
	1060 SE				

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
			2601	0	1.00	1.00	tr	<.20
0.0	2.90	RED-GREY ALTD FP	2602	1.00	2.00	1.00	tr	<.20
		-med grained; reddish to pinkish grey altn; 5% milky white qtz-carb veins (up to 5mm) at 35-50'	2639	2.0	2.9	0.9		0.38
		-trace Py generally; 3% at out contact						
2.90	3.56	ALTD MAFIC VOLCANICS	2603	2.90	3.56	0.66	5	6.79
		-grey-beige altn; fg to mg; beige-pink altn along thin shears locally 35-50'; 5% diss Py as patches and stringers; 3.00-3.17: Pink altd porphyry; no min'zn or sig'n alt'n	AVG	2.90	4.22	1.32		4.03
3.56	4.80	PINK ALTD FELDSPAR PORPHYRY	2604	3.56	4.22	0.66	tr	1.27
		-med grained; pink to pink-grey; grey-beige altn, volcs 4.06-4.18 with occ'n diss Py; minor qtz-carb veining	2605	4.22	4.88	0.66		1.65
4.80	6.35	ALTD MAFIC VOLCANICS	2606	4.88	5.84	1.04	5	1.16
		-ore; grey to beige altn; fine graige carbonetal strong altn and min'zn with up to 10% fine diss Py -stringers and blebs of Py locally; strongly fractural and sheared in places and in-filled with anastolmasing qtz-carb veins, veinlets and stgrs. pinkish hybrid in places with minor Fp at 5.84	2607	5.84	6.35	0.51	3-5	0.27

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-040 SHEET 2 OF 2

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
6.35	6.75	RED-PINK ALTN FP red and pink; med. grained; weak tan-brown altd sericite-locally; occn dissn Py;	2608	6.35	6.75	0.40		<.20
6.75	14.66	MAFIC VOLCANICS -fine grained; green; grey-green locally;strongly calcitic and magnetic; mod. fractural and in-filled with milky white qtz-carb veins 6.75-7.30; -red altd, aphanitic material 7.47-7.77 with 5% Py as massive patches and veins; graphitic mdst 12.45-12.70 with up to 1cm layers of broken, massive Py 30%; green epidote stringers and veinlets in fractures locally; generally sparse min'zn; minor diss Py locally; minor FP dyke 8.66-8.86 no min'zn; pink-grey	2609 2610 2611 2612 2613 2614 2615 2616 2617 2618	6.75 7.30 7.77 8.66 9.54 10.24 11.18 12.45 12.70 13.70	7.30 7.77 8.66 9.54 10.24 11.18 12.45 12.70 13.70 14.66	0.55 0.47 0.89 0.88 0.70 0.94 1.27 0.25 1.00 0.96		<.20 0.34 <.20 <.20 <.20 <.20 <.20 <.20 <.20 <.20
14.66	16.14	GREY FP --med grained, purplish hue locally; no sig'n min'zn, altn or veining; minor diss Py in places	2619	14.66	16.14	1.48		<.20
	16.14	END OF HOLE						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-041 SHEET 1 OF 2

Property	TP, or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
Rundle Mine	Newton Twp	225.0	1/12/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		0.0	2/12/87		
Claim No.	Co-ordinates:	Length	Drilled By:		
	1965.3 N	39.9	N Morissette Can.		
Grid No.	2921.9 E	Collar Elev.	Logged By:		
Ramp Leg 2		3940.9	R.E.Norman		

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
0.0	1.35	ALTD MAFIC VOLCANICS -fg, grey, mod altd, calcitic, magnetic, 2-3% diss Py; minor bands of beige carb altn	12992	0	1.35	1.35		1.47
1.35	7.00	FP -mg; generally grey with weak pinkish altn in places; greyish, siliceous altn (ore porphyry) at 6.70-7.00 with minor shears with cream-green altn and diss Py; generally no dig'n min'zn or veining; occ'n minor diss Py	12993 12994 12995 12996	1.35 3.0 4.5 6.0	3.00 4.5 6.0 7.0	1.65 1.5 1.5 1.0		0.72 <.20 <.20 <.20
7.00	7.55	ALTD MAFIC VOLCANICS -fg; grey; weakly alt'd; strongly calcitic and magnetic; .5-1% diss Py locally; 1% near out-contact	12997	7.00	7.55	0.55		2.37
7.55	8.78	PINK ALTD FP -fine to med grained, pink; no sig'n min'zn or alt'n	12998 AVG AVG	7.55 7.0 8.78	8.78 8.78 10.20	1.23 1.78 1.42		0.27 0.92 9.52

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-041 SHEET 2 OF 2

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
8.78	18.10	MAFIC VOLCANICS	12999	8.78	9.63	0.85	2	14.57
		-strongly calcitic t.o.; and magnetic; chloritc	13000	9.63	10.20	0.57	1	1.99
		locally; grey altd from 8.78-9.63 with 1-3% diss	13994	10.20	11.80	1.60	.5	1.54
		Py and veinlets of Py filling fractures; minor	13995	11.80	13.18	1.38	.5	<.20
		qtz-carb veining as blueish-grey veinlets;	13996	13.18	14.70	1.62	.5	0.24
		FP dyke at 15.61-16.06; purplish grey with bio.	13997	14.70	15.61	0.91	.5	0.34
		flakes; no min'zn; occ'n patch and blebs of diss	13998	15.61	16.06	0.45	tr	<.20
		Py t.o.	13999	16.06	17.70	1.64	.5	<.20
			14000	17.70	18.10	0.40	.5	<.20
18.10	21.1	GREY FP						
		-med.greained; grey with purplish hue locally;	11701	18.10	19.05	0.95		<.20
		mostly 'fresh'; no sig'n min'zn or veining	11702	19.05	20.50	1.45		<.20
			11703	20.50	21.10	0.60		<.20
21.1	22.54	RED ALTD FP	11704	21.10	21.89	0.79		0.75
		-gradational from previous; reddish to pinkish;						
		fine to med grain; 1% fine diss Py locally;						
		becomes greyish 21.89 to 22.54; Lamp dyke						
		21.64-21.84; no sig'n min'zn, altn or veining						
22.54	29.95	LAMPROPHYRE DYKE						
		-fg, purplish grey; strongly calcitic and magnet.						
		-no sig'n min'zn, alt'n or veining						
29.95	39.90	FP						
		-med grained; grey-fresh; no sig'n min'zn; lamp						
		dyke 34.67-35.75						
	39.90	END OF HOLE						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-043 SHEET 1 OF 2

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
Rundle Mine	Newton Twp	225.0	4/12/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		0.0	5/12/87		
Claim No.	Co-ordinates:	Length	Drilled By:		
	1961.6 N	39.6	N Morissette Can.		
Grid No.	2932.2 E	Collar Elev.	Logged By:		
Ramp Leg 2		3938.4	R.E.Norman		

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
0.0	4.21	PINK ALTD FP	11953	0	0.84	0.84		<.20
		-mg; pinkish grey to 3.64; reddish altn 3.64-4.21	11954	0.84	1.56	0.72		0.37
		-grey-white qtz vein with sparse Py at 1.56-1.88	11955	1.56	1.88	0.32		<.20
		and intense veining and silica flooding 3.04-3.64	11956	1.88	3.04	1.16		0.68
		with up to 1% diss Py; generally weak altn and	11957	3.04	3.64	0.60		1.02
		min'zn;	11958	3.64	4.21	0.57		0.72
4.21	9.38	ALTD MAFIC VOLCANICS	11959	4.21	5.21	1.00		3.12
		-generally mod altn; grey to grey-green; fg;	11960	5.21	6.21	1.00		6.17
		-calcitic t.o.; beige-grey altn; strongly	11961	6.21	7.21	1.00		3.42
		fractural in places; abund qtz-cal. veinlets and	11962	7.21	8.22	1.01		16.32
		stringers; 2-3% diss and bleb, stringers and	11963	8.22	9.38	1.16		1.68
		veins of Py	AVG	5.21	8.22	3.01		8.69
			AVG	4.21	8.22	4.01		7.28
9.38	13.60	MAFIC VOLCANICS						
		-gradational from above; dk green to green-grey	11964	9.38	10.50	1.12		0.30
		no sig'n veining or min'zn (minor diss Py t.o.)	11965	10.50	11.90	1.40		0.34
		strongly calcitic and magnetic; purplish FP dyke	11966	11.90	12.90	1.00		<.20
		12.9-13.27 with biot. flecks	11967	12.90	13.60	0.7		<.20
13.60	15.80	LAMP DYKE						
		-fine to med grained; purplish grey; calcitic						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-043 SHEET 2 OF 2

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
15.80	39.6	GREY FP -med to coarse grained; grey; flecked with biot. locally; grey 'fresh' porphyry 28.6-39.6; 21.2-24.4 -weak pink altn no Py, tr hematite 26.6-27.2 -pale-pink altn(ore alrn) with 10% diss Py generally; no veining; very weak altn 27.2-28.1 -minor weak pink altn locally; weak to tr Py	11968	26.6	27.2	0.60		0.72
			11969	27.2	28.1	0.90		0.30

NOVAMIN RESOURCES INC. | DRILL LOG | DRILL HOLE No. 2-044 | SHEET 1 OF 1

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
Rundle Mine	Newton Twp	45.0	12/12/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		0.0	12/12/87		
Claim No.	Co-ordinates:	Length	Drilled By:		
	1971.3 N	15.0	N Morissette Can.		
Grid No.	2942.0 E	Collar Elev.	Logged By:		
Ramp Leg 2	Section:	3925.0	C.P.Zorzi		
	1050 SE				

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
			12403	0	1.47	1.47		3.22
0	8.97	PINK RED ALTD FP	12404	1.47	2.37	0.9		0.24
		-fine to med. gr'd; pink to reddish; only minor	12405	2.37	3.05	0.68		0.45
		altn slong weak shears locally, 2.00-2.5; weak	12406	3.05	4.05	1.0		0.31
		to mod. qtz-carb veins and veinlets; generally	12407	4.05	5.05	1.0		0.55
		no sign min'zn, altn or veining; mod to weak	12408	5.05	6.05	1.0		2.09
		fracturing locally	12409	6.05	7.05	1.0		<.20
			12410	7.05	8.05	1.0		<.20
			12411	8.05	8.97	0.92		0.34
8.97	15.23	ULTRAMAFIC FLOWS						
		-fine grained; dk green to grey; talcose;	12412	8.97	10.08	1.11		0.34
		chloritic; excellent spinifex t.o.; 9.53-10.08:						
		FP; fine grained purplish grey; 1% diss Py locally						
	15.23	END OF HOLE						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-047 SHEET 1 OF 2

Property Rundle Mine	TP. or Area Newton Twp	Azimuth 225.0	Date Started 13/12/87	Corrected Dip Tests
Project 3382	Lot. & Conc.:	Dip 0.0	Date Completed 13/12/87	
Claim No.	Co-ordinates: 1970.90 N	Length 20.10	Drilled By: N Morissette Can.	
Grid No. Ramp Leg 2	2934.70 E Section: 1045 SE	Collar Elev. 3925.0	Logged By: R.E.Norman	Location sketch

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
0.0	0.20	FP -purplish grey; no min'zn						
			12413	0	1.00	1.00	1	<.20
0.20	4.08	MAFIC VOLCANICS	12414	1.00	2.00	1.00	1	0.58
		-grey-green; fine gr'd; generally weak one altn;	12415	2.00	2.39	0.39	2	0.82
		some fracturing a pink altn 2.00-2.30 with 3%	12416	2.39	2.86	0.47	1	1.10
		diss Py; similarly 3.78-4.08; generally 1%	12417	2.86	3.78	0.92	1	<.20
		diss Py; minor qtz-carb veining; pink-grey FP	12418	3.78	4.08	0.30	2	6.07
		dyke 2.39-2.86; calcitic and magnetic	AVG	3.78	5.87	2.09		4.68
			AVG	5.87	7.32	1.45		0.68
			AVG	7.32	9.94	2.62		9.04
4.08	9.14	PINK ALTD FP	AVG	3.78	9.94	6.16		5.59
		-fine to med. grd; pink-grey to 6.56; mafic volcs	12419	4.08	5.44	1.36		1.92
		5.44-5.87 with beige grey altn with fracture	12420	5.44	5.87	0.43		12.45
		sub-parallel and with 5-10% diss Py; fairly abund	12421	5.87	6.56	0.69		0.41
		qtz-carb veins, stringers and veinlets, white	12422	6.56	7.32	0.76		0.93
		grey to white at 15-20'; minor diss Py locally	12423	7.32	8.32	1.00		3.57
		some weak beige carb-sericite altn in bx'd	12424	8.32	9.14	0.82		10.08
		fractured zones but weakly min'zd						
9.14	9.94	ALTD MAFIC VOLCANICS	12425	9.14	9.94	0.80		14.82
		-fg to mg; lt grey; several qtz-veins up to 1cm						
		at 60' with 5% diss PY and beige-grey altn						
		- 2-3% diss Py generally; weakly calcitic;						
		strongly magnetic						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-047 SHEET 2 OF 2

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
9.94	16.39	FP	12426	9.94	11.03	1.09		0.45
		-fg to mg; grey; pinkish and red bands to 13.73	12427	11.03	12.18	1.15		2.13
		- 2-3% diss Py in red porphyry 13.0-13.73	12428	12.18	13.73	1.55		0.58
		-generally minor Py locally t.o.	12429	13.73	14.66	0.93		<.20
			12430	14.66	16.39	1.73		<.20
16.39	20.10	MAFIC VOLCANICS(FLOWS)						
		-green to lt green and grey; med.grained;	12431	16.39	17.50	1.11		<.20
		speckled gabbroic texture in some sections;	12432	17.50	18.97	1.47		<.20
		strongly calcitic and magnetic; fractured in	12433	18.97	20.10	1.13		<.20
		places and in-filled with qtz-calcite; minor						
		diss Py in places						

NOVAMIN RESOURCES INC. | DRILL LOG | DRILL HOLE No. 2-050 | SHEET 1 OF 1

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
Rundle Mine	Newton Twp	45.0	12/12/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		0.0	12/12/87		
Claim No.	Co-ordinates:	Length	Drilled By:		
	1981.0 N	10.66	N Morissette Can.		
Grid No.	2923.35 E	Collar Elev.	Logged By:		
Ramp Leg 2	Section:	3921.1	C.P.Zorzi		
	1030 SE				

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-	2640	0.0	1.0	1.0	.5-1	1.61
			2641	1.0	1.75	0.75	tr-.5	6.17
0.0	7.02	RED ALTD FP	2642	1.75	2.50	0.75	tr-.5	0.82
		-red, mg, slightly magnetic; highly sheared; red	2643	2.50	3.25	0.75	tr-.5	0.99
		altn throughout with numerous thin lt. grey qc	2644	3.25	4.00	0.75	tr-.5	0.48
		veins; chl infilling; tr-.5% f.g. diss Py;	2645	4.00	4.75	0.75	tr-.5	<.20
			2646	4.75	5.50	0.75	tr-.5	0.75
			2647	5.50	6.25	0.75	tr-.5	3.19
			2648	6.25	7.02	0.77	tr-.5	2.50
			AVG	0.0	1.75	1.75		3.56
			AVG	5.50	7.02	1.52		2.84
7.02	9.25	ALTD MAFIC VOLC	AVG	7.02	8.50	1.48		7.13
		-med. grey; fg, mag;,sheared; good lt. grey altn	2649	7.02	7.75	0.73	3-5	11.04
		with qc veinlets; 2-3% fg patchy and diss Py;	2650	7.75	8.50	0.75	1-2	3.33
			2651	8.50	9.25	0.75	3-5	1.92
9.25	10.66	ULTRAMAFIC VOLCANICS						
		-dk green, soft, fg, only tr Py;	2652	9.25	10.00	0.75	tr	<.20
			2653	10.00	10.66	0.66	tr	<.20
	10.66	END OF HOLE						
		EXET core						
		Whole core sampled						

NOVAMIN RESOURCES INC. | DRILL LOG | DRILL HOLE No. 2-051 | SHEET 1 OF 1

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
Rundle Mine	Newton Twp	225.0	7/12/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		0.0	7/12/87		
Claim No.	Co-ordinates:	Length	Drilled By:		
	1945.0 N	10.9	N Morissette Can.		
Grid No.	2907.2 E	Collar Elev.	Logged By:		
Ramp Leg III	Section:	3918.8	C.P.Zorzi		
	1015 SE				

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t	
		OBJECTIVES:-							
0.0	2.10	RED ALTD FP (ORE PORPHYRY)	12177	0.0	1.0	1.0	2-3	0.79	low to mo
		-red to beige; mg; non-magnetic; sheared; med to	12178	1.0	2.1	1.1	1-2	1.44	low to mo
		beige altn numerous thin lt grey qc veinlets with							
		a few 1cm qc veins, green chl infilling; 2-3%							
		fg to mg diss Py							
2.10	10.74	GREY SLIGHTLY ALTD FP	12179	2.1	3.5	1.4	.5-1	0.34	
		-grey red, mg, slightly magnetic, biotitic;	12180	3.5	4.0	0.5	tr-.5	0.45	
		sheared; minor patches of red altn; numerous	12181	4.0	5.0	1.0	tr-.5	<.20	
		thin lt grey qc veinlets with chloritic	12182	5.0	6.2	1.2	tr	0.31	
		infillings; tr Py; small band of red altd FP	12183	6.2	6.65	0.45	tr-.5	0.51	
		from 6.2-6.65	12184	6.65	8.00	1.35	tr	0.21	
			12185	8.00	9.00	1.00	tr	<.20	
10.74	10.90	DACITE DYKE	12186	9.00	10.00	1.20	tr	<.20	
		EXET Core	12187	10.00	10.74	0.74	tr	<.20	
		Whole core sampled	12188	10.74	10.90	0.16	tr	2.81	

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-052 SHEET 1 OF 1

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
Rundle Mine	Newton Twp	45.0	10/12/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		0.0	10/12/87		
Claim No.	Co-ordinates:	Length	Drilled By:		
	1983.5 N	10.66	N Morissette Can.		
Grid No.	2919.5 E	Collar Elev.	Logged By:		
Ramp Leg III	Section:	3921.0	C.P.Zorzi		
	1025 SE				

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-	2672	0.0	1.0	1.0	tr-.5	0.62
			2673	1.0	2.0	1.0	1-2	2.26
0.0	7.30	RED ALTD FP (ORE PORPHYRY)	2674	2.0	3.0	1.0	2-3	6.24
		-red to beige, mg; non-magnetic; highly fractured	2675	3.0	4.0	1.0	tr-.5	3.36
		very blocky; good red beige altn and numerous	2676	4.0	5.0	1.0	tr-.5	0.38
		paper thin lt grey qc veins; 1-2% fg diss Py	2677	5.0	6.0	1.0	1-2	0.51
			2678	6.0	7.0	1.0	2-3	0.24
			2679	7.0	7.3	0.3	2-3	0.31
			AVG	2.0	4.0	2.0		4.80
7.30	9.80	HYBRID RK						
		-red to lt grey, fg to mg; sheared and minor	2680	7.30	7.70	0.4	1-2	5.66
		fracturing; good red-beige altn in FP with good	2681	7.70	7.98	0.28	.5-1	0.21
		lt grey altn in volc; 1-2% fg diss Py	2682	7.98	9.00	1.02	1-2	2.50
			2683	9.00	9.80	0.80	1-2	0.99
			AVG	7.30	9.00	1.7		2.87
9.80	10.50	SPINIFEXED U.M.	2684	9.80	10.50	0.7	tr	<.20
10.50	10.66	RED ALTD FP						
		-poor altn and tr min'zn						
		Notes	0.16m Core lost at end of hole					
		EXET Core drilled						
		Whole core sampled						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-054 SHEET 1 OF 1

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests
Rundle Mine	Newton Twp	45.0	10/12/87	
Project	Lot. & Conc.:	Dip	Date Completed	
3382		0.0	10/12/87	
Claim No.	Co-ordinates:	Length	Drilled By:	
	1985.8 N	15.83	N Morissette Can.	
Grid No.	2914.2 E	Collar Elev.	Logged By:	
Ramp Leg III	Section:	3920.0	C.P.Zorzi	
	1020 SE			

Location sketch

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-	2654	0.0	1.0	1.0	.5-1	0.72
			2655	1.0	2.0	1.0	tr	0.82
0.0	7.02	RED ALTD FP	2656	2.0	3.05	1.05	.5-1	7.17
		red, mg, very slightly magnetic; highly sheared;	2657	3.05	3.40	0.35	tr	1.51
		red and beige altn throughout; minor chl and	2658	3.40	4.00	0.60	tr	1.13
		hematite infillings, numerous paper thin qc	2659	4.00	5.00	1.00	tr	0.58
		veinlets, qc vein 3.05-3.40; tr-.5% fg diss Py;	2660	5.00	5.60	0.60	.5-1	1.66
		-mafic incle 6.23-6.35	2661	5.60	6.23	0.63	1-2	0.96
			2662	6.23	6.35	0.12	5-10	1.68
			2663	6.35	7.02	0.67	.5-1	<.20
			AVG	2.0	3.4	1.4		5.76
7.02	9.00	ALTD MAFIC VOLC						
		-med to lt grey, fg, magnetic; highly sheared;	2664	7.02	8.00	0.98	3-5	3.74
		patches of lt grey altn with numerous thin lt	2665	8.00	9.00	1.00	3-5	3.53
		grey qc veinlets; 2-3% Py	AVG	7.02	9.00	1.98		3.63
9.00	10.36	RED ALTD FP	2666	9.0	9.60	0.6	.5-1	0.79
		-as above 0.0-7.02;	2667	9.60	10.36	0.76	.5-1	0.38
10.36	11.68	TALC CHLORITE CARBONATE SCHIST	2668	10.36	11.68	1.32	tr	<.20
		-soft, talcose, fg; only tr Py						
11.68	15.83	HBLD FSP PORPHYRY DYKE	2669	11.68	13.00	1.32	tr	<.20
			2670	13.00	14.50	1.50	tr	<.20
		NOTES	2671	14.50	15.83	1.33	tr	<.20
		EXET Core drilled						
		Whole core sampled						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-056B SHEET 1 OF 2

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
Rundle Mine	Newton Twp	45.0	13/12/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		0.0	13/12/87		
Claim No.	Co-ordinates:	Length	Drilled By:		
	1988.65 N	16.14	N Morissette Can.		
Grid No.	2910.00 E	Collar Elev.	Logged By:		
Ramp Leg 2	Section:	3918.7	R.E.Norman		
	1015 SE				

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
0.0	2.02	PINK ALTD FP	12492	0	1.00	1.00		1.06
		-med to cg; pink grey to pinkish-only eak altn;	12493	1.00	2.02	1.02		1.06
		-sporadic diss Py						
2.02	2.80	ALTD MAFIC VOLCANICS	12494	2.02	2.80	0.78		22.83
		-fg; grey; good grey carb-sericitc altn with 3-5% fine diss Py along fractures dominantly at 15'						
		-minor qtz-carb veining; mod'ly calcitic and mag	AVG	2.02	4.04	2.02		10.16
2.80	10.10	MAFIC VOLCANICS	12495	2.80	4.04	1.24		2.19
		-fg, grey to grey-green; minor fracturing locally	12496	4.04	4.74	0.70		0.48
		and in-filled with qtz-carb; up to 2% Py as diss	12497	4.74	5.87	1.13		1.65
		and stgrs in veins and fractures locally;	12498	5.87	7.24	1.37		2.13
		generally minor altn and min'zn; pinkish FP dykes	12499	7.24	8.57	1.33		1.23
		from 4.04-4.74 and 8.57-9.24 with minor Py	12500	8.57	9.24	0.67		0.51
			9829	9.24	10.10	0.86		1.65
10.10	10.45	ULTRAMAFICS						
		-talc-chlorite-calcite schist; dk green with white carb veins; strongly foliated at 65-70'						
		no min'zn						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-056B SHEET 2 OF 2

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
10.45	13.81	FELDSPAR-HBLD PORPHYRY -very fine grained, purple; no min'zn, veining -strongly calcitic						
13.81	16.14	ULTRAMAFIC VOLCANICS -dk green-grey; fine grained; talcose; strongly calcitic; no min'zn						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-057 SHEET 1 OF 2

Property Rundle Mine	TP. or Area Newton Twp	Azimuth 45.0	Date Started 7/12/87	Corrected Dip Tests
Project 3382	Lot. & Conc.:	Dip 0.0	Date Completed 7/12/87	
Claim No.	Co-ordinates: 1994.95 N	Length 12.18	Drilled By: N Morissette Can.	
Grid No. Ramp Leg 3	2894.8 E Section: 1000 SE	Collar Elev. 3915.5	Logged By: C.P.Zorzi	

Location sketch

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t	
		OBJECTIVES:-							
0.00	0.72	GREY RED ALTD FP -grey red, mg, slightly magnetic; sheared and fractured; grey red altn with chloritic infillings and qc veinlets; pervasive calcite 2-3% fg diss Py	12189	0.0	0.72	0.72	2-3	12.03	
0.72	3.10	ALTD MAFIC VOLCANICS -grey, fg, magneticl mod. sh'd; strongly calcitic small bands of lt grey cb altn; few thin wispy calcite veinlets; tr-.5% fg diss Py throughout more concentrated in narrow bands here and there	12190 12191 12192 12193 AVG	0.72 1.04 1.62 2.60 0.0	1.04 1.62 2.60 3.10 2.60	0.32 0.58 0.98 0.50 2.60	3-5 2-3 tr-.5 2-3	4.77 0.65 2.40 <.20 4.97	
3.10	4.45	RED ALTD FP (ORE PORPHYRY) beige-red, mg, slightly magnetic; sheared; red to beige altn, more intense in places with minor sericite and chloritic in fillings; mod. amt thin lt greyqc veinltes; 2-3% fg diss Py	12194 12195 12196	3.10 4.00 4.12	4.00 4.12 4.45	0.90 0.12 0.33	2-3 5-10 2-3	0.89 8.47 7.24	low to m
4.45	6.75	ALTD MAFIC VOLC -as above but more siliceous and slightly less calcitic; minor patches of lt grey altn with numerous paper thin wispy qc veins and calcite veins; tr-1% fg diss Py	12197 12198 12199 AVG AVG	4.45 5.00 6.00 4.00 0.00	5.00 6.00 6.75 6.75 6.75	0.55 1.00 0.75 2.75 6.75	.5-1 .5-1 .5-1	2.95 1.41 2.74 3.09 3.29	

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-057 SHEET 2 OF 2

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
6.75	7.43	RED ALTD FP (ORE PORPHYRY) -as above 3.10-4.45; good altn with 2-3% fg diss Py	12200	6.75	7.43	0.68	2-3	0.41 low to mo
7.43	9.92	ALTD MAFIC VOLC -med. grey; fg; magnetic; sh'd; paper thin lt grey, calcite veins with a few 2mm to 1cm qtz veins; tr-.5% fg diss Py	11401	7.43	8.10	0.67	tr-.5	0.72
			11402	8.10	8.75	0.64	tr-.5	1.30
			11403	8.75	9.00	0.25	2-3	0.96 cherty m
			11404	9.00	9.92	0.92	tr-.5	1.65
9.92	12.18	HBLD FSP PORPHYRY T.C.C.S. from 10.32-10.68 EXET Core drilled Whole core sampled	11405	9.92	10.32	0.40	tr	<.20
			11406	10.32	10.68	0.36	tr	<.20
			11407	10.68	11.30	0.62	tr	<.20
			11408	11.30	12.18	0.88	tr	<.20

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-059 SHEET 1 OF 2

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
Rundle Mine	Newton Twp	241.505	24/11/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		41.167	25/11/87		
Claim No.	Co-ordinates:	Length	Drilled By:		
	1970.414 N	28.02	N Morissette Can.		
Grid No.	2897.767 E	Collar Elev.	Logged By:		
2nd (91m) Level		3909.696	R.E.Norman		

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
0.0	2.89	PINK ALTD FP	13755	0	0.70	0.70	1	<.20
		-med to coarse grained; pink to pink-grey in some	13756	0.70	2.14	1.44	.5	0.24
		sections; strongly calcitic in grey sections	13757	2.14	2.89	0.75	.5	<.20
		-generally .5% Py; 1% at 0-0.70; no sig'n veining						
2.89	4.03	PINK ALTD FP (ORE ALTN)	13758	2.89	3.49	0.60		<.20
		-pink; fine grained; -weak carb altn; 1-2 fine diss Py;						
		3.18-3.49: abund. silica flooding and qtz-carb-sericite veining sub-parallel; tan coloured veining and wisps locally -sericite?; magnetic						
		locally; calcitic in spots; grey altn 3.49-4.03	13759	3.49	4.03	0.54		<.20
		-1% Py						
4.03	5.86	HYBRID-PINK ALTD FELDSPAR AND GREY-GREEN MAFICS	13760	4.03	4.47	0.44	tr	<.20
		-med. to fine grained; gradational from previos	13761	4.47	5.30	0.83	tr	<.20
		abund. chloritic fractures; tan-khaki crystals	13762	5.30	5.86	0.56	.5	<.20
		still present; minor qtz patches; trace Py;						
		fairly abund. qtz-calcite-chl veins at 5-10'						
5.86	9.90	FELDSPAR- BIOTITE PORPHYRY	13763	5.86	6.82	0.96	tr	<.20
		-med. grained; purplish-grey; no sign veining	13764	6.82	7.50	0.68	tr	<.20
		min'zn or altn; generally strongly calcitic and	13765	7.50	8.16	0.66	tr	<.20
		magnetic; occn diss Py	13766	8.16	8.82	0.66	tr	<.20
			13767	8.82	9.90	1.08	tr	<.20

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-059 (2-034) SHEET 2 OF 2

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
9.90	10.68	MAFIC VOLCANICS -dk green; fine grained; chloritic and calcitic; -chloritic and calcitic; minor diss and stringer Py; no sign veining; out -contact at 45'	13768	9.90	10.68	0.78		<.20
10.68	13.68	FELDSPAR PORPHYRY -interbanded Biotie-FP and biot-hbld-FP with large magnetic fragments; no sign, min'zn, veining or altn; mod to strongly calcite	13769 13770 13771	10.68 11.58 12.50	11.58 12.50 13.68	0.90 0.92 1.18		<.20 <.20 <.20
13.68	14.36	MAFIC VOLCANICS -grey-green; fine grained; mior light blue-grey qtz-calcite patches and shears? with 5% stringer Py and brown carb fragments; a 2cm grey qtz-vein occurs at 14.2 with a marginal vein of massive Py; generally 2-3% Py as diss, blebs and stringers minor 5cm aplite band at 14.05; irregular ct; strongly magnetic	13772	13.68	14.36	0.68		<.20
14.36	28.02	FP -interbanded grey and purplish; FELDSPAR-BIOT-HBLD-PORPHYRY -occn pink aplite band; weakly to strongly calcitic and magnetic t.o.; genrally no sign min'zn, veining or altn; NOTE: 27.13-27.41: Pink latd porphyry with 1-2% Py and minor qtz veining	13773 13774 13375 13376 13377 13378 13379 13380 13381 13782	14.36 15.10 16.55 18.12 19.67 21.16 22.52 24.06 25.49 27.13	15.10 16.55 18.12 19.67 21.16 22.52 24.06 25.49 27.13 27.41	0.74 1.45 1.57 1.55 1.49 1.36 1.54 1.43 1.64 0.28	tr tr tr tr tr tr tr tr tr 1-2	<.20 <.20 <.20 <.20 <.20 <.20 <.20 <.20 <.20 4.14
28.40	35.63	GREY BIO FP -grey, mg, magnetic, unaltd; OV at 28.40-28.50, .5-1% Py with slight red altn; 32.20-32.50, tr Py unaltd	13783 12257 12258 AVG	27.41 28.40 32.30 27.13	28.02 28.50 32.50 28.12*	0.61 0.10 0.20 0.99	 .5-1 tr	0.20 4.22 0.82 1.72

NOTE: 28.4-35.63 drilled from new set-up
28.02 in original hole probably equivalent to 28.40 in extensions
* adjusted to fint with original d.h.

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-060 SHEET 1 OF 2

Property Rundle Mine	TR. or Area Newton Twp	Azimuth 209.76	Date Started 23/11/87	Corrected Dip Tests
Project 3382	Lot. & Conc.:	Dip 30.38	Date Completed 24/11/87	Location sketch
Claim No.	Co-ordinates: 1969.983 N	Length 28.02	Drilled By: N Morissette Can.	
Grid No. 2nd (91m) Level	 2898.131 E Section: 1025 SE +/-	Collar Elev. 3909.696	Logged By: R.E.Norman	

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t	
		OBJECTIVES:-							
0.0	0.90	PINK ALTD FP -med grained; pink to pink-grey locally; weak to mod. altn with .5-1% fine diss Py locally - non-calcitic, weakly magnetic; out ct at 45'	13592	0	0.90	0.90	.5	1.17	
0.90	5.17	MAFIC VOLCANICS -fg; green to green-grey; minor altn; strongly magnetic and calcitic; minor qtz-carb stringers and veinlets; 1-2% diss, blebs and minor stringrs of Py; several thin (8cm) FP bands t.o.	13593 13594 13595 13596 13597	0.90 1.94 3.04 3.84 4.59	1.94 3.04 3.84 4.59 5.17	1.04 1.10 0.80 0.75 0.58	.5 1-2 1-2 1-2 1	2.61 <.20 <.20 <.20 <.20	(.35 lost core)
5.17	6.54	GREY FP -mg to cg; characterized by large (up to 1cm) angular dk green mafic fragments; generally massive; no sig'n qtz veining or altn; mod'ly to strongly magnetic; non-calcitic	13598	5.17	6.54	1.37	tr	<.20	
6.54	11.85	DIABASE -fine to med. grained; green to green grey; weakly calcitic locally and strongly magnetic; no sig'n veining, min'zn or altn; apple green epidote veining and altn 6.54-7.52 with minor pinkish aplitic bands	13599 13600 13601 13602 13603	6.54 7.52 8.27 9.02 10.44	7.52 8.27 9.02 10.44 11.85	0.98 0.75 0.75 1.42 1.41	tr tr tr tr tr	<.20 <.20 <.20 <.20 <.20	

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-060 SHEET 2 OF 2

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
11.85	14.51	GREY FP	13604	11.85	12.78	0.93	tr	<.20
		-as 5.17-6.54	13605	12.78	13.56	0.78	tr	<.20
			13606	13.56	14.51	0.95	tr	<.20
14.51	22.32	NOTE: Box spilled; core mixed-footages unsure:						
		-rock all of grey and purplish Feldspar with	13623	14.51	15.02	0.51		<.20
		Hornblende and/or biotite. No sign min'zn, altn	13607	15.02	16.50	1.48		<.20
		or veining; strongly calcitic and magnetic;	13608	16.50	17.90	1.40		<.20
		-occ'n pinkish bands of aplite; 1.2 m of ground	13609	19.10	20.50	1.40		<.20
		core from 16.50	13610	20.50	21.90	1.40		<.20
			13611	21.90	22.32	1.40		<.20
22.32	28.16	GREY HBLD FP						
		-as 5.17-6.54; appears as gabbroic texture in	13612	22.32	23.75	1.43		<.20
		places; weakly calcitic locally; mod'ly magnetic	13613	23.75	25.10	1.35		<.20
		no sig'n min'zn, veins, or altn; tr Py	13614	25.10	26.50	1.40		<.20
			13615	26.50	28.16	1.66		<.20
28.16	29.73	FELDSPAR-BIOTIE PORPHYRY						
		-purplish grey; med. grained; mod. pervasive	13616	28.16	28.81	0.65		<.20
		calcite altn; no sign veining; .5-1% fine	13617	28.81	29.73	0.92		
		diss Py locally; weakly magnetic locally						
29.73	34.11	GREY HBLD -FP	13618	29.73	30.83	1.10		<.20
		-med to coarse grained; as 22.32-28.16; reddish	13619	30.83	31.31	0.48		<.20
		altn form 31.31-31.53 with 1 to 2cm grey qtz	13620	31.31	31.53	0.22		<.20
		veining at 60-70'-tr Py (this maybe the #2 vein)	13621	31.53	32.99	1.46		
		-gabbroic looking texture locally; mod'ly	13622	32.99	34.11	1.12		<.20
		magnetic lcoally;						
34.11	48.40	GREY BIO. FP	12259	38.40	39.10	0.70	1-2	13.37
		-fresh unaltd; #2 vein 38.40-39.10; cts at 15-20'						
		-vein is unaltd with wispy Py along fractures						
		about 1-2% Py						
	48.40	END OF HOLE						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-061 SHEET 1 OF 3

Property Rundle Mine	TP. or Area Newton Twp	Azimuth 122.0	Date Started 23/11/87	Corrected Dip Tests
Project 3382	Lot. & Conc.:	Dip 0.0	Date Completed 23/11/87	Location sketch
Claim No.	Co-ordinates: 1969.983 N	Length 30.5	Drilled By: N Morissette Can.	
Grid No. 2nd (91m) Level	2898.131 E	Collar Elev. 3910.853	Logged By: R.E.Norman	

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
0.0	7.1	MAFIC VOLCANICS	13855	0.0	0.91	0.91	1	<.20
		-fine to med grained; green to grey-green; fairly	13856	0.91	1.61	0.70	1	<.20
		abund qtz-carb veinlets and stringers at 50-80'	13857	1.61	2.33	0.72	1	<.20
		-pervasive calcite altn t.o.; up to 1% Py locally	13858	2.33	3.08	0.75	1	<.20
		as diss along fractures; grey FP dyke 3.52-3.87,	13859	3.08	3.87	0.79	1	<.20
		5.18-5.44; 8cm FP dyklet at 3.22 and 4.07-4.27;	13560	3.87	4.56	0.69	1	<.20
		contacts at 45-70' and irregular; strongly	13561	4.56	5.44	0.88	1	<.20
		magnetic	13562	5.44	6.10	0.66	1	<.20
			13563	6.10	7.10	1.00	1	<.20
7.10	8.06	GREY FP						
		-med to coarse grained; mod. gractured and	13864	7.10	8.06	0.96	tr	<.20
		infilled with chlorite; no sig'n min'zn, altn						
		or veining; contacts at 45'; weakly magnetic						
8.06	15.85	FP	13865	8.06	9.06	1.00	tr	<.20
		-purplish-grey (weak pink altn); fine to mod	13866	9.06	9.74	0.68	tr	<.20
		grained (finer grained than above) out-contact	13867	9.74	10.46	0.72	tr	<.20
		marked by 3cm of mafic volc with 5% Py; mod	13868	10.46	11.21	0.75	tr	0.72
		fractured and in-filled with qtz-carb veinlets	13869	11.21	11.96	0.75	tr	0.99
		sub-parallel to 50'; mod to strongly calcitic;	13870	11.96	12.79	0.83	tr	<.20
		mod to strongly magnetic; pink-red altn from	13871	12.79	13.29	0.50	tr	<.20
		14.62-15.85 with 1% diss Py and minor qtz-carb	13872	13.29	14.04	0.75	tr	<.20
		veins;	13873	14.04	14.62	0.58	tr	<.20
			13874	14.62	15.37	0.75	1	0.34
			13875	15.37	15.85	0.48	1	1.16

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-061 SHEET 2 OF 3

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
15.85	17.49	MAFIC VOLCANICS -green; fine grained; fractured and in-filled with qtz-calcite veinlets and minor veins; anastomosing but generally at 45-50'; mod calcitic altn; .5-1% diss and blebs of Py locally; strongly magnetic	13876 13877	15.85 17.05	17.05 17.49	1.20 0.40	 .5-1	0.62 <.20
17.49	19.19	LAMPROPHYRE DYKE -fine to med. grained; purplish grey; strongly pervasive calcite altn; no sign min'zn; magnetic	13878	17.49	19.19	1.70	-	<.20
19.19	23.61	MAFIC VOLCANICS -fine to med. grained;grey-green; mod fractured and in-filled with qtz-calcite veinlets and strgs anastomosing but generally at 50-60'; 2 purplish grey FP dyke 20.9-20.12; 21.77-22.39; strongly magnetic and calcitic; chloritic; occ'n diss and blebs of Py generally .5%	13879 13880 13881 13882 13883 13884	19.19 19.94 20.69 21.39 21.77 22.39	19.94 20.69 21.39 21.77 22.39 23.61	0.75 0.75 0.70 0.38 0.62 1.22	.5 .5 .5 .5 tr tr	<.20 <.20 <.20 <.20 <.20 <.20
23.61	24.90	LAMPROPHYRE DYKE -purplish grey; fine to med grained; strongly calcitic and magnetic; minor veining	13885	23.61	24.90	1.29	-	<.20
24.90	26.10	GREY BIOTITE FP -med. grained; calcitic; magnetic; no sig'n min'n or veining	13886	24.90	26.10	1.20	tr	<.20
26.10	26.31	LAMPROPHYRE DYKE -as above	13887	26.10	26.31	0.21		<.20
26.31	26.90	GREY BIOTITE-FP -as 24.90-26.10	13888	26.31	26.90	0.59		0.38
26.90	27.49	PINK ALTD PORPHRY -fine to med grained; Feldspars partially oblit'd locally; strong silica flooding with 1% diss Py 27.02-27.29 and abundant qtz veins and blebs; veins appear pred. at 20-30' Py also with minor chloritic fractures	13889	26.90	27.49	0.59	1	1.16

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-061 SHEET 3 OF 3

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
27.49	28.68	GREY FP -still with biotite but feldspar ore much more abund. and coarser grained than with biot. FP -no sig'n min'zn, altn or veining	13890	27.49	28.68	1.19	tr	<.20
28.68	29.32	LAMP DYKE -as 26.10-26.31; 10cm FP at out-contact; in-ct at 60-70'	13891 13892	28.68 29.32	29.32 30.5	0.64 1.18	tr	1.16 <.20
29.32	30.50	HBLD-BIOT-FP -grey; med. grained; gabbroic texture locally; -no sig'n min'zn, alt'n or veining						
	30.50	END OF HOLE						

NOVAMIN RESOURCES INC. | DRILL LOG | DRILL HOLE No. 2-063 | SHEET 1 OF 2

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
Rundle S	Newton Twp	53.0	16/11/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		±27.0	17/11/87		
Claim No.	Co-ordinates:	Length	Drilled By:		
	1953.70 N	80.40	N Morissette Can.		
Grid No.	2876.5 E	Collar Elev.	Logged By:		
2nd (91m)	Section:	3912.0	C.P.Zorzi		
Level	1025-30 SE				

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
0.0	20.0	FRESH GREY BIO.FP -unaltd, no min'n						
20.0	20.75	MAFIC VOLC -unaltd, dioritic looking, no min'n						
20.75	23.45	DACITE DYKE Cts ~30-45'; both chilled						
23.45	28.00	MAFIC VOLC -as above 20-20.75; few 0.5m unaltd FP incl						
28.00	45.95	SLIGHTLY ALTD GREY BIO FP -as above with slight-strong red altn -mafic incl 42.85-43.25 tr-.5% Py	10906 10907	30.0 42.85	31.0 43.25	1.0 0.40	tr-.5 tr-.5	1.37 0.31
45.95	49.50	ALTD MAFIC VOLC -lt to med grey, fg, magnetic; sheared; good lt grey cb altn with numerous thin lt grey qc veinlets; 5-7% diss Py overall with up to 20% Py locally	10908 10909 10910 10911 AVG	45.95 47.0 48.0 48.75 47.0	47.0 48.0 48.75 49.50 49.5	1.0 1.0 0.75 0.75 2.5	1-2 3-5 8-10 1-2	1.23 6.62 18.27 5.31 9.81
49.50	52.84	RED ALTD FP -red, mg, magnetic; sh'd; good red altn with qc veinlets; only tr Py	10912 10913 10914	49.50 50.50 51.50	50.50 51.50 52.84	1.0 1.00 1.34	tr tr tr	0.55 0.80 0.62

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 2-063 SHEET 2 OF 2

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
52.84	60.66	HYBRID ROCK (ALTD MAFIC VOLC AND RED ALTD FP)	10915	52.84	54.00	1.16	2-3	8.57
		-red grey, mg, magnetic; bx'd and sh'd; good	10916	54.00	55.00	1.0	3-5	18.41
		patchy lt grey and beige red altn; numerous	10917	55.00	56.00	1.0	tr-.5	1.52
		lt grey cb veins; 1-2% overall, patches > 5-10%	10918	56.00	57.00	1.0	.5-1	1.68
			10919	57.00	58.00	1.0	3-5	10.35
			10920	58.00	59.00	1.0	1-2	4.87
			10921	59.00	60.00	1.0	.5-1	1.78
			10922	60.00	60.66	0.66	tr-.5	1.37
			AVG	52.84	59.00	6.16		7.59
60.66	73.75	ALTD MAFIC VOLC	10923	66.0	66.6	0.6	.5-1	10.08
		-as above but calcitic; lt grey altn here +there	10924	66.6	67.0	0.4	tr	0.45
		reflected in the sampling; min'n ~1-2% through	10925	67.0	68.0	1	.5-1	1.75
		better altd sections	10926	68.0	69.0	1	tr-.5	2.98
			10927	69	70	1	tr-.5	0.17
			10928	70	71	1	1-2	0.62
			10929	71	72	1	tr	<.20
			10930	72	73	1	tr	<.20
			10931	73	73.75	0.75	1-2	1.47
73.75	78.25	RED ALTD FP						
		-red, mg, slightly magnetic; sh'd; good red altn	10932	73.75	75.0	1.25	1-2	0.21
		with numerous thin lt. grey qc veins and chl	10933	75	76	1	tr-.5	<.20
		infillings; .5-1% diss Py overall with higher	10934	76	77	1	tr	0.21
		conc. locally	10935	77	78.25	1.25	tr	0.96
78.25	80.40	C.G. ULTRAMAFIC FLOW						
	80.40	END OF HOLE						
		AQ core drilled						
		whole core sampled						
		remaining core kept						

NOVAMIN RESOURCES INC. — DRILL LOG — HOLE NO. 3-01

PROPERTY	TP OR AREA	AZIMUTH	DATE STARTED
Rundle	Newton Twp	045	4-12-87
PROJECT	**LOT & CONC.**	**DIP**	**DATE COMPLETED**
3382		0	5-12-87
CLAIM NO.	**CO-ORDINATES.**	**LENGTH**	**DRILLED BY**
	1993oN 2898E	17.3	N. Morrissette
GRID NO.		**COLLAR ELEV.**	**LOGGED BY**
Ramp Leg IV		3900.40	REN

CORRECTED DIP TESTS

LOCATION SKETCH OF HOLE

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
			OBJECTIVES:-					
0	2.59		Red Alt'd Porphyry:	11982	0	0.74	0.74	.2
			- med. grained; predominantly reddish alt'n	11983	0.74	1.64	0.90	.82
				11984	1.64	2.59	0.95	.24
			- fractured and bx'd to 1.64 and					
			in-filled with beige-cream siliceous					
			carb'd parallel to LCA					
			- up to 1% pyrite in weakly alt'd					
			section 0.34 to 1.64					
2.59	4.97		Mafic Volcanics:					
			- fine grained; green to grey-green	11985	2.59	3.11	0.52	.54
				11986	3.11	4.29	1.18	.85
			-strongly calcitic and magnetic	11987	4.29	4.97	0.68	.2
			- highly brecciated and healed with					
			beige grey carb mat'd and up to					
			5% diss'd pyrite 2.79 to 3.04					
			- generally made to strong calcite alt'n					
			with 2% diss'd and stgr. pyrite					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-01 SHEET 2 OF 3

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS				
4.97	5.91		Feldspar Porphyry:									
			- greymed. grained to 5.52 and	11988	4.97	5.52	0.55		.27			
			pinkish - reddish alt'n 5.52 to 5.91	11989	5.52	5.91	0.39		1.13			
			-minor qtz.-carb veining and weak									
			diss'd pyrite min'n and alt'n section									
			5.52-5.91									
5.91	7.80		Mafic Volcanics:									
			- dark green , fine grained,	11990	5.91	6.40	0.49	3%	10.01			
				11991	6.40	7.10	0.70	1%	0.45			
			-calcitic; magnetic	11992	7.10	7.80	0.70	1%	0.24			
			- fractured with good pinkish to									
			beige alt'n as veins and generally									
			3% pyrite as diss'd blebs and									
			veins from 5.91to 6.4 - alt'n									
			& min'n decreases away from									
			contact with porphyry									
			-6.4 to 7.8: weakly alt'd, chloritic									
7.80	8.03		Exhalite - Banded Chert-PyriteZone	11993	7.80	8.03	0.23		32.93	757		
			-dark purplish grey; grey and cream									
			chert bands 85 - 90° to LCA	avg.	5.91	8.03	2.12		6.11			
			-20% pyrite as thin bands and									
			veinlets									

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-01 SHEET 2 OF 2

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS	
8.03	11.11		Red Alt'd Porphyry:						
			- med. to coarse grained	11994	8.03	8.55	0.52	tr	.62
				11995	8.55	9.20	0.65	tr-½%	1.71
			- pink alt'd section 10.3 to 10.45	11996	9.20	9.90	0.70	tr-1%	2.37
			with 2% diss'd pyrite silica flooded	11997	9.90	10.53	0.63	1%	1.20
				11998	10.53	11.11	0.58	1%	6.96
			- generally weak greyish alt'n in places with up to 1% diss'd py						
			- minor qtz-carb veining						
~~11.11~~	~~11.34~~		~~Exhalite - Chert Pyrite:~~						
			As 7.80 to 8.03; pyrite more finely diss'd rather than bands and up to 5%	11999	11.11	11.34	0.23	5%	3.12
11.34	15.34		Mafic Volcanics:						
			-green to grey green , finely grained	12000	11.34	12.60	1.26		.27
				12101	12.60	13.60	1.00		.38
			- mod. fractured and alt'd to	12102	13.60	14.45	0.85		.20
			pinkish grey from 11.34 to 12.6	12103	14.45	15.00	0.55		.41
			with up to 1% diss'd pyrite in places.						
			-generally weak alt'n and min'n						
			- strongly calcitic, abundant bluish qtz. calcite veinlets and wisps						
			- purplish F.P. dikes up to 10 cm. 14.55 to 15.0						
			- 15.0 to 15.34: light grey alt'n possibly hybrid with dike and m.v. 5% diss'd py	12104	15.00	15.34	0.34		4.80

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-01 SHEET 2 OF 2

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
15.34	16.30		Dacite Dyke:	12105	15.34	16.30	0.96	.27
			- fine to med. grained, light grey-green					
			- pinkish fragments t.o.					
16.30	17.17		Feldspar Porphyry:	12106	16.30	17.17	0.87	.?
			- fine grained purplishgrey;					
			ressembles lamp dyke with					
			widely scattered feldspar phenos					
			in a mafic rich matrix					
			- strongly calcitic					
17.17	17.30		Ultramafic Volcs:	12107	17.17	17.30	0.13	.20
			- dark green; talc - chl schist					
			- minor diss'd pyrite					
			END OF HOLE					

NOVAMIN RESOURCES INC. — DRILL LOG — HOLE NO. 3-02

PROPERTY	TP OR AREA	AZIMUTH	DATE STARTED
Rundle Mine	Newton Twp	44° 56'56"	19-11-87
PROJECT	**LOT & CONC.**	**DIP**	**DATE COMPLETED**
3382		+0°10'59"	19-11-87
CLAIM NO.	**CO-ORDINATES.**	**LENGTH**	**DRILLED BY**
	1993.833N 2907.664E	16.8	N. Morissette
GRID NO.		**COLLAR ELEV.**	**LOGGED BY**
Leg IV		3900.294	C.P. Zorzl

CORRECTED DIP TESTS

LOCATION SKETCH OF HOLE

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS				
			OBJECTIVES:-									
0.0	5.30		Alt'd Mafic Volc.									
			- med. grey green f.g. m.g.	10848	0.0	0.75	0.75	½-1	.2			
			Structure: slightly sheared	10849	0.75	1.50	.75	½-1	.2			
				10850	1.5	2.25	.75	½-1	2.13			
			Alt'n & Veins: strong pervasive calcite numerous	10851	2.25	3.00	.75	2-3	5.14			
			faint narrow calcite veins	10852	3.00	3.75	.75	1-2	4.92			
				10853	3.75	4.50	.75	1-2	1.17			
			Min'n: sections w 3-5% f.g. diss and wispy py	10854	4.5	5.3	0.8	1-2	.2			
			overall 1-2% py									
5.30	6.13		Grey Bio F.P.	10855	5.30	6.13	0.83	tr	.2			
			Alt'd Mafic Volc.									
			- as above									
				10856	6.13	6.76	0.63	tr	0.69			
6.76	9.32		Alt'd Mafic Volc									
			- med. to dk grey, f.g. mag									
			Structure: highly sheared									
			Alt'n and Veins: lt. grey ch alt'n minor calcite, strongly silicified									
			- numerous paper thin qc veinlets	10857	6.76	7.25	0.49	5-10	17.31			
			-blebs of red alt'd F.P.	10858	7.25	7.70	0.45	2-3	14.93			
				10859	7.7	8.45	0.75	1-2	2.06			
			Min'n: 2-3% f.g. wispy and diss py									

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-02

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
9.32	10.33		Lamp Dyke (Dacite)					
10.33	11.20		Alt'd Volc.					
			- as above 0.0 - 5.3	10860	10.55	11.20	0.65	tr-½ 1.58
			-TCCS 11.20 - 11.40					
			-TCCS 10.33 - 10.38					
11.20	16.8		Hbld FSP Porphry. Lamp					
			- highly fractured very blocky core					
			- strongly calcitic veinlets and pervasive					

NOVAMIN RESOURCES INC. — DRILL LOG — HOLE NO. 3-09

PROPERTY	TP OR AREA	AZIMUTH	DATE STARTED	CORRECTED DIP TESTS
Rundle	Newton Twp	225°-41-25"	19-11-87	
PROJECT 3382	LOT & CONC.	DIP +3-47'-04"(3.78)	DATE COMPLETED 20-11-87	
CLAIM NO.	CO-ORDINATES. 1988.576N 2902.508	LENGTH 24.40	DRILLED BY N. Morissette	
GRID NO. Ramp Leg iv		COLLAR ELEV. 3900.676	LOGGED BY REN	

LOCATION SKETCH OF HOLE

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
			OBJECTIVES:-					
0	1.43		Pink Alt'd F.P.	13460	0	1-10	1.10	½-1% 3.75
			-med. grained; pink-grey to pink;	13461	1.10	1.43	0.33	5% 19.27
			- 2 short sections of alt'd cbnd mafics					
			at .55 to. .66 and 1.1 to 1.3 -					
			both sheared with 5-10% diss'd and					
			stringers of pyrite					
			-0.66 to 1.1: pink-red alt'd					
			porphyry ½ to 1% diss'd py					
			-minor quartz-carb veining filling					
			tension gashes and fractures 20° to 45°					
			to LCA					
1.43	2.33		Alt'd Mafic Volc's:	13462	1.43	2.33	0.90	2-3% .2
			-fine grained, grey-green with pinkish					
			coloration locally					
			-strongly sheared and fractured (fragmental)					
			and foliated 45° to 70° to LCA					
			-minor quartz veinlets, blebs and					
			stringer					
			-strong pervasive calcite alt'n					
			2-3% diss'd and hairline stringers					
			and veinlets of pyrite - parallel					
			to foliation mostly					
			- strongly magnetic t.o.					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-03

