



41010NW0023 20 GREENLAW

010

DIAMOND DRILLING

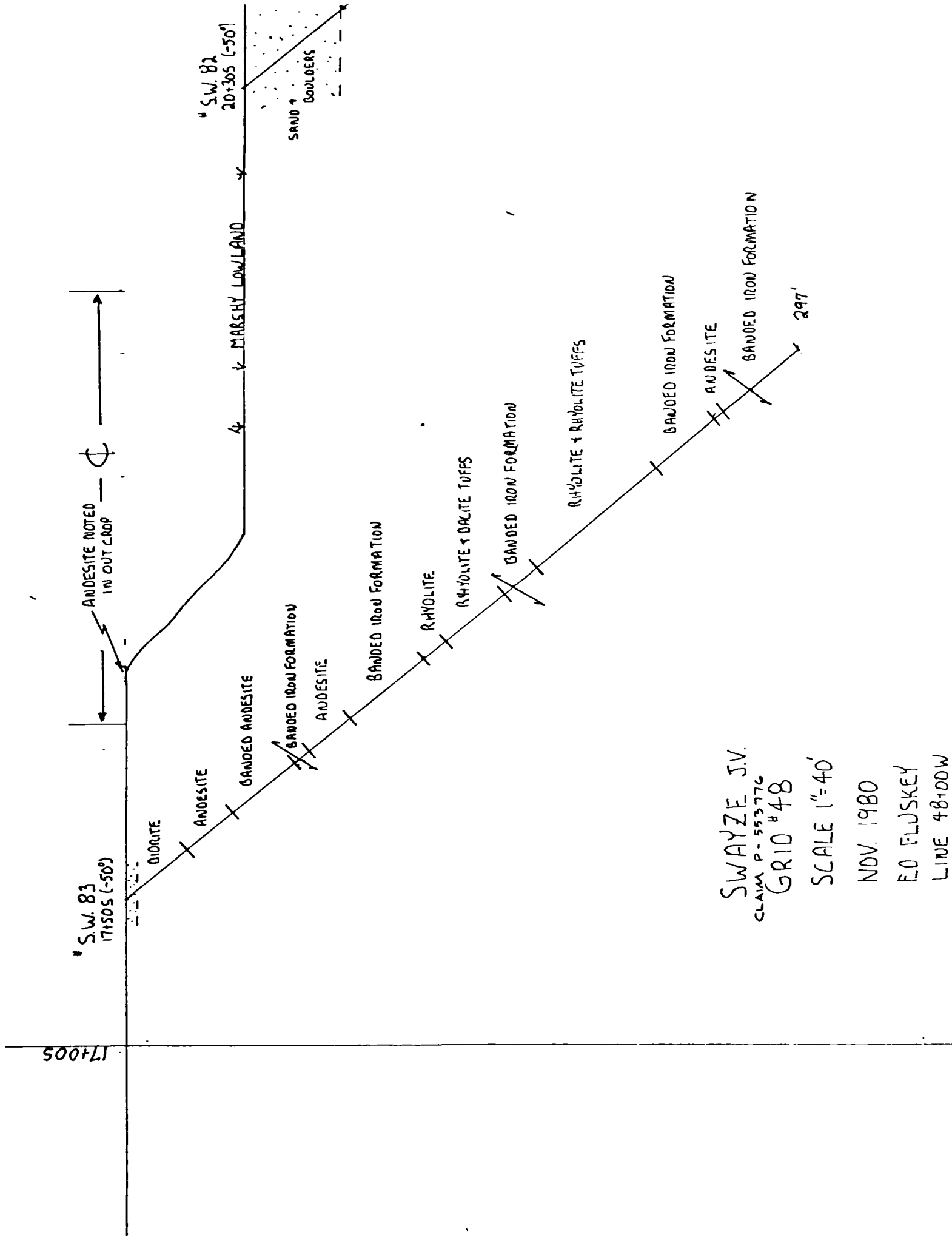
TOWNSHIP: Greenlaw

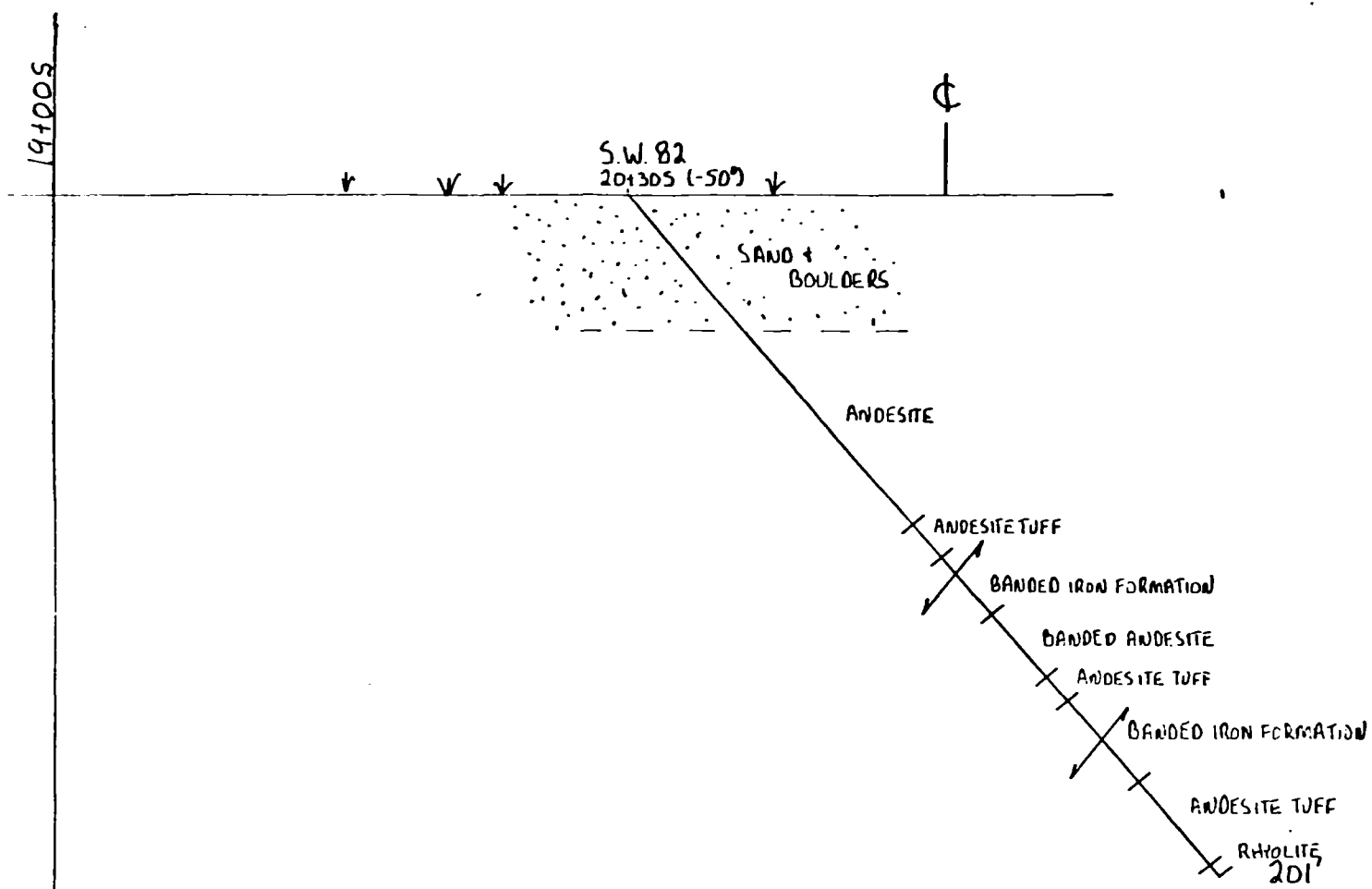
REPORT No.: 20

WORK PERFORMED BY: Granges Exploration AB

| <u>CLAIM No.</u> | <u>HOLE No.</u> | <u>FOOTAGE</u> | <u>DATE</u> | <u>NOTE</u> |
|------------------|-----------------|----------------|-------------|-------------|
| P 553776         | SW 82           | 201.0          | Nov/80      | (1)         |
|                  | SW 83           | 297.0          | Nov/80      | (1)         |
|                  | SW 95           | 233.0          | Feb/81      | (2)         |
|                  | SW 96           | 294.0          | Feb/81      | (2)         |
|                  | SW 97           | 247.0          | Feb/81      | (2)         |
| P 553775         | SW 84           | 177.0          | Nov/80      | (2)         |
| P 553854         | SW 85           | 202.0          | Nov/80      | (2)         |