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS	
2.33	5.00		Pink Alt'd F.P.:						
			-fine to med. grained; grey-pink to 3.2	13463	2.33	3.20	0.87	tr	20
			salmon pink to 5.0	13464	3.20	4.10	0.90	½	20
				13465	4.10	5.00	0.90	½-1%	79
			-2 sets of qtz.carb veining 30-40°						
			to LCA, filling fractures						
			-weak to mod. foliation 40° to 45°						
			LCM						
			- weakly magnetic generally						
			-sparse to rare pyrite						
5.00	8.5		Grey Feldspar Porphyry:						
			-slight pinkish tinge locally; mod.	13466	5.00	5.75	0.75	½%	2
			to coarse grained; fine dark biotite	13467	5.75	7.20	1.45	sparse	.2
			specks t.o.	13468	7.20	8.50	1.30	½%	.2
			- no significant veining, min'n or alt'n						
			minor hairline qtz-calcite veinlets						
			-screen of dark grey figd mafics						
			at 7.0 to 7.45; -1to 2% fine						
			diss'd and stringers pyrite; contact 45°						
			to LCA						
			~~out control 45° to LCM~~						
			MOD. TO STRONGLY MAGNETIC						
*.%	L).(		Alt'd Mafic Volc's:						
			- dark to med. grey; fine grained	13469	8.50	10.00	1.50	3-5%	2.06
			- pinkish alt'n and 10.3 to 10.9 at	13470	10.00	10.90	0.90	"	2.06
			contact with porphyry						
			- minor grey-white quartz-calcite veinlets						
			5% veining at contact 10.5 - 10.9						
			- mod. chloritic and siliceous and						
			pervasive calcitic						

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-03

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS				
			8.5 to 10.9 cont'd:									
			- 3 to 5% diss'd and stringer									
			pyrite									
			- strongly magnetic t.o.									
10.90	12.17		Pink Alt'd F.P.:									
			- med. grained, pink-reddish	13471	10.9	12.17	1.27	1-2%	1.06			
			-3-5% qtz.-carb veins (up to 3 mm)									
			30° to 45° to LCA									
			-weakly magnetic locally									
			- 1-2% diss'd pyrite									
			- in-contact blockly and irregular									
			outcontact gradatiional with grey									
			porphyry									
12.17	24.40		Grey Feldspar Porphyry:	13472	12.17	14.10	1.93		.2			
			-generally massive, med. to coarse	13473	14.10	15.54	1.44		.2			
			grained	13474	15.54	17.00	1.46		.2			
			-abundant specks of biotite and	13475	17.00	18.10	1.10		.2			
			hbld? at possible magnetic	13476	18.10	19.50	1.40		.2			
				13477	19.50	21.10	1.60		.2			
				13478	21.10	22.40	1.30		.2			
				13479	22.40	24.40	2.00		.2			
			- weak to strong calcitic alt'n									
			t.o. - y									
			- no sig't veining or min'n;									
			tr. pyrite locally									
			END OF HOLE									

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-04

PROPERTY: Rundle	TP OR AREA: Newton Twp.	AZIMUTH: 46° - 03'-02"(46.05	DATE STARTED: Nov. 21/87.	CORRECTED DIP TESTS
PROJECT: 3382	LOT & CONC.	DIP: -2-10'-12" (2.17)	DATE COMPLETED: Nov. 21/87.	
CLAIM NO.	CO-ORDINATES: 1989.491N 2910.445	LENGTH: 15.80 m	DRILLED BY: N. Morissette	
GRID NO.: Ramp Leg 4		COLLAR ELEV.: 3899.290	LOGGED BY: REN	

LOCATION SKETCH OF HOLE

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
			OBJECTIVES:-					
0	5.5		Pink grey alt'd Porphyry:					
			- med. to coarse grained; pink to					
			pink grey - weak to mod. pink	13480	0	0.6	0.6	2-3% 1.37
			Alt'n pink alt'n ends at 5.15	13481	0.6	1.39	0.79	r-½% 1.37
				13482	1.39	2.32	0.93	0.21
			-weak to mod. magnetic stringer	13483	2.32	2.88	0.56	2.61
			in unaltered zones	13484	2.88	3.68	0.80	0.69
				13485	3.68	4.36	0.68	0.34
			-strongest alt'n from 0.2 to 1.39	13486	4.36	5.50	1.14	0.41
			- weak to mod. calcite alt'n					
			Min'n: 2-3% fine diss'd py 0.2 - 0.6					
			-½ - 1% in general					
			Veining: thin to hairline qtz-carb.					
			veinlets parallel to sub-parallel					
			to LCA cut by younger set					
			35-40° to LCA.					
5.5	12.63		Mafic Volcs:					
			-fine grained, med. to dark green to	13487	5.50	6.45	0.95	2-5% 1.51
			grey-green	13488	6.45	7.16	0.71	.20
			-mod. to strongly magnetic t.o.	13489	7.16	8.10	0.94	.20
			-chloritic and strongly calcitic	13490	8.10	8.60	0.50	0.51
			- minor qtz-carb veinlets, veins	13491	8.60	9.29	0.67	5.97
			and stringers - 10° to 45° to LCM	13492	9.27	10.04	0.77	1.46
			minor silica flooding	13493	10.04	10.79	0.75	2.54
			-2-5% diss'd blebs and stringers	13494	10.79	11.55	0.76	1.71
			pyrite 1 15 mm thick band with	13495	11.55	12.63	1.08	2.47
			10% pyrite and beige carb alt'n at 9.71.					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-04

PROPERTY: Rundle	TP OR AREA: Newton Twp.	AZIMUTH: 46° - 03'-02"(46.05	DATE STARTED: Nov. 21/87.	CORRECTED DIP TESTS
PROJECT: 3382	LOT & CONC.	DIP: -2-10'-12" (2.17)	DATE COMPLETED: Nov. 21/87.	
CLAIM NO.	CO-ORDINATES: 1989.491N 2910.445	LENGTH: 15.80 m	DRILLED BY: N. Morissette	
GRID NO.: Ramp Leg 4		COLLAR ELEV.: 3899.290	LOGGED BY: REN	

LOCATION SKETCH OF HOLE

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
			OBJECTIVES:-					
0	5.5		Pink grey alt'd Porphyry:					
			- med. to coarse grained; pink to					
			pink grey - weak to mod. pink	13480	0	0.6	0.6	2-3% 1.37
			Alt'n pink alt'n ends at 5.15	13481	0.6	1.39	0.79	r-½% 1.37
				13482	1.39	2.32	0.93	0.21
			-weak to mod. magnetic stringer	13483	2.32	2.88	0.56	2.61
			in unaltered zones	13484	2.88	3.68	0.80	0.69
				13485	3.68	4.36	0.68	0.34
			-strongest alt'n from 0.2 to 1.39	13486	4.36	5.50	1.14	0.41
			- weak to mod. calcite alt'n					
			Min'n: 2-3% fine diss'd py 0.2 - 0.6					
			-½ - 1% in general					
			Veining: thin to hairline qtz-carb.					
			veinlets parallel to sub-parallel					
			to LCA cut by younger set					
			35-40° to LCA.					
5.5	12.63		Mafic Volcs:					
			-fine grained, med. to dark green to	13487	5.50	6.45	0.95	2-5% 1.51
			grey-green	13488	6.45	7.16	0.71	.20
			-mod. to strongly magnetic t.o.	13489	7.16	8.10	0.94	.20
			-chloritic and strongly calcitic	13490	8.10	8.60	0.50	0.51
			- minor qtz-carb veinlets, veins	13491	8.60	9.29	0.67	5.97
			and stringers - 10° to 45° to LCM	13492	9.27	10.04	0.77	1.46
			minor silica flooding	13493	10.04	10.79	0.75	2.54
			-2-5% diss'd blebs and stringers	13494	10.79	11.55	0.76	1.71
			pyrite 1 15 mm thick band with	13495	11.55	12.63	1.08	2.47
			10% pyrite and beige carb alt'n at 9.71.					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-05

SHEET 1 OF 2

PROPERTY: Rundle Mine	TP OR AREA: Newton Twp.	AZIMUTH: 223°-51'-56" (223.87)	DATE STARTED: Nov. 21/87.
PROJECT: wedgsrf 3382	LOT & CONC.	DIP: +1 -15'-36"(1.26)	DATE COMPLETED: Nov. 21/87.
CLAIM NO.	CO-ORDINATES: 1986.667N 2907.493E	LENGTH: 10.3	DRILLED BY: N. Morissette
GRID NO.: Ramp (leg 4)		COLLAR ELEV: 3899.463	LOGGED BY: REN

CORRECTED DIP TESTS

LOCATION SKETCH OF HOLE

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
			OBJECTIVES:-					
0	1.35		Pink Alt'd F.P.	13580	0	1.35	1.35	% 3.29
			- med. grained					
			-minor qtz-carb veining					
			-1% diss'd py 1.15 - 1.35					
			- 2-3 mm veins and carb alt'n					
			-generally weak alt'n and min'n					
			-0-0.50 broken core - 20% lost					
			-out-contact 5° to L.C.A.					
1.35	1.90		Mafic Volcs:	13581	1.35	1.90	0.55	% 0.94
			-fine grained; dark green;					
			- hard silicized locally;					
			-strongly sheared and in-filled with qtz.-calcite; shearing 45° to LCA					
			-strong pervasive calcite					
			-strongly magnetic					
			-1% diss'd and fine stringer pyrite					
			-sheared out-contact with veins of pyrite, 45° to LCA.					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-05

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
1.90	2.75		Pink Alt'd F.P.					
			-med. grained; pink to pink-grey	13582	1.90	2.75	0.85	.45
			mottled texture locally					
			-well fractured and infilled with qtz-carb					
			veins 30 - 40° to LCA					
			mod. to strongly magnetic					
			sparse pyrite					
2.75	4.70		Mafic Volcanics:					
			As 1.35 to 1.90	13583	2.75	4.00	1.25	.17
				13584	4.00	4.70	0.70	
			-1-2% diss'd blebs and wisps of					
			pyrite					
			- no sig't alt'n, veining or min'n					
			- occ dykelet (2-3 cm) of F.P.					
			-strongly magnetic					
4.70	5.42		Grey Hbld Feldspar Porphyry:	13585	4.70	5.42	0.72	.20
			- purplish grey; med. to c.g.					
			- occ speck of pyrite					
			- no sig veining or alt'n					
			-out-contact 75 - 80° to LCA					
5.42	8.1		Feldspar Porphyry - Hybrid:					
			- med. grained; pinkish grey; small	13586	5.42	6.20	0.78	.20
			patches & wisps of chloritic mafics	13587	6.20	7.00	0.80	.20
				13588	7.00	8.10	1.10	.20
			- rare diss'd py; one 1cm band of					
			10-20 % diss'd pyrite at 6.7					
			-out-contact 10-15°					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 305

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
8.10	9.02		Mafic Volcs:					
			-fine grained; grey-green	13589	8.10	9.02	0.92	1-2% .2
			-3% thin grey white veinlets of					
			qtz-carb - 45° to LCA					
			1-2% diss'd pyrite and blebs					
			and patches					
			- mod. to strongly calcitic					
			-strongly magnetic					
9.02	10.3		Grey Feldspar Porphyry:					
			- med. grained; specks of maybe	13590	9.02	9.41	0.39	1% .82
			biotite and hbld	13591	9.41	10.30	0.89	tr .20
			- red alt'n from 9.11 to 9.41					
			-with large patch of white quartz					
			at 9.11 to 9.21; this zone					
			~~has 1% fine pyrite and~~					
			weak calcitic alt'n.					
			- magnetic locally					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-06

PROPERTY: Newton Twp.	TP OR AREA: Newton Twp.	AZIMUTH: 43°-15'16"(43.25)	DATE STARTED: 21/11/87
PROJECT: 3382	LOT & CONC.	DIP: +5°-15'-57" (5.27	DATE COMPLETED: 22-11-87
CLAIM NO.	CO-ORDINATES: 1987121N 2915.128	LENGTH: 17.20	DRILLED BY: N. Morissette
GRID NO.: Leg IV		COLLAR ELEV.: 3898.011	LOGGED BY: REN

CORRECTED DIP TESTS

LOCATION SKETCH OF HOLE

METRES FROM	METRES TO	SECTION	DESCRIPTION
			OBJECTIVES:-
0	11.05		Pink and grey feldspar Porphyry:
			-altered pink sections to 4.30 with up to 1% diss'd pyrite; grey to purplish to 11.05
			-weak to strongly magnetic locally t.o.
			-fairly abundant narrow qtz-carb veins and veinlets 45° to 60° to L.C.A. predominantly in pink altered sections
			-strongly calcitic in grey porphyry beyond 4.20
			-thin screening of mafic volcanics 5.70 to 5.95 in pyrite 1%
11.05	12.33		Mafic Volcanics:
			-green to grey-green, fine grained
			-strongly magnetic
			-11.58 to 12.33: 3 thin sheared zones of alteration beige car with 5-10% diss'd py and upto .15 m in thickness
			3-5% pyrite generally
			-minor blebs, stgrs and veinlets of qtz-carb
			-weak to mod. calcitic

SAMPLE NO.	FROM	TO	LENGTH	ASSAYS	
13437	0	1.0	1.0	½%	1.30
13438	1.0	2.0	1.0	½-1%	1.27
13439	2.00	2.66	0.66	1-2%	6.65
13440	2.66	3.15	0.49	tr	0.55
13441	3.15	3.80	0.65	½-1%	5.69
13442	3.80	4.40	0.60	½-1%	1.92
13443	4.40	5.15	0.75	½%	0.82
13444	5.15	5.80	0.65	½%	0.24
13445	5.80	6.45	0.65	½%	1.20
13446	6.45	7.13	0.68	tr	0.86
13447	7.13	7.70	0.57	sparse	0.69
13448	7.70	8.30	0.60	sparse	1.82
13449	8.30	9.05	0.75	sparse	4.22
13450	9.05	9.81	0.76	tr-½%	1.85
13451	9.81	10.33	0.52	tr	0.31
13452	10.33	11.05	0.72	tr	.2
13453	11.05	11.58	0.53	1%	0.69
13454	11.58	12.33	0.75	5-10%	16.87

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-06

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS				
12.33	12.92		Pink Alt'd Feldspar Porphyry:	13455	12.33	12.92	0.59	1%	2.88			
			med. grained; irregular out-contact 45° LCA									
			-minor qtz-carb stringers veinlets & blebs									
			some chlorite veins at 45°									
			strongly calcitic									
			½ - 1% diss'd pyrite									
12.92	13.50		Mafic Volcs: As 11.05 to 12.33	13456	12.92	13.50	0.58	1-2%	0.55			
			1-2% Py									
13.50	13.93		Feldspar Porphyry - hybrid	13457	13.50	13.93	0.43	2%	12.27			
			-weak pinkish alt'n; sheared									
			with greenish alt'n locally									
			-2% pyrite pyrite stringers also									
			at in-contact									
13.93	14.86		Mafic Volcs: thin screen: minor py									
14.86	15.00		Dacite Dyke:									
			-massive, fine to med. grained	13458	13.93	15.00	1.07	tr	0.65			
			pink porp. frags; magnetic									
			no sig min'n									
			-strongly calcitic									
15.00	17.20		Ultramafic -talc-carb schist.	13459	15.00	17.20	2.00		.2			
			-strongly magnetic; calcitic; chloritic									
			minor qtz-carb veins; no sig t									
			mineralization									
			END OF HOLE									

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-07 SHEET 1 OF 3

PROPERTY	TP OR AREA	AZIMUTH	DATE STARTED	CORRECTED DIP TESTS
Rundle	Newton Twp.	225°-05'37"(225.09)	Nov. 22/87	
PROJECT 3382	LOT & CONC.	DIP -3°-05'-57" (3.099)	DATE COMPLETED Nov. 23/87.	
CLAIM NO.	CO-ORDINATES. 1984.362N 2912.22SE	LENGTH 25.8	DRILLED BY N. Morissette	
GRID NO. Ramp Leg A		COLLAR ELEV. 3898.348	LOGGED BY REM	

LOCATION SKETCH OF HOLE

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
			OBJECTIVES:-					
0	0.63		Pink Alt'd F.P.:	13710	0	0.43	0.43	.72
				13711	0.43	0.63	0.20	9.05
			- fine to med. grained;					
			-light pink grey to 0.43					
			-1-2% pyrite in pink alt'd zone					
			0.43 to 0.65 with brecciated					
			contract zone infilled with sil. grey					
			carb. material					
			tan sericite? alt'n locally					
			Out-contact 45-50° to L.C.M.					
0.63	1.96		Mafic Volcs:	13712	0.63	1.43	0.80	5.69
			-dark green, fine grained;	13713	1.43	1.96	0.53	12.48
			-grey alt'd band along thin					
			vein locally	avg.	0.43	1.96	1.53	8.48
			1-2% pyrite diss'd along					
			fractures; 20% pyrite as patches					
			in 2.5 cm zone at in-contact.					
			10% pyrite as diss'd and stringers					
			along fractures 1.81 to 1.96					
			at out-contact in grey altered					
			zone.					
			-irregular out-contact 90° to L.C.M.					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 307

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
1.96	12.14		Grey to pink alt'd Feldspar Porphyry:	13714	1.96	2.91	0.95	1.30
			-med. to coarse grained; predominantly	13715	2.91	3.56	0.65	.72
			pinkish grey	13716	3.56	4.20	0.64	.38
				13717	4.20	4.95	0.75	.2
			-2% qtz-carb veining	13718	4.95	5.65	0.70	.2
				13719	5.65	6.40	0.75	.2
			-mod. calcitic alt'n locally in	13720	6.40	7.10	0.70	.2
			the grey sections	13721	7.10	7.95	0.85	.2
				13722	7.95	8.65	0.70	.2
			-generally sparse py min'n - trace	13723	8.65	9.40	0.75	.2
			in most sections	13724	9.40	10.15	0.75	.2
				13725	10.15	10.90	0.75	.2
			-½ - 1% diss'd py in pink section	13726	10.90	11.20	0.30	.2
			7.95 to 8.5	13727	11.20	12.14	0.94	.2
				13728	12.14	12.68	0.54	6.21
				13729	12.68	13.64	0.96	.41
12.14	16.83		Pink Alt'd Feldspar Porphyry	13730	13.64	14.32	0.68	.34
				13731	14.32	15.07	0.75	.62
			Med. grained; salmon pink to	13732	15.07	15.62	0.55	2.26
			pink-grey	13733	15.62	16.83	1.21	.2
			-typical minor qtz-carb veining	avg.	12.14	13.64	1.5	2.50
			-no sig't min'n or alt'n	avg.	14.37	15.62	1.3	1.31
16.83	21.08		Interbanded Pink and Grey Feldspar Porphyry:	13734	16.83	17.77	0.94	.2
				13735	17.77	18.40	0.63	.65
			-med. to coarse grained;					
			Pink Alt'd Zones:					
			16.81 - 18.41: pink to pink grey;					
	non-calcitic		strongly fractured and in-filled with quartz-					
			carb veinlets, wisps and stringers. Generally					
			sparse pyrite min'n, minor thin bands of beige					
			carb alt'n; veins 45° to 70° L.C.M.					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-07

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
			16.81 - 18.80: cont'd	13736	18.40	18.80	0.40	.34
			A zone of red alt'd occurs	13737	18.80	20.25	1.45	.2
			between 18.63 & 18.80 with	13738	20.25	21.09	0.84	.2
			up to 1% py					
			20.25 to 21.09: pink to pink-grey:					
			sparse diss'd py;					
			-minor qtz-car veining at					
			2 directions 30-40° to L.C.A.					
			(2 sets) locally					
21.09	25.80		Grey Feldspar Porphyry:	13739	21.09	22.07	0.98	.2
				13740	22.07	22.80	0.73	.2
			-med. to coarse grained	13741	22.80	23.47	0.67	.2
				13742	23.47	24.27	0.80	.2
			-no sig't min'n or alt'n	13743	24.27	24.92	0.65	.2
			-minor qtz-carb veins and veinlets	13744	24.92	25.80	0.88	.2
			-mod. magnetic					
			-stron pervasive calcite					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-08

PROPERTY	TP OR AREA	AZIMUTH	DATE STARTED	CORRECTED DIP TESTS
Rundle Mine	Newton	0.45°	6-12-87	
PROJECT 3382	LOT & CONC.	DIP Flat 0	DATE COMPLETED 6-12-87	
CLAIM NO.	CO-ORDINATES. 1985.3N 2921OE	LENGTH 11.30 m	DRILLED BY Morissette	
GRID NO.	Sect. 1025SE	COLLAR ELEV. 3896.8m	LOGGED BY C.P. Zorzi	

LOCATION SKETCH OF HOLE

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS	
			OBJECTIVES:-						
0.0	0.32		Alt'd Mafic Volc.						
			-dk grey to black, f.g. magnetic						
				11446	0.00	0.32	0.32	2-3	0.62
			Alteration & Veins: strongly calcitic w. thin calcit	veins					
			Min'n: 2-3% fig. diss py						
0.32	9.25		Grey Bio Slightly alt'd F.P.	11447	0.32	1.42	1.10	tr	.48
			-minor red alt'd sections	11448	1.42	1.85	0.43	tr	2.23
				11449	1.85	3.00	1.15	tr	0.89
			Min'n: tr-½% fig. diss py	11450	3.00	4.00	1.0	tr	0.51
				11451	4.00	5.00	1.0	tr	0.24
				11452	5.00	6.00	1.0	tr	.2
9.25	10.5		Red Alt'd AVFP	~~11453~~	~~6.00~~	~~6.92~~	~~0.92~~	~~tr~~	~~.2~~
				11454	6.92	7.60	0.68	tr-½	3.05
			-red, m.g., slightly magnetic	11455	7.60	8.60	1.0	tr	0.31
				11456	8.60	9.25	0.65	tr	1.44
			Structure: highly sheared						
			Alt'n & Veins: mod red alt'n w a few qtz stringers	11457	9.25	10.00	0.75	½-1	1.10
			& veinlets	11458	10.00	10.58	0.58	½-1	0.86
			Min'n: tr - ½% fig. py w specks of cp	avg.	6.92	10.58	3.66		1.27

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-08

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
10.58	11.30		Alt'd Mafic Volc					
			-as above w 1-2% py	11459	10.58	11.30	0.72	0.34
			NOTES:					
			LKT 47 core					
			whole core samples					
			End of Hole					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-09

PROPERTY: Rundle	TP OR AREA: Newton Twp	AZIMUTH: 225	DATE STARTED: 5-12-87	CORRECTED DIP TESTS
PROJECT: 3382	LOT & CONC.	DIP: 0	DATE COMPLETED: 5-12-87	
CLAIM NO.	CO-ORDINATES: 1982.6N 291810E	LENGTH: 10.2	DRILLED BY: N. Morissette	
GRID NO.: Ramp Leg iv	Section 1025SE	COLLAR ELEV.: 3996.7	LOGGED BY: R.E. Norman	

LOCATION SKETCH OF HOLE

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
			OBJECTIVES:-					
0.0	3.92		Pink Alt'd Porphyry	11970	0.0	1.38	1.38	.62
				11971	1.38	2.88	1.50	.48
			-pink to pink grey; med. grained;	11972	2.88	3.70	0.82	3.53
			-unalt'd grey to 0.53 and					
			from 0.88 to 1.38					
			-generally, minor alt'n and min'n					
			and veining					
			-screen of mix with 3-5% pyrite	11973	3.70	3.92	0.22	.2
			at 3.7 to 3.8.					
3.92	5.30		Alt'd Mafic Volcanics:					
			-fine grained; grey	11974	3.92	4.32	0.40	5% 10.01
			-mod. to strongly alt'd with 3-5%	11975	4.32	5.30	0.98	3% 2.46
			stringers, veins, blebs and diss'd					
			pyrite	avg.	3.92	5.30	1.38	1.64
			-strongly fractured and bx'd					
			and infilled with pinkish	avg.	2.88	5.30	2.42	3.85
			beige carb'n					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-09

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS				
5.30	10.2		Pink-red alt'd feldspar Porphyry	11976	5.30	6.30	1.0	tr	.34			
				11977	6.30	7.30	1.0	tr	.2			
			-med to c.g'd, pinkish grey to	11978	7.30	8.60	1.30	tr	.2			
			7.2.									
			-generally sparse diss'd pyrite									
			in places									
			-8.6 to 9.85: pink alt'd	11979	8.60	9.35	0.75	½%	2.79			
			with up to 1% diss'd pyrite	11980	9.35	9.85	0.50	½-1%	10.15			
			-generally weak alt'd of	11981	9.85	10.10	0.35		0.72			
			one porphyry type									
			-minor qtz. carb veining t.o.	avg.	8.60	9.85	1.25		5.74			
			End of Hole									

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-10

PROPERTY	TP OR AREA	AZIMUTH (0.45)	DATE STARTED 5/12/87	CORRECTED DIP TESTS
PROJECT	LOT & CONC.	DIP -90°	DATE COMPLETED 5/12/87	
CLAIM NO.	CO-ORDINATES. 1983.3N 2925.9SE	LENGTH 9.70	DRILLED BY	
GRID NO.	Section 1030SE	COLLAR ELEV. 3895.8	LOGGED BY C.P.Zorz)	

LOCATION SKETCH OF HOLE

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS				
			OBJECTIVES:-									
0.0	2.74		Alt'd Mafic Volc.									
			-dk. grey, f.g. mag.	11460	0.0	1.0	1.0	tr	3.19			
				11461	1.0	2.0	1.0	tr	1.03			
			Structure: sh'd, fractured w 9.8m fault?	11462	2.0	2.74	0.74	tr	.2			
			Alt'n & Veins: strongly calcitic w numerous									
			thin calcitic veinlets									
			Min'n: tr py									
2.74	5.45		Grey Bio F.P.	11463	2.74	4.00	1.26	tr	.21			
				11464	4.00	5.00	1.00	tr	.21			
				11465	5.00	6.00	1.00	tr-½	.41			
5.45	8.00		Grey Slightly Alt'd F.P.									
			-grey red, mig. slightly magnetic									
			-Structure: sheared									
			Alt'n & Veins: mod. patches or gradational red									
			alt'n w few qc veinlets	11466	6.00	7.00	1.00	tr	.51			
			-chloritic infillings	11467	7.00	8.00	1.00	tr	.45			
			Min'n: tr-½% f.g. diss py									

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-10

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS				
8.00	9.70		Red Alt'd F.P. core prophyry									
			-red, med. grained, slightly magnetic, inclusions									
			of mafic volc over last 0.4m of core	11468	8.00	8.65	0.65	3-5	10.42			
	S		Structure: highly sheared	11469	8.65	9.30	0.65	3-5	5.90			
				11470	9.30	9.70	0.40	5-7	12.55			
			Alt'n & Veins: good red beige alt'n w lt. grey ch.	alt'n								
			in the volcanics									
			-numerous thin lt. grey qc veinlets									
			Min'n: 3-5% fig. diss py	avg.	8.00	9.70	1.70		9.19			
			NOTES:									
			LKT 47 core									
			whole core sampled									
			-hole should be extended because zone still									
			present at end of hole.									

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-11

PROPERTY	TP OR AREA	AZIMUTH (225°)	DATE STARTED 10/12/87	CORRECTED DIP TESTS
PROJECT	LOT & CONC.	DIP (00.)	DATE COMPLETED 10/12/87	
CLAIM NO.	CO-ORDINATES. 19805N/29229E	LENGTH 14.10m	DRILLED BY	
GRID NO.	Sect. 1030SE	COLLAR ELEV. 3895.8m	LOGGED BY C.P. Corel	

LOCATION SKETCH OF HOLE

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS	
			OBJECTIVES:-						
0.00	3.72		Alt'd Mafic Volc						
			-med. grey, f.g., magnetic	2620	0.0	1.00	1.00	tr-½	1.10
				2621	1.0	2.0	1.0	tr-½	.2
			Structure: sh'd	2622	2.0	2.3	0.3	½-1	3.15
				2623	2.3	3.0	0.70	tr-½	2.61
			Alt'n & Veins: weak lt. grey alt'n w weak to moderate						
			pervasive calcite	2624	3.0	3.72	0.72	½-1	1.71
			-numerous paper thin lt. grey qc & calcite						
			veins	avg.	3.0	3.72	1.72		2.33
			Min'n: patches diss py up to 1%	avg.	3.72	7.50	3.78		6.40
3.72	8.30		Red Alt'd F.P. Core porphyry						
			-red to beige, m.g., slightly magnetic	2625	3.72	4.50	0.78	1-2	4.78
			Structure: sheared	2626	4.50	5.25	0.75	1-2	5.28
				2627	5.25	6.00	0.75	1-2	9.39
			Alt'n & Veins: red to beige alt'n w numerous qtz.						
			veins	2628	6.00	6.75	0.75	½-1	9.33
				2629	6.75	7.50	0.75	tr-½	3.26
			Min'n: 1-2% fig. diss py	2630	7.50	8.30	0.80	tr	0.31
8.30	11.2		Grey Bio F.P.	2631	8.30	9.0	.7	tr	.2
				2632	9.0	10.0	1.0	tr	.2
				2633	10.0	11.0	1.0	tr	.2
				2634	11.0	11.5	.5	tr	.2

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 5-11 SHEET 2 OF 2

METRES FROM	METRES TO	SECTION	DESCRIPTION
11.50	14.10		Grey Slightly Alt'd F.P.
			-minor red alt'n biotic w tr py
			NOTES:
			LKT 46 core
			whole core sampled
			10-12-87

SAMPLE NO.	FROM	TO	LENGTH	ASSAYS				
2635	11.50	12.00	0.50	tr	0.86			
2636	12.00	12.75	0.75	tr	0.21			
~~2637~~	~~12.75~~	~~13.40~~	~~0.65~~	~~tr~~	.2			
2638	13.40	14.10	0.70	tr	.2			

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-19

PROPERTY	TP OR AREA	AZIMUTH	DATE STARTED	CORRECTED DIP TESTS
		225.0°	13/12/87	
PROJECT	LOT & CONC.	DIP -00°	DATE COMPLETED 13/12/87	
CLAIM NO.	CO-ORDINATES. 1978.35N 2928.00E	LENGTH 19.90 m	DRILLED BY	
GRID NO.	Sect. 1035SE	COLLAR ELEV. 3894.5	LOGGED BY	

LOCATION SKETCH OF HOLE

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
			OBJECTIVES:-					
0-	1.36		MaFIC Volcanics:	2685	0	1.36	1.36	0.38
			-fine grained, dark grey - green;					
			-calcitic and magnetic					
			-weak carb;d grey alt'd 0.76 to 0.94					
			with 5% fine diss'd py					
			-generally 1% diss'd pyrite and wisps					
			& steps in fractures locally					
			-minor qtz-carb veining	avg.	3.20	8.90	5.7	10.37
1.36	10.4		Pink Alt'd Feldspar Porphyry:					
			-med. to c.g.; greyish to 2.90	2686	1.36	2.38	1.02	0.2
			and reddish 7.3 to 9.9	2687	2.38	3.20	0.82	0.2
				2688	3.20	3.97	0.77	30.58
			grey to beige grey alt'n with	2689	3.97	4.60	0.63	5.77
			silica flooding and 3-5% diss'd py	2690	4.60	5.50	0.90	4.94
			and pyritic veins from 3.2 to 3.97					
			Alt'd appears parallel to sub-parallel					
			to L.C.A. - (one porphyry)					
			-weak greyish alt'n with up to	2691	5.50	5.90	0.40	6.86
			1% pyrite 5.5 to 5.9	2692	5.90	6.90	1.00	2.13
				2693	6.90	7.90	1.00	16.49
			-mod. qtz.-carb veining t.o. 30°	2694	7.90	8.90	1.00	6.10
				2695	8.90	9.90	1.00	0.27
				2696	9.90	10.42	0.52	0.2

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-24

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS			
50.20	51.76		Mafic Volcanics	11421	50.20	51.20	1.0	0-3	.2		
				11422	51.20	51.76	0.56	2-3	.2		
			Altn- calcitic 2-3% fractures healed with calcite								
			Min - 2-3% fine diss py assoc w calcite in fractures								
			-51.15 - 51.28 quartz - minor calcite vein at 30° T.C.A.								
51.76	54.14		Grey Bio F.P.								
			-mg grey bio F.P.								
			-see relect feldspar porphyryoblasts								
			-weakly alt'd chloritic								
			-irregular ct. w next unit								
54.14	57.22		Altered mafic Volcanics	11423	54.14	54.74	0.6	2	.2		
			-dark grey lg mafic volcanics mod. magnetic	11424	54.74	55.82	1.08	1-2	.2		
				11425	55.82	56.82	1.00	1-2	.21		
			Altn. calcitic beige grey dolomite qtz ore altn	11426	56.82	57.22	0.40	5	26.26		
			along fractures at 70° T.C.A. at 54.51 - 54.68								
			55.87 - 56.26, 56.82-57.22								
			min - 1-2% f.g. diss py in altd sections 2-3%								
			lg diss py assoc w pale grey altn along fractures								
			54.51 - 54.68, 5% py assoc w grey altn 56.82-								
			57.22								
57.22	62.42		Pink Altered F.P.								
			-pink pale to red red mg. F.P.	11427	57.22	58.32	1.1	1-2%	.2		
				11428	58.32	59.12	0.8	2-3%	4.22		
			Alt'n intensely alt'd w pale beige carbonate alteration	11429	59.12	59.72	0.6	2%	.45		
			-band of pale beige alt'n 57.67 - 57.74 pervasive	11430	59.72	60.42	0.7	4%	11.42		
			pale beige alt'n along hairline fractures	11431	60.42	60.82	0.4	1-2%	2.26		
			58.32 - 59.12 - also 59.72 - 60.42	11432	60.82	62.12	1.3	1%	.2		
				11433	62.12	62.52	0.40	2%	4.77		
			Min - 1-2% diss py F.P. 57.22 - 58.32, 2-3%								
			58.32 - 59.12								
			2% 59.12 - 59.72, 59.72 - 60.42, 3-4% py, 60.42								
			-60.92		56.82	60.42	3.60		6.21		
			1-2% Py, 60.82 - 61.12 1% py, 61.12-61.48 2% py	avg.	56.82	62.52	5.70		4.46		
			Roarke Hybrid Zone - mafic volcanics in red F.P. 60.42 - 60.82								
			alt'd inclusive mafic volcanics 61.12 - 61.35								
			unit ends at qv at 15° T.C.A. at 61.48								

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-24

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS				
62.47	80.72		Mafic Volcanics									
			-dark grey lg mafic volcanics									
			-generally calcitic - magnetic	11434	62.52	64.02	1.5	1	.55			
			-1% fg. diss py assoc. w calcite , lactic fractures	11435	64.02	65.02	1.0	1	.62			
			-66.54 - 66.92 lamp dyke	11436	65.02	66.52	1.5	1	.58			
			67.88 - 70.10 - dark grey F.P. dyke w inclusions	11440	70.10	70.95	0.85	tr-1	.34			
			unaltered mafic volc lower at 45° T.C.A.	11441	70.95	71.95	1.0	tr-1	.45			
			Mineralization - 71.95 - 72.35 intensely altd section	beige	carbonate							
				11442	71.95	72.80	0.85	3	23.80			
			alteration dolomite 2% diss py	11443	72.80	73.10	0.30	2-3	18.96			
			72.35 - 72.80 pale beige ore alt'n - 5% mg. py	11444	73.10	73.9	0.80	1	.51			
			-alt'n along fractures at 50° T.C.A.	11445	73.9	75.10	1.20	2-3	2.16			
			-72.86 - 73.07 - quartz veining at 50° T.C.A.									
			-minor pale grey alt'n & 2-3% py assoc w									
			frags of mafic volc in q.v.									
			-73.77 - 73.85 - quartz veining similar to above									
			at 50° T.C.A.	11437	66.52	67.85	1.33	1	.2			
			-74.05 - 75.10 - quartz flooding of calcitic mafic	11438	67.85	68.85	1.0	tr	.34			
			volcanics 2-3% lg diss py assoc w quartz	11439	68.85	70.10	1.25	tr	.24			
			+ calcite which has flooded mafic volcs									
			fabric at 55° T.C.A.									
			-narrow grey F.P. dykes at 45- 55° T.C.A.									
			78.59 - 78.63	avg.	71.95	73.10	1.15		22.54			
			80.43 - 80.51, 80.53 - 80.57.									
				avg.	71.95	75.10	3.15		9.18			
	80.72		End of Hole									
			Core size AW									
			Whole core samples									

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-25 SHEET 1 OF 3

PROPERTY	TP OR AREA	AZIMUTH	DATE STARTED
Rundle	Newton	235°	1/2/87
PROJECT 3382	LOT & CONC.	DIP -50°	DATE COMPLETED 12/12/87
CLAIM NO.	CO-ORDINATES. 2010.00N/300980E	LENGTH 99.90	DRILLED BY Morissette
GRID NO.		COLLAR ELEV. 3877.50m	LOGGED BY REN

CORRECTED DIP TESTS

LOCATION SKETCH OF HOLE

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
			OBJECTIVES:-					
0	22.06		Ultramafic Volcanics:					
			-dark to med. green; fine grained	4208	0	1.81	1.81	tr .2
			-talcose: calcitic locally	4209	1.81	2.69	0.88	2-3% 2.88
			-fractured and bx'd strongly car'd					
			and sil to olive green 1.81 to	4210	2.69	3.62	0.93	tr 2.33
			2.69 with 2-3% diss'd pyrite	4211	3.62	4.86	1.24	0.34
			near massive veins locally					
			-strongly foliated S° to L.C.M.	avg.	1.81	3.62	1.81	2.60
			1.44 to 5.26					
			-2-3% diss'd fine enhedral pyrite	4212	4.86	5.31	0.45	.20
			4.86 - 5.31					
			-minor spinifex in places					
			15.07 to 15.75: Lamp Dyke					
			grey-green, minor diss'd py;					
			strongly calcitic					
22.06	25.17		Hbld. Feldspar Porphyry:					
			-fine to med. grained; purplish grey	4213	22.06	22.86	0.80	.21
				4214	22.86	23.75	0.89	.20
			-½ to 1% fine diss'd pyrite	4215	23.75	24.24	0.49	.20
			-no sig't alt'n or veining	4216	24.24	25.17	0.93	.2

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-25

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
25.17	62.81		Ultramafic Flows:					
			-dark to light green fine grained					
			-Bx'd in places and infilled by dark green chlorite; talcose generally					
			36.68 to 38.90: Hbld Feldspar Porphyry	4217	36.68	37.32	0.64	.2
			fine grained, purplish	4218	37.32	38.32	1.00	.2
			½% diss'd and blebs of pyrite	4219	38.32	38.90	0.58	.2
			t.o. moderately calcitic					
			also minor dykes 51.90 to 52.50					
			-strong spinifex textures 59.4 to 62.0					
62.81	79.21		Feldspar Porohyry	avg	62.81	78.98	17.34	.28
				4220	62.81	63.81	1.00	.2
			-fine to med. grained, purplish to greyish	4221	63.81	64.71	0.90	.2
				4222	64.71	65.47	0.76	.2
				4223	65.47	66.12	0.65	.21
			-fine grained with greyish patches of volcanics (hybrid) to 65.47 with minor blebs of py	4224	66.12	67.58	1.46	.27
				4225	67.58	69.05	1.47	.20
				4226	69.05	70.51	1.46	.2
			-pink alt'd (one porphyry) at 78.98 to 79.21 with weak silica flooding and qtz. carb veining minor diss'd pyrite	4227	70.51	71.95	1.44	.2
				4228	71.95	73.49	1.54	0.48
				4229	73.49	74.91	1.42	.20
				4230	74.91	76.38	1.17	.2
				4231	76.38	77.06	0.68	.45
			-generally no sig't min'n or veining	4232	77.06	77.81	0.75	.27
				4233	77.81	78.98	1.17	.48
			-mafic volcanics with 1% diss'd and blebs of pyrite 76.38 to 77.06	4234	78.98	79.21	0.23	4.70

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-25

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS	
79.21	82.00		Mafic Volcanics:						
			-fine grained; dark grey green	1235	79.21	80.00	0.79	1%	1.71
				4236	80.00	80.78	0.78	1%	.72
			-calcitic to 86.73 then becomes	4237	80.78	82.00	1.22	1-3%	4.70
			light grey alt'n and non-calcitic to						
			82.00 with up to 3% pyrite as						
			blebs in qtz.-carb veinlets infilli						
			fractures						
			-generally weak alt'n and min'n	avg.					
				79.21	83.15	3.94		2.18	2.18
				avg.	83.15	85.04	1.89		6.28
				avg.	80.78	85.04	4.26		4.36
82.00	99.90		Alt'd Feldspar Porphyry:	4238	82.00	83.15	1.15		0.82
			-fine to med. grained, pink to pink	4239	83.15	83.71	0.56		6.65
			grey reddish locally	4240	83.71	84.30	0.59		1.78
			-bands of grey to pink-grey hybrid						
			~~mafics in places to 94.99~~						
			-84.30 to 85.04: one porph alt'n, poor	4241	84.30	85.04	0.74		9.60
			greyish hue; siliceous beige carb						
			alt'n along brecciated and fractured	4242	85.04	85.81	0.72		.38
			zones; sericitic locally; weak						
			diss'd pyrite (½ %) generally up to	4243	85.81	86.81	1.00		.33
			1% locally	4244	86.81	87.92	1.11		.2
				4245	87.92	88.92	1.00		.2
				4246	88.92	90.87	1.95		.2
			-5% qtz.-carb vein 30 to 50° to L.C.M.	4247	90.87	91.87	1.00	.72	.22
			t.o.	4248	91.87	92.87	1.00		.2
				4249	92.87	93.82	1.00		.2
			-94.99 to 99.90: good pink alt'n	4250	93.82	94.99	1.17		.38
			porphyry; salmon pink minor	4251	94.99	95.99	1.00		.48
			siliceous bands with diss'd pyrite but	4252	95.99	96.99	1.00	.21	.21
			generally sparse py	4253	96.99	97.99	1.00		1.03
				4254	97.99	98.99	1.00		.55
				42655	98.99	99.90	0.91		10.2
				avg	85.04	99.90	14.91		.37

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-26 SHEET 1 OF 12

PROPERTY: Rundle	TP OR AREA: Newton Twp.	AZIMUTH: 225°44'56" (225.75)	DATE STARTED: 1-12-87
PROJECT: 3382	LOT & CONC.	DIP: -16%10'20' (+16.17)	DATE COMPLETED: 3-12-87
CLAIM NO.	CO-ORDINATES: 2002.492N/3030.019E	LENGTH: 95.46m	DRILLED BY: N. Morissette
GRID NO.: A. South Zone Subdrift		COLLAR ELEV.: 3878.147m	LOGGED BY: R. Norman

CORRECTED DIP TESTS

depth	dip	type test
95.46	-16	acid

LOCATION SKETCH OF HOLE

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS				
			OBJECTIVES:-									
0	5.17		Min'n Zone ('A' - South Zone)									
			- 0-2.42: Alt'd Mafic Volc. & Quartz:									
			highly sheared and brecciated and	11783	0	0.78	0.78		3.43			
			95% quartz and silicafied grey	11784	0.78	1.88	1.10		1.41			
			remnants of mafic from 0 to 0.78	11785	1.88	2.42	1.54		7.51			
			and 1.88 to 2.42 at 70% altered									
			mafics 0.70 to 1.88 with 30%									
			qtz-carb veining; mafics highly									
			carb to dark olive green to green									
			grey; pyrite generally weak but									
			1 to 2% in qtz-rich zone from									
			1.88 to 2.42; highly foliated 45° to L.C.A.									
			2.42 to 2.89: highly fractured and	11786	2.42	2.89	0.47		1.06	0.50		
			brecciated and completed silicified									
			and alt'd rocks with beige carb'n									
			fragments 1-2% sulphides in									
			places (mostly in beige-greenish									
			altd sections)									
			2.89 + 3.36: gradational from previous	11787	2.89	3.36	0.47		4.7			
			strongly brecciated olive - green									
			carb alt'n and silicified healed by	avg.	0.0	3.36			5.51	*		
			qtz-carb in-filling; 2-3% fine									
			dissolved py.									

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
			3 .36 to 3.80: completely silicified pale grey a id white white feldspar phenos in places -alt'n porphyry; brecciated and intruded by white qtz. fragments carb'd a d light beige-green weakly min' with alt'n diss'd or blebs of pyrite; dark grey hematitic with 1 to 2% py at 3.70 to 3.80	11788	3.36	3.80	0 .44	.58
			3.80 to 4.62: fine grained highly carb'd and siliceous oli ve green to mau ve 1 to 3% pyrite; completely altered rock	11789	3.80	4.62	0.82	2.43
			4.62 to 5.17: Intensity alt'd and silicified , light grey, F.P.? with 2-3% pyrite to 4.88 Intensely brecciated ,dark grey with beige to cream cherry fragmented and 2 to 3% fine diss'd py	11790	4.62	5.17	0 .55	0.69
5 .17	5.53		Sulphide Chert Horizon:					
			-70% primary pyrite as bands + layers and grey cream and oli ve gree c'ert bands	11791	5 .17	5.53	0 .36	1.37

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-26

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
5.53	5.93		Chert:					
			Dark grey to light grey; intensely	11792	5.53	5.93	0.40	.20
			brecciated, irregular layering and					
			bands					
			½ - 1% diss'd and bands of pyrite					
5.93	6.38		Argillite- Greywacke:					
			- variegated green; brecciated locally;					
			-weak to strongly calcitic	11793	5.93	6.89	0.96	.20
			-maybe alt'd volcanic to 6.89	11794	6.89	7.39	0.50	.21
			- up to 1% diss'd pyrite locally					
			t.o.					
6.33	32.85		Ultramafic to Mafic Flows:					
			-fine grained; spinifex in					
			sections; dark to med. green					
			bx'd locally; talcosed in darker					
			green sections					
			-fragment veins and wisps of pyrite					
			filling fractures from 18.99 to					
			- particularly abundant diss'd and	11795	22.22	23.08	0.96	0.2
			lines of pyrite from 23.08	11796	23.08	23.54	0.46	0.2
			25.09 in fine grained; light	11797	23.54	24.36	0.82	0.2
			green altered volcanics	11798	24.36	25.09	0.73	0.2
			-fine grain d black mudstone	11799	31.09	31.32	0.23	0.2
			31.09 to 31.32 with 10-20% patches					
			and veins of massive py					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-26

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
			-dark olive green alt'n with spinifex 32.35 to 32 .85 in sheared qtz. carb veined contact .					
32 .85	33.27		Chert-Sulp ide Horizons:					
			- highly bx'd , beige to brownish cherty frags in-filled with siliceous grey material and 20% veins, blebs and patches of massi ve pyrite and diss'd pyrite.	11800	32.85	33.27	0.42	.20
33.27	33.63		Alt'd Mafic Volcanics:					
			-fine grained; purplish-grey; strongly calcitic and magnetic	11802	33.27	33.63	0 .36	.2
			-abundant qtz. carb , veinlets and stringers in-filling fractures					
			-minor blebs of pyrite					
33.63	33 96		Feldspar Porphyry:					
			-med grained; purplish grey; minor red alt'n					
			- trace pyrite					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-26

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
33.96	35.22		Alt'd Mafic Volcanics:					
			-fine grained: purplish-grey	11803	33.96	35.22	1.26	6.2
			-strongly calcitic					
			-highly sheared and fractured and healed by qtz calcite: foliation 95 to 70					
			up to 1% fine diss'd py locally					
35.22	35.77		Feldspar Porphyry:					
			- med. grained: purplish grey:	11804	35.22	35.77	0.55	.2
			-minor veining; ¼ - 1% fine diss'd py.					
35.77	36.65		Alt'd mafic Volcanics:					
			As above 33.96 to 35.22; red-brown alt'n locally	11805	35.77	36.65	0.88	.2
			-pinkish cherty alt'n at 35.71 to 35.81 with pinkish cherty bands and veins and patches of massive pyrite					
			- 1 -2% diss'd py locally associated w qtz. cal. in fractures					
			Feldspar Porphryr:	11806	36.65	36.96	0.31	.2
36.65	36.96		- purplish grey; med. grained no sig't min'n					

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
36.96	41.17		Mafic Dikes:					
			-predominantly fine grained diabase		36			
			dikes (with chilled contacts)					
			green to dark green with patches					
			dark purplish alt'n locally;					
			weakly to mod. fractured and healed					
			with gh - calcite veining;					
			weak diss'd pyrite and minor pyrite					
			in qtz. veins locally moderately	11807	36.96	37.37	0.41	.2
			magnetic; near massive diss'd pyrite	11808	37.37	38.34	0.97	.2
			at 37.37 to 37.31	11809	38.34	38.87	0.53	.2
			-several screens of light green	11810	38.87	39.42	0.55	.2
			mafic volcanics t.o.	11811	39.42	39.84	0.42	.2
			Two screens of thinly laminated	11812	39.84	40.95	1.11	.2
			variegated green layered argillitic	11813	40.95	41.17	0.22	.2
			cherty sediments at 39.76					
			to 39.84 with bands of massive pyrite					
			and again at 40.95 to 41.17					
			with thin bands of pyrite					
			-purplish grey, fig. F.P. at 38.87					
			to 39.42					
			- occ. wisps and patches of					
			diss'd py t.o.					
41.17	44.96		Feldspar Porphyry					
			- med. to coarse grained, pinkish grey with	11814	41.17	42.14	0.97	.2
			bands of pink alt'n t.o.	11815	42.14	42.86	0.72	.2
			red alt'd sections - to 41.79 to 42.14	11816	42.86	43.61	0.75	.2
			-occ minor diss pyrite; minor					
			qtz. carb veining	11817	43.61	44.96	1.35	.2
			occ minor diss'd pyrite; minor					
			qtz. carb veining					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-26

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
44.96	46.50		Mafic Volcanics:					
54			-dark green to grey green; fine grained	11818	44.96	43.71	1.21	.2
			-strongly calcitic locally, magnetic	11819	43.71	46.50	0.79	.2
			-minor grey-beige carb'n alt'n					
			locally and up to 1% diss'd pyrite					
			but generally weak alt'n and					
			min'n; weakly fractured - filled with qtz-calcite					
			- Red alt'n F.P. dike 46.04 to 46.16					
46.50	48.75		Red to pink alt'd Feldspar Porphry:					
			- med. grained; weak beige carb'n	11820	46.50	47.41	0.91	.2
			alt'n locally	11821	47.41	48.02	0.61	.2
			- generally minor diss'd pyrite but	11822	48.02	48.75	0.73	.2
			up to 1% 48.47 to 48.75					
48.75	51.26		Feldspar Porphry:					
			-gradational from above; purplish grey	11823	48.75	49.58	0.83	.2
				11824	49.58	51.26	1.68	.2
			-minor occ'n diss'd py; no sig't vic					
			-speckled m.v. (light green w dark					
			spots) 50.46 to 50.51					
51.26	51.74		Mafic Volcs & Cherty Sed:					
			-dark green mafic with 1% diss'd pyrite	11825	51.26	51.74	0.58	.2
			to 51.46;					
			-highly fractured and shattered					
			-variegated green banded cherty seds to					
			51.46 to 51.74 with 3% diss'd and					
			veinlets of pyrite.					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-26

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
51.74	53.87		Grey Feldspar Porophry:					
				11826	51.74	52.66	0.92	.2
			-fine to med. gr; light greyish	11827	52.66	53.87	1.21	.2
			alt'n.					
			- no sig. vac up to ½" h diss'd					
			pyrite t.o.;					
			-mod. calcitic t.o.;					
53.87	54.92		Mafic Volcanics:					
				11828	53.87	54.92	1.05	.2
			-fine grained; green to grey					
			green					
			-highly fractured and altered to					
			light green streaks locally					
			1-2% specks of pyrite to					
			54.12 generally 1% pyrite					
			as diss and veinlets filling					
			fractures (as at out-contact)					
			-calcitic locally					
54.92	55.94		Alt'd Mafic Dike:					
			-fine to med. grained; pinkish beige	11829	54.92	55.94	1.02	.2
			carb'd spots of chlorite t.o.					
			- no min'n or ng					
			-54.92 to 55.12 and 55.84 to					
			55.94 fig'd red alt'n hybrid					
			of F.P. and m.v.					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-26

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
55.94	57.12		Alt'd Mafic Volcanics:	11830	55.94	57.12	1.18	.2
			-fine grained grey to grey green					
			- non calcitic					
			-highly fractured and carbonated					
			-up to 1% diss'd and blebs of pyrite					
57.12	58.92		Hybrid - Mafics and F.P.:	11831	57.12	57.87	0.75	2
			~~-fine -grained, siliceous~~	~~11832~~	~~57.87~~	~~58.92~~	~~1.05~~	~~2~~
			-variegated hues of pinks, browns beige and greys					
			-highly sheared					
			-grey schisty at out contact					
			-no min'n					
58.92	61.57		Alt'd Mafic Volcanics:	11833	58.92	59.32	0.40	3
				11834	59.32	60.10	0.82	2
			-fine grained; light grey to grey	11835	60.10	60.59	0.49	54
				11836	60.59	61.57	0.98	2
			-light grey alt'n to 60.10 with beige alt'n along this shears and 1 to 2% diss'd and veinlets of pyrite locally					
			-green grey and minor py beyond 60.10					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-26

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
61.57	62.17		Feldspar Porphyry:	11837	61.57	62.17	0.60	.2
			-purplish grey; med. grained					
			-no sig't min'n alt'n or veining					
62.12	62.62		Mafic Volcanics:					
			-fine grained, grey with purplish	11838	62.17	62.67	0.50	.2
			hue					
			occ blebs of pyrite					
62.67	62.80		Feldspar Porphry: As 61.57 to 62.17					
62.80	66.51		Lamps Dike:					
			~~-fine to med. grained; purplish grey~~					
			-strongly calcitic					
			-no sig min'n, vac or alt'n.					
66.51			Feldspar Porphyry:					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-24

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS			
66.51	67.65		Grey Bio F.P.								
			-no significant min'n or alt'n	11839	66.51	67.65	1.14	tr	1.68	1.92	
67.65	79.03		Red Alt'd F.P.	11840	67.65	68.0	0.35	tr-½	1.02		
			pink to red m.g. slightly magnetic	11841	68	69	1	tr-½	1.68		
				11842	69	70	1	tr-½	1.26		
			~~Structure: highly sheared~~	11843	70	71	1	tr-½	1.64		
				11844	71	72	1	tr-½	0.51		
			Alt'n & Veins: lt. red alt'n throughout becomes	11845	72	73	1	tr-½	0.99		
			more intense here and there	11846	73	74	1	tr-½	0.58		
			-numerous paper thin to 1cm qc.	11847	74	75	1	tr-½	.2		
			veinlets usually at 10 - 20° T.C.A.	11848	75	76	1	tr-½	.48		
			-slightly biotitic in places	11849	76	77	1	tr-½	.24		
			~~-slightly to moderately sericitic~~	~~11850~~	~~77~~	~~78~~	~~1~~	~~tr-½~~	~~.38~~		
			Min'n: tr-½% fig. diss. py and tr f.g. c.p.	11851	78	79	1	tr-½	.89		
				avg.	66.51	7.10	4.49		1.53		
79.03	81.43		Grey Bio F.P.	11852	79	80	1	tr	.41		
				11853	80	81	1	tr	.2		
			as above 66.51 to 67.65								
81.43	82.34		Lamp Dyke	11854	81	82	1	tr	.2		
				11855	82	83	1	tr	.2		

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-26

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS			
82.34	89.23		Grey Slightly Alt'd F.P.								
			grey red, m.g. magnetic								
			Structure - sheared	11856	83	84	1	tr	.21		
			Altn & Veins - good red beige alt'd band	11857	84	84.4	0.4	tr	.2		
				~~11858~~	~~84.4~~	~~84.65~~	~~0.25~~	~~1-2~~	~~5.21~~		
			84.40 - 84.65	11859	84.65	85	0.35	tr	.58		
			-good red beige alt'd section w	11860	85	86	1	tr	.27		
			qv running 5-10% T.C.A.	11861	86	87.10	1.1	tr	.82		
			87.10-88.35	11862	87.10	87.35	0.25	½	1.09	.27	
			-overall highly sericitic w red alt'n	11863	87.35	88.35	1.0	tr-½	.58	.58	
			gradational from good to poor	~~11864~~	~~88.35~~	~~89.23~~	~~0.88~~	~~tr~~	~~4.46~~	~~3.92~~	
			-min'n the better alt'd sections have 1-2% fig. diss py	avg.	87.10	89.23	2.13		2.24		
			-the poorer alt'd sections tr-½ py	avg	81.1	87.35	2.05		1.00		
				avg.	87.35	89.23	1.88		2.40		
89.23	95.46		Grey Bio F.P	11865	89.23	90	0.77	tr	.2		
			AQ core drilled	11866	90	91	1	tr	.2		
			whole core sampled	11867	91	92	1	tr	.2		
				11868	92	93	1	tr	.2		
				11869	93	94	1	tr	.2		
				11870	94	95.46	1.46	tr	.2		
			End of Hole								

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 3-027 SHEET 1 OF 3

Property	TP. or Area	Azimuth	Date Started	Corrected depth	Dip	Tests	Location sketch
Rundle Mine	Newton Twp	224.52	?/12/87				
Project	Lot. & Conc.:	Dip	Date Completed				
3382		56.02	10/12/87	78	-56	acid	
Claim No.	Co-ordinates:	Length	Drilled By:	125.94	-56	acid	
	2010.0 N	125.94	N Morissette Can.				
Grid No.	3009.1 E	Collar Elev.	Logged By:				
		3878 m	C.P.Zorzi				

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
0.0	3.35	COARSE GRAINED ULTRA-MAFIC DYKE(LAMP?) -brown to black, mg to cg non-magnetic; slight fo'n at about 30',very blocky; mod. amt of calcitic veins						
3.35	7.93	T.C.C.S.	11471	3.35	4.00	0.65	tr	<.20
		-green to black, f.g, soft, talcose, slightly	11472	4.0	5.0	1.0	tr	<.20
		magnetic; highly sheared; numerous wispy calcitic	11473	5.0	6.0	1.0	tr	<.20
		veinlets; trace Py	11474	6.0	7.0	1.0	tr	12.17
			11475	7.0	7.93	0.93	tr	<.20
7.93	25.00	POLYHEDRAL JOINTED ULTRA-MAFIC -dk green, f.grained, non-magnetic; good jointing and minor spx, wispy calcite infillings; nil to trace pyrite;						
25.00	29.50	GREY BIOTITE FELDSPAR PORPHYRY(HBLD PORPHYRY DYKE) -grey purple, f.grained, with sparse m.grained subhedral fsp's; 5-10% hbld; massive; few 1-2mm calcitic veins; trace pyrite;						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
29.50	48.95	POLYHEDRAL JOINTED ULTRA-MAFIC as above						
48.95	52.20	HBLD FSP PORPHYRY (DYKE) as above 25.00-29.50						
52.20	56.30	MASSIVE ULTRA-MAFIC FLOW -dk green to black, f.grained, non-magnetic; massive, slightly fractured; few thin lt grey calcite veins; trace pyrite						
56.30	58.50	HBLD FSP PORPHYRY (LAMP DYKE) as above						
58.50	60.70	MASSIVE ULTRA-MAFIC -as above but slightly foliated at about 30'						
60.70	61.18	RED ALTERED FELDSPAR PORPHYRY AND ALTERED MAFIC VOLCANIC -red to med grey, m.grained to f.grained; slightly magnetic; sheared and bx'd; brick red altn and minor lt grey cb altn; tr-.5% f.grained diss and wispy pyrite	11476	60.70	61.18	0.48	tr-.5	<.20
61.18	62.16	RED ALTERED FELDSPAR PORPHYRY -red,m.grained, slightly magnetic; sheared weak red altn chloritic infillings with numerous thin lt grey qc veinlets; trace f.g. diss pyrite	11477	61.18	62.16	0.96		0.45
62.16	65.23	ALTERED MAFIC VOLCANIC -med grey, f.grained, magnetic; sheared; weak lt. grey cb altn , minor pervasive calcite; mod amt. lt. grey qc and calcite veins; patchy and diss f.grained pyrite 1-2% over all.	11478	62.16	63.0	0.84	.5-1	<.20
			11479	63.0	63.4	0.4	2-3	<.20
			11480	63.4	64.56	1.16	tr-.5	<.20
			11481	64.56	65.23	0.67	1-2	<.20
65.23	67.40	RED ALTERED FELDSPAR PORPHYRY -as aboe; stronger sericitization; tr-.5% f.g. diss Py	11482	65.23	66.00	0.77	tr-.5	<.20
			11483	66.00	67.00	1.0	tr-.5	0.27
			11484	67.00	67.40	0.4	tr-.5	<.20

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 3-027 SHEET 3 OF 3

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
67.40	80.90	GREY BIOTITE FELDSPAR PORPHYRY	11485	67.40	68	0.6	tr	<.20
		-as above but slight red altn (weak); tr pyrite	11486	68	69	1	tr	<.20
			11487	69	70	1	tr	<.20
			11488	70	71	1	tr	<.20
			11489	71	72	1	tr	<.20
			11490	72	73	1	tr	<.20
			11491	73	74	1	tr	<.20
			11492	74	75	1	tr	<.20
80.90	86.29	RED ALTERED FELDSPAR PORPHYRY (ORE PORPHYRY)						
		-red to beige, m.g., magnetic; sheared; various	9852	80.90	82	1.10	tr-.5	<.20
		degrees of red beige altn; over all tr-.5% f.g.	9853	82.0	83	1.0	tr	0.51
		diss pyrite with local sections up to 5%;	9854	83.0	83.72	0.72	1-2	12.45
		mafic inlusion 83.72-83.88	9855	83.72	83.88	0.16	1-2	4.90
		85.80-86.29	9856	83.88	85.00	1.12	.5-1	2.57
			9857	85.00	85.80	0.80	2-3	5.04
			9858	85.80	86.29	0.49	2-3	11.04
			9859	86.29	86.58	0.28	tr	0.79
			9860	86.58	86.81	0.23	tr-.5	0.34
			AVG	83.0	86.29	3.29		6.71
86.29	88.47	SERICITIZED FELDSPAR PORPHYRY						
		-med. green; mg, magnetic, bio'c; tr pyrite	9861	86.81	88.00	1.19	tr	0.45
			9862	88.00	89.00	1.0	tr	<.20
88.47	90.39	GREY BIOTITE FELDSPAR PORPHYRY	9863	89.00	90.39	1.39	tr	<.20
90.39	94.44	GREY RED SLIGHTLY ALTERED FELDSPAR PORPHYRY	9864	90.39	91.00	0.61	tr	0.27
		-varying degrees of pk rede altn; shot through	9865	91.00	92.00	1.0	tr	0.24
		in place with qtz; green -blk chl infilling; tr	9866	92.00	93.00	1.0	tr	<.20
			9867	93.00	94.00	1.0	tr	<.20
			9868	94.00	94.44	0.44	tr	<.20
			AVG	86.29	94.44	8.15		0.27
94.44	109.95	GREY BIOTITE FELDSPAR PORPHYRY						
109.95	110.78	LAMP DYKE						
110.78	117.85	GREY BIOTITE FELDSPAR PORPHYRY						
117.85	119.40	MATRIX DOMINANT FELDSPAR PORPHYRY (DYKE)						
119.40	125.94	FRESH BIOTITE FELDSPAR PORPHYRY						
	125.94	END OF HOLE						
		Notes: JVA AQ Core; whole core sampled						

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-28 SHEET 1 OF 9

PROPERTY	TP OR AREA	AZIMUTH	DATE STARTED	CORRECTED DIP TESTS depth		dip	
		227°14'40" (227.24)	?'12 87				
PROJECT	LOT & CONC.	DIP	DATE COMPLETED				
		-48°31'11" (+48-51)	5/12/87	130	06	-49	acid
CLAIM NO.	CO-ORDINATES.	LENGTH	DRILLED BY				
	2002 714N/30.30 224E	130.06					
GRID NO.		COLLAR ELEV.	LOGGED BY				
		3877.381	A. Soever & R. Norman				

LOCATION SKETCH OF HOLE

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS	
			OBJECTIVES:-						
0.0	1.10		Talc Chlorite Carbonate Schist	11880	0	1.10	1.10	1.5	*
			-dark green fg T.C.C.S.	11881	1.10	1.93	0.73	3.50	**
				11882	1.83	2.50	0.67	2.98	**
			Structure well foliated at 45-50° T.C.A.	11883	2.50	3.30	0.80	3.08	**
			numerous stringers calcitic-qtz.	11884	3.30	4.10	0.80	0.62	**
			veins - qtz. veined section 0.13-0.43	11885	4.10	4.94	0.84	1.85	
			- min - tr py						
			Remarks: brok blocky core	Avg.	1.10	3.3	2.2	3.19	
1.10	4.94		Siliceous highly altered QV F.P.						
			-grey highly fractured altered q v F.P.						
			Alt'n - ver siliceous, shattered shot thru with q vs.						
			- very little remnant original textu e						
			pale green sericitized sections 1.10-1.83, 3.30-4.10						
			4.35 - 4.94						
			Min- 5-6% vfg to fg diss py with sericitized sections						
			1-2% less altered with veining sections						
			-blebs submassive py 4.80 - 4.94 as approach next unit						
4.94	9.28		Siliceous Exhalite						
			- med. to pale grey green banded siliceous exhalite	11886	4.94	5.44	0.50	0.86	
				11887	5.44	6.14	0.70	0.34	
			Alt'n - stringers and pale grey stringery patches of	11888	6.14	7.14	1.00	0.58	
			carbonate throughout- both calcitic & locally	11889	7.14	8.14	1.00	0.20	
			dolomitic	11890	8.14	9.28	1.14	.24	
			Structure - well banded at 45° T.C.A.						
			Min'n - bands submassive py 4.94 - 5.44						
			- tr - 1% in rest of unit						
			Remarks: dacite dyke 5.59 - 5.99, 6.10 - 6.17						

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-28

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
9.28	10.18		Silicified T.C.C. S.					
			-hard dark grey green silicified T.C.C. S.	11891	9.28	10.18	0.9	.2
			-tr - 1% py					
			-narrow band of argellite 9.65 - 9.68					
			-alt'd dark grey q v F.P. with 2% py 9.71 - 9.86					
			-dacite dyke 10.07 - 10.18					
10.18	12.87		Talc-chlorite Carbonate Schist					
			-dark green T.C.C.S.	11892	10.18	11.18	1.0	.2
			-structure - well foliated at 45° T.C.A.	11893	11.18	12.18	1.0	.2
			-numerous white, stringers calcitic-quartz	11894	12.18	12.87	0.69	.2
			-becomes less sheared to base					
12.87	37.66		Massive Ultramafic Flow:					
			-mod. to dark grey massive mg u.m. flow					
			-locally spinefex					
			-Structure - massive few haulic fractures					
			-healed to calcite locally traces py					
			-spinifex more common to base in gradiational contact with ext unit					
37.66	44.85		Spinifex U.M. Flow:					
			-spinifex u.m. flow - some polyhedral jointing	11895	44.42	44.85	0.43	.2
			-few hairline fractures healed with calcite					
			-locally faint traces py					
			-becomes less spinefex to base					
			-44.42-44.50 - narrow dyke red heatitic F.P.					
			-44.58 - 44.59 1 cm white q v at 60° T.C.A.					
			-44.6 -44.58 - red altd hematitic silicified zones					
			-well foliated at 50° T.C.A.					
44.85	53.00		Massive U.M. Flow:					
			-massive m.g. dark grey u.m. flow					
			-locally spinifex					
			-1-2% fractures healed with white calcite & quartz					
			-locally way minor f.g. diss py					

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
53.00	53.90		Grey Weakly Altered Hbde F.P.					
			-grey m.g. weakly altd hbde F.P.	11896	53.00	53.90	0.90	.2
			-5-10% chloritic hornblende					
			Altn faint relect feldspar porphyroblasts					
			Min. 1-2% f.g diss py					
53.90	54.95		Exhalite					
			-red to grey green fg. firmly bonded siliceous exhalite	11897	53.90	54.95	1.05	.2
			Structure - well bedded at 30-35° T .C.A.					
			Alteration - red hematitic 53.90-54.50					
			Min. - patc es & stringers of f.g. py throughout - est 2-3% py					
54.95	56.30		Altered Mafic Volcanics	11898	54.95	55.20	0.25	.2
			-m.g. med . green f.g. altd mafic volcanics	11899	55.20	55.80	0.60	0.24
			Altn - highly calcitic 1-2% fg. hairline fractures healed with calcite	11900	55.80	56.30	0.50	<0.2
			55.2-55.8 intensely altd section highly calcitic, silicified, sericitic - 1% f.g. diss py					
			cts of altd unit sharp at 60° T.C.A.					
			Min - 1% diss py in altd section 55.20 - 55.80 tr py est.					
			Remarks: narrow dike red altd F.P. 56.13 - 56.30					
56.30	59.52		Mafic Volcanics:	11901	56.30	57.30	1.00	.2
			-med. greenish grey f.g. mafic volcs.	11902	57.30	58.30	1.00	.2
				11903	58.30	59.52	1.22	.2
			-altn. - calcitic few fine fractures healed with calcite					
			-quite calcitic					
			-intensly altd section 58 .70 - 58.87 with narrow dyke					
			red altd F.P. 58.73 - 58.77					
			Min - faint trace fg. diss py locally assoc with calcite fractures					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-28

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
59.52	61.52		Feldspar Porphry:	11904	59.52	60.92	1.40	.2
			-fine to med. grained; grey to pinkish	11905	60.92	61.52	0.60	.24
			-fine grained grey calcitic with wisps and specs of green mafics					
			-strongly boxed in places; minor veini g; spare diss'n pyrite locally					
61.52	62.52		Alt'd Mafic Volcanics:	11906	61.52	62.32	0.80	.2
			-mod. carb alt'n	11907	62.32	62.89	0.57	.2
			-fine grained, dark to med. grey,					
			-non-calcitic, greyish carb alt'n along fractured bands					
			-1% pyrite as diss'n blebs and patches; massi ve patches of pyrite at 62.37 to 62.42					
			- several bands of pink F.P. from 61.52 to 62.32					
62.52	63.96		Hybrid: Map Volc and F.P.					
			-fine to med. grained; pink, grey to pinkish grey	11908	62.89	63.96	1.07	2
			-mi or veining; occ speck of pyrite 5% diss'n to massi ve bands of pyrite 63.86 to 63.96					
			in dark gre contact zone.					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-28

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
6396	67.94		Pink and red alt'd Feldspar Porphry:					
			- med. grained , pink and	11909	63.96	64.36	0.40	.2
			pink grey to 65.29 , greyish	11910	64.36	65.11	0.75	1.16
			hybrid to 65.65 and red alt'n	11911	65.11	64.88	0.77	.62
			from 65.68 to 67.94	11912	64.88	65.29	0.41	.2
				11913	65.29	65.65	0.36	.2
			-fractured locally and infilled	11914	65.65	65.85	0.20	.2
			with beige - grey carb mat'd	11915	65.85	67.94	1.09	.34
			-generally very sparse pyrite min'n;					
			-greyish carb'd with bluish grey					
			silica flooding and veining; weak					
			pyrite min'n 63 .96 - 64.06					
			-weak carb and veining with weak					
			pyrite 64.88 to 64.29					
67.94	71.51		Feldspar Porphry:					
			-coarse grained; grey to pinkish grey;	11916	67.94	68.94	1.00	.2
				11917	68.94	69.94	1.00	.2
			-strongly foliated speckled m v with	11918	69.94	70.94	1.00	.2
			blebs of F.P. to 68 .94	11919	70.94	71.51	0.57	.2
			No sig't min'n or veining; occ					
			minor diss'd py					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-28

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
71.51	73.06		Mafic Volcanics:	11920	71.51	72.19	0.68	.2
			-fine grained dark green	11921	72.19	73.06	0.87	.2
			-no veining; strongly calcitic and magnetic;					
			- a few stringers and diss'd pyrite in fractures locally; minor min'n generally					
			-a couple thin F.P. dykes (up to scm)					
73 06	4.28		Alt'd Mafic Volcanics - Hybrid	11922	73.06	74.28	1.22	.2
			-med. grained; gree) to grey green;					
			-o verprinted with phenos of carb, bluish quartz and feldspar					
			-highly fractured . nom-calcitic abund qtz-carb wisps and stringers					
			- very sparse pyritic locally in fractures and patches					
74.28	76.60		Feldspar Porphyry:					
			-fi e to med. grained	11923	74.28	75.45	1.17	.2
				11924	75.45	76.00	0.55	.2
			-locally fractured and bx'd pink alt'd and infilled with qtz-carb 75.45 Grey and alt'd to 76.00					
			- no sig't min'n ; minor pyrite in pink alt'd zone					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-13

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
10.42	13.77		Hbld-Feldspar Porphyry:	2697	10.42	11.50	1.08	.308
				2698	11.50	11.93	0.43	.2
			-fine to med. grained; purplish grey	2699	11.93	12.60	0.67	.2
			± bist.	2700	12.60	13.77	1.17	.2
			-no sig't min'n, veining or alt'n					
			-11.5 to 11.93 pinkish Feldspar porphyry					
13.77	19.90		Feldspar Porphyry:	4201	13.77	14.77	1.00	.2
			-med. to c.grained; pinkish grey	4202	14.77	15.77	1.00	.2
				4203	15.77	16.77	1.00	.26
			-no sig't min'n or alt'n generally	4204	16.77	17.43	0.66	1.06
				4205	17.43	17.85	0.42	2.37
			-17.43 to 17.85: pinkish alt'd porphyry	4206	17.85	18.92	1.07	1.17
			with beige carb'n bx'd shears with	4207	18.92	19.92	1.00	.2
			½ to 1% diss'd pyrite, 25° to L.C.A.					
			End of Hole					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-14 SHEET 1 OF 2

PROPERTY	TP OR AREA	AZIMUTH	DATE STARTED	CORRECTED DIP TESTS
		045°	16/12/87	
PROJECT	LOT & CONC.	DIP	DATE COMPLETED	
		00°	16/12/87	
CLAIM NO.	CO-ORDINATES.	LENGTH	DRILLED BY	
	1978.50N3935.05E	14.01m		
GRID NO.	Sect. 1040SE	COLLAR ELEV.	LOGGED BY	
		3994.8	R.E.A.	

LOCATION SKETCH OF HOLE

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
			OBJECTIVES:-					
0	4.12		Mafic Volcanics:					
			-dark green to green-grey, fine gr'd	9836	0	1.64	1.64	0.2
				9837	1.64	3.04	1.40	0.2
			- no sig't alt'n, frequent blebs and	9838	3.04	4.12	1.08	.2
			diss'd py; minor qtz-carb veinlets					
			-strongly calcitic and magnetic					
4.12	4.22		Feldspar Porphyry:					
4.22	4.35		Lamprophyre dike:					
4.35	5.37		Alt'd Mafic Volcanics:	9839	4.12	4.72	0.60	0.?
			-fine grained; light grey with	9840	4.72	5.37	0.65	6.72
			brownish bx'd bands to 4.72					
			highly bx'd and cut by white					
			grey qtz veins 20° to L.C.M. from					
			4.72 to 5.37 with 3-5% diss'd					
			pyrite; veins thicker than core					
5.37	8.91		Feldspar Porphyry:					
			-med. grained; purplish grey, pinkish to					
			reddish bands locally	9841	5.37	6.13	0.76	0.2
			-abundant qtz. veining with ½% diss'd	9842	6.13	6.73	0.60	3.39
			pyrite in places 6.13 to 6.73	9843	6.73	7.57	0.84	0.34
				9844	7.57	8.91	1.34	0.2
				avg.	4.72	6.73	2.01	3.19

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-14

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
8.91	10.40		Mafic Volcanics:	9845	8.91	10.40	1.49	2.30
			-fine grained; dark green to grey					
			-fairly abund. milky white qtz-carb					
			veins 45 to 85° to L.C.A.					
			-strongly calcitic and magnetic					
			-minor blebs and diss'd pyrite t.o.					
			up to 1%					
			-no sig't alt'n					
10.40	11.12		Pink Alt'd Porphyry:					
			-fine to med. grained; pink to reddish	9846	10.40	11.12	0.72	0.2
			alt'n					
			-minor diss'd py in places					
11.12	11.98		Mafic Volcanics:					
			-fine grained; purplish alt'n t.o.	9847	11.12	11.98	0.86	0.2
			with wisps of massive py locally					
			-strongly calcitic and magnetic					
11.98	12.28		Lamporphyry Dyke:	9848	11.98	12.28	0.30	0.2
			-fig. calcitic; purplish					
12.28	14.01		Ultramafics:					
			-T.C.C.S.	9849	12.28	12.85	0.57	0.2
			-12.55 to 13.71: Lamp dyke as	9850	12.85	13.71	0.86	0.2
			above	9851	13.71	14.01	0.30	0.2
			End of Hole					

NOVAMIN RESOURCES INC. — DRILL LOG — HOLE NO. 3-15

PROPERTY	TP OR AREA	AZIMUTH	DATE STARTED	CORRECTED DIP TESTS
		225°	13/12/87	
PROJECT	LOT & CONC.	DIP -00°	DATE COMPLETED 15/12/87	
CLAIM NO.	CO-ORDINATES. 1975.75N 2932.30E	LENGTH 20.90 m	DRILLED BY	
GRID NO.	Sect. 1040 SE	COLLAR ELEV. 3893.30	LOGGED BY	

LOCATION SKETCH OF HOLE

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
			OBJECTIVES:-					
0	1.14		Mafic Volcanics:					
			-fine grained, grey	4256	0	1.14	1.14	2.37
			-weakly altered and min'n with diss'd pyrite along thin veins and fractured locally					
			-abund thin hairline veinlets of qtz. calcite					
			-calcitic and magnetic					
1.14	20.9		Red Alt'd Foldspar Porphyry	4257	1.14	2.10	1.0	.72
				58	2.10	3.10	1.0	.2
			Med. grained to c.g., red to pink-red	59	3.10	4.10	1.0	1.41
				60	4.10	5.02	0.9	.62
				61	5.02	5.80	0.78	4.80
			-pinkish alt'n 9.3 to 10.3	62	5.80	6.80	1.0	0.34
			with minor pyrite	63	6.80	7.80	1.0	0.2
				64	7.80	8.80	1.0	0.62
			-minor qtz-carb 30° to L.C.M.	65	8.80	9.32	0.5	2.09
				66	9.32	10.30	1.0	1.71
			-grey to pink-grey 15.37 to 19.5	67	10.3	11.30	1.0	0.55
				68	11.30	12.30	1.0	1.08
				69	12.30	13.20	0.9	4.80
			-generally no sig'n min'n alt'n or veining	70	13.20	14.37	1.17	0.31
				71	14.37	15.37	1.0	1.23
				72	15.37	16.37	1.0	0.20 →
				73	16.37	17.37	1.0	0.62

NOVAMIN RESOURCES INC.

DRILL LOG HOLE NO. 3-13

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
				74	17.37	18.37	1.00	2.09
				75	18.37	19.37	1.00	0.2
				76	19.37	20.37	1.00	0.2
				4277	20.37	20.90	0.53	0.2

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-16 SHEET 1 OF _

PROPERTY	TP OR AREA	AZIMUTH	DATE STARTED	CORRECTED DIP TESTS
		045°	16/12/87	
PROJECT	LOT & CONC.	DIP	DATE COMPLETED	
		00°	16/12/87	
CLAIM NO.	CO-ORDINATES.	LENGTH	DRILLED BY	
	1976.8N 2947.3E	10.35m		
GRID NO.		COLLAR ELEV.	LOGGED BY	
	Sect. 1050 SE	3890.60	R.EN.	

LOCATION SKETCH OF HOLE

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
			OBJECTIVES:-					
0	2.00		Hbld. Feldspar Porphyry:	9830	0	1.00	1.00	.2
				9831	1.00	2.00	1.00	.2
			-fine grained, purplish grey					
			-strongly calcitic, no sig't min'n or alt'n					
			-mafic volcanics 0-0.10					
2.00	3.24		Pink alt'd Feldspar Porphyry:					
			-pink to reddish locally; fine grained	9832	2.00	3.24	1.24	1.58
			-beige brown alt'n 2.0 to 2.10 at in-contact with 1% diss'd pyrite					
			-minor fracturing locally with beige to grey in-filling					
			-generally sparse py and minor veining					
3.24	4.94		Mafic Volcanics:					
			-f.g.d F.P. dyke 4-9 to 4.25	9833	3.24	4.09	0.85	0.82
			-fine grained; grey to dark green	9834	4.09	4.94	0.85	9.02
			-minor alt'd and fracturing locally minor diss'd and blebs of pyrite in places	avg	3.24	4.94	1.70	4.92
			-non-calcitic to calcitic in places					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 9-16 SHEET 2 OF 2

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
4.94	5.75		Hbld.-Feldspar Porphyry:	9835	4.94	5.75	0.81	0.38
			-fine ground; purplish, reddish to 5.24					
			-generally minor py: several blebs and wisps of pyrite 5.00 to 5.24					
			-strongly calcitic					
			-Ultramafic sliver at 5.24 to 5.30					
			T.C.C.S.					
5.75	7.79		Ultramafic Flows:					
			-T.C.C.S.					
			-dark green grey; schistosed					
			-no sig't min'n, spinifex locally					
			-Feldspar Porphyry dyke 6.19 to 6.54					
			-Yanolitic mafics (alt'd to purplish grey)					
			at 7.04 to 7.14					
7.79	10.35		Lamprophyre Dike:					
			-purplish; fine grained					
			-strongly calcitic					
			End of Hole					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-17 SHEET 1 OF —

PROPERTY	TP OR AREA	AZIMUTH	DATE STARTED	CORRECTED DIP TESTS
		225°	16/12/87	
PROJECT	LOT & CONC.	DIP	DATE COMPLETED	
		00°	16/12/87	
CLAIM NO.	CO-ORDINATES.	LENGTH	DRILLED BY	
	1973 8N 2937.4E	9.50 m.		
GRID NO.		COLLAR ELEV.	LOGGED BY	
	Sect. 1045 SE	3892.0	REM	

LOCATION SKETCH OF HOLE

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
			OBJECTIVES:-					
0	6.86		Feldspar - Porphyry:					
			- med. to coarse grained; red, grey	12481	0.0	0.80	0.80	.21
			alt'n red-grey mottled textured	12482	0.80	1.80	1.00	.2
				12483	1.80	2.80	1.00	1.82
			bands of weak pink alt'n	12484	2.80	3.80	1.00	0.48
			in places with beige carb and	12485	3.80	4.90	1.10	.20
			clots of sericite and minor py	12486	4.90	5.90	1.00	.62
			alt'n appears at 45° L.C.M.	12487	5.90	6.86	0.96	1.65
			- mod. abund. of milky white					
			qtz.-carb veins 40-50° to					
			L.C.M.					
			-generally sparse pyrite min'n					
6.86	8.78		Pink Alt'd Porphyry:					
			- ore porphyry					
			- mod. min'n generally					
			-fractured and alt'd to grey-beige	12488	6.86	7.64	0.78	4.39
			with 1 to 2% diss'd pyrite; this	12489	7.64	8.10	0.46	8.78
			alt'n is in bands w to 15 cm thick	12490	8.10	8.47	0.37	31.95
			separated by 30% red alt'n bands					
			with lesser pyrite; sericitic:					
			- min atz-carb veining, generally					
			but mostly in alt'd bands	avg.	6.86	-9.50	2.64	9.44

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-17

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
8.28	9.50		Feldspar Porphyry:					
				12491	8.42	9.50	1.08	5.18
			- med. grained; pink-grey to red-grey					
			-5% qtz-carb veins and veinlets					
			-some silica flooding locally					
			-no sig't min'n; alt'n diss'd py					
			End of Hole					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-21

SHEET 1 OF —

PROPERTY	TP OR AREA	AZIMUTH	DATE STARTED	CORRECTED DIP TESTS
		200°	16/12/87	
PROJECT	LOT & CONC.	DIP	DATE COMPLETED	
		00°	16/12/87	
CLAIM NO.	CO-ORDINATES	LENGTH	DRILLED BY	
	1971.9N 2950.6E	35.30m.		
GRID NO.		COLLAR ELEV.	LOGGED BY	
	Sect. 1050-10605E	3888.20	R & N	

LOCATION SKETCH OF HOLE

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
			OBJECTIVES:-					
			Broken core 0 to 0.71 wk .3 metres lost					
0	0.71		Mafic Volcanics:					
			.3 metres lost core	12452	0	0.71	.40	.20
			- finely grained; dark green, strongly calcitic					
			-no sig't min'n					
0.71	1.81		Pink-red Alt'd Feldspar Porphyry:	12453	0.71	1.81	1.10	.2
			-fine grained; pink to red					
			- mod. fractured and infilled with					
			qtz.-carb and dark green chlorite					
			- no sig't min'n					
1.81	5.60		Mafic Volcanics:	12454	1.81	3.03	1.22	.2
			-fine grained					
			-light green, calcitic with frequent					
			blebs of pyrite and diss'd to 3.03	12455	3.03	4.38	1.35	.38
			-grey-green non-calcitic to 4.38 & mod.					
			fractured locally; fairly abund. milky-					
			white qtz-carb veins parallel to 45°					
			to L.C.A.; occ blebs of pyrite					

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
			1.81 to 5.60 cont'd:					
				12456	4.38	5.10	0.72	.38
			4.38 to 5.6: dark grey; non-calcitic	12457	5.10	5.80	0.70	.2
			-weakly fractured; abund qtz-carb					
			veinlets and veins					
			1%pyrite as dissd and veinlets					
			in fractured					
			-fine gr'd pink F.P. dyke 4.53 to 4.73					
5.60	11.85		Hybrid - Alt'd Mafic Volcanics & F.P.					
			-fine grained: red to pink to grey alt'n	12458	5.80	6.60	0.80	1.37
				12459	6.60	7.23	0.63	0.51
			½% fine diss'd pyrite in places	12460	7.23	7.87	0.64	3.87
				12461	7.87	8.74	0.87	6.65
			-strongly bx'd with cherty beige	12462	8.74	9.30	0.56	4.11
			grey mat'd 7.65 to 7.87 w minor	12463	9.30	10.79	1.49	.96
			pyrite	12464	10.79	11.85	1.06	1.27
			-more like typical red alt'd feldspar					
			10.79 - 11.85	avg.	7.23	9.30	2.07	5.10
			-1 amprphryr dykes 8.12 to 8.54					
			8.74 to 8.94; 9.30 to 10.79					
			med. grained, grey					
11.85	14.69		Lamprophyre Dyke:					
			-med. grained; grey-green to	12465	11.85	13.30	1.45	.21
			purplish-locally	12466	13.30	14.69	1.39	0.51
			-no sig't min'n					
			- minor bands F.P.					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. B-21 SHEET 2 OF

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
14.69	18.29		Pink Alt'd Feldspar Porphyry:					
			-weak to med. ore alt.	12467	14.69	15.24	0.55	4.44
			-pink med. to light to 16.66	12468	15.24	15.64	0.40	9.27
			pale pink green, fine grained to 18.29	12469	15.64	16.10	0.46	9.40
				12470	16.10	16.66	0.56	14.61
			-generally weak to mod, beige-grey	12471	16.66	17.61	0.95	13.54
			carb'n and sericidic alt'n in shears	12472	17.61	18.29	0.62	3.94
			locally with up to 1% fine	12473	18.29	18.42	0.13	3.43
			diss'd py t.o.	12474	18.42	19.02	0.60	3.70
			-minor qtz. carb veining generally	avg	14.69	19.02	4.33	8.51
			white qtz-carb veins (2.5 cm in thickness) incl.					
			18.25 - 16.39; minor diss'd py	avg.	15.24	17.61	2.37	12.77
18.30	25.30		Feldspar Biot - Porphyry:	12475	19.02	20.02	1.00	0.51
			-med. grained, grey	12476	20.02	21.33	1.31	0.72
				12477	21.33	22.33	1.00	.20
			-thin band of pinkish alt'n	12478	22.33	23.33	1.00	.31
			gr. veins in places minor with	12479	23.33	24.40	1.7	.38
			no min'n	12480	24.40	25.30	0.90	.34
			-generally no sig't min'n or veining					
			-weak pinkish grey alt'n with minor					
			py					
			End of Hole					

NOVAMIN RESOURCES INC. — DRILL LOG — HOLE NO. 3-24

PROPERTY	TP OR AREA	AZIMUTH	DATE STARTED	CORRECTED DIP TESTS			
South Rundle	Newton	234° 32'43"(234.55		depth		dip	
PROJECT	LOT & CONC.	DIP	DATE COMPLETED				
3382		-21°59'08" (121.99	7-12-87	80.72		-20°	acid
CLAIM NO.	CO-ORDINATES	LENGTH	DRILLED BY				
	2013.494N/2995.43	80.7/m.	Morissette				
GRID NO.		COLLAR ELEV.	LOGGED BY				
From ramp A south Dr. Sect. 1050SE±		3878.707	A. So				

LOCATION SKETCH OF HOLE

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
			OBJECTIVES:-					
			Note: 1.88 m core missing from 0-5.84m					
			impossible to place therefore core logging started at	1.9				
0.0	1.9		Lost Core					
1.9	2.64		Mafic Lamp Dyke					
			-med. grey green m.g. lamp dykes	11409	1.9	2.64	0.74	.2
			-calcitic, non-magnetic					
			-15-20% chloritic hbde and biotites					
			-broken blocky cores					
2.64	4.53		Sheared U.M. - T.C.C.S.	11410	2.64	3.74	1.1	.2
			-med. green sheared WM - chloritic talcose grading	11411	3.74	4.20	0.46	1/3
			to T.C.C.S. - numerous stringers calcite	11412	4.20	4.53	0.33	.2
			-faint relect spinifex trace py - well foliated at 60-65°					
			T.C.A.					
			-3.99 to 4.17 - narrow dyke red alt'd F.P.					
			-4.17 - 4.53 intense quartz calcite veining parallel to					
			foliation at 60° T.C.A.					
4.53	5.98		Grey Siliceous Altd QV F.P.	11413	4.53	5.2	0.67	.2
			grey to beige siliceous highly alt'd F.P.	11414	5.20	5.98	0.78	.24
			no relect texture					
			-sheared, foliated at 60° T.C.A.					
			Veins - extensive very pale grey qtz veining 4.53 - 4.56; 5.68 - 5.98					
			~~Min - 1-2% f.g. dis. py - 5.56-5.72 -5.8%~~					
			diss py					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-24

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
5.98	11.27		Ultramafic Volcanics:					
			-massive ultramafic flow - locally spinifex					
			2-3% fine hairline fractures healed w calcite					
			5.98 - 7.11 - 1% fractures below this					
11.27	13.49		Hbde F.P. (Lamp)					
			-med. grey lg. hbde F.P. layers mod. calcitic					
			non-magnetic					
13.49	14.11		Ultramafic Volcanics					
			-as from 5.98 to 11.27					
14.11	15.16		Dacite Dyke					
			-fg med. green grey dacite dyke					
15.76	18.70		HBDE F.P. (Lamp)					
			-as from 11.27 to 13.49					
			-pink calcitic vein 1-2cm wide at 10° T.C.A.					
18.70	33.32		Massive to Spinifex UM	1415	27.7	29.0	1.3	.2
			-dark to red grey green u.m.	1416	29.0	29.2	0.2	.2
			-massive to spinifex	1417	29.2	30.7	1.3	.2
			-short section is pale brown alteration 2-3% diss py 29.0 - 29.2					
33.32	34.09		Hbde F.P. (Lamp)					
			as from 15.76 - 18.70					
34.09	35.64		Massive to spinifex U.M.					
			as from 78.70 - 33.22					
			~~-broken blocky core 34.09 - 35.00~~					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-24

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS				
35.64	36.98		Mafic Lamp Dyke									
			-med. green m.g. dyke									
			- calcitic									
			-15-20% hbde-10% biotite									
			1-2% f.g. diss py									
36.98	38.43		Ultramafic Volcanics:									
			-as from 18.70 to 33.22									
38.43	40.75		Mafic Lamp Dyke									
			-as from 35.64 - 36.98									
40.75	47.83		Spinifex U.M.									
			-massive to spinifex u.m. - dark grey green									
			-mod. magnetic - calcitic									
			-few narrow stringers calcite									
47.83	48.70		Lamp Dyke									
			-brown well foliated lamp dyke									
			-10-15% biotite very calcitic									
			2-3% f.g. diss py									
			48.09 - 48.20 bed of T.C.C.S. at 70° T.C.A.									
48.70	50.20		Hybrid Rock									
			- red alt'd F.P. - quite calcitic - non-magnetic									
			-partially assimilated inclusives of mafic volcanics									
			48.70 - 49.00, partially assimilated mafic volcs									
			& pyrite extralike 49.67 - 50.20	11418	48.70	49.00	0.30	3-5	.2			
				11419	49.00	49.67	0.67	tr	.2			
			Min. 3-5% diss py w assimilated volcanic 48.70-49.0	11420	49.67	50.20	0.53	5-7	.2			
			tr py in F.P. 49.0 - 49.67									
			-5-9% is extralite 49.67 - 50.20									

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-28

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
76.00	80.38		Mafic Volcanics:					
			- fine to med. grained dark green to green-grey	11925	76.00	77.00	1.00	.2
				11926	77.00	78.06	1.06	4.01
				11927	78.06	78.59	0.53	0.24
			-strongly calcitic and magnetic	11928	78.59	79.59	1.00	1.10
				11929	79.59	80.38	0.79	0.59
			- Minor qtz-carb veining local conc'n of diss'd pyrite t.o. (up to 1% in places) - generally weak					
			-grey F.P. dyke 78.06 to 8.59					
80.38	81.04		Feldspar Porphry:	11930	80.38	81.04	0.66	.2
			-med. grained, pinkish grey to reddish alt'n					
			-minor w ite and greyish qtz-carb veining 40-45° to L.C.M.					
			-trace pyrite					
81.04	82.24		Mafic Volcanics:	11931	81.04	82.24	1.20	1.29
			greyish-green, fine-grained					
			-strong grey carb alt'n in places in fractured and sheared zones; strong calcitic in places					
			-red fine-grained F.P. 81.57 to 81.72					
			2% fine diss'd pyrite and in fractures generally					

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS				
82.24	93 51		Pink Alt'd Porphry:	Avg.	82,24	83,49	1,25		3,77			
			-pink grey to 84,37 with bands of m. v. to 83,14;									
			-strong qtz-veining at 20° to L.C .A . .	11932	82.24	82.49	0.25		7,88			
			with 3-5% diss'n & blebs of pyrite 82 .24 to 82.49; in F .P. and M.V.	11933	82.49	83.49	1.00		2.74			
				11934	83.49	84.37	0,88		.41			
			Red alt'd 34.37 to 85.31 with	11935	84 .3	785.31	0,94	½-1%	.39			
			½ to 1% fine diss'd pyrite and clots of sericite	avg.	83.49	85,31	1 92		0.71			
			-pale pink alt'n (one porphry alt'n) from 95.31 to 8 .19 with weak silica flooding and white qtz veins 30° and sub-parallel to C.C.A.; also minor beige-grey carb alt'n 5° to L.C.A. in shears 1-1 fine diss'd pyrite	11936	85.31	86.19	0.83	1%	3.12			
			-red alt'd 86.19 to 87 .60 with	11937	86 .19	86 .83	0.64		1 .64			
			5% qtz-carb veining dominantly 30° to 45° to L.C.A., ½ - 1% diss'd pyrite to 36.83; 1% diss'd pyrite locally 86.83 to 87.60 with very weak siliceous and sericite alt'n.	11938	86.83	87.60	0 77		2.50			
				a vg.	85.31	92.83	7.52		2.25			
			-87 .60 - 91.42: grey to pink grey porphyry with thin bands of pink alt'n and qtz veining up to 10 cm; up to 1% pyrite in these bands but generally section weakly min'n and alt'n.	11939	87,60	88.35	0,75	½-1%	2.57			
				11940	88,35	39,06	0 71	½-1%	1.40			
				11941	89,06	89,89	0,83	½-1%	3,12			
				11942	89.89	91 42	1.53		1.58			
			-91.42 - 93 51 pale pink alt'n core porphyry alt'n with weak to med. alt'n of beige and grey carb'n and alt'n by white qtz veining 30° to L.C.A.	11943	91.42	92.03	0.61	½-1%	3 .39			
				11944	92.03	92 83	0,80	"	1.47			
				11945	92,83	93.51	0.68	"	14.67			
			Generally ½ - 1% fine diss'd pyrite	a vg.	85,31	92,83	8 20		3.2			
				avg.	85,31	91,42	6.11		2,23			
				a vg.	91,42	93,51	2,09		6 33			

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-28

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS				
93.51	130.06		Grey Feldspar Porphyry;									
			-med. to coarse grained: grey to purplish grey	11946	93.51	94.17	0.66	tr	.89			
				11947	94.17	95.01	0.84	tr	.20			
			minor weak pinkish alt'n in bands locally	11948	95.01	96.01	1.00	tr	.20			
				11949	96.01	97.01	1.00	tr	.58			
				11950	97.01	98.01	1.00	tr	.20			
			-Feldspar - histite porphry in some sections	11951	98.01	99.39	1.38		1.58			
				11952	99.39	100.92	1.53	tr	.20			
			- no sig'n min'n, veining or alt'n									
			-bleached white vacs with grey F.P. at 40° T.C.A. at 111.53 - 111.59, 112.96-113.06									
			- red heatitic gvs at 35° T.C.A. 111.63 - 111.73									
			111.80 - 111.82									
			-alt'd section of grey F.P. w 10-15% cg calcic amphiboles with bleached F.P. 119.69-121.99									
			particularly amphibole rich section 120.00 - 120.77 with 30 - 40% amphibole									
	130.06		E.O.H.									
			~~-core size AW~~									
			-whole core sampled									

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-29 SHEET 1 OF —

PROPERTY	TP OR AREA	AZIMUTH	DATE STARTED
Ru dle	Newton Twp	204, 24'49" (204.41)	Nov. 26 ,1987.
PROJECT 3382	LOT & CONC.	DIP -37°53'35" (+37.89	DATE COMPLETED Nov. 28 ,1987 .
CLAIM NO.	CO-ORDINATES. 200z.42N/3030.358E	LENGTH 122.4	DRILLED BY N. Morissette
GRID NO. 33N subdrift East		COLLAR ELEV. 3877.459	LOGGED BY REM

CORRECTED DIP TESTS

depth	org	dip	type test
61		-42	acid
122		-39°	acid poor test use 40°CPZ

LOCATION SKETCH OF HOLE

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS %Py	Au gt	Ag g/t
			OBJECTIVES:-							
0	1.13		Alt'd Mafic Volcanics:	13648	0	0.58	0.58	tr	0.82	1.6
				13649	0.58	1.13	0.55		0.65	1.8
			-strongly alt'd to light green grey							
			-20-25% qtz-carb veins at 70-80° to C.C.A. - parallel to foliation Qtz veins up to 10 cm in thickness							
			-generally minor pyrite mi'n							
			-intensely sheared; brecciated locally							
1.13	3.84		Alt'd mineralised zone ('A' South Zone)							
			1.13 to 1.35: strongly siliceous qtz veined zone grey silicification, fractured +bx'd and cut by grey-white quartz; Also light gree beige carb'n fragments. 3-5% large blebs of py.	13650	1.13	1.35	0.22		39.60	7.6
			1.35 to 1.95: light beige green highly silicified and carbonated; fractured and in-filled with blebs, wisps and stringers of quartz-carbonade 2-3% fine diss'n pyrite	13651	1.35	1.95	0.60		14.19	2.4
				avg.	1.13	1.9'	0.82		21.01	

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS				
			1.83 to 3.24: cont'd									
			1 .95 to 3.84: light grey highly siliceous and carbonated zone with intense silica flooding; blotchy white-grey texture generally;									
			Mod. beige-green alt'n as abo ve from 256 to 3.40									
			Pyrite Min'n:									
			1.95 to 2.56 1% py as blebs , diss'd and stringers along fractures and quartz veins	13652	1 .95	2.56	0 .61		1.97	1.6		
			2.56 to 3.40: 1-3%	13653	2.56	3.00	0 .44		0 82	0 .8		
			fine diss'd pyrite and	13654	3.00	3.40	0 .40		1.44	0 .6		
			blebs	a vg.	1.95	3 .40	1.45		1.47			
			3.40 to 3.84: trace to 2% locally contorted	13655	3.40	3.84	0.44		28.94	4.2		
			veinlets of pyrite 3.79 near out-contact	avg.	1.13	3.84	2.71		11.84			
			possible fine v.g at 3.72									
3.84	4.19		Banded Chert-Sulphide Zone:									
			-interbanded gre , beige and olive green chert and massive primary pyrite bands up to 2.5 cm. in thickness: bands are thinly laminated and 45-55° to L .C .A. Minor qtz-calcite veining .	13656	3.84	4.19	0 .35		2.26	2.6		

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-29

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS				
4.19	4.74		Banded Chert:									
			Interbanded thinly laminated dark grey to black , to light grey and cream bands. Brecciated & sheared with olive-green alt'n and minor qtz-veining locally, up to 2% fine diss'd pyrite in alt'n zones .	13657	4 .19	4.74	0 .55		0.38	0 .4		
4.74	5 .25		Diabase Dike:	13658	4.74	5 .25	0.51		1 .03	1 0		
			-green to grey green , massive; fine-grained									
			-strongly calcitic; non-magnetic									
			-chilled contacts 75 - 85° to L.C.A. - irregular.									
5.25	6.60		Mafic Volcanics:	13659	5.25	6.60	1.35		0.31	1.0		
			-green to grey-green; highly sheared , brecciated locally; in-filled with qtz-carb veinlets and locally with beige-green material									
			-strongly calcitic;									
6.60	7.12		Arigillitic - Cherty sediment:	13660	6.60	7.12	0 .52		0.45	0 .8		
			- well layered locally green to olive green layering; grey siliceous bands with pyrite laminex or veinlets , fragmented with dark green mafic frags at start - tuffaceous									

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-29

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS			
7.12	8.48		Mafic Volcanics:	13661	7.12	7.36	0.24		0.2	1.2	
			-green to green grey highly brecciated	13662	7.36	7.82	0.46		.2		
				13663	7.82	8.48	0.66		.2		
			mafic volcanis bordered from 7.12 to 7.36 and 8.23 to 8.48 by fault zones marked by talcose calcite schist- strongly calcitic too 5 to 10% diss'n and bands of pyrite 7.36 to 7.82 in light grey qtz-calcite altered area								
8.48	38.05		Ultramafic Volcanics -fine grained green to dark green -chloritic -abundant, serpentine-calcite veins t.o.-; -no sig' min'n veining or alteratio								
			-Feldspar porphry from 34.17 to 34.57 - purplish grey; minor diss'n pyrite -3 metres ground core at 9.10	13664	34.17	34.57	0.40		.2		
38.05	40.08		Mafic Volcanics:	13665	38.05	38.96	0.91		.2		
				13666	38.96	40.08	1.12		.2		
			-fine grained, green, oli ve green to purplish green; deep red alt'n 38.05 to 38.25								
			Brecciated locally; strongly calcitic								
			No sig'n min'n.								

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-29

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
40 08	43 43		Hybrid - Mafic Volcanics to Feldspar Porphry:	13667	40.26	41 .09	0.83	.2
			-intensely brecciated and fractured; highly altered to hues of olive greens , reds , browns and purples -healed by white qtz-carb material					
			~~-pink alt'd feldspar porphyry~~	~~13668~~	~~41.09~~	~~41.43~~	~~0.34~~	~~.2~~
			highly brecciated with beige carb alt'n and up to 2% fine diss'd pyrite at: 41.09 to 41.43 and 41.9' to 42.35	13669	41 43	41.95	0.52	.2
				13670	41.95	42.35	0.40	2
				13671	42.35	43.43	1.08	.2
43.43	44.67		Mafic Volcanics: -light green to grey-green; fine grained -strongly calcitic and mod. magnetic -pink-brown siliceous alt'n from 44.20 to 44 .38 with occ's pyrite stringers -generally minor py min'n	13672	43.43	44.67	1.24	.2

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-29

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
44.67	46.76		Pink alt'n Porphyry:	13673	44.77	45.16	0.39	.2
			-med. grained; pink to red alt'n	13674	45.16	45.91	0.75	.2
				13675	45.91	46.76	0.85	
			-no sig'n min'n , veining or alt'n					
46.76	48.12		Lamprophyre O.kk:	13676	46.76	47.34	0.58	.2
			-fine to med. grain; purplish grey	13677	47.34	48.12	0.78	.2
			-biot-hbld. t.o.					
			F.P. screen at 47.47 to 47.63					
			occ'n blebs of pyrite					
			-strongly calcitic					
48.12	50.58		Mafic Volcanics:	13678	48.12	48.81	0.69	.2
			-fine grained; purple green alt'n	13679	48.81	49.83	1.02	.2
			giving a mottled texture with the	13680	49.83	50.58	0.75	.2
			normal green colour					
			-strongly calcitic and magnetic					
			-up to 1% diss'n blebs and					
			patches of pyrite; also pyrite					
			veinlets					
			- o sig'n min'n or alt'n					
			-thin lamp? dike at 49.6 to 49.9					
			light green in colour					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-29 SHEET 1 OF 1

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
50.58	53 ,48		Hbld - Feldspar Porphry	13681	50.58	51 ,33	0.75	.2
				13682	51.33	52.17	0.84	.2
			-fine to med. grain; purplish pink	13683	52.17	53.40	1.23	.2
			alt'n					
			-large hbld crystals locally					
			-no sig't min'n or veining					
			-strongly calcitic					
53.40	56.85		Mafic Volcanics:					
			-green to grey-green; fine grained;	13684	53.40	53.90	0.50	.2
			purplish hue locally	13685	53.90	54.65	0.75	.2
				13686	54.65	55.40	0.75	.2
			-minor veinimg and alt'n	13687	55.40	56.00	0.60	.2
				13688	56.00	56.85	0 .85	.24
			-occ'n diss'd and blebs of pyrite					
			up to 1% locally					
			-strongly calcitic and magnetic					
			-contacts 70 to 75% to L.C.A.					
			-no sig'n min'n, alt'n or veining					
56.85	59 ,21		Pink alt'n Feldspar Porphry:					
			-med. grained; pink to pink grey	13689	56 ,85	57.68	0.83	.2
			generally weak pink alt'n	13690	57.68	58.33	0.65	.21
				13691	58.33	59.21	0 .88	.34
			-strongly brecciated and in-filled by	13692	59.21	60.13	0.92	
			grey hematitic mat 58.32 to 58.91					
			with 1/2% diss'd py					
			-beige grey alt'n mafic volc. 57.68 to 57.86					
			-minor pyrite					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-29 SHEET ___ OF ___

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
59.21	74.98		Mafic Volc & Intrusives:	12719	59.21	60.13	0.72	.2
			- fine grained; green to grey-green	12720	60.13	62.12	1.99	.2
			-weak grey alt'n 1% diss'd &	12721	62.12	63 .16	1.04	.58
			~~stringer pyrite 59.21 to 60.13~~					
			-generally no sig't min'n , alt'n or veining					
			-60.13 to 60.49: pink-red alt'n , minor py					
			Intrusi ves:					
			63.16 - 63.61: lamp dike;	12722	63.16	63.61	0.45	.2
			purplish grey , calcitic , magnetic	12723	63.61	65.46	1.85	.2
			65.46-66.52: Lamp Dike	12724	65.46	66 .56	1.10	.2
			As abo ve .					
			66.52-67.60 grey hybrid; minor qtz veins with pyrite	12725	66.52	67.60	1.08	.2
			67.60 - 68.22: grey Feldspar Porphry; calcitic	12726	67.60	68.22	0 62	.2
			weakly magnetic	12727	68.22	69.50	1.28	.2
				12728	69 .50	70.54	1.04	.2
			0.54 - 73.49: Feldspar	12729	70.54	72.05	1.04	.2
			porphry; purplish grey	12730	72.05	73.49	1.44	.2
			calcitic , wkt magnetic	12731	73.49	74.46	0.97	.21
			74.46 - 4 .90 Feldspar Porphry	12732	74.46	74.90	0.44	.2
			As abo ve					
			No sig't alt'n , min'n or veining					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-29 SHEET ___ OF ___

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
74.98	84.96		Red-pink alt'n Feldspar Porphry:	12733	74.90	76.00	1.12	.2
				12734	76.00	74.44	1.44	.31
			-red to pink and pink grey	12735	77.44	79.00	1.56	.2
			fine to med. grained:	12736	79.00	80.40	1.40	.24
				12737	80.40	81.90	1.50	.34
			-generally as sig'n min'n	12738	81.90	83.55	1.65	4.32
			alt'n or veining	12739	83.55	84.96	1.41	1.47
			-abundant qtz-carb, veins 40					
			to 45° to ccm (2 sets)					
			locally					
			-min'n white-grey, qtz veins					
			locally that may be related					
			to one min'n - barren usually					
			but 2-3% pyrite in one					
			such ore of silica flooding					
			at 82.75-82.85.					
			-specks of sericite 78.6 to 79.2					
84.96	85.49		Mafic volcanics:					
			-dark green grey; fine grain	12740	84.96	85.49	0.53	.44
			weakly to mod'y calcitic, weakly					
			magnetic					
			- No sig't min'n, veining or alt'n					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. S-29

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS				
85.49	87.30		Grey Feldspar Porphry:									
			med. to coarse graining granular									
			- mod. magnetic; weakly calcitic locall									
			-lamp dyke 86.87-87.30									
			-no sig't min'n, alt'n or veining									
87.30	90.80		Grey Quartz Flooded F.P.									
			grey, weakly altd bio F.P.									
			slightly calcitic									
			non magnetic									
			Alt'n quartz-flooded along flazure structure at 30°	12741	87.30	87.56	0.26	3-5	9.87			*
			T.G.A.	12742	37.56	88.20	0.64	1-2	2.94			*
				12743	88.20	88.50	0.30	3%	.2			*
			Min: 87.30-88.20 1-2% diss py assoc. w qtz glooding	12744	88.50	89.30	0.80	1	.51			
			-3.5% py stringers 87.30 - 37.56	12745	89.30	90.10	0.80	1	.2			
			-88.20 - 88.50 - 3% py assoc with ntcose qtz flooding	12746	90.10	90.30	0.70	2%	.62			*
			-88.50 - 80.10 less intensely altd patches									
			pale beige alt'n - qtz flooding - 1% fg diss									
			py									
			-good qtz flooding at 30° TCA - 2% lg to fg	a vg.	87.30	88.20	0.9		4.94			
			diss. py									

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-29 SHEET 1 OF 1

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS				
90.80	99.30		Fresh Grey Bio F.P.	12747	90.80	91.80	1.00	tr	.2			
			-m.g. fresh bio F.P.									
			-5-10% bio minor hbde									
			-massive few small inclusions									
			tr py									
99.30	102.65		Lamp Dyke									
			-dark brownish gre green m.g. lamp dyke									
			-calcitic non-magnetic - 5% bio hbde									
			tr to 1% fg diss py									
102.65	105.70		Fresh Grey Bio F.P.									
			-as for 90.80-99.30									
			-some development secondary feldspar									
105.70	115.70		Lamp Dyke									
			- as from 99.30 - 102.65									
			-fresh ground sections below 114.00									
			-narrow pink, pale veins at 20-30° T.C.A. scattered between 109.80 - 110.15 and at 114.25 - 114.30									
			114.58-114.60									
115.70	122.40		Fresh Grey Bio. F.P.									
			-as from 90.80 - 99.30									
	122.40		EOH									
			Core size AQ									
			Split core sampled									

5219 1 of 2

020

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-30 SHEET 1 OF 8

PROPERTY	TP OR AREA	AZIMUTH	DATE STARTED
		225° 34'24" (225.57)	2/12/87
PROJECT	LOT & CONC.	DIP	DATE COMPLETED
		-69°08'23"	16/12/87
CLAIM NO.	CO-ORDINATES	LENGTH	DRILLED BY
	2009.137N/3022.188E	150.16	
GRID NO.		COLLAR ELEV.	LOGGED BY
	Sect 1080SE	3877.236m	R EM

CORRECTED DIP TESTS

Depth	Dip
75m	-70°
~~150.16~~	~~-70°~~

LOCATION SKETCH OF HOLE
Horiz 51.8
Vert 140.8

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS g/t Au
			OBJECTIVES:-					
			0-0.60 casing					
	8.89		Ultramafic Flows:					
			-grey to grey-green talcose					
			- strongly sheared; fractured and bx'd and infilled and cut by 10-20% quartz carb veins and bands					
			-no min'n generally					
			7.20 to 7.60 extremely atl'd silicous sericitic and sheared with 20% pyrite as massive bands and diss's section characterized by thin , tan-brownish to greenish bands	4278	7.20	7.60	0.40	8.26
								(Zone A South)
8.89	13.90		Min'd Zone ('A' South Zone)	4279	8.89	9.59	0.70	6.79
				4280	9.59	10.79	1.20	1.30
			-strongly siliceous and gh flooded with	4281	10.7	11.65	0.90	1.34
			light beige-green alt'n carb'd sericity	4282	11.65	12.45	0.80	2.61
				4283	12.45	13.31	0.86	3 .84
			-1 % diss'd pyrite generally too	4284	13.31	13.90	0.59	0.45
			-Fractured and box'd locally and by					
			greyish-white qtz-carb veins 25° to 45° to C.C.A.	avg	9 .59	13 .31	3.76	2.16

OM87-5-1-092

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-30 SHEET 2 OF —

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS g/t Au
			8.89 to 13 .90 cont'd:					
			Specs of strongly foliated , weakly					
			min'd ultramafic qt:					
			9.13-9.30; 9.43 to 9.59;					
			9.81 to 10.03 and 11.09 to 11.65					
13.90	17.89		Argillite-Cherty Sediment:					
			- dark grey-black to well laminated	4285	13.90	14.44	0.54	0.45
			vanegeted greys to olive green	4286	14.44	14.82	0.38	0.20
				4237	14.82	15.45	0.63	0.20
			- interbanded primary massi ve pyrite	4288	15.45	16.22	0.77	0.20
			layers and patches i n sections	4289	16.22	16.92	0.70	0.31
				4290	16.92	12.89	0.97	0.20
			-14.82 to 16 .22: light grey alt'd					
			gwke (volcanics?); bx'd and					
			in-filled with grey qtz-calcite in					
			strongly bx'd and banded t.a.					
			mylanite?; and by pinkish					
			green feldspathic veins and patches-					
			sparse diss'd py					
			-light green fine grained alt'd mafic					
			volc's 14.07 to 14.44; fractured					
			and infilled with calcite qtz;					
			2-3 ° to fine diss'd py 14.34					
			to 14.44 at out-contact					
			- Out-contact 35 to C.C.A.					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-30 SHEET 3 OF 5

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
17.89	23.08		Au Mafic Volcanics - fine grained, light green to 20.96 and grades to dark green 20.96 to 23.08 - strongly calcitic; - abund 15 - 20% qtz-calcite, strongly foliated 45° to C.C N 19.94 to 20.96 No sig min'n, alt'n or veining					
23.08	82.92		Ultramafic Flow: - dash green, telcase, chloritic - highly shistosed, fractured and filled by qtz-calcite from 23.08 to 24.30 - Hbld - Feldspar Porphry 33.65 to 37.46; fine to med grained, purplish grey. Hbld - Feldspar Porphry 55.79 to 56.88 with mafic screens and from 37.85 to 62.75; minor diss'd py acc'm and qtz-carb veining similar hbld feldspar porphry 66.27 to 70.39; 73.02 to 74.41; 74.92 to 75.38; 76.96 to 77.32; 77.97 to 77.38; 79.74 to 80.23.	4291 4292 4293	60.41 61.18 61.83	61.18 61.83 62.75	0.77 0.65 0.92	0.20 0.20 0.20

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-30 SHEET ___ OF ___

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
17.89	2308		Alt'd Mafic Volcanics:					
			-fine grained, light green to 20.96 and grades to dark green 20.96 to 23.08					
			- strongly calcitic					
			abund. 15-20% qtz-calcite					
			strongly foliated 45° to C.C.A. 19.34 to 20.96					
			No sig't min' alt'n or veining					
23.08	82.92		Ultramafic Flow:					
			-Dark green: talcose, chloritic					
			-highly schistosed, fractured and filled by qtz calcite from 23.08 to 24.30					
			-Hbld - Feldspar Porphry 33.65 to 37.46; fine to med. grained; purplish-grey					
			-Hbld-Feldspar Porphry 55.79 to 56.88 with mafic screens and	4291	60.41	61.18	0.77	0.20
				4292	61.18	61.83	0.65	0.20
			from 57.85 to 62.75; minor	4293	61.83	62.75	0.92	0.20
			diss'd py occ and qtz-calc veining					
			similar Hbld-Feldspar Porphry 66.27 to 70.39; 73.02 to 74.41; 74.92 to 75.38; 76.96 to 77.32; 77.97 to 79.38; 79.74 to 80.23.					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-30 SHEET — OF —

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS g/t Au
82.92	85.19		Mafic to U/n Flow:					
			-Fine grained; dark green grey generally	4294	83.02	83.69	0.87	0,20
				4295	83.69	84.46	0.77	0,20
			-Med . fractured t .o and healed	4296	84.46	85.19	0.73	0,20
			by pinkish to purplish gre qtz-calcite.					
			- 1 to 2% pink as diss'd stronger					
			veinlets a d blebs generally					
			- strongly calcitic and magnetic:					
			-pinkish bands 84,6 to 83,07					
85.19	86.92		Red Alt'd Feldspar Porphry	4297	85 .19	86.92	1.73	0.20
			-Fine grained; red:					
			-no sig veining or min'n					
			-minor beige ser-carb filling a few					
			fractures					
86 .92	88.12		Mafic Volcs:					
			-As 82.92 - 85.19	12260	86.92	87.42	0,50	4,56
				12261	87.42	88.12	0,70	0,51
			-Min'n alt'd with beige-grey carb-sensite					
			in patches and fractures					
				avg	86.92	88.12	1,20	2 20
			- generally 1% diss sulphite; 3-5%					
			fine diss'd pyrite 86.92 to 87.32					
			- non-calcitic					

ROTOMAN Resources Inc.