NOTES: (1) #359-80  
(2) #520-81





SWAYZE S.V.  
 CLAIM P-553776  
 GRID #48

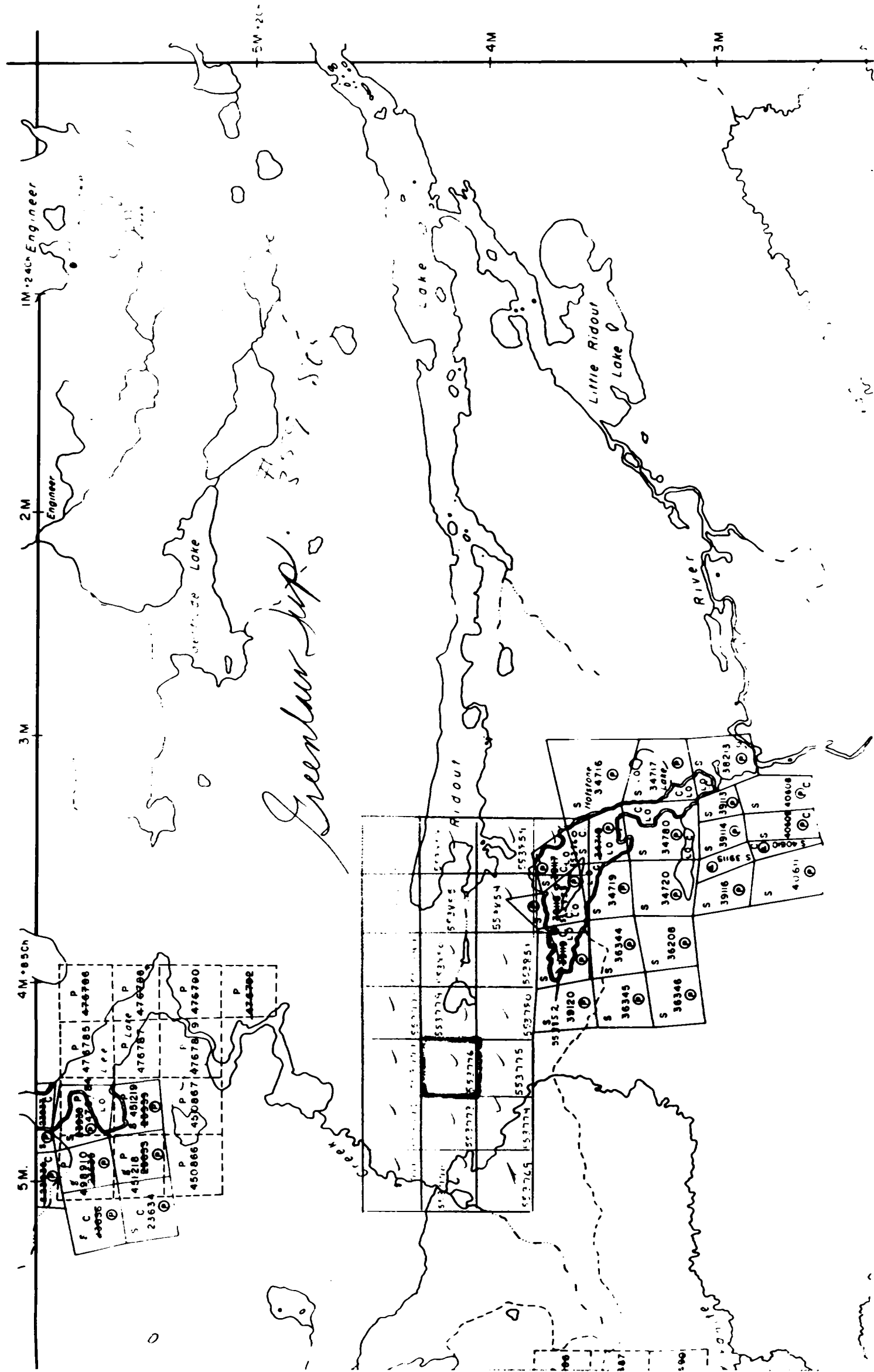
SCALE 1"=40'

NOV. 1980

ED FLUSKEY

LINE 48+00W

# Denyes Twp. - M.758



uningham Twp. - M.744

SC.

- PATEM
- CROW
- LEAS
- LOCA
- LICEP
- MININ
- SURF
- ROAD
- IMPRK
- KING
- RAIL
- POWE
- MARS
- MINE
- CANC



**GRANGES EXPLORATION AB**  
CANADIAN DIVISION  
**DIAMOND DRILL LOG**

Property: U.S. AREA J.V. Project No. 70504 Depth: 201 Date Began: NOV 22/80  
 Hole No. S.W. 82 Co. ord. 48400W Horizontal Length: 130' Date Completed: NOV 23/80  
 Sheet No. 1 Direction: SOUTH Drilled By: HEATH SHEARER DALLI  
 Claim No. 553776 Elevation: 20130 S. Logged By: FD FLUSKEY  
 Angle: -50°

| FOOTAGE        | DESCRIPTION  | ALTERATION |    |  |  | % RECY<br>CALC'D |
|----------------|--|------------|----|--|--|------------------|
|                |  | FROM       | TO |  |  |                  |
| 0 - 41.0       | CASING - SAND + BOULDERS   |            |    |  |  |                  |
| 41.0 - 96.8'   | ANDESITE<br>- MASSIVE GREY + UNIFORM<br>- MINOR SPORADIC QTR VEINING THROUGHOUT<br>- NO SULPHIDES  |            |    |  |  |                  |
| 96.8 - 106.5'  | ANDESITE TUFF<br>- FRAGMENTAL + REWORKED<br>- BANDED + 90° TO THE C.A. @ 100'<br>- 1.2 - 2.2% PY 103.5' - 105.4'   |            |    |  |  |                  |
| 106.5 - 123.9' | BANDED IRON FORMATION<br>- ALTERNATING BANDS OF MAGNETITE + QTR<br>- MINOR SCATTERED WHITE SCLEROTIC TO FOLIATION<br>- FOLIATION IS 75° TO C.A. @ 117'                         |            |    |  |  |                  |
| 123.9 - 141.9' | BANDED ANDESITE<br>- UNIFORM MFL GREY<br>- BANDS ARE PROBABLY PILLOW FEATURES<br>- SLIGHTLY PORPHYROCLASTIC WITH IRREGULAR FELDSPAR<br>- FOLIATION IS 80° TO C.A.              |            |    |  |  |                  |
| 141.9 - 148.1' | ANDESITE TUFF<br>- REWORKED + DREICATED<br>- COMPOSED OF 15' EVID BANDS OF CHL - QTR - FELDSPAR<br>- EPIDOTE LAST 10' OF UNIT<br>- 1.5% PY 143.7 - 143.9                       |            |    |  |  |                  |
| 148.1 - 173.0' | BANDED IRON FORMATION<br>- NO BULLIE BUT HIGH CONTENT OF TO 35% - 50%<br>- SLIGHTLY MORE CONTORTED<br>- FOLIATION IS 75° TO C.A. @ 170'<br>- 1.5 - 3.5% TO 4% PY 165.3 - 166.1 |            |    |  |  |                  |
| 173 - 197.1'   | ANDESITE TUFF<br>- 1.2% PY 197.4 C.A. @ 190'   |            |    |  |  |                  |
| 197.1 - 201'   | ANDALUSITE<br>- 1.0% PY + FOLIATED   |            |    |  |  |                  |







**GRANGES EXPLORATION AB**  
CANADIAN DIVISION  
**DIAMOND DRILL LOG**

Property SWAYZE J.V.  
Hole No. S.W. 83  
Sheet No. ①  
Claim No. 553770

Project No. 70504 Depth 297' Date Began NOV 23/96  
Co ord. 48400W Horizontal Length 188' Date Completed NOV 25/80  
17750S Direction SOUTH Drilled By HEATH + SHERWOOD DRILL  
Elevation 553770 Angle -50° Logged By E.O. FROSKY

| FOOTAGE     | DESCRIPTION  | ALTERATION |    |  |  | N RECY<br>CALC'D. |
|-------------|--|------------|----|--|--|-------------------|
|             |  | FROM       | TO |  |  |                   |
| 0-8'        | CASING SAND & BOULDERS   |            |    |  |  |                   |
| 8-26.0'     | DIORITE<br>- COARSE HRN CRYSTALS   |            |    |  |  |                   |
| 26.0-46.0   | ANDESITE<br>- MASSIVE, GREY & UNIFORM  |            |    |  |  |                   |
| 46.0-73.0   | BANDED ANDESITE<br>- DARK GREY, BANDS PROBABLY PILLOWS.  |            |    |  |  |                   |
| 73.0-79.0   | BANDED IRON FORMATION<br>- FOLIATION 72° TO S.A. @ 78'<br>- APPROX 20% MAGNETITE CONTENT<br>- 1' BOUND CORE @ 76'  |            |    |  |  |                   |
| 79.0-96.5   | DACITE<br>MASSIVE, LIGHT GREY  |            |    |  |  |                   |
| 96.5-129.0  | BANDED IRON FORMATION<br>- AS ABOVE WITH MAGNETITE UP TO 50%<br>- SCATTERED % 2% NODULES   |            |    |  |  |                   |
| 129.0-138.5 | RHYOLITE<br>- MASSIVE BEIGE  |            |    |  |  |                   |
| 138.5-164.0 | INTERBANKED RHYOLITE + DIACITE TUFF<br>- NO SULPHIDS   |            |    |  |  |                   |
| 164.0-177.9 | BANDED IRON FORMATION<br>- MINOR % WITH APPROX 30% MAGNETITE<br>- BANDED IS 70° TO S.A. @ 170'   |            |    |  |  |                   |
| 177.9-232.2 | INTERBANKED RHYOLITE + RHYOLITE TUFF<br>RHYOLITE SECTIONS: 178.5-181.0<br>187.0-188.4<br>217.0-219<br>228.5-231.0<br>FOLIATION IS 67° TO S.A. @ 206'<br>MINOR SCATTERED % WITH TUFF SECTIONS |            |    |  |  |                   |





**GRANGES EXPLORATION AB**  
CANADIAN DIVISION  
**DIAMOND DRILL LOG**

Property S.WAYZE, J.V. Project No. 70508 Depth 297 Date Began NOV 23 1980  
 Hole No. S.W. 83 Co ord. 48100.4 Horizontal Length 500.74 Date Completed NOV 25 1980  
 Sheet No. 2 Elevation 17150.5 Direction S00.74E Drilled By HEATHY SHERWOOD  
 Claim No. 553776 Angle -50° Logged By ED FLUSKEY

| FOOTAGE     | DESCRIPTION   | ALTERATION |    |  |  |  |  | % REC'Y<br>CALC'D. |
|-------------|---|------------|----|--|--|--|--|--------------------|
|             |   | FROM       | TO |  |  |  |  |                    |
| 232.2-257.8 | BANDED IRON FORMATION<br>- CONTAINS 35% - 50% MAGNETITE<br>- GENERALLY UNIFORM BANDING  |            |    |  |  |  |  |                    |
| 257.8-262.0 | QUARTZITE<br>- SLIGHTLY BANDED 85° TO C.A. @ 261'   |            |    |  |  |  |  |                    |
| 262.0-297.0 | BANDED IRON FORMATION<br>- RICH MAGNETITE FOR SECTIONS UP TO 90°<br>- MINOR TO 1% SCATTERED Fe<br>- BANDS 15 75° TO C.A. @ 288' |            |    |  |  |  |  |                    |
| 297         | End of Hole   |            |    |  |  |  |  |                    |
|             | MINERALIZATION  |            |    |  |  |  |  |                    |
|             | 73-79: 20% MAGNETITE, TR-2% Fe  |            |    |  |  |  |  |                    |
|             | 96.5-129: 20% - 50% MAGNETITE, TR-2% Fe   |            |    |  |  |  |  |                    |
|             | 164-172.9: 30% MAGNETITE, MINOR Fe  |            |    |  |  |  |  |                    |
|             | 232.2-257.8: 35% - 50% MAG., MINOR Fe   |            |    |  |  |  |  |                    |
|             | 262.0-297.0: 50% - 90% MAG., TR-1% Fe   |            |    |  |  |  |  |                    |
|             | CORE ANGLES   |            |    |  |  |  |  |                    |
|             | 78': 73°  |            |    |  |  |  |  |                    |
|             | 170': 70°   |            |    |  |  |  |  |                    |
|             | 206': 67°   |            |    |  |  |  |  |                    |
|             | 261': 85°   |            |    |  |  |  |  |                    |
|             | 288': 76°   |            |    |  |  |  |  |                    |







**GRANGES EXPLORATION AB**  
CANADIAN DIVISION  
**DIAMOND DRILL LOG**

Property: SWAYZE, J.V.      Project No. 70504      Depth: 233'      Date Began: FEB 5/81  
 Hole No. SW 95      Co. ord. 52700W      Horizontal Length      Date Completed: FEB 9/81  
 Sheet No. 1      1750S      Direction: SOUTH      Drilled By: HEATH ASHERWOOD  
 Claim No. 553776      Elevation      Angle: -45°S      Logged By: E.O. FLUSKEY

| FOOTAGE      | DESCRIPTION  | ALTERATION |    |  |  | % RECY<br>CALC'D. |
|--------------|--|------------|----|--|--|-------------------|
|              |  | FROM       | TO |  |  |                   |
| 0-9'         | CASING - SAND  |            |    |  |  |                   |
| 9'-42.1'     | DIORITE<br>- MASSIVE COARSE GRAINED<br>- HORNBLENE DOMINATES<br>- NO VISIBLE SULPHIDES   |            |    |  |  |                   |
| 42.1-92.3'   | BANDED ANDESITE<br>- SLIGHTLY PORPHYROCLASTIC (FELD)<br>- BANDED THROUGHOUT (ALLOUS)<br>- UNIFORM + CONSISTANT THROUGHOUT<br>- NO VISIBLE SULPHIDES                            |            |    |  |  |                   |
| 92.3-104.8'  | RHYOLITE TUFF<br>- REWORKED + BRECCIATED<br>- MAGNETITE BANDS LAST 2'<br>- MINOR (LIR) DISSEMINATED PY<br>- 1 FOOT GROUND CORE 97-98'<br>- SECTIONS CORRODED + LEACHED (WATER) |            |    |  |  |                   |
| 104.8-145.1' | ANDESITE<br>- MASSIVE MED GREY<br>- NO VISIBLE SULPHIDES   |            |    |  |  |                   |
| 145.1-153.8' | BANDED IRON FORMATION<br>- TOTAL 15.2-20.2 MINERALITE<br>- WELL BANDED<br>- TRACE GRANITE @ 150'<br>- TRACE Pb   |            |    |  |  |                   |
| 153.8-161.0' | RHYOLITE TUFF<br>- SILICES + REWORKED<br>- SMOKEY (BLUE) QZ<br>- MINOR (LIR) VISS PYR<br>- ISOLATED MINOR MAGNETITE BANDS  |            |    |  |  |                   |
| 161.0-163.5' | CALCITE (DOLOMITE) BRECCIA<br>- COARSE WHITE CRYSTALS<br>- COARSE RED-BROWN SPH 1% - 2%  |            |    |  |  |                   |



**GRANGES EXPLORATION AB**  
CANADIAN DIVISION  
**DIAMOND DRILL LOG**

Property **SWATZKE, J.V.**

Hole No. **SW 95**

Sheet No. **2**

Claim No.