DRILL LOG HOLE NO. S-30

SHEET 5a OF —

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
88.12	90.97		Hornfels - M.U. + F.P.:	12262	88.12	89.55	1.43	0.99
			- fine + med. grained hbl + cpx + plag, + pinkish to purplish grey + green.					
			- modal layering locally.					
			- minor pinkish aphanitic bands/zones.					
			- no sig. min. or veining.					
90.97	93.48		Feldspar Porphyry:					
			- Fine to med. grained; grey/pink.	12263	92.62	93.13	0.51	0.48
			- Specks of biotite hbl					
			- Strongly calcitic; med. magnetic					
			- Pink-red aphanitic 92.62 to 93.13					
			- no sig. min. or veining. - minor disseminated pyrite locally.					
93.48	95.00		Mafic Volcanics					
			- Dark green, fine grained; purplish in fractured patches/zones;	12264	93.48	95.00	1.52	<0.2%
			- Strongly calcitic; chloritic;					
			- minor pyrite in places.					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-30 SHEET 5 OF —

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
95.00	110.24		Feldspar Porphyry:	12265	95.0	95.67	0.67	0.27
				12266	95.67	96.67	1.0	0.69
			-med., grained, purplish to pinkish grey					
			- very weak pink alt'd with	12267	106.63	102.52	0.89	12.86
			abund qtz veining from 106.63 to	12268	107.52	108.48	0.96	3.36
			110.24; abund white to greyish white	12269	108.48	109.50	1.02	1.78
			vein sub-parallel to 25° to C.C.A.	12270	109.50	110.24	0.74	6.96
			between 106.63 to 107.52 with					
			occ diss pyrite					
			Mafic Volcanics 94.67 to 95.47					
			with minor pyrite					
			Lamp dyke: 100.40 to 100.82;					
			107.06 to 107.86 and 104.60 to					
			104.90; purplish and fine grained and calcitic					
110.24	111.49		Mafic Volcanics:					
			- Fine grained green to grey green					
			- good alt'n and min'n from 110.24	12271	110.24	110.94	0.70	15.02
			to 110.94 with beige grey carb'n	12272	110.94	111.49	0.55	10.39
			alt'n along fractions 3% to 5% diss'd pyrite					
			overall; abund. pink and white qtz.-carb					
			veining; pyrite in patches and veinlets.					
			-From 110.94 to 111.49; alt'n & min'n					
			decreases to minor	avg.	106.63	111.49	4.86	7.79

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-30 SHEET 1 OF —

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
111.49	138.90		Feldspar Porp ry:					
			Med. grained;					
			-purplish to reddis' alt'd predominently	12273	111.49	111.99	0.50	0.65
			-grey fresh feldspar bist. porphry in sections	12274	111.99	112.48	0.49	2.37
			112.48 to 119.02	12275	112.48	112.91	0.43	1.99
				avg	111.49	112.91	1.42	1.65
			-pink alt'd 127.82 to 130.46 in					
			sections with weak breccia and	12276	125.84	127.31	1.47	0.65
			beige-grey carb'n alt'n and	12277	127.31	127.82	0.51	0.24
			minor qtz veining very sparse	12278	127.82	128.27	0.45	0.62
			pyrite min'n (rare specks)	12279	128.22	128.69	0.42	0.20
				12230	128.69	129.44	0.77	"
			- weakly calcitic	12281	129.44	130.16	0.72	"
			-mafic volcanics 111.99 to 112.48	avg.	125.84	130.16	4.32	0.40
			-minor styros & diss'd pyrite and					
			qtz-veining					
				12282	133.09	134.09	1.00	0.20
				12283	134.09	134.93	0.84	3.81
			-134.93 to 135.13 pink alt'd with	12284	134.93	135.13	0.20	0.20
			beige carb alt'n and 2% diss'n	12285	135.13	136.05	0.92	0.20
			pyrite in zone parallel to	avg	133.09	136.05	2.96	1.22
			subparallel to C.C.A.					
			-weak s earing with sericite, qtz	12236	136.05	136.49	0.44	4.35
			and 1% pyrite at 136.05 to 136.15					
			3-5% to C.C.A.					
138.90	140.56		Dacite Dykes					
			~~med. grained grey~~,					
			-strongly calcitic					
			-speckled with dark gree mafics					

NOVAMIN RESOURCES INC.

DRILL LOG HOLE NO. 3-30

SHEET __ OF __

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
140.56	150.56		Feldspar Porphyry:					
			-med. grained: purpled grey					
			-no sig'n min'n, alt'n or veining					
			End 2 Hole					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-31 SHEET 1 OF 1

PROPERTY	TP OR AREA	AZIMUTH	DATE STARTED
Rundle	Newto Twp	215 213-12-19(213.21)	Nov. 28/87.
PROJECT 3382	LOT & CONC.	DIP -67 3212 (16254)	DATE COMPLETED Dec. 1/87
CLAIM NO.	CO-ORDINATES. 2003.94N/3030737E	LENGTH 150.7	DRILLED BY N. Morissette
GRID NO. "A" South Zone Drift		COLLAR ELEV. 3877.507m.	LOGGED BY AS & REN

CORRECTED DIP TESTS Depth	Digs	Type Test
76 m		-67
149m		-64

LOCATION SKETCH OF HOLE

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS				
			OBJECTIVES:-									
0.0	0.60		Casing					96 py				
0.6	1.15		Talc-Chlorite Carbonate Schist	23842	0.6	1.15	0.55	tr	0.2			
			green talc-chloriic-carbonate schist	13843	1.15	1.50	0.35	tr	0.58			
			calcitic stringers at 30° T.C.A. -shistosity at 30-40 T.C.A.									
			blocky core - trace py									
1.15	1.50		CONTACT ZONE									
			White, quartz-calcite veining talc-chlorie carbonate schist no pyrite blocky core									
1.5	2.40		Quartz-Veined Green silici ied carbonate rock	13844	1.5	2.0	0.5	8-10	22.70			
			green silicified carbonate rock silicified TCCS	13845	2.0	2.4	0.4	8-10		7.78		
			shot through w quartz veins									
			Min: 8% 70 vfg diss py w green carbonate									
2.70	4.2		Quartz veined silicified felsic rock (FP?)	13846	240	3.00	0.60	1-2	0.65			
			-shattered quartz veined siliceous rock (F.P.?)	13847	300	3.60	0.60	1-2	0.96		15.79/32	
			-sericitized 1-2% f.g. diss pyrite w anastomosing network of veins	13848	360	4.26	0.66	1-2	47.21			
			V.G. - one speck at 4.12 m									
4.20	5.33		Exhalite									
			-dark grey so buff colored exhalite	13849	4.26	4.70	0.44	7.5	10.42			
			-finely laminated at n 50° TCA	13850	4.70	5.33	0.63	1-2	0.58			
			-bleaching along fractures 4.63 - 4.94									
			-Min = patches pgl diss py 4.2-4.35 est 7-8% py									
			pyritic in fractures 5.05-5.12									
			-in conformable beds 5.29 - 5.33									
			-trace py w rest of writ									

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-31 SHEET 2 OF 3

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS %py	ASSAYS Au oz/t
5.3	5.78		Dacite Dyke						
			fg dacite dyke	13851	5.33	5.78	0.45	-	<0.020
			-chilled margins						
			-non-confortable contacts at 65° T.C.A.						
5.78	7.67		Exhalite	13852	5.78	6.28	0.50	tr	0.58
			-dark grey vfg exhalite	138153	6.28	6.88	0.60	tr	0.69
			-siliceous weakly calcitic only locally very strongly	13854	6.88	7.30	0.42	tr	2.13
			-magnetic	12883	7.30	7.67	0.37	tr	1.16
			-bleached pale greenish grey zones 6.00-6.88						
			-similar bleaching probably due to carbonate						
			alteration associated w quartz dolarita veining						
			6.88-7.53						
7.67	10.64		Sheared silicified ultramafic?	12884	7.67	8.67	1.0	tr	0.58
			-sheared ultramafics dark green silicified	12885	8.67	9.67	1.0	tr	0.2
			-well foliated at 45° T.C.A.	12886	9.67	10.64	0.97	tr	"
			Structure - well foliated at 45° T.C.A. numerous						
			stringers quartz-calcite at various angles T.C.A.						
			7.9 - 8.75, 90-10.64						
			Min tr . py						
10.64	11.01		Exhalite						
			-as for 5.73 - 7.6	12887	10.64	11.01	0.37	1%	"
11.01	11.90		Red altered F.P.	12888	11.01	11.90	0.89	tr-1%	0.20
			-f.g. red altd dyke - altd F.P.?						
			Altn. - red altd hematitic						
			Min. - tr - 1% py						
11.90	12.67		Sheared Ultramafics	12889	11.90	12.67	0.77		0.27
			- med green, polyhedrally jointed um flow						
			- shearing at 45° TCA						

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-31

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
12.67	14.14		Talc - chloritic carbonate schist	12890	12.67	13.47	0.80	0.2
			-dark green sheared T.C.C.S.	12891	13.47	14.14	0.6	"
			-numerous strigers calcite quartz along foliation					
			Structure - schistosity at 45° T.C.A.					
			- intensely sheared 13.08 - 13.10, 13.24 - 13.25					
14.14	61.18		Massive to spinifep u.m. flows					
			-massive to locally sporefex or polyhedrally jointed					
			u.m. flow - dark grey, to greenish - m.g.s					
			-a few hairline fractures healed to white calcite					
			-bra locally sheared 52.74 - 52.98					
			45° to lcu					
			- No. sig min or veining					
			58.97 to 60.57: Feldspar Porphry;					
			purplish grey no size min					
			altn or veining					
			-strong peruasive calcite to					
61.18	61.43		Feldspar Porphry:					
			As 58.97 to 60.57; but 25°	12892	61.18	61.43	0.25	
			pyrite veins at out contact awr					
			2.5 cm (mostl is m. v. as below)					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-31

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
61.43	62.06		BX Mafic Volca ics:	12893	61,43	61,38	0.45	< .2
			-strongly fractured , sheared and bxd	12894	61,88	62,06	0,18	< .2
			- fine grained; fractures infilled with qtz calcite					
			-1% diss blebs wwps and stri ges of pyrite associated predom with the cars in-filling					
			Altn is w dark olive green locally Purplish red F.P. 6 3.56 to 63.68					
			Stringers and blebs of pyrite at in-contact 25% over 1 2.5 cm.) with pinkish brown altd to 61.63					
62.06	70.40		Mafic Volcanics:	12895	62,06	64.82	2.76	< .2
			Green to light greenish; fine grained	12896	64.82	66,31	1.49	< .2
				1289[illegible]	66,31	67.55	1.24	< .2
			-non-calcitic , non magnetic					
			- cut by abund. pale green epidote - qtz veinlets					
			Minor bleb of pyritic locally generally no sig minn or veining					
			- Grey F.P 67.55 to 8 .00	12898	67.55	68.00	0.45	< .2
			- no min n or altn	12899	68,00	68.94	0.94	< .2
				12900	62.94	70.40	1.46	< .2

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-31 SHEET 2 OF 2

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
70.40	75.42		Altd Mafic Volcanics - maybe altn ultramafic or kamaiitic rks					
			-possibly remnant polytidrel joining locally	12901	70.40	70.93	0.53	.2
			-dark green ultramafic from 70.93 to 71.93	12902	70.93	71.93	1.00	.2
			Unaltd section					
			-spinifex like texture in places					
			-generally made to strongly brecciated	12903	71.93	72.55	0.62	.2
			-and fractured, sheared locally	12904	72.55	73.10	0.55	.2
				12905	73.10	73.70	0.60	.24
			Altn to dark olive green strongly	12906	73.70	74.35	0.65	.2
			calcitic, greyish to pinkish altn locally in bands	12907	74.35	75.42	1.07	.24
			with fine dissd pyrite.					
			Cut by abundant narrow veins and					
			veinlets (bluish grey) or qtz calcite,					
			filling fractures; pinkish to white veins					
			74.35					
			Mi n - Bands or heavily dissd pyrite up to 6 mm					
			in shear zone with qtz cars veining from					
			70.5 to 7.62; also wisps and dissnd py					
			(2-3%)					
			Generally 1-2% pyrite as dissd					
			in veins and patches					
75.42	76.44		Intensely altered volcanics	12908	75.42	76.44	1.02	.24
			-graduational from above					
			-strongly brecciated and sheared					
			-altered to hues of variegated					
			greens, greys, pinks and purples					
			-highl fractured and healed with qtz carb;					
			fairly abund qtz carb veinlets					
			and thin veins					
			-generally weak pyrite min n; up to 1% fine dissn or	break				

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-31

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
76.44	77.75		Pink Altd Feldsparr Porphyry	12909	76.44	76.93	0.49	.2
				12910	76.93	77.13	0.20	.2
			- fine grained; salmon pink;	12911	77.13	77.75	0.62	.27
			- fairly abund qtz carb veinlets					
			- tr. py t.o.					
			-grey altd mafic volcanic screen					
			76.93 - 77.13; non-calcitic					
			-abund white qtz carb veinlets					
			and stringes; 1/2 -1 tr fine diss d					
			pyrite					
77.75	79.57		Mafic Volcanics:					
			Grby altd fine grained	12912	77.75	78.84	1.09	.2
				12913	78.84	79.57	0.63	.2
			non-calcitic; strongly magnetic					
			weak pyrite min generally as dissn and occs					
			bleb & wisp (1% locally) 1-2%					
			dissd py 79 .34 to 79.57					
79.57	81.30		Pink altd Feldspar Porphyry:	12914	79.57	80.16	0.59	.26
			Pale grey - pink and partially grey mafic	12915	80.16	81.30	1.14	.2
			hybrid to 8 .16 salmo pink and					
			fig . to 81.30					
			-highly fractured minor veining					
			-occn patch a d bleb of dissd pyrite					
			to 80 .16; sparse sephides to 81.30					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-31

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
81.30	82.24		Hybrid - Feldspar Poryphry & M.V: Bands of pinkish grey and red F.P. and altn intersanded wit strongly siliceous greenish bands of replaced mafics -strongly foliated 45° to C.C.A. Occn dissd py	12916	81.30	82.24	0.94	.2
82.24	83.13		Gre Feldspar Porph: -fine to med. grained; pinkish hue -no sig n min n or veining	12917	82.24	83.13	0.89	.24
83.13	86.60		Red Altd Feldspar Porphry:					
			-Fine to med. grained greyish to 84.70	12918	83.13	84.70	1.57	.27
				12919	84.70	85.10	0.40	.31
			-greyish purplish hue 84.70 to 85.45	12920	85.10	85.81	0.71	.34
			with a strong silicone altn or silica flooding in sparse pyrite	12921	85.81	86.61	0.80	.51
			Fairly abund white qtz carb veins 25-30°					
			- Generally insig minn					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-331 SHEET — OF —

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS			
86.60	90.72		Grey Feldspar Porphry:	12922	86.60	87.30	0.70	.34			
			-gradational from strong pinkish hue	12923	87.30	88.76	1.46	.2			
			-minor gh carb veining 30° to C. M.	12924	88.76	90.72	1.96	.2			
			- no sig min								
			-out contact irregular 10 - 15° tu C.C.A.								
90.72	96.60		Mafic Volcanics:								
			-Mafic volcanics tith grey F.P. dykes	12925	90.72	91.77	1.05	.2			
				12926	91.77	92.57	0.80	.2			
			-green to grey-green locally	12927	92.57	94.18	1.41	.21			
			-strongly calcitic and magnetic								
			-generally minor blebs and dissn pyrite up to 1 locally								
			-good beige and grey carb altn	12928	94.18	94.53	0.35	2.06			
			in fractured contact green 94.18 to	12929	94.53	95.15	0.62	1.65			samples
			94.42 with 10-12% fine dissd	12930	95.15	96.60	1.45	.21			mixes
			pyrite and stringes intruded by eplitic dyke								
			Grey Feldspar Porphyry								
			91.01 to 91.32 spare Py purplish grey								
			91.32 to 92.09 hybrid F.P. & M.Y. sparse py; purplish grey								
			94.83 to 95.15 F.P.; purplish grey sparse py								

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-31

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
96.60	105.3		Grey Feldspar Porphry:	12931	96.60	97.65	1.05	5.04
				12932	97.65	99.20	1.55	.62
			- med. to coarse grain; purplish	12933	99.20	100.60	1.40	.2
			grey in color; bistile speckled	12934	100.60	102.00	1.40	.38
				12935	102.00	103.67	1.67	.48
			-mafic volc screen with 2% dissd py	12936	103.67	105.30	1 .63	1.10
			97.6 to 97.8					
			-Generally sparse py; no sig veining					
105.3	109.02		Mind altn zone (Main "B") Mafic					
			Volcanic & F.P.					
			105.30 to 105.7 Altn Mafic Volc	12937	105.30	105.70	0.40	8.09 3.24 4.89
			grey green with beige greay altn					
			bands; minor gh carb veins and					
			veinlets 40-to 546 parallel to CCU;					
			5-10% dissd to stringer pyrite					NB: cut 103.03 to 9.63 whic
			out contact 30° to lcd;					is the W.A.A. 109.02-107.15
			weakly calcitic					
			105.7 to 106.01 Pink Altn Feldspar	~~12938~~	~~105.70~~	~~106.01~~	~~0.31~~	~~109.03 33.80 9.63 2.99~~
			Porphyry med. grained					
			1-3% dissd pyrite minor	AVG	105.3	106.01	0.71	53.00 *
			qtz carb veining					
			106.01 to 107.15 Mafic Volcanics	12939	106.01	106.60	0.59	1.99 1.17 6.48
			grey-green, mody altd weakly	12940	106.60	107.15	0.55	.65 0.36 0.34
			calcitic minor qtz carb vein					
			and F.P. dykeable					
			1-2% dissd & bbls in py					
			107 .15 to 109.02: pink altd feldspar	12941	107.15	107.70	0.55	10 22 5.62 8 .69
			Porphry ore porphry grey	12942	107.70	108 .02	0.32	1.41 0.45 1.53
			altn with silica flooding and	12943	108.02	103.52	0.50	7.78 3.89 6 .38
			grey-white qtz carb veins 50-60% to C.C.A.	12944	108. 2	109.02	0.50	16.08 8 .04 17 .26
			beige-grey altn along thin shere zones	avg	107.15	109.02	1.87	11.71 *
			1% dissd py generally up to 2% locally:					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-31 SHEET ___ OF ___

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS			
109.02	109.65		Grey Biot. Feldspar Porphyry:	12975	109.02	109.65	0.63	.74	0.47	1.25	
			- Med. grained								
			- No sig minn altn or veining								
109.65	111.11		Mafic Volcanics:								
			-green grey fine to med. grained	12946	109.65	110.44	0.79	.2	.16	0.23	
			weak grey altn locally	12947	110.44	111.11	0.67	5.52	3.70	5.11	
			-1-2% dissd and and blebs of pyrite								
			minor qtz - carb veining								
			- strongly calcitic								
111.11	111.70		Feldspar Porphyry:	12948	111 11	111.70	0.59	9 74	5.75	6 .93	
			- minor dissd pyrite locally	avg.	110.44	111.70	1.26	7.50			
111.70	112.86		Mafic Volcanics:	avg.	105.30	111.70	6.40	5.60	*	cut to 9.6	
			-fine grained; green					10.45	uncut		
				avg	105.30	111.7	6.4	6.56		cut to 30 g/t	
			- calcitic, fairly abund								
			-patch of F.P. with ctc parellel	12949	111.70	112.20	0.50	.73	1.43		
			to 1cm and 2-3% dissd pyrite	12950	112.20	112.86	0.66	.34			
			from 111.70 to 111.90;								
			- 1-2% pyrite dissd and blebs locally								

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-31

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
112.86	126.80		Grey Bist - Feldspar Porphyry:	12951	112 86	114.13	1.27	.93
				12952	114.13	115.64	1.51	.24
			-Fresh; med . to strongly calcitic and	12953	115.64	117.11	1.42	.69
			magnetic mottled ,granular texture	12954	117.11	118.62	1.51	.2
			mostly	12955	118.62	120.05	1.43	.2
			grey, med. to c. grd	12956	120.05	121.32	1.27	.55
			minor pinkish bands too	12958	122.78	124.32	1.54	.2
				12959	12432	125.78	1.46	21
				12957	121.32	122.78	1.46	.2
			- pinkish altn with specks of sericite	12960	125.73	126.80	1.02	.2
			and tr pyrite from 119.77 to 120.05					
			-generally no sign minn, altn or veining					
126.80	135.87		Pink & Red Altn Porphry:					
			-fine to med. grained; pred. red altn.					
			-pink altn and silica flooded with	12961	126.80	127.48	0.68	.24
			white to grey qtz veining 126.80 to	12962	127.48	128.71	1.23	.34
			12f.48 cr a grey hue altn	12963	128.71	129.41	0 .70	1.34
			and similar to one porphyry occs					
			speck of pyrite					
			- Pink altn from 129.41 to 130.97	12964	129.41	130.22	0.81	.21
			with a weak beige carb altn - no	12965	130.22	130.97	0.75	.2
			sigt minn or veining accn dissd					
			py					
			Other than the pink altd sections	12966	130.97	131.97	1.00	.2
			described above , the rock is altn	12967	131.97	133.23	1.26	1.17
			elsewhere to weak red and purplish to	12968	133.23	134.02	0.79	2
			reddish grey with no sigt	12969	134.02	134.21	0.69	.2
			veining or minn - minor silica	12970	134.71	135.87	1.16	.2
			flooding and pinkish altd with					
			trace of pyrite at 134.46 to 134.61					
			occs dissd py 135.44 to 135 .54					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 3-31

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
135.87	150.75		Grey Feldspar Porphry:	12371	135.87	137.07	1.20	.2
			- Fresh, purplish green in places due to weak altn					
			- no sign minn veining or alt'n					
			End of Hole					

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 4-001 SHEET 1 OF ___

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
Rundle Mine	Newton Twp	102.	12/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		16.0 ?	12/87	106.7-18'	
Claim No.	Co-ordinates:	Length	Drilled By:	226.0-16'	
2nd Leg	2000.0 N	226.1	N Morissette Can.		
Grid No.	2937.7+/-E*	Collar Elev.	Logged By:		no directional tests
#1 DDST		3806 +/-	R.E.Norman, A.Soever		

*Coord. approx scaled from plot 4-02 (CPZ) section Est'd from shaft

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS Au g/t
		OBJECTIVES:-						
0	2.39	MAFIC VOLCANICS -fine grained; dk green; chloritic; strongly calcitic; abund qtz-carb veinlets; 1-2% diss and veinlets of Py	9891 9892	0 1.00	1.00 2.39	1.00 1.39		<.20 <.20
2.39	2.73	FP -med gr'd; grey; frequent blebs of Py; minor qtz-carb veins and veinlets;	9893	2.39	2.73	0.34		<.20
2.73	6.70	LAMP DYKE -fine to med. grained; purplish; strongly calc. -screen of dk green m.volc. at 5.95-6.19; -red altd FP dyke 6.19-6.39						
6.70	7.74	FP -minor biotite specks; med-c.grained; purplish to grey; minor pyrite;	9894	6.70	7.74	1.04		<.20
7.74	9.75	PINK ALTD FP -med grained; pink to red; weak to mod beige-grey carb-sericite altn locally with weak diss Py; minor qtz-veining; fairly abund qtz-carb veining 45-50'; in 2 directions	9895 9896	7.74 8.85	8.85 9.75	1.11 0.90		<.20 <.20

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 4-001 SHEET 2 OF

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au	
9.75	14.00	ALTD FP AND HYBRID	9897	9.75	10.75	1.00		<.20	
		-med. grained; blotchy green-pink in places;	9898	10.75	11.75	1.00		1.54	
		pinkish to pinkish green altn;-serictic; sheared	9899	11.75	12.80	1.05		0.72	
		locally with pale greenish altn; generally weak	9900	12.80	14.00	1.20		1.30	
		Py min'zn; occn diss and blebs of Py in places							
14.00	21.30	ALTD MAFIC VOLCANICS(MIN'ZD ZONE)	12249	14.00	14.81	0.81	3	27.87	
		-fine grained dk grey-green volcs intensly altd	12250	14.81	15.44	0.63	5	29.30	
		along fractured and bx'd zones; beige-grey carb'n	12251	15.44	15.85	0.41	5	18.45	
		altn in wide bands with up to 5% diss Py locally	12252	15.85	16.79	0.64	2	29.30	
		-generally 3-5% diss Py as diss, blebs and veins	12253	16.79	17.79	1.18	3	8.71	
		- non-calcitic; abund milky-white qtz-carb veins	12254	17.97	18.90	0.93	3	<.20	
		and veinlets; red altd FP dyke 15.44-15.75	12255	18.90	20.10	1.20	2	6.79	
		-1% diss Py;	12256	20.10	21.30	1.20	5	27.09	
		Note: actually 21.3-20.96 as metric rods used	AVG	14.00	21.30	7.30		16.21	*
		but markers placed for foot rods							
20.96	32.70	RED ALTD FP (ORE PORPHYRY)	18001	20.96	22.0	1.04	2-3	1.41	
		-pale red to buff red mg FP; dolomitic-highly	18002	22.0	23.0	1.0	2-3	1.92	
		fractured with fine hairline fractures healed wth	18003	23.0	24.0	1.0	2-3	0.82	
		buff ore altn; highly fractured-micro fracture	18004	24.0	25.0	1.0	2-3	0.99	
		healed with buff carbonate ore altn- 3-4% fine	18005	25.0	26.0	1.0	2-3	0.96	
		hairline fractures healed with dolomite; 2-3%	18006	26.0	27.0	1.0	2-3	2.19	
		f.g. diss Py throughout assoc with ore altn;	18007	27.0	28.0	1.0	2-3	3.39	
		inclusion of altd mafic volcs 30.6-30.85; lower	18008	28.0	29.0	1.0	2-3	1.03	
		ct obscured by blocky core	18009	29.0	30.0	1.0	2-3	1.61	
			18010	30.0	31.0	1.0	2-3	3.09	
			18011	31.0	32.0	1.0	2-3	8.28	
			18012	32.0	32.7	0.7	2-3	2.67	

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 4-001 SHEET 3 OF

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
32.7	36.1	ALTD MAFIC VOLCS -pale to med grey altd f.g. mafic volcs; magnetic -pervasive off whie dolomitic altn 32.7-33.26; -dolomitic to 3.45 -calcitic form 34.5-35.0; 35.0-36.1; dolomitic -pale beige ore altn along fractures; fg sheared section at 20'; 3.39-34.5 35.0-36.1- fractured at 45'; 3-5% stringers diss Py assoc with buff altn 33.14-33.26 at ct of altd Fp -tr Py -sheared action at 34.2 1-2% Py assoc with grey altn along fractures 35.0-36.1; Dyke altd FP 33.26-33.9; lower ct of unit at 36.1 at 20'						

Resources Inc. photos here → end DRILL LOG HOLE NO. 401

SHEET 5 OF —

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS %-Py	ASSAYS	
36.1	38.4		RED ALTD FP - red, fg dld FP - non-magnetic - no relict feldspars. Altn - wkly hematitic, chloritic - dolomitic slightly calcitic to base Structure - fractured - 1-2% fine hairline fractures. Healed ± dolomite. Rocks - lower ct irregular.	18	36.1	37.3	1.2	tr	2.95	
				19	37.3	38.4	1.1	tr	0.62	1.61 / 1.5
38.4	40.2		ALTD MAFIC VOLCS. - pale grey to red grey altd mafic volcs - magnetic - calcitic Altn - 40.0 - 40.2 - sl chl pale grey slightly dol. - ic carbonate altn Min - tr - 1% py assoc ± calcite ± fine fractures 38.9 - 40.0 - 40.0 - 40.2 - 3-4% fg diss py assoc ± dol carbonate altn	20	38.4	40.0	1.6	tr	0.62	
				21	40.0	40.2	0.2	3-4	6.12	
40.2	43.6		RED ALTD. FP. - red, fg locally greyish Altn - dolomite - wkly dol. for - mations beige grey at 41° C.A Structure - 3-4% fractures healed ± calc-dol Veins - qv ± numerous inclusions of FP at ~40° T.C.A 41.13 - 41.22 - pervasive beige carb altn assoc ± qv. 41.22 - 41.6. Min - generally tr py - up to 1% ± beige grey calcite assoc. 41.22-41.6 + 42.6 - 42.73. - 5% py ± mafic inclusions 43.3 - 43.6 Rocks - well min. inclusions of mafic volcs. 43.3 - 43.6	1226-42.73						
				22	40.2	41.6	1.4	tr	1.61	
				23	41.6	43.3	1.7	tr	0.27	
				24	43.3	43.6	0.3	5	7.20	

Resources Inc.

DRILL LOG HOLE NO. 4-01

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
43.6	51.0		RED-GREY F.P. - pale red to grey weakly silicified FP - sm relict fsp - patchy dev. of secondary feldspars Alt'n - dolomitic - weakly chloritic - pale beige ov alt'n weakly fract 47.4 - 47.7 - stmy at 50-55° TCA 47.4 - 47.8 Structure - 2-3% fractures locally ± qtz-dolom-fe 46.5 - 51.0 - appears similar to vein contact edge of ore zone u.g. Min - oly local fine dissem - - 1% diss py assoc ± beige carbonate 47.1 - 47.8. Remks - brown et marked by 1cm qv. at 65° TCA	19 25	43.6	45.0	1.4	<0.2
				26	45.0	46.5	1.5	0.55
				27	46.5	47.4	0.9	0.96
				28	47.4	47.8	0.4	2.78
				29	47.8	49.3	1.5	0.21
51.0	54.75		MAFIC VOLCANICS - med grey fg. - magnetic Alt'n - calcitic - pale green grey patches of calcite alt'n - locally few garnets ± calc. patches Structure - 1% fine chloritic fractures healed ± calc Min - 1-2% py assoc ± calc fractures + patches.					
54.75	56.95		GREY F.P. - fg to m.g. - 3% bio ± minor blebs. Alt'n - chl. - weakly hematitic - minor epidote along fractures. 56.2 - 56.55					

ROTHMAN Resources Inc.

DRILL LOG HOLE NO. 4-01

SHEET 1 OF —

METRES FROM	METRES TO	SECTION	DESCRIPTION
56.95	61.6		MAFIC VOLCS - as from 51.0 - 54.75 - more pervasive patchy calcitic altn
61.6	66.2		GREY F.P. - grey, f.g. - faint relict feldspars - 5% Ino. - weakly magnetic - quite calcitic Altn - calcitic, weakly hematitic chloritic Remks. - lower ct at 10-20° T.C.A
~~66.2~~			
66.2	70.0		MAFIC VOLCS - as from 56.95 - 61.60 - clasts of unaltered volcs in calcitic altd matrix
70.0	71.7		GREY ALTD. F.P. - grey, f.g. altd F.P. - no relict feldspar - limited development secondary feldspars - weakly calcitic - non-magnetic - bleached pale buff 71.3 - 71.7
71.7	84.2		MAFIC VOLCS. - grey f.g. to m.g. mafic volcs - magnetic - calcitic Structure - 1-2% Locally fractures healed w calcite Remks - dark grey m.g. F.P. dykes, v.wkly hem. chl 75.75 - 75.92 - at 35° T.C.A., 76.70 - 76.86 at 25° T.C.A 78.25 - 78.88 at 25-30° T.C.A., 83.87 - 83.96 at 40° T.C.A

SAMPLE NO.	FROM	TO	LENGTH

ASSAYS

Resources Inc. DRILL LOG HOLE NO. 1-01 SHEET 2 OF

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS				
								%py				
84.2	85.1		GREY F.P. - grey to slightly pk mg - fine calcite Feldspar & bio. - calcitic - weakly magnetic	130 30	88.0	89.3	1.3	1	<0.2			
				131	89.3	90.2	0.9	2				
85.1	90.2		ALTD MAFIC VOLCS - pale to med grey, fg. - magnetic, Very calcitic Structure - fractured w fine hairline fractures healed w calc-qtz - fracturing & calc alt more intense to base Min - 1% py assoc w calc-qtz & fractures 88.0-89.3 2% " " " " " 89.3-90.2 Remks - lower ct at 15° T.C.A.									
90.2	94.7		GREY F.P. - grey m.g. F.P. - mafic, weakly chl. calcitic - 90.2-90.6 - highly fractured - 2-3% py stringers assoc w calc & qtz -92.8-93.5 - Porp. dyke.	32	90.2	90.6	0.4	2.3				
				33	90.6	92.1	1.5	tr				
				34	92.1	93.6	1.5	tr				
				35	93.6	94.7	1.1	tr				
94.7	96.6		ALTD MAFIC VOLCS - grey fg - Argillic 94.7 - 95.5 - fractured, stringers py assoc w calc-qtz & fractures. est 1-2% py	36	94.7	96.6	1.9	tr	0.24			
91	97.4		LAMP. DYKE - brown - m.g.									

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 4-01 SHEET 9 OF _

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
97.1	98.3		WEAKLY ALTD F.P. - red, grey, m.g - faint relict feldspar - trace bio - calcite					
98.3	100.0		ALTD. MAFIC VOLCS. - grey, f.g, calcitic, magnetic - dyke gley F.P. 99.10 - 99.13.					
100.0	101.57		GREY F.P - f.g. to m.g, grey. - 2-3% bio - calcitic					
101.57	103.8		LAMP. DYKE - brown, f.g. to m.g - 3-4% GB. - cx tacks chilled at 20° T.C.A					
103.8	117.8		GREY WEAKLY ALTD FP - mg. grey weakly altd F.P. - calcitic - good relict feldspars - 2-3% fg diss bio. Altn. locally pale reddish Remks - locally fg phase 110.9 - 111.3 fg late grey F.P dyke - gradational ↓ in next unit.					

NOVAMIN RESOURCES INC. DRILL LOG HOLE NO. 1-01

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS % py				
117.8	121.1		Red Altd F.P. - fg to mg red altd F.P.	18° 37	117.8	119.3	1.5	tr	<.2			
			Altn - dolomitic - weakly calcitic	1 38	119.3	121.1	1.8	tr	<.2			
			- 120 - 121.1 - bleached ag approach lower ct.									
			Structure - sheared along lower ct at 50° T.C.A.									
			Min - tr - 1% py									
121.1	124.0		MAFIC VOLCANICS - grey m.g. - calcitic & - magnetic - Structure - 1% fine hairline fractures healed w calcite									
124.0	127.7		INT. DYKE - fg. pale grey green int dyke - locally grades to fg F.P.									
127.7	156.1		GREY-PINK LIGHTLY ALTD F.P. - grey-pink mg. wkly altd FP - tr fg. diss py - faint relict feldspars. Altn. very weak to mod. - dolomitic to wkly calcitic Min only faint traces f.g. diss py Remks - pink aplitic dyke 139.74 - 139.94 140.57 - 142.76 - bleached pale pink section with 5% chl. biotite - later dykes 153.64 - 153.88 & 153.98 - 154.09									

SULPETRO MINERALS LIMITED DRILL LOG HOLE NO. A-01 SHEET 2 OF _

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
156.1	163.3		ALTD MAFIC VOLCANICS -med grey, f.g mafic volcs Alt- quite calcitic - mottled w paler grey calcitic patches - fractured w fine hairline fractures healed w calcite. Min - 1% f.g diss py assoc w calc. Remks - grey F.P dyke 157.85 - 158.8 - patchy grey FP on side of core 162.65 - 162.75 - narrow dyke F.P - 163.67 - 163.15					
163.3	171.9		GREY F.P - grey m.g FP - sl alt relict feldspars. 2-3% bio. Remks - inclusion mafic volcs 168.63 - 169.44					
171.9	173.8		LAMP DYKE - brown-green bio lamp. - m.g					
173.8	185.5		RED ALTD FP - fine to m.g. red altd F.P - no relict feldspars Altn - dolomite Structure - fractured w fractures healed w dolomite Remks - green lamp dykes 183.17 - 183.72 Min - tr py Veins - 10-15% white qtz-dol veins at ~60° TCA. 183.72 - 184.55. - minor specks in qtz dol veins	1800 39 40 41 42 43 44 45 46	173.8 175.0 176.5 178.0 178.5 181.0 182.5 184.0	175.0 176.5 178.0 179.5 181.0 182.5 184.0 185.5	1.2 1.5 1.5 1.5 1.5 1.5 1.5 1.5	0.21 1.37 8.91 2.26 3.33 6.27 1.23 2.23 4.04 / 9.0 m 5.1

SULPETRO MINERALS LIMITED DRILL LOG HOLE NO. 4-01 SHEET 12 OF

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
185.5	201.6		BEIGE-RED CARB ALTO F.P. (ORE FORMING)					
			-beige - red intensely altd FP					
			Altn - pervasive beige carbonate-qtz-ore altn along micro fractures - locally forms distinct bands at 10-20°TCA	47	185.5	186.6	1.1	8.40
			- dolomitic - locally sericitic	48	186.6	188.1	1.5	3.43
				49	188.1	189.6	1.5	2.47
			Structure - highly fractured, microfractures.	50	189.6	191.1	1.5	7.41
				51	191.1	192.6	1.5	6.03
			Min - 1% fg diss py - locally up to 2% in intensely altd sections	52	192.6	194.1	1.5	4.39
				53	194.1	194.6	0.5	50.61
			- locally few fractures lined w spec. hem.	54	194.6	195.8	1.2	8.59
			- below 195.8 hematite is quite common in these fractures.	55	195.8	197.1	1.3	3.67
				56	197.1	198.5	1.4	15.26
			- well mineralized mafic partly assimilated mafic volc inclusions w 5-7% fg diss py 194.1-194.6	57	198.5	200.0	1.5	2.95
			- scattered smaller mineralized inclusions 194.6-195.8	58	200.0	201.6	1.6	2.04
			- almost completely assimilated inclusions 5% fg diss py 197.13-197.23, 197.66-197.80, 198.0-198.88, 198.32-198.48					
			- only trace py below 198.48.					
201.6	204.0		ALTO MAFIC VOLC					
			- pale grey beige fg altd mafic volc	59	201.6	203.0	1.4	1.65
				60	203.0	204.0	1.0	0.79
			Structure highly fractured - 5-6% fine fractures filled w dol qtz					
			Altn - dolomitic - pale beige pervasive					
			Min - surprisingly little py - only FT traces fg diss py					

8.19/13.0

14.02/14.1

SULPETRO MINERALS LIMITED DRILL LOG HOLE NO. 4-01 SHEET 12 OF —

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS				
209.0	209.9		RED ALTD FP - mg., red to beige Alt'n - beige carb altn pervasive near top. decreasing ↓ depth. - - coarse dol dolomitic Structure - fractured	180 61	209.0	205.5	1.5	tr	10.05			
				62	205.5	207.0	1.5	tr	0.51			
				63	207.0	208.5	1.5	tr	0.55			
				64	208.5	209.4	0.9	tr	0.31			
			Min - m-c. scale clots of limonite assoc ↓ beige carb altn - frequency of clots ↓ ↓ depth. est 1-2% - trace f-g diss py.									
209.9	217.0		EXHALITE ? - pale green-grey, f-g.	65	209.9	211.0	1.6	1-2	<0.25			
				66	211.0	212.5	1.5	1-2				
				67	212.5	214.0	1.5	1-2				
			Structure - fractured ↓ interwoven network fractures healed ↓ dol. qtz	68	214.0	215.5	1.5	1-2				
				69	215.5	217.0	1.5	3	0.31			
			Alt'n - dolomitic - locally sericitic Min - 1-2% f-g diss py. - bed subparallel py at ~40° TCA at 215.95-215.97 - 2-3% diss py 215.7 - 216.0									
			Remks - bed of pyritic argillite at 10-20° TCA along lower ct. 216.5-217.0									

SULPETRO MINERALS LIMITED DRILL LOG HOLE NO. 4-01 SHEET 4 OF –

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
217.0	226.1		SPINIFEX U.M - mod to pale green sparsely fine u.m. Structure - numerous dol.-qtz veins at low angles T.C.A. - local Min - locally trace py Rocks - 225.0 - 226.1 - pale green silicified sericitic	1270	217.0	218.5	1.5	<0.2
				71	218.5	220.0	1.5	
				72	220.0	221.5	1.5	
				73	221.5	223.0	1.5	
				74	223.0	224.5	1.5	
				75	224.5	225.0	0.5	5.71
				76	225.0	226.1	1.1	
	226.1		E.O.H -					
			DRILL CORE SIZE LM-37					
			Note - many blocks misplaced thus core recovery applied & core measured to determine distance					

DRILL LOG HOLE NO. 4-82

PROPERTY	TP OR AREA	AZIMUTH	DATE STARTED
RUNDLE	NEWTON	105.5 (Layout)	1/12/87
PROJECT	**LOT & CONC.**	**DIP**	**DATE COMPLETED**
3382		-18°17'	16/12/87
CLAIM NO.	**CO-ORDINATES.**	**LENGTH**	**DRILLED BY**
	1999.80N 2977.7E	226.47m.	MORISSETTE
GRID NO.		**COLLAR ELEV.**	**LOGGED BY**
		3806.0	REN, CPZ

CORRECTED DIP TESTS			
ACID	TEST		
110m	-17°		
226.m	-18°		

LOCATION SKETCH OF HOLE

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
			OBJECTIVES:-					
0	1.75		MAFIC VOLCANICS:					
	1.66							
			- Fine Grained; Dark green to grey green	12108	0.0	0.60	0.60	4.20
				12109	0.60	1.75	1.15	4.20
			- Mod. calcitic, strongly magnetic Chloritic;					
			- Minor 4th. calcite veinlets and pale green (epidote) veinlets.					
			- 1% pyrite as disc'd and locally veinlets					
			- Weak fracturing in places with light grey cast.					
1.75	2.90		FELDSPAR PORPHYRY					
1.66	2.28							
			- MED. GRAINED; Purplish grey;					
			- No sig. mineral or veining.					
2.90	6.39		LAMPROPHYRE DYKE:					
2.28	6.08							
			- Fine-to med. Grained; Purplish grey;					
			- Calcitic in places.					
			- No mineral or sig. veining.					

SOLEPRO MINERALS LIMITED — DRILL LOG — HOLE NO.

METERS FROM	METERS TO	SECTION 1 cm =	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS				
6.39	8.29		FELDSPAR ± PORPHYRY:									
6.08	8.31			12110	6.39	7.96	1.07	tr-1%	2.20			
			- Med. grained, grey;	12111	7.96	8.26	0.80	1-1%	.20			
				12112	8.26	8.29	0.98	1%	.48			
8.31			- Pink alt^{n} along bands up to 2 cm thick and cut by qtz.-carb veins starting at 7.96. These bands are 35 to 50° to c.c.n and with up to 1% fine dissem pyrite.									
			- 1% to 1½ diss^{d} pyrite locally 7.96 to 8.29									
8.29	13.33		Pink Alt^{n} FELDSPAR PORPHYRY:									
8.31	12.68		- ORE PORPHYRY									
			- Med. to coarse grained; pink to pink-grey locally;	12113	8.29	9.62	0.88	1-2%	.20			
			- Barren qtz alt^{n} along thin sheets in places	12114	9.62	10.39	0.77	1-2%	.30			
			- Generally 1% diss^{d} pyrite to 11.69. Weak pyrite 11.69 to 12.33	12115	10.39	11.39	1.00	½-1%	.41			
			- 11.39 to 11.69: Highly fractured min^{d} veined zone with abund. blue-white qtz veinlets 60° to c.c.n and 5-10% diss^{d} and patchy and veinl of pyrite. Pink to dark purple alt^{n}	12116	11.39	11.69	0.30		5.24			
				12117	11.69	12.37	0.68	tr-1%	.75			
			- 5% qtz and qtz-carb veining 1.0, 35 to 60° to c.c.n.									
			- 12.37 to 12.73: Hybrid rock with sacch. grey alt^{d} feldspathic matrix, cut by 15% pinkish F.P. 3% diss^{d} py at ext. contact; over 5 cm in pink to grey silicious zone; mottled texture.	12118	12.37	12.37	0.96		.68			

SOLITRO MINERALS LIMITED

DRILL LOG

METERS FROM	METERS TO	SECTION 1 cm =	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS Au g/t				
13.33	16.89		MAFIC Volcanics:									
12.68	16.02			12119	13.33	13.67	0.34	.1%	.72			
			- Light green to greenish fine grained	12120	13.67	14.07	0.40	3-5%	6.82			
			- Light green highly brecciated locally	12121	14.02	14.33	0.26	1/2-1%	1.68			
				12122	14.33	14.79	0.41	tr.	.82			
			- Generally strongly calcitic and weak to med. pyrite	12123	14.79	15.29	0.55	1%	5.1			
				12124	15.29	15.74	0.45	1-2%	.24			
			- 13.67 to 14.07 is extremely fractured and brit and highly calc^{d} to beige carb^{d} with fine to coarse 3-5% pyrite; similarly 15.29 to 15.99.	12125	15.74	16.89	1.10	K-1%	2.20			
				AV6	13.67	15.29	1.62		3.89			
			- Pink + grey F.P. dyke 14.33 to 14.79									
16.89	18.50		Pink Alt^{d} Feldspar Porphyry:	12126	16.89	17.39	0.50		3.29			
16.02	17.59			12127	17.34	17.80	0.46		.92			
			- Med. grained, pink to pink-grey.	12128	17.80	18.26	0.46		.24			
				12129	18.26	18.50	0.24		1.2			
			- 5-10% fsp + carb veins 2-9 mm. thick.									
			- Pale pink alt^{n} w. grey bands or 'bleached' appearance and 1-3% pyrite from 17.39 to 17.80 and 18.26 to 18.50 (core varies) with irregular white calcareous									
			- Generally weak mineralization outside of above.									

BULPETRO MINERALS LIMITED — DRILL LOG — HOLE NO.

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS			
18.50	20.82		Feldspar Porphyry:								
17.59	19.84			12130	18.50	19.67	1.17		.41		
			- Pinkish grey to purplish; grades from a mottled med. grained to a fine grained feldspar - biotite dike	12131	19.67	20.82	1.15		.34		
			- No. 515° cont's, sdd's & veining.								
20.82	23.84		Hybrid F.P + M.V.								
19.84	22.67										
			- Fine to med. grained; pinkish to greyish;	12132	20.82	22.10	1.28	tr	.93		
				12133	22.10	22.55	0.45	1-2	1.4		
				12134	22.55	23.29	0.69		.54		
			- Strongly veined; strongly brecciated	12135	23.29	23.84	0.60		4.94	2.96	
			- 22.10 to 22.55: 1-2-1 dark grey. with beige-grey carb. matrix filling fractures by 2 mm.								
			- 22.55 to 23.84: Generally strongly fractured and re-filled with beige-brown carb's with up to 1-2 grey bands & patches & red alt'n due.								

METERS FROM	METERS TO	SECTION 1 cm =	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS Au g/t				
23.89	32.47		CHERTY EXHALITE HORIZON:									
3.37	30.84											
22.67	30.88											
			– Intensely brecciated dark grey to green fine grained to aphanitic locally, siltstone-sandstone bearing bands of light tan cherty material with 10 to 15% disseminated veins and patches of massive pyrite;	12136	23.89	24.91	0.57		24.14	13.76		
				12137	24.91	24.95	0.54		16.35	8.83		
				12138	24.95	25.32	0.27		12.51	3.38		
				12139	25.32	26.60	1.28		2.02	2.59		
				12140	26.60	27.73	1.13		13.06	14.76		
				12141	27.73	28.73	1.00		13.26	12.86		
				12142	28.73	29.73	1.00		19.61	19.61		
				12143	29.73	31.29	1.51		29.38	44.36		
				12144	31.24	32.47	1.23		23.10	28.29		
			– 25.32 to 26.60: Pink to pink-grey altered Feldspar Porphyry with 1 to 2% disseminated pyrite and 5% qtz-carb veinlets + veinlets.									
			– Bands of fine grained redchert hosted rock with 2% disseminated pyrite 29.91 to 29.95									
32.47	34.19		PINK ALTERED FELDSPAR PORPHYRY:									
3.68	32.45											
			– One Porphyry									
			– Pale grayish pink bleached to 33.19 with 1–3% disseminated pyrite. Redchert pink 33.17 to 34.19 with minor bleached zones and generally 1% pyrite.	12145	32.47	33.17	0.70		9.77	6.84		
				12146	33.17	34.19	0.97		5.38	5.22		
			– Two sets of qtz-carb veins and veinlets 45° to C.S.A.									