Project No.

Co. ord. **S2+00W**

**17450.5**

Elevation

Depth

Horizontal Length

Direction **S007H**

Angle

**-45°**

Date Began

Date Completed

Drilled By

Logged By **ED. FLOSKEY**

| FOOTAGE             | DESCRIPTION   | ALTERATION |    |  |  | % RECY<br>CALC'D. |
|---------------------|---|------------|----|--|--|-------------------|
|                     |   | FROM       | TO |  |  |                   |
| 1635-1709           | RHYOLITE TUFF<br>- AS BEFORE<br>- 2% DISS. PO MINOR PY<br>- TRACE CPY @ 165'  |            |    |  |  |                   |
| 1709-1755           | <del>GABBRO</del> CALCITE BRECCIA<br>- AS BEFORE<br>- TR - 6% SPH - RED BROWN COLOUR<br>- 1709-1711: 15% SPH<br>- TRACE CPY THROUGHOUT  |            |    |  |  |                   |
| 1755-1805           | RHYOLITE TUFF<br>- SMOKEY (BLUE) QZ<br>- MINOR PO<br>- 1790-1805: 3% SPH  |            |    |  |  |                   |
| 1805-1970           | BASALT<br>- PORPHYROCLASTIC<br>- MINOR MAGNETITE (<5%)<br>- NO VISIBLE SULPHIDS   |            |    |  |  |                   |
| 1970-2250           | RHYOLITE TUFF<br>- SECTIONS OF MAGNETITE BANDS<br>- DISS. PO: TR-2% - CONDUCTOR 212' BAND AT 1966<br>- 10% 229-225' - CONDUCTIVE  |            |    |  |  |                   |
| 2250-2330           | ANDESITE<br>- MASSIVE, MED GREY   |            |    |  |  |                   |
| 2330' - END OF HOLE |   |            |    |  |  |                   |
|                     | <b>MINERALIZATION</b><br>923-1048: TR-2% PY<br>1538-1610: TR-2% B<br>* 1610-1635: 2% SPH; 1% Zn, TR CPY<br>* 1635-1709: TR-2% B, TR CPY<br>1709-1755: TR-6% SPH; 3% Zn, TR-2% CPY<br>1755-1805: TR-2% B * (1790-1805: 3% SPH)<br>1970-225': TR-2% B (224-225': 10% B) |            |    |  |  |                   |





**GRANGES EXPLORATION AB**  
CANADIAN DIVISION  
**DIAMOND DRILL RECORD**

Property *SWAYZE, J.V.* Project No. *70504* Depth *233'* Date Began *FEB 5/81*  
 Hole No. *SW 95* Co. ord. *S2100W* Horizontal Length Direction *SOUTH* Date Completed *FEB 9/81*  
 Sheet No. *1* Elevation *174505* Drilled By *HEATH, J.S. HERWOOD*  
 Claim No. *553776* Angle *-45°* Logged By *E.O. FLYSKEY*

| FOOTAGE              | NUMBER        | WIDTH        | Au.        | Ag.        | Cu.        | Zn.          | P.S.M.   | CO%         | WIDTH X ASSAY |     |     |     | AVERAGES |     |     | REMARKS |  |
|----------------------|---------------|--------------|------------|------------|------------|--------------|----------|-------------|---------------|-----|-----|-----|----------|-----|-----|---------|--|
|                      |               |              |            |            |            |              |          |             | Au.           | Ag. | Cu. | Zn. | Ag.      | Cu. | Zn. |         |  |
| <i>D-96</i>          | <i>CASING</i> | <i>9.0'</i>  |            |            |            |              |          |             |               |     |     |     |          |     |     |         |  |
| <i>90'-92.3'</i>     | <i>WASTE</i>  | <i>83.3'</i> |            |            |            |              |          |             |               |     |     |     |          |     |     |         |  |
| <i>92.3'-97.3'</i>   | <i>2436A</i>  | <i>5.0'</i>  | <i>.10</i> | <i>.5</i>  | <i>.05</i> | <i>.08</i>   |          |             |               |     |     |     |          |     |     |         |  |
| <i>97.3'-102.3'</i>  | <i>2437A</i>  | <i>5.0'</i>  | <i>.10</i> | <i>.5</i>  | <i>.07</i> | <i>.50</i>   |          |             |               |     |     |     |          |     |     |         |  |
| <i>102.3'-104.8'</i> | <i>2438A</i>  | <i>2.5'</i>  | <i>.05</i> | <i>.5</i>  | <i>.01</i> | <i>.03</i>   |          |             |               |     |     |     |          |     |     |         |  |
| <i>104.8'-145.0'</i> | <i>WASTE</i>  | <i>40.2'</i> |            |            |            |              |          |             |               |     |     |     |          |     |     |         |  |
| <i>145.0'-150.0'</i> | <i>2439A</i>  | <i>5.0'</i>  | <i>.20</i> | <i>.5</i>  | <i>.01</i> | <i>.03</i>   |          |             |               |     |     |     |          |     |     |         |  |
| <i>150.0'-153.8'</i> | <i>2440A</i>  | <i>3.8'</i>  | <i>.10</i> | <i>.5</i>  | <i>.01</i> | <i>.01</i>   |          |             |               |     |     |     |          |     |     |         |  |
| <i>153.8'-157.0'</i> | <i>2441A</i>  | <i>3.2'</i>  | <i>.30</i> | <i>1.5</i> | <i>.01</i> | <i>.02</i>   |          |             |               |     |     |     |          |     |     |         |  |
| <i>157.0'-161.0'</i> | <i>2442A</i>  | <i>4.0'</i>  | <i>.25</i> | <i>1.0</i> | <i>.01</i> | <i>.02</i>   |          |             |               |     |     |     |          |     |     |         |  |
| <i>161.0'-163.5'</i> | <i>2443A</i>  | <i>2.5'</i>  | <i>.10</i> | <i>1.0</i> | <i>.01</i> | <i>3.35</i>  |          | <i>.01</i>  |               |     |     |     |          |     |     |         |  |
| <i>163.5'-167.0'</i> | <i>2444A</i>  | <i>3.5'</i>  | <i>.35</i> | <i>3.0</i> | <i>.01</i> | <i>.06</i>   |          |             |               |     |     |     |          |     |     |         |  |
| <i>167.0'-170.9'</i> | <i>2445A</i>  | <i>3.9'</i>  | <i>.65</i> | <i>4.0</i> | <i>.01</i> | <i>.16</i>   |          |             |               |     |     |     |          |     |     |         |  |
| <i>170.9'-174.4'</i> | <i>2446A</i>  | <i>3.5'</i>  | <i>.25</i> | <i>6.0</i> | <i>.06</i> | <i>11.00</i> | <i>4</i> | <i>.03</i>  |               |     |     |     |          |     |     |         |  |
| <i>174.4'-175.5'</i> | <i>2447A</i>  | <i>1.1'</i>  | <i>.15</i> | <i>4.5</i> | <i>.03</i> | <i>8.40</i>  | <i>1</i> | <i>.023</i> |               |     |     |     |          |     |     |         |  |
| <i>175.5'-180.5'</i> | <i>2448A</i>  | <i>5.0'</i>  | <i>.10</i> | <i>2.0</i> | <i>.03</i> | <i>2.03</i>  |          |             |               |     |     |     |          |     |     |         |  |
| <i>180.5'-182.5'</i> | <i>2449A</i>  | <i>2.0'</i>  | <i>.10</i> | <i>1.0</i> | <i>.02</i> | <i>1.50</i>  |          |             |               |     |     |     |          |     |     |         |  |
| <i>182.5'-184.5'</i> | <i>6672A</i>  | <i>2.0'</i>  | <i>.05</i> | <i>1.0</i> | <i>.01</i> | <i>.01</i>   |          |             |               |     |     |     |          |     |     |         |  |
| <i>184.5'-189.0'</i> | <i>6673A</i>  | <i>4.5'</i>  | <i>.05</i> | <i>.5</i>  | <i>.01</i> | <i>.01</i>   |          |             |               |     |     |     |          |     |     |         |  |
| <i>189.0'-193.0'</i> | <i>6674A</i>  | <i>4.0'</i>  | <i>.05</i> | <i>.5</i>  | <i>.01</i> | <i>.01</i>   |          |             |               |     |     |     |          |     |     |         |  |
| <i>193.0'-197.0'</i> | <i>6675A</i>  | <i>4.0'</i>  | <i>.05</i> | <i>.5</i>  | <i>.01</i> | <i>.01</i>   |          |             |               |     |     |     |          |     |     |         |  |
| <i>197.0'-199.0'</i> | <i>6676A</i>  | <i>2.0'</i>  | <i>.05</i> | <i>.5</i>  | <i>.01</i> | <i>.01</i>   |          |             |               |     |     |     |          |     |     |         |  |

*9.6*  
*11.6*

*6.03*  
*5.24*







**GRANGES EXPLORATION AB**  
CANADIAN DIVISION  
**DIAMOND DRILL LOG**

Property SWARZE J.V. Project No. 7050A Depth 2974' Date Began FEB. 10/81  
 Hole No. SW 96 Co. ord. 43+89 W Horizontal Length 18+00 S Direction SOUTH FEB. 12/81  
 Sheet No. 1 Drilled By. HEATH YSHEAWOOD  
 Claim No. 533776 Elevation Logged By. E.O. FLUSKEY

| FOOTAGE      | DESCRIPTION   | ALTERATION |    |  |  | % REC'Y<br>CALC'D. |
|--------------|---|------------|----|--|--|--------------------|
|              |   | FROM       | TO |  |  |                    |
| 0-7'         | CASING: SAND  |            |    |  |  |                    |
| 7'-48'       | BANDED ANDESITE<br>- SLIGHTLY PORPHYROCLASTIC<br>- FINELY BANDED<br>- NO VISIBLE SULPHIDES  |            |    |  |  |                    |
| 43'-53.2'    | RHYOLITE TUFF<br>- FRAGMENTAL<br>- <1% DISS. BY THROUGHOUT<br>- MINOR MAGNETITE BANDS LAST FOOT   |            |    |  |  |                    |
| 53.2-56.5    | RHYOLITE<br>- MASSIVE LIGHT GREY TO BLUE<br>- NO VISIBLE SULPHIDES  |            |    |  |  |                    |
| 56.5-104.9   | RHYOLITE TUFF<br>- FRAGMENTAL OR - CALORITE<br>- SPARKING GRANITE SLIPS 66'-75'<br>- 56.5-58.0: 5% DISS. B<br>- 58.5-67.0: 10% DISS. B<br>- 67.0-96.0: SILICA RICH WITH <1% B<br>- OVERALL: 1% B                            |            |    |  |  |                    |
| 104.9-108.2  | BANDED IRON FORMATION<br>- CONJUNCTIVE MAG BAND WITH DISS B WITHIN<br>- MAG: 75% CONTACT OVER ALL   |            |    |  |  |                    |
| 108.2-119.5' | RHYOLITE TUFF<br>- FIRST 100' <del>FRAGMENTAL</del> WITH 1% DISS B<br>- 5% DISS. B<br>- 100' <del>FRAGMENTAL</del> WITH 1% DISS. B<br>- MINOR MAGNETITE BANDS<br>- FRAGMENTAL<br>- TR - 3% DISS B WITH MINOR GRANITE @ 118' |            |    |  |  |                    |
| 119.5-127.0  | RHYOLITE<br>- AS ABOVE  |            |    |  |  |                    |



**GRANGES EXPLORATION AB**  
CANADIAN DIVISION  
**DIAMOND DRILL LOG**

Property **S.W. AYZE J.U.** Project No. **.....** Date Began **.....**  
 Hole No. **S.W. 96** Co. ord. **.....** Horizontal Length **.....** Date Completed **.....**  
 Sheet No. **2** Direction **.....** Drilled By **.....**  
 Claim No. **.....** Elevation **.....** Logged By **FED. FLOUSKEY**

| FOOTAGE   | DESCRIPTION  | ALTERATION |    | % RECY<br>CALC'D. |
|-----------|--|------------|----|-------------------|
|           |  | FROM       | TO |                   |
| 1270-1467 | RHYOLITE TUFF<br>- FRAGMENTARY<br>- 149'-145' 5" BANNED 10 X GRAPHITE : CONJUGATIVE<br>- QUENBY TR-102 Pa (1320-1330 10% Pa)   |            |    |                   |
| 1467-1638 | RHYOLITE<br>- AS ABOVE   |            |    |                   |
| 1638-1920 | RHYOLITE TUFF<br>- FIRST 10' CHLORITE RICH WITH 12.5% Py + 1.0% Pa<br>- LAST 15' SILICEOUS WITH TR-28 Py -- TR SPA (182)<br>- QUENBY BANNED 10% DISTRICT   |            |    |                   |
| 1920-1988 | RHYOLITE<br>- AS ABOVE   |            |    |                   |
| 1988-2465 | RHYOLITE TUFF<br>- FRAGMENTARY<br>- 215'-216.5" : 15% BANNED 10 + MINOR GRAPHITE<br>- 225'-226.5" : " "<br>- 233.5-2460 : 20% ASS 10 X GRAPHITE - ASS CONJUGATIVE<br>- QUENBY SCATTERED ASS 10 FROM TR-576<br>- 230-232 5% to 14 QTZ |            |    |                   |
| 2465-2515 | RHYOLITE   |            |    |                   |
| 2515-2695 | RHYOLITE TUFF<br>- MINOR BANNED MAG 255'-256'<br>- 259'-260 CONJUGATIVE MAG BANNED (ASS to within)<br>- SPARSE MINERALIZATION  |            |    |                   |
| 2695-2749 | RHYOLITE<br>- AS BEFORE  |            |    |                   |
| 2749-280  | RHYOLITE TUFF<br>- 280-282' 12.5% Py<br>- NO OTHER SULPHIDES NOTED   |            |    |                   |
| 280-28940 | RHYOLITE<br>- AS BEFORE  |            |    |                   |
| 2840      | END OF LOG   |            |    |                   |



**GRANGES EXPLORATION AB**  
CANADIAN DIVISION  
**DIAMOND DRILL LOG**

Property SWAYZE J.U. Project No. 294 Date Began 294  
 Hole No. SW 96 Co ord. 3 Horizontal Length 294 Date Completed 294  
 Sheet No. 3 Direction 3 Drilled By ED FLUSKEY  
 Claim No. 3 Elevation 3 Angle 3 Logged By ED FLUSKEY

| FOOTAGE | DESCRIPTION   | ALTERATION |    |  |  | % RECY<br>CALC'D. |
|---------|---|------------|----|--|--|-------------------|
|         |   | FROM       | TO |  |  |                   |
|         | <u>MINERALIZATION</u>   |            |    |  |  |                   |
|         | <u>43-53.2: &lt;1% DISS PY</u>                                    |            |    |  |  |                   |
|         | <u>56.5-104.9: TR-5% to SPARSE GRAPHITE</u>                       |            |    |  |  |                   |
|         | <u>108.2-119.5: &lt;1% DISS PY</u>                                |            |    |  |  |                   |
|         | <u>127-146.7: TR-10% Py (BANDIED + DISS) ISOLATED GRAPHITE</u>    |            |    |  |  |                   |
|         | <u>163.8-192.0: 1% to 5% DISS PY, TR SPH (18%)</u>                |            |    |  |  |                   |
|         | <u>198.8-246.5: TR-20% DISS Py (29% to 24%) ISOLATED GRAPHITE</u> |            |    |  |  |                   |
|         | <u>255-256: BANNED MARGARITE</u>                                  |            |    |  |  |                   |
|         | <u>259-260: " " CONDUCTIVE</u>                                    |            |    |  |  |                   |
|         | <u>CORE ANGLES</u>  |            |    |  |  |                   |
|         | <u>51': 85°</u>   |            |    |  |  |                   |
|         | <u>190': 85°</u>  |            |    |  |  |                   |
|         | <u>106': 83°</u>  |            |    |  |  |                   |
|         | <u>255': 75°</u>  |            |    |  |  |                   |
|         | <u>ACID TESTS</u>   |            |    |  |  |                   |
|         | <u>150': 44° 30'</u>  |            |    |  |  |                   |
|         | <u>294': 45° 00'</u>  |            |    |  |  |                   |





**GRANGES EXPLORATION AB**  
CANADIAN DIVISION  
**DIAMOND DRILL RECORD**

Property SOPAY ZE JV Project No. 705704 Depth 294' Date Began .....