SULPETRO MINERALS LIMITED

METERS FROM	METERS TO	SECTION 1 cm =	DESCRIPTION
39.14	36.92		Alt'd Feldspar Porphyry:
32.47	35.11		- fine to med. grained; pale pinkish grey; fine specks of mafic in places — possibly hybrid.
			- patches of red alt'n in places
			- disst'd pyr veins & pyrite locally — up to 1%
			- moderate texture locally
36.92	39.09		Red. Alt'd Feldspar Porphyry:
35.11	37.18		- Med. grained; red;
			- Fairly abundant qtz-carb veins and stringers 5° to 60°
			- up to 1% fine disst'd and blebs of pyrite locally, but generally weak mineln
			- Gradational contacts
39.09	41.87		Alt'd Feldspar Porphyry:
37.18	39.82		- As 39.14 to 36.92

SAMPLE NO.	FROM	TO	LENGTH	ASSAYS			
12147	39.14	35.19	1.00	9.6	9.6		
12148	35.14	36.19	1.00	9.74	9.74		
12149	36.14	36.92	0.78	3.53	2.75		
12150	36.92	37.79	0.87	4.04	3.31		
12151	37.79	39.02	1.23	5.82	7.16		
AVG	23.24	39.02	15.78	12.46			*
12152	39.02	40.09	1.07	.30			
12153	40.09	40.84	0.75	.62			
12154	40.84	41.87	1.03	8.19			

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
41.82	42.42		MAFIC VOLCANIC					
39.82	40.34		- fine gr'd; 75% calc to less V grey;	12153	41.82	42.42	0.55	3.15
			- non-calcitic;					
			- contains weak pyrite mineralization 1-5% stgr at 10 cm. 2 intervals					
42.42	43.47		PINK ALT'D FELDSPAR PORPHYRY:					
40.34	41.34		- fine to med. gr'd; pink to pink grey; purplish	12156	42.42	43.47	1.05	2.3
			- massive texture locally;					
			- 5-10% qtz-carb veins (2 sets at 45° to C.A.);					
			- minor disc. py.					
43.89	43.89		ALT'D MAFIC VOLCANIC:	12157	43.47	43.89	0.42	3.39
41.34	41.74		- fine grained; strongly brecciated and silicified with siliceous cream-white matrix;					
			- 5% py disc. py.					

SULPETRO MINERALS LIMITED DRILL LOG HOLE NO.:

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
43.89	44.62		Hybrid - Brec'd Mod Volcanic ± F.P:					
41.74	42.44		- Fine grained, hem ± pinks and reds.	12158	43.89	44.62	0.73	2.46
			- thin bands ± alt'd mic. clas.					
			- Abund. stem. ± lith ± sphalerite.					
			- No sig' mins'n					
44.62	45.72		Alt'd Mafic Volcanic:					
42.44	43.42		- light to med. grey, fine grained	12159	44.62	45.72	1.10	.65
			- No sig' mins'n, alt'n or veining					
45.72	46.78		Alt'd Feldspar - Biotite Porphyry.					
43.42	44.49		- med grained, pinkish grey ± seriate texture.	12160	45.72	46.78	1.06	.65
			- No sig' mins'n, alt'n or veining.					
46.78	47.86		Alt'd Hybrid - Porphyry:					
44.49	45.52		- fine grained, pinkish red alt'n	12161	46.78	47.86	1.08	2.02
			- strongly sheared,					
			- minor veining ± trace pyrite					

METERS FROM	METERS TO	SECTION 1 cm =	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
42.96	49.30		Alt'n Mafic Volcanics:	12162	42.86	49.30	1.44	10.83
45.52	46.89		- Light. grey; fine grained;					
			- mod. calcitic + magnetic;	AVG	39.02	49.3	10.28	3.57
			- Fairly abund. qtz-carb veins + veinlets 2° to 45° to C.C.A					
			- 3-5% disc'd pyrite generally; Highly brecciated with 10% disc'd Pyrite and a chalky fragmental zone 49.15 to 99.30 at end - Contact					
99.3	50.3			12163	99.3	50.3	1.0'	1.13
46.89	47.84		Feldspar Porphyry:					
			- Med. to coarse gr'd, grey with deep pink to violet subh'l feldspars.					
			- Sparse pyrite					
			- Occ. fine veinlets of Carb					
50.30	51.89		Alt'n Mafic Volcanics:					
47.84	49.33			12164	50.3	51.87	1.57	1.75
			- Light grey-green; fine grained;					
			- bx'd & fractured locally; Sub parallel to 20° to C.C.A					
			- Occ' patches of disp. fine pyrite					
			- Minor FP dykes and patches					

SULPETRO MINERALS LIMITED

METERS FROM	METERS TO	SECTION 1 cm =	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
51.82	53.59		Pink Alt'n Felsenau Porphyry:	12165	51.82	52.82	0.95	2.09
49.33	50.92			12166	52.82	53.59	0.72	1.03
			- Fine to med grained, pink to pinkish-buff					
			- Abundant qtz. carb veins and veinlets 45° to 50° some blue qtz blebs and veins locally 45° to C.A.					
			- Minor beige-green alt'n along shears with minor disseminated pyrite at 52.82 to 53.02 - 45° to C.A.					
			- Fracturing 20° to C.A.					
53.59	60.20		Felsenau Porphyry:					
50.92	57.73		- Purplish grey; med. grained.					
			- Strongly calcitic; weakly to moderately magnetic	12167	53.59	54.85	1.32	.21
				12168	54.06	56.91	1.55	4.20
				12169	56.91	57.91	1.00	.86
			- Strongly bx'd + foliated 30° to C.A. 56.91 to 57.91 - no visible mineralization or veins	12170	57.91	58.91	1.00	4.20
				12171	58.91	60.20	1.29	4.20
				12172	60.20	60.70	0.50	.29
			- Bx'n locally with pink alt'n and qtz veining 58.59 to 59.86 C.A broken pyrite					
			- Minor blue qtz and pinkish alt'n along fracture 53.91 to 60.20 with occ. fine pyrite in plane					
			- Red alt'n 60.35 to 60.70 - minor pyrite					

METERS FROM	METERS TO	SECTION 1cm:	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS				
60.70 / 57.73	61.80 / 58.78		Exhalite - Chert Formn:									
			- Dark purplish grey-green; fractured and bx'd locally with and healed by cherty, purplish to beige-tan mat'l.	12173	60.70	61.80	1.10		2.4			
			- 1/2 to 1% pyrite as dissem and as massive blebs filling fractures locally.									
61.80 / 58.78	62.54 / 59.48		Pink Alt'd Feldspar Porphyry:									
			- Med. grained; pinkish red with beige carb-sericite alt'n and qtz-carb veins 45° to L.C.A. — 1% dissem pyrite generally.	12174	61.80	62.54	0.74		2.09			
62.54 / 59.48	62.79 / 59.67		Mafic Volcanics:									
			- Fine grained; green; 1% dissem py along fractured-filled qtz-veins	12175	62.54	63.09	0.55		4.01			
62.79 / 59.67	63.09 / 60.0		Red-Pink Alt'd Porphyry:									
			- Med. grained;	AVG	60.70	63.09	2.39		2.67			
			- 1% dissem pyrite									

SULPETRO MINERALS

METERS FROM	METERS TO	SECTION 1 cm =	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	ASSAYS
63.09	69.05		FELDSPAR – Gor. Porphyritic?	12176	63.09	69.05	0.96	.31
60.92	60.92		– Purplish-grey, fine grained					
			– Strongly calc.!					
			– No sig. mafics, veng. or alt'n					
69.05	66.00		LAMPROPHYRE DYKE:					
60.92	62.77		– Fgr. to med. grained, purplish grey					
			– Specks of mafics + ;					
			– Calcite + magnetic.					
66.00	73.62		FELDSPAR Por. Hbld. Porphyry!					
62.77	70.06		As 63.09 to 69.05					
73.62	79.85		LAMPROPHYRE DYKE:					
70.06	71.21		As 69.05 to 66.00.					

Resources Inc.

METRES FROM	METRES TO	SECTION	DESCRIPTION
74.83	80.95		GREY BIO. F.P.
71.21	76.99		as above.
80.95	89.50		SERICITIZED F.P.
76.99	85.12		yellow red, m.g.; non-magnetic
			Structure: sheared
			Alt'n + Veins: highly sericitized, red alt'n - pervasive thin to 3mm qc stringers - qv 87.0-87.10
			Min'n: tr py.
89.50	90.47		HALO ESP PORPHYRY DYKE
85.12	86.04		- slightly blocky 90.40-90.50.
90.47	90.97		Red ALT'D F.P.
86.04	86.52		- red, m.g.; magnetic (slight)
			Structure: shrd
			Alt'n + Veins: red alt'n w/ minor thin lt. grey qc veins
			Min'n: tr py

SAMPLE NO.	FROM	TO	LENGTH	% Py	g/t Au ASSAYS
11493	80.95	82	1.05	tr	0.41
11494	82	83	1	tr	<0.2
11495	83	84	1	tr	0.24
11496	84	85	1	tr	<0.2
11497	85	86	1	tr	<0.2
11498	86	87	1	tr	<0.2
11499	87	87.10	0.1	tr-1	massive
11500	87.10	88.	0.9	tr	<0.2
2503	88	89	1	tr	<0.2
2504	89	89.5	0.5	tr.	<0.2
2505	90.47	90.97	0.50	tr.	<0.2

FROM	TO	
		GREY A'n. F.P.
90.97	91.65	GREY BIO. F.P.
86.51	87.16	- slight pk altn., mil py
91.65	93.88	HBLD FSP. PORPHYRY (LAMP) DYKE.
87.16	89.29	
87.16	91.27	
93.88	110.00	GREY BIO. F.P.
89.29	104.62	as above.
		- unaltered, tr py
110.00	116.00	GREY RED ALT'D F.P.
104.67	110.32	- weakly altd w/ mod amt of qz veinlets only tr py.
116.00	122.58	MAFIC VOLC.
110.32	116.58	- unaltd, assay calcite w/ tr py
122.58	124.36	GREY BIO. F.P.
116.58	118.27	

SAMPLE NO	FROM	TO	LENGTH				
2506	110.0	111.0	1.0	tr	0.31		
2507	111.0	112.0	1.0	tr	<0.2		
2508	112.0	113.00	1.00	tr	<0.2		
2509	113.00	114.00	1.00	tr	<0.2		
2510	114.0	115.0	1.00	tr	0.24		
2511	115.0	116.0	1.00	tr	1.27		
2512	116.0	117.0	1	tr	0.55		
2513	117.0	118.0	1	tr	<0.20		
2514	118.0	119.0	1	tr	<0.20		
2515	119.0	120.0	1	tr	<0.20		
2516	120.0	121.0	1	tr	<0.20		
2517	121.0	122.0	1	tr	<0.2		
2518	122.0	122.58	0.68	tr	0.79		

Resources Inc.

DRILL LOG HOLE NO. [illegible]

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH		ASSAYS g/t Au
124.36	135.80		ALT'D MAFIC VOLC.						
118.27	129.15								
			- med grey, f.g., magnetic	2519	125.20	125.95	0.75	tr	0.27
				2520	125.95	126.12	0.17	5-7	1.34
			Structure: minor shearing	2521	126.12	126.90	0.78	tr	<0.2
				2522	126.90	127.10	0.20	1/2-1	"
			Alt'n + Veins: only a few small patches of blue grey alt'n.	2523	127.10	127.80	0.7	tr	"
				2524	127.8	128.40	0.7	tr	"
			- calcite throughout.	2525	128.40	128.90	0.5	1/2-1	"
				2526	128.9	129.70	0.8	tr	"
			Min'n: only tr py.	2527	129.7	131.00	1.30	tr	"
				2528	131	132	1	tr	"
			alt'd zones 125.95 - 126.12	2529	132	133	1	tr	"
			126.90 - 127.10	2530	133	134	1	tr	"
			128.4 - 128.90	2531	134	135	1	tr	"
				2532	135	135.8	.8	tr	"
				2533	135.8	136.0	.2	tr-1/2	"
				2534	136	137	1	tr	"
135.80	138.45		GREY SLIGHTLY ALT'D F.P.	2535	137	138	1	tr	"
129.15	131.67			2536	138	139	1	tr	<0.2
			- grey to red, m.g.	2537	139	140	1	tr	"
				2538	140	141	1	tr	"
			- slightly alt'd in sections here + there very minor py.	2539	141	142	1	tr	"
				2540	142	143	1	tr	"
				2541	143	144	1	tr	"
				2542	144	145	1	tr	"
				2543	145	146	1	tr	"
138.45	155.33		ALT'D MAFIC VOLC.						
131.67	142.33								
			at about 124.36 - 135.80.	2544	146	147	1	tr	<0.2
				2545	147	148.35	1.35	tr	"
			alt'd sections 118.27 - 118.75	2546	148.35	148.75	3.83	1=2	"
			150.50 - 150.85	2547	148.75	149.65	.90	tr	0.51
			149.65 - 149.85	2548	149.65	149.85	.20	tr-1/2	<0.2
				2549	149.85	150.50	0.75	tr	"
				2550	150.50	150.85	0.30	tr-1/2	"
				2552	150.85	152.0	1.15	tr	.27
				2553	152	153	1	tr	<0.2
				2554	153	154	1	tr	"

Resources Inc.

METRES FROM	METRES TO	SECTION	DESCRIPTION	SAMPLE NO.	FROM	TO	LENGTH	Est %Py	Au g/t	ASSAYS
153.33	153.59		· GREY BIO. F.P.	2581	155.0	155.33	0.33			
149.83	149.83			2561	155.33	156	0.67	tr	<0.2	
			marked, milky.	2562	156	157	1	tr	"	
				2563	157	157.54	0.54	tr	"	
153.54	162.30		ALT'D VOLC							
149.83	154.36			2564	157.54	158	0.46	tr	"	
			as above.	2565	158	159	1	tr	"	
			= strongly calcitic relatively unaltered	2566	159	160	1	tr	<0.2	
				2567	160	161	1	tr	"	
162.30	165.80		LAMP DYKE	2568	161	162.3	1.30	tr	0.27	
154.36	157.30									
165.40	138.16		GREY BIO. F.P.							
153.30	169.44									
			relatively unaltered							
			- Med. to c.g.							
			= No. Sig. min., calc. or veins.							
			= 175.39 to 176.19: Mafic volcanic(s) fine grained grey-green; strongly calcitic + magnetic; ½ to 1% disc. py	2569	175.39	176.19	0.80	½-1%	<0.2	
138.16	200.96		MAFIC VOLCANICS:							
169.44	190.54			9869	176.19	177.19	1.0		<0.2	
			- Fine grained, dark green-grey; grades to med. grained, grey at 191.5 to 199.96	9870	177.19	178.16	1.32		0.21	
				9871	178.16	179.16	1.0		<0.2	
			- Strongly calcitic + magnetic dis.	9872	179.16	180.16	1.0		"	
				9873	180.16	181.16	1.0		"	
				9874	181.16	182.16	1.0		1.06	
			- Minor qtz. carb. veinlets and veins dis.	9875	182.16	183.05	0.89		<0.2	
				9876	183.05	184	0.95		<0.2	
				9878	184	185	1.0		"	
			- Sporadic dis. pyrite in places.	9878	185	186	1.0		"	
				9879	186	187	1.0		"	
			- No sig. min. or calc.	9880	187	188	1.0		"	
				9881	188	189	1.0		"	

METRES FROM	METRES TO	SECTION	DESCRIPTION
			170.16 to 200.55 : Cont'd:
			- Fine grained, purplish F.P. dyke 188.16 to 189.94 (looks like lamp at 1st glance)
			- Med. grained, purplish grey F.P. dykes 183.05 to 197.95, 191.76 to 192.06, and 194.46 to 195.03
			- Weak alt^n to beige - purple to tan sericitic shear 198.78 to 199.58. 75 - 80° to C.A. - tr pyrite ;
			Alt. volc:
			- 199.58 - 200.20 : mod alt'd beige - grey volcanic with 3 - 5% diss^d pyrite - sericite + carb^n weakly fractured and alt'd 200.20 to 200.55
200.55	208.87		HYBRID - F.P + M.V.
190.34	M6/7		- fine grained, pinkish to greyish green to purplish grey.
			- Bands of mafic up to 1 cm with up to 3% diss^d py. 200.55 to 200.95.
			- predominantly Hbld - Feldspar Porphyry.
			- Pink alt'd F.P. 205.38 to 205.94 - tr. py
			- No sig^t min^n ;
			- Fairly abund. qtz - carb veins - veinlets

SAMPLE NO.	FROM	TO	LENGTH	Py %	ASSAYS
9882	189	190	1.0	1	<0.2
9883	190	191	1.0		"
9884	191	192	1.0		"
[illegible]	192	193	1.0		"
9886	193	194	1.0		"
9887	194	195	1.0		"
9888	195	196	1.0		"
9889	196	197	1.0		"
9890	197	198.18	1.18		"
2570	198.18	198.78	0.60	68	0.96
2571	198.78	199.58	0.80		<.2
AVG	198.18	200.2	2.02		1.94
2572	199.58	200.20	0.62		5.38
2573	200.20	200.55	0.35		0.55
2574	200.55	201.11	0.56		0.86
2575	201.11	202.11	1.00	tr	0.21
2576	202.11	203.11	1.00		0.86
2577	203.11	204.11	1.00		<.20
2578	204.11	205.38	1.27		<.20
2579	205.38	206.04	0.66		<.20
2580	206.04	206.27	0.23		0.53

Resources Inc. DRILL LOG HOLE NO. ~~88-402~~ 4-02.

METRES FROM	METRES TO	SECTION
206.27	226.47	
196.17	215.39	
	EOH	

DESCRIPTION

MAFIC VOLCANICS:

- Med. to c.g. flows; green to grey; andesitic locally.
- Fine to med. beige-grey alt^n in places t.a. along fractures and veining with good diss^d pyrite min^n locally from 211.82 to 218.89. Alt^n appears 25° to c.a. locally.
- Non-calcitic + strongly magnetic
- Fairly abundant white specks of Leucoxene t.a.
- Hybrid Porphyry 216.41 to 216.86
- 209.06 to 210.31: Feldspar Porphyry, fine grained, light pinkish-green, strongly calcitic.
- Light greenish siliceous hybrid F.P. 218.89 to 219.41 and 221.36 to 222.16. No min^n.
- Abund minor qtz-carb veinlets 65-70° to c.a.

END OF HOLE.

- split core sampled
- LM 37 AW CORE

- Hole made > 50g/min water; was grouted after drilling.

Note by AWB 15/12/89
Sect 206 - 225 Alteration is a grey and not typical pyritic light grey alt + 1-2% mt - expect values to be low relative to py content

225.16 - 226.47 A little typical pyritic light grey alt^n? - probably ... granitic ... values

SAMPLE NO.	FROM	TO	LENGTH	EST % Py (by AWB)	ASSAYS	
2582	206.27	206.92	0.65	½-1%	<.2	
2583	206.92	207.92	1.00	1%	<.2	
2584	207.92	209.06	1.14		1.71	
2585	209.06	210.31	1.25		0.29	
2586	210.31	211.82	1.51		<.2	
2587	211.82	212.41	0.59	½-1%	<.2	
2588	212.41	213.41	1.00	1%	1.18	
2589	213.41	214.41	1.00	3%	2.25	
2590	214.41	215.41	1.00	3%	0.75	
2591	215.41	216.41	1.00	½-1	<.2	
2592	216.41	216.86	0.45	—	<.2	
2593	216.86	217.63	0.77	tr	1.21	
2594	217.63	218.21	0.58	2%	3.46	2.01
2595	218.21	218.89	0.68	6%	18.51	12.59
2596	218.89	219.41	0.52	tr	6.31	3.28
2597	219.41	220.68	1.27	1-2%	0.71	
2598	220.68	221.36	0.68	1-2%	0.78	
2599	221.36	222.16	0.80	—	0.21	
2600	222.16	223.16	1.00	½-1%	0.86	
4298	223.16	224.16	1.00	tr-½	<.2	
4299	224.16	225.16	1.00	1%	<.2	
4300	225.16	226.47	1.31	1-2%	<.2	
AVG	212.41	214.41	2.0		1.72	
AVG.	217.63	219.41	1.78		10.04	

true width cannot be determined
- hole appears to be cu... along mineralized horizon.

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No.3382#75 SHEET 1 OF 10

Property South Rundle	TP. or Area Newton	Azimuth 200 degrees	Date Started 22/07/87	Corrected Dip Tests
Project 3382	Lot. & Conc.:	Dip -56 degrees	Date Completed 28/07/87	Location sketch
Claim No.	Co-ordinates: 1999.42N/3114.24E	Length 222m	Drilled By: Morisette	
Grid No.		Collar Elev. 3997.44m	Logged By: C.P.Zorzi	

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. %	ASSAYS
		OBJECTIVES:-To test up dip extension of Central Zone	DEPTH	AZ	TRAZ	ESTAZ	DIP	
			7.62			200.1	-56	AT
			45.70			200.7	-55	AT
0.0	4.00	CASING	101.74			201.5	-53	AT
			153.82			202.3	-51	AT
4.00	14.55	GWK - MAFIC FLOW	60.90	208.5	201.0		-54	TROP
		Med. grey, f.g., relatively hard with a few % f.g. detrital qtz grains	222.0			203.3	-51	AT
		Struct: Fr'd at random angles thru out mod. amounts of blocky core Small fault from 6.6-6.9						
		Veins: Numerous 1-5mm light grey calc. veins randomly orientated and also patchy						
14.55	21.85	HBLD F.P. Grey to sl. purple, f.g. matrix with m.g. fsp. phenos and 4% c.g. enhedral fsp. and f.g. hbld phenos with biot.						
		Struct: Relatively massive with minor fracturing Lower Ct. sharp at about 45 degrees						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Veins: A few paper thin to 2mm light grey randomly orientated cacl. veins						
21.85	27.60	MASSIVE GWK - MAFIC FLOW As above 4.0-14.55 Struct: Massive with numerous thin randomly oriented light grey calc. veins Min: tr patchy f.g. Py Remarks: Small lamp dyke 23.03-23.60						
27.60	30.10	SPECKLED GWK As above 4.0-14.55 but f.g. to m.g. calc. specks Struct: Relatively massive with minor fractures and sections of light grey calc. with paper thin calc. veinlets and strong pervasive calc.						
30.10	34.85	ARGILLITE BRECCIA Dark grey to black with grey green chloritic? matrix Clasts vary in size from 1mm to 2-3cm Magnetic Struct: Brecciated thru out, very minor fractures Veins: A few % thin light grey calc. veins						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
34.85	48.66	MASSIVE GWK As above, magnetic Struct: Massive with numerous randomly oriented calc. veins becoming speckled gwk near the end						
48.66	51.40	GRAPHITIC ARGILLITE AND SILTSTONE Grey to black, v.f.g. with blocks and blebs of siltstone Struct: Argillite shows good bedding at about 45 degrees Veins: A few % thin calc. veins with patches and veins or infillings along bedding planes						
51.40	52.20	SPECKLED GWK As above with schist. at 45 degrees and numerous thin light grey calc. veins						
52.20	57.35	CARBONATIZED U.M. OR GWK Yellow green grey, f.g., relatively hard, non-magnetic Struct: Highly fr'd and healed with qtz Veins: Numerous thin light grey calc. veins						
57.35	59.80	GREY F.P. Med. grey, f.g. matrix with 10-20% m.g. to c.g. enhedral to subhedral feldspar phenos, non-magnetic Struct: Massive with minor fractures filled with qtz-calc.						

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
59.80	66.60	CARBONATIZED U.M OR MAFIC FLOW As above 52.20-57.35 with small patches of ser'd F.P., non-magnetic Struct: Fr'd thru out with numerous thin 1-2mm qtz-carb veins Mod. pervasive calc.						
66.60	68.23	GRAPHITIC ARGILLITE AND SILTSTONE As above 48.66-51.40 Struct: Bx'd texture at upper Ct. becoming bedded in middle and grading to more massive at bottom						
68.23	79.98	SERICITIZED F.P. Yellow green with porphyry texture almost obliterated in places, non-magnetic Struct: Small fractures filled with qtz-carb Alt'n: Highly ser'd at upper Ct. becoming less sericitic over section Min: tr diss'd Py						
79.98	84.50	GREEN BANDED CARBONATE ROCK Green to yellow, f.g., weakly to mod. magnetic Struct: Banded thru out at 60 degrees						

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Alt'n & Veins: Banded with thin 2-5mm yellow white carb and qtz bands with numerous thin light grey calc. veins						
		Remarks: 84.15-84.50 sericitic F.P.						
84.50	85.25	SHEARED U.M. Grey green, f.g., relatively hard, non-magnetic						
		Struct: Highly sheared and bx'd with schist. at about 45 degrees						
		Veins: Numerous thin light grey qtz-carb veins						
85.25	86.15	SHEARED SILICIFIED SERITICIZED F.P. Pale yellow silicified F.P., non-magnetic						
		Struct: Highly sheared						
		Alt'n & Veins: Ser'd thru out and fr'd, fractures filled with qtz						
		Min: tr-0.5% f.g. diss'd Py	8623	85.25	86.15	0.9	tr	tr
86.15	86.96	SHEARED U.M. (FUCHSITIC) As above 84.50-85.25, non-magnetic but contains fuchsite as bands in certain locations						
86.96	91.20	SERITICIZED F.P. WITH INTERLAYERED GREY CARB. ROCK As above 68.23-79.98 with silicified or carbonatized sections grey in colour						
		Struct: Sheared with schist at 45 to 60 degrees						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Alt'n & Veins:						
		Ser'd with siliceous and carbonate infillings	8624	86.96	88.00	1.04	tr	0.3
			8625	88.00	89.50	1.5	tr	0.3
		Min:	8626	89.50	91.00	1.5	tr	1.3
		tr wispy f.g. Py	8627	91.00	92.00	1.0	tr	0.1
91.20	97.73	SHEARED SPX U.M. WITH CLOTS OF SER'D F.P. As above 84.50-85.25 with preserved spx and large clots of ser'd F.P.						
		Struct: Highly sheared						
		Alt'n & Veins: Ser'd and silicified in F.P. section U.M. contain numerous qtz-carb infillings and veins	8628	92.00	93.50	1.5	tr	tr
			8629	93.50	95.00	1.5	tr	tr
		Min:	8630	95.00	96.50	1.5	tr-0.5	0.8
		tr f.g. wispy and diss'd Py	8631	96.50	98.00	1.5	0.5-1	tr
97.73	101.78	POLYHEDRALLY JOINTED U.M. Grey green, f.g., relatively hard, magnetic						
		Struct: Good polyhedral jointing becoming vague						
		Alt'n: Short section of sericitic exhalite that has small bands of red alt'n						
		Min:	8632	99.50	101.00	1.5	2-3	0.4
		More or less restricted to exhalite bands where massive to submassive bands occur	8633	101.00	102.00	1.0	1-2	tr
101.78	105.43	HBLD - FSP PORPHYRITIC DYKE LAMP? Purple grey, m.g., sl. magnetic, composed of subhedral hbld and fsp, numerous chl. slips						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Struct: Highly fr'd thru out with plenty of broken and blocky core .						
		Alt'n & Veins: Chl'c slip planes with numerous thin light grey calc. veins Pervasive calc.						
105.43	108.56	GREY F.P. As above 57.35-59.80, magnetic and sl. more alt'n than above						
108.56	110.20	CHERTY EXHALITE AND MAFIC VOLC Upper half mafic volc with mod. epidote alt'n Lower half cherty exhalite						
		Struct: Mod. fracturing						
		Alt'n & Veins: Volcanics, numerous thin lime green epidote stringers, cherty horizon, red alt'n with carbonate veins						
		Min: Predominantly in the exhalite where clots and stringers of submassive Py occur	8634 8635	108.50 109.50	109.50 110.50	1.0 1.0	tr-0.5 0.5-1	tr tr
110.20	114.50	GREY F.P. As above with section of cherty exhalite 111.38-112.20 Exhalite bands contain 4-5% Py in bands						
		Struct: Both upper and lower Cts. are sharp but irregular	8636 8637	110.50 112.00	112.00 113.50	1.5 1.5	1-2 tr	tr tr
114.50	124.50	ALTERED MAFIC VOLC (PILLOWED) Grey green, f.g., magnetic						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Struct: Fr'd and healed, possible pillows						
		Alt'n & Veins: Numerous epidote veinlets and qtz-calc	8638	114.80	115.50	0.7	tr-0.5	tr
		Remarks: Cherty exhalite from 114.82-115.40 with 0.5-1% Py in bands						
124.50	133.10	RED ALTERED F.P. Red to burnt red, magnetic, Fsp. phenos are barely preserved Small sections of cherty exhalite						
		Struct: Highly fr'd						
		Alt'n & Veins: Good red carbonate alt'n with numerous thin light grey white qtz-carb veins	8639	124.50	126.00	1.5	tr	0.4
			8640	126.00	127.50	1.5	tr	tr
		Min: tr-0.5% f.g. diss'd Py with sections varying up to 1%	8641	127.50	129.00	1.5	tr	0.4
			8642	129.00	130.50	1.5	tr-1	2.2
			8643	130.50	132.00	1.5	tr	0.1
133.10	135.13	INTERMEDIATE LAMP DYKE (F.G. PORPHYRITIC DYKE) Light grey, f.g. with remnant porphyry texture Relatively massive						
		Struct: Massive with minor fracturing and a few % 1-2mm calc. veins						
135.13	138.07	GREY F.P. (SLIGHTLY ALTERED) As above but sl. alt'd						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Struct: Fr'd thru out and healed with vein material						
		Alt'n & Veins: Sl. amount of red alt'n with specularite infillings Numerous thin light grey qtz-carb veins						
		Min: tr-0 Py	8644	136.50	138.00	1.5	tr	0.6
138.07	141.20	RED ALTERED Q.V. F.P. As above 124.50-133.10						
		Struct: Numerous fractures with healings						
		Alt'n & Veins: Good red carbonate alt'n with numerous thin light grey qtz-carb veins						
		Min: tr Py and minor specularite infillings	8645 8646	138.00 139.50	139.59 141.00	1.5 1.5	tr tr	nil nil
141.20	154.10	SERITICIZED F.P. As above						
		Struct: Sheared and fr'd thru out	8647 8648 8649	141.00 142.50 144.00	142.50 144.00 145.50	1.5 1.5 1.5	tr tr tr	nil 0.5 nil
		Alt'n & Veins: Grey pink carb alt'n with numerous thin light grey qtz-carb veins	8650 8651 8652 8653	145.50 147.00 148.50 150.00	147.00 148.50 150.00 151.50	1.5 1.5 1.5 1.5	tr tr-0.5 0.5-1 0.5-1	4.7 7.4 1.4 nil
		Min: tr-0.5% f.g. diss'd Py scattered here and there	8654 8655	151.50 153.00	153.00 154.50	1.5 1.5	tr tr	0.8 nil

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 3382#75 SHEET 10OF 10

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
154.10	159.50	GREY SL. ALTERED F.P. As above with some short sections of red alt'n and qtz veins	8656	154.50	156.00	1.5	tr	nil
			8657	156.00	157.50	1.5	tr	nil
		Struct:	8658	157.50	159.00	1.5	tr	nil
		Fr'd and healed with qtz-carb	8659	159.00	160.50	1.5	tr	0.5
159.50	196.47	GREY BIOTITIC F.P. As above but with 10-20% f.g. biotite Magnetic						
		Struct: Relatively massive with minor fracturing						
		Alt'n & Veins: Minor pink alt'n here and there with a few % thin light grey qtz-calc. veins						
196.47	222.0	DIORITIC PORPHYRY Fresh, grey, m.g., magnetic						
		Struct: Massive with major fracturing thru out Very blocky, numerous thin light grey calc. veins						
	222.0	END OF HOLE						
		DRILLING NOTES Hole cemented from bottom to top Casing pulled BQ core drilled						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No.3382#76 SHEET 1 OF 6

Property South Rundle	TP. or Area Newton	Azimuth 200 degrees	Date Started 28/07/87	Corrected Dip Tests
Project 3382	Lot. & Conc.:	Dip -54 degrees	Date Completed 31/07/87	
Claim No.	Co-ordinates: 1964.63N/3090.67E	Length 151.22m	Drilled By: N.Morisette	
Grid No.	Section 670 SE 16.6m NE of ref. line	Collar Elev. 4003.46m	Logged By: C.P.Zorzi	

Location sketch

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. %	ASSAYS
		OBJECTIVES:-To test upper extension of east shoots around 660SE						
0.0	3.96	CASING						
3.96	6.40	SHEARED CARBONATIZED U.M. Pale green, f.g., relatively soft, non-magnetic Struct: Sheared with schist. at about 45 degrees Alt'n & Veins: Carb alt'n with light grey qtz and calc. veins Min: Small section with about 1-2% f.g. banded Py						
6.40	15.10	CARBONATIZED POLYHEDRALLY JOINTED U.M. Med. to light grey, f.g., relatively hard Non-magnetic Struct: Good jointing with numerous thin 1-3mm calc. and qtz-carb infillings						

DEPTH	MAZ	TRAZ	ESTAZ	DIP
26ft		200	200.12	-54
156ft		200	200.7	-54
310ft		200	201.43	-54
496ft		200	202.26	-54

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
15.10	17.15	SERICITIC SILICIFIED CARBONATE ROCK Yellow grey, f.g., non-magnetic with possible remnant porphyry structure and highly silicified						
		Struct: Highly fr'd						
		Alt'n & Veins: Numerous qtz-carb infillings with graphitic and chloritic infillings						
		Min: tr-1% f.g., patchy and wispy Py	8660 8661	15.00 16.50	16.50 18.00	1.5 1.5	tr-1 tr-0.5	0.3 nil
17.15	32.29	SHEARED POLYHEDRALLY JOINTED U.M. As above						
		Struct: Good jointing with a minor schist. at 45 degrees						
		Veins: Numerous thin qtz-calc veins						
32.29	41.12	HIGHLY SHEARED AND BANDED ROCK Pale yellow green, non-magnetic with short ser'd F.P. sections						
		Struct: Highly sheared at 45 degrees Complete section of broken and blocky core						
		Alt'n & Veins: Highly carb'd with numerous qtz-carb veins Also strongly ser'd sections						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 3382476 SHEET 3 OF 6

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
41.42	53.10	RED ALTERED F.P. Brick red, f.g. to m.g., sl. magnetic Struct: Sheared with minor schist. at 45 degrees Alt'n & Veins: Good red carbonate alt'n with mod. amount of thin Q.C. veins and chl. infillings	8662	41.42	42.50	1.08	tr	nil
			8663	42.50	44.00	1.5	tr	0.4
		Min: tr f.g. diss'd Py	8664	44.00	45.50	1.5	tr	0.3
			8665	45.50	47.00	1.5	tr	0.4
		Remarks: Section of cherty exhalite and U.M. 47.70-48.35 and small alt'd volc 50.00-50.25 From 52.20-52.80 lamp dyke	8666	47.00	48.50	1.5	tr	0.5
			8667	48.50	50.00	1.5	tr	0.3
			8668	50.00	51.50	1.5	tr	2.4
			8669	51.50	52.20	0.70	tr	0.9
53.10	61.85	ALTERED MAFIC VOLC. Med. to dark grey, f.g., magnetic Struct: Numerous randomly orientated small fractures Alt'n & Veins: Minor garnetiferous sections with numerous 1-3mm light grey calc. and Q.C. veins	8670	53.10	54.50	1.4	tr-0.5	0.4
			8671	54.50	56.00	1.5	0.5-1	0.4
			8672	56.00	57.50	1.5	1-2	tr
		Min: 0.5-2% f.g. diss'n and wispy Py with higher conc. in select areas	8673	57.50	59.00	1.5	0.5-1	0.5
			8674	59.00	60.50	1.5	tr-0.5	tr
			8675	60.50	62.00	1.5	1-2	tr
61.85	65.65	FRACTURED LAMP DYKE Light to med. grey, f.g., magnetic Struct: Highly fr'd with blocky and stretched core Probable fault						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
65.65	71.55	ALTERED MAFIC VOLC Dark grey to black, f.g., magnetic Struct: Fr'd thru out and healed Alt'n & Veins: Numerous thin wispy epidote veins and infillings with a similar amount of light grey calc. veins and garnetiferous patches Min: tr-0.5% diss'd Py						
71.55	72.40	LAMP DYKE Med. to dark grey, f.g., non-magnetic Struct: Massive with minor fractures and a few thin light grey calc. veins						
72.40	82.85	ALTERED MAFIC VOLC AND INTERLAYERED SLIGHTLY ALTERED F.P. As above with short sections of sl. alt'd F.P. Struct: Numerous minor fractures with infillings of Q.C. and calc. Alt'n: Cherty bands with minor red alt'n thru out Min: 0.5-2% f.g. diss'd Py	8676	72.40	74.00	1.6	tr-0.5	tr
			8677	74.00	75.50	1.5	tr-0.5	tr
			8678	75.50	77.00	1.5	tr-0.5	tr
			8679	77.00	78.50	1.5	0.5-1	0.2
			8680	78.50	80.00	1.5	0.5-1	tr
			8681	80.00	81.50	1.5	tr-0.5	tr
			8682	81.50	83.00	1.5	tr-0.5	1.0
			8683	83.00	84.50	1.5	tr	tr
			8684	84.50	85.90	1.4	tr	tr

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
82.85	85.40	GREY SLIGHTLY ALTERED F.P. As above with a minor amount of red alt'n Struct: Mod. fr'd and healed with qtz-carb and chl. infillings						
85.40	88.50	FRACTURED HBLD - FSP LAMP As above Struct: Highly fr'd thru out, possible fault Last 1.5m not fr'd	8683	87.50	88.50	1.0	tr-0.5	0.1
88.50	91.20	RED ALTERED F.P. AND MAFIC VOLC (HYBRID ROCK) Purple red F.P. with clots of mafic volc Struct: Highly fr'd and healed, good bx texture Alt'n & Veins: Grey red cb. alt'n with purple cb. alt'n Q.C. veins and infillings thru out Min: Py patches and diss'n 88.50-90.16 about 10% highly enriched zone	8684 8685	88.50 90.00	90.00 91.50	1.5 1.5	8-12 tr-0.5	2.4 0.9
91.20	106.33	GREY RED ALTERED F.P. As above Struct: Shattered with porphyry texture almost wiped out Alt'n & Veins: Good red to beige alt'n with mod. amount of Q.C. veins and chl. infillings						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Min:	8686	91.50	93.00	1.5	tr	2.9
		tr-0.5% f.g. diss'd Py	8687	93.00	94.50	1.5	tr-0.5	2.8
			8688	94.50	96.00	1.5	0.5-1	1.5
		Remarks:	8689	96.00	97.50	1.5	tr	0.5
		Becoming less alt'd as one goes through the	8690	97.50	99.00	1.5	tr	tr
		section	8691	99.00	100.50	1.5	tr	1.7
			8692	100.50	102.00	1.5	tr	0.8
106.33	108.02	LAMP DYKE (DACITE)	AVG	88.5	94.5	60		2.3
		Light grey, f.g., massive, non-magnetic						
		Struct:						
		Massive with good chilled Cts.						
108.02	116.60	GREY RED ALTERED F.P. Q.V.						
		As above						
		Struct:						
		Fractured						
		Alt'n & Veins:						
		Good red alt'n in places with mod. amount of						
		Q.C. veins						
			8693	110.00	111.50	1.5	tr	0.5
		Min:	8694	111.50	113.00	1.5	tr	0.4
		tr diss'd Py	8695	115.70	116.70	1.0	tr	tr
116.60	151.22	GREY F.P. DIORITIC WITH LAMP DYKE						
		As above, magnetic, fr'd thru out						
	151.22	END OF HOLE						

DRILLING NOTES
BQ core drilled, hole cemented thru out, casing pulled

GENERAL COMMENTS
B North Zone from 88.50-91.20, red alt'd F.P. with alt'd mafic volcanics and containing 8-12% diss Py, should carry medium to high Au values over 1.5m

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No.3382#77 SHEET 1 OF 10

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
South Rundle	Newton	200 degrees	31/07/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		-51 degrees	02/08/87		
Claim No.	Co-ordinates:	Length	Drilled By:		
	1995.046N/3070.455E	151.22m	Morisette		
Grid No.	Section 6406E	Collar Elev.	Logged By:		
	38.25m NE of ref line	3999.413m	C.P.Zorzi		

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. %	ASSAYS

OBJECTIVES:-

			DEPTH		MAZ		TRAZ	ESTAZ	DIP
0.0	4.0	CASING	22ft	6.71		est	200	200.11	51
4.0	5.23	GREY F.P. DYKE	150ft	45.73		est	200	200.70	49
		Light grey, m.g., non-magnetic	300ft	91.46		est	200	201.37	49
			450ft	137.20		est	200	202.06	49
		Struct:	496ft	151.22		est	200	202.27	49
		Fairly massive with mod. fractures that are healed with qtz							
		Alt'n & Veins:							
		Light grey alt'n (carb'd?)							
		Numerous thin 1-19mm white q.v.							
		Min:							
		tr f.g. diss'd Py							
5.23	8.05	MASSIVE GWK							
		Med. grey, f.g., with a few % detrital qtz grains							
		Non-magnetic							
		Struct:							
		Minor fractures							

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Veins: Minor to mod. amount of thin light grey calc. veins						
8.05	13.23	BEDDED GRAPHITIC ARGILLITE AND SILTSTONE Black to light grey, f.g., non-magnetic Struct: Good bedding and highly fr'd with minor calc. infillings Min: Patches of submassive Py						
13.23	15.30	MASSIVE GWK As above Struct: Minor fractures, a few thin light grey cacl. veins						
15.30	21.35	GREY BIOTITIC F.P. DYKE As above but unalt'd Struct: Massive Veins: A few % thin light grey calc. with pervasive calc.						
21.35	25.90	GABBROIC - U.M. DYKE Med. green, f.g. with m.g. mafic phenos, magnetic Struct: Predominantly massive with gabbroic texture Veins: Mod. amount of 1mm-1cm calc. veins and patches						

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
25.90	29.45	SHEARED U.M. FLOW Med. to light green, f.g., soft, non-magnetic Struct: Good schist. at about 45 to 60 degrees Veins: Numerous, about 40% calc. infillings and veinlets along schist.						
29.45	31.00	CARBONATIZED SILICIFIED F.P. AND U.M. Med. grey green, f.g. with preserved F.P. texture here and there Struct: Highly sheared Alt'n & Veins: Highly carb'd and sil'd with qtz and calc. infillings Min: tr f.g. diss'd Py	8697	29.45	30.45	1.0	tr-0.5	nil
31.00	32.60	POLYHEDRALLY JOINTED U.M. Med. grey green, f.g., non-magnetic, relatively hard Struct: Good jointing and fractures Alt'n & Veins: Sections show signs of carb'n, numerous thin light grey calc. veins						
32.60	34.55	ALTERED F.P. Grey green, f.g. matrix with m.g. fsp. phenos Struct: Highly sheared						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Alt'n & Veins: Probable carb'n and ser'n Numerous thin Q.C. veins						
		Min: Patches of f.g. submassive Py						
34.55	39.60	SHEARED SPINIFEXED U.M. As above						
		Struct: Highlt sheared with schist. at about 45 to 60 degrees Good spx texture in places						
		Alt'n & Veins: As above but sl. more chloritic						
39.60	41.20	ALTERED F.P. Q.V. Grey brown, f.g. matrix with m.g. fsp. phenos						
		Struct: Highly sheared						
		Alt'n & Veins: Red brown cb. alt'n with possible ser'n Numerous <1mm-5mm Q.C. veins						
		Min: tr-0.5% f.g. diss'd Py	8698 8699	39.60 40.60	40.60 41.20	1.0 0.6	0.5-1 tr-0.5	0.9 0.7
41.20	48.55	POLYHEDRALLY JOINTED U.M. As above						
		Struct: Good P.J'ing with some shearing .						
		Veins: Numerous, calc. veins and infillings						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
48.55	53.25	ALTERED Q.V. F.P. As above Struct: Highly sheared Alt'n & Veins: As above						
		Min: tr-0.5% f.g. diss'd Py	8700	52.00	53.00	1.0	tr	-
		Remarks: Sheared U.M. 49.95-50.70						
53.25	71.80	POLYHEDRALLY JOINTED U.M. As above, sl. magnetic Struct: Mod. shearing and good polyhedral jointing Veins: Numerous thin calc. veins and chloritic infillings						
		Min: tr f.g. wispy and patchy Py	8096	55.50	57.00	1.5	tr-0.5	tr
71.80	89.27	GREY RED ALTERED F.P. Grey red, f.g. matrix with m.g. phenos, magnetic Struct: Sheared Alt'n & Veins: Mod. amount of red alt'n with numerous thin light grey Q.C. veins and chloritic infillings and patches						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Min:	15205	73.30	74.30	1.0	tr	0.1
		tr-0.5% f.g. wispy and diss'd Py	15206	74.30	75.80	1.5	tr	tr
			15207	75.80	77.30	1.5	tr	tr
89.27	90.65	RED ALTERED F.P. Red, f.g., magnetic in places						
		Struct: Sheared						
		Alt'n & Veins: Good red brown alt'n with ser'n Numerous thin light grey Q.C. veins						
		Min: tr-0.5% f.g. diss'd Py	15208	89.30	90.65	1.35	tr-0.5	0.3
90.65	91.95	GREY SLIFGTLY ALTERED F.P. As above						
		Struct: Sheared						
		Alt'n & Veins: Minor patches of red alt'n but quite sericitic						
91.95	93.00	RED ALTERED F.P. As above						
		Struct: Sheared						
		Alt'n & Veins: Good red alt'n, numerous thin Q.C. veins Sericite infillings						
		Min: 1-2% f.g. diss'd Py	15209	91.90	93.00	1.1	1-2	0.6

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Remarks: Start of Zone						
93.00	95.00	ALTERED MAFIC VOLc AND RED ALTERED F.P. (HYBRID ROCK) Mottled grey - red texture, only very sl. magnetic Struct: Highly sheared Alt'n & Veins: Volcanics - good light grey alt'n with Q.C. infillings F.P. - good grey-red cb. alt'n with Q.C. veins Min: Overall 2-3% f.g. diss'd Py with patches up to 7%	15202	93.00	94.50	1.5	2-5	4.0****
95.00	96.17	RED ALTERED F.P. Grey red, f.g. with m.g. phenos (fsp) Struct: Sheared and healed Alt'n & Veins: Grey red cb. alt'n with Q.C. veins and sericite Min: 2-3% f.g. diss'd Py	15203	94.50	96.00	1.5	2-3	tr**
96.17	97.60	ALTERED MAFIC VOLC. AND RED ALTERED F.P. (HYBRID ROCK) As above Struct: Sheared and healed with bx texture Alt'n & Veins: See 93.00-95.00						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Min: 5-10% f.g. diss'd Py with sections up to 15%	15204	96.00	97.50	1.5	8-10	3.2****
97.60	99.75	ALTERED MAFIC VOLC Med. to dark grey, f.g., magnetic Struct: Minor shearing Alt'n & Veins: Minor amount of light grey alt'n with a few thin light grey calc. and Q.C. veins						
		Min: tr Py	15210 15211	97.50 99.00	99.00 100.50	1.5 1.5	tr-0.5 tr-0.5	- nil - nil
99.75	101.50	RED ALTERED F.P. As above Struct: As above Alt'n & Veins: Good red brown alt'n with numerous light grey Q.C. veins						
		Min: tr-0.5% f.g. diss'd Py	15212	100.50	102.00	1.5	tr-0.5	-1.3
101.50	102.85	ALTERED MAFIC VOLC AND RED F.P. (HYBRID ROCK) As above Struct: Sheared and shattered Alt'n & Veins: Grey and red cb. alt'n with numerous thin light grey cb. veins						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Min:	15214	106.50	108.00	1.5	tr-0.5	0.7
		tr-0.5% f.g. diss'd Py	15215	109.00	110.50	1.5	tr-0.5	0.6
102.85	113.25	ALT'D MAF. VOLC	15216	111.00	112.50	1.5	tr-0.5	1.0
		mod. gy, fg, ish vf'd; minor lt gy cb. alt'n + numerous	15217	112.50	114.00	1.5	1-2	4.6*
		thin lt gy Q.C. + calc. veins	15218	114.00	115.50	1.5	tr-0.5	0.5**
		tr - ½ % fg. diss'd Py						
113.25	116.15	RED ALTERED Q.V. F.P.						
		As above but with Q.V. gradational to grey F.P.						
		Struct:						
		Sheared						
		Alt'n & Veins:						
		Red to grey alt'n with numerous Q.C. veins						
		Min:						
		1-2% f.g. diss'd and wispy Py						
116.15	118.15	INTERMEDIATE LAMP DYKE						
		Grey green, f.g., magnetic						
		Struct:						
		Massive						
		Veins:						
		Very few thin calc. veins						
118.15	139.95	GREY RED ALTERED F.P.	15219	119.00	120.50	1.5	tr	3.4
		As above	15220	120.50	122.00	1.5	tr	0.7
			15221	122.00	123.50	1.5	tr	tr
		Struct:	15222	133.00	134.50	1.5	tr	tr
		Fractured	15223	134.50	135.50	1.0	tr	0.3
			15224	137.50	139.00	1.5	tr	0.6
		Alt'n & Veins:	15225	139.00	140.00	1.0	tr	0.4
		Mod. red to pink alt'n with numerous Q.C. veins						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
139.95	151.22	GREY F.P. As above Struct: Fairly massive with mod. fractures Veins: A few thin light grey Q.C. veins						
	151.22	END OF HOLE						

DRILLING NOTES
BQ core drilled
Hole completely cemented
Casing pulled

GENERAL COMMENTS
93.00-95.00
96.17-97.60
102.85-113.25

POSSIBLE B1 ZONE
Alt'd mafic volc and red alt'd F.P. (hybrid rocks) 93.00-94.50
May be B1 Zone or B North - good light grey cb. alt'n with 5-10% f.g. diss'd Py - should yield good Au values, probably greater than 10g

B NORTH ZONE
96.17-97.60
Alt'd mafic volc and red alt'd F.P. (hybrid rocks)
Good light grey cb. alt'n with 5-10% Py
Should yield good Au values
Small section of alt'd mafic volcs with minor light grey cb. alt'n and 1-2% Py may yield low to mod. grade Au

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No.3382#78 SHEET 1 OF 7

Property South Rundle	TP. or Area Newton	Azimuth 200 degrees	Date Started / /	Corrected Dip Tests
Project 3382	Lot. & Conc.:	Dip -56 degrees	Date Completed 06/08/87	
Claim No.	Co-ordinates: 2036.33N/3063.713E	Length 207.13m	Drilled By: Bradley Bros.	
Grid No.	Section 620SE 75.0m NE of ref line	Collar Elev. 3998.240m	Logged By: C.P.Zorzi	

Location sketch

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. %	ASSAYS
		OBJECTIVES:-						
0.0	3.96	CASING						
3.96	26.86	MASSIVE GWK Pale to med. grey, f.g., magnetic						
		Struct: Fractured						
		Alt'n & Veins: Numerous calc. patches and veins with minor epidote alt'n						
26.86	28.55	BEDDED GRAPHITIC ARGILLITE Black, f.g., well bedded at 45 degrees Tnin calc. bands infilling between beds Highly fr'd along bedding planes						
28.55	40.82	SHEARED POLY-JOINTED U.M. FLOW Med. grey green, f.g., soft						
		Struct: Sheared thru out with schist. at about 45 degrees Good jointing and minor amount of spx						

DEPTH	MAZ	TRAZ	ESTAZ	DIP	REMARKS
6.71			199.8	-55	Acid test
46.95			199.6	-54	"
91.44			199.4	-53	"
152.44			199.2	-51	"
205.79	206.5	199	199.0	-47	Tropari

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Veins: Numerous calc. veins thru out						
40.82	43.65	ARGILLITE BRECCIA Black, f.g., magnetic Struct: Well bx'd with argillite clasts from 3mm to 1cm in chl. argillite matrix Remarks: Grey F.P. dyke 41.13-41.80						
43.65	49.10	MASSIVE GWK As above Struct: Sl. more fracturing than the above units						
49.10	53.85	BEDDED GRAPHITIC ARGILLITE AND SILTSTONE As above but with beds of siltstone Min: Clots of f.g. Py						
53.88	63.65	SHEARED SPX'D POLY-JOINTED U.M. As above Struct: Mod. amount of spx with poly-jointing thru out Alt'd with schist. at about 45 degrees More chloritic and serpentanized than above						
63.65	71.87	GREY F.P. DYKE Pale to light grey, f.g. matrix with m.g. fsp phenos Struct: Relatively massive with a few fractures						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 3382#78 SHEET 3 OF 7

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Struct: Relatively massive with a few fractures						
		Veins: Mod. amount of thin 1-2mm light grey calc. veins	10023	73. - 74.5		1.5	½%	tr
			10024	74.5 - 76.0		1.5	tr	nil
71.89	90.17	SHEARED CARBONATIZED SILICIFIED U.M. Pale yellow green, relatively hard, non-magnetic	10025	76.0 - 77.5		1.5	tr	tr
			10026	77.5 - 79.0		1.5	tr	0.2
		Struct: Highly sheared with schist. at 45 degrees	10027	79.0 - 80.5		1.5	-	nil
		Alt'n & Veins: Highly cb'd and sil'd with numerous qtz veins and infillings						
		Min: tr f.g. wispy and diss'd Py	15226	80.50	82.00	1.5	1-2	0.4
			15229	82.00	83.50	1.5	1-2	1.4
		Remarks: Short F.P. sections reflected in sampling with 1-2% f.g. diss'd Py	10028	83.5- 85.0		1.5	½%	3.2
			15227	85.0 - 86.5		1.5	1-2	3.7
90.17	101.30	SHEARED U.M. (POLYHEDRALLY JOINTED) As above	10029	86.5 - 87.5		1.0	½%	5.6
			10030	87.5 - 88.5		1.0	1-2%	13.1
			15228	88.5 - 90.0		1.5	"	4.2
		Struct: Good shearing at about 45 degrees Good poly jointing Numerous thin light grey calc. veins	10031	90.0 - 90.3		0.3	2	3.6
			10032	90.3 - 91.4		1.1	tr	0.1
			10033	91.4 - 91.9		0.5	1	0.6
			10034	91.9 - 92.9		1.0	—	nil.
101.30	122.15	ALTERED MAFIC VOLCANICS Med. grey, f.g., magnetic						
		Struct: Numerous small fractures healed with calc. and epidote						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Veins: Mod. amount of thin 1-2mm light grey calc. veins						
71.89	90.17	SHEARED CARB'D SILICIFIED U.M. Pale yellow green, relatively hard, non-magnetic Struct: Highly sheared with schist. at 45 degrees Alt'n & Veins: Highly carb'd and sil'd with numerous qtz veins and infillings 87.0-90.2 stockwork 25-40% grey qtz Min: tr f.g. wispy and diss'd Py Remarks: Short F.P. sections reflected in sampling with 1-2% f.g. diss'd Py 73.0-77.8 sheared, carb'd U.M. with pale green mica (fuchsite?) 77.8-81.0 alt'd mafic volc 81.0-85.2 alt'd sil ser F.P. with minor incl partings of sil exhalite and T.C.C.S. 86.2-88.8 sil'd T.C.C.S. 88.8-90.2 alt'd sil'd F.P. 90.2-94.5 T.C.C.S. with alt'd sil and weakly Py F.P. from 91.6-92.0	10023	73.0	74.5	1.5	0.5	-
			10024	74.5	76.0	1.5	tr	-
			10025	76.0	77.5	1.5	tr	-
			10026	77.5	79.0	1.5	tr	-
			10027	79.0	80.5	1.5	-	-
			15226	80.5	82.0	1.5	1-2	0.4
			15229	82.0	83.5	1.5	1-2	14.0
			10028	83.5	85.0	1.5	0.5%	-
			10029	85.0	86.5	1.5	1-2	3.7
			10030	87.5	88.5	1.0	0.5%	-
			15228	88.5	90.0	1.5	1-2	4.2
			10031	90.0	90.3	0.3	2%	-
			10032	90.3	91.4	1.1	tr	-
			10033	91.4	91.9	0.5	1%	-
			10034	91.9	92.9	1.0	-	-
90.17	101.30	SHEARED U.M. (POLY-JOINTED) As above Struct: Good shearing at about 45 degrees T.C.A.						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Min: tr f.g. diss'd Py	15230	121.0	122.5	1.5	tr	tr
122.15	123.12	GREY SLIGHTLY ALTERED F.P. Grey, f.g. matrix with f.g. to m.g. phenos Magnetic Struct: Fractured Alt'n & Veins: Sl. red tinge with a few thin light grey calc. veins Min: tr-1% f.g. diss'd Py	15231	122.5	124.0	1.5	0.5-1	-
123.12	132.80	SPX'D POLY-JOINTED U.M. As above Struct: As above						
132.80	137.80	HBLD - FSP DYKE (LAMP) Green brown, f.g., with about 50-50 hbld - fsp Struct: Massive with minor fractures Good chilled Cts. Veins: Fair amount of calc. veins						
137.80	141.90	ALTERED MAFIC VOLC AND RED ALTERED F.P. (HYBRID ROCK) Mottled purple grey to red, very hard, volcanics and F.P.						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Struct: Sheared thru out						
		Alt'n & Veins: Cb. alt'n thru otu and silicified Numerous thin light grey qtz-calc. veins	15232	137.80	139.30	1.5	1-2	3.2
		Min:	15233	139.30	140.80	1.5	tr-0.5%	1.2
		2-3% f.g. diss'd Py	15234	140.80	142.30	1.5	tr-0.5%	1.1
141.90	144.30	ALTERED MAFIC VOLC. Dark grey to black, f.g., magnetic						
		Struct: Bx'd. looks like aquagene tuff						
		Veins: Numerous thin calc. veins						
		Min: 5-8% f.g. diss'd Py	15235	142.30	143.80	1.5	5-8	0.9
144.30	151.60	RED ALTERED F.P. Red, f.g., matrix with f.g. to m.g. fsp phenos						
		Struct: Fractured						
		Alt'n & Veins: Good red cb alt'n with some minor light grey cb. alt'n, numerous thin Q.C. veins	15236	145.00	146.50	1.5	tr	tr
		Min:	15237	146.50	148.00	1.5	tr	tr
		tr f.g. diss'd Py	15238	148.00	149.50	1.5	tr	tr
151.60	153.15	LAMP DYKE Struct: Fr'd possible fault zone						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
153.15	158.35	ALTERED MAFIC VOLC As above Struct: Numerous minor fractures Alt'n & Veins; Light grey alt'n around Q.C. veins Min: tr-0.55 diss'd Py Remarks: Aplite dyke 155.70-156.40	15239 15240 15241	153.00 154.50 156.00	154.50 156.00 157.50	1.5 1.5 1.5	tr tr-0.5% tr-0.5%	1.0 1.2 0.7
158.35	162.35	INTERLAYERED GREY F.P. AND LAMP DYKE As above Struct; Highly fr'd, possible fault zone						
162.35	170.85	RED ALTERED F.P. As above Struct: Minor fractures Alt'n & Veins: Good red cb. alt'n with minor grey cb. alt'n and mod. amount of Q.C. veins Min: tr f.g. diss'd Py	15242 15243 15244 15245 15246	163.00 164.50 166.00 167.50 169.00	164.50 166.00 167.50 169.00 170.50	1.5 1.5 1.5 1.5 1.5	tr tr tr tr-0.5 tr	0.6 tr 0.4 8.8 0.3
170.85	207.13	GREY BIOTITIC F.P. Light to med. grey, f.g., biotitic matrix with f.g. to m.g. fsp phenos						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Struct: Mod. fractures						
		Veins: A few % thin light grey calc. veins	15247	202.25	203.60	1.35	tr	0.4
	207.13	END OF HOLE						
		DRILLING NOTES BQ core drilled Casing pulled Hole cemented						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No.3382-79 SHEET 1 OF 24

Property South Rundle	TP. or Area Newton	Azimuth 198 degrees	Date Started 06/08/87	Corrected Dip Tests	Location sketch
Project 3382	Lot. & Conc.:	Dip -68 degrees	Date Completed 19/08/87		
Claim No.	Co-ordinates: 2027.01N/3305.86E	Length 532.15	Drilled By: Bradley Bros.		
Grid No.	Section 850 SE	Collar Elev. 1999.49	Logged By: A.Sower C.P.Zorzi		

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. %	ASSAYS

* Calc'd from avg gyro dip curve:

DEPTH	Mag. Az	Tr. Azm.	Calc'd * Azm	Dip	
					OBJECTIVES:-
10.98			197.9	68	acid test
45.7			197.75	66.5	"
91.4			197.5	66	"
139.0			197.4	63	"
	217.5	210°		63	trapezi
228.7			198.0	63	acid test
276.1			198.5	62	"
320			200.8	62	"
365.7			200.8	61	"
413.3			200.8	57	"
459.0			200.8	58	"
504.7			200.8	57	"
532.2			200.8	57	"

0.0 4.0 CASING

4.00 18.28 MASSIVE GWK
Med grey, f.g., magnetic

Struct:
Massive with small healed fractures

Veins:
Numerous thin light grey calc. veins

18.28 23.8 DACITE LAMP DYKE
light grey, f.g., small siltstone beds here and there

Struct:
Schist. at 10 degrees

23.8 25.3 MASSIVE GWK - MAFIC VOLC
As above but appears to be more of a volc rock

Struct:
As above

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
25.30	30.00	BEDDED GRAPHITIC ARGILLITE AND SILTSTONE light grey to black, f.g., greasy, non-magnetic Struct: Good bedding at 45 degrees, blocky along bedding planes (fr'd) Min: 1-2% f.g. patches of Py		26.00	27.5	1.5	tr-0.5%	0.4
30.00	37.25	PILLOWED MAFIC VOLC Light grey, f.g., magnetic Struct: Good pillow selvages and numerous small fractures healed with calc						
37.25	39.35	GREY F.P. DYKE Med. grey, f.g. matrix with m.g. to c.g. subhedral fsp phenos Struct: Massive Veins: A few % thin light grey calc. veins						
39.35	55.00	PILLOWED MAFIC VOLC As above						
55.00	72.50	HBLD FSP DYKE Grey brown, f.g. matrix 5-10% hbld and biot with m.g. to c.g. fsp. phenos Struct: Massive sl. schist. at 60 degrees						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Veins: A few % thin light grey calc. veins						
75.20	92.80	MASSIVE AMPHIB'D GWK - GWK As above, magnetic						
		Struct: Massive with a few fractures healed with calc.						
92.80	96.00	GREY BIOTITIC F.P. As above, sl. magnetic						
		Struct: Massive with minor fractures healed with calc. Cts. sharp but irregular						
96.00	101.20	MASSIVE GWK - AMPHIB'D As above but becoming sl. less amphib'c Magnetic						
		Struct: As above						
101.20	104.20	GREY BIOTITIC F.P. As above, sl. magnetic						
		Struct; Massive with a few minor fractures Chloritic slips lining the fractures Minor epidote alt'n						
104.20	113.93	MASSIVE GWK As above, magnetic						
		Struct: As above						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
113.93	118.80	GREY BIOTITIC F.P. As above, sl. magnetic Struct: Highlt fr'd with broken core A few thin light grey calc. veins						
118.80	121.75	MASSIVE GWK As above, magnetic Struct: Massive with minor fractures and a few thin light grey calc. veins						
121.75	131.00	HBLD - FSP. PORPHYRY DYKE Grey red, f.g. matrix with 40-60% f.g. to m.g. fsp and f.g. to m.g. hbld, non-magnetic Struct: Fr'd with minor blocky sections Veins: A few thin light grey calc. veins Minor epidote alt'n						
131.00	134.50	FRACTURED LAMP DYKE AND GWK Interlayered lamp and gwk, grey green, f.g., magnetic Struct: Well fr'd with broken and blocky sections Minor epidote alt'n						
134.50	144.55	GREY SLIGHTLY ALTERED F.P. As above, non-magnetic Struct: Mod. fracturing with short blocky section						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Alt'n & Veins: Becoming more alt'd towards the end of the section with wisps of epidote, numerous thin light grey Q.C. and calc. veins						
144.55	168.30	DIABASE DYKE Dark grey to black, m.g. with tr-1% f.g. to m.g. fsp. crystals, strongly magnetic with 10-15% f.g. magnetite Struct: Fr'd over the first 1.5m then becoming massive Alt'n: Short epidote bands 1-2mm to 5cm thick						
168.30	173.73	INTERMEDIATE TO FELSIC DYKE Grey brown, f.g. with m.g. enhedral to subhedral fsp. phenos, non-magnetic Struct: Hairline fractures healed with calc. Schist. at 45 degrees Minor red alt'n						
173.73	182.35	HBLD - FSP PORPHYRY (MATRIX DOMINANT) DYKE As above 121.75-131.00 but maybe tr-1% m.g. to c.g. subhedral fsp. phenos Hbld phenos m.g. to clots of c.g. hbld Struct: Relatively massive with gradational Cts. Numerous thin light grey calc. veins alt'd by epidote Ruggy appearance here and there						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
182.35	186.45	GREY F.P. DYKE As above Struct: Relatively massive with a few small fractures Slip phenos appear to be lined with calc. and epidote Veins: A few thin light grey calc. and epidote veins						
186.45	197.48	MASSIVE GWK - AMPHIB'D As above, magnetic Struct: Massive with minor fractures Numerous thin light grey calc. veins and patches of calc.						
197.48	200.45	HBLD - FSP. PORPHYRY DYKE As above Struct: Massive with mod. amount of thin light grey calc. veins Minor epidote alt'n in some of the veins						
200.45	227.80	MASSIVE GWK - AMPHIB'D As above, magnetic Struct: Massive with minor fractures Numerous calc. patches and thin veins						
227.80	229.60	HBLD - FSP. PORPHYRY DYKE As above Struct: Massive						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
229.60	230.60	MASSIVE GWK - AMPHIB'D As above Struct: Massive						
230.60	234.00	HBLD - FSP. PORPHYRY DYKE As above, more subhedral hbld phenos Struct: Massive with a few thin calc. veins						
234.00	237.50	MASSIVE GWK - AMPHIB'D As above Struct: Massive with minor epidote alt'n in and around calc. veins						
237.50	244.77	GREY F.P. (MATRIX DOMINANT) Light grey 85% f.g. matrix with 15% f.g. to m.g. subhedral fsp phenos, magnetic Struct: Massive with a few thin light grey calc. veins						
244.77	256.30	MASSIVE GWK - AMPHIB'D As above Struct: As above with more epidote veining in the section						
256.30	263.45	AMPHIB'D GWK - PILLOW MAFIC VOLC Dark grey green, f.g. to m.g., magnetic Struct: Massive with the last 1m being fr'd Possible pillow selvages						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Viens: A few % thin light grey calc. and epidote veins						
263.45	270.37	GREY F.P. As above, sl. magnetic, two sizes of fsp						
)		Struct: Minor fracturing, chl. slips Lower Ct. well defined at 30 degrees						
270.37	274.25	ARGILLITE - GWK F.g., dark grey green, f.g. argillite Mod. magnetic 1-3% v.f.g. Py Locally gf. 272.75-272.87 unit is sheared with calc. veining at 35-40 degrees 272.87-274.25 unit is pale green with homofelsic texture 20% f.g. biot., porphyry clasts speckled thru out, Ct. with next unit is at 60 degrees						
)		Struct: Massive faint irregular banding						
		Veins: A few % calc. veins up to 1cm thick Most commonly at 30 to 40 degrees						
274.25	280.15	GREY F.P. Grey, m.g. F.P. Only locally very weakly magnetic only a faint trace of Py 279.26-279.35 short finer grained weakly alt'd section Ct. with next unit marked by narrow qtz carb vein						
)		Struct: Very few chl. slips						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Veins: Narrow mm scale calc. veins at a low angle						
280.15	302.77	AMPHIB'D GWK Dark grey, m.g. amph F.g. to m .g., some biot flakes Locally minor qtz Weak to mod. magnetic 1-2% f.g. diss'd Py						
		Alt'n & Veins: Dolomite vein with fragments of qtz Cts. at 35 to 40 degrees A few mm to cm scale calc. veins at various angles 286.75-294.49 5-10% fine hairline fractures at various angles healed with epidote and calc. Most intense section of epidote alt'n 300.40-300.66 qtz carb gash vein, minor Py 301.05-301.21 fectonic bx, weakly sil'd, sl. reddish hem alt'n, tr Py						
		Struct: Massive, expect for veins matured above						
		Remarks: Narrow band of grey fsp 280.39-280.43 at 70 degrees Narrow 2-3mm band of magnetite, minor f.g. diss'd Py at 55 degrees at 291.57 Band may be related to calc. vein Gradational Ct. with next unit	15248	300.40	301.40	1.0	tr	nil
302.77	321.29	GWK Massive, dark grey, f.g. to m.g. meta gwk Locally minor qtz, tr Py Mod. magnetic 320.77-312.68 unit is quite calcerous						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Alt'n & Veins: Wispy veins and patches of qtz-carb alt'n Also from scale fractures filled with qtz-carb in this section Only 5% qtz-carb veins 312.68-321.29 Gradational Ct. with next unit						
321.29	324.38	SPOTTED ARGILLITE OR GWK F.g. dark grey meta arg. to gwk Speckled with mm scale specks of calc. % of specks varies from 1-2% from 321.29-321.90 to 5% from 321.90-322.80 to 10% from 322.80-323.70 and only a few specks below that Struct: Unit is well fol'd at 40 degrees Veins: A few fine fractures healed with qtz-calc. Locally minor epidote Hairline fracture filled with f.g. Py at 322.19						
324.38	332.20	BX'D ARGILLITE F.g. dark grey meta arg., locally green Cut by 10% fractures healed by qtz calc. veins Bx'd sections which predate the qtz carb veining at 324.68-325.15 and scattered thru rest of unit 1-2% scattered m.g. Py, locally up to 2mm in dia. Struct: Healed bx zones thru out unit one from 324.68-325.15 shows strong orientation at 55 degrees Veins: 5-10% later off white qtz-calc. veins Gradational Ct. with next unit						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
322.20	338.16	AMPHIB'D GWK M.g., dark to med. grey meta gwk A few visible qtz grains Dusted with 1% v.f.g. diss'd Py Non-magnetic Struct: Massive with 1-2% fine fractures healed with qtz-calc. Minor epidote assoc with qtz-calc. below 335.5 Gradational Ct. with next unit						
338.16	353.12	ARGILLITE - GWK Dark greenish grey, f.g., meta arg. - gwk 1-2% f.g. diss'd Py, locally up to 2-3% Struct: 5% qtz-carb veins in irregular fractures Locally minor epidote, hairline to 1cm fractures at various angles Bx zone 345.35-345.75 5% f.g. to m.g. po speckled thru out	15249 15250 15251 15252	342.75 344.25 345.35 345.75	344.25 345.35 345.75 346.85	1.5 1.1 0.4 1.1	1-2 1-2 5% 1-2	0.1 0.0 0.6 0.0
353.12	357.25	SPECKLED ARGILLITE - GWK As above but speckled with spots of calc. up to 1mm in dia. Struct: As above Alt'n: 357.01-357.25 unit is bleached with pale grey as bx. zone is approached at Ct. of next unit Ct. with next unit marked by bx Ct. well defined at 40 degrees						

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METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
357.25	366.21	SHEARED CARBONATE ROCK	15253	357.25	358.64	1.39	2%	0.0
		Pale green grey, f.g., siliceous - carbonate	15254	358.64	360.10	1.46	1%	tr
		fock, reacts with conc acid	15255	360.10	361.00	0.90	3%	0.3
		Very hard, f.g., possible pred diopside	15256	361.00	362.50	1.50	1%	0.1
		1-2% f.g. diss'd Py	15257	362.50	364.00	1.50	1%	0.1
			15258	364.00	364.50	0.50	1%	0.7
)		Struct:	15259	364.50	365.00	0.50	1%	0.2
		Well fol'd at 30 degrees, increasing to	15260	365.00	366.21	1.21	tr	2.0
		45 degrees towards base of unit						
		357.25-358.64 bx'd texture, pale green						
		fragments in a pale grey matrix						
		361.00-364.35 unit has bx'd texture and is						
		ser'c with f.g. yellow ser.						
		Calcsilicakes are alt'd darker green						
		Some fine white carb. veins						
		365.70-366.21 patches of red alt'd porphyry						
		Min:						
		1-2% f.g. diss'd Py thru out						
		Band of 5-10% f.g. Py in bx 357.48-357.54						
		Streaks of f.g. Py in grey rock						
		Streaks and patches of f.g. massive Py						
)								
		Remarks:						
		Well fol'd f.g. pale grey bands at 360.10-360.35						
		and 360.67-361.00 at 10 degrees						
		Ct. with porphyry sharp at 26 degrees						
366.21	370.19	PINK BIOTITIC F.P.						
		Pale pink, f.g. F.P.						
		Mottled pale green grey						
		Weakly alt'd, f.g. biotite remains, a few fsp						
		Matrix dominant						
	)							
		Struct:						
		Massive, tends to break along chl. slips						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Veins: A few white dolomite veins subparallel to core filling narrow fractures Alt'n: Pale pink minor chl, shadows of fsp. remain F.g. biot. remains Min: Locally up to 2% f.g. Py but < 4% overall Remarks: Inclusion of mafic volc. 368.93-396.63 Gradational Ct. with next unit						
370.19	380.47	PINK ALTERED F.P. Colour as above Fsp's only locally observed Only traces f.g. diss'd biot. speckled with fine flakes of muscovite Alt'n: Weakly alt'd, locally some relict fsp. biot. Alt'n becomes less intense towards base of unit grading into next unit Veins: White dolomite veins scattered thru out Generally < 1%, sections with 3-4% veins 370.64-371.34 Fine carb veins pred. dolomite in fracts. at about 40 degrees 378.47-380.47 Struct: Weak fabric at 40 to 50 degrees Min: tr Py, locally up to 1%	15261 15262	373.44 374.94	374.94 376.44	1.50 1.50	1% 1%	0.1 tr

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METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
380.47	385.14	GREY F.P. WEAKLY ALTERED Grey tinged red, m.g., F.P. 2-3% f.g. biot. flakes Alt'n: Weak chem-chl. alt'n tinges unit red Veins: A few narrow calc. veins at 35-40 degrees A few white dolomite veins in upper part, dolomite disappears with depth Struct: See "Veins" Min: Only locally faint tr Py Remarks: Round patches of green calcsilicate on one side of the core 384.2-384.28						
385.14	389.19	ALTERED MAFIC VOLC Dark greenish grey, f.g., mafic volc Alt'n: Pervasive carb alt'n thru out unit Most of unit is qtz-calc. 385.14-386.62 pale grey to reddish alt'n Minor hem. Struct: Weak fabric fracts. healed with calc. thr out Veins: 3-4% calc. veins at 30 degrees 388.48-389.19 a few milky white dolomite veins at 40 degrees						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Some brown carb clasts assoc'd with narrow bx zones and dolomite veins at 45 degrees at 385.68-385.73						
		Min: 1-2% v.f.g. diss'd Py assoc'd with alt'd section 385.14-386.62 tr-1% f.g. diss'd Py in mafic volc						
		Remarks:	15263	385.14	386.62	1.48	1-2%	tr
		Lower Ct. with lamp dyke sharp at 50 degrees	15264	386.62	388.12	1.50	1%	tr
		Band of red f.g. F.P. 386.62-386.74	15265	388.12	289.19	1.07	1%	0.3
389.19	398.13	GREY F.P. WITH AMPROPHYRE DYKES Grey m.g. to c.g. f.p. cut by lamp. dykes: Sectons of lamp 389.19-389.60, upper ct. 35 degrees T.C.A. lower ct 40 degrees T.C.A., 391.45-392.95. Upper ct at 40 degrees T.C.A. lower ct at 40 degrees T.C.A., 393.41-393.79. Upper ct at 55 degrees T.C.A., lower ct at 30 degrees, narrow band of lamprophyre at 30 degrees T.C.A. from 393.85-393.96						
		Alt'n: Tinged red due to hematite-chlorite-calcite alt'n Only weakly alt'd weakly calcite-alt'n increases towards base.						
		Struct: 3% fine hairline fractures healed with calcite 12 rpbs generally well foliated paralell to contacts.						
		Veins: Seriers of narrow 1mm dolomite veins at 35 degrees T.C.A. at 390.20, 340.28, 390.33, 390.48.						
		Min'n: Conc'n						
		Remarks: Lower contact gradational.						
398.1	403.05	PINK TO GREY WEAKLY ALT'D F.P. m.g. pk to grey f.p.						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Alt'n: Calcareous due to calcite alt'n. Moderate chl-hem alt', -feldspars still and visible as ghosts-no biotite., alt'n increases with depth.						
		Struct: Weak fabric at 40 degrees T.C.A.						
		Veins: Calcitic infilling of fine hairline fractures. Locally minor dolomite						
		Min'n: tr f.g. Py						
		Remarks: narrow well foliated sheared large dike at 30 degrees T.C.A., 401.54-401.62. Mafic inclusion. 402.58-402.74. Gradational transition to next unit						
403.05	408.93	PINK ALT'D F.P. Pale greyish pink f.g. to m.g. f.p.						
		Alt'n: Highly alt'd. No relict feldspars. Minor line biotite. Carbonate alt'n dominantly dolomitic.						
		Struct: Weak layer fabric at about 40 degrees T.C.A						
		Veins: Small irregular dolomite veins up to 5m across throughout as part of dolomite carbonate alt'n						
		Min'n: 2-3% f.g. diss pyrite associated with brick red alt'd highly dolomatized section 403.03-403.45. Tr to nil f.g. py in rest of section.	15266 15267	403.03 403.45	403.45 404.53	0.42 1.08	2-3% tr	0.1 tr
		Remarks: Well fol'd large dykes 405.78-405.03 406.79-406.8333 Narrow breccia'zone at 45 degrees T.C.A 406.22-406.27						
407.93	410.41	HYBRID ZONE Pale pink to reddish alt'd f.p.						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		30-40% pale grey Alt'd inclusions of mafic volcanics. Inclusions are mod. magnetic. Alt'n: No feldspar veins. Carbonate is dolomite. Struct: Weak fabric at 40 degrees T.C.A. Contacts of inclusions also at 40 degrees T.C.A. most often. Veins: shot through with narrow dolomite veinlets. Also white dolomite infilling fractures in inclusions. Min'n: 1-2% of g. diss Py in inclusions tr-1% u/g diss py in porphyry.	15268 15269	407.93 408.63	408.63 410.43	0.70 1.80	1-2% 1-2%	tr tr
410.41	418.82	PINK ALT'D F.P. Pale greenish greyish pink. f.g. alt'd f.p. No relict feldspars. Completely alt'd f.g. texture. Alt'n: Carbonitized. fine charline fractures throughout filled with dolomite. Completely alt'd, no feldspars or bio veins. Fine dark greenish grey chlorite. Core stained yellow 410.41-411.10. Alt'n decreases with depth. Struct: Weak fabric 40 degrees T.C.A. Veins: shot through with fine hairline fractures healed with dolomite. Also later qtz-dolomite veins up to 15 mm thick at 25-30 degrees T.C.A. at 413.99, 411.10, 415.05 415.58 417.42. Unit highly sheared: 410.43-410.60 Min'n: Only a very faint trace f.g. diss PY Remarks: Unit is shot thru with a network of narrow mm to 1-2cm scale pink aplitic dykes from:						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		414.77-415.75. 2nd: 415.95-416.73 These predate carb. alt'n. Gradational contact with next unit.						
418.82	430.65	PINK MODERATELY ALTERED F.P. Pink to brick red to pale greenish Alt'n: Moderately alt'd. Locally faint calcite feldspars and f.g. chloritic biotite. Shot thru in 3-4% fine hairline fractures. Healed with dolomite-qtz Intensity of alt'n diminishes with depth. Struct: hairline fractures. see 'alt'n' Veins: See 'alt'n' Min'n: Only very faint trace v.f.g. diss Py Remarks: isolated volcanic inclusions up to 2-3cm dia at 425.40, 425.52, 428.55, 429.89-429.95 Irregular ct with next unit at 40-45 degrees T.C.A.						
430.65	432.55	HYBRID ZONE Alt'd mafic volcanics and alt'd f.p. 430.65-430.89: Alt'd pale grey mafic volc. ct at 30-35 degrees T.C.A. 430.89-431.17: Pale greyish pink alt'd. f.p. lower ct at 35 degrees T.C.A. 431.17-431.58: Grey v.f.g. alt'd mafic volc. 431.58-431.82: Highly alt'd hematitic-chloritic f.p. lower ct irregular at 10-15 degrees T.C.A. F.g. pale grey alt'd mafic volcanic 431.82-432.55 Alt'n: volcanics with alt'd pale grey f.g. Pervasive calcite in volcanics. Not as noticalbe in porphyry is chloritic section from 431.58-431.82 being extremely hematitic and chloritic. Struct: contacts of inclusions. See above. Fine hairline fractures filled with calcite, minor dolomite	15270 15271 15272	430.65 431.50 432.55	431.50 432.55 433.00	0.85 1.05 0.45	1-2% 3% tr	tr tr 2.1(2.4)

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Veins: See fractures under 'struct'						
		Min'n: v.f.g. diss Py in alt'd vocls. along with f.g. py as fine fractures filling. Minor v.f.g. diss Py in porphyry 430.65-430.89 est. 1% Py 430.89-431.17 est. faint trace Py 431.17-431.58 est. 2-3% Py 431.58-431.82 est. 3-4% Py 431.82-432.55 est. 3-4% Py						
		Remarks: Sharp ct with next unit at 40 degrees.						
432.55	448.38	PINK TO GREY ALT'D PORPHYRY Pink to grey mod alt'd porphyry						
		Alt'n: Relict feldspars visible 3-4% f.g. diss Py. Moderately chloritic. 3-4% fine hairline fractures healed with dolomite qtz 443.50-448.38 Potassic alt'n(?) 1-2% f.g. pale mica (muscovite)						
		Struct: Weak fabric at 40 degrees T.C.A.more intensely alt'd sections are f.g. massive						
			15273	437.7	438.2	0.5	0.5-1%	nil
		Veins: Narrow qtz veins with specular hematite filling fractures.	15274	438.2	439.2	1.0	0.5%	tr
			15275	439.2	439.7	0.5	0.5-1%	1.0
			15276	443.5	445.0	1.5	tr	tr
		Min'n: Generally very faint trace Py	15277	445.0	446.5	1.5	tr	0.2
		Est 0.5-1% Py at 437.7-438.2; 2nd 439.2-439.7	15278	446.5	448.0	1.5	tr	0.1
448.38	455.60	GREY F.P/ Fairly fresh grey f.p. 3-5% f.g. b.b.						
		Alt'n: Decreases with depth. Unit becomes green. Carbonate alt'n changes from dolomitic to calcitic at 455-456.						
		Struct: Massive, hailine fractures filled with carbonate						

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Veins: Just fine carbonate veins. Min'n: Locally trace Py						
455.60	458.52	LAMP DYKE Grey-green foliated lamp dyke Foliated at 40-45 degrees. T.C.A. biotitic. Upper and lower cts sharp at 40 degrees T.C.A.						
458.52	464.50	FRESH GREY PORPHYRY Grey m.g. fresh f.p. 5-10% f.g. diss bio. Alt'n: Fresh. Struct: 2% fine hairline fractures, healed with calcite Veins: Only fine hairline fractures above. Min'n: Locally very faint trace Py						
464.50	465.26	DIORITIC FELDSPAR POPHYRY dioritic phase of above unit -quite calcitic.						
465.26	466.93	LAMP DYKE dk green grey f.g. lamp dyke Speckled in 3-5% books of m.g. bio. Quite calcitic. Remarks: Cut by narrow aplite dyke. 465.79-465.84 at 40% T.C.A. 466.33-466.37- at 30 degrees T.C.A. Feldspar porphyry dyke at 35 degrees T.C.A. 466.43-466.53.						
466.93	472.16	ALT'D GREY F.P. Med. grey tinged slightly red f.p.						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Alt'n: Reddish alt'n due to hem-chl alt'n Feldspars still visible. Locally bio remains. 1-2% fine hairline fractures healed with calc. Remarks: diffuse irregular contact with next unit						
472.16	477.76	MAFIC VOLCANICS Dk greenish grey f.g. mafic volcs. Alt'n: Minor calcite in local hairline fractures. Recrystallized m.g. from 472.16-474.40 Struct: Fairly massive Min'n: 3-4% Py from 472.16-474.40 in common Remarks: Sections grey porphyry: 475.40-476.23 and 476.57-476.75. Cts at 40 degrees T.C.A.	15279 15280	472.15 473.25	473.25 474.40	1.10 1.15	3-4% 3-4/5	tr tr
477.76	482.88	GREY F.P. M.g. grey f.p. dyke 3-4% f.g. biotite. Alt'n: Locally slightly pink hematitic, chloritic. Struct: Few chloritic slips at 15 degrees T.C.A. Veins: 0.5cm pink hematitic vein of f.g. qtz sub-paralell T.C.A. 480.53-480.17 Remarks: Lower ct well defined 70-75 degrees T.C.A.						
482.88	494.68	MAFIC VOLC WITH DYKES GREY F.P. dk grey f.g. mafic volcs. Possibly gwk. Struct: Massive cut by few fine hairline fractures healed with qtz calcite. Veins: Locally slightly hematitic qtz veins.						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Min'n: tr to 1% f.g. Py						
		Remarks: dykes of fresh grey f.p. at 15-20 degrees. T.C.A. 484.88-485.15, 485.26-485.44, 486.25-486.96 at 40 degrees T.C.A. Irregular patches grey f.p. 490.04-490.16,490.19-490.22 492.69-492.77. Lower ct sharp at 50 degrees T.C.A.						
494.68	497.80	LAMPROPHYRE DYKE Greenish grey f.g. to m.g. lamp dyke						
		Alt'n: Quite calcitic.						
		Struct: Massive non-foliated few hairline fractures healed with calcite.						
		Min'n: Locally tr Py 5% Py in breccia zone 494.67-495.17						
		Remarks: Breccia zone at upper contact. Inclusions of alt'd f.p. with 5% Py	15281	494.67	495.67	1.5		0.2
497.80	503.18	ALT'D CHLORITIC HEMATIC F.P. AND LAMP DYKE Interlayered sections highly alt'd chloritic hematitic f.p. and lamp rophyre dyke-contacts are difficult to distinguish due to alt'd nature of rock						
		Alt'n: Entire unit chloritic. Weakly hematitic, quite calcitic.						
		Struct: Highly fract'd calcitic 497.80-501.50 Core broken, blocky, broken along chloritic slips 500.03-501.50.	15282	497.8	499.3	1.5	tr	tr
		Min'n: tr to locally 1% Py	15283	499.3	500.8	1.5	tr	tr
			15284	500.8	501.50	0.7	tr	tr
		Remarks: Fairly fresh section of alt'd porphyry	15285	501.5	502.5	1.0	tr	tr
		501.50-501.94. Sharp ct with next unit at 35-40 degrees T.C.A.	15286	502.5	503.2	0.7	tr	tr

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
503.18	505.79	MAFIC VOLC. f.g. dk green grey mafic volc.	15287	503.20	504.29	1.09	1	nil
			15288	504.29	505.79	1.5	1-2	tr
		Min'n: 1% f.g. diss Py. Py contact increases as approach ct with porphyry. Up to 2-3% Py locally						
		Remarks: Narrow band of f.p. 504.75-504.81 Narrow lamp dyke 505.67-505.77						
505.79	510.92	HEMATITIC ALT'D GREY PORPHYRY AND MAFIC VOLC. 505.79-506.49- grey f.p. 60-70% feldspar 0.5% Py 506.49-508.08 Wkly alt'd hematic f.p. 60-70 % feldspar 507.99-508.43 in fairly unalt'd section. Rest has only a few select feldspar grains 0.5-1% f.g. Py 510.09-510.60-mafic volc. 510.60-510.92-hematitic f.p.						
		Alt'n: Wkly hematitic. Reddish. A few fine fractures with calc. Few chloritic slips						
		Min'n: Locally tr to 1% u/g diss Py	15289	505.79	506.49	0.70	tr	tr
			15290	306.49	507.99	1.50	tr	tr
			15291	507.99	508.99	1.00	tr	tr
			15292	508.99	510.09	1.10	tr	tr
			15293	510.09	511.098	1.0	tr	tr
510.92	532.15	MAFIC VOLCANICS m.g. to c.g. dk green grey mafic volcs. Numerous narrow large dikes up to 20-30 cm wide cutting across core at various angles.						
		Alt'n: Fairly fresh						
		Struct: Massive, narrow fractures healed with calcite qtz Some healed with epidote, particularly to base of unit						
		Veins: 3-5cm qtz carb vein at 30-50 degrees T.C.A. 513.33-513.40						
		Min'n: Locally minor Py. patches Py 527.60-527.69						

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Locally 1-2% Py in volcs at contacts of lamp dykes						
		Remarks: Section matrix dom. dk grey f.p. 519.46-520.86.						
			15294	519.46	520.86	1.40	1-2	tr

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No.3382#80 SHEET 1 OF 14

Property South Rundle	TP. or Area Newton	Azimuth -200 layout	Date Started AUG/19/87	Corrected Dip Tests Location sketch
Project 3382	Lot. & Conc.:	Dip -50	Date Completed AUG/22/87	
Claim No.	Co-ordinates: 1997.689N/	Length 232.11	Drilled By: Morissete	
Grid No.	3092.785E	Collar Elev. 3999.214	Logged By: A. Soever	
	Section: 6+60SE 55NE			

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. %	ASSAYS

OBJECTIVES:-To test upwards exxtension of B-North zone.

0 3.96 CASING- overburden

3.96 4.45 GREY F.P.
Fresh grey f.p.- 5-7% f.g. biotite.

Struct:
Massive.

Min'n:
1% f.g. diss Py

Remarks:
Lower ct at 70-80% T.C.A.

4.45 8.25 ARGILLITE-ARGILLITE-BRECCIA
Black f.g. argillite. Slaty cleavage.
Locally brecciated fabric.

Struct:
Slaty cleavage at 40 degrees T.C.A.
Broken blocky core 4.56-4.87, 7.20-7.71

DIRECTIONAL TESTS

DEPTH (m)	M.AZ.	T.AZ.	EST AZ	DIP	REMARKS
6.70			200.3	-50	ACID TEST
47.55			201.8	-49	" "
93.26			203.5	-47	" "
138.98			205	-45	" "
182.87			207.0	-44	" "
227.37			208.7	-43	" "
TROPARI					
130.14	212	205		-44	

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Veins: Fine fractures healed with qtz calcite						
		Min'n: F.g. Py associated with qtz-calc. veins in fractures.	15295	5.45	6.55	1.10	4-5	tr
			15296	6.55	6.95	0.4	8-10	tr
		Remarks: Lamp dyke with 8-20% f.g. diss Py 6.58-6.95						
8.25	12.94	GREY F.P. Fresh grey f.p. 5-8% black bio.						
		Struct: Massive						
		Min'n: tr f.g. diss PY						
		Remarks: Lower ct at 60 degrees T.C.A.						
12.94	15.24	ARGILLITE BRECCIA Black f.g. brecciated argillite.						
		Struct: Good breccited texture. Streaky well foliated at 40 degrees T.C.A. 14.27-14.58						
		Min'n: 2-3% m.g. diss Py						
		Veins: Few irregular qtz-calcite veins <1 cm dia. Milky white qtz vein at lower ct.						
		Remarks: Lower ct sharp at 45 degrees						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
15.24	18.42	SPECKLED ARGILLITE-GREYWACKE Med. grey argillite-gwke-speckled with mm scale white calcite. Struct: Well foliated at 40 degrees T.C.A. Min'n: 1% m.g. diss Py Veins: cm scale milky white qvs with argillite frags at 40-60 degrees T.C.A. at 16.07-16.28, 16.32-16.39						
18.42	27.60	GREYWACKE Grey f.g. to m.g. gwke. Locally spotted with white calc. Veins: Few narrow qtz-calcite veins scattered throughout unit. Min'n: Locally up to 1% f.g. diss Py.						
27.60	31.71	ARGILLITE BRECCIA EXHALITE Sections black argillite breccia interlayered v.f.g. green grey ewxhalite. Struct: Sections brecciated argillite 27.6-28.36, 28.79-29.26. Banded at about 35 degrees T.C.A. 28.36-28.79; Well banded exhalite at 35 degrees T.C.A. Min'n: On scale bands and patches massive Py in argillite breccia. Banded submassive Py						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au	
		in exhalite.	15297	27.60	28.40	0.8	10%	1.2	
			15298	28.40	28.80	0.4	15%	0.2	
		Remarks:	40014	28.8	29.30	0.5	30%	tr	
		Section gwke 30.45-31.71	40000	29.30	30.0	0.7	1-2%	tr	
			40001	30.0	30.3	0.3	5-10%	tr	
			40015	30.3	31.7	1.4	tr	tr	
31.71	38.71	ALT'D SERICITIZED MATRIX DOMINANT F.P.							
		Very pale grey green f.p.							
		Matrix dominant.							
			40016	31.7	32.7	1.0	1	0.4	
		Struct:	40017	32.7	34.2	1.5	1	tr	
		Massive locally weakly fol'd	40018	34.2	35.7	1.5	1	tr	
		Few hairline fractures healed with	40019	35.7	37.2	1.5		tr	
		qtz-dolomite.	40020	37.2	38.7	1.5		tr	
			40021	38.7	39.7	1.0		tr	
		Min'n:	40022	39.7	40.36	0.66		0.4	
		1% v.f.g. diss Py	40002	40.36	41.26	0.9		tr	
			40023	41.26	41.96	0.7		1.4	1.44/
		Veins:	40024	41.96	42.96	1.0		0.3	2.62m
		31.71-32.10 white qtz veins subparallel T.C.A.	40025	42.96	43.88	0.92		2.7	
38.71	43.88	SHEARED CARBONITIZED U.M.							
		Green sheared. Well foliated carbonate rich							
		rock. Sheared u.m. 10-15% irregular qtz							
		segregation.							
		Min'n:							
		Trace f.g. Py. 10% Py in foliation 41.67-41.96							
		Remarks:							
		Section of pale brown sericitized F.P. with							
		3-4% f.g. diss Py 40.36-41.26. Spinifex 42.76-42.92							
43.88	52.62	INTERLAYERED ARGILLITE BRECCIA-EXHALITE							
		Interlayered. black f.g. graphitic argillite breccia							
		v.f.g. pale grey. green calesilicate rock (exhaite)							
		Struct:							
		Argillite breccia is bedded at 50-60 degrees T.C.A.							

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Exhalite is massive to finely laminated.						
		Veins: Qtz veining in argillite breccia 49.20-49.41						
		Min'n: Cm scale bands and patches massive Py in argillite breccia. 2-3% f.g. diss Py in exhalite						
		Remarks: Bands argillite breccia. 45.26-45.69, 47.18-47.88 48.36-49.64						
			40003	43.88	45.28	1.40	1-2	0.3
			40004	45.28	45.68	0.40	2-3	tr
			40005	45.68	47.18	1.50	2-3	0.2
			40006	47.18	48.68	1.50	4-5	nil
			40007	48.68	49.68	1.00	10-20	nil
			40008	49.68	51.18	1.50	5	nil
			40009	51.18	52.28	1.10	5	nil
			40010	52.28	52.62	0.34	15	tr
52.62	56.77	MATRIX COMM SERICITIZED BLTD. GREY F.P. (As from 31.71-38.71) Appears to be repetition of sequence.						
			40026	52.62	54.12	1.5	0.5	0.3
			40027	54.12	55.62	1.5	0.5	tr
			40028	55.62	56.77	1.5	0.5	tr
56.77	65.73	SHEARED U.M. (As from 38.71-43.88)						
			40029	56.77	58.27	1.5	<0.5	0.7
		Remarks:	40030	58.27	59.77	1.5	<0.5	0.3
		Section pyritic argillite 59.18-59.60	40031	59.77	61.27	1.5	<0.5	0.2
		Highly sheared section 62.40-63.90 at 45	40032	61.27	62.77	1.5	<0.5	0.1
		degrees T.C.A. with blocky core breaking	40033	62.77	64.27	1.5	1-2	tr
		along serpentinous slips. Brecciated texture	40034	64.27	65.73	1.46	5%	0.5
		63.90-65.73 with Py.	40011	65.73	67.23	1.5	tr	0.3
			40012	67.23	68.73	1.5	tr	tr
		Min'n:	40013	68.73	69.94	1.21	tr	0.1
		Py in breccia matrix locally submassive streaks. est 5-10%. Lower ct sharp at 60 degrees T.C.A. (FROM 63.90-65.73)						

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
65.73	69.94	ALT'D REDDISH GREY F.P. QITH INCLUSIONS W.M. Pink to grey alt'd f.p. with inclusions pale green u.m. Alt'n: Weakly hematitic. Very few felict feldspars. Min'n: tr Py						
69.94	77.77	MAFIC TO ULTRAMAFIC VOLCANICS. Dk green grey mafic to ultramfic volcanics. Struct: Massive to polyhedrally jointed locally spinifex texture mod. well developed. Alt'n: quite calcite, 3-4% calcite. qtz infilling of fine fractures. up to 5mm wode/ Veins: Qtz vein at 45 degrees T.C.A. Min'n: tr f.g. Py Remarks: Sharp contact with next unit at 40 degrees T.C.A.						
77.77	96.95	PINK TO GREY ALT'D F.P. Grey to tinged pinkish biotitic alt'd f.p. Alt'n: Alt'd only faint ghost of relict feldspars. Biotite ischloritic. 3-5% fine hairline fractures healed with dolomite and qtz.						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Veins: Weakly hematitic-chloritic. 1cm white q.v.s. at 60-70 degrees T.C.A. at 83.53-83.54 and 84.30-84.31. Struct: Sheared, chloritic slips at about 25-30 degrees T.C.A. from 81.07-82.31. Sections blocky core. Generally core breaks along chl. slips at 40 degrees T.C.A. Hematitic hairline fractures at 15 degrees T.C.A. 93.38-93.64 Min'n: Only locally tr Py Remarks: Inclusions mafic volcs 91.77-91.94, 94.55-94.70 Gradational contact with next unit.						
96.95	105.0	RED ALT'D F.P. M.g. red altered f.p. Alt'n: Greyish brick red. Only faint ghosts of relict feldspars to 101.58. Lest alt'd with few bio flakes and noticable feldspars below this.	40035 40036 40037 40038 40039 40040	96.95 97.95 99.0 100.5 102.0 103.5	97.95 99.0 100.5 102.0 103.5 105.0	1.0 1.05 1.5 1.5 1.5 1.5	tr tr tr tr tr 1	0.1 0.2 tr tr 0.6 0.9
		Veins: Fine hairline fractures healed with dol-qtz. fine fractures with specular hem. 97.55-98.10 1cm q.v. 99.56-99.57 at 33 degrees T.C.A. Min'n: tr v.f.g. diss Py 1% Py from 104.17-105.0 aas approaches hybrid zone. Remarks: lamp dyke 101.35-101.58						
105.0	109.1	HYBRID ZONE: ALTERED F.P. AND MAFIC VOLCANICS. Altered pink to red f.p. with numerous inclusions						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au	
		pyritic pale grey alt'd mafic volcs.							
		105.0-106.3. Alt'd dark grey green mafic volcs.							
		Lamp dyke well foliated at 50 degrees T.C.A. from							
		105.55-105.78. Mafic volcs have pale grey alt'n with							
		4% Py 105.0-105.55 and 10% Py 105.78-106.30							
			40041	105.0	106.3	1.3	6	0.1	
		106.30-107.0: Bright red alt'd f.p. with 10% Py	40042	106.3	107.0	0.7	10	3.5 }	
)		107.0-108.0 : Highly alt'd f.p. with numreous	40043	107.0	108.0	1.0	5	12.5 }	10.9/
		pale grey alt'd mafiac volcanic inclusions	40044	108.0	109.1	1.1	3-5	14.2 }	2.8m
		est 15% Py 107.28-107.65							
		5% 107.64-107.98							
		108.0-108.5: Pale yellowy pink highly alt'd sericitized							
		porphyry 2-3%							
		108.5-109.1. Numerous inclusions with 5-10% Py							
		Few fine hairline fractures healed with dolomite and qtz.							
109.1	121.32	RED ALT'D F.P.							
									8.4/
		Red to pale grey highly altered f.p.							4.1m
		Alt'n:							
		Numerous short sections pale grey alt'n 109.1-111.0							
		Alt'n decreases in intensity with depth grading into							
)		grey F.P.							
			40045	109.1	110.4	1.3	8	2.9	
		Struct:	40046	110.4	111.0	0.6	3	1.7	25/1.9m
		3% fine hairline fractures healed with specular							
		Beratite. Other hairline fractures healed with							
		qtz-dolomite.							
		Min'n:							
		Est 8% f.g. diss Py assocd with grey alterate							
		109.1-110.4. 3% f.g. diss Py. Alt'd porphyry; 110.4-111.0							
121.32	123.67	GREY F.P.							
)		Grey m.p. f.p., 5-10% f.g. diss biotite.							
		Alt'n:							
		Few fine fractures healed with hematite or calc-qtz.							

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Locally weakly reddish due to hematite.						
		Min'n:						
		2-4% f.g. diss Py 123.22-123.67	40047	122.17	123.67	1.5		0.6*
123.67	125.46	F.G. MATRIX DOMINANT BIO-HBDE PORPHYRY DYKE f.g. matrix dominant bio hbde porphyry dyke						
125.46	141.63	GREY F.P. Grey weakly alt'd f.p.						
		Alt'n: Weakly hematitic chloritic. Giving unit reddish tint Fine hairline fractures healed with qtz-calcite or qtz-dolomite.						
			40048	130.40	131.90	1.50		0.3
		Veins: qtz veining with specular hematite. 130.32-130.52, 140.47-140.58						
		Struct: Massive						
		Remarks: Lamp dykes. 126.17-127.02 and 135.89-135.14 Becomes reddish to base grading into next unit.						
141.63	153.79	RED ALTERED BIO. F.P. Red to dark reddish grey alt'd f.p.						
		3-5% biotite.	40049	141.60	143.10	1.5		0.2
			40050	143.10	144.60	1.5		0.1
		Alt'n:	40051	144.60	146.10	1.5		0.8
		Hematitic chloritic core tends to break along	40052	146.10	147.60	1.5		0.1
		all slips.	40053	147.60	149.10	1.5		0.1
			40054	149.10	150.60	1.5		<0.1
		Struct:	40055	150.60	152.1	1.5		0.2
		2-3% hairline fractures healed with calc-qtz.	40056	152.1	153.60	1.5		nil

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Veins: Fine scattered fractures infilled with white dol. Min'n: Trace Py Remarks: Gradational contact with next unit Lower edge of red alt'n appears to be marked by chl fracture subparalell T.C.A.						
153.79	175.73	FRESH GREY BIO F.P. Fresh unalt'd bio F.P. 10-15% biotite. Alt'n: Locally stained slightly reddish Struct: Massive, few chl. slips 1% hairline fracture with qtz-calc. Veins: Narrow 1cm f.g. white to grey qtz veins at 40 degrees T.C.A. at 155.47, 156.79. Series of 1-3cm qtz veins at 45 degrees T.C.A. 146.47-146.54 Min'n: Only tr Py Remarks: Gradational contact with next unit.						
175.73	181.42	RED ALTERED F.P. Brick red alt'd F.P. Only faint ghosts of ffeldspars. No biotite. Below 130.15 get fresher section with bio and good feldspars.						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Alt'n: Hematitic. Weakly chloritic. 179.09-180.15; 0.3% hairline fractures healed with chl material. Few hairline fractures healed with calcite						
		Veins: Minor specular hematite in 2-3mm wide qv at 40 degrees T.C.A. at 178.79						
		Min'n: tr Py						
181.42	186.56	HYBRID ZONE Pink to grey alt'd bio F.P. with numerous inclusions of mafic volcanics	40057	181.4	181.90	0.5	2-3	tr
			44058	181.9	183.0	1.1	5	tr
		Struct: 10-15% fine hairline fractures healed with calc-qtz.	44059	183.0	183.5	0.5	10	0.1
			44060	183.5	185.0	1.5	2-3	0.3
			44061	185.0	185.6	1.6	2-4	tr
		Min'n: F.g. disseminated Py in sections of alt'd porphyry Also as fracture filling in hairline fractures in volc. : 181.42-181.90; 2-3% Py as fracture filling. in volcs.: 181.90-183.0-5% Py in alt'd porphyry. 183.0-183.5-; 10% Py mostly in breccia zones on either side of q.v. est 20% Py 183.32-183.50 183.5-186.56; 2-4% Py in hybrid rock. Mostly fine fractures in volcs. 183.07-183.34; greenish grey q.v. upper ct at 65 degrees T.C.A.lower one at about 30 degrees. Breccia on either side of vein with Py.(see min'n)						
			40062	186.6	188.1	1.5		0.1
			40063	188.1	189.6	1.5		tr
			40064	189.6	191.1	1.5		nil
			40065	191.1	192.6	1.5		0.2
			40066	192.6	194.1	1.5		nil
			40067	194.1	195.6	1.5		nil
			40068	195.6	197.1	1.5		nil

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
			40069	197.1	198.6	1.5		nil
			40070	198.6	200.1	1.5		0.1
186.56	201.38	MAFIC VOLCS.	40071	200.1	201.4	1.3		0.1
		Highly fract'd mafic volcs. f.g.						
		Alt'n:						
		Fairly fresh						
		Struct:						
		Cut by 2 networkds of fine hairline fractures.						
		Early set-5% fine hairline fractures healed with						
		qtz-epidote pyrite. Increase in frequency and Py						
		content adjacent to narrow dykes of F.P.						
		Late set 5% fine hairline fractures healed with calcite.						
		rock has very fract'd appearance.						
		Veins:						
		See 'fractures' under 'structure'						
		Min'n:						
		2-3% fine Py filling early hairline fractures						
		5-10% Py sections adjacent to alt'd F.P. dykes.						
		180.40-187.63, 190.11-190.36, 190.92-191.34, 200.32-201.38						
		Remarks:						
		Dykes alt'd porphyry 190.36-190.62						
		191.36-192.26						
201.38	204.66	GREY HORNBLENDE F.P.						
		Grey fresh dark grey m.g. hornblende F.P.						
		2 sizes feldspar	40072	204.2	205.7	1.5		0.3
		Struct:						
		Massive, broken blocky core 206.26-206.46						
		Min'n:						
		1-2% f.g. Py from 205.28-205.7						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
205.66	209.81	MAFIC VOLCANICS. Black f.g. mafic volcanics. Struct: Fract'd with 5% fine hairline fractures healed with fine Py-qtz-epidote. 2-3% hairline fractures hbld with calc. Min'n: 3-4% f.g. Py in filling fine fractures.	40073 40074 40075	205.7 207.2 208.7	207.2 208.7 209.8	1.5 1.5 1.1	3-4 3-4 3-4	0.1 0.2 0.1
209.81	211.63	GREY F.P. M.g. weakly alt'd F.P. 5% biotite. Remarks: Breccia zone with numerous inclusions mafic volc. 209.81=210.2						
211.63	224.09	MAFIC VOLCANICS- PYRITIC Dark grey f.g. mafic volcanics. Struct: Highly fract'd with fine hairline fractures. Early set healed with f.g. Py-qtz =/-epidote Later set healed with epidote. Latest set healed with calcite. Alt'n: fine fractures prevalent throughout fdPatchy pale grey green epidote alt'n 221.30-224.09. Veins: See 'fractures' under 'structure'. Min'n: 4% Py as fine Py infilling hairline fractures	40076 40077 40081 40078 40079 40080 40082 40083 40084 40085 40086	211.7 213.2 214.1 214.7 215.3 216.6 218.1 219.6 221.1 222.6 223.3	213.2 214.0 214.7 215.3 216.6 218.1 219.6 221.1 222.6 223.3 224.1	1.5 0.9 0.6 0.6 1.3 1.5 1.5 1.5 1.5 0.7 0.8	2-3 2 4 2 6 1-2 1-2 1-2 2-3 10 5	0.5 0.1 nil 0.3 1.2 tr nil 0.3 0.2 0.2 0.2

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		More highly fract'd pyritic section with 1% Py 215.3-216.6 222.6-223.3; 10% Py assoc'd with epidote alt'd 223.3-224.1; 5%.						
224.09	232.30	GREY F.P. Grey locally weakly alt'd F.P. Alt'n: fairly fresh						
			40087	224.1	224.4	0.3	10	0.7
		Struct:	40088	224.4	225.8	1.1	5	0.6
		massive	40089	225.8	226.8	0.8	1-2	1.0
			40090	226.6	228.1	1.5	1-2	0.8
		Veins:	40091	228.1	229.6	1.5	1-2	0.1
		Grey fract'd q.v. with Py infilling at upper	40092	229.6	231.1	1.7	1-2	0.1
		contact.	40093	232.1	232.3	1.2	1-2	nil
		Min'n: 10% Py as infilling of fine fractures in q.v. 224.09-224.37 5% Py in fractures in mafic inclusions 224.75-225.50 Few patches Py in grey q.v. 225.75-225.58 231.26-231.55 1-2% f.g. diss Py in prophyry. Remarks: Mafic inclusions 224.75-225.6; 229.94-230.12						
	232.30	END OF HOLE. HOLE CEMENTED						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No.3382#81 SHEET 1 OF 8

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
South Rundle	Newton	200	/ /		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		-50	/ /		
Claim No.	Co-ordinates:	Length	Drilled By:		
	1968.11N/	135.67	Morissette		
Grid No.	3072.76E	Collar Elev.	Logged By:		
		4003.90	A.Soever 0-7.94		
			C.P. Zorzi 7.94-135.55		

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. %	ASSAYS

OBJECTIVES:-To test top of East shoot of B-North zone

DIRECTIONAL TESTS

Depth (M)	Mbrg (FT)	Tbrg	est tbrg	dip	type test
10.97	36		200.2	48	AT
47.56	156		200.7	47	AT
90.24	296		201.4	48	AT
135.67	445		202.0	47	AT

0 0.7 OVERBURDEN
Casing to 4.87m due to blocky ground 1m seam 3.70-4.70.

0.7 4.75 MAFIC TO U.M. VOLCANIC.
Massive med. grey green f.g. volcanic
Weakly calcitic.