Hole No. 5696 Co ord. .... Horizontal Length ..... Date Completed .....

Sheet No. 2 Direction ..... Drilled By. E.O. FLOREY

Claim No. .... Elevation ..... Angle ..... Logged By. ....

| FOOTAGE   | NUMBER | WIDTH | Au. | Ag. | Cu. | Zn. | AVERAGES |     |     |     | REMARKS |     |
|-----------|--------|-------|-----|-----|-----|-----|----------|-----|-----|-----|---------|-----|
|           |        |       |     |     |     |     | WIDTH    | Au. | Ag. | Cu. |         | Zn. |
| 1370-1420 | 6641A  | 5.0   | .10 | .5  | .01 | .01 |          |     |     |     |         |     |
| 1420-1440 | 6642A  | 2.0   | .05 | .5  | .01 | .01 |          |     |     |     |         |     |
| 1440-1460 | 6643A  | 2.0   | .05 | 2.0 | .04 | .28 |          |     |     |     |         |     |
| 1460-1659 | WASTE  | 18.1  |     |     |     |     |          |     |     |     |         |     |
| 1659-1709 | 6644A  | 5.0   | .25 | 1.0 | .02 | .05 |          |     |     |     |         |     |
| 1709-1759 | 6645A  | 5.0   | .10 | .5  | .01 | .01 |          |     |     |     |         |     |
| 1759-1770 | WASTE  | 1.1   |     |     |     |     |          |     |     |     |         |     |
| 1770-1820 | 6646A  | 5.0   | .15 | 1.0 | .01 | .10 |          |     |     |     |         |     |
| 1820-1878 | WASTE  | 5.8   |     |     |     |     |          |     |     |     |         |     |
| 1878-1928 | 6647A  | 5.0   | .30 | 3.0 | .01 | .01 |          |     |     |     |         |     |
| 1928-2020 | WASTE  | 9.2   |     |     |     |     |          |     |     |     |         |     |
| 2020-2050 | 6648A  | 3.0   | .20 | 1.0 | .01 | .06 |          |     |     |     |         |     |
| 2050-2140 | WASTE  | 9.0   |     |     |     |     |          |     |     |     |         |     |
| 2140-2170 | 6649A  | 3.0   | .10 | 1.0 | .01 | .11 |          |     |     |     |         |     |
| 2170-2190 | WASTE  | 2.0   |     |     |     |     |          |     |     |     |         |     |
| 2190-2226 | 6650A  | 3.6   | .10 | 1.0 | .01 | .03 |          |     |     |     |         |     |
| 2226-2250 | WASTE  | 2.4   |     |     |     |     |          |     |     |     |         |     |
| 2250-2278 | 6651A  | 2.8   | .05 | 1.0 | .02 | .10 |          |     |     |     |         |     |
| 2278-2290 | WASTE  | 1.2   |     |     |     |     |          |     |     |     |         |     |
| 2290-2330 | 6652A  | 4.0   | .10 | 1.0 | .02 | .14 |          |     |     |     |         |     |





**GRANGES EXPLORATION AB**  
CANADIAN DIVISION  
**DIAMOND DRILL LOG**

Property: SWAYZE, J.V. Date Began: FEB 19/81  
 Hole No.: S.W. 97 Date Completed: FEB 15/81  
 Sheet No.: 1 Drilled By: HEATHY SHERWOOD  
 Claim No.: 553773 Logged By: ED FLUSKEY

855 3776

Project No.: 70504 Depth: 247

Co. ord.: 56100W Horizontal Length

161705 Direction: SOUTH

Elevation: -450 Angle

| FOOTAGE       | DESCRIPTION   | FROM | TO | ALTERATION | % REC'Y<br>CALC'D. |
|---------------|---|------|----|------------|--------------------|
| 0-12'         | CASING SAND   |      |    |            |                    |
| 12.0'-44.0'   | ANDESITE<br>- GENERALLY MASSIVE, MED GREY<br>- ISOLATED SLIGHTLY FOLIATED<br>- NO VISIBLE SULPHIDES   |      |    |            |                    |
| 44.0'-52.5'   | DIORITE<br>- MED GRAINED, BUFF TO DARK GREEN<br>- NUMEROUS HORNBLENDE XTALS<br>- MASSIVE<br>- NO VISIBLE SULPHIDES  |      |    |            |                    |
| 52.5'-95.1'   | BANDED ANDESITE<br>- BANDED & PORPHYROCLASTIC (FELDSPAR)<br>- REGULAR THROUGHOUT<br>- NO VISIBLE SULPHIDES  |      |    |            |                    |
| 95.1'-98.8'   | RHYODACITE TUFF<br>- BANDED & GENERALLY UNIFORM THROUGHOUT, GHT QTZ<br>- BANDED PY: 96.8-98.8 AVE 100% CONDUCTIVE<br>UP TO 30%  |      |    |            |                    |
| 98.8'-101.5'  | RHYODACITE<br>- MASSIVE, LIGHT GREY<br>- NO VISIBLE SULPHIDES   |      |    |            |                    |
| 101.5'-106.5' | RHYODACITE TUFF<br>- PY BANDING THROUGHOUT UP TO JOB AVE 100% CONDUCTIVE<br>- GENERALLY REGULAR THROUGHOUT * CONDUCTIVE   |      |    |            |                    |
| 106.5'-107.8' | RHYOLITE<br>- MASSIVE, LIGHT GREY<br>- NO VISIBLE SULPHIDES   |      |    |            |                    |
| 107.8'-115.3' | RHYOLITE TUFF<br>- FRAGMENTAL GENERALLY<br>- BANDED PY 5% 107.8-110.0<br>- GRANITE 2% 10% BANDED MAGNETITE: 110-111.3<br>- GRAPHITE, TO 20% TR. CPY 111.3-115.3<br>* - GOOD POSSIBLE GOLD STRUCTURE<br>- SURVEY 19.10. 117-112 TO 114 |      |    |            |                    |