Struct:
Massive, f.g. fractured with hairline fractures

Alt'n:
Cut by 3-4% hairline to cm wide fractures healed with calcite.

Remarks:
1m seam at lower ct.
Narrow 2cm piece of core. (Pyritic argillite breccia at 4.73-4.75) or lower edge of seam.
Broken blocky core in this area.

4.75 6.97 SERICITIZED ALT'D GREY F.P.
Highly alt'd. Pale grey F.P.

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Atl'n: Only very faint traces of relict feldspars Struct: Massive becoming fol'd as approach lower ct. Due to shearing C.A.+60 degrees. Min'n: Faint tr diss Py Remarks: Lower ct at about 35 degrees T.C.A.						
6.97	7.94	ARGILLITE BRECCIA Black grapyhitic sheared argillite breccia	040094	6.95	7.95	1.0	5-10	1.0
		Struct: Laminated at about 35 degrees T.C.A. Wavy banding broken blocky core. Min'n: Graphitic with streaks and contorted bands and patches of Py ut to 1cm thick. Remarks: pale green U.M. from 6.97-7.20, 7.41-7.53						
7.94	12.35	SHEARED CARBONITIZED SILICIFIED U.M. f.g.; non magnetic, lt grey to green, highly sheared and silicified. Struct: Highly sheared with minor preserved spx. Large amt of blocky core. Veins: Highly sliicified with numerous patchy qtz and qtz veinlets.						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
12.35	16.48	SHEARED SER'D F.P. Pale yellow green, non magnetic f.g. to m.g. Struct: Highly sheared. Veins: 2-3% 1mm-4mm lt grey qtz veins Numerous chloritic infilling. Min'n: tr-0.5% f.g. diss Py	040095	12.00	13.50	1.5	tr	nil
			10001	13.50	15.00	1.5	tr	0.3
			040096	15.00	16.50	1.5	tr	tr
16.48	19.62	SHEARED U.M. f.g., non-magnetic, pale yellow green. Struct: Sheared with bands (schistosity) at 90 degrees T.C.A. Veins: Numerous thin lt. grey qtz. cb veins. Min'n: tr f.g. diss Py						
19.62	21.22	SERICITIZED SILICIFIED F.P. Lt. grey yellow f.g. non-magnetic highly sil'd with qtz patches and infillings. Struct: Highly sheared Veins: and Alt'n: Sericitized with 30% qtz infillings						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Min'n:						
		0.5-1% f.g. diss Py.	040097	19.60	21.00	1.40	1-2	1.7
			040098	21.00	22.00	1.00	0.5-1	1.3
21.22	27.00	SHEARED U.M.						
		As above, 16.48-19.62						
		Slightly more sil'd. Highly seric'd with						
		short ser'd F.P. section at the end. Short py'c						
		section reflected in sampling.						
			040099	23.00	24.50	1.50	tr-0.5	nil
27.00	28.85	SERICITIZED F.P.						
		Pale yellow green, m.g., non-magnetic.						
		Struct:						
		Highly sheared with 3% 2-5mm qtz/cb						
		veinlets. Becoming bx'd near the end	10002	27.00	28.50	1.5	tr-1	0.4
			10003	28.50	30.00	1.5	tr-0.5	0.1
		Min'n:						
		tr-2% f.g. diss Py near the end of section.						
28.85	31.50	MAFIC VOLCANICS						
		Med. grey green, f.g., non-magnetic.						
		Struct:						
		Two distinct fracture patterns. Healed with						
		thin f.g. qtz-qtz/carb.						
31.50	42.25	RED ALT'D F.P.						
		Red, m.g. non-magnetic.						
		Struct:						
		Redlatively massive.	10004	31.50	33.00	1.5	tr	0.1
			10005	33.00	34.50	1.5	tr	0.1
		Alt'n and Veins:	10006	34.50	36.00	1.5	tr	0.1
		Red alt'n becoming less intense at	10007	36.00	37.50	1.5	tr	0.4
		either ct. 5-10% thin qtz-cb veinlets.	10008	37.50	39.00	1.5	tr	
			10009	39.00	40.50	1.5	tr	0.3
		Min'n:	10010	40.50	42.00	1.5	tr	0.2
		tr f.g. diss Py.						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
42.25	43.70	ARGILLITE AND MAFIC VOLC. block to dk. green, f.g., nonmagnetic. Struct: Fractured throughout with small seam at 42.80-43.00 Min'n: 1-2% f.g. diss Py						
43.70	46.40	GREY F.P. DYKE Pink to grey, m.g. Pheno's, magnetic. Struct: Massive with minor fractures. Veins: Thin lt. grey qtz/cb veinlets.						
46.40	68.25	ALT'D MAFIC VOLC. Med. grey-green, f.g., magnetic. Struct: Relatively massive with minor thin fractures, possible pillow salvages. Alt': Fractures, filled, with epidote near the upper ct. and gradually becoming less alt'd with epidtoe, garnetiferous patches here and there. 5-10% thin lt. grey calcite + qtz/ch veins.	10123 10124 10125 10126 10127 10128 10129 10130 10011 10012	54.50 56.00 57.50 59.00 60.50 62.00 63.50 65.00 65.50 67.00	56.00 57.50 59.00 60.50 62.00 63.50 65.00 65.50 67.00 68.85			
68.25	70.25	LAMP DYKE Reddish grey, f.g. Struct: Moderately fract'd with minor blocky sections.	10131 10132	68.25 69.25	69.25 70.25			

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
70.25	72.50	ALT'D MAFIC VOLC.	10133	70.25	71.25	1.00		0.4
		As above.	10134	71.25	72.50	1.25		0.7
		Struct: 2 phases of fractures. Numerous thin lt grey calcite and qtz/cb veins.						
		Min'n: tr-0.5% f.g. diss Py						
72.50	78.75	ALT'D MAFIC VOLC'S AND RED ALT'D F.P. (HYBRID ROCK)						
		Volcanics: Lt purple grey, f.g. magnetic.						
		Red F.P.: Reddish orange, m.g., non-magnetic.						
		Struct: Highly sheared						
		Alt'n and Veins: good cb. alt'n throughout and highly silicified.	10013	72.50	74.00	1.5	tr-1	1.2
			10014	74.00	75.50	1.5	tr-1	0.4
			10015	75.50	77.00	1.5	tr-1	1.6
			10016	77.00	78.50	1.5	tr-1	1.7
		Min'n: 0.5-1% f.g. diss Py.	10017	78.50	80.00	1.5	tr-1	0.8
78.75	82.40	RED ALT'D F.P. Red, f.g. to m.g., slightly mangetic.						
		Struct: Moderate shearing.						
		Alt'n and Veins: Good red alt'n becoming weaker towards the end.						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Min'n: tr f.g. diss Py	10018 10019	80.00 81.50	81.50 83.00	1.5 1.5	tr-1 tr-1	0.6 0.8
		Remarks: Small 10-20 cm sections of alt'd mafic volc.						
82.40	105.70	GREY SLIGHTLY ALT'D F.P. Grey red, f.g. to m.g., magnetic in places.						
		Struct: Moderately fract'd						
		Alt'n and Veins: Minor red alt'n becoming more intense (reflected in the samples) Large qtz stockwork also appears to be running along core axis.	10020 10021 10022	90.10 91.00 92.50	91.00 92.50 94.00	0.9 1.5 1.5	tr tr tr	0.3 0.2 0.5
		Min'n: tr f.g. diss Py.						
105.70	107.53	LAMP DYKE As above.						
		Structure: Massive with good chl'd upper and lower cts.						
107.53	121.25	GREY SLIGHTLY ALTERED FELDSPAR PORPHYRY as above 82.40-105.70						
121.25	135.67	GREY FELDSPAR PORPHYRY Med. grey, f.g., non-magnetic.						
		Structure: Minor fractures, dioritic textures.						
		Veins: Few thin lt. grey barren qtz and qtz/ch veins.						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 3382#81 SHEET 8 OF 8

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		BQ core drilled Casing pulled Hole cemented DRILLING NOTES: 27/08/87 Chris Zorzi General Comments B-North Zone Recognized as Hybrid Rock from 72.50-78.75m Zone well alt'd; both the volcanics and the FP. However, Py content is low with only up to 3-5% in the best areas. Expect low values.						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Min'n:						
		tr f.g. diss Py	10018	80.00	81.50	1.5	tr-1	0.6
			10019	81.50	83.00	1.5	tr-1	0.8
		Remarks:						
		Small 10-20 cm sections of alt'd mafic volc.						
82.40	105.70	GREY SLIGHTLY ALT'D F.P.						
		Grey red, f.g. to m.g., magnetic in places.						
		Struct:						
		Moderately fract'd						
		Alt'n and Veins:						
		Minor red alt'n becoming more intense	10020	90.10	91.00	0.9	tr	0.3
		(reflected in the samples) Large qtz	10021	91.00	92.50	1.5	tr	0.2
		stockwork also appears to be running along	10022	92.50	94.00	1.5	tr	0.5
		core azis.						
		Min'n:						
		tr f.g. diss Py.						
105.70	107.53	LAMP DYKE						
		As above.						
		Struct:						
		Massive with good chl'd upper and lower						
		cts.						
107.53	121.25	GREY SLIGHTLY ALT'D F.P.						
	E.O.H.	Med. grey, f.g., non-magnetic.						
		Struct:						
		Minor fractures, dioritic textures.						
		Veins:						
		Few thin lt. grey barren qtz and qtz/ch veins.						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 3382#81 SHEET 8 OF 8

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		DRILLING NOTES						
		BQ core drilled Casing pulled Hole cemented						
		27/08/87 Chris Zorzi						
		General Comments						
		B-North Zone						
		Recognized as Hybrid Rock from 72.50-78.75m lone well alt'd both the volcanics and the F.P. However, Py content is low with only up to 3-5% in the best areas. Expect low values.						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No.338282 SHEET 1 OF 23

Property: South Rundle
Project: 3382
Claim No.:
Grid No.:

TP. or Area: Newton
Lot. & Conc.:
Co-ordinates: 2091.355N, 3276.199E
Section: 800SE/200.5m SE of Ref.line

Azimuth: 198 layout
Dip: 70degrees
Length: 553.19
Collar Elev.: 3998.944m

Date Started: 25/8 /87
Date Completed: 06/09/87
Drilled By: Bradley Bros.
Logged By: C.P. Zorzi 0-306.55; A. Seever 306.55-553.19

Corrected Dip Tests

Location sketch

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. %	ASSAYS
		OBJECTIVES:-Deep test for Se rake of Zone B-East sheet	Depth metres collar	MAG Azim	Tr Azim	Dip	est Az	remarks
0.00	3.96	CASING	4.88			69.5	198	Acid test
			47.56			68.0	197.7	" "
3.96	8.70	MASSIVE GWK	91.46			67	197.4	" "
		Med. grey, f.g., magnetic, few <1% f.g.	139.02			67	197.1	
		detrital qtz.	182.98			67	196.8	" "
			230.49			67	196.5	" "
		Struct:	276.22			65	196.2	" "
		Moderately fract'd	322			62	196	" "
			368			62	195.3	" "
		Veins:	413.3			60	195.8	" "
		5%, 1-3mm lt. grey calcite veins, oriented	459.01			59.5	196.3	" "
		randomly.	519.96			57.0	197.5	" "
8.70	11.60	HBLD F.SP PORPHYRY DYKE						
		Reddish, purple, f.g. to m.g. f.sp, phenos with						
		30-40 degrees. f.g. to m.g. hbld., slightly magnetic.						
		Struct:	384.33	203	195.5	-61		
		Highly fract'd with blocky core	484.91	204	196.5	-59		
			524.53	205	197.5	-58		
11.60	22.30	MASSIVE GWK						
		As above 1.00-8.79						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Remarks: 2 X 20-30 cm F.P. dykes Slightly more fracturing than the above unit.						
22.30	34.25	HBLD F.SP. PORPHYRY DYKE As above 8.70-11.60 Struct: Highly fract'd section 22.50-29.00 Few 30-40 cm sections of GWK.						
34.25	36.00	MASSIVE GWK As above. Struct: Schistosity about 45 degrees T.C.A.						
36.00	37.70	HBLD F.SP PORPHYRY DYKE As above, more massive						
37.70	40.00	MASSIVE GWK As above, Struct: Minor fracturing with slightly higher amt calcite veinlets.						
40.00	44.25	HBLD F.SP. PORPHYRY DYKE As above, with thin 1mm calcite veinlets running the length of the core.						
44.25	46.80	MASSIVE GWK As above, Struct: Prevalent schistosity at about 45-60 degrees T.C.A. Only minor thin calcite veining						
46.80	51.25	HBLD F.SP PORPHYRY DYKE						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		As above with minor fracturing and moderate amt of qtz/calc, veins.						
51.25	56.96	SHEARED U.M. FLOW Med. green. f.g., relatively soft, chloritic and serp'd. Struct: Minor to moderate fractures. Veins: Numerous calcite veins and patches.						
56.96	88.30	HBLD F.SP PORPHYRY DYKE As above but colour changes from brick red to dull grey throughout the sequence. Struct: Relatively massive with some sections showing good schistosity at about 45-60 degrees.						
88.30	93.35	AMPHHIBOLITIZED GWK As above, but coasrser grained and with 20% more amphibole, magnetic. Struct: Massive Veins: Moderate amt of 1mm to 3mm lt grey calcite veins.						
93.35	96.84	GREY F.P. (MATRIX DOMINANT) Dull grey, f.g. matrix with m.g. subhedral f.sp phenos about 2-3%, non-magnetic. Struct: Massive						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Veins: 5% thin lt. grey calcite veinlets.						
96.86	98.65	AMPHIBOLITIZED GWK As above 88.30-93.35						
98.65	100.55	GREY F.P. (MATRIX DOMINANT) As above 93.35-96.86, with only 1% m.g. f.sp phenos.						
100.55	109.42	BEDDED GRAPHITIC ARGILLITE AND SILTSTONE Dull grey to black, f.g., non-magnetic. Struct: Good thin bedding of argillite. Siltstone relatevely massive. Veins: Few thin lt. grey calcite veins.						
109.42	110.80	GREY F.P. (MATRIX DOMINANT) As above.						
110.80	114.60	PILLOWED MAFIC VOLCANICS?? Dull grey green, f.g., magnetic. Struct: Numerous thin minor fractures Possible pillow salvages present. Veins: 10-20%, 1-2mm lt grey calcite veins. Remarks: Short grey F.P. matrix dominant dyke fream 112.90-113.80						
114.60	116.35	HBLD F.SP. PORPHYRY DYKE As above,						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
116.35	118.40	MAFIC VOLC-MASSIVE GWK As above, 110.80-114.60, no real pillow salvages Does have more of a gwk texture.						
118.40	120.10	HBLD F.SP. PORPHYRY DYKE As above, Hbld becoming coarser grained.						
120.10	138.65	PILLOWED MAFIC VOLC.?? As above, 110.80-114.60, good pillow salvages present and variolitic remnants seen as well.						
138.65	139.80	ARGILLITE AND SILTSTONE Lt to med. grey, f.g., hard, non-magnetic, small bed; about 10cm, graphitic argillite. Struct: Good bedding at 45 degrees T.C.A. Minor faults.						
139.80	145.95	AMPHIBOLITIZED GWK As above. Struct: Vague schistosity at about 45 degrees T.C.A.						
145.95	147.20	ARGILLITE AND SILTSTONE As above, 138.65-139.80						
147.20	149.10	CHERTY EXHALITE Pale grey green, f.g., very hard, non-magnetic. Struct: Bedding 30-45 degrees T.C.A. Minor cross fractures of bedding planes.						
149.10	160.00	INTERMEDIATE LAMP DYKE Pale green, f.g., non-magnetic.						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Struct: Massive, few remnant F.P. blebs here and there.						
160.00	170.55	AMPHIBOLITIZED GWK As above. Struct: Becomes slightly bx'd over short sections Infilling of calcite. Alt'n: Becomes highly alt'd with epidote near and up to ct. west next unit.						
170.55	171.90	INTERMEDIATE DYKE-LAMP? Pale yellow green, f.g., non-magnetic. Struct: Massive with good chilled upper and lower cts. Alt'n: Completely (strongly) alt'd with epidote.						
171.90	179.75	AMPHIBOLITEZED GWK As above, 160.90-170.55 Alt'n: Epidote alt'n strong at top becoming weak furthere south in section.						
179.75	211.55	DIABASE DYKE Dk grey to black, f.g. to m.g. magnetic. Struct: Upper ct chilled, first 3m of ocre moderately fract'd. Becomes massive and coarser grained as the section progresses south						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Veins: Few <1% calcite epidote veinlets here and there.						
211.55	220.85	GREY F.P. (MATRIX DOMINANT) DYKE As above. Struct: Relatively massive with large 5-10cm chloritic inclusions. -5% 1mm to .5cm calcite and epidote veins.						
220.85	223.17	AMPHIBOLITIZED GWK As above. Struct: Massive with moderate amt of lt grey calcite veins with epidote.						
223.17	227.40	GREY MATRIX DOMINANT F.P., LAMP DYKE Dull grey, f.g. matrix with less than 1% subhedral f.sp. phenos, amphibole rich nonmagnetic. Struct: Relatively massive with minor fractures. Min'n: 1-2% f.g. diss Py here and there.						
227.40	234.75	AMPHIBOLITIZED GWK As above but becomin less altered with epidote						
234.75	254.05	FOLIATED HBLD F.SP PORPHYRY DYKE (LAMP) Med. grey, f.g. magnetic. Struct: Foliation at about 45-60 degrees T.C.A. Relatively massive, Only few thin lt. grey calcite veins. One 0.5cm white qtz vein.						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
254.05	268.65	MASSIVE TO AMPHIBOLITEZED GWK Med. grey green, f.g., mg. amphibole content becoming decreasingly less. Struct: Fairly massive 5% thin 1mm to 0.5cm lt grey irregular calcite veinlets. Short speckled sections here and there.						
268.65	275.30	GREY BIO. F.P. Grey red, f.g. matrix with 10-15% f.g. to m.g. subhedral f.sp. phenos and 5-10% f.g. bt., non-magnetic. Struct: Massive with numerous healed minor fractures randomly oriented. Fractures healed with calcite and/or qtz/ch. Min'n: 0.5-1% f.g. to v.f.g. diss Py.						
275.30	306.55	MASSIVE GWK dEssentially the same as above but becoming finer grained and alsp depleted in amphibole Magnetic. Struct: Massive with 5-10% 1mm to 5mm. Irregular veins of calcite. Sections of patchy calcite. Short sections with f.g. to m.g. calcite speckles.						
306.55	316.53	ARGILLITE BRECCIA Dk grey to black f.g. argillite Often brecciated with angular clasts of argillite in a pale to med. greyish grey f.g. calcitic argillite matrix. Struct: Brecciated texture. Most commonly on scale clasts						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		in a calcitic matrix-locally highly brecciated zones, mm scale fragments 315.70-315.27 at 35-40 degrees T.C.A. Veins: 1-2% narrow calcite veins assoc. with calcitic matrix. Min'n: Locally patches of m.g. pyrite in calcite veins and calcite matrix of breccia est <1% Py overall.						
316.53	331.33	AMPHIBOLITIZED GWK Med. grey m.g. amphibolite assumed to be amphibolitezed gwk. Few qtz grains noted locally. Struct: Weakly fol'd at 40-45 degrees T.C.A. Veins: Few irregular calcite +/- qtz veins from mm to scale Scattered throughout unit at from 30-45 degrees T.C.A. White 0.5-1cm dolomite vein at 45 degrees T.C.A. 327.82-327.83. Remarks: Narrow 1cm wide sheared f.g. pyritic calcitic bands at 20 degrees T.C.A. at 321.17-321.18 and 324.73-324.76 Lower band has slips along contacts. Pale grey green intermediate dyke from 322.11-322.91. Many inclusions of amph'd gwk. Blocky core with slips at 15-30 degrees T.C.A. Upper ct along slip at about 10 degrees T.C.A. Lower ct sharp at 60 degrees T.C.A. Unit becomes finer grained to base grading into next unit. 329.53-331.33 Unit has irregular swirled fabric and brecciated texture. Quite calcitic with 2-3% v.f.g. to fg py. Unit is weakly to moderately magnetic.	10035	329.53	331.33	1.80		
331.33	346.86	GREYWACKE Grey f.g. gwk. Weakly amph'd. M.g. from 335.70-341.24						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Struct: M.g. secton wkly foliated at 45 degrees T.C.A. Rest massive. Veins: White calc. veins 1-5mm, filling fractures at various angles T.C.A. Est. <2% fractures. More intensely fractured sections 341.03-342.05 343.71-343.94; 344.95-344.13.						
		Min'n: f.g. Py associated with calcite veins at 331.43, 331.61, 341.33.	10036	331.33	332.33	1.0		nil
		Remarks: Speckled in 5-10% m.g. calcite grains 336.89-340.46. Speckled argillite from 345.59-346.86.						
346.86	348.18	ARGILLITE BRECCIA Black f.g. slightly graphitic argillite breccia Black frags. in a paler grey calcite matrix. Struct: Well foliated, laminated towards base at 25-30 degrees T.C.A. Min'n: Bands and patches of f.g. to m.g. pyrite Bands are 2-3mm wide in foliation phane. Patches are irrejular associated with calcitic breccia matrix. Veins: Narrow b.cm calcite-minor qtz vein at 30 degrees T.C.A. at lower contact.	10037	346.08	348.18	1.3		nil
348.18	367.92	GREYWACKE-ARGILLITE Med. to dk grey f.g. greywacke to argillite. Weakly amph'd.						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Struct: Massive. Veins: 2-3% hairline fractures filled with calcite. White calcite vein along fracture subparalell T.C.A. 366.14-366.92. Minor qtz-epidote assoc with this fracture. Min'n: Locally throughout unit 2-3% f.g. to v.f.g. diss pyrite. Also traces py assoc with calcitic veins in fractures. 3-5% f.g. Py in breccia zones 353.97-354.13 and 358.24-358.30. Remarks: Lower ct sharp at 70 degrees T.C.A.						
367.92	369.63	LAMPROPHYRE DYKE Grey m.g. lamp dyke. 5-10% each biotite and hblde in a f.g. grey matrix. Struct: Massive. Remarks: Non-magnetic. Upper ct at 70 degrees T.C.A. Lower ct at sharp ct 65 degrees T.C.A.						
369.63	393.96	GREYWACKE ARGILLITE F.g. med. grey to dk grey gwk- to argillite Grades from f.g. black argillite to gwk and back again. Calcitic; 2-3% f.g. calcite. Struct: Generally massive. 377.80-378.56. Sheared well developed. Schistosity at 50 degrees T.C.A. 390.03-390.70 Well foliated pyritic argillite with qtz veins and bands. f.g. siliceous exhalite banding at 40-60 degrees T.C.A.						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Veins: Hairline fractures filled in qtz-calcite. Very few from 367.92-375.96. Within this section 372.30-379.77: Sheared section in calcite qtz veining 375.96-379.77- 6-7% calcite qtz in fractures. 2-3% fractures with calcite-qtz 379.77-389.41 389.41-390.03: grey white m.g. calcite qtz veins subparallel to 30 degrees T.C.A. 390.70-393.96: 3-4% fine hairline fractures healed with qtz-calcite f.g. green serp.-qtz veins at 40 degrees T.C.A. from 384.63-384.72 and 381.76-381.81	10038	389.20	390.00	0.80	nil	
		Min'n: 3-4% m.g. py assoc with sheared section with calcite qtz veining 372.30-372.68. 1-2% f.g. diss Py, locally up to 3-4% scattered throughout unit. 6% diss py in argillite-exhalite unit. 340.03-390.70	10039	390.00	390.70	0.70	0.2	
		Remarks: Narrow lamp 'pebble dykes' 370.57-370.77, 380.88-389.07 Below 390.70- unit is grey m.g. ampibolitized. Lower ct sharp at 50 degrees T.C.A. marked by narrow calc vein.						
393.96	402.49	GREY HORNBLENDE-BIOTITE F.P. Fresh grey m.g. bio-hblde f.p. 5-10% each m.g. hblde and bio. 5% cg. white feldspars. Alsp some smaller feldspar porphyroblasts.						
		Min'n: 0.5-1% v.f.g. diss Py. 1-2% v.f.g. diss py 393.96-394.76						
		Remarks: Dyke of m.g. granodiorite with chilled margins 398.93 401.12-cts are sharp upper ct at 40 degrees T.C.A.; lower ct at 50 degrees T.C.A.						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
402.49	418.18	AMPHIBOLITIZED GREYWACKE OR MAFIC VOLC. Grey m.g. amphib'd gwk. M.g. mod amph'd., non-magnetic. Struct: Fairly massive. Veins: 3-4% hairline fractures infilled with calcite	10040	404.22	405.42	1.2	0.1	
		Alt'n: Grey qtz carbonate alt'n prominant 404.22-418.18 Unit ends with unit f.g. grey green siliceous exhalite 417.56-418.18 unit red.	10041	417.48	418.18	0.70	0.1	
		Min'n: 2-3% f.g. diss Py in exhalite 417.56-418.18						
418.18	422.15	LAMPROPHYRE DYKE pale green grey m.g. well foliated lamp dyke. Calcitic Non-magnetic. Struct: Well foliated at 60 degrees T.C.A. Min'n: 2% f.g. diss Py Remarks: Lower ct sharp at 50 degrees T.C.A.						
422.16	427.28	MASSIVE U.M. Massive pale greyish green u.m. Weakly magnetic. Struct: Becomes sheared towards base in gradational ct with next unit.						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Veins: 1-2% calcite infilling fractures. Min'n: Trace to 1% f.g. diss PY Remarks: 424.89-424.98, narrow band of f.g. black argillite with 5% diss Py. Gradational ct. with next unit.						
427.28	437.27	SHEARED U.M.-TALC CHLORITIC CARBONATE SCHIST. Greenish grey. Talc chlorite carbonate schist Locally weakly magnetic. Struct: Well developed schistosity Ca varies from 40 degrees T.C.A. -30 degrees T.C.A. Most prominant Veins: Sections with white qtz-calcite segregations and layers parallel to schistosity 430.10-430.76, 434.78-434.05, 435.58-435.54 Min'n: Trace to locally 1% v.gggf.g. diss Py Remarks: Grey well laminated siliceous exhalite banded at about 30 degrees T.C.A. from 429.57-430.7 About 5% Py in narrow 1-2mm bds parallel to lamnations. Gradational ct to next unit.	10042 10043 10044 10045 10046 10047 10048 10049 10050 10051 10052 10053	427.27 428.27 429.57 430.07 431.07 431.57 434.07 435.57 437.27 438.77 440.27 441.77	428.27 429.57 430.07 431.07 432.57 434.07 435.57 437.27 438.77 440.27 441.77 442.77	1.0 1.3 0.5 1.0 1.5 1.5 1.5 1.7 1.5 1.5 1.5 1.5	g/t Au 0.1 0.1 0.5 0.1 0.2 0.3 nil 0.1 nil tr tr tr
437.27	440.55	MASSIVE U.M. Dk. greenish grey u.m. Unsheared version of above. Veins: 5-7% fine hairlind fractures healed with calc. qtz						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Min'n:	10054	442.77	444.27	1.5	tr-1	0.2
		Trace v.f.g. diss Py	10055	444.27	445.77	1.5	tr-1	0.1
			10056	445.77	446.37	0.6	tr-1	nil
		Remarks:	10057	446.37	448.07	1.7	tr-1	nil
		Grad ct with next unit.	10058	448.07	449.07	1.0	tr-1	nil
			10059	449.07	450.57	1.5	tr-1	nil
440.55	442.71	SHEARED U.M. TALC CHL-CARB SCHIST	10060	450.57	452.07	1.5	tr-1	nil
		As from 427.28-437.27	10061	452.07	452.80	0.73	tr-1	nil
		Schistosity at 30-40 degrees T.C.A.						
		Trace to 1% Py.	10062	452.80	454.30	1.5	tr-1	nil
		g.vs. from 441.03-441.16 and 441.49-441.54	10063	454.30	455.80	1.5	tr-1	nil
			10064	455.80	457.30	1.5	tr-1	nil
442.71	452.80	MASSIVE TO SPINIFEXED U.M.	10065	457.30	458.80	1.5	tr-1	nil
		Similar to section texture at 445.40	10066	458.80	459.80	1.0	tr-1	nil
		Possible spinifex texturefrom 449.07-451.07.						
		Felsic lamp dykes 446.35-448.06 2nd: 448.85 -449.07						
452.80	459.99	SHEARED U.M. TALC CHLORITE CARBONATE SCHIST.						
		Sheared version of above ultrafico.						
		Locally grades to talc chlorite carbonatae	10067	459.80	460.70	0.9	4	1.1
		schist.	10068	460.70	461.60	0.9	1-2	0.1
			10069	461.60	463.10	1.5	0.5-1	nil-tr
		Struct:	10070	463.10	464.60	1.5	0.5-1	nil
		Well foliated at about 40 degrees. T.C.A.	10071	464.60	466.10	1.5	0.5-1	nil
			10072	466.10	467.80	1.7	0.5-1	nil
		Veins:						
		7-8% fractures filled with carbonate-qtz						
		Min'n:						
		Trace v.f.g. diss Py						
		Remarks:						
		457.42-459.79; 30% off white carbonate as wispy						
		bodies parallel to schistosity as approach						
		porphyry- ct with porphyy sharp at 50 degrees T.C.A.						
		Narrow red alt'd porphyry dykes 453.40-453.51 and						
		454.27-454.45.						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
459.79	467.77	RED ALTERED PORPHYRY F.g. to m.g. red highly alt'd porphyry Highly alt'd. No visible feldspar phenocryst or biotite. Alt'n: Pervasive pale grey qtz-carbonate alt'd from 459.79-560.69. Reest of unit alt'd no feldspar-bio locally sericitized. Sheared chloritic 463.17-463.67. Streaks of chlorite at 40-45 degrees T.C.A. Struct: Weak fabric at 30-40 degrees T.C.A. Thinnly laminar sheared f.g. sections 459.79-460.04 at 40 degrees T.C.A.460.63-460.87 at 20-30 degrees T.C.A. Fine anastamosing network of hairline fractures subparallel F.C.A. as approach next unit. Veins: 5% fine hairline fractures healed with dolomite qtz throughout. Series of narrow 3-4mm wide qtz veins at 45 degrees T.C.A. 460.70-461.60 Min'n: m-4% f.g. to v.f.g. diss Py assoc with pale grey qtz carb alt'n from 459.80-460.70 ;1-2% f.g. to v.f.g. diss Py and porphyry 460.70-461.69. -0.5-1% ff.g. to v.f.g. diss Py in rest of unit Locally short sections 1-2% Py Remarks: Distinct contact with next unit at 15-20 degrees T.C.A.						
467.77	471.05	FELSIC BIOTITE LAMPROPHYRE DYKE Pale green grey m.g. biotite lamprophyre 5-10% m.g. biotite. Alt'n: Weakly alt'd. Tinged slightly pink near contacts	10073 10074 10075	467.80 469.30 470.30	469.30 470.30 471.10	1.5 1.0 0.8		nil nil nil

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Sheared alt'd section 468.32-469.16. No biotite left Flazure structure. Streaks chlorite at 40 degrees T.C.A. Struct: Weakly foliated at 40 degrees T.C.A. Min'n: 1-2% ffff.g. diss PY Remarks: Lower ct at 15-20 degrees T.C.A.						
471.05	501.98	PINK SERICITIZED ALTERED FELDSPAR PORPHYRY Pink f.g. sugary seericitized f.p. Completely alt'd. No celict feldspar or biotite Non-magnetic. Struct: Fairly massive. Weak fabric at 40 degrees T.C.A. 2-3% fine hairline fractures healed with dolomite qtz. Alt'n: Weakly sericitized. Weakly hematiteic chloritic Veins: Dolomite-qtz infilling of hairline fractures. Results in a few narrow veins. Locally specular hematite noted assoc with there qtz veins. Min'n: tr to 0.5% v.f.g. diss Py	10076 10077 10078 10079 10080 10081 10082 10083 10084 10085 10086 10087 10088 10089 10090 10091 10092 10093 10094 10095 10096	471.10 472.60 474.10 475.60 477.10 478.60 480.10 481.60 483.10 484.60 486.10 487.60 489.10 490.60 492.10 493.60 495.10 496.60 498.10 499.60 501.10	472.60 474.10 475.60 477.10 478.60 480.10 481.60 483.10 484.60 486.10 487.60 489.10 490.60 492.10 493.60 495.10 496.60 498.10 499.60 501.10 502.00	1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 0.9	g/t Au tr 0.2 0.2 0.2 0.5 0.7 0.1 nil nil 0.1 nil nil 1.5 nil tr nil nil nil nil nil nil
		Remarks: Felsic lamp dyke 472.08-472.90 cts at 15-20 degrees T.C.A. Sections of alt'd felsic lamp dyke 498.29-499.1 Sheared bright red hematitic bagnd at 45 degrees T.C.A. 499.39-499.50						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 3382#82 SHEET 180F23

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
501.98	505.23	PINK TO GREY ALTERED BIOTITE F.P. Pink to grey mod. alt'd f.p. Similar to above unit but with 5% f.g. to m.g. biotite Alt'n: Weakly chloritic. Struct: Weak fabric at 40-45 degrees T.C.A. Min'n: 0.5-1% f.g. diss Py Remarks: Few scattered inclusions (mafaic volc). These contain 3-5% Py. Est <1% mm scale inclusions scattered throughout. Larger inclusions up to several cms. Across at 502.96-502.98, 503.29-503.31 503.48-503.54, 504.48-504.54, 504.96-505.01. Unit ends at fracture at abaout 40 degrees T.C.A. Below fracture porphyry is more altered.	10097 10098	502.0 503.5	503.5 503.0	1.5 1.5	nil 0.1	g/t Au
505.23	507.96	RED ALT'D SERICITIZED F.P. Brick red to pinkish grey m.g. F.P. Altered no relict feldspars. Only a few relict bro towards base. Non-magnetic. Alt'n: Weakly to mod sericitized. Pale grey qtz carbonate al'n with 1% Py 506.09-506.18 Struct: Sheared parallel to top ct at 10 degrees 505..23 -505.60. Veins: 3-4% fractures filled with qtz dolomite generally at low angles T.C.A.	10099 10100	505.0 506.5	506.5 508.0	1.5 1.5	nil 0.1	

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Min'n: Est 1% f.g. to v.f.g diss Py						
		Remarks: Inclusions alt'd mafic v.olc. 505.50-505.60 Gradational ct to next unit.						g/t Au
507.96	512.94	PINK TO GREY ALT'D BIOTITE F.P. M.g. pink to grey alt'd biotite F.P. 5% chloritic biotite.	10101 10102 10103 10104	508.0 509.5 511.0 512.0	509.5 511.00 512.0 513.0	1.5 1.3 1.0 1.0	0.2 nil 0.5 nil	
		Alt'n: No relict feldspar. Stained red due to hematite stain below 310.25. Quite chloritic.						
		Veins: Few fine hairline fractures healed with dolomite.						
		Struct: Weak fabric at 45 degrees T.C.A.						
		Min'n: tr to 0.5% f.g. Py						
		Remarks: Narrow dyke of grey F.P. 512.42-512.49 Lower ct is chloritic slip at 45 degrees T.C.A. at 512.75						
512.94	517.30	PINK BIOTITE F.P. M.g. pink biotite F.P. Good relict feldspars-5% biotite. Non-magnetic.	10105 10106 10107	513.0 514.5 516.0	514.5 516.0 517.3	1.5 1.5 1.3	0.2 0.3 0.1	
		Alt'n: Weakly alt'd. Locally slightly sercitic, especially from 514.03-514.66.						
		Struct: Weak fabric at 45 degrees T.C.A. Breccia flooded with qtz along upper ct 512.94-513.33						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Veins: More intensely alt'd section with qz dolomite veins 516.10-516.33. Few hairline fractures healed with qtz dol throughout. Min'n: tr to 0.5% v.f.g. diss Py Remarks: Gradational ct in next unit.						
517.30	521.65	PINK ALTERED SERICITIZED F.P. Alt'd greyish pink m.g. F.P. No relict feldspar or biotite. Weakly chloritic. Alt'n: Tinged yellowish due to pervasive sericite. some coarser grained mica as well. Veins: 2-3% white narrow dol-qtz veins filling in narrow hairline fractures. 0.5cm tO 1 cm qtz veins, with specular hem. at 518.40, 518.52, 520.48 at about 40 degrees T.C.A. Min'n: Tr py Remarks: Unit becomes like alt'd towards base grading into next unit.	10108 10109 10101	517.3 518.8 520.3	518.8 520.3 521.65	1.5 1.5 1.35	nil 0.2 nil	
521.65	531.96	RED ALTERED F.P. Greyish red m.g. altered F.P. No relict feldspars. 5% biotite. Alt'n: Weakly hematite chloritic.						

g/t Au

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		red finer grained sericitic sections 523.85-524.00, 527.48-529.11.					g/t Au	
		Struct:	10111	521.65	523.10	0.45	0.3	
		Weak fabric 45 degrees T.C.A.	10112	523.10	524.60	1.5	nil	
		Unit is heavily fractured 7% hairline fractures	10113	524.60	526.10	1.5	0.2	
		healed with qtz dol also fine chloritic	10114	526.10	526.60	1.5	0.7	
		fractures at angles < 40 degrees T.C.A.	10115	527.60	529.10	1.5	0.1	
			10116	529.10	530.60	1.5	0.3	
		Veins:	10117	530.60	532.0	1.4	nil	
		Hematite a.v. hematitic qtz 523.40-523.80						
		Qtz flooding of porphyry along fractures and						
		many assoc. white dol. veinlets. 525.98-526.45						
		Min'n:						
		Only a faint trace Py						
		Remarks:						
		Becomes fresher, grey below 529.11 with 5% biotite.						
		Lower ct at 45-50 degrees T.C.A.						
531.96	538.73	ALTERED MAFIC VOLCANICS						
		Med. grey to dk grey f.g. to m.g. mafic volc's	10118	532.0	533.5	1.5	0.6	
		Quite calcitic and mottled appearance due to	10119	533.5	535.0	1.5	0.2	
		alt'n						
		Alt'n:						
		Quite calcitic. 5% very fine hairline fractures healed with						
		calcite.						
		Veins:						
		3cm qtz vein at 40 degrees T.C.A. from 534.28-534.33						
		See alsp hairline fractures under alt'n.						
		Struct:						
		Massive, with 5% hairline fractures.						
		Min'n:						
		1-2% v.f.g. diss Py assoc with calc.						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Alt'n: Diss throughout. 1-2cm patch of Py 538.62-538.64 Remarks: Sheared upper ct at 40-45 degrees T.C.A. Mod.-strong magnetic alt'n. SEctio porphyry 532.48-532.73						
538.73	542.70	GREY F.P. Grey m.g. weakly alt'd F.P. Good relict feldspars. 2-3% f.g. biotite. Alt'n: Tinged red due to hem stain Remarks: Section calcitic alt'd volcanics 539.47-540.18. Lower ct at 15 degrees T.C.A.						
542.70	546.45	HYBRID ZONE Breccia of fragments of volcanics in a f.g. to m.g. Grey porphyry -60-70% volc's and 40-30% porphyry. Alt'n: Volcanics are calcitic, locally dolomitic. Veins: 1-2% hairline fractures healed with dol-qtz. Min'n: 1-2% f.g. Py as diss and stringers assoc'd with carbonate alt'n. Remarks: Grades into f.g. to m.g. grey bio F.P. with a few volcanic inclusions.	10120 10121 10122	542.70 544.20 545.70	544.20 545.70 546.45	1.5 1.5 0.75		0.4 0.9 1.9

g/t Au

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No. 3302#32 SHEET 23OF 23

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
546.48	553.19	GREY WEAKLY ALT'D BIOTITE F.P. Grey weakly alt'd bio F.P. Good relict feldspars. Few cm scale inclusions of mafic volcanic.						
	553.19	END OF HOLE CASING LEFT IN NO CEMENT.						

NUVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No.3382#83 SHEET 1 OF 20

Property	TP. or Area	Azimuth	Date Started	Corrected Dip Tests	Location sketch
South Rundle	Newton	198 layout	08 /09/87		
Project	Lot. & Conc.:	Dip	Date Completed		
3382		72	20 /09/87		
Claim No.	Co-ordinates:	Length	Drilled By:		
	2038.22N/3351.06E	582.53	Morissette		
Grid No.	Section:	Collar Elev.	Logged By:		
	890 SE/173 NE of 110 degrees of ref. line.	3997.86	A. Soever 0-340.5 C.P. Zorzi 340.5-582.53		

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. %	ASSAYS
		OBJECTIVES:- Deep test of favourable structure E of East Shoots.					DOWN HOLE COORDINATES *SEE PAGE 2	
0	3.96	CASING						
							est% Py	Aug/t
1.50	4.50	MASSIVE GWK	10135	4.5	6.0	1.5	tr	nil
		Grey f.g. massive gwke	10136	6.0	7.5	1.5	tr	nil
		5% streaky calciteic patches.	10137	7.5	9.0	1.5	0.5-1	nil
			10138	9.0	10.5	1.5	tr	nil
		Remarks:	10139	10.5	11.0	0.5	tr	nil
		Sections broken blocky core 1.5-7, 3.15-3.20	10140	11.0	12.5	1.5	2-3	nil
		3.75-3.96.	10141	12.5	14.0	1.5	2-3	nil
4.5	14.0	INTERLAYERED GREEN CARBONATE ROCK AND PYRITIC ARGILLITE F.g. green calictic carbonate rock with bands of black f.g. pyritic argillite. Bands ofblack thinly bedded argillite from 5.04-5.25. 5.46-5.48, 7.20-7.52, 8.02-8.78 8.89-9.10, 9.68-9.72, 10.97-14.010 Struct: f.g. pale green carbonate rock is massive to weakly fol'd argillite in thinly bedded. Contacts of argillite bands and bedding in argillite are at -40-45 degrees T.C.A. Argillite is sheared from 10.97-14.00 at 20-30 degrees T.C.A.							

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Alt'n:						
		Sheared argillite 10.97-14.00 is quite calcitic.						
		Min'n:						
		Trace Py in fol'n planes is green carbonate. Streaks and blebs of Py in argillite est avg of 3%						
14.0	21.0	SHEARED CARBONATE ROCK						
		Dk to m.g. schistose calcitic rock						
		Speckled with 5-10% pale mica-pred. calcite and calcsiliates						
		Either a slightly sheared U.M. or lamp.						
		Struct:						
		Well fol'd schistose at 40 degrees T.C.A.						
		Questionable spinifex at 14.10-14.20						
		Later shearing at 20 degrees T.C.A. from 14.50-15.20						
		Min'n:						
		trace Py.						
		Remarks:						
		Grey, bio F.P. dyke 16.95-18.03 -0.5-1% f.g. to u.f.g.						
		Py-trace py-at 17.80.						
			10142	14.0	15.5	1.5		nil
			10143	15.5	17.0	1.5		nil
			10144	17.0	18.0	1.0		nil
			10145	18.0	19.5	1.5		nil
21.0	27.5	DARK RED HBDE F.P.						
		Dk red hematitic hbde F.P.						
		20% feldspars up to 7mm dia						

DOWN HOLE COORDINATES

DEPTH	MAG.AXIM	TR.AZIM.	EST AZ.	DIP	REMARKS
367.68			204	66.5	ACID TEST
413.41			203	66.0	ACID TEST
459.15			202.5	65.0	ACID TEST
471.34	209.5	202	202	65	TROPARI
504.7			201.5	65	ACID TEST
550.5			201	65	ACID TEST
583			200.5	64	ACID TEST

SECTION COORDS (W/AZI CORRECTED FOR SPERRY DER)

DEPTH	NE	SE	ELEVATION.
0	1174.8	888.5	3997.9
50	1158.8	888.5	3950.5
100	1141.8	887.4	3903.5
150	1124.3	885.5	3856.7
200	1106.2	883.5	3810.1
250	1087.6	881.7	3763.8
300	1068.1	880.0	3717.7
350	1048.6	878.5	3671.7
400	1028.6	877.2	3625.9
450	1008.1	876.2	3580.3
500	986.98	875.4	3535.0
550	965.9	874.9	3489.7
582	952.1	874.8	3460.8

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		5% f.g. block hbde						
		Alt'n: Rock is brick red udue to hematite stain Becomes pale grey below 26.10						
		Remarks: Small inclusion (altered volcanics?) 2597.26-26.10						
27.5	28.7	SHEARED CLHORITIC MAFIC VOLCANICS Dk green chloritic sheared mafic volcs. Calcitic. Nonmagnetic.						
		Struct: Schistosity at 30 degrees T.C.A.						
		Remarks: 28.43-28.7 f.g. pale green siliceous exhalite.						
28.7	30.3	GREY HBDE F.P. Grey mg. hbde F.P. Weakly hematitic chloritic.						
		Min'n: 1% f.g. diss Py						
		Remarks: Lower ct at 35-40 degrees T.C.A.						
30.3	35.2	CALCAREOUS GREYWACKE Med. grey to green-partly amphibolitized gwke. Becomes massive to very weakly fol'd at 40 degrees T.C.A. Lower 0.2m sheared at 30 degrees T.C.A.						
		Remarks: Lower ct sharp at 30 degrees T.C.A.						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
35.2	37.2	EXHALITE Green hard siliceous f.g. exhalite. Struct: Fairly massive. Fine hairline fractures. Weakly fol'd along upper ct at 30 degrees T.C.A. Min'n: 0.5-1% f.g. diss Py Remarks: Lower ct gradational to next unit.						
37.2	46.1	CALCAREOUS GREYWACKE Pale greenish grey f.g. to m.g. calcarious gwke. Struct: Massive to weakly fol'd at 40 degrees T.C.A. Remarks: Rock has speckled appearance due to presence of 10% white f.g. anid. mineral. Non-magnetic. Narrow band of exhalite (as from 35.2-37.2) from 42.57-43.23. Very gradational ct with next unit.						
46.1	72.8	AMPHIBOLITIZED GREYWACKE Massive m.g. amphibolite. Probably amphibolitized gwk. Weakly to mod. magnetic. Struct: Massive 1% hairline fractures filled with calcite and qtz +/- minor eipdote. 51.36-52.48 fine network of calcite-qtz filled fractures. Min'n: Locally tr Py.						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Remarks: Gradually becomes finer grained less amphibolitized grading to speckled gwk-argillite from 71.50-72.76. Sharp ct with next unit at 30 degrees T.C.A.						
72.8	84.8	INTERBEDDED GREYWACKE AND ARGILLITE f.g. pale to med. grey gwke-argillite interbedded with bands of f.g. black pyritic-graphitic argillite. Non-magnetic. Struct: Gwke is massive-argillite is thinly bedded at 30-35 degrees T.C.A. Cut by 2-3% fractures healed with calcite qtz. Brecciated sections with fragments of gwk-argillite in calcite-qtz matrix 77.69-77.81, and 78.44-78.58. Alt'n: Unit is pale greenish calcareous from 79.0-81.53. Could be primary as opposed to alt'n. Min'n: Locally minor Py assoc. with qtz-carb fracture filling. Streaks and blebs Py parallell to bedding in argillite sections est up to 5% Py in argillite sections. est up to 5% Py in argillite sections.	10146	72.8	74.3	1.5	nil	
			10147	74.3	75.8	1.5	nil	
			10148	75.8	77.3	1.5	nil	
			10149	77.3	78.8	1.5	nil	
			10150	78.8	80.3	1.5	nil	
			10151	80.3	81.8	1.5	nil	
			10152	81.8	83.3	1.5	nil	
			10153	83.3	84.8	1.5	nil	
		Remarks: Argillite sections from 72.8-74.4, 78.8-78.95, 81.53-83.80, 84.3-84.8. Grey F.P. dyke from 83.80-84.30 Bands unidentified: white mineral in argillite 81.7-82.2 hardness: =4 woody texture.						
84.8	92.9	MASSIVE GWK Massive med. greenish grey f.g. to m.g. greywacke Struct: Cut by 2-3% fine fractures filled with calc-qtz						

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Remarks: Bands of f.g. dark grey to black pyritic argillite 92.04-92.07, 92.38-9290						
92.90	99.10	BIOTITE HBDE F.P. Dk reddish grey f.g. to m.g. biotite-hornblende F.P. About 5% biotite -10% hornblende 10-30% feldspar porphyroblasts. Alt'n: Weakly hematitic-chloritic giving unit reddish tint-alt'n decreases to base of unit. Min'n: 1% f.g. diss Py.						
99.10	106.40	MASSIVE GWK-MAFIC VOLC. Dk grey-green f.g. massive gwk-possibly mafic volc. Struct: Massive 3-4% f.g. hairline fractures, healed with calcite qtz. Min'n: Minor f.g. Py assoc with calc-qtz in fractures. 0.5-1% Py in Gwk. Remarks: dykes of grey hbde F.P. from 100.95-103.75. Irregular lower ct with F.P.						
106.40	113.0	GREY F.P. Med. grey m.g. F.P. 20-30 % feldspar porphyroblasts. 5-10% biotite. Minor hbde. Weakly magnetic. Struct: Massive, few fine hairline fractures healed with calcite.						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Min'n: 0.5-1% f.g. diss Py. Remarks: Lower ct at 55-60 degrees T.C.A.						
113.0	118.0	MASSIVE GWK OR MAFIC VOLCANICS F.g. massive dark to med. grey green gwk or mafic volc. Locally weakly to mod magnetic. Struct: 3-4% hairline fractures healed with calcite qtz. Min'n: 0.5-1% Py in unit, minor Py assoc with calc-qtz in fractures. Remarks: patches grey F.P. 117.67-117.83 Lower ct sharp at 35 degrees T.C.A.						
118.0	133.2	GREY HORNBLENDE BIOTITE F.P. m.g. grey F.P. 30% feldspar porphyroblasts. About 10% each biotite and hornblende. Weakly magnetic. Struct: Massive to weakly fol'd at 45 degrees T.C.A. Very few fractures. Veins: Fine fractures in epidote at 25 degrees T.C.A. 122.73- 2cm white qtz vein at 35 degrees T.C.A. at 125.34. Alt'n: Very weakly chloritic hematitic.						

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Remarks: Inclusions of gwk-mafic volc. with ragged irregular edges, (appear to be partially absorbed by porphyry) From 118.36-118.42, 118.90-119.10, 119.14-119.17 119.19-119.22, 119.24-119.32. Fairly sharp ct with next unit at 55 degrees T.C.A.						
133.2	140.4	MASSIVE GWK f.g. grey massive gwk. Non-magnetic. Struct: Massive, 3% hairline fractures healed with calcite. Min'n: trace Py. Remarks: Unit ends at band of dark grey to black thinnly bedded argillite 140.15-140.40. Banding in argillite is well defined at 30 degrees T.C.A. Thin bands of Py in argillite. Gradational ct with next unit.						
140.4	142.5	EXHALITE V.f.g. slightly greenish grey carbonate rock-reacts with undilute lt. C.L. -3% fine hairline fractures. Min'n: trace Py. Remarks: Upper contact gradational from argillite above Becomes dark grey sheared at 20-30 degrees T.C.A. Alt'd to calcitic from 141.80-142.50 as approach lower contact. Lower ct sharp at 20 degrees T.C.A.						
142.5	163.00	AMPHIBOLITIZED GREYWACKE dk grey green m.g. to c.g. amph'd greywacke. Slightly calcitic						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Weakly magnetic. 1-2% f.g. diss Py. Struct: Massive m.g. becomes finer grained below 153.36 1% fractures healed with qtz calcite. Most commonly at 40 degrees T.C.A. Remarks: Lamp dyke 146.06-146.05 Irregular contact with next unit.						
163.00	170.52	GREY HORNBLENDE-BIOTITE F.P. Grey f.g. to m.f. hornblende biotite F.P. 5-10% biotite minor hbde. Alt'n: Reddish colour due to hematite-chl alt'n 166.93-170.20 Min'n: 0.5-1% v.f.g. to f.g. diss Py.						
170.52	174.25	GREYWACKE F.g. grey greenish gwk Massive, weakly amphibolitized Struct: Few fine hairline fractures healed with calcite Alt'n: Silicified calcareous section 170.85-171.13 Silicified brecciated hematitic section 172.22-172.54. Remarks: Lower ct sheared at 50 degrees T.C.A.						
179.8	186.4	AMPHIBOLITIZED GREYWACKE Dk grey f.g. to m.g. amphibolite. Amphibolitized greyacke.?						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Struct: Sheared well fol'd 179.8-180.3. This section quite calcitic. Stringers of qtz calcite 119.8-179.9, 180.6-180.8. Breccia zone with fragments of amph'd greywacke in a calcitic matarix 180.93-181.07. Stringers qtz calcite parallell to fol'n 181.90-182.30; at 45 degrees T.C.A. Remarks: Section pale grey sheared F.P. 129.96-130.67 Unit becomes finer grained towards base grading into next unit.						
186.4	189.50	EXHALITE F.g, grey green. Siliceous carbonatic rock-green siliceous sections interbedded with grey calcitic ones. Struct: Finely bedded at 30-35 degrees T.C.A. Min'n: Traces f.g. Py along hairline fractures 189.1-189.50						
189.50	190.4	AMPH'D GWK dk grey to black amph'd gwk Remarks: Breccia zones with frags. of gwk in calc matrix 189.52-189.75-189.83.						
190.4	191.2	LAMP DYKE Sheard green well fol'd lap dyke. Well fol'd at 45 degrees T.C.A.						
191.2	192.7	HEMATITIC LAMP DYKE f.g. to v.f.g. hematitic lamp dyke upper portion foliated at 35-40 degrees T.C.A.						