**GRANGES EXPLORATION AB**  
CANADIAN DIVISION  
**DIAMOND DRILL LOG**

Property SWAYZE, J.V. Project No. \_\_\_\_\_ Date Began \_\_\_\_\_  
 Hole No. SW 97 Co ord. \_\_\_\_\_ Horizontal Length \_\_\_\_\_  
 Sheet No. 2 Direction \_\_\_\_\_ Date Completed \_\_\_\_\_  
 Claim No. \_\_\_\_\_ Elevation \_\_\_\_\_ Drilled By ED. FLUSKEY  
 Logged By \_\_\_\_\_

| FOOTAGE             | DESCRIPTION  | ALTERATION |    | % RECY<br>CALCD. |
|---------------------|--|------------|----|------------------|
|                     |  | FROM       | TO |                  |
| 115.3-117.4         | RHYOLITE<br>- AS ABOVE   |            |    |                  |
| 117.4-122.7         | RHYODACITE TUFF<br>- GENERALLY FRAGMENTAL<br>- SPORADIC BANDED MAGNETITE (CONDUCTIVE) LAST 5'<br>- NUMEROUS WHITE QTZ VEINS WITH TR-1% POTRY<br>- NOT AS MINERALIZED AS PREVIOUS TUFF UNIT<br>- COMPRISED PRIMARILY OF CHE & QTZ |            |    |                  |
| 122.7-247.0         | MASSIVE ARNITESITE<br>- MASSIVE MED GREY<br>- MINOR WHITE QTZ CUTTING VEINETS (NO MINERALIZATION)<br>- NO VISIBLE SULPHIDES NOTED<br>- NO CONDUCTORS NOTED   |            |    |                  |
| 247.0 - END OF HOLE | MINERALIZATION   |            |    |                  |
|                     | 95.1-98.8: BANDED PY 2% - 30% AVE 10%  |            |    |                  |
|                     | 101.5-106.5: " " 1% - 20% AVE 10%  |            |    |                  |
|                     | 107.8-115.3: BANDED PY (07.8-110) 5%<br>- GRAPHITE 2% TR-1% BANDED MAG (110-113.3)<br>117.4-122.7: TR-1% POTRY + ISOLATED MAG BANDS  |            |    |                  |
|                     | 61: 80° CORE ANGLES<br>98: 90°   |            |    |                  |
|                     | 85: 87°<br>106: 85°  |            |    |                  |
|                     | ACID TESTS   |            |    |                  |
|                     | 100: 45: 30' 247: 46: 30'  |            |    |                  |







**GRANGES EXPLORATION AB**  
CANADIAN DIVISION  
**DIAMOND DRILL LOG**

Property: **SWAYZE, J.V.** Date Began: **NOV 25/80**  
 Hole No.: **S.W. 84** Date Completed: **NOV 26/80**  
 Sheet No.: **①** Drilled By: **HEATH SHERWOOD**  
 Claim No.: **55-3775** Logged By: **ED. FLISKEY**

Project No.: **70504** Depth: **177'**  
 Co. ord.: **44100W 22100S** Horizontal Length: **103'**  
 Direction: **SOUTH** Angle: **-55°**

Date Rec'd: **NOV 25/80**

| FOOTAGE     | DESCRIPTION  | ALTERATION |    | % RECY<br>CALC'D. |
|-------------|--|------------|----|-------------------|
|             |  | FROM       | TO |                   |
| 0-12'       | CASING - SAND + BOULDERS   |            |    |                   |
| 12'-170'    | RHYOLITE<br>- MASSIVE, DUFF COLOR  |            |    |                   |
| 170-517'    | BANDED IRON FORMATION<br>- GENERALLY CONTORTED THROUGHOUT<br>- SECTION OF SCATTERED PY + AN UP TO 28"<br>- BANDING IS 67° @ 19', 63° @ 93'                           |            |    |                   |
| 517'-610'   | RHYOLITE<br>- AS ABOVE   |            |    |                   |
| 610'-859'   | RHYOLITE TUFF<br>- MINOR ISOLATED MAGNETITE BANDS THROUGHOUT<br>- SLIGHTLY CONTORTED<br>- GENERALLY PG. TAB RELATED TO THE MAGNETITE BANDS<br>- BANDING IS 63° @ 93' |            |    |                   |
| 859'-900'   | MASSIVE ANDESITE   |            |    |                   |
| 900'-933'   | BANDED IRON FORMATION<br>- NO VISIBLE SULPHIDES  |            |    |                   |
| 933'-1042'  | RHYOLITE<br>- NO VISIBLE SULPHIDES   |            |    |                   |
| 1042'-125.3 | ANDESITE TUFF<br>- UNIFORM + DARK GREY<br>- CARBONATE RICH<br>- NO VISIBLE SULPHIDES<br>- BANDING IS 84° @ 112'  |            |    |                   |
| 125.3-133.9 | BANDED IRON FORMATION<br>- 15% MAGNETITE CONTENT<br>- NO VISIBLE SULPHIDES<br>- BANDING IS 67° @ 132'  |            |    |                   |



**GRANGES EXPLORATION AB**  
CANADIAN DIVISION  
**DIAMOND DRILL LOG**

Property: S.W.M.T.E. J.V. Project No. 70504 Date Began: NOV 27 1980  
 Hole No. S.W. 84 Co. ord. 444006 Horizontal Length: 177'  
 Sheet No. 227005 Direction: SOUTH  
 Claim No. 553775 Elevation: -550 Drilled By: HEATH & SHELDON  
 Logged By: E.W. FLUSKEY

| FOOTAGE          | DESCRIPTION   | ALTERATION |    |  |  | % RECY<br>CALC'D. |
|------------------|---|------------|----|--|--|-------------------|
|                  |   | FROM       | TO |  |  |                   |
| 133.9-145.3      | ANDESITE<br>- MASSIVE + LIGHT GREY  |            |    |  |  |                   |
| 145.3-171.7      | QTZ - CHLORITE SCHIST<br>- CURRIER + DARK GREEN TRAVERTINE<br>- NO SULPHIDES                                    |            |    |  |  |                   |
| 171.7-174.9      | DARKER IRON FORMATION<br>- 15% MAGNETITE<br>- 2" FAULT ZONE AT 171.0' + IS 20° TO CIA<br>- NO VISIBLE SULPHIDES |            |    |  |  |                   |
| 174.9-177.0      | QTZ CHLORITE SCHIST<br>AS ABOVE   |            |    |  |  |                   |
| 177' END OF HOLE | MINERALIZATION  |            |    |  |  |                   |
|                  | 17.0-51.7: 25% MAGNETITE DRWD + 14-28 Pyrite SECTIONS   |            |    |  |  |                   |
|                  | 78.5-81.8: 20% MAGNETITE + 18-38 Py IN PLACES   |            |    |  |  |                   |
|                  | 90.0-93.2: 15% MAGNETITE  |            |    |  |  |                   |
|                  | 99.0-101.0: 1% Py IN Bx SILICA  |            |    |  |  |                   |
|                  | 125.3-133.9: 15% MAGNETITE  |            |    |  |  |                   |
|                  | 171.7-174.9: 15% MAGNETITE  |            |    |  |  |                   |
|                  | CODE ANGLES   |            |    |  |  |                   |
|                  | 19.0' : 67°   |            |    |  |  |                   |
|                  | 112' : 54°  |            |    |  |  |                   |
|                  | 83.0' : 63°   |            |    |  |  |                   |
|                  | 132' : 67°  |            |    |  |  |                   |
|                  | 91.0' : 79°   |            |    |  |  |                   |





**GRANGES EXPLORATION AB**  
CANADIAN DIVISION  
**DIAMOND DRILL LOG**

P 553854 Property **SWAYZE, J.V.** Project No. **70504** Depth **202'** Date Began **NOV 28/80**  
 Hole No. **# SW 85** Co ord. **8400W** Horizontal Length **115'** Date Completed **NOV 28/80**  
 Sheet No. **0** Elevation **15770.5** Direction **SOUTH** Drilled By **HEATH & SHERWOOD**  
 Claim No. **553854** Angle **-55°** Logged By **ED. FLUSKEY**

| FOOTAGE       | DESCRIPTION   | ALTERATION |    |  |  | % REC'Y<br>CALC'D. |
|---------------|---|------------|----|--|--|--------------------|
|               |   | FROM       | TO |  |  |                    |
| 0-8'          | CASING: SAND & GOLLERS  |            |    |  |  |                    |
| 8'-450'       | QTZ-CHLORITE SCHIST<br>- UNIFORM & CONSTANT THROUGHOUT<br>- NUMEROUS X-CUTTING WHITE QTZ VEINS<br>- LOCALLY POLYPHAC LASTIC<br>- NO VISIBLE SULPHIDS<br>- INCREASING SILICA CONTENT EAST 10' OF UNIT. |            |    |  |  |                    |
| 45'-62.5'     | Banded rock formation<br>- DOLERITE GENERALLY<br>- ALTERATIVE BANDS OF QTZ-FELDSPAR MAFENITE<br>- MAFENITE CONTENT ~ 15% - 25%<br>- 1/3-3/4 Banded py 45'-94'   |            |    |  |  |                    |
| 62.5'-75.9'   | RHYOLITE TUFF<br>- FRAGMENTARY SILICEOUS<br>- NO VISIBLE SULPHIDS   |            |    |  |  |                    |
| 75.9'-89.5'   | RHYOLITE<br>- MASSIVE<br>- NO VISIBLE SULPHIDS  |            |    |  |  |                    |
| 89.5'-112'    | RHYOLITE TUFF<br>- FRAGMENTARY<br>- ISOLATED MINOR MAFENITE BANDS<br>- ISOLATED MINOR PY TR-196 AS INFILTRATING VEINLETS  |            |    |  |  |                    |
| 112'-126'     | Banded rock formation<br>- UNIFORM BUT CONTAINED IN PLACES<br>- MAFENITE CONTENT ~ 30%<br>- AS BANDS 120-270 *<br>- 125.5-126.0 - 30% - POSSIBLE CONDUCTOR.   |            |    |  |  |                    |
| 126.0'-135.8' | RHYOLITE<br>- MASSIVE   |            |    |  |  |                    |
| 135.8'-138.0' | RHYOLITE TUFF<br>- 1/3 PY AS INFILTRATING VEINLETS  |            |    |  |  |                    |



**GRANGES EXPLORATION AB**  
CANADIAN DIVISION  
**DIAMOND DRILL LOG**

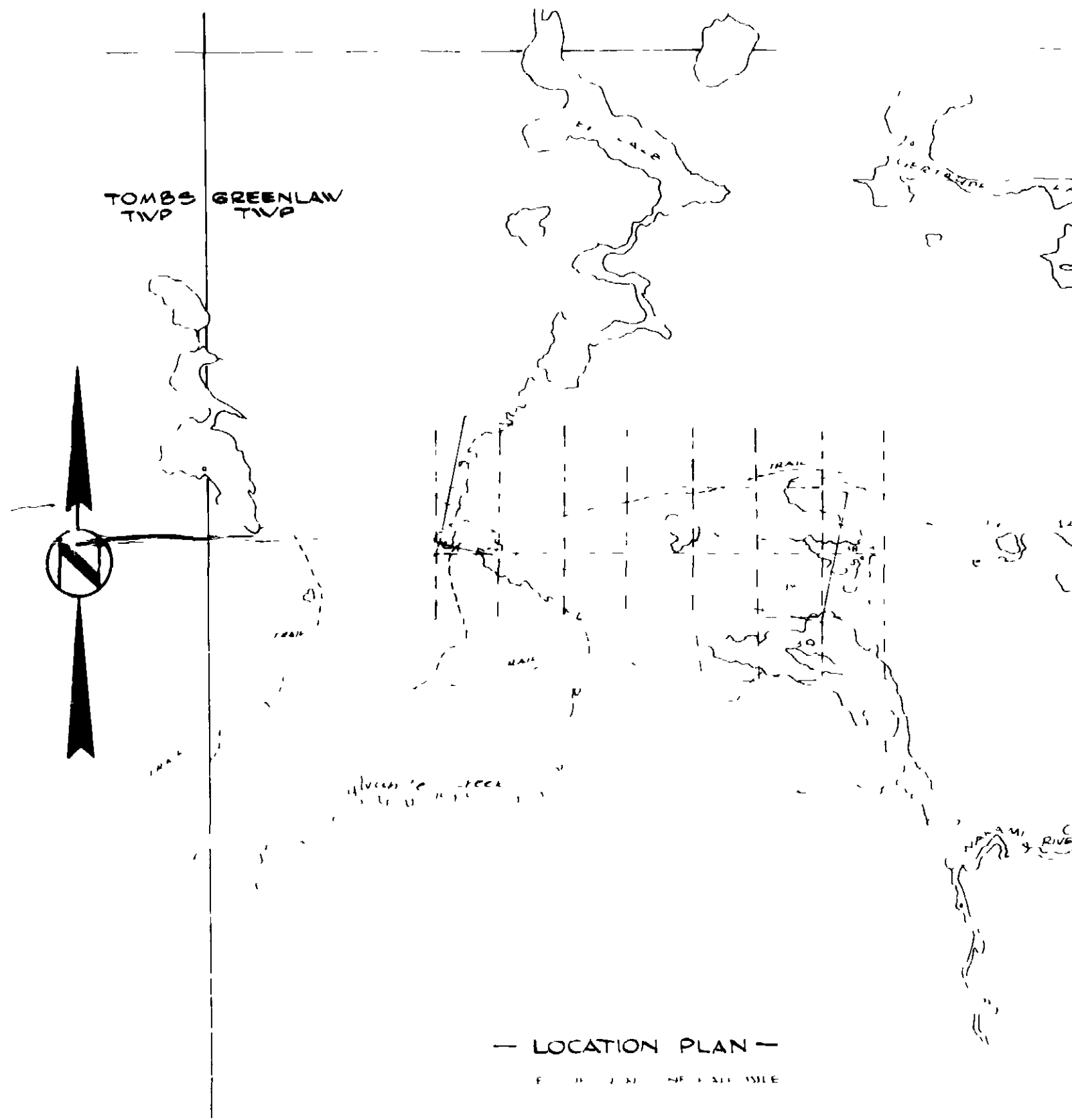
Property: SUWHYZE JU. Project No. 70504 Date Began: NOV 28/80  
 Hole No. S.W. 85 Co. ord. 8400W Date Completed: NOV 29/80  
 Sheet No. 2 Direction: SOUTH Drilled By: HEATHY SHERWOOD  
 Claim No. 553857 Elevation: 15770.5 Angle: -55° Logged By: ED. F. USNEY

| FOOTAGE   | DESCRIPTION  | ALTERATION |    |  |  | % REC'Y<br>CALC'D. |
|-----------|--|------------|----|--|--|--------------------|
|           |  | FROM       | TO |  |  |                    |
| 1380-2005 | QZ - CHLORITE SCHEDT<br>- GENERALLY UNIFORM & CONSISTANT THROUGHOUT<br>- NUMEROUS X CUTTING QZ STRINGER CLIMS<br>- ONLY SULPHIDS NOTE WAS A 3' VEIN OF 30 PY @ 173'<br>- ISOLATED PORPHYROBLASTIC SECTIONS |            |    |  |  |                    |
| 2005-2020 | <del>2005-2020</del> BASALT<br>- MASSIVE<br>- SHARPE CONTACT WITH PREVIOUS UNIT  |            |    |  |  |                    |
| 2020      | END OF HOLE  |            |    |  |  |                    |
|           | MINERALIZATION   |            |    |  |  |                    |
|           | 450-625: 15% - 25% MAGNETITE<br>45-49': 10-30 PY   |            |    |  |  |                    |
|           | 112-155: 30% MAGNETITE & 10-20 PY<br>155-160: 30% + CONTACTOR  |            |    |  |  |                    |
|           | 135.8-138 - 1% PY  |            |    |  |  |                    |
|           | CORE ANGLES  |            |    |  |  |                    |
|           | 22': 50°   |            |    |  |  |                    |
|           | 57': 68°   |            |    |  |  |                    |
|           | 122': 73°  |            |    |  |  |                    |
|           | 152': 78°  |            |    |  |  |                    |









**GRANGES EXPLORATION AB**  
 CANADIAN DIVISION  
 VANCOUVER OFFICE

HORIZONTAL LOOP ELECTROMAGNETIC SURVEY  
 E. DIAMOND DRILLING  
**SWAYZE JOINT VENTURE**  
 GREENLAW TWP ONT

SCALE 1:10,000  
 PROJECT No. 715-1-1  
 NTS No.