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
192.7	194.7	INTERBEDDED EXHALITE AND ARGILLITE Interbedded thinly bedded argillite and grey v.f.g. thinly bedded. Siliceous exhalite 193.55-193.70 Siliceous breccia zone. Fragments of exhalite in a qtz-calcitic matrix. Traces Py.						
194.7	205.70	AMPHIBOLITIZED GREYWACKE Dark grey green m.g. amphibolites. Moderately magnetic. Struct: Massive with a few calcite stringers. Veins: 3 cm qtz vein 194.95-194.99 Remarks: Lamp dyke 197.03-197.29 dykes grey F.P. 198.30-198.81; 199.86-200.22; Lamp dyke 202.61-203.13 Lower ct sharp at 25-30 degrees T.C.A.						
205.70	209.8	MATRIX DOMINANT HBDE F.P. DYKE (LAMP) Reddish grey f.g. to m.g. lamprophyre Speckled with 5-10% feldspar porphyroblasts. 207.5-209.0 10-15% hornblende. Calcitic, weakly magnetic. 1-2% f.g. diss pyrite. Struct: Weakly fol'd at 40-45 degrees T.C.A.						
209.8	211.6	AMPHIBOLITE Grey green m.g. amphibolite. 40% amphibole-60 % green alt'd feldspar. Strongly magnetic. Struct: Weakly fol'd at 40 degrees T.C.A.						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
211.6	215.8	MATARIX DOMINANT HORNBLENDE F.P. DYKE (LAMP) As from 205.7-209.8 but speckled with 5% feldspars throughout lower ct at 70 degrees T.C.A.						
215.8	218.3	AMPHIBOLITE As from 209.8-211.6 fol'd from 60-45 degrees T.C.A.						
218.3	222.8	MATRIX DOMINANT HORNBLENDE F.P. DYKE (LAMP) As from 211.6-215.8 but grain size of matraix increasing 10-15% feldspars.						
222.8	223.4	CHERT V.f.g. dark grey to pale brown chert Struct: Brecciated to banded at 20-30 degrees T.C.A.						
223.4	231.2	FELSIC LAMP DYKE Foliated felsic lamp dyke. 10-15% streaked out hornblende- calcitic-non-magnetic Struct: Mod. well fol'd at 45 degrees T.C.A. Min'n: 5% Py near upper ct 223.4-223.6. Traces Py in rest of unit.						
231.2	232.2	CHERT As from 222.8-223.4. But well banded at 40 degrees T.C.A. Appears to have formed at both contactsof felsic lamp Gradational ct with next unit.						
232.2	264.0	DIABASE DYKE Dk grey massive m.g. diabase dyke Mod.-strongly magnetic.						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Struct: Massive notable abscence of hairline fractures healed with calcite. Min'n: Traces Py.po Remarks: epidote rich bands 238.60-238.70. Few mm scale bds to 238.9. Narrow bands, 242.81, 243.02, 244.27-247.37. 247.63 Patch of grey F.P. on one side of core 261.63-261.75 Lower ct runs subparalell to core from 262.70-263.7. Patch grey F.P. from 262.70-263.40 on one side of core-Contact marked by patachas of pale grey calcite.						
264.0	268.0	GREY F.P.: 10-15% feldspars in a f.g. grey matrix. 3-5% f.g. hornblende. Nonmagnetic, weakly hematitic 266.38-267.38. Alt'n: Alt'd weakly hematitic 266.38-267.38 Only faint relict feldpars in this section. Also this section chl. Min'n: 1-2% f.g. diss Py. Remarks: Inclusion of mafic volcs. 267.67-267.74	10154 10155 10156	264.0 265.0 266.5	265.0 266.0 268.0	265.0 266.5 268.0	1.5 1.5 1.5	nil nil tr
268.0	274.7	AMPH'D MAFIC VOLCANICS M.g. dark grey to black amphibolite-strongly Struct: massive 1-2% hairline fractures healed with calcite +/- epidote-qtz.	10157	268.0	269.3	1.3	tr	

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Alt'n: Extensive epidote alt'n throughout unit. Min'n: 3-4% diss Py from 268.0-269.28 Remarks: Grey F.P. dyke from 269.27-269.63.						
274.4	280.2	AMPG'D GWK-MAFIC VOLCANICS. Similar to above unit but finer grained. Noticable lack of epidote -magnetic Struct: Massive 2-3% fractures filled with calcitic qtz. Min'n: tr Py. Also minor Py assoc' d with calcite qtz in fractures. Remarks: Lower ct sharp at 25-30 degrees T.C.A.						
280.2	283.7	LAMPROPHYRE DYKE F.g. grey lamp dyke, weakly calcitic Few m.g. to f.g. hornblende. tr Py Remarks: Gradational ct into next unit from 283.1-283.7						
283.7	288.0	GREY F.P. M.g. grey F.P. non-magnetic. Very weakly hematitic. tr Py						
288.0 - 295.1		AMPH'D GWK: dk grey, ~1% black, fg amph'd gwk. Struct: massive; Alteration: calcitic with +rstyss Co. Sub parallel & core 288.1 - 293.1 Min: 1-2% f.g' Py Remarks: Very gradational ct with next unit						

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
295.1	322.5	AMPHIBOLITE Med. grained becoming c.g. amphibolite Grain size increases noticably with depth in unit. Metamorphosed mafic volcs or intrusion. Quite strongly magnetic. Alt'n: Epidote quite prominent below 303.0 Healed with calcite-epidote qtz. Min'n: F.g. diss Py assoc with calc-qtz-epidote in fractions. 1-2% f.g. diss Py.po in unit. Remarks: Extensive qtz calcite veining along lower ct. 322.3-322.5						
322.5	340.5	GREY BIOTITE F.P. Grey m.g. biotite F.P. -25-30 % FELDSPARS 10% f.g. diss bio. Alt'n: Very fresh, slightly hematiteic 334.20-334.8 Struct: Massive, few hairline fractures healed with calcite-qtz epidote. Remarks: Inclusion of amphibolite 324.60-325.60						
340.50	355.80	AMPHIBOLITIZED GWK (AMPHIBOLITE) Med. green, m.g. to c.g., magnetic, comprised mainly of amphibole about 75%. Struct: Massive.						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Alt'n and Veins: Moderate epidote alt'n throughout with numerous patches and veins of calcite and epidote.						
355.80	367.25	GREY BIO F.P. As above. 322.5-340.5. Remarks: Alt'n turns green over last 3m of sections, epidote??						
367.25	403.70	AMPHIBOLITIZED GWK As above. 340.50-355.80						
403.70	416.82	PILLOWED MAFIC VOLC? FLOW BX.? Green, f.g., magnetic. Struct: Possible pillow salvages and variolites. Veins: Numerous thin lt. grey calcite veins chloritic infillings. Min'n: Tr m.g. to c.g. Py						
416.82	434.46	AMPHIBOLITIZED GWK As above.						
434.46	436.20	BEDDED ARGILLITE AND SILTSTONE Grey to black, fine grained, non-magnetic. Struct: Good bedding at 45 degrees T.C.A.						
436.20	447.85	AMPHIBOLITIZED GWK As above.						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
447.85	450.10	MAFIC LAMP DYKE Dk grey to black, f.g., non-magnetic. Struct: Minor schistosity at 45 degrees T.C.A.						
450.10	467.60	MASSIVE GWK-MAFIC VOLC. Grey-green. f.g., magnetic. Struct: Minor shearing generally massive. Veins: Numerous randomly oriented calcite veins Epidote alt'n throughout.						
467.60	475.15	SHEARED SILICIFIED U.M. T.C.C.S. Pale green, f.g., non-magnetic. Struct: Highly sheared at 45 degrees T.C.A. Veins: Numerous qtz-cb patches and veins. Min'n: tr f.g. Py.	10158	470	471.5	1.5	tr	0.1
			10159	471.5	473	1.5	tr	nil
475.15	477.64	SERICITIZED F.P.	10160	473	474.5	1.5	tr	nil
		Yellow-red, m.g., non-magnetic. Struct: Sheared Alt'n and Veins: Sericitized and cb'd with thin lt grey qtz-cb veins.	10161	474.5	476	1.5	tr	0.1
			10162	476.00	477.50	1.5	tr	0.1

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Min'n: tr-0.5.						
477.64	481.40	HBLD F.SP PORPH. Grey red, m.g., non-magnetic. Struct: Massive. Veins: Few thin lt grey cb veins. Min'n: tr f.g. Py	10163 10164	477.50 479.00	479.00 480.5	1.5 1.5	tr tr	tr nil
481.40	488.90	RED ALT'D F.P. Red, m.g., non-magnetic. Struct: Sheared. Alt'n and Veins: Good red cb alt'n throughout. Slightly chl in places. Numerous thin qtz-cb veins. Mod. sericite alt'n. Min'n: tr-0.5% f.g. diss Py.	10165 10166 10167 10168 10169 10170	480.5 482 483.5 485 486.5 488	482 483.5 485 486.5 488 488.9	1.5 1.5 1.5 1.5 1.5 0.9	tr tr tr tr tr tr	0.1 tr 0.1 tr tr tr
488.90	490.40	CARBONATIZED MAFIC VOLC.-U.M. Dull green, f.g., maganetic, cherty in places. Struct: Remnant spx possibly present.						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Alt'n and Veins: Very cb rich and chloritic. Numerous thin qtz and qtz-calc veins.						
490.40	493.82	LAMP DYKE As above. 447.85-450.10.						
493.82	495.30	RED ALT'D F.P. As above, becoming relatively unalt'd over the last 1.0 m of the section.						
			10206	493.80	495.30	1.5	tr	tr
495.30	498.30	CARBONATIZED U.M.(SHEARED U.M.) Pale green, f.g., magnetic. Struct: Well banded at 80 degrees T.C.A. with remnant polyhedral jointing. Veins: Numerous thin 2mm qtz-cb veins.						
498.30	503.22	SERICITIZED F.P. As above but with distinct qz-cb bands throughout. Quite siliceous throughout with small qtz stringers.	10171	498.00	499.5	1.5	tr	0.2
			10172	499.50	501	1.5	tr	tr
			10173	501	502.5	1.5	tr	0.2
			10174	502.5	504	1.5	tr	0.1
503.22	507.50	HBLD F.SP PORPH As above. Slightly sericitized						
507.50	553.15	SERICITIZED RED ALT'D F.P. Pink red, m.g., slightly magnetic. Struct: Highly sheared. Alt'n and Veins: Good red alt'n with mod. sericite alt'n. Sections with numerous thin lt. grey cb veins and minor q.v.	10175	507.5	509	1.5	tr-0.5	tr
			10176	509	510.5	1.5	0.5-1	tr
			10177	510.5	512	1.5	tr-1	tr
			10178	512	513.5	1.5	tr-0.5	nil
			10179	513.5	515	1.5	tr-0.5	<0.1
			10180	515	516.5	1.5	tr-0.5	0.1
			10181	516.5	518	1.5	tr-0.5	0.1
			10182	518	519.5	1.5	tr-0.5	<0.1
			10183	519.5	521	1.5	tr-0.5	0.1
			10184	521	522.5	1.5	tr-0.5	0.1

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Q.v. becomes greater: about 546.50-551.50.						
		Min'n:	10185	522.5	524	1.5	tr-0.5	0.2
		0.5-1% f.g. diss Py.	10186	524	525.5	1.5	tr-0.5	0.5
			10187	525.5	527	1.5	tr-0.5	0.3
553.15	582.53	GREY BIO. F.P.	10188	527	528.5	1.5	tr-0.5	1.4
	E.O.H.	As above 322.5-340.5.	10189	528.50	530.0	1.5	tr	0.2
		Becoming very fresh and chloritic in places	10190	530	531.5	1.5	tr	0.3
			10191	531.5	533	1.5	tr	0.7
		DRILLING NOTES.	10192	533	534.5	1.5	tr	0.5
		BQ CORE DRILLED	10193	534.5	536	1.5	tr	0.2
		CASING LEFT IN HOLE	10194	536	537.5	1.5	tr	0.2
		MAY BE RE-ENTERED.	10195	537.5	539	1.5	tr	0.1
			10196	539	540.5	1.5	tr	0.2
		CHRIS ZORZI	10197	540.5	542	1.5	tr	0.4
		21/09/87	10198	542	543.5	1.5	tr	0.2
			10199	543.5	545	1.5	tr	0.1
			10200	545	546.5	1.5	tr	0.1
			10201	546.5	548	1.5	tr	0.3
			10202	548	549.5	1.5	tr	0.5
			10203	549.5	551	1.5	tr	0.5
			10204	551	552.5	1.5	tr	0.4
			10205	552.5	553.15	0.65	tr	0.5

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No.3382#57 SHEET 1 OF 14

Property	TP. or Area	Azimuth	Date Started Corrected Dip Tests	Location sketch
South Rundle	Newton	200	21/09/87	
Project	Lot. & Conc.:	Dip	Date Completed	
3382		-57	23/09/87	
Claim No.	Co-ordinates:	Length	Drilled By:	
	2041.122N/3087.846E	199.94	Morissetteos.	
Grid No.	6+40SE 87.5m NE of	Collar	Logged By:	
	Ref. Line.	Elevation	A. Soever	
		3999.529		

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. %	ASSAYS

OBJECTIVES:-To test A South Zone on this section.

Depth Feet	Metres	trbrg	trbrg	estbrg	dip	type test
26'	7.92			200.2	-59	Acid
156'	47.55			201.5	-55	Acid
161'	49.07	209	201.5	201.5	-54	Tropari covered in casing.
306'	93.26			202.9		Acid
321'	97.84	202.5	195*	203	-52	Tropari*
456'	138.98			204.3	-52.5	Acid
600'	182.87			205.6	-52	Acid
651'	198.42	221	213.5*	206	-52	Tropari

0 3.9 OVERBURDEN
Casing to 4.44

3.9 4.4 BOULDERS POSSIBLY BEDROCK.
Recovered in casing. diorite, grey F.P. and amphibolitized gwke.

4.4 11.4 AMPHIBOLITIZED GREYWACKE
Dk grey f.g. to m.g. amphibolite. 2-3% grey qtz grains. Calcitic. Moderately magnetic.

Struct:
Fol'd at 40-45 degrees T.C.A., 2-3% fractures healed with calcite-qtz.

Min'n:
Faint trace diss Py.

Remarks:
Unit is very fine grained red to pale grey. finely laminated 10.5-11.4. Argillite? Two bands v.f.g. grey siliceous exhalite 11.15-11.24,

+No good mag for sample 321'
651'

* Note: est brg. based on avg deviation from tropari at 161' (49.07m)

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		11.36-11.43 with v. f.g. Py.						T 1 OF
11.4	13.4	GREY HORNBLENDE F.P. (HORNBLENDE LAMP) Grey f.g. matrix dom. F.P. 1-2% feldspar phenocrysts. 10% hornblende. Weakly magnetic. Struct: Weakly fol'd at 40-45 degrees T.C.A. Min'n: 1% f.g. to v.f.g. diss Py. Remarks: Lower ct at 20 degrees T.C.A.						
13.4	16.00	AMPHIBOLITIZED GWK as from 4.4-11.4, but slightly coarser grained. Remarks: Lower ct at 40 degrees T.C.A.						
16.00	18.00	GREY HORNBLENDE F.P. (HORNBLENDE LAMP) As from 11.4-13.4, verging on hornblende lamp.	10207 10208 10209	29.7 30.7 31.7	30.7 31.7 32.7	1.0 1.0 1.0		0.1 0 0.2 tr
18.0	30.7	AMPH'D GWK As from 4.4-11.4 Minor epidote assoc. with qtz-calc veins 23.8-24.1. On fine fracture, subparalell to core 29.20-30.63 healed with calcite. 2% f.g. diss Py as approach ct with q.v. F.P., 30.5-30.7.						
30.7	32.7	ALT'D GREY Q.V. F.P. Pink to grey m.g. alt'd F.P. Pink to grey m.g. alt'd F.P. Cut by numerous qtz-calcite veins from mm						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		to cm scale at 10-30 degrees T.C.A. Unit is 30 % veins> Alt'n: Weakly hematitic-chloritic. Min'n: 2-3% f.g. to m.g. diss Py from 30.7-30.9 1% f.g. to m.g. diss Py in rest of unit. Blebs and streaks of pyrite up to 5mm across in porphyry 31.3-31.6.						
32.7	35.1	ARGILLITE Dk grey f.g. argillite. Struct: Well fol'd schistose at 30-40 degrees T.C.A. Veins: 1-2% euhedral pyrite. Remarks: Generally non magnetic brecciated section from 33.1-33.3 to strongly magnetic.	10210 10211	32.7 33.7	33.7 35.1	1.0 1.4		0.2 0.1
35.1	41.4	ARGILLITE-GREYWACKE Grey f.g. argillite to greywacke. Magnetic weakly calcitic. Locally weakly amphibolitezed. Struct: Massive to weakly fol'd at 30-40 degrees T.C.A. 2-3% fractures healed with calcite. Min'n: 1-2% f.g. to m.g. euhedral Py assoc with calcite fracture filling. Remarks: Becomes paler grey, finer grained towards base						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	G/T Au	S
		Gradational contact with next unit.							
41.4	43.2	ARGILLITE-EXHALITE Dk grey to black, thinly bedded argillite interlayered with beds of grey f.g. siliceous rock. Exhalite? from 41.4-41.8, 41.8-42.0, 42.3-43.2. Min'n: Thin bands, blebs and patches and f.g. disseminations of Py. Est- 5% Py. Struct: Finely bedded at 30-35 degrees T.C.A. Remarks: Calcite qtz veining 43.1-43.2 adjacent to lower ct.	10212 10213	41.4 42.2	42.2 43.2	0.8 1.0	5 5	nil tr	
43.2	55.0	SHEARED U.M. TALC-CHLORITE-CARBONATE SCHIST Grey green sheared ultramafic, talc chlorite-carbonate schist. Locally relict spinifex texture in less schistose sections. Struct: Moderately to highly schistose at 35-40 degrees T.C.A. 4% hairline fractures healed with calcite subparalell to schistosity. Min'n: 1-2% pyrite assoc with calcite veinlets 45.3-46.5 m. 3-4% f.g. to v.f.g. diss Py in sheared lamp dyke 46.5-47.65. Tr Py is more massive U.M. 47.65-50.7. 5% Py in fine stringers assoc with T.C.C.S. and grey siliceous rock 50.7-51.6. 1% f.g. diss Py Grey F.P. 51.6-53.4. Remarks: F.G. sheared lamp-highly calcite-non-magnetic	10214 10215 10216 10217 10218 10219 10220 10221 10222 10223	43.2 44.2 45.3 46.5 47.7 49.2 50.7 51.6 52.6 53.4	44.2 45.3 46.5 47.7 49.2 50.7 51.6 52.6 53.4 55.0	1.0 1.1 1.2 1.2 1.5 1.5 0.9 1.0 0.8 1.6	tr tr 1-2 3-4 tr tr 5% 1% 1% tr	tr nil nil nil nil nil nil nil tr	

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		46.5-47.65. Grey f.g. hbde F.P. 51.61-53.4.						
55.0	57.45	SPECKLED ARGILLITE Dk grey schistose f.g. dark grey aragillite. Speckled with 5% white calcite. Struct: Sheared schistose at 35-40 degrees T.C.A. Veins: Network of white dolomite veins 56.0-56.40. Min'n: 1% f.g. diss Py. Stringer of m.g. euhedral Py at 55.65.						
57.45	59.50	ARGILLITE BRECCIA Clasts of black f.g. argillite in a paler grey calcitic matrix. Min'n: 1-2% f.g. to m.g. Py in calcitic matrix.						
59.50	67.10	MASSIVE GWK Massive f.g. med. grey greywacke. Weakly magnetic. Struct: 2-3% fractures healed with calcite qtz. Min'n: f.g. Py assoc in qtz-calcite in fractures est- 1-2% Py. Remarks: Lower ct sharp at 45 degrees T.C.A.						
67.10	71.50	ARGILLITE Black to grey f.g. finely bedded argillite						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Struct:						
		Finely bedded at 45 degrees T.C.A.						
		Locally bedding highly contorted.	10224	67.1	68.1	1.0	5	
		Few calcite qtz veins.	10225	68.1	69.6	1.5	5	nil
			10226	69.6	71.1	1.5	5	nil
		Min'n:	10227	71.1	71.5	0.4	5	
		F.g. diss Py in grey bands cm scale						
		Blebs of Py scattered throughout est 5%						
		Py.						
		Remarks:						
		Sharp lower ct at 45 degrees T.C.A.						
71.50	77.80	SPINIFEX U.M.						
		Pale green grey slightly sheared u.m. flow.						
		Spinifex texture quite common throughout.						
		Alt'n:						
		Slightly sheared sections spinifex to massive						
		shearing at 45 degrees T.C.A.						
77.80	79.20	GREYWACKE						
		similar to 59.5-67.10						
		Calcitic carbonated sectons.						
		3% qtz-calcite veins with Py.						
79.20	85.10	SHEARED U.M.-TALC-CHLORITE-CARBONATE SCHIST.						
		Sheared grey-green U.M. verging on T.C.C.S.						
		Locally spinifex.						
			10228	79.20	79.9	0.7	2	0.3
		Struct:	10229	79.70	80.8	1.1	<1	tr
		Sheareed at 45 degrees T.C.A. Few	10230	80.80	81.7	0.9	3	nil
		submissive or spinifex sections.	10231	81.7	83.2	1.5	tr	tr
			10232	83.2	84.2	1.0	tr	nil
		Min'n:	10233	84.2	85.1	0.9	tr	nil
		Diss Py in U.M. adjacent to contacts with						
		argillite bands 79.30-79.70, 79.8-79.9						
		80.7-80.8.						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Remarks: Bands black pyritic argillite 79.7-79.8, 80.8-81.7.						
85.10	88.80	GREY (MATRIX DOM'T) HORNBLENDE F.P.	10234	85.10	86.10	1.0	1	nil
		Grey f.g. (matrix dom) F.P.	10235	86.10	87.60	1.5	1	nil
		3-5% feldspar porphyroblasts.	10236	87.60	88.8	1.2	1	nil
		<5% hornblende. Trace to 1% Py.						
		Non-magnetic.						
		Alt'n:						
		86.8-87.5. Weakly hematitic-chloritic.						
88.8	93.6	SHEARED U.M.-TALC-CHLORITIC-CARBONATE SCHIST						
		Grey green sheared ultramafics.						
		Struct:						
		Massive to sheared to T.C.C.S. Locally relict spinifex. Shearing most intense towards base.						
		Remarks:	10237	88.8	90.3	1.5	tr	0.3
		Unit ends at breccia zone 93.2-93.6.	10238	90.3	91.8	1.5	tr	<0.2
			10239	91.8	92.8	1.0	tr	<0.2
93.6	112.9	CARBONATED MAFIC VOLCANICS.	10240	92.8	93.6	0.8	tr	<0.2
		Pale green f.g. mafic volcanics.	10241	93.6	96.6	1.5	2-3	<0.2
		very calcitic. Non-magnetic.	10242	95.1	98.1	1.5	tr	<0.2
			10243	96.6	99.0	1.5	tr	<0.2
		Struct:	10244	98.1	100.2	0.9	tr	<0.2
		Generally fairliy massive, weakly fol'd	10245	99.0	101.2	1.2	tr	<0.2
		at 45-50 degrees T.C.A. Fractured with	10246	100.2	101.1	1.0	tr	<0.2
		mm scale fractures healed with qtz.	10247	101.2	102.2	1.0	1	<0.2
		Fine graphitic fracture filling						
		102.05-104.4, 105.39-105.58,						
		106.10-107.20 Sections of volc-argillite breccia 100.75-100.93						
		102.6-103.25 1% freactures healed with qtz calc 94.9-96.2						
		3-4% from 96.2-99.0, tr from 100.2-107.2. Major veins						
		107.2-107.27, 107.69-107.87.						
		Unit becomes more sheared towards base grading into next unit.						

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Est. % Length Py	ASSAYS g/t Au
		Veins: Qtz-calcite flooding 94.9-95.1, Qtz calc veins 107.2-107.27, 107.69-107.87. Min'n: Fine grained diss Py in well fol'd section 93.6-94.85 2-3% Py assoc with fine qtz filled fractures in same section. 1% Py filling fractures 100.2-102.0. Alt'n: Pervasively calcitic-pale greyish green qtz. Carb alt'n non-calcitic 97.10-97.9, 98.1-98.2 in wispy bands at 40 degrees T.C.A. Remarks: Section sheared carbonated alt'd F.P. 99.0-100.2 Band of argillite 108.77-109.87, highly graphitic.					
112.9	118.9	SHEARED CARBONITIZED MAFIC VOLCS Sheared equivalent of unit above. Gradational ct Quite calcitic. Non-magnetic. Variable unit 112.9-113.6. Easily recognized as sheared equivalent of unit above. Chloritic schist, slightly talcose supertinous tr Py. 113.6-115.6 very highly sheared , f.g. silicified-mylonitic 114.33-114.40. Q.v. with 3-4% Py. CA=55-60 degrees T.C.A. Silicified section in fine hairline fractures 115.24-115.6. Sharp ct with next sub unit at 60 degrees T.C.A. 115.66-117.76, green serpentinous chl schist, -30% white wisps and augen of qtz-dolomite-trace f.g. diss Py Contorted fol'n at about 45 degrees T.C.A 117.76-118.2- Qtz vein unmi eralized. 118.2-118.6- Grey calcitic highly alt'd porphyry . 1% v.f.g. diss Py. 118.6-118.9- Alt'd mafic volcanics- Fractured with pale grey alt'n 2% f.g. to v.f.g. diss Py. Gradational ct with next unit.					

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est% Py	ASSAYS g/t Au	kkk
			10248	112.9	113.6	0.7	tr	<0.2	
118.9	134.10	MAFIC VOLCANICS	10249	113.6	114.6	1.0	tr	<0.27	
		Grey f.g. to m.g. mafic to int volcs.	10250	114.6	115.6	1.0	tr	<0.2	
		Non-magntic.	10251	115.6	116.6	1.0	tr	<0.2	
			10252	116.6	117.8	1.2	tr	<0.2	
		Struct:	10253	117.8	118.2	0.4	nil	<0.2	
		Fairly massive locally possibly pillowed	10254	118.2	118.6	0.4	1%	<0.2	
		3% fine hairline fractures healed with	10255	118.6	118.9	0.3	2%	<0.2	
		calcite qtz. Argillite breccia with argillite frags							
		in calcitic qtz matrix 131.43-131.58.							
		Alt'n:							
		Locally mottled pale green grey by calcite-epidote							
		alt'n. Extensive epidote alt'n along fractures							
		29.76-130.80.							
			10256	128.4	128.8	0.4	0.5-1	<0.2	
		Min'n:	10257	128.8	129.7	0.9	0.5-1	<0.2	
		0.5-1% Py associated mainly with calcite-qtz	10258	129.7	130.4	0.7	0.5-1	<0.2	
		in fractures or epidote alt'n. 3% f.g. Py associated							
		with calcite-qtz veins 127.85-129.50.							
		Remarks:							
		Section calcareous sed. unit 127.45-127.80, narrow							
		band of pyritic argillite 128.85-129.7. f.g. flow							
		or interflow argillite sedimet. Argillite from							
		130.80-131.58.							
134.10	135.9	CALCAREOUS ARGILLITE							
		Pale green to dk grey f.g. interbanded calcareous							
		sedimet. and argillite.							
		Struct:							
		fine bands at 35-60 degrees T.C.A. Sheared.							
		Min'n:							
		8-10% pyrite as f.g. disseminations and wispy							
		streaks along fol'n at about 30 degrees T.C.A.							

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est% Py	ASSAYS g/t Au
		Remarks: Ct with next unit sharp at 20 degrees T.C.A.	10302	134.10	135.4	1.3		<0.20
135.9	142.9	MAFIC VOLCANICS Pale green grey f.g. to m.g. mafic volcs Non-magnetic.	10303	141.80	142.90	1.1	3	<0.20
		Alt'n: Quite calcitic locally with patches pale green carbonitized mafic volcs. Shot through with 6-7% fine hairline fractures healed with calcite-qtz +/- epidote.						
		Min'n: tr f.g. diss Py. 10-20% Py assoc with calc vein 139.26-139.30. 3% Py in volcs 141.77-142.9.						
		Struct: Massive with numerous hairline fractures.						
		Remarks: f.g. matarix dom F.P. dyke with 1% f.g. diss Py 140.10-141.77.						
			10304	142.90	143.55	0.65	15%	<.20
142.9	146.2	ARGILLITE-GWKE-EXHALITE	10305	143.55	144.60	1.05	1%	<.20
		Interflow sedimets comprised of:	10306	144.60	145.60	1.00	1%	.45
		1) Black to dk green grey f.g. argillite from 142.90-143.55. fine contorted banding at 35 degrees T.C.A. Irregular cm scale patches and wisps of Py. Est 10-15% Py.	10307	145.60	146.20	0.60	7%	<.20
		2) Grey m.g. greywacke 143.55-145.60, Massive -1% f.g. diss Py. Calcite qtz veins at 145.20-145.27, 145.51-1455.63.						
		3) Grey f.g. siliceous exhalite 145.60- faint weak banding at 30 degrees T.C.A. 6-8% f.g. diss Py as f.g. diss and few cm scale patches.						
146.2	159.20	MAFIC TO U.M. FLOWS Grey green f.g. mafic volcs.						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est% Py	ASSAYS g/t Au
		Non-magnetic to locally very weakly magnetic.						
		Struct: Massive flows. 3-4% fine hairline fracture healed with calcite +/- qtz +/- epidote -?polyhedral jointing.	10308	146.20	147.7	1.5	tr	<0.2
		Veins: Wispy calcite vein with fagmets and vein qtz 152.18-152.50. Calcite-qtz veins wit hem subparalell. T.C.A. 156.60-157.00.	10309	147.70	148.2	0.5	6	<0.2
			10310	148.2	149.7	1.5	1	<0.2
			10311	149.7	150.9	1.2	3-5	<0.2
			10312	150.9	151.5	0.6	1	<0.2
			10313	151.5	152.2	0.7	3-4	<0.2
		Min'n: 8% Py assoc with band of siliceous exhalite 147.70-148.00. 3-5% fg diss Py in mafic volcs 148.0-148.18, 149.7-150.90. 1% fg diss Py in grey F.P. 148.18-149.70, 150.9-151.45. 3-4% Py in mafics assoc with calc veins 151.50-152.2. 1-2% Py 152.2-155.5. Tr Py 155.	10314	152.2	153.7	1.5	1-2	<0.2
			10315	153.7	154.7	1.0	1-2	<0.2
			10316	154.7	155.5	0.8	1-2	<0.2
			10317	155.5	157.0	1.5	tr-1	<0.2
			10318	157.0	158.5	1.5	tr-1	<0.2
			10319	158.5	159.2	0.7	tr	<0.2
		Remarks: Band grey sileous exhalite 147.7-148.0- grey F.P. 148.20-149.70, 150.9-151.45. F.g. black argillite in mm scale fractures 155.75, 156.00-156.40, 157.0-157.25, 158.0-158.6.	Sections					
159.20	164.20	PALE GREY ALT'D F.P.	10320	159.2	160.7	1.5	tr	<0.2
		Grey f.g. to m.g. alt'd F.P.	10321	160.7	162.2	1.5	tr	<0.2
		Non-magnetic.	10322	162.2	163.2	1.0	tr	<0.2
			10323	163.2	164.2	1.0	tr	<0.2
		Struct: Massive 159.20-162.0- 3% fine fractures healed with calcite-qtz.						
		Alt'n: Porphyry is bleached pale beige adjacent to fine healed fractures 159.2-162.0						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		162.30-162.70.						
		Veins: Several narrow <1cm wide q.v. in alt'd section 159.20-162.70.						
		Min'n: est 0.5% f.g. to v.f.g. diss Py.						
		Remarks: Porphyry is fresher towares base lower ct. Sharp at 30 degrees T.C.A.						
164.2	167.0	POLYHEDRAL U.M. Dk grey green polyhedrally jointed U.M. flow. Quite calcitic locally magnetic.						
		Struct: Polyhedral jointing with chlorite.	10324 10325	164.2 165.7	1.5 1.3		3 3	<0.2 <0.2
		Alt'n: Calcitic.						
		Min'n: 3% f.g. diss Py of the assoc with calc in fractures. 5% diss y with argillite-exhalite band						
		Remarks: Section grey banded argillite-exhalite 164.77-165.02. Narrow lamp dyke at lower ct 166.81-167.97. Lower ct sharp ata 25-30 degrees T.C.A.						
167.0	170.1	ALT'D MAFIC TO U.M. VOLCANICS AND ALT'D F.P. Interlayered highly alt'd F. P. and highly alt'd pale green to beige mafic or u.m. volcanics.						
		Alt'n: Volcanics are higly alt'd pale beige f.g.						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Struct: Cut by mm to 0.5cm wide fractures. Healed by dolomite + qtz.						
		Min'n: <1% f.g. diss Py throughout.	10326	167.0	168.5	1.5	<1	<.2
			10327	168.5	170.1	1.6	<1	<.2
		Remarks: Section red alt'd F.P. 167.0-167.8. ? Highly alt'd bands of porphyry or very highly alt'd volcs, with 10% white dol +qtz veins 168.1-168.37, 169.45-169.95. Lower ct of unit marked by mylomite and fine cataclastic breccia at 35 degrees T.C.A. 169.95-170.05.						
170.1	187.4	RED ALT'D F.P. Pink to red alt'd F.P. Non-magnetic.						
		Alt'n: Completely alt'd only faint relict feldspar phenocrysts. No biotite- Slightly hematitic-chloritic. Locally weakly sericitic. Section intense pale beige qtz-carb alt'n 171.46-171.52. Alt'n becomes less intense to base of unit.	10328	170.1	171.6	1.5	tr-1	0.54
			10329	171.6	173.1	1.5	tr-1	<0.2
			10330	173.1	174.6	1.5	tr-1	<0.2
			10331	174.6	176.1	1.5	tr-1	<0.2
			10332	176.1	177.6	1.5	tr-1	<0.2
			10333	177.6	179.1	1.5	tr-1	<0.2
			10334	179.1	180.6	1.5	tr-1	<0.2
			10335	180.6	182.1	1.5	tr-1	<0.2
		Struct: Massive to weakly fol'd at 50-55 degrees T.C.A. 3-4% hairline to mm scale fractures healed with dol-qtz	10336	182.1	183.6	1.5	tr-1	<0.2
			10337	183.6	185.1	1.5	tr-1	<0.2
			10338	185.1	186.6	1.5	tr-1	1.13
			10339	186.6	187.4	0.8	tr-1	2.40
		Veins: Early qtz vein, qtz vein, qtz flooding in porphyry. 175.16-175.24. Qtz vein in fragments F.P. 185.50-185.61.						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Min'n: tr 1% f.g. to v.f.g. diss Py. Remarks: Int. lamp dyke 180.2-182.1: Gradational contact with next unit.						
187.4	199.82	GREY BIOTITE F.P. Fresh grey m.g. bio F.P . 15-20% biotite magnetic. Alt'n: Weakly hematitic-chl. 187.1-189.7, unit is weakly alt'd as ct with last unit gradational. Struct: Massive 1% fine hairline fractures healed with calc. Min'n: Trace f.g. Py. Remarks: Few cm scale inclusions of mafiac volcs.						
	199.94	END OF HOLE CASING PULLED, HOLE CEMENTED						

NOVAMIN RESOURCES INC. DRILL LOG DRILL HOLE No.3382#85 SHEET 1 OF 16

Property South Rundle	TP. or Area Newton	Azimuth 200 layout	Date Started Sept/14/87	Corrected Dip Tests Location sketch
Project 3382	Lot. & Conc.:	Dip -57	Date Completed Sept/26/87	
Claim No.	Co-ordinates: 2061.66N/3072.38E	Length 221.27	Drilled By: Morissette Can Inc.	
Grid No.		Collar Elev. 3998.56	Logged By: Alan Soever	

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. %	ASSAYS
		OBJECTIVES:-To test A south zone on section 6+40SE.						
0	1.0	OVERBURDEN Casing to 4.00						
1.0	4.5	CHLORITIC MAFIC VOLCS Pale grey to med. grey green f.g. sheared mafic volcanics. Locally magnetic. Struct: Well fol'd, slightly schistose at 45 degrees T.C.A. 3% wispy calcite stringers predominately subpatalell to fol'n. Min'n: Traces f.g. diss Py. Remarks: Ct with next unit sharp at 70 degrees T.C.A.						
4.5	5.5	LAMP DYKE F.g. green grey lamp dyke. Slightly calcitic. 0.5-1% f.g. diss Py. Non-magnetic.						

DIRECTIONAL TESTS

Depth Feet	M	MBrg	TrBrg	Est Brg	Dip	Type test
16'	4.88			201	-57	Acid
81'	24.69	210.5	203	203	-55	Tropari
150'	45.72			203	-55	Acid
261'	79.55	210.5	203	203	-53	Tropari
306'	93.26			203	-53	Acid
441'	134.41	210.5	203	203	-53	Tropari
450'	137.15			203	-53	Acid
600'	182.87			203	-52.5	Acid
726'	221.27			203	-53	Acid

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Remarks: Lower ct at about 30 degrees T.C.A.						
5.5	10.20	AMPHIBOLITIZED GWK Dk grey f.g. to m.g. amph'd gwk. Mod. magnetic. Struct: Massive 1% hairline fractures healed with calcite. Minor qtz+/- epidote. Locally patches of grey calcite along these fractures. Min'n: 3-5% pyrite assoc with patches calcite. Remarks: Gradational ct with next unit.						
10.20	21.9	SILTSTONE-ARGILLITE F.g. pale to med. grey siltstone. Bands of finely banded black pyritic argillite. 12.2-13.0, 13.15-13.25, 13.5-14.1 21.3-21.9. Locally narrow bands finely banded pale green exhalite along cts of argillite bands. Struct: Siltstone massive, few mm scale fractures healed with calcite, argillite, finely banded, schistose at 40-45 degrees T.C.A. Min'n: Up to 1% f.g. diss PY in siltstone. 2-4% diss Py in a argillite. Remarks: Section is marked by blocky broken core. Locally quite calcitic. Lower ct at 45 degrees T.C.A.						
21.9	24.9	LAMPROPHYRE DYKE Grey green m.g. well fol'd lamp dyke.						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Struct: well fol'd at 45 degrees T.C.A. Min'n: 1-2% f.g. diss Py. Remarks: Lower ct in broken core.						
24.9	30.8	GREYWACKE-ARGILLITE Dk-grey f.g. to m.g. greywacke. Weakly amphibolitized. Non-magnetic, calcitic. Struct: Mod. Well fol'd at 40-45 degrees T.C.A. 2-3% mm to cm scale fractures healed in calcite. Remarks: Bands v.f.g. pale grey green calcareous exhalite. 25.42-25.64, (Highly contorted) 26.52-26.70, 26.93-26.94, 26.19, 26.30-31, 26.44-26.46; Most at 45 degrees T.C.A. Unit ends at sections of argillite 30.2-30.8.						
30.8	58.85	AMPHIBOLITIZED GREYWACKE Dk grey green well fol'd amphibolite. Locally minor qtz. Mod-strongly magnetic. Slightly calcitic. Struct: Mod well fol'd at 40-45 degrees T.C.A. 1-2% fine fractures healed with calcite-qtz. Breccia zones fragments of amphibolite in calcite matrix with fragments oriented parallel to fol'n: 33.58-33.77 and 34.00-34.80. Min'n: Only traces f.g. diss Py.						

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Remarks: finely banded pale grey siliceous exhalite. 35.85-36.65. Matrix dominant F.P. dyke (lamp) from 36.65-37.60. Unit becomesfiner grained less amphib'd towards base grading toagreywacketo argillite.						
58.85	62.9	GREYF.P. M.g. grey F.P. mm scale phenocrysts in a much fine grained matrix. Struct: Massive,very few fractures. Alt'n: Slighlty reddish, hematitic. Min'n: 1% f.g. diss Py. Remarks: Broken blocky core 62.10-62.90.						
62.9	65.2	ARGILLITE F.g. black argillite. Struct: Cut by 2-3% hairline fractures healed with calcite-qtz. Brecciated locally with black frags of argillite in a paler grey calcite matrix. Min'n: Small streaks and diss of f.g. to m.g. Py est 1-2% Py. Remarks: Fairly sharp ct with next unit at about 45 degrees T.C.A.						
65.2	70.3	GREYWACKE Dk grey f.g. gwk-slightly amph'd.						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Struct: Mod well fol'd at 45 degrees T.C.A. 3-4% of fractures healed with calcite-qtz. Min'n: 1-2% Py occuring as f.g. to m.g. Py assoc. with calc-qtz in fractures. Remarks: Sharp ct with next unit at 45 degrees T.C.A.						
70.3	73.1	ARGILLITE Thinly banded black to grey f.g. argillite. Min'n: Graphitic. Streaks and blebs of pyrite paralell to schistosity. Struct: Banding at 35 degrees T.C.A. Remarks: Lamp dyke 72.4-73.05. Core broken blocky. Tends to break along graphitic planes in schistosity.						
73.2	76.7	SHEARED U.M. Sheared schistose u.m. rock. Verging on talc-chloritic. Minor carbonate schist. Struct: Well dev'd schistosity at about 35 degrees T.C.A. ?Spinifex at 74.73. Veins: Milky white cm scale calc-qtz veins 73.1-73.4 Min'n: 1-2% f.g. diss Py in more sheared section 75.8-76.7	10340 10341 10342	73.2 74.6 75.8	74.6 75.8 76.7	1.4 1.2 0.9	tr tr 1-2	<0.2 <0.2 <0.2

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
76.7	81.2	ARGILLITE-GWK Dk grey f.g. argillite to gwk. Struct: Well dev'd schistosity at 40 degrees T.C.A 1-2% fine fractures healed with calcite-qtz. Min'n: 1-2% streaks f.g. to m.g. Py schistosity. Remarks: 81.0-81.2: Pyritic argillite. Broken blocky core.						
81.2	83.1	SHEARED SPINIFEX U.M. pale green grey sheared u.m. Struct: Well dev'd schistosity at 40 degrees T.C.A. Locally relict spinifex. Veins: Qtz-calcite veining 82.34-82.44. Remarks: Broken blocky core 82.57-82.90. Lower ct sharp at 65-70 degrees T.C.A.						
83.1	85.3	LAMPROPHYRE DYKE F.g. to mf.g. lamp dyke 2-3% diss Py.						
83.1	92.8	MASSIVE TO SPINIFEX :U.M. Massive to spinifex u.m. Locally polyhedrally jointed. Alt'n: Chloritic, slightly talcose.						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Min'n: Locally faint trace PY. Struct: Slightly sheared at about 40 degrees T.C.A. Remarks: Sections broken blocky core.						
92.8	102.2	GREY F.P. Fresh m.g. grey F.P. 5-10% whtie feldspar phenocrysts in a m.g. matrix. 5% short stubby f.g. hornblende. Locally minor biotite. weakly magnetic. Remarks: core is fairly blocky.						
102.2	109.5	SPINIFEX U.M. Med. grey green. Spinifex u.m.. Good spinifex texture dev'd throughout. Struct: Good spinifex. Only a few calcite filled fractures. Major one at 105.02-105.95. Subparalell T.C.A. Min'n: 105.95-106.25, 106.47-106.72: Sheared pyritic Lamp dyke: 5% f.g. diss Py.	10343 10344 10345	104.4 105.9 106.7	105.9 106.7 107.3	1.5 0.9 0.6	tr 3-5 tr	<0.2 <0.2 <0.2
109.5	110.7	LAMP DYKE Pale green m.g. lamp dyke. Struct: Fairly massive to weakly fol'd. 3-4% white qtz-calc veins. Min'n" 3-5% f.g. diss Py.						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
110.7	113.6	SHEARED U.M. Dk grey green sheard u.m. Verging on talc-chlorite carbonate schist. Struct: Well dev'd schistosity at about 50 degrees T.C.A. Min'n: 1-1.5% f.g. diss Py. Remarks: Lamp dyke with 3-5% f.g. diss Py. 112.0-112.6. Silicified brecciated version of sheared U.M. 112.8-113.6. Could also be brecciated exhalite. (Green silicified brecciated carbonate rock) 3% f.g. diss Py.	10346 10347 10348	110.7 112.0 112.8	112.0 112.8 113.6	1.3 0.8 0.8	tr 3-5 3	<0.2 <0.2 <0.2
113.6	117.2	PYRITIC ARGILLITE black f.g. finely banded argillite. Struct: Well dev'd schistosity at 45 degrees T.C.A. Min'n: Streaks on cm scale patches of f.g. massive Py. Streaks and thin bands are paralell to schistosity. Est 10% Py and unit also graphitic. Remarks: f.g. Lamp dyke 115.22-115.50. 3-5% f.g. diss Py.						
117.2	127.00	SHATTERED HIGHLY ALT'D F.P. Grey to beige, m.g. highly alt'd F.P. No phenocrysts remain due to intense fracturing and alt'n. Struct: 117.2-123.0. Highly brecciated grey. Very weak						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		fol'n at about 45 degrees T.C.A.	10259	117.2	118.4	1.2	1-2	<0.2
		123.0-127.0: Still highly fract'd but less	10260	118.4	119.8	1.4	1-2	<0.2
		obvious than 117.2-123.0. Weak fol'n at about	10261	119.8	120.2	0.4	3-4	0.24
		55 degrees T.C.A. 1-2% fine hairline fractures	10262	120.2	121.5	1.3	1-2	0.27
		healed with calcite throughout.	10263	121.5	123.0	1.5	1-2	0.30
			10264	123.0	124.5	1.5	1-2	1.40
		Min'n:	10265	124.5	126.0	1.5	1-2	2.26
		117.2-123.0, 1-2% f.g. diss Py in shattered	10266	126.0	127.05	1.05	5-6	4.73
		F.P.. 3-4% v.f.g. to f.g. diss Py in breccia						
		zone 119.8-120.2. With pale beige alt'n.						
		120.2-121.5, 1-2% f.g. diss Py in alt'd F.P.						
		121.5-126.0, 1-2% f.g. diss Py in alt'd F.P. with						
		minor pale grey brown alt'n.						
		126.0-127.05- Intense pale grey brown ore alt'n						
		in alt'd qtz flooded F.P. 5-6 Py.						
			10267	127.05	128.3	1.25	25	4.80
127.0	129.7	PYRITIC ARGILLITE	10268	128.3	129.7	1.40	20	4.52
		Similar to 113.6-117.2, but 20-25% pyrite						
		as large cm scalepatches. Unitbecomes siliceous	AVG	126.0	129.7	3.7		4.67gm
		below 127.8. either silicified argillite or	AVG	123.0	132.0	9.0		2.84gm
		exhalite component. Extensiveqtz veining						
		(flooding) 129.1-129.7						
		Remarks:						
		Sharp ct with next unit at about 55-60 degrees T.C.A.						
129.7	131.2	SHEARED SILICIFIED U.M.						
		Sheared silicified u.m.. Well fol'd green	10269	129.7	131.2	1.5	1-2	0.75
		carbonate rock.						
		Struct:						
		Well fol'd, schistose at 55 degrees T.C.A.						
		Veins:						
		white qtz veins at 60-70 degrees T.C.A. 130.15-130.17						
		131.12-131.25.						
		Min'n:						
		1-2% f.g. diss Py.						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
131.2	133.9	SHEARED ALT'D F.P. Much like 117.1-127.0 Sheared at 55-60 degrees T.C.A. Locally sericitic. 1% f.g. diss Py. Bands of Py assoc with alt'n 133.67-133.85	10270 10271 10272	131.2 132.0 133.0	132.0 133.0 133.9	0.8 1.9 0.9	1 1 1	2.09 0.75 0.68
133.9	135.4	TALC CHLORITE CARBONATE SCHIST Pale green talc-chlorite carbonate schist. Struct: Schistose at 35-40 degrees T.C.A. 5% hairline fracture healed with calcite. Alt'n: Silicified 133.9-134.1. Min'n: 1-2% Py in silicified section 133.9-134.1. Tr to 1% f.g. diss Py in rest. Remarks: Unit gradually becomes less sheared grading into next unit.	10273 10349	133.9 135.2	135.2 136.4	1.3 1.2	1 1	<.2 <0.2
136.4	142.2	SHEARED SPINIFEX U.M. Dk grey to greenish grey u.m. Non-magnetic. Struct: Sheared slightly schistose, locally spinifex. Alt'n: Sheared sections slightly talcose. 2-3% fine hairline fractures healed with calc-qtz.						
142.2	143.5	ARGILLITE Black f.g. graphitic argillite.						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Min'n: Few mm scale bands of Py, paralell to schistosity at 35-40 degrees T.CA. Remarks: Core is broken blocky.						
143.5	153.10	ALT'D MAFIC VOLC'S Pale green f.g to m.g. mafic volc's, non-magnetic. struct: Massive, cut by 5-10% fine hairline fractures healed with calcite. Alt'n: Quite calcitic-carbonitized. Veins: Calcite qtz veins 148.68-148.78 at 20-30 degrees T.C.A. 150.30-151.10, subparalell T.C.A. Irregular patches whtie qtz minorcalcite 151.29-152.20 152.53-152.73, 152.95-153.08. Remarks: f.g. green lamp dyke 146.25-147.64.						
153.10	157.43	COARSE GRAINED MASSIVE TO SPINIFEX U.M. C.g. dk green-grey u.m.-locally spinifex. Non-magnetic. Remarks: Unit is bounded on both sides by narrow bands of pyritic argillite. Argillite bands from 153.10-153.35 and form 158.25-157.43.						
157.43	160.9	ALT'D MAFIC VOLC'S As from 143.5-153.10						
160.9	168.7	MASSIVE ULTRAMAFIC dk grey m.g. ultramafic.						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Struct: Massive, locally weak polyhedral jointing or spinifex textures. 1-2% f.g. fractures healed with calcite.						
		Min'n: Locally tr PYy						
		Remarks: M.g. mafic lamp dyke 164.60-166.42 Unit becomes sheared schistose, grading into a talc-chl-carb schist 168.12-168.72.	10274	168.10	168.7	0.6	tr	<0.2
168.7	177.3	HYBRID ZONE Hybrid unit consisting predominantly of highly alt'd mafic volcanics with sections of red alt'd F.P. Also a few short sections of talc chlorite carbonate schist.	10275	168.7	169.1	0.4	1%	<0.2
			10276	169.1	169.7	0.6	15-20%	0.27
		Struct: Highly fract'd with 5-10% fractures healed with calcite-qtz above 171.70 dolomite qtz below.	10277	169.7	170.6	0.9	1%	0.51
			10278	170.6	171.8	1.2	10%	0.55
			10279	171.8	173.3	1.5	tr-1	<0.2
			10280	173.3	174.8	1.5	tr-1	<0.2
			10281	174.8	176.3	1.5	tr-1	<0.2
		Alt'n: Red porphyry sections highly alt'd. No feldspar phenocrysts 171.70-177.20. Pervasive pale beige alt'n in both F.P. and mafic volcs. Believed to be qtz-carbonate. Fractures within this section are healed with dolomite-qtz.	10282	176.3	177.3	1.0	tr-1	0.274
		Min'n: 1% f.g. diss Py in F.P. and T.C.C.S. 168.7-169.1 15-20% Py as stringers submassive f.g. Py in red alt'd F.P. 169.1-169.7. 1% f.g. diss Py in F.P. and alt'd volcs 169.7-170.6. 170.6-171.8: 10% Py as submassive stringers in red F.P. alt'd volcs, and T.C.C.S. 171.8-177.3, tr to 1% Py in alt'd mafic volcs with a few short sections red F.P.	AVG	169.1	171.8	2.7		0.47

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		Remarks: below 171.8 Predominantly alt'd mafic volcanics.						
177.3	181.8	MASSIVE MAFIC VOLCANICS Grey f.g. massive mafic volcanics, possibly ultramafic magnetic. Struct: Massive, 1-2% fine chlortic fractures. Alt'n: Very calcitic. Veins: White dolomite-qtz vein with red hematitic fragments of volcanic 178.80-178.94 Min'n: 1-2% f.g. diss Py , assoc with chlorite fractures. Pyrite assoc with pale grey ore alt'n adjacent to fractures 178.65-181.71.	10283 10284 10285	177.3 178.8 180.3	178.8 180.3 181.8	1.5 1.5 1.5	1 1 1	<0.2 ,0.2 <0.2
181.8	183.7	PINK ALT'D F.P. Pink to pale red m.g. alt'd F.P. Non-magnetic. Struct: Weak fabric at about 45-50 degrees T.C.A. 3-4% hairline fracatureshealed with dolomite. Alt'n: Intensely alt'd. No relict feldspars or biotite. Min'n: tr-1% f.g. to v.f.g. diss Py in F.P. Mafic inclusion with 3% diss Py 182.00-182.15.	10286 10287	181.8 182.8	182.8 183.7	1.0 0.9	TR-1 tr-1	<0.2 <0.2

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
183.7	187.8	ALT'D MAFIC VOLCS.						
		Med. grey tomed. grey-green f.g. mafic. volc	10288	183.7	185.2	1.5	2-3	<0.2
		Magnetic.	10289	185.2	186.7	1.5	2-3	<0.2
			10290	186.7	187.8	1.1	2-3	<0.2
		Struct:						
		Massive 3-4% fine fractaures haled with dol -qtz.						
		Alt'n:						
		Pale greenish grey.						
		Min'n:						
		2-3% f.g. to v.f.g. diss Py.						
		Remarks:						
		Section pink alt'd F.P. (as above) 184.98-185.18						
		Lower ct of unit sharp at 35 degrees T.C.A.						
187.8	201.4	RED ALT'D F.P.						
		F.g. to m.g. pink to red to beige red TF.P.						
		Higly alt'd. Locally maganetic.						
		Struct:						
		Weak fabric at 45 degrees T.C.A.						
		Fract'd with 3-4% fine fractures healed with dolomite. Also evidence of earlier fracturing	10291	187.8	188.8	1.0	0.5	<0.2
			10292	188.8	190.3	1.5	0.5	<0.2
		Alt'n:	10293	190.3	191.8	1.5	0.5	<0.2
		No feldspar phenocrysts remain.	10294	191.8	193.3	1.5	0.5	<0.2
		Beige sections sue to intense carbonate	10295	193.3	194.8	1.5	0.5	<0.2
		qtz alt'n.	10296	194.8	195.8	1.0	0.5	0.41
		190.34-190.74, 194.30-194.44.	10297	195.8	197.2	1.4	0.5	0.72
			10298	197.2	197.5	0.3	0.5	0.79
		Min'n:	10299	197.5	199.0	1.5	0.5	1.03
		0.5% f.g. diss Py in F.P. Min'n assoc	10300	199.0	200.5	1.5	0.5	0.24
		with grey ore alt'n in mafic inclusions	10301	200.5	201.4	0.9	0.5	<0.2
		at 195.55, 196.6-196.8, est 2-3% Py						
		Well mineralized inclusion with grey alt'n	AVG	194.8	200.5	5.7		0.63

METRES From	To	D E S C R I P T I O N	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		and 3-4% f.g. diss Py 197.17, 197.45. Remarks: Mafic inclusions form 194.78-195.15, 195.86-196.89, 197.17-197.45. Below 197.45, Porpohyry is fresher looking less alt'd, with secondary feldspars.						
201.4	204.3	ALT'D GREY F.P. M.g. pale grey alt'd feldspar porphyry. weakly magnetic. Struct: Weak fol'n at 45 degrees T.C.A. Alt'n: Develop most oflarge secondary feldspars. Remarks: Narrow dyke f.g. fresh grey F.P. 202.25-202.30 202.35-202.39. Inclusion mafic volc 202.9-203.1. Sharp ct wtih next unit at 345 degrees T.C.A.						
204.3	206.9	GREY F.P. F.g. to m.g. fresh bio F.P. 5-10% f.g. bio. Alt'n: Weakly chl. Remarks: Gradational ct with next unit.						
206.9	211.0	ALT'D GREY F.P. alt'd m.g. grey F.P. Slightly pink. feldspars.opment of secondary Alt'n: Siliceous thin fresh porphyry.						

METRES From	To	DESCRIPTION	Sample#	From	To	Length	Est. % Py	ASSAYS g/t Au
		hematitic 206.9-208.4. Struct: Massive 1% dol qtz veins about 40 degrees T.C.A. Veins: Qvs with 1% f.g. diss Py 210.47-210.53.						
211.0	221.27	FRESH GREY BIOTITE F.P. Fresh m.g. grey biotite feldspar porphyry. 10-15% abiotite. Alt'n: Hematitic section 212.5-214.0 Veins: qvs 217.70-217.73, 217.79-217.84. Remarks: Lamp dyke 214.8-215.30						
	221.27	END OF HOLE CASING PULLED HOLE CEMENTED						

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August 8, 1988

Mr. Edward R. Solonyka
Administrator
Ontario Mineral Exploration Program
Mineral Development and Lands Branch
Ministry of Northern Development
and Mines
3rd Floor, 880 Bay Street
Toronto, Ontario
M5S 1Z8

Dear Mr. Solonyka:

RE: NOVAMIN RESOURCES INC.
RUNDLE PROJECT
OMEP PROGRAM NO. OM87-8-L-092

I refer to your letter of August 2 and, as requested, enclose a second copy of the report and supporting documentation.

Yours truly,

Graeme M. Gordon
Controller

GMG/cr
Encl.